

NOTICE OF MEETING
PLANNING COMMISSION
CITY OF ST. GEORGE
WASHINGTON COUNTY, UTAH

Public Notice

Notice is hereby given that the Planning Commission of the City of St. George, Washington County, Utah, will hold a **Planning Commission** meeting in the City Council Chambers, 175 East 200 North, St George, Utah, on **Tuesday, October 26, 2021**, commencing at **5:00 p.m.**

The agenda for the meeting is as follows:

Call to Order

Flag Salute

1. GENERAL PLAN AMENDMENT (GPA) (Public Hearing) Legislative

Consider a request for a general plan amendment from COM (Commercial) to MDR (Medium Density Residential) and from IND (Industrial) to MDR (Medium Density Residential), HDR (High Density Residential), and PF (Public Facilities) on approximately 53 acres generally located east of 3050 East Street at about 750 North Street (Please see exhibit on back). The applicant is Scott Sandberg, and the representative is Garrett Goff. The project will be known as St. George White Hills Development. Case No. 2021-GPA-012. (Staff – Carol Davidson)

2. ZONE CHANGE (ZC) (Public Hearing) Legislative

Consider a request to change the zone from R-1-10 (Residential, Single-Family, 10,000 sq ft minimum lot size) to R-1-8 (Residential, Single-Family, 8,000 sq ft minimum lot size) on approximately 35.65 acres located generally south-west of Gap Canyon Parkway approximately 1,200 feet. The applicant is proposing to change the zoning on the property to accommodate a future single-family subdivision. The applicant is St. George 730 LC and the representative is Mark Teepen. The project will be known as Divario PA 4 Rezone. Case No. 2021-ZC-077 (Staff – Dan Boles)

3. ZONING CHANGE AMENDMENT (ZCA) (Public Hearing) Legislative

A. Consider a request for a zone change amendment for The Tonaquint Center PD-C (Planned Development Commercial) zone in order to review elevations and site layout for the Onset Financial Building on approximately 3.11 acres located approximately at the Southeast corner of Silicon Way and Dixie Drive. The representative is Jake Heward. The project will be known as Onset Financial Building Case No. 2021-ZCA-079. (Staff – Mike Hadley)

B. Consider a request to amend the Blackridge Commercial Center PD-C (Planned Development Commercial) and to change the zoning from R-1-10 (Single Family Residential) to PD-C (Planned Development Commercial) on an approximate 1.02-acre parcel for the purpose of constructing a new hotel. The total property area is approximately 17.03 acres. The project is located on the northwest corner of Blackridge Drive and 250 West Street (Please see map on back). The applicant is Oscar Covarrubias. The project will be known as St George Hotel Commercial Project. Case No. 2021-ZCA-078. (Staff – Carol Davidson)

4. HILLSIDE DEVELOPMENT PERMIT (HS) Administrative

Consider a request for a hillside development permit to allow disturbance of areas greater than 20% slope areas. This application is in anticipation of a new hotel. The property is generally located on the north-west corner of 250 West and Blackridge Drive and is zoned PD-C (Planned Development Commercial). The applicant is New England Alliance, LLC/Glen Overton. Case No. 2021-HS-008. (Staff – Wes Jenkins)

5. CONDITIONAL USE PERMIT (CUP) Administrative

Consider a request for a conditional use permit to operate a short-term rental within the Sevy House which has been designated as a local landmark. The project is located at 274 S. 200 W. (Please see map on back). The applicant is Cimarron Chacon. The project will be known as Sevy House Short-term Rental. Case No. 2021-CUP-012. (Staff – Carol Davidson)

6. PRELIMINARY PLAT (PP) Administrative

- A. Consider a request for a sixteen (16) lot residential subdivision known as The Cove at Desert Color Lot 501 located along Lagoon Parkway in the Desert Color Development. The property is .47 acres and is zoned PD-R. The applicant is Cole West Development, representative Eric Day. Case No. 2021-PP-055. (Staff – Wes Jenkins)
- B. Consider a request for a twenty (20) lot residential subdivision known as The Cove at Desert Color Lot 514-515 located along Lagoon Parkway in the Desert Color Development. The property is .61 acres and is zoned PD-R. The applicant is Cole West Development, representative Eric Day. Case No. 2021-PP-056. (Staff – Wes Jenkins)

7. MINUTES

Consider a request to approve the meeting minutes from the August 26, 2021, joint work meeting and the October 7, 2021, October 12, 2021, and October 14, 2021 meetings.

8. CITY COUNCIL ACTIONS

John Willis the Community Development Director will report on the items heard at City Council from the October 21, 2021, meeting.

- 1. 2021-ZRA-009 10-17A-3 ADU
- 2. 2021-ZC-065 Hope Pregnancy Care Center
- 3. 2021-ZC-066 900 South Properties
- 4. 2021-ZCA-067 Quench IT
- 5. 2021-ZC-068 Open Space
- 6. 2021-ZC-069 The Fields at Mall Dr ph3 Fat Cats
- 7. 2021-ZC-070 SLR Fields
- 8. 2021-ZC-071 The Park at Temple View
- 9. 2021-PP-045 The Fields at Mall Dr ph3
- 10. 2021-PP-051 Patio Furniture at SunRiver

11. 2021-PP-050 The Flats at Grand Views
12. 2021-PP-052 Desert Providence
13. 2021-PP-053 Desert Reserve Ph 3
14. 2021-PP-054 Desert Solace Ph 4

9. ADJOURN

Brenda Hatch – Development Office Supervisor

Reasonable Accommodation: The City of St. George will make efforts to provide reasonable accommodations to disabled members of the public in accessing City programs. Please contact the City Human Resources Office at (435) 627-4674 at least 24 hours in advance if you have special needs

PLANNING COMMISSION AGENDA REPORT: 10/26/2021

St. George White Hills Development General Plan Amendment (Case No. 2021-GPA-012)	
Request:	To amend the General Plan Land-Use Map from COM (Commercial) to MDR (Medium Density Residential) and from IND (Industrial) to MDR (Medium Density Residential), HDR (High Density Residential), and PF (Public Facilities)
Applicant:	Scott Sandberg
Representative:	Garrett Goff
Location:	East of 3050 East Street and north of 750 North Street
Existing General Plan:	COM (Commercial) and IND (Industrial)
Proposed General Plan:	MDR (Medium Density Residential), HDR (High Density Residential), and PF (Public Facilities)
Existing Zoning:	R-1-10 (Single Family Residential), C-3 (General Commercial), and M-1 (Manufacturing)
Land Area:	Approximately 53 acres



BACKGROUND:

This is a General Plan Amendment for land generally located east of 3050 East Street and north of 750 North Street. The General Plan is a guide for land-use decisions and contains various policies to help direct decisions related to land use and development of the City. This property sits on the eastern boundary of St. George and is currently vacant. The applicant is also the owner of the surrounding 100 acres and seeks to develop the land for future commercial, residential, and light industrial development.

The proposal reduces the commercial and industrial land-use designations to add MDR (Medium Density Residential) and HDR (High Density Residential) land use designations as well as a PF (Public Facility) land use designation. The proposed MDR designation will cover approximately 39 acres. The proposed HDR designation will cover approximately 13 acres. The proposed PF designation will cover approximately 1 acre and will be used for a city electrical substation. Until the substation is put in, no development will be allowed on the property.

The developer is currently performing a traffic study for this location. The results of this study are expected to be completed by the last week of October. Staff will, at that time, determine what road improvements will be expected. In addition, there is a planned pedestrian path that heads east along 850 North Street and then turns north to meet up with a planned Washington City trail on the east side of Walmart. The developer will be required to put in the pedestrian path and will work with our engineers to do so.

There is a small pond that sits at the northwest corner of this property. This pond is owned by the city and will change to the residential land use designation along with the applicant's property. The general plan also shows the future extension of 850 North Street to the east into Washington City. The developer will follow the general plan and extend this street as part of their future plans.

A very small portion of this property in the northeast corner is in the 100-year flood plain and the floodway of a small creek that runs through Washington City. No structures will be allowed to be built in this location.

ALTERNATIVES:

1. Recommend approval of this General Plan Amendment.
2. Recommend denial of this General Plan Amendment
3. Table the proposed General Plan Amendment to a specific date.

POSSIBLE MOTION:

The Planning Commission recommends approval of this General Plan Amendment for the St. George White Hills Development.

FINDINGS FOR APPROVAL:

1. The proposed land-uses are compatible with the surrounding land uses in this area.

Exhibit A Applicant's Narrative



General Plan Amendment

Summary:

The applicant is applying for a General Plan Amendment for the property at approximately 3050 E 850 N. on parcels SG-5-2-22-112, SG-5-2-22-111, SG-5-2-22-12. This is currently undeveloped property. We will be developing the site to include 15 acres for a hospital, 14 acres of mid box retail, retail pads along the frontage of 3050 E, 15 acres of Flex Industrial/Storage, 9 acres of high density residential, and 34 acres of mixed density residential. We are requesting amending the General Plan to accommodate the proposed uses as delineated on the master plan drawing submitted herewith. The zone change request is to change the C-3 zone to PD-C and change some of the R-1-10 zone to PD-C. The rest of the R-1-10 zone and some of the M-1 zone to the South will be an "area for future rezone". This is a great piece of ground, and we feel that we are using the land to its highest and best use. It will create a great environment of work live play in St George, we have worked with the city of St George in the past and have had nothing but great experiences. Thank you for your time and consideration on this particular project.

Exhibit B Citizen Comment

From: Andrew Christensen
Sent: Friday, October 8, 2021 2:48 PM
To: Carol Davidson
Subject: Re: Planning & Zoning Meeting Tuesday 10/12 5pm, St. George, UT

Hi Carol:

Thank you for your email.

I think the biggest questions we would have would be the obvious increased congestion on N. 3050 E., and Red Cliffs Drive.

The main statement we would have would be the potential widening of N. 3050 E., and widening of Red Cliffs Drive to accommodate the increased congestion for the large developments.

Would the developers be sharing the cost to widen the roads, or would this be a potential local roads or transportation municipality that will ultimately have to complete and fund the road improvements?

Thank you again for your email, and let me know if you have any questions.

Andrew Christensen
Real Estate Manager
Sportsman's Warehouse

Exhibit C
PowerPoint Presentation

White Hills General Plan Amendment

2021-GPA-012



Location

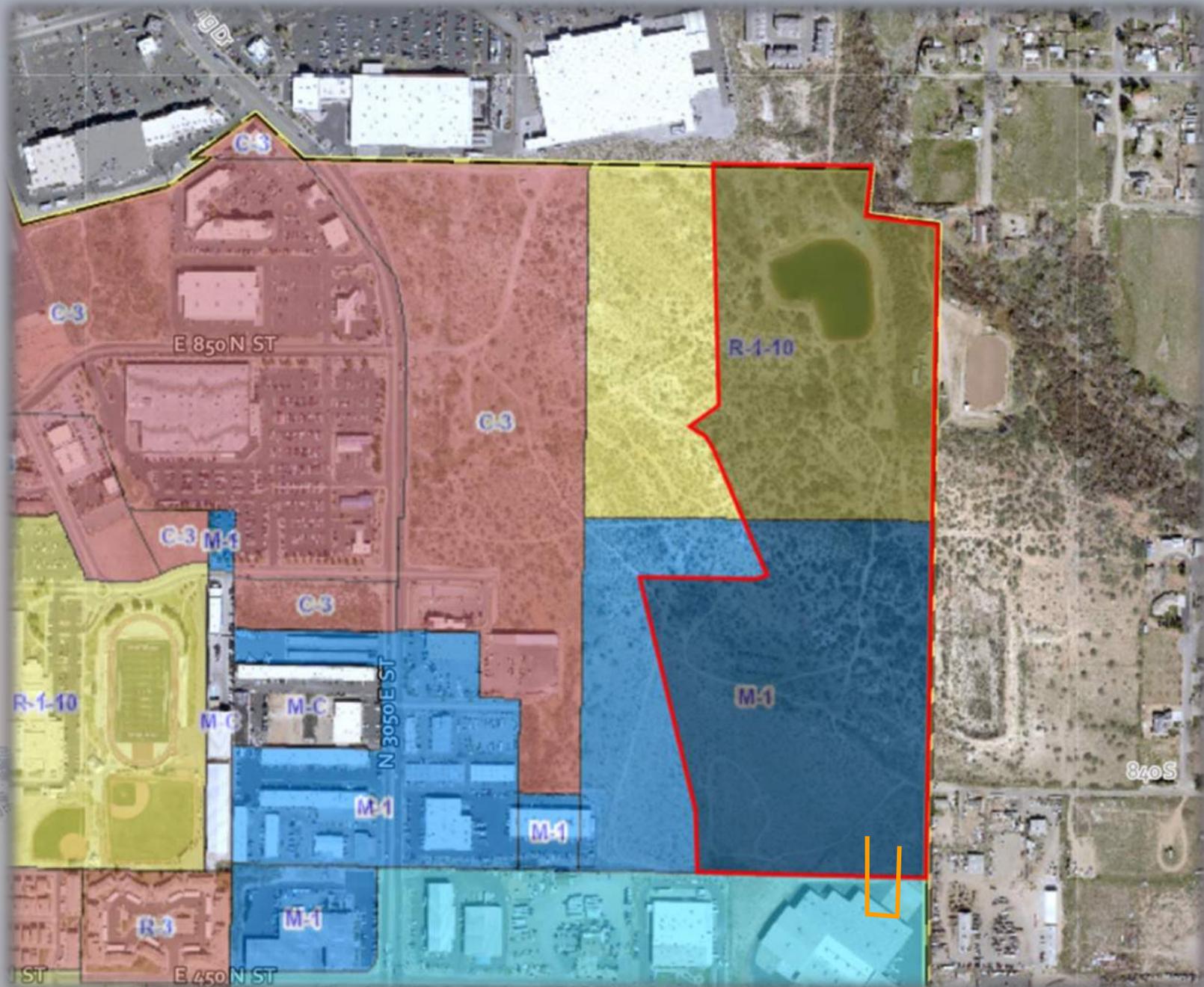


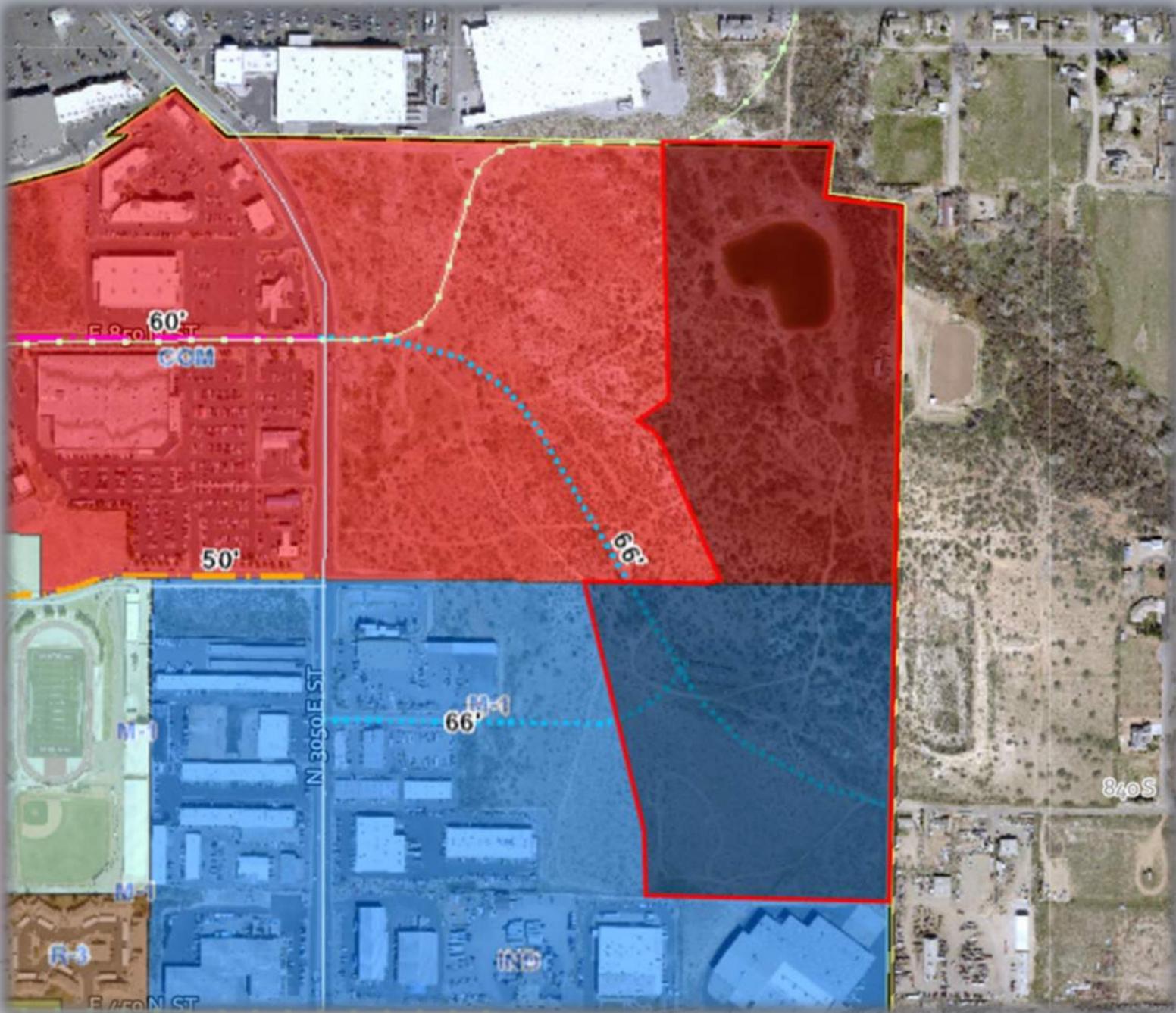


City
Property

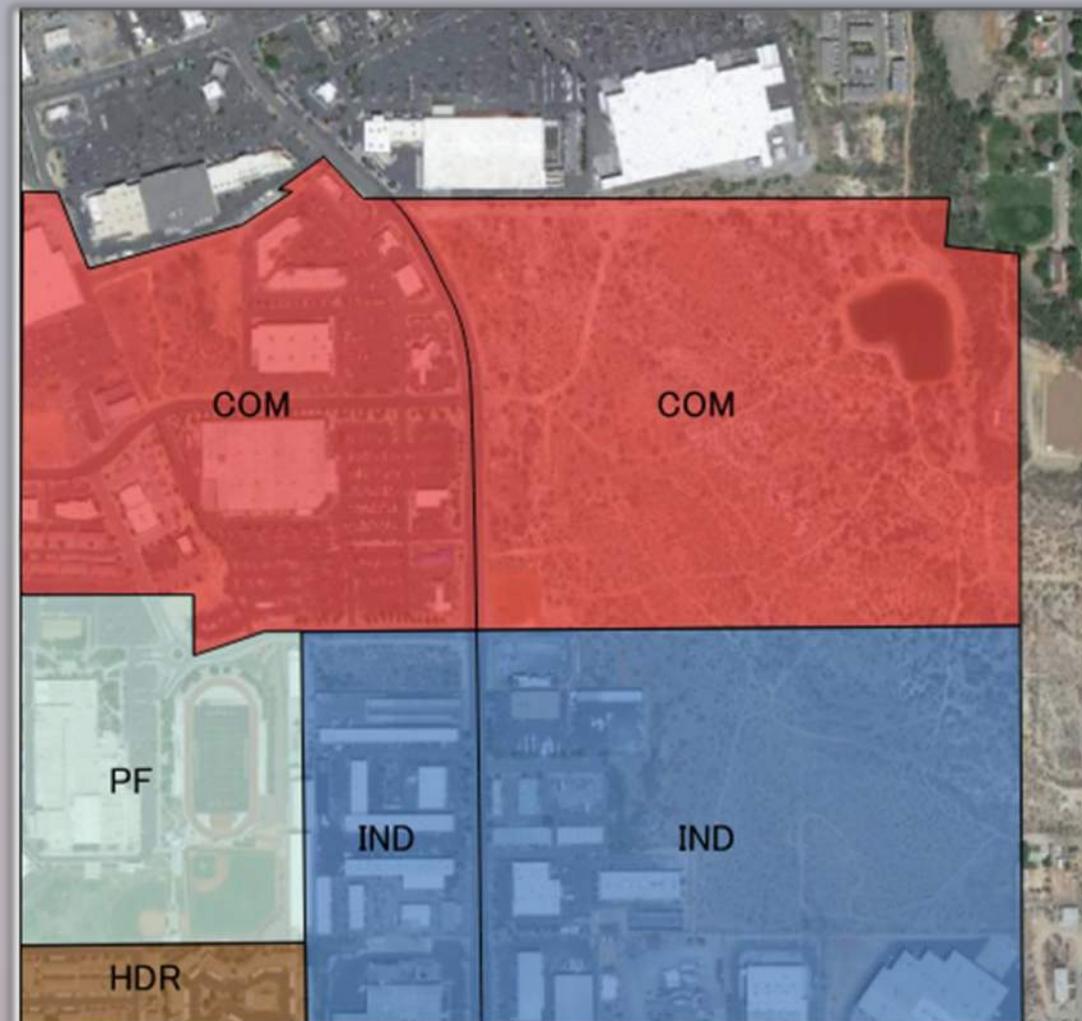
450 E ST

Zoning

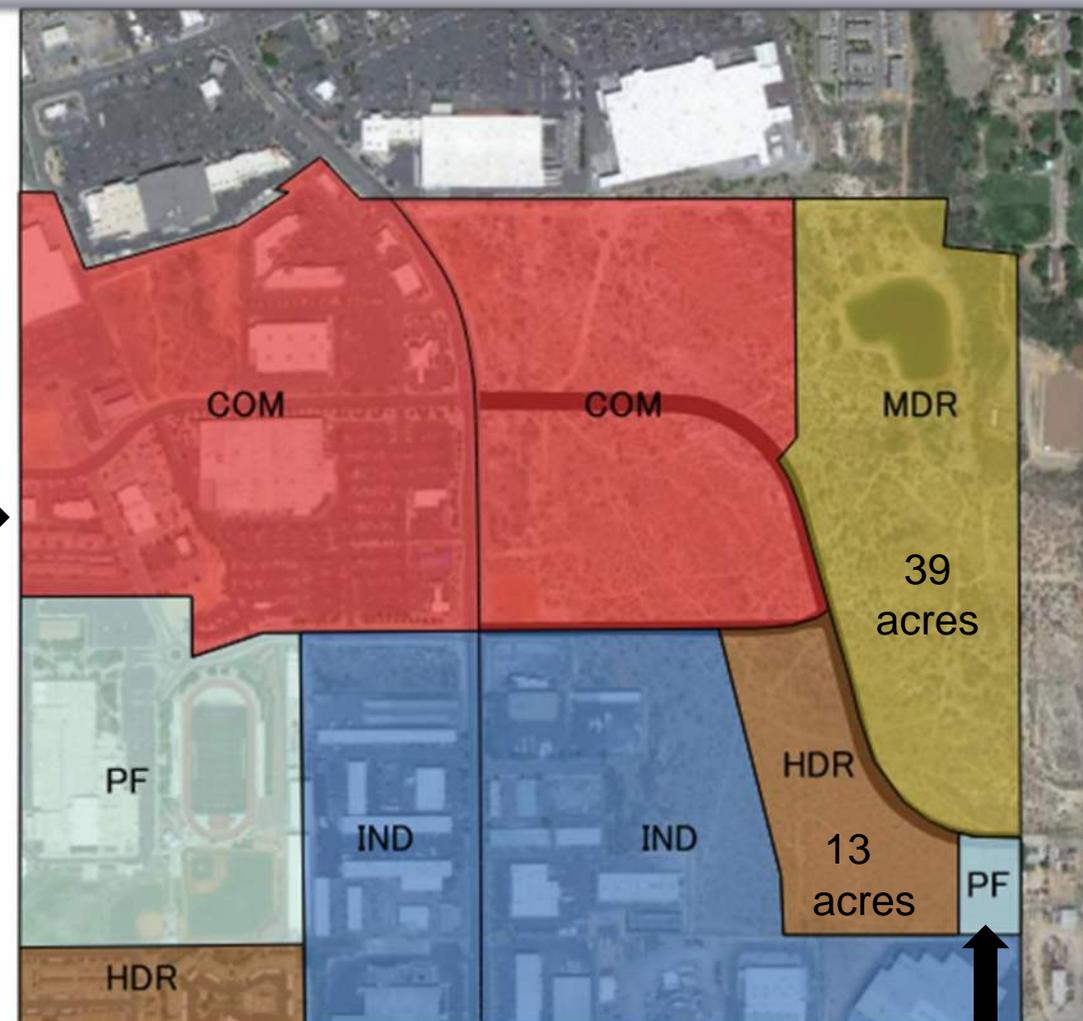




General Plan



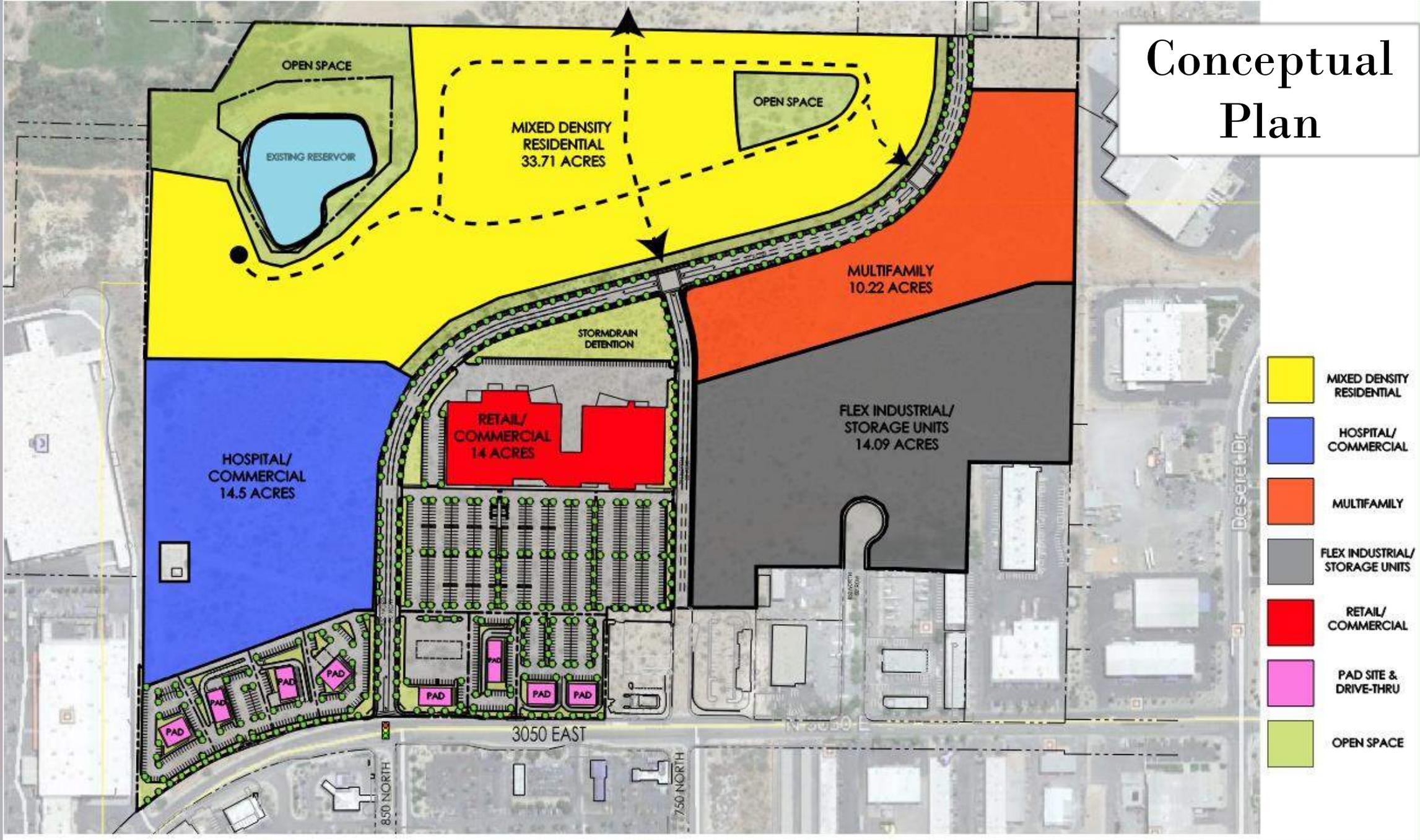
EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN

1 acre

Conceptual Plan



OPEN SPACE

EXISTING RESERVOIR

MIXED DENSITY RESIDENTIAL 33.71 ACRES

OPEN SPACE

MULTIFAMILY 10.22 ACRES

STORMDRAIN DETENTION

HOSPITAL/COMMERCIAL 14.5 ACRES

RETAIL/COMMERCIAL 14 ACRES

FLEX INDUSTRIAL/STORAGE UNITS 14.09 ACRES

PAD

3050 EAST

850 NORTH

750 NORTH

Desert Dr

- MIXED DENSITY RESIDENTIAL
- HOSPITAL/COMMERCIAL
- MULTIFAMILY
- FLEX INDUSTRIAL/STORAGE UNITS
- RETAIL/COMMERCIAL
- PAD SITE & DRIVE-THRU
- OPEN SPACE



Staff recommends general plan amendment

PLANNING COMMISSION AGENDA REPORT: 10/26/2021

ZONE CHANGE

Divario PA 4 (Planning Area 4)

Case No. 2021-ZC-077

Request: This is a request to consider a zone change from R-1-10 (Single Family Residential, minimum lot size 10,000 square feet) to R-1-8 (Single Family Residential, minimum lot size 8,000 sq ft) on approximately 35.65 acres.

Owner: St George 730, LLC

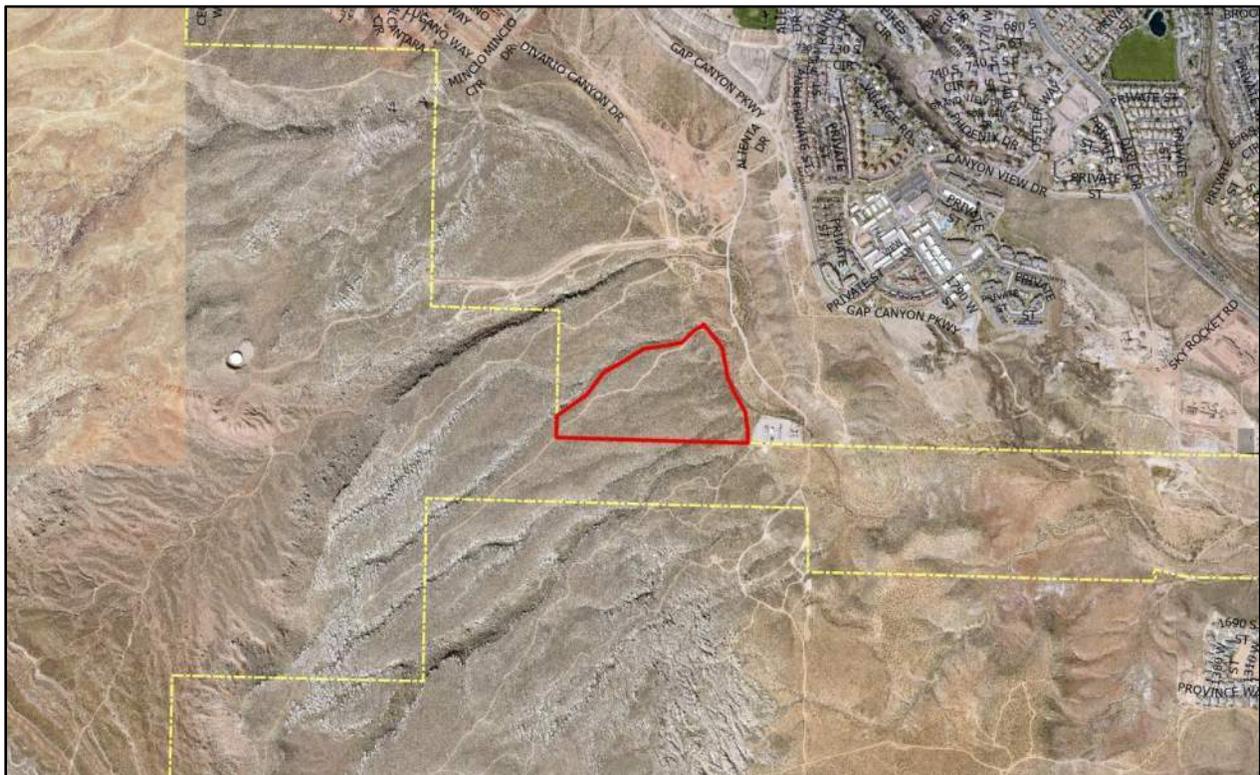
Representative: Mark Teepen

Location: The property is generally located approximately 1,200 feet south-west of Gap Canyon Parkway.

Acreage: 35.65 acres

Current Zoning: R-1-10

General Plan: LDR (Low Density Residential)



Background: The property was annexed as part of the Plantations Land in 1994. In 2007, a development agreement (DA) was approved between the developer and the City. At the time, the development was called “The Lakes”. The name has since changed to “Divario”. An updated development agreement was approved in 2014 which actually set forth the parameters of the development, planning areas, etc. The Planning Commission has reviewed several zone changes and plats in the development over the past two years.

Dev. Agreement: Unlike PA (Planning Area) 9, PA 4 stays within the bounds of its designated boundary. For reference though, the development agreement states the following regarding transferring densities:

“...Developer shall have the right to shift units from one Planning Area to another, thus modifying the relative densities in the affected Planning Areas, without being required to get City approval or to amend the Master Plan, provided that the overall maximum density for the Planned Community is not exceeded, and provided that the maximum density in any one Planning Area does not exceed the maximum density permitted in any given Planning Area in the Master Plan attached hereto.”

Planning Area four is proposed to have approximately 132 lots over the roughly 35 acres creating an overall density of approximately 3.78 units per acre, which is below the four units per acre allowed by the master plan. As the development is in the beginning stages, they have not come near the 3,196 maximum units allowed by the development agreement. The applicant is in the process of updating their traffic study as required by the development agreement.

Adjacent zones: To the north and east of the property is R-1-10 which is all undeveloped. The property to the south and west of the subject land is all unincorporated county land. The previously reviewed PA 3 is to the north-east and PA 1 is directly east approximately $\frac{3}{4}$ of a mile.

Power: At the present time, there isn't adequate power to service some of planning areas in Divario. The city has identified a solution which will require the Divario developers to dedicate easements throughout Divario for powerlines. The applicant has indicated that they are willing to participate in this solution and are currently working with the power department to create the necessary easements, etc. The easements will need to be in place before this application moves forward to the City Council.

Recommendation:

Staff recommends approval of this Zone Change to R-1-8. The applicant will need to work with the city to ensure that there is adequate access to power before this application moves forward to the City Council.

Alternatives:

1. Recommend approval as presented.
2. Recommend denial.
3. Table the proposed zone change amendment to a specific date.

Possible Motion: “I move that we forward a positive recommendation to the City Council for the zone change for Divario PA 4 as presented, case no. 2021-ZC-077, based on the findings listed in the staff report.”

Findings for Approval:

1. That a zoning map amendment application was filed by the applicant in accordance with section 10-1-8 of the St. George city code.
2. That the request is consistent with the development agreement.
3. The density meets the requirements of the general plan of four units per acre.

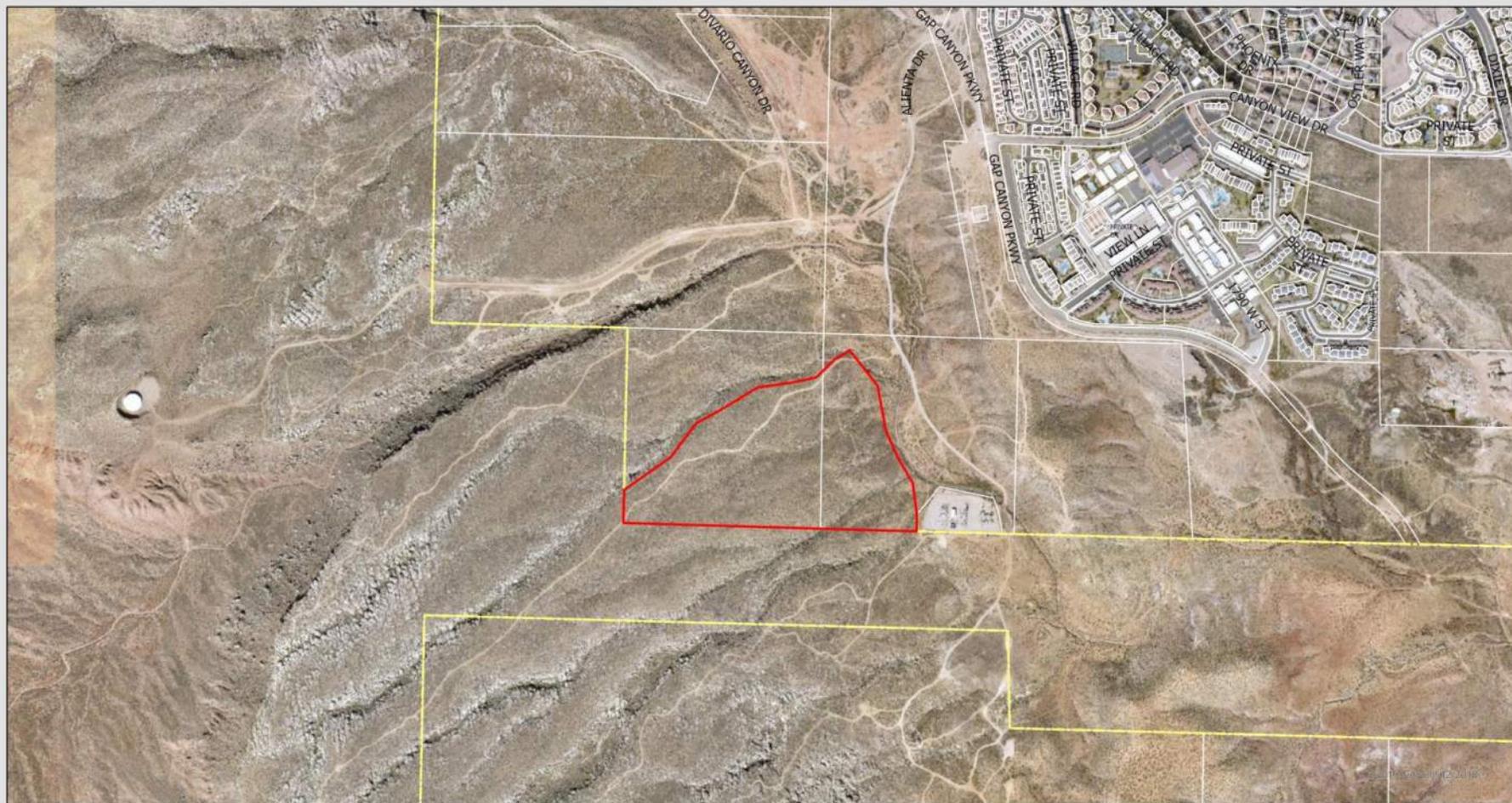
Presentation



Divario Planning Area 4

2021-ZC-077

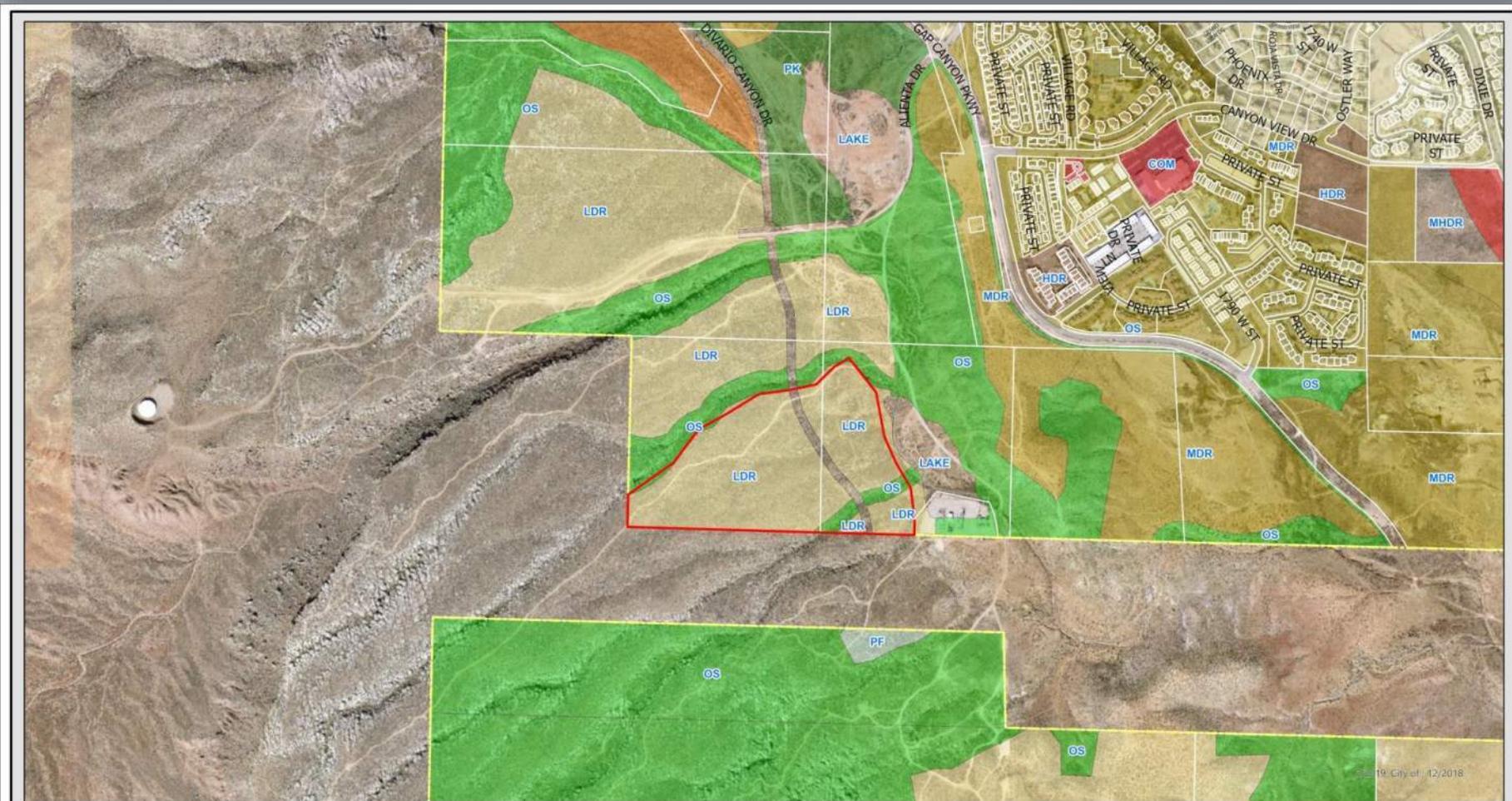
Aerial Map



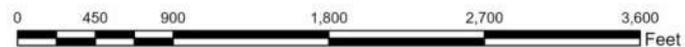
Divario PA 4 Rezone



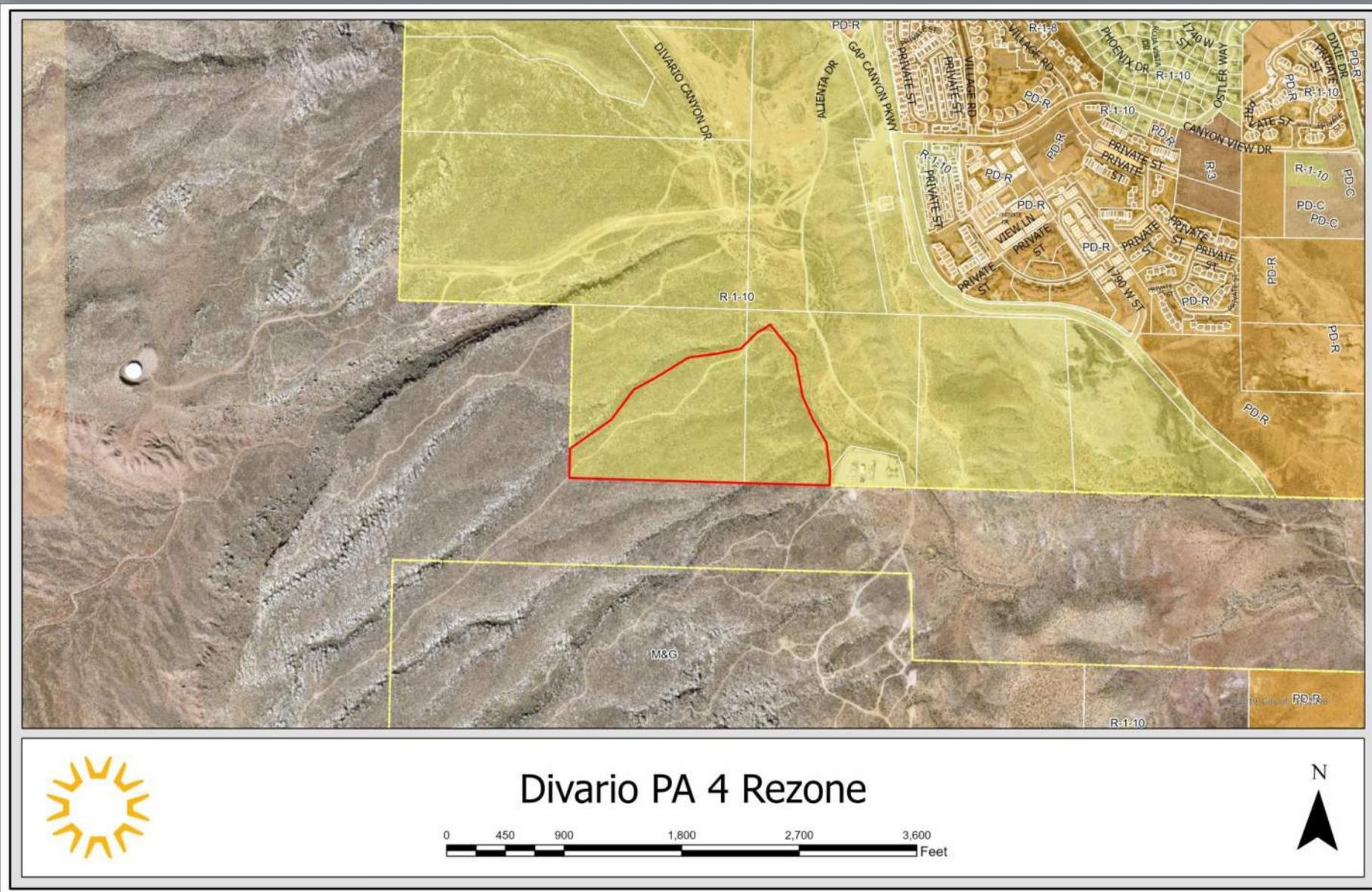
Land Use Map



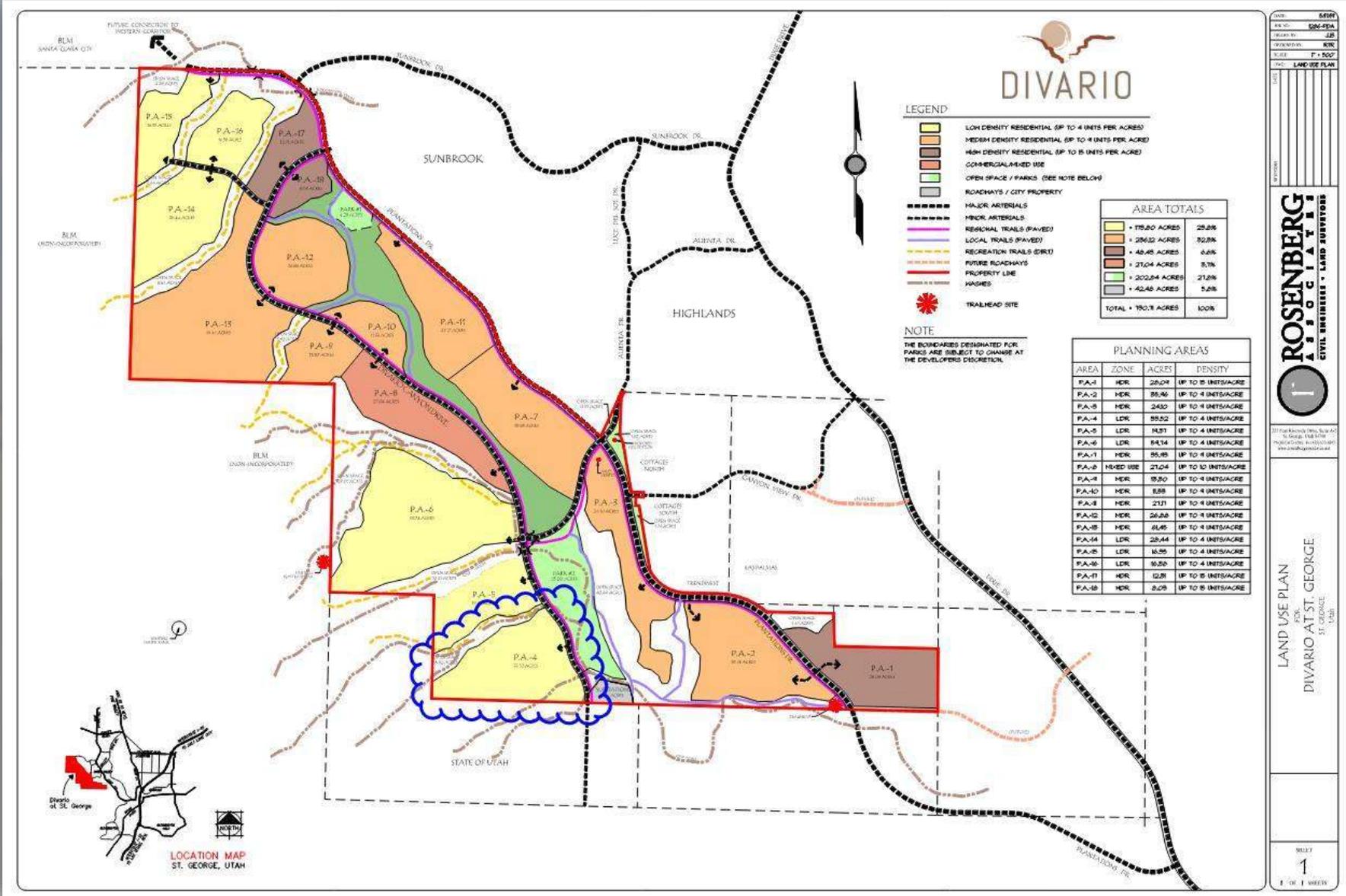
Divario PA 4 Rezone



Zoning Map



Divario Master Plan



PLANNING COMMISSION AGENDA REPORT: 10/26/2021

Zone Change Amendment
Onset Financial Building
Case No. 2021-ZCA-079

Request: Consider a zone change amendment to the Tonaquint Center PD-C (Planned Development Commercial) to build an office building for Onset Financial Headquarters. This request to review the site plan and elevations on approximately 3.11 acres.

