



PLANNING COMMISSION MEETING AGENDA

Department of Community and Economic Development
Meeting Date: July 15, 2020

NOTICE is hereby given that the Cottonwood Heights Planning Commission will electronically hold a work session meeting at approximately 5:00 p.m., and a business meeting beginning at approximately 6:00 p.m., or soon thereafter, on **Wednesday, July 15, 2020**. In view of the current COVID-19 pandemic, this meeting will occur only electronically, without a physical location, as authorized by the Governor's Executive Order 2020-05 dated March 18, 2020 and related legislation enacted by the Utah Legislature since that date. (See the attached written determination of the chair or acting chair of the planning commission that conducting this meeting with a physical anchor location presents a substantial risk to the health and safety of those who may be present at the anchor location). The public may remotely hear the open portions of the meeting through live broadcast by connecting to <http://mixlr.com/chmeetings>.

***** Public comments may be submitted to city staff by email at mtaylor@ch.utah.gov up to the start of the meeting at 5:00 p.m., MST. Comments received by that deadline will be verbally read into the meeting's record by the Planning Commission Chair or a designee for up to three minutes per submission. Comments received after the start of the meeting will be forwarded to the Planning Commission, but not read into the meeting record or addressed during the meeting. There will be no opportunity for verbal comments, questions or other input by the public during this electronic meeting.*****

5:00 p.m. WORK MEETING

1.0 Planning Commission Business

1.1. Review Business Meeting Agenda

The Commission will review and discuss agenda items.

1.2. Additional Discussion Items

The Commission may discuss the status of pending applications and matters before the Commission and new applications and matters that may be considered by the Commission in the future.

6:00 p.m. BUSINESS MEETING

1.0 Welcome and Acknowledgements

1.1. Ex parte communications or conflicts of interest to disclose.

2.0 General Public Comment

General public comments will be read into the record following the procedure detailed above.

3.0 Business Items

3.1 Election of a Planning Commission Chair and Vice Chair.

3.2 (Project CUP-20-009)

A public hearing and possible action on a request from Dimond Zollinger (Salt Lake City Department of Public Utilities) for a conditional use permit for a wireless telecommunication facility (roof-mounted antenna) and a reduction to the minimum yard requirements for a public use at 8800 S. Kings Hill Dr. #A. in the F-1-21 – Foothill Residential zone. **Continued from the July 1, 2020 Public Hearing.**

3.3 (Project PDD-19-001)

A public hearing to receive comments on a request from AJ Rock, LLC, for an ordinance and zone map amendment for approximately 21.5 acres of property located at 6695 S. Wasatch Blvd. utilizing the city's Planned Development District (PDD) ordinance and changing the zoning designation from F-1-21 (Foothill Residential) to PDD-2 (this is a zoning designation prepared specifically for the subject property by the applicant, within the guidelines of chapter 19.51 of the city zoning ordinance). **Continued from the July 1, 2020 Public Hearing.**

3.3 (Project GPA-20-002)

A public hearing and possible recommendation to the City Council on a city-initiated proposal to adopt a Bonneville Shoreline Trail Access Master Plan as an addendum to the Cottonwood Heights General Plan.

4.0 Adjourn

Meeting Procedures

Items will generally be heard in the following order:

1. Staff Presentation
2. Applicant Presentation
3. Open Public Hearing (if item has been noticed for public hearing). Written public comment received prior to the meeting will be read into the record.
4. Close Public Hearing
5. Planning Commission Deliberation
6. Planning Commission Motion and Vote

Planning Commission applications may be tabled if: 1) Additional information is needed in order to act on the item; OR 2) The Planning Commission feels there are unresolved issues that may need further attention before the Commission is ready to make a motion. **NO agenda item will begin after 9 pm** without a unanimous vote of the Commission. The Commission may carry over agenda items, scheduled late in the evening and not heard, to the next regularly scheduled meeting.

Submission of Written Public Comment

Written comments on any agenda item should be received by the Cottonwood Heights Community and Economic Development Department prior to the start of the meeting to be read into the record. Comments should be emailed to mtaylor@ch.utah.gov. Comments received after the start of the meeting will be distributed to the Commission members after the meeting.

Notice of Compliance with the Americans with Disabilities Act (ADA)

In compliance with the Americans with Disabilities Act, individuals needing special accommodations or assistance during this meeting shall notify the City Recorder at (801) 944-7021 at least 24 hours prior to the meeting. TDD number is (801) 270-2425 or call Relay Utah at #711.

Confirmation of Public Notice

On Friday, July 9, 2020 a copy of the foregoing notice was posted in conspicuous view in the front foyer of the Cottonwood Heights City Offices. The agenda was also posted on the City's website at www.cottonwoodheights.utah.gov and the Utah public notice website at <http://pmn.utah.gov>.

DETERMINATION OF THE PLANNING COMMISSION CHAIR CONCERNING AN ANCHOR LOCATION

Pursuant to UTAH CODE ANN. 52-4-207(4), the chair (or acting chair) of the Cottonwood Heights Planning Commission hereby determines that conducting this Planning Commission meeting at an anchor location presents a substantial risk to the health and safety of those who may be present at the anchor location. The World Health Organization, the President of the United States, the Governor of Utah, the Salt Lake County Mayor and Health Department, and the Mayor of this city have all recognized that a global pandemic exists related to the new strain of a coronavirus named SARS-CoV-2. Due to the state of emergency caused by the global pandemic, I find that conducting a meeting at an anchor location under the current state of public health emergency constitutes a substantial risk to the health and safety of those who may be present at the location. According to information from state epidemiology experts, Utah is currently in an acceleration phase, which has the potential to overwhelm the state's healthcare system.

Signature

Date

DATED THIS 9th day of July, 2020, Paula Melgar, City Recorder



Planning Commission PROJECT MEMORANDUM

Conditional Use Permit: Wireless Telecommunications Facility

Meeting Date: July 15, 2020

Staff Contact: Andy Hulka, Planner

(801-944-7065, ahulka@ch.utah.gov)

Summary

PROJECT NAME:	Wireless Telecommunications Facility (Project CUP-20-009)
REQUEST:	1. Conditional use permit for a wireless telecommunication facility. 2. Reduction to the minimum yard requirements for a public use.
APPLICANT:	Dimond Zollinger (SLC Department of Public Utilities)
RECOMMENDATION:	Approve, with conditions

Background

July 1st Planning Commission Meeting

The Planning Commission held a public hearing on July 1st, 2020 to receive public comment on the request from Salt Lake City Public Utilities (SLCPU) to construct an above-ground water pump station structure with a roof-mounted communications antenna. Commissioners voted to continue the item to the July 15th Planning Commission meeting to allow additional time for the applicant to provide more detail on the requirement for the antenna to be a stealth facility.

The applicant is proposing a camouflage paint scheme to minimize the visual impact of the antenna to the neighborhood. SLCPU feels that a paint scheme will be less visually obstructive than other stealth options like using architectural elements or a flagpole to disguise the antenna. They are preparing a presentation for the Planning Commission with more information on the proposal which will be presented at the meeting.

Recommendation

Staff recommends approval of CUP-20-009, with the conditions of approval included in the July 1st, 2020 staff report.

Model Motions

Approval

I move that we approve project CUP-20-009, based upon the conditions and findings for approval outlined in the staff report:

- List any additional conditions of approval...

Denial

I move that we deny project CUP-20-009, based on the following findings:

- List findings for denial...

Attachments

1. July 1st Staff Report, with attachments



PLANNING COMMISSION STAFF REPORT

Conditional Use Permit: Wireless Telecommunications Facility

Meeting Date: July 1, 2020

Staff Contact: Andy Hulka, Planner

(801-944-7065, ahulka@ch.utah.gov)

Summary

Project #:

CUP-20-009

Subject Property:

8800 S. Kings Hill Dr. #A

Actions Requested:

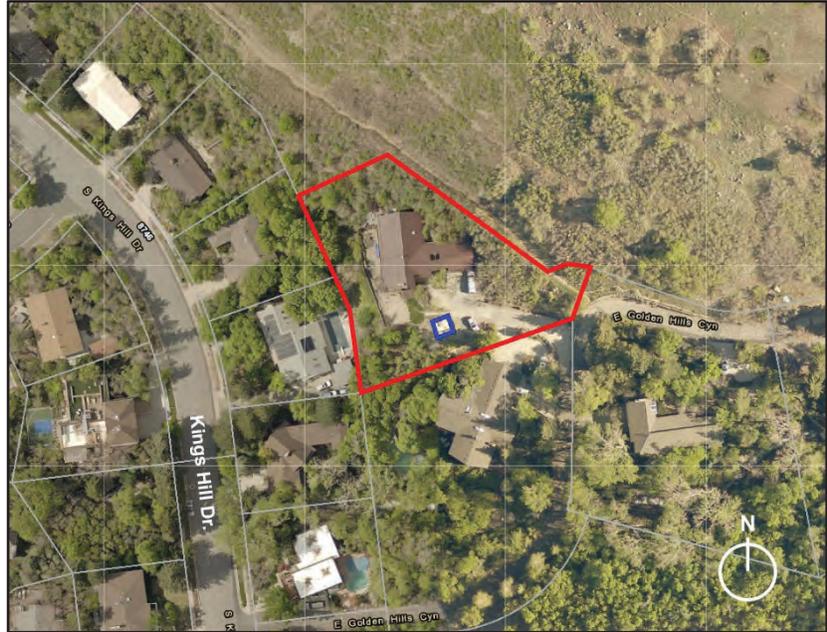
1. Conditional use permit for a wireless telecommunication facility.
2. Reduction to the minimum yard requirements for a public use.

Applicant:

Dimond Zollinger (SLC
Department of Public Utilities)

Recommendation:

Approve, with conditions



Aerial View (with proposed facility location in blue)

Context

Property Owner:

Suzanne Harris
(Easement owned by SLC
Department of Public Utilities)

Parcel Number:

28-01-127-009

Acres:

0.70 acres

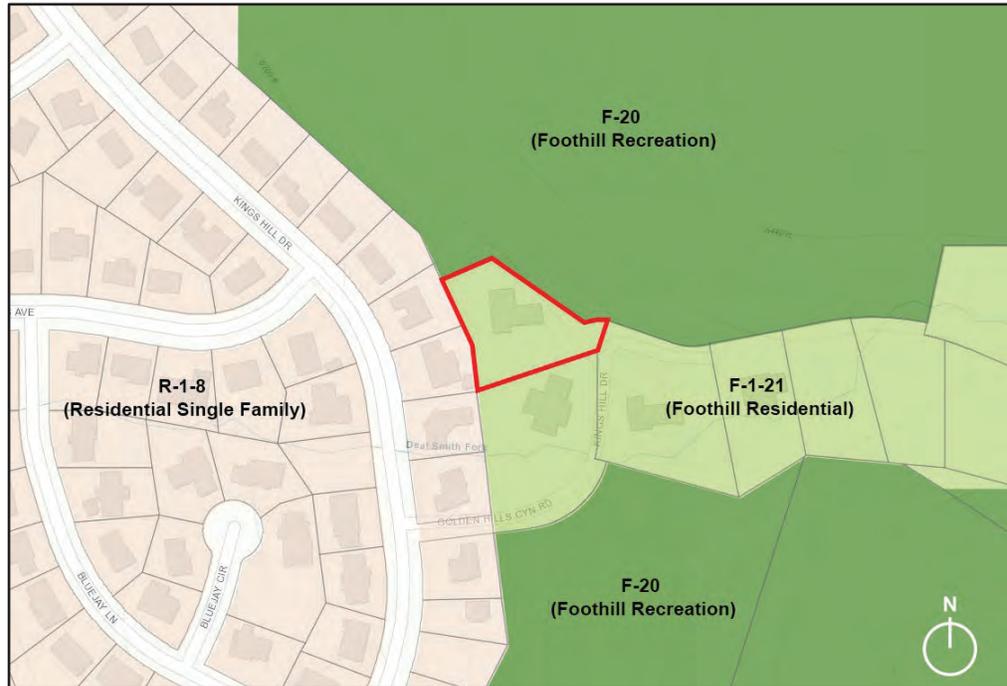


Looking west from driveway

Zoning and Land Use

Zone:
F-1-21 (Foothill Residential)

Land Use:
Sensitive Lands



Zoning Vicinity Map

Site Photos



Existing pump station, looking north towards the primary dwelling



Existing pump station, looking west towards neighboring property

Background

June 3rd Planning Commission Meeting

This application was originally scheduled for a public hearing and possible action at the June 3rd Planning Commission meeting. At the applicant's request, the item was continued to the July 1st Planning Commission meeting to allow additional time for the applicant to coordinate with the property owner and address other neighborhood concerns.

On June 24th, 2020, representatives from the Salt Lake City Department of Public Utilities (SLCDPU) met with residents of the Golden Hills Canyon Subdivision to discuss their concerns. The applicant (Dimond Zollinger, SLCDPU) submitted the following information about the meeting:

Today Jeff Grimsdell (SLCPU Water Distribution Manger), Delmas Johnson (Design Engineer – J-U-B Engineers) and I met with Tyler Harris (future property owner), Jason Ehrhart (8795 Kings Hill Drive), Nicholas Chachas (8800 Kings Hill unit B), and the residents that live in the home at 8811 S Kings Hill Drive to discuss the project further and to address their concerns. It was confirmed that our proposed generator location was the reason the property owner was opposed to the generator, rather than the generator itself, because the placement conflicted with his atv access into his back yard. We were able to come up with three alternative locations to place the generator that Tyler was in agreement with. Our design engineer is now looking into the

feasibility of each of these options to determine which would be best. When that is determined we will incorporate these changes into the design drawings.

Tyler stated that he is in agreement with the above ground entrance structure that is included in our proposal. He expressed that he does see the need for this upgrade for the safety of our operators and expressed gratitude for us working with him to match the siding and roofing to his home.

However, the property owner and other neighboring residents are still opposed to the antenna. We brought the actual antenna with us so they could see the exact size and explained to them further the reasons we recommend that it be included in the rehabilitation of the pump station. We were able to address their questions and they agreed that SCADA system would bring value to the project but want us to be able to connect this technology to our system by some other means. We explained that we have looked into other options but the antenna is the only secure and compatible way that we can connect the new SCADA system into the SLCPU Network.

Additional responses sent from the applicant to concerned neighbors by email have been attached to this report for Planning Commission review and consideration. Staff added a new condition of approval requiring the applicant to verify their legal right to build in the easement or obtain owner's consent, subject to approval by the City Attorney.

Request

Applicant Proposal

Salt Lake City Department of Public Utilities (SLCDPU) has submitted a conditional use permit application for a new wireless facility at 8800 S. Kings Hill Dr. #A. There is an existing underground pump station on the property that was built in 1970 to supply drinking water to the homes in the Golden Hills Subdivision. SLCDPU plans to rehabilitate the pump station by replacing the pumps and piping and making improvements to the structure itself. The structure improvements will include an above-ground pump vault entrance with a ten-foot Supervisory Control and Data Acquisitions (SCADA) antenna on top. The SCADA antenna will allow SLCDPU to remotely control the pump station and monitor water quality.

SLCDPU initially proposed a 30-foot standalone SCADA antenna elsewhere on the property but revised the design to the current proposal after receiving feedback from neighboring property owners. The applicant's intent is to use colors and materials on the above-ground structure to match the primary dwelling on the property.

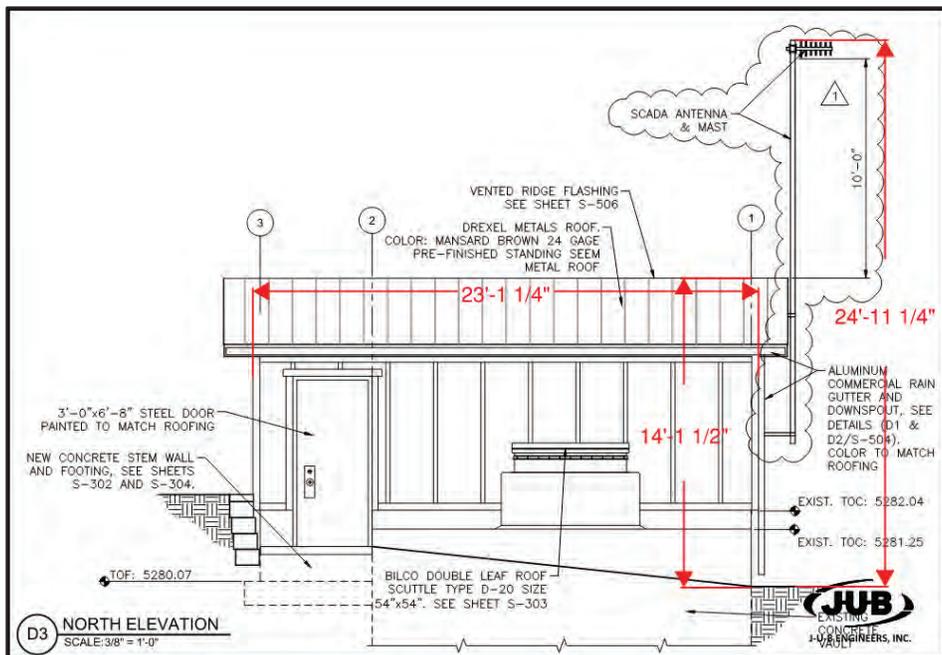
Proposed Site Plan, Design, and Photos

All proposed improvements will take place in the location of the existing pump station, which is in the side yard area of the residential property.

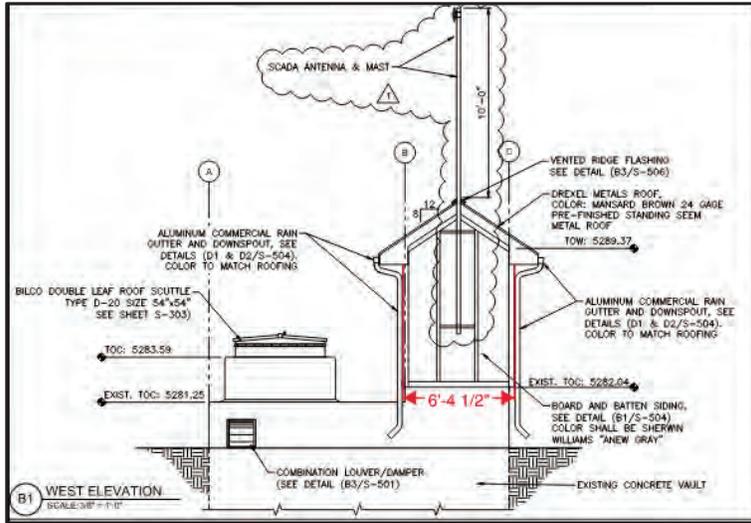


Site Plan

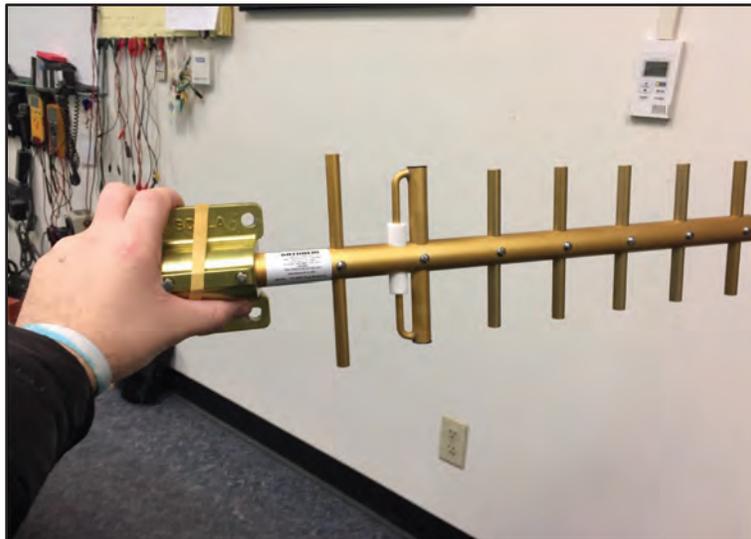
The above-ground entrance structure is proposed to be approximately 6.5 ft. by 23 ft. (approx. 150 sq. ft.) and just over 14 ft. above grade at the highest point (or about 10.5 ft. above the existing concrete). The SCADA antenna is proposed to be approximately 24-25 ft. above existing grade on the west side of the structure (about 20 ft. over the existing concrete).



North Elevation



West Elevation



Proposed SCADA Antenna



Example SCADA Antenna on Other SLCDPU Pump Station

Ordinance Review

Conditional Uses

Roof mounted wireless facilities are classified as a conditional use, allowable only on nonresidential buildings in the F-1-21 (Foothill Residential) zone, per section 19.83.050 of the zoning ordinance (Allowable Uses). The Planning Commission may review the request to determine whether the materials and colors match or blend with the surrounding natural or built environment to the greatest extent practicable. The Planning Commission may not consider electromagnetic or microwave radiation when considering a conditional use for a wireless facility:

19.83.090 Additional Conditional Use Requirements.

I. In considering a conditional use application for a telecommunications tower, the planning commission shall not consider evidence that the electromagnetic or microwave radiation used by communication services detrimentally affects public health or the environment. The planning commission may, however, consider other valid health and safety concerns, such as structural integrity, electrical safety, etc.

In order for the antenna to be located on the edge of the roof as proposed, the antenna must be a stealth facility, as defined in the zoning ordinance:

19.83.020 Definitions.

“Stealth facility” means a facility which is either: (1) virtually invisible to the casual observer, such as an antenna behind louvers on a building, or inside a steeple or similar structure; or (2) camouflaged, through stealth design, so as to blend in with its surroundings to such an extent that it is indistinguishable by the casual observer from the structure on which it is placed or the surrounding in which it is located. Examples of stealth facilities include antennas which are disguised as flagpoles, as indigenous trees, as rocks, or as architectural elements such as dormers, steeples and chimneys. To qualify as “stealth” design, the item in question must match the type of item that it is mimicking in size, scale, shape, dimensions, color, materials, function and other attributes as closely as possible, as reasonably determined by the city.

The Planning Commission must also authorize a reduction to the yard requirements for the structure. Typically, accessory structures in residential zones are not allowed to be located in a front, side, or corner side yard area of any lot, per section 19.76.030.B of the zoning ordinance (Accessory Buildings – Area of Coverage and Building Area). Because this structure is for a public use (water utility), the Planning Commission may authorize the above-ground portion of the structure to be located in the side yard area of the property:

19.76.030 Structures, bulk and massing requirements.

C. Public use—reduced lot area and yards. The minimum lot area and minimum yard requirements of this title may be reduced by the planning commission for a public use. The planning commission shall not authorize a reduction in the lot area or yard requirements if rule 19.76.030(H), “Additional height allowed when,” is in use, or unless the evidence presented is such as to establish that the reduction will not, under the circumstances of the particular case, be

detrimental to the health, safety or general welfare of persons residing or working in the vicinity, or injurious to property or improvements in the vicinity.

Staff Analysis: The request is generally compliant with the requirements of the zoning ordinance for a public use with a roof mounted wireless facility. The Planning Commission should review and make specific recommendations for what stealth design method would be appropriate for this project.

Criteria for Granting the Conditional Use Permit

The city code establishes the criteria by which a conditional use permit may be issued:

19.84.020 Approval standard.

A conditional use shall be approved if reasonable conditions are proposed, or can be imposed, to mitigate the reasonably anticipated detrimental effects of the proposed use in accordance with applicable standards. If the reasonably anticipated detrimental effects of a proposed conditional use cannot be substantially mitigated by the proposal or the imposition of reasonable conditions to achieve compliance with applicable standards, the conditional use may be denied.

Recommendation

Staff recommends approval of CUP-20-009, with the following conditions of approval:

1. A building permit must be obtained from the city prior to construction of the facility.
2. As part of the building permit application, the applicant must submit a certificate from a licensed professional engineer certifying that the design of the facility meets all applicable standards for the facility, including, but not limited to: electrical safety, material and design integrity, seismic safety, etc.
3. The antenna must be designed as a stealth facility, which is camouflaged so as to blend in with its surroundings to such an extent that it is indistinguishable by the casual observer from the structure on which it is placed or the surrounding in which it is located. The antenna may be disguised as a flagpole, designed as part of an architectural element such as a steeple or chimney, or otherwise camouflaged with materials and colors that blend in with the surrounding area as approved by the Planning Commission.
4. On no more than one occasion within six months after the facility has been constructed, the Planning Commission or the department may require the color be changed if it is determined that the original color does not blend with the surroundings.
5. The roof mounted antenna shall not vary from the height requirements for accessory structures in the F-1-21 zone. The distance from the top of the antenna to the average natural grade of the above-ground entrance structure must not exceed 20 feet.
6. Continuous outside lighting of the facility is prohibited.
7. Any existing landscaping disturbed or removed during the construction process must be repaired or replaced by the applicant.
8. All utility lines on the lot leading to the accessory building and antenna structure shall be underground.
9. Applicant shall provide proof of legal right to build in the existing pump station easement or appropriate owner's consent to build as proposed, subject to approval of the City Attorney.

Conclusions - Findings for Approval

- The proposed use described in the report is a conditional use in the F-1-21 – Foothill Residential zone.
- A public hearing was held in accordance with local and state requirements.
- The use will comply with the intent, spirit, and regulations of this title and will be compatible with and implement the planning goals and objectives of the city.
- The use will be harmonious with the neighboring uses in the zoning district in which it is to be located.
- Nuisances which would not be in harmony with the neighboring uses, will be abated by the conditions imposed.
- Protection of property values, the environment, and the tax base for the city will be assured.
- The use will comply with the city’s general plan.
- The proposed facility is compatible with the height and mass of existing buildings.
- The proposed facility will be located in a position to provide visual screening to the greatest extent practicable.
- Existing vegetation on the site will be preserved to the greatest extent practicable.
- The facility does not create an unreasonable adverse impact on the city’s mountain viewsheds or other scenic resources.
- Staff will verify compliance with all imposed conditions upon review of the required building permit application.
- Appropriate buffering will be provided to protect adjacent land uses from light, noise and visual impacts.
- The architecture and building materials are consistent with the development and surrounding uses, and otherwise compatible with the city’s general plan, subdivision ordinance, land use ordinance, and any applicable design standards.
- The reduction of minimum yard requirements for the accessory structure will not, under the circumstances of this particular case, be detrimental to the health, safety or general welfare of persons residing in the vicinity, or injurious to property or improvements in the vicinity.

Model Motions

Approval

I move that we approve project CUP-20-009, based upon the conditions and findings for approval outlined in the staff report:

- List any additional conditions of approval...

Denial

I move that we deny project CUP-20-009, based on the following findings:

- List findings for denial...

Attachments

- Proposed Plans
- Citizen Comments

May 15, 2020

Attn: City of Cottonwood Heights Planning Commission

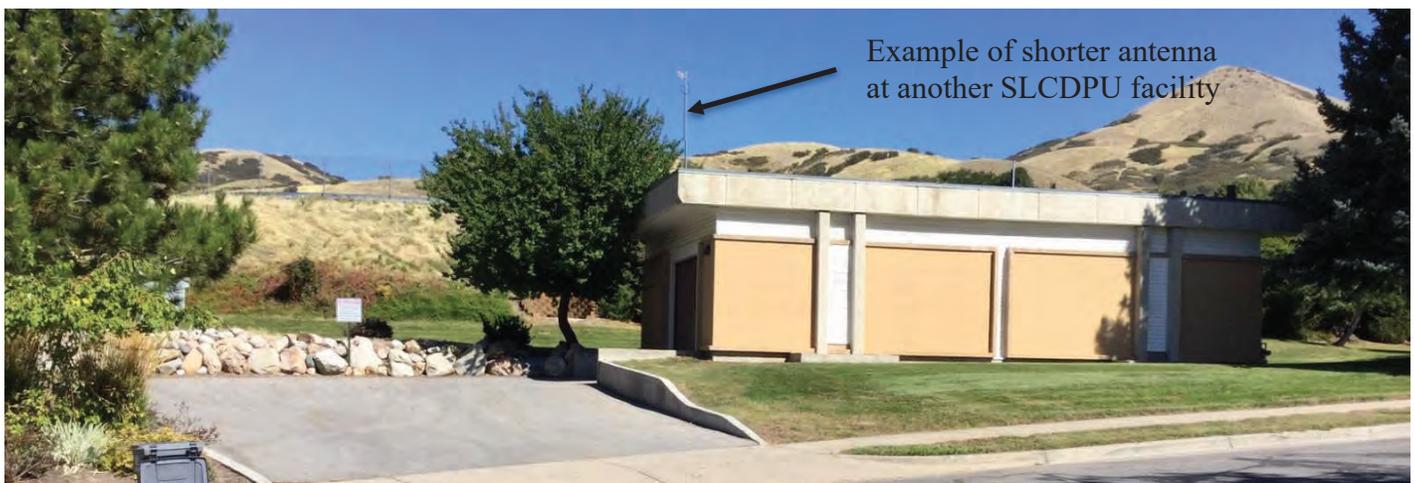
Re: SCADA Antenna for the Golden Hills Pump Station Rehabilitation Project

Dear Members of the Planning Commission:

Salt Lake City Department of Public Utilities (SLCDPU) will be rehabilitating the existing Golden Hills Pump Station located at 8800 S. Kings Hill Drive #A. This pump station was built in 1970 and supplies drinking water to the homes in the Golden Hills Subdivision. The pump station is located on private property but SLCDPU owns an Easement for the pump station and waterline in this subdivision. Rehabilitating this station is necessary as it is no longer safe for our crews to operate and the mechanical components are well past their functioning life span. The rehabilitation will include new piping, new pumps, improvements to the site and structure itself, and is scheduled for this summer (2020).

