

### Community Development

PLANNING, BUILDING INSPECTIONS, CUSTOMER SERVICE, AND CODE COMPLIANCE

## CLEARFIELD CITY PLANNING COMMISSION MEETING AGENDA

Notice is hereby given that the Clearfield City Planning Commission will hold a regularly scheduled meeting at **6:30 P.M.**, Wednesday, July 2<sup>nd</sup>, 2025, on the 3<sup>rd</sup> floor in the City Council Chambers of the Clearfield City Municipal Building, located at 55 S. State Street, Clearfield, UT 84015.

**PRE-MEETING – 6:00 PM- Executive Conference Room** Review of agenda items to address questions.

#### **REGULAR MEETING – 6:30 PM- Council Chambers**

- CALL TO ORDER PLEDGE OF ALLEGIANCE
- PLANNING COMMISSION CHAIR STATEMENT
- APPROVAL OF MINUTES
  - None

#### **DECISION ITEMS**

#### **Scheduled Items:**

- Discussion and Possible Action on SP 2025-0601, a site plan request by Design West Architects for a motor vehicle sales establishment at the subject location. Location: 460 West 1700 South (TIN: 12-065-0203).
   Parcel Area: 1.87 Acres Zone: C-2 (Commercial). Staff: Tyson Stoddard, Associate Planner. (Administrative Matter).
- 2. Discussion and Possible Action on the Clearfield City Transportation Master Plan, a plan to provide guidance on the operation of the City's transportation network and future infrastructure investments. Staff: Tyson Stoddard, Associate Planner. (Administrative Matter).
- 3. Discussion and Possible Action on **ASP 2025-0603**, an amended subdivision plat request by Maverik, Inc. to amend the existing Woodward Subdivision and consolidate the two lots into one lot to be named the Clearfield Maverik Commercial Subdivision. **Location:** 1350 East 700 South (TIN: 09-435-0001 & 09-435-0002). **Project Area:** 1.27 Acres. **Zone:** C-2 (Commercial). **Staff:** Tyson Stoddard, Associate Planner. (**Administrative Matter**).

#### DISCUSSION ITEMS

- 1. Staff Discussion
- 2. Staff Communications
  - Youth Commission Ambassador

#### \*\*PLANNING COMMISSION MEETING ADJOURNED\*\*

Dated this 26<sup>th</sup> day of June 2025. /s/Tyson Stoddard, Associate Planner

#### CLEARFIELD CITY

Meetings of the Planning Commission of Clearfield City may be conducted via electronic means pursuant to Utah Code Ann. § 52-4-207 as amended. In such circumstances, contact will be established and maintained via electronic means and the meetings will be conducted pursuant to the Electronic Meetings Policy established in City Code § 1-6-4H for electronic meetings.

Clearfield City, in accordance with the 'Americans with Disabilities Act', provides accommodations and auxiliary communicative aids and services for all those citizens needing assistance. Persons requesting accommodations for City sponsored public meetings, service programs, or events, should call the Customer Service Center at 801-525-2701, giving the City a 48 hour notice.

The Work Session meeting is a public meeting; however, public comments are only received in the formal Planning Commission meeting. The Planning Commission Public Meeting is a public forum where the Planning Commission may receive comment from applicants, the public, applicable agencies and city staff regarding land use applications and other items on the Commission's agenda. In addition, it is where the Planning Commission takes action on these items. Action may be taken which may include: approval, approval with conditions, denial, continuance or recommendation to other bodies as applicable.

The complete public notice is posted on the Utah Public Notice Website - <a href="www.utah.gov/pmn/">www.utah.gov/pmn/</a>, the Clearfield City Website - clearfield.city, and at Clearfield City Hall, 55 South State Street, Clearfield, UT 84015. To request a copy of the public notice or for additional inquiries please contact Tyson Stoddard at Clearfield City, tyson.stoddard@clearfieldcity.org & 801-525-2718.



# Planning Commission STAFF REPORT

AGENDA ITEM
#1

**TO:** Clearfield City Planning Commission

**FROM:** Tyson Stoddard, Associate Planner

tyson.stoddard@clearfieldcity.org

(801) 525-2718

**MEETING DATE:** Wednesday, July 2<sup>nd</sup>, 2025

SUBJECT: Discussion and Possible Action on SP 2025-0601, a site plan request by Design

West Architects for a motor vehicle sales establishment at the subject location. **Location:** 460 West 1700 South (TIN: 12-065-0203). **Parcel Area:** 1.87 Acres **Zone:** 

C-2 (Commercial). (Administrative Action).

#### RECOMMENDATIONS

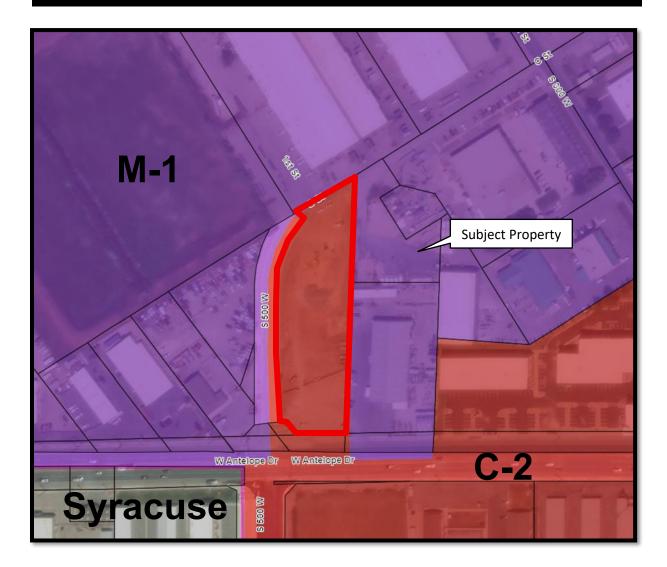
Staff recommends that the Planning Commission move to **approve as conditioned, SP 2025-0601**, a site plan request by Design West Architects for a motor vehicle sales establishment at 460 West 1700 South (TIN: 12-065-0203). This recommendation is based on the discussion and findings in the Staff Report.

#### **PROJECT SUMMARY**

	Project Information
Project Name	Monument Motors
Site Location	460 West 1700 South
Tax ID Number	12-065-0203
Applicant	Design West Architects
Owners	Lundock Deets LLC
Proposed Actions	Site Plan Approval
Current Zoning	C-2 (Commercial)
General Plan Land Use Classification	Commercial
Gross Site	1.87 Acres

Surround	ling Properties and Uses:	Properties and Uses: Current Zoning District	
North Freeport West		Freeport West M-1 (Manufacturing)	
East	Existing Commercial	M-1 (Manufacturing)	Commercial
South	Vacant	C-2 (Commercial)	Commercial
West	Existing Commercial	M-1 (Manufacturing)	Commercial

#### **Aerial Image & Zoning**



#### **BACKGROUND & OVERVIEW**

In February of 2025, the subject property was rezoned from M-1 (Manufacturing) to C-2 (Commercial). The rezone was supported by the General Plan, which envisions Antelope Drive as a corridor for general commercial and business activities. The rezone of the subject property was in anticipation of a motor vehicles sales establishment. Since the rezone, the applicant has prepared plans and is now applying for site plan approval for development of the property with the motor vehicle sales business, Monument Motors. The C-2 Zone includes motor vehicle sales as a permitted use, subject to development standards.

#### **SITE PLAN REVIEW**

#### Setbacks & Height

The C-2 Zone requires that buildings comply with the following setback, height, and yard coverage standards:

• Front Setback: 5 feet

Rear Setback: NoneSide Setback: None

Corner Side Setback: 10 feet
Maximum Height: 35 feet
Maximum Yard Coverage: No

The proposed development complies with all the above standards as required by the C-2 Zone.

#### Landscaping, Dumper Enclosures, and Fencing

#### Landscaping

Each development in the C-2 Zone is required to provide a minimum of 10% landscaped open space of the total project area. The landscape plan shows that the project would meet this requirement by providing 21.1% of the site as landscaped area.

Chapter 11-21, "Landscape Standards and Requirements", of the Clearfield City Code provides requirements for new landscaping for commercial projects. Under these standards, this development is required to have one (1) tree for every six hundred (600) square feet of required landscaped area, one (1) shrub for every two hundred (200) square feet of required landscaped area, and vegetative cover for at least fifty percent (50%) of the ground plane of planter beds. The proposed landscape plan complies with the plant quantity standards with thirty-three (33) trees, one hundred seventy-seven (177) shrubs, and additional ornamental grasses and perennials.

The landscaping standards specify that park strips and other areas less than eight feet (8') wide shall not be landscaped with turf, and that the turf area shall not exceed 15% of the total landscaped area, outside of recreation areas. The landscape plan has been designed with a small grass area to the west of the building. The grass area is 1,178 square feet, or approximately seven percent (7%) of the total landscaped area.

The irrigation plan meets the water efficiency standards of our code. The landscaping will require a separate water meter which is not shown on the plans. Staff recommends that the applicant review the civil utility plans, and locate the water meter and backflow device toward the rear of the property where the culinary connection is planned.

#### **Dumpster Enclosures**

The proposed site plan shows a dumpster enclosure in the parking area to the rear of the property. The enclosure will be constructed with a CMU (Concrete Masonry Unit) block wall and a solid metal gate and complies with code standards.

#### Fencing

Fencing is not required by code for this use at this location and is not proposed on any of the submitted plans. The existing fencing along a portion of the east property line is to remain.

#### **Site Access and Parking**

Chapters 11-14 "Off Street Parking and Loading" and 11-18 "Design Standards" outline the development standards for site access and parking.

#### Access

Vehicular and pedestrian access to the site is provided from 500 West. There are two proposed vehicular access points: one for customer parking and public access, and one for the inventory lot used exclusively for business operations and the storage of vehicles. The inventory lot will include gates to separate the uses. As required by code, site layout and design shall consider with equal weight the needs of pedestrians and automobiles. The pedestrian consideration requirements of code can be met by including a walkway

into the site at the same location as access to the customer parking, or by making a direct pedestrian connection between the sidewalk on 500 West and the main entrance to the building.

#### Parking

For motor vehicle sales establishments, one (1) space per 250 square feet of sales and office floor area and one (1) space for every ten (10) inventory spaces is required. With approximately 2,900 square feet of sales and office floor space and seventy-seven (77) inventory spaces, the minimum customer parking required for the site is twenty (20) spaces. The applicant has provided twenty-two (22) parking spaces on the site plan, which meets code requirements based upon the above ratios. All the parking spaces meet the minimum dimension standards. The site plan also shows two (2) accessible parking spaces, which complies with ADA (Americans with Disabilities Act) standards.

The site plan provides landscaped islands for single rows of parking in accordance with code requirements. The project was granted a variance from parking lot island requirements for the inventory lot. The staff report for the variance is included as an attachment to this report.

Parking lot designs are required to plan for snow stacking areas. The site plan will need to indicate where the snow will be stacked onsite.

#### **Building & Site Design Standards**

Chapters 11-11B "C-2 Zone" and 11-18 "Design Standards" of city code outline all the building and site design standards required for new motor vehicle sales developments within the city. As a new commercial project, these design standards are applied to this project.

#### **Building Design**

The applicant has provided a materials and color legend on the elevation sheets of the plans. The proposed materials include EIFS (similar to stucco), metal panels, patterned concrete, and glass windows. While the proposed building does not include the use of brick, stone, or rock, a variety of high-quality materials and colors are proposed. Because of the high-quality architecture and materials proposed—and because the Site Plan Review chapter of Clearfield City Code (11-5) states that site plan review is not meant to be so rigidly controlled to stifle creativity or individual expression—the proposed building can be approved as designed without any changes to materials.

The C-2 Zone has specific architectural standards for Motor Vehicle Sales establishments, intended to create buildings that have detailed elevations with human scale and interest through the varied use of forms, materials, details, and colors. Specifically, an increased use of windows is required for street facing facades. Staff recommends that the applicant review the window standards for street facing facades and add some type of window treatment to the south façade of the vehicle pick up bays.

Included in the plans is a proposed accessory structure that will be used as a detail bay. The proposed location is at the far north end of the site. The design and colors of the structure are complementary to the exterior of the main building as required by code for commercial developments.

#### Site Design

The applicant has located the building towards the front property line as encouraged by code. The main or front façade is oriented to the north, towards the parking area. This orientation and building placement meets the needs of the business and is the desired placement given the restraints of the site such as existing utility locations and easements. With the property being a corner lot, the street facing facades are treated as main facades with an increased use of glass and a prominent architectural feature at the corner where the two streets meet.

A six-foot (6') sidewalk is proposed along 500 West. This sidewalk will be a continuation of the existing public sidewalk along Antelope Drive. As currently proposed, the new sidewalk would be on the subject

property and not part of the 500 West right-of-way. Staff recommends that the proposed 6' sidewalk be dedicated to the City as part of the right-of-way to ensure future public use. There may be alternative solutions, such as an easement for public sidewalk use, but a final solution will need to be determined prior to final land use approval.

#### Lighting

Any exterior lighting will need to be reduced to the minimum levels necessary for safety and security purposes and done in an aesthetic manner. A photometric site plan was included with the submittal, which shows eighteen-foot (18') light poles for the parking areas and wall mounted light fixtures for the building. Based on staff's review, the proposed lighting plan meets the design standards for commercial development.

#### **DEPARTMENT REVIEW & PUBLIC COMMENT**

The plans were distributed for review amongst Clearfield City Planning, Engineering, and Building staff, as well as with the North Davis Fire District and the North Davis Sewer District. Engineering Staff have provided a review letter dated June 12, 2025. The plans will need to receive approval from the North Davis Fire District.

#### **Public Comment**

A public notice sign was placed on the property on June 25, 2025. No public comment has been received to date.

#### SITE PLAN – CONDITIONS OF APPROVAL

Based upon review of Clearfield City ordinances and the proposed site plan, Staff recommends that the Planning Commission **approve** the site plan request, subject to the following conditions.

- The plans will need to be updated to provide pedestrian access from the public sidewalk to the main entrance of the building. This can be accomplished with a direct connection from the proposed sidewalk to the concrete landing in front of the main entrance, or a connection at the point of vehicular access to the customer parking lot.
- 2) The utility and irrigation plans shall be updated to show the separate connection and water meter for irrigation.
- 3) The site plan shall be revised to designate a snow stacking area that complies with ordinance standards as outlined in Chapter 14 of the Land Use Ordinance.
- 4) The plans will need to be updated to include an increased use of windows on the south façade, along the vehicle pick up bay portion of the building.
- 5) The proposed sidewalk along 500 West will need to be dedicated to the city right of way for public use, or an easement will need to be granted for the public use of the sidewalk.
- 6) The plans will need to be updated to address the comments of the Engineering Review Letter dated June 12, 2025.
- 7) The project shall comply with all requirements of the North Davis Fire District.

#### **ATTACHMENTS**

- 1. Variance Staff Report (VAR 2025-0301)
- 2. General Notes
- 3. Demolition Plan
- 4. Site Plan

- 5. Grading and Drainage Plan
- 6. Utility Plan
- 7. Erosion Control Plan
- 8. Details
- 9. Architectural Site Plan
- 10. Planting Plan
- 11. Irrigation Plan
- 12. Floor Plans
- 13. Elevations
- 14. Photometric Site Plan
- 15. Photometric Details



## **STAFF REPORT**

**TO:** Jonathan Arbuckle

**FROM:** Tyson Stoddard, Planner

**SUBJECT:** VAR 2025-0301, a variance request from the landscaped island requirements for

parking lots as listed in Section 11-14-5 of the Clearfield City Municipal Code. **Location:** 460 W 1700 S (TIN: 12-065-0203). **Zone:** C-2 (Commercial) **Total Parcel** 

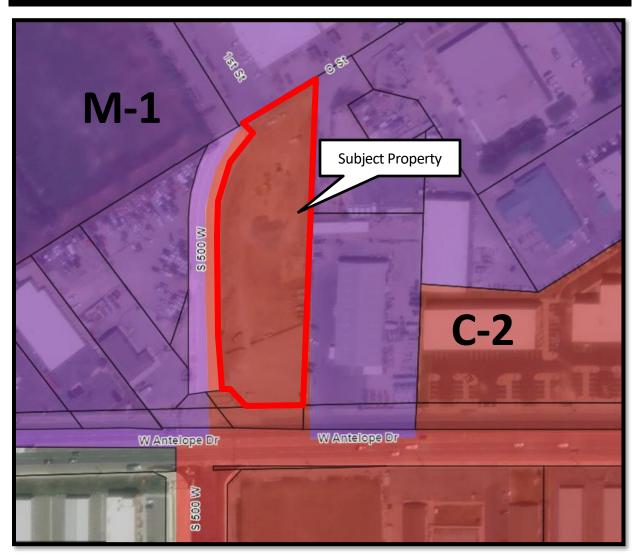
Area: 1.87 Acres.

#### **PROJECT SUMMARY**

Project Information		
Project Name	460 W 1700 S Auto Dealership Variance	
Location	460 W 1700 S	
Parcel ID	12-065-0203	
Applicant	Jonathan Arbuckle	
Property Owner	Tips Leasing LLC and Crockett, Ken & Tyrin	
Requested Action	Variance Approval	
Current Zoning	C-2 (Commercial)	
Total Project Area	1.87 Acres	

Surrou	nding Properties and Uses:	Zoning District	General Plan Land Use Classification
North	Freeport	M-1 (Manufacturing)	Manufacturing
East	General Commercial	M-1 (Manufacturing)	Manufacturing and Commercial
South	General Commercial and Agriculture	C-2 (Commercial)	Commercial
West	Tow Yard and General Commercial	M-1 (Manufacturing)	Manufacturing and Commercial

#### **Aerial Image and Zoning**



#### **DESCRIPTION & BACKGROUND**

It is the desire of the applicant to move forward with development of an Automobile Dealership at the subject property. The development would include two parking lots: one for customer parking and public access, and one for inventory used exclusively for business operations and the storage of vehicles. The Clearfield City Code requires landscaped islands at the end of interior parking spaces, as well as a landscaped island to be placed at a minimum of every twelve (12) parking spaces. The applicant is requesting a variance from the landscaped island requirements for the inventory lot. Development of the customer parking lot would comply with all code standards.

#### **VARIANCE FINDINGS**

Pursuant to Utah State Code Section 10-9a-702, variances may be granted if the following five (5) criteria are met.

1. Literal enforcement of the ordinance would cause an unreasonable hardship for the applicant that is not necessary to carry out the general purpose of the land use ordinances.

#### <u>Applicant Narrative:</u>

Parking islands in the inventory lot will cause difficulties in the business operations for vehicular circulation. Large delivery trucks will be accessing the lot to deliver inventory vehicles, per code 11-11B-13 "Loading/delivery of inventory shall occur on the property, not on public streets", and parking islands in this lot would create obstacles to safe and efficient maneuvering.

#### Staff Analysis:

The literal enforcement of the parking lot island regulations would constrain the reasonable operational needs of a business that is allowed by right in the C-2 Zone. Through literal enforcement of the current regulations, the hardship created is not necessary to fulfill the purposes of the general plan or the land use ordinance.

2. There are special circumstances attached to the property that do not generally apply to other properties in the district.

#### Applicant Narrative:

This property is adjacent to M-1 zones, where the code applicable to the M-1 zone reads: "Interior parking lot islands are not required for industrial properties in order to facilitate traffic flow for large vehicles and proper snow removal." (11-14-5 F-4) The inventory lot will also be fenced from public access, unlike other parking lots in the C-2 zone.

#### **Staff Analysis:**

The subject property is unique in that it is surrounded on three sides by properties in the M-1 (Manufacturing) Zone. Additionally, the inventory parking is proposed for the rear portion of the lot and next to properties that don't have frontage on Antelope Drive. These properties are envisioned to maintain a 'Manufacturing' land use as identified in the General Plan. The conditions mentioned above—and the observation that most of the C-2 zoned properties in the City are not adjacent to M-1 zoned properties—support the finding that there are special circumstances that do not generally apply to other properties in the district.

3. Granting the variance is essential to the enjoyment of a substantial property right possessed by other property in the same zone.

#### <u>Applicant Narrative:</u>

Granting this variance removes limitations to business operations that may cause the project to be terminated. The variance would allow the owner to use the land according to the needs and desires of their business.

#### **Staff Analysis:**

Motor Vehicle Sales is a permitted use in the C-2 Zone. Observations from other Auto Dealerships in the area, even those developed in recent years, show auto sales inventory lots that do not include landscaped islands. This indicates that flexibility for auto sales parking lots and their operational needs is a substantial property right possessed by other properties in the area.

## 4. The variance will not substantially affect the general plan and will not be contrary to the public interest.

#### Applicant Narrative:

The variance will not affect the general interest of the public, as the proposed removal of parking islands would only apply to the fenced area within the inventory lot. In the customer parking lot that provides public access, code-conforming landscape islands will still be provided.

#### Staff Analysis:

Granting the variance will not be contrary to the general plan or public interest. The development of the site will still require ten percent (10%) landscaped open space and the required minimums for tree and plant quantities. The required landscaping can be appropriately provided while allowing for the operational needs of the business.

#### 5. The spirit of the land use ordinance is observed and substantial justice is done.

#### Applicant Narrative:

The development of the inventory parking lot will maintain aesthetic appeal through abiding by landscaping requirements found in 11-14-5 G-1: a 10' landscaped area adjacent to the street frontage and a 6' wide landscaped area adjacent to the neighboring parcel will be provided. All landscaping will be thoughtfully designed per 11-21-4 and will achieve a desirable built environment despite the absence of landscaped parking islands.

#### Staff Analysis:

In granting the variance the spirit of the land use ordinance is observed, which allows for certain heavier commercial uses in the C-2 Zone that are appropriately reviewed, and substantial justice is done. The development will comply with all other parking lot landscaping standards as well as all other landscaping requirements from Clearfield City Code Chapter 11-21.

#### **UNREASONABLE HARDSHIP ANALYSIS**

In determining whether enforcement of the Land Use Ordinance would cause unreasonable hardship, an unreasonable hardship may not be found unless the alleged hardship:

- A. Is located on or associated with the property for which the variance is sought; and
  The alleged hardship is associated with the property for which the variance is sought.
- B. Comes from circumstances peculiar to the property, not from conditions that are general to the neighborhood. Circumstances peculiar to the property must: (1) Relate to the hardship complained of, and (2) Deprive the property of privileges granted to other properties in the same zone.

The circumstances relate to the property complained of and deprive the property of privileges other auto sales businesses generally have in the area.

#### **DETERMINATION AND FINDINGS**

Based upon the review of the request, staff determines that the variance is necessary for the applicant to meet the operational needs of the proposed business, and will not substantially affect the general plan or be contrary to the public interest. Therefore, staff grants **APPROVAL** of variance request **VAR 2025-0301**, with the following condition.

1. The variance is applicable to the proposed inventory parking lot, not the customer and public access parking lot.

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

UTAH AND SHALL BE BONDABLE FOR AN AMOUNT REQUIRED BY THE OWNER.

REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.

- 23. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED
- UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

24. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE

- CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
- WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
- 26. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
- WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 28. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM
- 29. ALL EXISTING TREES ARE TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL TREES FROM DAMAGE
- 30. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE GOVERNING AGENCY PRIOR TO THE PLACEMENT.
- 31. CONTRACTORS ARE RESPONSIBLE FOR ALL OSHA REQUIREMENTS ON THE PROJECT SITE.

MORE AS WELL AS A STORM WATER POLLUTION PREVENTION PLAN.

32. A UPDES (UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR ALL CONSTRUCTION ACTIVITIES 1 ACRE OR

### UTILITY NOTES

- 1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS, CITY AND STATE REQUIREMENTS AND THE MOST RECENT EDITIONS OF THE FOLLOWING: THE INTERNATIONAL PLUMBING CODE, UTAH DRINKING WATER REGULATIONS, APWA MANUAL OF STANDARD PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO ADHERE TO ALL OF THE ABOVE-MENTIONED DOCUMENTS UNLESS OTHERWISE NOTED AND APPROVED BY THE
- 2. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE & INTERNET SERVICE, GAS SERVICE, CABLE, AND POWER.
- 3. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS BASED ON ON-SITE SURVEY. PRIOR TO COMMENCING ANY WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
- CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT CONTRACTOR'S EXPENSE
- TRENCH BACKFILL MATERIAL AND COMPACTION TESTS ARE TO BE TAKEN PER APWA STANDARD SPECIFICATIONS (CURRENT EDITION), SECTION 33 05 20 - BACKFILLING TRENCHES, OR AS REQUIRED BY THE GEOTECHNICAL REPORT IF NATIVE MATERIALS ARE USED. NO NATIVE MATERIALS ARE ALLOWED IN THE PIPE ZONE. THE MAXIMUM LIFT FOR BACKFILLING EXCAVATIONS IS DETERMINED BY THE GEOTECHNICAL RECOMMENDATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL AND FEDERAL CODES GOVERNING SHORING AND BRACING OF EXCAVATIONS AND TRENCHES AND FOR THE PROTECTION OF WORKERS.
- 7. THE CONTRACTOR IS REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE APPROVED PROJECT LIMITS. THIS INCLUDES. BUT IS NOT LIMITED TO VEHICLE AND EQUIPMENT STAGING. MATERIAL STORAGE AND LIMITS OF TRENCH EXCAVATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION AND/OR EASEMENTS FROM THE APPROPRIATE GOVERNING ENTITY AND/OR INDIVIDUAL PROPERTY OWNER(S) FOR WORK OR STAGING OUTSIDE OF THE
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE, CAUSED BY ANY CONDITION INCLUDING SETTLEMENT, TO EXISTING UTILITIES FROM WORK PERFORMED AT OR NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT ALL EXISTING PUBLIC AND PRIVATE ROADWAY AND UTILITY FACILITIES. DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE TO THE SATISFACTION OF THE OWNER OF SAID FACILITIES.
- 9. ALL WATER LINE AND SEWER LINE INSTALLATION AND TESTING TO BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCY'S
- 10. ALL MANHOLES, HYDRANTS, VALVES, CLEANOUT BOXES, CATCH BASINS, METERS, ETC. MUST BE RAISED OR LOWERED TO FINAL GRADE PER APWA (CURRENT EDITION) STANDARDS AND INSPECTOR REQUIREMENTS. CONCRETE COLLARS MUST BE CONSTRUCTED ON ALL MANHOLES, CLEANOUT BOXES, CATCH BASINS, AND VALVES PER APWA STANDARDS. ALL MANHOLE, CATCH BASIN, OR CLEANOUT BOX CONNECTIONS MUST BE MADE WITH THE PIPE CUT FLUSH WITH THE INSIDE OF THE BOX AND GROUTED OR SEALED.
- 11. CONTRACTOR SHALL NOT ALLOW ANY GROUNDWATER OR DEBRIS TO ENTER THE NEW OR EXISTING PIPE DURING
- 12. SILT AND DEBRIS ARE TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
- 13. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
- 14. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE
- DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS. 15. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE
- 16. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, EDGE TO EDGE, FROM THE WATER LINES. IF A 10 FOOT SEPARATION CAN NOT BE MAINTAINED, CONSTRUCT PER GOVERNING AGENCY'S MINIMUM
- 17. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.

PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.

- 18. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET
- 19. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.

## TRAFFIC CONTROL AND SAFETY NOTES

MAINTAINED FOR ALL PROPERTIES ADJACENT TO THE WORK.

SEPARATION STANDARDS.

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

## **DEMOLITION NOTES**

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

### **GRADING AND DRAINAGE NOTES**

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

### **ABBREVIA**

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

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

VERTICAL CURVE WALL INDICATOR VALVE

### LEGEND

<b>k</b>			
	SECTION CORNER		EXISTING EDGE OF ASPHALT
+	EXISTING MONUMENT		PROPOSED EDGE OF ASPHALT
⊡	PROPOSED MONUMENT		EXISTING STRIPING
0	EXISTING REBAR AND CAP		PROPOSED STRIPING
0	SET ENSIGN REBAR AND CAP	— — x — —	EXISTING FENCE
WM O	EXISTING WATER METER	X	PROPOSED FENCE
WM O	PROPOSED WATER METER	- · · - · · -	EXISTING FLOW LINE
(W)	EXISTING WATER MANHOLE	<u> </u>	PROPOSED FLOW LINE
<b>(</b>	PROPOSED WATER MANHOLE		GRADE BREAK
W	EXISTING WATER BOX	— — sd — —	EXISTING STORM DRAIN LINE
₩V WV	EXISTING WATER VALVE	SD	PROPOSED STORM DRAIN LINE
₩V WV	PROPOSED WATER VALVE		ROOF DRAIN LINE
X	EXISTING FIRE HYDRANT		CATCHMENTS
	PROPOSED FIRE HYDRANT	— HWL — —	HIGHWATER LINE
FR	PROPOSED FIRE DEPARTMENT CONNECTION	— ss — —	EXISTING SANITARY SEWER
SWV	EXISTING SECONDARY WATER VALVE	——— SS ———	PROPOSED SANITARY SEWER LINE
swv	PROPOSED SECONDARY WATER VALVE		PROPOSED SAN. SWR. SERVICE LINE
[IRR]	EXISTING IRRIGATION BOX	— — Id — —	EXISTING LAND DRAIN LINE
IRR	EXISTING IRRIGATION VALVE	—— LD ——	PROPOSED LAND DRAIN LINE
ĬRR.	PROPOSED IRRIGATION VALVE		PROPOSED LAND DRAIN SERVICE LINE
(\$)	EXISTING SANITARY SEWER MANHOLE	— — w — —	EXISTING CULINARY WATER LINE
S	PROPOSED SANITARY SEWER MANHOLE	—— W ——	PROPOSED CULINARY WATER LINE
CO	EXISTING SANITARY CLEAN OUT		PROPOSED CULINARY WATER SERVICE
D	EXISTING STORM DRAIN CLEAN OUT BOX	— — sw — —	EXISTING SECONDARY WATER LINE
D	PROPOSED STORM DRAIN CLEAN OUT BOX	SW	PROPOSED SECONDARY WATER LINE
	EXISTING STORM DRAIN INLET BOX	——————————————————————————————————————	PROPOSED SEC. WATER SERVICE LINE
	EXISTING STORM DRAIN CATCH BASIN	- $-$ irr $ -$	EXISTING IRRIGATION LINE
	PROPOSED STORM DRAIN CATCH BASIN	—— IRR ——	PROPOSED IRRIGATION LINE
	EXISTING STORM DRAIN COMBO BOX	ohp	EXISTING OVERHEAD POWER LINE
	PROPOSED STORM DRAIN COMBO BOX	— e — —	EXISTING ELECTRICAL LINE
CO	EXISTING STORM DRAIN CLEAN OUT	— g — —	EXISTING GAS LINE

PROPOSED CULINARY WATER SERVICE LINE

— — t — — EXISTING TELEPHONE LINE

AR ACCESSIBLE ROUTE

· · · · · · · · SAW CUT LINE

STRAW WATTLE

□□□□□□□□ EXISTING WALL

PROPOSED WALL

EXISTING CONTOURS

PROPOSED CONTOURS

PROPOSED ASPHALT

PROPOSED REVERSE PAN CURB AND GUTTER

CONCRETE TO BE REMOVED

EXISTING CURB AND GUTTER

\_\_\_\_\_\_

PROPOSED CURB AND GUTTER

TRANSITION TO REVERSE PAN CURB

EXISTING CONCRETE

EXISTING BUILDING

PROPOSED BUILDING

PROPOSED CONCRETE

BUILDING TO BE REMOVED

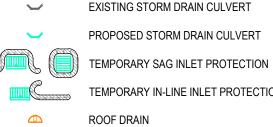
BUILDABLE AREA WITHIN SETBACKS

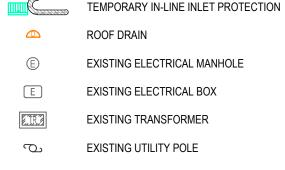
EXISTING ASPHALT TO BE REMOVED

PUBLIC DRAINAGE EASEMENT

—— SF — TEMPORARY SILT FENCE

LIMITS OF DISTURBANCE





EXISTING LIGHT PROPOSED LIGHT **EXISTING GAS METER** EXISTING GAS MANHOLE

EXISTING GAS VALVE EXISTING TELEPHONE MANHOLE EXISTING TELEPHONE BOX EXISTING TRAFFIC SIGNAL BOX

EXISTING CABLE BOX EXISTING BOLLARD PROPOSED BOLLARD

EXISTING SIGN PROPOSED SIGN EXISTING SPOT ELEVATION PROPOSED SPOT ELEVATION

**EXISTING TREE** DENSE VEGETATION

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

EXISTING FLOW DIRECTION

(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



919 North 400 West Layton, UT 84041 Phone: 801.547.1100 WWW.ENSIGNENG.COM

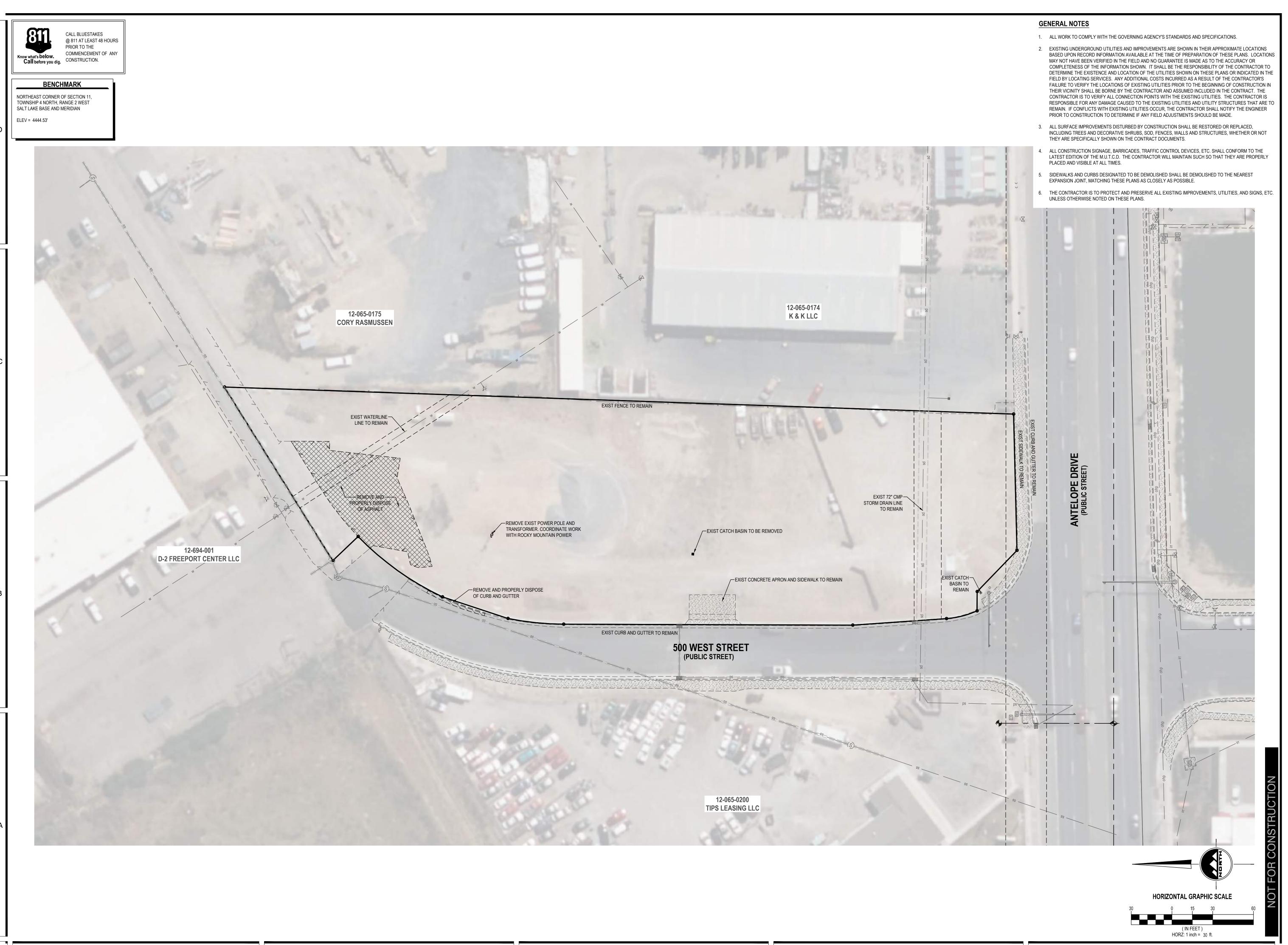
**ENSIGN PROJECT #: 13403** 

 $\Delta$ 

424207 PROJECT #: J.MOSS DRAWN BY

K.SIMMONS

**GENERAL NOTES** 



DESIGN WEST

(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

ENSIGN
THE STANDARD IN ENGINEERING

LAYTON
919 North 400 West
Layton, UT 84041
Phone: 801.547.1100
WWW.ENSIGNENG.COM
ENSIGN PROJECT #: 13403

ONUMENT MOTORS
West 1700 South, Clearfield, UT 84015

MARK: DATE: DESCRIPTION:

PROJECT #: 424207

DRAWN BY: J.MOSS

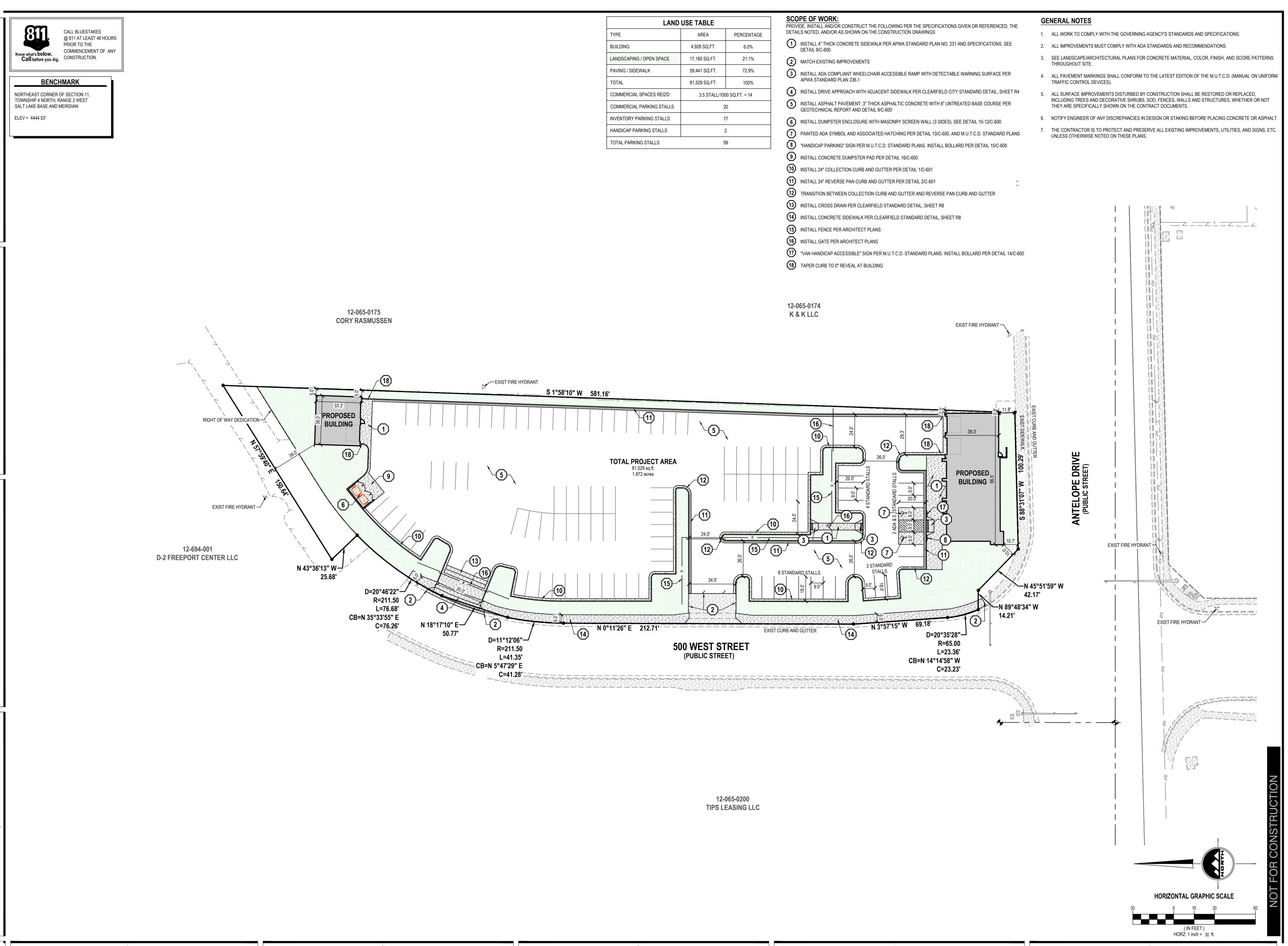
CHECKED BY: K.SIMMONS

ISSUED: 06.04.2025

No. 12129848-2202

DEMOLITION PLAN

C-100
© COPYRIGHT DESIGN WEST ARCHITECTS 2025



(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

THE STANDARD IN ENGINEERING 919 North 400 West Layton, UT 84041 Phone: 801.547.1100

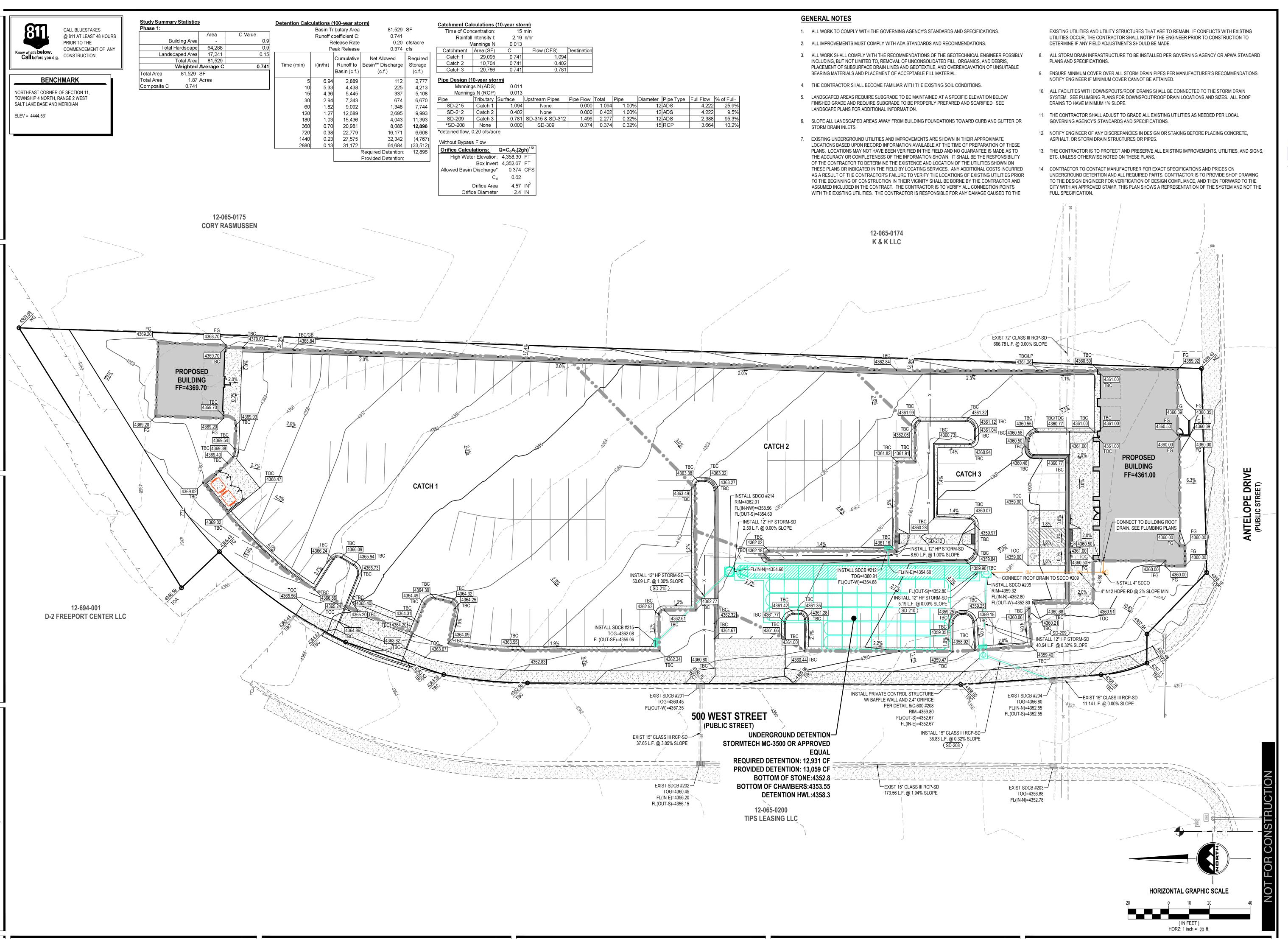
WWW.ENSIGNENG.COM **ENSIGN PROJECT #: 13403** 

 $\Delta$ 10 MOM ENT ONUME

424207

K.SIMMONS

SITE PLAN



DESIGN WEST

(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

31,000 0221

LAYTON
919 North 400 West
Layton, UT 84041
Phone: 801.547.1100

Layton, UT 84041
Phone: 801.547.1100

WWW.ENSIGNENG.COM
ENSIGN PROJECT #: 13403

JUMENT MOTORS

DATE: DESCRIPTION:

PROJECT #: 424207

DRAWN BY: J.MOSS

CHECKED BY: K.SIMMONS

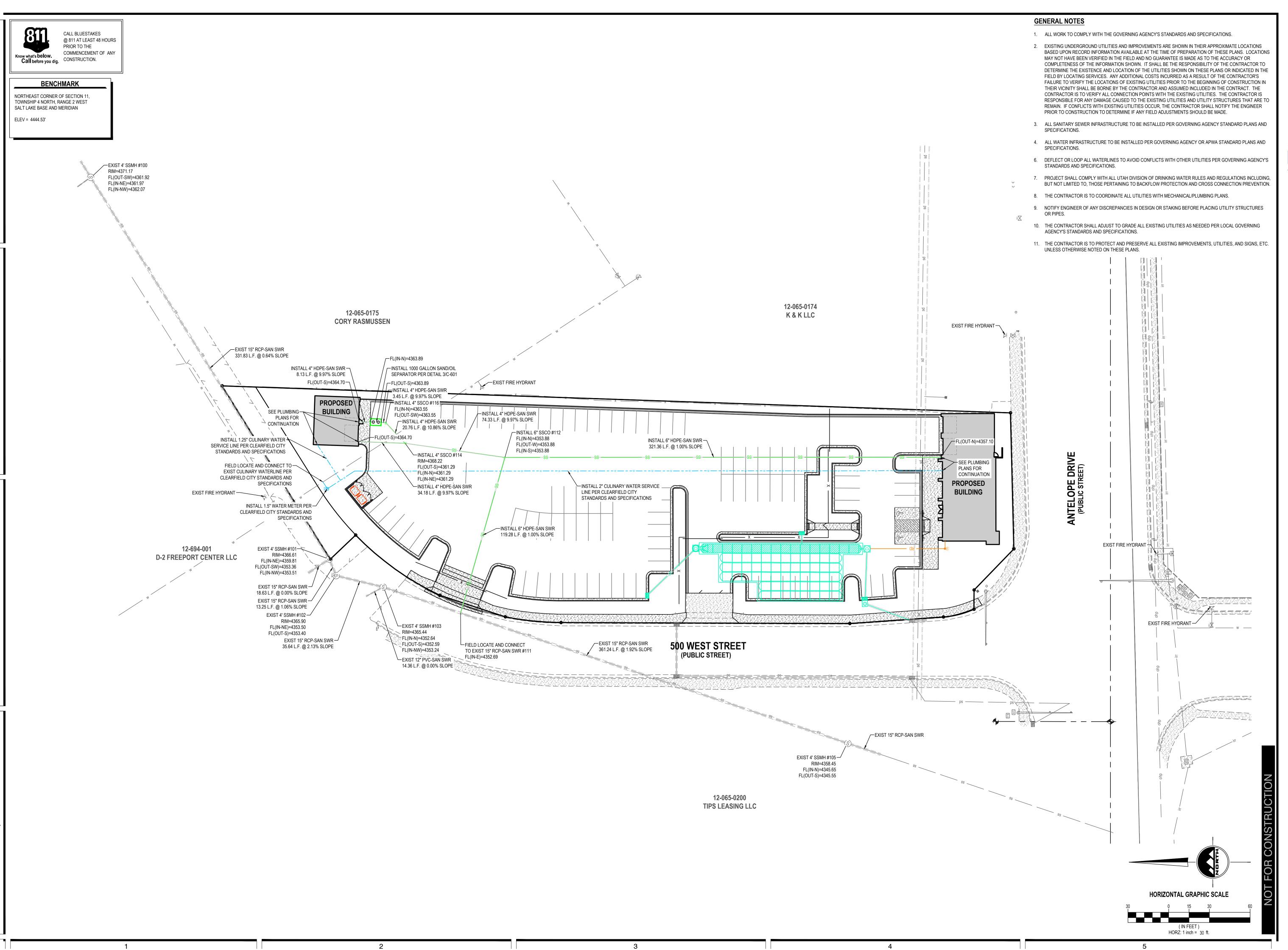
ISSUED: 06 04 2025

06.04.2025

No. 12129848-2202

GRADING AND DRAINAGE PLAN

C-300
© COPYRIGHT DESIGN WEST ARCHITECTS 2025





(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



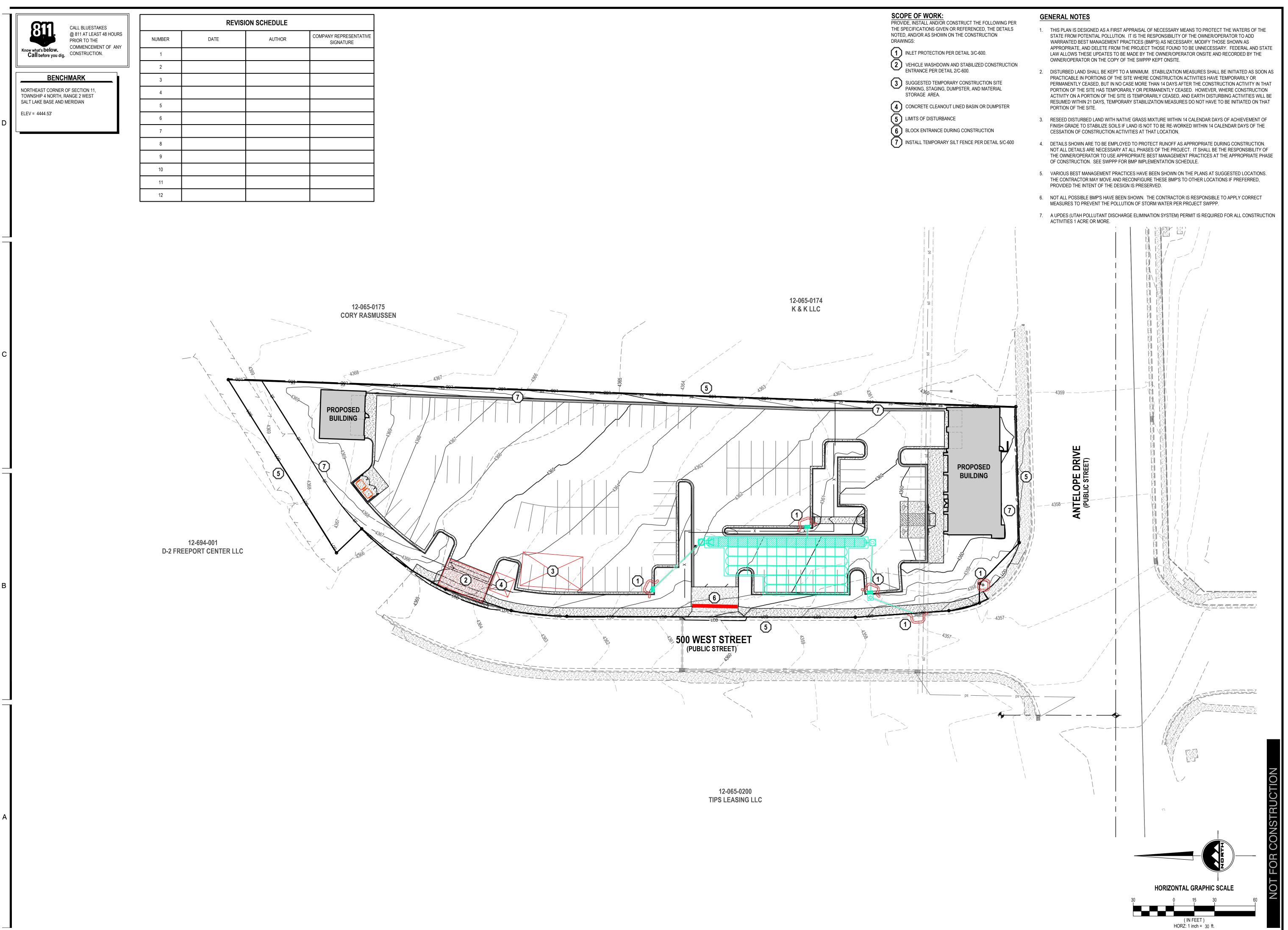
LAYTON 919 North 400 West Layton, UT 84041 Phone: 801.547.1100 WWW.ENSIGNENG.COM

**ENSIGN PROJECT #: 13403** 

 $\Delta$ **T**0 MOM ONUME

424207 PROJECT #: K.SIMMONS

**UTILITY PLAN** 



DESIGN WEST

LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

ENSIGN
THE STANDARD IN ENGINEERING

**LAYTON**919 North 400 West
Layton, UT 84041
Phone: 801.547.1100

Phone: 801.547.1100

WWW.ENSIGNENG.COM

ENSIGN PROJECT #: 13403

RS

T0

.0W

ONUMENT

est 1700 South, Clearfield, UT 84015

MARK: DATE: DESCRIPTION:

BY THE PROJECT #: 42420

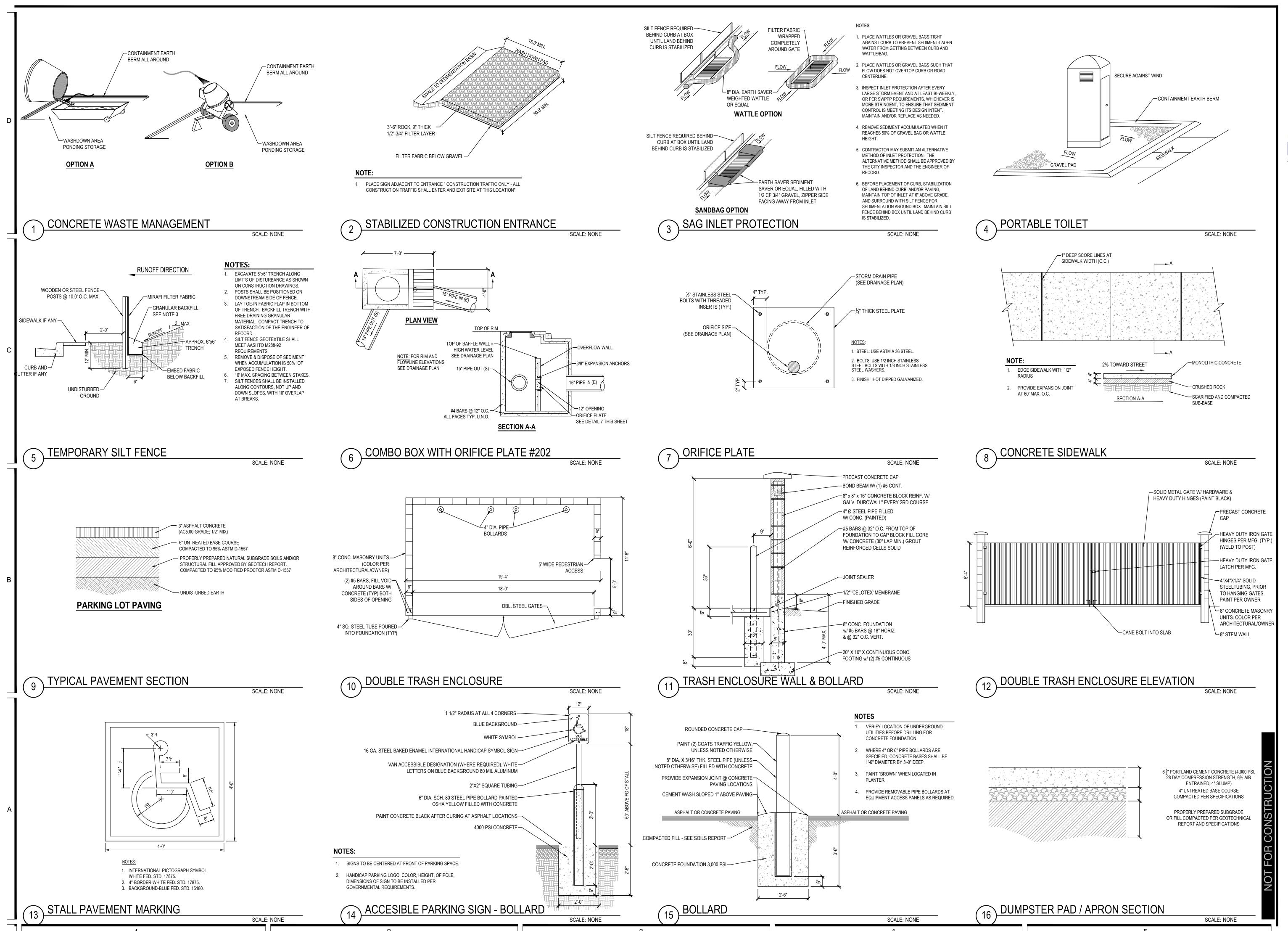
JECT #: 424207
WN BY: J.MOSS
CKED BY: K.SIMMONS

ECKED BY: K.SIM



EROSION CONTROL PLAN

C-500



(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



LAYTON 919 North 400 West

Layton, UT 84041 Phone: 801.547.1100 WWW.ENSIGNENG.COM **ENSIGN PROJECT #: 13403** 

 $\Delta$ **T**0 MOM

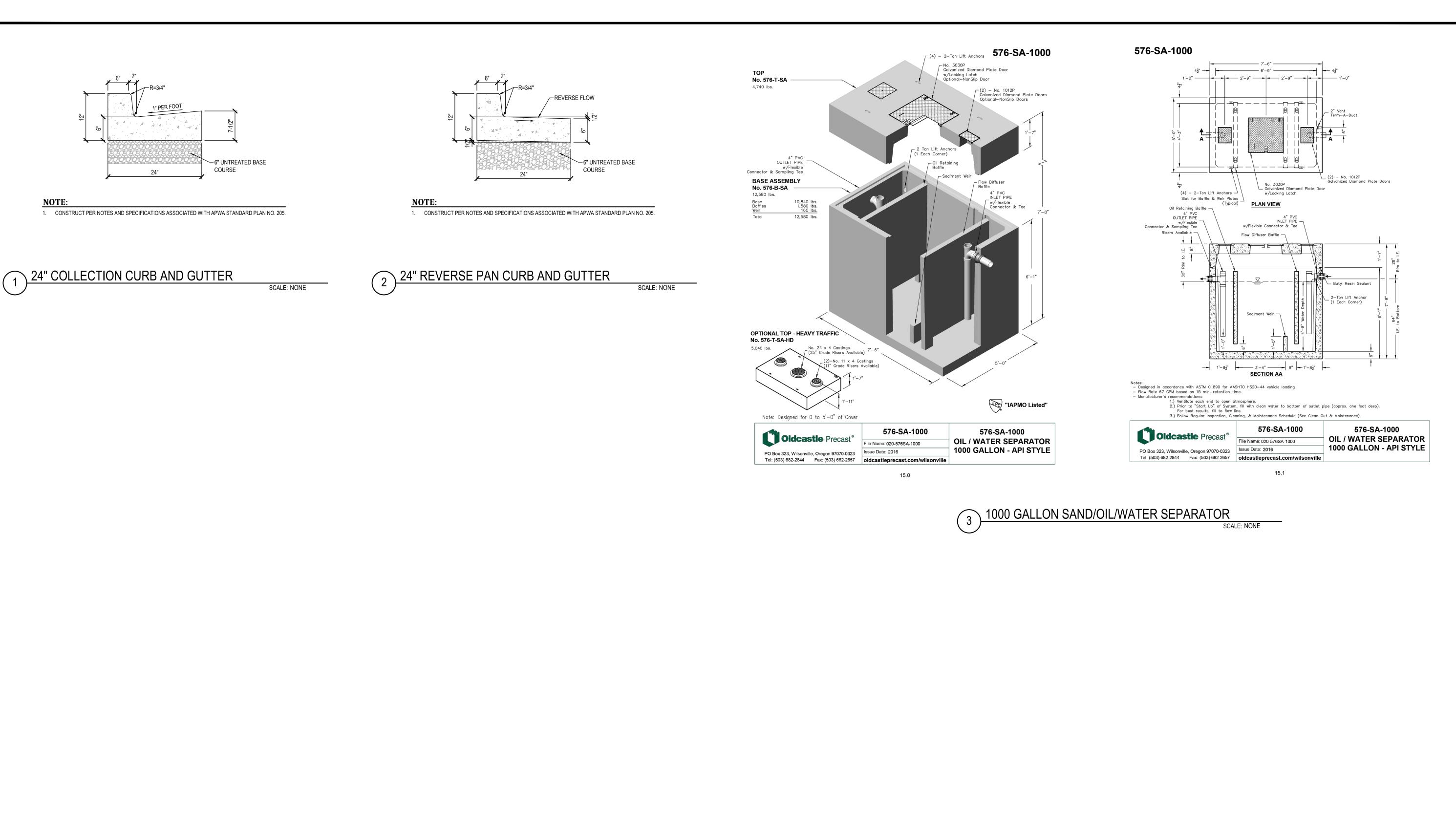
ш

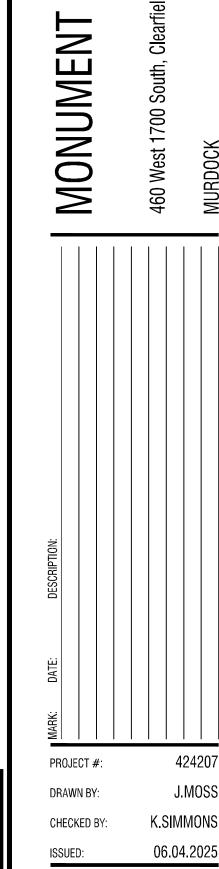
NOM

 $\geq$ 

424207 J.MOSS **K.SIMMONS** 

**DETAILS** 





(435) 752-7031

LAYTON

MOTORS

SALT LAKE CITY, UTAH (801) 539-8221

THE STANDARD IN ENGINEERING

WWW.ENSIGNENG.COM

**ENSIGN PROJECT #: 13403** 

919 North 400 West

Layton, UT 84041 Phone: 801.547.1100

C-601

**DETAILS** 





## MURDOC AUTO DEALERSHIP

## CLEARFIELD, UT, USA

## MC-3500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.

THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.

- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
- STACKING LUGS • TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS

TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING

 TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C). CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS

#### ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE

- DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS: THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
- THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
- THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- 10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- 11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS. THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

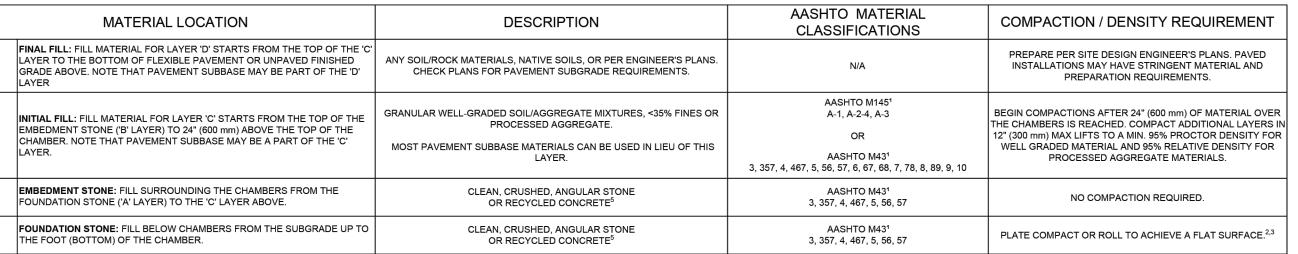
### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED
- BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE. 6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4,
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING. 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN
- 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.
- NOTES FOR CONSTRUCTION EQUIPMENT
- 1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED: NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE
- WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".

3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

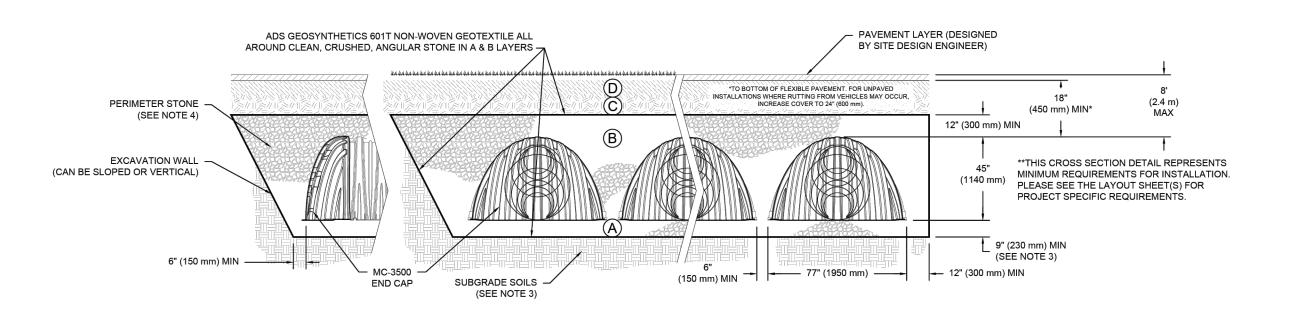


ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

PLEASE NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".

STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE, MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL"



INSTALL SDCB #212-

FL(OUT-W)=4354.68

INSTALL 12" HP STORM-SD-

8.50 L.F. @ 1.00% SLOPE

TOG=4360.91-

SHEET 4 OF 5

- . CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- . MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION
  - FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
  - 5. REQUIREMENTS FOR HANDLING AND INSTALLATION: TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.

─INSTALL SDCO #214

INSTALL 12" HP STORM-SI

2.50 L.F. @ 0.00% SLOPE

RIM=4362.01 FL(IN-NW)=4358.56

- TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
- TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW

INSTALL FLAMP ON 24" (600 mm) ACCESS PIPE PART #: MCFLAMP COVER PIPE CONNECTION TO END CAP WITH ADS -- MC-3500 CHAMBER GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE OPTIONAL INSPECTION PORT STORMTECH HIGHLY RECOMMENDS FLEXSTORM INSERTS IN ANY UPSTREAM STRUCTURES WITH OPEN GRATES MC-3500 END CAP SUMP DEPTH TBD BY SITE DESIGN ENGINEER (24" [600 mm] MIN RECOMMENDED) · 24" (600 mm) HDPE ACCESS PIPE REQUIRED USE ONE LAYER OF ADSPLUS125 WOVEN GEOTEXTILE BETWEEN FACTORY PRE-CORED END CAP FOUNDATION STONE AND CHAMBERS PART #: MC3500IEPP24BC OR MC3500IEPP24BW 8.25' (2.51 m) MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS MC-3500 ISOLATOR ROW PLUS DETAIL

## **INSPECTION & MAINTENANCE**

- 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY

-INSTALL 12" HP STORM-SD 50.09 L.F. @ 1.00% SLOPE **UNDERGROUND DETENTION** STORMTECH MC-3500 OR APPROVED **REQUIRED DETENTION: 12,931 CF PROVIDED DETENTION: 13,059 CF BOTTOM OF STONE:4352.8 BOTTOM OF CHAMBERS:4353.55 DETENTION HWL:4358.3 500 WEST STREET** 

HORZ: 1 inch = 10 ft.

✓ FL(OUT-S)=4352.80

INSTALL 12" HP STORM-SD-

5.19 L.F. @ 0.00% SLOPE

INSTALL SDCO #209 —

FL(IN-N)=4352.80

FL(OUT-W)=4352.80

NSTALL 12" HP STORM-SD 40.54 L.F. @ 0.32% SLOPE

INSTALL PRIVATE CONTROL STRUCTURE -

W/ BAFFLE WALL AND 2.4" ORIFICE

PER DETAIL 6/C-600 #208

RIM=4359.80

NSTALL 15" CLASS III RCP-SD 💳

36.83 L.F. @ 0.32% SLOPE \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

FL(OUT-S)=4352.67

FL(IN-E)=4352.67

RIM=4359.32

(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



919 North 400 West Layton, UT 84041 Phone: 801.547.1100 WWW.ENSIGNENG.COM

**ENSIGN PROJECT #: 13403** 

 $\sim$ ш  $\geq$ 

3 OF 5

424207 PROJECT #:

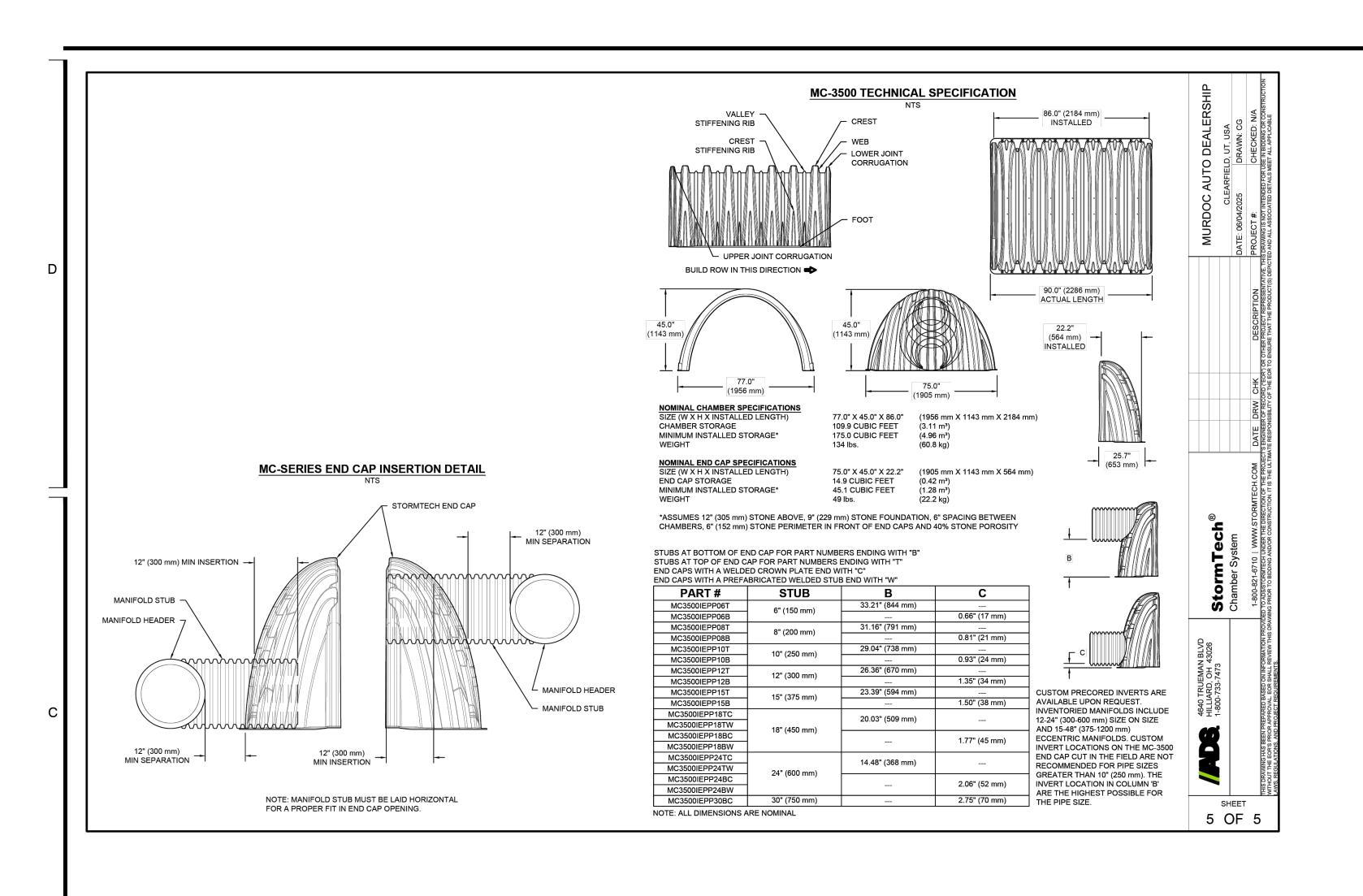
K.SIMMONS

MC-3500 STORM TECH **DETAILS** 

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT A. INSPECTION PORTS (IF PRESENT) REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL) A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3. B. ALL ISOLATOR PLUS ROWS REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE ) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY ; i) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED 3. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS. STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.



(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



LAYTON 919 North 400 West Layton, UT 84041 Phone: 801.547.1100 WWW.ENSIGNENG.COM

**ENSIGN PROJECT #: 13403** 

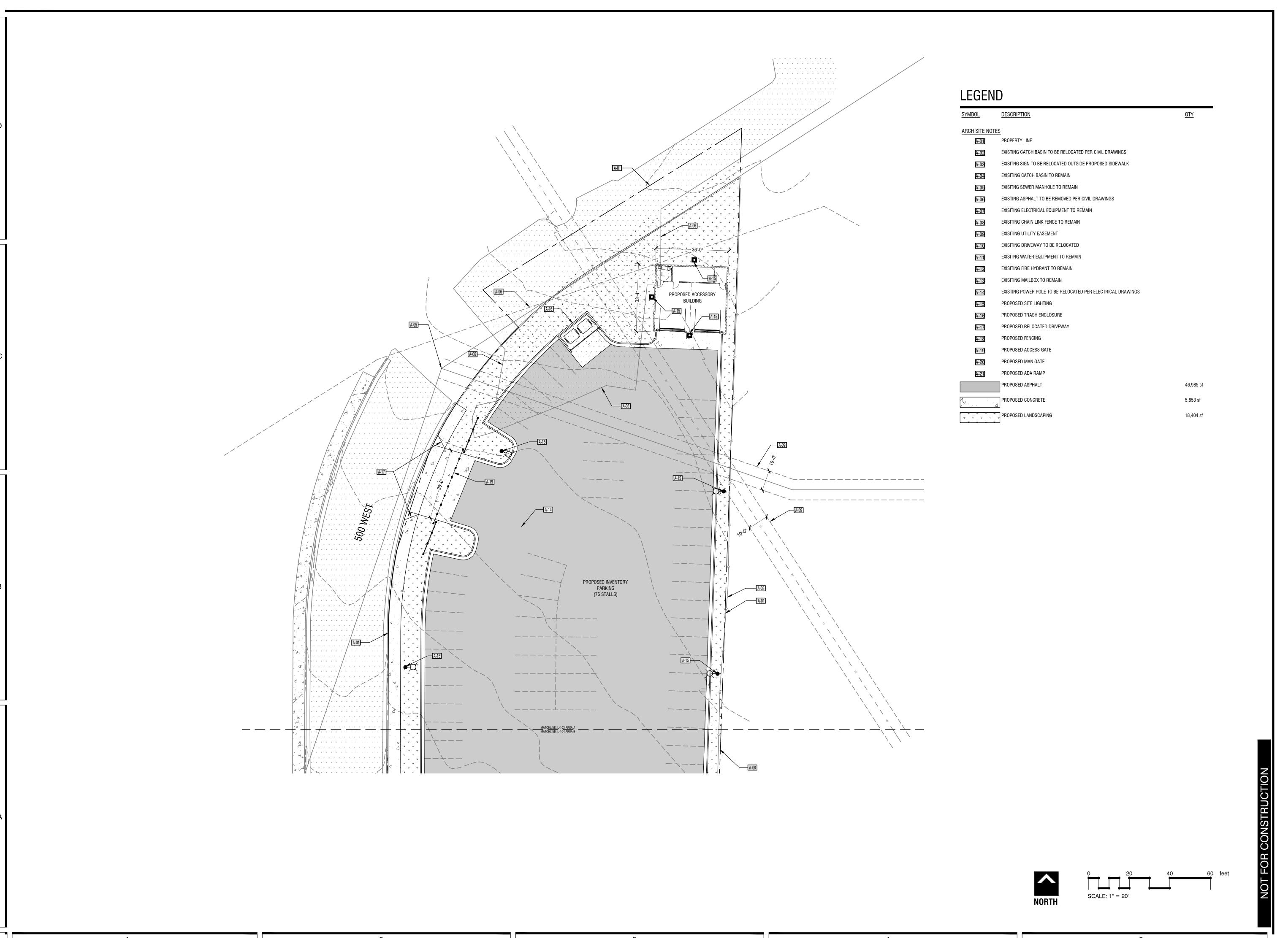
MOTORS ONUMENT

424207



MC-3500 STORM TECH **DETAILS** 





DESIGN WEST

LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

MOTORS CO., INC.

| MONUMENT | 460 WEST 1700 SOUTH

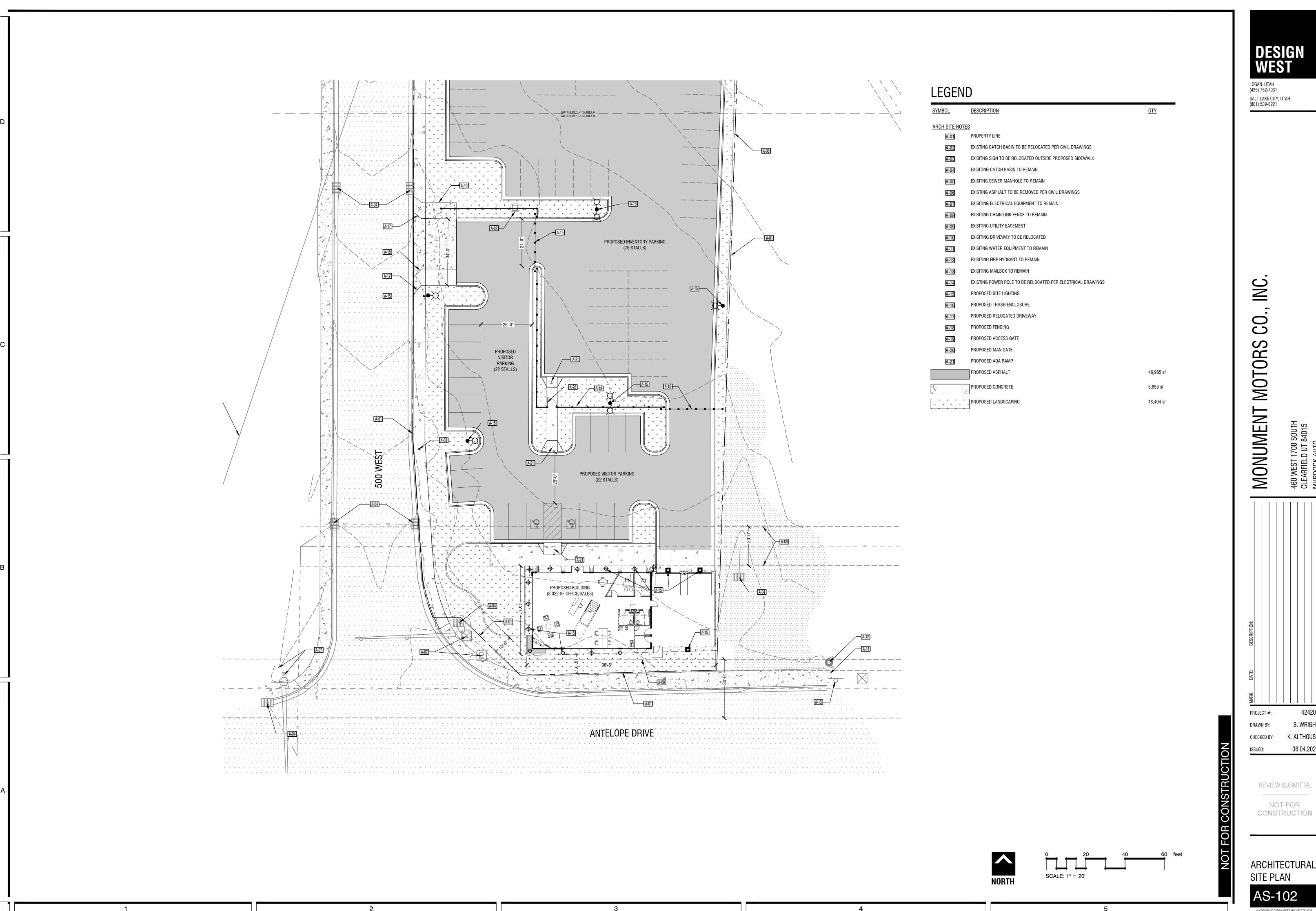
HAWN BY: B. WRIGHT CHECKED BY: K. ALTHOUSE ISSUED: 06.04.2025

REVIEW SUBMITTAL

NOT FOR CONSTRUCTION

ARCHITECTURAL SITE PLAN

AS-101



LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH

> NC NC 00

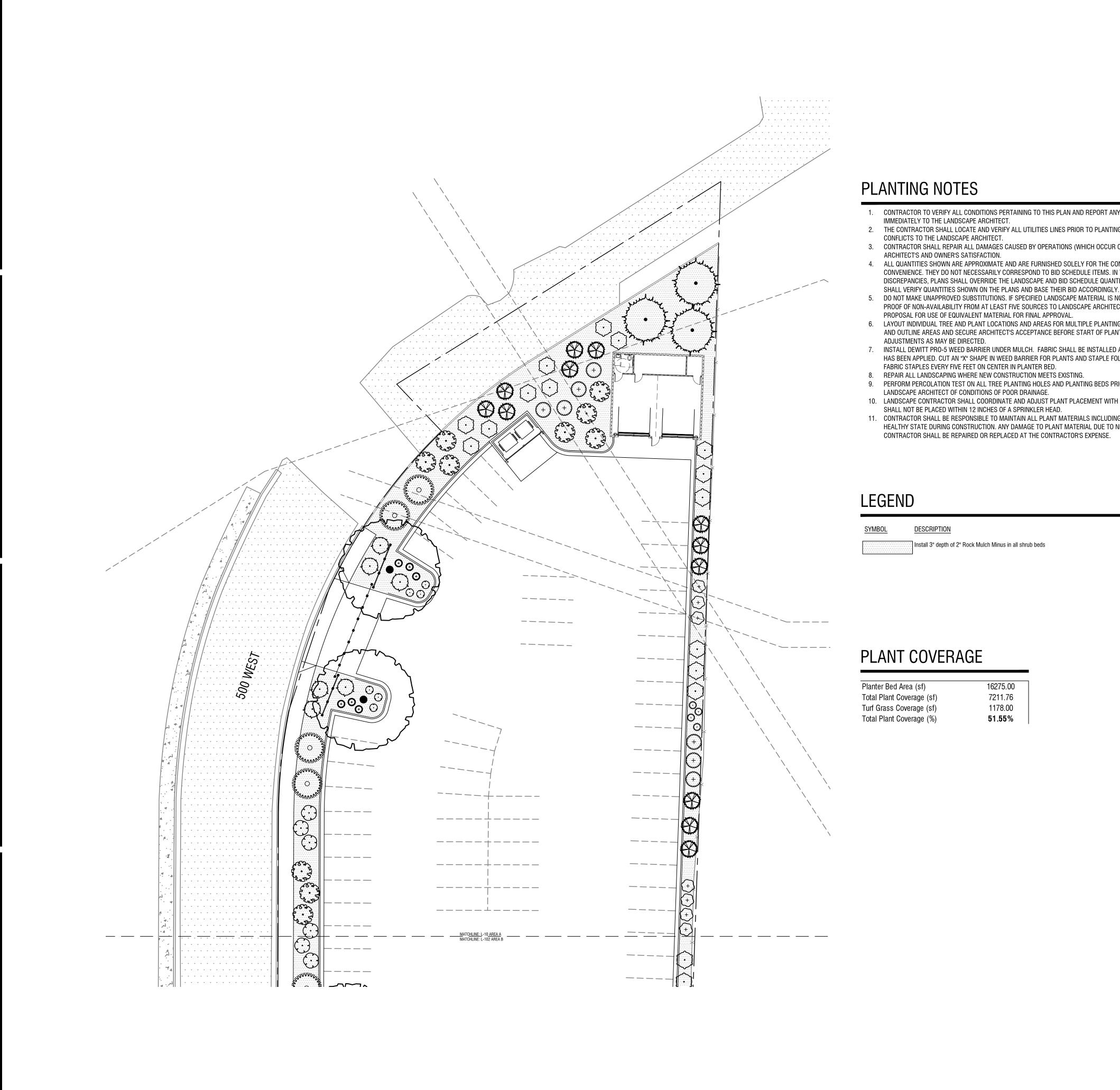
PROJECT #:

REVIEW SUBMITTAL

NOT FOR

K. ALTHOUSE

ARCHITECTURAL SITE PLAN



## PLANTING NOTES

- 1. CONTRACTOR TO VERIFY ALL CONDITIONS PERTAINING TO THIS PLAN AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
- 2. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL REPAIR ALL DAMAGES CAUSED BY OPERATIONS (WHICH OCCUR ON OR OFF SITE) TO THE ARCHITECT'S AND OWNER'S SATISFACTION.
- 4. ALL QUANTITIES SHOWN ARE APPROXIMATE AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. IN THE CASE OF ANY DISCREPANCIES, PLANS SHALL OVERRIDE THE LANDSCAPE AND BID SCHEDULE QUANTITIES. CONTRACTOR
- DO NOT MAKE UNAPPROVED SUBSTITUTIONS. IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY FROM AT LEAST FIVE SOURCES TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL FOR FINAL APPROVAL.
- 6. LAYOUT INDIVIDUAL TREE AND PLANT LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS, STAKE LOCATIONS, AND OUTLINE AREAS AND SECURE ARCHITECT'S ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE DIRECTED.
- INSTALL DEWITT PRO-5 WEED BARRIER UNDER MULCH. FABRIC SHALL BE INSTALLED AFTER PRE-EMERGENT HAS BEEN APPLIED. CUT AN "X" SHAPE IN WEED BARRIER FOR PLANTS AND STAPLE FOLDS DOWN INTO SOIL. USE FABRIC STAPLES EVERY FIVE FEET ON CENTER IN PLANTER BED.
- 8. REPAIR ALL LANDSCAPING WHERE NEW CONSTRUCTION MEETS EXISTING. 9. PERFORM PERCOLATION TEST ON ALL TREE PLANTING HOLES AND PLANTING BEDS PRIOR TO PLANTING. INFORM
- LANDSCAPE ARCHITECT OF CONDITIONS OF POOR DRAINAGE. 10. LANDSCAPE CONTRACTOR SHALL COORDINATE AND ADJUST PLANT PLACEMENT WITH SPRINKLERS. PLANTS
- 11. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL PLANT MATERIALS INCLUDING SOD AREAS IN A HEALTHY STATE DURING CONSTRUCTION. ANY DAMAGE TO PLANT MATERIAL DUE TO NEGLECT BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

SYMB0L	DESCRIPTION	QTY
	Install 3" depth of 2" Rock Mulch Minus in all shrub beds	16,275 sf

## PLANT COVERAGE

Planter Bed Area (sf)	16275.00
Total Plant Coverage (sf)	7211.76
Turf Grass Coverage (sf)	1178.00
Total Plant Coverage (%)	51.55%

## PLANTING SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
TREES	MS	4	Malus x 'Spring Snow' / Spring Snow Crabapple	B & B	2"
	PA	15	Pinus nigra 'Arnold Sentinel' / Arnold Sentinel Austrian Pine	B & B	2"
•	QN	5	Quercus robur x bicolor 'Nadler' / Kindred Spirit® Oak	B & B	2"
$\left(\begin{array}{c} \cdot \end{array}\right)$	ZG	6	Zelkova serrata 'Green Vase' / Green Vase Japanese Zelkova	В&В	2"
EVERGREEN T	REES				
The state of the s	PD	3	Picea glauca 'Densata' / Black Hills White Spruce	B & B	2"
<u>SYMBOL</u>	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
SHRUBS					
	AA	20	Aronia melanocarpa 'Autumn Magic' / Autumn Magic Black Chokeberry	5 gal	
(+)	CM	22	Chamaebatiaria millefolium / Fernbush	5 gal	
(+)	FP	21	Fallugia paradoxa / Apache Plume	5 gal	
	LB	27	Lavandula angustifolia 'Buena Vista' / Buena Vista English Lavender	5 gal	
( · c)	PD3	21	Physocarpus opulifolius 'Donna May' / Little Devil™ Dwarf Ninebark	5 gal	
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	PC	10	Picea pungens 'Procumbens' / Creeping Colorado Spruce	5 gal	
	PP2	18	Prunus besseyi 'P011S' / Pawnee Buttes® Sand Cherry	5 gal	
6. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	RA	18	Rhus trilobata 'Autumn Amber' / Autumn Amber Sumac	5 gal	
	VM	20	Viburnum dentatum 'Blue Muffin' / Blue Muffin Arrowwood Viburnum	5 gal	
GRASSES					
₹ <u>`</u>	CK	25	Cenchrus orientalis 'Karley Rose' / Karley Rose Fountain Grass	2 gal	
Marianania + 44	FM	26	Festuca mairei / Atlas Fescue	2 gal	
PERENNIALS	AK	24	Agastache x `Kudos Gold` / Kudos Gold Dwarf Anise Hyssop	1 gal	
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
GROUND COV	ERS PP	1,178 sf	Poa pratensis / Kentucky Bluegrass	804 Flat	

REVIEW SUBMITTAL

PROJECT #:

PLANTING PLAN

SCALE: 1" = 20'

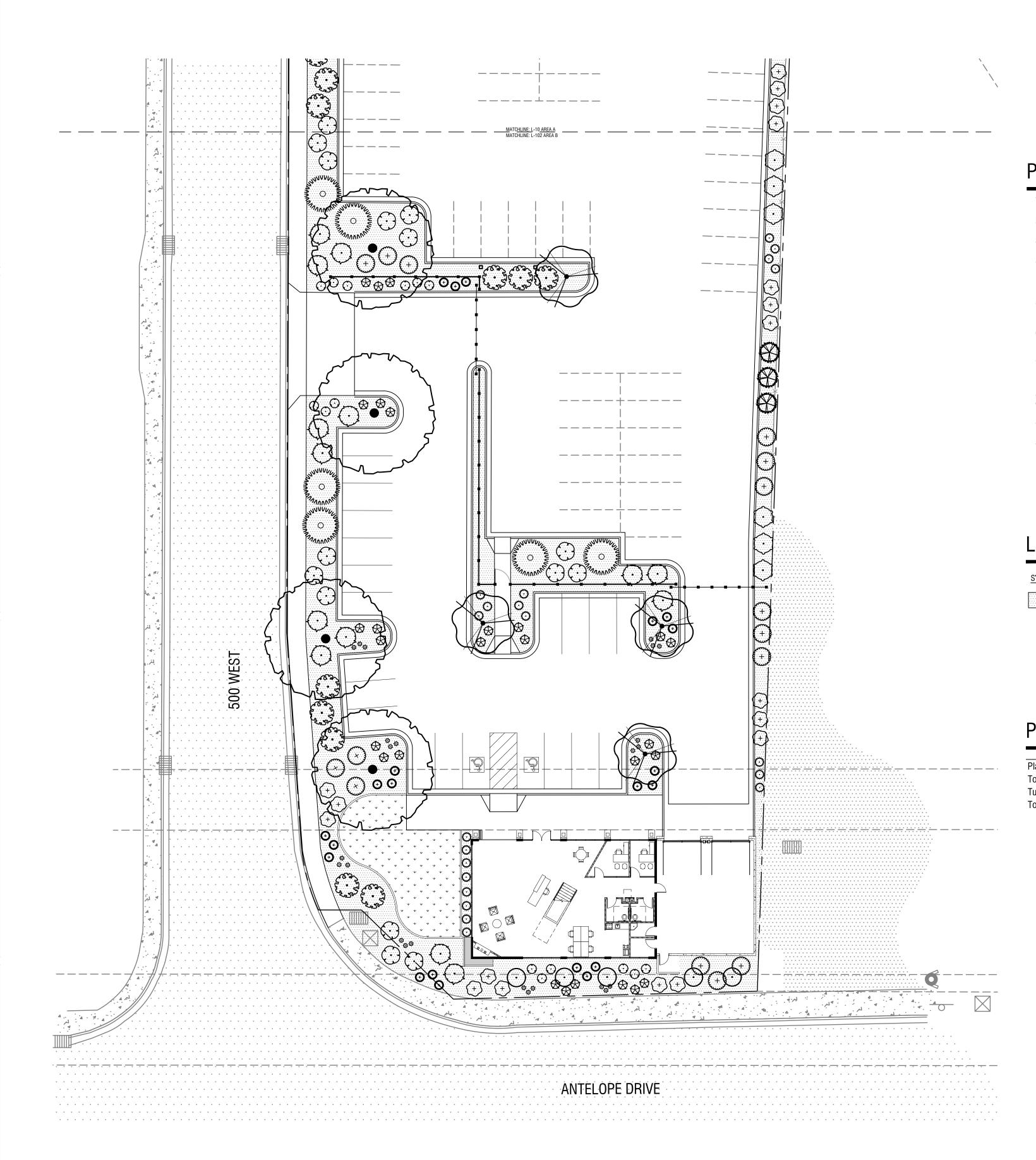
(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

00 MOTORS ONUMENT

424207

K. ALTHOUSE

NOT FOR CONSTRUCTION



## PLANTING NOTES

1. CONTRACTOR TO VERIFY ALL CONDITIONS PERTAINING TO THIS PLAN AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT.

2. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.

3. CONTRACTOR SHALL REPAIR ALL DAMAGES CAUSED BY OPERATIONS (WHICH OCCUR ON OR OFF SITE) TO THE ARCHITECT'S AND OWNER'S SATISFACTION.

4. ALL QUANTITIES SHOWN ARE APPROXIMATE AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. IN THE CASE OF ANY DISCREPANCIES, PLANS SHALL OVERRIDE THE LANDSCAPE AND BID SCHEDULE QUANTITIES. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON THE PLANS AND BASE THEIR BID ACCORDINGLY. 5. DO NOT MAKE UNAPPROVED SUBSTITUTIONS. IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT

PROOF OF NON-AVAILABILITY FROM AT LEAST FIVE SOURCES TO LANDSCAPE ARCHITECT, TOGETHER WITH PROPOSAL FOR USE OF EQUIVALENT MATERIAL FOR FINAL APPROVAL. 6. LAYOUT INDIVIDUAL TREE AND PLANT LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS, STAKE LOCATIONS, AND OUTLINE AREAS AND SECURE ARCHITECT'S ACCEPTANCE BEFORE START OF PLANTING WORK. MAKE MINOR

ADJUSTMENTS AS MAY BE DIRECTED. 7. INSTALL DEWITT PRO-5 WEED BARRIER UNDER MULCH. FABRIC SHALL BE INSTALLED AFTER PRE-EMERGENT

HAS BEEN APPLIED. CUT AN "X" SHAPE IN WEED BARRIER FOR PLANTS AND STAPLE FOLDS DOWN INTO SOIL. USE FABRIC STAPLES EVERY FIVE FEET ON CENTER IN PLANTER BED. 8. REPAIR ALL LANDSCAPING WHERE NEW CONSTRUCTION MEETS EXISTING.

9. PERFORM PERCOLATION TEST ON ALL TREE PLANTING HOLES AND PLANTING BEDS PRIOR TO PLANTING. INFORM LANDSCAPE ARCHITECT OF CONDITIONS OF POOR DRAINAGE.

10. LANDSCAPE CONTRACTOR SHALL COORDINATE AND ADJUST PLANT PLACEMENT WITH SPRINKLERS. PLANTS SHALL NOT BE PLACED WITHIN 12 INCHES OF A SPRINKLER HEAD.

11. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL PLANT MATERIALS INCLUDING SOD AREAS IN A HEALTHY STATE DURING CONSTRUCTION. ANY DAMAGE TO PLANT MATERIAL DUE TO NEGLECT BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

## LEGEND

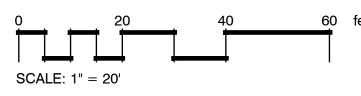
SYMBOL	DESCRIPTION	QTY
	<del>-</del> -	16,275 sf

## PLANT COVERAGE

Planter Bed Area (sf)	16275.00
Total Plant Coverage (sf)	7211.76
Turf Grass Coverage (sf)	1178.00
Total Plant Coverage (%)	51 55%

## PLANTING SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
TREES	MS	4	Malus x 'Spring Snow' / Spring Snow Crabapple	B & B	2"
	PA	15	Pinus nigra 'Arnold Sentinel' / Arnold Sentinel Austrian Pine	B & B	2"
$\odot$	QN	5	Quercus robur x bicolor 'Nadler' / Kindred Spirit® Oak	B & B	2"
	ZG	6	Zelkova serrata 'Green Vase' / Green Vase Japanese Zelkova	B & B	2"
EVERGREEN T	REES				
	PD	3	Picea glauca 'Densata' / Black Hills White Spruce	B & B	2"
<u>SYMBOL</u>	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
SHRUBS	AA	20	Aronia melanocarpa 'Autumn Magic' / Autumn Magic Black Chokeberry	5 gal	
(+)	CM	22	Chamaebatiaria millefolium / Fernbush	5 gal	
(+)	FP	21	Fallugia paradoxa / Apache Plume	5 gal	
$\bigotimes$	LB	27	Lavandula angustifolia 'Buena Vista' / Buena Vista English Lavender	5 gal	
$\widetilde{\langle \cdot \rangle}$	PD3	21	Physocarpus opulifolius 'Donna May' / Little Devil™ Dwarf Ninebark	5 gal	
NAVANAVARIA	PC	10	Picea pungens 'Procumbens' / Creeping Colorado Spruce	5 gal	
$\odot$	PP2	18	Prunus besseyi 'P011S' / Pawnee Buttes® Sand Cherry	5 gal	
6. 2. 2. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	RA	18	Rhus trilobata 'Autumn Amber' / Autumn Amber Sumac	5 gal	
	VM	20	Viburnum dentatum 'Blue Muffin' / Blue Muffin Arrowwood Viburnum	5 gal	
GRASSES					
<b>3</b>	CK	25	Cenchrus orientalis 'Karley Rose' / Karley Rose Fountain Grass	2 gal	
AND HER	FM	26	Festuca mairei / Atlas Fescue	2 gal	
PERENNIALS	AK	24	Agastache x `Kudos Gold` / Kudos Gold Dwarf Anise Hyssop	1 gal	
SYMBOL	CODE	<u>QTY</u>	BOTANICAL / COMMON NAME	CONT	
GROUND COV	ERS PP	1,178 sf	Poa pratensis / Kentucky Bluegrass	804 Flat	



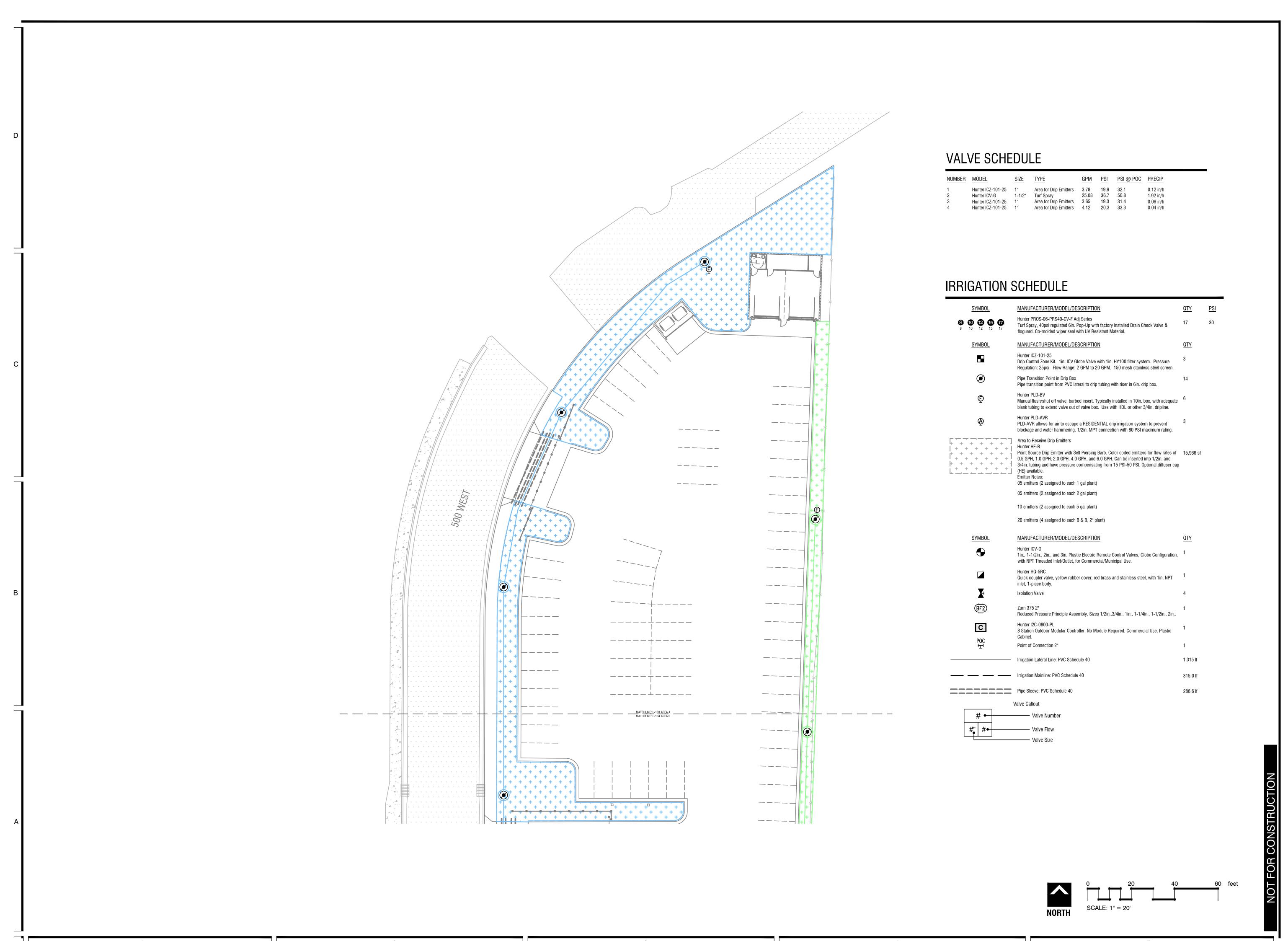
ONUMENT

MOTORS

(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

REVIEW SUBMITTAL

NOT FOR CONSTRUCTION



(435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

00 MOTORS

ONUMENT

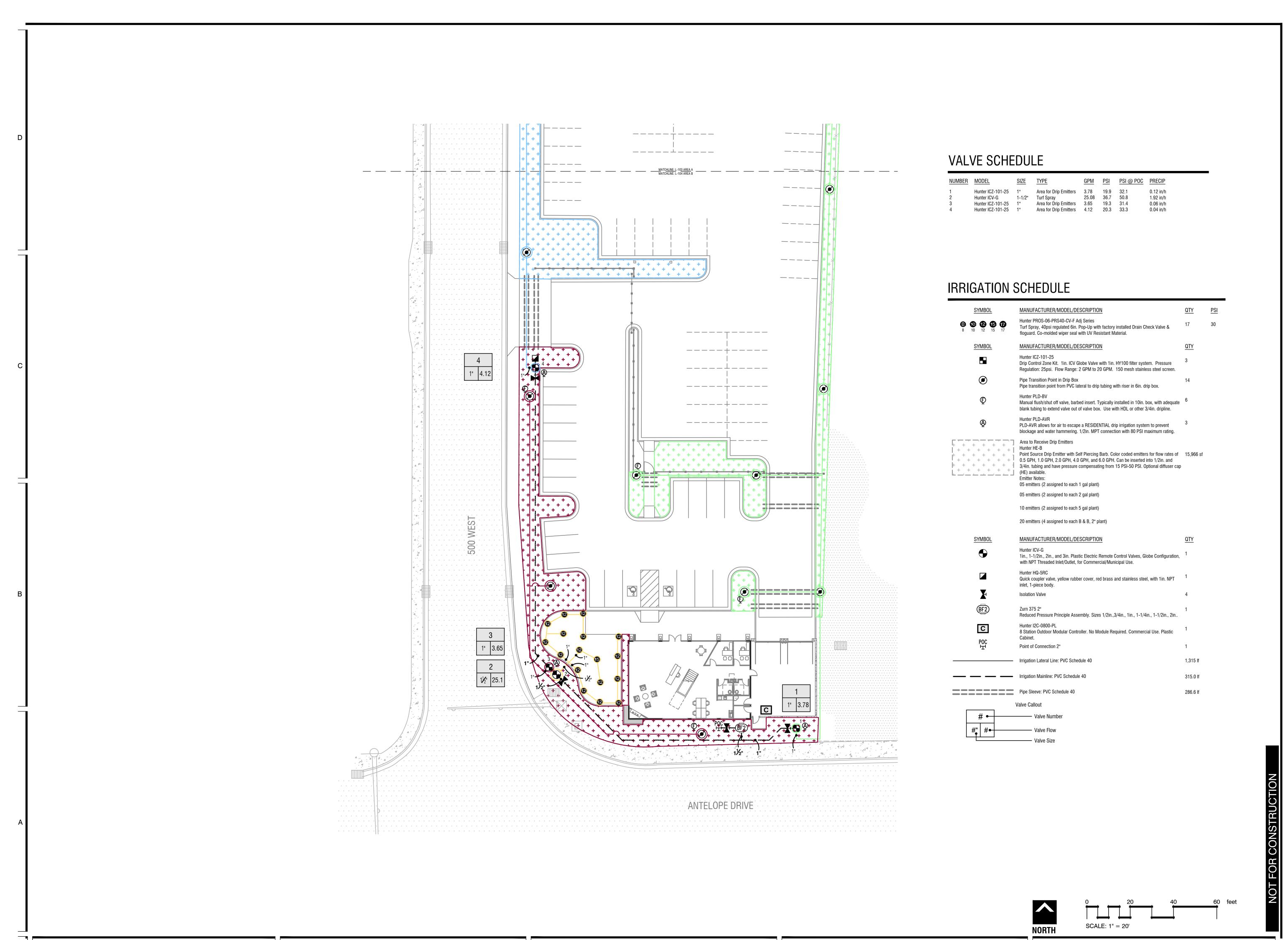
424207 PROJECT #: B. WRIGHT

K. ALTHOUSE CHECKED BY: 06.04.2025

REVIEW SUBMITTAL

NOT FOR CONSTRUCTION

IRRIGATION PLAN



DESIGN WEST

LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

ONUMENT MOTORS CO., INC.

- 460 WEST 1700 SOUTH - CLEARFIELD UT 84015

PROJECT #: 424207

DRAWN BY: B. WRIGHT

REVIEW SUBMITTAL

NOT FOR

NOT FOR CONSTRUCTION

K. ALTHOUSE

IRRIGATION PLAN

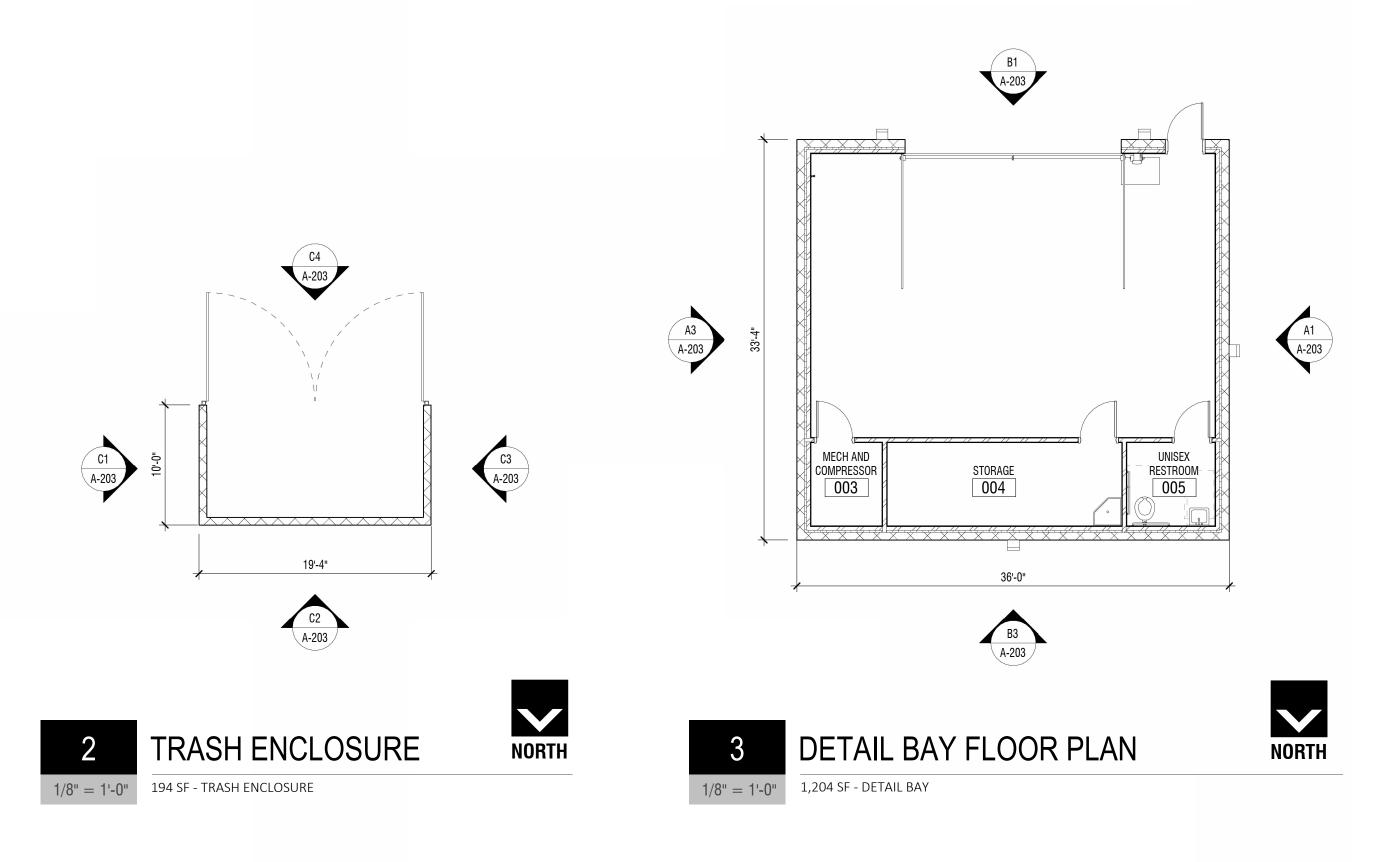
460 WEST 1700 SOUTH, CLEARFIELD, UT 84015

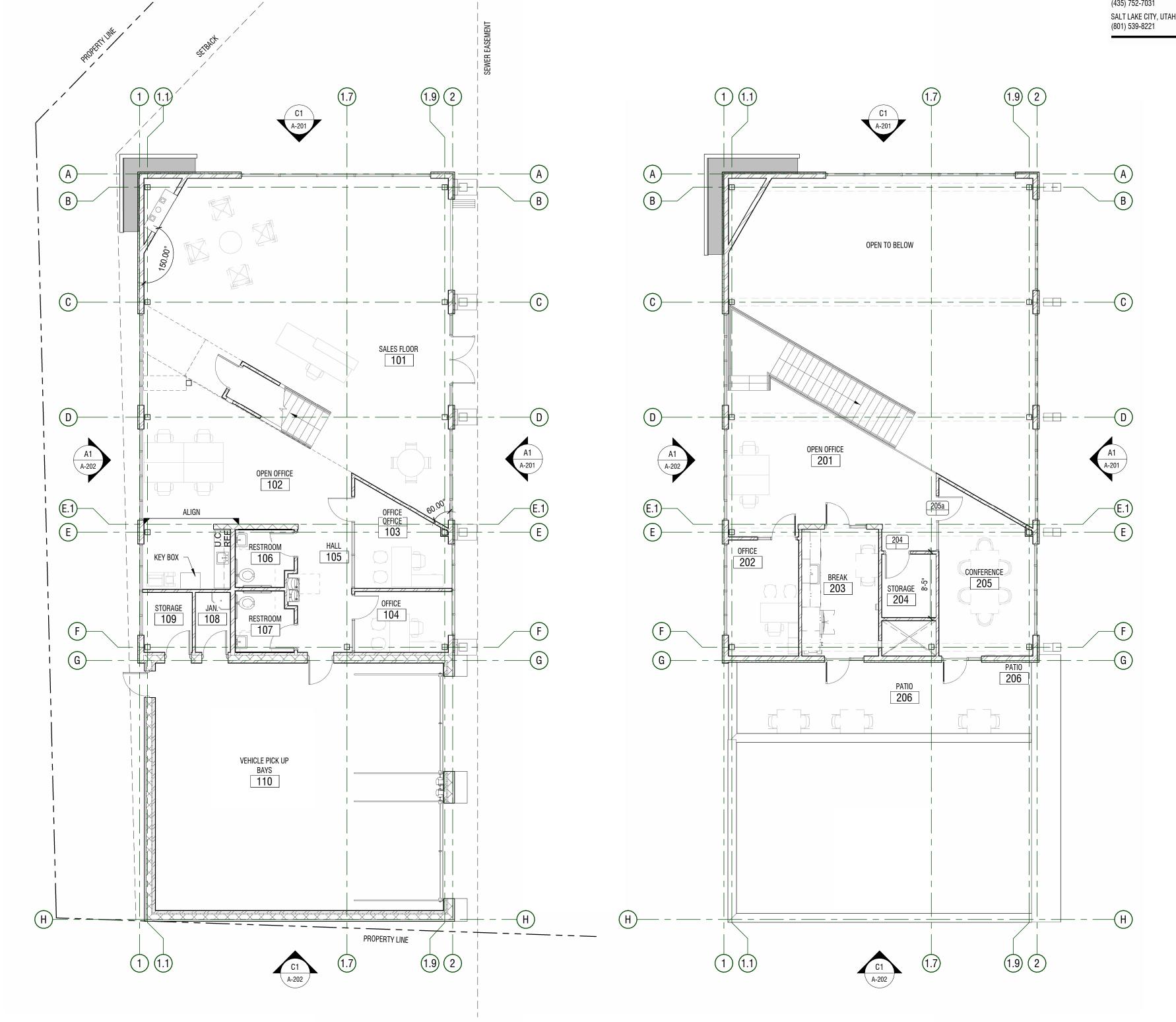


LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221



3D VIEW

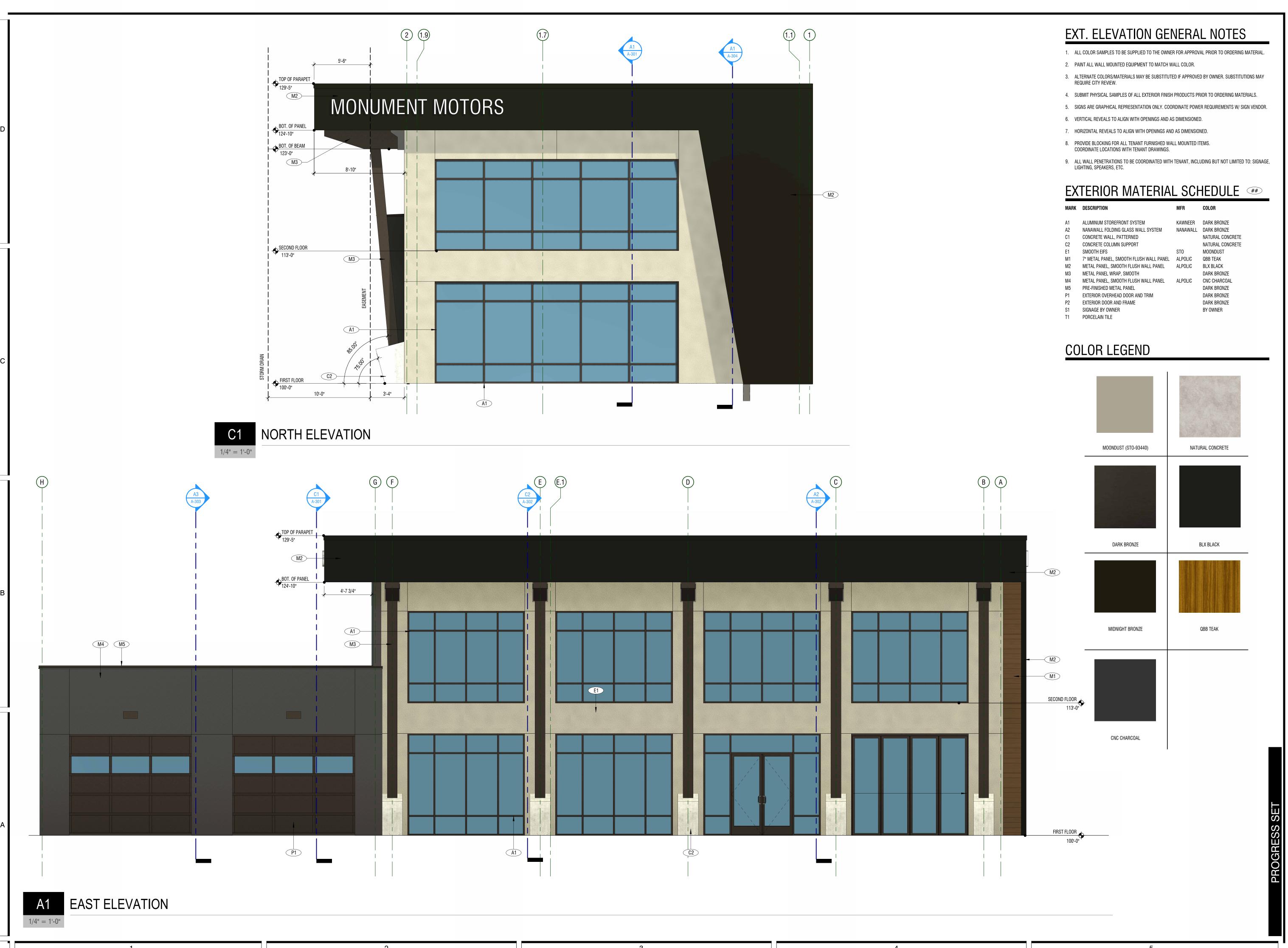














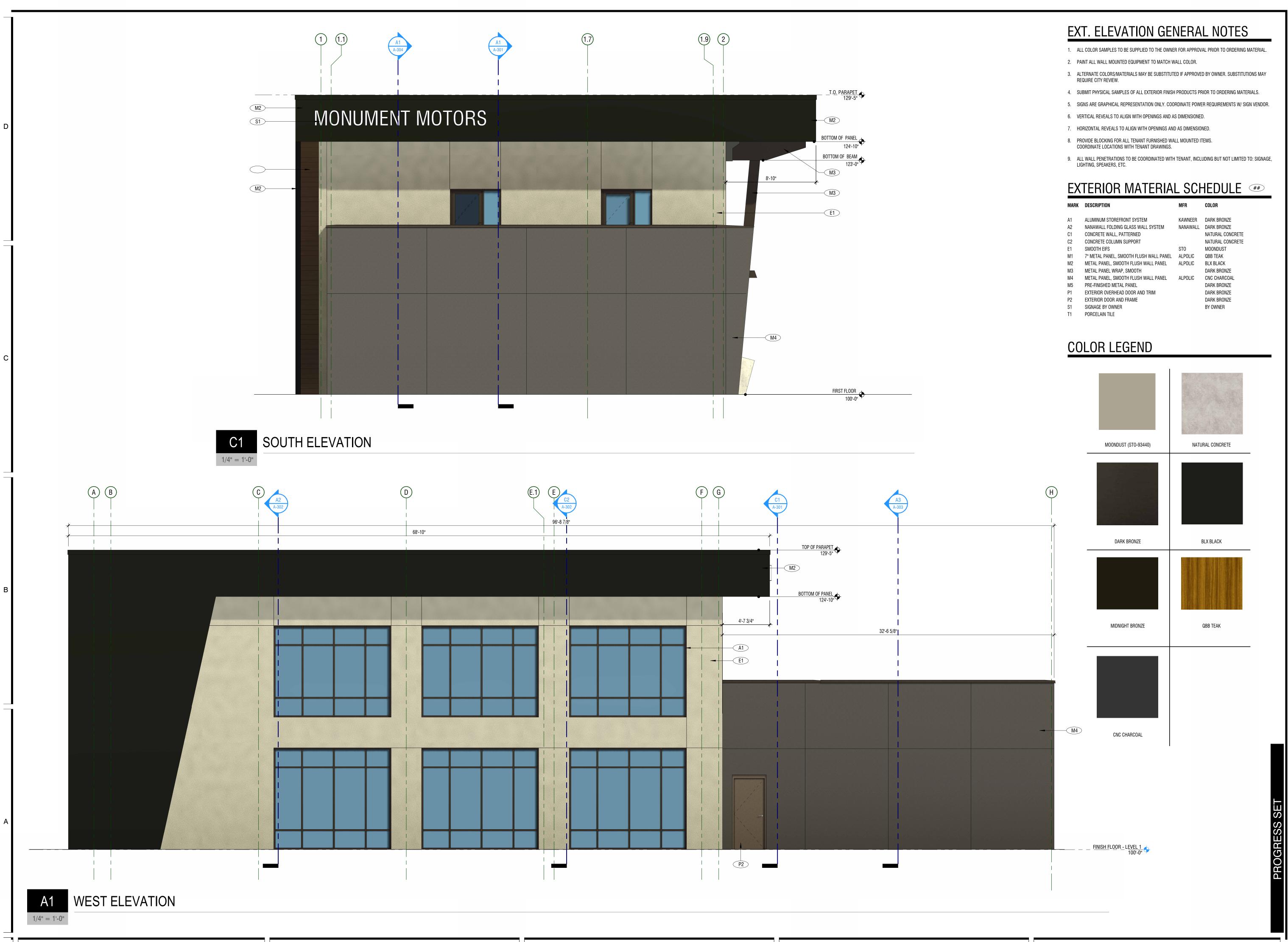
LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

URDOCK AUTO GROUP

OJECT #: 424207
AWN BY: ZH
BECKED BY: CD
SUED: 06.04.2025

ELEVATIONS -EXTERIOR







LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

OCK AUTO GROUP

MURD

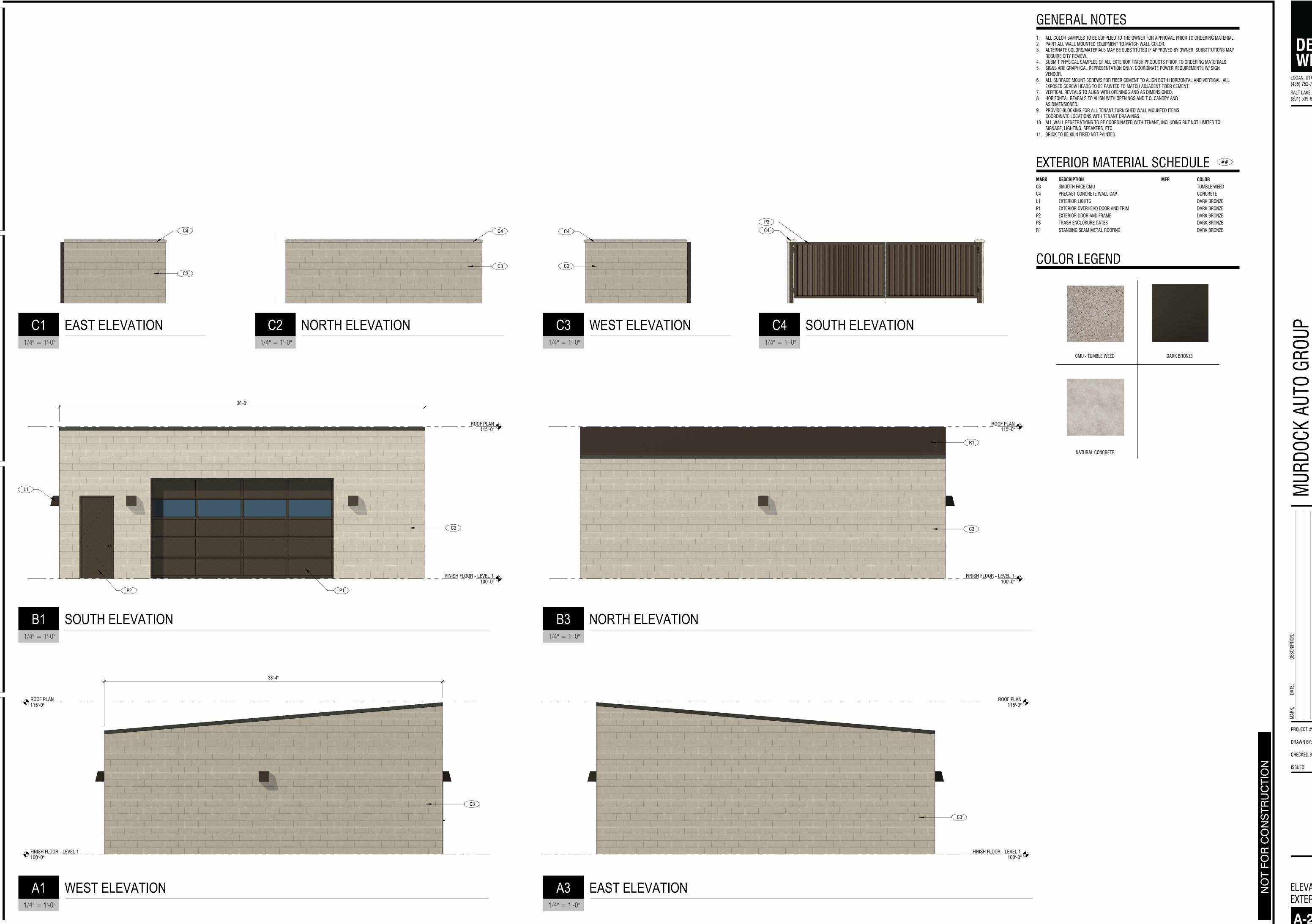
LOCATION, UT

OJECT #: 42420
AWN BY: Z
BECKED BY: C
SUED: 06.04.202

ISSUED: 06.04.2025

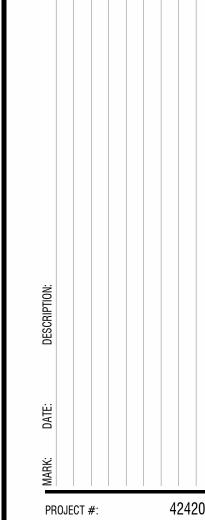
ELEVATIONS -EXTERIOR







LOGAN, UTAH (435) 752-7031 SALT LAKE CITY, UTAH (801) 539-8221

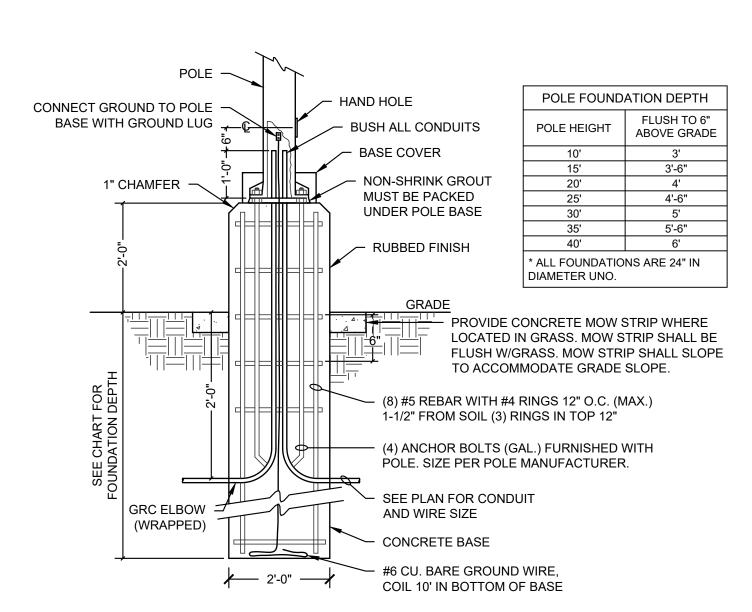


**ELEVATIONS** -**EXTERIOR** 

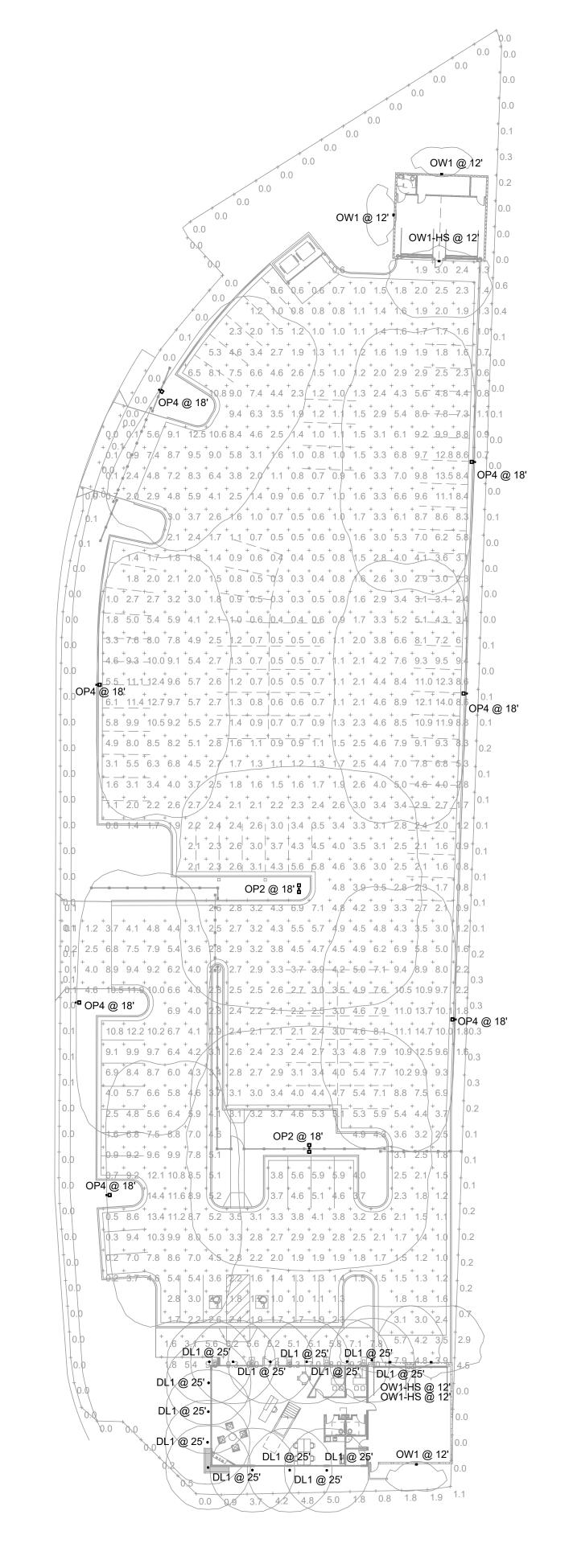


Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Property Line	+	0.3 fc	5.0 fc	0.0 fc	N/A	N/A
WALKWAY	+	6.6 fc	10.1 fc	1.6 fc	6.3:1	4.1:1
PARKING	+	3.9 fc	14.7 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
<u> </u>	OP2	2	Lithonia Lighting	DSX1 LED P3 40K 70CRI T4M	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 70 CRI Type 4 Medium	1	13968	1	204.34
	OP4	7	Lithonia Lighting	DSX1 LED P9 40K 70CRI BLC3	D-Series Size 1 Area Luminaire P9 Performance Package 4000K CCT 70 CRI Type 3 Extreme Backlight Control	1	24735	1	277.07
	OW1	3	Lithonia Lighting	WDGE2 LED P1 40K 70CRI T3M	WDGE2 LED WITH P1 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 3 MEDIUM OPTIC	1	1427	1	11.1658
	OW1- -HS	3	Lithonia Lighting	WDGE2 LED P3 40K 80CRI T4M	WDGE2 LED WITH P3 - PERFORMANCE PACKAGE, 4000K, 80CRI, TYPE 4 MEDIUM OPTIC	1	3147	1	32.1375
	DL1	13	Lithonia Lighting	LDN6 40/25 LO6AR LS	6IN LDN, 4000K, 2500LM, CLEAR, SPECULAR REFLECTOR, CRI80	1	2640	1	28.25

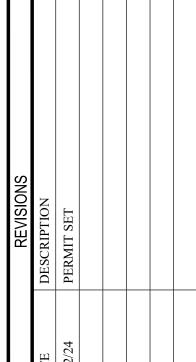








76 W 13775 S, STE 3 DRAPER, UT 84020 (801) 618-9656 eric@elementalelectricalengineers.com



MURDOCK

SHEET TITLE:

**PHOTOMETRIC** SITE PLAN

ES001

**FEATURES & SPECIFICATIONS**  $\textbf{INTENDED USE} \ -- \ \textbf{Typical applications include corridors, lobbies, conference rooms and private offices.}$ **CONSTRUCTION** — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs. Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.

AWG conductors, rated for 90°C. Accommodates 12"-24" joist spacing.  $Passive cooling thermal management for 25 ^{\circ} C standard; high ambient (40 ^{\circ} C) option available. Light engine and drivers$ are accessible from above or below ceiling.

Two combination  $\frac{1}{2}$  -3/4" and four  $\frac{1}{2}$ " knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12

Max ceiling thickness 1-1/2". **OPTICS** — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens. General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors. **ELECTRICAL** — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled. 70% lumen maintenance at 60,000 hours. **LISTINGS** — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated.

ENERGY STAR® certified product. **BUY AMERICAN** — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for

additional information. **WARRANTY** — 5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

A+ Capable options indicated by this color background.

LDN6

6" Open and WallWash LED

**New Construction Downlight** 

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. Example: LDN6 35/15 LO6AR LSS MVOLT EZ10										
LDN6										
Series	Color temperature	Lumens <sup>1</sup>	Aperture/Trim Color	Finish	Voltage					
LDN6 6" round	27/ 2700K 30/ 3000K 35/ 3500K	05     500 lumens     25     2500 lumens       07     750 lumens     30     3000 lumens       10     1000 lumens     40     4000 lumens       15     1500 lumens     5000 lumens	LO6 Downlight LW6 Wallwash WR2 White BR2 Black	LSS Semi-specular LD Matte diffuse LS Specular	MVOLT Multi-volt 120 120V 277 277V					

50/	5000K 15 1500 lumens 50 5000 lumens 5000 lumens		34/2 34/4
Driver	Options		
GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% D10 Minimum dimming 10% driver for use with JOT D1 Minimum dimming 1% driver for use with JOT EZ10 0-10V eldoLED driver with smooth and flicker- free deep dimming performance down to 10% EZ1 0-10V eldoLED driver with smooth and flicker- free deep dimming performance down to 10% EZ1 0-10V eldoLED driver with smooth and flicker- free deep dimming performance down to 1%  EDAB eldoLED DALI SOLDRIVE dim to dark	SF4 Single fuse TRW5 White painted flange TRBL5 Black painted flange EL6 Emergency battery pack with integral test switch. 10 Not Certified in CA Title 20 MAEDBS ELR6 Emergency battery pack with remote test switch. 10 Not Certified in CA Title 20 MAEDBS ELSD6 Emergency battery pack with self-diagnostics, integronstant Power, Not Certified in CA Title 20 MAEDBS ELRSD6 Emergency battery pack with self-diagnostics, remote Constant Power, Not Certified in CA Title 20 MAEDBS E10WCP6 Emergency battery pack, 10W Constant Power with in Certified in CA Title 20 MAEDB E10WCPR6 Emergency battery pack, 10W Constant Power with in Certified in CA Title 20 MAEDB NPP16D7 Emergency battery pack, 10W Constant Power with in Certified in CA Title 20 MAEDB NPP16D87 network power/relay pack with 0-10V dimmindrivers (GZ10, GZ1). NPP16DER7 network power/relay pack with 0-10V dimmindrivers (GZ10, GZ1). ER controls fixtures on emergency	JOT <sup>13</sup> Wireless rooi NPS80EZ <sup>7</sup> nLight® dimi NPS80EZER <sup>7</sup> nLight® dimi RR controls fi: NPS80EZER <sup>7</sup> nLight® dimi ER controls fi: NPS80EZER <sup>7</sup> nLight® dimi ER controls fi: CP <sup>12</sup> Chicago Plen RRL RELOC®-read sistent factor Available onl spec sheet or specification NLTAIRE <sup>9,10</sup> nLight® Air e mergency c ing for non-eldoLED NLTAIREM2 <sup>9,10</sup> nLight® AIRI Operation, vi pack options	num  dy luminaire connectors enable a simple and con- ry installed option across all ABL luminaire brands. ly in RRLA, RRLB, RRLAE, and RRLC12S. Refer to RRL n www.acuitybrands.com for the RELOC product is. enabled Dimming Pack Wireless Controls. Controls fixtures on circuit, not available with battery pack options Dimming Pack Wireless Controls. UL924 Emergency ia power interrupt detection. Available with battery s. l(n) Act Compliant

Accessories: O	rder as separate catalog number.
Accessories.	der as separate catalog hamber.
DC40FFCD	FMCD C . I I TOO II .
PS1055CP	FMC Power Sentry batterypack, T20 compliant,
	field installable, 10w constant power
FACICOM 27F	Compact interventible omergency AC never system
<b>EAC ISSM 375</b>	Compact interruptible emergency AC power system

AC ISSM 125 Compact interruptible emergency AC power system

GRA68 JZ Oversized trim ring with 8" outside diameter 1

- Overall height varies based on lumen package; refer to dimen- 9 Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPPsional chart on page 3. Not available with finishes. Not available with emergency options. 4 Must specify voltage 120V or 277V.
- 10 NLTAIR2, NLTAIRER2 and NLTAIREM2 not recommended for metal ceiling installations. 11 Fixture height is 6.5" for all lumen packages with HAO. Available with clear (AR) reflector only. 6 12.5" of plenum depth or top access required for battery pack gency battery pack option.
- 12 Must specify voltage for 3000lm and above, 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emer-Will require an emergency hot feed and normal hot feed. options. Not available with CP. Not recommended for metal Fixture begins at 80% light level. Must be specified with NPceiling installation. Not for use with emergency backup power S80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers. systems other than battery packs.

DOWNLIGHTING LDN6



**Specifications** 

Depth (D1):

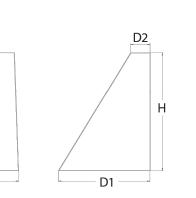
Depth (D2):

WDGE2 LED Architectural Wall Sconce Visual Comfort Optic









OW1, OW1-HS

Introduction

The WDGE LED family is designed to meet specifier's every wallmounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

ds design select	Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit <u>www.acuitybrands.com/designselect</u> *See ordering tree for details

### WDGE LED Family Overview

11.5"

Luminaire	uminaire Optics Standard EM, 0°C Cold EM, -20°C		Concor	Approximate Lumens (4000K, 80CRI)							
Luminaire	Optics	Standard EW, U C	COIG EM, -20 C	Sensor	P0	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W			750	1,200	2,000				
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	-	1,200	2,000	3,000	4,500	6,000	
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200		
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000		
WDGE4 LED	Precision Refractive			Standalone / nLight	-	12,000	16,000	18,000	20,000	22,000	25,000

Ordering	T C	
Orderind	Into	rmatior
Oracinig	11110	. III G CI O I

<b>EXAMPLE:</b>	WDGE2 LED	P3 40K 80CRI	VF MVOLT	SRM DD
				· · · · · · ·

				EARIVIFI	E: VVD	GEZ LED P3 40K 60C	KI VE IVIV	OLI 3	(IVI DDB/
Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting			
WDGE2 LED	P11 P1SW P21 P2SW P31 P3SW P41 Door with small window (SW) is required to accommodate sensors. See page 2 for more details.	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K <sup>2</sup> 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347 <sup>3</sup> 480 <sup>3</sup>	Shipped included  SRM Surface mounting bracket  ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) <sup>4</sup>	Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, right conduit entry). Use when th is no junction box available. <sup>5</sup>		
MA <b>E10WH</b> Eme	ergency battery backup, Certified in CA Title 20 EDBS (4W, 0°C min) ergency battery backup, Certified in CA Title 20 EDBS (10W, 5°C min)	PIR Bi-I dav	level (100/35%) vn switching.		ting heights. I	ntended for use on switched circuits with o		DDBXD DBLXD DNAXD	Dark bronze Black Natural aluminum

E4WH	Emergency battery backup, Certified in CA Title 20	Standalone Sen	sors/Controls (only available with P1SW, P2SW & P3SW)	DDBXD	Dark bronze
	MAEDBS (4W, 0°C min)	PIR	Bi-level (100/35%) motion sensor for 8-15′ mounting heights. Intended for use on switched circuits with external dusk to	DBLXD	Black
E10WH	Emergency battery backup, Certified in CA Title 20		dawn switching.	DNAXD	Natural
	MAEDBS (10W, 5°C min)	PIRH	Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk		aluminum
E20WC			to dawn switching	DWHXD	White
	MAEDBS (18W, -20°C min)	PIR1FC3V	Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	DSSXD	Sandstone
PE	Photocell, Button Type <sup>6</sup>	PIRH1FC3V	Bi-level (100/35%) motion sensor for 15–30' mounting heights with photocell pre-programmed for dusk to dawn operation.	DDBTXD	Textured dark
DS	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details) <sup>7</sup>	Networked Sens	sors/Controls (only available with P1SW, P2SW & P3SW)	DUDIND	bronze
DMG	0-10V dimming wires pulled outside fixture (for use	NLTAIR2 PIR	Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8–15' mounting heights.	DBLBXD	Textured black
ріміц	with an external control, ordered separately) <sup>8</sup>	NLTAIR2 PIRH	Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15–30' mounting heights.	DNATXD	Textured natural
BCE	Bottom conduit entry for back box (PBBW). Total of 4	NLTAIREM2 PIR	Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off		aluminum
_	entry points.	5 6 8 8 8 8 8 8	photocell for 8-15' mounting heights <sup>9</sup>	DWHGXD	Textured white
DSLE	Dual Switching (1 Driver, 2 Light Engines)	NLTAIREM2 PIRH	Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off	DSSTXD	Textured

CCE Coastal Construction<sup>5</sup>

COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2019-2024 Acuity Brands Lighting, Inc. All rights reserved.

photocell for 15-30' mounting heights<sup>9</sup>

See page 4 for out of box functionality

WDGE2 LED Rev. 08/08/24 **D-Series Size 1** LED Area Luminaire

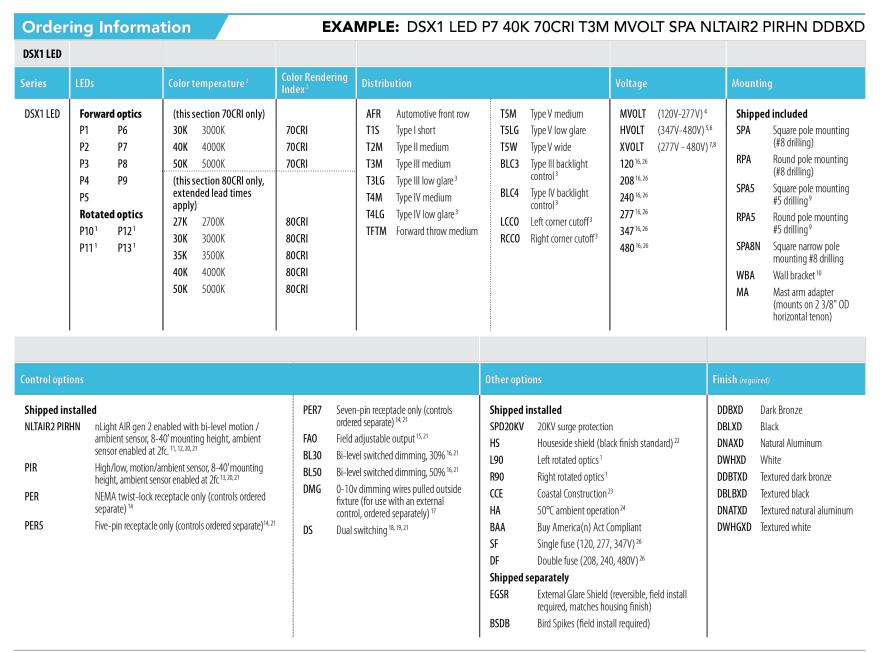
	d"serie	25	
Specificat	tions	100 UI	
EPA:	0.69 ft <sup>2</sup> (0.06 m <sup>2</sup> )		
Length:	32.71 " (83.1 cm)		
Width:	14.26" (36.2 cm)	no no	
Height H1:	7.88" (20.0 cm)	L	
Height H2:	2.73" (6.9 cm)	H2	
Weight:	34 lbs (15.4 kg)		

<sup>Type</sup> OP1, OP2, OP3, & OP4

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.