Applicant: JustAng SG LLC

Representative: Kae Heward Alpha Engineering

Area: 3.11 acres

Location: Southeast Corner of Silicon Way and Dixie Drive

Current Zone: PD-C (Planned Development Commercial)

General Plan: COM (Commercial).

APN: SG-6-2-35-230

Background: The Onset Financial Office Building is a four-story building designed to provide office space for the Onset Financial headquarters. It is located near the intersection of Silicon Way and Dixie Drive. The building offers the employees a lifestyle floor to help provide for a healthy lifestyle. Floors 2 and 3 are for the sells and marketing teams and the fourth floor will serve as an executive suite for the CEO.

.EXAMPLE

Motion to Approve: The Planning Commission recommends approval to the City Council to the existing PD-C zone located on the southeast corner of silicon way and dixie drive. The following are suggested conditions and comments:

1. Zoning – The PC recommends the PD-C zone change amendment as presented on 3.11 acres.
2. Site Plan – The conceptual layout as presented is approved.

3. Colors & Materials – As presented the colors and materials are approved.
4. Building Height - The maximum height for a building in the PD-C zone is 50 feet. The city council, after recommendation from the planning commission, may approve increased building height upon making a finding, as part of a zone change approval, that the increase in height will fit harmoniously into the neighborhood, minimizing any negative impacts, after considering the following:
 - a. Proposed setbacks provide an appropriate buffer to neighboring properties.
 - b. Increased landscaping enhances the project and reduces any negative impacts
 - c. Site layout and design enhance the project and reduce any negative impacts.
 - d. The massing and building scale is appropriate for the location;
 - e. The proposed height increase is appropriate for the area; and
 - f. The increase in height is consistent with any applicable master plan

Staff believes that the location, design, and placement of the building on the site is appropriate to recommend approval for the increased height.

5. Setbacks – Setbacks shall meet the Zoning Ordinance (*staff will confirm this during the SPR process*).
6. Parking – The parking on site shall meet the Zoning Ordinance (*staff will confirm this during the SPR process*).
7. Landscaping – The applicant shall provide landscaping to comply with Title 10 Chapter 25 ‘Landscaping’ in the Zoning Ordinance (*staff will confirm this during the SPR process*).
8. Lighting – The applicant shall provide a photometric plan with submittal of the SPR and demonstrate that lighting will not exceed 1 ft candle at property line and shall not exceed 15 ft candle on site. Dark sky style lighting fixtures shall be used to avoid a nuisance as seen from adjacent residential neighborhoods and surrounding community.

9. SPR – Upon approval of the zone change, the applicant shall submit an application for a SPR (Site Plan Review) along with the required civil engineering plan set which may include but not be limited to: cover sheet, site plan, grading plan, erosion control plan, utility plan, landscape plan, irrigation plan, and photometric plan.

Recommendation: Staff recommends approval of this zone change amendment request.

Alternatives:

1. Recommend approval as presented.
2. Recommend approval with conditions.
3. Recommend denial.
4. Table the proposed zone change to a specific date.

Area View



Narrative

RE: Secondary Zone Change Application Narrative - Onset Financial Headquarters

We have prepared the following narrative to accompany the Planned Development Commercial Secondary Zone Change Application for the proposed Onset Financial Headquarters, located in St. George, Utah near the intersection of Dixie Drive and Silicon Way.

This four-story office building is nestled on the east edge of the property with parking on three sides of the building. This positioning embraces the natural topography of the site by following the Santa Clara River and providing employees with unincumbered views of the neighboring bluffs and peaks of Snow Canyon in the distance.

Constructed as a steel frame and concrete deck system, the building stands four-stories tall and strikes a dramatic form against the desert landscape. Subtle shifting in the orientation of each floor plate offers unique indoor & outdoor spaces on each level. Exterior zinc metal panels comprise the majority of the exterior façade. An aluminum curtainwall system with high performance glazing system enables the building to perform under the extreme conditions of southern Utah.

The main entrance hall is accessible from both sides of the building. As vestibule serves as the conventional entrance from the parking and drop-off lane on the west side. Yet the lobby also has operable glass windows on both sides that open to blur the line between indoor and outdoor space.

The first floor is considered the “Lifestyle Level,” with an array of employee amenities. Prominently positioned directly behind the reception desk is the game room with a half-court basketball court and other gaming options. A “Bistro” stocked with snacks and designed to host large groups of employees at any time is open to an outdoor terrace on the east side of the building, protected from the relentless southern Utah sun. The “Fitness Center” loaded with the latest equipment is positioned to view primarily north, ideal for group activities and personal fitness. Upscale locker rooms afford employees every opportunity to take advantage of the corporate amenities and encourage a well-rounded, healthy lifestyle.

An interior atrium with a grand stair climbs through the center of the building. This “active stair” encourages employees to make the “healthy-choice” throughout their workday by opting to stay active with small bursts of daily activity. A skylight above the atrium showers the building in controlled, natural light. A rooftop mounted mechanical smoke evacuation system will rapidly direct smoke in the case of a fire out of the building and away from the key areas where occupants may be sheltering or escaping from the danger.

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Level two is dedicated to Onset Financials' sales team. Glass enclosed manager offices line the west side of the building while cubicles for up to 60 employees fill the remaining interior space. A multi-media / training room bookends the north end of the building, and two unique conference rooms bookend the south end. Flanking outdoor terraces on opposite sides of the building afford the sales team access to the outdoors throughout their workday furthering daily healthy choices. This healthy corporate ethos begins at the top and by design permeates each aspect of the building's composition.

Level three is dedicated to Onset Financials' Marketing, Accounting, Documentation, Legal and Human Resources teams. Fifteen manager offices, along with cubicles for up to another 60 employees fill the floor. An executive conference suite and several private conference rooms complete the program. Another outdoor terrace with east facing views serves at the third floor's convenient access to the outdoors.

Level four is quite unique for any office building. The entire twelve thousand square foot floor serves primarily as the CEO's executive suite dedicated to his daily operations and his personal health. Guests arrive via elevator or stair and are ushered into a private executive waiting area. Here they either enter the CEO office on the north end of the building, or the conference room with west facing views. These areas are serviced by the executive kitchen and lounge, where break-out activities can take place in a more casual setting with access to a private outdoor terrace. The CEO also has a more private area on this floor dedicated to personal health and well-being. Accessed by way of a private elevator that originates from an exclusive garage on level one allows for the privacy required by the CEO. An exclusive fitness center, sauna, hot tub and locker room with access to a private open air Zen garden allow for moments of isolation and introspection. A luxurious lounge with kitchen and area for repose completes the south end of the fourth floor.

Like many conventional office buildings, the mechanical systems are located on the roof. However, by tapering the exterior walls the equipment is disguised, much like a conventional screen wall, but more integrated into the overall building composition. A bank of air source condensers serve to supply the VRF mechanical system which distribute heating and cooling in a localized and controlled manner, contribute highly to the building's overall performance and comfort. An air-handler supplies fresh, purified make-up air throughout the building.

The top of the proposed building is approximately 69'-4" from the entry on the main level as shown in the attached architectural building elevations. The site of the building has been designed to provide exterior 220 parking stalls with another 3 stalls provided in an enclosed garage within the building for an overall total of 223. The extent of the proposed landcover is shown in the Site Plan included with the Secondary Zone Change application. The site plan also shows the general location of two proposed exterior signs on the site. These signs will conform to all applicable City signage ordinances. All mechanical equipment will be screen as noted above. Utilities will be screened as noted.

October 5, 2021

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installed underground and transformers will be installed and screened per St. George City Energy Services standards. It is also intended that the site improvements and buildings be constructed as a single phase. A PDF of the color and materials board is included with this submittal, while the actual physical copy will be delivered to the City on October 8, 2021.

If you have any questions regarding any of the above, feel free to reach out to me. If additional printed copies of any of the submitted items are desired, please advise, and we are happy to provide them.

Sincerely,

Jake Heward, P.E.
ALPHA ENGINEERING COMPANY

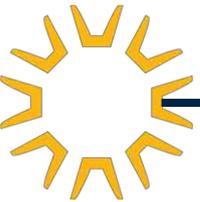


Onset Financial Building

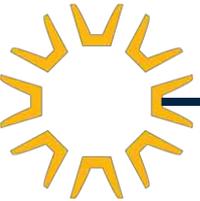
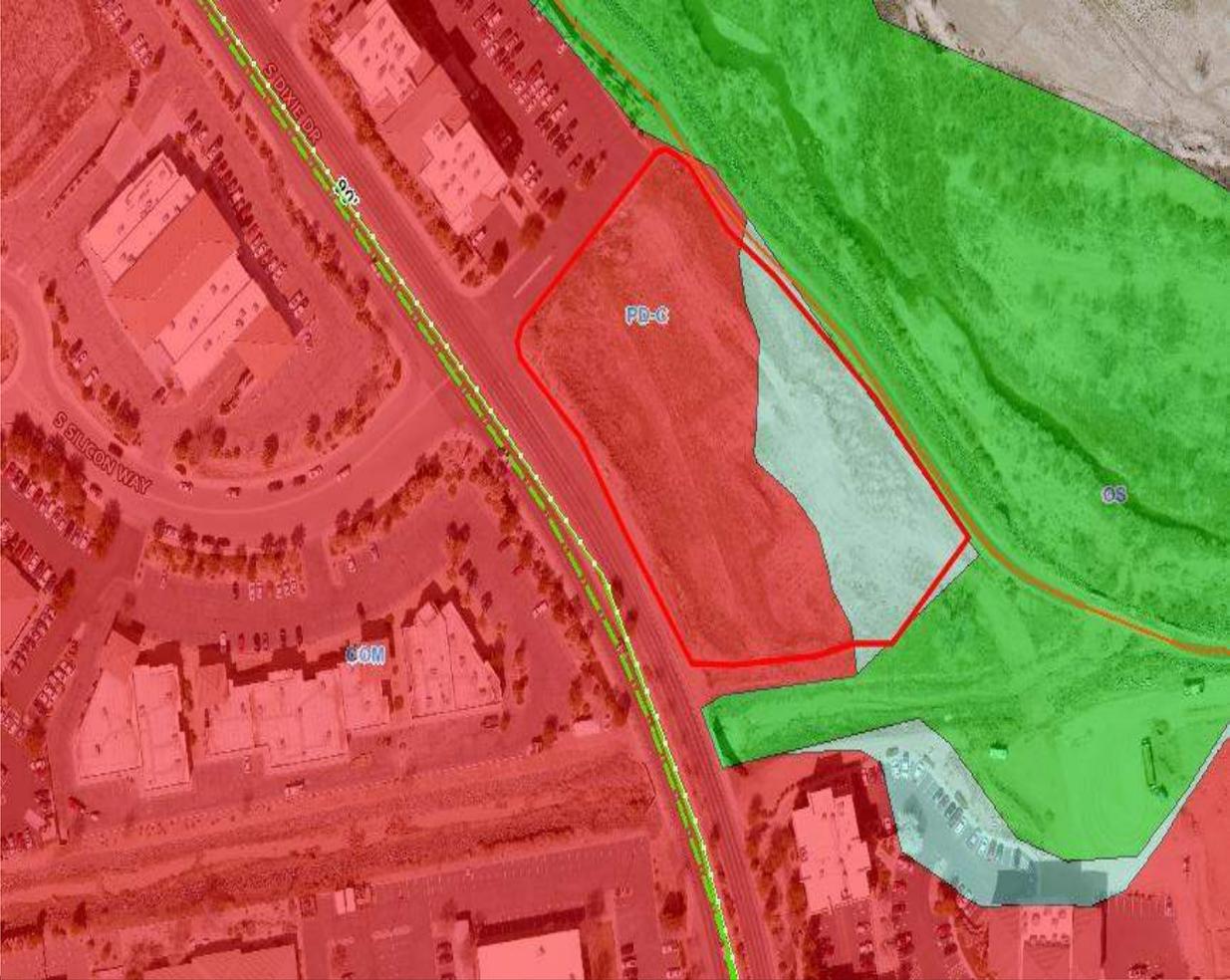
Zone Change Amendment

2021-ZCA-079

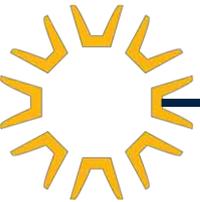
Aerial Map



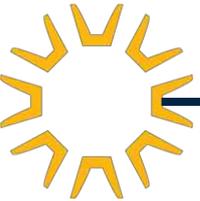
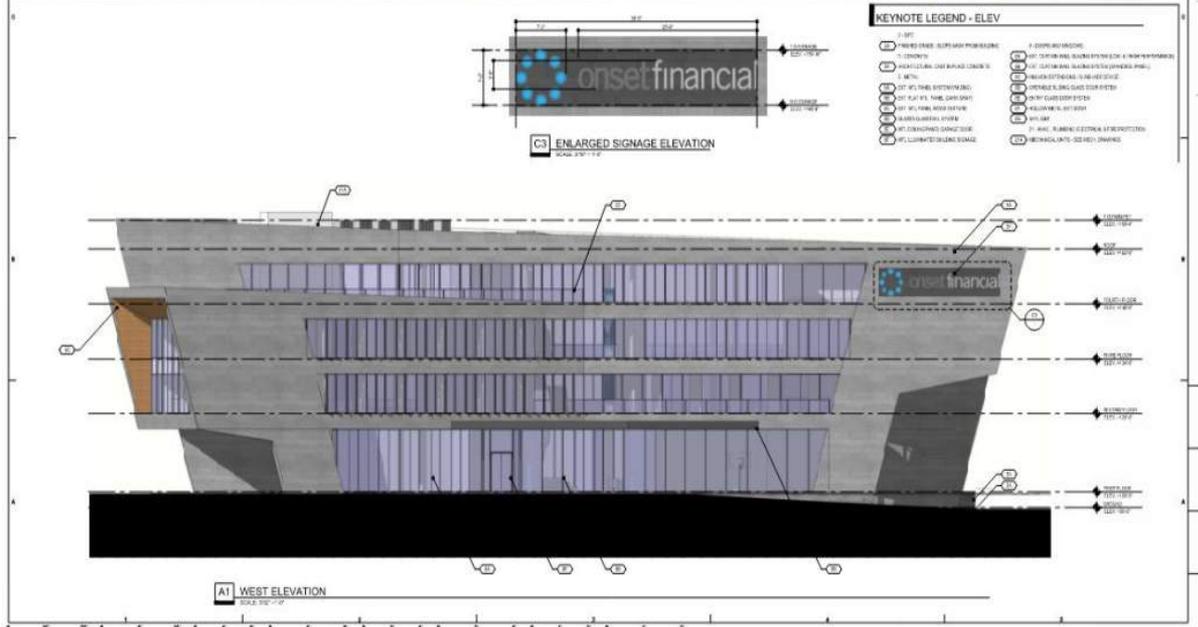
General Plan Map



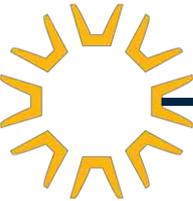
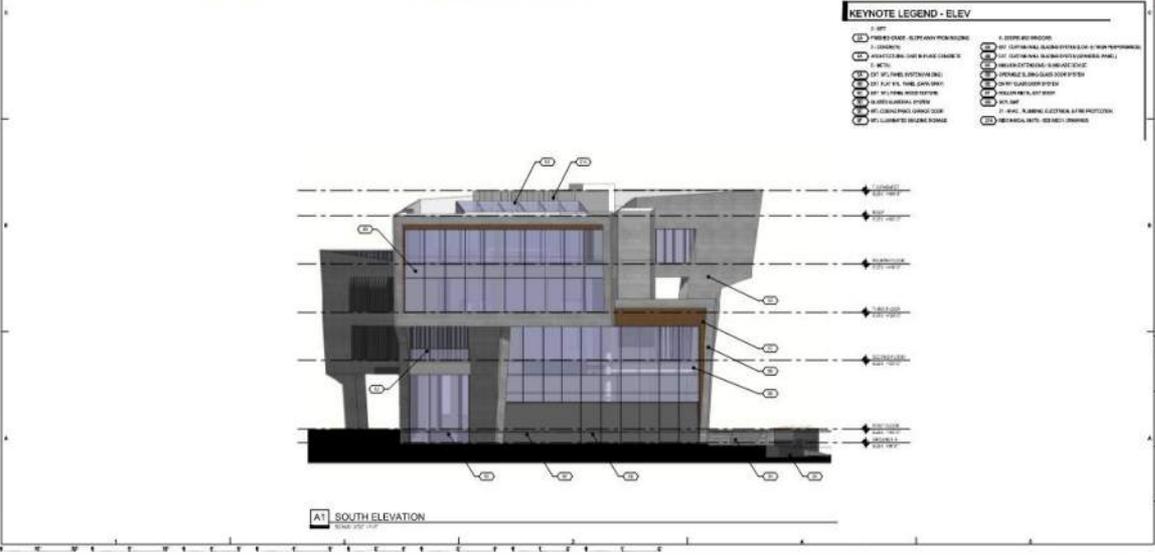
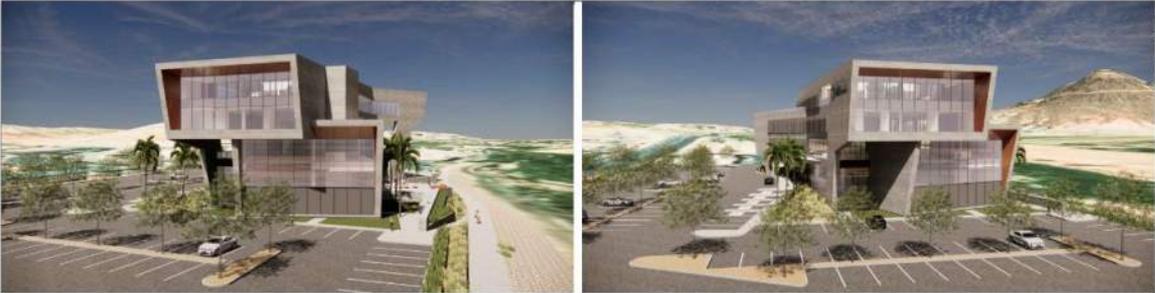
Zoning Map



Elevations



Elevations

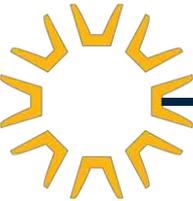


Materials Board

The materials board displays several material samples and a rendering of the Onset Financial Headquarters. The samples include:

- Two zinc metal panels: one labeled "ZINC" and another "GLAZED ZINC".
- A "WOOD-LOOK METAL PANEL" with a yellowish-gold finish.
- A "ZINC METAL PANEL" with a brushed metal texture.
- An "ALUMINUM CURTAIN WALL" with a brushed metal finish.
- A "GLAZING" sample showing a glass panel with a dark frame.

The rendering shows the "ONSET FINANCIAL HEADQUARTERS" building, a modern structure with a prominent cantilevered section. The building's facade features vertical slats and large glass windows. The rendering includes the "onset financial" logo and the name of the building. The "Axie Architects" logo is also present at the bottom right of the board.



PLANNING COMMISSION AGENDA REPORT: 10/12/2021

St. George Hotel Commercial Project Zone Change (Case No. 2021-ZC-078)	
Request:	This is a request to amend the Blackridge Commercial Center PD-C (Planned Development Commercial) and to change the zoning from R-1-10 (Single Family Residential) to PD-C (Planned Development Commercial) on an approximate 1.02-acre parcel for the purpose of constructing a new hotel.
Applicant:	Oscar Covarrubias
Representative:	Oscar Covarrubias
Location:	The property is located on the northwest corner of Blackridge Drive and 250 West Street.
General Plan:	COM (Commercial), MDR (Medium Density Residential), and OS (Open Space)
Existing Zoning:	PD-C (Planned Development Commercial) and R-1-10 (Single Family Residential)
Surrounding Zoning:	North: PD-C (Planned Development Commercial) and R-1-10 (Single Family Residential)
	South: PD-C (Planned Development Commercial)
	East: PD-C (Planned Development Commercial) and C-2 (Highway Commercial)
	West: R-1-10 (Single Family Residential) and PD-C (Planned Development Commercial)
Land Area:	Approximately 17.03 acres total property area



BACKGROUND:

On October 8, 2019, the planning commission recommended approval of a hotel to be built on the Blackridge Commercial Center PD-C (Planned Development Commercial) zone. It was to be located at 1150 South and 250 West (on the east side of 250 West). The hotel was later approved by the city council on October 17, 2019. However, due to the geological conditions of the land, the hotel was never built.

The applicant has returned proposing to move the hotel to the west side of 250 West Street. The hotel will be the similar except the configuration will be different due to the difference of the topography on the new site. This new site has more room for parking so a parking garage will not be built at this new location. The applicant returned to the Hillside Review Board on September 29, 2021. Please refer to case 2021-HS-008 for information on the hillside development permit.

The hotel will be five stories with a total of 146 rooms. The amenities for this hotel will include a swimming pool, spa, lazy river, exercise room, pickleball court, and miniature golf course. The hotel will be five stories on the lower side (west) and three stories on the higher side (east). The hotel will also have a restaurant; however, the restaurant will come in about one year after the hotel is complete. It is unclear of the total square footage of the restaurant at this time. Therefore, the parking for the restaurant has not been determined in the parking requirements and will need to be determined at the time they are ready to develop the restaurant. If the existing parking is not sufficient, the applicant will need to add additional parking.

This property is in a landslide area. The land has been closely monitored for many years and has not shown movement. The biggest detriment to landslides is water. Due to this issue, the applicant is planning on keeping as little free-flowing water on the property as necessary. This might affect the required landscaping. Staff will work closely with the applicant during the landscape design and installation to ensure this sensitive land is protected.

Zoning Requirements			
Regulation	Section Number	Proposal	Staff Comments
Setbacks		The applicants have not provided setbacks.	The required setbacks will be: Front: 20' Side: 20' and 0' Rear: 30' The site plan provided appears to meet setbacks
Temporary Buildings, including Cargo Containers	10-8-4	None	N/A

Pedestrian Circulation Plan	10-8-6	The site plan provided does not show any proposed pedestrian circulation plans	There are already public sidewalks along Blackridge Drive and 250 N. During the site plan review process the applicant will be required to have additional pedestrian access to connect the public ROW to the property.
Uses	10-8D-2	Please see the existing use list for this PD-C.	The existing use list for this PD-C has hotel on it.
Height and Elevation	10-8D-2	The two highest points of the roofline are at 64' and 62' which averages to 63'	The PD-C zone allows for a 50' height. The applicants are asking for an increase in height to a maximum
Phasing Plan	10-8D-2	None	N/A
Landscape Plan	10-8D-2	A concept landscape plan has been provided.	5% of the parking lot will need to be landscaped. There will also need to be a 15' wide landscaped section along 250 W Street and Blackridge Drive.
Utilities	10-8D-2	None shown	All utilities will be required to be underground, and all transformer equipment must be screened. We will ensure this is completed during site plan approval process.
Signs	10-8D-2	No signage has been provided.	The applicants will be required to pull a sign permit when they are ready to put in their signs.
Lighting	10-8D-2	A photometric plan has not been provided.	The parking lot lighting will be required to meet the regulations and be 1.0 foot candle or less at the property line. Staff will ensure it meets the regulations during the site plan process.
Lot Coverage	10-8D-6	The building will cover 14% of the lot.	The PD-C zone allows coverage up to 50%. This meets the zoning regulations.
Solid Waste	10-8D-6	The site plan does not show the location of solid waste.	During site plan review, the location and details of the solid waste will be reviewed and required to be compliant.
Buffer Protection	10-8D-6	A concept landscaping	The applicant will be required

of Residential Property		plan has been provided.	to put in a buffer strip along the western side of the property where it will abut residential. The buffer strips will need to be at least 10' wide with required landscaping and 6' solid wall.
Overlay Zones	10-13	None	N/A
Parking	10-19-5	<p>Parking shown: 173 stalls. Parking is determined as:</p> <p>Rooms 1 stall per room @ 146 rooms = 146 stalls</p> <p>Manager 2 stalls</p> <p>Total Required = 148 stalls, over 33 stalls</p>	The proposed parking meets regulations.
EVCS And Bike Parking	10-19-6	No bike parking is shown. No EVCS conduit is shown	They will be required to provide bike racks for at least 2 bicycles. They will be required to provide conduit for future electrical charging station for at least 4 parking stalls.

RECOMMENDATION:

Staff recommends approval of this Zone Change Amendment with the following conditions:

1. The applicant meets all requirements found in Section 10-8D of the Zoning Regulations.
2. The future restaurant will be required to meet the parking regulations at one space per 100sq.ft. for the dining area and one space for 250sq.ft. for the kitchen space at the time of the certificate of occupancy for the restaurant.
3. A maximum height of no more than 63 ' will be allowed for all structures.
4. Approval of this zone change amendment is conditional upon approval of the hillside development permit.
5. The applicant will work with staff on the landscape plan.

ALTERNATIVES:

1. Recommend approval as presented.
2. Recommend approval with conditions.

3. Recommend denial.
4. Table the proposed zone change amendment to a specific date.

POSSIBLE MOTION:

The Planning Commission recommends approval to amend the Blackridge Commercial Center PD-C (Planned Development Commercial) and to change the zoning from R-1-10 (Single Family Residential) to PD-C (Planned Development Commercial) on an approximate 1.02-acre parcel all for the purpose of constructing a new hotel with the conditions and comments outlined in the staff report.

FINDINGS FOR APPROVAL:

1. The proposed amendment meets the requirements of the original zone change as approved by City Council.
2. There will be adequate parking on site to facilitate the development.
3. The increase in height will fit harmoniously into the neighborhood, minimizing any negative impacts by considering the proposed setbacks provide an appropriate buffer to neighboring properties.

Exhibit A Applicant's Narrative



May 29, 2019

Hillside Review Board
City of St. George
175 North 200 East
St. George, UT 84770

RE: Blackstone Hotel Narrative and Plan Summary

Dear Board Members and City Officials:

The purpose of this letter is to describe the proposed project known as Blackstone Hotel and provide details associated with the application to the Hillside Review Board. Blackstone Hotel is an upscale 120 room hotel with amazing lap and leisure pools, exercise room, conference room, business center, and a proposed steakhouse restaurant. Colored renderings of the project are included with this letter to show the presentation of the hotel. Also included in the project is a parking structure that sits on the north parcel that will comprise two levels of parking. The two levels will be independent of one another to maximize the number of stalls that can be developed on each level. The entrance for the upper level will be from the loop road to the north and there will be a staircase to facilitate getting to the first level and eventually to the hotel or restaurant. The entrance for the lower level will be on the southeast corner of the parking structure and will connect to the loop road as it comes around to the front of the hotel. The project will be located on the northeast corner of Black Ridge Drive and 250 West in St. George. The project sits on two parcels that total approximately 3.7 acres of land. The property is currently undeveloped but has been previously disturbed as piles of rock have been stored here for future use. The Blackstone Hotel project will clean up the disturbed areas and will enhance it to be a preferred destination. The goal of the project is to preserve the health, safety, and general welfare of the public while providing an oasis in the desert for tourists and residents alike to enjoy.

The rock walls associated with the site have not been maintained and significant erosion and damage has occurred over time. Due to this concern and unpleasant look of the wall, they need to be reconstructed. As part of this project we are proposing replacing the rock walls with engineered walls. AGEC has prepared a detail showing the proposed construction of these rock walls. The detail is included in the plans and attached to this letter. The wall design includes extending Geosynthetic reinforcement behind the walls that will also assist in adding stability to the site. To control surface drainage, drainage pipes will also be incorporated into the site to collect any water and protect the walls from water damage.

The project sits on expansive clay soils and an ancient landslide which has been a concern for all parties. AGEC has monitored the slope with 6 deep slope inclinometers over the past 12 to 13 years. There has been no movement over this time period. The stability of the slope has been thoroughly analyzed and summarized in the geotechnical study provided in this submittal.

The concern for foundations on expansive soils can be addressed by deep foundations or over-excavation. Due to the extensive grading process for the walls and placement of geogrid, the alternative of over-excavation is planned to be used. We anticipate structures (hotel and parking garage) along with the pool will be over-excavated 15 to 18 feet below the pad grade. As a part of the earth moving plan, it is proposed to export the rock, the expansive clay soil and replace with imported or on site structural fill. As a part of

the wall structure and to increase the stability of the slope, it is proposed to construct a "secant" wall at the base of the slope. The secant wall will be designed by a "design build" specialty ground improvement contractor. Our experience has shown that the depth will extend below the determined ancient slide plane and will consist of reinforced concrete piers that are on the order of 4 to 8 feet in diameter. Additionally, there is a significant temporary cut slope along the north edge of the site. This area will likely be shored during construction. The backfilling at this location is being considered to consist of Geo Foam, a light weight material to assist in wall design reduction.

Due to the sensitivity of the landslide issues associated with this site, we have proposed all surface water be contained within the site and no water will be allowed to soak into the hillside. This will take careful planning and even more detailed observation during construction to make sure the strict plan is adhered to. We are proposing drains at each of the locations where water is introduced for landscaping and a membrane will be placed underneath each of these areas that will direct the water to the drains. The pool is of special concern due to the amount of water that can soak into the hillside. The pool design will incorporate a liner system with a subdrain that will assist in reducing concerns for water infiltration. We are going to design the pool such that it is bullet proof and anticipates any future problems. We are also proposing leak detection that will assist in long term monitoring of potential water into the subsurface.

A complete drainage study and plan has been prepared by Horrocks that includes underground detention below the parking lot adjacent to 250 West. Storing water on this site is not an ideal situation and we would like to discuss with the city the option of dumping the storm water directly into the storm drain system. We can improve off site facilities if needed in lieu of retention or to accommodate increased flows. This can be discussed further as we get into the details of the site.

A landscape plan has been prepared by Think Architecture and is included in the submittal. The plan focuses on xeriscape landscaping and drought tolerant plants. Again, controlling water will be of utmost importance and membranes will be placed under all landscaped areas to collect the water and deliver it to a drain that will ultimately dump into the storm drain system.

The schedule for this project is critical as time is of the essence for its completion. It is anticipated that we will finalize the development plans and obtain a grading permit in August. We hope to obtain all city approvals from each of the departments by December and start construction in January of 2020. Construction is anticipated to take approximately 18 months and so the project completion date would be June of 2021.