The rehabilitation of the pump station includes installing a SCADA (Supervisory Control and Data Acquisitions) system. The new SCADA system will allow SLCDPU to control and monitor the pump station and water quality remotely in real time by sending and receiving data through an antenna to our network by line of site telemetry. Due to the pump station's location being in a canyon the antenna was initially proposed to be 30 feet tall to transmit and receive signals. However, a new proposal is for a shorter antenna to be installed on top of the pump station building.

There have been several residents that have reached out with concerns about the proposed 30-foot-tall standalone antenna. Due to these concerns our SCADA and Engineering team have re-accessed the situation and propose another option that would have less of an impact to residents. SLCDPU will now install a receiver station at one of our water reservoirs located in line of sight approximately eight miles to the northwest of Golden Hills in order to relay the signal to our network. This will allow the new antenna at Golden Hills to be much shorter (by approximately 10 feet) because the receiver station would have a less impeded line of site. The new approximately 10-foot-tall antenna will be placed on the roof of the new pump station structure. For reference, see photo below of a similar antenna on one of SLCDPU other pump stations.



Residents were also concerned that allowing this antenna would open the door for other utility companies to install antennas (i.e. cellular 5G antennas) at this location. This would not be the case as the proposed antenna would be in the SLCDPU Easement and the Easements specifies it is only for the "installation, maintenance, replacement and repair of the pumping station".



Golden Hills Pump Station Rehab Project Summer 2020

SLCDPU would like the Planning Commission for the City of Cottonwood Heights to approve the installation of this SCADA antenna for the Golden Hills Pump Station. The SCADA system would bring the pump station to current system standards, eliminate the need and possible error of manually checking the system, and help SLCDPU to continue to provide safe drinking water by being able to more closely monitor the pump station and water quality.

Sincerely,

A handwritten signature in black ink, appearing to read "Dimond Zollinger".

Dimond Zollinger - Project Engineer

Salt Lake City Department of Public Utilities
1805 West 500 South
Salt Lake City, UT 84104
Dimond.zollinger@slcgov.com,
(801) 483-6766

SALT LAKE CITY CORPORATION

THE DEPARTMENT OF PUBLIC UTILITIES

DRAWINGS FOR CONSTRUCTION OF
GOLDEN HILLS PUMP STATION REHABILITATION

PROJECT NO. 513416366
 FISCAL YEAR 2019-2020



Public
Utilities

ERIN MENDENHALL – MAYOR

CITY COUNCIL

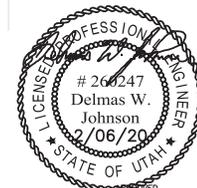
JAMES ROGERS	DARIN MANO
ANDREW JOHNSTON	DAN DUGAN
CHRIS WHARTON	AMY FOWLER
ANA VALDEMOROS	

APPROVED

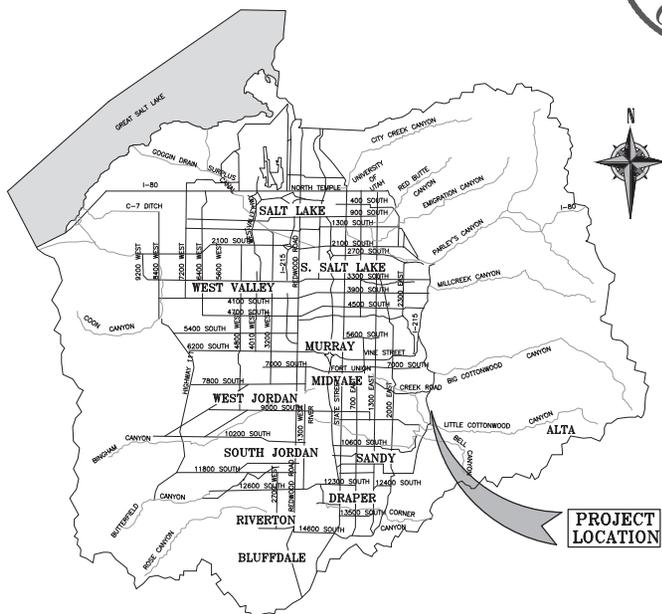
 LAURA BRIEFER
 DIRECTOR OF PUBLIC UTILITIES

APPROVED

 JASON BROWN, P.E.
 CHIEF ENGINEER



 DELMAS W. JOHNSON P.E.
 PROJECT ENGINEER



PROJECT VICINITY MAP



J-U-B ENGINEERS, INC.
 392 E. WINCHESTER ST.
 SUITE 300
 SALT LAKE CITY, UT 84107
 phone: 801.886.9052
 www.jub.com

\\S:\FILES\Public\Projects\Water\Salt Lake City Public Utilities\GIS-19-024 Golden Hills Pump Station\CAD\Sheet\Civil\3-19-04-C-101-Site-Plan.dwg May 20, 2020 - 4:38pm



SHEET NOTES

1. LOCATION AND SIZE OF NEW GAS SERVICE TO BE DETERMINED BY DOMINION ENERGY.

SCALE: 1" = 10'
VERIFY SCALE
 BAR IS ONE INCH ON ORIGINAL DRAWING

DESIGNED BY: MJC
 DRAWN BY: JMM
 CHECKED BY: JMM
 DATE: May 2020
 EWO NO: 03110366
 ACCOUNT NO: 03110366

NO.	DATE	REVISIONS	MADE BY	AUTH. BY
1	5/20/20	ADDITION OF SCADA ANTENNA LOCATION	JMM	JMM

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
 GOLDEN HILLS PUMP STATION
 REHABILITATION
SITE UTILITY PLAN



CALL BEFORE YOU DIG.
 IT'S FREE AND IT'S THE LAW.

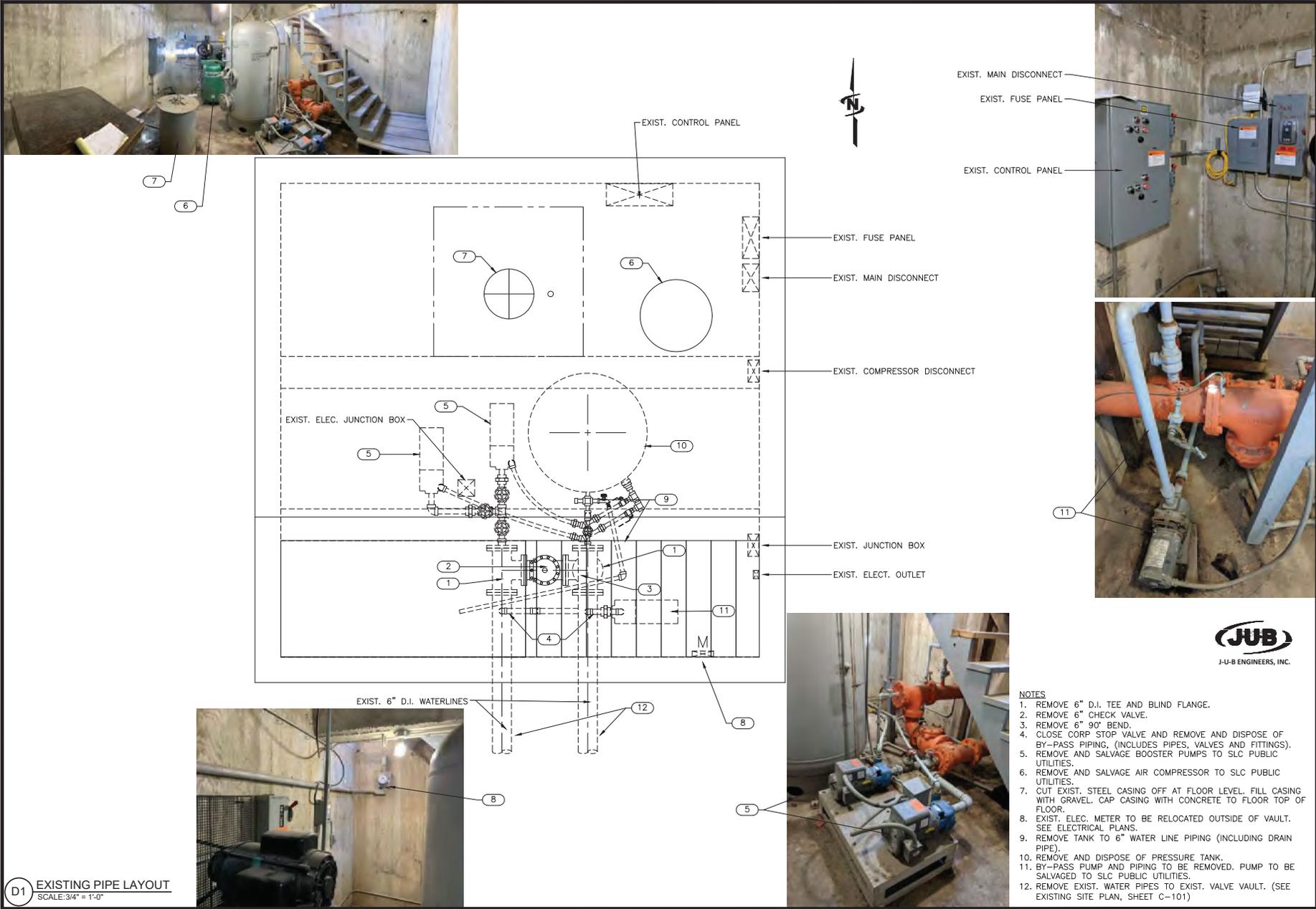
BLUE STAKES OF UTAH
 Utility Notification Center, Inc.
 1-800-662-4111
 www.bluestakes.org

Dig Safely.

DRAWING NO.
C-103
 SHEET 09 OF 49

\\SCLFILES\Public\Projects\JUB\SS - Lake City Public Utilities\SS-19-224 Golden Hills Pump Station\CAD\Sheet\Mechanical\08-19-2024_M-101.dwg Mar 05, 2020 - 2:09pm

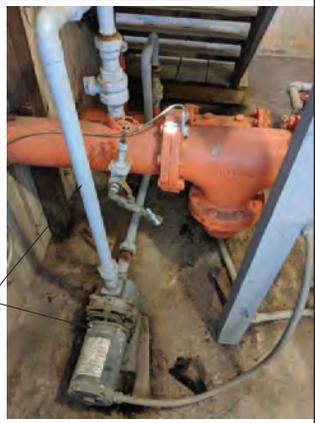
D1 EXISTING PIPE LAYOUT
SCALE: 3/4" = 1'-0"



EXIST. MAIN DISCONNECT
EXIST. FUSE PANEL
EXIST. CONTROL PANEL



EXIST. FUSE PANEL
EXIST. MAIN DISCONNECT
EXIST. COMPRESSOR DISCONNECT



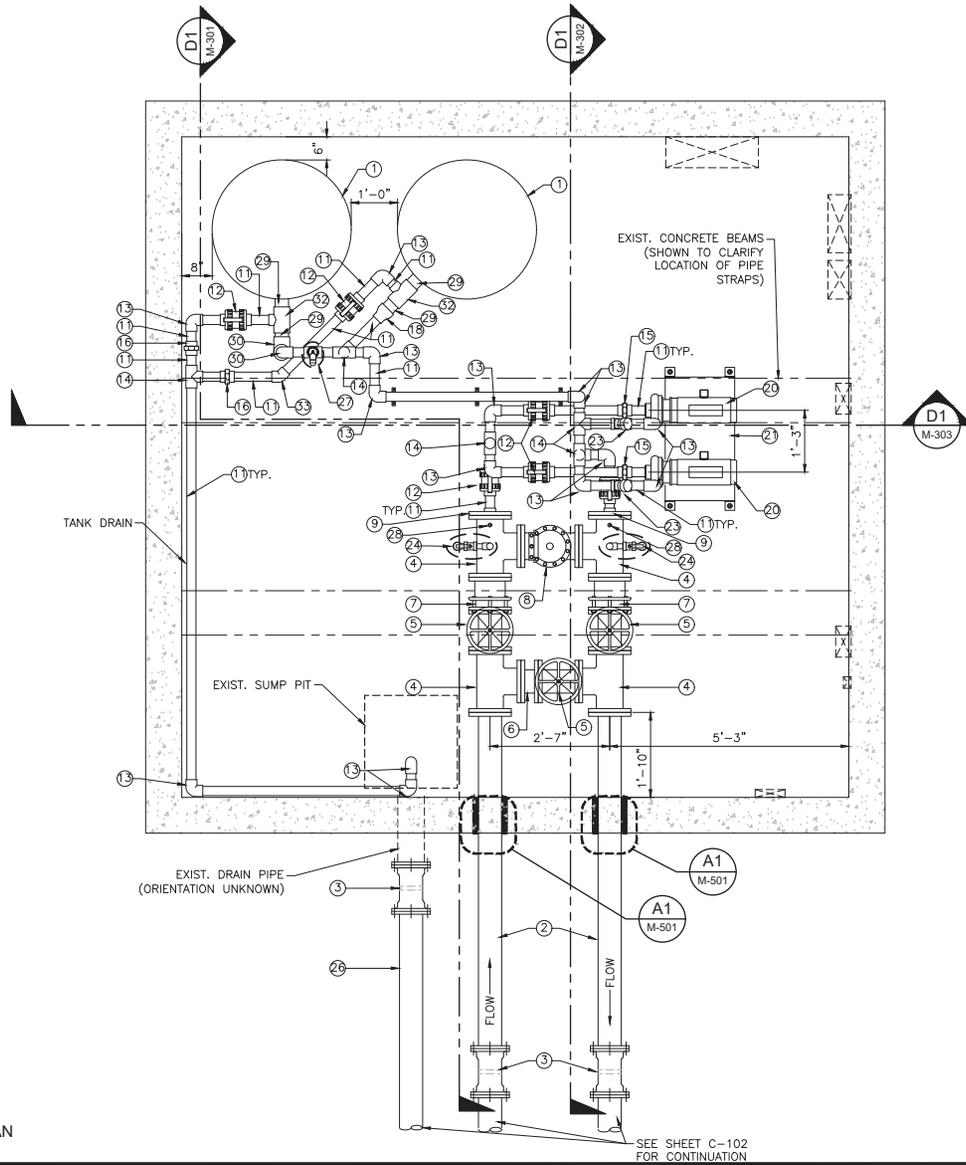
EXIST. JUNCTION BOX
EXIST. ELECT. OUTLET



- NOTES**
1. REMOVE 6" D.I. TEE AND BLIND FLANGE.
 2. REMOVE 6" CHECK VALVE.
 3. REMOVE 6" 90° BEND.
 4. CLOSE CORP STOP VALVE AND REMOVE AND DISPOSE OF BY-PASS PIPING, (INCLUDES PIPES, VALVES AND FITTINGS).
 5. REMOVE AND SALVAGE BOOSTER PUMPS TO SLC PUBLIC UTILITIES.
 6. REMOVE AND SALVAGE AIR COMPRESSOR TO SLC PUBLIC UTILITIES.
 7. CUT EXIST. STEEL CASING OFF AT FLOOR LEVEL. FILL CASING WITH GRAVEL. CAP CASING WITH CONCRETE TO FLOOR TOP OF FLOOR.
 8. EXIST. ELEC. METER TO BE RELOCATED OUTSIDE OF VAULT. SEE ELECTRICAL PLANS.
 9. REMOVE TANK TO 6" WATER LINE PIPING (INCLUDING DRAIN PIPE).
 10. REMOVE AND DISPOSE OF PRESSURE TANK.
 11. BY-PASS PUMP AND PIPING TO BE REMOVED. PUMP TO BE SALVAGED TO SLC PUBLIC UTILITIES.
 12. REMOVE EXIST. WATER PIPES TO EXIST. VALVE VAULT. (SEE EXISTING SITE PLAN, SHEET C-101)

SCALE: NONE		VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
DESIGNED BY: MJC	DRAWN BY: JMM	
MADE BY:	CHECKED BY: DMJ	DATE: March 2020
NO. DATE	APPROVED BY: DMJ	
REVISIONS		ACCOUNT NO. 215218266
SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES GOLDEN HILLS PUMP STATION REHABILITATION MECHANICAL REMOVAL		
		
DRAWING NO.		M-101
SHEET 13 OF 49		

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PIPING LAYOUT PLAN
SCALE: 3/4" = 1'-0"

SEE SHEET C-102
FOR CONTINUATION

MATERIALS LIST

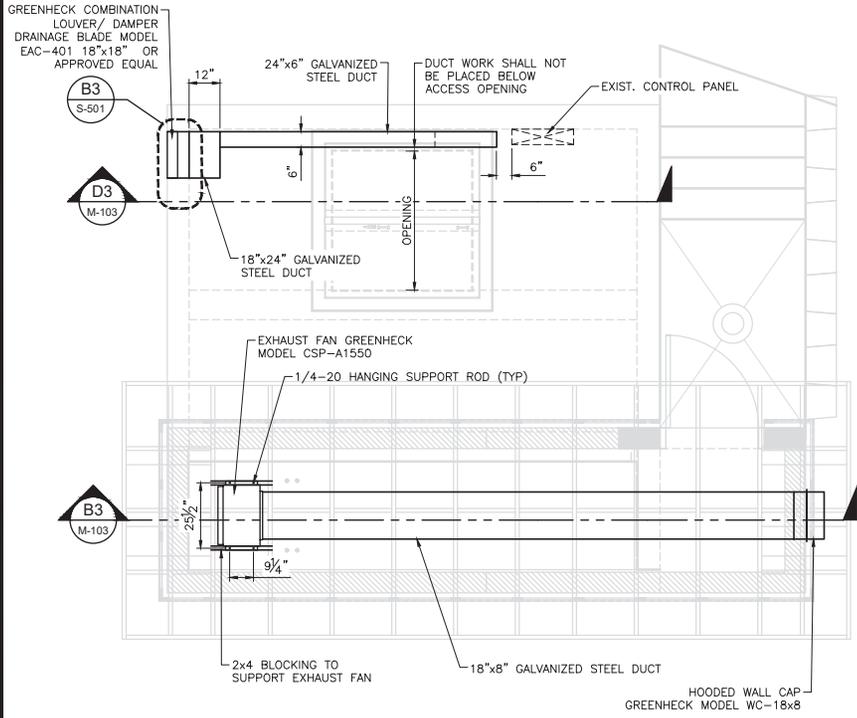
1. PRESSURE TANK W/SIESMIC RESTRAINTS
2. 6" D.I. PIPE (FLGXPE)
3. 6" LONG SLEEVE (MJ)
4. 6" D.I. TEE (FLG)
5. 6" GATE VALVE (FLG)
6. 6" D.I. PIPE (FLG)
7. 6" FLANGE COUPLING ADAPTOR WITH RESTRAINING LUGS
8. 6" CHECK VALVE (FLG)
9. 6" BLIND FLANGE W/ 2" TAP
10. 2" x 1 1/2" PVC REDUCER
11. 2" SCH 80 PVC PIPE
12. 2" SCH 80 PVC TURN BALL VALVE, UNIVERSAL ENDS, TRUE UNION
13. 2" SCH 80 PVC 90° BEND
14. 2" SCH 80 PVC TEE
15. 2" SCH 80 PVC UNION
16. 1 1/2" SCH 80 PVC PIPE
17. 3" SCH 80 PVC TEE
18. 3" x 2" SCH 80 PVC REDUCER
19. 2" 2 HOLE GALVANIZED PIPE STRAP
20. 1 1/2" x 2" BOOSTER PUMP
21. PUMP PEDESTAL. (SEE DETAIL B1/M-502)
22. PIPE SUPPORT. (SEE DETAIL D2/M-501)
23. 2" BRASS CHECK VALVE (THD.)
24. SAMPLING TAP/PRESSURE GAUGE. (SEE DETAIL D2/M-501)
25. 2" COMPOUND WATER METER (VERTICAL ORIENTATION)
26. 6" SDR 35 PVC PIPE
27. 1" AIR/VACUUM RELIEF VALVE ASSEMBLY (SEE DETAIL B3/M-501)
28. PRESSURE TRANSMITTER. (SEE DETAIL B2/M-501)
29. 3" SCH 80 PVC PIPE
30. 3" SCH 80 PVC 90° BEND
31. 2" SCH 80 PVC FLANGE
32. 3"x3"x2" SCH 80 PVC TEE
33. 3"x2" SCH 80 PVC REDUCER
34. 2" SCH 80 45° BEND



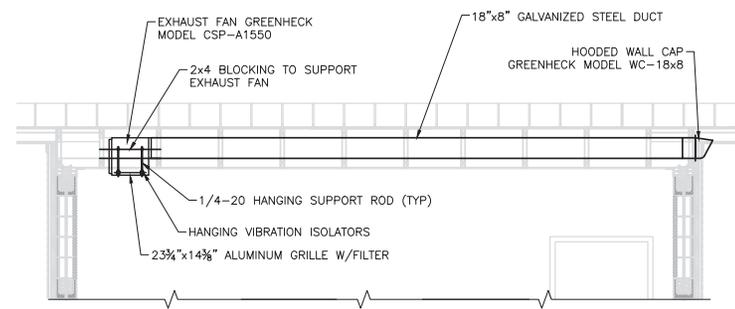
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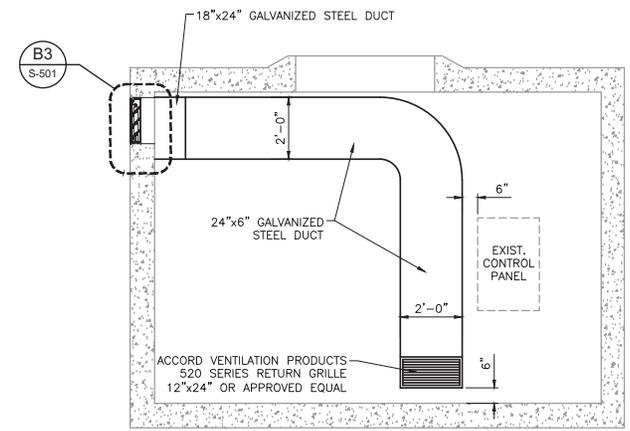
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D1 VENTILATION PLAN
SCALE: 3/4" = 1'-0"



B3 EXHAUST DUCT ELEVATION
SCALE: 1/2" = 1'-0"



D3 AIR INTAKE DUCT ELEVATION
SCALE: 1/2" = 1'-0"

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REVISIONS

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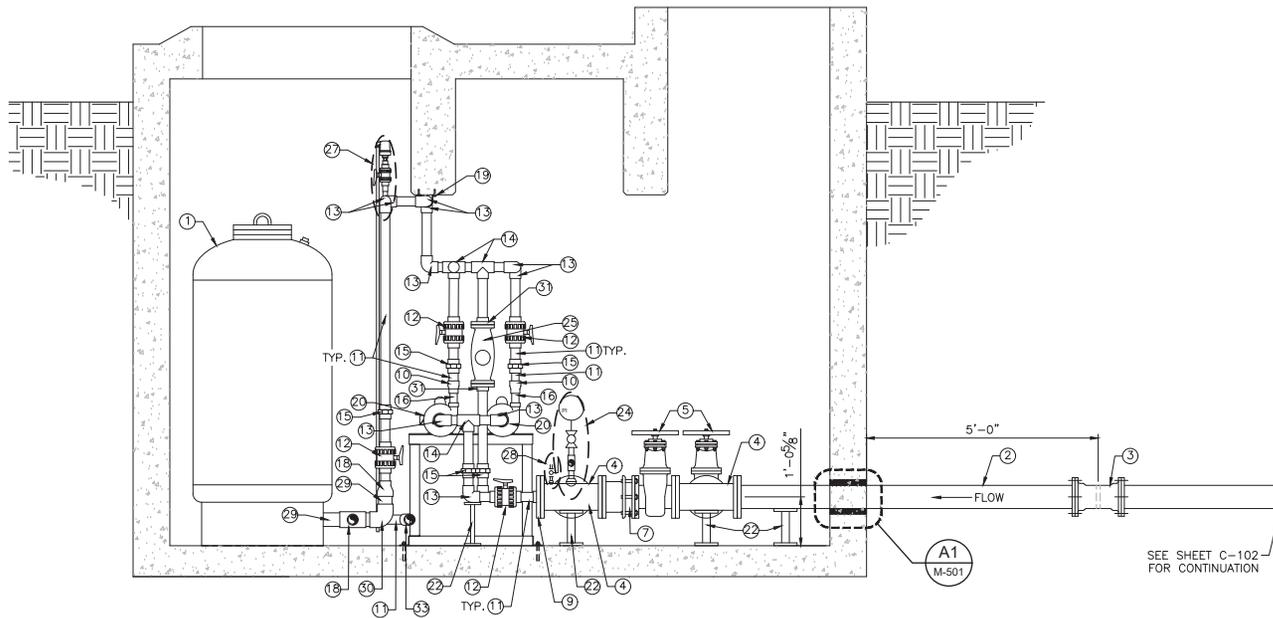
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GOLDEN HILLS PUMP STATION
REHABILITATION

VENTILATION PLAN



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D1 PIPING SECTION
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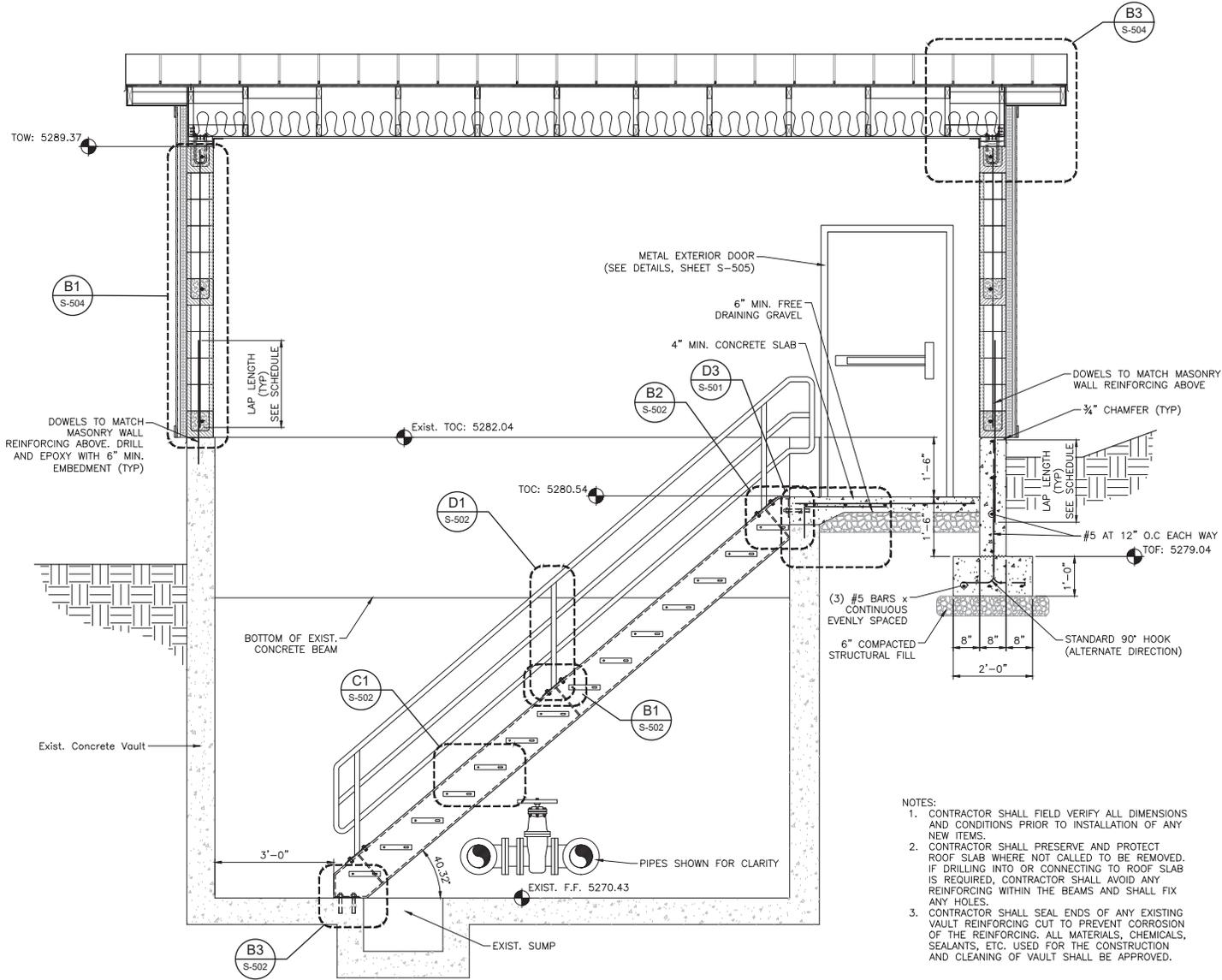
MATERIALS LIST

1. PRESSURE TANK W/SIEMIC RESTRAINTS
2. 6" D.I. PIPE (FLGXPE)
3. 6" LONG SLEEVE (MJ)
4. 6" D.I. TEE (FLG)
5. 6" GATE VALVE (FLG)
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- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO INSTALLATION OF ANY NEW ITEMS.
 2. CONTRACTOR SHALL PRESERVE AND PROTECT ROOF SLAB WHERE NOT CALLED TO BE REMOVED. IF DRILLING INTO OR CONNECTING TO ROOF SLAB IS REQUIRED, CONTRACTOR SHALL AVOID ANY REINFORCING WITHIN THE BEAMS AND SHALL FIX ANY HOLES.
 3. CONTRACTOR SHALL SEAL ENDS OF ANY EXISTING VAULT REINFORCING CUT TO PREVENT CORROSION OF THE REINFORCING. ALL MATERIALS, CHEMICALS, SEALANTS, ETC. USED FOR THE CONSTRUCTION AND CLEANING OF VAULT SHALL BE APPROVED.