One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com © 2011-2023 Acuity Brands Lighting, Inc. All rights reserved.

DSX1-LED Rev. 09/05/23

MURDOCK

#24114

76 W 13775 S, STE 3

DRAPER, UT 84020

(801) 618-9656

eric@elementalelectricalengineers.com

SHEET TITLE:

**PHOTOMETRIC DETAIL** 

ES002



# Planning Commission STAFF REPORT

AGENDA ITEM
#2

**TO:** Clearfield City Planning Commission

**FROM:** Tyson Stoddard, Associate Planner

tyson.stoddard@clearfieldcity.org

(801) 525-2718

**MEETING DATE:** Wednesday, July 2<sup>nd</sup>, 2025

SUBJECT: Discussion and Possible Action on the Clearfield City Transportation Master Plan,

a plan to provide guidance on the operation of the City's transportation network

and future infrastructure investments. (Administrative Matter)

#### STAFF RECOMMENDATION

Staff recommends that the Planning Commission forward a recommendation of **APPROVAL** to the City Council for the **Clearfield City Transportation Master Plan**. This recommendation is based upon the findings outlined in this report.

#### PLANNING COMMISSION RECOMMENDATION OPTIONS: | GENERAL PLAN

After careful consideration and analysis of the information included in this report, the Planning Commission may forward one of the following recommendations to the City Council:

- Move to recommend approval of the Clearfield City Transportation Master Plan to the Clearfield City Council.
- **2. Move to recommend Denial** of the Clearfield City Transportation Master Plan to the Clearfield City Council.
- **3.** Move to Table recommendation of the Clearfield City Transportation Master Plan and request additional time with an articulated basis in which there is a need to further consider the plan and its contents.

#### **BACKGROUND**

In March of 2024, Clearfield City was awarded \$106,000 from the Wasatch Front Regional Council (WFRC) as part of the Transportation and Land Use Connection (TLC) grant program, to complete a transportation master plan. The grant required a local match of \$24,000 for a total project budget of \$130,000. Wall Consultant Group (WGC) was the selected contractor for the plan, and they assembled a project team consisting of City personnel, Fehr and Peers, and Zions Bank. This group met throughout the planning process, with a project kickoff meeting and regular coordination meetings up until the draft plan was complete.

#### What is a Transportation Master Plan?

The Transportation Master Plan (TMP) guides transportation infrastructure investments for the future by addressing several goals identified by the City. The guidance is established by understanding the transportation network's existing operations, while forecasting to 2034 and 2050 to identify deficiencies in the roadway network that may occur due to land development and the resulting population growth.

This TMP also covers best practices, access management standards, safety analyses, bridge maintenance, traffic impact study standards, and truck routes.

#### **Coordination Efforts**

Clearfield City hosted a work meeting with stakeholders, neighboring cities, UDOT, UTA, and WFRC to coordinate the transportation planning efforts. Discussion included roadway plans in neighboring cities, regional transit plans, the active transportation network, and increased connectivity. Follow up meetings occurred with West Point City, MIDA/Falcon Hill, Freeport Center, and Davis County.

### STAFF RECOMMENDATION/CONCLUSION

Staff recommends that the Planning Commission forward a recommendation of **APPROVAL** to the City Council for the proposed **Clearfield City Transportation Master Plan**. This recommendation is based upon the following findings:

- 1. The proposed plan includes consistent goals and objectives in coordination with the Clearfield City General Plan.
- 2. The proposed plan is a tool to manage growth, providing analysis of the transportation network and identifying future deficiencies that may occur due to increased traffic associated with land development and increased population.
- 3. The proposed plan will function as a guide for future transportation infrastructure investments, allowing the city to better plan and prioritize future projects.
- 4. The Transportation Master Plan will provide greater opportunities for grant funding of transportation infrastructure and projects within the City.

#### **ATTACHMENTS**

1. Transportation Master Plan DRAFT

MAY 2025



TRANSPORTATION MASTER PLAN





FEHR PEERS

### TABLE OF CONTENTS

I. Introduction	4
A. Overview	4
B. Previous Studies	6
C. TMP Development Process	9
D. Clearfield Characteristics	10
II. Roadway Network	12
A. Purpose	12
B. Roadway Functional Classification	12
C. Level of Service Definitions	18
D. Existing (2024) Conditions	19
E. Travel Demand Model	22
G. Future (2034) Conditions	
H. Future (2050) Conditions	30
I. Roadway and Intersection Projects	36
III. Public Transit	40
A. Existing Transit Service	
B. Future Transit Service and Projects	42
IV. Active Transportation	45
A. Existing Facilities	

B. Future Projects	49
V. City Transportation System Management	
A. Purpose	
B. Transportation Safety Analysis	
C.Access Management Standards	58
D. Traffic Impact Studies	59
E. Connectivity	59
G. Freight	65
F. Bridge Inventory, Maintenance And	
Improvements Plan	67
VI. Capital Facilities and Implementation Plan	ı . 72
A. Capital Facilities Plan	72
B. Additional Transportation Strategies	75
C.Performance Metrics	
VII. Conclusion	76
A. Overview	76
B. Next Steps	
VIII. Appendix	78

### LIST OF TABLES

Table 1: Historic and Projected Population Growth	10
Table 2: Clearfield Key Cross Section Elements	13
Table 3: Level of Service Capacity Ranges	19
Table 4: Future Roadway Projects	38
Table 5: Future Intersection Projects	39
Table 6: UTA Routes Serving Clearfield City	40
Table 7: Changes to UTA Routes Serving Clearfield Proposed in 5-Year Service Plan	42
Table 8: Future Transit Projects by Phase	44
Table 9: Active Transportation Crossing Projects by Phase	51
Table 10: Active Transportation Path Projects by Phase	52
Table 11: Percent of Crashes (2019–2024, Excluding I-15)	54
Table 12: WFRC CSAP Recommendations	57
Table 13: Bridge Inventory	71
Table 14: CFP Vehicle Capacity Projects	72
Table 15: CFP Active Transportation Projects	73

#### List of Figures

Figure 1: Vicinity Map	4
November 14, 2024, TMP Entity Coordination Meeting at Clearfield City Hall	9
Figure 2: Historical and Projected Clearfield Population	11
Figure 3: Worker In-Flow and Out-Flow (2021)	11
Figure 4: Functional Classification Definitions	
Figure 5: Local Residential Cross Section	13
Figure 6: Special Residential Cross Section	14
Figure 7: Minor Collector Cross Section	14
Figure 8: Major Collector Cross Section	15
Figure 9: Side Treatment Options	16
Figure 10: All figure numbers after this need to be decreased by one	17
Figure 11: Level of Service Definitions	18
Figure 12: Traffic Count Data	20
Figure 13: Existing (2024) Roadway LOS and ADT	
Figure 14: 2024 Combined Household and Employment Density	23
Figure 15: 2024 to 2034 Combined Household and Employment Density Growth	25
Figure 16: 2034 Combined Household and Employment Density	26
Figure 17: 2034 Roadway LOS and ADT— No-Build	28
Figure 18: 2034 Roadway LOS and ADT—Build	29
Figure 19: 2024 to 2050 Combined Household and Employment Density Growth	31
Figure 20: 2050 Combined Household and Employment Density	32
Figure 21: Future (2050) LOS and ADT—No-Build	34
Figure 22: Future (2050) LOS and ADT—Build	35
Figure 23: Roadway and Intersection Projects	37
Figure 24: Clearfield Existing Transit	41
Figure 25: Clearfield Future Transit Facilities	43
Figure 26: Existing Clearfield Active Transportation Facilities	46
Figure 27: Clearfield Pedestrian Potential Demand Score	
Figure 28: Clearfield Bike Potential Demand Score	48
Figure 29: Clearfield Active Transportation Network (Existing & Future Facilities)	
Figure 30: 2019 to 2023 Clearfield City Crash Trends	53
Figure 31: The Safe System Approach	
Figure 32: Heat Map of Crashes in Clearfield (2019–2023)	55
Figure 33: Severe Crashes in Clearfield (2019–2023)	56
Figure 34: Opportunity Connections Across Major Barriers	62
Figure 35: Local Connectivity Improvement Opportunities	64
Figure 36: Clearfield City Designated Truck Routes	66
Figure 37: Bridges within Clearfield City	
Figure 38: Future Projects—Capital Facilities Plan	74



### I. INTRODUCTION

### A. OVERVIEW

Clearfield City (City) continues to see rapid growth with the construction of residential and commercial developments throughout the City. Significant growth in neighboring cities is also impacting Clearfield roadways and facilities. Clearfield's current population is estimated near 35,000. This represents an increase of about 4,000 since the 2020 census, and about 6,000 since the 2010 census. It is projected that this growth will continue, with the population reaching 48,000 by 2050.

This Transportation Master Plan (TMP) guides transportation infrastructure investments for the future by addressing several goals identified by the City. Understanding the roadway network's existing and future operation is key to planning for Clearfield's transportation needs. Once existing conditions are established, roadway conditions are forecasted to 2034 and 2050 to identify deficiencies in the roadway network that may occur due to land development and the resulting population growth.

Additionally, this TMP covers City transportation management-related best practices, such as access management standards, safety analyses, establishing a bridge maintenance and improvements plan, truck routes, and traffic impact study standards. An interactive online mapping website has been created to summarize this TMP.

The location of Clearfield within the context of Davis and Weber Counties is shown in **Figure 1**.

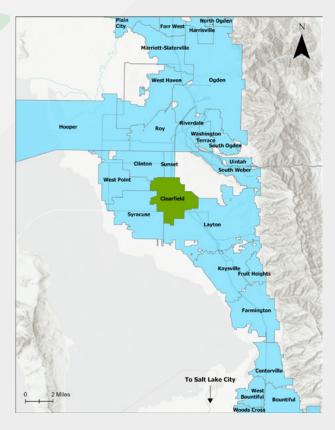


Figure 1: Vicinity Map

#### **GOALS AND OBJECTIVES**

Consistent with the Clearfield General Plan, Clearfield aims to have a safe and connected multi-modal transportation network to offer the community access to opportunities, foster a high quality of life, and support sustainable, happy, and healthy neighborhoods. As follows are the key objectives, policies and strategies that the City has identified to achieve this goal:

### **Objectives**

Five objectives reflect key targets Clearfield would like to achieve to meet its overall goal for transportation:

- 1. Promote the enhancement of all modes of transportation throughout the City to support regional connections to destinations in the Salt Lake and Ogden/Clearfield metropolitan areas.
- Focus design requirements and investments on multi-modal transportation projects that support the planned growth in the City's key centers and promote citywide connections and economic resilience.

- Provide easy connections via multiple modes to community amenities, services, and jobs for residents, daytime employees, and visitors by working to improve the transportation network.
- Preserve and enhance the City's main corridors by defining each corridor's key functions and focusing on transportation investment accordingly.
- **5.** Make Clearfield City more comfortable and attractive for pedestrians and bicyclists, with a focus on safety for all users.

### **Policies and Strategies**

The following policies and strategies reflect a framework of potential options for helping Clearfield meet the five objectives and overall goal for transportation:

TA-1 Provide safe and efficient movement of people and goods within and through the City, and to regional transportation connections and/or destinations.

- Strive for a balanced, context-sensitive set of major corridors that manage congestion in a way that is supportive of businesses and allows efficient travel while balancing the need to preserve quality of life for City residents.
- Improve connectivity in Clearfield in areas with poor maintenance conditions, facility gaps, high delay and/or multimodal safety barriers.

TA-2 Continue to coordinate with nearby jurisdictions and regional partners and stakeholders—including the Utah Department of Transportation (UDOT), Utah Transit Authority (UTA), Wasatch Front Regional Council (WFRC), and Davis County—on multimodal transportation, including:

- Roadway projects that improve functionality and connections
- Freight connectivity projects that balance the needs of freight traffic with multimodal safety and mobility
- Active transportation projects that improve and expand the regional network
- Integrated transit planning to facilitate transit connections within and between

- Clearfield and the regional network
- Safety projects identified in the WFRC Comprehensive Safety Action Plan and other regional planning efforts

TA-3 Continue to support cross-city multi-modal travel by improving routes and connections at key areas, including:

- Clearfield FrontRunner station
- Freeport Center
- Downtown Clearfield
- Parks, open spaces, and schools
- Transportation barrier crossings, such as I-15 overpasses; rail tracks; bridges; and major roadways

TA-4 Ensure the parking, access, and multi-modal transportation options for housing in centers are designed to be safe and convenient while minimizing impacts on surrounding neighborhoods.

TA-5 Continue to evaluate additional strategies and standards for city-wide parking policies that reduce extraneous amounts of land used only for parking, referring to the parking study conducted in 2022. These strategies may include, but are not limited to:

- Shared parking standards
- Reduction of minimum parking requirements
- The use of maximum parking requirements in designated "centers", and
- The opportunity to count on-street parking toward parking requirements for uses associated with short-term parking, such as ground floor retail, in specific areas

TA-6 Continue to collaborate with UDOT on implementing context-sensitive design solutions to the major corridors connecting to and through Clearfield, which contribute to local and regional impressions of Clearfield's community character.

TA-7 Continue to develop and implement contextappropriate streetscape requirements throughout the City's road network to consistently improve the public realm and physical character of Clearfield. Streetscape improvements include, but are not limited to, street trees, landscaping, sidewalks, furnishings, lighting, and on-street or separated bike lanes. TA-8 Continue to support the expansion of each school's **Safe Routes to School (SRTS)** coverage by working to make any route a safe route.

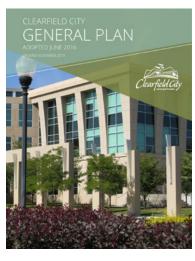
TA-9 Support the success of various destinations in Clearfield by creating high-quality, comfortable, and safe routes geared toward walking, biking, and other forms of active transportation. Enhance the safety and experience of active transportation travel by:

- Using sufficient signage and/or pavement markings for on-street bike lanes and routes;
- Coordinating implementation of on-street bike lanes with proposed streetscape and roadway projects. This should include prioritization of separated bicycle facilities where feasible to improve comfort and safety for bicyclists traveling locally and regionally.
- Prioritization and implementation of sidewalk improvements and filling sidewalk gaps on high-use routes.

**TA-10** Continue to advance the initiatives of the North Davis Active Transportation Implementation Plan.

### **B. PREVIOUS STUDIES**

### **CLEARFIELD GENERAL PLAN (2021)**



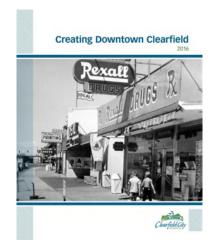
The Clearfield General Plan establishes a vision for sustainable growth in Clearfield. It describes the character of each land-use in the City and includes a land-use map for the City. It also defines future plans for transportation improvements and references the 2016 Creating Downtown Clearfield plan.

### **CLEARFIELD STATION AREA PLAN (2024)**



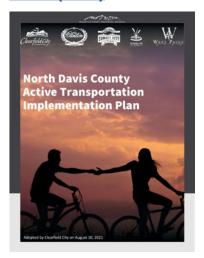
The Clearfield Station Area Plan details a vision for developing the Clearfield Station Area into a vibrant, mixed-use, highly connective transit-oriented neighborhood. It builds on the 2019 plan, expanding its focus to align with recent state planning requirements and the changing dynamics of Clearfield's development landscape. The plan covers approximately 56 acres near the Clearfield FrontRunner Station, aiming to establish a walkable, connected community that serves as a regional destination for employment, housing, shopping, and recreation.

### **DOWNTOWN CLEARFIELD (2016)**



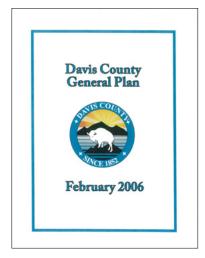
Published in 2016 and subsequently attached to the adopted General Plan, Creating Downtown Clearfield sought "to accomplish two main objectives: (1) to create a vision for downtown Clearfield, and (2) to develop supporting recommendations on how to achieve and implement the vision over time." Creating Downtown Clearfield covers the area along SR-126 between 700 South and 650 North and includes the Clearfield Station Area. Pertaining to transportation, Creating Downtown Clearfield supports a variety of strategies intended to minimize automobile dependency in the emerging downtown area.

# NORTH DAVIS COUNTY ACTIVE TRANSPORTATION IMPLEMENTATION PLAN (2021)



This multijurisdictional plan outlines a series of projects aimed at improving the connectivity and cohesion of the active transportation network across the communities of Clearfield, Clinton. Sunset, Syracuse, and West Point. For Clearfield, the plan includes numerous recommendations developed through a project prioritization process, several of which are now incorporated into the latest WFRC Regional Transportation Plan (RTP). Notably, the plan proposes a shared-use path and on-road bike facilities along Antelope Drive, as well as a trail linking the Clearfield FrontRunner Station to nearby east-west arterials to improve first/last mile transit access. Access to the FrontRunner station from downtown is further improved by the recommendation to build bike lanes along State Street. The overarching goal is to create a safe, well-connected, and accessible active transportation network that supports both recreational and commuting needs.

### **DAVIS COUNTY GENERAL PLAN (2006)**



The Davis County General Plan provides a succinct set of policies to address local values and challenges, primarily focused on balancing the needs of agriculture and increasing growth. The Strategic Plan (2004) serves as a supporting document that addresses transportation issues in Davis County, several of which have been addressed by subsequent regional planning efforts since the plan was published (e.g., improvements to I-15 and the construction of Legacy Parkway and FrontRunner). Two major needs that were identified remain unmet: a north-south light rail or BRT route and an east-west connection on 200 South to overcome rail barriers to walking and biking access.

# UTA FALCON HILL SMALL AREA TRANSIT STUDY (2021)

The Falcon Hill Small Area Transit Study provides a comprehensive evaluation of transportation needs and future development impacts related to the Falcon Hill area, which lies adjacent to Hill Air Force Base (HAFB) in northern Davis County. The study identifies key transit and mobility challenges as Falcon Hill evolves into a major regional employment hub, with an anticipated addition of approximately 1,000 new jobs annually from 2020 to 2035. Of particular concern are traffic congestion and limited public transit options, which are expected to worsen unless strategic transportation alternatives are implemented.

### UTA FIVE-YEAR SERVICE PLAN (2025-2029)



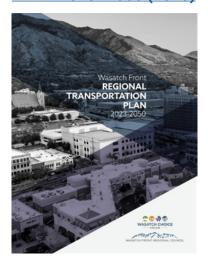
The UTA Five-Year Service Plan outlines UTA's approach to addressing increasing transit demand driven by regional growth. Updated every two years, the plan provides an overview of planned service adjustments, incorporating insights from both regional and local plans. Its goals are to align transit services with revenue forecasts, adapt to shifting travel patterns, enhance reliability, and foster community engagement.

### **UTA LONG-RANGE TRANSIT PLAN (2023)**



The UTA Moves 2050 Long-Range Transit Plan phases a strategy for the future of public transportation along the Wasatch Front, with an emphasis on addressing the region's rapid growth and expanding access to key destinations like schools, job centers, and essential services by implementing its "Vision Network." The plan also highlights the need for transit-oriented development to support Clearfield's growing population, encouraging the use of active transportation options like biking and walking. These improvements are part of a broader regional strategy to enhance connectivity and improve service reliability throughout northern Davis County as major employers, new families, and other kinds of growth increase in the area.

### WFRC REGIONAL TRANSPORTATION PLAN 2023–2050 (2023)

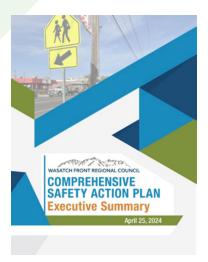


WFRC's RTP outlines a long-term vision for the regional transportation system through 2050, focusing on roadways, transit, and active transportation. The plan aims to support regional economic growth by developing a resilient, intermodal transportation system. Key features relevant to Clearfield include operational roadway improvements to 1000 West and Antelope Drive, roadway widening on SR-193, double tracking the FrontRunner commuter rail, increased frequencies on local bus routes, and several major active transportation investments.

# WFRC COMPREHENSIVE SAFETY ACTION PLAN (2024)

The WFRC Comprehensive Safety Action Plan was a regional effort undertaken to develop a plan to

Clear field City



address rising crash rates in the WFRC region. The plan provides project and policy recommendations for WFRC to implement at the regional level, such as an updated project prioritization process, while individual communities receive tailored strategies and project suggestions.

### C. TMP DEVELOPMENT PROCESS

To help ensure existing and future needs are met while providing a clear vision for Clearfield to grow and change, Wall Consultant Group (WCG) assembled a TMP project team, coordinated with neighboring jurisdictions, and met with the planning commission and city council. Each of these efforts are summarized below.

### **PROJECT TEAM**

A project team was established with City personnel, Fehr and Peers, Zions Bank, and WCG. This group met throughout the planning process and conducted a kickoff meeting, monthly coordination meetings, neighboring jurisdiction coordination, and planning commission/city council coordination. Team members from the City included Brad Wheeler, Brad McIlrath, Tyson Stoddard, and Braden Felix.

### **EXTERNAL COORDINATION WITH NEIGHBORING JURISDICTIONS**

On Thursday November 14, 2024 Clearfield City hosted a working lunch for prominent stakeholders, neighboring cities, UDOT, UTA, and WFRC to coordinate the update of the City's TMP with its neighbors. The consultants facilitated a review of

their existing and future transportation plans. The following organizations were invited:

- Clearfield City
- Davis County
- Syracuse City
- Davis School District
- Layton City
- West Point City
- Clinton City
- Sunset City
- WFRC UDOT

UTA

- Freeport Center
- HAFB

Meeting topics included future roadway plans in neighboring cities, coordinating cross section dimensions on regional roadways, outlining regional transit plans, discussing the regional active transportation network, discussing ways to increase connectivity and safety through the Freeport Center, and discussing plans for future schools in the City. Several follow-up meetings occurred with West Point City, MIDA Falcon Hill, Freeport Center, and Davis County. In addition, the potential for a follow-up study examining opportunities for transit onto HAFB was further discussed by Layton City, WFRC, and Clearfield City staff. Clearfield and Layton City staff should work with WFRC Staff to follow up on applying to WFRC for future study funding.



November 14, 2024, TMP Entity Coordination Meeting at Clearfield City Hall

### PLANNING COMMISSION AND CITY COUNCIL

To assist with the adoption of the TMP, IFFP, and IFA, WCG presented the analysis, findings, and recommendations from this TMP to the City Council and Planning Commission as the final step of the plan's development.

# D. CLEARFIELD CHARACTERISTICS

The purpose of this section is to discuss the existing and future land use and demographics of Clearfield City. The land use and demographic characteristics are used in the travel demand modeling process to project traffic volumes and determine future transportation needs.

#### **LAND USE**

As land use directly drives the quantity and location of new vehicle/bike/transit trips, it is essential to pinpoint changes in future land use to understand the needs of the future transportation network. As new areas develop and existing areas redevelop over time, changes to the transportation network are often needed to accommodate the associated growth and changes in travel demand. The zoning and future land use maps can be found on the City's website.

Given Clearfield's location in the Wasatch Front, direct access to I-15, and the desire to upzone and revitalize the downtown business district, it is primed for continued development. Due to these factors, the Wasatch Front RTP for 2023–2050 forecasts that the number of households in Clearfield will increase by over 7,000 by 2050—nearly doubling the existing number of households.

While a majority of Clearfield (outside of the Freeport Center) is either existing or planned residential, significant mixed-use, industrial, and commercial areas are also present and are expected to grow. It is expected that the City will build upon and further densify its existing mixed-

use and commercial areas along State Street.
Additional mixed-use growth is expected adjacent to Antelope Drive and in the transit-oriented development district around the FrontRunner station.

### **DEMOGRAPHICS**

This section discusses the demographics of Clearfield City and provides statistical characteristics of human populations such as household size, income, and employment. These characteristics have a direct impact on the transportation needs of the City.

### **Population**

Clearfield has experienced steady population growth over the past 40 years. The most recent 2020 census showed that Clearfield had a population of 31,909, which represents an increase of approximately 1,787 since the previous 2010 survey. Historic population census data are shown below in **Table 1**. It is estimated that the population has continued to increase to 34,694 in 2024, and it is expected to increase by 12,933 by 2050, or 37%. This population growth projection is based on data from WFRC, the Kem C. Gardner Policy Institute, and from analyses of growth patterns within the City performed by Clearfield City staff. Table 1 below also shows a breakdown of expected population growth between 2023 and 2050. Figure 2 shows a summary of the historic and projected Clearfield population.

**Table 1: Historic and Projected Population Growth** 

Year	Population	% Change
1990	21,435	
2000	25,974	21.18% (2.12% per year)
2010	30,122	15.97% (1.60% per year)
2020	31,909	5.93% (0.59% per year)
2024	34,694	8.73% (2.18% per year)
2034	40,320	16.22% (1.62% per year)
2050	47,627	18.12% (1.13% per year)

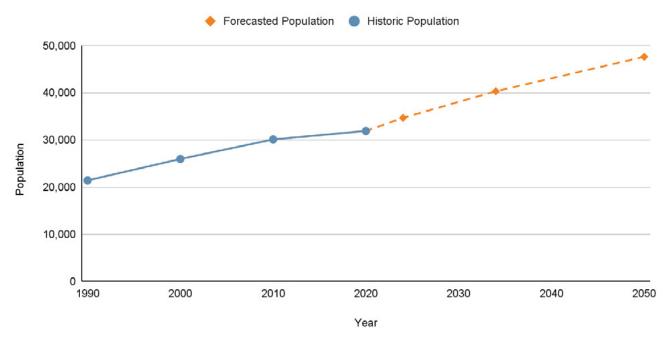


Figure 2: Historical and Projected Clearfield Population

### **HOUSEHOLDS**

In 2020 there were an estimated 10,870 housing units. Most of the housing in Clearfield is single-family homes. As of the 2020 census, there is an average of 3.46 persons per household. The median income for each household in 2020 was \$93,421 (in 2020 dollars). Approximately 97% of households have at least one vehicle available for use.

### **EMPLOYMENT AND JOURNEY TO WORK**

The average travel time to work for those who are 16 and older is 22 minutes. Based on data from the US Census Bureau's Center for Economics, **Figure 3** shows that the number of workers who live in Clearfield and travel elsewhere for work is slightly lower than those workers living elsewhere who travel into the City for work. Five percent of the City's workforce both live and work in the City.

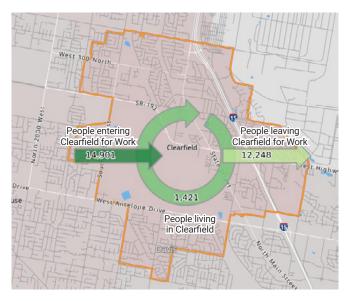


Figure 3: Worker In-Flow and Out-Flow (2021)

### II. ROADWAY NETWORK

### A. PURPOSE

The purpose of the transportation network analysis is to identify existing and future deficiencies in the roadway network that may occur due to increased vehicular traffic associated with land development and population growth. Traffic conditions are examined for the base year (2024) and two future years (2034 and 2050) and recommendations for future improvements are discussed.

# B. ROADWAY FUNCTIONAL CLASSIFICATION

Roads are categorized into a hierarchical system based on roadway attributes such as speed, access and right-of-way (ROW) width. The higher a street classification, the more mobility it provides with limited access. Lower street classifications have less mobility but more access. The functional classification of a roadway indicates the road's role within the transportation system, which in turn helps determine when increased travel demand or change in the road's use could lead to negative impacts on its intended function in terms of speed, capacity, and relationship to existing and future land use (FHWA, 2013).

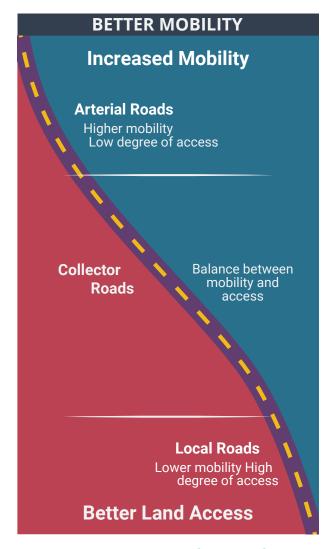


Figure 4: Functional Classification Definitions

The City's functional classifications used in this TMP are:

- Arterial
- Major collector
- Minor collector
- Local residential (for all future construction)
- Special residential (for some previously constructed)

Key cross sectional elements for each of these classifications are summarized in **Table 2** and are accurate as of the publication of this document. See the most recent <u>Clearfield Standard Drawings</u> for up-to-date cross section design criteria city-wide and the <u>Clearfield City Downtown Form-Based Code</u> for additional guidance in the downtown area. Cross section renderings based on these standards were developed for this plan and are shown in **Figures 5** through **9**, including acceptable side treatments for active transportation facilities. Clearfield City classifies street facilities based primarily on the ROW widths provided. An additional classification of "MIDA" was created to designate those roads that are under the management purview of the Military Installation Development Authority. The planned functional classification of each roadway in the city is depicted in **Figure 10** below.

**Table 2: Clearfield Key Cross Section Elements** 

Functional Classification	# Lanes	ROW Width (ft)	Asphalt Width (ft
Arterial	7/5	Per Coordination with the City and UDOT	
Major Collector	3	80	56
Minor Collector	3/2	66	42
Local Residential	2	60	32
Special Residential*	2	60	36
*For previously constructed roads only. Per State law, all new residential streets cannot exceed 32 feet of asphalt.			

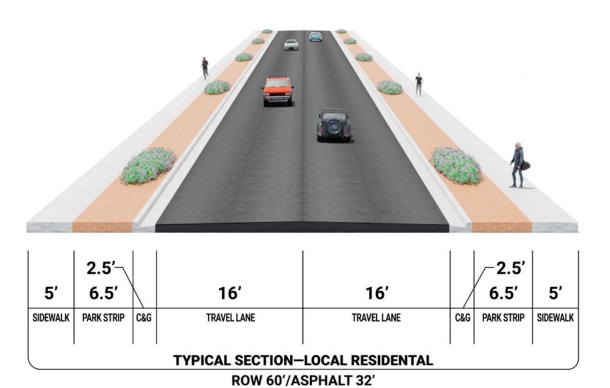


Figure 5: Local Residential Cross Section

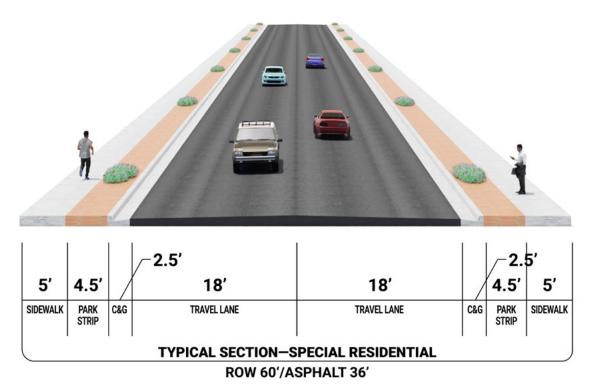
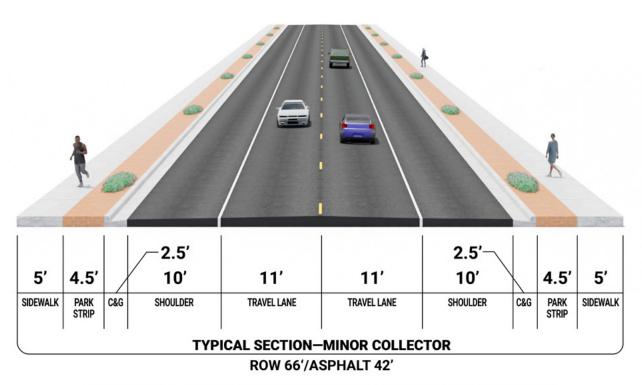
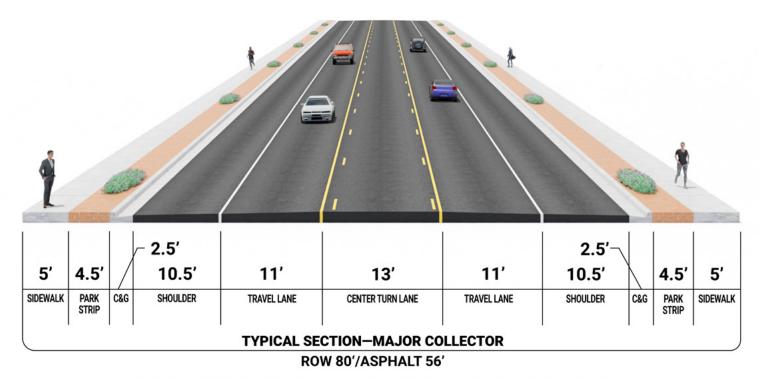


Figure 6: Special Residential Cross Section



\*Side treatments (i.e. bike lanes, shared used path, parking etc.) to be determined per City plan.

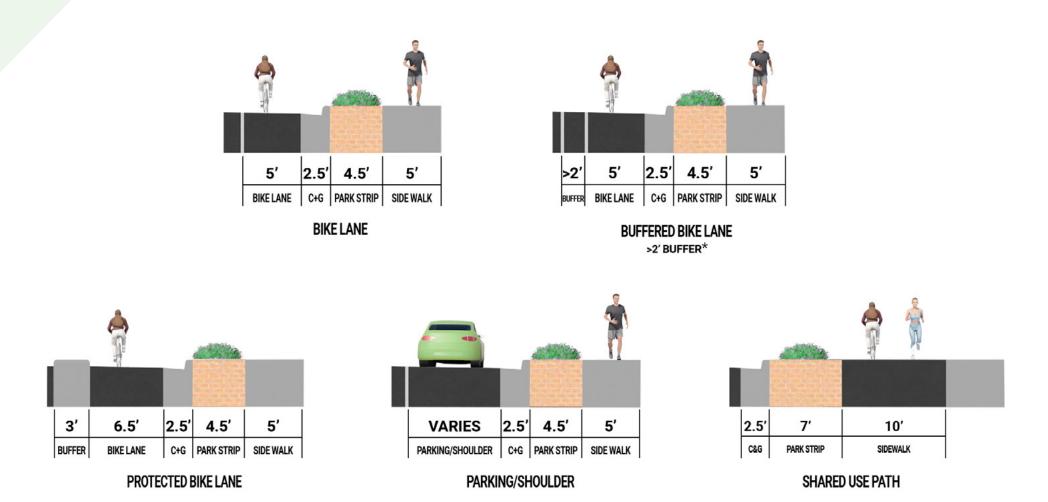
Figure 7: Minor Collector Cross Section



\*Side treatments (i.e. bike lanes, shared used path, parking etc.) to be determined per City plan.

Figure 8: Major Collector Cross Section





<sup>\*</sup>Per NACTO, cross-hatching to be added if buffer width is 3 feet or higher

Figure 9: Side Treatment Options

<sup>\*\*</sup>Width of side treatments should be based on available right of way, volume and speed of adjacent roadway, as well as guidance and direction from city staff. Refer to the form-based code for appropriate cross section side treatments for the downtown area.

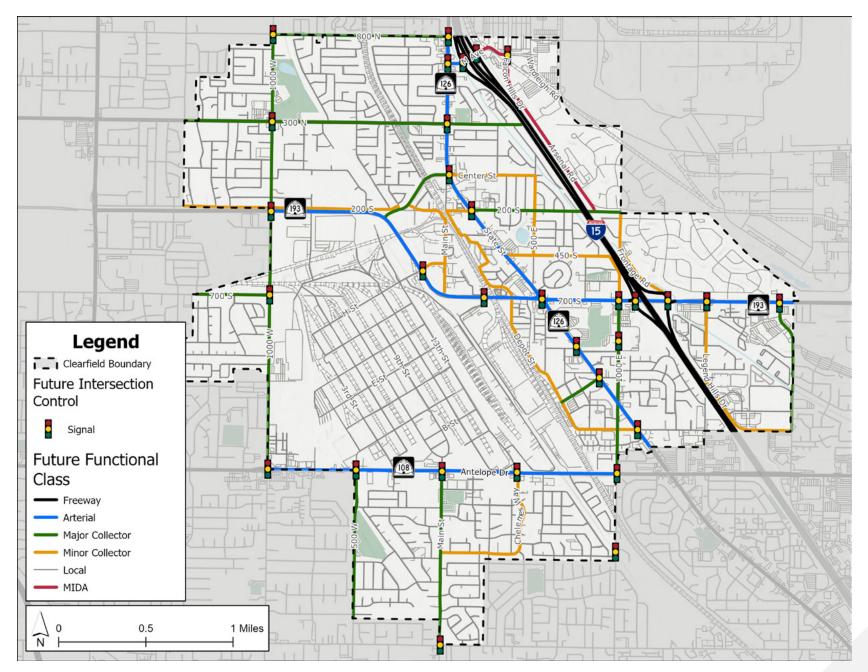


Figure 10: All figure numbers after this need to be decreased by one

### C. LEVEL OF SERVICE DEFINITIONS

Roadway traffic congestion is reported using the term "Level of Service" (LOS). Roadway segments are assigned LOS categories based on the calculated density of vehicle flow, or the volume-to-capacity (VC) ratio. LOS is reported on a scale from A to F, with A representing free-flow conditions and F representing traffic congestion. For this analysis, daily LOS is calculated for study roadway segments using the projected Average Daily Traffic (ADT) for the given roadway segments and

capacities informed by lane count and functional classification. Descriptions for each LOS letter designation and the accompanying range of VC ratios are shown below in **Figure 11** and **Table 3**.<sup>1</sup>

For the purposes of this study, a minimum overall roadway performance of LOS D is considered acceptable. If LOS E or F is calculated for a roadway, explanations and/or mitigation measures are presented.

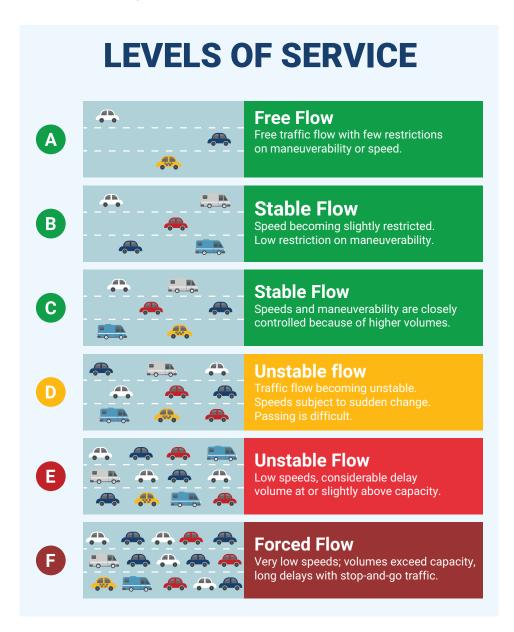


Figure 11: Level of Service Definitions

Clearfield City -

<sup>&</sup>lt;sup>1</sup>Level of service volume ranges reflect assumed capacity levels for typical sections of the roadway type and cross section indicated. In select locations, capacity adjustments are applied for this analysis based on local conditions including the presence of turn lanes, intersection spacing, access management, and engineering judgment.

Functional Classification	Lanes	LOS A-C	LOS D	LOS E	LOS F
Collectors & Arterials	2	< 9,375	9,375 to 10,625	10,625 to 12,500	> 12,500
	3	< 13,350	13,350 to 15,130	15,130 to 17,800	> 17,800
	5	< 28,500	28,500 to 32,300	32,300 to 38,000	> 38,000
	7	< 43,500	43,500 to 49,300	49,300 to 58,000	> 58,000

### **D. EXISTING (2024) CONDITIONS**

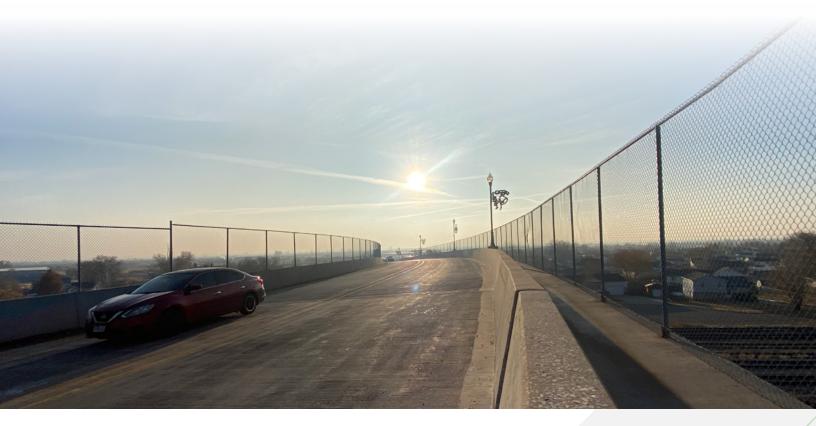
In order to accurately identify existing conditions on the roadway network in Clearfield City, the consultant team gathered traffic data. Tube count data were collected on November 13, 2024 at locations on key roadways to assist with model calibration. The weather was good for the duration of the counts. The traffic data have been summarized in **Figure 12** below.

Traffic data from UDOT's Automated Traffic Signal Performance Metrics (ATSPM) were used to help identify traffic volumes on state roads.

The volumes from these sources were compiled to calculate the 2024 LOS for study area roadways

using cirteria from **Table 3**. The roadway LOS together with current traffic volumes are presented below in **Figure 13**. All roadways in Clearfield are currently operating at an acceptable LOS D or higher with the exception of the following roadway segments, which operate at LOS E or F:

- State Street (SR-126); 650 North/M Avenue to City Boundary
- 700 South (SR-193); 1000 East to Frontage Road
- Antelope Drive (SR-108); Chelemes Way to 1000 East



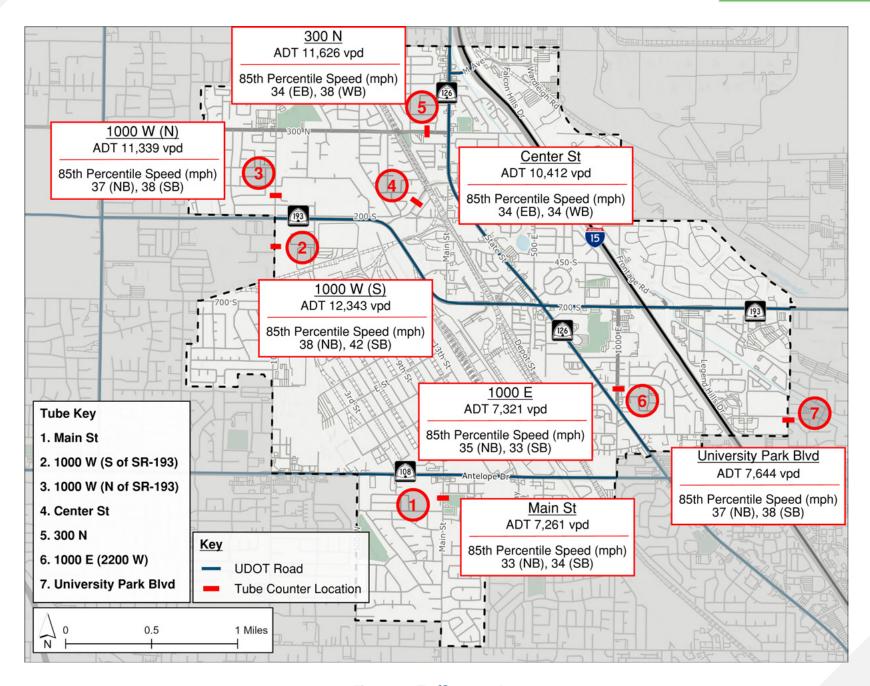


Figure 12: Traffic Count Data



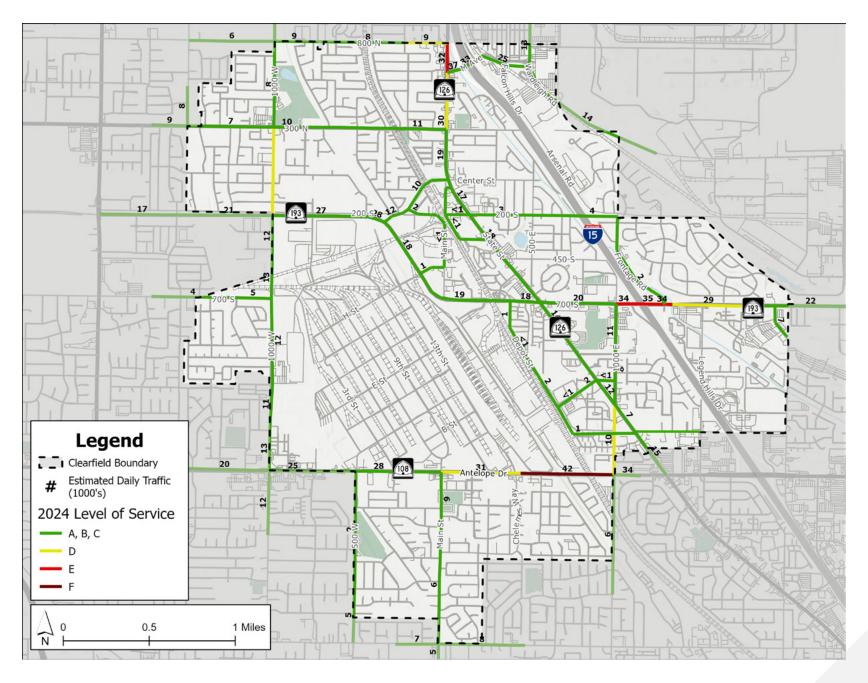


Figure 13: Existing (2024) Roadway LOS and ADT

### E. TRAVEL DEMAND MODEL

The transportation network analysis was performed using a locally refined version of the WFRC model (v9.0.1, dated June 24, 2024). The WFRC model was updated to include more refined roadway and land use inputs including base and future-year socioeconomic data informed by planned developments and Clearfield planning staff expectations. Travel demand modeling was performed in Bentley Cube version 6.5.1.

WCG reviewed and updated the roadway network to reflect 2024 conditions. This included adding recently constructed roadway connections near the State Street & 1000 E intersection and refining TAZ centroid connections, particularly along the HAFB fence line. Study area roadways were also reviewed and adjusted to reflect local operating conditions.

Base year (2024) household and employment estimates were initially developed by WFRC for the Wasatch Front 2023 RTP and were refined

based on input from Clearfield planning staff and a review of aerial imagery to account for recent construction. **Figure 14** shows the base year 2024 land use inputs in the form of combined relative household and employment density.

Base year ADT estimates from the refined travel model were compared with recent count data collected by WCG in November 2024 and obtained from the UDOT Performance Management System (PeMS) and ATSPM systems. Where the travel demand model over or under predicted current traffic volumes, adjustment factors were identified and applied to base year and future traffic projections to account for inherent imperfections in the travel demand model and to provide the best possible future traffic volume projections.

Details regarding modeling specifics such as roadway network, demographics, and scenario testing are described in the sections below.





Figure 14: 2024 Combined Household and Employment Density

### **G. FUTURE (2034) CONDITIONS**

This section discusses the future (2034) roadway conditions in Clearfield City. Future roadway projects and network updates to the travel demand model are discussed. A no-build scenario LOS is completed. The LOS of each major road is analyzed, improvements are recommended, and a build scenario LOS analysis is completed.

### **2034 ROADWAY NETWORK**

The local roadway network was updated for the 2034 analysis to include new roadways and grid connections that have been planned within Clearfield during the 10-year planning window. WFRC lists the following projects in the RTP 2023–2050. It was assumed that all new roadway connections included in these projects were completed when running the 2034 No-Build and Build travel demand models. Capacity expansion projects from the RTP are assumed along with Clearfield identified projects in the Build scenario.

- Arsenal Road New Construction from Weber County Line to 200 South: A new three-lane roadway planned between 2024 and 2033
- Main Street/State Street (SR-126) Operations from Weber County Line to Layton Parkway: An operational improvement project expected to occur between 2024 and 2033
  - Clearfield City has planned a raised median project on State Street through 1000 E that is assumed to be at least a portion of this overall RTP project. The Phase 1 (2034) and Phase 2 (2050) No-Build and Build analyses all include prohibitions of left turns at the State Street & 1000 E intersection due to this project. Left turns would be accommodated at new signalized intersections on State Street at 1150 S and 1450 S.

