



EAGLE MOUNTAIN PLANNING COMMISSION MEETING

JULY 9, 2024, 6:30 PM

EAGLE MOUNTAIN CITY COUNCIL CHAMBERS

1650 EAST STAGECOACH RUN, EAGLE MOUNTAIN, UTAH 84005

6:30 PM PLANNING COMMISSION POLICY SESSION

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. DECLARATION OF CONFLICTS OF INTEREST

4. MINUTES

4.A. June 25, 2024 Planning Commission Minutes

5. STATUS REPORT

6. ACTION AND ADVISORY ITEMS

6.A. Action Item/Public Hearing - Ranches Crossing Preliminary Plat

6.B. Action Item/Public Hearing - Ranches Crossing Drive-Through Site Plan

7. DISCUSSION ITEMS

8. NEXT SCHEDULED MEETING

9. ADJOURNMENT

THE PUBLIC IS INVITED TO PARTICIPATE IN PUBLIC MEETINGS FOR ALL AGENDAS.

By the Americans with Disabilities Act, Eagle Mountain City will make reasonable accommodations for participation in all Public Meetings and Work Sessions. Please call the City Recorder's Office at least 3 working days prior to the meeting at 801-789-6610. This meeting may be held telephonically to allow a member of the public body to participate. This agenda is subject to change with a minimum 24-hour notice.

CERTIFICATE OF POSTING

The undersigned, duly appointed City Recorder, does hereby certify that the above agenda notice was posted on this 3rd day of July, 2024, on the Eagle Mountain City bulletin boards, the Eagle Mountain City website www.emcity.org, posted to the Utah State public notice website <http://www.utah.gov/pmn/index.html>, and was emailed to at least one newspaper of general circulation within the jurisdiction of the public body.

Fionnuala B. Kofoed, MMC, City Recorder



EAGLE MOUNTAIN PLANNING COMMISSION MEETING MINUTES

June 25, 2024, 5:30 p.m.
Eagle Mountain City Council Chambers
1650 East Stagecoach Run, Eagle Mountain, Utah 84005

COMMISSION MEMBERS PRESENT: Commissioners Jason Allen, Rod Hess, Robert Fox, Brent Strong, and Craig Whiting; and Alternate Commissioner Bryan Free.

ELECTED OFFICIALS PRESENT: Councilmember Brett Wright, Liaison to the Planning Commission.

CITY STAFF PRESENT: Evan Berrett, Economic Development Director; Brandon Larsen; Planning Director; Marcus Draper, City Attorney; Robert Hobbs, Senior Planner; David Stroud, Senior Planner; Steven Lehmitz, Planner; and Elizabeth Fewkes, Recording Secretary.

5:30 P.M. – Eagle Mountain City Planning Commission Work Session

Commissioner Allen called the meeting to order at 5:30 p.m.

1. Discussion Items

1.A. DISCUSSION – Towns at Brylee Farms Phase B

Planner Steven Lehmitz presented the item. Brylee Estates/Farms is located at the northwest corner of the Eagle Mountain Boulevard and Aviator Avenue intersection. The Brylee Estates Phase B preliminary plat (all townhomes) was originally approved on July 16, 2019, and then amended on January 5, 2021, to move and increase open space/park amenities between both Phase A (single-family) and Phase B. Two final plats within Phase B were approved and recorded: Plat 1 on September 29, 2020, and Plat 2 on July 21, 2021. The approved amenities have been constructed in both Phase A and B. The preliminary plat has since expired, and the applicant never requested an extension. The City has recently been approached with a request to enter into a development agreement to allow the project to be completed as originally approved. If not approved, the project must adhere to current codes, necessitating changes to the design.

Applicant representative Ross Holliday explained that the primary issue revolves around the garage width requirements, which were expanded to 22 feet wide, while the lots are only 26 feet wide. This makes it architecturally unfeasible to accommodate a garage and a stairwell to the second floor. If the original approval is not reinstated, pending changes could lead to incongruence within the neighborhood and a loss of zoned units, reducing the project's density by 12 to 15 units per acre which would impact the project's overall density, the financial viability of the homeowners' association (HOA), and the financial impact on the residents. They misunderstood that delays during the phases would result in the loss of the entire entitlement. Work has commenced in several areas of the project and efforts have been made in good faith to continue the project, including infrastructure installations.

Applicant representative Sam Brown explained that the project was delayed due to supply chain issues and market conditions during the COVID-19 pandemic. They had assumed that renewing entitlements would be a formality once the market stabilized. Unclear understanding of entitlement expiration led to the current situation where the development's entitlement has lapsed.

Discussion ensued regarding the City's development agreement expiration standards and procedures, concerns with setting a precedent, and the process and whether the City should enter a development agreement to allow the project to proceed under the original approval or to require areas where development has not begun to follow new standards, particularly 22-foot wide garages.

1.B. DISCUSSION – ADU Code Minor Revisions

Senior Planner Robert Hobbs presented the item. The goal is to gauge the Planning Commission's stance on drafting amendments to accessory dwelling unit (ADU) standards, which could also affect any attached housing product, by requiring a minimum amount and type of connection of an ADU to a house. The City has received plans proposing to effectively join two separate homes with breezeways, hallways, carports, pergolas, patio covers, etc., and call that assembly one house. He presented examples of units similar to those requested and proposed by residents. Staff believes that connecting two separate homes on the same lot with minimal structures violates the spirit and intent of municipal laws. Additionally, staff desires Commission feedback regarding the maximum size of additions and potential appearance regulations. He clarified that residents are permitted only one ADU per property.

Discussion and Commission feedback:

- Balancing the protection of single-family home characteristics with the need for affordable housing.
- Possibly introducing a minimum common wall requirement for attached ADUs.
- Shared or separate utility requirements.
- Potentially introducing new standards to limit the size of attached ADUs to no larger than the existing floor area of the primary structure.
- The State's focus on creating additional affordable housing units.
- Concerns that oversized ADUs do not support the goal of affordable housing.
- Importance of ADUs for multi-generational living and supporting people on fixed incomes.
- Potential for relaxing square footage restrictions and other regulations to facilitate ADU construction.
- Requirements for owner and familial occupancy to prevent properties from being converted into multi-unit rentals.
- Difficulties in enforcing owner occupancy and usage restrictions.
- Importance of parking regulations for ADUs and challenges in policing subleasing and unauthorized use of ADUs.

Commissioner Allen adjourned the work session at 6:24 p.m.

6:30 P.M. – Eagle Mountain City Planning Commission Policy Session

Commissioner Allen called the policy session to order at 6:33 p.m.

2. Pledge of Allegiance

Commissioner Allen led the Pledge of Allegiance.

3. Declaration of Conflicts of Interest

None.

4. Approval of Meeting Minutes

4.A. June 11, 2024 Planning Commission Minutes

MOTION: *Commissioner Fox moved to approve the June 11, 2024 minutes. Commissioner Whiting seconded the motion.*

Jason Allen	Abstain
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Yes

The motion passed with a vote of 4:0.

Commissioner Allen abstained due to his absence at the June 11, 2024 meeting. Due to Commissioner Allen's absence, as alternate Commissioner Free voted.

5. Status Report

Planning Director Brandon Larsen reviewed the planning items discussed and voted upon during the City Council June 18, 2024 meeting.

6. Action and Advisory Items

6.A. ACTION ITEM/PUBLIC HEARING – Eagle Square Commercial Phase 1 – Preliminary Plat

Senior Planner David Stroud presented the item. The proposed preliminary plat complies with the standards of the Porter's Crossing master development regarding the subdivision of the property. The development is situated within Porter's Crossing, specifically in commercial Pod 1, which includes five lots fronting Pony Express Parkway. The area is governed by the Porter's Crossing master development agreement (MDA), first executed in 2016 with two amendments and a third pending execution. The property is vested with commercial zoning, and no users of the property have been identified at this time. Road dedication will occur with the recordation of the final plat, which has been approved by staff. He noted public notices resulted in six or seven emails from residents, primarily concerned about the potential for a hotel on the northern property, which is permissible under the initial MDA as a conditional use since 2016. One email expressed opposition to commercial development in general.

Commissioner Allen opened the public hearing at 6:40 p.m.

The following residents submitted emails against the proposal due to concerns with the potential for a hotel to be located within the plat in the future and the resulting impacts: Kalleen Pratt, Parker Lyons, Robert Williams, Megan Lyons, Allie Henrich, Aimee Gough, Calli Wilson, Sarah Villamizar, Kelsey Jumper, and Emily Layton.

Daniel Wilson voiced concerns about traffic congestion causing safety issues and objections to a hotel being located on the site in the future.

Jared Campbell spoke against commercial development of the site due to increased traffic.

Commissioner Allen closed the public hearing at 6:46 p.m.

Commissioner Allen clarified that the meeting focused on the layout rather than zoning, emphasizing the Planning Commission's obligation to approve permitted uses. He raised concerns about traffic flow, specifically questioning the feasibility of a left-turn exit onto Pony Express Parkway without a traffic light, suggesting potential congestion issues.

Discussion ensued regarding traffic concerns due to increased trips caused by commercial development, traffic routes and flow patterns, and possible mitigation measures.

Applicant representative Fred Simpson explained the traffic study findings and proposed improvements. He highlighted plans to relocate the traffic signal at Pony Express Parkway and Porters Crossing and to add a right-turn pocket on Pony Express Parkway to improve traffic flow into the development. He assured the Commission that the current plan accounts for existing traffic conditions and anticipated future needs, such as potentially adding a left-turn lane onto Pony Express Parkway. No street parking is permitted by the City on Pony Express Parkway or in turn lanes near intersections.

Mr. Stroud clarified that the redlines have been corrected by the applicant.

MOTION: *Commissioner Hess moved to recommend approval to the City Council of the preliminary plat for Eagle Square Commercial Phase 1. Commissioner Strong seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes

**Craig Whiting
Bryan Free**

**Yes
Not Voting - Alternate**

The motion passed with a unanimous vote.

Mr. Larsen noted that the City Engineer retains the authority to mandate additional traffic studies for new developments, especially those of significant scale like hotels to ensure that any potential traffic impacts are thoroughly assessed and mitigated as necessary.

6.B. ACTION ITEM/PUBLIC HEARING – Second Kitchen – CODE AMENDMENT

Planner Steven Lehmitz presented the item. Residents desiring to construct a second kitchen on their property have been completing an agreement form with the City. The purpose of the agreement is to permit the construction of the second kitchen without creating an ADU. The proposed code amendment formalizes the process for reviewing and permitting the construction of second kitchens. He reviewed the standards for a second kitchen and how they differ from those for ADUs with kitchens. All International Building Codes would still be applicable. Residents could convert the area with the second kitchen to an ADU in the future if desired.

Commissioner Whiting supported the ordinance, highlighting its clarity and the convenience it offers residents who wish to add a second kitchen for non-ADU purposes, such as accommodating family members without the need for an ADU process. He appreciated the safeguards in the standards, including recording requirements at the Utah County Recorder's Office.

Commissioner Strong agreed with Commissioner Whiting, noting that the ordinance appropriately addresses scenarios like adding a wet bar with kitchen-like features and ensuring proper safeguards are in place.

Commissioner Allen opened the public hearing at 7:05 p.m. As there were no comments, he closed the hearing.

MOTION: *Commissioner Fox moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code enacting Chapter 17.69 Second Kitchen. Commissioner Whiting seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

6.C. ACTION ITEM/PUBLIC HEARING – Modification to 17.55.120 Tables. Parking Requirements for Hotel, Motel, Bed and Breakfast Uses - CODE AMENDMENT

Economic Development Director Evan Berrett presented the item. Previously, Eagle Mountain City staff requested a modification to the parking code for hotel developments. Following feedback from the City Council, staff waited to pursue further action until a Hotel Market Feasibility Study was completed and discussions with various hotel brands took place. Both actions have been completed.

Mr. Berrett detailed research, comparing Eagle Mountain's parking codes with those of over 20 cities in Utah. The current requirement of one parking stall per bed is unique to Eagle Mountain, while other cities typically require one stall per room, plus additional stalls for employees and ancillary spaces such as banquet halls or restaurants. The purpose of the new standard is to bring parking restrictions in line with other cities in Utah so as to not deter hotel development in Eagle Mountain. The proposed code revision suggests: one stall per sleeping unit, one stall per employee on duty, and one stall per 200 square feet of banquet or restaurant space. He provided an example using a floor plan from a typical hotel, showing a 27% reduction in required parking spaces under the new code, which could significantly impact the feasibility of hotel projects in smaller sites within the City.

In response to event and RV/trailer parking concerns raised by the Commission, Mr. Berrett clarified that the proposed requirements are a minimum and hotel developers could choose to add more parking if they see the need. He emphasized the importance of making parking requirements manageable for developers while recognizing potential demand from specific groups such as mountain bikers. He explained that adding RV/trailer parking would complicate site planning and that there is no substantial data to support the need for such spaces especially as a City-wide standard applicable to all hotels that might not be needed or beneficial for some locations. He noted that hotel developers could include these spaces voluntarily.

Discussion ensued regarding whether to allow the free market and hotels to determine methods to accommodate large vehicle parking, such as permitting vehicles to utilize multiple stalls or including requirements to provide for large vehicles, and the possibility of moving hotels to a special use permit category for more control over parking requirements with consideration of the negative effects of large parking lots that are empty most of the time.

Mr. Hobbs explained that hotels are typically permitted depending on the zone, and even with a special use permit, standards would need to be clearly defined in the code.

Commissioner Allen opened the public hearing at 7:25 p.m. As there were no comments, he closed the hearing.

MOTION: *Commissioner Allen moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code 17.55.120 Tables. Parking Requirements for Hotel, Motel, Bed and Breakfast Uses. Commissioner Hess seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

6.D. ACTION ITEM/PUBLIC HEARING – Drive-Thru Escape Lanes – CODE AMENDMENT

Mr. Hobbs presented the item proposing an amendment to Eagle Mountain Municipal Code 17.35.050 regarding drive-thru lanes to refer to standards in 17.55.130. The proposal includes adding a new subsection 130 to 17.55, titled Drive-Thru Regulations, which preserves existing standards and introduces new ones, primarily requiring minor escape lanes in drive-thru designs. This proposal also involves deleting section 17.75.069, Restaurant with drive-thru services, in its entirety. The standards were reviewed by the Commission previously and have been modified to be more concise. The site plan review process will ensure the proper application of the proposed language, which mandates some form of escape or bypass lane in drive-thru designs.

Drive-thru bypass or escape lanes can be practical and beneficial for several reasons:

- **Improved Traffic Flow:** Bypass lanes help prevent congestion and long lines by allowing customers with complex orders or issues to move aside temporarily, keeping the main drive-thru lane flowing smoothly.
- **Customer Safety and Convenience:** These lanes provide an option for customers to leave in an emergency, assist in moving stalled vehicles into a free space, and allow those who need to adjust their order or have last-minute changes to do so without holding up others.
- **Reduced Frustration:** They minimize frustration for both customers and staff by preventing backups and allowing for more efficient handling of different situations. In busy locations or during peak times, bypass lanes can significantly enhance efficiency and customer satisfaction by contributing to faster service times and separating straightforward orders from those needing more attention.

Mr. Hobbs clarified that 17.75.069(D)(1), “A minimum of 120 feet for a single stacking lane or 60 feet per lane when there is more than one stacking lane. A stacking lane is measured back to the point of service or final service window. Stacking lanes do not have to be linear,” is being removed from the standards due to difficulties in universal application to sites with varying configurations. The intent of the requirement is accommodated in other portions of the standards.

Commissioner Allen stated he agreed with the principles set forth and the requirements to prevent vehicle queuing over sidewalks or public streets instead of mandating specific lengths for stacking lanes.

Commissioner Allen opened the public hearing at 7:40 p.m. As there were no comments, he closed the hearing.

Commissioner Hess supported the escape lane requirement, citing safety concerns and aligning with standards he has experienced as a licensed landscape architect. He also strongly suggested eliminating drive-thrus altogether to promote better public use of parking and transit.

MOTION: *Commissioner Whiting moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code amending 17.35.050 Generally Applicable Provisions, enacting 17.55.130 Drive-Thru Regulations, and deleting 17.75.069 Restaurant with Drive-Thru Services. Commissioner Allen seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

6.E. ACTION ITEM/PUBLIC HEARING – Livestock Housing Setbacks – CODE AMENDMENT

Mr. Hobbs presented proposed changes to EMMC 17.10.030 Definitions and to 17.25.040 Residential Development Standards to clarify that structures housing livestock must be kept 50 feet from neighboring residences and 6 feet from all other structures in the RA1, RA2, RD1, RD2, and FR zones. Additionally, in the R1, R2, R3, RC, MF1, and MF2 zones, structures housing livestock must be kept 6 feet away from all structures, including neighboring residences. The proposal also amends footnote number 3 under the table to specify that setbacks for structures not requiring a building permit are not required, except for those that house livestock.

A conflict between two neighbors over the placement of a chicken coop highlighted the need to modify the code's setbacks for accessory livestock structures and to define the term "structure." These amendments do not change existing policy but clarify the required separations for livestock housing. This item was previously reviewed in November last year. However, due to the passage of nearly seven months, staff recommends reviewing the item again.

Commissioner Strong raised concerns about the specifics of the code amendment, noting that while it is clear about maintaining a 50-foot distance from someone else's house, it seems to allow placing a loafing shed for cows just six feet from a resident's own house. He questioned if this interpretation was correct, pointing out that many cities require a significant buffer even on the same property. He asked if it was acceptable to place a horse barn so close to a house and sought clarification on the differences between livestock and chicken coops under the code, expressing concerns about the adequacy of spacing requirements in certain zones, particularly the RA1 Zone.

City Attorney Marcus Draper explained that the intent of the code was to ensure separation distance from neighbors, rather than enforcing a buffer on one's own property. He clarified that the code treats livestock and chickens differently, noting that chickens are permitted in all but one single-family residential zone and their coops are considered accessory uses.

Commissioner Fox expressed concern that large chicken coops can produce odors comparable to livestock. He noted that while livestock is regulated due to its potential impact on neighbors, chickens are not classified as livestock and are treated differently. He emphasized that livestock regulations are in place due to their potential smell and noise, and stressed that the number of chickens should be limited to mitigate impacts on neighbors.

Commissioner Allen opened the public hearing at 7:50 p.m. As there were no comments, he closed the hearing.

MOTION: *Commissioner Hess moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code 17.10.030 Definitions and 17.25.040 Residential Development Standards. Commissioner Whiting seconded the motion.*

Jason Allen	Yes
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Robert Fox	No
Rod Hess	Yes
Brent Strong	No
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a vote of 3:2.

6.F. ACTION ITEM/PUBLIC HEARING – Right-of-way Illustration Set – CODE AMENDMENT

Mr. Hobbs presented a proposal to amend EMMC 16.35 to reformat, re-illustrate, and clarify the City's required rights-of-way profiles. Staff was tasked with reorganizing the chapter to ensure that the illustrations are correctly ordered and uniformly formatted. Except for three types of rights-of-way illustrations, which could not be updated as the original illustrator is no longer with staff, this task has been completed. These changes apply only to public or private roadways and do not affect service drives or driveways.

Commissioner Allen opened the public hearing at 7:58 p.m. As there were no comments, he closed the hearing.

Discussion focused on the amount of redundancy to include, specifically whether to have a table, graphic, and written explanation. The Commission ultimately decided to approve the amendment as presented.

MOTION: *Commissioner Fox moved to recommend approval to the City Council of amendments to Eagle Mountain Municipal Code 16.35 Development Standards for Required Public Facilities. Commissioner Allen seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

6.G. ACTION ITEM/PUBLIC HEARING – Industrial/Agricultural Comm Storage Revamp – CODE AMENDMENT

Mr. Hobbs presented proposed amendments to EMMC 17.20 Agriculture Zone, 17.38 Commercial Storage Zone, and 17.40 Industrial Zone. The amendments aim to add an introductory subsection for each chapter, reformat the land use tables, eliminate conditional use permit (CUP) requirements, and make minor revisions to 17.40.070 and 17.40.100. These revisions include removing the moving vehicle quantity cap and eliminating references to previous zoning district equivalents.

The Council expressed a desire to revise the Industrial Zone's land use table many months ago, intending to convert all CUP-required entries to "special use permits" due to Utah's lenient stance on CUPs. Similar changes are now proposed for the Agricultural and Commercial Storage zones. Additionally, land use allowances for all three zones have been reformatted into tables organized thematically and alphabetically for ease of use and reference.

Discussion clarified the definitions of commercial riding arena, equestrian center, and equine therapy center and considered whether each should be permitted or special uses.

Mr. Larsen provided context from his experience in Utah County, explaining that commercial riding arenas often come with significant externalities such as lighting, traffic, and large gatherings, which justify requiring special use permits. He supported the idea of making these arenas special uses while keeping equestrian centers as permitted uses.

Commissioner Whiting raised concerns about the land use changes in the Agricultural Zone, particularly questioning why commercial stockyards were shown as a permitted use when they were previously prohibited. He noted a potential clerical error regarding manufacturing allowance in the commercial storage zone in EMMC 17.38.050(B).