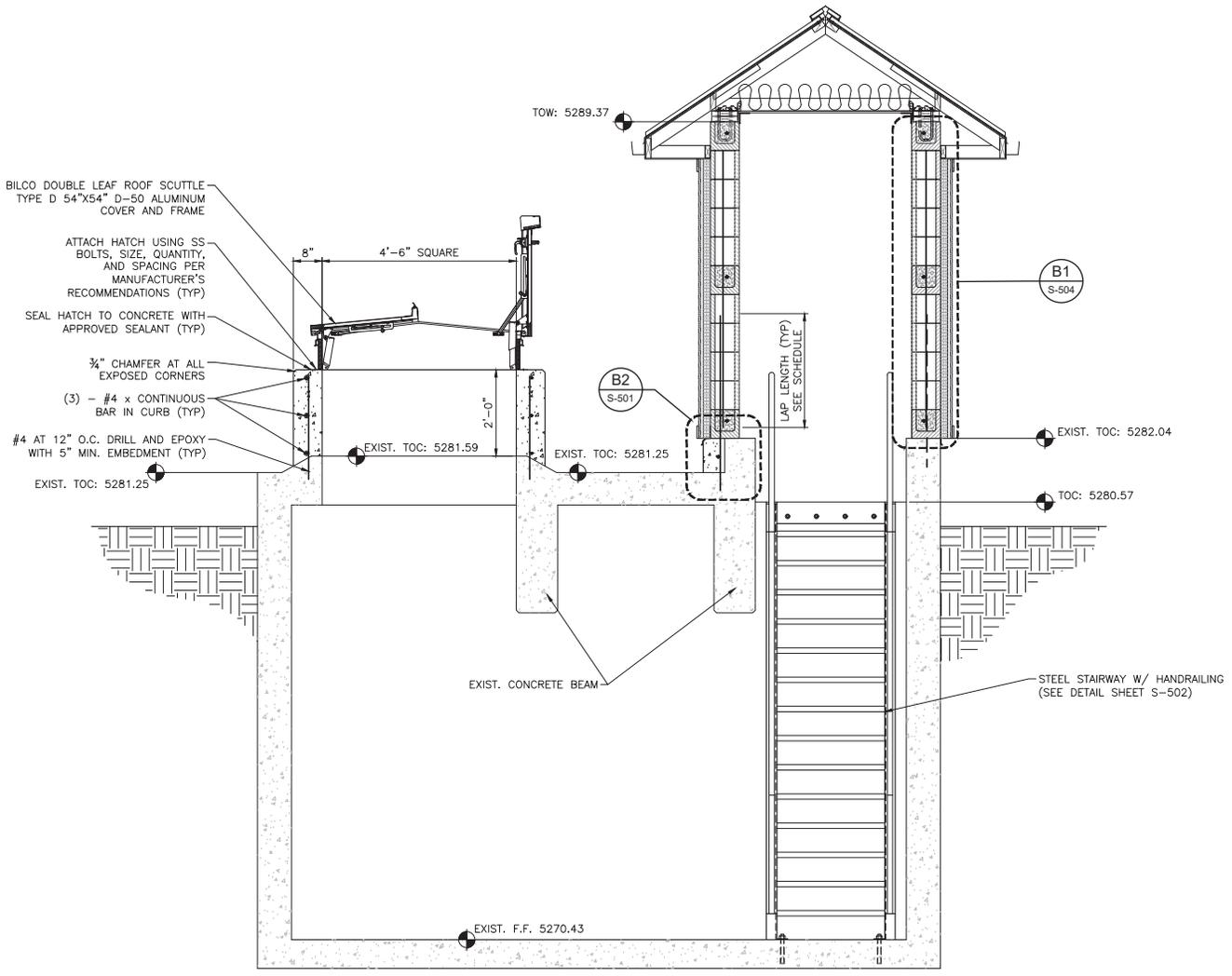
D1 VAULT SECTION
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		DRAWING NO. S-302	
JUB J-U-B ENGINEERS, INC.		SHEET 29 OF 49	

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D1 VAULT SECTION
SCALE: 3/4" = 1'-0"



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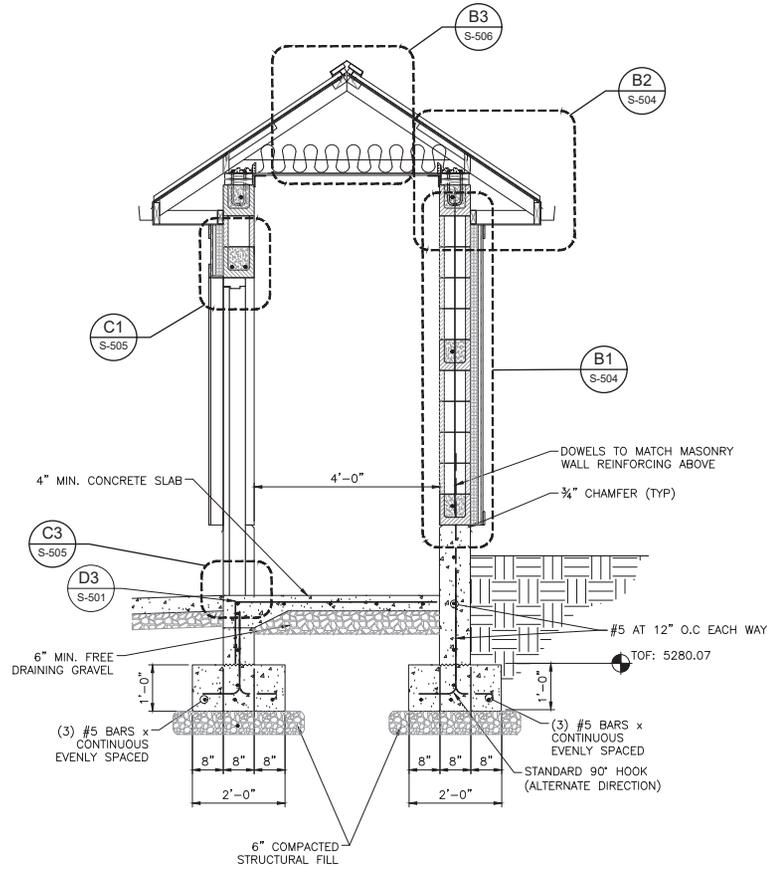


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SHEET 30 OF 49			

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D1 VAULT ENTRANCE SECTION

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APPROVED BY: JUB
DATE: March 2020
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ACCOUNT NO.: 21218846

NO.	DATE	REVISIONS	MADE BY	AUTH. BY

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
GOLDEN HILLS PUMP STATION
REHABILITATION
VAULT ENTRANCE SECTION



DRAWING NO.
S-304





PLANNING COMMISSION STAFF UPDATE MEMO

Planned Development District – 6695 S. Wasatch Blvd.

July 15, 2020

Staff Contact: [Matt Taylor, Senior Planner](mailto:mtaylor@ch.utah.gov)
(801) 944-7066, mtaylor@ch.utah.gov

*****Updated Sections Have Highlighted Headings*****

Summary

Applicant:
AJ Rock, LLC

Subject Properties
6695 S. Wasatch Blvd.

Action Requested
Zone map amendment from F-1-21 to PDD-2 (per 19.51 of the zoning ordinance)

Recommendation
Recommend Continuance

Project
PDD-19-001



Context

Property Owner	Address -- Parcel #	Acres
AJ Rock, LLC	6695 S. Wasatch Blvd. (SR 190) 222-23-426-001	21.56
AJ Rock, LLC	3402 E. Gun Club Rd. (Holladay City) 22-23-279-003	0.13
	Total Acres:	21.69



Site

Use: Single-Family Residential with Pool House

General Plan Land Use Policy: Mixed Use

Zone: F-1-21 (Foothill Residential Zone with 1/2 acre lots)

Proposed Zone: PD – Planned Development District with multiple uses and densities.

Surrounding Properties

Existing Uses:

- North: Single-Family Residential
- South: Gravel Pit/Vacant Ski Shop
- West: Highway/Single-Family Res.
- East: Gravel Pit/Open Space

General Plan Land Use:

- North: Single-Family Residential
- South: Mixed-Use
- West: Highway/Single-Family Res.
- East: Mixed-Use

Zone:

- North: Single-Family Residential
- South: Gravel Pit/ CR – Regional Commercial
- West: Highway/Single-Family Res.
- East: Foothill Residential – 1/2 acre lots

Land Use



Zoning



Outstanding Issues Requiring Resolution Prior to Final Staff Recommendation

The applicant requested that Community Development Department schedule their request for a Planning Commission Public Hearing although several outstanding items had not been finally resolved.

Preliminary Engineering Drawings

The Public Works Department cannot provide a recommendation of approval to the Planning Commission until the applicant has demonstrated that the conceptual project plan will function within city and generally accepted engineering practices. Insufficient information has been provided in the preliminary engineering drawings (grading, stormwater, slope reclamation, geologic investigation, etc.) preventing a final recommendation (see Attachment 4).

Preliminary plans should also identify dedications for Gun Club Road.

Inconsistent Development Plans

The applicant has amended the site plan twice of their own accord and have made additional changes based upon staff and Architectural Review Commission feedback. Accordingly, there is inconsistency between the current development plan and supporting documents such as the master landscape plan. All site plans need to be consistent with each other as they will be adopted as part of the regulating zoning ordinance.

Refinements to Proposed Regulating Zoning Ordinance

Some exemptions may need to be specified in the regulating ordinance for this PDD development plan. These have not been finalized and further review from the Public Works department is needed prior to finalization of the proposed ordinance. Additional regulations require drafting:

- Hillside reclamation/bonding standards.
- Utilization and maintenance standards for any angled right-of-way parking.
- Shared parking and cross-over agreement standards.

Affordable Housing

The applicant's current Below Market Rate/Senior/Disabled housing proposal does not meet the global standards for PDD zones. A new proposal by the applicant should be prepared.

Applicant's Proposal

The applicant is requesting to utilize the city's Planned Development District (PDD) ordinance (Chapter 19.51) to amend the zoning designation of the above-mentioned property from F-1-21 Zone (Foothill Residential) to a newly created zone, the PDD-2 Zone (Wasatch Rock Redevelopment Planned Development District). This zone does not exist yet.

Process to Create a New PDD Zone on Zoning Map

The PDD ordinance establishes the process to create a new PDD Zone, as follows:

1. The PDD ordinance limits the creation of new PDD zones to a limited number of areas within the City. These areas are further subdivided into three development intensity areas: Tier 1, 2, and 3 – Tier 1 allowing the highest intensity of development. The property proposed for the rezone falls within Tier 1 (see Figure 1).



FIGURE 1 - PDD TIER MAP - OVERLAID WITH LOCATION OF PROPOSED REZONE.

2. The Planning Commission recommends to the City Council, and the City Council approves, two actions:
 - a. The zoning map is amended to designate an area for a new PDD zone.
 - b. The zoning ordinance is amended to adopt a new PDD subchapter regulating the area within the new zone. The regulations fall within the scope that the PDD regulating chapter permit.
3. The new ordinance regulates allowed uses, setbacks, heights, signage, lighting standards, landscaping requirements, supplemental design standards, and other aspect of the future development (see Attachment 2).
4. A development plan is adopted as part of the ordinance as an exhibit. The future development of each phase of the site is required to follow the overall scope and direction as shown on this development plan (see Attachment 1).

PDD Approval Timeline

Planned Development District applications are processed differently than other applications for zone changes or development approvals. To help understand the steps in the process and the role each approval body serves, a general summary of the approval process (per 19.51.070) is provided as follows:

1. Pre-Application Conference
 - a. The applicant met with the Community Development Director, and the Development Review Committee multiple times prior to an application being submitted;
2. Concept Plan
 - a. A concept plan is required when a PDD application contains more than 50 dwelling units and/or five or more acres of non-residential development. The concept plan is required

- to be presented in a planning commission work session at least once prior to full application;
- b. The applicant presented a concept plan in 2018;
3. Community Workshop
 - a. At least two community workshops are required to be held by the applicant, independently of the city, to present the proposal and understand the concerns of nearby residents. Meeting notes are required to be submitted to city staff as part of the official PDD application;
 - b. The applicant held neighborhood meetings May 20 and July 15, 2019 (minutes – Attachment 15)
 4. Draft Planned Development Zone (PDZ) Plan Submittal
 - a. A draft application submittal is required to be submitted after the pre-application conference to be reviewed for minimum compliance with the PDD ordinance;
 - b. Staff completed a comprehensive preliminary review of the applicant’s draft PDZ plan submittal. Many of the material review comments have been addressed and incorporated into the current proposal;
 5. PDD zone Application
 - a. This step constitutes an official plan submittal and the beginning of the public process. This step requires detailed submittal materials, per ordinance. Staff has reviewed this application to ensure that each item is present in the application. If an item is not present, it becomes a condition of final approval to provide it for review;
 6. Department Review and Report
 - a. A complete review has been completed for the official plan submittal. This report, as well as all city correction letters to date constitute compliance with this step;
 7. Public Notice
 - a. Public notice is required to comply with state and local regulations pertaining to the adoption and/or amendment of land use regulations;
 - b. See public notice section at the end of this report for details
 8. Planning Commission Review and Recommendation
 - a. The planning commission reviews PDD proposals in the same manner as it reviews other legislative matters. It will take official public comments, request any modifications it sees fit, and ultimately make a final recommendation to the City Council for final consideration; *****We are currently at this stage in the process.*****
 9. City Council Review and Decision
 - a. After a planning commission recommendation, the city council may seek additional public input and will take final action to either approve or deny the proposal.

Proposed Ordinance

Development plan: Each phase of this development will be governed by the development plan, including total building heights, setbacks, density (total number of units), required parking, landscaping, open space, and signage.

Allowed uses: Multi-family dwelling units, hotels, office space, retail, and restaurants.

Height: Maximum height from the grade per the proposed development plan:

Architectural Standards: The applicant has received a certificate of design compliance from the Architectural Review Commission (ARC). The ARC has recommended supplemental design guidelines that will be applied to each final phase of the project. Each phase of the development will be required to

meet the city design guidelines as well as supplemental design guidelines that are adopted as part of the ordinance.

Lighting: Lighting will comply with Chapter 19.77 – Outdoor Lighting Regulations, with the exception that reduced lighting standards east of Wasatch Blvd will not apply.

Below Market Rate / Senior/ Disabled Housing (affordable) Requirement: The proposed ordinance outlines that 10% all residential units will be senior housing units. The proposed ordinance states that the units will “be discounted ten percent (10%) to be in line with similar market rate unit.”

Staff Analysis of BMR Housing Requirements

The PDD ordinance provides the following instructions on providing affordable housing:

“All PD zone ordinances shall require the development to include below market rate or senior/disabled housing units (collectively, "BMR units") equal to at least ten percent (subject to a threshold) of the total number of dwelling units contained within the zone, as shown on Table 1. Required BMR units shall be affordable to households earning not more than 50% of the city's median income, and shall be provided in accordance with the standards, definitions and procedures contained in this code and/or the PDD ordinance.”

When the city approved the PDD-1 zone, the city maintained its interpretation that whether it was BMR, senior, or disabled housing, that the ordinance specifically identifies them all collectively as “BMR units.” The ordinance later states that “BMR units shall be affordable to households earning not more than 50% of the city's median income...”

Staff Recommendation

Staff recommends that the proposed PDD-2 ordinance is amended to reflect this PDD zoning regulation. If it is not amended, it will conflict with the governing provisions for the use of this zoning tool and staff will recommend denial of the application.

Preliminary Development Plan

Note: This report contains several graphics of the proposed development plan. Figure 2 is the current layout. Other site layouts are included which contain outdated building, driveway, and site layouts. These older plans are included to illustrate landscaping, open space, plaza, and site amenities, cycling and pedestrian circulation, and site constraints. All these plans are required to be updated with the current site layout prior to Planning Commission approval of the development plan.

The proposed development plan consists of ten buildings on 21.56 acres. The applicant is proposing to construct the following:

Building	Units / Square Feet	Height	Parking
Apartments	284 units (1 and 2-bed units)	78 ft - Five stories over two parking levels.	486 – 1.7 per unit
Condominium	99 units	128 ft - 10 stories over two parking levels.	133 – 1.34 per unit
Affordable Units	35 units*	1 story over 1 parking level	47 – 1.34 per unit
Retail – Pad A	4,200 sq. ft.	15 ft	298 shared
Retail – Pad B	4,200 sq. ft.	15 ft	
Mixed-Use Pad C	9,400 sq. ft. per floor	45 ft	
Mixed-Use Pad D	9,400 sq. ft. per floor	45 ft	
Retail Pad E	6,140 sq. ft. per floor	15 ft	
Retail Pad F	6,140 sq. ft. per floor	15 ft	
Hotel	140 rooms.	65 ft	

Table 1 – Development Plan Summary. *BASED ON THE NUMBER OF PROPOSED MARKET RATE APARTMENT AND CONDOMINIUM UNITS, AT LEAST 42 AFFORDABLE HOUSING UNITS ARE REQUIRED.

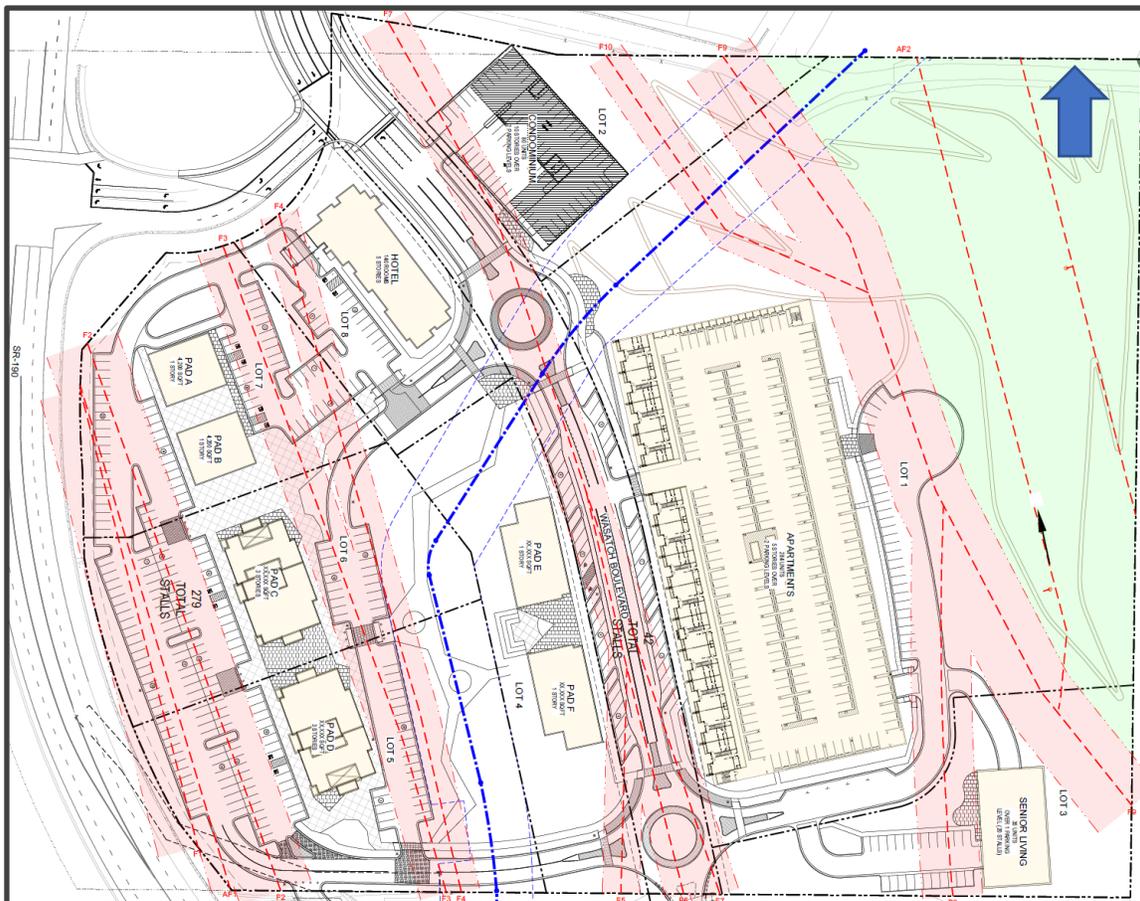


FIGURE 2- CURRENT PROPOSED SITE LAYOUT – SEE ATTACHMENT 1 FOR HIGH-RESOLUTION

Height

The Tier 1 PDD area allows heights much greater than what the development plan proposes (outlined in Table 1). However, when the ordinance is adopted, the heights presented in the development plan will be the maximum building height that is required for each phase of the development.

Setback from Wasatch Blvd.	Tier 1 Allowance	Proposed
0' to 20'	No Building	No Building
20' to 50'	60' Height	No Building
50' to 100'	100' Height	45'
100' to 250'	120' Height	65'
250' to 500'	150' Height	130'
500' and greater	300' Height	130'

TABLE 2 – TIER 1 BUILDING HEIGHT ALLOWANCE / DEVELOPMENT PLAN COMPARISON

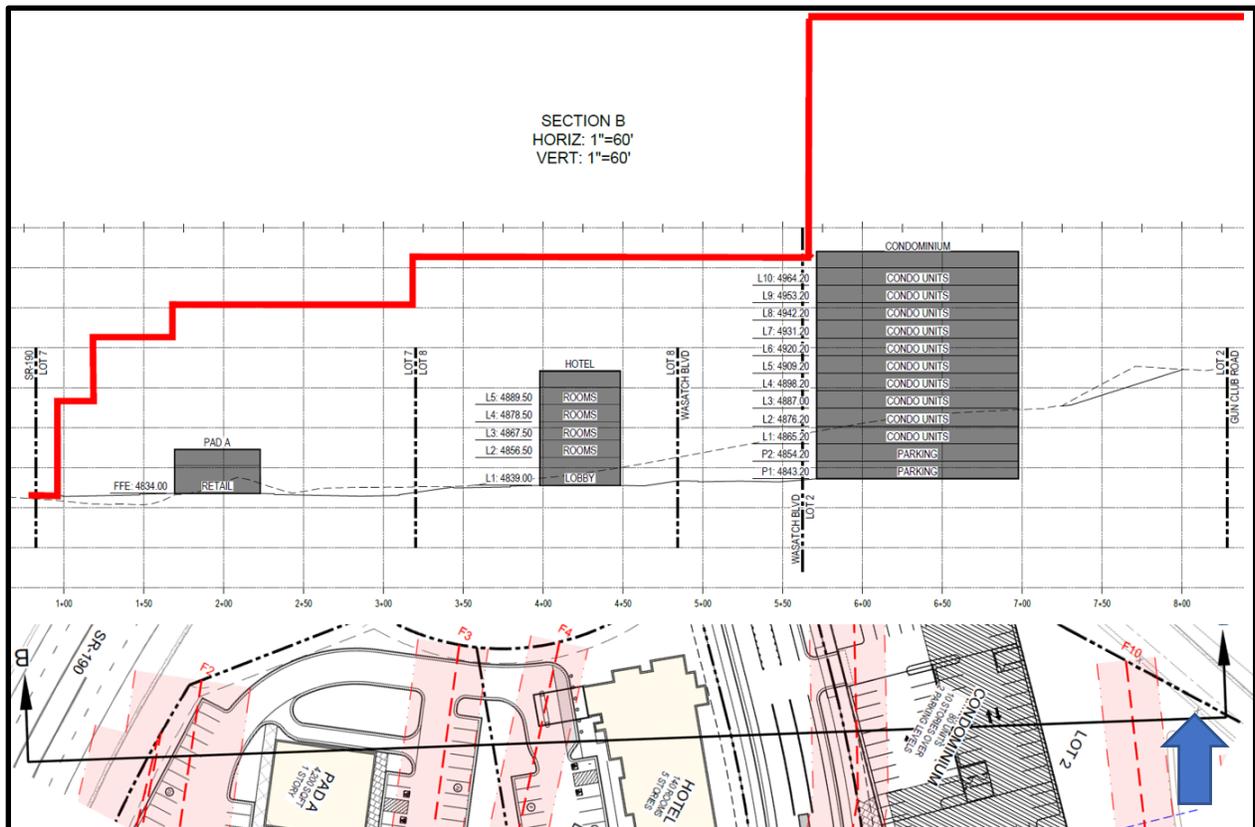


FIGURE 3 - NORTH BUILDINGS - HEIGHT CROSS SECTION (RED MAXIMUM HEIGHT PERMITTED)

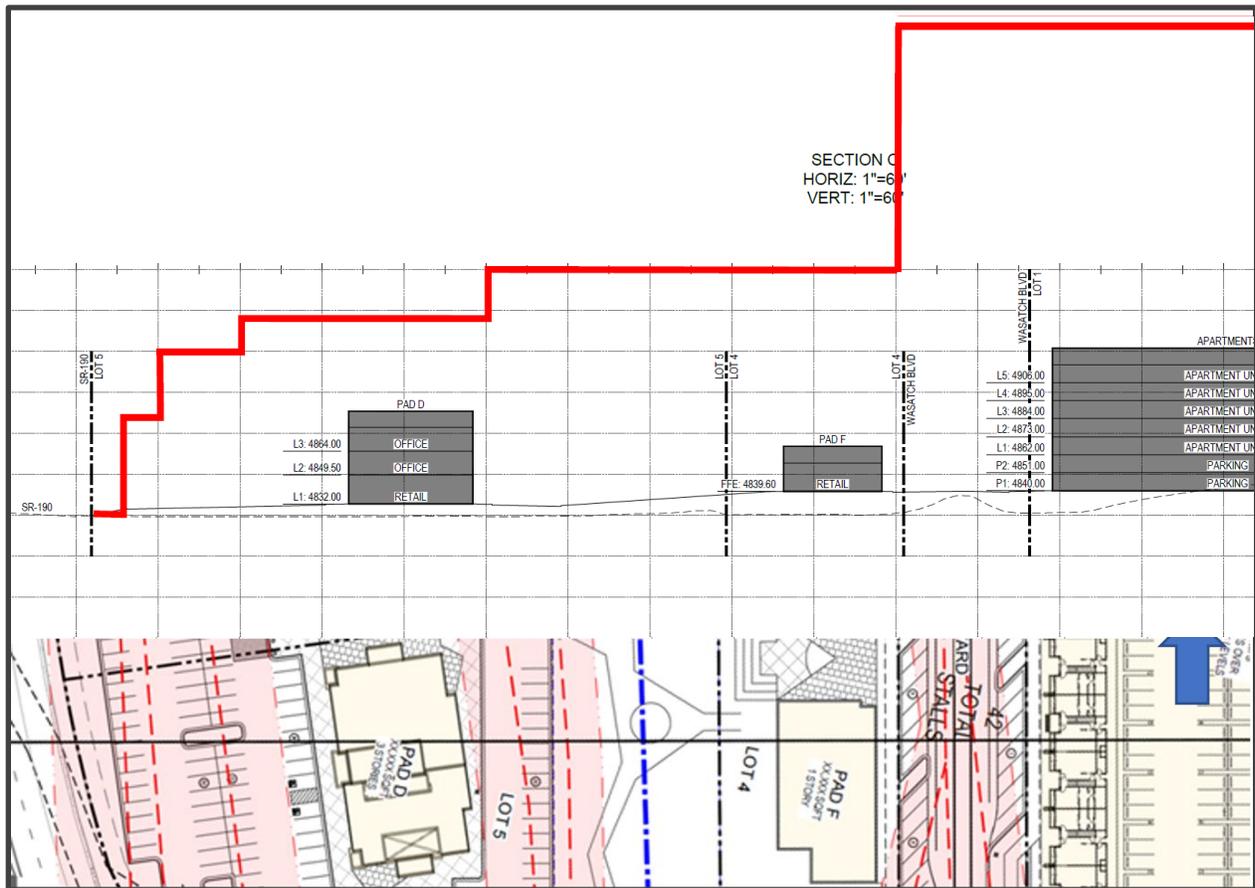


FIGURE 4 - SOUTH BUILDINGS - HEIGHT CROSS SECTION (RED MAXIMUM HEIGHT PERMITTED)

Parking

Typically, city ordinances establish parking minimums established by ITE Parking Generation. The applicant has proposed the minimum parking for each property and use as identified in the development plan. To determine if this proposal is acceptable, staff conducted a parking analysis of each use against ITE Parking Generation averages.