The 2034 analysis also includes major UDOT roadway improvements outside of Clearfield,

including the continuation of the West Davis Corridor and the planned I-15 interchange at 1800 N in Sunset.

### ANTICIPATED DEVELOPMENT

The project team coordinated with City planning staff and representatives from both the Freeport Center and MIDA to ascertain what developments can be expected within City limits. Little development is expected to occur in the Freeport Center, but MIDA is planning housing and commercial development in the area between I-15 and HAFB on the northeast side of the city, to be completed along with the new Arsenal Road/Falcon Hills Drive connection. Some infill development is expected along State Street (SR-126) in light of the change to mixed-use zoning, particularly in the FrontRunner station area.

#### 2034 SOCIOECONOMIC DATA

The population in Clearfield is projected to reach 40,000 by 2034, with approximately 3,000 new households accommodating this growth.

Future land use growth in the 2034 travel model scenario was informed by the 2034 WFRC Version 9 land use forecasts and was refined to reflect permitted and planned projects and local planning expertise. Large, planned developments discussed above were incorporated into future land use estimates. Growth projections were reviewed with City staff and adjusted to reflect their best understanding of future growth patterns.

**Figure 15** and **Figure 16** present the change in combined household and employment densities from 2024 to 2034 and the final 2034 combined household and employment densities, respectively. As can be seen below, 10-year projected growth is concentrated along Arsenal Road/Falcon Hills Drive and the space between the Union Pacific Rail Alignment and I-15.



Figure 15: 2024 to 2034 Combined Household and Employment Density Growth



Figure 16: 2034 Combined Household and Employment Density



### **2034 NO-BUILD SCENARIO**

The 2034 No-Build scenario provides an analysis of traffic conditions without project capacity improvements.

Figure 17 presents the 2034 No-Build LOS results obtained by applying LOS thresholds from Table 3 to the projected 2034 No-Build traffic volumes from the travel demand modeling.

As shown, the following roadway segments are expected to operate at unacceptable levels of service (LOS E or worse):

- 1000 West; SR-193 to 300 North
- SR-193; 1000 West to Center Street
- State Street (SR-126); 300 North to 650 North/M Avenue
- Antelope Drive (SR-108); Main Street to 1000 East
- 1000 East; 2200 South to 1450 South
- SR-193; 1000 East to University Park Boulevard

### **2034 BUILD SCENARIO**

The 2034 Build scenario provides an analysis of traffic conditions after implementation of roadway projects identified to improve areas of unacceptable LOS from the 2034 No-Build scenario. Projects shown in Phase 1 (2024-2033) of **Table 4** and Figure 23 of the Roadway Projects section are recommended to increase roadway capacity and accommodate projected 2034 traffic volumes. The 2034 Build scenario LOS is shown below in Figure 18. As shown in the 2034 Build scenario, Phase 1 (2024-2033) projects for 2034 address the majority of LOS E and LOS F conditions identified in the No-Build analysis. However, LOS E conditions remain on SR-193 between 1000 West and Center Street and between I-15 and 1600 East. These locations are planned to be addressed with a Phase 2 project between 2034 and 2043.

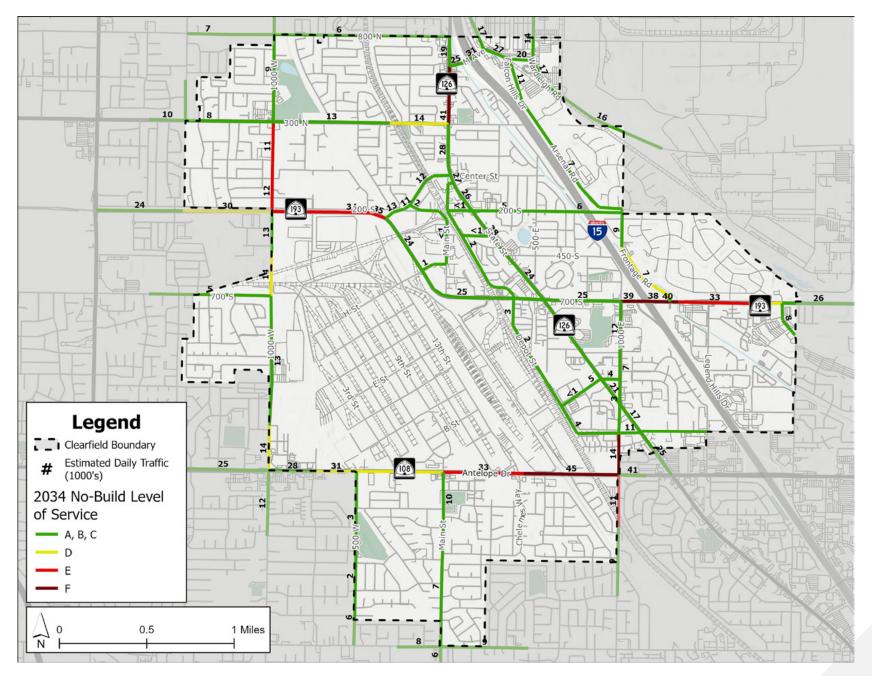


Figure 17: 2034 Roadway LOS and ADT- No-Build

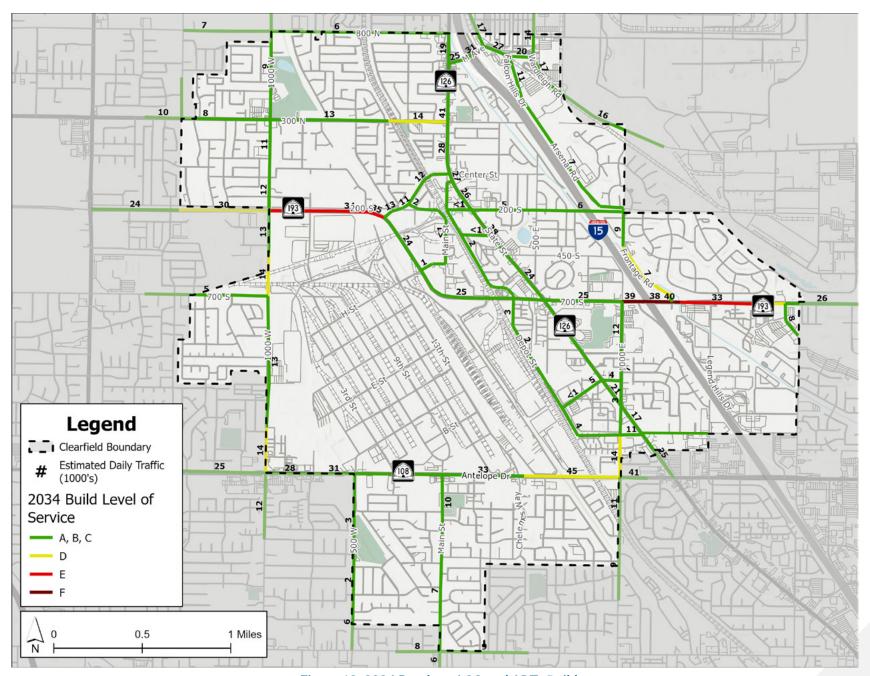


Figure 18: 2034 Roadway LOS and ADT—Build

### H. FUTURE (2050) CONDITIONS

This section discusses the future (2050) roadway conditions in Clearfield City. Future roadway projects and network updates to the travel demand model are discussed. A no-build scenario LOS is completed. The LOS of each major road is analyzed, improvements are recommended, and a build scenario LOS analysis is completed.

### **2050 ROADWAY NETWORK**

The local roadway network was updated for the 2050 analysis to include new roadways and grid connections that have been planned to occur within Clearfield during the planning window. WFRC lists the following projects in the RTP 2023–2050 under Phase 2 and #3:

- SR-193 Widening from 1000 West to I-15:
   A five-lane to seven-lane roadway widening project expected to take place between 2034 and 2043
- SR-193 Widening from I-15 to Fort Lane: A five-lane to seven-lane roadway widening project expected to take place between 2034 and 2043
- 1000 East Operations Project from SR-193 to Antelope Drive: An operations project expected between 2034 and 2043.
- Antelope Drive (SR-108) Operations Project from 2000 West to I-15: An operations project expected between 2034 and 2043
- 2200 West Railroad Structure: Railroad Crossing planned between 2034 and 2043
- I-15 Interchange at SR-193: An upgraded interchange project expected to occur between 2034 and 2043
- 1000 West Operations Project from 800 N to Bluff Road: An operations project expected between 2044 and 2050

As with the Phase 1 2034 analysis, new roadway connections included in these projects, and assumed in Phase 1, are assumed to be in place for the 2050 No-Build travel model analysis. Capacity expansion projects identified in the RTP and Clearfield identified projects are added to the 2050 Build scenario analysis.

The 2050 analysis also includes major UDOT roadway improvements outside of Clearfield, including the continuation of the West Davis Corridor and the planned I-15 interchange at 1800 North in Sunset.

#### 2050 SOCIOECONOMIC DATA

The population in Clearfield is projected to be approximately 48,000 by 2050; approximately 8,000 new households are expected to accommodate this population growth.

Future land use growth in the 2050 travel model scenario was informed by the 2050 WFRC Version 9 land use forecasts and was refined to reflect permitted and planned projects and local planning expertise. Large, planned developments discussed above were incorporated into future land use estimates. Growth projections were reviewed with City staff and adjusted to reflect their best understanding of future growth patterns.

**Figure 19** and **Figure 20** present the change in combined household and employment densities from 2024 to 2050 and the final 2050 scenario densities, respectively. As can be seen below, projected growth is concentrated along Arsenal Road/Falcon Hills Drive and the space between the Union Pacific Rail Alignment and I-15.



Figure 19: 2024 to 2050 Combined Household and Employment Density Growth



Figure 20: 2050 Combined Household and Employment Density

### **2050 NO-BUILD SCENARIO**

The 2050 No-Build scenario provides an analysis of traffic conditions without project roadway improvements. **Figure 21** presents the 2050 No-Build LOS results obtained by applying LOS thresholds from **Table 3** to the projected 2050 No-Build traffic volumes from the travel demand modeling.

As shown below, the following roadway segments are expected to operate at unacceptable levels of service (LOS E or worse):

- 1000 West; Antelope Drive (SR-108) to 800 North
- 300 North; 200 West to Main Street
- SR-193; 1000 West to Center Street
- Center Street; SR-193 to 300 West
- State Street (SR-126); Center Street to 650 North/M Avenue
- Antelope Drive (SR-108); 1000 West to 1000 East
- 1000 East; 2200 South to 1450 South
- SR-193; 1000 East to University Park Boulevard
- Frontage Road; SR-193 to 200 South
- 1450 South; 1000 East to State Street (SR-126)

#### **2050 BUILD SCENARIO**

The 2050 Build scenario provides an analysis of traffic conditions after implementation of roadway projects identified to improve areas of unacceptable LOS from the 2050 No-Build scenario. Projects shown in Phase 2 (2034–2043) and Phase 3 (2043–2050) of **Table 4** and **Figure 23** of the Roadway Projects section are recommended to increase roadway capacity and accommodate projected 2050 traffic volumes. The 2050 Build scenario LOS is shown below in **Figure 22**.

As shown in the 2050 Build scenario, all roadways are expected to operate at an acceptable LOS D or higher with the exception of the following roadways which are expected to operate at LOS E:

- SR-193; near Center Street: Part of a state route, widening beyond a seven-lane cross section isn't recommended for an arterial
- Antelope Dr; Chelemes Way to 1000 E: Part of a state route, there are heavy commercial uses that make widening to a seven-lane cross section difficult and undesirable



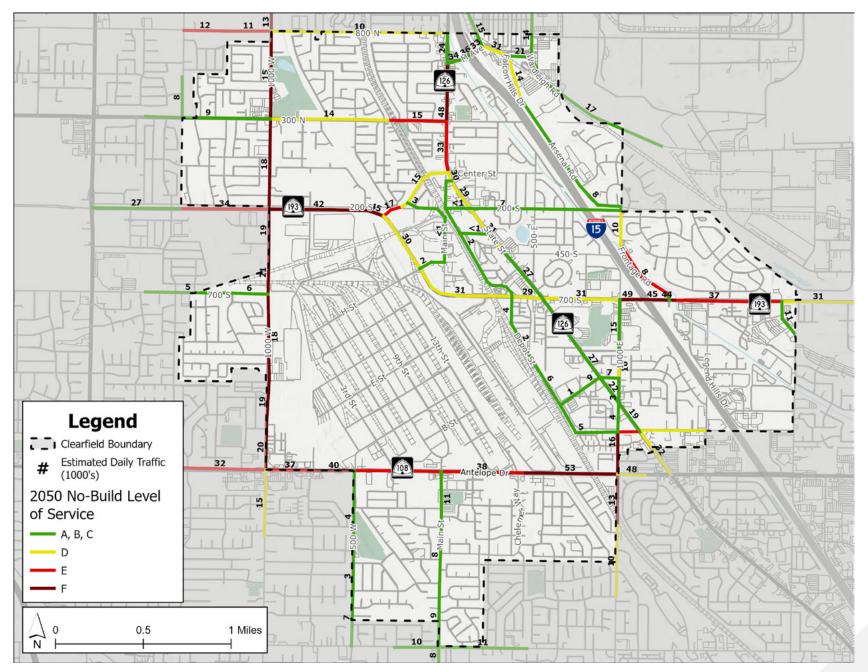


Figure 21: Future (2050) LOS and ADT—No-Build

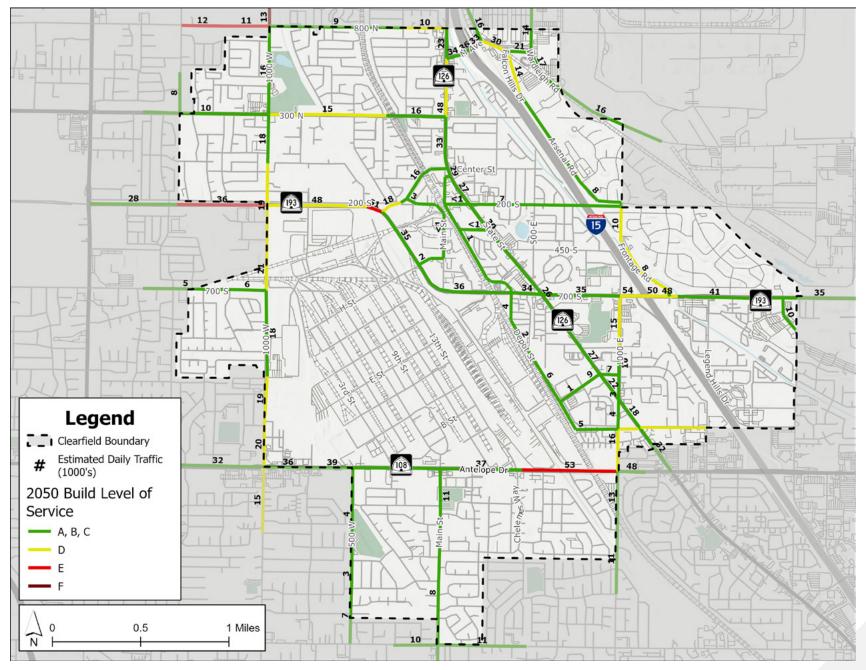
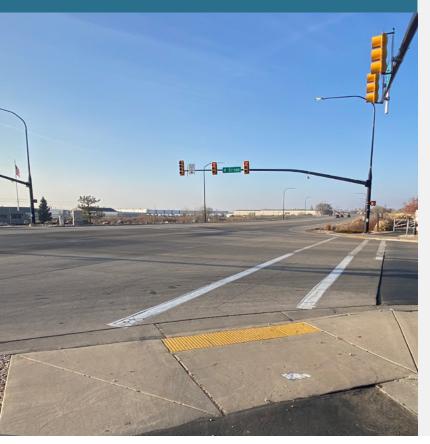


Figure 22: Future (2050) LOS and ADT—Build

## I. ROADWAY AND INTERSECTION PROJECTS

Figure 23 below summarizes the planned roadway and intersection projects that were discussed previously in the 2034 and 2050 travel demand modeling analysis and that are necessary to increase roadway capacity and accommodate future development. Project numbers listed in Table 4, Table 5, and Figure 23 include the project phase followed by an additional number or letter. These numbers are for identification only and are no indication of project prioritization. WFRC projects listed in the RTP 2024-2050 guided the initial selection of projects added to the Build scenario analysis. Roadway projects are categorized as either being "new roadway", "operational improvements", "widening", or "restriping" projects and indicate the proposed number of lanes, which correspond with typical cross sections shown above and defined in the most recent Clearfield Standard Drawings.

Signal warrant analyses are to be performed prior to installing a traffic signal. The intersection improvement projects provided in the TMP are highlevel in nature and, thus, further analysis should be performed before initiating any projects to add additional turn lanes.





Intersection improvement scopes for the following projects are described as:

- 1-B1, 1-B2, 1-B3; Intersection Improvements State Street from Station Boulevard to 1450 South: These projects will need to be constructed in close succession. The signal at 1000 East will be removed and replaced with a raised median to enforce left-turn prohibitions into and out of the side streets. This will support operations at new signals, one at the Station Boulevard entrance to the Transit-Oriented Development district and one at 1450 South. These projects cannot be constructed until development in the station area progresses and traffic volumes at Station Boulevard meet signal warrants.
- 2-B; SR-193 & Center Street: Add an additional left-turn pocket on Center Street in the southwest-bound direction to increase capacity.
- 2-C; 1450 South & 1000 East: Projected volumes for 2044 exceed the typical capacity for the current configuration. Further analysis will be needed to determine the best configuration and type of control for this intersection.
- 3-A, 3-B; 1000 West & 300 North, 800 North:
   Add right-turn pockets and dedicated
   left-turn phasing to the northbound and
   southbound approaches on 1000 West to
   support the operational improvements
   planned for the roadway.
- 3-C; Center Street & State Street: Add an additional left-turn pocket to Center Street in the eastbound direction.
- 3-D; 300 North & State Street: Add a rightturn picket to 300 North in the eastbound direction.

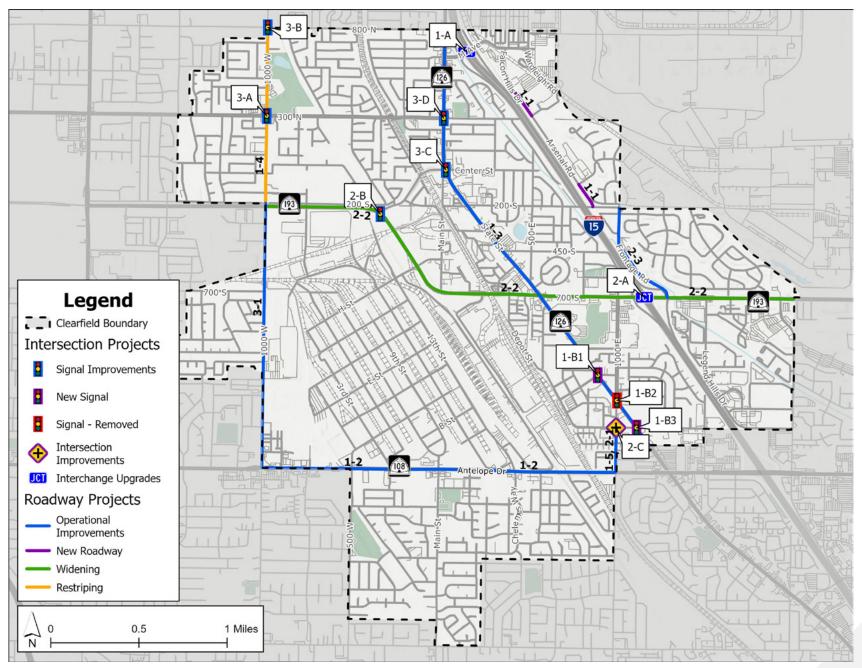


Figure 23: Roadway and Intersection Projects

Table 4	: Future	Roadway	Projects

Project			# of	Lanes	
Number			Scope		Proposed
	Ph	ase #1 (2024-203	33)		
1-1	Falcon Hills Dr Connections	MIDA	New Roadway	0	3
1-2	Antelope Drive (SR-108) Operations	UDOT	Operational Improvements	5	5
1-3	State Street (SR-126) Operations	UDOT	Operational Improvements	5	5
1-4	1000 West Restriping (North of SR-193)	WFRC, Clearfield	Restriping	2	3
1-5	1000 East Restriping (South of 1450 S)	Clearfield, WFRC, UDOT	Restriping	2	3
	Ph	ase #2 (2034-204	<b>I</b> 3)		
2-1	1000 East Operations (South of 1450 S)	Clearfield, WFRC, UDOT	Operational Improvements	3	3
2-2	SR-193 Widening (With Project 2-B)	UDOT	Widening	5	7
2-3	Frontage Road Operational Improvements	Clearfield	Operational Improvements	2	2
	Ph	ase #3 (2044-205	50)		
3-1	1000 West Operations (South of SR-193)	WFRC, Clearfield	Operational Improvements	3	3

<b>Table 5: Future Intersection Projects</b>	Table 5:	<b>Future</b>	Intersectio	n Pro	ects
--	----------	---------------	-------------	-------	------

	Table 5: Future Intersection Projects					
Project Number	Description	Responsibility	Improvement Scope	Estimated Cost		
	Phase #1 (2024-2033)					
1-A	l-15 Interchange — 650 North	UDOT	Interchange Upgrades	\$100,000,000		
1-B1	Station Boulevard & State St Signal	Clearfield, UDOT	New Signal	\$820,000		
1-B2	1000 E to RIRO with Raised Median	Clearfield, WFRC, UDOT	Signal - Removed	\$750,000		
1-B3	1450 S & State St Signal and Turn Lanes	Clearfield, UDOT	New Signal	\$1,200,000		
		Phase #2 (2034-	2043)			
2-A	I-15 Interchange — SR- 193	UDOT	Interchange Upgrades	\$100,000,000		
2-B	SR-193 and Center St Dual SB LTL (With Project 2-2)	UDOT	Signal Improvements	\$950,000		
2-C	1450 S & 1000 E Intersection Improvements	Clearfield	Intersection Improvements	\$1,500,000		
		Phase #3 (2044-	2050)			
3-A	1000 W and 300 N RTL, Left Turn Phasing	Clearfield	Signal Improvements	\$1,200,000		
3-B	1000 W and 800 N RTL, Left Turn Phasing	Clinton, Clearfield	Signal Improvements	\$1,500,000		
3-C	Center St and State St (SR-126) Dual EB LTL	Clearfield, UDOT	Signal Improvements	\$2,100,000		
3-D	300 N Dual EB LTL @ State Street	Clearfield, UDOT	Signal Improvements	\$1,550,000		

### III. PUBLIC TRANSIT

#### A. EXISTING TRANSIT SERVICE

UTA is the primary public transit service provider along the Wasatch Front, operating six bus routes and one commuter rail line that pass through Clearfield. The FrontRunner station is Clearfield's busiest transit stop, averaging 661 weekday boardings at this stop alone. Bus ridership in the city is relatively low compared to the region, with the highest volumes also at the FrontRunner station. State Street stops have the second highest bus ridership in the city, averaging 11-20 weekday boardings. Overall, ridership remains below prepandemic levels, with stop-level boardings peaking at 1,350 for FrontRunner and 497 for buses serving the station in 2019, compared to today's averages of 661 and 388 respectively. Service frequency, route-wide, and route level ridership details for each route are provided in **Table 6**.

Most routes serving Clearfield operate on regular 30-60-minute frequencies throughout the day, except for the regional commuter Route 472, which operates with three AM and PM runs. Note that Route 472 does not currently make stops in Clearfield, instead keeping to I-15. All other UTA routes serving Clearfield include a stop at the Clearfield FrontRunner Station. As the highest capacity and most regional service, FrontRunner garners an average daily ridership of more than 17,000. The Ogden-SLC Intercity route (Route 470) is the second highest-ridership route in Clearfield, with approximately 2,900 boardings. Figure 24 shows the routes that currently run through Clearfield, including stop locations and ridership information.

**Table 6: UTA Routes Serving Clearfield City** 

Route Number	Route Name	Frequency	Route Type	Avg Weekday Boardings (Route-Wide) [1]
470	Ogden-SLC Intercity	30 min	Commuter Bus	2,934
472	Riverdale-SLC Express	30 min peak	Commuter Bus	109
626	West Roy – Clearfield Station	20-60 min	Local Bus	214
627	WSU Davis – DTC	30-90 min	Local Bus	339
628	Midtown Trolley	30 min	Local Bus	500
640	Layton Hills Mall – WSU Ogden	30 min	Local Bus	787
750	FrontRunner	30-60 min	Commuter Rail	17,245
	Sour	ce: UTA, 2024		

Clearfield City -

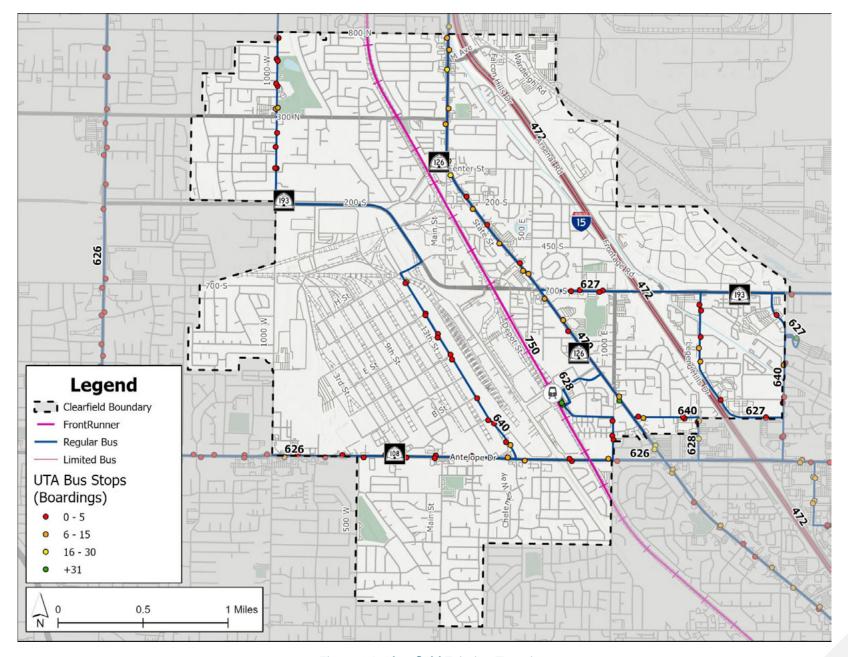


Figure 24: Clearfield Existing Transit

Source: UTA & WFRC

#### **B. FUTURE TRANSIT SERVICE AND PROJECTS**

UTA recently finalized its new Five-Year Service Plan that lays out service changes expected by 2029. Changes impacting service within Clearfield City are shown in **Table 7**. The WFRC RTP also documents planned future transit improvements in Clearfield that go beyond this 5-year horizon. Key changes identified in the RTP include the double tracking and electrification of the FrontRunner Commuter Rail and the development of two other

high-frequency bus routes (Route 600 along Main Street and Route 629 between Roy and HAFB). Both of these planned high-frequency routes would have 15-minute frequency or better and connect to the Clearfield FrontRunner Station. **Figure 25** summarizes all planned transit service changes within the City through 2050, including frequency updates and new routes. **Table 8** summarizes these major changes by phase.

**Table 7: Changes to UTA Routes Serving Clearfield Proposed in 5-Year Service Plan** 

Route Number	Route Name	Status	Alignment
470	Ogden-SLC Intercity	Discontinued	-
472	Riverdale-SLC Express	Unchanged	-
600	Main Street Weber/Davis	New Route	Service between Farmington and Ogden, serving Clearfield's FrontRunner Station.
626	West Roy – Clearfield Station	Discontinued	-
627	WSU Davis – DTC	Adjusted	Serving Main Street between Clearfield Station and Layton Station.
628	Midtown Trolley	Discontinued	-
640	Layton Hills Mall – WSU Ogden	Adjusted	Ending at Roy Station and incorporating service to Layton Station that was previously provided by 628.
642	North Davis Neighborhood Connector	New Route	Connecting the Clearfield Station to Roy Station via 2000 West.
750	FrontRunner	Unchanged	-
		Source: UTA	

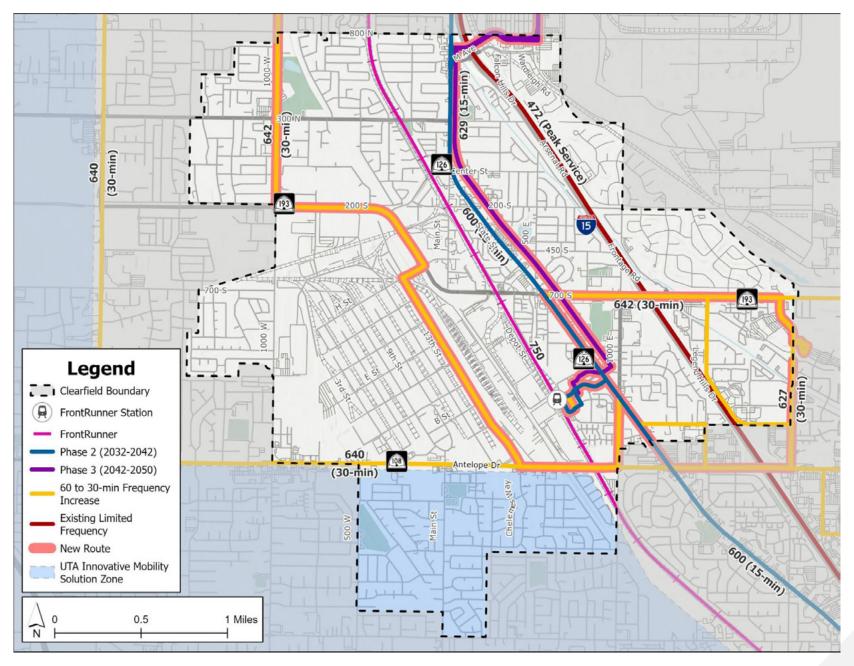


Figure 25: Clearfield Future Transit Facilities

Source: UTA & WFRC

Table 8: Future Transit Projects by Phase					
Project Number	Description	Improvement Scope			
Phase # 1 (2024-2033)					
T1-1	Farmington Innovative Mobility Zone	New Mobility Zone			
T1-2	Route 642, North Davis Neighborhood Connector	New route, up to 30-min freq			
T1-3	FrontRunner Forward Investment Package I	Doubletracking			
T1-4	Hill AFB Transit Connectivity Study	Study			
Phase #2 (2034-2043)					
T2-1	Route 600, Main Street	Freq increase to 15-min or less			
T2-2	FrontRunner Forward Investment Package II	Doubletracking			
	Phase #3 (2044	-2050)			
T3-1	Route 629, Roy - Hill AFB, Clearfield	New route,15-min freq or less			
T3-2	Transit Connections to Hill AFB	New route			
Unconstrained Vision					
TU-1	Route 626, West Roy - Clearfield Station	Freq increase up to 30-min			
TU-2	Route 627, WSU Davis - DTC	Freq increase up to 30-min			
TU-3	Route 628, Midtown Trolley	Freq increase up to 30-min			

Route 640, WSU-WSU Davis

TU-4

Freq increase up to 30-min

### IV. ACTIVE TRANSPORTATION

#### A. EXISTING FACILITIES

Active transportation encompasses all human-powered modes of travel including walking, biking, and the use of mobility-assistive devices. This section provides an overview of the major existing and proposed bicycle and pedestrian facility types in Clearfield. Existing facilities tracked by the City are mapped in **Figure 26**, primarily comprising multi-use paths. The Clearfield Canal Trail, Denver & Rio Grande Western Rail Trail, and Syracuse Trail represent the most regionally significant active transportation facilities in the city, providing fully paved and separated facilities for users. In addition to these facilities, the City maintains sidewalks on most of its major arterial and collector roadways.

**Figure 27** and **Figure 28** illustrate the most recent (2024) update of the WFRC Pedestrian and Bicycle Demand Indices in Clearfield. Each

index is an estimate of latent demand (not necessarily usage) in a given area based on land use, population and employment densities, demographic information, and built environment factors such as the accessibility of the existing street network. Latent demand in this case refers to the likelihood that people would walk or bike in a certain location if active transportation infrastructure existed. Roughly, the estimate provides a glimpse of the walkability and bikeability in a given area. According to the estimate, along with neighborhoods south of Antelope Drive alongside Main Street, Downtown Clearfield and the surrounding neighborhoods host the largest concentration of high-scoring areas. On the other hand, the Freeport Center represents the lowestscoring area.



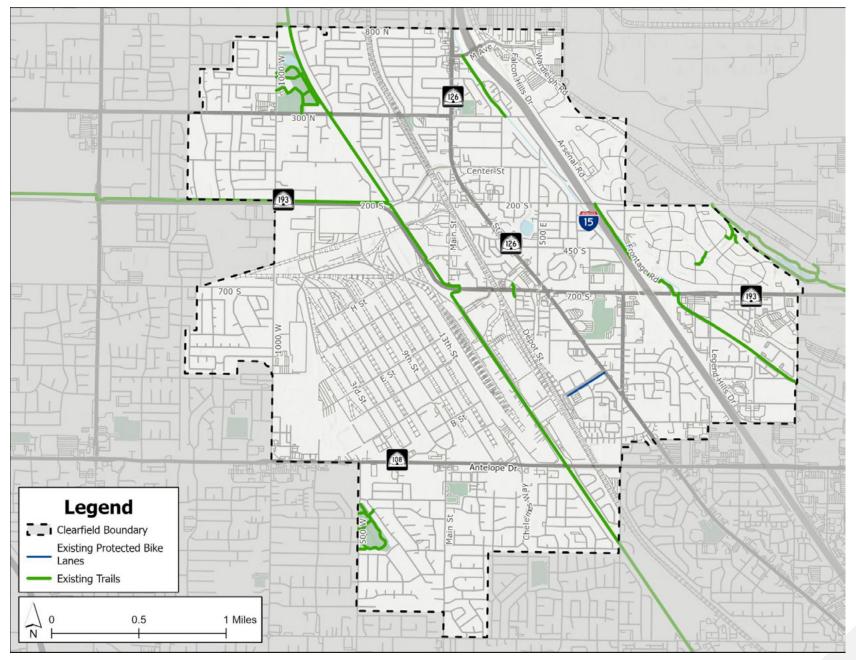


Figure 26: Existing Clearfield Active Transportation Facilities

Source: UTA & WFRC

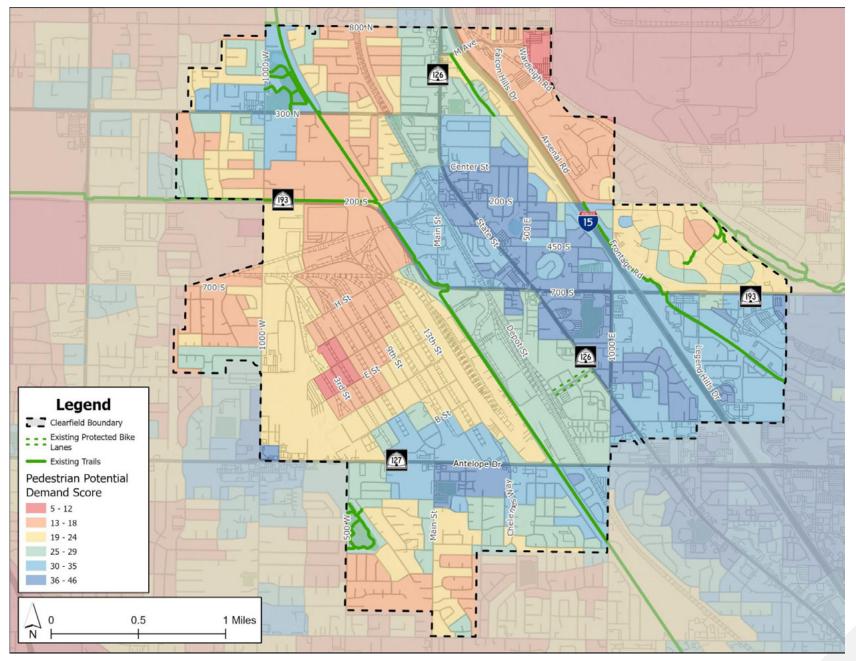


Figure 27: Clearfield Pedestrian Potential Demand Score
Source: UTA & WFRC

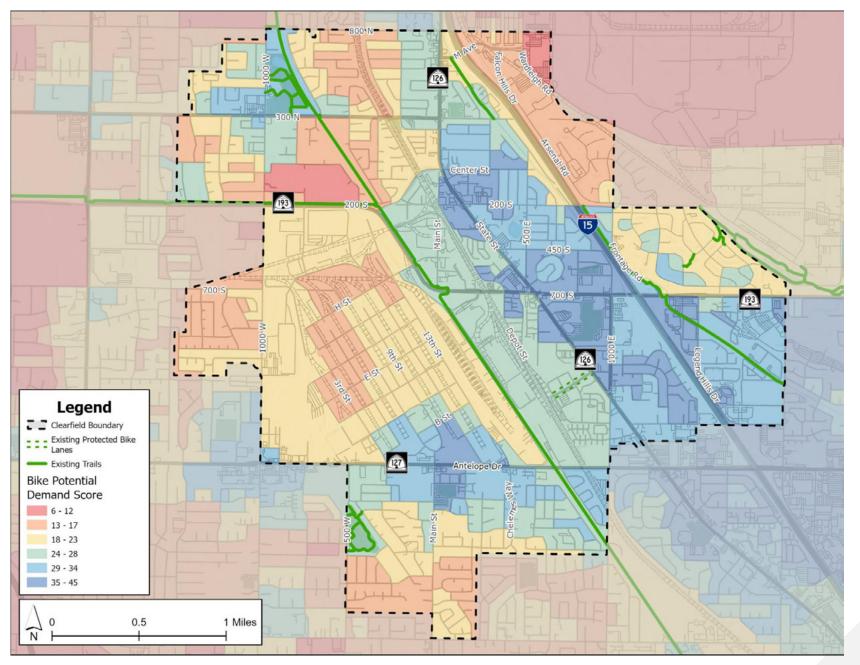
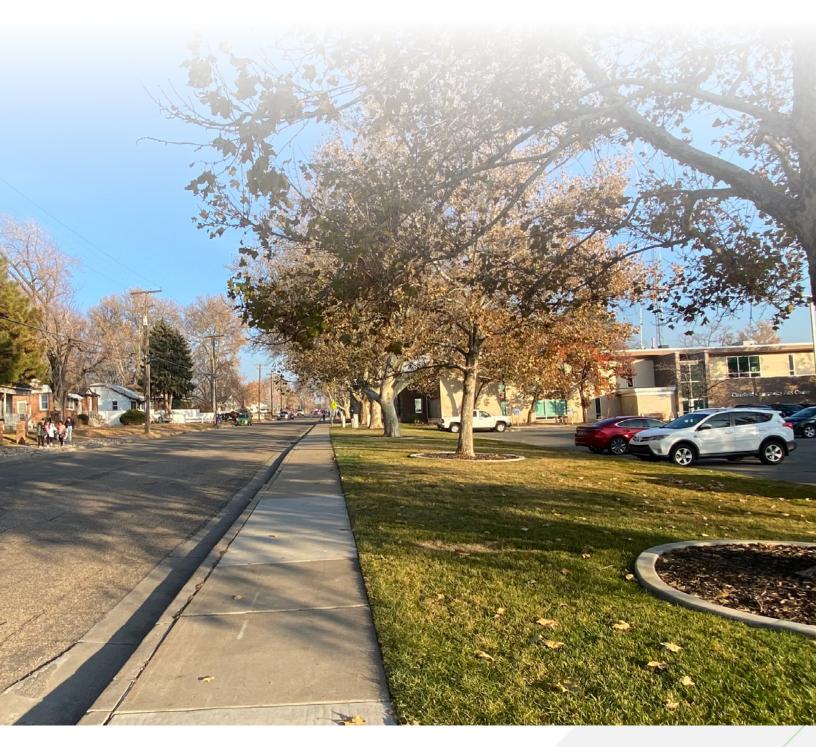


Figure 28: Clearfield Bike Potential Demand Score
Source: UTA & WFRC

#### **B. FUTURE PROJECTS**

Figure 29 shows existing active transportation infrastructure in Clearfield alongside the City's planned active transportation projects. Though several robust active transportation facilities exist in Clearfield, there are several regional gaps evident in the overall City network, most visibly along the Canal Trail. The City's project list includes projects that address these gaps, such as the 3-Gate Trail (intended to connect the Canal Trail to the wider

region) and Antelope Drive Shared-Use Path (under construction as of Fall 2024). The list also includes projects such as bike lanes, buffered bike lanes, and both grade-separated and at-grade crossings for roadways and railways. **Table 9** shows proposed active transportation crossing facilities broken out by phase, while **Table 10** shows proposed path facilities.



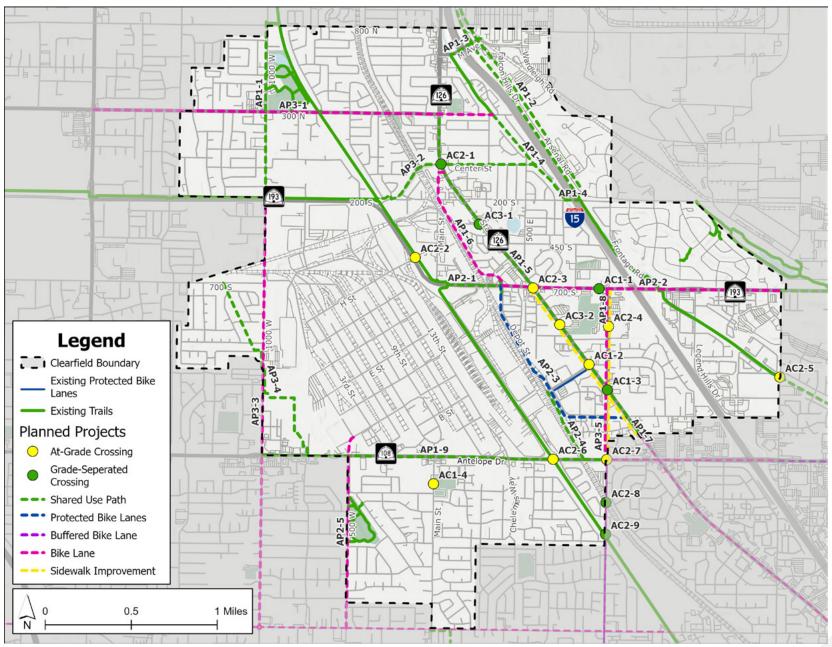


Figure 29: Clearfield Active Transportation Network (Existing & Future Facilities)

Source: WFRC & UGRC & Clearfield Station Area Plan

**Table 9: Active Transportation Crossing Projects by Phase** 

Project Number	Description	Responsibility	Improvement Scope	Estimated Cost
	Phase # 1	(2024-2033)		
AC1-1	1000 East Grade-Separated Crossing	UDOT, Clearfield	Grade-Separated	\$2,433,306
AC1-2	1150 South At-Grade Crossing	Developer, Clearfield	At-Grade	\$2,400,000
AC1-3	State Street & 1000 East Crossing	UDOT, Clearfield	Grade-Separated	-
AC1-4	Antelope Elementary Crossing	Clearfield	At-Grade	-
	Phase #2	(2034-2043)		
AC2-1	State Street & Center Crossing	UDOT, Clearfield	Grade-Separated	-
AC2-2	Denver & Rio Grande Western Rail Trail At-Grade Crossing	WFRC, Clearfield	At-Grade	\$2,400,000
AC2-3	State Street & 700 South Crossing Improvement	UDOT, Clearfield	At-Grade	-
AC2-4	1000 East and High School Crossing Traffic Calming Improvements	Clearfield	At-Grade	-
AC2-5	Davis Weber Canal Trail Crossing		At-Grade	\$360,189
AC2-6	SR-108 / Antelope Drive At-Grade Crossing	UDOT, Clearfield	At-Grade	\$360,000
AC2-7	SR-108 / Antelope Drive At-Grade Crossing	UDOT, Clearfield	At-Grade	\$360,000
AC2-8	2200 West Grade-Separated Crossing	WFRC, Clearfield	Grade-Separated	\$8,940,000
AC2-9	D&RGW Rail Trail Crossing	WFRC, Clearfield	Grade-Separated	\$8,938,619
	Phase #3	(2044-2050)		
AC3-1	State Street & 450 S Crossing	UDOT, Clearfield	Grade-Separated	-
AC3-2	State Street & 1000 South Crossing Traffic Calming Improvements	UDOT, Clearfield	At-Grade	-

**Table 10: Active Transportation Path Projects by Phase** 

Project Number	Description	Responsibility	Improvement Scope	Estimated Cost
	Phase # 1	l (2024-2033)		
AP1-1	1000 West Shared Use Path	Clearfield	Shared Use Path	-
AP1-2	3 Gates Trail Shared Use Path	WFRC	Shared Use Path	\$10,950,000
AP1-3	650 North Shared Use Path	WFRC, Clearfield	Shared Use Path	\$1,200,000
AP1-4	Clearfield Canal Extension	Clearfield	Shared Use Path	-
AP1-5	State Street / Main Street Shared Use Path	UDOT, Clearfield	Shared Use Path	\$340,000
AP1-6	Depot Street Bike Lane	Developer	Bicycle Lane	\$230,000
AP1-7	State Street Sidewalk Improvements	Developer, Clearfield	Sidewalk	-
AP1-8	1000 East Sidewalk Improvements	Clearfield	Sidewalk	-
AP1-9	Antelope Drive Shared Use Path	UDOT, Clearfield	Shared Use Path	\$2,980,000
	Phase #2	2 (2034-2043)		
AP2-1	700 South Shared Use Path Spur	UDOT, Clearfield	Shared Use Path	-
AP2-2	700 South Shared Use Path	UDOT, Clearfield	Shared Use Path	-
AP2-3	Station-Area Depot Street Protected Bike Lanes	Developer	Bicycle Lane	-
AP2-4	Clearfield FrontRunner Trail Shared Use Path	Clearfield, UTA	Shared Use Path	\$360,000
AP2-5	500 West Bike Lane	Clearfield	Bicycle Lane	\$250,000
	Phase #3	3 (2044-2050)		
AP3-1	300 North Bike Lane	Clearfield	Bicycle Lane	\$2,560,000
AP3-2	Center Street / 200 East Shared Use Path	Clearfield	Shared Use Path	\$160,000
AP3-3	1000 West Bike Lane	Clearfield	Bicycle Lane	\$1,070,000
AP3-4	Powerline Trail Connection	Clearfield	Shared Use Path	-
AP3-5	1000 East Bike Lane	Clearfield	Bicycle Lane	\$320,000

# V. CITY TRANSPORTATION SYSTEM MANAGEMENT

#### A. PURPOSE

The City Transportation System Management section discusses best practices to ensure the City develops and maintains a safe and efficient transportation network. This section includes the following:

- Transportation safety analysis
- · Access management standards
- Connectivity
- Freight
- Traffic impact study standards

# B. TRANSPORTATION SAFETY ANALYSIS

A safety analysis was performed for all roadways within Clearfield City. The most recent six full

years of available crash data (January 1, 2019 to December 31, 2024) from UDOT Traffic & Safety were used to perform the analysis. Crashes that occurred on I-15 are excluded from this analysis. Crash patterns were analyzed within Clearfield City to develop project and policy recommendations.

In total there were 2,725 crashes reported within Clearfield City between January 1, 2019 and December 31, 2024. Of these, 71 (2.60%) involved suspected serious injuries and seven (0.26%) were fatal. In 2024 there were eleven suspected serious injury crashes and one fatal crash. Figure 30 shows total crashes and severe crashes year-to-year. There is an upward trend in total crashes since 2020. There has been a slight decrease in severe crashes since 2022.