Respectfully,



Tyler Hoskins
Project Manager for Black Ridge Development

Exhibit B
PowerPoint Presentation

ST. GEORGE HOTEL COMMERCIAL PROJECT

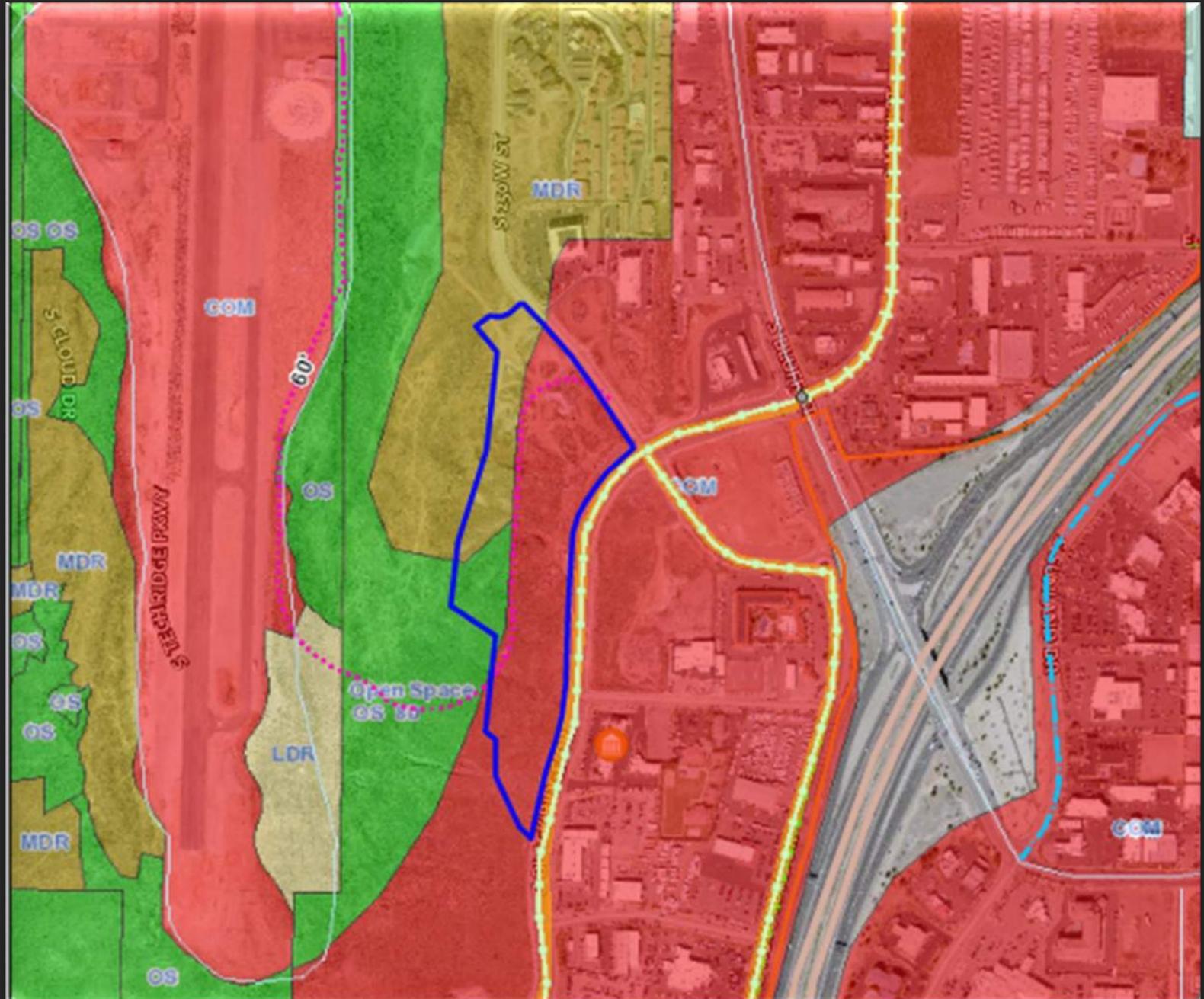
ZONE CHANGE AMENDMENT

2021-ZCA-078



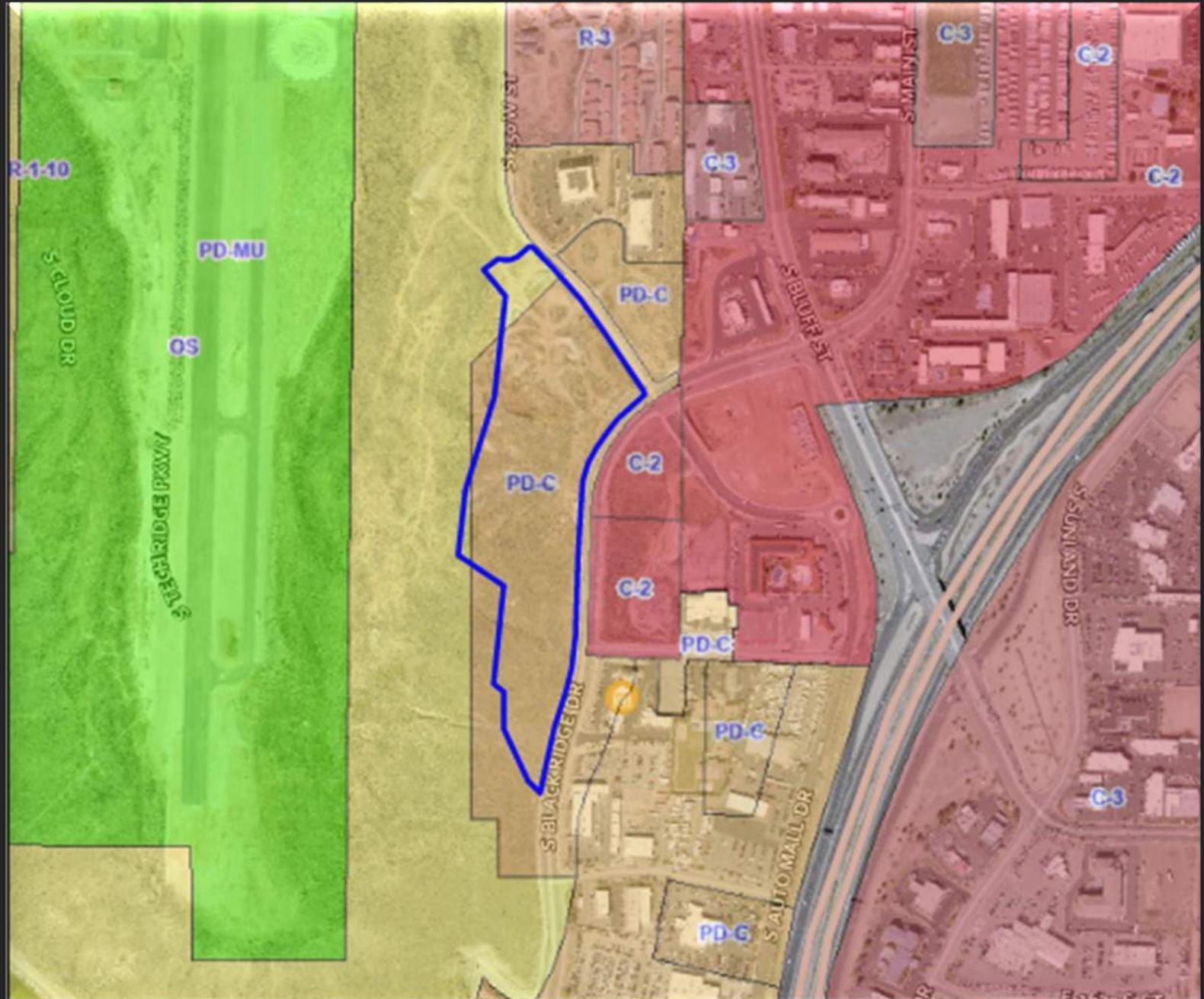
ST. GEORGE HOTEL COMMERCIAL PROJECT

ZONE CHANGE AMENDMENT
2021-ZCA-078



ST. GEORGE HOTEL COMMERCIAL PROJECT

ZONE CHANGE AMENDMENT
2021-ZCA-078

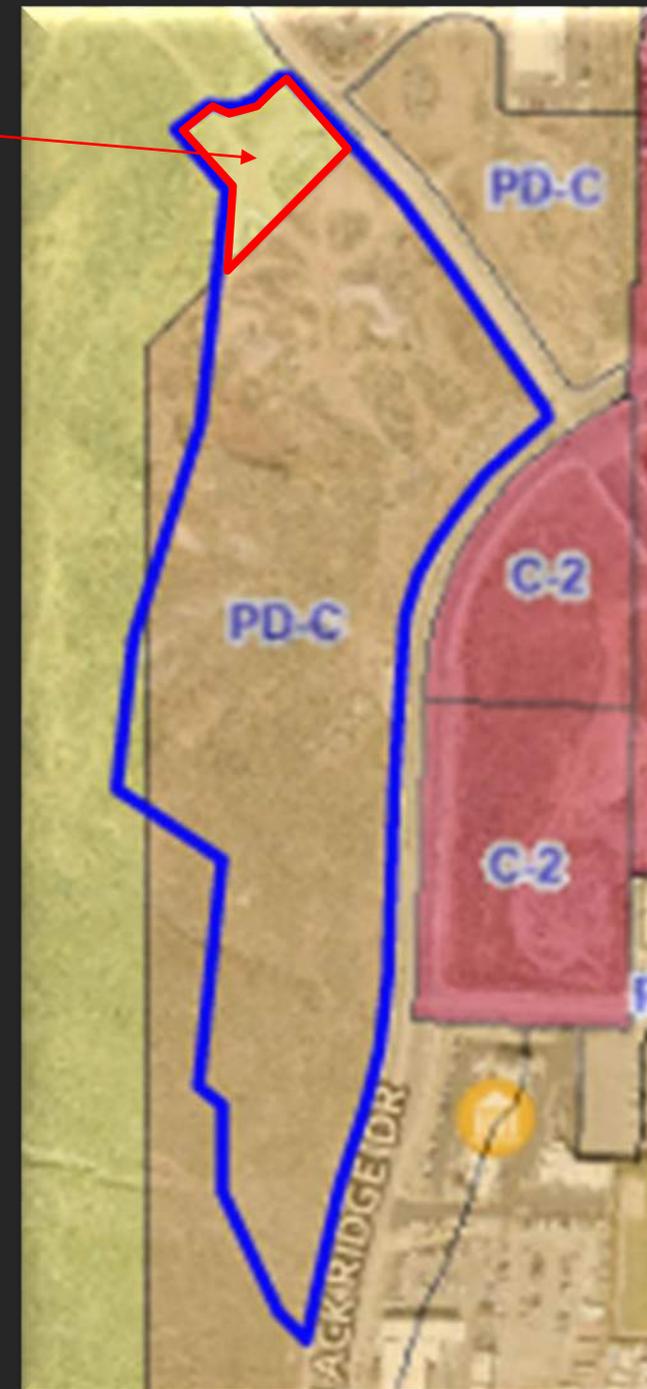


ST. GEORGE HOTEL COMMERCIAL PROJECT

ZONE CHANGE AMENDMENT

2021-ZCA-078

R-1-10

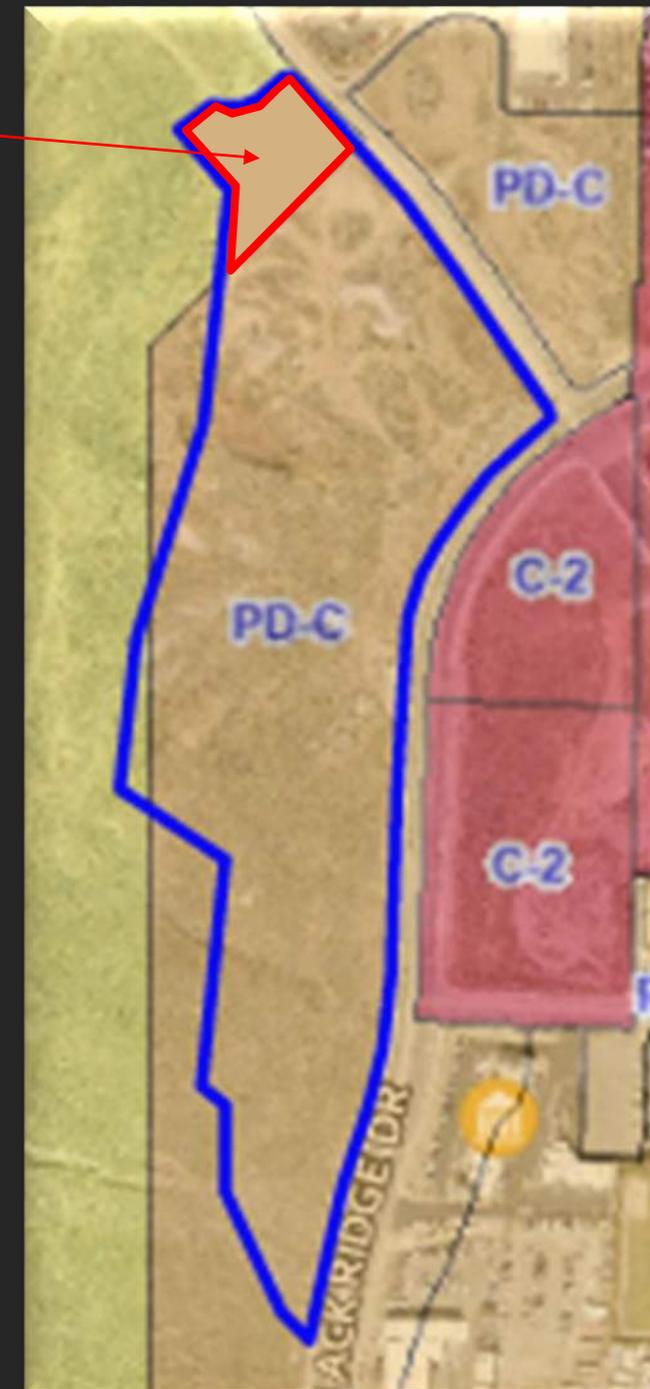


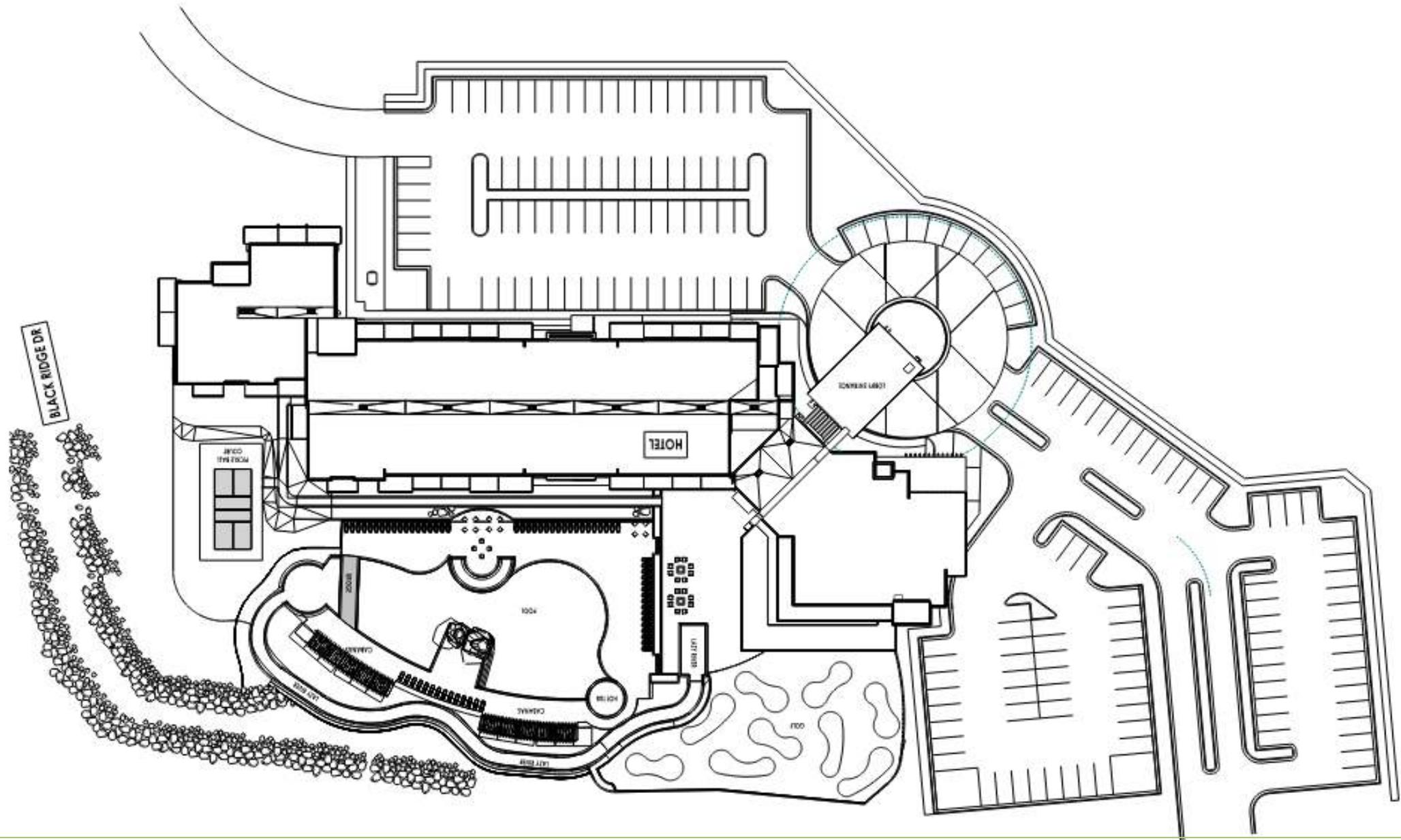
ST. GEORGE HOTEL COMMERCIAL PROJECT

ZONE CHANGE AMENDMENT

2021-ZCA-078

PD-C





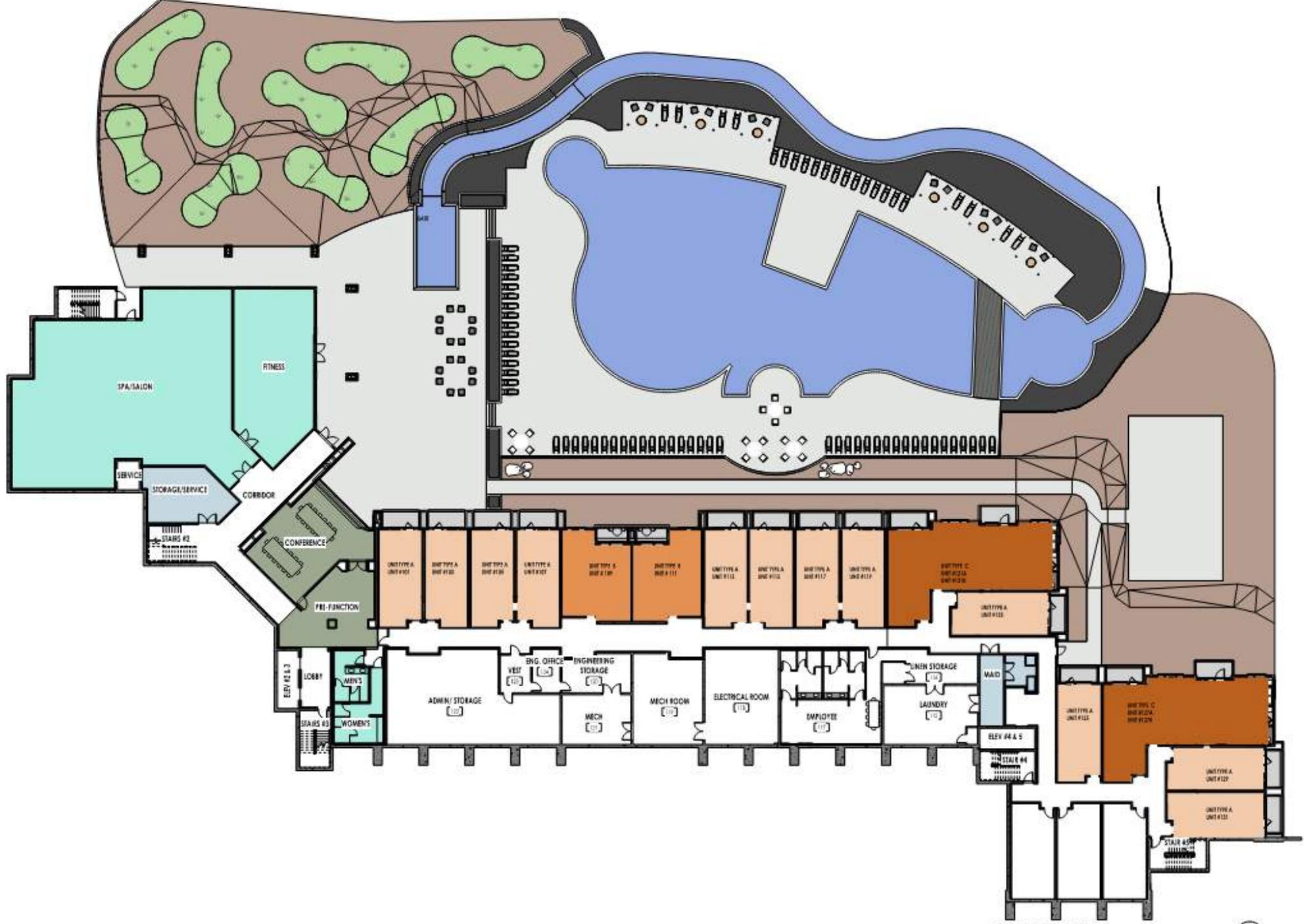
250 North

ST. GEORGE HOTEL COMMERCIAL PROJECT

ZONE CHANGE AMENDMENT

2021-ZCA-078





LEVEL 1, PRESENTATION

Number of stories = 5

Number of Rooms = 146

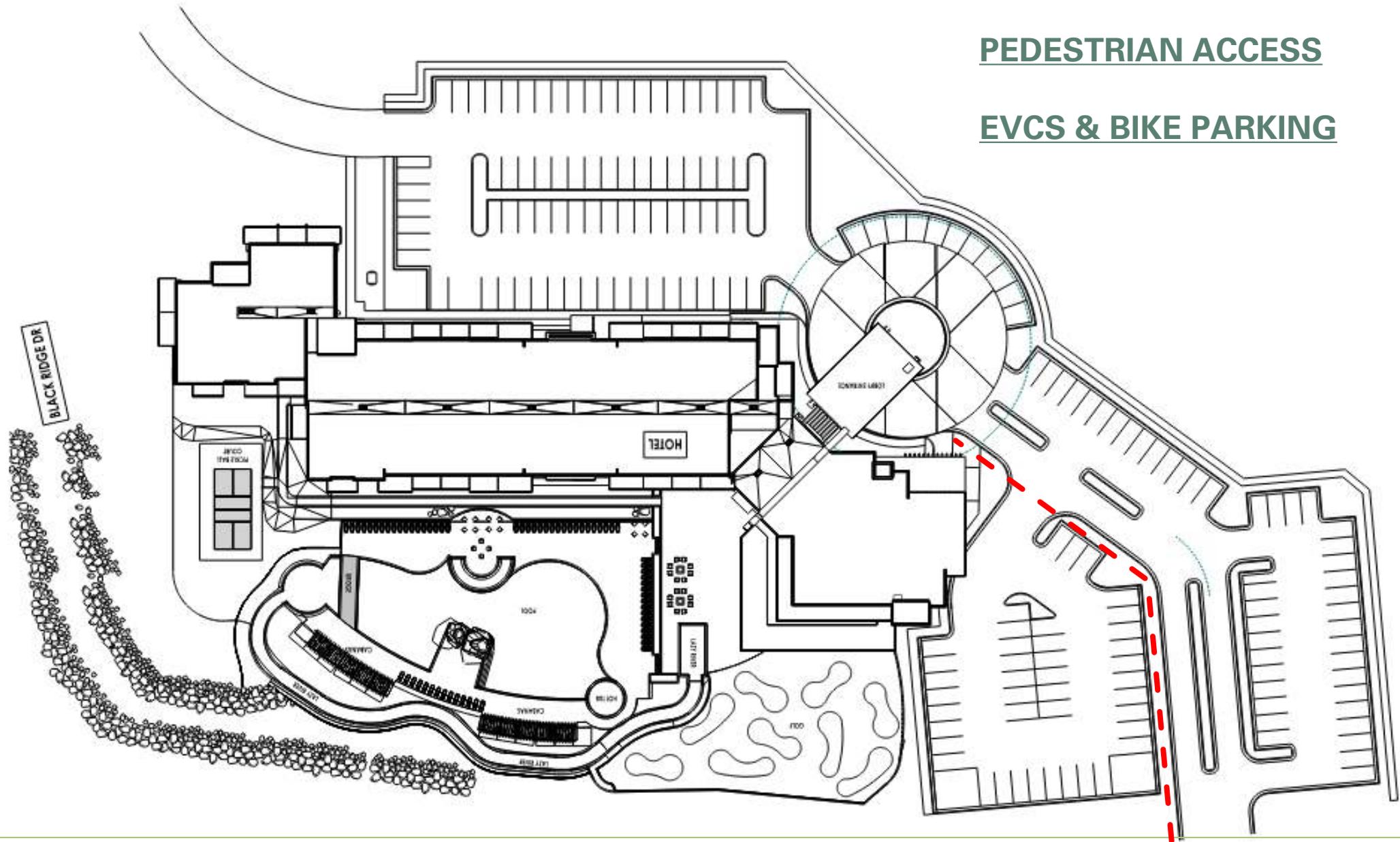
**Amenities = Pool, spa, fitness center,
pickleball court, miniature golf**



Future
Restaurant

PEDESTRIAN ACCESS

EVCS & BIKE PARKING



250 North



LANDSCAPE & BUFFER



NORTH PRESENTATION
1/16" = 1' 0"



Maximum Height = 63'



EAST PRESENTATION
1/16" = 1' 0"





SOUTH PRESENTATION
3/16 x 1/8"



WEST PRESENTATION
3/16 x 1/8"











RECOMMENDATION:

Staff recommends approval of this Zone Change Amendment with the following conditions:

1. The applicant meets all requirements found in Section 10-8D of the Zoning Regulations.
2. The future restaurant will be required to meet the parking regulations at one space per 100sq.ft. for the dining area and one space for 250sq.ft. for the kitchen space at the time of the certificate of occupancy for the restaurant.
3. A maximum height of no more than 63 ' will be allowed for all structures.
4. Approval of this zone change amendment is conditional upon approval of the hillside development permit.
5. The applicant will work with staff on the landscape plan.

BACKGROUND

This is a request to obtain a hillside permit for the property located on the northwest corner of 250 W. Street and Blackridge Drive. The applicants are proposing to build a hotel on this property. This hotel was originally approved in 2019 (2019-HS-005) to be built on the property located at 1150 South and 250 West (the northeast corner of 250 W St. and Blackridge Dr.). However, the applicants have decided to move locations, directly across the street.

This property is in the hillside overlay. Section 10-13A-7 of the Zoning Regulations requires that all major development (i.e., cut greater than 4’, etc.) on slopes above 20% requires a ‘hillside development permit’ granted by the City Council upon recommendation from the Hillside Review Board and the Planning Commission.

This location has previously been disturbed and already has retaining elements along the street right-of-ways. The applicant has provided a slope analysis table in relation to the slope analysis map.

SLOPES TABLE			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	1.00%	20.00%	
2	20.00%	30.00%	
3	30.00%	40.00%	
4	40.00%	100.00%	

In the Slope Analysis Breakdown, the percentage of slopes is shown in three different areas:

1. Total Phase Area

This area is outlined in blue.

2. Net Area

This is outlined with a black dotted line. Nothing outside this line will be disturbed.

3. Net Area Less Artificial Slope

Since much of this area has previously been disturbed. These calculations show the percentage of slope being disturbed that is not manmade.

SLOPE ANALYSIS BREAKDOWN:			
TOTAL PHASE 1 AREA:	285,557.61 SF		
AREA 20% OR LESS:	180,271.09 SF	TOTAL % OF SITE:	63.2%
AREA 20%-30%:	27,112.97 SF	TOTAL % OF SITE:	9.5%
AREA 30%-40%:	23,843.59 SF	TOTAL % OF SITE:	8.3%
AREA 40% OR MORE:	54,329.99 SF	TOTAL % OF SITE:	19.0%
NET AREA PHASE 1: LIMITS OF DISTURBANCE:	230,986.07 SF		
AREA 20% OR LESS:	152,463.07 SF	TOTAL % OF SITE:	66%
AREA 20%-30%:	25,040.45 SF	TOTAL % OF SITE:	10.8%
AREA 30%-40%:	20,878.54 SF	TOTAL % OF SITE:	9.1%
AREA 40% OR MORE:	32,604.01 SF	TOTAL % OF SITE:	14.11%
NET AREA LESS ARTIFICIAL SLOPE:	230,986.07 SF		
AREA 20% OR LESS:	188,346.20 SF	TOTAL % OF SITE:	82%
AREA 20%-30%:	18,372.10 SF	TOTAL % OF SITE:	8%
AREA 30%-40%:	13,190.83 SF	TOTAL % OF SITE:	6%
AREA 40% OR MORE:	11,076.94 SF	TOTAL % OF SITE:	4%

BASED ON THE NET AREA LESS ARTIFICIAL SLOPE CALCULATIONS, THE AREAS BEING DISTURBED AND DEVELOPED ARE UNDER THE PERCENTAGES IN THE CITY ORDINANCE.

APPLICABLE ORDINANCE(S) *(Selected portions)*

10-13A-1: Density and Disturbance Standards

A. The hillside development overlay zone (HDOZ) limits development densities and provides specific development incentives to transfer underlying zone densities from hillsides (sending areas), to less steep slopes or more safe development areas (receiving areas), within a development.

B. For those portions of a proposed development with natural slopes twenty percent (20%) or less, development density follows the density and development standards in the underlying zone.

C. For those portions of a proposed development with natural slopes from twenty-one percent (21%) to thirty percent (30%), development activity shall not disturb more than thirty percent (30%) of the parcel within this slope category.

D. For those portions of a proposed development with natural slopes from thirty-one percent (31%) to forty percent (40%), development activity shall not disturb more than five percent (5%) of the area within this slope category.

E. A proposed development may not disturb slopes in excess of forty percent (40%).

10-13A-2: Slope and Slope Areas Determined

A. Slope shall be determined for each significant portion of a development parcel.

B. *Procedure:* The applicant shall map the location of the natural slope by using the following procedure:

1. *Preparation of Contour Maps:* The applicant shall submit an accurate, current contour map, prepared and certified by a licensed professional engineer or surveyor, which shows all land contours at intervals no greater than five feet (5'), drawn at a one inch equals one hundred feet (1" = 100') scale maximum.

2. *Verification through Field Surveys:* The city engineer or designee may require the applicant to submit a field survey to verify the accuracy of the contour map.

C. *Determination of Slope Areas:* Using the contour map, natural slopes shall be calculated using points identified as natural slopes of twenty percent (20%), thirty percent (30%), and forty percent (40%), and shall be located on the contour map and connected by a continuous line. That area bounded by said lines and intersecting property lines shall be used for determining project density. Small washes or outcrops, which have slopes distinctly different from surrounding property, and are not part of the contiguous topography, may be excluded from the slope determination.

EXHIBITS PROVIDED

1. Exhibit A – Site Plan/ Grading and Drainage Plan

“Exhibit A” in the packet shows the overall site plan for the project as well as curb and gutter, utility connections, storm water connections, signage, cross sections of grading, and an expanded slope analysis

2. Exhibit B – Slope Analysis Map

“Exhibit B” in the packet shows the overall slope analysis for the area to be disturbed.

3. Exhibit C – Drainage Report

“Exhibit C” – This is the drainage report for this location.

4. Exhibit D – Geotechnical Report

“Exhibit D” is a report investigating the geological hazards, slope stability, subsurface, and groundwater at this location.

5. Exhibit E – Landscape Plan

“Exhibit E” is the landscape plan for the new hotel.

RECOMMENDATION

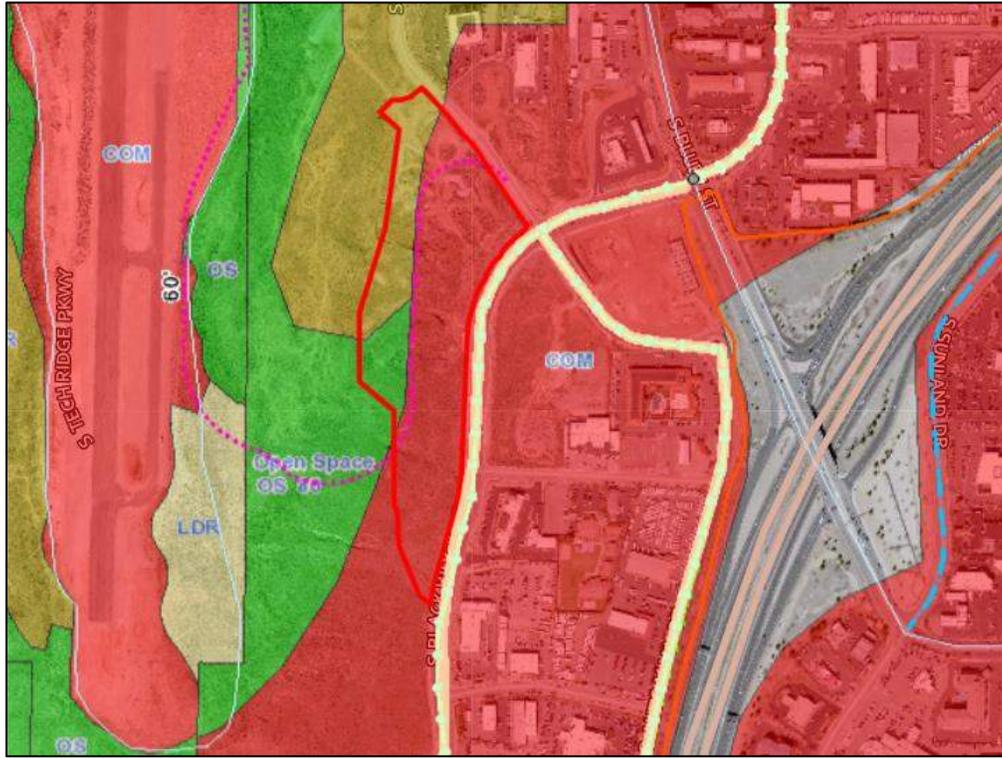
The Hillside Review Board recommended approval of the hillside permit for the Black Ridge Hotel development with the following conditions:

1. Through their design they can obtain and meet an acceptable factor of safety in terms of overall landslide and slope stability.
2. They comply with the requirements of moisture protection and drainage and that there be some type of compliance report or letter at the completion of construction to indicate that they met the drainage recommendations in design.
3. They look specifically at the front of the project, the existing slope on the southwest corner slope behind the building where they are creating a graded slope and that they try to hide and mitigate as much as possible the scar on the back of the slope and that they take to the Planning Commission a detail showing their mitigation plans in those areas.
4. Address landscape issues, especially the watering.

Area to be Disturbed



General Plan - COM



Zoning - R-2

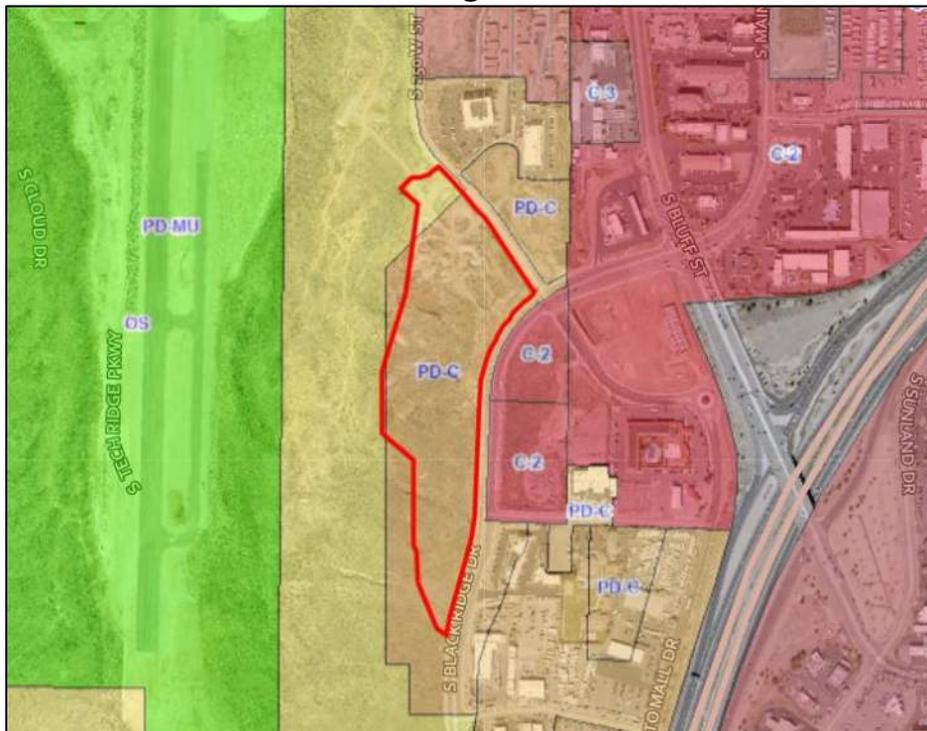


Exhibit A
SITE PLAN/GRADING & DRAINAGE PLAN



ST. GEORGE HOTEL

250 WEST, BLACK RIDGE DR.
ST. GEORGE, UTAH

INDEX OF DRAWINGS

C-001	GENERAL NOTES
C-200	SITE PLAN
C-300	GRADING AND DRAINAGE PLAN
C-500	DETAILS
C-CS	SITE CROSS SECTIONS
C-SA	SLOPE ANALYSIS PLAN

**FOR REVIEW
NOT FOR CONSTRUCTION**

DATE PRINTED
07/28/2021



CEDAR CITY
88 E. Fiddlers Canyon Road
Suite 210
Cedar City, UT. 84720
Phone: 435.865.1453

SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

LAYTON
Phone: 801.547.1100

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049

CONTACT:
OSCAR@LOGGINGANDHOSPITALITY.COM
PHONE: 801-628-0234

ST. GEORGE HOTEL
PHASE I
ST. GEORGE
ST. GEORGE, UTAH

NOTICE TO CONTRACTOR

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF UTAH DEPARTMENT OF INDUSTRIAL RELATIONS CONSTRUCTION SAFETY ORDERS. THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES TO 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 OWNER AND THE CIVIL 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 ENGINEER.

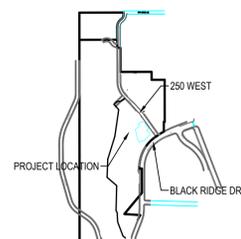
NOTICE TO DEVELOPER/CONTRACTOR

UNAPPROVED DRAWINGS REPRESENT WORK IN PROGRESS, ARE SUBJECT TO CHANGE, AND DO NOT CONSTITUTE A FINISHED ENGINEERING PRODUCT. ANY WORK UNDERTAKEN BY DEVELOPER OR CONTRACTOR BEFORE PLANS ARE APPROVED IS UNDERTAKEN AT THE SOLE RISK OF THE DEVELOPER, INCLUDING BUT NOT LIMITED TO BIDS, ESTIMATION, FINANCING, BONDING, SITE CLEARING, GRADING, INFRASTRUCTURE CONSTRUCTION, ETC.

UTILITY DISCLAIMER

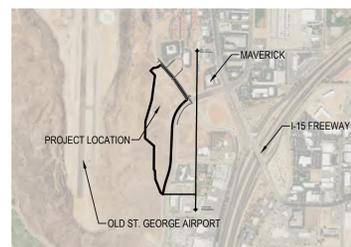
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

KEY MAP



NO SCALE

VICINITY MAP



NO SCALE

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO ST. GEORGE CITY STANDARDS & SPECIFICATIONS.
2. CALL BLUE STAKES AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
3. BENCHMARK ELEVATION = NORTH QUARTER CORNER SECTION 25, T3N, R11W SALT LAKE BASE & MERIDIAN ELEV. = 42XX.XX.

PROJECT NUMBER: 10928 PRINT DATE: 7/28/21

DRAWN BY: CHECKED BY:

PROJECT MANAGER

GENERAL NOTES

- ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE DESIGN ENGINEER, LOCAL AGENCY JURISDICTION, APWA (CURRENT EDITION), AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. THE LATEST EDITION OF ALL STANDARDS AND SPECIFICATIONS MUST BE ADHERED TO. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
- CONTRACTOR TO STRICTLY FOLLOW THE MOST CURRENT COPY OF THE SOILS REPORT FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH SOILS REPORT.
- CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING, AND BRING UP ANY QUESTIONS BEFORE SUBMITTING BID.
- CONTRACTOR SHALL PROVIDE A CONSTRUCTION SCHEDULE IN ACCORDANCE WITH THE CITY, STATE, OR COUNTY REGULATIONS FOR WORKING IN THE PUBLIC WAY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ACCORDING TO GOVERNING AGENCY STANDARDS. WET DOWN DRY MATERIALS AND RUBBISH TO PREVENT BLOWING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT SURFACE IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING UTILITIES.
- THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL MATERIALS TO COMPLETE THE PROJECT.
- ALL EXPOSED SURFACES WILL HAVE A TEXTURED FINISH, RUBBED, OR BROOMED. ANY "PLASTERING" OF NEW CONCRETE WILL BE DONE WHILE IT IS STILL "GREEN".
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS AND LOCAL UTILITY COMPANY RECORDS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
- ALL DIMENSIONS, GRADES, AND UTILITY DESIGN SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST. PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO THE DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS, IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- NO CHANGE IN DESIGN LOCATION OR GRADE WILL BE MADE BY THE CONTRACTOR WITHOUT THE WRITTEN APPROVAL OF THE PROJECT ENGINEER.
- NATURAL VEGETATION AND SOIL COVER SHALL NOT BE DISTURBED PRIOR TO ACTUAL CONSTRUCTION OF A REQUIRED FACILITY OR IMPROVEMENT. MASS CLEARINGS OF THE SITE IN ANTICIPATION OF CONSTRUCTION SHALL BE AVOIDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING, OR RESTORING ALL MONUMENTS AND MONUMENT REFERENCE MARKS WITHIN THE PROJECT SITE. CONTACT THE CITY OR COUNTY SURVEYOR FOR MONUMENT LOCATIONS AND CONSTRUCTION DETAILS.
- EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND/OR UTILITY MAPPING PROVIDED TO THE ENGINEER, AND THEREFORE UTILITIES MAY NOT BE LOCATED CORRECTLY, EITHER HORIZONTALLY OR VERTICALLY, AND MAY NOT BE ALL INCLUSIVE. CONTRACTOR IS REQUIRED TO FOLLOW THE PROCEDURE OUTLINED BELOW.
 - CONTRACTOR IS REQUIRED TO LOCATE AND POTHOLE ALL EXISTING UTILITY LINES (BOTH HORIZONTALLY AND VERTICALLY) THAT AFFECT THE PROJECT CONSTRUCTION, EITHER ON-SITE OR OFF-SITE, AND DETERMINE IF THERE ARE ANY CONFLICTS WITH THE DESIGN OF THE SITE AS SHOWN ON THE APPROVED PLANS PRIOR TO ANY CONSTRUCTION. IF IT IS DETERMINED THAT CONFLICTS EXIST BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO CORRECT THE CONFLICTS BEFORE ANY WORK CAN BEGIN. IF THE CONTRACTOR FAILS TO FOLLOW THIS ABSOLUTE REQUIREMENT AND CONFLICTS ARISE DURING CONSTRUCTION THE CONTRACTOR WILL BEAR THE SOLE RESPONSIBILITY TO FIX THE CONFLICTS.
 - CONTRACTOR IS REQUIRED TO VERIFY THAT PROPER COVER AND PROTECTION OF EXISTING UTILITY LINES IS MAINTAINED OR ATTAINED WITHIN THE DESIGN ONCE VERIFICATION OF THE EXISTING UTILITIES IS COMPLETED AS OUTLINED IN 16.1 ABOVE.
 - IN ADDITION TO 16.1 AND 16.2 ABOVE THE CONTRACTOR WILL VERIFY DEPTHS OF UTILITIES IN THE FIELD BY "POTHOLING" A MINIMUM OF 300 FEET AHEAD OF PROPOSED PIPELINE CONSTRUCTION TO AVOID POTENTIAL CONFLICTS WITH DESIGNED PIPELINE ALIGNMENT AND GRADE AND EXISTING UTILITIES.
 - IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) AS DETERMINED UNDER 16.1, 16.2 OR 16.3 THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.
 - IF A CONFLICT ARISES BETWEEN EXISTING UTILITIES AND DESIGN UTILITIES (OR ANOTHER ASPECT OF PROPOSED CONSTRUCTION) RESULTING FROM THE CONTRACTOR'S NEGLIGENCE TO IDENTIFY AND/OR "POTHOLE" EXISTING UTILITIES AS REQUIRED IN 16.1, 16.2 AND 16.3 ABOVE, THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER OR ENGINEER.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
- CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
- AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
- CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT REQUIRED BY THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
- 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 RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
- 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.
- 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.
- CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. 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 RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE 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.
- 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.
- ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.
- ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL TREES FROM DAMAGE.
- ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE GOVERNING AGENCY PRIOR TO THE PLACEMENT.
- CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.
- A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR MORE AS WELL AS A STORM WATER POLLUTION PREVENTION PLAN.

UTILITY NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS, CITY AND STATE REQUIREMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE & INTERNET SERVICE, GAS SERVICE, CABLE, AND POWER.
- EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS BASED ON ON-SITE SURVEY. 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 AT 1-800-662-4111 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.
- 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 CONTRACTOR'S EXPENSE.
- TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS (CURRENT EDITION), SECTION 0230 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE GEOTECHNICAL REPORT IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED IN THE PIPE ZONE. THE MAXIMUM LIFT FOR BACKFILLING EXCAVATIONS IS DETERMINED BY THE GEOTECHNICAL RECOMMENDATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
- THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES, BUT IS NOT LIMITED TO VEHICLE AND EQUIPMENT STAGING, MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE PROJECT LIMITS.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OR SAID FACILITIES.
- ALL WATER LINE AND SEWER LINE INSTALLATION AND TESTING TO BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
- ALL MANHOLES, HYDRANTS, VALVES, CLEANOUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER APWA (CURRENT EDITION) STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS, AND VALVES PER APWA STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED.
- CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING CONSTRUCTION.
- SILT AND DEBRIS ARE 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.
- CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
- 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 DEWATERED CONDITIONS.
- 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.
- ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, EDGE TO EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, CONSTRUCT PER GOVERNING AGENCY'S MINIMUM SEPARATION STANDARDS.
- CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
- ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
- CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

TRAFFIC CONTROL AND SAFETY NOTES

- TRAFFIC CONTROL AND STRIPING TO CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- BARRICADING AND DETOURING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE CURRENT M.U.T.C.D.
- NO STREET SHALL BE CLOSED TO TRAFFIC WITHOUT WRITTEN PERMISSION FROM THE APPROPRIATE AGENCY, EXCEPT WHEN DIRECTED BY LAW ENFORCEMENT OR FIRE OFFICIALS.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROVIDE FOR SMOOTH TRAFFIC FLOW AND SAFETY. ACCESS SHALL BE MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.
- DETOURING OPERATIONS FOR A PERIOD OF SIX CONSECUTIVE CALENDAR DAYS, OR MORE, REQUIRE THE INSTALLATION OF TEMPORARY STREET STRIPING AND REMOVAL OF INTERFERING STRIPING BY SANDBLASTING. THE DETOURING STRIPING PLAN OR CONSTRUCTION TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE GOVERNING AGENCY FOR REVIEW AND APPROVAL.
- ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE WORK TO THE SATISFACTION OF THE GOVERNING AGENCY.
- TRAFFIC CONTROL DEVICES (TCDs) SHALL REMAIN VISIBLE AND OPERATIONAL AT ALL TIMES.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTAH TRANSIT AUTHORITY (UTA) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.

DEMOLITION NOTES

- EXISTING UTILITY INFORMATION SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. IT IS DERIVED FROM ON-SITE SURVEY AND MAY NOT BE LOCATED CORRECTLY AND IS NOT ALL INCLUSIVE. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES WITHIN THE PROJECT LIMITS BEFORE BEGINNING DEMOLITION/CONSTRUCTION.
- THERE MAY BE BURIED UTILITIES WITHIN THE LIMITS OF DISTURBANCE THAT ARE NOT SHOWN ON THE PLANS DUE TO LACK OF MAPPING OR RECORD INFORMATION. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN UNEXPECTED UTILITIES ARE DISCOVERED.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LOCATING AND PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND IMPROVEMENTS WHETHER OR NOT SHOWN ON THESE PLANS. THE FACILITIES AND IMPROVEMENTS ARE BELIEVED TO BE CORRECTLY SHOWN BUT THE CONTRACTOR IS REQUIRED TO SATISFY HIMSELF AS TO THE COMPLETENESS AND ACCURACY OF THE LOCATIONS. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY, OR INDIRECTLY, FROM HIS OPERATIONS, WHETHER OR NOT SAID FACILITIES ARE SHOWN ON THESE PLANS.

GRADING AND DRAINAGE NOTES

- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL RELATED ADDENDUMS.
- THE CONTRACTOR SHALL STRIP AND CLEAR THE TOPSOIL, MAJOR ROOTS AND ORGANIC MATERIAL FROM ALL PROPOSED BUILDING AND PAVEMENT AREAS PRIOR TO SITE GRADING. (THE TOPSOIL MAY BE STOCKPILED FOR LATER USE IN LANDSCAPED AREAS.)
- THE CONTRACTOR SHALL REMOVE ALL ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS PRIOR TO PLACING GRADING FILL OR BASE COURSE. THE AREA SHOULD BE PROOF-ROLLED TO IDENTIFY ANY SOFT AREAS. WHERE SOFT AREAS ARE ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE SOIL AND REPLACE WITH COMPACTED FILL.
- ALL DEBRIS PILES AND BERMS SHOULD BE REMOVED AND HAULED AWAY FROM SITE OR USED AS GENERAL FILL IN LANDSCAPED AREAS.
- THE CONTRACTOR SHALL CONSTRUCT THE BUILDING PAD TO THESE DESIGN PLANS AS PART OF THE SITE GRADING CONTRACT, AND STRICTLY ADHERE TO THE SITE PREPARATION AND GRADING REQUIREMENTS OUTLINED IN THE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL GRADE THE PROJECT SITE TO PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING ASPHALT, CURB AND GUTTER, AND ADJOINING SITE IMPROVEMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE AND DEBRIS ON ADJACENT STREETS WHEN EQUIPMENT IS TRAVELING THOSE STREETS.
- THE CONTRACTOR SHALL BE FAMILIAR WITH ALL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT AND TAKE ALL NECESSARY PRECAUTIONS AND RECOMMENDED PROCEDURES TO ASSURE SOUND GRADING PRACTICES.
- THE CONTRACTOR SHALL TAKE APPROPRIATE GRADING MEASURES TO DIRECT STORM SURFACE RUNOFF TOWARDS CATCH BASINS.
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON ON-SITE SURVEY. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES, AND SLOPES SHOWN.
- THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT. ALL CONTRACTOR ACTIVITIES 1 ACRE OR MORE IN SIZE ARE REQUIRED TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER FROM GOVERNING AGENCY.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS, AND ALL OTHER PUBLIC RIGHT-OF-WAYS IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY-OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC, SHALL BE MAINTAINED IN A CLEAN, SAFE, AND USABLE CONDITION.

ABBREVIATIONS

APWA	AMERICAN PUBLIC WORKS ASSOCIATION
AR	ACCESSIBLE ROUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AHWA	AMERICAN WATER WORKS ASSOCIATION
BOS	BOTTOM OF STEP
BVC	BEGIN VERTICAL CURVE
C	CURVE
CB	CATCH BASIN
CF	CURB FACE OR CUBIC FEET
CL	CENTER LINE
CO	CLEAN OUT
COMM	COMMUNICATION
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
ELEV	ELEVATION
EDA	EDGE OF ASPHALT
EVC	END OF VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE OR FLANGE
GB	GRADE BREAK
GF	GARAGE FLOOR
GV	GATE VALVE
HC	HANDICAP
HP	HIGH POINT
IRR	IRRIGATION
K	RATE OF VERTICAL CURVATURE
LD	LAND DRAIN
LF	LINEAR FEET
LP	LOW POINT
MEX	MATCH EXISTING
MH	MANHOLE
MJ	MECHANICAL JOINT
NG	NATURAL GROUND
NC	NOT IN CONTRACT
NO	NUMBER
OC	ON CENTER
OCEW	ON CENTER EACH WAY
OHP	OVERHEAD POWER
PC	POINT OF CURVATURE OR PRESSURE CLASS
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PV	POST INDICATOR VALVE
PL	PROPERTY LINE
PRO	POINT OF REVERSE CURVATURE
PRO	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RD	ROOF DRAIN
ROW	RIGHT OF WAY
S	SLOPE
SAN SWR	SANITARY SEWER
SD	STORM DRAIN
SEC	SECONDARY
SS	SANITARY SEWER
STA	STATION
SW	SECONDARY WATER LINE
TBC	TOP BACK OF CURB
TOG	TOP OF GRATE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOUNDATION
TOW	TOP OF WALL
TOS	TOP OF STEP
TYP	TYPICAL
VC	VERTICAL CURVE
WIV	WALL INDICATOR VALVE
W	WATER LINE

NOTE: MAY CONTAIN ABBREVIATIONS THAT ARE NOT USED IN THIS PLAN SET.

LEGEND

	SECTION CORNER		EXISTING EDGE OF ASPHALT
	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
	PROPOSED MONUMENT		EXISTING STRIPING
	EXISTING REBAR AND CAP		PROPOSED STRIPING
	EXISTING WATER METER		EXISTING FENCE
	PROPOSED WATER METER		PROPOSED FENCE
	EXISTING WATER MANHOLE		EXISTING FLOW LINE
	PROPOSED WATER MANHOLE		PROPOSED FLOW LINE
	EXISTING WATER BOX		GRADE BREAK
	EXISTING WATER VALVE		EXISTING STORM DRAIN LINE
	PROPOSED WATER VALVE		PROPOSED STORM DRAIN LINE
	EXISTING FIRE HYDRANT		ROOF DRAIN LINE
	PROPOSED FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE DEPARTMENT CONNECTION		HIGHWATER LINE
	EXISTING SECONDARY WATER VALVE		EXISTING SANITARY SEWER
	PROPOSED SECONDARY WATER VALVE		PROPOSED SANITARY SEWER LINE
	EXISTING IRRIGATION BOX		PROPOSED SAN. SWR. SERVICE LINE
	EXISTING IRRIGATION VALVE		EXISTING LAND DRAIN LINE
	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN LINE
	EXISTING SANITARY SEWER MANHOLE		PROPOSED LAND DRAIN SERVICE LINE
	PROPOSED SANITARY SEWER MANHOLE		EXISTING CULINARY WATER LINE
	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER LINE
	EXISTING STORM DRAIN CLEAN OUT BOX		PROPOSED CULINARY WATER SERVICE LINE
	PROPOSED STORM DRAIN CLEAN OUT BOX		EXISTING SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX		PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN CATCH BASIN		PROPOSED SEC. WATER SERVICE LINE
	PROPOSED STORM DRAIN CATCH BASIN		EXISTING IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX		PROPOSED IRRIGATION LINE
	PROPOSED STORM DRAIN COMBO BOX		EXISTING OVERHEAD POWER LINE
	EXISTING STORM DRAIN CLEAN OUT		EXISTING ELECTRICAL LINE
	EXISTING STORM DRAIN CULVERT		EXISTING GAS LINE
	PROPOSED STORM DRAIN CULVERT		EXISTING TELEPHONE LINE
	TEMPORARY SAG INLET PROTECTION		ACCESSIBLE ROUTE
	TEMPORARY IN-LINE INLET PROTECTION		TEMPORARY SAW CUT LINE
	ROOF DRAIN		STRAW WATTLE
	EXISTING ELECTRICAL MANHOLE		TEMPORARY BERM
	EXISTING ELECTRICAL BOX		TEMPORARY SILT FENCE
	EXISTING TRANSFORMER		LIMITS OF DISTURBANCE
	EXISTING UTILITY POLE		EXISTING WALL
	EXISTING LIGHT		PROPOSED WALL
	EXISTING GAS METER		EXISTING CONTOURS
	EXISTING GAS MANHOLE		PROPOSED CONTOURS
	EXISTING GAS VALVE		BUILDABLE AREA WITHIN SETBACKS
	EXISTING TELEPHONE MANHOLE		PUBLIC DRAINAGE EASEMENT
	EXISTING TELEPHONE BOX		EXISTING ASPHALT TO BE REMOVED
	EXISTING TRAFFIC SIGNAL BOX		PROPOSED ASPHALT
	EXISTING CABLE BOX		EXISTING CURB AND GUTTER
	EXISTING BOLLARD		PROPOSED CURB AND GUTTER
	PROPOSED BOLLARD		PROPOSED REVERSE PAN CURB AND GUTTER
	EXISTING SIGN		TRANSITION TO REVERSE PAN CURB
	PROPOSED SIGN		CONCRETE TO BE REMOVED
	EXISTING SPOT ELEVATION		EXISTING CONCRETE
	PROPOSED SPOT ELEVATION		PROPOSED CONCRETE
	EXISTING FLOW DIRECTION		BUILDING TO BE REMOVED
	EXISTING TREE		EXISTING BUILDING
	DENSE VEGETATION		PROPOSED BUILDING

NOTE: MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PLAN SET.



CEDAR CITY
88 E. Fiddlers Canyon Road
Suite 210
Cedar City, UT, 84720
Phone: 435.865.1453

SALT LAKE CITY
Phone: 801.255.0529

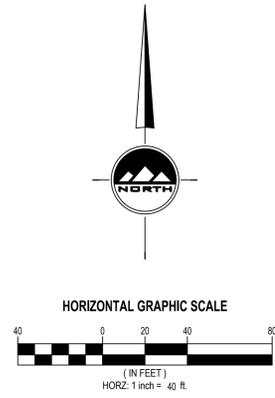
TOOELE
Phone: 435.843.3590

LAYTON
Phone: 801.547.1100

RICHFIELD
Phone: 435.896.2983

WWW.ENSGNENG.COM

FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049
CONTACT:
OSCAR@LOGGINGANDHOSPITAL



GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. SEE LANDSCAPE/ARCHITECTURAL PLANS FOR CONCRETE MATERIAL, COLOR, FINISH, AND SCORE PATTERNS THROUGHOUT SITE.
4. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE M.U.T.C.D. (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES).
5. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES AND DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
6. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE OR ASPHALT.
7. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

SCOPE OF WORK:

- PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:
- 1 ASPHALT PAVEMENT PER GEOTECHNICAL REPORT AND DETAIL 1/C-500.
 - 2 4' WIDE CONCRETE SIDEWALK PER ST. GEORGE STANDARDS PER DRAWING 120. SEE SHEET C-500.
 - 3 5' WIDE CONCRETE SIDEWALK PER ST. GEORGE STANDARDS PER DRAWING 120. SEE SHEET C-500.
 - 4 24" CURB AND GUTTER PER APWA STANDARD DRAWING 205.2. SEE SHEET C-500.
 - 5 24" REVERSE PAN CURB AND GUTTER PER STANDARD 7. SEE SHEET C-500.
 - 6 ADA ACCESSIBLE RAMP PER ST. GEORGE STANDARDS DRAWING 121. SEE SHEET C-500.
 - 7 INSTALL 6" CROSS GUTTER PER ST. GEORGE STANDARD DRAWING 151. SEE SHEET C-500.
 - 8 STREET SIGNS TO BE INSTALLED PER ST. GEORGE STANDARD DRAWINGS 400 AND 410. SEE SHEET C-506.
 - 9 ROAD TO BE CONSTRUCTED PER 45' TYPICAL ROAD CROSS SECTION PER ST. GEORGE STANDARDS. SEE SHEET C-504 ST. GEORGE DETAIL R4 AND SHEET C-504 DETAIL 1.
 - 10 TYPICAL KNUCKLE FOR 45' STREET PER ST. GEORGE STANDARDS. SEE SHEET C-504 ST. GEORGE DETAIL R7.
 - 11 STREET LIGHT TO BE INSTALLED PER ST. GEORGE STANDARD. SEE SHEET C-505 ST. GEORGE DETAIL R14.
 - 12 STOP SIGNS TO BE INSTALLED SIGN PER ST. GEORGE STANDARD DRAWING R10. SEE SHEET C-505.
 - 13 STOP BAR MARKING PER M.U.T.C.D. STANDARD PLANS.
 - 14 INSTALL 4" CROSS GUTTER PER ST. GEORGE STANDARD DRAWING 150. SEE SHEET C-500.
 - 15 INSTALL DRIVEWAY PER ST. GEORGE STANDARDS DRAWING 111. SEE SHEET C-507.



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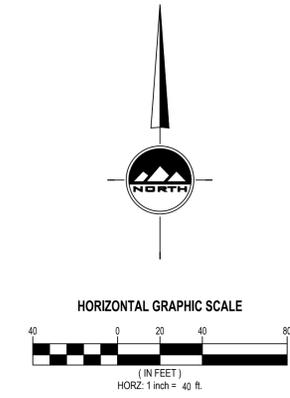
FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049
CONTACT:
OSCAR@LODGINGANDHOSPITALITY.COM
PHONE: 801-628-0234

**ST. GEORGE HOTEL
PHASE I
ST GEORGE
ST. GEORGE, UTAH**

SITE PLAN

PROJECT NUMBER 10928 PRINT DATE 7/28/21
DRAWN BY CHECKED BY
PROJECT MANAGER

C-200



CONSTRUCTION NOTE:

1. ALL EXCAVATIONS AND FILLS CONFORM TO APPENDIX "K" OF THE UTAH UNIFORM BUILDING STANDARDS ACT RULES AND THE CURRENT ADAPTED EDITION OF INTERNATIONAL BUILDING CODE.
2. SEE SHEET C-C51 FOR CROSS SECTIONS.

GENERAL NOTES

1. ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
2. ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
3. ALL WORK SHALL COMPLY WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER POSSIBLY INCLUDING, BUT NOT LIMITED TO, REMOVAL OF UNCONSOLIDATED FILL, ORGANICS, AND DEBRIS, PLACEMENT OF SUBSURFACE DRAIN LINES AND GEOTEXTILE, AND OVEREXCAVATION OF UNSUITABLE BEARING MATERIALS AND PLACEMENT OF ACCEPTABLE FILL MATERIAL.
4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
5. ELEVATIONS HAVE BEEN TRUNCATED FOR CLARITY. XX.XX REPRESENTS AN ELEVATION OF 48XX.XX ON THESE PLANS.
6. LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
7. SLOPE ALL LANDSCAPED AREAS AWAY FROM BUILDING FOUNDATIONS TOWARD CURB AND GUTTER OR STORM DRAIN INLETS.
8. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATIONS OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT. THE CONTRACTOR IS TO VERIFY ALL CONNECTION POINTS WITH THE EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN. IF CONFLICTS WITH EXISTING UTILITIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
9. ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
10. ENSURE MINIMUM COVER OVER ALL STORM DRAIN PIPES PER MANUFACTURER'S RECOMMENDATIONS. NOTIFY ENGINEER IF MINIMUM COVER CANNOT BE ATTAINED.
11. ALL FACILITIES WITH DOWNSPOUTS/ROOF DRAINS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM. SEE PLUMBING PLANS FOR DOWNSPOUT/ROOF DRAIN LOCATIONS AND SIZES. ALL ROOF DRAINS TO HAVE MINIMUM 1% SLOPE.
12. THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
13. NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
14. THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.