Additionally, he expressed concern about the height restrictions for office buildings in the Industrial Zone EMMC 17.40.060 Maximum Building Height, seeking clarification on the existing and proposed standards.

Commissioner Strong supported removing commercial stockyards as a permitted use.

Mr. Hobbs explained that office buildings up to five stories are currently allowed in the Industrial Zone per EMMC 17.40.030.

Discussion clarified that the business park zones remain separate from industrial zones and that the proposed amendments do not alter the three-story height restrictions for office buildings with a 50-foot height maximum in those zones.

Commissioner Allen opened the public hearing at 8:13 p.m. As there were no comments, he closed the hearing.

MOTION: *Commissioner Allen moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code 17.20 Agriculture Zone, 17.38 Commercial Storage Zone, and 17.40 Industrial Zone with the following changes:*

- 1. The Agricultural Land Use Table shall be amended as follows:*
 - a. Commercial Riding Arena shall be changed from a permitted to a special use,*
 - b. Commercial Stockard shall be stricken and become a prohibited use, and*
 - c. Equestrian Center shall be changed from special to a permitted use; and*
- 2. The Commercial Storage Land Use Table shall be amended as follows:*
 - a. Manufacturing shall be stricken and become a prohibited use.*

Commissioner Whiting seconded the motion.

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

Mr. Hobbs recommended adding rodeo arenas to the Agricultural Land Use Table in addition to commercial riding arenas and noted that a typo in the heading for the Commercial Storage Land Use table would be corrected.

SUBSTITUTE MOTION: *Commissioner Allen moved to recommend approval to the City Council of an amendment to Eagle Mountain Municipal Code 17.20 Agriculture Zone, 17.38 Commercial Storage Zone, and 17.40 Industrial Zone with the following changes:*

- 1. The Agricultural Land Use Table shall be amended as follows:*
 - a. Commercial Riding Arena/Rodeo Arena shall be changed from a permitted to a special use,*
 - b. Commercial Stockard shall be stricken and become a prohibited use, and*
 - c. Equestrian Center shall be changed from special to a permitted use; and*
- 2. The Commercial Storage Land Use Table shall be amended as follows:*
 - a. Manufacturing shall be stricken and become a prohibited use.*

Commissioner Whiting seconded the motion.

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

7. Discussion Items

Commissioner Whiting recognized and thanked Mr. Hobbs for his preparation and amazing work during the meeting.

8. Next Scheduled Meeting

The next Planning Commission meeting is scheduled for July 9, 2024.

9. Adjournment

MOTION: *Commissioner Strong moved to adjourn the meeting at 8:29 p.m. Commissioner Whiting seconded the motion.*

Jason Allen	Yes
Robert Fox	Yes
Rod Hess	Yes
Brent Strong	Yes
Craig Whiting	Yes
Bryan Free	Not Voting - Alternate

The motion passed with a unanimous vote.

The meeting was adjourned at 8:29 p.m.

Approved by the Planning Commission on July 9, 2024.

Brandon Larsen
Planning Director



**EAGLE MOUNTAIN CITY
PLANNING COMMISSION MEETING
JULY 9, 2024**

TITLE:	Ranches Crossing Preliminary Plat
ITEM TYPE:	Preliminary Plat
FISCAL IMPACT:	N/A
APPLICANT:	Brian Haskell

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
Community Commercial/Commercial Community	3.74

PUBLIC HEARING

Yes

PREPARED BY

David Stroud, Senior Planner

PRESENTED BY

David Stroud

RECOMMENDATION:

Staff recommends the Planning Commission forward a positive recommendation to the City Council regarding the Ranches Crossing preliminary plat.

BACKGROUND:

Preliminary plat approval request of a commercial subdivision governed by the Commercial Community zone. The plat will permit commercial development of the property which has two active site plan applications under review.

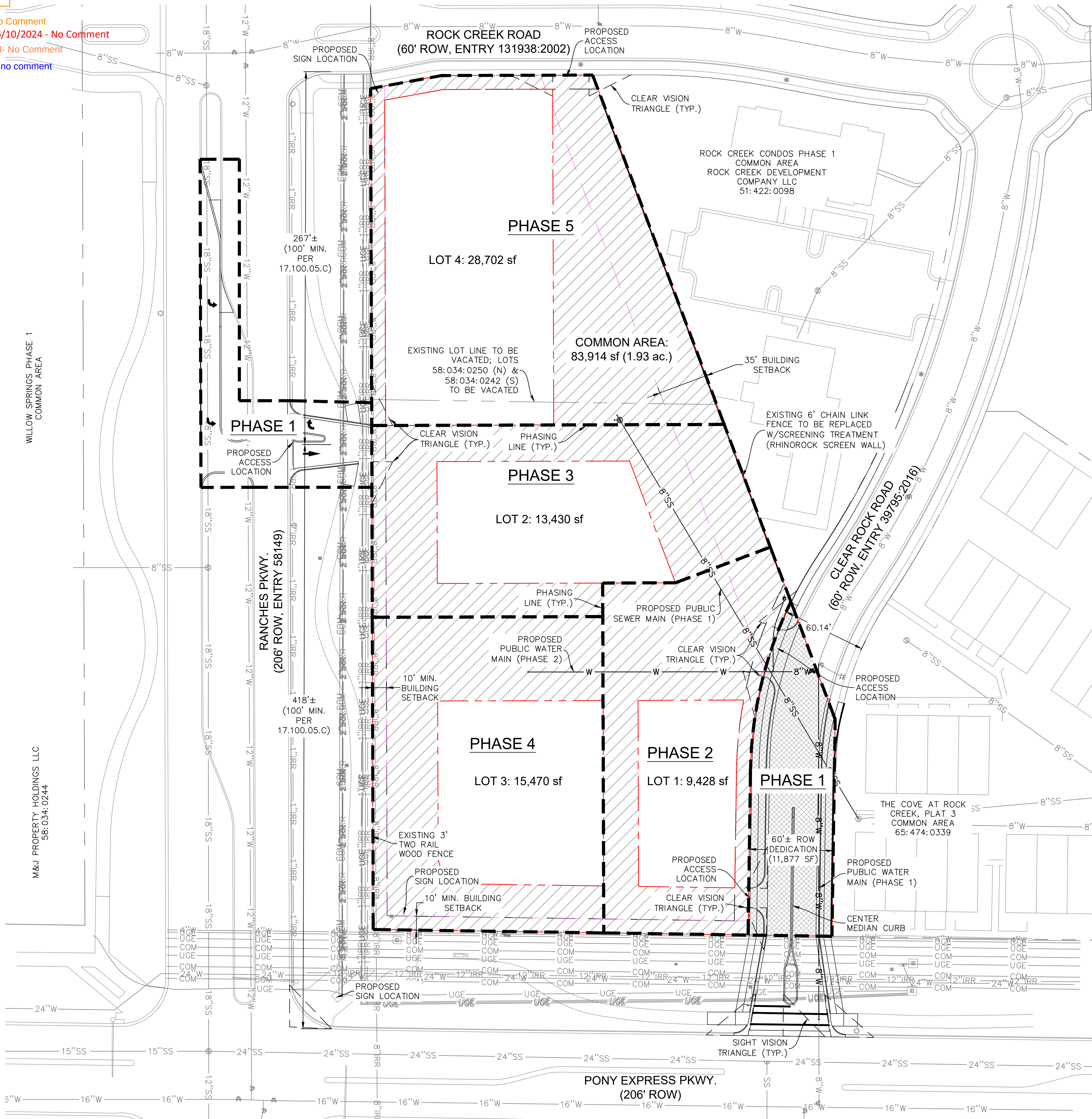
ITEMS FOR CONSIDERATION:

The proposed preliminary plat complies with the standards of the Commercial Community zone regarding subdivision of the property. There is no minimum square footage of commercial lots within the CC zone. One user of the property has been identified - Freddy's, with a second yet to be named drive-through business.

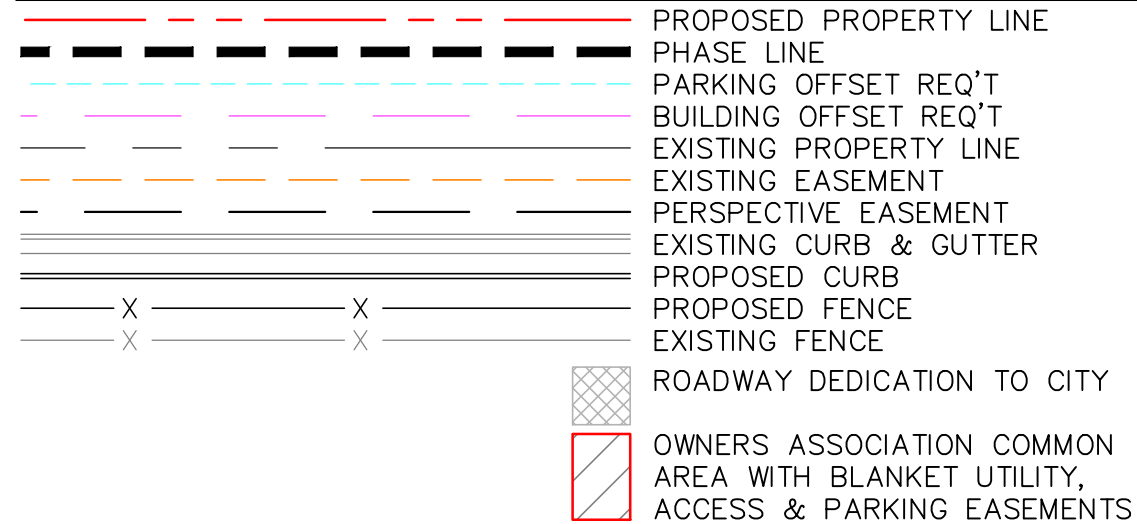
PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

1. Ranches Crossing Prelim Plat



LEGEND



GENERAL NOTES:

1. NO SLOPES EXIST OVER 15%.
2. NO NATURAL DRAINAGES EXIST THROUGH THE SITE.
3. ACCORDING TO THE UTAH GEOLOGIC HAZARDS PORTAL THERE ARE NO EARTHQUAKE FAULT HAZARDS WITHIN OR ADJACENT TO THE SITE.
4. PHASING SHALL OCCUR FOR EACH LOT & ASSOCIATED ACCESS, INFRASTRUCTURE, PLATTING, ETC. AS USERS BECOME SECURED.

LEGAL DESCRIPTION

BEGINNING AT A POINT LOCATED NORTH 89°02'40" WEST ALONG SECTION LINE 419.44 FEET AND NORTH 122.78 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 20, TOWNSHIP 5 SOUTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN; THENCE NORTH 89°09'24" WEST ALONG THE NORTHERLY RIGHT-OF-WAY OF PONY EXPRESS PARKWAY A DISTANCE OF 328.08 FEET; THENCE NORTH 01°03'37" WEST ALONG THE EASTERLY RIGHT-OF-WAY OF RANCHES PARKWAY A DISTANCE OF 601.40 FEET; THENCE ALONG THE SOUTHERLY BOUNDARY OF ROCK CREEK CONDOMINIUMS PHASE 1 THE FOLLOWING THREE COURSES AND DISTANCES: 1) NORTH 79°37'08" EAST 51.70 FEET, 2) NORTH 89°49'22" EAST 107.91 FEET, AND 3) SOUTH 20°37'28" EAST 402.56 FEET; THENCE ALONG THE WESTERLY BOUNDARY OF THE COVE AT ROCK CREEK PHASE 3 THE FOLLOWING TWO COURSES AND DISTANCES: 1) SOUTH 20°37'28" EAST 89.76 FEET, AND 2) SOUTH 0°50'36" WEST 155.13 FEET TO THE POINT OF BEGINNING. AREA = 3.738 ACRES.

LOT DEVELOPMENT NOTES

PARCEL NUMBER: 58:034:0242 & 58:034:0250
SECTION: 20
TOWNSHIP: 5S
RANGE: 1W

DEVELOPMENT ACREAGE: 3.738 ACRES (162,824 SF)

ZONING: CC – COMMERCIAL COMMUNITY

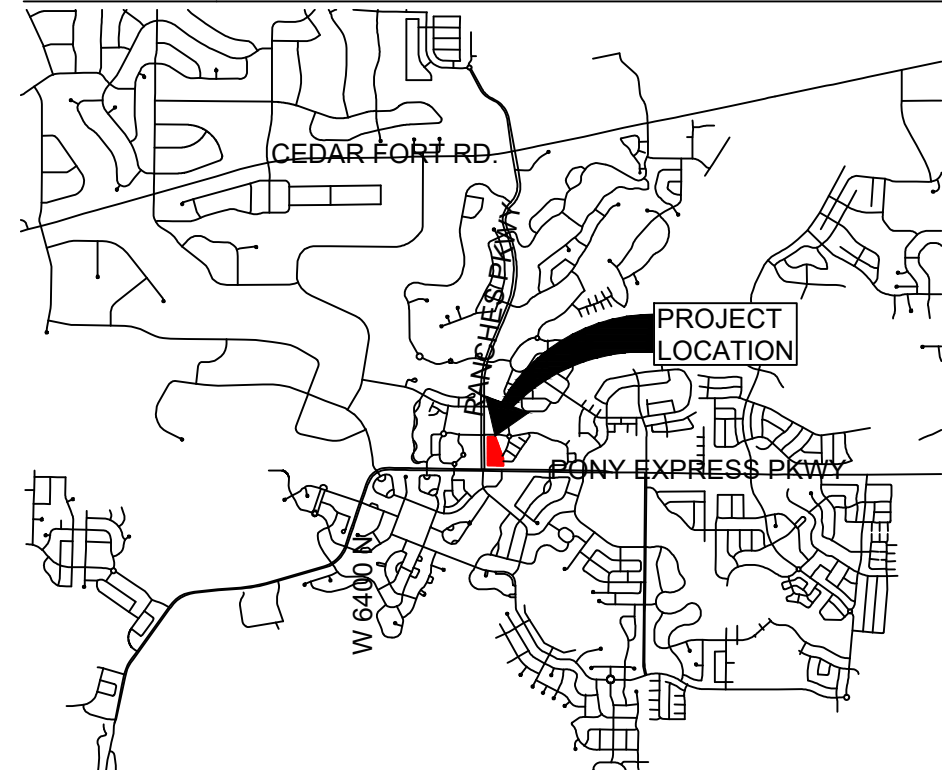
ADJOINING RECORDED DEED NAMES:

- ROCK CREEK CONDOS PHASE 1
- THE COVE AT ROCK CREEK
- WILLOW SPRINGS PHASE 1
- M&J PROPERTY HOLDINGS LLC

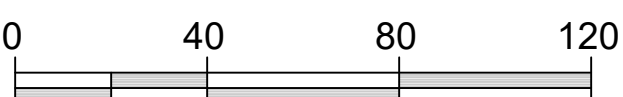
FLOOD PLAIN: PER FEMA FLOOD INSURANCE RATE MAP #49049C0300F CITY OF EAGLE MOUNTAIN 490258, EFFECTIVE DATE 6/19/2020, THIS PROPERTY LIES WITHIN UNSHADED ZONE X AND DOES NOT FALL WITHIN THE SPECIAL FLOOD HAZARD AREA.

PLAT CALCULATIONS	
TOTAL ACREAGE:	3.74 ACRES
BUILDABLE ACREAGE:	1.54 ACRES
TOTAL ACREAGE IN LOTS:	1.54 ACRES
TOTAL COMMON AREA:	1.93 ACRES
TOTAL OPEN SPACE:	0 ACRES
TOTAL IMPROVED OPEN SPACE:	0 ACRES
AVERAGE LOT SIZE:	16,758 sf
LARGEST LOT:	28,702 sf
SMALLEST LOT SIZE:	9,428 sf
OVERALL DENSITY:	1.1 LOTS/ACRE
TOTAL # OF LOTS:	4 LOTS

VICINITY MAP



SCALE (FT)



OWNER:
EAGLE 11 LLC

RANCHES CROSSING

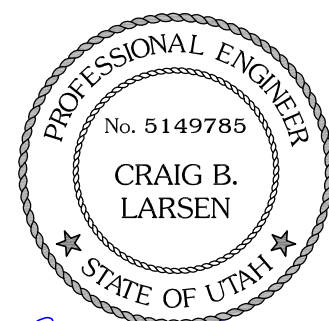
PONY EXPRESS PKWY &
RANCHES PKWY
EAGLE MOUNTAIN, UT

Rev.	Date	Comment
C	05.17.24	RESUBMITTAL
D	05.30.24	RESUBMITTAL

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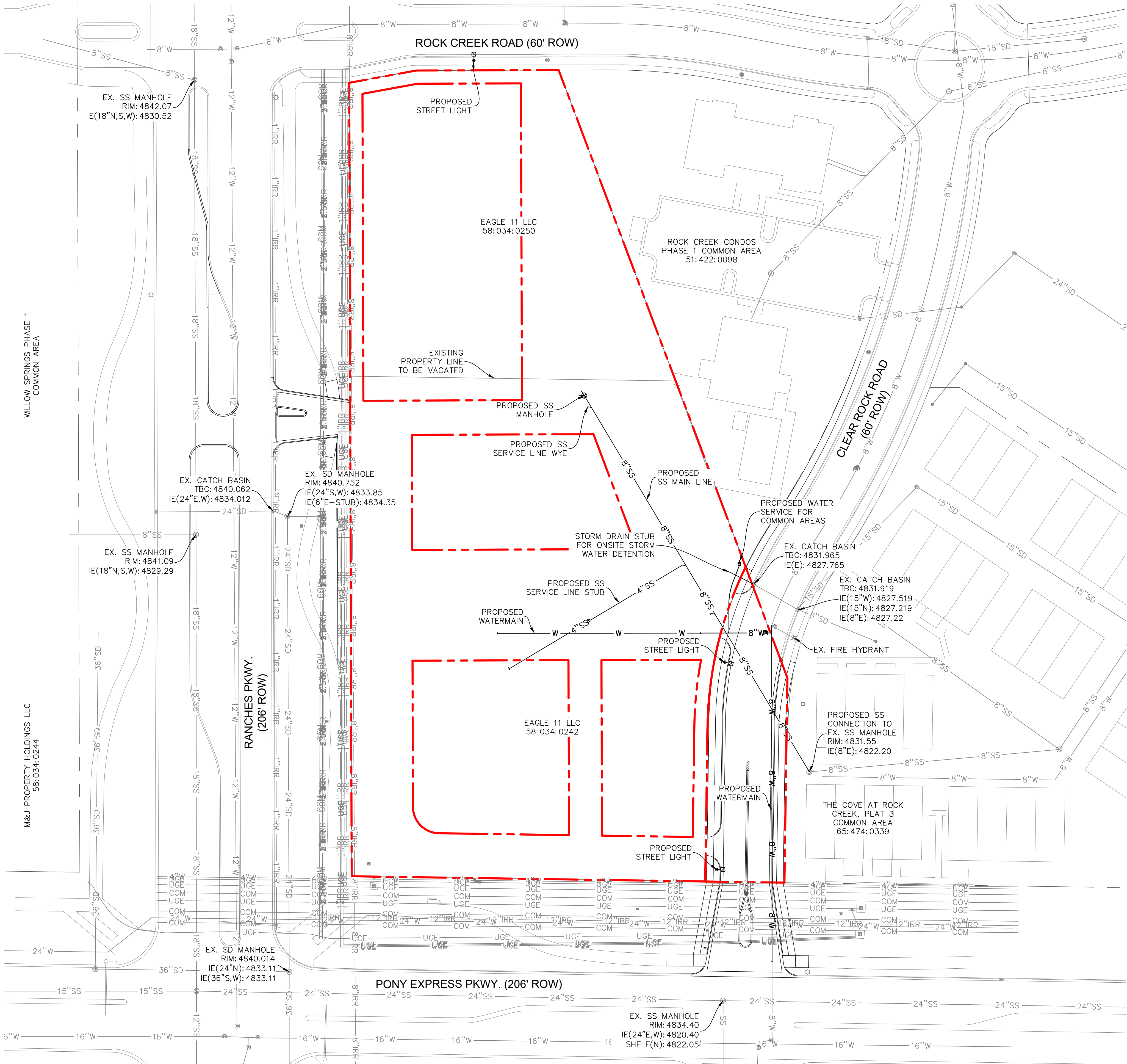
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ORIG. ISSUE DATE:



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PRELIMINARY
PLAT
P100



LEGEND		
PROPOSED	EXISTING	
SD	SD	STORMDRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
OHE	OHE	OVERHEAD ELECTRIC LINE
UGE	UGE	UNDERGROUND ELECTRIC LINE
COM	COM	COMMUNICATIONS LINE
G	G	GAS LINE
COND	COND	CONDUIT
		PROPERTY LINE
		EASEMENT
		STORMDRAIN INLET
		STORMDRAIN COMBINATION BOX
		STORMDRAIN MANHOLE
		DOWNSPOUT CONNECTION (ROOF DRAIN W/CONNECTION)
		ROOFDRAIN DISCHARGE (DISCHARGE TO LANDSCAPING)
		CLEANOUT
		SANITARY SEWER MANHOLE
		ELECTRICAL/TRANSFORMER BOX
		FIRE HYDRANT
		WATER METER & DIAMETER IF KNOWN
		WATER, IRRIGATION, POST INDICATOR VALVES
		FIRE DEPT. CONNECTION
		SITE LIGHT
		POWER POLE & GUY WIRE

- GENERAL UTILITY NOTES:
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES FOR UTILITY MARKING. DIAL 811.
 - CONTRACTOR SHALL FOLLOW GUIDELINES & RECOMMENDATIONS OF PROJECT GEOTECHNICAL INVESTIGATION & ALL ADDENDUMS.
 - ALL UTILITY INSTALLATIONS SHALL BE DONE PER LOCAL JURISDICTION AND AGENCY REQUIREMENTS & SPECIFICATIONS.

