HURRICANE CITY
UTAH

Mayor Nanette Billings

City Manager Kaden DeMille

Planning Commission

Mark Sampson, Chair
Shelley Goodfellow, Alternate Chair
Ralph Ballard
Paul Farthing
Rebecca Broneman
Michelle Cloud
Brad Winder
Kelby Iverson

Hurricane Planning Commission Meeting Agenda

November 14, 2024
5:30 PM
Hurricane City Offices 147 N 870 W, Hurricane

Notice is hereby given that the Hurricane City Planning Commission will hold a Regular Meeting commencing at 5:30 p.m. at the Hurricane City Offices 147 N 870 W, Hurricane, UT.

Meeting link:
https://cityofhurricane.webex.com/cityofhurricane/j.php?MTID=me42b4eb65609e35eb0e0664c925c9dbc
Meeting number:2632 882 4836
Password:HCplanning
Host key:730111
Join by phone+1-415-655-0001 US Toll
Access code: 2632 882 4836
Host PIN: 9461
Details on these applications are available in the Planning Department at the City Office, 147 N. 870 West.

5:30 p.m. - Planning Commission Business:

1. Discussion on proposed amendments to the airport overlay zone

6:00 p.m. - Call to Order

Roll Call

Pledge of Allegiance

Prayer and/or thought by invitation

Declaration of any conflicts of interest

Public Hearings

1. A Zone Change Amendment request located at 259 N Main St. from R1-10, residential one unit per 10,000 square feet, to RM-3, multifamily 15 units per acre.
2. A Zone Change Amendment request located at 1015 W 250 N from R1-10, residential one unit per 10,000 square feet, to RA-0.5, residential agriculture one unit per half acre.

3. A Zone Change Amendment request located at 1268 W 650 S from RA-1, residential agriculture one unit per acre, to R1-15, residential one unit per 15,000 square feet.
4. A Land Use Code Amendment to Title 10 Chapter 23 regarding Planned Development Overlays and Title 10 Chapter 11 and Chapter 17 regarding the Public Facility zone.

OLD BUSINESS

1. LUCA24-05: Discussion and consideration of a recommendation to the City Council on a Land Use Code Amendment to Title 10, Chapters 3, 15, and 51 regarding transient lodging facilities in commercial zones. Hurricane City Planning, Applicant.
2. LUCA24-06: Discussion and consideration of a recommendation to the City Council on a Land Use Code Amendment to Title 10, Chapter 28 regarding development standards in rockfall zones. Hurricane City Planning, Applicant.

NEW BUSINESS

1. ZC24-09: Discussion and consideration of a recommendation to the City Council on a Zone Change Amendment request located at 259 N Main St. from R1-10, residential one unit per 10,000 square feet, to RM-3, multifamily 15 units per acre. Interstate Homes LLC, Applicant.
2. ZC24-10: Discussion and consideration of a recommendation to the City Council on a Zone Change Amendment request located at 1015 W 250 N from R1-10, residential one unit per 10,000 square feet, to RA-0.5, residential agriculture one unit per half acre. Jaymie Wetzel, Applicant. Karl Rasmussen, Agent.
3. ZC24-11: Discussion and consideration of a recommendation to the City Council on a Zone Change Amendment request located at 1268 W 650 S from RA-1, residential agriculture one unit per acre, to R1-15, residential one unit per 15,000 square feet. CCH&N Holdings LLC, Applicant. Daryl Brown, Agent.
4. AFP24-17: Discussion and consideration of a possible approval of an amended final plat for Ridge at Zion Vista Phase 1B, Lots 19 & 20, located at 557 S 1800 W. Interstate Homes LLC, Applicant. Dannie Green, Agent
5. AFP24-18: Discussion and consideration of a possible approval of an amended final plat for Windsong Subdivision Lots 1 & 2, located at 335 W 1180 S. Beau Davis, Applicant. Karl Rasmussen, Agent.
6. PP24-26: Discussion and consideration of a possible approval of a preliminary plat for Cielo at Coral Canyon, a subdivision consisting of 54 townhomes, 140 vacation rental units, and 218 single family residential lots and commercial space, located at Old Highway 91 and Foothills Canyon Dr. Cole West, Applicant. Tony Carter, Agent.
7. PP24-27: Discussion and consideration of a possible approval of a preliminary plat for Black Ridge Phase 2, a 45 lot single family subdivision, located north of 900 S and east of 1760 W. Wasatch Commercial Builders, Applicant. Focus Engineering, Agent.
8. PP24-28: Discussion and consideration of a possible approval of a preliminary plat for Hawk Ridge, a residential subdivision consisting of 146 townhomes and two

single family lots, located near 2800 w and Cliffhanger Dr. Perry Development-Mitch Weis, Applicant. Bush & Gudgell, Agent.

9. PP23-21: Discussion and consideration of a possible approval of an extension of the preliminary plat for Gateway at Sand Hollow Commercial, a six lot commercial subdivision located between SR-9 and Sand Hollow Road, Western Mortgage & Realty Company, Applicant. Karl Rasmussen, Agent.
10. CUP24-26: Discussion and consideration of a possible approval of a conditional use permit for a building of greater height and size located at 2521 W 250 S. Brick Loring, Applicant.
11. CUP24-27: Discussion and consideration of a possible approval of a conditional use permit for a metal building located at 498 S 1310 W. Jay and Tracy Mansanarez, Applicant.
12. FSP24-74: Discussion and consideration of a possible approval of a final site plan for Rush Funplex, an indoor recreation and entertainment facility located at Coral Junction Rd and Coral Canyon Blvd. Rush Funplex, Applicant. Dan Milich, Agent.
13. PP24-29: Discussion and consideration of a possible approval of a preliminary plat for Red Slate Estates, a 135 lot single family subdivision located at approximately 4020 W Bash Parkway. Heritage Land Development, Applicant. Alpha Engineering, Agent.
14. FSP24-73: Discussion and consideration of a possible approval of a final site plan for Hurricane Self-Storage, a storage unit complex, located at 260 N 3700 W. Mike Wade, Applicant. Guy Williams, Agent.
15. LUCA24-08: Discussion and consideration of a recommendation to the City Council on a Land Use Code Amendment to Title 10 Chapter 23 regarding Planned Development Overlays and Title 10 Chapter 11 and Chapter 17 regarding the Public Facility zone.

Approval of Minutes:

Adjournment

PLANNING & ZONING
HURRICANE CITY
UTAH

Gary Cupp II, Planning Director
Fred Resch, City Planner/Code Enforcement
Brienna Spencer, Planning Technician

Briefing Document:

Re: State requirements and changes to Title 10, Chapter 28 regarding a proposed Airport Overlay Ordinance

This is a discussion item. A public hearing and recommendation to the City Council will be made at the next available meeting. House Bill 206 (HB206), which became effective on May 3, 2023, requires municipalities to enforce land use regulations for the airport influence areas, including creation of an airport overlay zone. Hurricane City Code already has a runway protection zone found in Title 10, Chapter 25, but it needs to be updated to meet the technical requirements of the new State Code. One specific example being that the State Code defines the airport influence area as land within 5,000 feet of the airport runway. Chapter 25 currently defines an "approach zone" that extends 5,000 feet from the runway, but it does not appear to extend in all directions to the required 5,000-foot distance. The City is required to adopt by December 31, 2024, an airport overlay zone conforming to HB206 and 14 C.F.R. Part 77, and require that any proposed development within an airport influence area (i.e., within 5,000 feet) conform to 14 C.F.R. Part 77.

Chapter 25 is currently called the "Runway Protection Zone." Staff has prepared a draft of the ordinance revisions that addresses the requirements mandated under HB206 and proposes to rename the chapter the "Airport Overlay Zone."

Staff recommends the Planning Commission read through the proposed ordinance changes to be discussed at the meeting.

AIRPORT LAND USE AMENDMENTS

2023 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Melissa G. Ballard

Senate Sponsor: Todd D. Weiler

LONG TITLE

General Description:

This bill amends provisions related to land use requirements near an airport influence area.

Highlighted Provisions:

This bill:

- amends definitions related to airport influence areas and airport overlay zones;
- encourages a political subdivision to adopt land use regulations that protect airports, including:
  - adopting airport overlay zones;
  - notifying of airport impacts; and
  - granting of avigation easements;
- amends provisions related to governing law in the event of a conflict between land use regulations related to airport overlay zones;
- amends provisions related to the acquisition of an avigation easement or similar rights;
- repeals sections of code related to zoning and land use related to airports; and
- makes technical changes.

Money Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

10-9a-501, as last amended by Laws of Utah 2021, Chapter 60

17-27a-501, as last amended by Laws of Utah 2021, Chapter 60

72-10-401, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-402, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-403, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-404, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-413, as renumbered and amended by Laws of Utah 1998, Chapter 270

REPEALS:

72-10-405, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-406, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-407, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-408, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-409, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-410, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-411, as renumbered and amended by Laws of Utah 1998, Chapter 270

72-10-412, as last amended by Laws of Utah 2018, Chapter 148

72-10-414, as renumbered and amended by Laws of Utah 1998, Chapter 270

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **10-9a-501** is amended to read:

10-9a-501. Enactment of land use regulation, land use decision, or development agreement.

(1) Only a legislative body, as the body authorized to weigh policy considerations, may enact a land use regulation.

(2) (a) Except as provided in Subsection (2)(b), a legislative body may enact a land use regulation only by ordinance.

(b) A legislative body may, by ordinance or resolution, enact a land use regulation that

imposes a fee.

(3) A legislative body shall ensure that a land use regulation is consistent with the purposes set forth in this chapter.

(4) (a) A legislative body shall adopt a land use regulation to:

(i) create or amend a zoning district under Subsection 10-9a-503(1)(a); and

(ii) designate general uses allowed in each zoning district.

(b) A land use authority may establish or modify other restrictions or requirements other than those described in Subsection (4)(a), including the configuration or modification of uses or density, through a land use decision that applies criteria or policy elements that a land use regulation establishes or describes.

(5) A municipality may not adopt a land use regulation, development agreement, or land use decision that restricts the type of crop that may be grown in an area that is:

(a) zoned agricultural; or

(b) assessed under Title 59, Chapter 2, Part 5, Farmland Assessment Act.

(6) A municipal land use regulation pertaining to an airport or an airport influence area, as that term is defined in Section 72-10-401, is subject to Title 72, Chapter 10, Part 4, Airport Zoning Act.

Section 2. Section **17-27a-501** is amended to read:

17-27a-501. Enactment of land use regulation.

(1) Only a legislative body, as the body authorized to weigh policy considerations, may enact a land use regulation.

(2) (a) Except as provided in Subsection (2)(b), a legislative body may enact a land use regulation only by ordinance.

(b) A legislative body may, by ordinance or resolution, enact a land use regulation that imposes a fee.

(3) A land use regulation shall be consistent with the purposes set forth in this chapter.

(4) (a) A legislative body shall adopt a land use regulation to:

(i) create or amend a zoning district under Subsection 17-27a-503(1)(a); and

(ii) designate general uses allowed in each zoning district.

(b) A land use authority may establish or modify other restrictions or requirements other than those described in Subsection (4)(a), including the configuration or modification of uses or density, through a land use decision that applies criteria or policy elements that a land use regulation establishes or describes.

(5) A county may not adopt a land use regulation, development agreement, or land use decision that restricts the type of crop that may be grown in an area that is:

(a) zoned agricultural; or

(b) assessed under Title 59, Chapter 2, Part 5, Farmland Assessment Act.

(6) A county land use regulation pertaining to an airport or an airport influence area, as that term is defined in Section 72-10-401, is subject to Title 72, Chapter 10, Part 4, Airport Zoning Act.

Section 3. Section **72-10-401** is amended to read:

72-10-401. Definitions.

As used in this part, unless the context otherwise requires:

(1) "Airport" means any publicly used area of land or water [~~designed and set aside~~] that is used, or intended to be used, for the landing and [~~taking-off~~] take-off of aircraft and utilized or to be utilized in the interest of the public for these purposes.

[~~(2) "Airport hazard" means any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport or is otherwise hazardous to the landing or taking-off of aircraft.~~]

[~~(3) "Airport hazard area" means any area of land or water upon which an airport hazard might be established if not prevented as provided in this part.~~]

(2) "Airport hazard" means any structure, tree, object of natural growth, or use of land that potentially obstructs or otherwise impacts the safe and efficient utilization of the navigable airspace required for the flight of aircraft in landing or take-off at an airport.

(3) "Airport influence area" means land located within 5,000 feet of an airport runway.

(4) "Airport overlay zone" means a secondary zoning district designed to protect the

public health, safety, and welfare near an airport that:

(a) applies land use regulation in addition to the primary zoning district land use regulation of property used as an airport and property within an airport influence area;

(b) may extend beyond the airport influence area;

(c) ensures airport utility as a public asset;

(d) protects property owner land values near an airport through compatible land use regulations as recommended by the Federal Aviation Administration; and

(e) protects aircraft occupant safety through protection of navigable airspace.

(5) "Avigation easement" means an easement permitting unimpeded aircraft flights over property subject to the easement and includes the right:

(a) to create or increase noise or other effects that may result from the lawful operation of aircraft; and

(b) to prohibit or remove any obstruction to such overflight.

(6) "Land use regulation" means the same as that term is defined in Sections 10-9a-103 and 17-27a-103.

[~~(4)~~] (7) "Political subdivision" means any municipality, city, town, or county.

[~~(5)~~] (8) "Structure" means any object constructed or installed by man, including buildings, towers, smokestacks, and overhead transmission lines.

[~~(6)~~] (9) "Tree" means any object of natural growth.

Section 4. Section **72-10-402** is amended to read:

72-10-402. Declaration with respect to airport hazards.

The Legislature finds that:

(1) an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity;

(2) an obstruction of the type that reduces the size of the area available for the landing, taking-off, and maneuvering of aircraft tends to destroy or impair the utility of the airport and the public investment in the airport;

(3) the creation or establishment of an airport hazard is a public nuisance and an injury

to the community served by the airport in question;

(4) it is necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards be prevented;

(5) this should be accomplished, to the extent legally possible, by exercise of the police power, without compensation; [~~and~~]

(6) both the prevention of the creation or establishment of airport hazards and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which political subdivisions may raise and expend public funds and acquire land or property interests in land[~~.~~]; and

(7) the establishment of an airport overlay zone best prevents the creation or establishment of an airport hazard, and promotes the public health, safety, and general welfare.

Section 5. Section **72-10-403** is amended to read:

72-10-403. Airport zoning regulations.

[~~(1) (a) In order to prevent the creation or establishment of airport hazards, every political subdivision having an airport hazard area within its territorial limits may adopt, administer, and enforce, under the police power and in the manner and upon the conditions prescribed in this part, airport zoning regulations for the airport hazard area.~~]

[~~(b) The regulations may divide the area into zones, and, within the zones, specify the land uses permitted and regulate and restrict the height to which structures and trees may be erected or allowed to grow.~~]

[~~(2) (a) If an airport is owned or controlled by a political subdivision and any airport hazard area appertaining to the airport is located outside the territorial limits of the political subdivision, the political subdivision owning or controlling the airport and the political subdivision within which the airport hazard area is located may, by ordinance or resolution duly adopted, create a joint airport zoning board.~~]

[~~(b) The board shall have the same power to adopt, administer, and enforce airport zoning regulations applicable to the airport hazard area in question as that vested by Subsection (1) in the political subdivision within which the area is located.~~]

[~~(c) Each joint board shall have as members two representatives appointed by each political subdivision participating in its creation and in addition a chair elected by a majority of the appointed members.~~]

(1) In order to prevent the creation or establishment of airport hazards, each political subdivision located within an airport influence area, shall adopt, administer, and enforce land use regulations for the airport influence area, including an airport overlay zone, under the police power and in the manner and upon the conditions prescribed:

(a) in this part;

(b) Title 10, Chapter 9a, Municipal Land Use, Development, and Management Act; and

(c) Title 17, Chapter 27a, County Land Use Development, and Management Act.

(2) (a) Each political subdivision located within an airport influence area shall notify a person building on or developing land in an airport influence area, in writing, of aircraft overflights and associated noise.

(b) To promote the safe and efficient operation of the airport, a political subdivision located within an airport influence area:

(i) shall:

(A) adopt an airport overlay zone conforming to the requirements of this chapter and 14 C.F.R. Part 77; and

(B) require any proposed development within an airport influence area to conform with 14 C.F.R. Part 77; and

(ii) may, as a condition to granting a building permit, subdivision plat, or a requested zoning change within an airport influence area, require a person building or developing land to grant or sell to the airport owner, at appraised fair market value, an avigation easement.

(3) If a political subdivision located within an airport influence area fails to adopt an airport overlay zone by December 31, 2024, then the following requirements shall apply in an airport influence area:

(a) each political subdivision located within an airport influence area shall notify a

person building on or developing land within an airport influence area, in writing, of aircraft overflights and associated noise;

(b) as a condition to granting a building permit, subdivision plat, or a requested zoning change within an airport influence area, require the person building or developing land to grant or sell to the airport owner, at appraised fair market value, an avigation easement; and

(c) require a person building or developing land within an airport influence area conform to the requirements of this chapter and 14 C.F.R. Part 77.

Section 6. Section **72-10-404** is amended to read:

72-10-404. Zoning ordinances -- Governing law in event of conflict.

[~~(1) In the event that a political subdivision has adopted or adopts a comprehensive zoning ordinance regulating the height of buildings, any airport zoning regulations applicable to the same area or a portion of the area may be incorporated in and made a part of comprehensive zoning regulations, and be administered and enforced in connection with the comprehensive zoning regulations. (2)~~] In the event of conflict between any airport [~~zoning~~] land use regulations adopted under this part and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, [~~and whether the other regulations were adopted by the political subdivision which adopted the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement~~] the airport overlay zone requirement shall govern and prevail.

Section 7. Section **72-10-413** is amended to read:

72-10-413. Purchase or condemnation of air rights or navigation easements.

A political subdivision [~~within which the property or nonconforming use is located or the political subdivision~~] owning the airport [~~or~~], whether or not the airport is located within the territorial limits of the political subdivision, or a political subdivision that is served by [~~it~~] the airport may acquire, by purchase, grant, or condemnation in the manner provided by the law under which political subdivisions are authorized to acquire real property for public purposes, an air right, [~~navigation~~] an avigation easement, or other estate or interest in the property or

nonconforming structure or use in question if:

(1) it is desired to remove, lower, or otherwise terminate a nonconforming structure or use;

(2) the approach protection necessary cannot, because of constitutional limitations, be provided by airport [~~zoning~~] land use regulations under this part; or

(3) it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations.

Section 8. **Repealer.**

This bill repeals:

Section **72-10-405**, **Airport zoning regulations -- Adoption and amendment -- Airport zoning commission -- Powers and duties.**

Section **72-10-406**, **Airport zoning regulations -- Validity, limitations, and restrictions.**

Section **72-10-407**, **Permit for new or changed structures or uses -- Nonconforming structures -- Airport hazards -- Application to board of adjustment for variance -- Allowance of variance -- Conditioning permit or variance.**

Section **72-10-408**, **Appeals to board of adjustment -- Procedure -- Stay of proceedings -- Hearing and judgment.**

Section **72-10-409**, **Airport zoning regulations -- Administration and enforcement.**

Section **72-10-410**, **Board of adjustment -- Powers -- Appointment and membership of board -- Hearings and decisions by board -- Meetings -- Adoption of rules.**

Section **72-10-411**, **Appeals to district courts -- Procedure -- Findings, judgment, and costs -- Regulations invalid as to one structure or parcel of land.**

Section **72-10-412**, **Violations of chapter or rulings -- Misdemeanor -- Remedies of political subdivisions.**

Section **72-10-414**, **Exchange of private property near federal airports.**

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	LUCA24-05
Type of Application:	Land Use Code Amendment
Action Type:	Legislative
Applicant:	Hurricane City
Agent:	N/A
Request:	Amend Title 10 with regards to vacation rentals in commercial zones.
Recommendation:	Recommend approval to the City Council.
Report Prepared By:	Gary Cupp/Fred Resch III

Updated Discussion for 11/14/2024:
This item was heard on 10/24/2024, and the Planning Commission continued it for staff to consider further revisions to the ordinance. Members of the Planning Commission voiced concern about disallowing short-term rentals in Hurricane's commercial zones. The Commission is reluctant to disallow short-term rentals, because they may provide a needed housing option in the community, and they may also be a viable incentive for revitalization of historic buildings in the downtown area. The Commission continued the item and requested that staff look into how short-term rentals might be allowed as a conditional use in commercial zones. Staff feels that the Commission's concerns are valid and their suggestions are worthy of further consideration. In fact, the Commission's ideas will be better implemented under the forthcoming downtown zoning overlay that will guide development in the downtown area under the Downtown Master Plan. Therefore, staff recommends approval of the land use code amendment as it is currently presented, and that short-term rentals be considered as a use that will be allowed under the new downtown zoning overlay that is being developed.

Recommendation for 11/14/2024: Staff recommends the Planning Commission consider the revised ordinance and make a recommendation of approval to the City Council.

—----------

Previous Discussion (10/24/2024):
Historically, short-term rentals (vacation rentals, Airbnbs, Vrbos, etc.) have been permitted in commercial zones as being substantially similar to a hotel or motel use as permitted under Hurricane City Code (HCC) section 10-15-3. This has allowed for the proliferation of a large number of vacation rental developments throughout the City, and especially in the downtown area.

There has been some concern expressed, and with examples from some of our neighboring communities, that these developments are taking up commercial space that could be used for retail and restaurant uses that provide amenities, not just to the tourist community our area attracts, but also to benefit the residents of Hurricane which these types of short-term rentals do not. The growth of short-term rentals has also created concerns about short-term rental uses replacing existing residential units with commercial uses, thus reducing existing housing stock in commercial zones.

After direction from the City Council, staff has prepared an ordinance update to specify that short-term rentals of ten rooms or less are not permitted in commercial zones. This will still allow for more traditional hotel development but will prohibit or strongly discourage the smaller-scale vacation rental developments that have proliferated in our commercial areas in the past few years.

Recommendation: Staff recommends the Planning Commission consider the revised ordinance and make a recommendation of approval to the City Council.

Sec. 10-3-4. Definitions of words and phrases.

As used in this title, the words and phrases defined in this section shall have the following meanings unless the context clearly indicates a contrary meaning. Words not included herein but defined in the building code shall be construed as defined therein.

Hotel means an establishment with or without fixed cooking facilities in individual rooms offering transient lodging accommodations to the general public, and which may provide additional services such as restaurants and meeting rooms. Hotels shall contain ten~~four~~ or more sleeping rooms.

Motel means any building or group of buildings containing ten ~~four~~ or more sleeping rooms, with or without fixed cooking facilities, designed for temporary occupancy by tourists or transients, with a garage attached or parking space conveniently located to each unit.

Short-term rental means a structure, room, or space that qualifies as a transient lodging facility, but excluding hotels and motels.

~~*Short-term rental complex* means any group of two to three short-term rental units within commercial zones.~~

CHAPTER 15. COMMERCIAL ZONES

Sec. 10-15-1. Purpose.

See section 10-11-2 of this title.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. No. 2022-12, 5-5-2022)

Sec. 10-15-2. Scope.

The provisions of this chapter shall apply to any real property located in a commercial zone as shown on the official zoning map. No building, structure or real property shall be used and no building or structure shall be hereafter erected, structurally or substantially altered, or enlarged except as set forth in this chapter. Such requirements shall not be construed to prohibit or limit other applicable provisions of this title, this Code, or other laws.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. No. 2022-12, 5-5-2022)

Sec. 10-15-3. Uses allowed.

A. *Permitted and conditional uses.* Permitted and conditional uses allowed within commercial zones shall be as set forth in table 10-15-1 of this section. Permitted and conditional uses are indicated by a "P" or "C," respectively, in the appropriate column. Uses not permitted are indicated by "N." Any use not shown on table 10-15-1 of this section shall be prohibited unless the Zoning Administrator determines the use is substantially the same as a permitted or conditional use as provided in subsection 10-7-18E4 of this title.

TABLE 10-15-1
PERMITTED AND CONDITIONAL USES ALLOWED IN COMMERCIAL ZONES

Use	Zones				
	NC	GC	HC	PC	POC
Residential uses:					
Building, accessory	P	N	N	P	P
Dwelling, multiple-family[4]	C	C	C	P	P
Dwelling, single-family[4]	N	N	N	P	N
Dwelling, temporary	N	N	N	N	N
Dwelling, two-family[4]	N	N	N	P	P
Manufactured home	N	N	N	N	N
Manufactured/mobile home park	N	N	N	N	N
Protective housing facility	N	N	N	N	N
Rehabilitation/treatment facility	N	P	P	P	P
Residential facility for elderly persons[1]	P	N	N	P	P
Residential facility for persons with a disability[1]	P	N	N	P	P
Residential facility for troubled youth	N	N	N	N	N
Transitional housing facility	N	N	N	N	N
Public and civic uses:					

Auditorium or stadium	N	P	P	P	N
Bus terminal	N	P	P	P	N
Cemetery	P	P	P	P	P
Church or place of worship	P	P	P	P	P
Club or service organization	P	P	P	P	P
Convalescent care facility	N	P	P	P	N
Cultural service	P	P	P	P	P
Golf course	P	P	P	P	P
Government service	N	P	P	P	N
Hospital	N	P	P	P	N
Operations center	N	P	P	P	P
Park	P	P	P	P	P
Post office	P	P	P	P	P
Protective service	P	P	P	P	P
Reception center	C	P	P	P	P
Utility, major[3]	N	N	N	C	C
Utility, minor[3]	P	P	P	P	P
Utility substation[3]	P	P	P	P	P
Commercial uses:					
Agricultural sales and service	N	P	P	P	N
Animal hospital	P	P	P	P	N
Bail bond service	N	P	P	P	N
Bank or financial institution	P	P	P	P	P
Bed and breakfast, home	N	N	N	N	N
Bed and breakfast inn	P	P	P	P	N
Business equipment rental, services, and supplies	P	P	P	P	P
Car wash	P	P	P	P	P
Child care center	P	P	P	P	P
Club, private	N	P	P	P	N
Construction sales and service	N	P	P	N	N
Convenience store	P	P	P	P	P
Funeral home	N	P	P	P	N
Garden center	P	P	P	P	P
Gas and fuel, storage and sales	N	N	C	N	N
Gasoline service station	P	P	P	P	N
Hostel	N	P	P	P	N
Hotel	N	P	P	P	N
Kennel, commercial	C	C	C	C	C
Laundry or dry cleaning, limited	P	P	P	P	P
Licensed family child care[2]	P	N	N	P	N
Liquor store	N	P	P	P	N
Media service	P	P	P	P	P
Medical or dental laboratory	N	P	P	P	N
Medical service	P	P	P	P	P
Motel	N	P	P	P	N
Office, general	P	P	P	P	P
Parking garage, public	N	P	P	P	P

Parking lot, public	N	P	P	P	P
Pawnshop	N	N	P	P	N
Personal care service	P	P	P	P	P
Personal instruction service	P	P	P	P	P
Printing and copying, limited	P	P	P	P	P
Printing, general	N	P	P	P	P
Produce stand	P	P	P	P	P
Recreation and entertainment, indoor	P	P	P	P	P
Recreation and entertainment, outdoor	N	P	P	P	N
Recreational vehicle park	N	N	P	N	N
Repair service	P	P	P	N	P
Research service	N	P	P	N	N
Residential certificate child care[2]	P	N	N	P	N
Restaurant, fast food	P	P	P	P	P
Restaurant, general	P	P	P	P	P
Retail, general	P	P	P	P	P
Secondhand store	P	P	P	P	P
Shopping center	P	P	P	P	P
Short-term rental	N	N	N	N	N
Takeoff and landing of aircraft	N	N	N	N	N
Tattoo establishment	P	P	P	N	N
Tavern	N	P	P	P	N
Temporary trailer	P	P	P	P	P
Transportation service	N	P	P	N	N
Vehicle and equipment rental or sale	N	P	P	N	N
Vehicle and equipment repair, general	N	P	P	N	N
Vehicle repair, limited	N	P	P	N	P
Veterinary service	P	P	P	N	N
Warehouse, self-service storage	P	P	N	N	N
Wireless telecommunication facility	See section 10-50-5, table 10-50-1 of this title				
Industrial uses:					
Laundry services	N	N	N	P	N
Wholesale and warehousing, general	N	N	N	N	N
Wholesale and warehousing, limited	N	N	N	N	N

Notes:

1. See chapter 46 of this title.
2. See chapter 42 of this title.
3. See chapter 45 of this title.
4. In the area designated as downtown district on the general plan map, existing single family residential uses may continue as permitted residential uses. Use and development standards for an R-1-8 zone shall apply. Existing approved multi-family and two family uses may continue as permitted residential uses. Use and development standards for an RM-3 zone would apply.

B. *Accessory uses.* Permitted and conditional uses set forth in table 10-15-1 of this section shall be deemed to include accessory uses and activities that are necessarily and customarily associated with and incidental and subordinate to such uses.

1. Accessory uses shall be subject to the same regulations that apply to permitted and conditional uses in the same zone except as otherwise expressly provided in this title.
2. No accessory use, building, or structure shall be allowed on a lot unless a permitted or conditional use has been established.
3. Accessory uses in commercial zones shall include, but not be limited to, the following:

   Accessory dwelling units attached to a commercial permitted use structure or on the same lot and under same ownership as a permitted use structure.

   Accessory dwelling units for security and maintenance personnel.

   Cafeterias, dining halls and similar food service facilities when located within the main use and operated primarily for the convenience of employees, residents, clients, or visitors to the main use.

   Garages and off street parking areas, subject to applicable standards of chapter 34, off street parking and loading, of this title.

   Recreational areas and facilities for the use of employees.

   Recycling collection stations.

   Refreshment stands and food and beverage sales located in uses involving public assembly.

   Temporary uses, subject to applicable standards of chapter 48, temporary uses, of this title.

(Ord. 2012-8, 10-18-2012; Ord. 2016-11, 11-17-2016; Ord. 2017-14, 8-17-2017; Ord. No. 2021-05, 6-3-2021; Ord. No. 2022-12, 5-5-2022; Ord. No. 2024-06, 6-6-2024; Ord. No. 2024-12, 8-15-2024)

Sec. 10-15-4. Development standards.

Development standards within commercial zones shall be as set forth in table 10-15-2 of this section.

TABLE 10-15-2
DEVELOPMENT STANDARDS IN COMMERCIAL ZONES

Development standard	Zones				
	NC	GC	HC	PC	POC
Lot standards:					
Minimum lot area	No requirement	No requirement	No requirement	5 acres (see note 3)	5 acres
Minimum lot width	No requirement	No requirement	No requirement	No requirement	No requirement
Building standards:					
Maximum height, main building[1]	35 feet	35 feet	35 feet	55 feet	55 feet
Maximum height, accessory building	20 feet	20 feet	20 feet	20 feet	20 feet
Setback standards—front yard:					
All buildings[2]	20 feet	20 feet	20 feet	12 feet, corner lots 20 feet	20 feet
Setback standards—rear yard:					
Main building	New building on a lot abutting an existing agricultural or				

Accessory building	residential use: 10 feet. Otherwise: no requirement.				
Setback standards—interior side yard:					
Main building	New building on a lot abutting an existing agricultural or residential use: 10 feet. Otherwise: No requirement				
Accessory building					
Setback standards—street side yard:					
Main building	20 feet	20 feet	20 feet	20 feet	20 feet
Accessory building	Not permitted	Not permitted	Not permitted	Not permitted	Not permitted

Notes:

1. Except as otherwise permitted by subsection 10-15-7A of this chapter.
2. Except as modified by the provisions of subsection 10-37-12F, "Setback Measurement", of this title.
3. An area less than five acres may be zoned for planned commercial use if the City Council finds that the zoning meets the following:
    a. The zone change meets the standards within section 10-7-7 of this Code.
    b. The property is incorporated into an existing commercial or multi-family development, and the proposed change will further the purpose of the planned commercial zone.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. No. 2022-12, 5-5-2022)

Sec. 10-15-5. Regulations of general applicability.

The use and development of real property in commercial zones shall conform to regulations of general applicability as set forth in the following chapters of this title:

A. Design and compatibility standards: see chapter 33 of this title.

B. Landscaping and screening: see chapter 32 of this title.

C. Motor vehicle access: see chapter 35 of this title.

D. Natural resource inventory: see chapter 31 of this title.

E. Off street parking: see chapter 34 of this title.

F. Signs: see chapter 36 of this title.

G. Supplementary development standards: see chapter 37 of this title.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. No. 2022-12, 5-5-2022)

Sec. 10-15-6. Regulations for specific uses.

To the extent that use and development of real property includes any matter encompassed by a regulation for a specific use as set forth in division 6 of this title, such regulation shall apply in addition to the requirements of this chapter and shall prevail over any conflicting provision of this chapter.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. No. 2022-12, 5-5-2022)

Sec. 10-15-7. Special regulations.

A. *Increased height.* Notwithstanding the height limitations shown in section 10-15-4, table 10-15-2 of this chapter a greater building height may be allowed in a commercial zone for a commercial use pursuant to a conditional use permit.

B. *Use within an enclosed building.* Each use specified in section 10-15-3, table 10-15-1 of this chapter shall be conducted completely within a completely enclosed building, except for the parking of motor vehicles and services to persons therein.

C. *Dust, odor, smoke, noise, and vibration.* Each use specified in section 10-15-3, table 10-15-1 of this chapter shall be free from objectionable dust, odor, smoke, noise, and vibration.

D. *Highway commercial zone location.* For property abutting SR-9, the highway commercial zone shall begin at the highway right-of-way line and shall extend a distance of 500 feet from the state highway right-of-way line.

(Ord. 2014-13, 11-20-2014; Ord. 2020-12, 3-5-2020; Ord. No. 2022-12, 5-5-2022; Ord. No. 2023-15, 8-17-2023)

CHAPTER 51. TRANSIENT LODGING FACILITIES[1]

Sec. 10-51-1. Purpose.

The purpose of this chapter is to establish use and development regulations for transient lodging facilities to ensure their compatibility with adjoining uses, particularly when located in a residential zone.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-2. Definitions.

Terms and phrases used in this chapter are found in chapter 3 of this title.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-3. Management.

A. Each bed and breakfast inn, boarding house, hostel, hotel, or motel must maintain a management office on the premises at all times that is under the immediate supervision of a manager or attendant. The management office shall remain continuously open and staffed whenever guests are registered or present or when the facility is open to receive guests.

~~B. Short-term rental complexes must have management located within Hurricane City boundaries and be available at all times to respond to complaints or issues related to the complex. A phone number for management must be posted within each unit and be given to the City with the business license application. Management shall inform the City if the contact phone number is updated.~~

~~C~~B. Residential hosting facilities shall be managed by the resident owner and meet accessory dwelling unit standards in title 10, chapter 41 of this Code.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-4. Disclosure of available rooms.

Each transient lodging facility shall disclose to the business license officer the current number of rooms available and/or held out for public accommodation, or, in the case of short-term rentals, the total number of people the dwelling can safely accommodate:

1. At the time of initial licensure or license renewal; and
2. Within 72 hours of any change in the number of such available rooms or accommodation of guests.

---

[1]Editor's note(s)—Ord. No. 2022-62, adopted February 16, 2023, repealed ch. 51, §§ 10-51-1—10-51-5, and enacted a new ch. 51 as set out herein and later amended. Former ch. 51 pertained to bed and breakfast and residential hosting facilities and derived from Ord. 2015-12, adopted December 17, 2015; Ord. 2017-14, adopted August 17, 2017; Ord. 2018-04, adopted April 5, 2018; and Ord. No. 2022-10, adopted May 19, 2022.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-5. Display of license; guest register.

A. Business license required. No transient lodging facility shall be occupied or used until such time that the owner has obtained a business license in accordance with this section's provisions. A current, valid business license shall be posted in a conspicuous place in each transient lodging facility.

B. A register of all guests shall be kept at all times on the transient lodging facility premises, except for short-term rentals ~~or short-term rental complexes~~. The guest register shall contain in ink the following information about each guest for which the transient lodging facility affords accommodations:

   1. Name and permanent address.

   2. Dates of arrival at the transient lodging facility and departure from the transient lodging facility.

   3. License plate number, state of licensure, make, type, and color of all motor vehicles.

   4. Verification of a form of picture identification, including, but not limited to, driver's license, passport, or state issued identification card showing current name, address, and age of person registering and indicating which type of identification was verified and the identification number shown on said identification.

C. The guest register required by this section shall be kept current and shall be immediately available at all times for inspection upon the demand of police officers or City officials.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-6. Occupancy.

It shall be unlawful for any transient lodging facility unit to be occupied by a greater number of persons than that which it is designed or furnished to accommodate.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-7. Responsibility for minors.

No transient lodging facilities unit shall be rented, leased, or registered to any person under the age of 18 years. Each person to whom a lodging unit is rented, leased, or registered shall be responsible for any minors occupying such unit and shall remain on the transient lodging facility premises at all times while there are minors occupying such unit.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-8. Length of stay.

No person shall occupy any unit or combination of units at any one transient lodging facility for longer than 30 consecutive days, and no transient lodging facility shall permit any person to occupy any unit or combination of units on the facility premises for longer than 30 consecutive days. This section shall not apply to federal, state, or municipal law enforcement or emergency personnel, or to transient lodging facilities renting, leasing, or registering units to such personnel. Short-term rental properties within residential and recreation resort zones may be occupied for longer than 30 days but must still comply with all short-term rental regulations.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-9. Sanitary facilities.

A. Each unit within a transient lodging facility held out for public accommodation must comply with the minimum rules established by the state department of health.

B. It shall be unlawful to rent, lease, or otherwise hold out for public accommodation any transient lodging facility unit that does not have:

   1. A complete operable bathroom, including flush toilet, sink, and bath or shower in working order; and

   2. For each guest, an adequate daily supply of at least the following sanitary supplies:

      a. Hot and cold running water;

      b. Soap;

      c. Towels;

      d. Toilet paper; and

      e. Clean linen.

C. Each transient lodging facility shall be cleaned after the departure of each guest and before the arrival of any subsequent guest.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-10. Inspections.

Each transient lodging facility shall comply and cooperate with any fire, land use, code enforcement, building, health, or other inspection conducted by municipal officials, with or without notice. Each short-term rental unit shall be inspected by the Fire Marshal or their representative each year prior to the renewal of the business license for the short-term rental.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-11. Duty to report.

Any owner, manager, or attendant of any facility covered by this section shall report promptly to the proper authorities any violations of a municipal ordinance or any violation of law which he or she has reason to believe was or is being committed on the premises.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-12. General development and maintenance standards.

A. *Maintenance standards.* Any property that contains a dwelling which is licensed as transient lodging facilities shall conform to the following standards:

   1. Structures shall be properly maintained, painted and kept in good repair, and grounds and landscaped areas shall be properly maintained and watered in order that the use in no way detracts from the general appearance of the area;

2. For short-term rentals, the use of a dwelling as a short-term rental shall not in any way change the appearance of the dwelling or property for residential purposes; and

3. Each sleeping room must meet current international residential codes for egress and be equipped with smoke and CO2 detectors. A fire exiting route plan and maximum occupancy number must be posted in each sleeping room.

B. *Prevention of noise, nuisance, or trespass at short-term rentals.* The owner of any short-term rental shall be responsible to ensure that guests or occupants do not:

1. Create noises that by reason of time, nature, intensity, or duration are out of character with noises customarily heard in the surrounding residential neighborhood.

2. Disturb the peace of surrounding residential property residents by engaging in shouting, fighting, playing of loud music, racing of cars or recreational vehicles on streets, engaging in outside recreational activities after 10:00 p.m., or other similar activities.

3. Interfere with the privacy of surrounding residents or trespass onto surrounding properties.

4. Allow pets or animals to create noise, roam the streets, trespass on neighboring properties, or create a mess that is not cleaned up by the owner or custodian of the pet or animal.

5. Engage in any disorderly or illegal conduct, including illegal consumption of drugs and alcohol.

C. *Required posting.* The following information must be posted in a clear, concise, and unambiguous manner and in a conspicuous location inside any dwelling licensed as a short-term rental:

1. A copy of the short-term rental business license.

2. The name, address, and phone number of the owner or property manager.

3. The location of all fire extinguishers.

4. A list of all rules applicable for short-term rentals.

5. The maximum occupancy of the short-term rental and the maximum number of vehicles allowed.

D. *Miscellaneous rules and regulations.* The following rules and regulations shall apply to any property for which a transient lodging facilities license has been issued:

1. Outdoor pools, hot tubs, or spas shall not be used between the hours of 11:00 p.m. and 6:00 a.m.

2. Maximum occupancy in any dwelling licensed as a short-term rental shall be ten persons at any one time. If, however, the property has a fire sprinkler system or other fire suppression system acceptable to the Hurricane Valley Fire District, a greater occupancy may be approved. Maximum occupancy of the dwelling must be included in the regulations sign.

3. The owner of any property containing a dwelling licensed as a short-term rental shall cause to be displayed in a City approved location on the exterior of the property an approved sign containing the name and 24-hour per day, 365-day per year telephone number of the owner or other party designated by the owner as property manager who will be responsible for receiving and resolving complaints regarding activities on the property and the conduct of its occupants and guests. The sign shall not exceed 12 inches by 18 inches and shall be the only sign other than an address permitted on a short-term rental property.

4. The owner or property manager shall provide information on current occupants to police, emergency, or City personnel as requested. The owner or other person designated as the property manager shall respond to complaints and concerns within one hour of any phone call or other notification. Failure of the owner or property manager to respond in a timely manner may result in a violation and possible fines to the business license holder and property owner.

5. The requirements of this section shall be in effect throughout the time a short-term rental license is in effect on the property, regardless of whether the property is occupied by the owner, nonpaying guests of the owner, or paying guests of the owner. The City finds that, given the practical difficulty of determining whether or not the occupants are paying guests, enforcement of the requirements contained in this section shall be based on whether the property is licensed as a short-term rental.

6. An inspection of a short-term rental property for compliance with these regulations shall be performed prior to the issuance of a business license and shall be required each year before renewal of the business license. Additional inspections may be performed with 24-hour notice to the license holder/property manager if deemed necessary by the City.

7. The owner of any dwelling licensed as a short-term rental shall be required to collect and remit on a timely basis transient lodging taxes pursuant to Utah law.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-13. Whole home vacation rentals and other short-term rental standards.

A. *Purpose.* Regulations and restrictions imposed by this section are in recognition of the premise that short-term rentals provide lodging for a transient population that may or may not honor neighborhood mores or exhibit neighborly consideration to the same extent as permanent residents. The requirements listed in subsections D, E, and F of this section are based on a desire to maintain the overall residential character of neighborhoods and the purpose of single-family residential zones to promote safe locations for residential uses.

B. *Business license required.* No dwelling in any permitted zone shall be occupied or used as short-term rental until such time that the owner has obtained a business license issued in accordance with the provisions of this section.

C. *Conditions for issuance of a business license for a short-term rental.* Where a new short-term rental business is permitted, issuance of a short-term rental business license by the business license officer shall be subject to the following:

1. A complete application for a short-term rental business license shall have been submitted in accordance with section 3-1-5, and which shall also include:

   a. The name, address, and phone number of the owner or other person designated by the owner as the property manager who shall be responsible for ensuring compliance with the rules and regulations specified in this section, and

   b. A valid state tax number for remittance of transient lodging taxes.

2. The dwelling unit for which the business license is sought shall be located in a permitted zone according to this title, have been built to meet building and fire codes for transient occupancy, and have been issued a certificate of occupancy.

3. Portions of a single-family dwelling may not be used as a short-term rental unless located within a recreation resort zone or appropriately licensed as a residential hosting facility in accordance with the regulations for that use. A whole home vacation rental and a residential hosting facility located in a residential zone may not be located in the same single-family dwelling.

4. In permitted single-family zones, the owner of a single-family dwelling for which a short-term rental business license is sought shall not hold a business license to operate another short-term rental within the City limits. For purposes of this subsection, "owner" means any individual, corporation, partnership, limited liability company, trust or other entity which has a legal or equitable ownership

interest in the single-family dwelling, or any individual who has an ownership or beneficial interest in any corporation, partnership, limited liability company, trust, or other entity which has a legal or equitable ownership interest in the single-family dwelling.

D. *Prohibition of additional whole home vacation rental licenses within single-family zones as described in title 10, chapters 13 and 14 of this Code.*

1. From the effective date of this ordinance, no new or additional whole home vacation rentals shall be permitted or licensed within any single-family zones as described in title 10, chapters 13 and 14 of this Code.

2. Whole home vacation rentals with current, valid business licenses shall be permitted to continue to operate and to receive annual renewals of the business licenses, subject to the requirements and conditions of this section and all city, state, and federal rules, regulations, laws, and statutes.

3. In the event of a sale or other transfer of property for which the owner holds a current, valid business license to operate a whole home vacation rental, the purchaser or transferee of the property shall apply for a new license within 45 days of the date of purchase or transfer. If the purchaser or transferee fails to submit a complete business license application within 45 days of the date of purchase or transfer, or if the applicant fails to complete the licensing process within six months after submitting the application, the purchaser or transferee shall not be issued a whole home vacation rental business license.

4. The revocation or non-renewal of a whole home vacation rental business license pursuant to this Code shall terminate any rights of the license holder and property owner to operate a whole home vacation rental at the property.

E. *Parking regulations.* The following parking regulations apply to property licensed as a whole home vacation rental:

1. No tenant, guest, or other person visiting a whole home vacation rental shall park on a public street.

2. Off-street parking shall be provided on the same lot as the dwelling that is licensed as a whole home vacation rental.

3. Off-street parking shall be provided at one vehicle per bedroom. Tandem spaces on a driveway may be used.

4. No off-street parking space may be located in front of the living area of the dwelling unless there is a circular driveway.

5. The number of vehicles permitted for the occupants of a whole home vacation rental shall be restricted to the number of off-street parking spaces provided by the owner.

6. No tenant, guest, or other person visiting a whole home vacation rental shall park or allow to be parked recreational vehicles or trailers of any kind on the public street.

7. Owner shall supply a parking plan that complies with this section with the business license application.

F. *Transferee probation period and local management.*

1. *Transferee probation.* A new whole home vacation rental business license issued to a purchaser or transferee of a property pursuant to subsection (D)(3) of this section shall be subject to a six-month probation period, with the probation period beginning on the date the new license is issued. In the event of two or more violations of this section committed by an owner or guest, or any combination of the two, the City Planning Director shall revoke the license by issuing a written notice of revocation to the owner. The revocation of the license by the City Planning Director is an administrative decision that may be appealed to the City Appeals Board as set forth in section 10-6-5.

2. *Local management.* To ensure the proper and timely management of whole home vacation rentals, whole home vacation rental business licenses issued to a purchaser or transferee of a property pursuant to subsection (D)(3) of this section shall be managed by either:

    a. A property management company licensed by Hurricane City with a staffed office within city limits; or

    b. An owner who is a resident of Hurricane City.

(Ord. No. 2022-62, 2-16-2023; Ord. No. 2023-20, 12-7-2023)

Sec. 10-51-14. Residential hosting facilities.

A. *Conformity with standards and business license required*. No residential hosting facility shall be established unless:

1. The facility can meet the development standards of this chapter;

2. A business license has been issued in accordance with the regulations in title 3 of this Code;

3. Operation of a residential hosting facility without a current City business license is considered a violation and each day of operation shall be considered a separate offense.

B. *Development standards; residential hosting facilities*. The development standards set forth in this section shall apply to all residential hosting facilities.

1. *Location.* A residential hosting facility shall be located in a single-family residential structure deemed suitable for habitation.

2. *Number of accessory dwelling units (ADU)*. Only one ADU may be used as a residential hosting facility on any one lot, as those terms are defined in title 10, chapter 3 and chapter 41 of this Code.

3. *Accessory dwelling units*. The use of an ADU for a residential hosting facility shall be governed by this chapter, chapter 10-41, and other applicable chapters.

4. *Guestrooms.* Rentable guestrooms shall be limited to not more than four bedrooms in the entirety of one ADU. The total number of occupants, including an owner, owner's family, and guests occupying the home at one time shall be no more than ten. Maximum occupancy must be posted in each rentable guestroom.

5. *Number of bookings*. No more than one booking is allowed and no more than one party may occupy any residential hosting facility at any one time.

6. *Current codes.* Guestrooms must meet current international residential codes for egress and be provided with smoke and CO2 detectors. A fire exiting route plan must be posted in each sleeping guestroom.

7. *Meals.* If meals are offered, meals shall be served only to overnight guests.

8. *Landscaping.* Landscaping shall be provided and maintained to minimize impact on neighboring properties, to retain the residential character, and to provide a visual buffer for on-site parking in relation to adjacent properties and the street.

9. *Parking.* The following parking regulations apply to residential hosting facilities:

    a. Two off-street parking spaces shall be provided for the owner.

    b. One space shall be provided per guestroom.

    c. Off-street parking shall be provided on the same lot as the residential hosting facility.

d. Tandem parking is permitted for one space only. Spaces that are located directly in front of the garage doors may not be counted as off-street parking.

e. Off-street parking may not be provided within the front yard setback other than the existing driveway.

f. No tenant, guest, or other person visiting a residential hosting facility shall park on a public street.

g. The number of vehicles permitted for the occupants of a residential hosting facility shall be restricted to the number of off-street parking spaces provided by the owner.

h. No tenant, guest, or other person visiting a residential hosting facility shall park or allow to be parked recreational vehicles or trailers of any kind on the public street.

i. Owner shall supply a parking plan that complies with this section with the business license application.

9. *Signs.* Only one sign not larger than one foot by two foot in size may be used to advertise a residential hosting facility. The sign may not be illuminated unless by a single down facing low wattage fixture.

10. *Street standards.* A residential hosting facility shall be located on a street that meets fire code requirements.

11. *Structural modifications.* A valid building permit is required before any structural modifications or additions may be made to a building to be used pursuant to this chapter. A business license to operate a residential hosting facility shall not be issued for a property that was modified or added to without a valid building permit. A previously-issued business license shall be subject to revocation pursuant to title 3 of this Code upon evidence that the structure was modified or added to without a valid building permit. Provided, however, that a business license may be issued or maintained for a structure that was modified or constructed without a building permit if all applicable fines are paid and the Building Official is provided with adequate evidence to the satisfaction of the Official that the modification or construction was done in compliance with the building code and fire code.

12. *Other regulations.* A residential hosting facility is subject to all other applicable sections of this Code, including, but not limited to, building and fire codes, transient lodging facility regulations, and transient room tax requirements.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-15. Recreation resort units.

Recreation resort short-term rental units shall be subject to the provision of this chapter.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-16. Development standards; bed and breakfast inn.

A bed and breakfast inn may be established in any zone where allowed as a permitted or conditional use, and shall conform to applicable commercial construction codes, zoning requirements, state health department requirements, and the requirements of any other applicable codes and/or ordinances adopted by the City.

(Ord. No. 2022-62, 2-16-2023)

Sec. 10-51-17. Penalty; suspension or revocation of license.

A. Enforcement provisions.

1. Any owner of any dwelling within the City who allows or permits occupation of said dwelling as a short-term rental without having first obtained a business license in accordance with the provisions of this section shall be in violation of this section and shall be subject to a civil citation with a penalty of $750.00 per day as set forth in section 1-4-5 of this Code. A violator of this paragraph shall also be guilty of an infraction, which shall be punishable by a fine of up to $750.00 for each such violation.

2. Any owner of any dwelling within the City, who, having first obtained a business license for use or occupation of said dwelling as a short-term rental, thereafter operates or permits the operation of said short-term rental in violation of the terms and provisions of this section shall be subject to a civil citation with a penalty of $750.00 per day as set forth in section 1-4-5 of this Code. A violator of this paragraph shall also be guilty of an infraction and shall be punished by a fine of up to $750.00 for each such violation.

3. Any person who occupies a short-term rental as a guest and who violates any local ordinance or state law shall be subject to arrest, issuance of a citation, or other civil or criminal process in accordance with all state, federal or local statutes, rules, or ordinances.

4. Violation of any provision of this section regulating short-term rentals shall constitute a separate offense for each day said violation occurs or continues.

5. In the event of three or more violations of this section committed by an owner or guest, or any combination of the two, within any 12-month period, the City Planning Director is authorized to revoke the short-term business license by issuing a written notice of revocation to the owner. The revocation of a short-term business license by the City Planning Director is an administrative decision that may be appealed to the City Appeals Board as set forth in section 10-6-5.

6. In the event of a license being revoked for violations of this chapter, the owner of the property in question shall not be issued a new short-term rental business license for a period of one year, provided that a new license is otherwise permitted and available.

B. In addition to the denial, suspension, revocation, or refusal to renew a license as outlined in this chapter, any licensee who shall operate a transient lodging facility in violation of this chapter, and/or any person designated by the licensee as the manager or person in charge of daily operation of said facility who shall permit or allow said facility to operate in violation of this chapter, shall be guilty of an infraction and shall be punished for each offense by a fine as provided in section 1-4-1 of this Code.

(Ord. No. 2022-62, 2-16-2023; Ord. No. 2023-20, 12-7-2023)

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	LUCA24-06
Type of Application:	Land Use Code Amendment
Action Type:	Legislative
Applicant:	Hurricane City
Agent:	N/A
Request:	Amend Title 10, Chapter 28 with regards to rockfall zones
Recommendation:	Recommend approval to the City Council
Report Prepared By:	Gary Cupp

Update for 11/14/24:
On 10/24/24, the planning commission continued this item and requested that staff determine the corresponding level of geotechnical review for all rockfall hazard levels (i.e. High, Moderate, Low, None). Accordingly, staff has confirmed that the same level of professional geotechnical review is required for any proposed residential development in either a low, moderate, or high rockfall-hazard category. It should also be noted that the geotechnical review process also applies to other geologic hazards, such as earthquakes and earthquake ground shaking, liquefaction, floods, landslides, problem soil and rock, and shallow groundwater.

Recommendation for 11/14/24:
Staff recommends the Planning Commission consider the revised ordinance and make a recommendation of approval to the City Council.

Previous Discussion (10/24/24):
This is a "clean-up" ordinance to update city code to clarify what has been the practice of the City concerning development in geologic hazard zones. In 2014, the City adopted the Utah Geological Survey Rockfall Hazard Map to determine where professional reports should be required for development in possible rockfall zones. The practice of the city has been to require a detailed geologic report be prepared when a development is located within an identified rockfall zone to confirm the

location of the rockfall hazard zone in relation to a project. Staff believes this process works and is appropriate for developments in these areas of special concern; however, the ordinance does not clearly reflect that process, so it is proposed that the code be amended to clarify the requirement.

Recommendation: Staff recommends the Planning Commission consider the revised ordinance and make a recommendation of approval to the City Council.

CHAPTER 28. DEVELOPMENT IN AREAS OF SPECIAL CONSIDERATION

Sec. 10-28-1. Purpose.

To further the health, safety, and welfare of the inhabitants of the City and developers of project within the City, development in areas of special consideration shall be undertaken in accordance with the requirements of this chapter to minimize danger to persons and property and to ensure development of lasting value.

(Ord. 2014-6, 5-1-2014)

Sec. 10-28-2. Natural hazards and adverse construction conditions.

A. *Report required.*

1. A geotechnical report shall be prepared by a state licensed professional engineer who is trained and experienced in the practice of geotechnical engineering ~~a geologist licensed to practice in the state~~ whenever a proposed building permit in an area that has not been reviewed under this chapter or a development project is located on land which falls within any of the identified natural hazards or adverse construction conditions shown on the maps associated with the Geologic Hazards and Adverse Construction Conditions, St. George—Hurricane Metropolitan Area, Washington County, Utah, 2008, by William R. Lund, Tyler R. Knudsen, Garrett S. Vice, and Lucas M. Shaw, Special Study 127 Utah Geological Survey, a division of the Utah Department of Natural Resources.

B. *Report requirements.* The geotechnical report shall include the following:

1. *Conditions and features.* A general description of the topography, drainage conditions and surface vegetation. The report shall include surface features such as rock outcroppings, existing structures, debris, and unstable or wet conditions.

2. *Location map.* A location map showing the footprints of the planned improvements and the exploration locations with elevations.

3. *Subsurface condition evaluation.* An evaluation of the subsurface conditions, including a complete record of the explorations, laboratory test results, and the elevation of the water table, if encountered.

4. *Potential geotechnical constraints.* Identification of potential geotechnical constraints on the project site (such as expansive rock and soil, collapsible soil, shallow bedrock and caliche, gypsiferous rock and soil, potentially unstable rock or soil units, shallow groundwater, and windblown sand), and recommendations for their mitigation.

5. *Springs and seeps.* The locations of any springs and seeps on the project site, and recommendations concerning the effects of the springs and seeps on the proposed development.

6. *Geotechnical recommendations.* Specific geotechnical recommendations for the design and construction of the proposed project, which shall include the following:

a. A general assessment of the requirements needing to be met to develop the proposed site.

b. Site preparation and grading, and the suitability of the on site soils for use as structural fill.

c. Stable cut and fill slopes, including recommendations concerning the effects of material removal and the introduction of water, both on and off site.

d. Recommendations for foundation type and design criteria, including, but not limited to, bearing capacity of natural or compacted soils, provisions to mitigate the effects of expansive, compressible or collapsible soils, differential settlement and varying soil strength, and the effects of adjacent loads.

e. Anticipated total and differential settlement.

f. Special design and construction considerations, as necessary, such as the excavation and replacement of unsuitable materials, excavation difficulties, stabilization, or special foundation provisions for problem soil conditions.

g. Design criteria for restrained and unrestrained retaining walls.

h. Soil corrosion.

i. Moisture protection and surface drainage.

7. *Design recommendations for walls and fill slopes.* Detailed design recommendations for any planned rockery walls, mechanically stabilized earth (MSE) walls, and/or reinforced fill slopes.

8. *Slope stability analysis.* A detailed slope stability analysis may be required if potentially unstable rock or soil units or slope creep has been identified on the site. The analysis should include, but not be limited to, a determination of shear strength and in some instances residual shear strength, soil saturation, and treatment methods required to provide a minimum safety factor of 1.5 for any slope within the project boundary.

9. *Inspection and certification.* It is strongly recommended that the geotechnical firm for the project also provide inspection, testing, and verification services for all grading, foundations, pavement sections, retaining structures, utility line placement, and backfill and any other construction relating to geotechnical aspects of the development. For real property for which development has proceeded on the basis of a geologic or geotechnical report which has been accepted by the City, no final inspection of a subdivision or other improvements shall be completed or certificate of occupancy issued or performance bond released until the engineering geologist or geotechnical engineering firm who prepared and approved the report provides a letter of compliance, in writing, that the completed improvements and structures conform to the descriptions and requirements contained in said report including any approved revisions.

~~C~~10. *Geology report.* The Geologic Hazards and Adverse Construction Conditions, St. George—Hurricane Metropolitan Area Washington County, Utah document and maps prepared by the Utah Geological Survey (current edition) shall be reviewed when considering a site for development. A state licensed professional engineering geologist or a state licensed professional engineer who is trained and experienced in the practice of geotechnical engineering shall prepare the geology report. The geology report may be included in the geotechnical report, and shall include the following:

~~1~~a. The location and boundaries of the project site and its general geologic setting.

~~2~~b. A description of the specific geologic conditions at the site.

~~3~~c. Identification of potential geologic hazards (such as faults, landslides, rockfall, flooding and liquefaction).

~~4~~d. Conclusions and recommendations regarding the effects of the geologic conditions and any potential hazards on the proposed development, and recommendations to minimize any hazard to life or property, or any adverse impact on the natural environment.

~~D~~C. *Development standards.* The following minimum standards shall apply to minimize the effect of geologic hazards:

1. No structures shall be built on or within ten feet of any known fault line, or such ~~greater~~ distance as may be recommended by a licensed engineering geologist.

2. No structure or improvement shall be allowed on any area known to be within an active landslide area.

3. Problems associated with development on or near perched groundwater and shallow groundwater shall be mitigated.

4. No structure shall be allowed in any rockfall zone as determined by Utah Geological Survey Special Study 127 unless a site-specific study as outlined in subsections A and B above finds that the proposed structure is not located in a rockfall zone. The site-specific study may redefine the rockfall zone boundary. The adequacy, implementation, and acceptance of the site-specific study shall be determined by the City Engineer or designee. Platted developments must depict the rockfall zone boundary, as may be amended pursuant to this paragraph, on the recorded plat.

5. A waiver of liability shall be signed by the property owner and recorded with the county recorder in a form approved by the City Attorney, for any parcel where the geotechnical ~~geologist~~ report identifies the potential existence of any of the above hazards.

(Ord. 2014-6, 5-1-2014)

Sec. 10-28-3. Floodplains and streams.

A. *Floodplain study required.* Whenever a proposed building permit or development project is located within 200 feet of Frog Hollow Wash an engineering analysis shall be prepared which identifies the effect of the 100-year flood or floodway on the building or project site. This 100-year identification shall not be required when a flood study has previously been completed for the area by a licensed civil engineer, and when said study clearly identifies the 100-year flood elevations and floodway for the area and project site.

B. *Habitable floor elevation.* Building permits and development plans found to be located within a 100-year floodplain shall be conditioned to require the location of the ground floor of any building a minimum of one foot above the identified 100-year flood. Prior to issuance of final occupancy of any building, a certification shall be prepared by a licensed surveyor or civil engineer, providing the elevation of the lowest habitable floor, noting that the lowest habitable floor is at least one foot above the identified 100-year flood. No buildings shall be allowed within an identified floodway.

C. *Special flood hazard areas.* Development within a special flood hazard area or within 150 feet of a special flood hazard area without an identified floodway as identified on an official flood insurance rate map issued by the Federal Emergency Management Agency shall be required to meet all the requirements of chapter 40, flood damage prevention, of this title.

D. *Prohibited activities.* No person shall disturb, remove, fill, dredge, clear, destroy or alter any stream corridor or identified floodway, except as may be expressly allowed by a valid stream channel alteration permit issued by the state department of natural resources.

E. *Required setbacks.* Setbacks for any building, structure or improvement located within or adjacent to a stream corridor shall comply with the most restrictive setback requirements of either the zoning district in which it is located, the requirements of the state department of natural resources, or the requirements of the U.S. Army Corps of Engineers.

F. *Runoff controls.* All construction and development projects located adjacent to any stream corridor shall apply best management practices as may be required by a federal or state agency with jurisdiction.

G. *Management recommendations.* The City Council, Planning Commission, or Zoning Administrator, as applicable, may request recommendations from any federal, state, or local agencies, or other professionals, prior to deciding on an application required for any permit or approval.

(Ord. 2014-6, 5-1-2014)

Sec. 10-28-4. Wetlands.

A. *Applicant responsibility.* The applicant shall be responsible to contact the U.S. Army Corps of Engineers to determine if a project site contains any wetlands, and obtain necessary permits and meet permit specified requirements as may be necessary. A copy of the permit shall be provided to the Zoning Administrator prior to issuance of a notice to proceed.

(Ord. 2014-6, 5-1-2014)

Sec. 10-28-5. Important archaeological sites.

The intent of this requirement is to avoid the unnecessary or inadvertent disturbance of prehistoric or historic human remains and to preserve important archaeological site locations wherever possible. Density transfer and/or including the site in an open space set aside are encouraged as a way to avoid disturbance of important sites.

Location of known important archaeological sites is on file with the City Planning Department. Local landowners are likely aware of substantial sites on their land and should include these in the planning process for a parcel.

(Ord. 2014-6, 5-1-2014)

Hurricane City Application

Application Accepted Date:	09/16/2024
Type of Improvement:	Zone Change Application
Description:	We would like to build a duplex and a single famil
Bldg. Address:	259 N. Main Street
City:	Hurricane City
State:	UT
Zip:	84737
Subdivision:	
Phase:	
Block:	
Lot #:	
Parcel ID #:	H-212-C
Zone:	R1-10
Property Owner:	Interstate Homes, LLC
Permit Contact:	Amanda Pectol
P:(435) 635-2944	
Email:	team@myinterstatehome.com

CONTACT INFORMATION

General Contractor:	Interstate Homes, LLC
License #:	
P: (435) 635-2944	
Address:	52 S. 850 W. 202A
City:	Hurricane
State:	UT
Zip:	84737
Email:	team@myinterstatehome.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	500.00
Planning Fee	$	500.00
Sub Total:	**$**	**500.00**
Permit Total:	**$**	**500.00**
Amount Paid:	**$**	**500.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANZC24-09

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Amanda Pectol

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

INTERSTATE
HOMES

At Interstate Homes, we are aware of the housing-crisis facing our country, state, and local communities and the dire need for starter homes. We have made it a goal to do our part in solving this problem in our community.

We feel a natural first step in accomplishing this goal is to find property close to schools and jobs so we can develop and build affordable housing. That's what makes this property, 259 N Main St, ideal.

We are hopeful, with your blessing of a zone change, we can build 4 housing units on this property. We understand with the size of this lot and density allowance only 3 units would be permitted, however, we plan to deed-restrict the 4th unit to be classified as "affordable-housing", following the 80% AMI requirements and utilize the 15% density bonus. Our organization already has 8 units we rent out in Hurricane at an affordable rate, so we plan to utilize that experience on this project, which will continue the progress that the neighboring properties have already made in providing affordable housing in our developing downtown area.

We appreciate your consideration and look forward to working with you to solve this dire housing challenge.

Kind regards,

The Interstate Homes Team

Interstate Homes - 435.635.2944 - 52 S 850 W, 202A, Hurricane, UT 84737 - team@myinterstatehome.com

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	ZC24-09
Type of Application:	Zone Change
Action Type:	Legislative
Applicant:	Interstate Homes LLC
Agent:	
Request:	Approval of a Zone Change from R1-10 to RM-3.
Location:	259 N Main St
Zoning:	R1-10
General Plan Map:	Downtown
Recommendation:	Recommend approval to the City Council.
Report Prepared by:	Fred Resch III

Discussion:
The applicant is seeking a zone change from Single Family R1-10 to Multiple Family RM-3 on 0.26 acres. This property is currently vacant and is located along Main St. within Downtown Hurricane.

RM-3 zoning typically requires a full acre to be considered for a zone change; however, Hurricane City Code (HCC) 10-13-4 states: "*Minimum area shall not be required in downtown area as listed within the general plan map to allow for infill and redevelopment of the downtown area in order to accomplish goals within the City's general plan and supporting master plans.*" Thus, the request for RM-3 zoning on the 0.26-acre parcel is not subject to the 1-acre minimum.

Due to its small size, under RM-3 zoning only three units would typically be allowed on the property. Under the applicant's narrative they are proposing to use the affordable housing incentive located in Hurricane City Code Title 10 Chapter 52 to add an additional deed restricted unit for a total of four units. Unless the City would like to require a development agreement this narrative and site plan should not be considered binding.

	Zoning	Adjacent Land Use
North	R1-10	Single family homes
East	R1-10, RM-1	Single family homes
South	RM-2	Multifamily developments
West	R1-10	Single family homes

To change the zoning on any parcel of land within the City of Hurricane, the following questions need to be addressed:

10-7-7: ZONING MAP AND TEXT AMENDMENTS:

E. Approval Standards: A decision to amend the text of this title or the zoning map is a matter within the legislative discretion of the city council as described in subsection 10-7-5A of this chapter. In making an amendment, the following factors should be considered:

1. Whether the proposed amendment is consistent with goals, objectives and policies of the city's general plan;

2. Whether the proposed amendment is harmonious with the overall character of existing development in the vicinity of the subject property;

3. The extent to which the proposed amendment may adversely affect adjacent property; and

4. The adequacy of facilities and services intended to serve the subject property, including, but not limited to, roadways, parks and recreation facilities, police and fire protection, schools, stormwater drainage systems, water supplies, and wastewater and refuse collection.

1. Is the proposed amendment consistent with the City's General Plan's goals, objectives, and policies?

Response: The General Plan Map shows this area as a part of our Downtown. The 2021 General Plan defines the Downtown as follows:

Downtown
This land use is concentrated in Hurricane's historic downtown district. Desired uses downtown include retail, residential, dining, public, and entertainment. Development in this area should build on Hurricane's unique character and heritage, reusing existing buildings where possible. This area is held to a higher standard of design and strives to create a safe and inviting environment for pedestrians.

This property is located in the heart of downtown Hurricane in close vicinity to commercial and civic uses. The property is also a popular part of town that the city has desired to revitalize in the past. The General Plan calls on the city to "*protect and revitalize*" the historic downtown. New infill development bringing a variety of income levels and employment opportunities can be a way to revitalize downtown.

Some of the General Plan's Policies with regards to the historic downtown are:

Policy 3.2. Hurricane supports infill development and redevelopment in the Downtown.

Policy 3.4. Downtown Hurricane is intended to function as a mixed use village with effective pedestrian and bicycle connectivity to the surrounding neighborhoods.
Policy 3.5. Hurricane supports the development of unique shops, restaurants, professional offices, financial institutions in the Downtown, and supports additional residential options, including lofts, apartments, and townhouses.

The 2023 Downtown Master Plan encourages the City to: "*Provide zoning changes allowing a variety of residences in Downtown and surrounding area"* and "*[provide] a missing middle housing option"* This amendment would support this General Plan policy.

2. Is the proposed amendment harmonious with the overall character of existing development in the subject property's vicinity?

Response: There are already multifamily developments on this block and the block to the south, thus, this amendment will be harmonious with the character of the existing development.

3. Will the proposed amendment adversely affect the adjacent property?

Response: Adding four new units to a currently vacant property is unlikely to cause an adverse effect on adjacent property. The property has proper access to Main St. and is set back from Main St., which will further decrease any effect on the neighboring properties.

4. Are public facilities and services adequate to serve the subject property?

Response: Facilities and services are adequate for this development. JUC had no concerns about availability.

Other Considerations

Site Plan Design:
A preliminary site plan application will be required prior to site development if this zone change is approved. As noted under the JUC comments below, the shape of the property will necessitate an off-street parking lot/aisle. This property is a good location for "missing middle housing" or multifamily typologies that are similar in size and character to the adjacent single family homes.

JUC Comments:
Public Works: No comments.
Power: Power will need to be upgraded to current standards, an underground power line will need to be dug across the roadway with the transformer upgraded. All measures will be taken to assure the neighbors will keep current power or be placed underground to the home at the applicant's cost.
Water: If units are separate owners a water meter will be required for each unit.
Streets: Is access from Main St going to be adequate for future plans on the property?
Sewer: Ash Creek has no issue with the zone change. It should be noted that there is only 1 existing lateral stubbed to the property. Additional laterals may need to be installed depending on the nature of the project.
Engineering: The applicant should be able to secure or construct adequate facilities when they select a specific use. Existing utilities are in Main Street and the site's location near a public park and the middle school make it desirable for higher density. The applicant would benefit from reviewing HCC 10-34-8(B) which states, "Except for parking for a single- family or two-family dwelling and townhouses, access to a parking space or parking lot shall be from a parking lot aisle and not directly from a public street. Every parking lot shall have access to a public street."

Fire: Okay.
Fiber: No comments.
Gas: Enbridge Gas is okay with this. 12” main in Main St.

Findings:
Staff makes the following findings:

1. The application meets many of the standards within the General Plan and General Plan Map.
2. This zone change is harmonious with the overall surrounding development.
3. The proposed amendment will not have an adverse impact on the area, and only a limited number of units are proposed to be added.
4. Services are adequate to serve the property.

Recommendation: The Planning Commission should review this zone change application based on standards within the Hurricane City Code and consider any public comments received in the public hearing. Staff recommends that the Planning Commission send a recommendation of approval to the City Council subject to staff and JUC comments.

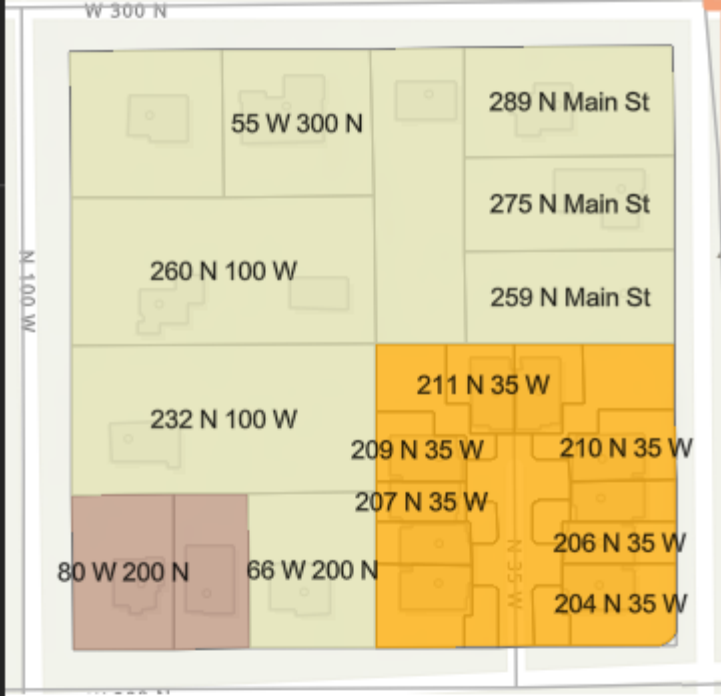
Municipal Boundary

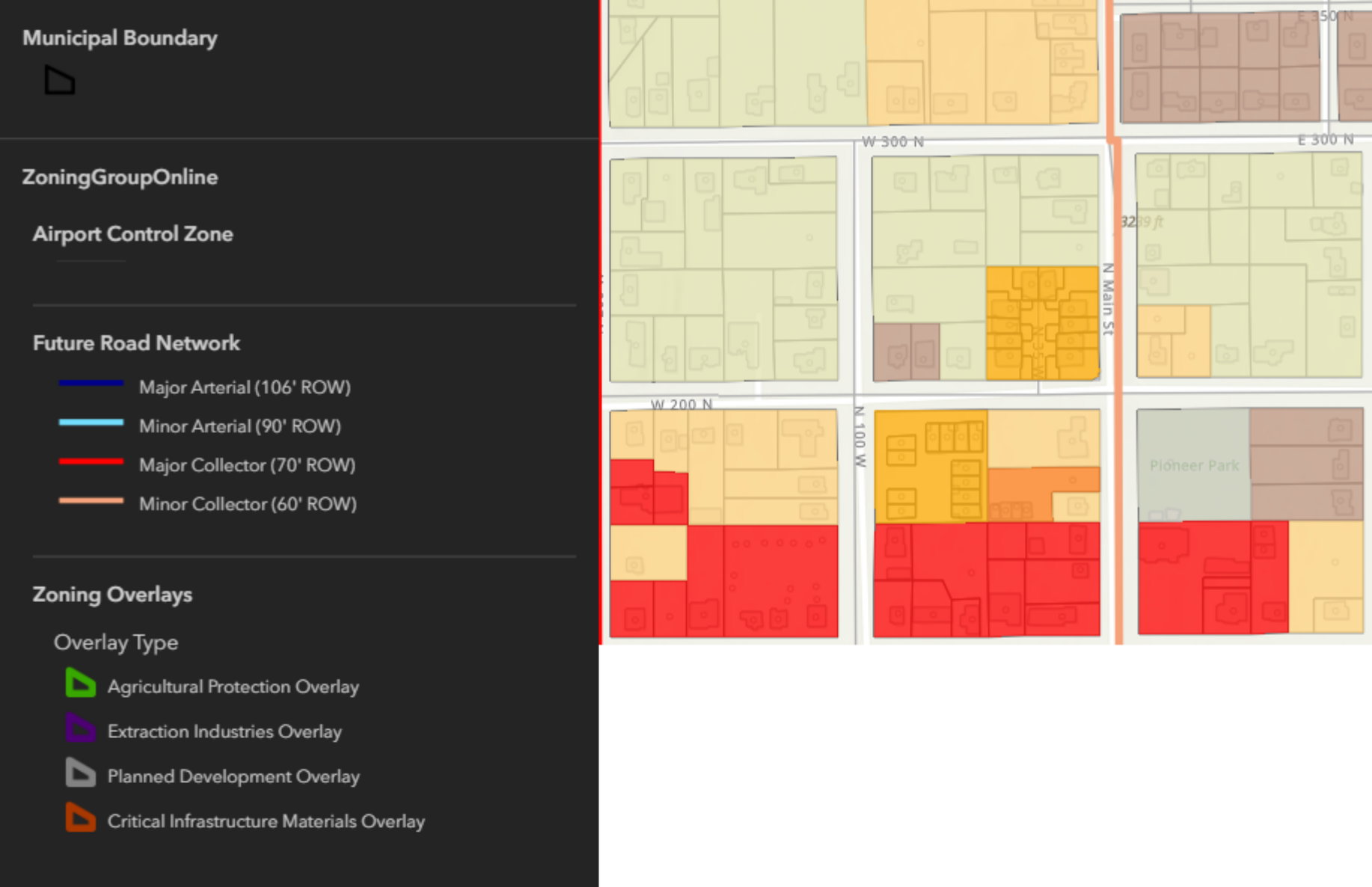
ZoningGroupOnline

Airport Control Zone

Future Road Network

- Major Arterial (106' ROW)
- Minor Arterial (90' ROW)
- Major Collector (70' ROW)
- Minor Collector (60' ROW)




Municipal Boundary
ZoningGroupOnline
Airport Control Zone
Future Road Network
Major Arterial (106' ROW)
Minor Arterial (90' ROW)
Major Collector (70' ROW)
Minor Collector (60' ROW)
Zoning Overlays
Overlay Type
Agricultural Protection Overlay
Extraction Industries Overlay
Planned Development Overlay
Critical Infrastructure Materials Overlay
W 300 N
E 300 N
N Main St
W 200 N
N 100 W
Pioneer Park

Zoning

Classification

- A-10: Agricultural - 1 Unit Per 10 Acres
- A-5: Agricultural - 1 Unit Per 5 Acres
- RR: Recreational Resort Zone
- OS: Open Space
- RA-1: Residential Agricultural - 1 Unit Per Acre
- RA-0.5: Residential Agricultural - 2 Units Per Acre
- R1-15: Residential - 1 Unit Per 15,000 Sq. Ft.
- R1-10: Residential - 1 Unit Per 10,000 Sq. Ft.
- R1-8: Residential - 1 Unit Per 8,000 Sq. Ft.
- R1-6: Residential - 1 Unit Per 6,000 Sq. Ft.
- RM-1: Multi-Family - 6 Units Per Acre
- RM-2: Multi-Family - 10 Units Per Acre
- RM-3: Multi-Family - 15 Units Per Acre
- MH/RV: Mobile Home - RV
- GC: General Commercial
- PC: Planned Commercial
- HC: Highway Commercial
- NC: Neighborhood Commercial
- BMP: Business/Manufacturing Park
- M-1: Light Industrial
- M-2: Heavy Industrial
- Public Facility

JOINT UTILITY COMMITTEE'S APPROVAL

HURRICANE CITY ENGINEERING DEPT

HURRICANE CITY WATER DEPT

HURRICANE CITY STREETS DEPT

HURRICANE CITY SEWER DEPT

HURRICANE CITY PARKS DEPT

HURRICANE CITY GIS DEPT

HURRICANE VALLEY FIRE DEPT

PHONE

T-MOBILE

GAS

WCWCD

HURRICANE CITY PLANNING DEP

IT DEPT. WORKS

ELECTRICAL LEGEND

1. [illegible]
2. INSTALL T-CON BOX AND 30 AMP, 1 METER
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]

SITE PLAN LEGEND

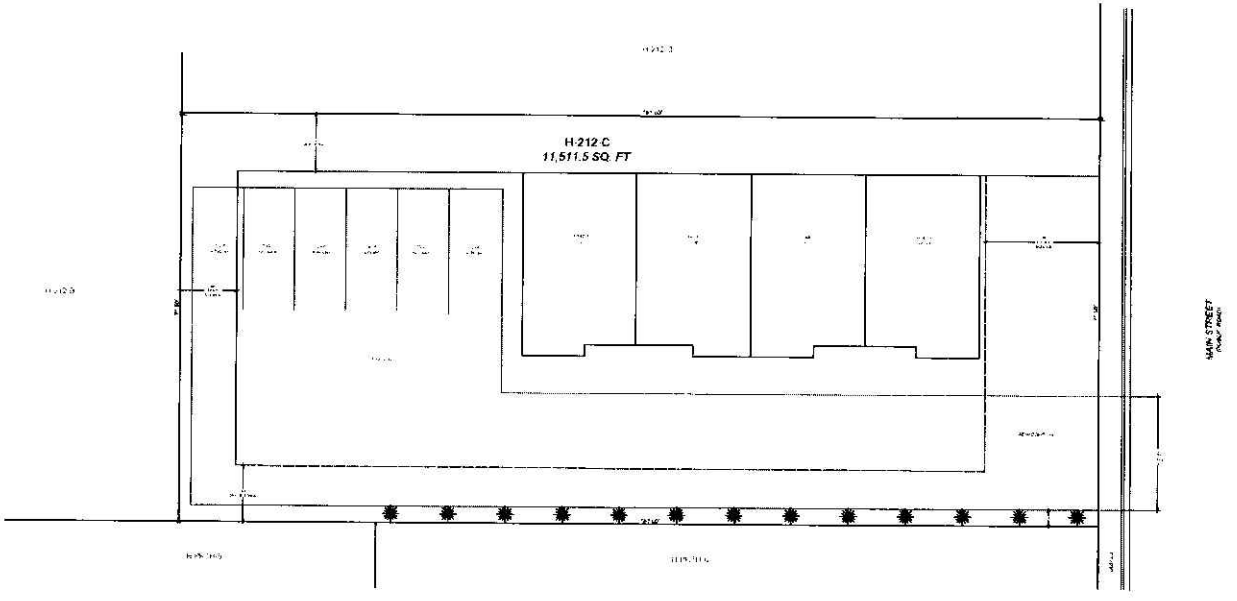
- LOT LINE
- [illegible]
- CENTERLINE
- STREET CENTERLINE
- [illegible]
- CLOSETS

UTILITIES LEGEND

- [illegible]
- [illegible]
- [illegible]
- ELECTRICAL PANEL
- [illegible]
- GAS METER
- FIRE HYDRANT LOCATION
- [illegible]
- [illegible]
- ELECTRICAL LINE
- [illegible]

NOTES:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. [illegible]
14. [illegible]
15. [illegible]
16. [illegible]
17. [illegible]
18. [illegible]
19. [illegible]



SITE PLAN

SCALE 1" = 10'

(SPACE RESERVED FOR APPLICABLE CONSTRUCTION DETAILS)

REVISIONS:

NO	DESCRIPTION	DATE

SAPP DESIGN & ENGINEERING

SHEET TITLE: SITE PLAN

PROJECT: INTERSTATE HOMES
259 N MAIN STREET
HURRICANE, UTAH

DATE: 9/30/2024

SCALE: 1" = 10'

SHEET: SP1

Hurricane City Application

Application Accepted Date: 09/26/2024

Type of Improvement: Zone Change Application

Description: Change to RA-.5

Tenant / Project Name: Jaymie Wetzel Barn

Bldg. Address: 1015 W 250 N

City: Hurricane City State: UT Zip: 84737

Subdivision: Phase:

Block: Lot #: Parcel ID #: H-3-1-34-4316

Zone: R1-10

Property Owner: Jaymie Wetzel

Permit Contact: Karl Rasmussen P:(435) 680-0816

Email: karl@pv-eng.com

CONTACT INFORMATION

Engineer of Record: Karl Rasmussen

Email: karl@pv-eng.com P: (435) 668-8307

General Contractor: Jaymie Wetzel

License #: P: (435) 467-3991

Address: 1015 W 250 N

City: Hurricane State: UT Zip: 84737

Email: jwetzel1122@hotmail.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	500.00
Planning Fee	$	500.00
Sub Total:	**$**	**500.00**
Permit Total:	**$**	**500.00**
Amount Paid:	**$**	**500.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANZC24-10

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Treasa Anderson

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

NARRATIVE

Jaymie Wetzel Property

- Jaymie Wetzel requests a Zone Change on the property located at 1015 W 250 N, Hurricane, UT. It is currently zoned A-10. It is requesting that it be changed to RA-0.5.

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	ZC24-10
Type of Application:	Zone Change
Action Type:	Legislative
Applicant:	Jaymie Wetzel
Agent:	Karl Rasmussen
Request:	Approval of a Zone Change from R1-10 to RA-0.5.
Location:	1015 W 250 N
Zoning:	R1-10
General Plan Map:	Planned Community
Recommendation:	Recommend approval to the City Council subject to staff and JUC comments.
Report Prepared by:	Fred Resch III/Gary Cupp

Discussion:
The applicant is seeking a zone change on 1015 W 250 N from Single Family R1-10 to Residential Agriculture RA-0.5 for the purpose of building a metal accessory dwelling unit of larger size and height than is allowed by R1-10 zoning standards. This property is located west of the City Office and is surrounded by property that is intended to be developed by the City as part of the City Center Master Plan. The property is 2.01 acres, for which the RA-0.5 zoning would allow potential for further subdivisions of the property.

	Zoning	Adjacent Land Use
North	R1-10	Single Family Homes, some agricultural use
East	R1-10, PF	Undeveloped property, single family homes, Hurricane City Office

South	R1-10	Undeveloped property (future Hurricane Civic Center)
West	R1-10	Single Family Homes, undeveloped property (future Hurricane Civic Center)

To change the zoning on any parcel of land within the City of Hurricane, the following questions need to be addressed:

10-7-7: ZONING MAP AND TEXT AMENDMENTS:

E. Approval Standards: A decision to amend the text of this title or the zoning map is a matter within the legislative discretion of the city council as described in subsection 10-7-5A of this chapter. In making an amendment, the following factors should be considered:

1. Whether the proposed amendment is consistent with goals, objectives and policies of the city's general plan;

2. Whether the proposed amendment is harmonious with the overall character of existing development in the vicinity of the subject property;

3. The extent to which the proposed amendment may adversely affect adjacent property; and

4. The adequacy of facilities and services intended to serve the subject property, including, but not limited to, roadways, parks and recreation facilities, police and fire protection, schools, stormwater drainage systems, water supplies, and wastewater and refuse collection.

1. Is the proposed amendment consistent with the goals, objectives, and policies of the City's General Plan?

Response: The General Plan Map shows this area as a Planned Community. The 2020 general plan states the following for the Single Family designation:

Master planned communities should be complete communities that offer a mixture of housing types and supporting uses such as neighborhood and supporting commercial uses, offices, churches, schools, and parks. Development in this designation should take into account the character of existing surrounding development.

Based on the description cited above, the proposed zone change to RA-0.5 does not strictly comply with the general plan designation of the site. However, the General Plan does allow for, and calls for, the City to preserve existing agriculture and *"work with landowners to provide regulatory agricultural protections where desired and feasible."* The existing use of the property does not appear to strictly be agricultural but the large, two-acre property is used in a way that is compatible with the nearby agricultural uses in the area.

2. Is the proposed amendment harmonious with the overall character of existing development in the subject property's vicinity?

Response: The surrounding properties are zoned either R1-10 or Public Facility and consist mostly of single-family homes or open fields. The proposed RA-0.5 zoning designation would be compatible with the current existing development in the vicinity, although it is important to note that as the City develops the Civic Center Master Plan, there will be less open land in this area, but the anticipated varied-use character of the civic center development will be harmonious and compatible with this proposal.

3. Will the proposed amendment adversely affect the adjacent property?

Response: The proposed zone change is compatible with the overall zoning of the area and sufficiently meets the intent, goals, and objectives of the general plan. Furthermore, the single-family nature of the development proposed for the site is harmonious with the existing development patterns in the surrounding neighborhood; therefore, this action will not adversely affect adjacent properties.

4. Are public facilities and services adequate to serve the subject property?

Response: See JUC comments below. Staff does not anticipate concerns about utility availability.

JUC Comments:

1. **Public Works:** No comments.
2. **Power:** No comments.
3. **Sewer:** 8" sewer line across the property.
4. **Streets:** Okay with zone change.
5. **Water:** Okay.
6. **Engineering:** Engineering asserts that the existing private right of way for the subject property is inadequate for a zone change. Public right of way must be extended by the neighboring property

owners for the applicant to provide themselves adequate facilities. Although the property touches a public street at a point, it does not front a public street.

7. **Fire:** Any additional homes will require an approved turnaround per 2021 IFC appendix D. 2. Any additional homes will require fire hydrants space no further than 250' from the home per 2021 IFC appendix C.
8. **Gas:** Okay with Enbridge Gas. If building anything additional please request a setback request.

Staff Comments:

1. The property is bordered on three sides by City-owned property intended to be developed as part of the Civic Center Master Plan. The plan intends that the civic center be influenced by the agricultural heritage of Hurricane, and the applicant's proposed plans to build a barn near their property line adjacent to the future City Hall would not conflict with the objectives of the master plan. The anticipated varied-use character of the master plan development will be harmonious with this proposal.
2. The current property under consideration does not currently have access from a public street. Hurricane City Code (HCC) 10-37-13 states that building permits shall not be issued for lots with access only on a private right-of-way. The Civic Center Master Plan contemplates the City will execute the long-planned connection of 250 N through to 1150 W. Staff believes it is prudent and good planning practice to require that the roadway frontage be required to be dedicated to the City at this time as a condition of approval for the requested zone change . To delay could hinder the development of the Civic Center and possibly incur additional expense that would be borne by the public.

Findings:

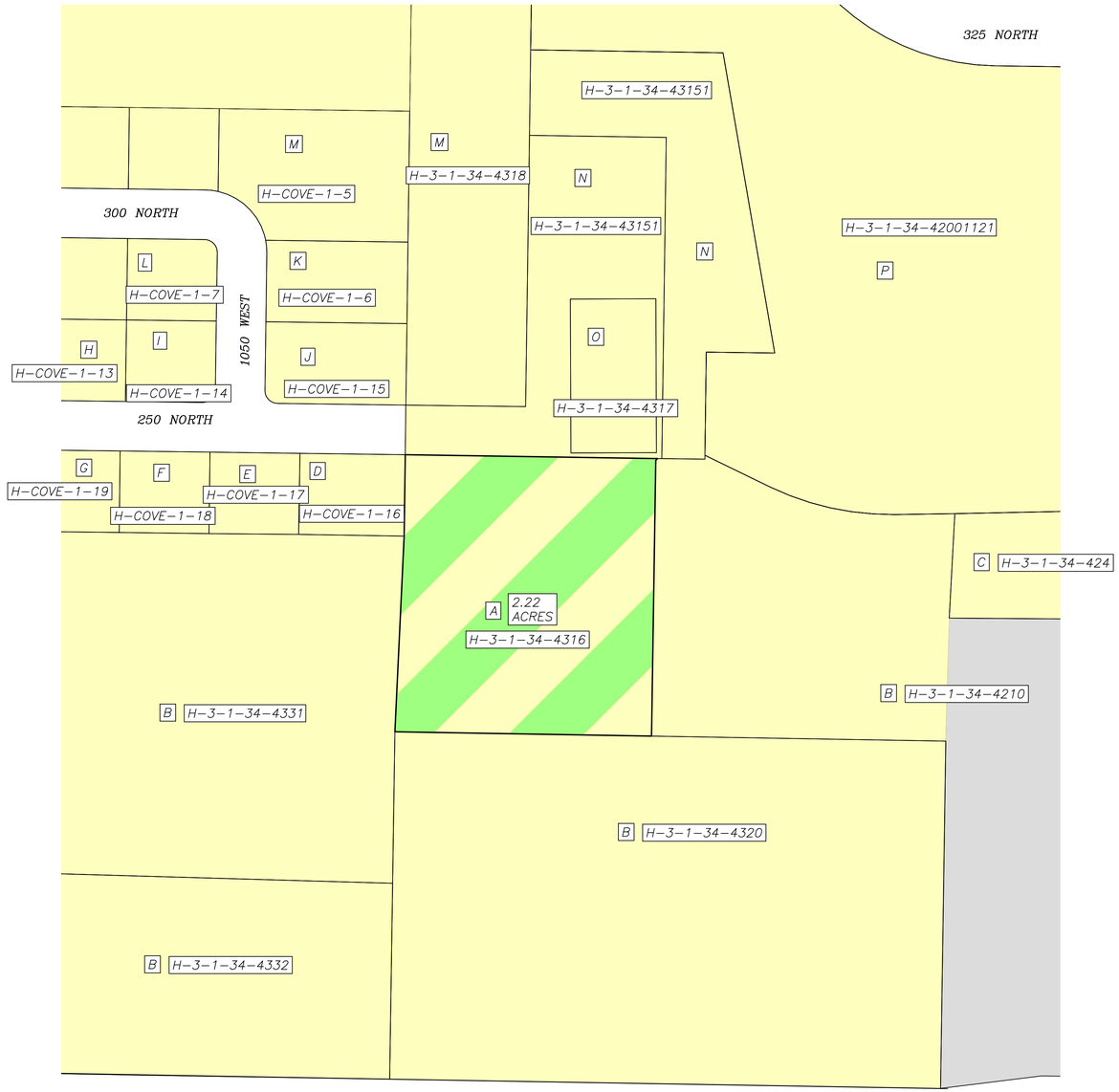
Staff makes the following findings:

1. The application meets the standards within the General Plan and General Plan Map.
2. Most of the surrounding development is large lot single family homes.
3. The proposed amendment will not have an adverse impact on the area.
4. Services are adequate to serve the area and proposed project, with the exception of proper access to a public street, which must be resolved as a condition of approval for this zone change.

Recommendation: The Planning Commission should review this zone change application based on standards within the Hurricane City Code and consider any public comments received in the public hearing. Staff recommends that the Planning Commission send a recommendation of approval to the City Council, subject to staff and JUC comments, and subject to right-of-way dedications to bring the property into compliance with City codes and standards.

ZONE CHANGE MAP FOR:
JAYMIE WETZEL

1015 W 250 N
HURRICANE CITY, WASHINGTON COUNTY, UTAH
PARCEL H-3-1-34-4316 2.22 ACRES



LEGEND

PROPERTY LINE

ADJACENT PROPERTY LINE

N
W E
S
80 0 80

R1-10: RESIDENTIAL – 1 UNIT PER 10,000 SQ. FT

PF: PUBLIC FACILITY

RA-10 TO RA-0.5:
ZONE CHANGE FROM RA-10: RESIDENTIAL – 1 UNIT PER 10,000 SQ. FT.
ZONE CHANGE INTO RA-0.5: RESIDENTIAL AGRICULTURAL – 1 UNIT PER ACRE

A-8TXL LLC, C/O: MATTHEW WETZEL
B-HURRICANE CITY
C-EXCELL MATTHEW W & ANGIE
D-BROUGH KEVIN
E-COLLARD JASON & KAMI
F-BAGLEY LAYNE
G-SHOUSE GARY & DONNA
H-PICKETT VICKY TR
I-BELKA RAYMOND JAMES & LINDA DIANE TRS
J-BARTON DAVID G
K-BROWN ROBERT GENE TR
L-WILSON TERRAL K
M-M & S RANCH LLC
N-HALL MAC J TR
O-HALL DARRELL M & SARAH KAY
P-VALLEY ACADEMY INC

H-3-1-34-4316 LEGAL DESCRIPTION

BEGINNING SOUTH 89°52'11" EAST, ALONG THE SOUTH LOT LINE, 660.49 FEET FROM THE SOUTHWEST CORNER OF LOT FIVE (5), BLOCK SIXTEEN (16), HURRICANE FIELD SURVEY, AND RUNNING THENCE SOUTH 0°02'22" WEST, 252.38 FEET; THENCE SOUTH 89°52'11" EAST, 300.00 FEET; THENCE NORTH 0°02'22" EAST, 322.34 FEET; THENCE SOUTH 90°00' WEST, 300.00 FEET; THENCE SOUTH 0°02'22" WEST, 69.28 FEET TO THE POINT OF BEGINNING.

COPYRIGHT © 2003 PROVALUE ENGINEERING INC.

NO	DESCRIPTION	DATE	BY
	REVISIONS		

PROVALUE ENGINEERING, INC.
ENGINEERS - LAND SURVEYORS - LAND PLANNERS
20 South 850 West, Suite 1
Hurricane City, Utah 84737
Phone: 435-668-8307

ZONE CHANGE MAP FOR:
JAYMIE WETZEL
1015 W 250 N
HURRICANE CITY, WASHINGTON COUNTY, UTAH

DATE	9/26/2024
SCALE	1"=80'
JOB NO.	738-001
SHEET NO:	1 OF 1

738-001 ZONE CHANGE DWG

Hurricane City Application

Application Accepted Date: 10/10/2024

Type of Improvement: Zone Change Application

Description: Proposed Zone Change from RA-1 to R1-15

Tenant / Project Name: CCH&N Holdings, LLC Zone Change

Bldg. Address: 1268 W 650 S

City: Hurricane City State: UT Zip: 84737

Subdivision: Phase:

Block: Lot #: Parcel ID #: H-3-2-4-1113

Zone: RA-1

Property Owner: CCH&N Holdings, LLC (Chris Weimholt)

Permit Contact: Daryl T. Brown P:(435) 586-3004

Email: daryl@wecinc.com

CONTACT INFORMATION

Engineer of Record: Tim Watson

Email: tim@wecinc.com P: (435) 586-3004

General Contractor: Daryl Brown

License #: 11864106 P: (435) 586-3004

Address: 472 N 2150 W, Suite 7

City: Cedar City State: UT Zip: 84721

Email: daryl@wecinc.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	500.00
Planning Fee	$	500.00
Sub Total:	**$**	**500.00**
Permit Total:	**$**	**500.00**
Amount Paid:	**$**	**500.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANZC24-11

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Daryl Brown

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #: 8.182685-10/10/24

DRAFT

WATSON
ENGINEERING COMPANY, INC.

Zone Change Narrative

PROJECT:	**CCH&N Holdings, LLC – Zone Change**	DATE:	**October 8, 2024**
	Portion of Lots 1, 8, 9, & 16, Blk 11, Hurricane Field Surv		
	1268 W 650 S, Hurricane City, Utah	WEC Project #:	24-7190

REMARKS:

A Zone Change from **RA-1** to **R1-15** is being proposed for Parcel H-3-2-4-1113, a 5 acre parcel, for the purpose of creating a future subdivision, including residential lots that will comply with the proposed zone. The subject parcel is located at 1268 W 650 S, and fronts on both 400 S & 650 S. The requested Zone Change matches the zoning for Westfield Estates Subdivision, a residential subdivision contiguous with the west boundary of the subject property. See the Zone Change Map for details.

472 North 2150 West, Suite #7 | Cedar City, Utah 84721
Office: 435.586.3004 Fax: 435.586.7480 Web: www.wecinc.com

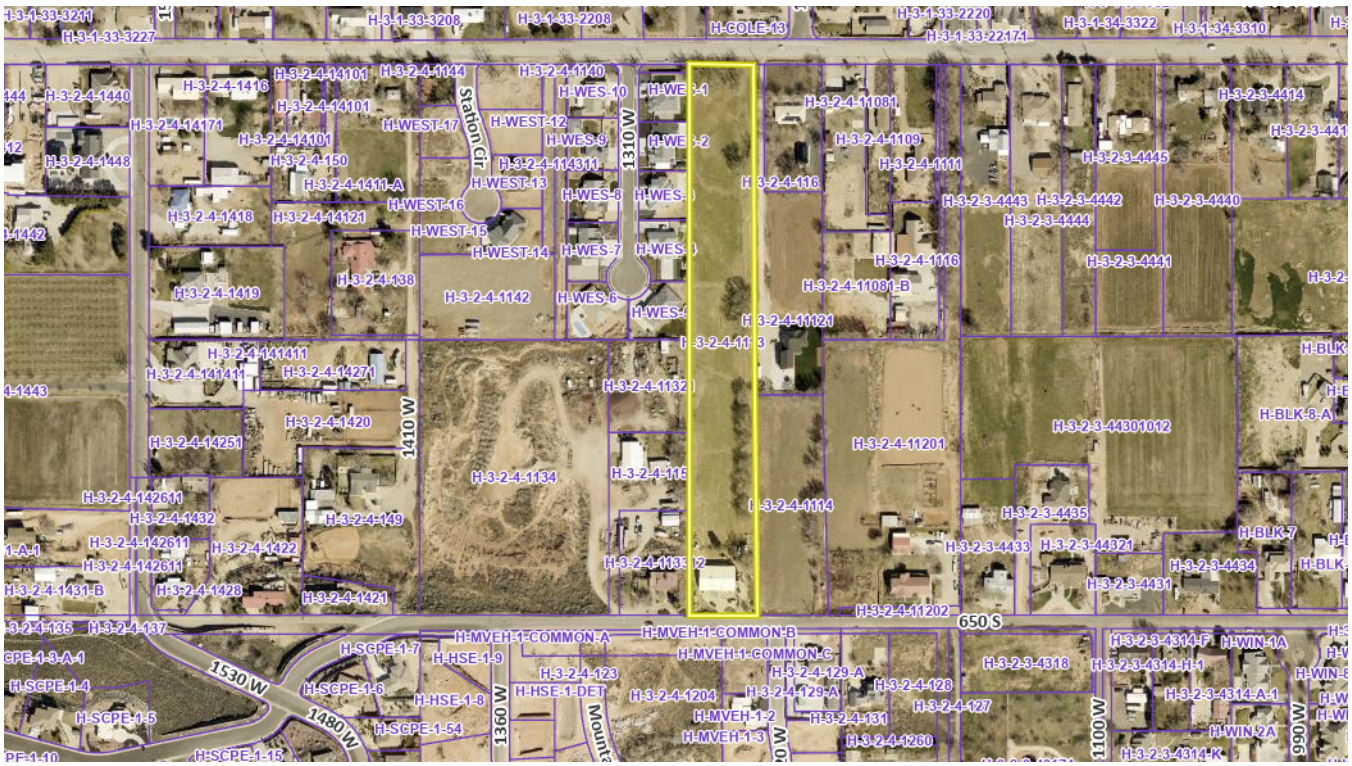
PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	ZC24-11
Type of Application:	Zone Change
Action Type:	Legislative
Applicant:	CCH&N Holdings LLC
Agent:	Daryl Brown
Request:	Approval of a Zone Change from RA-1 to R1-15.
Location:	1268 W 650 S
Zoning:	RA-1
General Plan Map:	Single Family
Recommendation:	Recommend approval to the City Council subject to staff and JUC comments.
Report Prepared by:	Fred Resch III/Gary Cupp

Discussion:
The applicant is seeking a zone change from Residential Agriculture RA-1 to Single Family R1-15 to allow for the purpose of building a residential subdivision. This is a long narrow property (approximately 170' by 1350') that stretches north-south between 400 S and 650 S. The property is 5 acres, and under normal R1-15 development approximately 11 lots can be expected; however, due to the narrow configuration of the property, fewer lots are more likely.

	Zoning	Adjacent Land Use
North	RA-1,	Single Family Homes, agricultural property
East	R1-15, RA-1	Single Family Homes
South	R1-10	Single Family Homes
West	RA-1	Single Family Homes, some agriculture



To change the zoning on any parcel of land within the City of Hurricane, the following questions need to be addressed:

10-7-7: ZONING MAP AND TEXT AMENDMENTS:

E. Approval Standards: A decision to amend the text of this title or the zoning map is a matter within the legislative discretion of the city council as described in subsection 10-7-5A of this chapter. In making an amendment, the following factors should be considered:

1. Whether the proposed amendment is consistent with goals, objectives and policies of the city's general plan;

2. Whether the proposed amendment is harmonious with the overall character of existing development in the vicinity of the subject property;

3. The extent to which the proposed amendment may adversely affect adjacent property; and

4. The adequacy of facilities and services intended to serve the subject property, including, but not limited to, roadways, parks and recreation facilities, police and fire protection, schools, stormwater drainage systems, water supplies, and wastewater and refuse collection.

1. Is the proposed amendment consistent with the City's General Plan's goals, objectives, and policies?

Response: The General Plan Map shows this area as a Single Family. The 2020 General Plan defines Single Family as follows:

These uses should be located near supporting community uses such as, but not limited to churches, schools, and parks. Appropriate densities for this land use include R1-15, R1-10, R1-8, and R1-6.

This proposed zone change complies with the General Plan Map. In fact, the current RA-1 zoning is inconsistent with the existing Single Family general plan designation of the site and, therefore, the requested zone change would bring the property's zoning into conformance with the general plan for this area. This area is also close to parks, schools, and churches as is also recommended by the general plan for this zoning designation.

2. Is the proposed amendment harmonious with the overall character of existing development in the subject property's vicinity?

Response: The proposed zone change will allow for single-family homes to be built on larger single-family lots. This is compatible with the existing surrounding development. The applicant's request is for the largest single-family zoning class outside of the agriculture and residential agriculture zones and, which would be harmonious with other properties in the vicinity.

3. Will the proposed amendment adversely affect the adjacent property?

Response: The proposed zone change is within the densities approved by the general plan for the area. R1-15 zoning would allow for up to 11 units on the property, although fewer units would be more feasible based on the site configuration. No development is proposed at this time, but any subdivision requests could be designed to provide additional connections between 400 S and 650 S which could benefit connectivity in the area.

4. Are public facilities and services adequate to serve the subject property?

Response: Power, water, and sewer are at or near the property and should be readily accessible. Some aspects of facility availability will be determined based on the design of the proposed subdivision. 650 S is not currently at its full build-out and may require upgrades and reconfiguration beyond the impact of this development.

JUC Comments:
These comments will need to be addressed

1. **Public Works:** Most utilities located in 400 S and 650 S although upgrades to existing utilities may be required for this property. Would need to make the appropriate improvements on 400 S as well as on 650 S. Additional property dedication may be required for 400 S and 650 S. Drainage study will be required. Should look at shared access with Lovell property.
2. **Power:** Requires an easement for the entire length of parcel. May be required to upgrade portions of the powerlines along either 400 S or 650 S to accommodate added load. Must fill out the power line extension application form. Must provide load calculations.
3. **Sewer:** 8" sewer main with easement running along east side of property. ASh Creek was under the assumption this would be a future road-is this still the plan.

4. **Streets:** Access for this type of zoning may create problems.
5. **Water:** Okay.
6. **Engineering:** The applicant must know that due to the narrowness of the property, Hurricane City development standards (namely access [see HCS section 3.2.2 & HCC 10-39-11]), and the location of existing utilities and nearby master planned roads, developing the subject property will likely require the neighbors' participation (regardless of its zone). Per Hurricane City maps, an 8" sanitary sewer crosses the property, overhead power is on 400 South and 650 South. The existing water main in 400 S is a 14" ductile iron pipe, and the water main in 650 S is just a 6" PVC pipe. Reconstruction of 650 South has recently been suggested by Hurricane City for prioritization. The owner can likely provide itself the necessary infrastructure and development of the property may provide Hurricane City the opportunity to partner in improving the adjacent roads.
7. **Fire:** Homes will be required to be within 250' of a fire hydrant. 2021 IFC appendix C 2. Any roadway over 150' will need an approved fire department turnaround. 2021 IFC appendix D.
8. **Gas:** Okay.
9. **Cable/Phone//WCWCD:** No comments.

Staff Comments:

1. As stated above, this is a long narrow piece of property, approximately 155’ by 1335’, which can make development of this property challenging under R1-15 development standards. R1-15 development standards include:

Average lot area 2	*15,000 sq. ft.*
Minimum lot area or acreage	*12,000 sq. ft.*
Minimum lot width and/or project frontage	*90 ft.*
Building standards:	
Maximum height, main building 3	*35 ft.*
Maximum height, accessory building 4	*16 ft.*
Maximum size, accessory building	*1,200 sq. ft.*
Building coverage:	*50% of lot*
Distance between buildings	*10 ft.*

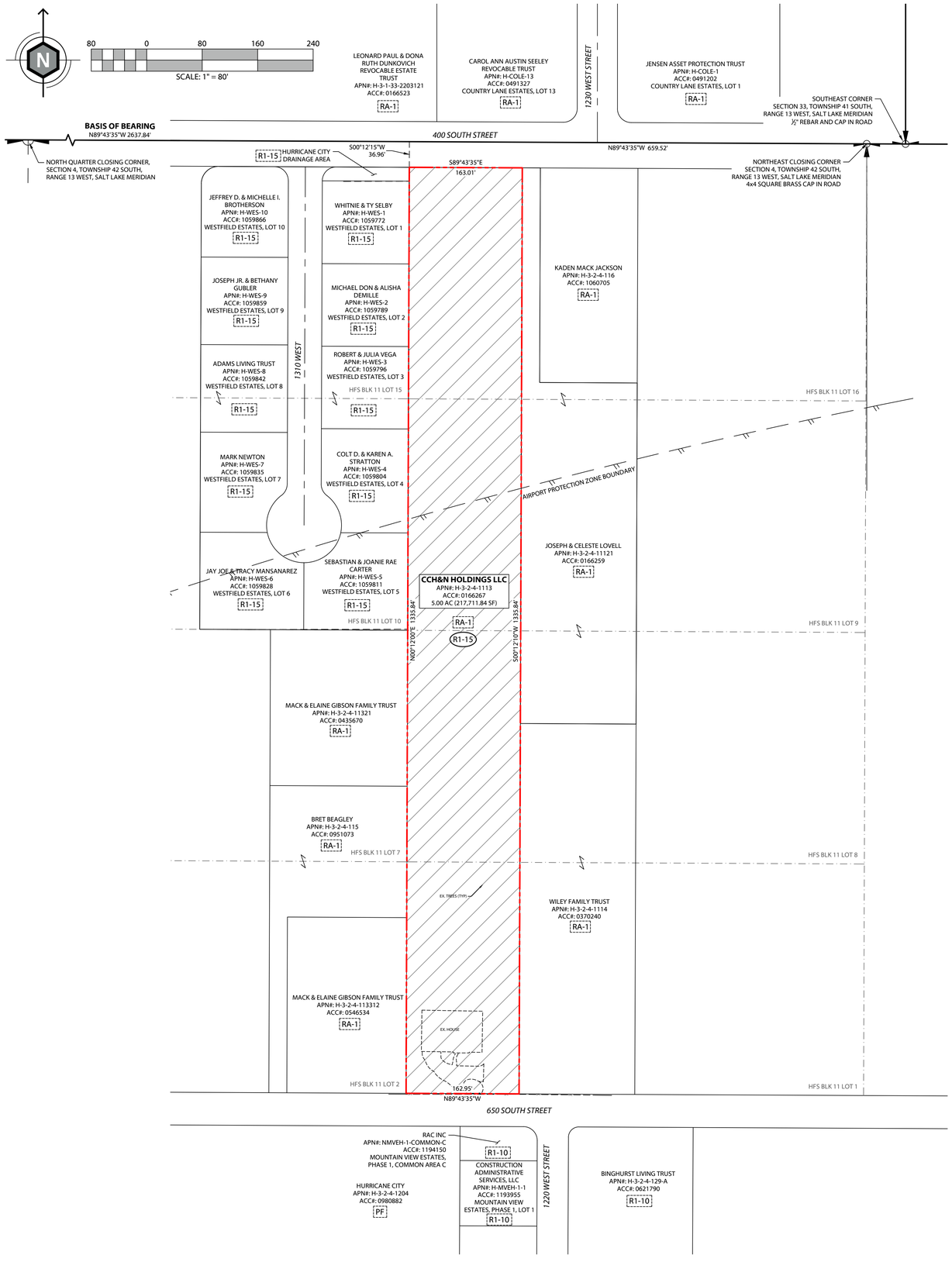
Setback standards—front yard:	
Any building 5	*25 ft.*
Setback standards—rear yard:	
Main building	*20 ft.*
Accessory building, including private garage 6	*See note 9*
Setback standards—interior side yard:	
Main building	*10 ft.*
Setback standards—street side yard:	
Main building 7	*20 ft.*

2. No preliminary layout has been provided and none is required at this stage. The standards above will need to be met with any proposed subdivision. Any future site development or subdivision proposals would have to meet all city standards, particularly those relating to access and road widths as highlighted by the city engineer.

Findings:
Staff makes the following findings:

1. The application meets the standards within the General Plan and General Plan Map by remedying an existing inconsistency between zoning and the General Plan, thus the zone change is desirable to correct this existing inconsistency. Even if the property is never developed, the zone change is nonetheless very desirable in that it will correct this inconsistency.
2. Any future site development or subdivision proposals would have to meet all city standards, particularly those relating to access and road widths as highlighted by the city engineer.
3. Most of the surrounding development is large lot single-family homes.
4. The proposed amendment will not adversely impact the area, due the limited number of units possible with the current lot configuration, which would mitigate any impacts.
5. Services are adequate to serve the area of the proposed project or can be provided in a timely manner.

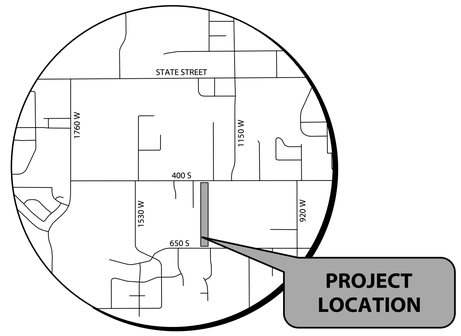
Recommendation: The Planning Commission should review this zone change application based on standards within the Hurricane City Code and consider any public comments received in the public hearing. Staff recommends that the Planning Commission send a recommendation of approval to the City Council subject to staff and JUC comments.



ZONE CHANGE

CCH&N HOLDINGS, LLC

PORTION OF LOTS 1, 8, 9, & 16, BLOCK 11, HURRICANE FIELD SURVEY
WITHIN THE NE ¼ OF SECTION 4, TOWNSHIP 42 SOUTH, RANGE 13 WEST, SALT LAKE MERIDIAN
HURRICANE CITY, WASHINGTON COUNTY, UTAH



VICINITY MAP

N.T.S.

LEGEND

- PROPERTY LINE
- SECTION LINE
- HURRICANE FIELD SURVEY LOT LINE
- HURRICANE AIRPORT PROTECTION ZONE BOUNDARY
- PROPOSED ZONE CHANGE BOUNDARY
- PROPOSED ZONE CHANGE AREA
- RA-1 EXISTING ZONE
- R1-15 PROPOSED ZONE

ABBERVATIONS

HFS HURRICANE FIELD SURVEY
BLK BLOCK

NOTES

1. REZONE ADDRESS: 1268 W 650 S, HURRICANE, UT
2. REZONE PARCELS
   2.1. CCH&N HOLDINGS LLC, 1268 W 650 S, HURRICANE, UT. APN# H-3-2-4-1113
3. REZONE LAND AREA: 5.00 ACRES
4. CURRENT ZONING CLASSIFICATION: RA-1, RESIDENTIAL-AGRICULTURE 1
5. PROPOSED ZONING CLASSIFICATION: R1-15, SINGLE-FAMILY RESIDENTIAL 15
6. THIS PROPERTY IS LOCATED IN THE VICINITY OF THE HURRICANE MUNICIPAL AIRPORT OR OTHER PUBLIC OR PRIVATE AIRPORT, IN WHICH NORMAL AVIATION USES AND ACTIVITIES EXIST.
   6.1. AIRPORT PROTECTION ZONE BOUNDARY LOCATION AS SHOWN HEREON.
7. THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO 650 SOUTH STREET AND 400 SOUTH STREET, (2) PUBLICLY DEDICATED STREETS.

ZONE CHANGE BOUNDARY DESCRIPTION

BEGINNING AT THE NORTHWEST CORNER OF LOT 16, BLOCK 11, HURRICANE FIELD SURVEY; SAID CORNER BEING N89°43'35"W 659.52 FEET ALONG THE SECTION LINE, AND S00°12'00"W 36.96 FEET FROM THE NORTHEAST CORNER OF SECTION 4, TOWNSHIP 42 SOUTH, RANGE 13 WEST, SALT LAKE MERIDIAN; THENCE ALONG THE NORTHERLY LINE OF SAID LOT S89°43'35"E 163.01 FEET; THENCE DEPARTING SAID LOT LINE S00°12'10"W 1335.84 FEET TO A POINT ON THE SOUTHERLY LINE OF LOT 1, SAID BLOCK 11; THENCE ALONG SAID LOT LINE N89°43'35"W 162.95 FEET TO THE SOUTHWEST CORNER OF SAID LOT 1; THENCE ALONG THE WESTERLY LINE OF SAID LOT N00°12'00"E 1335.84 FEET TO THE POINT-OF-BEGINNING (P.O.B.) CONTAINING 5.00 ACRES.

BASIS OF BEARING

THE BASIS OF BEARING IS N89°43'35"W FROM THE NORTHEAST CLOSING CORNER TO THE NORTH QUARTER CLOSING CORNER OF SECTION 4, TOWNSHIP 42 SOUTH, RANGE 13 WEST, SALT LAKE MERIDIAN.

SURVEYOR'S CERTIFICATE

I, DARYL T. BROWN, PROFESSIONAL LAND SURVEYOR No. 11864106, HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, DO HEREBY CERTIFY THE FOLLOWING:

1. THIS ZONE CHANGE PLAT, IN ACCORDANCE WITH SECTION 17-23-17, REPRESENTS THE RESULTS OF A SURVEY CONDUCTED BY MYSELF AND UNDER MY DIRECT SUPERVISION AT THE REQUEST OF MR. CHRIS WEIMHOLT.
2. THE LAND SURVEYED LIES IN HURRICANE CITY, UTAH, WHICH IS WITHIN A PORTION OF THE NW ¼ OF SECTION 4, TOWNSHIP 42 SOUTH, RANGE 13 WEST, SALT LAKE MERIDIAN, AND WAS COMPLETED SEPTEMBER 2024.
3. THE MONUMENTS SHOWN ON THIS MAP ARE OF THE CHARACTER SHOWN AND OCCUPYING THE POSITION INDICATED AND ARE OF SUFFICIENT NUMBER TO DEFINE THE SAID BOUNDARY.

DARYL T. BROWN, P.L.S.

October 1, 2024
DATE

PROFESSIONAL LAND SURVEYOR
10/01/2024
No. 11864106
DARYL TAFITI BROWN
STATE OF UTAH

NARRATIVE

THIS ZONE CHANGE PLAT COMPLETED AT THE REQUEST OF MR. CHRIS WEIMHOLT TO IDENTIFY THE SUBJECT REZONE BOUNDARY AS PART OF A PREVIOUSLY COMPLETED RECORD OF SURVEY FOR THE SUBJECT PROPERTY.

THE EAST-WEST LINES OF THE SUBJECT BLOCK 11 WERE ESTABLISHED BY PROPORTIONATE METHODS, AND THE NORTH-SOUTH LINES OF SAID BLOCK MATCH THE RECORD DISTANCES.

NO INVESTIGATION OR INDEPENDENT SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP, TITLE EVIDENCE, OR ANY OTHER FACTS WHICH AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

WATSON ENGINEERING COMPANY, INC.

472 N 2150 W, Suite 7
Cedar City, UT 84721

Tel. (435) 586-3004

www.wecinc.com

Copyright © 2024
Watson Engineering Co.

ZONE CHANGE
CCH&N HOLDINGS, LLC
PORTION OF LOTS 1, 8, 9, & 16, HURRICANE FIELD SURVEY
WITHIN SEC. 4, T. 42 S., R. 13 W., S.L.M.
HURRICANE CITY, WASHINGTON COUNTY, UTAH

DRAWN BY:
D. T. BROWN

CHECKED BY:
T. G. WATSON

DATE:
October 1, 2024

SCALE:
1:80

WATSON PROJECT No.:
24-7190

FILE:
WEIMHOLT - HURRICANE REZONE.DWG

Hurricane City Application

Application Accepted Date:	10/14/2024
Type of Improvement:	Subdivision (Final Plat Amendment)
Description:	Lot Line Adjustment between Lots 19 and 20
Bldg. Address:	557 South 1800 West
City:	Hurricane City
State:	UT
Zip:	84737
Subdivision:	Ridge at Zion Vista
Phase:	1B
Block:	
Lot #:	19 & 20
Parcel ID #:	H-RZV-1B-19, H-RZV-1B-20
Property Owner:	INTERSTATE HOMES LLC
Permit Contact:	Dannie Green
P:	(435) 669-8976
Email:	dgreen@psomas.com

CONTACT INFORMATION

Engineer of Record:	Stuart Adams
Email:	stuart.adams@psomas.com
P:	(801) 284-1361
General Contractor:	Dannie Green
License #:	
P:	(435) 669-8976
Address:	11456 South Temple Drive Suite 200
City:	South Jordan
State:	UT
Zip:	84095
Email:	dgreen@psomas.com

APPLICATION DETAILS

Valuation	$ 0.00

PERMIT FEES

Planning Fee	$ 150.00
Planning Fee	$ 150.00
Sub Total:	**$ 150.00**
Permit Total:	**$ 150.00**
Amount Paid:	**$ 150.00**
Remaining Due:	**$ 0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANAFP24-17

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Dannie Green

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #: 8.182753-10/14/24

DRAFT

PSOMAS

Balancing the Natural and Built Environment

October 10, 2024

Fred Resch III
City Planner
147 North 870 West, Hurricane UT 84737

Subject: Amended Plat – The Ridge at Zion Vista Phase 1B – Lots 19 and 20

Dear: Fred

The purpose of this amended plat is to adjust the Lot Line between Lots 19 and 20. This line was staked in the field based on a prior version of the Lot layout which does not match the recorded Subdivision Plat. The staked Lot Line has since been used to laying out a new home for the site

Sincerely,

PSOMAS

Dannie Green
Project Surveyor

11456 S. Temple Drive
Suite 200
South Jordan, UT 84095

Tel 801.270.5777
www.Psomas.com

PLANNING & ZONING
HURRICANE CITY
UTAH

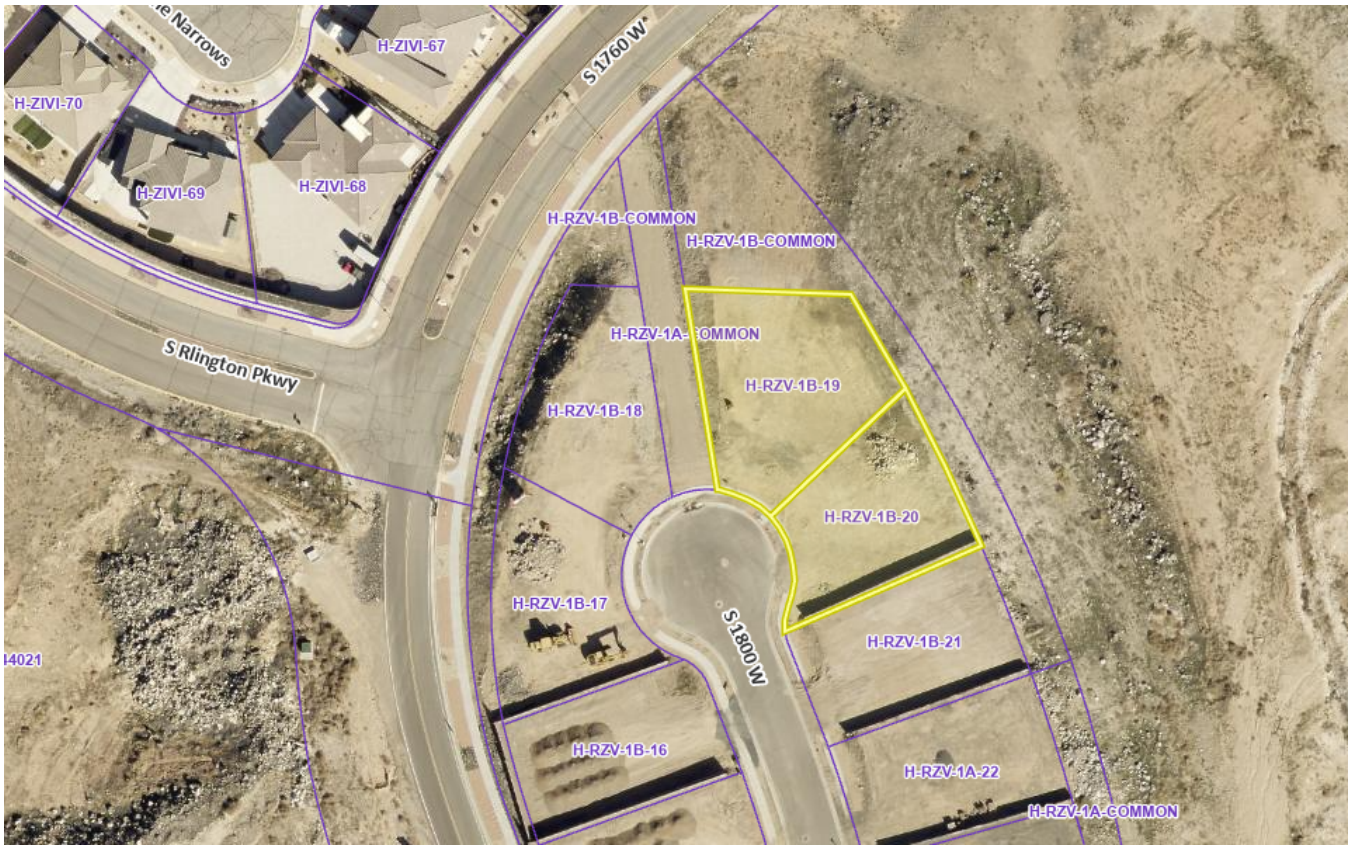
STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	AFP24-17
Type of Application:	Amended Final Plat
Action Type:	Administrative
Applicant:	Interstate Homes
Agent:	Dannie Green
Request:	Approval of an Amended Final Plat.
Location:	557 S 1800 W
Zoning:	R1-10 (PDO)
General Plan Map:	Planned Community
Recommendation:	Approve subject to staff and JUC comments.
Report Prepared by:	Fred Resch III

Discussion: The applicant has applied to amend the final plat for Ridge at Zion Vista Phase 1B to adjust the lot line between lots 19 & 20 due to a survey error. Any lot line adjustments in a recorded subdivision require approval of an amended final plat. The subject properties are zoned Single Family Residential R1-10 (PDO).

JUC Comments

1. **Public Works:** Need to make sure that the utilities for each lot stay with the appropriate lot and not end up on the other side of the lot line.
2. **Power:** No concerns.
3. **Water:** Okay. Make sure meters are located on lot to be serviced.
4. **Streets:** Okay with amendment.
5. **Sewer:** Each lot has an existing lateral. If the lot line adjustment causes a lateral to cross the lot line a new lateral will need to be installed.
6. **Engineering:** Engineering supports approving the intent of the amendment. Corrections must be made before the plat is printed, signed, and recorded. Please provide an updated plat to jeremy@hurricane.utah.gov after the amended final plat is approved by the Planning Commission. Additional comments provided to the applicant.
7. **Fire:** Approved.
8. **Fiber:** No comment.
9. **Gas:** Okay with gas.



Staff Comments

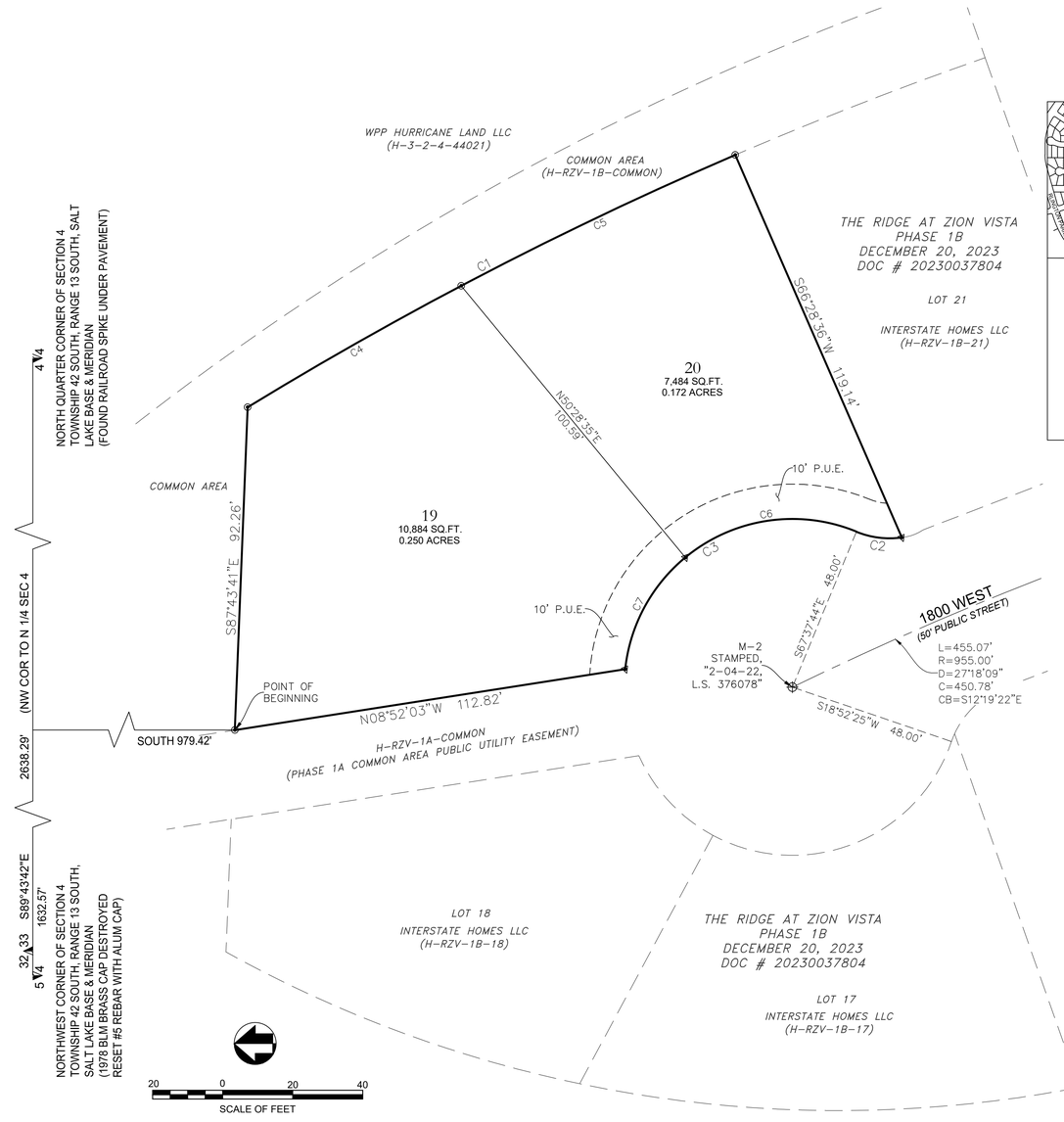
1. The plat meets all standards for amending final plats contained in Utah Code 10-9a-608, subdivision amendments, updated in 2023. The following are key requirements of the code:
    a. Depicts only the portion of the subdivision that is proposed to be amended.
    b. Includes a plat name distinguishing the amended plat from the original plat.
    c. Provides an amendment note referencing the original plat and describing the changes. The second sentence of this note can be removed.
2. The Final Plat needs a full review by the City Engineering Department for surveying details.

Findings: The proposal meets all the requirements of state and city codes relating to plat amendments.

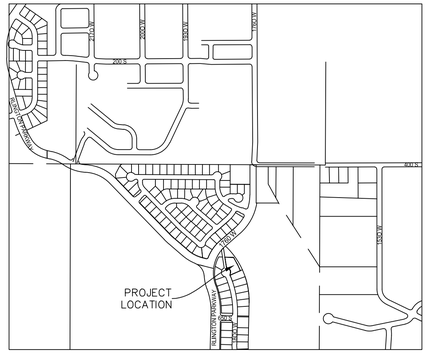
Recommendation: The Planning Commission should review this application based on standards within the Hurricane City Code and State Code. Staff recommends approval of this item subject to staff and JUC comments.

THE RIDGE AT ZION VISTA PHASE 1B
PARTIAL AMENDMENT A (LOTS 19 & 20)

Located in the Northwest 1/4 of Section 4
Township 42 South, Range 13 West,
Salt Lake Base & Meridian. Hurricane City, Utah



VICINITY MAP



Hurricane City Application

Application Accepted Date: 10/14/2024

Type of Improvement: Subdivision (Final Plat Amendment)

Description: Lot line adjustments for lots 1 & 2

Tenant / Project Name: Windsong Subivision

Bldg. Address: 335 W 1180 S

City: Hurricane City State: UT Zip: 84737

Subdivision: Windsong Subdivision Phase: 1

Block: Lot #: Parcel ID #: H-WNSG-1, H-WNSG-2

Zone: RA-0.5

Property Owner: Beau Davis

Permit Contact: Karl Rasmussen P:(435) 680-0816

Email: karl@pv-eng.com

CONTACT INFORMATION

Engineer of Record: Karl Rasmussen

Email: karl@pv-eng.com P: (435) 668-8307

General Contractor: Beau Davis

License #: P: (208) 403-9509

City: State: Zip:

Email: beaugdavis@gmail.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	150.00
Planning Fee	$	150.00
Sub Total:	**$**	**150.00**
Permit Total:	**$**	**150.00**
Amount Paid:	**$**	**150.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANAFP24-18

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Treasa Anderson

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

PLANNING & ZONING
HURRICANE CITY
UTAH

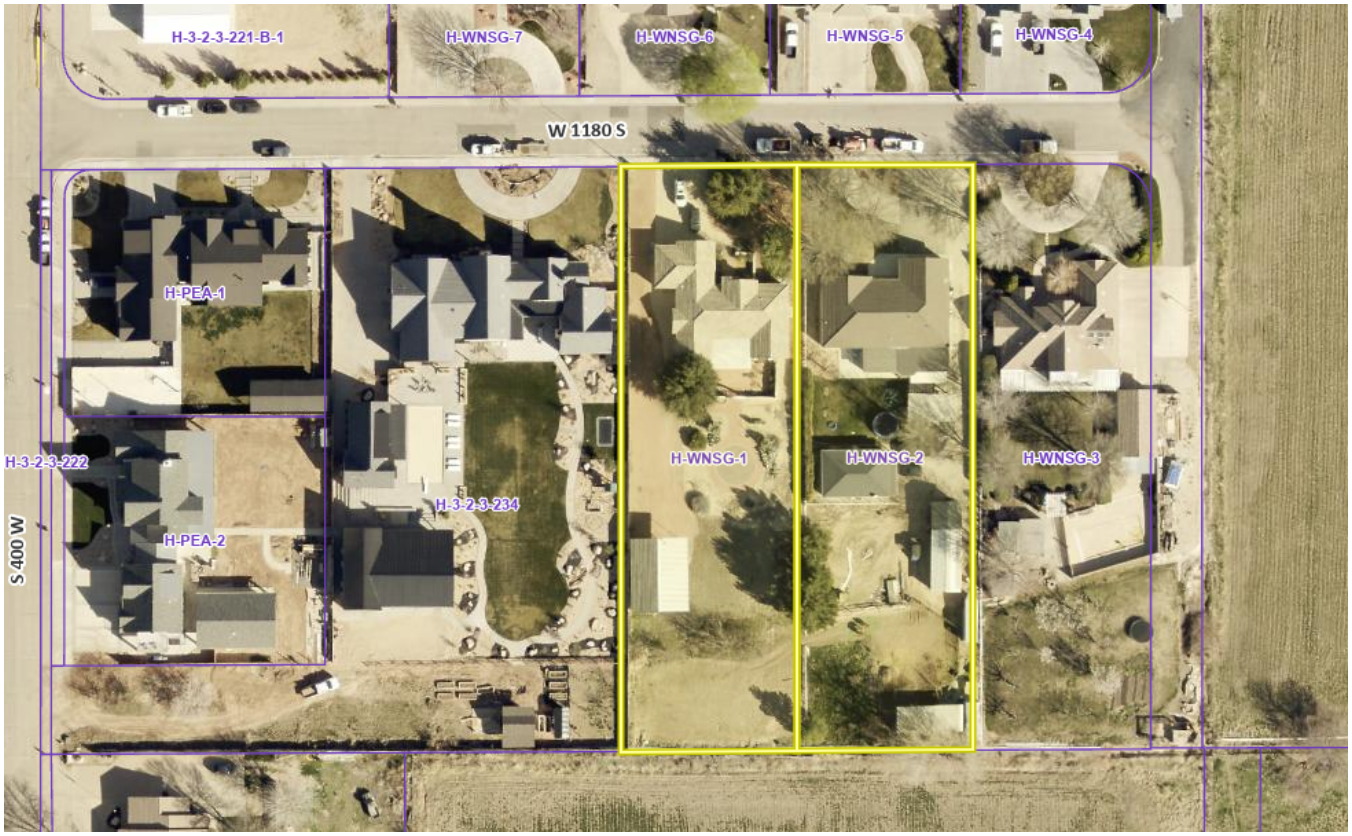
STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	AFP24-18
Type of Application:	Amended Final Plat
Action Type:	Administrative
Applicant:	Beau Davis
Agent:	Karl Rasmussen
Request:	Approval of an Amended Final Plat.
Location:	335 W 1180 S
Zoning:	RA-0.5
General Plan Map:	Single Family
Recommendation:	Approve subject to staff and JUC comments.
Report Prepared by:	Fred Resch III

Discussion: The applicant has applied to amend the final plat for the Windsong subdivision to grant a portion of Lot 1 to Lot 2. Any lot line adjustments in a recorded subdivision require approval of an amended final plat. The subject properties are zoned Residential Agriculture RA-0.5.

JUC Comments

1. **Public Works:** Public Works has no comments.
2. **Power:** No concerns.
3. **Water:** Okay.
4. **Streets:** Okay with amendment.
5. **Sewer:** No comments.
6. **Engineering:** Engineering supports a lot line adjustment.Encourage the Planning Commission to approve the Amended Final Plat and tell the applicant to get me an updated final plat to review before it's printed, signed, and recorded.
7. **Fire:** 1. Any new home will need to be within 250' of a fire hydrant. 2021 IFC appendix C. 2. Any road that is over 150' will require a fire department approved turnaround. 2021 IFC appendix D.
8. **Fiber:** No comment.
9. **Gas:** Okay with gas.



Staff Comments

1. The plat meets all standards for amending final plats contained in Utah Code 10-9a-608, subdivision amendments, updated in 2023. The following are key requirements of the code:
    a. Depicts only the portion of the subdivision that is proposed to be amended.
    b. Includes a plat name distinguishing the amended plat from the original plat.
    c. An amendment note referencing the original plat and describing the changes needs to be provided.
2. The Final Plat needs a full review by the City Engineering Department for surveying details.

Recommendation: The Planning Commission should review this application based on standards within the Hurricane City Code and State Code. Staff recommends approval of this item subject to staff and JUC comments.

Windsong Subdivision Partial Amendment A (Lots 1 & 2): Parcels, H-WNSG-1, H-WNSG-2, is currently owned by B&T Ventures LLC (Lot 1); Richard S & Marnae K Holmes (Lot 2). Plans are to adjust lot lines.

FINAL PLAT FOR:
WINDSONG SUBDIVISION
PARTIAL AMENDMENT A

LOCATED IN SECTION 3, T42S, R13W, S.L.B.&M.
HURRICANE CITY, WASHINGTON COUNTY, UTAH

BASIS OF BEARINGS

THE BASIS OF BEARINGS IS S89°50'19"E 2640.52 FEET FROM THE SOUTH QUARTER (1/4) CORNER TO THE SOUTHEAST CORNER OF SECTION 3, TOWNSHIP 42 SOUTH, RANGE 13 WEST, OF THE SALT LAKE BASE AND MERIDIAN.

SURVEYOR'S CERTIFICATE

I, CHAD J. HILL, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NO. 7837685, IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNER, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED HEREON, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND EASEMENTS, HEREAFTER TO BE KNOWN AS WINDSONG SUBDIVISION PARTIAL AMENDMENT A, AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AND WILL BE MONUMENTED ON THE GROUND AS SHOWN ON THIS PLAT.

CHAD J. HILL, P.L.S. #7837685

PROFESSIONAL LAND SURVEYOR — CHAD J. HILL — 7837685-2201 — STATE OF UTAH

10/24/2024
DATE

WINDSONG SUBDIVISION PARTIAL AMENDMENT A BOUNDARY DESCRIPTION

BEGINNING AT THE SOUTHWEST CORNER OF LOT 6, BLOCK 8, HURRICANE FIELD SURVEY; THENCE ALONG THE WESTERLY LINE OF SAID LOT 6, N00°14'38"E 331.06 FEET TO THE SOUTHERN BOUNDARY OF 1180 SOUTH; THENCE ALONG SAID BOUNDARY, N89°52'50"E 200.00 FEET; THENCE S00°14'38"W 331.36 FEET TO THE SOUTHERLY LINE OF SAID LOT 6; THENCE ALONG SAID LINE, S89°58'01"W 200.00 FEET TO THE POINT OF BEGINNING.

AREA CONTAINS 66,239 SQ. FT. OR 1.520 ACRES.

LIMITED LIABILITY ACKNOWLEDGEMENT

STATE OF UTAH
COUNTY OF WASHINGTON } S.S.

ON THIS THE _____ DAY OF _____, 20_____, PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR SAID STATE AND COUNTY, BEAU DAVIS, WHO BEING BY ME DULY SWORN, DID SAY THAT HE IS THE MANAGING MEMBER OF B & T VENTURES, LLC, A UTAH LIMITED LIABILITY COMPANY, AND THAT HE EXECUTED THE FOREGOING OWNERS' DEDICATION ON BEHALF OF SAID LIMITED LIABILITY COMPANY BEING AUTHORIZED AND EMPOWERED TO DO SO BY THE OPERATING AGREEMENT OF B & T VENTURES, LLC, AND HE DID DULY ACKNOWLEDGE TO ME THAT SUCH LIMITED LIABILITY COMPANY EXECUTED THE SAME FOR THE USES AND PURPOSES STATED THEREIN.

RESIDING IN _____ COUNTY, UTAH

_____
NOTARY PUBLIC

NOTARY PUBLIC FULL NAME: _____

MY COMMISSION EXPIRES: _____

COMMISSION NUMBER: _____

A NOTARY PUBLIC COMMISSIONED IN UTAH STAMP IS NOT REQUIRED PER UTAH CODE 46-1-16(6)

INDIVIDUAL ACKNOWLEDGEMENT

STATE OF UTAH
COUNTY OF WASHINGTON } S.S.

ON THIS THE _____ DAY OF _____, 20_____, PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR SAID STATE AND COUNTY, RICHARD S HOLMES AND MARNAE K HOLMES, AS JOINT TENANTS, WHO BEING BY ME DULY SWORN, DID PROVE ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSONS NAMED IN THIS DOCUMENT, AND THAT THEY EXECUTED THE FOREGOING OWNERS' DEDICATION.

RESIDING IN _____ COUNTY, UTAH

_____
NOTARY PUBLIC

NOTARY PUBLIC FULL NAME: _____

MY COMMISSION EXPIRES: _____

COMMISSION NUMBER: _____

A NOTARY PUBLIC COMMISSIONED IN UTAH STAMP IS NOT REQUIRED PER UTAH CODE 46-1-16(6)

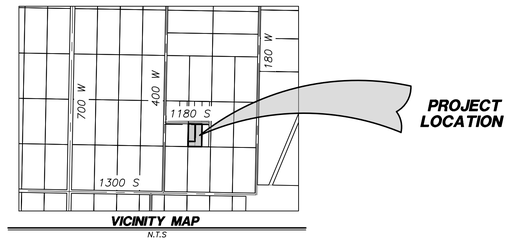
GENERAL NOTES

1. THERE IS A 7.5' UTILITY EASEMENT ALONG ALL SIDE & REAR LOT LINES AND 10.0' UTILITY EASEMENT ALONG ALL FRONT LOT LINES, EXCEPT AS OTHERWISE NOTED.
2. ALL RECORD BEARINGS, DISTANCES, AND NOTES REFER TO THE WINDSONG SUBDIVISION PLAT ON RECORD AT THE WASHINGTON COUNTRY RECORDERS OFFICE AS ENTRY NUMBER: 00738836

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- ORIGINAL PROPERTY LINE
- EXISTING BUILDING LINE
- CENTER LINE
- PUBLIC UTILITY EASEMENT (P.U.E.) / UTILITY EASEMENT LINE
- SECTION MONUMENT AS DESCRIBED
- SET PROVALUE ENGINEERING REBAR & CAP P.L.S. #7837685
- FOUND REBAR & CAP/ P.K. NAIL AS DESCRIBED
- CENTERLINE MONUMENT AS DESCRIBED

DAVIS BEAU
H-3-2-3-234



PROJECT LOCATION

VICINITY MAP
N.T.S

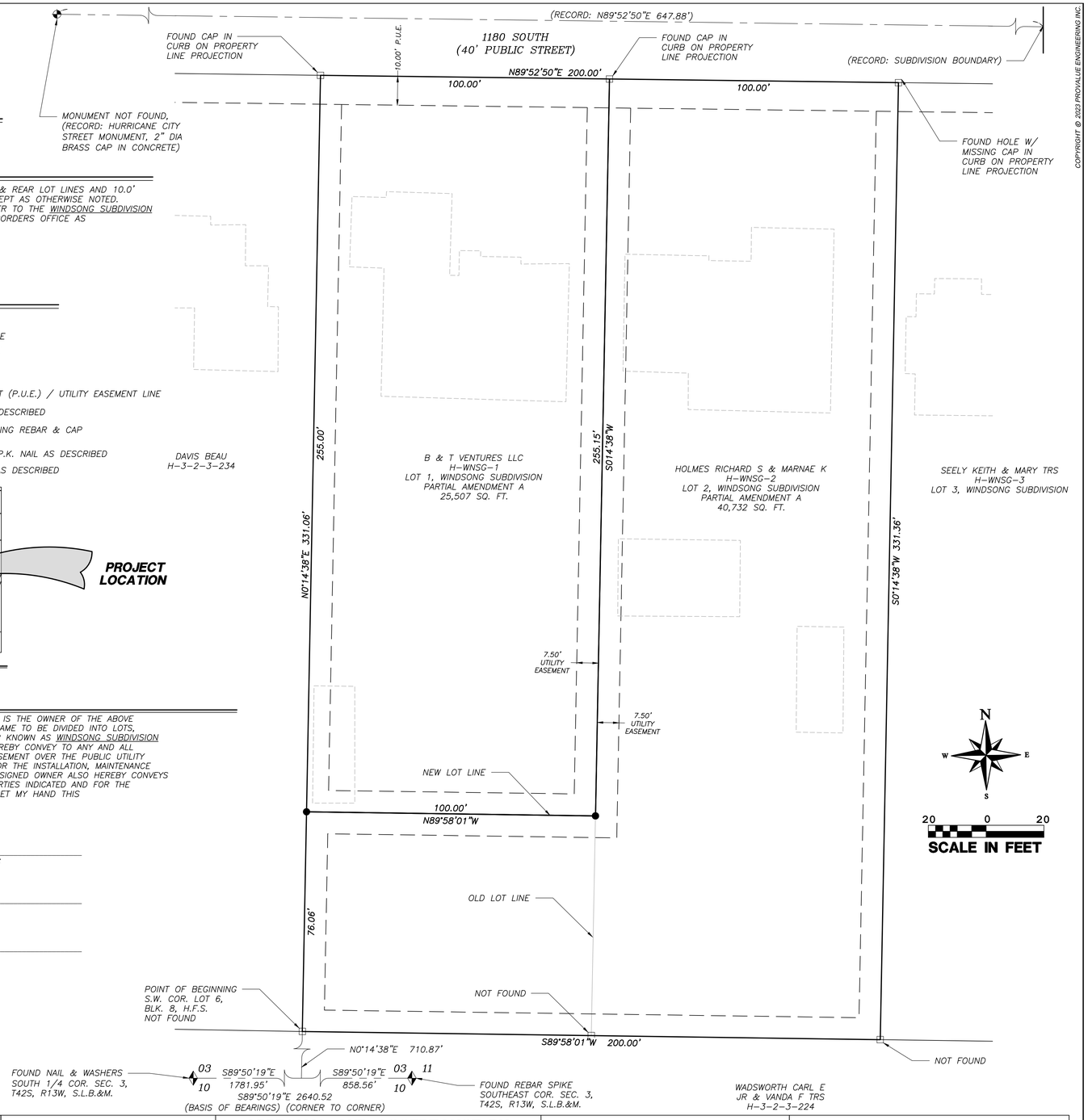
OWNERS' DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED IS THE OWNER OF THE ABOVE DESCRIBED TRACT OF LAND, AND DOES HEREBY CAUSE THE SAME TO BE DIVIDED INTO LOTS, TOGETHER WITH EASEMENTS, AS SET FORTH TO BE HEREAFTER KNOWN AS WINDSONG SUBDIVISION PARTIAL AMENDMENT A. THE UNDERSIGNED OWNERS ALSO HEREBY CONVEY TO ANY AND ALL PUBLIC UTILITY COMPANIES A PERPETUAL, NON-EXCLUSIVE EASEMENT OVER THE PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT. THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF UTILITY LINES AND FACILITIES. THE UNDERSIGNED OWNER ALSO HEREBY CONVEYS ANY OTHER EASEMENTS AS SHOWN ON THIS PLAT TO THE PARTIES INDICATED AND FOR THE PURPOSES SHOWN HEREON. IN WITNESS WHEREOF, I HAVE SET MY HAND THIS THE _____ DAY OF _____, 20_____.

_____
BEAU DAVIS, MANAGING MEMBER OF: B & T VENTURES, LLC

_____
RICHARD S HOLMES, JOINT TENANT

_____
MARNAE K HOLMES, JOINT TENANT



ASHCREEK SPECIAL SERVICE DISTRICT APPROVAL	ENGINEER'S APPROVAL	APPROVAL AS TO FORM	APPROVAL AND ACCEPTANCE BY HURRICANE CITY, UTAH	TREASURER APPROVAL	RECORDED NUMBER
I HEREBY CERTIFY THAT THIS OFFICE HAS EXAMINED THIS PLAT AND IT IS CORRECT IN ACCORDANCE WITH INFORMATION ON FILE IN THIS OFFICE. THIS _____ DAY OF _____, A.D. 20_____.	THE HEREON SUBDIVISION FINAL PLAT HAS BEEN REVIEWED AND IS APPROVED IN ACCORDANCE WITH THE INFORMATION ON FILE IN THIS OFFICE THIS ___ DAY OF _____, A.D. 20___	APPROVED AS TO FORM, THIS THE___ DAY OF _____, A.D. 20___.	WE, THE CITY COUNCIL OF HURRICANE CITY, HAVE REVIEWED THE ABOVE PLAT AND HEREBY ACCEPT SAID PLAT WITH ALL COMMITMENTS AND ALL OBLIGATIONS PERTAINING THERETO THIS _____ DAY OF _____ A.D. 20___.	I, WASHINGTON COUNTY TREASURER, CERTIFY ON THIS THE ___ DAY OF _____ A.D. 20___, THAT ALL TAXES, SPECIAL ASSESSMENTS, AND FEES, DUE AND PENDING ON THIS SUBDIVISION PLAT HAVE BEEN PAID IN FULL.	
SUPERINTENDENT, A.C.S.S.D.	ENGINEER HURRICANE CITY, UTAH	CITY ATTORNEY HURRICANE CITY, UTAH	ATTEST: CITY RECORDER HURRICANE CITY, UTAH — NANETTE BILLINGS, MAYOR HURRICANE CITY, UTAH	WASHINGTON COUNTY TREASURER	WASHINGTON COUNTY RECORDER

COPYRIGHT © 2023 PROVALUE ENGINEERING INC.

NO	DESCRIPTION	DATE	BY
	REVISIONS		

PROVALUE ENGINEERING, INC.
ENGINEERS - LAND SURVEYORS - LAND PLANNERS
20 South 850 West, Suite 1
Hurricane City, Utah 84737
Phone: 435-668-8307

FINAL PLAT FOR:
WINDSONG SUBDIVISION
PARTIAL AMENDMENT A
LOCATED IN SECTION 3, T42S, R13W, S.L.B.&M.
HURRICANE CITY, WASHINGTON COUNTY, UTAH

DATE	10/28/2024
SCALE	1"=20'
JOB NO.	300-008
SHEET NO:	1 OF 1

300-008 WINDSONG FINAL PLAT HURRICANE VRS.DWG

Hurricane City Application

Application Accepted Date: 10/17/2024

Type of Improvement: Subdivision (Preliminary Plat)

Description: A mix of single family residential, overnight rent

Tenant / Project Name: Cielo at Coral Canyon

Bldg. Address: Oldy Hwy 91 & Coral Ridge Drive

City: Hurricane City State: UT Zip: 84737

Subdivision: Cielo at Coral Canyon Phase: 1-7

Block: Lot #: 412 Parcel ID #: SITLA

Zone: PDO

Property Owner: Cole West Home

Permit Contact: Tony Carter P:(262) 408-7596

Email: tony@alcsg.com

CONTACT INFORMATION

Engineer of Record: Tony Carter

Email: tony@alcsg.com P: (262) 408-7596

General Contractor: Tony Carter

License #: 12982989-2202 P: (262) 408-7596

Address: 1173 S 250 W Suite 504

City: St. George State: UT Zip: 84770

Email: tony@alcsg.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	150.00
Planning Fee	$	150.00
Sub Total:	**$**	**150.00**
Permit Total:	**$**	**150.00**
Amount Paid:	**$**	**150.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANPP24-26

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Tony Carter

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #: 8.182860-10/17/24

DRAFT

Cielo At Coral Canyon – Narrative

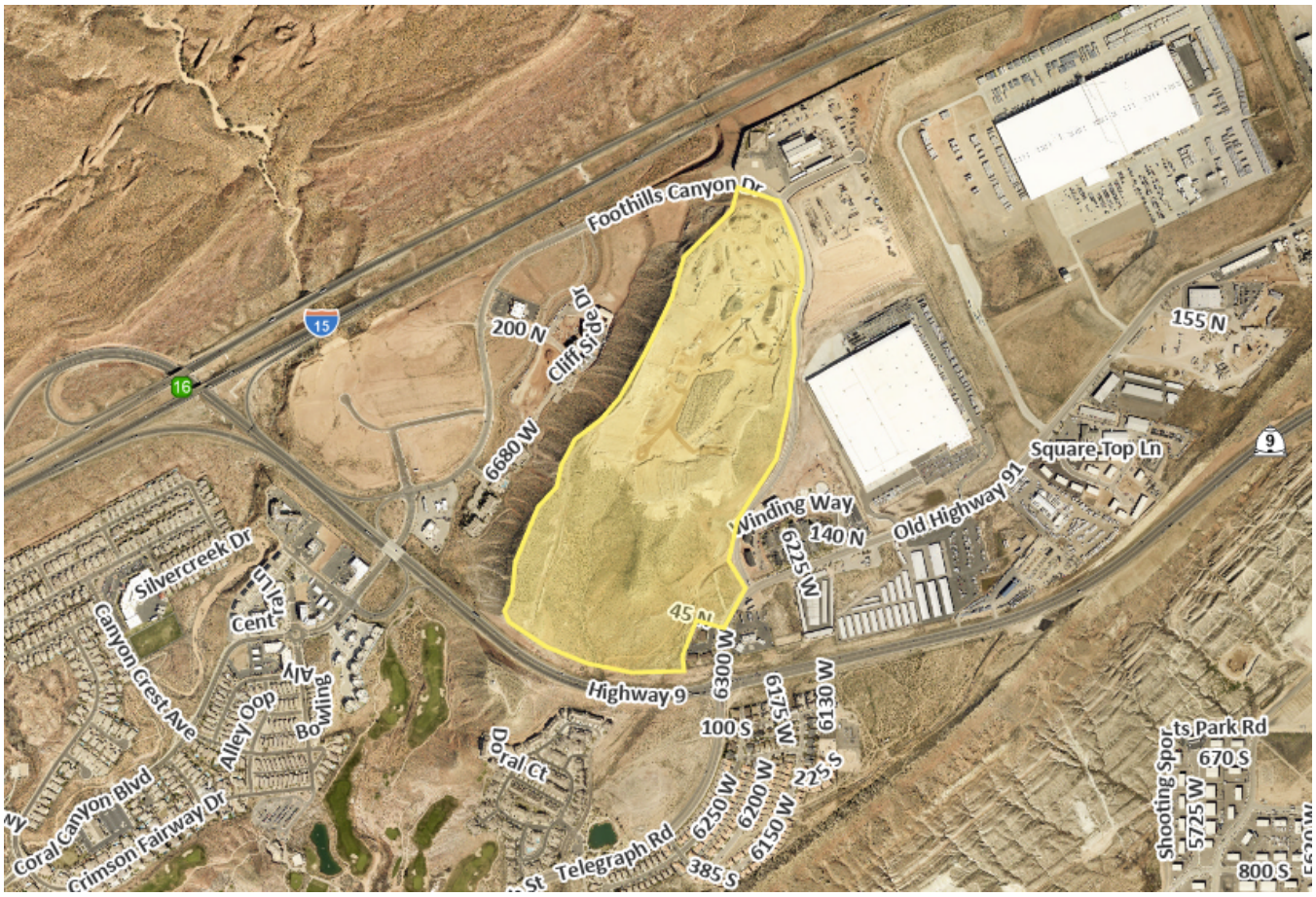
The proposed 143.74-acre site is currently undeveloped but is surrounded by either existing subdivisions or future growth. To the east is the partially developed Lone Rock Condominiums, to the north is Gilber Development, and to the west is Terra at Coral Canyon. Access to the site is provided by Old Highway 91 and Coral Ridge Drive.. The completed Cielo at Coral Canyon development will consist of 54 multifamily townhouse, 140 nightly rentals, and another 218 single family residential lots for a total of 412 new dwelling units.

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	PP24-26
Type of Application:	Preliminary Plat
Action Type:	Administrative
Applicant:	Cole West
Agent:	Tony Carter
Request:	Preliminary Plat Approval
Location:	Old Highway 91 and Foothills Canyon Dr.
Zoning:	Planned Development Overlay Zone (PDO) with underlying Single Family R1-8, Open Space, General Commercial, and Light Industrial zones.
General Plan Map:	Planned Community
Recommendation:	Continue/table this item.
Report Prepared by:	Fred Resch III

Discussion:
This application is a preliminary plat for a mixed use development located along Old Highway 91 and Foothills Canyon Dr. This development consists of 54 townhomes, 140 short-term rentals, and 218 single family residential lots for a total of 412 units as well as designated commercial space along SR-9. This development will take up the majority of Area 10 on the approved master plan and is currently being used as a gravel pit. The property is part of the Coral Canyon PDO zone, a master planned development stretching across the Washington City-Hurricane City boundary.



Map is approximate

JUC Comments
The following items will need to be addressed:

1. **Public Works:** No comments.
2. **Power:** Project can only move forward with power after Hurricane Power, Hurricane Power Board, Planning Commission, and City Council have all agreed that power can supply sufficient power to the project, or have a plan to do so. Project may be required to upgrade off-site power infrastructure to make this happen. American will provide a lot line with numbers, only overall utility plan for power (phase lines are also helpful). For design purposes American will provide a 2-page, more-detailed power design with Apollo Ridge Rd being the divider line between the pages. An invoice for power design will be sent and must be paid before signatures on construction drawings. No retaining walls in the 10' PUE. Power will be given according to the application signed, any changes will be the responsibility of the developer and associates
3. **Sewer:** No comment for the planning department. Construction drawings will need to include manhole station information and profile views.
4. **Street:** No comments.
5. **Water:** Water line will need to be looped.
6. **Engineering:** Existing and planned accesses on Foothills Canyon Drive must be shown to evaluate the proposed access locations (see HCS 3.2.4.3 & Tables 11 & 12 of the Transportation

Master Plan) it appears some realignment is in order. Is the platted area within any of the geologic hazards mapped by special study 127? (see HCC 10-39-7(b)(8)). Street connectivity should be reconsidered especially where utilities cross common areas. (see HCS 3.2.2 & 3.2.4.2(f)). RV on-street parking? All the on-street parking must meet HCC 10-34-8(J). Applicant and city staff should discuss. Unused existing driveways/roadway stubs must be removed and replaced with typical curb, gutter, and sidewalk. A traffic impact study is expected.

7. **Fire:** Approved.
8. **Fiber:** No comments.
9. **Cable/Phone/Fiber:** No comments.
10. **Gas:** Okay with Gas.
11. **Water Conservancy District:** Washington County Water Conservancy District hereby acknowledges that based on the information provided, the zone change adequately mitigates interference with district facilities and property interests. The District reserves the right to rescind this acknowledgement if additional information becomes available. The district has not determined whether water will be available for this development and does not hereby make any guarantee of water availability. In addition, the development must conform with applicable district requirements, including but not limited to payment of fees.

Staff Comments: Preliminary Plat

1. This application is for Area 10 of the Coral Canyon PDO. The layout of the plat is a departure from the original site plan, however, it is still within the density parameters of the Coral Canyon master plan.
    a. The nightly rental area will be required to meet all development standards of HCC 10-26.
    b. There is a large area fronting SR-9 designated as future commercial which will need a separate site plan and possible plat application.
2. **Sensitive Lands and Areas of Special Consideration:** There are some existing steep slopes on the property, specifically on the east and west sides of the site. However, due to the current use of the property, a gravel pit whose operation has already disturbed the sensitive lands, staff has determined per HCC 10-24-3(C), that a sensitive lands application is not required. There are some Areas of Special Consideration (HCC 10-28 as amended) that will need to be addressed during the geotechnical and geological report phases.
3. **Parking:**
    a. The single family units will presumably have garages and driveways to meet this code.
    b. The townhouse units show driveways to accommodate two vehicles which would meet the parking code.
    c. The vacation rental units need to meet HCC 10-26-6(E) *an application shall provide two parking spaces per unit or one space per bedroom, whichever is higher. Tandem parking spaces are permitted only if approved as part of the preliminary site plan by the Planning Commission.* Each unit shows driveway and garage space for four cars. The site plan shows 263 off-street parking spaces. There will need to be further coordination between Planning, Engineering, and the applicant to ensure the street parking meets HCC 10-26-6(E)(3).
4. **Open Space and Amenities:** The site plan does not indicate how much open space is provided, although several open space and amenity areas are provided. Per HCC 10-33-5 the townhome area needs 15% open space and three amenities. The nightly rental area requires a clubhouse

(which is shown) and two pools of at least 1500 sq ft. Hillsides with slopes over 30% do not count as open space.
    a. There is a trail along the ridgeline behind the single family homes, which will be a nice amenity for the area.
5. All streets within this development will need a number assigned to them alongside their names. Duplicate street names within the city should be avoided.
6. All block lengths appear to meet city standards.
7. **Water use:** The Washington County Water Conservancy District has a county-wide tracking budget of approximately 75,000 units with approximately 20,000 units being located within Hurricane City. Approval of this preliminary plat would add 412 units to Hurricane City's total.

Recommendation: The Planning Commission should review this application based on standards in the Hurricane City Code. Staff is generally supportive of the application, but the proposed plat needs some additional work before it can be approved. Staff recommends continuing or tabling this item to address staff and JUC comments.

October 10, 2024

Cole West Home, LLC
2250 North Coral Canyon Blvd. Suite 200
Washington, Utah 84780

Attention: Jack Evans
Email: jack.evans@colewest.com

Subject: Geotechnical Recommendations
Cielo at Coral Canyon (Area 10)
Hurricane, Utah
Project No. 2220520

Applied Geotechnical Engineering Consultants (AGEC), Inc., was requested to provide geotechnical recommendations for the proposed Cielo at Cielo at Coral Canyon Development also known as Coral Canyon Area 10, located in Hurricane, Utah. AGEC has previously conducted a site investigation at different times for different purposes. These studies are referenced below:

1. **Subsurface Investigation, Project No. 2080779, Report Dated August 26, 2008.** This study consisted of geologic reviews along with the drilling of 36 borings. The results of the field investigation along with the geologic review were provided for the property to be used as a gravel pit. The study was conducted for Gilbert Development that used the property for several years as a gravel pit. Subsequently most of the site has been used by Sunroc Corporation for aggregate use in concrete, asphalt and other construction uses.

2. **Geotechnical Investigation, Project No. 2051110, Report dated May 22, 2006.** This study consisted of an overall evaluation of the original Area 10 boundary that consisted of 14 test pits and 4 borings. The report was provided as a preliminary evaluation of the development of this area. It was primarily used

to develop where the Crusher Rental and Gilbert Development offices are located and were graded previously. A portion of the explorations were in this area and the remainder of the explorations were in the area of future or now current development.

3. **Geotechnical Recommendations, Project No. 2060454, Report dated October 18, 2006.** This document was used for design and construction of the Crusher Rental Sales/Facility on the north end of Area 10. This work was completed outside of the current development area but was referenced as adjacent property and valuable information/data.

4. **Geotechnical Recommendations, Project No. 2060454, Report dated April 11, 2007.** This document was used for the design and construction of the Crusher Rental and Office Complex and is an addendum to Reference No. 3 above.

AGEC has also completed several other studies for properties adjacent to the project that were referenced or utilized in our evaluation. These are listed below:

- **Orgil Distribution Center (original construction and expansion)**
- **Lone Rock Condos**
- **Terra at Coral Canyon (Coral Springs)**
- **Coral Canyon Area 11**

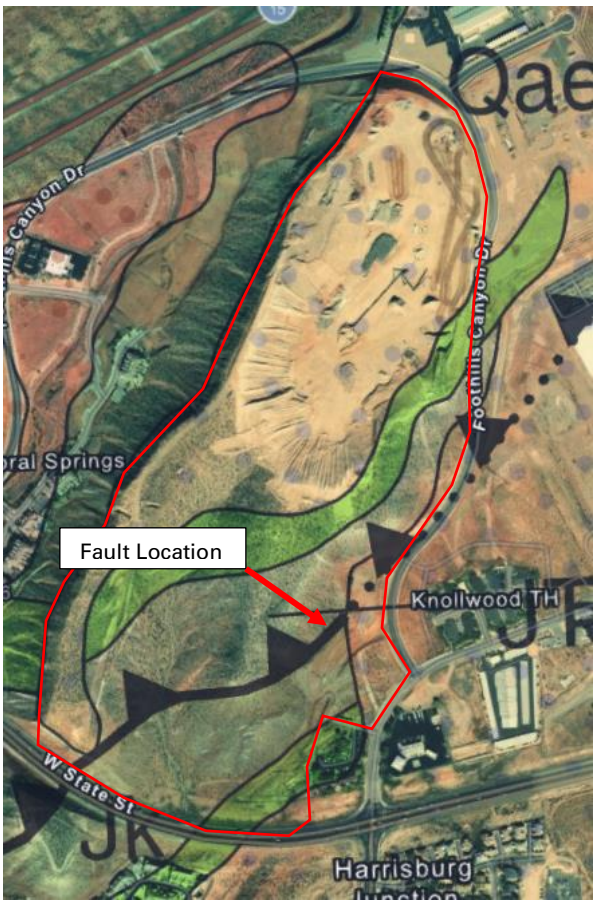
AGEC has also been working with and reviewed the proposed plans prepared by American Consulting Engineering. The plans are dated September 27, 2024, and Job # 23-504-1.

At this time the property is being used as a gravel pit or aggregate source for construction materials by Sunroc Corporation. The site is being mined for these materials and exported from the site on an ongoing basis. The proposed grading has significant cuts and fills that are planned to be completed for the development of the site. Due to the activity of the site, there has not been additional subsurface exploration conducted at this time. AGEC has reviewed the previous studies that included deeper borings (Ref No. 1) for anticipation of the grading conditions. The following is a summary of our preliminary conclusions and recommendations at the site.

1. The site is suitable for the development of the planned project.

2. The site conditions vary with a significant thickness of materials (sand and gravel) that are part of what is mapped as "older alluvial fan deposits". This deposit varied from approximately 20 to 60 feet thick. The deposit consists of sand and boulder deposits that are up several feet in size. The boulders or clasts are predominantly from the Pine Valley instructive complex. The boulders are highly weathered or rounded that indicate extensive distances of travel or migration through significant water events. These are the materials that are currently being mined and processed by Sunroc Corp.

3. The underlying bedrock at the site is dipping down to the east to southeast. Based on the literature, (Biek, 2003) there is an un-named, west dipping, thrust fault that is likely associated with the Virgin Anticline. The fault that crosses the southern portion of the property can also be seen in the roadway cut along SR-9 to the south of the property. The fault is not an active fault and may be constructed over as is the Orgill Facility and Wal-Mart Distribution facility to the north and northeast and Coral Ridge Development to the South.



The mapping indicates the Kayenta Sandstone is present along the south side of the fault and the Moenave Formation including the Whitmore Point and Springdale Sandstone members are exposed along the west side of the fault. These members are evident along Foothills Canyon Blvd. and outcrop through other areas of the site.

During our study of Reference No. 1, the bedrock was encountered throughout the site and cross sections of the overlying materials were provided within the report. The bedrock was not evaluated during this study but was evaluated in the study referenced as No. 2 above. The bedrock contains occasional mudstone layers, that will likely result in the removal or over excavation of these layers within pad areas.

It is our understanding that within the next several months, the mining operation will be completed or discontinued and there will be a significant amount of material to remove from the site as export. Following this removal and prior to placing fill in other areas, AGEC will further investigate the site to provide the following:

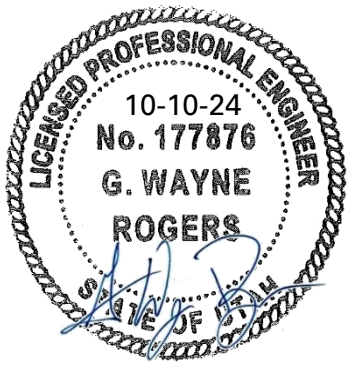
- Specific areas of previous grading and proper removal of existing possible loose fill materials.
- Bedrock conditions and potential hard layers (Springdale Sandstone) or slightly expansive layers with the other members or formations.
- The proper use of fill materials and placement recommendations for the significant fill zones.
- Rock retaining designs and details for specific areas.

The planned additional investigation will be provided in a final report that will also provide foundation and roadway recommendations.

Attached to this report are portions of the studies referenced as No. 1 and 2 that are on the property. The portions include the title page and site map with boring, test pit logs and other pertinent figures within these reports.

If you have any questions or would like additional information at this time, please contact us.

Sincerely,
APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, Inc.



G. Wayne Rogers, P.E.

Attachments

P:\2022 Project Files\2220500\2220520 - GT Coral Canyon Area 10 Exhibit\Preliminary Report - Cielo at Coral Canyon (Area 10).docx

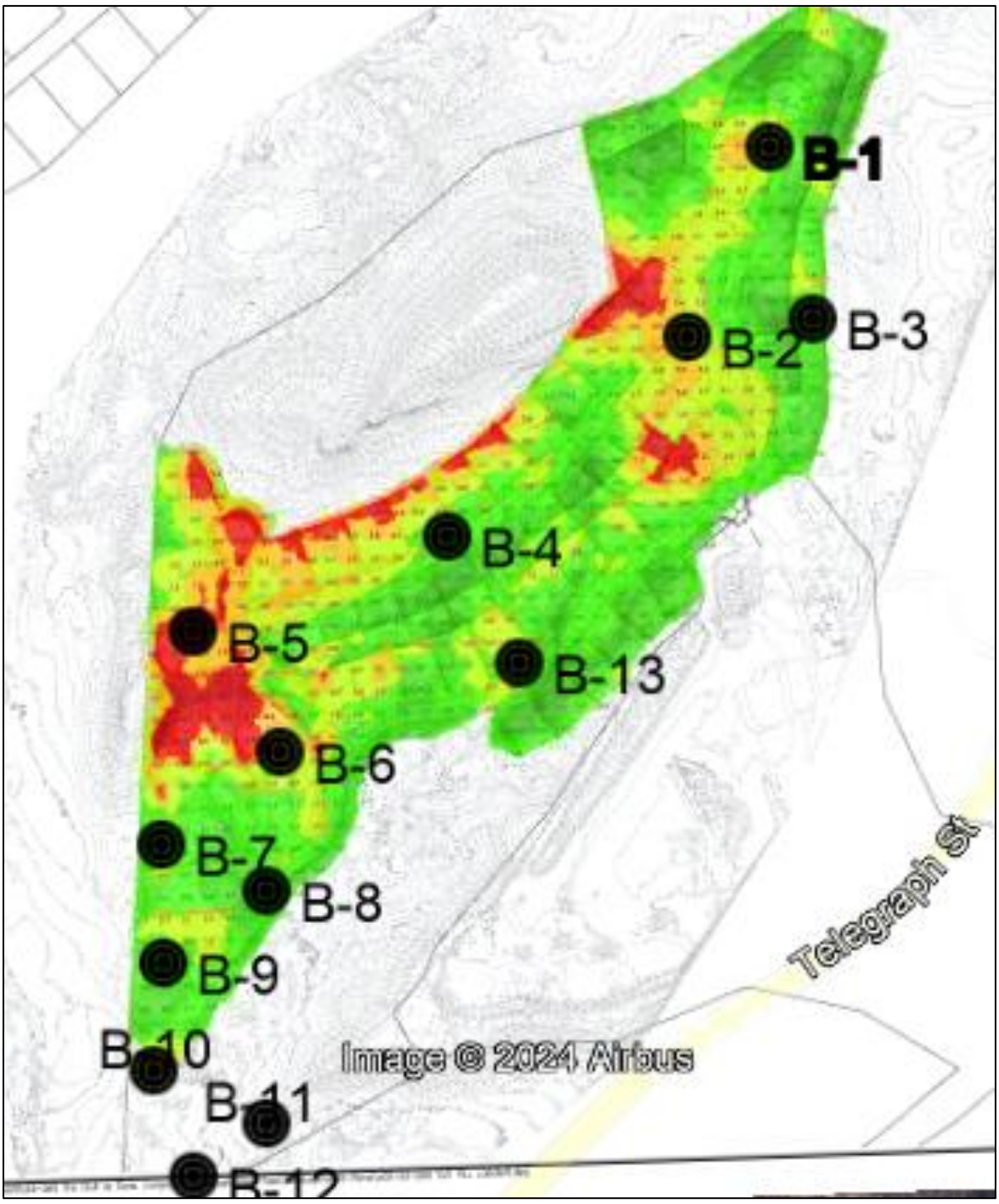


Figure 1, Site plan with previous boring locations. Colors indicate grading as shown on the cut fill map provided by American Engineering

Applied Geotechnical Engineering Consultants, Inc.

August 26, 2008

Gilbert Development
6249 West Gilbert Industrial Court
Hurricane, Utah 84737

Attention: Dale Gilbert

Subject: Subsurface Investigation
Gilbert Gravel Pit Study
Hurricane, Utah
Project No. 2080779

Mr. Gilbert:

Applied Geotechnical Engineering Consultants, Inc. (AGEC), was requested to conduct a subsurface investigation at the above referenced project to provide information regarding the thickness of the gravel layer at the site. The site is located at the approximate location shown on Figure 1

SCOPE OF WORK

The following scope of work was conducted:

- Reviewed geologic literature describing geologic units present at the site.
- AGEC observed the drilling of 36 borings with a truck mounted rotary blasting rig using air to remove cuttings. The blasting rig was utilized to provide generalized information regarding the subsurface conditions. The blasting rig was selected due to its high drill rate and ability to rapidly obtain subsurface information. Subsurface soil samples were not obtained with the blasting rig.
- AGEC observed the drilling of one additional boring drilled with a CME 55 drill rig equipped with 8 inch hollow stem augers. The boring was drilled to verify subsurface conditions by obtaining samples of the subsurface soils at approximately 5 foot intervals.
- No laboratory testing to determine soil classification or rock quality was requested at this time.

DOCUMENT REVIEW

AGEC has reviewed the following document as a part of this evaluation:

1. "Geologic Map of the Harrisburg Junction Quadrangle, Washington County, Utah", map 191 UGS, prepared by Robert F. Beik., 2003.

SITE CONDITIONS

The site generally slopes down to the south at an approximate grade of 6 to 10 percent. The vegetation on the site consists of desert brush and grass. The east edge of the site consists of a cut slope exposing sandstone and shale with a gravel cap.

The west edge of the site is bordered by a steep slope with out crops of weathered shale near the top. Foothills canyon drive is to the east of the cut slope. The cut slope is outside the property boundaries. Vacant property borders the site to south. The northern portion of the site has been mined as a gravel pit over the past several years. The northern end of the site is bordered by Foothills Canyon Boulevard.

GEOLOGIC UNITS

The following geologic units were encountered at the site. The geologic map is shown on Figure 3 with the Key to the Geologic Map shown on Figure 3A.

Older Alluvial Fan Deposits (Qaf_6) - Consists of poorly to moderately sorted sand to boulders deposits with common clasts in excess of 10 feet in diameter. Clasts are predominately from Pine Valley intrusive complex; boulders are highly weathered such that the outer rind easily disaggregates into constituent grains; forms broad deeply dissected surfaces along the west side of the Virgin Anticline. Deposits are from 120 to 200 feet thick above modern drainages.

Jurassic Aged Bedrock of the Moenave Formation (Jms, Jmw and Jmd) - The gravel is underlain by Jurassic aged bedrock including the Springdale Sandstone Member, the Whitmore Point Member and the Dinosaur Canyon Member of the Moenave Formation. The bedrock units in this area are tilted due to the presence of the Virgin river Anticline. Descriptions of the bedrock are provided below.

Springdale Sandstone - Medium the thick bedded, fine-grained sandstone. Contains planar to low angle stratification and thin minor lenses of conglomerate with red-brown to green-grey interbeds of mudstone to siltstone; weathered to from rounded cliffs and ledges; contains locally abundant petrified and carbonized fossil plant remains;120 to 164 feet thick.

Whitmore Point Member - Interbedded pale red-purple to greenish-grey and blackish-red mudstone and claystone, reddish-brown fine grained sandstone ans siltstone and pale-orange very fine-grained sandstone. Weathers to form poorly exposed brightly colored slopes. Slopes contain several 3 to 18 inch thick dolomitic limestone beds.

Dinosaur Canyon Member - Interbedded, generally thin bedded moderate-reddish-brown to reddish-grey, very fine to fine-grained sandstone, siltstone and mudstone with planar, low angle, and ripples cross-stratification; slope forming; deposited in river and flood plain environments; 163 feet thick.

SUBSURFACE CONDITIONS

On August 18, 19, and 20, 2008, an engineer from AGEC visited the site and observed the drilling of 36 borings (profile holes) with a rotary blasting using air to remove cuttings. AGEC re-visited the site on August 21, 2008 to observe the drilling of one additional boring with a truck mounted drill rig (CME 55) equipped with hollow stem augers. The approximate boring locations are shown on the site plan, Figure 2.

The subsurface soil conditions observed at the site generally consist of up to 70 feet of silty gravel underlain by mudstone and sandstone bedrock. The gravel contains occasional interbedded layers of sand varying in thickness up to approximately 20 feet in thickness. Cobbles and boulders were also encountered during drilling. The silty gravel layer varied in thickness up to 70 feet. The average thickness of usable gravel/sand encountered in the borings was on the order of 35 to 45 feet.

Representative cross-sections of the subsurface conditions are shown on Figures 4 and 5. The Logs of Exploratory Borings are shown graphically in Figures 4 through 15. The Legend and Notes of the Exploratory Borings are shown on Figure 15.

SUBSURFACE WATER

Groundwater was not encountered to the maximum depth investigated, approximately 70 feet. Fluctuations in the groundwater level may occur over time. An evaluation of such fluctuations is beyond the scope of this report.

CONCLUSIONS

Based on the findings listed above, the following conclusions are made:

1. A significant deposit of silty gravel was encountered during the subsurface exploration across the site. The gravel contains zones of cobbles and boulders and some sandy layers. The silty gravel layer varied in thickness from 1 foot in Boring 1 up to greater than 70 feet in boring B-26. The average thickness of usable gravel/sand encountered in the borings was on the order of 35 to 45 feet. Typical cross-sections of the subsurface profile are shown on Figures 16 and 17.

2. The gravel material appears suitable for manufacture of construction aggregate and sand similar to its current use.

3. The upper gravel is underlain by shale and sandstone bedrock. This bedrock is likely too soft for manufacture of construction aggregate. Portions of the sandstone may be suitable for landscape rock.

LIMITATIONS

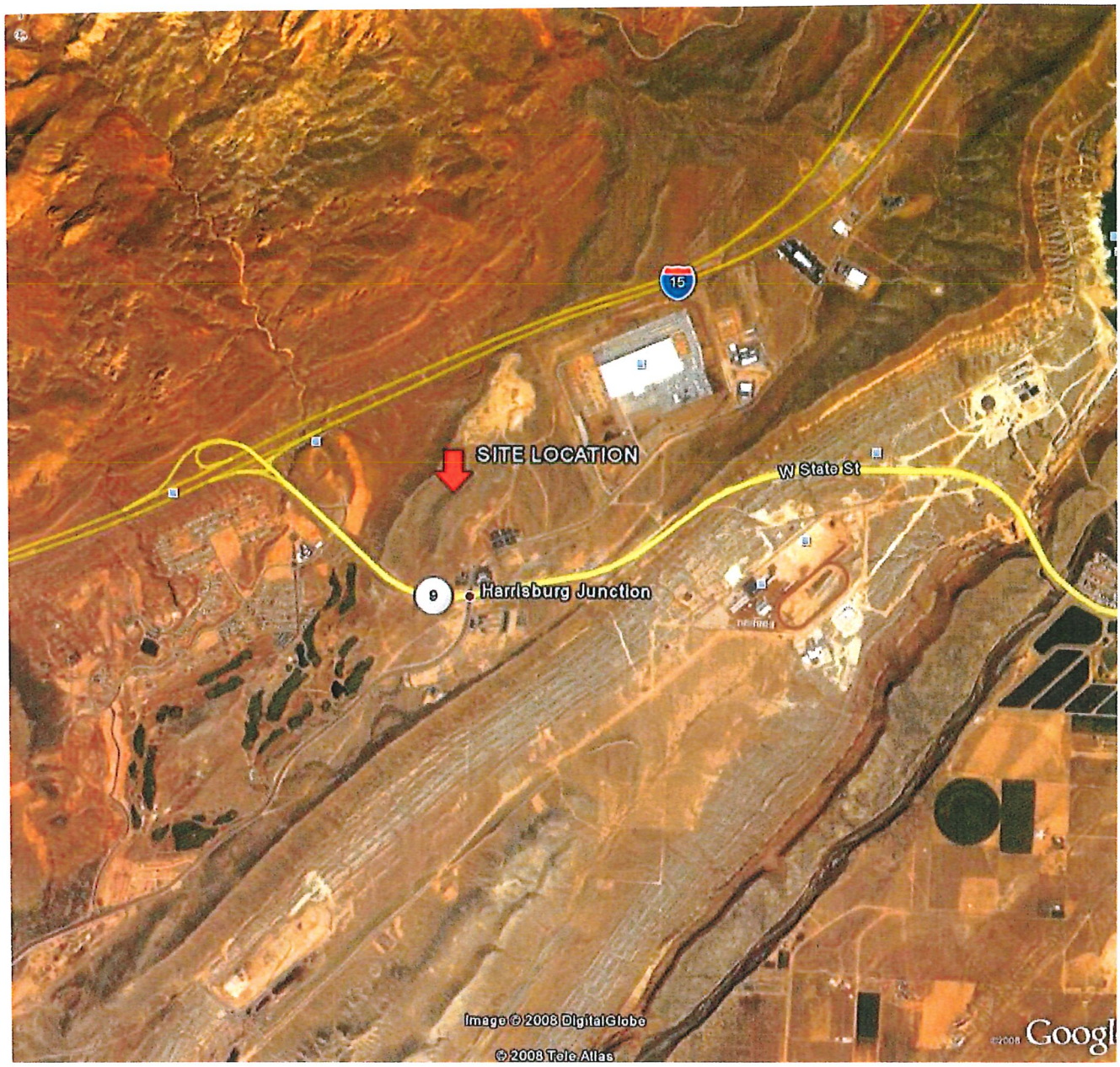
This report is prepared in accordance with generally accepted soil engineering practices in the area for the use of the client for design purposes. The conclusions included within the report are based on the information obtained from the borings drilled and our experience in the area. Borings B-1 through B-36 were conducted using a blasting rig to observing drill rate and the cuttings. Undisturbed samples were not obtained and the borings were logged based on our interpretation of the drill rate, our experience in the area and cuttings. Therefore, the depth to bedrock and the accuracy of the soil profile/descriptions on the boring logs may vary. Therefore If the soil or groundwater conditions are found to be different from those described in the report, we should be notified to reevaluate the recommendations given.