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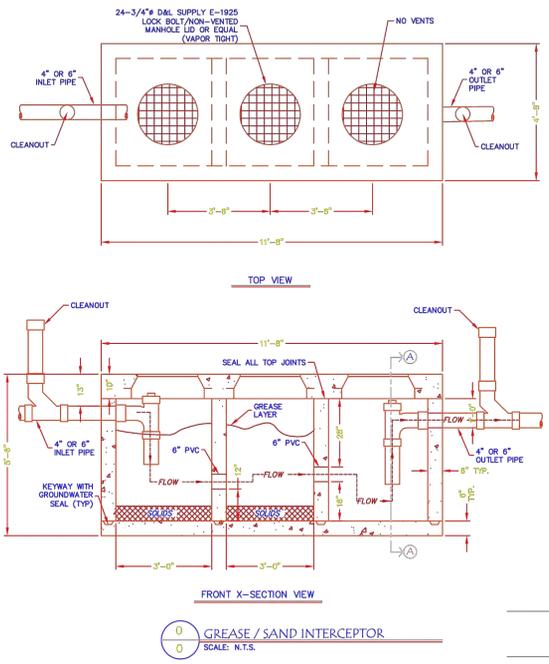
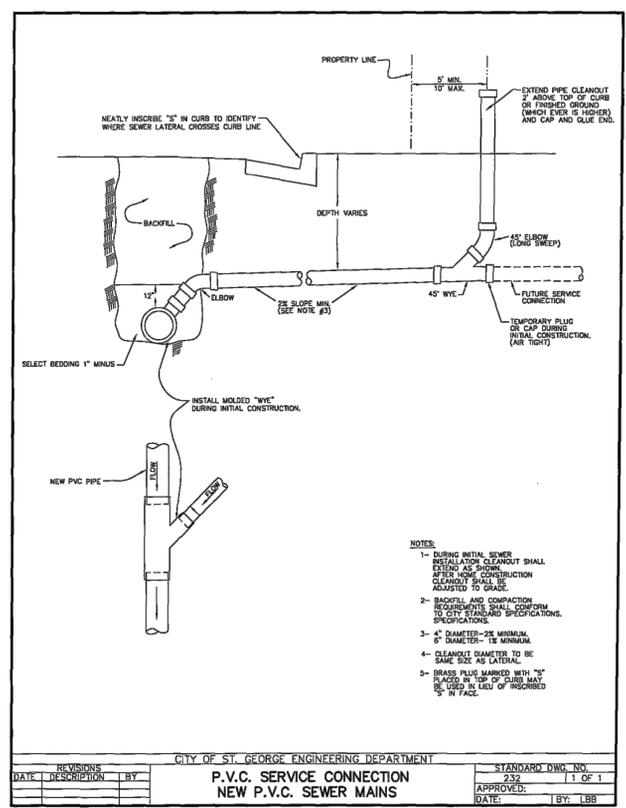
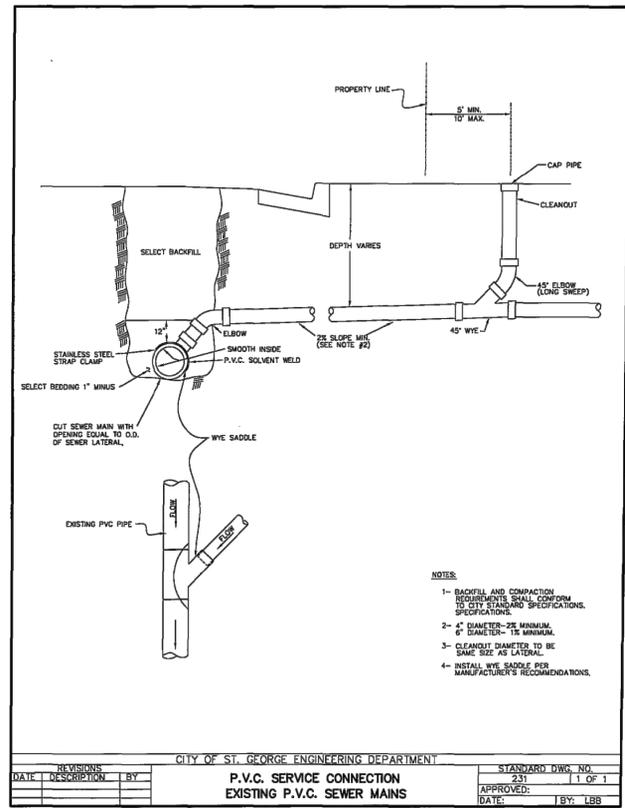
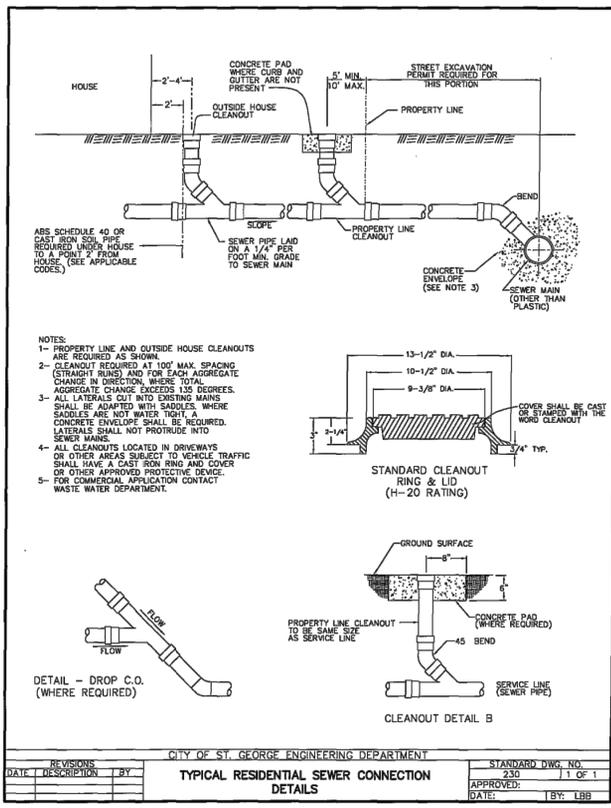
FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049
CONTACT:
OSCAR@LOGGINGANDHOSPITALITY.COM
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**ST. GEORGE HOTEL
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SITE PLAN

PROJECT NUMBER 10928 PRINT DATE 7/28/21
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C-300

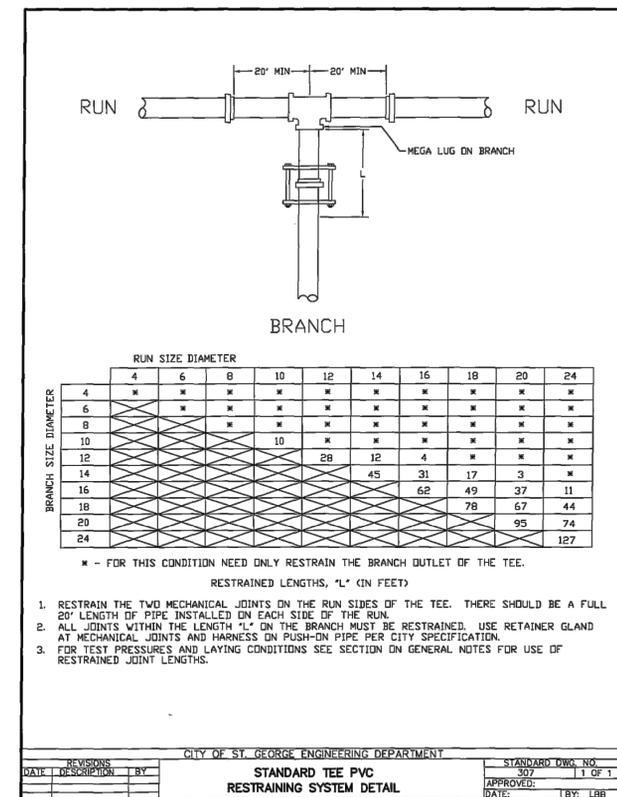
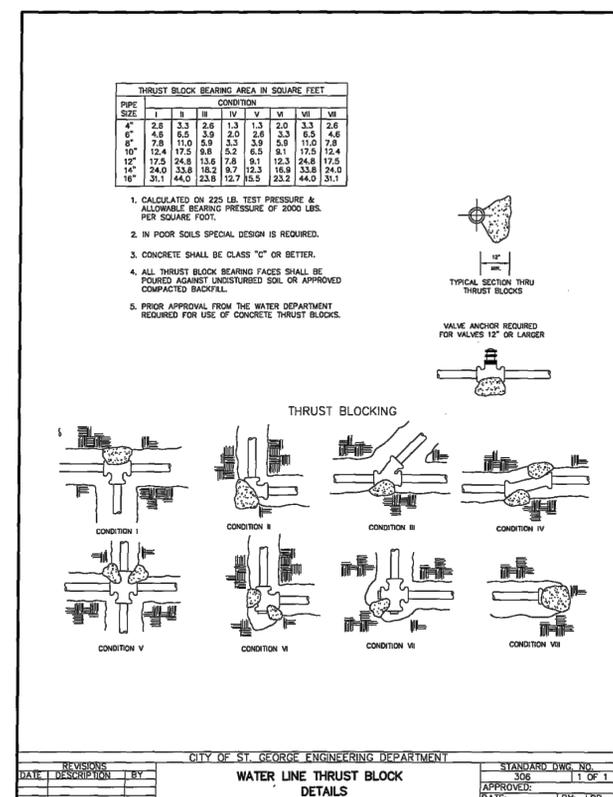
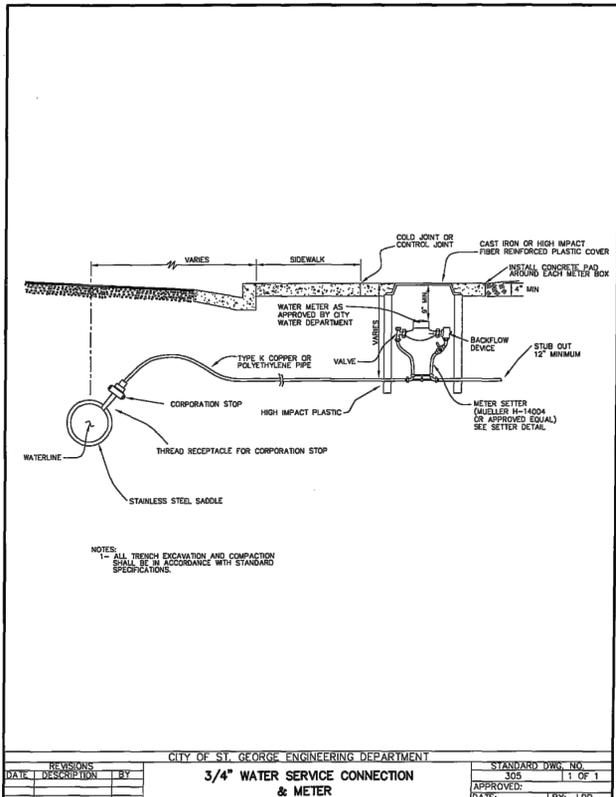
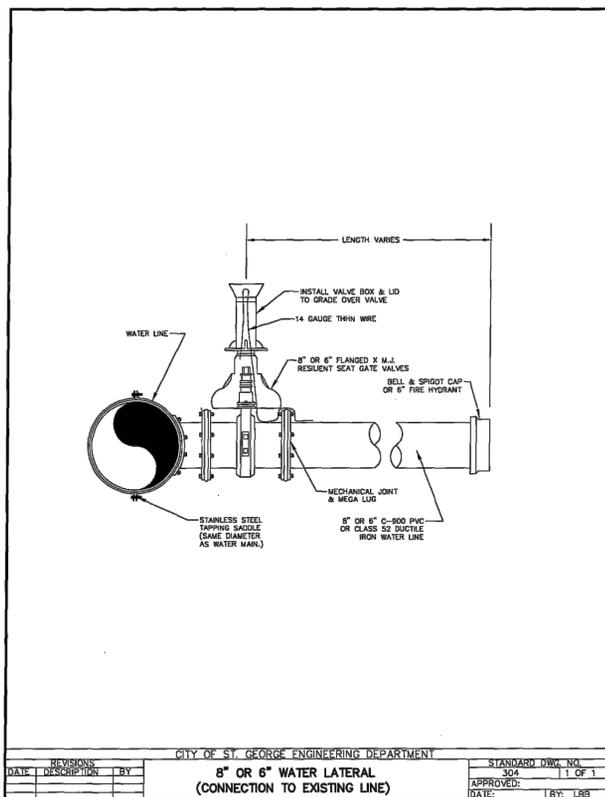
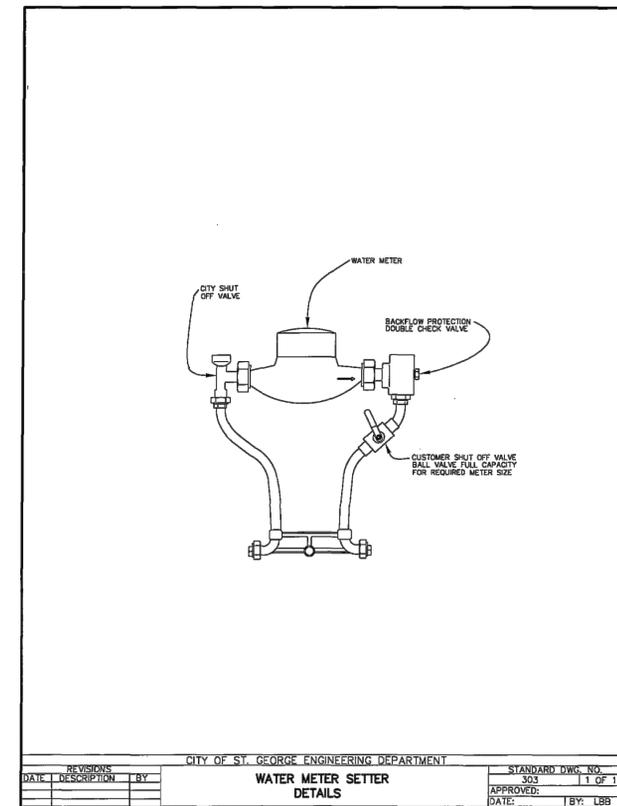
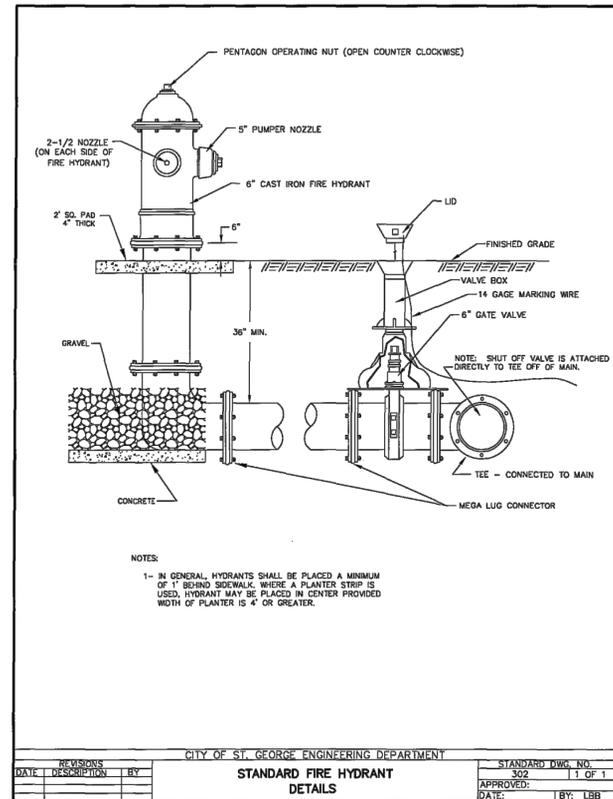
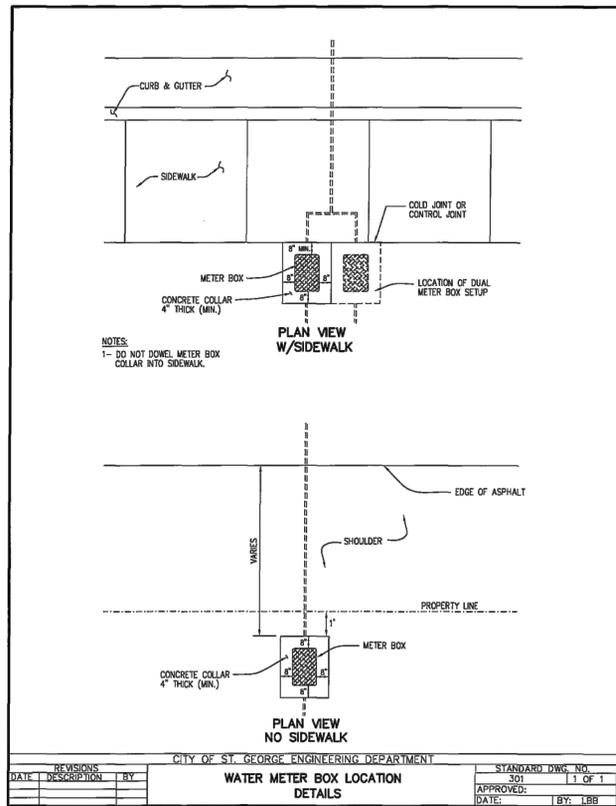
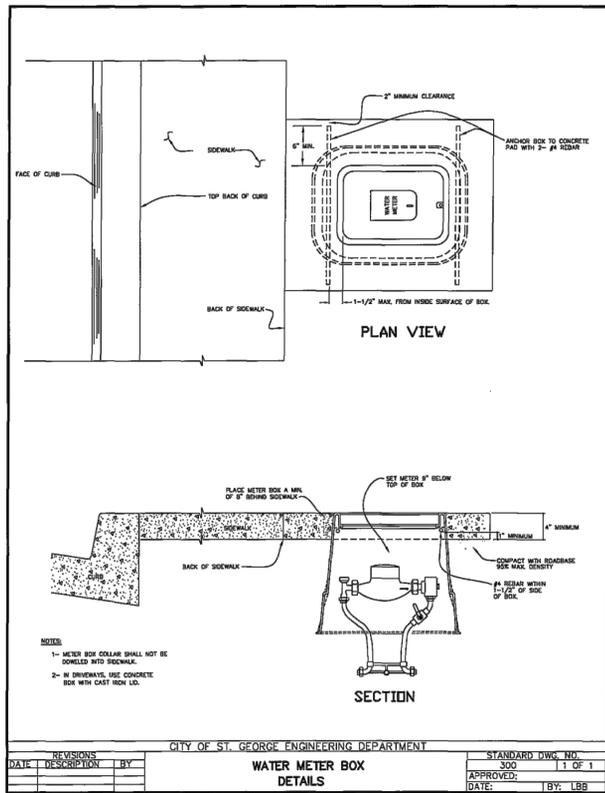


- NOTES:**
- MATERIAL SPECIFICATIONS:
 - CONCRETE PORTLAND CEMENT TYPE II, MINIMUM COMPRESSIVE STRENGTH=300 PSI AT 28 DAYS
 - REINFORCING BAR INTERMEDIATE GRADE ASTM A615
 - REINFORCING WELDED WIRE MESH ASTM A185
 - UNIT COATED OUTSIDE WITH AN APPROVED PROTECTIVE COATING
 - ALL DIMENSIONS & NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED
 - PRECAST UNIT TO BE PLACED ON NATURAL SOIL OR APPROVED COMPACTED FILL
 - STANDARD GROUND WATER SEAL- BUTYL ROPE MASTIC OR CEMENT MORTAR
 - 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
 - CLEANOUT SIZE TO MATCH INLET/OUTLET SIZE

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DETAILS

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THE STANDARD IN ENGINEERING

CEDAR CITY
88 E. Fiddlers Canyon Road
Suite 210
Cedar City, UT, 84720
Phone: 435.865.1453

SALT LAKE CITY
Phone: 801.255.0529

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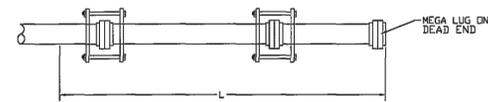
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N.T.S.

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MEGA LUG ON DEAD END

- ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
- 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)

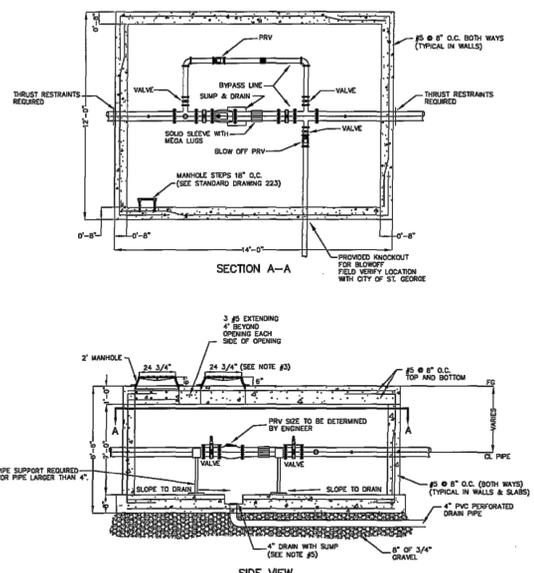
RESTRAINED JOINT LENGTHS USAGE GENERAL NOTES

RESTRAINED LENGTH CALCULATIONS ARE BASED ON THE FOLLOWING DESIGN TYPICALLY USED WITH BACKFILL IN ST. GEORGE.

- THREE (3) FEET MINIMUM DEPTH OF COVER.
- A SAFETY FACTOR OF 1.5
- SOIL TYPE SANDY CLAY
- 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).
- 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 ST. GEORGE ENGINEERING DEPARTMENT				STANDARD DWG. NO.	
DATE:	DESCRIPTION:	BY:	APPROVED:	312	1 OF 1
	IN LINE VALVE/DEAD END ON PVC PIPE				
	DETAIL				



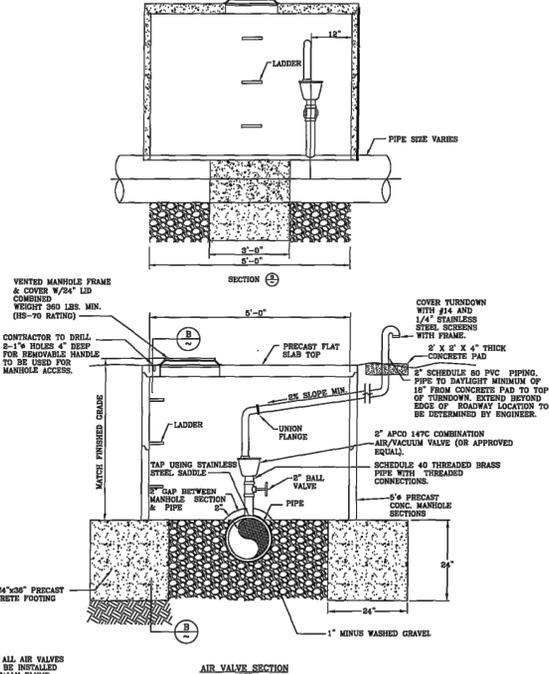
SECTION A-A

SIDE VIEW

NOTES:

- IF VALVE IS IN SIDEWALK THE FINISH GRADE OF TOP OF VALVE SHALL MATCH SLOPE OF EXISTING SIDEWALK.
- ALL FITTINGS SHALL BE FLANGED AND MEGA LOADED.
- MANHOLE RING & ISD WILL VARY WITH SIZE OF P.V.V. CONTACT WATER DEPARTMENT.
- IF VALVE IS IN ROADWAY, FINISH GRADE OF TOP OF VALVE SHALL MATCH SUBGRADE.
- SUMP SIZE SHALL BE 12" x 12" x 4" DEEP.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT				STANDARD DWG. NO.	
DATE:	DESCRIPTION:	BY:	APPROVED:	315	1 OF 2
	STANDARD PRESSURE REDUCING VALVE				
	& VALVE FOR NEW CONSTRUCTION				

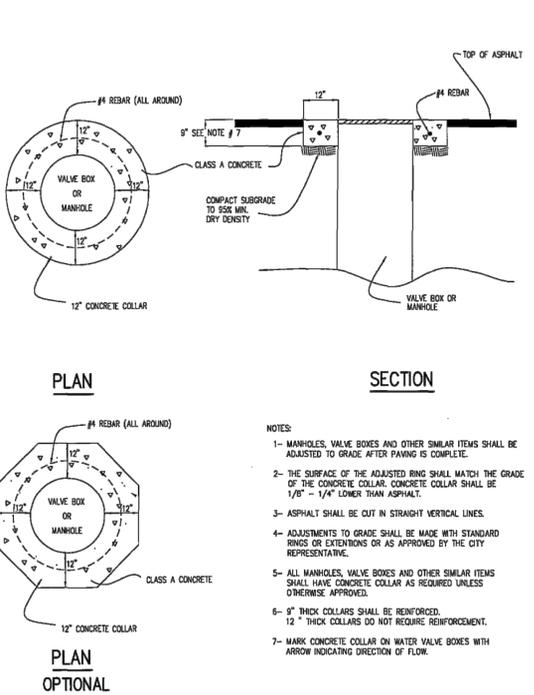


SECTION

AIR VALVE SECTION

NOTES: ALL AIR VALVES SHALL BE INSTALLED VERTICALLY PLUMB

CITY OF ST. GEORGE ENGINEERING DEPARTMENT				STANDARD DWG. NO.	
DATE:	DESCRIPTION:	BY:	APPROVED:	316	1 OF 1
	STANDARD AIR VAC DETAIL				



PLAN

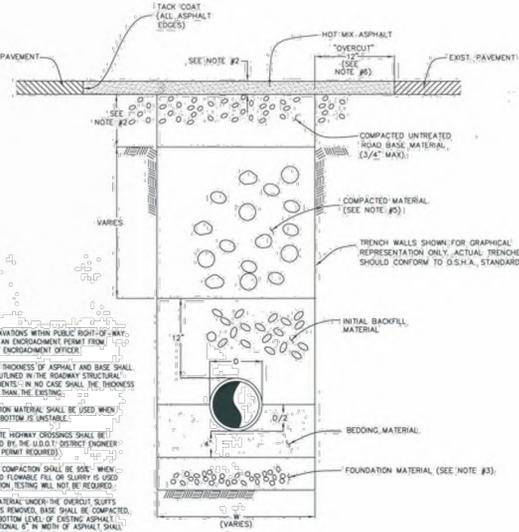
SECTION

PLAN OPTIONAL

NOTES:

- MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL BE ADJUSTED TO GRADE AFTER PAVING IS COMPLETE.
- THE SURFACE OF THE ADJUSTED RING SHALL MATCH THE GRADE OF THE CONCRETE COLLAR. CONCRETE COLLAR SHALL BE 1/8" - 1/4" LOWER THAN ASPHALT.
- ASPHALT SHALL BE CUT IN STRAIGHT VERTICAL LINES.
- ADJUSTMENTS TO GRADE SHALL BE MADE WITH STANDARD RINGS OR EXTENSIONS OR AS APPROVED BY THE CITY REPRESENTATIVE.
- ALL MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL HAVE CONCRETE COLLAR AS REQUIRED UNLESS OTHERWISE APPROVED.
- 6" THICK COLLARS SHALL BE REINFORCED. 12" THICK COLLARS DO NOT REQUIRE REINFORCEMENT.
- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT				STANDARD DWG. NO.	
DATE:	DESCRIPTION:	BY:	APPROVED:	317	1 OF 1
	MANHOLES & VALVE BOXES				
	CONCRETE COLLAR				

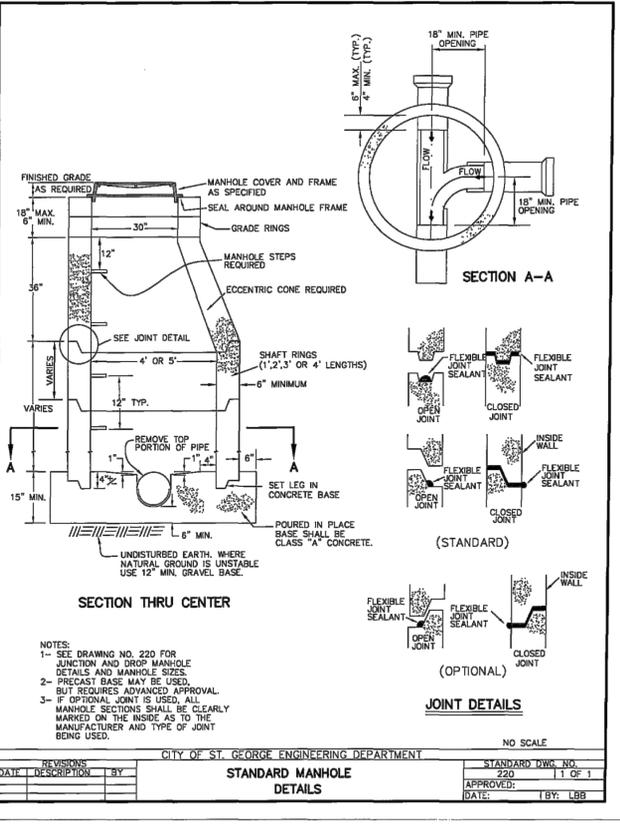
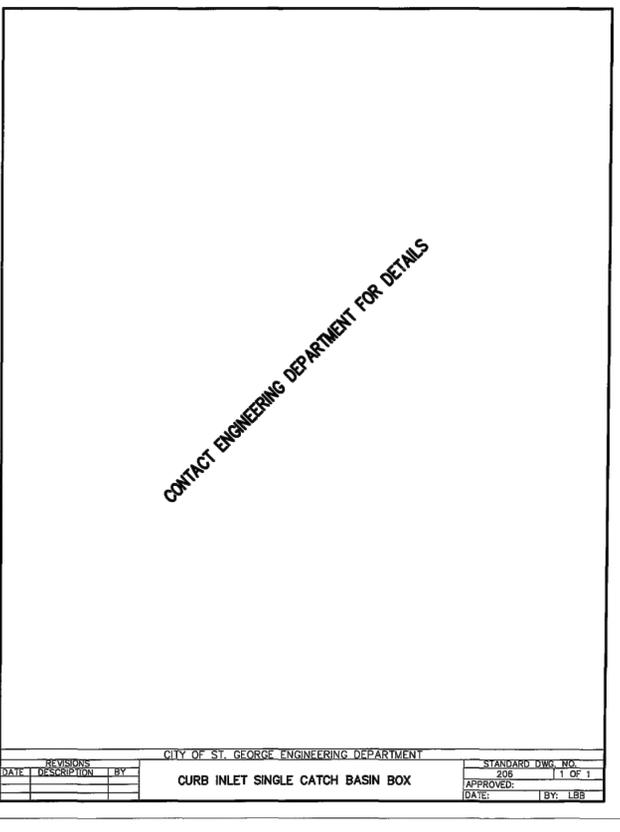
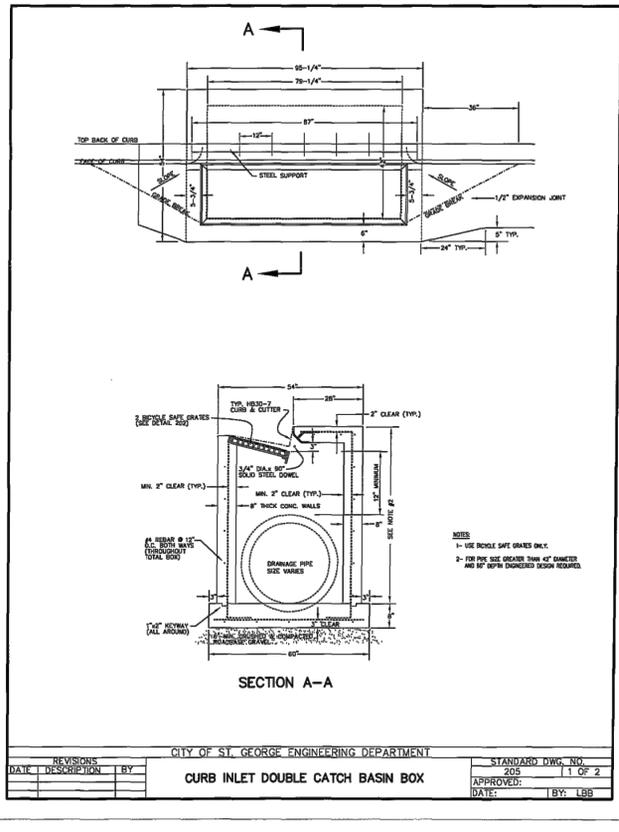
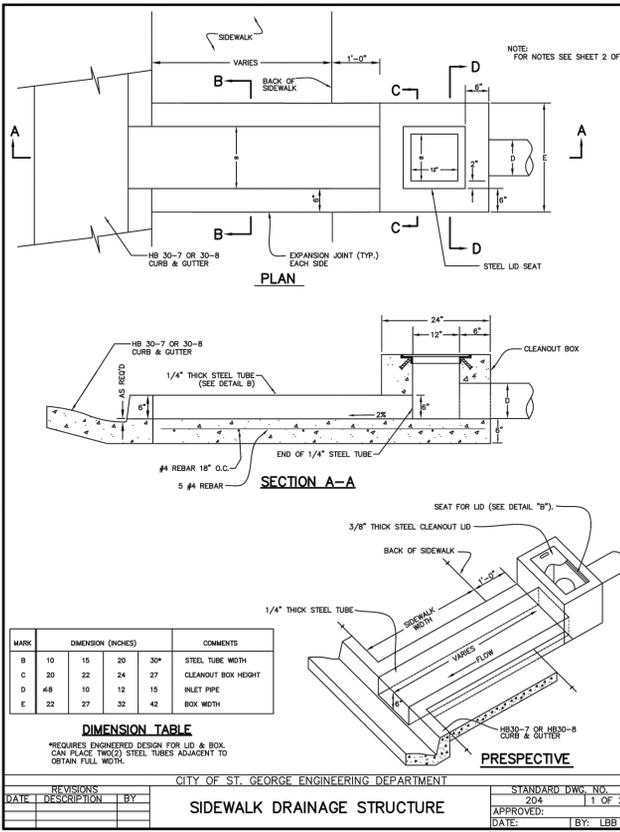
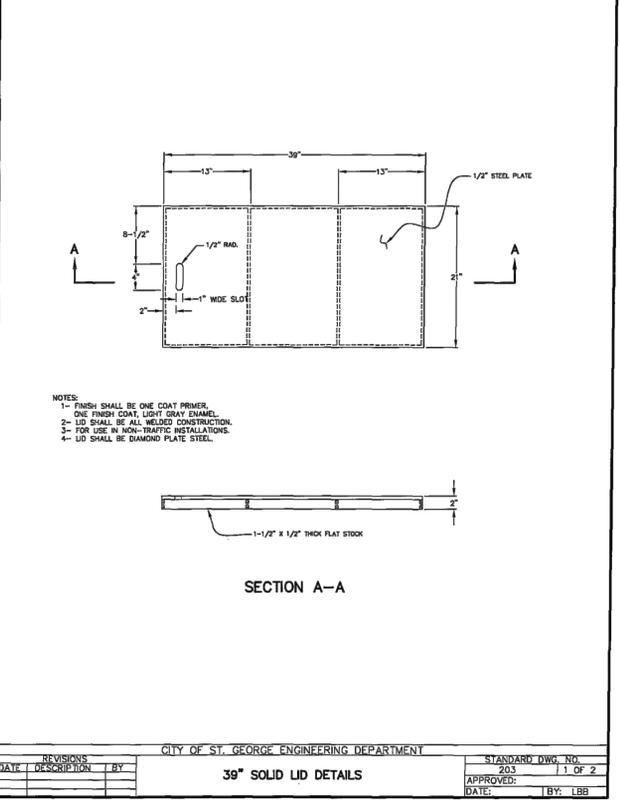
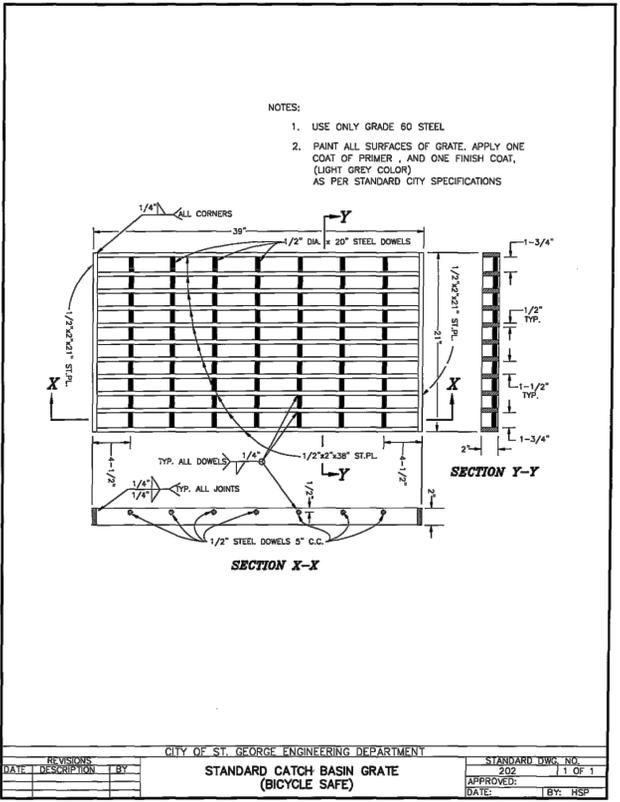
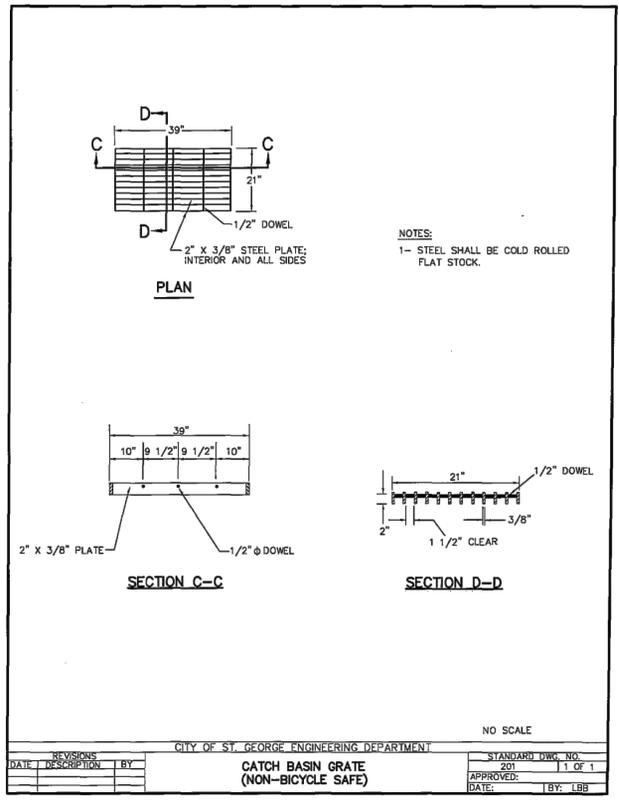
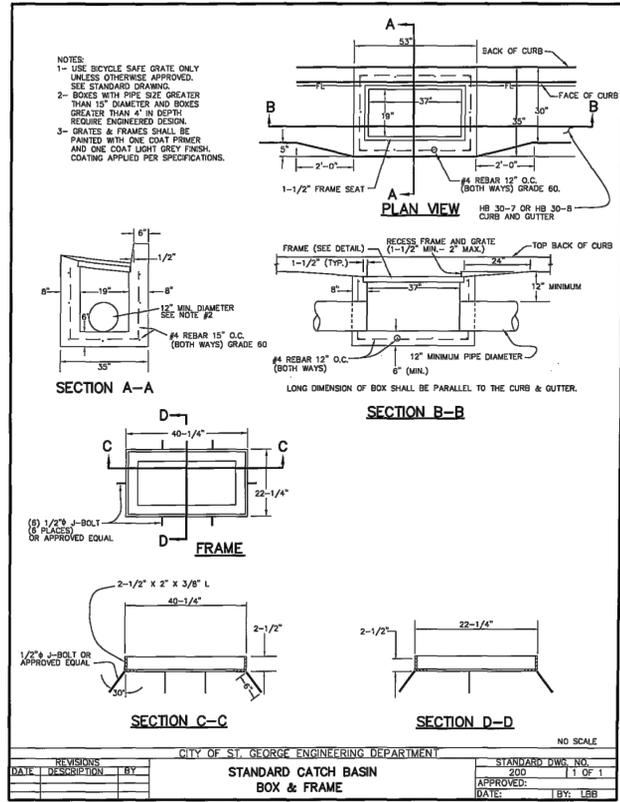


TRENCH BACKFILL AND REPAIR DETAIL

NOTES:

- ALL EXCAVATIONS WITHIN PUBLIC RIGHT-OF-WAY REQUIRE AN ENCROACHMENT PERMIT FROM THE CITY ENCROACHMENT OFFICER.
- MINIMUM THICKNESS OF ASPHALT AND BASE SHALL BE AS OUTLINED IN THE ROADWAY STRUCTURAL REQUIREMENTS. IN NO CASE SHALL THE THICKNESS BE LESS THAN THE EXISTING.
- FOUNDATION MATERIAL SHALL BE USED WHEN TRENCH BOTTOM IS IRREGULAR.
- ALL STATE HIGHWAY CROSSINGS SHALL BE APPROVED BY THE U.S.D.O.T. DISTRICT ENGINEER (U.S.D.O.T. PERMIT REQUIRED).
- MINIMUM COMPACTION SHALL BE DONE WHEN APPROVED FLOWABLE FILL OR SLURRY IS USED. COMPACTION TESTING WILL NOT BE REQUIRED.
- WHEN MATERIAL UNDER THE EXISTING SLURRY IS OFF OR IS REMOVED, BASE SHALL BE COMPACTED TO THE BOTTOM LEVEL OF EXISTING ASPHALT. AN ADDITIONAL 4" IN THICKNESS OF ASPHALT SHALL BE CUT, REMOVED AND REPLACED AS PART OF THE ORIGINAL PATCH.
- WHERE ROAD SECTION HAS A DESIGNED GRANULAR SUB-BASE, IT SHALL BE REPLACED IN KIND OR WITH ROAD BASE GRAVEL.
- IN GENERAL, STREET SURFACES LESS THAN 24 HOURS OLD WILL NOT BE CUT. IF A CUT MUST BE MADE, ADDITIONAL REQUIREMENTS MAY BE NECESSARY. SEE ENCROACHMENT OFFICER.
- 24 HOUR NOTICE REQUIRED ON ALL INDICATIONS.
- ALL TRENCH BACKFILL SHALL MEET MIN. COMPACTION REQUIREMENTS.
- EXCLUDING EMERGENCY CLOSURES ALL ROAD CLOSURES AND DETOURS REQUIRE 48 HOURS PRIOR NOTICE.
- ASPHALT PATCHWORK SHALL CONSIST OF 3/4" HOT MIX ASPHALT OVER 2" THICK SHALL REQUIRE PLACEMENT IN SEPARATE COMPACTED LIFTS.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT				STANDARD DWG. NO.	
DATE:	DESCRIPTION:	BY:	APPROVED:	310	1 OF 1
8/2008	GENERAL REVISIONS	DJO			
	TRENCH BACKFILL AND REPAIR DETAIL				



ENSIGN
 THE STANDARD IN ENGINEERING

CEDAR CITY
 88 E. Fiddlers Canyon Road
 Suite 210
 Cedar City, UT. 84720
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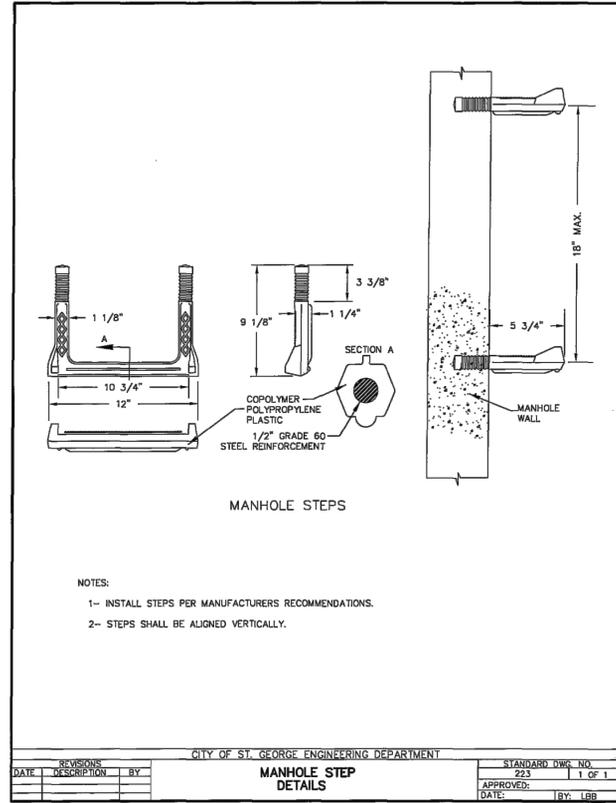
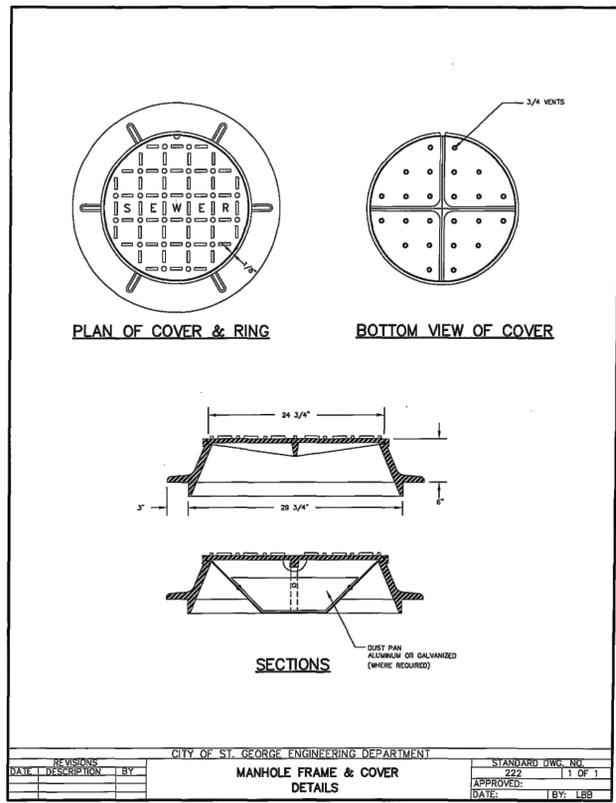
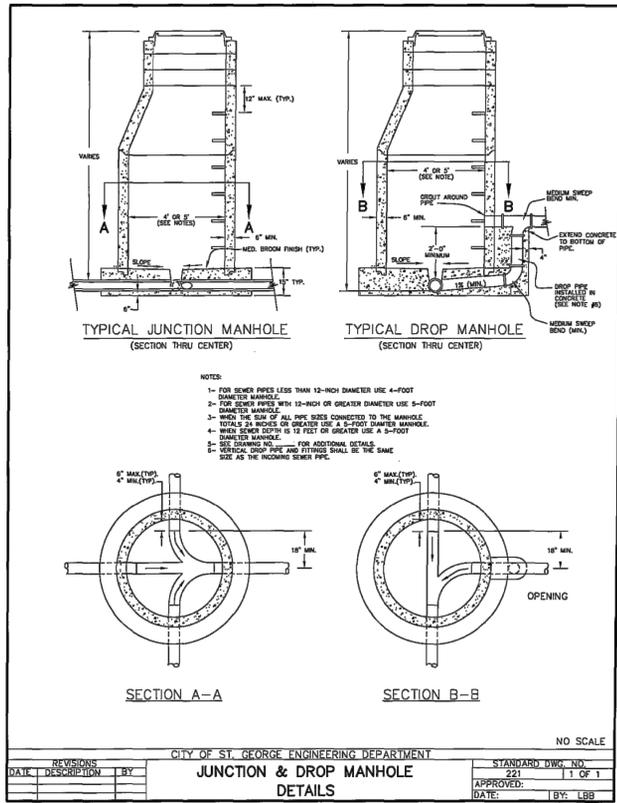
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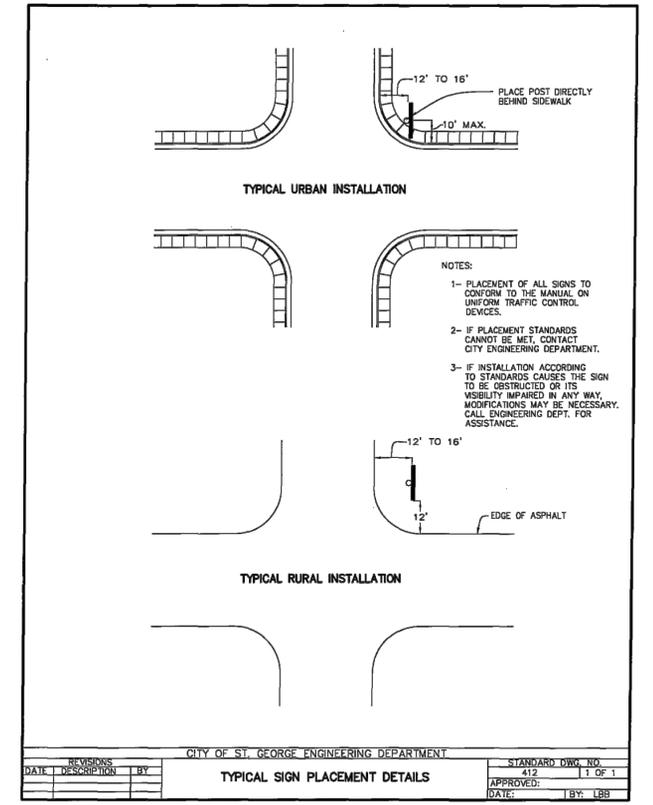
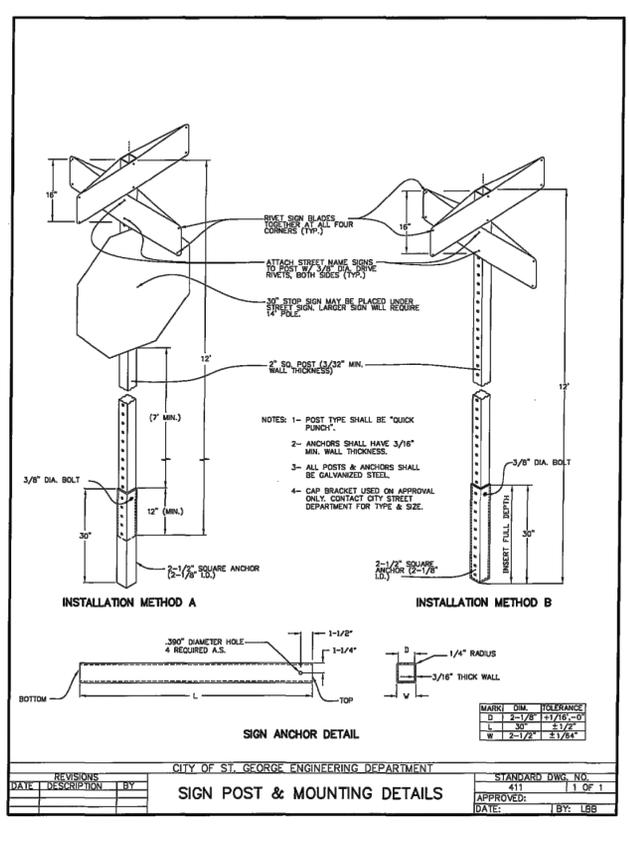
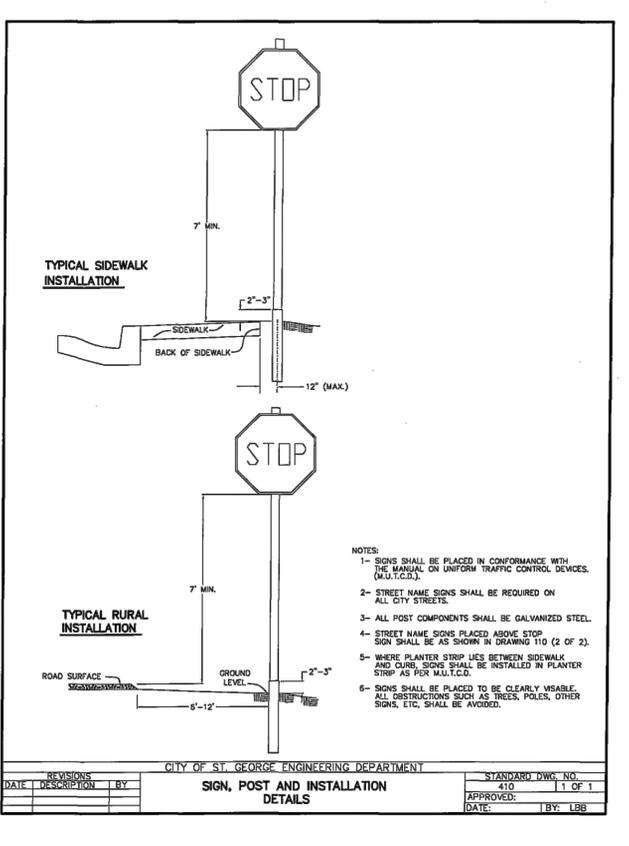
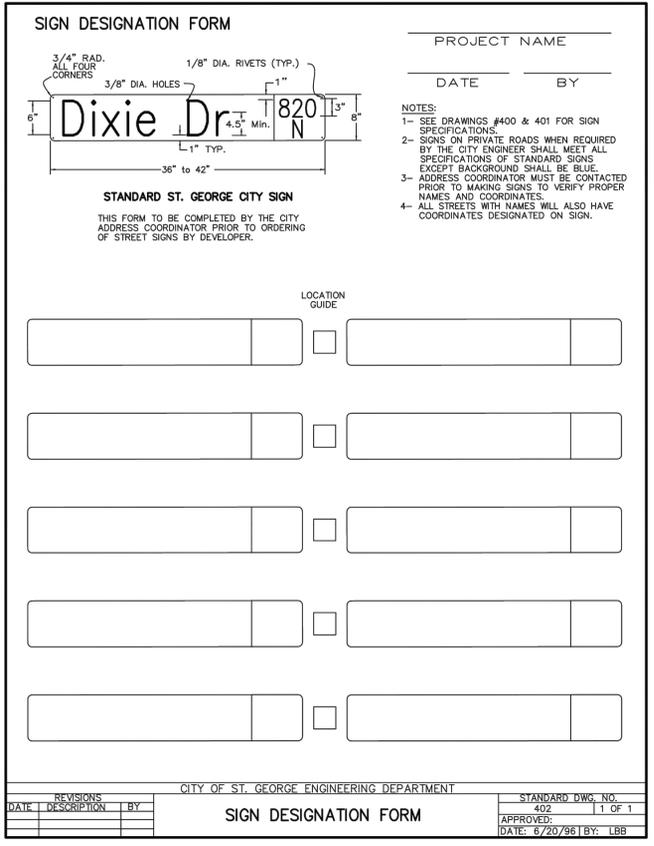
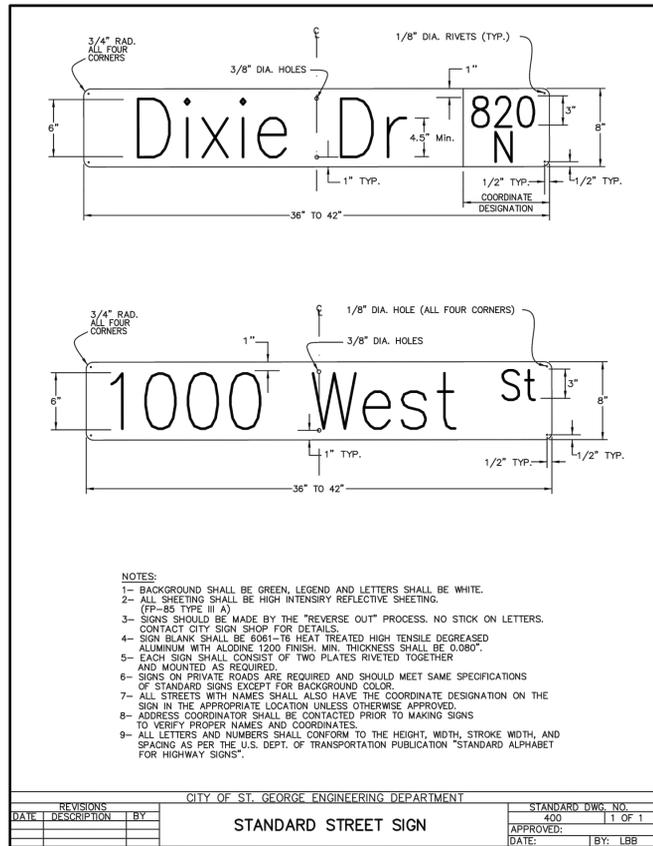
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DETAILS

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CEDAR CITY
88 E. Fiddlers Canyon Road
Suite 210
Cedar City, UT, 84720
Phone: 435.865.1453

SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

LAYTON
Phone: 801.547.1100

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049
CONTACT:
OSCAR@LODGINGANDHOSPITALITY.COM
PHONE: 801-628-0234

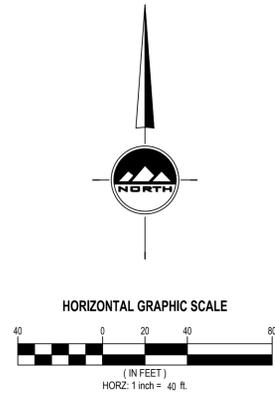
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N.T.S.
DETAILS

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CHECKED BY

PROJECT MANAGER

C-506



CONSTRUCTION NOTE:

1. ALL EXCAVATIONS AND FILLS CONFORM TO APPENDIX "K" OF THE UTAH UNIFORM BUILDING STANDARDS ACT RULES AND THE CURRENT ADAPTED EDITION OF INTERNATIONAL BUILDING CODE.
2. SEE SHEET C-CS1 FOR CROSS SECTIONS.