Ldg

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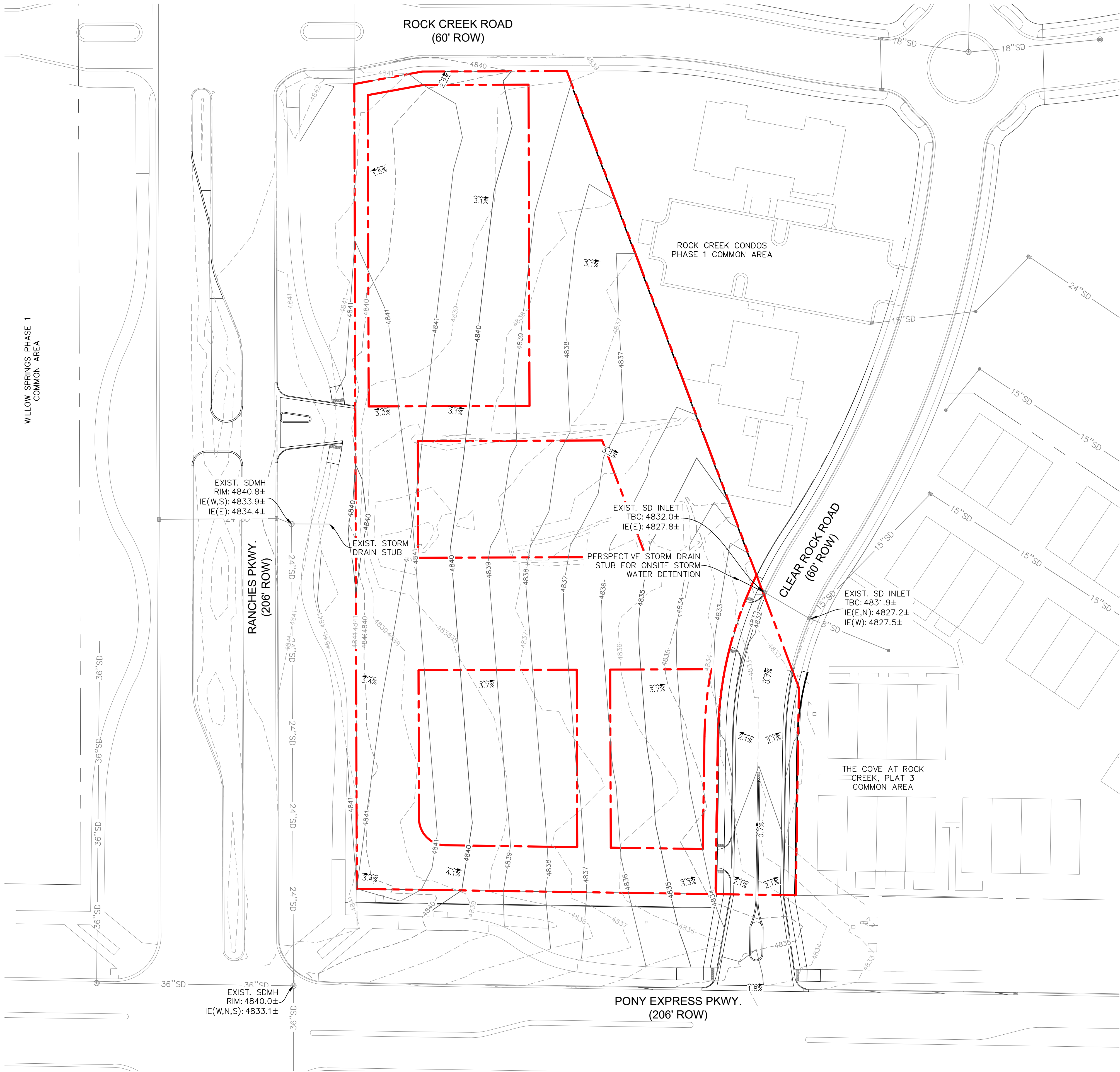
Rev.	Date	Comment
A	11.04.21	CITY COMMENTS
B	03.27.24	RESUBMITTAL
C	05.17.24	RESUBMITTAL

DRAWN BY: DRS
DESIGN BY: CBL
ORIG. ISSUE DATE: OCT. 4, 2021

PROFESSIONAL ENGINEER
No. 5149785
CRAIG B. LARSEN
STATE OF S.D.

5/17/2024 12:24:42 PM

UTILITY PLAN
C200



LEGEND

PROPOSED	EXISTING	
		MAJOR CONTOUR
		MINOR CONTOUR
		DITCH BANK, FLOWLINE
		BUILDING/STRUCTURE
		CURB, GUTTER
		PROPERTY LINE
		EASEMENT
		GRADE BREAK LINE/CONVERGENCE POINT
		STORMDRAIN INLET
		STORMDRAIN COMBINATION BOX
		STORMDRAIN MANHOLE
		DOWNSPOUT CONNECTION (ROOF DRAIN W/CONNECTION)
		ROOFDRAIN DISCHARGE (DISCHARGE TO LANDSCAPING)
		CLEANOUT

- GRADING, DRAINAGE & EROSION PLAN NOTES & INFORMATION:
- PREDEVELOPMENT RUNOFF OF 3.74 ac. (SEE ADD'L CALCS PROVIDED):
 - 1.1 10 YEAR-24 HOUR STORM (2.16 in. RAINFALL): 0.27 CFS
 - 1.2 100 YEAR-24 HOUR STORM (3.07 in. RAINFALL): 1.07 CFS
 - 1.3 TOC: 55 min.
 - 1.4 CN: 67.0 (BRUSH)
 - 1.5 SOIL GROUP B: JUAB LOAM - WELL DRAINED MIXED ALLUVIUM & LAKE SEDIMENT
 - NO MAJOR OR NATURAL DRAINAGES EXISTING WITHIN THE PROPERTY
 - HISTORICAL DRAINAGE PATTERN: EAST-SOUTHEAST SHEET FLOW (SEE EXIST. CONTOURS)
 - PROPOSED DRAINAGE PATTERN: EAST-SOUTHEAST FOLLOWING EXIST. PATTERN
 - 4.1 EXISTING STORMWATER FACILITIES EXIST IN THE RANCHES PARKWAY & CLEAR ROCK ROAD FOR FUTURE CONNECTIONS FOR ON-SITE DEVELOPMENT. NO ADDITIONAL STORMWATER PUBLIC INFRASTRUCTURE IS REQUIRED.
 - 4.2 ONSITE DETENTION & TREATMENT WILL BE PROVIDED FOR FUTURE ONSITE DEVELOPMENT TO LIMIT RUNOFF TO PREDEVELOPMENT RATES & 0.2 CFS/AC.
 - 4.3 ALL DISTURBED & IMPROVED AREAS NOT ALREADY IMPROVED WITH A FINISHED SURFACE SHALL BE LANDSCAPED.
 - CONSTRUCTION EROSION & SEDIMENT CONTROL SHALL BE CONTROLLED BY ADHERENCE TO A SWPPP (SEE C400) & PERMITTED UNDER THE CURRENT STATE OF UTAH UPDES CONSTRUCTION GENERAL PERMIT (UTRC000000)
 - THERE ARE NO EXISTING SLOPES GREATER THAN 15%
 - NO FUTURE SLOPES, CUT OR FILL SURFACES, GREATER THAN 15% ARE ANTICIPATED.
 - CUT & FILL DEPTHS WILL BE LESS THAN 10 ft.
 - NO OFFSITE RUNOFF IS EXPECTED TO IMPACT OR RUN THROUGH THE SITE DUE TO EXISTING IMPROVEMENTS AND ELEVATIONS.
 - ALL PROPOSED CONTOURS & SLOPES SHOWN HERE SHOULD BE CONSIDERED PRELIMINARY TO DEMONSTRATE FEASIBILITY & MASS GRADING & DRAINAGE PATTERNS.

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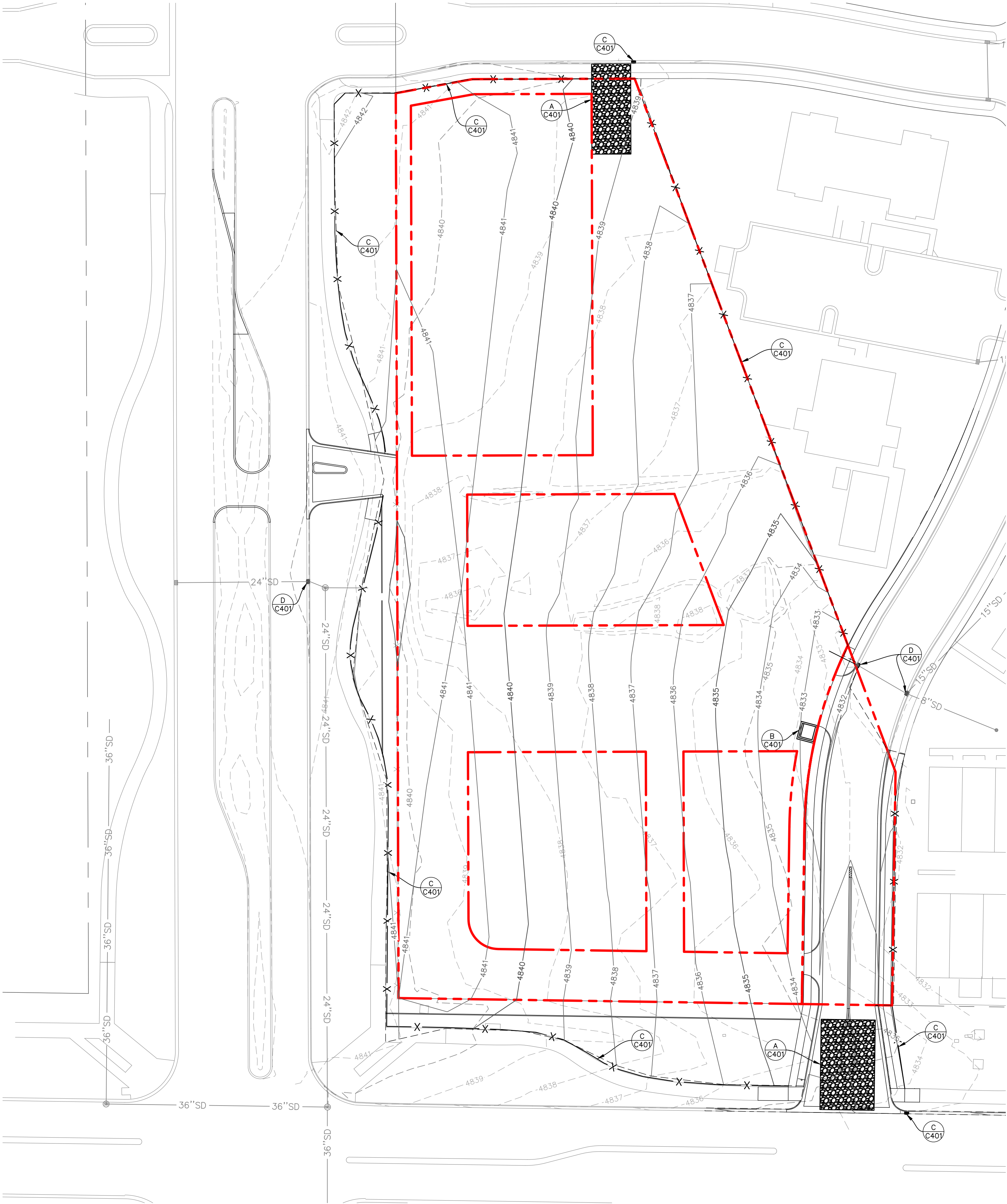
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Rev.	Date	Comment
B	03.27.24	RESUBMITTAL

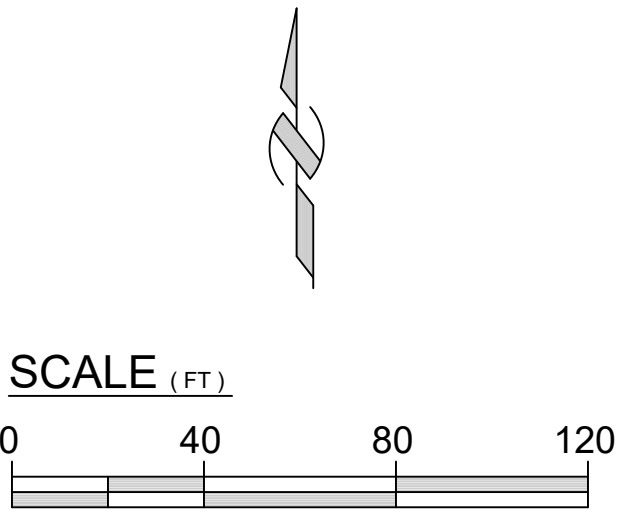
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ORIG. ISSUE DATE: OCT. 4, 2021

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GRADING
& DRAINAGE
C300



- (A) C401 CONSTRUCT VEHICLE TRACKING CONTROL ENTRANCE, LOCATION TO BE DETERMINED BY CONTRACTOR THROUGHOUT PROJECT FOR PRACTICALITY
- (B) C401 CONSTRUCT CONCRETE WASHOUT FACILITY, LOCATION(S) TO BE DETERMINED BY CONTRACTOR THROUGHOUT PROJECT FOR PRACTICALITY, CLEAN & DISPOSE OF EXCESS MATERIAL AS NECESSARY IN A LAWFUL MANNER
- (C) C401 INSTALL SILT FENCE, STRAW WATTLE OR BALE EROSION CONTROL BARRIER AT ALL LOCATIONS, INCLUDING STREET GUTTERS, WHERE STORMWATER RUNOFF MAY FLOW BEYOND CONSTRUCTION LIMITS
- (D) C401 PLACE INLET PROTECTION, OVER PROPOSED & EXISTING INLETS UNTIL COMPLETION OF SITE CONSTRUCTION & LANDSCAPING (TYP. ALL INLETS)

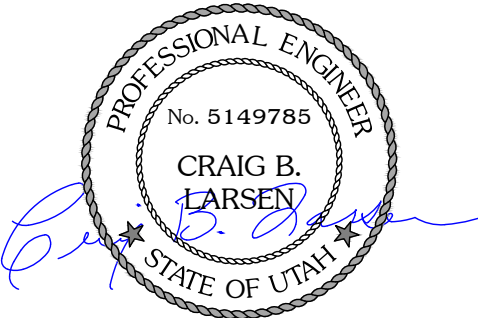


LEGEND		
PROPOSED	EXISTING	
SD	SD	STORMDRAIN LINE
---	---	PROPERTY LINE
---	---	EASEMENT
---	---	MAJOR CONTOUR
---	---	MINOR CONTOUR
X	---	DITCH BANK, FLOWLINE
---	---	SILT FENCE, STRAW WATTLE
---	---	STRAW BAIL
---	---	GRAVEL BAG
---	---	STORMDRAIN INLET
---	---	STORMDRAIN COMBINATION BOX
---	---	STORMDRAIN MANHOLE
---	---	DOWNSPOUT CONNECTION



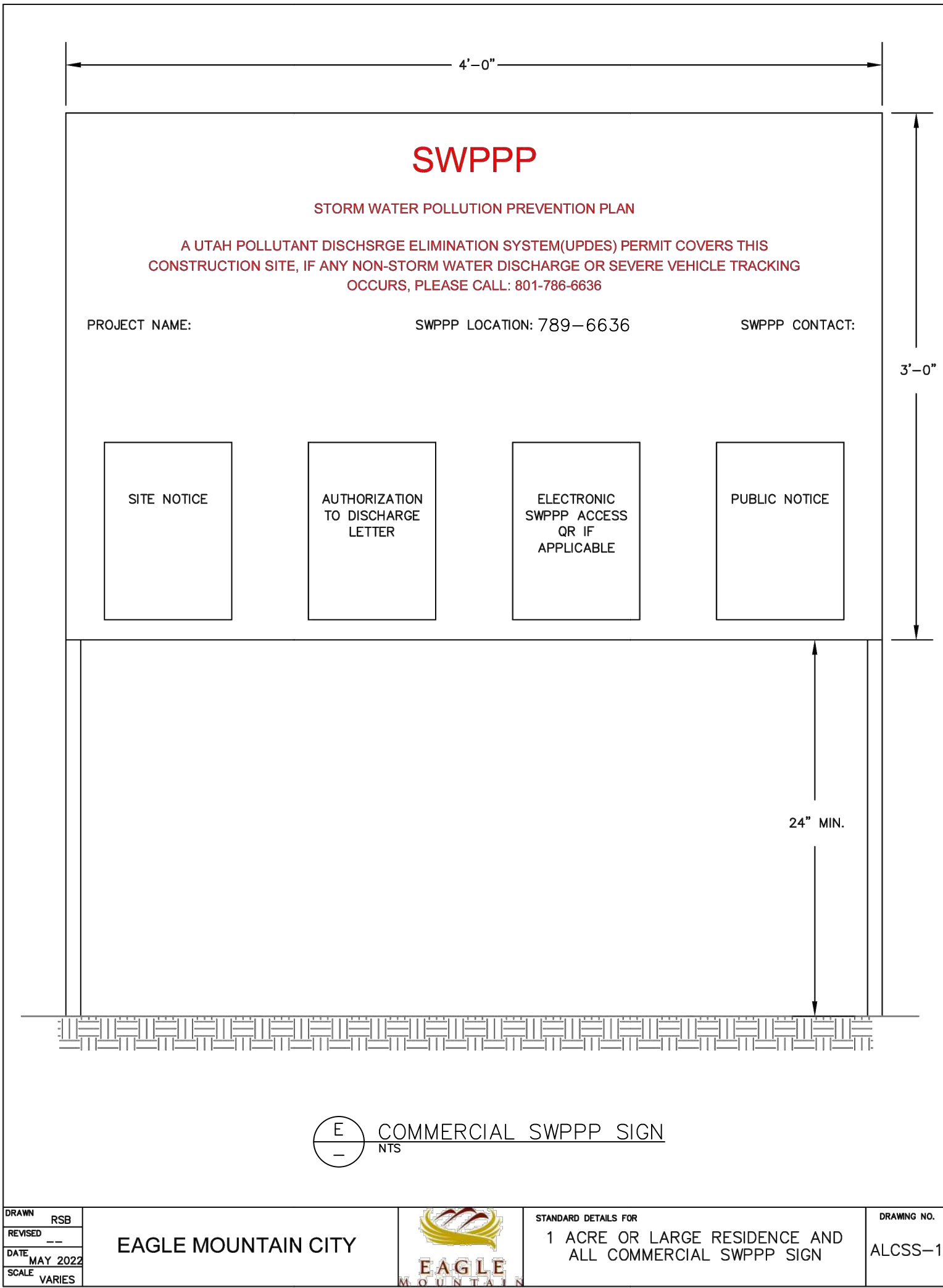
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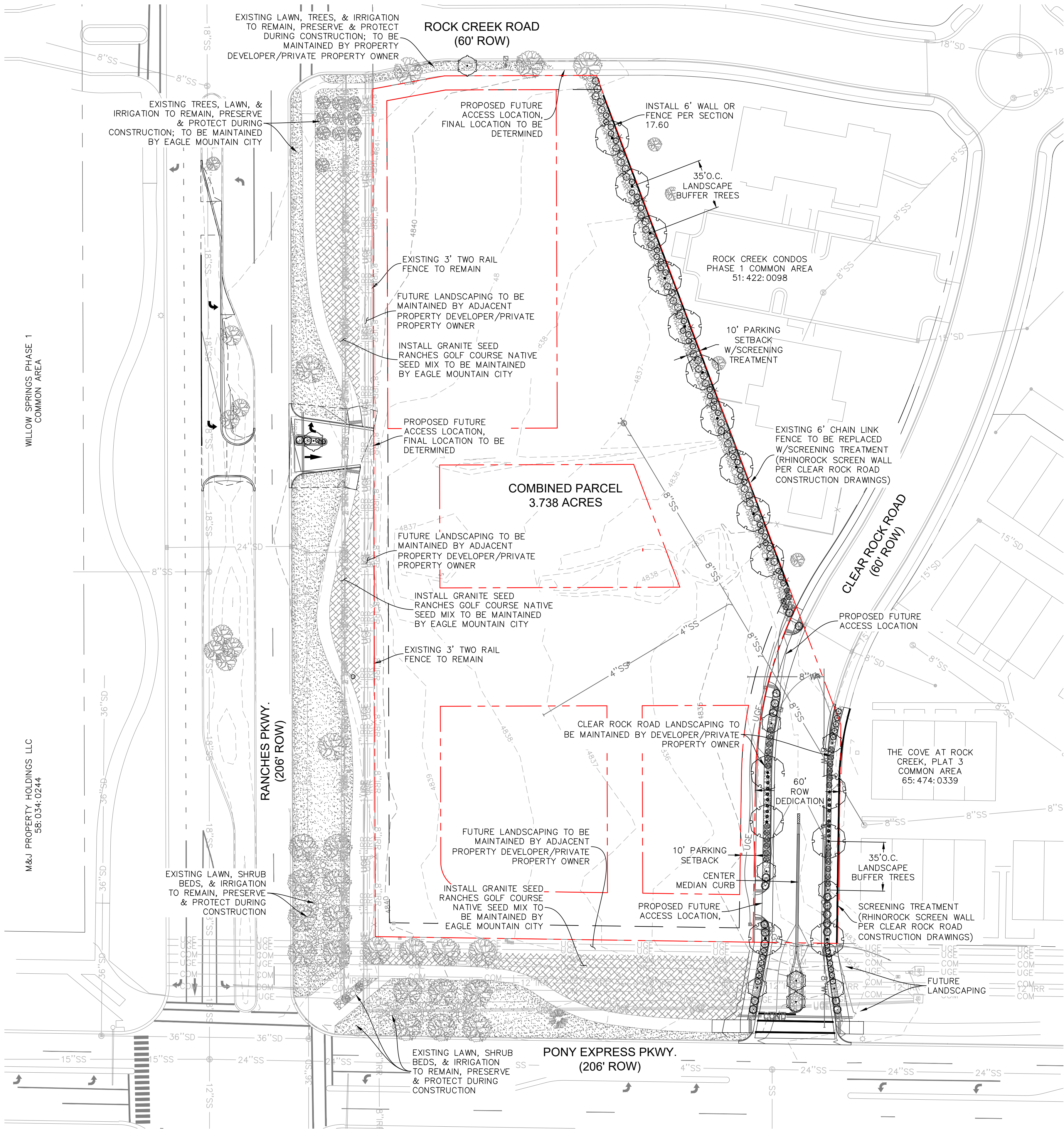
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ORIG. ISSUE DATE: OCT. 4, 2021