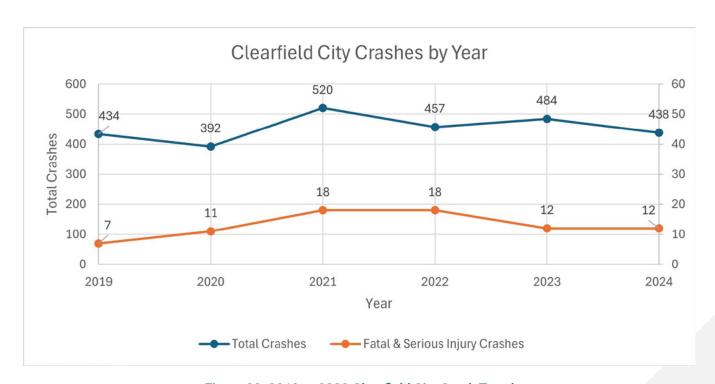


Figure 30: 2019 to 2023 Clearfield City Crash Trends

Comparisons between crash rates in Clearfield City and Davis County as a whole are listed in Table 11. Crashes that occurred on I-15 are excluded from all parts of the analysis.

Table 11.1 credit of crashes (2013-2024, Excluding 1-13)	<b>Table 11: Percent</b>	of Crashes	(2019-2024	, Excluding I-15)
--	--------------------------	------------	------------	-------------------

Category	Clearfield City	Davis County
Total Crashes	2,725	23,432
Percent Fatal & Serious Injury	2.86%	2.46%
Pedestrian or Cyclist Involved	4.33%	3.14%
Intersection Related	57.68%	54.29%

Overall, crash trends in Clearfield City were consistent with other cities in Davis County. About one percent more crashes in Clearfield involved a pedestrian or bicyclist than for the county on average, though the less developed areas of in the county likely skew the average lower because of the lower active transportation usage. The proportion of crashes that were intersection related was over three percent higher in Clearfield than it was for the county as a whole. Crashes in Clearfield represent approximately 12% of all crashes in the County.

Crash severity is reported according to a five-category scale ranging from property damage only to fatality. UDOT, like many other agencies, has taken on the goal of Zero Fatalities. This zero fatalities approach is guided by the Safe System Approach. The Safe System Approach consists of the five elements summarized in Figure 31.



Given these goals and the significant cost of severe crashes (both fatal and suspected serious injury), these crash types are the focus of the analysis for project and policy recommendations.

Figure 32 is a heatmap showing the density of crashes at each point in Clearfield City. Figure 33 plots the serious injury and fatal crashes, including highlights for those crashes that occurred on City-owned roadways. From 2019 to 2024 there were seven fatal crashes and 71 crashes with suspected serious injuries. Of these 77 severe crashes, 55 occurred on UDOT roadways and 23 occurred on Clearfield City roadways.

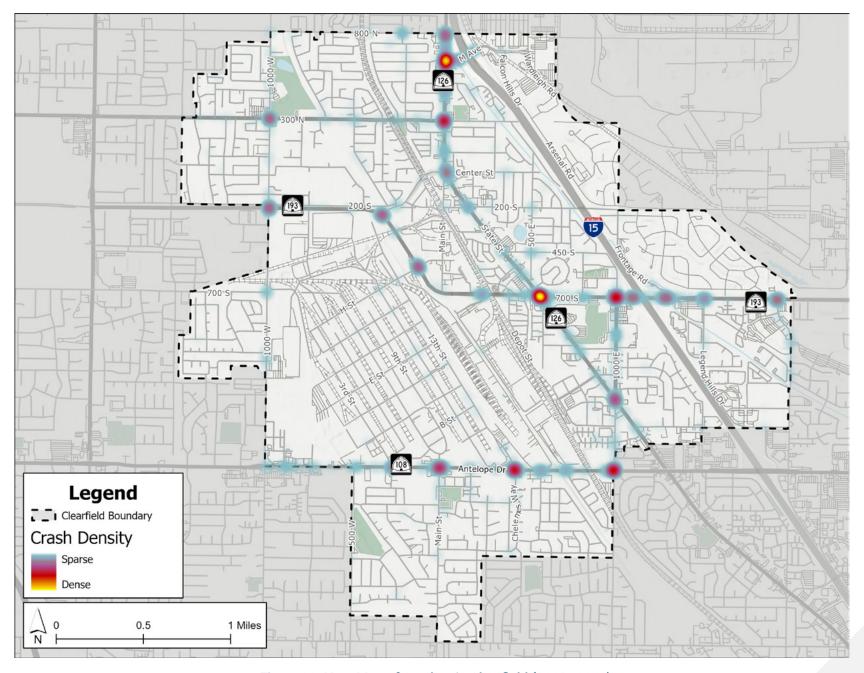


Figure 32: Heat Map of Crashes in Clearfield (2019–2023)

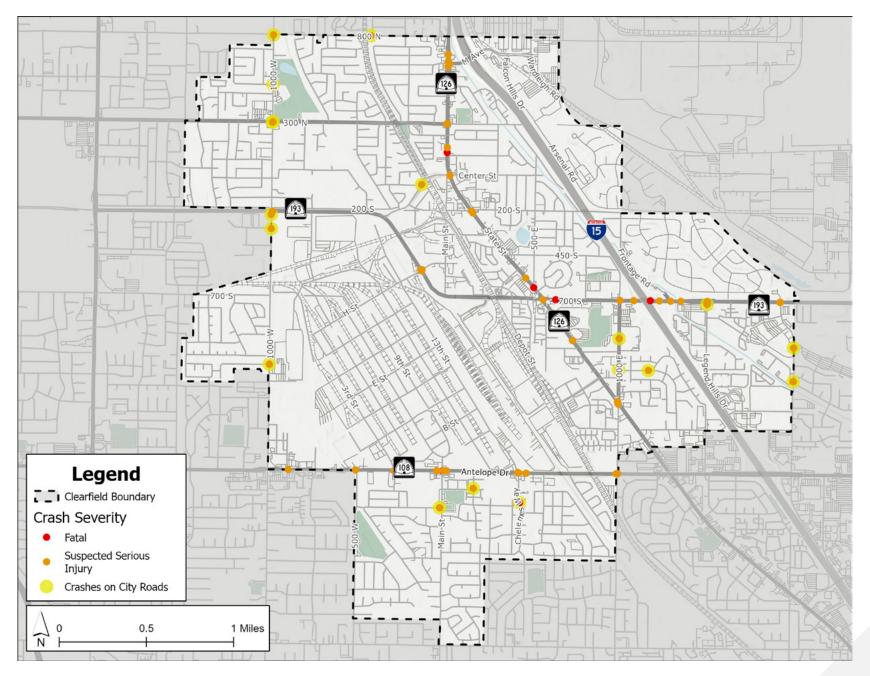


Figure 33: Severe Crashes in Clearfield (2019–2023)

Of Clearfield's 118 crashes involving a bicycle or pedestrian between 2019 and 2024, 48 of them involve a right-turning vehicle. In addition, 38 crashes involving a pedestrian or bicycle occurred at intersections with a gas station on the corner. As more people are walking near gas stations, safety improvements should be prioritized at these intersections. These improvements can include bulb-outs, improved lighting, raised intersections, and leading pedestrian intervals. Additionally, right turns can be restricted at

intersections with higher pedestrian volumes, preventing vehicles from turning right on red while a pedestrian may be crossing the intersection.

The WFRC Comprehensive Safety Action Plan (2024) sets a cohesive regional safety vision and fulfills the road safety requirement for local jurisdictions to apply for SS4A grants. As part of this Safety Action Plan, several safety recommendations are included within Davis County and Clearfield City. These recommendations are summarized in **Table 12**.

**Table 12: WFRC CSAP Recommendations** 

Project ID	Description of Improvements	Location(s)
6.21.1.1	Raised medians, driver feedback speed limit signs, adjusted speed limits, updates to access management, protected intersections, protected left-turns, and removal of permissive yellow left turns.	<ul> <li>1000 West &amp; 700 South</li> <li>Center Street &amp; 700 South</li> <li>Industrial Pathway &amp; 700 South</li> <li>State Street &amp; 700 South</li> <li>800 East &amp; 700 South</li> <li>1000 East &amp; 700 South</li> <li>Frontage Road &amp; 700 South</li> <li>700 South from 1000 West to US-89</li> </ul>
6.21.3	Traffic calming via narrowed lanes, Safe Routes to School, adjusted speed limits, reduced lanes, RRFBS, bulb-outs, raised crosswalks, protected intersections, and dedicated right-turn lanes.	• State Street & 1000 East
6.23.4.1	Raised medians, updated intersection controls, protected intersections, and removal of permissive yellow left turns.	• 700 South from 1000 West to US-89
6.25.1.1	Raised medians, sidewalks/walkways, bicycle improvements at intersections, buffered bike lanes, adjusted speed limits, and removal of permissive yellow left turns.	<ul><li>Main Street from 800 North to 6000 South</li><li>800 North &amp; Main Street</li></ul>

Details for each project are included in Appendix C. A GIS StoryMap showing the locations of these projects and other supplemental information is found here.

In addition to the recommendations presented in the WFRC Safety Action Plan, WCG recommends the following:

- 1. Prohibit right turn on red (RTOR) at the following intersections:
  - Southbound right turns at the 1000 East / Antelope Drive (SR-108) intersection
  - 400 East / Antelope Drive (SR-108)

Six crashes involving a right-turning vehicle and a pedestrian occurred at each of these intersections. Prohibiting RTOR eliminates this conflict point.

#### 2. Add bulb-outs at the following intersections:

1000 West / 300 North

Two crashes involving a pedestrian occurred at this intersection. Installing a bulb-out at this location shortens the asphalt distance for a pedestrian to cross.

Main Street / 300 North

Five crashes involving a pedestrian at this intersection. Installing a bulb-out at this location shortens the asphalt distance for a pedestrian to cross.

- 3. Install improved lighting for northbound vehicles at the 1000 West / SR-193 intersection
  - Two serious injury front-to-rear crashes involving northbound vehicles occurred on the south leg of this intersection. One of these crashes involved a motorcycle.
- 4. Request a pedestrian study from UDOT near Lakeside Square on SR-126
  - A total of 14 crashes involving a pedestrian have occurred between 200 South and 700 South along SR-126. UDOT can complete a pedestrian study upon request to determine if a pedestrian crossing is feasible within this location. It is recommended that a study be requested from UDOT.

### C. ACCESS MANAGEMENT STANDARDS

The Transportation Research Board defines access management as "the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway" (TRB Access Management Manual, 2nd Edition, 2014). Access management is a key element in transportation planning, helping to make transportation corridors operate more efficiently and carry more traffic without costly road widening projects. Access management offers local governments a systematic approach to decision-making: applying principles uniformly, equitably, and consistently throughout the jurisdiction.

Access management has been documented to provide the following safety and operational benefits:

- Lower crash rates
- Lower crash severity
- Increased traffic signal efficiency
- Decreased delay
- Increased capacity

Positive economic benefits can also result from proper access management, which may improve travel times and congestion. This makes locations more desirable to patrons (Federal Highway Administration, Safe Access is Good for Business, 2006).

In Clearfield, all of the arterial roadways are owned by UDOT and, therefore, access to them is controlled by UDOT's access management requirements. UDOT has established state highway access management requirements as part of Administrative Rule R930-6. All Utah state roadways are assigned an access category between 1 and 10. Each access category has varying spacing requirements, with lower access category numbers having stricter spacing.

All other roadways are managed by Clearfield, so it is up to City staff to ensure that access is managed along these roadways. This may include making changes to the current roadways to address existing problems as well as requiring good access management as new roads and/or developments are planned.

An access management program must address the balance between access and mobility. Where the functional classification of a road implies the level of priority for access versus mobility, access management requirements define exactly how that balance is to be maintained. Freeways move vehicles over long distances at high speeds with very controlled access and great mobility. Conversely, residential streets offer high levels of access but at low speeds and with little mobility. Access management standards must account for these different functions of various facilities as no facility can operate at peak efficiency and provide unlimited property access at the same time. The Clearfield City Code and page R4 of the City's Standard Drawings (Public Works Standards, Appendix F) each establish minimum access spacing requirements for roadways in the city. For greater clarity, it is recommended that the City consolidate all relevant requirements into a single place in the Public Works Standards. with a reference to this section to be included in the City Code.

#### D. TRAFFIC IMPACT STUDIES

As the City continues to grow and develop, traffic-related impacts will need to be addressed. This can be accomplished by requiring future developments to complete a Traffic Impact Study (TIS). The TIS is an important document that informs City staff how a development will impact the traffic in the project area. The scope of a TIS is dependent on the size and type of new land uses proposed by a development, which determine the number of trips that will be generated by the project. Appendix C of the City's Public Works Standards defines minimum requirements for TIS scope based on these characteristics.

WCG conducted a review of the City's TIS requirements to provide feedback on how they can be made clearer and better fit to the City's needs. Interested parties can refer to the Public Works Standards as discussed above for up-to-date requirements.

#### **E. CONNECTIVITY**

Connectivity refers to an interconnected roadway, bikeway, and walkway network that allows for multiple routes for travel. A system with excellent connectivity allows people multiple options when traveling between points within a city. A well-connected local street network allows short trips to be completed on local roadways rather than relying on regional collectors and arterials. A well-connected regional road network improves access, reduces travel times for all users, and can reduce the need for future roadway widening. Good network connectivity also improves emergency access and response times and allows multiple exit routes in the event of emergencies.

### REGIONAL CONNECTIVITY AND MAJOR BARRIERS

The size and location of the Freeport Center has historically made it difficult to provide a variety of connections across the city. Additionally, the city area is crisscrossed by other physical barriers that make maintaining connectivity difficult, including several rail lines and I-15. Opportunities to bridge these barriers should be sought out. The Utah Legislature recently passed Senate Bill SB0195, which states in Section 1, Chapter 10-8-87 that, as part of the development of a transportation master plan, municipalities shall "identify priority connections to remedy physical impediments... that would improve circulation and enhance vehicle, transit, bicycle, or pedestrian access to... priority



destinations". The intention of the bill is to provide an avenue for cities to enlist State assistance in approaching regional connectivity improvements within their boundaries that would otherwise be cost-prohibitive to undertake. To this end, the City has identified a set of projects as opportunity connections across major barriers. These are shown and numbered in **Figure 34** and described below:

- The railroad bridge on 300 North (Connection

   represents one of the City's few connections across the tracks; however, traffic demand on the bridge is expected to exceed capacity by 2050 and the bridge is expected to be due for reconstruction by 2040 (see the Bridge Maintenance and Improvements Plan). The cost for the reconstruction is expected to exceed the City's entire 2025 budget at \$25 million and will thus need State funds and careful planning to complete. This was identified as a priority project by the City.
- 2. 300 North currently dead-ends at I-15. This was discussed as a potential location for a new connection over I-15 (Connection 2). This would provide a desirable alternative to the 650 North/M Avenue interchange for accessing the MIDA development area and the HAFB gate and would likely alleviate pressure on Center Street, SR-126, and other routes that carry traffic destined for the air force base area. An alternative Build analysis for the 2050 condition was conducted in the travel demand model with this link in place. It was found that constructing this connection would alleviate congestion at the 650 North/M Avenue interchange without causing a significant increase in traffic on 300 North

- or Center Street west of SR-126; as such, it is recommended that the City present this project to UDOT as an opportunity to benefit both parties.
- 3. As traffic increases on both SR-193 and SR-126 through 2050, the Center Street bridge between the two facilities (Connection 3) will increasingly become a barrier for traffic wishing to cross the railroad tracks and travel between the two state highways. A project to increase the capacity of the bridge while preserving active transportation accessibility would require a similar investment to the 300 North bridge reconstruction, and is thus similarly identified as a priority connection on which to enlist state assistance.
- 4. Once the Falcon Hills Road connections are constructed, the Frontage Road east of I-15 between SR-193 and 200 South will provide a valuable alternative to SR-126 for north-south connectivity, particularly for vehicles accessing HAFB. However, the southbound travel lane on this road currently ends north of SR-193 due to the recent consolidation of the Frontage Road with the I-15 northbound on-ramp. This was necessary to preserve operations on SR-193 with the current configuration of the interchange, but the City wishes to explore opportunities to restore southbound access to SR-193 on the frontage road in the future (Connection 4). During discussions with UDOT, it was concluded that restoring full connectivity at this location could be possible when this interchange is fully reconstructed, so to this end the City is identifying this location as a priority connection to explore when that opportunity comes.



- Alternatively, a potential connection across I-15 was identified at 1000 East (Connection 5). This would provide an alternative connection to the SR-193 interchange for traffic coming southbound from the base; however, this connection was judged to be counterproductive to the City's goal of deemphasizing 1000 East for through-traffic. The raised median on SR-126 that will enforce a right-in/right-out configuration at 1000 East would diminish the utility of a connection over I-15 to the north; as such, it is not recommended that this alternative be pursued.
- 5. The Clearfield FrontRunner Station is located relatively close to a major employment destination in the Freeport Center, which occupies a significant portion of the halfmile station area studied in the station area plan. Additionally, the Denver and Rio Grande (D&RG) Rail Trail is a major regional facility for active transportation trips which runs along the eastern edge of the Freeport Center and passes through the station area. There is currently no direct connection to the Freeport Center or to the D&RG Rail Trail from the station platform, instead, D&RG trail users
- who wish to access the FrontRunner station or Freeport Center employees who wish to take transit to work must travel far out of their way via 1000 East and Antelope Drive in order to travel between the two locations. It was to this end that a pedestrian bridge and trail connection between Clearfield Station and the D&RG Trail (Connection 6) was proposed as part of the Future Active Transportation portion of this TMP (see Project AP2-3). Due to the rail alignment and heavy industrial uses along the path, this connection will be difficult to implement, but it has nevertheless been identified as a high-value project for improving regional connectivity and access.
- 6. A few possible alignments were identified for a connection across I-15 at 1500 East (Connection 7). After assessing the effect this connection would have in the travel demand model, it was determined that it would provide a valuable alternative to the nearby interchange at Antelope Drive, so the City could keep this in mind as a project to pursue in the future; however, the potential crossing at 300 North (Connection 2) was identified as a higher priority for the City to pursue at this time.



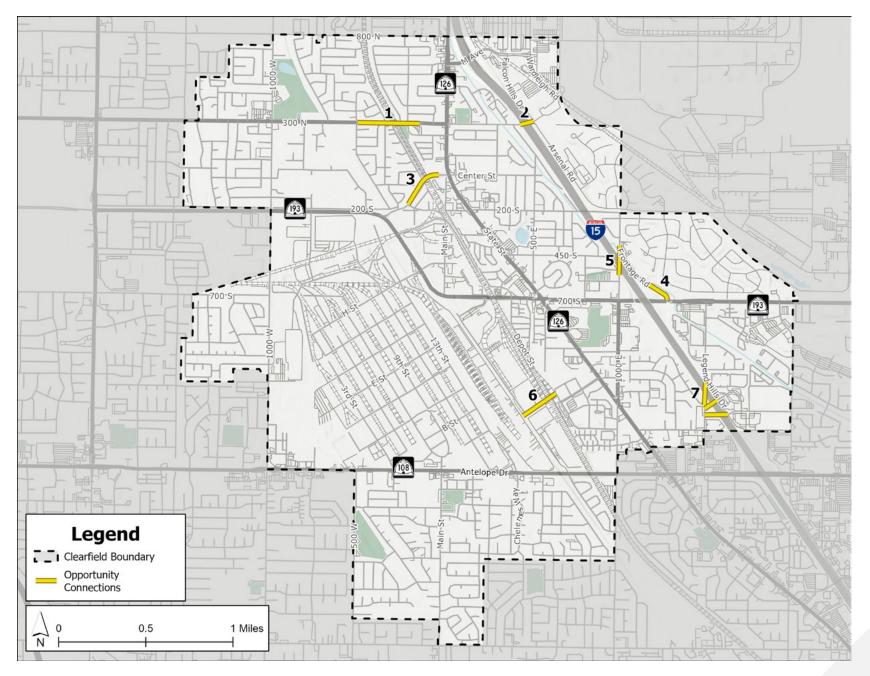


Figure 34: Opportunity Connections Across Major Barriers

#### LOCAL CONNECTIVITY

New development should be designed and approved with connectivity in mind. This can be done by minimizing the use of cul-de-sacs where possible and connecting stub roads with infill projects. Opportunities should also be taken to provide greater connectivity for active transportation users beyond the roadway network, like building mid-block trail connections between neighboring streets or linking cul-desacs with pathways. Disconnected streets, which oftentimes include cul-de-sacs and dead ends, are a major factor in increasing auto dependency and traffic on collectors and arterials. The City should keep locations with dead ends, cul-de-sacs, T-intersections, and stub roads in mind for new connections, at least for active modes if not for

motor vehicles, as properties come up for sale.

One opportunity of note is on the northern edge of Oakstone Apartments along the newly constructed 1450 South. Now that this roadway is constructed, it is recommended that the City work with apartment management to open a more direct active transportation connection north to 1450 South, which will greatly improve residents' ability to access and utilize the transit system. Outside of this location, stub roads that terminate at the boundary of undeveloped lots throughout the City have been identified. **Figure 35** depicts proposed roadways that would connect these stub roads to the existing network and maximize connectivity going forward.



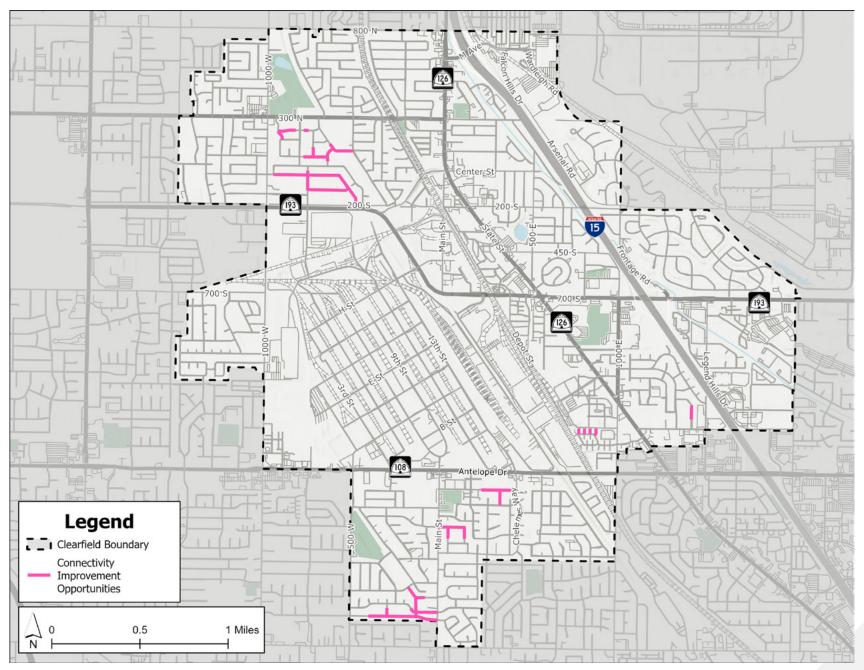


Figure 35: Local Connectivity Improvement Opportunities

#### **G. FREIGHT**

With the Freeport Center lying within city limits just west of I-15 at Exits 332 and 334 and representing such a major regional hub for freight and warehousing, the efficient movement of freight is an essential consideration for Clearfield City. Truck traffic should be accommodated to the maximum extent possible while also considering the comfort of residents and the load capacity/impact on City roads. In section 7-4-3 of the City Code, Clearfield has designated certain roadways within city limits as truck routes. Outside of certain circumstances, truck traffic should follow these routes and not depart from them. This minimizes the excess noise and safety concerns that accompany heavy freight

vehicle cut-through traffic on local roads. The City's designated truck routes are mapped in **Figure 36**.

One concern that was raised during the development of the plan was the volume of truck traffic that uses Center Street (a City-owned and maintained road) to access SR-193 from SR-126, or vice-versa. Some turning radii on this facility are challenging for trucks to navigate, which results in damage to roadside signage. Per federal law, cities cannot prohibit truck traffic on facilities that have been built with federal aid; however, the City could post signage recommending that trucks avoid Center Street and in any other locations where truck cut-through traffic is not desired.



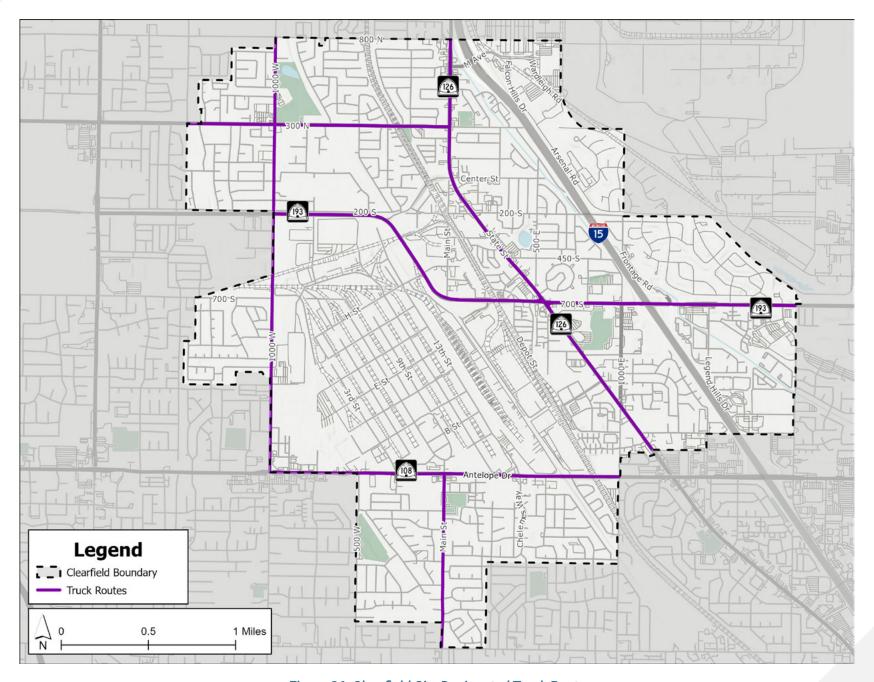


Figure 36: Clearfield City Designated Truck Routes

#### F. BRIDGE INVENTORY, MAINTENANCE AND IMPROVEMENTS PLAN

A map inventory was developed of existing bridges located within Clearfield City Boundaries. This inventory includes documentation of the bridge age, existing conditions, and an indication of upgrades and improvements to serve all travel modes. A timeline of when these bridges may need to be reconstructed or rehabilitated is presented and recommendations for how these bridges can be upgraded to serve all modes is provided. The objective of this plan is to guide City bridge investment through the future to ensure safety and ongoing maintenance. A map of all bridges within Clearfield City is shown in **Figure 37**.

The following bridges are owned by Clearfield City:

- 800 North
- Bruce Street
- 300 North over railroad tracks
- 300 North over Weber Davis Canal
- Center Street

The following bridges are owned by UDOT:

- 700 South (SR-193)
- Antelope Drive (SR-108)



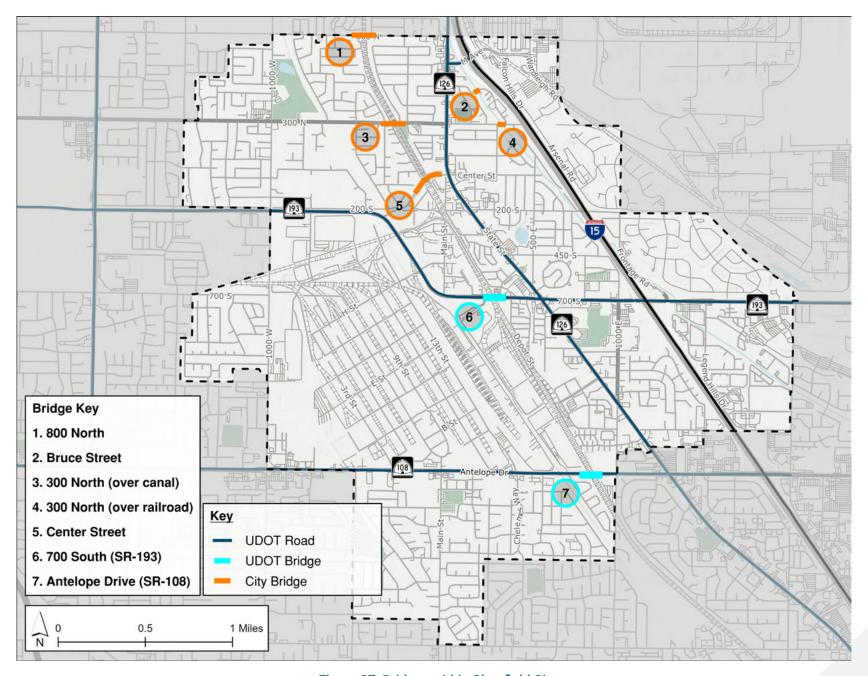


Figure 37: Bridges within Clearfield City



UDOT completes inspections of these bridges every two years and sends these inspections to the City. The inspection contains information on the conditions of various bridge elements, including the deck, superstructure, and substructure. The most recent inspection available was used to establish the existing conditions.

UDOT's method for determining when bridges need to be rehabilitated or replaced is based on bridge design life, current bridge conditions, and the amount of time in that condition. Generally, bridges built before 2000 have a design life of 50 years. Bridges built after 2000 are built to more current standards and generally have a design life of 75 years. Regular inspection and maintenance can extend the life of the structure. The UDOT Structures Design and Detailing Manual (SDDM) details preventative treatments and timings of these treatments to optimize lifecycle costs of the bridges. Treatments may only be for part of the structure, such as the deck. Bridges should continue to be monitored at regular intervals to determine a more exact timeline for replacement or rehabilitation.

The bridges owned by Clearfield City are described below, including their existing conditions as reported by UDOT and an estimated timeline for when the bridge would need to be replaced or rehabilitated. Recommendations are given regarding improvements to be made when the bridges are replaced so they can better serve all modes.

#### 800 NORTH



Constructed in 1985 and spanning approximately 120 feet, this bridge spans four sets of railroad tracks on the north border of Clearfield. It has a single travel lane in either direction and carried an average of 9,000 vehicles per day in 2024. There is a sidewalk on the north side of the bridge. Based on the most recent inspection, this bridge is currently in fair condition. As this bridge was

constructed before 2000, it has a design life of 50 years. Thus, the anticipated timeline for this bridge to be replaced is sometime between 2035 and 2050. Clearfield should continue to coordinate with UDOT to determine an exact timeline for when the bridge will be replaced.

When this bridge is replaced, the following improvements can be added to better serve all travel modes:

 Sidewalk on the south side of the bridge this should connect with the sidewalk on the south side of 800 North

Improved lighting on the north side of the bridge on the approach slabs

#### **BRUCE STREET**



Constructed in 1974, this bridge spans the Weber Davis Canal. It has a single travel lane in either direction and a sidewalk on the south side of the bridge. This bridge is adjacent to the Clearfield Canal Trail. This bridge was reconstructed as a box culvert in 2023. As it was reconstructed after 2000, the anticipated design life is 75 years. Thus, the anticipated timeline for this culvert to be replaced is sometime between 2090 and 2095. Regular inspection and maintenance can extend the design life of the structure.

When this culvert is replaced, the following improvements can be added to better serve all travel modes:

- Sidewalk on the north side of the culvert
- Improved lighting on the north or south side of the culvert

#### 300 NORTH (OVER RAILROAD TRACKS)

Built in 1974, this long bridge runs 0.25 miles over the railroad tracks on the north side of Clearfield. Originally built by UDOT and then gifted to the City,



this bridge spans six sets of tracks including the Union Pacific Rail Road and UTA's FrontRunner Commuter rail and carried an average of 12,000 vehicles per day in 2024. A portion of this bridge was rehabilitated in 2015. Based on the most recent inspection, this bridge is currently in fair condition. As this bridge was constructed before 2000, it has a design life of 50 years. Thus, the anticipated timeline for this bridge to be replaced is sometime between 2025 and 2040. This bridge is the highest priority for replacement in Clearfield.

Clearfield City should work with UDOT to better understand the expected lifespan and approach to rehabilitation/replacement of their bridges. The City should begin discussions with UDOT's Director of Region One, Region One Program Manager, and Local Government Program to best determine the appropriate course of action. Replacement costs could be as much as the City's entire 2025 annual budget at approximately \$40M.

When this bridge is replaced, the following improvements can be added to better serve all travel modes:

- Bike lanes on the north and south sides of the bridge
- Improved lighting on the south side of the bridge

#### **300 NORTH (OVER CANAL)**



This bridge spans the Weber Davis Canal on the east side of Clearfield. This bridge was built in 1965. It has a single travel lane in either direction and sidewalks on both the north and south sides. This bridge was reconstructed as a box culvert in 2023. As it was reconstructed after 2000, the anticipated design life is 75 years. Thus, the anticipated timeline for this culvert to be replaced is sometime between 2090 and 2095.

When this culvert is replaced, the following improvements can be added to better serve all travel modes:

- Improved lighting on the north and south sides of the culvert
- Raised trail crossing on the west side as part of the Clearfield Canal Trail

#### **CENTER STREET**



Built in 2000, this bridge is constructed over the railroad tracks in the center of the City. Spanning approximately 245 feet, this bridge has a single travel lane in either direction and carried an average of 10,000 vehicles per day in 2024. There is a sidewalk on the north side of the bridge. Based on the most recent inspection, this bridge is currently in fair condition. Since this bridge was constructed with updated design standards, the anticipated design life is 75 years. Thus, the anticipated timeline for this bridge to be replaced is sometime between 2070 and 2075.

When this bridge is replaced, the following improvements can be added to better serve all travel modes:

- Bike lanes on the north and south sides of the bridge
- A sidewalk on the south side of the bridge this should connect with the sidewalk on the south side of Center Street
- Improved lighting on the south side of the bridge

A summary of the Clearfield City bridge inventory is shown in **Table 13**.

**Table 13: Bridge Inventory** 

Bridge	Year Built (Age)	Bridge Condition	Timeline for Replacement	Improvements to serve all modes
800 North	1985 (40 years)	Fair	2035 - 2050	Sidewalk on south side of bridge to connect with sidewalk on south side of 800 North
				<ul> <li>Improved lighting on north side of bridge on approach slabs</li> </ul>
Bruce Street	1974 (51 years)	Fair	2090 - 2095	<ul> <li>Sidewalk north of the culvert</li> <li>Improved lighting north or south of the culvert</li> <li>Raised trail crossing west of the culvert</li> </ul>
300 North over railroad	1974 (51 years) Reconstructed as box culvert in 2023 (2 years)	Fair	2025 - 2040	<ul> <li>Bike lanes on both sides of the bridge</li> <li>Improved lighting on the south side of the bridge</li> </ul>
300 North over Weber Davis Canal	1965 (60 years) Reconstructed as box culvert in 2023 (2 years)	Fair	2090 - 2095	<ul> <li>Improved lighting on the north and south sides of the culvert</li> <li>Raised trail crossing on the west side as part of the Clearfield Canal Trail</li> </ul>
Center Street	2000 (25 years)	Fair	2070 - 2075	<ul> <li>Bike lanes on both sides of the bridge</li> <li>Sidewalk on the south side of the bridge connecting to Center Street</li> <li>Improved lighting on the south side of the bridge</li> </ul>

# VI. CAPITAL FACILITIES AND IMPLEMENTATION PLAN

#### A. CAPITAL FACILITIES PLAN

As shown in the previous sections, future growth due to new development requires Clearfield to make improvements to their transportation network to provide residents with a safe and efficient transportation network and maintain an acceptable LOS. Specific intersection and roadway improvements are listed below in **Table 14**, while active mode projects are listed in **Table 15**. All Capital Facilities Plan (CFP) projects are summarized below in **Figure 38**. The project numbers listed in the table are for identification

only and are no indication of project prioritization. Each project cost estimate represents 2023 costs and is not adjusted for inflation; therefore, estimates will need to be regularly updated by the City as project scopes may change as development occurs. Only roadway improvements to arterials and collectors are identified, as local roads are typically built by future development. Details for each project cost estimate can be found in the **Appendix B**.

Table 14: CFP Vehicle Capacity Projects							
Project	Description	Responsi-	Improvement	# o	f Lanes	Estimated	
Number		bility	Scope	2024	Proposed	Cost	
		Phase #	1 (2024-2033)				
1-1	Falcon Hills Dr Connections	MIDA	New Roadway	0	3	\$14,693,939	
1-2	Antelope Drive (SR- 108) Operations	UDOT	Operational Improvements	5	5	\$6,979,896	
1-3	State Street (SR- 126) Operations	UDOT	Operational Improvements	5	5	\$9,712,853	
1-4	1000 West Restriping (North of SR-193)	WFRC, Clearfield	Restriping	2	3	\$260,000	
1-5	1000 East Restriping (South of 1450 S)	Clearfield, WFRC, UDOT	Restriping	2	3	\$85,000	
1-A	I-15 Interchange — 650 North	UDOT	Interchange Upgrades			\$100,000,000	
1-B1	Station Boulevard & State St Signal	Clearfield, UDOT	New Signal			\$820,000	
1-B2	1000 E to RIRO with Raised Median	Clearfield, WFRC, UDOT	Signal - Removed			\$750,000	
1-B3	1450 S & State St Signal and Turn Lanes	Clearfield, UDOT	New Signal			\$1,200,000	

**Table 15: CFP Active Transportation Projects** 

	Table 15. CFF Active			
Project Number	Description	Responsibility	Improvement Scope	Estimated Cost
	Phase # 7	1 (2024-2033)		
AC1-1	1000 East Grade-Separated Crossing	UDOT, Clearfield	Grade-Separated	\$2,433,306
AC1-2	1150 South At-Grade Crossing	Developer, Clearfield	At-Grade	\$2,400,000
AC1-3	State Street & 1000 East Crossing	UDOT, Clearfield	Grade-Separated	-
AC1-4	Antelope Elementary Crossing	Clearfield	At-Grade	-
	CFP Active M	ode Path Projects		
	Phase #1	(2024-2033)		
AP1-1	1000 West Shared Use Path	Clearfield	Shared Use Path	-
AP1-2	3 Gates Trail Shared Use Path	WFRC	Shared Use Path	\$10,950,000
AP1-3	650 North Shared Use Path	WFRC, Clearfield	Shared Use Path	\$1,200,000
AP1-4	Clearfield Canal Extension	Clearfield	Shared Use Path	-
AP1-5	State Street / Main Street Shared Use Path	UDOT, Clearfield	Shared Use Path	\$340,000
AP1-6	Depot Street Bike Lane	Developer	Bicycle Lane	\$230,000
AP1-7	State Street Sidewalk Improvements	Developer, Clearfield	Sidewalk	-
AP1-8	1000 East Sidewalk Improvements	Clearfield	Sidewalk	-
AP1-9	Antelope Drive Shared Use Path	UDOT, Clearfield	Shared Use Path	\$2,980,000

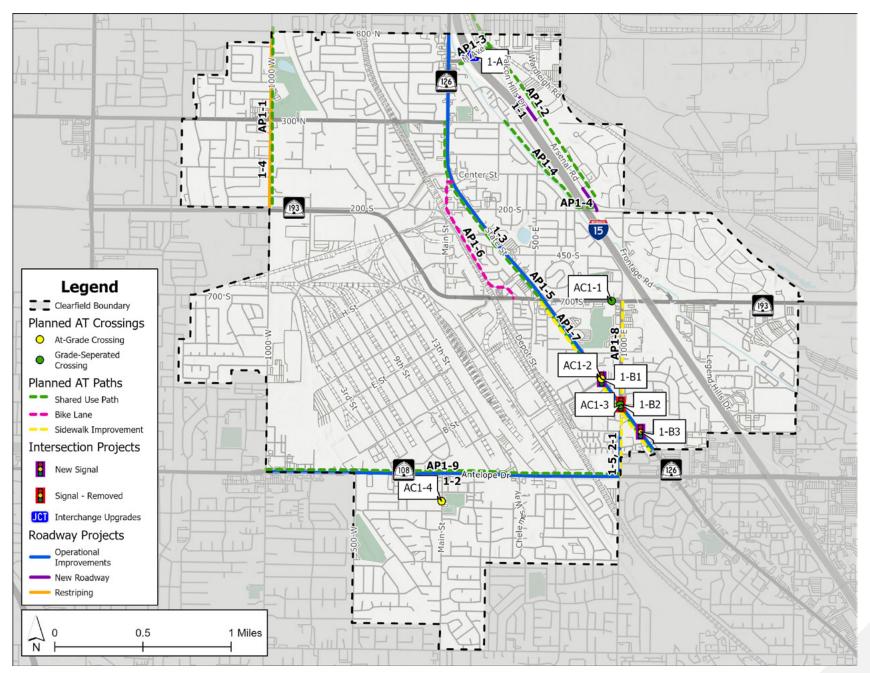


Figure 38: Future Projects—Capital Facilities Plan



# B. ADDITIONAL TRANSPORTATION STRATEGIES

In addition to the capital projects identified in the CFP and the previous sections, the City has identified several non-capital strategies that could be implemented to further meet the goals and objectives identified in Section I. These include:

#### **COORDINATION:**

- Perform quarterly coordination with UDOT to institutionalize regular communication, ensure UDOT projects meet community needs, and that multimodal needs are incorporated into UDOT roadway projects as applicable
- Perform annual coordination with UTA and WFRC on regional active transportation, roadway, transit and safety projects to ensure community projects align with regional priorities and planning
- Perform annual coordination with the Davis County School District to identify, install, and maintain safe walkways, crossings, and connections along defined routes to schools and other district-maintained amenities

#### **FACILITIES:**

- Where feasible, retrofit existing roadways to be consistent with the cross sections proposed in this plan on roadways designated minor collectors or greater
- Where feasible, replace or repair broken or damaged sidewalks
- Where feasible, ensure pedestrian and bicycle corridors have sufficient lighting to provide a safe nighttime walking environment

#### **PLAN DEVELOPMENT:**

 Consider development of city-wide wayfinding and/or transportation demand management plans to encourage multimodal travel to and from businesses within and around the City's downtown area

#### C. PERFORMANCE METRICS

The long-term identity and effectiveness of the Clearfield transportation network should reflect the goals and objectives described in Section I. As part of the Clearfield TMP's implementation, the City has identified the following metrics to measure overall efficacy of the plan and the progress the City is making in meeting the goals and objectives it has set:

#### 1. Implementation of Projects and Strategies:

The projects and strategies identified throughout the Clearfield TMP are the Clty's principal means to achieving its goals and objectives. As part of implementation of this plan, City staff will annually:

- Track which projects have been completed for each transportation mode identified in this plan
- Track which strategies have been implemented
- Identify which projects or strategies should be a priority for the coming year based on input received and/or data collected over the prior year
- 2. Regular Inventories of Roadway and Active Mode Facilities: The City already maintains an inventory of its roadway facilities and overarching trails network. As part of implementing the Clearfield TMP, this inventory will be expanded to include sidewalks, bicycle lanes, and shared-use paths. This inventory will serve to measure the mix of multimodal facilities that the City maintains, and will be updated periodically based on staff availability.
- 3. Reviews of Parking Code Compliance: In addition to reviewing development compliance with City parking code and regulations as part of entitlement of the development, the City may perform periodic reviews of existing on- and off-street parking facilities and identify any areas where facilities are not meeting parking demand. These reviews will be done on a case-by-case basis according to community or staff input and will serve to measure the overall effectiveness of the City's parking code and regulations.

## VII. CONCLUSION

#### A. OVERVIEW

The purpose of the Clearfield TMP is to plan the future transportation needs of Clearfield City. The following tasks were completed as part of this TMP:

- Traffic data was analyzed to help establish existing conditions in the City.
- Future traffic volumes were developed for future planning years 2034 and 2050.
- A travel demand analysis based on existing and future land use was performed.
- A list of needed future roadway and intersection projects was created.
- City street functional classifications were updated based on the future roadway projects.
- The active transportation plan was updated with recommendations for project phasing.
- UTA's most recent plans for future transit projects were summarized.
- A safety analysis was performed.
- Connectivity improvement opportunities were identified.
- The access management and traffic impact study (TIS) standards were reviewed.
- Truck routes were identified and mapped.
- An inventory was taken of all bridges within City limits, including the age and condition.
- Utah State Code Requirements for the transportation and traffic circulation elements were met.
- An analysis was conducted to determine the feasibility of charging impact fees.
- An ArcGIS Online StoryMap was created that summarized the analysis performed in this TMP.



#### **B. NEXT STEPS**

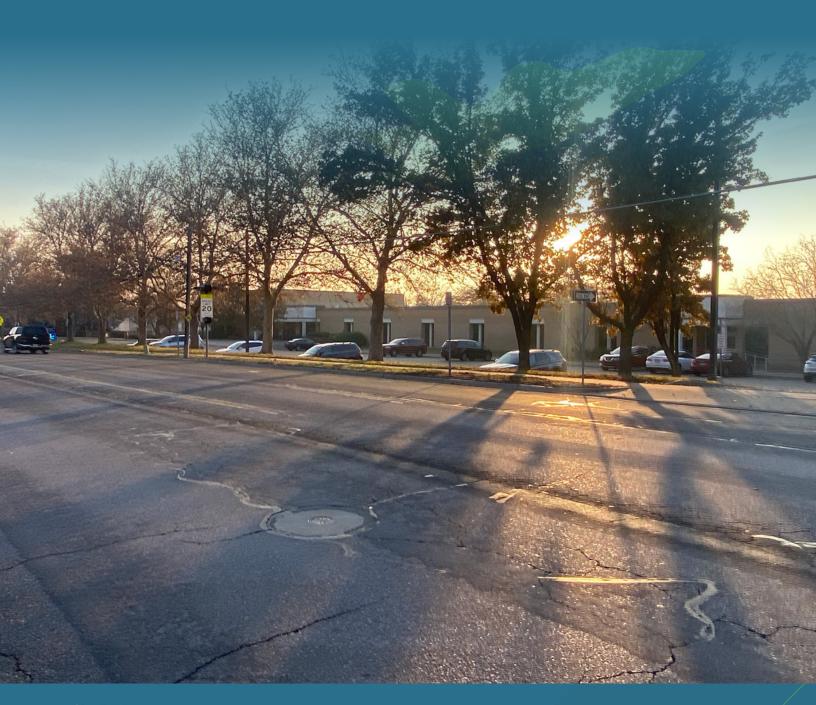
As a result of this TMP, there are several opportunities for Clearfield City staff to apply the recommendations in the coming months and years. It is recommended that Clearfield City complete the following when possible:

- Continue to monitor and collect traffic data to inform transportation planning decisions.
- Work to get funding for projects that are not currently funded.
- Acquire funding for the Phase 1 active transportation projects.
- Work with staff from Layton City and WFRC to apply for funding to conduct a study on the potential for transit service onto Hill Air Force Base.
- Monitor crash trends to find discernible patterns.
- In addition to projects listed in the WFRC Comprehensive Safety Action plan, implement the following safety improvements:
- Prohibit RTOR at the following intersections:
  - Southbound right turns at the 1000 East / Antelope Drive (SR-108) intersection
  - 400 East / Antelope Drive (SR-108)
- Install bulb-outs at the following intersections:
  - 1000 West / 300 North
  - Main Street / 300 North
- Install improved lighting for northbound vehicles at the 1000 West / SR-193 intersection
- Request a pedestrian study from UDOT near Lakeside Square on SR-126
- Install signage directing truck traffic onto designated truck routes.
- Work with WFRC, UDOT, and other relevant entities to propose the priority projects identified in Figure 34 to connect across major barriers in the region:
  - Connection 1: Reconstruct the 300 North railroad bridge with increased capacity.
  - Connection 2: Construct a roadway bridge across I-15 connecting 300 North to Falcon Hills Drive.
  - Connection 3: Reconstruct the Center Street railroad bridge with increased capacity.
  - **Connection 4:** Consider options to restore southbound access to SR-193 from the Frontage Road when the interchange is reconstructed.
  - Connection 6: Construct a pedestrian connection across the railroad between the FrontRunner station and the D&RG Rail Trail.
- Improve connectivity as development continues by making key connections as shown in Figure 35 when appropriate.
- Coordinate with UDOT for continued maintenance and replacement of City bridges, particularly 300
   North over the railroad tracks.
- Coordinate regularly with UTA and WFRC on implementation of and connection to the regional transit and active transportation networks.
- Update the City's roadway/trail facility inventories to include sidewalks, bicycle lanes, and shared-use paths.
- Follow the best practices as outlined in Section III. City Transportation Management.
- Consider updates to the TIS requirements as discussed in a memorandum shared with the City
- Consolidate all access management guidelines into the Public Works Standards and reference them in the City Code.