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CEDAR CITY
 88 E. Fiddlers Canyon Road
 Suite 210
 Cedar City, UT, 84720
 Phone: 435.865.1453

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 Phone: 801.255.0529

TOOELE
 Phone: 435.843.3590

LAYTON
 Phone: 801.547.1100

RICHFIELD
 Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
 OSCAR COVARRUBIAS
 784 RESORT DR.
 MIDWAY, UTAH 84049
 CONTACT:
 OSCAR@LODGINGANDHOSPITALITY.COM
 PHONE: 801-628-0234

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CROSS SECTIONS

PROJECT NUMBER: 10928
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CEDAR CITY
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 Suite 210
 Cedar City, UT, 84720
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SALT LAKE CITY
 Phone: 801.255.0529

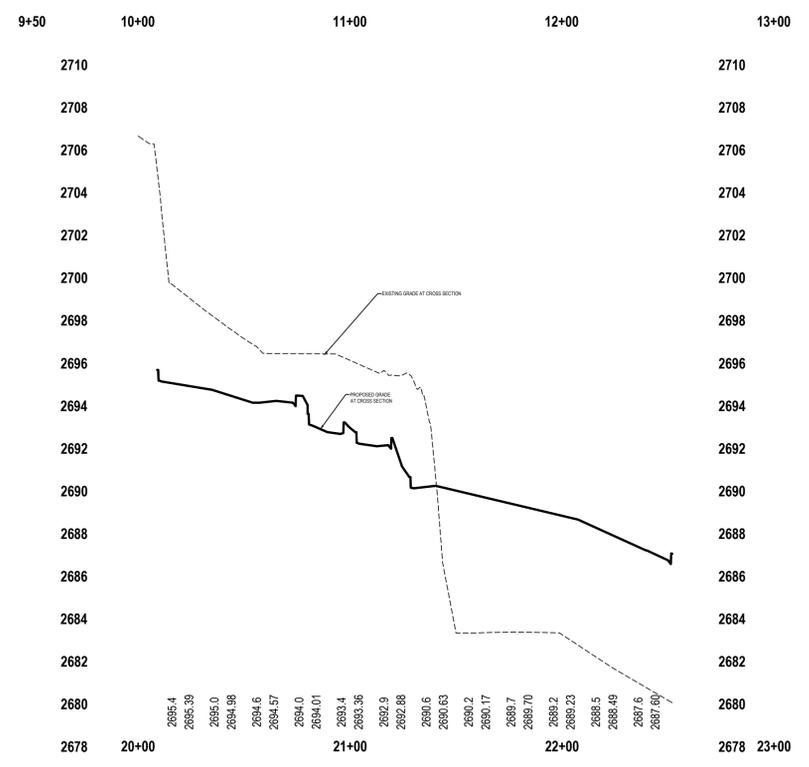
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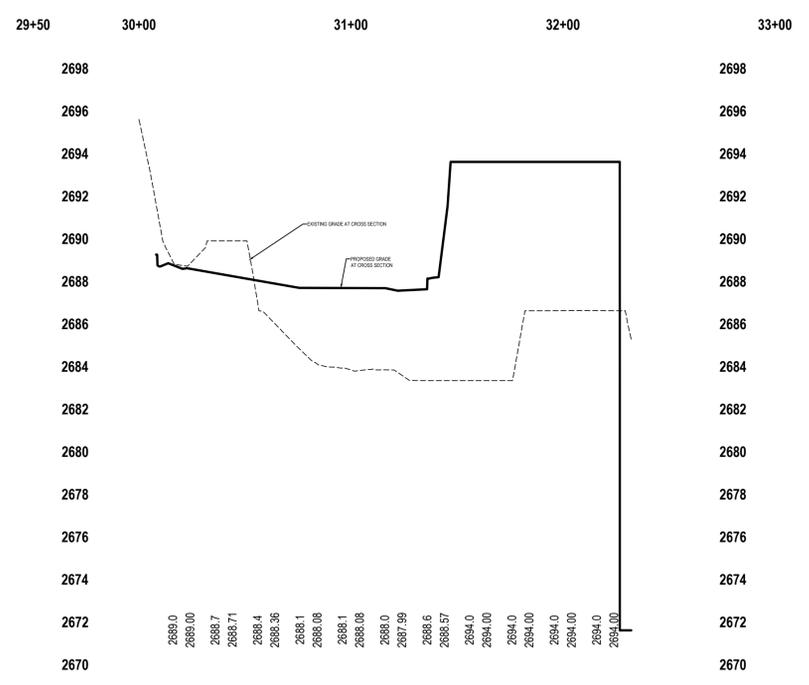
RICHFIELD
 Phone: 435.896.2983

WWW.ENSIGNENG.COM

FOR:
 OSCAR COVARRUBIAS
 784 RESORT DR.
 MIDWAY, UTAH 84049
 CONTACT:
 OSCAR@LODGINGANDHOSPITALITY.COM
 PHONE: 801-628-0234



A SECTION A-A
 SCALE: NONE



B SECTION B-B
 SCALE: NONE

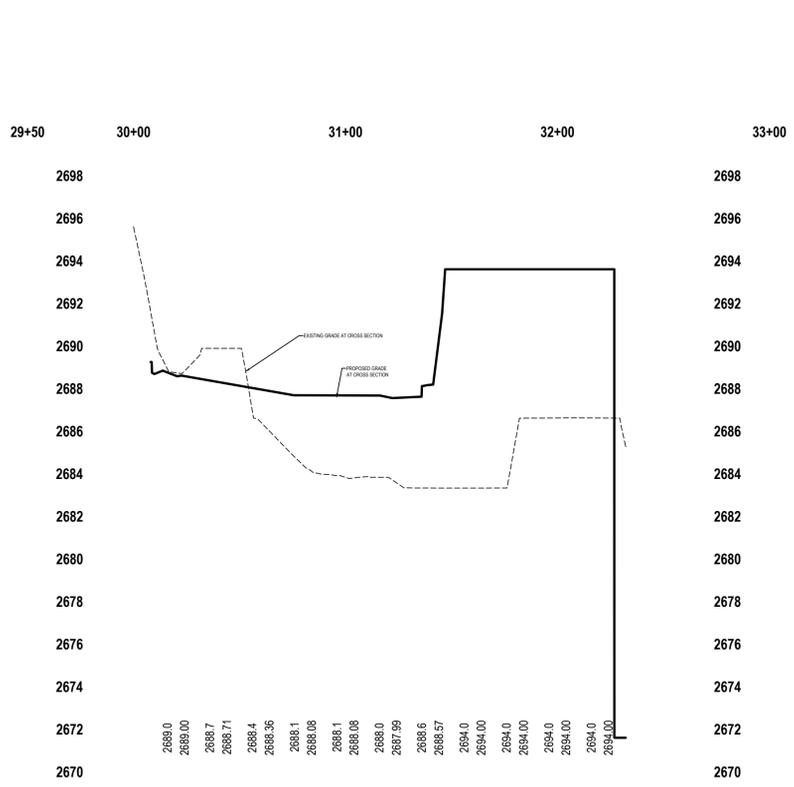
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 PHASE I
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CROSS SECTIONS

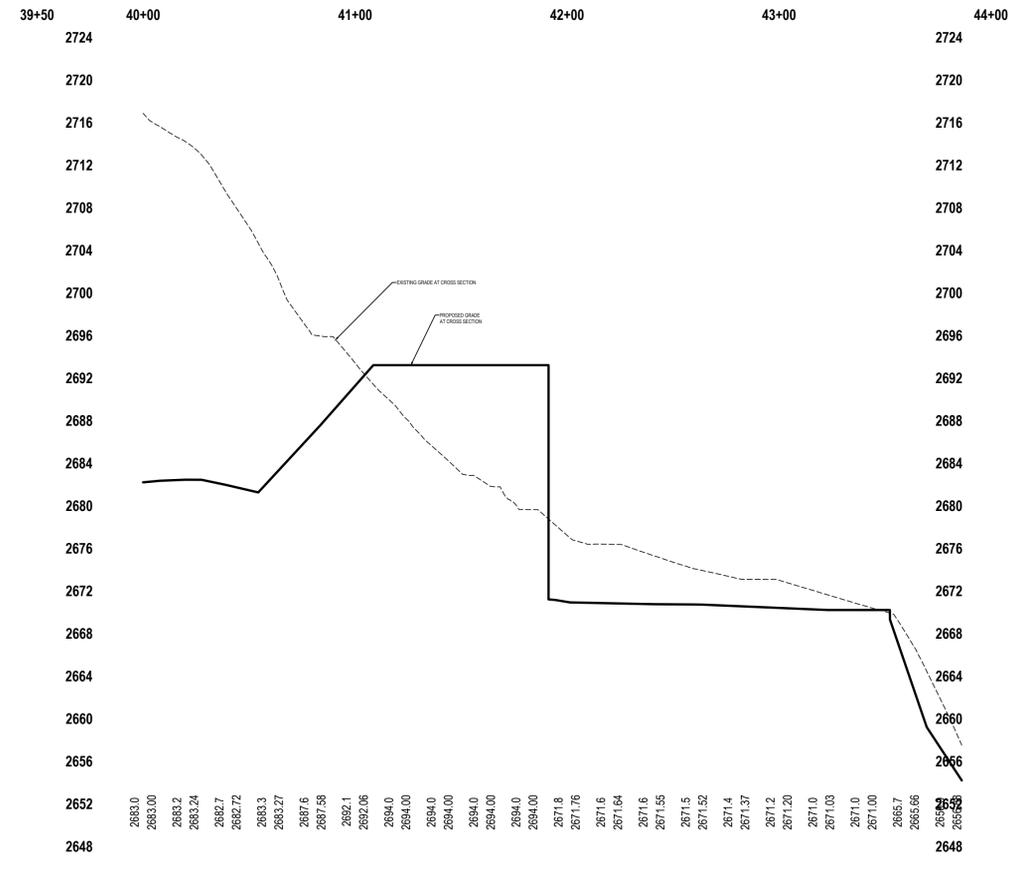
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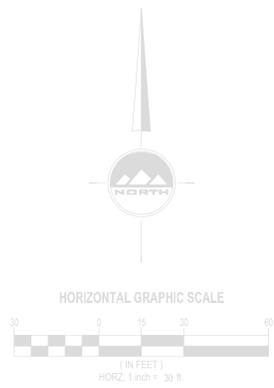
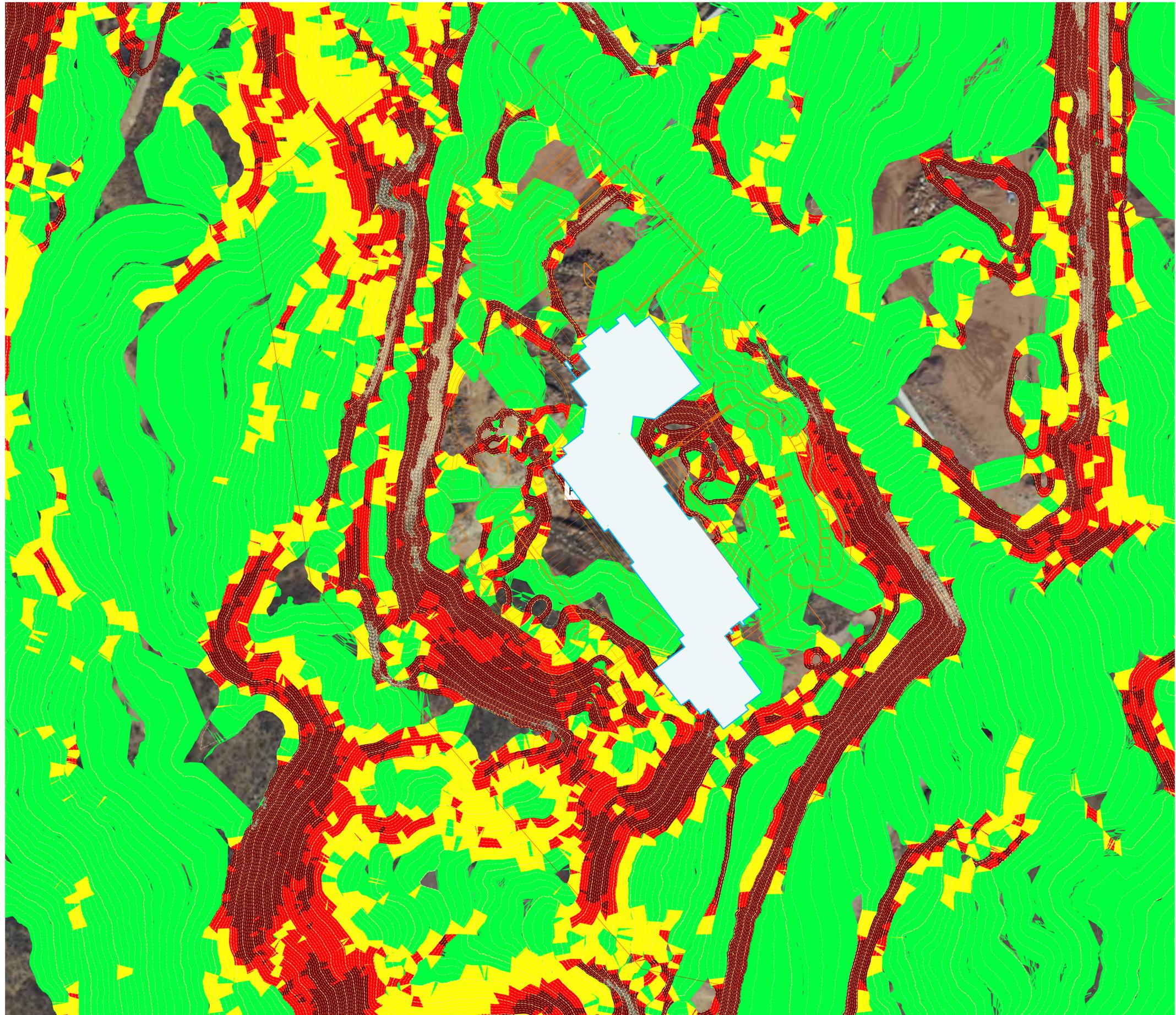
C SECTION C-C SCALE: NONE



D SECTION D-D SCALE: NONE

CROSS SECTIONS

Exhibit B
Slope Analysis



SLOPES TABLE			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	1.00%	20.00%	Green
2	20.00%	30.00%	Yellow
3	30.00%	40.00%	Red
4	40.00%	100.00%	Brown



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THE STANDARD IN ENGINEERING

CEDAR CITY
88 E. Fiddlers Canyon Road
Suite 210
Cedar City, UT, 84720
Phone: 435.865.1453

SALT LAKE CITY
Phone: 801.255.0529

TOOELE
Phone: 435.843.3590

LAYTON
Phone: 801.547.1100

RICHFIELD
Phone: 435.896.2983

WWW.ENSIGNENG.COM

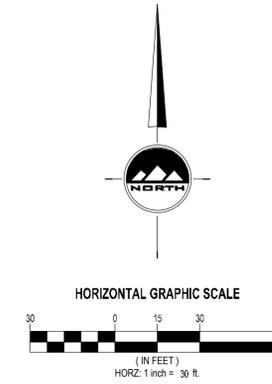
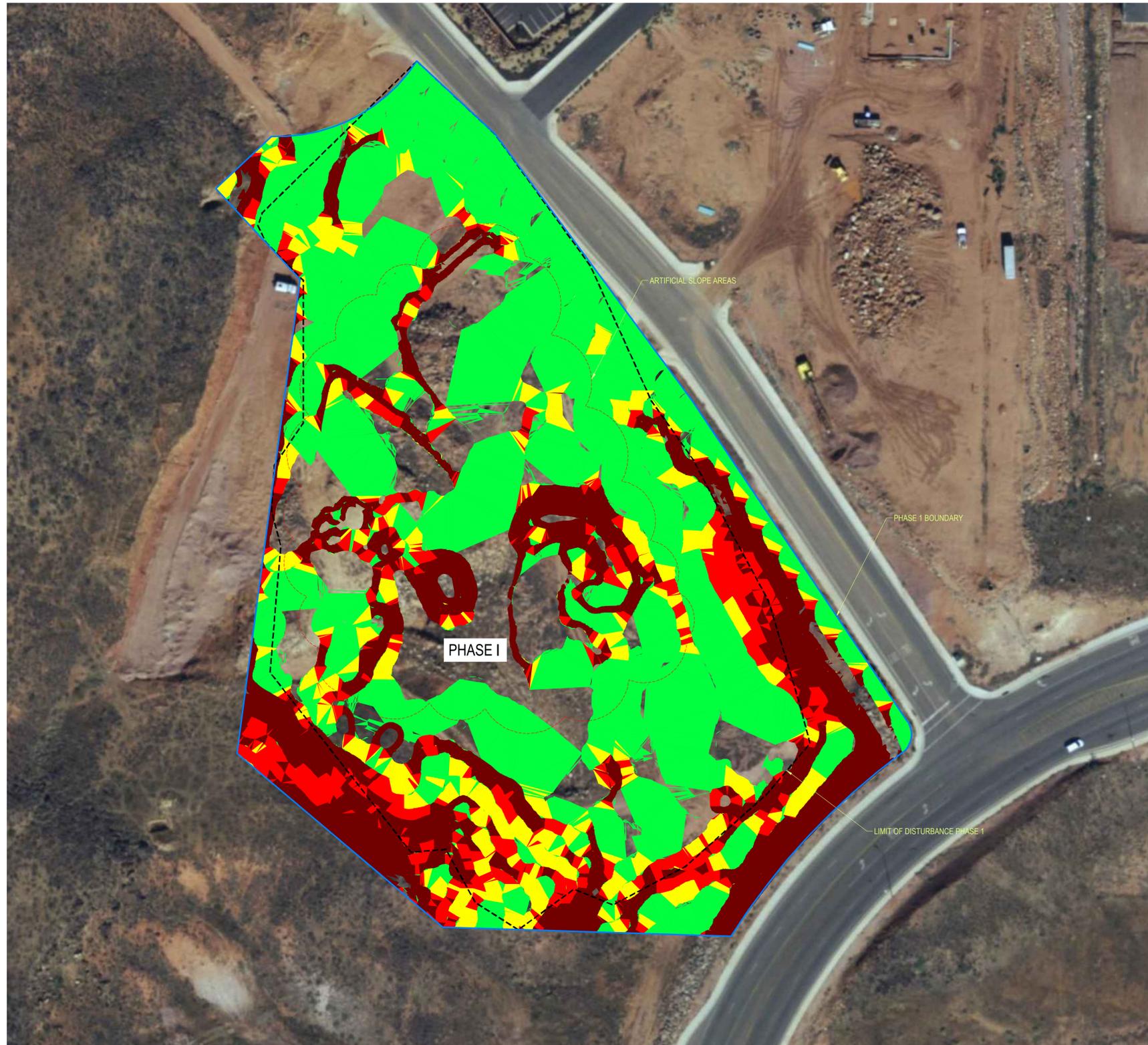
FOR:
OSCAR COVARRUBIAS
784 RESORT DR.
MIDWAY, UTAH 84049
CONTACT:
OSCAR@LOGGINGANDHOSPITALITY.COM
PHONE: 801-628-0234

**ST. GEORGE HOTEL
PHASE I
ST. GEORGE
ST. GEORGE, UTAH**

SLOPE ANALYSIS

PROJECT NUMBER: 10928
PRINT DATE: 7/27/21
DRAWN BY: _____
CHECKED BY: _____
PROJECT MANAGER: _____

EX-01



SLOPES TABLE			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	1.00%	20.00%	Green
2	20.00%	30.00%	Yellow
3	30.00%	40.00%	Red
4	40.00%	100.00%	Dark Red

SLOPE ANALYSIS BREAKDOWN:			
TOTAL PHASE 1 AREA:	285,557.61 SF		
AREA 20% OR LESS:	180,271.09 SF	TOTAL % OF SITE:	63.2%
AREA 20%-30%:	27,112.97 SF	TOTAL % OF SITE:	9.5%
AREA 30%-40%:	23,843.59 SF	TOTAL % OF SITE:	8.3%
AREA 40% OR MORE:	54,329.99 SF	TOTAL % OF SITE:	19.0%
NET AREA PHASE 1: LIMITS OF DISTURBANCE:			
AREA 20% OR LESS:	152,463.07 SF	TOTAL % OF SITE:	66%
AREA 20%-30%:	25,040.45 SF	TOTAL % OF SITE:	10.8%
AREA 30%-40%:	20,878.54 SF	TOTAL % OF SITE:	9.1%
AREA 40% OR MORE:	32,604.01 SF	TOTAL % OF SITE:	14.11%
NET AREA LESS ARTIFICIAL SLOPE:			
AREA 20% OR LESS:	188,346.20 SF	TOTAL % OF SITE:	82%
AREA 20%-30%:	18,372.10 SF	TOTAL % OF SITE:	8%
AREA 30%-40%:	13,190.83 SF	TOTAL % OF SITE:	6%
AREA 40% OR MORE:	11,076.94 SF	TOTAL % OF SITE:	4%

BASED ON THE NET AREA LESS ARTIFICIAL SLOPE CALCULATIONS, THE AREAS BEING DISTURBED AND DEVELOPED ARE UNDER THE PERCENTAGES IN THE CITY ORDINANCE.

LEGEND:	
PHASE 1 BOUNDARY	
LIMIT OF DISTURBANCE	
ARTIFICIAL SLOPE AREA	

Exhibit C
Drainage Report

DRAINAGE REPORT

ST. GEORGE HOTEL PHASE 1

ST. GEORGE, UTAH

PREPARED FOR:
**NEW ENGLAND ALLIANCE,
LLC**
PO BOX 680039
PARK CITY, UT

PREPARED BY:
BRENNAN REES, EIT

REVIEWED BY:
ROBERT Q. ELDER, PE

ENSIGN ENGINEERING
88 E FIDDLERS CANYON RD
STE 210
CEDAR CITY, UT 84721
(435) 865-1453

ENSIGN
THE STANDARD IN ENGINEERING

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1.0 PROJECT OVERVIEW/LOCATION

The subject property is located in St George Utah, in the southeast half of Section 36, Township 31 South, Range 16 West, Salt Lake Base, and Meridian, Washington County, Utah. The development is bounded by 250 West to the east, Black Ridge Dr to the south, and Techridge to the north and west.

The purpose of this report is to present the conceptual drainage design for the proposed commercial St. George Hotel site. The proposed project sits on approximately 7.08 acres of the previously excavated site and will include the construction of a new commercial hotel. The proposed site is part of a subject parcel including 17.03 acres. Because of the topography and location of the proposed site, a sub-basin can be delineated that only includes the 7.08 acres. All runoff will be managed and detained on-site through curb & gutter, pipe networks, and underground detention facilities. All stormwater will be managed on-site and discharged at a controlled rate into the city’s storm drain system.

2.0 EXISTING DRAINAGE CONDITIONS

The existing watershed consists of mixed-use of previously excavated hillside and spoil piles, rock piles, cut banks. Vegetation consists of short grasses and weeds, and desert brush. This area is contained by 250 West to the east, Black Ridge Dr. to the west, and private undeveloped land to the north, and Techridge to the west.

Overall, the site has steep slopes and cut banks, but naturally drains from the northwest to the southeast side of the property. Onsite slopes range from 3-99%. Offsite slopes that will impact the site range from 4-35%. The rational method was used to calculate the pre-development runoff for the site. The USGS Web Soil Survey (WSS) illustrated the different soil types but did not provide a hydraulic soil group. Being familiar with the area, a soil group D was assumed. Using table 2-6 in the St. George City Drainage Manual, the following coefficients were used.

TABLE 2-1: RATIONAL METHOD RUNOFF COEFFICIENTS (PRE-DEVELOPMENT)

<i>Land Use</i>	<i>Curve Number by Soil Type</i>		
	<i>B</i>	<i>C</i>	<i>D</i>
Land Cover Category			
<i>Bare Soil: Newly Graded Areas</i>	0.10	0.30	0.50
<i>Desert Shrub: 30% to 70% ground cover</i>	0.05	0.10	0.15

- Hydrologic soil group: This value is classified by the Natural Resources Conservation Service (NRCS) and is based on a soil’s runoff potential. The soil group for this area is assumed D classification as defined by the NRCS and found through the Web Soil Survey.

The total pre-development runoff for the 100-yr, 24-hr storm event is 0.50 cfs or 0.03 cfs/acre. This value takes into account the offsite drainage area of 9.54 acres that will impact the site. See appendix B for calculations regarding pre-development areas and flows.

3.0 DESIGN OBJECTIVES AND METHODOLOGY

The site drainage system will be designed to meet the requirements of St. George City. This report will address the proposed drainage system, which is intended to both reduce the post-developed peak runoff as well as reduce the impact of the development on the environment. The proposed construction of this project will increase the amount of impervious areas on the site, which will increase the amount of site runoff. To address this increase, curb & gutter, a pipe network system, and an underground detention system have been designed to help reduce runoff. The site has been analyzed as one large drainage area and divided into smaller sub-basins. The sub-basins are associated with each respective underground detention structure as shown on the grading plan as well as attached in the appendix of this report.

The hydrology and hydraulics of this project area watershed was completed using the Rational Method to provide a conservative approach to sizing and stormwater management. Watersheds or sub-basins were delineated based upon the local topography from land survey data and the proposed finish-grade surface using AutoCAD Civil 3D. The sub-basins were then split into onsite and offsite areas. Each respective sub-basin and catchment was assigned a runoff coefficients based on the ground cover, impervious area, and Hydrologic Soil Group. The coefficients used were analyzed appropriate for the area of this study.

TABLE 3-1 RATIONAL METHOD RUNOFF COEFFICIENTS (POST-DEVELOPMENT)

<i>Land Use</i>	<i>Curve Number by Soil Type</i>		
	<i>B</i>	<i>C</i>	<i>D</i>
Land Cover Category			
<i>Commercial</i>	0.95	0.95	0.95
<i>Bare Soil: Newly Graded Areas</i>	0.10	0.30	0.50
<i>Desert Shrub: 30% to 70% ground cover</i>	0.05	0.10	0.15

Per the new UPDES MS4 permit, new developments shall retain the 80th percentile storm on site. Along with the MS4 permit requirements, the design criteria required by St. George City and implemented by Ensign during the modeling includes:

- Conveyance systems designed for the 100-year, 3-hour storm event.
- Detention designed for the 100-year, 24-hour storm event.
- Post-development discharges not to exceed 0.20 cfs/acre (pre-development = 0.30 cfs/acre)

The following rainfall distribution was used to analyze the system (Rainfall data obtained from NOAA’s Atlas 14 Point Precipitation Frequency Estimates system):

TABLE 3-2 RAINFALL DATA

Frequency (years)	Precipitation (inches)
2	1.13
10	1.63
25	1.93
100	2.40

Precipitation depths shown are for a 24-hour time period. NOAA ATLAS 14 point precipitation frequency estimates for the subject site shows a precipitation depth of 1.60 inches for the 10-year, 24-hr storm event.

4.0 PROPOSED DRAINAGE CONDITIONS

The proposed site will be designed to direct runoff from paved and other hardscape areas into curb & gutter and waterways which will be collected in catch basins and discharged into underground detention structures. Once storm water has entered a series of pipes and catch basins, it will be conveyed to two detention structures on-site. Water will then be managed/treated and infiltrated and discharged at a controlled rate into the city's stormdrain system. The pre-development release rate of the system was computed to be 0.30 cfs/acre for the 100-year storm while the post-development release rate will be 0.20 cfs/acre.

The roadways, pipes, structures, and sumps are designed to be able to convey runoff and manage the 100-year, 3-hour storm event.

The site has been designed to detain the 100-year storm event at a 0.20 cfs/acre release rate. There is a total of 16.63-acres of contributing area that will be detained. This results in a total allowable release rate of 3.33 cfs ($Q_{allowable} = 16.63 \text{ acres} \times 0.2 \text{ cfs/acre} = 3.33 \text{ cfs}$) which is less than the pre-developed flow of 4.99 cfs.

Storage volumes to manage the 100-year event is calculated to be 27,166 cu.ft. See appendix B for calculations regarding pre-development areas and flows.

Refer to Appendix A Grading Plan for sub-basin delineation and associated detention structures..

5.0 CONCLUSIONS

The drainage system as outlined will safely convey storm water to and manage on-site storm water. In addition, the design will limit post-construction stormwater flow rates to less than pre-developed rates. All pipe sizes shown are adequate to convey runoff from the 100-year, 3-hour storm event and detention has been sized to manage the 100-year, 24-hr event.

Ensign Engineering

Brennan Rees, EIT
Design Engineer

Robert Q. Elder, P.E.
Principle

6.0 APPENDIX A – OVERALL GRADING PLAN / BASIN DELINEATION

7.0 APPENDIX B – RATIONAL METHOD CALCULATIONS

PRE-DEVELOPMENT						
<i>Hotel Site in St. George</i>						
PROJECT TITLE: St. George Hotel			PROJECT NUMBER: 10928			
LOCATION: St. George, Utah			DATE: 07/28/21			
OWNER: New England Alliance, LLC			SHEET: 1 OF 1			
DESIGNED BY: B. Rees		CHECKED BY: J. Nowell		APPROVED BY: R. Elder		
AREA CALCULATION						
HARDSCAPE AREA :		0.00	acres	runoff coeff. C :	0.95	
Offsite		9.54			0.15	
NATIVE AREA :		7.09	acres	runoff coeff. C :	0.50	
TOTAL AREA :		16.63	acres	WEIGHTED C :	0.30	
RUNOFF CALCULATION						
100 Year Design Storm						
				Allowable Runoff	cfs/ac	
				Total allowable runoff	cfs	
Time (min)	CA (Acres)	Precipitation (in/hr)	Time (sec)	Cumulative Runoff (ft ³)	Allowed Runoff (ft ³)	Storage (ft ³)
5	4.97	5.8	300	8,655	0	8,655
10	4.97	4.42	600	13,191	0	13,191
15	4.97	3.65	900	16,339	0	16,339
30	4.97	2.46	1,800	22,024	0	22,024
60	4.97	1.52	3,600	27,217	0	27,217
120	4.97	0.809	7,200	28,972	0	28,972
180	4.97	0.551	10,800	29,599	0	29,599
360	4.97	0.326	21,600	35,024	0	35,024
720	4.97	0.181	43,200	38,892	0	38,892
1440	4.97	0.1	86,400	42,974	0	42,974
Total Pre-development runoff (cfs) (Cumulative Runoff (ft³) / Time (sec)) =					0.50	
Total Pre-development total runoff (cfs/ac) =					0.03	

POST-DEVELOPMENT

Hotel Site in St. George



PROJECT TITLE: St. George Hotel		PROJECT NUMBER: 10928
LOCATION: St. George, Utah		DATE: 07/28/21
OWNER: New England Alliance, LLC		SHEET: 1 OF 1
DESIGNED BY: B. Rees	CHECKED BY: J. Nowell	APPROVED BY: R. Elder

AREA CALCULATION

HARDSCAPE AREA :	4.85	acres	runoff coeff. C :	0.95
Offsite	9.54			0.15
NATIVE AREA :	2.24	acres	runoff coeff. C :	0.50
TOTAL AREA :	16.63	acres	WEIGHTED C :	0.43

RUNOFF CALCULATION

100 Year Design Storm					Allowable Runoff	0.2	cfs/ac
					Total allowable runoff	3.330	cfs
Time (min)	CA (Acres)	Precipitation (in/hr)	Time (sec)	Cumulative Runoff (ft ³)	Allowed Runoff (ft ³)	Storage (ft ³)	
5	7.16	5.8	300	12,450	999	11,451	
10	7.16	4.42	600	18,976	1,998	16,978	
15	7.16	3.65	900	23,505	2,997	20,508	
30	7.16	2.46	1,800	31,684	5,994	25,690	
60	7.16	1.52	3,600	39,154	11,988	27,166	
120	7.16	0.809	7,200	41,678	23,976	17,702	
180	7.16	0.551	10,800	42,580	35,964	6,616	
360	7.16	0.326	21,600	50,385	71,928	0	
720	7.16	0.181	43,200	55,949	143,856	0	
1440	7.16	0.1	86,400	61,822	287,712	0	
STORAGE REQUIRED :						27,166	

Exhibit D
Geotechnical Report



GEOTECHNICAL INVESTIGATION

**BLACKSTONE HOTEL SITE
WEST PARCEL**

250 WEST BLACKRIDGE DRIVE

ST. GEORGE, UTAH

PREPARED FOR:

**BLACK RIDGE DEVELOPMENT, LLC
2001 PARK AVENUE
PARK CITY, UTAH 84060**

ATTENTION: OSCAR COVARRUBIAS

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EXECUTIVE SUMMARY

1. Two geologic hazards exist at the site which could impact the project. The hazards include the potential for landslide movement and heave due to the highly expansive soil and bedrock.
2. The stability of the slope, upon which the hotel is planned does not meet the minimum standard criteria for stability using saturated soil strengths. AGECE is conducting additional studies to evaluate the stability of the slope incorporating unsaturated strengths of the landslide and undisturbed materials.
3. Due to the expansive characteristics of the on site clay and bedrock, there is the potential for significant heave up wetting of the subgrade soil and bedrock. We understand that the foundation system is planned to be a deep foundation system consisting of caissons or micropiles to address this issue.
4. The subsurface investigation include the drilling of Six borings were drilled at the locations shown on Figure 2. The borings were drilled to depths of 24 to 124 feet below the existing ground surface. The borings were drilled entirely in the landslide deposit. The subsurface profile observed in the borings drilled generally consists clay mixed with rock (talus) overlying mudstone bedrock to the maximum depth investigated. There were layers of sandstone within the mudstone.
5. Groundwater was measured at an elevation of approximately 2,576½ feet, which is approximately 113 feet below the proposed "0" level of the hotel.
6. Detailed recommendations for subgrade preparation, grading, materials, foundations, pavement and drainage are included in the report.

SCOPE OF WORK

This report presents the results of a geotechnical investigation for the proposed Blackstone Hotel to be located in St. George, Utah, as shown on Figure 1. This report presents the subsurface conditions encountered and recommendations for the geotechnical aspects of the project.

Field exploration was conducted to obtain information on the subsurface conditions and to obtain samples for laboratory testing. Results of the field exploration and laboratory testing were analyzed to develop conclusions, professional opinions and recommendations for the proposed development.

This report has been prepared to summarize the data obtained during the study and to present our conclusions and recommendations based on the proposed construction and the subsurface conditions encountered. Design parameters and a discussion of geotechnical engineering considerations related to construction are included in the report. Our scope of work was conducted in general accordance with our proposal dated April 19, 2021 and signed May 19, 2021.

An additional slope stability report will be provided that will address the landslide hazard.

PREVIOUS STUDIES

AGEC has conducted various levels of studies on the property and adjacent properties since 1998. The following studies were referenced as a part of our study.

1. Blackridge Development, Geologic Hazard Assessment and Preliminary Geotechnical Recommendations, AGEC Project No. 980473, dated March 5, 1999.

2. Blackridge Drive Special Improvement District, AGEC Project No. 981307, dated April 25, 2000.
3. Grading Recommendations and West Slope Grading Recommendations, AGEC Project No. 2991121, dated September 15, 1999 and November 15, 1999.
4. Tech Ridge South Access Road, AGEC Project No. 2180187, dated October 19, 2018.
5. Black Stone Hotel, (east parcel), AGEC Project No. 2180187, dated December 14, 2018.
6. Black Stone Hotel Slope Stability Consultation, AGEC Project No. 2180187, dated September 23, 2019.

SITE CONDITIONS

The site consists of a previously graded parcel of undeveloped property in the Black Ridge Development in St. George, Utah. A large amount of soil and bedrock was removed from the site resulting in a relatively level site with a few stockpiles of soil.

The graded area has a significant cut slope along the west side of the property and a moderately steep cut slope along the south portion of the property. The graded area is generally lower through the center of the site with several piles of fill. Due to the lower area, storm water has not been allowed to drain off the property and is generally retained on the site.

A containment area of deposited pieces of asbestos pipe is also located on the property. The area is shown on a recorded survey map included in Appendix A of this report. The asbestos removal and disposal is not included in our scope of work.

There is a roadway, (250 West Street) located along the eastern portion of the site which slopes down from the north to the south to the intersection with Blackridge Drive. The slope, which was cut to grade the roadway is partially lined with stacked basalt boulders.

The property to the south consists of additional hillside and slopes from the top of Tech Ridge to the west down to Blackridge Drive.

The property immediately to the west, above the graded slopes up to the top of Tech Ridge (the previous airport property). The top of the ridge is a basalt capped ridge with talus or littered rocks along the upper slope.

The area to the north is relatively level with additional small knolls and bench areas.

Across 250 West Street to the east is vacant, previously graded property along with two office buildings.

Several photos of the site conditions are included in the appendix.

FIELD STUDY

An engineer from AGECEC visited the site on June 14-16, 2021 and observed the drilling of six borings as shown on Figure 2. The borings were drilled utilizing a truck-mounted rill rig equipped with augers and coring tools. Boring B-4 was drilled using a 2½ inch HQ core barrel with a carbide and carbonado bit using mud rotary techniques. The other borings were drilled with auger. The subsurface conditions were logged and samples were obtained.

In addition, five test pits were excavated on July 6, 2021 with a track excavator at the approximate locations shown on Figure 2.

SUBSURFACE CONDITIONS

The subsurface profile observed in the borings drilled and test pits excavated generally consists lean clay mixed with rock (talus) overlying mudstone bedrock, all within the landslide deposit. There were layers of sandstone within the mudstone.

Descriptions of each soil and bedrock type observed follow.

Fill - The fill varies from clayey gravel to lean/fat clay. It contains occasional cobbles and boulders. Consistency appears poorly compacted and is red to brown to purple in color. The clay varies from low to high plasticity. The cobbles and boulders are mixed with basalt and sandstone/shale bedrock chunks.

Lean/Fat Clay (CL/CH) - The lean clay is medium stiff to very stiff and is slightly moist. It is generally medium to highly plastic and red to brown to purple in color.

Clayey Gravel (GC) - The clayey gravel is dense and generally dry. The gravel is angular and generally contains cobbles and boulder size particles. It is brown to red in color. The basalt gravel is gray and black in color.

Mudstone Bedrock - The mudstone consists of lean to fat clay with varied amounts of sand. It is soft to moderately hard, slightly moist to very moist to wet, medium to high plastic, and is purple to red to grey in color.

Laboratory tests conducted on samples of the mudstone bedrock indicate in-place moisture contents ranging from 7 to 24 percent, in-place dry densities ranging from 93 to 126 pounds per cubic foot (pcf) and percent passing the No. 200 sieve (fines contents) ranging from 60 to 94 percent. Atterberg Limits tests indicate liquid limits ranging from 53 to 77 percent and plasticity indexes ranging from 37 to 54 percent. Water soluble sulfate tests indicate water soluble sulfate concentrations ranging from

370 to 11,707 ppm. Unconfined compressive strength tests indicate unconfined compressive strengths ranging from 1,540 to 6,900 psf.

Relatively undisturbed, one-dimensional consolidation tests conducted on samples of the mudstone indicate it is non to highly expansive when wetted under a constant pressure of 1,000 psf. Swell percentages up to 7½ percent were measured. Swell pressures ranging from approximately 3 to 13 kips per square foot (ksf) were also measured.

The Logs of Exploratory Borings are shown on Figures 3 to 6. Legend and Notes of the Exploratory Borings are shown on Figure 7. The laboratory test results are also shown on Figures 3 to 6 and are summarized in the Summary of Laboratory Testing, Table 1. The consolidation/swell test results are shown graphically on Figures 8 to 12.

SUBSURFACE WATER

The depth to groundwater was measured on August 11, 2021 (in deeper borings in the area) and found to be approximately 113 feet below the proposed "0" level of the hotel.

PROPOSED CONSTRUCTION

It is currently proposed to develop the site for a resort style hotel. The resort hotel will include a conference center, a restaurant, a gym as well as other amenities. There will also be a below grade swimming pool/spa on the east side of the hotel.

Architectural drawings of the development indicate the hotel will consist of a four-story structure with perimeter parking. The hotel will require excavation on the order of 10 to 15 feet below the existing grade. The front or east side of the hotel will expose the lower level, while the back or west side will be backfilled up to the main or 2nd level.

We understand the upper levels of the hotel will consist of conventional wood framing and we anticipate the below grade portions will utilize reinforced concrete construction. The swimming pool will use a reinforced gunnite shell.

Due to the presence of the underlying expansive soil and bedrock, the buildings and pool will be supported on deep foundation elements consisting of micropiles or drilled concrete piers in conjunction with grade beams and structural floors.

The development will also include underground utilities, asphalt concrete pavement and concrete retaining walls.

Additional details regarding the design, site improvements and building loads are currently not available. If the proposed construction, loading conditions, or grading are significantly different from what is described above, we should be notified so we may reevaluate our recommendations.

GEOLOGIC HAZARDS

Review of geologic hazard mapping by Lund et. al. (2008) and our experience in the area indicate the following conditions that could adversely impact the site:

A. Landslide

The site for the proposed new hotel is located in the lower section of a 300-foot high slope. The lower $\frac{2}{3}$ of the slope has been mapped as a landslide deposit. The ground surface of the landslide deposit slopes on average approximately 7:1 H:V (horizontal to vertical). The landslide deposit is estimated to extend up to a depth of approximately 200 feet below the existing ground surface at the site.

Old landslides are often marginally stable and may reactivate with new loadings or other changes in condition that tend to reduce their stability. With the site located on a landslide deposit, the subsurface conditions need to be carefully investigated and the stability of the slope evaluated under static and seismic conditions in order to estimate the risk. The risk of future movement needs to then be recognized, potential impact of ground movement identified, appropriate consideration given to remedial measures and then a decision made if the benefit is worth the risk.

B. Expansive Soil and Bedrock

Geologic mapping indicates that the site is situated where the Chinle Formation, which consists of highly expansive bedrock, is present. It is high plastic and also has a high shrink/swell susceptibility.

SLOPE STABILITY

A. Earlier Evaluations

Earlier studies by AGECEC on the stability of the east slope of Tech Ridge (slope on which the hotel is proposed) indicate that the stability of the slope is marginal.

Previous studies included the installment of five inclinometers. The inclinometers were installed in order to determine if movement is occurring on the slope, five inclinometers were installed in 2007 on the east slope of Tech Ridge extending to depths of 92 to 250 feet. When measured in 2018, four of the five inclinometer measurements indicated that there had been no movement since 2007. Ground movement was measured in 2011 at multiple depths in the inclinometer north of the proposed hotel site. The inclinometer was located immediately west of the vacant fast food restaurant located at 1090 South Bluff Street.

With the lack of measured movement in the four inclinometers over a time period of 10½ years, along with the lack of surficial evidence of movement, it appears that the portion of the slope, for this project, is currently maintaining its stability. Using the information available from our subsurface exploration, the laboratory test results and our experience in the area, it is our professional opinion that the stability of the slope is marginal even with the lack of apparent movement.

B. Site Specific Stability

Based on our experience in the area along with the information that we have gathered from studies on this landslide, we have analyzed the stability of the slope in the area of the proposed hotel.

1. Prior Slope Modifications

A number of years ago, a relatively large amount of soil and bedrock was removed from the area currently proposed for the hotel and placed on the lower portions of the slope (east of the hotel site). These changes have not significantly changed the stability of the slope.

2. Proposed Site Grading

The ground surface profile proposed for the hotel, does not change the stability of the slope.