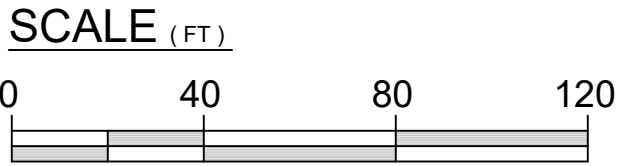
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EROSION
PLAN
C400





LEGEND		
PROPOSED	EXISTING	
SD	SD	STORMDRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
OHE	OHE	OVERHEAD ELECTRIC LINE
UGE	UGE	UNDERGROUND ELECTRIC LINE
COM	COM	COMMUNICATIONS LINE
G	G	GAS LINE
COND	COND	CONDUIT
		PROPERTY LINE
		STORMDRAIN INLET
		STORMDRAIN COMBINATION BOX
		STORMDRAIN MANHOLE
		DOWNSPOUT (ROOF DRAIN W/CONNECTION)
		ROOFDRAIN (OUTLET TO LANDSCAPING)
		CLEANOUT
		SANITARY SEWER MANHOLE
		ELECTRICAL/TRANSFORMER BOX
		FIRE HYDRANT
		WATER METER & DIAMETER IF KNOWN
		WATER, IRRIGATION, POST INDICATOR VALVES
		SITE LIGHT
		POWER POLE & GUY WIRE



LANDSCAPE AREAS SUMMARY	
TOTAL LANDSCAPE AREA	53,012 SF
TURF LANDSCAPE AREA	24,455 SF (46%)
WATER-WISE LANDSCAPE AREA	20,011 SF (38%)
FUTURE DEVELOPMENT AREA	8,540 SF (16%)
LANDSCAPE BUFFER TREES	10 TREES
ROW TREES	36 TREES
STREET TREES	10 TREES

- LANDSCAPE NOTES:**
- DECORATIVE ROCK MULCH MIN. 1" AGGREGATE TO MATCH EXISTING ROCK MULCH ON SITE SHALL BE A MIN. OF 3" THICK ABOVE DEWIT PRO WEED BARRIER FABRIC.
 - ALL ROCK MATERIALS SHALL NOT EXCEED THE HEIGHT OF THE SIDEWALK/TRAIL OR THE TOP BACK OF CURB.
 - ALL ROCK MULCH AREAS TO BE WATER-WISE LANDSCAPE WITH DRIP IRRIGATION SYSTEM.
 - INSTALL LANDSCAPE BERM HEADLIGHT SCREEN WHERE INDICATED WITH MAXIMUM HEIGHT OF 3' AND SLOPED SIDES TO BE NO GREATER THAN 1' VERTICAL TO 6' HORIZONTAL.

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
TREES						
	PYR CAP	Pyrus calleryana 'Capital'	Capital Callery Pear	1.5" Cal.	B&B	1
DROUGHT TOLERANT TREES						
	GLE IMP	Gleditsia tricanthos inermis 'Impcole' 30'-40' Tall	Imperial Honeylocust	1.5" Cal.	B&B	16
	PYR TRI	Pyrus calleryana 'Trinity' 25'-30' Tall	Trinity Flowering Pear	1.5" Cal.	B&B	10
SHRUBS						
	SYR BL2	Syringa x 'Bloomerang'	Bloomerang Series Lilac	5 gal.	Pot	1
DROUGHT TOLERANT GRASSES						
	PEN HAM	Pennisetum alopecuroides 'Hameln' 18"-30" Tall	Hameln Fountain Grass	1 gal.	Pot	15
DROUGHT TOLERANT SHRUBS						
	HIB EUU	Hibiscus syriacus 'SHIMRV24' TM 3.5'-4' Tall	Lil' Kim Violet Rose of Sharon	2 gal.	Pot	18
	JUN MOO	Juniperus sabina 'Monard' TM 6"-12" Tall	Moor-Dense Juniper	5 gal.	Pot	21
	MAH COM	Mahonia aquifolium 'Compacta' 2'-3' Tall	Compact Oregon Grape	5 gal.	Pot	38
	PER NYJ	Perovskia atriplicifolia 'Blue Jean Baby' 2'-3' Tall	Blue Jean Baby Russian Sage	1 gal.	Pot	3
	PHY GOL	Physocarpus opulifolius 'Golden Nugget' 3.5'-6' Tall	Golden Nugget Ninebark	5 gal.	Pot	37
	SPI NBU	Spiraea betulifolia 'COURISP01' TM 3'-4' Tall	Pink Sparkler Birchleaf Spirea	2 gal.	Pot	24
	SYR YOL	Syringa meyeri 'Anny200810' TM 4'-5' Tall	Flowerfesta White Korean Lilac	2 gal.	Pot	4
GROUND COVERS						
	NAT SED	Native Seed Mix	Ranches Golf Course Native Seed Mix	---	---	12,800 sf
	POA PRA	Poa pratensis	Kentucky Bluegrass	---	---	24,455 sf
	ROC MUL	Rock Mulch	1"-2" Charcoal Grey Rock Mulch 3" Depth	---	---	7,211 sf

L

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ABERDEEN, SD
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OWNER:
EAGLE 11 LLC.

**RANCHES
CROSSING**

PONY EXPRESS PKWY &
RANCHES PRWY

SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH

811

Know what's below.
Call before you dig.

REV.	DATE	COMMENT
A	11.04.21	CITY COMMENTS
C	05.17.24	RESUBMITTAL

DRAWN BY: DRS

DESIGN BY: DRS

ISSUE DATE: OCT. 4, 2021

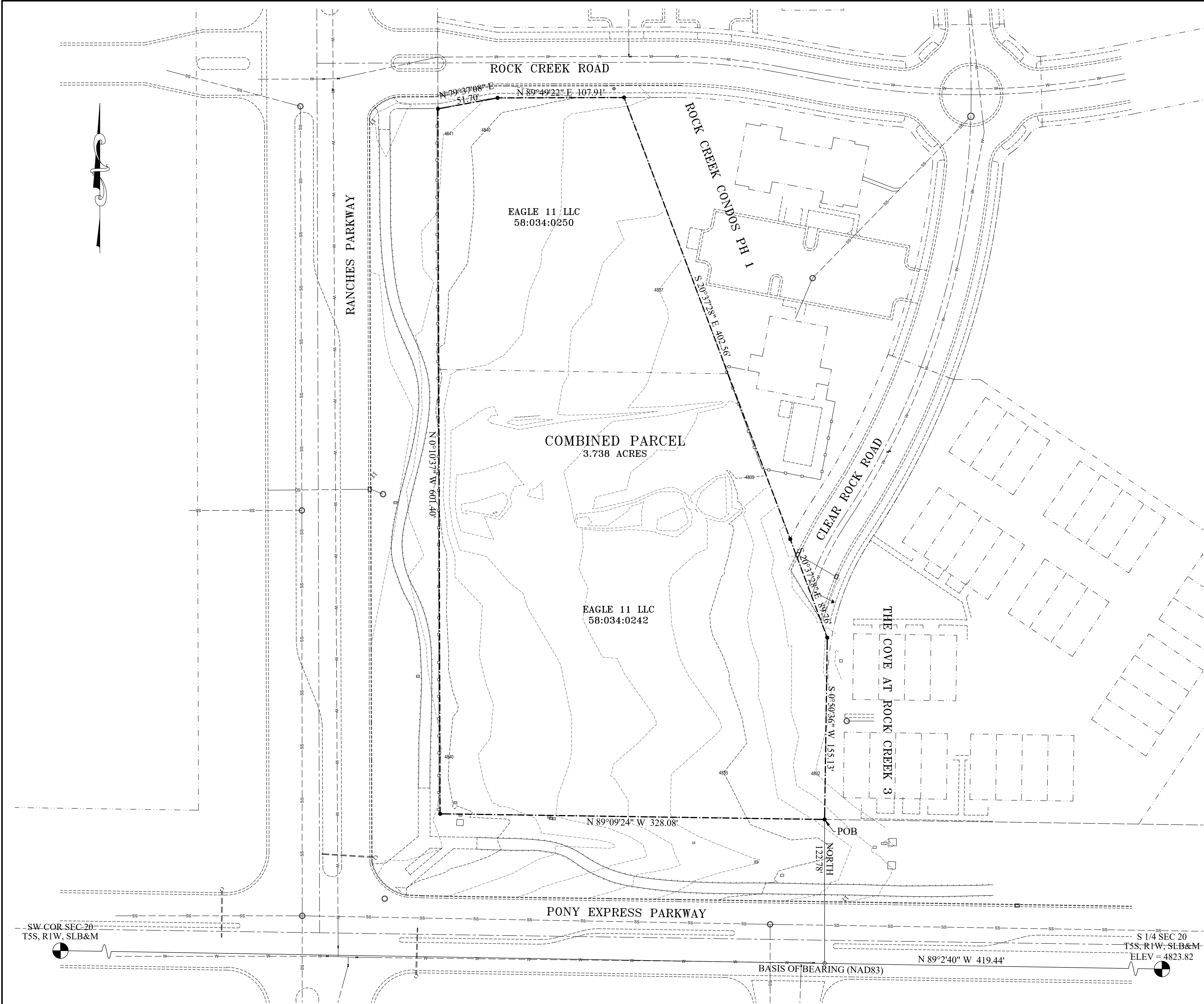
State of Utah

DEBORA R. SHEPARD
349758-9301

Licensed Landscape Architect

5/17/2024 12:25:11 PM

**LANDSCAPE
PLAN
L100**



DESCRIPTION

Beginning at a point located North 89°02'40" West along section line 419.44 feet and North 122.78 feet from the South Quarter Corner of Section 20, Township 5 South, Range 1 West, Salt Lake Base and Meridian; thence North 89°09'24" West along the northerly right-of-way of Pony Express Parkway a distance of 328.08 feet; thence North 0°10'37" West along the easterly right-of-way of Ranches Parkway a distance of 601.40 feet; thence along the southerly boundary of Rock Creek Condominiums Phase 1 the following three courses and distances: 1) North 79°37'08" East 51.70 feet, 2) North 89°49'22" East 107.91 feet, and 3) South 20°37'28" East 402.56 feet; thence along the westerly boundary of The Cove at Rock Creek Phase 3 the following two courses and distances: 1) South 20°37'28" East 89.76 feet, and 2) South 0°50'36" West 155.13 feet to the point of beginning.
Area = 3.738 Acres

NARRATIVE

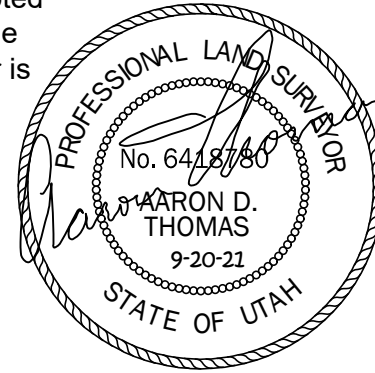
The Basis of Bearing for this survey is North 89°02'40" West along Section Line from the South Quarter Corner of Section 20, Township 5 South, Range 1 West, Salt Lake Base and Meridian to the Southwest Corner of said Section 20. Both monuments were located as shown on county tie sheets. The purpose of this survey was to determine an overall boundary and locate existing improvements to facilitate the design of future improvements. Final boundary markers are to be set with construction of the future development.

CERTIFICATION

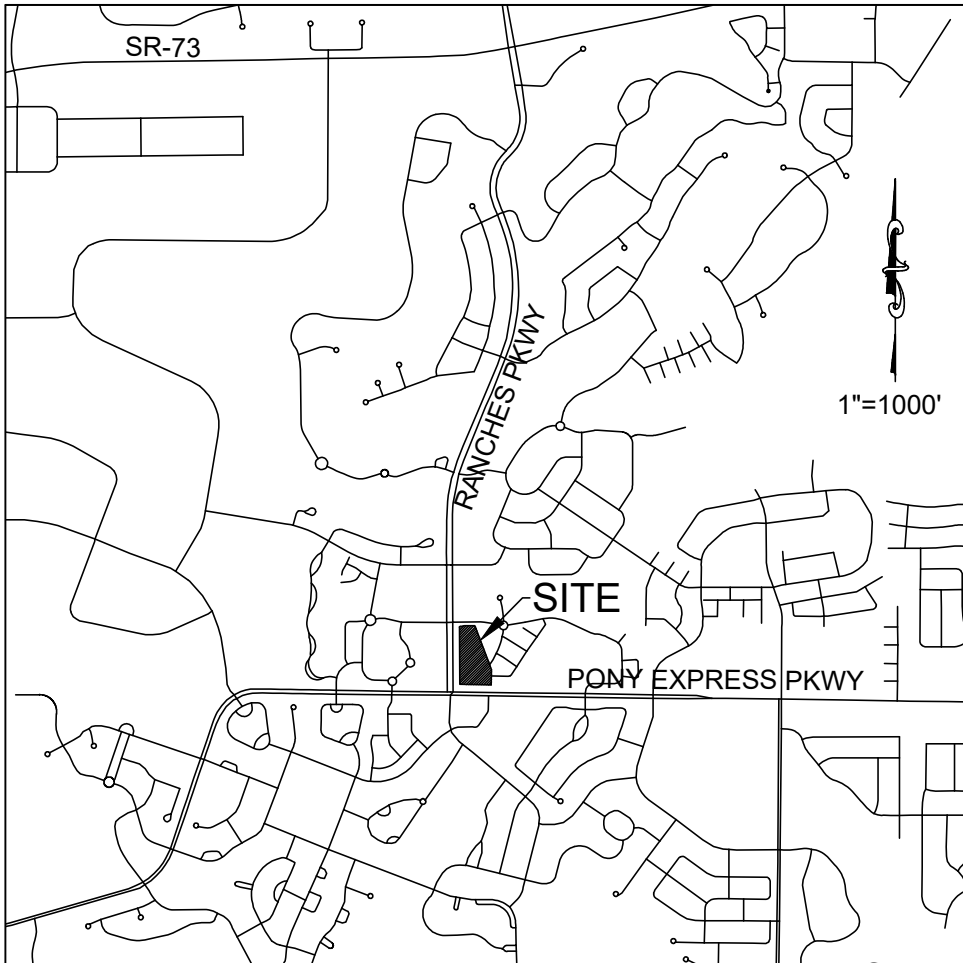
I Aaron D. Thomas, do hereby certify that I am a Professional Land Surveyor, licensed to practice in the State of Utah, holding license number 6418780, and that in September 2021, I made a survey of the property described on this plat.

This survey was made in conformity with generally accepted local surveying practices. It does not guarantee title to the lines set, nor purport to show all easements of record nor is it proof of ownership.

Aaron D. Thomas
AARON D. THOMAS - PLS NO. 6418780



VICINITY MAP



PLAT LEGEND

---	PARCEL BOUNDARIES
---	NEIGHBOR TITLES
---	CENTERLINE ROAD
---	ASPHALT
---	CONCRETE
---	FENCE LINE
---	SANITARY SEWER
---	STORM DRAIN
---	WATER LINE
---	POWER LINE
---	PHONE / FIBER OPTIC
---	GAS LINE
---	CONTOUR LINE



**EAGLE MOUNTAIN CITY
PLANNING COMMISSION MEETING
JULY 9, 2024**

TITLE:	Ranches Crossing Drive-Through Site Plan
ITEM TYPE:	Site Plan
FISCAL IMPACT:	N/A
APPLICANT:	Brian Haskell

CURRENT GENERAL PLAN DESIGNATION & ZONE	ACREAGE
Community Commercial/Commercial Community	0.83

PUBLIC HEARING

Yes

PREPARED BY

David Stroud, Senior Planner

PRESENTED BY

David Stroud

RECOMMENDATION:

Staff recommends the Planning Commission forward a positive recommendation to the City Council regarding this site plan request.

BACKGROUND:

Request to approve the site plan of a TBD drive-through business; likely a food/drink establishment.

ITEMS FOR CONSIDERATION:

This site plan approval is based upon compliance with City Code requirements which can be found in EMMC 17.100 with other chapters referenced therein. This site plan has been reviewed and deemed to comply with standards applicable to landscaping, parking, lighting, and architecture.

PLANNING COMMISSION ACTION/RECOMMENDATION:

ATTACHMENTS:

1. Ranches Drive Through Site

GENERAL NOTES

- ALL WORKS SHALL BE GOVERNED BY AND CONFORM TO APPLICABLE CURRENT NATIONAL AND LOCAL STANDARDS UNLESS OTHERWISE SPECIFIED ON DRAWINGS & THIS NOTE SHEET.
- THE PERMITTEE SHALL FULLY COMPLY WITH THE REQUIREMENTS OF THE CITY ORDINANCES AND REGULATIONS, SPECIFICATIONS AND STANDARDS RELATIVE TO WORK IN THE PUBLIC WAY.
- A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. SUCH MEETING SHALL COMPLY WITH ADOPTED ENGINEERING STANDARDS.
- APPLICATION FOR INSPECTION BY GOVERNING AGENCY SHALL BE MADE BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS BEFORE THE SERVICES THEREOF WILL BE REQUIRED.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE PROSECUTED TO COMPLETION WITH DILIGENCE AND EXPEDITION AND RESTORE THE PUBLIC WAY TO CITY SPECIFICATIONS WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS FROM THE COMPLETION OF SUCH WORK, WITH REASONABLE WEAR AND TEAR EXCEPTED.
- NO BACKFILL SHALL OCCUR UNTIL THE UTILITY HAS BEEN INSTALLED CORRECTLY, INSPECTED, AND APPROVED FOR BACKFILLING
- THE OWNER'S SOIL TEST ENGINEER SHALL CERTIFY THAT ALL FILLS, BACKFILLS OVER UNDERGROUND UTILITIES, BASE AND ASPHALT HAVE BEEN ADEQUATELY COMPACTED. THIS CERTIFICATION SHALL BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THE WORK BY THE CITY.
- ALL REPAVING OF UTILITY TRENCHES SHALL BE COMPLETED IN SUCH A MANNER AS TO ALLOW THE NEW PAVEMENT TO JOIN THE EXISTING PAVEMENT WITHOUT A RIDGE BEING FORMED AND TO THE SATISFACTION OF THE CITY ENGINEER.
- NO CONCRETE SHALL BE PLACED UNTIL THE FORMS AND REINFORCING STEEL (WHERE APPLICABLE) HAVE BEEN PLACED, INSPECTED AND APPROVED.
- NUCLEAR DENSITY TESTING OF ANY ASPHALT SHALL BE FOR GUIDANCE ONLY AT CONTRACTORS RISK. ACTUAL ASPHALT DENSITY SHALL BE DETERMINED BY CORES IF REQUIRED.
- THE CONTRACTOR SHALL COMPLY WITH MINIMUM SAFETY REQUIREMENTS AS GIVEN BY OSHA, NATIONAL AND LOCAL STANDARDS.