## VIII. APPENDIX

APPENDIX A — COST ESTIMATES

APPENDIX B — WFRC COMPREHENSIVE SAFETY ACTION PLAN PROJECTS



	MATE (2024 COSTS) I & State St Signal			
BID ITEMS				
GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	Quantity 1	lump	7.00%	\$32,800.00
Public Information Services	1	lump	0.50%	\$2,400.00
Traffic Control	1	lump	4.50%	\$2,400.00
Survey	1	lump	2.00%	\$9,400.00
Survey		ішпр	2.0070	\$65,700.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	250	ft	\$ 12.00	\$3,000.00
Remove Concrete Sidewalk	300	sq yd	\$ 28.00	\$8,400.00
Roadway Excavation (Plan Quantity)	700	cu yd	\$ 24.00	\$16.800.00
Granular Borrow (Plan Quantity)	300	cu yd	\$ 35.00	\$10,500.00
Untreated Base Course	300	Ton	\$ 40.00	\$12,000.00
Remove Concrete Driveway	50	sq yd	\$ 28.00	\$1,400.00
HMA - 1/2 inch	200	Ton	\$ 150.00	\$30.000.00
Pavement Marking Paint	60	gal	\$ 80.00	\$4,800.00
Pavement Message (Preformed Thermoplastic)	30	Each	\$ 250.00	\$7,500.00
Concrete Curb and Gutter Type B1	300	ft	\$ 45.00	\$13,500.00
Perpendicular/Parallel Pedestrian Access Ramp	6	Each	\$ 4,000.00	\$24,000.00
Concrete Sidewalk	250	sq ft	\$ 4,000.00	\$3,750.00
Chip Seal Coat, Type II	250	sq yd	\$ 5.00	\$0.00
Micro-Surfacing	5 000	sq yd sq yd	\$ 3.00	
Concrete Flatwork, 6 inch Thick	5,000	sq yu	\$ 3.00	\$15,000.00
Concrete Hatwork, O men Thick	200.00	5 <b>4</b> It	φ 15.00	\$3,000.00
				\$153,650.00
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"	200	ft	\$ 125.00	\$25,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
- Cottangaran Orato, mar ramo (Diojoio Garo Grannig)	-		,	ψ 1,000.00
				\$39,000.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
New signal	1	lump	\$250,000.00	\$250.000.00
inew signal	1	iunp	φ230,000.00	Ψ230,000.00
				\$250,000.00
				¥200,000.00
UTILITIES Description	Quantity	Unit	Unit Price	Amount
Utility Contingency	1	lump	\$25,000.00	\$25,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
			\$5,000.00	ψ0.00
			1	
				\$25,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping		Lump	\$50,000.00	\$0.00
				\$0.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
				\$0.00
				,,,,,,
			BID ITEMS \$	\$533,350.00
		Cor	ntingency 30% \$	\$160,005.00
		BID	ITEMS TOTAL \$	\$693,355.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	0	sq ft	\$17.00	\$0.00
Assuming 5' wide construction easement required for length of project		sq ft	\$3.00	\$0.00
Potential full right of way takes		each	\$600,000.00	\$0.00
				\$0.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$69,335.50	\$69,335.50
Seeigh Engineering (1070 of Bid Remo)	1	шпр	ψου,σου.σο	\$69,335.50
				<del>+00,000.00</del>
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$55,468.40	\$55,468.40
				\$55,468.40
				\$693,355.00
BID ITEMS TOTAL				
			D ITEMS TOTAL TOTAL	\$124,803.90 \$818,158.90

	MATE (2024 COSTS)			
1000 E to RIRO w	ith Raised Median			
BID ITEMS				
GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	5.00%	\$21,600.00
Public Information Services	1	lump	0.50%	\$2,200.00
Traffic Control	1	lump	4.00%	\$17,300.00
Survey	1	lump	2.00%	\$8,700.00
	-	•		\$49,800.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter		ft	\$ 12.00	\$0.00
Remove Concrete Sidewalk		sq yd	\$ 28.00	\$0.00
Roadway Excavation (Plan Quantity)		cu yd	\$ 24.00	\$0.00
Granular Borrow (Plan Quantity)		cu yd	\$ 35.00	\$0.00
Untreated Base Course	300	Ton	\$ 40.00	\$12,000.00
Remove Concrete Driveway		sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch		Ton	\$ 150.00	\$0.00
Pavement Marking Paint	70	gal	\$ 80.00	\$5,600.00
Pavement Message (Preformed Thermoplastic)	15	Each	\$ 250.00	\$3,750.00
Concrete Curb and Gutter Type B1	1,500	ft	\$ 45.00	\$67,500.00
Perpendicular/Parallel Pedestrian Access Ramp	2	Each	\$ 4,000.00	\$8,000.00
Concrete Sidewalk		sq ft	\$ 15.00	\$0.00
Chip Seal Coat, Type II		sq yd	\$ 5.00	\$0.00
Micro-Surfacing	6,500	sq yd	\$ 3.00	\$19,500.00
Concrete Flatwork, 6 inch Thick	2,000.00	sq ft	\$ 15.00	\$30,000.00
				\$146,350.00
				. ,
DRAINAGE & IRRIGATION  Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"				
		ft	\$ 125.00	
	845	ft Each	\$ 125.00	\$105,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9			\$ 125.00 \$ 5,000.00	\$105,625.00 \$30,000.00
	845	Each	\$ 125.00 \$ 5,000.00	\$105,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	845	Each	\$ 125.00 \$ 5,000.00	\$105,625.00 \$30,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	845	Each	\$ 125.00 \$ 5,000.00	\$105,625.00 \$30,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	845	Each	\$ 125.00 \$ 5,000.00	\$105,625.00 \$30,000.00 \$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9 Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM	845 6	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	845 6 Quantity	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9 Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM	845 6	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	845 6 Quantity	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal	845 6 Quantity	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal	Quantity 1	Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$85,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal  UTILITIES  Description	845 6 Quantity	Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$85,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal  UTILITIES  Description  Utility Contingency	Quantity 1 Quantity	Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 <b>Unit Price</b> \$85,000.00 <b>Unit Price</b> \$15,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal  UTILITIES  Description	Quantity 1 Quantity 1	Each Each Unit lump Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$85,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00 \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal  UTILITIES  Description  Utility Contingency	Quantity 1 Quantity 1	Each Each Unit lump Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 <b>Unit Price</b> \$85,000.00 <b>Unit Price</b> \$15,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00 \$85,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Existing signal removal  UTILITIES  Description  Utility Contingency	Quantity 1 Quantity 1	Each Each Unit lump Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 <b>Unit Price</b> \$85,000.00 <b>Unit Price</b> \$15,000.00	\$105,625.00 \$30,000.00 \$0.00 \$135,625.00 Amount \$85,000.00 \$85,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
•				
Structures				
Description Description	Quantity	Unit		Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
			+	
				\$0.00
			BID ITEMS \$	\$481,775.00
				\$144,532.50
		BID	ITEMS TOTAL \$	\$626,307.50
NON-BID ITEMS				
Description	Quantity	Unit	Unit Drice	Amount
Right of Way	Quantity	sq ft		\$0.00
Assuming 5' wide construction easement required for length of project	0	sq ft		\$0.00
Potential full right of way takes		each	Unit Price \$17.00 \$3.00 \$600,000.00  Unit Price \$17.00 \$3.00 \$600,000.70	\$0.00
- contain raining in contain tailed			7000,00000	\$0.00
				,
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	#250,000.00  BID ITEMS \$  Pontingency 30% \$  D ITEMS TOTAL \$  Unit Price	\$62,630.75
				\$62,630.75
<u>Description</u>	Quantity	Unit		Amount
Construction Management (8% of Bid Items)	1	lump	\$50,104.60	\$50,104.60
				\$50,104.60
		ы	D ITEMS TOTAL	¢626 207 50
				\$626,307.50 \$112,735.35
		INOIN-DI		\$739,042.85
			IUIAL	φ/ 39,U42.83

	MATE (2024 COSTS) gnal and Turn Lanes			
BID ITEMS				
GENERAL	- 111			
Description	Quantity	Unit	Unit Price	Amount
Mobilization D. His H. G. Line Co. Line	1	lump	7.00%	\$45,600.0
Public Information Services	1	lump	1.00%	\$6,600.00
Traffic Control	1	lump	5.00%	\$32,600.00
Survey	ı	lump	2.00%	\$13,100.00 <b>\$97,900.0</b> 0
				ψ37,300.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	200	ft	\$ 12.00	\$2,400.00
Remove Concrete Sidewalk	500	sq yd	\$ 28.00	\$14,000.00
Roadway Excavation (Plan Quantity)	700	cu yd	\$ 24.00	\$16,800.00
Granular Borrow (Plan Quantity)	300	cu yd	\$ 35.00	\$10,500.00
Untreated Base Course	350	Ton	\$ 40.00	\$14,000.00
Remove Concrete Driveway		sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	300	Ton	\$ 150.00	\$45,000.00
Pavement Marking Paint	70	gal	\$ 80.00	\$5,600.00
Pavement Message (Preformed Thermoplastic)	50	Each	\$ 250.00	\$12,500.00
Concrete Curb and Gutter Type B1	360	ft	\$ 45.00	\$16,200.00
Perpendicular/Parallel Pedestrian Access Ramp	2	Each	\$ 4,000.00	\$8,000.00
Concrete Sidewalk	1,000	sq ft	\$ 15.00	\$15,000.00
Chip Seal Coat, Type II	1,000	sq yd	\$ 5.00	\$0.00
Micro-Surfacing	6,500	sq yd	\$ 3.00	\$19,500.00
Concrete Flatwork, 6 inch Thick	0,000	sq ft	\$ 15.00	\$0.00
,				φυ.υ.
	•			\$179,500.00
DRAINAGE & IRRIGATION	Quantity	Unit	Unit Drice	Amount
Description	Quantity	Unit ft	<b>Unit Price</b> \$ 125.00	Amount
18 Inch Irrigation HDPE Pipe"	845	Each	· · · · · · · · · · · · · · · · · · ·	\$105,625.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	6	Each	+	\$30,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	\$0.00
				\$135,625.00
ALOUAL AVOTELL				
SIGNAL SYSTEM	Quantity	Unit	Unit Price	Amount
Description New Stand	Quantity	Unit	\$250,000.00	Amount
New Signal	1	lump	\$250,000.00	\$250,000.00
			'	\$250,000.00
UTILITIES Description	Quantity	Unit	Unit Price	Amount
•	Quantity 1		\$35,000.00	\$35,000.00
Utility Contingency Street Lighting (speed eveny 200')	-	lump		
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
				\$35,000.0
				<b>400,000.00</b>

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
•				
Structures				
Description Description	Quantity	Unit		Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$748,025.00
				\$224,407.50
		BID	ITEMS TOTAL \$	\$972,432.50
NON-BID ITEMS				
Description	Quantity	Unit	Unit Drice	Amount
Right of Way	Quantity	sq ft		\$0.00
Assuming 5' wide construction easement required for length of project	0	sq ft		\$0.00
Potential full right of way takes		each	Unit Price \$250,000.00  BID ITEMS \$ ontingency 30% \$ D ITEMS TOTAL \$  Unit Price \$17.00 \$3.00 \$600,000.00  Unit Price \$97,243.25	\$0.00
- contain raining in contagnition of the conta			7000,000	\$0.00
				,
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	### STOTAL STOTA	\$97,243.25
				\$97,243.25
Description Control of	Quantity	Unit		Amount
Construction Management (8% of Bid Items)	1	lump	\$77,794.60	\$77,794.60
				\$77,794.60
			D ITEMS TOTAL	£070 400 50
				\$972,432.50 \$175,037.85
		NUN-BI		
			IUIAL	\$1,147,470.35

# ENGINEER'S ESTIMATE (2024 COSTS) SR-193 and Center St Dual SB LTL (With Project 2-2)

SR-193 and Center St Dual	1 3B LTL (With Project 2-2)			
BID ITEMS				
GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	10.00%	\$51,500.00
Public Information Services	1	lump	1.00%	\$5,200.00
Traffic Control	1	lump	10.00%	\$51,500.00
Survey	1	lump	2.00%	\$10,300.00
		•	'	\$118,500.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	1,000	ft	\$ 12.00	\$12,000.00
Remove Concrete Sidewalk	56	sq yd	\$ 28.00	\$1,555.56
Roadway Excavation (Plan Quantity)	1,000	cu yd	\$ 24.00	\$24,000.00
Granular Borrow (Plan Quantity)	444	cu yd	\$ 35.00	
Untreated Base Course	580	Ton	\$ 40.00	\$15,555.56
Remove Concrete Driveway	120	sq yd	\$ 28.00	\$23,200.00
HMA - 1/2 inch		Ton		\$3,360.00
4 inch Pavement Marking Tape - White	536	ft	\$ 150.00	\$80,325.00
Pavement Message (Preformed Thermoplastic)	100	π Each	\$ 5.00	\$500.00
	30	ft	\$ 250.00	\$7,500.00
Concrete Curb and Gutter Type B1	1,000		\$ 45.00	\$45,000.00
Perpendicular/Parallel Pedestrian Access Ramp		Each	\$ 5,000.00	\$0.00
Concrete Sidewalk	500	sq ft	\$ 15.00	\$7,500.00
Micro-Surfacing	8,000	sq yd	\$ 5.00	\$40,000.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
DRAINAGE & IRRIGATION				\$264,496.11
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"	100	ft	\$ 125.00	\$12,500.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$12,500.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	4 4	Each	\$ 2,000.00	\$8,000.00
Rectangular Grate And Frame (bicycle Sale Grating) - GF 3	4	Lacii	Ψ 2,000.00	\$6,000.00
			1	\$40,500.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
	Quantity 1	<b>Unit</b> lump	Unit Price \$150,000.00	<b>Amount</b> \$150,000.00
Description				
Description				\$150,000.00
Description				\$150,000.00
Modify signal				\$150,000.00
Description				
Description  Modify signal  UTILITIES	1	lump	\$150,000.00	\$150,000.00 \$150,000.00
Description  Modify signal  UTILITIES  Description	Quantity	lump Unit	\$150,000.00  Unit Price	\$150,000.00 \$150,000.00 Amount
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 0	lump  Unit lump	\$150,000.00  Unit Price \$100,000.00	\$150,000.00 \$150,000.00 Amount \$0.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 0	lump  Unit lump	\$150,000.00  Unit Price \$100,000.00	\$150,000.00 \$150,000.00 Amount \$0.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 0	lump  Unit lump	\$150,000.00  Unit Price \$100,000.00	\$150,000.00 \$150,000.00 Amount \$0.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 0	lump  Unit lump	\$150,000.00  Unit Price \$100,000.00	\$150,000.00 \$150,000.00 Amount \$0.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall	0	Lump	\$250,000.00	\$0.00
				***
				\$0.00
			DID ITEMS 6	¢c22 40C 44
		Cor	BID ITEMS \$ ntingency 25% \$	\$633,496.11 \$158,374.03
			ITEMS TOTAL \$	\$791,870.14
		ы	ITENIS TOTAL \$	\$791,070.14
NON-BID ITEMS				
NON DID TELLIO				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	0	sq ft	\$17.00	\$0.00
,	0	sq ft	\$3.00	\$0.00
		each	\$600,000.00	\$0.00
				\$0.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$79,187.01	\$79,187.01
				\$79,187.01
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$63,349.61	\$63,349.61
				\$63,349.61
				<b>A</b>
			D ITEMS TOTAL	\$791,870.14
		NON-BI	D ITEMS TOTAL	\$142,536.63
			TOTAL	\$934,406.76

# ENGINEER'S ESTIMATE (2023 COSTS) 1450 S & 1000 E Intersection Improvements

1450 S & 1000 E Inter	section Improvements			
BID ITEMS				
GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	9.50%	\$59,500.00
Public Information Services	1	lump	2.00%	\$12,600.00
Traffic Control	1	lump	10.00%	\$62,600.00
Survey	1	lump	5.00%	\$31,300.00
			0.0070	\$166,000.00
				•
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	200	ft	\$ 12.00	\$2,400.00
Remove Concrete Sidewalk	200	sq yd	\$ 28.00	\$5,600.00
Roadway Excavation (Plan Quantity)	1,219	cu yd	\$ 24.00	\$29,248.00
Granular Borrow (Plan Quantity)	1,219	cu yd	\$ 35.00	\$42,653.33
Untreated Base Course	1,621	Ton	\$ 40.00	\$64,826.99
Remove Concrete Driveway	0	sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	855	Ton	\$ 150.00	\$128,256.84
Pavement Marking Paint	100	gal	\$ 80.00	\$8,000.00
Pavement Message (Preformed Thermoplastic)	15	Each	\$ 250.00	\$3,750.00
Concrete Curb and Gutter Type B1	800	ft	\$ 35.00	\$28,000.00
Perpendicular/Parallel Pedestrian Access Ramp	8	Each	\$ 4,000.00	\$32,000.00
Concrete Sidewalk	4,000	sq ft	\$ 9.00	\$36,000.00
Concrete Curb and Gutter Type M1	437	ft	\$ 25.00	\$10,925.00
Concrete Flatwork, 6 inch Thick	3409	sq ft	\$ 10.00	\$34,092.00
•	0.100			ΨΟ 1,002.00
				\$425,752.16
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	200	ft	\$ 125.00	\$25,000.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	8	Each	\$ 5,000.00	\$40,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	8	Each	\$ 2,000.00	\$16,000.00
				\$81,000.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
None		lump		\$0.00
				\$0.00
LITH ITIES				
UTILITIES Description	Quantity	Unit	Unit Price	Amount
-	Quantity			
utility relocates	1	lump	\$40,000.00	\$40,000.00
Lighting at roundabout (assume 8 lights)	8	Each	\$8,000.00	\$64,000.00

\$104,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
andscaping (assume higher price to landscape medians)	1	Lump	\$15,000.00	\$15,000.0
				\$15,000.0
Structures	_			
Description	Quantity	Unit	Unit Price	Amount
				<b>***</b>
				\$0.0
			BID ITEMS \$	\$791,752.10
		Cont	ingency (30%) \$	
			ITEMS TOTAL \$	
		סוט	TIEMO TOTAL V	Ψ1,023,211.0
NON-BID ITEMS			I	
Description	Quantity	Unit	Unit Price	Amount
ump estimate for right of way takes for extra space requried for roundabout	7,000	sq ft	\$20.00	\$140,000.00
Assuming 5' wide construction easement	1,000	sq ft	\$3.00	\$3,000.00
			,	\$143,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (12% of Bid Items)	1	lump	\$123,513.34	\$123,513.3
				\$123,513.3
Description	Quantity	Unit	Unit Price	Amount
Construction Management (12% of Bid Items)	1	lump	\$123,513.34	\$123,513.3
				\$123,513.34
		p.s.	 	*4 ***
			ITEMS TOTAL \$	
		NON-BID	ITEMS TOTAL \$	\$390,026.67

GRAND TOTAL \$ \$1,419,304.48

ENGINEER'S ESTIM				
1000 W and 300 N RT	L, Left Turn Phasing			
BID ITEMS				
GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	10.00%	\$67,300.00
Public Information Services	1	lump	1.00%	\$6,800.00
Traffic Control	1	lump	10.00%	\$67,300.00
Survey	1	lump	2.00%	\$13,500.00
				\$154,900.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	500	ft	\$ 12.00	\$6,000.00
Remove Concrete Sidewalk	100	sq yd	\$ 28.00	\$2,800.00
Roadway Excavation (Plan Quantity)	400	cu yd	\$ 24.00	\$9,600.00
Granular Borrow (Plan Quantity)	400	cu yd	\$ 35.00	\$14,000.00
Untreated Base Course	348	Ton	\$ 40.00	\$13,920.00
Remove Concrete Driveway	200	sq yd	\$ 28.00	\$5,600.00
HMA - 1/2 inch	245	Ton	\$ 150.00	\$36,720.00
Pavement Marking Paint	30	gal	\$ 80.00	\$2,400.00
Pavement Message (Preformed Thermoplastic)	20	Each	\$ 250.00	\$5,000.00
Concrete Curb and Gutter Type B1	500	ft	\$ 45.00	\$22,500.00
Perpendicular/Parallel Pedestrian Access Ramp	2	Each	\$ 5,000.00	\$10,000.00
Concrete Sidewalk	1,000	sq ft	\$ 15.00	\$15,000.00
Micro-Surfacing	2,500	sq yd	\$ 3.00	\$7,500.00
Concrete Driveway Flared, 7 inch Thick	1,800	sq ft	\$ 20.00	\$36,000.00
				\$187,040.00
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"	Quantity	ft	\$ 125.00	\$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$0.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	\$0.00
				,,,,,
				\$0.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
Modify signal	1	lump	\$150,000.00	\$150,000.00
				\$150,000.00
UTILITIES Description	Quantity	Unit	Unit Price	Amount
Utility Contingency	quantity	lump	\$250,000.00	\$250,000.00
( Curry CornaryCHO)		ιαπρ	μ200,000.00	Ψ200,000.00
	1	lumn	\$35,000,00	\$35 000 00
Street Lighting relocation	1	lump	\$35,000.00	\$35,000.00
	1	lump	\$35,000.00	\$35,000.00

\$285,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
				\$0.00
				****
			BID ITEMS \$	\$826,940.00
			ntingency 20% \$	\$165,388.00
		ВІР	ITEMS TOTAL \$	\$992,328.00
NON-BID ITEMS				
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	750	sq ft	\$25.00	\$18,750.00
Assuming 5' wide construction easement required for length of project	2,500	sq ft	\$3.00	\$7,500.00
Potential full right of way takes		each	\$600,000.00	\$0.00
	I		, , , , , , , , , , , , , , , , , , , ,	\$26,250.00
				, ,
			· ·	
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (12% of Bid Items)	1	lump	\$119,079.36	\$119,079.36
				\$119,079.36
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$79,386.24	\$79,386.24
				\$79,386.24
			D ITEMS TOTAL	\$992,328.00
		NON-BI	D ITEMS TOTAL	\$224,715.60
			TOTAL	\$1,217,043.60

ENGINEER'S ESTIN 1000 W and 800 N RT				
DID ITEMS				
BID ITEMS GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization Description	quantity	lump	10.00%	\$77,200.00
Public Information Services	1	lump	1.00%	\$7,800.00
Traffic Control	1	lump	10.00%	\$77,200.00
Survey	1	lump	2.00%	\$15,500.00
Survey	, ,	iump	2.00%	\$177,700.00
ROADWAY Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	500	ft	\$ 12.00	\$6,000.00
Remove Concrete Sidewalk	100	sq yd	\$ 28.00	\$2,800.00
Roadway Excavation (Plan Quantity)	400	cu yd	\$ 24.00	\$9,600.00
Granular Borrow (Plan Quantity)	400	cu yd	\$ 35.00	\$14,000.00
Untreated Base Course	348	Ton	\$ 40.00	\$13,920.00
Remove Concrete Driveway	200	sq yd	\$ 28.00	\$5,600.00
HMA - 1/2 inch	245	Ton	\$ 150.00	\$36,720.00
Pavement Marking Paint	30	gal	\$ 80.00	\$2,400.00
Pavement Message (Preformed Thermoplastic)	20	Each	\$ 250.00	\$5,000.00
Concrete Curb and Gutter Type B1	500	ft	\$ 45.00	\$22,500.00
Perpendicular/Parallel Pedestrian Access Ramp	3	Each	\$ 5,000.00	\$15,000.00
Concrete Sidewalk	1,500	sq ft	\$ 15.00	\$22,500.00
Micro-Surfacing	2,500	sq yd	\$ 3.00	\$7,500.00
Concrete Driveway Flared, 7 inch Thick	1,500	sq ft	\$ 15.00	\$22,500.00
	1,300		Ψ 13.00	Ψ22,300.00
				\$186,040.00
				+
DRAINAGE & IRRIGATION	0(!)	11.14	II. '' B.'	
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"		ft	\$ 125.00	\$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$0.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	\$0.00
				\$0.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
Modify signal	1	lump	\$150,000.00	\$150,000.00
				\$150,000.00
UTILITIES				
UTILITIES  Description	Quantity	Unit	Unit Price	Amount
Description	Quantity 1			
Description Utility Contingency		lump	\$250,000.00	\$250,000.00
Description	1			

\$285,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$150,000.00	\$150,000.00
				\$150,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
			+	
				\$0.00
				<b>V</b> 0.00
			BID ITEMS \$	\$948,740.00
		Coi	ntingency 30% \$	\$284,622.00
		BID	ITEMS TOTAL \$	\$1,233,362.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	2,500	sq ft	\$25.00	\$62,500.00
Assuming 5' wide construction easement required for length of project	2,500	sq ft	\$3.00	\$7,500.00
Potential full right of way takes		each	\$600,000.00	\$0.00
				\$70,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (12% of Bid Items)	1	lump	\$148,003.44	\$148,003.44
boolgn Engineering (1270 of bla Remo)		таттр	ψ110,000.11	\$148,003.44
				<b>*</b> * * * * * * * * * * * * * * * * * *
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$98,668.96	\$98,668.96
				\$98,668.96
			D ITEMS TOTAL	
		NON-BI	D ITEMS TOTAL	\$316,672.40
			TOTAL	\$1,550,034.40

ENGINEER'S ESTIMATE (2024 COSTS)
Center St and State St (SR-126) Dual EB LTL

<u> </u>			
Quantity	Unit	Unit Price	Amount
1			\$107,200.00
1	•		\$10,800.00
<u> </u>		1	\$107,200.00
		1	\$21,500.00
•	таттр	2.5070	\$246,700.00
Quantity	Unit	Unit Price	Amount
			\$6,000.00
		<del> </del>	\$2,800.00
		-t	\$9,600.00
		+ '	\$14,000.00
			\$13,920.00
			\$13,920.00
			\$36,720.00
<u> </u>		<u> </u>	\$2,400.00
		+	\$2,400.00 \$5,000.00
			\$22,500.00
		+	
			\$15,000.00
	-	<u> </u>	\$22,500.00
			\$7,500.00 \$22,500.00
1,500		Ψ 13.00	\$22,300.00
			\$186,040.00
Quantity	Unit	Unit Price	Amount
Quantity	Unit ft	Unit Price \$ 125.00	
Quantity			\$0.00
Quantity	ft	\$ 125.00	\$0.00 \$0.00
Quantity	ft Each	\$ 125.00 \$ 5,000.00	\$0.00 \$0.00
Quantity	ft Each	\$ 125.00 \$ 5,000.00	\$0.00 \$0.00
Quantity	ft Each	\$ 125.00 \$ 5,000.00	\$0.00 \$0.00 \$0.00 \$0.00
Quantity	ft Each	\$ 125.00 \$ 5,000.00	\$0.00 \$0.00 \$0.00
	ft Each	\$ 125.00 \$ 5,000.00	\$0.00 \$0.00 \$0.00
Quantity  Quantity  1	ft Each Each	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$0.00 \$0.00 \$0.00
Quantity	ft Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$0.00 \$0.00 \$0.00
Quantity	ft Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$0.00 \$0.00 \$0.00 \$0.00
Quantity	ft Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>Amount</b> \$150,000.00
Quantity	ft Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$150,000.00	\$0.00 \$0.00 \$0.00 \$0.00 Amount \$150,000.00
Quantity 1	ft Each Each Unit	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$150,000.00 Unit Price \$250,000.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Amount \$150,000.00 Amount \$250,000.00
Quantity 1 Quantity	ft Each Unit lump	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$150,000.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Amount \$150,000.00 Amount \$250,000.00
Quantity 1  Quantity 1	ft Each Whit Lump Unit Lump	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$150,000.00 Unit Price \$250,000.00	\$0.00 \$0.00 \$0.00 \$0.00 <b>Amount</b> \$150,000.00
Quantity 1  Quantity 1	ft Each Whit Lump Unit Lump	\$ 125.00 \$ 5,000.00 \$ 2,000.00 Unit Price \$150,000.00 Unit Price \$250,000.00	\$0.00 \$0.00 \$0.00 \$0.00 \$150,000.00 \$150,000.00 \$150,000.00
	Quantity  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Quantity         Unit           1         lump           2         lump           1         lump           2         lump           2         lump           2         lump           2         lump           3         lump           2         lump <td>1   lump   10.00%   1   lump   1.00%   1   lump   10.00%   1   lump   2.00%   1   lump   2.00%  </td>	1   lump   10.00%   1   lump   1.00%   1   lump   10.00%   1   lump   2.00%   1   lump   2.00%

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$150,000.00	\$150,000.00
				\$150,000.00
Structures	-			
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall	1	Lump	\$300,000.00	\$300,000.00
				\$300,000.00
				\$300,000.00
			BID ITEMS \$	\$1,317,740.00
		Cor	ntingency 30% \$	
			ITEMS TOTAL \$	
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	2,500	sq ft	\$25.00	\$62,500.00
Assuming 5' wide construction easement required for length of project	2,500	sq ft	\$3.00	\$7,500.00
Potential full right of way takes		each	\$600,000.00	\$0.00
				\$70,000.00
Description	Overetites	I I a ! 4	Unit Dries	A
Description  Description	Quantity 1	Unit	<b>Unit Price</b> \$205,567.44	Amount \$205,567.44
Design Engineering (12% of Bid Items)	1	lump	\$205,567.44	\$205,567.44 \$205,567.44
				\$205,567.44
Description	Quantity	Unit	Unit Price	Amount
Description  Construction Management (8% of Bid Items)	Quantity 1	<b>Unit</b>	Unit Price \$137,044.96	<b>Amount</b> \$137,044.96
Description  Construction Management (8% of Bid Items)		<b>Unit</b> lump	Unit Price \$137,044.96	\$137,044.96
		lump	\$137,044.96	\$137,044.96 <b>\$137,044.96</b>
		lump		\$137,044.96 <b>\$137,044.96</b>

ENGINEER'S ESTIMATE (2024 ) 300 N Dual EB LTL @ State S				
DID ITEMS				
BID ITEMS GENERAL				
Description	Quantity	Unit	Unit Price	Amount
Mobilization	1	lump	10.00%	\$71,400.00
Public Information Services	1	lump	1.00%	\$7,200.00
Traffic Control	1	lump	10.00%	\$71,400.00
Survey	1	lump	2.00%	\$14,300.00
	-			\$164,300.00
ROADWAY				
Description Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	700	ft	\$ 12.00	\$8,400.00
Remove Concrete Sidewalk	350	sq yd	\$ 28.00	\$9,800.00
Roadway Excavation (Plan Quantity)	500	cu yd	\$ 24.00	\$12,000.00
Granular Borrow (Plan Quantity) Untreated Base Course	500	cu yd Ton	\$ 35.00	\$17,500.00
Remove Concrete Driveway	435		\$ 40.00	\$17,400.00
HMA - 1/2 inch	200	sq yd Ton	\$ 28.00 \$ 150.00	\$5,600.00
Pavement Marking Paint	306 30	gal	\$ 150.00 \$ 80.00	\$45,900.00
Pavement Message (Preformed Thermoplastic)		Each	\$ 250.00	\$2,400.00 \$5,000.00
Concrete Curb and Gutter Type B1	20 500	ft	\$ 250.00	\$5,000.00
Perpendicular/Parallel Pedestrian Access Ramp	3	Each	\$ 5,000.00	\$15,000.00
Concrete Sidewalk	3,150	sq ft	\$ 15.00	\$47,250.00
Micro-Surfacing	2,500	sq yd	\$ 3.00	\$7,500.00
Concrete Driveway Flared, 7 inch Thick	1,800	sq ft	\$ 15.00	\$27,000.00
	1,000		Ψ 10.00	Ψ27,000.00
			1	\$243,250.00
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"		ft	\$ 125.00	\$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$0.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	00.00
			+	\$0.00
	+			\$0.00
				\$0.00
				\$0.00
SIGNAL SYSTEM	Outputito	llm:4	Hait Drice	\$0.00
Description	Quantity	Unit	Unit Price	\$0.00 Amount
	Quantity 1	<b>Unit</b> lump	Unit Price \$150,000.00	\$0.00
Description				\$0.00 Amount
Description				\$0.00 Amount \$150,000.00
Description				\$0.00 Amount
Modify signal				\$0.00 Amount \$150,000.00
Description  Modify signal  UTILITIES	1			\$0.00 Amount \$150,000.00
Description  Modify signal  UTILITIES  Description		lump	\$150,000.00	\$0.00  Amount \$150,000.00  \$150,000.00
Description  Modify signal  UTILITIES	Quantity	lump Unit	\$150,000.00  Unit Price	\$0.00  Amount \$150,000.00  \$150,000.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 1	lump  Unit lump	\$150,000.00  Unit Price \$250,000.00	\$0.00  Amount \$150,000.00  \$150,000.00  Amount \$250,000.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 1	lump  Unit lump	\$150,000.00  Unit Price \$250,000.00	\$0.00  Amount \$150,000.00  \$150,000.00  Amount \$250,000.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 1	lump  Unit lump	\$150,000.00  Unit Price \$250,000.00	\$0.00  Amount \$150,000.00  \$150,000.00  Amount \$250,000.00
Description  Modify signal  UTILITIES  Description  Utility Contingency	Quantity 1	lump  Unit lump	\$150,000.00  Unit Price \$250,000.00	\$0.00  Amount \$150,000.00  \$150,000.00  Amount \$250,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$35,000.00	\$35,000.00
				\$35,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall		Lump	\$250,000.00	\$0.00
				\$0.00
			BID ITEMS \$	\$877,550.00
			ntingency 30% \$	\$263,265.00
		BID	ITEMS TOTAL \$	\$1,140,815.00
NOVE DE LETTE				
NON-BID ITEMS				
Description	Overtity	l lesi4	Unit Drice	Amount
Description Description	Quantity 5,500	Unit	Unit Price \$25.00	
Right of Way Assuming 5' wide construction easement required for length of project	2,500	sq ft sq ft	\$3.00	\$137,500.00 \$7,500.00
Potential full right of way takes	2,500	each	\$600,000.00	\$0.00
Folential full right of way takes		eacii	φουσ,σου.σο	\$145,000.00
				\$ 145,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (12% of Bid Items)	1	lump	\$136,897.80	\$136,897.80
Dooign Engineering (1270 of Did Ronto)		idilip	ψ100,001.00	\$136,897.80
				<b>V 100,001100</b>
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$91,265.20	\$91,265.20
V (	1	- r	, , , , , , , , , , , , , , , , , , , ,	\$91,265.20
				, , , , , , , , , , , , , , , ,
		ВІ	D ITEMS TOTAL	\$1,140,815.00
			D ITEMS TOTAL D ITEMS TOTAL	\$1,140,815.00 \$373,163.00

ENGINEER'S ESTIF	MATE (2024 COSTS)			
Falcon Hills D	r Connections			
BID ITEMS				
GENERAL	Overstites	I last	Unit Daise	A
Description	Quantity	Unit	Unit Price	Amount
Mobilization  Dublic Information Consisce	1	lump	9.00%	\$158,600.00
Public Information Services Traffic Control	1	lump	0.50%	\$8,900.00
Survey	1 1	lump	3.50% 2.00%	\$61,700.00 \$35,300.00
Survey		lump	2.00 /6	\$264,500.00
				<b>420</b> 1,000100
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	1,000	ft	\$ 12.00	\$12,000.00
Remove Concrete Sidewalk	267	sq yd	\$ 28.00	\$7,466.67
Roadway Excavation (Plan Quantity)	5,400	cu yd	\$ 24.00	\$129,600.00
Granular Borrow (Plan Quantity)	2,400	cu yd	\$ 35.00	\$84,000.00
Untreated Base Course	3,132	Ton	\$ 40.00	\$125,280.00
Remove Concrete Driveway	100	sq yd	\$ 28.00	\$2,800.00
HMA - 1/2 inch	2,892	Ton	\$ 150.00	\$433,755.00
Pavement Marking Paint	100	gal	\$ 80.00	\$8,000.00
Pavement Message (Preformed Thermoplastic)	30	Each	\$ 250.00	\$7,500.00
Concrete Curb and Gutter Type B1	3,800	ft	\$ 45.00	\$171,000.00
Perpendicular/Parallel Pedestrian Access Ramp	4	Each	\$ 5,000.00	\$20,000.00
Concrete Sidewalk	2,000	sq ft	\$ 15.00	\$30,000.00
Chip Seal Coat, Type II	_,	sq yd	\$ 5.00	\$0.00
		.,	· ·	70.00
	L			
1				\$1.031.401.67
				\$1,031,401.67
DRAINAGE & IRRIGATION				\$1,031,401.67
DRAINAGE & IRRIGATION  Description	Quantity	Unit	Unit Price	\$1,031,401.67 Amount
	Quantity 1908	<b>Unit</b>		Amount
Description			Unit Price	Amount \$238,500.00
Description  18 Inch Irrigation HDPE Pipe"	1908	ft	Unit Price \$ 125.00	Amount \$238,500.00 \$30,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	1908 6	ft Each	Unit Price \$ 125.00 \$ 5,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM	1908 6 6	ft Each Each	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	1908 6 6	ft Each Each	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	1908 6 6	ft Each Each	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00	\$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00 Amount \$0.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	1908 6 6	ft Each Each	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description	1908 6 6	ft Each Each	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00	\$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00 Amount \$0.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal	1908 6 6	ft Each Each Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00 Amount \$0.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description	1908 6 6	ft Each Each Unit lump	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description  Utility Contingency	1908 6 6 0 0 Quantity 0 Quantity 1	ft Each Each Unit lump Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00  Unit Price \$150,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description	1908 6 6	ft Each Each Unit lump	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description  Utility Contingency	1908 6 6 0 0 Quantity 0 Quantity 1	ft Each Each Unit lump Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00  Unit Price \$150,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description  Utility Contingency	1908 6 6 0 0 Quantity 0 Quantity 1	ft Each Each Unit lump Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00  Unit Price \$150,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description  Utility Contingency	1908 6 6 0 0 Quantity 0 Quantity 1	ft Each Each Unit lump Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00  Unit Price \$150,000.00	Amount \$238,500.00 \$30,000.00 \$12,000.00 \$280,500.00 Amount \$0.00 Amount \$150,000.00 \$0.00
Description  18 Inch Irrigation HDPE Pipe"  Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9  Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3  SIGNAL SYSTEM  Description  Modify signal  UTILITIES  Description  Utility Contingency	1908 6 6 0 0 Quantity 0 Quantity 1	ft Each Each Unit lump Unit	Unit Price \$ 125.00 \$ 5,000.00 \$ 2,000.00  Unit Price \$100,000.00  Unit Price \$150,000.00	### Amount   \$238,500.00   \$30,000.00   \$12,000.00   \$280,500.00   ### ### ### ### ### ### ### ### ###

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$50,000.00	\$50,000.00
				\$50,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall	1	Lump	\$250,000.00	\$250,000.00
Total in gran	·	Lamp	Ψ200,000.00	Ψ200,000.00
				\$250,000.00
				,,
			BID ITEMS \$	\$2,026,401.67
		Cor	tingency 30% \$	
			ITEMS TOTAL \$	
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	0	sq ft	\$17.00	\$0.00
Assuming 5' wide construction easement required for length of project	9,000	sq ft	\$3.00	\$27,000.00
Potential full right of way takes		each	\$600,000.00	\$0.00
				\$27,000.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)		lump	\$263,432.22	\$263,432.22
				\$263,432.22
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1 1	lump	\$210,745.77	\$210,745.77
				\$210,745.77
			D ITEMS TOTAL	
		NON-BI	D ITEMS TOTAL	\$501,177.99
			TOTAL	\$3,135,500.16

ENGINEER'S ESTIMATE (2024 COSTS) 1000 West Restriping (North of SR-193)					
BID ITEMS					
GENERAL					
Description	Quantity	Unit	Unit Price	Amount	
Mobilization	1	lump	10.00%	\$15,600.00	
Public Information Services	1	lump	1.00%	\$1,600.00	
Traffic Control	1	lump	10.00%	\$15,600.00	
Survey	1	lump	2.00%	\$3,200.00	
				\$36,000.00	
ROADWAY					
Description	Quantity	Unit	Unit Price	Amount	
Remove Concrete Curb and Gutter		ft	\$ 12.00	\$0.00	
Remove Concrete Sidewalk		sq yd	\$ 28.00	\$0.00	
Roadway Excavation (Plan Quantity)	0	cu yd	\$ 24.00	\$0.00	
Granular Borrow (Plan Quantity)	0	cu yd	\$ 35.00	\$0.00	
Untreated Base Course	0	Ton	\$ 40.00	\$0.00	
Remove Concrete Driveway		sq yd	\$ 28.00	\$0.00	
HMA - 1/2 inch	0	Ton	\$ 150.00	\$0.00	
Pavement Marking Paint	350	gal	\$ 80.00	\$28,000.00	
Pavement Message (Preformed Thermoplastic)	150	Each	\$ 250.00	\$37,500.00	
Concrete Curb and Gutter Type B1		ft	\$ 45.00	\$0.00	
Perpendicular/Parallel Pedestrian Access Ramp		Each	\$ 5,000.00	\$0.00	
Concrete Sidewalk		sq ft	\$ 15.00	\$0.00	
Micro-Surfacing	30,000	sq yd	\$ 3.00	\$90,000.00	
				\$155,500.00	
DRAINAGE & IRRIGATION					
Description	Quantity	Unit	Unit Price	Amount	
18 Inch Irrigation HDPE Pipe"		ft	\$ 125.00	\$0.00	
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$0.00	
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	\$0.00	
				\$0.00	
SIGNAL SYSTEM					
Description	Quantity	Unit	Unit Price	Amount	
Modify signal	0	lump	\$100,000.00	\$0.00	
				\$0.00	
UTILITIES					
Description	Quantity	Unit	Unit Price	Amount	
Utility Contingency	0	lump	\$100,000.00	\$0.00	
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00	
			+		

\$0.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	0	Lump	\$50,000.00	\$0.00
				\$0.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall	0	Lump	\$250,000.00	\$0.00
				\$0.00
				*****
			BID ITEMS \$	\$191,500.00
			ntingency 15% \$	\$28,725.00
		ВІР	ITEMS TOTAL \$	\$220,225.00
NON-BID ITEMS				
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
Right of Way	0	sq ft	\$17.00	\$0.00
Assuming 5' wide construction easement required for length of project	0	sq ft	\$3.00	\$0.00
Potential full right of way takes		each	\$600,000.00	\$0.00
	1		, , , , , , , , , , , , , , , , , , , ,	\$0.00
				, , , , , , , , , , , , , , , , , , , ,
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (10% of Bid Items)	1	lump	\$22,022.50	\$22,022.50
				\$22,022.50
Description	Quantity	Unit	Unit Price	Amount
Construction Management (8% of Bid Items)	1	lump	\$17,618.00	\$17,618.00
				\$17,618.00
			D ITEMS TOTAL	\$220,225.00
		NON-BI	D ITEMS TOTAL	\$39,640.50
			TOTAL	\$259,865.50

#### **ENGINEER'S ESTIMATE (2024 COSTS)** 1000 East Restriping (South of 1450 S) **BID ITEMS GENERAL** Description Quantity Unit **Unit Price** Amount Mobilization lump 10.00% \$4,700.00 **Public Information Services** lump 1.00% \$500.00 10.00% \$4,700.00 Traffic Control 1 lump 2.00% \$1,000.00 Survey 1 lump \$10,900.00 **ROADWAY** Quantity Unit **Unit Price** Amount Description Remove Concrete Curb and Gutter ft \$ 12.00 \$0.00 Remove Concrete Sidewalk sq yd \$ 28.00 \$0.00 Roadway Excavation (Plan Quantity) \$ cu yd 24.00 \$0.00 0 Granular Borrow (Plan Quantity) cu yd \$ 35.00 \$0.00 0 Untreated Base Course Ton 0 \$ 40.00 \$0.00 Remove Concrete Driveway sq yd \$ 28.00 \$0.00 HMA - 1/2 inch Ton 0 \$ 150.00 \$0.00 Pavement Marking Paint gal \$ 80.00 100 \$8,000.00 Pavement Message (Preformed Thermoplastic) Each \$ 250.00 70 \$17,500.00 ft \$ 45.00 Concrete Curb and Gutter Type B1 \$0.00 Perpendicular/Parallel Pedestrian Access Ramp Each \$ 5,000.00 \$0.00 Concrete Sidewalk sq ft \$ 15.00 \$0.00 Micro-Surfacing sq yd \$ 7,000 3.00 \$21,000.00 \$46,500.00 **DRAINAGE & IRRIGATION** Description Quantity Unit **Unit Price Amount** 18 Inch Irrigation HDPE Pipe" ft \$ 125.00 \$0.00 Each \$ 5,000.00 Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9 \$0.00 \$ 2,000.00 Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3 Each \$0.00 \$0.00 SIGNAL SYSTEM Quantity Unit **Unit Price** Amount Description Modify signal \$100,000.00 lump \$0.00 \$0.00

Quantity

0

0

Unit

lump

Each

**Unit Price** 

\$100,000.00

\$8,000.00

Amount

\$0.00

\$0.00

\$0.00

**UTILITIES** 

**Utility Contingency** 

Street Lighting (spaced every 200')

**Description** 

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	0	Lump	\$50,000.00	\$0.00
				\$0.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
Retaining Wall	0	Lump	\$250,000.00	\$0.00
				\$0.00
				\$0.00
			BID ITEMS \$	\$57,400.00
		Con	tingency 25% \$	\$14,350.00
			ITEMS TOTAL \$	\$71,750.00
				. ,
NON-BID ITEMS				
INCIN-DID I I EIVIS				
INON-DID IT EINIG				
Description Description	Quantity	Unit	Unit Price	Amount
Description Right of Way	0	sq ft	\$17.00	\$0.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project		sq ft sq ft	\$17.00 \$3.00	\$0.00 \$0.00
Description Right of Way	0	sq ft	\$17.00	\$0.00 \$0.00 \$0.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project	0	sq ft sq ft	\$17.00 \$3.00	\$0.00 \$0.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project	0	sq ft sq ft	\$17.00 \$3.00	\$0.00 \$0.00 \$0.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes	0 0	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 \$0.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description	0 0 Quantity	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b>
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes	0 0	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>Amount</b> \$8,610.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description	0 0 Quantity	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b>
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description	0 0 Quantity	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>Amount</b> \$8,610.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description  Design Engineering (12% of Bid Items)	Quantity 1	sq ft sq ft each	\$17.00 \$3.00 \$600,000.00 <b>Unit Price</b> \$8,610.00	\$0.00 \$0.00 \$0.00 \$0.00 <b>Amount</b> \$8,610.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description	0 0 Quantity	sq ft sq ft each  Unit lump	\$17.00 \$3.00 \$600,000.00	\$0.00 \$0.00 \$0.00 <b>\$0.00</b> <b>Amount</b> \$8,610.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description  Design Engineering (12% of Bid Items)  Description	Quantity 1 Quantity	sq ft sq ft each  Unit lump	\$17.00 \$3.00 \$600,000.00 Unit Price \$8,610.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Amount \$8,610.00 \$8,610.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description  Design Engineering (12% of Bid Items)  Description	Quantity 1 Quantity	sq ft sq ft each  Unit lump	\$17.00 \$3.00 \$600,000.00 Unit Price \$8,610.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Amount \$8,610.00 \$8,610.00 Amount \$5,740.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description  Design Engineering (12% of Bid Items)  Description	Quantity 1 Quantity	sq ft sq ft each  Unit lump  Unit	\$17.00 \$3.00 \$600,000.00 Unit Price \$8,610.00	\$0.00 \$0.00 \$0.00 \$0.00 <b>Amount</b> \$8,610.00 <b>Amount</b> \$5,740.00 \$71,750.00
Description  Right of Way  Assuming 5' wide construction easement required for length of project  Potential full right of way takes  Description  Design Engineering (12% of Bid Items)  Description	Quantity 1 Quantity	sq ft sq ft each  Unit lump  Unit lump	\$17.00 \$3.00 \$600,000.00 <b>Unit Price</b> \$8,610.00 <b>Unit Price</b> \$5,740.00	\$0.00 \$0.00 \$0.00 \$0.00 <b>Amount</b> \$8,610.00 <b>\$8,610.00</b> <b>Amount</b> \$5,740.00