Residential Parking

Residential parking overall is provided at a higher rate than that required by similar zoning elsewhere in the city.

Commercial Shared Parking

The applicant is proposing that parking is shared between non-residential uses that have alternating peak parking demand times. A prime example of shared parking peak demand opposites would be hotel and office use where peak demand is opposite of each other. It is estimated that peak demand for this mixture of uses will occur during a winter season weekday around 12 pm.

Table 1 outlines the parking standards as proposed by the developer and how they apply to each building. Staff notes that the restaurant uses have typically seen higher parking demand (8-12 spaces per 1,000 square feet). However, their proposed retail per 1,000 square feet is also under what is typically required under the ITE Parking Generation manual (3.5 per 1,000 square feet).

If each use was a standalone use, then there would be a parking deficiency of approximately 72 parking spaces. However, with the proposed mixed of uses and alternating parking demand times, the project is estimated to have a small parking surplus available.

Proposed Non-Res. Parking Requirements					
Use	Stalls Per 1,000 Rm/Sq.	Total Rm/Sq.	Required Stalls	Provided	Shared
Hotel	0.9	140	125	61	64
Office	4	24000	96	96	0
Restaurant/Retail	5	34400	172	164	8
Total			393	321	72

Mid-week 12 pm (Winter) - Peak Demand Non-Res. Only - Shared Ratios		
Use	Utilization	Spaces Used
Hotel	50%	62
Office	90%	86
Restaurant/Retail	90%	155
Total Non-Residential Peak Demand		304
Total Non-Residential Stall Provided		321
Surplus		18

TABLE 1 – SHARED PARKING ANALYSIS

Preliminary Architecture and Supplemental Design Guidelines

Attachment 3 contains preliminary architecture and supplemental design guidelines that are recommended by the Architectural Review Commission to be adopted as part of the proposed ordinance. These guidelines will supplement the City’s existing design guidelines and will be used by the ARC to review each phase of the development to ensure a design consistency throughout the project as it develops.

Landscaping and Open Space



FIGURE 5 - LANDSCAPING/PUBLIC SPACE DETAILS (HOTEL AND PAD A ARE OUTDATED).

PLANT SCHEDULE: MANICURED

TREES	COMMON NAME	BOTANICAL NAME
	ACE OF HEARTS REDBUD	CERCIS CANADENSIS 'ACE OF HEARTS'
	ALLEE LACEBARK ELM	ULMUS PARVIFOLIA 'ALLEE'
	GREEN VASE SAWLEAF ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'
	MUSHASHINO COLUMNAR ZELKOVA	ZELKOVA SERRATA 'MUSHASHINO'
EVERGREEN TREES	COMMON NAME	BOTANICAL NAME
	WEEPING BLUE ATLAS CEDAR	CEDRUS ATLANTICA 'GLAUCA PENDULA'
	KASHMIR DEODAR CEDAR	CEDRUS DEODARA 'KASHMIR'
	COLORADO BLUE SPRUCE	PICEA PUNGENS 'GLAUCA'
SHRUBS	COMMON NAME	BOTANICAL NAME
	PURPLE STEMMED DOGWOOD	CORNUS ALBA 'KESSLERLINGI'
	GREENSPIRE UPRIGHT EUONYMUS	EUONYMUS JAPONICUS 'GREENSPIRE'
	WILTONII BLUE RUG JUNIPER	JUNIPERUS HORIZONTALIS 'WILTONII'
	DWARF JAPANESE GARDEN JUNIPER	JUNIPERUS PROCUMBENS 'NANA'
	HIDCOTE BLUE LAVENDER	LAVANDULA ANGUSTIFOLIA 'HIDCOTE BLUE'
	GRO-LOW SUMAC	RHUS AROMATICA 'GRO-LOW'
	LAVENDER COTTON	SANTOLINA CHAMAECYPARISSUS
	LITTLE GIANT DWARF ARBORVITAE	THUJA OCCIDENTALIS 'LITTLE GIANT'
	MORGAN'S CHINESE ARBORVITAE	THUJA OCCIDENTALIS 'MORGAN'

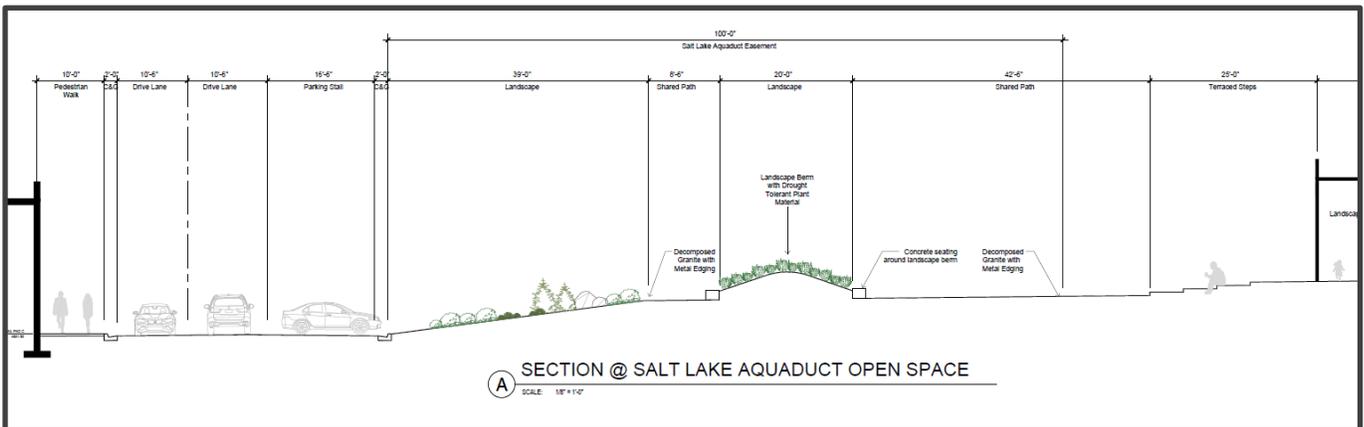
ORNAMENTAL GRASSES	COMMON NAME	BOTANICAL NAME
	BLONDE AMBITION BLUE GRAMA	BOUTELLOUA GRACILIS 'BLONDE AMBITION'
	EVERLITE VARIEGATED SEDGE	CAREX OSHIMENSIS 'EVERLITE'
	ELIJAH BLUE FESCUE	FESTUCA GLAUCA 'ELIJAH BLUE'
	PINK MUHLY	MUHLENBERGIA CAPILLARIS
	HEAVY METAL SWITCH GRASS	PANICUM VIRGATUM 'HEAVY METAL'
	NORTHWIND SWITCH GRASS	PANICUM VIRGATUM 'NORTH WIND'
	BLUE HEAVEN LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM 'MINNBLUE A'

PLANT SCHEDULE: NATIVE

TREES	COMMON NAME	BOTANICAL NAME
	BIGTOOTH MAPLE	ACER GRANDIDENTATUM
EVERGREEN TREES	COMMON NAME	BOTANICAL NAME
	PINYON PINE	PINUS EDULIS
SHRUBS	COMMON NAME	BOTANICAL NAME
	BIG SAGEBRUSH	ARTEMISIA TRIDENTATA
	CURL-LEAF MOUNTAIN MAHOGANY	CERCOCARPUS LEDIFOLIUS
	GREEN MORMON TEA	EPHEDRA VIRIDIS
	RUBBER RABBITBRUSH	ERICAMERIA NAUSEOSA
	ROCKY MOUNTAIN JUNIPER	JUNIPERUS SCOPULORUM

NON-IRRIGATED NATIVE SEED MIX

- MOUNTAIN BROME
- SLENDER WHEATGRASS
- SANDBERG BLUEGRASS
- BIG BLUEGRASS
- SHEEP FESCUE
- WESTERN WHEATGRASS
- BLUEBUNCH WHEATGRASS
- BASIN BIG SAGEBRUSH
- RUBBER RABBITBRUSH
- GREEN MORMON TEA
- BLUE GRAMA GRASS
- Bromus marginatus
- Elymus trachycaulus ssp. trachycaulus
- Poa secunda ssp. sandbergii
- Festuca ovina
- Pascopyrum smithii
- Pseudotsugomera spicata ssp. spicata
- Artemisia tridentata ssp. tridentata
- Ericameria nauseosa
- Ephedra viridis
- Bouteloua gracilis



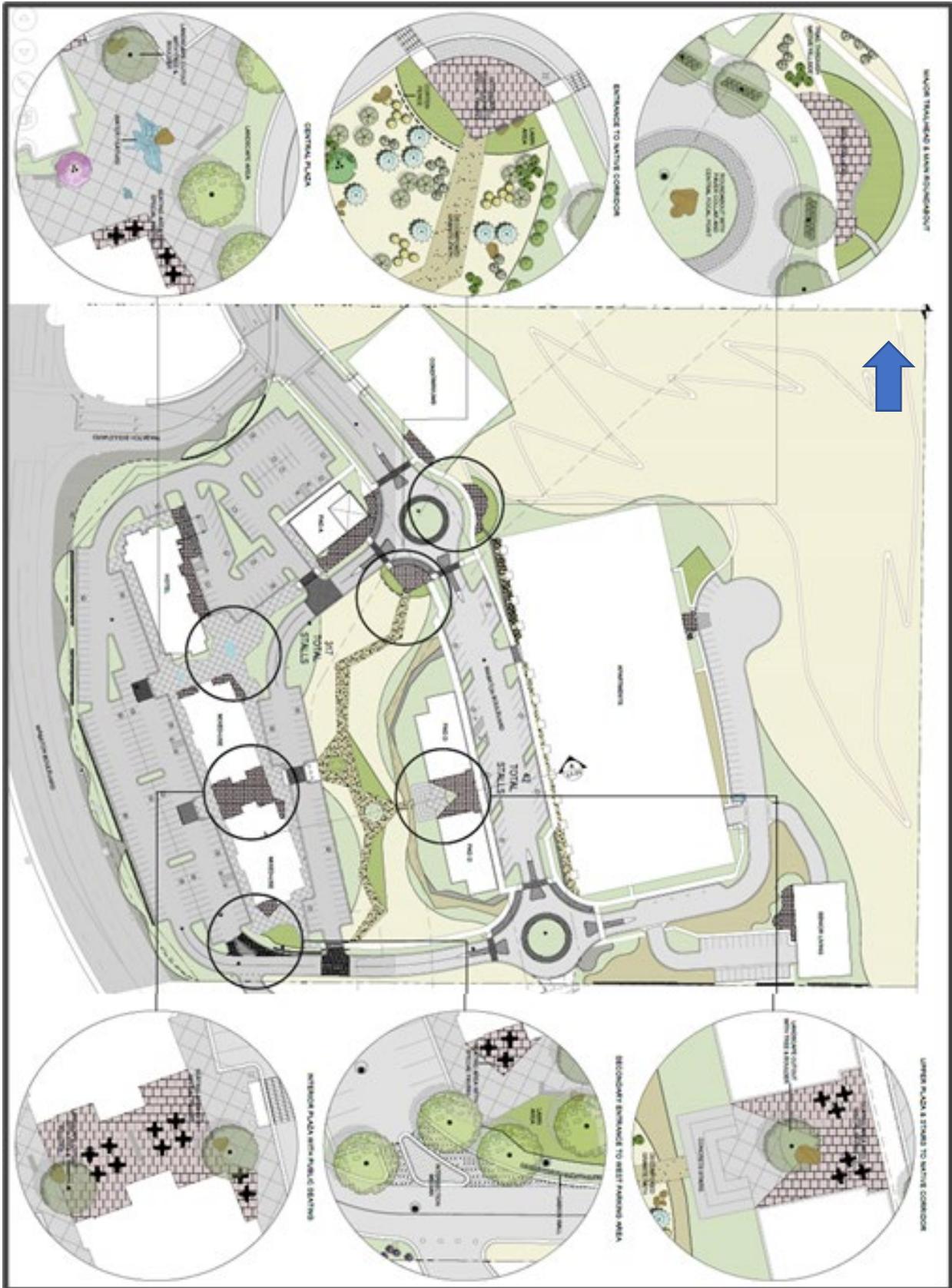


FIGURE 6 LANDSCAPING DETAIL - BUILDING SITE PLAN OUTDATED.

Signage

A MAJOR MONUMENT SIGN
 Monolithic, pitted concrete with the development name engraved into the concrete.
 Tenant names on removable corten steel plates.

B MAJOR MONUMENT SIGN
 Monolithic, pitted concrete with the development name engraved into the concrete.
 Does not list tenants.

C SECONDARY MONUMENT SIGN
 Angled corten steel, with letters cut out of the steel and a black powder-coated metal sheet attached to the back of the sign.
 Lists occupants in each area of development.
 Map of a given area.

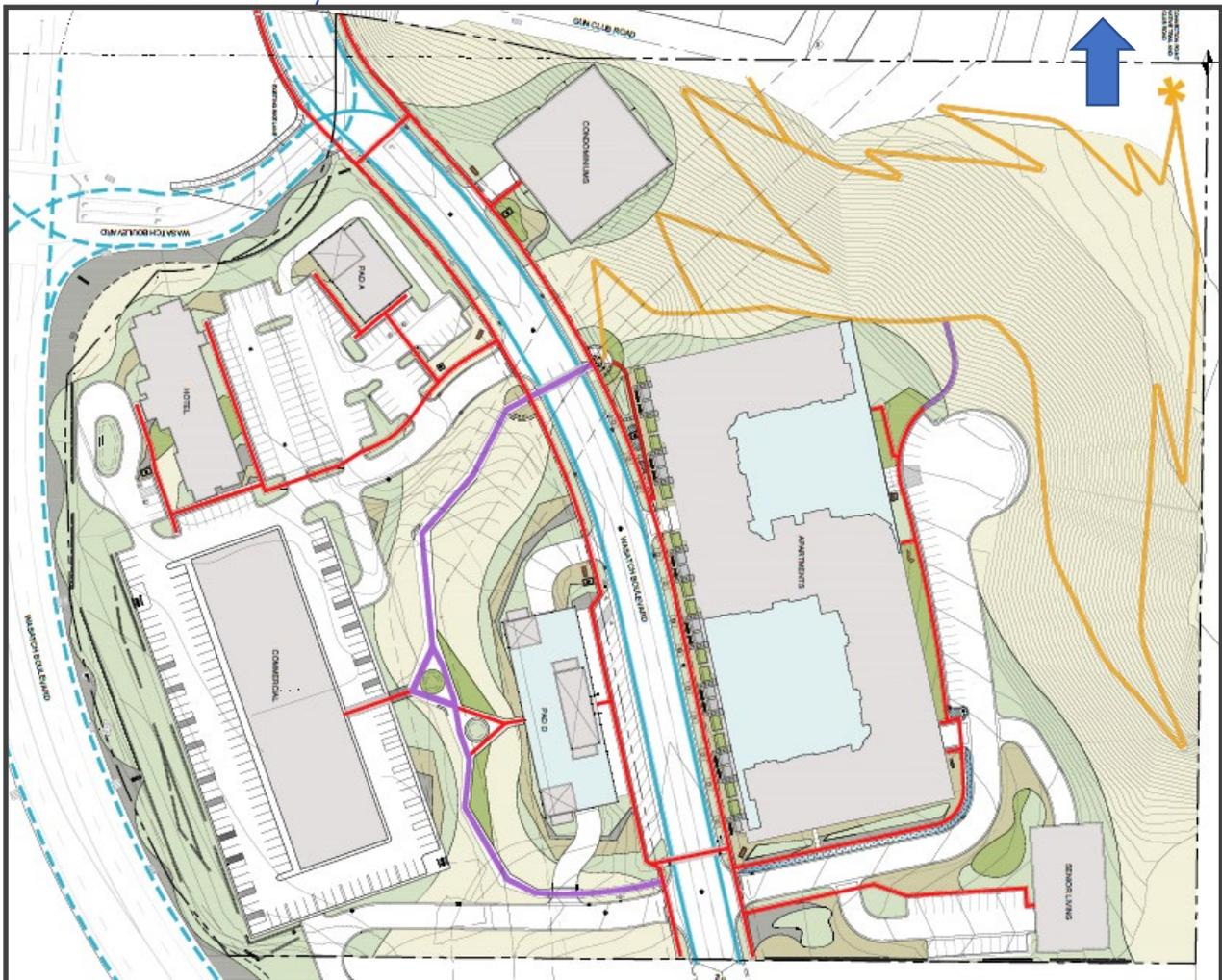
D ADDRESS SIGNS
 For stand-alone buildings.
 Numbers cut out of corten steel, in a concrete footing.

E DIRECTIONAL SIGNAGE
 Corten steel sheets—attached to a post—with letters cut out of the steel and a black powder-coated metal sheet attached to the back of the corten.

F TRAILHEAD SIGN
 Corten steel slats on a concrete base, with concrete bench seating on the end.
 Corten steel overhang.
 Trail and hillside information, with map of trails.

G TRAIL MARKERS
 Corten steel sheet with metal plate attached, wherein the name of the trail, the distance, etc. is listed.

Pedestrian and Bicycle Circulation



CONNECTIVITY

The circulation of bicycle and pedestrian traffic through the site is a defining feature of Wasatch Rock Redevelopment. In addition to the shared biking and walking trails through the retail area, a new on-site trail head will connect the Bonneville Shoreline Trail with the site via a multipurpose trail along Gun Club Road.

The existing bicycle path along Wasatch Boulevard will be rerouted through the Wasatch Rock site, further encouraging passers-by to utilize this unique mixed-use development and increasing access to the multipurpose trails throughout the adjacent hillside.



PEDESTRIAN PATH



BICYCLE PATH



SHARED PEDESTRIAN AND BIKE PATH



NATIVE TRAIL

Street Design

The project calls for a new main collector road to bisect the site and stub into the property southward. Based upon Architectural Review Commission feedback, the street was redesigned with a slower design speed to encourage walking and increasing bicycling. The latest iteration includes the following traffic calming measures:

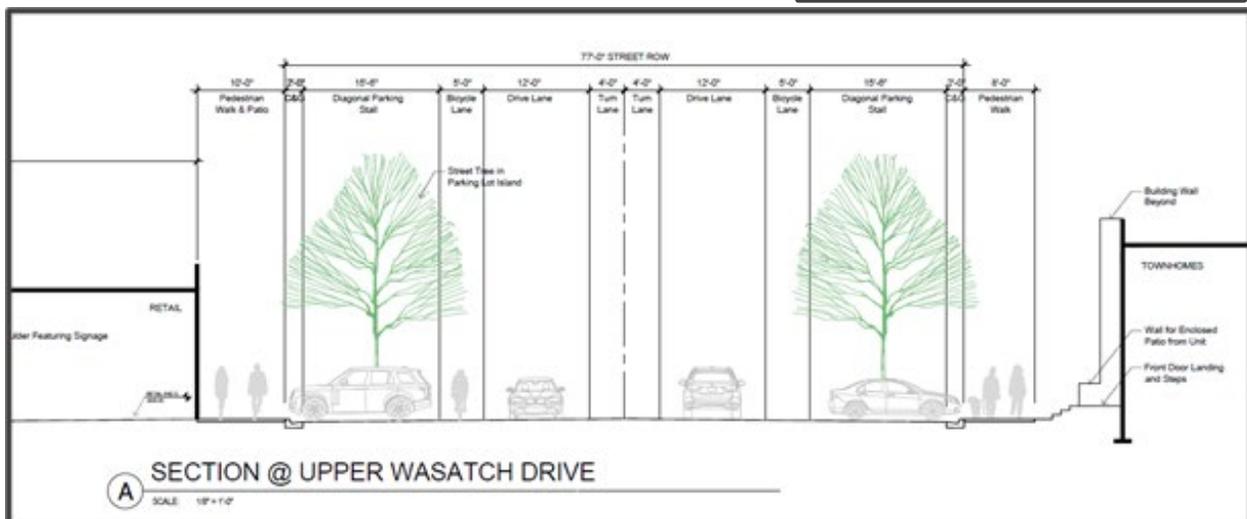
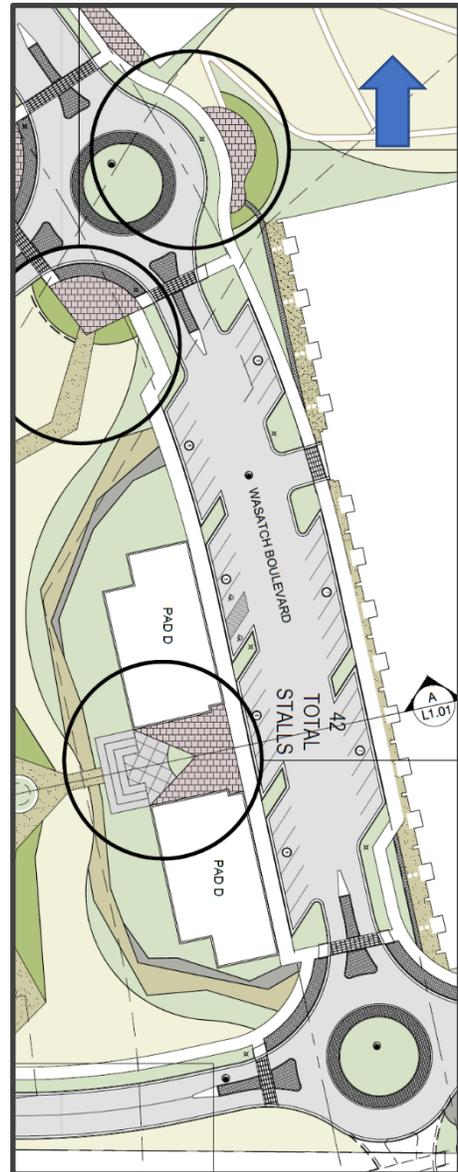
Roundabouts slow down traffic and create safer pedestrian crossings at intersections.

Angled parking on the sides of the street

Transit

Previous presentations to the Planning Commission on this development included a discussion reporting on the applicant's efforts to consider designing a Cottonwood Canyons transit hub in partnership with UDOT. UDOT has selected a preferred site centrally located at the gravel pit south of this site for the future transit hub. A primary consideration for the preferred site is a future centrally located intersection that will allow for efficient ingress/egress onto SR-190 and fewer site constraints allowing for a larger hub facility.

Although the hub is not planned to be at this development site, the site remains in an ideal location for current and future transit service. In addition to being near a planned future mass-transit hub, the site is within just a very short walk to an existing Salt Lake City commuter/Canyon Ski Bus park-and-ride facility to the north.



Vehicular Site Access

The site is primarily accessed via Wasatch Blvd approximately 200 feet from the SR-190 / Millrock Dr / and Wasatch Blvd Intersection. A secondary emergency access is provided for at the Southeast of the site. The property owner has a right of access over the property to the south for this purpose.

Access Onto SR-190

SR-190 is a Utah Department of Transportation (UDOT) highway. The City does not control the ability to add signals or street access onto this route. Staff understanding, based on UDOT State Administrative Rule 930-6-7, that access from this site onto SR-190 would not be permitted, primarily for three reasons:

1. Exceptions for access are not granted when there is a reasonable alternate access. Access onto Wasatch Blvd is a reasonable alternative to SR-190 in this situation.
2. Minimum street spacing from an intersection is 1000 feet and the spacing from Wasatch Blvd centerline to the edge of the property is approximately 800 feet. Signalized intersections require ½ mile of spacing.¹
3. The property south of this site has three streets (one signalized) planned. When developed, the street labeled as “Upper Wasatch” on the development plan will have access to exit the site through these egress points.

Future access to all gravel pit redevelopment sites is likely to occur as shown on Figure 7.

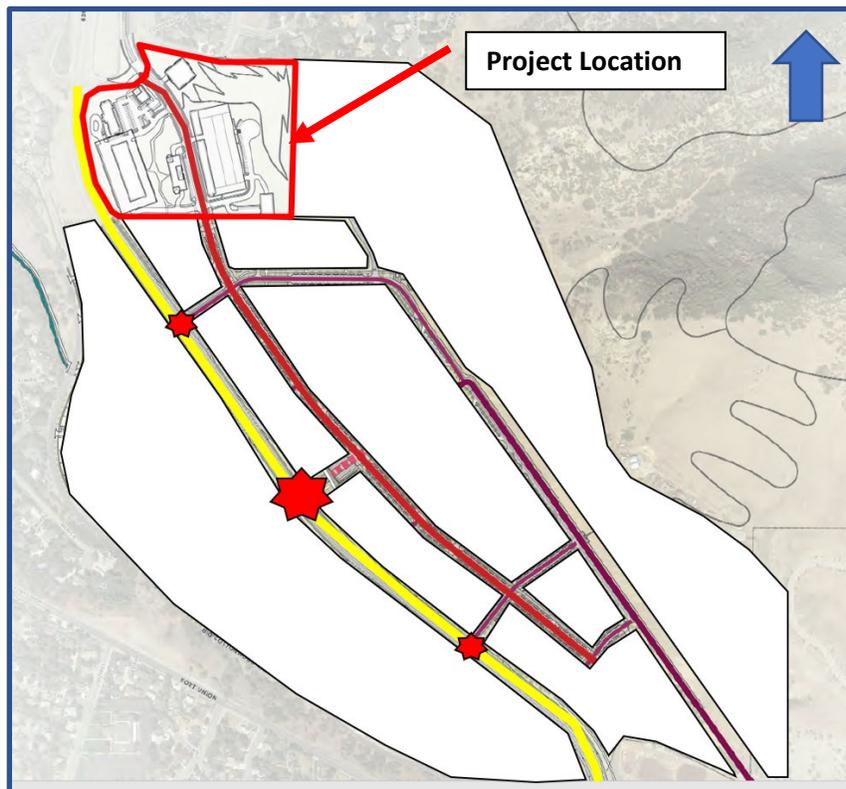


FIGURE 7 - FUTURE ACCESS POINTS FOR GRAVEL PIT REDEVELOPMENT AREAS

¹ UDOT (2013). R930-6. Access Management. Table – 1. Online:
https://www.udot.utah.gov/main_old/uconowner.gf?n=11066229893635233

UDOT has confirmed that additional street access to SR-190 in this location will not be permitted under the rules cited in this report. That could be superseded by the specific access corridor plan being prepared for this location at this time, but is still unlikely to consider access onto SR-190 from this property directly.