PROJECT NOTES

- LOCATION OF EXISTING UTILITIES AS SHOWN HAS BEEN IN PART TAKEN FROM RECORDS PROVIDED BY OTHERS. SURVEY DATA HAS BEEN USED TO SUPPLEMENT THESE RECORDS AS MUCH AS POSSIBLE. ACTUAL LOCATIONS MAY VARY SIGNIFICANTLY FROM LOCATIONS AS SHOWN ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATIONS OF EXISTING UTILITIES. UTILITIES NOT SHOWN ON PLANS, OR SHOWN INCORRECTLY SHALL BE WORKED AROUND AT NO ADDITIONAL COST TO THE OWNER. EXCEPTIONS SHALL BE OBTAINED IN ADVANCE IN WRITTEN FORM FROM THE ENGINEER AND ARE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR SHALL EXAMINE THE DRAWINGS AND SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE OWNER & ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.
- SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES, TYPICAL DETAILS, AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE TEMPORARY ERECTION OF BRACING AND SHORING AS REQUIRED FOR STABILITY OF STRUCTURES AND EXCAVATIONS DURING ALL PHASES OF CONSTRUCTION.
- PROJECT DATUM AND COORDINATES ARE BASED ON LOCALIZED CONTROL POINTS LOCATED AT THE FOLLOWING LOCATIONS:
SEE SITE PLAN, SHEET C100
- THE CONTRACTOR SHALL OBTAIN APPLICABLE PERMITS FROM LOCAL AUTHORITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER NECESSARY PERMITS AND LICENSES REQUIRED FOR COMPLETION OF THE WORK AND WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL TEMPORARY WATER, POWER, OR OTHER UTILITIES AS REQUIRED TO COMPLETE CONSTRUCTION OF THE PROJECT AS DETAILED.
- THE CONTRACTOR SHALL HOLD A VALID CONTRACTOR'S LICENSE PRIOR TO BEGINNING CONSTRUCTION IN THE JURISDICTION WHERE THE PROJECT IS TO TAKE PLACE.
- THE CONTRACTOR SHALL MAINTAIN CLEAN CONSTRUCTION AREAS. ALL DEBRIS, RUBBISH AND TRASH MUST BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN A SET OF APPROVED DRAWINGS AT THE JOB SITE, ON WHICH THE CONTRACTOR SHALL RECORD ALL ACTUAL MEASUREMENTS AND DETAILS AS CONSTRUCTED. THESE DRAWINGS SHALL BE SUBMITTED AS "AS-BUILT" OR "RECORD" DRAWINGS AT THE CONCLUSION OF THE PROJECT. FINAL PAYMENT WILL NOT BE RELEASED UNTIL "AS-BUILT" OR "RECORD" DRAWINGS HAVE BEEN SUBMITTED TO AND ACCEPTED BY THE OWNER & ENGINEER.
- VARIOUS WATER, SANITARY AND STORM DRAIN SEWER, COMMUNICATION, GAS, AND ELECTRICAL UTILITIES EXIST IN OR NEAR THE IMPROVEMENT PROJECT. THE EXACT LOCATION OF THESE UTILITIES IS NOT KNOWN. THE CONTRACTOR SHALL EXERCISE CAUTION TO ENSURE MINIMAL DISRUPTION OF SERVICE DURING EARTHWORK OPERATIONS.
- CONTRACTOR SHALL ARRANGE FOR EXISTING UTILITY LOCATING AND MARKING

ENVIRONMENTAL

- THE CONTRACTOR WILL BE REQUIRED TO STORE ALL FUELS, OILS, SOLVENTS AND HAZARDOUS MATERIALS IN DESIGNATED IMPOUND AREAS LOCATED IN ONE OR MORE OF THE APPROVED STAGING AREAS. IMPOUND AREAS WILL BE EXCAVATED AND LINED WITH AN IMPERMEABLE LINER, BACKFILLED AND GRADED SUCH THAT A DEPRESSION IS CREATED. THE SIZE OF THE DEPRESSION SHALL BE LARGE ENOUGH TO COMPLETELY CONTAIN TOTAL VOLUMES OF HAZARDOUS MATERIALS BEING STORED AT THAT LOCATION. CLEAN-UP/CONTAINMENT KITS ARE TO BE KEPT AT EACH STORAGE LOCATION.
- THE CONTRACTOR SHALL CONSTRUCT ONE OR MORE "WASHOUT" AREAS FOR CONCRETE TRUCKS. "WASHOUT" AREAS SHALL BE LOCATED OUTSIDE THE FLOOD PLAIN OF ALL WATERWAYS. "WASHOUT" AREAS SHALL BE COMPLETELY CONTAINED WITHIN EXTERIOR DRAINAGE DITCHES. ALL WASTE CONCRETE IS TO BE REMOVED FROM SITE BY COMPLETION OF PROJECT.
- IN THE EVENT OF A SPILL, PERSONNEL DISCOVERING THE SPILL SHALL IMMEDIATELY MAKE ATTEMPTS TO CONTAIN AND/OR ABSORB THE SPILLED MATERIALS AND SHALL NOTIFY EMERGENCY RESPONSE AGENCIES.CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF ONE IS NOT PROVIDED, FILING THE "NOTICE OF INTENT" (NOI), AND OBTAINING PERMIT FROM THE STATE OR OTHER GOVERNING AGENCIES

CONCRETE

- CONCRETE CLASS/STRENGTH SHALL BE ACCORDING TO STRUCTURE TYPE AS FOLLOWS:
THRUST BLOCKS: 2000 PSI
NON-EXPOSED: 3000 PSI
EXPOSED: 4000 PSI
- AIR ENTRAINMENT IS NOT REQUIRED FOR THRUST BLOCKS. ALL EXPANSION JOINTS SHALL BE ACI RECOMMENDATIONS. MAXIMUM SLUMP FOR EXPOSED CONCRETE IS 4.5 INCHES, AND REQUIRED AIR CONTENT IS 6%±1%. 4000 PSI CONCRETE. CONCRETE FOR BOXES AND MANHOLES SHALL BE CONSIDERED AS EXPOSED CONCRETE.

EARTHWORK

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BLUE STAKES OR UTILITIES AS REQUIRED TO HAVE UNDERGROUND UTILITIES MARKED IN THE FIELD PRIOR TO ANY EXCAVATION WORK.
- UNTREATED BASE COURSE MATERIALS SHALL MEET THE REQUIREMENTS OF THE STATE DEPARTMENT OF TRANSPORTATION WITH THE FOLLOWING MODIFICATIONS:
GRADING BAND LIMITS FOR THE PERCENT PASSING THE NO. 200 SIEVE SHALL BE 6% TO 10% FOR ALL GRADES OF BASE COURSE.
- GRANULAR BORROW SHALL MEET THE AASHTO CLASSIFICATION OF A-1a WITH THE FOLLOWING LIMITATIONS:
MAXIMUM PARTICLE SIZE: 4"
MAXIMUM PERCENT PASSING #200 SIEVE: 13%
- ALL TRENCHES AND EXCAVATIONS SHALL BE CUT, PROTECTED, AND SUPPORTED AS PRESCRIBED BY OSHA.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN ANY EQUIPMENT NECESSARY TO DEWATER EXCAVATIONS.
- FILL MATERIAL ABOVE THE PIPE ZONE SHALL BE NATIVE GRANULAR MATERIAL APPROVED BY THE ENGINEER AND FREE FROM ROOTS, BRUSH, ORGANIC MATTER, PERISHABLE OR OBJECTIONABLE MATERIAL, TRASH, MUD, MUCK, FROZEN MATERIAL AND STONES GREATER THAN 3 INCHES IN DIAMETER. IF ACCEPTABLE MATERIAL CANNOT BE FOUND ON SITE, APPROVED MATERIAL SHALL BE IMPORTED. NATIVE GRANULAR BACKFILL OR GRANULAR BACKFILL BORROW SHALL MEET THE AASHTO CLASSIFICATION OF A-1a WITH THE FOLLOWING LIMITATIONS:
MAXIMUM PARTICLE SIZE: 3"
MAXIMUM PERCENT PASSING #200 SIEVE: 13%
- PIPE ZONE BEDDING MATERIAL SHALL BE FREE FROM ROOTS, BRUSH, ORGANIC MATTER, PERISHABLE OR OBJECTIONABLE MATERIAL, TRASH, MUD, MUCK, FROZEN MATERIAL, AND STONES GREATER THAN 1 INCH IN DIAMETER. BACKFILL IN THE PIPE ZONE SHALL BE A 3/4" MINUS MATERIAL MEETING THE REQUIREMENTS OF THE ASTM CLASSIFICATION OF SOIL GROUPS GW OR GW-GM WITH THE EXCEPTION THAT THE FINES CONTENT (MATERIAL PASSING THE #200 SIEVE) SHALL BE LESS THAN 9% WHEN TESTED IN ACCORDANCE WITH ASTM C 136. CLASSIFICATION SHALL BE CONSISTENT WITH THE REQUIREMENTS OF ASTM D 2487 AND OTHER REFERENCED STANDARDS. PERCENTAGES IN TABLE 4 SHALL BE MAXIMUM PERCENT PASSING FOR EACH SIEVE SIZE. MATERIAL SHALL BE COMPACTED IN 6" LIFTS TO 95% RELATIVE COMPACTION (ASTM D-1557) OR 75% RELATIVE DENSITY (ASTM D4253, D4254). IF ACCEPTABLE MATERIAL CAN BE FOUND ON SITE, IT MAY BE USED UPON ENGINEER'S APPROVAL.
- PULVERIZED ASPHALT MAY BE USED AS GRANULAR BORROW (SUBBASE) AND AS SELECT FILL (UNTREATED BASE COURSE/ROAD BASE) UNDER SIDEWALKS AND IN PAVEMENT SECTIONS INSOFAR AS THE PULVERIZED ASPHALT MEETS THE GRADATION REQUIREMENTS OF THE SUBBASE OR BASE COURSE. WHERE PULVERIZED ASPHALT IS USED, COMPACTION AND OTHER INSTALLATION REQUIREMENTS OF APPROPRIATE SECTIONS SHALL APPLY.

PIPING

- PVC WATERLINES, 4 INCH THROUGH 12 INCH Ø, SHALL BE CONSTRUCTED OF C-900 PVC PIPE CONFORMING TO AWWA STANDARD C900, AND MEET GOVERNING AGENCY REQUIREMENTS.
- PVC WATERLINES, 14 INCH THROUGH 48 INCH Ø, SHALL BE CONSTRUCTED OF C-905 PVC PIPE CONFORMING TO AWWA STANDARD C905, AND MEET GOVERNING AGENCY REQUIREMENTS.
- ALL PVC PIPE MUST BE APPROVED FOR POTABLE WATER USE BY THE NATIONAL SANITATION FOUNDATION AND SHALL BEAR THE LOGO "NSFpw".
- ALL DUCTILE IRON PIPE SHALL BE EITHER CLASS 51 FOR 10" AND SMALLER OR CLASS 50 FOR 12" AND LARGER, ALL CONFORMING TO AWWA C-151, AS INDICATED ON THE DRAWINGS, AND MEET GOVERNING AGENCY REQUIREMENTS.
- ALL HDPE PIPE UTILIZED FOR POTABLE WATER MUST BE APPROVED FOR SUCH BY THE NATIONAL SANITATION FOUNDATION, MEET GOVERNING AGENCY REQUIREMENTS AND MEET AWWA C901/C906, ASTM D2239, ASTM D2737, ASTM D3035, ASTM F714 AND ANSI/NSF 14/61 LISTED.
- ALL WATER FITTINGS SHALL BE RATED FOR WORKING PRESSURES AT OR ABOVE 250 PSI AND MEET GOVERNING AGENCY REQUIREMENTS.
- BOLTS AND NUTS ON ALL FITTINGS SHALL BE COATED WITH FM GREASE AND ENTIRE FITTING SHALL BE WRAPPED IN PLASTIC PRIOR TO POURING OF THRUST BLOCKS AND BACK-FILLING.
- PIPE IS TO BE HANDLED WITH NYLON SLINGS, STEEL CABLE, OR PADDED LIFTING DEVICES. CHAINS OR PLATE CLAMPS SHALL NOT BE USED TO HANDLE OR POSITION PIPE.
- THE CONTRACTOR SHALL NOT OPERATE ANY VALVES ON THE EXISTING AGENCY-OWNED WATER SYSTEM. THE CONTRACTOR SHALL NOTIFY THE AGENCY AT LEAST 24 HOURS BEFORE REQUESTED SHUT-OFFS AND THE AGENCY WILL OPEN AND CLOSE THE VALVES AS NEEDED.
- ALL OPEN ENDS AND/OR CUTS IN ABANDONED PIPING LEFT IN PLACE SHALL BE CAPPED OR PLUGGED BEFORE BACKFILLING.
- THRUST BLOCKS MAY BE ELIMINATED IF MEGALUG, ONE-BOLT, OR OTHER LOCK-TYPE JOINT RESTRAINTS ARE USED.
- WATER PIPE SHALL BE INSTALLED SUCH THAT DEVIATION FROM STRAIGHT LINE AT ANY JOINT SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDATIONS.
- STORM DRAIN PIPING LESS THAN 36" IN DIAMETER MAY BE EITHER REINFORCED CONCRETE PIPE (RCP) CLASS II, ADS N-12 HDPE, OR PVC PIPE (SCHEDULE 40 MIN.), UNLESS NOTED OTHERWISE. STORM DRAIN PIPING 36" IN DIAMETER AND LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS II UNLESS NOTED OTHERWISE.
- ALL SEWER PIPE SHALL BE SDR 35 PVC UNLESS NOTED OTHERWISE.
- ALL UTILITY STUBS AND SLEEVING SHALL BE CAPPED OR PLUGGED AND MARKED WITH A 4x4 POST AND BACKFILLED BY CONTRACTOR ONLY AFTER THE ENGINEER'S SURVEYORS RECORD LOCATION AND INVERT OF STUB.
- JOINTS OF ALL RCP STORM DRAIN PIPE 48" IN DIAMETER AND LARGER SHALL BE GROUTED SMOOTH INSIDE THE PIPE AFTER PLACEMENT OF THE PIPE AND BACKFILL OPERATIONS ARE COMPLETE.
- THE CONTRACTOR MUST VERIFY LOCATION OF SEWER LATERAL AT BUILDING BEFORE INSTALLING "WYE" OR CONSTRUCTING LATERAL. LOCATIONS ON DRAWINGS ARE NOT CERTAIN AND MUST BE FIELD VERIFIED AT THE TIME OF CONSTRUCTION.
- UTILITY BURIAL DEPTH SHALL BE PER LOCAL JURISDICTION REQUIREMENTS.

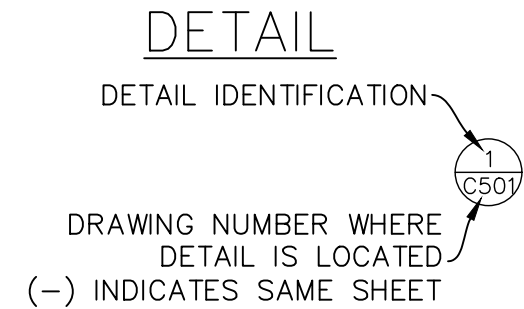
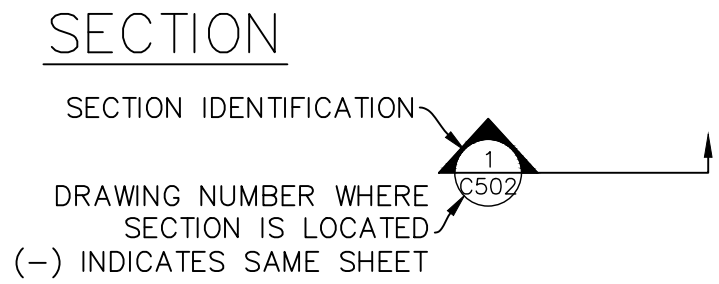
SPECIAL INSPECTIONS PER 2015/2019 IBC 1705

- CONCRETE:
 - INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT PRIOR TO CONCRETE PLACEMENT; PERIODIC, SEE ACI 318 CH. 20, 25.2, 25.3, 26.61-26.63; IBC 1908.4.
 - VERIFY USE OF REQUIRED DESIGN MIX; PERIODIC, SEE ACI 318: CH 19, 26.4.3, 26.4.4; IBC 1904.1, 1904.2, 1908.2, 1908.3.
 - INSPECT AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS; PERFORM OR PROVIDE ONE (1) SLUMP, ONE (1) AIR CONTENT & ONE (1) SET OF COMPRESSION CYLINDERS AND DETERMINE TEMPERATURE OF THE CONCRETE FOR EACH 50 CUBIC YARDS, OR FRACTION THEREOF, FOR EACH CONCRETE POUR; CONTINUOUS, SEE ASTM C172; ASTM C31; ACI 318:26.4 (2015 IBC); ACI 318:26.5 (2018 IBC), ACI 318:26.12; IBC 1908.10.
 - VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES; PERIODIC, SEE ACI 318: 26.5.3-26.5.5; IBC 1908.9.
- SOILS
 - VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; PERIODIC.
 - VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL; PERIODIC.
 - PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS; PERIODIC.
 - VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL; CONTINUOUS.
 - PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY; PERIODIC.

ABBREVIATIONS

APPX	APPROXIMATE	NTS	NOT TO SCALE
BEG	BEGIN	OC, O.C.	ON CENTER
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BOT	BOTTOM	PL, $\varnothing$	PROPERTY LINE OR PLATE
BW, BOW	BOTTOM OF WALL	PC	POINT OF CURVE
CB	CATCH BASIN	PCC	POINT OF COMPOUND CURVE
CL, $\varnothing$	CENTERLINE	PI	POINT OF INTERSECTION
CFS	CUBIC FEET PER SECOND	P.I. (P.I.V.)	POST INDICATOR (VALVE)
CLR	CLEAR	PRC	POINT OF REVERSE CURVE
CMP	CORRUGATED METAL PIPE	PREFAB	PREFABRICATED
CONC	CONCRETE	PSF	POUND PER SQUARE FOOT
CONT	CONTINUOUS	PSI	POUND PER SQUARE INCH
CY	CUBIC YARD	PT	POINT OF TANGENCY
DET	DETAIL	PVI	POINT OF VERTICAL INTERSECTION
DIA, $\varnothing$	DIAMETER	QTY	QUANTITY
DIM	DIMENSION	R, RAD	RADIUS
DWG	DRAWING	RCP	REINFORCED CONCRETE PIPE
EA	EACH	REF	REFERENCE
EG	EXISTING GRADE	REINF	REINFORCEMENT
EL, ELEV	ELEVATION	REQ'D	REQUIRED
EOA, EA	EDGE OF ASPHALT	SCH	SCHEDULE
EQ	EQUAL	SDMH	STORMDRAIN MANHOLE
EXIST, EX	EXISTING	SECT	SECTION
EXP	EXPANSION	SHT	SHEET
FDN	FOUNDATION	SMH	SEWER MAHHOLE
FG	FINISHED GRADE	SPEC	SPECIFICATION
FH	FIRE HYDRANT	STA	STATION
FL	FLOW LINE	STD	STANDARD
GAGE	GAGE	SW	SIDEWALK
GALV	GALVANIZED	SYM	SYMMETRICAL
HORIZ	HORIZONTAL	TA, TOA	TOP OF ASPHALT
HP	HIGH POINT	TBC	TOP BACK OF CURB
IB	INLET BOX	TBW	TOP BACK OF WALK
ID	INSIDE DIAMETER	TFW	TOP FACE OF WALK
IE	INVERT ELEVATION	TC, TOC	TOP OF CONCRETE
INV	INVERT	TOP	TOP
LB	POUND	TW, TOW	TOP OF WALL
LP	LOW POINT	TYP	TYPICAL
MATL	MATERIAL	UNO	UNLESS NOTED OTHERWISE
MAX	MAXIMUM	VC	VERTICAL CURVE
MIN	MINIMUM	VERT	VERTICAL
MISC	MISCELLANEOUS	W/	WITH
MFR	MANUFACTURER	W/O	WITHOUT
MWSEL	MAX WATER SURFACE ELEV.	WS	WATER SURFACE
NIC, N.I.C.	NOT IN CONTRACT	YD	YARD

DETAIL AND SECTION SYMBOLS



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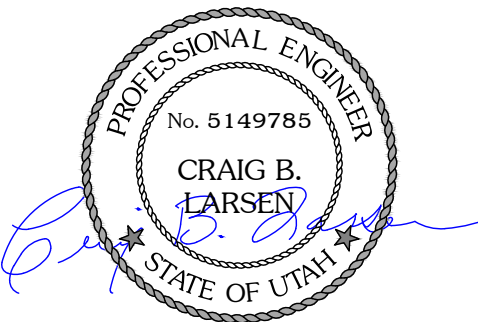
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CIVIL NOTES

C001

EAGLE MOUNTAIN CITY GENERAL NOTES:

1. SEWER–
 - PIPE BEDDING: ¾" GRAVEL REQUIRED 6" BELOW, ON THE SIDES & 12" ABOVE THE PIPE (MINIMUM).
 - DEPTH: SEWER MAIN/LATERALS TO MAINTAIN 4' OF COVER (MINIMUM) FROM FINISHED GRADE, 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION.
 - SEPARATION: SEWER MAINS & LATERALS TO MAINTAIN 10' SEPARATION (MINIMUM) FROM CULINARY WATER MAINS & LATERALS.
 - SEWER Y'S: 3' MINIMUM SEPARATION BETWEEN SEWER Y'S.
 - LATERAL STUBS: A) STUBS MUST EXTEND 15' INTO PROPERTY & BE MARKED WITH 2X4 PAINTED GREEN. B) ALL LATERALS MUST BE GIS (SHOT IN) AT THE Y'S AND STUBS. ALSO SLOPES (2% MIN. ON 4" PIPE) TO BE CHECKED BEFORE BACKFILL.
 - MANHOLES: MANHOLES TO BE WITHIN 1' OF FINISHED GRADE. 12" OF WHIRLY GIG FORM (MAX) & NO FLAT RINGS ALLOWED. 12" OF ¾" GRAVEL REQUIRED UNDER MANHOLES/BOXES.
2. WATER–
 - VALVES: 1. VALVES MUST BE FLANGED TO TEE'S (FITTINGS). 2. VALVES 12" & LARGER TO BE BUTTERFLY VALVES.
 - BEDDING: SAND MUST MEET AASHTO (A–3) GRADATION WITH 100% PASSING THE #4 SIEVE. 6" BELOW PIPE ON THE SIDES & 12" ABOVE PIPE (MINIMUM).
 - DEPTH: WATER MAIN & LATERALS MUST MAINTAIN 4' COVER FROM FINISHED GRADE (MINIMUM), 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION. MAX DEPTH 72" FROM FINISHED GRADE.
 - SERVICES & FITTINGS: SERVICES & FITTINGS TO MAINTAIN 3' MINIMUM SEPARATION FROM PIPE JOINTS & OTHER FITTINGS.
 - SETTERS: ALL SETTERS TO BE 21" TALL (MINIMUM), HAVE UNIONS AT THE BASE & BE DUAL CHECK MODEL, ALSO ¾" SETTERS TO HAVE DOUBLE BRACES. SETTERS TO BE SET AT: 18" TO 22" FROM THE TOP OF SETTER TO TOP OF LID.
 - WATER CAN LID: ALL LIDS TO SAY "EAGLE MOUNTAIN" ON THEM RECESSED WITH A HOLE FOR THE ERT & TO BE SET AT LEVEL TO 1" ABOVE THE PLANE OF THE CURB & SIDEWALK.
 - WATER CAN: THE WATER CAN FOR ¾" & 1" SERVICES WILL NEED TO BE A 36" TALL MINIMUM & 21" INSIDE DIAMETER. WATER CAN FOR 1–1/2" TO 2" SERVICE WILL NEED TO FOLLOW APWA SPECIFICATION.
 - HYDRANTS: HYDRANTS TO BE 5' BURY (MINIMUM).
 - LATERALS: ALL LATERALS NEED TO BE GIS (SHOT IN) AT THE CORP. STOP & SETTER, & ALSO VISUAL INSPECTION ON POLY INSERTS BEFORE BACKFILL. WATER LATERALS TO EXTEND 15' INTO PROPERTY & BE MARKED WITH A 2X4 PAINTED BLUE. ALL POLY LINES TO HAVE VISUAL POLY INSERT INSPECTION.
 - TRACER WIRE: RUN TRACER WIRE ALONG MAIN & EXTEND UP SETTERS & HYDRANTS, DO NOT RUN UP VALVE BOXES.
 - WATER FITTINGS: ALL WATER FITTINGS TO BE CHECKED FOR THRUST BLOCKS (PRE & POST) & GIS (SHOT IN) BEFORE BACKFILL.
 - VERTICAL SEPARATION: WATER MAIN TO MAINTAIN 18" SEPARATION FROM STORM DRAIN OR OTHER OBSTACLE/UTILITIES.
 - WATER LINE FITTINGS: ALL FITTINGS TO HAVE MEGA LUG FOLLOWERS.
 - WATER MAIN LINE: NO DEFLECTION OR BENDING OF PIPE WILL BE ALLOWED IN THE WATER LINES & BEND FITTINGS WILL BE REQUIRED. ALL FITTINGS TO BE MEGA–LUG FITTINGS.
3. STORM DRAIN–
 - BEDDING: ¾" GRAVEL 6" BELOW & ON SIDES OF PIPE & 12" ABOVE PIPE (MINIMUM).
 - ADS: ALL ADS PIPE TO BE "HP" BRAND.
 - COLLARS: COLLARS TO BE 1'X1' AROUND PIPE, 4000 PSI CONCRETE, INSPECTION IS NEEDED PRE & POST COLLAR POUR.
 - MANHOLES: MANHOLES TO BE WITHIN 1' OF FINISHED GRADE. 12" OF WHIRLY GIG FORM (MAX) & NO FLAT RINGS ALLOWED. 12" OF ¾" GRAVEL REQUIRED UNDER MANHOLES/BOXES.
4. ROAD SECTION–
 - PROOF ROLLS: PROOF ROLL REQUIRED ON ALL SECTIONS OF ROAD: I.E. SUB–GRADE, SUB–BASE, & CURB BASE & ROAD BASE. CURB STAKES REQUIRED FOR SUB–GRADE INSPECTION & STRING LINE REQUIRED FOR SUB–BASE & ROAD BASE INSPECTION.
 - UTBC: STATE SPEC. ROAD BASE REQUIRED FOR ALL ROADS, COMMERCIAL BASE ACCEPTABLE FOR THE SIDEWALKS & TRAILS.
 - COLLARS: ALL COLLARS TO BE 1' WIDE BY 1' DEEP WITH A 6000 PSI CONCRETE WITH 1.5# FIBER MESH PER CUBIC YARD (¾" MONOFILAMENT) REQUIRED FOR ALL STREET COLLARS. MANHOLE COVERS & WATER VALVE TOWERS TO BE ½" DOWN FROM ASPHALT EDGE & CONCRETE TO BE ¼" TO ⅜" DOWN FROM ASPHALT EDGE.
5. EAGLE MOUNTAIN CITY FOLLOWS APWA STANDARDS FOR CONSTRUCTION UNLESS OTHERWISE NOTED.

Ldg

LEGACY DESIGN GROUP

ABERDEEN, SD

SALT LAKE CITY, UT

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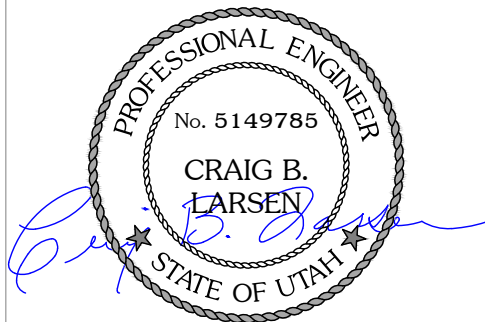
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811

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Call before you dig.

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A	05.17.24	CITY COMMENTS

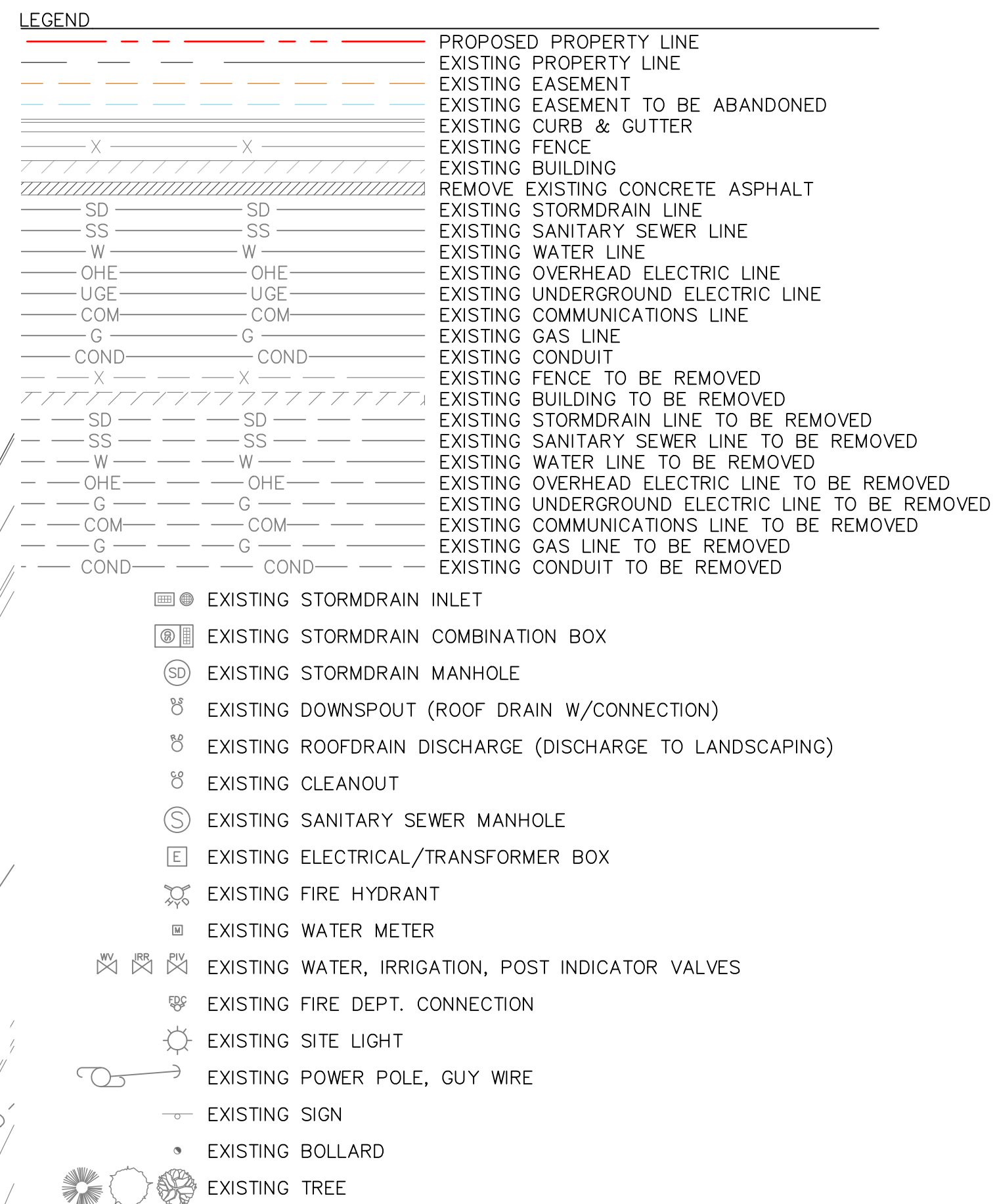
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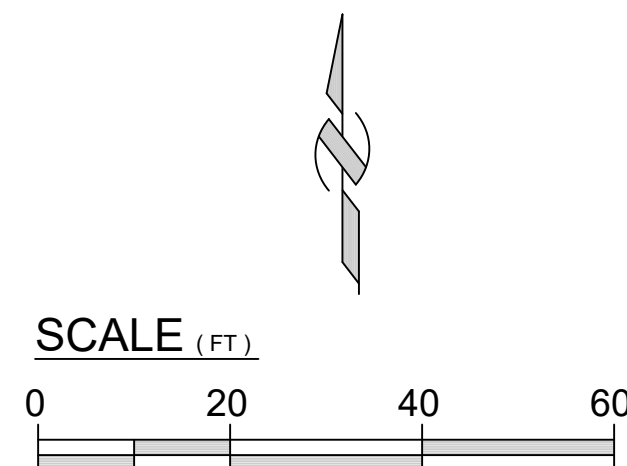
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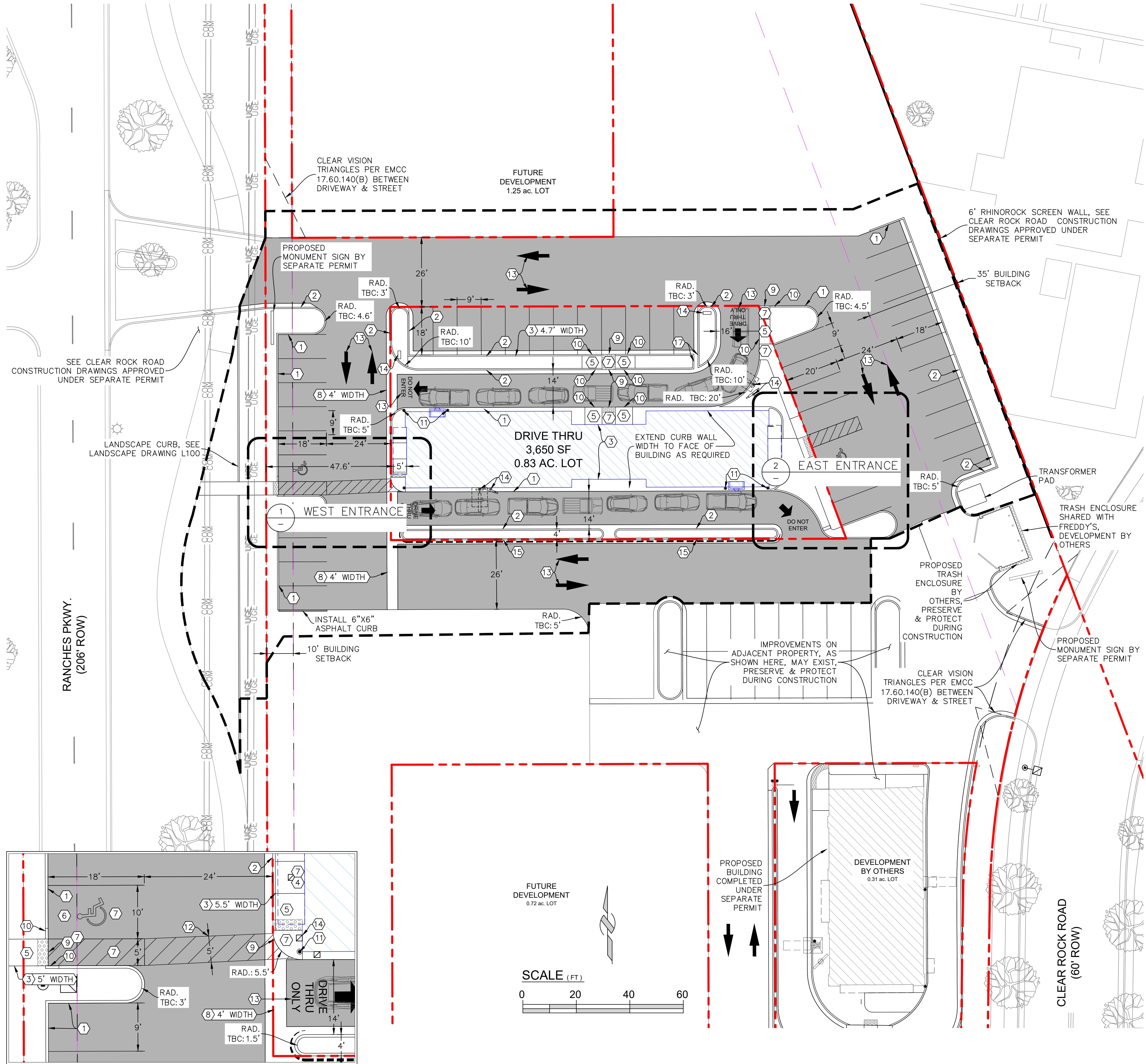
CITY NOTES

C002



1. COORDINATE ANY PRIVATE UTILITY WORK WITH PROVIDERS (GAS, POWER, COMMUNICATIONS).
2. COORDINATE ANY PUBLIC UTILITY WORK WITH THE CITY OR UTILITY OWNER (SANITARY SEWER, WATER, STORM DRAIN).
3. SMALL OR MINOR IMPROVEMENTS MAY EXIST THAT ARE TO BE DEMOLISHED THAT ARE NOT SHOWN HERE.
4. INTENT IS TO DEMOLISH SITE TO THE EXTENT REQUIRED FOR NEW CONSTRUCTION. LANDSCAPING CONTRACTORS ARE CAUTIONED & ENCOURAGED TO VERIFY SITE CONDITIONS & EXISTING FEATURES THAT MAY NOT BE SHOWN ON DRAWINGS BUT REQUIRE WORK AND/OR DEMOLITION.

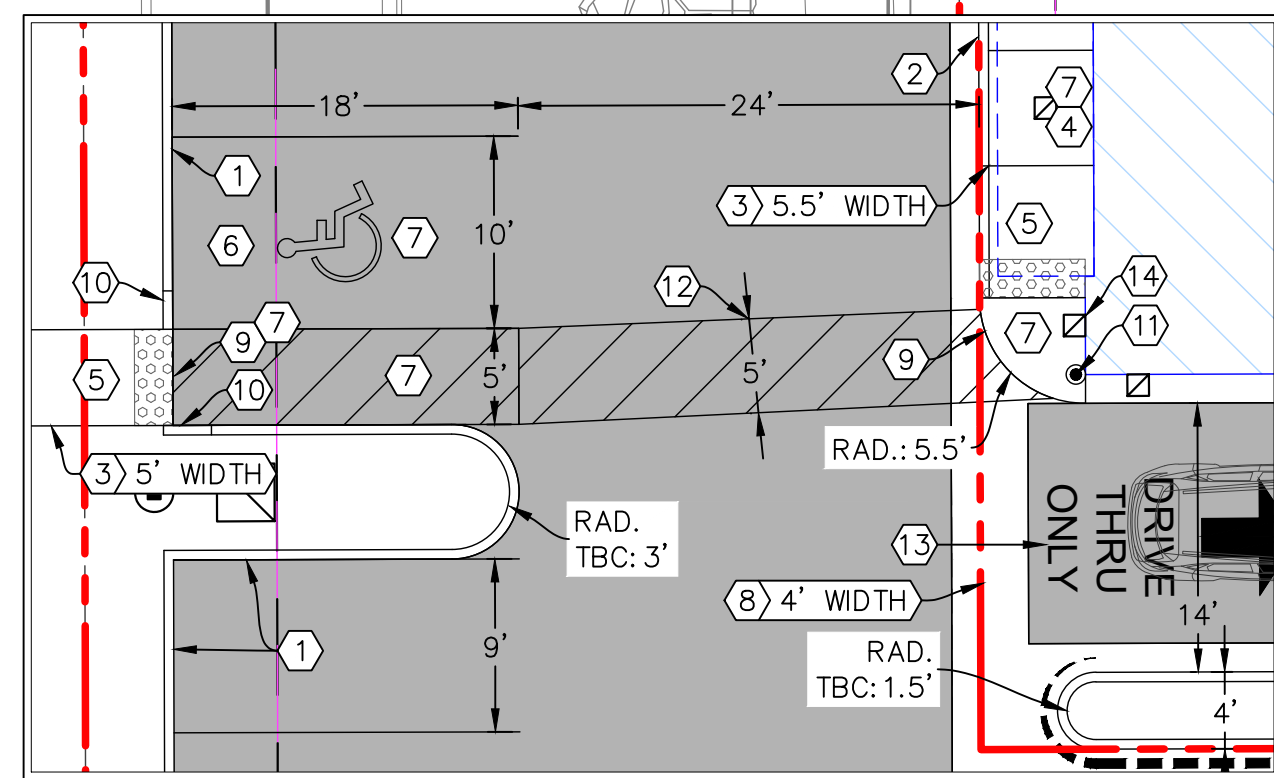
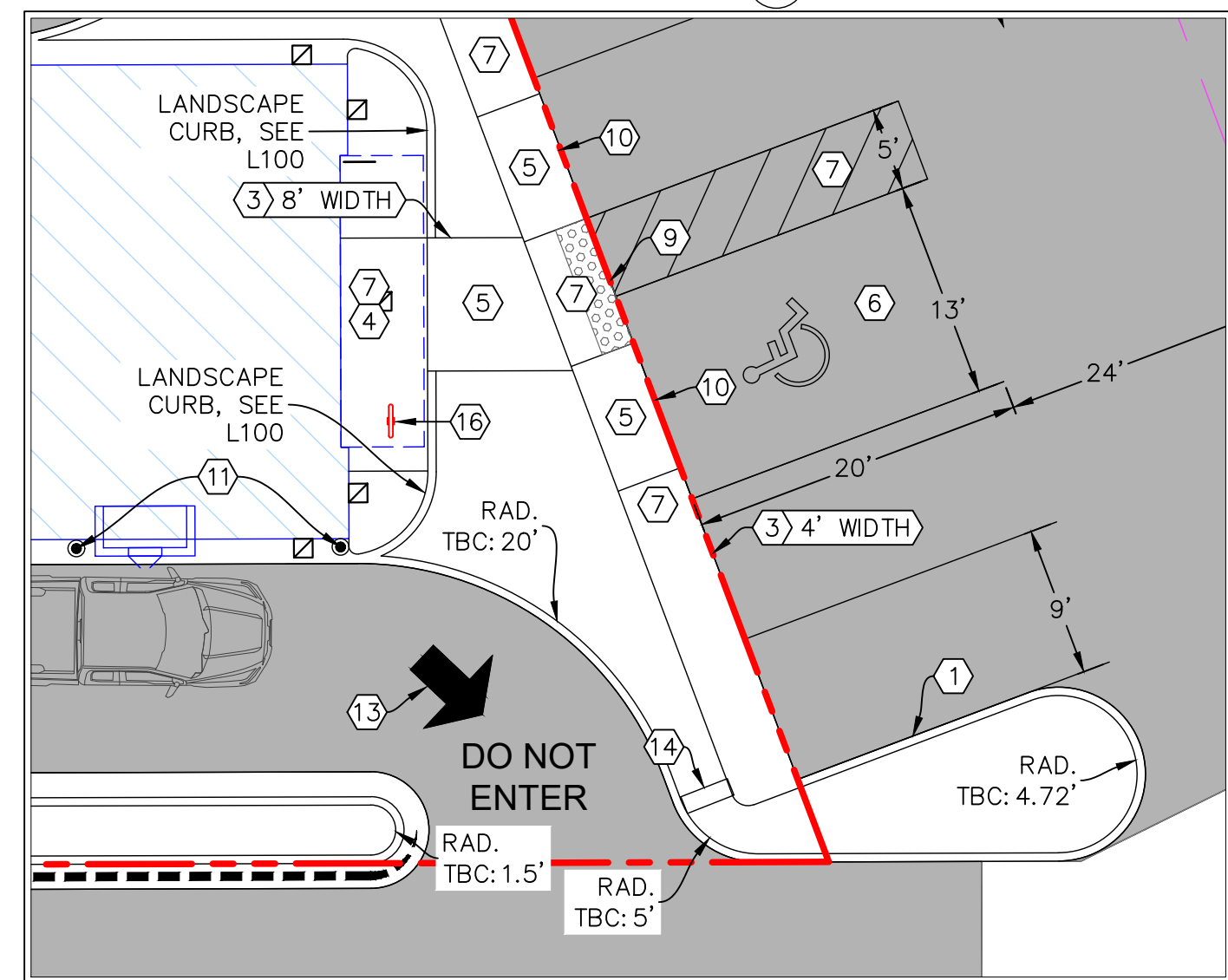