If you have any questions or if we can be of further assistance please call.

Sincerely,
APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.

Arnold DeCastro, P.E.

Reviewed by: G. Wayne Rogers, P.E.
AD P:\Geotechnical\2080700\2080779gravel.wpd



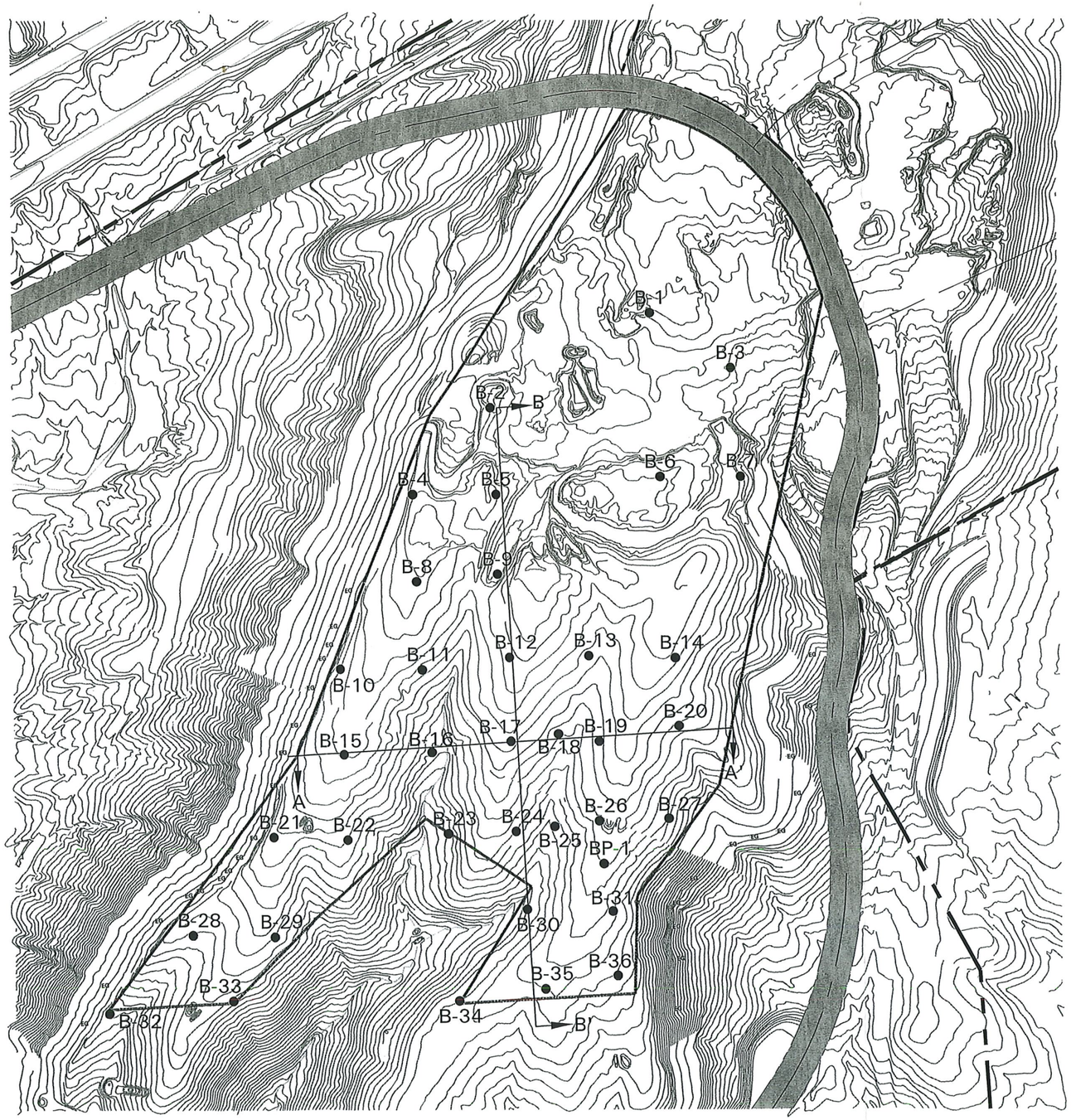
N

Google Earth, 2008

GILBERT GRAVEL PIT STUDY
HURRICANE, UTAH

2080779	AGEC	Vicinity Map	Figure 1

GILBERT GRAVEL PIT STUDY
HURRICANE, UTAH



● Approximate boring location

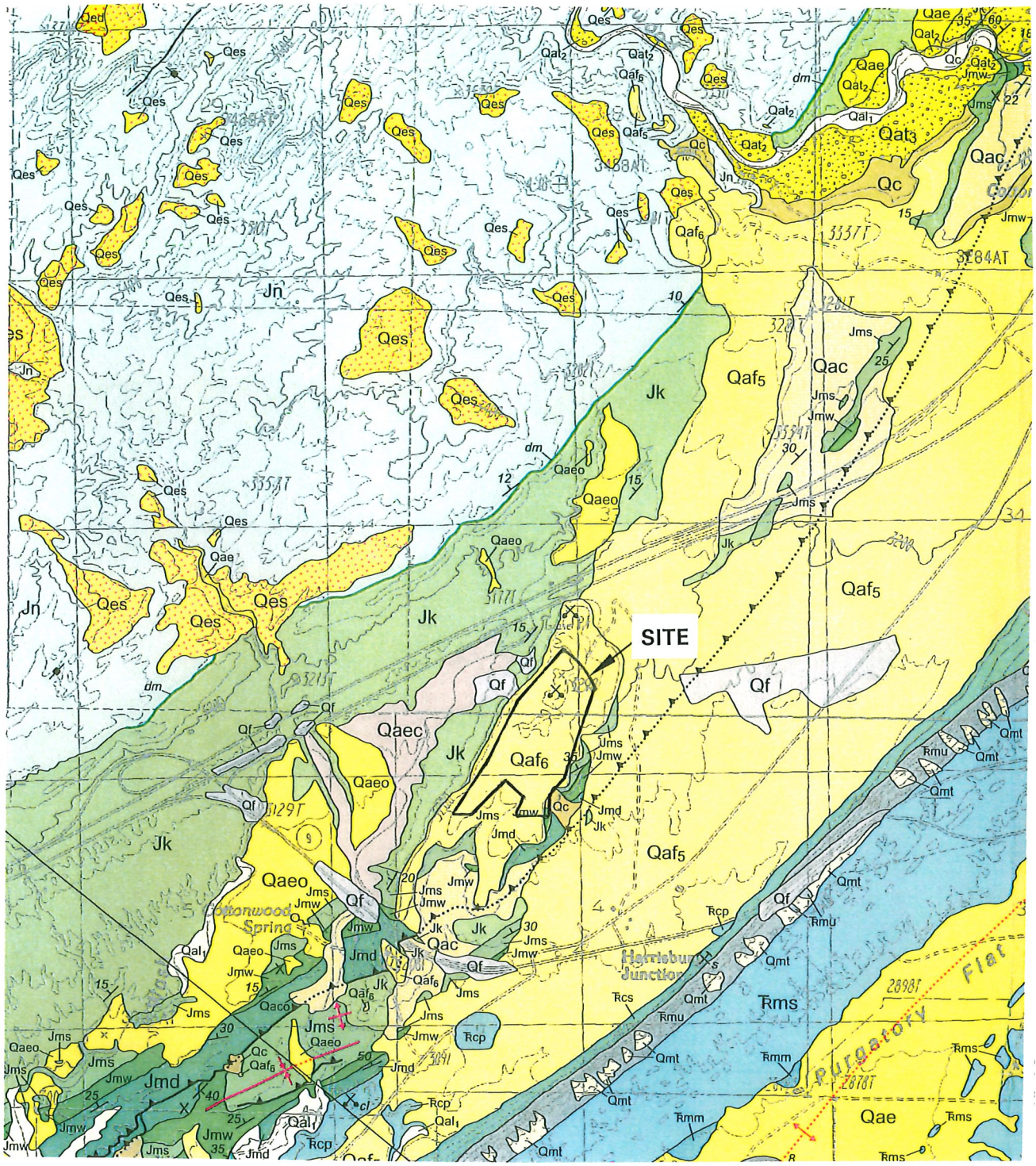
Approximate cross section location

N

0 200 400 feet

Approximate Scale

2080779	AGEC	Site Plan	Figure 2



Harrisburg Junction Quadrangle,
Biek, 2003

N

GILBERT GRAVEL PIT STUDY
HURRICANE, UTAH

Scale 1:24,000

2080779	AGEC	Geologic Map	Figure 3

$Qaf_{5,6}$	Older alluvial-fan deposits - Poorly to moderately sorted sand to boulder deposits with common clasts in excess of 10 feet (3 m) in diameter; clasts are predominantly from Pine Valley intrusive complex; boulders are highly weathered such that outer rind easily disaggregates into constituent grains; forms broad, deeply dissected surfaces along the west side of the Virgin anticline; Qaf_5 deposits are generally found from 40 to 100 feet (12-30 m) and Qaf_6 deposits from 120 to 200 feet (36-60 m) above modern drainages; about 0 to 30 feet (0-9 m) thick.
	Moenave Formation
Jm	Moenave Formation, undivided - Shown on cross section only.
Jms	Springdale Sandstone Member - Medium- to very thick-bedded, fine-grained or rarely medium-grained sandstone, with planar and low-angle cross-stratification, and minor, thin, discontinuous lenses of intraformational conglomerate and thin interbeds of moderate-reddish-brown or greenish-gray mudstone and siltstone; weathers to rounded cliffs and ledges; contains locally abundant petrified and carbonized fossil plant remains; host to ore deposits of the Silver Reef mining district; deposited in braided-stream and minor flood-plain environments; 120 to 164 feet (36-50 m) thick.
Jmw	Whitmore Point Member - Interbedded, pale-red-purple, greenish-gray, and blackish-red mudstone and claystone, lesser moderate-reddish-brown very fine- to fine-grained sandstone and siltstone, and uncommon dark-yellowish-orange micaceous siltstone and very pale-orange, very fine- to fine-grained sandstone; weathers to poorly exposed, brightly colored slopes; contains several 3- to 18-inch-thick (8-46 cm), bioturbated, cherty, dolomitic limestone beds with algal structures and fossil fish scales of *Semionotus kanabensis* (Hesse, 1935; Schaeffer and Dunkle, 1950); the dolomitic limestones vary in color from light greenish gray to very light gray and yellowish gray, and weather to mottled colors of pale yellowish orange, white, yellowish gray, and pinkish gray, commonly with green copper-carbonate stains; lower 25 feet (7.5 m) consists of moderate-reddish-brown sandstone similar to that of the Dinosaur Canyon Member; deposited in flood-plain and lacustrine environments; 64 to 125 feet (19-38 m) thick.
Jmd	Dinosaur Canyon Member - Interbedded, generally thin-bedded, moderate-reddish-brown to moderate-reddish-orange, very fine- to fine-grained sandstone, very fine grained silty sandstone, and lesser siltstone and mudstone with planar, low-angle, and ripple cross-stratification; slope forming; deposited in river and flood-plain environments; 163 feet (50 m) thick.

GEOLOGIC SYMBOLS

Contact

dm — Kayenta Formation dolomite marker bed

High-angle normal fault - dashed where approximate, dotted where concealed; bar and ball on down-thrown side

Thrust or reverse fault - dotted where concealed; teeth on upper plate

Tear fault - arrows show direction of relative movement

Fault - displacement unknown

Prominent joint

8 — Anticline - with direction and degree of plunge; dotted where concealed

Syncline - with direction of plunge; dotted where concealed

40 — Strike and dip of inclined bedding

Strike of near vertical joint

Pit - sand and gravel (no letter), sand (s), clay (cl)

Quarry - gypsum (g), building or ornamental stone (s)

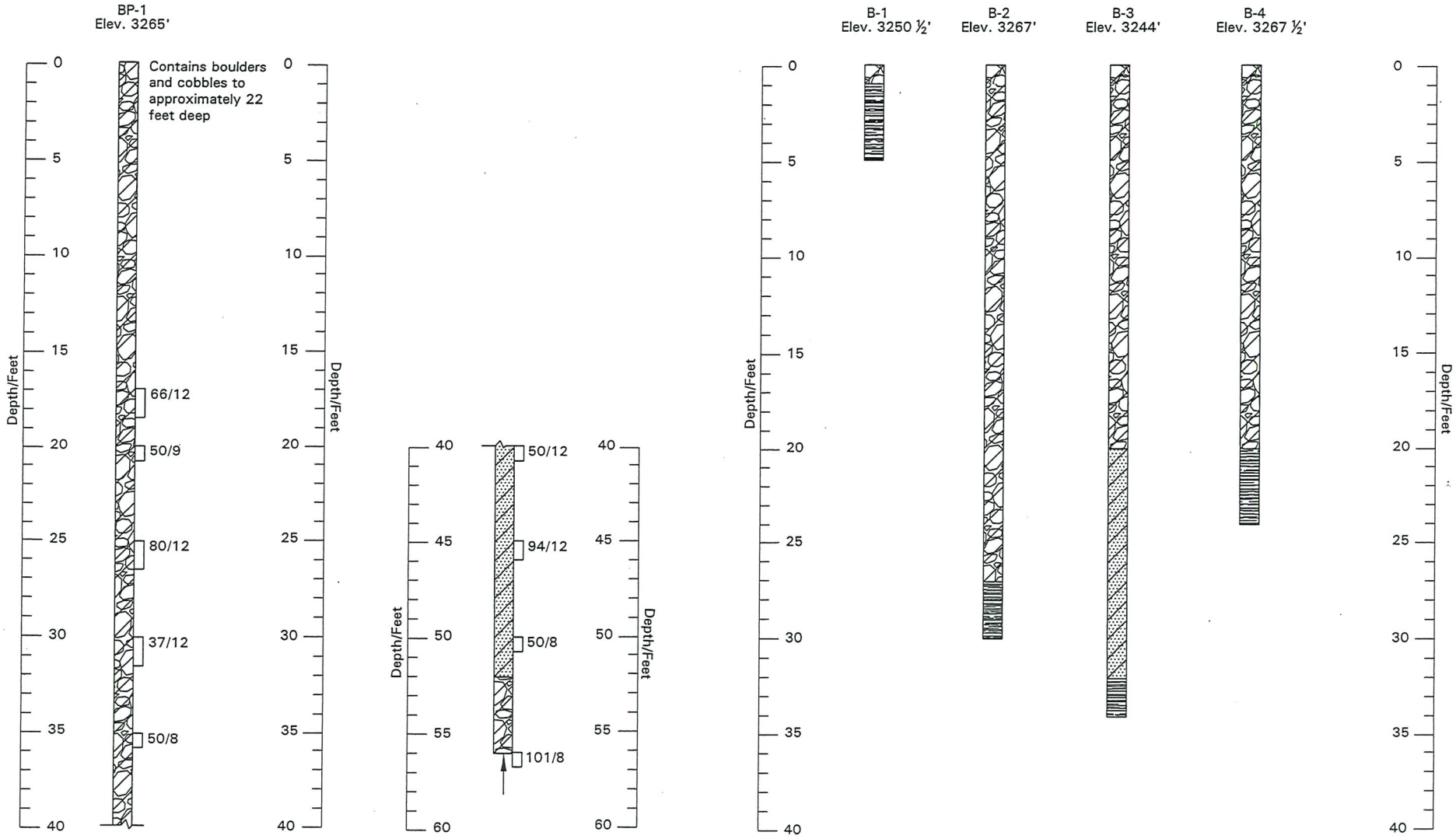
Prospect - gypsum (g), metals (no letter)

Spring

Volcanic vent

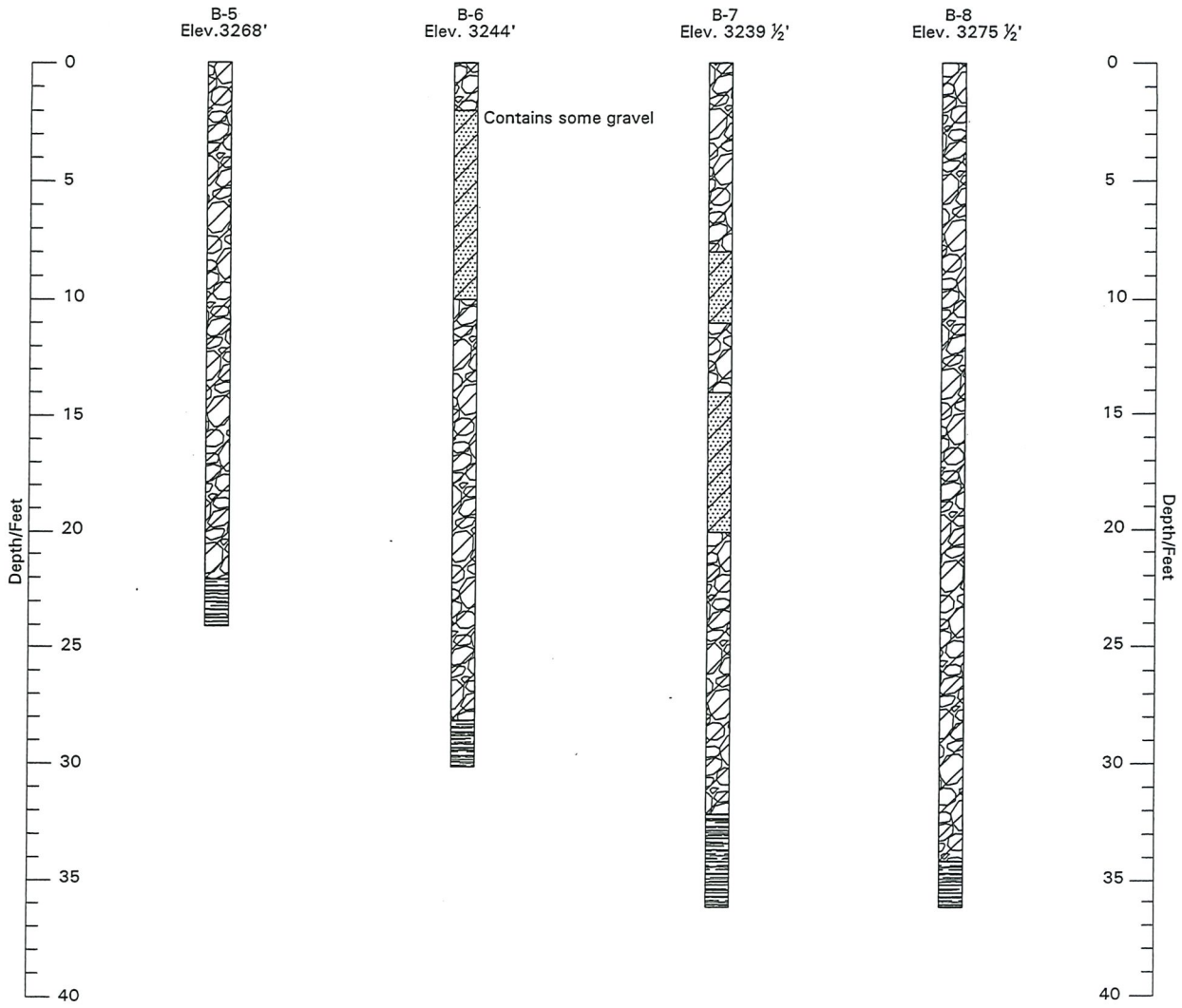
Petroleum exploration drill hole - plugged and abandoned

VR40-08 + Sample location and number



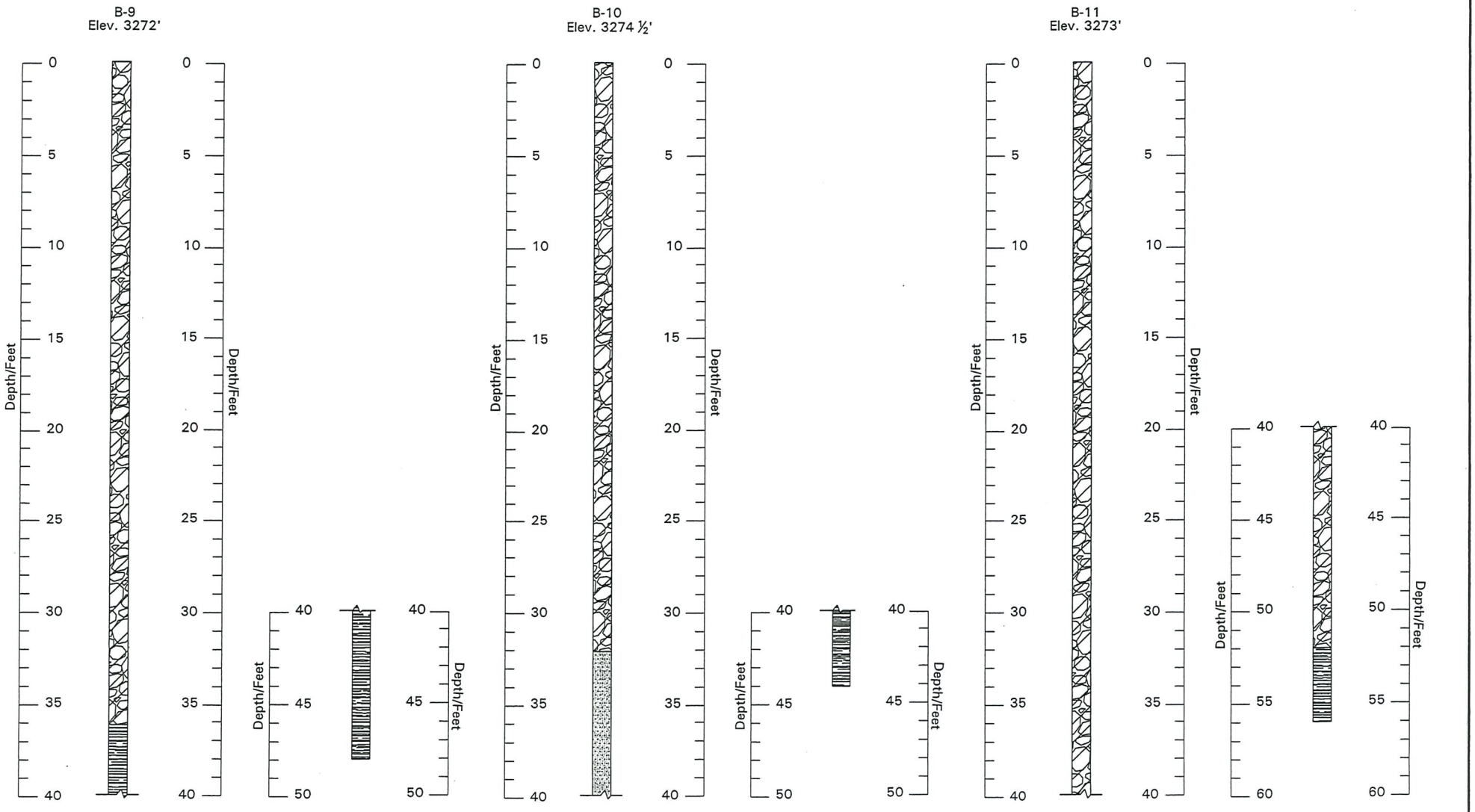
See Figure 15 for Legend and Notes

2080779	AGEC	Logs of Exploratory Borings	Figure 4

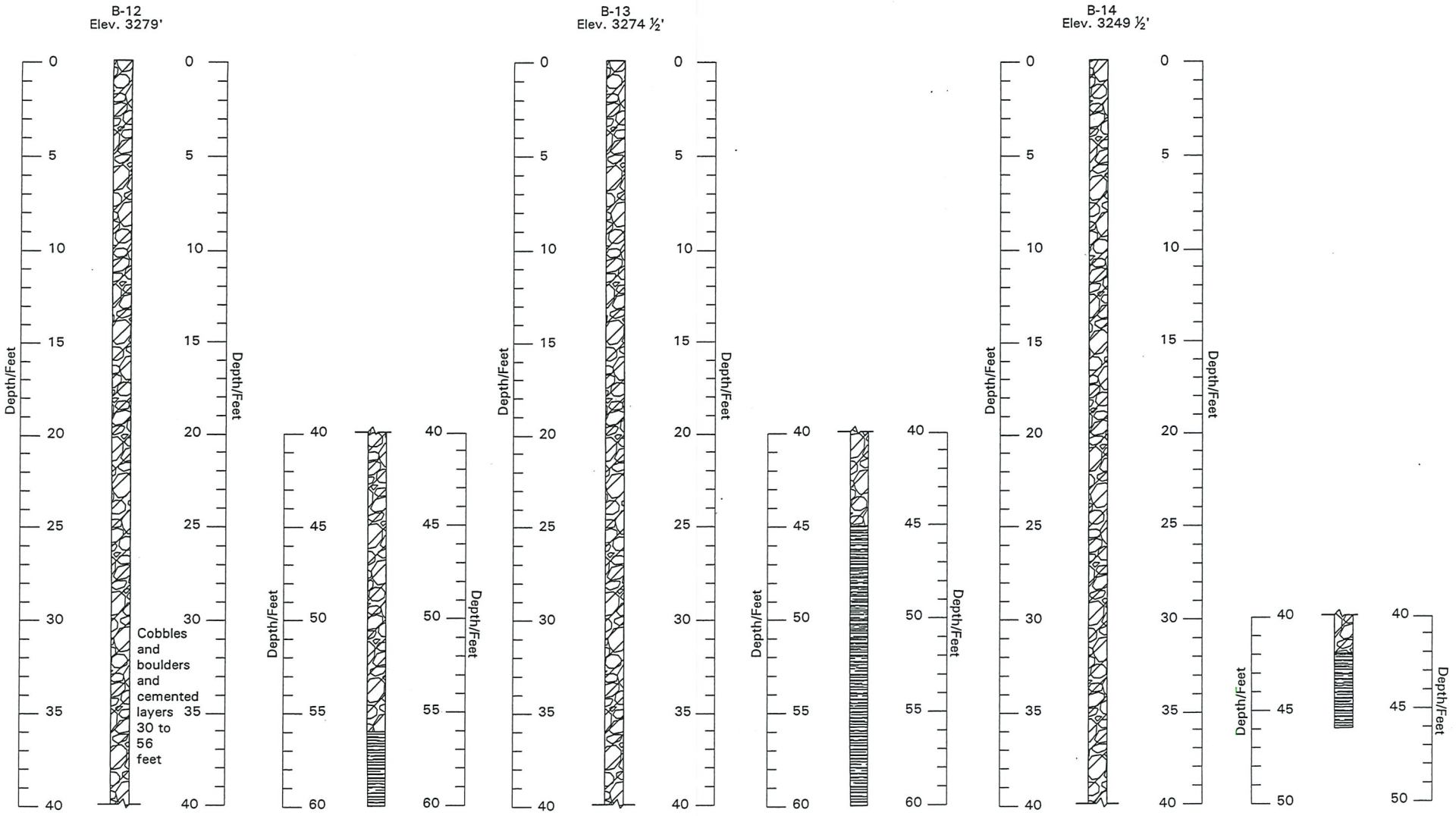


See Figure 15 for Legend and Notes

2080779	AGEC	Logs of Exploratory Borings	Figure 5

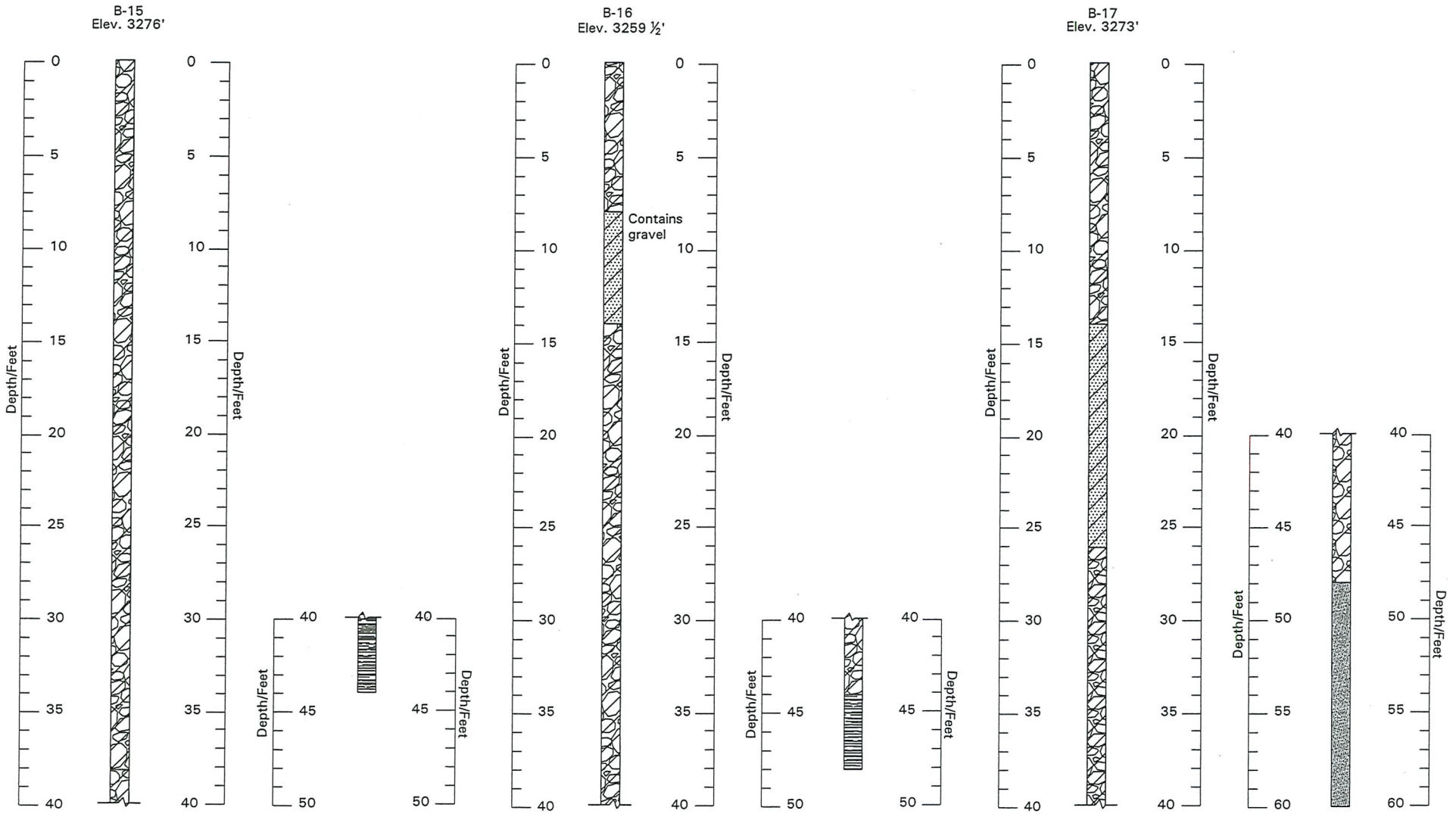


See Figure 15 for Legend and Notes



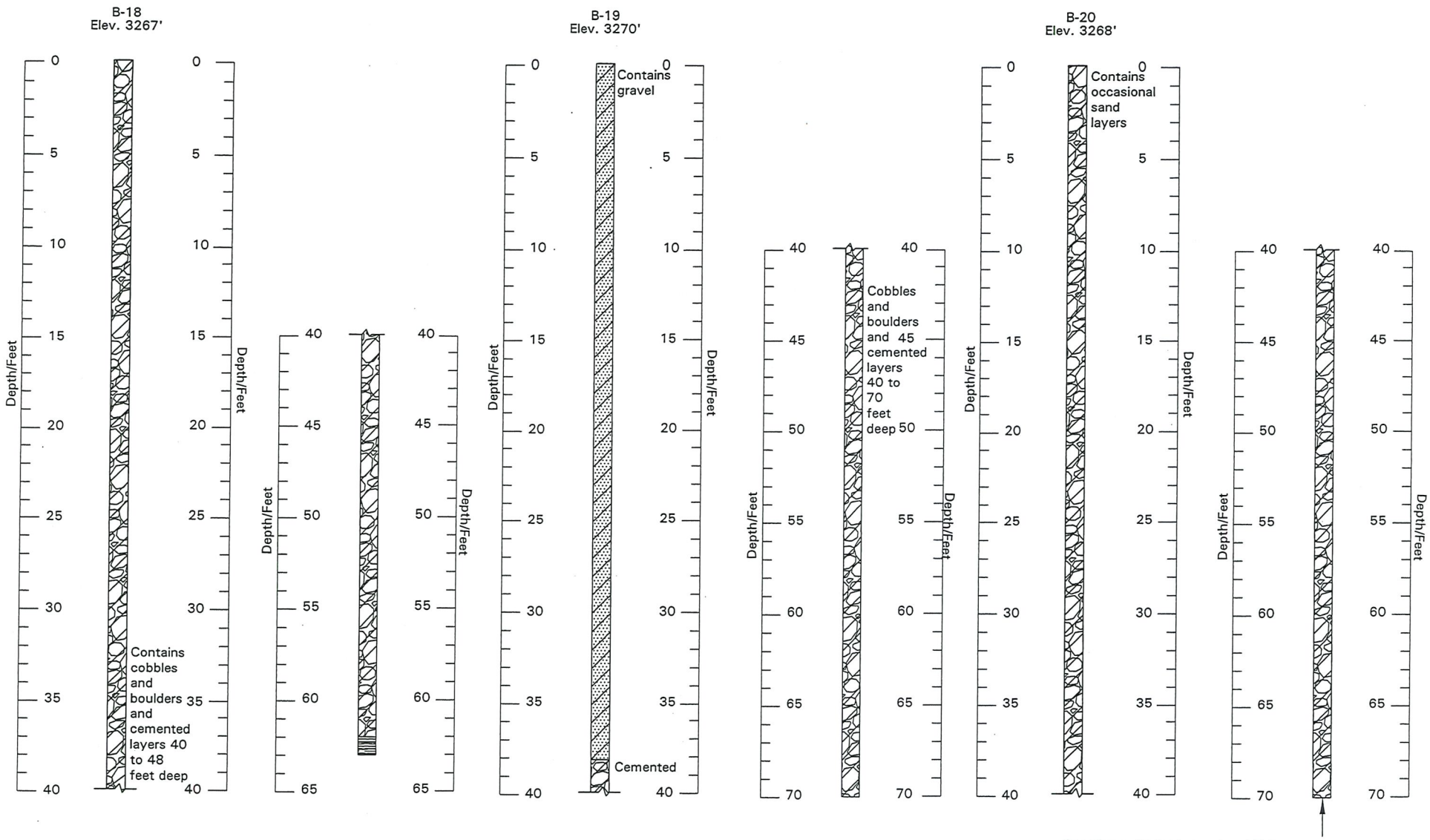
See Figure 15 for Legend and Notes

2080779	AGRA	Logs of Exploratory Borings	Figure 7



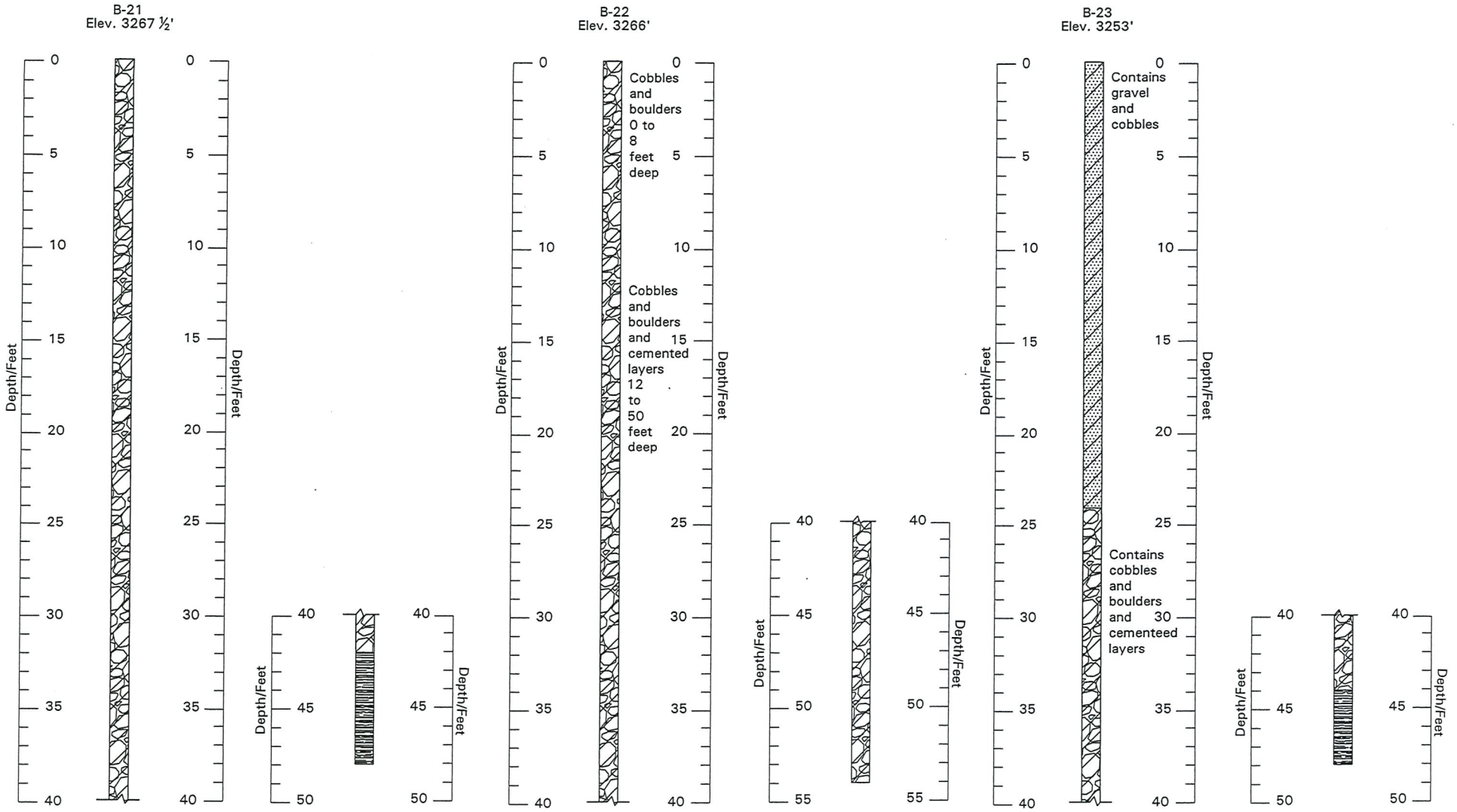
See Figure 15 for Legend and Notes

2080779	AGES	Logs of Exploratory Borings	Figure 8



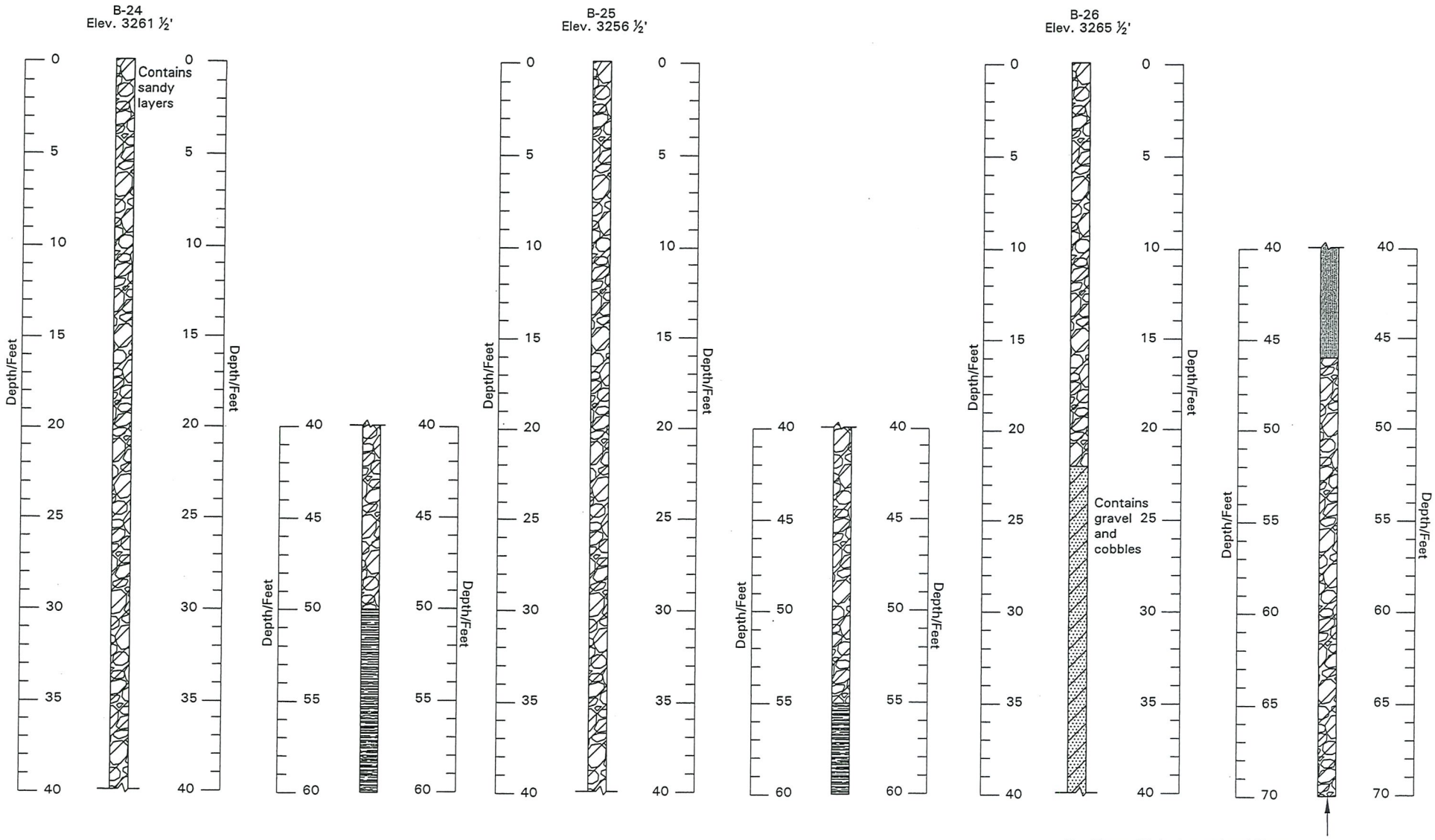
See Figure 15 for Legend and Notes

2080779	AGEC	Logs of Exploratory Borings	Figure 9



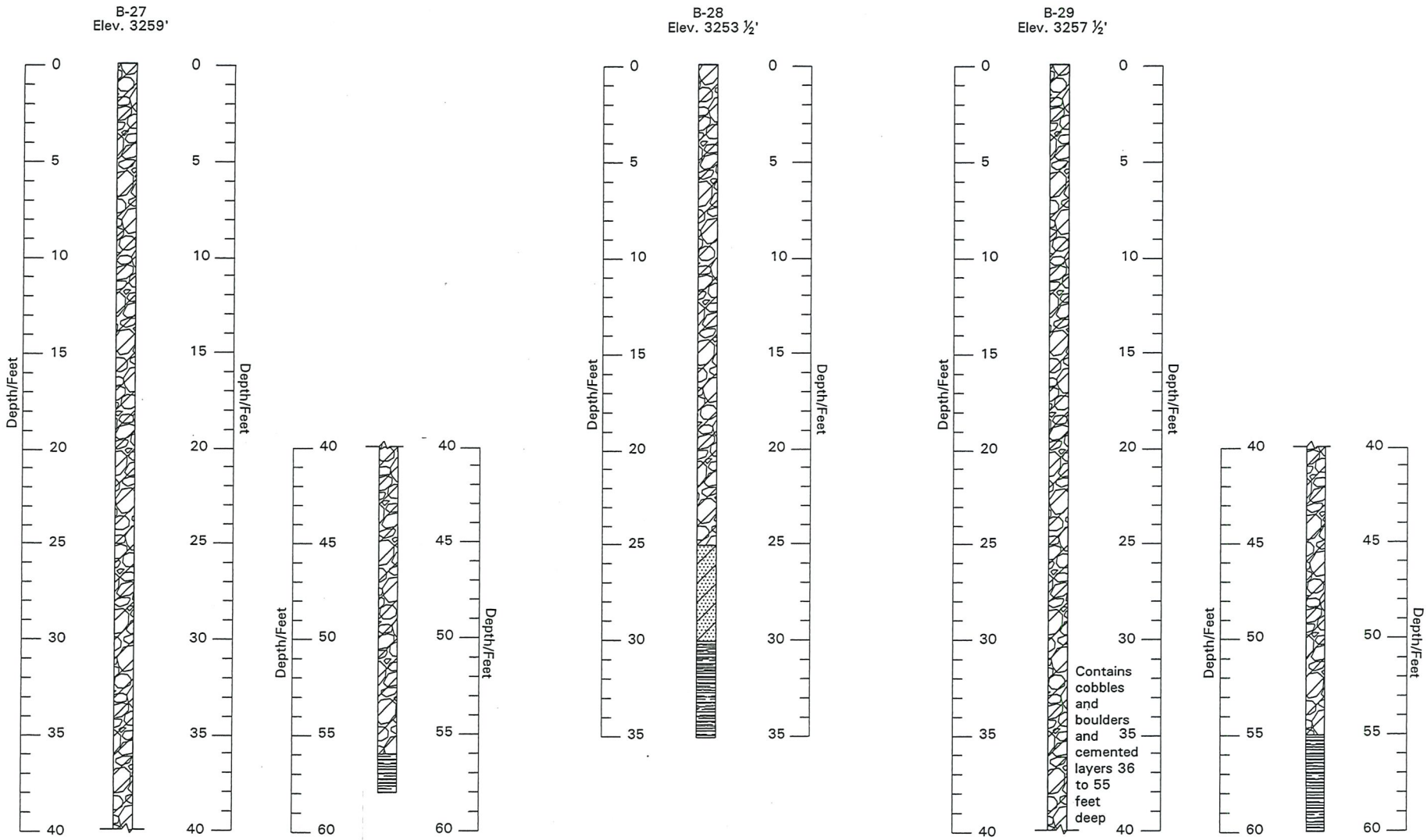
See Figure 15 for Legend and Notes

2080779	AGE	Logs of Exploratory Borings	Figure 10



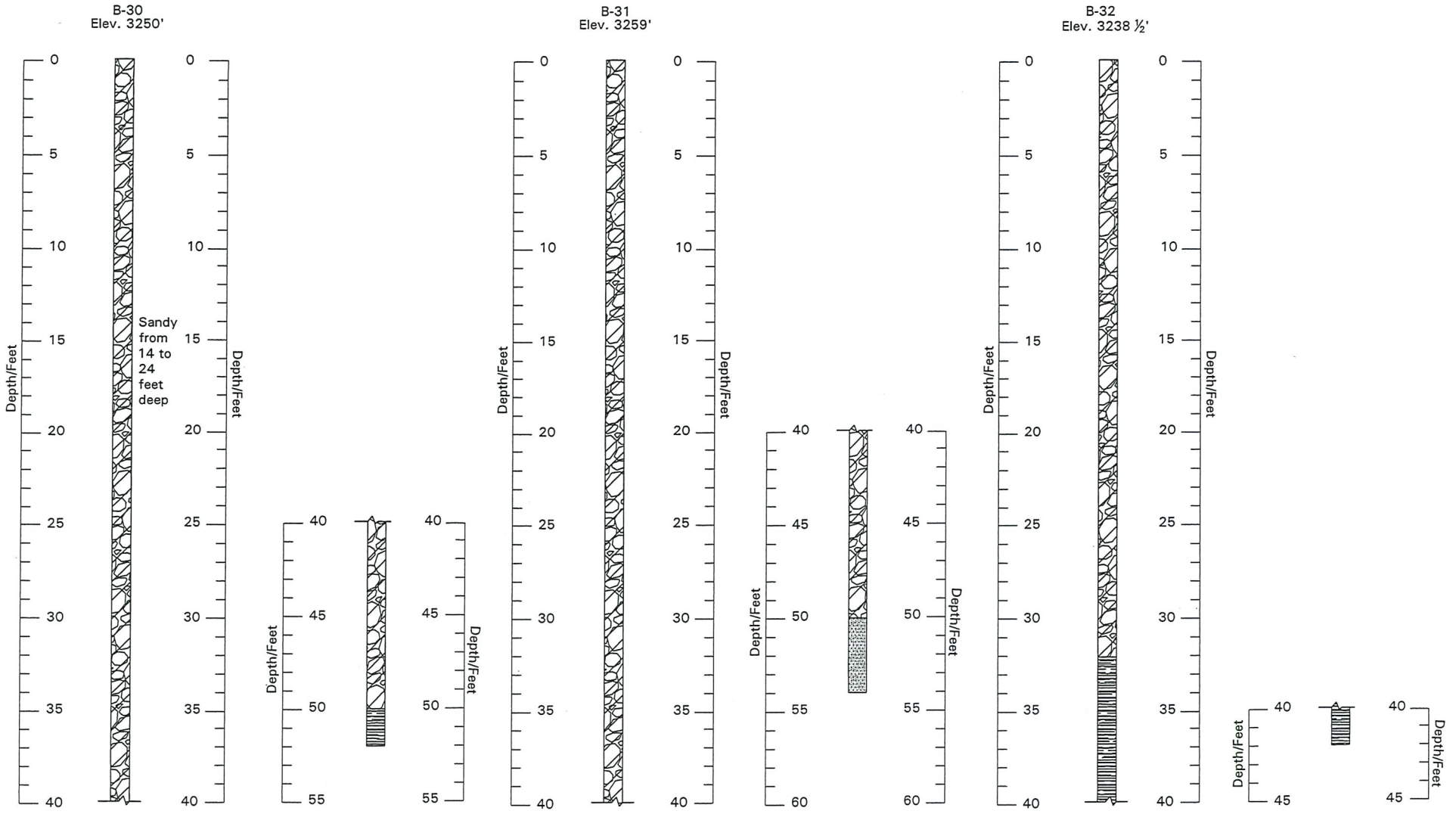
See Figure 15 for Legend and Notes

2080779	AGEC	Logs of Exploratory Borings	Figure 11



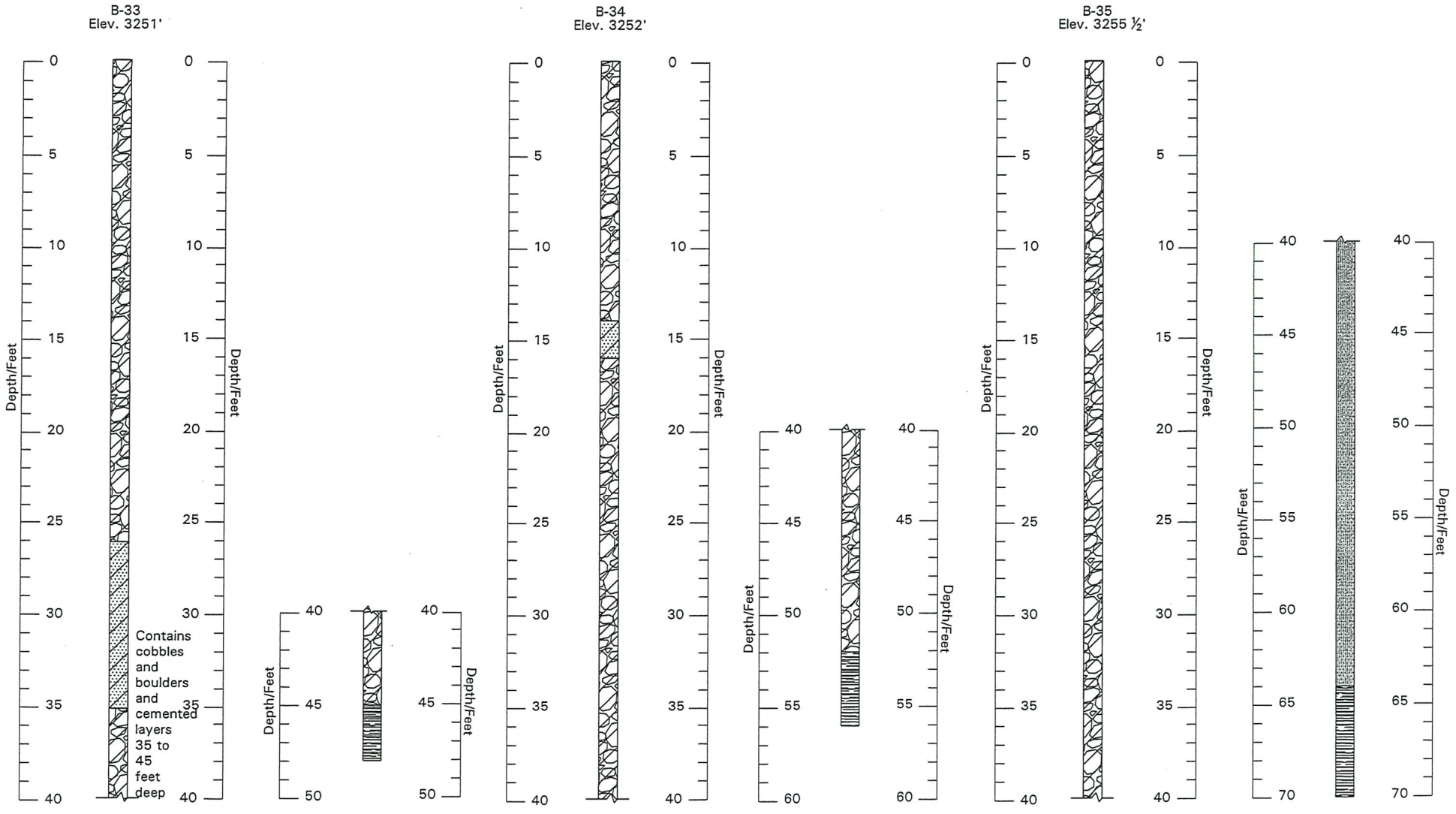
See Figure 15 for Legend and Notes

2080779 | AGEC | Logs of Exploratory Borings | Figure 12



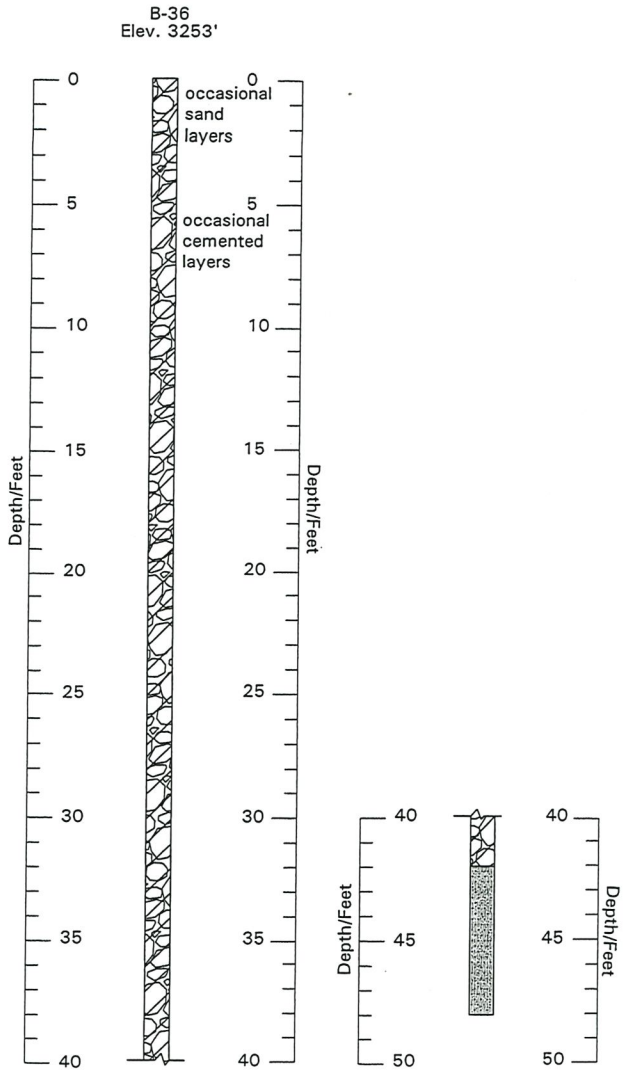
See Figure 15 for Legend and Notes

2080779	AGEC	Logs of Exploratory Borings	Figure 13



See Figure 15 for Legend and Notes

2080779 | AGE | Logs of Exploratory Borings | Figure 14



LEGEND:

Silty sand (SM); contains varied amounts of gravel and cobbles, medium dense, dry to slightly moist, red to brown.

Silty gravel; contains varied amounts of sand with layers of cobbles and boulders, contains cemented layers, medium dense to very dense, dry to slightly moist, brown.

Sandstone bedrock; medium hard, slightly moist, fine-grained, red to brown.

Shale bedrock; soft, moist, dark red.

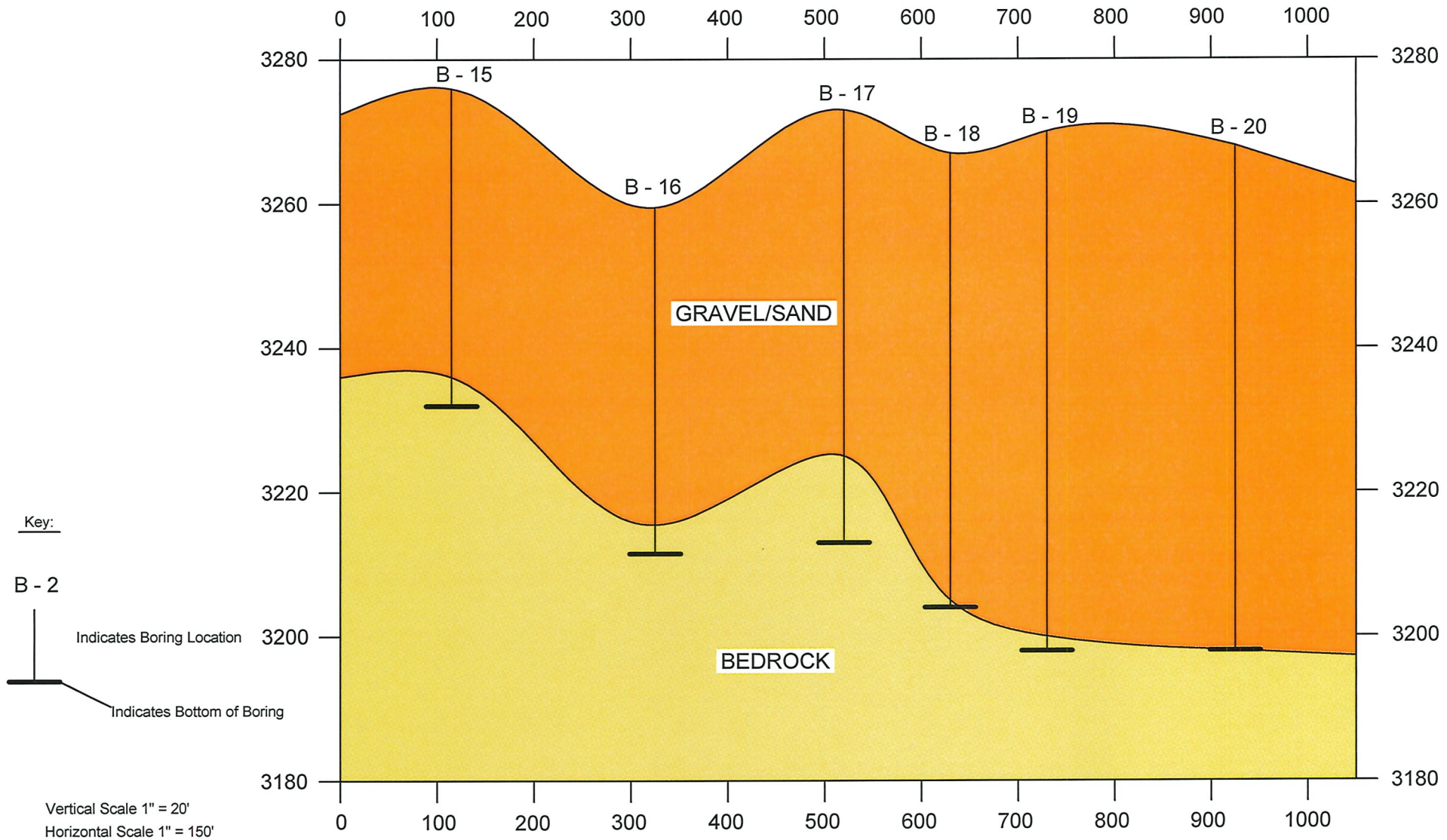
10/12 California Drive sample taken. The symbol 10/12 indicates that 10 blows from a 140 pound automatic hammer falling 30 inches were required to drive the sampler 12 inches.

Indicates practical Auger refusal on cobbles/boulders.

NOTES:

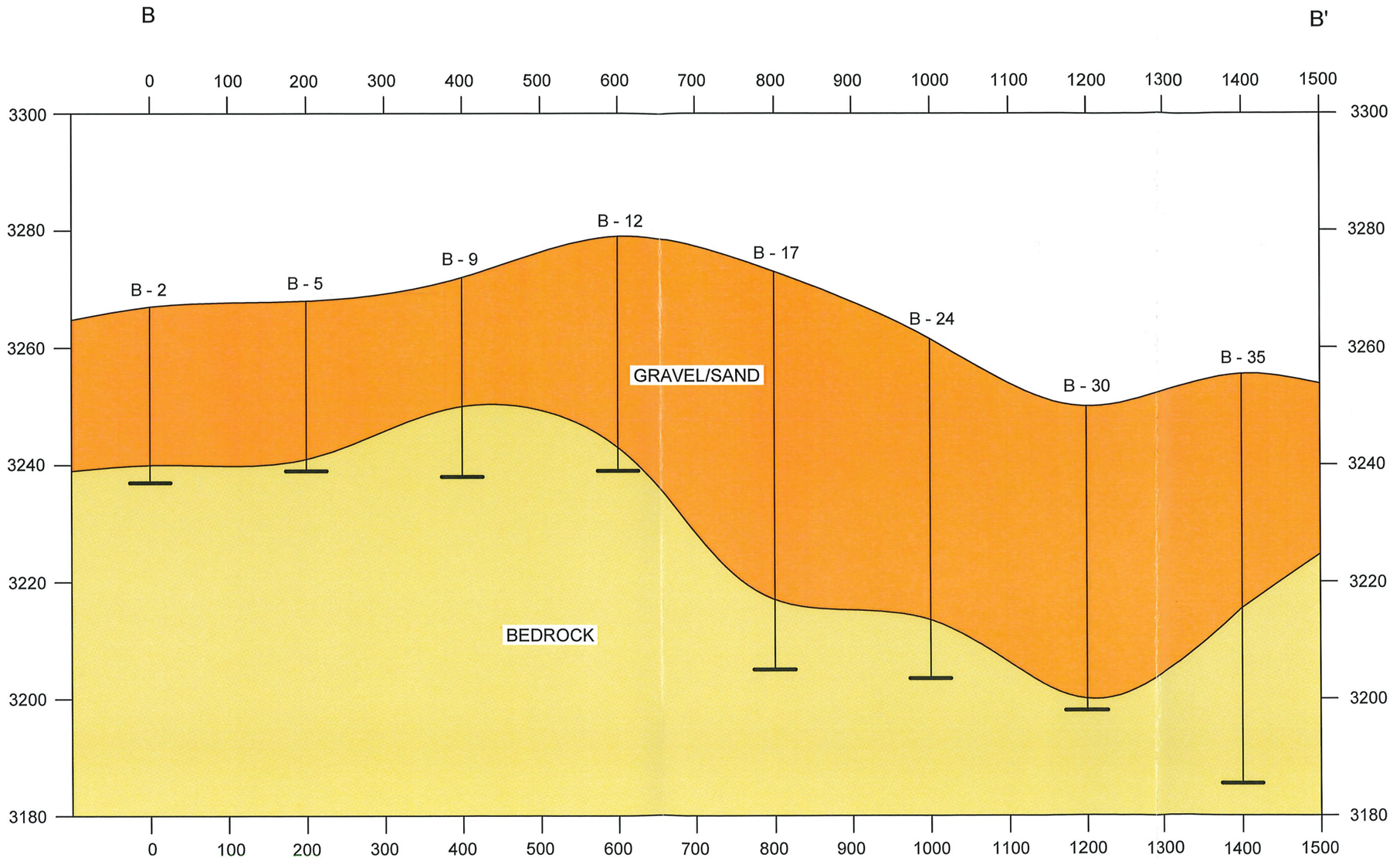
1. Borings B-1 through B-36 were drilled on August 18, 19, and 20, 2008 with a truck mounted blasting rig using air rotary methods. Boring BP-1 was drilled on August 21, 2008 with a truck-mounted drill rig equipped with 8-inch hollow-stem augers.
2. The locations of the borings were measured using GPS.
3. The elevations of the borings were measured using GPS.
4. The boring locations and elevations should be considered accurate only to the degree implied by the method used.
5. The lines between the materials shown on the boring logs represent the approximate boundaries between material types and the transitions may be gradual.
6. Free water was not encountered in the borings at the time of drilling.

SECTION "A"
GILBERT GRAVEL PIT EVALUATION
HURRICANE, UTAH



2080779	AGEC	CROSS-SECTION A - A'	Figure 16

CROSS-SECTION B-B'
GILBERT GRAVEL PIT EVALUATION
HURRICANE, UTAH



Key:

B - 2

Indicates Boring Location

Indicates Bottom of Boring

Vertical Scale 1" = 20'
Horizontal Scale 1" = 150'

2080779	AGEC	CROSS-SECTION B - B'	Figure 17

Applied Geotechnical Engineering Consultants, P.C.

GEOTECHNICAL INVESTIGATION

CORAL CANYON AREA 10

HURRICANE, UTAH

PREPARED FOR:

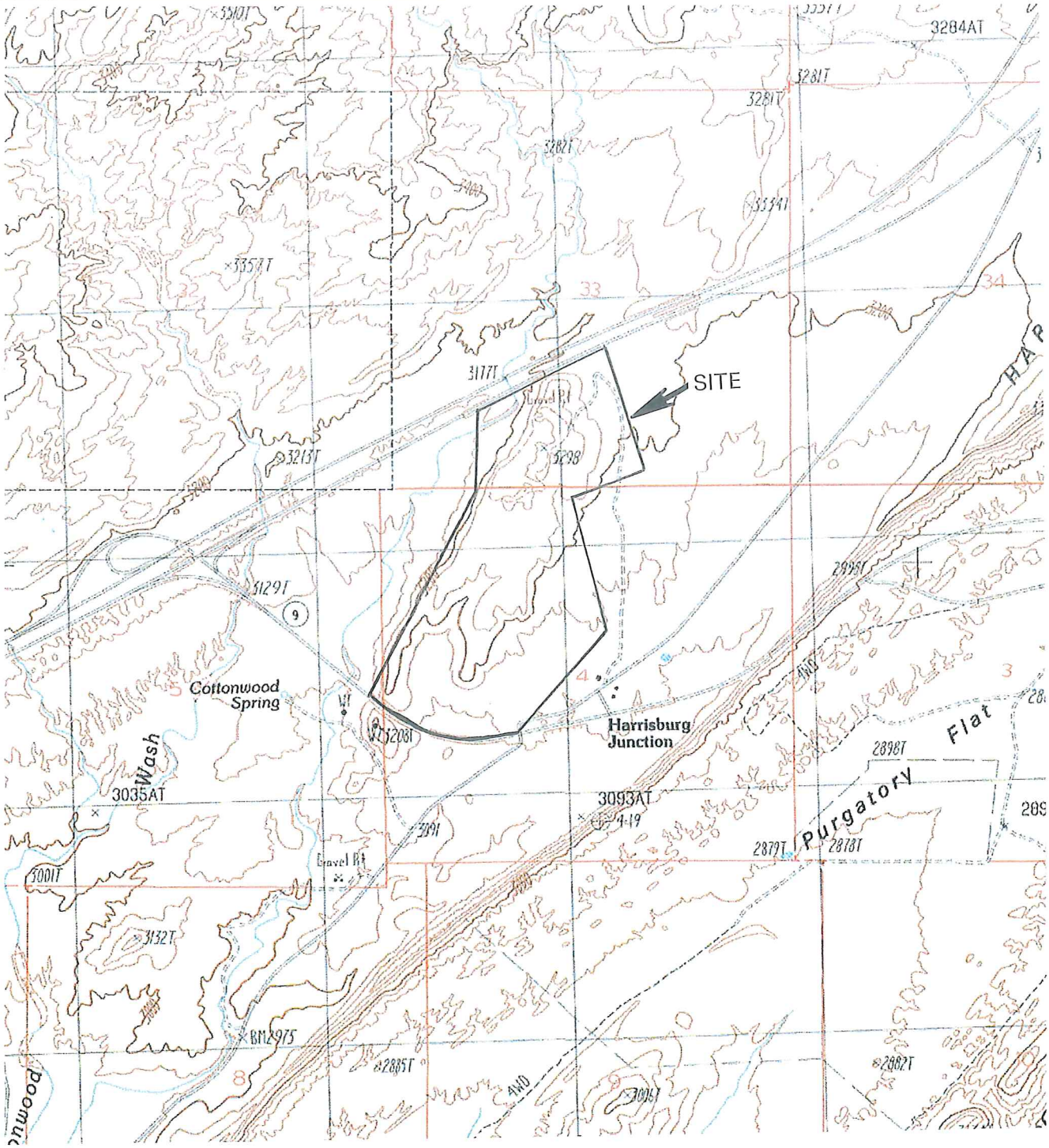
ALLIANCE CONSULTING
2303 NORTH CORAL CANYON BOULEVARD
WASHINGTON, UTAH 84780-0577

ATTENTION: DELOSS HAMMON, P.E.

PROJECT NO. 2051110

MAY 22, 2006

158 West 1600 South • St. George, Utah 84770 • (435) 673-6850 • FAX (435) 673-1044



Harrisburg Junction Quadrangle, 1986

N

Scale 1" = 2,000'

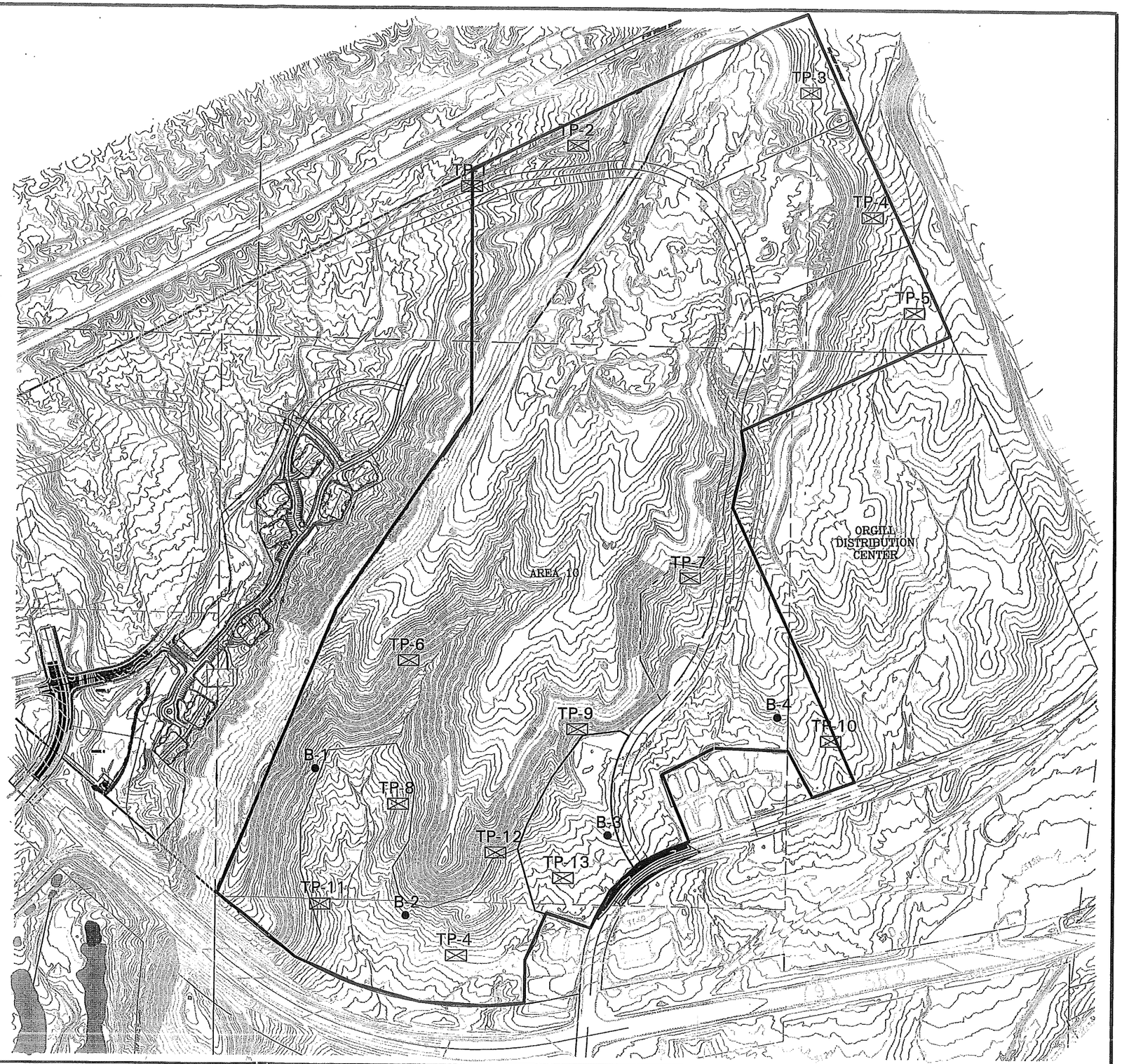
CORAL CANYON AREA 10
HURRICANE, UTAH

2051110	AGEC	Vicinity Map	Figure 1

CORAL CANYON AREA 10
HURRICANE, UTAH

⊠ Approximate test pit locations

● Approximate test pit locations



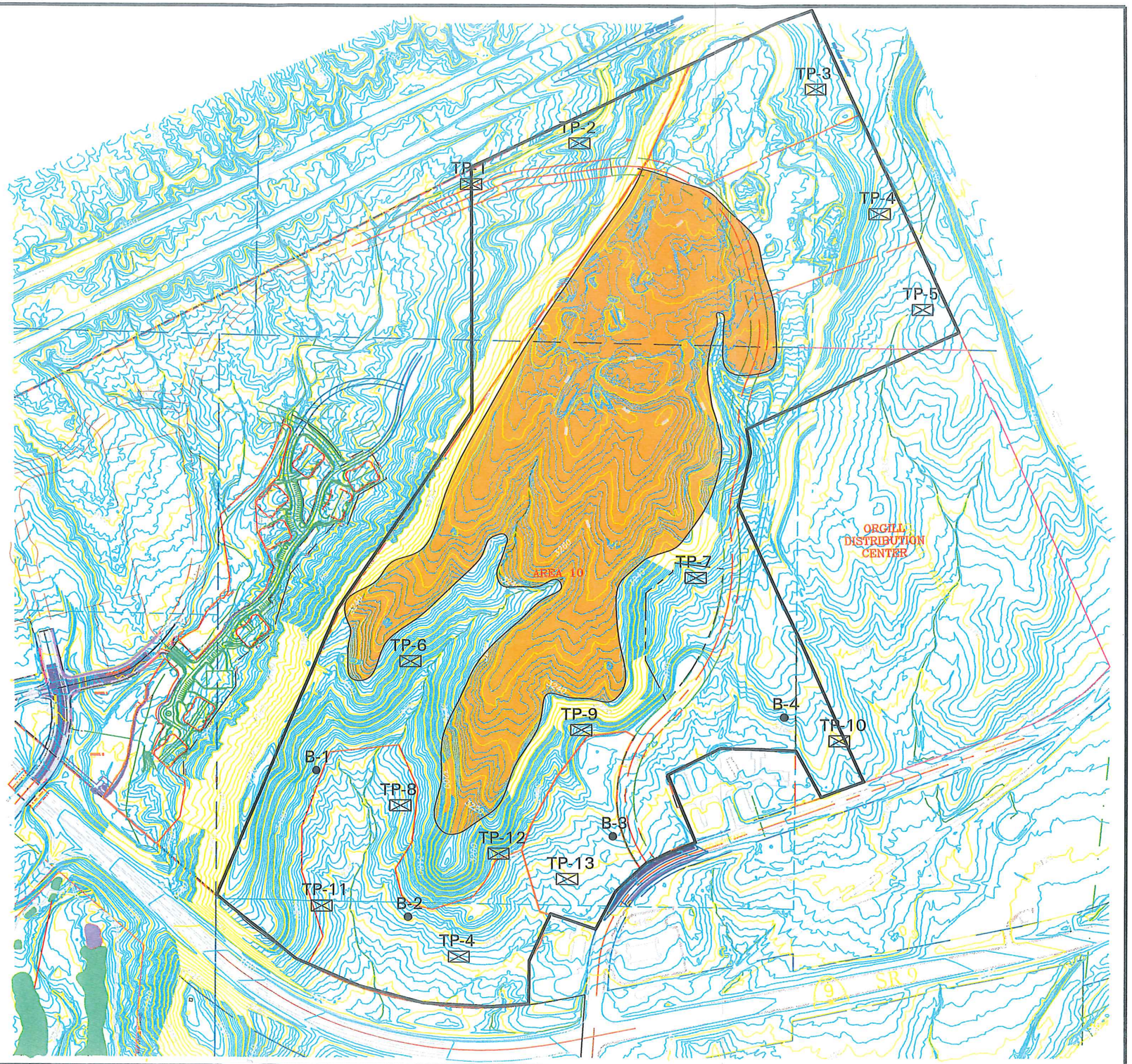
N

0 500 1000 feet

Approximate Scale

2051110	AGEC	Site Plan	Figure 2

CORAL CANYON AREA 10
HURRICANE, UTAH



⊠ Approximate test pit locations

● Approximate test pit locations

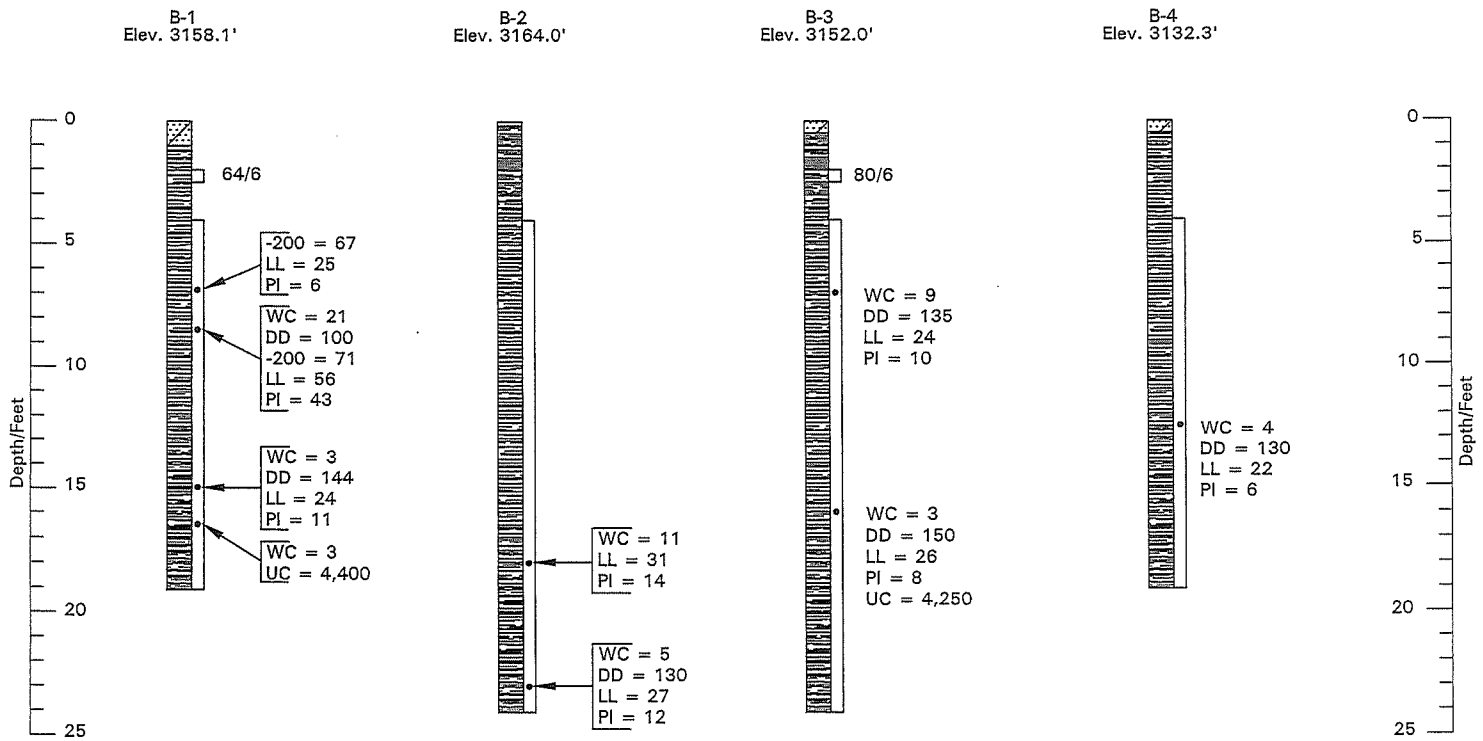
Approximate area requiring additional investigation

N

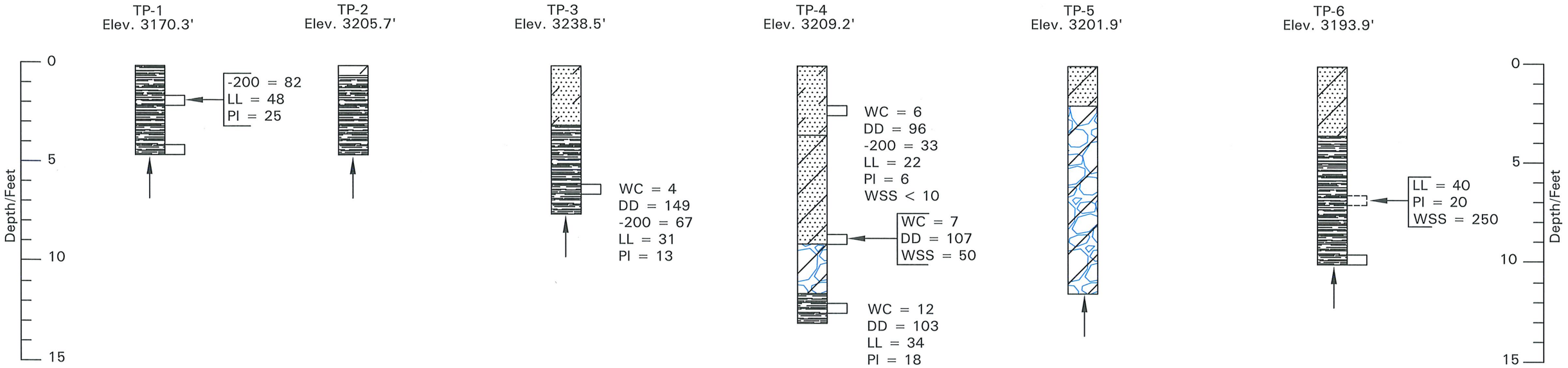
0 500 1000 feet

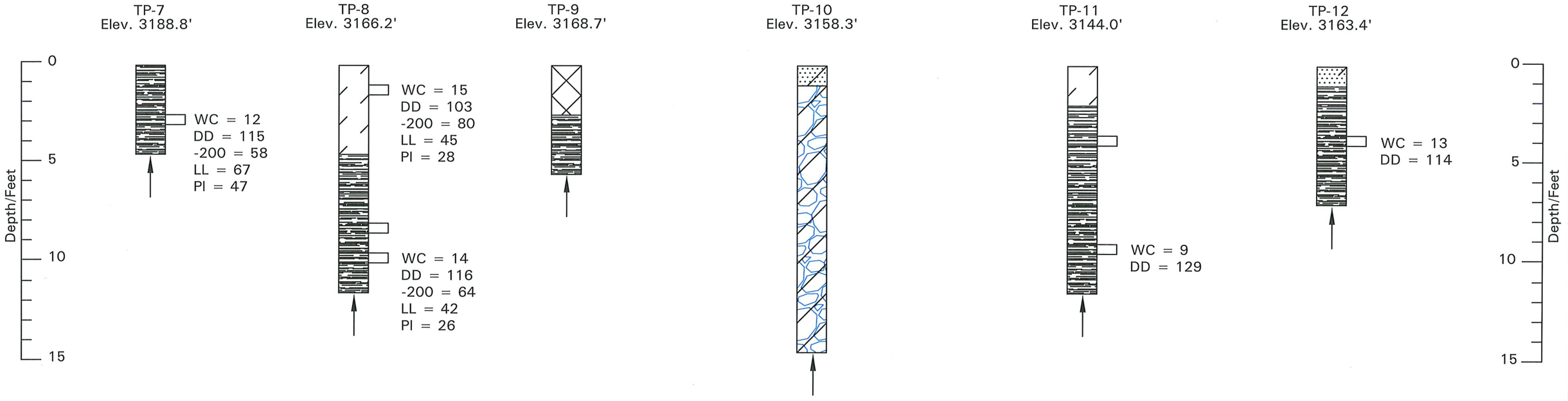
Approximate Scale

2051110	AGEC	Site Plan - Approximate Area Requiring Additional Investigation	Figure 2a



2051110	AGRA	Logs of Exploratory Borings	Figure 3

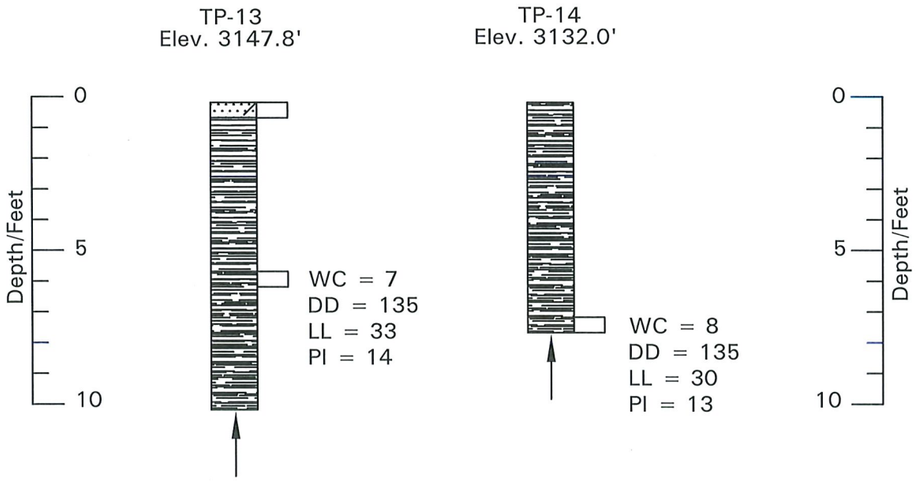




2051110

Logs of Test Pits

Figure 4



LEGEND:

Fill; clayey sand with gravel (SC); cobbles, moderately compacted, slightly moist, low plastic, fine-grained, brown.

Lean clay with sand (SM); some gravel, soft to stiff, dry, low to medium plastic, gypsiferous, brown.

Clayey sand (SC); varied amounts of gravel, medium dense, dry to moist, fine-grained, low plastic, brown to red.

Silty sand (SM); varied amounts of gravel, occasional cobbles, medium dense to very dense, dry, fine-grained, brown to red.

Silty gravel with sand (GM); cobbles and boulders, very dense, dry to slightly moist, sub-rounded, light brown.

Shale bedrock; weathered to hard, dry to moist, low to high plastic, gypsiferous, brown to red-brown to gray.

Indicates relativley undisturbed block sample taken.

Indicates disturbed sample taken.

10/12 California Drive sample taken. The symbol 10/12 indicates that 10 blows from a 140 pound hammer falling 30 inches were required to drive the sampler 12 inches.

Indicates core sample taken.

Indicates practical trackhoe refusal on shale bedrock or boulders.

NOTES:

1. The test pits were excavated on February 9, 10, and 13, 2006 with a track mounted excavator. The borings were drilled on February 14 and 15, 2006 with 7-inch diameter hollow-stem augers and a 2-inch NX core barrel.
2. The locations of the test pits and borings were measured by pacing from features shown on the site plan provided.
3. The elevations of the test pits and borings were measured with a global positioning system (GPS) and are based on U.S. State Plane 1983 Utah South 4303.
4. The test pit and boring locations and elevations should be considered accurate only to the degree implied by the method used.
5. The lines between the materials shown on the test pit and boring logs represent the approximate boundaries between material types and the transitions may be gradual.
6. No subsurface water was encountered in the test pits and borings at time of excavation/drilling.
7. WC = Water Content (%);
   DD = Dry Density (pcf);
   -200 = Percent Passing No. 200 Sieve;
   LL = Liquid Limit (%);
   PI = Plasticity Index (%);
   UC = Unconfined Compressive Strength (psi);
   WSS = Water Soluble Sulfates (ppm).

AMENDED LAND USE MASTER PLAN

for

CORAL CANYON

A PLANNED COMMUNITY DEVELOPMENT

CITY OF WASHINGTON, UTAH

by

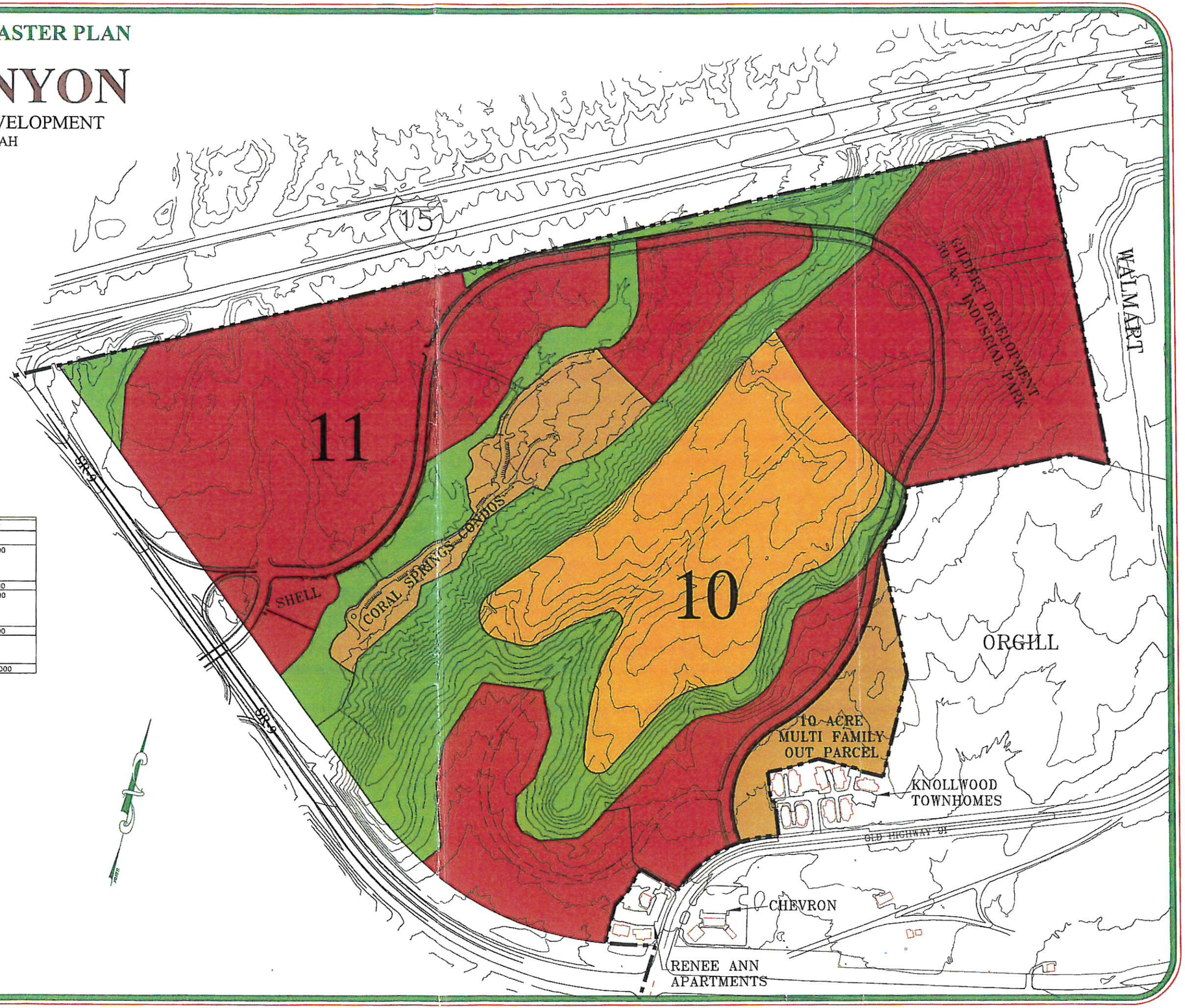
SUNCOR

PCD ZONING LEGEND

- MIXED DENSITY - RESIDENTIAL
- COMMERCIAL / INDUSTRIAL
- MULTIFAMILY RECREATIONAL CONDO / TIME SHARE
- OPEN SPACE / UNDEVELOPED AREA

LAND USE TABLE

NEIGHBORHOOD	LAND USE	ACRES	UNITS	SQ FT
10.	COMMERCIAL	83.31		650,000
	MULTIFAMILY RECREATIONAL	10.34	140	
	OPEN SPACE	53.25		
	RESIDENTIAL	47.48	500	
	SUB-TOTAL UNITS	194.38	640	650,000
11.	COMMERCIAL	76.66		850,000
	MULTIFAMILY RECREATIONAL	14.34	143	
	OPEN SPACE	17.39		
	LODGING	0	0	
	SUB-TOTAL UNITS	108.39	143	850,000
	TOTAL MIXED RESIDENTIAL UNITS		0	
	TOTAL LODGING UNITS		0	
	TOTAL UNITS		783	1,500,000



Engineering by

ALLIANCE CONSULTING

AMENDED 10-06-2005

approved Mapp

AMENDED LAND USE MASTER PLAN
for
CORAL CANYON
A PLANNED COMMUNITY DEVELOPMENT
CITY OF HURRICANE & CITY OF WASHINGTON, UTAH
by

SunCor
the art of place

Engineering by

ALLIANCE CONSULTING
AMENDED 9-06-2007

PCD ZONING LEGEND

- RESIDENTIAL
- CHURCH
- GOLF COURSE
- COMMERCIAL/INDUSTRIAL
- MULTIFAMILY RECREATIONAL CONDO / TIME SHARE
- OPEN SPACE
- UNDEVELOPED AREA
- COMMERCIAL
- FIRE STATION
- CLUBHOUSE
- SCHOOL
- CHURCH
- PARKS/TRAILWAYS

GRAPHIC SCALE
600 0 300 600 1200 2400
(IN FEET)
1 inch = 600 ft.

CITY OF HURRICANE
PLANNED DEVELOPMENT OVERLAY "PDO"
AREA 10 & 11

CITY OF WASHINGTON
PLANNED COMMUNITY DEVELOPMENT "PCD"
AREA 1–9 & 12

LAND USE TABLE

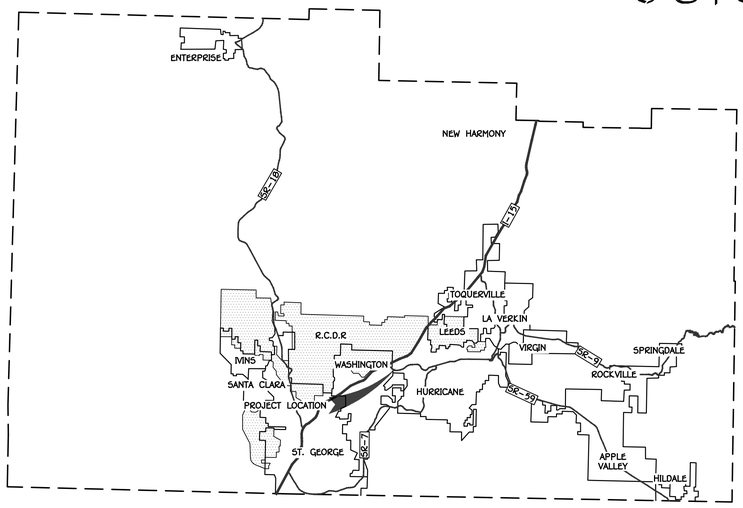
NEIGHBORHOOD	LAND USE	ACRES	UNITS	SQ. FT.
1.	MIXED RESIDENTIAL	120	411	
	COMMERCIAL-OFFICE			45,000
	COMMERCIAL-RETAIL			180,000
	LODGING	7	275	
	OPEN SPACE	17		
	SCHOOL	9		
	CHURCH	3.6		
	SUB-TOTAL LODGING UNITS		275	
	SUB-TOTAL UNITS	156.6	411	
2.	MIXED RESIDENTIAL	82.6	260	
	OPEN SPACE	20		
	SUB-TOTAL UNITS	102.6	260	
3.	MIXED RESIDENTIAL	162.5	624	
	COMMERCIAL	3		60,000
	SCHOOL	8		
	CHURCH	3		
	OPEN SPACE	38		
	SUB-TOTAL UNITS	214.5	624	
4.	MIXED RESIDENTIAL	82.5	316	
	COMMERCIAL	3		80,000
	SCHOOL	8		
	CHURCH	3		
	SUB-TOTAL UNITS	95.5	316	
5.	MIXED RESIDENTIAL	35	125	
	OPEN SPACE/GOLF COURSE	55		
	SUB-TOTAL UNITS	90	125	
6.	MIXED RESIDENTIAL	57.15	142	
	CHURCH	3		130,680
	OPEN SPACE	14		
	SUB-TOTAL UNITS	74.15	142	
7.	MIXED RESIDENTIAL	49.2	151	
	COMMERCIAL	5		100,000
	OPEN SPACE	18		
	CHURCH	3		
	SUB-TOTAL UNITS	75.2	151	
8.	MIXED RESIDENTIAL	47	160	
	COMMERCIAL	5		100,000
	OPEN SPACE	32		
	SUB-TOTAL UNITS	84	160	
9.	COMMERCIAL	17.32		250,000
	MULTIFAMILY RECREATIONAL	21.94	250	
	OPEN SPACE	16.53		
	SUB-TOTAL UNITS	55.79	250	
10.	COMMERCIAL	83.31		650,000
	MULTIFAMILY RECREATIONAL	10.34	140	
	OPEN SPACE	53.25		
	RESIDENTIAL	47.45	500	
	SUB-TOTAL UNITS	194.35	640	
11.	COMMERCIAL	81.49		850,000
	MULTIFAMILY RECREATIONAL	9.51	101	
	OPEN SPACE	17.39		
	LODGING	0	7	
	SUB-TOTAL LODGING UNITS		7	
	SUB-TOTAL UNITS	108.39	101	
12.	GOLF	223		
13.	MIXED RESIDENTIAL	38.41	161	
	COMMERCIAL	7.82		156,400
	OPEN SPACE	13		
	SUB-TOTAL UNITS	57.23	161	
	TOTAL MIXED RESIDENTIAL UNITS		3291	
	TOTAL LODGING UNITS		282	
	TOTAL UNITS		3573	
	TOTAL COMMERCIAL SQUARE FOOT			2,582,080

CIELO AT CORAL CANYON

HURRICANE, UTAH

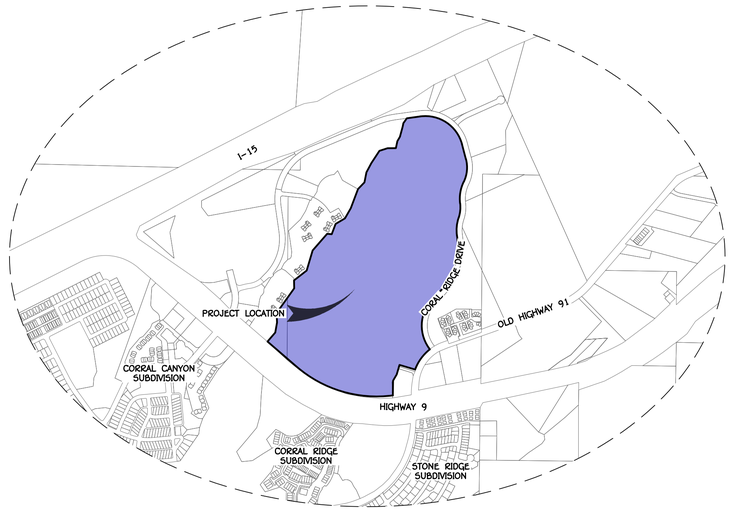
PRELIMINARY PLAT

OCTOBER 2024



WASHINGTON COUNTY

N.T.S.



VICINITY MAP

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M

0 1000' 2000'

SCALE: 1" = 1000'

SHEET INDEX		
#	SHEET	DESCRIPTION
1	C.1.1	COVER SHEET
2	C.1.2	OVERALL SITE PLAN
3	C.2.1	SITE PLAN I
4	C.2.2	SITE PLAN II
5	C.2.3	SITE PLAN III
6	C.2.4	SITE PLAN IV
7	C.2.5	SITE PLAN V
8	C.3.1	GRADING PLAN I
9	C.3.2	GRADING PLAN II
10	C.3.3	GRADING PLAN III
11	C.3.4	GRADING PLAN IV
12	C.3.5	GRADING PLAN V
13	C.3.6	GRADING PLAN VI
14	C.3.7	GRADING PLAN VII
15	C.3.8	GRADING PLAN VIII
16	C.3.9	GRADING PLAN IX
17	C.3.10	GRADING PLAN X
18	C.3.11	GRADING PLAN XI
19	C.4.0	WATER IRRIGATION & SEWER OVERALL
20	C.4.1	WATER IRRIGATION & SEWER I
21	C.4.2	WATER IRRIGATION & SEWER II
22	C.4.3	WATER IRRIGATION & SEWER III
23	C.4.4	WATER IRRIGATION & SEWER IV
24	C.4.5	WATER IRRIGATION & SEWER V
25	C.5.1	GAS-JUT I
26	C.5.2	GAS-JUT II
27	C.5.3	GAS-JUT III
28	C.5.4	GAS-JUT IV
29	C.5.5	GAS-JUT V
30	C.6.0	OVERALL POWER PLAN
31	C.6.1	POWER PLAN I
32	C.6.2	POWER PLAN II
33	C.6.3	POWER PLAN III
34	C.6.4	POWER PLAN IV
35	C.6.5	POWER PLAN V

CIELO SITE DATA		
DESCRIPTION	DATA	
CURRENT ZONING	P.C.D.	
TOTAL AREA (SQ. FT)	6,261,190	SQ. FT.
TOTAL AREA (ACRE)	143.74	ACRES
NO. OF LOTS (PHASE 1)	53	LOTS
NO. OF LOTS (PHASE 2)	63	LOTS
NO. OF LOTS (PHASE 3)	66	LOTS
NO. OF LOTS (PHASE 4)	36	LOTS
NO. OF LOTS (PHASE 5)	66	LOTS
NO. OF LOTS (PHASE 6)	74	LOTS
NO. OF LOTS (PHASE 7)	54	LOTS
NO. OF LOTS (TOTAL)	412	LOTS
DENSITY	2.87	D.U./ACRE
MIN LOT SIZE	5,390	SQ FT
MAX LOT SIZE	13,579	SQ FT

LEGAL DESCRIPTION

BEGINNING AT A POINT THAT LIES NORTH 00°22'41" EAST ALONG THE SECTION LINE 873.71 FEET FROM THE WEST QUARTER CORNER OF SECTION 4, TOWNSHIP 42 SOUTH, RANGE 14 WEST, SALT LAKE BASE AND MERIDIAN; RUNNING THENCE NORTH 35°26'49" EAST 156.54 FEET; THENCE NORTH 01°06'49" WEST 111.00 FEET; THENCE NORTH 52°08'16" EAST 223.04 FEET; THENCE NORTH 16°32'07" EAST 292.85 FEET; THENCE NORTH 41°04'16" EAST 310.01 FEET; THENCE SOUTH 84°14'12" EAST 63.51 FEET; THENCE NORTH 20°29'44" EAST 153.47 FEET; THENCE NORTH 59°29'19" EAST 152.44 FEET; THENCE NORTH 29°52'49" EAST 164.10 FEET; THENCE NORTH 20°37'07" EAST 286.51 FEET; THENCE NORTH 43°57'12" EAST 128.98 FEET; THENCE NORTH 11°08'24" EAST 142.74 FEET; THENCE NORTH 28°01'53" EAST 145.92 FEET; THENCE NORTH 33°22'56" EAST 206.03 FEET; THENCE NORTH 72°00'23" EAST 120.03 FEET; THENCE NORTH 89°54'10" EAST 115.41 FEET; THENCE NORTH 12°17'16" EAST 99.91 FEET; THENCE NORTH 30°11'36" EAST 71.04 FEET; THENCE NORTH 15°11'01" EAST 147.25 FEET; THENCE NORTH 11°15'32" EAST 49.53 FEET; THENCE NORTH 35°27'03" EAST 83.66 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF FOOTHILLS CANYON DRIVE; THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING TEN (10) COURSES, NORTH 82°14'26" EAST 100.08 FEET; THENCE SOUTHEASTERLY ALONG A 530.00 FOOT RADIUS CURVE TO THE RIGHT, (CENTER POINT LIES SOUTH 07°45'34" EAST) THROUGH A CENTRAL ANGLE OF 82°56'07", A DISTANCE OF 767.17 FEET; THENCE SOUTHERLY ALONG A 460.00 FOOT RADIUS CURVE TO THE RIGHT, (CENTER POINT LIES SOUTH 75°10'33" WEST) THROUGH A CENTRAL ANGLE OF 40°42'13", A DISTANCE OF 326.79 FEET; THENCE SOUTHERLY ALONG A 540.00 FOOT RADIUS REVERSE CURVE TO THE LEFT, (CENTER POINT LIES SOUTH 64°07'14" EAST) THROUGH A CENTRAL ANGLE OF 32°42'55", A DISTANCE OF 308.33 FEET; THENCE SOUTHERLY ALONG A 460.00 FOOT RADIUS REVERSE CURVE TO THE RIGHT, (CENTER POINT LIES SOUTH 83°09'51" WEST) THROUGH A CENTRAL ANGLE OF 25°30'57", A DISTANCE OF 204.85 FEET; THENCE SOUTHERLY ALONG A 540.00 FOOT RADIUS REVERSE CURVE TO THE LEFT, (CENTER POINT LIES SOUTH 71°19'12" EAST) THROUGH A CENTRAL ANGLE OF 26°53'06", A DISTANCE OF 253.39 FEET; THENCE SOUTHERLY ALONG A 960.00 FOOT RADIUS REVERSE CURVE TO THE RIGHT, (CENTER POINT LIES SOUTH 81°47'42" WEST) THROUGH A CENTRAL ANGLE OF 56°28'40", A DISTANCE OF 946.29 FEET; THENCE SOUTHERLY ALONG A 540.00 FOOT RADIUS REVERSE CURVE TO THE LEFT, (CENTER POINT LIES SOUTH 41°43'38" EAST) THROUGH A CENTRAL ANGLE OF 82°57'57", A DISTANCE OF 781.93 FEET; THENCE SOUTH 34°41'46" EAST 29.63 FEET TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF HIGHWAY 91; THENCE SOUTHWESTERLY ALONG SAID RIGHT-OF-WAY AND A 650.10 FOOT RADIUS NON-TANGENT CURVE TO THE LEFT, (CENTER POINT LIES SOUTH 38°12'42" EAST) THROUGH A CENTRAL ANGLE OF 31°10'41", A DISTANCE OF 353.76 FEET; THENCE NORTH 73°35'59" WEST 226.50 FEET; THENCE SOUTH 16°24'01" WEST 139.00 FEET; THENCE SOUTH 30°30'26" WEST 99.86 FEET; THENCE SOUTH 00°52'17" WEST 205.77 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY OF SR-9; THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES, WESTERLY ALONG A 1,709.86 FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT, (CENTER POINT LIES NORTH 07°36'33" WEST) THROUGH A CENTRAL ANGLE OF 48°34'16", A DISTANCE OF 1,449.49 FEET; THENCE NORTH 49°13'12" WEST 168.50 FEET; THENCE NORTH 49°13'12" WEST 365.19 FEET; THENCE NORTH 40°49'42" EAST 165.55 FEET; THENCE NORTH 09°54'17" EAST 142.85 FEET; THENCE NORTH 01°57'27" WEST 134.36 FEET; THENCE NORTH 35°26'49" EAST 265.42 FEET; TO THE POINT OF BEGINNING, CONTAINING 6,261,191 SQUARE FEET OR 143.74 ACRES.

PRELIMINARY PLAT SITE DATA		PROPERTY OWNER	GEOTECH ENGINEER	CIVIL ENGINEER	APPLICANT-AGENT
CIELO AT CORAL CANYON		COLE WEST HOME	APPLIED GEOTECHNICAL (AGEC)	AMERICAN CONSULTING & ENGINEERING	AMERICAN CONSULTING & ENGINEERING
CURRENT ZONING:	P.D.O.	2250 N. CORAL CANYON BLVD, STE. #200	1420 S. 270 E.	1173 S. 250 W., SUITE #504	1173 S. 250 W., SUITE #504
PROJECT AREA	143.74 ACRES	WASHINGTON, UT 84780	ST. GEORGE, UT 84790	ST. GEORGE, UT 84770	ST. GEORGE, UT 84770
NIGHTLY RENTAL	140 UNITS (49 LOTS + 91 TH)	CONTACT: ERIC DAY	CONTACT: WAYNE ROGERS	CONTACT: AUSTIN CHAPPELL	PRIMARY CONTACT: ADAM ALLEN
MULTIFAMILY	54 TOWNHOUSES	PHONE: (360) 798-8075	PHONE: (435) 673-6850	PHONE: (435) 288-3330	PHONE: (435) 288-3330
SINGLE FAMILY LOTS	218 LOTS	EMAIL: eric.day@colewest.com	EMAIL: rogers@agecinc.com	EMAIL: austin@alcsg.com	EMAIL: adam@alcsg.com
TOTAL DWELLING UNITS	412 D.U(DENSITY=2.87D.U./ACRE)				
FUTURE COMMERCIAL	0.24 ACRE (350829.31 SF)				

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504
ST. GEORGE, UT 84770

DATE: 10/07/2024
JOB #: 23-504-1
DRAWN BY: CDF
CHECKED BY: ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

COVER SHEET
PRELIMINARY PLAT

C.1.1

SHEET: 1 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Cover Pre-Plat.dwg

BASIS OF BEARING & BENCHMARK:

N00° 22' 41.23" E ALONG THE SECTION LINE BETWEEN THE WEST 1/4 CORNER OF SECTION 4 AND THE NORTHWEST CORNER OF SECTION 4, T42 SOUTH RANGE 14 WEST SLB&M.

NOTES

BASED ON THE RED CLIFFS DESERT RESERVE TAKE AREA MAPS THE PROJECT SITE IS NOT LOCATED IN A DESERT TORTOISE TAKE AREA.

LEGEND:

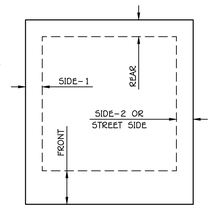
- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- SURVEY SECTION LINE
- PHASE LINE
- PLANNED RIDGELINE FROM MINING RECLAMATION
- SURVEY SECTION CORNER MONUMENT
- NIGHTLY RENTAL UNITS
- OPEN/COMMON SPACE
- FUTURE COMMERCIAL
- MULTIFAMILY UNITS
- LONG TERM RENTALS UNITS

RENTAL UNITS PARKING INFORMATION

DESCRIPTION	PROVIDED	REQUIRED
GARAGES	280	
DRIVEWAYS	280	
OFF-STREET GUEST PARKING	263	
RV PARKING	32	28
TOTAL	855	840

MULTIFAMILY PARKING INFORMATION

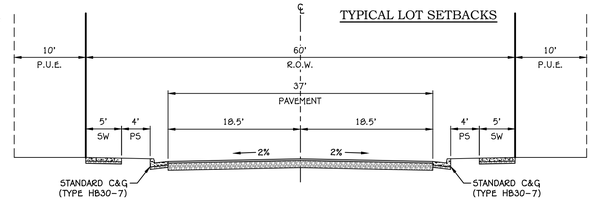
DESCRIPTION	PROVIDED	REQUIRED
GARAGES	54	
DRIVEWAYS	54	
OFF-STREET GUEST PARKING	0	
TOTAL	108	54

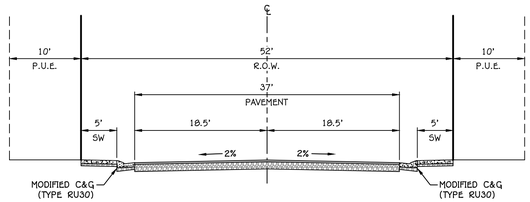


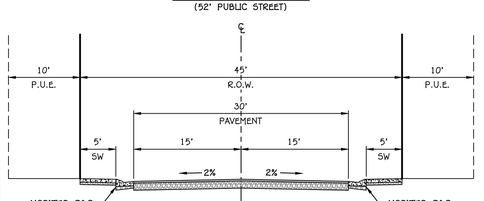
TYPICAL SETBACKS	
*FRONT	20'
REAR	10'
SIDE-1	5'
SIDE-2	5'
STREET SIDE	14'

* 14' TO BLDG
* 20' TO GARAGE
* 20' TO SIDE ENTRY GARAGE

NOTE: AT NIGHTLY RENTAL AREA / COMMUNAL PROPERTIES SHALL HAVE 10' MINIMUM BUILDING TO BUILDING SIDEYARDS







TYPICAL SECTION (A)
(45' PUBLIC STREET)

PRELIMINARY
NOT FOR
CONSTRUCTION

REV.	DATE:	REVISION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

OVERALL SITE PLAN

CONSTRUCTION DRAWINGS

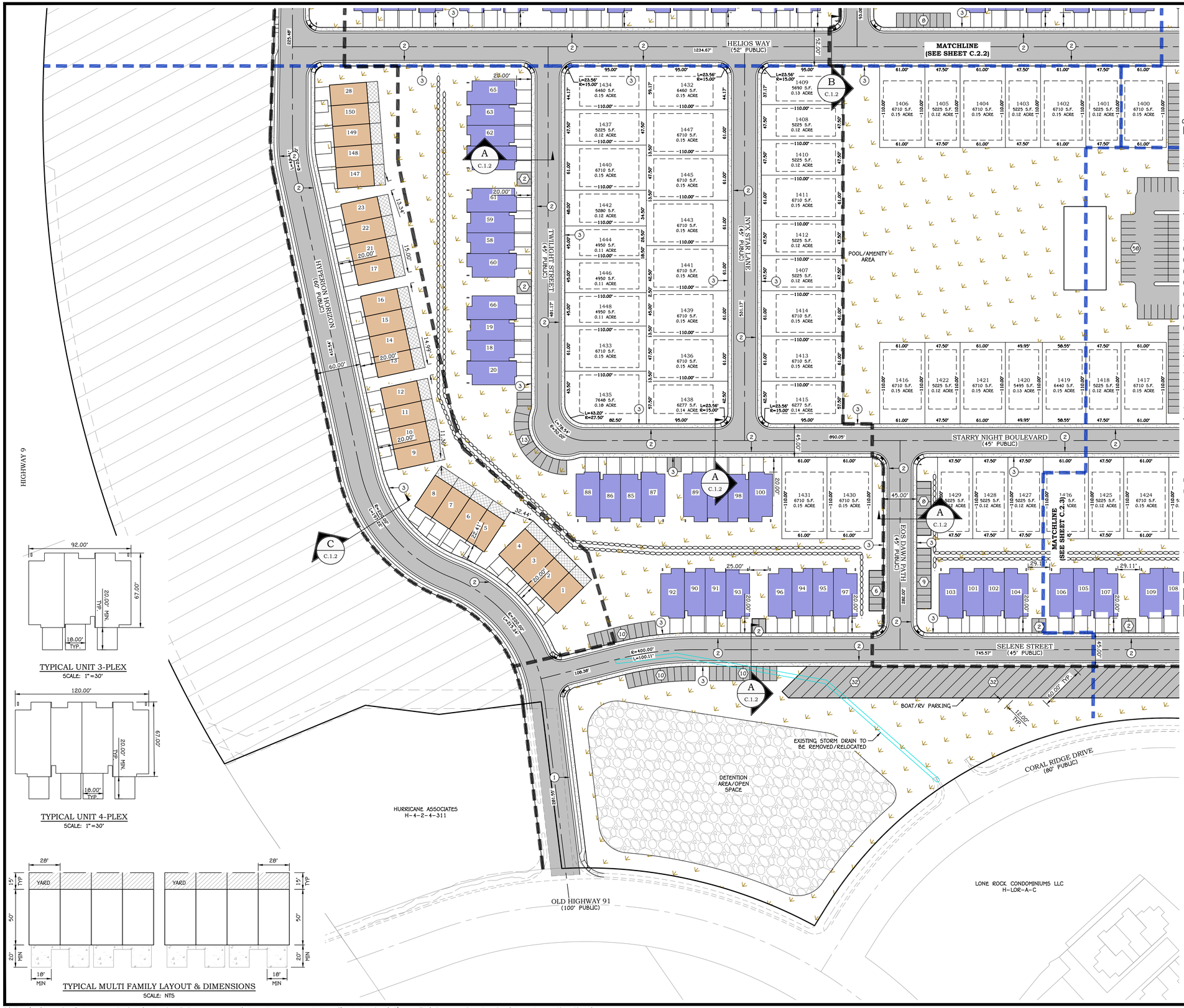
C.1.2

SHEET: 2 of 76

SCALE: 1" = 150'

Blue Stakes of UTAH 811
Bluestakes.org
Call Before You Dig!

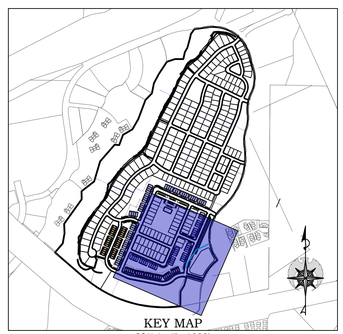
C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Overall Site Plan.dwg



TYPICAL UNIT 3-PLEX
SCALE: 1"=30'

TYPICAL UNIT 4-PLEX
SCALE: 1"=30'

TYPICAL MULTI FAMILY LAYOUT & DIMENSIONS
SCALE: NTS



SCALE: 1"=1000'

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

SITE PLAN NOTES:

1. CONTRACTOR TO MATCH EXISTING CONDITIONS AT ALL TIE IN LOCATIONS. PROTECT IN PLACE ALL INFRASTRUCTURE TO REMAIN. SAWCUT EXISTING C&G AND ASPHALT WHERE APPROPRIATE TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO NEW.
2. CLASS I AND/OR CLASS II SURVEY MONUMENTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. FINAL LOCATIONS FOR ALL SURVEY MONUMENTS TO BE PROVIDED BY THE LICENSED SURVEYOR.
3. ALL FIELD DESIGN CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO PROCEEDING WITH PROPOSED FIELD DESIGN CHANGES.

KEY NOTES:

		DETAIL
1	STANDARD CURB & GUTTER (HB30-7)	CC 101
2	MODIFIED CURB & GUTTER (RU30)	CC 102
3	SIDEWALK DETAILS	CC 105
4	STANDARD 8' CROSS GUTTER	CG 100
5	PARALLEL PEDESTRIAN ACCESS RAMP	PED 107
6	(3) END OF ROADWAY MARKER	MUTCD OM4-3
7	10' TRAIL SECTION	C.8.1
8	ACCESSIBLE PARKING SIGN (MUTCD R7-8 & R7-8P)	SS 102 & 103

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PROPOSED CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PROPOSED SETBACK LINE	
SURVEY SECTION LINE	
SURVEY SECTION CORNER MONUMENT	
CLASS I SURVEY MONUMENT	MON 100
CLASS II SURVEY MONUMENT	MON 101
PHASE LINE	
SHEET MATCH LINE	
CORNER PEDESTRIAN RAMP	PED 100
ADA PARKING SPACE	
STANDARD STREET SIGN WITH STANDARD STOP SIGN	SS 100-103
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK RETAINING WALL	
2.5" ASPHALT OVER 6" BASE PAVEMENT SECTION	
CONCRETE SURFACE	
OPEN SPACE/LANDSCAPE AREA	

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

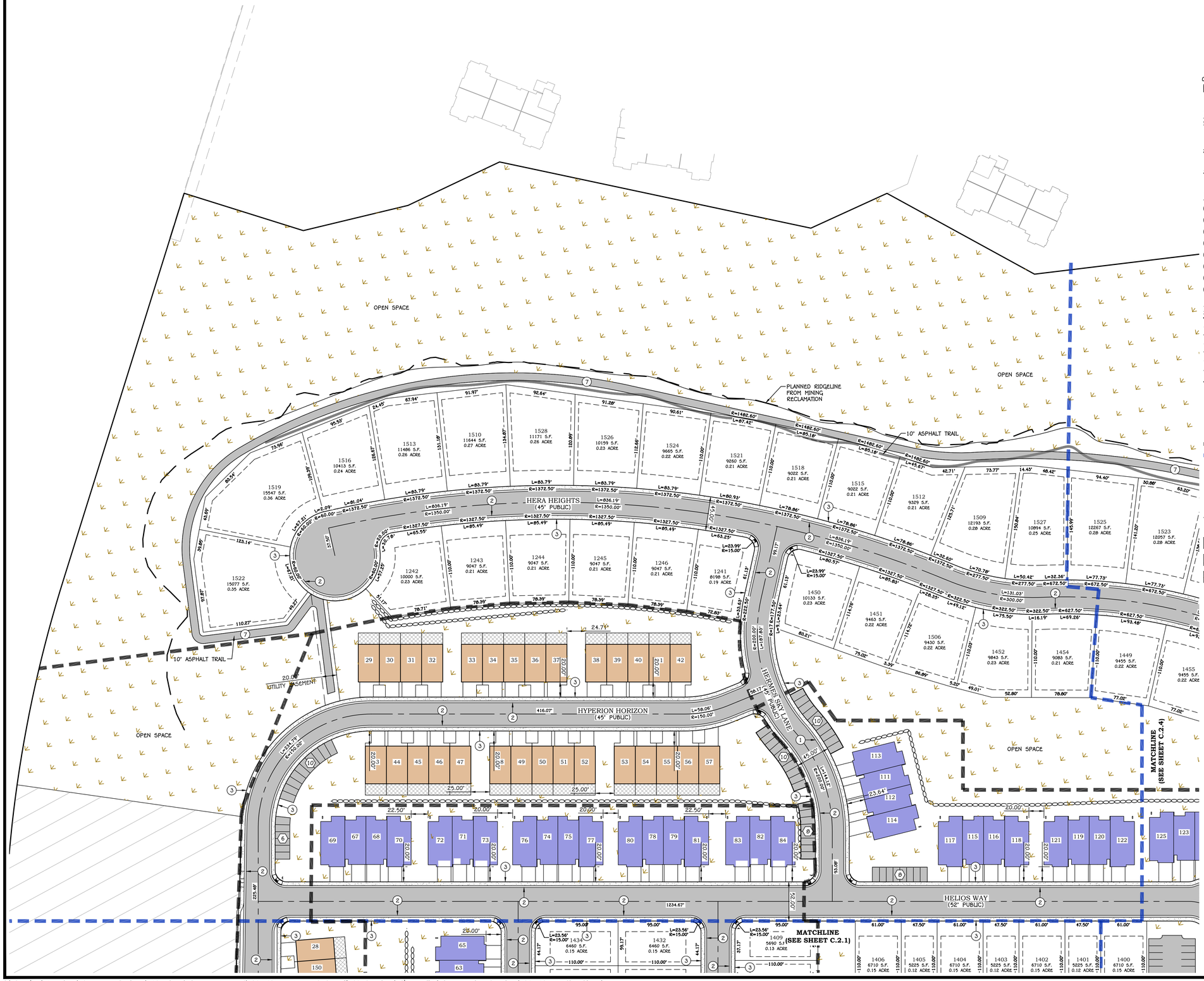
SITE PLAN I

CONSTRUCTION DRAWINGS

C.2.1

SHEET: 3 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Site Plan.dwg



0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

SITE PLAN NOTES:

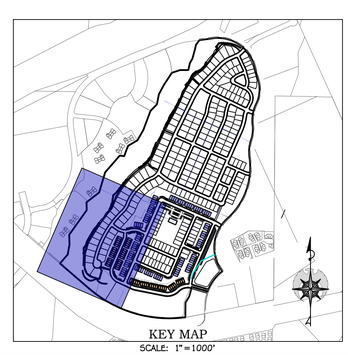
1. CONTRACTOR TO MATCH EXISTING CONDITIONS AT ALL TIE IN LOCATIONS. PROTECT IN PLACE ALL INFRASTRUCTURE TO REMAIN. SAWCUT EXISTING C&G AND ASPHALT WHERE APPROPRIATE TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO NEW.
2. CLASS I AND/OR CLASS II SURVEY MONUMENTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. FINAL LOCATIONS FOR ALL SURVEY MONUMENTS TO BE PROVIDED BY THE LICENSED SURVEYOR.
3. ALL FIELD DESIGN CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO PROCEEDING WITH PROPOSED FIELD DESIGN CHANGES.

KEY NOTES:

		DETAIL
1	STANDARD CURB & GUTTER (HB30-7)	CC 101
2	MODIFIED CURB & GUTTER (RU30)	CC 102
3	SIDEWALK DETAILS	CC 105
4	STANDARD 8' CROSS GUTTER	CG 100
5	PARALLEL PEDESTRIAN ACCESS RAMP	PED 107
6	(3) END OF ROADWAY MARKER	MUTCD OM4-3
7	10' TRAIL SECTION	C.8.1
8	ACCESSIBLE PARKING SIGN (MUTCD R7-8 & R7-8P)	SS 102 & 103

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PROPOSED CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PROPOSED SETBACK LINE	
SURVEY SECTION LINE	
SURVEY SECTION CORNER MONUMENT	
CLASS I SURVEY MONUMENT	MON 100
CLASS II SURVEY MONUMENT	MON 101
PHASE LINE	
SHEET MATCH LINE	
CORNER PEDESTRIAN RAMP	PED 100
ADA PARKING SPACE	
STANDARD STREET SIGN WITH STANDARD STOP SIGN	SS 100-103
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK RETAINING WALL	
2.5" ASPHALT OVER 6" BASE PAVEMENT SECTION	
CONCRETE SURFACE	
OPEN SPACE/LANDSCAPE AREA	



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ★ ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

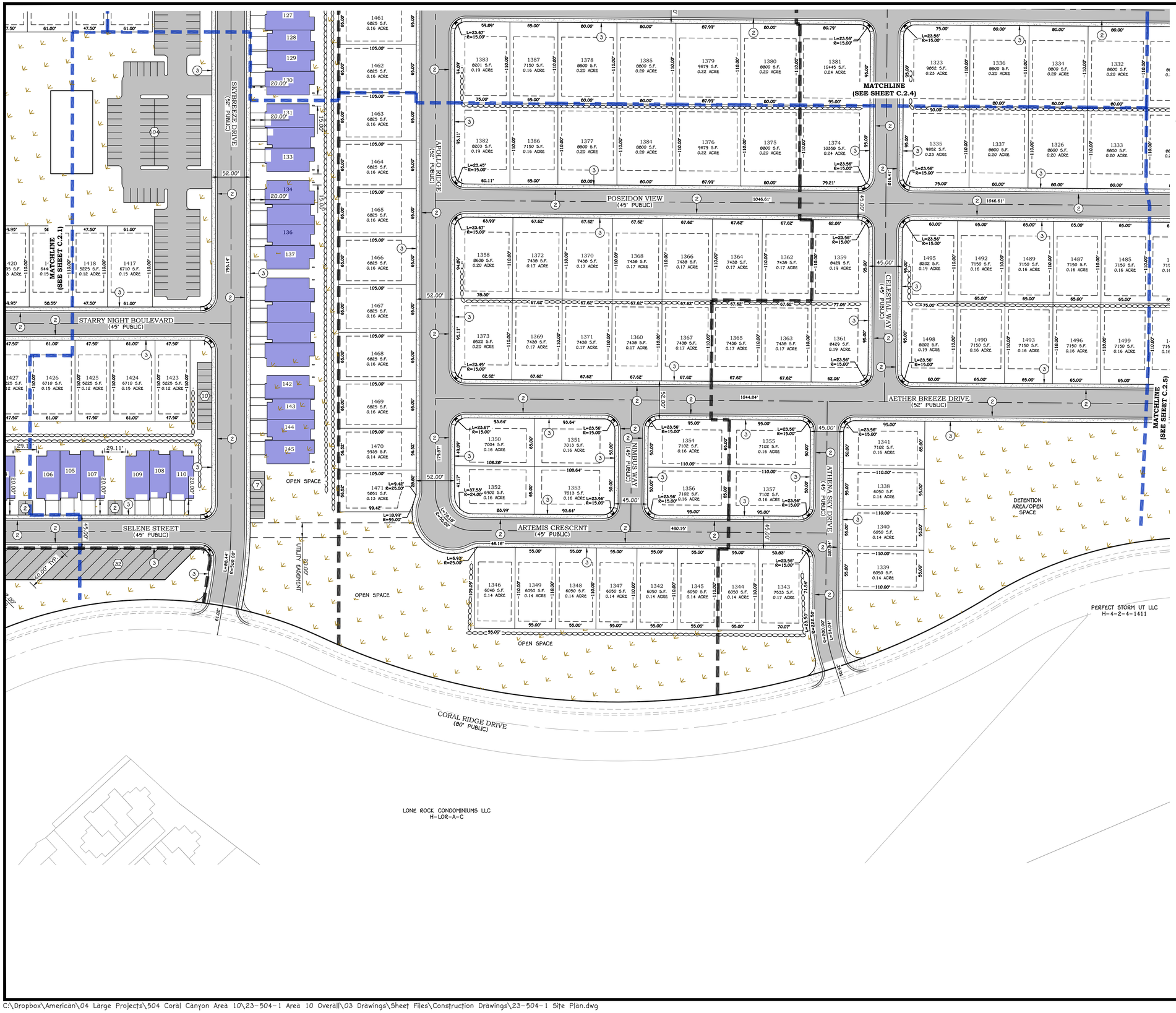
SITE PLAN II

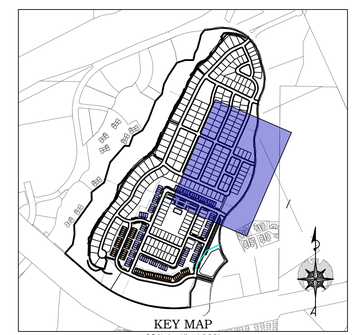
CONSTRUCTION DRAWINGS

C.2.2

SHEET: 4 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Site Plan.dwg





Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

0 60' 120'
SCALE: 1" = 60'

SITE PLAN NOTES:

1. CONTRACTOR TO MATCH EXISTING CONDITIONS AT ALL TIE IN LOCATIONS. PROTECT IN PLACE ALL INFRASTRUCTURE TO REMAIN. SAWCUT EXISTING C&G AND ASPHALT WHERE APPROPRIATE TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO NEW.
2. CLASS I AND/OR CLASS II SURVEY MONUMENTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. FINAL LOCATIONS FOR ALL SURVEY MONUMENTS TO BE PROVIDED BY THE LICENSED SURVEYOR.
3. ALL FIELD DESIGN CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO PROCEEDING WITH PROPOSED FIELD DESIGN CHANGES.

KEY NOTES:

		DETAIL
1	STANDARD CURB & GUTTER (HB30-7)	CC 101
2	MODIFIED CURB & GUTTER (RU30)	CC 102
3	SIDEWALK DETAILS	CC 105
4	STANDARD 8' CROSS GUTTER	CG 100
5	PARALLEL PEDESTRIAN ACCESS RAMP	PED 107
6	(3) END OF ROADWAY MARKER	MUTCD OM4-3
7	10' TRAIL SECTION	C.8.1
8	ACCESSIBLE PARKING SIGN (MUTCD R7-8 & R7-8P)	SS 102 & 103

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PROPOSED CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PROPOSED SETBACK LINE	
SURVEY SECTION LINE	
SURVEY SECTION CORNER MONUMENT	
CLASS I SURVEY MONUMENT	MON 100
CLASS II SURVEY MONUMENT	MON 101
PHASE LINE	
SHEET MATCH LINE	
CORNER PEDESTRIAN RAMP	PED 100
ADA PARKING SPACE	
STANDARD STREET SIGN WITH STANDARD STOP SIGN	SS 100-103
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK RETAINING WALL	
2.5" ASPHALT OVER 6" BASE PAVEMENT SECTION	
CONCRETE SURFACE	
OPEN SPACE/LANDSCAPE AREA	

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

SITE PLAN III
CONSTRUCTION DRAWINGS

C.2.3

SHEET: 5 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Site Plan.dwg

CORAL SPRINGS CONDOS

OPEN SPACE

10' ASPHALT TRAIL

PLANNED RIDGELINE FROM MINING RECLAMATION

OPEN SPACE

OPEN SPACE

HERA HEIGHTS (45' PUBLIC)

HERA HEIGHTS (52' PUBLIC)

HELIOS WAY (52' PUBLIC)

ZEUS SKYWAY (45' PUBLIC)

APOLLO RIDGE (52' PUBLIC)

SKYBREEZE DRIVE (52' PUBLIC)

CELESTIAL WAY (45' PUBLIC)

MATCHLINE (SEE SHEET C.2.2)

MATCHLINE (SEE SHEET C.2.3)

MATCHLINE (SEE SHEET C.2.5)

1527 10894 S.F. 0.25 ACRE
1525 12267 S.F. 0.28 ACRE
1523 12297 S.F. 0.28 ACRE
1520 11999 S.F. 0.28 ACRE
1517 12466 S.F. 0.29 ACRE
1514 12587 S.F. 0.29 ACRE
1511 13483 S.F. 0.31 ACRE
1508 14624 S.F. 0.34 ACRE
1454 9083 S.F. 0.21 ACRE
1449 9455 S.F. 0.22 ACRE
1455 9455 S.F. 0.22 ACRE
1453 9455 S.F. 0.22 ACRE
1457 9455 S.F. 0.22 ACRE
1456 9182 S.F. 0.21 ACRE
1458 9701 S.F. 0.22 ACRE
1459 12144 S.F. 0.28 ACRE
1460 6834 S.F. 0.16 ACRE
1461 6825 S.F. 0.16 ACRE
1462 6825 S.F. 0.16 ACRE
1463 6825 S.F. 0.16 ACRE
1269 11200 S.F. 0.26 ACRE
1268 11489 S.F. 0.26 ACRE
1267 11297 S.F. 0.26 ACRE
1272 11105 S.F. 0.25 ACRE
1271 10913 S.F. 0.25 ACRE
1270 10721 S.F. 0.25 ACRE
1277 10693 S.F. 0.25 ACRE
1275 9938 S.F. 0.23 ACRE
1274 9567 S.F. 0.22 ACRE
1273 9351 S.F. 0.21 ACRE
1393 11516 S.F. 0.26 ACRE
1392 9892 S.F. 0.23 ACRE
1390 9944 S.F. 0.23 ACRE
1388 9995 S.F. 0.23 ACRE
1398 10047 S.F. 0.23 ACRE
1396 12054 S.F. 0.28 ACRE
1394 13061 S.F. 0.32 ACRE
1395 9775 S.F. 0.22 ACRE
1397 9775 S.F. 0.22 ACRE
1399 9775 S.F. 0.22 ACRE
1389 9775 S.F. 0.22 ACRE
1391 11563 S.F. 0.27 ACRE
1481 11122 S.F. 0.26 ACRE
1472 9692 S.F. 0.22 ACRE
1473 9441 S.F. 0.22 ACRE
1475 9190 S.F. 0.21 ACRE
1480 9852 S.F. 0.23 ACRE
1479 8800 S.F. 0.20 ACRE
1478 8800 S.F. 0.20 ACRE
1476 8800 S.F. 0.20 ACRE
1474 8800 S.F. 0.20 ACRE
1383 8201 S.F. 0.19 ACRE
1387 7150 S.F. 0.16 ACRE
1378 8800 S.F. 0.20 ACRE
1385 8800 S.F. 0.20 ACRE
1379 9879 S.F. 0.22 ACRE
1380 8800 S.F. 0.20 ACRE
1381 10445 S.F. 0.24 ACRE
1323 9852 S.F. 0.23 ACRE
1336 8800 S.F. 0.20 ACRE
1334 8800 S.F. 0.20 ACRE
1332 8800 S.F. 0.20 ACRE
1330 8800 S.F. 0.20 ACRE
1402 6710 S.F. 0.15 ACRE
1401 5225 S.F. 0.12 ACRE
1400 6710 S.F. 0.15 ACRE
121 119 120 122 125 123 124 126 127 128 129 130 131

0 60' 120'
SCALE: 1" = 60'

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

SITE PLAN NOTES:

1. CONTRACTOR TO MATCH EXISTING CONDITIONS AT ALL TIE IN LOCATIONS. PROTECT IN PLACE ALL INFRASTRUCTURE TO REMAIN. SAWCUT EXISTING C&G AND ASPHALT WHERE APPROPRIATE TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO NEW.
2. CLASS I AND/OR CLASS II SURVEY MONUMENTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. FINAL LOCATIONS FOR ALL SURVEY MONUMENTS TO BE PROVIDED BY THE LICENSED SURVEYOR.
3. ALL FIELD DESIGN CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO PROCEEDING WITH PROPOSED FIELD DESIGN CHANGES.

KEY NOTES:

		DETAIL
1	STANDARD CURB & GUTTER (HB30-7)	CC 101
2	MODIFIED CURB & GUTTER (RU30)	CC 102
3	SIDEWALK DETAILS	CC 105
4	STANDARD 8' CROSS GUTTER	CG 100
5	PARALLEL PEDESTRIAN ACCESS RAMP	PED 107
6	(3) END OF ROADWAY MARKER	MUTCD OM4-3
7	10' TRAIL SECTION	C.8.1
8	ACCESSIBLE PARKING SIGN (MUTCD R7-8 & R7-8P)	SS 102 & 103

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PROPOSED CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PROPOSED SETBACK LINE	
SURVEY SECTION LINE	
SURVEY SECTION CORNER MONUMENT	
CLASS I SURVEY MONUMENT	MON 100
CLASS II SURVEY MONUMENT	MON 101
PHASE LINE	
SHEET MATCH LINE	
CORNER PEDESTRIAN RAMP	PED 100
ADA PARKING SPACE	
STANDARD STREET SIGN WITH STANDARD STOP SIGN	SS 100-103
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK RETAINING WALL	
2.5" ASPHALT OVER 6" BASE PAVEMENT SECTION	
CONCRETE SURFACE	
OPEN SPACE/LANDSCAPE AREA	

KEY MAP
SCALE: 1"=1000'

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

SITE PLAN IV
CONSTRUCTION DRAWINGS

C.2.4

SHEET: 6 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Site Plan.dwg

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

0 60' 120'
SCALE: 1" = 60'

SITE PLAN NOTES:

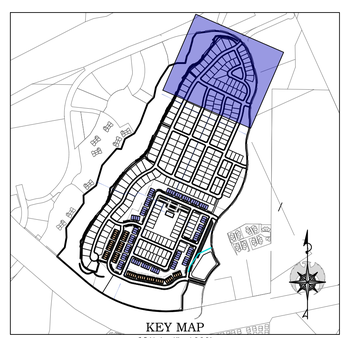
1. CONTRACTOR TO MATCH EXISTING CONDITIONS AT ALL TIE IN LOCATIONS. PROTECT IN PLACE ALL INFRASTRUCTURE TO REMAIN. SAWCUT EXISTING C&G AND ASPHALT WHERE APPROPRIATE TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO NEW.
2. CLASS I AND/OR CLASS II SURVEY MONUMENTS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. FINAL LOCATIONS FOR ALL SURVEY MONUMENTS TO BE PROVIDED BY THE LICENSED SURVEYOR.
3. ALL FIELD DESIGN CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO PROCEEDING WITH PROPOSED FIELD DESIGN CHANGES.

KEY NOTES:

		DETAIL
1	STANDARD CURB & GUTTER (HB30-7)	CC 101
2	MODIFIED CURB & GUTTER (RU30)	CC 102
3	SIDEWALK DETAILS	CC 105
4	STANDARD 8' CROSS GUTTER	CG 100
5	PARALLEL PEDESTRIAN ACCESS RAMP	PED 107
6	(3) END OF ROADWAY MARKER	MUTCD OM4-3
7	10' TRAIL SECTION	C.8.1
8	ACCESSIBLE PARKING SIGN (MUTCD R7-8 & R7-8P)	SS 102 & 103

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PROPOSED CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PROPOSED SETBACK LINE	
SURVEY SECTION LINE	
SURVEY SECTION CORNER MONUMENT	
CLASS I SURVEY MONUMENT	MON 100
CLASS II SURVEY MONUMENT	MON 101
PHASE LINE	
SHEET MATCH LINE	
CORNER PEDESTRIAN RAMP	PED 100
ADA PARKING SPACE	
STANDARD STREET SIGN WITH STANDARD STOP SIGN	SS 100-103
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK RETAINING WALL	
2.5" ASPHALT OVER 6" BASE PAVEMENT SECTION	
CONCRETE SURFACE	
OPEN SPACE/LANDSCAPE AREA	



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDP
CHECKED BY:	ARC

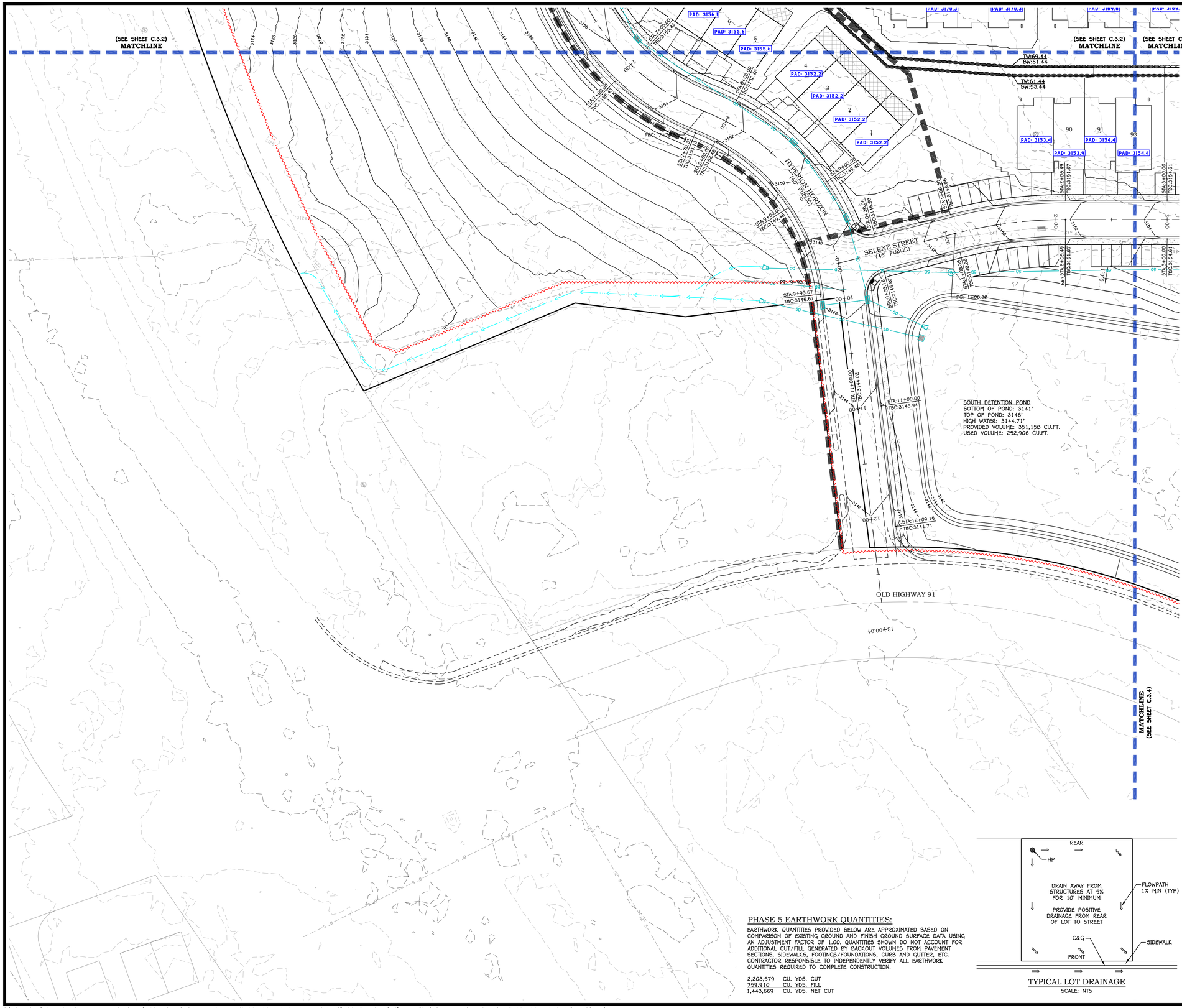
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

SITE PLAN V
CONSTRUCTION DRAWINGS

C.2.5

SHEET: 7 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Site Plan.dwg



GRADING PLAN NOTES:

1. THE CONTRACTOR SHALL PROVIDE APPROPRIATE EQUIPMENT TO CONTROL DUST AND AIR POLLUTION CAUSED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ALSO PROVIDE APPROPRIATE MUD AND DIRT CONTAINMENT TO MAINTAIN THE WORK SITE, ACCESS ROADWAYS, AND ADJACENT PROPERTIES IN A CLEAN CONDITION.
2. ALL EXCAVATION AND GRADING SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS ALONG WITH APPENDIX J STANDARDS OF THE INTERNATIONAL BUILDING CODE 2018 EDITION OR NEWER AS ADOPTED BY THE STATE OF UTAH AND CITY.
3. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS BETWEEN THE REQUIREMENTS OF THE PLANS AND GEOTECHNICAL REPORT AND/OR GEOTECHNICAL FIELD OBSERVATIONS.
4. GEOTECHNICAL ENGINEER TO PROVIDE GRADING COMPLETION REPORT TO CONFRIM THAT WORK HAS BEEN PERFORMED IN CONFORMANCE WITH GEOTECHNICAL RECOMMENDATIONS.
5. RETAINING WALLS GREATER THAN 3' IN HEIGHT REQUIRE A PERMIT FROM THE CITY BUILDING DEPARTMENT. ALL ROCK RETAINING WALLS MUST BE CERTIFIED AND INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE CITY'S FINAL ACCEPTANCE.
6. IT IS THE PROPERTY OWNER'S RESPONSIBILITY (DEVELOPER, HOMEOWNER, HOA, ETC.) TO COMPLETE AND MAINTAIN THE FINAL GRADING ON THEIR PROPERTY IN ACCORDANCE WITH THE GRADING AND DRAINAGE PLAN ALONG WITH ALL RECOMMENDATIONS FROM THE GEOTECHNICAL ENGINEER. THE PROPERTY OWNER IS RESPONSIBLE IN PERPETUITY, FOR INSPECTING AND MAINTAINING PROPER DRAINAGE FOR THEIR PROPERTY.
7. ALL STORM DRAIN PIPE LENGTHS ARE GIVEN FROM AND TO THE CENTER OF EACH STRUCTURE. CONTRACTOR SHALL VERIFY THE ACTUAL LENGTHS REQUIRED PRIOR TO ORDERING PIPE MATERIALS.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

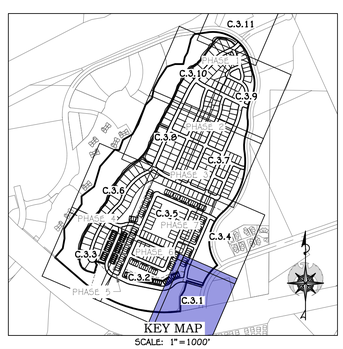
	DETAIL
PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
CENTERLINE ALIGNMENT	
EXISTING CENTERLINE ALIGNMENT	
PHASE LINE	
BLOCK/CONC. RETAINING WALL	E/#####
EXISTING BLOCK/CONC. RETAINING WALL	
ROCK RETAINING WALL	
EXISTING ROCK RETAINING WALL	
GRADING LIMITS OF DISTURBANCE	
EXISTING GROUND MAJOR CONTOUR	
EXISTING GROUND MINOR CONTOUR	
FINISH GROUND MAJOR CONTOUR	
FINISH GROUND MINOR CONTOUR	
PROPOSED STORM PIPE (SIZE PER PLAN)	
EXISTING STORM PIPE (SIZE PER PLAN)	
CURB INLET SINGLE CATCH BASIN	205A
CURB INLET DOUBLE CATCH BASIN	205B
STANDARD STORM DRAIN MANHOLE	220
FLARED END SECTION	
GRATE INLET AREA DRAIN BOX	
DRAINAGE SWALE/DITCH (SEE SECTIONS)	
EXISTING DRAINAGE SWALE/DITCH	

PHASE 5 EARTHWORK QUANTITIES:

EARTHWORK QUANTITIES PROVIDED BELOW ARE APPROXIMATED BASED ON COMPARISON OF EXISTING GROUND AND FINISH GROUND SURFACE DATA USING AN ADJUSTMENT FACTOR OF 1.00. QUANTITIES SHOWN DO NOT ACCOUNT FOR ADDITIONAL CUT/FILL GENERATED BY BACKOUT VOLUMES FROM PAVEMENT SECTIONS, SIDEWALKS, FOOTINGS/FOUNDATIONS, CURB AND GUTTER, ETC. CONTRACTOR RESPONSIBLE TO INDEPENDENTLY VERIFY ALL EARTHWORK QUANTITIES REQUIRED TO COMPLETE CONSTRUCTION.

2,203,579 CU. YDS. CUT
759,910 CU. YDS. FILL
1,443,669 CU. YDS. NET CUT

TYPICAL LOT DRAINAGE
SCALE: NTS



KEY MAP
SCALE: 1"=1000'

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

REV.	DATE:	REVISION

DATE: 10/07/2024
JOB #: 23-504-1
DRAWN BY: CDF
CHECKED BY: ARC

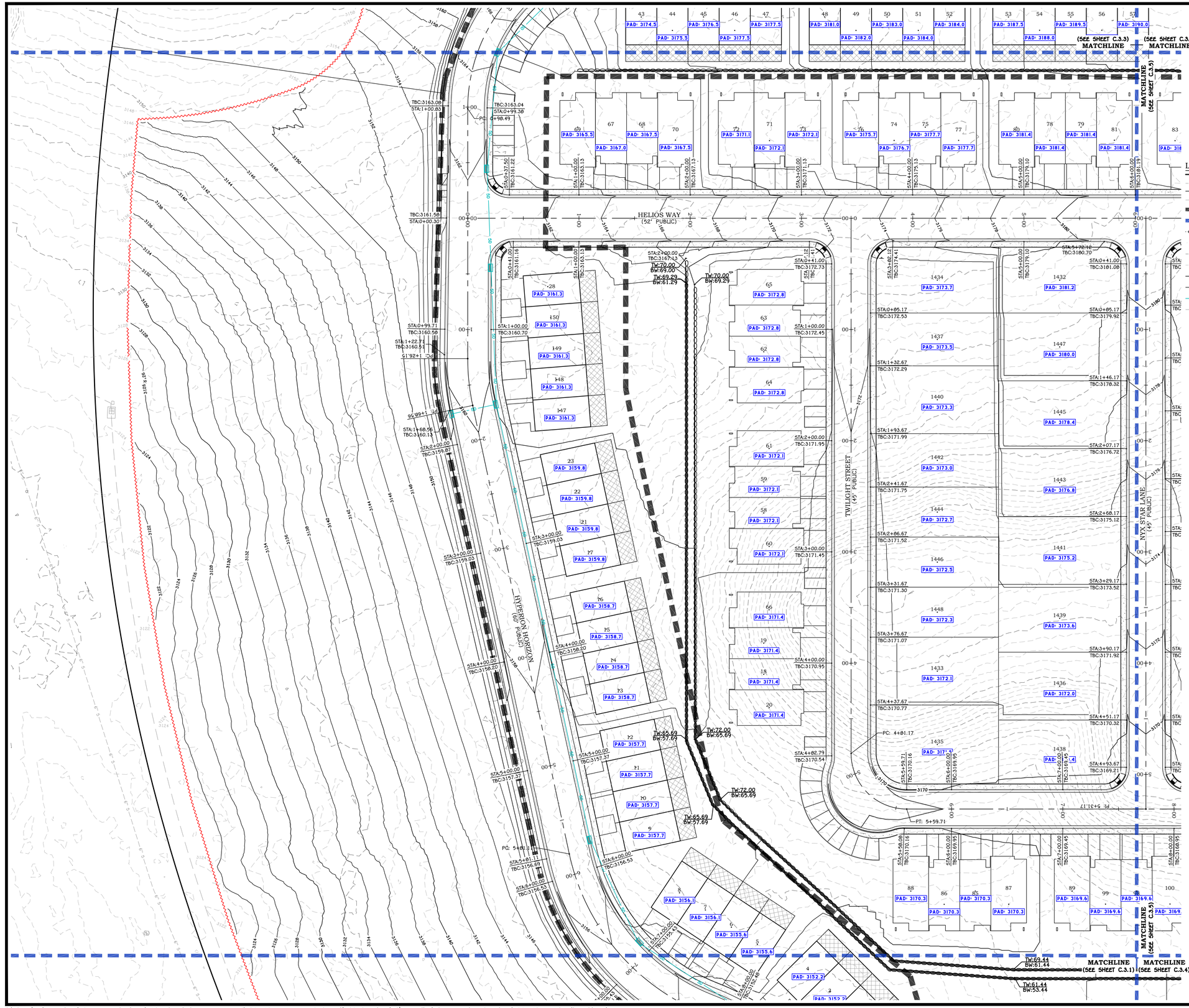
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN I
PRELIMINARY PLAT

C.3.1

SHEET: 8 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

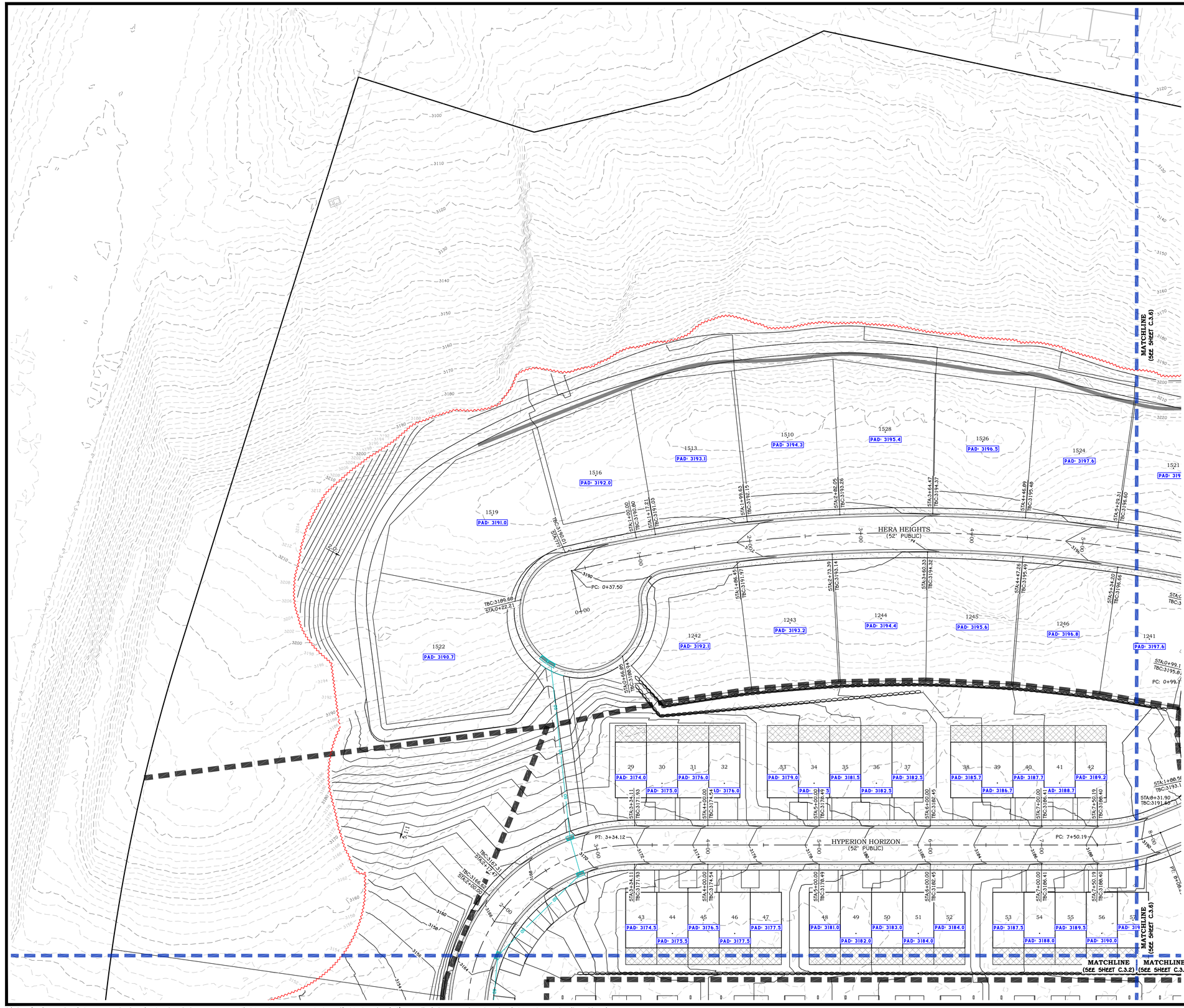
GRADING PLAN II

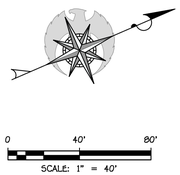
PRELIMINARY PLAT

C.3.2

SHEET: 9 of 35

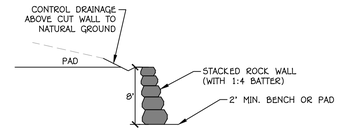
C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg



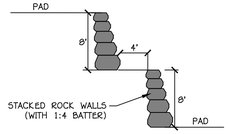


LEGEND:

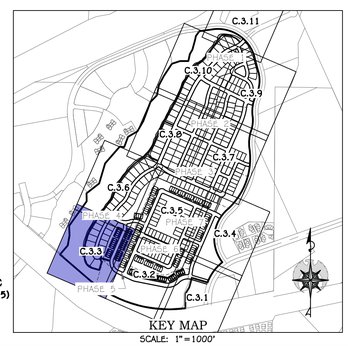
- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



A SINGLE ROCK RETAINING WALL SECTION
SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION
SCALE: NTS



KEY MAP
SCALE: 1"=1000'

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

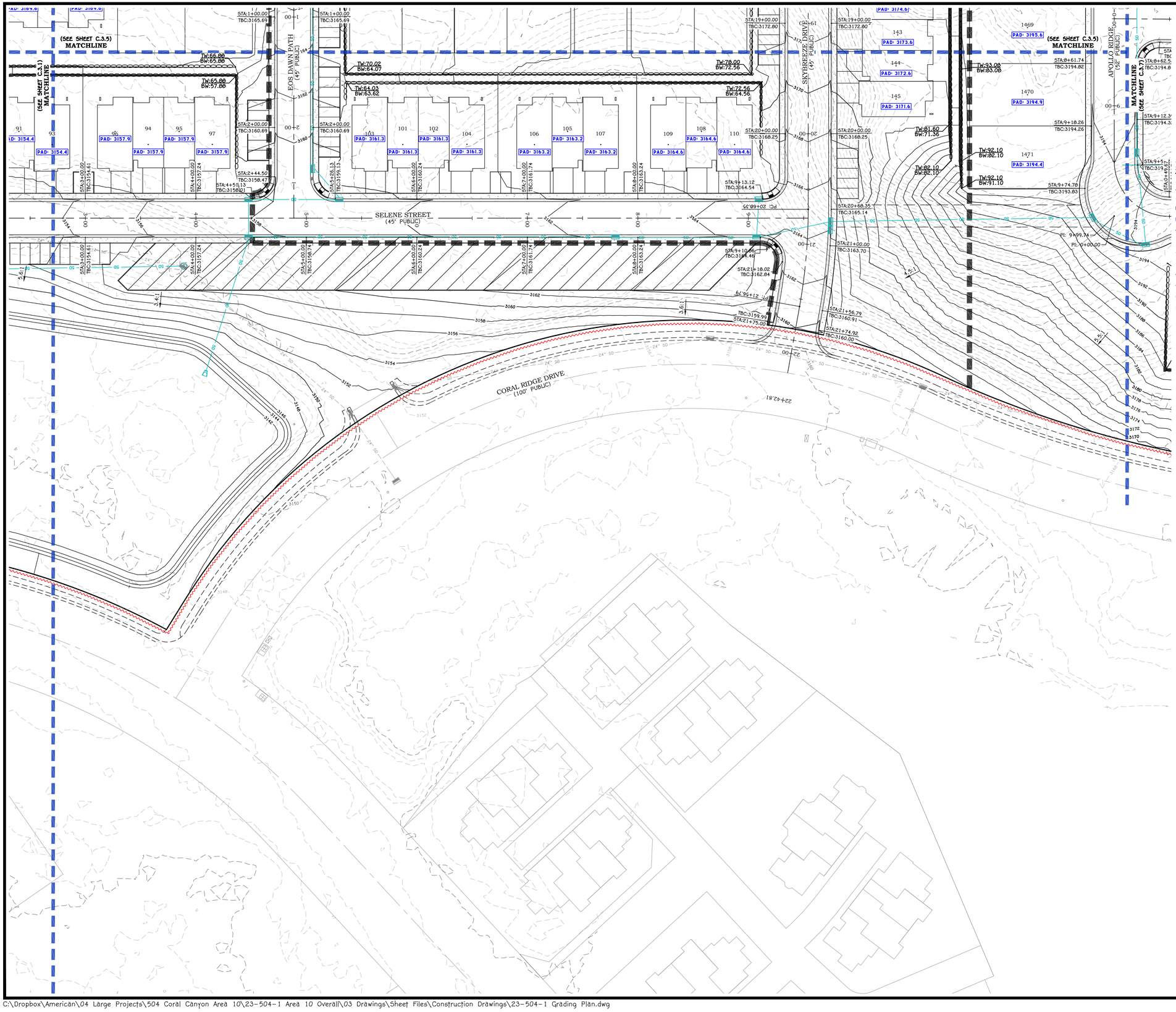
GRADING PLAN III

PRELIMINARY PLAT

C.3.3

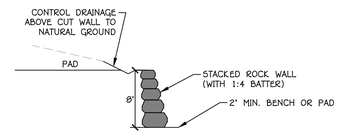
SHEET: 10 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg

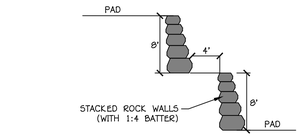


LEGEND:

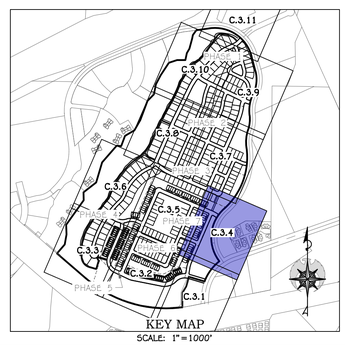
- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



A SINGLE ROCK RETAINING WALL SECTION
SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION
SCALE: NTS



KEY MAP
SCALE: 1"=1000'

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

REV.	DATE:	REVISION

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

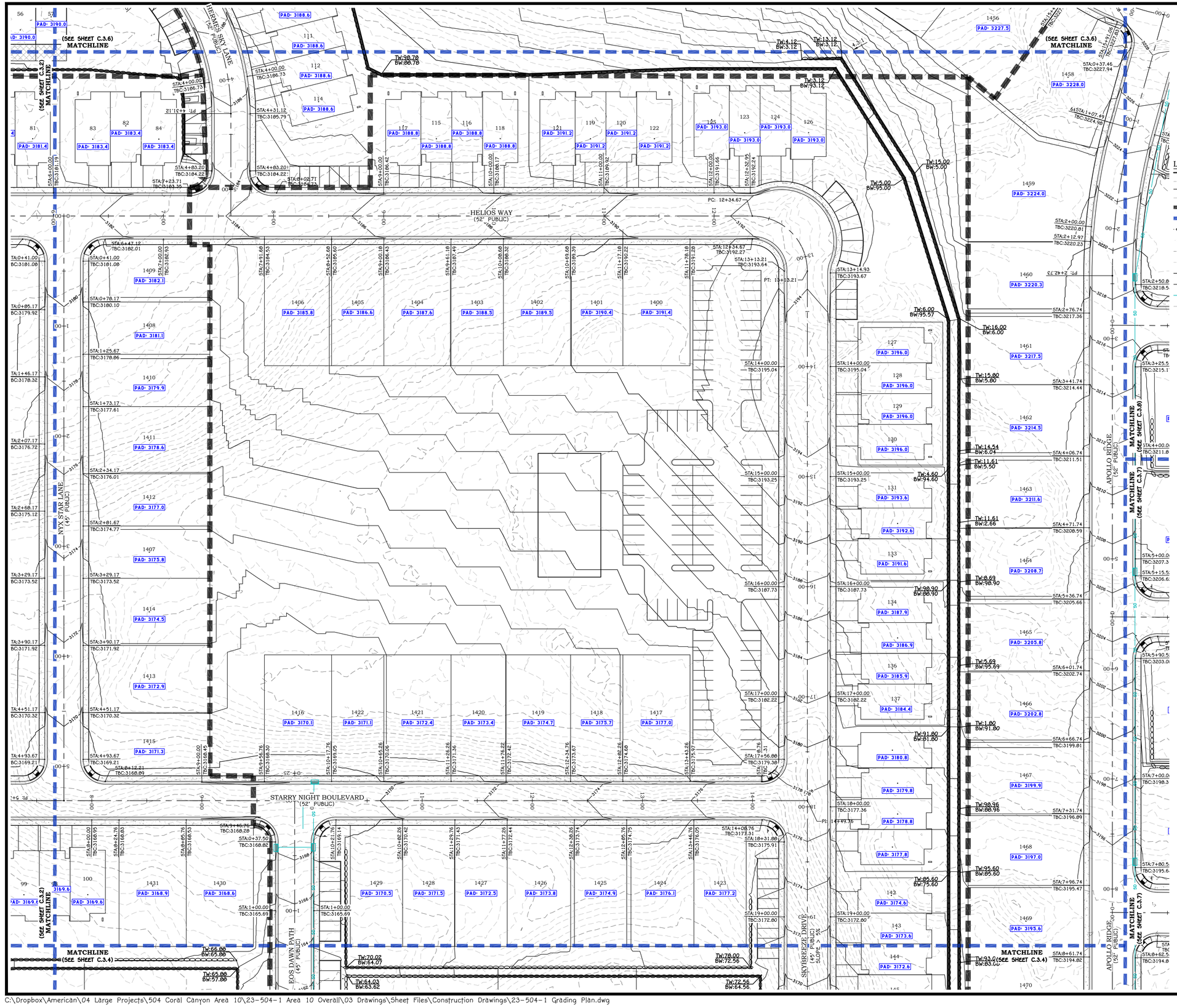
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN IV
PRELIMINARY PLAT

C.3.4

SHEET: 11 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg



REV. | DATE: | REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE: 10/07/2024
JOB #: 23-504-1
DRAWN BY: CDF
CHECKED BY: ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN V
PRELIMINARY PLAT

C.3.5

SHEET: 12 of 35

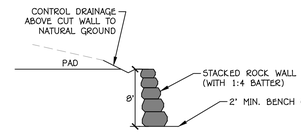
C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg

0 40' 80'

SCALE: 1" = 40'

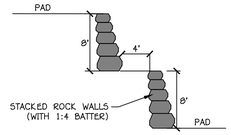
LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



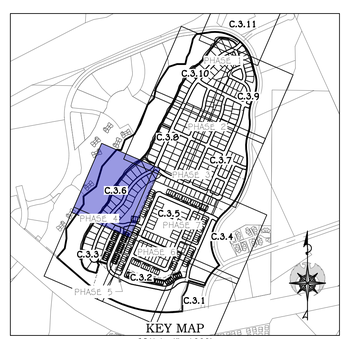
A SINGLE ROCK RETAINING WALL SECTION

SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION

SCALE: NTS



KEY MAP

SCALE: 1"=1000'

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1175 S. 250 W. #504 ST. GEORGE, UT 84770

REV.	DATE:	REVISION

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

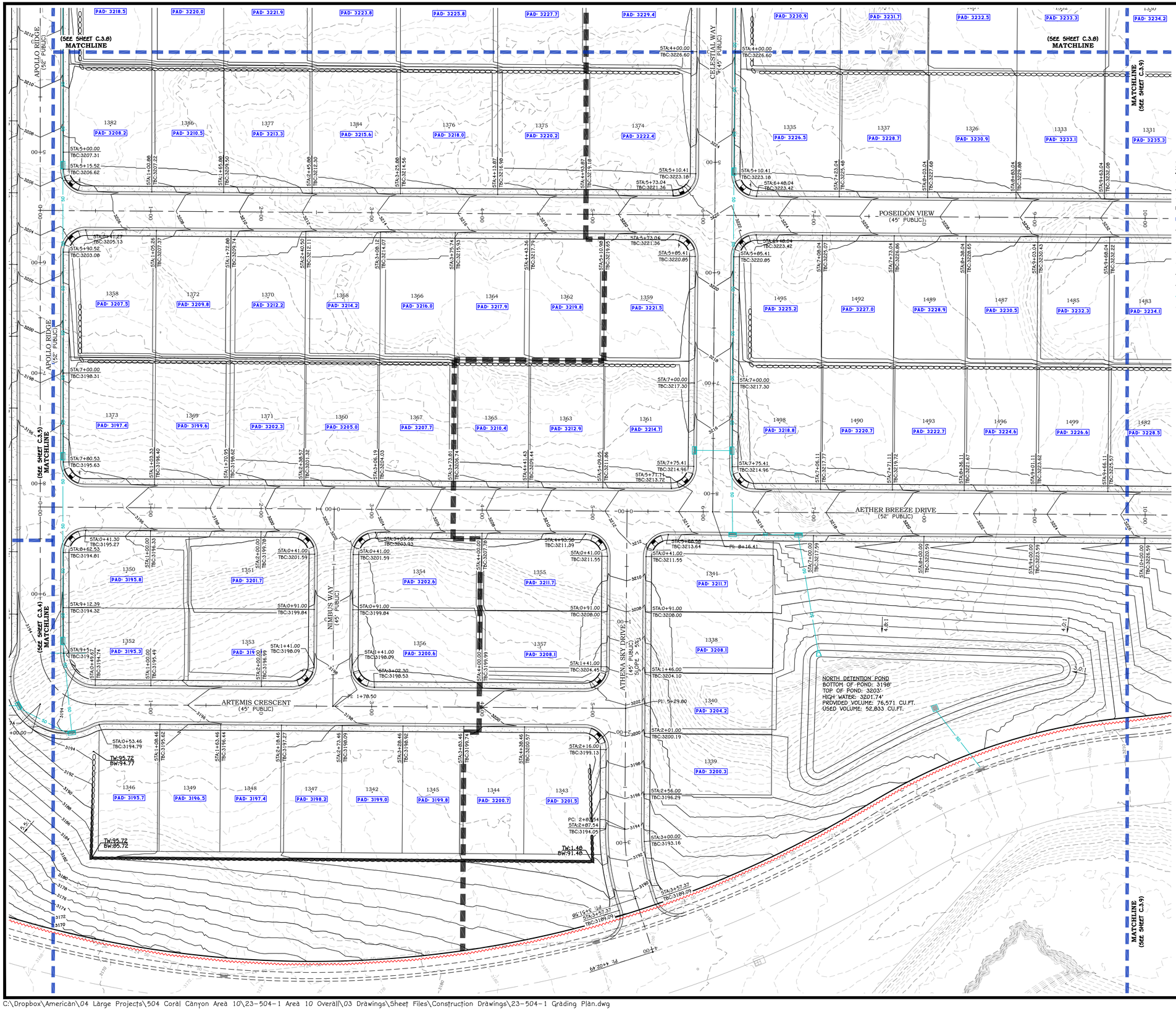
GRADING PLAN VI

PRELIMINARY PLAT

C.3.6

SHEET: 13 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN VII
PRELIMINARY PLAT

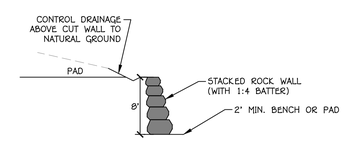
C.3.7

SHEET: 14 of 35

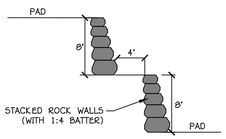
C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg

LEGEND:

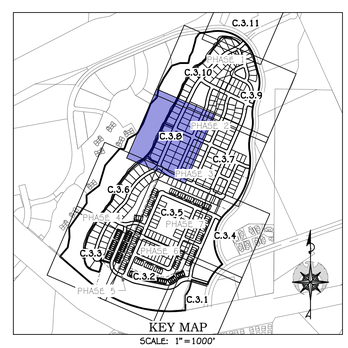
- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



A SINGLE ROCK RETAINING WALL SECTION
SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION
SCALE: NTS



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN VIII

PRELIMINARY PLAT

C.3.8

SHEET:	15	of	35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg

(SEE SHEET C.3.7) MATCHLINE

(SEE SHEET C.3.10) MATCHLINE

(SEE SHEET C.3.10) MATCHLINE

MATCHLINE (SEE SHEET C.3.11)

(SEE SHEET C.3.7) MATCHLINE

POSEIDON VIEW (45' PUBLIC)

ORION WAY (52' PUBLIC)

CIRRUS CIRCLE (45' PUBLIC)

BOREAS WIND ROAD (45' PUBLIC)

AETHER BREEZE DRIVE (45' PUBLIC)

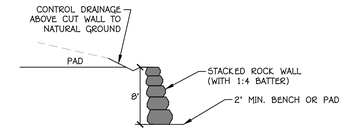
CORAL RIDGE DRIVE (100' PUBLIC)

0 40' 80'

SCALE: 1" = 40'

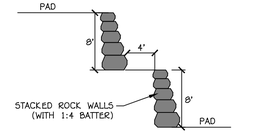
LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



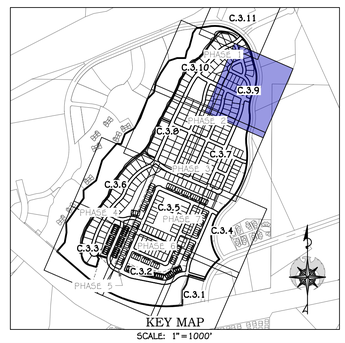
A SINGLE ROCK RETAINING WALL SECTION

SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION

SCALE: NTS



PRELIMINARY NOT FOR CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

REV.	DATE:	REVISION

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

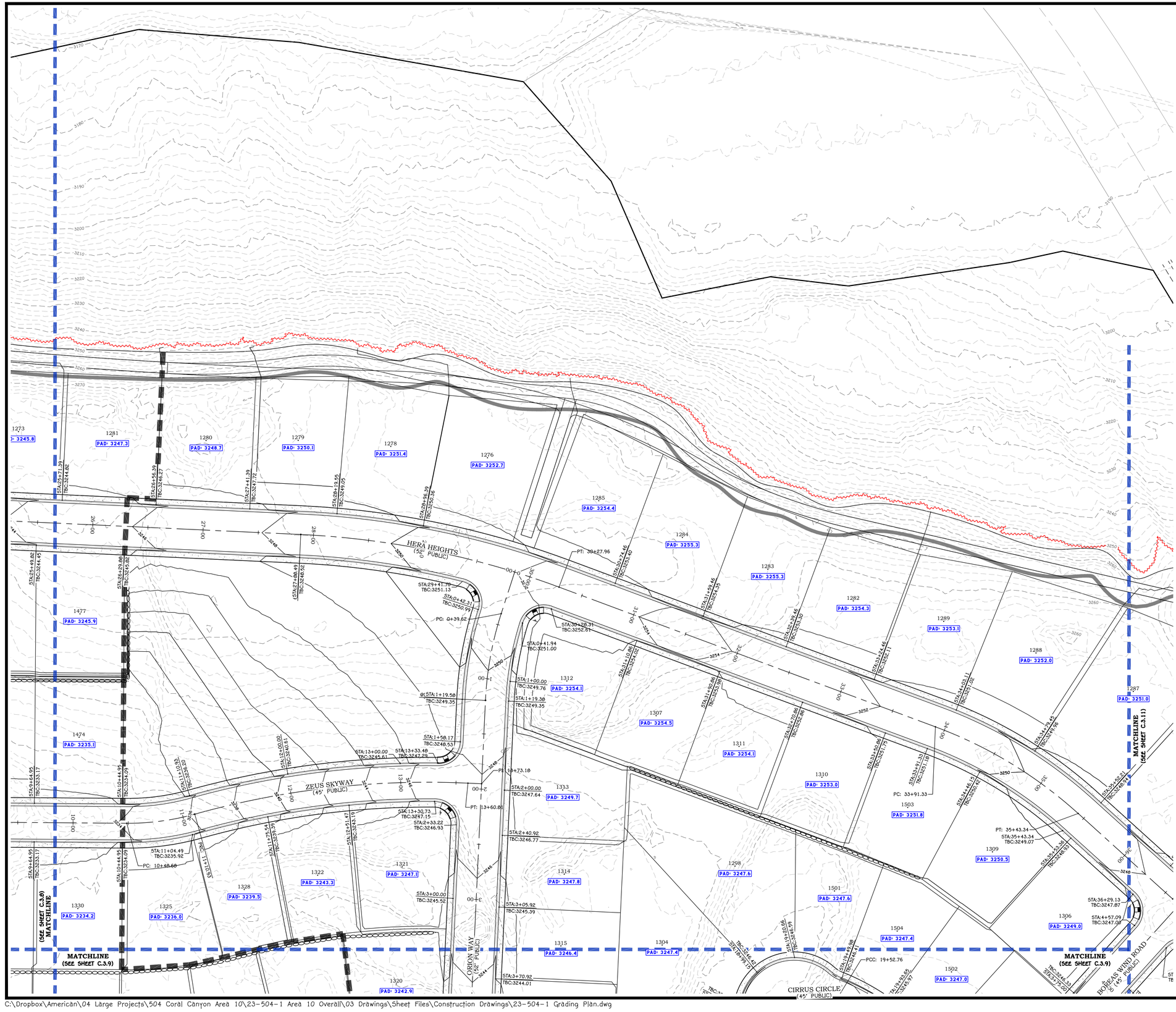
GRADING PLAN IX

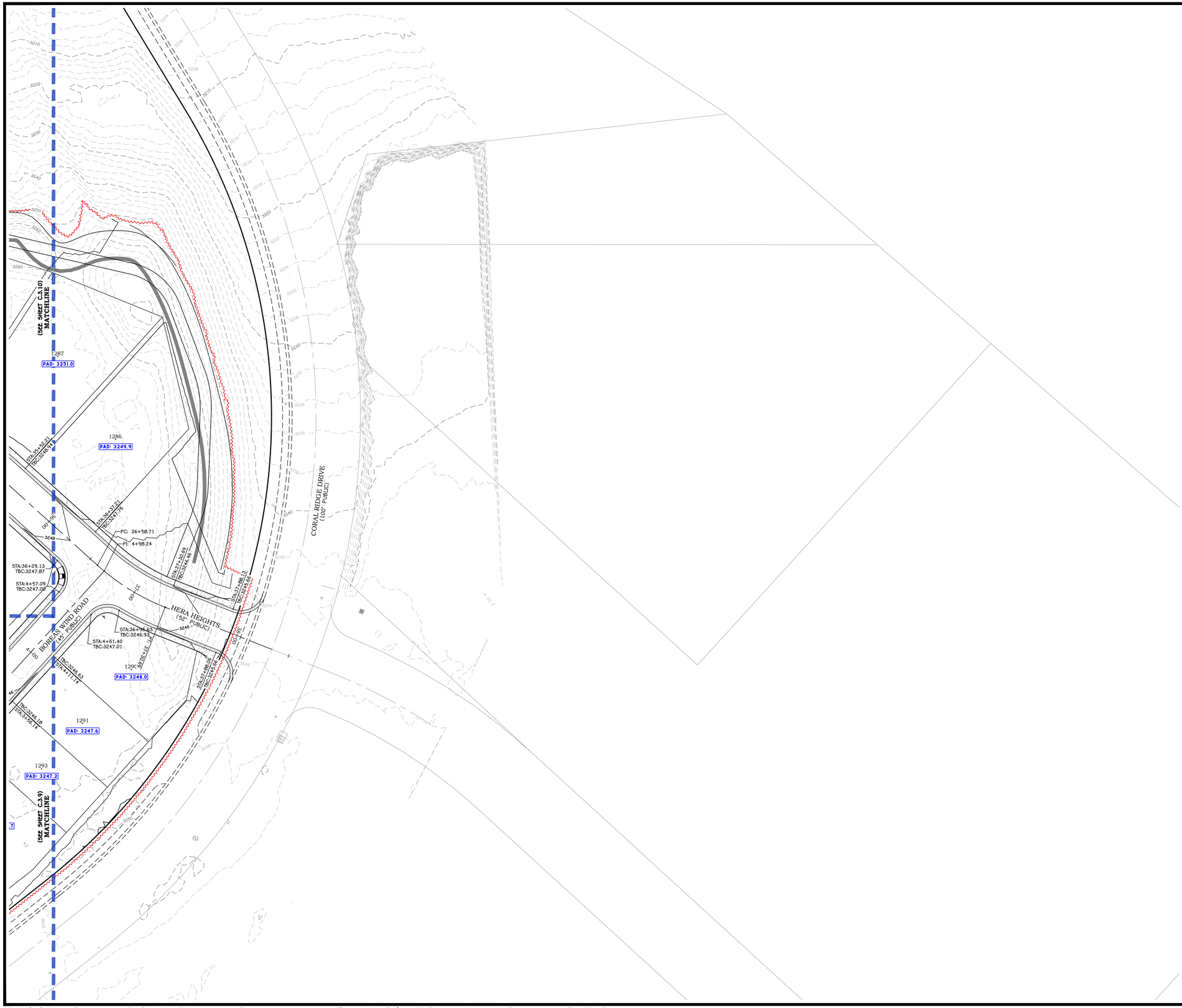
PRELIMINARY PLAT

C.3.9

SHEET: 16 of 35

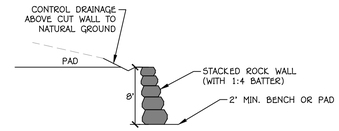
C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg


HERA HEIGHTS (52' PUBLIC)
ZEUS SKYWAY (45' PUBLIC)
ORION WAY (52' PUBLIC)
CIRRUS CIRCLE (45' PUBLIC)
BOREAS WIND ROAD (45' PUBLIC)
MATCHLINE (SEE SHEET C.3.9)
MATCHLINE (SEE SHEET C.3.11)
MATCHLINE (SEE SHEET C.3.9)
MATCHLINE (SEE SHEET C.3.8)
1273 PAD: 3245.8
1281 PAD: 3247.3
1280 PAD: 3248.7
1279 PAD: 3250.1
1278 PAD: 3251.4
1276 PAD: 3252.7
1285 PAD: 3254.4
1284 PAD: 3255.3
1283 PAD: 3255.3
1282 PAD: 3254.3
1289 PAD: 3253.1
1288 PAD: 3252.0
1287 PAD: 3251.0
1477 PAD: 3245.9
1474 PAD: 3235.1
1312 PAD: 3254.1
1307 PAD: 3254.5
1311 PAD: 3254.1
1310 PAD: 3253.0
1503 PAD: 3251.8
1309 PAD: 3250.5
1322 PAD: 3243.3
1321 PAD: 3247.1
1314 PAD: 3247.8
1298 PAD: 3247.6
1501 PAD: 3247.6
1504 PAD: 3247.4
1502 PAD: 3247.0
1306 PAD: 3249.0
1328 PAD: 3239.5
1330 PAD: 3234.2
1325 PAD: 3236.0
1315 PAD: 3246.4
1304 PAD: 3247.4
1320 PAD: 3242.9
1333 PAD: 3249.7
PT: 39+27.96
PC: 0+39.62
PT: 19+73.18
PC: 33+91.33
PT: 35+43.34
PC: 10+48.66
PCC: 19+52.76
5TA:25+49.82 TBC:3244.45
5TA:26+29.89 TBC:3245.82
5TA:27+09.49 TBC:3248.52
5TA:29+41.79 TBC:3251.13
5TA:0+42.31 TBC:3250.99
5TA:30+28.31 TBC:3252.61
5TA:0+41.94 TBC:3251.00
5TA:1+00.00 TBC:3249.76
5TA:1+19.58 TBC:3249.35
5TA:1+19.38 TBC:3249.35
5TA:1+58.17 TBC:3248.53
5TA:13+00.00 TBC:3245.61
5TA:13+33.48 TBC:3247.29
5TA:2+00.00 TBC:3247.64
5TA:2+40.92 TBC:3246.77
5TA:13+30.73 TBC:3247.15
5TA:2+33.22 TBC:3246.93
5TA:3+00.00 TBC:3245.52
5TA:3+05.92 TBC:3245.39
5TA:3+70.92 TBC:3244.01
5TA:11+04.49 TBC:3235.92
5TA:9+64.95 TBC:3233.17
5TA:10+44.95 TBC:3234.09
5TA:11+10.95 TBC:3236.60
5TA:12+00.00 TBC:3240.61
5TA:11+75.54 TBC:3239.39
5TA:13+41.47 TBC:3243.16
5TA:27+71.32 TBC:3244.82
5TA:26+56.39 TBC:3246.27
5TA:27+41.39 TBC:3247.72
5TA:29+19.95 TBC:3249.05
5TA:29+46.39 TBC:3250.36
5TA:30+74.46 TBC:3253.48
5TA:31+56.46 TBC:3254.95
5TA:32+35.46 TBC:3253.30
5TA:33+24.46 TBC:3252.14
5TA:34+03.11 TBC:3249.02
5TA:34+73.45 TBC:3249.96
5TA:3+10.86 TBC:3254.00
5TA:3+19.86 TBC:3253.78
5TA:3+70.86 TBC:3250.86
5TA:33+46.86 TBC:3251.72
5TA:33+91.33 TBC:3251.18
5TA:34+46.15 TBC:3250.82
5TA:35+43.34 TBC:3249.07
5TA:35+93.34 TBC:3248.93
5TA:36+29.13 TBC:3247.87
5TA:4+57.09 TBC:3247.08
5TA:19+20.66 TBC:3246.99
5TA:19+33.66 TBC:3246.97
5TA:19+44.66 TBC:3246.98
5TA:19+66.66 TBC:3246.99
5TA:19+78.66 TBC:3247.00
5TA:20+19.66 TBC:3247.00
5TA:20+46.66 TBC:3246.99
5TA:20+72.66 TBC:3246.97
5TA:20+85.66 TBC:3246.97
5TA:21+06.66 TBC:3246.97
5TA:21+19.66 TBC:3246.97
5TA:21+40.66 TBC:3246.97
5TA:21+53.66 TBC:3246.97
5TA:21+74.66 TBC:3246.97
5TA:21+87.66 TBC:3246.97
5TA:22+08.66 TBC:3246.97
5TA:22+21.66 TBC:3246.97
5TA:22+42.66 TBC:3246.97
5TA:22+55.66 TBC:3246.97
5TA:22+76.66 TBC:3246.97
5TA:22+89.66 TBC:3246.97
5TA:23+10.66 TBC:3246.97
5TA:23+23.66 TBC:3246.97
5TA:23+44.66 TBC:3246.97
5TA:23+57.66 TBC:3246.97
5TA:23+78.66 TBC:3246.97
5TA:23+91.66 TBC:3246.97
5TA:24+12.66 TBC:3246.97
5TA:24+25.66 TBC:3246.97
5TA:24+46.66 TBC:3246.97
5TA:24+59.66 TBC:3246.97
5TA:24+80.66 TBC:3246.97
5TA:24+93.66 TBC:3246.97
5TA:25+14.66 TBC:3246.97
5TA:25+27.66 TBC:3246.97
5TA:25+48.66 TBC:3246.97
5TA:25+61.66 TBC:3246.97
5TA:25+82.66 TBC:3246.97
5TA:25+95.66 TBC:3246.97
5TA:26+16.66 TBC:3246.97
5TA:26+29.66 TBC:3246.97
5TA:26+50.66 TBC:3246.97
5TA:26+63.66 TBC:3246.97
5TA:26+84.66 TBC:3246.97
5TA:26+97.66 TBC:3246.97
5TA:27+18.66 TBC:3246.97
5TA:27+31.66 TBC:3246.97
5TA:27+52.66 TBC:3246.97
5TA:27+65.66 TBC:3246.97
5TA:27+86.66 TBC:3246.97
5TA:27+99.66 TBC:3246.97
5TA:28+20.66 TBC:3246.97
5TA:28+33.66 TBC:3246.97
5TA:28+54.66 TBC:3246.97
5TA:28+67.66 TBC:3246.97
5TA:28+88.66 TBC:3246.97
5TA:29+01.66 TBC:3246.97
5TA:29+22.66 TBC:3246.97
5TA:29+35.66 TBC:3246.97
5TA:29+56.66 TBC:3246.97
5TA:29+69.66 TBC:3246.97
5TA:29+90.66 TBC:3246.97
5TA:30+03.66 TBC:3246.97
5TA:30+24.66 TBC:3246.97
5TA:30+37.66 TBC:3246.97
5TA:30+58.66 TBC:3246.97
5TA:30+71.66 TBC:3246.97
5TA:30+92.66 TBC:3246.97
5TA:31+05.66 TBC:3246.97
5TA:31+26.66 TBC:3246.97
5TA:31+39.66 TBC:3246.97
5TA:31+60.66 TBC:3246.97
5TA:31+73.66 TBC:3246.97
5TA:31+94.66 TBC:3246.97
5TA:32+07.66 TBC:3246.97
5TA:32+28.66 TBC:3246.97
5TA:32+41.66 TBC:3246.97
5TA:32+62.66 TBC:3246.97
5TA:32+75.66 TBC:3246.97
5TA:32+96.66 TBC:3246.97
5TA:33+09.66 TBC:3246.97
5TA:33+30.66 TBC:3246.97
5TA:33+43.66 TBC:3246.97
5TA:33+64.66 TBC:3246.97
5TA:33+77.66 TBC:3246.97
5TA:33+98.66 TBC:3246.97
5TA:34+11.66 TBC:3246.97
5TA:34+32.66 TBC:3246.97
5TA:34+45.66 TBC:3246.97
5TA:34+66.66 TBC:3246.97
5TA:34+79.66 TBC:3246.97
5TA:35+00.66 TBC:3246.97
5TA:35+13.66 TBC:3246.97
5TA:35+34.66 TBC:3246.97
5TA:35+47.66 TBC:3246.97
5TA:35+68.66 TBC:3246.97
5TA:35+81.66 TBC:3246.97
5TA:36+02.66 TBC:3246.97
5TA:36+15.66 TBC:3246.97
5TA:36+36.66 TBC:3246.97
5TA:36+49.66 TBC:3246.97
5TA:36+70.66 TBC:3246.97
5TA:36+83.66 TBC:3246.97
5TA:37+04.66 TBC:3246.97
5TA:37+17.66 TBC:3246.97
5TA:37+38.66 TBC:3246.97
5TA:37+51.66 TBC:3246.97
5TA:37+72.66 TBC:3246.97
5TA:37+85.66 TBC:3246.97
5TA:38+06.66 TBC:3246.97
5TA:38+19.66 TBC:3246.97
5TA:38+40.66 TBC:3246.97
5TA:38+53.66 TBC:3246.97
5TA:38+74.66 TBC:3246.97
5TA:38+87.66 TBC:3246.97
5TA:39+08.66 TBC:3246.97
5TA:39+21.66 TBC:3246.97
5TA:39+42.66 TBC:3246.97
5TA:39+55.66 TBC:3246.97
5TA:39+76.66 TBC:3246.97
5TA:39+89.66 TBC:3246.97
5TA:40+10.66 TBC:3246.97
5TA:40+23.66 TBC:3246.97
5TA:40+44.66 TBC:3246.97
5TA:40+57.66 TBC:3246.97
5TA:40+78.66 TBC:3246.97
5TA:40+91.66 TBC:3246.97
5TA:41+12.66 TBC:3246.97
5TA:41+25.66 TBC:3246.97
5TA:41+46.66 TBC:3246.97
5TA:41+59.66 TBC:3246.97
5TA:41+80.66 TBC:3246.97
5TA:41+93.66 TBC:3246.97
5TA:42+14.66 TBC:3246.97
5TA:42+27.66 TBC:3246.97
5TA:42+48.66 TBC:3246.97
5TA:42+61.66 TBC:3246.97
5TA:42+82.66 TBC:3246.97
5TA:42+95.66 TBC:3246.97
5TA:43+16.66 TBC:3246.97
5TA:43+29.66 TBC:3246.97
5TA:43+50.66 TBC:3246.97
5TA:43+63.66 TBC:3246.97
5TA:43+84.66 TBC:3246.97
5TA:43+97.66 TBC:3246.97
5TA:44+18.66 TBC:3246.97
5TA:44+31.66 TBC:3246.97
5TA:44+52.66 TBC:3246.97
5TA:44+65.66 TBC:3246.97
5TA:44+86.66 TBC:3246.97
5TA:44+99.66 TBC:3246.97
5TA:45+20.66 TBC:3246.97
5TA:45+33.66 TBC:3246.97
5TA:45+54.66 TBC:3246.97
5TA:45+67.66 TBC:3246.97
5TA:45+88.66 TBC:3246.97
5TA:46+01.66 TBC:3246.97
5TA:46+22.66 TBC:3246.97
5TA:46+35.66 TBC:3246.97
5TA:46+56.66 TBC:3246.97
5TA:46+69.66 TBC:3246.97
5TA:46+90.66 TBC:3246.97
5TA:47+03.66 TBC:3246.97
5TA:47+24.66 TBC:3246.97
5TA:47+37.66 TBC:3246.97
5TA:47+58.66 TBC:3246.97
5TA:47+71.66 TBC:3246.97
5TA:47+92.66 TBC:3246.97
5TA:48+05.66 TBC:3246.97
5TA:48+26.66 TBC:3246.97
5TA:48+39.66 TBC:3246.97
5TA:48+60.66 TBC:3246.97
5TA:48+73.66 TBC:3246.97
5TA:48+94.66 TBC:3246.97
5TA:49+07.66 TBC:3246.97
5TA:49+28.66 TBC:3246.97
5TA:49+41.66 TBC:3246.97
5TA:49+62.66 TBC:3246.97
5TA:49+75.66 TBC:3246.97
5TA:49+96.66 TBC:3246.97
5TA:50+09.66 TBC:3246.97
5TA:50+30.66 TBC:3246.97
5TA:50+43.66 TBC:3246.97
5TA:50+64.66 TBC:3246.97
5TA:50+77.66 TBC:3246.97
5TA:50+98.66 TBC:3246.97
5TA:51+11.66 TBC:3246.97
5TA:51+32.66 TBC:3246.97
5TA:51+45.66 TBC:3246.97
5TA:51+66.66 TBC:3246.97
5TA:51+79.66 TBC:3246.97
5TA:52+00.66 TBC:3246.97
5TA:52+13.66 TBC:3246.97
5TA:52+34.66 TBC:3246.97
5TA:52+47.66 TBC:3246.97
5TA:52+68.66 TBC:3246.97
5TA:52+81.66 TBC:3246.97
5TA:53+02.66 TBC:3246.97
5TA:53+15.66 TBC:3246.97
5TA:53+36.66 TBC:3246.97
5TA:53+49.66 TBC:3246.97
5TA:53+70.66 TBC:3246.97
5TA:53+83.66 TBC:3246.97
5TA:54+04.66 TBC:3246.97
5TA:54+17.66 TBC:3246.97
5TA:54+38.66 TBC:3246.97
5TA:54+51.66 TBC:3246.97
5TA:54+72.66 TBC:3246.97
5TA:54+85.66 TBC:3246.97
5TA:55+06.66 TBC:3246.97
5TA:55+19.66 TBC:3246.97
5TA:55+40.66 TBC:3246.97
5TA:55+53.66 TBC:3246.97
5TA:55+74.66 TBC:3246.97
5TA:55+87.66 TBC:3246.97
5TA:56+08.66 TBC:3246.97
5TA:56+21.66 TBC:3246.97
5TA:56+42.66 TBC:3246.97
5TA:56+55.66 TBC:3246.97
5TA:56+76.66 TBC:3246.97
5TA:56+89.66 TBC:3246.97
5TA:57+10.66 TBC:3246.97
5TA:57+23.66 TBC:3246.97
5TA:57+44.66 TBC:3246.97
5TA:57+57.66 TBC:3246.97
5TA:57+78.66 TBC:3246.97
5TA:57+91.66 TBC:3246.97
5TA:58+12.66 TBC:3246.97
5TA:58+25.66 TBC:3246.97
5TA:58+46.66 TBC:3246.97
5TA:58+59.66 TBC:3246.97
5TA:58+80.66 TBC:3246.97
5TA:58+93.66 TBC:3246.97
5TA:59+14.66 TBC:3246.97
5TA:59+27.66 TBC:3246.97
5TA:59+48.66 TBC:3246.97
5TA:59+61.66 TBC:3246.97
5TA:59+82.66 TBC:3246.97
5TA:59+95.66 TBC:3246.97
5TA:60+16.66 TBC:3246.97
5TA:60+29.66 TBC:3246.97
5TA:60+50.66 TBC:3246.97
5TA:60+63.66 TBC:3246.97
5TA:60+84.66 TBC:3246.97
5TA:60+97.66 TBC:3246.97
5TA:61+18.66 TBC:3246.97
5TA:61+31.66 TBC:3246.97
5TA:61+52.66 TBC:3246.97
5TA:61+65.66 TBC:3246.97
5TA:61+86.66 TBC:3246.97
5TA:61+99.66 TBC:3246.97
5TA:62+20.66 TBC:3246.97
5TA:62+33.66 TBC:3246.97
5TA:62+54.66 TBC:3246.97
5TA:62+67.66 TBC:3246.97
5TA:62+88.66 TBC:3246.97
5TA:63+01.66 TBC:3246.97
5TA:63+22.66 TBC:3246.97
5TA:63+35.66 TBC:3246.97
5TA:63+56.66 TBC:3246.97
5TA:63+69.66 TBC:3246.97
5TA:63+90.66 TBC:3246.97
5TA:64+03.66 TBC:3246.97
5TA:64+24.66 TBC:3246.97
5TA:64+37.66 TBC:3246.97
5TA:64+58.66 TBC:3246.97
5TA:64+71.66 TBC:3246.97
5TA:64+92.66 TBC:3246.97
5TA:65+05.66 TBC:3246.97
5TA:65+26.66 TBC:3246.97
5TA:65+39.66 TBC:3246.97
5TA:65+60.66 TBC:3246.97
5TA:65+73.66 TBC:3246.97
5TA:65+94.66 TBC:3246.97
5TA:66+07.66 TBC:3246.97
5TA:66+28.66 TBC:3246.97
5TA:66+41.66 TBC:3246.97
5TA:66+62.66 TBC:3246.97
5TA:66+75.66 TBC:3246.97
5TA:66+96.66 TBC:3246.97
5TA:67+09.66 TBC:3246.97
5TA:67+30.66 TBC:3246.97
5TA:67+43.66 TBC:3246.97
5TA:67+64.66 TBC:3246.97
5TA:67+77.66 TBC:3246.97
5TA:67+98.66 TBC:3246.97
5TA:68+11.66 TBC:3246.97
5TA:68+32.66 TBC:3246.97
5TA:68+45.66 TBC:3246.97
5TA:68+66.66 TBC:3246.97
5TA:68+79.66 TBC:3246.97
5TA:69+00.66 TBC:3246.97
5TA:69+13.66 TBC:3246.97
5TA:69+34.66 TBC:3246.97
5TA:69+47.66 TBC:3246.97
5TA:69+68.66 TBC:3246.97
5TA:69+81.66 TBC:3246.97
5TA:70+02.66 TBC:3246.97
5TA:70+15.66 TBC:3246.97
5TA:70+36.66 TBC:3246.97
5TA:70+49.66 TBC:3246.97
5TA:70+70.66 TBC:3246.97
5TA:70+83.66 TBC:3246.97
5TA:71+04.66 TBC:3246.97
5TA:71+17.66 TBC:3246.97
5TA:71+38.66 TBC:3246.97
5TA:71+51.66 TBC:3246.97
5TA:71+72.66 TBC:3246.97
5TA:71+85.66 TBC:3246.97
5TA:72+06.66 TBC:3246.97
5TA:72+19.66 TBC:3246.97
5TA:72+40.66 TBC:3246.97
5TA:72+53.66 TBC:3246.97
5TA:72+74.66 TBC:3246.97
5TA:72+87.66 TBC:3246.97
5TA:73+08.66 TBC:3246.97
5TA:73+21.66 TBC:3246.97
5TA:73+42.66 TBC:3246.97
5TA:73+55.66 TBC:3246.97
5TA:73+76.66 TBC:3246.97
5TA:73+89.66 TBC:3246.97
5TA:74+10.66 TBC:3246.97
5TA:74+23.66 TBC:3246.97
5TA:74+44.66 TBC:3246.97
5TA:74+57.66 TBC:3246.97
5TA:74+78.66 TBC:3246.97
5TA:74+91.66 TBC:3246.97
5TA:75+12.66 TBC:3246.97
5TA:75+25.66 TBC:3246.97
5TA:75+46.66 TBC:3246.97
5TA:75+59.66 TBC:3246.97
5TA:75+80.66 TBC:3246.97
5TA:75+93.66 TBC:3246.97
5TA:76+14.66 TBC:3246.97
5TA:76+27.66 TBC:3246.97
5TA:76+48.66 TBC:3246.97
5TA:76+61.66 TBC:3246.97
5TA:76+82.66 TBC:3246.97
5TA:76+95.66 TBC:3246.97
5TA:77+16.66 TBC:3246.97
5TA:77+29.66 TBC:3246.97
5TA:77+50.66 TBC:3246.97
5TA:77+63.66 TBC:3246.97
5TA:77+84.66 TBC:3246.97
5TA:77+97.66 TBC:3246.97
5TA:78+18.66 TBC:3246.97
5TA:78+31.66 TBC:3246.97
5TA:78+52.66 TBC:3246.97
5TA:78+65.66 TBC:3246.97
5TA:78+86.66 TBC:3246.97
5TA:78+99.66 TBC:3246.97
5TA:79+20.66 TBC:3246.97
5TA:79+33.66 TBC:3246.97
5TA:79+54.66 TBC:3246.97
5TA:79+67.66 TBC:3246.97
5TA:79+88.66 TBC:3246.97
5TA:80+01.66 TBC:3246.97
5TA:80+22.66 TBC:3246.97
5TA:80+35.66 TBC:3246.97
5TA:80+56.66 TBC:3246.97
5TA:80+69.66 TBC:3246.97
5TA:80+90.66 TBC:3246.97
5TA:81+03.66 TBC:3246.97
5TA:81+24.66 TBC:3246.97
5TA:81+37.66 TBC:3246.97
5TA:81+58.66 TBC:3246.97
5TA:81+71.66 TBC:3246.97
5TA:81+92.66 TBC:3246.97
5TA:82+05.66 TBC:3246.97
5TA:82+26.66 TBC:3246.97
5TA:82+39.66 TBC:3246.97
5TA:82+60.66 TBC:3246.97
5TA:82+73.66 TBC:3246.97
5TA:82+94.66 TBC:3246.97
5TA:83+07.66 TBC:3246.97
5TA:83+28.66 TBC:3246.97
5TA:83+41.66 TBC:3246.97
5TA:83+62.66 TBC:3246.97
5TA:83+75.66 TBC:3246.97
5TA:83+96.66 TBC:3246.97
5TA:84+09.66 TBC:3246.97
5TA:84+30.66 TBC:3246.97
5TA:84+43.66 TBC:3246.97
5TA:84+64.66 TBC:3246.97
5TA:84+77.66 TBC:3246.97
5TA:84+98.66 TBC:3246.97
5TA:85+11.66 TBC:3246.97
5TA:85+32.66 TBC:3246.97
5TA:85+45.66 TBC:3246.97
5TA:85+66.66 TBC:3246.97
5TA:85+79.66 TBC:3246.97
5TA:86+00.66 TBC:3246.97
5TA:86+13.66 TBC:3246.97
5TA:86+34.66 TBC:3246.97
5TA:86+47.66 TBC:3246.97
5TA:86+68.66 TBC:3246.97
5TA:86+81.66 TBC:3246.97
5TA:87+02.66 TBC:3246.97
5TA:87+15.66 TBC:3246.97
5TA:87+36.66 TBC:3246.97
5TA:87+49.66 TBC:3246.97
5TA:87+70.66 TBC:3246.97
5TA:87+83.66 TBC:3246.97
5TA:88+04.66 TBC:3246.97
5TA:88+17.66 TBC:3246.97
5TA:88+38.66 TBC:3246.97
5TA:88+51.66 TBC:3246.97
5TA:88+72.66 TBC:3246.97
5TA:88+85.66 TBC:3246.97
5TA:89+06.66 TBC:3246.97
5TA:89+19.66 TBC:3246.97
5TA:89+40.66 TBC:3246.97
5TA:89+53.66 TBC:3246.97
5TA:89+74.66 TBC:3246.97
5TA:89+87.66 TBC:3246.97
5TA:90+08.66 TBC:3246.97
5TA:90+21.66 TBC:3246.97
5TA:90+42.66 TBC:3246.97
5TA:90+55.66 TBC:3246.97
5TA:90+76.66 TBC:3246.97
5TA:90+89.66 TBC:3246.97
5TA:91+10.66 TBC:3246.97
5TA:91+23.66 TBC:3246.97
5TA:91+44.66 TBC:3246.97
5TA:91+57.66 TBC:3246.97
5TA:91+78.66 TBC:3246.97
5TA:91+91.66 TBC:3246.97
5TA:92+12.66 TBC:3246.97
5TA:92+25.66 TBC:3246.97
5TA:92+46.66 TBC:3246.97
5TA:92+59.66 TBC:3246.97
5TA:92+80.66 TBC:3246.97
5TA:92+93.66 TBC:3246.97
5TA:93+14.66 TBC:3246.97
5TA:93+27.66 TBC:3246.97
5TA:93+48.66 TBC:3246.97
5TA:93+61.66 TBC:3246.97
5TA:93+82.66 TBC:3246.97
5TA:93+95.66 TBC:3246.97
5TA:94+16.66 TBC:3246.97
5TA:94+29.66 TBC:3246.97
5TA:94+50.66 TBC:3246.97
5TA:94+63.66 TBC:3246.97
5TA:94+84.66 TBC:3246.97
5TA:94+97.66 TBC:3246.97
5TA:95+18.66 TBC:3246.97
5TA:95+31.66 TBC:3246.97
5TA:95+52.66 TBC:3246.97
5TA:95+65.66 TBC:3246.97
5TA:95+86.66 TBC:3246.97
5TA:95+99.66 TBC:3246.97
5TA:96+20.66 TBC:3246.97
5TA:96+33.66 TBC:3246.97
5TA:96+54.66 TBC:3246.97
5TA:96+67.66 TBC:3246.97
5TA:96+88.66 TBC:3246.97
5TA:97+01.66 TBC:3246.97
5TA:97+22.66 TBC:3246.97
5TA:97+35.66 TBC:3246.97
5TA:97+56.66 TBC:3246.97
5TA:97+69.66 TBC:3246.97
5TA:97+90.66 TBC:3246.97
5TA:98+03.66 TBC:3246.97
5TA:98+24.66 TBC:3246.97
5TA:98+37.66 TBC:3246.97
5TA:98+58.66 TBC:3246.97
5TA:98+71.66 TBC:3246.97
5TA:98+92.66 TBC:3246.97
5TA:99+05.66 TBC:3246.97
5TA:99+26.66 TBC:3246.97
5TA:99+39.66 TBC:3246.97
5TA:99+60.66 TBC:3246.97
5TA:99+73.66 TBC:3246.97
5TA:99+94.66 TBC:3246.97
5TA:100+07.66 TBC:3246.97
5TA:100+28.66 TBC:3246.97
5TA:100+41.66 TBC:3246.97
5TA:100+62.66 TBC:3246.97
5TA:100+75.66 TBC:3246.97
5TA:100+96.66 TBC:3246.97
5TA:101+09.66 TBC:3246.97
5TA:101+30.66 TBC:3246.97
5TA:101+43.66 TBC:3246.97
5TA:101+64.66 TBC:3246.97
5TA:101+77.66 TBC:3246.97
5TA:101+98.66 TBC:3246.97
5TA:102+11.66 TBC:3246.97
5TA:102+32.66 TBC:3246.97
5TA:102+45.66 TBC:3246.97
5TA:102+66.66 TBC:3246.97
5TA:102+79.66 TBC:3246.97
5TA:103+00.66 TBC:3246.97
5TA:103+13.66 TBC:3246.97
5TA:103+34.66 TBC:3246.97
5TA:103+47.66 TBC:3246.97
5TA:103+68.66 TBC:3246.97
5TA:103+81.66 TBC:3246.97
5TA:104+02.66 TBC:3246.97
5TA:104+15.66 TBC:3246.97
5TA:104+36.66 TBC:3246.97
5TA:104+49.66 TBC:3246.97
5TA:104+70.66 TBC:3246.97
5TA:104+83.66 TBC:3246.97
5TA:105+04.66 TBC:3246.97
5TA:105+17.66 TBC:3246.97
5TA:105+38.66 TBC:3246.97
5TA:105+51.66 TBC:3246.97
5TA:105+72.66 TBC:3246.97
5TA:105+85.66 TBC:3246.97
5TA:106+06.66 TBC:3246.97
5TA:106+19.66 TBC:3246.97
5TA:106+40.66 TBC:3246.97
5TA:106+53.66 TBC:3246.97
5TA:106+74.66 TBC:3246.97
5TA:106+87.66 TBC:3246.97
5TA:107+08.66 TBC:3246.97
5TA:107+21.66 TBC:3246.97
5TA:107+42.66 TBC:3246.97
5TA:107+55.66 TBC:3246.97
5TA:107+76.66 TBC:3246.97
5TA:107+89.66 TBC:3246.97
5TA:108+10.66 TBC:3246.97
5TA:108+23.66 TBC:3246.97
5TA:108+44.66 TBC:3246.97
5TA:108+57.66 TBC:3246.97
5TA:108+78.66 TBC:3246.97
5TA:108+91.66 TBC:3246.97
5TA:109+12.66 TBC:3246.97
5TA:109+25.66 TBC:3246.97
5TA:109+46.66 TBC:3246.97
5TA:109+59.66 TBC:3246.97
5TA:109+80.66 TBC:3246.97
5TA:109+93.66 TBC:3246.97
5TA:110+14.66 TBC:3246.97
5TA:110+27.66 TBC:3246.97
5TA:110+48.66 TBC:3246.97
5TA:110+61.66 TBC:3246.97
5TA:110+82.66 TBC:3246.97
5TA:110+95.66 TBC:3246.97
5TA:111+16.66 TBC:3246.97
5TA:111+29.66 TBC:3246.97
5TA:111+50.66 TBC:3246.97
5TA:111+63.66 TBC:3246.97
5TA:111+84.66 TBC:3246.97
5TA:111+97.66 TBC:3246.97
5TA:112+18.66 TBC:3246.97
5TA:112+31.66 TBC:3246.97
5TA:112+52.66 TBC:3246.97
5TA:112+65.66 TBC:3246.97
5TA:112+86.66 TBC:3246.97
5TA:112+99.66 TBC:3246.97
5TA:113+20.66 TBC:3246.97
5TA:113+33.66 TBC:3246.97
5TA:113+54.66 TBC:3246.97
5TA:113+67.66 TBC:3246.97
5TA:113+88.66 TBC:3246.97
5TA:114+01.66 TBC:3246.97
5TA:114+22.66 TBC:3246.97
5TA:114+35.66 TBC:3246.97
5TA:114+56.66 TBC:3246.97
5TA:114+69.66 TBC:3246.97
5TA:114+90.66 TBC:3246.97
5TA:115+03.66 TBC:3246.97
5TA:115+24.66 TBC:3246.97
5TA:115+37.66 TBC:3246.97
5TA:115+58.66 TBC:3246.97
5TA:115+71.66 TBC:3246.97
5TA:115+92.66 TBC:3246.97
5TA:116+05.66 TBC:3246.97
5TA:116+26.66 TBC:3246.97
5TA:116+39.66 TBC:3246.97
5TA:116+60.66 TBC:3246.97
5TA:116+73.66 TBC:3246.97
5TA:116+94.66 TBC:3246.97
5TA:117+07.66 TBC:3246.97
5TA:117+28.66 TBC:3246.97
5TA:117+41.66 TBC:3246.97
5TA:117+62.66 TBC:3246.97
5TA:117+75.66 TBC:3246.97
5TA:117+96.66 TBC:3246.97
5TA:118+09.66 TBC:3246.97
5TA:118+30.66 TBC:3246.97
5TA:118+43.66 TBC:3246.97
5TA:118+64.66 TBC:3246.97
5TA:118+77.66 TBC:3246.97
5TA:118+98.66 TBC:3246.97
5TA:119+11.66 TBC:3246.97
5TA:119+32.66 TBC:3246.97
5TA:119+45.66 TBC:3246.97
5TA:119+66.66 TBC:3246.97
5TA:119+79.66 TBC:3246.97
5TA:120+00.66 TBC:3246.97
5TA:120+13.66 TBC:3246.97
5TA:120+34.66 TBC:3246.97
5TA:120+47.66 TBC:3246.97
5TA:120+68.66 TBC:3246.97
5TA:120+81.66 TBC:3246.97
5TA:121+02.66 TBC:3246.97
5TA:121+15.66 TBC:3246.97
5TA:121+36.66 TBC:3246.97
5TA:121+49.66 TBC:3246.97
5TA:121+70.66 TBC:3246.97
5TA:121+83.66 TBC:3246.97
5TA:122+04.66 TBC:3246.97
5TA:122+17.66 TBC:3246.97
5TA:122+38.66 TBC:3246.97
5TA:122+51.66 TBC:3246.97
5TA:122+72.66 TBC:3246.97
5TA:122+85.66 TBC:3246.97
5TA:123+06.66 TBC:3246.97
5TA:123+19.66 TBC:3246.97
5TA:123+40.66 TBC:3246.97
5TA:123+53.66 TBC:3246.97
5TA:123+74.66 TBC:3246.97
5TA:123+87.66 TBC:3246.97
5TA:124+08.66 TBC:3246.97
5TA:124+21.66 TBC:3246.97
5TA:124+42.66 TBC:3246.97
5TA:124+55.66 TBC:3246.97
5TA:124+76.66 TBC:3246.97
5TA:124+89.66 TBC:3246.97
5TA:125+10.66 TBC:3246.97
5TA:125+23.66 TBC:3246.97
5TA:125+44.66 TBC:3246.97
5TA:125+57.66 TBC:3246.97
5TA:125+78.66 TBC:3246.97
5TA:125+91.66 TBC:3246.97
5TA:126+12.66 TBC:3246.97
5TA:126+25.66 TBC:3246.97
5TA:126+46.66 TBC:3246.97
5TA:126+59.66 TBC:3246.97
5TA:126+80.66 TBC:3246.97
5TA:126+93.66 TBC:3246.97
5TA:127+14.66 TBC:3246.97
5TA:127+27.66 TBC:3246.97
5TA:127+48.66 TBC:3246.97
5TA:127+61.66 TBC:3246.97
5TA:127+82.66 TBC:3246.97
5TA:127+95.66 TBC:3246.97
5TA:128+16.66 TBC:3246.97
5TA:128+29.66 TBC:3246.97
5TA:128+50.66 TBC:3246.97
5TA:128+63.66 TBC:3246.97
5TA:128+84.66 TBC:3246.97
5TA:128+97.66 TBC:3246.97
5TA:129+18.66 TBC:3246.97
5TA:129+31.66 TBC:3246.97
5TA:129+52.66 TBC:3246.97
5TA:129+65.66 TBC:3246.97
5TA:129+86.66 TBC:3246.97
5TA:129+99.66 TBC:3246.97
5TA:130+20.66 TBC:3246.97
5TA:130+33.66 TBC:3246.97
5TA:130+54.66 TBC:3246.97
5TA:130+67.66 TBC:3246.97
5TA:130+88.66 TBC:3246.97
5TA:131+01.66 TBC:3246.97
5TA:131+22.66 TBC:3246.97
5TA:131+35.66 TBC:3246.97
5TA:131+56.66 TBC:3246.97
5TA:131+69.66 TBC:3246.97
5TA:131+90.66 TBC:3246.97
5TA:132+03.66 TBC:3246.97
5TA:132+24.66 TBC:3246.97
5TA:132+37.66 TBC:3246.97
5TA:132+58.66 TBC:3246.97
5TA:132+71.66 TBC:3246.97
5TA:132+92.66 TBC:3246.97
5TA:133+05.66 TBC:3246.97
5TA:133+26.66 TBC:3246.97
5TA:133+39.66 TBC:3246.97
5TA:133+60.66 TBC:3246.97
5TA:133+73.66 TBC:3246.97
5TA:133+94.66 TBC:3246.97
5TA:134+07.66 TBC:3246.97
5TA:134+28.66 TBC:3246.97
5TA:134+41.66 TBC:3246.97
5TA:134+62.66 TBC:3246.97
5TA:134+75.66 TBC:3246.97
5TA:134+96.66 TBC:3246.97
5TA:135+09.66 TBC:3246.97
5TA:135+30.66 TBC:3246.97
5TA:135+43.66 TBC:3246.97
5TA:135+64.66 TBC:3246.97
5TA:135+77.66 TBC:3246.97
5TA:135+98.66 TBC:3246.97
5TA:136+11.66 TBC:3246.97
5TA:136+32.66 TBC:3246.97
5TA:136+45.66 TBC:3246.97
5TA:136+66.66 TBC:3246.97
5TA:136+79.66 TBC:3246.97
5TA:137+00.66 TBC:3246.97
5TA:137+13.66 TBC:3246.97
5TA:137+34.66 TBC:3246.97
5TA:137+47.66 TBC:3246.97
5TA:137+68.66 TBC:3246.97
5TA:137+81.66 TBC:3246.97
5TA:138+02.66 TBC:3246.97
5TA:138+15.66 TBC:3246.97
5TA:138+36.66 TBC:3246.97
5TA:138+49.66 TBC:3246.97
5TA:138+70.66 TBC:3246.97
5TA:138+83.66 TBC:3246.97
5TA:139+04.66 TBC:3246.97
5TA:139+17.66 TBC:3246.97
5TA:139+38.66 TBC:3246.97
5TA:139+51.66 TBC:3246.97
5TA:139+72.66 TBC:3246.97
5TA:139+85.66 TBC:3246.97
5TA:140+06.66 TBC:3246.97
5TA:140+19.66 TBC:3246.97
5TA:140+40.66 TBC:3246.97
5TA:140+53.66 TBC:3246.97
5TA:140+74.66 TBC:3246.97
5TA:140+87.66 TBC:3246.97
5TA:141+08.66 TBC:3246.97
5TA:141+21.66 TBC:3246.97
5TA:141+42.66 TBC:3246.97
5TA:141+55.66 TBC:3246.97
5TA:141+76.66 TBC:3246.97
5TA:141+89.66 TBC:3246.97
5TA:142+10.66 TBC:3246.97
5TA:142+23.66 TBC:3246.97
5TA:142+44.66 TBC:3246.97
5TA:142+57.66 TBC:3246.97
5TA:142+78.66 TBC:3246.97
5TA:142+91.66 TBC:3246.97
5TA:143+12.66 TBC:3246.97
5TA:143+25.66 TBC:3246.97
5TA:143+46.66 TBC:3246.97
5TA:143+59.66 TBC:3246.97
5TA:143+80.66 TBC:3246.97
5TA:143+93.66 TBC:3246.97
5TA:144+14.66 TBC:3246.97
5TA:144+27.66 TBC:3246.97
5TA:144+48.66 TBC:3246.97
5TA:144+61.66 TBC:3246.97
5TA:144+82.66 TBC:3246.97
5TA:144+95.66 TBC:3246.97
5TA:145+16.66 TBC:3246.97
5TA:145+29.66 TBC:3246.97
5TA:145+50.66 TBC:3246.97
5TA:145+63.66 TBC:3246.97
5TA:145+84.66 TBC:3246.97
5TA:145+97.66 TBC:3246.97
5TA:146+18.66 TBC:3246.97
5TA:146+31.66 TBC:3246.97
5TA:146+52.66 TBC:3246.97
5TA:146+65.66 TBC:3246.97
5TA:146+86.66 TBC:3246.97
5TA:146+99.66 TBC:3246.97
5TA:147+20.66 TBC:3246.97
5TA:

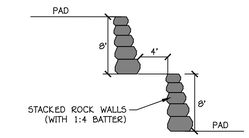


LEGEND:

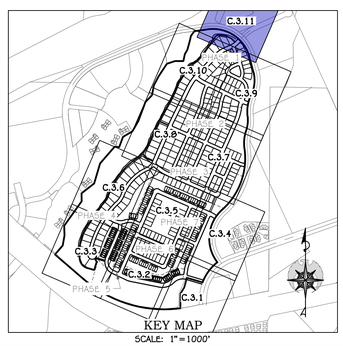
- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED CENTERLINE ALIGNMENT
- EXISTING CENTERLINE ALIGNMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED ROCK RETAINING WALL
- EXISTING ROCK RETAINING WALL
- 3000 EXISTING GROUND MAJOR CONTOUR
- 3001 EXISTING GROUND MINOR CONTOUR
- 3000 FINISH GROUND MAJOR CONTOUR
- 3001 FINISH GROUND MINOR CONTOUR
- 50 PROPOSED STORM PIPE (SIZE PER PLAN)
- 50 EXISTING STORM PIPE (SIZE PER PLAN)
- CURB INLET SINGLE CATCH BASIN
- CURB INLET DOUBLE CATCH BASIN
- 50 STANDARD STORM DRAIN MANHOLE
- FLARED END SECTION
- GRATE INLET AREA DRAIN BOX



A SINGLE ROCK RETAINING WALL SECTION
SCALE: NTS



B 2 TIER ROCK RETAINING WALL SECTION
SCALE: NTS



KEY MAP
SCALE: 1"=1000'

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #450 ST. GEORGE, UT 84770

REV.	DATE:	REVISION

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GRADING PLAN XI
PRELIMINARY PLAT

C.3.11

SHEET: 18 of 35

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Grading Plan.dwg

STATE OF UTAH

CORAL SPRINGS CONDOS

CORAL SPRINGS CONDOS

CORAL SPRINGS CONDOS

0 150' 300'

SCALE: 1" = 150'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

HURRICANE CITY WATER NOTES:

1. ALL WATERLINE WORKS MUST BE INSTALLED BY A CONTRACTOR THAT HAS BEEN PRE-QUALIFIED BY THE CITY OF HURRICANE WATER DEPARTMENT.
2. ALL CONSTRUCTION SHALL CONFORM TO THE "CITY OF HURRICANE DESIGN STANDARD", THE INTERNATIONAL PLUMBING CODE', AND THE "UNIFORM BUILDING CODE" LATEST EDITION AS ADMINISTERED BY THE CITY OF HURRICANE.
3. CONTRACTOR SHALL POTHOLE ALL PIPELINES AND VERIFY LOCATION AND DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION. IF THE IN FIELD CONDITION VARIES FROM DESIGN THE CONTRACTOR IS RESPONSIBLE FOR COSTS DUE TO CHANGES IN CONDITION. CITY MAPS ARE "BEST KNOWLEDGE" AND APPROXIMATE.
4. THE POTABLE WATER SUPPLY TO LAWN IRRIGATION SYSTEMS SHALL BE PROTECTED AGAINST BACKFLOW PER THE "INTERNATIONAL PLUMBING CODE (IPC)" SECTION 608.16.5 AND FIRE SPRINKLER SYSTEMS PER (IPC) 608.16.4.
5. ALL BACKFLOW ASSEMBLY INSTALLATION AND TEST REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE HURRICANE CITY ORDINANCE SECTION 8-3-9.
6. 14 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL ALSO BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.
7. THRUST RESTRAINT NEW PIPELINE AS REQUIRED. USE MEGA-LUG ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.
8. ASPHALT REPLACED OVER THE PIPE TRENCHING IS TO MATCH EXISTING PAVEMENT DEPTHS WITH A 6" OVER CUT FROM EDGE OF THE TRENCH ON EACH SIDE OF THE TRENCH.
9. CONTRACTORS SHALL CUT OFF AND CAP (BACK AT THE WATER MAIN) ALL EXISTING SERVICE LINES OR UNUSED STUB LINES THAT WILL BE ABANDONED.
10. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY THE HURRICANE CITY WATER SERVICES REPRESENTATIVE.
11. ALL NEW FIRE HYDRANTS SHALL BE INSTALLED AT THE CORRECT HEIGHT. RISERS WILL NOT BE ALLOWED.
12. RAISE ALL UTILITIES, SUCH AS MANHOLES, METER SETTERS, FIRE HYDRANTS, WATER VALVE LIDS, ETC. TO ROADWAY OR PROJECT FINISHED GRADE AS MAY BE APPLICABLE.

ASH CREEK SEWER DISTRICT:

1. SEWER IS TO MEET THE CURRENT ASH CREEK SPECIAL SERVICE DISTRICT (DISTRICT) CONSTRUCTION STANDARD.
2. PRIOR TO COMPLETION OF THE PROJECT PROVIDE A COPY OF THE GEOTECHNICAL REPORT AND THE COMPACTION TEST RESULTS TO THE DISTRICT.
3. PRIOR TO COMPLETION OF THE PROJECT PROVIDE A PDF AND A 2'X3' PLAN SHEET DRAWING OF RECORD TO THE DISTRICT. THE DRAWING OF RECORD SHOULD INCLUDE A DISTANCE FROM THE NEAR SIDE PROPERTY LINE TO THE SEWER LATERAL MARKER, ALSO INCLUDE ANY CHANGER TO SEWER MAIN LINE SLOPES AND DEPTHS.
4. THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN AND TEST THE SEWER LINES AFTER ALL UTILITIES HAVE BEEN INSTALLED BUT PRIOR TO ASPHALT PLACEMENT. THE FOLLOWING TESTS WILL NEED TO BE COMPLETED BY THE CONTRACTOR: MANDREL TEST, AIR TEST AND CLOSED-CIRCUIT CAMERA INSPECTION. CAMERA INSPECTION IF PROVIDED BY THE DISTRICT CAN BE SCHEDULED WITH THE DISTRICT REPRESENTATIVE. TUESDAYS OR THURSDAYS ARE GENERALLY WHEN THE DISTRICT CAN PERFORM THIS CAMERA WORK.
5. DURING CONSTRUCTION, ALL SEWER LINES WILL NEED TO BE CAPPED OR SEALED TO PROTECT THE SEWER SYSTEM FROM FLOODING OR RAIN EVENTS.

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

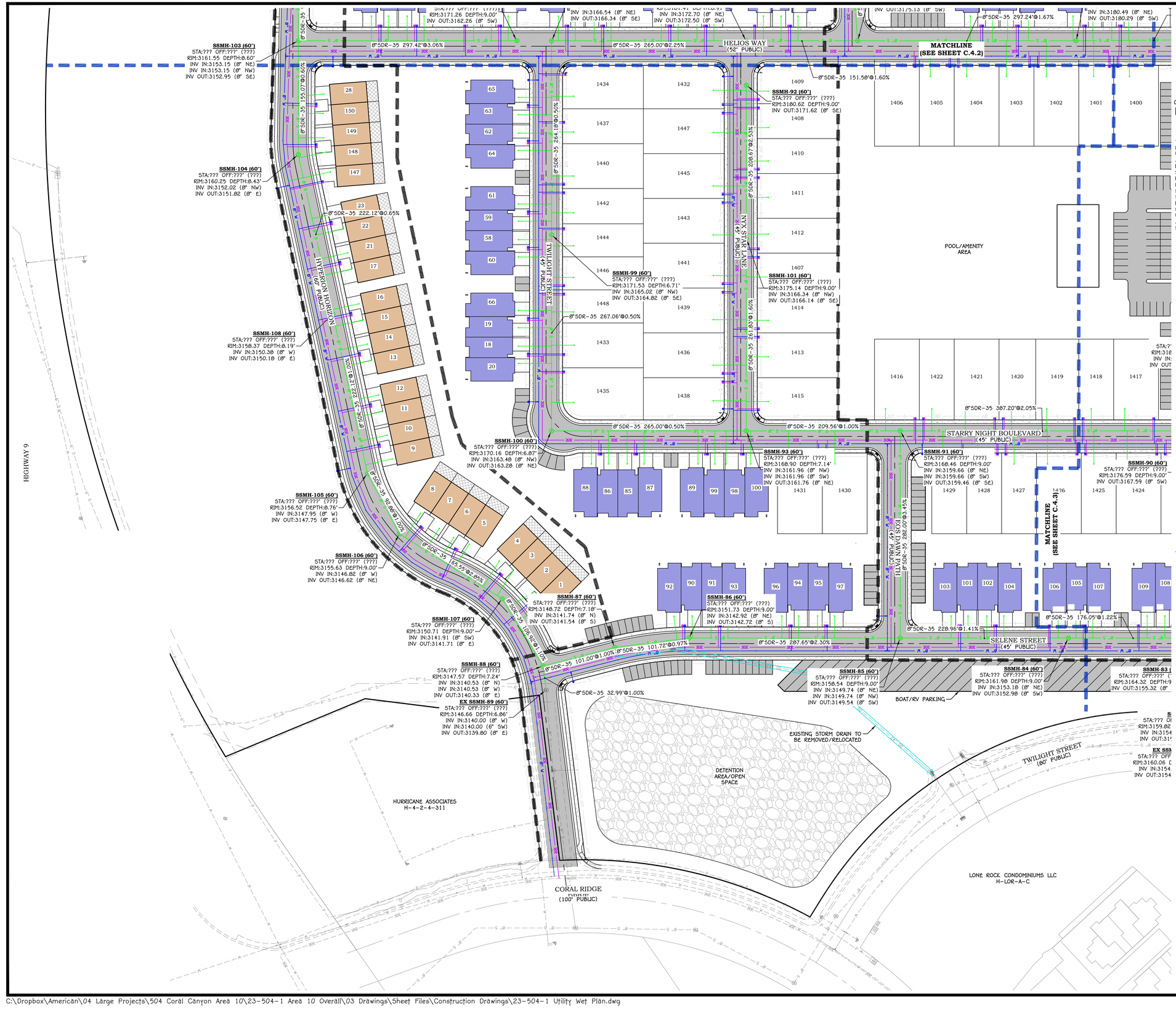
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

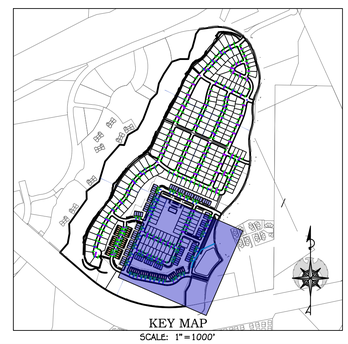
WATER IRRIGATION & SEWER OVERALL

CONSTRUCTION DRAWINGS

C.4.0

SHEET: 19 of 76





Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

0 60' 120'
SCALE: 1" = 60'

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

WATER, SEWER, & IRRIGATION PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF WATER METERS, SEWER LATERALS, AND IRRIGATION METERS, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS, THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. CONNECTION TO EXISTING LOCATION SHOWN IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL CONNECTIONS WITH EXISTING WATER, SEWER, AND IRRIGATION LINES. FOR PRESSURIZED UTILITY LINES, CONTRACTOR TO VERIFY PROPER RESTRAINTS ARE PROVIDED. IF EXISTING RESTRAINTS DO NOT EXIST, CONTRACTOR TO RESTRAIN ALL PRESSURIZED LINES IN ACCORDANCE WITH CITY/AGENCY STANDARDS AND SPECIFICATIONS.

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PHASE LINE	
SHEET MATCH LINE	
PROPOSED RETAINING WALL (SEE GRADING PLANS)	
EXISTING RETAINING WALL	
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK WALL	
PROPOSED WATER MAIN (SIZE PER PLAN)	
EXISTING WATER MAIN (SIZE PER PLAN)	
WATER MANHOLE	SD 108
FIRE HYDRANT AND VALVE ASSEMBLY	WD 302
WATER SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
STANDARD AIR VAC VAULT	WD 312
IN-LINE WATER VALVE	WD 316
PROPOSED IRRIGATION MAIN (SIZE PER PLAN)	
EXISTING IRRIGATION MAIN (SIZE PER PLAN)	
IRRIGATION MANHOLE	SD 108
IRRIGATION SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
IN-LINE VALVE	WD 316
PROPOSED SEWER MAIN (SIZE PER PLAN)	
EXISTING SEWER MAIN (SIZE PER PLAN)	
STANDARD SEWER MANHOLE	SD 109
SEWER CLEANOUT COVER	
SEWER SERVICE CONNECTION	

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

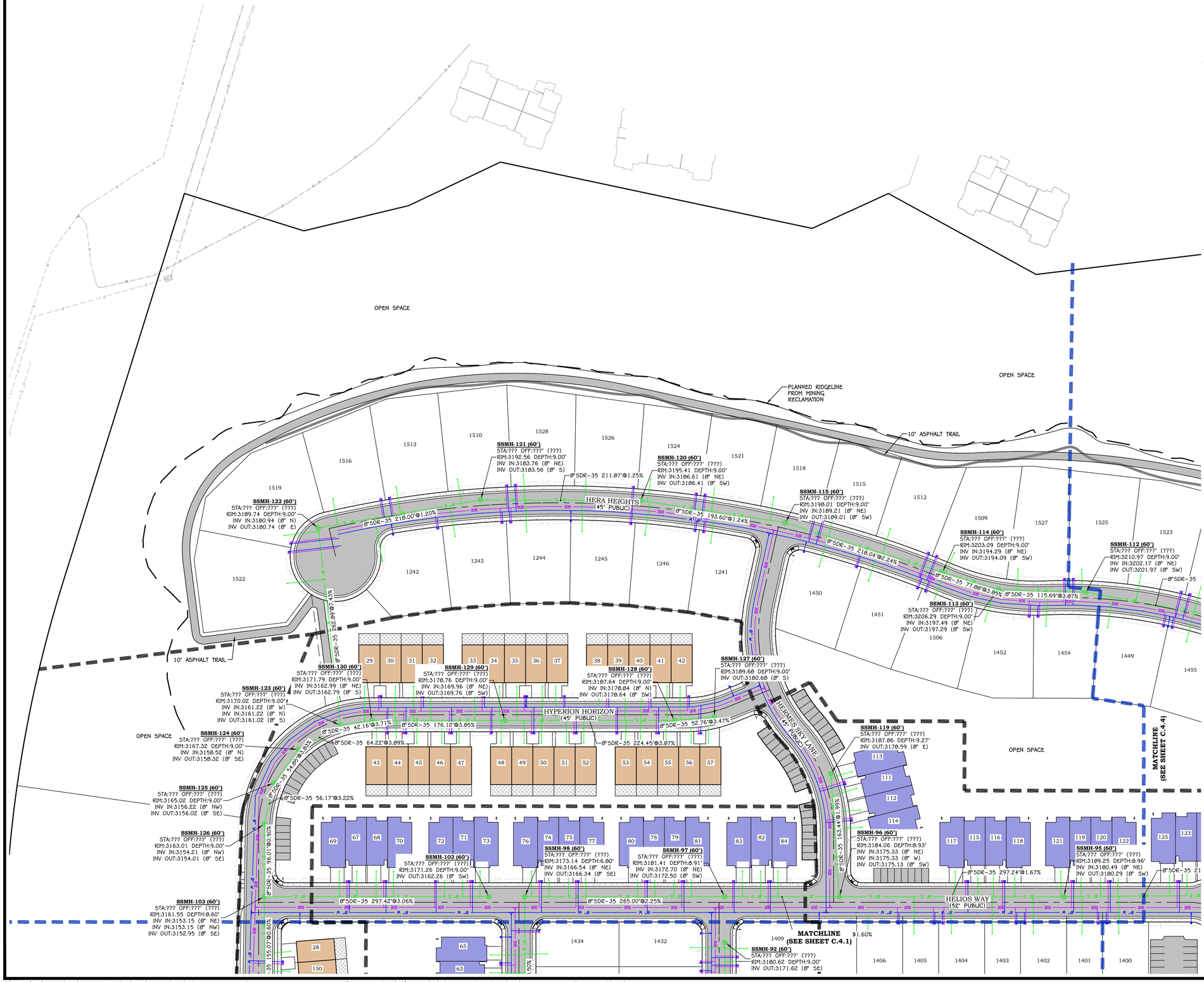
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

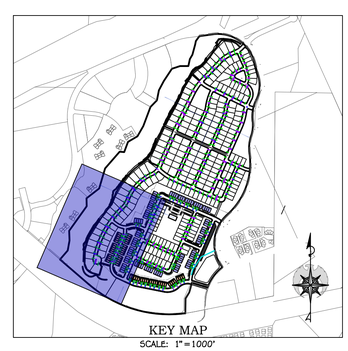
WATER IRRIGATION & SEWER I
CONSTRUCTION DRAWINGS

C.4.1

SHEET: 20 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Wet Plan.dwg





0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

WATER, SEWER, & IRRIGATION PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF WATER METERS, SEWER LATERALS, AND IRRIGATION METERS, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS, THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. CONNECTION TO EXISTING LOCATION SHOWN IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL CONNECTIONS WITH EXISTING WATER, SEWER, AND IRRIGATION LINES. FOR PRESSURIZED UTILITY LINES, CONTRACTOR TO VERIFY PROPER RESTRAINTS ARE PROVIDED. IF EXISTING RESTRAINTS DO NOT EXIST, CONTRACTOR TO RESTRAIN ALL PRESSURIZED LINES IN ACCORDANCE WITH CITY/AGENCY STANDARDS AND SPECIFICATIONS.

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PHASE LINE	
SHEET MATCH LINE	
PROPOSED RETAINING WALL (SEE GRADING PLANS)	
EXISTING RETAINING WALL	
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK WALL	
PROPOSED WATER MAIN (SIZE PER PLAN)	
EXISTING WATER MAIN (SIZE PER PLAN)	
WATER MANHOLE	SD 108
FIRE HYDRANT AND VALVE ASSEMBLY	WD 302
WATER SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
STANDARD AIR VAC VAULT	WD 312
IN-LINE WATER VALVE	WD 316
PROPOSED IRRIGATION MAIN (SIZE PER PLAN)	
EXISTING IRRIGATION MAIN (SIZE PER PLAN)	
IRRIGATION MANHOLE	SD 108
IRRIGATION SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
IN-LINE VALVE	WD 316
PROPOSED SEWER MAIN (SIZE PER PLAN)	
EXISTING SEWER MAIN (SIZE PER PLAN)	
STANDARD SEWER MANHOLE	SD 109
SEWER CLEANOUT COVER	
SEWER SERVICE CONNECTION	

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

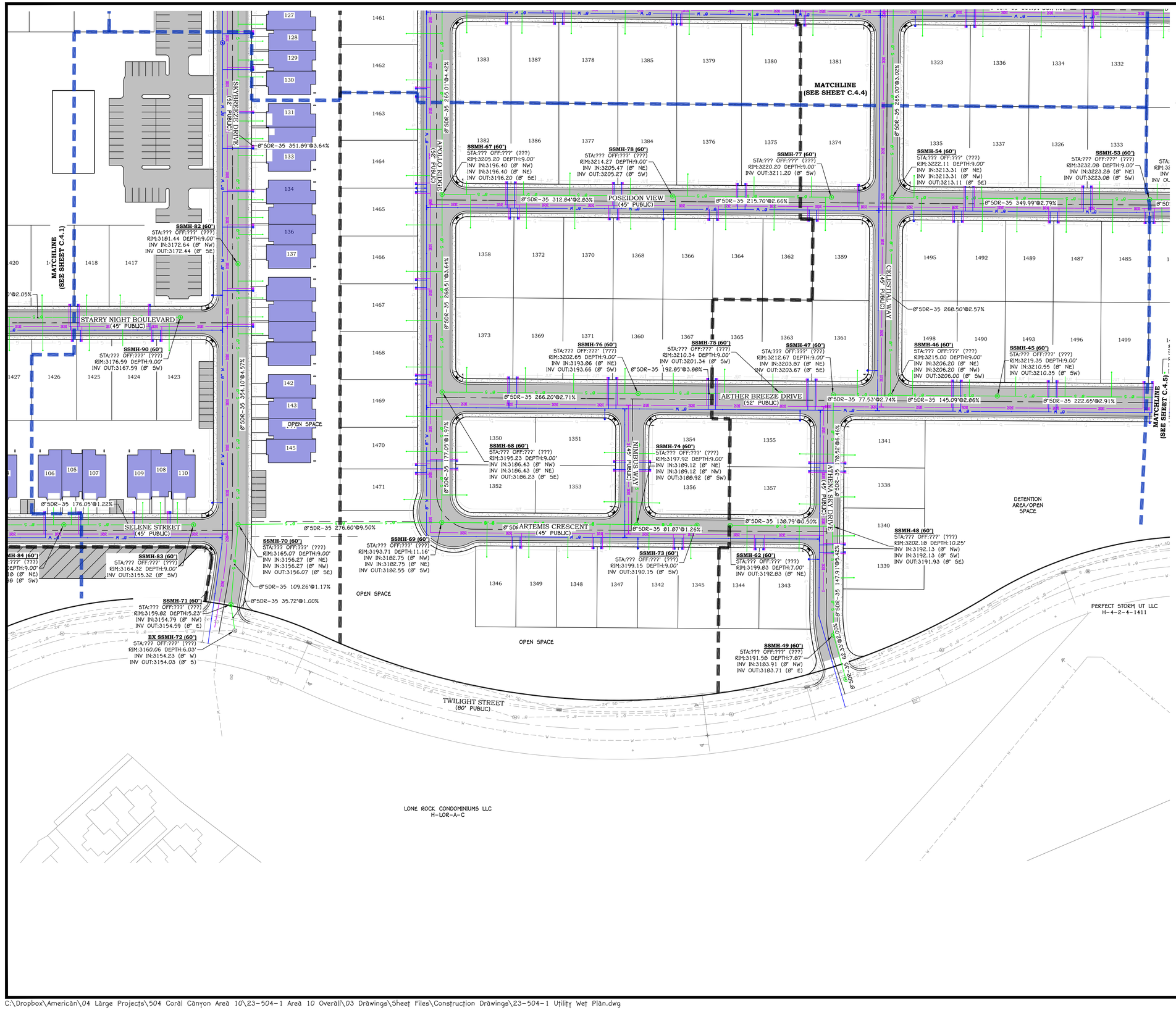
WATER IRRIGATION & SEWER II

CONSTRUCTION DRAWINGS

C.4.2

SHEET: 21 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Wet Plan.dwg



Blue Stakes of UTAH811 Bluestakes.org
Call Before You Dig!

0 60' 120'
SCALE: 1" = 60'

NOTICE TO CONTRACTORS:

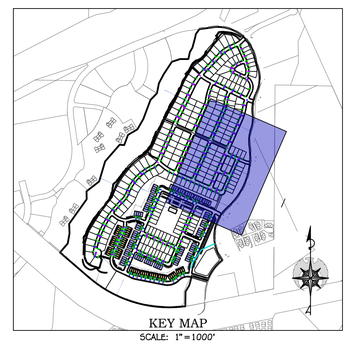
ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

WATER, SEWER, & IRRIGATION PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF WATER METERS, SEWER LATERALS, AND IRRIGATION METERS, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS, THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. CONNECTION TO EXISTING LOCATION SHOWN IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL CONNECTIONS WITH EXISTING WATER, SEWER, AND IRRIGATION LINES. FOR PRESSURIZED UTILITY LINES, CONTRACTOR TO VERIFY PROPER RESTRAINTS ARE PROVIDED. IF EXISTING RESTRAINTS DO NOT EXIST, CONTRACTOR TO RESTRAIN ALL PRESSURIZED LINES IN ACCORDANCE WITH CITY/AGENCY STANDARDS AND SPECIFICATIONS.

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PHASE LINE	
SHEET MATCH LINE	
PROPOSED RETAINING WALL (SEE GRADING PLANS)	
EXISTING RETAINING WALL	
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK WALL	
PROPOSED WATER MAIN (SIZE PER PLAN)	
EXISTING WATER MAIN (SIZE PER PLAN)	
WATER MANHOLE	SD 108
FIRE HYDRANT AND VALVE ASSEMBLY	WD 302
WATER SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
STANDARD AIR VAC VAULT	WD 312
IN-LINE WATER VALVE	WD 316
PROPOSED IRRIGATION MAIN (SIZE PER PLAN)	
EXISTING IRRIGATION MAIN (SIZE PER PLAN)	
IRRIGATION MANHOLE	SD 108
IRRIGATION SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
IN-LINE VALVE	WD 316
PROPOSED SEWER MAIN (SIZE PER PLAN)	
EXISTING SEWER MAIN (SIZE PER PLAN)	
STANDARD SEWER MANHOLE	SD 109
SEWER CLEANOUT COVER	
SEWER SERVICE CONNECTION	



REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

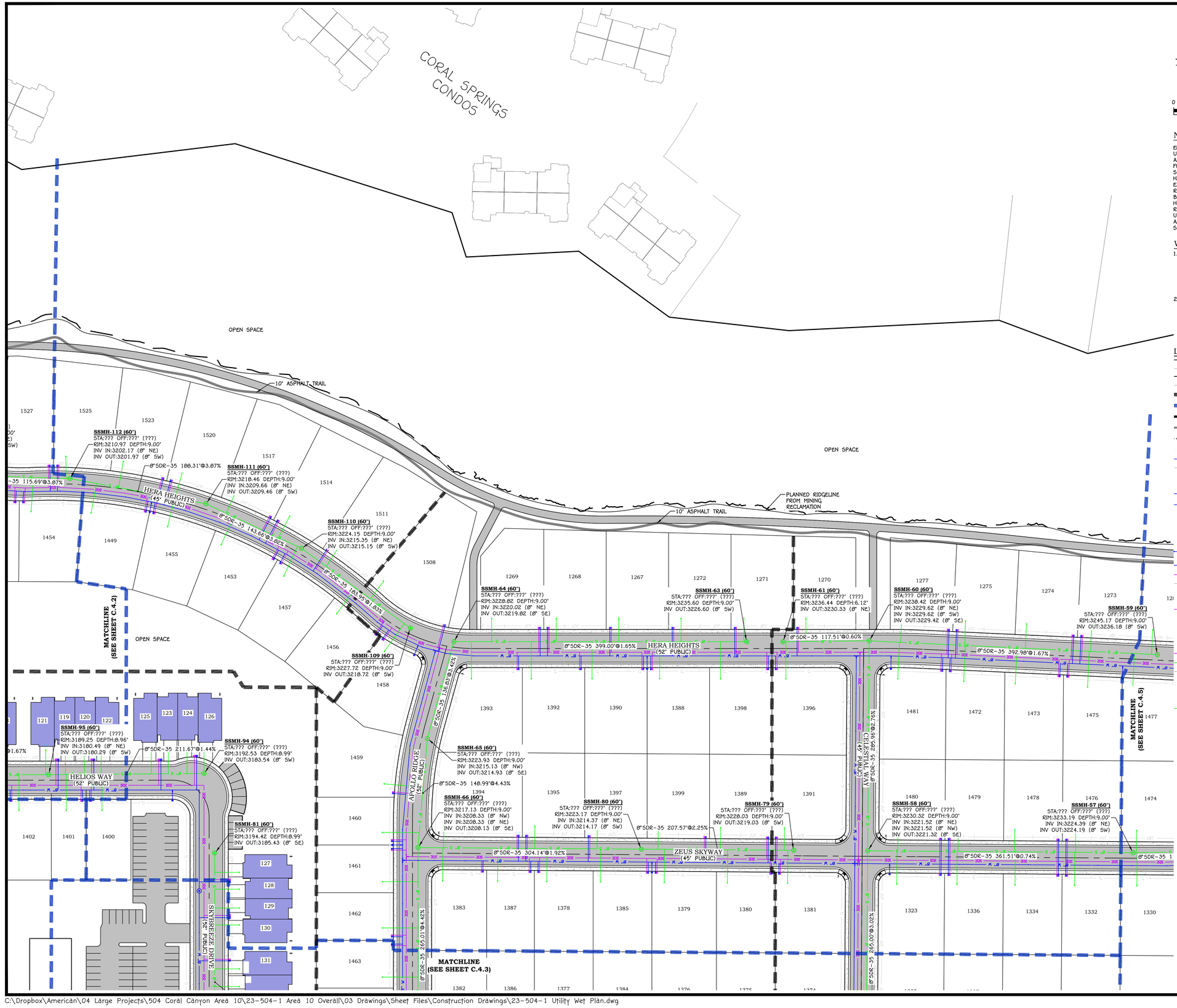
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

WATER IRRIGATION & SEWER III
CONSTRUCTION DRAWINGS

C.4.3

SHEET: 22 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Wet Plan.dwg



0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

NOTICE TO CONTRACTORS:

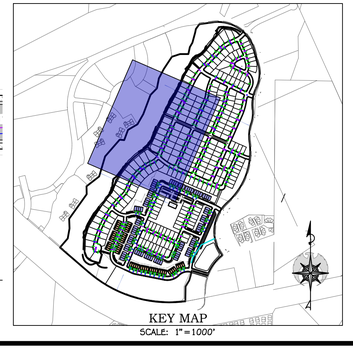
ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

WATER, SEWER, & IRRIGATION PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF WATER METERS, SEWER LATERALS, AND IRRIGATION METERS, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS, THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. CONNECTION TO EXISTING LOCATION SHOWN IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL CONNECTIONS WITH EXISTING WATER, SEWER, AND IRRIGATION LINES. FOR PRESSURIZED UTILITY LINES, CONTRACTOR TO VERIFY PROPER RESTRAINTS ARE PROVIDED. IF EXISTING RESTRAINTS DO NOT EXIST, CONTRACTOR TO RESTRAIN ALL PRESSURIZED LINES IN ACCORDANCE WITH CITY/AGENCY STANDARDS AND SPECIFICATIONS.

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PHASE LINE	
SHEET MATCH LINE	
PROPOSED RETAINING WALL (SEE GRADING PLANS)	
EXISTING RETAINING WALL	
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK WALL	
PROPOSED WATER MAIN (SIZE PER PLAN)	
EXISTING WATER MAIN (SIZE PER PLAN)	
WATER MANHOLE	SD 108
FIRE HYDRANT AND VALVE ASSEMBLY	WD 302
WATER SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
STANDARD AIR VAC VAULT	WD 312
IN-LINE WATER VALVE	WD 316
PROPOSED IRRIGATION MAIN (SIZE PER PLAN)	
EXISTING IRRIGATION MAIN (SIZE PER PLAN)	
IRRIGATION MANHOLE	SD 108
IRRIGATION SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
IN-LINE VALVE	WD 316
PROPOSED SEWER MAIN (SIZE PER PLAN)	
EXISTING SEWER MAIN (SIZE PER PLAN)	
STANDARD SEWER MANHOLE	SD 109
SEWER CLEANOUT COVER	
SEWER SERVICE CONNECTION	



KEY MAP

SCALE: 1"=1000'

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

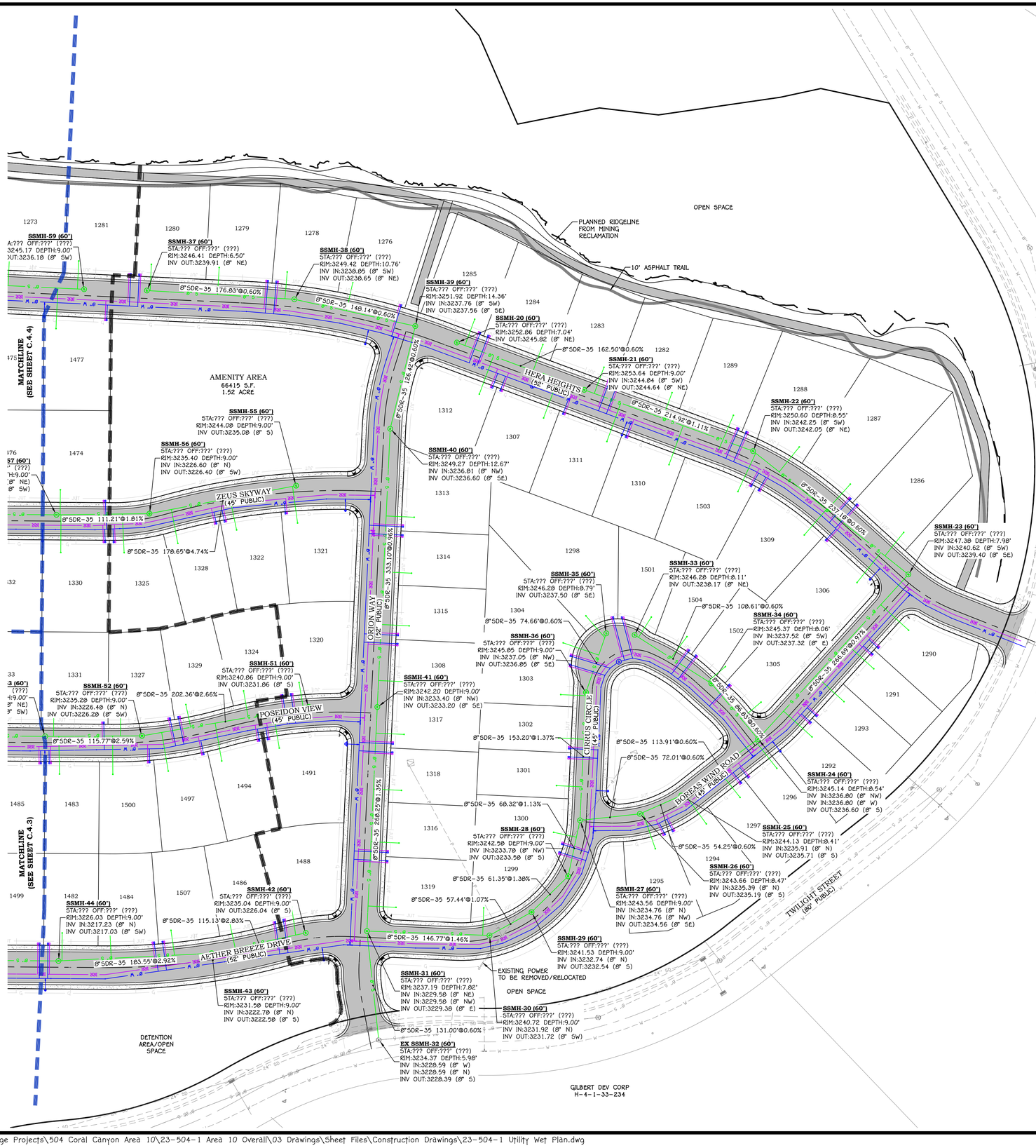
WATER IRRIGATION & SEWER IV

CONSTRUCTION DRAWINGS

C.4.4

SHEET: 23 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Wet Plan.dwg



0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

NOTICE TO CONTRACTORS:

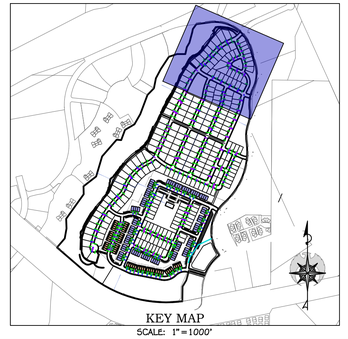
ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

WATER, SEWER, & IRRIGATION PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF WATER METERS, SEWER LATERALS, AND IRRIGATION METERS, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS, THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. CONNECTION TO EXISTING LOCATION SHOWN IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL CONNECTIONS WITH EXISTING WATER, SEWER, AND IRRIGATION LINES. FOR PRESSURIZED UTILITY LINES, CONTRACTOR TO VERIFY PROPER RESTRAINTS ARE PROVIDED. IF EXISTING RESTRAINTS DO NOT EXIST, CONTRACTOR TO RESTRAIN ALL PRESSURIZED LINES IN ACCORDANCE WITH CITY/AGENCY STANDARDS AND SPECIFICATIONS.

LEGEND:

	DETAIL
PROPOSED PARCEL BOUNDARY	
EXISTING/ADJACENT PARCEL BOUNDARY	
PROPOSED EASEMENT	
EXISTING EASEMENT	
PHASE LINE	
SHEET MATCH LINE	
PROPOSED RETAINING WALL (SEE GRADING PLANS)	
EXISTING RETAINING WALL	
PROPOSED ROCK WALL (SEE GRADING PLANS)	
EXISTING ROCK WALL	
PROPOSED WATER MAIN (SIZE PER PLAN)	
EXISTING WATER MAIN (SIZE PER PLAN)	
WATER MANHOLE	SD 108
FIRE HYDRANT AND VALVE ASSEMBLY	WD 302
WATER SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
STANDARD AIR VAC VAULT	WD 312
IN-LINE WATER VALVE	WD 316
PROPOSED IRRIGATION MAIN (SIZE PER PLAN)	
EXISTING IRRIGATION MAIN (SIZE PER PLAN)	
IRRIGATION MANHOLE	SD 108
IRRIGATION SERVICE LATERAL	WD 303
FOUR-WAY VALVE CLUSTER	
THREE-WAY VALVE CLUSTER	
IN-LINE VALVE	WD 316
PROPOSED SEWER MAIN (SIZE PER PLAN)	
EXISTING SEWER MAIN (SIZE PER PLAN)	
STANDARD SEWER MANHOLE	SD 109
SEWER CLEANOUT COVER	
SEWER SERVICE CONNECTION	



KEY MAP

SCALE: 1"=1000'

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	CDF
CHECKED BY:	ARC

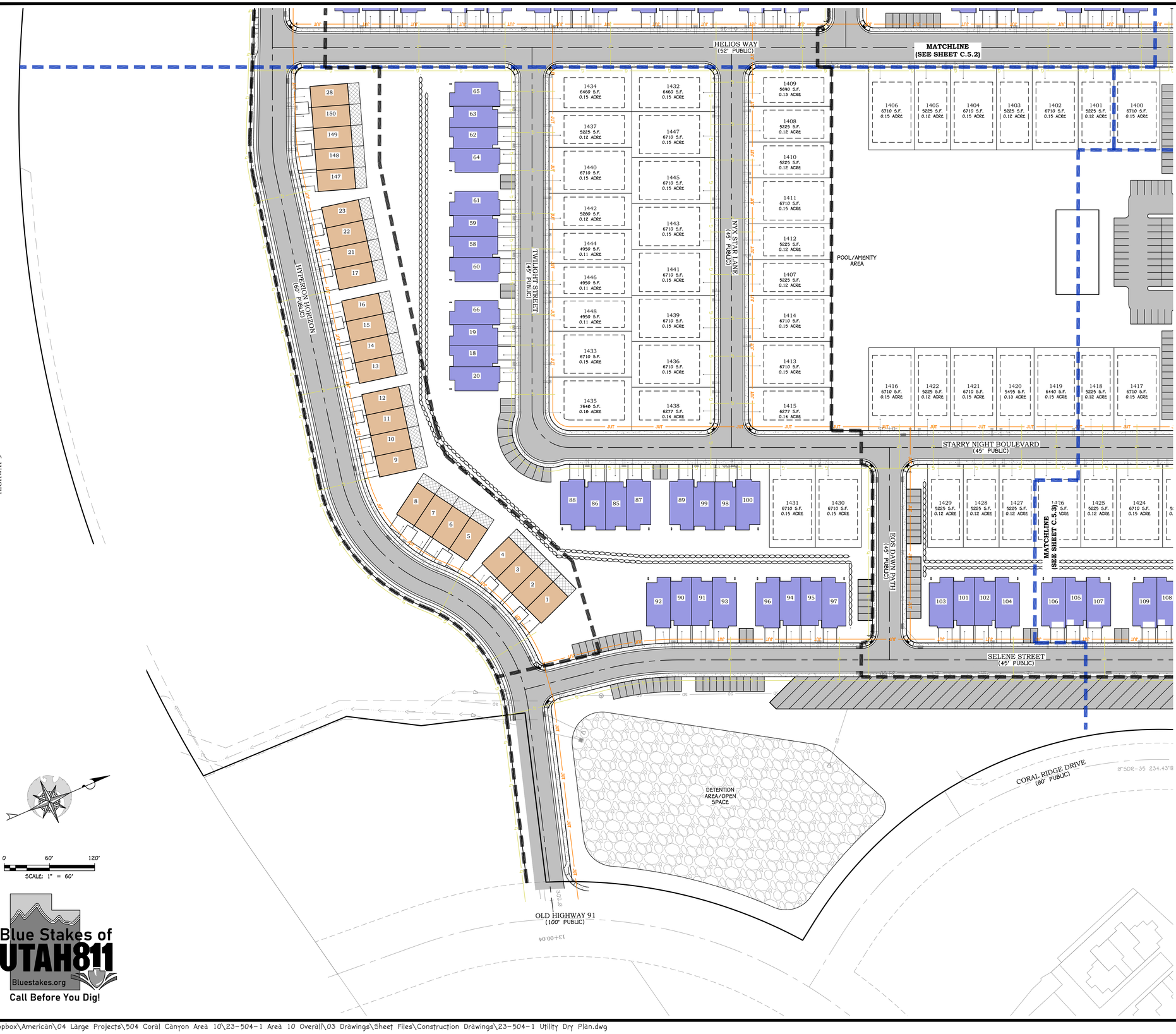
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

WATER IRRIGATION & SEWER V
CONSTRUCTION DRAWINGS

C.4.5

SHEET: 24 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Wet Plan.dwg



Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

GAS, COMM, & CATV PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF GAS, PHONE/COMM, CATV, AND OTHER JOINT UTILITY FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. GAS, PHONE/COMM, AND CATV DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDER.

DOMINION ENERGY NOTES:

1. DEVELOPER NEEDS TO CONTACT DOMINION ENERGY PRECONSTRUCTION DEPARTMENT PRIOR TO BREAKING GROUND FOR GAS SIGN UP. DJ CAMBELL 435-674-6154.
2. DEVELOPER WILL BE RESPONSIBLE TO GET ALL COMPACTION TESTS DONE AT DEVELOPER'S EXPENSE.
3. IF CASINGS/CONDUITS ARE NEEDED, THEY ARE TO BE INSTALLED BY DEVELOPER AT THEIR COSTS. A MAP WILL BE AVAILABLE AT DOMINION ENERGY FOR CASING LOCATIONS (1155 E 450 N - ST GEORGE).
4. ALL OF THE UTILITY EASEMENTS BACK OF SIDEWALK WILL BE GRADED TO WITHIN 6 INCHES OF TOP BACK OF CURB BEFORE GAS LINES WILL BE INSTALLED. **NO RETAINING, ROCK, OR BLOCK WALLS MAY BE CONSTRUCTED ON/IN A PUE. **DEVELOPER WILL BE RESPONSIBLE FOR THE COSTS OF ANY GAS LINES TO BE LOWERED AND/OR RELOCATED AFTER INSTALLATION.**
5. ALL TRENCHES SHALL BE BACKFILLED AND ALL DEBRIS, CONSTRUCTION MATERIALS AND EXCESS DIRT PILES SHALL BE CLEARED AWAY.
6. PROPERTY LOT LINES, BACK OF CURB GRADE AND GAS RUNNING LINE MUST BE STAKED BY DEVELOPER BEFORE GAS WILL BE INSTALLED.
7. POWER, WATER, SEWER LINES, CULVERTS OR OTHER HAZARDS NOT CLEARLY NOTICEABLE SHALL BE STAKED BY DEVELOPER.
8. FAILURE TO COMPLY WITH THE ABOVE NOTES WILL RESULT IN DELAY OF THE GAS INSTALLATION TO THIS PROJECT.
9. CONTACT JC HALL, 435-210-0729, AT LEAST TWO (2) WEEKS PRIOR TO BEING READY, FOR SCHEDULING OF INSTALLATION.
10. **IMPORTANT NOTICE** GAS WILL BE PUT ON THE SCHEDULE FOR INSTALLATION WHEN POWER TRENCH IS BURIED, STREETS ARE WITHIN 6 INCHES OF SUB-GRADE AND 10' PUE UTILITY EASEMENT IS GRADED TO 6" OF TOP BACK OF CURB.
11. HIGH PRESSURE GAS NOTE: IF HIGH PRESSURE GAS LINE ARE LOCATED IN OR NEAR YOUR DIGGING AREA CONTRACTOR IS REQUIRED TO CALL HIGH PRESSURE DISPATCH AT (801)324-3370, AT LEAST 48 HOURS IN ADVANCE, BEFORE WORKING WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE. THIS WILL SCHEDULE A DOMINION ENERGY HIGH PRESSURE INSPECTOR TO THE PROJECT SITE.

CENTURY LINK NOTES:

1. DEVELOPER TO PLACER CONDUIT IN ALL JUC TRENCH AND STUB UP AT ALL POWER LOCATIONS. CONTACT CENTURYLINK ENGINEER FOR PRINT IF NEEDED.
2. CENTURYLINK WILL PROVIDE ALL CONDUIT AND DELIVER TO JOB SITE. CALL 435-632-6553 SEVEN (7) DAYS PRIOR TO REQUIRING CONDUIT TO SCHEDULE DELIVERY.
3. CONTRACTOR SOT INSTALL CONDUIT AND PLACE PULL STINGS IN ALL CONDUIT TO VERIFY CONDUIT INTEGRITY.
4. ALL CONDUIT IS 2" UNLESS OTHERWISE NOTED.
5. ANY QUESTIONS TO JUC APPROVED PLANS PLEASE CONTACT CENTURYLINK ENGINEER ZACH MATHEWS AT 435-673-9639.
6. ANY CENTURYLINK FACILITY RELOCATIONS ASSOCIATED WITH PROJECT WILL BE BILLABLE TO OWNER/DEVELOPER. CENTURYLINK ENGINEER MUST BE CONTACTED A MINIMUM OF FOUR (4) WEEKS BEFORE RELOCATION IS REQUIRED.
7. DEVELOPER IS RESPONSIBLE TO PROVIDE ALL STREET NAMES AND ADDRESSES WITHIN THREE (3) WEEKS OF UTILITY PLAN APPROVAL. FAILURE TO PROVIDE ADDRESS WILL RESULT IN A DELAY OF SERVICE TO PROJECT.

INFOWEST NOTES:

1. DEVELOPER TO PROVIDE ALL REQUIRED TRENCHING WITHIN THE PROJECT.
2. ANY MODIFICATIONS REQUIRED TO FEED PROJECT WILL BE BILLED TO THE DEVELOPER.
3. INFOWEST WILL PROVIDE ALL CONDUITS. CALL 435-272-3559 OR EMAIL JUC@INFOWEST.COM FOR CONDUIT DELIVERY AT LEAST ONE WEEK PRIOR TO OPENING THE TRENCH.
4. FOR COMMERCIAL PROJECTS WITH AN MDF/COMM ROOM, DEVELOPER WILL INSTALL A 2" PVC RUN TO THE EXTERIOR OF THE BUILDING.
5. ANY QUESTIONS REGARDING SERVICE SHOULD BE DIRECTED TOWARDS GAB TREMBLAY, 435-272-3559 OR JUC@INFOWEST.COM
6. RELOCATION OF NEW OR EXISTING INFOWEST FACILITIES IS BILLABLE TO THE DEVELOPER. THE DEVELOPER WILL BE PROVIDED WITH AN ESTIMATE OF COSTS FOR WORK DONE.

TDS BROADBAND NOTES:

1. THE DEVELOPER WILL PROVIDE ALL REQUIRED TRENCH WITHIN THE PROJECT. ANY MODIFICATIONS ALONG THE PERIPHERY TO FEED THIS PROJECT WILL BE BILLED TO THE DEVELOPER.
2. TDS WILL PLACE CONDUITS IN AN OPEN/JOINT TRENCH. PLEASE CONTACT TDS ENGINEERING AT 435-288-1415 AT LEAST 3 WEEKS PRIOR TO OPENING TRENCH TO CREATE DESIGN AND SCHEDULE WORK.
3. CONTACT TDS PRIOR TO CONSTRUCTING BUILDINGS FOR PREWIRE OPTIONS FOR FIBER OPTIC SERVICE. ANY OTHER QUESTIONS REGARDING CONSTRUCTION OF SERVICE SHOULD BE DIRECTED TO TDS ENGINEERING AT 435-288-1415.
4. RELOCATION OF NEW OR EXISTING TDS FACILITIES WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR
5. ANY MODIFICATIONS AFTER CONDUIT/CABLE PLACEMENT WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR AS WILL DAMAGES CAUSED BY OTHER CONTRACTORS WORKING FOR THE DEVELOPER ON THIS PROJECT.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED JOINT UTILITY TRENCH
- EXISTING JOINT UTILITY TRENCH

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

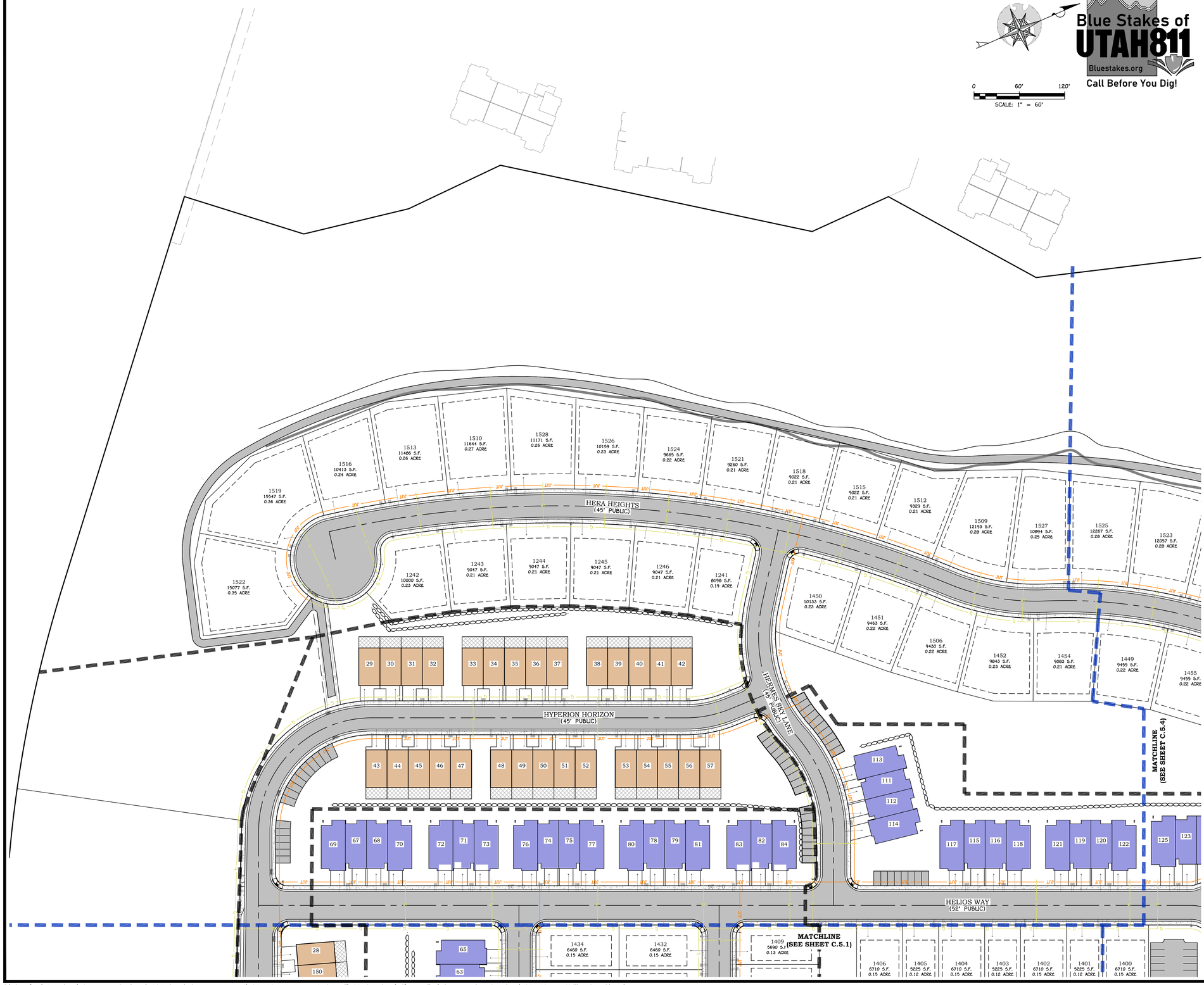
DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ASA

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GAS-JUT I
CONSTRUCTION DRAWINGS

C.5.1

SHEET: 25 of 76



Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

GAS, COMM, & CATV PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF GAS, PHONE/COMM, CATV, AND OTHER JOINT UTILITY FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. GAS, PHONE/COMM, AND CATV DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDER.

DOMINION ENERGY NOTES:

1. DEVELOPER NEEDS TO CONTACT DOMINION ENERGY PRECONSTRUCTION DEPARTMENT PRIOR TO BREAKING GROUND FOR GAS SIGN UP. DJ CAMBELL 435-674-6154.
2. DEVELOPER WILL BE RESPONSIBLE TO GET ALL COMPACTION TESTS DONE AT DEVELOPER'S EXPENSE.
3. IF CASINGS/CONDUITS ARE NEEDED, THEY ARE TO BE INSTALLED BY DEVELOPER AT THEIR COSTS. A MAP WILL BE AVAILABLE AT DOMINION ENERGY FOR CASING LOCATIONS (1155 E 450 N - ST GEORGE).
4. ALL OF THE UTILITY EASEMENTS BACK OF SIDEWALK WILL BE GRADED TO WITHIN 6 INCHES OF TOP BACK OF CURB BEFORE GAS LINES WILL BE INSTALLED. **NO RETAINING, ROCK, OR BLOCK WALLS MAY BE CONSTRUCTED ON/IN A PUE **DEVELOPER WILL BE RESPONSIBLE FOR THE COSTS OF ANY GAS LINES TO BE LOWERED AND/OR RELOCATED AFTER INSTALLATION.**
5. ALL TRENCHES SHALL BE BACKFILLED AND ALL DEBRIS, CONSTRUCTION MATERIALS AND EXCESS DIRT PILES SHALL BE CLEARED AWAY.
6. PROPERTY LOT LINES, BACK OF CURB GRADE AND GAS RUNNING LINE MUST BE STAKED BY DEVELOPER BEFORE GAS WILL BE INSTALLED.
7. POWER, WATER, SEWER LINES, CULVERTS OR OTHER HAZARDS NOT CLEARLY NOTICEABLE SHALL BE STAKED BY DEVELOPER.
8. FAILURE TO COMPLY WITH THE ABOVE NOTES WILL RESULT IN DELAY OF THE GAS INSTALLATION TO THIS PROJECT.
9. CONTACT JC HALL, 435-210-0729, AT LEAST TWO (2) WEEKS PRIOR TO BEING READY, FOR SCHEDULING OF INSTALLATION.
10. **IMPORTANT NOTICE** GAS WILL BE PUT ON THE SCHEDULE FOR INSTALLATION WHEN POWER TRENCH IS BURIED, STREETS ARE WITHIN 6 INCHES OF SUB-GRADE AND 10' PUE UTILITY EASEMENT IS GRADED TO 6" OF TOP BACK OF CURB.
11. HIGH PRESSURE GAS NOTE: IF HIGH PRESSURE GAS LINE ARE LOCATED IN OR NEAR YOUR DIGGING AREA CONTRACTOR IS REQUIRED TO CALL HIGH PRESSURE DISPATCH AT (801)324-3370, AT LEAST 48 HOURS IN ADVANCE, BEFORE WORKING WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE. THIS WILL SCHEDULE A DOMINION ENERGY HIGH PRESSURE INSPECTOR TO THE PROJECT SITE.

CENTURY LINK NOTES:

1. DEVELOPER TO PLACER CONDUIT IN ALL JUC TRENCH AND STUB UP AT ALL POWER LOCATIONS. CONTACT CENTURYLINK ENGINEER FOR PRINT IF NEEDED.
2. CENTURYLINK WILL PROVIDE ALL CONDUIT AND DELIVER TO JOB SITE. CALL 435-632-6553 SEVEN (7) DAYS PRIOR TO REQUIRING CONDUIT TO SCHEDULE DELIVERY.
3. CONTRACTOR SOT INSTALL CONDUIT AND PLACE PULL STINGS IN ALL CONDUIT TO VERIFY CONDUIT INTEGRITY.
4. ALL CONDUIT IS 2" UNLESS OTHERWISE NOTED.
5. ANY QUESTIONS TO JUC APPROVED PLANS PLEASE CONTACT CENTURYLINK ENGINEER ZACH MATHEWS AT 435-673-9639.
6. ANY CENTURYLINK FACILITY RELOCATIONS ASSOCIATED WITH PROJECT WILL BE BILLABLE TO OWNER/DEVELOPER. CENTURYLINK ENGINEER MUST BE CONTACTED A MINIMUM OF FOUR (4) WEEKS BEFORE RELOCATION IS REQUIRED.
7. DEVELOPER IS RESPONSIBLE TO PROVIDE ALL STREET NAMES AND ADDRESSES WITHIN THREE (3) WEEKS OF UTILITY PLAN APPROVAL. FAILURE TO PROVIDE ADDRESS WILL RESULT IN A DELAY OF SERVICE TO PROJECT.

INFOWEST NOTES:

1. DEVELOPER TO PROVIDE ALL REQUIRED TRENCHING WITHIN THE PROJECT.
2. ANY MODIFICATIONS REQUIRED TO FEED PROJECT WILL BE BILLED TO THE DEVELOPER.
3. INFOWEST WILL PROVIDE ALL CONDUITS. CALL 435-272-3559 OR EMAIL JUC@INFOWEST.COM FOR CONDUIT DELIVERY AT LEAST ONE WEEK PRIOR TO OPENING THE TRENCH.
4. FOR COMMERCIAL PROJECTS WITH AN MDF/COMM ROOM, DEVELOPER WILL INSTALL A 2" PVC RUN TO THE EXTERIOR OF THE BUILDING.
5. ANY QUESTIONS REGARDING SERVICE SHOULD BE DIRECTED TOWARDS GAB TREMBLAY, 435-272-3559 OR JUC@INFOWEST.COM
6. RELOCATION OF NEW OR EXISTING INFOWEST FACILITIES IS BILLABLE TO THE DEVELOPER. THE DEVELOPER WILL BE PROVIDED WITH AN ESTIMATE OF COSTS FOR WORK DONE.

TDS BROADBAND NOTES:

1. THE DEVELOPER WILL PROVIDE ALL REQUIRED TRENCH WITHIN THE PROJECT. ANY MODIFICATIONS ALONG THE PERIPHERY TO FEED THIS PROJECT WILL BE BILLED TO THE DEVELOPER.
2. TDS WILL PLACE CONDUITS IN AN OPEN/JOINT TRENCH. PLEASE CONTACT TDS ENGINEERING AT 435-288-1415 AT LEAST 3 WEEKS PRIOR TO OPENING TRENCH TO CREATE DESIGN AND SCHEDULE WORK.
3. CONTACT TDS PRIOR TO CONSTRUCTING BUILDINGS FOR PREWIRE OPTIONS FOR FIBER OPTIC SERVICE. ANY OTHER QUESTIONS REGARDING CONSTRUCTION OF SERVICE SHOULD BE DIRECTED TO TDS ENGINEERING AT 435-288-1415.
4. RELOCATION OF NEW OR EXISTING TDS FACILITIES WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR
5. ANY MODIFICATIONS AFTER CONDUIT/CABLE PLACEMENT WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR AS WILL DAMAGES CAUSED BY OTHER CONTRACTORS WORKING FOR THE DEVELOPER ON THIS PROJECT.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED JOINT UTILITY TRENCH
- EXISTING JOINT UTILITY TRENCH

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ★ ST. GEORGE, UT 84770

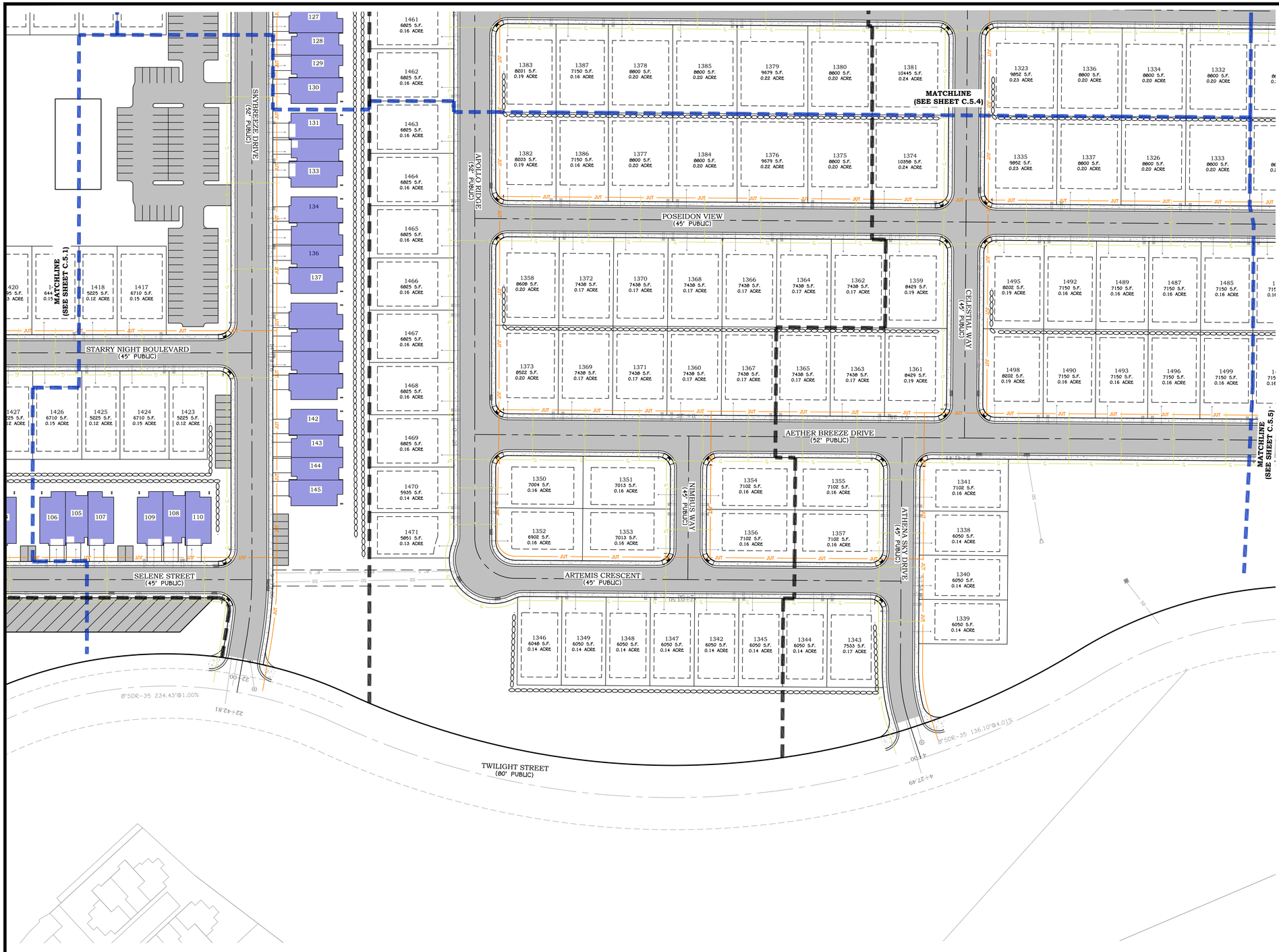
DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ASA

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GAS-JUT II
CONSTRUCTION DRAWINGS

C.5.2

SHEET: 26 of 76



GAS, COMM, & CATV PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF GAS, PHONE/COMM, CATV, AND OTHER JOINT UTILITY FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. GAS, PHONE/COMM, AND CATV DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDER.

DOMINION ENERGY NOTES:

1. DEVELOPER NEEDS TO CONTACT DOMINION ENERGY PRECONSTRUCTION DEPARTMENT PRIOR TO BREAKING GROUND FOR GAS SIGN UP. DJ CAMBELL 435-674-6154.
2. DEVELOPER WILL BE RESPONSIBLE TO GET ALL COMPACTION TESTS DONE AT DEVELOPER'S EXPENSE.
3. IF CASINGS/CONDUITS ARE NEEDED, THEY ARE TO BE INSTALLED BY DEVELOPER AT THEIR COSTS. A MAP WILL BE AVAILABLE AT DOMINION ENERGY FOR CASING LOCATIONS (1155 E 450 N - ST GEORGE).
4. ALL OF THE UTILITY EASEMENTS BACK OF SIDEWALK WILL BE GRADED TO WITHIN 6 INCHES OF TOP BACK OF CURB BEFORE GAS LINES WILL BE INSTALLED. **NO RETAINING, ROCK, OR BLOCK WALLS MAY BE CONSTRUCTED ON/IN A PUE.**DEVELOPER WILL BE RESPONSIBLE FOR THE COSTS OF ANY GAS LINES TO BE LOWERED AND/OR RELOCATED AFTER INSTALLATION.**
5. ALL TRENCHES SHALL BE BACKFILLED AND ALL DEBRIS, CONSTRUCTION MATERIALS AND EXCESS DIRT PILES SHALL BE CLEARED AWAY.
6. PROPERTY LOT LINES, BACK OF CURB GRADE AND GAS RUNNING LINE MUST BE STAKED BY DEVELOPER BEFORE GAS WILL BE INSTALLED.
7. POWER, WATER, SEWER LINES, CULVERTS OR OTHER HAZARDS NOT CLEARLY NOTICEABLE SHALL BE STAKED BY DEVELOPER.
8. FAILURE TO COMPLY WITH THE ABOVE NOTES WILL RESULT IN DELAY OF THE GAS INSTALLATION TO THIS PROJECT.
9. CONTACT JC HALL, 435-210-0729, AT LEAST TWO (2) WEEKS PRIOR TO BEING READY, FOR SCHEDULING OF INSTALLATION.
10. **IMPORTANT NOTICE** GAS WILL BE PUT ON THE SCHEDULE FOR INSTALLATION WHEN POWER TRENCH IS BURIED, STREETS ARE WITHIN 6 INCHES OF SUB-GRADE AND 10' PUE UTILITY EASEMENT IS GRADED TO 6" OF TOP BACK OF CURB.
11. HIGH PRESSURE GAS NOTE: IF HIGH PRESSURE GAS LINE ARE LOCATED IN OR NEAR YOUR DIGGING AREA CONTRACTOR IS REQUIRED TO CALL HIGH PRESSURE DISPATCH AT (801)324-3370, AT LEAST 48 HOURS IN ADVANCE, BEFORE WORKING WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE. THIS WILL SCHEDULE A DOMINION ENERGY HIGH PRESSURE INSPECTOR TO THE PROJECT SITE.

CENTURY LINK NOTES:

1. DEVELOPER TO PLACER CONDUIT IN ALL JUC TRENCH AND STUB UP AT ALL POWER LOCATIONS. CONTACT CENTURYLINK ENGINEER FOR PRINT IF NEEDED.
2. CENTURYLINK WILL PROVIDE ALL CONDUIT AND DELIVER TO JOB SITE. CALL 435-632-6553 SEVEN (7) DAYS PRIOR TO REQUIRING CONDUIT TO SCHEDULE DELIVERY.
3. CONTRACTOR SOT INSTALL CONDUIT AND PLACE PULL STINGS IN ALL CONDUIT TO VERIFY CONDUIT INTEGRITY.
4. ALL CONDUIT IS 2" UNLESS OTHERWISE NOTED.
5. ANY QUESTIONS TO JUC APPROVED PLANS PLEASE CONTACT CENTURYLINK ENGINEER ZACH MATHEWS AT 435-673-9639.
6. ANY CENTURYLINK FACILITY RELOCATIONS ASSOCIATED WITH PROJECT WILL BE BILLABLE TO OWNER/DEVELOPER. CENTURYLINK ENGINEER MUST BE CONTACTED A MINIMUM OF FOUR (4) WEEKS BEFORE RELOCATION IS REQUIRED.
7. DEVELOPER IS RESPONSIBLE TO PROVIDE ALL STREET NAMES AND ADDRESSES WITHIN THREE (3) WEEKS OF UTILITY PLAN APPROVAL. FAILURE TO PROVIDE ADDRESS WILL RESULT IN A DELAY OF SERVICE TO PROJECT.

INFOWEST NOTES:

1. DEVELOPER TO PROVIDE ALL REQUIRED TRENCHING WITHIN THE PROJECT.
2. ANY MODIFICATIONS REQUIRED TO FEED PROJECT WILL BE BILLED TO THE DEVELOPER.
3. INFOWEST WILL PROVIDE ALL CONDUITS. CALL 435-272-3559 OR EMAIL JUC@INFOWEST.COM FOR CONDUIT DELIVERY AT LEAST ONE WEEK PRIOR TO OPENING THE TRENCH.
4. FOR COMMERCIAL PROJECTS WITH AN MDF/COMM ROOM, DEVELOPER WILL INSTALL A 2" PVC RUN TO THE EXTERIOR OF THE BUILDING.
5. ANY QUESTIONS REGARDING SERVICE SHOULD BE DIRECTED TOWARDS GAB TREMBLAY, 435-272-3559 OR JUC@INFOWEST.COM
6. RELOCATION OF NEW OR EXISTING INFOWEST FACILITIES IS BILLABLE TO THE DEVELOPER. THE DEVELOPER WILL BE PROVIDED WITH AN ESTIMATE OF COSTS FOR WORK DONE.

TDS BROADBAND NOTES:

1. THE DEVELOPER WILL PROVIDE ALL REQUIRED TRENCH WITHIN THE PROJECT. ANY MODIFICATIONS ALONG THE PERIPHERY TO FEED THIS PROJECT WILL BE BILLED TO THE DEVELOPER.
2. TDS WILL PLACE CONDUITS IN AN OPEN/JOINT TRENCH. PLEASE CONTACT TDS ENGINEERING AT 435-288-1415 AT LEAST 3 WEEKS PRIOR TO OPENING TRENCH TO CREATE DESIGN AND SCHEDULE WORK.
3. CONTACT TDS PRIOR TO CONSTRUCTING BUILDINGS FOR PREWIRE OPTIONS FOR FIBER OPTIC SERVICE. ANY OTHER QUESTIONS REGARDING CONSTRUCTION OF SERVICE SHOULD BE DIRECTED TO TDS ENGINEERING AT 435-288-1415.
4. RELOCATION OF NEW OR EXISTING TDS FACILITIES WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR
5. ANY MODIFICATIONS AFTER CONDUIT/CABLE PLACEMENT WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR AS WILL DAMAGES CAUSED BY OTHER CONTRACTORS WORKING FOR THE DEVELOPER ON THIS PROJECT.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- G — PROPOSED GAS LINE
- G — EXISTING GAS LINE
- JUT — PROPOSED JOINT UTILITY TRENCH
- JUT — EXISTING JOINT UTILITY TRENCH

0 60' 120'
SCALE: 1" = 60'

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ASA

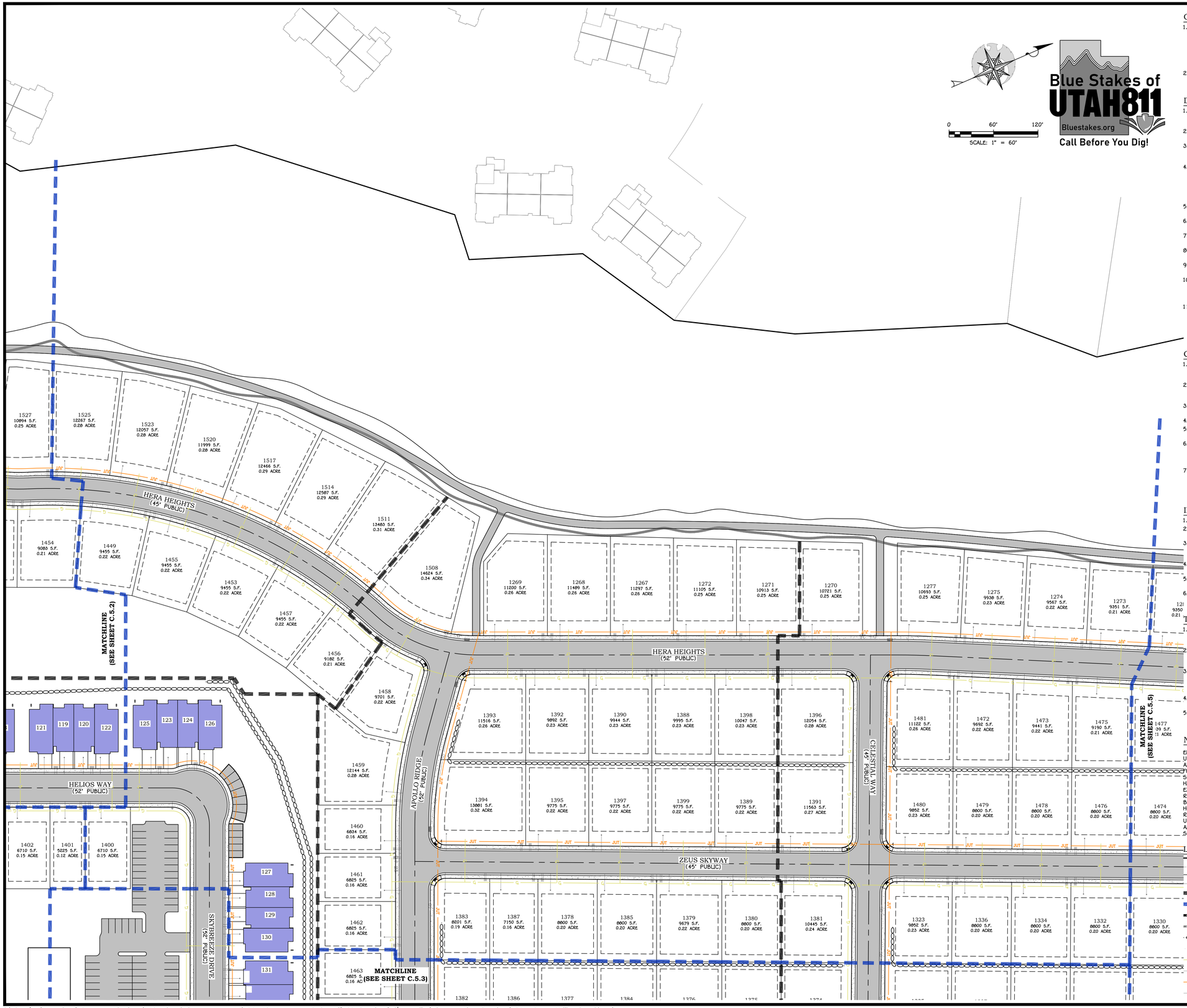
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GAS-JUT III
CONSTRUCTION DRAWINGS

C.5.3

SHEET: 27 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



GAS, COMM, & CATV PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF GAS, PHONE/COMM, CATV, AND OTHER JOINT UTILITY FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. GAS, PHONE/COMM, AND CATV DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDER.

DOMINION ENERGY NOTES:

1. DEVELOPER NEEDS TO CONTACT DOMINION ENERGY PRECONSTRUCTION DEPARTMENT PRIOR TO BREAKING GROUND FOR GAS SIGN UP. DJ CAMBELL 435-674-6154.
2. DEVELOPER WILL BE RESPONSIBLE TO GET ALL COMPACTION TESTS DONE AT DEVELOPER'S EXPENSE.
3. IF CASINGS/CONDUITS ARE NEEDED, THEY ARE TO BE INSTALLED BY DEVELOPER AT THEIR COSTS. A MAP WILL BE AVAILABLE AT DOMINION ENERGY FOR CASING LOCATIONS (1155 E 450 N - ST GEORGE).
4. ALL OF THE UTILITY EASEMENTS BACK OF SIDEWALK WILL BE GRADED TO WITHIN 6 INCHES OF TOP BACK OF CURB BEFORE GAS LINES WILL BE INSTALLED. **NO RETAINING, ROCK, OR BLOCK WALLS MAY BE CONSTRUCTED ON/IN A PUE **DEVELOPER WILL BE RESPONSIBLE FOR THE COSTS OF ANY GAS LINES TO BE LOWERED AND/OR RELOCATED AFTER INSTALLATION.**
5. ALL TRENCHES SHALL BE BACKFILLED AND ALL DEBRIS, CONSTRUCTION MATERIALS AND EXCESS DIRT PILES SHALL BE CLEARED AWAY.
6. PROPERTY LOT LINES, BACK OF CURB GRADE AND GAS RUNNING LINE MUST BE STAKED BY DEVELOPER BEFORE GAS WILL BE INSTALLED.
7. POWER, WATER, SEWER LINES, CULVERTS OR OTHER HAZARDS NOT CLEARLY NOTICEABLE SHALL BE STAKED BY DEVELOPER.
8. FAILURE TO COMPLY WITH THE ABOVE NOTES WILL RESULT IN DELAY OF THE GAS INSTALLATION TO THIS PROJECT.
9. CONTACT JC HALL, 435-210-0729, AT LEAST TWO (2) WEEKS PRIOR TO BEING READY, FOR SCHEDULING OF INSTALLATION.
10. **IMPORTANT NOTICE** GAS WILL BE PUT ON THE SCHEDULE FOR INSTALLATION WHEN POWER TRENCH IS BURIED, STREETS ARE WITHIN 6 INCHES OF SUB-GRADE AND 10' PUE UTILITY EASEMENT IS GRADED TO 6" OF TOP BACK OF CURB.
11. HIGH PRESSURE GAS NOTE: IF HIGH PRESSURE GAS LINE ARE LOCATED IN OR NEAR YOUR DIGGING AREA CONTRACTOR IS REQUIRED TO CALL HIGH PRESSURE DISPATCH AT (801)324-3370, AT LEAST 48 HOURS IN ADVANCE, BEFORE WORKING WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE. THIS WILL SCHEDULE A DOMINION ENERGY HIGH PRESSURE INSPECTOR TO THE PROJECT SITE.

CENTURY LINK NOTES:

1. DEVELOPER TO PLACE CONDUIT IN ALL JUC TRENCH AND STUB UP AT ALL POWER LOCATIONS. CONTACT CENTURYLINK ENGINEER FOR PRINT IF NEEDED.
2. CENTURYLINK WILL PROVIDE ALL CONDUIT AND DELIVER TO JOB SITE. CALL 435-632-6553 SEVEN (7) DAYS PRIOR TO REQUIRING CONDUIT TO SCHEDULE DELIVERY.
3. CONTRACTOR SOT INSTALL CONDUIT AND PLACE PULL STINGS IN ALL CONDUIT TO VERIFY CONDUIT INTEGRITY.
4. ALL CONDUIT IS 2" UNLESS OTHERWISE NOTED.
5. ANY QUESTIONS TO JUC APPROVED PLANS PLEASE CONTACT CENTURYLINK ENGINEER ZACH MATHEWS AT 435-673-9639.
6. ANY CENTURYLINK FACILITY RELOCATIONS ASSOCIATED WITH PROJECT WILL BE BILLABLE TO OWNER/DEVELOPER. CENTURYLINK ENGINEER MUST BE CONTACTED A MINIMUM OF FOUR (4) WEEKS BEFORE RELOCATION IS REQUIRED.
7. DEVELOPER IS RESPONSIBLE TO PROVIDE ALL STREET NAMES AND ADDRESSES WITHIN THREE (3) WEEKS OF UTILITY PLAN APPROVAL. FAILURE TO PROVIDE ADDRESS WILL RESULT IN A DELAY OF SERVICE TO PROJECT.

INFOWEST NOTES:

1. DEVELOPER TO PROVIDE ALL REQUIRED TRENCHING WITHIN THE PROJECT.
2. ANY MODIFICATIONS REQUIRED TO FEED PROJECT WILL BE BILLED TO THE DEVELOPER.
3. INFOWEST WILL PROVIDE ALL CONDUITS. CALL 435-272-3559 OR EMAIL JUC@INFOWEST.COM FOR CONDUIT DELIVERY AT LEAST ONE WEEK PRIOR TO OPENING THE TRENCH.
4. FOR COMMERCIAL PROJECTS WITH AN MDF/COMM ROOM, DEVELOPER WILL INSTALL A 2" PVC RUN TO THE EXTERIOR OF THE BUILDING.
5. ANY QUESTIONS REGARDING SERVICE SHOULD BE DIRECTED TOWARDS GAB TREMBLAY, 435-272-3559 OR JUC@INFOWEST.COM
6. RELOCATION OF NEW OR EXISTING INFOWEST FACILITIES IS BILLABLE TO THE DEVELOPER. THE DEVELOPER WILL BE PROVIDED WITH AN ESTIMATE OF COSTS FOR WORK DONE.

TDS BROADBAND NOTES:

1. THE DEVELOPER WILL PROVIDE ALL REQUIRED TRENCH WITHIN THE PROJECT. ANY MODIFICATIONS ALONG THE PERIPHERY TO FEED THIS PROJECT WILL BE BILLED TO THE DEVELOPER.
2. TDS WILL PLACE CONDUITS IN AN OPEN/JOINT TRENCH. PLEASE CONTACT TDS ENGINEERING AT 435-288-1415 AT LEAST 3 WEEKS PRIOR TO OPENING TRENCH TO CREATE DESIGN AND SCHEDULE WORK.
3. CONTACT TDS PRIOR TO CONSTRUCTING BUILDINGS FOR PREWIRE OPTIONS FOR FIBER OPTIC SERVICE. ANY OTHER QUESTIONS REGARDING CONSTRUCTION OF SERVICE SHOULD BE DIRECTED TO TDS ENGINEERING AT 435-288-1415.
4. RELOCATION OF NEW OR EXISTING TDS FACILITIES WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR
5. ANY MODIFICATIONS AFTER CONDUIT/CABLE PLACEMENT WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR AS WILL DAMAGES CAUSED BY OTHER CONTRACTORS WORKING FOR THE DEVELOPER ON THIS PROJECT.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED JOINT UTILITY TRENCH
- EXISTING JOINT UTILITY TRENCH

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #304 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ASA

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GAS-JUT IV
CONSTRUCTION DRAWINGS

C.5.4

SHEET: 28 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

GAS, COMM, & CATV PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF GAS, PHONE/COMM, CATV, AND OTHER JOINT UTILITY FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. GAS, PHONE/COMM, AND CATV DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE RESPECTIVE UTILITY SERVICE PROVIDER.

DOMINION ENERGY NOTES:

1. DEVELOPER NEEDS TO CONTACT DOMINION ENERGY PRECONSTRUCTION DEPARTMENT PRIOR TO BREAKING GROUND FOR GAS SIGN UP. DJ CAMBELL 435-674-6154.
2. DEVELOPER WILL BE RESPONSIBLE TO GET ALL COMPACTION TESTS DONE AT DEVELOPER'S EXPENSE.
3. IF CASINGS/CONDUITS ARE NEEDED, THEY ARE TO BE INSTALLED BY DEVELOPER AT THEIR COSTS. A MAP WILL BE AVAILABLE AT DOMINION ENERGY FOR CASING LOCATIONS (1155 E 450 N - ST GEORGE).
4. ALL OF THE UTILITY EASEMENTS BACK OF SIDEWALK WILL BE GRADED TO WITHIN 6 INCHES OF TOP BACK OF CURB BEFORE GAS LINES WILL BE INSTALLED. **NO RETAINING, ROCK, OR BLOCK WALLS MAY BE CONSTRUCTED ON/IN A PUE **DEVELOPER WILL BE RESPONSIBLE FOR THE COSTS OF ANY GAS LINES TO BE LOWERED AND/OR RELOCATED AFTER INSTALLATION.**
5. ALL TRENCHES SHALL BE BACKFILLED AND ALL DEBRIS, CONSTRUCTION MATERIALS AND EXCESS DIRT PILES SHALL BE CLEARED AWAY.
6. PROPERTY LOT LINES, BACK OF CURB GRADE AND GAS RUNNING LINE MUST BE STAKED BY DEVELOPER BEFORE GAS WILL BE INSTALLED.
7. POWER, WATER, SEWER LINES, CULVERTS OR OTHER HAZARDS NOT CLEARLY NOTICEABLE SHALL BE STAKED BY DEVELOPER.
8. FAILURE TO COMPLY WITH THE ABOVE NOTES WILL RESULT IN DELAY OF THE GAS INSTALLATION TO THIS PROJECT.
9. CONTACT JC HALL, 435-210-0729, AT LEAST TWO (2) WEEKS PRIOR TO BEING READY, FOR SCHEDULING OF INSTALLATION.
10. **IMPORTANT NOTICE** GAS WILL BE PUT ON THE SCHEDULE FOR INSTALLATION WHEN POWER TRENCH IS BURIED, STREETS ARE WITHIN 6 INCHES OF SUB-GRADE AND 10' PUE UTILITY EASEMENT IS GRADED TO 6" OF TOP BACK OF CURB.
11. HIGH PRESSURE GAS NOTE: IF HIGH PRESSURE GAS LINE ARE LOCATED IN OR NEAR YOUR DIGGING AREA CONTRACTOR IS REQUIRED TO CALL HIGH PRESSURE DISPATCH AT (801)324-3370, AT LEAST 48 HOURS IN ADVANCE, BEFORE WORKING WITHIN 10 FEET OF A HIGH PRESSURE GAS LINE. THIS WILL SCHEDULE A DOMINION ENERGY HIGH PRESSURE INSPECTOR TO THE PROJECT SITE.

CENTURY LINK NOTES:

1. DEVELOPER TO PLACER CONDUIT IN ALL JUC TRENCH AND STUB UP AT ALL POWER LOCATIONS. CONTACT CENTURYLINK ENGINEER FOR PRINT IF NEEDED.
2. CENTURYLINK WILL PROVIDE ALL CONDUIT AND DELIVER TO JOB SITE. CALL 435-632-6553 SEVEN (7) DAYS PRIOR TO REQUIRING CONDUIT TO SCHEDULE DELIVERY.
3. CONTRACTOR SOT INSTALL CONDUIT AND PLACE PULL STINGS IN ALL CONDUIT TO VERIFY CONDUIT INTEGRITY.
4. ALL CONDUIT IS 2" UNLESS OTHERWISE NOTED.
5. ANY QUESTIONS TO JUC APPROVED PLANS PLEASE CONTACT CENTURYLINK ENGINEER ZACH MATHEWS AT 435-673-9639.
6. ANY CENTURYLINK FACILITY RELOCATIONS ASSOCIATED WITH PROJECT WILL BE BILLABLE TO OWNER/DEVELOPER. CENTURYLINK ENGINEER MUST BE CONTACTED A MINIMUM OF FOUR (4) WEEKS BEFORE RELOCATION IS REQUIRED.
7. DEVELOPER IS RESPONSIBLE TO PROVIDE ALL STREET NAMES AND ADDRESSES WITHIN THREE (3) WEEKS OF UTILITY PLAN APPROVAL. FAILURE TO PROVIDE ADDRESS WILL RESULT IN A DELAY OF SERVICE TO PROJECT.

INFOWEST NOTES:

1. DEVELOPER TO PROVIDE ALL REQUIRED TRENCHING WITHIN THE PROJECT.
2. ANY MODIFICATIONS REQUIRED TO FEED PROJECT WILL BE BILLED TO THE DEVELOPER.
3. INFOWEST WILL PROVIDE ALL CONDUITS. CALL 435-272-3559 OR EMAIL JUC@INFOWEST.COM FOR CONDUIT DELIVERY AT LEAST ONE WEEK PRIOR TO OPENING THE TRENCH.
4. FOR COMMERCIAL PROJECTS WITH AN MDF/COMM ROOM, DEVELOPER WILL INSTALL A 2" PVC RUN TO THE EXTERIOR OF THE BUILDING.
5. ANY QUESTIONS REGARDING SERVICE SHOULD BE DIRECTED TOWARDS GAB TREMBLAY, 435-272-3559 OR JUC@INFOWEST.COM
6. RELOCATION OF NEW OR EXISTING INFOWEST FACILITIES IS BILLABLE TO THE DEVELOPER. THE DEVELOPER WILL BE PROVIDED WITH AN ESTIMATE OF COSTS FOR WORK DONE.

TDS BROADBAND NOTES:

1. THE DEVELOPER WILL PROVIDE ALL REQUIRED TRENCH WITHIN THE PROJECT. ANY MODIFICATIONS ALONG THE PERIPHERY TO FEED THIS PROJECT WILL BE BILLED TO THE DEVELOPER.
2. TDS WILL PLACE CONDUITS IN AN OPEN/JOINT TRENCH. PLEASE CONTACT TDS ENGINEERING AT 435-288-1415 AT LEAST 3 WEEKS PRIOR TO OPENING TRENCH TO CREATE DESIGN AND SCHEDULE WORK.
3. CONTACT TDS PRIOR TO CONSTRUCTING BUILDINGS FOR PREWIRE OPTIONS FOR FIBER OPTIC SERVICE. ANY OTHER QUESTIONS REGARDING CONSTRUCTION OF SERVICE SHOULD BE DIRECTED TO TDS ENGINEERING AT 435-288-1415.
4. RELOCATION OF NEW OR EXISTING TDS FACILITIES WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR
5. ANY MODIFICATIONS AFTER CONDUIT/CABLE PLACEMENT WILL BE BILLABLE TO THE DEVELOPER/CONTRACTOR AS WILL DAMAGES CAUSED BY OTHER CONTRACTORS WORKING FOR THE DEVELOPER ON THIS PROJECT.

NOTICE TO CONTRACTORS:

ENGINEER CAN NOT GUARANTEE THE ACCURACY OF THE EXISTING UNDERGROUND UTILITIES DEPICTED IN THESE PLANS. LOCATIONS SHOWN FOR ALL EXISTING UNDERGROUND UTILITIES IS BASED ON EXTERNAL INFORMATION FROM GIS MAPPING, PREVIOUS AS-BUILT RECORD DRAWINGS, BLUE STAKES SURFACE MARKINGS IN THE FIELD, OR COMBINATION THEREOF. THE ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT BLUE STAKES OF UTAH AT LEAST TWO (2) BUSINESS DAYS PRIOR TO COMMENCING WITH EXCAVATION TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES. CONTRACTOR ALSO REQUIRED TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING UNDERGROUND UTILITIES BOTH SHOWN, AND NOT SHOWN, IN THESE PLANS. IF ANY UTILITY LOCATION DISCREPANCIES ARE FOUND IN THE FIELD, CONTRACTOR SHOULD NOTIFY THE ENGINEER IMMEDIATELY.

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED JOINT UTILITY TRENCH
- EXISTING JOINT UTILITY TRENCH

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ★ ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ASA

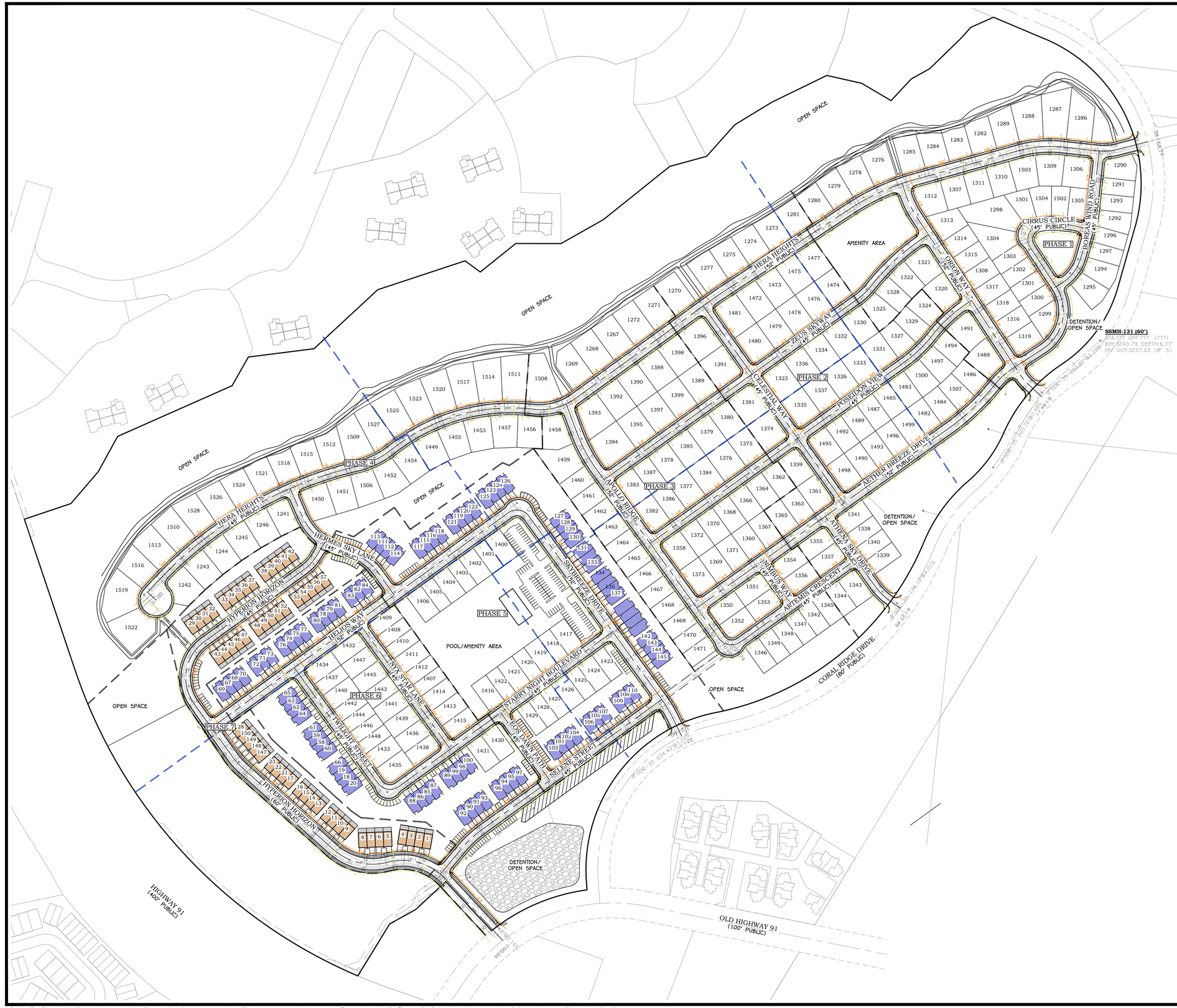
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

GAS-JUT V
CONSTRUCTION DRAWINGS

C.5.5

SHEET: 29 of 31

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



0 150' 300'

SCALE: 1" = 150'

Blue Stakes of UTAH811 Bluestakes.org

Call Before You Dig!

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:

	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- ABC PROPOSED THREE PHASE POWER
- ABC EXISTING THREE PHASE POWER
- OH PROPOSED OVERHEAD POWER
- OH PROPOSED OVERHEAD POWER
- P PROPOSED MISCELLANEOUS POWER
- P EXISTING MISCELLANEOUS POWER
- A PROPOSED SINGLE PHASE POWER
- A EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ARE

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

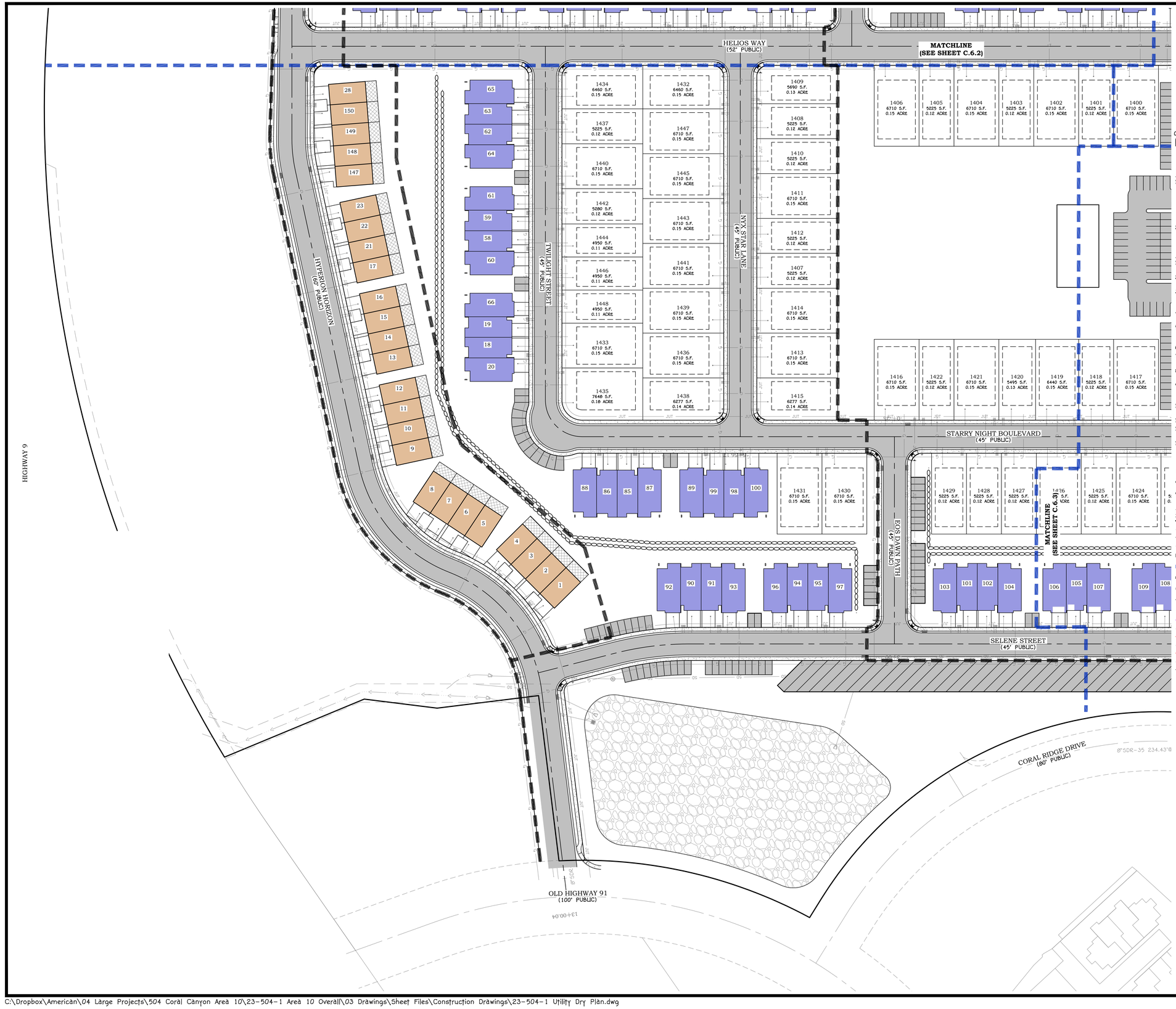
OVERALL POWER PLAN

CONSTRUCTION DRAWINGS

C.6.0

SHEET: 30 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:

	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- ABC PROPOSED THREE PHASE POWER
- ABC EXISTING THREE PHASE POWER
- OH PROPOSED OVERHEAD POWER
- OH PROPOSED OVERHEAD POWER
- P PROPOSED MISCELLANEOUS POWER
- P EXISTING MISCELLANEOUS POWER
- A PROPOSED SINGLE PHASE POWER
- EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE: 10/07/2024
JOB #: 23-504-1
DRAWN BY: SKA
CHECKED BY: ABC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

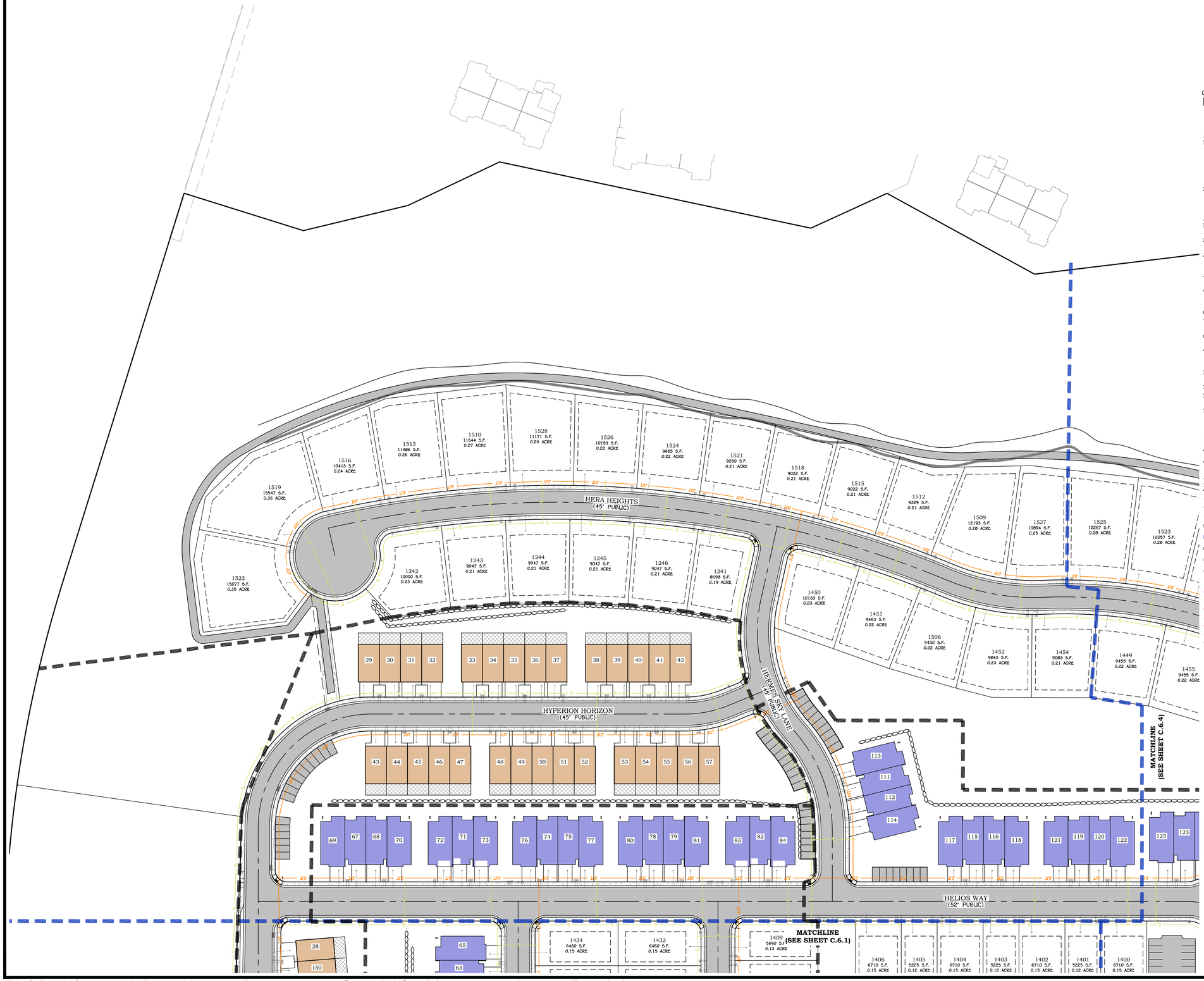
POWER PLAN I

CONSTRUCTION DRAWINGS

C.6.1

SHEET: 31 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

0 60' 120'
SCALE: 1" = 60'

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:

	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- PROPOSED THREE PHASE POWER
- EXISTING THREE PHASE POWER
- PROPOSED OVERHEAD POWER
- PROPOSED OVERHEAD POWER
- PROPOSED MISCELLANEOUS POWER
- EXISTING MISCELLANEOUS POWER
- PROPOSED SINGLE PHASE POWER
- EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ARC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

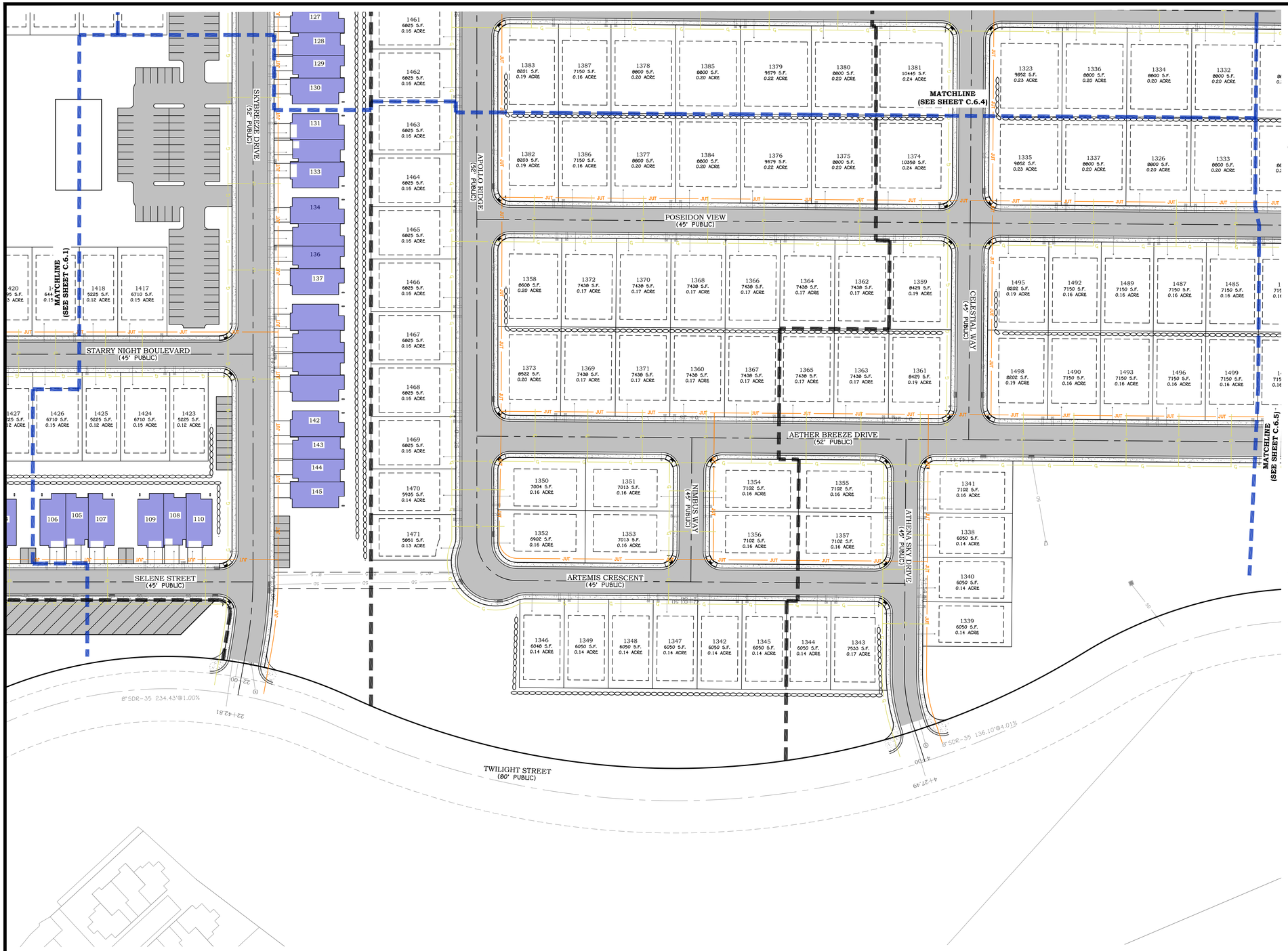
POWER PLAN II

CONSTRUCTION DRAWINGS

C.6.2

SHEET: 32 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:

	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- ABC PROPOSED THREE PHASE POWER
- ABC EXISTING THREE PHASE POWER
- OH PROPOSED OVERHEAD POWER
- OH PROPOSED OVERHEAD POWER
- P PROPOSED MISCELLANEOUS POWER
- P EXISTING MISCELLANEOUS POWER
- A PROPOSED SINGLE PHASE POWER
- EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR CONSTRUCTION

AMERICAN CONSULTING & ENGINEERING
1175 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #:	23-504-1
DRAWN BY:	SKA
CHECKED BY:	ABC

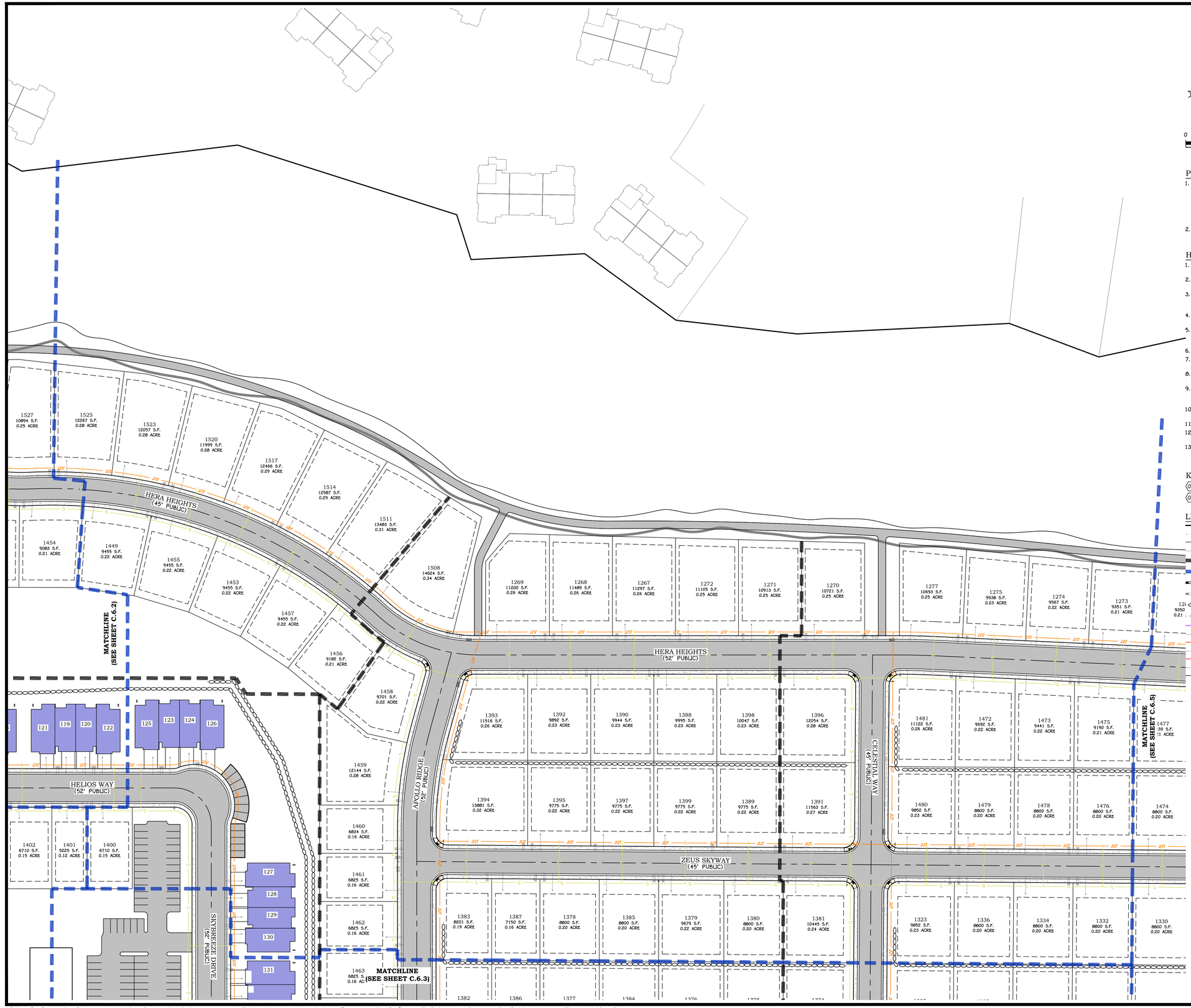
CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

POWER PLAN III
CONSTRUCTION DRAWINGS

C.6.3

SHEET: 33 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg



0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- ABC PROPOSED THREE PHASE POWER
- ABC EXISTING THREE PHASE POWER
- OH PROPOSED OVERHEAD POWER
- OH PROPOSED OVERHEAD POWER
- P PROPOSED MISCELLANEOUS POWER
- P EXISTING MISCELLANEOUS POWER
- A PROPOSED SINGLE PHASE POWER
- EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE:	10/07/2024
JOB #	28-504-1
DRAWN BY:	SKA
CHECKED BY:	ARC

CIELO AT CORAL CANYON
SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

POWER PLAN IV
CONSTRUCTION DRAWINGS

C.6.4

SHEET: 34 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg

0 60' 120'

SCALE: 1" = 60'

Blue Stakes of UTAH811
Bluestakes.org
Call Before You Dig!

POWER PLAN NOTES:

1. ENGINEER HAS MADE EVERY EFFORT TO ACCURATELY DEPICT THE LOCATIONS OF POWER BOXES, EQUIPMENT, AND OTHER POWER FACILITIES, HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL SUCH FACILITIES IN ACCORDANCE WITH THE APPLICABLE CITY/AGENCY STANDARDS AND SPECIFICATIONS. IF THERE ARE DISCREPANCIES BETWEEN THE PLANS AND THE CITY/AGENCY STANDARDS THE CITY/AGENCY STANDARDS WILL SUPERSEDE THE PLANS.
2. POWER DESIGN PROVIDED FOR INFORMATION ONLY. FINAL DESIGN TO BE COORDINATED WITH THE POWER DEPARTMENT. SEE COVER SHEET FOR UTILITY CONTACT INFORMATION.

HURRICANE POWER NOTES:

1. DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
2. ONLY A PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
3. PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER AT (435) 635-5536 FOR AN APPOINTMENT.
4. LINES ARE FOR SCHEMATIC PURPOSES ONLY. ALL EQUIPMENT AND PLACEMENT OF, TO BE TO HURRICANE POWER SPECS.
5. EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
6. NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
7. ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
8. ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
9. THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT.
10. DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 DOLLARS PER PRIMARY ELBOW TERMINATIONS.
11. ALL STREET LIGHTS TO BE LED PER HURRICANE POWER SPECIFICATIONS.
12. THIS SUBDIVISION WAS DESIGNED WITH A MAXIMUM SERVICE SIZE OF 200 AMPS PER UNIT.
13. IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER, CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.

KEY NOTES:

	DETAIL
(00) KEYNOTE 1	XXXX
(00) KEYNOTE 2	XXXX

LEGEND:

- PROPOSED PARCEL BOUNDARY
- EXISTING/ADJACENT PARCEL BOUNDARY
- PROPOSED EASEMENT
- EXISTING EASEMENT
- PHASE LINE
- SHEET MATCH LINE
- PROPOSED RETAINING WALL (SEE GRADING PLANS)
- EXISTING RETAINING WALL
- PROPOSED ROCK WALL (SEE GRADING PLANS)
- EXISTING ROCK WALL
- ABC PROPOSED THREE PHASE POWER
- ABC EXISTING THREE PHASE POWER
- OH PROPOSED OVERHEAD POWER
- OH PROPOSED OVERHEAD POWER
- P PROPOSED MISCELLANEOUS POWER
- P EXISTING MISCELLANEOUS POWER
- A PROPOSED SINGLE PHASE POWER
- EXISTING SINGLE PHASE POWER
- POWER SERVICE
- PAD MOUNT SWITCHGEAR
- ELECTRIC VAULT
- ELECTRIC TRANSFORMER
- STREET LIGHT

REV.	DATE:	REVISION

PRELIMINARY
NOT FOR
CONSTRUCTION

AMERICAN
CONSULTING & ENGINEERING
1173 S. 250 W. #504 ST. GEORGE, UT 84770

DATE: 10/07/2024
JOB #: 28-504-1
DRAWN BY: SKA
CHECKED BY: ABC

CIELO AT CORAL CANYON

SECTION 4 TOWNSHIP 42 S, RANGE 14 W, SLB&M
HURRICANE, UTAH

POWER PLAN V

CONSTRUCTION DRAWINGS

C.6.5

SHEET: 35 of 76

C:\Dropbox\American\04 Large Projects\504 Coral Canyon Area 10\23-504-1 Area 10 Overall\03 Drawings\Sheet Files\Construction Drawings\23-504-1 Utility Dry Plan.dwg

Hurricane City Application

Application Accepted Date:	10/17/2024
Type of Improvement:	Subdivision (Preliminary Plat)
Description:	We are updating the number of single family lots i
Tenant / Project Name:	Black Ridge Phase 2
Bldg. Address:	North of 900 s and east of 1760w
City:	Hurricane City
State:	UT
Zip:	84737
Subdivision:	Black Ridge
Phase:	2
Block:	
Lot #:	45
Parcel ID #:	H-3-2-4-44021
Property Owner:	Wasatch Comercial Builders
Permit Contact:	Mathew Christensen
P:	(801) 201-9207
Email:	mchristensen@focus-es.com

CONTACT INFORMATION

Engineer of Record:	Ben Duzett
Email:	bduzett@focus-es.com
P:	(801) 352-0075
General Contractor:	Austin Overman
License #:	
P:	(801) 688-5400
City:	
State:	
Zip:	
Email:	austin.overman@wasatchcb.com

APPLICATION DETAILS

Valuation	$ 0.00

PERMIT FEES

Planning Fee	$ 150.00
Planning Fee	$ 150.00
Sub Total:	**$ 150.00**
Permit Total:	**$ 150.00**
Amount Paid:	**$ 150.00**
Remaining Due:	**$ 0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANPP24-27

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Matt christensen

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

Black Ridge Phase 2 Narrative

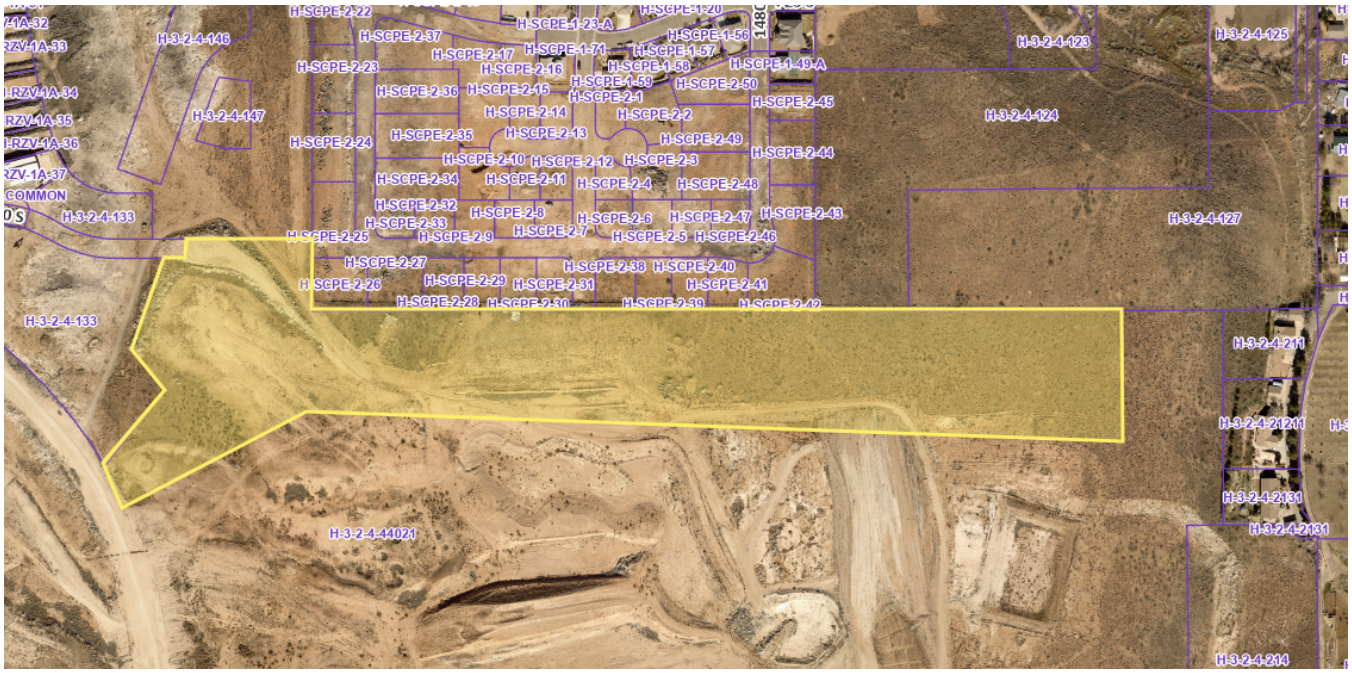
This phase lies within the Black Ridge Masterplan (formerly Painted Hills Collina Tinta) This phase consists of 45 single family lots along the frontage of the proposed 900 South. The single family lots range from 5,000 sf - 10,000 sf. The density of this phase is 3.33 units/acre.

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	PP24-27
Type of Application:	Preliminary Plat
Action Type:	Administrative
Applicant:	Wasatch Commercial Builders
Agent:	Focus Engineering
Request:	Approval of a Preliminary Plat.
Location:	North of 900 S and east of 1760 W.
Zoning:	R1-10 PDO
General Plan Map:	Planned Community
Recommendation:	Table this item.
Report Prepared by:	Fred Resch III

Discussion:
The applicant has filed a preliminary plat for Phase 2 of the Black Ridge development (formerly known as Collina Tinta). This preliminary plat was originally approved in April of 2023 with 35 lots; this proposal is for 45 lots in a similar layout to the previous approval. HCC 10-39-16 requires that any increase in the impact of the plat needs to be approved with a new plat application. This phase will provide a connection from 1760 W to Mountain View Estates through the master planned 920 S. The site is zoned Single Family Residential R1-10 (PDO).



Location is approximate

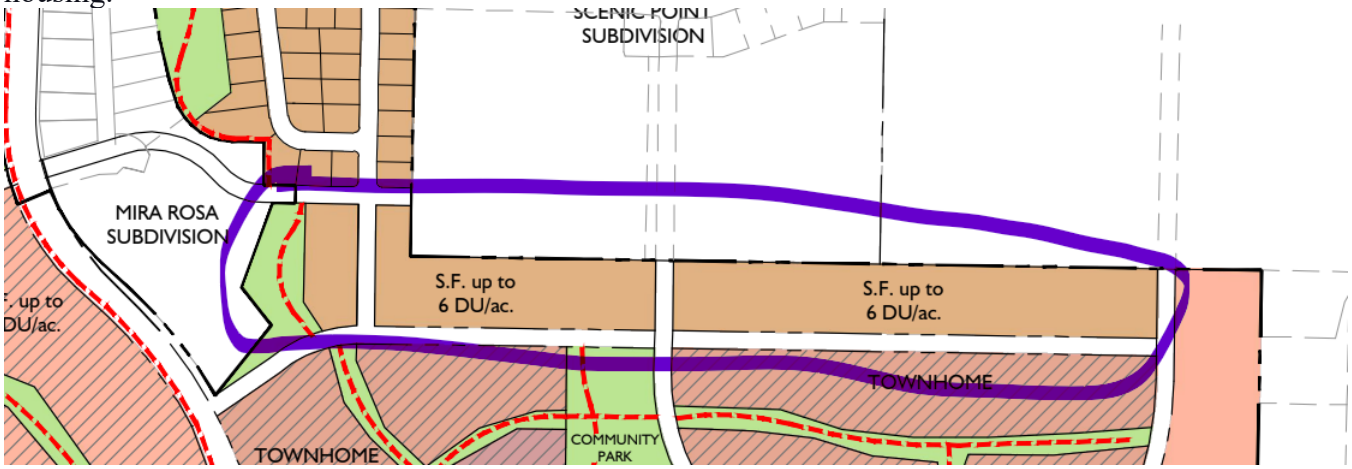
JUC Comments

1. **Public Works:** No comments.
2. **Power:** A complete redesign of the power system will be necessary. Please provide a blank sheet in the new plan when submitted. Water and Irrigation lines will probably have to move depending on where power ends up on the design. Do not build retaining walls into the 10’ utility easements. If there is any idea of what will happen on the south side, please show concept (this to try and eliminate problems in the future). A design fee will be invoiced to developer or engineer and must be paid to sign construction drawings.
3. **Sewer:** Ash Creek is continuing to work through sewer for this area.
4. **Water:** Water line needs to be looped through Mountain View.
5. **Engineering:** Some redlines from previous reviews have not been addressed. 840 S or Rlington Parkway (1760 W) must have completed roadway improvements extended from existing before or by phase 2 (32' minimum off-site pavement, curb, gutter, sidewalk and 32' minimum pavement at the subdivision [Parcel A is part of this subdivision]).
6. **Street:** No comments.
7. **Fire:** Approved with conditions. All roads tied in. Mountain View Dr news completed. Need fire turnaround if road not completed.
8. **Fiber:** No comments.
9. **Gas**: Will there be gas? If so gas needs to be added.
10. **Water Conservancy:** Washington County Water Conservancy District hereby acknowledges that based on the information provided, the plans adequately mitigates interference with district facilities and property interests. The District reserves the right to rescind this acknowledgement if additional information becomes available. The district has not determined whether water will be available for this development and does not hereby make any guarantee of water availability.

In addition, the development must conform with applicable district requirements, including but not limited to payment of fees.

Staff Comments: Preliminary Plat

1. **Density:** This area was designated as "Single Family up to 6 dwelling units per acre," as seen below. They are proposing 45 single family lots over 13.5 acres which is about 3.33 units per acre. The lots vary in size from 5,000 sq ft to 9,211 sq ft, and are smaller lot single family homes which meets many of the goals of the City as well as the State in terms of providing more housing.



2. Setbacks are shown on the site plan. The side setbacks can be adjusted to match the PDO setbacks of "minimum 5', 15' aggregate"

3. **Open Space**: The master plan shown above shows a trail connecting from 920 S to 840 S behind the houses (see above). This will need to be shown on the plans. Keeping that hillside as open space is shown on the master plan and the preliminary site plan. Hurricane City will require that the open space have a final site plan that needs to be approved by the Planning Commission.

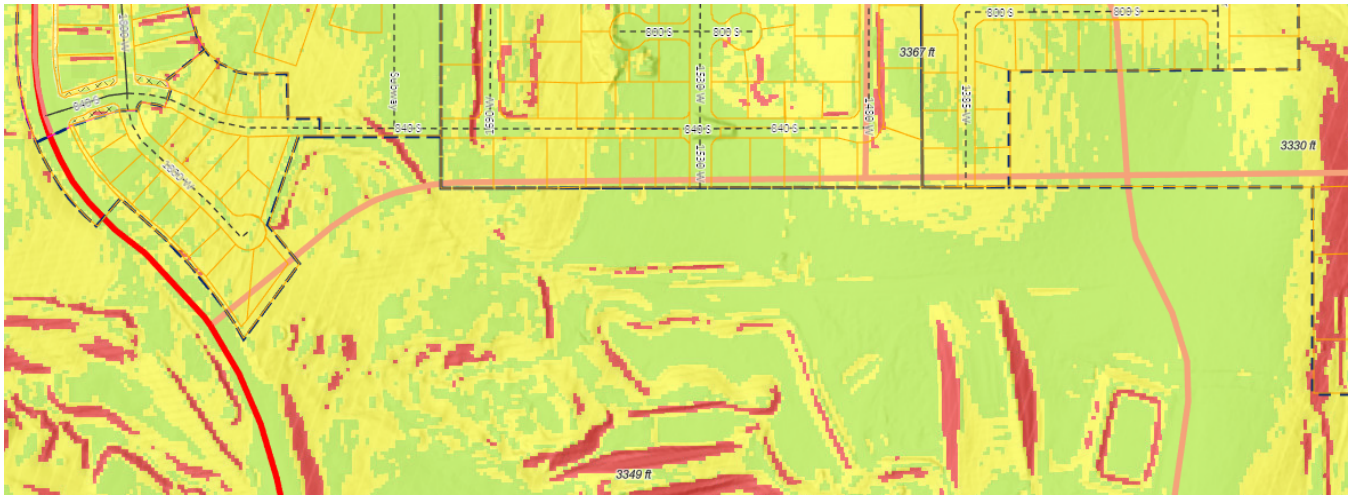
4. Staff has received a will serve letter from the sanitary and culinary water providers

5. **Water use:** The Washington County Water Conservancy District has a county-wide tracking budget of approximately 75,000 units with approximately 20,000 units being located within Hurricane City. As part of Black Ridge development agreement these units are already accounted for within Hurricane City's tracking data.

6. **Sensitive Lands:** A sensitive lands application was not provided. The topographic map provided as well as the county's contour maps indicate that a sensitive lands application would probably be required, however, the development agreement for this project states that:

2.2.2 Sensitive Lands Ordinance. Pursuant to Section 10-24-3G1 of the Sensitive Lands Ordinance and Recitals J,K, and L set forth above, the Project Shall Not be subject to the Sensitive Lands Ordinance but shall incorporate the alternative methods listed below to protect sensitive lands. The specific application of such methods to any Development Phase, or a particular portion thereof,shall be reasonably determined by the City Engineer; provided,however, that such determination shall not have the effect of negating the rights or duties of the Developer or Owners as provided in this Agreement.

Engineering will have to sign off on all grading and retaining wall heights. Staff would recommend that the principles of the sensitive lands ordinance be generally followed.



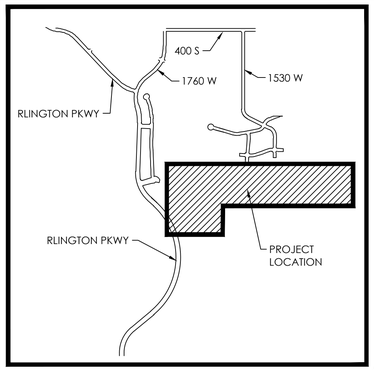
Slope map of the area

7. **Utilities:** HCC 10-39-6(C) requires that any off-site power extensions be approved by the Power Board and City Council prior to preliminary plat approval; this approval has not occurred at this time, due to a need to work out the power demand for the entire development. HCC 10-37-4 states: *No subsequent approval of such development shall be given until either the developer or the City installs improvements calculated to raise service levels to the standard adopted by the City.* The Black Ridge Development Agreement states:
    a. *4.3.1 Developer's Obligations. Developer shall, consistent with governmental requirements as of the date hereof, except as otherwise provided in Paragraph 2.2.5 of this Agreement, design, build,and dedicate to City an electrical power transmission system to service the Project. City shall reimburse Developer for City's Proportionate Share of Systems Improvements.*

Recommendation: Staff recommends the Planning Commission review this application based on standards with Hurricane City Code. Staff would recommend the item be tabled until the off-site power line extension is approved by the City Council.

BLACK RIDGE PHASE 2

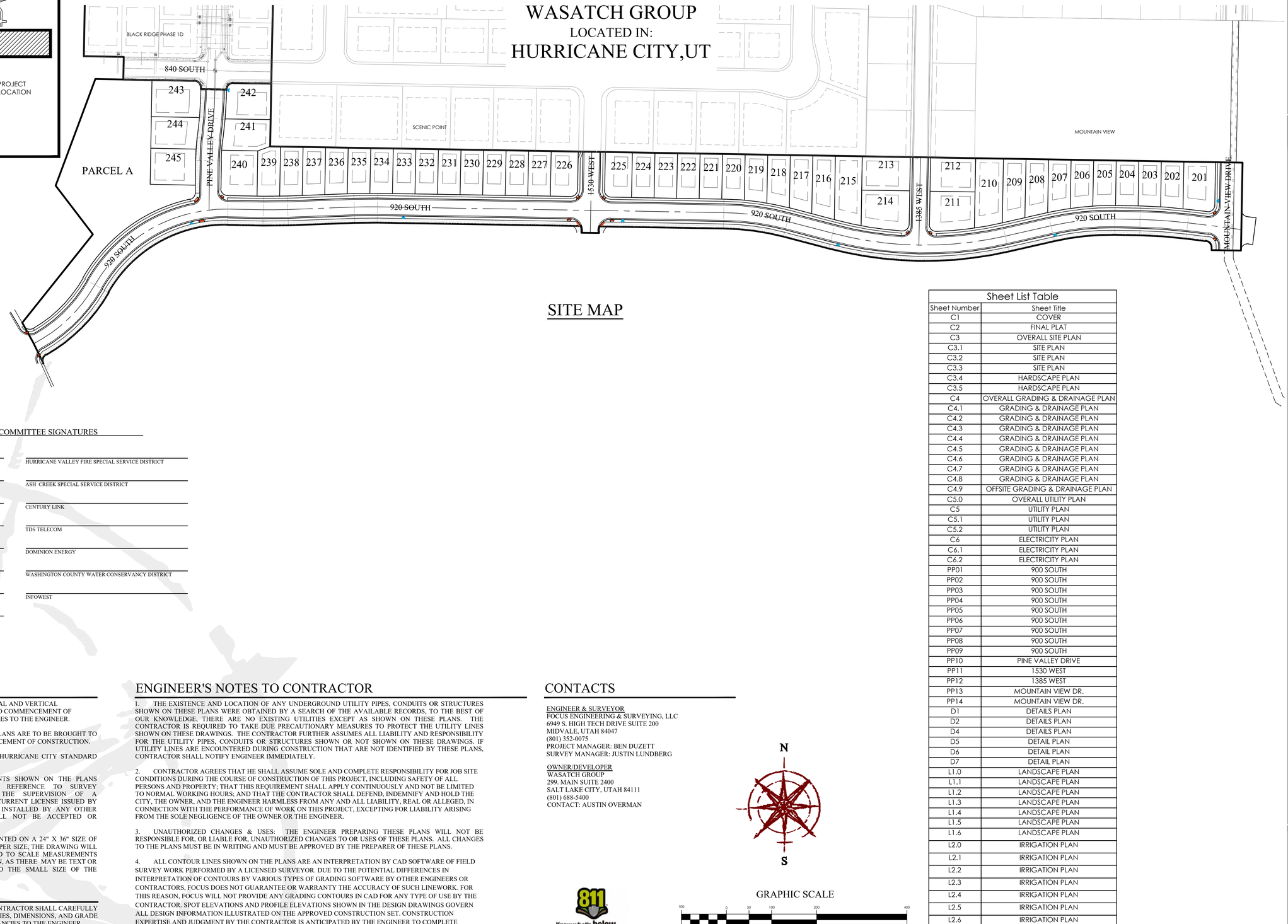
PREPARED FOR:
WASATCH GROUP
LOCATED IN:
HURRICANE CITY,UT



VICINITY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S , RANGE 13.W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88



SITE MAP

Sheet List Table	
Sheet Number	Sheet Title
C1	COVER
C2	FINAL PLAT
C3	OVERALL SITE PLAN
C3.1	SITE PLAN
C3.2	SITE PLAN
C3.3	SITE PLAN
C3.4	HARDSCAPE PLAN
C3.5	HARDSCAPE PLAN
C4	OVERALL GRADING & DRAINAGE PLAN
C4.1	GRADING & DRAINAGE PLAN
C4.2	GRADING & DRAINAGE PLAN
C4.3	GRADING & DRAINAGE PLAN
C4.4	GRADING & DRAINAGE PLAN
C4.5	GRADING & DRAINAGE PLAN
C4.6	GRADING & DRAINAGE PLAN
C4.7	GRADING & DRAINAGE PLAN
C4.8	GRADING & DRAINAGE PLAN
C4.9	OFFSITE GRADING & DRAINAGE PLAN
C5.0	OVERALL UTILITY PLAN
C5	UTILITY PLAN
C5.1	UTILITY PLAN
C5.2	UTILITY PLAN
C6	ELECTRICITY PLAN
C6.1	ELECTRICITY PLAN
C6.2	ELECTRICITY PLAN
PP01	900 SOUTH
PP02	900 SOUTH
PP03	900 SOUTH
PP04	900 SOUTH
PP05	900 SOUTH
PP06	900 SOUTH
PP07	900 SOUTH
PP08	900 SOUTH
PP09	900 SOUTH
PP10	PINE VALLEY DRIVE
PP11	1530 WEST
PP12	1385 WEST
PP13	MOUNTAIN VIEW DR.
PP14	MOUNTAIN VIEW DR.
D1	DETAILS PLAN
D2	DETAILS PLAN
D4	DETAILS PLAN
D5	DETAIL PLAN
D6	DETAIL PLAN
D7	DETAIL PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN
L1.2	LANDSCAPE PLAN
L1.3	LANDSCAPE PLAN
L1.4	LANDSCAPE PLAN
L1.5	LANDSCAPE PLAN
L1.6	LANDSCAPE PLAN
L2.0	IRRIGATION PLAN
L2.1	IRRIGATION PLAN
L2.2	IRRIGATION PLAN
L2.3	IRRIGATION PLAN
L2.4	IRRIGATION PLAN
L2.5	IRRIGATION PLAN
L2.6	IRRIGATION PLAN
L2.7	IRRIGATION DETAILS

JOINT UTILITY COMMITTEE SIGNATURES

HURRICANE CITY WATER DEPARTMENT
HURRICANE CITY POWER DEPARTMENT
HURRICANE CITY STREETS DEPARTMENT
HURRICANE CITY PARKS DEPARTMENT
HURRICANE CITY GIS DEPARTMENT
HURRICANE CITY PLANNING DEPARTMENT
HURRICANE CITY ENGINEERING DEPARTMENT
HURRICANE CITY PUBLIC WORKS DEPARTMENT

HURRICANE VALLEY FIRE SPECIAL SERVICE DISTRICT
ASH CREEK SPECIAL SERVICE DISTRICT
CENTURY LINK
TDS TELECOM
DOMINION ENERGY
WASHINGTON COUNTY WATER CONSERVANCY DISTRICT
INFOWEST

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

2. ANY AND ALL DISCREPANCIES IN THESE PLANS ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OF CONSTRUCTION.

3. ALL CONSTRUCTION SHALL ADHERE TO HURRICANE CITY STANDARD PLANS AND SPECIFICATIONS.

4. ALL UTILITIES AND ROAD IMPROVEMENTS SHOWN ON THE PLANS HEREIN SHALL BE CONSTRUCTED USING REFERENCE TO SURVEY CONSTRUCTION STAKES PLACED UNDER THE SUPERVISION OF A PROFESSIONAL LICENSED SURVEYOR WITH A CURRENT LICENSE ISSUED BY THE STATE OF UTAH. ANY IMPROVEMENTS INSTALLED BY ANY OTHER VERTICAL OR HORIZONTAL REFERENCE WILL NOT BE ACCEPTED OR CERTIFIED BY THE ENGINEER OF RECORD.

5. THIS DRAWING SET IS SCALED TO BE PRINTED ON A 24" X 36" SIZE OF PAPER (ARCH. D). IF PRINTED ON A SMALLER PAPER SIZE, THE DRAWING WILL NOT BE TO SCALE AND SHOULD NOT BE USED TO SCALE MEASUREMENTS FROM THE PAPER DRAWING. ALSO USE CAUTION, AS THERE MAY BE TEXT OR DETAIL THAT MAY BE OVERLOOKED DUE TO THE SMALL SIZE OF THE DRAWING.

NOTICE

BEFORE PROCEEDING WITH THIS WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL CONDITIONS, QUANTITIES, DIMENSIONS, AND GRADE ELEVATIONS, AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER.

ENGINEER'S NOTES TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. IF UTILITY LINES ARE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT IDENTIFIED BY THESE PLANS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

2. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY, THE OWNER, AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

3. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

4. ALL CONTOUR LINES SHOWN ON THE PLANS ARE AN INTERPRETATION BY CAD SOFTWARE OF FIELD SURVEY WORK PERFORMED BY A LICENSED SURVEYOR. DUE TO THE POTENTIAL DIFFERENCES IN INTERPRETATION OF CONTOURS BY VARIOUS TYPES OF GRADING SOFTWARE BY OTHER ENGINEERS OR CONTRACTORS, FOCUS DOES NOT GUARANTEE OR WARRANTY THE ACCURACY OF SUCH LINEWORK. FOR THIS REASON, FOCUS WILL NOT PROVIDE ANY GRADING CONTOURS IN CAD FOR ANY TYPE OF USE BY THE CONTRACTOR. SPOT ELEVATIONS AND PROFILE ELEVATIONS SHOWN IN THE DESIGN DRAWINGS GOVERN ALL DESIGN INFORMATION ILLUSTRATED ON THE APPROVED CONSTRUCTION SET. CONSTRUCTION EXPERTISE AND JUDGMENT BY THE CONTRACTOR IS ANTICIPATED BY THE ENGINEER TO COMPLETE BUILD-OUT OF THE INTENDED IMPROVEMENTS.

CONTACTS

ENGINEER & SURVEYOR
FOCUS ENGINEERING & SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047
(801) 352-0075
PROJECT MANAGER: BEN DUZETT
SURVEY MANAGER: JUSTIN LUNDBERG

OWNER/DEVELOPER
WASATCH GROUP
299. MAIN SUITE 2400
SALT LAKE CITY, UTAH 84111
(801) 688-5400
CONTACT: AUSTIN OVERMAN

Know what's below.
Call 811 before you dig.

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
COVER

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

COVER

Scale: 1"=100' | Drawn: DCJ
Date: 11/7/23 | Job #: 23-0124
Sheet: C1

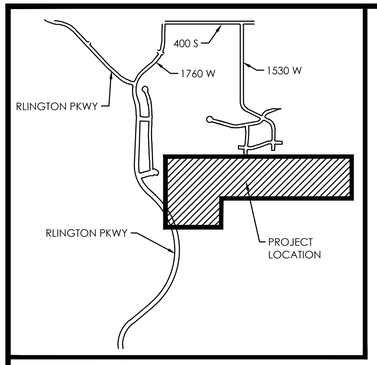
Z:_2023\23-0124 Black Ridge Phase 2 Final Job\Design 23-0124\dwg\sheets\C1 COVER.dwg

BLACK RIDGE PHASE 2

SUBDIVISION PLAT

LOCATED IN SECTION 4, T42 S, R13 W,
SALT LAKE BASE & MERIDIAN
HURRICANE, WASHINGTON COUNTY, UTAH

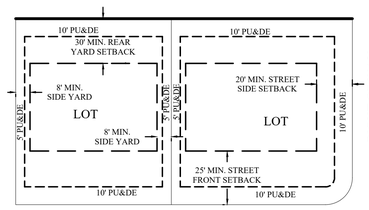
NOTES:
1) #5 REBAR & CAP TO BE SET AT ALL REAR LOT CORNERS. NAIL OR LEAD PLUGS TO BE SET IN THE TOP BACK OF CURB AT THE EXTENSION OF THE SIDE LOT LINES.
2) A 10' PUBLIC UTILITY EASEMENT IS LOCATED ALONG ALL STREET FRONTAGES.
3) ALL PUBLIC STREETS AND UTILITY EASEMENTS SHALL HAVE AN EASEMENT GRANTED HEREON TO "ASH CREEK SPECIAL SERVICE DISTRICT" FOR THE CONSTRUCTION AND MAINTENANCE OF THE SEWER MAIN IMPROVEMENTS.
4) PARCEL A IS HEREBY DEDICATED TO HURRICANE CITY
5) HURRICANE CITY OPERATES A MUNICIPAL CULINARY WATER SYSTEM WITH LIMITED WATER SUPPLY. APPROVAL OF A PLAT BY HURRICANE CITY DOES NOT GUARANTEE THAT SUFFICIENT WATER WILL BE AVAILABLE TO SERVE LOTS DEPICTED ON ANY PLAT. ANY LAND USE APPLICANT MAY BE REQUIRED BY HURRICANE CITY TO PROVIDE A GUARANTEE OF WATER AVAILABILITY. IF THERE IS ANY APPROVAL WITHOUT A WATER GUARANTEE, THE APPLICANT ASSUMES THE ENTIRE RISK OF WATER AVAILABILITY FOR A PLATTED LOT.



VICINITY MAP
N.T.S

LEGEND
- BOUNDARY
- SECTION LINE
- EASEMENT
- RIGHT-OF-WAY LINE
- CENTERLINE
- BUILDING SETBACK
- EXISTING PROPERTY LINE
- SECTION MONUMENT (FOUND)
- STREET MONUMENT (TO BE SET)
- BOUNDARY MARKERS

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100ft.