Public Works/Engineering Site Plan Topics

The Cottonwood Heights Public Works Department reviews plans for engineering compliance. Because of the nature of the site as a reclamation area, and the size of the development, it is important to confirm that the development plan will work at a high-level design view. Of importance to the city is preliminary grading, geologic, and storm drainage studies. If any of these development aspects end up adjusting overall site layout, densities, and building heights, that must be determined now before the development plan becomes a part of the regulating ordinance. This is to the applicant's benefit to avoid amended site plans that conflict with the adopted ordinance. Further, as the entitlement of this site resides within the zoning parameters that are approved, it is important for the city to not entitle a site development plan by ordinance that would violate other city standards. Attachment 4 is a list of outstanding items that need addressing prior to any final recommendation from the Public Works department.

Site Reclamation

Site reclamation refers to restoring or stabilizing previous gravel pit operations to safe and attractive conditions. The applicant has proposed the following general reclamation strategy for the former gravel pit. The development plan states:

"that the hillside on which the site sits will be re-graded to restore the natural slope.... – smoothing out the hillside -- and then be re-seeded with a native seed mix.... Throughout the site, we will incorporate the native seed mix and other native landscape corridor through the entire site."

The applicant has provided additional details on the initial preliminary grading plan on the strategy to reclaim the slope as shown in Figure 9.



FIGURE 8 – EXISTING AND PROPOSED SITE GRADING BASED ON OLD SITE PLAN LAYOUT.

Reclamation Vegetation

See Figure 5 for details on the vegetation proposed for the hillside. Mature vegetation assist hillside stability, although establishment must be carefully done as to water avoid run-off and soil oversaturation.

Additional Reclamation Information Needed

Public works is requesting additional planning on the reclamation prior to providing a recommendation on the development plan. The reclamation plan shall include at a minimum:

- Scope of the disturbed areas
- Drainage impact to native vegetation
- Slope stabilization methods and compaction requirements
- Erosion control methods and Revegetation Plan

Recommended Reclamation Ordinance Details

Planning staff proposes that specific reclamation standards are incorporated into the PDD ordinance. These will be developed when more details are received.

Geologic Site Constraints

Due to two factors, the site's building area is highly constrained as illustrated below:

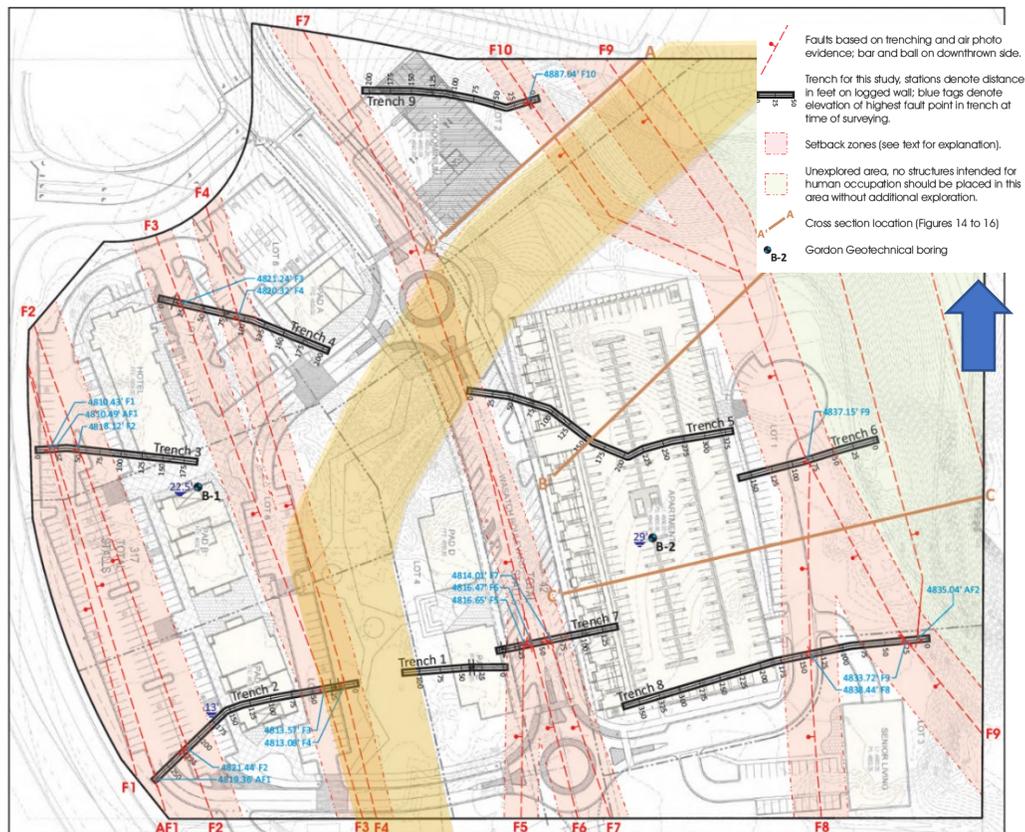


Figure 9- Major Site Constraints – Red: Fault Setback Area. Orange: MDWSS Salt Lake Aqueduct

Red areas on the above diagram indicate fault lines and their required setbacks. Per the Surface Fault Rupture Study, no structures intended for human occupancy should be located in these areas. Streets, driveways, yards, parking, and other non-occupied non-attached structures may be constructed in these areas.

The **orange** area is an easement for the Metropolitan Water District of Salt Lake and Sandy (MWDSS) and created to house Salt Lake Aqueduct. No building and only limited surface development, as approved by MWDSS.

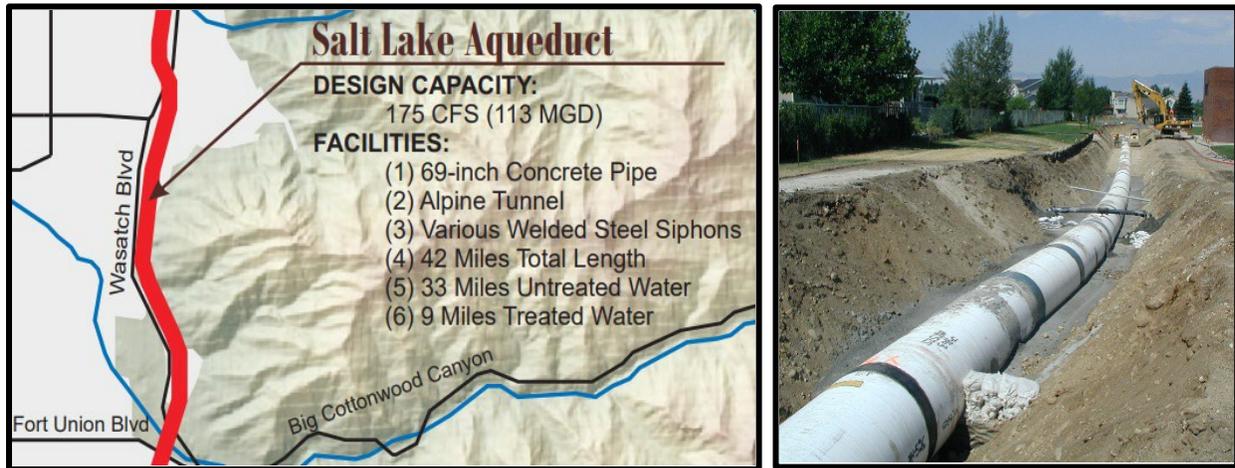


FIGURE 10 - THE SALT LAKE AQUEDUCT

Site Geologic Considerations

The applicant has submitted the following:

Geotechnical Study and Slope Stability Analysis

A summary of findings from the investigation are detailed on p. 13-15 on Attachment 5.

Surface Fault Rupture Hazard Evaluation

Conclusions and recommendations are found on p. 19 of the report (Attachment 6 - p. 78). The City Geologist has provided a review and recommendations after an evaluation of the Surface Fault Rupture Hazard Evaluation (see Attachment 7)

Staff Recommendation

As final plan design-level geotechnical engineering studies required for each final phase may present, and as Significant cuts could change fault locations and setback zone calculations, staff recommends the inclusion of ordinance language that indicates that additionally recommendations from qualified geologic engineers and accepted by the Public Works department may negate approved locations on the Development Plan.

Traffic Impact Study

A traffic impact study was completed by Hales Engineering to analyze the impact of the proposed development on existing traffic conditions (see Attachment 8).

Key points from the study are:

- Existing traffic volumes were studied in December 2017 at:
 - 6200 S / Wasatch Blvd/Millrock Dr.
 - Gun Club Road / Wasatch Blvd.
- Peak traffic hour was determined to be between 5 pm and 6 pm (35% higher than morning peak).
- Mixed-use methodologies reduce estimated trip generation by 5% in morning peak hour and 18% in evening peak hour.
- The project estimates 4,342 vehicle trips per day at total buildout (26% less than the applicant's previous proposals with more office space). Trip generation at peak times is as follows:
- Morning peak hour trips: 273
- Evening peak hour trips: 347
- All study intersections are anticipated to continue to operate at an acceptable level of service during the evening peak hour in future (2040) traffic plus project.
- The intersection into the adjacent residential are currently and project to be at an "A" service level.
- Level "D" is considered acceptable by UDOT standards² (see figure 10).



FIGURE 11 - TRAFFIC CLASSIFICATION LEVEL OF SERVICE

² UDOT (2017). Signalized Intersection Design Guidelines, p. 3. Online:
https://www.udot.utah.gov/main_old/uconowner.gf?n=13679121470326565

Traffic Study Addendum

An addendum was submitted to the city addressing:

- the internal redesign of the street to a lower-design speed,
- the inclusion of roundabouts,
- and questions on traffic impacts through the development plan when property to the south develops.

The analysis concluded:

“It is determined that the new configuration is not likely to create any additional impact beyond what was estimated in the prior study on the existing intersections in the study area. Based on the projected ADT, it is likely that there will be some reserve capacity for the future development to the south. Should the south roundabout connect to the neighboring project to the south, it is likely that with their (southern project) accesses to SR-190, the roadway for this project would receive very little traffic flow; however, this road has enough reserve capacity to accommodate some additional vehicles.” (see Attachment 9 for the addendum).

Google Maps Traffic Data – 5:30 PM Peak Traffic

The Google Maps app for mobile devices collects user data, and other data sources to create real-time traffic condition maps. They also permit users to see typical traffic conditions. Although this resource does not provide specific numbers, they can help confirm peak-hour traffic conditions. Traffic on weekdays at 5:30 pm show minor slowing (orange), but never show slow or gridlock traffic on average.

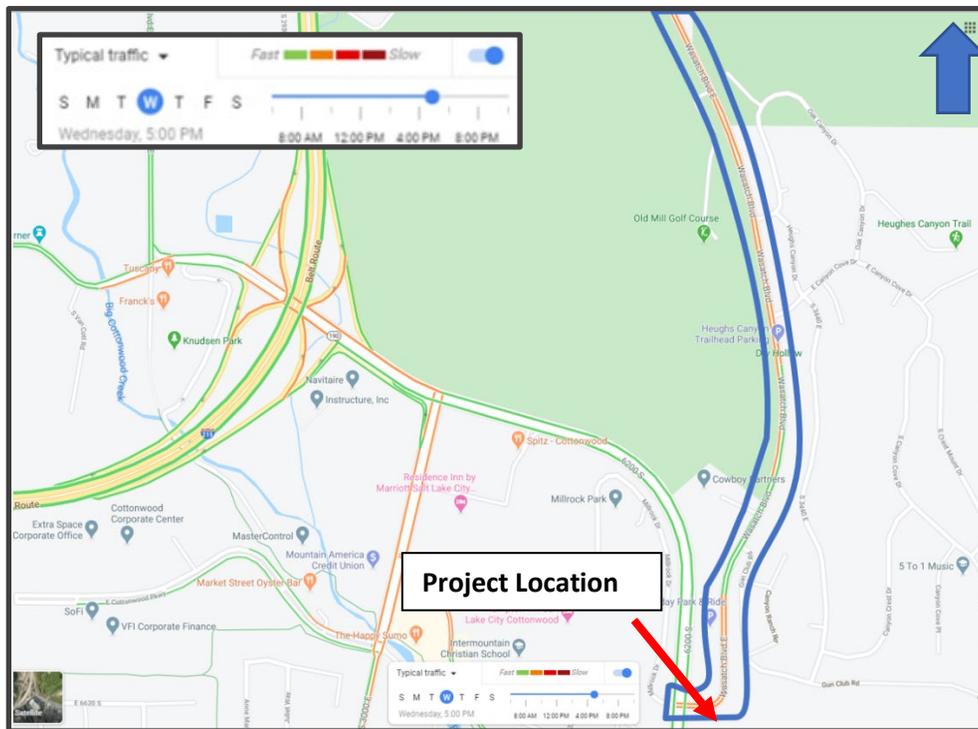


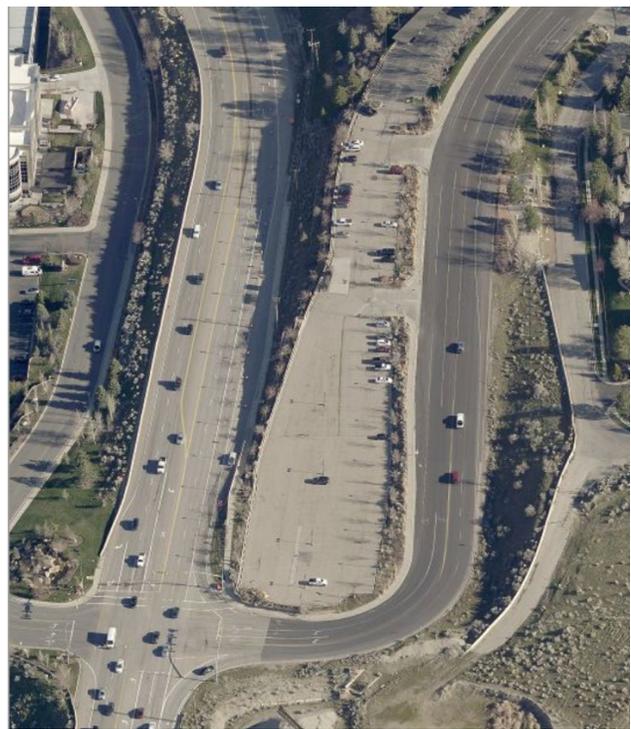
FIGURE 12 - GOOGLE MAPS APP - TRAFFIC CONGESTION AVERAGES - PEAK TRAFFIC

Parking and Congestions Concerns on Wasatch Blvd.

Many public comments have so far addressed parking and congestion issues on Wasatch Blvd. Except for approximately 20-25 snow days per year, the area has little congestion and or parking. Granted, some increase in parking on Saturdays may be the case, too, especially with increased outdoor activity due to COVID-19. However, a survey of aerial photography indicates that the area is mostly vacant (likely about 95% of the year (see Figure 8 and Attachment 14 – only one aerial photo during winter was discovered as most aerial photography is taken in early spring and late fall). Conditions may be worse than pictured on ski days, especially during morning hours.



December 20, 2019



April 8, 2019

FIGURE 13 – SKI-DAY CONDITIONS AND TYPICAL CONDITIONS

Fire Department Review

Unified Fire has reviewed the plan and has found access to each building site acceptable. Proposed roundabouts will need to be designed with an appropriate radius to allow for sufficient fire apparatus turning.

ANALYSIS OF PROPOSAL – KEY ISSUES

In addition to outstanding items needing resolution as outlined in the beginning of this report, the following sections will analyze:

- Evaluation of the proposal against adopted plans and policies.

- Evaluation of the proposal against PDD goals and objectives.
- Evaluation of the proposal against specific/global PDD requirements for use of a PDD zone.
- Evaluation of the proposed PDD-2 ordinance that will regulate the specifics of this site.

Evaluation of the Proposal Against Adopted Plans

The PDD ordinance was created as a tool to better implement certain aspects of the city's General Plan. Many components of the General Plan support the Planned Development District application process. As a legislative process, the PDD gives city leadership greater input in the development process than traditional development applications. Whereas most land use and zoning changes are considered without any specific development plans, the PDD is a type of zone change application that requires applicants to include a development plan as part of the proposed zone. In exchange for this level of required detail, an applicant can create zoning standards that are custom-tailored to a specific property.

Staff has evaluated policies within the City General Plan and the Wasatch Blvd. Master Plan. The full evaluation may be found in Attachment 11.

Evaluation of the Proposal Against PDD Goals and Objectives

The PDD zone establishes goal and objectives for its use as a regulatory/development tool. Attachment 11 contains staff complete analysis.

Evaluation of Proposal Against PDD Global Regulations

A point-by-point analysis of the PDD global regulations and the applicant's submittal is provided. Further detail is provided in the applicant's narrative attached to this staff report. See attachment 12.

Evaluation of Proposed PDD-2 Ordinance

The applicant has submitted a proposed zoning ordinance to regulate the specifics of the PDD-2 zone. See attachment 13.

PUBLIC NOTICE

Public notice for the Planning Commission public hearing was distributed as required by State law. A 10-day notice was provided:

- Newspaper
- State public notice website
- City bulletin board
- Affected entities and adjacent municipalities.

Additional 10-day public notice was placed in the following ways:

- On-site sign.
- Mailed notice to property owners within 1,000 feet of the project boundary.
- City public notice website.
- City email distribution system.
- An additional courtesy notice was sent to property owners within 1,000 feet of the project boundary on July 8, 2020.

Public Comments

All written public comments prior to the close of the public hearing will be distributed to the Planning Commission for their consideration. Public comments received so far are included in Attachment 15.

STAFF RECOMMENDATION

Staff's review of the application is based on whether the proposal complies with the baseline standards of relevant city plans, codes, ordinances, and development standards. There are outstanding issues that remain to be addressed. Staff recommends that the request is continued to the August 5, 2020 Planning Commission meeting to allow the applicant to resolve outstanding issues and for staff to review their response to them.

Model Motions

Continue

I move that we project #PDD-19-001 to the August 5, 2020 Planning Commission meeting.

Attachments

There are many very large files associated with this proposal. They files are available for download via this link:

<https://www.cottonwoodheights.utah.gov/your-government/boards-and-commissions/planning-commission/agendas-packets-minutes>

Attachments 12 and 13 are pending and will be uploaded as soon as they are prepared.

1. Proposed Development Plan
2. Proposed PPD-2 Ordinance
3. Supplemental Design Guidelines
4. Outstanding Issues Requiring Resolution – Cottonwood Heights Public Works
5. Geotechnical Study and Slope Stability Analysis
 - a. Review of Geotech and Surface Fault Rupture Hazard Evaluation
6. Geologic Hazards Including Surface Fault Rupture Hazard Evaluation
 - a. Review of Geologic Hazards Including Surface Fault Rupture Hazard Evaluation
7. Traffic Impact Study
8. Traffic Impact Study Addendum
9. Developer Held Community Meeting Minutes
10. Review Letter by the Metropolitan Water District of Salt Lake and Sandy
11. Evaluation of the Proposal Against PDD Goals and Objectives, and Adopted City Plans
12. Evaluation of Proposal Against PDD Global Regulations - Pending
13. Evaluation of Proposed PDD-2 Ordinance – Pending
14. Aerial Photography of Wasatch Blvd/SR-190 Intersection and UTA Park and Ride: 2007 – 2020
15. Public Comments received as of July 9, 2020.



Planning Commission PROJECT MEMORANDUM

Bonneville Shoreline Trail Access Master Plan

Meeting Date: July 15, 2020

Staff Contact: Mike Johnson, CED Director

(801) 944-7060, mjohnson@ch.utah.gov

Summary

PROJECT NAME: Bonneville Shoreline Trail Access Master Plan (Project GPA-20-002)
REQUEST: General Plan Amendment / Master Plan Adoption
APPLICANT: Cottonwood Heights City
RECOMMENDATION: Approve

Background & Request

A future Bonneville Shoreline Trail alignment through Cottonwood Heights has been contemplated for many years. In the last few years, one of the city's outdoor recreation priorities is to further efforts to begin constructing the Bonneville Shoreline Trail. While a potential trail alignment has previously been studied and planned, the city has never conducted a formal analysis of trail access.

A trail can only be successful if it has proper, well-planned access points. The Bonneville Shoreline Trail Master Plan makes recommendations for the type, location, and extent of access required for the anticipated trail. The plan includes 9 locations east of Wasatch Blvd. that could potentially serve as future trailhead locations, with design recommendations for regional, secondary, and local access points. The plan does not recommend that all sites be used as trailheads, but rather that each site should be individually evaluated by the City to determine the final trailhead locations. With an adopted master plan in place, the city will have opportunities to seek potential funding assistance to begin implementation of trail access at the appropriate time in the future.

Work on the draft plan began in 2019 and has consisted of site visits, multiple meetings with a small steering committee comprised of city staff and Parks, Trails, and Open Space Committee members, and a public open house in February 2020. The plan has been presented and discussed by the Parks, Trails, and Open Space Committee, and is ready for formal consideration by the Planning Commission.

Process

The proposed plan will require public hearing and recommendation by the Planning Commission. Concurrently, it will be presented to the Parks, Trails, and Open Space Committee for recommendation. With a recommendation from both the Planning Commission and Parks,

Trails, and Open Space Committee, the plan will be considered by the Mayor and City Council for final approval and adoption.

Public comments received prior to 5:00 p.m. on July 15th will be read into the Planning Commission meeting for consideration.

Model Motions

APPROVAL

I move that we forward a recommendation of approval to the Council for project GPA-20-002, a Bonneville Shoreline Trail Access Master Plan

- Add any additional conditions of approval

DENIAL

I move that we forward a recommendation of denial to the City Council for project GPA-20-002, a Bonneville Shoreline Trail Access Master Plan

- List findings for denial

Attachments

- Bonneville Shoreline Trail Access Master Plan (Draft)



Cottonwood Heights

Bonneville Shoreline Trail - Trailhead and Access Plan

June 2020

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acknowledgements

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Michael J. Peterson

City Manager

Tim Tingey

City Council

Scott Bracken

Tali C. Bruce

Christine Mikell

Doug Petersen

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Parks, Trails, Open Space Committee

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Michael Menssen

Erin Davis

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Cottonwood Heights City Staff

Mike Johnson Community and Economic
Development Director

Consultant Team

blū line designs

Planning

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A Public Open House Comment Summary	
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CHAPTER ONE | INTRODUCTION & SUMMARY

THE BONNEVILLE SHORELINE TRAIL (BST) IS A LONG-ENVISIONED TRAIL SYSTEM PLANNED TO EXTEND OVER 280 MILES ALONG THE WASATCH FRONT AND CONNECT COMMUNITIES FROM LOGAN TO NEPHI. THE PROPOSED BST ALIGNMENT RUNS ALONG THE EASTERN BOUNDARY OF COTTONWOOD HEIGHTS CITY, AND THOUGH MANY MILES OF THIS TRAIL HAVE BEEN BUILT IN NEIGHBORING JURISDICTIONS, CURRENTLY NO FINISHED SECTIONS OF THE BST EXIST IN COTTONWOOD HEIGHTS. THE PURPOSE OF THIS MASTER PLAN IS TO IDENTIFY AND PRIORITIZE ACCESS POINTS TO THE BST WHEN IT IS CONSTRUCTED.

1.1 - INTRODUCTION & PURPOSE

Settled within the foothills of the Wasatch Mountain Range and between two of the most prominent and popular canyons within the Salt Lake Valley, Cottonwood Heights City (the City) is perfectly situated to provide access to miles of recreational trails and to the natural amenities that the mountains provide. Recognizing the importance of providing safe, controlled, and appropriate access to these amenities, the City has placed a renewed priority on beginning construction and implementation of the Bonneville Shoreline Trail (BST) within and adjacent to City limits. (see [Figure 1.1 - Bonneville Shoreline Trail](#)) Along with that comes the need to identify the most appropriate and viable trail access points, which is the purpose and goal of this master plan document.

Recent events have only emphasized the need and desire for activities that allow people to recreate and engage with nature individually or in small groups. Some municipalities have seen trail usage increase 200-400% in 2020 compared to previous years.

1.2 - EXECUTIVE SUMMARY

This Trailhead and Access Plan documents the existing conditions analysis; the needs assessment component of the project; establishes plan goals and objectives; recommends varying types and locations of trailheads and access points; and provides preliminary estimates of construction costs for budgeting purposes.

1.2.1 - EXISTING CONDITIONS ANALYSIS

Existing conditions of possible BST access points within City boundaries were analyzed in a variety of ways. Aerial and GIS information provided by the City were used to perform a high level accessibility, spacial, ownership, and topographical analysis. The proposed BST alignment was documented and considered. Existing and proposed development within the area was also considered. Additionally, site visits were performed to provide verification and more in depth “on-the-ground” analysis. (see [Figure 1.2 - Existing Aerial](#) and [Figures 1.3.1 - 1.3.4 Enlargements One through Four](#))

In summary, existing conditions are favorable to the selection and development of different types of trail access points along the City limits. Major constraints to be dealt with include property access/ownership; proximity to existing residences; and existing topography.

1.2.2 - NEEDS ASSESSMENT

A multi-faceted approach was taken to identify needs, desires and necessary improvements as they pertain to BST trailheads and access points. This process included meeting regularly with a City steering committee; meeting with the Cottonwood Heights Parks, Trails and Open Space Committee; performing a comparative analysis with other similar Wasatch Front communities; and engaging the public through a community open house. This assessment

was further informed and supported by previous planning and studies that the City has performed.

As construction of the BST through the City is just getting started and thereby no formalized access points to the BST currently exist, the greatest identified needs are to construct the BST and then to provide legal and safe access points to the trail.

Based on the existing access points to the existing trails (non-BST) in the area, it is clear that popularity and usage outweigh the current access provisions and facilities.

1.2.3 - GOALS AND OBJECTIVES

As informed by the needs assessment task of this plan, preliminary goals and objectives were established, reviewed by the City steering committee, refined, and then presented at the Community Open House. These goals and objectives represent the essence of the City's desires and intents for access to the BST.

GOAL 1.0 | IDENTIFY AND PROVIDE SUFFICIENT AND EFFECTIVELY LOCATED REGIONAL, SECONDARY, AND LOCAL ACCESS POINTS TO THE BONNEVILLE SHORELINE TRAIL WITHIN COTTONWOOD HEIGHTS' CITY LIMITS THAT PROVIDE GOOD CONNECTIVITY TO THE WASATCH FRONT MOUNTAINS AND NATURAL AREAS.

OBJECTIVE 1.1: Provide trailhead access points that are safe and accessible to all ages and abilities.

OBJECTIVE 1.2: Provide a minimum of two regional access points, at least one per four miles of trail.

OBJECTIVE 1.3: Provide A Minimum Of Three Local Access Points, At Least One Per Mile Of Trail.

OBJECTIVE 1.4: Identify Cost Estimates And Sufficient Funding Opportunities For All Trail Access Development.

OBJECTIVE 1.5: Prioritize And Identify Phasing Of Regional And Local Access Points.

OBJECTIVE 1.6: Identify and pursue local, regional, state, and national funding opportunities to achieve plan goals and objectives.

GOAL 2.0 | PROVIDE WELL DESIGNED REGIONAL, SECONDARY, AND LOCAL ACCESS POINTS TO THE BONNEVILLE SHORELINE TRAIL WITHIN COTTONWOOD HEIGHTS' CITY LIMITS THAT HAVE APPROPRIATE WAYFINDING, AMENITIES, AND INTERPRETIVE ELEMENTS.

OBJECTIVE 2.1: Provide clear trailhead and trail signage that allows for sufficient wayfinding and information to orient and direct all trails users, including trail etiquette and regulatory signage.

OBJECTIVE 2.2: Provide interpretive signage at trail

access points to interpret the natural environment including vegetation, wildlife, history, water resources, and geologic features.

OBJECTIVE 2.3: Provide restrooms, tables, benches, waste receptacles, pavilions, drinking fountains, bike repair stations, dog waste dispensers, and other appropriate amenities at trail access points.