3. Stability Analysis

The stability analysis indicates the following:

- a. A calculated factor of safety using saturated soil and bedrock strengths is near 1. A factor of safety on the order of 1.5 is typically desired for slopes upon which human occupied improvements are constructed when using saturated soil and bedrock strengths. Lower factors of

safety can be considered appropriate when weaker strengths are included in the analysis.

- b. Changes in the internal conditions and the surficial geometry modifications may improve or reduce the ability of the slope to maintain its stability.

4. Possible Impact of Current Conditions

Assuming that strength characteristics of the landslide mass have improved (soils behaving as if they are unsaturated) since the ancient landslide movements occurred, overall calculated stability of the slope is estimated to increase approximately 20 to 30 percent.

The stability under a seismic event, assuming the improved strength characteristics described above, is estimated to have a safety factor of less than 1. A major seismic event could potentially result in displacement of the slope.

The potential increase in the calculated safety factor using un-saturated soil strength needs further evaluation and substantiation in order to quantify this improvement.

5. Other Mitigating Factors

If the decision is made to continue with further design and potential construction of the hotel at this location, we recommend that the following items be considered:

- a. Minimize, if not eliminate the introduction of moisture into the subgrade. This could be accomplished by,

- i. Collecting and transporting surface drainage off of the site in water tight storm drainage systems. This type of construction is not standard and therefore it would require specific attention to verify that the improvements are water tight.
 - ii. Water ways should be lined to prevent seepage into the ground.
 - iii. Measures need to be taken to eliminate the potential for water to pond on the slope.
- b. Positive steps would need to be taken on other improvements on the landslide mass to help maintain the overall stability of the slope.

RECOMMENDATIONS

Based on our experience in the area, subsurface conditions encountered, laboratory test results, and proposed construction, the following recommendations are provided:

A. Site Grading

Based on the subsurface conditions observed and the proposed grading, the following recommendations are provided.

1. Subgrade Preparation
 - a. General: Prior to placing site grading fill or concrete, the existing sparse vegetation should be removed. The piles of fill and boulders should also be removed.
 - b. Flatwork and Pavement Support: We recommend removing the existing fill, which appears to vary from 1 to 4 feet prior to placing additional fill in

these areas. We anticipate improvements (pool and decking) will be supported on deep foundation elements.

The Asbestos Deposit area subgrade preparation will be addressed by others.

We recommend flatwork and pavement be supported on an appropriate thickness of non-expansive, low permeable fill. The thickness of low permeable fill should be based on the acceptable magnitude of potential differential vertical movement.

The low permeable fill layer is intended to reduce the risk of wetting the expansive soil/bedrock. Strict site drainage is critical to the satisfactory performance of flatwork, pavement and other movement sensitive surface supported features. The estimated potential surface heave associated with corresponding overexcavation depths are provided in the following table.

Thickness of Non-Expansive Low Permeable Fill (feet)	Estimated Potential Differential Vertical Slab Movement (inches)
0	3½ to 5
2	2½ to 3¾
4	2 to 3
6	1½ to 2½
8	1¼ to 2
10	1 to 1½
12	¾ to 1¼
14	¾ to 1
16	½ to ¾

As a minimum, we recommend at least 5 feet of non-expansive, low permeable fill be placed above the mudstone bedrock in areas which will support flatwork or pavement. The risk of heave potential may also be reduced by increasing the overexcavation depth and providing strict drainage.

Buildings: Buildings will be supported on deep foundation elements with raised structural floors. Therefore, removal of fill or mudstone is not critical under building areas unless slab-on-grade floors will be considered.

Lateral Extent: All overexcavation and subgrade preparation procedures should extend at least 5 feet beyond the perimeter of the proposed construction. Excavations should be located by survey.

2. Excavation/Earthwork

Excavation of the on-site soil and soft bedrock at the site may be accomplished with typical excavation equipment. The drilling of the soil and bedrock encountered to the depths investigated may be performed with typical rotary drilling equipment. Difficulty may be encountered when drilling through cobbles and boulders which are present in the fill and talus. Loss of drilling fluid may also occur due to the presence of voids in the fill.

3. Grading Slopes and Trenches

Permanent cut slopes excavated into the overburden soils should be cut no steeper than 2:1 (Horizontal:Vertical). Permanent cut slopes into the soft mudstone bedrock should be cut no steeper than 1:1 (Horizontal:Vertical).

It has been our experience that the mudstone surface will dry to a “pop corn” texture and ravel resulting in deposition of material at the toe until an approximate 2½:1 slope is achieved over time. To improve performance of steeper cut slopes in the mudstone, slope facing should be considered along

with strict site drainage away from the slope and implementation of desert landscaping.

Facing could consist of large stacked boulders, precast concrete blocks or reinforced gunnite facing attached with soil nails. A drain should also be constructed behind the facing to reduce the potential for water accumulation and buildup of hydro-static pressure. If these options will be considered, AGECE should be contacted to provide further consultation.

Unretained fill slopes constructed with properly compacted on-site soil should be graded no steeper than 2:1 (horizontal to vertical). Slopes should include benches in accordance with the 2018 IBC. The cut and fill slopes will be highly susceptible to erosion, particularly resulting from run off from the adjacent slopes. Water should be directed around slopes using drainage swales to reduce potential erosion.

Fill slopes should be graded by overbuilding and then cutting them back to the desired grade to provide a compacted slope face. Fill placed on existing slopes steeper than 4:1 (horizontal to vertical) should be placed using a benching procedure. Benches should be of sufficient width to allow adequate area for the compaction equipment.

Utility trenches excavated in the on-site soils should be excavated in accordance with OSHA requirements using a OSHA Soil Class C (1½:1 Horizontal:Vertical) for overburden soils and soft mudstone. Steeper trenches may require the use of shoring or a trench box to provide as safe work environment. Safe trench excavation is the responsibility of the contractor.

4. Compaction

Compaction of fill materials placed at the site should equal or exceed the following percentages when compared to the maximum dry density as determined by ASTM D-698 or ASTM D-1557:

Area	Percent Compaction ASTM D-698*	Percent Compaction ASTM D-1557**
Subgrade	95	90
Site grading	95	90
Slabs (base course)	Does not apply	95
Utility trench backfill	95	90
Wall Backfill	95	90

* Fine-grained low permeable fill/processed mudstone.

** Granular site grading fill/granular low permeable fill/structural fill.

Prior to placing approved fill, the exposed subgrade should be moisture conditioned and compacted as recommended above. Fill should be placed in lifts which do not exceed the capability of the equipment used. Generally 6 to 8 inch lifts are adequate for heavy rubber tire equipment. Lift thicknesses should be reduced to 4 inches for hand compaction equipment.

Fill materials should be properly moisture conditioned prior to placement. Fine-grained soil, low permeable fill and processed mudstone or mudstone/sand mixture should be moisture conditioned to 2 to 4 percentage points over the optimum moisture content as determined by ASTM D-698. Granular soil should be moisture conditioned to within 2 percentage points of the optimum moisture content as determined by ASTM D-1557. Each lift of fill placed should be tested to verify moisture content and compaction are appropriate.

5. Materials

Recommendations for imported fill types follow. If structural floors are used, the type of fill placed under the buildings is not critical. Imported fill should be non-expansive and meet the following recommendations.

Area	Fill Type	Recommendations
Footings/pads/site	Structural and site grading fill	-200 < 35%, LL < 30% Maximum size: 4 inches Solubility < 1%
Under slabs/flatwork	Base course	-200 < 12% Maximum size: 1 inch
Drains	Gravel	1 inch max size -200 < 5%

-200 = Percent Passing the No. 200 Sieve

LL = Liquid Limit

The existing site grading fill is variable in plasticity and portions are expansive. The on site fill is suitable for use as site grading fill, wall backfill and utility trench backfill in areas which will support hard surfaces and pavement at depths greater than 5 feet below the finished grade.

If portions of the onsite fill appear low plastic, it may also be suitable for use as fill extending to the surface, but observation and additional testing would be necessary. Alternatively, the fill may be mixed with imported, non-expansive fill or imported soil would be placed to support in the upper 5 feet of the profile.

The on-site mudstone is not suitable for use wall backfill or as fill in structural areas or areas which will support hard surfaces and pavement. It may be used as fill in landscape areas or it should be disposed of offsite.

The potential impact of the expansive characteristics of the underlying clay and mudstone can be reduced by protecting the soil and bedrock from becoming wet. Placement of relatively low permeable fill above the expansive materials can help reduce the possibility of water coming in contact with the expansive materials. The low permeable fill supporting these areas is intended to provide a low permeable zone to reduce the potential for water to infiltrate and wet the underlying subgrade. If the expansive subgrade below the low permeable fill is wetted, surface heave will occur. This will result in reduced flatwork and pavement life.

Low permeable fill used to replace removed mudstone should meet one of the following set of criteria.

Liquid Limit (%)	Percent Passing the No. 200 Sieve
45 +	15-20
30-45	20-40
0-30	30-100

The onsite fill soil mixed with some imported, non-expansive, granular fill will likely meet the low permeable fill requirements at a ratio of 1 part granular soil to one part of the onsite fill. The mixture should be tested by AGECE to verify its engineering characteristics prior to use as fill.

6. Drainage

The following drainage recommendations should be implemented to reduce the potential for wetting of the underlying expansive soil and bedrock.

- a. Positive site drainage away from foundations should be maintained during the course of construction.

- b. After construction has been completed, positive drainage of surface water away from the buildings should be maintained throughout the life of the structure. We recommend a minimum slope of 6 inches in the first 10 feet from the perimeter of the structure. In no case should water be allowed to pond adjacent to foundations.
- c. Desert landscaping, which requires no water, should be implemented. Grass should not be used. Rock mulch and turf are recommended.
- d. Rain gutters should be utilized and roof down spouts should be piped to discharge to the storm drain system. This will require design of buried discharge pipes with flexible watertight connections.
- e. If planters are used, they should be underlined by a impermeable membrane which is sloped to a discharge pipe which discharges water to storm drain.
- f. We also recommend that desert landscaping, which requires no water, be used adjacent to concrete walls and masonry walls or other cement containing elements which will be backfilled. Further, the below grade portions of walls/fences which are backfilled with soil should be protected with an impermeable membrane and a subsurface drain. A gravel covered, perforated PVC pipe should also be placed at the base of the wall to carry water to a discharge point. This is intended to reduce the potential for salt weathering on concrete/masonry.

7. Subsurface Drainage Protection

As a precautionary measure, the crawl space and below grade portions of the hotel and parking structure should be protected from potential infiltration of surface water by constructing a perimeter subsurface drain around the crawl space of the building.

The drain system should consist of a 1 foot wide trench excavated around the outside perimeter of the grade beam/walls supporting the buildings. The trench should be excavated to a depth of at least 2 feet below the crawl space depth. A 4-inch perforated PVC pipe should be placed in the bottom of the trench and covered with free-draining gravel to within 2 feet of the ground surface. Prior to backfilling, Mirafi 140N filter fabric should be placed over the gravel. The perimeter drain trench and the grade beams should be backfilled with properly compacted, low permeable fill above the gravel to reduce the potential for surface water infiltration directly to the crawl space between the beams and the trench.

The drain pipe should be placed in the bottom of the drain trench and sloped at a 2 percent grade (minimum) to drain by gravity or to a sump and discharge to the storm drain system.

B. Foundations

We recommend the proposed hotel, parking structure, pool and pool decking be supported on deep foundation elements which will extend support of the structures through any existing fill and the active zone of the expansive materials down to the underlying "non-active" mudstone. The deep foundation elements should extend at least 30 feet into the underlying expansive mudstone and be designed by a structural engineer according to the parameters provided in Table 2 of this report. Grade beams should be utilized to span the distance between piers and support a structural floor with a crawl space below. The following recommendations should be followed for the design and construction of the deep foundation system.

1. Micropile Design

- a. Minimum length = 30 feet.
- b. End bearing should not be considered for micropile capacity. Capacity of micropiles will be developed through skin friction.

- c. The micropiles should be structurally reinforced to resist tensile forces on the pile due to upward skin friction (uplift) which could result if the mudstone is wetted and swells. The tensile force may be calculated utilizing at least 10 feet of pile length with an ultimate skin friction of 1,000 psf. A "greased PVC bond breaker" may also be considered to reduce uplift forces on the micropiles.
- d. The micropile should be designed for a minimum dead load of 3,000 pounds. If the minimum dead load cannot be met and piles are spaced as far apart as practical, the length should extend beyond the minimum penetration to make up the dead load deficit. This can be accomplished by using the appropriate resisting ultimate skin friction as given in Table 2.
- e. Care should be taken to assure the micropiles are not over-sized (mushroomed) at the ground surface, which could provide an area where swelling soil/rock could exert uplift forces on the piles.
- f. The water cement ratio of the grout should be on the order of 0.45 to 0.50. This should be verified during construction using a grout scale to verify the grout has a specific gravity on the order of 1.8 to 1.9. The grout volume should be recorded for each micropile constructed to ensure the appropriate volume is placed.
- g. Grout should be placed in the micropiles the same day they are drilled using a tremmie pipe which extends to the bottom of the drill hole. The tremmie pipe should be raised as the grout is placed to ensure the element is free of voids. If water enters the drill holes, it would be necessary to place grout immediately after the drill hole is completed using a tremmie. The tremmie will also displace water out of the hole

as grout is placed. Failure to place grout the day of drilling may require re-drilling for additional bedrock penetration.

- h. Micropile holes should be observed during drilling to verify depth. If air rotary methods are used, they can also be inspected to verify caving does not occur below the ground surface which could also result in additional uplift forces.
- j. "Centralizers" should be used on the micropile steel reinforcing bar at approximately a 5 to 7 foot spacing to ensure the appropriate grout cover on the reinforcing.

2. Drill Pier Design

- a. Minimum length = 30 feet.
- b. Capacity of drilled piers may consider end bearing and skin friction to determine capacity. The end bearing capacities provided in Table 2 are allowable and include a factor of safety of 2.0.
- c. The drilled piers should be structurally reinforced to resist tensile forces on the pier due to upward skin friction (uplift) which could result if the mudstone is wetted and swells. The tensile force may be calculated utilizing at least 20 feet of pier length with an ultimate skin friction of 1,000 psf.
- d. The foundation elements should be designed for a minimum dead load of 10,000 psf. If the minimum dead load cannot be met and piers are spaced as far apart as practical, the length should extend beyond the minimum penetration to make up the dead load deficit. This can be accomplished by assuming an appropriate resisting ultimate skin friction as given in Table 2.

- e. Care should be taken to assure the drilled piers are not over-sized (mushroomed) at the ground surface, which could provide an area where swelling soil/rock could exert uplift forces on the piers.
- f. The concrete volume should be recorded for each pier constructed to ensure the appropriate volume is placed.
- g. Concrete should be placed in the piers the same day they are drilled using a tremmie pipe which extends to the bottom of the drill hole. The tremmie pipe should be raised as the concrete is placed to ensure the element is free of voids. If water enters the drill holes, it would be necessary to place concrete immediately after the drill hole is completed using a tremmie. The tremmie will also displace water out of the hole as concrete is placed. Failure to place concrete the day of drilling may require re-drilling for additional bedrock penetration.
- h. Drilled pier holes should also be inspected to verify caving does not occur below the ground surface which could also result in additional uplift forces. Casing the drill hole may be necessary if the caving occurs to ensure a straight shaft with a consistent diameter. Pier holes must also be inspected to ensure they are cleaned and free of loose or disturbed soil.
- i. Concrete coverage should be verified on reinforcing cages by placing spacers on the outside of the reinforcing cage to ensure it is not touching the drill hole side wall.

C. Floor System and Construction Details

1. Structural Floor/Beams/Crawl Space

Structural floors (including entries, porches and patios), supported on grade beams should be supported on deep foundation systems.

We recommend that a minimum 24-inch crawl space be provided below structural floors. Proper ventilation of the crawl space is critical and the ventilation system should be designed by the appropriate design professional.

A minimum 12-inch void space should be provided below the grade beams to allow the expansive mudstone to swell without exerting uplift forces on the grade beams. The void space should be protected prior to backfilling the exterior grade beams to ensure the void space is not compromised. We also recommend low permeable fill be used as backfill adjacent to the beams to reduce the potential for infiltration and migration of water to the crawl space. Proper compaction and moisture conditioning of the backfill is critical.

2. Vapor Barrier

A vapor barrier should be placed on the bottom of the crawl space, attached to the exterior grade beams using a water resistant attachment system to reduce moisture in the crawl space.

3. Plumbing and Utility Lines

Plumbing lines and utility lines should be hung from the floor when a pier/pile foundation system is utilized. Plumbing lines should have flexible joints where connections are made. A 12-inch void space should also be provided below plumbing where it crosses below grade beams.

4. Exterior Flatwork

The owners should be aware that exterior flatwork may move where expansive materials are present. To reduce concerns for flatwork movement causing distress to the structures, the flatwork should be separated from the main structure and allow for unrestrained vertical movement. This generally is accomplished by providing a construction joint between the concrete flatwork and the wall/slab with a heavy felt board.

A 4-inch layer of properly compacted base course should be placed below slabs to provide a firm and consistent subgrade and to promote even curing of the concrete.

Use of pavers or compacted decorative gravel in lieu of concrete flatwork may also be considered. Pavers or gravel will allow for some movement if the supporting subgrade heaves.

5. Exterior Porches

Exterior porches, patios and overhangs that are structurally tied to the remainder of the building should be supported by the same foundation system as the building.

D. Pool Construction Details

1. Pool Structural Floor

The shell of the pool should be structurally reinforced to span the distance between the piers. We recommend a minimum 2- inch void be provided below the pool to prevent expansive materials from exerting uplift forces on the pool. A void box should be placed in the bottom of the pool excavation prior to placing plumbing and rebar, or spraying gunnite to allow for construction above the void below the pool.

As an alternative, the bottom of the pool may be constructed as a structural floor supported on the piers using V-decking with a crawl space (This is the preferred method). The raised structural floor should be supported on grade beams. We recommend that a minimum 24-inch crawl space and access be provided below the structural floor. A 12-inch void space should be provided below the grade beams to allow the expansive materials to swell without exerting uplift forces on the grade beams. Subsequent to removing concrete forms from grade beams, the void should be inspected by AGECE to ensure the proper void space is provided.

2. Pool Plumbing and Utility Lines

Plumbing lines and utility lines should be hung from the floor when a pier foundation and structural floor system is utilized or placed above the void box (if used) to prevent crushing of the piping or connections.

Plumbing lines should have flexible joints where connections are made. A 12-inch void space should also be provided below plumbing where it crosses below grade beams. Exterior plumbing lines may be run inside a larger pipe conduit to allow for some movement without negatively affecting the plumbing lines. Plumbing lines should be tested prior to operation.

3. Pool Decking

Due to the presence of the underlying fill and expansive materials, we recommend the pool decking consist of a raised structural slab supported on deep foundation elements.

If slab-on-grade pool decking will be considered, the subgrade supporting the decking should be prepared as recommended in the Subgrade Preparation section of this report for "Flatwork". The owner should be aware that exterior

flatwork will likely heave (as stated in the Subgrade Preparation section of this report).

Slab-on-grade pool decking should be separated (free vertical movement) from the main structure of the pool and should not be tied directly to the pool shell or to adjacent buildings. This is recommended to allow for unrestrained uplift of the pool decking so as not to affect the main structure of the pool. This generally is accomplished by providing a construction joint between the concrete flatwork and pool or building with a heavy felt board.

The pool decking should be sloped away from the pool to provide adequate drainage. We also recommend constructing a water-tight concrete gutter system (depression) or drain around the pool decking to catch runoff water, divert it around the pool, and discharge off site. Joints or seams in the pool decking should be sealed to reduce infiltration of surface water.

A 4-inch layer of properly compacted base course should be placed below slabs to provide a firm and consistent subgrade and to promote even curing of the concrete.

E. Lateral Earth Pressures

1. Retaining Structures

The following equivalent fluid weights are given for design of subgrade walls and retaining structures. The active condition is where the wall moves away from the soil. The passive condition is where the wall moves into the soil and the at-rest condition is where the wall does not move. We recommend basement walls or below grade beams be designed in an at-rest condition. Walls where lateral movement is not tolerable should also be designed in the at-rest condition.

The values listed below assume a horizontal surface adjacent the top and bottom of the wall.

Soil Type	Active Condition		At-Rest Condition		Passive Condition
	Equivalent Fluid Weight	Earth Pressure Coefficient	Equivalent Fluid Weight	Earth Pressure Coefficient	Equivalent Fluid Weight
Imported Granular Backfill	35 pcf	0.28	55 pcf	0.44	325 pcf
On-site Clayey Fill Soil	45 pcf	0.38	65pcf	0.54	225 pcf

The above values account for the lateral earth pressures due to the soil and level backfill conditions and do not account for hydrostatic pressures or surcharge loads.

Lateral loading should be increased to account for surcharge loading using the appropriate earth pressure coefficient and a rectangular distribution if structures are placed above the wall and are within a horizontal distance equal to the height of the wall. If the ground surface slopes up away from the wall, the equivalent fluid weights should also be increased.

Care should be taken to prevent percolation of surface water into the backfill material adjacent to the retaining walls. The risk of hydrostatic buildup can be reduced by placing a subdrain behind the walls consisting of free-draining gravel wrapped in a filter fabric.

2. Seismic Conditions

Under seismic conditions, the equivalent fluid weights should be modified as follows according to the Mononobe-Okabe method assuming a level backfill condition:

Lateral Earth Pressure Condition	Seismic Modification (2% PE in 50 yrs)
Active	9 pcf increase
At-rest	no increase
Passive	18 pcf decrease

The seismic increases and decrease assume a peak ground acceleration (PGA) of 0.23g and a 1 second period ground acceleration (S_1) of 0.17g using the Mononobe-Okabe pressure distribution.

3. Safety Factors

The values recommended assume mobilization of the soil to achieve the assumed soil strength. Conventional safety factors used for structural analysis for such items as overturning and sliding resistance should be used in design.

F. Seismicity, Liquefaction and Faulting

1. Seismicity

Listed below is a summary of the seismic site parameters.

Description	Value - Seismic Event (2% PE in 50 yrs)
2018 IBC Seismic Site Class	C
PGA	0.23g
S_s	0.51g
S_1	0.17g
F_a	1.38
F_v	2.27
F_{PGA}	1.37

2. Seismic Design Considerations

Based on the subsurface conditions anticipated, a ground motion hazard analysis as per ASCE 7-16 is not required by the 2018 International Building Code. A 10 percent decrease in design seismic load might be achieved if shear wave velocities are measured on site. If this is requested, we propose to perform a Refraction Microtremor (ReMi) survey to measure subsurface shear wave velocity

3. Liquefaction

Based on subsurface conditions encountered in the boring, the subsurface soils observed are non-liquefiable during a severe seismic event.

4. Faults

Based on review of available geologic literature, there are no mapped faults extending through the site.

G. Soil Corrosion

Our experience in the area and laboratory test results indicates the on-site soil and bedrock contain sulfate concentration corresponding to a "moderate" to "severe" potential sulfate attack on concrete exposed to these materials. Therefore, we recommend concrete elements that will be exposed to the on-site soils be designed in accordance with provisions provided in the American Concrete Institute Manual of Concrete Practice (ACI) 318-11. Tables 4.2.1 and 4.3.1 of ACI 318-11 should be referenced for design of concrete elements utilizing a Sulfate Exposure Class of S2, and a sulfate exposure severity of "severe".

Consideration should also be given to cathodic protection of buried metal pipes. We recommend utilizing PVC pipes where local building codes allow.

H. Pavement

Based on the subsoil conditions encountered and the laboratory test results, the following recommendations are given:

1. Analysis

The flexible pavement analysis is based on AASHTO design methods and a 20-year design life. The rigid pavement is based on AASHTO and PCCA design methods and a 20-year design life.

2. Subgrade Support

Our design assumes a properly prepared subgrade as recommended in the Subgrade Preparation section of this report. The subgrade preparation varies depending on the location on the site. Prior to base course or pavement or grading fill, the subgrade should be prepared as recommended in the Subgrade Preparation section of this report.

3. Pavement Thickness

Based on the anticipated traffic, the following pavement sections are recommended.

Area	Rigid Pavement		Flexible Pavement	
	Portland Cement (inches)	Base Course (inches)	Asphaltic concrete (inches)	Base Course (inches)
Light Duty Parking	--	--	2½	8
Entrances and dumpster pad	4	4	3	12

4. Pavement Materials

a. *Flexible Pavement (Asphaltic Concrete)*

The pavement materials should meet AASHTO, St. George City specifications for gradation and quality. The pavement thicknesses indicated above assume that the base course is a high quality material with a CBR value of at least 80 percent. Asphalt material should have a Marshal stability of at least 1,800 pounds.

b. *Rigid Pavement (Portland Cement Concrete)*

The pavement thicknesses indicated assumes that the concrete will have a 28-day compressive strength of at least 4,500 psi.

5. Jointing

Joints for concrete (rigid) pavement should be laid out in a square or rectangular pattern. Joint spacings should not exceed 30 times the thickness of the slab. The depth of joints should be at least one-quarter of the slab thickness.

6. Drainage

The collection and diversion of drainage away from the pavement surface is extremely important to the satisfactory performance of the pavement section. Proper drainage should be provided. We further recommend proper pavement maintenance to extend the pavement life.

I. Design Review/Construction Observation

Design review and construction observations are recommended to verify the recommendations in this report are properly implemented and followed. In order to provide a foundation compliance report as required by the St. George City, we recommend the following be done as a minimum:

1. Review the foundation plan and design to verify the geotechnical aspects of the design were correctly and properly included.
2. Observe on a full time basis the drilling and construction of the micropiles and piers including reinforcement and concrete placement.
3. Observe the reinforcing steel in the grade beams.
4. Verify the proper void space is provided below the grade beams.
5. Conduct special inspections as required by the St. George City, the 2018 International Building Code and the Structural engineer.

The above observations will be conducted by qualified individuals and according to standard test methods (ASTM, ICBO, ICC, etc.).

LIMITATIONS

This report has been prepared in accordance with generally accepted soil and foundation engineering practices in the area for the use of the client for design purposes. The conclusions and recommendations included within the report are based on the information obtained from the borings drilled, geologic literature, laboratory test results, engineering analysis and our experience in the area. Variations in the subsurface conditions may not become evident until additional exploration or excavation is conducted. If the subsurface soil or groundwater conditions are found to be different from what is described in this report, we should be notified to reevaluate the recommendations given.

If you have any questions or we can be of further service, please call.

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.



G. Wayne Rogers, P.E.

Reviewed by: Arnold DeCastro, P.E.

Reviewed By: James E Nordquist, P.E., D.G.E.

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GEOLOGIC LITERATURE REFERENCES

"Geologic map of the St. George quadrangle, Washington County, Utah", Hayden, J.M., Willis, G.C., 2011, Utah Geological Survey map, 251DM.

"Geologic hazards and adverse construction conditions, St. George-Hurricane Metropolitan Area, Washington County, Utah", Lund, W.R., Knudsen, T.R., Vice, G.S., and Shaw, L.M., 2008, Utah Geological Survey Special Study 127, variously paginated, 14 plates, scale 1:24,000.



Approximate site location

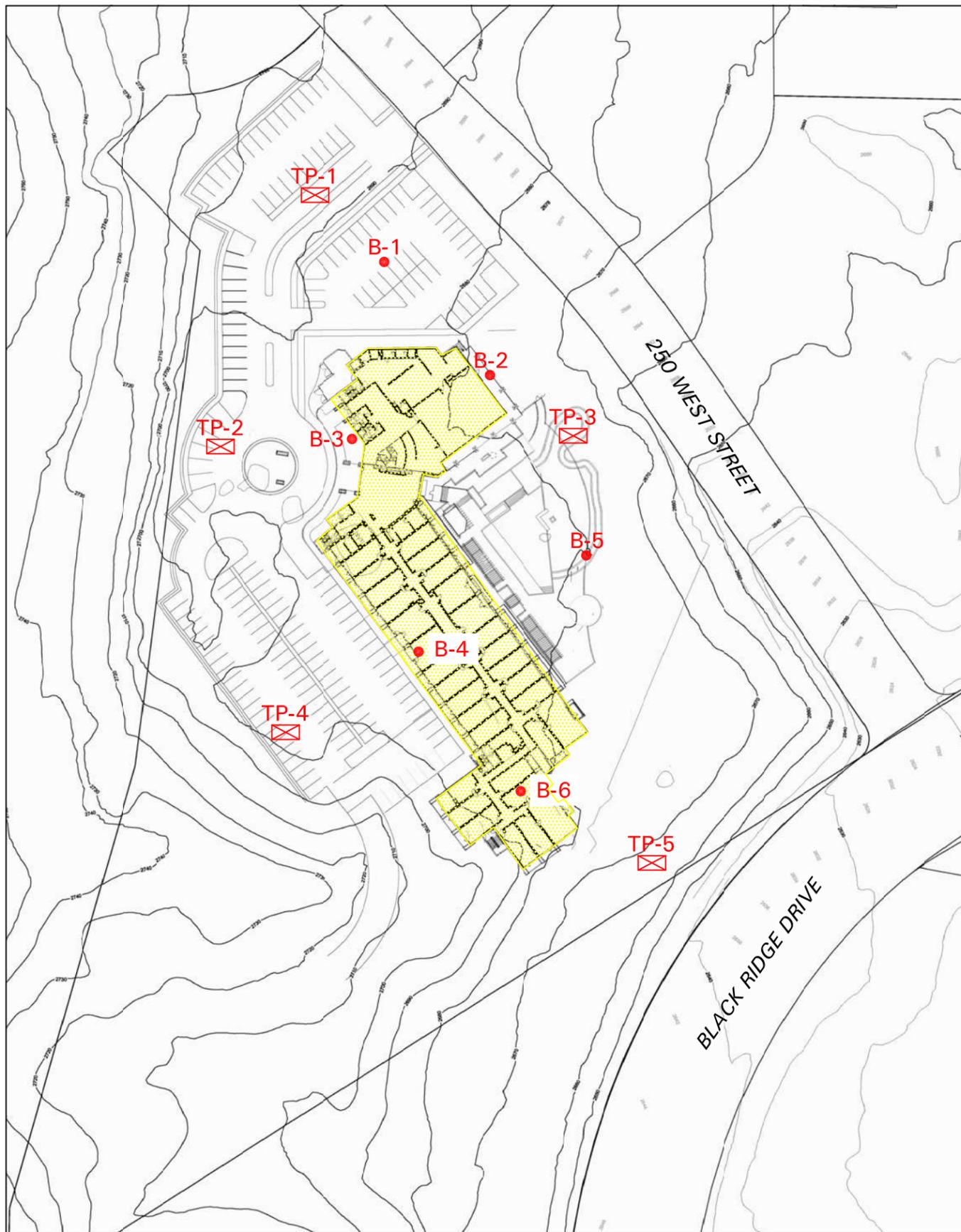
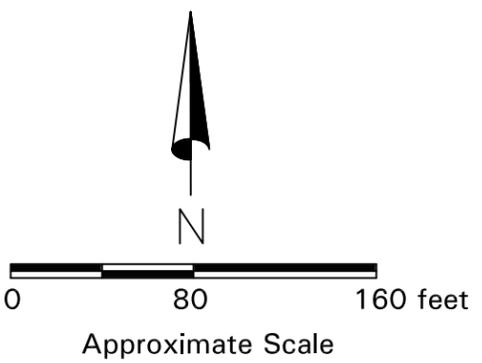


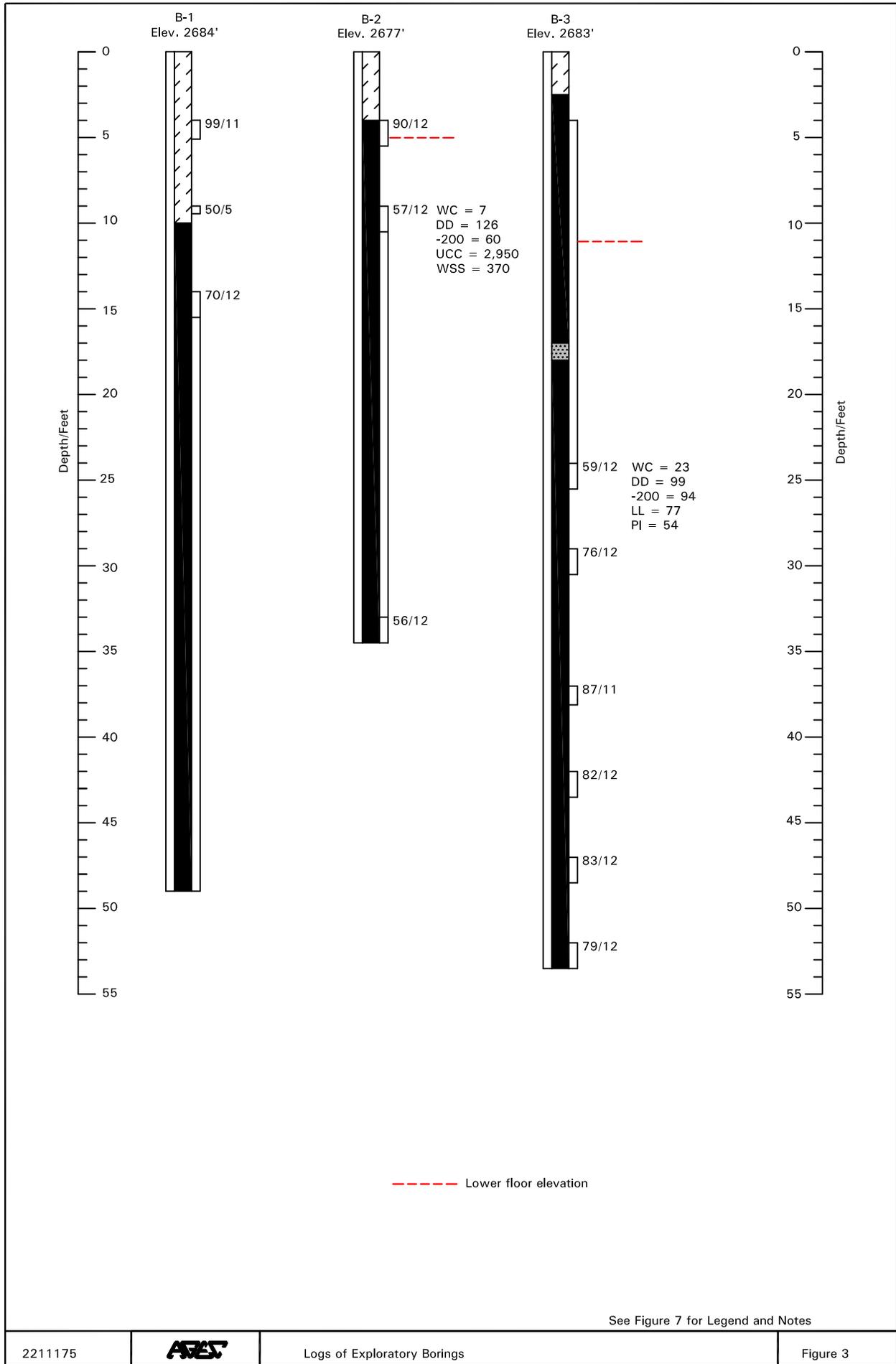
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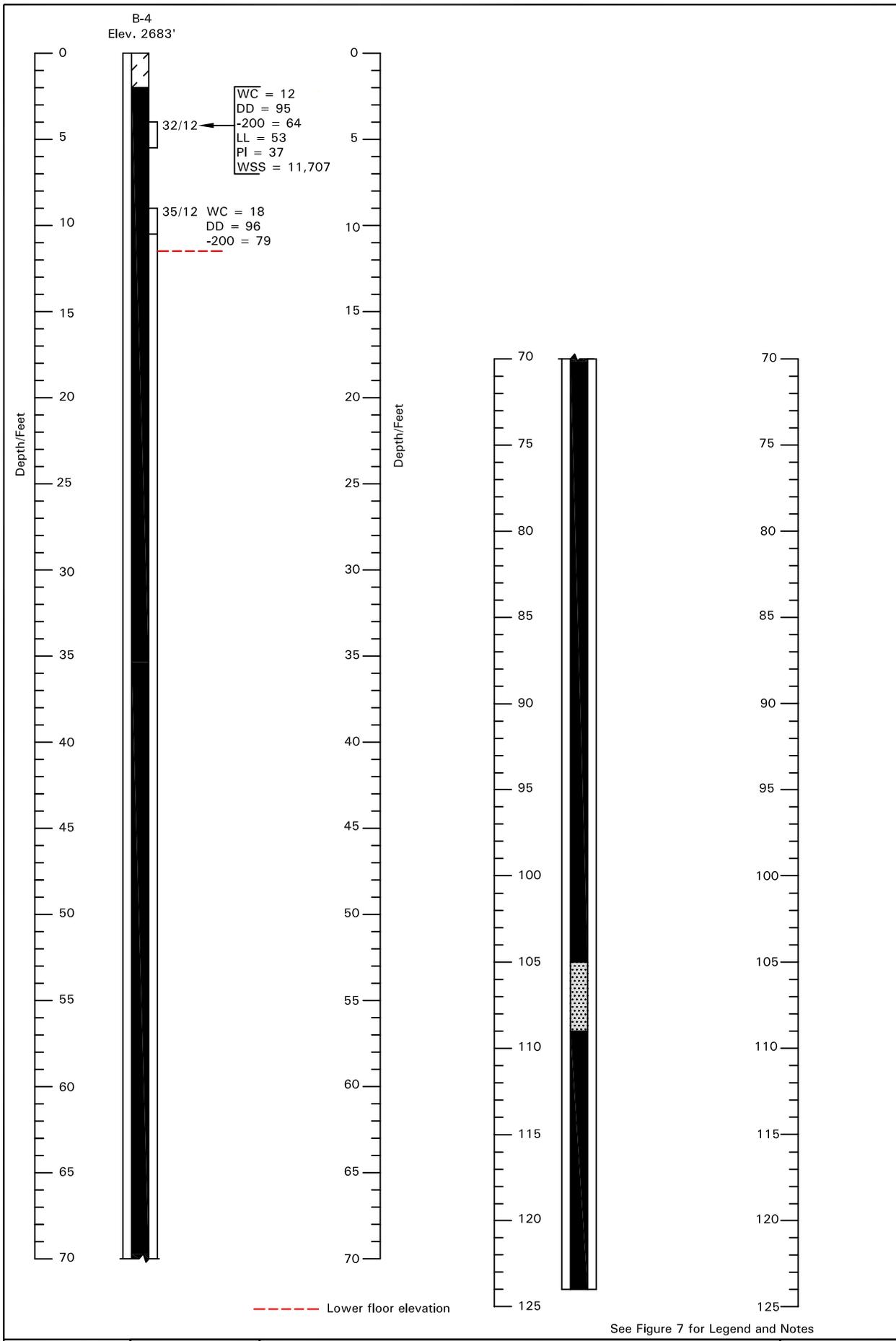
BLACKSTONE HOTEL
WEST PARCEL
ST. GEORGE, UTAH

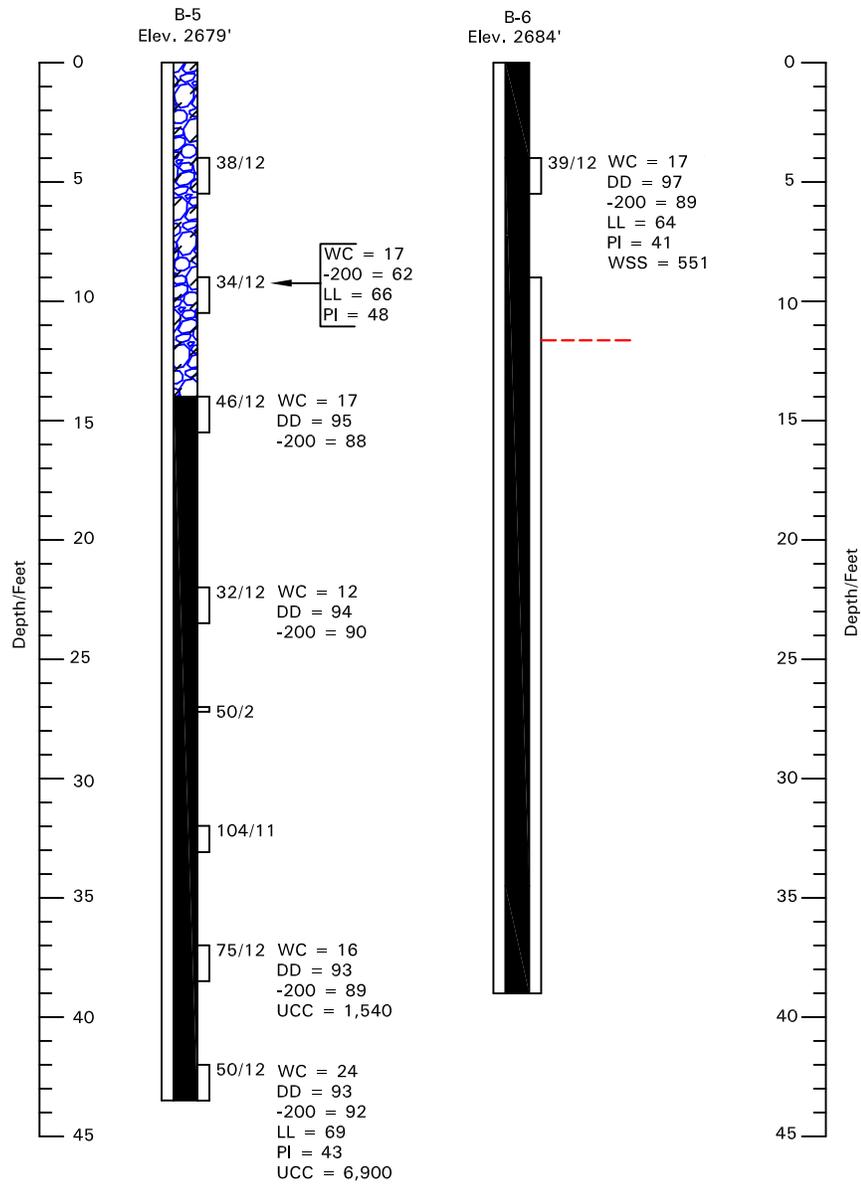
BLACKSTONE HOTEL WEST PARCEL
ST. GEORGE, UTAH

- Approximate boring location
- ⊠ Approximate test pit location
- ▨ Proposed Hotel

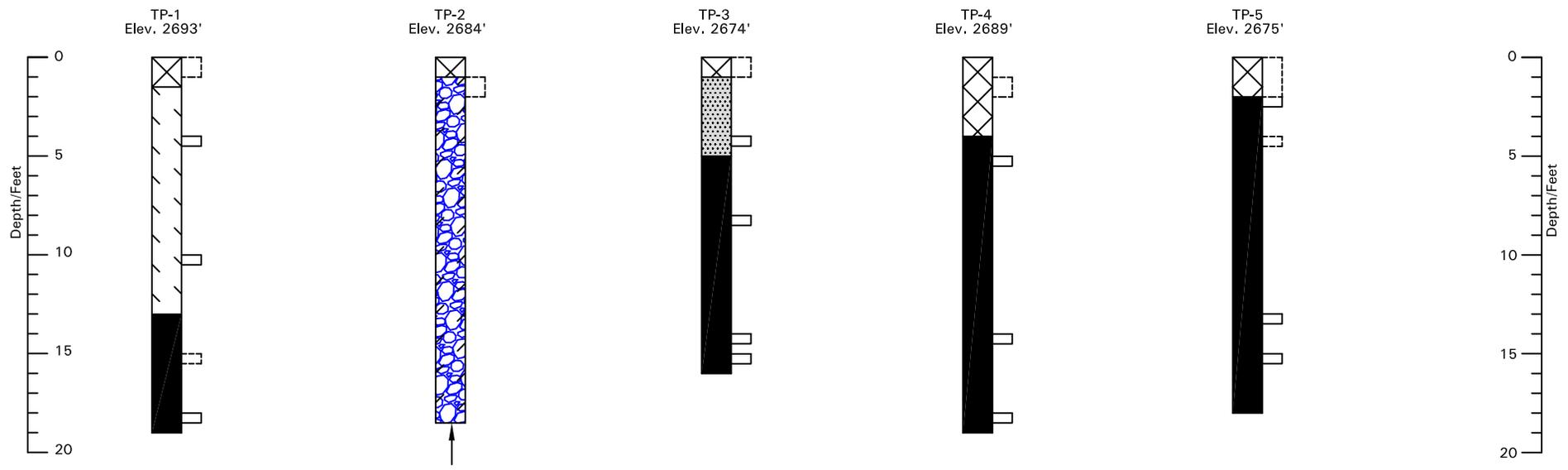








See Figure 7 for Legend and Notes



See Figure 7 for Legend and Notes

LEGEND:



Fill; varies from clayey gravel to lean/fat clay, poorly compacted, dry, and red-brown to purple in color.



Landslide deposit - Lean/Fat Clay (CL/CH); medium stiff to very stiff, weathered mudstone, slightly moist, medium to highly plastic, and brown, red to slightly purple in color.



Landslide deposit - Clayey Gravel (GC); dense, dry, contains angular gravel up to boulder size, and brown to red in color. The gravel is slightly gray to black basalt.



Landslide deposit - Mudstone Bedrock; consists of lean to fat clay with varied amounts of sand. It is soft to moderately hard, slightly moist to wet, and purple, grey, red-brown in color.



Landslide deposit - Sandstone Bedrock; moderately hard, contains layers of clay, dry to wet and grey to brown to red in color.



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 slotted 1 inch PVC pipe installed in the boring to the depth shown.



Indicates core sample taken.



Indicates practical excavator refusal.



Lower floor elevation (Elevation 2671 feet)

NOTES:

1. The borings were drilled on June 14, 15, and 16, 2021 with a truck mounted drill rig equipped with 8-inch hollow-stem augers. The test pits were excavated on July 6, 2021 with a track excavator (CAT 336).
2. The locations of the borings and test pits were located by a hand held GPS.
3. The elevations of the borings and test pits were determined by interpolations of the contours on the site plan provided.
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 logs represent the approximate boundaries between material types and the transitions may be gradual.
6. Free water was not encountered in the borings or test pits at the time of drilling/excavation.
7. WC = water content (%);
DD = dry density (pcf);
+ 4 = percent retained on the No. 4 sieve;
-200 = percent passing No. 200 sieve;
LL = liquid limit (%);
PI = plasticity index (%).

Applied Geotechnical Engineering Consultants, Inc.

Table 1 - Summary of Laboratory Test Results

Blackstone Hotel

Project No. 2211175

Sample Location		Natural Moisture Content (%)	Natural Dry Density (pcf)	Gradation			Atterberg Limits		Moisture-Density Relationship		Unconfined Compressive Strength (psf)	Water Soluble Sulfate (ppm)	Soil Type
Boring No.	Depth (ft)			Gravel (%)	Sand (%)	Silt/Clay (%)	Liquid Limit (%)	Plastic Index (%)	Maximum Dry Density (pcf)	Optimum Moisture Content (%)			
B-2	9	7	126			60				2,950	370	Landslide Deposit - Mudstone Bedrock, Sandy Fat Clay (CH)	
B-3	24	23	99			94	77	54				Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	
B-4	4	12	95			64	53	37			11,707	Landslide Deposit - Mudstone Bedrock, Sandy Fat Clay (CH)	
B-4	9	18	96			79						Landslide Deposit - Mudstone Bedrock, Fat Clay with Sand (CH)	
B-5	9	17				62	66	48				Landslide Deposit - Mudstone Bedrock, Sandy Fat Clay (CH)	
B-5	14	17	95			88						Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	
B-5	22	12	94			90						Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	
B-5	37	16	93			89				1,540		Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	
B-5	42	24	93			92	69	43		6,900		Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	
B-6	4	17	97			89	64	41			551	Landslide Deposit - Mudstone Bedrock, Fat Clay (CH)	

Applied Geotechnical Engineering Consultants, Inc.

Table 2

Deep Foundation Element Design Parameters

Blackstone Hotel

Project No. 2211175

Soil Type	Soil Properties			Lateral Design Parameters			Axial Design Parameters		
	Total Unit Weight (pcf)	Cohesion (psf)	Friction Angle (Degrees)	Horizontal Modulus (pci)	Ultimate Passive Resistance (psf)	Strain @ 50% Yield (k_m)	Ultimate Skin Friction (psf)	Ultimate Uplift Skin Friction (psf)	Net Allowable** Bearing Capacity (ksf)
Mudstone (upper 10 feet)	100	2,000	0	500	18,000	0.006	1,000	750	--
Mudstone (10 to 20 feet)	110	4,000	0	1,400	36,000	0.006	2,000	1,333	--
Mudstone (> 20 feet)	120	6,000	0	2,000	54,000	0.005	3,000	2,000	35

* Ignore the upper 2 feet

** Minimum embedment of 20 feet into the mudstone.

APPENDIX

SITE PHOTOS, CORE LOGS AND ASBESTOS LOCATION MAP



Photo No. 1, View of property to right or west of 250 West, looking south.



Photo No. 2, View of property from west of SWC property looking north



Photo No. 3, View of property from Near SWC, looking NE.



Photo No. 4, View of property from near SEC corner at top of slope, looking NW



Photo No. 5, View of property from above and west of property, looking west



Photo No. 6, View of property from above and west of property, looking south to southeast.