RIGHT OF WAY

N
S

NORTHEAST CORNER OF SECTION 4, T42S, R13W, SLB&M (BLM BRASS CAP FOUND)

(TIE 477.01)

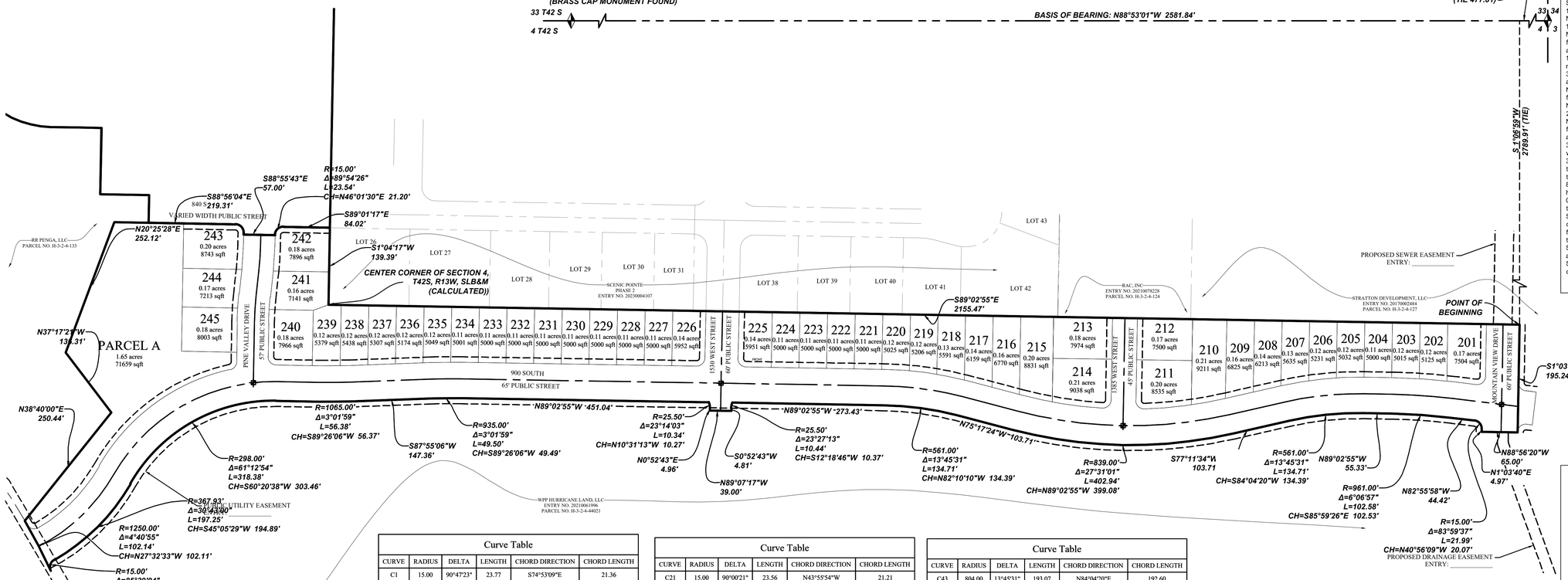
SOUTH 1/4 CORNER OF SECTION 33, T41S, R13W, SLB&M (BRASS CAP MONUMENT FOUND)

33 T42 S
4 T42 S

BASIS OF BEARING: N88°53'01"W 2581.84'

33 34
4 3

S 1°05'59"W 2789.91' (TIE)



Curve Table

CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C1	15.00	90°47'23"	23.77	S74°53'09"E	21.36
C2	303.00	29°58'59"	158.56	N44°43'40"E	156.76
C3	363.00	47°45'53"	302.61	S53°37'07"W	293.93
C4	15.00	76°32'58"	20.04	N39°13'34"E	18.58
C5	333.00	61°12'54"	355.78	S60°20'38"W	339.10
C6	333.00	32°48'31"	190.68	N46°08'26"E	188.09
C7	15.00	90°08'40"	23.60	S44°06'59"E	21.24
C8	557.00	5°15'54"	51.18	S03°35'02"W	51.17
C9	500.00	5°15'54"	45.95	S03°35'02"W	45.93
C10	526.00	5°15'54"	48.34	S03°35'02"W	48.32
C11	557.00	2°37'38"	25.54	N02°15'54"E	25.54
C12	557.00	2°37'57"	25.59	N04°54'01"E	25.59
C13	500.00	2°33'29"	22.32	N04°56'15"E	22.32
C14	500.00	2°42'25"	23.62	N02°18'18"E	23.62
C15	500.00	5°08'42"	44.90	N03°38'38"E	44.88
C16	469.00	5°08'42"	42.12	N03°38'38"E	42.10
C17	526.00	5°08'42"	47.23	N03°38'38"E	47.22
C18	526.00	0°10'59"	1.68	S06°07'30"W	1.68
C19	526.00	4°57'43"	45.55	N03°33'09"E	45.54
C20	15.00	89°54'26"	23.54	S46°01'30"W	21.20

Curve Table

CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C21	15.00	90°00'21"	23.56	N43°55'54"W	21.21
C24	1000.00	3°01'59"	52.94	N89°26'06"E	52.93
C25	1030.00	3°01'59"	54.52	N89°26'06"E	54.52
C26	1000.00	3°01'59"	52.94	S89°26'06"W	52.93
C27	970.00	3°01'59"	51.35	S89°26'06"W	51.34
C28	15.00	89°51'17"	23.52	N46°01'27"E	21.19
C29	15.00	90°08'43"	23.60	S43°58'33"E	21.24
C30	626.00	4°36'19"	50.32	S82°36'14"E	50.30
C31	626.00	4°39'44"	50.94	S77°58'12"E	50.92
C32	626.00	0°20'56"	3.81	S75°27'52"E	3.81
C33	596.00	13°45'31"	143.12	N82°10'10"W	142.77
C34	626.00	13°45'31"	150.32	N82°10'10"W	149.96
C35	774.00	10°55'36"	147.61	S80°45'12"E	147.38
C36	774.00	4°10'41"	56.44	S77°22'45"E	56.43
C37	774.00	6°44'55"	91.16	S82°50'32"E	91.11
C38	804.00	13°45'31"	193.07	S82°10'10"E	192.60
C39	15.00	92°49'55"	24.30	N47°22'03"E	21.73
C40	15.00	92°49'55"	24.30	S45°27'52"E	21.73
C41	774.00	10°55'36"	147.61	N82°39'22"E	147.38
C42	804.00	27°31'01"	386.13	S89°02'55"E	382.43

Curve Table

CURVE	RADIUS	DELTA	LENGTH	CHORD DIRECTION	CHORD LENGTH
C43	804.00	13°45'31"	193.07	N84°04'20"E	192.60
C44	774.00	6°16'28"	84.76	N84°58'56"E	84.72
C45	774.00	4°39'08"	62.84	N79°31'08"E	62.83
C46	596.00	13°45'31"	143.12	S84°04'20"W	142.77
C47	626.00	13°45'31"	150.32	S84°04'20"W	149.96
C48	626.00	4°36'26"	50.34	N79°29'48"E	50.32
C49	626.00	4°36'41"	50.38	N84°06'21"E	50.37
C50	626.00	4°32'23"	49.60	N88°40'54"E	49.59
C51	1026.00	6°06'57"	109.52	N85°59'26"W	109.47
C52	1026.00	2°31'15"	45.14	S87°47'17"E	45.14
C53	1026.00	2°47'55"	50.12	S85°07'42"E	50.11
C54	996.00	6°06'57"	106.32	N85°59'26"W	106.27
C55	15.00	96°00'23"	25.13	N49°03'51"E	22.30
C57	363.00	0°08'25"	0.89	S89°07'07"E	0.89
C58	1250.00	2°25'42"	52.98	N28°40'10"W	52.97
C59	1250.00	2°15'13"	49.17	N26°19'42"W	49.16

Line Table

LINE	DIRECTION	LENGTH

SURVEYOR'S CERTIFICATE

I, JUSTIN LUNDBERG, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENCE NUMBER 12554439. ACCORDANCE WITH TITLE 58, CHAPTER 22 PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, AND HAVE VERIFIED A SURVEY OF THE PROPERTY DESCRIBED HEREON IN ACCORDANCE WITH SECTION 17-23-17 AND HEREBY CERTIFY ALL MEASUREMENTS AND DESCRIPTIONS ARE CORRECT. MONUMENTS HAVE BEEN SET AS REPRESENTED ON THIS PLAT.

BLACK RIDGE PHASE 2
SUBDIVISION PLAT

AND THAT SAID TRACT OF LAND HAS BEN SUBDIVIDED INTO LOTS, STREETS, TOGETHER WITH EASEMENTS AND SAME HAS BEEN CORRECTLY SURVEYED AND STAKED ON THE GROUND AS SHOWN ON THIS PLAT, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED IN THE BOUNDARY DESCRIPTION.

FOR REVIEW

JUSTIN LUNDBERG
PROFESSIONAL LAND SURVEYOR
LICENCE NO: 12554439

Date

BOUNDARY DESCRIPTION

A part of the Southeast 1/4 Section 4, Township 42 South, Range 13 West, Salt Lake Base and Meridian, located in Hurricane City, Washington County, Utah, being more particularly described as follows;

Beginning at a point N88°53'01"W 477.01 feet along the Section line and S1°06'59"W 2789.91 feet from the Northeast Corner of Section 4, Township 42 South, Range 13 West, Salt Lake Base and Meridian; thence S01°03'40"W 104.74 feet; thence along the arc of a curve to the left with a radius of 15.00 feet a distance of 21.99 feet through a central angle of 83°59'37" Chord; S40°56'09"E 20.07 feet; thence S82°55'58"E 18.88 feet; thence S7°04'02"W 60.00 feet; thence N82°55'58"W 9.41 feet; thence along the arc of a curve to the left with a radius of 15.00 feet a distance of 25.13 feet through a central angle of 96°00'23" Chord; S49°03'51"W 22.30 feet; thence N88°56'20"W 65.00 feet; thence N01°03'40"E 4.97 feet; thence along the arc of a curve to the left with a radius of 15.00 feet a distance of 21.99 feet through a central angle of 83°59'37" Chord; N40°56'09"W 20.07 feet; thence N82°55'58"W 44.42 feet; thence along the arc of a curve to the left with a radius of 961.00 feet a distance of 102.58 feet through a central angle of 06°06'57" Chord; N85°59'26"W 102.53 feet; thence N89°02'55"W 55.33 feet; thence along the arc of a curve to the left with a radius of 561.00 feet a distance of 134.71 feet through a central angle of 13°45'31" Chord; S84°04'20"W 134.39 feet; thence S77°11'34"W 103.71 feet; thence along the arc of a curve to the right with a radius of 839.00 feet a distance of 402.94 feet through a central angle of 27°31'01" Chord; N89°02'55"W 399.08 feet; thence N75°17'24"W 103.71 feet; thence along the arc of a curve to the left with a radius of 561.00 feet a distance of 134.71 feet through a central angle of 13°45'31" Chord; N82°10'10"W 134.39 feet; thence N89°02'55"W 273.43 feet; thence along the arc of a curve to the left with a radius of 25.50 feet a distance of 10.44 feet through a central angle of 23°27'13" Chord; S12°18'46"W 10.37 feet; thence S0°52'43"W 4.81 feet; thence N89°07'17"W 39.00 feet; thence N0°52'43"E 4.96 feet; thence along the arc of a curve to the left with a radius of 25.50 feet a distance of 10.34 feet through a central angle of 23°14'03" Chord; N10°31'13"W 10.27 feet; thence N89°02'55"W 451.04 feet; thence along the arc of a curve to the left with a radius of 935.00 feet a distance of 49.50 feet through a central angle of 3°01'59" Chord; S89°26'06"W 49.49 feet; thence S87°55'06"W 147.36 feet; thence along the arc of a curve to the right with a radius of 1065.00 feet a distance of 56.38 feet through a central angle of 3°01'59" Chord; S89°26'06"W 56.37 feet; thence N89°02'55"W 78.33 feet; thence along the arc of a curve to the left with a radius of 298.00 feet a distance of 318.38 feet through a central angle of 61°12'54" Chord; S60°20'38"W 303.46 feet; thence along the arc of a curve to the right having a radius of 368.00 feet a distance of 197.25 feet through a central angle of 30°42'37" Chord; S45°05'30"W 194.89 feet; to a point of reverse curvature; thence along the arc of a curve to the left having a radius of 15.00 feet a distance of 22.42 feet through a central angle of 85°39'22" Chord; S17°37'07"W 20.39 feet; thence Northwesterly along the arc of a non-tangent curve to the left having a radius of 1,250.00 feet (radius bears: S64°47'54"W) a distance of 102.14 feet through a central angle of 04°40'55" Chord: N27°32'33"W 102.11 feet; thence N38°40'00"E 250.43 feet; thence N37°17'21"W 136.31 feet; thence N20°25'28"E 252.12 feet; thence S88°56'04"E 62.18 feet; thence N01°03'56"E 50.00 feet; thence S88°56'04"E 157.14 feet; thence Northeasterly along the arc of a curve to the left having a radius of 15.00 feet a distance of 23.56 feet through a central angle of 89°59'39" Chord; N46°04'06"E 21.21 feet; thence N1°04'17"E 5.00 feet; thence S88°55'43"E 57.00 feet; thence S1°04'17"W 6.06 feet; thence Southeasterly along the arc of a curve to the left having a radius of 15.00 feet a distance of 23.59 feet through a central angle of 90°05'34" Chord; S43°58'30"E 21.23 feet; thence S89°01'17"E 83.98 feet to the Westerly edge of SCENIC POINTE PHASE 2, on file and recorded in the office of Washington County Recorder as Entry No. 20230004107; thence along said Subdivision the following two (2) courses: (1) S01°04'17"W 191.39 feet; (2) S89°02'55"E 2,155.47 feet; to the point of beginning.

Area Containing +/-13.5 acres

OWNER'S DEDICATION

KNOW ALL BY THESE PRESENTS THAT THE UNDERSIGNED OWNER OF ALL THE DESCRIBED TRACT OF LAND, HAVING CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, PUBLIC STREETS, PARCEL A, AND EASEMENTS TO HEREAFTER BE KNOWN AS

BLACK RIDGE PHASE 2
SUBDIVISION PLAT

FOR GOOD AND VALUABLE CONSIDERATION RECEIVED, DO HEREBY DEDICATE AND CONVEY TO HURRICANE CITY FOR PERPETUAL USE OF THE PUBLIC ALL PARCELS AND LAND SHOWN ON THIS PLAT AS PUBLIC STREETS AND EASEMENTS, ALL LOTS, STREETS AND EASEMENTS ARE AS NOTED OR SHOWN. THE OWNER DOES HEREBY CONVEY TO PUBLIC USE HEREIN AGAINST THE CLAIMS OF ALL PERSONS. LOTS SHOWN ON THIS PLAT ARE SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS, OF THE _____. RECORDED IN THE OFFICE OF THE WASHINGTON COUNTY RECORDER ON THIS _____ DAY OF _____, 20____, AT BOOK _____, PAGE_____. SAID DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS IS HEREBY INCORPORATED AND MADE A PART OF THIS PLAT

IN WITNESS WHEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____ 20____.

WPP HURRICANE LAND, LLC

ACKNOWLEDGMENT

STATE OF UTAH
S.S.
COUNTY OF _____

ON THE ____ DAY OF _____, 20 ____ PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND FOR THE COUNTY OF _____ IN SAID STATE OF UTAH, _____ THE PERSON SIGNING THE FOREGOING OWNER'S DEDICATION WHO DULY ACKNOWLEDGED TO ME THAT HE DID EXECUTE THE SAME FREELY AND VOLUNTARILY AND FOR THE USES AND PURPOSES THEREIN DESCRIBED.

MY COMMISSION EXPIRES:_____

A NOTARY PUBLIC COMMISSIONED IN UTAH RESIDING IN _____ COUNTY

MY COMMISSION No._____

PRINTED FULL NAME OF NOTARY

SHEET 1 OF 2

PREPARED BY

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 SOUTH HIGH TECH DRIVE SUITE 200
MIDVALE, UT 84047 PH: (801) 352-0075
www.focusutah.com

CITY ENGINEER APPROVAL

I HEREBY VERIFY THAT THIS OFFICE EXAMINED THIS SUBDIVISION PLAT AND HEREBY RECOMMENDS APPROVAL ON THIS _____DAY OF _____

CITY ENGINEER
HURRICANE CITY, UTAH

CITY ATTORNEY APPROVAL

APPROVED AS TO FORM, THIS THE _____DAY OF _____

CITY ATTORNEY
HURRICANE CITY, UTAH

ASH CREEK SPECIAL SERVICE DIST.

THE HEREON SUBDIVISION PLAT HAS BEEN REVIEWED AND IS APPROVED IN ACCORDANCE WITH THE INFORMATION ON FILE IN THE OFFICE THIS _____ DAY OF _____

SUPERINTENDENT
ASH CREEK SPECIAL SERVICE DISTRICT

TREASURER APPROVAL

I WASHINGTON COUNTY TREASURE, CERTIFY ON THIS _____ DAY OF _____ THAT ALL TAXES, SPECIAL ASSESSMENTS, AND FEES DUE AND OWNING ON THIS ROADWAY DEDICATION PLAT HAVE BEEN PAID IN FULL.

WASHINGTON COUNTY TREASURER

APPROVAL AND ACCEPTANCE BY HURRICANE CITY, UTAH

WE, THE CITY COUNCIL OF HURRICANE CITY, UTAH, HAVE REVIEWED THE ABOVE ROADWAY DEDICATION PLAT AND HEREBY ACCEPT SAID ROADWAY DEDICATION PLAT WITH ALL COMMITMENTS AND ALL OBLIGATIONS PERTAINING THERETO THIS _____ DAY OF _____

ATTEST: CITY RECORDER
HURRICANE CITY, UTAH

MAYOR
HURRICANE CITY, UTAH

BLACK RIDGE PHASE 2
SUBDIVISION PLAT
LOCATED IN SECTION 4, T42 S, R13 W,
SALT LAKE BASE & MERIDIAN
HURRICANE, WASHINGTON COUNTY, UTAH

RECORDED # _____
STATE OF UTAH, COUNTY OF WASHINGTON, RECORDED AND FILED AT THE REQUEST OF:

WASHINGTON COUNTY RECORDER

C:\Users\Justin\Dropbox\Work Folder\2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheets\C2 - FINAL PLAT.dwg

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION

N

S

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft.

811 Know what's below. Call 811 before you dig.

BLACK RIDGE PHASE 1D

840 SOUTH

PARCEL A

PINE VALLEY DRIVE

SCENIC POINT

MOUNTAIN VIEW

243 242 244 241 245 240 239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216 215 213 214 212 211 210 209 208 207 206 205 204 203 202 201

LEAVITT'S LANE

1340 WEST

MOUNTAIN VIEW DRIVE

920 SOUTH

960 SOUTH

1760 W

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
OVERALL SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

OVERALL SITE PLAN

Scale: 1"=100'	Drawn: DCJ
Date: 11/7/23	Job #: 23-0124
Sheet: C3	

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\C4 OVERALL SITE PLAN.dwg

Know what's below. Call 811 before you dig.

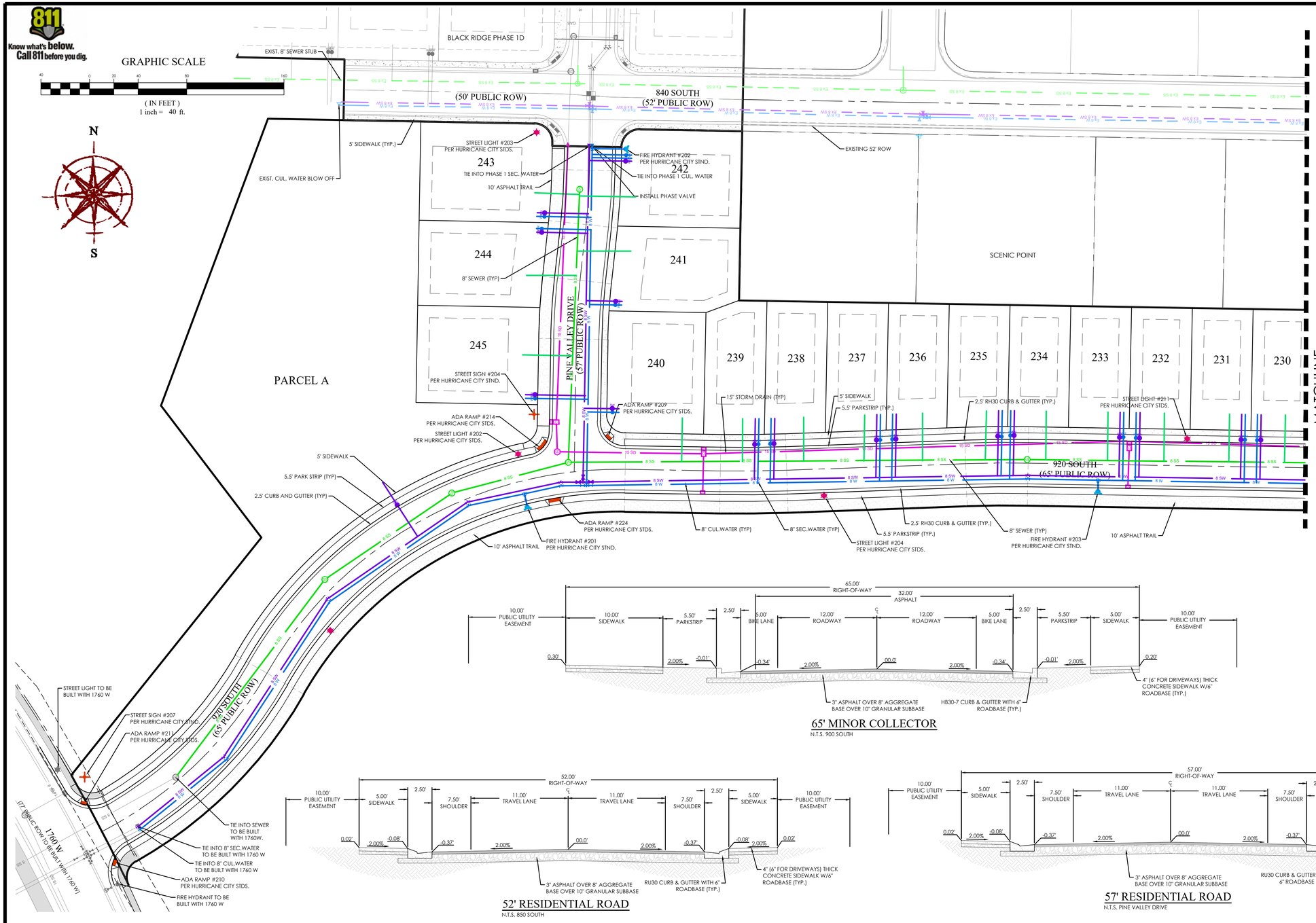
GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

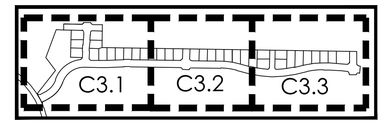
N

S



LEGEND

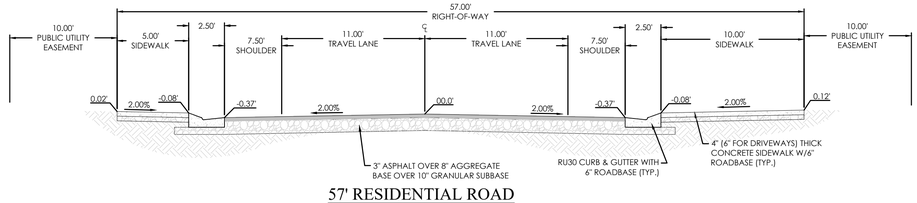
- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



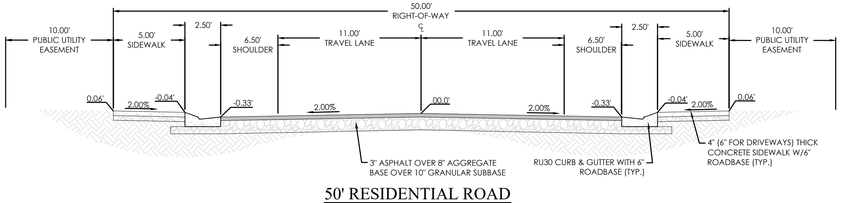
KEY MAP
N.T.S

65' MINOR COLLECTOR
N.T.S. 900 SOUTH

52' RESIDENTIAL ROAD
N.T.S. 850 SOUTH



57' RESIDENTIAL ROAD
N.T.S. PINE VALLEY DRIVE



50' RESIDENTIAL ROAD
N.T.S. 850 SOUTH

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
SITE PLAN

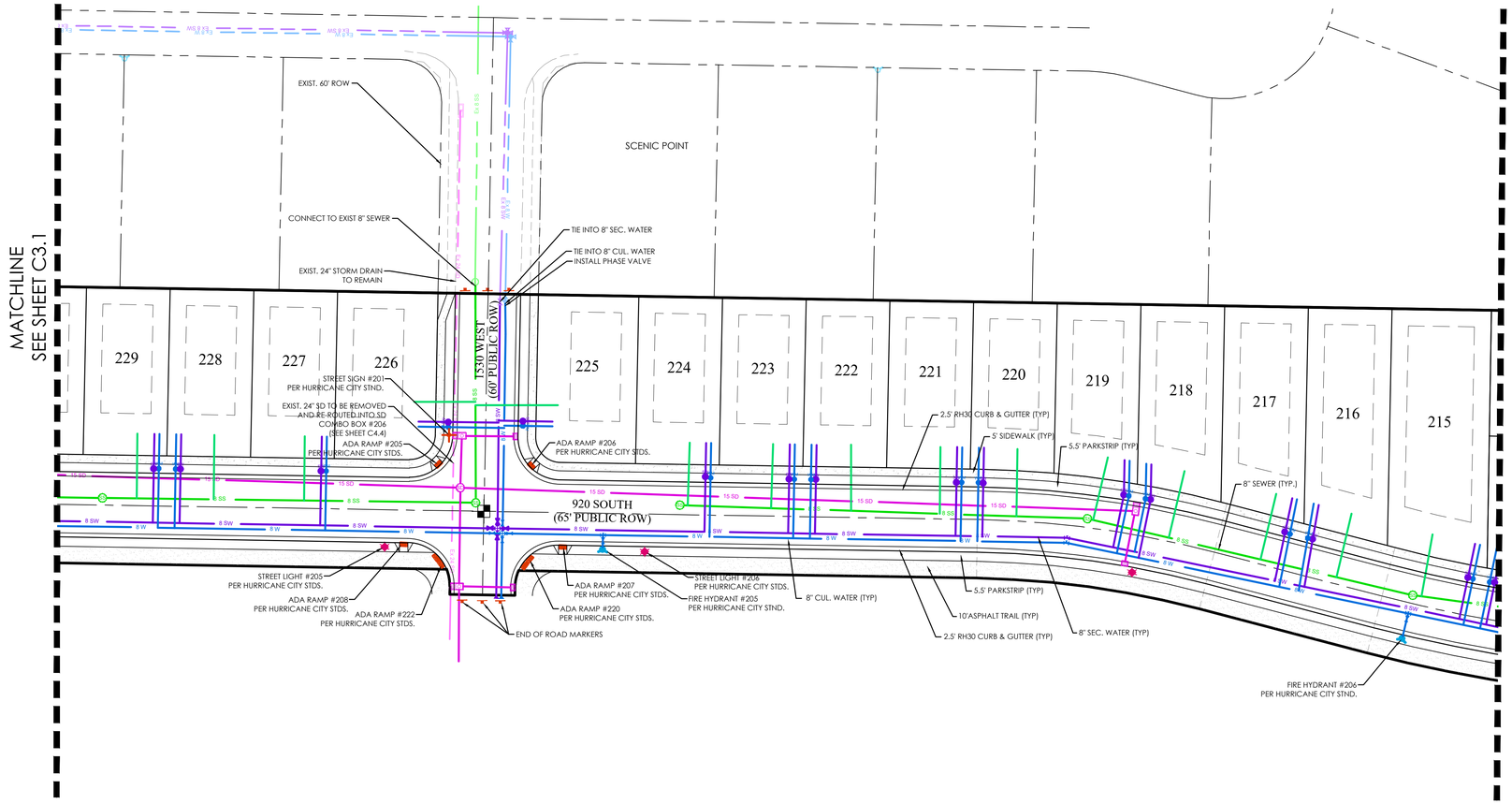
REVISION BLOCK

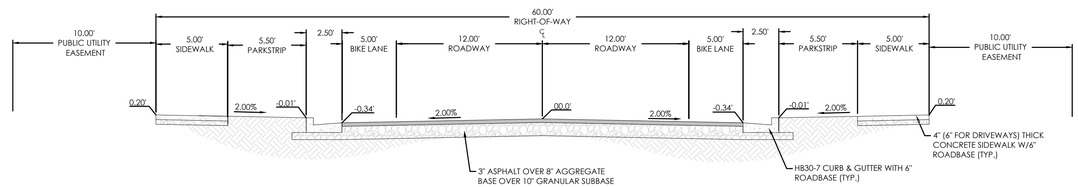
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

SITE PLAN

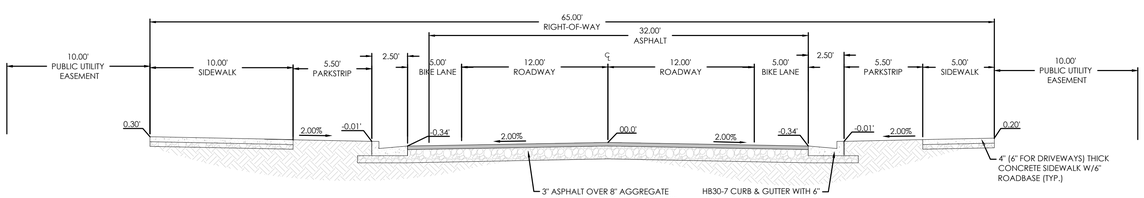
Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C3.1		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\\C4.1 SITE PLAN.dwg





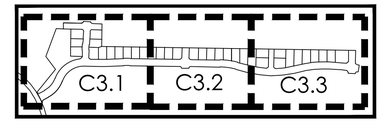
60' PUBLIC STREET
N.T.S. MOUNTAIN VIEW DRIVE



65' MINOR COLLECTOR
N.T.S. 900 SOUTH

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- XXXX CONTOUR MAJOR
- XXXX CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) EXIST. CONTOUR MAJOR
- (XXXX) EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

SITE PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C3.2		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-012A\dwg\sheets\C4.2 SITE PLAN.dwg

MATCHLINE
SEE SHEET C3.2

MOUNTAIN VIEW ESTATES

NOTE:
TIMING OF DEVELOPMENT OF MOUNTAIN VIEW ESTATES IS UNKNOWN COMPARED TO BLACK RIDGE PHASE 2. COORDINATION OF PLACEMENT OF UTILITIES AND SURFACE IMPROVEMENTS TO BE DETERMINED

45' ROW

END OF ROAD MARKERS

TIE IN 8" SEC. WATER (TYP)

TIE IN 8" CUL. WATER (TYP)

INSTALL PHASE VALVE

8" CUL. WATER (TYP)

8" SEWER (TYP)

8" SEC. WATER (TYP)

213 212 210 209 208 207 206 205 204 203 202 201 214 211

1385 WEST (45' PUBLIC ROW)

ADA RAMP #202 PER HURRICANE CITY STDS.

ADA RAMP #201 PER HURRICANE CITY STDS.

2.5' HB30-7 CURB AND GUTTER (TYP.)

5' SIDEWALK (TYP.)

5.5' PARK STRIP (TYP.)

15" STORM DRAIN (TYP)

920 SOUTH (65' PUBLIC ROW)

2.5' HB30-7 CURB AND GUTTER (TYP.)

5.5' PARK STRIP (TYP.)

10' ASPHALT TRAIL (TYP)

FIRE HYDRANT #207 PER HURRICANE CITY STND.

STREET LIGHT #209 PER HURRICANE CITY STDS.

8" SEWER (TYP)

8" SEC. WATER (TYP)

8" CUL. WATER (TYP)

STREET LIGHT #208 PER HURRICANE CITY STDS.

TIE INTO EXIST. CUL. WATER

INSTALL PHASE VALVE

TIE INTO EXIST 8" SEWER

TIE INTO EXIST. SEC. WATER

14' ALL WEATHER ROAD

END OF ROAD MARKERS

8" SEWER (TYP)

FIRE HYDRANT #208 PER HURRICANE CITY STND.

STREET SIGN #205 PER HURRICANE CITY STND.

ADA RAMP #203 PER HURRICANE CITY STDS.

MOUNTAIN VIEW DRIVE (60' PUBLIC ROW)

END OF ROAD MARKERS

8' DRAINAGE SWALE SEE SHEET C4.7 FOR DETAIL

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- XXXX CONTOUR MAJOR
- XXXX CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) EXIST. CONTOUR MAJOR
- (XXXX) EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

C3.1 C3.2 C3.3

KEY MAP
N.T.S

Know what's below. Call 811 before you dig.

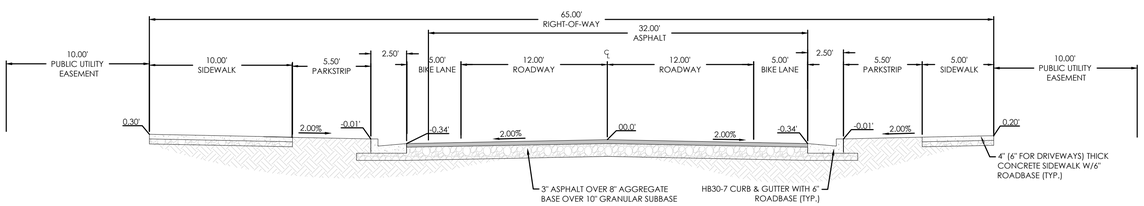
N

S

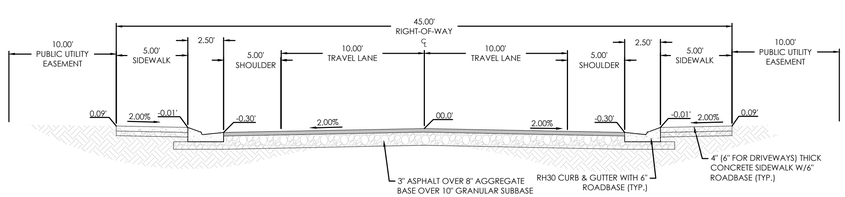
GRAPHIC SCALE

40 0 20 40 80 160

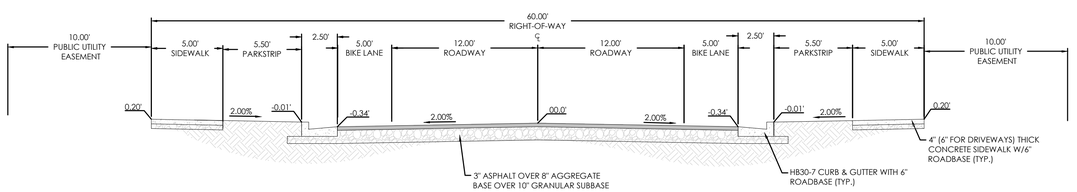
(IN FEET)
1 inch = 40 ft.



65' MINOR COLLECTOR
N.T.S. 900 SOUTH



45' RESIDENTIAL ROAD
N.T.S. 1385 WEST



60' PUBLIC STREET
N.T.S. MOUNTAIN VIEW DRIVE

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
SITE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

SITE PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C3.3		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\C4.3 SITE PLAN.dwg

N

S

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

840 SOUTH

PARCEL A

PINE VALLEY DRIVE

920 SOUTH

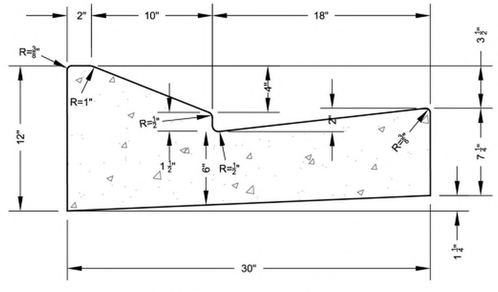
1530 WEST

243 244 245 242 241 240 239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224

MATCHLINE A SEE SHEET C3.5

HARDSCAPE LEGEND

- HIGH BACK CURB AND GUTTER PER HURRICANE CITY STND. HB30-7 SEE DETAIL THIS SHEET
- 4" CONCRETE OVER 6" ROADBASE
- 3" ASPHALT OVER 8" AGGREGATE BASE OVER 10" GRANULAR SUBBASE
- TRANSITION ZONE
- MODIFIED CURB AND GUTTER PER HURRICANE CITY STND. RU30 SEE DETAIL THIS SHEET
- 4" CRUSHED ROCK, ASPHALT OR ALL WEATHER EQUIVALENT



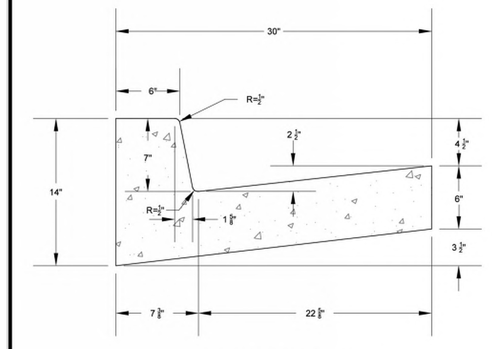
MODIFIED CURB & GUTTER
TYPE RU30

N.T.S.

NOTES:

1. ALL CONSTRUCTION & MATERIALS SHALL CONFORM TO HURRICANE CITY STANDARD.
2. REQUIRED ON ALL RESIDENTIAL STREETS WHERE A PLANTER STRIP IS ABSENT.

CITY OF HURRICANE ENGINEERING		
REVISIONS: DATE / DESCRIPTION / BY	MODIFIED CURB & GUTTER DETAILS	STANDARD DWG. NO. CC 102 | 1 OF 1; APPROVED: DATE: APRIL 2020 BY: H.C.E.



STANDARD CURB & GUTTER
(TYPE HB30-7)

CONCRETE SHALL BE COMPOSED OF COARSE AGGREGATE, FINE AGGREGATE, PORTLAND CEMENT AND WATER, AS PER SECTION 4.8.1.1 OF THE HURRICANE CITY STANDARDS FOR DESIGN AND CONSTRUCTION.

CITY OF HURRICANE ENGINEERING		
REVISIONS: DATE / DESCRIPTION / BY	STANDARD CURB & GUTTER DETAILS	STANDARD DWG. NO. CC 101 | 1 OF 1; APPROVED: DATE: APRIL 2020 BY: H.C.E.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

HARDSCAPE PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

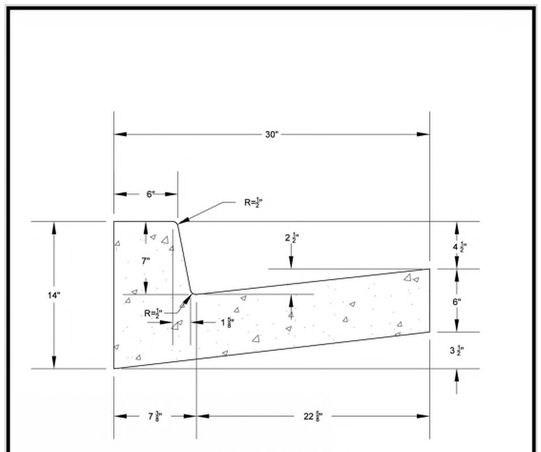
HARDSCAPE PLAN

Scale:	1"=50'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C3.4		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\Design\23-0124.dwg\Sheet\\C3.4 HARDSCAPE PLAN.dwg

HARDSCAPE LEGEND

- HIGH BACK CURB AND GUTTER PER HURRICANE CITY STND. HB30-7 SEE DETAIL THIS SHEET
- 4" CONCRETE OVER 6" ROADBASE
- 3" ASPHALT OVER 8" AGGREGATE BASE OVER 10" GRANULAR SUBBASE
- TRANSITION ZONE
- MODIFIED CURB AND GUTTER PER HURRICANE CITY STND. RU30 SEE DETAIL THIS SHEET
- 4" CRUSHED ROCK, ASPHALT OR ALL WEATHER EQUIVALENT

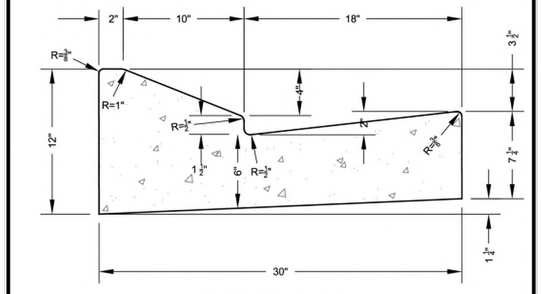


STANDARD CURB & GUTTER (TYPE HB30-7)

N.T.S.

CONCRETE SHALL BE COMPOSED OF COARSE AGGREGATE, FINE AGGREGATE, PORTLAND CEMENT AND WATER, AS PER SECTION 4.8.1.1 OF THE HURRICANE CITY STANDARDS FOR DESIGN AND CONSTRUCTION.

CITY OF HURRICANE ENGINEERING				
REVISIONS DATE	DESCRIPTION	BY	STANDARD CURB & GUTTER DETAILS	STANDARD DWG. NO. CC 101 — 1 OF 1; APPROVED: DATE: APRIL 2020 BY: H.C.E.



MODIFIED CURB & GUTTER TYPE RU30

N.T.S.

NOTES:

1. ALL CONSTRUCTION & MATERIALS SHALL CONFORM TO HURRICANE CITY STANDARD.
2. REQUIRED ON ALL RESIDENTIAL STREETS WHERE A PLANTER STRIP IS ABSENT.

CITY OF HURRICANE ENGINEERING				
REVISIONS DATE	DESCRIPTION	BY	MODIFIED CURB & GUTTER DETAILS	STANDARD DWG. NO. CC 102 — 1 OF 1; APPROVED: DATE: APRIL 2020 BY: H.C.E.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
HARDSCAPE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

HARDSCAPE PLAN

Scale:	1"=50'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C3.5		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\\C3.5 HARDSCAPE PLAN.dwg

Know what's below. Call 811 before you dig.

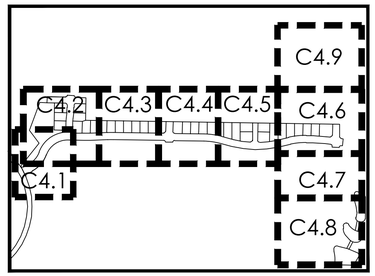
N

S

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100ft.



KEY MAP
N.T.S

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

OVERALL GRADING & DRAINAGE PLAN

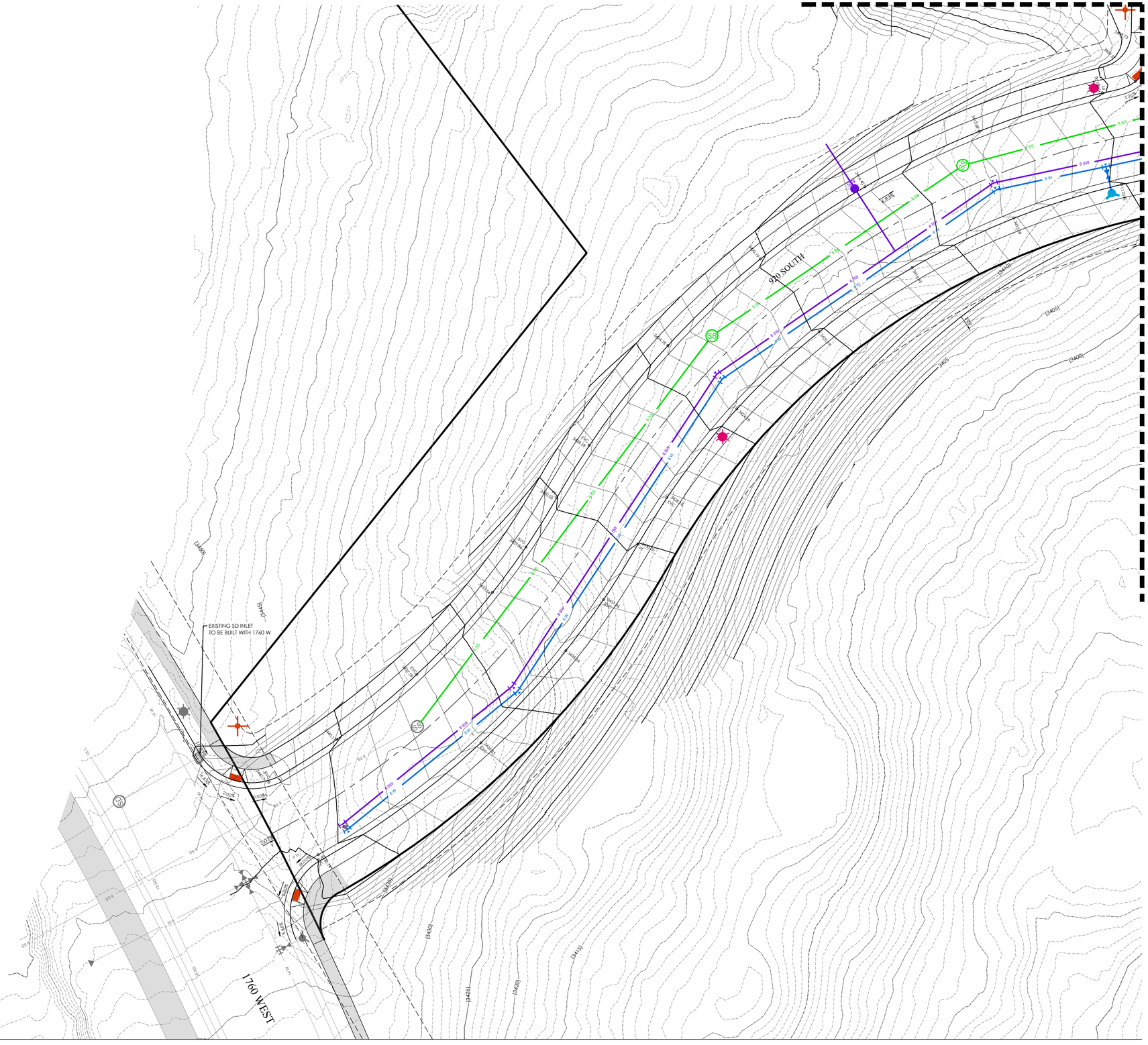
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

OVERALL GRADING & DRAINAGE PLAN

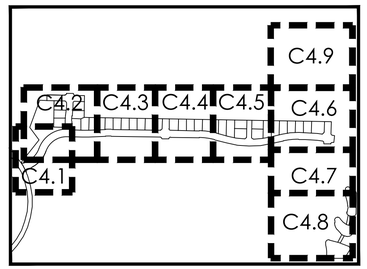
Scale:	1"=100'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\Design 23-0124\dwg\sheets\C5 OVERALL GRADING & DRAINAGE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below.
Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

GRADING & DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124

Sheet: C4.1

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\VCS-1 GRADING & DRAINAGE PLAN.dwg

840 SOUTH

PARCEL A

PROPOSED CONTOURS INDICATE THE LIMIT OF DISTURBANCE ON PARCEL A. GRADING OF HOME PADS TIED INTO EXISTING ELEVATION USING 3:1 GRADE (TYP.)

PINE VALLEY DRIVE

920 SOUTH

243 ELEV=3415.32

242 ELEV=3413.95

244 ELEV=3414.48

241 ELEV=3412.47

245 ELEV=3412.90

240 ELEV=3404.52

239 ELEV=3401.45

238

6' CUT FACE WALL

9' FILL ROCK WALL

4' CUT FACE WALL

3' FILL ROCK WALL

5' CUT FACE WALL

RETAINING WALL (PER GEOTECHNICAL ENGINEER'S CERTIFICATION)

SCENIC POINT WALL
3405.10: TW
3402.41: BW

15" RCP
L=227.43'
S=2.00%

SD COMBO #215
TBC=3408.89
INV. OUT=3405.46 (S)
INV. IN=3405.46 (N)
PER APWA 316

15" ADS
L=24.47'
S=0.50%

SDMH #205
RIM=3408.48
INV. IN=3405.34 (N)
INV. OUT=3405.34 (E)
PER HURRICANE CITY STND.

SD COMBO #201
TBC=3401.25
INV. IN=3397.44 (W)
INV. OUT=3397.44 (E)
INV. IN=3397.44 (S)
PER APWA 316

15" ADS
L=120.53'
S=6.56%

15" ADS
L=350.28'
S=10.00%

15" ADS
L=39.00'
S=0.50%

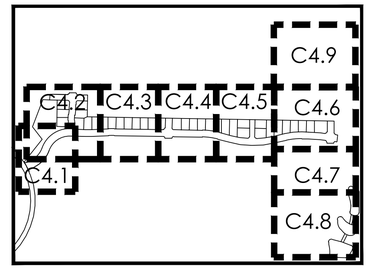
SD INLET #210
TBC=3401.27
INV. OUT=3397.63 (N)
PER APWA 315

MATCHLLINE SEE SHEET C4.1

MATCHLLINE SEE SHEET C4.3

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

GRADING & DRAINAGE PLAN

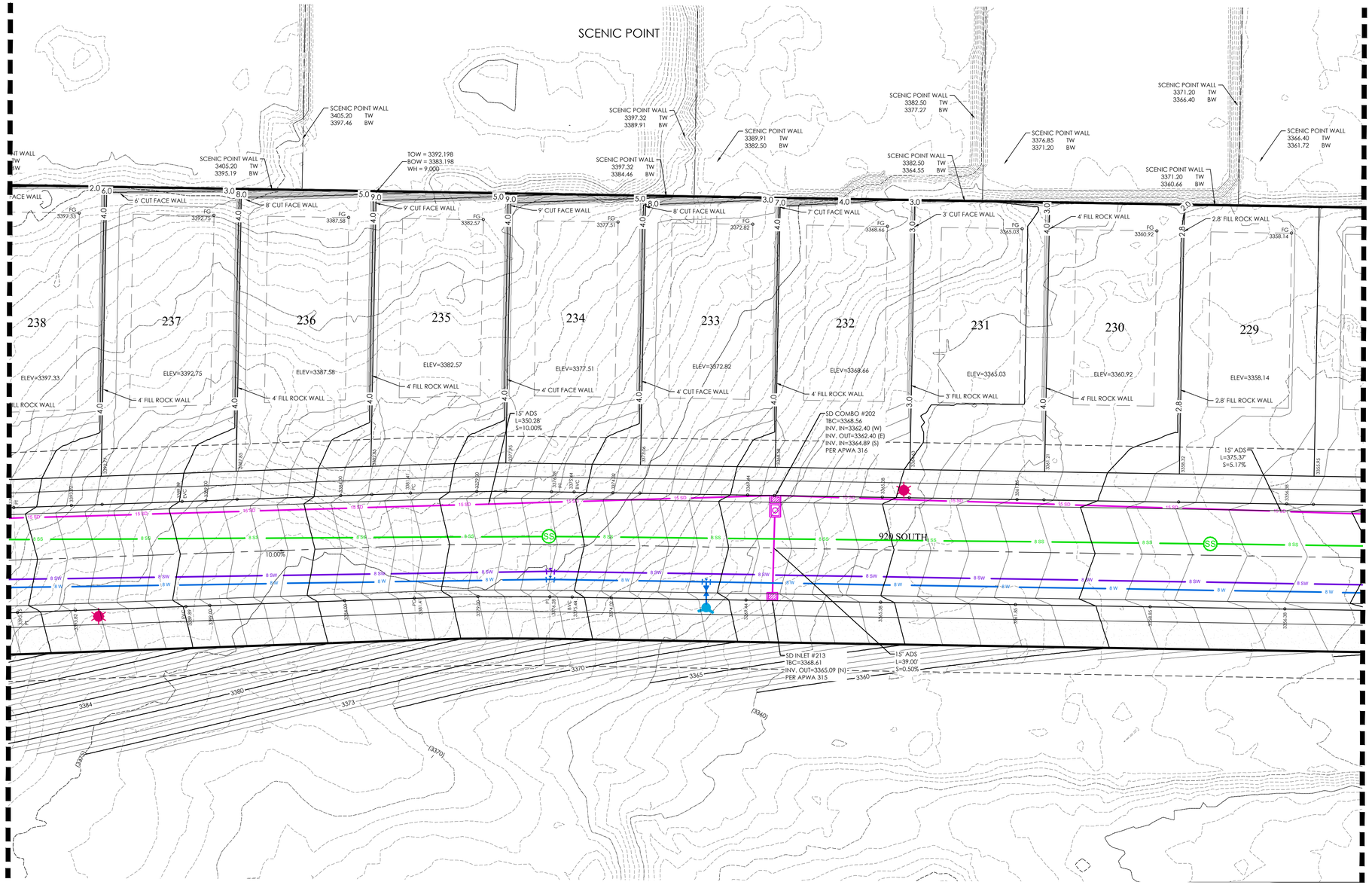
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.2		

Z:\...2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\1\CS.2 GRADING & DRAINAGE PLAN.dwg

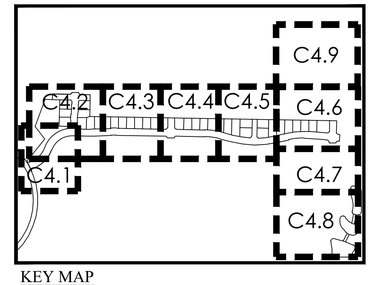


MATCHLINE SEE SHEET C4.2

MATCHLINE SEE SHEET C4.4

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
GRADING & DRAINAGE PLAN

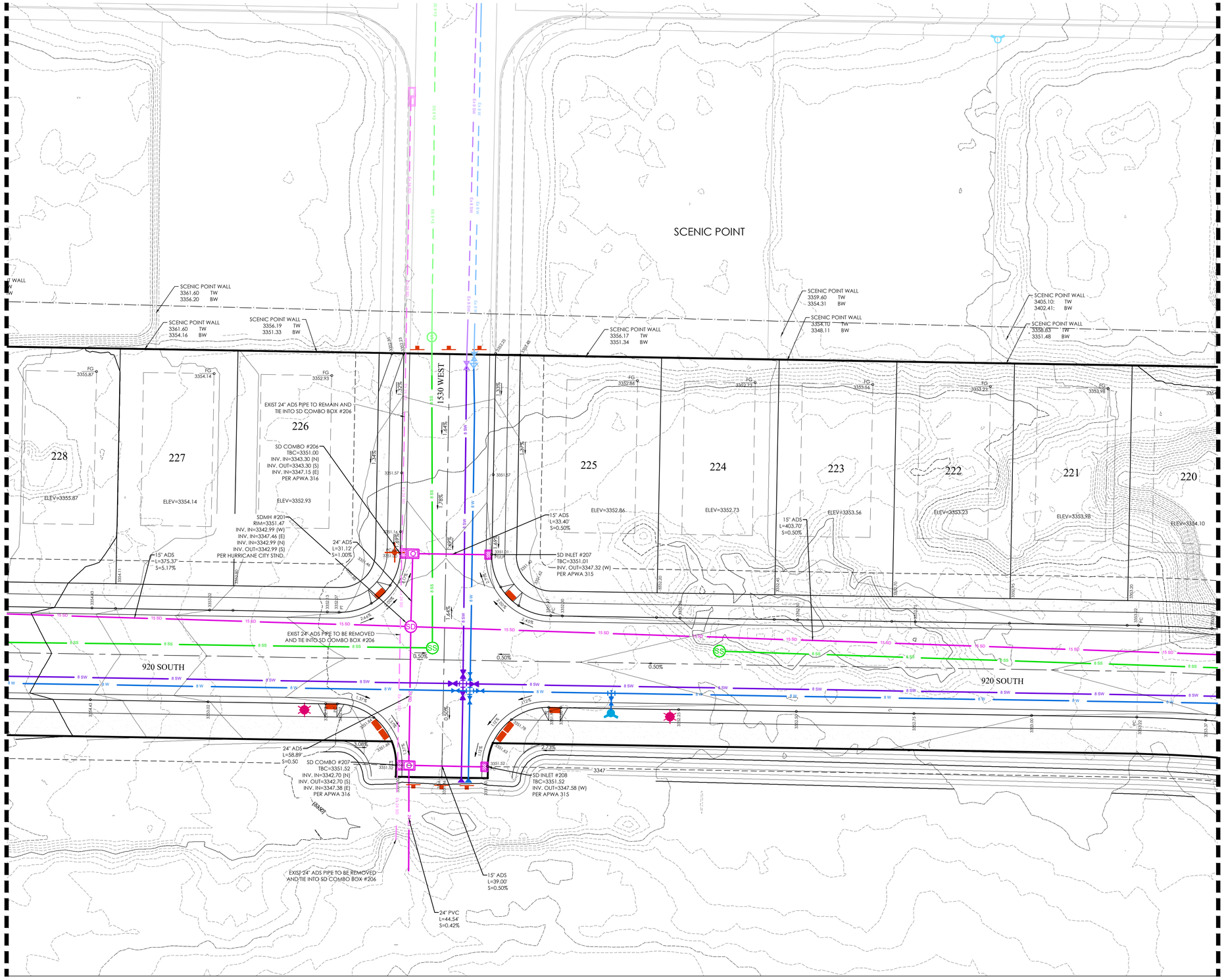
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

GRADING & DRAINAGE PLAN

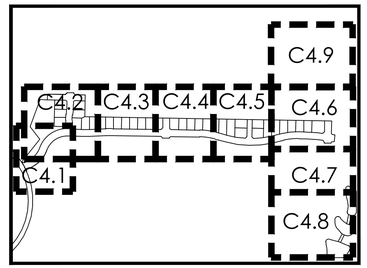
Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.3		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\\C3.3 GRADING & DRAINAGE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- X — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
GRADING & DRAINAGE PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.4		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\\C5.4 GRADING & DRAINAGE PLAN.dwg

MATCHLINE SEE SHEET C4.4

MATCHLINE SEE SHEET C4.6

SCENIC POINT

MOUNTAIN VIEW ESTATES

SCENIC POINT WALL 3373.30 TW 3365.83 BW

SCENIC POINT WALL 3373.30 TW 3363.47 BW

SCENIC POINT WALL 3363.30 TW 3356.36 BW

SCENIC POINT WALL 3378.10 TW 3373.30 BW

SCENIC POINT WALL 3378.10 TW 3371.10 BW

SCENIC POINT WALL 3371.10 TW 3363.81 BW

SCENIC POINT WALL 3378.10 TW 3370.58 BW

SCENIC POINT WALL 3378.1 TW 3373.72 BW

SCENIC POINT WALL 3373.72 TW 3369.33 BW

SCENIC POINT WALL 3378.10 TW 3375.43 BW

SCENIC POINT WALL 3378.10 TW 3374.21 BW

3' CUT FACE WALL

6' CUT FACE WALL

8' CUT FACE WALL

5' CUT FACE WALL

9' CUT FACE WALL

4' CUT FACE WALLS

6' ROCK FILL WALL

4' FILL ROCK WALL

6' FILL ROCK WALL

8' FILL ROCK WALL

9' CUT FACE WALL

6' CUT FACE WALL

8' FILL ROCK WALL

20

219

218

217

216

215

214

213

212

211

210

ELEV=3355.74

ELEV=3356.30

ELEV=3356.57

ELEV=3356.83

ELEV=3357.13

ELEV=3369.30

ELEV=3369.10

ELEV=3361.97

ELEV=3361.60

ELEV=3352.31

15" ADS L=403.70' S=0.50%

SD COMBO #205 TBC=3353.68 INV. OUT=3349.47 (W) INV. IN=3349.47 (S) PER APWA 316

SD COMBO #211 TBC=3354.86 INV. OUT=3351.34 (E) PER APWA 315

SD COMBO #204 TBC=3353.68 INV. IN=3349.82 (W) INV. OUT=3349.82 (E) PER APWA 316

SDMH #204 RIM=3350.47 INV. IN=3346.77 (W) INV. OUT=3346.77 (E) PER HURRICANE CITY STND.

15" ADS L=77.28' S=1.96%

15" ADS L=92.75' S=3.29% ALL

15" ADS L=209.54' S=3.21%

15" ADS L=39.01' S=1.75%

SD INLET #206 TBC=3353.68 INV. OUT=3350.16 (N) PER APWA 315

0.49%

0.50%

1.10%

1.90%

10.00%

920 SOUTH

1385 WEST

8 SS

8 SW

8 W

15 SD

3354

3355

3356

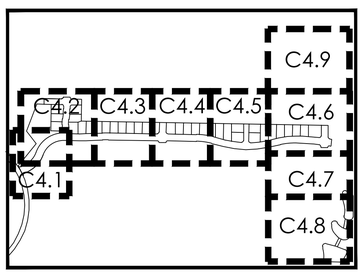
3361

3363

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- X — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION

KEY MAP
N.T.S



N

S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

811 Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
GRADING & DRAINAGE PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

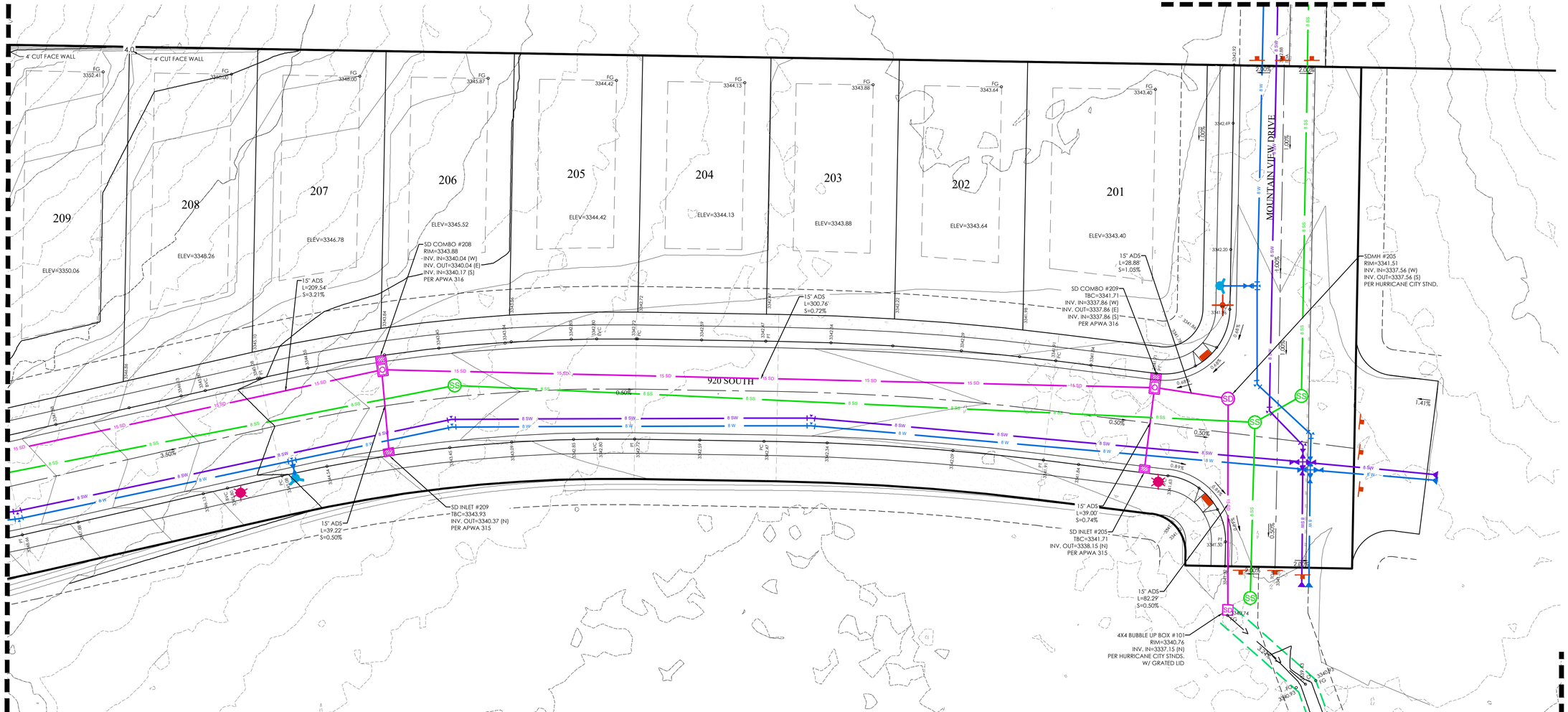
GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.5		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\\C5.5 GRADING & DRAINAGE PLAN.dwg

MATCHLINE SEE SHEET C4.5

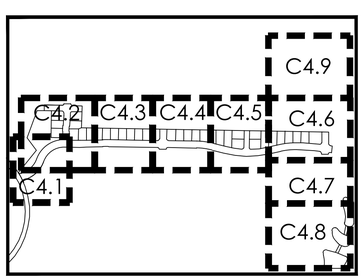
MATCHLINE SEE SHEET C4.9



MATCHLINE SEE SHEET C4.7

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

N
S

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

811 Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY, UT

GRADING & DRAINAGE PLAN

REVISION BLOCK

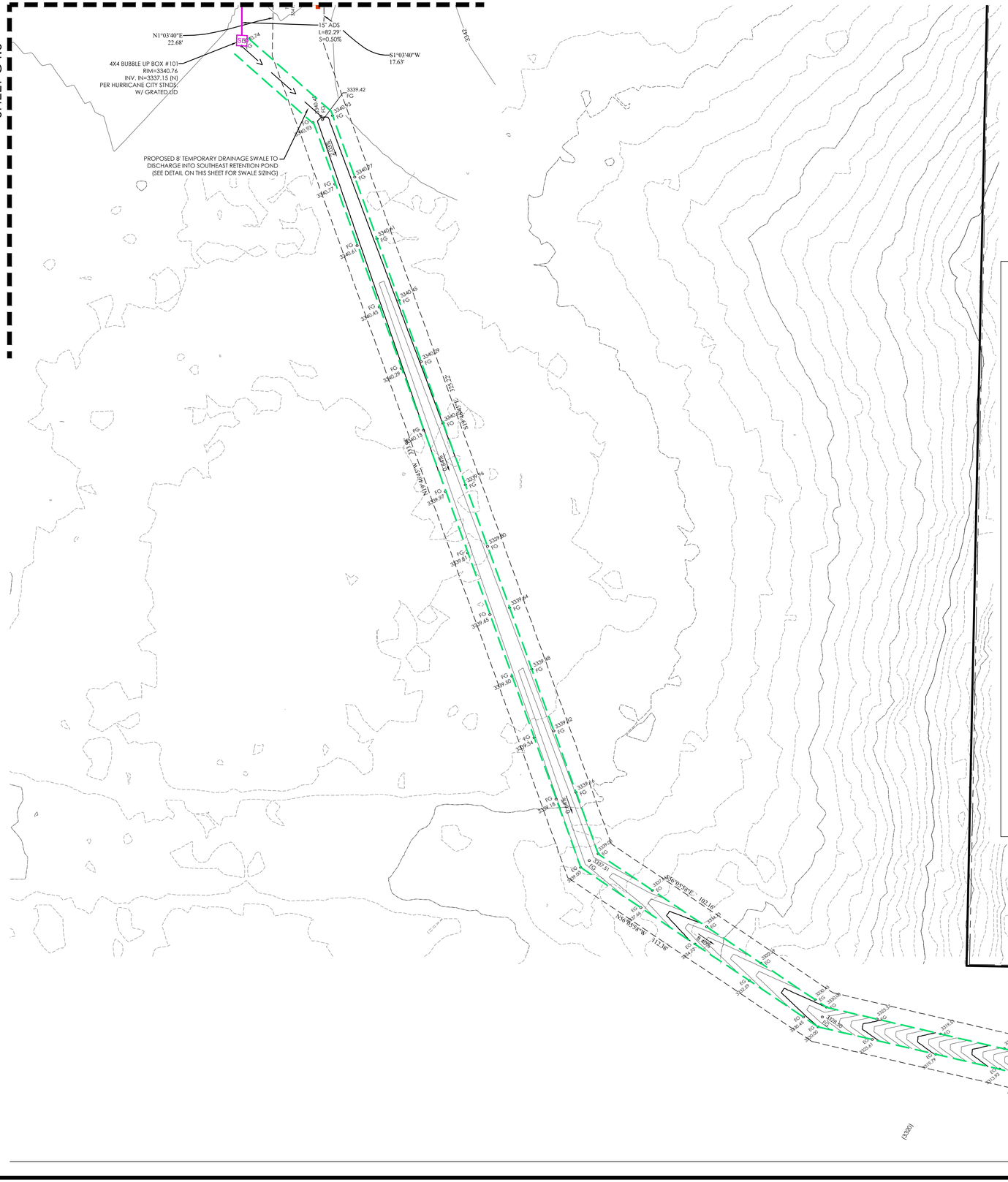
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

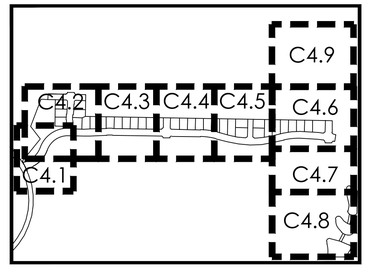
GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.6		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheets\C5.6 GRADING & DRAINAGE PLAN.dwg

MATCHLINE SEE SHEET C4.6





KEY MAP
N.T.S

LEGEND

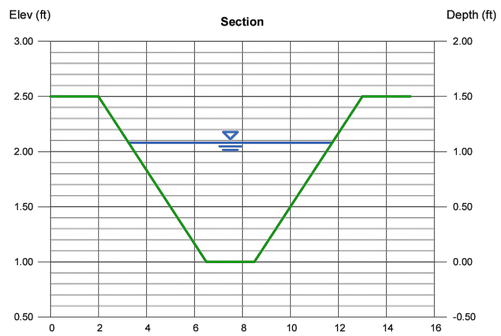
- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- XXXX.XX SPOT ELEVATION

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jun 14 2023

Black Ridge Phase 2 - Temporary Drainage Swale

Trapezoidal		Highlighted	
Bottom Width (ft)	= 2.00	Depth (ft)	= 1.08
Side Slopes (z:1)	= 3.00, 3.00	Q (cfs)	= 22.00
Total Depth (ft)	= 1.50	Area (sqft)	= 5.66
Invert Elev (ft)	= 1.00	Velocity (ft/s)	= 3.89
Slope (%)	= 0.50	Wetted Perim (ft)	= 8.83
N-Value	= 0.020	Crit Depth, Yc (ft)	= 1.00
		Top Width (ft)	= 8.48
Calculations		EGL (ft)	= 1.31
Compute by:	Known Q		
Known Q (cfs)	= 22.00		



GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

N

S

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
GRADING & DRAINAGE PLAN

REVISION BLOCK

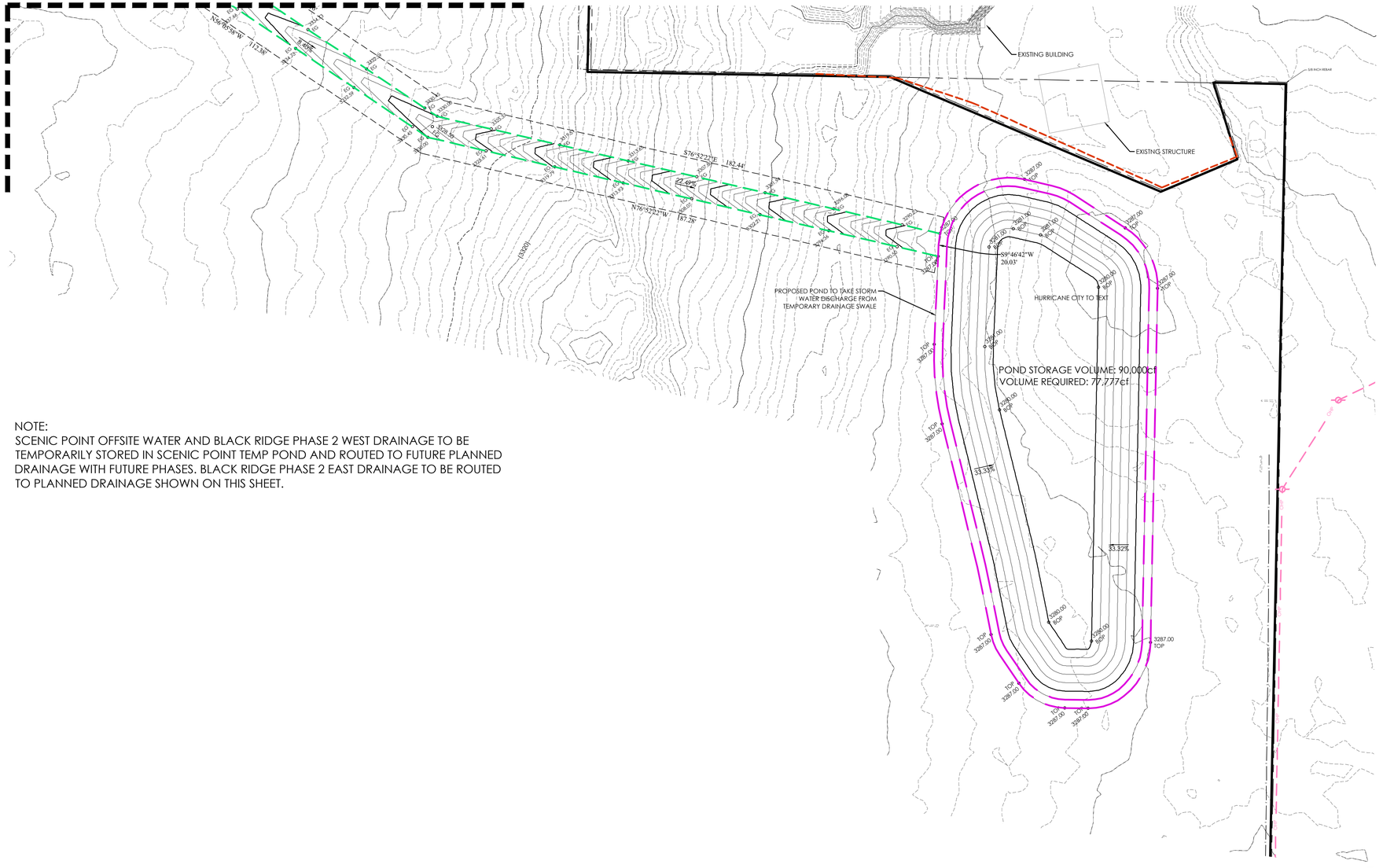
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

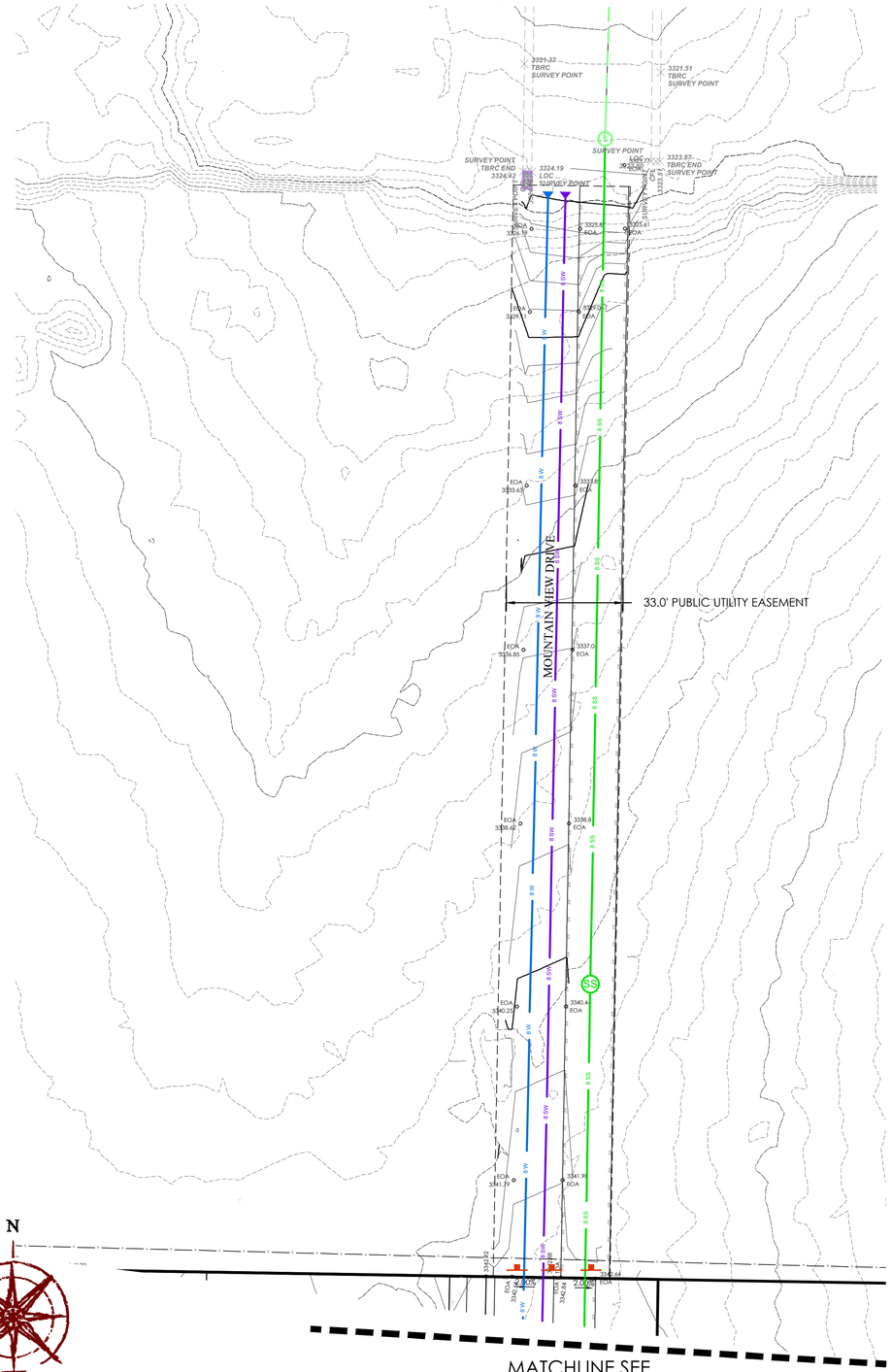
GRADING & DRAINAGE PLAN

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.7		

Know what's below. Call 811 before you dig.

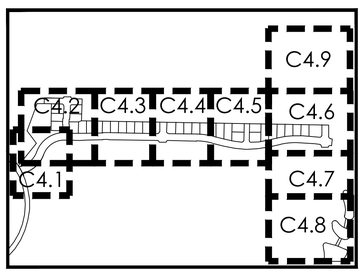
Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124.dwg\sheet\C5.7 GRADING & DRAINAGE PLAN.dwg


MATCHLINE SEE SHEET C4.7
EXISTING BUILDING
EXISTING STRUCTURE
PROPOSED POND TO TAKE STORM WATER DISCHARGE FROM TEMPORARY DRAINAGE SWALE
HURRICANE CITY TO TEXT
POND STORAGE VOLUME: 90,000cf
VOLUME REQUIRED: 77,777cf
N76°55'22"W 187.35'
S76°55'22"E 182.44'
S9°46'42"W 20.03'
33.33%
33.32%
3287.00 TOP
3286.00 BOP
3285.00 BOP
3284.00 BOP
3283.00 BOP
3282.00 BOP
3281.00 BOP
3280.00 BOP
3287.00 TOP
3287.00 TOP
3287.00 T



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- XXXX CONTOUR MAJOR
- XXXX CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) EXIST. CONTOUR MAJOR
- (XXXX) EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

N
S

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below.
Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

OFFSITE GRADING & DRAINAGE PLAN

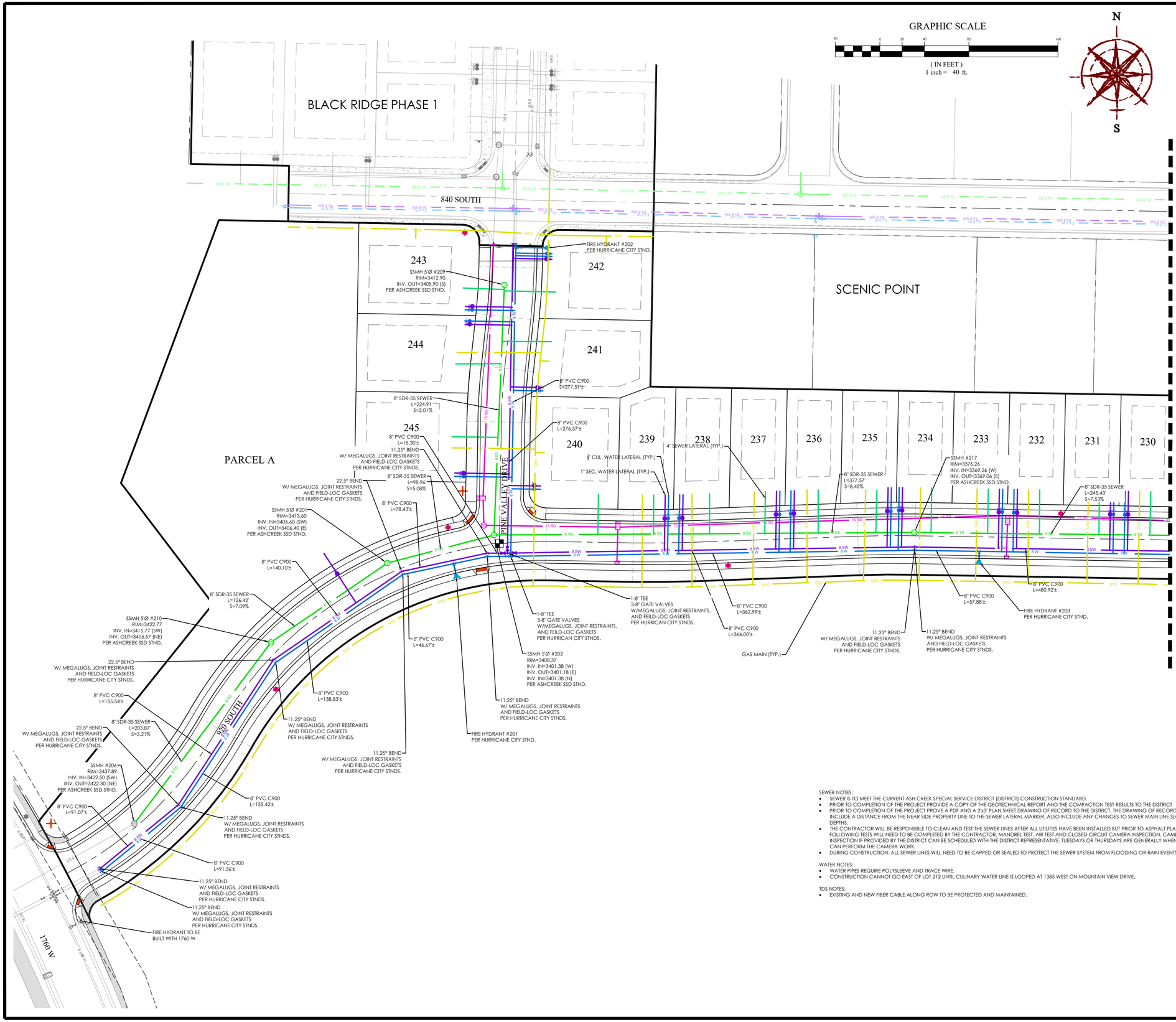
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

OFFSITE GRADING & DRAINAGE PLAN

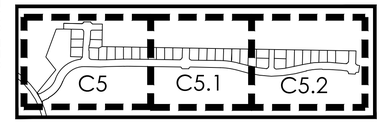
Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C4.9		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design\23-0124.dwg\sheet\VCS\9 GRADING & DRAINAGE PLAN.dwg



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

SEWER NOTES:
- SEWER IS TO MEET THE CURRENT ASH CREEK SPECIAL SERVICE DISTRICT (DISTRICT) CONSTRUCTION STANDARD.
- PRIOR TO COMPLETION OF THE PROJECT PROVIDE A COPY OF THE GEOTECHNICAL REPORT AND THE COMPACTION TEST RESULTS TO THE DISTRICT
- PRIOR TO COMPLETION OF THE PROJECT PROVE A PDF AND A 2'x3' PLAN SHEET DRAWING OF RECORD TO THE DISTRICT. THE DRAWING OF RECORD SHOULD INCLUDE A DISTANCE FROM THE NEAR SIDE PROPERTY LINE TO THE SEWER LATERAL MARKER. ALSO INCLUDE ANY CHANGES TO SEWER MAIN LINE SLOPES AND DEPTHS.
- THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN AND TEST THE SEWER LINES AFTER ALL UTILITIES HAVE BEEN INSTALLED BUT PRIOR TO ASPHALT PLACEMENT. THE FOLLOWING TESTS WILL NEED TO BE COMPLETED BY THE CONTRACTOR. MANDREL TEST. AIR TEST AND CLOSED-CIRCUIT CAMERA INSPECTION. CAMERA INSPECTION IF PROVIDED BY THE DISTRICT CAN BE SCHEDULED WITH THE DISTRICT REPRESENTATIVE. TUESDAYS OR THURSDAYS ARE GENERALLY WHEN THE DISTRICT CAN PERFORM THE CAMERA WORK.
- DURING CONSTRUCTION, ALL SEWER LINES WILL NEED TO BE CAPPED OR SEALED TO PROTECT THE SEWER SYSTEM FROM FLOODING OR RAIN EVENTS.

WATER NOTES:
- WATER PIPES REQUIRE POLYSLEEVE AND TRACE WIRE.
- CONSTRUCTION CANNOT GO EAST OF LOT 212 UNTIL CULINARY WATER LINE IS LOOPED AT 1385 WEST ON MOUNTAIN VIEW DRIVE.

TDS NOTES:
- EXISTING AND NEW FIBER CABLE ALONG ROW TO BE PROTECTED AND MAINTAINED.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
UTILITY PLAN

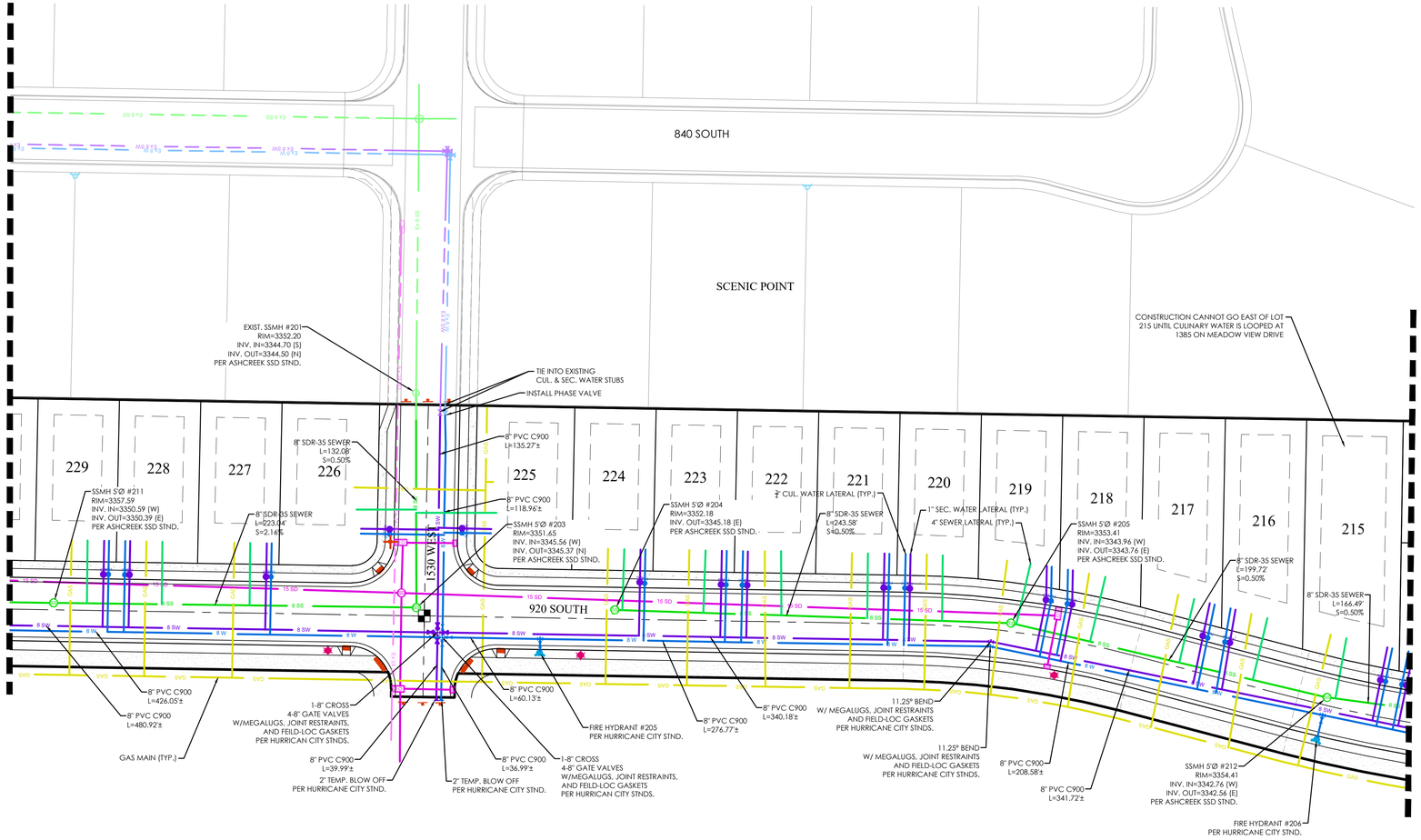
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

UTILITY PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C5		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\\C6 UTILITY PLAN.dwg



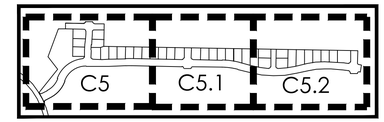
SEWER NOTES:
- SEWER IS TO MEET THE CURRENT ASH CREEK SPECIAL SERVICE DISTRICT (DISTRICT) CONSTRUCTION STANDARD.
- PRIOR TO COMPLETION OF THE PROJECT PROVIDE A COPY OF THE GEOTECHNICAL REPORT AND THE COMPACTION TEST RESULTS TO THE DISTRICT
- PRIOR TO COMPLETION OF THE PROJECT PROVE A PDF AND A 2'x3' PLAN SHEET DRAWING OF RECORD TO THE DISTRICT. THE DRAWING OF RECORD SHOULD INCLUDE A DISTANCE FROM THE NEAR SIDE PROPERTY LINE TO THE SEWER LATERAL MARKER, ALSO INCLUDE ANY CHANGES TO SEWER MAIN LINE SLOPES AND DEPTHS.
- THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN AND TEST THE SEWER LINES AFTER ALL UTILITIES HAVE BEEN INSTALLED BUT PRIOR TO ASPHALT PLACEMENT. THE FOLLOWING TESTS WILL NEED TO BE COMPLETED BY THE CONTRACTOR, MANDREL TEST, AIR TEST AND CLOSED-CIRCUIT CAMERA INSPECTION. CAMERA INSPECTION IF PROVIDED BY THE DISTRICT CAN BE SCHEDULED WITH THE DISTRICT REPRESENTATIVE. TUESDAYS OR THURSDAYS ARE GENERALLY WHEN THE DISTRICT CAN PERFORM THE CAMERA WORK.
- DURING CONSTRUCTION, ALL SEWER LINES WILL NEED TO BE CAPPED OR SEALED TO PROTECT THE SEWER SYSTEM FROM FLOODING OR RAIN EVENTS.

WATER NOTES:
- WATER PIPES REQUIRE POLYSLEEVE AND TRACE WIRE.
- CONSTRUCTION CANNOT GO EAST OF LOT 212 UNTIL CULINARY WATER LINE IS LOOPED AT 1385 WEST ON MOUNTAIN VIEW DRIVE.

TDS NOTES:
- EXISTING AND NEW FIBER CABLE ALONG ROW TO BE PROTECTED AND MAINTAINED.

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
UTILITY PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

UTILITY PLAN

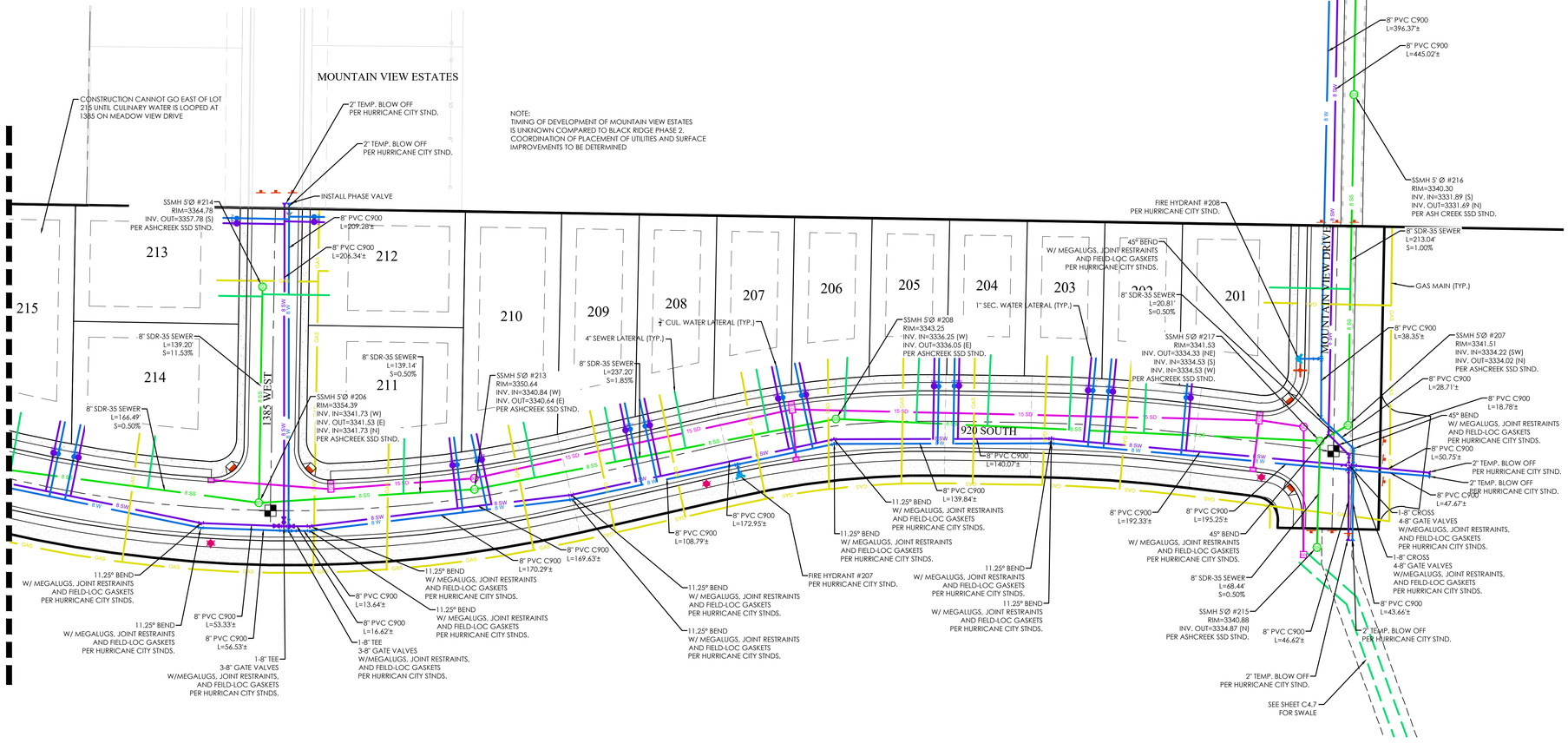
Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C5.1		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\\C5.1 UTILITY PLAN.dwg

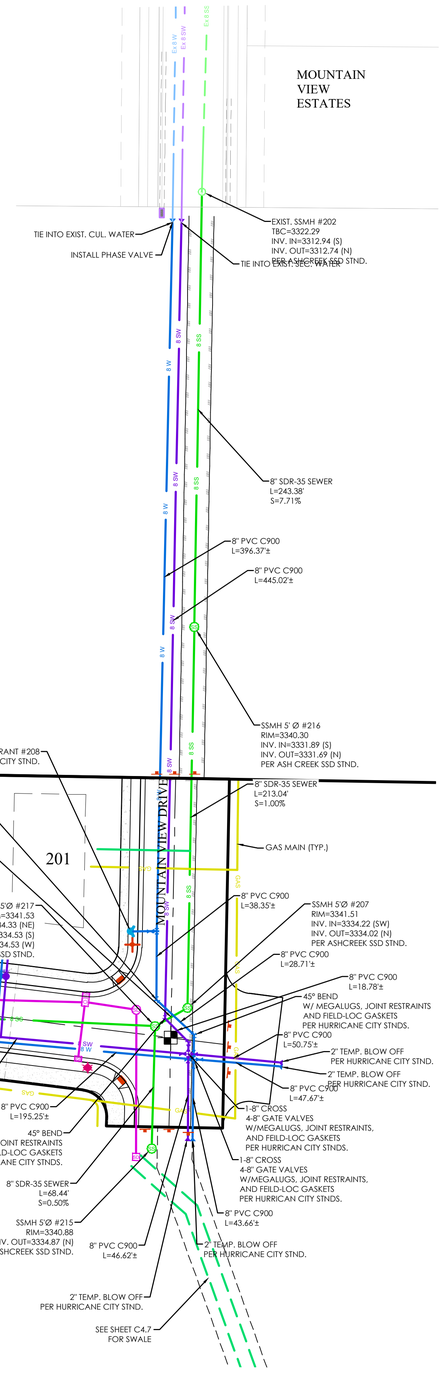
SEWER NOTES:
- SEWER IS TO MEET THE CURRENT ASH CREEK SPECIAL SERVICE DISTRICT (DISTRICT) CONSTRUCTION STANDARD.
- PRIOR TO COMPLETION OF THE PROJECT PROVIDE A COPY OF THE GEOTECHNICAL REPORT AND THE COMPACTION TEST RESULTS TO THE DISTRICT
- PRIOR TO COMPLETION OF THE PROJECT PROVE A PDF AND A 2'x3' PLAN SHEET DRAWING OF RECORD TO THE DISTRICT. THE DRAWING OF RECORD SHOULD INCLUDE A DISTANCE FROM THE NEAR SIDE PROPERTY LINE TO THE SEWER LATERAL MARKER. ALSO INCLUDE ANY CHANGES TO SEWER MAIN LINE SLOPES AND DEPTHS.
- THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN AND TEST THE SEWER LINES AFTER ALL UTILITIES HAVE BEEN INSTALLED BUT PRIOR TO ASPHALT PLACEMENT. THE FOLLOWING TESTS WILL NEED TO BE COMPLETED BY THE CONTRACTOR, MANDREL TEST, AIR TEST AND CLOSED-CIRCUIT CAMERA INSPECTION. CAMERA INSPECTION IF PROVIDED BY THE DISTRICT CAN BE SCHEDULED WITH THE DISTRICT REPRESENTATIVE. TUESDAYS OR THURSDAYS ARE GENERALLY WHEN THE DISTRICT CAN PERFORM THE CAMERA WORK.
- DURING CONSTRUCTION, ALL SEWER LINES WILL NEED TO BE CAPPED OR SEALED TO PROTECT THE SEWER SYSTEM FROM FLOODING OR RAIN EVENTS.

WATER NOTES:
- WATER PIPES REQUIRE POLYSLEEVE AND TRACE WIRE.
- CONSTRUCTION CANNOT GO EAST OF LOT 212 UNTIL CULINARY WATER LINE IS LOOPED AT 1385 WEST ON MOUNTAIN VIEW DRIVE.

TDS NOTES:
- EXISTING AND NEW FIBER CABLE ALONG ROW TO BE PROTECTED AND MAINTAINED.

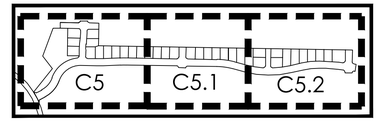


NOTE:
TIMING OF DEVELOPMENT OF MOUNTAIN VIEW ESTATES IS UNKNOWN COMPARED TO BLACK RIDGE PHASE 2. COORDINATION OF PLACEMENT OF UTILITIES AND SURFACE IMPROVEMENTS TO BE DETERMINED



LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- XXXX CONTOUR MAJOR
- XXXX CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) EXIST. CONTOUR MAJOR
- (XXXX) EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

N

S

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
UTILITY PLAN

REVISION BLOCK

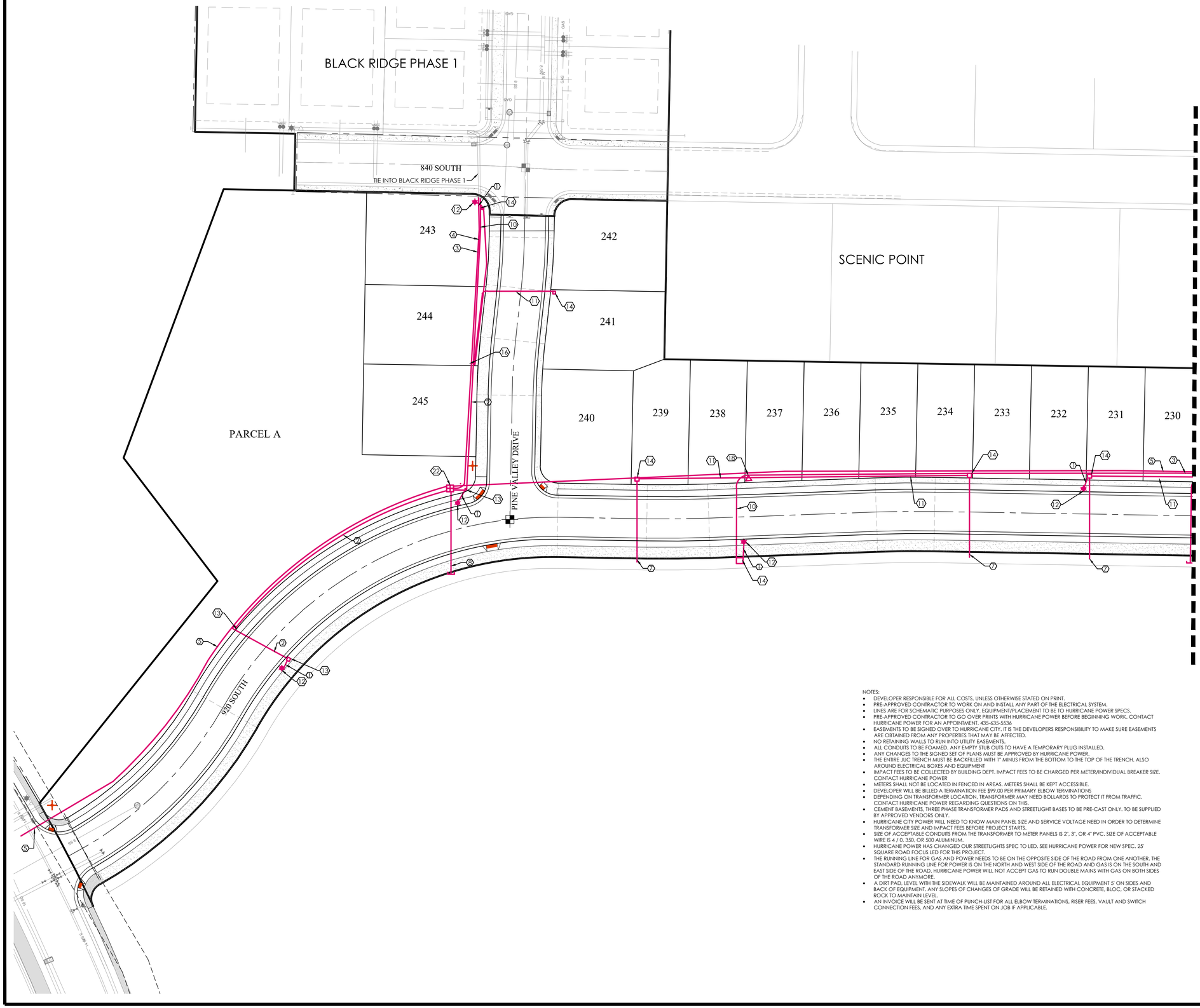
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

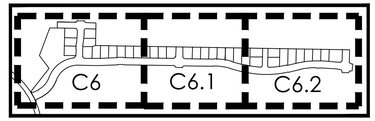
UTILITY PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C5.2		

811 Know what's below. Call 811 before you dig.

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\23-0124\dwg\sheet\UC6.2 UTILITY PLAN.dwg





KEY MAP
N.T.S

POWER LEGEND

1. INSTALL 1" PVC WITH #10 COPPER
2. INSTALL 2" PVC WITH 1/0 TRIPLEX
3. INSTALL 2 1/2" PVC WITH 1/0 15 KV 1 PHASE
4. INSTALL 4" PVC WITH 4/0 15 KV 3 PHASE
5. INSTALL 6" PVC WITH 750 MCM 15 KV
6. INSTALL 2 1/2" PVC FOR FUTURE
7. INSTALL 3" PVC FOR FUTURE
8. INSTALL 4" PVC FOR FUTURE
9. INSTALL 6" PVC FOR FUTURE
10. INSTALL 3" PVC WITH 350 MCM TRIPLEX
11. INSTALL 3" PVC WITH 500 MCM TRIPLEX
12. INSTALL 15' DECORATIVE LED STREETLIGHT (BLACK)
13. INSTALL STREETLIGHT BOX
14. INSTALL SECONDARY BOX
15. INSTALL 37.5 KVA TRANSFORMER
16. INSTALL 50 KVA TRANSFORMER
17. INSTALL 75 KVA TRANSFORMER
18. INSTALL 100 KVA TRANSFORMER
19. CONNECT TO EXISTING 2 1/2" PVC STUB
20. CONNECT TO EXISTING 4" PVC STUB
21. INSTALL 3 PHASE VAULT
22. INSTALL NEW PHM-9
23. INSTALL NEW PHM-11

NOTES:

- DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
- PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
- LINES ARE FOR SCHEMATIC PURPOSES ONLY. EQUIPMENT/PLACEMENT TO BE TO HURRICANE POWER SPECS.
- PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER FOR AN APPOINTMENT. 435-635-5536
- EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
- NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
- ALL CONDUITS TO BE FOAMED. ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
- ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
- THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF THE TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT
- IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER SIZE. CONTACT HURRICANE POWER
- METERS SHALL NOT BE LOCATED IN FENCED IN AREAS. METERS SHALL BE KEPT ACCESSIBLE.
- DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 PER PRIMARY ELBOW TERMINATIONS
- DEPENDING ON TRANSFORMER LOCATION, TRANSFORMER MAY NEED BOLLARDS TO PROTECT IT FROM TRAFFIC. CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.
- CEMENT BASEMENTS, THREE PHASE TRANSFORMER PADS AND STREETLIGHT BASES TO BE PRE-CAST ONLY. TO BE SUPPLIED BY APPROVED VENDORS ONLY.
- HURRICANE CITY POWER WILL NEED TO KNOW MAIN PANEL SIZE AND SERVICE VOLTAGE NEED IN ORDER TO DETERMINE TRANSFORMER SIZE AND IMPACT FEES BEFORE PROJECT STARTS.
- SIZE OF ACCEPTABLE CONDUITS FROM THE TRANSFORMER TO METER PANELS IS 2", 3", OR 4" PVC. SIZE OF ACCEPTABLE WIRE IS 4 / 0, 350, OR 500 ALUMINUM.
- HURRICANE POWER HAS CHANGED OUR STREETLIGHTS SPEC TO LED. SEE HURRICANE POWER FOR NEW SPEC. 25' SQUARE ROAD FOCUS LED FOR THIS PROJECT.
- THE RUNNING LINE FOR GAS AND POWER NEEDS TO BE ON THE OPPOSITE SIDE OF THE ROAD FROM ONE ANOTHER. THE STANDARD RUNNING LINE FOR POWER IS ON THE NORTH AND WEST SIDE OF THE ROAD AND GAS IS ON THE SOUTH AND EAST SIDE OF THE ROAD. HURRICANE POWER WILL NOT ACCEPT GAS TO RUN DOUBLE MAINS WITH GAS ON BOTH SIDES OF THE ROAD ANYMORE.
- A DIRT PAD, LEVEL WITH THE SIDEWALK WILL BE MAINTAINED AROUND ALL ELECTRICAL EQUIPMENT 5' ON SIDES AND BACK OF EQUIPMENT. ANY SLOPES OF CHANGES OF GRADE WILL BE RETAINED WITH CONCRETE, BLOC, OR STACKED ROCK TO MAINTAIN LEVEL.
- AN INVOICE WILL BE SENT AT TIME OF PUNCH-LIST FOR ALL ELBOW TERMINATIONS, RISER FEES, VAULT AND SWITCH CONNECTION FEES, AND ANY EXTRA TIME SPENT ON JOB IF APPLICABLE.

N

S

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Know what's below.
Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY, UT
ELECTRICITY PLAN

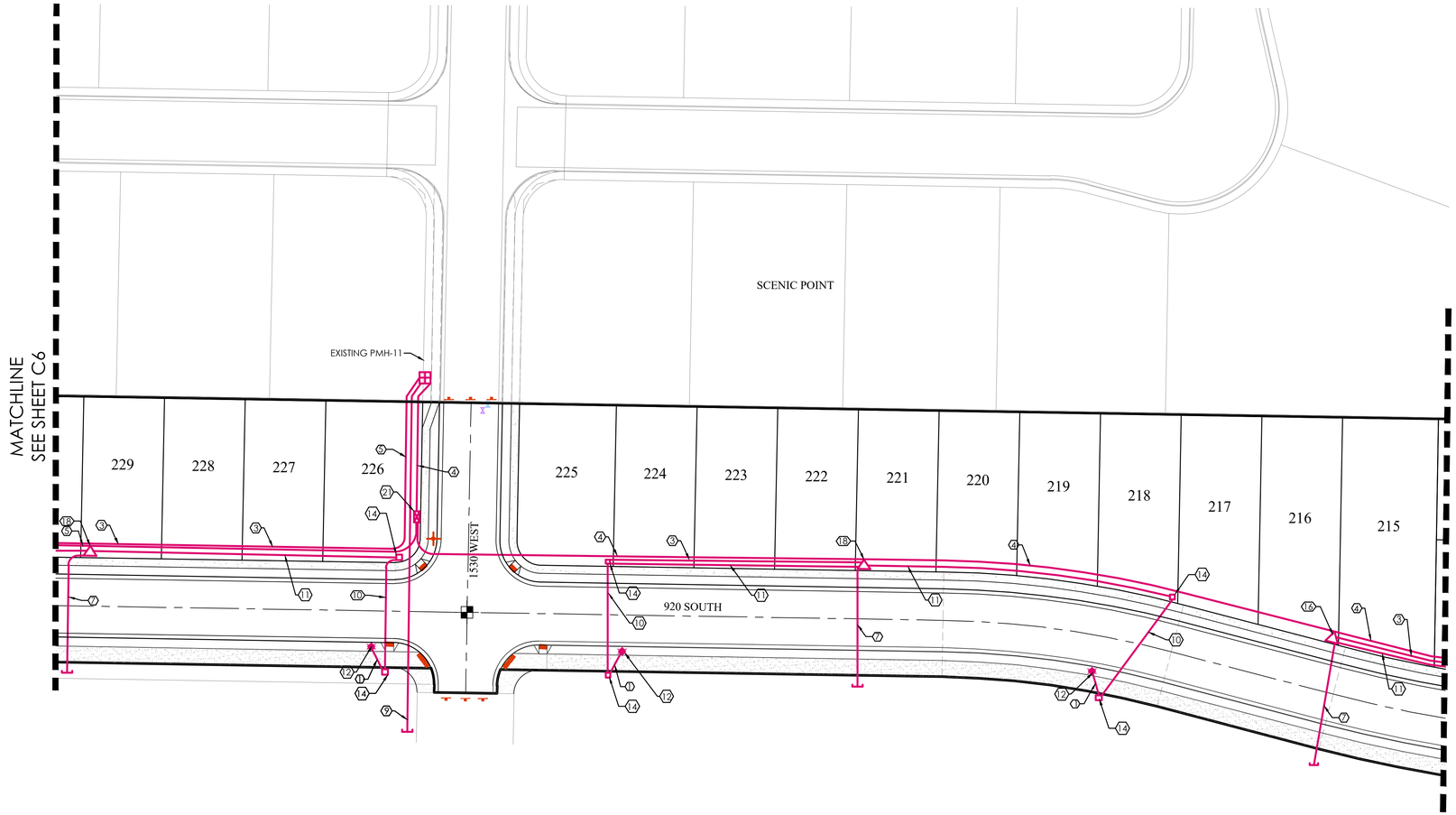
REVISION BLOCK

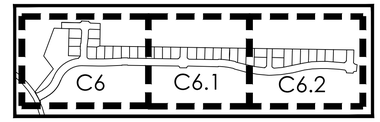
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

ELECTRICITY PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C6		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124.dwg\sheets\C7 ELECTRICITY PLAN.dwg





KEY MAP
N.T.S

POWER LEGEND

1. INSTALL 1" PVC WITH #10 COPPER
2. INSTALL 2" PVC WITH 1/0 TRIPLEX
3. INSTALL 2 1/2" PVC WITH 1/0 15 KV 1 PHASE
4. INSTALL 4" PVC WITH 4/0 15 KV 3 PHASE
5. INSTALL 6" PVC WITH 750 MCM 15 KV
6. INSTALL 2 1/2" PVC FOR FUTURE
7. INSTALL 3" PVC FOR FUTURE
8. INSTALL 4" PVC FOR FUTURE
9. INSTALL 6" PVC FOR FUTURE
10. INSTALL 3" PVC WITH 350 MCM TRIPLEX
11. INSTALL 3" PVC WITH 500 MCM TRIPLEX
12. INSTALL 15' DECORATIVE LED STREETLIGHT (BLACK)
13. INSTALL STREETLIGHT BOX
14. INSTALL SECONDARY BOX
15. INSTALL 37.5 KVA TRANSFORMER
16. INSTALL 50 KVA TRANSFORMER
17. INSTALL 75 KVA TRANSFORMER
18. INSTALL 100 KVA TRANSFORMER
19. CONNECT TO EXISTING 2 1/2" PVC STUB
20. CONNECT TO EXISTING 4" PVC STUB
21. INSTALL 3 PHASE VAULT
22. INSTALL NEW PHM-9
23. INSTALL NEW PHM-11

NOTES:

- DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
- PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
- LINES ARE FOR SCHEMATIC PURPOSES ONLY. EQUIPMENT/PLACEMENT TO BE TO HURRICANE POWER SPECS.
- PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER FOR AN APPOINTMENT. 435-635-5536
- EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
- NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
- ALL CONDUITS TO BE FOAMED, ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
- ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
- THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF THE TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT
- IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER SIZE. CONTACT HURRICANE POWER
- METERS SHALL NOT BE LOCATED IN FENCED IN AREAS. METERS SHALL BE KEPT ACCESSIBLE.
- DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 PER PRIMARY ELBOW TERMINATIONS
- DEPENDING ON TRANSFORMER LOCATION, TRANSFORMER MAY NEED BOLLARDS TO PROTECT IT FROM TRAFFIC. CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.
- CEMENT BASEMENTS, THREE PHASE TRANSFORMER PADS AND STREETLIGHT BASES TO BE PRE-CAST ONLY. TO BE SUPPLIED BY APPROVED VENDORS ONLY.
- HURRICANE CITY POWER WILL NEED TO KNOW MAIN PANEL SIZE AND SERVICE VOLTAGE NEED IN ORDER TO DETERMINE TRANSFORMER SIZE AND IMPACT FEES BEFORE PROJECT STARTS.
- SIZE OF ACCEPTABLE CONDUITS FROM THE TRANSFORMER TO METER PANELS IS 2", 3", OR 4" PVC. SIZE OF ACCEPTABLE WIRE IS 4 / 0, 350, OR 500 ALUMINUM.
- HURRICANE POWER HAS CHANGED OUR STREETLIGHTS SPEC TO LED. SEE HURRICANE POWER FOR NEW SPEC. 25' SQUARE ROAD FOCUS LED FOR THIS PROJECT.
- THE RUNNING LINE FOR GAS AND POWER NEEDS TO BE ON THE OPPOSITE SIDE OF THE ROAD FROM ONE ANOTHER. THE STANDARD RUNNING LINE FOR POWER IS ON THE NORTH AND WEST SIDE OF THE ROAD AND GAS IS ON THE SOUTH AND EAST SIDE OF THE ROAD. HURRICANE POWER WILL NOT ACCEPT GAS TO RUN DOUBLE MAINS WITH GAS ON BOTH SIDES OF THE ROAD ANYMORE.
- A DIRT PAD, LEVEL WITH THE SIDEWALK WILL BE MAINTAINED AROUND ALL ELECTRICAL EQUIPMENT 5' ON SIDES AND BACK OF EQUIPMENT, ANY SLOPES OF CHANGES OF GRADE WILL BE RETAINED WITH CONCRETE, BLOC, OR STACKED ROCK TO MAINTAIN LEVEL.
- AN INVOICE WILL BE SENT AT TIME OF PUNCH-LIST FOR ALL ELBOW TERMINATIONS, RISER FEES, VAULT AND SWITCH CONNECTION FEES, AND ANY EXTRA TIME SPENT ON JOB IF APPLICABLE.

N

S

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY, UT

ELECTRICITY PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

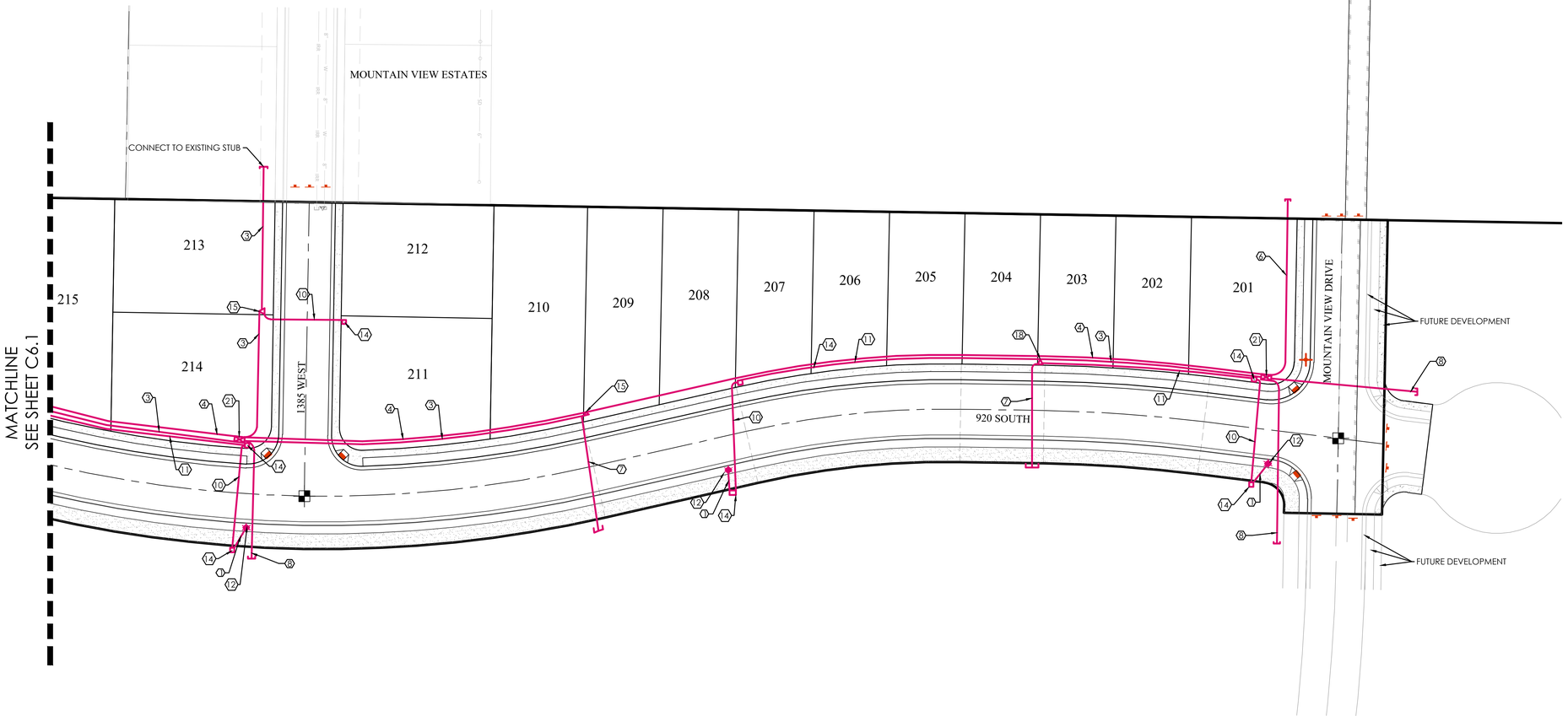
ELECTRICITY PLAN

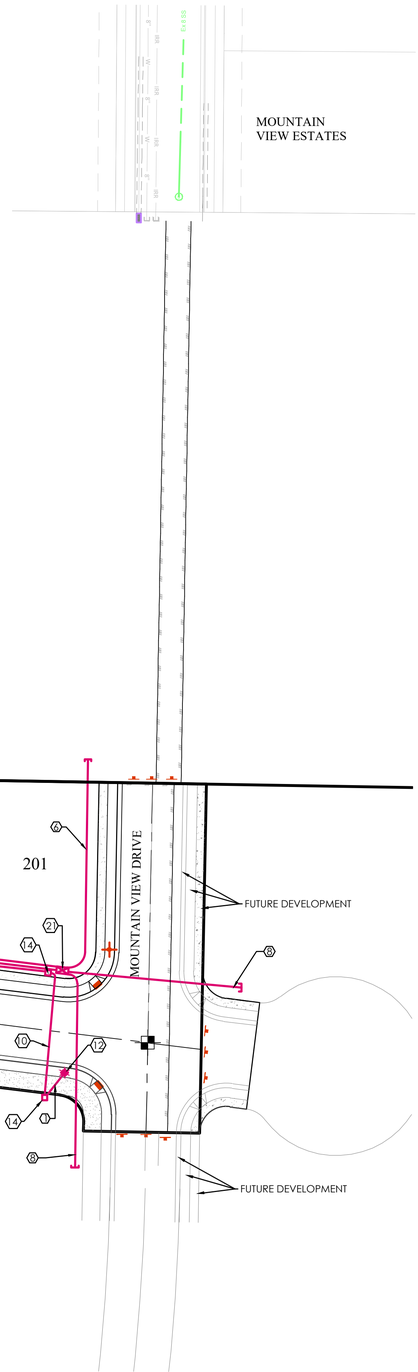
Scale: 1"=40'	Drawn: DCJ
Date: 11/7/23	Job #: 23-0124
Sheet: C6.1	

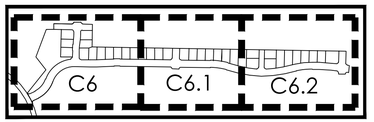
Z:\...2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\Dwg\sheets\C7.1 ELECTRICITY PLAN.dwg

NOTES:

- DEVELOPER RESPONSIBLE FOR ALL COSTS, UNLESS OTHERWISE STATED ON PRINT.
- PRE-APPROVED CONTRACTOR TO WORK ON AND INSTALL ANY PART OF THE ELECTRICAL SYSTEM.
- LINES ARE FOR SCHEMATIC PURPOSES ONLY. EQUIPMENT/PLACEMENT TO BE TO HURRICANE POWER SPECS.
- PRE-APPROVED CONTRACTOR TO GO OVER PRINTS WITH HURRICANE POWER BEFORE BEGINNING WORK. CONTACT HURRICANE POWER FOR AN APPOINTMENT. 435-635-5536
- EASEMENTS TO BE SIGNED OVER TO HURRICANE CITY. IT IS THE DEVELOPERS RESPONSIBILITY TO MAKE SURE EASEMENTS ARE OBTAINED FROM ANY PROPERTIES THAT MAY BE AFFECTED.
- NO RETAINING WALLS TO RUN INTO UTILITY EASEMENTS.
- ALL CONDUITS TO BE FOAMED, ANY EMPTY STUB OUTS TO HAVE A TEMPORARY PLUG INSTALLED.
- ANY CHANGES TO THE SIGNED SET OF PLANS MUST BE APPROVED BY HURRICANE POWER.
- THE ENTIRE JUC TRENCH MUST BE BACKFILLED WITH 1" MINUS FROM THE BOTTOM TO THE TOP OF THE TRENCH. ALSO AROUND ELECTRICAL BOXES AND EQUIPMENT
- IMPACT FEES TO BE COLLECTED BY BUILDING DEPT. IMPACT FEES TO BE CHARGED PER METER/INDIVIDUAL BREAKER SIZE. CONTACT HURRICANE POWER
- METERS SHALL NOT BE LOCATED IN FENCED IN AREAS. METERS SHALL BE KEPT ACCESSIBLE.
- DEVELOPER WILL BE BILLED A TERMINATION FEE $99.00 PER PRIMARY ELBOW TERMINATIONS
- DEPENDING ON TRANSFORMER LOCATION, TRANSFORMER MAY NEED BOLLARDS TO PROTECT IT FROM TRAFFIC. CONTACT HURRICANE POWER REGARDING QUESTIONS ON THIS.
- CEMENT BASEMENTS, THREE PHASE TRANSFORMER PADS AND STREETLIGHT BASES TO BE PRE-CAST ONLY. TO BE SUPPLIED BY APPROVED VENDORS ONLY.
- HURRICANE CITY POWER WILL NEED TO KNOW MAIN PANEL SIZE AND SERVICE VOLTAGE NEED IN ORDER TO DETERMINE TRANSFORMER SIZE AND IMPACT FEES BEFORE PROJECT STARTS.
- SIZE OF ACCEPTABLE CONDUITS FROM THE TRANSFORMER TO METER PANELS IS 2", 3", OR 4" PVC. SIZE OF ACCEPTABLE WIRE IS 4 / 0, 350, OR 500 ALUMINUM.
- HURRICANE POWER HAS CHANGED OUR STREETLIGHTS SPEC TO LED. SEE HURRICANE POWER FOR NEW SPEC. 25' SQUARE ROAD FOCUS LED FOR THIS PROJECT.
- THE RUNNING LINE FOR GAS AND POWER NEEDS TO BE ON THE OPPOSITE SIDE OF THE ROAD FROM ONE ANOTHER. THE STANDARD RUNNING LINE FOR POWER IS ON THE NORTH AND WEST SIDE OF THE ROAD AND GAS IS ON THE SOUTH AND EAST SIDE OF THE ROAD. HURRICANE POWER WILL NOT ACCEPT GAS TO RUN DOUBLE MAINS WITH GAS ON BOTH SIDES OF THE ROAD ANYMORE.
- A DIRT PAD, LEVEL WITH THE SIDEWALK WILL BE MAINTAINED AROUND ALL ELECTRICAL EQUIPMENT 5' ON SIDES AND BACK OF EQUIPMENT. ANY SLOPES OF CHANGES OF GRADE WILL BE RETAINED WITH CONCRETE, BLOC, OR STACKED ROCK TO MAINTAIN LEVEL.
- AN INVOICE WILL BE SENT AT TIME OF PUNCH-LIST FOR ALL ELBOW TERMINATIONS, RISER FEES, VAULT AND SWITCH CONNECTION FEES, AND ANY EXTRA TIME SPENT ON JOB IF APPLICABLE.





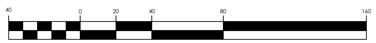


KEY MAP
N.T.S

POWER LEGEND

1. INSTALL 1" PVC WITH #10 COPPER
2. INSTALL 2" PVC WITH 1/0 TRIPLEX
3. INSTALL 2 1/2" PVC WITH 1/0 15 KV 1 PHASE
4. INSTALL 4" PVC WITH 4/0 15 KV 3 PHASE
5. INSTALL 6" PVC WITH 750 MCM 15 KV
6. INSTALL 2 1/2" PVC FOR FUTURE
7. INSTALL 3" PVC FOR FUTURE
8. INSTALL 4" PVC FOR FUTURE
9. INSTALL 6" PVC FOR FUTURE
10. INSTALL 3" PVC WITH 350 MCM TRIPLEX
11. INSTALL 3" PVC WITH 500 MCM TRIPLEX
12. INSTALL 15' DECORATIVE LED STREETLIGHT (BLACK)
13. INSTALL STREETLIGHT BOX
14. INSTALL SECONDARY BOX
15. INSTALL 37.5 KVA TRANSFORMER
16. INSTALL 50 KVA TRANSFORMER
17. INSTALL 75 KVA TRANSFORMER
18. INSTALL 100 KVA TRANSFORMER
19. CONNECT TO EXISTING 2 1/2" PVC STUB
20. CONNECT TO EXISTING 4" PVC STUB
21. INSTALL 3 PHASE VAULT
22. INSTALL NEW PHM-9
23. INSTALL NEW PHM-11

GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

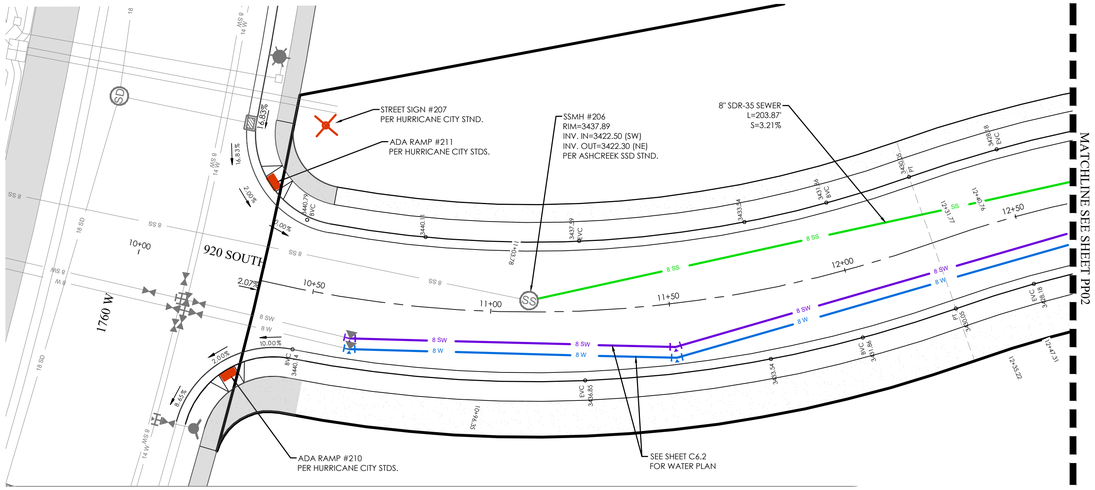
BLACK RIDGE PHASE 2
HURRICANE CITY,UT
ELECTRICITY PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

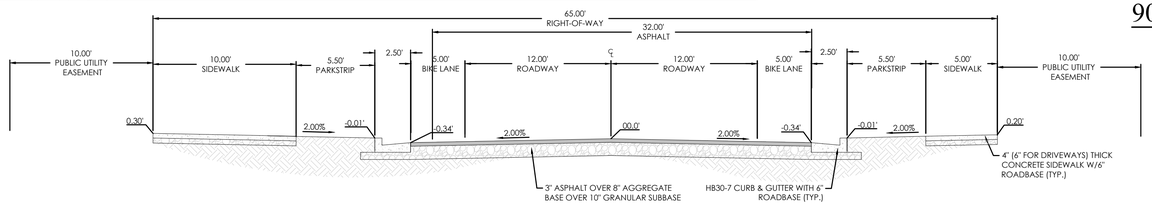
ELECTRICITY PLAN

Scale:	1"=40'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	C6.2		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\C7.2 ELECTRICITY PLAN.dwg

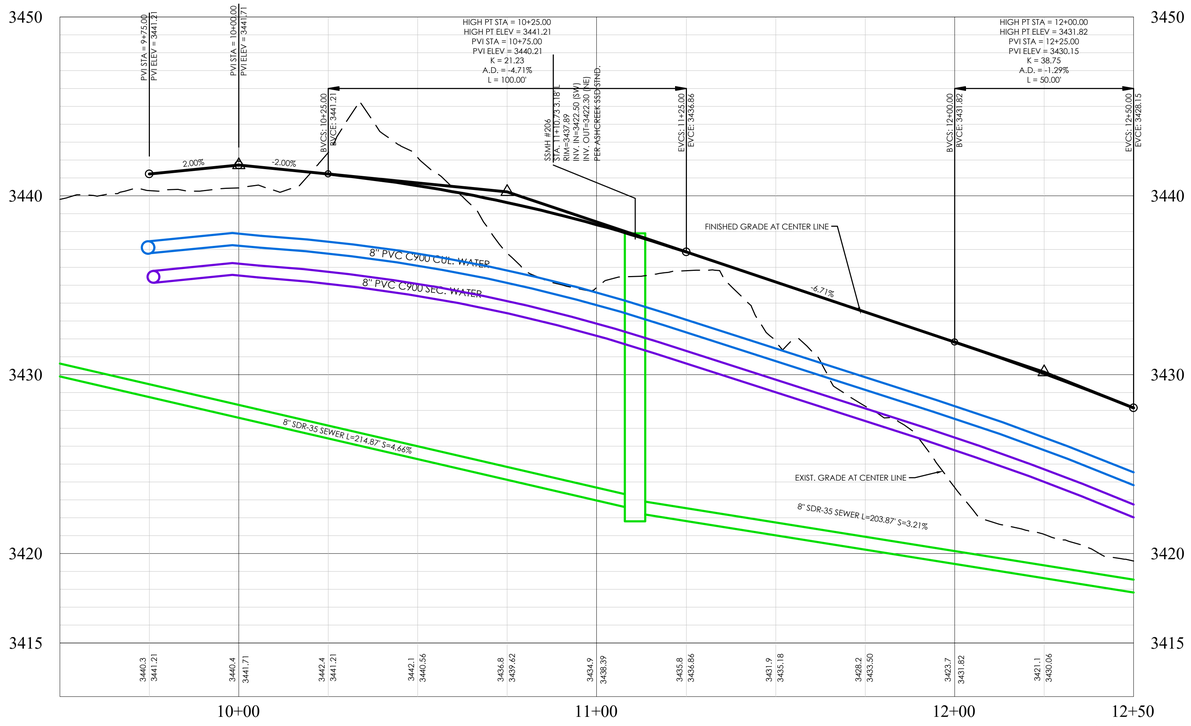


900 SOUTH PLAN



65' MINOR COLLECTOR

N.T.S. 900 SOUTH

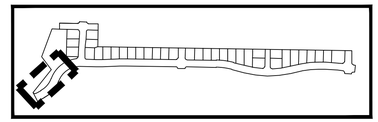


VERTICAL SCALE 1:5

920 SOUTH PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
900 SOUTH

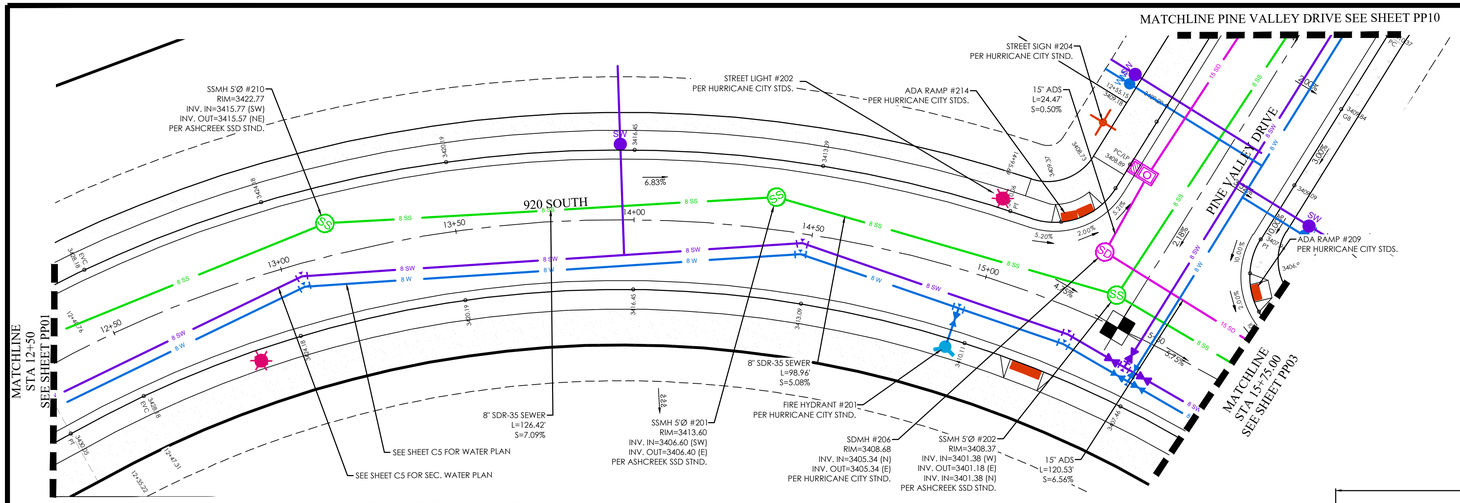
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP01		

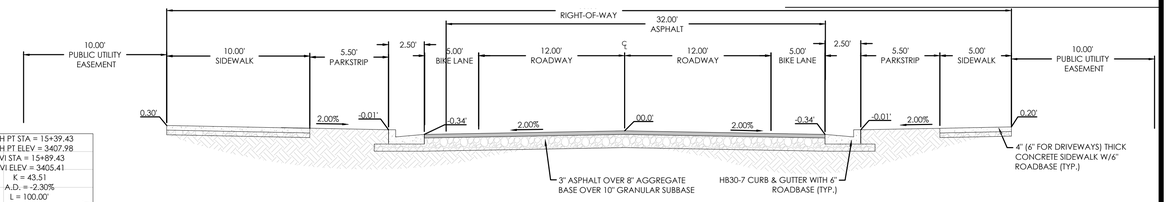
Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\[Sheet A.1 Plan and profile.dwg]



900 SOUTH PLAN

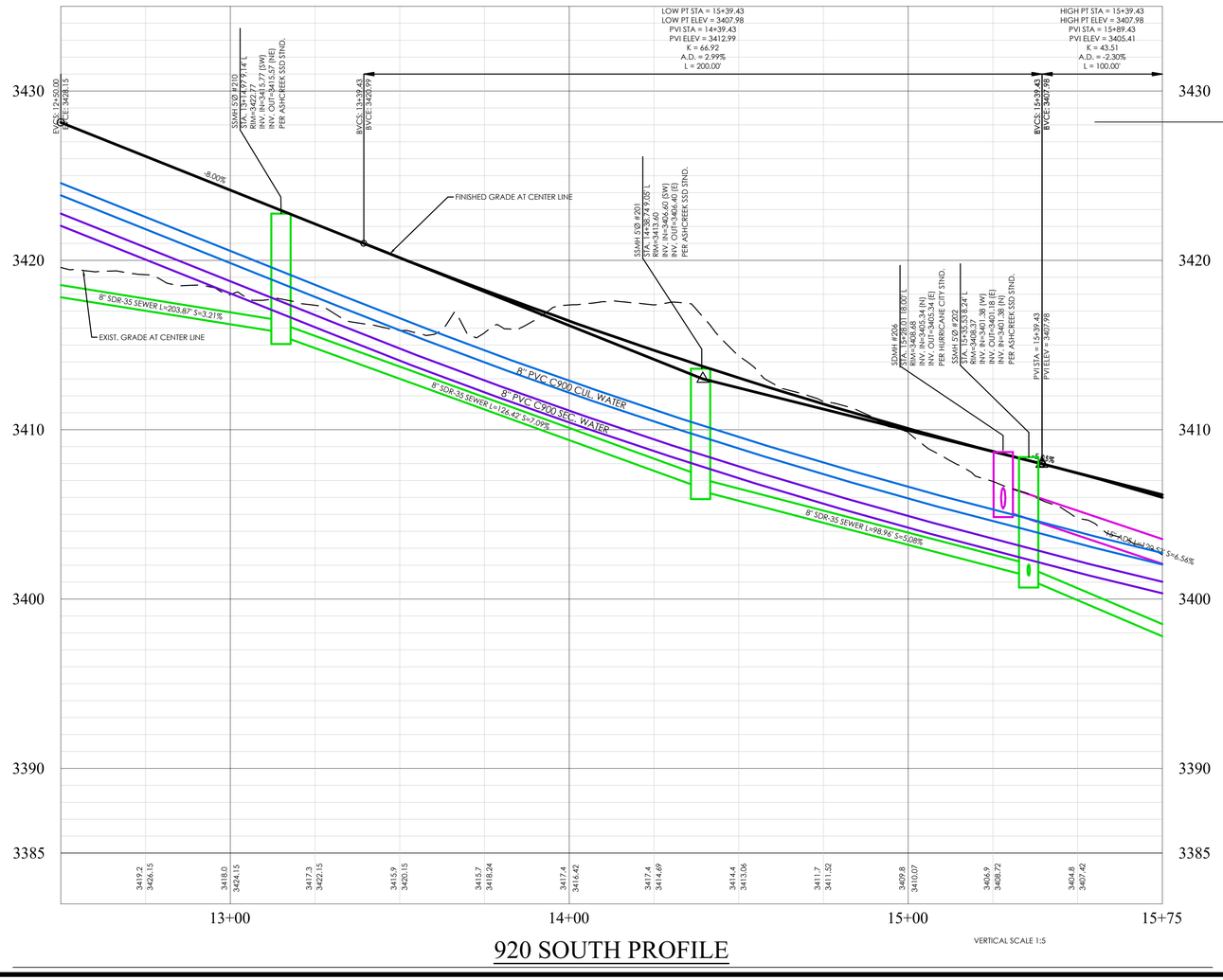
LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



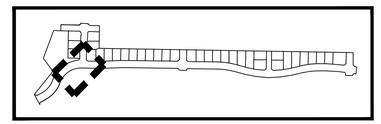
65' MINOR COLLECTOR

N.T.S. 900 SOUTH



VERTICAL SCALE 1:5

920 SOUTH PROFILE



KEY MAP

N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

900 SOUTH

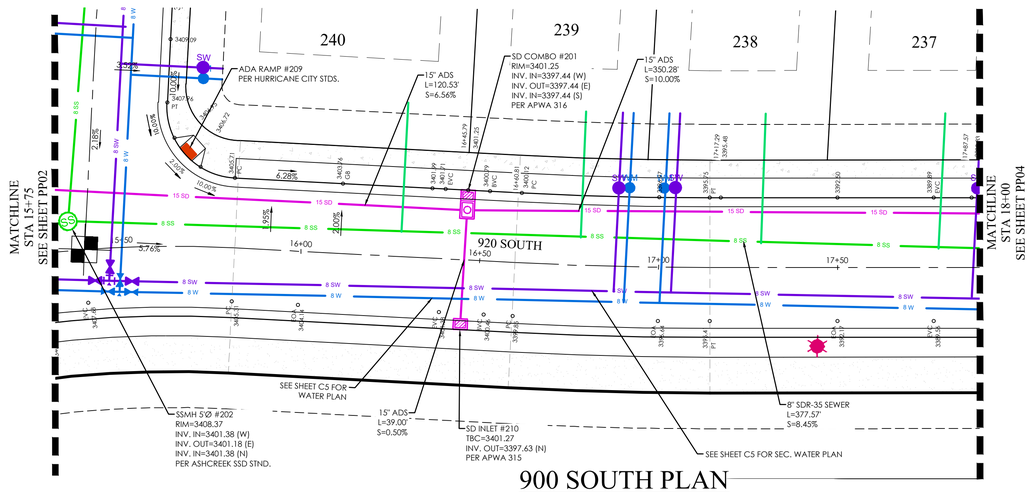
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

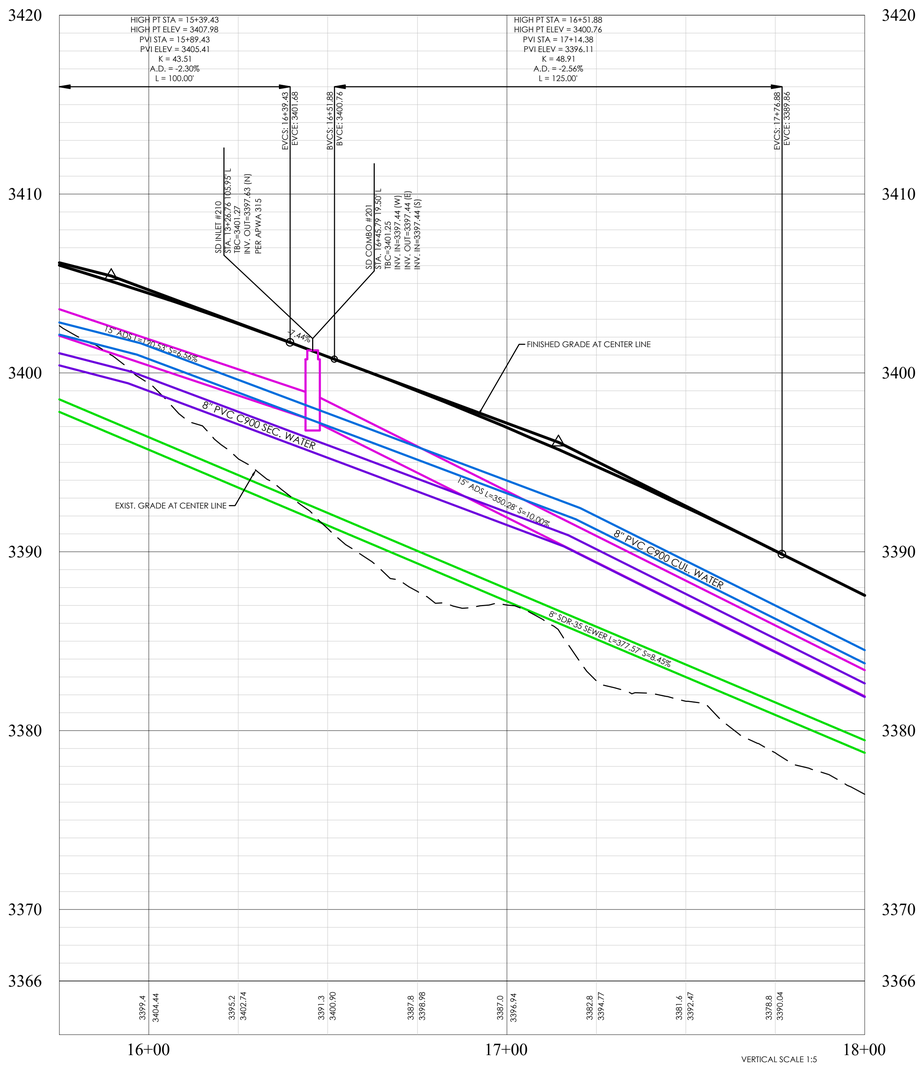
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP02		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\Sheet A-2 Plan and profile.dwg



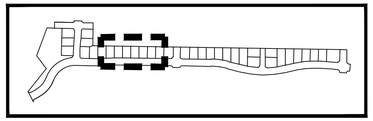
900 SOUTH PLAN



920 SOUTH PROFILE

LEGEND

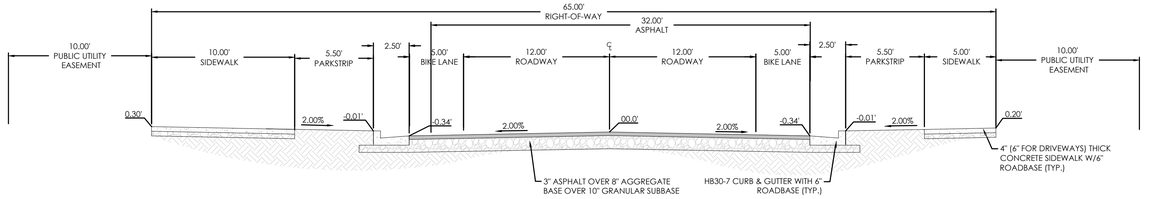
	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
15 SD	15" STORM DRAIN
8 SS	8" SANITARY SEWER
8 W	8" CULINARY WATER
8 SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
Ex SD	EXIST. STORM DRAIN
Ex SS	EXIST. SANITARY SEWER
Ex W	EXIST. CULINARY WATER
x x x	EXIST. FENCE
(XXXX)	EXIST. CONTOUR MAJOR
(XXXX)	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	5' SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
o XXXX.XX	SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88



65' MINOR COLLECTOR
N.T.S. 900 SOUTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
900 SOUTH

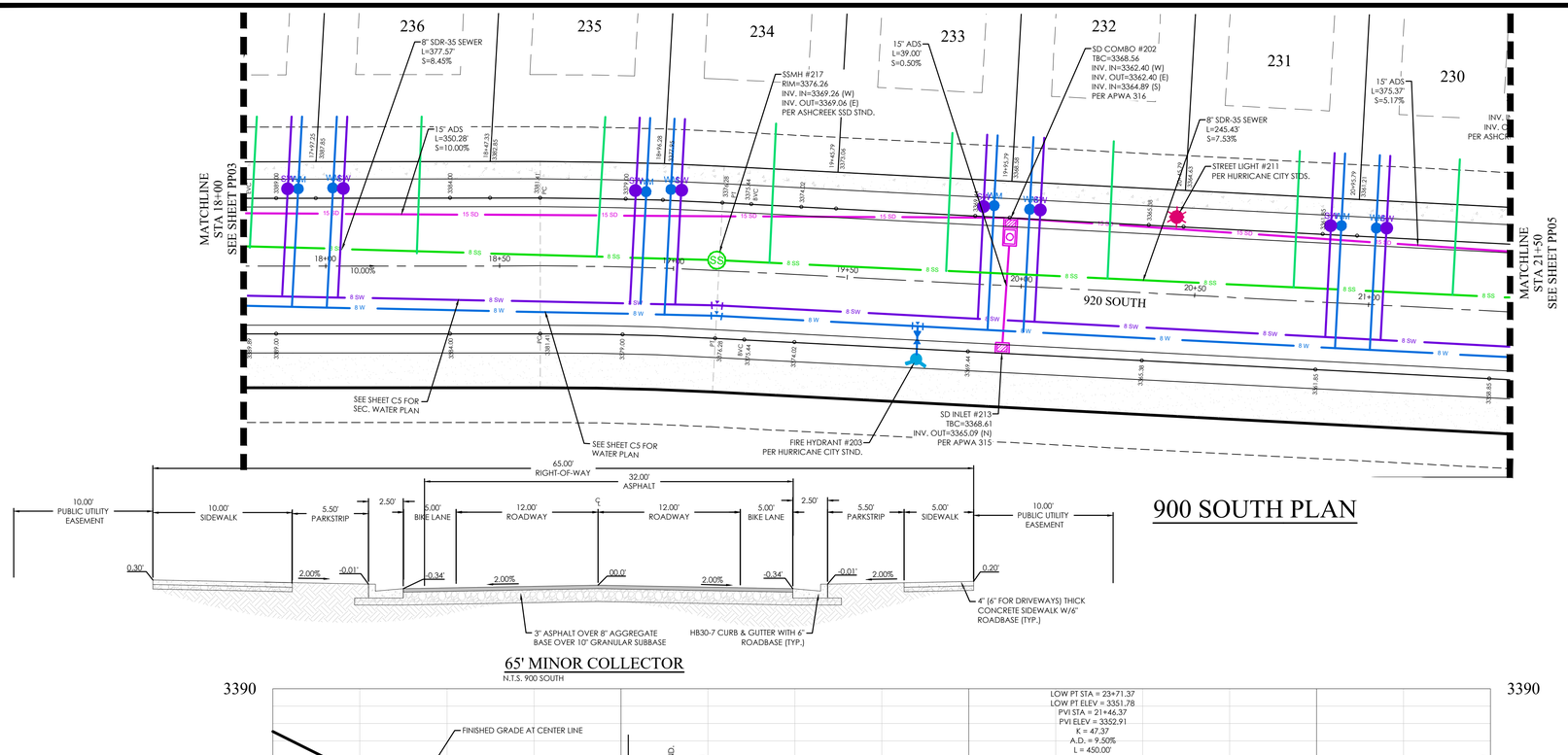
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP03		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\Design\Sheet\Sheet A 3 Plan and profile.dwg



900 SOUTH PLAN

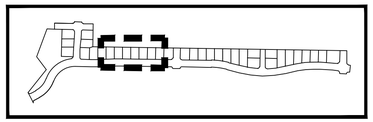
65' MINOR COLLECTOR

N.T.S. 900 SOUTH

920 SOUTH PROFILE

LEGEND

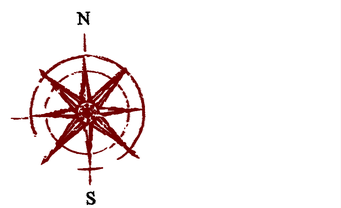
- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- x — x — x — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- S — 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88



811 Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

900 SOUTH

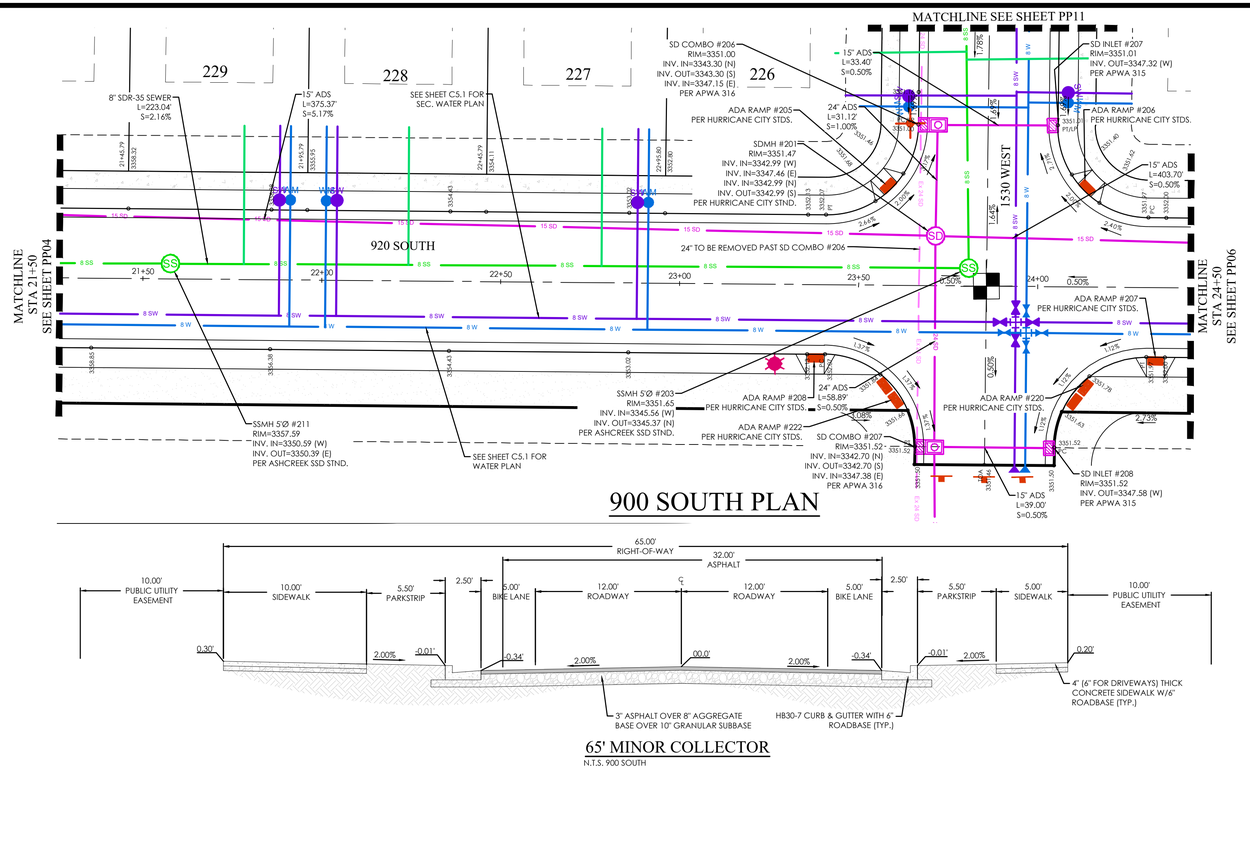
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP04		

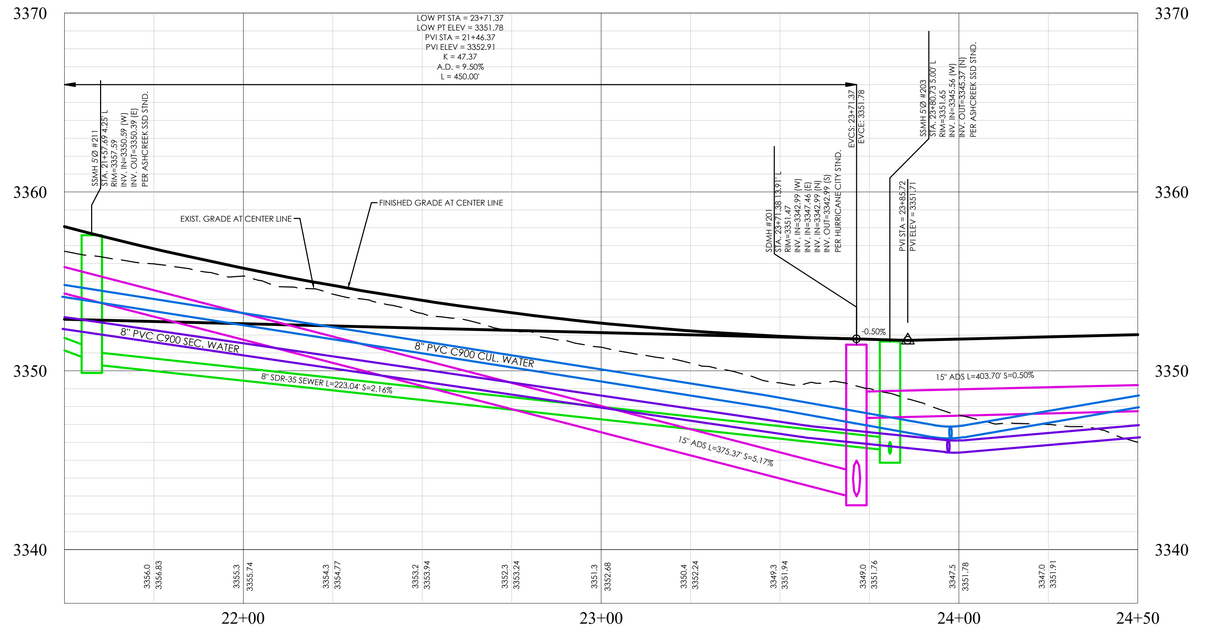
Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheets\PP04 STREET A.dwg



900 SOUTH PLAN

65' MINOR COLLECTOR

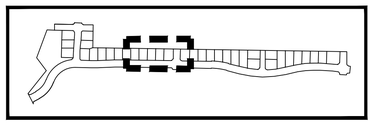
N.T.S. 900 SOUTH



920 SOUTH PROFILE

LEGEND

	BOUNDARY
	ROW
	CENTERLINE
	LOT LINE
	EASEMENT
15 SD	15" STORM DRAIN
8 SS	8" SANITARY SEWER
8 W	8" CULINARY WATER
8 SW	8" SECONDARY WATER
XXXX	CONTOUR MAJOR
XXXX	CONTOUR MINOR
Ex SD	EXIST. STORM DRAIN
Ex SS	EXIST. SANITARY SEWER
Ex W	EXIST. CULINARY WATER
x x x	EXIST. FENCE
(XXXX)	EXIST. CONTOUR MAJOR
(XXXX)	EXIST. CONTOUR MINOR
	SIGN
	STREET LIGHT
	SD MH, INLET, AND COMBO
	5' SEWER MANHOLE
	CULINARY VALVE, TEE & BEND
	SECONDARY VALVE, TEE & BEND
	WATER BLOW-OFF
	FIRE HYDRANT
	STREET MONUMENT (TO BE SET)
	EXIST. STREET MONUMENT
	EXIST. SD INLET & MH
	EXIST. SEWER MH
	EXIST. VALVE, TEE, & BEND
	EXIST. FIRE HYDRANT
o XXXX.XX	SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
900 SOUTH

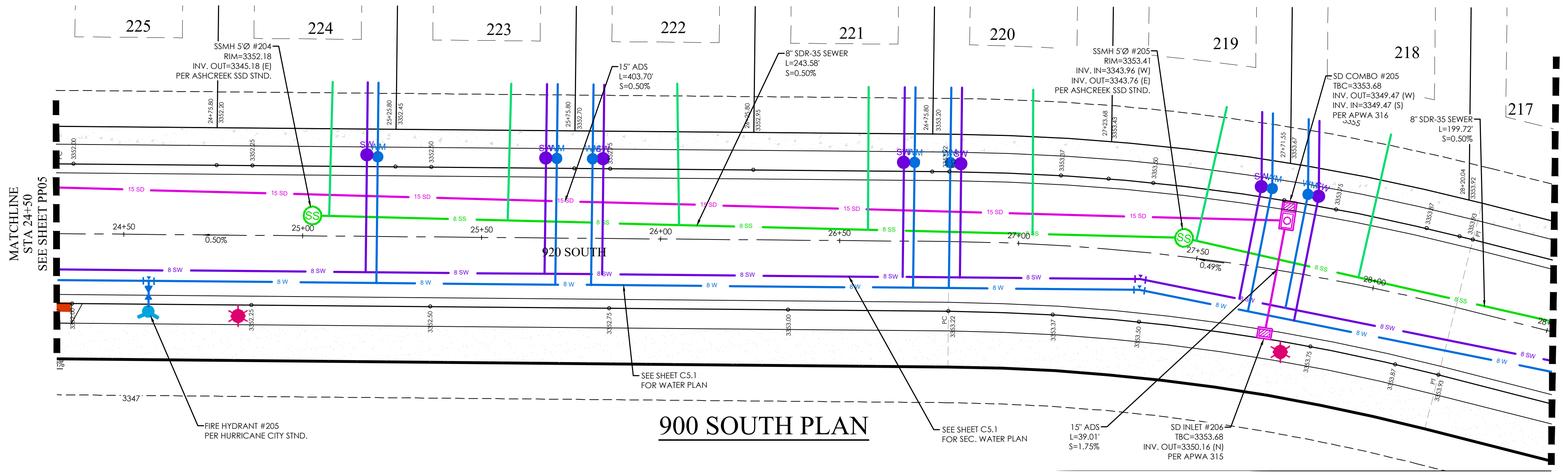
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

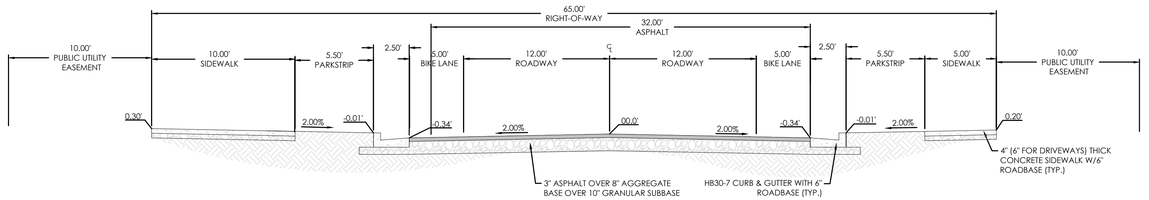
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP05		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\Sheet A.4Plan and profile.dwg

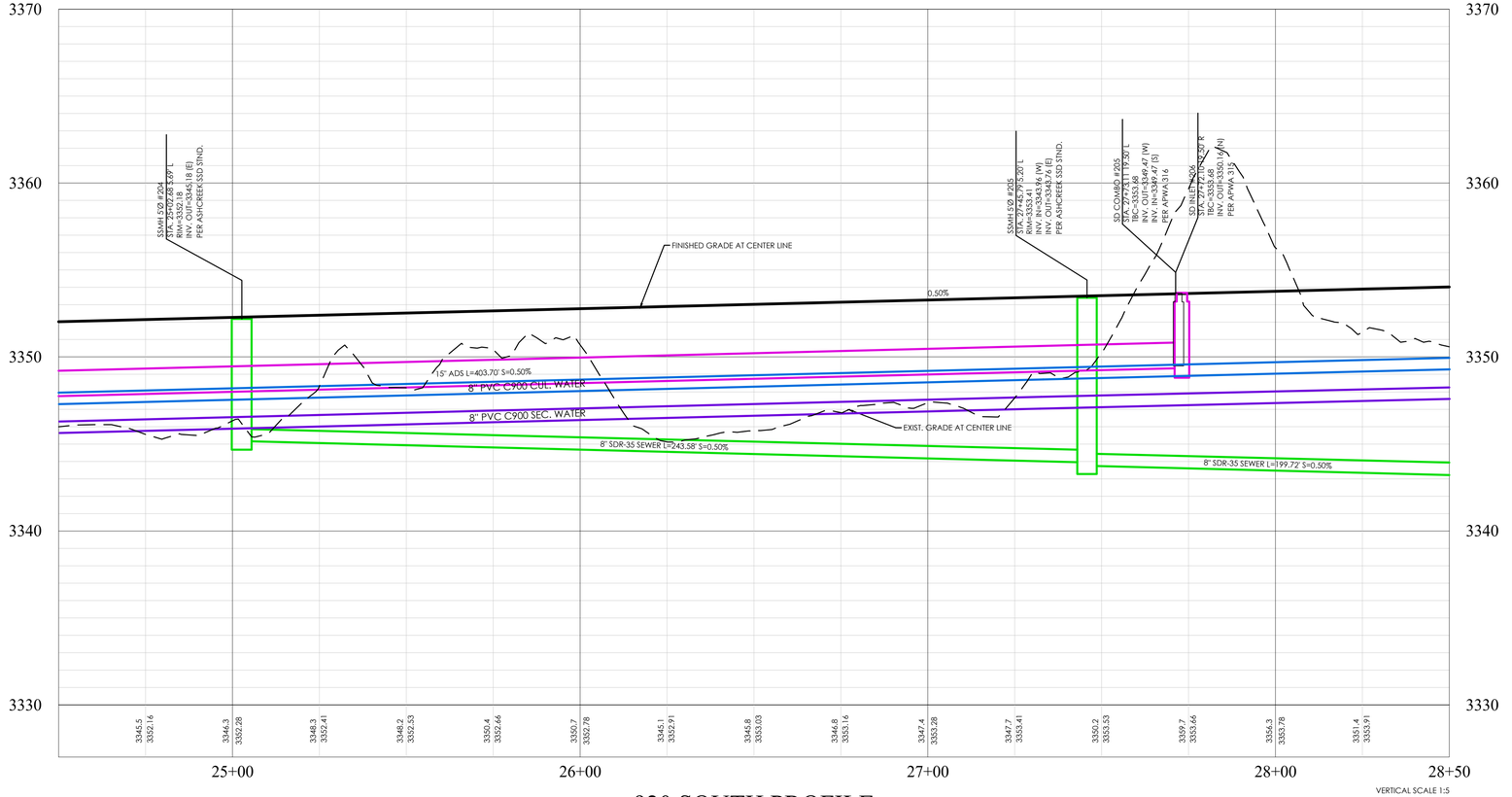


900 SOUTH PLAN



65' MINOR COLLECTOR

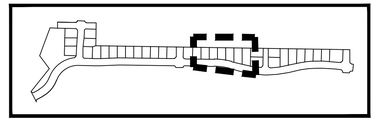
N.T.S. 900 SOUTH



920 SOUTH PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP

N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

900 SOUTH

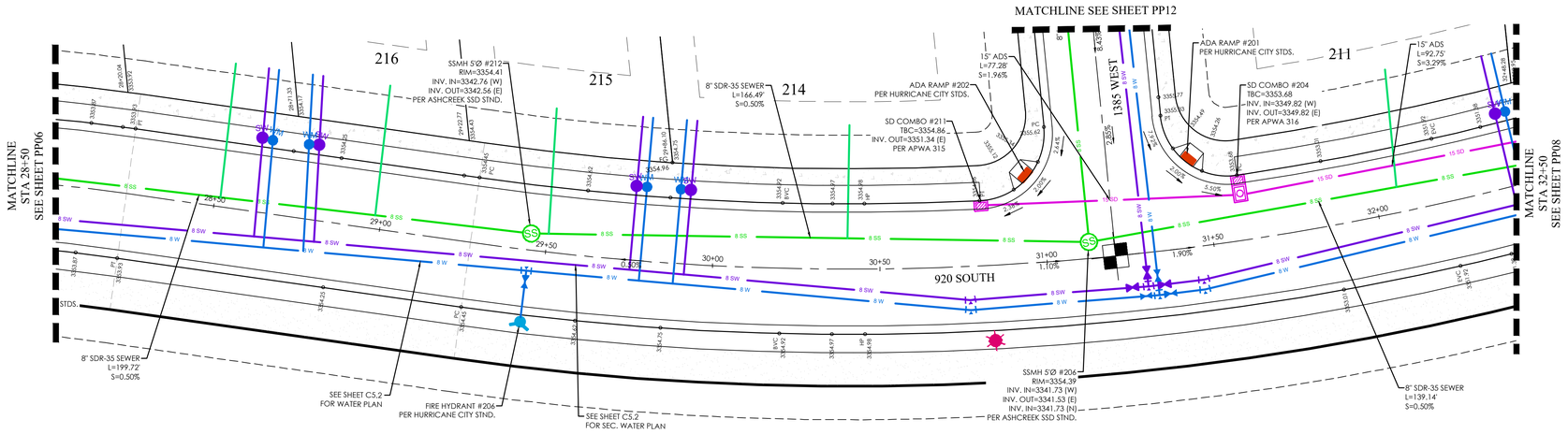
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

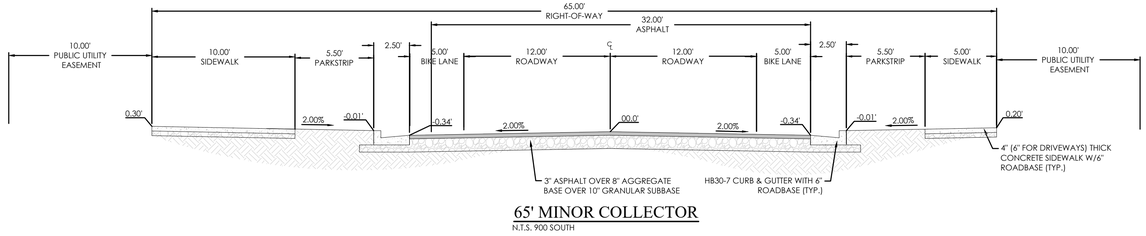
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP06		

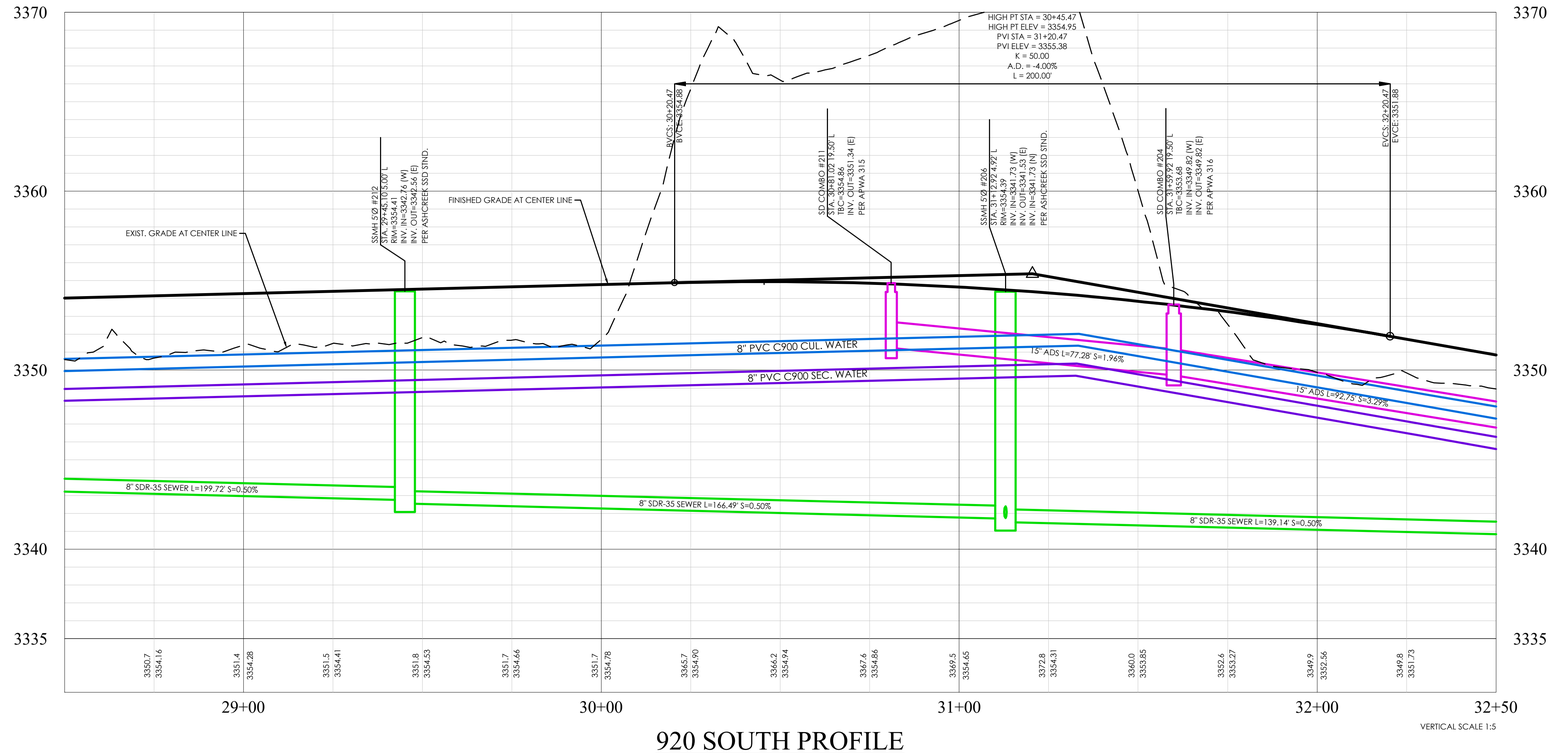
Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\s3\street A,S Plan and profile.dwg



900 SOUTH PLAN



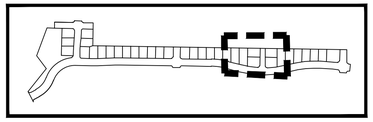
65' MINOR COLLECTOR
N.T.S. 900 SOUTH



920 SOUTH PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO SECTIONS 3 & 4 TOWNSHIP 42.S. , RANGE 13.W. (FOUND 2" BRASS CAP) ELEV: 3215.98 DATUM: NAD88

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
900 SOUTH

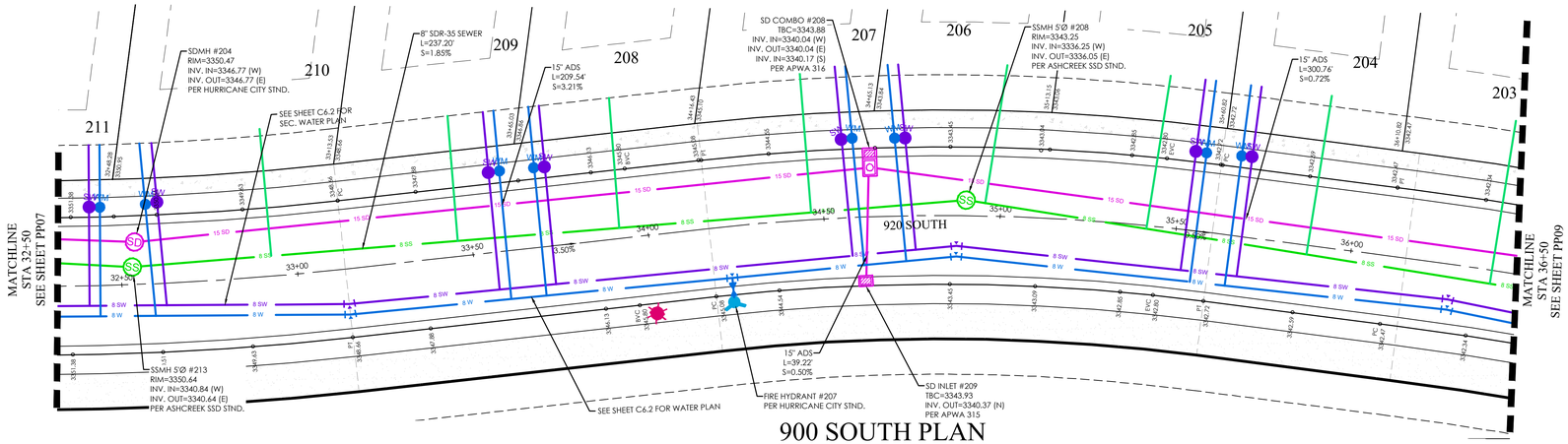
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

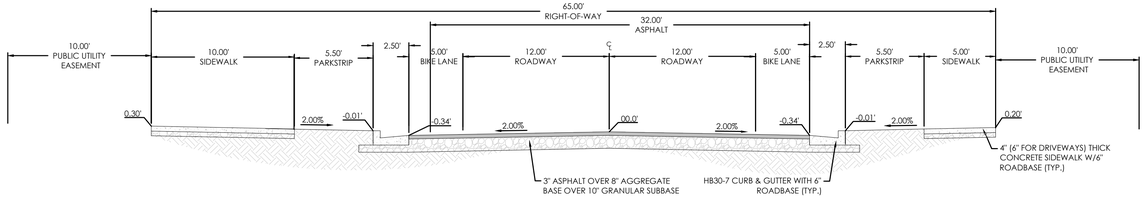
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP07		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design\Street A & Plan and profile.dwg

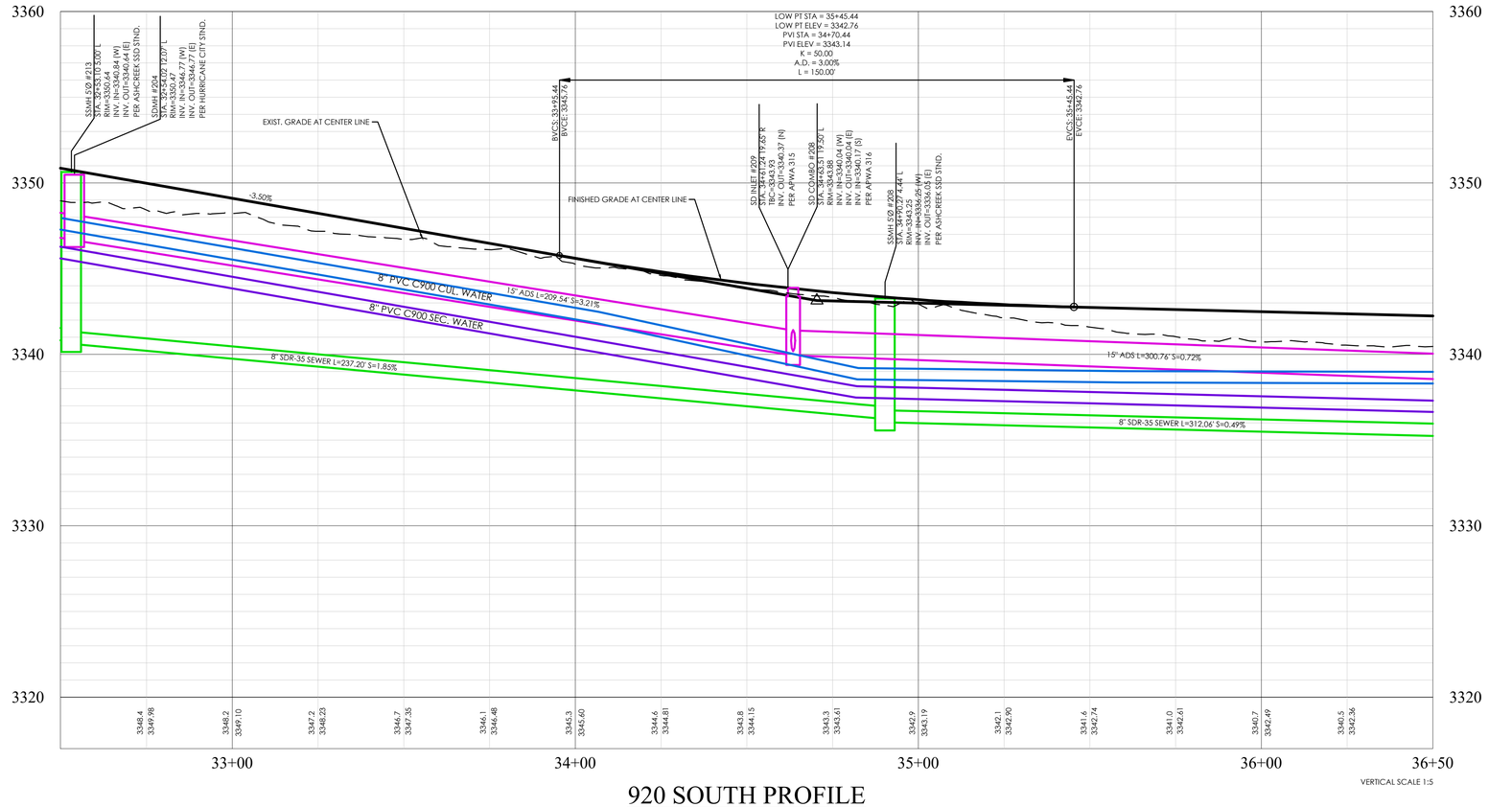


900 SOUTH PLAN



65' MINOR COLLECTOR

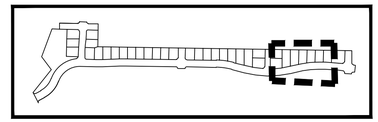
N.T.S. 900 SOUTH



920 SOUTH PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- x x x — EXIST. FENCE
- (XXXX) — EXIST. CONTOUR MAJOR
- (XXXX) — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

811 Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

900 SOUTH

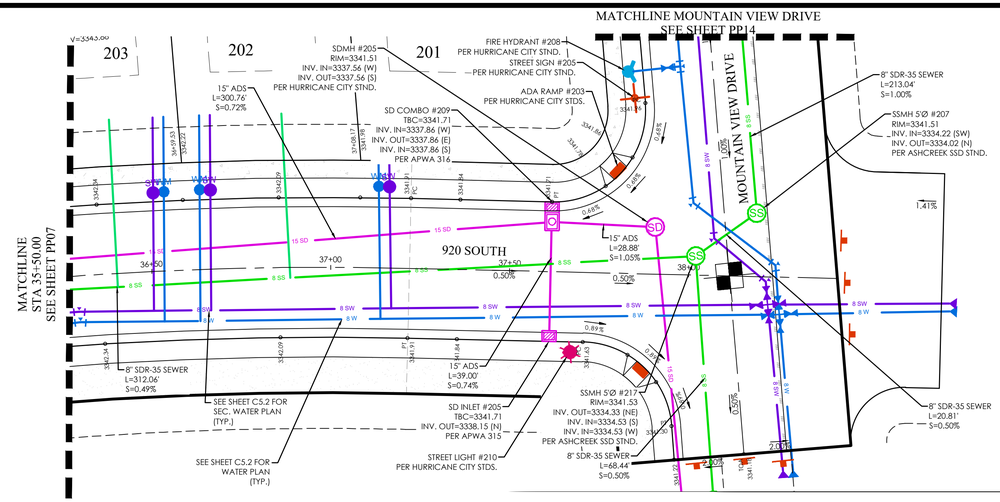
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

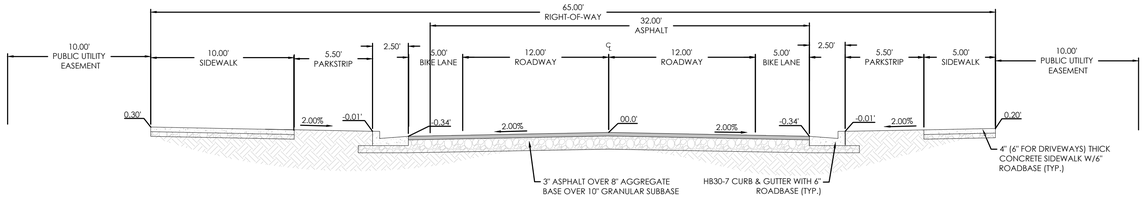
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP08		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheets\Street A_7 Plan and profile.dwg

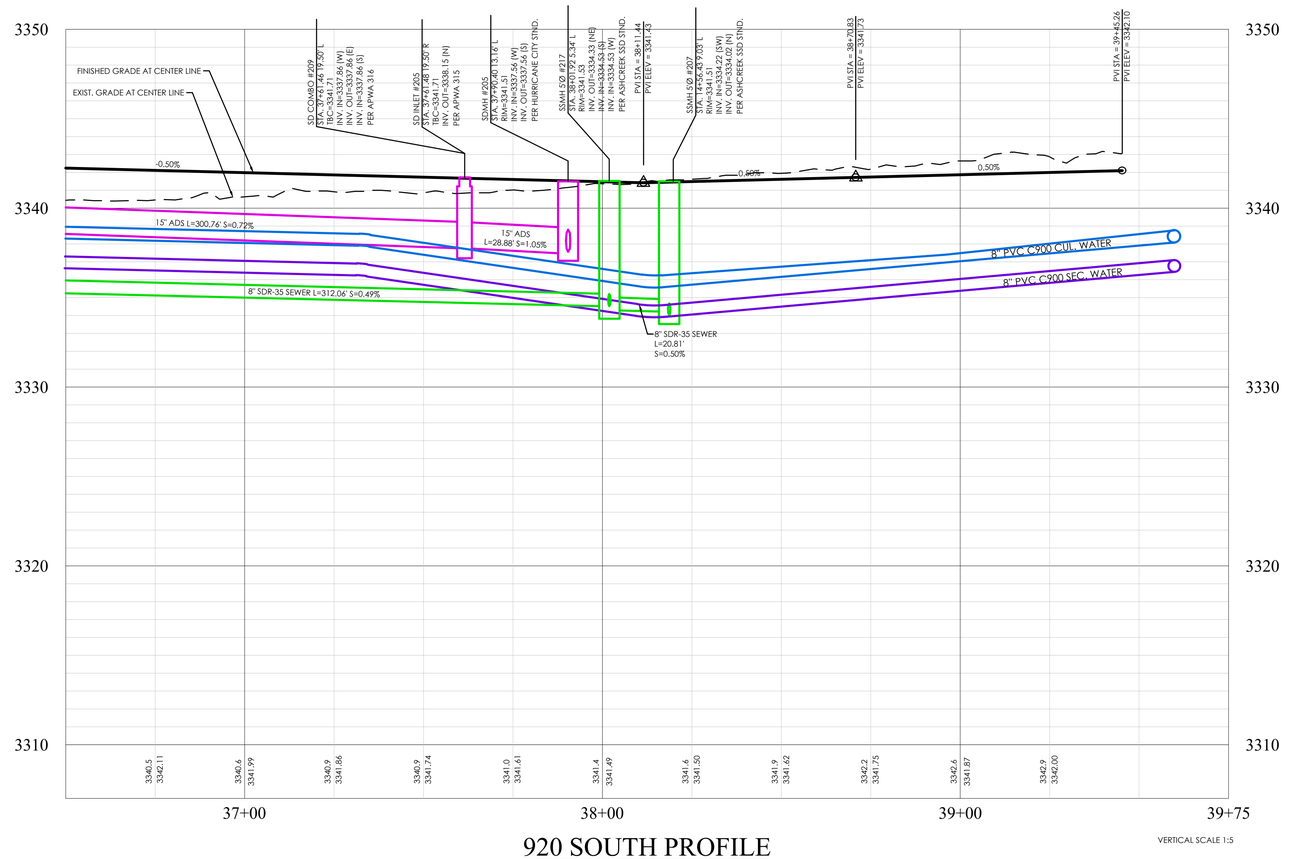


900 SOUTH PLAN



65' MINOR COLLECTOR

N.T.S. 900 SOUTH

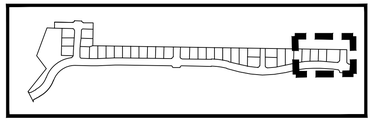


VERTICAL SCALE 1:5

920 SOUTH PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below.
Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY, UT

900 SOUTH

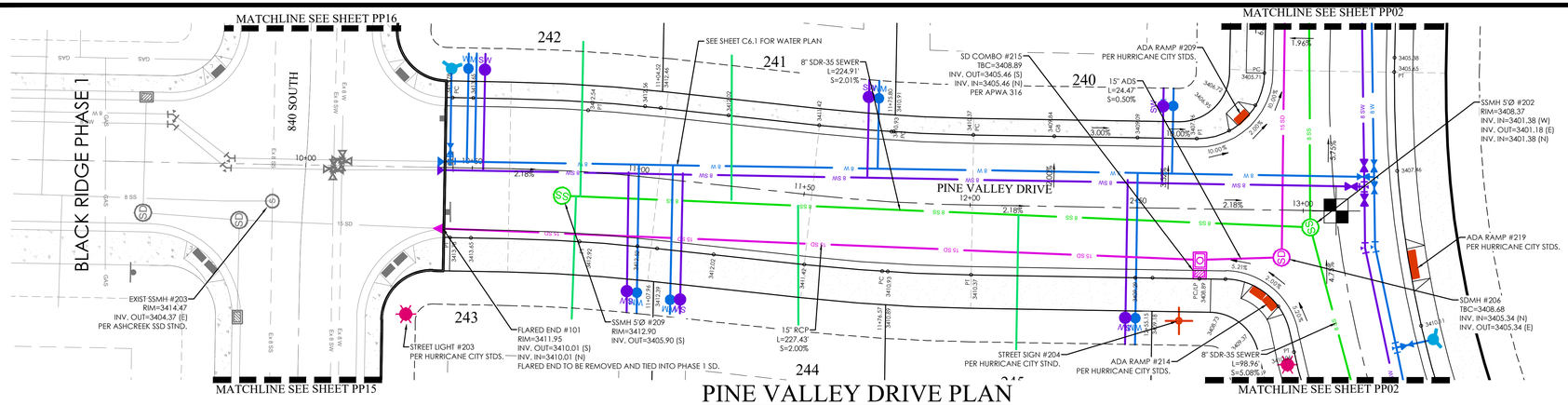
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

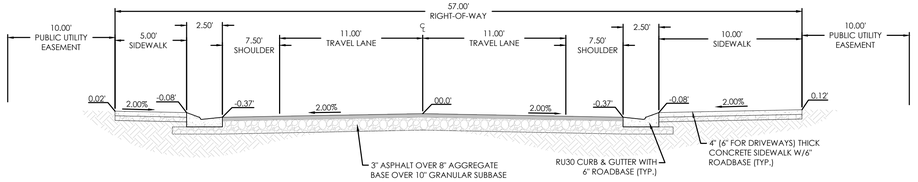
900 SOUTH

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP09		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheets\Street A,B Plan and profile.dwg

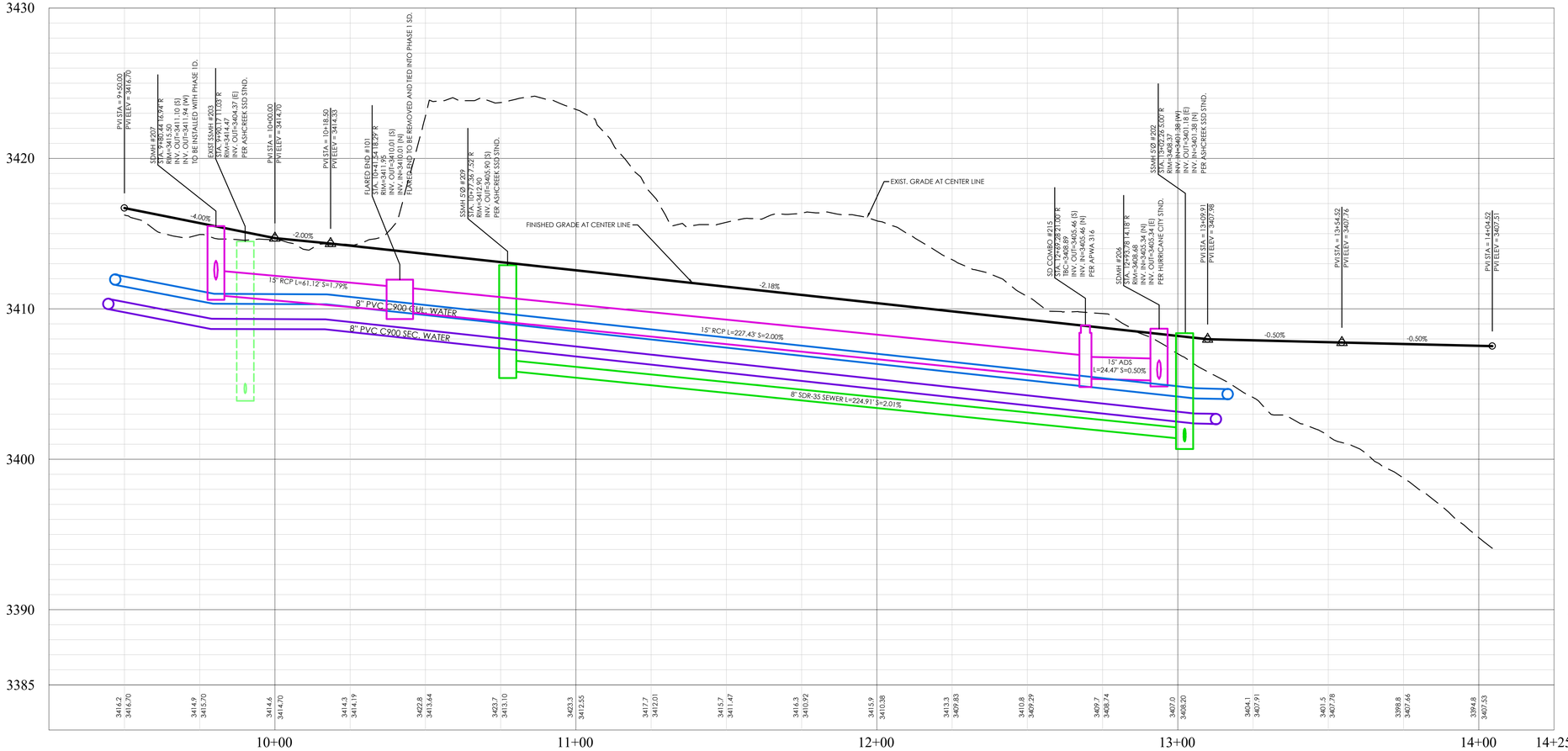


PINE VALLEY DRIVE PLAN



57' RESIDENTIAL ROAD

N.T.S. PINE VALLEY DRIVE

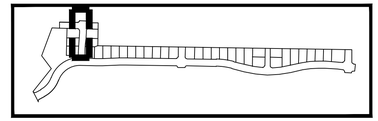


PINE VALLEY DRIVE PROFILE

VERTICAL SCALE 1:5

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX SPOT ELEVATION



KEY MAP

N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV.: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY, UT
PINE VALLEY DRIVE

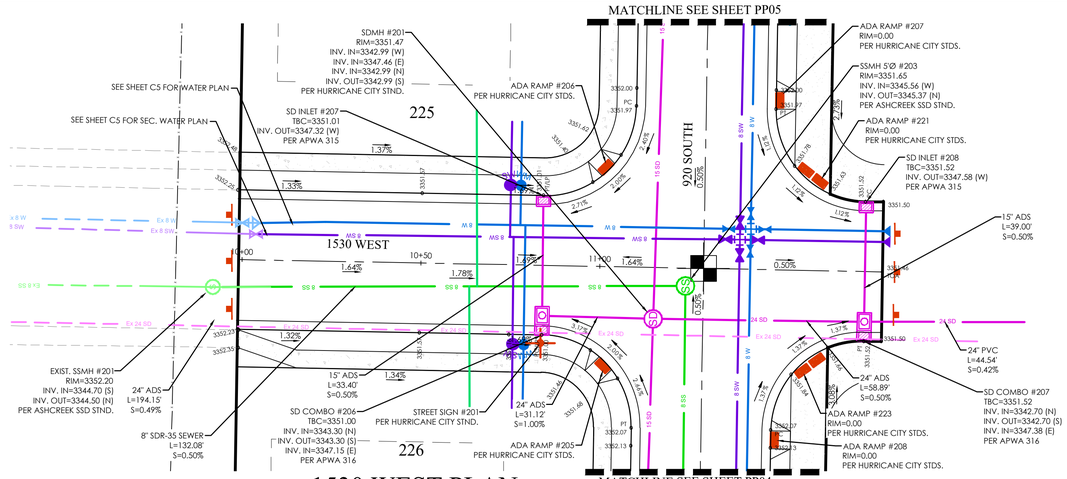
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

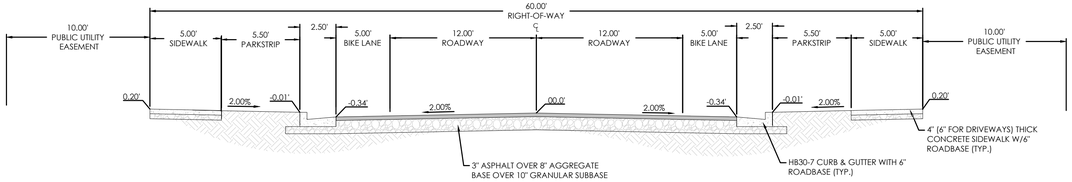
PINE VALLEY DRIVE

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP10		

Z:_2023\23-0124 Block Ridge Phase 2 Final\ Job\design 23-0124\dwg\sheet\s\Sheet 8 Plan and profile.dwg

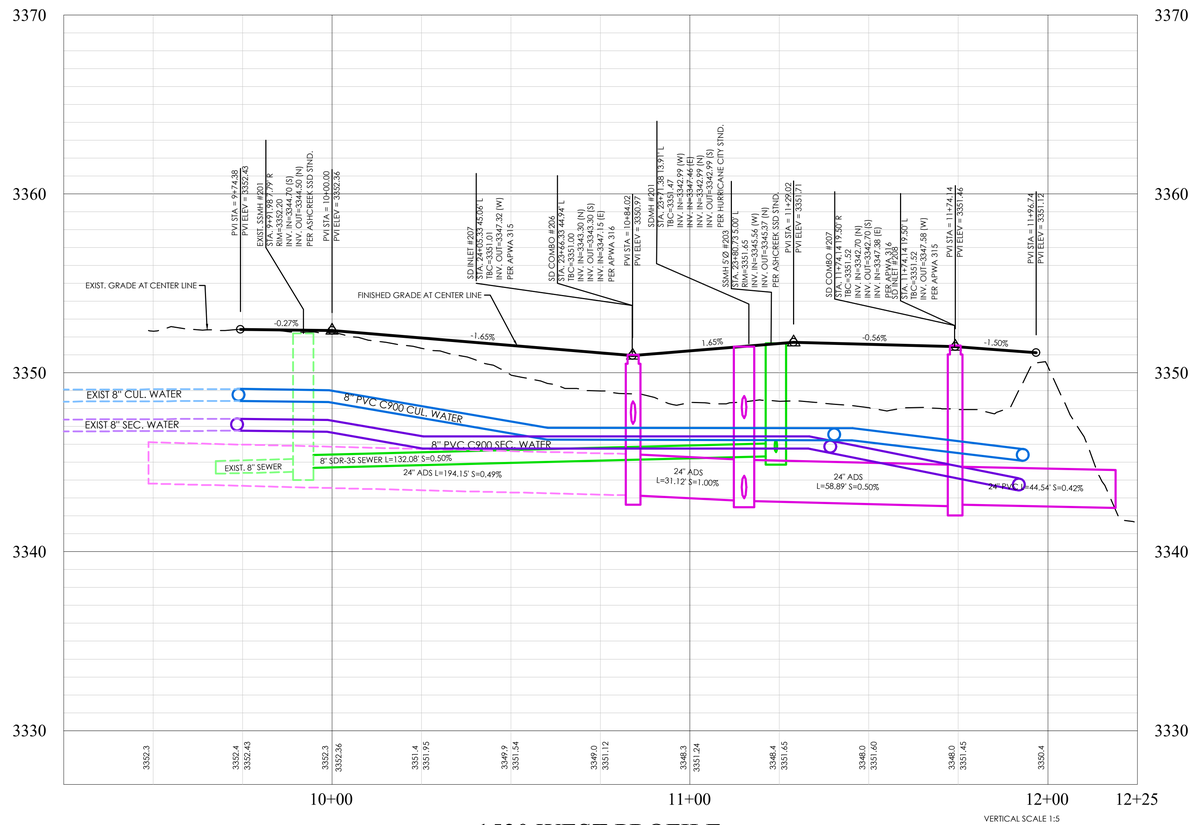


1530 WEST PLAN



60' PUBLIC STREET

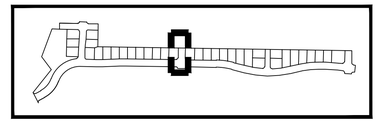
N.T.S. MOUNTAIN VIEW DRIVE



1530 WEST PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP

N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

1530 WEST

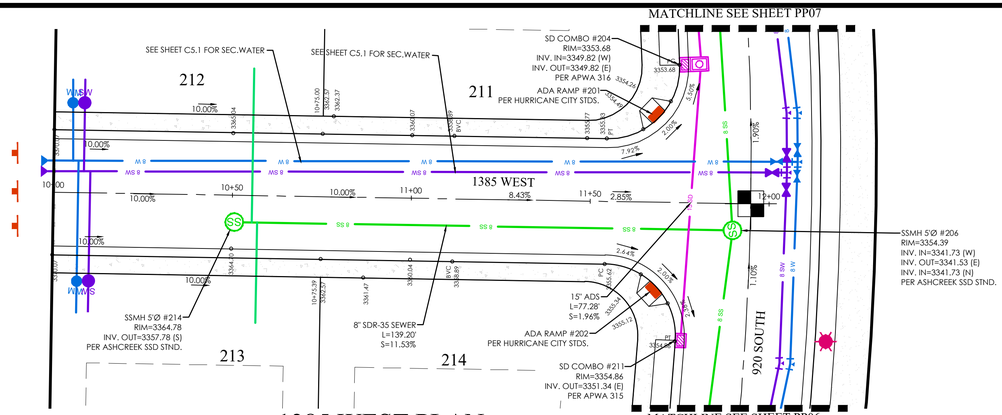
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

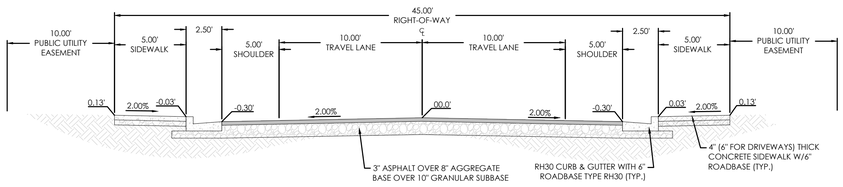
1530 WEST

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP11		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\Street C Plan and profile.dwg

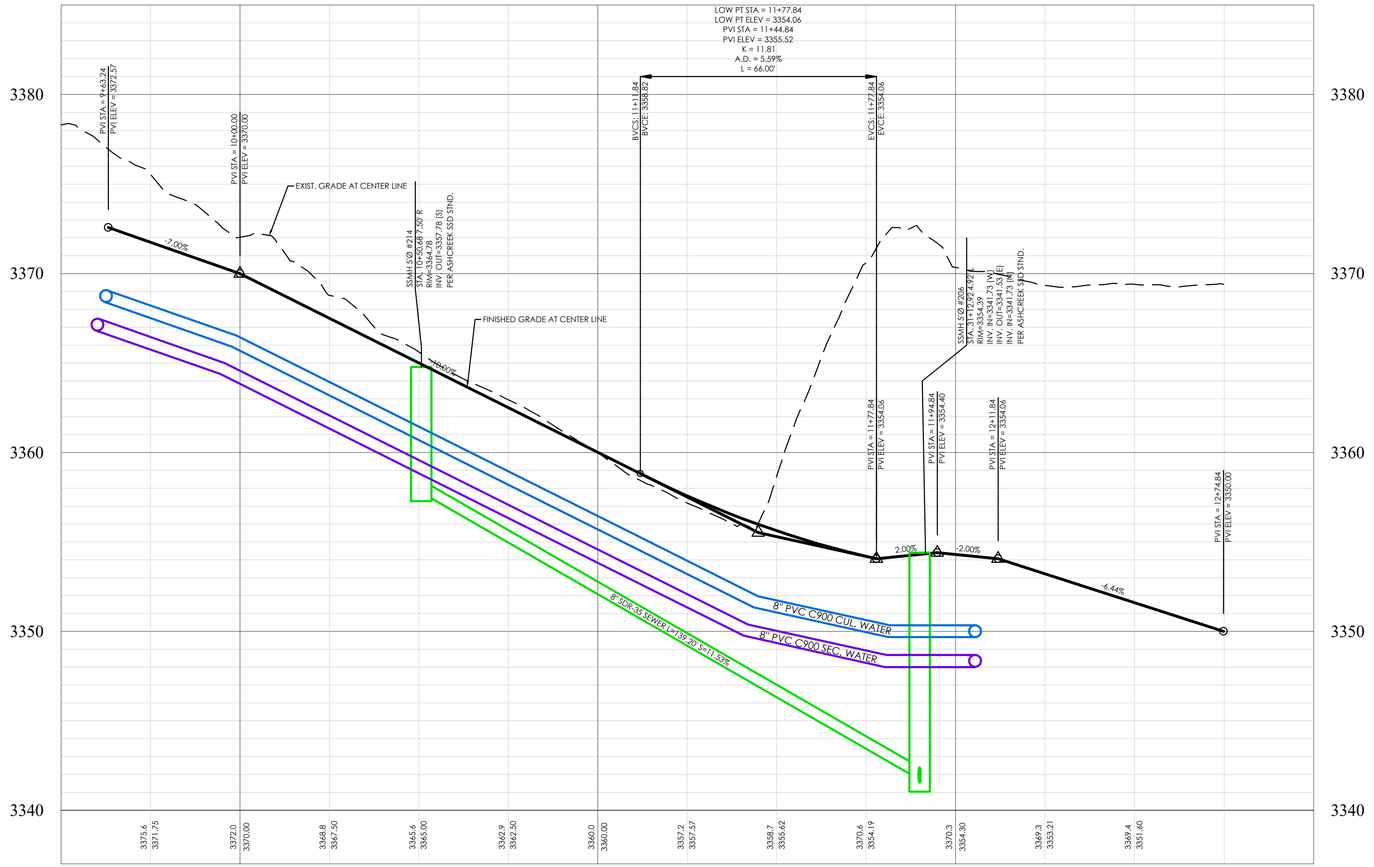


1385 WEST PLAN



45' RESIDENTIAL ROAD

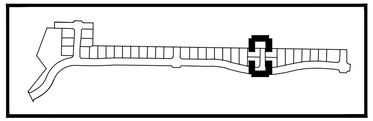
N.T.S. 1385 WEST



1385 WEST PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP

N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42,S. , RANGE 13,W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
1385 WEST

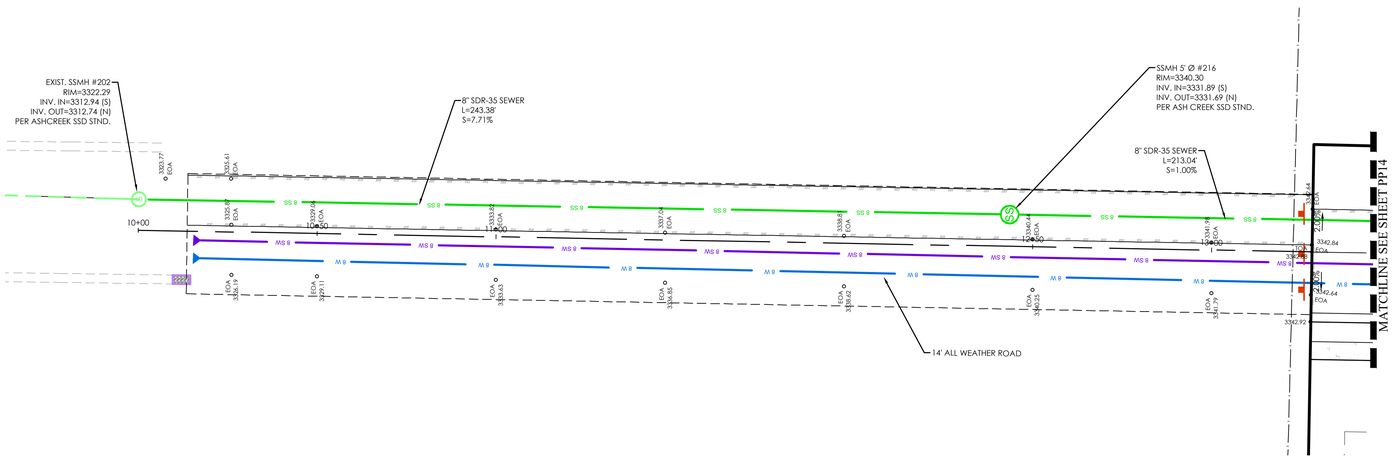
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

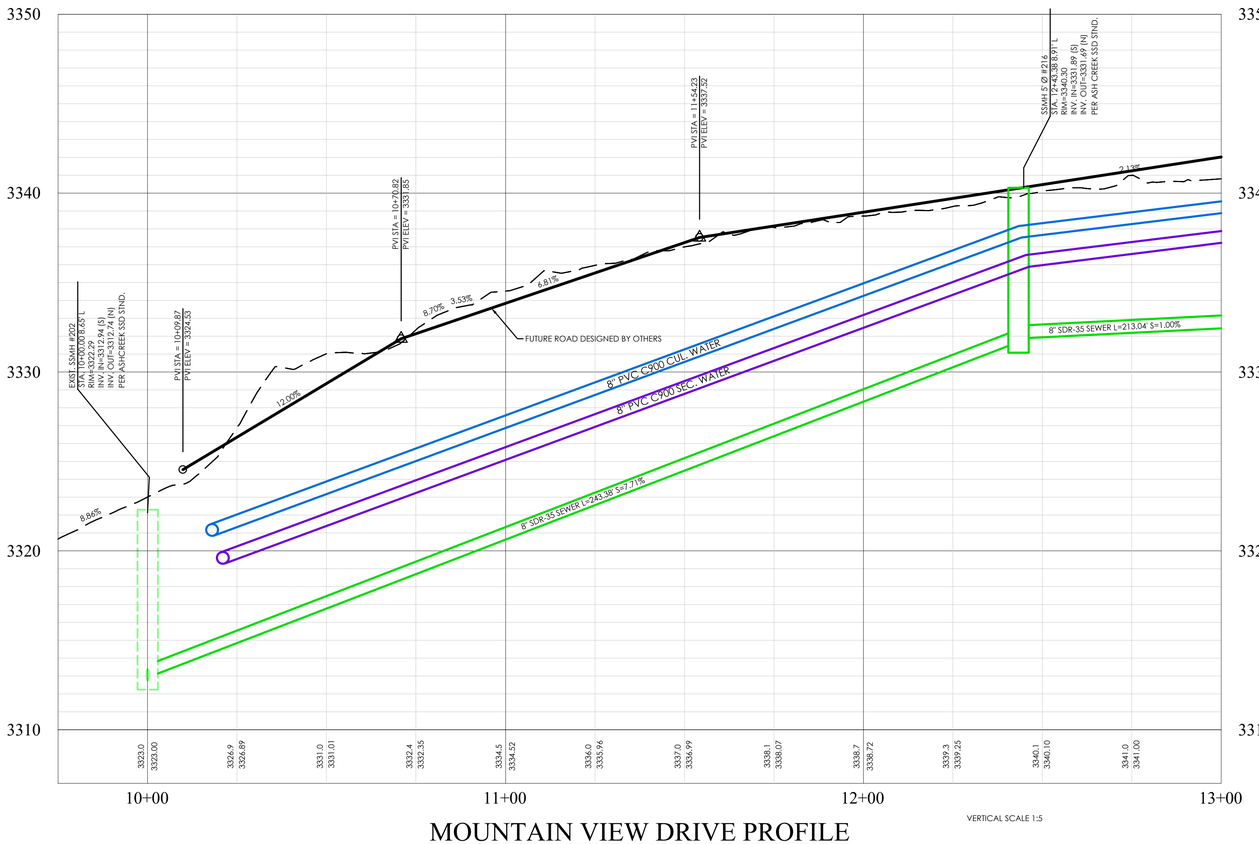
1385 WEST

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP12		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\Street D Plan and profile.dwg



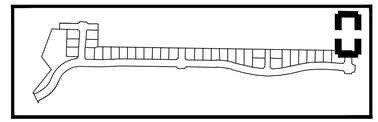
MOUNTAIN VIEW DR. PLAN



MOUNTAIN VIEW DRIVE PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15 SD — 15" STORM DRAIN
- 8 SS — 8" SANITARY SEWER
- 8 W — 8" CULINARY WATER
- 8 SW — 8" SECONDARY WATER
- XXXX — CONTOUR MAJOR
- XXXX — CONTOUR MINOR
- Ex SD — EXIST. STORM DRAIN
- Ex SS — EXIST. SANITARY SEWER
- Ex W — EXIST. CULINARY WATER
- x x x — EXIST. FENCE
- [XXXX] — EXIST. CONTOUR MAJOR
- [XXXX] — EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- o XXXX.XX — SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S. , RANGE 13.W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
MOUNTAIN VIEW DR.