1.2.4 - RECOMMENDATIONS

Based upon the existing conditions analysis and the needs assessment process, three types of recommended access points are proposed: Regional Trailhead, Secondary Access, and Local Access. (*see Figure 1.3 - Bonneville Shoreline Trail Access Plan*)

REGIONAL TRAILHEADS

These are primary accesses to the BST located at key points along the trail with significant amenities and meaningful parking. These trailheads would serve regional, community, and local trail users. Three locations are proposed: one at the existing gravel pit at the northeast corner of the Wasatch Drive and Big Cottonwood Canyon Road; one on Prospector Drive just down the hill and west of the existing Ferguson Canyon Trailhead; and one just east of Wasatch Drive at the City's southern boundary.

SECONDARY ACCESS

Secondary access points are accesses that may serve community and local trail use, as well as some regional use, though due to spatial constraints, location or other considerations, amenities and parking may be limited. One location is proposed up Big Cottonwood Canyon at an existing pull off on the south side of Big Cottonwood Road.

LOCAL ACCESS

Local access points are located within individual neighborhoods with very limited amenities and limited parking (if any). These are primarily for neighborhood residents and meant to be accessed by foot or bicycle. Three local access points are recommended. The plan shows five possible locations: one at the end of Mountain Cove Circle; one at the end of 8335 South; one at the end of Golden Oaks Drive; one at the southern end of King Hills Drive; and one from the cul-de-sac at the end of King Hills Place. These identified locations offer the City options to consider when the opportunity is presented to develop a local access point. Not all of these are required nor recommended.

1.2.5 - PRELIMINARY COST ESTIMATES

To facilitate City funding and budgets and to assist in fundraising opportunities, preliminary construction cost estimates have been provided for both the specific and typical access improvements identified.

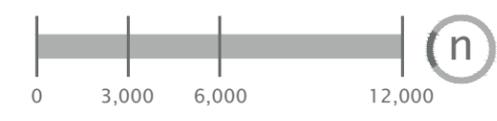
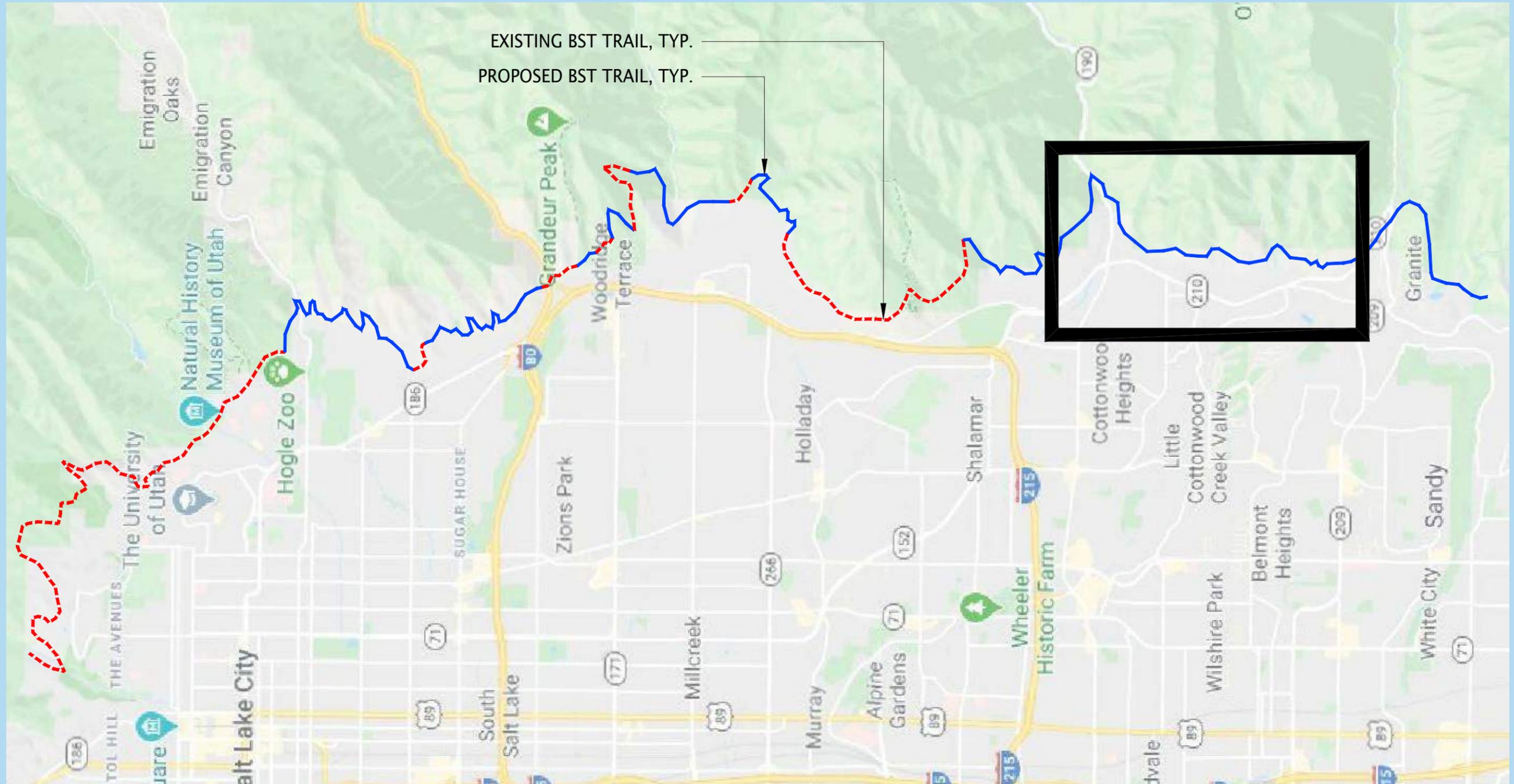
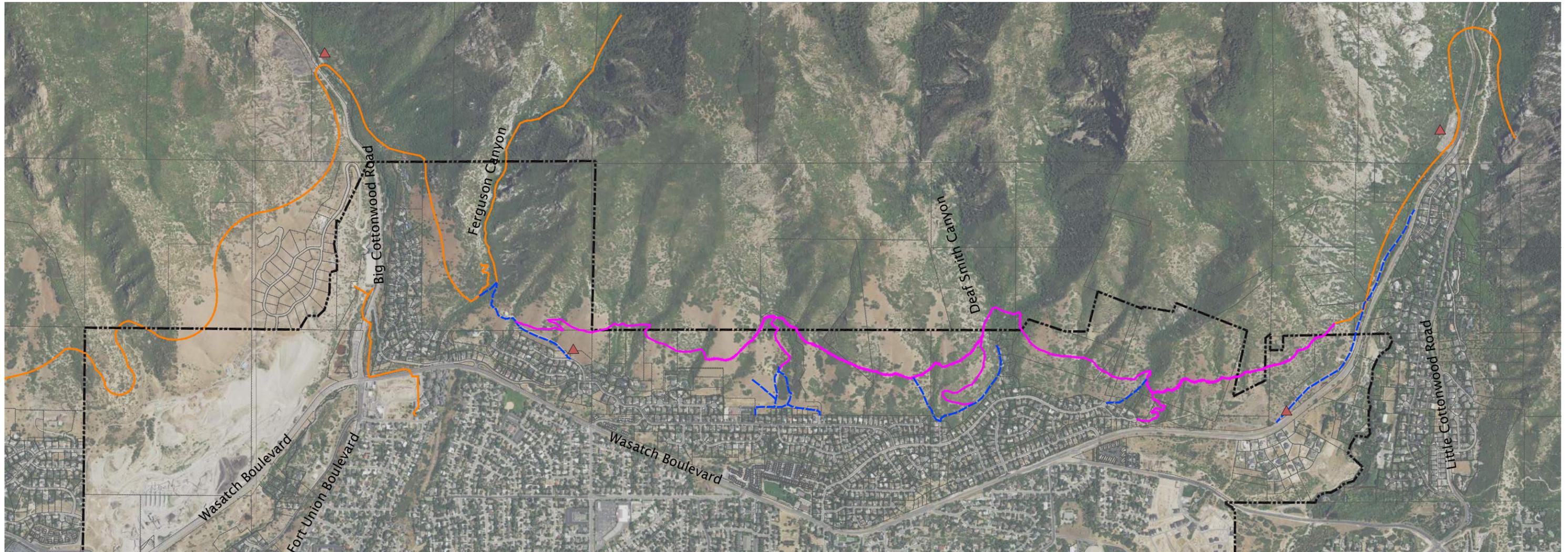


FIGURE 1.2 - EXISTING AERIAL

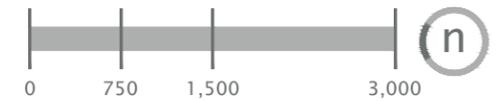


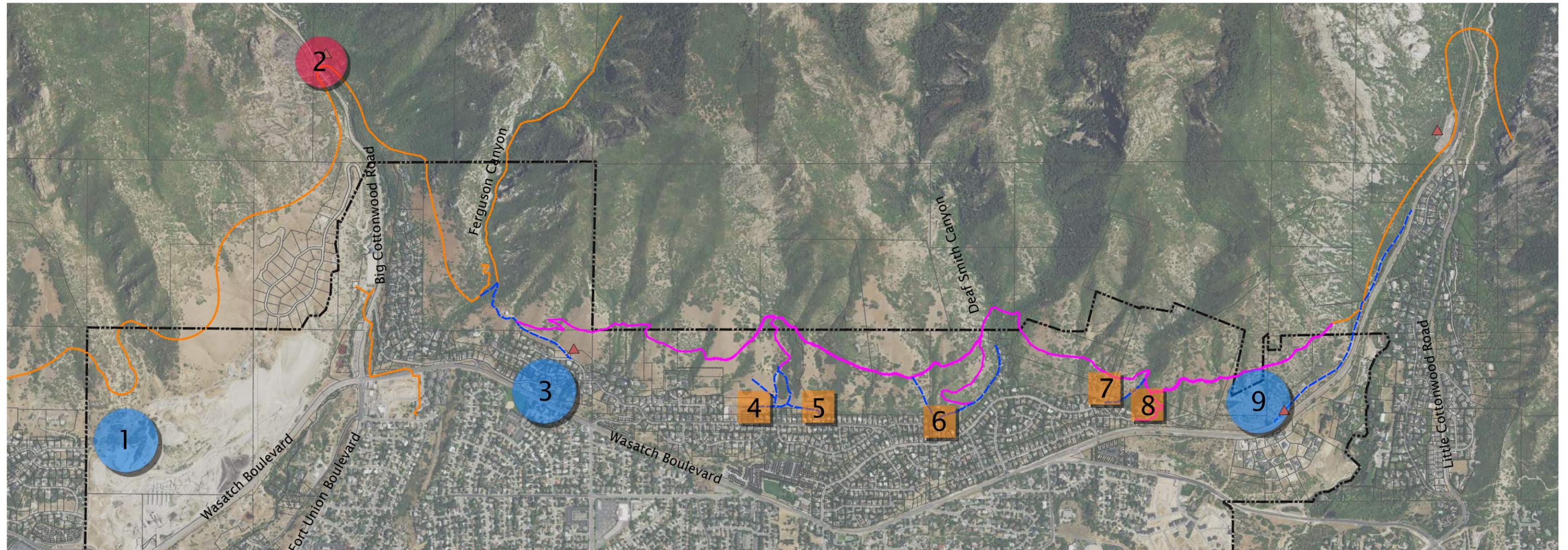
LEGEND

- - - Existing Trail
- Proposed Trail (CH)
- Proposed Trail (BST)
- ▲ Existing Trailhead
- Cottonwood Heights City Boundary



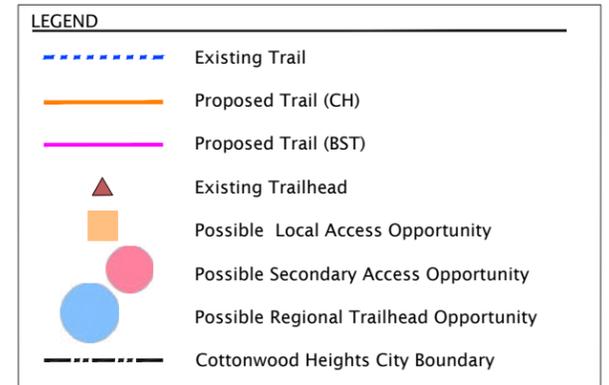
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Recommended Accesses:

- Three Regional Trailheads (Sites #1, #3, and #9)
- One Secondary Access (Site #2)
- Three Local Accesses (Selected from Sites #4-8)



Bonneville Shoreline Trail Access Plan

06.19.2020

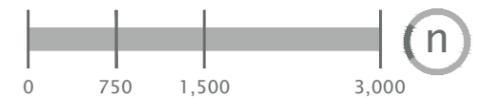
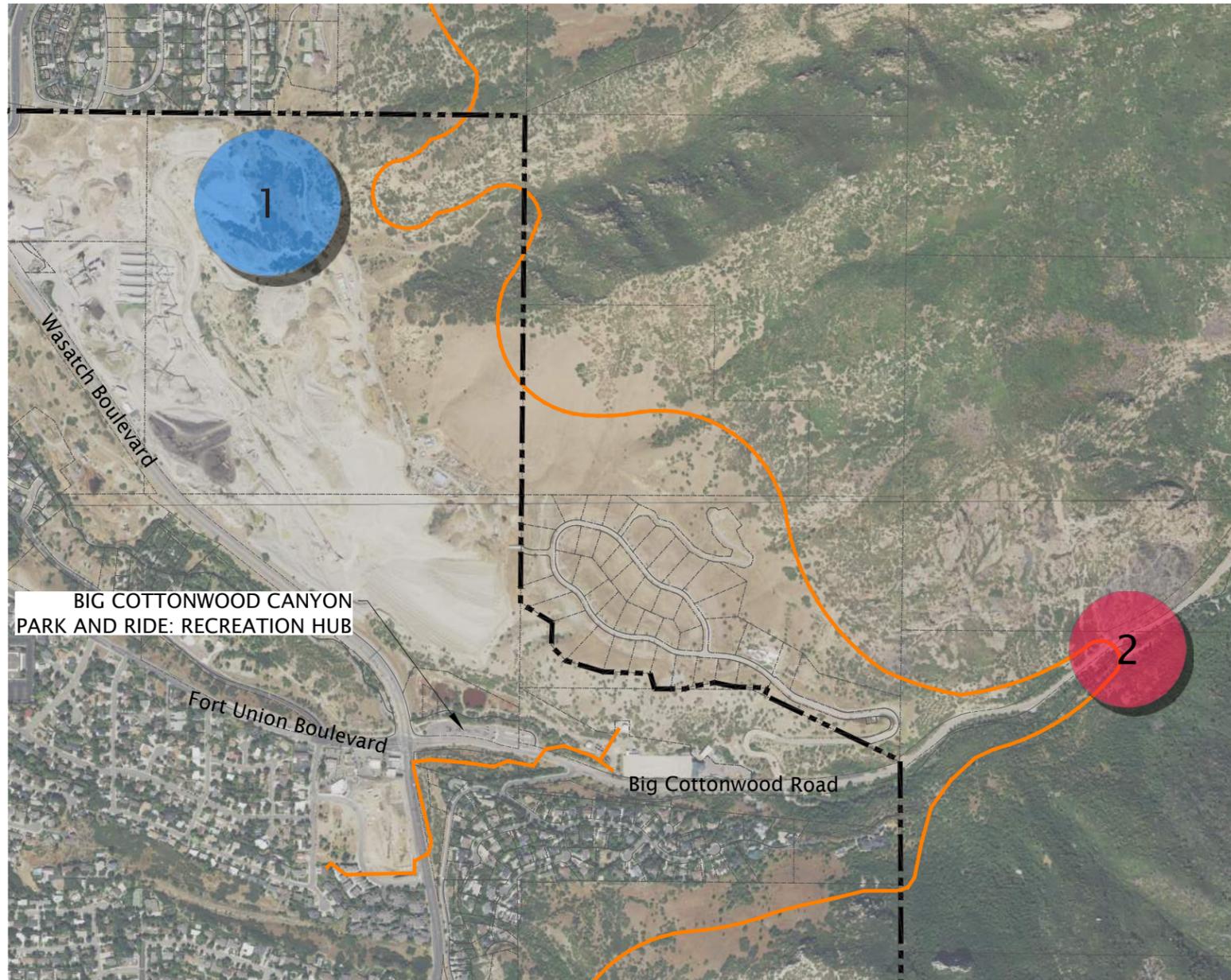


FIGURE 1.3.1 - ENLARGEMENT ONE



1. GRAVEL PIT: REGIONAL OPPORTUNITY

OPPORTUNITIES:

- No Existing Development
- Can Plan for Large Parking Lot/Access
- Expected Recreational Hub

CONSTRAINTS:

- Timing of Development
- Limited Existing Vegetation
- Significant Slopes



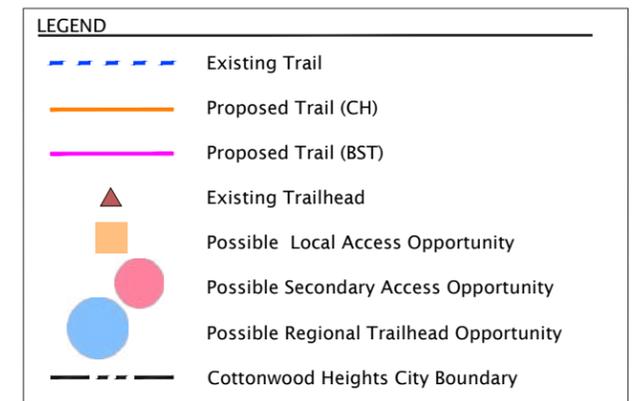
2. BIG COTTONWOOD CANYON PULL OFF: REGIONAL OPPORTUNITY

OPPORTUNITIES:

- Existing Parking Lot and Access
- Visible and Easily Accessible
- Along Proposed BST Alignment
- Forest Service

CONSTRAINTS:

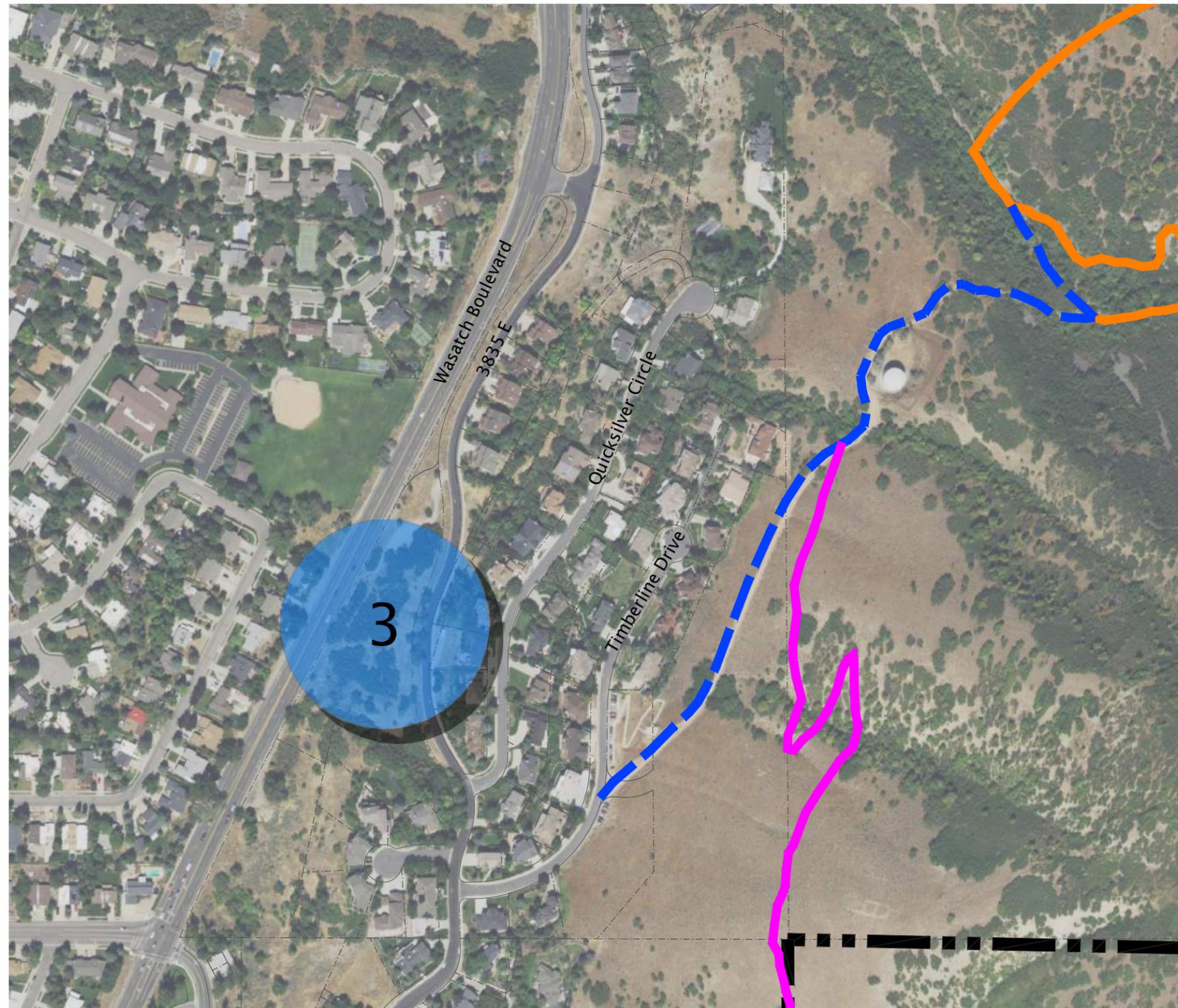
- Limited Space
- No Existing Crossing



BST Access Plan | Enlargement One

06.19.2020





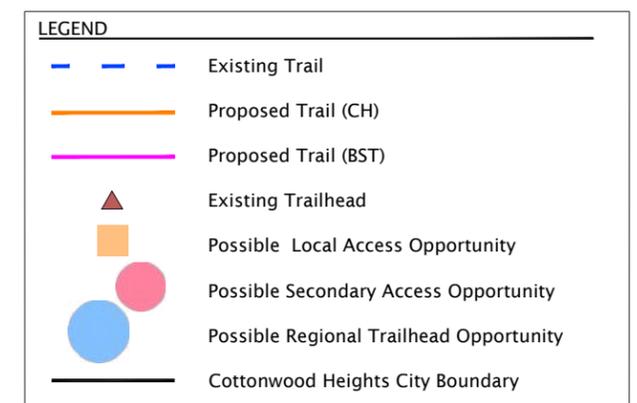
3. FERGUSON CANYON OVERFLOW: REGIONAL OPPORTUNITY

OPPORTUNITIES:

- Available Land (Salt Lake County)
- Easily Accessible from Wasatch
- Within 1/4 Mile of Existing Trailhead
- At Periphery of Neighborhood
- Possible Connection to Shared Use Path on Wasatch

CONSTRAINTS:

- 1/4 Mile Hike to Existing Trailhead Through Neighborhood
- Additional Wayfinding Needed



BST Access Plan | Enlargement Two

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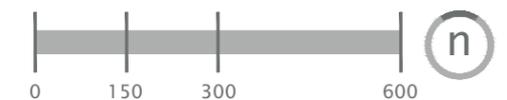
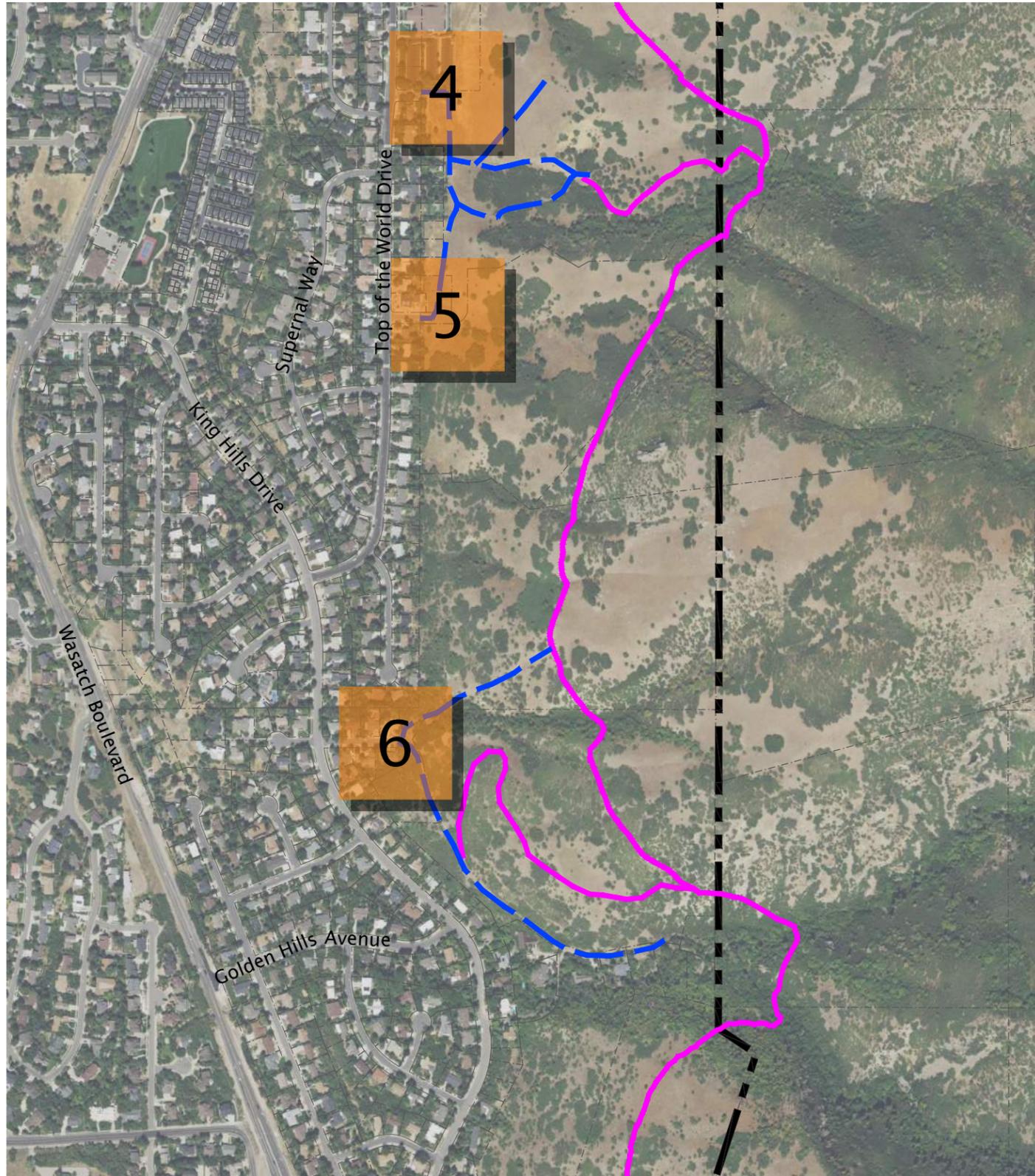


FIGURE 1.3.3 - ENLARGEMENT THREE



4. MOUNTAIN COVE CIR. (LDS CHAPEL LOCATION): LOCAL ACCESS OPPORTUNITY

OPPORTUNITIES:

- Possible Use of LDS Parking Lot
- Room for Small Parking Lot at End of Road
- Favorable Grades
- Existing Informal Trail Access

CONSTRAINTS:

- Adjacent to Home
- Existing Uses
- Ownership



5. 8335 S: LOCAL ACCESS OPPORTUNITY

OPPORTUNITIES:

- Room for Small Parking Lot at End of Road
- Favorable Grades
- Existing Informal Trail Access Space for Parking Lot

CONSTRAINTS:

- Adjacent to Homes
- Ownership



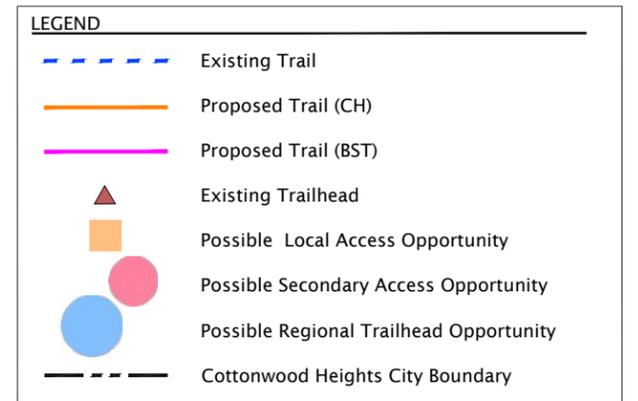
6. GOLDEN OAKS DRIVE: LOCAL ACCESS OPPORTUNITY