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 14, 2021

LOCATION _____ ELEVATION 2684' PAGE Page 2 of 3

FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-1

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING						
0															20		
21			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.												1.8		
22											5	3 1/2	30		22		
23															23		
24															24		
25															25		
26												5	3 1/2	30	26	2.6	
27															27		
28															28		
29															29		
30															30		
31															31		
32												5	3 1/2	30	32	3.2	
33															33		
34															34		Switch to carbide bit
35															35		
36															36		
37												5	3 1/2	30	37	0.4	
38															38		
39															39		
											5				1.2		

PROJECT NO. 2211175 **AGEC FIELD CORE LOG** DATE June 14, 2021
 PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2"
 LOCATION _____ ELEVATION 2677' PAGE Page 1 of 2
 FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-2

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING						
0																	
1			Landslide deposit - Lean Clay with sand and gravel, hard, slightly moist, red/mottled.		/	/											Boring cased with 8" diameter HSA to 14'.
2				/	/												
3				/	/												
4				/	/												
5			Landslide deposit - Mudstone Bedrock, soft to moderately hard, grey to purple to red.														Boring advanced with 2 1/2" HQ Core and carbide bit using air.
6																	
7																	
8																	
9																	
10																	
11											5	2	25		0.4		
12																	
13																	
14																	
15																	
16										5	5			1.0			
17			Landslide deposit - Sandstone Bedrock, soft, grey to brown.														
18																	
19			Landslide deposit - Mudstone Bedrock, red to grey.														
										5	3						

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**
 PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 15, 2021
 LOCATION _____ ELEVATION _____ PAGE Page 2 of 2
 FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-3

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING						
0																	
21			Landslide deposit - Mudstone Bedrock, soft, moist, grey to purple to red.														
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	
39																	

0.8

End of coring at 24'.

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 16, 2021

LOCATION _____ ELEVATION 2683' PAGE Page 1 of 7

FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG				CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.						
0																
1			Landslide deposit - Lean Clay with sand and gravel, hard, slightly moist, red/mottled.													Boring cased with 8" diameter HSA to 9'.
2			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.													
3																
4																
5																
6																
7																
8																
9																
10															Boring advanced with 2 1/2" HQ Core and carbide bit using air.	
11									5	3 1/2	70		0.6			
12																
13																
14																
15										2				2.0		
16																
17																
18										3	2 1/2	80				
19																
										5	5	80		4.8		

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 16, 2021

LOCATION _____ ELEVATION 2683' PAGE Page 2 of 7

FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS	
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING							
0																		
21			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.															
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		
39																		

Switch to carbide bit

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 16/17, 2021

LOCATION _____ ELEVATION 2683' PAGE 3 of 7

FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING						
40			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.														
41																	
42											5	5	90			5.6	
43																	
44																	
45																	
46											5	5	80			7.8	
47																	
48																	
49																	
50																	
51											5	5	50			10.6	
52																	
53																	
54																	
55																	
56											5	5	70			5.8	
57																	
58																	
59											5	5	60				

PROJECT NO. 2211175 **AGEC FIELD CORE LOG** DATE June 17, 2021
 PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2"
 LOCATION _____ ELEVATION 2683' PAGE 4 of 7
 FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS		
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING								
60			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.									60				60	Boring advanced with 2 1/2" HQ Core and carbide bit using air.		
61																			
62														5	5	60			7.4
63																			
64																			
65														5	5	80			
66																			
67																			
68																			
69																			
70												5	5	95					
71																			
72																			
73																			
74																			
75												5	4 1/2	70					
76																			
77																			
78																			
79												5	5	40					

PROJECT NO. 2211175

AGEC FIELD CORE LOG

PROJECT Blackstone Hotel West Parcel

CORE SIZE 2 1/2"

DATE June 17/18, 2021

LOCATION _____

ELEVATION 2683'

PAGE 5 of 7

FIELD ENG. T.R.A.

DRILLER B.L.

BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS		
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING								
80			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.																
81																			Boring advanced with 2 1/2" HQ Core and carbide bit using air.
82												5	5	90				6.6	
83																			
84																			
85																			
86																			
87												5	5	90				6.0	
88																			
89																			
90																			
91																			
92												5	5	90				7.2	
93																			
94																			
95																			
96																			
97												5	5	90				6.4	
98																			
99																			
										5	5	95				7.0			

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2"

DATE June 18, 2021

LOCATION _____ ELEVATION 2683'

PAGE 6 of 7

FIELD ENG. T.R.A. DRILLER B.L.

BORING NO. B-4

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	ROD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS	
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING							
100			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.															
101																		
102											5	5	95			7.0		
103																		
104																		
105			Landslide deposit - Sandstone Bedrock; moderately hard, grey to purple.															
106											5	5	95			6.2		
107																		
108																		
109			Landslide deposit - Mudstone Bedrock, moderately hard slightly moist to moist, purple.															
110																		
111											5	5	90			8.0		
112																		
113																		
114																		
115																		
116											5	5	95			10		
117																		
118																		
119										5	5	95			2.8			

PROJECT NO. 2211175 **AGEC FIELD CORE LOG** DATE June 15, 2021
 PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2"
 LOCATION _____ ELEVATION 2784' PAGE Page 1 of 2
 FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-6

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	RQD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS		
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING								
0			Landslide deposit - Mudstone Bedrock, soft to moderately hard, grey to purple to red.									0				0	Boring cased with 8" diameter HSA to 9'.		
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																	Boring advanced with 2 1/2" HQ Core and carbide bit using air.		
10																			
11											5	2	0		0.4				
12																			
13																			
14																			
15																			
16											5	2	20		0.6				
17																			
18																			
19																			
											5	4 1/2	40		0.6				

PROJECT NO. 2211175 **AGEC FIELD CORE LOG**

PROJECT Blackstone Hotel West Parcel CORE SIZE 2 1/2" DATE June 15, 2021

LOCATION _____ ELEVATION 2784' PAGE Page 2 of 2

FIELD ENG. T.R.A. DRILLER B.L. BORING NO. B-6

DEPTH (ft)	ALTERATION	HARDNESS	CORE DESCRIPTION	WATER	PACKER TESTS	GRAPHIC LOG	DISCONTINUITY LOG					CORE RUN (FT)	RECOVERY (FT)	RQD (%)	FRAC./FT.	PROGRESS	DRILLING COMMENTS
							ORIENT.	TYPE	ROUGH.	PLAN.	FILLING						
20			Landslide deposit - Mudstone Bedrock, soft to moderately hard, grey to purple to red.														
21				21													
22											5	4 1/2	40			0.6	
23																	
24																	
25																	
26											5	3 1/2	0				
27																0.8	
28																	
29																	
30																	
31											5	2 1/2	0				
32																2.5	
33																	
34																	
35																	
36											5	3	60			2.0	
37																	
38																	
39																	End of boring at 39'.



BROWN CONSULTING ENGINEERS
 CIVIL ENGINEERING * LAND SURVEYING * LAND PLANNING

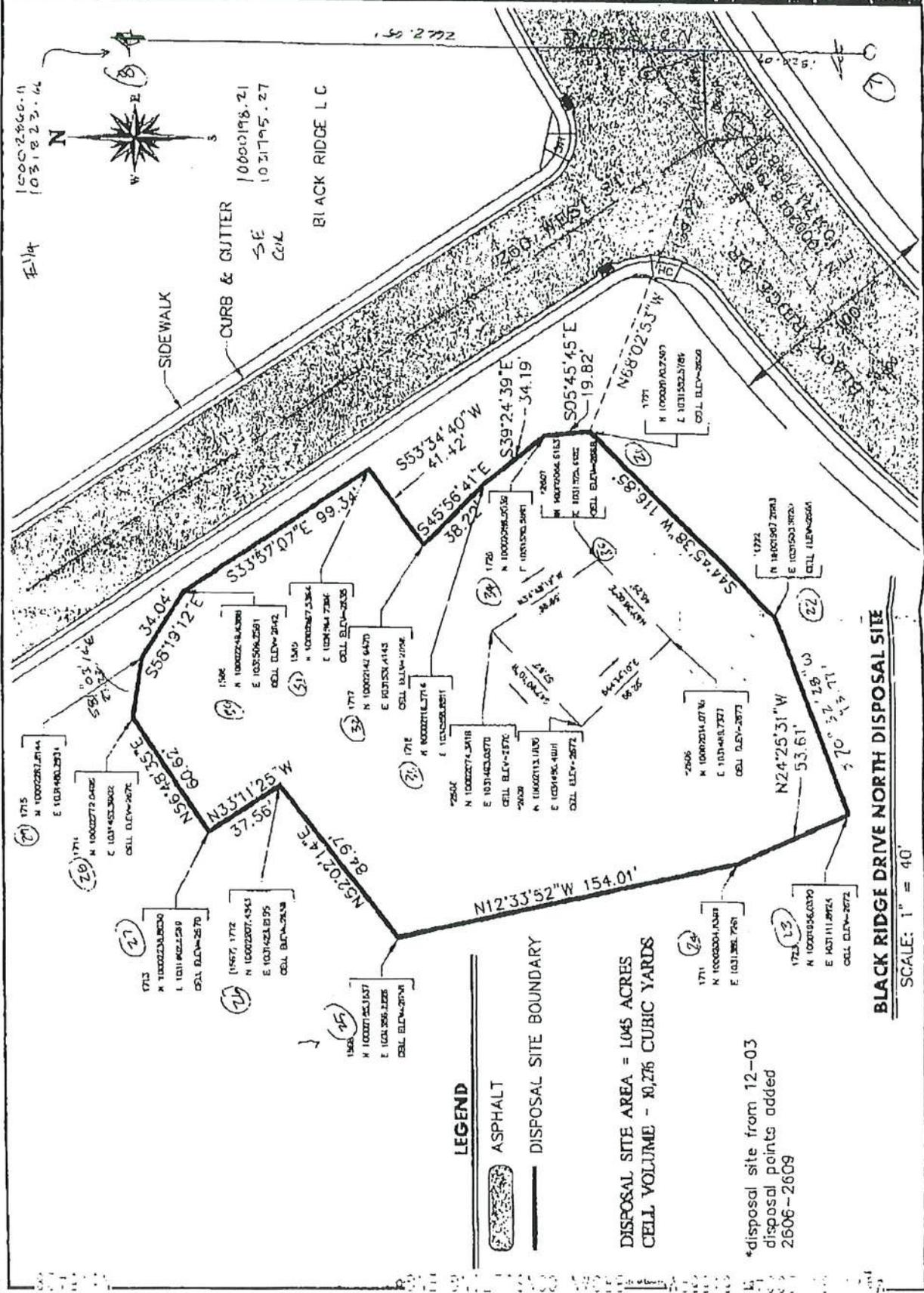
MAY 3, 2004

BLACK RIDGE NORTH ASBESTOS DISPOSAL SITE

BEGINNING AT THE SOUTHEAST CORNER OF SECTION 36, T42S, R16W, SLB&M THENCE N0°36'40"E, 1820.09 FEET ALONG THE SECTION LINE AND WEST 102.98 FEET TO THE CENTERLINE OF 250 WEST STREET AND BLACKRIDGE DRIVE; THENCE N68°02'53"W, 139.22 FEET TO THE TRUE POINT OF BEGINNING; THENCE S44°45'38"W, 116.85 FEET; THENCE S70°32'28"W, 93.77 FEET; THENCE N24°25'31"W, 53.61 FEET; THENCE N12°33'52"W, 154.01 FEET; THENCE N52°02'14"E, 84.97 FEET; THENCE N33°11'25"W, 37.56 FEET; THENCE N56°48'35"E, 60.62 FEET; THENCE S81°03'14"E, 27.23 FEET; THENCE S58°19'12"E, 34.04 FEET; THENCE S33°57'07"E, 99.34; THENCE S53°34'40"W, 41.42 FEET; THENCE S45°56'41"E, 38.22 FEET; THENCE S39°24'39"E, 34.19 FEET; THENCE S5°45'45"E, 19.82 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINS 1.0455 ACRES





LEGEND

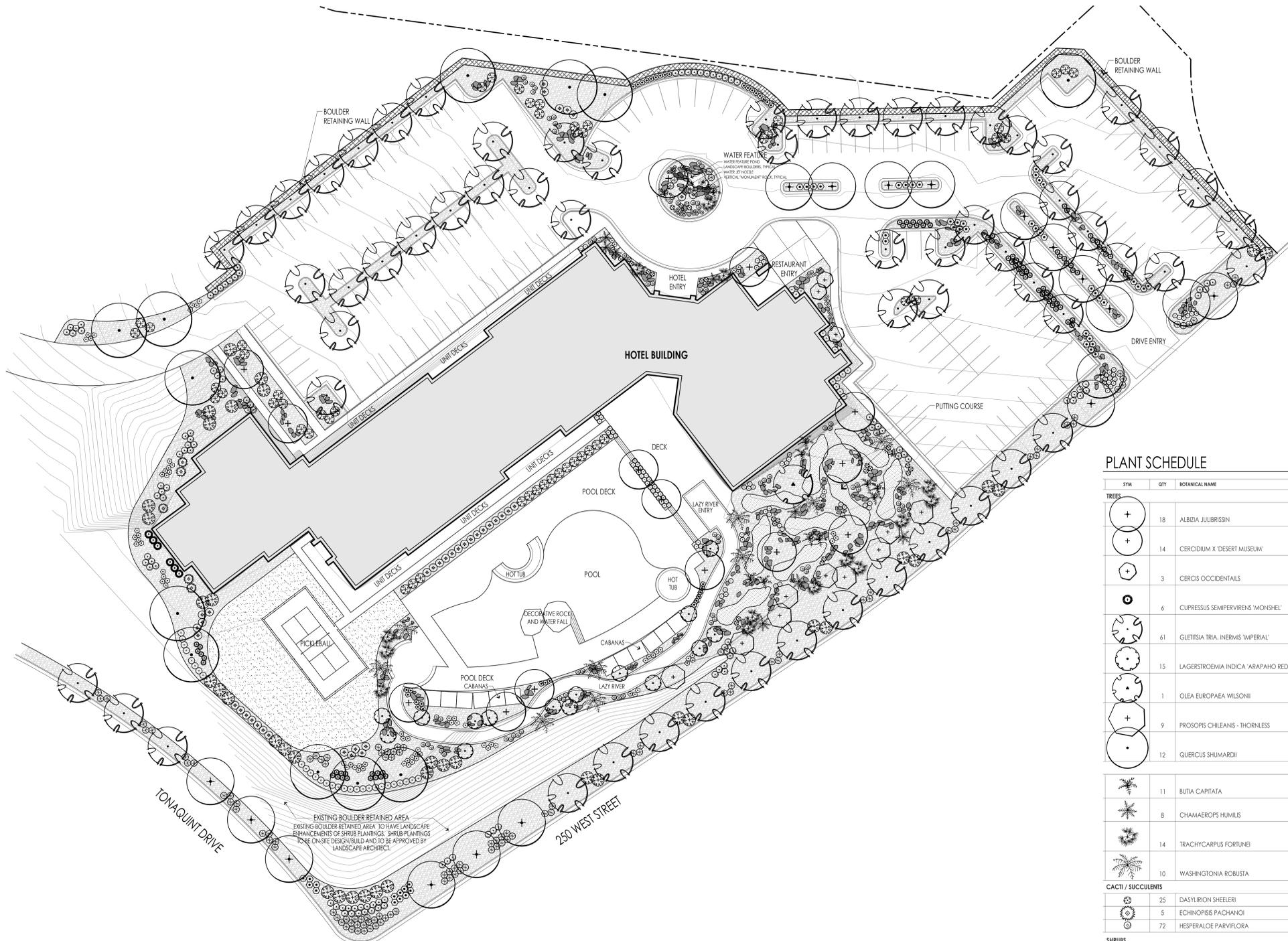
- ASPHALT
- DISPOSAL SITE BOUNDARY

DISPOSAL SITE AREA = 1.045 ACRES
 CELL VOLUME = 80,276 CUBIC YARDS

*disposal site from 12-03
 disposal points added
 2606-2609

BLACK RIDGE DRIVE NORTH DISPOSAL SITE
 SCALE: 1" = 40'

Exhibit E
Landscape Plan



PLANTING PLAN

IRRIGATION NOTES

1. IRRIGATION CONTRACTOR TO INSTALL A COMPLETE NEW AND OPERATIONAL IRRIGATION SYSTEM WITHIN THE LIMIT OF WORK. INSTALL ALL DRIP IRRIGATION COMPONENTS APPROPRIATE FOR THE AREA AND PLANTS TO BE IRRIGATED.
2. THE NEW IRRIGATION SYSTEM MAY INCLUDE BUT IS NOT LIMITED TO IRRIGATION MAIN LINE (PRESSURE PIPE), LATERAL LINES (CIRCUIT PIPE), IRRIGATION VALVES, CONTROL WIRING, CONTROLLER, CONTROLLER ELECTRICAL SUPPLY, BACKFLOW PREVENTER, GATE VALVES(S), SLEEVING, ISOLATION VALVES, QUICK COUPLER VALVES, VALVE BOXES, DRIP TUBING AND DRIP COMPONENTS.
3. WORK SHALL CONFORM WITH ALL APPLICABLE STANDARDS AND CODES.
4. IRRIGATION CONTRACTOR TO INSTALL CIRCUITS SO AS TO MAINTAIN APPROPRIATE OPERATING PRESSURE FOR EACH CIRCUIT AND SHALL BE RESPONSIBLE FOR ENSURING ADEQUATE COVERAGE OF ALL IRRIGATED AREAS.
5. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BECOME FAMILIAR WITH CONDITIONS OF THE SITE INCLUDING GRADES, LOCATIONS OF WALLS, STRUCTURES AND UTILITIES.
6. THE IRRIGATION CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL OF PROPOSED IRRIGATION SYSTEM PRIOR TO INSTALLATION OF IRRIGATION SYSTEM.
7. THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES AND LATERAL LINES THROUGH WALLS AND UNDER HARD SURFACES. SLEEVES INSTALLED AT IMPROPER DEPTHS WILL BE RE-INSTALLED BY BORING METHODS.
8. CONTROLLER LOCATION TO BE COORDINATED AND APPROVED BY LANDSCAPE ARCHITECT. INSTALL CONTROLLER AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
9. IRRIGATION CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR 120V AC ELECTRICAL POWER SOURCE AT THE CONTROLLER LOCATION. POWER SOURCE SHALL BE INSTALLED PER CODE. THE IRRIGATION CONTRACTOR SHALL MAKE THE FINAL CONNECTION FROM THE ELECTRICAL SOURCE TO THE CONTROLLER. REFER TO THE CONTROLLER MANUFACTURER'S PRODUCT SPECIFICATIONS FOR ELECTRICAL REQUIREMENTS.
10. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR INSTALLING CONDUITS AND WIRING FROM VALVES TO CONTROLLERS.
11. INSTALL CHECK VALVES AS NEEDED TO PREVENT EXCESSIVE DRAINAGE AT LOW POINT OF EACH CIRCUIT.
12. IRRIGATION CONTRACTOR SHALL ADJUST VALVES, FLUSH AND ADJUST IRRIGATION CIRCUITS FOR OPTIMUM COVERAGE.
13. ALL IRRIGATION SYSTEM COMPONENTS TO BE INSTALLED AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
14. IT IS THE INTENT TO HAVE ALL PIPING, VALVES, AND WIRING TO BE LOCATED IN PLANTING AREAS. WITH THE EXCEPTION OF LOCATIONS REQUIRED FOR HARD SURFACE CROSSINGS. ADDITIONAL SLEEVES WILL BE REQUIRED. NOT ALL SLEEVES ARE SHOWN.

15. ESTIMATED STATIC WATER PRESSURE AT POINT OF CONNECTION: 75 PSI. IRRIGATION CONTRACTOR IS TO NOTIFY LANDSCAPE ARCHITECT IN WRITING IF STATIC PRESSURE IS LESS.
16. ALL VALVE BOXES TO BE SUPPORTED WITH BRICK AS INDICATED.
17. LOCATE IRRIGATION CONTROL VALVES IN LANDSCAPE AREAS, ADJACENT TO WALKS AND CURBS TO GREATEST EXTENT POSSIBLE.
18. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE MATERIAL OR WORK WHICH DOES NOT CONFORM TO THE CONSTRUCTION DOCUMENTS. REJECTED WORK SHALL BE REMOVED OR CORRECTED AS SOON AS POSSIBLE AT THE EXPENSE OF THE IRRIGATION CONTRACTOR.
19. IRRIGATION CONTRACTOR TO PROVIDE AS-BUILT DRAWINGS AS INDICATED IN SPECIFICATIONS.
20. PRIOR TO ACCEPTANCE OF WORK AND AS PART OF THE IRRIGATION PUNCH LIST THE IRRIGATION CONTRACTOR SHALL CONDUCT A MEETING WITH THE OWNER TO DEMONSTRATE THE OPERATION OF THE ENTIRE IRRIGATION SYSTEM INCLUDING WINTERIZATION AND START-UP PROCEDURES AND PROVIDE A RECOMMENDED IRRIGATION SCHEDULE. REMOTE OPERATING EQUIPMENT, IF ANY, SHALL BE GIVEN TO OWNER AT THIS TIME.
21. GUARANTEE: ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF ACCEPTANCE AGAINST ALL DEFECTS IN MATERIAL, EQUIPMENT, AND WORKMANSHIP. GUARANTEE SHALL ALSO COVER REPAIR FOR DAMAGE TO ANY PART OF THE PROJECT PROPERTY RESULTING FROM LEAKS OR OTHER DEFECTS IN MATERIAL, EQUIPMENT OR WORKMANSHIP. TO THE SATISFACTION OF THE OWNER. REPAIRS, IF REQUIRED, SHALL BE COMPLETED PROMPTLY AND AT NO COST TO THE OWNER.
22. EACH TREE TO BE IRRIGATED WITH CONCENTRIC RINGS OF IN-LINE EMITTER TUBING AS INDICATED IN THE DETAIL.
23. ALL WIRING LAID APART FROM THE IRRIGATION MAIN LINE TO BE IN GRAY SLEEVE(S) OF ADEQUATE SIZE BURIED 18" DEEP.
24. CONTRACTOR TO CONDUCT A SYSTEM PRESSURE TEST IN THE PRESENCE OF THE LANDSCAPE ARCHITECT PRIOR TO BACKFILLING MAIN LINE TRENCHES. CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT TWO WORKING DAYS MINIMUM PRIOR TO CONDUCTING THE SYSTEM PRESSURE TEST. PRESSURE TEST MAIN LINE AND ALL VALVES INSTALLED AT 100 PSI FOR 2 HOURS MINIMUM.

PLANTING NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITIES, INCLUDING UTILITY DEPTHS, PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY AND ALL COST OR OTHER LIABILITY INCURRED DUE TO DAMAGE OF UTILITIES, STRUCTURES, ETC.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE OF ALL RELATED EXISTING CONDITIONS, UTILITIES, PIPES, AND STRUCTURES, ETC. PRIOR TO BEGINNING AND CONSTRUCTION.
3. IF CONFLICTS ARISE BETWEEN SITE CONDITIONS AND CONSTRUCTION DOCUMENTS, CONTRACTOR IS REQUIRED TO CONTACT OWNER'S REPRESENTATIVE FOR RESOLUTION. FAILURE TO MAKE SUCH CONTACTS KNOWN TO THE OWNER'S REPRESENTATIVE WILL RESULT IN THE CONTRACTOR BEING LIABLE TO RECONCILE CONFLICTS TO OWNER'S SATISFACTION.
4. THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL PLANT MATERIAL FREE OF PESTS AND/OR PLANT DISEASES AND WITH FULL AND NATURAL SHAPE. ALL PLANT MATERIAL IS SUBJECT TO OWNER'S APPROVAL PRIOR TO INSTALLATION.
5. PRE-SELECTED OR "TAGGED" MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE.
6. THE CONTRACTOR IS OBLIGATED TO MAINTAIN AND WARRANT ALL PLANT MATERIALS AS SPECIFIED.
7. PROVIDE MATCHING SIZES AND FORMS FOR EACH SPECIES OF TREES AND/OR PLANTS TO BE INSTALLED ON GRID OR SPACED IN ROWS AS INDICATED ON DRAWINGS. ALL PLANT MATERIAL TO BE PLANTED IN SUCH MANNER AS TO BE EQUALLY SPACED. PLANT LOCATIONS SUBJECT TO ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.
8. THE LANDSCAPE CONTRACTOR SHALL SCHEDULE PLANTING OPERATIONS AND TAKE ALL NECESSARY PRECAUTIONS TO AVOID WINTER, CLIMATIC, WILDFIRE, OR OTHER DAMAGE TO PLANT MATERIAL.
9. CONTRACTOR SHALL PLACE A 12" DEEP LAYER MINIMUM OF TOPSOIL TO ALL SHRUB/PERENNIAL PLANTING AREAS. IMPORT TOPSOIL AS REQUIRED.
10. PITS FOR ALL PLANT MATERIAL SHALL BE DUG WITH THE DEPTH AND WIDTH AS INDICATED IN PLANTING DETAILS.
11. TREES LESS THAN TWO-INCH CALIPER MUST BE DOUBLE-STAKED UNTIL THE TREES MATURE TO A TWO-INCH CALIPER.
12. CONTRACTOR TO PRUNE TREES AS DIRECTED BY LANDSCAPE ARCHITECT FOR PROPER TREE SHAPING.
13. CONTRACTOR TO REMOVE ALL TAGS, TIES AND FLAGGING FROM ALL PLANT MATERIAL PRIOR TO SUBSTANTIAL COMPLETION.
14. WITH THE EXCEPTION OF PALMS, CACTI AND SUCCEULENTS, PLANT BACKFILL MIXTURE SHALL BE COMPOSED OF 3 PARTS TOPSOIL TO 1 PART HUMUS. ROTARY MIXED ON-SITE PRIOR TO INSTALLATION.

PLANT SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	REMARKS
TREES						
+	18	ALBIZIA JULIBRISIN	MIMOSA SILK TREE	2' CAL.	B&B	
+	14	CERCIDIUM X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	24" BOX	CONT.	
+	3	CERCIS OCCIDENTALS	WESTERN RED BUD	2" CAL.	B&B	
+	6	CLUPRESSUS SEMIPERVIRENS 'MONSHEL'	ITALIAN CYPRESS	10' HT.	B&B	
+	61	GLETISIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST	3' CAL.	B&B	
+	15	LAGERSTROEMIA INDICA 'ARAPAHO RED'	ARAPAHO RED CREPE MYRTLE	24" BOX	CONT.	
+	1	OLEA EUROPAEA WILSONII	WILSON OLIVE	24" BOX	CONT.	
+	9	PROSOPIS CHILEANIS - THORNLESS	CHILEAN MESQUITE	2" CAL.	B&B	
+	12	QUERCUS SHUMARDII	SHUMARD OAK	3" CAL.	B&B	
+	11	BUTIA CAPITATA	PINDO PALM	24" BOX	CONT.	
+	8	CHAMAEROPS HUMILIS	MEDITERRANEAN FAN PALM	24" BOX	CONT.	
+	14	TRACHYCARPUS FORTUNEI	WINDMILL PALM	24" BOX	CONT.	
+	10	WASHINGTONIA ROBUSTA	MEXIAN FAN PALM	24" HT.	B&B	
CACTI / SUCCEULENTS						
+	25	DASYLIRION SHEELERI	DESERT SPOON	7 GAL.	CONT.	
+	5	ECHINOPIUS PACHANOI	SAN PEDRO CACTUS	15 GAL.	CONT.	
+	72	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL.	CONT.	
SHRUBS						
+	42	BUXUS MICROPHYLLA JAPONICA	WINTER GEM BOXWOOD	5 GAL.	CONT.	
+	106	CARYOPTERIS X CLANDONENSIS 'BLUE MIST'	BLUE MIST SPIREA	5 GAL.	CONT.	
+	15	ERYSIUM LINARIFOLIUM 'BOWLES MAUVE'	DESERT LILAC	3 GAL.	CONT.	
+	78	EURYOPS PECTINATUS 'VIRIDIS'	GREEN BUSH DAISY	5 GAL.	CONT.	
+	67	LEUCOPHYLLUM FRUTESCENS 'COMPACTA'	COMPACT TEXAS SAGE	5 GAL.	CONT.	
+	19	NANDINA DOMESTICA 'GULF STREAM'	GULF STREAM HEAVENLY BAMBOO	5 GAL.	CONT.	
+	40	NERIUM OLEANDER 'DWARF RED'	DWARF RED OLEANDER	5 GAL.	CONT.	
+	51	ROSMARINUS OFFICINALIS 'PROSTRATUS'	PROSTRATE ROSEMARY	3 GAL.	CONT.	
+	38	TECOMA 'ORANGE JUBILEE'	ORANGE JUBILEE	7 GAL.	CONT.	
+	113	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	3 GAL.	CONT.	
ORNAMENTAL GRASSES						
+	95	MUHLENBERGIA CAPILLARIS 'REGAL MIST'	REGAL MIST PINK MUHLY GRASS	3 GAL.	CONT.	
+	12	NASSELLA TENUISSIMA	MEXICAN FEATHER GRASS	1 GAL.	CONT.	
+	14	OPHIPOGON JAPONICUS	MONDO GRASS	1 GAL.	CONT.	
+	78	PHORMIUM 'GOLDEN RAY'	NEW ZEALAND FLAX	3 GAL.	CONT.	

LANDSCAPE LEGEND

- ROCK MULCH
ROCK MULCH TO BE NATIVE, LOCAL STONE - 2-3", 4" LAYER PLACED OVER WEED BARRIER FABRIC. PROVIDE SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- TURF (SOD)
LAWN SOD TO BE DROUGHT TOLERANT TURF AS APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR TO SUBMIT SOD SEED MIX FOR APPROVAL PRIOR TO INSTALLATION.
- SYNTHETIC TURF
SYNTHETIC TURF AT PUTTING COURSE TO BE 'READY PUTT' BY XGRASS, DALTON, GA. PHONE: 877.881.8477. WWW.XGRASS.COM. OR AS IDENTIFIED BY OWNER.
- LANDSCAPE BOULDERS
LANDSCAPE BOULDERS, LOCAL, NATURAL ROCK. ROCK TO BE APPROVED BY LANDSCAPE ARCHITECT.
- "MONUMENT" ROCKS
"MONUMENT" TYPE ROCK, LOCAL, NATURAL ROCK PLACED VERTICALLY WITH HEIGHTS ABOVE GRADE BETWEEN 5' - 8'. PROVIDE CONCRETE BASE AS REQUIRED.



Architecture
Interior Design
Landscape Architecture
Land Planning
Construction Management

7927 High Point Parkway, Suite 300
Sandys, UT 84094
ph. 801.269.0055
fax. 801.269.1425
www.thinkaoc.com

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28 JULY 2021

HOTEL ST. GEORGE
ST. GEORGE, UTAH

PROJECT NO. 18074
DATE: 28 JULY 2021

REVISIONS:

SHEET TITLE:
PLANTING PLAN
SHEET NUMBER:

LP101
LANDSCAPE



PLANTING PLAN

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PLANT SCHEDULE

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	REMARKS
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	14	CERCIDIUM X 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	24" BOX	CONT.	
	3	CERCIS OCCIDENTALS	WESTERN RED BUD	2" CAL.	B&B	
	6	CLUPRESSUS SEMIPERVIRENS 'MONSHEL'	ITALIAN CYPRESS	10' HT.	B&B	
	61	GLETITIA TRIA. INERMIS 'IMPERIAL'	IMPERIAL HONEYLOCUST	3" CAL.	B&B	
	15	LAGERSTROEMIA INDICA 'ARAPAHO RED'	ARAPAHO RED CREPE MYRTLE	24" BOX	CONT.	
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	9	PROSOPIS CHILEANIS - THORNLESS	CHILEAN MESQUITE	2" CAL.	B&B	
	12	QUERCUS SHUMARDII	SHUMARD OAK	3" CAL.	B&B	
	11	BUTIA CAPITATA	PINDO PALM	24" BOX	CONT.	
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SHRUBS						
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	106	CARYOPTERIS X CLANDONENSIS 'BLUE MIST'	BLUE MIST SPIREA	5 GAL.	CONT.	
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	51	ROSMAIRIUS OFFICINALIS 'PROSTRATUS'	PROSTRATE ROSEMARY	3 GAL.	CONT.	
	38	TECOMA 'ORANGE JUBILEE'	ORANGE JUBILEE	7 GAL.	CONT.	
	113	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	3 GAL.	CONT.	
ORNAMENTAL GRASSES						
	95	MUHLENBERGIA CAPILLARIS 'REGAL MIST'	REGAL MIST PINK MUHLY GRASS	3 GAL.	CONT.	
	12	NASSELLA TENUISSIMA	MEXICAN FEATHER GRASS	1 GAL.	CONT.	
	14	OPHIPOGON JAPONICUS	MONDO GRASS	1 GAL.	CONT.	
	78	PHORMIUM 'GOLDEN RAY'	NEW ZEALAND FLAX	3 GAL.	CONT.	

LANDSCAPE LEGEND

- ROCK MULCH
ROCK MULCH TO BE NATIVE, LOCAL STONE - 2-3", 4" LAYER PLACED OVER WEED BARRIER FABRIC. PROVIDE SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- TURF (SOD)
LAWN SOD TO BE DROUGHT TOLERANT TURF AS APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR TO SUBMIT SOD SEED MIX FOR APPROVAL PRIOR TO INSTALLATION.
- SYNTHETIC TURF
SYNTHETIC TURF AT PUTTING COURSE TO BE 'READY PUTT' BY XGRASS, DALTON, GA. PHONE: 877.881.8477. WWW.XGRASS.COM. OR AS IDENTIFIED BY OWNER.
- LANDSCAPE BOULDERS
LANDSCAPE BOULDERS, LOCAL, NATURAL ROCK. ROCK TO BE APPROVED BY LANDSCAPE ARCHITECT.
- "MONUMENT ROCKS"
"MONUMENT" TYPE ROCK, LOCAL, NATURAL ROCK PLACED VERTICALLY WITH HEIGHTS ABOVE GRADE BETWEEN 5' - 8'. PROVIDE CONCRETE BASE AS REQUIRED.



Architecture
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Land Planning
Construction Management

7927 High Point Parkway, Suite 300
Sandusky, MI 49894
ph. 801.269.0055
fax. 801.269.1425
www.thinkaoc.com

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28 JULY 2021

HOTEL ST. GEORGE
ST. GEORGE UTAH

PROJECT NO. 18074
DATE: 28 JULY 2021

REVISIONS:

SHEET TITLE:
PLANTING PLAN
SHEET NUMBER:

LP101
LANDSCAPE

PLANNING COMMISSION AGENDA REPORT: 10/26/2021

Sevy Home as a Short-Term Rental Conditional Use Permit (Case No. 2021-CUP-012)	
Request:	To approve a registered landmark to be used as a short-term rental.
Applicant:	Cimarron Chacon
Representative:	Cimarron Chacon
Location:	274 South 200 West Street St. George, UT 84770
General Plan:	MDR, Medium Density Residential
Zoning:	RCC, Residential Central City
Land Area:	Approximately .15 acres



BACKGROUND:

This property was designated as a landmark site by the City Council on September 2, 2021 and is known as the Sevy Home. The applicant is now seeking a conditional use permit to operate a short-term rental. In Section 10-13E-4B, *Conditional Uses for Landmark Sites*, it states that landmark sites are allowed a conditional use permit only if five specific conditions are met. The five conditions are listed below along with an explanation of how that condition is being met.

1. *The requested use is for low impact professional office or commercial use.*

The Sevy Home is a pioneer home that totals 1380 square feet. The home has three bedrooms and one common, living, dining, kitchen, and bathroom. The house sleeps a maximum of five people. The applicant lives in this home and plans on renting it on an occasional basis. The rental will be limited to four occupants, two vehicles, with no smoking, or pets allowed.

2. *Substantial investment is made to upgrade the property and enhance its historic significance.*

The owners have renovated the entire house. The ground floor was stripped to the wall, and both structural and system upgrades were made to modernize the home. The upstairs floors were stripped of the carpet and original flooring refinished. A modern 4 1/2' claw foot tub was installed in the bathroom to replicate the original and custom shaker cabinets were built for the kitchen. Colors and textures were matched as closely as possible to remnants found in the floorboards during reconstruction. Two new rooms were added to the rear of the home to expand the square footage but keep with the form of the original home. Finally, the windows were replaced and a ductless cooling and heating system was installed.

3. *Any renovation maintains or enhances the historic, architectural and aesthetic features of the property.*

There have been many renovations made to this home over the years. The porch and mudroom (location of the granary) were enclosed and completely attached to the house leaving two of the four walls still exposed to the outside. A covered front porch has also been added and two additions have been added to the rear with the roofline being extended keeping the original pitch but adding a dormer window to the north side of the roofline. Except for the new dormer, the rear additions cannot be seen from the public right-of-way. The Historic Preservation Commission, Planning Commission, and City Council agreed that the renovations performed have not detracted from the historic features of the property.

4. *The proposed use shall generate only minimal traffic or parking demand as determined by the city council.*

With the maximum group size of four people, it is expected that the traffic impact will be minimal. The property does have two tandem parking spaces which is allowed in the RCC district. However, the parking area within the front setback must be paved Section 10-19-4(A)(6).

In addition, Section 10-19-4(A)(7) requires *two (2) parking spaces for a single-family short-term rental, one (1) of which must be covered*. At this time, there is no covered parking on this property.

- 5. The city council may impose such other conditions for granting a conditional use permit as it deems necessary to protect the character of the landmark site.**
The Planning Commission may recommend additional conditions.

RECOMMENDATION:

Staff recommends approval of the Sevy Home Conditional Use Permit with the following conditions:

1. The parking space within the front setback must be paved.
2. One required parking space shall be covered.

ALTERNATIVES:

1. Recommend approval as presented.
2. Recommend approval with additional conditions.
3. Recommend denial.
4. Table the proposed conditional use permit to a specific date.

POSSIBLE MOTION:

The Planning Commission recommends approval of the Sevy Home Conditional Use Permit with the conditions outlined in the staff report.

FINDINGS FOR APPROVAL:

1. The proposed conditional use permit is compatible in use, scale and design with allowed uses in the zone.
2. The proposed conditional use permit meets the requirements found in Section 10-13E-4B found in the Zoning Regulations.

Exhibit A Applicants Narrative

CUP Application Sevy Property Short term rental

1 message

Cimarron Chacon <cimarron@gropromotions.com>
To: cdapps@sgcity.org, carol.davidson@sgcity.org
Cc: Cimarron Chacon <cimarronchacon@yahoo.com>

Thu, Sep 30, 2021 at 4:45 PM

My home, the Sevy Home was designated as a landmark property by City Council on 8/31/21. We, therefore, wish to apply for a conditional use permit so that we may rent it as a short-term rental.

As part of this request, we ask that the condition to have 1 covered parking spot be waived, as this would compromise the historic character of the home and the history of the property. Adding Covered parking would also require cutting down a shade tree. (See Pictures attached)

We intend to rent the property on an occasional basis when we travel to care for other families and for work. The home sleeps a maximum of 5 people, but one bedroom is used as a home office.
The house has been permitted as a home office for 5 years or more. The current license number is 00038220

We will limit the rental to 4 occupants, 2 vehicles, with no children, smoking, or pets allowed.

- The property sits on .15 acres
- Lot Size 120 x53.25
- Home Sq Ft 1380
- The home has 8 rooms, 3 bedrooms, 1 common room, 1 living room, 1 dining room, 1 kitchen, 1 bath,
- Parking - 2 stacked on-site in the driveway (gravel), 2 street parking
- Outdoor Space include a front porch, and front patio (flagstone), a back patio (concrete) , a side patio (gravel) , a 2 rear patios flagstone.
- There is a 12x10 Ft Shed in the rear.
- The home is surrounded by a white picket fence in the front and a 6-8" privacy fence in the back.

Attached is an image of the property and a map showing the 300' radius. We will contact a title company for a current address list.

Please let me know if you have any additional questions and how to proceed with payment.

Cimarron Chacon
President
GRO Promotions LLC
Race and Trail Consulting and Management
St. George UT
970-759-3048
<https://gropromotions.com/>
True Grit Epic,
6 & 25 Hours in Frog Hollow,
Seveto Costa Rica

Exhibit B
PowerPoint Presentation



SEVY HOME

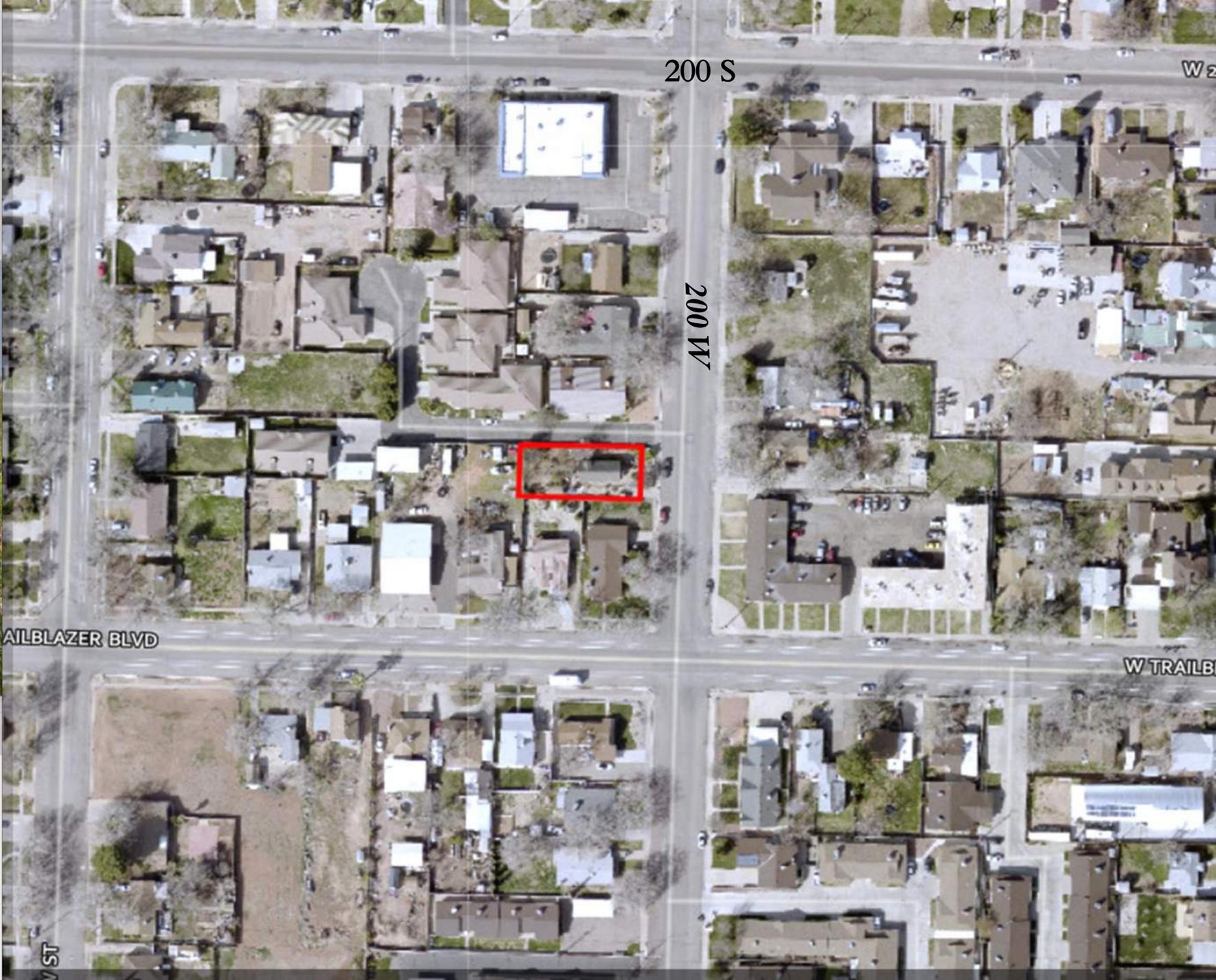
Conditional Use Permit for a Short-term Rental

2021-CUP-012



LOCATION

274 SOUTH
200 WEST





LOCATION

274 SOUTH
200 WEST

10-13E-4B
=
CONDITIONS

1. LOW IMPACT

1380 SQUARE
FEET

MAXIMUM OF 4
PEOPLE

MAXIMUM OF 2
VEHICLES



10-13E-4B
=
CONDITIONS

2. SUBSTANTIAL
INVESTMENT

COMPLETE
INTERIOR
REMODEL

STRUCTURAL
UPGRADES





10-13E-4B - CONDITIONS

2.

10-13E-4B
=
CONDITIONS

3. RENOVATIONS
MAINTAINS
HISTORIC
FEATURES

FRONT PORCH
ADDITION

REAR ADDITIONS
INCLUDING
DORMER WINDOW





10-13E-4B - CONDITIONS

3.

A photograph of a house with a green exterior and a white door, with a garden in the foreground. The house has a gabled roof and a small window above the door. The garden features wooden raised beds with various plants and a gravel path.

10-13E-4B
=
CONDITIONS

4. MINIMAL TRAFFIC
OR
PARKING DEMAND

OFF-STREET
PARKING

10-13E-4B -
CONDITIONS
4.





10-13E-4B
=
CONDITIONS

5. ADDITIONAL
CONDITIONS



RECOMMENDATION:

STAFF RECOMMENDS APPROVAL OF THE SEVY HOME CONDITIONAL USE PERMIT WITH THE FOLLOWING CONDITIONS:

1. THE PARKING SPACE WITHIN THE FRONT SETBACK MUST BE PAVED.
2. ONE REQUIRED PARKING SPACE SHALL BE COVERED.



PLANNING COMMISSION AGENDA REPORT: 10/26/2021

PRELIMINARY PLAT

The Cove at Desert Color Lot 501

Case No. 2021-PP-055

Request: To approve a preliminary plat for a sixteen (16) lot residential subdivision.

Location: The site is located along Lagoon Parkway in the Desert Color development

Property: .47 acres

Number of Lots: 16

Density: 34.04

Zoning: PD-R

Adjacent zones: This plat is surrounded by the following zones:
North – PD-R
South – PD-R
East – PD-R
West – PD-R

General Plan: TC

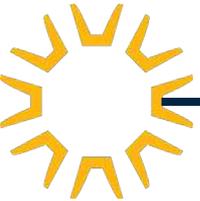
Applicant: Cole West Development

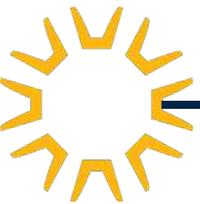
Representative: Eric Day

Comments:

Preliminary Plats

October 26, 2021





Preliminary Plat – The Cove at Desert Color Lot 501

PLANNING COMMISSION AGENDA REPORT: 10/26/2021

PRELIMINARY PLAT

The Cove at Desert Color Lot 514-515

Case No. 2021-PP-056

Request: To approve a preliminary plat for a twenty (20) lot residential subdivision.

Location: The site is located along Lagoon Parkway in the Desert Color development.