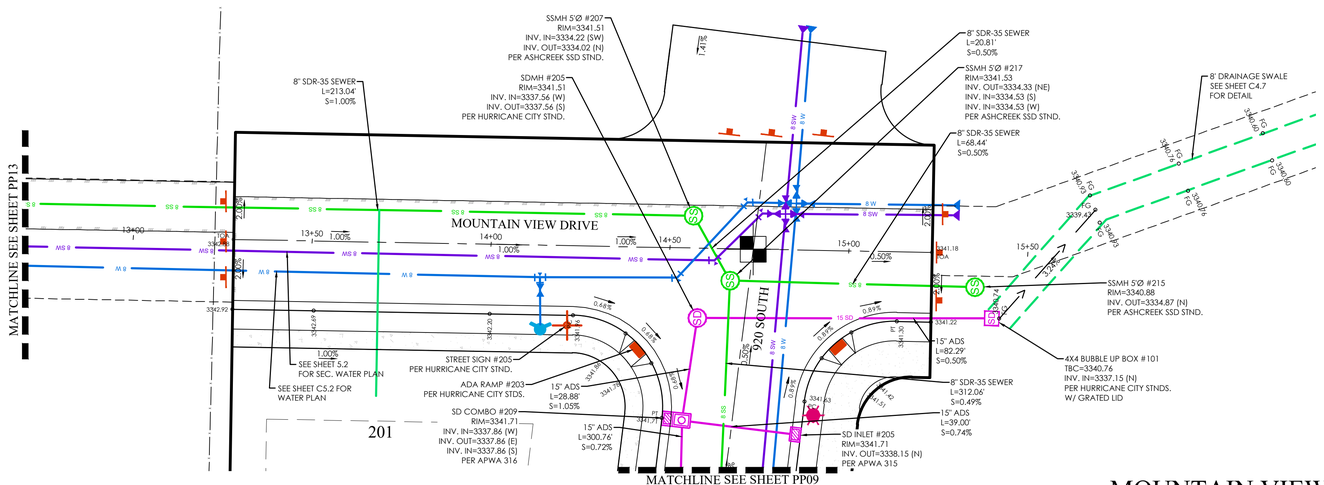
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

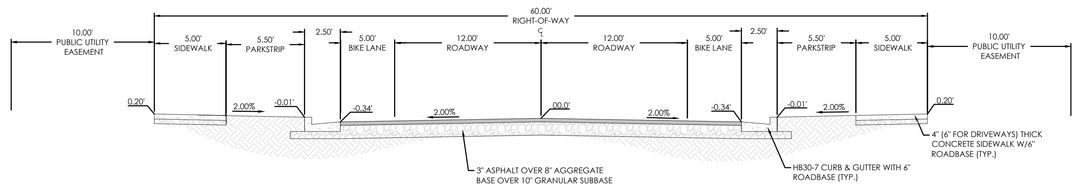
MOUNTAIN VIEW DR.

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP13		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-012A\dwg\sheets\Sheet E Plan and profile.dwg

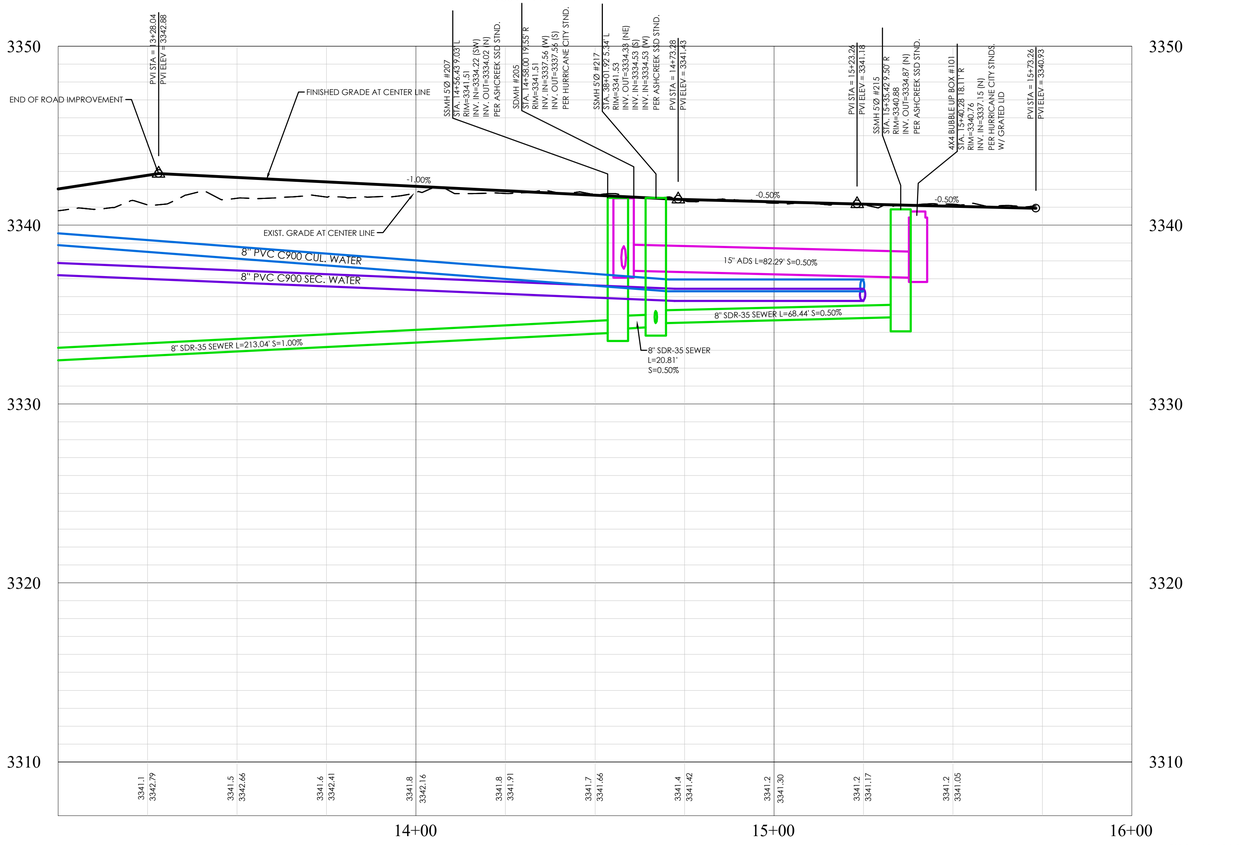


MOUNTAIN VIEW DR. PLAN



60' PUBLIC STREET

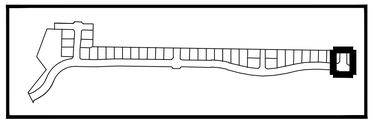
N.T.S. MOUNTAIN VIEW DRIVE



MOUNTAIN VIEW DRIVE PROFILE

LEGEND

- BOUNDARY
- ROW
- CENTERLINE
- LOT LINE
- EASEMENT
- 15" STORM DRAIN
- 8" SANITARY SEWER
- 8" CULINARY WATER
- 8" SECONDARY WATER
- CONTOUR MAJOR
- CONTOUR MINOR
- EXIST. STORM DRAIN
- EXIST. SANITARY SEWER
- EXIST. CULINARY WATER
- EXIST. FENCE
- EXIST. CONTOUR MAJOR
- EXIST. CONTOUR MINOR
- SIGN
- STREET LIGHT
- SD MH, INLET, AND COMBO
- 5' SEWER MANHOLE
- CULINARY VALVE, TEE & BEND
- SECONDARY VALVE, TEE & BEND
- WATER BLOW-OFF
- FIRE HYDRANT
- STREET MONUMENT (TO BE SET)
- EXIST. STREET MONUMENT
- EXIST. SD INLET & MH
- EXIST. SEWER MH
- EXIST. VALVE, TEE, & BEND
- EXIST. FIRE HYDRANT
- SPOT ELEVATION



KEY MAP
N.T.S

BENCHMARK

CORNER COMMON TO
SECTIONS 3 & 4
TOWNSHIP 42.S. , RANGE 13.W.
(FOUND 2" BRASS CAP)
ELEV: 3215.98
DATUM: NAD88

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY, UT

MOUNTAIN VIEW DR.

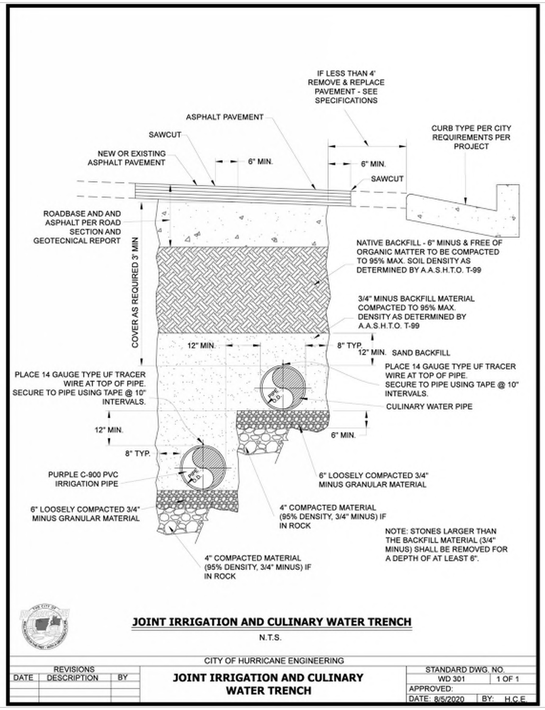
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

MOUNTAIN VIEW DR.

Scale:	1"=20'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	PP14		

Z:_2023\23-0124 Black Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\Street E.I Plan and profile.dwg



JOINT IRRIGATION AND CULINARY WATER TRENCH

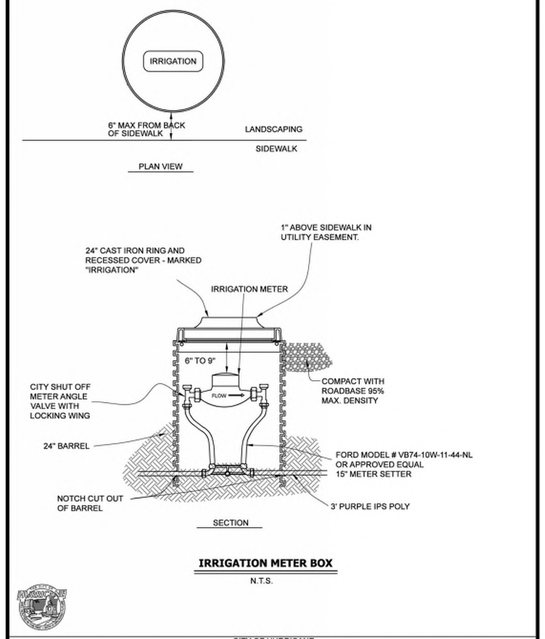
N.T.S.

CITY OF HURRICANE ENGINEERING

REVISIONS		
DATE	DESCRIPTION	BY

JOINT IRRIGATION AND CULINARY WATER TRENCH

STANDARD DWG. NO.	
WD 301	1 OF 1
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.



IRRIGATION METER BOX

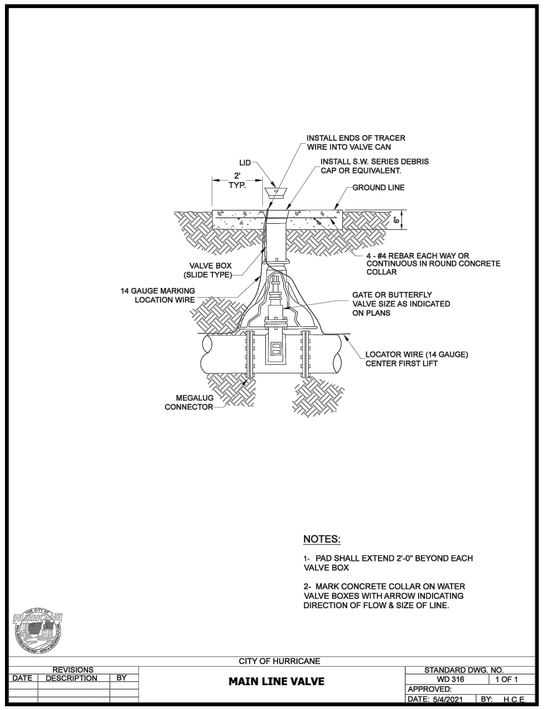
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

IRRIGATION METER BOX DETAILS

STANDARD DWG. NO.	
WD 305-2	2 OF 2
APPROVED:	
DATE: 8/25/20	BY: H.C.E.



NOTES:

1- PAD SHALL EXTEND 2'-0" BEYOND EACH VALVE BOX

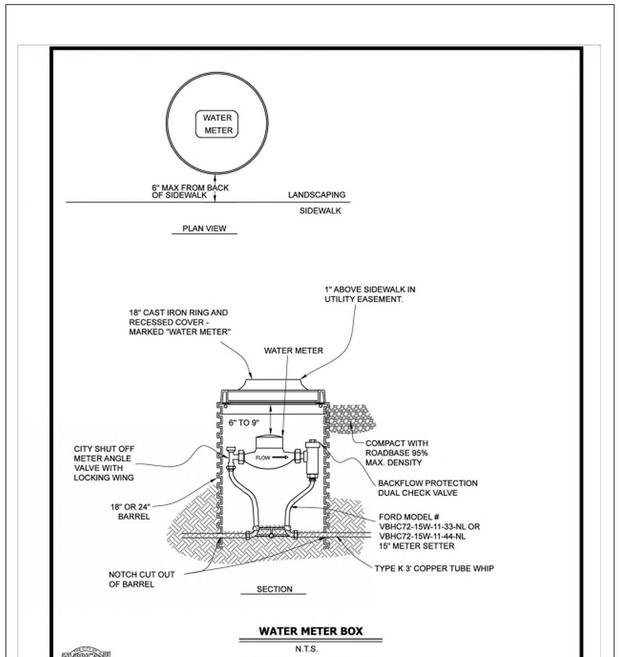
2- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW & SIZE OF LINE.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

MAIN LINE VALVE

STANDARD DWG. NO.	
WD 316	1 OF 1
APPROVED:	
DATE: 5/4/2021	BY: H.C.E.



WATER METER BOX

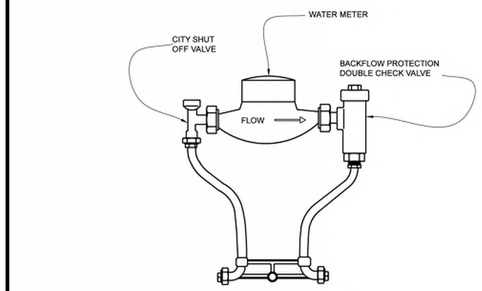
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER BOX DETAILS

STANDARD DWG. NO.	
WD 303-2	2 OF 4
APPROVED:	
DATE: 8/06/20	BY: H.C.E.



APPROVED METER SETTERS	
SIZE	FORD MODEL NUMBER
¾"	VBHC72-15W-11-33-NL
1"	VBHC72-15W-11-44-NL
1½"	VBHH76-15B-44-66-NL
2"	VBHH77-15B-44-77-NL

WATER METER SETTER

N.T.S.

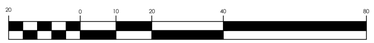
CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER SETTER DETAILS

STANDARD DWG. NO.	
WD 303-1	1 OF 4
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.

GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

Know what's below. Call 811 before you dig.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
DETAILS PLAN

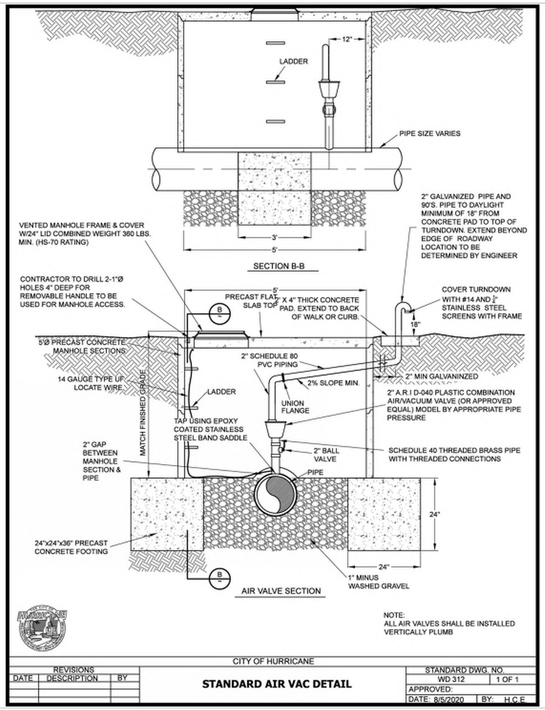
REVISION BLOCK

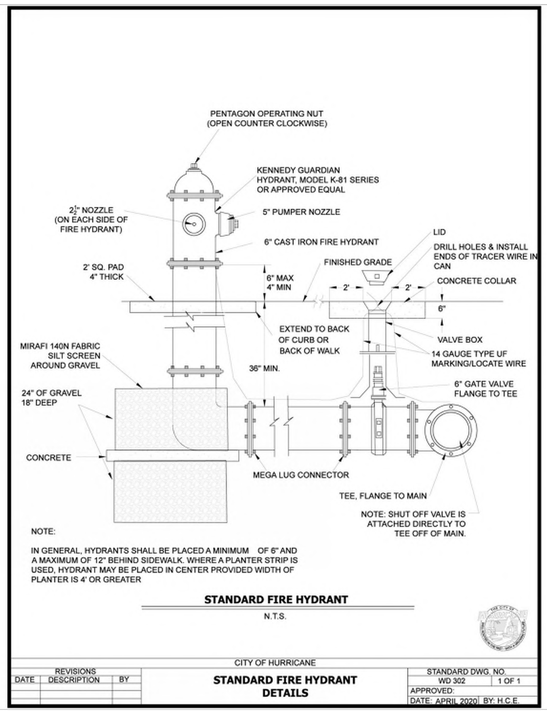
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

DETAILS PLAN

Scale:	N/A	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	D1		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\Design 23-0124\dwg\Sheet\1\D1-Details.dwg





STANDARD FIRE HYDRANT

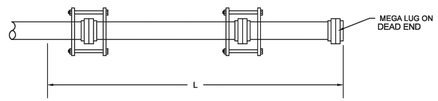
N.T.S.

CITY OF HURRICANE

REVISIONS
DATE | DESCRIPTION | BY

STANDARD FIRE HYDRANT DETAILS

STANDARD DWG. NO.
WD 302 | 1 OF 1
APPROVED:
DATE: APRIL 2020 | BY: H.C.E.



1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

PIPE SIZE	IN INCHES							
4	6	8	10	12	14	16	18	20
44	62	82	99	118	135	153	169	187

RESTRAINED LENGTHS, "L" (IN FEET)

RESTRAINED JOINT LENGTHS USAGE GENERAL NOTES

RESTRAINED LENGTH CALCULATIONS ARE BASED ON THE FOLLOWING DESIGN TYPICALLY USED WITH BACKFILL IN THE CITY OF HURRICANE.

1. THREE (3) FEET MINIMUM DEPTH OF COVER.
2. A SAFTEY FACTOR OF 1.5
3. SOIL TYPE SANDY CLAY
4. TYPE 5 TRENCH COMPACTION FROM FOUR (4) INCHES MINIMUM UNDER THE PIPE TO THE CENTER LINE OF THE PIPE, AND COMPACTED GRANULAR OR SELECTED MATERIAL FROM THE CENTER LINE OF THE PIPE TO THE TOP OF THE PIPE (90 PERCENT STANDARD PROCTOR DENSITY, AASHTO T-99).
5. 200 PSI TEST PRESSURES FOR FOUR (4) THROUGH SIXTEEN (16) INCH SIZE PIPES.

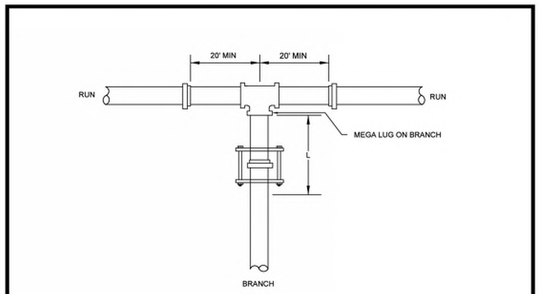
IF ACTUAL CONDITIONS DIFFER FROM THOSE LISTED ABOVE OR THE REQUIRED RESTRAINED LENGTH CANNOT BE MET, THE RESTRAINED JOINT LENGTH SHALL BE DETERMINED BY THE WATER AND POWER ENGINEER.

CITY OF HURRICANE ENGINEERING

REVISIONS
DATE | DESCRIPTION | BY

STD. DEAD END/INLINE VALVE FOR PVC PIPE RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.
WD 308 | 1 OF 1
APPROVED:
DATE: 5/4/2021 | BY: H.C.E.



RUN SIZE DIAMETER

BRANCH SIZE DIAMETER	4	6	8	10	12	14	16	18	20	24
4	*	*	*	*	*	*	*	*	*	*
6		*	*	*	*	*	*	*	*	*
8			*	*	*	*	*	*	*	*
10				10	*	*	*	*	*	*
12					28	12	*	*	*	*
14						44	30	17	3	*
16							61	48	35	10
18								77	65	41
20									93	70
24										124

* - FOR THIS CONDITION NEED ONLY RESTRAIN THE BRANCH OUTLET OF THE TEE.

RESTRAINED LENGTHS, "L" (IN FEET)

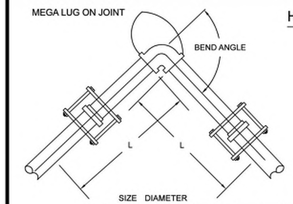
1. RESTRAIN THE TWO MECHANICAL JOINTS ON THE RUN SIDES OF THE TEE. THERE SHOULD BE A FULL 20' LENGTH OF PIPE INSTALLED ON EACH SIDE OF THE RUN.
2. ALL JOINTS WITHIN THE LENGTH "L" ON THE BRANCH MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS ON PUSH-ON PIPE PER CITY SPECIFICATION.
3. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

CITY OF HURRICANE ENGINEERING

REVISIONS
DATE | DESCRIPTION | BY

STANDARD TEE FOR PVC RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.
WD 306 | 1 OF 1
APPROVED:
DATE: OCT. 2020 | BY: H.C.E.



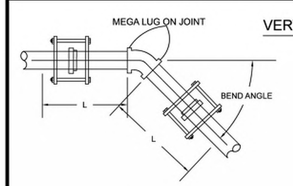
HORIZONTAL BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	2	3	4	5	6	6	7	8	8
22.5	4	6	8	9	11	12	14	15	17
45	9	12	16	19	22	25	28	31	34
90	20	28	37	44	52	60	67	74	81

RESTRAINED LENGTHS, "L" (IN FEET)



VERTICAL DOWN BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	6	8	11	13	15	18	20	22	24
22.5	12	17	22	26	31	35	39	44	48
45	24	34	45	53	63	72	81	90	99

RESTRAINED LENGTHS, "L" (IN FEET)

CITY OF HURRICANE ENGINEERING

REVISIONS
DATE | DESCRIPTION | BY

STANDARD BENDS FOR PVC RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.
WD 307 | 1 OF 1
APPROVED:
DATE: OCT. 2020 | BY: H.C.E.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
DETAILS PLAN

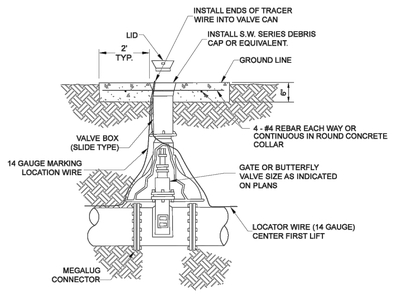
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

DETAILS PLAN

Scale: N/A | Drawn: DCJ
Date: 11/7/23 | Job #: 23-0124
Sheet: D2

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\Design 23-0124\dwg\Sheet\1\D2 Details.dwg



NOTES:

1- PAD SHALL EXTEND 2'-0" BEYOND EACH VALVE BOX

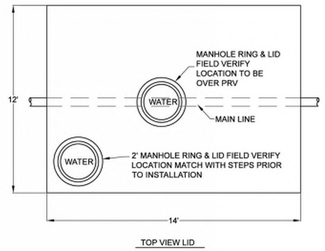
2- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW & SIZE OF LINE.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

MAIN LINE VALVE

STANDARD DWG. NO.	
WD 316	1 OF 1
APPROVED:	
DATE: 5/4/2021	BY: H.C.E.



TOP VIEW LID

NOTE:

SIZE OF MANHOLE RING & LID WILL VARY WITH SIZE OF PRV (CONTACT WATER DEPARTMENT)

STANDARD PRESSURE REDUCING VALVE VAULT LID FOR NEW CONSTRUCTION

N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

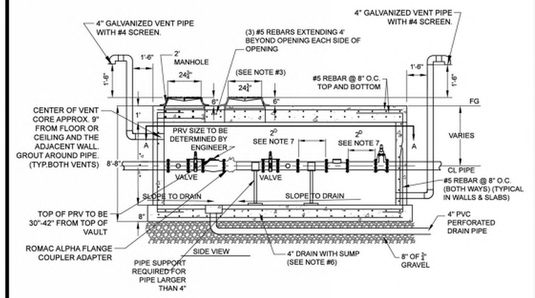
STANDARD PRESSURE REDUCING VALVE VAULT LID

STANDARD DWG. NO.	
WD 315-3	3 OF 3
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.

* SEE SHEET 1 OF 3 FOR PLAN VIEW & VENT DETAILS *

NOTES:

1. REMOVE EXISTING PRV VAULT STRUCTURE
2. FIELD VERIFY EXISTING PIPING CONFIGURATION AND SIZES TO DETERMINE KNOCKOUT AND MANHOLE LOCATIONS
3. IF VAULT IS IN SIDEWALK THE FINISH GRADE OF TOP OF VAULT SHALL MATCH SLOPE OF EXISTING SIDEWALK
4. IF VAULT IS IN ROADWAY, FINISH GRADE OF TOP OF VAULT SHALL MATCH SUBGRADE
5. MANHOLE RING & LID WILL VARY WITH SIZE OF P.R.V. CONTACT WATER DEPARTMENT
6. SUMP SIZE SHALL BE 12" X 12" X 4" DEEP
7. MINIMUM LENGTH = TWO TIMES THE DIAMETER OF THE METER.
8. USE ONLY WATTS STAINLESS STEEL PRESSURE REDUCING VALVES.



STANDARD PRESSURE REDUCING VALVE AND VAULT FOR NEW CONSTRUCTION

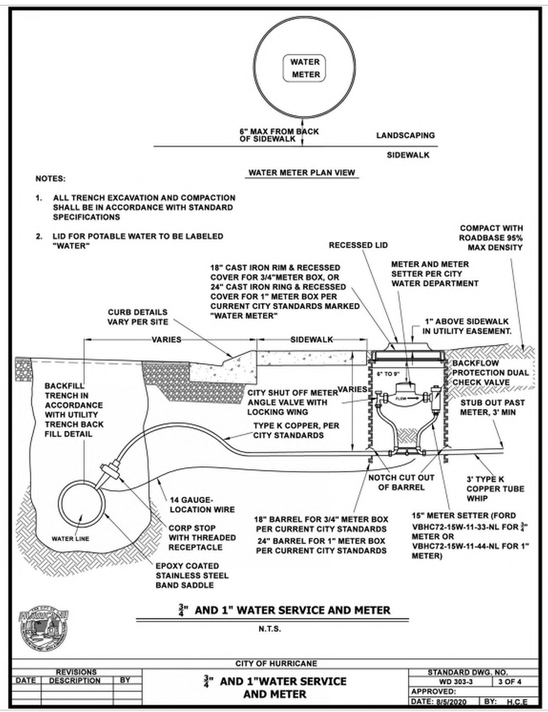
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD PRESSURE REDUCING VALVE AND VAULT FOR NEW CONSTRUCTION

STANDARD DWG. NO.	
WD 315-2	2 OF 3
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.



3/4" AND 1" WATER SERVICE AND METER

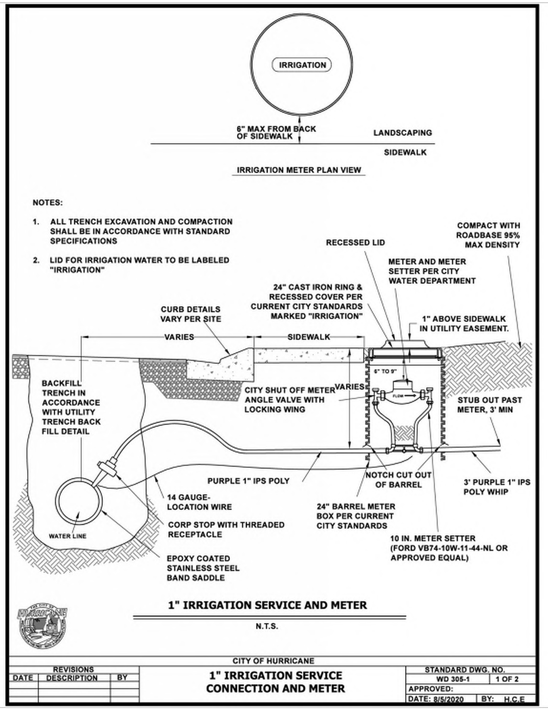
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

3/4" AND 1"WATER SERVICE AND METER

STANDARD DWG. NO.	
WD 303-3	3 OF 4
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.



1" IRRIGATION SERVICE AND METER

N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

1" IRRIGATION SERVICE CONNECTION AND METER

STANDARD DWG. NO.	
WD 305-1	1 OF 2
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

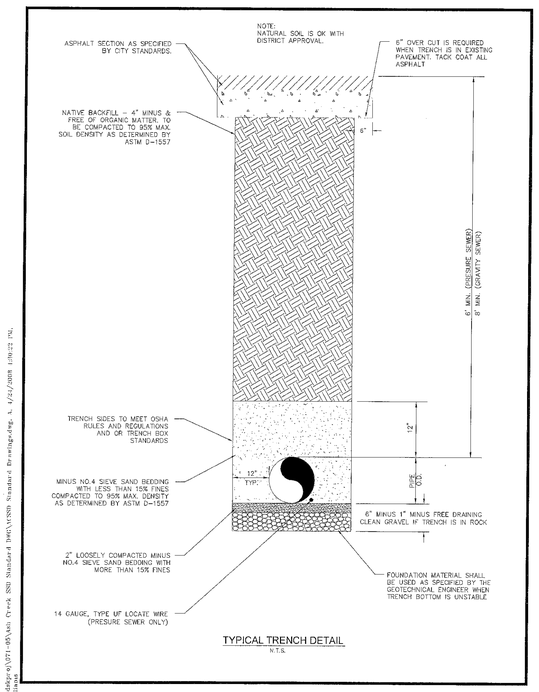
DETAILS PLAN

REVISION BLOCK		
#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

DETAILS PLAN

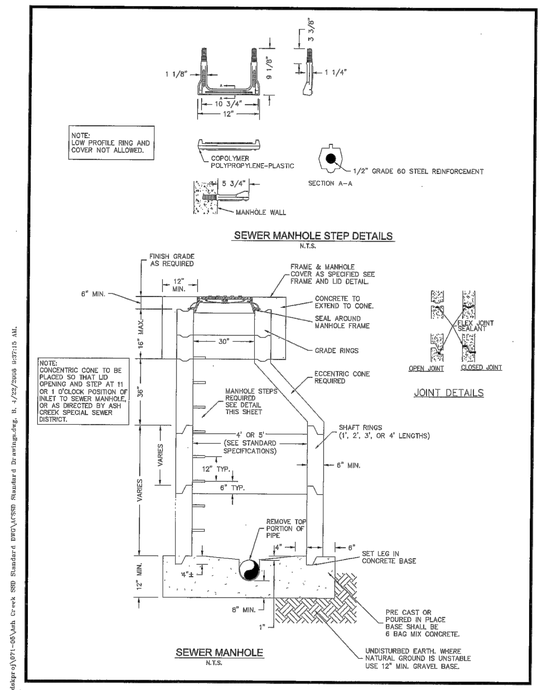
Scale:	N/A	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	D4		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124.dwg\sheet\\D4-Details.dwg



TYPICAL TRENCH DETAIL
N.T.S.

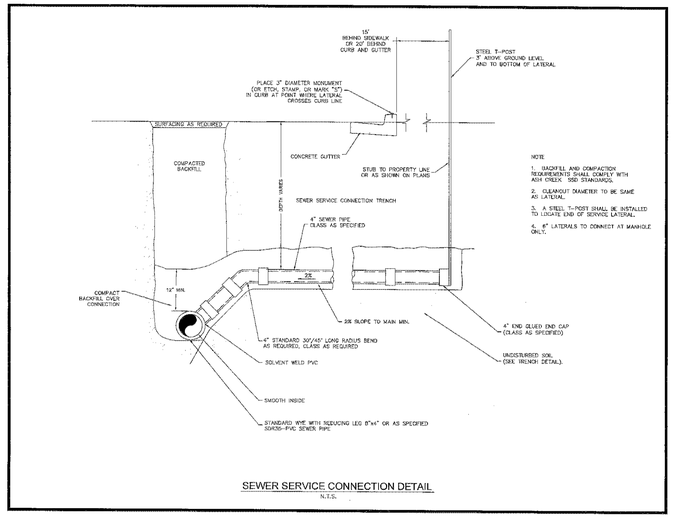
S:\wdesign\071-05\Ash Creek SSD Standard DWG\ASHSSD Standard Drawings-Eng. B. 4/24/2008 1:09:22 PM



SEWER MANHOLE STEP DETAILS
N.T.S.

SEWER MANHOLE
N.T.S.

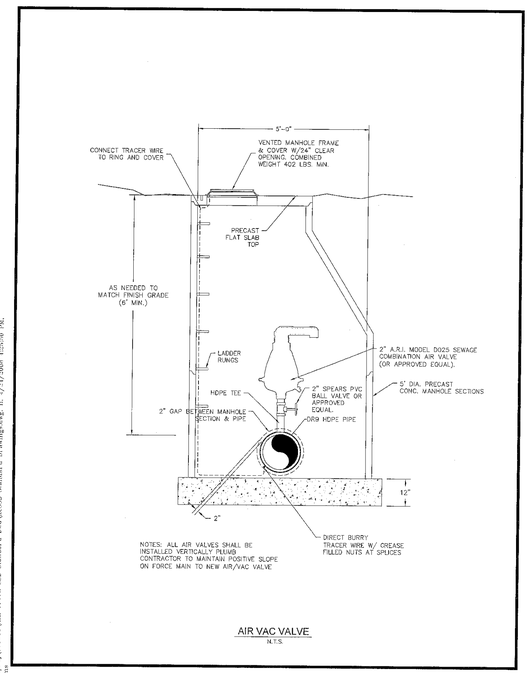
S:\wdesign\071-05\Ash Creek SSD Standard DWG\ASHSSD Standard Drawings-Eng. B. 4/24/2008 1:07:15 AM



SEWER SERVICE CONNECTION DETAIL
N.T.S.

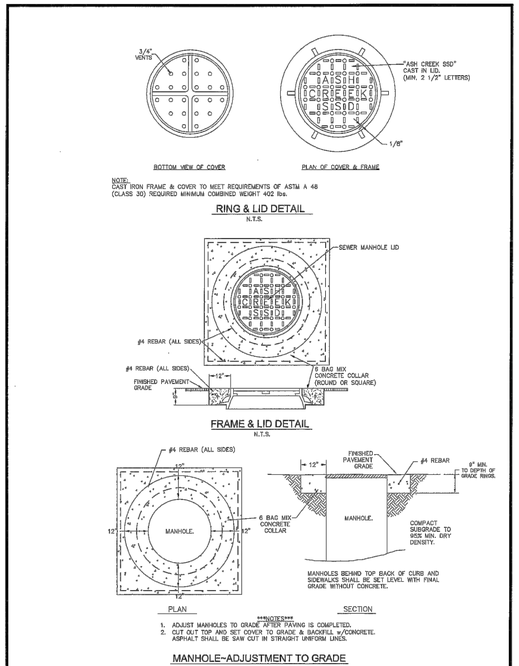
S:\wdesign\071-05\Ash Creek SSD Standard DWG\ASHSSD Standard Drawings-Eng. C. 4/22/2008 8:37:13 AM

JOINT DETAILS



AIR VAC VALVE
N.T.S.

S:\wdesign\071-05\Ash Creek SSD Standard DWG\ASHSSD Standard Drawings-Eng. C. 4/22/2008 8:38:01 AM



RING & LID DETAIL
N.T.S.

FRAME & LID DETAIL
N.T.S.

NOTICE
1. ADJUST MANHOLES TO GRADE AFTER PAVING IS COMPLETED.
2. CUT OUT TOP AND SET COVER TO GRADE & BACKFILL w/CONCRETE.
ASPHALT SHALL BE SAW CUT IN STRAIGHT UNIFORM LINES.

MANHOLE-ADJUSTMENT TO GRADE
N.T.S.

S:\wdesign\071-05\Ash Creek SSD Standard DWG\ASHSSD Standard Drawings-Eng. C. 4/22/2008 8:38:01 AM

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
DETAIL PLAN

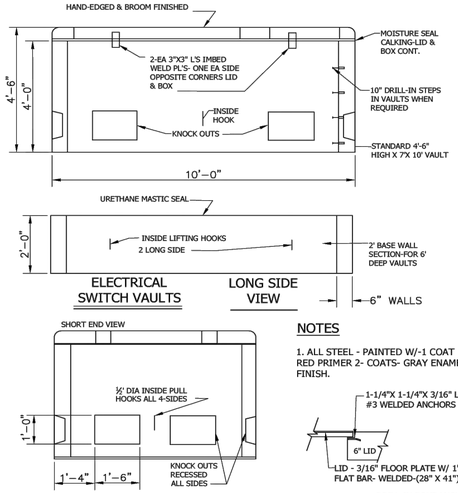
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

DETAIL PLAN

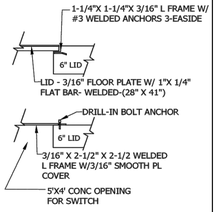
Scale:	1"=XX'	Drawn:	DCJ
Date:	11/7/23	Job #:	23-0124
Sheet:	D5		

Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124\dwg\sheet\D5- DETAIL PLAN.dwg

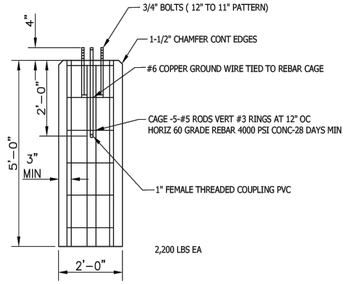


NOTES

1. ALL STEEL - PAINTED W/-1 COAT RED PRIMER 2- COATS- GRAY ENAMEL FINISH.



HURRICANE CITY UTAH	SWITCH BASEMENTS	
	CITY OF HURRICANE POWER DEPARTMENT STANDARD DRAWINGS	STANDARD DRAWING NO. DR-1



HURRICANE CITY - 5' BASES

HURRICANE CITY UTAH	STREET LIGHT BASE 5'	
	CITY OF HURRICANE POWER DEPARTMENT STANDARD DRAWINGS	STANDARD DRAWING NO. DR-5

Finial: Decorative cast 356 aluminum, mechanically assembled.

Hood: Made of die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the cast aluminum heat sink.

Access-Mechanism: A die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness technical ring with latch and hinge.

Temperature: Maximum ambient operating temperature up to 40C(104F) degrees.

Lens: Made of soda lime tempered glass lens, mechanically assembled and sealed onto the ring of the access mechanism.

LED Module: Composed of 48 high performance white LEDs. Color temperature as per ANSI/NEMA bin Warm White, 3000 Kelvin nominal, CRI 70 Min. 75 Typical.

Optical System: (LE5, LE3), IES type V, or III. Edge lit optical system, no substitutions* . Optical system is rated IP66. 0% uplight and U0 per IESNA TM 15.

Driver: High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC Driver Options: (DMG), Dimming compatible 0 10 volts.

Surge Protector: Surge protector 10kV/10kA.

Lumens: 7,452 lumens in type III, 7,572 lumens, in type 5, FAWS dial at 10*.

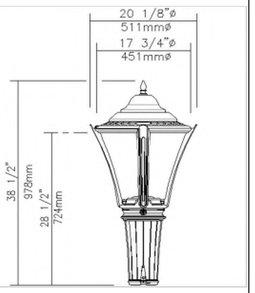
Wattage: Max 95 watts.

FAWS: Field Adjustable Wattage Switch. No substitutions*

Warranty: 10 year limited warranty. No substitutions*

Photocell Receptacle: 7 pin.

Finish: Powder coat black



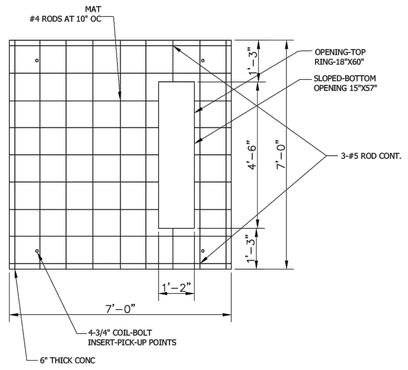
Same table for type 5 and type 3 optics.

Field Adjustable Wattage (FAWS) Multiplier Chart

FAWS Position	Typical Delivered Lumens Multiplier	Typical System wattage
1	0.30	0.29
2	0.50	0.50
3	0.60	0.59
4	0.68	0.67
5	0.77	0.76
6	0.84	0.82
7	0.90	0.89
8	0.94	0.93
9	0.99	0.98
10	1.00	1.00

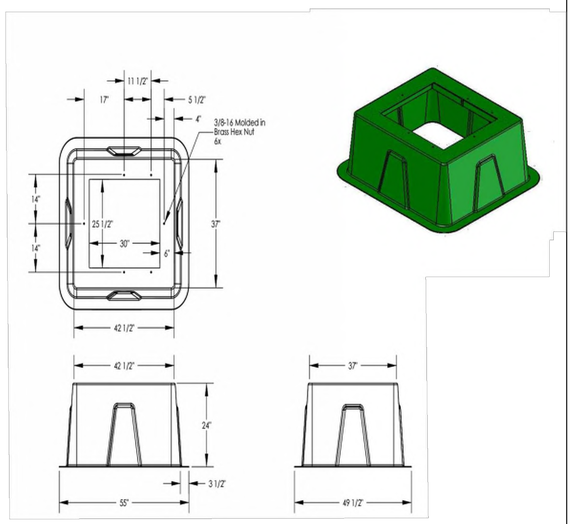
Note: Typical value accuracy ± 5%

HURRICANE CITY UTAH	POST TOP STREET LIGHT	
	CITY OF HURRICANE POWER DEPARTMENT STANDARD DRAWINGS	STANDARD DRAWING NO. DR-9



3-PH TRANSFORMER PAD POWER

HURRICANE CITY UTAH	3 PHASE TRANSFORMER PAD	
	CITY OF HURRICANE POWER DEPARTMENT STANDARD DRAWINGS	STANDARD DRAWING NO. DR-10



HURRICANE CITY UTAH	1 PHASE TRANSFORMER PAD	
	CITY OF HURRICANE POWER DEPARTMENT STANDARD DRAWINGS	STANDARD DRAWING NO. DR-11

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2

HURRICANE CITY,UT

DETAIL PLAN

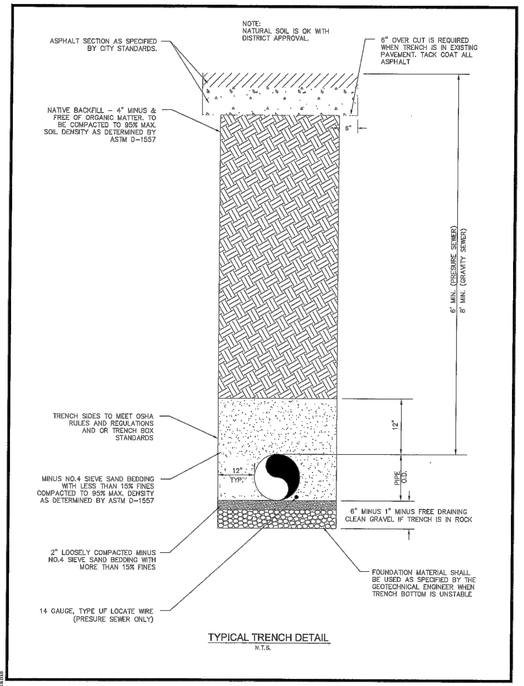
REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

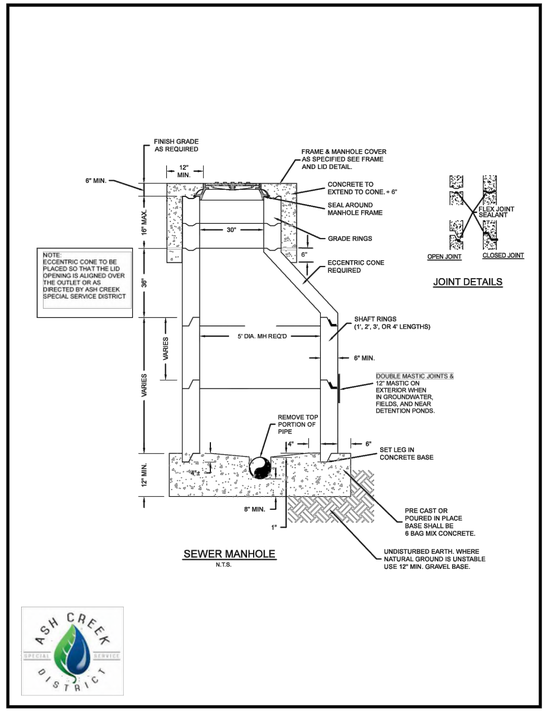
DETAIL PLAN

Scale: 1"=XX'	Drawn: DCJ
Date: 11/7/23	Job #: 23-0124
Sheet: D6	

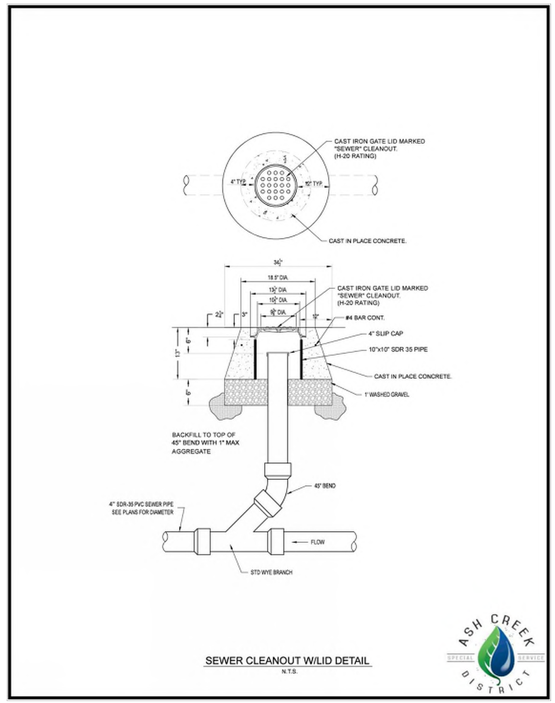
Z:_2023\23-0124 Block Ridge Phase 2 Final Job\design 23-0124.dwg\sheets\Det DETAIL PLAN.dwg



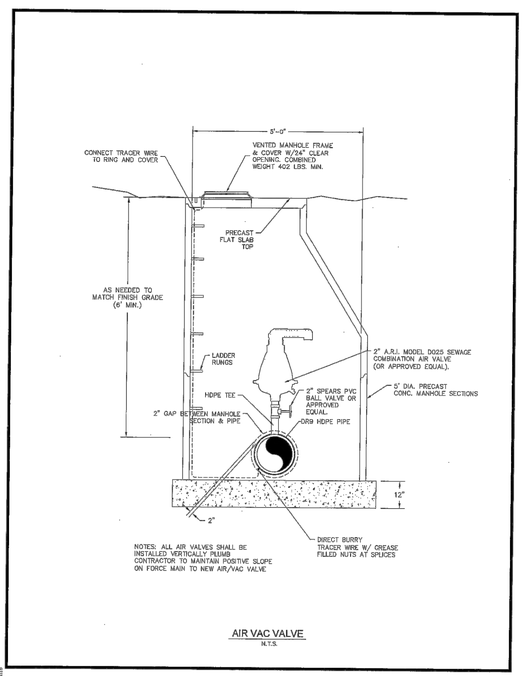
TYPICAL TRENCH DETAIL
N.T.S.



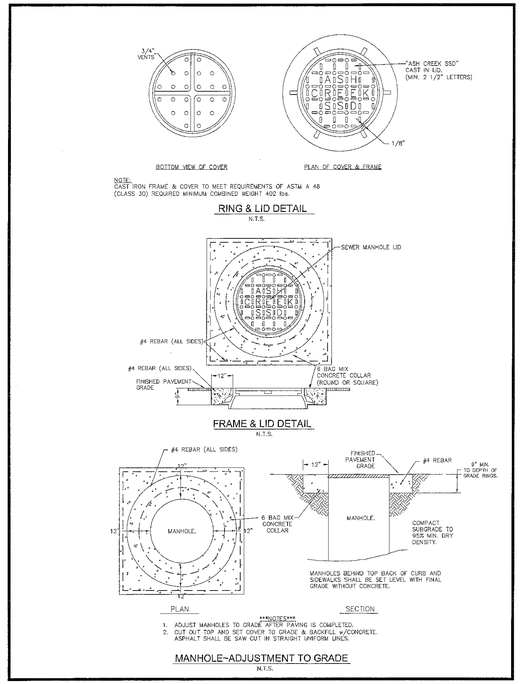
SEWER MANHOLE
N.T.S.



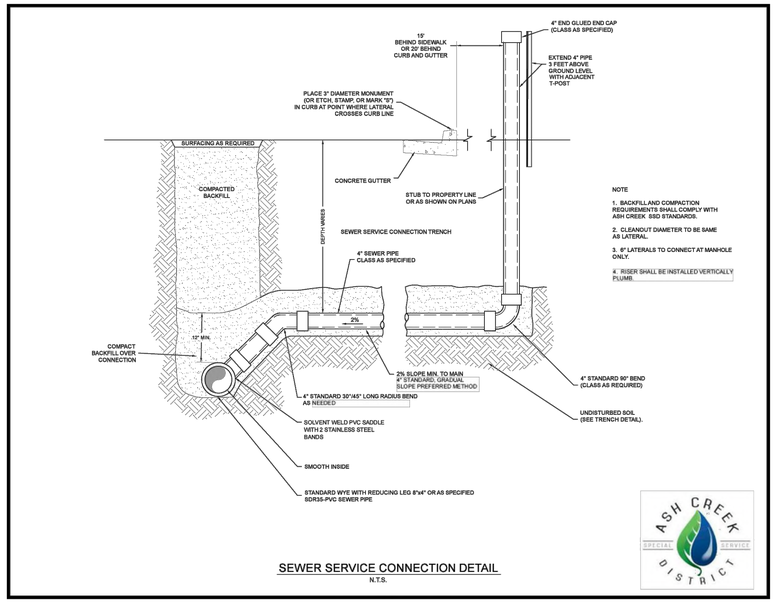
SEWER CLEANOUT W/LID DETAIL
N.T.S.



AIR VAC VALVE
N.T.S.



MANHOLE-ADJUSTMENT TO GRADE
N.T.S.



SEWER SERVICE CONNECTION DETAIL
N.T.S.

FOCUS©
ENGINEERING AND SURVEYING, LLC
6949 S. HIGH TECH DRIVE SUITE 200
MIDVALE, UTAH 84047 PH: (801) 352-0075
www.focus-es.com

FOR REVIEW ONLY

BLACK RIDGE PHASE 2
HURRICANE CITY,UT
DETAIL PLAN

REVISION BLOCK

#	DATE	DESCRIPTION
1	----	----
2	----	----
3	----	----
4	----	----
5	----	----
6	----	----

DETAIL PLAN

Scale: 1"=XX' | Drawn: DCJ
Date: 11/7/23 | Job #: 23-0124
Sheet: D7

S:\Subdiv\Z\2023\23-0124\Black Ridge Phase 2 Final Job\design 23-0124.dwg\sheet\1\D8-DETAIL PLAN.dwg

Product Type	Units	Acreage	%
Open Space, Amenities, Paths and Parks		100	19.7%
Single Family up to 4 DU/acre lots	120	55	10.8%
Single Familyv up to 6 DU/acre lots	120	48	9.5%
Single Family up to 8 DU/acre lots	780	208	41.0%
Townhomes up to 10 DU/acre	149	20	3.9%
Multifamily uo to 12 DU/acre	200	20	3.9%
Multifamily & Retirement 12+ DU/acre	400	40	7.9%
Commercial		5	1.0%
Major Roadways (66' ROW)		11	2.2%
Allocated units in Grand Canary & Mira Rosa	117		
Total	1886	507	100.0%

A LAND USE PLAN
SCALE: 1"=300'-0" NORTH

STB DESIGN
LANDSCAPE ARCHITECTURE & LAND PLANNING
1375 E. PERRYS HOLLOW ROAD
SALT LAKE CITY, UTAH 84103
PH/TXT/MO 801. 554 . 6146
SCOTT@STBDESIGNLLC.COM

ISSUE DESCRIP.	DATE
	5.18.2022

This drawing, as an instrument of professional service, and shall not be used, in whole or part, for any other project without the written permission of SCOTT THOMAS BLAKE DESIGN L.L.C. Copyright © 2022

BLACK RIDGE
HURRICANE, UTAH

LAND USE

101

Hurricane City Application

Application Accepted Date: 10/23/2024

Type of Improvement: Subdivision (Preliminary Plat)

Description: Proposed 149 unit subdivision

Tenant / Project Name: Hawk Ridge

Bldg. Address: East End of Cliffhangar Drive

City: Hurricane City State: UT Zip: 84737

Subdivision: Hawk Ridge Phase: 1 & 2

Block: Lot #: Parcel ID #: H-3-1-30-2208

Property Owner: Perry Development LLC

Permit Contact: Bush & Gudgell, Inc. P:(435) 673-2337

Email: rlay@bushandgudgell.com

CONTACT INFORMATION

General Contractor: Mitch Weis

License #: P: (435) 236-0617

City: State: Zip:

Email: mweis@perryhomesutah.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	150.00
Planning Fee	$	150.00
Sub Total:	**$**	**150.00**
Permit Total:	**$**	**150.00**
Amount Paid:	**$**	**150.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANPP24-28

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Rick Meyer

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

BUSH & GUDGELL, INC.
Engineers • Planners • Surveyors
205 East Tabernacle
St. George, Utah 84770
(435) 673-2337 (ph.)
(435) 673-3161 (fax)

October 23, 2024

Hurricane City Planning and Zoning
Hurricane City, UT

RE: Preliminary plat – Hawk Ridge subdivision

To whom it may concern,

The purpose of this application is to entitle a single family and townhome residential subdivision on parcel H-3-1-30-2208. The general plan designation is Single Family and zoning designation is R-1-8. The proposed lot layout conforms to those designations. The proposal is for 146 townhomes and two single family lots on 23.68 acres. Please see the attached exhibits for reference. Your consideration of this request is greatly appreciated.

Sincerely,

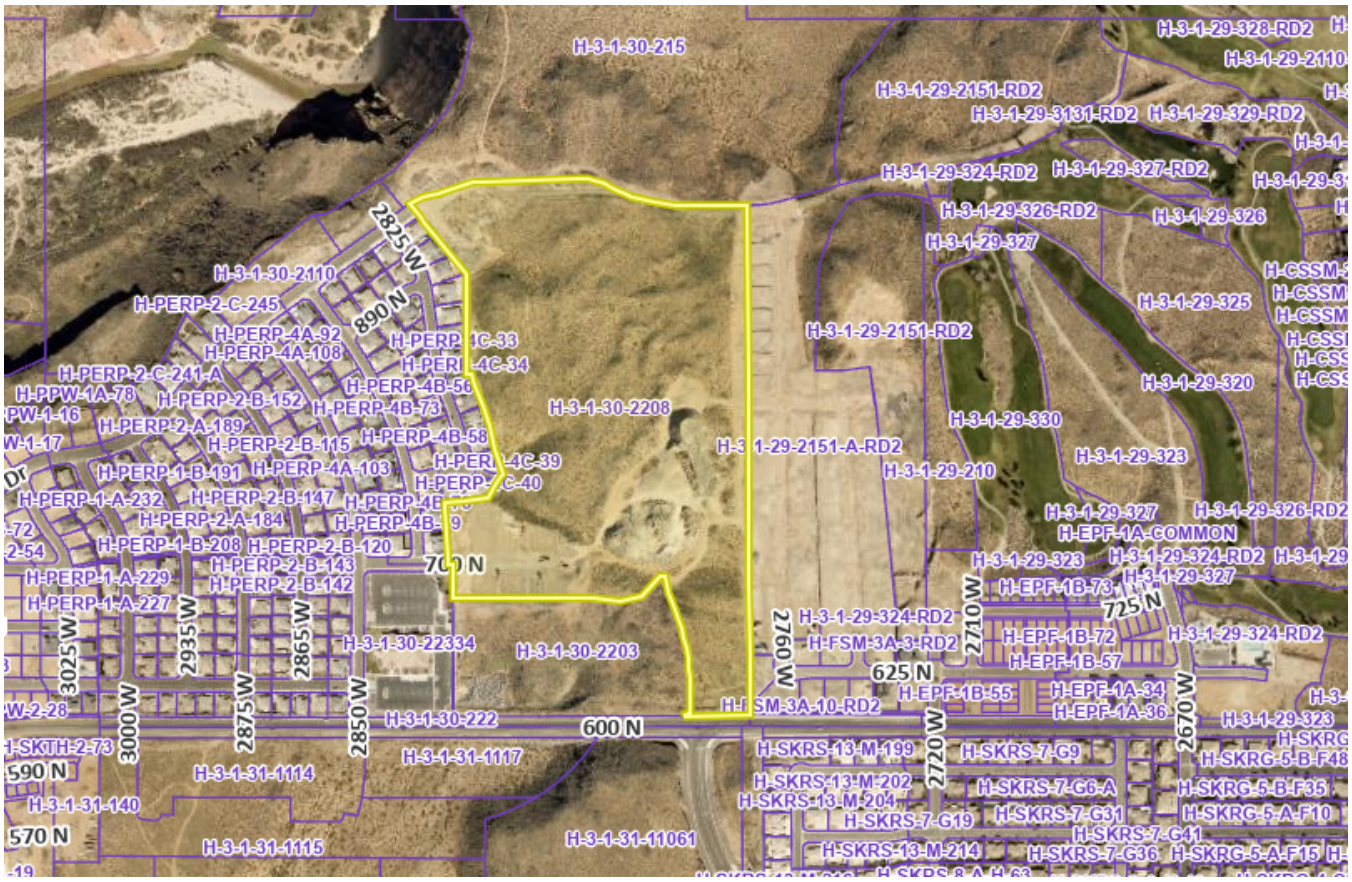
Rick Meyer, PE
Project Engineer
Bush and Gudgell

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	PP24-28
Type of Application:	Preliminary Plat Application
Action Type:	Administrative
Applicant:	Perry Development-Mitch Weis
Agent:	Bush & Gudgell
Request:	Approval of a Preliminary Plat
Location:	2800 W and Cliffhanger Dr
Zoning:	R1-10 PDO
General Plan Map:	Planned Community
Recommendation:	Table this item
Report Prepared by:	Fred Resch III

Discussion:
The applicant has filed a preliminary plat for Hawk Ridge, a 148 unit development, located east of Peregrine Pointe. The applicant previously applied for and received preliminary plat approval for a different development proposal on the same property. This property is located east of the existing Peregrine Pointe development and west of the planned right-of-way for 2800 W.



Location is approximate

JUC Comments

1. **Public Works:** There are too many units being served off a single access. Water loop required on cul-de-sac. Need drainage study and report
2. **Power:** 1. Hawk Ridge will submit a line extension application found on our website. 2. Application will then be reviewed by Hurricane Power staff, power board, and then ultimately passed by Hurricane City Council[1]. 3. Upon approval Hurricane Power will design the main power to be fed from Cliffhanger Dr. 4. The temporary Overhead line will need to be installed on the west side of Peregrine Pointe West as previously determined in order to have capacity at this site. (agreement from Perry Homes). 5. amperes per unit will need to be sited on the application.
3. **Sewer:** Ash Creek's main 24" sewer trunk line runs through this area and the proposed development does not appear to keep the 24" line in the roadway. This is one of our main trunk lines and it must be kept in the roadway. The developer will need to realign the 24" main line to stay in Cliffhanger drive. There is another area in the proposed plan where sewer is also not kept in a roadway which needs to be addressed.
4. **Water:** Specifications under the City standards allow 30 units and 2 fire hydrants on a cul-de-sac (HCS 3.6.4, 3.6.8.11 & 3.6.8.2) This project is on a pressure zone boundary division. Making this as drawn a cul-de-sac water line looping will be required. Also needs a water model.

[1] This is scheduled to be reviewed by the Power Board on December 4th, 2024

5. **Engineering:** Water system will require additional roadway connections in order to work. Applicant will need to meet with the Water Department and Engineeringto further discuss and come up with a better plan before this project is ready for recommendation for approval. Peregrine Court presents too long of a cul-de-sac per Hurricane City Standards. Also, one access serving 30+ units is substandard for water looping and unit count on one access for fire code.
6. **Streets:** Detention area elevation higher than adjacent homes. Public or private detention area? Where will drainage on east cul-de-sac go?
7. **Fire:** Cliffhanger Dr and 700 N roads must be connected for Fire Department access. Temporary turnaround installed if road not improved.
8. **Fiber:** No comments.
9. **Gas**: Show PUE in cross-section.
10. **Water Conservancy:** Washington County Water Conservancy District hereby acknowledges that based on the information provided, the plans adequately mitigates interference with district facilities and property interests. The District reserves the right to rescind this acknowledgement if additional information becomes available. The district has not determined whether water will be available for this development and does not hereby make any guarantee of water availability. In addition, the development must conform with applicable district requirements, including but not limited to payment of fees.

Staff Comments: Preliminary Plat

1. **Density:** This area's zoning was approved as part of the Sky Mountain/Peregrine Pointe PDO in 2003. This approval approved 396 units of "medium density" residential units in this area including the existing Peregrine Pointe development. There are 229 approved lots in Peregrine Pointe leaving 19 lots remaining for the remainder of the development. While the layout does not match the original approved site plan, the density is still within acceptable parameters

2. **Open Space and Amenities**: The proposed plat does not appear to meet HCC 10-33-5 regarding required 20% open space or the required four amenities.

3. **Parking:** It is not clear whether enough parking is provided for the development. For each four-plex there is enough driveway parking for six vehicles and eight are required. There is no indication whether the units will have garages that might be used to meet this code.

4. Staff has received a will serve letter from the sanitary and culinary water providers

5. **Sensitive Lands:** A sensitive lands application was approved for the property during the previous approvals on the property. This approval still hsa standing and this development proposal more successfully keeps development away from the steeper slopes than the previous one.

6. This approval does not approve or entitle the properties marked as “future development” on this preliminary plat. The City reserves the right to require that these areas be redesigned to meet city ordinances and standards.
7. **Water use:** The Washington County Water Conservancy District has a county-wide tracking budget of approximately 75,000 units with approximately 20,000 units being located within Hurricane City. As this is a redesign of an already approved preliminary plat these units are already accounted for within Hurricane City’s tracking data.

Recommendation: Staff recommends the Planning Commission review this application based on standards with Hurricane City Code. Staff would recommend the item be tabled so that the applicant can address staff and JUC comments.

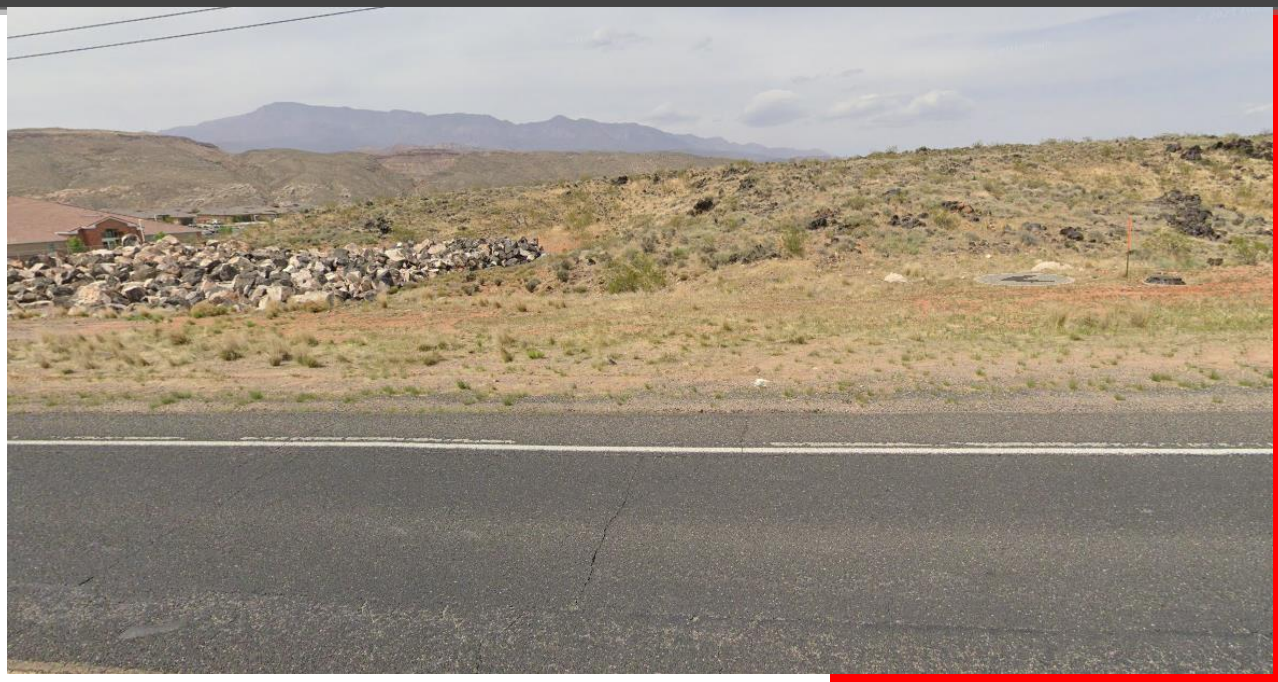
DESKTOP GEOTECHNICAL REPORT

Prepared for:

Perry Homes
Attn: Greg Sant
2250 North Coral Canyon Blvd
Washington, UT 84780

April 26, 2022

Shadow Mountain at Peregrine Point East



Prepared by:

LANDMARK TESTING & ENGINEERING

795 East Factory Drive
St. George, UT 84790

Landmark Project No: 220313

April 26, 2022

Perry Homes
Attn: Greg Sant
2250 North Coral Canyon Blvd
Washington, UT 84780

Subject: Desktop Geotechnical Report
Shadow Mountain at Peregrine Point East
Hurricane, Utah
Landmark Project No.: 220313

References: Geotechnical Investigation Report, Sky Mountain Golf Estates, Hurricane, UT, Landmark Project Number 19002, Dated January 21, 2019.

Geotechnical Investigation Report, Peregrine Point West, Hurricane, UT, Landmark Project Number 20441, Dated July 7, 2020.

Greg,

This report presents the results of Landmark Testing & Engineering's geotechnical desktop study for the Shadow Mountain at Peregrine Point East project in Hurricane, Utah. The data provided in this report is based on the reports referenced above, the Utah Geological Survey (UGS), USDA NRCS, and our experience in the area. The referenced reports were completed by Landmark for Perry Homes; although, Landmark has completed additional geotechnical investigations and reports for other subdivisions in the vicinity and within the same geologic units.

This report does not constitute a "Geotechnical Investigation Report." We recommend that a geotechnical investigation be completed on the project site in order to determine site specific soil conditions and to provide site specific geotechnical recommendations. If you advise us of the appropriate time to discuss these engineering services, we will be pleased to meet with you at your convenience.

Please feel free to contact our office at (435) 986-0566 if you have any questions.

Sincerely,
LANDMARK TESTING AND ENGINEERING

Steven Wells, P.E.
Geotechnical Manager

TABLE OF CONTENTS

DESKTOP GEOTECHNICAL REPORT
SHADOW MOUNTAIN AT PEREGRINE POINT EAST
HURRICANE, UTAH

1.0 INTRODUCTION 1

2.0 PROPOSED CONSTRUCTION 1

3.0 SITE SETTING 1

3.1 SURFACE CONDITIONS 1
3.2 GEOLOGIC SETTING 1
3.3 GEOLOGIC HAZARDS 1
3.4 SURFACE DRAINAGE 3
3.5 EXISTING GEOTECHNICAL INFORMATION 4

4.0 LIMITATIONS 4

TABLE OF FIGURES

DESKTOP GEOTECHNICAL REPORT
SHADOW MOUNTAIN AT PEREGRINE POINT EAST
HURRICANE, UTAH

FIGURE 1:	**VICINITY MAP**
FIGURE 2:	**SITE MAP**
FIGURE 3:	**SITE PLAN**
FIGURE 4:	**GEOLOGIC MAP**
APPENDIX A	**UGS HAZARDS REPORT**
APPENDIX B	**NRCS CUSTOM SOIL RESOURCE REPORT**

1.0 INTRODUCTION

This report presents the results of Landmark Testing & Engineering's geotechnical desktop study for the Shadow Mountain at Peregrine Point East project in Hurricane, Utah. The data provided in this report is based on a literature review of existing documentation of the site and surrounding areas, and our experience in the area. Our literature review included a review of geotechnical investigation reports completed by Landmark in the vicinity of the project, data from the Utah Geological Survey (UGS), and USDA NRCS.

2.0 PROPOSED CONSTRUCTION

The project site is approximately 84.8 acres of undeveloped land located in Hurricane, Utah. Figure 1 is a Vicinity Map showing the project location relative to surrounding features. Figure 2 is a Site Map showing the proposed project layout. Figure 3 is a Site Plan showing the preliminary lot layout of the project. Development of the land will consist of site grading and construction of residential lots with the associated residential roadways, curb and gutters, sidewalks, and utilities.

3.0 SITE SETTING

3.1 SURFACE CONDITIONS

The site is located on undeveloped desert land. The site generally slopes up to the east with basalt outcroppings throughout the project. Rock outcrops up to 15 feet high should be anticipated. There is a moderate amount of vegetation on the site consisting of field grasses, desert brush, and cacti.

3.2 GEOLOGIC SETTING

Previous geologic mapping by the Utah Geologic Survey (UGS) classifies the majority of the site as Qec/Qbv1 described as "Volcano Mountain" flows, cinder cone, and associated deposits – Divisible into three flows in the Hurricane quadrangle. The youngest flow, Qbv1, is a medium- to dark-gray, fine-grained olivine basanite. The flow is generally 35 to 45 feet thick and form very rough, blocky surfaces partially covered with eolian sand and pedogenic carbonate up to several feet thick.[1] Eolian sand deposits (Qes) are mapped on the western portion of the project. A geologic map of the site is shown on Figure 4 for reference.

3.3 GEOLOGIC HAZARDS

The St. George basin lies within the transitional zone between the Colorado Plateau to the east and the Basin and Range Province to the west. Southwestern Utah is located on a structural block proximate to the southern segment of the Intermountain Seismic belt, which is characterized by high-angle normal faults that tend to step down to the west. The Hurricane fault with an offset of 6,000 to 8,000 feet forms the eastern edge of the transition zone. The Grand Wash-Reef Reservoir-Gunlock fault system with displacement of about 1,500 to 3,000 feet forms the western edge.

1 Biek, Robert F.,2003, Geologic Map of the Hurricane 7.5' Quadrangle, Washington County, Utah; Utah Geological Survey, Utah Geologic Survey Map 187, Plate 2.

Geologic hazards mapped by the UGS are summarized below. The UGS Geologic Hazards Mapping and Data Custom Report for the project site is provided in Appendix A.

Liquefaction

The eolian sand deposits (Qes) along the western edge of the project site are mapped as having "high liquefaction susceptibility." The remainder and majority of the site is mapped as not being susceptible to liquefaction.

Liquefaction is the sudden loss of shear strength in the soil due to the build-up of excess pore water pressure.[2] This can occur when the soil is subjected to intense shaking such as during a seismic event. The soils that are most susceptible to liquefaction are loose, saturated sandy soils with a low fines content (material passing the #200 sieve).

Out experience shows that onsite eolian soils will typically consist of loose to medium dense sands underlain by relatively shallow caliche and basalt bedrock. Groundwater is typically not encountered in the area. Due to the anticipated lack of groundwater and presence of relatively shallow bedrock, the liquefaction potential for the soils will generally be considered low.

Landslide

The canyon cliffs on the north side of project site are mapped as having low landslide susceptibility. Low landslide susceptibility includes geologic units of low landslide-prone susceptibility that crop out on slopes at or above a determined critical angle, and moderately landslide-prone geologic units that crop out on slopes less than the critical angle determined for moderate landslide susceptibility.

Rockfall

The canyon cliffs on the north side of project site are mapped as having high rockfall hazard. The hazard would be for the downslope property and not on the project site.

Caliche Hazard

Caliche horizons have been identified in the area. Strongly indurated caliche layers may approach the hardness of bedrock and greatly reduce soil permeability.

Collapsible Soils

Collapsible soil is mapped in the eolian sand deposits (Qes) on the project site. Collapsible Soil 1 - Unconsolidated geologic units with reported collapse values greater than or equal to 3 percent. Collapsible soils are unlikely in areas continually subjected to saturation or flooding.

2 Coduto, Donald P. (1999), Geotechnical Engineering: Principles and Practices, Prentice Hall, Upper Saddle River, NJ

Expansive Soil and Rock

Soils classified by the Natural Resources Conservation Service as having low susceptibility for volumetric change; and/or have a liquid limit [LL] from 0 to 40, a plasticity index [PI] from non-plastic [NP] to 15, and a swell/collapse (SCT) value of 0 to 2 percent; and/or a linear extensibility potential of less than 3 percent. These values overlap at their upper ends with soils in the moderate susceptibility category. However, the low category includes soils with highly variable potential for volumetric change that do not fit easily into the moderate or high categories.

Shallow Bedrock

Hard, buried, shallow bedrock occurs on the site with bedrock crops out at the ground surface and typically requires blasting to excavate.

Piping and Erosion

Soil susceptible to piping and erosion are mapped in the eolian sand deposits (Qes). Typically, fine-grained, non-cohesive, loose to poorly consolidated sand and silt deposits, landslide deposits and some very poorly consolidated siltstone and claystone. For piping to develop, a free face and percolating groundwater are required. The loose, non-cohesive nature of erodible soils makes them highly susceptible to the effects of water and wind erosion, especially when disturbed from their natural conditions.

Wind-Blown Sand

High wind-blown-sand susceptibility is mapped within the Qes deposits. Low wind-blown-sand susceptibility is mapped on the remainder of the site.

A full description and mapping of the geologic hazards is provided in the UGS Geologic Hazards Mapping and Data Custom Report for the project site in Appendix A.

3.4 SURFACE DRAINAGE

The following data is summarized from the USDA NRCS Custom Soil Resource Report for the project site. The full report is included in Appendix B.

The Winkel-Rock outcrop complex, 8 to 30 percent slopes, which encompasses 70.6 percent of the project area according the NRCS, is considered Hydrologic Soil Group D. The NRCS classifies these soils as well drained with a medum runoff class. The capacity of the most limiting layer to transmit water (Ksat) is very low to moderately high (0.00 to 0.60 in/hr).

The Bermesa fine sandy loam, 1 to 10 percent slopes, which encompasses 29.1 percent of the project area according the NRCS, is considered Hydrologic Soil Group C. The NRCS classifies these soils as well drained with a very high runoff class. The capacity of the most limiting layer to transmit water (Ksat) is very low to low (0.00 to 0.01 in/hr).

3.5 EXISTING GEOTECHNICAL INFORMATION

Landmark has completed the following geotechnical investigation reports for Perry Homes in the vicinity of the project site:

> Geotechnical Investigation Report, Sky Mountain Golf Estates, Hurricane, UT, Landmark Project Number 19002, Dated January 21, 2019.
>
> Geotechnical Investigation Report, Peregrine Point West, Hurricane, UT, Landmark Project Number 20441, Dated July 7, 2020.

Landmark has completed additional geotechnical investigations and reports for other subdivisions in the vicinity and within the same geologic units.

The soil conditions encountered in our geotechnical investigations in the vicinity and within the same geologic units as the project site are consistent with the geologic mapping of the site. The soil conditions generally consist of loose to medium dense, poorly graded sand and silty sand with varying amounts of gravel and cobble underlain by caliche and/or basalt bedrock. Refusal on well cemented caliche or competent bedrock may be encountered within the upper 8 feet throughout most of the project site. Occasional deeper deposits of loose soil may be encountered. The poorly graded sand and silty sand are typically loose and may experience collapse under saturated, loaded conditions. Occasional pockets of clay have been encountered in our investigations.

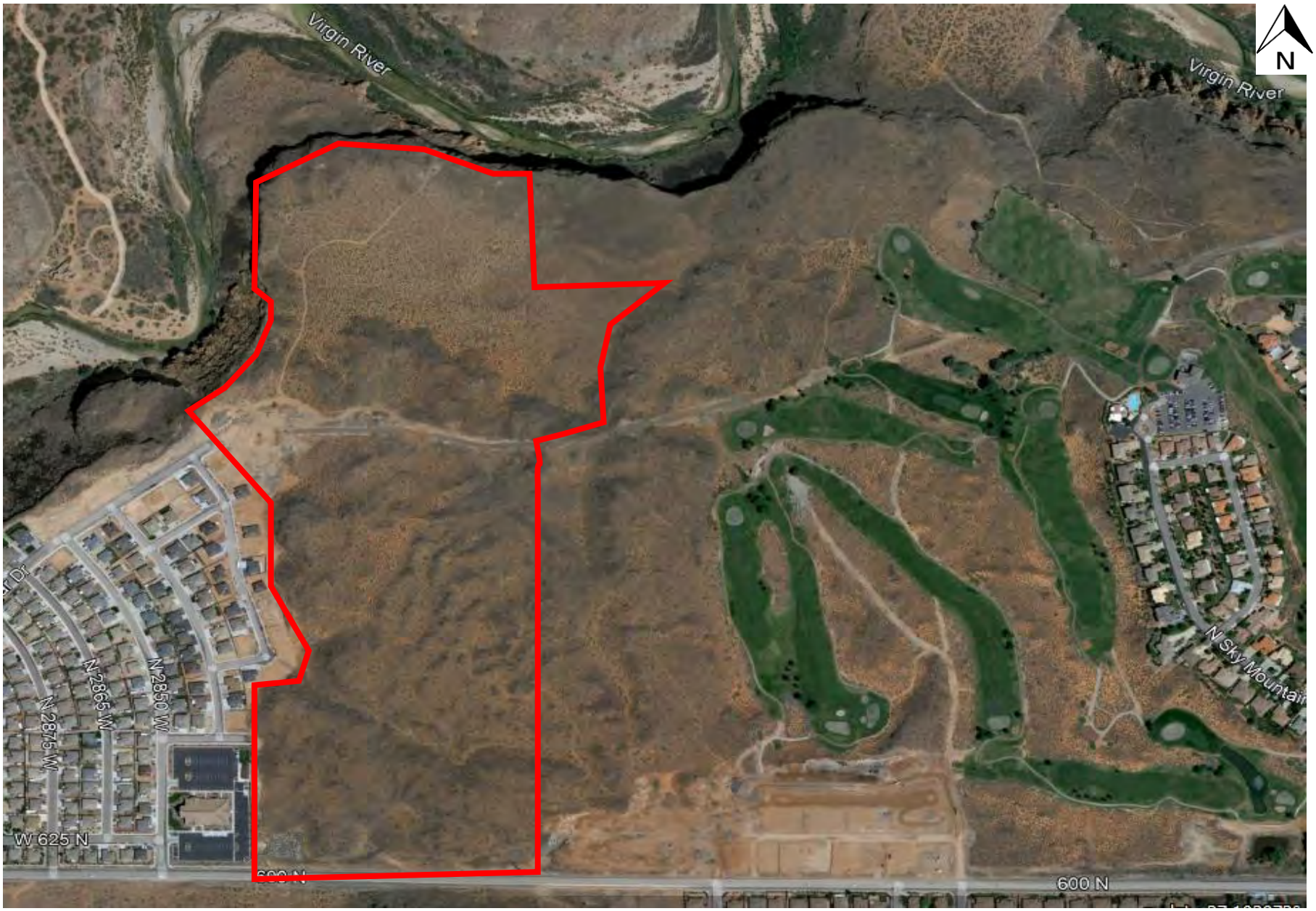
4.0 LIMITATIONS

The data provided in this report is based on geotechnical investigation reports completed in the vicinity of the project site, the Utah Geological Survey (UGS), USDA NRCS, and our experience in the area. This report does not constitute a "Geotechnical Investigation Report." We recommend that a geotechnical investigation be completed on the project site in order to determine site specific soil conditions and to provide site specific geotechnical recommendations.

LANDMARK TESTING & ENGINEERING

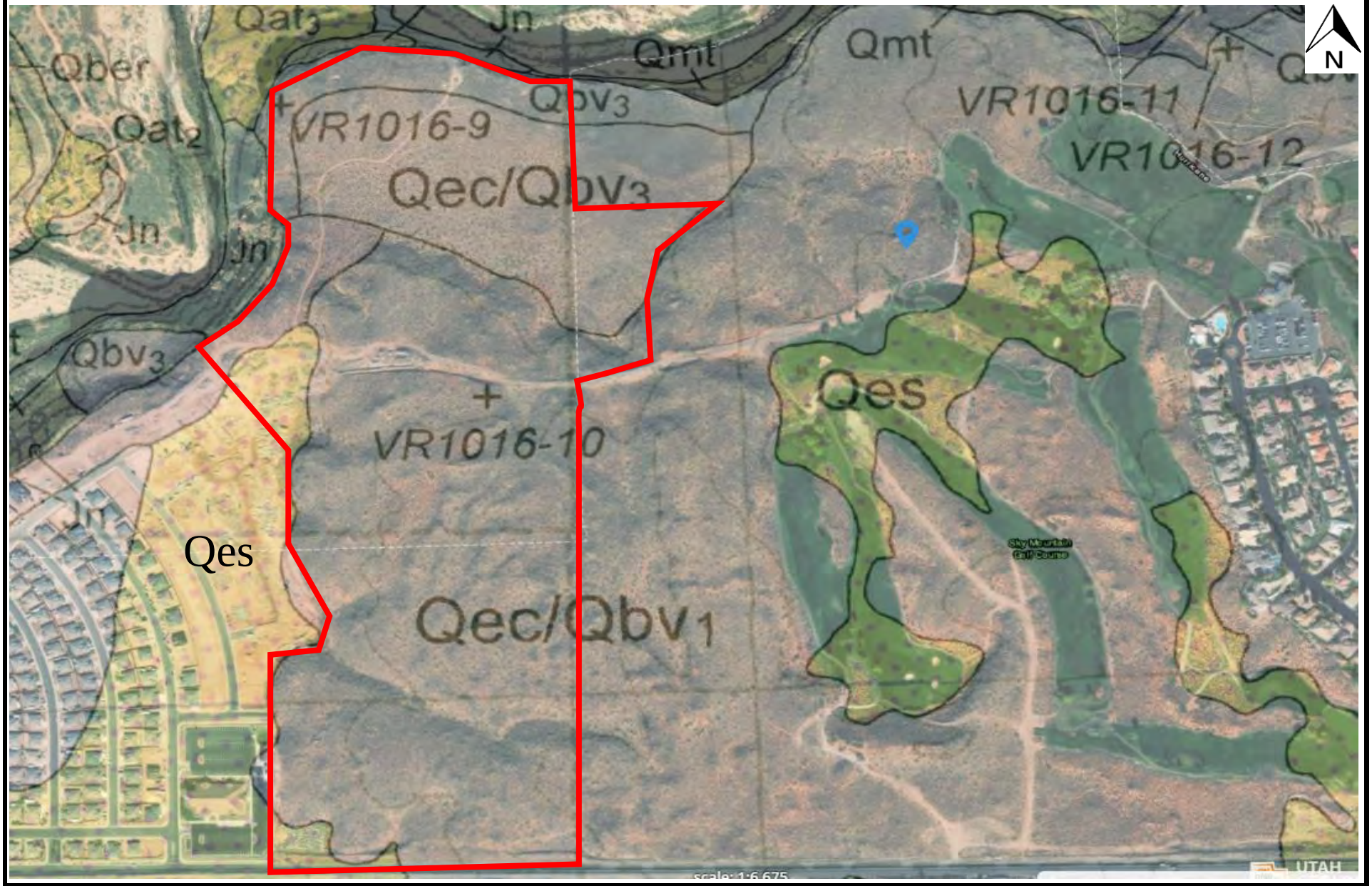
Steven Wells, P.E.
Geotechnical Manager

LANDMARK TESTING & ENGINEERING	Vicinity Map Project Number 220313	Figure 1



LANDMARK TESTING & ENGINEERING	Site Map Project Number 220313	Figure 2

LANDMARK TESTING & ENGINEERING	Site Plan Project Number 220313	Figure 3



LANDMARK TESTING & ENGINEERING	Geologic Map Project Number 220313	Figure 4

APPENDIX A

UGS Hazards Report

Utah Geological Survey

GEOLOGIC HAZARDS MAPPING AND DATA CUSTOM REPORT

Report generated on 4/20/2022 at 4:35:42 PM

This report contains geologic hazard information and data from the Utah Geological Survey (UGS) and other sources for the area of interest shown on the map below and can be used to identify mapped geologic hazards in an area, understand what the hazards are, and learn potential ways to mitigate them. This report is not a substitute for site-specific geologic hazards and geotechnical engineering investigations by a qualified, Utah-licensed consultant. These investigations provide valuable information on the site geologic conditions that may affect or be affected by development, as well as the type and susceptibility of geologic hazards at a site and recommend solutions to mitigate the effects and costs of the hazards, both at the time of construction and over the life of the development. See your local city or county building department for details on these investigations and UGS Circular 122 (https://ugspub.nr.utah.gov/publications/circular/c-122.pdf). Since 1850, at least 5797 deaths and an undetermined financial cost have been attributed to geologic hazards in Utah. Damages resulting from many geologic hazards are often not covered by property or other insurance. In almost all cases, it is more cost effective to investigate and characterize potential hazards and implement appropriate mitigation, rather than rely on additional maintenance over the life of a project and/or incur costly construction change orders and other financial costs.

0.6 km
0.4 mi

Scale 1:32,500

Although this product represents the work of professional scientists, the Utah Department of Natural Resources, Utah Geological Survey, makes no warranty, expressed or implied, regarding its suitability for a particular use, and does not guarantee accuracy or completeness of the data. The Utah Department of Natural Resources, Utah Geological Survey, shall not be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages with respect to claims by users of this product. The Utah Geological Survey does not endorse any products or manufacturers. Reference to any specific commercial product, process, service, or company by trade name, trademark, or otherwise, does not imply endorsement or recommendation by the Utah Geological Survey.

Report Summary

Geologic hazards affect Utah, negatively impacting life safety, health, property, and the state's economy. These hazards are those geologic conditions that present a risk to life or of substantial loss or damage of real property, and are generally within five categories: landslide, earthquake (seismic), flooding, problem soil and rock, and volcanic hazards. Although many geologic hazards are not life threatening, they are often costly when not recognized and properly accommodated and mitigated in project planning and design, and may result in additional, significant construction and/or future maintenance costs and injury or death. However, we can live and deal with geologic hazards by understanding what they are, where they exist, how large or difficult they are, and how to effectively mitigate them. Detailed geologic hazard mapping is available for limited areas and for specific hazards in Utah and additional mapping is ongoing. This report represents geologic hazard data extracted from the Utah Geologic Hazards Database of current geologic hazard mapping by the UGS for part of Utah and from other sources at the date and time indicated on the cover page. For each of the major geologic hazard categories (earthquake, landslide, flooding, and problem soil and rock) mapped in Utah, a summary page is available that describes the hazard category and the individual types of hazards within that category. Following the summary page, are detailed pages for each mapped hazard type that contain a brief description of that hazard type, a map of your area of interest and the mapped hazard susceptibility, a brief discussion on the susceptibility rankings and their meaning, and a list of references and other information on that hazard type. The absence of data does not imply that no geologic hazard or hazards exist. Additional geologic hazard mapping is on-going and will be added to the database as it is finalized.

Table 1 lists the mapped geologic hazards, the mapped hazard relative susceptibility, and the corresponding report page(s) with information on that hazard in your area of interest.

Mapped Geologic Hazards	**Hazard Category**
Liquefaction Susceptibility	High
Ground Shaking	Strong/Very Strong
Flood and Debris-Flow Hazard	Undefined
Landslide Susceptibility	Low
Rockfall Hazard	High
Caliche Hazard	Areas Indentified
Collapsible Soil Susceptibility	Collapsible Soil 1
Expansive Soil and Rock Susceptibility	Low
Shallow Bedrock Potential	Hard Shallow
Shallow Bedrock Potential	Buried Shallow
Shallow Groundwater Susceptibility	Potentially Shallow
Piping and Erosion Susceptibility	Soil Susceptible
Wind-Blown Sand Susceptibility	High
Wind-Blown Sand Susceptibility	Low

The database is updated when new geologic hazard mapping is published by the UGS, most commonly in urban areas using 7.5-minute map quadrangles as comprehensive geologic hazard map sets. If mapping is not available for your area of interest at the time this report was created, check the website for updates or contact the UGS at (801) 537-3300 or https://geology.utah.gov/about-us/ask-a-geologist

EARTHQUAKE HAZARD

Utah has experienced sixteen earthquakes greater than magnitude (M) 5.5 since pioneer settlement in 1847, and geologic investigations of Utah's faults indicate a long geologic history of repeated large earthquakes of M 6.5 and greater prior to settlement. Although Utah is not on a boundary between tectonic plates where most of the world's earthquakes occur, it is in the tectonically extending western part of the North American plate. Thus, earthquakes in Utah are indirectly caused by interactions with the Pacific plate along the plate margin on the west coast of the United States. Also, many small earthquakes in east-central Utah are induced by underground coal mining. Large, damaging earthquakes in Utah are likely to occur in the Intermountain Seismic Belt (ISB) that generally extends north-south through the center of the state, essentially following Interstate 15, where there are many hazardous faults capable of producing earthquakes. However, areas outside the ISB also experience earthquakes. Moderate to large earthquakes (generally M 6 and greater) can kill and injure many people and cause substantial damage to buildings, roads, bridges, and utilities. The Utah Earthquakes (1850 to 2016) and Quaternary Fault Map (https://ugspub.nr.utah.gov/publications/maps/m-277.pdf) shows earthquakes known to have occurred within and surrounding Utah and mapped Quaternary faults (those with movement in the past 2.6 million years) considered to be earthquake sources.

Earthquake hazards include:

Earthquake Ground Shaking – the sudden motion or trembling of the Earth as stored elastic energy is released by fracture (breaking) and movement of rocks along a fault.

Surface Fault Rupture – displacement(s) of the ground surface along a tectonic fault during an earthquake that results in a steep slope known as a scarp.

Liquefaction – a sudden, large decrease in strength of a saturated sandy soil caused by a temporary increase in soil water pressure during an earthquake and subsequent collapse of soil structure, resulting in sand boils, differential foundation settlement, and localized flooding.

Tsunamis – a series of waves in the ocean or a lake caused by the displacement of a large volume of water, such as from underwater fault rupture or landsliding into the water.

Seiches – an oscillating wave in an enclosed body of water, such as a lake, river, canal, or tank, induced by earthquakes or other energy sources.

Tectonic Deformation – the lowering and tilting of a valley floor on the down-dropped side of a fault during an earthquake that commonly causes localized flooding and gravity-flow utility failure.

Earthquake – **Triggered Landslides and Rockfall** – landslides and rockfall triggered by earthquake ground shaking.

Quick Clays – typically, marine-type clays that significantly lose strength when subjected to earthquake ground shaking.

The UGS has mapped surface-fault-rupture and liquefaction earthquake hazards for selected areas, and the U.S. Geological Survey has mapped expected earthquake ground shaking in Utah. The other earthquake hazard types have not yet been mapped in Utah. More information on earthquake hazards are available at https://geology.utah.gov/hazards/earthquakes-faults and https://ussc.utah.gov. The following Earthquake Hazards pages describe the individual mapped earthquake hazards for your area of interest.

EARTHQUAKE HAZARD
Liquefaction Susceptibility

Generally, earthquakes greater than about M 5 can cause liquefaction—a sudden, large decrease in the strength of sandy soils caused by a temporary increase in soil water pressure during earthquakes. Liquefaction can result in soil collapse, sand boils, differential building foundation settlement, lateral spread landslides, and localized, shallow flooding. The map below shows where liquefaction susceptibility may exist for your area of interest and the mapped relative susceptibility in terms of very high, high, moderate, low, very low, and not susceptible. Due to limited information, some areas are mapped as susceptible or unknown. The map does not integrate earthquake ground shaking which is required to determine the liquefaction potential (potential is equal to susceptibility plus opportunity) in susceptible soils or the probability (likelihood) of liquefaction.

How to Use This Map

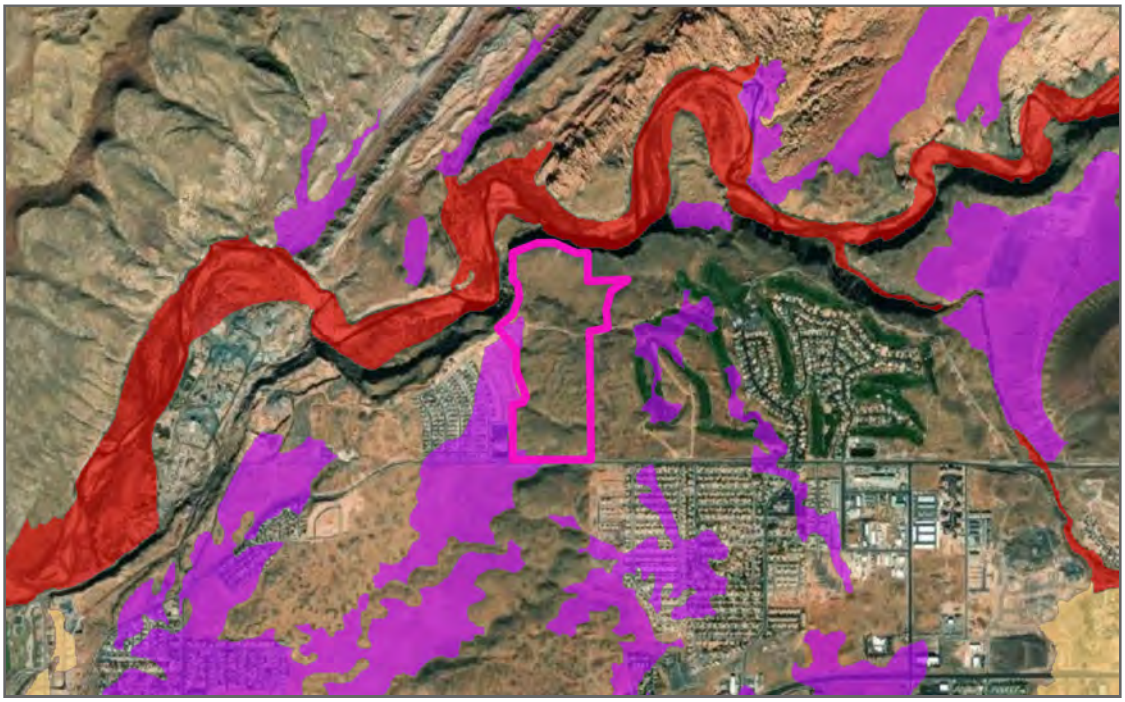
The liquefaction susceptibility mapping is intended for general planning purposes to indicate where liquefaction susceptibility may be present and to assist in designing liquefaction-hazard investigations. Your area of interest has an area mapped as having liquefaction susceptibility. The susceptibility of liquefaction susceptibility and the description of the liquefaction susceptibility categories identified in your area of interest are listed above. This means that some form of liquefaction is likely to occur during an earthquake if the conditions to produce liquefaction are present at the site, including strong enough ground shaking, sandy soils, and shallow groundwater at or above 50 feet. Areas with no mapped liquefaction susceptibility either do not have the conditions for liquefaction present or there was not enough data to determine the subsurface and groundwater conditions. Groundwater levels fluctuate seasonally and can change after development. Due to scale and data restrictions, a site-specific assessment should be conducted in areas with no mapped liquefaction susceptibility. In areas with mapped liquefaction susceptibility hazard, a site-specific investigation is highly recommended. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where liquefiable soils may be present beneath a building. Specifically, the IBC requires the investigation to evaluate liquefaction hazard, including the total and differential settlement, and surface displacement from lateral spreading and/or lateral flow.

More Information

Although these areas are not regulated on a state-level many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific liquefaction investigation. Site-specific investigations are necessary to accurately characterize the site-specific liquefaction susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Liquefaction.



0.6 km
0.4 mi

Scale 1:32,500

High liquefaction susceptibility, includes highly susceptible geologic units consisting of well-sorted sand, silty sand, and gravel with sufficient evidence to indicate the depth to groundwater is less than or equal to 50 feet. Determining if a liquefaction hazard exists at a specific location in this zone requires acquiring site-specific information about soil texture and density, groundwater conditions, and the frequency and intensity of anticipated ground shaking.

References

Liquefaction Hazards in Utah (UGS Public Information Series 100): https://ugspub.nr.utah.gov/publications/public_information/pi-100.pdf.

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 9— Liquefaction Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl9.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 5— Liquefaction Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl5.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 2— Liquefaction Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl2.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 2— Liquefaction Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-2.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 1— Liquefaction Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate1.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

EARTHQUAKE HAZARD
Ground Shaking

Ground shaking is the primary hazard resulting from earthquakes. Based on data from the UGS, the University of Utah Seismograph Stations, and other agencies, the U.S. Geological Survey periodically creates seismic hazard maps of the entire U.S. These maps are used by engineers and architects in designing buildings to meet the seismic requirements of the 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide in Utah. Unless the building is specially designed, such as a critical facility (police and fire stations, emergency operations centers, etc.), building “to the code” means that the building is not expected to collapse during an earthquake of a magnitude for which it was designed. However, the building may dangerous and uninhabitable, due to significant structural damage and must then be replaced.

The map below shows the level of ground shaking (peak horizontal acceleration with a 2 percent probability of exceedance in 50 years) (in percent of the standard acceleration due to gravity or one g,) expected during a large earthquake in the vicinity of your area of interest. This map is at a reduced scale (zoomed out) compared to the other maps in this report, due to the low resolution of the source data and mapping.

How to Use This Map

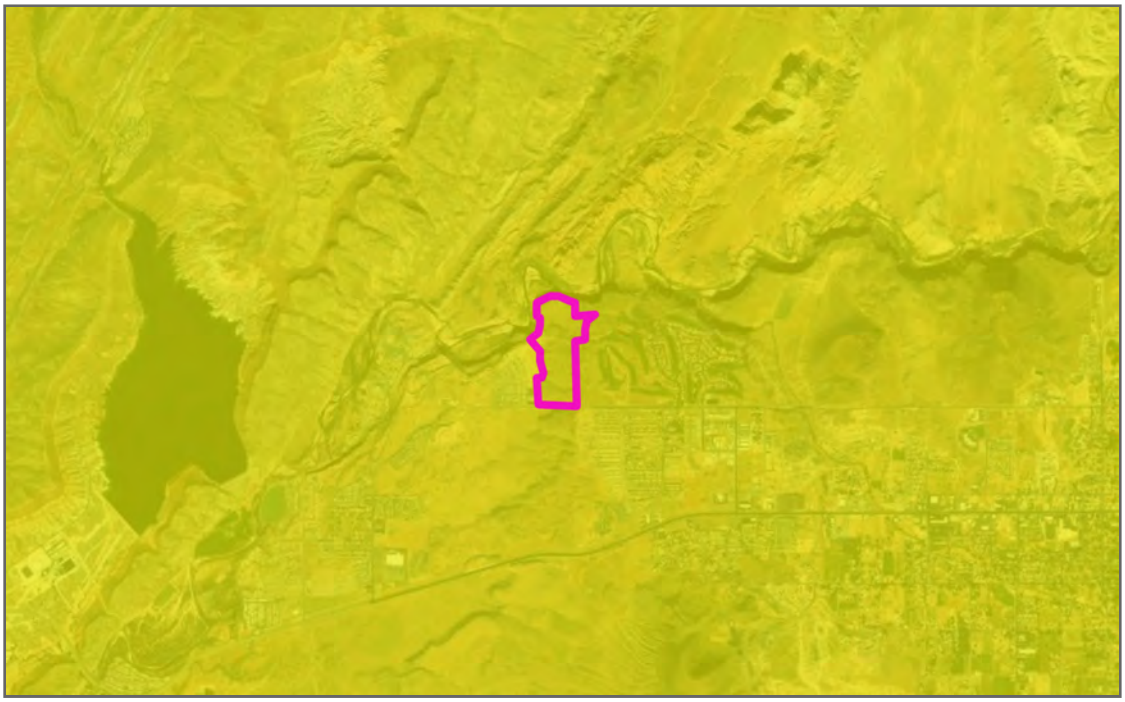
Your area of interest has an area with an expected ground shaking with a potential for damage. See the Ground Shaking Maps linked in the More Information section for technical information related to ground shaking categories. Typical homeowner's insurance excludes damages from earthquakes.

More Information

Ground shaking is the most widespread and typically the most damaging hazard associated with an earthquake. Strong ground shaking can last for several seconds to minutes and can be more or less intense depending on local soil and rock conditions. This map can be used by professionals to identify peak horizontal acceleration with a 2 percent probability of exceedance in 50 years. Damaging ground shaking can occur during earthquakes generated by an unspecified fault or at a distance from an identified fault.

Additional informational resources are listed below:

UGS: Earthquake Scenario and Probabilistic Ground Shaking Maps for the Salt Lake City, Utah Metropolitan Area.



1 km
1 mi

Scale 1:65,000

Strong/Very Strong

References

Seismic Hazard Maps and Site-Specific Data (U.S. Geological Survey): https://earthquake.usgs.gov/hazards/hazmaps.

FLOODING HAZARD

Flooding is the overflow of water onto lands that are normally dry and is the most commonly occurring natural hazard in Utah. Damage from flooding includes inundation of land and property, erosion, deposition of sediment and debris, and the force of the water itself, which can damage property and take lives. Historically, flooding is the most prevalent, costly, and destructive (on an annual basis) hazard in Utah. Since 1850, at least 101 people in Utah have died from flooding.

Flooding hazards include:

River, Lake, or Sheet Flooding – overflow of water from excessive river/stream flow, water in lakes, and thin flow across generally flat to gently sloping ground.

Debris Flows – fast-moving flow-type landslides composed of a slurry of rock, mud, organic matter, and water that move down drainage-basin channels onto alluvial fans.

Shallow Groundwater – shallow groundwater can flood basements and other underground facilities, damage buried utility lines, and destabilize excavations.

Dam and Canal Failure – an unintentional release of water due to the failure of a water-retention or conveyance structure (dam or canal) that may occur with little warning.

Seiches – an oscillating wave in a lake or tank induced by earthquakes and other energy sources.

Tsunamis – a series of waves in the ocean or a lake caused by the displacement of a large volume of water, such as from underwater fault rupture or landsliding into the water.

The Federal Emergency Management Agency (FEMA) has mapped flood hazards for selected areas in Utah (https://msc.fema.gov) and these maps are the official maps for flood insurance and related activities. However, the FEMA maps do not show flooding from debris flows, alluvial fans, and shallow groundwater, and may be out-of-date. The UGS has mapped river, lake, or sheet; debris flows; and shallow groundwater flooding hazards for selected areas in Utah using geologic-based methods, and the Utah Division of Water Rights has mapped dam failure flooding for selected dams in Utah (https://maps.waterrights.utah.gov/EsriMap/map.asp?layersToAdd=Dams). Canal failure, seiches, and tsunami flooding hazards remain unmapped in Utah. The following Flooding Hazards pages describe the individual mapped flooding hazards for your area of interest.

FLOODING HAZARD
Flood and Debris-Flow Hazard

Flooding is the overflow of water onto lands that are normally dry and is the most commonly occurring natural hazard in Utah. Damage from flooding includes inundation of land and property, erosion, deposition of sediment and debris, and the force of the water itself, which can damage property and take lives. Historically, flooding is the most prevalent, costly, and destructive (on an annual basis) hazard in Utah. Debris flows and related sediment flows are fast-moving flow-type landslides composed of a slurry of rock, mud, organic matter, and water that move down drainage-basin channels onto alluvial fans. Debris flows generally initiate on steep slopes or in channels by the addition of water from intense rainfall or rapid snowmelt and often occur after wildland fires. When flows go beyond the mountain front and lose channel confinement, they spread laterally on alluvial fans and deposit the carried debris. In addition to being debris-flow-deposition sites, alluvial fans are favored sites for urban development; therefore, a debris-flow-hazard investigation is necessary when developing on alluvial fans. Debris flows pose a hazard very different from other types of landslides and floods, due to their rapid movement and destructive power as they often occur with little warning. Since 1850, at least 15 people have been killed by debris flows in Utah. In addition to threatening lives, debris flows can damage buildings and infrastructure by debris, erosion, direct impact, and flooding. The map below shows the mapped flood and debris-flow hazard for your area of interest in relative terms of very high, high, moderate, low, very low, and not mapped categories.

How to Use This Map

The flood hazard mapping is intended for general planning purposes to indicate where flooding may occur and to assist in designing flood-hazard investigations. Your area of interest has an area mapped as having locations of flood hazard. The susceptibility of flood hazard and the description of categories identified in your area of interest are listed above. Areas with no mapped flood hazard either do not have geologic units associated with flood, there was not enough data to determine the hazard, or limitations of scale. Areas of flood hazard may be mapped even though it may not be in a FEMA mapped flood zone where flood insurance may be required. The FEMA maps do not typically show flooding from debris flows, alluvial fans, thin sheet flooding, and shallow groundwater, and may be out-of-date. A flood hazard investigation is highly recommended. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where buildings are located within flood hazard areas as adopted by local communities.

If your area of interest is in a FEMA-mapped flood zone where flood insurance will be required by federally regulated or insured lenders for a mortgage on the property. Consult the official FEMA Flood Insurance Rate Maps at https://msc.fema.gov/portal/home to confirm the mapped FEMA flood zone(s).

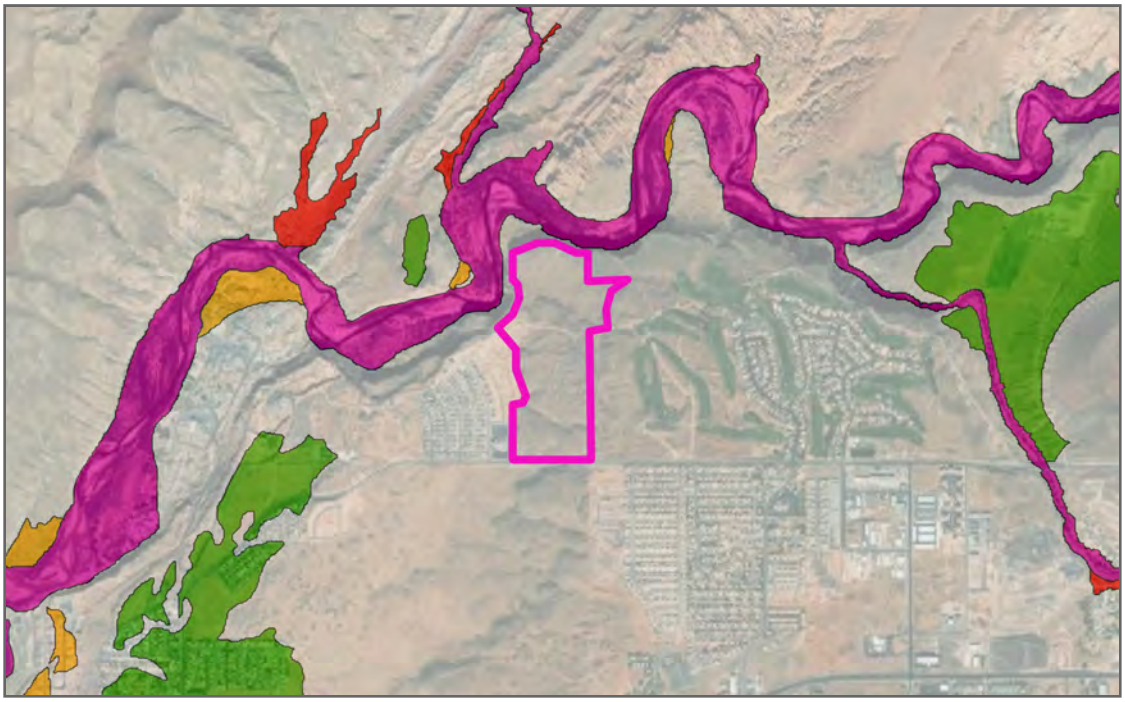
More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring comprehensive, site-specific flood and debris-flow investigations. Site-specific investigations are necessary to accurately characterize the site-specific flood hazard and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local building department for requirements, and a Utah-licensed geotechnical engineer for investigations. Owners with a mortgage on a building outside FEMA-designated high-risk areas can also purchase flood insurance and may be eligible for lower-cost preferred risk policies.

Additional informational resources are listed below:

UGS: Flooding Hazards.

Utah Division of Water Rights: Dam Inundation



0.6 km
0.4 mi

Scale 1:32,500

Undefined flood hazard, includes flood hazard in narrow, bedrock-floored canyons with perennial streams, but that lack mappable alluvial deposits includes areas mapped as bedrock.

References

Debris-Flow Hazards in Utah (UGS Public Information Series 70: https://ugspub.nr.utah.gov/publications/public_information/pi-70.pdf.
Wildfires and Debris Flows in Northern Utah (UGS Public Information Series 90): https://ugspub.nr.utah.gov/publications/public_information/pi-90.pdf.

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 1— Flood and Debris-Flow Hazards: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl1.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 1— Flood and Debris-Flow Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl1.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 3— Flood and Debris-Flow Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl3.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 4— Flood and Debris-Flow Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-4.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 3— Flood and Debris-Flow Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate3.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 3— Flood and Debris-Flow Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl3.pdf.

Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Contract Deliverable) Report and Maps: https://doi.org/10.34191/SS-166.

LANDSLIDE HAZARD

A landslide is the downslope movement of rock, soil, and debris, in which much of the material moves as a coherent or semi-coherent mass with little internal deformation and movement typically occurs on either a curved (rotational slide) or flat (translational slide) rupture surface. Occasionally, individual landslides may involve multiple types of movement if conditions change as the displaced material moves downslope. For example, a landslide may initiate as a rotational slide and then become a translational slide as it progresses downslope. Landslides occur in all 50 states; however, the coastal states and the Intermountain West, including Utah, are the primary regions of landslide activity. Nationally, landslides result in 25 to 50 deaths annually and cause approximately $5 billion (2019 dollars) in damage.

Since 1850, at least 338 people in Utah have died from landslides. Specific types of landslides are classified by the material involved and the movement type. Material in a landslide can be rock, soil, organic debris, or a combination of these materials, and movement types include fall, topple, slide, and flow. Typical landslides in Utah include slides, rockfalls, debris flows, and earth flows. In Utah, many landslides move slowly, but some move quickly with devastating results. Debris flows, which are a type of landslide having a very high-water content, can travel at speeds greater than 30 to 50 miles per hour. Slope instability can result from many factors, including ground surface topography, water (hydrologic), and geologic conditions.

Landslides can be naturally occurring or human-caused. Landslides often result from a rise in groundwater levels caused by increased precipitation, rapid snowmelt, or by human causes, such as landscape irrigation and leakage from water-conveyance structures (reservoirs, ponds, and pipelines). Modification of a slope that results in over-steepening of the slope, either by removal of material from the lower part of the slope or addition of material near its top, can also trigger landslides. Development-related slope modification can include loading by construction of buildings or fill materials, or removal of material during grading for building pads and roadways.

Landslide hazards include:

Landslide and Debris Avalanches – a mass-movement involving the downslope transport under gravity of soil and rock materials.

Rockfall – the relatively free-falling or rapid movement of rock from a slope by rolling, falling, toppling, and bouncing.

Debris Flows – a slurry of rock, soil, organic matter, and water that flows down channels and onto valley edges that can travel long distances very quickly.

Snow Avalanches – a large mass of snow and ice that moves rapidly down a mountain slope.

The UGS has mapped landslide, rockfall, and debris flow hazards for selected areas in Utah. Snow avalanche hazard potential is generally unmapped in Utah. The following Landslide Hazards pages describe the individual mapped landslide hazards for your area of interest.

LANDSLIDE HAZARD
Landslide Susceptibility

Landslide susceptibility mapping incorporates mapped landslides, geologic data, slope angle, and moisture data where available. Past slope failures can be used to identify the geologic, hydrologic, and topographic conditions that may reactivate existing landslides and initiate new landslides. The map below shows the mapped landslide susceptibility for your area of interest in relative terms of very high, high, moderate, low, or not mapped categories.

How to Use This Map

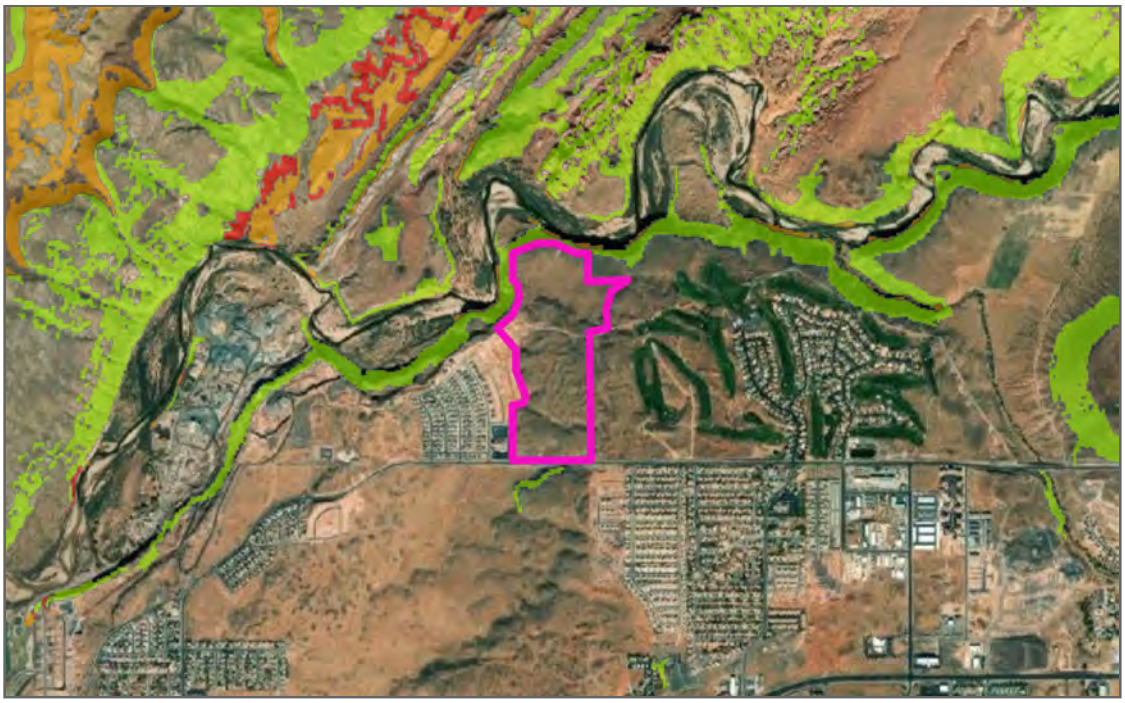
The landslide-susceptibility map shows areas of relative landslide susceptibility where site-specific slope-stability conditions (material strength, orientation of bedding and/or fractures, groundwater conditions, erosion or undercutting, and slope loading) should be evaluated prior to development. A valid landslide-hazard investigation must address all pertinent conditions that could affect, or be affected by, the proposed development, including earthquake ground shaking, perched or irrigation-induced groundwater, and slope modifications. Landslide susceptibility may be a hazard in areas where no mapped landslides are currently identified. A landslide hazard investigation is highly recommended. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where landslides (slope instability) may be present beneath or affect a building. Contact your local building department for requirements, and a Utah-licensed geotechnical engineer for investigations. Note that many landslides impact more than one parcel and mitigating one of these landslides on only one parcel is rarely successful, resulting in continued building and property damage.

More Information

Although these areas are not regulated on a state-level many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific landslide investigation. Site-specific investigations are necessary to accurately characterize the site-specific landslide susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Landslide Hazards.



Scale 1:32,500

Low landslide susceptibility, includes geologic units of low landslide-prone susceptibility that crop out on slopes at or above a determined critical angle, and moderately landslide-prone geologic units that crop out on slopes less than the critical angle determined for moderate landslide susceptibility.

References

Landslide Hazards in Utah (UGS Public Information Series 98): https://ugspub.nr.utah.gov/publications/public_information/pi-98.pdf.

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 2— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl2.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 3— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl3.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 4— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl4.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 5— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-5.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 4— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate4.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 4— Landslide Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl4.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

LANDSLIDE HAZARD
Rockfall Hazard

Rockfall is a natural mass-wasting (landslide) process that involves the dislodging and rapid downslope movement of individual rocks and rock masses. The widespread combination of steep slopes capped by well-jointed bedrock makes rockfall among the most common landslide types in Utah. Rockfall poses a hazard because falling, rolling, and/or bouncing rocks can cause significant property damage and be life threatening. At least 16 deaths directly attributable to rockfalls have occurred in Utah since 1850. Rockfalls occur where a source of rock exists above a slope steep enough to allow rapid downslope movement of dislodged rocks by falling, rolling, bouncing, and sliding. Rockfall sources include bedrock outcrops or boulders on steep slopes or near the edges of cliffs, bluffs, and terraces. Talus cones and scree-covered slopes are indicators of a high rockfall hazard, but other less obvious areas may also be vulnerable. Most rockfalls originate on slopes steeper than 35 degrees, although rockfall hazards may be found on less-steep slopes. The runout distance for exposed rock can be determined and structures should not be built in the runout zone.

Rockfalls may be triggered by freeze/thaw action, rainfall, changes in groundwater conditions, weathering and erosion of the rock and surrounding material, and root growth. Slope modifications, such as cuts for roads and building pads and clearing slope vegetation for development or from wildfire, can increase or create rockfall hazards, as can construction of non-engineered and poorly constructed rockery walls, which are becoming increasingly common in Utah. Rockfall is the most common landslide type caused by earthquakes. Generally, earthquakes greater than magnitude (M) 4 can trigger rockfalls. In Utah, the 1988 M_L 5.3 San Rafael Swell and the 1992 M_L 5.8 St. George earthquakes caused many rockfalls. Although not well documented, rockfalls in Utah appear to occur more frequently during the spring and summer, likely due to spring snowmelt, summer storms, and large daily temperature variations. The map below shows the mapped rockfall hazard for your area of interest in relative terms of very high, high, moderate, low, low with a high hazard, or not mapped categories.

How to Use This Map

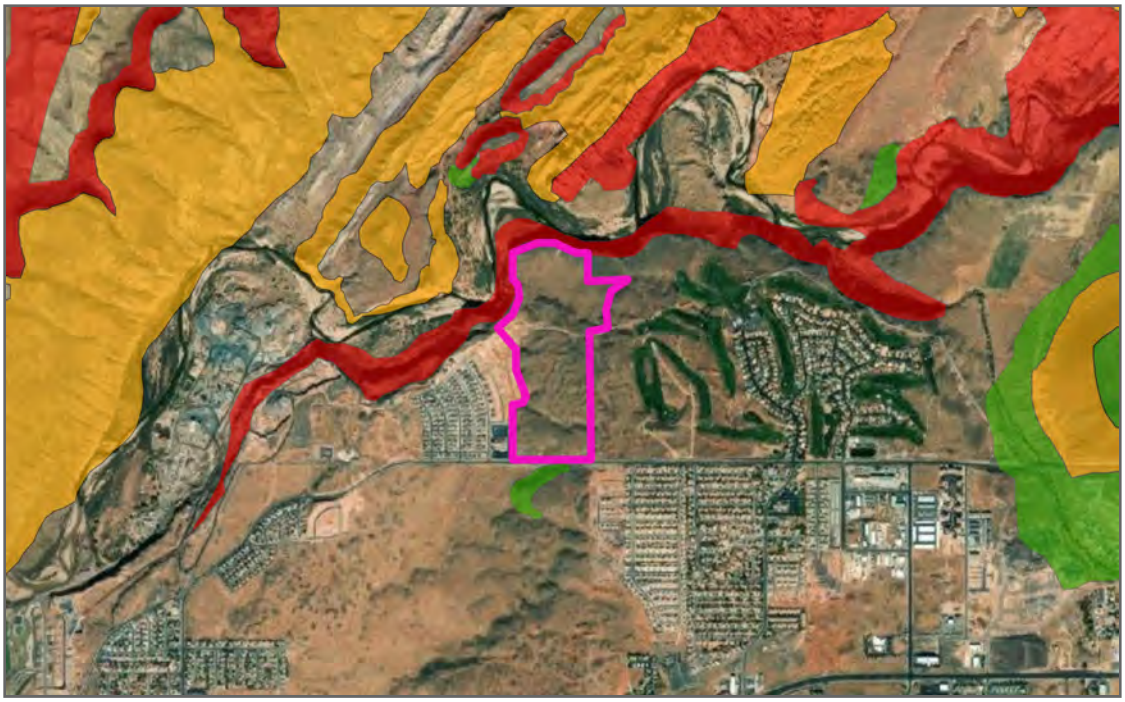
The rockfall hazard mapping is intended for general planning purposes to indicate where rockfall hazard may be present and to assist in designing rockfall-hazard investigations. Your area of interest has an area mapped as having rockfall hazard. The susceptibility of rockfall hazard and the description of the hazard categories identified in your area of interest are listed above. Areas with no mapped rockfall hazard either do not have the conditions for rockfall present or may be in an area with significant human disturbance, these areas may include quarries, mine pits and dumps, and similar operations. Rockfall hazard can become a hazard in areas with no mapped hazard due to modification of slopes for construction, roads, or natural processes. A rockfall investigation and design for rockfall mitigation is highly recommended to determine the level of rockfall hazard, determine the runout distance, provide design parameters, and implement rockfall mitigation measures.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific slope investigation. Site-specific investigations are necessary to accurately locate rockfall hazard and determine appropriate runout distance. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Landslide Hazards.



Scale 1:32,500

High rockfall hazard areas include canyon cliffs and other near-vertical slopes not undercut by erosion of underlying units and lack obvious discontinuities and overhanging rock masses but are still capable of producing damaging rockfall. These areas also include steep mountainous areas (slopes greater than 20 degrees) where bedrock units highly susceptible to rockfall crop out in the slope rather than forming a capping unit. Also included are mountainous areas where bedrock units moderately susceptible to rockfall crop out on slopes greater than 35 degrees.

References

Rockfall Hazards in Utah (UGS Public Information Series 94): https://ugspub.nr.utah.gov/publications/public_information/pi-94.pdf.

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 3— Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl3.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 2— Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl2.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate - Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl5.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 6— Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-6.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 5— Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate5.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 5— Rockfall Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl5.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

PROBLEM SOIL/ROCK HAZARD

Problem soil and rock can cause extensive damage to structures and foundations. Problem soil and rock may also damage pavements after construction, resulting in high maintenance and/or replacement costs, along with increased legal and financial liability from pavement separation and/or gaps causing tripping hazards. In addition, future maintenance may disrupt business activities, resulting in increased costs and/or lost revenue. Except for radon gas, Utah's most deadly geologic hazard which has caused at least 5630 deaths since 1973, no deaths have been reported in Utah from other problem soil and rock hazards; however, they have caused an undetermined, but very significant, amount of infrastructure damage and resulting economic impact.

Problem soil and rock hazards include:

Caliche – a calcareous material that can accumulate in the shallow subsurface of soils in arid and semiarid climates that can be very difficult to excavate.

Collapsible Soils – soils that have considerable strength when in a dry, natural state, but that significantly settle due to hydrocompaction (reduction of air space within the soil) when wetted.

Corrosive Soil and Rock – soil and rock that is corrosive to exposed metals and/or concrete.

Expansive Soil and Rock – soil and rock with high clay content that swells when wetted and shrinks when dried.

Karst Landscape – formed from the dissolution of limestone, dolomite, and gypsum rocks that can create features, such as caves, sinkholes, and breccia pipes (rubble-filled vertical tubes that form and project to the surface as overlying rock collapse into buried karst caverns).

Land Subsidence and Earth Fissures – sinking of the ground surface caused by groundwater mining and underground mine subsidence or collapse. Subsidence often causes earth fissures which are permanent, linear tension crack(s) in the ground that extend upward from the groundwater table.

Piping and Erosion – piping is the subsurface erosion of soil or rock by groundwater flow that form narrow voids. Piping can remove support of overlying soil and rock, resulting in collapse. Erosion is the process of material being moved by wind, water, and other processes and can occur at or below the ground surface.

Radon Gas – an odorless, tasteless, and clear radioactive gas resulting from the natural decay of uranium that occurs in nearly all rock and soil, and when concentrated, such as in a building or other confined space can lead to lung cancer.

Salt Tectonics – salt formations at depth below the ground surface may deform, causing deformation and cracks at the ground surface.

Shallow Bedrock – rock at shallow depths that may be encountered in construction and other excavations.

Soluble Soil and Rock – soil and rock that may be dissolved by water, causing ground subsidence.

Wind-Blown Sand – geologically young, active or partially stabilized, deposits characterized by a well-sorted, loose, sandy soil texture with little to no clay.

The UGS has mapped problem soil and rock hazards for selected areas in Utah. The following problem soil and rock hazards pages describe the individual mapped problem soil and rock hazards for your area of interest.

PROBLEM SOIL/ROCK HAZARD
Caliche Hazard

Caliche is a hard layer within soils formed from the accumulation of calcium from past groundwater flow and can be extremely difficult or impossible to excavate without blasting in some cases. Dense caliche layers may approach the hardness of bedrock and greatly reduce soil permeability, causing shallow groundwater from excess landscape irrigation and septic waste disposal systems. The map below shows where caliche may be present for your area of interest.

How to Use This Map

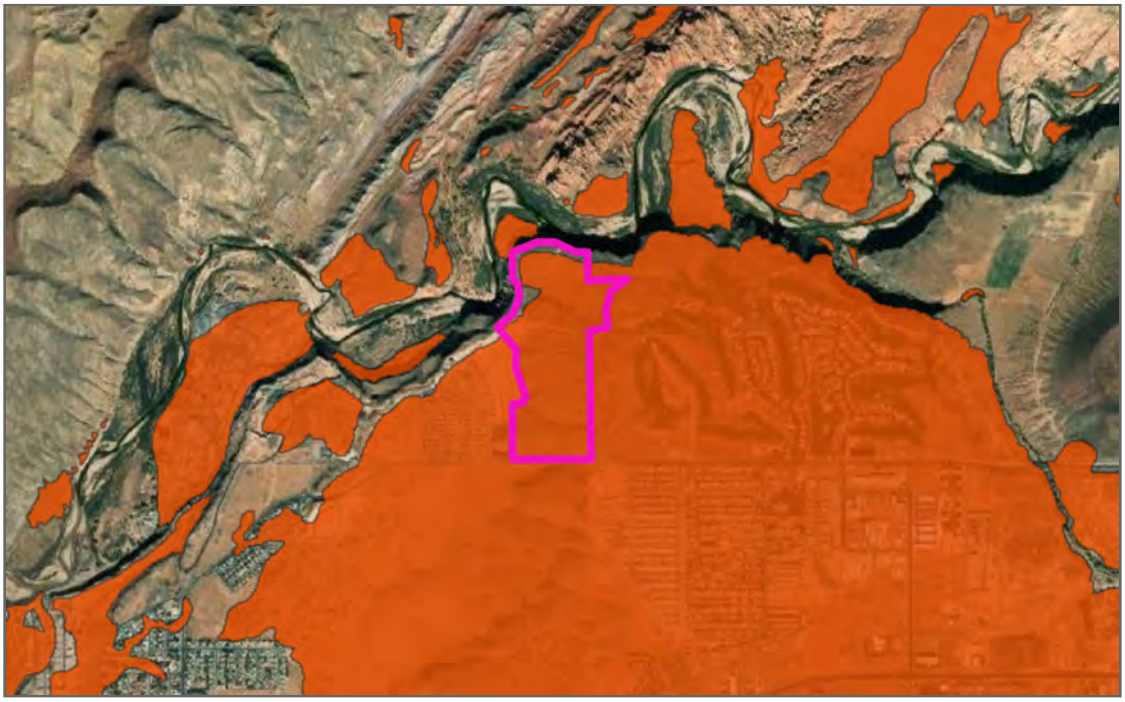
The caliche hazard mapping is intended for general planning purposes to indicate where caliche may be present and to assist in designing caliche-hazard investigations. A geotechnical investigation that specifically addresses caliche soils is highly recommended to determine if these soils are present. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where questionable soils and rocks may be present beneath a building.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring comprehensive, site-specific geotechnical and geologic hazards investigations. Site-specific investigations are necessary to accurately characterize the site-specific caliche hazard and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local building department for requirements, and a Utah-licensed geotechnical engineer for investigations.

Additional informational resources are listed below:

UGS: Utah Geological Survey.



Scale 1:32,500

Areas where caliche horizons have been identified or where older (Pleistocene) deposits are present which may contain caliche in the subsurface. Strongly indurated caliche layers may approach the hardness of bedrock and greatly reduce soil permeability.

References

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 11— Caliche Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl11.pdf.

PROBLEM SOIL/ROCK HAZARD
Collapsible Soil Susceptibility

Collapsible soils have considerable strength when in a dry, natural state, but significantly settle due to hydrocompaction when wetted. Typically, they are associated with young alluvial fans, debris flows, and loess (wind-blown silts), where soil structure creates a significant amount of air space within the soil and includes certain rock units that weather in-place to soil. Collapsible soils may cause extensive damage to building foundations, asphalt and concrete slabs and pavements, and buried utilities and other infrastructure if not identified, investigated, and mitigated prior to the construction of buildings, pavements, and utilities. Often, these soils can be mitigated by over excavating and recompacting or removal of the collapse susceptible soils. The map below shows where collapsible soil and/or rock may be present for your area of interest and the relative susceptibility in terms of high, susceptible, bedrock, or not mapped.

How to Use This Map

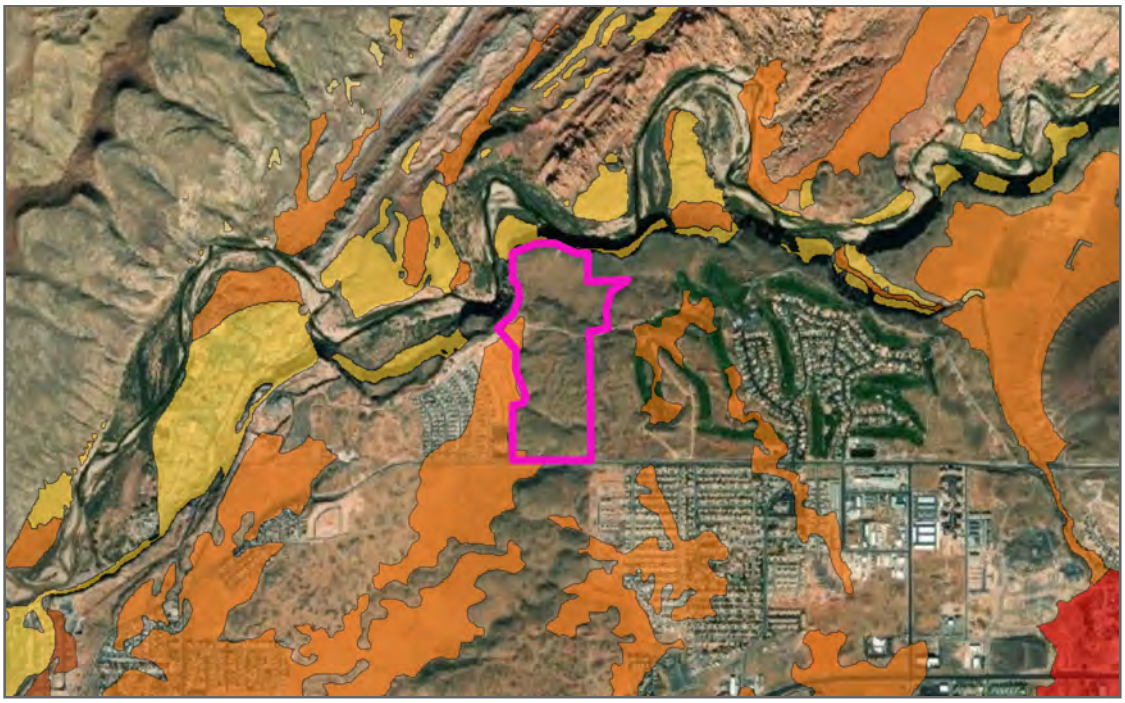
The collapsible soil susceptibility mapping is intended for general planning purposes to indicate where collapsible soils may be present and to assist in designing geotechnical and geologic-hazard investigations. Your area of interest has an area mapped as having collapsible soil susceptibility. The susceptibility of collapsible soil susceptibility and the description of the susceptibility categories identified in your area of interest are listed above. When not mitigated, these soils can cause considerable damage to buildings, foundations, concrete and asphalt pavements, and underground utilities. A geotechnical investigation that specifically addresses collapsible soils is highly recommended to determine if these soils are present. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where compressible soils may be present beneath a building.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific geotechnical and geologic-hazard investigation. Site-specific investigations are necessary to accurately characterize the site-specific collapsible soil susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Problem Soil and Rock Hazards.



0.6 km
0.4 mi

Scale 1:32,500

Collapsible Soil 1 - Unconsolidated geologic units with reported collapse values greater than or equal to 3 percent. Collapsible soils are unlikely in areas continually subjected to saturation or flooding.

References

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 4— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl4.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 6— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl6.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 7— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl7.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 8— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-8.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdfand Map, Plate 7— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate7.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 7— Collapsible Soil Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl7.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Contract Deliverable) Report and Maps: https://doi.org/10.34191/SS-166.

PROBLEM SOIL/ROCK HAZARD
Expansive Soil and Rock Susceptibility

Expansive soil and rock swells as it gets wet and shrinks as it dries out. These changes in volume can cause cracked foundations and other structural damage to buildings, asphalt and concrete pavements, and underground utilities, heaving and cracking of canals and road surfaces, and the failure of septic disposal systems. Expansive soil and rock contains a significant percentage of clay minerals that can absorb water directly into their crystal structure when wetted. Often, these soils and rocks can be mitigated by over excavating and replacing with non-expansive, engineered fill materials that are properly placed and compacted. These soils and rocks should be identified, investigated, and mitigated prior to the construction of buildings, pavements, and utilities.

The map below shows where expansive soil and rock susceptibility has been mapped for your area of interest and the relative susceptibility in terms of high, moderate, low, not susceptible, or not mapped categories.

How to Use This Map

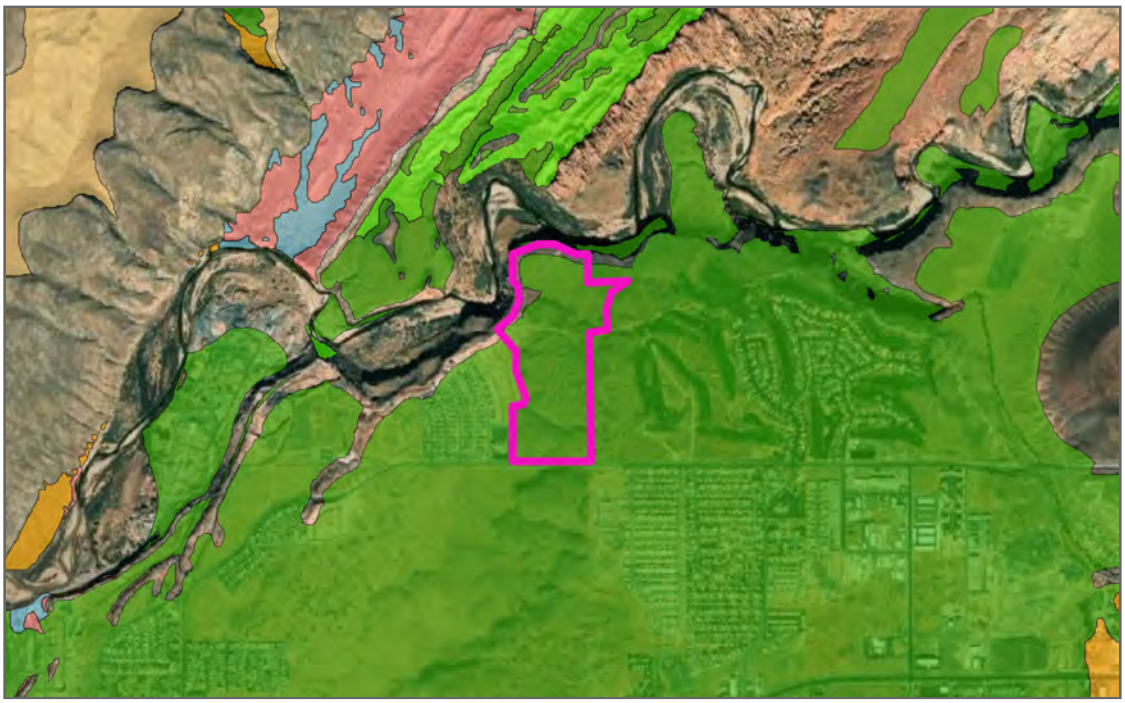
The expansive soil and rock susceptibility mapping is intended for general planning purposes to indicate where expansive soil and rock may occur and to assist in designing expansive soil and rock susceptibility investigations. Your area of interest has an area mapped as having locations of expansive soil and rock susceptibility. The susceptibility of expansive soil and rock susceptibility and the description of categories identified in your area of interest are listed above. Soil and rock that expands when wet and shrinks as it dries is likely present at the site. These soils and rocks can cause considerable damage to buildings, concrete and asphalt pavements, and underground utilities and damages are often costly to repair. A geotechnical investigation that specifically addresses expansive soils and rock is highly recommended to determine if these soils and rocks are present. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where expansive soils and rocks may be present beneath a building. Areas with no mapped expansive soil and rock susceptibility may not have had enough data to determine the hazard, or limitations of scale.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific geotechnical and geologic-hazard investigation. Site-specific investigations are necessary to accurately characterize the site-specific expansive soil and rock susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Problem Soil and Rock Hazards.



0.6 km
0.4 mi

Scale 1:32,500

Soils classified by the Natural Resources Conservation Service as having low susceptibility for volumetric change; and/or have a liquid limit [LL] from 0 to 40, a plasticity index [PI] from non-plastic [NP] to 15, and a swell/collapse (SCT) value of 0 to 2 percent; and/or a linear extensibility potential of less than 3 percent. These values overlap at their upper ends with soils in the moderate susceptibility category. However, the low category includes soils with highly variable potential for volumetric change that do not fit easily into the moderate or high categories.

References

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 5— Expansive Soil and Rock Hazard: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl5.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 7— Expansive Soil and Rock: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl7.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 6— Expansive Soil and Rock Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl6.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 9— Expansive Soil and Rock Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-9.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 8— Expansive Soil and Rock Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate8.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 8— Expansive Soil and Rock Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl8.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

PROBLEM SOIL/ROCK HAZARD
Shallow Bedrock Potential

Bedrock at shallow depths may cause difficulties in construction and excavations, may cause septic disposal systems to fail, and may provide pathways for groundwater contamination. When not identified and investigated, shallow bedrock can cause significant construction delays and cost-overruns. The map below shows mapped shallow bedrock potential for your area of interest in relative terms of hard, soft, buried, or deep (likely greater than 10 feet below the ground surface).

How to Use This Map

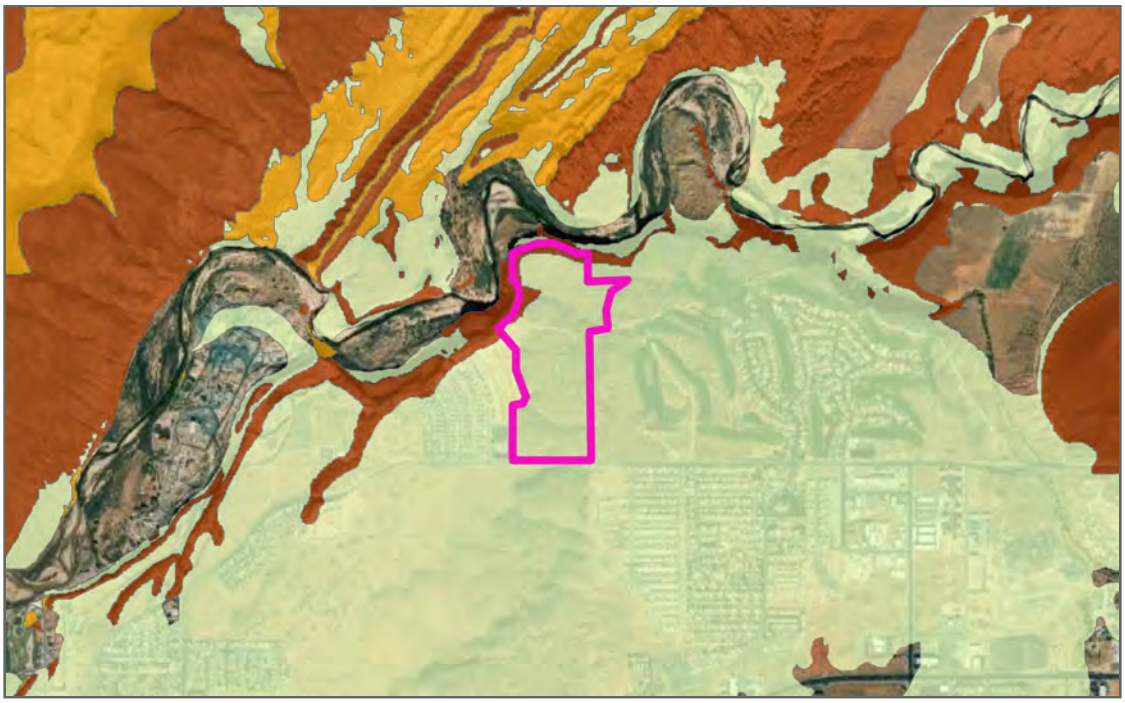
The shallow bedrock potential mapping is intended for general planning purposes to indicate where shallow bedrock may be present and to assist in designing geotechnical and geologic-hazard investigations. Your area of interest has an area mapped as having shallow bedrock potential. The shallow bedrock potential category descriptions identified in your area of interest are listed above. Bedrock can be shallow or deep as well as hard and soft. A geotechnical investigation that specifically addresses shallow bedrock is highly recommended where significant excavation is anticipated to determine if these features are present. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation to evaluate unsuitable soils and rocks that may be present beneath a building.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific geotechnical and geologic-hazard investigation. Site-specific investigations are necessary to accurately characterize the site-specific shallow bedrock potential and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Problem Soil and Rock Hazards.



Scale 1:32,500

Hard, shallow bedrock occurs in areas where generally hard and resistant bedrock crops out at the ground surface and typically requires blasting to excavate.

Buried, shallow bedrock occurs in areas where the depth to bedrock is less than or equal to 10 feet beneath soil cover. In most areas, the identity and degree of weathering of the underlying bedrock is unknown. However, areas where basalt flows are nearby that consist of very hard and durable rock and are covered with a thin veneer of soil, fall into this hazard category.

References

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 10— Shallow Bedrock Potential:

https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl10.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 10— Shallow Bedrock Potential: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-10.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 9— Shallow Bedrock Potential: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate9.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 13— Shallow Bedrock Potential: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl13.pdf.

PROBLEM SOIL/ROCK HAZARD
Shallow Groundwater Susceptibility

Shallow groundwater can flood basements and other underground facilities, damage buried utility lines, and destabilize excavations. Shallow groundwater may be related to a regional water table but can also occur locally in soils that retain water and above a confining (barrier to water flow) layer, and can fluctuate seasonally. Development can create shallow groundwater conditions by the addition of landscape irrigation and altered surface drainage patterns. The map below shows where shallow groundwater may exist for your area of interest.

How to Use This Map

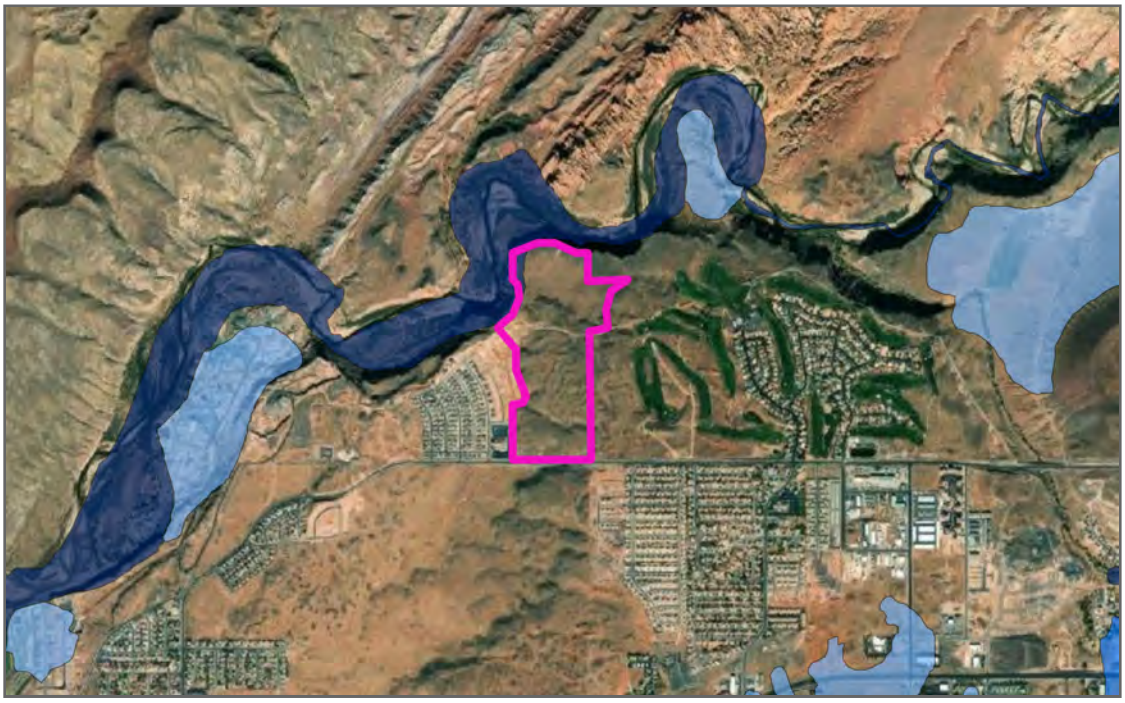
The shallow groundwater susceptibility mapping is intended for general planning purposes to indicate where shallow groundwater susceptibility may be present and to assist in designing shallow groundwater investigations. Your area of interest has an area mapped as having shallow groundwater susceptibility. Groundwater susceptibility categories are described above. Shallow groundwater can fluctuate seasonally and after development. Areas with no shallow groundwater mapped may still experience shallow groundwater after development or changing climate conditions. A geotechnical investigation that specifically addresses shallow groundwater is highly recommended to determine the shallowest water depth. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation where shallow groundwater exists that includes determining groundwater depths, soil permeability, and other data.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring comprehensive, site-specific geotechnical and geologic hazards investigations. Site-specific investigations are necessary to accurately characterize the shallow groundwater susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local building department for requirements, and a Utah-licensed geotechnical engineer for investigations.

Additional informational resources are listed below:

UGS: Flooding Hazards.



Scale 1:32,500

Areas identified as potentially having shallow groundwater or developing shallow groundwater. Includes naturally wet soils mapped by the Natural Resources Conservation Service as having a groundwater depth less than or equal to 5 feet and soils classified as poorly drained or frequently irrigated where water well or geotechnical data indicates a significant area of permanent shallow groundwater (less than or equal to 10 feet). Also includes areas where field observations indicate shallow groundwater, for example wetlands, springs, vegetation. Construction in these areas will likely encounter shallow groundwater at depths less than or equal to 10 feet, and basements and other water-sensitive underground facilities are not recommended without adequate drainage or other protection. Urbanization, development, landscape irrigation, wastewater disposal, and other sources of urban runoff may cause groundwater levels to rise even higher in these areas.

References

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 14— Shallow Groundwater Susceptibility:

https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl14.pdf.

Geologic Hazards of the Tickville Spring Quadrangle, Salt Lake and Utah Counties, Utah (UGS Special Study 163) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163.pdf and Map, Plate 1— Shallow Groundwater Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-163/ss-163-1.pdf.

Geologic Hazards of the Magna Quadrangle, Salt Lake County, Utah (UGS Special Study 137) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137.pdf and Map, Plate 10— Shallow Groundwater Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-137/ss-137_Plate10.pdf.

Geologic Hazards of the Copperton Quadrangle, Salt Lake County, Utah (UGS Special Study 152) Report and Maps: https://ugspub.nr.utah.gov/publications/special_studies/ss-152/ss-152.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 1— Shallow Groundwater Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl1.pdf.

PROBLEM SOIL/ROCK HAZARD
Piping and Erosion Susceptibility

Piping and erosion can cause significant damage to roads, canals, earth-fill dams, buildings, bridges, culverts, and farmland. Piping, also referred to as tunnel erosion, is the subsurface erosion of soil by groundwater that moves through permeable, non-clay layers in soils and exits at a slope. Fine-grained sand, silt, and clay particles are removed by the subsurface flow of water, creating void space. An exit point at a slope may not always be obvious. Silt and clay carried in water can travel with the subsurface groundwater flow for long distances, enter the regional groundwater regime, and exit as seeps and springs or into streams and rivers. Rapid erosion may occur when susceptible materials are exposed to running water or wind. Monsoonal storms typically bring intense rainfall and high winds. Heavy rain can quickly erode silts and clays. Slope runoff that becomes channelized can form gullies and erode steep banks of streams and rivers. Erosional gullies can also contribute to the piping hazard. The map below shows mapped piping and erosion susceptibility for your area of interest in relative terms of high, susceptible, or not mapped.

How to Use This Map

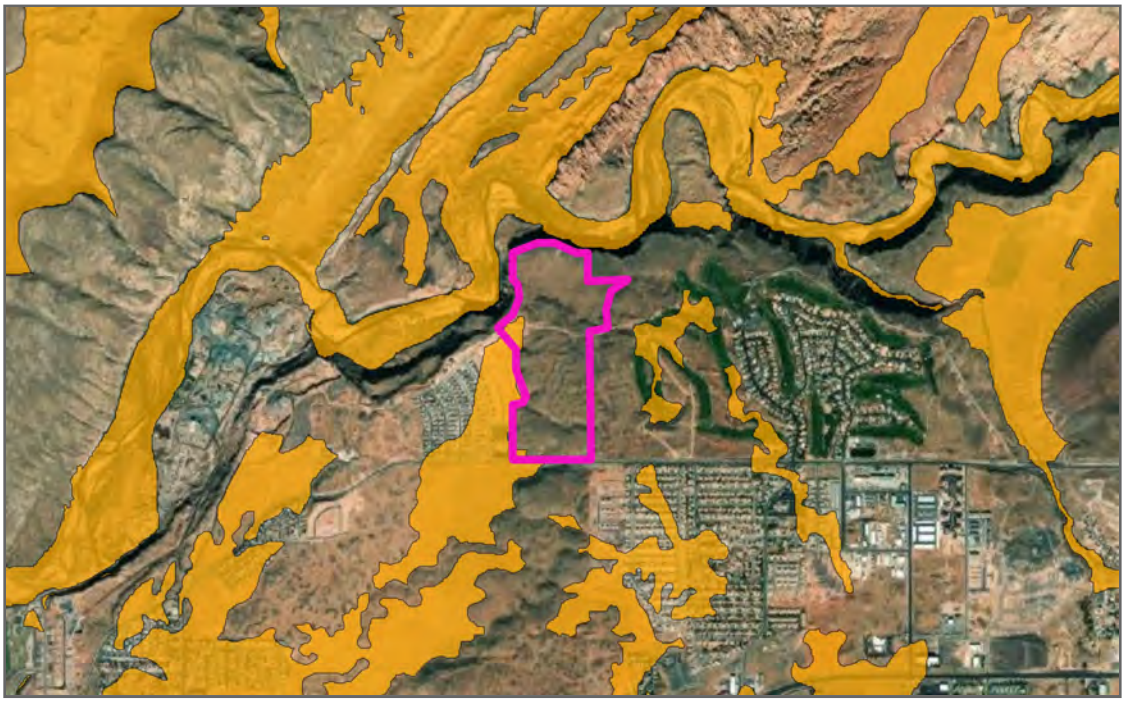
The piping and erosion susceptibility mapping is intended for general planning purposes to indicate where piping and erosion susceptibility may be present and to assist in designing piping and erosion-hazard investigations. Your area of interest has an area mapped as having piping and erosion susceptibility. The description of the piping and erosion susceptibility categories identified in your area of interest are listed above. A geotechnical investigation that specifically addresses piping and erosion is highly recommended to determine if these features are present. The 2018 International Building Code (IBC) and International Residential Code (IRC), adopted statewide, require a geotechnical investigation to evaluate unsuitable soils and rocks that may be present beneath a building.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific geotechnical and geologic-hazard investigation. Site-specific investigations are necessary to accurately characterize the site-specific piping and erosion susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Problem Soil and Rock Hazards.



Scale 1:32,500

Soil susceptible to piping and erosion. Typically, fine-grained, non-cohesive, loose to poorly consolidated sand and silt deposits, landslide deposits and some very poorly consolidated siltstone and claystone. For piping to develop, a free face and percolating groundwater are required. The loose, non-cohesive nature of erodible soils makes them highly susceptible to the effects of water and wind erosion, especially when disturbed from their natural conditions.

References

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 7— Piping, Erosion, and Wind-Blown Sand Susceptibility:

https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl7.pdf.

Geologic Hazards of the Zion National Park Geologic-Hazard Study Area, Washington and Kane Counties, Utah (UGS Special Study 133) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133.pdf and Map, Plate 9— Piping and Erosion Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-133/ss-133pl9.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 13— Piping and Erosion Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl13.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 11— Piping and Erosion Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl11.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

PROBLEM SOIL/ROCK HAZARD
Wind-Blown Sand Susceptibility

Wind-blown sand can cause damage to infrastructure by burial, sandblasting effects, and by creating unsafe driving conditions. Dust storms commonly occur due to wind associated with the monsoonal season that affects southern Utah and northern Arizona. Even a few inches of sand on a road can be very dangerous. Wind-blown sand hazards are often reduced by armoring deposits with appropriately sized and graded gravel, cobbles, and boulders, where adequate irrigation water is not available for vegetation planting. The map below shows areas of mapped wind-blown-sand susceptibility for your area of interest in relative terms of high, moderate, low, susceptible, or not mapped.

How to Use This Map

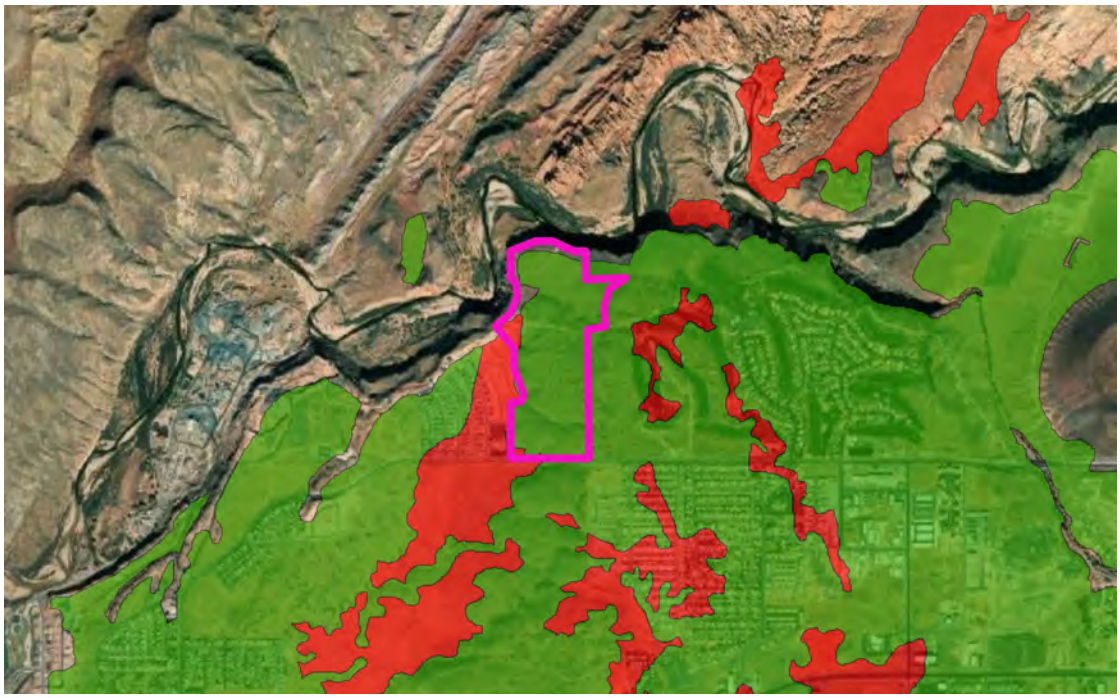
The wind-blown-sand susceptibility mapping is intended for general planning purposes to indicate where wind-blown-sand susceptibility may be present and to assist in designing wind-blown-sand-hazard investigations. Your area of interest has an area mapped as having wind-blown-sand susceptibility. The susceptibility of wind-blown-sand susceptibility and the description of the susceptibility categories identified in your area of interest are listed above. Wind-blown sand may be deposited around structures and bury agricultural fields, roads, and other features. A geotechnical investigation that specifically addresses wind-blown sand is highly recommended, especially when soils are disturbed, and vegetation removed.