OPPORTUNITIES:

- Existing Informal Trail Access
- Access to Deaf Smith Canyon

CONSTRAINTS:

- Adjacent to Homes
- Ownership
- Sloped Hillside



7. KING HILLS DRIVE: LOCAL ACCESS OPPORTUNITY

OPPORTUNITIES:

- Good Trail Access
- Open End of Cul-de-sac

CONSTRAINTS:

- Ownership
- Sloped Hillside



8. KING HILLS PLACE: LOCAL ACCESS OPPORTUNITY

OPPORTUNITIES:

- Good Trail Access
- Open End of Cul-de-sac

CONSTRAINTS:

- Ownership
- Adjacent to Home
- Sloped Hillside



9. N. LITTLE COTTONWOOD PULL OFF: REGIONAL OPPORTUNITY

OPPORTUNITIES:

- Good Access, Open and Elevated
- Room for Parking
- Away from Neighborhood

CONSTRAINTS:

- Ownership
- Sloped Hillside
- Slope up to BST



LEGEND

- - - Existing Trail
- Proposed Trail (CH)
- Proposed Trail (BST)
- ▲ Existing Trailhead
- Possible Local Access Opportunity
- Possible Secondary Access Opportunity
- Possible Regional Trailhead Opportunity
- - - Cottonwood Heights City Boundary

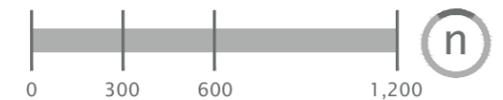
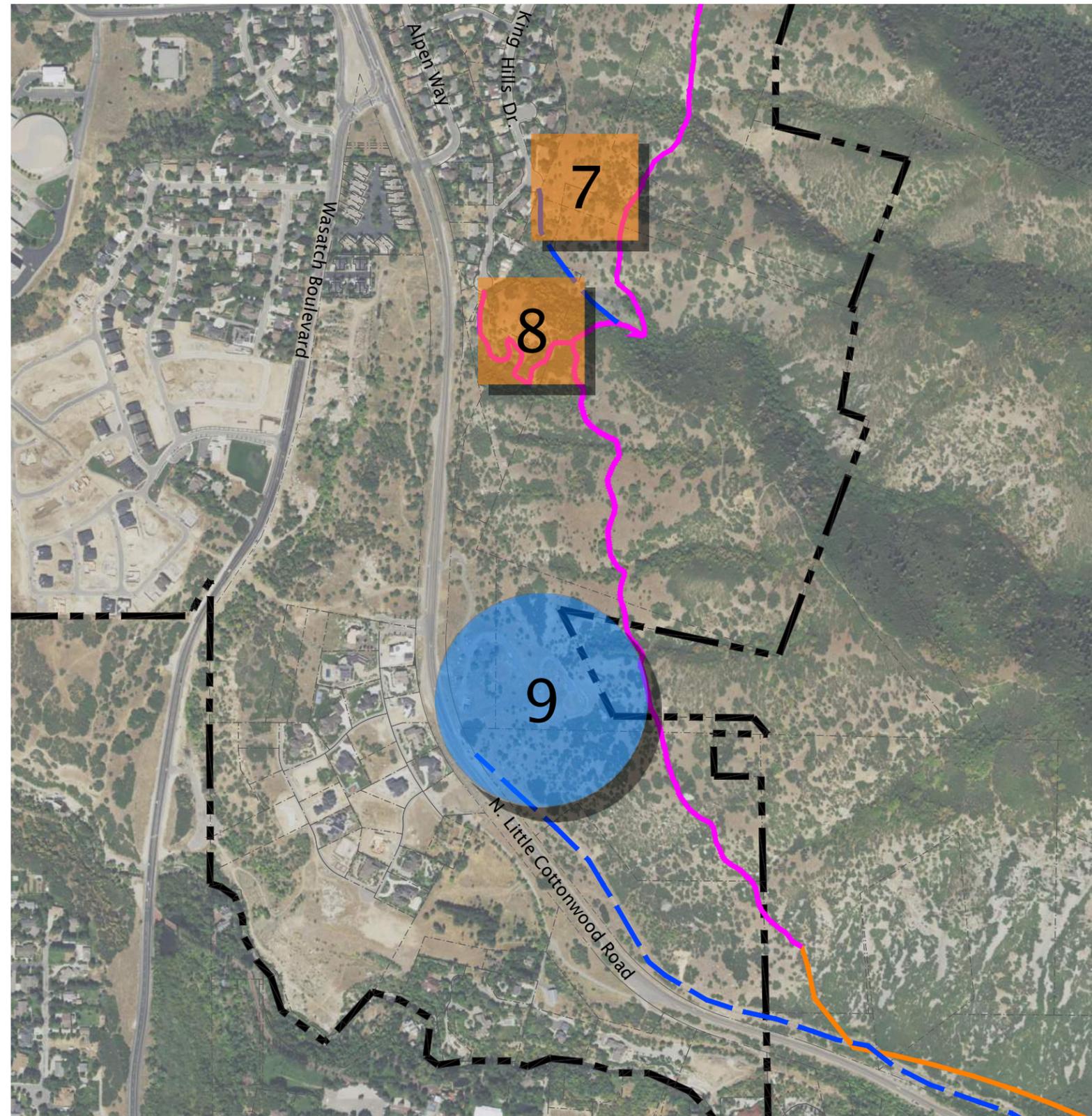
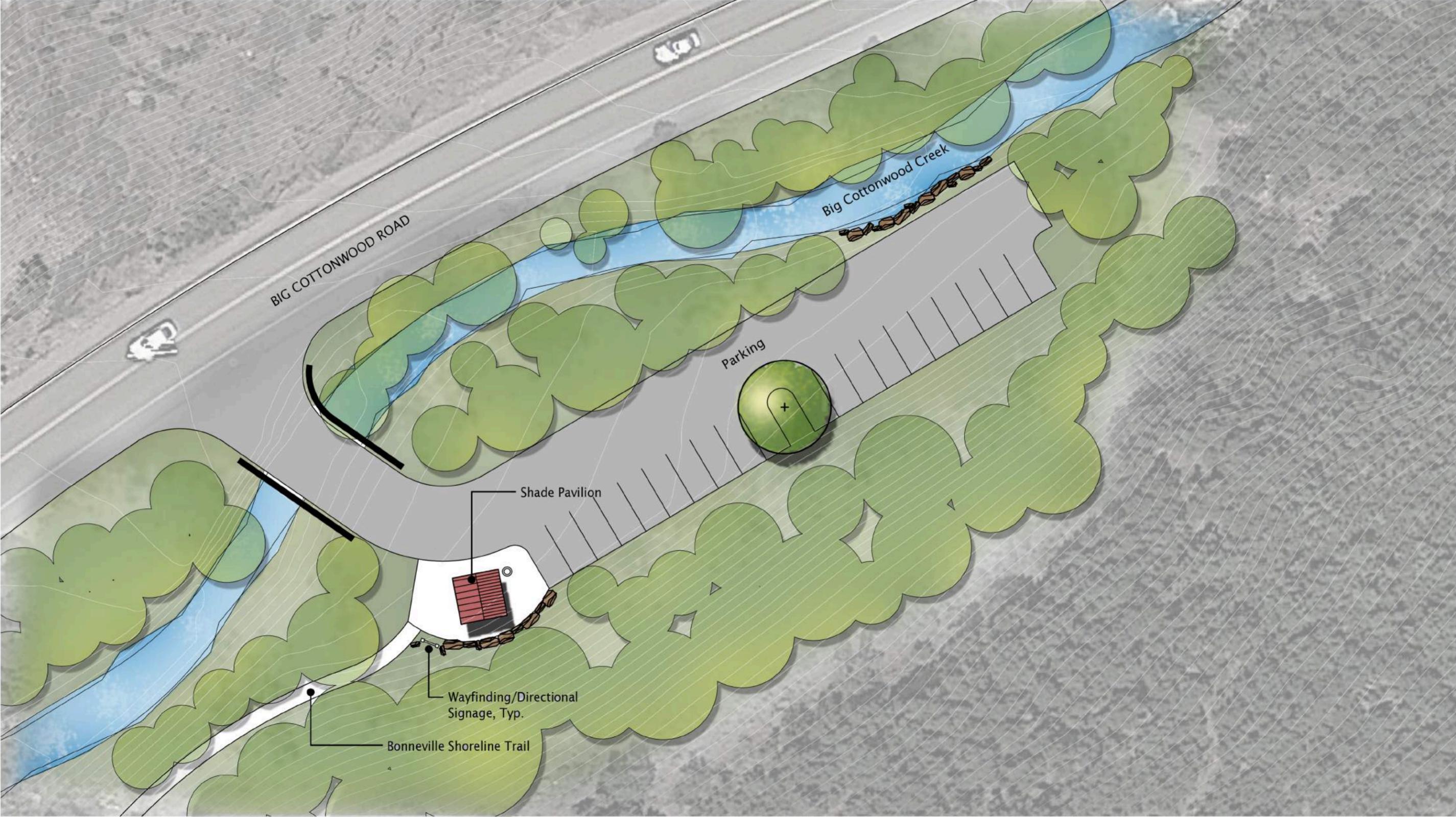


FIGURE 1.4 - REGIONAL TRAILHEAD TYPICAL





Big Cottonwood Trailhead
Concept Plan

06.19.2020

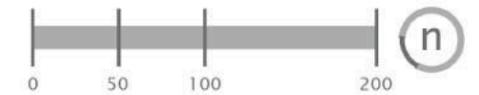


FIGURE 1.6 - FERGUSON TRAILHEAD



Ferguson Trailhead
Concept Plan

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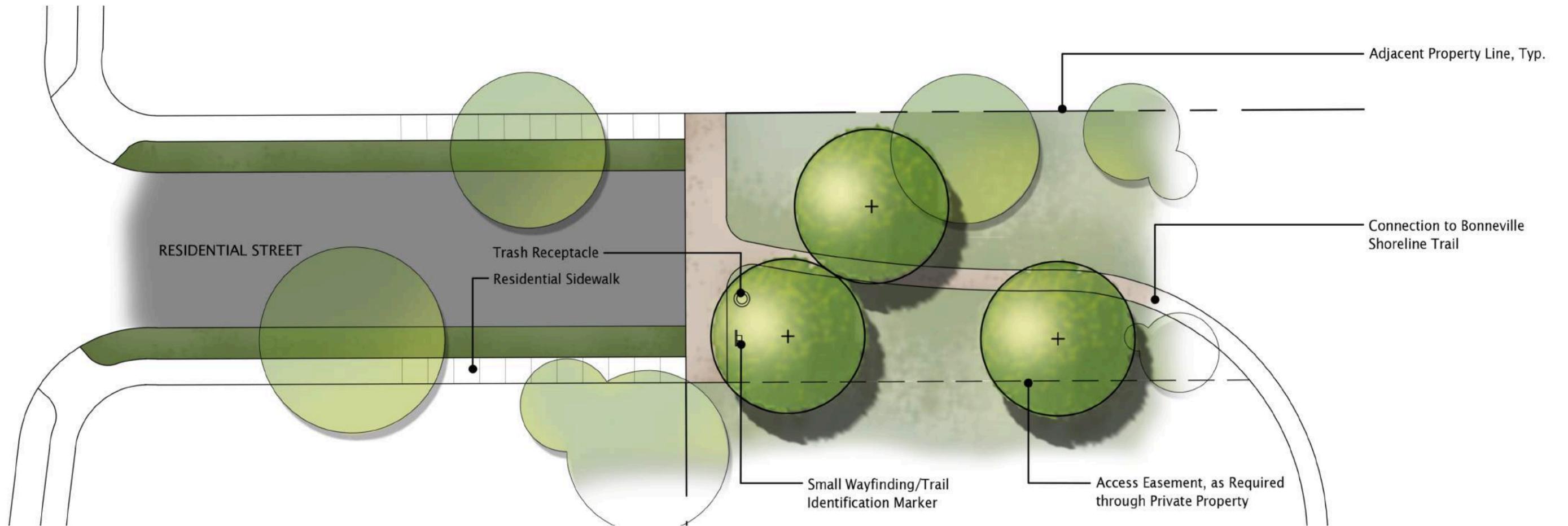


FIGURE 1.8 - TYPICAL TRAILHEAD IMPROVEMENTS

RESTROOM & PAVILIONS



SIGNAGE & WAYFINDING



SITE FURNITURE



PARKING



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CHAPTER TWO | NEEDS ASSESSMENT

THE BONNEVILLE SHORELINE TRAIL (BST) WILL BE USED AND ACCESSED BY ALL TYPES OF PEOPLE. INDIVIDUAL NEEDS AND DESIRES WILL VARY DEPENDING ON MANY DIFFERENT FACTORS. THE INTENT OF THIS TASK IS TO CONSIDER THE VARYING NEEDS OF ALL DIFFERENT USER TYPES TO MOST AFFECTIVELY INFORM PLAN RECOMMENDATIONS.

2.1 - EXISTING CONDITIONS ANALYSIS

As the crow flies, the City's eastern boundary through which the BST will traverse is approximately four miles in length. Existing conditions along this length vary substantially. The existing land use north of Big Cottonwood Canyon is predominantly a gravel pit. The middle section between Big Cottonwood Canyon and Alpen Way is fully developed as single family homes. The southern section from Alpen Way to the southern City boundary is predominantly undeveloped. (see [Figure 1.2 - Existing Aerial](#)) The only existing formalized trail access point is the Ferguson Canyon Trailhead, through there are numerous social trails that already exist on the hillsides above the City. The Ferguson Canyon Trailhead has only 16 stalls and resides within a residential neighborhood on Timberline Drive. Trail usage and parking demand already overwhelm this small trailhead. In addition to Ferguson Canyon, Deaf Smith Canyon is another well known and popular canyon within the plan area.

Many factors were considered in analyzing the best possible trail access points. These include: accessibility (pedestrian and vehicular), property ownership/use, and topography. An official site visit was performed with City staff and members of the Steering Committee to evaluate access points based on these considerations. Follow up visits to further investigate these sites and the general area were also performed.



Ferguson Canyon Trailhead

ACCESSIBILITY

Though ADA accessibility is a consideration when looking at specific site design, accessibility as it pertains to possible trail access points considers more than that. The ability to physically access the trail, whether it be by walking or by vehicle is the main consideration here. As different access locations were considered, those that quickly rose to the top were the ones that already had vehicular or pedestrian connectivity in close proximity to the proposed BST alignment. A key factor that limits accessibility is property ownership (see below). Each access point considered was evaluated based on existing or possible accessibility to the BST.

PROPERTY OWNERSHIP/USE

This was probably the most limiting evaluating factor as possible access points were considered. Of the approximate 4 miles of shared length with the BST trail alignment, approximately two-thirds of that length is already developed as single family residential lots. This

severely limits viable trail access points from both a physical standpoint and a social one. In areas where residential homes or development do not exist yet, viable access points were much easier to identify, such as at the very north end and very south end of the City. However, even when there was a clear opening through existing residential lots, in most cases, that trail access would still need to cross private property. In those cases, property would need to be acquired or some type of access easement would need to be agreed upon.

TOPOGRAPHY

Topography becomes a limiting consideration when slopes are too steep to allow for viable trails and, in the case of secondary access points and regional access points, when they do not allow for trailhead/parking development. There are many dead end roads through the middle section of the City that seemingly could provide easy trail access until topography is considered. Dealing with steep topography, even when access is possible, results in costly construction and has a greater impact to the natural hillside.



Big Cottonwood Creek

2.2.1 - STEERING COMMITTEE

The Steering Committee was made up of City staff and selected representatives from the Parks, Trails and Open Space Committee. The key purpose of the Steering Committee was to share their vision, to guide and inform the process, and to give critical feedback at key points during the process.

Six meetings were held with the Steering Committee: a kick-off and visioning meeting; a preliminary analysis review meeting; a meeting to review preliminary Goals and Objectives and draft material for the Public Open House; a meeting to review and discuss Public Open House feedback; a meeting to review the preliminary draft Trailhead and Access Plan; and a final meeting to review

the final draft Trailhead and Access Plan.

The Steering Committee was instrumental in providing valuable guidance, knowledge, and feedback during the planning process. They were also very supportive during the public engagement process and in communicating and coordinating with citizens, council members, and the Parks, Trails and Open Space Committee.

2.2.2 - PARKS, TRAILS, AND OPEN SPACE COMMITTEE

The Parks, Trails and Open Space Committee was created on August 28, 2018 “to perform research and outreach to help preserve outdoor recreational and open spaces with the intent of enhancing the quality of life in Cottonwood Heights”. The Parks, Trails and Open Space Committee has identified overarching goals including the following that pertain to and align with the goals and objectives of this plan:

- *Preserve and enhance the character, livability, and safety of the City through enhanced parks, trails and open space.*
- *Enhance the interconnectivity of trails (natural, paved, bike lanes, etc.) within the City and other communities.*
- *Preserve natural open space.*

Two presentations were given to the Parks, Trails, and Open Space Committee, presenting the preliminary analysis and a draft Trailhead and Access Plan. The Parks, Trails and Open Space Committee gave valuable feedback and was key in pushing the plan forward.

2.2.3 - PUBLIC OPEN HOUSE

A Public Open House was held on February 20, 2020 at the Cottonwood Heights City Hall to gather critical input and feedback from citizens, neighbors, and trail users. As an open house format, no formal presentation was given, but rather numerous informational boards were displayed for attendees to peruse, analyze, and give comment on. Attendees were allowed to mark or write directly on the boards and were also given a comment form to provide written feedback. Attendees were also encouraged to e-mail comments to City staff if desired. A detailed summary of public comments is included in the Appendix.

The majority of the public comments can be grouped into one of four categories:

- 1) Access;
- 2) Bonneville Shoreline Trail location/alignment;
- 3) Privacy/Safety; and
- 4) Traffic/Parking

Of these, most comments, both positive and otherwise, dealt with the Bonneville Shoreline Trail project itself and not necessarily the proposed trailheads and access points presented.

ACCESS

Comments supported multiple points of access to disperse concentrated and congested access; parking outside of residential neighborhoods; and keeping the local access points as discreet as possible, with minimal amenities, to allow them to remain purely local in use.

BONNEVILLE SHORELINE TRAIL LOCATION/ALIGNMENT

Conflicting comments were received regarding the location and alignment of the BST. Some supported the trail being higher on the hill to be further away from residences, while others supported the trail being lower on the hill for easier access. Concerns over future maintenance and impacts of the BST were also voiced.

PRIVACY/SAFETY

Many of the comments regarding access locations and BST alignment revolved around concerns over privacy and safety. Many want a buffer between the trail and their property line to maintain their privacy and to minimize the impacts of numerous trail users on the trail.

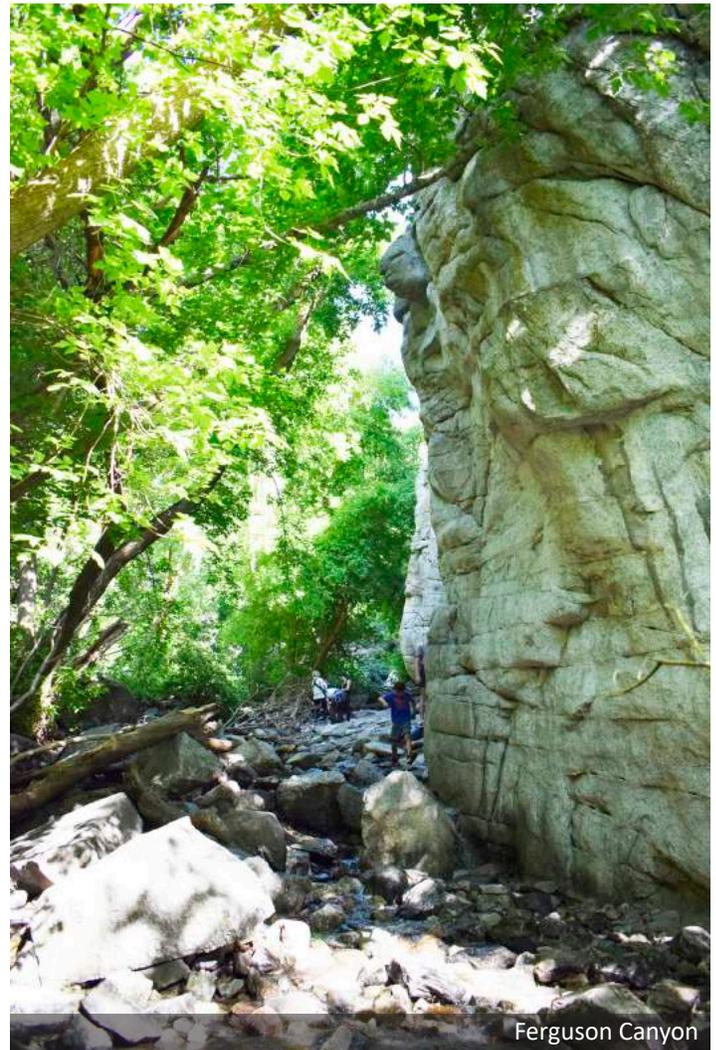
TRAFFIC/PARKING

Even though the BST through the City has not been installed yet, and the only existing formalized trail access is the Ferguson Canyon Trailhead, the residential neighborhood within the project area already experiences traffic from outside users wanting to access the hills and mountainside above the City. Comments supported providing main access points outside of the existing neighborhoods to reduce outside traffic and parking congestion on neighborhood roads. Signage discouraging or prohibiting non-local parking should be considered.

To that point, the proposed regional trailheads at the north end of the City and south end of the City, that would provide significant parking facilities outside of the existing residential neighborhood received strong support.

2.2.4 - COMPARATIVE ANALYSIS

A comparative analysis was performed analyzing similar Utah communities along the Wasatch Front with existing or proposed access to the eastern hillsides, mountains, and BST. Draper, Sandy, Holladay/Millcreek, Salt Lake City, Bountiful, and Provo were considered. Total miles of trail was quantified along with the number, type, and frequency of trail access points provided. Parking quantity was also considered. Resulting averages are included below:



- **AVERAGE MILES OF TRAIL = 7.8 miles**
- **AVERAGE NO. OF TRAILHEADS = 3.33**
- **AVERAGE FREQUENCY OF TRAILHEADS = 1 per 3.5 miles**
- **AVERAGE NO. OF LOCAL ACCESSES = 6.5**
- **AVERAGE FREQUENCY OF LOCAL ACCESS = 1 per 1.6 miles**
- **AVERAGE NO. OF PARKING STALLS = 189**

Based upon these averages a minimum target of one trailhead access per four miles and one local access per mile was established.

2.2.5 - RELATED PLANS AND STUDIES

Over recent years, the City has expended significant effort and resources to understand the needs and desires of its public pertaining to parks, recreation and trails including completing and performing numerous plans, studies and surveys. These include:

- **Cottonwood Heights General Plan (2005)**
- **Y2 Analytics Survey (2016)**
- **Y2 Analytics Survey (2017)**

- **Butterville Days Public Comments (2017)**
- **2017 Open Space Open House**
- **2018 Open Space Open House & Survey**
- **Y2 Analytics Survey (2019)**
- **Wasatch Boulevard Master Plan (2019)**

Policies, concepts, comments and ideas from these plans, studies, and surveys were used to inform the recommendations of this plan including:

- ***The need for an urban trail system and connection to the foothills and Bonneville Shoreline Trail.***

(General Plan 2005)

- ***Continue development and preservations of sidewalks, trails, open space; and provide access to open space and public lands.*** (Y2 Analytics Survey (2016))

- ***Provide additional parking, accessibility, and amenities at trailheads; and provide additional parks and trails.*** (Y2 Analytics Survey (2017))

- ***Preserve green space, develop Bonneville Shoreline Trail, and provide access to public lands.*** (Butterville Days 2017 Public Comments)

- ***Connect the BST between Big Cottonwood and Little Cottonwood Canyons and provide access to it.*** (2017 Open Space Open House)

- ***Provide access to the mountains and BST between Big Cottonwood and Little Cottonwood Canyons; and provide more trails.*** (2018 Open Space Open House & Survey)

- ***Improve quality of life through preserving existing open space and trails and providing additional open space and trails and access to the mountains.*** (Y2 Analytics Survey (2019))

2.2.6 - BONNEVILLE SHORELINE TRAIL

The Bonneville Shoreline Trail (BST) is a planned regional trail on the west slopes of the Wasatch Range on or near the shoreline bench of ancient glacial Lake Bonneville in Cache, Box Elder, Weber, Davis, Salt Lake, and Utah Counties. (*see Figure 1.1 - Bonneville Shoreline Trail*) The trail is envisioned to connect from the Idaho border to Nephi - a stretch of over 280 miles. More important than the distance of the trail is the size of the population served and the magnitude of recreational opportunity the trail provides.

Placed near the Bonneville Bench, the trail skirts the developed areas of the Wasatch Front, often forming the boundary between urban subdivisions and National Forest wilderness. The BST will provide a long distance regional hiking, biking, and equestrian trail at the back door of more than a million people and will be the trunk line of a branching regional system of trails linking city sidewalks to wilderness mountain tops. Currently, just over 100 miles of the planned trail is officially designated as the Bonneville Shoreline Trail.

Though just a small piece of the greater system (approximately four miles), completion of the trail through Cottonwood Heights is important to allow for Cottonwood Height residents to access the foothills, mountains, and eventually the entire BST system. Naturally, once the trail segment(s) within Cottonwood Heights are installed, providing viable and functional access points to the trail is of critical importance to allow for use of this invaluable amenity.



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CHAPTER THREE | GOALS AND OBJECTIVES

ANY GOOD PLAN NEEDS TO HAVE DEFINED AND ACHIEVABLE GOALS AND OBJECTIVES. THESE WILL CONTINUE TO PROVIDE GUIDANCE AND REASONING TO IMPLEMENTATION AS TIME GOES ON.

3.1 - GOALS AND OBJECTIVES

The plan goals and objectives are based on input from City Staff, the Steering Committee, and the comparative analysis. Preliminary Goals and Objectives were presented to the Steering Committee and revised prior to presentation at the Public Open House and inclusion in this document.

GOAL ONE:

- 1.0 | IDENTIFY AND PROVIDE SUFFICIENT AND EFFECTIVELY LOCATED REGIONAL, SECONDARY, AND LOCAL ACCESS POINTS TO THE BONNEVILLE SHORELINE TRAIL WITHIN COTTONWOOD HEIGHTS' CITY LIMITS THAT PROVIDE GOOD CONNECTIVITY TO THE WASATCH FRONT MOUNTAINS AND NATURAL AREAS.