LEGEND

- PROPOSED PROPERTY LINE
- PHASE BOUNDARY
- BUILDING OFFSET REQ'T
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EASEMENT TO BE ABANDONED
- PROPOSED EASEMENT
- EXISTING CURB & GUTTER
- PROPOSED CURB
- PROPOSED FENCE
- EXISTING FENCE
- PROPOSED BUILDING
- EXISTING BUILDING
- PROPOSED SIGNAGE
- EXISTING SIGNAGE
- PROPOSED BOLLARD
- EXISTING BOLLARD
- PROPOSED ADA TRUNCATED DOMES
- SURVEY CONTROL
- FLEXIBLE PAVEMENT
- RIGID PAVEMENT
- RESTORE CONCRETE, ASPHALT, LANDSCAPING, ETC. AFTER UTILITY INSTALLATION
- EXISTING TREE

- KEY TAGS:**
- 1 INSTALL CURB WALL
 - 2 INSTALL CURB & GUTTER
 - 3 INSTALL SIDEWALK, WIDTH PER PLAN, USE THICKENED EDGE ADJACENT TO ASPHALT & CONCRETE PAVING
 - 4 INSTALL CRITICAL SIDEWALK PANEL & ADA LANDING ADJACENT TO BUILDING
 - 5 INSTALL ADA RAMP
 - 6 INSTALL ADA STALLS & SIGNAGE
 - 7 ADA LANDING/ZONE; SLOPE < 2% ANY DIRECTION
 - 8 INSTALL CONCRETE WATERWAY, WIDTH PER PLAN
 - 9 LOW BACK CURB, PROVIDE TRUNCATED DOMES WHEN SHOWN PER PLAN; WHEN GUTTER IS PRESENT PROVIDE 3" ELEVATION CHANGE FROM FLOWLINE TO BACK OF CURB (6" MIN. SLOPE LENGTH) TO MAINTAIN DRAINAGE WITHIN GUTTER & ADA ACCESSIBILITY
 - 10 TRANSITION FROM LOWBACK TO HIGHBACK CURB OVER 24", TO NEAREST RADIUS POINT WITHIN 5' OR FOLLOW ADA RAMP SLOPE.
 - 11 INSTALL BOLLARD
 - 12 STRIPED MARKING PER PLAN
 - 13 STRIPED ARROW & MESSAGE PER PLAN
 - 14 INSTALL DRIVE THRU EQUIPMENT PER ARCHITECTURAL PLANS
 - 15 INSTALL SPILL CURB & GUTTER
 - 16 INSTALL WAVE BICYCLE RACK (ITEM# 398-8009 THEPARKCATALOG.COM) OR APPROVED EQUAL, COLOR BY OWNER
 - 17 INSTALL DOUBLE CURBED GUTTER



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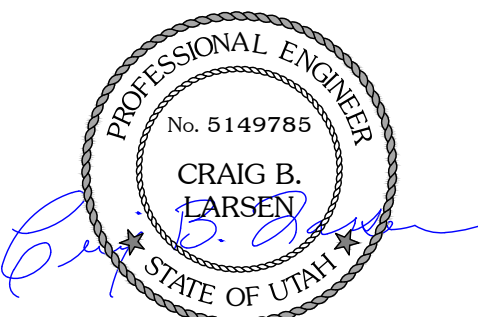
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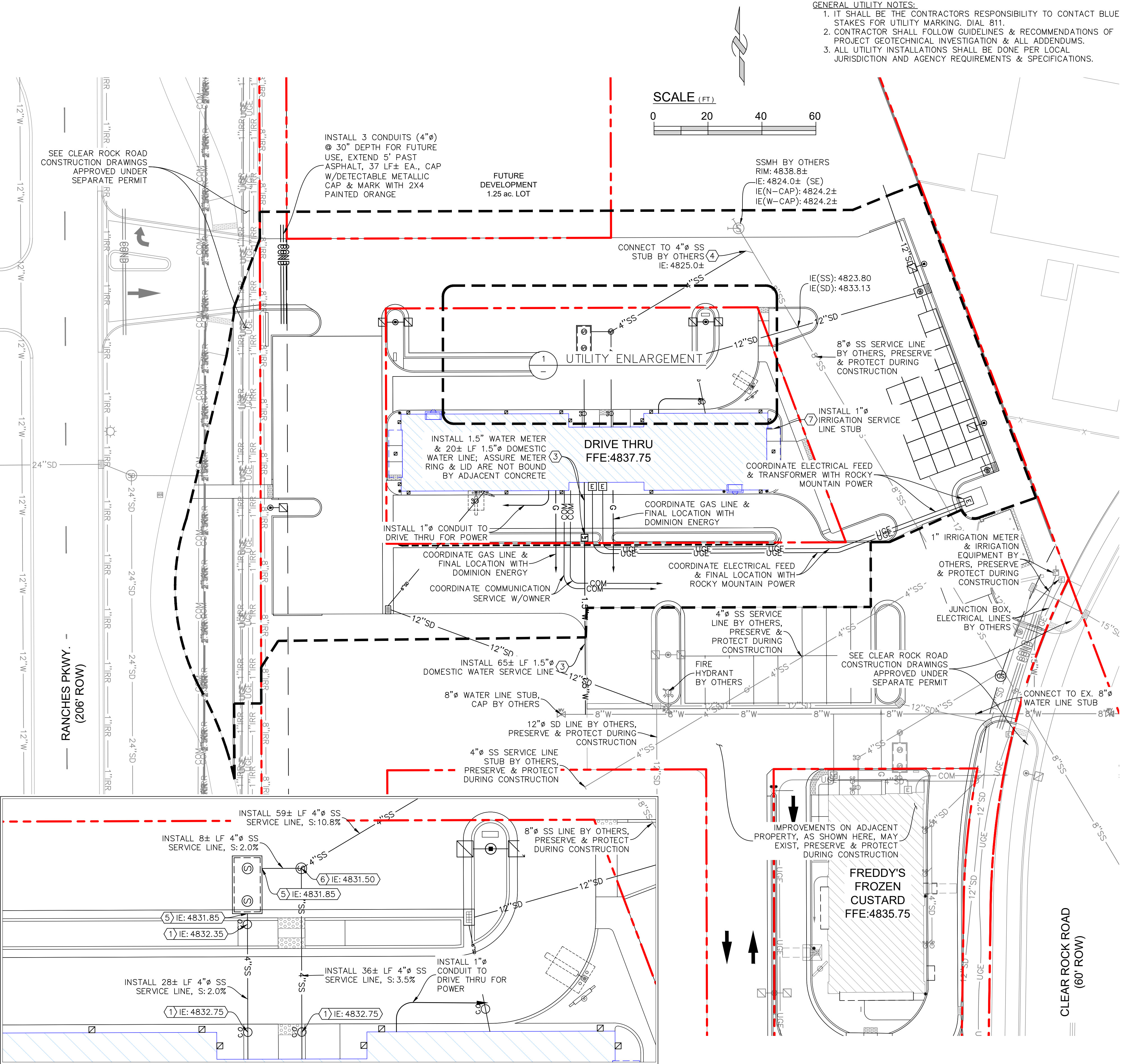
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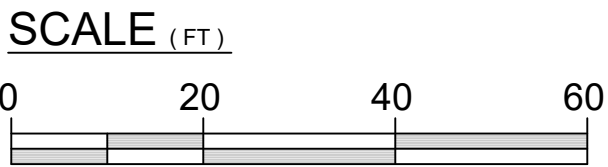


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SITE PLAN
C100



- GENERAL UTILITY NOTES:
1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES FOR UTILITY MARKING. DIAL 811.
 2. CONTRACTOR SHALL FOLLOW GUIDELINES & RECOMMENDATIONS OF PROJECT GEOTECHNICAL INVESTIGATION & ALL ADDENDUMS.
 3. ALL UTILITY INSTALLATIONS SHALL BE DONE PER LOCAL JURISDICTION AND AGENCY REQUIREMENTS & SPECIFICATIONS.



LEGEND		PROPOSED	EXISTING	
SD	SD	SD	SD	STORMDRAIN LINE
SS	SS	SS	SS	SANITARY SEWER LINE
W	W	W	W	WATER LINE
OHE	OHE	OHE	OHE	OVERHEAD ELECTRIC LINE
UGE	UGE	UGE	UGE	UNDERGROUND ELECTRIC LINE
COM	COM	COM	COM	COMMUNICATIONS LINE
G	G	G	G	GAS LINE
COND	COND	COND	COND	CONDUIT
				PROPERTY LINE
				EASEMENT
				PHASE BOUNDARY
				STORMDRAIN INLET
				STORMDRAIN COMBINATION BOX
				STORMDRAIN MANHOLE
				DOWNSPOUT CONNECTION (ROOF DRAIN W/CONNECTION)
				ROOFDRAIN DISCHARGE (DISCHARGE TO LANDSCAPING)
				CLEANOUT
				SANITARY SEWER MANHOLE
				ELECTRICAL/TRANSFORMER BOX
				FIRE HYDRANT
				WATER METER & DIAMETER IF KNOWN
				WATER, IRRIGATION, POST INDICATOR VALVES
				FIRE DEPT. CONNECTION
				SITE LIGHT (9/CS09)
				POWER POLE & GUY WIRE
				BOLLARD
				RESTORE CONCRETE, ASPHALT, LANDSCAPING, ETC. AFTER UTILITY INSTALLATION

- KEY TAGS:
- ① INSTALL SS CLEANOUT (SLSC1/CS02)
 - ② INSTALL WATER VALVE (4/CS09)
 - ③ INSTALL WATER LINE, SETTER, & 5X5 VAULT (WSC1, 505/CS02)
 - ④ INSTALL SEWER LATERAL SERVICE CONNECTION (SLSC1/CS02)
 - ⑤ INSTALL 1500 GREASE TRAP/INTERCEPTOR (D12/CS02)
 - ⑥ INSTALL SEWER SAMPLING MANHOLE (B7/CS02)

EAGLE MOUNTAIN CITY GENERAL NOTES:

1. SEWER—
 - PIPE BEDDING: 3/4" GRAVEL REQUIRED 6" BELOW, ON THE SIDES & 12" ABOVE THE PIPE (MINIMUM).
 - DEPTH: SEWER MAIN/LATERALS TO MAINTAIN 4' OF COVER (MINIMUM) FROM FINISHED GRADE. 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION.
 - SEPARATION: SEWER MAINS & LATERALS TO MAINTAIN 10' SEPARATION (MINIMUM) FROM CULINARY WATER MAINS & LATERALS.
 - SEWER Y'S: 3' MINIMUM SEPARATION BETWEEN SEWER Y'S.
 - LATERAL STUBS: A) STUBS MUST EXTEND 15' INTO PROPERTY & BE MARKED WITH 2X4 PAINTED GREEN. B) ALL LATERALS MUST BE GIS (SHOT IN) AT THE Y'S AND STUBS. ALSO SLOPES (2% MIN. ON 4" PIPE) TO BE CHECKED BEFORE BACKFILL.
 - MANHOLES: MANHOLES TO BE WITHIN 1' OF FINISHED GRADE. 12" OF WHIRLY GIG FORM (MAX) & NO FLAT RINGS ALLOWED. 12" OF 3/4" GRAVEL REQUIRED UNDER MANHOLES/BOXES.
2. WATER—
 - VALVES: 1. VALVES MUST BE FLANGED TO TEE'S (FITTINGS). 2. VALVES 12" & LARGER TO BE BUTTERFLY VALVES.
 - BEDDING: SAND MUST MEET AASHTO (A-3) GRADATION WITH 100% PASSING THE #4 SIEVE. 6" BELOW PIPE ON THE SIDES & 12" ABOVE PIPE (MINIMUM).
 - DEPTH: WATER MAIN & LATERALS MUST MAINTAIN 4' COVER FROM FINISHED GRADE (MINIMUM). 3' MINIMUM FROM TOP OF PIPE AT TIME OF INSTALLATION. MAX DEPTH 72" FROM FINISHED GRADE.
 - SERVICES & FITTINGS: SERVICES & FITTINGS TO MAINTAIN 3' MINIMUM SEPARATION FROM PIPE JOINTS & OTHER FITTINGS.
 - SETTERS: ALL SETTERS TO BE 21" TALL (MINIMUM), HAVE UNIONS AT THE BASE & BE DUAL CHECK MODEL, ALSO 3/4" SETTERS TO HAVE DOUBLE BRACES. SETTERS TO BE SET AT: 18" TO 22" FROM THE TOP OF SETTER TO TOP OF LID.
 - WATER CAN LID: ALL LIDS TO SAY "EAGLE MOUNTAIN" ON THEM RECESSED WITH A HOLE FOR THE ERT & TO BE SET AT LEVEL TO 1" ABOVE THE PLANE OF THE CURB & SIDEWALK.
 - WATER CAN: THE WATER CAN FOR 3/4" & 1" SERVICES WILL NEED TO BE A 36" TALL MINIMUM & 21" INSIDE DIAMETER. WATER CAN FOR 1-1/2" TO 2" SERVICE WILL NEED TO FOLLOW APWA SPECIFICATION.
 - HYDRANTS: HYDRANTS TO BE 5' BURY (MINIMUM).
 - LATERALS: ALL LATERALS NEED TO BE GIS (SHOT IN) AT THE CORP. STOP & SETTER, & ALSO VISUAL INSPECTION ON POLY INSERTS BEFORE BACKFILL. WATER LATERALS TO EXTEND 15' INTO PROPERTY & BE MARKED WITH A 2X4 PAINTED BLUE. ALL POLY LINES TO HAVE VISUAL POLY INSERT INSPECTION.
 - TRACER WIRE: RUN TRACER WIRE ALONG MAIN & EXTEND UP SETTERS & HYDRANTS, DO NOT RUN UP VALVE BOXES.
 - WATER FITTINGS: ALL WATER FITTINGS TO BE CHECKED FOR THRUST BLOCKS (PRE & POST) & GIS (SHOT IN) BEFORE BACKFILL.
 - VERTICAL SEPARATION: WATER MAIN TO MAINTAIN 18" SEPARATION FROM STORM DRAIN OR OTHER OBSTACLE/UTILITIES.
 - WATER LINE FITTINGS: ALL FITTINGS TO HAVE MEGA LUG FOLLOWERS.
 - WATER MAIN LINE: NO DEFLECTION OR BENDING OF PIPE WILL BE ALLOWED IN THE WATER LINES & BEND FITTINGS WILL BE REQUIRED. ALL FITTINGS TO BE MEGA-LUG FITTINGS.

OWNER:
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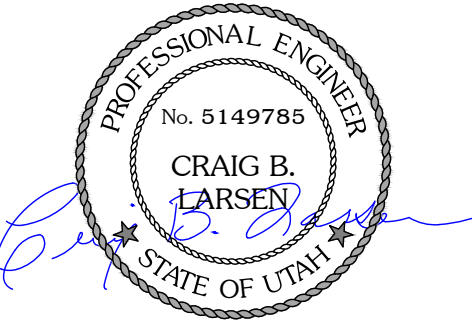
CLEAR ROCK RD.

SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH



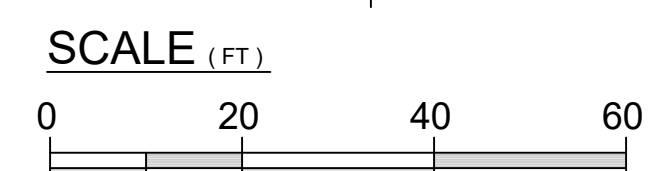
Rev.	Date	Comment
A	05.17.24	CITY COMMENTS
B	06.03.24	CITY COMMENTS

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DESIGN BY: CBL
ORIG. ISSUE DATE: MAR. 20, 2024



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UTILITY PLAN
WAT, SS, ELEC, G
C200



KEY TAGS:

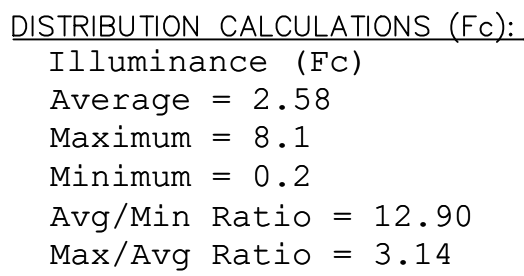
① INSTALL 2'X3" SD INLET BOX ⁵_{C500}

② INSTALL SD COMBO BOX ¹_{C500} ³¹⁶_{C503}

③ INSTALL UNDERGROUND STORMWATER STORAGE ¹_{C504} ²_{C504} ³_{C504} ⁴_{C504} ⁵_{C504} ⁶_{C504}

④ INSTALL SD CLEANOUT ²_{C509}

- GENERAL UTILITY NOTES:**
1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUE STAKES FOR UTILITY MARKING. DIAL 811.
 2. CONTRACTOR SHALL FOLLOW GUIDELINES & RECOMMENDATIONS OF PROJECT GEOTECHNICAL INVESTIGATION & ALL ADDENDUMS.
 3. ALL UTILITY INSTALLATIONS SHALL BE DONE PER LOCAL JURISDICTION AND AGENCY REQUIREMENTS & SPECIFICATIONS.



1) x ft	SINGLE HEAD FIXTURE & FIXTURE HEIGHT: BEACON VP-1 36L-55 5K-7-4W LED	9 C500
2) x ft	DOUBLE HEAD FIXTURE & FIXTURE HEIGHT: BEACON VP-1 36L-55 5K-7-4W LED	9 C500
3) x ft	UNDER CANOPY MOUNTED LIGHTS: V4 P2 50K 70CRI T5M DBBXD	
4) x ft	BUILDING MOUNTED LIGHTS: ARC1 LED P1 30K DBBXD	

*ALL KEY TAG HEIGHTS LISTED REFER TO ACTUAL FIXTURE HEIGHT

1. SEE ELECTRICAL SHEETS FOR CABLEING, PANEL, ELECTRIC, CIRCUIT DESIGN & BUILDING MOUNTED LIGHTING.
2. OWNER/DEVELOPER TO VERIFY & COORDINATE WITH SUPPLIER, ARCHITECT & ELECTRICAL ENGINEER FOR COMPLIANCE WITH PHOTOMETRIC PLAN, FIXTURE MODEL, FINISH, SHIELD, HEIGHT, MOUNTING, ACCESSORIES, ETC.
3. ALL NONESSENTIAL COMMERCIAL EXTERIOR LIGHTING SHALL ONLY CONTINUE IN OPERATION UNTIL 11:00 P.M. OR FOR AS LONG AS THE BUSINESS IS OPEN OR AREA IS IN ACTIVE USE AND SHALL REMAIN OFF UNTIL THE BUSINESS REOPENS OR UNTIL DAYLIGHT THE FOLLOWING DAY.
4. ALL LIGHTS TO BE FULL CUT-OFF AND DOWN LIGHT ONLY.