More Information

Although these areas are not regulated on a state-level, many cities and counties throughout Utah have adopted development ordinances requiring a comprehensive, site-specific geotechnical and geologic-hazard investigation. Site-specific investigations are necessary to accurately characterize the site-specific wind-blown-sand susceptibility and determine appropriate building requirements. The UGS offers guidelines for these investigations and recommends they are conducted as part of the development permitting process. Contact your local city or county building department for requirements, and a Utah-licensed engineering geology consultant for investigations.

Additional informational resources are listed below:

UGS: Problem Soil and Rock Hazards.



0.6 km
0.4 mi

Scale 1:32,500

High wind-blown-sand susceptibility as defined by modern sand-dune or sand-sheet deposits, either active or stabilized with vegetation, and generally with greater than 50 percent sandy soil deposits. These active wind-blown deposits or reactivated, formerly stabilized deposits are highly susceptible to wind erosion and transport. The moving sand may migrate across roads and bury structures and wind erosion may expose foundations and underground facilities. These soils are also susceptible to piping and erosion.

Low wind-blown-sand susceptibility as defined by mixed-unit geologic deposits that contain a wind-blown component, but for which the wind was not the dominant transport mechanism. Water and gravity transport dominate in these deposits, and they may contain greater than 30 percent fines and thin horizons of fine- to medium-sized gravel. These units are generally stable in their natural state but may destabilize locally if disturbed. Also included in this category are older (Pleistocene) wind-blown and mixed-unit geologic deposits that have developed thick, indurated calcium carbonate (caliche) horizons over time that help to further stabilize the deposits, but which may become destabilized if disturbed.

References

Geologic Hazards of the State Route 9 Corridor, La Verkin to Springdale, Washington County, Utah (UGS Special Study 148) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148.pdf and Map, Plate 7— Piping, Erosion, and Wind-Blown-Sand Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-148/ss-148pl7.pdf.

Geologic Hazards and Adverse Construction Conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah (UGS Special Study 127) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127.pdf and Map, Plate 12— Wind Blown Sand: https://ugspub.nr.utah.gov/publications/special_studies/ss-127/ss-127pl12.pdf.

Geologic Hazards of the Moab Quadrangle, Grand County, Utah (UGS Special Study 162) Report: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162txt.pdf and Map, Plate 12— Wind-Blown-Sand Susceptibility: https://ugspub.nr.utah.gov/publications/special_studies/ss-162/ss-162pl12.pdf.

Geologic Hazards of the Bullfrog and Wahweap High-Use Areas of Glen Canyon National Recreation Area, San Juan, Kane, and Garfield Counties, Utah, and Coconino County, Arizona (UGS Special Study 166) Report and Maps: https://doi.org/10.34191/SS-166.

OTHER GEOLOGIC HAZARD RESOURCES

Utah Geological Survey

For information on geologic hazards, contact the UGS online at https://geology.utah.gov/about-us/ask-a-geologist/ or by telephone at (801) 537-3300 and for southern Utah at (435) 865-9036.

The Guidelines for Investigating Geologic Hazards and Preparing Engineering-Geology Reports with a Suggested Approach to Geologic-Hazard Ordinances in Utah (UGS Circular 122, https://ugspub.nr.utah.gov/publications/circular/c-122.pdf) provides geologic and geotechnical consultants, local government officials, and land owners with comprehensive information on how to conduct appropriate and effective investigations of various geologic hazards before building and infrastructure design and construction. These guidelines were developed to reduce the life safety risk and overall cost of geologic hazards to Utahans and have been adopted by numerous cities and counties in Utah. The UGS strongly recommends that all development incorporate these guidelines in their planning, design, and construction.

The UGS GeoData Archive (https://geodata.geology.utah.gov) contains Utah geologic related scanned documents, consultant geologic and geotechnical reports, photographs, and other digital materials from our files and those gathered from other agencies or organizations. Most of the items in the archive have not been formally published and are not available elsewhere.

The UGS Utah Aerial Imagery Collection (https://geodata.geology.utah.gov) contains aerial photography (air photos) across Utah and dating from 1935 to 2005, about half of the collection dates before 1960.

The Utah Geologic Map Portal (https://geology.utah.gov/apps/intgeomap/) contains geologic maps that show the mapped ground surface soil and rock types across the state.

Building Codes (the IBC and IRC with amendments are adopted statewide by Utah law)

State of Utah Adopted Building Codes in Law: https://le.utah.gov/xcode/Title15A/15A.html.

2015 International Building Code (IBC): https://codes.iccsafe.org/content/IBC2015/toc.

2015 International Residential Code (IRC) for One- and Two-Family Dwellings: https://codes.iccsafe.org/content/IRC2015/toc.

Professional Licensing

When selecting a geologist or engineer consultant and a construction contractor, make sure they are licensed to practice in Utah using the Utah Division of Occupational & Professional Licensing website at https://secure.utah.gov/llv/search/index.html. For more information, see https://dopl.utah.gov/.

APPENDIX B

NRCS Custom Soil Resource Report

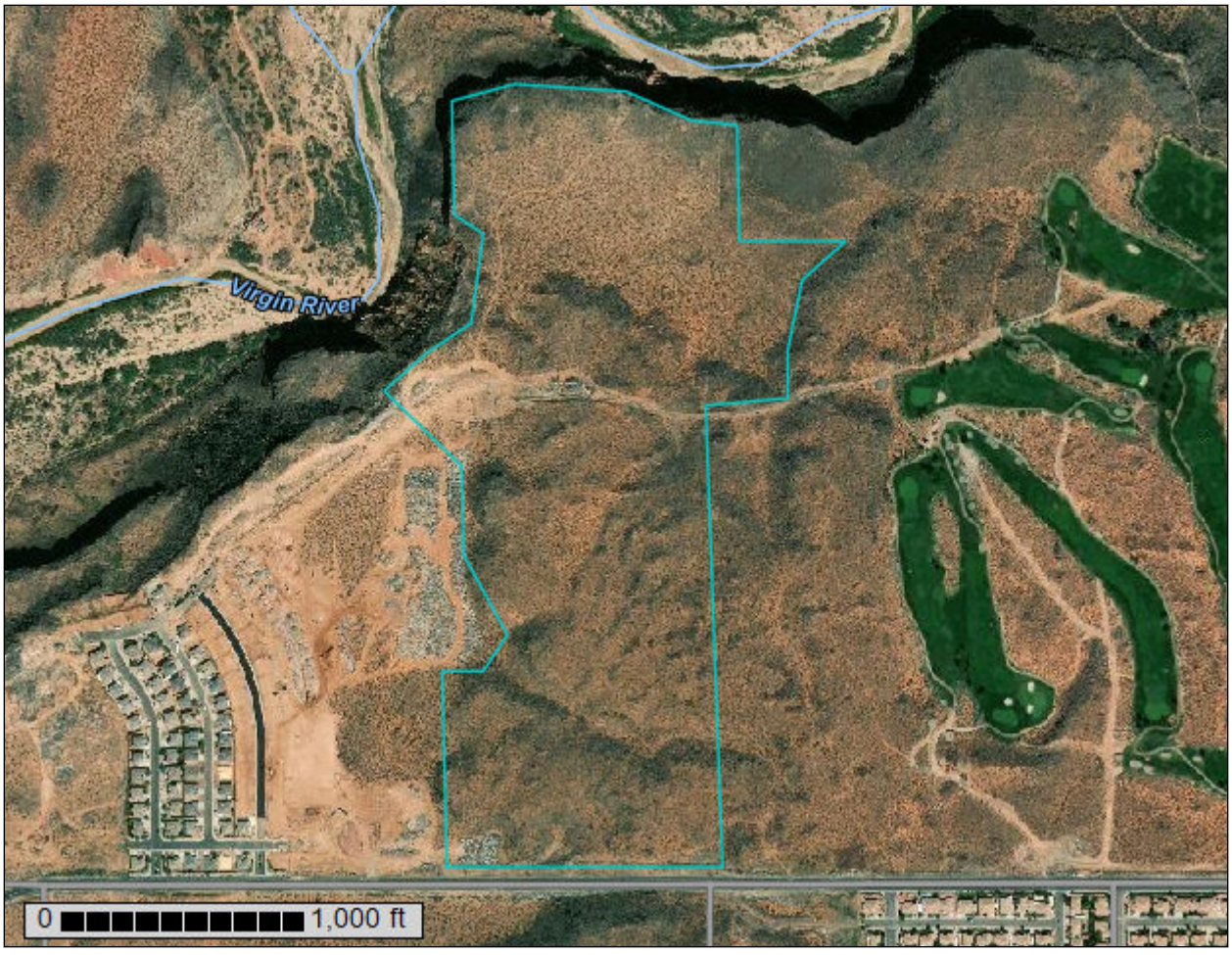
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Washington County Area, Utah



April 21, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Washington County Area, Utah.....13
BED—Bermesa fine sandy loam, 1 to 10 percent slopes.....13
FA—Fluvaquents and torrifluvents, sandy.....14
SY—Stony colluvial land.....16
WCF—Winkel-Rock outcrop complex, 8 to 30 percent slopes.....16
References.....18

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

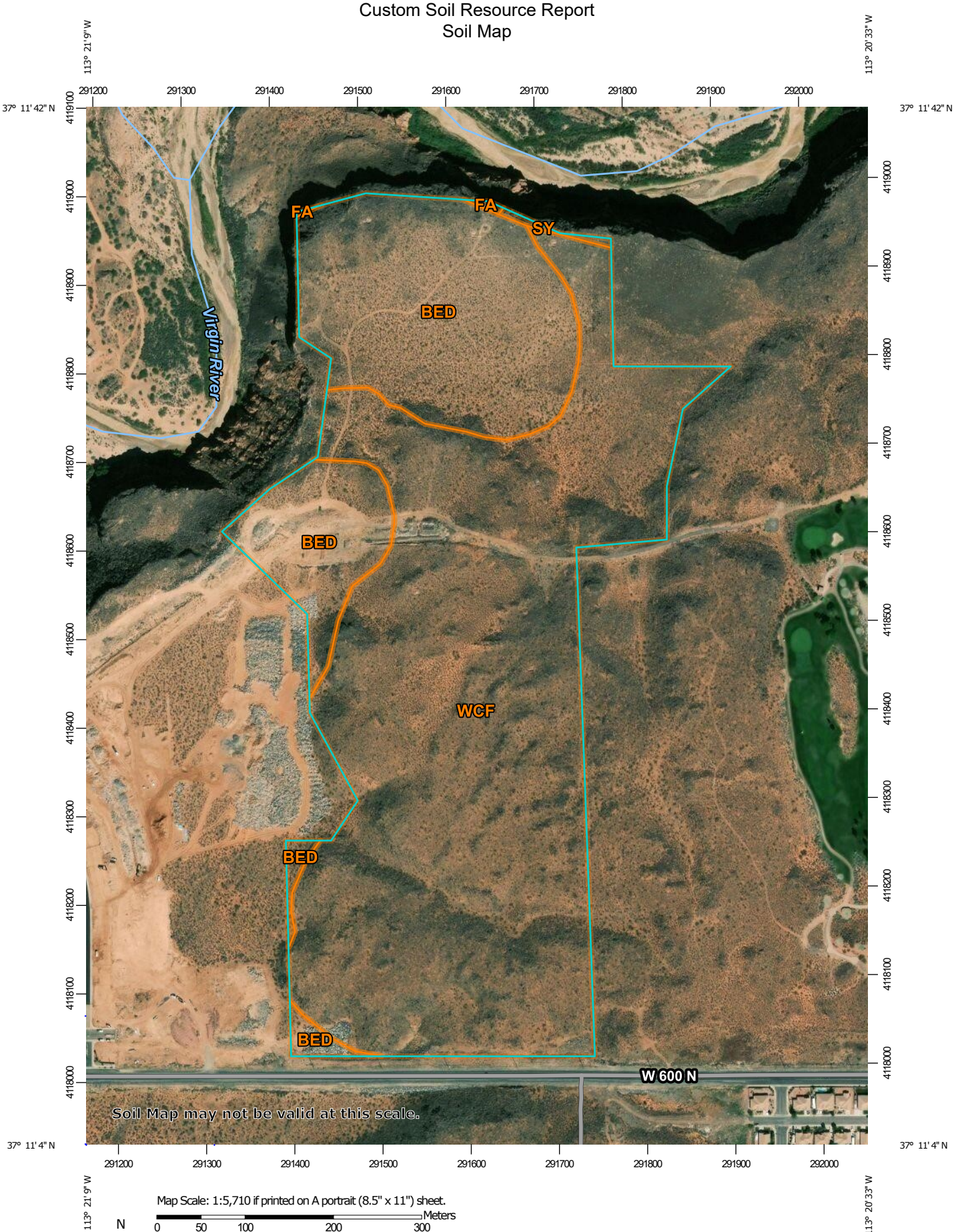
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Map Scale: 1:5,710 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washington County Area, Utah
Survey Area Data: Version 15, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 7, 2015—Oct 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BED	Bermesa fine sandy loam, 1 to 10 percent slopes	24.2	29.1%
FA	Fluvaquents and torrifluvents, sandy	0.1	0.1%
SY	Stony colluvial land	0.2	0.2%
WCF	Winkel-Rock outcrop complex, 8 to 30 percent slopes	58.8	70.6%
Totals for Area of Interest		**83.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Washington County Area, Utah

BED—Bermesa fine sandy loam, 1 to 10 percent slopes

Map Unit Setting

National map unit symbol: j8d5
Elevation: 2,600 to 3,400 feet
Mean annual precipitation: 8 to 11 inches
Mean annual air temperature: 57 to 67 degrees F
Frost-free period: 190 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition

Bermesa and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bermesa

Setting

Landform: Lava flows
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from sandstone and shale over residuum weathered from basalt

Typical profile

H1 - 0 to 3 inches: fine sandy loam
H2 - 3 to 14 inches: fine sandy loam
H3 - 14 to 21 inches: extremely gravelly sandy clay loam
H4 - 21 to 26 inches: extremely cobbly sandy clay loam
H5 - 26 to 28 inches: indurated
H6 - 28 to 32 inches: unweathered bedrock

Properties and qualities

Slope: 1 to 10 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic; 24 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: R030XY134UT - Desert Shallow Loam (Creosotebush)
Hydric soil rating: No

Minor Components

Bermesa
Percent of map unit: 5 percent

Winkel
Percent of map unit: 5 percent

Laverkin
Percent of map unit: 4 percent

Rock land
Percent of map unit: 1 percent

FA—Fluvaquents and torrifluvents, sandy

Map Unit Setting
National map unit symbol: j8dt
Elevation: 2,500 to 3,000 feet
Mean annual precipitation: 8 to 11 inches
Mean annual air temperature: 57 to 67 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition
Fluvaquents and similar soils: 55 percent
Torrifluvents and similar soils: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting
Landform: Swales
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy alluvium derived from limestone, sandstone, and shale

Typical profile
H1 - 0 to 5 inches: fine sand
H2 - 5 to 60 inches: stratified fine sand to silt loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 6 to 24 inches

Frequency of flooding: Frequent
Frequency of ponding: Rare
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: R035XY011UT - Loamy Bottom (Basin Big Sagebrush)
Hydric soil rating: Yes

Description of Torrifluvents

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from limestone, sandstone, and shale

Typical profile

H1 - 0 to 5 inches: loamy fine sand
H2 - 5 to 60 inches: stratified loamy fine sand to silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A
Ecological site: R035XY011UT - Loamy Bottom (Basin Big Sagebrush)
Other vegetative classification: Loamy Bottom (Basin Big Sagebrush) (035XY011UT)
Hydric soil rating: No

Minor Components

Riverwash

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Dip

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Tobler, silty clay loam
Percent of map unit: 3 percent

Tobler, fine sandy loam
Percent of map unit: 3 percent

SY—Stony colluvial land

Map Unit Composition
Stony colluvial land: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

WCF—Winkel-Rock outcrop complex, 8 to 30 percent slopes

Map Unit Setting
National map unit symbol: j8hb
Elevation: 2,800 to 4,000 feet
Mean annual precipitation: 8 to 11 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 190 to 195 days
Farmland classification: Not prime farmland

Map Unit Composition
Winkel and similar soils: 65 percent
Rock outcrop: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Winkel

Setting
Landform: Mesas
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Calcareous material weathered from basalt, limestone, and wind-deposited sand.

Typical profile
H1 - 0 to 1 inches: gravelly fine sandy loam
H2 - 1 to 6 inches: gravelly fine sandy loam
H3 - 6 to 12 inches: very gravelly fine sandy loam
H4 - 12 to 16 inches: extremely cobbly fine sandy loam
H5 - 16 to 20 inches: indurated
H6 - 20 to 24 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 30 percent
Depth to restrictive feature: 11 to 19 inches to petrocalcic; 14 to 24 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: Very low (about 1.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R030XY134UT - Desert Shallow Loam (Creosotebush)
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mesas
Down-slope shape: Linear
Across-slope shape: Linear

Minor Components

Bermesa

Percent of map unit: 4 percent

Cinder land

Percent of map unit: 3 percent

Curhollow

Percent of map unit: 3 percent

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

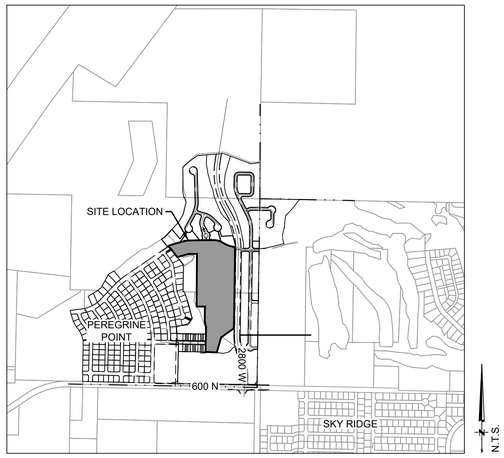
B&G PROJECT NUMBER 241049

HAWK RIDGE

PRELIMINARY PLAT

LOCATED IN HURRICANE, UTAH

SECTION 29 & 30, T 41 S, R 13 W, SLB&M



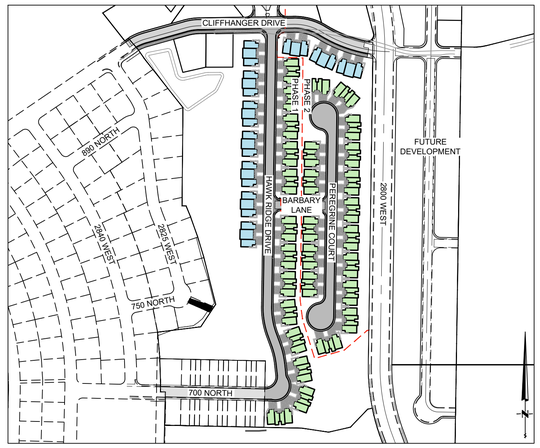
VICINITY MAP

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	OVERALL PLAN
3	SITE PLAN
4	GRADING PLAN
5	UTILITY PLAN

BOUNDARY DESCRIPTION

BEGINNING AT A POINT ON THE SECTION LINE, SAID POINT BEING ON THE NORTHERLY LINE OF 600 NORTH STREET, SAID POINT BEING NORTH 00°52'54" EAST 40.00 FEET ALONG SAID SECTION LINE FROM THE SOUTHEAST CORNER OF SECTION 30, TOWNSHIP 41 SOUTH, RANGE 13 WEST, SALT LAKE BASE & MERIDIAN, AND RUNNING THENCE NORTH 88°56'30" WEST 247.98 FEET ALONG THE NORTHERLY LINE OF 600 NORTH STREET; THENCE NORTHEASTERLY 39.21 FEET ALONG AN ARC OF A 25.00 FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (CENTER BEARS NORTH 01°03'17" EAST, LONG CHORD BEARS NORTH 46°07'41" EAST 35.31 FEET WITH A CENTRAL ANGLE OF 89°51'11"); THENCE NORTH 01°11'49" EAST 81.58 FEET; THENCE NORTHERLY 295.41 FEET ALONG AN ARC OF A 755.00 FOOT RADIUS CURVE TO THE LEFT (CENTER BEARS NORTH 88°48'10" WEST, LONG CHORD BEARS NORTH 10°00'43" WEST 293.53 FEET WITH A CENTRAL ANGLE OF 22°25'06"); THENCE NORTHERLY 133.28 FEET ALONG AN ARC OF A 773.55 FOOT RADIUS REVERSE CURVE TO THE RIGHT (CENTER BEARS NORTH 68°45'25" EAST, LONG CHORD BEARS NORTH 16°18'25" WEST 133.12 FEET WITH A CENTRAL ANGLE OF 09°52'20"); THENCE SOUTH 78°36'29" WEST 17.38 FEET; THENCE SOUTH 44°03'14" WEST 96.00 FEET; THENCE SOUTH 77°15'52" WEST 85.26 FEET; THENCE NORTH 81°18'58" WEST 99.77 FEET; THENCE NORTH 88°44'35" WEST 524.81 FEET; THENCE NORTH 01°15'25" EAST 126.25 FEET; THENCE NORTH 88°44'35" WEST 19.20 FEET TO THE SOUTHEAST CORNER OF PEREGRINE POINT - PHASE 4B; THENCE NORTHERLY THE FOLLOWING (3) COURSES ALONG THE EASTERLY LINE OF SAID PEREGRINE POINTE - PHASE 4B; THENCE NORTH 01°15'25" EAST 26.00 FEET; THENCE NORTH 01°40'43" WEST 103.67 FEET; THENCE NORTH 04°49'06" WEST 98.57 FEET TO THE SOUTHWESTERLY CORNER OF PREGRINE POINTE - PHASE 4C; THENCE NORTHERLY THE FOLLOWING (13) COURSES ALONG THE EASTERLY LINE OF SAID PEREGRINE POINT - PHASE 4C; THENCE NORTH 82°58'36" EAST 165.21 FEET; THENCE NORTH 33°49'24" EAST 102.56 FEET; THENCE NORTH 14°04'11" WEST 183.86 FEET; THENCE NORTH 16°47'28" WEST 81.37 FEET; THENCE NORTH 19°26'56" WEST 81.37 FEET; THENCE NORTH 22°06'29" WEST 46.09 FEET; THENCE NORTH 88°55'40" WEST 15.62 FEET; THENCE NORTH 00°35'41" EAST 373.51 FEET; THENCE NORTH 38°13'32" WEST 240.38 FEET; THENCE NORTH 34°22'27" WEST 36.08 FEET; THENCE NORTH 40°18'48" WEST 59.99 FEET; THENCE SOUTHWEST 17.09 FEET ALONG AN ARC OF A 165.00 FOOT RADIUS CURVE TO THE RIGHT (CENTER BEARS NORTH 40°18'38" WEST, LONG CHORD BEARS SOUTH 52°39'27" WEST 17.09 FEET WITH A CENTRAL ANGLE OF 05°56'09"); THENCE SOUTH 55°37'33" WEST 11.96 FEET; THENCE NORTH 38°12'32" WEST 136.46 FEET; THENCE NORTH 58°23'17" EAST 65.12 FEET TO A 1997 3" BLM ALUMINUM CAP STAMPED AP-5; THENCE NORTH 42°41'11" EAST 290.96 FEET TO A 1997 3" BLM ALUMINUM CAP STAMPED AP-4; THENCE NORTH 29°09'47" EAST 120.24 FEET TO A 1997 3" BLM ALUMINUM CAP STAMPED AP-3; THENCE NORTH 13°49'34" EAST 178.00 FEET TO A ¾" REBAR; THENCE NORTH 22°08'56" WEST 70.77 FEET TO A 1997 3" BLM ALUMINUM CAP STAMPED AP-1; THENCE NORTH 85°55'22" WEST 6.37 FEET ALONG SAID CENTER SECTION LINE; THENCE NORTH 08°30'39" WEST 86.71 FEET; THENCE NORTH 00°07'27" EAST 331.42 FEET; THENCE NORTH 46°26'05" EAST 110.94 FEET; THENCE NORTH 54°29'47" EAST 153.91 FEET; THENCE NORTH 85°27'04" EAST 360.85 FEET; THENCE SOUTH 69°29'44" EAST 409.88 FEET; THENCE NORTH 82°18'06" EAST 129.77 FEET TO THE SECTION LINE; THENCE SOUTH 00°06'39" WEST 505.48 FEET ALONG SAID SECTION LINE TO THE QUARTER CORNER COMMON TO SECTIONS 29 & 30, TOWNSHIP 41 SOUTH, RANGE 13 WEST, SALT LAKE BASE & MERIDIAN; THENCE SOUTH 88°53'46" EAST 553.63 FEET ALONG THE CENTER SECTION LINE; THENCE SOUTH 38°06'51" WEST 177.85 FEET; THENCE SOUTH 44°43'57" WEST 120.46 FEET; THENCE SOUTH 06°40'01" WEST 173.55 FEET; THENCE SOUTH 13°17'45" WEST 90.74 FEET; THENCE SOUTH 00°21'54" EAST 65.58 FEET; THENCE SOUTH 13°56'32" EAST 67.25 FEET; THENCE SOUTH 76°03'28" WEST 259.22 FEET; THENCE WEST 45.32 FEET ALONG AN ARC OF A 177.50 FOOT RADIUS CURVE TO THE RIGHT (CENTER BEARS NORTH 13°45'00" WEST, LONG CHORD BEARS SOUTH 83°33'54" WEST 45.20 FEET WITH A CENTRAL ANGLE OF 14°37'48"); THENCE NORTH 89°07'14" WEST 48.69 FEET TO THE SECTION LINE; THENCE SOUTH 00°52'46" WEST 624.35 FEET ALONG THE SECTION LINE TO THE SOUTH 1/16TH CORNER AS DEFINED BY A 1978 BRASS CAP; THENCE SOUTH 00°52'56" WEST 1,279.48 FEET ALONG SAID SECTION LINE TO THE POINT OF BEGINNING.

CONTAINING 3,318,961 SQUARE FEET OR 76.19 ACRES.



PROJECT MAP
N.T.S.

GENERAL NOTES

1) CONTRACTOR IS RESPONSIBLE TO VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK IN ANY ZONE.
2) ALL WORK AND MATERIALS SHALL COMPLY WITH HURRICANE CITY STANDARD SPECIFICATIONS.
3) PROJECTS SHALL INSTALL AN INFORMATIONAL SIGN ON SITE BEFORE CONSTRUCTION BEGINS. THIS SIGN WILL HAVE A MINIMUM SIZE, PLACEMENT LOCATION AND CONTENT INFORMATION WITH THE COMPANY NAME, PHONE CONTACT AND GRADING PERMIT NUMBER.
4) PROJECTS SHALL SUBMIT A DUST CONTROL PLAN WITH DETAILS ON EQUIPMENT, SCHEDULING AND REPORTING OF DUST CONTROL ACTIVITIES.
5) A MANDATORY PRE-CONSTRUCTION MEETING WILL BE REQUIRED ON ALL PROJECTS PRIOR TO ANY GRUBBING, GRADING OR CONSTRUCTION ACTIVITIES. THE PERMIT HOLDER WILL BE REQUIRED TO NOTIFY ALL DEVELOPMENT SERVICE INSPECTORS.
6) FOLLOW APPENDIX 'J' STANDARDS FOUND IN THE IBC.
7) ALL OBJECTS SHALL BE KEPT OUT OF THE SIGHT DISTANCE CORRIDORS THAT MAY OBSTRUCT THE DRIVER'S VIEW.

DUST CONTROL

THESE DUST CONTROL MEASURES MUST BE OBSERVED AT ALL TIMES:

EARTH MOVING ACTIVITIES:

1) APPLY WATER BY MEANS OF TRUCKS, HOSES AND/OR SPRINKLERS AT SUFFICIENT FREQUENCY AND QUANTITY, PRIOR TO CONDUCTING, DURING AND AFTER EARTHMOVING ACTIVITIES.
2) PRE-APPLY WATER TO THE DEPTH OF THE PROPOSED CUTS OR EQUIPMENT PENETRATION.
3) APPLY WATER AS NECESSARY AND PRIOR TO EXPECTED WIND EVENTS.
4) OPERATE HAUL VEHICLES APPROPRIATELY IN ORDER TO MINIMIZE FUGITIVE DUST AND APPLY WATER AS NECESSARY DURING LOADING OPERATIONS.

DISTURBED SURFACE AREAS OR INACTIVE CONSTRUCTION SITES:

1) WHEN ACTIVE CONSTRUCTION OPERATIONS HAVE CEASED, APPLY WATER AT SUFFICIENT FREQUENCY AND QUANTITY TO DEVELOP A SURFACE CRUST AND PRIOR TO EXPECTED WIND EVENTS.
2) INSTALL FENCE BARRIER AND/OR "NO TRESPASSING" SIGNS TO PREVENT ACCESS TO DISTURBED SURFACE AREAS.

OCTOBER 2024

BUSH & GUDGELL, INC.

Engineers - Planners - Surveyors

205 East Tabernacle #4
St. George, Utah 84770
Phone (435) 673-2337

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY
Call before you Dig
1-800-662-4111
BLUE STAKES LOCATION CENTER (UTAH)

OWNER / DEVELOPER

GREG SANT
PERRY HOMES UTAH, INC.
2250 NORTH CORAL CANYON BOULEVARD, SUITE 215
WASHINGTON, UTAH 84780
(435) 251-9090

ENGINEERING CONTACT

BUSH AND GUDGELL, INC.
205 EAST TABERNACLE #4
ST GEORGE, UT 84770

RICK MEYER - PROJECT MANAGER
(435)-673-2337

BUSH & GUDGELL, INC.
Engineers - Planners - Surveyors
205 East Tabernacle Suite #4
St. George Utah 84770
Phone (435) 673-2337 / Fax (435) 673-3161
www.bushandgudgell.com

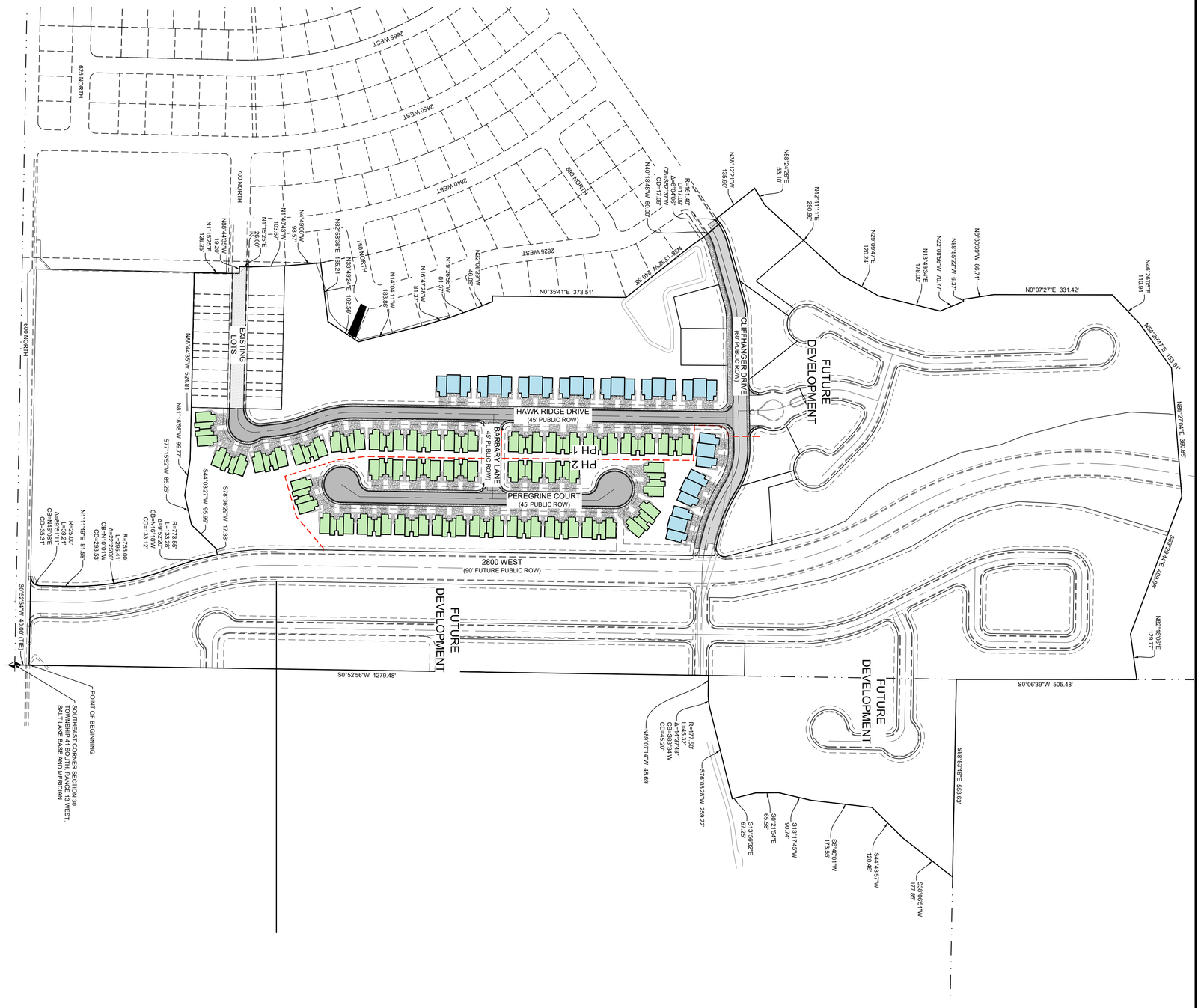
No.	Date	By	Revision

DATE: OCT 2024 | DRAWN: MG | APPROVED: WFM | SCALE: NTS | JOB NO. 241049

COVER SHEET
HAWK RIDGE PHASE 1 & 2
LOCATED IN HURRICANE, UTAH

SHEET 1 OF 5 SHEETS
FILE: 241049

X:\241000-241999\241049 - Peregrine Point\Drawings\Preliminary Plat\241049 - Preliminary Plat.dwg



OVERALL SITE PLAN

HAWK RIDGE PHASE 1 & 2
LOCATED IN HURRICANE, UTAH

DATE: OCT 2024
DRAWN: MG
APPROVED: WFM
SCALE: 1" = 150'
JOB NO.: 241049

BUSH & GUDGELL, INC.
Engineers - Planners - Surveyors
205 East Tabernacle Suite #4
St. George, Utah 84770
Phone (435) 673-2337 / Fax (435) 673-3161
www.bushandgudgell.com

No	Date	By	Revision

FILE 241049 — SHEET 2 OF 5 SHEETS

KEYED NOTES:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. EXISTING EDGE OF ASPHALT
2. PROPOSED HIGHBACK CURB & GUTTER
3. PROPOSED MODIFIED CURB & GUTTER
4. MODIFIED TO HIGHBACK CURB TRANSITION
5. EXISTING CURB & GUTTER
6. 5' CONCRETE SIDEWALK
7. 12' CONCRETE TRAIL
8. ADA RAMP
9. PROPOSED ASPHALT
10. EXISTING PARCEL LINES

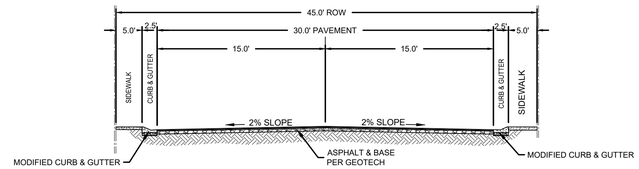
LEGEND

- EXISTING FENCE
- SAWCUT
- UTILITY AND DRAINAGE EASEMENT
- ROAD CENTER LINE
- PROPOSED CURB & GUTTER
- EXISTING CURB & GUTTER

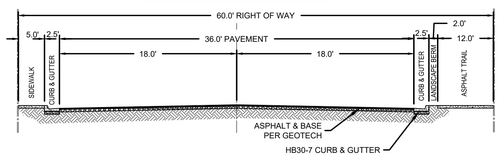
PROJECT INFORMATION

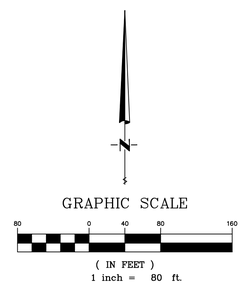
GENERAL PLAN	SINGLE FAMILY
ZONING	R-1-8
UNITS/LOTS	148
TOTAL ACRES	23.68 AC
IMPERVIOUS AREA	14.96 ACRES
PERVIOUS AREA	10.98 ACRES

45' PUBLIC RIGHT OF WAY



60' PUBLIC RIGHT OF WAY





No.	Revision	By	Date

BUSH & GUDGELL, INC.
Engineers - Planners - Surveyors
205 East Tabernacle Suite #4
St. George, Utah 84770
Phone (435) 673-2337 / Fax (435) 673-3161
www.bushandgudgell.com

DATE: OCT 2024
DRAWN: MG
APPROVED: WFM
SCALE: 1" = 80'
JOB NO. 241049

SITE PLAN
HAWK RIDGE PHASE 1 & 2
LOCATED IN HURRICANE, UTAH

SHEET 3 OF 5 SHEETS
FILE: 241049

X:\241000-241999\241049 - Peregrine Point\Drawings\Preliminary Plat\241049 - Preliminary Plat.dwg

GRADING QUANTITIES:

APPROXIMATELY **40,492** CU.YD. OF CUT **68,509** CU.YD. OF FILL AND **28,017** CU.YD. OF **IMPORT** MATERIAL IS REQUIRED (FOR GRADING PERMIT ONLY) THE CONTRACTOR SHOULD VERIFY THE QUANTITIES FOR COMPLETION OF WORK. QUANTITIES ARE BASED ON FINISH GRADE OF ROADS & PADS.

ALL IMPORTED STRUCTURAL FILL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO DELIVERY TO THE SITE. ALL IMPORTED STRUCTURAL FILL SHALL BE PLACED IN 8-INCH LOOSE HORIZONTAL LIFTS AND COMPACTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY (ASTM D-1557).

ALL EXCAVATION, GRADING AND FILL OPERATIONS WITHIN THE BUILDING AREA SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER TO VERIFY SUB-SOIL CONDITIONS AND DETERMINE ADEQUACY OF SITE PREPARATION, SUITABILITY OF FILL MATERIALS AND COMPLIANCE WITH COMPACTION REQUIREMENTS.

THE CONTRACTOR SHALL PROVIDE SUITABLE EQUIPMENT TO CONTROL DUST AND AIR POLLUTION CAUSED BY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ALSO PROVIDE SUITABLE MUD AND DIRT CONTAINMENT TO MAINTAIN THE WORK SITE, ACCESS ROADWAYS AND ADJACENT PROPERTIES IN A CLEAN CONDITION.

ALL EXCAVATION AND GRADING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF HURRICANE CITY AND APPENDIX K OF THE UNIFORM BUILDING CODE, 1994 EDITION, AND THE SPECIFICATIONS AND REQUIREMENTS INCLUDED IN THE GEOTECHNICAL STUDY.

GEOTECHNICAL ENGINEER TO PROVIDE GRADING COMPLETION REPORT TO CONFIRM WORK HAS BEEN PERFORMED IN CONFORMANCE WITH THEIR RECOMMENDATIONS.

OWNER IS RESPONSIBLE FOR ALL ON-SITE DRAINAGE AND DETENTION.

N

GRAPHIC SCALE

80 0 40 80 160

(IN FEET)
1 inch = 80 ft.

LEGEND

- EXISTING GROUND CONTOUR
- FINISH GROUND CONTOUR
- RETAINING WALL
- FFE: 00.00 — FFE = FINISHED FLOOR ELEVATION
- -2.0% — SLOPE
- 2650 — CONTOUR ELEVATION IN FEET

No	Date	By	Revision

BUSH & GUDGELL, INC.
Engineers - Planners - Surveyors
205 East Tabernacle Suite #4
St. George, Utah 84770
Phone (435) 673-2337 / Fax (435) 673-3161
www.bushandgudgell.com

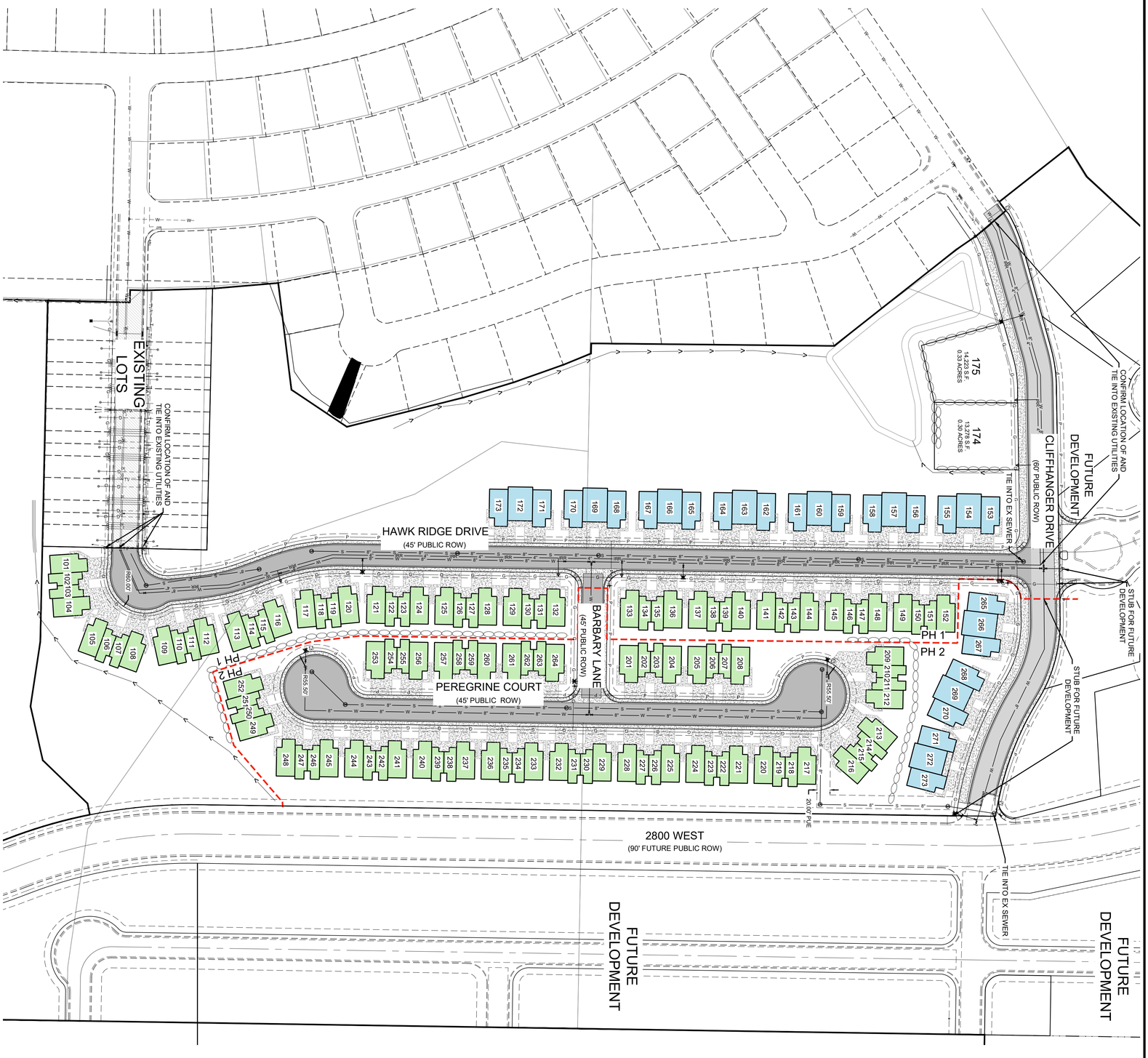
DATE: OCT 2024
DRAWN: MG
APPROVED: WFM
SCALE: 1" = 80'
JOB NO. 241049

GRADING & DRAINAGE PLAN

HAWK RIDGE PHASE 1 & 2
LOCATED IN HURRICANE, UTAH

SHEET 4 OF 5 SHEETS
FILE: 241049

X:\241000-241999\241049 - Peregrine Point\Drawings\Preliminary Plat\241049 - Preliminary Plat.dwg



LEGEND

- PROPOSED STORM DRAIN PIPE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- PROPOSED IRRIGATION LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED SEWER MANHOLE
- PROPOSED WATER VALVE
- PROPOSED IRRIGATION VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED CATCH BASIN

GRAPHIC SCALE
(IN FEET)
1 inch = 80 ft.

N

UTILITIES PLAN

HAWK RIDGE PHASE 1 & 2
LOCATED IN HURRICANE, UTAH

DATE: OCT 2024
DRAWN: MG
APPROVED: WFM
SCALE: 1" = 80'
JOB NO. 241049

BUSH & GUDGELL, INC.
Engineers - Planners - Surveyors
205 East Tabernacle Suite #4
St. George, Utah 84770
Phone (435) 673-2337 / Fax (435) 673-3161
www.bushandgudgell.com

No.	Date	By	Revision

SHEET 5 OF 5 SHEETS
FILE 241049

Hurricane City Application

Permit #: PP23-21
Issue Date: 10/20/2023

Application Accepted Date: 08/30/2023
Type of Improvement: Subdivision (Preliminary Plat)
Description: A 6 Phase/lots Commercial Subdivision is planned n

Tenant / Project Name: Gateway Commercial at Sand Hollow

Bldg. Address: Sand Hollow Road
City: Hurricane City State: UT Zip: 84737
Subdivision: Gateway Commercial at Sand Hollow Phase:
Block: Lot #: Parcel #: H-4-2-1-300,H-4-2-1-4203,H-4-2-1-1123-GS1, H-4-2-1-1107-GS1, H-4-2-1-1102-GS1
Zone: General Commercial, Highway Commercial
Property Owner: Western Mortgage & Realty Company
Permit Contact: Karl Rasmussen P: (435) 680-0816
Email: karl@pv-eng.com

CONTACT INFORMATION

Engineer of Record: Karl Rasmussen
Email: karl@pv-eng.com P: (435) 668-8307

General Contractor: Gateway Commercial at Sand Hollow / Western Mortgage and Realty Company P: (509) 582-9354
License #: 191090-2208
Address: 6610 WEST COURT STREET
City: PASCO State: WA Zip: 99302
Email: ttippett@westernmort.com

APPLICATION DETAILS

of Units: 0
custom text:

Valuation	$	0.00

PERMIT FEES

Preliminary Plat Fee	$	150.00
Planning Fee	$	150.00
Planning Fee	$	150.00
Sub Total:	**$**	**300.00**
Permit Total:	**$**	**300.00**
Amount Paid:	**$**	**300.00**
Remaining Due:	**$**	**0.00**

APPROVALS		DATE	INFO
Plan Review Finalized:	Yes	10/19/23	Brienna Spencer

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PENDPP23-21

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Jeffrey Thomas

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Brienna Spencer Date: 10/19/2023

Application Issued By: Date: 10/20/2023

Receipt #: 8.173375-10/20/23

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	PP23-21
Type of Application:	Preliminary Plat Extension
Action Type:	Administrative
Applicant:	Western Mortgage & Realty Co
Agent:	Karl Rasmussen
Request:	Extension of a Preliminary Plat approval.
Location:	Between SR-9 and Sand Hollow Road
Zoning:	HC and GC
General Plan Map:	General Commercial
Recommendation:	Approve the extension of the preliminary plat approval
Report Prepared by:	Fred Resch III

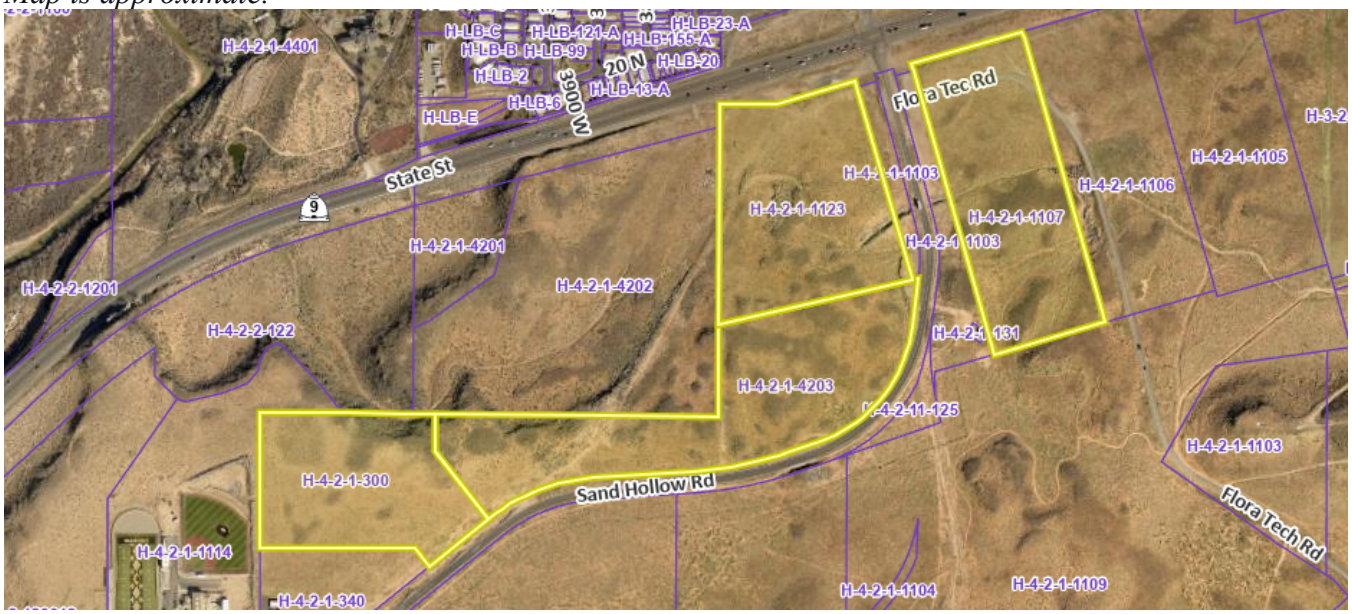
Update for 11/14/2024: The applicant is requesting an extension of the final plat deadline for this project. Pursuant to city ordinance, a final plat must be submitted within one year of approval of a preliminary plat; however, the applicant can request a 1-year extension from the Planning Commission. This preliminary plat was approved by the City Council in November of 2023.

The applicant and the staff have reviewed some construction drawings for this project.

11/14/2024 Extension Recommendation: Staff recommends the Planning Commission approve the extension of this preliminary plat approval. Below is the original Planning Commission 2023 staff report. The project was approved by the City Council on November 16th, 2023.

Discussion:
The applicant has filed a preliminary plat for the Gateway at Sand Hollow Commercial District. The applicant filed a preliminary plat for this property in early 2022, but that application was never approved due to negotiations with UDOT over corridor preservation along SR-9. They are proposing six commercial lots along current Sand Hollow Road, with Lot 4 being called out as a future Maverik location. This project will be highly dependent on utilities and road connections from the Gateway at Sand Hollow PID.

Map is approximate.



JUC Comments

The following items will need to be addressed:

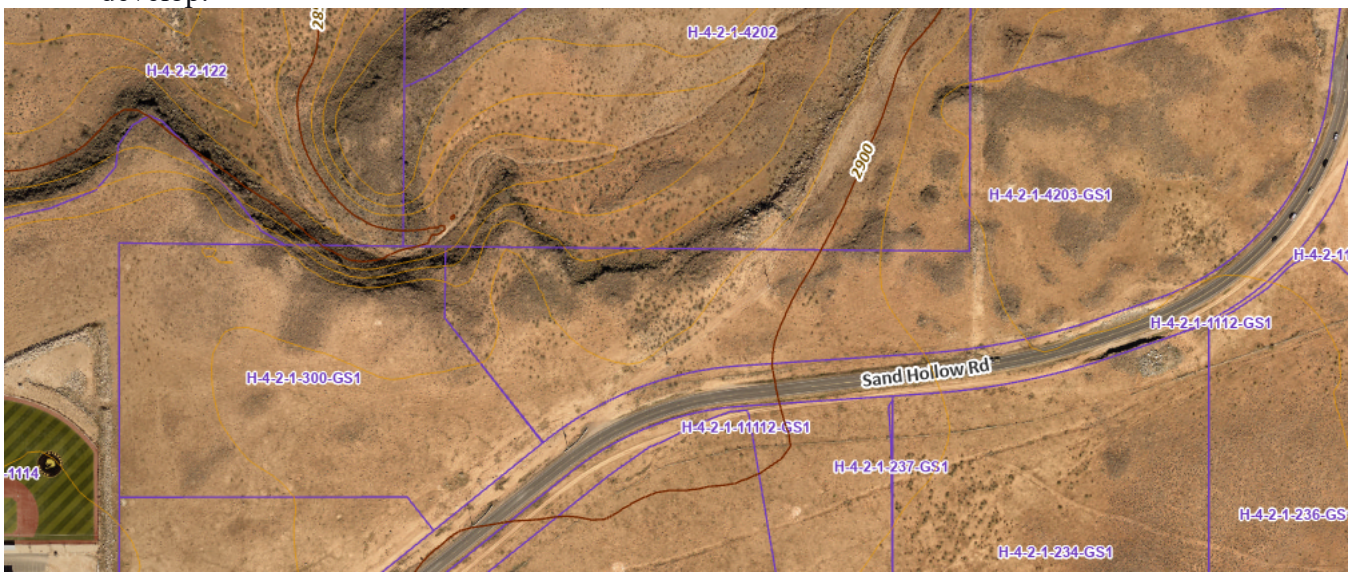
1. **Power:** This area is in both Dixie Power's and Hurricane City Power's service area.
    a. **Hurricane City Power:** Power must be installed from SR-9 along Gateway Blvd and throughout the roundabout. Lots 4, 5, and 6 are in Hurricane City Power's area; all other lots must meet Dixie Power regulations. Hurricane Power requires a prequalified contractor to install high voltage power lines. Individual los must supply Hurricane Power the sizing of power needed voltage and amperage requirements. Hurricane Power would recommend a JUC review per each lot. Lot 3 is under review for power service from Hurricane or from Dixie
    b. **Dixie Power:** Power is in PID roads on the north side. Need to discuss Lot 3 with Hurricane City Power.
2. **Sewer:** Existing 36" sewer main runs through the property. This line cannot be relocated. Future roadways through the project area should incorporate this line. Interceptor and sample manhole will be required. Curbs should not be located over 36" line.
3. **Street:** Roundabout and Sand Hollow Road realignment are not currently existing at this time
4. **Water:** Okay
5. **Engineering:** Stormwater note does not appear to apply to this development. Specify the tentative plan to detain stormwater increases from this development, most of this subdivision is below the detention basins provided by the Gateway to Sand Hollow PID. Hurricane City's Master Plan specifies this area drains to Berry Springs. Existing grade surface model is inaccurate. Per code, the preliminary plat shall show existing condition contours at vertical intervals not greater than five feet. Hurricane City standards discourage the use of cul-de-sacs, Engineering recommends a connection to the west. Show proposed preservation or reroute and show proposed public drainage easement. Frontage road is a 67' master planned public street. With regards to any potential UDOT corridor preservation, Engineering would recommend limiting the scope of the preliminary plat (i.e. make the boundary of the subdivision enclose just the Maverik site and its roadways) or completing said coordination before proceeding with the

current preliminary plat. It's anticipated that the subdivision boundary and street layout can change drastically because of coordination and agreements with UDOT. Engineering can help facilitate a meeting with UDOT.

6. **Fire:** Okay
7. **Phone:** No comments
8. **Gas**: No comments
9. **WCWCD**: No trees or permanent structures over our water line.
10. **Fiber:** Add Infowest notes during construction drawings

Staff Comments: Preliminary Plat

1. The property is split zoned between HC and GC. Lots 5 and 6 are zoned Highway Commercial and Lots 1 and 2 are zoned General Commercial. Lots 3 and 4 are split zoned, as these two zones have almost identical permitted uses and development standards so it is unlikely this will cause a conflict.
2. This property may be subdivided further and city staff would prefer that it is indicated on the plat.
3. The preliminary plat shows a "Future Maverik" on Lot 4, a separate preliminary site plan application will need to be turned in and all detail shown should be removed for the final plat.
4. Preliminary site plans will need to be turned in for each lot.
5. Access points between Lots 1 and 2 will need to be properly spaced.
6. There are some cliffs within this property. These are near the property boundaries and should be easy to avoid, but the Sensitive Lands ordinance will need to be addressed when these lots develop.



7. A note indicating that the property is not in a desert tortoise take area has been provided.
8. Utilities are not available to the property but will be with the PID buildout.

Recommendation: Staff recommends the Planning Commission review this application based on standards with Hurricane City Code. Staff recommends approval subject to staff and JUC comments.

PRELIMINARY PLAT FOR:
GATEWAY COMMERCIAL AT SAND HOLLOW

LOCATED IN SECTION 1, T42S, R14W, S.L.B.&M.
HURRICANE, WASHINGTON COUNTY, UTAH

DESERT TORTOISE TAKE AREA

THE PROJECT IS NOT LOCATED IN A DESERT TORTOISE TAKE AREA (PER RED CLIFFS DESERT RESERVE TAKE AREA 7 & 10 MAP)

ADDITIONAL NOTES

STORM WATER CAN BE LOCALLY DETAINED AND CONTROLLED USING DETENTION BASINS. WATER WILL BE COLLECTED AND DELIVERED TO THE REGIONAL DETENTION BASIN AT THE PROPOSED PARK
THERE ARE NO IRRIGATION FACILITIES.

PROPERTY CAN BE SERVED BY HURRICANE CITY WATER,
AND ASH CREEK SPECIAL SERVICE DISTRICT.

THERE ARE NO WELLS, SPRINGS OR SEEPS ON THIS PROPERTY.

OWNER PLANS TO ALLOW PLACEMENT OF COMMUNICATIONS INFRASTRUCTURE AND PLACEMENT OF UTILITY INFRASTRUCTURE ON AND ALONG ALL RIGHTS-OF-WAY AND EASEMENTS.

OWNER:

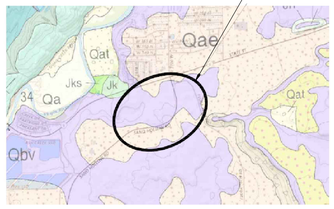
WESTERN MTG & REALTY CO
6610 WEST COURT STREET
PASCO, WASHINGTON 99302
(509) 521-9354

LAND USE SUMMARY

TOTAL LOTS: 6

AVERAGE AREA: 431,244 SQ.FT. (9.90 AC)

PROJECT LOCATION



GATEWAY COMMERCIAL AT SAND HOLLOW DESCRIPTION:

COMMENCING AT THE NORTH QUARTER CORNER OF SECTION 1, TOWNSHIP 42 SOUTH, RANGE 14 WEST, SALT LAKE BASE AND MERIDIAN; THENCE N88°43'14"E 658.23 FEET; THENCE S88°43'14"E 254.45 FEET; THENCE N74°27'42"E 422.67 FEET; THENCE N74°35'34"E 111.76 FEET; THENCE N74°45'10"E 562.26 FEET; THENCE S15°13'38"E 1306.80 FEET; THENCE S74°46'24"W 476.08 FEET; THENCE S77°19'47"W 698.65 FEET; THENCE S73°46'38"W 1160.82 FEET; THENCE WESTERLY ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT A DISTANCE OF 134.71 FEET, HAVING A RADIUS OF 1056.00 FEET AND A RADIAL BEARING OF S15°13'38"E, THROUGH A CENTRAL ANGLE OF 07°18'32" (LONG CHORD BEARS: S71°07'06"W 134.62 FEET); THENCE SOUTHWESTERLY ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT A DISTANCE OF 348.77 FEET, HAVING A RADIUS OF 827.96 FEET AND A RADIAL BEARING OF S14°03'11"E, THROUGH A CENTRAL ANGLE OF 24°08'06" (LONG CHORD BEARS: S63°52'46"W 346.20 FEET); THENCE S37°13'20"E 1.13 FEET; THENCE S52°40'11"W 303.44 FEET; THENCE N37°19'49"W 33.59 FEET; THENCE WESTERLY ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT A DISTANCE OF 179.40 FEET, HAVING A RADIUS OF 210.44 FEET AND A RADIAL BEARING OF S47°09'24"W, THROUGH A CENTRAL ANGLE OF 48°50'41" (LONG CHORD BEARS: N67°15'57"W 174.02 FEET); THENCE N88°51'09"W 274.18 FEET; THENCE WESTERLY ALONG THE ARC OF A 28.00 FOOT RADIUS CURVE TO THE RIGHT A DISTANCE OF 20.51 FEET, THROUGH A CENTRAL ANGLE OF 41°57'43", (LONG CHORD BEARS: N67°52'17"W 20.05 FEET); THENCE SOUTHWESTERLY ALONG THE ARC OF A 50.00 FOOT RADIUS REVERSE CURVE TO THE LEFT A DISTANCE OF 115.78 FEET, THROUGH A CENTRAL ANGLE OF 132°40'33", (LONG CHORD BEARS: S66°46'17"W 91.59 FEET); THENCE N88°40'59"W 199.69 FEET; THENCE N01°31'31"E 591.26 FEET; THENCE S88°16'22"E 765.18 FEET; THENCE S88°27'47"E 1223.85 FEET; THENCE N01°26'01"E 931.19 FEET; THENCE N01°17'52"E 417.87 FEET; TO THE POINT OF BEGINNING.

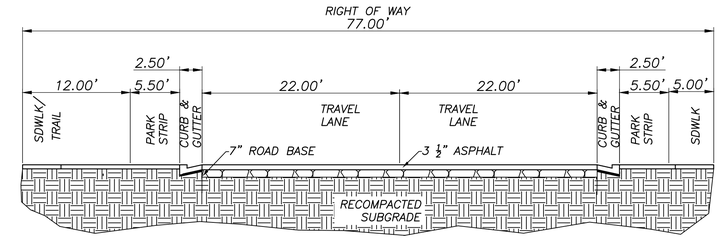
AREA CONTAINS 2808700 SQUARE FEET OR 64.479 ACRES.

GEOLOGICAL NARRATIVE

THIS PARCEL OF LAND LIES INSIDE A VOLCANO MOUNTAIN LAVA FLOW (MIDDLE PLEISTOCENE) SHOWN WITH A Qbv. IT ALSO LIES INSIDE AN ALLUVIAL AND EOLIAN DEPOSITS (HOLOCENE TO UPPER PLEISTOCENE) SHOWN WITH A Qae. THIS AREA ALSO HAS A MEDIUM TO DARK-GRAY TO GRAYISH-BLACK, FINE TO MEDIUM-GRAINED ALKALI BASALT (Qbv) WITH SPARSE OLIVINE PHENOCRYSTS; ERUPTED FROM A VENT AT VOLCANO MOUNTAIN (Qbvc) SOUTHWEST OF HURRICANE; DIVISIBLE INTO THREE SEPARATE FLOWS (BieK, 2003a, 2003b); YOUNGEST AND MIDDLE-LEVEL FLOWS YIELDED 40Ar/39Ar AGES OF 0.289 ± 0.024 Ma AND 0.353 ± 0.045 Ma, RESPECTIVELY (SANCHEZ, 1995), IN ACCORD WITH K-Ar AGES OF 0.289 ± 0.085 AND 0.303 ± 0.30 (BEST AND OTHERS, 1980) ON THE MIDDLE-LEVEL FLOW; MIDDLE-LEVEL FLOW IS DISPLACED ABOUT 240 FEET (73 m) BY THE HURRICANE FAULT AT TIMPOWEAP CANYON AND LOCALLY HAS PILLOW BASALT AT ITS BASE; THE OLDEST LAVA FLOW FLOWED ABOUT 8 MILES (13 km) DOWN THE VIRGIN RIVER; LAVA FLOWS ARE GENERALLY 35 TO 45 FEET (11-14 m) THICK AND FORM ROUGH, BLOCKY SURFACES, BUT THE MIDDLE-LEVEL FLOW IS AS MUCH AS 170 FEET (50 m) THICK WHERE IT FILLS THE ANCESTRAL VIRGIN RIVER CHANNEL. THIS AREA ALSO HAS MODERATELY SORTED GRAVEL, SAND, AND SILT DEPOSITED IN SMALL CHANNELS AND ON ALLUVIAL FLATS, AND WELL-SORTED, FINE- TO MEDIUM-GRAINED, REDDISH-BROWN EOLIAN SAND LOCALLY REWORKED BY ALLUVIAL PROCESSES, YOUNGER DEPOSITS (Qae) FORM ACTIVE DEPOSITIONAL SURFACES, WHEREAS OLDER DEPOSITS (Qaeo) TYPICALLY FORM INCISED, INACTIVE SURFACES; AS MUCH AS ABOUT 20 FEET (6 m) THICK.

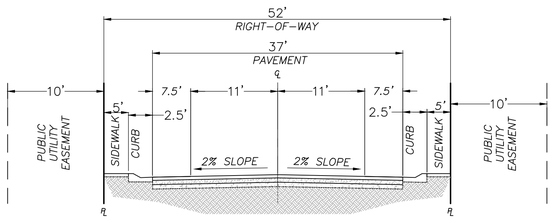
GEOLOGICAL HAZARDS

FAULTS & SURFACE FAULTING	NONE
LIQUEFACTION	H2 – HIGH2–SIMILAR IN TEXTURE TO HIGH CATEGORY, NO GROUND–WATER INFORMATION
FLOODING	ZONE X–AREA OF MINIMAL FLOOD HAZARD
LANDSLIDE HAZARD	NONE
ROCKFALL HAZARD	NONE
BRECCIA PIPES AND PALEOKARST	NONE
CALICHE	CA – CALICHE
COLLAPSIBLE SOIL	CSA–STREAM/TERRACE ALLUVIUM >=3%
EXPANSIVE SOIL	ESL–LOW SUSCEPTIBILITY TO EXPANSION
GYPSIFEROUS SOIL & ROCK	NONE
PIPING & EROSION	P&ES–SOILS SUSCEPTIBLE TO PIPING AND EROSION
SHALLOW BEDROCK	BRB–BURIED: AREAS WHERE DEPTH TO BEDROCK IS GENERALLY ≤10 FEET BENEATH SOIL COVER
WIND BLOWN SAND	WBSL–LOW: MIXED–UNIT GEOLOGIC DEPOSITS WHICH CONTAIN WIND–BLOWN COMPONENT
SHALLOW GROUND WATER	NONE



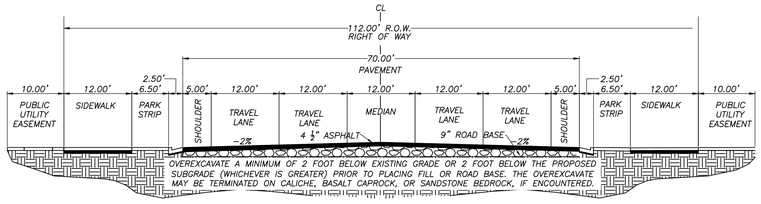
77' R-O-W

N.T.S



52' R-O-W

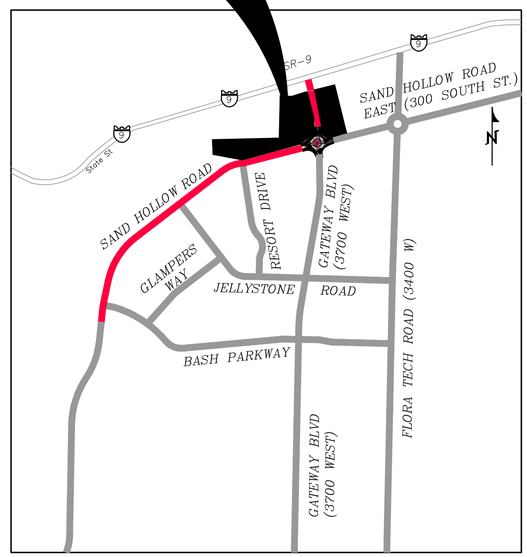
N.T.S



112' R-O-W

N.T.S

PROJECT LOCATION



VICINITY MAP

N. T. S.

COPYRIGHT © 2013 PROVALUE ENGINEERING INC.

REVISIONS

NO	DESCRIPTION	DATE	BY

PROVALUE ENGINEERING, INC.
Engineers - Land Surveyors - Land Planners
20 South 850 West, Suite 1
Hurricane City, Utah 84737
Phone: (435) 668-8301

PRELIMINARY PLAT FOR:
GATEWAY COMMERCIAL AT SAND HOLLOW
LOCATED IN SECTION 1, T42S, R14W, S.L.B.&M.
HURRICANE, WASHINGTON COUNTY, UTAH

DATE: 08/24/2023
SCALE: N.T.S

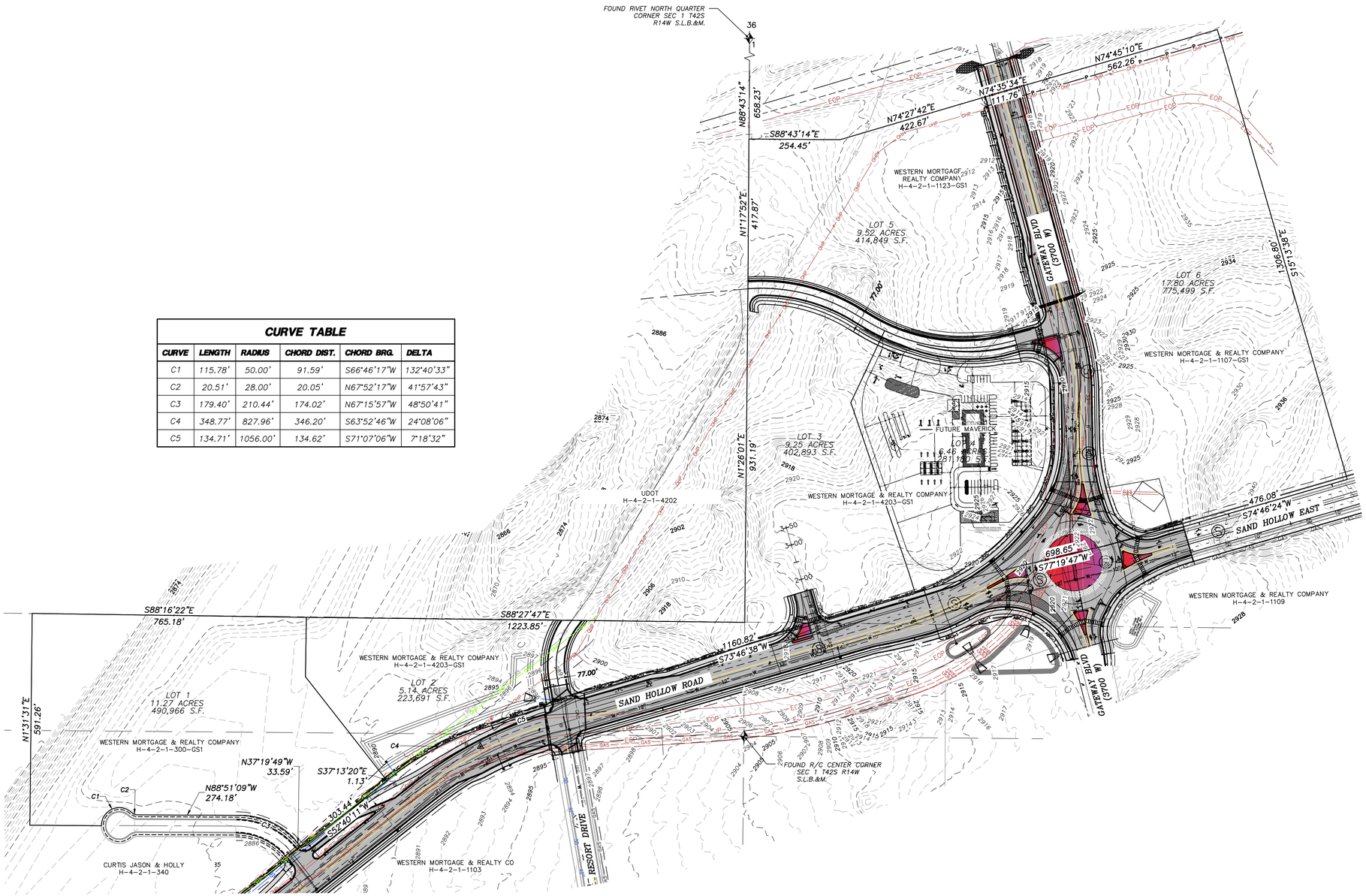
JOB NO.
336-004

SHEET NO:
1 OF 2

PRELIMINARY PLAT

PRELIMINARY PLAT FOR:
GATEWAY COMMERCIAL AT SAND HOLLOW

LOCATED IN SECTION 1, T42S, R14W, S.L.B.&M.
HURRICANE, WASHINGTON COUNTY, UTAH



CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	115.78'	50.00'	91.59'	S66°46'17"W	132°40'33"
C2	20.51'	28.00'	20.05'	N67°52'17"W	41°57'43"
C3	179.40'	210.44'	174.02'	N67°15'57"W	48°50'41"
C4	348.77'	827.96'	346.20'	S63°52'46"W	24°08'06"
C5	134.71'	1056.00'	134.62'	S71°07'06"W	7°18'32"

150 0 150
SCALE IN FEET

LEGEND

- OUTER PROPERTY LINE
- PROPERTY LINE
- CENTER LINE
- SECTION LINE
- PROPOSED 10' PUBLIC UTILITY EASEMENT
- EXISTING 20' SEWER EASEMENT
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING 24" SEWER LINE
- PROPOSED REROUTED 24" SEWER LINE
- PROPOSED REROUTED 24" SEWER LINE
- PROPOSED REROUTED 24" SEWER LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING GAS LINE
- EXISTING 24" SEWER
- PROPOSED PHONE
- EXISTING UTILITY LINE
- PROPOSED GAS
- PROPOSED POWER
- PROPOSED WATER
- EXISTING OHP LINE
- EXISTING 60" WATER LINE
- EXISTING 18" WATER LINE
- FUTURE ROW LINE
- PROPOSED CURB AND GUTTER
- FUTURE CURB AND GUTTER INSTALLED WITH PID ROADS
- SECTION CORNER AS DESCRIBED
- PROPOSED PAVEMENT
- PROPOSED REROUTED 24" SEWER MANHOLE
- EXISTING 24" SEWER MANHOLE
- UDOT CORRIDOR PRESERVATION AREA, 5.82 ACRES

NOTE: OWNER TO MEET UDOT TO ESTABLISH THE CORRIDOR PRESERVATION AREA NEEDED BEFORE THE CONSTRUCTION DRAWING AND FINAL PLAT PROCESS AND COORDINATE THIS WITH THE CITY ENGINEER.

COPYRIGHT © 2023 PROVALUE ENGINEERING INC.

REVISIONS			
NO	DESCRIPTION	DATE	BY

PROVALUE ENGINEERING, INC.
Engineers - Land Surveyors - Land Planners
20 South 850 West, Suite 1
Hurricane City, Utah 84737
Phone: (435) 668-8307

PRO VALUE ENGINEERING

KARL BRADLEY RASMUSSEN
No. 9187090
5/15/23
STATE OF UTAH

PRELIMINARY PLAT FOR:
GATEWAY COMMERCIAL AT SAND HOLLOW
LOCATED IN SECTION 1, T42S, R14W S.L.B.&M.
HURRICANE, WASHINGTON COUNTY, UTAH

DATE: 08/24/2023
SCALE: 1"=150'

JOB NO.
336-002

SHEET NO.
2 OF 2

PRELIMINARY PLAT

Hurricane City Application

Application Accepted Date: 11/04/2024

Type of Improvement: Conditional Use Permit

Description: Building a detached RV Garage with a ADU built on

Tenant / Project Name: Brick and Georgette Loring

Bldg. Address: 2521 W 250 S

City: Hurricane City State: UT Zip: 84737

Subdivision: La Grande Heights Lot 9 Phase:

Block: Lot #: 9 Parcel ID #: H-HGH-5-9

Property Owner: Brick Loring

Permit Contact: Charles Brick Loring P:(801) 455-9048

Email: brickloring@me.com

CONTACT INFORMATION

General Contractor: brick loring

License #: P: (801) 455-9048

Address: 5205 W 1930 S

City: Hurricane State: ut Zip: 84737

Email: BrickLoring@me.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	250.00
Planning Fee	$	250.00
Sub Total:	**$**	**250.00**
Permit Total:	**$**	**250.00**
Amount Paid:	**$**	**250.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANCUP24-26

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Brick Loring

Signature of Applicant/Authorized Agent or Owner: Date:

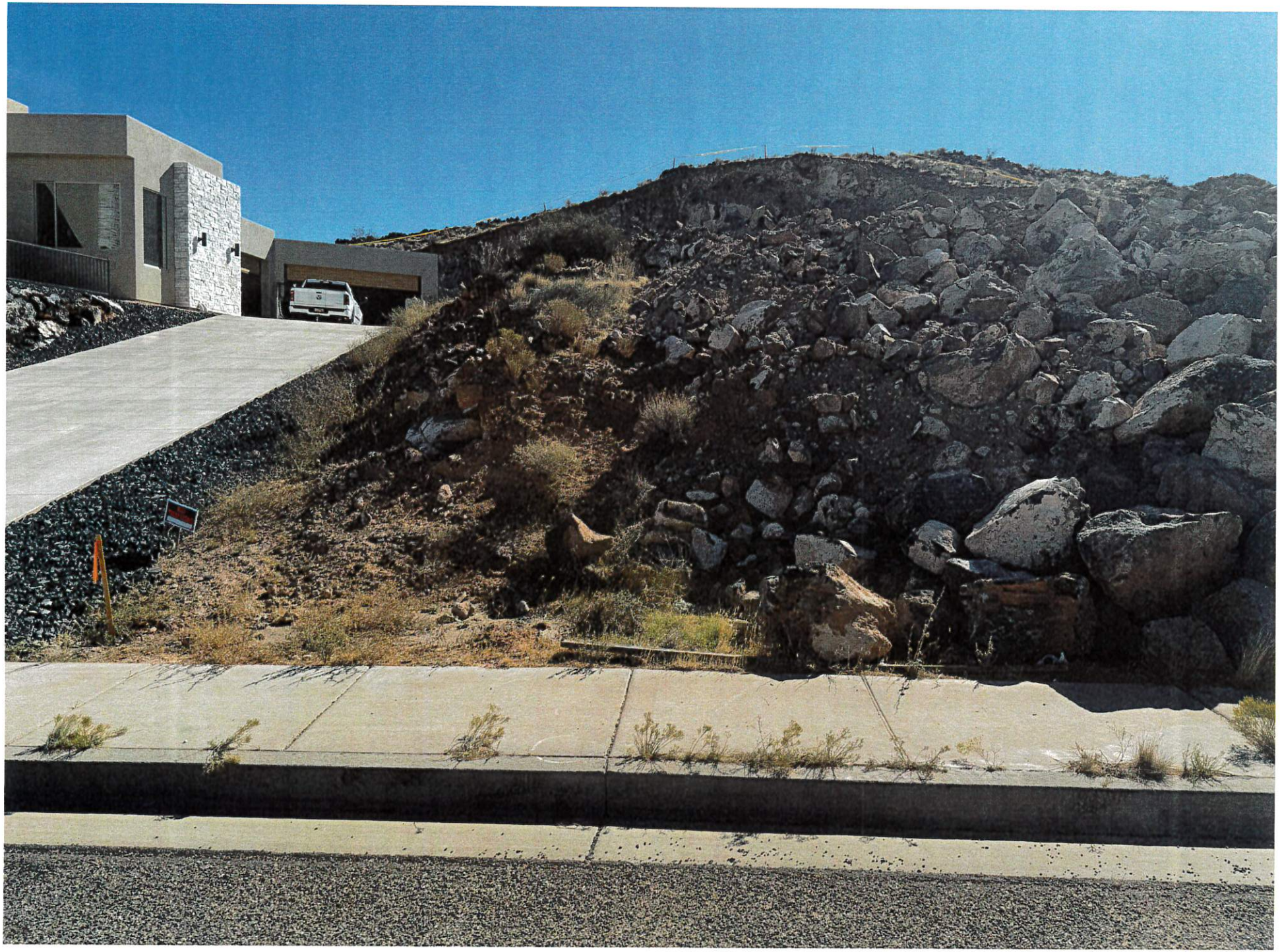
Application Approved By: Date:

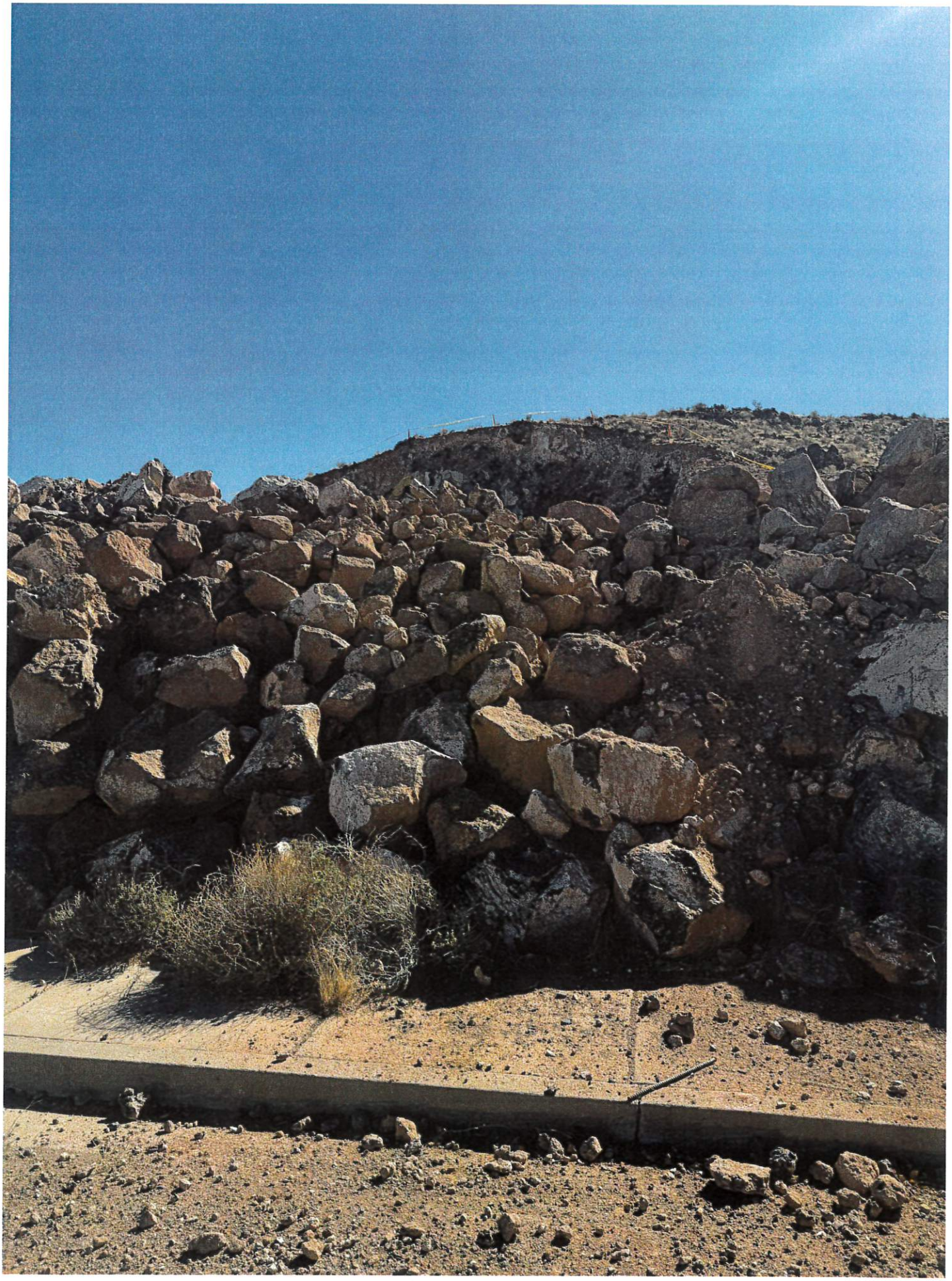
Application Issued By: Date:

Receipt #:

DRAFT

Building a 7486 square foot detached RV garage and casita. The building is proposed to be 33' in height, however, the property next to this is about 55' taller than existing lot due to elevation change and typography.





CAT

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	CUP24-26
Type of Application:	Conditional Use Permit
Action Type:	Administrative
Applicant:	Brick and Georgette Loring
Agent:	n/a
Request:	Approval of a conditional use permit for a building of greater height and size than allowed by code.
Location:	2521 W 250 S
Zoning:	R1-10
General Plan Map:	Single Family
Recommendation:	Approve subject to staff comments.
Report Prepared by:	Fred Resch III

Discussion: The applicant proposes constructing a 7,486 sq ft and 33-ft-tall, two-story RV garage and casita. The applicant has applied for an amended final plat to expand the size of their lot, which should be recorded with the County Recorder. Hurricane City Code (HCC) 10-13-4 allows the maximum size and height of an accessory building to be 1,200 sq. ft. and 16 ft. tall. The site is zoned Single Family Residential R1-10.

The standards to obtain a conditional use permit are as follows:

10-7-9(E): CONDITIONAL USE PERMIT. Approval Standards: The following standards shall apply to the issuance of a conditional use permit:
1. A conditional use permit may be issued only when the proposed use is shown as conditional in the zone where the conditional use will be located, or by another provision of this title.
2. Standards for each use must be reviewed. Specific standards are set forth for each use in subsections E2a through E2l of this section: (Subsection e. applies)…

e. Standards for greater heights and size than permitted by this Code:
(1) The height may not be greater than two (2) stories or 1.5 times the average height of the immediately adjacent buildings, whichever is greater and the building must be of compatible architecture with immediately adjacent buildings.
(2) When a greater height accessory building is approved, the building must be set back a minimum of five feet (5') from side and rear property lines when the adjoining property is for single family residential use.

(3) The greater size building desired must be of compatible architecture with immediately adjacent buildings, must leave at least fifty percent (50%) of the lot on which it is located free of buildings, and must be for a use permitted in the zone in which it is located. (Ord. 2018-14, 12-20-2018)

Findings:

1. The proposed building is not greater than two stories.
2. The proposed building will be architecturally compatible with the main home.
3. The building is set back a minimum of 5 ft from the side property lines and 5 ft off the back.
4. When complete, only 33% of the lot will be encumbered by buildings.
5. The proposed use is a permitted use in the R1-10 zoning district.

Recommendation: Staff recommends approval of the conditional use permit subject to staff findings.

GENERAL NOTES AND DESIGN CRITERIA

CONCRETE NOTES:

- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE, ACI 318, AND LOCAL ORDINANCES.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO POURING CONCRETE.
- ALL REINFORCING STEEL SHALL BE GRADE 60, AND BE PROPERLY TIED INTO PLACE PRIOR TO POURING CONCRETE.
- MINIMUM COMPRESSIVE STRENGTH f'c = 4500 PSI FOR SLABS, SUSPENDED SLABS, AND FOUNDATION WALLS, AND f'c = 3000 PSI MINIMUM FOR FOOTINGS.
- DEPRESS FOUNDATION AND POUR SLAB THROUGH, TYPICAL ALL EXTERIOR DOORS AND STORE FRONT TYPE WINDOWS, UNLESS NOTED OR DETAILED OTHERWISE.
- ALL EXTERIOR FOOTINGS SHALL BEAR BELOW FROST DEPTH (FIELD VERIFY).
- CONTRACTOR SHALL COORDINATE WITH MECHANICAL, ELECTRICAL, AND DESIGNER PRIOR TO POURING CONCRETE. PROVIDE SLEEVES, BLOCKOUTS, ETC. AS REQUIRED.
- PROVIDE ISOLATION JOINTS AROUND COLUMNS/SPREAD FOOTINGS, AND CONTROL JOINTS AS REQUIRED. VERIFY LOCATIONS WITH DESIGNER.
- DEPRESS SLAB AS REQUIRED IN AREA OF CERAMIC TILE AND SPECIAL ENTRY MATS, ETC. (VERIFY WITH DESIGNER)
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF ALL ANCHORS OR STRAPS, ETC. INSTALL PER MANUFACTURER.
- WHERE FOUNDATION WALLS OR FOOTINGS SUPPORT MASONRY WALLS, PROVIDE MATCHING DOWELS OF SAME SIZE AND SPACING.
- CONTRACTOR SHALL PROVIDE ALL SHORING AS REQUIRED.
- BRACE WALLS AS REQUIRED UNTIL FLOOR SLABS ARE IN PLACE.
- TO MINIMIZE CRACKING OF SLABS ON GRADE, #3 REBAR @ 30" O.C. MINIMUM EACH WAY 1" CLEAR FROM TOP, OR EQUIVALENT WELDED WIRE MESH IS RECOMMENDED. VERIFY WITH OWNER.
- CONTRACTOR SHALL FIELD VERIFY ACTUAL SOIL CONDITIONS. ALLOWABLE BEARING PRESSURE USED FOR DESIGN = 1500 PSF.
- FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL MATERIAL, OR ON PROPERLY PLACED ENGINEERED FILL. CONTRACTOR SHALL HAVE SOILS ENGINEER FIELD VERIFY AS REQUIRED.
- CONTRACTOR SHALL STEP FOOTINGS AND FOUNDATIONS AS REQUIRED. TO MAINTAIN FROST DEPTH AS REQUIRED BY BUILDING OFFICIAL.
- ENSURE PROPER COMPACTION OF SOIL PRIOR TO POURING EXTERIOR CONCRETE (I.E. CONCRETE SLABS, STEPS ETC.).

GENERAL FRAMING NOTES:

- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE, AND LOCAL ORDINANCES.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.
- **PROVIDE DRAFTSTOPPING AT OPEN WEB FLOOR TRUSSES SEC. R302.12**
- ALL JOISTS, RAFTERS, AND HEADERS SHALL BE DOUGLAS FIR LARCH NO. 2 OR EQUAL. IF TJI'S OR EQUAL ARE USED, THEY MUST BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. ALSO PROVIDE BRIDGING @ 8' O.C. FOR FLOOR JOISTS.
- ALL JOISTS AND RAFTERS SHALL HAVE SOLID BLOCKING AT THEIR BEARING POINTS. CONNECT BLOCKING TO TOP OF WALL WITH SIMPSON A35 FRAMING ANCHORS. ROOF JOISTS TO HAVE HURRICANE CLIPS AT 48" O.C. MIN.
- GLULAM BEAMS SHALL BE 24F-V4 DF/DF OR EQUAL FOR SIMPLE SPANS, AND 24F-V8 DF/DF OR EQUAL FOR CONTINUOUS SPANS.
- ALL STRUCTURAL STEEL SHALL BE A50, PROPERLY PRIMED AND PAINTED.
- ALL WOOD CONNECTIONS MUST CARRY THE CAPACITY OF THE MEMBER, CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS. IF OTHER THAN STANDARD CONNECTIONS ARE REQUIRED, SEE PROJECT ENGINEER FOR ADDITIONAL ASSISTANCE. USE SIMPSON OR EQUAL CONNECTIONS FOR WOOD TO WOOD.
- THRUST SHALL BE ELIMINATED BY USE OF COLLAR TIES, OR JOISTS, (PROPERLY INSTALLED), AT ALL STICK FRAME AREAS, UNLESS SUPPORTED BY BEAMS.
- PREFABRICATED AND ENGINEERED TRUSSES CAN BE USED FOR THE ROOF AND OR THE FLOORS. INSTALL PER MANUFACTUR'S RECOMMENDATIONS AND SPECIFICATIONS. TRUSS MANUFACTURER SHALL DESIGN TRUSSES FOR ALL LOADS PER 2021 INTERNATIONAL RESIDENTIAL CODE, INCLUDING UNBALANCED SNOW LOADS, SNOW DRIFTING, SNOW BUILD-UPS IN VALLEYS AND ON EAVES, ETC.
- ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. ALL COLUMNS SHALL BE BRACED AT ALL FLOOR LEVELS. COLUNMS SHALL BE AS WIDE AS THE MEMBER THEY SUPPORT.
- ALL EXTERIOR WALLS SHALL BE SHEATHED WITH MIN. 7/16" THICK EXP 1 SHEATHING OR EQUAL WITH 8d NAILS @ 6" O.C. EDGES AND @ 12" O.C IN THE FIELD - BLOCKED, UNLESS OTHERWISE NOTED.
- ALL ROOF SHEATHING SHALL BE MIN. 7/16" OSB OR PLYWOOD SHEATHING EQUAL W/ 8d COMMON NAILS @ 6" O.C. EDGES AND @ 12" O.C. IN THE FIELD, UNLESS NOTED. PROVIDE (2) 2" X __ BLOCKING @ RIDGES UNLESS CONTINUOUS MEMBER EXISTS.
- ALL FLOOR SHEATHING TO BE 3/4" THICK T&G SHEATHING WITH 10d COMMON NAILS OR EQUAL @ 6" O.C. PANEL EDGES AND @ 12" O.C. IN THE FIELD.

GENERAL ELECTRICAL NOTES:

- METER PANELS SHALL BE AT LEAST 36" AWAY FROM ALL DOORS AND WINDOWS
- MAIN DISCONNECTS ARE REQUIRED ON EXTERIOR OF ALL BUILDINGS.
- BREAKER PANELS SHALL NOT BE LOCATED ON THE EXTERIOR OF BUILDING.
- PROVIDE METALLIC WATER SERVICE OR CONCRETE ENCASED GROUNDING ELECTRODE IAW 2011 N.E.C. SEC. 250-50 (C)
- INSTALL A MINIMUM OF TWO WATER-PROOFED GFCI RECEPTACLES (ONE IN REAR AND ONE IN FRONT)
- ALL REQUIRED RECEPTACLES SHALL BE SPACED SO THAT AT NO POINT ALONG THE FLOOR LINE OF WALLS, COUNTERS, ETC. SHALL THE DISTANCE BE GREATER THAN 6 FEET.
- RATED OR METAL BOXES SHALL BE USED IN WALLS SEPARATING HOUSES FROM GARAGES.

GENERAL MECHANICAL NOTES:

- GAS METERS SHALL BE LOCATED AS PER LOCAL GAS COMPANY AND SHALL BE A MINIMUM OF 3' FROM ELEC. METER PANELS AND PERMANENT AIR VENTS.
- ADEQUATE COMBUSTION AIR IS REQUIRED FOR ALL FUEL BURNING APPLIANCES
- VENTILATING FANS ARE REQUIRED FOR ALL BATHROOMS WITH TUBS OR SHOWERS AND LAUNDRY ROOMS.
- ALL BATHROOM AND LAUNDRY VENT FANS SHALL BE VENTED TO THE EXTERIOR OF THE BUILDING NO ATTIC VENTING WILL BE ACCEPTABLE.
- DRYER VENT SHALL BE INSTALLED IAW IRC SEC G2439 OR PER MANUF. SPECS
- RANGE AND COOK TOP CLEARANCES TO UNPROTECTED COMBUSTABLES SHALL BE 30" MINIMUM.

GENERAL PLUMBING NOTES:

- VENTING IS REQUIRED FOR ALL FIXTURE TRAPS PER CODE
- NO PIPING SHALL BE INSTALLED SO AS TO BE SUBJECT TO FREEZING
- NO LEAD OR ACID BEARING SOLDERS OR FLUXES ARE ALLOWED FOR POTABLE WATER PIPING SYSTEM.
- PRESSURE REDUCING VALVES ARE REQUIRED WHEN WATER PRESSURE EXCEEDS 80 PSI
- BACKFLOW PROTECTION IS REQUIRED FOR ALL HOSE BIBS, LAWN SPRINKLER SYSTEMS, AND OTHER OUTLETS HAVING HOSE THREADS OR POSING POTENTIAL CROSS CONNECTIONS WITH CITY WATER SYSTEMS.
- FLOOR DRAINS SHALL BE PROVIDED NEAR ALL WATER HEATERS AND HAVE CAST METAL BODIES & GRATES.
- FLOOR DRAINS SHALL BE FULLY VISIBLE AND ACCESSIBLE.
- WATER CLOSET SPACES SHALL BE A MIN OF 30" IN WIDTH AND ALLOW FOR A FRONT CLEARANCE OF 21".
- SHOWER FLOOR SPACES SHALL BE A MIN OF 900 SQ IN AND SHALL BE ABLE TO ENCOMPASS A 30" CIRCLE TO THE HEIGHT OF 72" AND SHALL BE FRAMED FOR A MIN 22" DOOR.
- AIR GAP PROTECTION IS REQUIRED ON ALL DISHWASHER DRAIN CONNECTIONS TO THE DWV SYSTEM.
- UNFINISHED PLUMBING DWV ROUGH-INS SHALL BE PROPERLY VENTED AND CAPPED OFF.

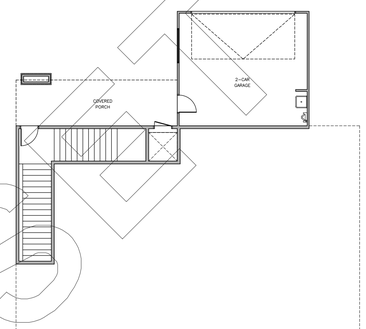
WOOD TRUSS NOTES:

- BOTTOM CHORDS OF TRUSSES, ACTING AS CEILING MEMBERS, MUST BE ABLE TO SUPPORT A 10 PSF LIVE LOAD PER IRC REQUIREMENTS.
- THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF THE PRE-ENGINEERED TRUSSES, AND SHALL DESIGN THE TRUSSES PER ATTACHED ENGINEERING SPECIFICATIONS.
- THE TRUSSES SHALL BE DESIGNED TO CARRY ANY ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
- THE TRUSSES SHALL ALSO BE DESIGNED PER THE 2021 INTERNATIONAL RESIDENTIAL CODE, AND LOCAL ORDINANCES. DESIGN MUST ALSO TAKE INTO ACCOUNT UNBALANCED SNOW LOADS, SNOW DRIFTING, INCREASED SNOW LOADS ON EAVES AND VALLEYS, IMPACT LOADS FROM FALLING SNOW AND ICE, ETC.
- ALL MEMBERS SHALL BE DESIGNED FOR COMBINED STRESSES, BASED ON THE WORST LOADING CONDITION.
- THE TRUSS MANUFACTURER SHALL INDICATE PROPER BRACING OF COMPRESSION CHORD MEMBERS @ 6'-0" LONG (OR LONGER), AS WELL AS BRACING FOR TRUSS ERECTION.
- ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TRUSSES PER THE TRUSS MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. NO WEB OR CHORD MEMBERS SHALL BE MODIFIED IN THE FIELD.
- THE PROJECT ENGINEER, OR ENGINEER OF RECORD, IS NOT RESPONSIBLE FOR THE PRE-ENGINEERED TRUSSES, NOR FOR THE INSTALLATION, ETC. OF THE TRUSSES. TRUSS PLANT SHALL PROVIDE LICENSED ENGINEERED PLAN.
- FABRICATION OF TRUSSES SHALL BE AS APPROVED BY ICBO EXCEPT THAT THIS SPECIFICATION SHALL GOVERN WHEN IT EXCEEDS ICBO REQUIREMENTS.
- FABRICATE TRUSSES FROM APPROVED SHOP DRAWINGS.
- FABRICATE TRUSSES IN JIGS WITH MEMBERS ACCURATELY CUT TO PROVIDE GOOD BEARING AT JOINTS. JOINTS SHALL BE ACCEPTABLE IF THE AVERAGE OPENING BETWEEN ENDS OF MEMBERS IMMEDIATELY AFTER FABRICATION IS LESS THAN 1/16", EXCEPT THAT TRUSS COMPRESSION CHORD JOINTS AT SPLICES AND RIDGES SHALL HAVE FULL CONTACT BETWEEN MEMBERS.
- EACH CHORD SECTION SHALL BE INVOLVED IN TWO PANEL POINTS BEFORE BEING SPLICED.
- PROVIDE 1/8" CAMBER FOR EACH 6 FEET OF TRUSS UNLESS OTHERWISE INDICATED.
- TRUSS FABRICATORS USING METAL PLATES SHALL HAVE PLANT INSPECTED FOUR TIMES PER YEAR BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH TPI REGULATIONS AND COPIES OF INSPECTIONS MADE AVAILABLE TO OWNER UPON REQUEST.

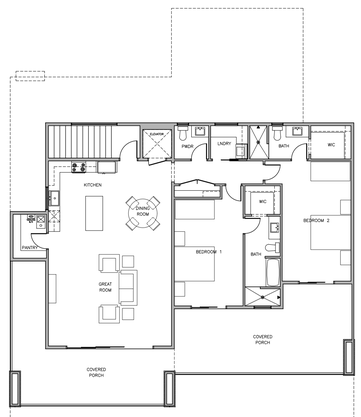
METAL GUSSET PLATES:

- SIZE PLATES FOR GREATER OF MEMBER FORCES SHOWN ON DRAWINGS OR MEMBER FORCES DERIVED FROM STRUCTURAL ANALYSIS.
- NO PANEL POINT SHALL HAVE MORE THAN ONE PLATE PER TRUSS SIDE.
- PLATES SHALL HAVE MINIMUM BITE OF 2 1/2" ON MEMBERS. MEASURE BITE ALONG CENTER LINE OF WEBS AND PERPENDICULAR TO CHORD AXES. ORIENT PLATE AXIS PARALLEL WITH TRUSS CHORD AXIS EXCEPT WHERE CHORDS CHANGE PITCH AT JOINT.
- PLATE SIZES.
  - MINIMUM WIDTH OF PLATES SHALL BE 3"
  - TRUSSES OTHER THAN SCISSOR TRUSSES - SIZE PLATES, NAIL AND STEEL SECTION, FOR 135% OF MEMBER FORCES.
  - SCISSOR TRUSSES - SIZE PLATES, NAIL AND STEEL SECTION, FOR 135% OF MEMBER FORCES.
  - NO INCREASE IN PLATE VALUES WILL BE ALLOWED FOR DURATION OF LOADING OR OTHER FACTORS.
- PRESS PLATES INTO MEMBERS TO OBTAIN FULL PENETRATION WITHOUT CRUSHING OUT SURFACE OF WOOD. PLATE EMBEDMENT IS ACCEPTABLE IF OPENING BETWEEN PLATE AND WOOD SURFACE IS LESS THAN 1/32".
- LUMBER DEFECTS AND PLATE MISPLACEMENT, IN COMBINATION, SHALL NOT REDUCE PLATE AREA OR NUMBER OF EFFECTIVE TEETH, PRONGS, OR NAILS BY MORE THAN 10%.
- DO NOT APPLY METAL GUSSET PLATES AFTER SHOP FABRICATION.

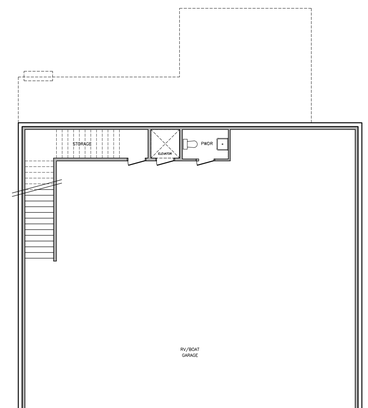
1 CS.1 FRONT ELEVATION SCALE: N.T.S.



2 CS.1 SECOND FLOOR PLAN SCALE: N.T.S.



3 CS.1 MAIN FLOOR PLAN SCALE: N.T.S.



4 CS.1 BASEMENT FLOOR PLAN SCALE: N.T.S.

SHEET INDEX	
CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:	
-	-
-	-

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION: HURRICANE

CITY: SUBD.: LEGRAND HEIGHTS 09
LOT: *ONE TIME BUILD

SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

evōkhome LIVE BETTER
ph: 1.435.313.1577 fax: 1.866.522.7016
dan@evokhome.com www.evokhome.com

FILE NAME: 2024-150

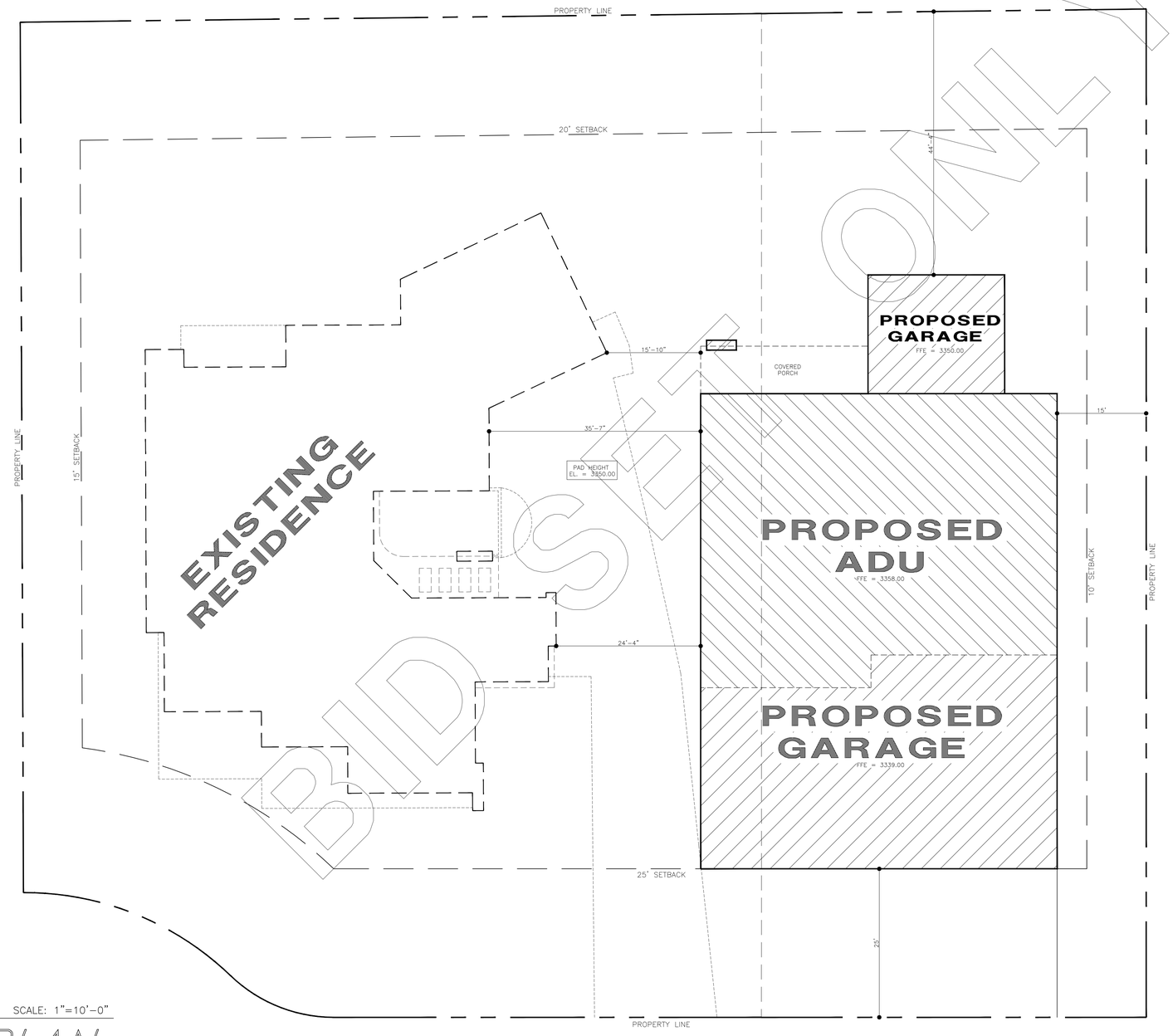
CS.1

LOCATION	
CITY	HURRICANE
TRACT	LEGRAND HEIGHTS
PHASE	5
ADDRESS	–
LOT	9

NOTES	
1	LOT TO BE GRADED SUCH THAT DRAINAGE WILL NOT DRAIN ONTO ADJOINING PROPERTIES.
2	GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SITE WORK (I.E. EXCAVATION, BACKFILL, GRADE, COMPACTION, ETC.) ALL WORK MUST IAW IRC AND LOCAL CODES.

CURVE DATA

MARK	RADIUS	ARC LENGTH	CHORD DIST.	CHORD BRG.	DELTA
D	25.00	19.17	–	–	43°56'44"



1 SD.1 SITE PLAN SCALE: 1"=10'-0"

ZION VISTA

SHEET INDEX	
CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:	
–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:

CITY: HURRICANE
SUBD.: LEGRAND HEIGHTS
LOT: 09
*ONE TIME BUILD

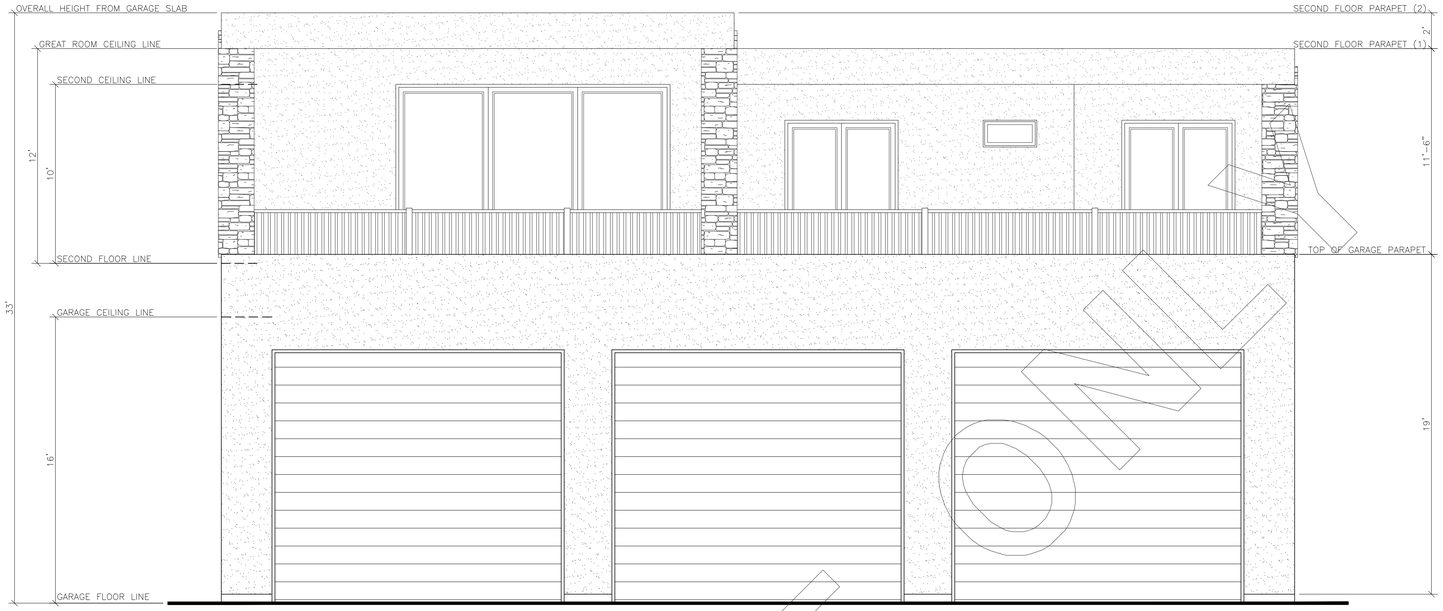
SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

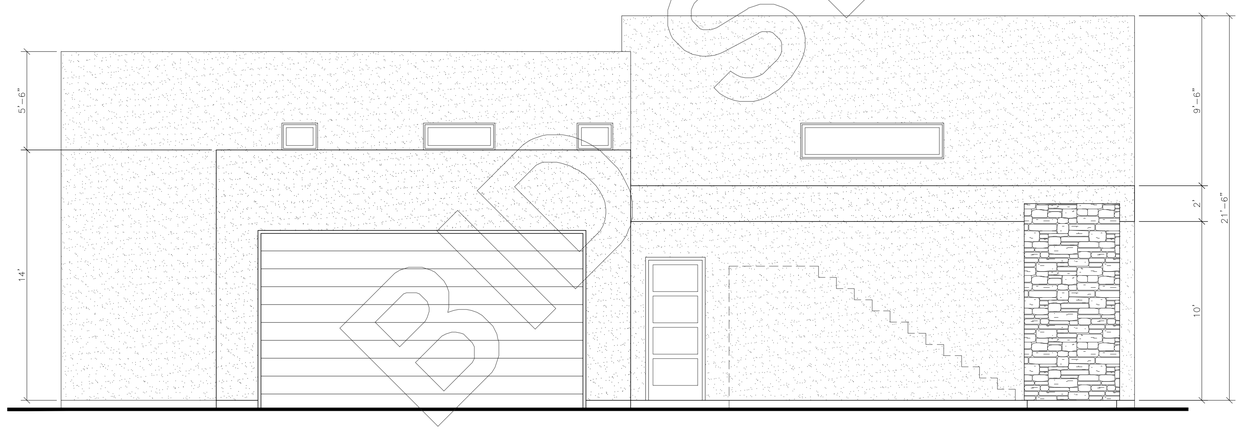
evōkhome LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME: 2024-150

SD.1



1 / A.1 FRONT ELEVATION SCALE: 1/4"=1'-0"



2 / A.1 REAR ELEVATION SCALE: 1/4"=1'-0"

BID SET
NOT FOR CONSTRUCTION

GENERAL NOTES:

1	GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE DESIGNER PRIOR TO CONSTRUCTION.
2	DRAWINGS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS.
3	ALL EXTERIOR DOOR AND WINDOW STYLES SHALL BE APPROVED BY OWNER.
4	ALL EXTERIOR TREATMENTS SHALL BE APPROVED BY OWNER.
5	PROVIDE SEVERE CLIMATED PROTECTION ON ALL ROOFS IAW LOCAL CODES AND IRC SEC. R905.1.2
6	ALL EXTERIOR OPENINGS SHALL BE FLASHED SUCH THAT THEY ARE WEATHER PROOFED
7	SEE ELEVATIONS NOTED AND DIMENSIONED FOR WALL HEIGHTS AND FLOOR PLACEMENT.
8	APPLICABLE CODE 2021 INTERNATIONAL RESIDENTIAL CODE
9	SEE STRUCTURAL CALCULATIONS FOR DESIGN VALUES.
10	GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SITE WORK (I.E. EXCAVATION, BACKFILL, GRADE, COMPACTION, ETC.) ALL WORK MUST BE IAW LATEST EDITION OF INTERNATIONAL RESIDENTIAL CODE AND ALL LOCAL CODES.
11	GENERAL CONTRACTOR/OWNER IS RESPONSIBLE TO OBTAIN MEC CHECK AND GAS PIPING DIAGRAM.
12	PROVIDE ATTIC VENTILATION IAW INTERNATIONAL RESIDENTIAL CODE SEC. R806

KEYED NOTES:

1	ROOFING MATERIAL AND APPLICATION SHALL BE IAW INTERNATIONAL RESIDENTIAL CODE SEC. R905
2	PROVIDE FLASHING IAW INTERNATIONAL RESIDENTIAL CODE AS FOLLOWS: ARCHITECTURAL SHINGLES –R905.2.8 TILE ROOF –R905.3.8 METAL ROOF –R905.4.6 CEDAR SHAKES –R905.8.8
3	PROVIDE ATTIC VENTILATION IAW INTERNATIONAL RESIDENTIAL CODE SEC. R806
4	PROVIDE 36" HIGH RAILING W/ BALUSTER PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH (SEE IRC SEC. R312)
5	APPLY BRICK AND STONE IAW IRC SEC. R703.8
6	PROVIDE ROCK RETAINING WALL – 4' MAXIMUM HEIGHT

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:
CITY: HURRICANE
SUBD.: LEGRAND HEIGHTS
LOT: *ONE TIME BUILD 09

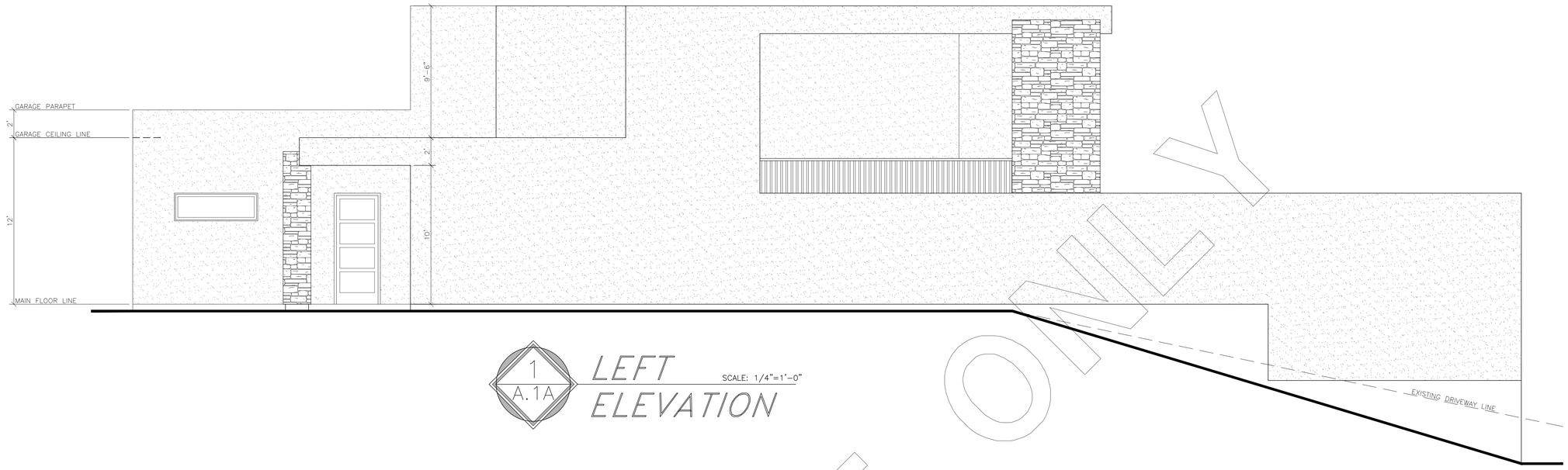
SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

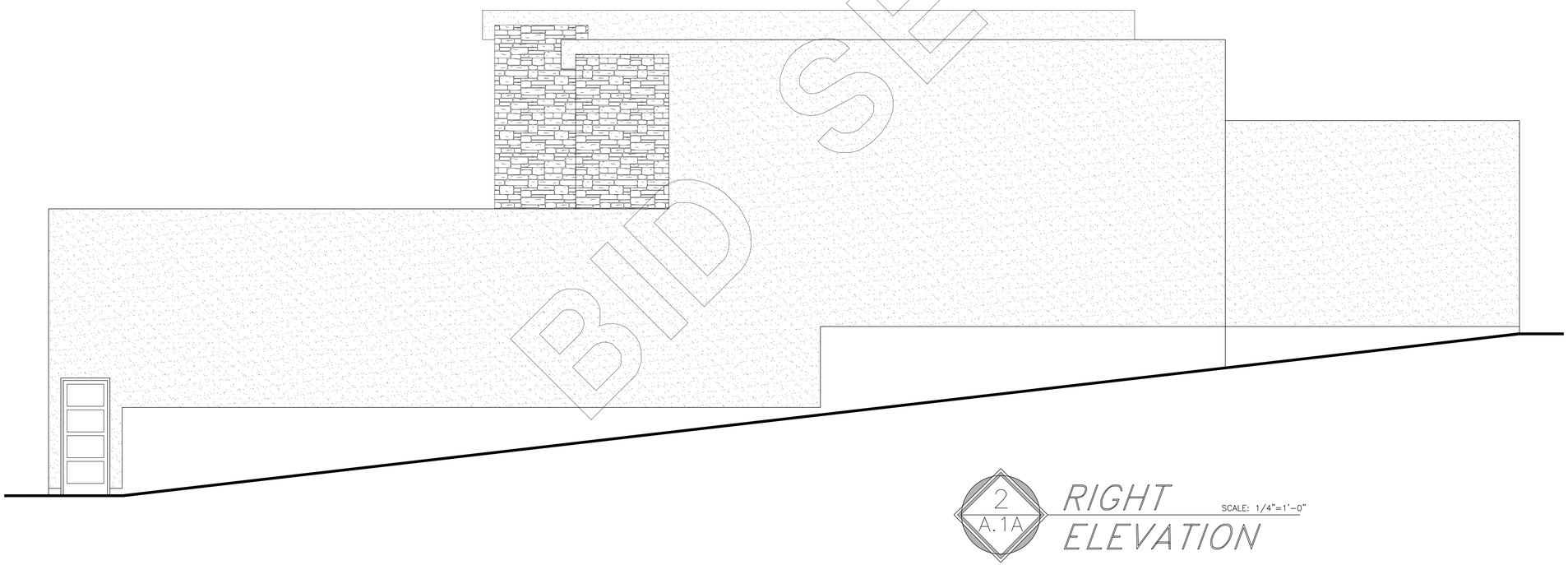
evōkhome LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024–150

A.1



1 A.1A LEFT ELEVATION SCALE: 1/4"=1'-0"



2 A.1A RIGHT ELEVATION SCALE: 1/4"=1'-0"

BID SET
EVOKHOME ONLY

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:

HURRICANE
CITY:
SUBD.: LEGRAND HEIGHTS
LOT: 09
*ONE TIME BUILD

SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

GENERAL NOTES:

1	GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE DESIGNER PRIOR TO CONSTRUCTION.
2	DRAWINGS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS.
3	ALL EXTERIOR DOOR AND WINDOW STYLES SHALL BE APPROVED BY OWNER.
4	ALL EXTERIOR TREATMENTS SHALL BE APPROVED BY OWNER.
5	PROVIDE SEVERE CLIMATED PROTECTION ON ALL ROOFS IAW LOCAL CODES AND IRC SEC. R905.1.2
6	ALL EXTERIOR OPENINGS SHALL BE FLASHED SUCH THAT THEY ARE WEATHER PROOFED
7	SEE ELEVATIONS NOTED AND DIMENSIONED FOR WALL HEIGHTS AND FLOOR PLACEMENT.
8	APPLICABLE CODE 2015 INTERNATIONAL RESIDENTIAL CODE
9	SEE STRUCTURAL CALCULATIONS FOR DESIGN VALUES.
10	GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL SITE WORK (I.E. EXCAVATION, BACKFILL, GRADE, COMPACTION, ETC.) ALL WORK MUST BE IAW LATEST EDITION OF INTERNATIONAL RESIDENTIAL CODE AND ALL LOCAL CODES.
11	GENERAL CONTRACTOR/OWNER IS RESPONSIBLE TO OBTAIN MEC CHECK AND GAS PIPING DIAGRAM.
12	PROVIDE ATTIC VENTILATION IAW INTERNATIONAL RESIDENTIAL CODE SEC. R806

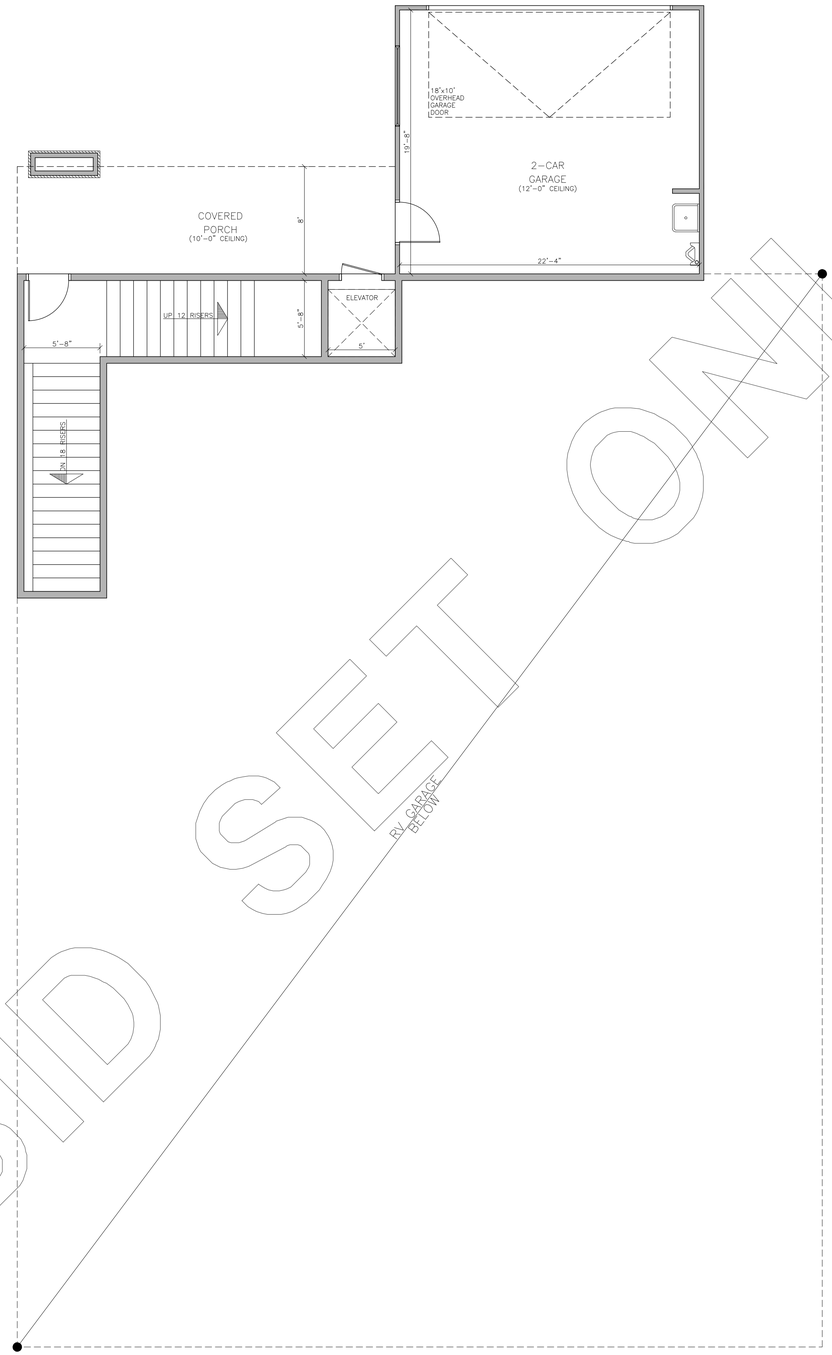
KEYED NOTES:

1	ROOFING MATERIAL AND APPLICATION SHALL BE IAW INTERNATIONAL RESIDENTIAL CODE SEC. R905
2	PROVIDE FLASHING IAW INTERNATIONAL RESIDENTIAL CODE AS FOLLOWS: ARCHITECTURAL SHINGLES –R905.2.8 TILE ROOF –R905.3.8 METAL ROOF –R905.4.6 CEDAR SHAKES –R905.8.8
3	PROVIDE ATTIC VENTILATION IAW INTERNATIONAL RESIDENTIAL CODE SEC. R806
4	PROVIDE 36" HIGH RAILING W/ BALUSTER PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH (SEE IRC SEC. R312)
5	APPLY BRICK AND STONE IAW IRC SEC. R703.8
6	PROVIDE ROCK RETAINING WALL – 4' MAXIMUM HEIGHT

evōkhome
LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024–150

A.1A



BID SET ONLY

1 A.2 MAIN FLOOR PLAN SCALE: 3/16"=1'-0"

GENERAL NOTES:

1	GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO DESIGNER PRIOR TO CONSTRUCTION.
2	THIS PLAN NOT COMPLETE WITHOUT ATTACHED ENGENEERING SPECS.
3	ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE AND LOCAL ORDINANCES.
4	ALL EXTERIOR WALLS ARE 2" X 6" STUDS @ 16" O.C. W/ R-19 INSULATION BETWEEN.
5	ALL PLUMBING WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 6".
6	ALL INTERIOR WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 4".
7	BRICK AND STONE ARE DIMENSIONED AT 3", ADJUST AS REQ'D FOR CULTURED STONE.
8	ALL STYLES AND TYPES OF INTERIOR FINISH (I.E. DOORS, HARDWARE, WINDOWS, PAINT, FLOOR COVERINGS, AND APPLIANCES ETC.) SHALL BE DETERMINED BY OWNER.
9	ALL EXTERIOR OPENINGS SHALL BE FLASHED SUCH THAT THEY ARE WEATHER PROOFED
10	SEE GENERAL FRAMING NOTES ON SHEET CS1
11	ALL EXTERIOR DOOR LANDINGS-SLOPE 2% MAX (ALL DIRECTIONS)

KEYED NOTES:

1	ALL TOILETS SHALL BE 1.6 GPM IAW IRC SEC. P2903
2	ALL TUBS & SHOWERS SHALL HAVE 2.5 GPM HEADS IAW IRC SEC. P2903
3	ALL HOSE BIBS, INCLUDING AUTO WASHER VALVE IN GARAGE, MUST BE BACKFLOW PROTECTED.
4	PROVIDE DRAIN PAN FOR WASHER
5	VENT DRYER TO OUTSIDE IAW IRC SEC. G2439 OR PER MANUF. SPEC.
6	SHEETROCK ALL WALLS WITH MINIMUM 1/2" GYPBOARD ON GARAGE SIDE AND SHEETROCK ALL CEILINGS & BEAMS WITH MIN. 5/8" GYPBOARD IAW IRC SEC. R302.6(SCREWED)
7	PROVIDE 36" HIGH RAILING W/ GUARD PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH. NO HORIZONTAL RAILS ARE ALLOWED (SEE IRC SEC. R312)
8	PROVIDE JETTED TUB MOTOR ACCESS
9	PROVIDE OUTSIDE COMBUSTABLE AIR TO ALL GAS APPLIANCES. VENT TERMINATION IN ACCORDANCE w/ IRC SEC. M1804.2
10	PROVIDE SEIZMIC STRAPS FOR WATER HEATERS WATER HEATERS: – PROVIDE SEIZMIC STRAPS – PROVIDE EXPANSION TANKS – PROVIDE 18" PLATFORM – PROVIDE CONCRETE FILLED BUMPER POST-IN GARAGE
11	"0" CLEARANCE GAS FIREPLACE INSTALL PER MANUF. SPEC. PROVIDE GAS SHUTOFF VALVE WITHIN 6' OF FIREPLACE IAW IRC SEC. G2420.5
12	PROVIDE 20 MIN FIRE RATED DOOR W/ SELF CLOSER/LATCH.
13	PROVIDE 22" X 30" ATTIC ACCESS AND LATCHED ATTIC ACCESS AS SHOWN (SEE IRC SEC. R807.1)
14	PROVIDE CONTINUOUS HANDRAIL IAW IRC SEC. R311.7.8 SEE APPLICABLE DETAIL ON SHEET D.2
15	PROVIDE SAFETY GLAZING IAW IRC SEC. R308
16	PROVIDE MIN 1/2" GYPBOARD ON WALLS AND CEILING BELOW STAIRS IAW IRC R302.7
17	BEARING WALL – SEE APPLICABLE DETAIL ON D.2
18	FURNACE LOCATION: A MINIMUM 30"x30" LEVEL WORKING SPACE IN FRONT OF THE FURNACE AND A MINIMUM OF 3 INCHES ALONG THE SIDES AND BACK. IRC M1305.1

THERMAL ENVELOPE:

1	THERMAL ENVELOPE VOLUME: X,XXX CUBIC FEET
2	A WHOLE HOUSE MECHANICAL VENTILATION SYSTEM WILL BE REQUIRED FOR BUILDINGS w/ LESS THAN 3 AIR CHANGES PER HOUR (IRC 303.4 STATE AMENDMENT) WHEN TESTED BY BY A BLOWER DOOR TEST
3	THE BUILDING THERMAL ENVELOPE SHALL COMPLY w/ SECTION N1102.4.1.2(R402.4.1.2) "BLOWER DOOR" TESTING.

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:
HURRICANE
CITY:
SUBD.: LEGRAND HEIGHTS 09
LOT: *ONE TIME BUILD

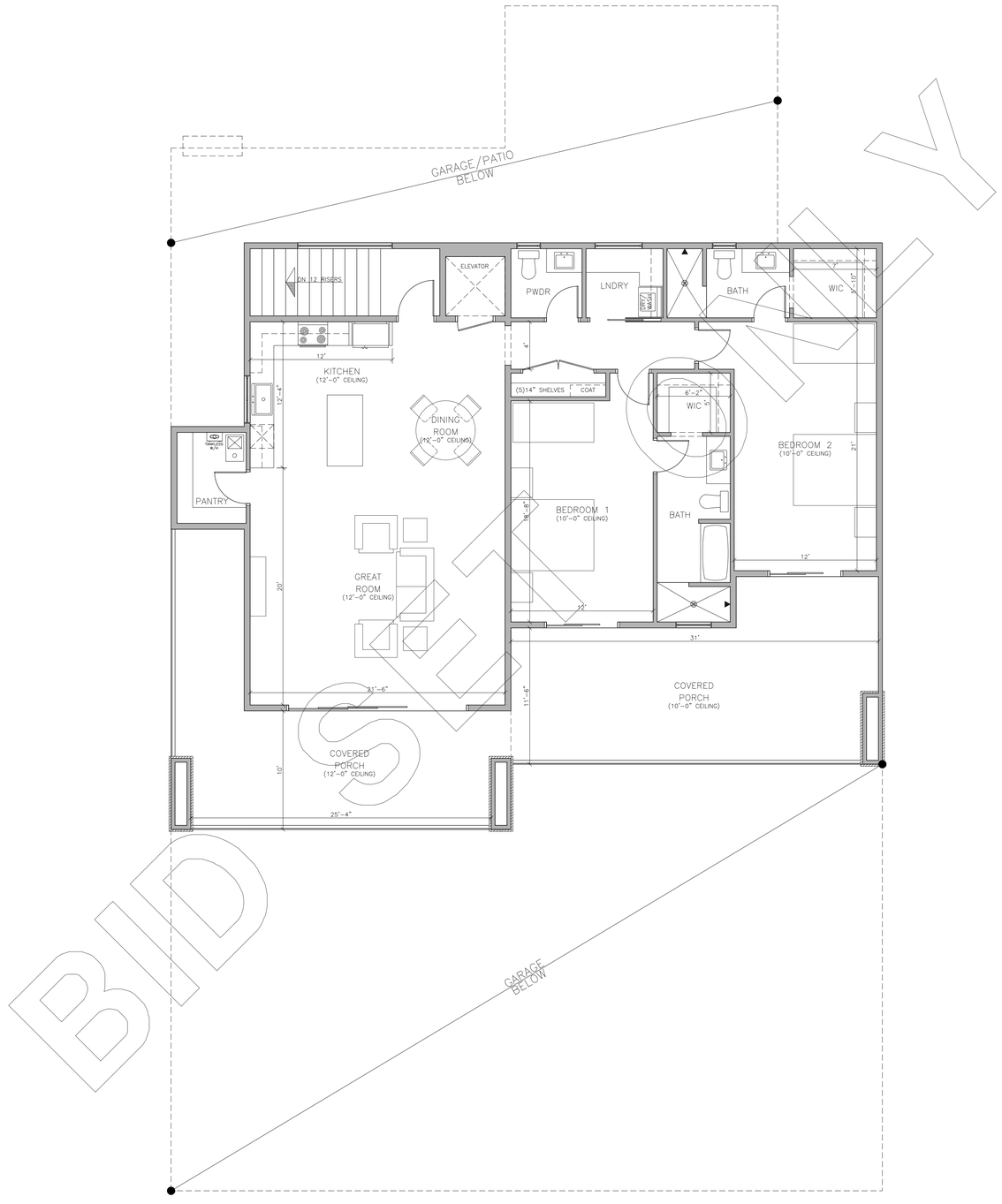
SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

evōkhome
LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024-150

A.2



1 A.3 SECOND FLOOR PLAN SCALE: 3/16"=1'-0"

GENERAL NOTES:

1	GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO DESIGNER PRIOR TO CONSTRUCTION.
2	THIS PLAN NOT COMPLETE WITHOUT ATTACHED ENGENEERING SPECS.
3	ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE AND LOCAL ORDINANCES.
4	ALL EXTERIOR WALLS ARE 2" X 6" STUDS @ 16" O.C. W/ R-19 INSULATION BETWEEN.
5	ALL PLUMBING WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 6".
6	ALL INTERIOR WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 4".
7	BRICK AND STONE ARE DIMENSIONED AT 3", ADJUST AS REQ'D FOR CULTURED STONE.
8	ALL STYLES AND TYPES OF INTERIOR FINISH (I.E. DOORS, HARDWARE, WINDOWS, PAINT, FLOOR COVERINGS, AND APPLIANCES ETC.) SHALL BE DETERMINED BY OWNER.
9	ALL EXTERIOR OPENINGS SHALL BE FLASHED SUCH THAT THEY ARE WEATHER PROOFED
10	SEE GENERAL FRAMING NOTES ON SHEET CS1

KEYED NOTES:

1	ALL TOILETS SHALL BE 1.6 GPM IAW IRC SEC. P2903
2	ALL TUBS & SHOWERS SHALL HAVE 2.5 GPM HEADS IAW IRC SEC. P2903
3	ALL HOSE BIBS, INCLUDING AUTO WASHER VALVE IN GARAGE, MUST BE BACKFLOW PROTECTED.
4	PROVIDE DRAIN PAN FOR WASHER
5	VENT DRYER TO OUTSIDE IAW IRC SEC. G2439 OR PER MANUF. SPEC.
6	SHEETROCK ALL WALLS WITH MINIMUM 1/2" GYPBOARD ON GARAGE SIDE AND SHEETROCK ALL CEILINGS & BEAMS WITH MIN. 5/8" GYPBOARD IAW IRC SEC. R302.6(SCREWED)
7	PROVIDE 36" HIGH RAILING W/ GUARD PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH. NO HORIZONTAL RAILS ARE ALLOWED (SEE IRC SEC. R312)
8	PROVIDE JETTED TUB MOTOR ACCESS
9	PROVIDE OUTSIDE COMBUSTABLE AIR TO ALL GAS APPLIANCES. VENT TERMINATION IN ACCORDANCE w/ IRC SEC. M1804.2
10	PROVIDE SEIZMIC STRAPS FOR WATER HEATERS WATER HEATERS: – PROVIDE SEIZMIC STRAPS – PROVIDE EXPANSION TANKS – PROVIDE 18" PLATFORM – PROVIDE CONCRETE FILLED BUMPER POST–IN GARAGE
11	"0" CLEARANCE GAS FIREPLACE INSTALL PER MANUF. SPEC. PROVIDE GAS SHUTOFF VALVE WITHIN 6' OF FIREPLACE IAW IRC SEC. G2420.5
12	PROVIDE 20 MIN FIRE RATED DOOR W/ SELF CLOSER/LATCH.
13	PROVIDE 22" X 30" ATTIC ACCESS AND LATCHED ATTIC ACCESS AS SHOWN (SEE IRC SEC. R807.1)
14	PROVIDE CONTINUOUS HANDRAIL IAW IRC SEC. R311.7.8 SEE APPLICABLE DETAIL ON SHEET D.2
15	PROVIDE SAFETY GLAZING IAW IRC SEC. R308
16	PROVIDE MIN 1/2" GYPBOARD ON WALLS AND CEILING BELOW STAIRS IAW IRC R302.7
17	BEARING WALL – SEE APPLICABLE DETAIL ON D.2
18	FURNACE LOCATION: A MINIMUM 30"x30" LEVEL WORKING SPACE IN FRONT OF THE FURNACE AND A MINIMUM OF 3 INCHES ALONG THE SIDES AND BACK. IRC M1305.1

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:
CITY: HURRICANE
SUBD.: LEGRAND HEIGHTS 09
LOT: *ONE TIME BUILD

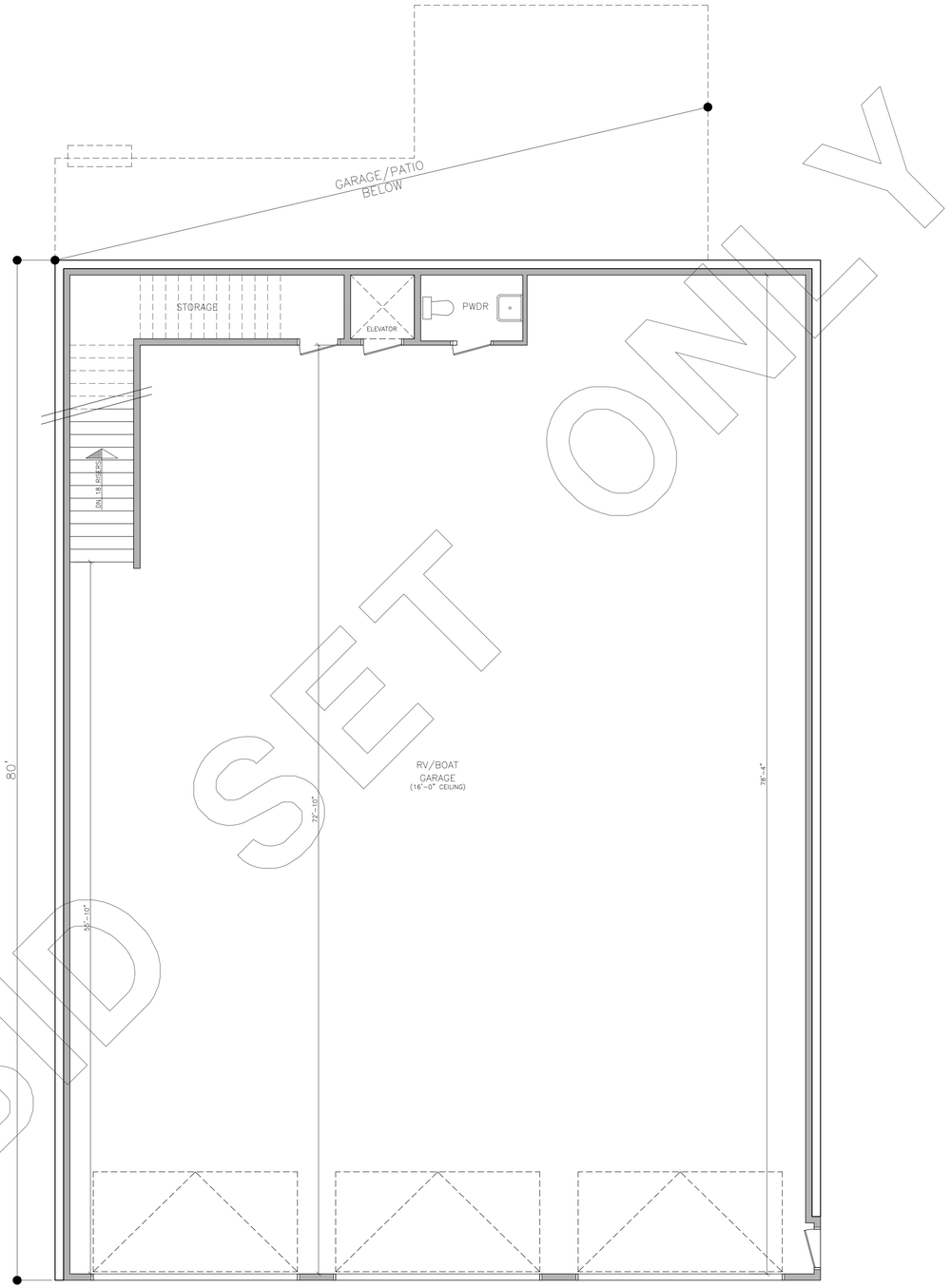
SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

evōkhome
LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024–150

A.3



1 A.4 BASEMENT FLOOR PLAN SCALE: 3/16"=1'-0"

GENERAL NOTES:

1	GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO DESIGNER PRIOR TO CONSTRUCTION.
2	THIS PLAN NOT COMPLETE WITHOUT ATTACHED ENGINEERING SPECS.
3	ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE, AND LOCAL ORDINANCES.
4	ALL EXTERIOR WALLS ARE 2" X 6" STUDS @ 16" O.C. W/ R-19 INSULATION BETWEEN.
5	ALL PLUMBING WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 6"
6	ALL INTERIOR WALLS ARE DIMENSIONED TO FINISHED WALLS AND ARE 4"
7	BRICK AND STONE ARE DIMENSIONED AT 3", ADJUST AS REQ'D FOR CULTURED STONE.
8	ALL EXTERIOR OPENINGS SHALL BE FLASHED SUCH THAT THEY ARE WEATHER PROOFED

KEYED NOTES:

1	PROVIDE 20 MIN FIRE RATED DOOR W/ SELF CLOSER/LATCH
2	PROVIDE MIN 1/2" GYPBOARD ON WALLS AND CEILING BELOW STAIRS IAW IRC SEC. R302.7
3	PROVIDE ELEC PANEL PROPERLY SIZED BY ELECTRICAL CONTRACTOR. CONNECT GROUND WIRE TO METAL PIPES OR CONCRETE ENCASED ELECTRODE IAW '99 N.E.C. 250-50 (C)
4	PROVIDE SEIZMIC STRAPS FOR WATER HEATERS
5	PROVIDE OUTSIDE COMBUSTABLE AIR TO ALL GAS APPLIANCES
6	PROVIDE SMOKE DETECTOR WIRED IN SERIES W/ BATTERY BACKUP
7	PROVIDE 36" HIGH RAILING W/ GUARD PATTERN SUCH THAT A 4" DIAMETER SPHERE CANNOT PASS THROUGH. NO HORIZONTAL RAILS ARE ALLOWED (SEE IRC SEC. R312)
8	BEARING WALL - SEE DETAIL 17 ON SHEET D.2.
9	"0" CLEARANCE GAS FIREPLACE INSTALL PER MANUF. SPEC. PROVIDE GAS SHUTOFF VALVE WITHIN 6' OF FIREPLACE IAW IRC SEC. G2420.5
10	PROVIDE JETTED TUB MOTOR ACCESS
11	ALL TOILETS SHALL BE 1.6 GPM IAW IRC SEC. P2903
12	ALL TUBS & SHOWERS SHALL BE 2.5 GPM IAW IRC SEC. P2903
13	ALL HOSE BIBS, INCLUDING AUTO WASHER VALVE IN GARAGE, MUST BE BACKFLOW PROTECTED.
14	PROVIDE CONTINOUS HANDRAIL IAW IRC SEC. R311.7.8 SEE APPLICABLE DETAIL ON SHEET D.2
15	PROVIDE DRAIN PAN FOR WASHER
16	VENT DRIER TO OUTSIDE IAW IRC SEC. G2439 OR PER MANUF. SPEC.
17	PROVIDE FLOOR DRAIN
18	PROVIDE 36" DEEP WINDOW WELL W/ LADDER AS REQ'D
19	PROVIDE SAFETY GLAZING IAW IRC. SEC. R308

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:
HURRICANE
CITY:
SUBD.: LEGRAND HEIGHTS 09
LOT: *ONE TIME BUILD

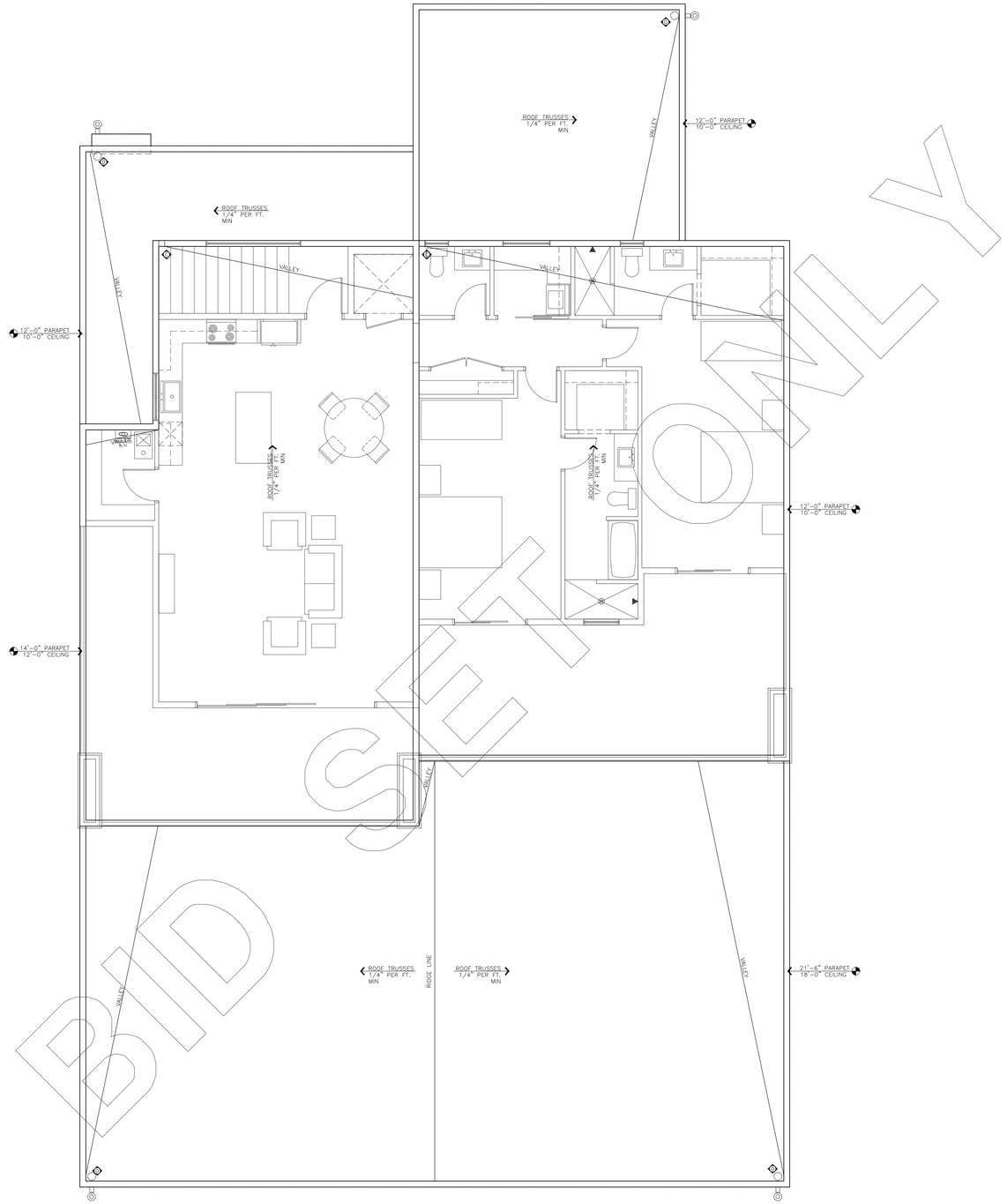
SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

evōkhome
LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024-150

A.4



BID SET
PRELIMINARY

1 S.4 ROOF LINE PLAN

SCALE: 1/4"=1'-0"

GENERAL NOTES:

1. GENERAL CONTRACTOR AND SUB CONTRACTORS SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE DESIGNER PRIOR TO CONSTRUCTION.
2. VERIFY ALL BEAM SIZES WITH ENGINEERING SPECIFICATIONS.
3. ALL BEAMS AND HEADERS OVER 48" SHALL BE SUPPORTED BY DOUBLE TRIMMERS
4. ALL FRAMING MATERIAL SHALL BE #2 D.F. U.N.O.
5. ALL BEAMS AND POSTS EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
6. TRUSS MANUFACTURER SHALL PROVIDE ENGINEERING SPECS. FOR ALL TRUSSES
7. SIZE AND SPACING OF "TJI" ROOF JOISTS SHALL BE DETERMINED BY MANUFACTURER.
8. 7/16" O.S.B. OR CDX PLYWOOD SHEATHING
   - –8D NAILS @ 6" O.C. AT EDGES OF ROOF
   - –10D NAILS @ 4" O.C. AT GABLE ENDS
   - –SPACE NAILS 12" O.C. ON INTERMEDIATE MEMBERS
   - –STAGGER SHEATHING JOINTS
   - –PLYWOOD PERP. TO RAFTERS & TRUSSES
9. SOLID BLOCK BETWEEN TRUSSES –SEE APPLICABLE DETAILS ON SHEET D.2.
10. ANCHOR ROOF TRUSSES OR RAFTERS WITH SIMPSON H1 CONNECTORS @ BOTH ENDS
11. ALL OVER FRAME AREAS TO HAVE FULL ROOF SHEATHING BELOW. (I.E. SEE APPLICABLE DETAIL ON SHEET D.2)
12. SEE WOOD TRUSS AND METAL GUSSET PLATE NOTES ON SHEET CS.1.
13. ROOF FRAME PLAN IS INCOMPLETE WITHOUT ATTACHED ENGINEERED ROOF TRUSS PLAN WITH TRUSS DETAILS AND ALL CONNECTING HARDWARE SPECIFIED.

KEYED NOTES:

1. 2" X 10" VALLEY PLATE (SEE APPL. DETAIL ON SHEET D.2)
2. 2" X 8" STICKFRAME OVERBUILD @ 16" O.C. W/ PONY WALLS @ 8" O.C.
3. ROOF SCUPPER
4. ROOF DRAIN / OVER–FLOW / CATCH BASIN

SHEET INDEX

CS.1	COVER SHEET
SD.1	SITE PLAN
A.1	ELEVATIONS
A.1A	ELEVATIONS
A.2	MAIN FLOOR PLAN
A.3	SCND FLOOR PLAN
A.4	BSMNT FLOOR PLAN
E.1	MAIN ELECTRICAL
E.2	SCND ELECTRICAL
E.3	BSMNT ELECTRICAL
S.1	FTG & FND
S.1A	N/A
S.2	N/A
S.3	N/A
S.4	ROOF LINES
D.1	CROSS SECTION
D.2	DETAILS

REVISED:

–	–
–	–

THESE PLANS AND DOCUMENTS ARE THE PROPERTY OF EVŌKHOME, AND ANY REUSE OR FURTHER DISTRIBUTION THEREOF IN PART OR IN WHOLE WITHOUT WRITTEN PERMISSION OF EVŌKHOME IS PROHIBITED

© COPYRIGHT 2024 EVŌKHOME

DESIGNER IS NOT AN ARCHITECT OR ENGINEER. PLANS ARE INCOMPLETE WITHOUT ATTACHED ENGINEERING SPECS. VERIFY ALL DIMENSIONS, CONDITIONS, AND MEASUREMENTS ON SITE PRIOR TO CONSTRUCTION

NOVEMBER 01, 2024

LORING RESIDENCE

SITE INFORMATION:
CITY: HURRICANE
SUBD.: LEGRAND HEIGHTS
LOT: *ONE TIME BUILD 09

SQUARE FOOTAGE:

MAIN:	308
SECOND:	1907
MAIN GARAGE:	471
RV GARAGE:	4800
COVERED:	8506

evōkhome
LIVE BETTER
ph: 1.435.313.1577
fax: 1.866.522.7016
dan@evokhome.com
www.evokhome.com

FILE NAME:
2024–150

S.4

Hurricane City Application

Application Accepted Date: 11/04/2024

Type of Improvement: Conditional Use Permit

Description: Detached Garage.

Tenant / Project Name: Garage

Bldg. Address: 498 s 1310 w

City: Hurricane City State: UT Zip: 84737

Subdivision: Westfield Estates Phase:

Block: Lot #: 6 Parcel ID #: H-WES-6

Zone: R1

Property Owner: Jay and Tracy Mansanarez

Permit Contact: Jay Mansanarez P:(801) 375-9110

Email: jmansanarez@msn.com

CONTACT INFORMATION

Engineer of Record: Great Western Buildings

Email: contact@gwbuildings.com P: (800) 497-2135

General Contractor: Jay Mansanarez

License #: P: (801) 375-9110

Address: 498 S 1310 W

City: Hurricane State: Utah Zip: 84737

Email: jmansanarez@msn.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	250.00
Planning Fee	$	250.00
Sub Total:	**$**	**250.00**
Permit Total:	**$**	**250.00**
Amount Paid:	**$**	**250.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANCUP24-27

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Jay Mansanarez

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

Jay Mansanarez 801-375-9110
Tracy Mansanarez 801-319-6453
498 s. 1310 w.
Hurricane, Utah

Oct 9, 2024

Statement from Jay and Tracy Mansanarez regarding their application for a conditional use permit at the above address. The application is for a metal building and references part h. of the city's code for "Standards for metal buildings".

The proposed building has a maximum height of 15 feet. 1 foot lower than the allowed 16 feet.

The building exterior is 26 gauge steel in a ribbed design factory painted with Sherwin Williams coatings. The warranties on the exterior panels are 40 years for the roof and 40 years for the walls. The structure itself has a lifetime structural warranty. In comparison the 10 homes on our street and cul de sac, (all of which are 3 years old) had a 1 year builders warranty. The roof shingles have a 10 year warranty from the manufacturer.

The colors chosen for the building are earth tones in nature and thus will not produce excessive reflections. The gable end of the building faces north and to the street (1310 west).

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	CUP24-27
Type of Application:	Conditional Use Permit
Action Type:	Administrative
Applicant:	Jay and Tracy Mansanarez
Agent:	n/a
Request:	Approval of a conditional use permit for a metal building.
Location:	498 S 1310 W
Zoning:	R1-15
General Plan Map:	N/A
Recommendation:	Approve subject to staff comments.
Report Prepared by:	Fred Resch III

Discussion: The applicant proposes constructing a metal building on their property. A property owner needs approval of a conditional use permit to be able to build a metal building. The property is zoned Single Family Residential R1-15.

The standards to obtain a conditional use permit are as follows:

10-7-9(E): CONDITIONAL USE PERMIT. Approval Standards: The following standards shall apply to the issuance of a conditional use permit:
1. A conditional use permit may be issued only when the proposed use is shown as conditional in the zone where the conditional use will be located, or by another provision of this title.
2. Standards for each use must be reviewed. Specific standards are set forth for each use in subsections E2a through E2l of this section (section h applies):

h. Standards for metal buildings:
(1) In residential (R-1) zones the height and size may not be greater than permitted in the zone.
(2) The building must meet the following design standards:
(A) Exterior building materials shall be durable, require low maintenance, and be of the same or higher quality as surrounding developments.
(B) Details of proposed colors and materials, including color chips, samples, and colored building elevations, shall be shown on building plans when a development project application is submitted. Colors shall be compatible with surrounding structures.

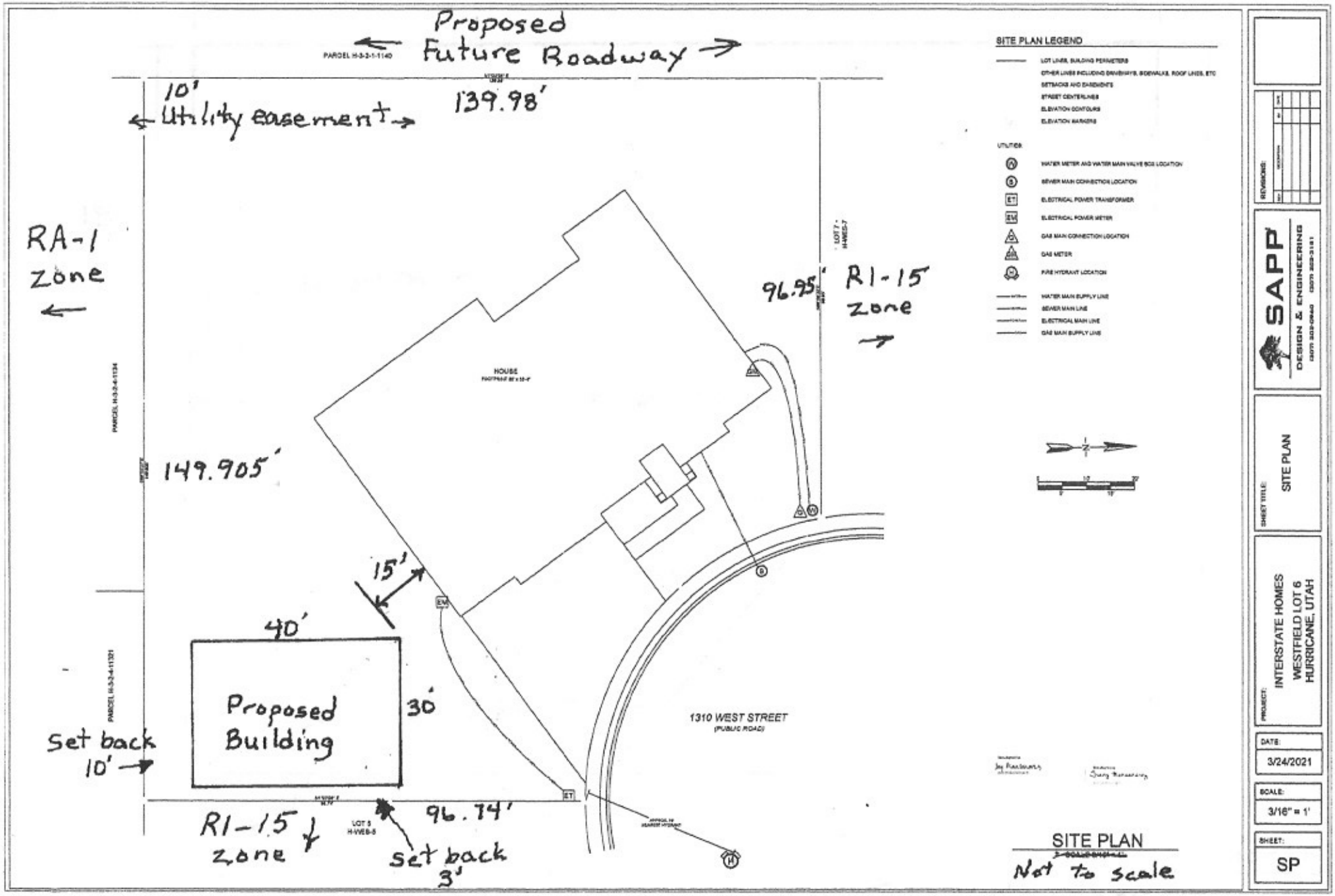
(C) Reflective surfaces or colors which may produce excessive reflections or glare that may create a potential safety problem are prohibited.

(D) In a commercial zone the faces of the building visible from nearby streets must include architectural relief items of non-metal materials including wood, stone, or stucco. (Ord. 2017-14, 8-17-2017; amd. Ord. 2018-04, 4-5-2018)

Findings:

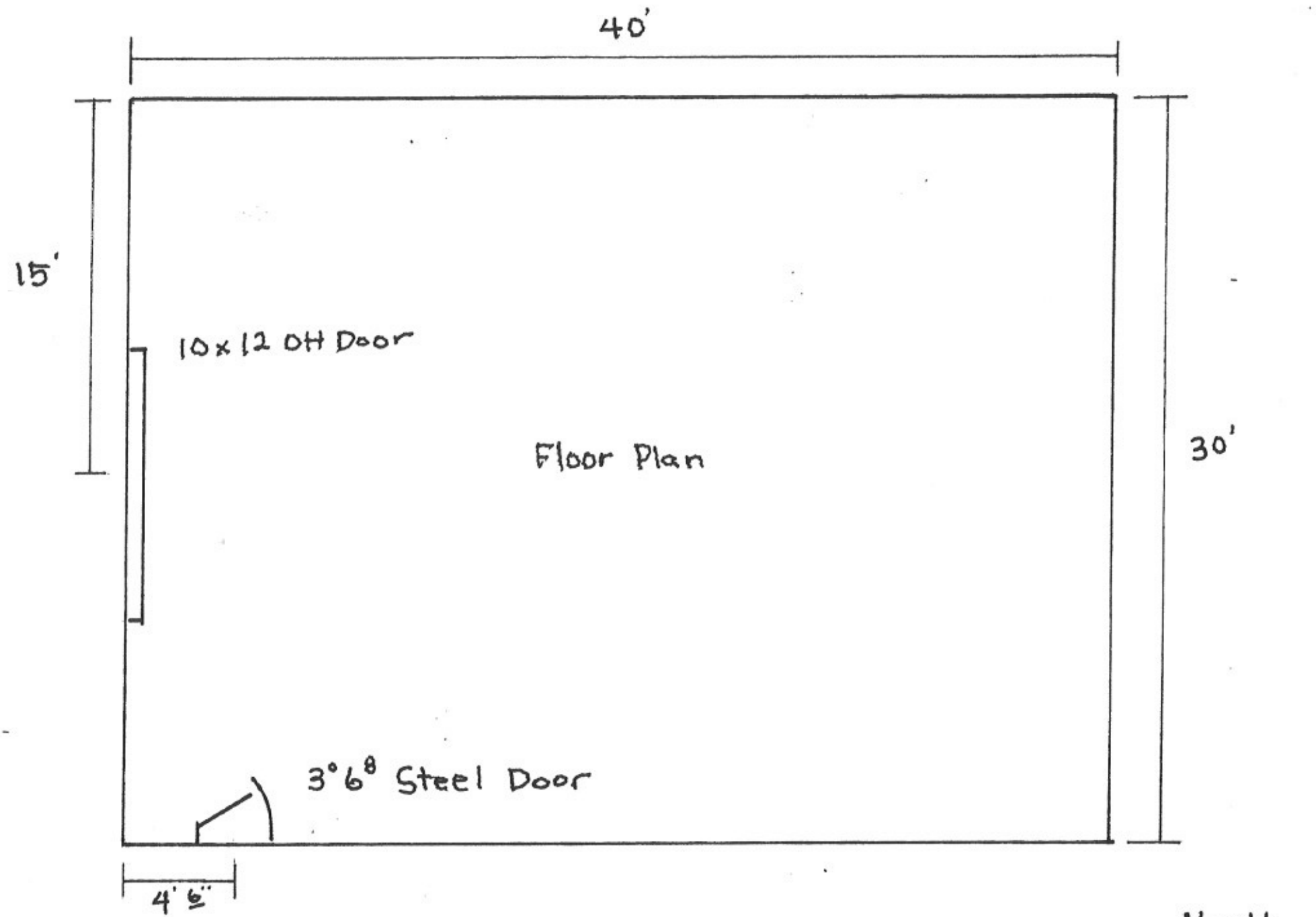
1. The proposed building is 15' and the maximum height is 16'
2. The proposed building is 1,200 sq ft , which complies with the 1,200 sq. ft. maximum size requirement.
3. The colors presented are compatible with surrounding structures and should be nonreflective.
4. Setbacks from the property lines are met.

Recommendation: Based on the above findings, staff recommends the conditional use permit for the proposed metal buildings be approved, subject to staff comments.



SITE PLAN

Not to scale



Jay + Tracy Mansanarez
498 s 1310 w Hurricane Utah
801-375-9110

10-8-24

Hurricane City Application

Application Accepted Date:	11/04/2024
Type of Improvement:	Site Plan (Final)
Description:	100% indoor Family Entertainment and Recreational
Tenant / Project Name:	Rush Funplex
Bldg. Address:	North of the intersection of Coral Junction Rd and Coral Canyon Rd.
City:	Hurricane City State: UT Zip: 84737
Subdivision:	Coral Junction Subdivision Phase 1 Phase: 1
Block:	Lot: 1 Lot #: 1 Parcel ID #: H-4-2-5-126-CJ1
Zone:	CG PDO
Property Owner:	MP16, LLC, a Utah Limited Liability company
Permit Contact:	Dan Milich P:(760) 644-5119
Email:	dwmilich@gmail.com

CONTACT INFORMATION

General Contractor:	Dan Milich
License #:	P: (760) 644-5119
City:	State: Zip:
Email:	dwmilich@gmail.com

APPLICATION DETAILS

Valuation	$ 0.00

PERMIT FEES

Planning Fee	$ 250.00
Sub Total:	**$ 250.00**
Permit Total:	**$ 250.00**
Amount Paid:	**$ 250.00**
Remaining Due:	**$ 0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANFSP24-74

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Dan Milich

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

September 27, 2024

Hurricane City UT

RUSH FUNPLEX – Hurricane City UT – Letter of Support / Project Narrative

Parcels: H-4-2-5-126-CJ1

Lot 1 of proposed Coral Junction Subdivision – Phase 1 (3.99 acres)

Lot 2 of proposed Coral Junction Subdivision – Phase 1 (.46 acres, used for shared parking)

The intent of this application is to gain entitlement approvals for: a new Rush Funplex building to house an indoor, family entertainment and recreational use.

The approximately 3.99-acre development site is located north of the intersection of Coral Canyon Blvd. and Coral Junction Road, which is just south of I-15 and just east of UT-9.

Upon obtaining required entitlement and permit approvals, our goal is to immediately file for building permits to allow the development of this site with a new Rush Funplex building and use.

Rush Funplex is a Family Entertainment and Recreational use. All entertainment and recreational uses are conducted 100% indoors, and therefore available for year-round use.

The City's municipal code defines the Rush Funplex use as a Recreation and Entertainment use. This use is consistent with and permitted within the GC PDO zoning designation and consistent with Planned Community designation of this site.

To develop this site as proposed, we respectfully request Hurricane City's approval of our Preliminary Site Plan application.

We appreciate your support of this request.

Rush Funplex – Hurricane City - Description and Justification

Introduction

The Rush Funplex is a proposed Family Entertainment Center to be located in a new building constructed on a new parcel located within proposed Lot 1 of the Coral Springs Phase I subdivision. Proposed Lot 2 of the Coral Springs Phase I subdivision is intended to provide shared parking and will be developed as a part of the Rush Funplex development.

The Rush Funplex building is proposed as a single level structure, with a total gross building square footage of approximately 70,946 square feet.

The building is proposed of tilt-up concrete construction and will be articulated in a manner consistent with the City's requirements, and any specific standards needed to be met by virtue of this building location within this area of Hurricane City.

Exterior materials include concrete walls with Formliner end caps with decorative cornice features at each corner, aluminum storefront entry on the north elevation and additional storefront features along this primary building entry, and metal wall cap.

Building colors are all earth tones, including grays and charcoal, with black and white horizontal accent striping along the building sides, and accent striping at the top and bottom of walls.

Proposed activities within the building include: bowling; billiards; go-carts; arcades; bumper cars; climbing walls; foam pit and other similar indoor recreational uses; as well as party rooms, restaurant / food service areas, and building support service areas.

Rush Funplex: Proposed use; operating characteristics; number of employees; hours of operation, etc.

Rush Funplex is a family entertainment use, conducted 100% indoors. Proposed Hours of Operation are: 10am – 8pm Sunday through Thursday; and 10am – 11pm Friday and Saturday. This business will employee approximately 25 full and part time employees.

Site Development – The development proposed includes significant landscaped setback areas and extensive landscaping along the Coral Junction Road site frontage. Coral Junction Road also provides primary site access to the Rush Funplex use. This road cul-de-sacs at the NW corner our site. Ingress and egress to Coral Junction Road are provided by the adjoining roadways of: Canyon Cliffs Blvd.; Foothills Canyon Drive; and Coral Canyon Blvd.

The approximately 4.45-acre development site (Lot 1 and Lot 2 – shared parking lot) is to include the following:

70,946 sf of building coverage (36.6% of site)

100,889 sf of parking and other hard surface area (52.1% of site)

21,889 sf of landscape area (11.3% of site)

188 total parking spaces (6 of this total are required ADA spaces)

Findings for Approval: Site Plan

1. Site development. The entire site shall be developed at one time unless a phased development plan is approved.

We propose to develop the entire Rush Funplex site at one time upon receiving necessary city approvals of our construction plans.

2. Compliance with standards. A site plan shall conform to applicable standards set forth in Title 10 and other applicable provisions of the Hurricane City Code of Ordinances (City Code). Conditions may be imposed as necessary to achieve compliance with applicable Code requirements.

This application proposes a Rush Funplex use. This is defined as a commercial use per the City's Code requirements. This use is designed to be compatible with and meet or exceed all applicable revisions of the City Code.

Consideration shall also be given to include any relevant conditions necessary to achieve compliance with applicable City Code requirements.

This site and surrounding area were recently subdivided, and the subdivided lots were developed with street systems, utilities and rough graded pad areas.

We believe the proposed use of the site as a Rush Funplex will be a compatible use to those existing in proximity to the site currently, and to those future and proposed potential uses on the surrounding commercially zoned properties.

We believe all applicable provisions of the City's Code met by this proposed development. This use is a commercial use that is permitted in the GC (General Commercial) zone with the review and approval of a site plan review.

We believe there is a lack of family type entertainment facilities within this part of the city. As such, this use will fulfill an unmet or underserved need.

We believe the proposed use of this site will be compatible with adjacent uses in terms of scale, site design, operating characteristics, hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts.

This development site is in a new and area of Hurricane City. This area is generally under improvement with new construction activity. This development will take advantage of these newly developed public infrastructure improvements and in turn be able to be developed more quickly and all on site – as all needed infrastructure and roadway systems have been put in place.

This new development will create local jobs and strengthen the tax base of the city.

Parking, pedestrian access, and environmentally sensitive site design characters will be implemented as required and consistent with city standards and policies. This will be completed to derive a safe, efficient and harmonious development that is compatible with the location and surrounding, as well as the existing and planned development pattern in and around this development site.

This development is proposed in a manner that adheres to or complies with all development and use related criteria for the city. It will provide a family entertainment facility all 100% indoors for the year-round enjoyment of residents and visitors alike.

This development is consistent with the city development standards and requirements. Landscaping will be provided as required by the city standards and requirements, and in a manner that enhances the buildings character and features.

Conclusion:

As evidenced by the information provided herein, the Rush Funplex building and use is proposed in a manner that is compliant with applicable codes, development standards and comprehensive plan of Hurricane City.

We respectfully request your approval of the Site Plan.

Thank you.

Dan Milich

VP of Development

Rush Funplex

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	FSP24-74
Type of Application:	Final Site Plan
Action Type:	Administrative
Applicant:	Rush Funplex
Agent:	Dan Milich
Request:	Approval of a Final Site Plan.
Location:	The corner of Coral Canyon Blvd and Coral Junction Road.
Zoning:	GC PDO
General Plan Map:	Planned Community
Recommendation:	Approve subject to staff and JUC comments.
Report Prepared by:	Fred Resch III

Discussion:
The applicant has filed a final site plan for Rush Funplex, an indoor recreation and entertainment center located within the Coral Junction PID, near the SR-9 and I-15 interchange. This site received preliminary site plan approval in November 2023. This site is zoned General Commercial with a Planned Development Overlay (PDO) and is part of the Coral Canyon PDO.

JUC Comments

The construction drawings were signed off in November 2024.

Location is approximate

Staff Comments: Final Site Plan

1. The proposed uses are permitted in the General Commercial zone within the Coral Canyon PDO.
2. A final plat to split this property off from the parent parcel has been submitted and approved but has yet to be recorded.
3. Parking Requirement: Per HCC 10-34-10

Recreation and entertainment, indoor:	*1 space per 300 square feet of gross floor area*	

a. They are showing 181 parking stalls on their plans with some of their stalls shared with the adjacent lot. As laid out the development requires 236 parking stalls. The applicant has provided documentation using data from their existing fun centers to justify the parking amounts. Per HCC 10-34-9 can approve the parking modification and staff would recommend approval of a parking modification.

4. Landscape: A landscaping plan has been provided that meets HCC 10-32 with sufficient landscaping in the parking area and along the street frontages.
5. Elevations: The proposed building elevations are under the height restriction of 55' in this zoning. The applicant has provided building renderings of how the building could look.
6. Lighting: The applicant has provided a note stating that, when decided, all outdoor lighting will meet HCC 10-33-7.

Recommendation: The Planning Commission should review this application based on standards in the Hurricane City Code. Staff recommends approval of the final site plan and parking modification subject to staff and JUC Comments.

February 1, 2024

RUSH FUNPLEX – HURRICANE UT

Application Number: PSP23-31
Type of Application: Preliminary Site Plan Application
Action Type: Administrative
Applicant: Rush Funplex
Agent: Matt Gertge
Request: Approval of a Preliminary Site Plan
Location: The corner of Coral Canyon Blvd and Coral Junction Road
Zoning: GC PDO
General Plan Map: Planned Community

Response to the Staff Comments related to Parking per Agenda dated 11/9/2023:

Staff Parking related comments:

JUC Comments
The following items will need to be addressed:

1. Public Works: Parking needs to be sufficient.

Staff Comments: Preliminary Site Plan
3. Parking Requirement: Per HCC 10-34-10

Recreation and entertainment, indoor:
1 space per 300 square feet of gross floor area

a. They are showing 188 parking stalls on their plans with 134 on site and 54 shared. As laid out the development requires 250 parking stalls. The Planning Commission can approve a shared parking plan under HCC 10-34-9, however more detail on the use of the property to the east is required. Our ordinances with regards to the proposed family fun center use are fairly vague and Planning staff has no major concerns with a parking plan modification. Parking does not need to be approved until the final site plan, so staff has no concerns about moving forward with the application at this time.

Please find below our response to the noted Parking Related comments:

Response – we've prepared a parking study for our Rush FunPlex development in Pleasant View UT. The study is attached and shows the maximum number of parking spaces occupied at 115 spaces, this occurring on Sunday afternoon and Sunday evening. However, please note – the typical parking demand at the Pleasant View UT Rush FunPlex is well under 100 spaces as this study indicates.

The Pleasant View UT Rush FunPlex totals 74,000 SF and has the same make-up percentage of uses within the building as the subject building in Hurricane. The Hurricane Rush FunPlex has a total square footage proposed at 70,946 SF, which is 3,054 SF smaller than the Pleasant View UT Rush FunPlex building.

The Hurricane Rush FunPlex proposes a total of 188 vehicle parking spaces; with 134 of these spaces provided on-site, and 54 spaces provided immediately adjacent to and east of the site. While we do not believe parking would be an issue even if we simply provided the 134 on-site spaces as evidenced by data provided regarding our Pleasant View UT operation (i.e., maximum number of parking spaces utilized is at 115), we have proposed to add in the additional 54 adjacent parking spaces to more closely meet the city parking calculation requirements.

This concludes the response to Staff's Parking related comments. If additional information is needed in this regard, please let me know. We appreciate your consideration.

Thank you.

Dan Milich

VP of Development – Rush FunPlex

	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM
Monday	9	11	11	14	17	19	23	23	25	28	22	19		
Tuesday	8	10	13	13	14	17	24	25	26	26	23	20		
Wednesday	8	8	10	13	13	18	23	25	25	26	21	18		
Thursday	9	9	10	12	14	14	18	21	24	27	24	20		
Friday	10	15	45	75	85	90	80	85	93	105	80	80	60	45
Saturday	15	30	42	56	75	110	95	85	85	90	105	90	85	75
Sunday			25	45	65	105	115	90	80	85	110	115	100	85

Daniel Milich Rush Funplex		Mobile / Office 760 644 5119

MEMORANDUM

FROM: Dan Milich

TO: Fred Resch - Hurricane City UT

DATE: September 30, 2024

SUBJECT: Rush Funplex Final Site Plan application –

Lighting Plan Requirement

At this time, we have not yet finalized our site lighting plan.

We are providing this document to attest that we will follow all Hurricane City outdoor lighting ordinances (HCC 10-33-7).

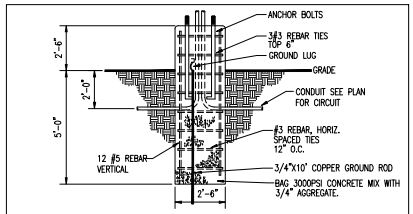
Please contact me with any questions or to discuss this memo.

Thank you –

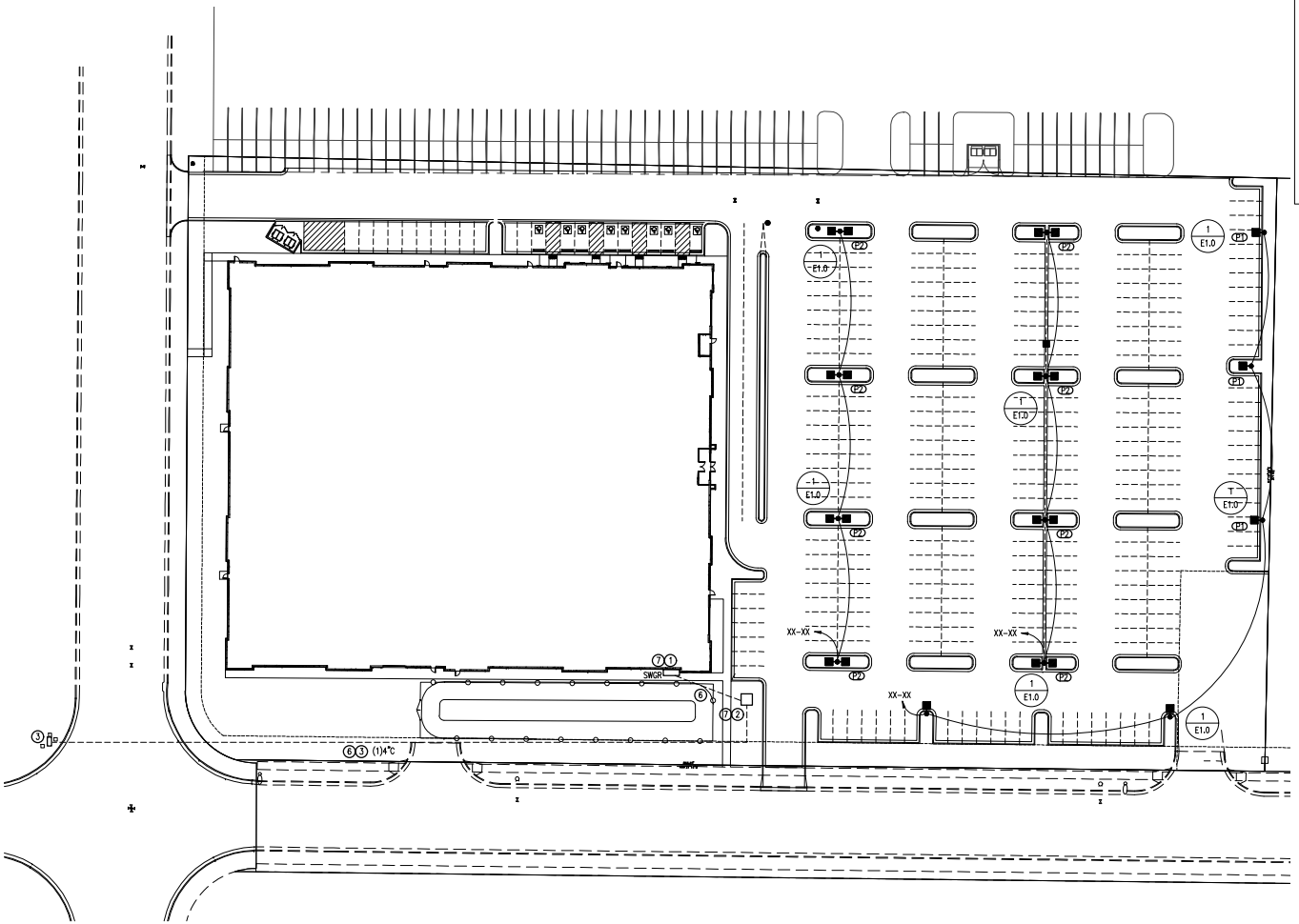
1875 Jardine Court Vista CA 92081 dwmilich@gmail.com

REFERENCE NOTES

1. PROPOSED LOCATION OF MAIN SWITCHGEAR.
2. PROPOSED LOCATION OF PAD MOUNTED TRANSFORMER. VERIFY WITH POWER COMPANY.
3. VERIFY PRIMARY ELECTRICAL SERVICE WITH POWER COMPANY.
4. TELEPHONE BOARD. LOCATED ON MEZZANINE.
5. VERIFY COMMUNICATION SERVICE LOCATION WITH SERVICE PROVIDER.
6. COMPLY WITH NEC 300.5 FOR BURIALS DEPTH OF UNDERGROUND RACEWAY.
7. PROTECT ALL ELECTRICAL EQUIPMENT SUBJECT TO DAMAGE WITH BOLLARDS.
8. CIRCUIT THROUGH ASTRONOMICAL TIME CLOCK.