ENGINEER'S ESTIN	IATE (2024 COSTS)			
1000 East Operation	ns (South of 1450 S)			
BID ITEMS				
GENERAL	0(1)	11.14	U. Y. D. L.	
Description Description	Quantity 1	Unit	Unit Price	Amount
Mobilization Public Information Services	1	lump	9.50% 1.00%	\$30,500.00 \$3,300.00
Traffic Control	1	lump	2.00%	\$6,500.00
Survey	1	lump lump	2.00%	\$6,500.00
Survey		ιαπρ	2.00 /0	\$46,800.00
ROADWAY				
<u>Description</u>	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	150	ft	\$ 12.00	\$1,800.00
Remove Concrete Sidewalk	80	sq yd	\$ 28.00	\$2,240.00
Roadway Excavation (Plan Quantity)	500	cu yd	\$ 24.00	\$12,000.00
Granular Borrow (Plan Quantity) Untreated Base Course	200	cu yd Ton	\$ 35.00 \$ 40.00	\$7,000.00
Remove Concrete Driveway	275			\$11,000.00
HMA - 1/2 inch	050	sq yd Ton	\$ 28.00 \$ 130.00	\$0.00
Pavement Marking Paint	250	gal	\$ 130.00	\$32,500.00
Pavement Message (Preformed Thermoplastic)	50	gai Each	\$ 250.00	\$4,000.00
	30	ft	\$ 250.00	\$7,500.00
Concrete Curb and Gutter Type B1 Perpendicular/Parallel Pedestrian Access Ramp		Each	\$ 5,000.00	\$0.00 \$0.00
Concrete Sidewalk	750	sq ft	\$ 9.00	•
Chip Seal Coat, Type II	750	sq yd	\$ 3.00	\$6,750.00 \$0.00
Micro-Surfacing	12,000	sq yd sq yd	\$ 9.00	\$108,000.00
	12,000		Ψ 0.00	\$100,000.00
				\$192,790.00
				, , , , , , , , , , , , , , , , , , , ,
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
24 Inch Irrigation HDPE Pipe	150	ft	\$ 125.00	\$18,750.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9	2	Each	\$ 5,000.00	\$10,000.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3	2	Each	\$ 2,000.00	\$4,000.00
	!		!	\$32,750.00
OLONAL OVOTEN				
SIGNAL SYSTEM  Description	Quantity	Unit	Unit Price	Amount
Description	Quantity	Oiiit	- Onit i rice	Amount
				\$0.00
				Ψ0.00
UTILITIES Description	Quantity	Unit	Unit Price	Amount
Utility contingency	quantity	lump	\$75,000.00	\$75,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$75,000.00
On our Lighting (appaced every 200)		Laui	ψυ,σου.σο	φυ.υι
			+	

\$75,000.00

LANDSCAPING				
Description	Quantity	Unit	Unit Price	Amount
Landscaping	1	Lump	\$20,000.00	\$20,000.00
				\$20,000.00
Structures				
Description	Quantity	Unit	Unit Price	Amount
				\$0.00
			BID ITEMS \$	\$367,340.00
			ingency (30%) \$	\$110,202.00
		BID	ITEMS TOTAL \$	\$477,542.00
NON-BID ITEMS				
Description	Quantity	Unit	Unit Price	Amount
	0	sq ft	\$5.00	\$0.00
Assuming 5' wide construction easement required for length of project	0	sq ft	\$2.00	\$0.00
				\$0.00
Description	Quantity	Unit	Unit Price	Amount
Design Engineering (15% of Bid Items)	1	lump	\$71,631.30	\$71,631.30
				\$71,631.30
Description	Quantity	Unit	Unit Price	Amount
Construction Management (10% of Bid Items)	1	lump	\$47,754.20	\$47,754.20
				\$47,754.20
			ITEMS TOTAL \$	\$477,542.00
		NON-BID	ITEMS TOTAL \$	\$119,385.50
		_	DAND TOTAL A	A

GRAND TOTAL \$ \$596,927.50

	MATE (2024 COSTS) ational Improvements			
DID ITEMS				
BID ITEMS				
GENERAL Description	Quantity	Unit	Unit Price	Amount
Mobilization	Quantity 1	lump	10.00%	\$78,000.00
Public Information Services	1	lump	1.00%	\$7,800.00
Traffic Control	1	lump	10.00%	\$78,000.00
Survey	1	lump	2.00%	\$15,600.00
- Control	, ,	Таттр	2.0070	\$179,400.00
ROADWAY				
Description	Quantity	Unit	Unit Price	Amount
Remove Concrete Curb and Gutter	150	ft	\$ 12.00	\$1,800.00
Remove Concrete Sidewalk	100	sq yd	\$ 28.00	\$2,800.00
Roadway Excavation (Plan Quantity)	867	cu yd	\$ 24.00	\$20,800.00
Granular Borrow (Plan Quantity)	867	cu yd	\$ 35.00	\$30,333.33
Untreated Base Course	754	Ton	\$ 40.00	\$30,160.00
Remove Concrete Driveway		sq yd	\$ 28.00	\$0.00
HMA - 1/2 inch	530	Ton	\$ 150.00	\$79,560.00
Pavement Marking Paint	50	gal	\$ 80.00	\$4,000.00
Pavement Message (Preformed Thermoplastic)	10	Each	\$ 250.00	\$2,500.00
Concrete Curb and Gutter Type B1	250	ft	\$ 45.00	\$11,250.00
Perpendicular/Parallel Pedestrian Access Ramp	2	Each	\$ 5,000.00	\$10,000.00
Concrete Sidewalk	1,000	sq ft	\$ 15.00	\$15,000.00
Micro-Surfacing	7,000	sq yd	\$ 3.00	\$21,000.00
				\$229,203.33
DRAINAGE & IRRIGATION				
Description	Quantity	Unit	Unit Price	Amount
18 Inch Irrigation HDPE Pipe"		ft	\$ 125.00	\$0.00
Concrete Drainage Structure 3 ft to 5 ft Deep - CB 9		Each	\$ 5,000.00	\$0.00
Rectangular Grate And Frame (Bicycle Safe Grating) - GF 3		Each	\$ 2,000.00	\$0.00
				\$0.00
SIGNAL SYSTEM				
Description	Quantity	Unit	Unit Price	Amount
			\$100,000.00	\$100,000.00
Modify signal	1	lump	\$100,000.00	\$100,000.00
				\$100,000.00
LITH ITIES				,
UTILITIES Description	Quantity	Unit	Unit Price	Amount
Utility Contingency	1	lump	\$150,000.00	\$150,000.00
Street Lighting (spaced every 200')	0	Each	\$8,000.00	\$0.00
				¢450.000.00
				\$150,000.00

LANDSCAPING									
Description	Quantity	Unit	Unit Price	Amount					
Landscaping	1	Lump	\$50,000.00	\$50,000.00					
				\$50,000.00					
Structures									
Description	Quantity	Unit	Unit Price	Amount					
Retaining Wall	1	Lump	\$250,000.00	\$250,000.00					
				4070 000 00					
				\$250,000.00					
			DID ITEMO 6	<b>*050 000 00</b>					
		Cor	BID ITEMS \$ ntingency 30% \$	\$958,603.33 \$287,581.00					
			ITEMS TOTAL \$						
		סוט	TIEWS TOTAL \$	\$1,240,104.33					
NON-BID ITEMS									
NOTE DID TELLIO									
Description	Quantity	Unit	Unit Price	Amount					
Right of Way	0	sq ft	\$17.00	\$0.00					
Assuming 5' wide construction easement required for length of project	0	sq ft	\$3.00	\$0.00					
Potential full right of way takes		each	\$600,000.00	\$0.00					
				\$0.00					
Description	Quantity	Unit	Unit Price	Amount					
Design Engineering (12% of Bid Items)	1 1	lump	\$149,542.12	\$149,542.12					
				\$149,542.12					
Description (COV. CELLY)	Quantity	Unit	Unit Price	Amount					
Construction Management (8% of Bid Items)	1 1	lump	\$99,694.75	\$99,694.75					
				\$99,694.75					
			D ITEMS TOTAL	£4.04C.404.00					
			D ITEMS TOTAL						
		NON-BI	D ITEMS TOTAL	\$249,236.87 \$1,495,421,20					
TOTAL \$1,									

3/14/2024

**JSF** 

BCC

Checked By:



#### Project Information Sheet

GFA(s): North Davis County Date Prepared:
Project Name: 700 South (SR 193) from 1000 West to US 89 Prepared By:

Jurisdiction(s): Clearfield, Layton

Emphasis Areas: Intersections, Roadway Departures, Teen Driver

Equity Priority: High

#### **Location Description**

Roadway: 700 South (SR 193) Key Intersection Locations:

From: 1000 West 800 East 1000 East State Street Center Street US 89 Industrial Parkway 3100 North Frontage Road 2400 East 1000 West To: Length: 7.24 miles 2650 East Hill Field Road

#### **Project Location Map**

Map ID: 6.21.1.1



#### Segment Information and Safety Analysis Areas Summary

Roadway Characteristics	Value
Length (miles)	7.24
Average Daily Traffic (vehicles per day)	27,063
Functional Classification	Other Principal Arterial
Roadway Ownership	State
Urban/Rural Designation	Urban
Number of Key Intersections	11

Why Was This Location Identified?					
Composite Safety Score	✓				
Historic Crashes	✓				
Critical Crash Rate Differential	✓				
Crash Profile Risk Score	✓				
usRAP - Star Rating (Veh, Ped, Bike)	✓				
Local Street Assessment					

#### **Segment Crash History**

Crash History (2018 - 2022)	# of crashes
Fatal Crashes (K)	3
Suspected Serious Injury Crashes (A)	3
Suspected Minor Injury Crashes (B)	17
Possible Injury Crashes (C)	36
No Injury/PDO Crashes (O)	175
Total Crashes	234
Total EPDO Crashes	3,909

What Crash Types are Over-Represented?								
Fatal	tal ✓ Head On (HO)							
Serious Injury	✓	Parked Vehicle (PV)	1					
Pedestrian (Ped)		Single Vehicle	<b>✓</b>					
Bicycle (Bike)		Rear to Rear (RR)						
Motorcycle	,	Rear to Side (RS)						
Angle	<b>√</b>	Sideswipe (SS)	1					
Front to Rear (FR)	<b>√</b>	Other/Unknown	1					

#### Intersection Crash History

									What Crash Types are Over-Represented?							
Intersections	Signal	K	Α	В	С	0	Total	EPDO	K/A	Ped/Bike	Angle	FR	НО	PV	RR/RS	SS
800 East & 700 South		0	0	1	6	4	11	94				<b>✓</b>				<b>✓</b>
Industrial Parkway & 700 South		0	0	2	11	1	14	171				<b>\</b>				
2650 East & 700 South		0	3	2	5	11	21	394	>		<b>✓</b>					
1000 East & 700 South	✓	0	0	16	44	34	94	890		✓				✓		
3100 North & 700 South	✓	0	0	1	12	4	17	163				>				
Hill Field Road & 700 South	✓	0	4	16	82	10	112	1,673				>				
State Street & 700 South	✓	0	1	30	62	43	136	1,509		✓		>	✓			
Frontage Road & 700 South	✓	0	0	5	8	2	15	204				✓				
2400 East & 700 South	<b>✓</b>	0	2	1	14	7	24	376	✓			✓				<b>✓</b>
Center Street & 700 South	✓	0	0	9	15	8	32	379				✓	✓			<b>✓</b>
1000 West & 700 South	✓	0	0	9	11	16	36	341					<b>✓</b>			<b>✓</b>



#### Project Description/How is safety improved?

This project addresses speed management to address front to rear crashes, intersection improvements to reduce left turn crashes, and access management to address sideswipe and head on crashes. Improvements include raised medians along the entire length of the corridor. An Intersection Control Evaluation (ICE) is recommended at locations with high frequency of crashes and at existing High-T configurations (1700 E., 2400 E., Fort Ln., Haven J Barlow Pkwy, 1500 E., Frontage Rd., & H St.). Minor street access should be evaluated to determine locations were access can be managed including consolidation or elimination. Protected intersection are proposed to reduce pedestrian crashes at Fort Ln. and Frontage Rd. Signal upgrades are proposed at Fairfield Rd. Church St. & H St.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

#### **Proposed Proven Safety Countermeasures**





#### **Opinion of Probable Construction Cost**

Segment	Improvements	3
---------	--------------	---

- cgc.ii iii pi c i ciii ciii c							
Item Description	CMF	<b>Applicable Crashes</b>	Quantity	Unit	Unit Price		Item Cost
Install Raised Medians on Roadways with Existing TWLTL	0.29	All Crashes	7.24	MILE	\$ 928,000	\$	6,718,720
Install Driver Feedback Speed Limit Signs	NA	All Crashes	4.00	EACH	\$ 10,000	\$	40,000
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-

#### Intersection Improvements

Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price		Item Cost
	CIVIE	Applicable Crasnes	Quantity	Unit			
Perform an Intersection Control Evaluation and Implement	NA	All Crashes	7.00	INT	\$ 225,000	\$	1,575,000
Change a 5-section "Doghouse" to Flashing Yellow Arrow	0.75 - 0.93	Left-Turn	1.00	INT	\$ 8,000	\$	8,000
Change Permissive Left-Turn to Protected or Protected/Permissive	0.79 - 0.95	Left-Turn	2.00	INT	\$ 8,000	\$	16,000
Protected Intersection	NA	All Crashes	2.00	INT	\$ 650,000	\$	1,300,000
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						69	-
_			, and the second			\$	-

Local Match<sup>†</sup>: 20% \$ 3,330,800

\*Mobilization is 10% +/- of the subtotal with a minimum of \$2,500 and a maximum of \$75,000

#### **Additional Potential Improvements**

Additional safety improvements could be considered that were not included due to availability of data, need for site-specific information, and/or agency/jurisdiction input. Potential additional countermeasures are listed below. Refer to the *Countermeasure Toolbox* for a complete list of safety countermeasures.

Additional Improvements #1:	Set Appropriate Speed Limits for All Road Users
Additional Improvements #2:	
Additional Improvements #3:	Implement 3/4 access at unsignalized locations with median installation where feasible
Additional Improvements #4:	
Additional Improvements #5:	

#### Disclaimer:

Disclaimer: The cost estimates provided in this document are for comparison purposes only. Actual project costs will vary. The recommended safety improvement strategies were based on available data and reasonable engineering judgment and a more detailed assessment may suggest additional safety strategies that could be considered.

<sup>&</sup>lt;sup>†</sup> Toward SS4A Implementation Grants

Preconstruction Engineering/Design Utilities\*\*
 12%
 \$ 1,573,551

 \*\*
 \*
 \*

 \*\*
 \*

 Construction Engineering/Management
 15%
 \$ 1,966,938

 \*\*
 \*
 16,654,000

<sup>\*\*</sup>To be evaluated during feasibility study/design

Checked By:



#### Project Information Sheet

GFA(s): **North Davis County** Date Prepared: 3/14/2024 Project Name: 1000 East from 700 South (SR 193) to Antelope Drive (SR 108) Prepared By: MΑ

Jurisdiction(s): Clearfield

**Emphasis Areas:** Intersections, Roadway Departures, Teen Driver

High, Medium **Equity Priority:** 

#### **Location Description**

Roadway: 1000 East From: 700 South (SR 193) Antelope Drive (SR 108) To: Length: 0.99 miles

Key Intersection Locations: 700 South

State Street

#### **Project Location Map**

6.21.3 Map ID:

**EMF** 



#### Segment Information and Safety Analysis Areas Summary

Roadway Characteristics	Value
Length (miles)	0.99
Average Daily Traffic (vehicles per day)	749
Functional Classification	Major Collector
Roadway Ownership	Federal Aid - Local
Urban/Rural Designation	Urban
Number of Key Intersections	2

Why Was This Location Identified?			
Composite Safety Score			
Historic Crashes	✓		
Critical Crash Rate Differential	<b>1</b>		
Crash Profile Risk Score			
usRAP - Star Rating (Veh, Ped, Bike)	<b>√</b>		
Local Street Assessment	✓		

#### **Segment Crash History**

Crash History (2018 - 2022)	# of crashes
Fatal Crashes (K)	0
Suspected Serious Injury Crashes (A)	0
Suspected Minor Injury Crashes (B)	5
Possible Injury Crashes (C)	11
No Injury/PDO Crashes (O)	34
Total Crashes	
Total EPDO Crashes	270

What Crash Types are Over-Represented?							
Fatal		Head On (HO)					
Serious Injury		Parked Vehicle (PV)	✓				
Pedestrian (Ped)		Single Vehicle					
Bicycle (Bike)		Rear to Rear (RR)					
Motorcycle		Rear to Side (RS)					
Angle		Sideswipe (SS)					
Front to Rear (FR)	✓	Other/Unknown					

#### **Intersection Crash History**

											ypes ar	e Over-	Represe	ented?		
Intersections	Signal	K	Α	В	С	0	Total	EPDO	K/A	Ped/Bike	Angle	FR	HO	PV	RR/RS	SS
700 South & 1000 East	<b>✓</b>	0	0	15	16	44	75	560		✓				<b>✓</b>		
State Street & 1000 East	<b>✓</b>	0	2	7	6	27	42	439		✓		✓				



#### Project Description/How is safety improved?

This project includes improvements along 1000 E to address an overrepresentation of rear-end and parked vehicle collisions: lane narrowing through parked area striping and wider lane striping; removal of southbound through lane from 700 S to approximately 900 S; implementation of bulbouts at crossing south of 900 S; RRFB's at Campbell Heights and 1525 S, including bulb outs and raised crossings. The following intersection improvements are recommended to address an overrepresentation of ped/bike, rear-end and parked vehicle collisions: 700 S/1000 E, protected intersection improvements.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

#### **Proposed Proven Safety Countermeasures**







Rectangular Rapid Flashing Beacons (RRFB)



Estimated Project Total: \$

2,869,000

Opinion of Probable Construction Cost								
Segment Improvements								
Item Description	CMF	Applicable Crashes	Quantity	Unit	Ų	Jnit Price		Item Cost
Traffic Calming - Lane Narrowing	0.68	All Crashes	0.99	MILE	\$	39,000	\$	38,610
Traffic Calming - Wider Lane Lines	0.68	All Crashes	0.99	MILE	\$	21,000	\$	20,790
4-Lane to 3-Lane Road Diet Conversion	0.53 - 0.81	All Crashes	0.19	MILE	\$	22,000	\$	4,180
Install a Rectangular Rapid Flashing Beacons (RRFB)	0.526	Pedestrian	2.00	XING (2)	\$	15,000	\$	30,000
Traffic Calming - Bulbouts	0.68	All Crashes	12.00	EACH	\$	36,000	\$	432,000
Install Raised Crosswalk	NA	Pedestrian	2.00	EACH	\$	71,000	\$	142,000
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
Intersection Improvements								
Item Description	CMF	Applicable Crashes	Quantity	Unit	Ų	Jnit Price		Item Cost
Protected Intersection	NA	All Crashes	1.00	INT	\$	650,000	\$	650,000
Provide Right-Turn Lanes	0.74 - 0.86	All Crashes	2.00	LANE	\$	150,000	\$	300,000
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
							\$	-
				Imp	rovem	ents Subtotal:	\$	1,617,580
			I	Mobilizatior				75,000
			Tr	affic Contr	ol: (%	+/-) 5%	\$	80,879
		Items Not E.						485,274
						struction Cost:		2,258,733
Local Match <sup>†</sup> : 20% \$ 573,800							_	=,===,700
† Toward SS4A Implementation Grants	Preconstruction Engineering/Design 12% \$ 271,048							
,				5	Utilitie		\$	
					ROW	<b>*</b> **	\$	-
		Constru	ction Engin	eering/Mai	nagem	nent 15%	\$	338,810

**Additional Potential Improvements** 

Additional safety improvements could be considered that were not included due to availability of data, need for site-specific information, and/or agency/jurisdiction input. Potential additional countermeasures are listed below. Refer to the Countermeasure Toolbox for a complete list of safety countermeasures.

\*\*To be evaluated during feasibility study/design

\*Mobilization is 10% +/- of the subtotal with a minimum of \$2,500 and a maximum of \$75,000

Additional Improvements #1:	Set Appropriate Speed Limits for All Road Users
Additional Improvements #2:	Safe Routes to School
Additional Improvements #3:	
Additional Improvements #4:	
Additional Improvements #5:	

#### Disclaimer:

Disclaimer: The cost estimates provided in this document are for comparison purposes only. Actual project costs will vary. The recommended safety improvement strategies were based on available data and reasonable engineering judgment and a more detailed assessment may suggest additional safety strategies that could be considered.

3/14/2024

JSF

вс

Date Prepared:

Prepared By:

Checked By:

State Street



#### Project Information Sheet

GFA(s): **North Davis County** 

Project Name: 700 South (SR 193) from 1000 West to US 89

Jurisdiction(s): Layton, Clearfield

**Emphasis Areas:** Intersections, Roadway Departures, Teen Driver

**Equity Priority:** 

#### **Location Description**

Roadway: 700 South (SR 193)

From: 1000 West US 89 To:

Length: 7.24 miles **Key Intersection Locations:** 

800 East 1000 East Industrial Parkway 3100 North 2650 East

Frontage Road 2400 East Hill Field Road

Map ID:

6.23.4.1

Center Street

1000 West

#### **Project Location Map**



#### Segment Information and Safety Analysis Areas Summary

Roadway Characteristics	Value
Length (miles)	7.24
Average Daily Traffic (vehicles per day)	27,063
Functional Classification	Other Principal Arteria
Roadway Ownership	State
Urban/Rural Designation	Urban
Number of Key Intersections	11

Why Was This Location Identified?					
Composite Safety Score	<b>✓</b>				
Historic Crashes	✓				
Critical Crash Rate Differential	<b>✓</b>				
Crash Profile Risk Score	<b>✓</b>				
usRAP - Star Rating (Veh, Ped, Bike)	✓				
Local Street Assessment					

#### **Segment Crash History**

Crash History (2018 - 2022)	# of crashes
Fatal Crashes (K)	3
Suspected Serious Injury Crashes (A)	3
Suspected Minor Injury Crashes (B)	17
Possible Injury Crashes (C)	36
No Injury/PDO Crashes (O)	175
Total Crashes	234
Total EPDO Crashes	3,909

What Crash Types are Over-Represented?										
Fatal	✓	Head On (HO)	✓							
Serious Injury	✓	Parked Vehicle (PV)	1							
Pedestrian (Ped)		Single Vehicle	<b>/</b>							
Bicycle (Bike)		Rear to Rear (RR)								
Motorcycle		Rear to Side (RS)								
Angle	<b>✓</b>	Sideswipe (SS)	✓							
Front to Rear (FR)	<b>✓</b>	Other/Unknown	<b>✓</b>							

#### **Intersection Crash History**

									What Crash Types are Over-Represented?							
Intersections	Signal	K	Α	В	С	0	Total	EPDO	K/A	Ped/Bike	Angle	FR	HO	PV	RR/RS	SS
800 East & 700 South		0	0	1	6	4	11	94				✓				<b>✓</b>
Industrial Parkway & 700 South		0	0	2	11	1	14	171				<b>√</b>				
2650 East & 700 South		0	3	2	5	11	21	394	<b>\</b>		<b>✓</b>					
1000 East & 700 South	✓	0	0	16	44	34	94	890		✓				✓		
3100 North & 700 South	✓	0	0	1	12	4	17	163				>				
Hill Field Road & 700 South	✓	0	4	16	82	10	112	1,673				>				
State Street & 700 South	✓	0	1	30	62	43	136	1,509		✓		<b>\</b>	✓			
Frontage Road & 700 South	✓	0	0	5	8	2	15	204				✓				
2400 East & 700 South	<b>✓</b>	0	2	1	14	7	24	376	✓			✓				<b>✓</b>
Center Street & 700 South	✓	0	0	9	15	8	32	379				✓	✓			✓
1000 West & 700 South	✓	0	0	9	11	16	36	341					<b>✓</b>			<b>✓</b>



#### Project Description/How is safety improved?

This projects looks at systemically improving safety along the corridor and addressing intersection related crashes including left turning crashes. This is done by implementing raised medians along the entire length of the corridor and evaluating control at major intersections to determine the best control type. An Intersection Control Evaluation (ICE) is recommended at locations with high crashes total and existing High-T configurations (1700 E., 2400 E., Fort Ln., Haven J Barlow Pkwy, 1500 E., Frontage Rd., & H St.). Minor street access should also be evaluated to determine locations were access can be eliminated. Protected intersection are need to reduce pedestrian crashes Fort Ln. and Frontage Rd. On signal upgrades are also needed (Fairfield Rd. Church St. & H St.). This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

#### **Proposed Proven Safety Countermeasures**



#### **Opinion of Probable Construction Cost**

Segment Im	provements
------------	------------

Cognicit improvements						
Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price	Item Cost
Install Raised Medians on Roadways with Existing TWLTL	0.29	All Crashes	7.24	MILE	\$ 928,000	\$ 6,718,720
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

#### Intersection Improvements

intersection improvements						
Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price	Item Cost
Perform an Intersection Control Evaluation and Implement	NA	All Crashes	7.00	INT	\$ 225,000	\$ 1,575,000
Change a 5-section "Doghouse" to Flashing Yellow Arrow	0.75 - 0.93	Left-Turn	1.00	INT	\$ 8,000	\$ 8,000
Change Permissive Left-Turn to Protected or Protected/Permissive	0.79 - 0.95	Left-Turn	2.00	INT	\$ 8,000	\$ 16,000
Protected Intersection	NA	All Crashes	2.00	INT	\$ 650,000	\$ 1,300,000
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Local Match<sup>†</sup>: 20% \$ 3,317,000

\*Mobilization is 10% +/- of the subtotal with a minimum of \$2,500 and a maximum of \$75,000

#### **Additional Potential Improvements**

Additional safety improvements could be considered that were not included due to availability of data, need for site-specific information, and/or agency/jurisdiction input. Potential additional countermeasures are listed below. Refer to the *Countermeasure Toolbox* for a complete list of safety countermeasures.

Additional Improvements #1:	Set Appropriate Speed Limits for All Road Users
Additional Improvements #2:	
Additional Improvements #3:	Implement 3/4 access at unsignalized locations with median installation where feasible
Additional Improvements #4:	
Additional Improvements #5:	

#### Disclaimer:

Disclaimer: The cost estimates provided in this document are for comparison purposes only. Actual project costs will vary. The recommended safety improvement strategies were based on available data and reasonable engineering judgment and a more detailed assessment may suggest additional safety strategies that could be considered.

<sup>&</sup>lt;sup>†</sup> Toward SS4A Implementation Grants

Preconstruction Engineering/Design Utilities\*\*
 12%
 \$ 1,567,071

 \*\*
 \*

 \*\*
 \*

 \*\*
 \*

 \*\*
 \*

 \*\*
 1,958,838
 \*

 \*\*
 1,585,000
 \*

<sup>\*\*</sup>To be evaluated during feasibility study/design

Checked By:

**Key Intersection Locations:** 

1800 North

2400 North



#### Project Information Sheet

GFA(s): North Davis County Date Prepared: 3/14/2024
Project Name: Main Street (SR 126) from 6000 South (Roy) to 800 North Prepared By: JSF

Jurisdiction(s): Sunset, Roy

Emphasis Areas: Intersections, Roadway Departures, Teen Driver

Equity Priority: Medium

#### **Location Description**

 Roadway:
 Main Street (SR 126)

 From:
 6000 South (Roy)

 To:
 800 North

 To:
 800 North
 800 North

 Length:
 2.01 miles
 1300 North

#### **Project Location Map**

Map ID: 6.25.1.1

EJS



#### Segment Information and Safety Analysis Areas Summary

Roadway Characteristics	Value
Length (miles)	2.01
Average Daily Traffic (vehicles per day)	24,754
Functional Classification	Other Principal Arteria
Roadway Ownership	State
Urban/Rural Designation	Urban
Number of Key Intersections	4

Why Was This Location Identified?							
Composite Safety Score	<b>✓</b>						
Historic Crashes	<b>✓</b>						
Critical Crash Rate Differential	<b>✓</b>						
Crash Profile Risk Score	<b>✓</b>						
usRAP - Star Rating (Veh, Ped, Bike)	<b>✓</b>						
Local Street Assessment							

#### **Segment Crash History**

Crash History (2018 - 2022)	# of crashes
Fatal Crashes (K)	1
Suspected Serious Injury Crashes (A)	1
Suspected Minor Injury Crashes (B)	12
Possible Injury Crashes (C)	19
No Injury/PDO Crashes (O)	89
Total Crashes	122
Total EPDO Crashes	1,554

What Crash Types are Over-Represented?										
Fatal	atal ✓ Head On (HO)									
Serious Injury		Parked Vehicle (PV)	<b>✓</b>							
Pedestrian (Ped)		Single Vehicle	<b>\</b>							
Bicycle (Bike)		Rear to Rear (RR)								
Motorcycle		Rear to Side (RS)								
Angle		Sideswipe (SS)								
Front to Rear (FR)	1	Other/Unknown								

#### **Intersection Crash History**

									What Crash Types are Over-Represented?							
Intersections	Signal	K	Α	В	С	0	Total	EPDO	K/A	Ped/Bike	Angle	FR	HO	PV	RR/RS	SS
2400 North & Main Street		0	0	2	9	8	19	155		<b>✓</b>	✓					
800 North & Main Street	✓	0	0	18	82	39	139	1,372				✓	✓			
1300 North & Main Street	<b>✓</b>	0	0	2	28	9	39	372				✓				<b>✓</b>
1800 North & Main Street	✓	1	2	11	47	45	106	1,900	<b>~</b>		<b>✓</b>					



#### Project Description/How is safety improved?

This project improves safety by installing raised medians along the corridor and sidewalk infill on the east side of the corridor. Systemic bicycle improvements include adding bicycle treatments at key intersections along the corridor (800 N., 1300 N., 1800 N., 2300 N., 6000 S.). These countermeasures help address over-represented head-on and pedestrian/bicycle crashes.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

#### **Proposed Proven Safety Countermeasures**







#### **Opinion of Probable Construction Cost**

Segment Improvements						
Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price	Item Cost
Install Raised Medians on Roadways with Existing TWLTL	0.29	All Crashes	2.01	MILE	\$ 928,000	\$ 1,865,280
Install Sidewalk or Walkways	NA	Pedestrian	1.18	MILE	\$ 634,000	\$ 747,728
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -

Intersection Improvements							
Item Description	CMF	Applicable Crashes	Quantity	Unit	Unit Price		Item Cost
Add Bicycle Treatments at Intersections	NA	All Crashes	5.00	INT	\$ 9,000	<b>\$</b>	45,000
Change a 5-section "Doghouse" to Flashing Yellow Arrow	0.75 - 0.93	Left-Turn	1.00	INT	\$ 8,000	\$	8,000
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
					,	•	

Local Match<sup>†</sup>: 20% \$ 933,400

 
 Preconstruction Engineering/Design Utilities\*\*
 12%
 \$ 440,893

 ROW\*\*
 \$ 

 Construction Engineering/Management
 15%
 \$ 551,117

 Estimated Project Total:
 \$ 4,667,000

\*Mobilization is 10% +/- of the subtotal with a minimum of \$2,500 and a maximum of \$75,000

#### **Additional Potential Improvements**

Additional safety improvements could be considered that were not included due to availability of data, need for site-specific information, and/or agency/jurisdiction input. Potential additional countermeasures are listed below. Refer to the *Countermeasure Toolbox* for a complete list of safety countermeasures.

Additional Improvements #1:	Set Appropriate Speed Limits for All Road Users
Additional Improvements #2:	Remove on street parking to ensure upgrade to buffered bicycle lane fits with existing width
Additional Improvements #3:	
Additional Improvements #4:	
Additional Improvements #5	

#### Disclaimer:

Disclaimer: The cost estimates provided in this document are for comparison purposes only. Actual project costs will vary. The recommended safety improvement strategies were based on available data and reasonable engineering judgment and a more detailed assessment may suggest additional safety strategies that could be considered.

<sup>&</sup>lt;sup>†</sup> Toward SS4A Implementation Grants

<sup>\*\*</sup>To be evaluated during feasibility study/design



# Planning Commission STAFF REPORT

AGENDA ITEM
#3

**TO:** Clearfield City Planning Commission

FROM: Tyson Stoddard, Associate Planner

tyson.stoddard@clearfieldcity.org

(801) 525-2718

**MEETING DATE:** Wednesday, July 2<sup>nd</sup>, 2025

SUBJECT: Discussion and Possible Action on ASP 2025-0603, an amended subdivision plat

request by Maverik, Inc. to amend the existing Woodward Subdivision and consolidate the two lots into one lot to be named the Clearfield Maverik Commercial Subdivision. Location: 1350 East 700 South (TIN: 09-435-0001 & 09-435-0002). Project Area: 1.27 Acres. Zone: C-2 (Commercial). (Administrative

Action).

#### **RECOMMENDATION**

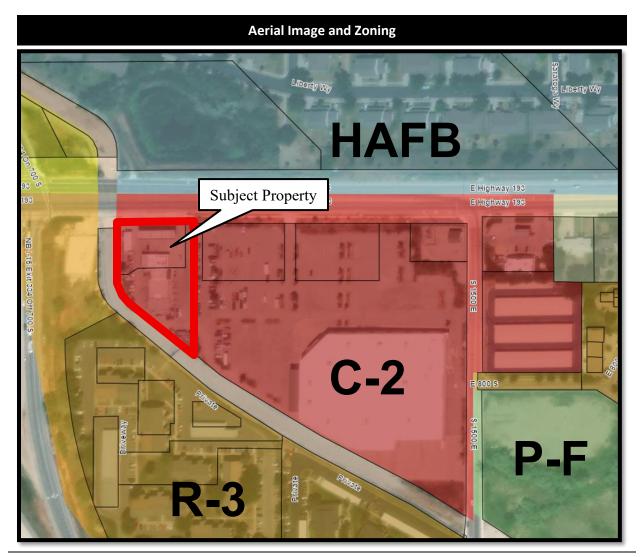
Staff recommends that the Planning Commission **approve as conditioned**, **ASP 2025-0603**, an amended subdivision plat request by Maverik, Inc. to amend the existing Woodward Subdivision and consolidate the two lots into one lot to be named the Clearfield Maverik Commercial Subdivision at the property addressed 1350 East 700 South (TIN: 09-435-0001 & 09-435-0002). This recommendation is based on the findings and discussion in the Staff Report.

#### **PROJECT SUMMARY**

Project Information				
Project Name	Clearfield Maverik Commercial Subdivision			
Site Location	1350 East 700 South			
Parcel ID	09-435-0001 & 09-435-0002			
Applicant	Maverik, Inc.			
Property Owner	Dreamworks 1350 Clearfield LLC & IDA Holdings LLC			
Proposed Actions	Subdivision Amendment Approval			
Current Zoning	C-2 (Commercial)			
Parcel Area	1.27 Acres			

Surrou	nding Properties and Uses:	Zoning District	General Plan Land Use Classification
North	Hill Air Force Base	HAFB (Hill Air Force Base)	Hill Air Force Base
East	Living Spaces	C-2 (Commercial)	Commercial
South	Canal Trail & Pepper Ridge Apartments	R-3 (Residential)	Commercial

West	Canal Trail & I-15	C 2 (Commorgial)	Commorcial
west	Interchange	C-2 (Commercial)	Commerciai



#### **BACKGROUND**

Maverik, Inc. received conditional use permit approval to redevelop the subject property with a new convenience store and gas station. As part of the redevelopment, they are requesting to amend the Woodward Subdivision and consolidate two existing lots into one single lot.

#### AMENDED SUBDIVISION PLAT REVIEW

The proposed lot will have an area of 1.27 acres and will comply with the minimum area and frontage requirements of the C-2 Zone in which it is located.

There are several easements showing on the plat, with a few of them being vacated. Staff recommends that the appropriate entities are added in an easement vacation signatory block, allowing for acknowledgement and consent of the vacations. Additionally, staff recommends that a cross-access easement or agreement be established along the east property line, between the proposed lot and the neighboring subdivision.

#### **PUBLIC NOTICE**

Public notice was placed on the property the week of June 23<sup>rd</sup>, 2025. No public comments have been received to date.

#### **CITY DEPARTMENT / AGENCY REVIEW**

The plans were shared for review by Clearfield Planning and Engineering staff. Engineering staff provided a review comment on June 26, 2025, to include a ten-foot (10') Public Utility Easement (PUE) on the entire perimeter of the property. Engineering comments will need to be addressed prior to the final approval and recording of the plat with the Davis County Recorder's Office.

#### **CONDITIONS OF APPROVAL**

The following conditions of approval shall be addressed by the applicant and shown on a set of revised plans prior to issuance of Final Land Use Approval unless otherwise noted.

- 1) The plat shall be updated to address Clearfield City Engineering review comments.
- 2) The easement and right-of-way vacations indicated on the plat shall follow the proper process and comply with local and state requirements.

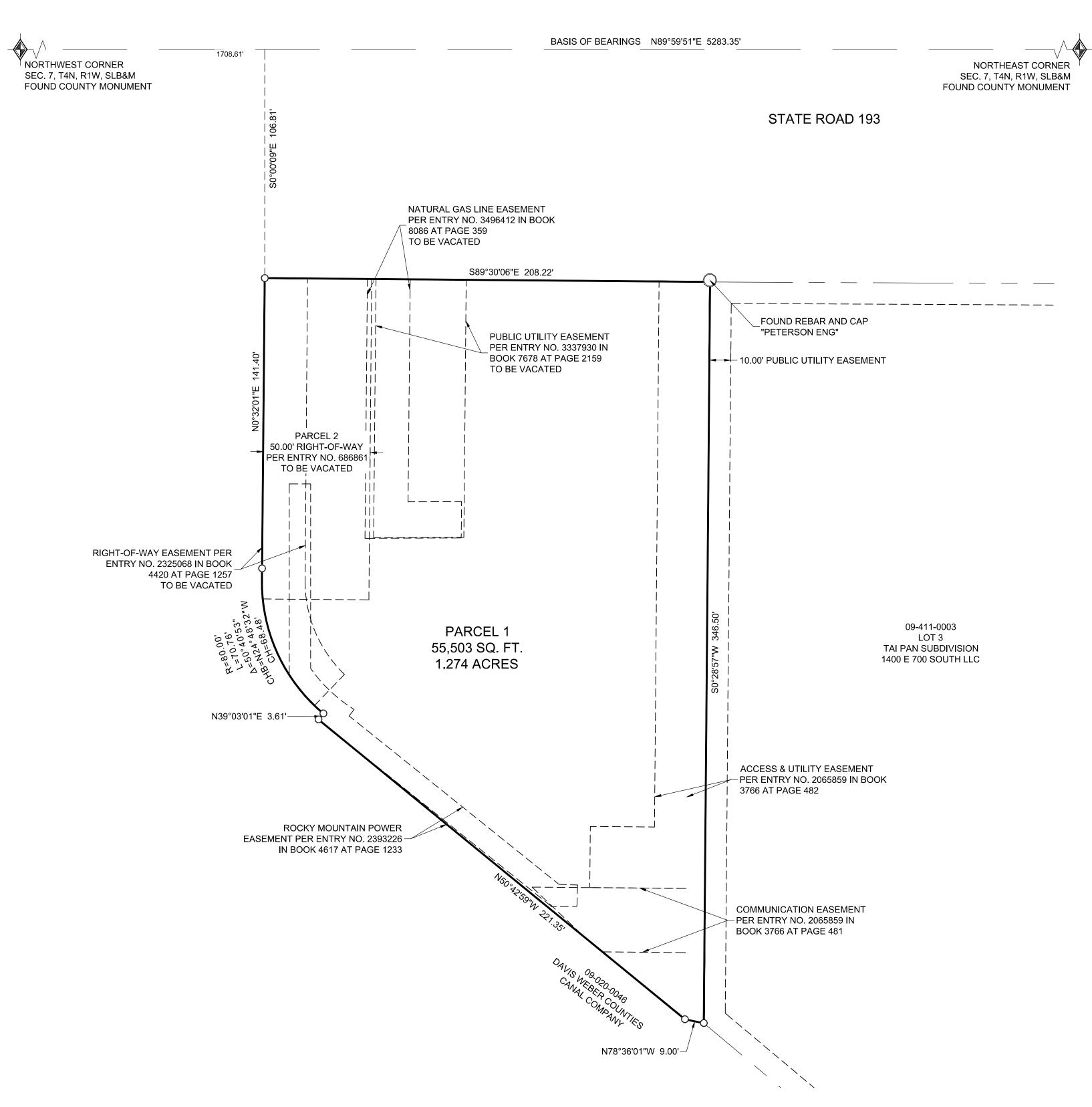
#### **ATTACHMENTS**

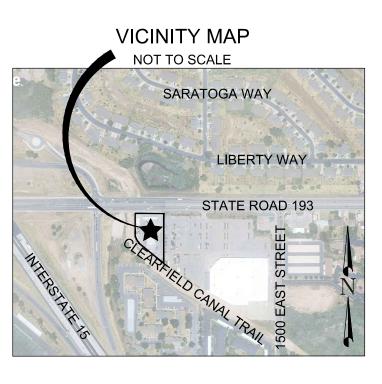
1. Clearfield Maverik Commercial Subdivision Proposed Plat

## CLEARFIELD MAVERIK COMMERCIAL SUBDIVISION

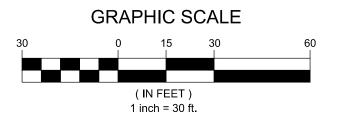
LOCATED IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 4 NORTH, RANGE 1 WEST SALT LAKE BASIN AND MERIDIAN CLEARFIELD CITY, DAVIS COUNTY, UTAH

**JUNE 2025** 

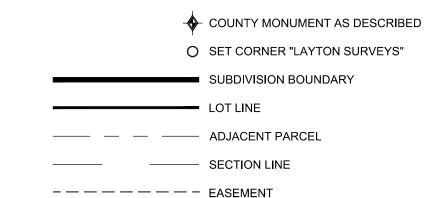








## LEGEND



### **BOUNDARY DESCRIPTION**

A PARCEL OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN, CLEARFIELD CITY, DAVIS COUNTY, UTAH. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTH LINE OF UTAH STATE ROAD193, SAID POINT BEING NORTH 89°59'51" EAST 1,708.61 FEET ALONG THE SECTION LINE AND SOUTH 00°00'09" EAST 106.81 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 7, AND RUNNING THENCE;

THENCE SOUTH 89°30'06" EAST 208.22 FEET ALONG THE SAID SOUTH LINE OF UTAH STATE ROAD 193 TO THE NORTHWEST CORNER OF LOT 3, TAI PAN SUBDIVISION AS RECORDED IN BOOK 6577, PAGE 1163 IN THE OFFICE OF THE

THENCE SOUTH 00°28'57" WEST 346.50 FEET ALONG THE WEST LINE OF SAID LOT 3, TAI PAN SUBDIVISION; THENCE NORTH 78°36'01" WEST 9.00 FEET TO A POINT ON THE NORTHEASTERLY LINE OF THE CLEARFIELD CANAL;

- 1. NORTH 50°42'59" WEST 221.35 FEET
- NORTH 39°03'01" EAST 3.61 FEET
- NORTHWESTERLY ALONG THE ARC OF CURVE TO THE RIGHT A DISTANCE OF 70.76 FEET HAVING A RADIUS OF 80.00 FEET A CENTRAL ANGLE OF 50°40'53" AND CHORD BEARING AND DISTANCE OF NORTH 24°48'32" WEST 68.48

THENCE ALONG THE BOUNDARY OF SAID CLEARFIELD CANAL THE FOLLOWING FOUR (4) COURSES AND DISTANCES:

4. NORTH 00°32'01" EAST 141.41 FEET TO THE POINT OF BEGINNING.

CONTAINING 55,503 SQUARE FEET OR 1.274 ACRES, MORE OR LESS

### NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO COMBINE LOTS 1 AND 2 OF WOODWARD SUBDIVISION INTO ONE LOT COMMERCIAL SUBDIVISION. THE SURVEY IS BASED ON THE COMMITMENT FOR TITLE INSURANCE PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NUMBER NCS-1239601-SLC1 WITH AN EFFECTIVE DATE OF OCTOBER 31, 2025 AT 7:30 A.M. THE SURVEY WAS ORDERED BY HUNT DAY CO. THE BASIS OF BEARING IS THE NORTH LINE OF SECTION 7, TOWNSHIP 4 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN WHICH BEARS NORTH 89°59'51" EAST, DAVIS COUNTY, UTAH, NAD 83 STATE PLANE GRID BEARING.

### SURVEYOR'S CERTIFICATE

I, Willis D. Long, DO HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH AND THAT I HOLD CERTIFICATE NO. 10708886 IN ACCORDANCE WITH TITLE 58, CHAPTER 22, OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS ACT; I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS RECORD OF SURVEY PLAT IN ACCORDANCE WITH SECTION 17-23-20 AND HAVE VERIFIED ALL MEASUREMENTS; THAT THE REFERENCE MONUMENTS SHOWN ON THIS RECORD OF SURVEY PLAT ARE LOCATED AS INDICATED AND ARE SUFFICIENT TO RETRACE OR REESTABLISH THIS SURVEY; AND THAT THE INFORMATION SHOWN HEREIN IS SUFFICIENT TO ACCURATELY ESTABLISH THE LATERAL BOUNDARIES OF THE HEREIN DESCRIBED TRACT OF REAL PROPERTY.

SIGNED THIS 6TH DAY OF JUNE, 2025.



Willis D. Long, PLS NO. 10708886

## OWNER'S DEDICATION

I THE UNDERSIGNED OWNER OF THE HEREON DESCRIBED TRACT OF LAND, HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS, PARCELS AND STREETS AS SHOWN ON THIS PLAT AND NAME SAID TRACT:

### CLEARFIELD MAVERIK COMMERCIAL SUBDIVISION

AND HEREBY DEDICATE, GRANT AND CONVEY TO CLEARFIELD CITY, DAVIS COUNTY, UTAH ALL THOSE PARTS OR PORTIONS OF SAID TRACT OF LAND DESIGNATED AS STREETS, THE SAME TO BE USED AS PUBLIC THOROUGHFARES FOREVER, AND ALSO GRANT AND DEDICATE A PERPETUAL EASEMENT OVER, UPON AND UNDER THE LANDS DESIGNATED ON THE PLAT AS PUBLIC UTILITY, THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF PUBLIC UTILITY SERVICE LINES, STORM DRAINAGE FACILITIES OR FOR THE PERPETUAL PRESERVATION OF WATER DRAINAGE CHANNELS IN THEIR NATURAL STATE WHICHEVER IS APPLICABLE AS MAY BE AUTHORIZED BY GOVERNING AUTHORITY, WITH NO BUILDINGS OR STRUCTURES BEING ERECTED WITHIN SUCH EASEMENTS.

SIGNED THIS \_\_\_\_\_\_DAY OF \_\_\_\_\_\_, 2025. NOTARY ACKNOWLEDGMENT STATE OF UTAH COUNTY OF DAVIS \_, in the year 2025, before me \_\_\_ , a notary public, personally appeared of Utah Community Federal Credit Union proved on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to in the foregoing Lien Holder Consent to Record regarding the Jordan River Flats and was signed by him/her on behalf of said Utah Community Federal Credit Union and acknowledged that he/she/they executed the same. Commission Number My Commission Expires

> CLEARFIELD MAVERIK COMMERCIAL SUBDIVISION LOCATED IN THE NORTHWEST QUARTER OF SECTION 7, TOWNSHIP 4

A Notary Public Commissioned in Utah

NORTH, RANGE 1 WEST SALT LAKE BASIN AND MERIDIAN CLEARFIELD CITY, DAVIS COUNTY, UTAH COUNTY RECORDER MAVERICK

CLEARFIELD CITY PLANNING COMMISSION
APPROVED BY THE CLEARFIELD CITY PLANNING COMMISSION. SIGNED THIS DAY OF,2025.

CLEARFIELD CITY PLANNING COMMISSION,

CLEARFIELD CITY ENGINEER APPROVED BY THE CLEARFIELD CITY ENGINEER. SIGNED THIS \_\_\_ DAY OF \_\_\_\_

CLEARFIELD CITY ENGINEER

CLEARFIELD MAYOR THIS PLAT AND ANY DEDICATIONS OFFERE HEREIN ARE APPROVED AND ACCEPTED BY TH MAYOR OF CLEARFIELD CITY THIS \_\_\_\_\_ DAY OF

**CLEARFIELD CITY ATTORNEY'S** OFFICE

APPROVED BY THE CLEARFIELD CITY ATTORNEY'S OFFICE SIGNED THIS \_\_\_ DAY OF \_\_\_\_\_,2025. ATTEST: CITY RECORDER CLEARFIELD CITY ATTORNEY

FILED FOR AND RECORDED \_. IN BOOK \_\_\_\_\_ OF OFFICIAL RECORDS, PAGE \_\_\_\_\_. RECORDED COUNTY RECORDER

ENTRY NO.