OBJECTIVES:

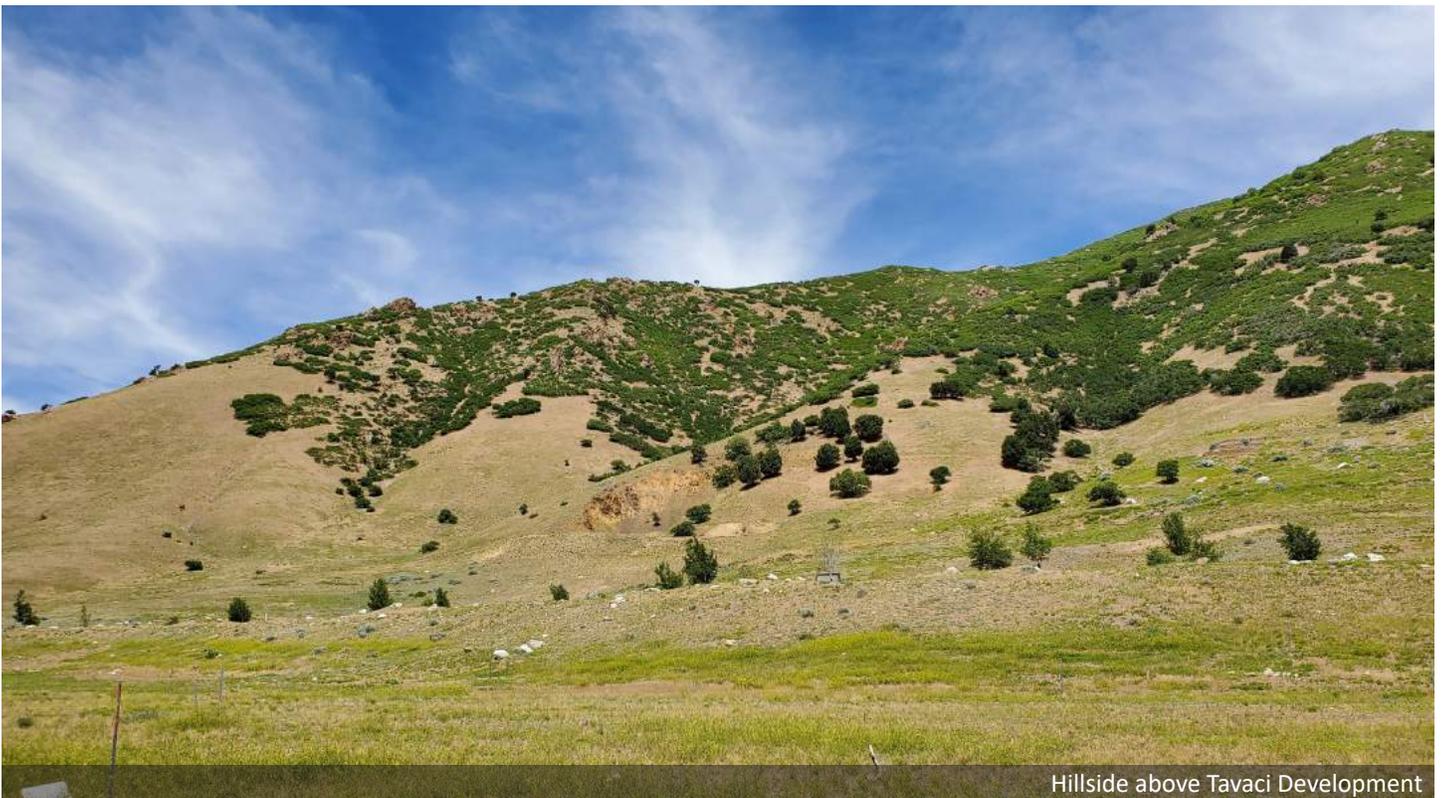
- 1.1 | PROVIDE TRAILHEAD ACCESS POINTS THAT ARE SAFE AND ACCESSIBLE TO ALL AGES AND ABILITIES.
- 1.2 | PROVIDE A MINIMUM OF TWO REGIONAL ACCESS POINTS, AT LEAST ONE PER FOUR MILES OF TRAIL.
- 1.3 | PROVIDE A MINIMUM OF THREE LOCAL ACCESS POINTS, AT LEAST ONE PER MILE OF TRAIL
- 1.4 | IDENTIFY COST ESTIMATES AND SUFFICIENT FUNDING OPPORTUNITIES FOR ALL TRAIL ACCESS DEVELOPMENT.
 - 1.4.1 | PRIORITIZE AND IDENTIFY PHASING OF REGIONAL AND LOCAL ACCESS POINTS.
 - 1.4.2 | IDENTIFY AND PURSUE LOCAL, REGIONAL, STATE, AND NATIONAL FUNDING OPPORTUNITIES TO ACHIEVE PLAN GOALS AND OBJECTIVES.

GOAL TWO:

- 2.0 | PROVIDE WELL DESIGNED REGIONAL, SECONDARY, AND LOCAL ACCESS POINTS TO THE BONNEVILLE SHORELINE TRAIL WITHIN COTTONWOOD HEIGHTS' CITY LIMITS THAT HAVE APPROPRIATE WAYFINDING, AMENITIES, AND INTERPRETIVE ELEMENTS.

OBJECTIVES:

- 2.1 | PROVIDE CLEAR TRAILHEAD AND TRAIL SIGNAGE THAT ALLOWS FOR SUFFICIENT WAYFINDING AND INFORMATION TO ORIENT AND DIRECT ALL TRAILS USERS, INCLUDING TRAIL ETIQUETTE AND REGULATORY SIGNAGE.
- 2.2 | PROVIDE INTERPRETIVE SIGNAGE AT TRAIL ACCESS POINTS TO INTERPRET THE NATURAL ENVIRONMENT INCLUDING VEGETATION, WILDLIFE, HISTORY, WATER RESOURCES, AND GEOLOGIC FEATURES.
- 2.3 | PROVIDE RESTROOMS, TABLES, BENCHES, WASTE RECEPTACLES, PAVILIONS, DRINKING FOUNTAINS, BIKE REPAIR STATIONS, DOG WASTE DISPENSERS, AND OTHER APPROPRIATE AMENITIES AT TRAIL ACCESS POINTS.



Hillside above Tavaci Development

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CHAPTER FOUR | RECOMMENDATIONS

CONSIDERING THE EXISTING CONDITIONS ANALYSIS, THE NEEDS ASSESSMENT, AND ALL INPUT GATHERED FROM CITY STAFF, THE STEERING COMMITTEE, AND THE PUBLIC, THIS CHAPTER PRESENTS RECOMMENDED TRAILHEADS AND ACCESS POINTS ALONG THE PROPOSED BONNEVILLE SHORELINE ALIGNMENT WITHIN CITY LIMITS.

4.1 - TYPES OF ACCESS

For purposes of this plan there are three types of access points proposed: Regional Trailhead, Secondary Access, and Local Access. Each is defined below with either a specific and/or typical plan also included.

REGIONAL TRAILHEADS

These are primary accesses to the BST located at key points along the trail with significant amenities and meaningful parking. These trailheads would serve regional, community, and local trail users. Min. Frequency: 1 per 4 miles. Three recommended locations are proposed. (*see Figure 1.4 - Regional Trailhead Typical and Figure 1.6- Ferguson Trailhead*)

Typical Amenities Include:

- Trail Signage and Wayfinding
- Waste Receptacles
- Benches
- Tables
- Dog Waste Dispensers
- Restroom Facilities
- Pavilions
- Drinking Fountain
- Bike Repair Station
- Large Parking Lot

SECONDARY ACCESS

Secondary access points are accesses that may serve community and local trail use, as well as some regional use, though due to spatial constraints, location or other considerations amenities and parking may be limited. One recommended location is proposed. (*see Figure 1.5 - Big Cottonwood Trailhead*)

Typical Amenities Include:

- Trail Signage and Wayfinding
- Waste Receptacle(s)
- Tables
- Dog Waste Dispensers
- Pavilion
- Parking Lot

LOCAL ACCESS

Local access points are located within individual neighborhoods with very limited amenities and limited parking (if any). These are primarily for neighborhood residents and meant to be accessed by foot or bicycle. Min. Frequency: 1 per mile. Five possible locations are proposed, though per the recommended standard only three are necessary. These possible locations provide options for the City to consider when specific opportunities to develop these accesses is presented. (*see Figure 1.7 - Local Access Typical*)

Typical Amenities Include:

- Trail Signage and Wayfinding
- Waste Receptacle
- Dog Waste Dispensers

4.2 - PLAN RECOMMENDATIONS

In total, along the approximate four mile length within the City limits, three regional trailhead locations are proposed,

one secondary access is proposed, and three local accesses are proposed (see [Figure 1.3 - Bonneville Shoreline Trail Access Plan](#)). These more than satisfy the recommended standards established following the needs assessment and comparative analysis performed.

4.2.1 - REGIONAL TRAILHEAD LOCATIONS

LOCATION: **GRAVEL PIT (Site #1)**

DESCRIPTION: This location is ideally situated at the northern end of the City, and at the confluence of Fort Union Boulevard, Wasatch Boulevard, and the mouth of Big Cottonwood Canyon. Though currently functioning as a gravel pit, future development plans are currently underway. As development plans are submitted to the City for review, the City will work with developers to include a trailhead location as a key component of their plans. A regional trailhead here will connect proposed/existing urban trails along Wasatch and Fort Union to the BST system and will also help alleviate traffic in the existing neighborhoods east of Wasatch Boulevard. Typical regional trailhead amenities are proposed here.



LOCATION: **FERGUSON AT PROSPECTOR DRIVE (Site #3)**

DESCRIPTION: The City has had an Interlocal Cooperative Agreement with Salt Lake County since 2008 to develop this property as a trailhead to include such items as a parking lot, a pavilion, signage, and restroom facilities. Parking at this location will reduce the traffic and congestion experienced at the existing Ferguson Canyon Trailhead. This site is easily accessed just off of Wasatch Boulevard from Prospector Drive. In addition to the amenities agreed upon in the Interlocal Cooperative Agreement, this trailhead will provide walking paths (both paved and natural) and pedestrian connections to Prospector Drive to connect to Ferguson Canyon and the future BST. When this trailhead is completed, it is recommended that all on street parking on Timberline Drive for non-residents be prohibited.



LOCATION: **WATER TANKS/N. LITTLE COTTONWOOD (Site #9)**

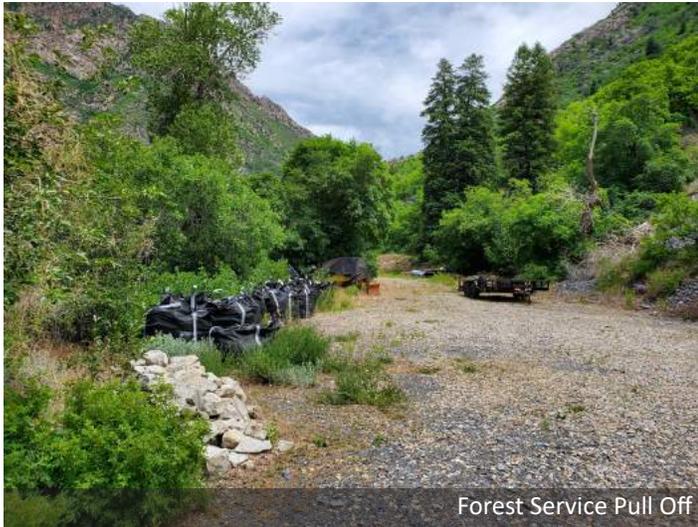
DESCRIPTION: The exact site for a trailhead in this location is to be determined, but opportunities exist as development, conservation, and/or shared use are contemplated. In conjunction with a trailhead at the gravel pit site, this location will provide a nice book end to the BST system within Cottonwood Heights. Outside of existing residential development, the potential for meaningful parking exists, further reducing the need for traffic to enter existing neighborhoods to access the BST. Typical regional trailhead amenities are proposed here.



4.2.2 - SECONDARY ACCESS LOCATION

LOCATION: **BIG COTTONWOOD CANYON PULL OFF (Site #2)**

DESCRIPTION: There is an existing Forest Service pull off on the south side of Big Cottonwood Road that could possibly fit a small parking lot to provide a secondary access to the BST. This would provide easy-access parking from Big Cottonwood Road further reducing traffic into the existing neighborhood. This location is also conveniently located near the end of a segment of the BST that is currently being constructed. Typical secondary access amenities are proposed here.



Forest Service Pull Off

slopes a little, but is not too steep to prohibit trail access. This location could provide a nice connection to the proposed BST alignment further up the hill and to Deaf Smith Canyon. The property is currently privately held however so property acquisition or an access easement would need to be explored. Typical local access amenities are proposed here.

LOCATION: **SOUTH KING HILLS DRIVE (Site #7)**

DESCRIPTION: At the very south end of King Hills Drive, there is a bulb out that opens up nicely to the existing hillside between residential homes. Initially there is a steep slope up from the bulb out to the open space, but eventually becomes more gentle and could provide a nice connection to the proposed BST alignment further up the hill. The property is currently privately held however so property acquisition or an access easement would need to be explored. Typical local access amenities are proposed here.

LOCATION: **KING HILLS PLACE(Site #8)**

DESCRIPTION: There is an opening between two residential homes at the south end of the King Hills Place cul-de-sac that could allow for a connection to the BST alignment further up the hill. However, the hillside here is quite steep with the only feasible trail route running along a residential property line that is elevated above that adjacent lot. The property is currently privately held however so property acquisition or an access easement would need to be explored. Typical local access amenities are proposed here.



Hillside above King Hills Drive

4.2.3 - LOCAL ACCESS LOCATIONS

LOCATION: **MOUNTAIN COVE CIRCLE (Site #4)**

DESCRIPTION: Mountain Cove Circle dead ends into the hillside between an LDS Church and a private residence along Top of the World Drive. The existing topography at the end of the road is fairly gentle and could provide a nice connection to the proposed BST alignment further up the hill. The property is currently privately held however so property acquisition or an access easement would need to be explored. Typical local access amenities are proposed here.

LOCATION: **8335 SOUTH (Site #5)**

DESCRIPTION: 8335 South dead ends into the hillside between two private residences along Top of the World Drive. The existing topography at the end of the road is fairly gentle and could provide a nice connection to the proposed BST alignment further up the hill. The property is currently privately held however so property acquisition or an access easement would need to be explored. Typical local access amenities are proposed here.

LOCATION: **GOLDEN OAK DRIVE (Site #6)**

DESCRIPTION: Golden Oak Drive dead ends into the hillside between two private residences off of King Hills Drive. The existing topography at the end of the road

4.3 - SIGNAGE AND WAYFINDING

Various levels of signage and wayfinding are recommended at each type of access: Regional, Secondary, and Local. (see [Figure 1.8- Typical Trailhead Improvements](#)) The final signage size, design, and content should correlate with the type of access it is. Furthermore, the signage design should be compatible with the natural character and feel of the open spaces in which these accesses will reside.

Types of signage that may be anticipated include:

- **Trailhead Identification Signage** - clearly identifying the name of the trailhead from adjacent roadways. Appropriate at Regional and Secondary access locations.
- **Trailhead Kiosk** - may include such content as trail system and wilderness mapping including both local and regional information; regulatory information; and trail system and wilderness etiquette guidelines. Appropriate at Regional and Secondary access locations.
- **Wayfinding Markers** - small and more discrete in size, could include identification and directional information. Appropriate at Regional, Secondary, and Local access locations.
- **Interpretive Signage** - could be stand alone and vary in size or be incorporated into other sign types. These could include images and/or graphics; and educational narratives that interpret the features of the area such as vegetation, wildlife, history, water resources, geologic features, etc.

and should also be appropriate to the natural setting they will be located in. (see [Figure 1.8- Typical Trailhead Improvements](#))

4.5 - LANDSCAPING

Due to the native nature of most of these sites, it is recommended that any supplemental plant material to provide shade, buffering/screening, and/or visual interest be native or adaptive to the region and drought tolerant. If available, irrigation is recommended to establish even the most drought tolerant species. If not available, supplemental hand watering is recommended for at least the first full growing season. Revegetation of disturbed areas due to construction is critical to minimize erosion and invasive species establishment.



Ferguson Canyon - Twin Peaks Wilderness

4.4 - SITE FURNITURE

A variety of different site furniture is appropriate at each type of access. Regional and Secondary accesses may feature more prominent furnishings such as pavilions and restrooms, whereas Local accesses will be more minimalistic and may only include a waste receptacle and dog waste dispenser (see [typical amenity list by access type](#)). In any case, the selected furnishings should be complementary to each other in color and material

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CHAPTER FIVE | PRELIMINARY COST ESTIMATES

RECOGNIZING THAT THE PROPOSED TRAILHEAD AND ACCESS IMPROVEMENTS FOR THE BONNEVILLE SHORELINE TRAIL REQUIRE FUNDING, THIS CHAPTER PRESENTS PRELIMINARY CONSTRUCTION COST ESTIMATES FOR EACH OF THE IDENTIFIED PROJECTS FOR FUNDRAISING AND BUDGETING PURPOSES. IT ALSO IDENTIFIES POSSIBLE FUNDING OPPORTUNITIES TO FACILITATE CONSTRUCTION.

5.1 - PRELIMINARY COST ESTIMATES

The proposed improvements of this plan vary from the small local access point to more significant regional trailheads. Preliminary construction cost estimates have been provided for each of the proposed projects ([Table 5.1](#)). These estimates are based on current industry pricing, recent similar projects, consulting with reputable contractors, and rough quantity takeoffs from the schematic layouts included in this master plan. It is noted that these estimates do not reflect detailed design of these projects and that depending on the timing of bidding and installation pricing will undoubtedly increase due to inflation, bidding environment, and material costs.

5.2 - FUNDING OPPORTUNITIES

5.2.1 - IMPACT FEES

Impact fees are collected with new development projects to help pay for the costs of providing public services to new development. The collection and use of impact fees are governed by Utah law - UC11-36-202(1)(a)(ii).

5.2.2 - BONDS

General Obligation Bonds (G.O. Bonds) are a low interest financing option for local government projects. Though low interest, this option is sometimes unpopular because it represents an additional tax burden on the City's residents.

These bonds would need to be approved by the public through a G.O. Bond election and are therefore subject to success or failure based on the popularity of the proposed project.

Like Impact Fees, G.O. Bond funding may only be used for a project's capital expenditures and may not be used for on-going maintenance and operational costs. Other bond alternatives include Sales Tax Revenue Bonds and Lease Revenue Bonds.

5.2.3 - SPECIAL TAXES

Special taxes such as the Zoo, Arts & Parks (ZAP) tax or the Recreation, Arts & Parks (RAP) tax have been initiated and voted on by multiple Utah communities. These have successfully provided millions of dollars of improvements across the state. However this funding option is again voted on and approved by the public with an increased tax burden. Other special taxes may be utilized for parks and recreation development, but again would need to be approved by Santaquin's citizens.

5.2.4 - FEDERAL & STATE FUNDING/GRANTS

There are many types of federal and state grants that may be utilized for parks and recreation facilities but are often minimal in nature and difficult to acquire. Some of these include:

- Community Development Block Grants (CDBG): funding provided and used in low and moderate income areas. Certain restrictions and guidelines apply to how these funds are utilized.
- Land and Water Conservation Fund
- Utah Trails and Pathways / Non-motorized Trails Program
- Federal Recreation Trails Program
- UDOT Transportation Alternatives Program (MAP-

5.2.5 - PUBLIC/PRIVATE PARTNERSHIPS

Cottonwood Heights may partner with other public entities or private groups/developers on facilities that service the public but are also attractive and beneficial to the private partner. This will result in a shared cost, thus reducing the up-front burden carried by the City, but may result in a pay-to-use facility that is not free to public use.

5.2.6 - DEVELOPMENT AGREEMENTS

Establishing development agreements with new developments within Cottonwood Heights is an established way to receive dedication of park land and in some cases developed park land and/or trails for public use. The City may elect to exchange the donation of park land and/or recreation facilities for developer concessions or negotiated considerations. Such considerations may include, but are not limited to: increased densities, reduced lot sizes, impact fee credits, future reimbursements for oversized facilities or credits for multi-use facilities such as storm drainage and park space. This practice is beneficial to the City and the developer.

5.2.7 - PRIVATE DONATIONS/FUNDRAISING

The potential for local investment and interest in parks and recreation projects that are important to special interest groups, neighborhoods, businesses, or even individuals and/or families should not be overlooked. This interest may result in focused fundraising efforts or at least in the donation of time and services. However, this type of funding usually requires a significant time and focused effort by municipal staff.

TABLE 5.1 - PRELIMINARY COST ESTIMATES

Regional Trailhead Typical					
1	MOBILIZATION / DEMOBILIZATION	1	L.S.	\$ 56,529.65	\$ 56,529.65
2	SITE CLEARING AND GRUBBING	44,700	S.F.	\$ 0.10	\$ 4,470.00
3	DEMO	1	L.S.	\$ 10,000.00	\$ 10,000.00
4	SITE GRADING (PLACE AND COMPACT EXISTING MATERIAL)	1,656	C.Y.	\$ 18.00	\$ 29,800.00
5	IRRIGATION SERVICE	1	EA.	\$ 12,000.00	\$ 12,000.00
6	STORM DRAINAGE	1	L.S.	\$ 25,000.00	\$ 25,000.00
7	SEWER SERVICE	1	L.S.	\$ 8,000.00	\$ 8,000.00
8	LIGHTING/ELECTRICAL	1	L.S.	\$ 25,000.00	\$ 25,000.00
9	ASPHALT ROADWAY/PARKING	17,565	S.F.	\$ 4.50	\$ 79,042.50
10	CONCRETE PAVEMENT	3,495	S.F.	\$ 8.00	\$ 27,960.00
11	ADA RAMP	1	EA.	\$ 1,700.00	\$ 1,700.00
12	SOFT SURFACE TRAIL (5')	920	S.F.	\$ 2.50	\$ 2,300.00
13	ACCESSIBLE RESTROOM	1	L.S.	\$ 180,000.00	\$ 180,000.00
14	PAVILION (25'x25')	2	EA.	\$ 50,000.00	\$ 100,000.00
15	PICNIC TABLE	4	EA.	\$ 1,200.00	\$ 4,800.00
16	PARK BENCH	2	EA.	\$ 2,000.00	\$ 4,000.00
17	TRASH RECEPTACLE	4	EA.	\$ 1,000.00	\$ 4,000.00
18	DOG WASTE DISPENSER	2	EA.	\$ 500.00	\$ 1,000.00
19	DRINKING FOUNTAIN	1	EA.	\$ 5,000.00	\$ 5,000.00
20	TRAILHEAD SIGN	1	EA.	\$ 10,000.00	\$ 10,000.00
21	WAYFINDING SIGNAGE	2	EA.	\$ 5,000.00	\$ 10,000.00
22	DECIDUOUS TREE (2" CAL.)	14	EA.	\$ 400.00	\$ 5,600.00
23	NATIVE GRASS SEED MIX	22,185	S.F.	\$ 0.40	\$ 8,874.00
24	IRRIGATION - DRIP	1	L.S.	\$ 6,750.00	\$ 6,750.00
				Subtotal	\$ 621,826.15
				Construction Contingency (10%)	\$ 62,182.62
				Engineering Cost (10%)	\$ 62,182.62
				Estimated Total	\$ 746,191.38
Big Cottonwood Trailhead					
1	MOBILIZATION / DEMOBILIZATION	1	L.S.	\$ 17,774.48	\$ 17,774.48
2	SITE CLEARING AND GRUBBING	21,215	S.F.	\$ 0.10	\$ 2,121.50
3	DEMO	1	L.S.	\$ 10,000.00	\$ 10,000.00
4	SITE GRADING (PLACE AND COMPACT EXISTING MATERIAL)	786	C.Y.	\$ 18.00	\$ 14,143.33
5	STORM DRAINAGE	1	L.S.	\$ 5,000.00	\$ 5,000.00
6	ASPHALT ROADWAY/PARKING	10,800	S.F.	\$ 4.50	\$ 48,600.00
7	CONCRETE PAVEMENT	1,015	S.F.	\$ 8.00	\$ 8,120.00
8	ADA RAMP	1	EA.	\$ 1,700.00	\$ 1,700.00
9	BOULDER RETAINING WALL	100	L.F.	\$ 150.00	\$ 15,000.00
10	PAVILION (25'x25')	1	EA.	\$ 50,000.00	\$ 50,000.00
11	PICNIC TABLE	2	EA.	\$ 1,200.00	\$ 2,400.00
12	TRASH RECEPTACLE	1	EA.	\$ 1,000.00	\$ 1,000.00
13	DOG WASTE DISPENSER	1	EA.	\$ 500.00	\$ 500.00
14	TRAILHEAD SIGN	1	EA.	\$ 10,000.00	\$ 10,000.00
15	WAYFINDING SIGNAGE	1	EA.	\$ 5,000.00	\$ 5,000.00
16	DECIDUOUS TREE (2" CAL.)	1	EA.	\$ 400.00	\$ 400.00
17	NATIVE GRASS SEED MIX	9,400	S.F.	\$ 0.40	\$ 3,760.00
				Subtotal	\$ 195,519.32
				Construction Contingency (10%)	\$ 19,551.93
				Engineering Cost (10%)	\$ 19,551.93
				Estimated Total	\$ 234,623.18
Ferguson Trailhead					
1	MOBILIZATION / DEMOBILIZATION	1	L.S.	\$ 60,000.00	\$ 60,000.00
2	SITE CLEARING AND GRUBBING	53,745	S.F.	\$ 0.10	\$ 5,374.50
3	DEMO	1	L.S.	\$ 10,000.00	\$ 10,000.00
4	SITE GRADING (PLACE AND COMPACT EXISTING MATERIAL)	3,981	C.Y.	\$ 18.00	\$ 71,658.00
5	IRRIGATION SERVICE	1	EA.	\$ 12,000.00	\$ 12,000.00
6	STORM DRAINAGE	1	L.S.	\$ 59,000.00	\$ 59,000.00
7	SEWER SERVICE	1	L.S.	\$ 8,000.00	\$ 8,000.00
8	LIGHTING/ELECTRICAL	1	L.S.	\$ 35,000.00	\$ 35,000.00
9	ASPHALT ROADWAY/PARKING	32,000	S.F.	\$ 4.50	\$ 144,000.00
10	CONCRETE CURB & GUTTER (30")	1,460	L.F.	\$ 25.00	\$ 36,500.00
11	8-FT ASPHALT PATH	10,080	S.F.	\$ 3.50	\$ 35,280.00
12	CONCRETE PAVEMENT	7,465	S.F.	\$ 8.00	\$ 59,720.00
13	ADA RAMP	4	EA.	\$ 1,700.00	\$ 6,800.00
14	STEPS	20	EA.	\$ 3,200.00	\$ 64,000.00
15	RETAINING WALLS	1	L.S.	\$ 200,000.00	\$ 200,000.00
16	SOFT SURFACE TRAIL (5')	2,300	S.F.	\$ 2.50	\$ 5,750.00
17	ACCESSIBLE RESTROOM	1	L.S.	\$ 180,000.00	\$ 180,000.00
18	PAVILION (25'x25')	1	EA.	\$ 30,000.00	\$ 30,000.00
19	PICNIC TABLE	2	EA.	\$ 1,200.00	\$ 2,400.00
20	PARK BENCH	2	EA.	\$ 2,000.00	\$ 4,000.00
21	TRASH RECEPTACLE	3	EA.	\$ 1,000.00	\$ 3,000.00
22	DOG WASTE DISPENSER	2	EA.	\$ 500.00	\$ 1,000.00
23	DRINKING FOUNTAIN	1	EA.	\$ 5,000.00	\$ 5,000.00
24	TRAILHEAD SIGN	1	EA.	\$ 10,000.00	\$ 10,000.00
25	WAYFINDING SIGNAGE	2	EA.	\$ 5,000.00	\$ 10,000.00
26	6-FT BLACK EPOXY COATED CHAIN LINK FENCING	2600	L.F.	\$ 34.00	\$ 88,400.00
27	LANDSCAPING	1	L.S.	\$ 25,000.00	\$ 25,000.00
28	NATIVE GRASS SEED MIX	20,000	S.F.	\$ 0.40	\$ 8,000.00
29	IRRIGATION - DRIP	1	L.S.	\$ 20,000.00	\$ 20,000.00
				Subtotal	\$ 1,199,882.50
				Construction Contingency (10%)	\$ 119,988.25
				Engineering Cost (10%)	\$ 119,988.25
				Estimated Total	\$ 1,439,859.00
Local Access Typical					
1	MOBILIZATION / DEMOBILIZATION	1	L.S.	\$ 746.32	\$ 746.32
2	SITE CLEARING AND GRUBBING	3,770	S.F.	\$ 0.10	\$ 377.00
3	SITE GRADING (PLACE AND COMPACT EXISTING MATERIAL)	140	C.Y.	\$ 18.00	\$ 2,513.33
4	CONCRETE PAVEMENT	425	S.F.	\$ 8.00	\$ 3,400.00
5	SOFT SURFACE TRAIL (5')	380	S.F.	\$ 2.50	\$ 950.00
6	TRASH RECEPTACLE	1	EA.	\$ 1,000.00	\$ 1,000.00
7	DOG WASTE DISPENSER	1	EA.	\$ 500.00	\$ 500.00
8	WAYFINDING SIGNAGE	1	EA.	\$ 5,000.00	\$ 5,000.00
9	NATIVE GRASS SEED MIX	2,965	S.F.	\$ 0.40	\$ 1,186.00
				Subtotal	\$ 15,672.65
				Construction Contingency (10%)	\$ 1,567.27
				Engineering Cost (10%)	\$ 1,567.27
				Estimated Total	\$ 18,807.18

*NOTE: PRELIMINARY COST ESTIMATES DO NOT INCLUDE LAND ACQUISITION COSTS.

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