TYPICAL POLE BASE DETAIL (30'-0" POLE MAXIMUM) NTS — 1 E1.0



NORTH

ELECTRICAL SITE PLAN

SCALE: 1"=20'-0"

FELLEX ENGINEERING
Eden – St George, Utah
Phone – 801-913-3111
sussi@fellex.com

No.	revision	date	by
0			
8			
7			
6			
5			
4			
3			
2			
1			

project name: RUSH FUNPLEX
200 WEST 2850 NORTH
LOGAN, UTAH

sheet title: ELECTRICAL SITE PLAN

file: RUSH FUNPLEX

project no. AE-2419

sheet: E1.0

date: 09-22-24

ae urbia
ARCHITECTS & ENGINEERS

ae urbia
ARCHITECTS & ENGINEERS

The Rush Funplex

THE
RUSH
FUNPLEX

ae urbia
ARCHITECTS & ENGINEERS

The Rush Funplex

Reeve & Associates, Inc. - Solutions You Can Build On

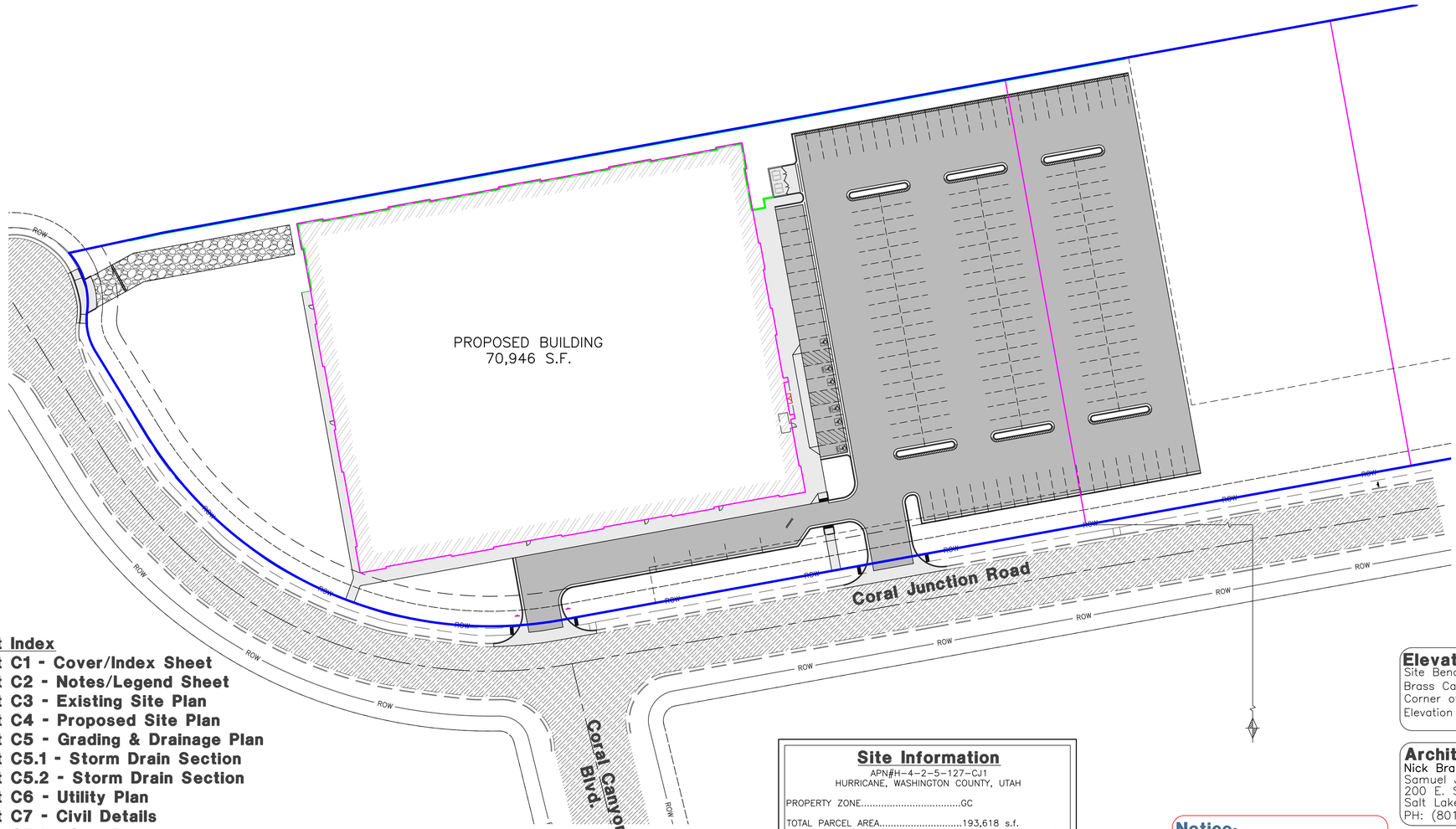
Project Narrative/Notes/Revisions

1. 12/22/2023 RH – COMPLETED DESIGN FOR CLIENT & CITY REVIEW.
2. 02/01/2024 RH – REVISED PLANS PER CITY COMMENTS.
3. 07/09/2024 RH – REVISED PLANS PER CLIENT CHANGE.
4. 08/22/2024 NF – REVISED GRADING & DRAINAGE.
5. 09/20/2024 NF – REVISED PLANS PER CITY COMMENTS.

RUSH FUNPLEX
HURRICANE
Site Construction Plans

HURRICANE CITY, WASHINGTON COUNTY, UTAH
DECEMBER 2023

Vicinity Map
NOT TO SCALE



HURRICANE VALLEY FIRE SSD, JOE DECKER DATE

ASH CREEK SEWER DISTRICT, AMBER GILLETTE DATE

QUESTAR GAS COMPANY/DOMINION ENERGY, DATE

TDS TELECOM, DATE

QWEST COMMUNICATIONS, DATE

PLANNING, DATE

POWER DEPT., CITY OF HURRICANE, BRIAN ANDERSON DATE

PARKS DEPT., CITY OF HURRICANE, DARREN BARNEY DATE

WATER DEPT., CITY OF HURRICANE, KEN RICHINS DATE

STREETS DEPT., CITY OF HURRICANE, ANGIE TRIPP DATE

CITY ENGINEER, CITY OF HURRICANE, ARTHUR LEBARON DATE

PUBLIC WORKS DIRECTOR, CITY OF HURRICANE, MIKE VERCIMACK DATE

HURRICANE CITY GIS, DATE

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT, DATE

INFOWEST, DATE

Sheet Index

Sheet C1 - Cover/Index Sheet
Sheet C2 - Notes/Legend Sheet
Sheet C3 - Existing Site Plan
Sheet C4 - Proposed Site Plan
Sheet C5 - Grading & Drainage Plan
Sheet C5.1 - Storm Drain Section
Sheet C5.2 - Storm Drain Section
Sheet C6 - Utility Plan
Sheet C7 - Civil Details
Sheet C7.1 - Civil Details
Sheet C7.2 - Drainage Details
Sheet C7.3 - Drainage Details
Sheet C7.4 - City Details
Sheet C7.5 - City Details
Sheet C8 - Storm Water Pollution Prevention Plan Exhibit
Sheet C9 - Storm Water Pollution Prevention Plan Details
Sheet C10 - Landscape Plan

Site Information

APN#H-4-2-5-127-CJ1
HURRICANE, WASHINGTON COUNTY, UTAH

PROPERTY ZONE.....GC

TOTAL PARCEL AREA	193,618 s.f.	
BUILDING AREA	70,946 s.f.	36.6%
HARD SURFACED AREA	77,390 s.f.	40.0%
LANDSCAPE AREA	45,282 s.f.	23.4%

AUTO PARKING PROVIDED.....175 STALLS
ADA PARKING PROVIDED.....6 STALLS

40 0 40 80 120
Scale: 1" = 40'

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

Engineer's Notice To Contractors:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS. THE LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO CONTACT THE UTILITY COMPANIES AND TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN, AND ANY OTHER LINES OBTAINED BY THE CONTRACTOR'S RESEARCH, AND OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

Architect:
Nick Brady
Samuel J. Brady Architects
200 E. South Temple, Ste. 160
Salt Lake City, Utah, 84111
PH: (801) 652-5951

Geotechnical Report:
Dated: January 30, 2019
Landmark Testing & Engineering
795 East Factory Drive
St. George, Utah 84790

Surveyor:
Jason Felt
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100

Landscape Architect:
Nathan Peterson
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH: (801) 621-3100

Developer Contact:
Matt Gertge
mattgertge1@yahoo.com
PH: (801) 430-0405

Project Contact:
Jeremy Draper
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc.
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Revised: 2024-07-09

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Cover/Index Sheet

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C1
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

General Notes:

1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: GOVERNING UTILITY MUNICIPALITY, GOVERNING CITY OR COUNTY (IF UN-INCORPORATED), INDIVIDUAL PRODUCT MANUFACTURERS, AMERICAN PUBLIC WORKS ASSOCIATION (APWA), AND THE DESIGN ENGINEER. THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
2. CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, RETAINING WALLS AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH THE PROJECT GEOTECHNICAL ENGINEER.
3. TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT GOVERNING AGENCIES TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
10. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD, INCLUDING OBTAINING REQUIRED INSPECTIONS.
11. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.
12. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFOREHAND.
13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.
14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
16. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.
17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY HIMSELF BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS HE MAY PREFER OF THE LOCATIONS OF THE PROPOSED WORK AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF HIS EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO HIM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, HE SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING HIS BID. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, HE HAS RELIED AND IS RELYING ON HIS OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON HIS OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT HE HAS NOT RELIED SOLELY UPON OWNER- OR ENGINEER-FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING HIS BID.
18. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.
20. CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
21. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
23. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
24. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
25. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE HIGHEST QUALITY ARE TO BE USED.
27. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR. PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.
29. CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4 FEET OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH LOCAL, STATE AND NATIONAL SAFETY CODES, ORDINANCES. OR REQUIREMENTS FOR EXCAVATION AND TRENCHES.
30. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

Utility Notes:

1. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.
2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON-SITE SURVEYS (BY OTHERS). PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE IN THE FIELD, THEIR MAIN AND SERVICE LINES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
3. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES TO WHICH NEW UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE REQUIRED PROCEDURES.
4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT HIS EXPENSE.
5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.
7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.
8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX
9. SILT AND DEBRIS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DE-WATERED CONDITIONS.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.
13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.
16. UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).
17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" BELOW FINISHED GRADE.
18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, THE SEWER LINE AND WATER LINE SHALL BE LAID IN SEPARATE TRENCHES AND THE BOTTOM OF THE WATER LINE SHALL BE AT LEAST 18" ABOVE THE TOP OF THE SEWER LINE.
19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
20. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.
22. THRUST BLOCKS & RESTRAINED JOINTS WITH MEGA-LUG ADAPTERS REQUIRED ON ALL BENDS AND FITTINGS USING BLUE BOLTS. PROTECT ALL BOLTS FROM BEING ENCASED IN CONCRETE. INSTALL PER MANUFACTURER RECOMMENDATIONS.

Notice to Contractor:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON RECORDS OF THE VARIOUS UTILITY COMPANIES AND/OR MUNICIPALITIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

NOTE:
1. SAWCUT EXISTING ASPHALT INSIDE FROM OUTER EDGE FOR TACK SEAL OF NEW ASPHALT
2. CONTRACTOR TO VERIFY 2% MIN. AND 5% MAX SLOPE FROM EDGE OF ASPHALT TO LIP OF GUTTER

Survey Control Note:

THE CONTRACTOR OR SURVEYOR SHALL BE RESPONSIBLE FOR FOLLOWING THE NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS (NSPS) MODEL STANDARDS FOR ANY SURVEYING OR CONSTRUCTION LAYOUT TO BE COMPLETED USING REEVE & ASSOCIATES, INC. SURVEY DATA OR CONSTRUCTION IMPROVEMENT PLANS. PRIOR TO PROCEEDING WITH CONSTRUCTION STAKING, THE SURVEYOR SHALL BE RESPONSIBLE FOR VERIFYING HORIZONTAL CONTROL FROM THE SURVEY MONUMENTS AND FOR VERIFYING ANY ADDITIONAL CONTROL POINTS SHOWN ON AN ALTA SURVEY, IMPROVEMENT PLAN, OR ANY ELECTRONIC DATA PROVIDED. THE SURVEYOR SHALL ALSO USE THE BENCHMARKS AS SHOWN ON THE PLAN, AND VERIFY THEM AGAINST NO LESS THAN FIVE (5) EXISTING HARD IMPROVEMENT ELEVATIONS INCLUDED ON THESE PLANS OR ON ELECTRONIC DATA PROVIDED. IF ANY DISCREPANCIES ARE ENCOUNTERED, THE SURVEYOR SHALL IMMEDIATELY NOTIFY REEVE & ASSOCIATES, INC. AND RESOLVE THE DISCREPANCIES BEFORE PROCEEDING WITH ANY CONSTRUCTION STAKING.

Erosion Control General Notes:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO GOVERNING AGENCIES ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTIES. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT OPEN FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS. THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE GOVERNING AGENCIES.

Maintenance:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL PROJECT CLOSE-OUT.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

EXPOSED SLOPES:

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:
- A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED
- B) TRACKING STRAW PERPENDICULAR TO SLOPES
- C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

Ash Creek General Notes:

1. Sewer is to meet the current Ash Creek Special Service District (District) Construction Standard.
2. Prior to completion of the project provide a copy of the geotechnical report and the compaction test results to the District.
3. Prior to completion of the project provide a PDF and a 2'x3' plan sheet Drawing of Record to the District. The Drawing of Record should include a distance from the near side property line to the sewer lateral marker, also include any changes to sewer main line slopes and depths.
4. The contractor will be responsible to clean and test the sewer lines after all utilities ave been installed but prior to asphalt placement. The following tests will need to be completed by the contractor; mandrel test, air test, and closed-circuit camera inspection. Camera inspection if provided by the District can be scheduled with the District representative. Tuesdays or Thursdays are generally when the District can perform this camera work.
5. During construction, all sewer lines will need to be capped or sealed to protect the sewer system from flooding or rain events.

InfoWest, CATV/Fiber Optic Notes:

1. Developer to provide all required trenching within the project.
2. Any modifications required to feed project will be billed to the developer.
3. InfoWest will provide all conduits. Call 435-272-3559 or email JUC@infowest.com for conduit delivery at least one week prior to opening the trench.
4. For commercial projects with an MDF/COMM room, developer will install a 2" PVC run to the exterior of the building.
5. Any questions regarding service should be directed towards Gab Tremblay, 435-272-3559 or JUC@infowest.com
6. Relocation of new or existing InfoWest facilities is billable to the developer. The developer will be provided with an estimate of costs for work done.

TDS, CATV/Broadband Notes:

1. The developer will provide all required trench within the project. Any modifications along the periphery to feed this project will be billed to the developer.
2. TDS will place conduits in an open/joint trench. Please contact TDS Engineering at 435-288-1415 at least 3 weeks prior to opening trench to create a design and schedule work.
3. Contact TDS prior to construction buildings for prewire options for fiber optic service. Any other questions regarding construction of service should be directed to TDS Engineering at 435-288-1415.
4. Relocation of new or existing TDS facilities will be billable to the developer/contractor.
5. Any modifications after conduit/cable placement will be billable to the developer/contractor as will damages caused by other contractors working for the developer on this project.

Legend

- SW LAT = PROPOSED SECONDARY WATER LATERAL
- LD LAT = PROPOSED LAND DRAIN LATERAL
- W LAT = PROPOSED WATER LATERAL
- SS LAT = PROPOSED SEWER LATERAL
- = PROPOSED CULINARY WATER LINE
- = EXISTING CULINARY WATER LINE
- SW/8 = PROPOSED SECONDARY WATER LINE
- EX.SW = EXISTING SECONDARY WATER LINE
- = PROPOSED SANITARY SEWER LINE
- = EXISTING SANITARY SEWER LINE
- SD/15 = PROPOSED STORM DRAIN LINE
- EX.SD = EXISTING STORM DRAIN LINE
- LD/8 = PROPOSED LAND DRAIN LINE
- EX.LD = EXISTING LAND DRAIN LINE
- IRR/18 = PROPOSED IRRIGATION LINE
- EX.IRR = EXISTING IRRIGATION LINE
- = EXISTING FENCE LINE
- = PROPOSED FENCE LINE
- = DRAINAGE SWALE
- OHP = OVERHEAD POWER LINE
- = PROPOSED FIRE HYDRANT
- = EXISTING FIRE HYDRANT
- = PROPOSED MANHOLE
- = EXISTING MANHOLE
- = PROPOSED SEWER CLEAN-OUT
- = PROPOSED GATE VALVE
- = EXISTING GATE VALVE
- = PLUG & BLOCK
- = AIR VAC ASSEMBLY
- = DUAL SECONDARY METER

- = PROPOSED WATER METER
- = EXISTING WATER METER
- = PROPOSED REDUCER
- = EXISTING REDUCER
- = PROPOSED CATCH BASIN
- = EXISTING CATCH BASIN
- = PLUG W/ 2" BLOW-OFF
- = STREET LIGHT
- = SIGN
- = POWER POLE

BFE	= BASEMENT FLOOR ELEVATION
BLDG	= BUILDING
BOS	= BOTTOM OF STAIRS
BOW	= BOTTOM OF WALL
BP	= BEGINNING POINT
C&G	= CURB & GUTTER
CB	= CATCH BASIN
CF	= CUBIC FEET
CFS	= CUBIC FEET PER SECOND
EP	= EDGE OF PAVEMENT
FF	= FINISH FLOOR
FFE	= FINISH FLOOR ELEVATION
FG	= FINISHED GRADE
FH	= FIRE HYDRANT
FL	= FLOW LINE
GB	= GRADE BREAK
GFE	= GARAGE FLOOR ELEVATION
INV	= INVERT
LF	= LINEAR FEET
NG	= NATURAL GRADE
OHP	= OVERHEAD POWER
PC	= POINT OF CURVATURE
PP	= POWER/UTILITY POLE
PRC	= POINT OF RETURN CURVATURE
PT	= POINT OF TANGENCY
PUE	= PUBLIC UTILITY EASEMENT
RCP	= REINFORCED CONCRETE PIPE
RIM	= RIM OF MANHOLE
ROW	= RIGHT-OF-WAY
SD	= STORM DRAIN
SL	= STREET LIGHT
SS	= SANITARY SEWER
TBC	= TOP BACK OF CURB
TOA	= TOP OF ASPHALT
TOC	= TOP OF CONCRETE
TOFF	= TOP OF FINISHED FLOOR
TOS	= TOP OF STAIRS
TOW	= TOP OF WALL
TSW	= TOP OF SIDEWALK
UGP	= UNDERGROUND POWER
W	= CULINARY WATER
WM	= WATER METER

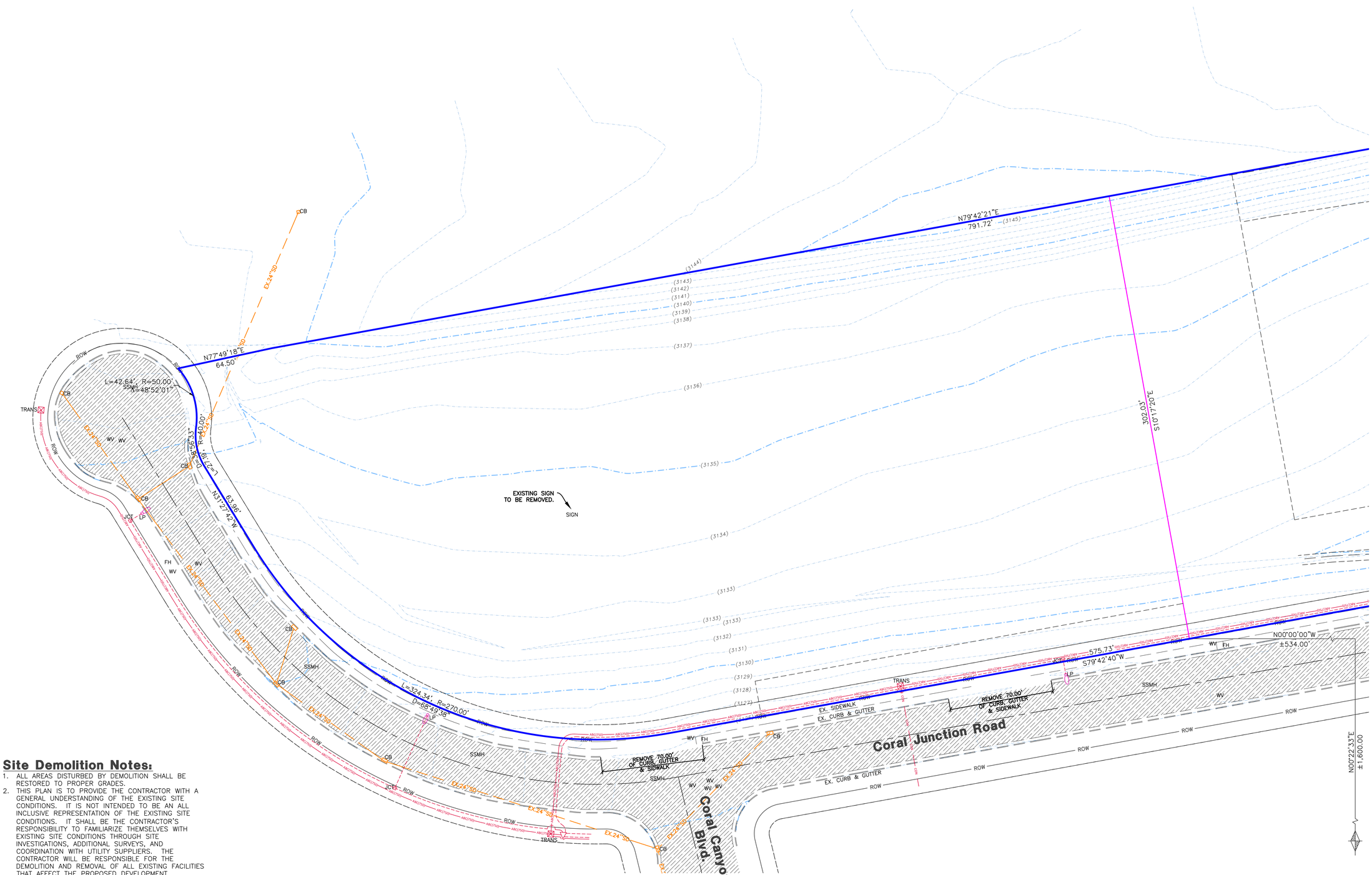
- = EXISTING ASPHALT PAVEMENT
- = PROPOSED ASPHALT PAVEMENT
- = PROPOSED CONCRETE
- = PROPOSED COMPACTED GRAVEL
- (4800) = EXISTING CONTOUR GRADE
- 4800 = PROPOSED CONTOUR GRADE
- = PROPOSED RETAINING WALL

Hurricane City Water Notes:

1. ALL WATERLINE WORKS MUST BE INSTALLED BY A CONTRACTOR THAT HAS BEEN PRE-QUALIFIED BY THE CITY OF HURRICANE WATER DEPARTMENT.
2. ALL CONSTRUCTION SHALL CONFORM TO THE "CITY OF HURRICANE STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION", "THE UNIFORM PLUMBING CODE", AND THE "UNIFORM BUILDING CODE" LATEST EDITION AS ADMINISTERED BY THE CITY OF HURRICANE.
3. CONTRACTOR SHALL POTHOLE ALL PIPELINES AND VERIFY LOCATION AND DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION.
4. THE POTABLE WATER SUPPLY TO LAWN IRRIGATION SYSTEMS SHALL BE PROTECTED AGAINST BACKFLOW PER THE INTERNATIONAL PLUMBING CODE (IPC) SECTION 608.16.5 AND FOR FIRE SPRINKLER SYSTEMS PER (IPC) 608.16.4.
5. 12 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.
6. THRUST RESTRAINT ON THE NEW PIPELINE WILL BE AS SHOWN ON THE DETAILS. USE MEGA-LUG ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.
7. ASPHALT REPLACED OVER THE PIPE TRENCHING IS TO MATCH EXISTING PAVEMENT DEPTHS WITH A 6" OVER CUT FROM EDGE OF THE TRENCH LINE ON EACH SIDE OF THE TRENCH.
8. CONTRACTORS SHALL CUT OFF AND CAP (BACK AT THE WATER MAIN), ALL EXISTING SERVICE LINES OR UN-USED STUB LINES THAT WILL BE ABANDONED.
9. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY THE CITY OF HURRICANE WATER SERVICES ENGINEER.
10. PROVIDE HOT TAP IF EXISTING SHUTDOWN IS MORE THAN 12 HRS. NOTIFY HOME OWNERS 48 HOURS PRIOR TO SHUTDOWN.
11. SEE LANDSCAPE PLANS FOR IRRIGATION CONDUIT SLEEVING.
12. NOTE: HOA PAYS FOR PARK STRIP WATER, CITY PAYS FOR MEDIAN WATER.
13. WATER SERVICES TO BE TYPE K COPPER.

Reeve & Associates, Inc.
5160 SOUTH 1500 W

Reeve & Associates, Inc. - Solutions You Can Build On



Site Demolition Notes:

1. ALL AREAS DISTURBED BY DEMOLITION SHALL BE RESTORED TO PROPER GRADES.
2. THIS PLAN IS TO PROVIDE THE CONTRACTOR WITH A GENERAL UNDERSTANDING OF THE EXISTING SITE CONDITIONS. IT IS NOT INTENDED TO BE AN ALL INCLUSIVE REPRESENTATION OF THE EXISTING SITE CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH EXISTING SITE CONDITIONS THROUGH SITE INVESTIGATIONS, ADDITIONAL SURVEYS, AND COORDINATION WITH UTILITY SUPPLIERS. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL EXISTING FACILITIES THAT AFFECT THE PROPOSED DEVELOPMENT.
3. DEMOLITION DEBRIS TO BE DISPOSED OF OFF-SITE AT AN APPROVED LANDFILL. CONTRACTOR TO PROVIDE ANY CERTIFICATION DOCUMENTATION FOR THE LANDFILL PRIOR TO COMMENCING ON-SITE DEMOLITION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION, TRANSPORT AND DISPOSAL OF DEBRIS.
5. THE CONTRACTOR DOES NOT HAVE ANY ACCESS EASEMENTS OR CONSTRUCTION EASEMENTS WITH ANY OF THE ADJACENT PROPERTIES FOR DEMOLITION. ALL DEMOLITION ACTIVITIES MUST REMAIN ON-SITE OF THE PROJECT PROPERTY.

30 0 30 60 90
Scale: 1" = 30'

Note:
Contractor to verify ALL Existing Utility Locations, Terminations and Invert Elevations.

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Existing Site Plan

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Revised: 2024-07-09

Project Info.

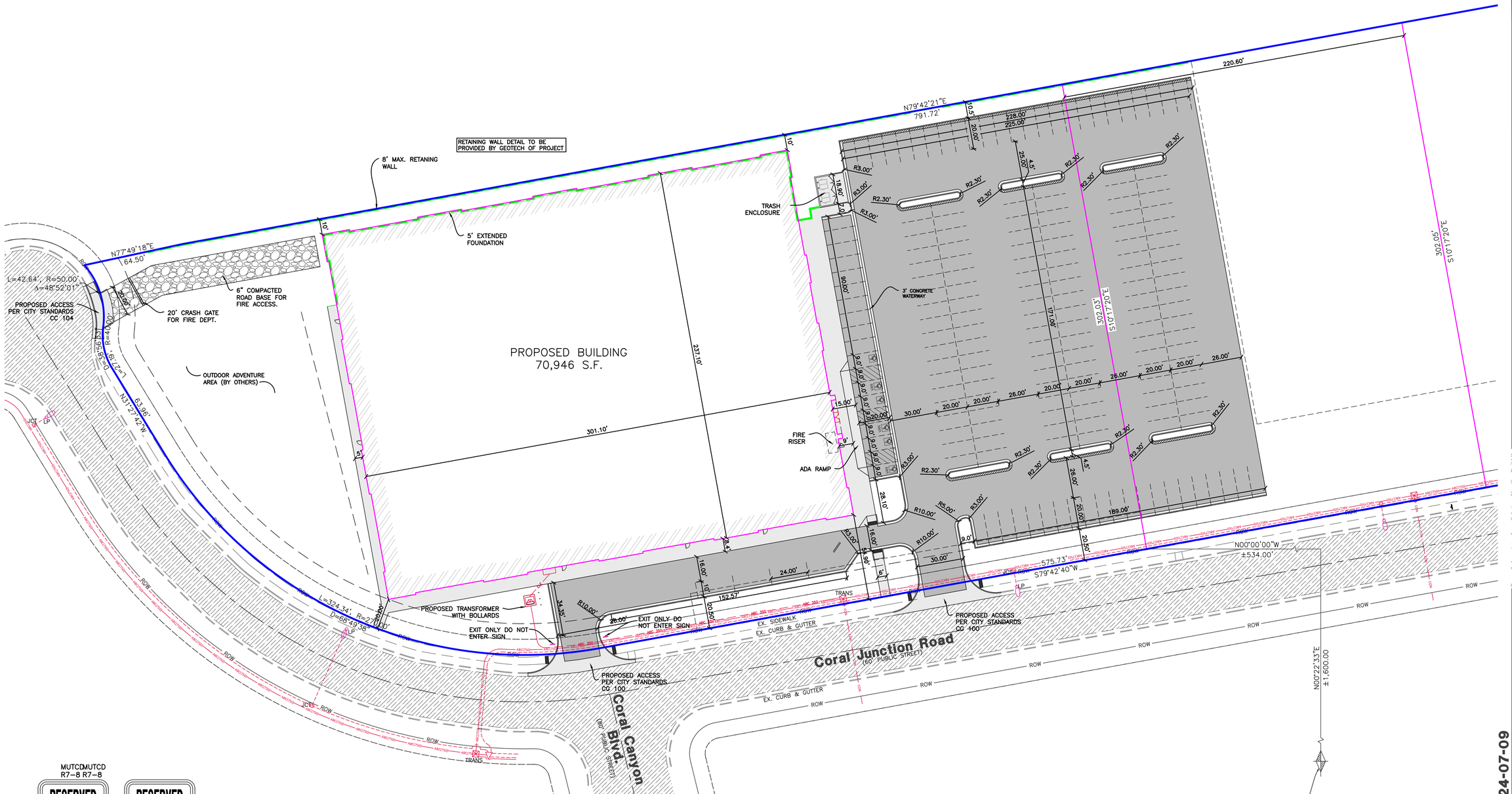
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C3

15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On



MUTCD R7-8 R7-8

MUTCD R7-8P

NOTES:
1) WHERE PARKING SPACES THAT ARE RESERVED FOR PERSONS WITH DISABILITIES ARE DESIGNATED TO ACCOMMODATE WHEELCHAIR VANS, A "VAN ACCESSIBLE" (R7-8P) PLAQUE SHALL BE MOUNTED BELOW THE R7-8 SIGN.
2) SIGNS SHALL BE MOUNTED A MINIMUM OF 60" FROM BOTTOM OF SIGN TO TOP OF SIDEWALK.
3) SIGNS TO MEET ALL STATE AND LOCAL REGULATIONS.

ADA Parking Signage

30 0 30 60 90
Scale: 1" = 30'

Legend

- = EXISTING ASPHALT PAVEMENT
- = PROPOSED ASPHALT PAVEMENT
- = PROPOSED CONCRETE
- = OUTFLOW CURB & GUTTER

NOTES:
1. SEE ELECTRICAL PLANS FOR ALL LIGHT POLES ALL LIGHT POLE BASES SHALL BE STRAIGHT AND PLASTERED SMOOTH. TOP OF LIGHT BASE SHALL BE 2'-6" ABOVE TOP OF CURB/SIDEWALK. BASES PROVIDED BY G.C., TYP.
2. ALL UTILITY DIGGING OR OTHER EXCAVATION SHALL TAKE IN CONSIDERATION EXISTING SIDEWALKS, CURB & GUTTERS, AND OTHER STRUCTURES THAT MAY NEED TO BE REMOVED AND/OR REPLACED AS PART OF THE G.C. BID.

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Proposed Site Plan

Revised: 2024-07-09

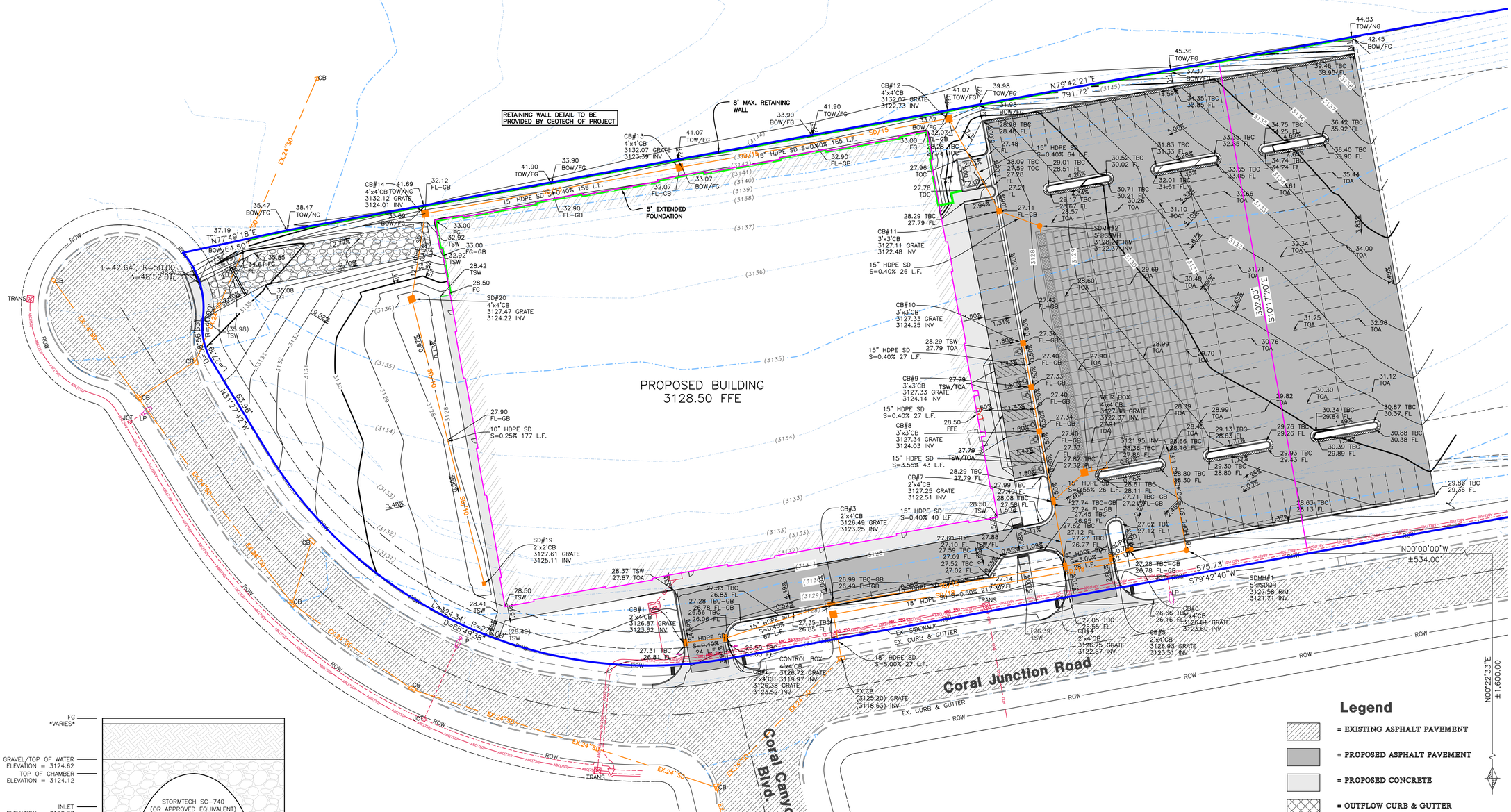
REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

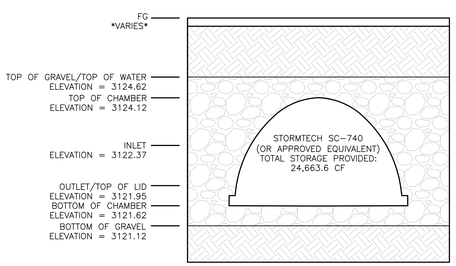
Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C4
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

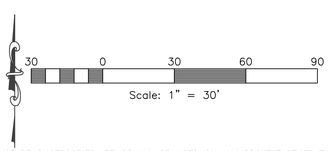
Reeve & Associates, Inc. - Solutions You Can Build On





Chamber Elevations

SCALE: NONE



Legend

- = EXISTING ASPHALT PAVEMENT
- = PROPOSED ASPHALT PAVEMENT
- = PROPOSED CONCRETE
- = OUTFLOW CURB & GUTTER

Note:
Contractor to verify ALL Existing Utility Locations, Terminations and Invert Elevations.

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
24-02-01	RH City Comments
24-07-09	RH Client Changes
24-08-22	NF Grading & Drainage
24-09-20	NF City Comments

Revised: 2024-07-09

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Grading & Drainage Plan

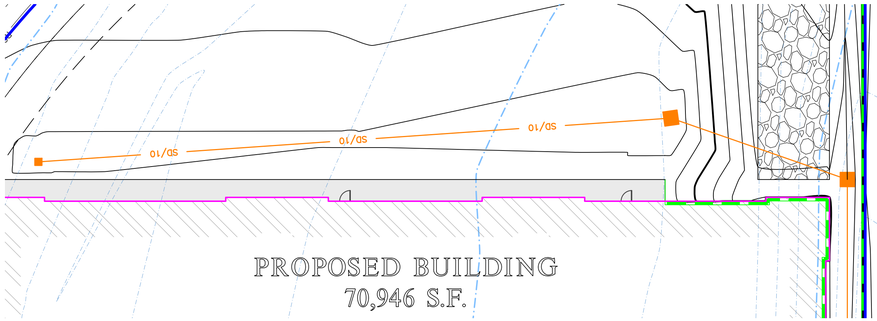
REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C5
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

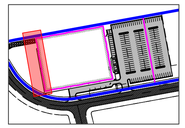
Reeve & Associates, Inc. - Solutions You Can Build On



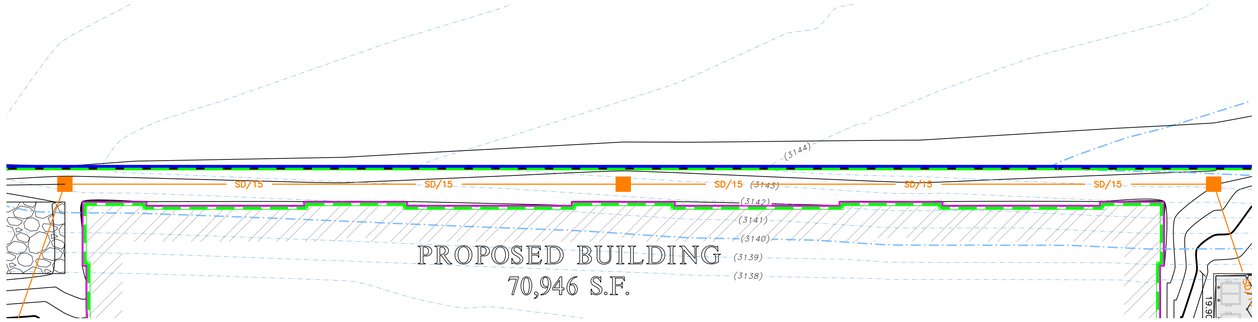
Building West Drainage

20 0 20 40 60

Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'



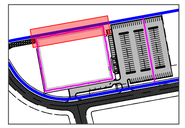
Key Map
NOT TO SCALE



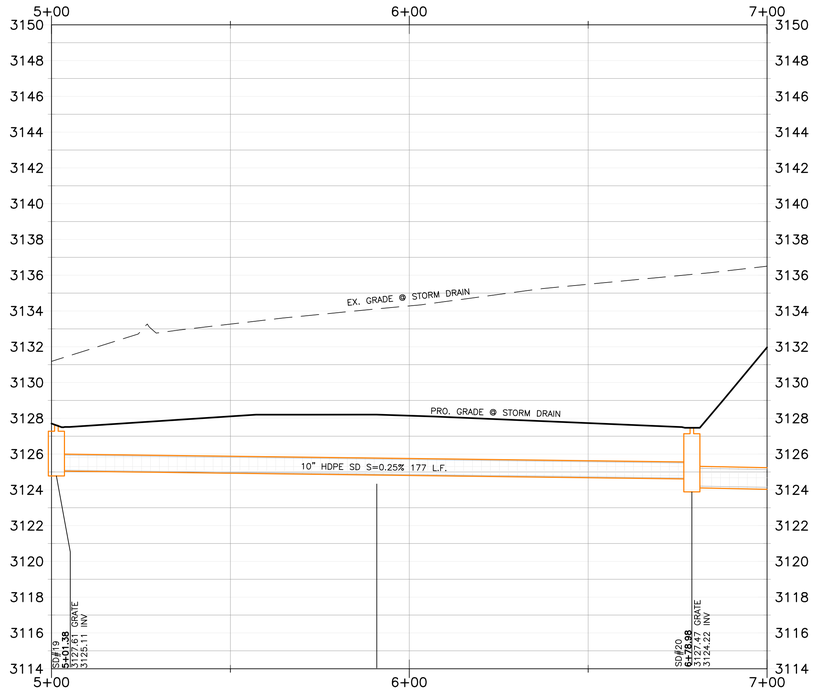
Building North Drainage

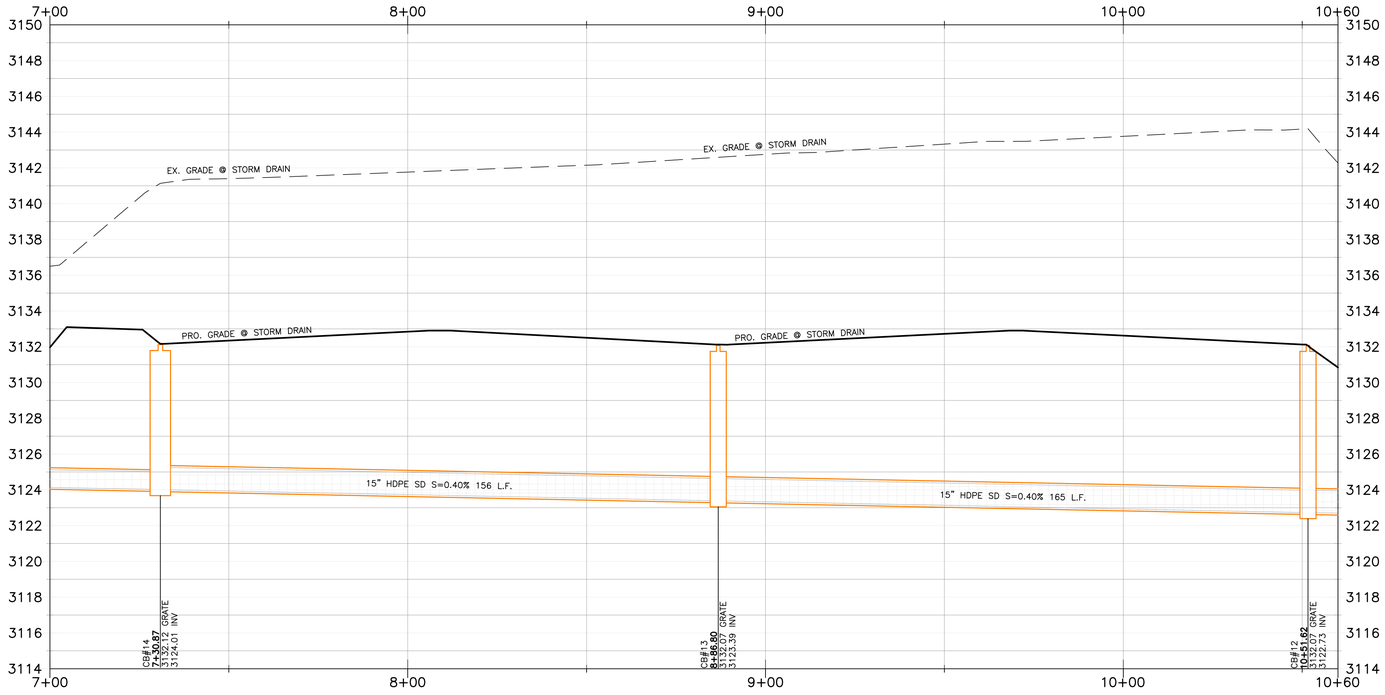
20 0 20 40 60

Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'



Key Map
NOT TO SCALE





811 Know what's below. Call before you dig.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc.
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Storm Drain Section

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Revised: 2024-07-09

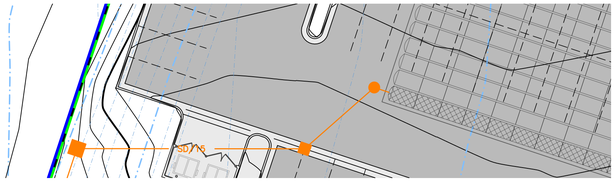
Project Info.

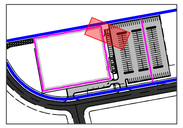
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C5.1

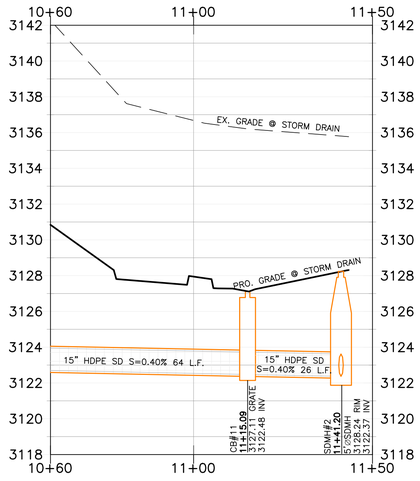
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On





Key Map
NOT TO SCALE

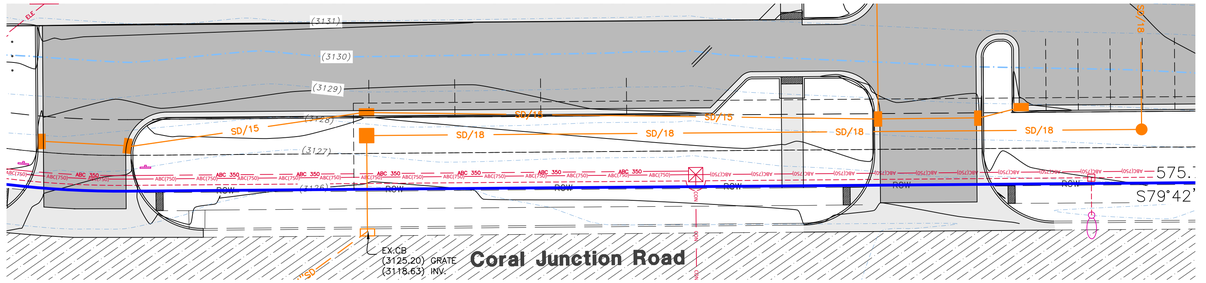


Building North East Drainage

20 0 20 40 60

Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'

NOTE:
OTHER UTILITIES SHOWN ARE FOR REFERENCE ONLY.
SEE UTILITY PLAN FOR ALL OTHER UTILITY DESIGNS.

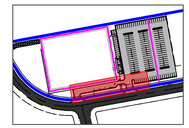


Building South Drainage

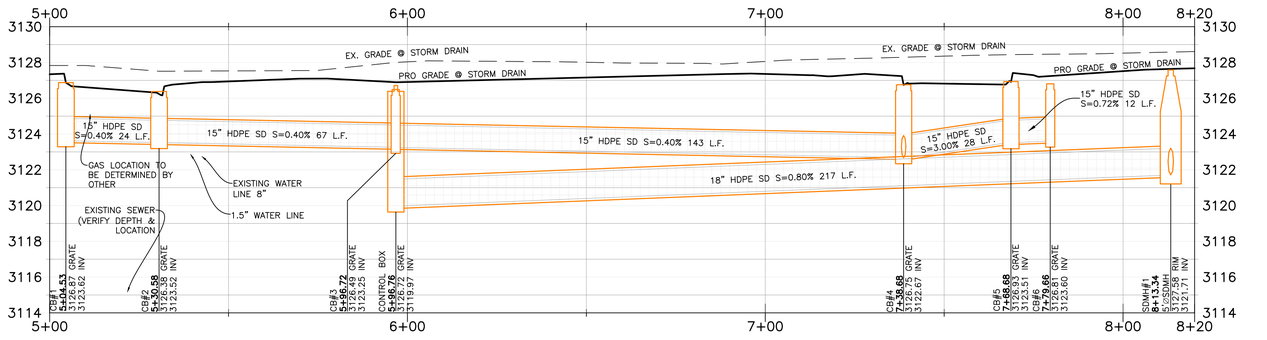
20 0 20 40 60

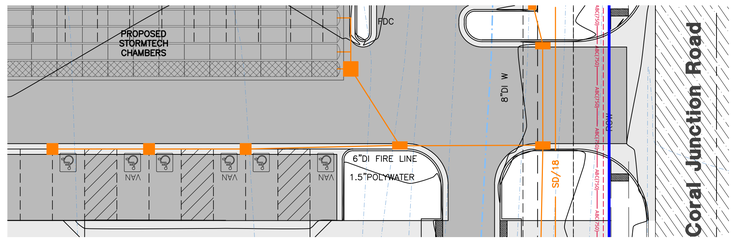
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'

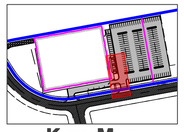
NOTE:
OTHER UTILITIES SHOWN ARE FOR REFERENCE ONLY.
SEE UTILITY PLAN FOR ALL OTHER UTILITY DESIGNS.



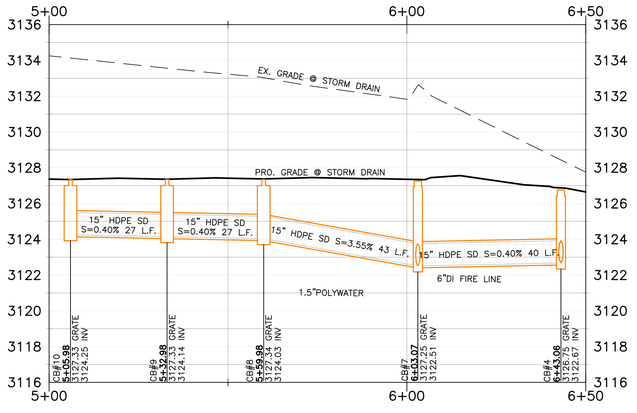
Key Map
NOT TO SCALE







Key Map
NOT TO SCALE

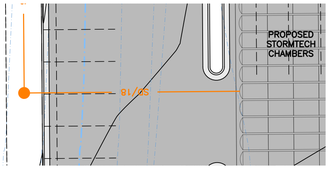


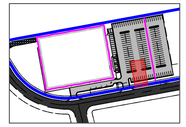
Building East Drainage

20 0 20 40 60

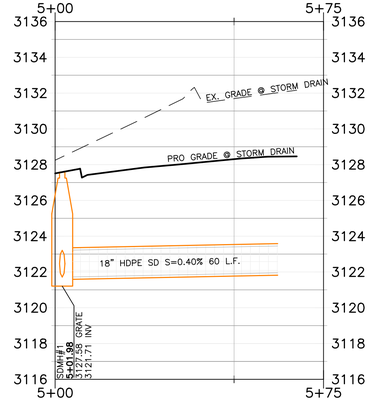
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'

NOTE:
OTHER UTILITIES SHOWN ARE FOR REFERENCE ONLY.
SEE UTILITY PLAN FOR ALL OTHER UTILITY DESIGNS.





Key Map
NOT TO SCALE



Outfall Drainage

20 0 20 40 60

Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 4'

NOTE:
OTHER UTILITIES SHOWN ARE FOR REFERENCE ONLY.
SEE UTILITY PLAN FOR ALL OTHER UTILITY DESIGNS.

811 Know what's below. Call before you dig.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Storm Drain Section

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Revised: 2024-07-09

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C5.2
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

Hurricane City Water Notes:

1. ALL WATERLINE WORKS MUST BE INSTALLED BY A CONTRACTOR THAT HAS BEEN PRE-QUALIFIED BY THE CITY OF HURRICANE WATER DEPARTMENT.
2. ALL CONSTRUCTION SHALL CONFORM TO THE "CITY OF HURRICANE STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION", "THE UNIFORM PLUMBING CODE", AND THE "UNIFORM BUILDING CODE" LATEST EDITION AS ADMINISTERED BY THE CITY OF HURRICANE.
3. CONTRACTOR SHALL POTHOLE ALL PIPELINES AND VERIFY LOCATION AND DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION.
4. THE POTABLE WATER SUPPLY TO LAWN IRRIGATION SYSTEMS SHALL BE PROTECTED AGAINST BACKFLOW PER THE INTERNATIONAL PLUMBING CODE (IPC) SECTION 608.16.5 AND FOR FIRE SPRINKLER SYSTEMS PER (IPC) 608.16.4.
5. 12 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.
6. THRUST RESTRAINT ON THE NEW PIPELINE WILL BE AS SHOWN ON THE DETAILS. USE MEGA-LUG ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.
7. ASPHALT REPLACED OVER THE PIPE TRENCHING IS TO MATCH EXISTING PAVEMENT DEPTHS WITH A 6" OVER CUT FROM EDGE OF THE TRENCH LINE ON EACH SIDE OF THE TRENCH.
8. CONTRACTORS SHALL CUT OFF AND CAP (BACK AT THE WATER MAIN), ALL EXISTING SERVICE LINES OR UN-USED STUB LINES THAT WILL BE ABANDONED.
9. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY THE CITY OF HURRICANE WATER SERVICES ENGINEER.
10. PROVIDE HOT TAP IF EXISTING SHUTDOWN IS MORE THAN 12 HRS. NOTIFY HOME OWNERS 48 HOURS PRIOR TO SHUTDOWN.
11. SEE LANDSCAPE PLANS FOR IRRIGATION CONDUIT SLEEVING.
12. NOTE: HOA PAYS FOR PARK STRIP WATER, CITY PAYS FOR MEDIAN WATER.
13. WATER SERVICES TO BE TYPE K COPPER.

Ash Creek General Notes:

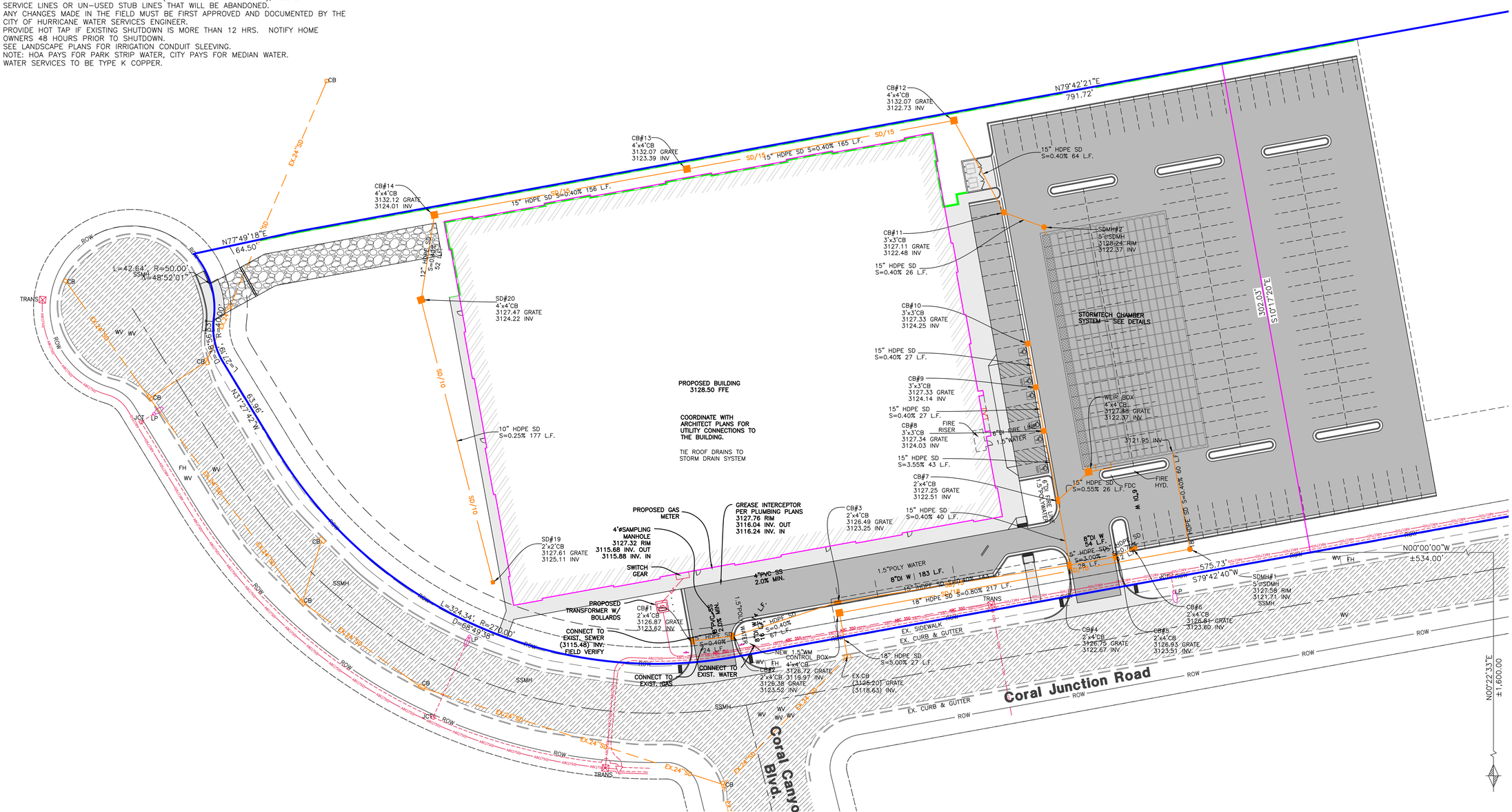
1. Sewer is to meet the current Ash Creek Special Service District (District) Construction Standard.
2. Prior to completion of the project provide a copy of the geotechnical report and the compaction test results to the District.
3. Prior to completion of the project provide a PDF and a 2'x3' plan sheet Drawing of Record to the District. The Drawing of Record should include a distance from the near side property line to the sewer lateral marker, also include any changes to sewer main line slopes and depths.
4. The contractor will be responsible to clean and test the sewer lines after all utilities ave been installed but prior to asphalt placement. The following tests will need to be completed by the contractor; mandrel test, air test, and closed-circuit camera inspection. Camera inspection if provided by the District can be scheduled with the District representative. Tuesdays or Thursdays are generally when the District can perform this camera work.
5. During construction, all sewer lines will need to be capped or sealed to protect the sewer system from flooding or rain events.

InfoWest, CATV/Fiber Optic Notes:

1. Developer to provide all required trenching within the project.
2. Any modifications required to feed project will be billed to the developer.
3. InfoWest will provide all conduits. Call 435-272-3559 or email JUC@infowest.com for conduit delivery at least one week prior to opening the trench.
4. For commercial projects with an MDF/COMM room, developer will install a 2" PVC run to the exterior of the building.
5. Any questions regarding service should be directed towards Gab Tremblay, 435-272-3559 or JUC@infowest.com
6. Relocation of new or existing InfoWest facilities is billable to the developer. The developer will be provided with an estimate of costs for work done.

TDS, CATV/Broadband Notes:

1. The developer will provide all required trench within the project. Any modifications along the periphery to feed this project will be billed to the developer.
2. TDS will place conduits in an open/joint trench. Please contact TDS Engineering at 435-288-1415 at least 3 weeks prior to opening trench to create a design and schedule work.
3. Contact TDS prior to construction buildings for prewire options for fiber optic service. Any other questions regarding construction of service should be directed to TDS Engineering at 435-288-1415.
4. Relocation of new or existing TDS facilities will be billable to the developer/contractor.
5. Any modifications after conduit/cable placement will be billable to the developer/contractor as will damages caused by other contractors working for the developer on this project.



30 0 30 60 90

Scale: 1" = 30'

Note:
Contractor to verify ALL Existing Utility Locations, Terminations and Invert Elevations.

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Utility Plan

Revised: 2024-07-09

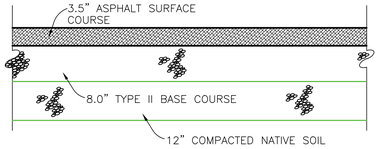
REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C6
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

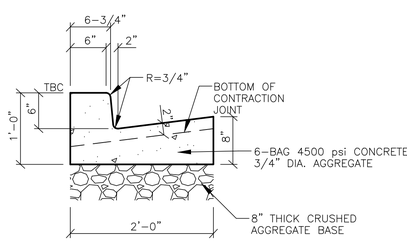
Reeve & Associates, Inc. - Solutions You Can Build On



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

Typical On-Site Asphalt Paving

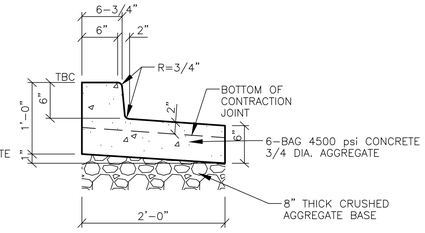
SCALE: NONE



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

On-Site Curb & Gutter

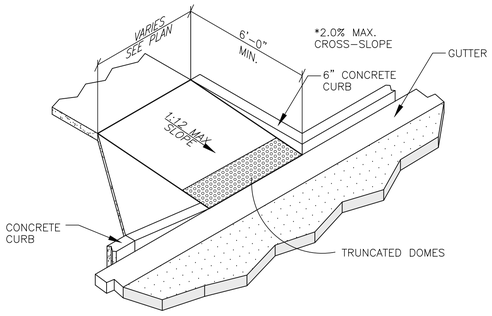
SCALE: NONE



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

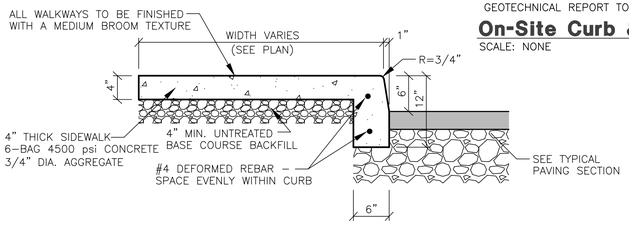
On-Site Outflow Curb & Gutter

SCALE: NONE



ADA Ramp Detail

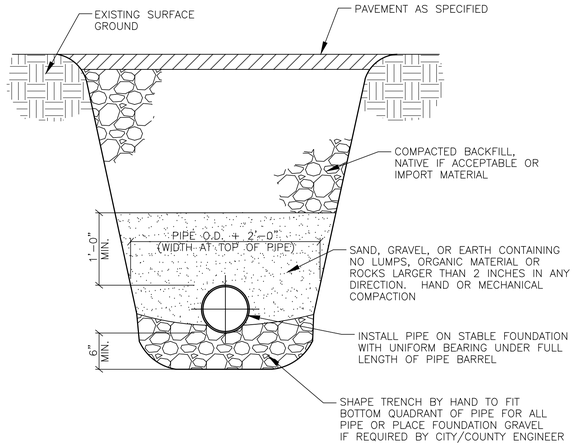
SCALE: NONE



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

On-Site Sidewalk/Curb Detail

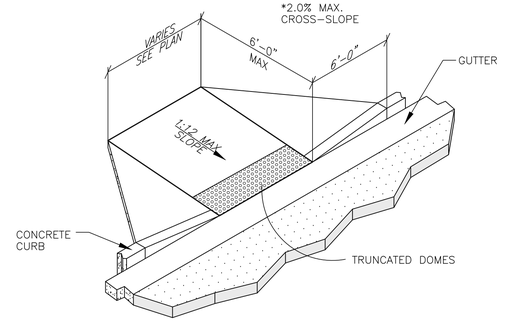
SCALE: NONE



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

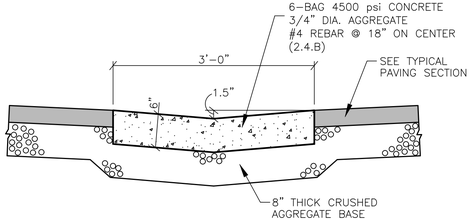
Typical On-Site Pipe Bed Section

SCALE: NONE



ADA Ramp Detail

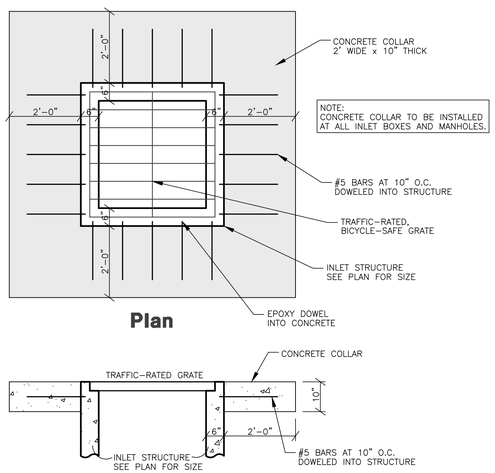
SCALE: NONE



(REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT, PREPARED BY LANDMARK TESTING & ENGINEERING, DATED JAN. 30, 2019. GEOTECHNICAL REPORT TO GOVERN & CONTROL.)

On-Site 3' Concrete Waterway

SCALE: NONE



Concrete Collar Detail

SCALE: NONE

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Civil Details

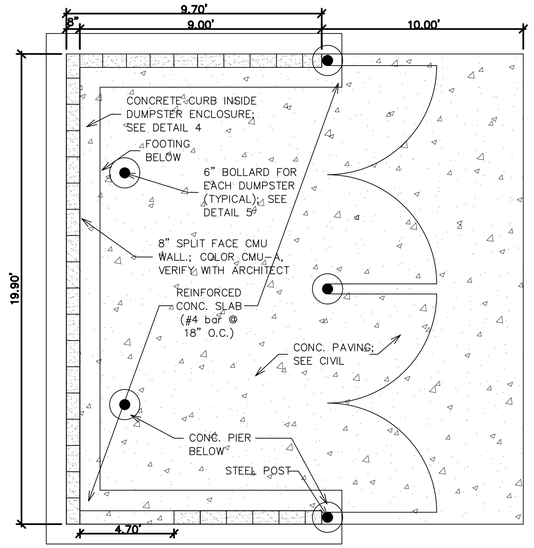
REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Revised: 2024-07-09

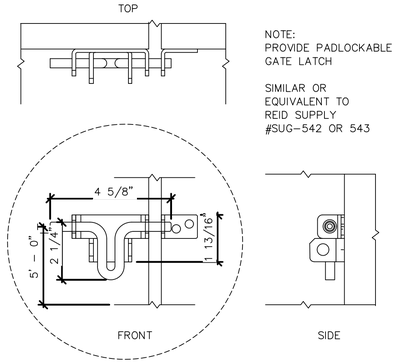
Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C7
15 Total Sheets

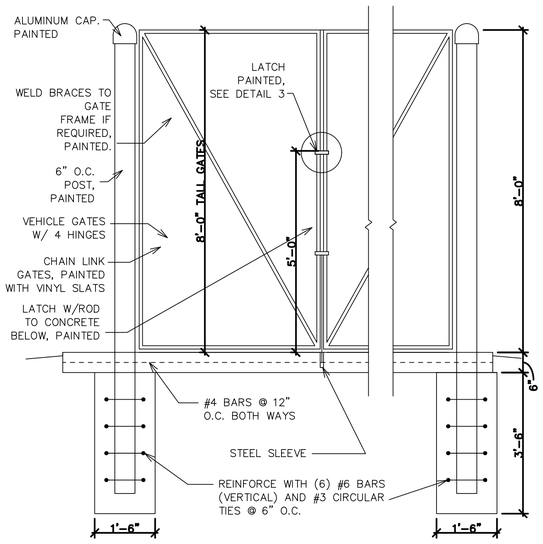
Reeve & Associates, Inc. - Solutions You Can Build On



1 Trash Enclosure Plan
SCALE: NONE

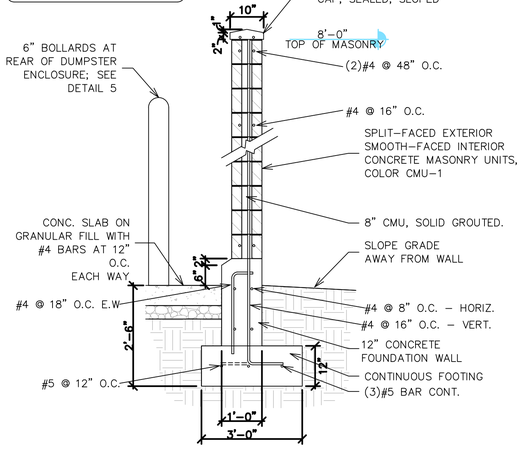


3 Trash Enclosure Gate Latch Detail
SCALE: NONE

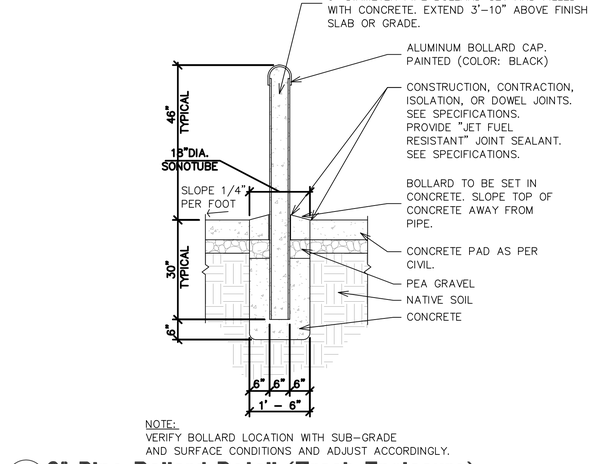


2 Trash Enclosure Gate Detail
SCALE: NONE

NOTE: SEE DETAILS 1 AND 2 FOR ENCLOSURE PLAN AND GATE ELEVATION. SEE STRUCTURAL FOR ADDITIONAL INFORMATION.



4 Trash Enclosure Wall Section
SCALE: NONE



NOTE:
VERIFY BOLLARD LOCATION WITH SUB-GRADE AND SURFACE CONDITIONS AND ADJUST ACCORDINGLY.

5 6" Pipe Bollard Detail (Trash Enclosure)
SCALE: NONE

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Civil Details

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Revised: 2024-07-09

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C7.1
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

Project:

StormTech — Detention • Retention • Water Quality — A division of ADS

Chamber Model -	SC-740	
Units -	Imperial	Click Here for Metric
Number of chambers -	320	
Voids in the stone (porosity) -	40	%
Base of Stone Elevation -	3121.12	ft
Amount of Stone Above Chambers -	6	in
Amount of Stone Below Chambers -	6	in
Area of system -	11315	sf Min. Area - 10817 sf min. area

☑ Include Perimeter Stone in Calculations

StormTech SC-740 Cumulative Storage Volumes

Height of System (inches)	Incremental Single Chamber (cubic feet)	Incremental Total Chamber (cubic feet)	Incremental Stone (cubic feet)	Incremental Ch & St (cubic feet)	Cumulative Chamber (cubic feet)	Elevation (feet)	
42	0.00	0.00	377.17	377.17	24663.56	3124.62	
41	0.00	0.00	377.17	377.17	24286.40	3124.54	
40	0.00	0.00	377.17	377.17	23909.23	3124.45	
39	0.00	0.00	377.17	377.17	23532.06	3124.37	
38	0.00	0.00	377.17	377.17	23154.90	3124.29	
37	0.00	0.00	377.17	377.17	22777.73	3124.20	
36	0.05	17.60	370.13	387.73	22400.56	3124.12	
35	0.16	52.13	356.31	408.45	22012.84	3124.04	
34	0.28	90.22	341.08	431.30	21604.39	3123.95	
33	0.60	193.27	299.86	493.13	21173.09	3123.87	
32	0.80	256.55	274.55	531.10	20679.96	3123.79	
31	0.95	304.21	255.48	559.70	20148.87	3123.70	
30	1.07	343.84	239.63	583.47	19589.17	3123.62	
29	1.18	377.76	226.06	603.82	19005.70	3123.54	
28	1.27	405.01	215.16	620.17	18401.88	3123.45	
27	1.36	433.60	203.73	637.33	17781.70	3123.37	
26	1.45	465.31	191.04	656.35	17144.37	3123.29	
25	1.52	487.91	182.00	669.91	16488.02	3123.20	
24	1.58	506.34	174.63	680.97	15818.11	3123.12	
23	1.64	525.53	166.95	692.48	15137.13	3123.04	
22	1.70	543.84	159.63	703.47	14444.65	3122.95	
21	1.75	560.94	152.79	713.73	13741.17	3122.87	
20	1.80	576.90	146.41	723.31	13027.45	3122.79	
19	1.85	593.60	139.73	733.33	12304.14	3122.70	
18	1.89	605.79	134.85	740.64	11570.81	3122.62	
17	1.93	618.88	129.61	748.50	10830.17	3122.54	
16	1.97	632.00	124.37	756.37	10081.68	3122.45	
15	2.01	643.17	119.90	763.07	9325.31	3122.37	
14	2.04	654.40	115.41	769.80	8562.24	3122.29	
13	2.07	663.99	111.57	775.56	7792.43	3122.20	
12	2.10	673.57	107.74	781.31	7016.87	3122.12	
11	2.13	682.17	104.30	786.47	6235.56	3122.04	
10	2.15	689.23	101.47	790.71	5449.09	3121.95	
9	2.18	696.66	98.50	795.16	4658.39	3121.87	
8	2.20	703.47	95.78	799.25	3863.22	3121.79	
7	2.21	706.34	94.63	800.97	3063.97	3121.70	L.I.D. VOLUME
6	0.00	0.00	377.17	377.17	2263.00	3121.62	
5	0.00	0.00	377.17	377.17	1885.83	3121.54	
4	0.00	0.00	377.17	377.17	1508.67	3121.45	
3	0.00	0.00	377.17	377.17	1131.50	3121.37	
2	0.00	0.00	377.17	377.17	754.33	3121.29	
1	0.00	0.00	377.17	377.17	377.17	3121.20	

Storm Runoff Calculations

Project Name

12/14/2023 BAG

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Hurricane, UT area taken from the NOAA Atlas 14 database. Calculations have been completed for the 100-yr 24-hr storm event. Storm water runoff has been calculated for a fully developed site and limited to a release rate of 0.2 cfs/acre.

The calculations are as follows:

Drainage Area:

Total Area = 4.45 acre or 193,724 ft²

Runoff Coefficients

Paved Area	100,889	C = 0.9
Roof	70,946	C = 0.9
Landscaped Area	21,889	C = 0.2
Weighted Runoff Coefficient		C = 0.82

LID Retention

80th Percentile Rainfall Event	0.45	in
Is the site Feasible for LID?	Yes	
Site Imperviousness	0.89	
NRCS Soil Group	C/D	
Rv Equation	0.83^1.122	
R_v	0.73	
V_{goal}	5271	c.f.

Rainfall Intensities:

10-yr intensity for a 10 minute TOC - Pipe Capacity 2.59 in/hr

Peak Run-off:

Runoff Coefficient	C =	0.82
Rainfall Intensity	i =	2.59 IN./HR.
Acreage	A =	4.45 ACRES
Q	**Q =**	**9.46 cfs**

Volume of Run-off for 100-year Storm Event:

C = 0.82
I = See Below in/hr
A = 193724.00 ft²
Q(out) = 0.89 ft³/s (0.2 cfs per acre)

time (min)	time (sec)	i (in./hr.)	Q (cfs)	Vol. in (cf)	Vol. out (cf)	Difference (cf)
0	0	0.00	0.00	0	0	0
5	300	6.28	23.12	6935	267	6669
10	600	4.78	17.60	10558	534	10024
15	900	3.94	14.50	13054	801	12253
30	1800	2.66	9.79	17626	1601	16025
60	3600	1.64	6.04	21734	3202	18532
120	7200	0.88	3.25	23377	6404	16973
180	10800	0.60	2.22	23934	9606	14328
360	21600	0.35	1.28	27592	19212	8379
720	43200	0.19	0.71	30852	38425	-7573
1440	86400	0.11	0.40	34986	76849	-41863

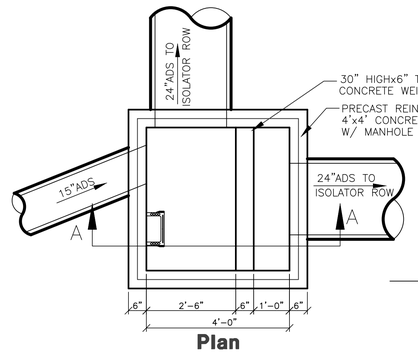
Orifice Sizing

Given:

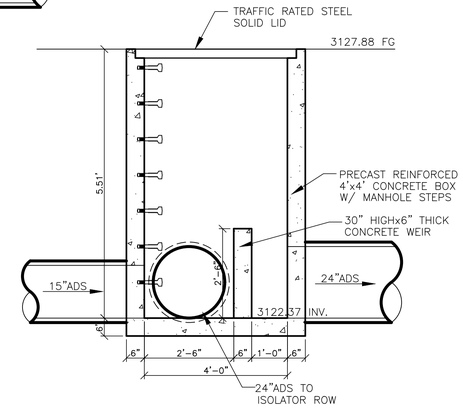
Q =	0.89	cfs	
2g =	64.4	ft/s²	
H =	3.00	ft	
Cd =	0.62		for circular openings
R =	SQRT(Q/pi/(0.7*(64.4*H)^0.5))		
R =	0.18	feet	
	2.18	inches	
D =	4.35	inches	
A =	14.87	inches ^2	0.1033 ft ^2

SUMMARY:

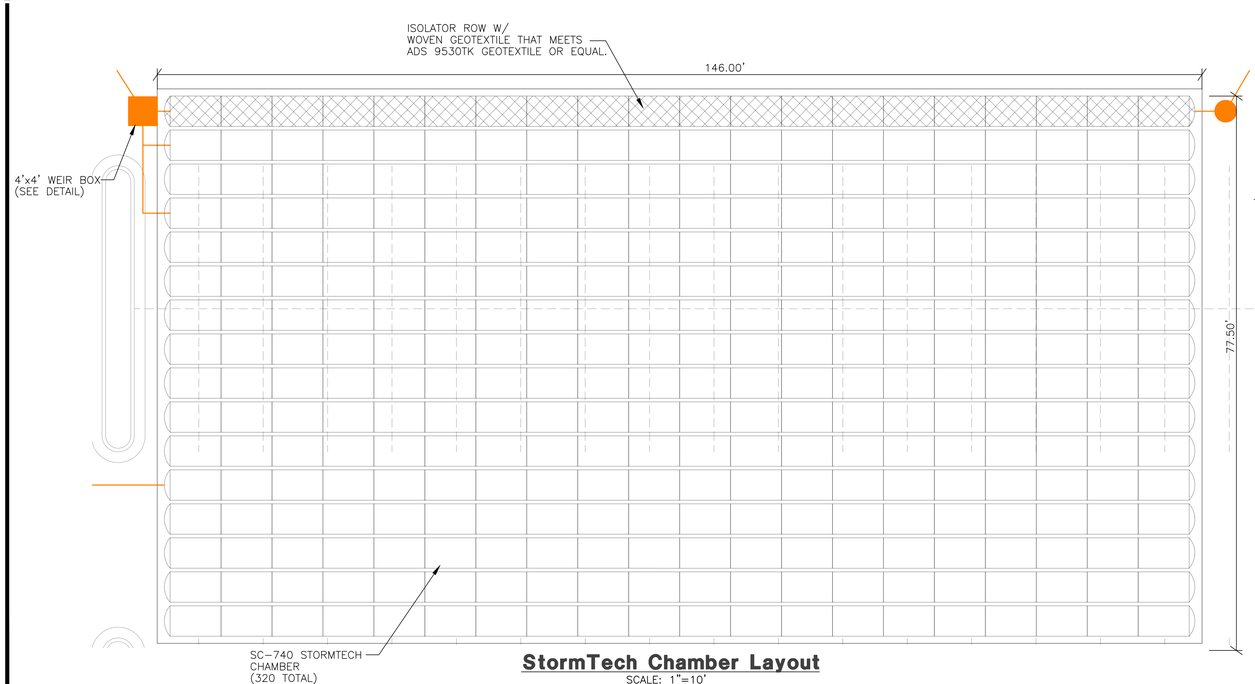
The required 100-yr storage volume is	**18,532**	**cubic feet**
The required LID Retention volume is	**5,271**	**cubic feet**
Orifice size is	**4.4**	**inches**



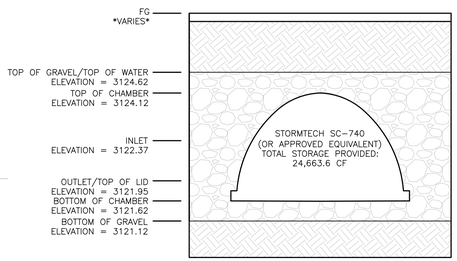
Plan



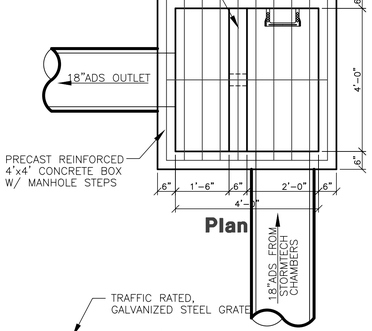
Section A-A
4'x4' Weir Box
SCALE: 1"=2'



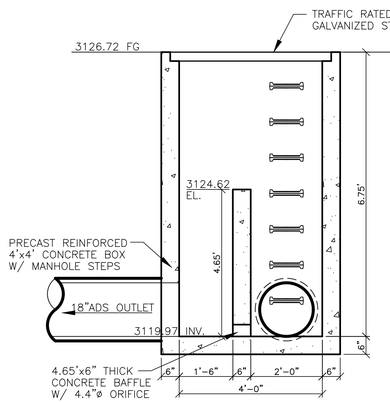
StormTech Chamber Layout
SCALE: 1"=10'



Chamber Elevations
SCALE: NONE



Plan



Section
Control Box Detail
SCALE: NONE

Revised: 2024-07-09

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
24-02-01	RH CityComments
24-07-09	RH Client Changes
24-08-22	NF Grading & Drainage
24-09-20	NF CityComments

REGISTERED PROFESSIONAL ENGINEER — 5338480 — JEREMY A. DRAPER — 09/20/2024 — STATE OF UTAH

Project Info.

Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

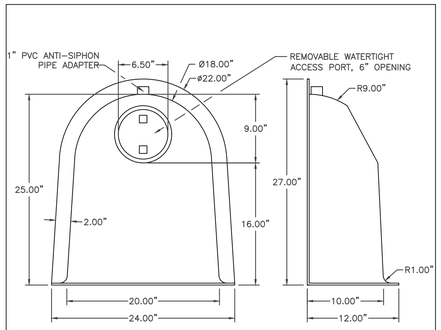
Drainage Details

C7.2
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On



US PATENT #6126817ADDITIONAL PATENTS PENDING

NOTE:
USE OF BIO-SKIRTS WILL BE REQUIRED ON ALL SNOUTS.

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
18F SNOUT OIL & DEBRIS STOP	09/14/99	NONE
	DRAWING NUMBER 18F	

Snout Detail
SCALE: NONE

CONFIGURATION DETAIL

SNOUT OIL-WATER-DEBRIS SEPARATOR

TYPICAL INSTALLATION

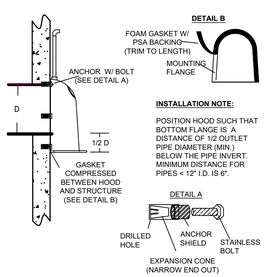
NOTE SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIAM. OUTLET. FOR OUTLETS >OR= 15", DEPTH = 2.5-3X DIAM.

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY:
   BEST MANAGEMENT PRODUCTS, INC.
   53 MT. ARCHER RD.
   LYME, CT 06371
   (860) 434-0277, (860) 434-3195 FAX
   TOLL FREE: (800) 504-8008 OR (888) 354-7585
   WEB SITE: www.bestmp.com
   OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
   INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

US Patent # 6126817

INSTALLATION DETAIL

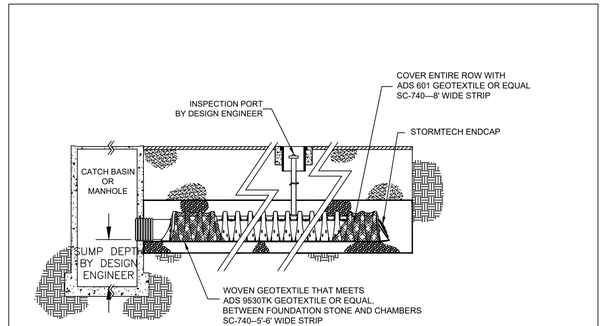


INSTALLATION NOTE:
POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL- DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/08/00	NONE
	DRAWING NUMBER SP-SN	

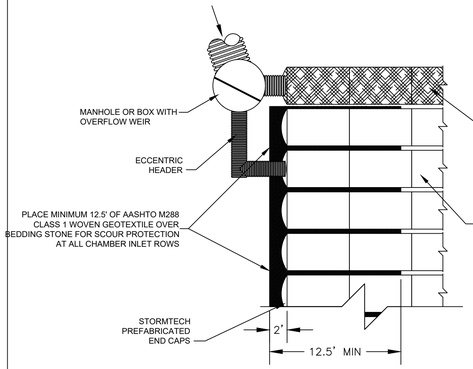
Snout Installation Specifications
SCALE: NONE



* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

STORMTECH LLC CONCEPTUAL PLAN DISCLAIMER
THIS STORMTECH CHAMBER SYSTEM LAYOUT WAS PRODUCED TO DEMONSTRATE A BED LAYOUT THAT WILL HANDLE THE DESIGN VOLUME LISTED ABOVE. THE SIZING, FIT AND APPLICABILITY OF THE STORMTECH CHAMBER SYSTEM FOR THIS SPECIFIC PROJECT HAS NOT BEEN DETERMINED. IT IS THE ULTIMATE RESPONSIBILITY OF THE DESIGN ENGINEER TO ASSURE THAT THE STORMWATER SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. STORMTECH PRODUCTS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMTECH'S MINIMUM REQUIREMENTS. STORMTECH LLC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS. THE DESIGNING ENGINEER IS RESPONSIBLE FOR ALL DESIGN DECISIONS.

StormTech	20 Beaver Road, Suite 104 Wethersfield, CT 06109 Phone: 888-892-2694 Fax: 866-328-8401 www.stormtech.com
STORMTECH ISOLATOR ROW PROFILE	
SCALE: NTS	CHECKED
DATE:	ACAD NO.
DRAWN BY:	SHEET OF

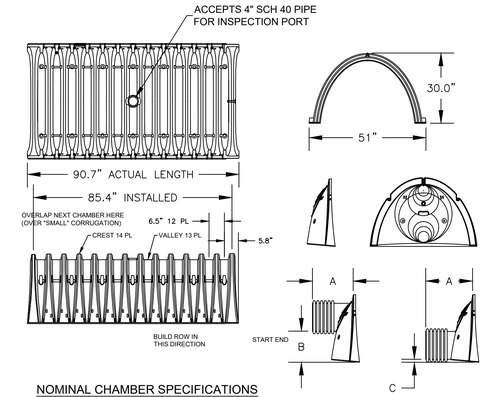


FOR STORMTECH INFORMATION CALL 1-888-892-2694

* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

STORMTECH LLC CONCEPTUAL PLAN DISCLAIMER
THIS STORMTECH CHAMBER SYSTEM LAYOUT WAS PRODUCED TO DEMONSTRATE A BED LAYOUT THAT WILL HANDLE THE DESIGN VOLUME LISTED ABOVE. THE SIZING, FIT AND APPLICABILITY OF THE STORMTECH CHAMBER SYSTEM FOR THIS SPECIFIC PROJECT HAS NOT BEEN DETERMINED. IT IS THE ULTIMATE RESPONSIBILITY OF THE DESIGN ENGINEER TO ASSURE THAT THE STORMWATER SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. STORMTECH PRODUCTS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMTECH'S MINIMUM REQUIREMENTS. STORMTECH LLC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS. THE DESIGNING ENGINEER IS RESPONSIBLE FOR ALL DESIGN DECISIONS.

StormTech	20 Beaver Road, Suite 104 Wethersfield, CT 06109 Phone: 888-892-2694 Fax: 866-328-8401 www.stormtech.com
ISOLATOR ROW MANIFOLD DETAIL	
SCALE: NTS	CHECKED
DATE: 9/25//2007	ACAD NO.
DRAWN BY:	SHEET OF



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W x H x INSTALLED LENGTH) -	*51.0" x 30.0" x 85.4"*
CHAMBER STORAGE -	*45.9 CUBIC FEET*
MINIMUM INSTALLED STORAGE -	*74.9 CUBIC FEET*
WEIGHT -	*75 LBS.*

STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "T"

STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH "B"

PART #	CHAMBER	PIPE SIZE	A	B	C
SC740EPE06T	SC-740	6 in (150 mm)	10.90 in (277 mm)	18.50 in (470 mm)	N/A
SC740EPE06B	SC-740	6 in (150 mm)	10.90 in (277 mm)	N/A	0.50 in (13 mm)
SC740EPE08T	SC-740	8 in (200 mm)	12.20 in (310 mm)	16.50 in (419 mm)	N/A
SC740EPE08B	SC-740	8 in (200 mm)	12.20 in (310 mm)	N/A	0.60 in (15 mm)
SC740EPE10T	SC-740	10 in (250 mm)	13.40 in (340 mm)	14.50 in (368 mm)	N/A
SC740EPE10B	SC-740	10 in (250 mm)	13.40 in (340 mm)	N/A	0.70 in (18 mm)
SC740EPE12T	SC-740	12 in (300 mm)	14.70 in (373 mm)	12.50 in (318 mm)	N/A
SC740EPE12B	SC-740	12 in (300 mm)	14.70 in (373 mm)	N/A	1.20 in (30 mm)
SC740EPE15T	SC-740	15 in (375 mm)	18.40 in (467 mm)	9.00 in (229 mm)	N/A
SC740EPE15B	SC-740	15 in (375 mm)	18.40 in (467 mm)	N/A	1.30 in (33 mm)
SC740EPE18T	SC-740	18 in (450 mm)	19.70 in (500 mm)	5.00 in (127 mm)	N/A
SC740EPE18B	SC-740	18 in (450 mm)	19.70 in (500 mm)	N/A	1.60 in (41 mm)
★ SC740EPE24B	SC-740	24 in (600 mm)	18.50 in (470 mm)	N/A	0.10 in (3 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

★ FOR THE SC740EPE24B THE 24" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SETS LEVEL.

* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

STORMTECH LLC CONCEPTUAL PLAN DISCLAIMER
THIS STORMTECH CHAMBER SYSTEM LAYOUT WAS PRODUCED TO DEMONSTRATE A BED LAYOUT THAT WILL HANDLE THE DESIGN VOLUME LISTED ABOVE. THE SIZING, FIT AND APPLICABILITY OF THE STORMTECH CHAMBER SYSTEM FOR THIS SPECIFIC PROJECT HAS NOT BEEN DETERMINED. IT IS THE ULTIMATE RESPONSIBILITY OF THE DESIGN ENGINEER TO ASSURE THAT THE STORMWATER SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. STORMTECH PRODUCTS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMTECH'S MINIMUM REQUIREMENTS. STORMTECH LLC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS. THE DESIGNING ENGINEER IS RESPONSIBLE FOR ALL DESIGN DECISIONS.

StormTech	20 Beaver Road, Suite 104 Wethersfield, CT 06109 Phone: 888-892-2694 Fax: 866-328-8401 www.stormtech.com
SC-740_TECHNICAL_SPECIFICATIONS	
SCALE: NTS	CHECKED
DATE:	ACAD NO.
DRAWN BY:	SHEET OF

THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS

FOR STORMTECH INFORMATION CALL 1-888-892-2694

*SEE STORMTECH DESIGN MANUAL

* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

STORMTECH LLC CONCEPTUAL PLAN DISCLAIMER
THIS STORMTECH CHAMBER SYSTEM LAYOUT WAS PRODUCED TO DEMONSTRATE A BED LAYOUT THAT WILL HANDLE THE DESIGN VOLUME LISTED ABOVE. THE SIZING, FIT AND APPLICABILITY OF THE STORMTECH CHAMBER SYSTEM FOR THIS SPECIFIC PROJECT HAS NOT BEEN DETERMINED. IT IS THE ULTIMATE RESPONSIBILITY OF THE DESIGN ENGINEER TO ASSURE THAT THE STORMWATER SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. STORMTECH PRODUCTS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMTECH'S MINIMUM REQUIREMENTS. STORMTECH LLC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS. THE DESIGNING ENGINEER IS RESPONSIBLE FOR ALL DESIGN DECISIONS.

StormTech	20 Beaver Road, Suite 104 Wethersfield, CT 06109 Phone: 866-328-8401 Fax: 866-328-8401 www.stormtech.com
STORMTECH SC-740 CROSS SECTION	
SCALE: NTS	CHECKED
DATE:	ACAD NO.
DRAWN BY:	SHEET OF

STORMTECH GENERAL NOTES

1. STORMTECH LLC ("STORMTECH") REQUIRES INSTALLING CONTRACTORS TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
2. OUR TECHNICAL SERVICES DEPARTMENT OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICES REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE-INSTALLATION CONSULTATION. OUR REPRESENTATIVES CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEMS CONSTRUCTION. CALL **1-888-892-2694** TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT **WWW.STORMTECH.COM** TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
3. STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVERS, ETC.): MINIMUM COVER IS 18 INCHES NOT INCLUDING PAVEMENT; MAXIMUM COVER IS 96 INCHES INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES, MAXIMUM COVER IS 96 INCHES.
4. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
5. AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
6. STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
7. BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
8. THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: **WWW.STORMTECH.COM**. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMWATER SYSTEM. TEMPORARY FENCING, WARNING TAPE AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
9. THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMWATER SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
10. STORMTECH PRODUCT WARRANTY IS LIMITED. SEE CURRENT PRODUCT WARRANTY FOR DETAILS. TO ACQUIRE A COPY CALL STORMTECH AT **1-888-892-2694** OR VISIT **WWW.STORMTECH.COM**.

* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN ACCORDANCE WITH STORMTECH DESIGN MANUAL

STORMTECH LLC CONCEPTUAL PLAN DISCLAIMER
THIS STORMTECH CHAMBER SYSTEM LAYOUT WAS PRODUCED TO DEMONSTRATE A BED LAYOUT THAT WILL HANDLE THE DESIGN VOLUME LISTED ABOVE. THE SIZING, FIT AND APPLICABILITY OF THE STORMTECH CHAMBER SYSTEM FOR THIS SPECIFIC PROJECT HAS NOT BEEN DETERMINED. IT IS THE ULTIMATE RESPONSIBILITY OF THE DESIGN ENGINEER TO ASSURE THAT THE STORMWATER SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. STORMTECH PRODUCTS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMTECH'S MINIMUM REQUIREMENTS. STORMTECH LLC DOES NOT APPROVE PLANS, SIZING, OR SYSTEM DESIGNS. THE DESIGNING ENGINEER IS RESPONSIBLE FOR ALL DESIGN DECISIONS.

StormTech	20 Beaver Road, Suite 104 Wethersfield, CT 06109 Phone: 888-892-2694 Fax: 866-328-8401 www.stormtech.com
STORMTECH GENERAL NOTES	
SCALE: NTS	CHECKED
DATE:	ACAD NO.
DRAWN BY:	SHEET OF

Reeve & Associates, Inc
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
24-02-01	RH City Comments
24-07-09	RH Client Changes
24-08-22	NF Grading & Drainage
24-09-20	NF City Comments

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Drainage Details

Revised: 2024-07-09

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

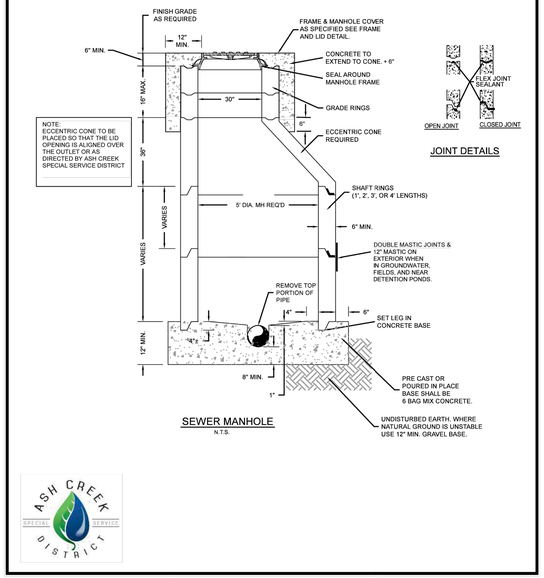
Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C7.3
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

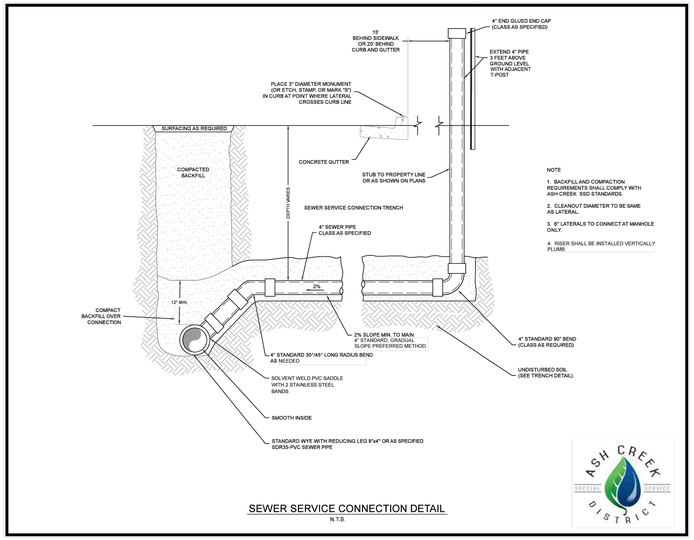
Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On



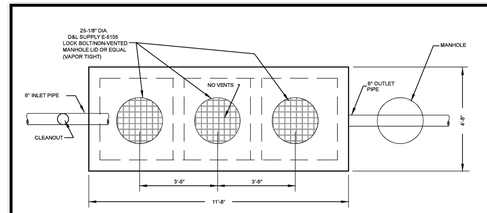
SEWER MANHOLE
N.T.S.

JOINT DETAILS

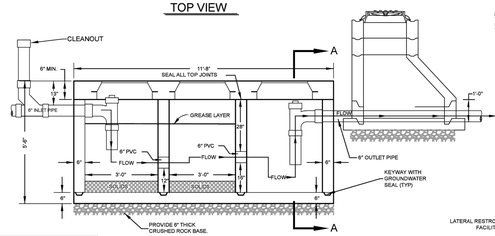


NOTE
1. BACKFILL AND COMPACTION REQUIREMENTS SHALL COMPLY WITH ASH CREEK SSD STANDARDS.
2. CLEANOUT DIAMETER TO BE SAME AS LATERAL.
3. 8" LATERALS TO CONNECT AT MANHOLE ONLY.
4. RISER SHALL BE INSTALLED VERTICALLY PLUMB.

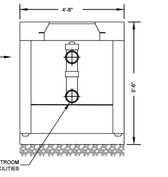
SEWER SERVICE CONNECTION DETAIL
N.T.S.



TOP VIEW



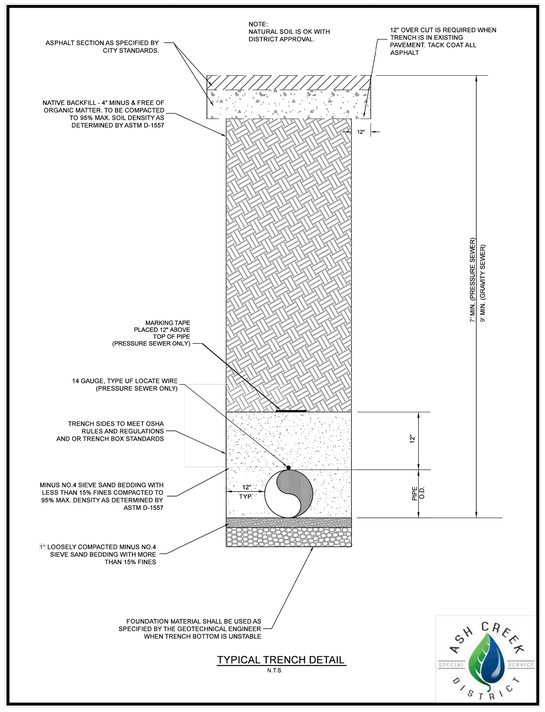
FRONT X-SECTION VIEW



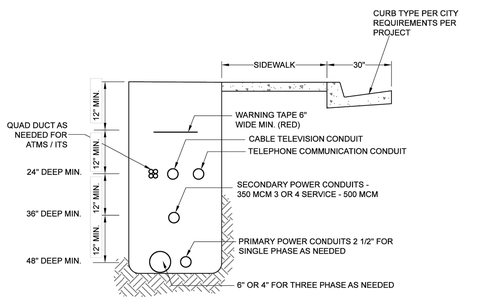
SIDE X-SECTION A-A

NOTES:
1- MATERIAL SPEC'S:
A. CONCRETE PORTLAND CEMENT TYPE II. MINIMUM COMPRESSIVE STRENGTH=4000 PSI AT 28 DAYS.
B. REINFORCING BAR INTERMEDIATE GRADE ASTM A615.
C. REINFORCING WELDED WIRE MESH ASTM A185
2- ALL DIMENSIONS +/- NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
3- PRECAST UNIT TO BE PLACED ON NATURAL SOIL OR APPROVED COMPACTED FILL.
4- STANDARD GROUND WATER SEAL- BUTYL ROPE MASTIC OR CEMENT MORTAR.
5- PRIOR TO BACKFILLING, INTERCEPTOR SHALL BE TESTED. TANK SHALL BE EXPOSED ON ALL SIDES AND FILLED WITH WATER AND SHALL HOLD WATER FOR A MINIMUM TEST PERIOD OF TWO HOURS.
6- CLEANOUT SIZE TO MATCH INLET/OUTLET SIZE.
7- NOT TO EXCEED 5' COVER OVER SAND TRAP INTERCEPTOR

GREASE AND SAND INTERCEPTOR DETAIL
N.T.S.



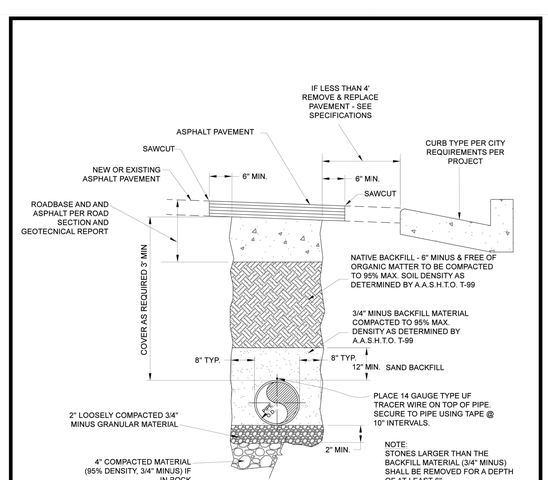
TYPICAL TRENCH DETAIL
N.T.S.



NOTE:

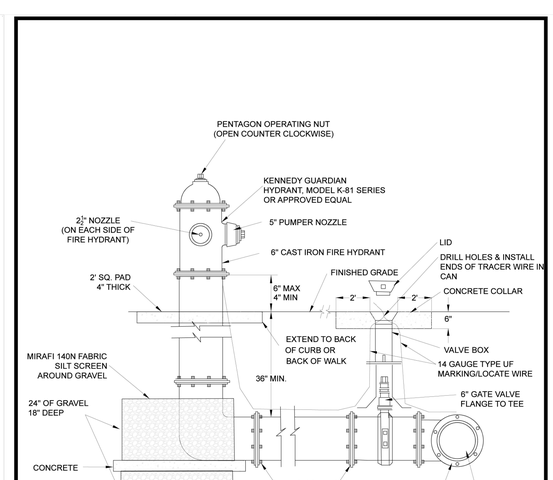
*BURIAL DEPTH MEASURED TO CENTER OF CONDUIT

CITY OF HURRICANE ENGINEERING		
REVISIONS: DATE / DESCRIPTION / BY	JOINT UTILITIES TRENCH DETAIL	STANDARD DWG. NO.: TD 101 | 1 OF 1; APPROVED: ; DATE: APRIL 2020 | BY: H.C.E.



CULINARY WATER TRENCH
N.T.S.

CITY OF HURRICANE		
REVISIONS: DATE / DESCRIPTION / BY	CULINARY WATER TRENCH DETAIL	STANDARD DWG. NO.: WD 300 | 1 OF 1; APPROVED: ; DATE: 8/5/2020 | BY: H.C.E.



NOTE:

IN GENERAL, HYDRANTS SHALL BE PLACED A MINIMUM OF 6" AND A MAXIMUM OF 12" BEHIND SIDEWALK. WHERE A PLANTER STRIP IS USED, HYDRANT MAY BE PLACED IN CENTER PROVIDED WIDTH OF PLANTER IS 4' OR GREATER

STANDARD FIRE HYDRANT
N.T.S.

CITY OF HURRICANE		
REVISIONS: DATE / DESCRIPTION / BY	STANDARD FIRE HYDRANT DETAILS	STANDARD DWG. NO.: WD 302 | 1 OF 1; APPROVED: ; DATE: APRIL 2020 | BY: H.C.E.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION	
24-02-01	City Comments	RH
24-07-09	Client Changes	RH
24-08-22	Grading & Drainage	NF
24-09-20	City Comments	NF

Revised: 2024-07-09

Rush Funplex
Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

City Details

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.

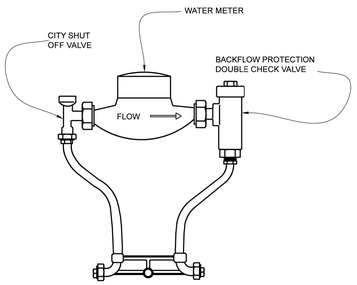
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C7.4
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On



APPROVED METER SETTERS	
SIZE	FORD MODEL NUMBER
¾"	VBHC72-15W-11-33-NL
1"	VBHC72-15W-11-44-NL
1½"	VBHH76-15B-44-66-NL
2"	VBHH77-15B-44-77-NL

WATER METER SETTER

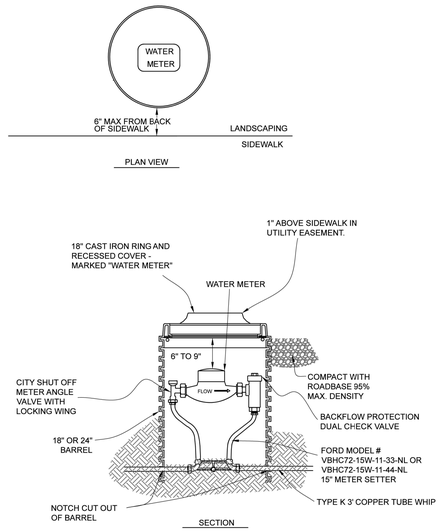
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER SETTER DETAILS

STANDARD DWG. NO.	
WD 303-1	1 OF 4
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.



WATER METER BOX

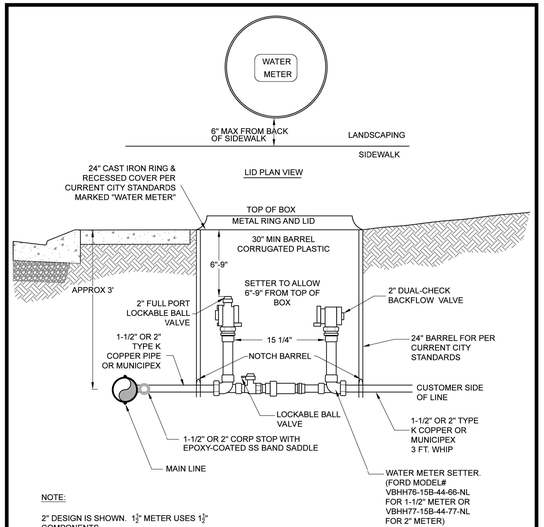
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER BOX DETAILS

STANDARD DWG. NO.	
WD 303-2	2 OF 4
APPROVED:	
DATE: 8/05/20	BY: H.C.E.



NOTE:

2" DESIGN IS SHOWN. 1½" METER USES 1½" COMPONENTS.

1½ " OR 2" WATER SERVICE & METER

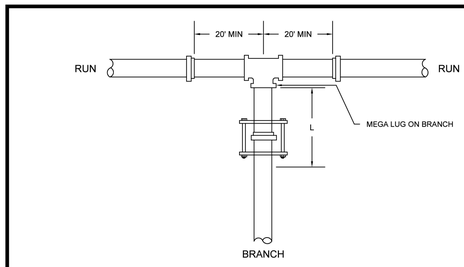
N.T.S.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

1½ " OR 2" WATER SERVICE & METER

STANDARD DWG. NO.	
WD 303-4	4 OF 4
APPROVED:	
DATE: 8/5/2020	BY: H.C.E.



RUN SIZE DIAMETER

BRANCH SIZE DIAMETER	4	6	8	10	12	14	16	18	20	24
4	*	*	*	*	*	*	*	*	*	*
6		*	*	*	*	*	*	*	*	*
8			*	*	*	*	*	*	*	*
10				19	*	*	*	*	*	*
12					52	22	*	*	*	*
14						82	56	30	5	*
16							114	88	64	18
18								143	119	73
20									172	126
24										227

* - FOR THIS CONDITION NEED ONLY RESTRAIN THE BRANCH OUTLET OF THE TEE.

RESTRAINED LENGTHS, "L" (IN FEET)

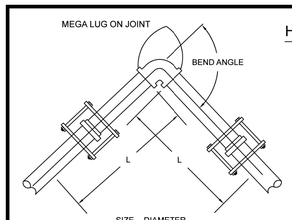
1. RESTRAIN THE TWO MECHANICAL JOINTS ON THE RUN SIDES OF THE TEE. THERE SHOULD BE A FULL 18' LENGTH OF PIPE INSTALLED ON EACH SIDE OF THE RUN.
2. ALL JOINTS WITHIN THE LENGTH "L" ON THE BRANCH MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS ON PUSH-ON PIPE PER CITY SPECIFICATION.
3. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

CITY OF HURRICANE ENGINEERING

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD TEE FOR DUCTILE IRON w/POLY WRAP RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	
WD 309	1 OF 1
APPROVED:	
DATE: OCT. 2020	BY: H.C.E.



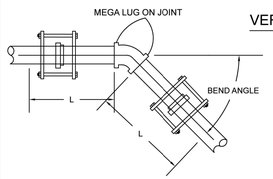
HORIZONTAL BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	3	4	5	5	6	7	8	9	9
22.5	5	7	9	10	12	14	15	17	18
45	10	13	17	21	24	28	31	34	38
90	23	32	42	50	58	66	75	82	90

RESTRAINED LENGTHS, "L" (IN FEET)



VERTICAL DOWN BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	9	12	16	19	22	25	28	31	34
22.5	17	24	31	37	44	50	56	62	68
45	35	50	65	77	91	103	116	128	145

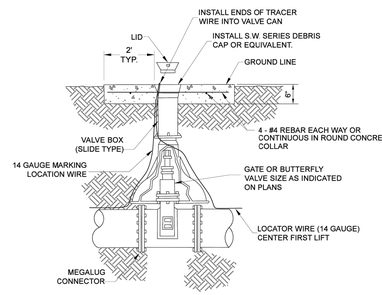
RESTRAINED LENGTHS, "L" (IN FEET)

CITY OF HURRICANE ENGINEERING

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD BENDS FOR DUCTILE IRON w/POLY WRAP RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	
WD 310	1 OF 1
APPROVED:	
DATE: OCT. 2020	BY: H.C.E.



NOTES:

1- PAD SHALL EXTEND 2'-0" BEYOND EACH VALVE BOX

2- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW & SIZE OF LINE.

CITY OF HURRICANE

REVISIONS		
DATE	DESCRIPTION	BY

MAIN LINE VALVE

STANDARD DWG. NO.	
WD 316	1 OF 1
APPROVED:	
DATE: 5/4/2021	BY: H.C.E.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Revised: 2024-07-09

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

City Details

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.

Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C7.5
15 Total Sheets

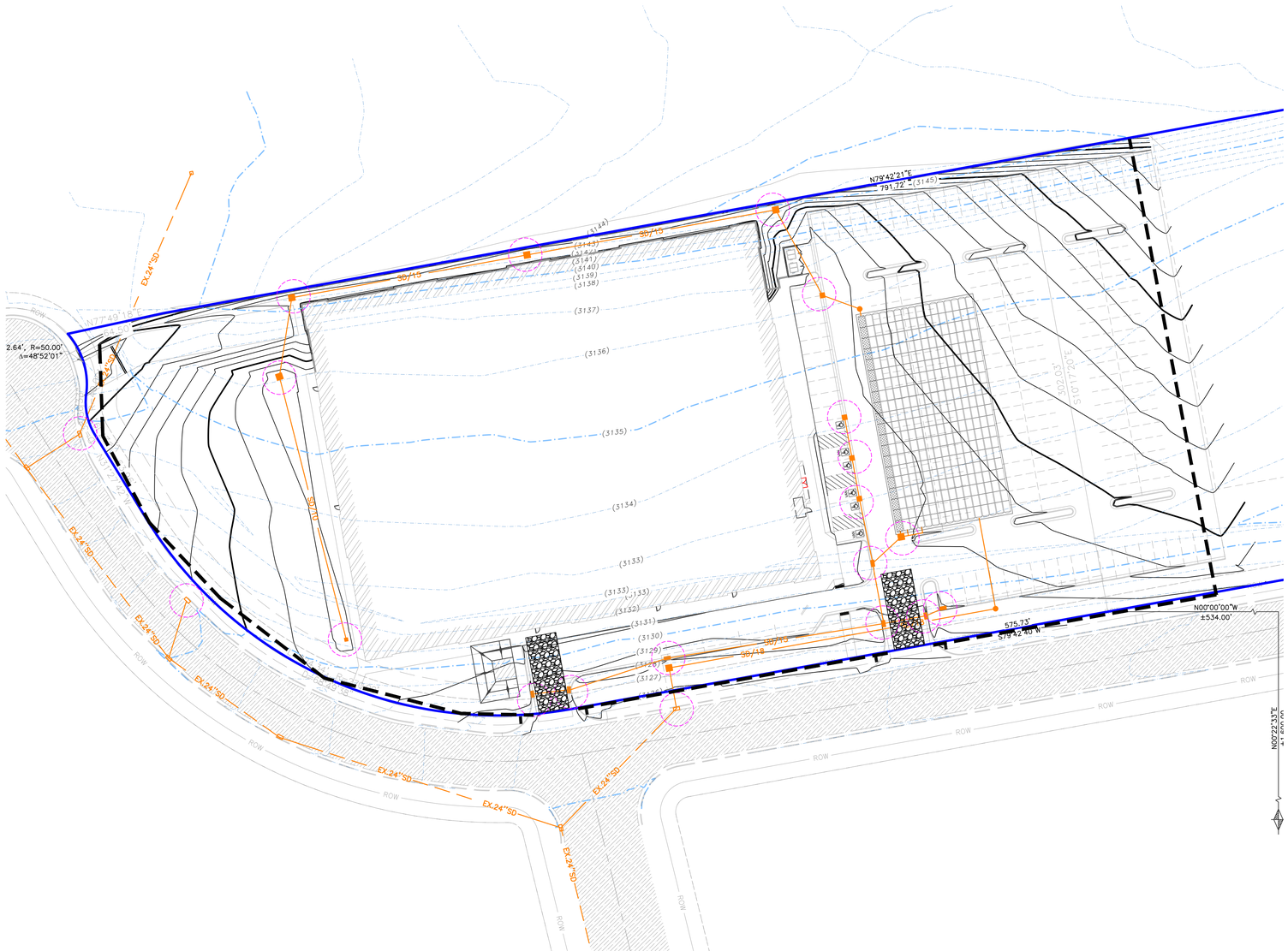
THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

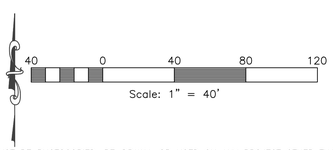
Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

RUSH FUNPLEX
HURRICANE
Storm Water Pollution Prevention Plan Exhibit

HURRICANE CITY, WASHINGTON COUNTY, UTAH
DECEMBER 2023





Vicinity Map
NOT TO SCALE

SWPPP Legend

- = PORTABLE TOILET
- = INLET PROTECTION TYP. (SEE DETAIL)
- = SILT FENCE (SEE DETAIL)
- = 50'x20' CONSTRUCTION ENTRANCE W/8" CLEAN GRAVEL
- = CONCRETE WASH AREA (SEE DETAIL) OR AS SELECTED BY CONTRACTOR

SWPPP NOTES:
1. ALL VEHICLES EXITING SITE TO PROCEED THROUGH CONSTRUCTION ENTRANCE TO REDUCE AMOUNTS OF SEDIMENT TRACKED ONTO ROADWAYS.
2. STREETS TO BE SWEPT WITHIN 1000 FEET OF CONSTRUCTION ENTRANCE DAILY IF NECESSARY

Construction Activity Schedule

- PROJECT LOCATION.....HURRICANE CITY, WASHINGTON COUNTY, UT
- PROJECT BEGINNING DATE.....DECEMBER 2023
- BMP'S DEPLOYMENT DATE.....DECEMBER 2023
- STORM WATER MANAGEMENT CONTACT / INSPECTOR.....MATT GERTGE (801) 430-0405
- SPECIFIC CONSTRUCTION SCHEDULE INCLUDING BMP CONSTRUCTION SCHEDULE TO BE INCLUDED WITH SWPPP BY OWNER/DEVELOPER

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE		DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Revised: 2024-07-09

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Storm Water Pollution Prevention Plan Exhibit

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

C8
15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

Notes:

1. Describe all BMP's to protect storm water inlets:
All storm water inlets to be protected by straw wattle barriers, or gravel bags (see detail).

2. Describe BMP's to eliminate/reduce contamination of storm water from:
   a. Equipment / building / concrete wash areas:
      To be performed in designated areas only and surrounded with silt fence barriers.
   b. Soil contaminated by soil amendments:
      If any contaminates are found or generated, contact environmental engineer and contacts listed.
   c. Areas of contaminated soil:
      If any contaminates are found or generated, contact environmental engineer and contacts listed.
   d. Fueling area:
      To be performed in designated areas only and surrounded with silt fence.
   e. Vehicle maintenance areas:
      To be performed in designated areas only and surrounded with silt fence.
   f. Vehicle parking areas:
      To be performed in designated areas only and surrounded with silt fence.
   g. Equipment storage areas:
      To be performed in designated areas only and surrounded with silt fence.
   h. Materials storage areas:
      To be performed in designated areas only and surrounded with silt fence.
   i. Waste containment areas:
      To be performed in designated areas only and surrounded with silt fence.
   j. Service areas:
      To be performed in designated areas only and surrounded with silt fence.

3. BMP's for wind erosion:
Stockpiles and site as needed to be watered regularly to eliminate / control wind erosion

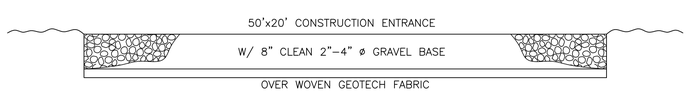
4. Construction Vehicles and Equipment:
   a. Maintenance
      – Maintain all construction equipment to prevent oil or other fluid leaks.
      – Keep vehicles and equipment clean, prevent excessive build–up of oil and grease.
      – Regularly inspect on–site vehicles and equipment for leaks, and repair immediately.
      – Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on–site.
      – Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic, and transmission fluids.
   b. Fueling
      – If fueling must occur on–site, use designated areas away from drainage.
      – Locate on–site fuel storage tanks within a bermed area designed to hold the tank volume.
      – Cover retention area with an impervious material and install in in a manner to ensure that any spills will be contained in the retention area. To catch spills or leaks when removing or changing fluids.
      – Use drip pans for any oil or fluid changes.
   c. Washing
      – Use as little water as possible to avoid installing erosion and sediment controls for the wash area.
      – If washing must occur on–site, use designated, bermed wash areas to prevent waste water discharge into storm water, creeks, rivers, and other water bodies.
      – Use phosphate–free, biodegradable soaps.
      – Do not permit steam cleaning on–site.

5. Spill Prevention and Control
   a. Minor Spills:
      Minor spills are those which are likely to be controlled by on–site personnel. After contacting local emergency response agencies, the following actions should occur upon discovery of a minor spill:
      – Contain the spread of the spill.
      – If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (i.e. absorbent materials, cat litter, and / or rags).
      – If the spill occurs in dirt areas, immediately contain the spill by constructing an earth dike. Dig up and properly dispose of contaminated soil.
      – If the spill occurs during rain, cover the impacted area to avoid runoff.
      – Record all steps taken to report and contain spill.
   b. Major Spills:
      On–site personnel should not attempt to control major spills until the appropriate and qualified emergency response staff have arrived at the site. For spills of federal reportable quantities, also notify the National Response Center at (800) 424–8802. A written report should be sent to all notified authorities. Failure to report major spills can result in significant fines and penalties.

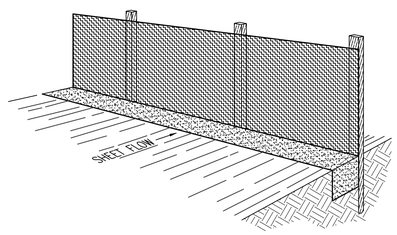
6. Post Roadway / Utility Construction
   a. Maintain good housekeeping practices.
   b. Enclose or cover building material storage areas.
   c. Properly store materials such as paints and solvents.
   d. Store dry and wet materials under cover, away from drainage areas.
   e. Avoid mixing excess amounts of fresh concrete or cement on–site.
   f. Perform washout of concrete trucks offsite or in designated areas only.
   g. Do not wash out concrete trucks into storm drains, open ditches, streets or streams.
   h. Do not place material or debris into streams, gutters or catch basins that stop or reduce the flow of runoff water.
   i. All public streets and storm drain facilities shall be maintained free of building materials, mud and debris caused by grading or construction operations. Roads will be swept within 1000' of construction entrance daily, if necessary.
   j. Install straw wattle around all inlets contained within the development and all others that receive runoff from the development.

7. Erosion Control Plan Notes
   a. The contractor will designate an emergency contact that can be reached 24 hours a day 7 days a week.
   b. A stand–by crew for emergency work shall be available at all times during potential rain or snow runoff events. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain or runoff is eminent.
   c. Erosion control devices shown on the plans and approved for the project may not be removed without approval of the engineer of record. If devices are removed, no work may continue that have the potential of erosion without consulting the engineer of record. If deemed necessary erosion control should be reestablished before this work begins.
   d. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of the slope at the conclusion of each working day. this should be confirmed by survey or other means acceptable to the engineer of record.
   e. All silt and debris shall be removed from all devices within 24 hours after each rain or runoff event.
   f. Except as otherwise approved by the inspector, all removable protective devices shown shall be in place at the end of each working day and through weekends until removal of the system is approved.
   g. All loose soil and debris, which may create a potential hazard to offsite property, shall be removed from the site as directed by the engineer of record of the governing agency.
   h. The placement of additional devices to reduce erosion damage within the site is left to the discretion of the engineer of record.
   i. Desilting basins may not be removed or made inoperable without the approval of the engineer of record and the governing agency.
   j. Erosion control devices will be modified as need as the project progresses and plans of these changes submitted for approval by the engineer of record and the governing agency.

8. Conduct a minimum of one inspection of the erosion and sediment controls every two weeks. Maintain documentation on site.
   a. Part III.D.4 of general permit UTRC00000 identifies the minimum inspection requirements.
   b. Part II.D.4.C identifies the minimum inspection report requirements.
   c. Failure to complete and/or document storm water inspections is a violation of part III.D.4 of Utah General Permit UTR 300000.

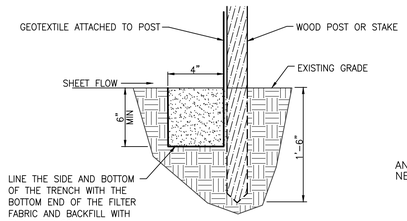


Cross Section 50' x 20' Construction Entrance



Perspective View

Figure 2



Section

INSTALLATION
The silt fence should be installed prior to major soil disturbances in the drainage area. The fence should be placed across the slope along a line of uniform elevation wherever flow of sediment is anticipated. Table 1 shows generally–recommended maximum slope lengths (slope spacing between fences) at various site grades for most silt fence applications.

TABLE 1:
Recommended Maximum Slope Lengths for Silt Fence
(Richardson & Middlebrooks, 1991)

Slope Steepness (%)	Max. Slope Length m (ft)
<2%	30.5m (100ft)
2–5%	22.9m (75ft)
5–10%	15.2m (50ft)
10–20%	7.6m (25ft)
>20%	4.5m (15ft)

PREFABRICATED SILT FENCE ROLLS
*Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location.
*Unroll the silt fence, positioning the post against the downstream wall of the trench.
*Adjacent rolls of silt fence should be joined be nesting the end post of one fence into the other. Before nesting the end posts, rotate each post until the geotextile is wrapped completely around the post, then abut the end posts to create a tight seal as shown in Figure 1.
*Drive posts into the ground until the required fence height and/or anchorage depth is obtained.
*Bury the loose geotextile at the bottom of the fence in the upstream trench and backfill with natural soil, tamping the backfill to provide good compaction and anchorage. Figure 2 illustrates a typical silt fence installation and anchor trench placement.

FIELD ASSEMBLY:
*Excavate a minimum 15.2cm x 15.2cm (6"x6") trench at the desired location.
*Drive wooden posts, or steel posts with fastening projections, against the downstream wall of the trench. Maximum post spacing should be 2.4–3.0m (8–10ft). Post spacing should generally be less than three (3) times the height of the fence.
*If a steel or plastic mesh is required to reinforce the geotextile, it shall have a minimum mesh opening of 15.2cm (6").
*Fasten the mesh to the upslope side of the posts using heavy duty wire staples, tie wires or hog strings. Extend the mesh into the bottom of the trench.
*The geotextile shall then be stapled or wired to the posts. An extra 20–50cm (8–20") of geotextile shall extend into the trench.

INSPECTION
*Inspect the silt fence daily during periods of rainfall, immediately after significant rainfall event and weekly during periods of no rainfall. Make any repairs immediately.
*When sediment deposits behind the silt fence are one–third of the fence height, remove and properly dispose of the silt accumulations. Avoid damage to the fabric during cleanout.

REMOVAL
*Silt fence should not be removed until construction ceases and the upslope area has been properly stabilized and/or revegetated.

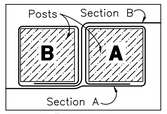
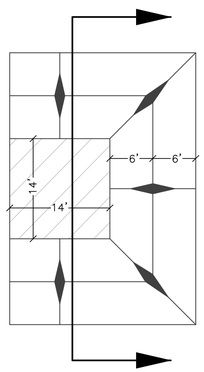
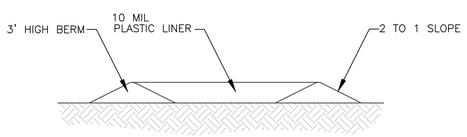


Figure 1:
Top View of
Roll–to–Roll Connection

Silt Fence Detail

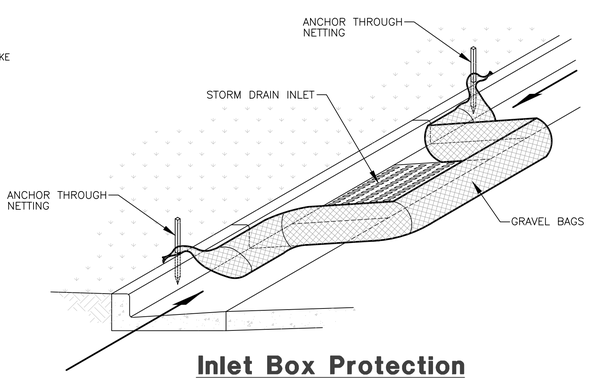
SCALE: NONE



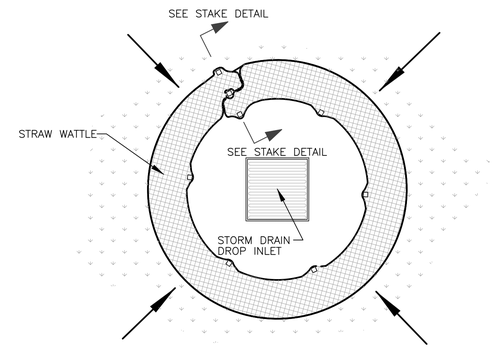


Concrete Washout Area w/ 10 mil Plastic Liner

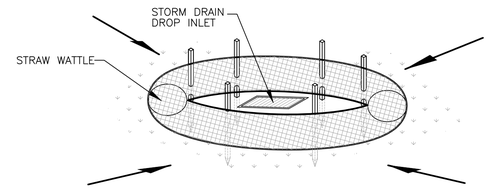
SCALE: NONE



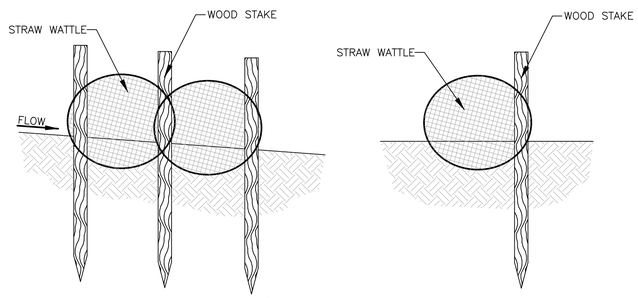
Inlet Box Protection



Plan View



Drop Inlet Protection



Stake Detail

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621–3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
24–02–01 RH	City Comments
24–07–09 RH	Client Changes
24–08–22 NF	Grading & Drainage
24–09–20 NF	City Comments

Revised: 2024-07-09

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

Storm Water Pollution Prevention Plan Details

REGISTERED PROFESSIONAL ENGINEER
5338480
JEREMY A. DRAPER
09/20/2024
STATE OF UTAH

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155–02

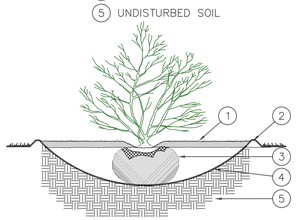
C9
15 Total Sheets

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE–DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc. - Solutions You Can Build On

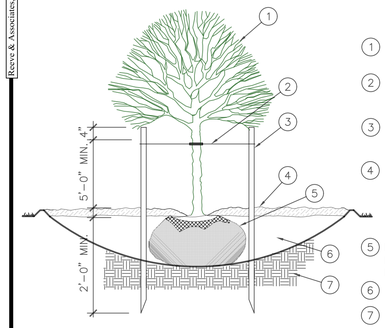
1. 3" OF BARK/ROCK MULCH. BRUSH AWAY FROM STEM
2. 3" EARTH BERM SAUCER. REMOVE AFTER ONE YEAR
3. REMOVE BURLAP/PACKAGING MAT. PLANT SHRUBS 2"–3" HIGHER THAN GRADE.
4. BACKFILL WITH NATIVE SOIL
5. UNDISTURBED SOIL



NOTE: DIG HOLE THREE TIMES THE WIDTH AND AS DEEP AS ROOTBALL.

SHRUB PLANTING

NTS



1. PRUNE ALL DEAD AND INJURED WOOD. DO NOT CUT LEADER.
2. LOOSELY TIE TO ALLOW FOR TREE MOVEMENT, BUT SECURED FOR HIGH WIND CONDITIONS.
3. METAL T–POSTS, 2 PER TREE. REMOVE POSTS & TIES AFTER ONE YEAR.
4. CONSTRUCT 4" EARTH BERM SAUCER. FILL WITH 3" BARK/ROCK MULCH. BRUSH AWAY FROM TRUNK. REMOVE SAUCER AFTER ONE YEAR.
5. REMOVE BURLAP/PACKAGING MAT. PLANT TREES 2"–3" HIGHER THAN GRADE.
6. BACKFILL WITH NATIVE SOIL
7. UNDISTURBED SOIL

NOTE: DIG HOLE THREE TIMES THE WIDTH AND AS DEEP AS ROOTBALL.

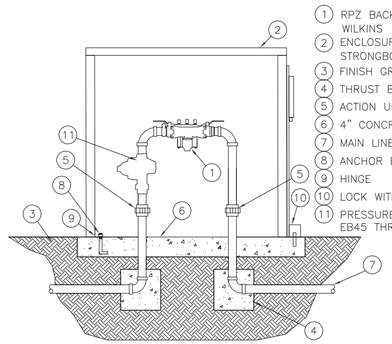
DECIDUOUS TREE PLANTING

NTS

PLANTING NOTES

1. This planting plan is diagrammatic and plant locations are approximate. Contractor to verify all quantities and do their own takeoffs.
2. Field survey, stake, and string the layout and locations of site construction features for approval before actual construction. The layout shall conform to the exact location and grades of the intended work to be done.
3. Coordinate all aspects of the planting plans with the irrigation system and call the attention of the owners representative to any conflict in placement of plants in relation to sprinkler heads, lines and valves at the time the landscape installation phase takes place.
4. Finish grade of soil in lawn areas shall be 2" below pads, walks, paving, headers and curbs to accommodate sod. Grades in areas when seeded shall be 1" lower than adjacent edge.
5. Native topsoil shall be stockpiled and stored on site whenever possible for use in landscape areas.
6. All sod areas shall receive a minimum 4" depth of native topsoil and shrub beds shall receive a minimum of 8" of native topsoil.
7. Imported topsoil, when required, shall come from a reputable source, have a loam consistency and be free of weeds and debris.
8. Face each shrub to give the most pleasing look as seen from a line perpendicular to the wall or walk to/from which it is viewed.
9. Edging or Curbing shall be installed as shown on the plan to separate grass from shrub beds.
10. Shrub beds shall drain properly to prevent standing water from occurring. Call improperly draining planters or planting beds to the attention of the owners representative before planting. Provide positive drainage away from all structures and walls. Slope landscape areas 2% minimum.
11. Place mulch in all shrub beds and perennial areas. See schedule for depth and type. Do not crowd out small perennial plants with excessive mulch.
12. Provide a 3' minimum diameter circle "tree ring" around trees that are placed within lawn areas. Place a 3" min. depth of mulch. Use shredded bark mulch or match mulch being used for shrub beds.
13. The contractor shall maintain all work until work is complete and accepted by the Owner. The contractor shall maintain and guarantee all work for a period of THIRTY DAYS from the date of final acceptance by the Owner. Maintenance shall include mowing, weeding, fertilizing and irrigating.

1. RPZ BACKFLOW PREVENTER WILKINS 975XL2
2. ENCLOSURE STRONGBOX SBBC–30AL
3. FINISH GRADE
4. THRUST BLOCK
5. ACTION UNION
6. 4" CONCRETE PAD
7. MAIN LINE
8. ANCHOR BOLTS "L" STYLE
9. HINGE
10. LOCK WITH COVER
11. PRESSURE REDUCER VALVE EB45 THREADED NPT



BACKFLOW PREVENTER

NTS

0 0 0 0 0

Scale: 1" = 0'

PLANT TABLE

TREES

Quantity	Symbol	Scientific Name	Common Name	Size	Dia.
13		Celtis occidentalis 'Prairie Sentinel'	Prairie Sentinel Hackberry	1.5" cal.	12'
26		Pistacia chinensis	Chinese Pistache	1.5 cal.	35'
3		Gleditsia triacanthos 'Imperial'	Imperial Honey Locust	2" cal.	35'
7		Prosopis glandulosa glandulosa	Texas Honey Mesquite	1.5" cal.	30'

SHRUBS

Quantity	Symbol	Scientific Name	Common Name	Size	Dia.	Area
80		Rhus aromatica 'Gro–Low'	Gro–Low Sumac	5 gal.	8'	50
42		Salvia dorrii	Dorr Sage	1 gal.	2.5'	5

3,895 sf

OTHER

Symbol	Description	Type
	Rock Mulch – Red or Brown Color Place mulch over 5 ounce Professional weed barrier cloth in all planting beds. Contractor to provide samples to owner for approval prior to delivery.	2" Diameter 3" Depth

Street frontage		915 LF
Trees Required	(1 per 35 lf of street frontage)	26 Trees
Trees Provided		26 Trees
Shrubs Required	(3 per 35 lf of street frontage)	78 Shrubs
Shrubs Provided		80 Shrubs
Parking Lot	(188 Stalls)	66,761 s.f.
Parking Lot Landscaping Required	(7% of Parking Lot)	4,673 s.f.
Parking Lot Landscaping Provided	(7% of Parking Lot)	4,673 s.f.
Parking Lot Landscaping Required	(1 tree per 10 stalls)	19 Trees
Parking Lot Landscaping Provided		19 Trees
Parking Lot Landscaping Required	(2 shrubs per 10 stalls)	38 Shrubs
Parking Lot Landscaping Provided		39 Shrubs
Ground Treatment		
Ground Treatment Required	(15% plant coverage)	3,707 s.f.
Ground Treatment Provided	(16% plant coverage)	3,895 s.f.

Reeve & Associates, Inc.
5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405
TEL: (801) 621-3100 www.reeve.co
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DESCRIPTION	DATE

Revised: 2024-07-09

Rush Funplex Hurricane

HURRICANE CITY, WASHINGTON COUNTY, UTAH

Landscape Plan

LICENSED LANDSCAPE ARCHITECT
6431661
NATHAN C. PETERSON
09/20/2024
STATE OF UTAH

Project Info.

Engineer: J. NATE REEVE, P.E.
Drafter: N. PETERSON
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155–02

C10

15 Total Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE–DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

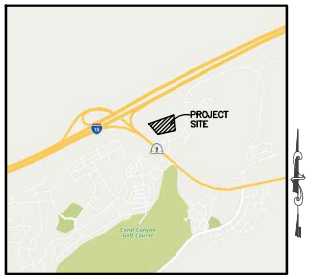
Reeve & Associates, Inc. - Solutions You Can Build On

Project Narrative/Notes/Revisions

1. 12/22/2023 RH – COMPLETED DESIGN FOR CLIENT & CITY REVIEW.
2. 02/01/2024 RH – REVISED PLANS PER CITY COMMENTS.
3. 07/09/2024 RH – REVISED PLANS PER CLIENT CHANGE.
4. 08/22/2024 NF – REVISED GRADING & DRAINAGE.
5. 09/20/2024 NF – REVISED PLANS PER CITY COMMENTS.

RUSH FUNPLEX
HURRICANE
Site Construction Plans

HURRICANE CITY, WASHINGTON COUNTY, UTAH
DECEMBER 2023



Vicinity Map
NOT TO SCALE

HURRICANE VALLEY FIRE SSD, JOE DECKER DATE

ASH CREEK SEWER DISTRICT, AMBER GILLETTE DATE

QUESTAR GAS COMPANY/DOMINION ENERGY, DATE

TDS TELECOM, DATE

QWEST COMMUNICATIONS, DATE

PLANNING, DATE

POWER DEPT., CITY OF HURRICANE, BRIAN ANDERSON DATE

PARKS DEPT., CITY OF HURRICANE, DARREN BARNEY DATE

WATER DEPT., CITY OF HURRICANE, KEN RICHINS DATE

STREETS DEPT., CITY OF HURRICANE, ANGIE TRIPP DATE

CITY ENGINEER, CITY OF HURRICANE, ARTHUR LEBARON DATE

PUBLIC WORKS DIRECTOR, CITY OF HURRICANE, MIKE VERCIMACK DATE

HURRICANE CITY GIS, DATE

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT, DATE

INFOWEST, DATE

Sheet Index

Sheet C1 - Cover/Index Sheet
Sheet C2 - Notes/Legend Sheet
Sheet C3 - Existing Site Plan
Sheet C4 - Proposed Site Plan
Sheet C5 - Grading & Drainage Plan
Sheet C5.1 - Storm Drain Section
Sheet C5.2 - Storm Drain Section
Sheet C6 - Utility Plan
Sheet C7 - Civil Details
Sheet C7.1 - Civil Details
Sheet C7.2 - Drainage Details
Sheet C7.3 - Drainage Details
Sheet C7.4 - City Details
Sheet C7.5 - City Details
Sheet C8 - Storm Water Pollution Prevention Plan Exhibit
Sheet C9 - Storm Water Pollution Prevention Plan Details
Sheet C10 - Landscape Plan

Site Information

APN#H-4-2-5-127-CJ1
HURRICANE, WASHINGTON COUNTY, UTAH

PROPERTY ZONE.....GC

TOTAL PARCEL AREA.....193,618 s.f.		
BUILDING AREA.....70,946 s.f.	36.6%	
HARD SURFACED AREA.....77,390 s.f.	40.0%	
LANDSCAPE AREA.....45,282 s.f.	23.4%	

AUTO PARKING PROVIDED.....175 STALLS
ADA PARKING PROVIDED.....6 STALLS

Notice:
THESE PLANS WERE CREATED UTILIZING COLORS FOR UTILITIES & OTHER INFRASTRUCTURE. IF PRINTED IN, OR COPIED TO BLACK & WHITE, SOME LINE WORK MAY NOT SHOW UP PROPERLY.

40 0 40 80 120
Scale: 1" = 40'

Engineer's Notice To Contractors:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM AVAILABLE INFORMATION PROVIDED BY OTHERS. THE LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO CONTACT THE UTILITY COMPANIES AND TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN, AND ANY OTHER LINES OBTAINED BY THE CONTRACTOR'S RESEARCH, AND OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

Elevation Datum:
Site Benchmark:
Brass Cap Monument at the E/4 Corner of Section 5.
Elevation = 3192.093'

811 Know what's below. Call before you dig.

Architect:
Nick Brady
Samuel J. Brady Architects
200 E. South Temple, Ste. 160
Salt Lake City, Utah, 84111
PH: (801) 652-5951

Geotechnical Report:
Dated: January 30, 2019
Landmark Testing & Engineering
795 East Factory Drive
St. George, Utah 84790

Surveyor:
Jason Felt
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100

Landscape Architect:
Nathan Peterson
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH: (801) 621-3100

Developer Contact:
Matt Gertge
mattgertge1@yahoo.com
PH: (801) 430-0405

Project Contact:
Jeremy Draper
Reeve & Associates, Inc.
5160 South 1500 West
Riverdale, Utah, 84405
PH:(801) 621-3100

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF REEVE & ASSOCIATES, INC., 5160 SOUTH 1500 WEST, RIVERDALE, UTAH 84405, AND SHALL NOT BE PHOTOCOPIED, RE-DRAWN, OR USED ON ANY PROJECT OTHER THAN THE PROJECT SPECIFICALLY DESIGNED FOR, WITHOUT THEIR WRITTEN PERMISSION. THE OWNERS AND ENGINEERS OF REEVE & ASSOCIATES, INC. DISCLAIM ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE PLANS OR THE DESIGN THEREON WITHOUT THEIR CONSENT.

Reeve & Associates, Inc. – Solutions You Can Build On

Reeve & Associates, Inc.
5160 South 1500 West, Riverdale, Utah 84405
TEL: (801) 621-3100 www.reeve-assoc.com
CIVIL ENGINEERS • STRUCTURAL ENGINEERS • LAND PLANNERS • SURVEYORS

REVISIONS

DATE	BY	DESCRIPTION
24-02-01	RH	City Comments
24-07-09	RH	Client Changes
24-08-22	NF	Grading & Drainage
24-09-20	NF	City Comments

Rush Funplex Hurricane
HURRICANE CITY, WASHINGTON COUNTY, UTAH

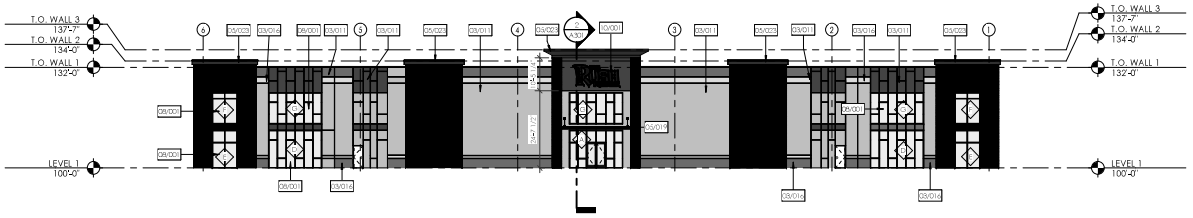
Cover/Index Sheet

Revised: 2024-07-09

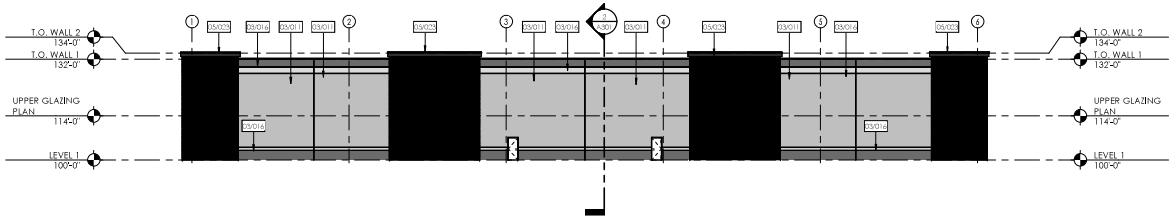
REGISTERED PROFESSIONAL ENGINEER
JASON R. FELT
5334280
STATE OF UTAH
09/20/2024

Project Info.
Engineer: JEREMY A. DRAPER, P.E.
Drafter: R. HANSEN
Begin Date: DECEMBER 2023
Name: RUSH FUNPLEX HURRICANE
Number: 8155-02

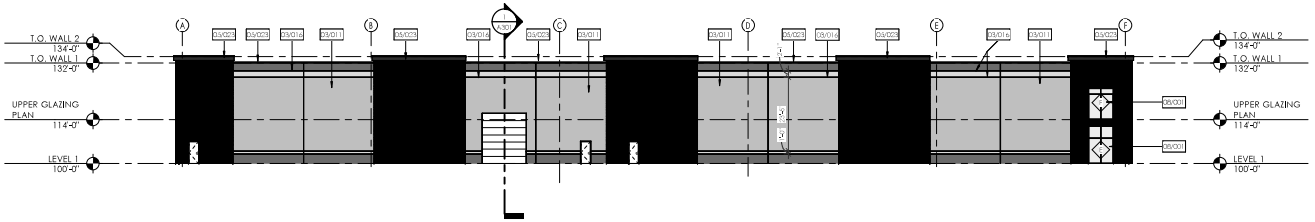
C1
15 Total Sheets



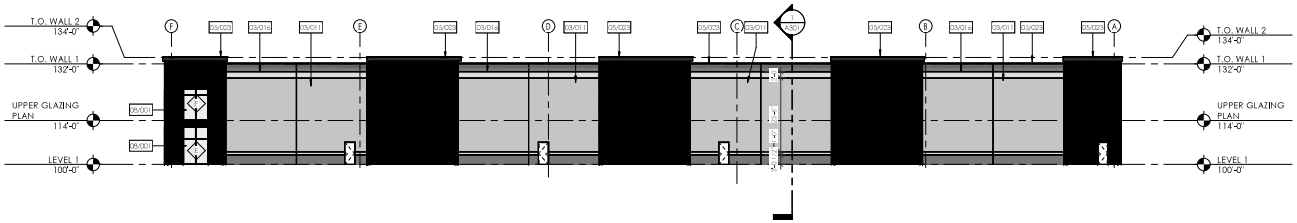
4 A201 **ELEVATION 4**
1/16" = 1'-0"



3 A201 **ELEVATION 3**
1/16" = 1'-0"



2 A201 **ELEVATION 2**
1/16" = 1'-0"



1 A201 **ELEVATION 1**
1/16" = 1'-0"

EXTERIOR ELEVATION FINISH LEGEND:

- PAINTED CONCRETE: SHERWIN WILLIAMS SW 7674: PEPPERCORN
- PAINTED CONCRETE: SHERWIN WILLIAMS SW 7039: BIXBE
- PAINTED CONCRETE: SHERWIN WILLIAMS SW 6074: SPALDING GRAY
- PAINTED CONCRETE: SHERWIN WILLIAMS SW 7029: CLASSICAL WHITE
- FORMLINER: CUSTOM ROCK PATTERN # 4010 3/4" DEEP RIB @ 4' O.C.; PAINTED SW 6074 SPALDING GRAY
- GLAZING: SEE GLAZING ELEVATIONS

GENERAL EXTERIOR FINISH NOTES:

1. ALL EXTERIOR CONCRETE WALLS THAT REQUIRE PAINTING SHALL BE SACK AND PATCHED PRIOR TO PAINTING.
2. REFER TO ELECTRICAL SHEETS FOR ALL EXTERIOR LIGHTING AND COORDINATE ALL NECESSARY POWER LOCATIONS APPROPRIATELY.
3. SEE DETAILS FOR TYPICAL CONCRETE REVEALS AND PANEL JOINTS.
4. CAULK AND SEAL ALL EXTERIOR JOINTS WITH APPROVED POLYURETHANE SEALANT.
5. REFER TO MECHANICAL COMCHECK FOR GLAZING STANDARDS.
6. EXTERIOR FINISHES AND SAMPLES MUST BE PRESENTED AND APPROVED PRIOR TO APPLICATION.
7. ALL PRODUCTS MUST BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATION AND MUST COMPLY WITH ALL WIND LOADING PER THE GENERAL STRUCTURAL NOTES.

GENERAL NOTES

1. CONTRACTOR TO PROVIDE SUBMITTALS FOR REVIEW.
2. ALL GLAZING WITHIN 24" INCH OF A DOOR/FLOOR SHALL BE TEMPERED.
3. COORDINATE GRADING WITH CIVIL.
4. SEE DETAILS FOR WINDOW HEADER, JAMB AND SILL DETAILS.
5. ALL EXTERIOR GLASS TO BE DOUBLE PANE TINTED AND TO BE LOW E. VERIFY GLASS SPECIFICATIONS WITH COMCHECK PROVIDED BY MECHANICAL ENGINEER.
6. REFER TO MECHANICAL COMCHECK FOR MINIMUM DESIGN STANDARDS FOR GLAZING.
7. ALL EXTERIOR CONCRETE WALLS THAT REQUIRE PAINTING SHALL BE SACK AND PATCHED PRIOR TO PAINTING.
8. REFER TO ELECTRICAL SHEETS FOR ALL EXTERIOR LIGHTING AND COORDINATE ALL NECESSARY POWER LOCATIONS APPROPRIATELY. ALL CONDUIT REQUIRED FOR EXTERIOR LIGHTING TO BE HIDDEN ON THE INTERIOR SIDE OF W ALLS.
9. SEE DETAILS FOR TYPICAL CONCRETE REVEALS AND PANEL JOINTS. ALL DOORS AND GLAZING SYSTEMS TO HAVE REVEALS SEE DETAILS.
10. CONTRACTOR TO COORDINATE THAT ALL REVEALS LINE UP FROM PANEL TO PANEL AND AROUND CORNERS AND RETURN AT EDGES.
11. METAL PARAPET CAPS TO RETURN
12. CAULK AND SEAL ALL EXTERIOR JOINTS WITH APPROVED POLYURETHANE ELASTOMERIC SEALANT. COLOR MATCH CAULK TO FINISHED PANEL AND MUST BE PAINTABLE.
13. SPANDREL GLAZING TO MATCH EXTERIOR FINISH OF REGULAR GLAZING.
14. EXTERIOR FINISHES AND SAMPLES MUST BE PRESENTED AND APPROVED PRIOR TO APPLICATION.
15. EXTERIOR EDGE OF POUR-THROUGH SLAB, BELOW ALL OPENINGS (STOREFRONT, CURTAIN-WALL, OVERHEAD AND MAN DOORS, ECT.), TO BE SACK AND PATCHED, PRIMED AND PAINTED TO MATCH SURROUNDING CONCRETE PANEL.
16. CONTRACTOR TO COORDINATE OVERHEAD DOOR TRACKS W/ ID CROSSBAR VERSUS IN WINDOW

KEYNOTE LEGEND	
03.011	CONCRETE TILT UP PANEL, SEE STRUCTURAL DRAWINGS
03.016	CONCRETE WALL REVEAL, TYP.
05.019	POWDER COATED METAL CANOPY
05.023	METAL PARAPET WALL CAP, TYPICAL ON ALL WALLS
08.001	STOREFRONT WINDOW/DOOR SYSTEM - PROVIDE SUBMITTAL FOR APPROVAL
10.001	FUTURE SIGNAGE PROVIDED BY TENANT, SIGNAGE PERMIT TO BE SEPARATE FROM BUILDING PERMIT.

urbia
ARCHITECTURE & ENGINEERING
950 W SOUTH JORDAN PKWY, SOUTH JORDAN, UT 84095
www.aeurbia.com
801.746.0458

PRELIMINARY NOT FOR CONSTRUCTION

9/24/2024 8:28:38 AM

RUSH FUNPLEX

TOM STUART & MATT GERTGE

200 W NORTH LOGAN, NORTH LOGAN CITY, UTAH

Revision Schedule		
Mark	Description	Revision Date

AE2024.211

CONSTRUCTION DOCUMENTS

BUILDING ELEVATIONS

DATE: SEPTEMBER 18, 2024

SHEET #:

A201

COPYRIGHT © AE URBIA, LLC.

Hurricane City Application

Application Accepted Date:	11/05/2024
Type of Improvement:	Subdivision (Preliminary Plat)
Description:	
Tenant / Project Name:	Red Slate Estates
Bldg. Address:	Approximately 4020 West Bash Parkway
City:	Hurricane City
State:	UT
Zip:	84737
Subdivision:	TBD
Phase:	
Block:	
Lot #:	
Parcel ID #:	H-4-2-12-401-GS1 & H-4-2-12-402-GS1
Property Owner:	Heritage Land Dev LLC
Permit Contact:	Rhett Beazer
P:	(435) 628-6500
Email:	rhettbeazer@alphaengineering.com

CONTACT INFORMATION

General Contractor:	
License #:	
P:	
City:	
State:	
Zip:	
Email:	

APPLICATION DETAILS

Valuation	$ 0.00

PERMIT FEES

Planning Fee	$ 150.00
Planning Fee	$ 150.00
Sub Total:	**$ 150.00**
Permit Total:	**$ 150.00**
Amount Paid:	**$ 150.00**
Remaining Due:	**$ 0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANPP24-29

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Jon Sorenson

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

ALPHA ENGINEERING

43 South 100 East, Suite 100
St George, Utah 84770

T 435.628.6500
F 435.628.6553

alphaengineering.com

November 1, 2024

Hurricane City
147 North 870 West
Hurricane, Utah 84737

Re: Red Slate Estates Subdivision – Narrative

To Whom It May Concern,

The proposed Red Slate Estates Subdivision is located along the south border of Bash Parkway (Parcels H-4-2-12-401-GS1 & H-4-12-402-GS1) and is part of a PID. The current zoning is R-1-8, and there are 135 proposed lots. The subdivision will be phased. Let us know if additional information is required.

Sincerely,

Rhett Beazer, P.E.
Alpha Engineering Company

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

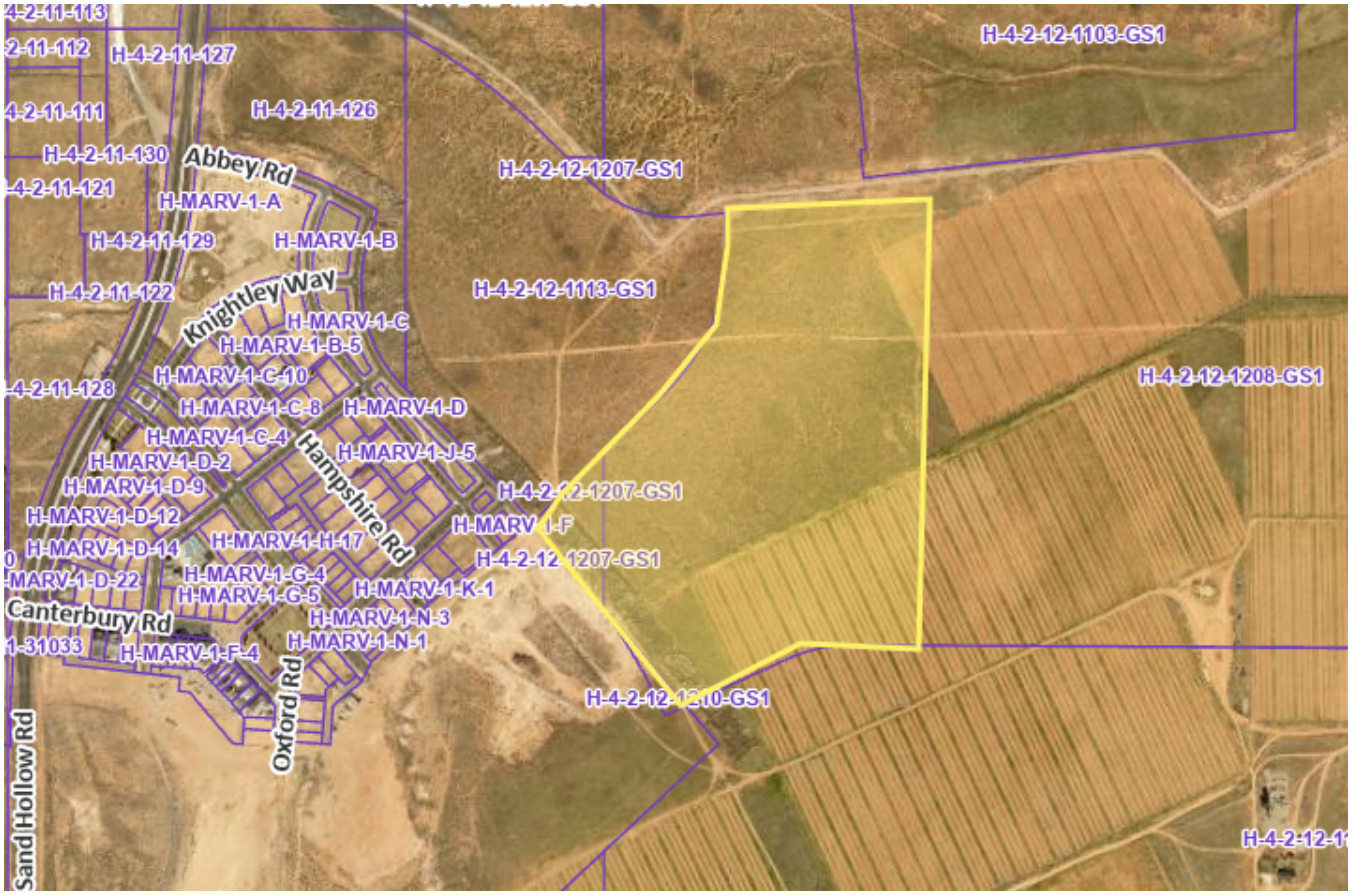
Agenda Date:	**11/14/2024**
Application Number:	PP24-29
Type of Application:	Preliminary Plat
Action Type:	Administrative
Applicant:	Heritage Land Development
Agent:	Rhett Beazer
Request:	Approval of a Preliminary Plat.
Location:	4020 W Bash Parkway
Zoning:	R1-8
General Plan Map:	Planned Community
Recommendation:	Approval subject to staff and JUC comments.
Report Prepared by:	Fred Resch III

Discussion:
The applicant is seeking preliminary plat approval for a 135 lot subdivision located within the Gateway to Sand Hollow PID area. This subdivision originally received preliminary plat approval in 2022, but that approval has since expired. The applicant has signed construction drawings for the first phase of the development, but due to a clerical error was allowed to begin construction without getting an approved final plat. The site is zoned Single Family Residential R1-8.

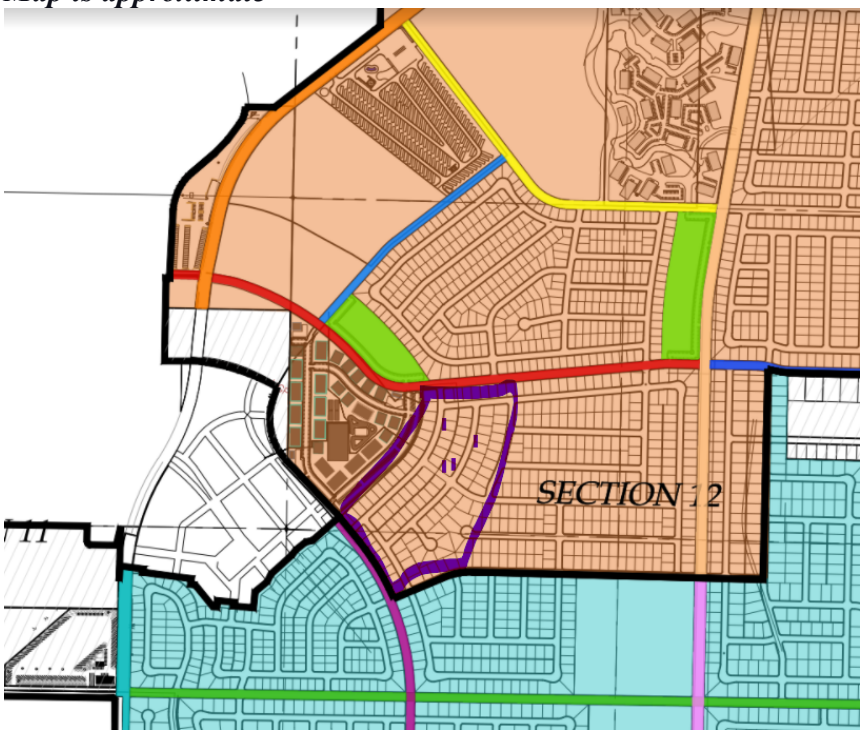
JUC Comments
The following items will need to be addressed, construction drawings are approved for phase 1:

JUC comments are due November 13th and this report will be updated at that time

1. **Public Works:** No comments
2. **Power:**
3. **Sewer:**
4. **Streets:**
5. **Water**:
6. **Engineer:** Phasing plan needs to be modified due to the construction timelines on PID and other developers projects.
7. **Fire:**
8. **Cable/Phone:** No comments.
9. **Gas:**
10. **Water Conservancy District**:



Map is approximate

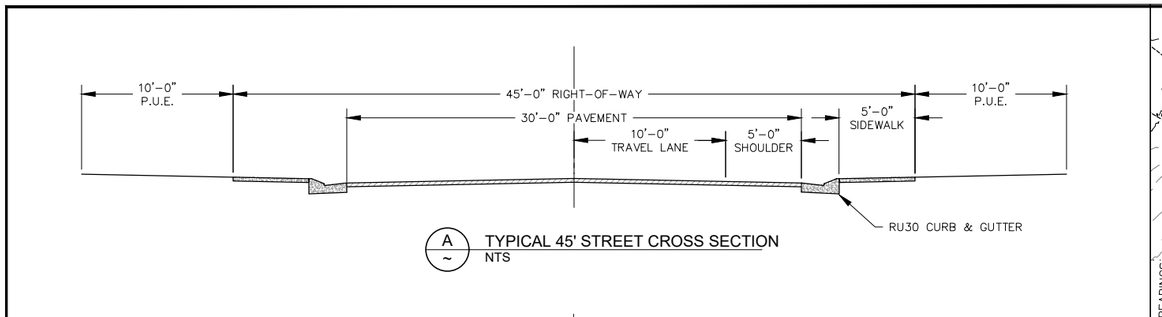


Red Slate Estates on Gateway at Sand Hollow PID Map. Boundaries are approximate.

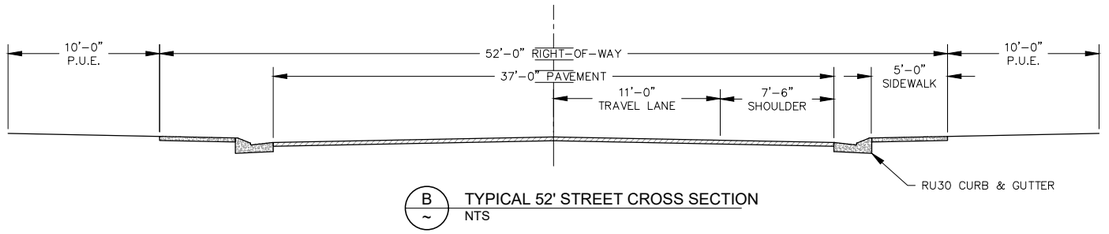
Staff Comments: Preliminary Plat

1. Zoning is R1-8. Staff would recommend that the average lot size be put on a note on the plat. 3.31 units an acre is less dense than the maximum density in R1-8.
2. The applicant has noted that the property isn't located in a desert tortoise take area.
3. All block lengths meet city standards.
4. Road N is a 60' right of way. Houses are allowed to front 60' right of ways. Generally speaking, staff recommends that collector roadways have limited driveway access.
5. A note on the plat will be required stating that Lots 308-310 and 411-412 will only have access from internal subdivision streets.
6. There is no open space planned within this development. None is required by code; however, there is a planned PID park to the north of this development.
7. A will serve letter from Hurricane City Water and Ash Creek Sewer District has been provided
8. Utilities: Bash Parkway has recently been completed which will bring utilities to the area. Iron Bridge Blvd will need to be extended to provide second access and water looping to the later phases.
9. **Water use:** The Washington County Water Conservancy District has a county-wide tracking budget of approximately 75,000 units with approximately 20,000 units being located within Hurricane City.As part of the Gateway to Sand Hollow Public Infrastructure District this development and its 135 units are already accounted for within Hurricane City's tracking data.

Recommendation: The Planning Commission should review this application based on standards in the Hurricane City Code. Staff recommends approval subject to staff and JUC comments.



A ~ TYPICAL 45' STREET CROSS SECTION
NTS



B ~ TYPICAL 52' STREET CROSS SECTION
NTS

NORTHWEST CORNER SECTION 12, T42S, R14W, SLB&M FOUND BRASS CAP MONUMENT

WEST 1/4 CORNER SECTION 12, T42S, R14W, SLB&M FOUND BRASS CAP MONUMENT

BASIS OF BEARINGS S 01°07'24" W 2642.11' (MEASURED)

EAST 1066.27'

H-4-2-12-1113-GS1 BASH RESORTS LLC

BASH PARKWAY

IRON BRIDGE NORTH BLVD (66' PUBLIC ROW)

IRON BRIDGE SOUTH BLVD (66' PUBLIC ROW)

ROAD E (45' ROW)

ROAD F (45' ROW)

ROAD G (52' ROW)

ROAD H (52' ROW)

ROAD J (45' ROW)

ROAD K (45' ROW)

ROAD L (45' ROW)

ROAD M (52' ROW)

ROAD N (60' ROW)

PHASE 1

PHASE 2

PHASE 3

PHASE 4

FUTURE PHASE

N

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft. (22x34 SHEET)
1 inch = 200 ft. (11X17 SHEET)

SITE NOTES

OWNER/DEVELOPER
HERITAGE LAND DEVELOPMENT LLC
AARON ROBERTSON, VICE PRESIDENT
2650 WASHINGTON BOULEVARD, SUITE 203
OGDEN, UTAH 84401

PLAN PREPARER
ALPHA ENGINEERING COMPANY
43 SOUTH 100 EAST, SUITE 100
ST. GEORGE, UTAH 84770
PH. (435) 628-6500
FAX (435) 628-6553

PROJECT LOCATION
APPROX ADDRESS: 4020 WEST AND BASH PARKWAY
HURRICANE, UTAH 84737

PARCEL ID:
H-4-2-12-401-GS1 & H-4-2-12-402-GS1
SECTION 12, RANGE 14 WEST, TOWNSHIP 42 SOUTH, SLB&M

CONTAINING: ~40.59 ACRES

DESERT TORTOISE TAKE AREA = NO

NO.	DATE	BY	DESCRIPTION

REVISIONS

PRELIMINARY
NOT FOR CONSTRUCTION

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

TITLE: PRELIMINARY PLAT

PROJECT: RED SLATE ESTATES
HURRICANE, UTAH

PROJECT #	1734-06
NAME	JMD
DATE	NOVEMBER 1, 2024
SCALE	AS NOTED
SHEET	1 of 1
FILE	1734-06 Preliminary Plat.dwg

P:\1734-06 Red Sands Estates\Drawings\Exhibit Drawings\1734-06 Preliminary Plat.dwg, PRELIMINARY PLAT, 11/1/2024 12:33:26 PM, mdutton

Hurricane City Application

Application Accepted Date: 11/01/2024

Type of Improvement: Site Plan (Final)

Description: Adding 4 new self-storage buildings to an existing

Tenant / Project Name: Hurricane Self Storage

Bldg. Address: 260 N 3700 W

City: Hurricane City State: UT Zip: 84745

Subdivision: NA Phase: 2

Block: Lot #: Parcel ID #: H-4-1-36-240

Zone: General Commercial

Property Owner: Mike Wade

Permit Contact: Jordan Williams P:(213) 500-5936

Email: gwilliams@fawkesconsultants.com

CONTACT INFORMATION

Engineer of Record: Jordan Williams

Email: gwilliams@fawkesconsultants.com P: (213) 500-5936

General Contractor: Mike Wade

License #: P: (801) 809-9965

City: State: Zip:

Email: mikew5353@gmail.com

APPLICATION DETAILS

Valuation	$	0.00

PERMIT FEES

Planning Fee	$	250.00
Sub Total:	**$**	**250.00**
Permit Total:	**$**	**250.00**
Amount Paid:	**$**	**250.00**
Remaining Due:	**$**	**0.00**

APPROVALS	DATE	INFO

Setbacks	Front:	Rear:	Left:	Right:
Min.				
Actual:				

APPLICATION NUMBER: PLANFSP24-73

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Applicant Name: Jordan Williams

Signature of Applicant/Authorized Agent or Owner: Date:

Application Approved By: Date:

Application Issued By: Date:

Receipt #:

DRAFT

FAWKES
CONSULTANTS INC.

Hurricane Self-Storage
260 N 3700 W
Hurricane, Utah
Project No. 24.015
10-31-24

Narrative

The scope of the project is to add 4 additional Self-Storage Facility located at 260 N 3700 W in Hurricane, Utah. The 4 additional buildings will fit in between the existing buildings and provide enough access width to accommodate the fire requirements. There will be minimal Utility Upgrades to the site due to the buildings only needing minimal power. There will be LED lighting which does not increase the load significantly so the existing power supply will be sufficient. We will add additional Storm Water Runoff to compensate for the additional hardscape on site. There will be no additional Water or Sewer Connections. The only connections are to the existing Fire Hydrant and the Main Office which has one bathroom.

PLANNING & ZONING
HURRICANE CITY
UTAH

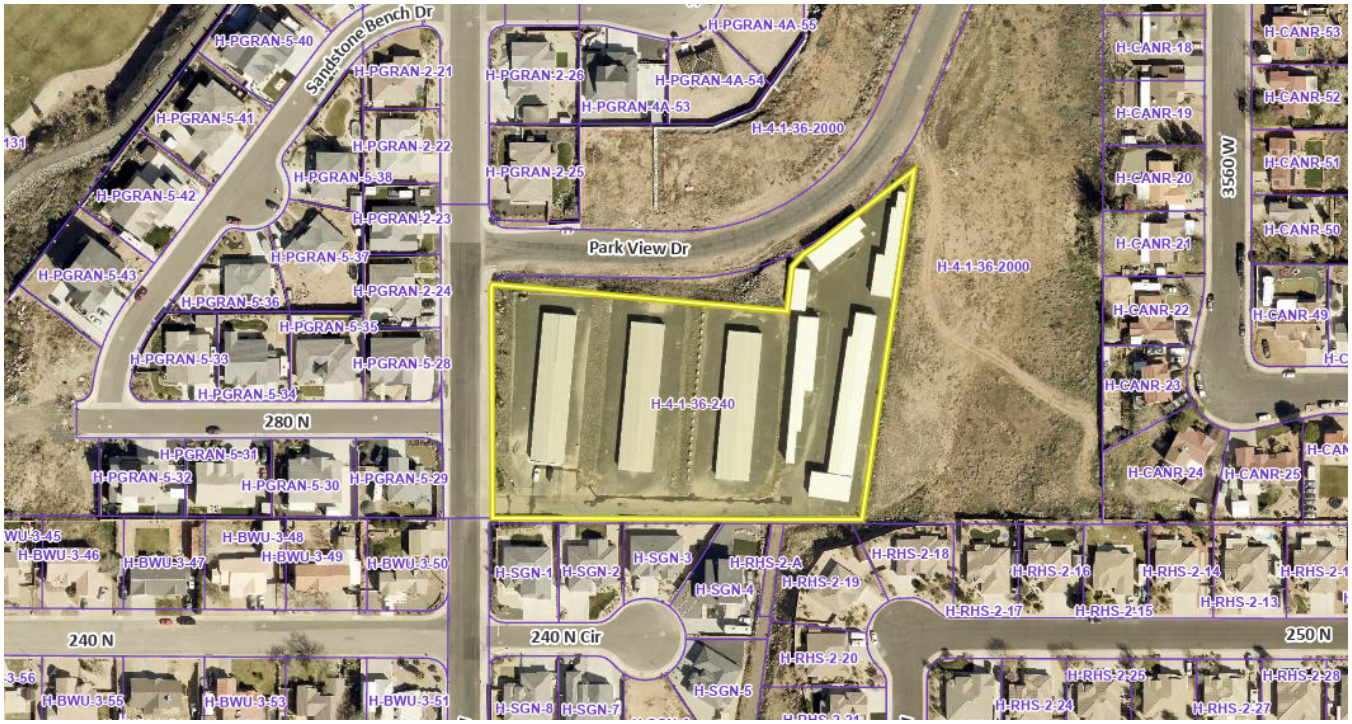
STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	FSP24-73
Type of Application:	Final Site Plan
Action Type:	Administrative
Applicant:	Mike Wade
Agent:	Jordan Williams
Request:	Final Site Plan Approval
Location:	260 N 3700 W
Zoning:	GC
General Plan Map:	Single Family
Recommendation:	Approve subject to staff and JUC comments.
Report Prepared by:	Fred Resch III

Discussion:
The applicant has filed a final site plan for additional storage units at the existing Hurricane Self Storage facility on 3700 W near Grandpa's Pond. They are proposing to add four additional storage buildings to the site. The project received preliminary site plan approval in September 2024. The project site is zoned General Commercial (GC).

JUC Comments

1. Construction drawings were signed off in November of 2024.



Staff Comments: Final Site Plan

1. The proposed use of warehouse, self storage is a permitted use in the General Commercial zone.
2. **Parking Requirement:** Per Hurricane City Code (HCC) 10-34-10

Warehouse, self-service storage	*1 space per employee on highest employment shift*	

No marked parking stalls are proposed or existing on the site. No office space for on site employees exists or is proposed, thus this code is met.

3. **Landscape:** A landscaping plan has been provided that meets Hurricane City Code. A landscaping inspection is required before a certificate of occupancy is approved.
4. An outdoor lighting plan has been submitted that meets HCC 10-33-7. Any existing outdoor lighting which does not meet this code will need to be removed and replaced with the lighting shown in the plan.
5. Building elevations have been submitted and all buildings will be under 35’ in height.

Recommendation: The Planning Commission should review this application based on standards in the Hurricane City Code. Staff recommends approval of the final site plan subject to JUC and staff comments.

Scale: 1" = 30'

Graphic Scale

N

SITE INFORMATION

TOTAL GROSS ACREAGE : 3.2909 AC
TOTAL AREA OF PROPOSED BUILDINGS : 18,222 SF
TOTAL AREA OF EXISTING BUILDINGS : 38,215 SF
TOTAL AREA OF BUILDINGS : 56,437 SF
TOTAL AREA OF PAVEMENT : 72,205 SF
TOTAL AREA OF LANDSCAPE : 14,496 SF

PARK VIEW DR.
(58' PUBLIC STREET)

N 3700 W
(60' PUBLIC STREET)

W 280 N

STRATTON BROTHERS LLC
Parcel Number H-4-1-36-2000

STONE GARDENS SUBDIVISION

STEVENSON JOHN P & TERRI A
Parcel Number H-SGN-1

SNEGIREV IVAN & LINDSEY
Parcel Number H-SGN-3

SESSUM RODERICK D & JANET C
Parcel Number H-SGN-2

HAINES ROBERT M JR
Parcel Number H-SGN-4

ROCK HAMPTON SUBDIVISION PHASE 2

BRYANT HORVAL L JR & JANET C
Parcel Number H-RHS-2-19

MACHADO RUDY M
Parcel Number H-RHS-2-18

E ¼ CORNER SECTION 36, T41S, R14W, SLB&M

SE ¼ CORNER SECTION 36, T41S, R14W, SLB&M

FAWKES CONSULTANTS INC.

©2024

260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsulatants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

SITE PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=30'

C200

DRAWN BY: JJW

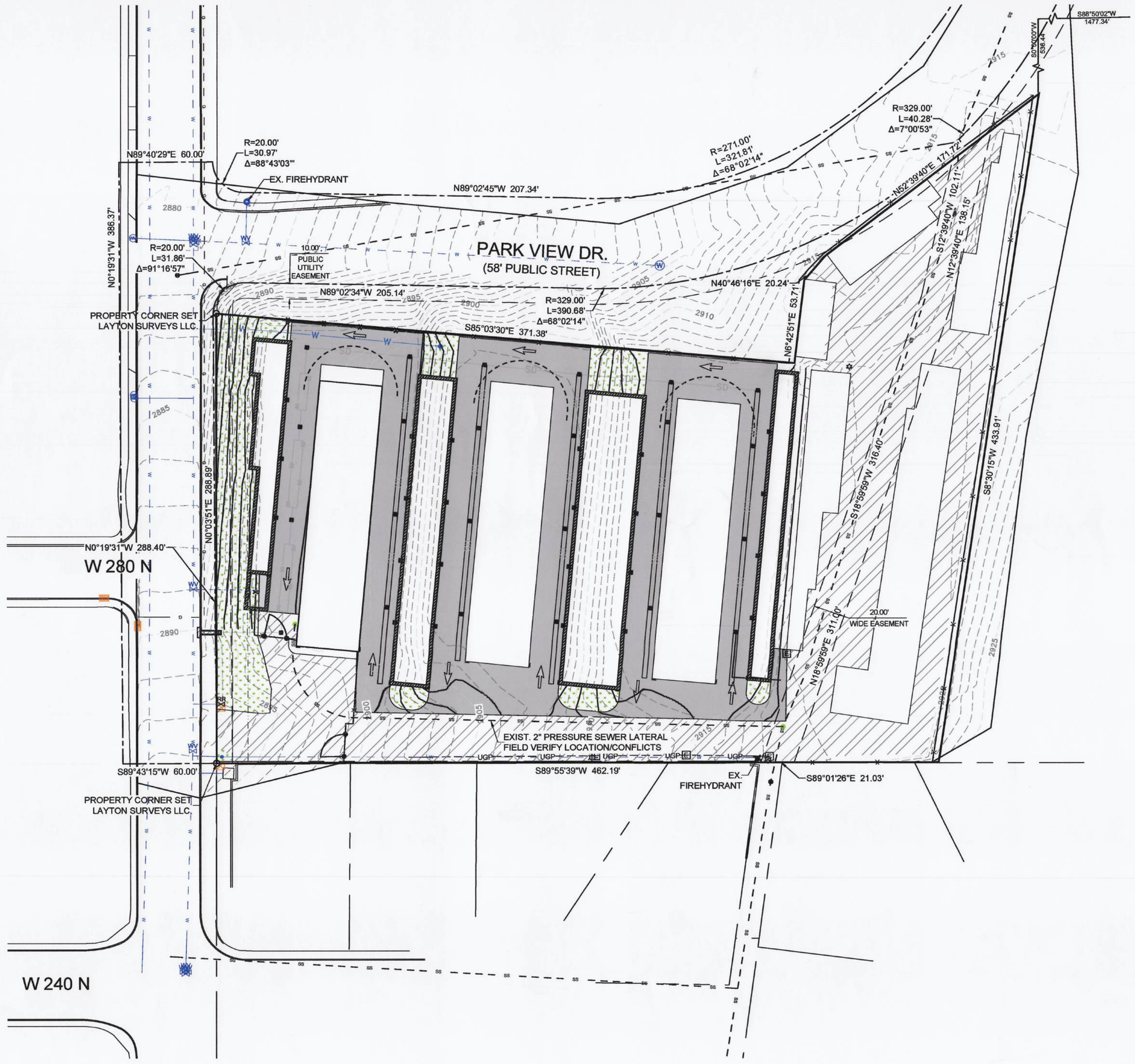
HURRICANE SELF-STORAGE

Civil Construction Drawings

260 N 3700 W
HURRICANE, UTAH 84745

Vicinity Map

Not to Scale



OWNER

MIKE WADE
PHONE: *801-809-9965*
EMAIL: *MIKEW5353@GMAIL.COM*

CIVIL ENGINEER

Fawkes Consultants
ADDRESS: 165 W CANYON CREST RD STE 26
ALPINE, UTAH 84004
CONTACT: JORDAN "GUY" WILLIAMS, P.E.
PHONE: (213) 500-5936

SITE INFORMATION

ZONE: GC
ACREAGE: 3.32

SHEET INDEX

Sheet Number	Sheet Title
CV	COVER SHEET
GN	GENERAL NOTES
C100	DEMOLITION PLAN
C200	SITE PLAN
C300	GRADING PLAN
C400	UTILITY PLAN
C500	PLAN AND PROFILE
C501	PLAN AND PROFILE
C600	LANDSCAPE PLAN
C700	LIGHTING PLAN
C800	EROSION CONTROL PLAN
C900	STORMBRIXX DETAILS
C901	STORMBRIXX DETAILS
C902	DETAILS

ENGINEERING	11/1/24
WATER DEPARTMENT	10/31/24
POWER DEPARTMENT	10-31-24
ASH CREEK SPECIAL SERVICE DISTRICT	10-31-24
HURRICANE VALLEY FIRE SPECIAL SERVICE DISTRICT	10-31-24
STREETS DEPARTMENT	10-31-24
PARKS DEPARTMENT	10-31-24
GIS DEPARTMENT	11-4-24
PLANNING DEPARTMENT	11-1-24
CENTURYLINK/ LUMEN (PHONE)	10-31-24
TDS (CABLE)	10-31-24
INFOWEST (FIBER)	10/31/24
ENBRIDGE GAS	10-31-24
WASHINGTON COUNTRY WATER CONSERVANCY DISTRICT	11-4-2024
PUBLIC WORKS DEPARTMENT	

Call before you Dig
Avoid cutting underground utility lines, it's lovely.
Call 811
1-800-662-4111

NOV 04 2024

FAWKES CONSULTANTS INC.

©2024

260 N 3700 W
HURRICANE, UT. 84745
GwilliamsB@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

COVER SHEET
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No.12298559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=30'

CV

DRAWN BY: JJW

1/14

THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATIONS, THE CONTRACTOR SHALL BE SATISFIED AS TO THE TRUE MEANING AND INTENTION AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH.

GENERAL NOTES:

1) ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: CURRENT REGULATORY AGENCY STANDARDS AND SPECIFICATIONS, AND REGULATORY AGENCY COMPREHENSIVE PLAN, WHERE APPLICABLE.

2) PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT REGULATORY AGENCY FOR A PRE-CONSTRUCTION CONFERENCE AS DIRECTED BY THE OWNER. CONTRACTOR SHALL ALSO NOTIFY THE BELOW LISTED PROJECT CONTACTS (48) HOURS IN ADVANCE OF SAID MEETING:

A. REGULATORY AGENCY: HURRICANE CITY
WATER, SEWER, & STORM WATER 646 W 600 N
HURRICANE, UT 84737

B. DEVELOPER: MIKE WADE

C. ENGINEER: FAWKES CONSULTANTS
165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004

CONTACT:
gwilliams@fawkesconsultants.com
Jordan "Guy" Williams, P.E.
213-500-5936

D. GAS ENBRIDGE GAS
CUSTOMER SERVICE LINE: 1-800-323-5517

E. POWER COMPANY: HURRICANE CITY POWER DEPARTMENT
CUSTOMER SERVICE LINE: 435-635-5536

3) IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.

4) WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

5) THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHT-OF-WAYS, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.

7) CONTRACTOR SHALL OBTAIN A LAND DISTURBANCE PERMIT WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHT-OF-WAYS OR EASEMENTS FROM REGULATORY AGENCY AND/OR UDOT. CONTRACTOR SHALL NOTIFY REGULATORY AGENCY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMENCING THE WORK, OR AS REQUIRED BY SAID PERMITS.