Property: .61 acres

Number of Lots: 20

Density: N/A

Zoning: 32.79

Adjacent zones: This plat is surrounded by the following zones:
North – PD-R
South – PD-R
East – PD-R
West – PD-R

General Plan: PD-R

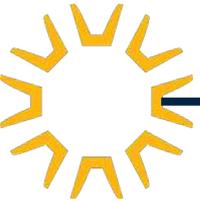
Applicant: Cole West Development

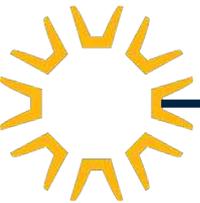
Representative: Eric Day

Comments:

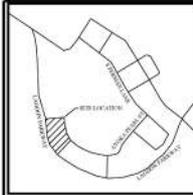
Preliminary Plats

October 26, 2021





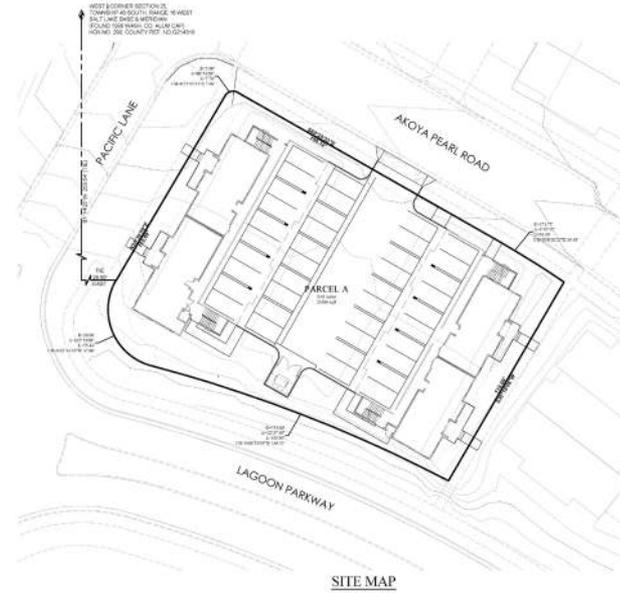
Preliminary Plat – The Cove at Desert Color Lots 514 - 515



VICINITY MAP

PRELIMINARY PLAT PARCEL A AT THE COVE

PREPARED FOR:
COLE WEST DEVELOPMENT
LOCATED IN:
ST. GEORGE, UTAH



SITE MAP

EXHIBIT A LEGAL DESCRIPTION

A PARCEL OF LAND LOCATED IN SOUTHWEST QUARTER OF SECTION 26, TOWNSHIP 43 NORTH, RANGE 10 WEST, S14E, L42E, BLM AND NEIGHBORING, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT THAT LIES SOUTH OF 1/22° WEST ALONG THE SECTION LINE 282.4 FEET, AND EAST 260 FEET, FROM THE WEST QUARTER CORNER OF SAID SECTION 27, AND PROCEEDING THENCE NORTH 89° 09' 00" EAST, 110.00 FEET, THENCE EASTERLY ALONG A 1.80 FOOT RADIUS CURVE TO THE RIGHT, ALONG CHORD BEARS NORTH 70° 17' 00" EAST A DISTANCE OF 7.00 FEET, CENTER POINT LIES NORTH 89° 09' 00" EAST THROUGH A CENTRAL ANGLE OF 38° 54' 00", A DISTANCE OF 7.76 FEET, THENCE SOUTH 46° 25' 00" EAST 102.82 FEET, THENCE SOUTHWESTERLY ALONG A 47.20 FOOT RADIUS CURVE TO THE RIGHT, CHORD BEARS SOUTH 80° 04' 00" EAST A DISTANCE OF 32.84 FEET, CENTER POINT LIES SOUTH 26° 32' 00" WEST THROUGH A CENTRAL ANGLE OF 84° 47' 00", A DISTANCE OF 35.55 FEET, THENCE SOUTH 87° 18' 00" WEST 118.00 FEET, THENCE WICKERLY ALONG A 75.00 FOOT RADIUS CONV. TANGENT CURVE TO THE LEFT, CHORD BEARS NORTH 66° 54' 00" WEST, A DISTANCE OF 346.81 FEET, CENTER POINT LIES SOUTH 27° 24' 00" WEST THROUGH A CENTRAL ANGLE OF 12° 27' 00", A DISTANCE OF 183.80 FEET, THENCE NORTHWESTERLY ALONG A 300.00 FOOT RADIUS CURVE TO THE RIGHT, CHORD BEARS NORTH 27° 10' 00" WEST, A DISTANCE OF 478.80 FEET, CENTER POINT LIES SOUTH 14° 02' 00" EAST THROUGH A CENTRAL ANGLE OF 107° 03' 00", A DISTANCE OF 35.44 FEET, TO THE POINT OF BEGINNING.

CONTAINING 26.560 SQUARE FEET OR 0.60 ACRES.

CONTACTS

ENGINEER & SURVEYOR
FOCUS ENGINEERING AND SURVEYING, LLC
4000 N. HIGHLAND DRIVE, SUITE 200
MOUNTAIN VIEW, UT 84040
(801) 875-0400
FOCUS@FOCUS-ENG.COM
WWW.FOCUS-ENG.COM

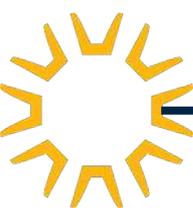
CADRE DEVELOPERS
COLE WEST DEVELOPMENT
220 N. CENTRAL, SUITE 100, ST. GEORGE, UT 84770
(801) 862-2100
CONTACT@CWDEV.COM



PARCEL A AT THE COVE
ST. GEORGE, UTAH
PRELIMINARY PLAT

LOT	AREA (SQ. FT.)	AREA (ACRES)
1	10,000	0.23
2	10,000	0.23
3	10,000	0.23
4	10,000	0.23
5	10,000	0.23
6	10,000	0.23
7	10,000	0.23
8	10,000	0.23
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91	10,000	0.23
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93	10,000	0.23
94	10,000	0.23
95	10,000	0.23
96	10,000	0.23
97	10,000	0.23
98	10,000	0.23
99	10,000	0.23
100	10,000	0.23

PRELIMINARY PLAT
C2



**JOINT MEETING OF THE ST. GEORGE CITY COUNCIL
AND PLANNING COMMISSION
WORK MEETING MINUTES
OCTOBER 7, 2021, 4:00 PM
CITY COUNCIL CHAMBERS**

PRESENT:

**Mayor Michele Randall
Councilmember Jimmie Hughes
Councilmember Bryan Smethurst
Councilmember Gregg McArthur
Councilmember Dannielle Larkin
Councilmember Vardell Curtis
City Manager Adam Lenhard
City Attorney Shawn Guzman
City Recorder Christina Fernandez**

ALSO PRESENT:

**Planning Commission Member Ray Draper
Planning Commission Member Nathan Fisher
Planning Commission Member Emily Andrus
Planning Commission Member Steve Kemp
Planning Commission Member Elise West
Planning Commission Member Natalie Larsen
Planning Commission Member Austin Anderson**

OPENING:

Mayor Randall called the meeting to order and welcomed all in attendance. The invocation was offered by Councilmember Curtis and The Pledge of Allegiance was led by Councilmember McArthur.

DISCUSSION REGARDING THE PRELIMINARY MASTER PLAN FOR THE SANDBERG PROPERTY:

Mike Christensen with Garn Development provided a PowerPoint presentation covering the following topics: General plan and zone change proposal map; Saint George White Hills Development general plan amendment – existing general plan and proposed general plan; Saint George White Hills Development PD-C initial zone change, existing zoning and proposed zoning; Site plan; and Elevations. After being asked by Councilmember Larkin, Mr. Christensen outlined the boundary with Washington City. The traffic study is anticipated to be completed next week.

Mayor Randall commented about the amount of traffic already in the area.

After being asked by Councilmember McArthur, Mr. Christensen explained where the road on the eastside will extend. City Manager Adam Lenhard inquired about the road in southeast corner; He asked Mr. Christensen if he has spoken to Washington City. Mr. Christensen indicated that he has not yet spoken to Washington City; however, they plan on talking to Washington City about the road as well as connecting to their sewer lines.

City Manager Adam Lenhard noted this is a quiet neighborhood and he wants to make sure the road is coordinated with Washington City.

Mr. Christensen hospital closing in February. He spoke about roads to the pads as shown on the general plan.

Jarod Cox with Coaction Development explained the hospital is a new entity - Zions Regional Medical. It is a non-profit hospital and will be run by a hospital group that runs over 100 hospitals throughout the Country. He mentioned with regards to the road that ties into Washington City, it is part of their transportation master plan and have plans to expand and connect the road.

Planning Commission Member West asked about the if the road near the multi-family is currently a through road. Mr. Christensen replied yes, they will carry it through. He indicated a stop light will be up to the City.

Planning Commission Member Kemp inquired about the size of 3050 East. He asked if it could be expanded to create more lanes as he believes Exit 10 is the toughest intersections in the City. He then mentioned 840 North in Washington City. While he likes the project and noted that the use is needed; however, if they plan on doing the flex industrial, having the multi-family front onto the road in some areas so that the industrial is behind the units.

Mr. Christensen noted he does not think the best use of the property is industrial; however, the industrial that would work in this area is flex buildings.

City Manager Adam Lenhard asked if City code has a requirement for any kind of transition from residential to industrial use. Community Development John Willis explained there are buffer and wall requirements.

Water Director Scott Taylor outlined the water and sewer infrastructure in the area. He is concerned with the applicant tying into the Washington City sewer line because if that were to happen, the City of St. George would have to maintain the line all the way down until it ties back into the City of St. George's line.

Mr. Christensen spoke about a pump station as a solution.

Councilmember Larkin inquired about active transportation for this development. She does not agree with Planning Commission Member Kemp with regard to widening 3050 East; rather than being a benefit she believes widening this road would make it a much more dangerous road.

Mr. Christensen noted they will have a number of sidewalks and a flow within the development; however, pedestrians will need to walk to a traffic signal to cross 3050 East.

Planner Carol Davidson commented There is a master trail planned to come up 850 North and connects into Washington City's trail system.

Planning Commission Member Larsen inquired about the timeline for Washington City's interchange; no one had an answer. She noted that her hope is that the interchange will alleviate some of the traffic in this area.

Planning Commission Member Andrus commented the new interchange will take a lot of pressure off this intersection. She noted Washington City is planning on expanding the Green Springs/Telegraph intersection after which she suggested some changes to the proposed development that could provide relief.

Mr. Christensen commented the changes Planning Commission Member Andrus suggested will not work unless Washington City is willing to condemn ground from Walmart to Home Depot. After being asked by City Manager Adam Lenhard, Mr. Christensen outlined the number of units and proposed amenities.

Public Works Director Cameron Cutler noted there is a fairly good-sized storm drain along 3050 East; however, staff will need to determine where the storm water from this development flows to. Staff may need to coordinate with Washington City.

Mr. Christensen noted the Sandberg's also own the property in Washington City which is right behind this property.

Property owner Scott Sandberg stated there is a pond nearby; however, it is not located in the City of St. George. There is an agreement that his father made for storage of the Millcreek stream; it was never a retention for flood. Because of how it is located, it could be used for storage of drainage. He does not want to give up the pond, but if it has to happen to develop this property he may do so.

Planning Commission Member Anderson commented that he likes the idea of the hospital; however, he is concerned about access and the multi-family being sandwiched in between industrial and commercial on three sides, he would rather keep the industrial on one side.

Planning Commission Members West and Kemp agreed.

Planning Commission Member Kemp suggested having the flex industrial facing onto 3050 East, with the storage component behind and multi-family facing 850 North.

Planning Commission Member Anderson commented that he does not think multi-family fits in this area at all as 3050 East already has issues with congestion. He would rather see it all be industrial.

Planning Commission Member West suggested moving uses around to make it more accommodating for homeowners and traffic flow.

City Manager Adam Lenhard asked about soils and possible remediation.

Mr. Christensen explained the geotechnical report will be completed shortly and his understanding is that there is no blue clay in the area.

Councilmember Larkin commented that the layout being recommended by the Planning Commission Members makes sense if the industrial traffic goes towards 3050 East.

Mr. Christensen noted that visibility for multi-family is helpful for leasing. They will look into the suggestions of the Planning Commission Members.

Planning Commission Member West commented that what is being suggested is not only safer, but more visually appealing.

City Manager Adam Lenhard clarified the substation will need to be complete and energized prior to completion and building on the site.

Mr. Christensen noted he has met with the power company; they are in going to enter into a purchase and sales agreement. The quickest the substation can be energized is January/February, 2023. He then outlined the timeline for the hospital project and retailers.

City Manager Adam Lenhard explained the City has been planning on a substation in this area. Cost would be covered through impact fees and other rates in place.

Councilmember McArthur asked if having would east entrance will help alleviate traffic off 3050 and noted that he worries about the traffic. He would like to see what Washington City is willing to do. Councilmembers Hughes and Larkin agreed.

Mr. Sandberg stated that he owns property in both cities and has dealt with both Councils and Planning Commissions. He explained that on the main road going to the Washington Fields area there is an exit that goes to a dead-end street. That is in line with the east entrance into St. George. It comes through agricultural property currently. Although the property owners are not willing to work with them to provide access of the main road at this time, Washington City is planning for this as an access. His opinion is that this will be one main entrance to get to this shopping center. Mike Shaw with Washington City guaranteed him that is the plan for Washington City.

Councilmember Hughes commented that 840 South does go into Washington Fields Road, but it does dead-end. That is the way he would go to avoid 3050 East.

Mayor Randall thanked Mr. Christensen for his time.

The meeting adjourned at approximately 4:50 p.m.

NOTICE OF MEETING
PLANNING COMMISSION
CITY OF ST. GEORGE
WASHINGTON COUNTY, UTAH

Public Notice

PRESENT:

Commissioner Emily Andrus
Commissioner Steve Kemp
Commissioner Elise West
Commissioner Nathan Fisher
Commissioner Austin Anderson

CITY STAFF: Community Development Director John Willis

Assistant Public Works Director Wes Jenkins
Assistant City Attorney Bryan Pack
Planner III Dan Boles
Planner III Carol Davidson
Planner III Mike Hadley
Development Office Supervisor Brenda Hatch

EXCUSED: Chairman Ray Draper
Commissioner Larsen

CALL TO ORDER/FLAG SALUTE

Commissioner Andrus made a motion to elect Commissioner Fisher as the Pro tempore Chair second Anderson. Unanimous, motion carried. Pro tempore Chair Fisher called the meeting to order at 5:05 pm. Commissioner Anderson led the flag salute.

1. RETURNING TABLED ITEMS

- A. Consider a request to change the zone from C-2 (Commercial) to PD-R (Planned Development Residential) on approximately 19.72 acres located generally west of the 900 South and 250 West intersection. The applicant is proposing 223 units on the property. The applicant is Wasatch Commercial Builders and the representative is Josh Lyon. The project will be known as Soleil Ridge Apartments. Case No. 2021-ZC-064 (Staff – Dan Boles) THIS **ITEM HAS BEEN POSTPONED**
- B. Consider a request a Hillside Development Permit on Soleil Ridge. The property is generally located west of Bluff Street at approximately 300 West and 900 South. The property is currently zoned C-2 (Commercial) and OS (Open Space). The owner is Soleil Ridge Partners, LLC. Case No. 2021-HS-007 (Staff – Wes Jenkins) THIS **ITEM HAS BEEN POSTPONED**

2. GENERAL PLAN AMENDMENT (GPA) (Public Hearing) Legislative

- A. A general plan amendment from MDR (Medium Density Residential) to COM (Commercial) on approximately 2.89 acres generally located on the north side of 100 S between 100 West and 200 West.

The applicant is St George City, and the representative is Genna Davenport. 2021-GPA-010 (Staff – Mike Hadley)

Commissioner West recused herself from this item.

Mike Hadley presented the following:

Mike Hadley – The City does own 3 of these properties and they would like to move forward with commercial development in that area.

Commissioner Kemp – Has the City spoken to the other property owners? We did receive a letter from two of the owners, how do the others feel?

Mike Hadley – I don't know, I have had contact with some of them.

Pro tempore chair Fisher opened the public hearing.

Jane Mann – I am one of the people who submitted the letter, we had very short notice. Without knowing what impact this would have on us as a property owner, we would ask that you delay this decision so that we can get more information.

Keith Kelsch – I am not against or for anything right now, commercial, I'm for that, I'm a business man but I would like to know what it is. I have seen a lot of homes downtown go empty, and they never get rehabbed. The real issue is something going to become blighted. That is the real issue. I actually sold the Andrus home to the City, and I know they are trying to keep it as historical. It's just knowing what the vision is.

Kathy Covington – I am worried about what's going in there, how it will affect my neighborhood. I am really frustrated with all the destruction and the changing of our free Dixie. When you have events we are blocked in, there is no parking. I would like to keep our St. George Dixie and stop destroying it. I have a lot of concerns, I would like to know what is going in, if you are going to have parking to accommodate all of this stuff they are putting in.

Connie Blake – I have a great concern about buildings going in and what it will be used for. I am really concerned about the, what is going to affect the families in the neighborhood, the parking. How high are they going to go, what all is it going to entail? I am all for keeping families in downtown St. George.

Scott Armour – I think it's great that the City is finding a better way to use these properties that they own. I find it curious that they didn't include the properties that they devalued by approving Joule Plaza in this change.

Pro tempore chair Fisher closed the public hearing.

Commissioner Anderson – Can staff explain what uses they want on the property?

John Willis – Changing the general plan will open the door for future zoning requests on the property at that time we would know more detail. The general plan is general in nature, so it doesn't give specifics. Tonight, what is before you is do these properties make sense commercial? The dividing line has been 100 South. Right now, we are going through our Downtown Plan and some discussion has been on commercializing our Town Square, we are missing out on an opportunity not commercializing around

that public space and providing those services around our town square. In regard to parking, if any commercial were to go in there, that property would have to meet the parking requirements for the downtown area which is C-4, 1 parking space per 500 square feet of retail space or restaurant. They would have to provide the parking onsite and not count what is on the road.

Commissioner Kemp - If we move forward with this how would it affect the other properties that are not owned by the City?

John Willis – They can use the properties exactly like they are now, this is only a general plan amendment a zone change would need to follow and go through the same process.

Commissioner Andrus – I think it’s a great idea to have more commercial around the Plaza.

Commissioner Anderson – I see the citizens’ concerns, but I think they will be addressed in the zone change that would come forward. I think everything north of 100 South makes sense to be commercial.

Commissioner Kemp – Even if a zone change took place would the residents still be able to use their homes in their current use regardless of what the zone is?

Paula Houston – Yes, that is correct, they would only lose that status if they quit using it as a residence for longer than a year then the property would need to be commercial, but that is only if the zone is changed.

Pro tempore chair Fisher – We would see it again if a zone change comes through.

MOTION: Commissioner Anderson made a motion to recommend approval of the general plan amendment to amend the general plan from medium density residential to commercial on the total area of 2.89 acres.

SECOND: Commissioner Andrus

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- B. A general plan amendment from COM (Commercial) to MDR (Medium Density Residential) and from IND (Industrial) to MDR (Medium Density Residential), HDR (High Density Residential), and PF (Public Facilities) on approximately 51 acres generally located east of 3050 East Street and north of 750 North Street. The applicant is Scott Sandberg, and the representative is Garrett Goff. The project will be known as St. George White Hills Development. Case No. 2021-GPA-012. (Staff – Carol Davidson)
THIS ITEM HAS BEEN POSTPONED

- C. A general plan amendment from OS (Open Space) to LDR (Low Density Residential) on approximately 2.18 acres generally located 1620 West Traverse Dr. The applicant is Quality Development LLC, and the representative is Logan Blake. 2021-GPA-011 (Staff – Mike Hadley)

Mike Hadley presented the following:

Mike Hadley – You can see the portion on the southeast side has been developed, they are in the process of coming through with the portion on the west, it is just waiting on the outcome of this amendment.

Commissioner Anderson – Is there a reason it was left out originally?

Ryan Thomas – When we looked at it originally we looked at it at a 10,000 ft level, no detail was put into it until this point. Now we are looking at the terrain and we can see there are some developable areas. In the zoning plan it is zoned R-1-10. We noticed some unique rocks to keep so we kept some of that open space even though it is R-1-10.

Commissioner West – So is that 3 lots the additional space would allow for?

Ryan Thomas – Portions of some lots and then 2 additional lots.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

MOTION: Commissioner West made a motion to recommend approval of item 2C a general plan amendment from OS (Open Space) to LDR (Low Density Residential) on approximately 2.18 acres generally located 1620 West Traverse Dr.

SECOND: Commissioner Kemp

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- D. A general plan amendment from LDR (Low Density Residential) to MDR (Medium Density Residential) on approximately 19.4 acres generally located east of 3000 East Street and north of 1140 South Street. The applicant is Suburban Land Reserve, and the representative is Rollin Johnson. The project will be known as SLR Fields Case No. 2021-GPA-013 (Staff – Carol Davidson)

Carol Davidson presented the following:

Carol Davidson – You recently saw cases in this area. This is the middle section of that property that has not been changed. We have AG zoning; the general plan is LDR. This is to match what will be north of it. Staff does recommend approval.

Commissioner Andrus – Below the chapels, that’s all-low density?

Carol Davidson – Yes, that is correct.

Commissioner Kemp – Is that other portion in the County in process to be annexed?

Carol Davidson – That is the plan, we are working on our annexation policy now.

Commissioner Anderson – Is there a master planned road in this area?

John Willis – There is a 60 foot and there are a lot of utilities in this area.

Dan McKay – I really don’t have much to add, I appreciate the work staff has put into it. There is also a high-powered gas line in that area.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

Commissioner Kemp – My understanding is that it will just be an extension of the medium density project we already saw?

John Willis – We don’t know, this is a general plan amendment, so we are just looking to see if MDR makes sense in this area.

<p>MOTION: Commissioner Anderson made a motion to recommend approval of the general plan amendment for SLR Fields Item 2D.</p> <p>SECOND: Commissioner Andrus</p> <p>ROLL CALL VOTE:</p> <p>AYES (5)</p> <p>Commissioner Steve Kemp</p> <p>Commissioner Emily Andrus</p> <p>Commissioner Elise West</p> <p>Commissioner Nathan Fisher</p> <p>Commissioner Anderson</p> <p>NAYS (0)</p> <p>Motion Carries unanimous recommend approval</p>
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3. ZONE CHANGE (ZC) (Public Hearing) Legislative

- A. A request to change the zone from R-1-10 (Residential Single Family, 10,000 sq ft minimum lot size) to OS (Open Space) on approximately 14.60 acres located approximately 4000 S 2900 E. The applicant is

DSG Engineering Inc and the representative is Brad Peterson. The project will be known as Banded Ridge Open Space. Case No. 2021-ZC-072 (Staff – Mike Hadley)

Mike Hadley presented the following:

Mike Hadley – This really is just a cleanup item to match the general plan.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

MOTION: Commissioner Andrus made a motion to recommend approval of Item 3A a zone change from R-1-10 to OS on approximately 14.6 acres.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- B. A request to change the zone from R-1-10 (Residential Single Family, 10,000 sq ft minimum lot size), to PD-R (Planned Development Residential) on approximately 5.1 acres located at the NE end of Broken Mesa Drive. The applicant is proposing townhomes on the property. The applicant is Desert Canyons Dev Inc and the representative is Curt Gordon. The project will be known as Desert Canyons Townhomes. Case No. 2021-ZC-073 (Staff – Mike Hadley)

Mike Hadley presented the following:

Mike Hadley – This is another subdivision of Desert Canyons. Each home would have a 2-car garage and they do have 7 extra stalls for the required parking.

Commissioner Kemp – Is that a big elevation change?

Curt Gordon – That is a good observation, this is a little knoll out here, it's zoned residential, and we just want to leave the little hill and build on the developable area.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

MOTION: Commissioner Kemp made a motion to recommend approval of Item 3B from R-1-10 to PD-R on 5.1 acres to include everything presented by staff.

SECOND: Commissioner West

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- C. A request to change the Zoning from C-3 (General Commercial), M-1 (Manufacturing), and R-1-10 (Residential) to PD-C (Planned Development Commercial) to allow for a new commercial development. The property is approximately 26.99 acres. This property is generally located east of 3050 East Street and north of 850 North Street. The applicant is Scott Sandberg, and the representative is Garrett Goff. The project will be known as St. George White Hills Commercial Development. Case No. 2021-ZC-074 (Staff – Carol Davidson)

Carol Davidson presented the following:

Carol Davidson – This is across from Costco; it has been vacant for a very long time. There is a conceptual plan for the rest of this development. This request today is just the initial request to change it to a PD-C they have a use list and this conceptual site plan. They are performing a traffic study at this time, and we are expecting the results in the last week of October, that is required before they can develop. Animal Hospital is permitted with standards in the regular code and staff recommends if you include it in this use list you keep it as permitted with standards. Carwash is a use that staff recommends we remove from the list. We would also recommend taking out 20,000 sq ft building, this is something that requires a CUP in the regular code but this being a PD you would already see everything you would see on a CUP. Staff also had a concern with crematorium on the list because there is residential near here.

Commissioner Andrus – Do you guys know what you might have in mind with your traffic without seeing the traffic study?

Garrett Goff – We don't, like staff said, we will be getting that information at the end of this month.

Commissioner West – It would be lovely to be able to save some of those trees as an area for some of the birds to hang out. It would be interesting to take a walk out there and see what is out there.

Commissioner Kemp – Do you have any problems with what uses staff had recommended to remove? Do you anticipate a large animal clinic on this project? Would you want to remove that use?

Scott Sandberg – If it were to occur it would happen on the east side of the property closer to where animals are already.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

Commissioner Anderson – I think it’s a great use of the property. Obviously there are some concerns on the traffic, and there is a traffic study.

Commissioner Andrus – My concern is that with the traffic study Telegraph and Green Springs are going to blow up, it is already at capacity. Also, the light on 3050 at Costco will not help as much as it could or should. It makes me uncomfortable to approve something this big without the traffic study.

Discussion on roads that may go through and extend to different areas and the effect of traffic.

Paula Houston – Something you may want to ask staff, is this zone change going to do anything to increase traffic? Because they are already zoned commercial they are entitled to those uses under the current zoning. I don’t how much it is increasing the uses and changing them that would make the traffic any worse than what it already potentially could be.

John Willis – That is true Paula, we could also require the traffic study be complete and satisfied by staff before it goes to City Council. It is zoned commercial now and it could come in and submit a building permit for those uses.

Discussion continued on what the traffic study might show and the mitigation it may require.

Commissioner Anderson – I think the tough thing is that there are a lot of things hinging on this zone change for them to go forward, but on the other hand we don’t want to send things on to City Council before they are put to bed on our side.

Discussed what could be on the traffic study and what the mitigations might be.

Pro tempore chair Fisher – I do think we should go through the use list.

Commissioner Andrus – The good thing about this area is you have a little bit of everything there. I think all these uses you could fit in anything, and it would work just fine. I do agree about taking car wash off because there is one on the corner right next to it. Then they can always bring it back if they want to.

MOTION: Commissioner Kemp made a motion to recommend approval of item 3C a zone change from C-3, M-1 and R-1-10 to PD-C to allow a new commercial development of 26.99 acres subject to the recommendations of staff in the packet for the allow large animals with conditions, the removal of car wash from the use list and the removal of large building because it is redundant, and subject to the traffic study being acceptable to the staff during the site plan review process. And removal of the use crematorium.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- D. A request to change the Zoning from R-1-10 (Single-Family Residential) and C-3 (Commercial) to PD-C (Planned Development Commercial) to allow for the development of a new commercial development. The property is approximately 15 acres. This property is generally located east of 3050 East Street and north of 850 North Street. The applicant is Coaction International Development, and the representative is Jared Cox. The project will be known as Zion Regional Medical Center. Case No. 2021-ZC-076 (Staff – Carol Davidson)

Carol Davidson presented the following:

Carol Davidson – This is a little further east from the last item. The applicants want to go to all commercial, this is split zoned residential and commercial, but they want to go to all since it matches the general plan. This is a master planned trail that starts off of 850 and it ends up connecting with a Washington City trail. At some point they will need to make the connection with this trail. They would like to be approved for a 54 ft building. Staff recommends approval of this item. The traffic study will be required to be completed and they will need to install the mitigating items from the traffic study. They do also have a communication tower over 50 ft and that is a permitted with standards in regular code so staff would recommend that you keep the permitted with standards.

Commissioner Kemp – Do we know what the required height for buildings are around that helipad?

Jared Cox – There is a clearance requirement because of the crosswinds. That location on the southeast corner fits all the requirements. We had to keep our distance from the high-powered lines behind the Home Depot as well.

Commissioner West – I see the service drive further east, is it for public use?

Jared Cox – Primarily it is to maintain fire access around the entire property. It will not be negated for public use, but it will not be assigned for that either.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

Commissioner Andrus – I just want to reiterate my concern on traffic.

MOTION: Commissioner West made a motion to recommend approval of item 3D from R-1-10 and C-3 to PD-C with the suggestions and recommendations for a traffic study and recommendations by staff with the conditions that are listed items 1-4. And add another recommendation to provide pedestrian friendly access to the west.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher
Commissioner Anderson
NAYS (0)
Motion Carries unanimous recommend approval

4. ZONING CHANGE AMENDMENT (ZCA) (Public Hearing) Legislative

- A. A request for a zone change amendment to the approved Tonaquint Center PD (Planned Development) to allow for a new Maverik convenience store and its associated gas sales on approximately 2.57 acres located generally on the south-east corner of Dixie Drive and 1600 South. The applicant is Maverik, Inc. and the representative is Rich Piggott. The project will be known as Dixie Drive Maverik. Case No. 2021-ZCA-043 (Staff – Dan Boles)

Dan Boles presented the following:

Dan Boles – You saw this about a year and a half ago, it is back with a few changes for new consideration. The approved use list allows for convenience store or market, but it does not mention gasoline. They are asking that it be included in the motion that is a use that is being added. We were a little concerned because the cemetery is right here and how well do those two uses mesh. They have agreed to tone down what the canopy looks like. They did put in lighting that will automatically dim after 5 minutes. The other thing is that they are proposing a buffer. They have been working with the City to see how to buffer the cemetery from their site. It will be quite a tall berm with trees and shrubs it will straddle the property line. We will look and make sure everything is draining right and that it won't cause any issues. It looks similar to the Maverik stores that are around town. The sign is 15 ft, they are allowed 10 ft, so they are asking for a 15 ft. One thing that came up is a concern that the right of way may not be a public street. We looked at the previous plats and it does show 1600 South as a public street. We feel it is likely that it is a public street. We will make sure that is correct before the council meeting.

Commissioner Kemp – Where will the sign be located on the site?

Commissioner Andrus – How tall is the berm? Does it go all the way to the cemetery?

Dan Boles – It is 10 foot; it doesn't quite go all the way.

Discussion continued on the berm.

Richard Day – As Daniel said we have been working with the City staff since we were here a year ago. The lighting package, the muted colors on the building itself and the berm. I was able to tell that the monument sign is located on Dixie Drive near the entrance. We will work with staff on the sign with the sign permit.

Commissioner Anderson – Do you guys own the land?

Richard Day – We do not, we will be leasing it.

Pro tempore chair Fisher opened the public hearing.

Brandon Staples – I own the building across the street. We were the ones who brought some of the concerns yesterday. When we had our survey done, it shows that we own this corner here. We have been paying to maintain this corner and the median that is in the middle of the street. It is honestly a mess. We just got notice yesterday. I do know that our survey says we own this property currently and the landscaping in the median matches ours. We just don't feel that it's clear if this is a private street, do we want to inherit the traffic that a Maverik would bring? This is an area where the buildings already appraise from 3 million to 9 million class A office. We don't feel Maverik fits there. How will the traffic get across? We don't want to be terrible neighbors, but we would love a little more time before anything is done.

Commissioner Anderson – So are you thinking the HOA owns this street, not you? Are all these buildings part of the HOA?

Brandon Staples – The three buildings are.

Commissioner Anderson – Riverwoods Mill?

Brandon Staples – No, we talked to Chris last night and he had to get an easement to access through here. So, if that is true then it makes us think that the street is private.

Commissioner Kemp – So would you be amicable to deeding this area to the City if you own it?

Brandon Staples – From a liability point of view? Yes.

Randy Simonsen – I am the current owner of the property. This is news to me if they think they own the corner as well as the front of the street. The title reports show that. To my knowledge 1600 South is a dedicated street. The cemetery was dedicated in May of 2001. This property was zoned commercial in 2003 after the cemetery was dedicated. The property is 3.82 acres Maverik will use 2.57 acres and the rest will be sold to the City. The accesses that are existing right now are the same accesses that will be there. I might note that when this was approved there were 105 uses for that property, C-store was one of those uses. Of the 104 other uses I can think of things that would be more detrimental than a C-store on this corner.

Pro tempore chair Fisher closed the public hearing.

Richard Day – Based on our survey it does show that as a public roadway. There are quite a bit of utilities in that roadway and there were no flags on the title report. As far as the berm we understand that berm. Maverik is a local Utah company, we pride ourselves on being a top tier store. We are pretty sure it fits in with most of the St. George region.

Commissioner Kemp – I would like to see the issue with 1600 South be taken care of, those trees need to be trimmed the canopy is low. I see Mr. Staples concern because the county website shows it as private.

Commissioner Fisher – As far as public or private there would be an issue with access. We could condition it; it will get resolved that way. I understand their concern and if it's accurate that this is one of the uses, then a store could be there anyway.

Commissioner Anderson – If the City doesn't purchase the property set aside, I would like to see the applicant landscape that property.

Commissioner Fisher – I think Dan said that the berm is proposed to straddle the property line.

John Willis – This is a PD so the landscaping plan is what you will get. I would include in the motion that the landscaping berm should be completed with the building.

Commissioner Anderson – Does staff have concern with the 15 ft sign.

John Willis – It is not unusual for a commercial sign.

Commissioner West – It seems appropriate to have a gas station. Maverik has seemed to up their game in the last 5 or 10 years. It seems like it is an appropriate location.

Commissioner Kemp – Parks made comments about undulating the berm to break it up, so it isn't just a big mound.

Commissioner Fisher – Perhaps we can put a condition that they work with the Parks department and staff before it goes forward. My concern is access, I know how problematic that can be and what an expense.

Mark Gobel – I made the comment about the trees on the corner, in the plan they show those removed. I made the recommendation that they go through the shade tree board before they remove those.

MOTION: Commissioner Kemp made a motion to recommend approval of Item 4A a zone change to the approved Tonaquint PD to allow for a Maverik convenience store with the following conditions 1. The questions of whether or not 1600 S is a public street and if it is not that it is through some form, a quit claim or other and is dedicated as a public street. 2 The applicant work with the parks department to resolve their concerns about both design and maintenance of the berm between the Maverik and the proposed addition to the cemetery. 3 the applicant work with the shade tree board if they are intending to remove trees from the corner of 1600 S and Dixie Dr. 4 They will use the muted colors that is shown in their plan and the signage depicted in the renderings will match the building plans. 5 If the City does not end up purchasing the property the property owner will landscape the property similar to adjacent property. 6 Add fuel sales as a use.

SECOND: Commissioner West

ROLL CALL VOTE:

AYES (4)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Anderson

NAYS (1)

Commissioner Nathan Fisher

Motion Carries, recommend approval

- B. A request for a zone change amendment for the Desert Color PD (Planned Development). The zone change amendment would allow the applicant to construct twenty (20) residential units on the site (two ten-unit buildings). The site is approximately 0.61 acres and is located generally west of the lagoon, north of Lagoon Parkway. The applicant is Cole West Development and the representative is Eric Day. The project is known as Desert Color Resort Phase 5 Lots 514 & 515. Case No. 2021-ZCA-075 (Staff – Dan Boles)

Dan Boles presented the following:

Dan Boles – Looking at this project we are not just looking at it specifically, we are, but it also blends into the resort as a whole. If you look at just the one lot it's a higher amount of dwelling units per acre, but if you look at the whole phase it is under 7 dwelling units per acre. There is quite a bit of civic space in that area. They meet the required parking; in fact, they are exceeding it by 4 stalls. The civic space requirement is being met also. The renderings are similar to the ones you saw for 501. You can see the rooftops are similar to 501 with places to lounge, places to congregate.

Commissioner Fisher – In the meeting for 501 there were certain suggestions made by commissioners as far as shielding it from certain views and things like that. Does that incorporate those suggestions or not, do you know?

Dan Boles – This is what they proposed for 501. You could make those same conditions on this motion.

Eric Day – We had already submitted for this one before we heard the suggestions from 501 but we are happy to adhere to the same conditions.

Pro tempore chair Fisher opened the public hearing.

Pro tempore chair Fisher closed the public hearing.

Commissioner Kemp – It feels like a lot of our questions seem to be answered by the development agreement. I still have concern with the density on one lot but as long as the civic space and the other requirements of the development agreement are met then we should move forward with it.

Commissioner Anderson – Did they fix the issue with covered parking?

Commissioner Kemp – It looks like that is shown on the stalls.

Commissioner Andrus – We had a condition about the screening on the roof, is that something we want to include on this one too?

Pro tempore chair Fisher – I think the easiest thing is to refer back to the last one, because what they are presenting, you have to make it part of the motion if it isn't already presented here. We are approving what is here only.

MOTION: Commissioner Andrus made a motion to recommend approval of item 4B a zone change amendment for Desert Color PD with the condition that lots 514 and 515 also meet the conditions that were discussed on lot 501 in a previous meeting as far as parking and screening on the roofs.

SECOND: Commissioner Kemp

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

5. HILLSIDE DEVELOPMENT PERMIT (HS) Administrative

- A. Consider a request for a hillside development permit to allow disturbance of areas greater than 20% slope areas. The application is in anticipation of the construction of a city park and trail. The property is generally located on 700 East (University Blvd), north of St. George Blvd and is currently zoned OS (Open Space) and C-2 (Highway Commercial). The applicant is the City of St. George. Case No. 2021-HS-009 (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – Right now we are just looking at a trail between 700 East and 800 East and above the boulevard. There is some in the above 40% but it is a city project, the ordinance does allow that. The Hillside Board did give the condition that they contact the Temple to make sure it would affect their spring and that the retaining walls match the natural colors.

Commissioner Andrus – How steep is the trail.

Joseph Neilson – I think about 20%, there are a few spots that are more than 20%. That's why there are so many squiggly turns because the longer we can make that trail the less steep we can make that grade. It's a tricky site to be honest with you. We are doing our best with what we have.

Commissioner Kemp – Will you be doing the parking lot with the park or with the trail?

Joseph Neilson – With the park in a future phase. This was not in the parks master plan. It was brought to us by Officer Fuller, it is a magnet for homeless camps and crime. The only way they could patrol it is on their mountain bikes. They asked us to propose something, and we did, City Council latched onto that. There is some really cool scenery and vegetation.

Commissioner Anderson – I think it's great.

Commissioner West – I agree.

Pro tempore chair Fisher – It will be a great project.

MOTION: Commissioner Anderson made a motion to recommend approval of the hillside permit for the Temple Springs Park.

SECOND: Commissioner Andrus

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- B. Consider a request for a hillside development permit at the Banded Hills Subdivision. The applicant is proposing to adjust the no-build area designated on the plat. The property is located at 2973 E Banded Hills Drive. The property is currently zoned R-1-10 (Single-Family Residential, 10,000 sq ft minimum lot size). The applicant is Split Rock Custom Homes. Case No. 2021-HS-010 (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – This came before you in 2018. This is the road that leads to the other side of the airport where the hangars are. When it came it was for disturbance, the ridgeline and the rockfall hazard line. The owner of lot 2 has come forward and is asking to amend that rock fall hazard line. They went AGEC who did the original study, when they went back and looked at this one lot in more detail they determined that the line could be moved for this lot.

Commissioner Fisher – So we will see each lot come forward?

Wes Jenkins – They might. AGEC did indicate that they didn't look in detail at any of the other lots. We will ask them to amend the final plat to move the line.

Discussion continued on the more detailed study.

Bart Smith – We just appreciate all your service and all your work. We did do a more detailed study prior to submitting for this so we feel confident.

Pro tempore chair Fisher – My guess is AGEC wouldn't have signed the letter unless they felt very comfortable.

Commissioner Kemp – The entire lot is in the original rock fall hazard area, right?

Wes Jenkins – This front area here would not have been able to have a structure, but the back half would have been able to be built on. If you go to the UGES the whole property lies within the rockfall hazard zone. That's what initiates the study, that is what indicates that a more detail study needs to be done. Then they are required to come to hillside.

MOTION: Commissioner West made a motion to recommend approval on Item 5B to adjust the no build area on the property located 2973 E Banded Hills Dr. a request for a hillside development permit.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (4)

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (1)

Commissioner Steve Kemp

Motion Carries, recommend approval

6. PRELIMINARY PLAT (PP) Administrative

- A. Consider a request for a sixty (60) lot residential subdivision known as The Flats at Grand View located at approximately Sky Rocket Road and Dixie Drive. The property is 9.62 acres and is zoned PD-R. The applicant is American Land Consulting, representative Adam Allen. Case No. 2021-PP-050. (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – This came recently before you as a PD. This is how they will subdivide it with private pads, common area, public roads and a detention basin.

MOTION: Commissioner Kemp made a motion to recommend approval of item 6A a 60-lot residential subdivision known as The Flats at Grand View.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- B. Consider a request for a one (1) lot commercial subdivision known as Patio Furniture Sunriver located at the southwesterly corner of the intersection of Pioneer Road and Nighthawk Drive. The property is 5.06 acres and is zoned PD-C. The applicant is Bush and Gudgell, representative Rick Myer. Case No. 2021-PP-051. (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – You saw the PD zone change for this also. This is a request to create a one lot subdivision dedicating the Right of Way and the decel lane.

Commissioner Andrus – I want to disclose that the company I work for has been hired to do the access management study, but I have no connection to this property.

MOTION: Commissioner Anderson made a motion to recommend approval of a preliminary plat for a 1 lot commercial subdivision for Item 6B

SECOND: Commissioner Andrus

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- C. Consider a request for an eighty-six (86) lot residential subdivision known as Desert Providence located at the southwest corner of the intersection of Desert Canyons Parkway and Castillo Drive in the Desert Canyons Development. The property is 12.43 acres and is zoned PD-R. The applicant is DSG Engineering, representative Ken Miller. Case No. 2021-PP-052. (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – They did a KLOMAR a long time ago and they will actually follow through with a LOMAR. These lots would not be able to plat until they go through with the LOMAR, that would need to be a condition.

MOTION: Commissioner Andrus made a motion to recommend approval for item 6C the 86-lot residential subdivision known as Desert Providence with the condition that the lots that are in the floodplain cannot plat until the LOMAR is approved.

SECOND: Commissioner West

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- D. Consider a request for a nineteen (19) lot residential subdivision known as Desert Reserve Phase 3 located at approximately the intersection of Desert Canyons Parkway and Castillo Drive in the Desert Canyons Development. The property is 4.75 acres and is zoned PD-R. The applicant is DSG Engineering, representative Ken Miller. Case No. 2021-PP-053. (Staff – Wes Jenkins)

Wes Jenkins presented the following:

Wes Jenkins – This is located to the southwest of the last one up against the hillside.

MOTION: Commissioner West made a motion to recommend approval for item 6D a 19-lot residential subdivision for Desert Reserve phase 3 located at the intersection of Desert Canyons Parkway and Castillo Drive.

SECOND: Commissioner Anderson

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

- E. Consider a request for a twenty-one (21) lot residential subdivision known as Desert Providence located along the future extension of Rim Runner Drive at approximately 4200 East in the Desert Canyons Development. The property is 10.4 acres and is zoned PD-R. The applicant is DSG Engineering, representative Ken Miller. Case No. 2021-PP-054. (Staff – Wes Jenkins)

Wes Jenkins presented with no further comment.

MOTION: Commissioner Anderson made a motion to recommend approval of the preliminary plat for Desert Solace phase 4 a 21-lot residential subdivision.

SECOND: Commissioner Kemp

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

7. MINUTES

Consider a request to approve the meeting minutes from the August 26, 2021, joint work meeting and the September 28, 2021, meeting.

MOTION: Commissioner Andrus made a motion to approve the minutes.

SECOND: Commissioner Kemp

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

8. CITY COUNCIL ACTIONS

John Willis the Community Development Director will report on the items heard at City Council from the September 23, 2021, meeting.

1. 2021-ZC-056 TDC Office Building
2. 2021-ZCA-059 Walmart 3220 St. George Expansion
3. 2021-ZCA-058 Red Cliffs Mall
4. 2021-ZCA-060 The Cove at Desert Color ph. 5 lot 501
5. 2021-ZCA-062 Patio Furniture SunRiver
6. 2021-ZCA-063 SunRiver Flex Warehouse
7. Sandberg Property Work Mtg
8. 2021-ZRA- 010 Airport uses

9. ADJOURN

MOTION: Commissioner Anderson made a motion to adjourn at 7:43 pm.

SECOND: Commissioner Andrus

ROLL CALL VOTE:

AYES (5)

Commissioner Steve Kemp

Commissioner Emily Andrus

Commissioner Elise West

Commissioner Nathan Fisher

Commissioner Anderson

NAYS (0)

Motion Carries unanimous recommend approval

1 **JOINT MEETING OF THE ST. GEORGE CITY COUNCIL**
2 **AND PLANNING COMMISSION MINUTES**
3 **REGULAR MEETING**
4 **OCTOBER 14, 2021, 4:00 PM**
5 **CITY COUNCIL CHAMBERS**
6

7 **PRESENT:**

8 **Planning Commission Member Nathan Fisher – arrived at 4:17 p.m.**
9 **Planning Commission Member Emily Andrus**
10 **Planning Commission Member Steve Kemp**
11 **Planning Commission Member Elise West**
12

13 **ALSO PRESENT:**

14 **Mayor Michele Randall**
15 **Councilmember Jimmie Hughes – arrived at 4:15 p.m.**
16 **Councilmember Bryan Smethurst**
17 **Councilmember Gregg McArthur**
18 **Councilmember Dannielle Larkin**
19 **City Manager Adam Lenhard**
20 **City Attorney Shawn Guzman – arrived at 4:50 p.m.**
21 **City Recorder Christina Fernandez**
22

23 **EXCUSED:**

24 **Councilmember Vardell Curtis**
25 **Planning Commission Member Ray Draper**
26 **Planning Commission Member Emily Andrus**
27 **Planning Commission Member Austin Anderson**
28

29 **OPENING:**

30 Mayor Randall called the meeting to order and welcomed all in attendance. The
31 invocation was offered by Mike Stephenson with the Church of Jesus Christ of Latter-
32 Day Saints and The Pledge of Allegiance was led by Mayor Randall.
33

34 **DISCUSSION REGARDING THE GENERAL PLAN AND DOWNTOWN MASTER PLAN:**

35 Whitney Ward with VCBO Architecture covering the following topics: Connection to
36 nature; Q15 – In your opinion, how satisfied are you with St. George City’s efforts to
37 integrate nature into the City in the following areas?: Connection to nature – priority
38 view corridors, trail network integration, and sensitive land preservation; and June
39 21-23 working group discussions – natural environment.
40

41 A discussion took place regarding open space preservation and compact
42 development. Councilmember Larkin commented that she would like to include
43 language so that it is not easily reversible by future Councils. Councilmember Larkin
44 noted that City Attorney Shawn Guzman’s concern with land trust with regards to
45 areas such as Webb Hill, is that if the property becomes part of a land trust and new
46 technology comes along that the City would like to utilize the space for and still
47 keeping it as open space, entering into a land trust for that area may be premature.
48 With regards to riparian areas, there may not be the same reservations.
49

50 Community Development Director John Willis explained the hillside ordinance
51 provides protection; however, there is not an ordinance that addresses flood plain
52 development. There is no standard or direction on preserving these properties. If
53 FEMA allows for development on these properties, there is a good chance the City

5 will allow the development also. He asked if the City should look at the Virgin River
6 corridor and the Santa Clara River and other riparian areas through the same lens as
7 hillsides and create an ordinance that encourages preservation.
8

9 Ms. Ward noted looking at the FEMA floodplain map, water ways connect the City
10 better than anything else.
11

12 Councilmember McArthur stated that he does not agree with the ordinance allowing
13 areas to be pulled out of the floodplain to build them up. He noted as less lands
14 become available, there are issues with flooding down river and stated he would like
15 to adjust the ordinance.
16

17 Councilmember Hughes arrived at 4:15 p.m.
18

19 Planning Commission Member Fisher arrived 4:17 p.m.
20

21 Councilmember Larkin commented the City could act as an intermediary, introducing
22 people to the concept of land trusts. She stated that most of the land throughout
23 the City that is flat and ready to develop is privately owned.
24

25 Ms. Ward explained there is a mechanism where development rights can be
26 transferred to obtain more density in another area and donate the land to the City.
27 There are areas in the City that are highly susceptible to landslides; however, there
28 are some policies regarding landscape standards that can help reduce the risk for
29 landslides. For properties at the base of the bluffs and other key locations can be
30 preserved for the long term through open space preservation.
31

32 Community Development Director John Willis explained there are occasions where
33 people wanted to preserve property that is less than the 20% and staff felt like it
34 should be preserved. The developer would be given development credit for that.
35 There are situations where ordinance could be in place for areas that may not meet
36 the slope category but is still valuable there could be some density transfer, giving
37 some sort of incentive to preserve the property.
38

39 Ms. Ward noted the city currently has a standard that parks under three acres are
40 not maintained by the City. She suggested reducing the size for properties that have
41 already been developed, to obtain open space preservation in these areas to have
42 access to open areas throughout the City. She continued with her PowerPoint
43 presentation covering the following topics: Q24 – Which of the following
44 transportation improvements are most important to you?; Accessible city – trail
45 urban connectivity; Parking study summary; Parking recommendations; Accessible
46 city – 100 South and St. George Boulevard; Complete streets.
47

48 Richard Brockmyer with Fehr and Peers showed a slide that outlined transit
49 integration.
50

51 A discussion took place regarding micro transit and how this differs from services like
52 Uber and Lyft.
53

4
5 City Attorney Shawn Guzman arrived.

6
7 Councilmember McArthur mentioned the City's Suntran bus system. He asked if
8 there are new funding methods for micro transit. Mr. Brockmyer explained funding
9 for micro transit systems.

10
11 Ms. Ward showed a slide outlining Arts and culture.

12
13 Councilmember McArthur spoke about historic preservation and commented that he
14 is concerned that accessory dwelling units can be larger and more visually impactful
15 than the original historic home.

16
17 Councilmember Larkin commented that she agrees with Councilmember McArthur;
18 however, limiting too closely what a property owner can do on these historic homes
19 can force them to tear down the existing home down and build something bigger
20 rather than preserving the home.

21
22 Ms. Ward stated the City does not have many homes on the national register for
23 historic places, most of them are locally recognized as a historic landmark. This
24 allows the homeowner to what they want with their properties.

25
26 Councilmember McArthur mentioned that he would like to have the landmark
27 preservation code preserve homes the City really wants to preserve. There is a
28 potential for a loophole that allows a property owner to build a large home behind
29 the older home.

30
31 Ms. Ward noted they will look at a policy to balance improvement and investment
32 with preservation and restoration.

33
34 Planning Commission Member West stated she likes the idea of the murals proposed.
35 She mentioned some parking structures throughout the Country that have murals
36 painted on them; she feels they look very nice.

37
38 **REPORTS FROM MAYOR, COUNCILMEMBERS, AND CITY MANAGER:**

39 Councilmember Smethurst mentioned the golf courses have recently been reseeded
40 and are looking great.

41
42 The meeting adjourned at approximately 5:10 p.m.