8) THE CONTRACTOR SHALL, AT THE TIME OF BIDDING, AND, THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.

9) OWNER SHALL FILE NOTICE OF INTENT WITH THE STATE DIVISION OF WATER QUALITY AND ALSO OBTAIN A FUGITIVE DUST CONTROL PERMIT AS REQUIRED.

10) CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

IF, DURING THE COURSE OF THEIR EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

11) THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY, AS REQUIRED BY REGULATORY AGENCY. IF TRAFFIC CONTROL IS NECESSARY, A TRAFFIC CONTROL PLAN SHOULD BE SUBMITTED TO REGULATORY AGENCY ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO ANY WORK BEING STARTED.

12) THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

13) THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR REGULATORY AGENCY.

14) THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.

15) THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACHPHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND RE-INSPECTIONS AT THEIR OWN EXPENSE.

16) THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

17) DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH REGULATORY AGENCY COMPREHENSIVE PLAN.

18) FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAYS OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION TRAFFIC CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE PLAN AND RECEIVE PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION.

19) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR RE- INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

20) IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS. THERE WILL BE NO EXTRA COST DUE THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

21) WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

22) THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOM- MODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

PRIOR TO COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

23) WORK IN EASEMENT AND/OR RIGHT-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID EASEMENT AND/OR RIGHT-OF-WAY.

CLEARING AND GRADING NOTES:

1) CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH REGULATORY AGENCY STANDARD SPECIFICATIONS AND DIVISION 2 OF THE AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS.

2) IF THE PROJECT REQUIRES ANY IMPORT OR EXPORT TO ACHIEVE A BALANCED SITE, A SEPARATE UNIT PRICE PER CUBIC YARD SHALL BE INCLUDED IN THE BID FOR SAID IMPORT OR EXPORT. ANY EXPORT MATERIAL SHALL BE STOCKPILED OR REMOVED FROM THE PROJECT SITE AS DIRECTED BY THE OWNER AND/OR ENGINEER.

UNDERGROUND UTILITIES:

1) THE INFORMATION SHOWN ON THE PLANS WITH REGARD TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS, WAS DERIVED FROM FIELD INVESTIGATIONS AND/OR RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THESE LOCATIONS TO BE EITHER TRUE OR EXACT. PRIOR TO CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENTS AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER, IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING THE UTILITIES, SO THAT THE EXACT LOCATION AND ELEVATION CAN BE VERIFIED AND DOCUMENTED. THE COST ASSOCIATED TO PERFORM THIS WORK SHALL BE INCLUDED IN EITHER THE LUMP SUM CLEARING COST OR IN THE VARIOUS ITEMS OF WORK. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION/ELEVATION MUST BE MADE PRIOR TO CONSTRUCTION.

2) PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES BY DIALING 811 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES CALL. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

3) THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH INDUSTRIAL COMMISSION SAFETY ORDERS OF THE STATE FOR EXCAVATIONS AND TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.

4) PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

THE CONTRACTOR WILL VERIFY DEPTHS OF ALL UTILITIES IN THE FIELD BY POT HOLING A MINIMUM OF 300 FEET AHEAD OF PIPELINE CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED PIPELINE GRADE AND ALIGNMENT. IF A CONFLICT ARISES RESULTING FROM THE CONTRACTOR NEGLECTING TO POT HOLE UTILITIES THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER.

5) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS OF THE REGULATORY AGENCY FOR H-20 LOAD REQUIREMENTS.

6) SANITARY SEWER AND WATER SYSTEM CONSTRUCTION TO BE INSTALLED PER THE REQUIREMENTS OF THE REGULATORY AGENCY.
A. ALL SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH THE REGULATORY AGENCY STANDARDS.
B. ALL WATER SERVICE LINES SHALL BE CONSTRUCTED ACCORDING TO REGULATORY AGENCY STANDARDS.
C. ALL WATERLINE BENDS, ELBOWS, TEES, AND CROSSES SHALL HAVE THRUST BLOCKS PLACED ACCORDING TO REGULATORY AGENCY STANDARDS.
D. ALL WATERLINE LOOPS SHALL BE CONSTRUCTED ACCORDING TO REGULATORY AGENCY STANDARDS.
E. CONTRACTOR TO VERIFY ALL PIPE LENGTHS. PIPE LENGTHS SHOWN ARE MEASURED FROM EDGE OF MH TO EDGE OF MH. NO ADJUSTMENT WAS MADE FOR SLOPE.

7) THE CONTRACTOR SHALL NOTIFY INFINITY CONSULTANTS, INC. IN WRITING AT LEAST 48 HOURS PRIOR TO BACKFILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH THE REGULATORY AGENCY STANDARD SPECIFICATIONS.

8) ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.

9) THE CONTRACTOR IS RESPONSIBLE FOR ALL STREET LIGHT TRENCHING.

SURFACE IMPROVEMENTS:
1) ALL MANHOLE RIMS, LAMPHOLES, VALVES AND MONUMENT BOXES, ETC. SHALL BE ADJUSTED TO FINISHED GRADE & COLLARED AFTER STREET PAVING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAID FACILITIES.

2) PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.

3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.

4) STRIPING AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH REGULATORY AGENCY STANDARDS.

ROADWAY MATERIALS:
ROADWAY MATERIALS SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS SHALL BE AS OUTLINED BY REGULATORY AGENCY STANDARDS AND THESE PLANS.

SWPPP NOTES
1) SEE EROSION CONTROL SHEET FOR DETAILS AND BMP's.

2) CONTRACTOR IS REQUIRED TO OBTAIN AN NOI FROM THE STATE FOR SWPPP PURPOSES.

3) CONTRACTOR IS REQUIRED TO SCHEDULE AND ATTEND A PRE-CONSTRUCTION MEETING WITH REGULATORY AGENCY PRIOR TO COMMENCING ANY SITE WORK FOR THIS PROJECT.

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT NOTES:
1) CONTRACTOR IS REQUIRED TO CALL RYAN NAY AT (435)773-3016, AT LEAST 48 HOURS IN ADVANCE BEFORE WORKING WITHIN 10' OF A WCWCD WATERLINE. THIS WILL SCHEDULE A WCWCD INSPECTOR TO THE PROJECT SITE.
2) CONTRACTOR SHALL POTHOLE ALL PIPELINES AND VERIFY LOCATION AND DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION. WCWCD INSPECTOR IS REQUIRED TO BE ONSITE WHEN POTHOLING WITHIN 10' OF A WCWCD WATERLINE.
3) ALL CHANGES TO EXISTING GRADES NEAR EXISTING WCWCD WATERLINES MUST BE APPROVED BY THE DISTRICT PRIOR TO CONSTRUCTION.
4) ANY INFRASTRUCTURE RELOCATIONS ASSOCIATED WITH THE PROJECT WILL BE AT THE OWNER/DEVELOPER'S EXPENSE.
5) WCWCD WATERLINES AND FACILITIES ARE TO MEET THE CURRENT WCWCD SPECIFICATIONS.

GENERAL DEMOLITION NOTES:
1. DEMOLITION AND SITE CLEARING FOR THIS CONTRACT ARE TO INCLUDE ALL AREAS SHOWN WITHIN DEMOLITION LIMITS OR BY NOTE.
2. REFER TO SITE IMPROVEMENT PLANS FOR MORE DETAILS ON LIMITS OF REMOVAL.
3. DEMOLISH EXISTING BUILDINGS AND CLEAR FROM SITE. (INCLUDING REMOVAL OF ALL FOOTINGS AND FOUNDATIONS.)
4. ALL CURBS, GUTTERS, WALKS, SLABS, WALLS, FENCES, FLATWORK, ASPHALT, WATERLINES AND METERS, GAS LINES, SEWER LINES, LIGHT POLES, BURIED CABLES, STORM DRAIN PIPING AND STRUCTURES TO BE CLEARED FROM SITE UNLESS OTHERWISE SHOWN.
5. ALL UTILITIES, SEWER, WATER, GAS, TELEPHONE AND ELECTRICAL SERVICES TO BE DISCONNECTED AND CAPPED ACCORDING TO CITY, COUNTY AND UTILITY COMPANY REQUIREMENTS, UNLESS OTHERWISE SHOWN.
6. BASEMENTS AND OTHER EXCAVATED AREAS TO BE BACKFILLED WITH CLEAN GRANULAR MATERIAL COMPACTED TO 95% OF MAXIMUM LAB DENSITY AS DETERMINED BY ASTM D 1557-78. (TEST RESULTS TO BE GIVEN TO OWNER)
7. CLEAR AND GRUB TREES, SHRUBS, AND VEGETATION WITHIN CONSTRUCTION LIMITS, DISPOSAL TO BE OFF-SITE EXCEPT WHERE NOTED OTHERWISE.
8. DO NOT INTERRUPT ANY SERVICES OR DISRUPT THE OPERATION OF ANY BUSINESSES SHOWN OUTSIDE THE DEMOLITION LIMITS.
9. IF ASBESTOS IS FOUND IN EXISTING STRUCTURES, THE ASBESTOS MUST BE REMOVED IN A LEGAL MANNER BY A CONTRACTOR LICENSED TO HANDLE ASBESTOS MATERIALS. (NOT A PART OF CONTRACT)
10. REMOVE DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM THE DEMOLITION AND SITE CLEARING OPERATIONS FROM THE SITE AND DISPOSE OF IN A LEGAL MANNER.
11. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. CONTRACTOR SHALL CONTACT AUTHORITIES HAVING JURISDICTION FOR FIELD LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF IN PLACE AND RELOCATED UTILITIES DURING CONSTRUCTION.
12. STOCKPILES SHALL BE GRADED TO MAINTAIN SLOPES NOT GREATER THAN 3 HORIZONTAL TO 1 VERTICAL. PROVIDE EROSION CONTROL AS NEEDED TO PREVENT SEDIMENT TRANSPORT TO ADJACENT DRAINAGE WAYS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL WASTE MATERIAL. DISPOSAL SHALL BE AT AN APPROVED SITE FOR SUCH MATERIAL. BURNING ONSITE IS NOT PERMITTED.
14. CONTRACTOR SHALL VERIFY WITH CITY ANY STREET REMOVAL, CURB CUTS, AND ANY RESTORATION REQUIRED FOR UTILITY LINE REMOVAL.
15. INSTALL TRAFFIC WARNING DEVICES AS NEEDED IN ACCORDANCE WITH LOCAL STANDARDS.
16. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR DEMOLITION FROM CITY, COUNTY, STATE OR FEDERAL AGENCIES AS REQUIRED.

GENERAL SITE NOTES:
1. STALLS DESIGNATED AS ACCESSIBLE WILL REQUIRE A PAINTED ACCESSIBLE SYMBOL AND SIGN.
2. FIRE LANE MARKINGS AND SIGNS TO BE INSTALLED AS DIRECTED BY THE FIRE MARSHALL. ROAD WIDTHS EQUAL TO OR LESS THAN 32 FEET SHALL REQUIRE RED CURBSIDE PAINTING AND "NO PARKING" SIGNS THAT ARE APPROVED POSITIONED ALONG THE FIRE APPARATUS ACCESS ROUTES.
3. AISLE MARKINGS, DIRECTIONAL ARROWS AND STOP BARS WILL BE PAINTED AT EACH DRIVEWAY AS SHOWN ON THE PLANS.
4. BUILDING SIDEWALKS, RAMPS, AND BOLLARDS ARE BUILDING CONTRACTOR RESPONSIBLE ITEMS. SEE ARCHITECTURAL PLANS.
5. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
6. FIRE HYDRANTS AND ACCESS ROADS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF ANY BUILDINGS. ALL FIRE HYDRANTS SHALL BE PLACED WITH THE 4 1/2" CONNECTION FACING THE POINT OF ACCESS FOR FIRE DEPARTMENT APPARATUS.
7. ALL STREET LIGHTING INSTALLED WITHIN THE PROJECT WILL BE INSTALLED BY THE DEVELOPER(S) AND WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER(S).

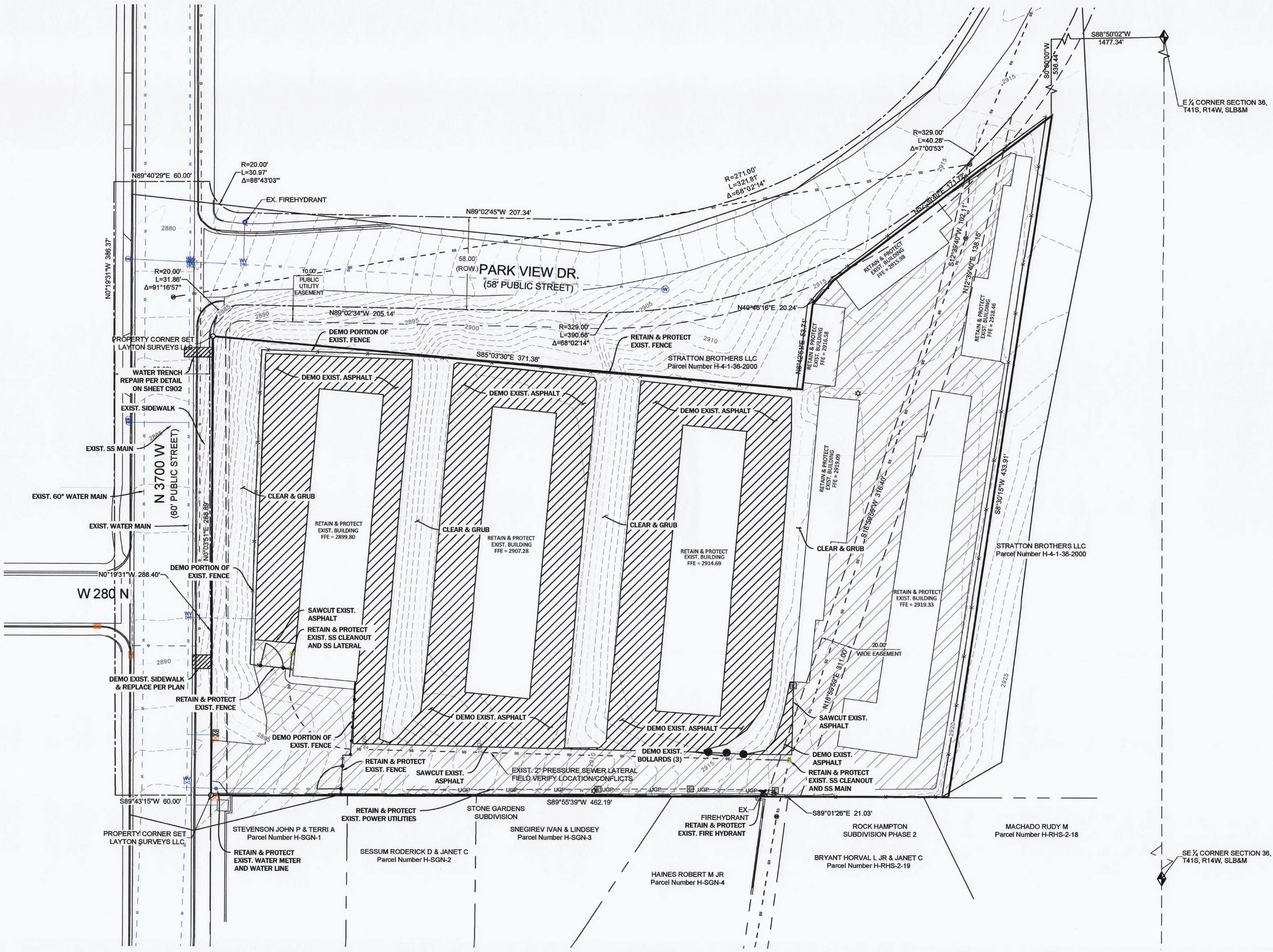
GENERAL GRADING NOTES:
1. SURVEY PROVIDED BY OWNER. CIVIL ENGINEER NOT RESPONSIBILITY FOR INACCURACIES IN SURVEY INFORMATION. CONTRACTOR TO VERIFY IN FIELD DATA AND TO INFORM CIVIL ENGINEER OF ANY DISCREPANCIES.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY PUBLIC WORKS STANDARD.
3. CUT SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
4. FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
5. FILLS SHALL BE COMPACTED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT PREPARED FOR THE PROJECT AND SHALL BE CERTIFIED BY THE GEOTECHNICAL ENGINEER.
6. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE CITY INSPECTOR AND GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.
7. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER SPECIFICATIONS AND GEOTECHNICAL REPORT.
8. ALL TRENCH BACKFILL SHALL BE TESTED AND CERTIFIED BY THE SITE GEOTECHNICAL ENGINEER PER THE GRADING CODE.
9. A GEOTECHNICAL ENGINEER SHALL PERFORM PERIODIC INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING.
10. THE FINAL COMPACTION REPORT AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR DRIVE RING AND SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
11. DUST SHALL BE CONTROLLED BY WATERING.
12. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITEE.
13. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.
14. ALL PUBLIC ROADWAYS MUST BE CLEARED DAILY OF ALL DIRT, MUD AND DEBRIS DEPOSITED ON THEM AS A RESULT OF THE GRADING OPERATION. CLEANING IS TO BE DONE TO THE SATISFACTION OF THE CITY ENGINEER.
15. THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DELETERIOUS MATTER PRIOR TO GRADING.
16. THE CONTRACTOR SHALL PROVIDE SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS FOR TRENCH WALLS.
17. AGGREGATE BASE SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT PREPARED FOR THE PROJECT.
18. ELEVATIONS SHOWN ON THIS PLAN ARE FINISH GRADES. ROUGH GRADES ARE THE SUBGRADES OF THE IMPROVEMENTS SHOWN HEREON.
19. AS PART OF THE CONSTRUCTION DOCUMENTS, OWNER HAS PROVIDED CONTRACTOR WITH A TOPOGRAPHIC SURVEY PERFORMED BY MANUAL OR AERIAL MEANS. SUCH SURVEY WAS PREPARED FOR PROJECT DESIGN PURPOSES AND IS PROVIDED TO THE CONTRACTOR AS A COURTESY. IT IS EXPRESSLY UNDERSTOOD THAT SUCH SURVEY MA

Scale: 1" = 30'

Graphic Scale

N

WEST EAST SOUTH



NOV 0 4 2024

FAWKES CONSULTANTS INC.

©2024

260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

DEMOLITION PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER No.12286559 JORDAN J. WILLIAMS 10/30/24 STATE OF UTAH

SCALE: 1"=30'

C100

DRAWN BY: JJW

3/14

Scale: 1" = 30'

Graphic Scale

N

WEST EAST S 0°33'-E

S88°50'02"W 1477.34'

S0°50'00"W 536.44'

E ¼ CORNER SECTION 36, T41S, R14W, SLB&M

R=329.00' L=40.28' Δ=7°00'53"

R=271.00' L=321.81' Δ=68°02'14"

N89°40'29"E 60.00'

R=20.00' L=30.97' Δ=88°43'03"

N89°02'45"W 207.34'

N0°19'31"W 386.37'

R=20.00' L=31.86' Δ=91°16'57"

10.00' PUBLIC UTILITY EASEMENT

58.00' (ROW.) PARK VIEW DR. (58' PUBLIC STREET)

N89°02'34"W 205.14'

R=329.00' L=390.68' Δ=68°02'14"

N40°46'16"E 20.24'

N52°40'11"E 117.77'

S12°39'40"W 102.11'

N12°39'40"E 138.15'

EXIST. BUILDING FFE = 2915.58

EXIST. BUILDING FFE = 2916.46

PROPERTY CORNER SET LAYTON SURVEYS LLC

CONST. NEW FENCE MATCH EXIST. TYPE

S85°03'30"E 371.38'

NATIVE VEGETATION (TYP.)

STRATTON BROTHERS LLC Parcel Number H-4-1-36-2000

N52°40'11"E 83.21'

EXIST. BUILDING FFE = 2916.58

TURNING RADIUS STRIPING (TYP.)

60.08' (ROW.)

REPAIR TRENCH PER DETAIL ON SHEET C902

N 3700 W (60' PUBLIC STREET)

N0°03'51"E 268.89'

N0°19'31"W 288.40'

W 280 N

EXIST. 6" PVC WATER LINE L= ±42'

PROP. 15" PVC SD LINE L=88.86'

REPAIR CONCRETE SIDEWALK PER DETAIL ON SHEET C902

S89°43'15"W 60.00'

PROPERTY CORNER SET LAYTON SURVEYS LLC

CONST. ASPHALT MATCH EXIST.

EXIST. BUILDING FFE = 2899.80

PROPOSED BUILDING FFE = 2899.80

DO NOT ENTER SIGNS SEE SHEET C902 DETAIL 1

ONE WAY SIGNS SEE SHEET C902 DETAIL 2

MATCH EXIST. GRADE

EXIST. BUILDING FFE = 2907.28

PROPOSED BUILDING FFE 1ST = 2899.80 FFE 2ND = 2907.28

VALLEY GUTTER

TRAFFIC FLOW SYMBOL (TYP.)

EXIST. BUILDING FFE = 2914.69

PROPOSED BUILDING FFE 1ST = 2907.28 FFE 2ND = 2914.69

DO NOT ENTER SIGNS SEE SHEET C902 DETAIL 1

ONE WAY SIGNS SEE SHEET C902 DETAIL 2

EXIST. BUILDING FFE = 2919.09

S19°39'55"W 316.40'

S8°39'15"W 433.91'

STRATTON BROTHERS LLC Parcel Number H-4-1-36-2000

EXIST. BUILDING FFE = 2919.33

20.00' WIDE EASEMENT

N19°39'55"E 311.00'

UGP

S89°55'39"W 462.19'

S89°01'26"E 21.03'

STONE GARDENS SUBDIVISION

STEVENSON JOHN P & TERRI A Parcel Number H-SGN-1

SNEGIREV IVAN & LINDSEY Parcel Number H-SGN-3

SESSUM RODERICK D & JANET C Parcel Number H-SGN-2

HAINES ROBERT M JR Parcel Number H-SGN-4

ROCK HAMPTON SUBDIVISION PHASE 2

BRYANT HORVAL L JR & JANET C Parcel Number H-RHS-2-19

MACHADO RUDY M Parcel Number H-RHS-2-18

SE ¼ CORNER SECTION 36, T41S, R14W, SLB&M

NOV 0 4 2024

FAWKES CONSULTANTS INC.

©2024

260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

SITE PLAN

HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER No.12298559 JORDAN J. WILLIAMS 10/30/24 STATE OF UTAH

SCALE: 1"=30'

C200

DRAWN BY: JJW

4/14

N

Scale: 1" = 20'

20 0 10 20 30 40

Graphic Scale

RATIONAL METHOD (PRE):

Q = CIA

C = RUNOFF COEFFICIENT

I = STORM INTENSITY (100-YR/1-HR STORM) [IN/HR] = 1.64 IN/HR

A= TOTAL AREA [ACRES] = 3.2909 AC

CALCULATE RUNOFF COEFFICIENT (PRE):

TOTAL AREA [TA] = 143,351 SF

LANDSCAPED AREA [LA] = 28,293 SF (C_A=0.15)

HARDSCAPED AREA [HA] = 115,058 SF (C_H=0.90)

$C = [(LA * C_{LA}) + (HA * C_{HA})] / TA$

$C = [(28,293 * 0.15) + (115,058 * 0.90)] / 143,351$

C = 0.75

Q = 0.75 * 1.64 IN/HR * 3.2909 AC = 4.05 CFS

RATIONAL METHOD (POST):

Q = CIA

C = RUNOFF COEFFICIENT

I = STORM INTENSITY (100-YR/1-HR STORM) [IN/HR] = 1.64 IN/HR

A= TOTAL AREA [ACRES] = 3.2909 AC

CALCULATE RUNOFF COEFFICIENT (POST):

TOTAL AREA [TA] = 143,351 SF

LANDSCAPED AREA [LA] = 14,496 SF (C_A=0.15)

HARDSCAPED AREA [HA] = 128,855 SF (C_H=0.90)

$C = [(LA * C_{LA}) + (HA * C_{HA})] / TA$

$C = [(14,496 * 0.15) + (128,855 * 0.90)] / 143,496$

C = 0.82

Q = 0.82 * 1.64 IN/HR * 3.2909 AC = 4.43 CFS

DETENTION VOLUME REQUIRED

$V_{REQ} = C * D * A - R$

C = RUNOFF COEFFICIENT = 0.82

D = 100-YR/1-HR STORM DEPTH (FT)

A = TOTAL AREA [SF] = 143,351 SF

R = PRE Runoff (Not Detained) for the First Hour of the 100-YR 1-HR Storm = 4.05 CFS * 60 SEC/MIN * 60 MIN/HR = 14,580 CF/HR

D is calculated using the NOAA ATLAS 14, VOLUME 1, VERSION 5 ; Latitude: 37.1745°, Longitude: -113.3736°

D = 1.64 IN = 0.14 FT

V_{REQ} = 0.82 * 0.14 FT * 143,351 SF - 14,580 CF

V_{REQ} = 1,877 CF

V_{PRO}UNDERGROUND = 1,892 CF

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-662-4111

NOV 04 2024

FAWKES CONSULTANTS INC.
©2024
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

GRADING PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

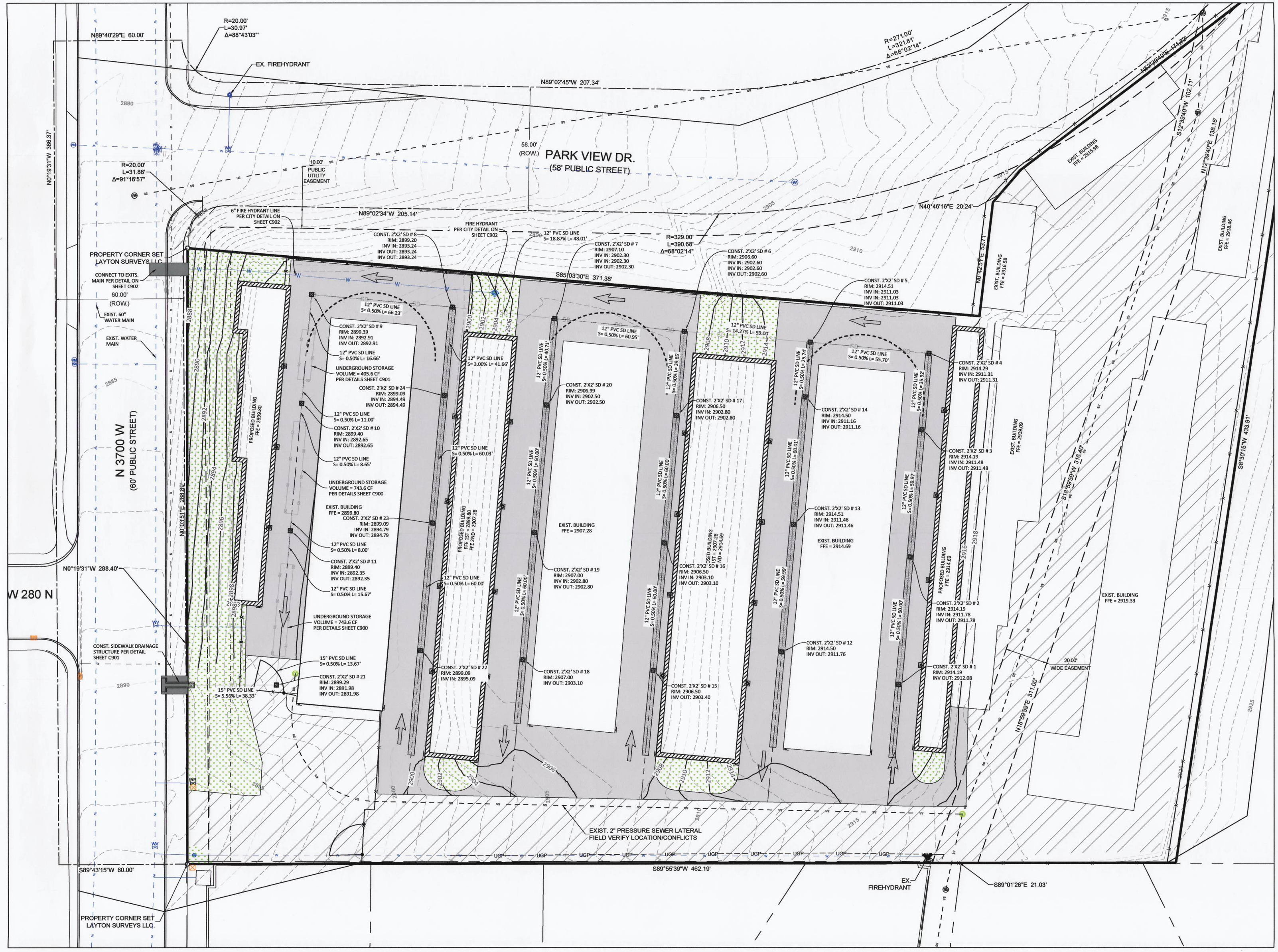
GEOSPATIAL PROFESSIONAL ENGINEER
No.12298559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=20'

C300

DRAWN BY: JJW

5/14



N

WEST EAST

Scale: 1" = 20'

20 0 10 20 30 40

Graphic Scale

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-662-4111

NOV 04 2024

FAWKES
CONSULTANTS INC.

©2024

260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsulatants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

UTILITY PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

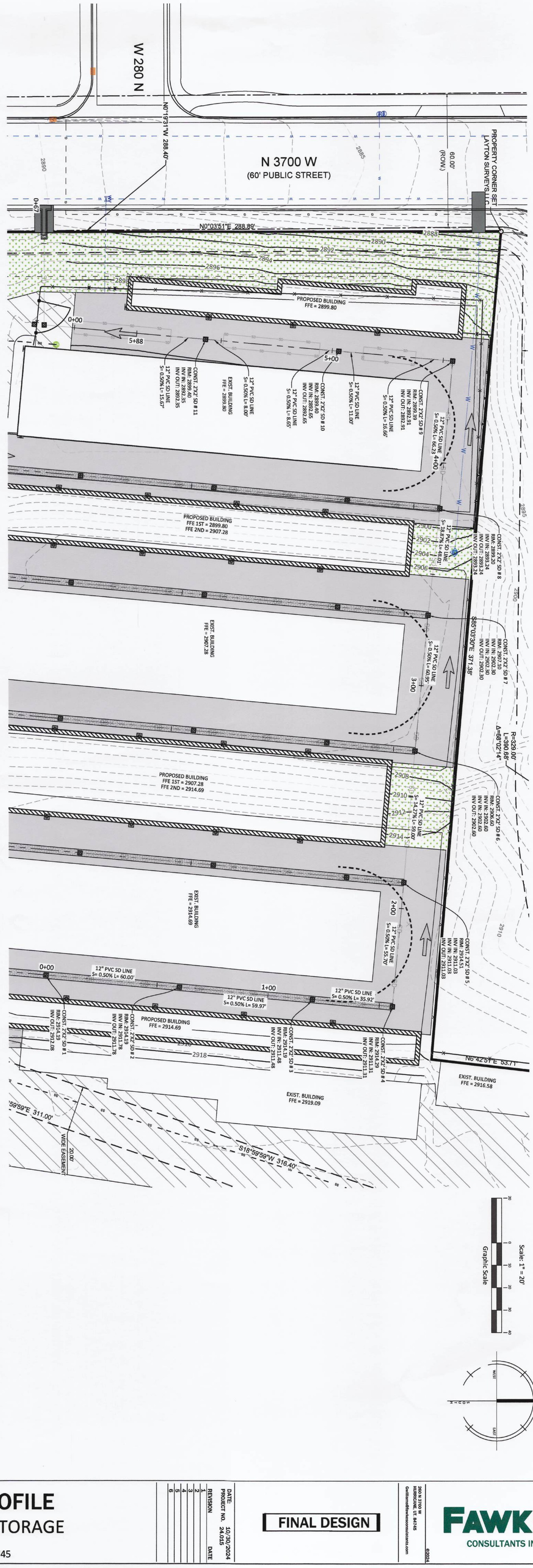
REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J.
WILLIAMS
10/30/24
STATE OF UTAH

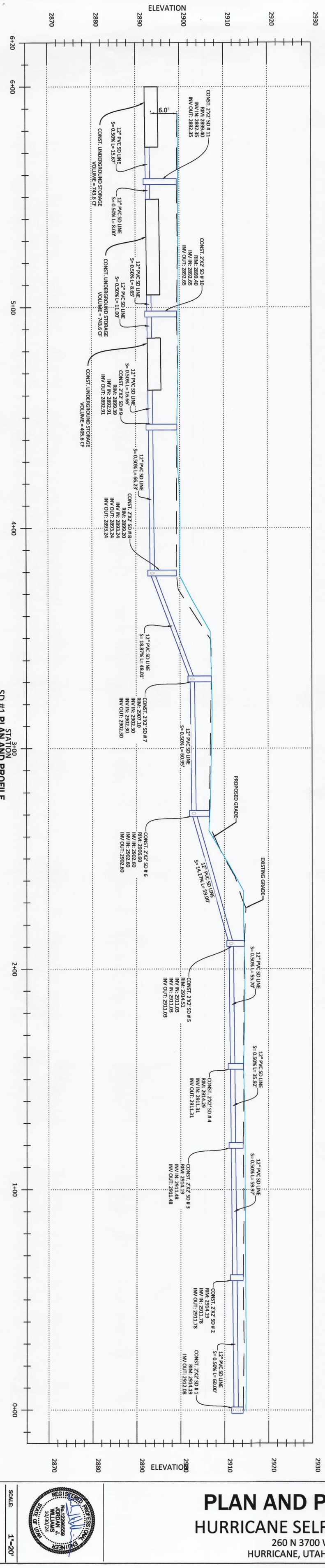
SCALE: 1"=20'

C400

DRAWN BY: JJW

6/14





Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-662-4111

NOV 04 2024

PLAN AND PROFILE

HURRICANE SELF-STORAGE

260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No. 12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=20'
DRAWN BY: JJW

C500

7/14

REVISION	DATE
1	
2	
3	
4	
5	
6	

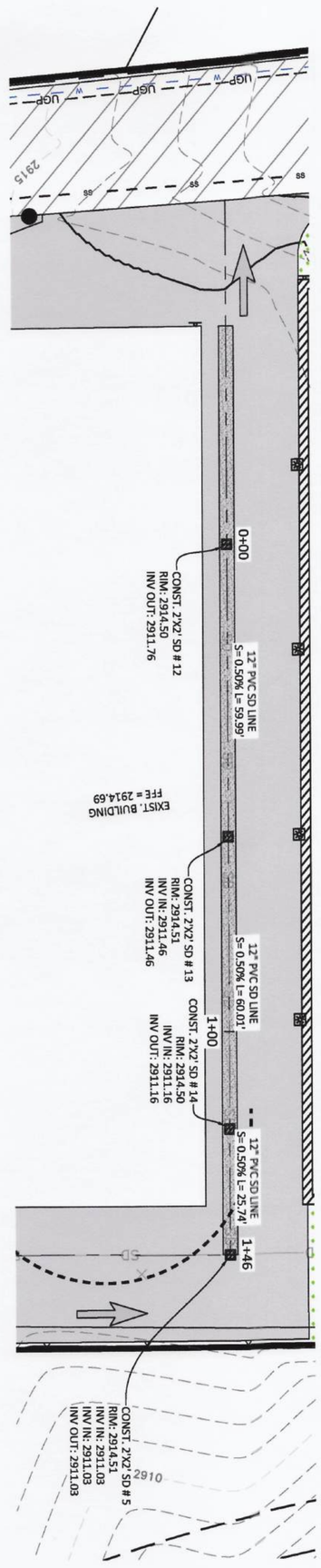
DATE: 10/30/2024
PROJECT NO. 24.015

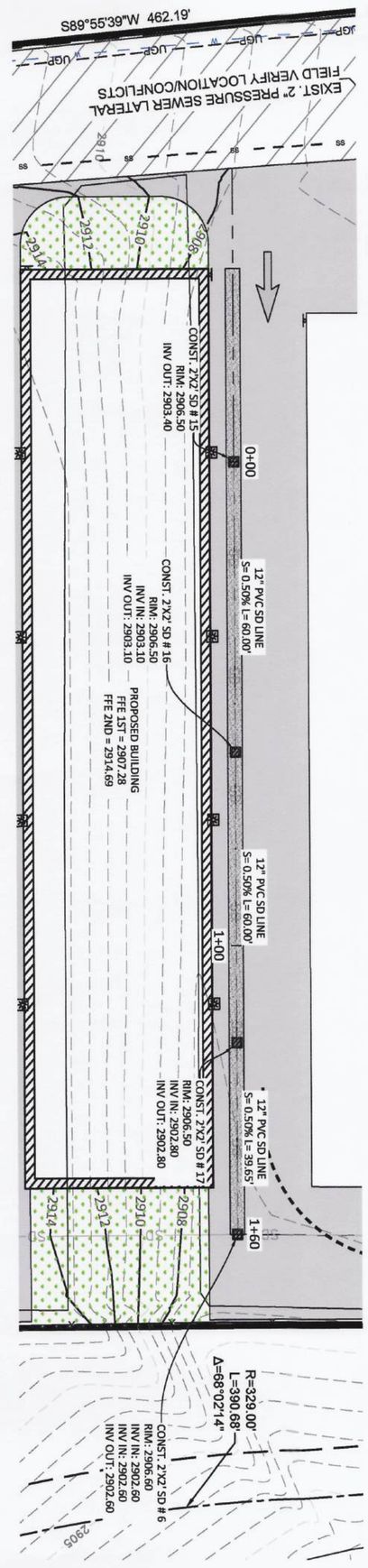
FINAL DESIGN

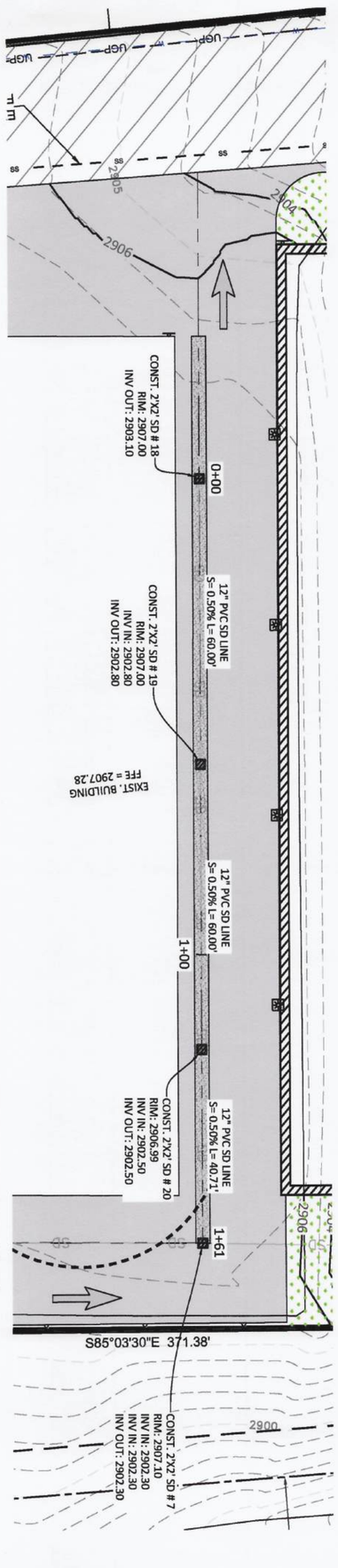
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

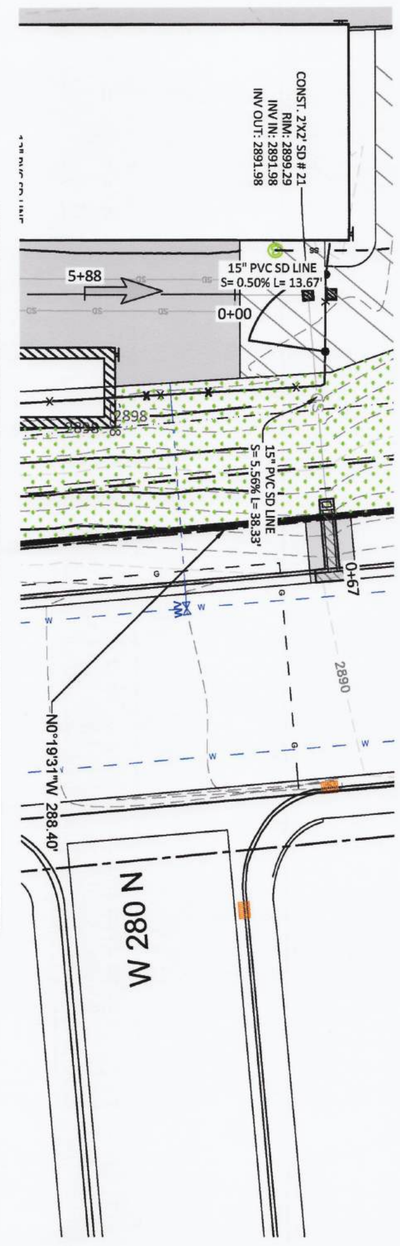
©2024

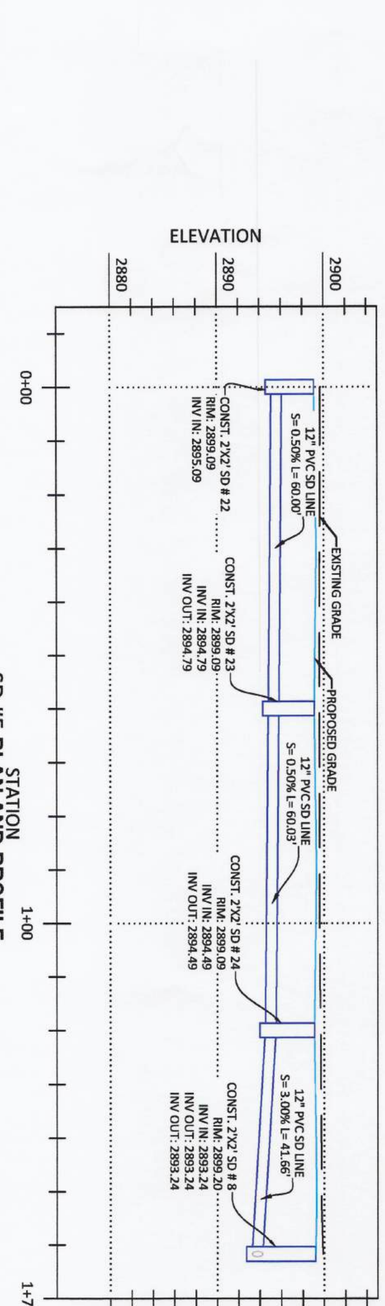
FAWKES
CONSULTANTS INC.

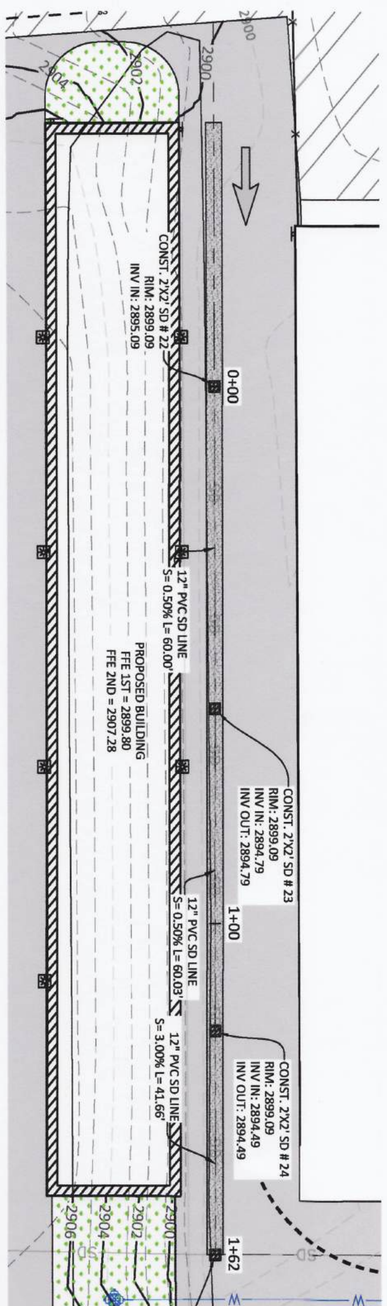












Scale: 1" = 20'

Graphic Scale

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-662-4111

NOV 04 2024

PLAN AND PROFILE

HURRICANE SELF-STORAGE

260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No. 12286589
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=20'
DRAWN BY: JJW

C501

8/14

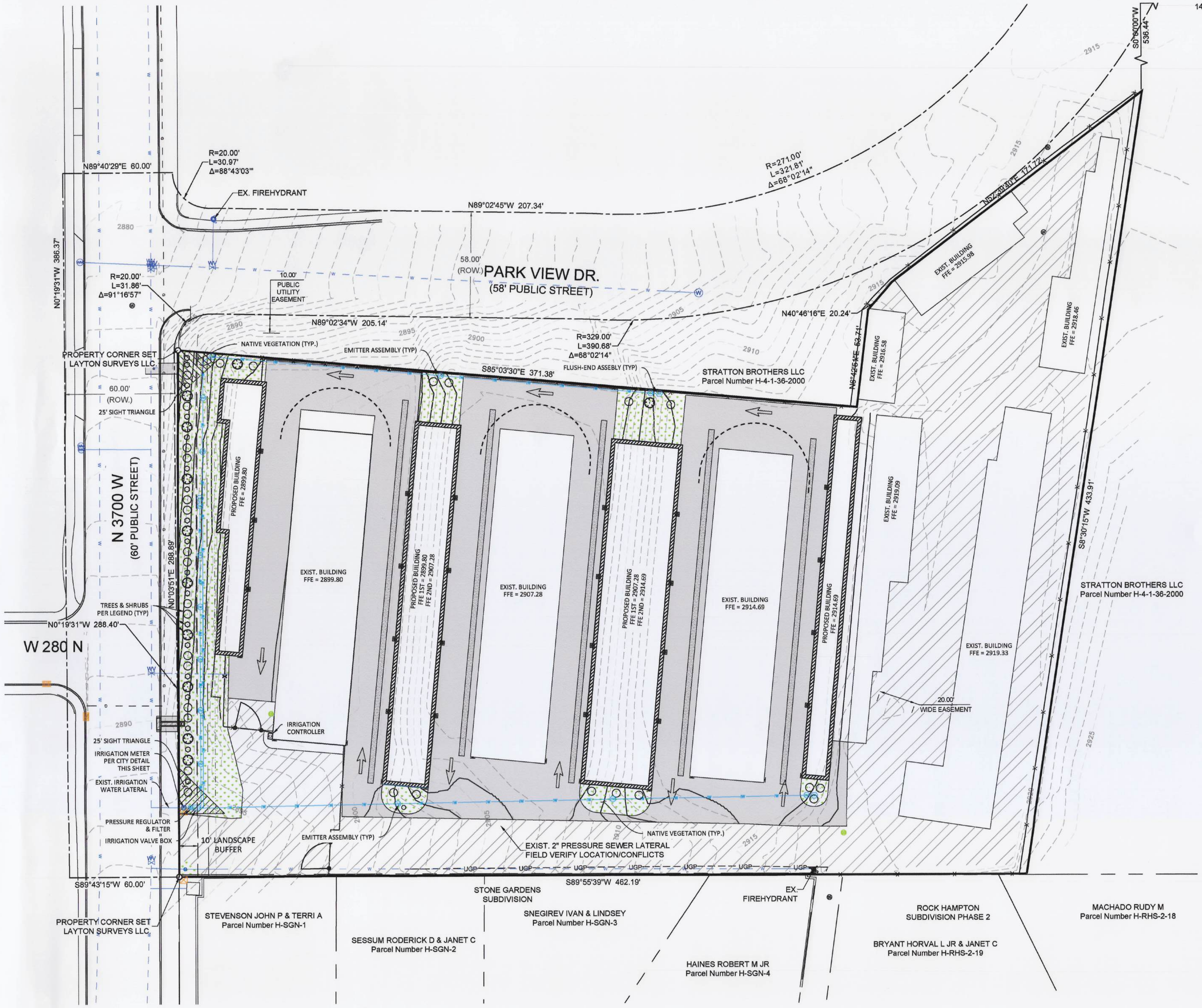
FINAL DESIGN

REVISION	DATE
1	
2	
3	
4	
5	
6	

DATE: 10/30/2024
PROJECT NO. 24.015

FAWKES CONSULTANTS INC.
260 N 3700 W
HURRICANE, UT. 84745
GwilliamsflawkesconsultantsCom

©2024



Scale: 1" = 30'

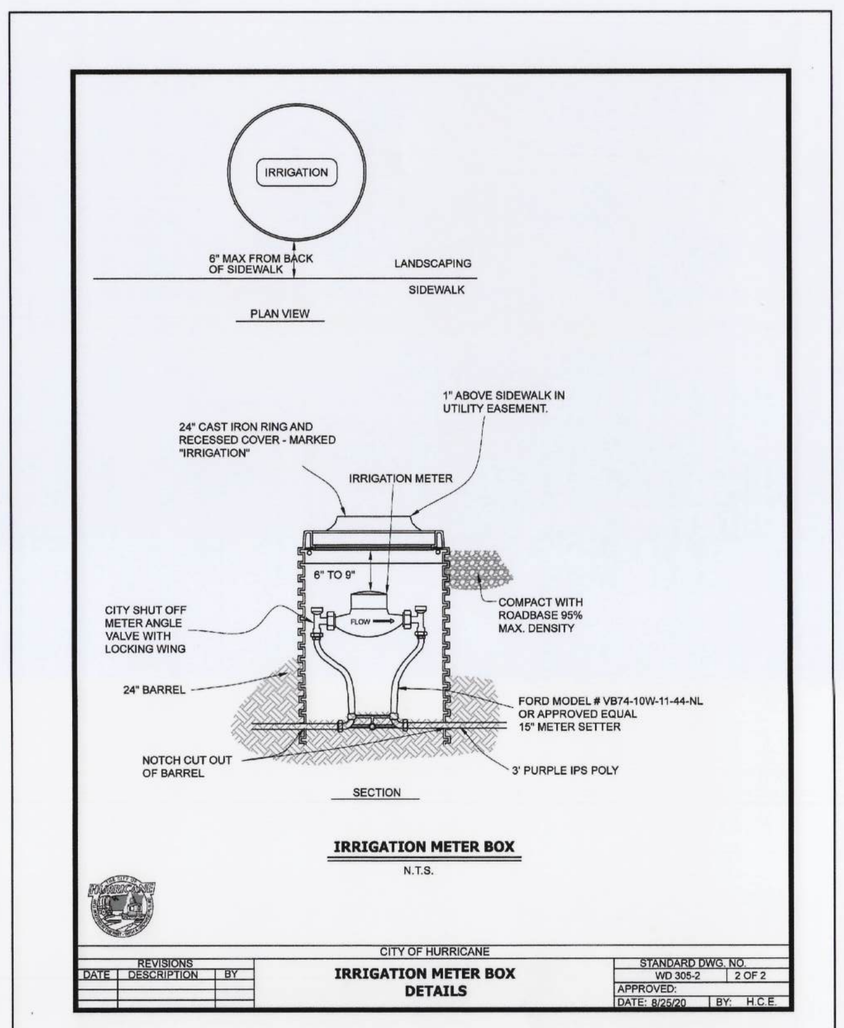
Graphic Scale

N

WEST EAST SOUTH

LEGEND

- GRAVEL MULCH AREA WITH POROUS LANDSCAPE FABRIC - COLOR TO MATCH NATIVE ROCK
- IW — IRRIGATION LINE - 1 INCH IRRIGATION LINE
- IM — IRRIGATION METER PER CITY DETAIL
- IVB — IRRIGATION VALVE BOX WITH IRRIGATION VALVES - HUNTER 1 INCH PGV-ASV (3)
- EM — EMITTER ASSEMBLY - HUNTER MPE (2) - SIX PORTS - UNUSED TO BE PLUGGED
- FA — FLUSH-END ASSEMBLY - 1 INCH FLUSH END ASSEMBLY VALVE
- PRESSURE REGULATOR & FILTER - 1 INCH HY100 FILTER SYSTEM. PRESSURE REGULATOR: FLOW RANGE: 0.5 GPM TO 15 GPM. 1500 MESH STAINLESS STEEL SCREEN.
- C — IRRIGATION SMART CONTROLLER - US EPA WATERSENSE
- EUONYMUS JAPONICUS 'AUREO-MARGINATUS' - GOLDEN EUONYMUS
  5 GALLON - 18 INCH TALL (MIN) - 18 TOTAL
- PRUNUS X CISTENA - PURPLE LEAF SAND CHERRY
  5 GALLON - 18 INCH TALL (MIN) - 31 TOTAL
- QUERCUS GAMBELII - GAMBLE OAK
  15 GALLON - 2 INCH DIAMETER (MIN) - 11 TOTAL



NOTES

1. LANDSCAPE AREAS SHALL BE IRRIGATED AS NECESSARY TO MAINTAIN REQUIRED PLANT MATERIALS IN GOOD AND HEALTHY CONDITION, WHILE AT THE SAME TIME AVOIDING WATER WASTE THROUGH INEFFICIENT IRRIGATION.
2. LANDSCAPE AREAS, INCLUDING PARK STRIPS, SHALL BE MAINTAINED IN A HEALTHY, NEAT, AND ORDERLY CONDITION AS FOLLOWS:
   - 2.1. LANDSCAPED AREAS SHALL BE FREE OF WEEDS AND LITTER.
   - 2.2. LANDSCAPE STRUCTURES (E.G. WALLS, FENCES) SHALL BE REPAIRED OR REPLACED IN A STRUCTURALLY SOUND CONDITION CONSISTENT WITH ORIGINAL APPEARANCE.
   - 2.3. THE CITY MAY REQUIRE THAT ANY DEAD TREES, SHRUBS, AND PLANTS BE REPLACED WITHIN THE CURRENT OR NEXT PLANTING SEASON.
3. COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL LAWNS AREAS ARE PROHIBITED EXCEPT WHERE AN ACTIVE RECREATION AREA IS APPROPRIATE, SUCH AS AT A CHILDCARE CENTER OR ATHLETIC COMPLEX.
4. GROUND TREATMENT. GROUND AREA WITHIN A REQUIRED LANDSCAPE AREA SHALL BE LANDSCAPED AND PRESENT A FINISHED APPEARANCE UPON COMPLETION OF LANDSCAPING. ADDITIONAL GROUND COVER MAY CONSIST OF PLANT MATERIALS CHARACTERIZED BY HORIZONTAL AS WELL AS VERTICAL GROWTH, GENERALLY NOT EXCEED 18 INCHES IN HEIGHT. UP TO 85 PERCENT OF ADDITIONAL GROUND COVER MAY CONSIST OF MULCH SUCH AS DECOMPOSED GRANITE, GRAVEL, CRUSH ROCK, BARK CHIPS, OR SIMILAR MATERIAL. POROUS LANDSCAPE FABRIC SHALL BE REQUIRED UNDER THESE TYPES OF GROUND COVER.

Call before you Dig
Avoid cutting underground utility lines. It's easily.
Call 811
1-800-662-4111

NOV 04 2024

FAWKES CONSULTANTS INC.
©2024
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

LANDSCAPE PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=30'

C600

DRAWN BY: JJW

9/14

Scale: 1" = 30'

Graphic Scale

N

S88°50'02"W 1477.34'

S0°30'00"W 535.44'

E ¼ CORNER SECTION 36
T41S, R14W, SLB&M

R=329.00'
L=40.28'
Δ=7°00'53"

R=271.00'
L=321.61'
Δ=68°02'14"

R=20.00'
L=30.97'
Δ=88°43'03"

N89°40'29"E 60.00'

EX. FIREHYDRANT

N89°02'45"W 207.34'

R=20.00'
L=31.86'
Δ=91°16'57"

10.00' PUBLIC UTILITY EASEMENT

58.00' (ROW.)

PARK VIEW DR.
(58' PUBLIC STREET)

N89°02'34"W 205.14'

N40°46'16"E 20.24'

R=329.00'
L=390.68'
Δ=68°02'14"

N0°19'31"W 386.37'

PROPERTY CORNER SET
LAYTON SURVEYS LLC

S85°03'30"E 371.38'

STRATTON BROTHERS LLC
Parcel Number H-4-1-36-2000

N0°46'45"E 52.71'

EXIST. BUILDING
FFE = 2916.58

EXIST. BUILDING
FFE = 2918.46

EXIST. BUILDING
FFE = 2912.98

S12°39'40"W 102.11'

S12°39'40"E 138.15'

60.00' (ROW.)

N 3700 W
(60' PUBLIC STREET)

N0°13'51"E 288.89'

PROPOSED BUILDING
FFE = 2899.80

SITE LIGHTING (TYP.)

EXIST. BUILDING
FFE = 2899.80

PROPOSED BUILDING
FFE 1ST = 2899.80
FFE 2ND = 2917.28

EXIST. BUILDING
FFE = 2907.28

PROPOSED BUILDING
FFE 1ST = 2900.25
FFE 2ND = 2914.69

EXIST. BUILDING
FFE = 2914.69

PROPOSED BUILDING
FFE = 2914.69

EXIST. BUILDING
FFE = 2915.09

S18°59'59"W 316.40'

S8°30'16"W 433.91'

STRATTON BROTHERS LLC
Parcel Number H-4-1-36-2000

EXIST. BUILDING
FFE = 2919.33

20.00' WIDE EASEMENT

N18°59'59"E 311.00'

N0°19'31"W 288.40'

W 280 N

EXIST. 2" PRESSURE SEWER LATERAL
FIELD VERIFY LOCATION/CONFLICTS

UGP

S89°43'15"W 60.00'

S89°55'39"W 462.19'

EX. FIREHYDRANT

S89°01'26"E 21.03'

PROPERTY CORNER SET
LAYTON SURVEYS LLC

STEVENSON JOHN P & TERRI A
Parcel Number H-SGN-1

SESSUM RODERICK D & JANET C
Parcel Number H-SGN-2

STONE GARDENS
SUBDIVISION

SNEGIREV IVAN & LINDSEY
Parcel Number H-SGN-3

HAINES ROBERT M JR
Parcel Number H-SGN-4

ROCK HAMPTON
SUBDIVISION PHASE 2

BRYANT HORVAL L JR & JANET C
Parcel Number H-RHS-2-19

MACHADO RUDY M
Parcel Number H-RHS-2-18

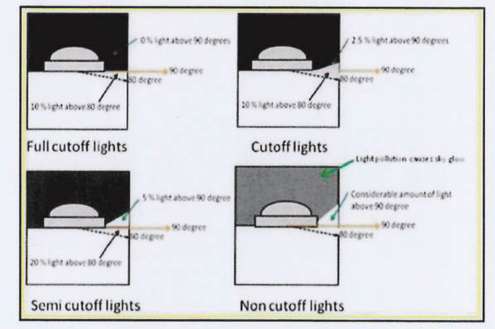
SE ¼ CORNER SECTION 3
T41S, R14W, SLB&M

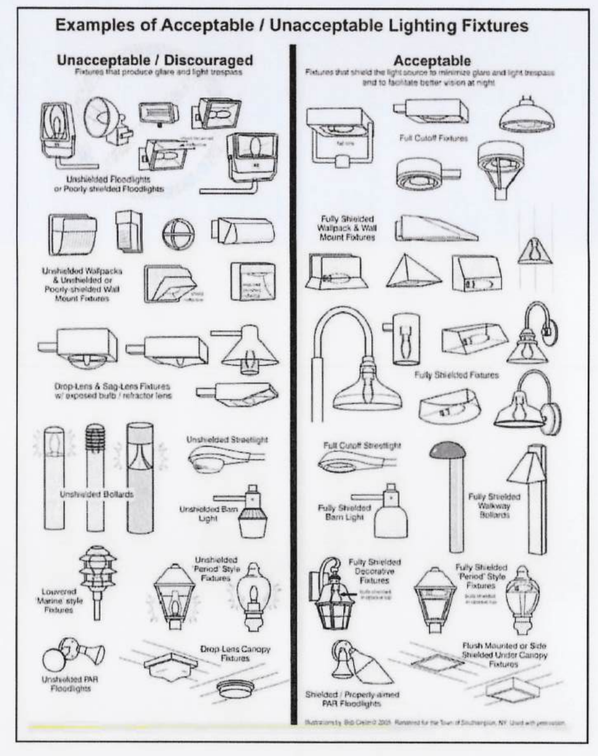
LEGEND

NEW LED SITE LIGHT - 2,700 KELVIN

SITE LIGHTING NOTES

1. EXTERIOR LIGHTING SHALL BE FULLY CUT OFF, FOCUSED DOWNWARDS, AND FULLY SHIELDED SO THAT NO LIGHT SOURCE IS VISIBLE, AND PLACED AND SCREENED SO THAT IT DOES NOT CAUSE LIGHT TRESPASS ON ANY ADJACENT PROPERTIES.
2. FULLY CUT OFF LIGHTING SHALL BE DEFINED AS LIGHTING FIXTURES THAT HAVE COMPLETELY OPAQUE TOPS AND SIDES, SUCH THAT LIGHT CAN ONLY ESCAPE FROM THE BOTTOM AND IS AIMED TOWARDS THE GROUND WITH NO LIGHT AIMING UPWARDS.
3. EXISTING LIGHTS ON SITE SHALL BE BROUGHT IN COMPLIANCE WITH CODE PER BUILDING INSPECTOR.
4. SEE CITY DETAILS BELOW OF APPROVED LIGHTING SPECIFICATIONS/EXAMPLES.





NOV 04 2024

FAWKES CONSULTANTS INC.

260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsulatants.com

©2024

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

LIGHTING PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

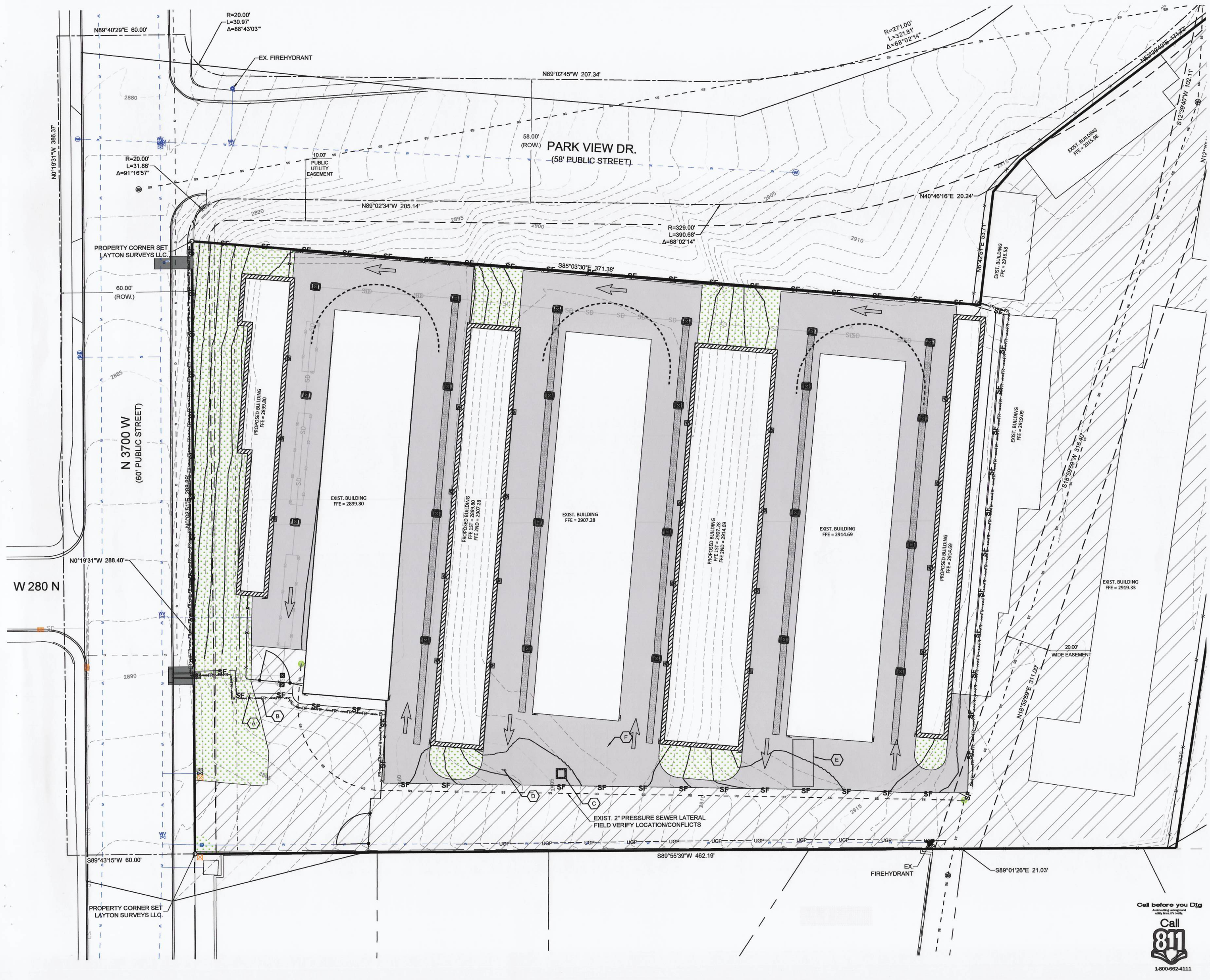
REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

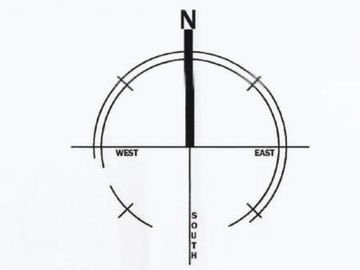
SCALE: 1"=30'

C700

DRAWN BY: JJW

10/14





EROSION CONTROL KEYNOTES

A	FIBER ROLL MAT
B	SILT FENCE
C	CONCRETE WASH OUT
D	STABILIZED CONSTRUCTION ENTRANCE
E	MATERIAL STORAGE
F	STOCKPILE AREA

LEGEND

- SF — SILT FENCE
- CF CF CF — CONSTRUCTION FENCE AT PROPERTY LINE
- LOD LOD — LIMITS OF DISTURBANCE
- DIRECTION OF EXISTING OVERLAND FLOW
- FR FR FR — LINEAR FIBER ROLL
- INLET PROTECTION- WHERE CATCH BASINS AND STORM DRAINS ARE PRESENT ON SITE
- PORTABLE TOILET CONTAINMENT
- JOBSITE DUMPSTER
- CONCRETE WASHOUT AREA
- STABILIZED CONSTRUCTION ENTRANCE
- MATERIAL STORAGE AREA
- STOCK PILE AREA

NOTE: SEE LANDSCAPE PLANS FOR HYDROSEED AREAS FOR SITE SLOPE STABILIZATION.

FAWKES
CONSULTANTS INC.
©2024
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsulstants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

EROSION CONTROL PLAN
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No.12286559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=20'

C800

DRAWN BY: JJW

11/14

ACO StormBrixx®

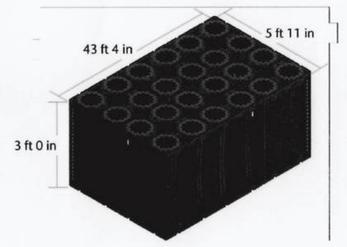
Online Project Configuration

Project Details
Description : Hurricane Self-Storage
Date : 10-24-2024
City : Hurricane
State : Utah
Zip Code : 84745
Country : USA

Customer Details
Contact : Guy Williams
Email : gwilliams@fawkesconsultants.com

Tank Configuration

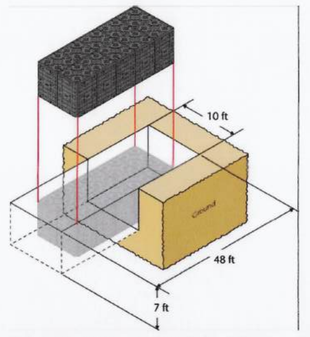
Tank Function	Detention/Retention
Product	Standard Duty (900SD)
Number of Layers	1
Total Net Volume (ft³)	743.6 ft³
Total Gross Volume (ft³)	766.9 ft³
Length of Tank (ft/in)	43 ft 4 in
Width of Tank (ft/in)	5 ft 11 in
Depth of Tank (ft/in)	3 ft 0 in



Cavity & Excavation Details

Length of Cavity (ft/in)	47 ft 4 in
Width of Cavity (ft/in)	9 ft 11 in
Depth of Cavity (ft/in)	6 ft 6 in
Volume of Material to be Excavated (ft³)	3,045.3 ft³
*Membrane Quantity (ft²)	927.6 ft²
Cover Dimension (ft/in)	3 ft 0 in
**Backfill Material (ft³)	2,278.4 ft³

* Calculation includes a 15% overlap
** Pavement not accounted for



* Diagram shows cavity size rounded to nearest foot

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

Project Configuration Inlets, Outlets, and Access

Inlets

	Qty
Inlets	**1**
Remote Access Unit	0
Side Panels	0
Horizontal Pipe Connector	1

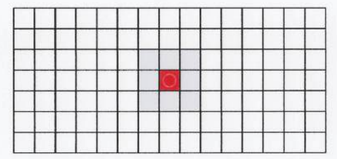
Outlets

	Qty
Outlets	**1**
Remote Access Unit	0
Side Panels	0
Horizontal Pipe Connector	1

Access

	Qty
Access Points	**1**
Remote Access Unit	1
Remote Access Plate	0

Grid Note
The grids below do not represent accurate dimensions or proportions they just give a general guide to both inlet / outlet and access placement on your StormBrixx scheme.



Inlet/Outlet Grid Key
Inlet/Outlet Pipe
Inlet/Outlet using Remote Access Unit

Access Grid Key
Remote Access Unit with maintenance access
Remote Access Plate with maintenance access

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

Bill of Materials

Pt No.		Description	Qty	Price Each ($)	Extended Price ($)	Weight Each (lbs)	Extended Weight (lbs)
138464		Half-Module 900 SD	66	70.00	4,620.00	23.81	1,571.5
138463		Side Panel 900 SD	50	25.00	1,250.00	6.55	327.5
140213		Stormbrixx Universal top cover	66	9.00	594.00	1.31	86.5
314093		Layer Connector	33	1.00	33.00	0.03	1.0
138141		SD Remote Access Unit	1	255.00	255.00	40.00	40.0
314038		Extension Shaft	4	80.00	320.00	4.84	19.4
314133		Remote Access Vented Cover - Ductile Iron	1	275.00	275.00	83.60	83.6
93142		Horizontal Pipe Connector 12" SDR 35	2	179.00	358.00	7.00	14.0
Totals				**Price**	**7,705.00**	**Weight**	**2,143.4**

Notes:
1) These prices are the manufacturer's suggested retail price (MSRP). Please contact your local dealer or ACO Customer Service for more information.

2) You should have received an email with your output results from: no-reply@acosbconfigurator.com If you do not receive the confirmation within a few minutes, please check your spam folder.

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

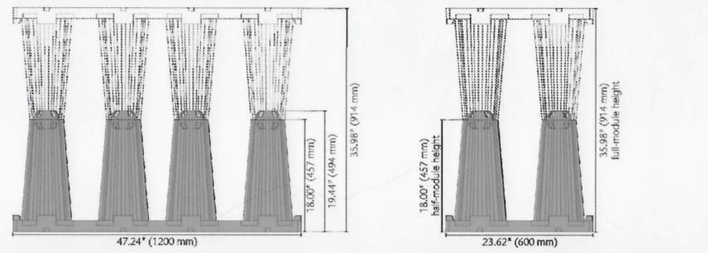
ACO StormBrixx®

October 2024

StormBrixx 900 SD

Half-Module 900 SD

part no. 138464



Note: (2) half-modules are connected to form (1) full-module. (1) side panel fits (1) full-module.

Telephone #: 888.490.9552

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

ACO Specification Information

ACO StormBrixx®

October 2024

StormBrixx 900 SD

Product Details

Product Name	Part No.	Length in (mm)	Width in (mm)	Depth in (mm)	Weight lbs
Half-Module 900 SD	138464	47.24 (1200)	23.62 (600)	19.44 (494)	23.8
Side Panel 900 SD	138463	34.37 (873)	23.18 (589)	2.87 (73)	6.6
Universal Top Cover	140213	21.55 (548)	21.58 (548)	1.74 (44)	1.3
Half-Layer Top Plate	314094	47.28 (1201)	23.66 (601)	3.70 (94)	7.7
Half-Layer Side Panel 900 SD	138567	23.18 (589)	16.18 (411)	2.83 (72)	3.4
Layer Connector	314093	2.11 (54)	1.75 (44)	1.05 (27)	0.1
Remote Access Cover (Vented) - Ductile Iron (Load Class D400)	314133	-	Ø 20.79 (528)	4.33 (110)	83.6
Remote Access Cover (Non-Vented) - Ductile Iron (Load Class D400)	314132	-	Ø 20.79 (528)	4.33 (110)	86.5
Inspection Point Cover - Ductile Iron (Load Class D400)	314044	-	Ø 8.85 (225)	2.95 (75)	34.5
Remote Access Plate	314075	25.59 (650)	25.59 (650)	4.72 (120)	10.8
Remote Access Unit 900 SD	138141	23.39 (594)	23.39 (594)	19.57 (497)	40.0
Extension Shaft	314038	-	Ø 17.20 (437)	13.77 (350)	4.8
Extension Shaft with Pipe Socket	314039	-	Ø 17.20 (437)	13.77 (350)	6.2
Vertical Inspection Point Connector	27018	-	Ø 8.85" (225)	7.87 (200)	5.5
4" SDR 35 Horizontal Pipe Connector	93139	8.00 (203)	6.70 (170)	8.25 (209)	1.9
4" SCH 40 Horizontal Pipe Connector	93145	8.00 (203)	6.70 (170)	8.29 (210)	1.9
6" SDR 35 Horizontal Pipe Connector	93140	8.00 (203)	10.22 (259)	9.93 (252)	3.2
6" SCH 40 Horizontal Pipe Connector	93146	8.00 (203)	10.22 (259)	9.93 (252)	3.2
8" SDR 35 Horizontal Pipe Connector	93141	8.00 (203)	11.64 (295)	11.39 (289)	5.5
8" SCH 40 Horizontal Pipe Connector	93147	8.00 (203)	11.64 (295)	11.39 (289)	5.5
12" SDR 35 Horizontal Pipe Connector	93142	8.00 (203)	16.66 (423)	14.30 (363)	5.5
15" SCH 40 Horizontal Pipe Connector	93144	8.00 (203)	19.25 (489)	19.25 (489)	5.5

* internal width

Specification Summary

General
The StormBrixx stormwater management system shall be ACO StormBrixx 900 SD as supplied by ACO, Inc.

ACO StormBrixx 900 SD meets AASHTO HS-20 loading conditions.

Geomembranes/Geotextiles
The StormBrixx stormwater system shall be wrapped in either appropriate permeable geotextile or impermeable geomembrane (supplied and specified by others) as indicated by project design engineer.

Accessories
The StormBrixx stormwater system may be used in conjunction with one or more optional products: remote access unit, remote access plate extension shaft, and/or inspection point connector.

Installation
The StormBrixx stormwater system shall be installed in strict accordance with the manufacturer's installation instructions and recommendations.

Materials
The half-module shall be manufactured from polypropylene and have minimum properties as follows:

Charpy unnotched impact strength:	1.4 ft-lb/in² (3 kJ/m²)
Tensile strength, ultimate:	8,480 psi (23,994 kPa)
Water absorption:	0.01%
Frost proof:	YES
Salt proof:	YES
Flashpoint resistant:	YES

The stormwater tank shall provide an average 97% open area, holding up to 22.54 ft³ (0.64 m³) per module (2 half-modules assembled) and allow full access to all areas and levels for maintenance. Configuration and use of side/top panels will marginally impact these figures.

ACO, Inc.

© October 2024 ACO, Inc.
All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on the use of ACO products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to ensure that each product is fit for its intended purpose and that the actual conditions of use are suitable. ACO, Inc. reserves the right to change products and specifications without notice.

Telephone #: 888.490.9552

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

ACO Specification Information

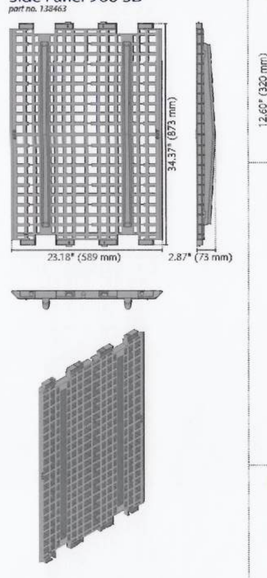
ACO StormBrixx®

October 2024

StormBrixx 900 SD

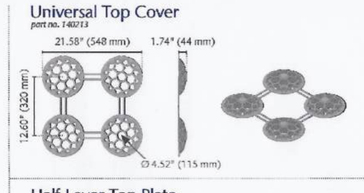
Side Panel 900 SD

part no. 138463



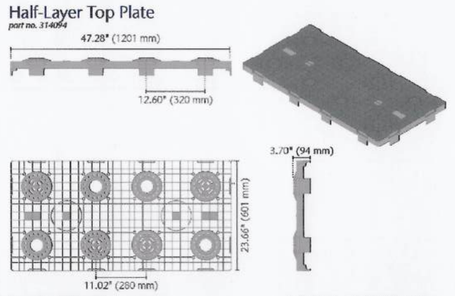
Universal Top Cover

part no. 140213



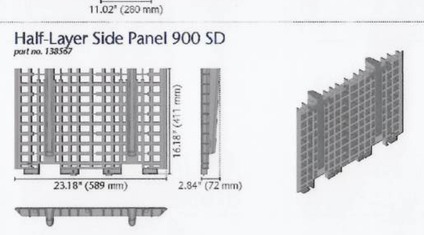
Half-Layer Top Plate

part no. 314094



Half-Layer Side Panel 900 SD

part no. 138567



Telephone #: 888.490.9552

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

ACO Specification Information

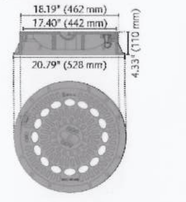
ACO StormBrixx®

October 2024

StormBrixx 900 SD

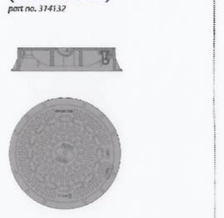
Remote Access Cover (Vented)

part no. 314133



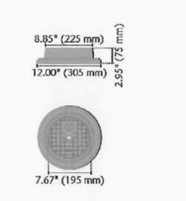
Remote Access Cover (Non-Vented)

part no. 314132



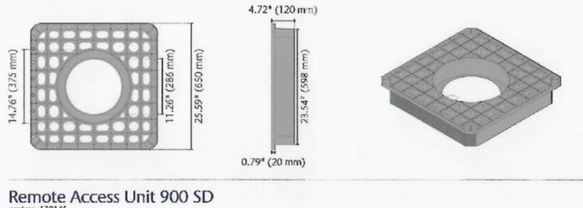
Inspection Point Cover

part no. 314044



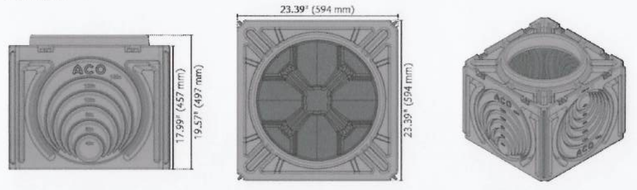
Remote Access Plate

part no. 314075



Remote Access Unit 900 SD

part no. 138141



Telephone #: 888.490.9552

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

ACO Specification Information

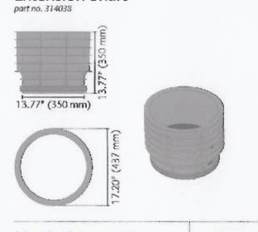
ACO StormBrixx®

October 2024

StormBrixx 900 SD

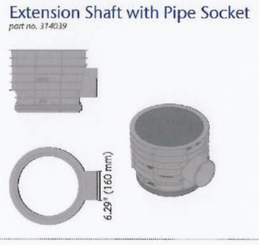
Extension Shaft

part no. 314038



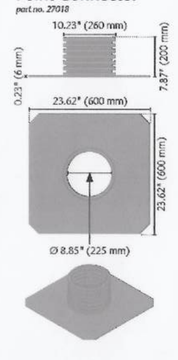
Extension Shaft with Pipe Socket

part no. 314039



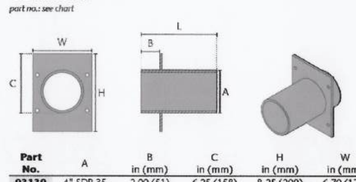
Vertical Inspection Point Connector

part no. 27018



Horizontal Pipe Connector

part no.: see chart



Part No.	A	B in (mm)	C in (mm)	H in (mm)	W in (mm)	L in (mm)
93139	4" SDR 35	2.00 (51)	6.25 (158)	8.25 (209)	6.70 (170)	8.00 (203)
93145	4" SCH 40	2.00 (51)	7.47 (189)	8.29 (210)	6.70 (170)	8.00 (203)
93140	6" SDR 35	2.00 (51)	8.95 (227)	9.93 (252)	10.22 (259)	8.00 (203)
93146	6" SCH 40	2.00 (51)	9.31 (231)	9.93 (252)	10.22 (259)	8.00 (203)
93141	8" SDR 35	2.00 (51)	10.46 (265)	11.39 (289)	11.64 (295)	8.00 (203)
93147	8" SCH 40	2.00 (51)	10.57 (268)	11.39 (289)	11.64 (295)	8.00 (203)
93142	12" SDR 35	2.00 (51)	13.48 (342)	14.30 (363)	16.66 (423)	8.00 (203)
93144	15" SCH 40	2.00 (51)	17.28 (439)	19.25 (489)	19.25 (489)	8.00 (203)

Telephone #: 888.490.9552

© ACO, Inc.

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

ACO Specification Information

FAWKES CONSULTANTS INC.
©2024
260 N 3700 W
HURRICANE, UT. 84745
GwIlliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

STORMBRIXX DETAILS
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=30'

C900

DRAWN BY: JJW

12/14

NOV 0 4 2024

ACO StormBrixx®

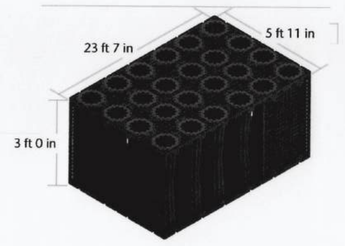
Online Project Configuration

Project Details
Description : Hurricane Self-Storage
Date : 10-24-2024
City : Hurricane
State : Utah
Zip Code : 84745
Country : USA

Customer Details
Contact : Guy Williams
Email : gwilliams@fawkesconsultants.com

Tank Configuration

Tank Function	Detention/Retention
Product	Standard Duty (900SD)
Number of Layers	1
Total Net Volume (ft³)	405.6 ft³
Total Gross Volume (ft³)	418.3 ft³
Length of Tank (ft/in)	23 ft 7 in
Width of Tank (ft/in)	5 ft 11 in
Depth of Tank (ft/in)	3 ft 0 in



Cavity & Excavation Details

Length of Cavity (ft/in)	27 ft 7 in
Width of Cavity (ft/in)	9 ft 11 in
Depth of Cavity (ft/in)	6 ft 6 in
Volume of Material to be Excavated (ft³)	1,778.1 ft³
*Membrane Quantity (ft²)	524.5 ft²
Cover Dimension (ft/in)	3 ft 0 in
**Backfill Material (ft³)	1,359.8 ft³

* Calculation includes a 15% overlap
** Pavement not accounted for

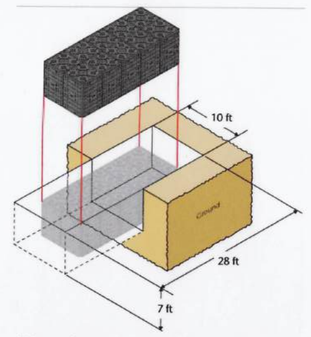


*Diagram shows cavity size rounded to nearest foot

Project Configuration Inlets, Outlets, and Access

Inlets

	Qty
Inlets	**1**
Remote Access Unit	0
Side Panels	0
Horizontal Pipe Connector	1

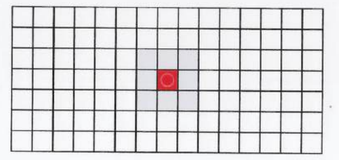
Outlets

	Qty
Outlets	**1**
Remote Access Unit	0
Side Panels	0
Horizontal Pipe Connector	1

Access

	Qty
Access Points	**1**
Remote Access Unit	1
Remote Access Plate	0

Grid Note
The grids below do not represent accurate dimensions or proportions they just give a general guide to both inlet / outlet and access placement on your StormBrixx scheme.



Inlet/Outlet Grid Key
Inlet/Outlet Pipe
Inlet/Outlet using Remote Access Unit

Access Grid Key
Remote Access Unit with maintenance access
Remote Access Plate with maintenance access

Bill of Materials

Pt No.		Description	Qty	Price Each ($)	Extended Price ($)	Weight Each (lbs)	Extended Weight (lbs)
138464		Half-Module 900 SD	36	70.00	2,520.00	23.81	857.2
138463		Side Panel 900 SD	30	25.00	750.00	6.55	196.5
140213		Stormbrixx Universal top cover	36	9.00	324.00	1.31	47.2
314093		Layer Connector	18	1.00	18.00	0.03	0.5
138141		SD Remote Access Unit	1	255.00	255.00	40.00	40.0
314038		Extension Shaft	4	80.00	320.00	4.84	19.4
314133		Remote Access Vented Cover - Ductile Iron	1	275.00	275.00	83.60	83.6
93142		Horizontal Pipe Connector 12" SDR 35	2	179.00	358.00	7.00	14.0
Totals				**Price**	**4,820.00**	**Weight**	**1,258.3**

Notes:
1) These prices are the manufacturer's suggested retail price (MSRP). Please contact your local dealer or ACO Customer Service for more information.

2) You should have received an email with your output results from: no-reply@acosbconfigurator.com If you do not receive the confirmation within a few minutes, please check your spam folder.

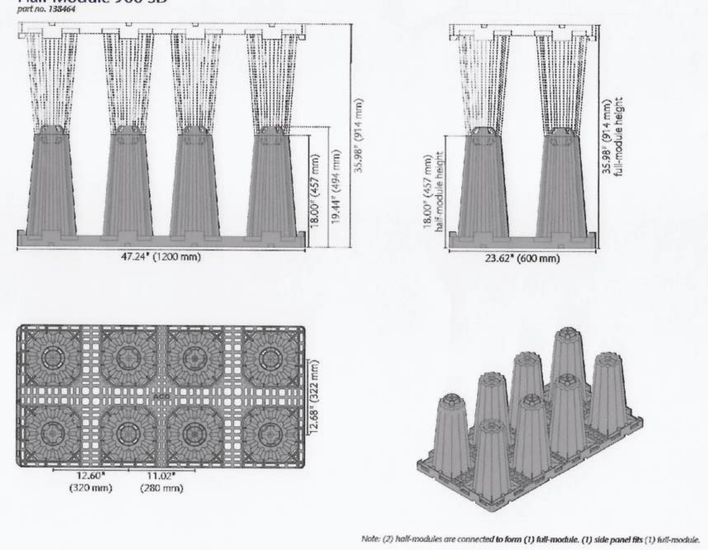
ACO StormBrixx®

October 2024

StormBrixx 900 SD

Half-Module 900 SD

part no. 138464



Note: (2) half-modules are connected to form (1) full-module. (1) side panel fits (1) full-module.

Telephone #: 888.490.9552

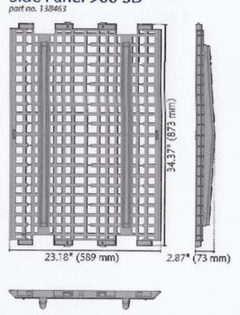
ACO StormBrixx®

October 2024

StormBrixx 900 SD

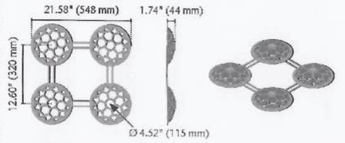
Side Panel 900 SD

part no. 138463



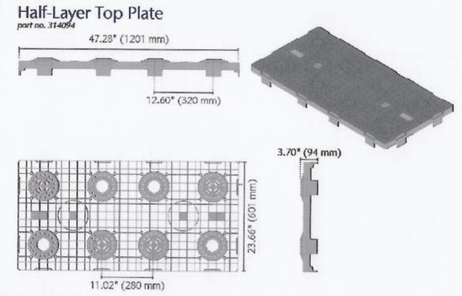
Universal Top Cover

part no. 140213



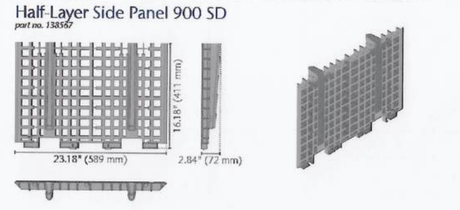
Half-Layer Top Plate

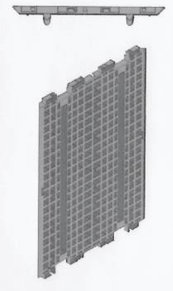
part no. 314094



Half-Layer Side Panel 900 SD

part no. 138567





Telephone #: 888.490.9552

ACO Specification Information

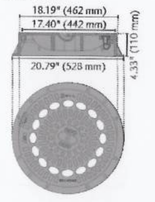
ACO StormBrixx®

October 2024

StormBrixx 900 SD

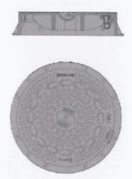
Remote Access Cover (Vented)

part no. 314132



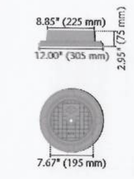
Remote Access Cover (Non-Vented)

part no. 314132



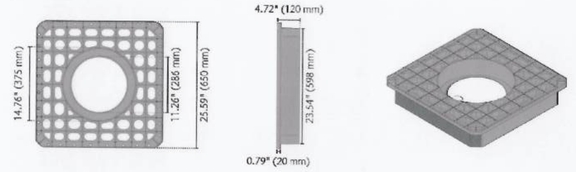
Inspection Point Cover

part no. 314044



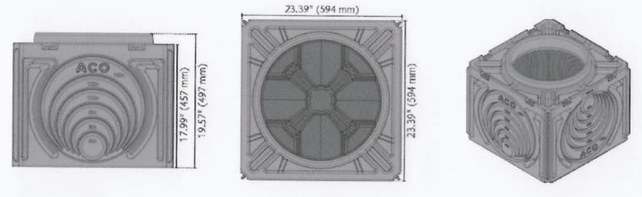
Remote Access Plate

part no. 314075



Remote Access Unit 900 SD

part no. 138141



Telephone #: 888.490.9552

ACO Specification Information

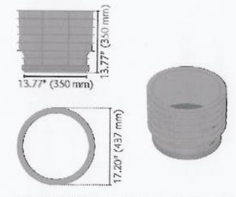
ACO StormBrixx®

October 2024

StormBrixx 900 SD

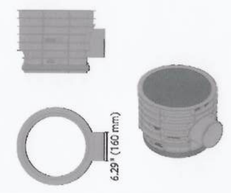
Extension Shaft

part no. 314038



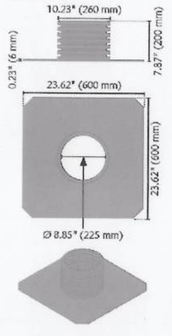
Extension Shaft with Pipe Socket

part no. 314039



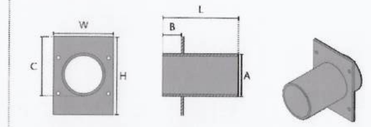
Vertical Inspection Point Connector

part no. 27018



Horizontal Pipe Connector

part no.: see chart



Part No.	A	B in (mm)	C in (mm)	H in (mm)	W in (mm)	L in (mm)
93139	4" SDR 35	2.00 (51)	6.25 (158)	8.25 (209)	6.70 (170)	8.00 (203)
93145	4" SCH 40	2.00 (51)	7.47 (189)	8.29 (210)	6.70 (170)	8.00 (203)
93140	6" SDR 35	2.00 (51)	8.95 (227)	9.93 (252)	10.22 (259)	8.00 (203)
93146	6" SCH 40	2.00 (51)	9.11 (231)	9.93 (252)	10.22 (259)	8.00 (203)
93141	8" SDR 35	2.00 (51)	10.46 (265)	11.39 (289)	11.64 (295)	8.00 (203)
93147	8" SCH 40	2.00 (51)	10.57 (268)	11.39 (289)	11.64 (295)	8.00 (203)
93142	12" SDR 35	2.00 (51)	13.48 (342)	14.30 (363)	16.66 (423)	8.00 (203)
93144	15" SCH 40	2.00 (51)	17.28 (439)	19.25 (489)	19.25 (489)	8.00 (203)

Telephone #: 888.490.9552

ACO Specification Information

ACO StormBrixx®

October 2024

StormBrixx 900 SD

Product Details

Product Name	Part No.	Length in (mm)	Width in (mm)	Depth in (mm)	Weight lbs
Half-Module 900 SD	138464	47.24 (1200)	23.62 (600)	19.44 (494)	23.8
Side Panel 900 SD	138463	34.37 (873)	23.18 (589)	2.87 (73)	6.6
Universal Top Cover	140213	21.58 (548)	21.58 (348)	1.74 (44)	1.3
Half-Layer Top Plate	314094	47.28 (1201)	23.66 (601)	3.70 (94)	7.7
Half-Layer Side Panel 900 SD	138567	23.18 (589)	16.18 (411)	2.83 (72)	3.4
Layer Connector	314093	2.11 (54)	1.75 (44)	1.05 (27)	0.1
Remote Access Cover (Vented) - Ductile Iron (Load Class D400)	314133	-	Ø 20.79 (528)	4.33 (110)	83.6
Remote Access Cover (Non-Vented) - Ductile Iron (Load Class D400)	314132	-	Ø 20.79 (528)	4.33 (110)	86.5
Inspection Point Cover - Ductile Iron (Load Class D400)	314044	-	Ø 8.85 (225)	2.95 (75)	34.5
Remote Access Plate	314075	25.59 (650)	25.59 (650)	4.72 (120)	10.8
Remote Access Unit 900 SD	138141	23.39 (594)	23.39 (594)	19.57 (497)	40.0
Extension Shaft	314038	-	Ø 17.20 (437)	13.77 (350)	4.8
Extension Shaft with Pipe Socket	314039	-	Ø 17.20 (437)	13.77 (350)	6.2
Vertical Inspection Point Connector	27018	-	Ø 8.85" (225)	7.87 (200)	5.5
4" SDR 35 Horizontal Pipe Connector	93139	8.00 (203)	6.70 (170)	8.25 (209)	1.9
4" SCH 40 Horizontal Pipe Connector	93145	8.00 (203)	6.70 (170)	8.29 (210)	1.9
6" SDR 35 Horizontal Pipe Connector	93140	8.00 (203)	10.22 (259)	9.93 (252)	3.2
6" SCH 40 Horizontal Pipe Connector	93146	8.00 (203)	10.22 (259)	9.93 (252)	3.2
8" SDR 35 Horizontal Pipe Connector	93141	8.00 (203)	11.64 (295)	11.39 (289)	5.5
8" SCH 40 Horizontal Pipe Connector	93147	8.00 (203)	11.64 (295)	11.39 (289)	5.5
12" SDR 35 Horizontal Pipe Connector	93142	8.00 (203)	16.66 (423)	14.30 (363)	5.5
15" SCH 40 Horizontal Pipe Connector	93144	8.00 (203)	19.25 (489)	19.25 (489)	5.5

* internal width

Specification Summary

General

The StormBrixx stormwater management system shall be ACO StormBrixx 900 SD as supplied by ACO, Inc.

ACO StormBrixx 900 SD meets AASHTO HS-20 loading conditions.

Geomembranes/Geotextiles

The StormBrixx stormwater system shall be wrapped in either appropriate permeable geotextile or impermeable geomembrane (supplied and specified by others) as indicated by project design engineer.

Accessories

The StormBrixx stormwater system may be used in conjunction with one or more optional products: remote access unit, remote access plate extension shaft, and/or inspection point connector.

Installation

The StormBrixx stormwater system shall be installed in strict accordance with the manufacturer's installation instructions and recommendations.

Materials

The half-module shall be manufactured from polypropylene and have minimum properties as follows:

Charpy unnotched impact strength:	1.4 ft-lb/in² (3 kJ/m²)
Tensile strength, ultimate:	3,480 psi (23,994 kPa)
Water absorption:	0.01%
Frost proof:	YES
Salt proof:	YES
Fuel/oils resistant:	YES

The stormwater tank shall provide an average 97% open area, holding up to 22.54 ft³ (0.64 m³) per module (2 half-modules assembled) and offer full access to all areas and levels for maintenance. Configuration and use of side/top panels will marginally impact these figures.

ACO, Inc.

© October 2024 ACO, Inc.
All reasonable care has been taken in compiling the information in this document. All recommendations and suggestions on the use of ACO products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to ensure that each product is fit for its intended purpose and that the actual conditions of use are suitable. ACO, Inc. reserves the right to change products and specifications without notice.

Telephone #: 888.490.9552

ACO Specification Information

NOV 04 2024

FAWKES CONSULTANTS INC.
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

©2024

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

STORMBRIXX DETAILS
HURRICANE SELF-STORAGE
260 N 3700 W
HURRICANE, UTAH 84745

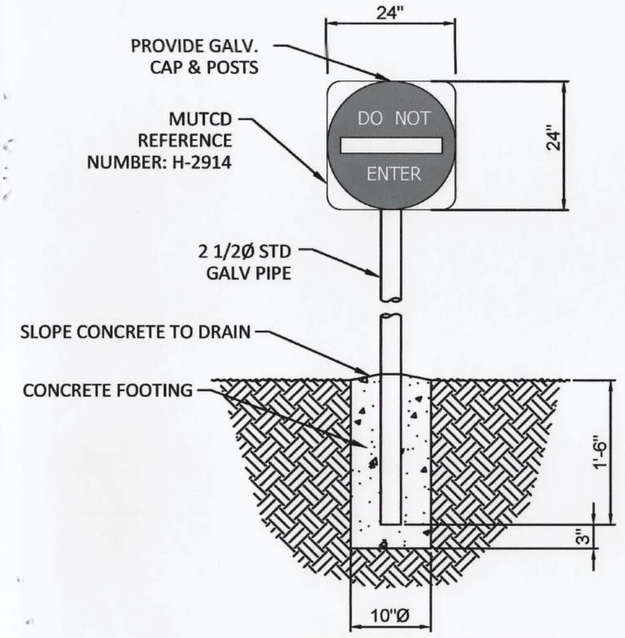
REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

SCALE: 1"=30'

C901

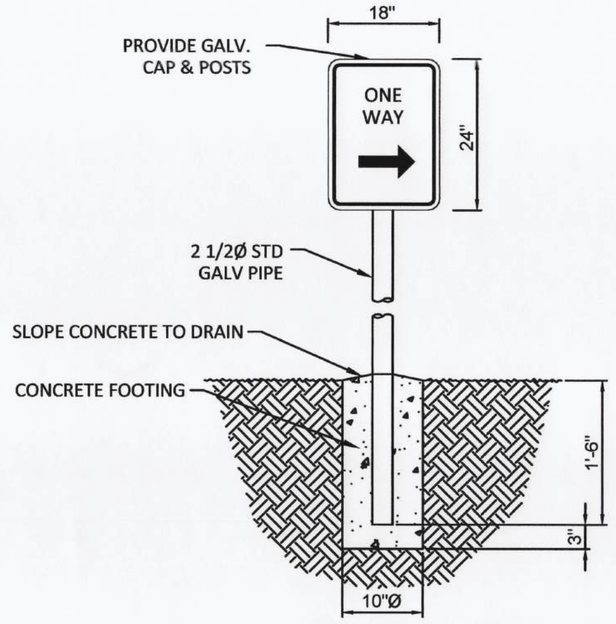
DRAWN BY: JJW

13/14



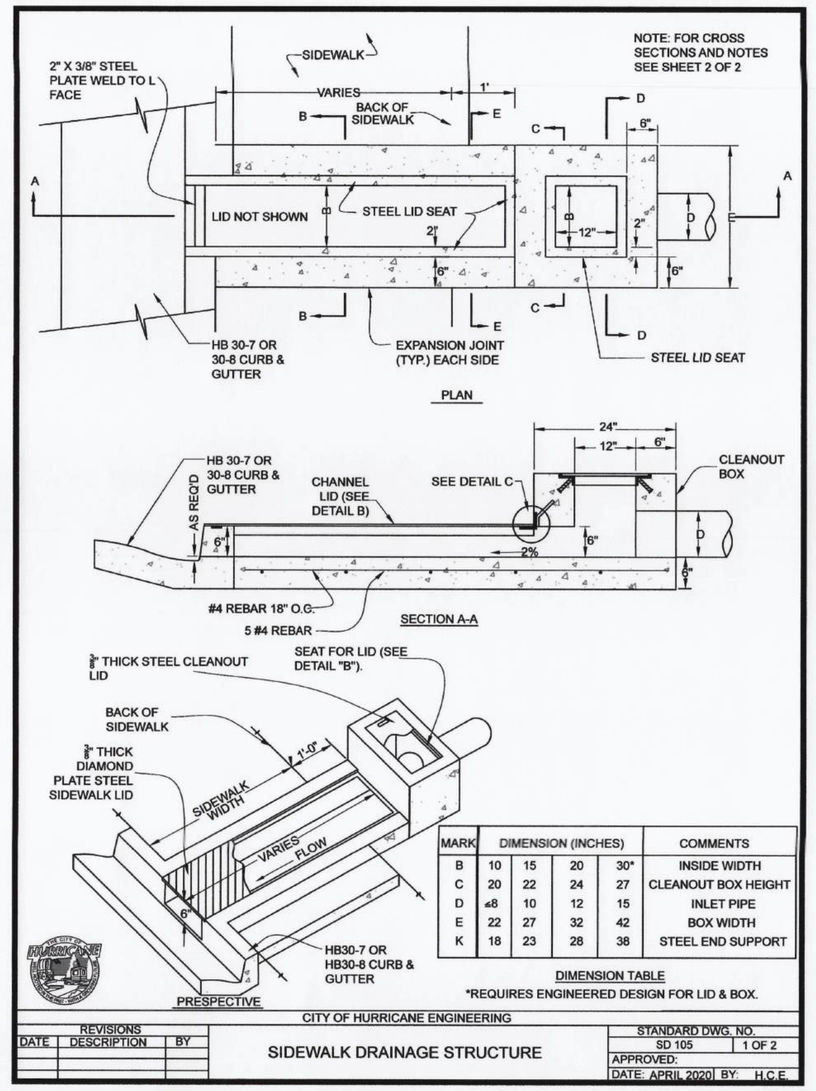
1 DO NOT ENTER SIGN DETAIL

NOT TO SCALE



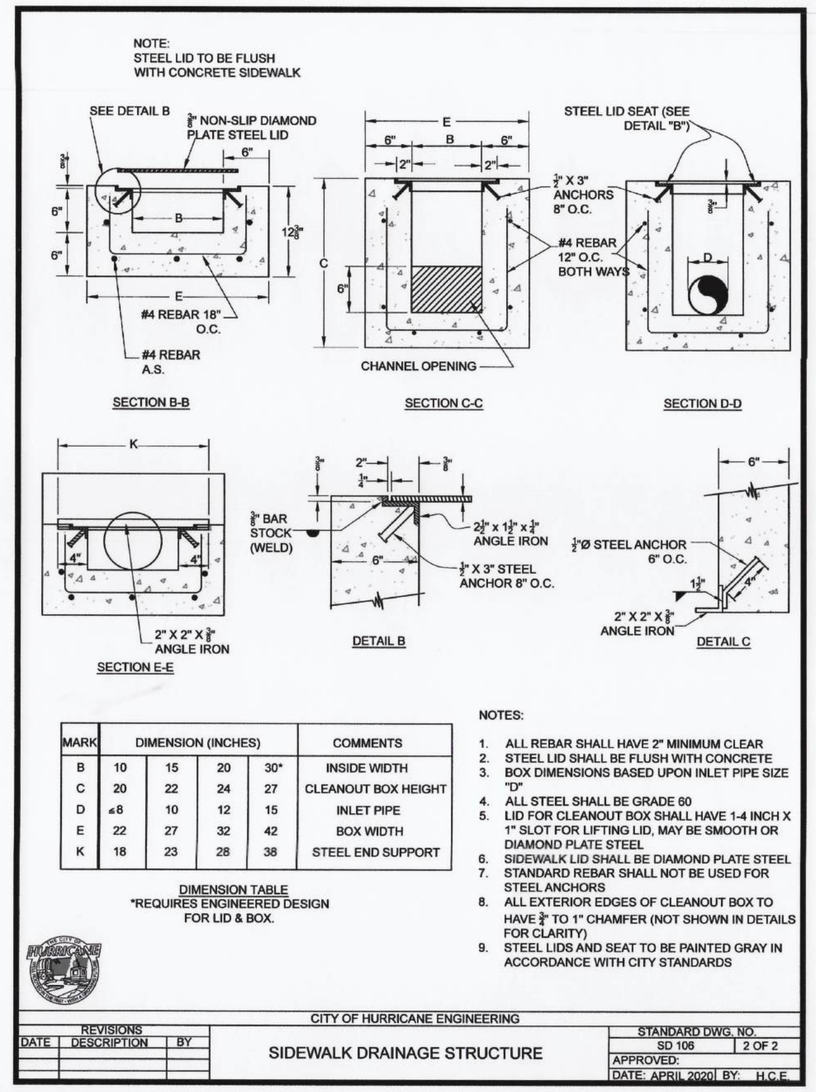
2 ONE WAY SIGN DETAIL

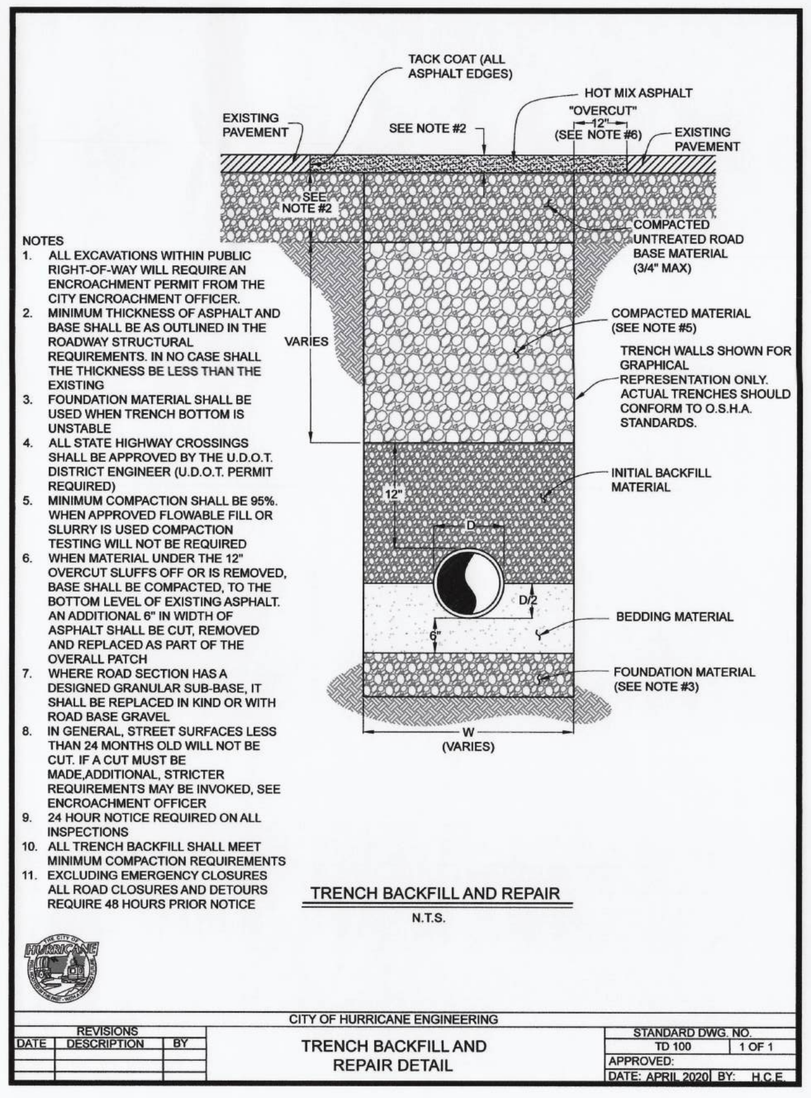
NOT TO SCALE



3 SIDEWALK DRAINAGE STRUCTURE

NOT TO SCALE



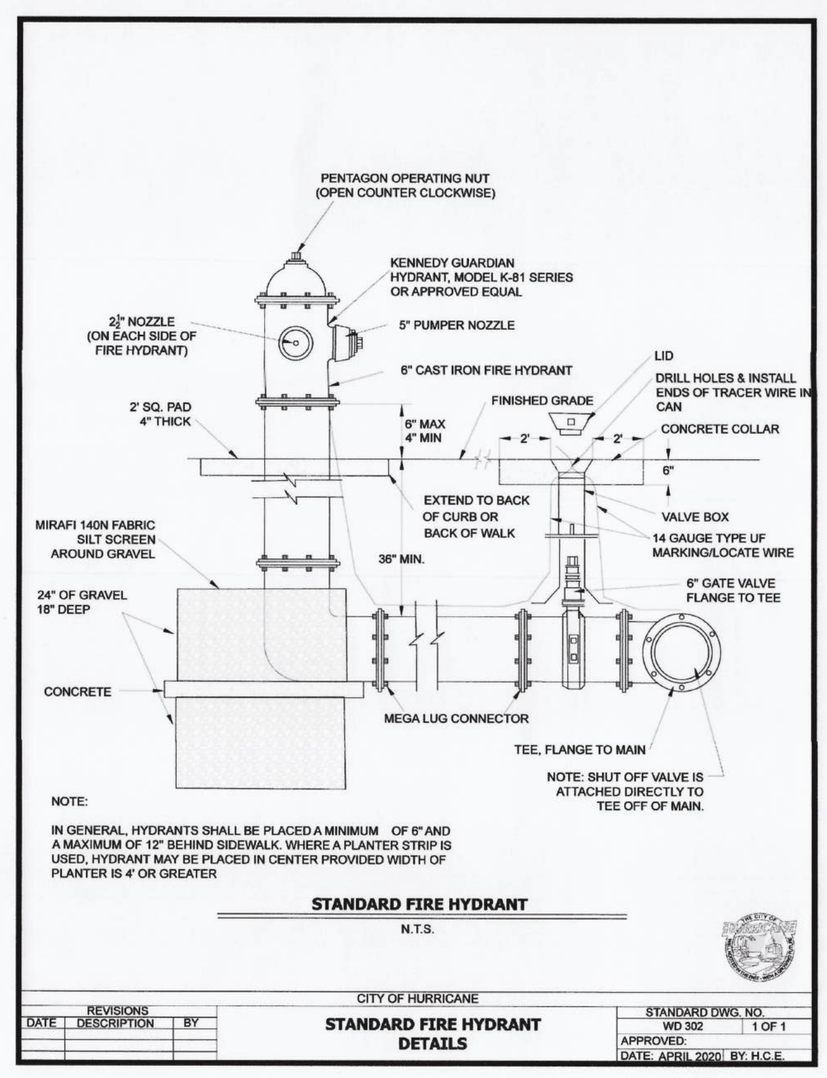


4 TRENCH BACKFILL DETAIL

NOT TO SCALE

TRENCH BACKFILL AND REPAIR

N.T.S.



5 FIRE HYDRANT DETAIL

NOT TO SCALE

NOV 0 4 2024

FAWKES CONSULTANTS INC.
©2024
260 N 3700 W
HURRICANE, UT. 84745
Gwilliams@fawkesconsultants.com

FINAL DESIGN

DATE: 10/30/2024
PROJECT NO. 24.015

REVISION	DATE
1	
2	
3	
4	
5	
6	

DETAILS

HURRICANE SELF-STORAGE

260 N 3700 W
HURRICANE, UTAH 84745

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
10/30/24
STATE OF UTAH

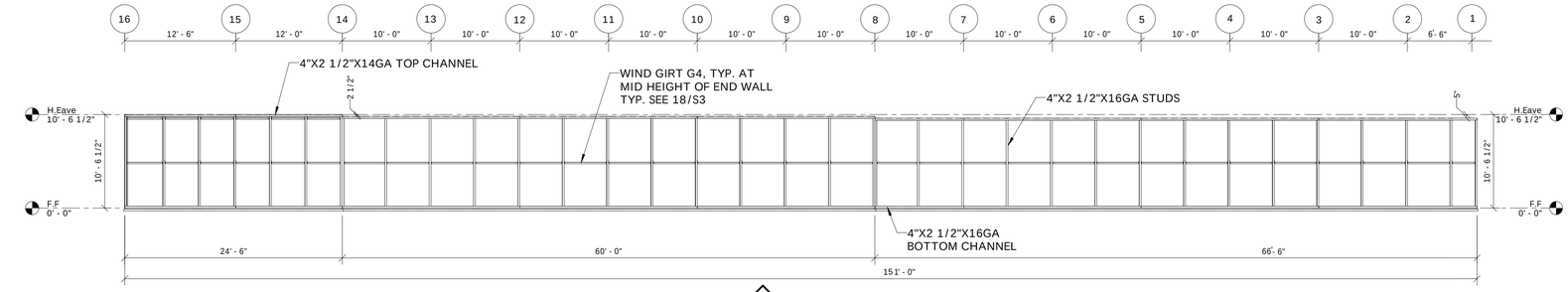
SCALE: 1"=30'

C902

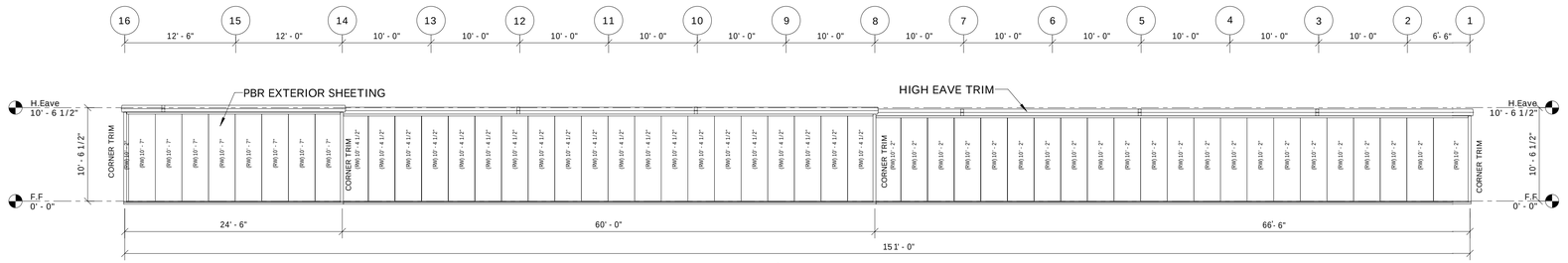
DRAWN BY: JJW

14/14

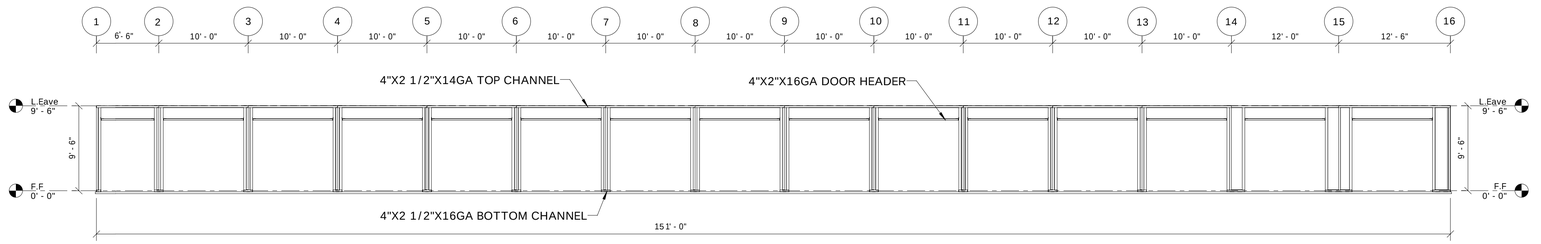
BUILDING A



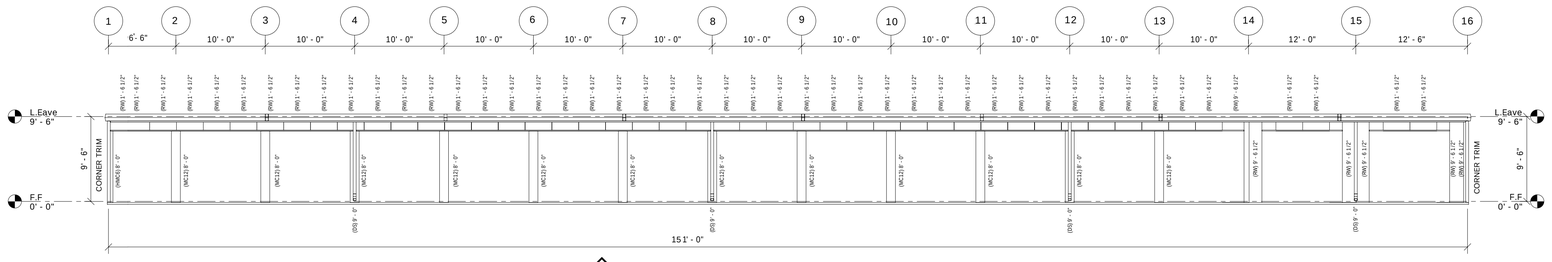
1 WEST FRAMING ELEVATION
BUILDING "A"(1/8"=1'-0")



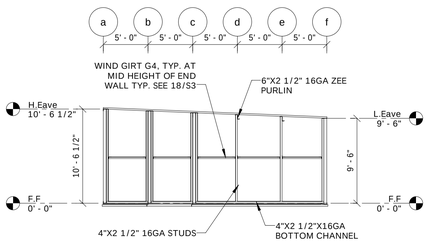
2 WEST ELEVATION
BUILDING "A"(1/8"=1'-0")



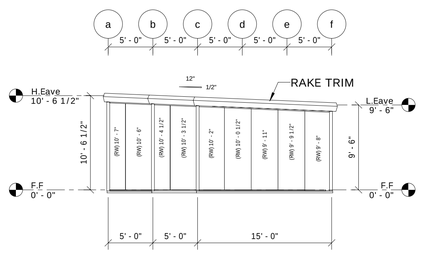
3 EAST FRAMING ELEVATION
BUILDING "A"(1/8"=1'-0")



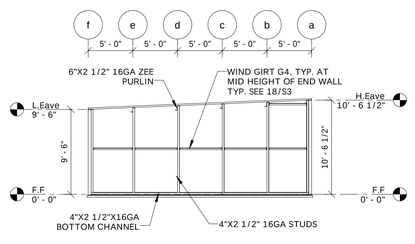
4 EAST ELEVATION
BUILDING "A"(1/8"=1'-0")



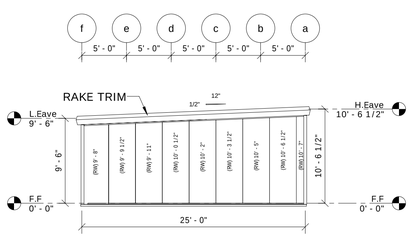
5 SOUTH FRAMING ELEVATION
BUILDING "A"(1/8"=1'-0")



6 SOUTH ELEVATION
BUILDING "A"(1/8"=1'-0")



7 NORTH FRAMING ELEVATION
BUILDING "A"(1/8"=1'-0")



8 NORTH ELEVATION
BUILDING "A"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

PROJECT
Hurricane Self Storage

DESCRIPTION: TAKE OFF SET
LOCATION: La Verkin, UT
DRAWING BY: A.G.
DRAWING DATE: 07/27/2024
CHECKED BY: M.J.
SCALE: 1/8" = 1'-0"

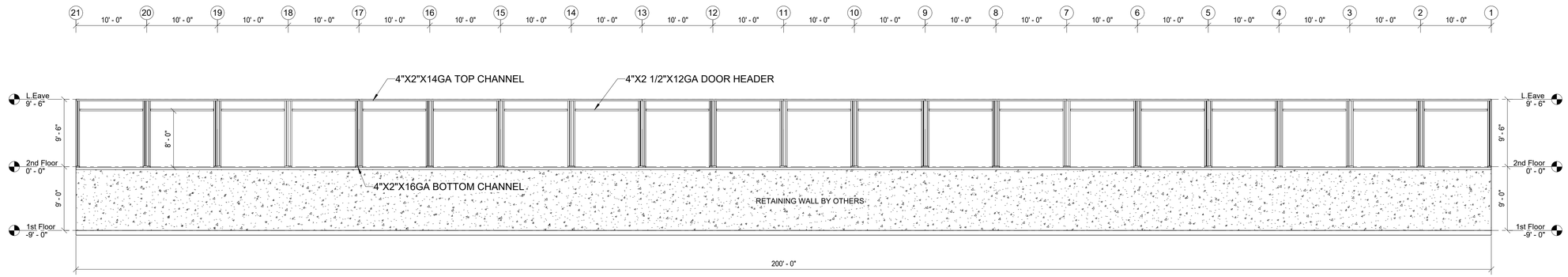
REVISION:

NO.	DATE	DESCRIPTION
1.	07-17-2024	STRUCTURAL SPECIFICATION CHANGE AND MEMBER ADDED

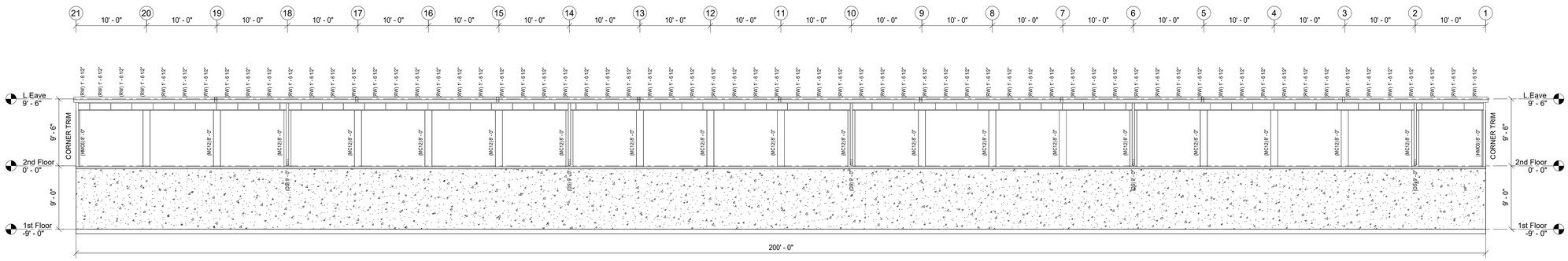
PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
07/24/2024
STATE OF UTAH

JOB #: Hurricane Self Storage
ISSUE DATE: 06/10/2024
ISSUE: TAKE OFF
SHEET: S-4
OF SHEETS

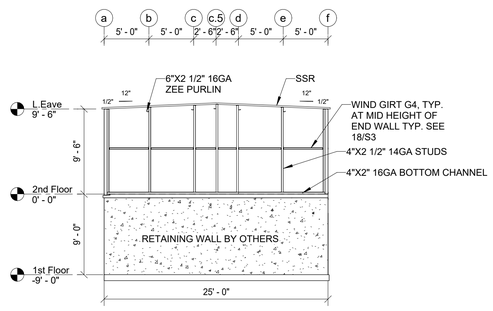
BUILDING B



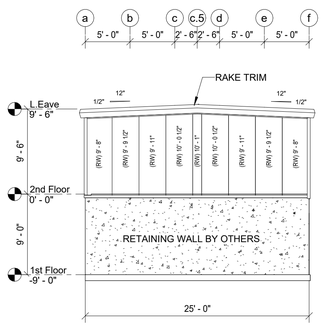
1 EAST FRAMING ELEVATION
BUILDING "B1"(1/8"=1'-0")



2 EAST
BUILDING "B1"(1/8"=1'-0")



5 NORTH FRAMING
BUILDING "B1"(1/8"=1'-0")



6 NORTH ELEVATION
BUILDING "B1"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

Hurricane Self Storage

PROJECT

DESCRIPTION: TAKE OFF SET

LOCATION: La Verkin, UT

DRAWING BY: A.G.

CHECKED BY: M.J.

DRAWING DATE: 07/27/2024

SCALE: 1/8" = 1'-0"

REVISION:

NO.	DATE	DESCRIPTION

PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
07/30/2024
STATE OF UTAH

JOB #: Hurricane Self Storage

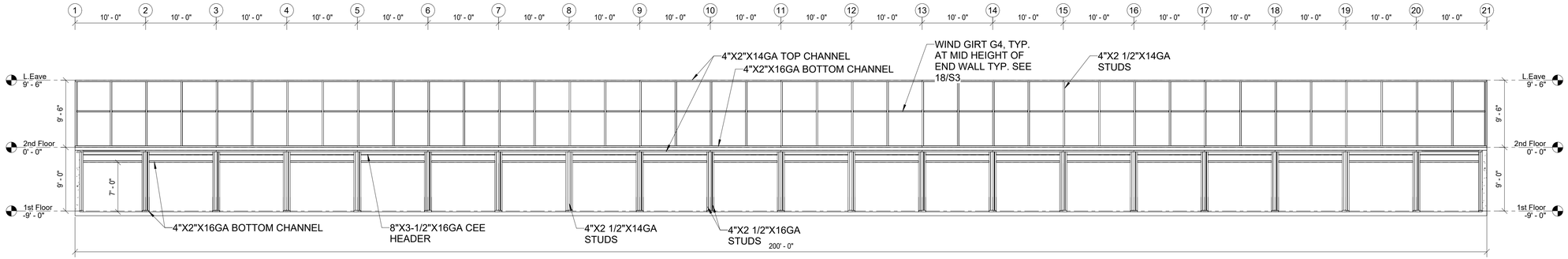
ISSUE DATE: 06/10/2024

ISSUE: TAKE OFF

SHEET: S-4.1

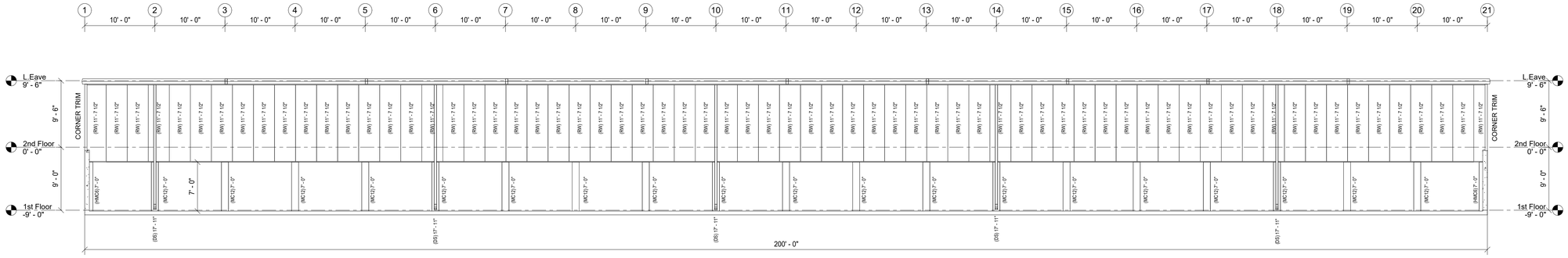
OF SHEETS

BUILDING B



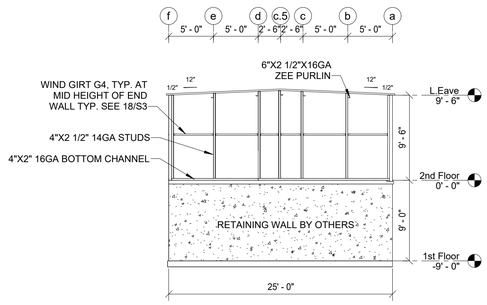
3 WEST FRAMING ELEVATION

BUILDING "B1"(1/8"=1'-0")



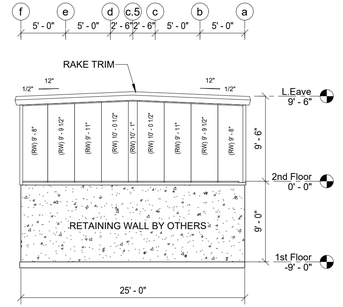
4 WEST ELEVATION

BUILDING "B1"(1/8"=1'-0")



7 SOUTH FRAMING ELEVATION

BUILDING "B1"(1/8"=1'-0")



8 SOUTH ELEVATION

BUILDING "B1"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

Hurricane Self Storage

PROJECT

DESCRIPTION: TAKE OFF SET

LOCATION: La Verkin, UT

DRAWING BY: A.G.

DRAWING DATE: 07/27/2024

CHECKED BY: M.J.

SCALE: 1/8" = 1'-0"

REVISION:

NO.	DATE	DESCRIPTION

PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
01/30/2024
STATE OF UTAH

JOB #: Hurricane Self Storage

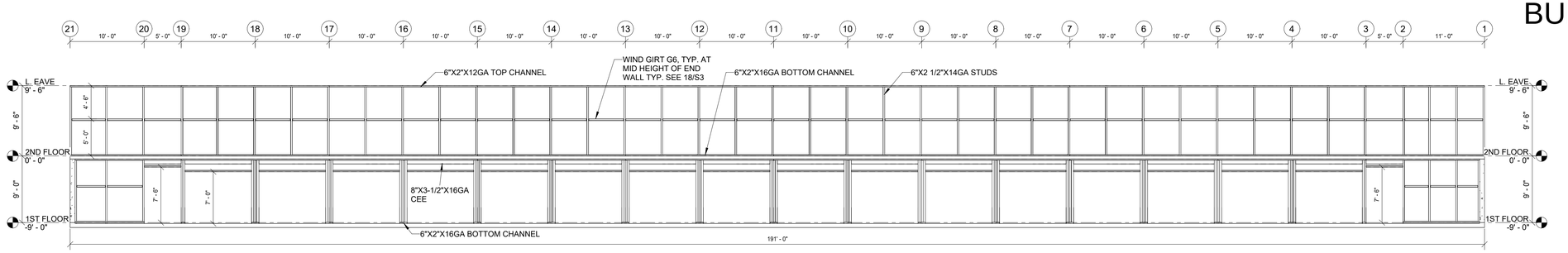
ISSUE DATE: 06/10/2024

ISSUE: TAKE OFF

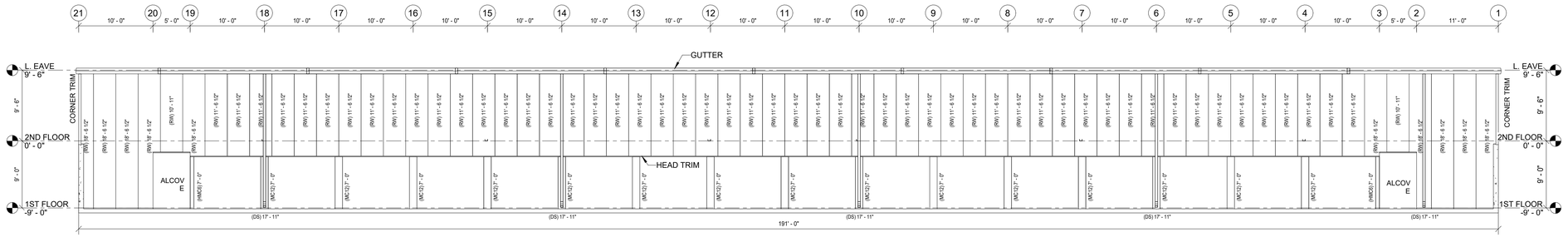
SHEET: S-4.2

OF SHEETS

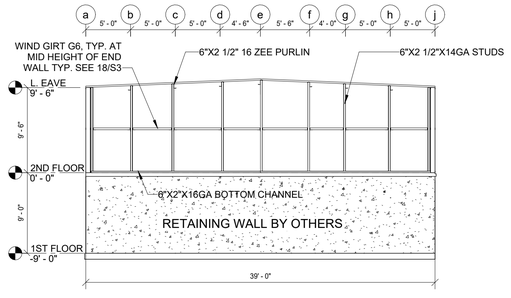
BUILDING C



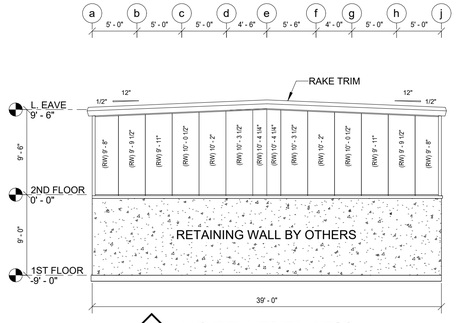
1 EAST FRAMING ELEVATION
BUILDING "C1-C2"(1/8"=1'-0")



2 EAST ELEVATION
BUILDING "C1-C2"(1/8"=1'-0")



3 NORTH FRAMING ELEVATION
BUILDING "C1-C2"(1/8"=1'-0")



4 NORTH ELEVATION
BUILDING "C1-C2"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

Hurricane Self Storage

PROJECT

DESCRIPTION: TAKE OFF SET

LOCATION: La Verkin, UT

DRAWING BY: A.G.

DRAWING DATE: 07/27/2024

CHECKED BY: M.J.

SCALE: 1/8" = 1'-0"

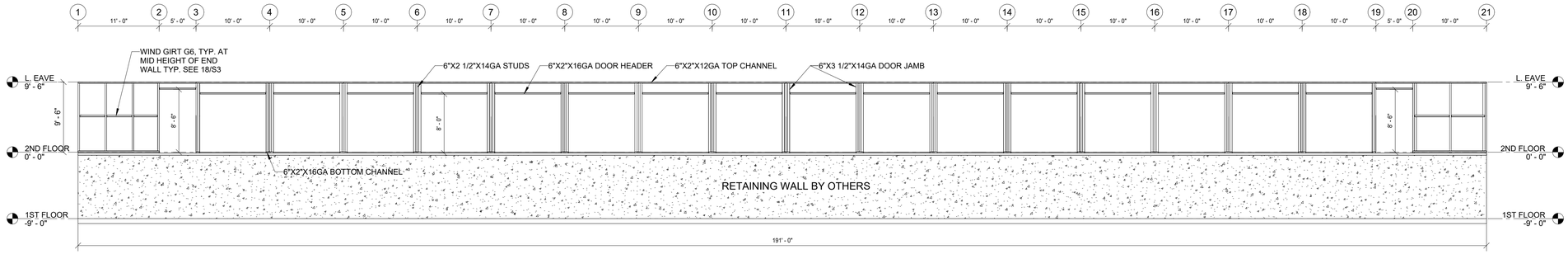
REVISION:

NO.	DATE	DESCRIPTION

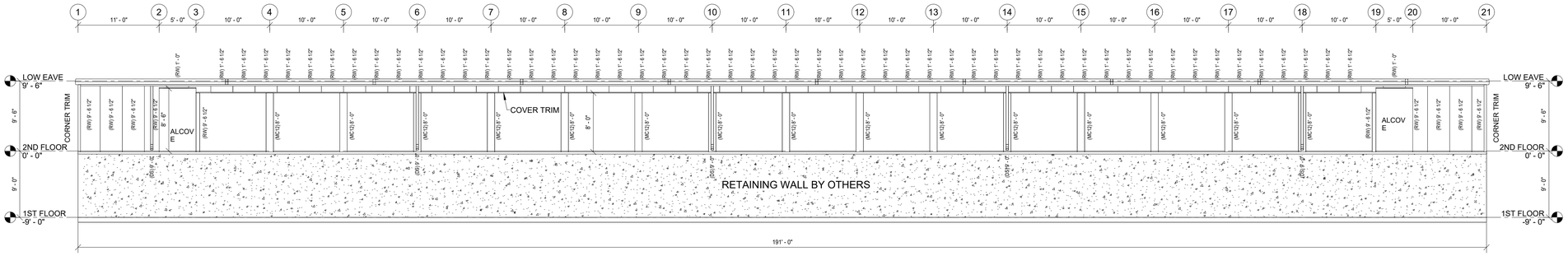
PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
5/30/2024
STATE OF UTAH

JOB #: Hurricane Self Storage
ISSUE DATE: 06/10/2024
ISSUE: TAKE OFF
SHEET: S-4.1
OF SHEETS

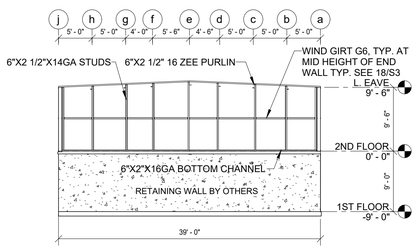
BUILDING C



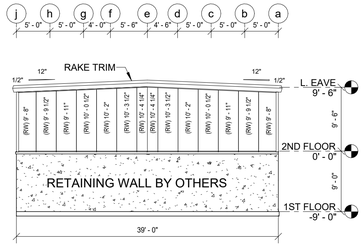
5 **WEST FRAMING**
BUILDING "C1-C2"(1/8"=1'-0")



6 **WEST ELEVATION**
BUILDING "C1-C2"(1/8"=1'-0")



7 **SOUTH FRAMING ELEVATION**
BUILDING "C1-C2"(1/8"=1'-0")



8 **SOUTH ELEVATION**
BUILDING "C1-C2"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

Hurricane Self Storage

PROJECT

DESCRIPTION: TAKE OFF SET

LOCATION: La Verkin, UT

DRAWING BY: A.G.

DRAWING DATE: 07/27/2024

CHECKED BY: M.J.

SCALE: As indicated

REVISION:

NO.	DATE	DESCRIPTION

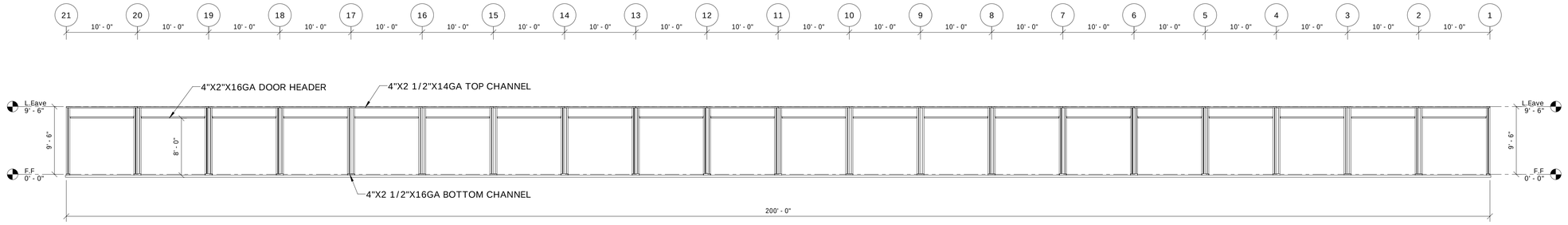
PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
07/30/2024
STATE OF UTAH

JOB #: Hurricane Self Storage
ISSUE DATE: 06/10/2024
ISSUE: TAKE OFF
SHEET:

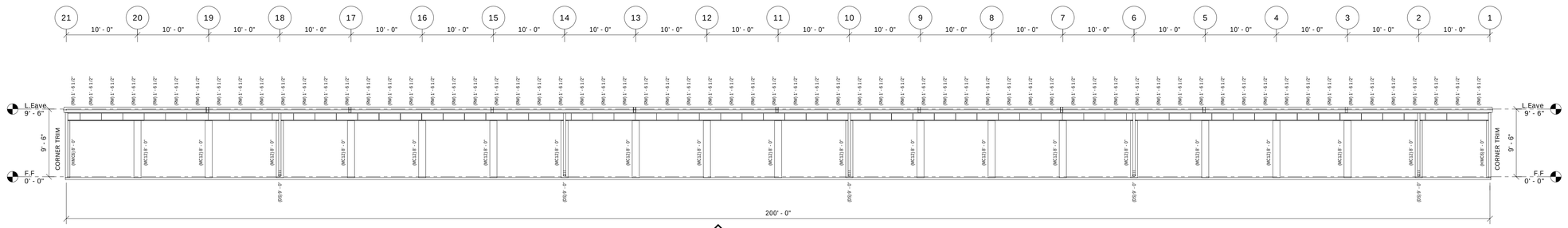
S-4.2

OF SHEETS

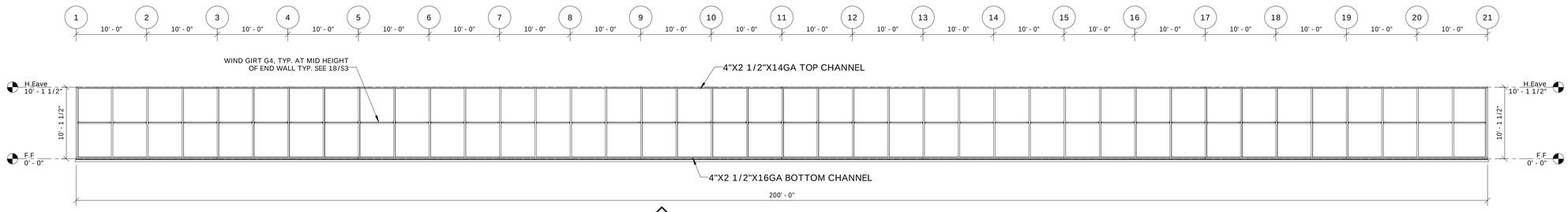
BUILDING D



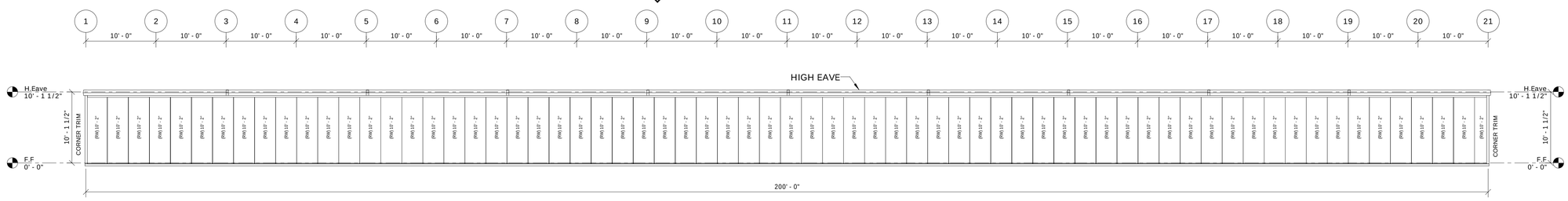
1 WEST FRAMING ELEVATION
BUILDING "D"(1/8"=1'-0")



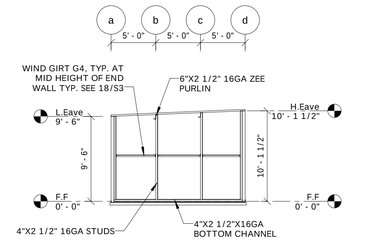
2 WEST ELEVATION
BUILDING "D"(1/8"=1'-0")



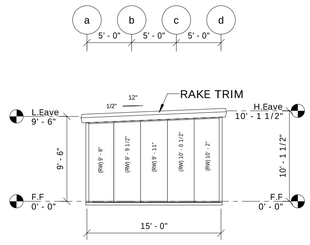
3 EAST FRAMING ELEVATION
BUILDING "D"(1/8"=1'-0")



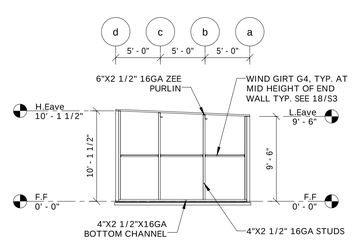
4 EAST ELEVATION
BUILDING "D"(1/8"=1'-0")



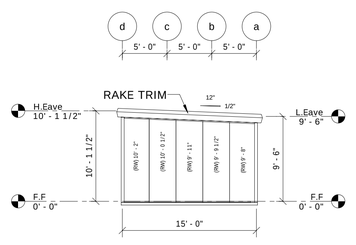
5 SOUTH FRAMING ELEVATION
BUILDING "D"(1/8"=1'-0")



6 SOUTH ELEVATION
BUILDING "D"(1/8"=1'-0")



7 NORTH FRAMING ELEVATION
BUILDING "D"(1/8"=1'-0")



8 NORTH ELEVATION
BUILDING "D"(1/8"=1'-0")

36x24 Paper Size

WASATCH STRUCTURES

WASATCH STRUCTURES LLC
15112 S PONY EXPRESS ROAD
BLUFFDALE, UTAH 84065
801-792-1860

PROJECT

Hurricane Self Storage

DESCRIPTION: TAKE OFF SET

LOCATION: La Verkin, UT

DRAWING BY: A.G.

DRAWING DATE: 07/27/2024

CHECKED BY: M.J.

SCALE: 1/8" = 1'-0"

REVISION:

NO.	DATE	DESCRIPTION
1.	07-17-2024	STRUCTURAL SPECIFICATION CHANGE AND MEMBER ADDED

PROFESSIONAL ENGINEER
JASON M. GUDMUNDSON
7914241
07/29/2024
STATE OF UTAH

JOB #: Hurricane Self Storage
ISSUE DATE: 06/10/2024
ISSUE: TAKE OFF
SHEET:

S-4

OF SHEETS

PLANNING & ZONING
HURRICANE CITY
UTAH

STAFF COMMENTS

Agenda Date:	**11/14/2024**
Application Number:	LUCA24-08
Type of Application:	Land Use Code Amendment
Action Type:	Legislative
Applicant:	Hurricane City
Agent:	N/A
Request:	Amend Title 10, Chapters 11, 17, and 23 regarding Public Facility and PDO zones.
Recommendation:	Recommend approval to the City Council.
Report Prepared By:	Gary Cupp

Discussion:

On October 17th, 2024, the City Council approved the Civic Center Master Plan to guide the development of 20 city-owned acres to the west of, and including, the current City offices. The master plan includes an urgently needed new Police Station and City Hall, as well as commercial and residential developments to help offset the costs of the planned civic center. The zoning categories in the current Hurricane City Code do not facilitate the varied uses that the master plan envisions. Thus, staff is proposing an amendment to the zoning code that will better accommodate the proposed Civic Center.

It is proposed to amend the Public Facility (PF) and Planned Development Overlay (PDO) zones to allow for a Public Facility (PDO) zone that provides for a wider range of uses and standards to meet the needs of the new civic center development. The Public Facility PDO is reserved for city-sponsored civic developments such as the proposed Hurricane Civic Center; a Public Facility PDO shall not be granted to private landowners and the community at large. This ordinance change will also include some clean-up of both the Public Facility and Planned Development Overlay codes.

Recommendation: Staff recommends the Planning Commission consider the revised ordinance revisions to Chapters 11, 17, and 23 of Title 10, and any public comments received, and make a recommendation of approval to the City Council.

Sec. 10-11-2. Zone purposes.

In addition to the general purposes of this title as set forth in section 10-1-3 of this title, the various zones each serve more specific purposes as set forth below:

A. *Agricultural zones.* Agricultural zones preserve and protect agricultural lands and related activities, permit activities normally and necessarily related to agricultural production, and prohibit land uses that may undermine continued agricultural activity.

B. *Residential agriculture zones.* Residential agriculture zones allow a mix of agricultural and residential uses on large lots. Limited agriculture activities, the keeping of limited numbers of animals, and the enjoyment of a "gentleman farmer" type neighborhood are the purpose of these zones.

1. The purpose of the RA-1 and RA-.5 zones is to foster very low and low density development with little impact on its surroundings and municipal services; to preserve the character of the City's semirural areas; and to promote and preserve conditions favorable to large-lot family life, including the keeping of limited numbers of farm animals and fowl. The predominant use in these zones is intended to be large lot neighborhoods with detached single-family dwellings, protected from encroachment by commercial and industrial uses. Other major uses in these zones are small farms, hobby farms and agricultural developments. Ancillary uses include churches, schools, and parks to serve neighborhood areas.

C. *Residential zones.* Residential zones allow a wide range of residential land uses at various densities. These zones protect the stability of neighborhoods and encourage, collectively, diverse types of desirable new residential development and protect existing residential uses.

1. The purpose of the R1-15, R1-10, R1-8 and R1-6 zones is to permit development of detached single-family homes on individual lots at medium to high densities. Ancillary uses include churches, schools, and parks to serve neighborhood areas.

2. The purpose of the RM-1 and RM-2 zones is to permit well designed apartments, townhomes, twin homes, and condominiums at medium to high density that are appropriately buffered from and compatible with surrounding land uses. Ancillary uses include churches, schools, and parks to serve neighborhood areas.

3. The purpose of the MH/RV zone is to provide locations where neighborhoods consisting of manufactured/mobile homes and recreational vehicle parks and subdivisions may be created, maintained, and preserved. Ancillary uses include churches, schools, and parks to serve neighborhood areas.

D. *Commercial zones.* Commercial zones provide areas where a combination of business, commercial, entertainment, office, and related activities may be established, maintained and protected. Commercial zones are intended to provide a suitable environment for those commercial and service uses vital to the economic base of the City.

1. The purpose of the NC zone is to provide areas where convenience buying outlets, having small trade areas, may be established to serve surrounding residential neighborhoods. This zone is intended to promote a combination of retail and service facilities that meet day to day needs of nearby residents and which are compatible in character and scale with adjacent development.

2. The purpose of the GC zone is to accommodate a wide range of commercial uses developed without an overall plan or design scheme. Use of the GC zone for new commercial development should be avoided unless integrated shopping center development in another zone is not practical or desirable because of difficult size, shape, topography, or similar problems related to

land otherwise deemed appropriate for commercial use. Typical uses in this zone may include offices, retail stores, personal services, heavy commercial, and institutional uses.

3. The purpose of the HC zone is to provide commercial areas with visibility and access from Interstate 15 and major arterial roads for the convenience of commuters and the traveling public. Typical uses include lodging facilities, personal services, travel plazas, restaurants and fast food facilities, and commuter parking.

4. The purpose of the PC zone is to provide areas of mixed use developments where a combination of destination-oriented business, retail commercial, entertainment, high density housing, and related uses may be established, maintained, and protected to serve both residents and nonresidents of the City. Typical uses in this zone include large scale, master planned commercial centers with outlying commercial pads, big box stores, offices, and various types of high density residential uses.

5. The purpose of the POC zone is to provide walkable commercial areas which are generally oriented toward local residents rather than out of town patrons. Uses typical of this zone include planned retail and office development and limited medium to high density residential uses that can be harmoniously mixed with commercial development.

E. *Business and industrial zones.* Business and industrial zones provide areas for conducting business, manufacturing and industrial activities.

1. The purpose of the BMP zone is to provide aesthetically attractive planned developments having a mix of office, research and development, light manufacturing, and limited retail uses. Typical uses in this zone include offices, clean indoor manufacturing facilities, service retail, restaurants, athletic clubs, personal service shops, medical offices, office/warehouse buildings, and research facilities.

2. The purpose of the PO zone is to provide locations primarily along arterial or major collector streets which will accommodate offices or laboratories for professional persons and other related uses. The zone is intended to provide availability of professional services conveniently to all neighborhoods in the City. Typical uses in this zone include offices for doctors, dentists, accountants, and other similar professions, medical and dental laboratories, and pharmacies.

3. The purpose of the M-1 zone is to provide areas for uses involving processing and assembly of manufactured goods, warehousing, and material storage. Uses which generate excessive noise, vibration, odor, dust, and fumes are excluded from this zone.

4. The purpose of the M-2 zone is to provide areas where uses involving industrial processes and natural resource extraction may be permitted without negatively impacting other areas of the City, especially when undertaken on a large scale.

F. *Open space and public facility zones.* Open space and public facility zones allow public or quasi-public uses.

1. The purpose of the OS zone is to recognize on the official zoning map areas which are open and generally undevelopable due to government ownership, their sensitive environmental nature and/or the unavailability of adequate public facilities, such as conservation areas and national park land.

2. The purpose of the PF zone is to provide areas for facilities owned by public and quasi-public entities and which utilize relatively large areas of land. This zone is intended to provide immediate recognition of such areas on the official zoning map. Typical uses in this zone are cemeteries, government services, hospitals, open air theaters, public parks, public schools, and public utility facilities.

G. *Special purpose and overlay zones.* Special purpose zones are intended to accomplish objectives unique to the particular zone. Overlay zones implement supplemental regulations that apply geographically, regardless of the underlying base zone. Whenever the regulations of a base zone and an overlay zone conflict, overlay zone regulations apply.

1. The purpose of the APO zone is to protect and preserve existing agricultural areas from encroachment of development and to allow ongoing agricultural operations to continue without unreasonable regulations, except for those needed to protect public health and safety.

2. The purpose of the HDO zone is to implement regulations designed to promote the preservation of structures and sites having historical, cultural, or architectural significance, and to foster economic development consistent with historic preservation plans adopted by the City.

3. The purpose of the PDO zone is to permit a compatible, master planned mix of various uses in combination with open space components on land that has unique or unusual characteristics that warrant customized development requirements. Although development size may vary from location to location, each development is intended to consist of well designed, architecturally integrated structures which are appropriately landscaped and buffered from surrounding land uses.

4. The SLO zone provides regulations to protect sensitive land areas such as hillsides, floodplains, and river parkway areas.

5. The RPZ zone provides regulations to promote and protect the City airport.

6. The recreation resort zone is established to designate certain areas within the City where it is desirable and beneficial to the area economy to allow for a mix of limited commercial, public, and residential uses. Specifically, to authorize recreation and resort developments in which residential dwelling units may be occupied by the owners thereof on a full or part time basis, to authorize the rental of residential units on an overnight or short term basis by owners who reside elsewhere; and to authorize limited commercial and public uses that are incidental to and compatible with resort developments.

7. The general purpose of the extraction industries overlay zone is to provide for the operation of extraction industries in the City, while regulating the operation of such industrial uses particularly on properties in close proximity to residential districts and to provide regulatory standards and procedures to ensure the reclamation of the extraction industry sites upon completion of the extraction processes.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. 2004-9, 4-1-2004; Ord. 2004-15, 6-17-2004; Ord. 2008-10, 6-5-2008; Ord. 2009-04, 3-19-2009; Ord. 2009-15A, 11-5-2009; Ord. 2013-02, 3-21-2013; Ord. No. 2022-12, 5-5-2022)

CHAPTER 17 OPEN SPACE AND PUBLIC FACILITY ZONES

Sec. 10-17-1. Purpose.

See section 10-11-2 of this title.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-17-2. Scope.

The provisions of this chapter shall apply to any real property located in an open space or public facility zone as shown on the official zoning map. No building, structure or real property shall be used and no building or structure shall be hereafter erected, structurally or substantially altered, or enlarged except as set forth in this chapter. Such requirements shall not be construed to prohibit or limit other applicable provisions of this title, this Code, or other laws.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-17-3. Uses allowed.

A. *Permitted and conditional uses.* Permitted and conditional uses allowed within open space or public facility zones shall be as set forth in table 10-17-1 of this section. Permitted and conditional uses are indicated by a "P" or "C," respectively, in the appropriate column. Uses not permitted are indicated by "N." Any use not shown on table 10-17-1 of this section shall be prohibited unless the Zoning Administrator determines the use is substantially the same as a permitted or conditional use as provided in subsection 10-7-18E4 of this title.

TABLE 10-17-1
PERMITTED AND CONDITIONAL USES ALLOWED IN
OPEN SPACE AND PUBLIC FACILITY ZONES

Use	Zones	
	OS	PF
Agricultural uses:		
Agricultural business	P	N
Animal specialties	P	N
Animals and fowl for recreation and family food production	P	N
Stable, private	P	N
Public and civic uses:		
Airport	N	P
Auditorium or stadium	N	P
Cemetery	N	P
Church or place of worship	N	N
Club or service organization	N	N
College or university	N	P
Cultural service	N	P

Golf course	N	P
Government service	N	P
Hospital	N	P
Park	P	P
Post Office	N	P
Protective service	N	P
Reception center	N	P
School, elementary, middle, or high	N	P
School, vocational	N	P
Utility, major[2]	P	P
Utility, minor[2]	P	P
Utility substation[2]	P	P
Commercial uses:		
Animal hospital	N	N
Child care center[1]	N	P
Club, private	N	N
Licensed family child care[1]	N	N
Parking lot, public	N	P
Recreation and entertainment, outdoor	N	P
Research service	N	N
Residential certificate child care[1]	N	N
Temporary trailer	N	P
Wireless telecommunication facility	See section 10-50-5, table 10-50-1 of this title	
Industrial uses:		
Mineral extraction	N	N

Notes

1. See chapter 42 of this title.
2. See chapter 45 of this title.

B. *Accessory uses.* Permitted and conditional uses set forth in table 10-17-1 of this section shall be deemed to include accessory uses and activities that are necessarily and customarily associated with and incidental and subordinate to such uses.

1. Accessory uses shall be subject to the same regulations that apply to permitted and conditional uses in the same zone except as otherwise expressly provided in this title.
2. No accessory use, building, or structure shall be allowed on a lot unless a permitted or conditional use has been established.
3. Accessory uses in public facility zones shall include, but not be limited to, the following:

   Cafeterias, dining halls and similar food service facilities when located within the main use and operated primarily for the convenience of employees, residents, clients, or visitors to the main use.

   Garages and off street parking areas, subject to applicable standards of chapter 34, off street parking and loading, of this title.

   Gift shops, newsstands, and similar commercial activities operated primarily for the convenience of employees, residents, clients, or visitors to the main use.

Recreational areas and facilities.

Refreshment stands and food and beverage sales located in uses involving public assembly.

Temporary uses, subject to applicable standards of chapter 48, temporary uses, of this title.

(Ord. 2018-01, 2-15-2018)

Sec. 10-17-4. Reserved.

Editor's note(s)—Repealed by Ord. 2018-01, adopted February 15, 2018.

Sec. 10-17-5. Regulations of general applicability.

The use and development of real property in open space and public facility zones shall conform to regulations of general applicability as set forth in the following chapters of this title:

A. Design and compatibility standards: see chapter 33 of this title.

B. Landscaping and screening: see chapter 32 of this title.

C. Motor vehicle access: see chapter 35 of this title.

D. Off street parking: see chapter 34 of this title.

E. Signs: see chapter 36 of this title.

F. Supplementary development standards: see chapter 37 of this title.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-17-6. Regulations for specific uses.

To the extent that use and development of real property includes any matter encompassed by a regulation for a specific use as set forth in division 6 of this title, such regulation shall apply in addition to the requirements of this chapter and shall prevail over any conflicting provision of this chapter.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-17-7. Special regulations.

A. *Increased height.* A greater building height may be allowed in open space or public facility zones pursuant to a conditional use permit.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

CHAPTER 23. PLANNED DEVELOPMENT OVERLAY ZONE

Sec. 10-23-1. Purpose and objectives.

A. *Purpose.* The planned development overlay (PDO) zone is a floating zone that is unmapped until applied to specific property in accordance with the provisions of this chapter. It is intended to allow development design flexibility, integration of mutually compatible uses, consolidation of open spaces, clustering of dwelling units, and optimum land planning with greater efficiency, convenience and amenity than is possible under conventional zone regulations. To achieve these purposes, a planned development should be planned as one complex land use with a common architectural design theme that provides variety with architectural compatibility, rather than as an aggregation of individual, unrelated buildings located on separate, unrelated lots.

B. *Objectives.* Objectives to be accomplished under the provisions of this chapter include:

1. Create more attractive and desirable environments within the City.
2. Allow a variety of housing types in one development project.
3. Encourage variety in physical development patterns, including flexibility in building location.
4. Preserve open space for visual enjoyment and recreational use.
5. Encourage development on a large scale, since the purposes of a planned development can be best realized in large scale developments.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-2. Scope.

The requirements of this chapter shall apply to any planned development within the City. Such requirements shall not be construed to prohibit or limit other applicable provisions of this title, this Code, or other laws except to the extent such provisions are altered by the requirements of this chapter.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-3. Minimum acreage.

The planned development overlay zone shall be applied only to projects consisting of at least five acres. City-sponsored projects on city-owned lands are not subject to this requirement. The planned development overlay may be applied to a proposed development site of less than five acres in a developed area upon finding by the City Council that the PDO zone will not be incompatible with existing development patterns in the vicinity of the proposed project.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-4. Use in combination with underlying zone.

The planned development overlay zone may be used in combination with any zone set forth in chapters 12, 13, 14, and Public Facility zones in chapter 17,~~14~~ of this title, subject to the requirements of this chapter. A Public Facility PDO is reserved for city-sponsored civic developments; a Public Facility PDO shall not be granted to private landowners and the community at large.

A. *Provisions supplementary.* The provisions of the planned development overlay zone shall be supplementary to the provisions of the zone with which it is combined and shall not be applied to any land area as an independent zone.

B. *Zone designation.* The planned development overlay zone designation shall be shown on the official zoning map in parentheses as a suffix to the zone designation with which it is combined. For example, if the planned development overlay zone were being combined with the residential agriculture (RA-1) zone, it would be designated on the official zoning map as "RA-1 (PDO)."

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-5. Uses allowed.

Uses allowed in a planned development overlay zone shall be limited to those permitted or conditional uses set forth in the zone with which the planned development overlay zone is combined and the uses set forth in this section. Any conditional use shall be subject to the issuance of a conditional use permit as set forth in this title.

A. *Density.* Multiple-family dwellings shall be a permitted use in a planned development overlay zone provided total density in a particular planned development project does not exceed the greater of:

1. The density permitted by the underlying zone in which the project is situated; or

2. The density authorized by a density bonus pursuant to subsection 10-23-8(C) of this chapter.

B. *Accessory uses.* Accessory uses located in a common main building may be permitted. Accessory uses may include recreational facilities and structures, daycare centers, personal services, and RV parking.

C. *Commercial uses.* Commercial uses may be approved within Planned Developments subject to the following:

1. The locations of any commercial areas are clearly marked on the Preliminary Site Plan as approved by the Planning Commission and City Council.

2. The commercial uses shall be limited to those approved in the NC or PC zoning as shown in table 10-15-1 in subsection 10-15-3(A) of this title, unless otherwise approved by the Zoning Administrator or Planning Commission as a use that is harmonious with adjacent residential properties.

3. The commercial areas should be located near major corridors and shall be designed as an integral element of the planned development, including building and landscaping design consistent with design elements of the development.

D. Recreation Resort: Short-term vacation rentals and recreation resort uses as permitted in 10-26-3 of this code may be approved within a Planned Development subject to the following:

1. The proposal must be found to meet the standards of 10-26-5(B).

2. The development standards of section 10-26-4 of this title must be followed including requirements for amenities and onsite management.

3. The locations of the Recreation Resort uses must be clearly shown on the Preliminary Site Plan and should be located near major corridors and shall be designed as an integral element of the planned development, including building and landscaping design consistent with design elements of the development.

4. Short-term vacation rentals shall only be permitted within Recreation Resort areas of Planned Developments.

~~Any commercial use shown on table 10-15-1 in subsection 10-15-3A of this title may be permitted within a planned unit development provided such use is:~~

1. Specifically authorized as part of a site plan approved pursuant to the provisions of this chapter; and

2. Designed as an integral element of the planned development, including building and landscaping design which is consistent with design elements of the development.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-6. Variations from development standards.

A. Variations from applicable development standards of an underlying zone and chapter 39 of this title may be approved as part of a preliminary site plan for a planned development pursuant to the provisions of this chapter.

B. A variation from the yard requirements set forth in subsection 10-23-9(D) of this chapter may be approved if the City Council, after receiving a recommendation from the Planning Commission, finds such variation meets the approval criteria set forth in subsection 10-23-7(B) of this chapter and as set forth below. Any such variation shall be explicitly noted in the approval of a preliminary site plan and shall be shown on the approved plan.

1. Variations from the development standards set forth in this chapter are intended to be rare and shall be approved by at least four members of the City Council.

2. The applicant shall bear the burden of persuasion with regard to any request for a variation under this subsection B. Such burden shall include demonstrating that:

a. A proposed project which includes a variation is the result of a substantial amount of advanced planning;

b. Any adverse conditions which may result from the variation will be mitigated; and

c. The variation will result in a substantial benefit not only to persons who will live or work within the project, but also to the City and its citizens generally.

(Ord. 2006-29, 10-19-2006)

Sec. 10-23-7. Approval of planned development overlay zone.

A. *Approval procedure.* Land shall be placed in a planned development overlay zone pursuant to a zoning map amendment as set forth in section 10-7-7 of this title. The following shall be submitted in conjunction with an application for a zoning map amendment:

1. A natural resource inventory as required by chapter 31 of this title, and

1.2. A preliminary site plan as provided in subsection 10-7-10(D)(2) of this title.

B. *Approval criteria.* Submittal of an application for a planned development overlay zone does not guarantee that the zone or a preliminary site plan will be approved. A zoning map amendment and preliminary site plan may be approved only if the City Council, after receiving a recommendation from the Planning Commission, finds:

1. The proposed planned development overlay zone and associated preliminary site plan:

a. Does not conflict with any applicable policy of the City general plan;

b. Meets the spirit and intent of this chapter as set forth in section 10-23-1 of this chapter;

c. Will allow integrated planning and design of the property and, on the whole, better development than would be possible under conventional land use regulations;

d. Meets the use limitations and other requirements of the zone with which the planned development overlay zone is combined, except as otherwise allowed by this chapter;

e. Meets the density limitations of the underlying zone, unless a density bonus is granted pursuant to the provisions of this chapter; and

f. If a density bonus is authorized, provides superior site design and increased amenities, as provided in subsection 10-23-8(C) of this chapter, which ameliorate the potential impact of increased density; and

2. The applicant has:

a. Sufficient control over the property to be developed to ensure development will occur as approved;

b. The financial capability to carry out the planned development project; and

c. The capability to start construction within one year of final plan approval.

C. *Imposition of conditions.* In order to make findings necessary to approve a planned development overlay zone, conditions of approval may be imposed on a preliminary site plan to assure the planned development will:

1. Accomplish the purpose of this chapter;

2. Be developed as one integrated land use rather than as an aggregation of individual and unrelated buildings and uses; and

3. Meet the requirements of the zone in which the proposed development is located except as such requirements are modified by this chapter and as shown on an approved preliminary site plan for the planned development.

D. *Site plan approval.* A preliminary site plan shall be required with the approval of the planned development overlay. This site plan may be conceptual but shall show locations of uses, densities of units, and basic types of units within the proposed development.~~Within 12 months after approval of a planned development overlay zone and a corresponding preliminary site plan, and before the issuance of any building permit, an applicant shall obtain approval of a site plan pursuant to section 10-7-10 of this title.~~

1. A planned development may be constructed in phases as shown on an approved preliminary site plan. In such case, a site plan shall be submitted for each phase that includes multifamily or commercial elements as cited in 10-7-10(C).

a. The site plan shall provide a table with each phase of development the total number of units that have been approved for the total project. If the project requires multiple plats, the remaining number of units should be tabulated on each successive plat.

~~2. At its discretion and for good cause, the Planning Commission may extend for 12 months for one time only the period for filing a site plan, or in the case of a phased planned development, a site plan for the first phase. If these time requirements are not met, the preliminary site plan approval shall be deemed revoked and the property may be rezoned to remove the planned development overlay zone.~~

~~E. *Subdivision requirements.* An application for subdivision approval may proceed concurrently with an application for a planned development. Compliance with the requirements of this chapter does not exempt any applicant from meeting the requirements of chapter 39 of this title except as may be amended by the provisions of this chapter.~~

~~F~~E. *Construction limitations.* Upon approval of a site plan for a planned development, construction shall proceed in accordance with approved plans and specifications, and in conformity with any conditions associated with preliminary site plan or site plan approval. No permit shall be issued for any proposed building, structure or

use within a planned development unless such building, structure or use accords with the approved preliminary site plan and site plan and with any conditions imposed in conjunction with such approvals.

~~G~~F. *Amendments.* Amendments to the approved preliminary site plan for any planned development and specifications shall be obtained by following the procedure required for a zone change as set out in 10-7-7 for any change that increases the impact of the development either by increasing the number of units or changing the approved uses. Minor changes, such as changing the street layout or shifting units from one phase to another, may be approved by the Planning Commission as part of a preliminary site plan application in 10-7-10 and as required by this chapter.~~preliminary plan approval.~~

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-8. Density.

A. *Base density.* Base density for a planned development shall be determined as set forth in subsection B of this section. Provided, however, that base density shall not exceed the density permitted in the underlying zone in which the planned development will be situated.

B. *Base density calculation.* Base density shall be determined by calculating the number of dwelling units that could be developed on lots in a conventional subdivision under the provisions of the underlying zone where the planned development will be located (referred to as the "yield plan").

1. The yield plan shall be prepared as a conceptual plan based on requirements of this Code that pertain to a conventional subdivision and shall reflect the dimensional (lot area, frontage, width, setbacks, etc.) and other standards of the underlying zone in which the proposed planned development will be located.

2. The yield plan shall take into consideration the site's natural and cultural features as shown on a natural resource inventory prepared for the property and shall demonstrate that sensitive lands identified in the natural resource inventory can be successfully included within open space areas or as part of residential lots without disturbing the health or safety of present or future City residents. At least one-half of the minimum area required for each lot shall be exclusive of wetlands, floodplains, and slopes exceeding 30 percent.

3. The yield plan shall be drawn to scale, but need not be based on a field survey. Each yield plan shall, however, exhibit a realistic layout reflecting a development pattern that could reasonably be expected to be implemented, taking into account the presence of wetlands, floodplains, steep slopes, existing easements and other encumbrances on the property identified by the natural resource inventory and the requirements of this title, and any other regulatory requirements applicable to the property.

C. *Density bonus.* The City Council, after receiving a recommendation from the Planning Commission, may authorize a density bonus of up to 20 percent above the base density for a planned development. The purpose of a density bonus is to provide an incentive to an applicant to provide amenities that are not required by this chapter or the applicable underlying zone, and which otherwise would not be provided.

1. The basis for granting a density bonus shall be included in the findings required to approve a planned development set forth in subsection 10-23-7(B) of this chapter.

2. A density bonus may be authorized based upon provision of one or more of the following amenities. The maximum density bonus granted for any one class of amenities shall not exceed the percentage indicated.

a. Enhanced overall design theme (~~up to~~ five percent):

(1) Landscaping is designed and installed along all streets of the development according to a theme which provides overall design unity;

(2) Theme lighting is used throughout the development for street lighting, walkway lighting, parking areas, entrances, and building exteriors;

(3) Perimeter fencing is used throughout the project that matches building design, such as, masonry columns or piers using the same brick or stone as the buildings; and

(4) Special features such as fountains, streams, ponds, sculptures, buildings or other elements which establish a strong design theme for the development and are utilized in highly visible locations.

~~b. Improved building design (up to five percent):~~

~~(1) Seventy-five percent of the front exterior of each dwelling, exclusive of windows or doors, consists of brick or stone;~~

~~(2) Required parking for each unit is provided within a garage.~~

~~c. Improved energy efficiency (up to five percent):~~

~~(1) Dwellings and main buildings have insulation greater than R-19 in walls and R-38 in ceilings; and~~

~~(2) Dwellings are designed with an active or passive solar feature, including, but not limited to, solar water heaters, Trombe walls, earth insulation of building walls.~~

~~d. Parking upgrades (up to five percent):~~

~~(1) Parking lots are screened from public view by means of increased berming or landscaping around the parking lot perimeter;~~

~~(2) Parking lots have landscaped islands beyond the minimum required by this title;~~

~~(3) Additional and/or larger trees that will shade 50 percent of the parking area upon tree maturation; and~~

~~(4) Provision of screened recreational vehicle parking areas.~~

~~e~~b. Provision of usable open space above and beyond any required open space (~~up to~~ five percent):

(1) Open space is integrated into the entire development and is connected to developed areas by a system of trails and walkways; and

(2) Stormwater detention facilities are designed, landscaped, and used for multiple purposes that are consistent with the overall design of the planned development and which reduce the perception of the area as a stormwater detention pond.

~~f~~c. Provision of recreational facilities (~~up to~~ five percent):

(1) The planned development includes recreational amenities primarily for the use by residents of the development, including swimming pools, sports courts, spas, barbecue and picnic facilities;

(2) Development of one or more common buildings used for meetings, indoor recreation, daycare, or other common uses; and

(3) Dedication and improvement of land for a publicly accessible park or trail system, subject to acceptance by the City.

~~g~~d. Increased landscaping (~~up to~~ five percent):

(1) Planting more than the minimum number of trees, shrubs, and other landscaping required by this title; and

(2) Use of landscaping to soften the appearance of wood or masonry fences and walls.

(3) Use of water wise landscaping throughout the development as recommended by the Washington County Water Conservancy District.

~~h~~e. Utilization of recommended design and compatibility guidelines set forth in chapter 33 of this title (~~up to~~ five percent).

f. Provision of affordable housing (for every one affordable unit, one additional unit may be added, up to a ten percent bonus).

1. Affordable Housing means housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80% of the median gross income for households in Washington County. Housing costs must be affordable based on Housing and Urban Development standards.

2. Duration and requirements of affordability:

a. Affordable rental unit: An affordable rental unit shall remain affordable for a period of 25 years from the time a certificate of occupancy is issued. Prior to or as a condition of approval of a Final Site Plan, a deed restriction requiring compliance with this section shall be recorded with the Washington County Recorder, which deed restriction shall run with the land and bind all assigns, heirs, and successors of the applicant.

b. Affordable ownership unit: An affordable ownership unit shall be sold only to income-qualified households for a period of 25 years from the time a certificate of occupancy is issued. Prior to or as a condition of approval of a Final Site Plan, a deed restriction requiring compliance with this section shall be recorded with the Washington County Recorder, which deed restriction shall run with the land and bind all assigns, heirs, and successors of the applicant.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)

Sec. 10-23-9. Residential development standards.

The development standards set forth in this section shall apply to any planned development and shall prevail over any contrary standard established in chapters 12, 13, 14, and Public Facility zones in chapter 17 of this title.

A. *Residential use types.* Residential use types within a planned development shall be shown on an approved site plan and may include one or more of the following:

1. *Single-family detached dwelling.* This dwelling type consists of a single-family dwelling located on a privately owned lot which is not attached to another dwelling unit and has a private yard on all four sides of the dwelling.

2. *Twin home dwelling.* This dwelling type consists of a single-family dwelling which has one common wall with another dwelling.

3. *Townhouse dwelling.* This dwelling type consists of three or more single family dwelling units where each unit has its own front and rear exterior access, no unit is located above or below another unit, and each unit is separated from any other dwelling unit by one or more common walls.

4. *Multiple dwelling.* This dwelling type consists of single-family dwelling units arranged in a variety of configurations including back to back, side to side, or vertically.

DEVELOPMENT STANDARDS FOR RESIDENTIAL USES

Lot standards:	

Average lot area	n/a
Maximum density per acre	See underlying zone
Building standards:	
Maximum height, main building[1]	See underlying zone
Maximum height, accessory building1	See underlying zone
Building coverage	50 percent per site plan
Distance between buildings	10 feet
Setback standards - front:	
Any building - pedestrian entrance	15 feet

Garage or parking building3	25 feet
Setbacks - rear:	
Main building	10 feet
Accessory building, including private garage32	See note 310 feet
Setback standards - interior side yard:	
Main building	10 feet
Accessory building, including private garage2	See note 23 feet
Setback standards - street side yard:	
Main building	15 feet
Accessory building, including private garage4	See note 4Not permitted
Parking[5]	See note 54

Notes:

1. Except a greater height may be approved subject to a conditional use permit

2. If located at least 10 feet from the main building, 32 feet.

3. If located at least 10 feet from the main building, 5 feet.

4. If located at least ten feet from the main building, two feet. Otherwise, same as the main building. No accessory building shall be built within a public utility easement.

5. Garages are not required in Planned Developments. Off-street parking standards in 10-34 of this title must be met.

~~B. *Lot area and width.* A planned development shall not be subject to the lot width and lot area requirements of the underlying zone in which the development is located. The area and widths of lots shall be shown on an approved site plan.~~

~~C. *Lot and dwelling location requirements.* Where possible, dwelling lots should be accessed from interior streets rather than from roads bordering a planned development.~~

~~D. *Required yards.* Minimum required yards shall be as follows:~~

~~1. *Front yard.*~~

~~a. Dwellings: 19 feet from back of curb.~~

~~b. Garages with doors facing the street: at least 20 feet from back of sidewalk to accommodate cars parked in driveways.~~

~~2. *Side yard.*~~

~~a. Single-family dwelling: five feet.~~

~~b. Accessory buildings: three feet from a property line and ten feet from a dwelling located on the same lot or property.~~

~~c. All other uses: ten feet.~~

~~3. *Aggregate side yard (on the same lot).*~~

~~a. Single-family dwelling and twin home: 15 feet.~~

~~b. All other structures: 20 feet.~~

~~c. All other uses: ten feet.~~

~~4. *Rear yard.*~~

~~a. Single-family dwelling: ten feet.~~

~~b. Garages and accessory buildings located ten feet from main building: five feet.~~

~~c. All other structures: ten feet.~~

~~E. *Distance between buildings.* The minimum distance between main buildings shall be ten feet. Main buildings include all buildings in a common area. The minimum distance between accessory buildings, such as garages, may be four feet if the accessory building is located at least ten feet from a main building.~~

~~F. *Tract perimeter setback and buffer requirements.* Structures shall be situated so as to maintain a minimum setback from any tract property line equivalent to the front rear yard setback of the adjoining zone.~~

~~G~~B. *Walls and fences.* Walls and fences may be required around the perimeter of a planned development where the development abuts an adjacent zone.

~~H. *Height of buildings.* The maximum residential building height permitted in the underlying zone shall apply unless the terms of a development agreement have set other standards.~~

~~I~~C. *Commercial and recreation resort~~industrial~~.* Development standards for commercial and recreation resort~~industrial~~ uses shall be the same as for GC and RR~~M-1~~ zones.

~~J~~D. *Common areas.*

1. Areas intended for public use shall be freely accessible from streets and/or other common areas that have unrestricted entry. Areas intended for restricted use shall be interspersed within residential development so as to convey a sense of openness within the planned development. Residential development may not totally exclude open space from fronting onto streets at appropriate intervals.

2. Common areas shall include all jointly used recreation areas and related landscaping provided for the use and/or visual enjoyment of the residents of the project. Common recreation areas shall be located and improved so they may be readily accessed and used by residents of the dwelling units they are intended to serve. Where necessary, walls or landscaping may be required to protect the privacy of adjoining residents.

3. Common areas may include:

a. Natural areas of undisturbed vegetation or areas replanted with vegetation after development.

(1) Use and maintenance shall be limited to removal of litter and accumulated plant material.

(2) Natural waterways and drainage channels shall be maintained as free flowing and devoid of debris.

(3) Stream channels shall conform to the city stormwater management requirements and be maintained so as not to alter floodplain levels.

b. Agricultural uses where conditions are suitable for agricultural production. Minimum areas for agricultural use designation shall be five acres.

c. Garden plots for use by residents.

d. Greenways, including pedestrian ways, bike paths and equestrian trails linking residential areas with other open space uses.

e. Recreation areas designed for specific recreational activities such as children's play areas, playing fields, tennis courts, and similar facilities.

f. Stormwater control and management areas that are designed, landscaped, and used for multiple purposes that are consistent with the overall design of the planned development and which reduce the perception of the area as a stormwater detention pond.

g. Roads, buildings and other impervious surfaces as needed to support common open space use. A determination as to whether the roads, buildings or other impervious surfaces may function as common open space shall be made in conjunction with approval of a preliminary site plan.

~~K~~E. *Public and community facilities.* In addition to dwellings, a planned development may include areas for schools, churches, public or private recreation buildings, and other similar community facilities.

~~L~~F. *Required improvements.*

1. All streets shall be public streets and shall be established according to public street standards adopted by the City.

2. Curb and gutter shall be required along each side of all streets except:

a. Where an approved stormwater management system eliminates the necessity of the curb and gutter function; and

b. Where the roadway is approved for construction according to City street standards.

3. Sidewalks shall be installed along both sides of all streets except where alternate pedestrian ways are provided as part of an approved preliminary site plan.

4. Stormwater shall be controlled and managed according to a plan approved by the City.

5. Water and sewer systems shall be provided in accordance with standards of chapter 39, subdivisions, of this title.

6. Irrigation water, street signs, street lighting, fencing, and any other required improvements shall be provided in accordance with City standards.

7. Other utilities and improvements shall be provided and installed in accordance with City standards.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003; Ord. 2016-08, 10-6-2016; Ord. 2018-12, 10-18-2018; Ord. 2019-01, 2-7-2019; Ord. 2019-10, 9-19-2019)

Sec. 10-23-10. Protection of common areas.

A. *Maintenance of common areas.* If common areas are provided within a planned development, adequate guarantees shall be provided to protect such common areas from future development. No certificate of occupancy shall be issued for any structure in a planned development until all required guarantees have been submitted to and approved by the City. The developer of a planned development may elect any of the following to preserve common areas:

1. *Fee simple donation.* A fee simple donation of any portion of common area land may be made to the City so long as the City agrees to accept such donation. Upon receipt of such donation the City shall impose a conservation easement on such land.

2. *Condominium association.* Common areas and facilities may be controlled by a condominium association as provided in the Utah Condominium Ownership Act. All common area land and facilities shall be held as a "common element."

3. *Homeowners' association.* Common area land and facilities may be owned by a homeowners' association, subject to applicable provisions of state law. The developer shall provide the City with a description of the organization of the proposed association, including its bylaws, and all documents governing ownership, maintenance, and use restrictions for common facilities. The proposed association shall be established by the owner or applicant and shall be operating (with a financial subsidy from the developer if necessary) before the sale of any dwelling units in the planned development. The association documents shall include the following provisions:

a. Membership in the association shall be mandatory for each owner and its grantees, successors and assigns.

b. Restrictions concerning common open space and/or facilities shall run with the land and not for a period of years.

c. The association shall be responsible for the maintenance of all common open space and/or facilities, liability insurance on all common open spaces and/or facilities and paying general property taxes on all common open spaces and/or facilities.

d. In the event the association does not maintain private common open space areas and facilities as shown on an approved site plan, the City may perform any required maintenance and may

thereafter recover all costs incident to performing the required maintenance from the association and/or each of its members.

e. Members of the association shall pay their pro rata share of costs of upkeep, maintenance, and operation of common open space and/or facilities and/or improvements not dedicated to the City. The association bylaws shall confer legal authority on the association to place a lien on the real property of any member whose dues become delinquent. The bylaws shall also provide that such delinquent dues and all accrued interest shall be paid before the lien may be removed.

f. Written notice to all association members and to the City shall be provided no less than 60 days prior to any proposed transfer of any common area land or facility, or the assumption of maintenance for common area land or facility. No such transfer shall be effective unless approved by the City, which approval shall not be unreasonably withheld so long as it is consistent with the provisions of this chapter and applicable law.

4. *Private conservation organization or the City.* Fee simple title of common area land or conservation easements may be transferred to a private nonprofit conservation organization or to the City having jurisdiction where the land is located.

5. *Grant of easements to the City.* The City may, but shall not be required to, accept easements for public use of any portion of common area land or facilities. Such land shall be subject to a satisfactory maintenance agreement between the developer and the City.

6. *Noncommon private ownership.* Common area land and facilities may be located on one or more privately owned lots of at least five acres provided that the lot is restricted from future development through a conservation easement, except uses allowed by an approved site plan.

B. *Protective covenants.* A declaration of building use restrictions (protective covenants) shall be required for each planned development and phase thereof. The declaration in original form bearing appropriate signatures and certifications shall be submitted to the City for approval, which approval shall not be unreasonably withheld. Such protective covenants shall include provisions that:

1. An architectural control committee shall approve plans for all buildings proposed for erection, placement, or alteration with the planned development. The City may require that building permit applications show evidence that the architectural control committee has approved each building plan.

2. No person, firm or entity shall change, modify or amend any of the conditions of a recorded declaration of building use restrictions for a planned development without first obtaining City approval. No change shall be approved which would be contrary to the requirements of this chapter or an approved preliminary plan.

(Ord. 03-5-1, 5-1-2003, eff. 6-1-2003)