1. POLE LIGHTS: 7 @ 6,724 lm EA. = 47,068 lm
2. DOWNWARD WALL SCONCE: 16 @ 1,376 lm EA. = 22,016 lm
3. DOWNWARD CANOPY LIGHT: 2 @ 4,942 lm EA. = 9,884 lm
4. TOTAL LUMENS: 78,968 lm.
5. ALLOWABLE LUMENS: 100,000/ac. @ 0.791 ac. = 79,100 lm

 **COMMERCIAL OUTDOOR** One Lithonia Way • Cary, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com **ARC1 LED**
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PAGE 6 OF 8

Journal of Management Education 35(10) 1103-1120

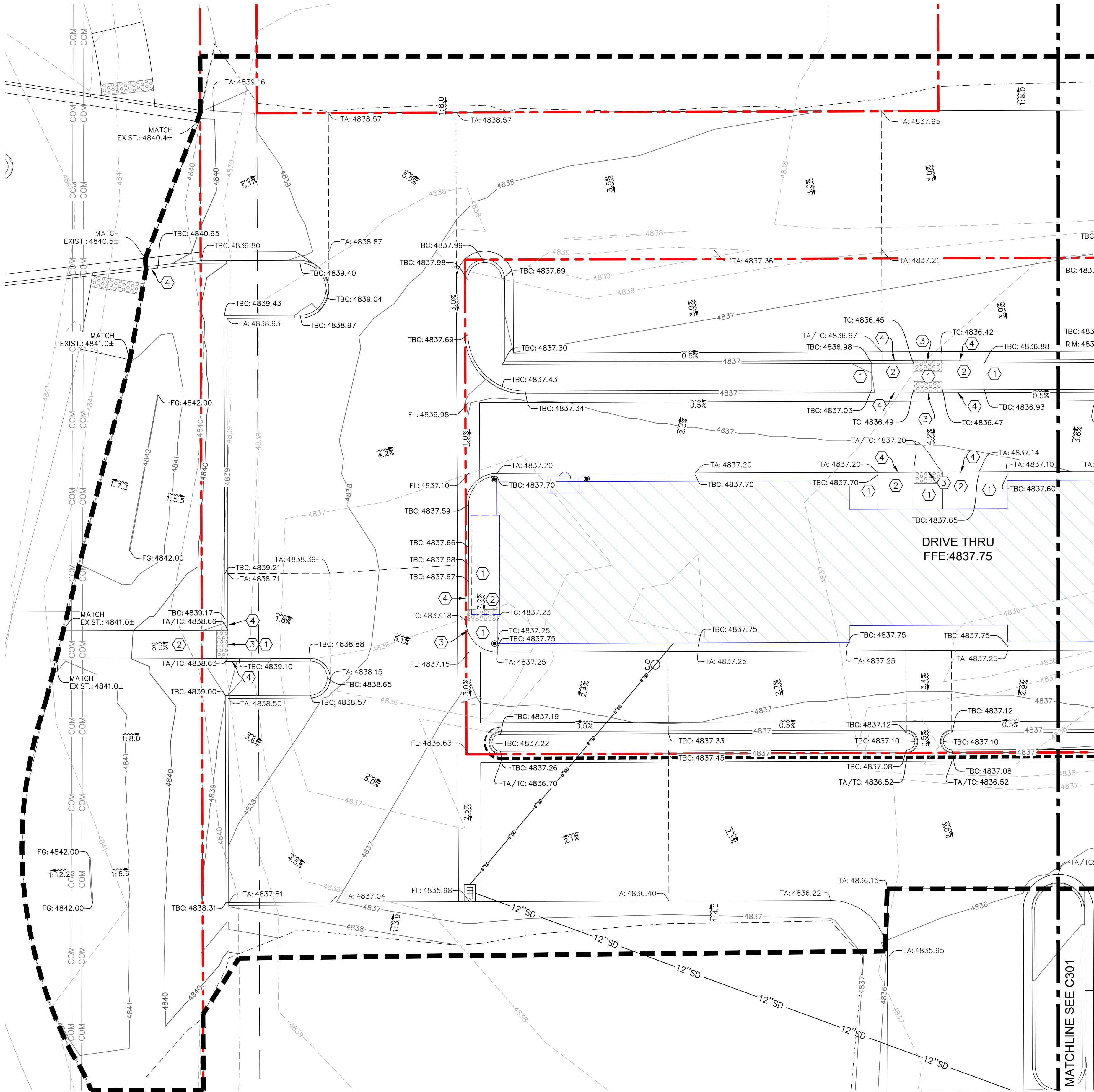
OWNER:
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CROSSING

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SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH

C202



LEGEND		
PROPOSED	EXISTING	
		MAJOR CONTOUR
		MINOR CONTOUR
		DITCH BANK, FLOWLINE
		BUILDING/STRUCTURE
		CURB, GUTTER
		PROPERTY LINE
		GRADE BREAK LINE/CONVERGENCE POINT
		PHASE BOUNDARY
		STORMDRAIN INLET
		STORMDRAIN COMBINATION BOX
		STORMDRAIN MANHOLE
		DOWNSPOUT CONNECTION (ROOF DRAIN W/CONNECTION)
		ROOFDRAIN DISCHARGE (DISCHARGE TO LANDSCAPING)
		CLEANOUT
		100 YR. STORM WATER SURFACE
		ADA TRUNCATED DOMES

KEY TAGS:

- ① ADA ZONE/LANDING, SLOPE < 2% IN ANY DIRECTION
- ② INSTALL ADA RAMP
- ③ LOW BACK CURB, PROVIDE TRUNCATED DOMES WHEN SHOWN PER PLAN; WHEN GUTTER IS PRESENT PROVIDE 1/2" ELEVATION CHANGE FROM FLOWLINE TO BACK OF CURB (6" MIN. SLOPE LENGTH) TO MAINTAIN DRAINAGE WITHIN GUTTER & ADA ACCESSIBILITY
- ④ TRANSITION FROM LOWBACK TO HIGHBACK CURB OVER 24", TO NEAREST RADIUS POINT WITHIN 5' OR FOLLOW ADA RAMP SLOPE.

DESIGN ELEVATION CALLOUT NOTIFICATION:
TA & TC LABELS REFER TO THE LOWER ELEVATION WHEN LABEL IS PLACED AT A POINT OF ABRUPT VERTICAL CHANGE (FACE OF CURB, FACE OF DROP SIDEWALK, ETC.)

SCALE (FT.)



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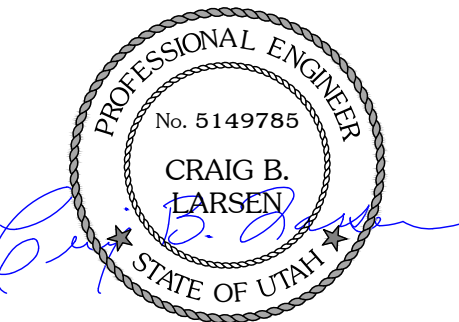
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SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
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UTAH COUNTY, UTAH



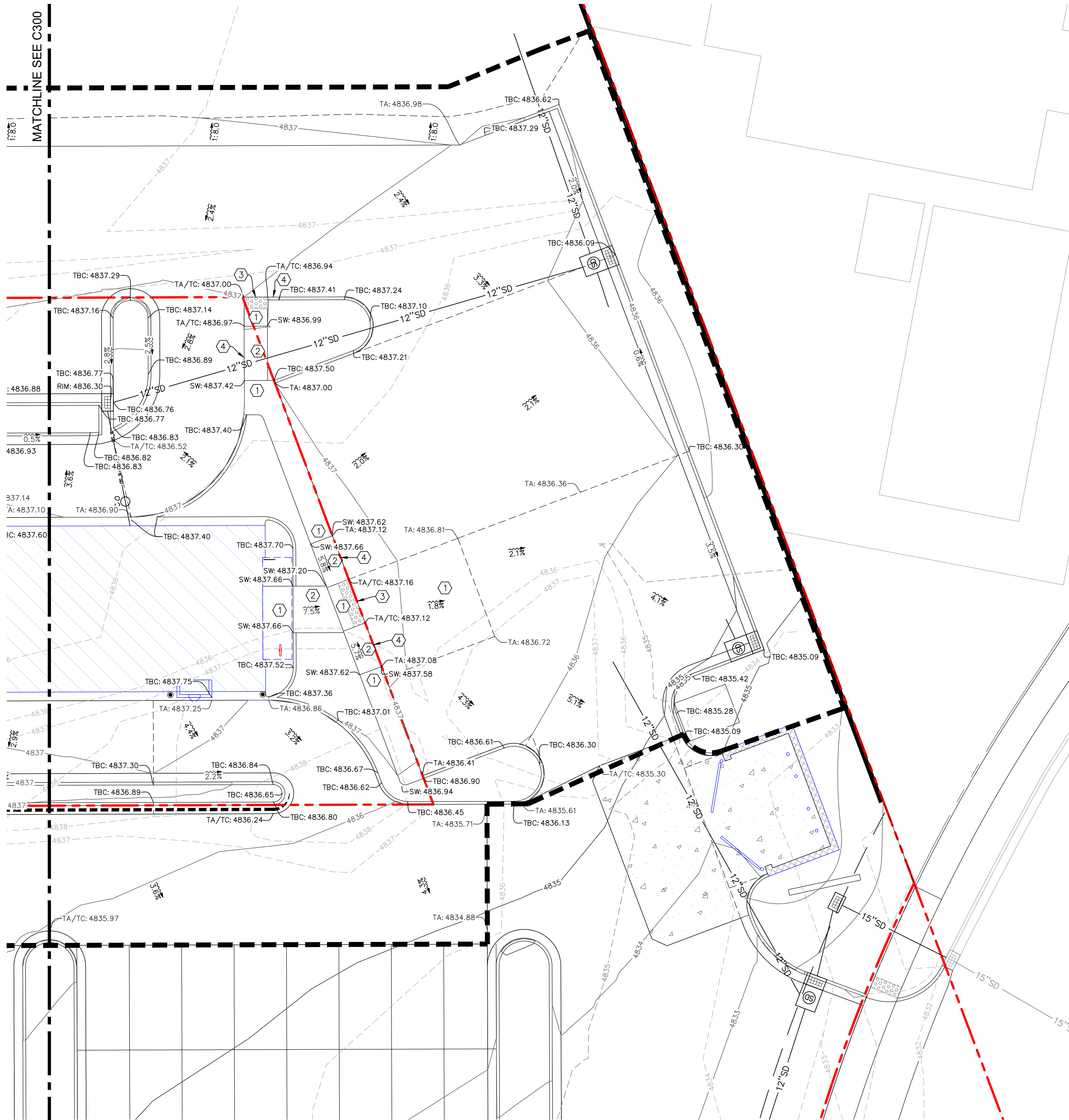
Rev.	Date	Comment
A	05.17.24	CITY COMMENTS

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ORIG. ISSUE DATE: MAR. 20, 2024



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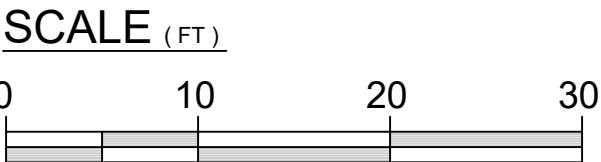
GRADING PLAN
WEST
C300



LEGEND		
PROPOSED	EXISTING	
4650	4650	MAJOR CONTOUR
4649	4649	MINOR CONTOUR
		DITCH BANK, FLOWLINE
		BUILDING/STRUCTURE
		CURB, GUTTER
		PROPERTY LINE
		GRADE BREAK LINE/CONVERGENCE POINT
		PHASE BOUNDARY
		STORMDRAIN INLET
		STORMDRAIN COMBINATION BOX
		STORMDRAIN MANHOLE
		DOWNSPOUT CONNECTION (ROOF DRAIN W/CONNECTION)
		ROOFDRAIN DISCHARGE (DISCHARGE TO LANDSCAPING)
		CLEANOUT
		100 YR. STORM WATER SURFACE
		ADA TRUNCATED DOMES

- KEY TAGS:
- ① ADA ZONE/LANDING, SLOPE < 2% IN ANY DIRECTION
 - ② INSTALL ADA RAMP $\frac{9}{C50}$
 - ③ LOW BACK CURB, PROVIDE TRUNCATED DOMES WHEN SHOWN PER PLAN; WHEN GUTTER IS PRESENT PROVIDE $\frac{1}{2}$ " ELEVATION CHANGE FROM FLOWLINE TO BACK OF CURB (6" MIN. SLOPE LENGTH) TO MAINTAIN DRAINAGE WITHIN GUTTER & ADA ACCESSIBILITY
 - ④ TRANSITION FROM LOWBACK TO HIGHBACK CURB OVER 24", TO NEAREST RADIUS POINT WITHIN 5' OR FOLLOW ADA RAMP SLOPE.

DESIGN ELEVATION CALLOUT NOTIFICATION:
TA & TC LABELS REFER TO THE LOWER ELEVATION WHEN LABEL IS PLACED AT A POINT OF ABRUPT VERTICAL CHANGE (FACE OF CURB, FACE OF DROP SIDEWALK, ETC.)



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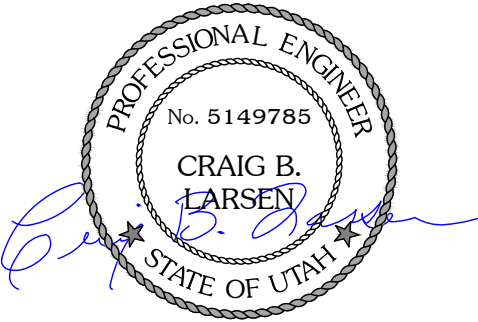
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SECTION 20, TOWNSHIP 5
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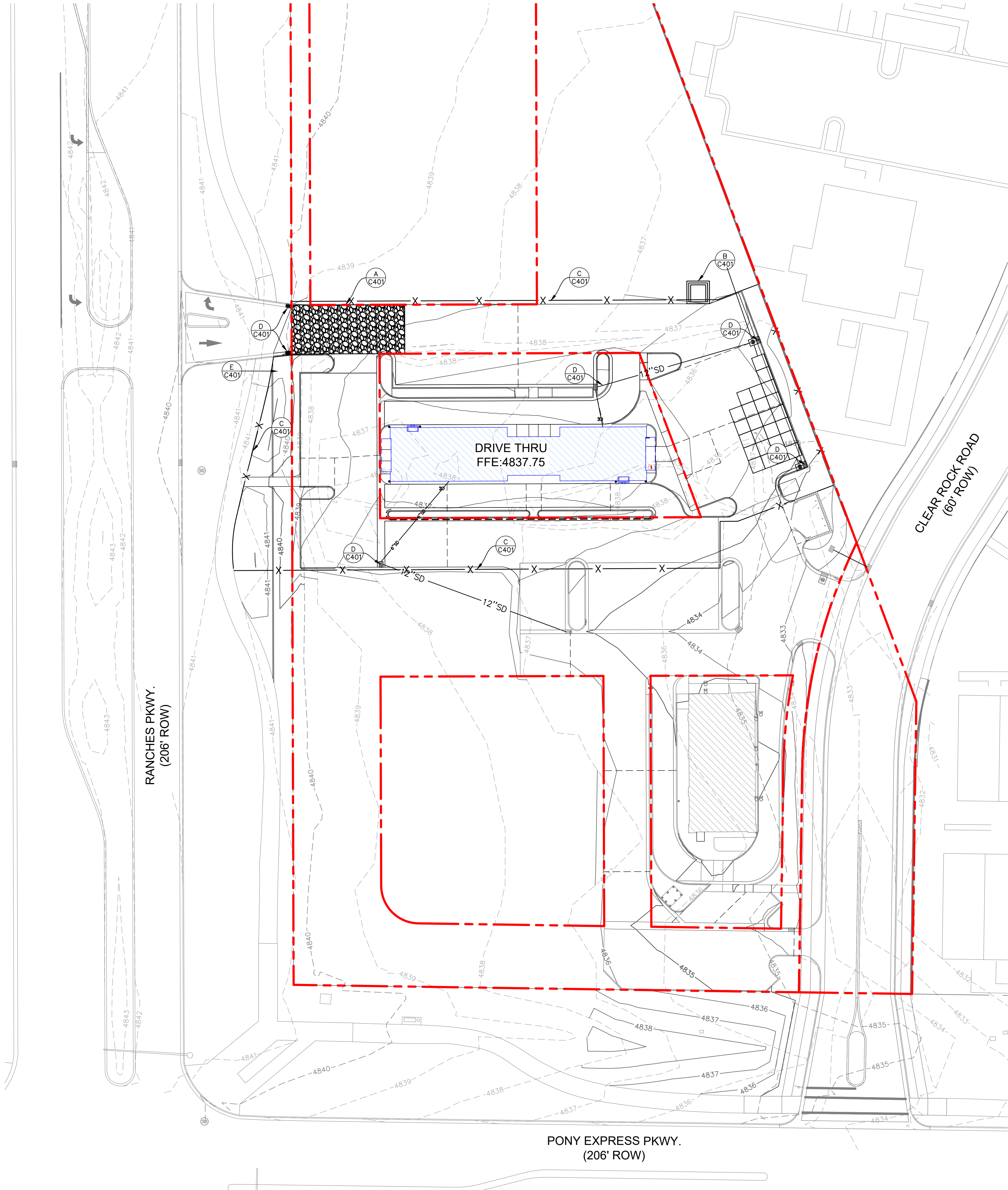
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A	05.17.24	CITY COMMENTS

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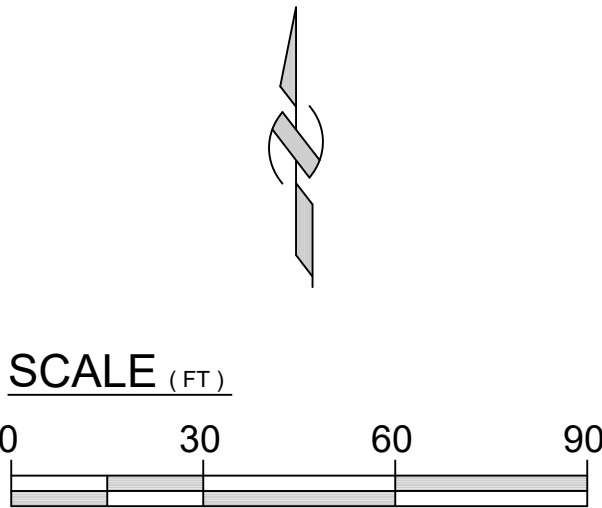
GRADING PLAN
EAST
C301



LEGEND		
PROPOSED	EXISTING	
SD	SD	STORMDRAIN LINE
-1775	-1775	PROPERTY LINE
-1776	-1776	MAJOR CONTOUR
		MINOR CONTOUR
X		DITCH BANK, FLOWLINE
		SILT FENCE, STRAW WATTLE
	STRAW BAIL	
	GRAVEL BAG	
	STORMDRAIN INLET	
	STORMDRAIN COMBINATION BOX	
	STORMDRAIN MANHOLE	
	DOWNSPOUT CONNECTION	

- CONSTRUCT VEHICLE TRACKING CONTROL ENTRANCE, LOCATION TO BE DETERMINED BY CONTRACTOR THROUGHOUT PROJECT FOR PRACTICALITY
- CONSTRUCT CONCRETE WASHOUT FACILITY, LOCATION(S) TO BE DETERMINED BY CONTRACTOR THROUGHOUT PROJECT FOR PRACTICALITY, CLEAN & DISPOSE OF EXCESS MATERIAL AS NECESSARY IN A LAWFUL MANNER
- INSTALL SILT FENCE, STRAW WATTLE OR BALE EROSION CONTROL BARRIER AT ALL LOCATIONS WHERE STORMWATER RUNOFF MAY FLOW OFF-SITE
- PLACE INLET PROTECTION, OVER PROPOSED & EXISTING INLETS UNTIL COMPLETION OF SITE CONSTRUCTION & LANDSCAPING (TYP. ALL INLETS)
- CONTRACTOR SHALL INSTALL SWPPP SIGN IN LOCATION SELECTED BY CITY INSPECTOR OR CONTRACTOR.

- SWPPP GENERAL NOTES:
- CONTRACTOR SHALL COORDINATE WITH ADJACENT PROJECTS & CONTRACTORS TO ASSURE ALL REASONABLE ACTIONS ARE TAKEN TO AVOID STORMWATER POLLUTION PREVENTION.
 - CONTRACTOR SHALL REGISTER FOR COVERAGE UNDER THE STATE OF UTAH UPDES, UTRC PERMIT AND PROVIDE THE NECESSARY PLAN, REPORTING AND DOCUMENTATION REQUIRED FOR COMPLIANCE.
 - CONTRACTOR MAY ADJUST THIS SHEET AS REQUIRED TO MEET PERMIT REQUIREMENTS AND THE NEEDS OF THE PROJECT.



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UTAH COUNTY, UTAH

811

Know what's below.
Call before you dig.

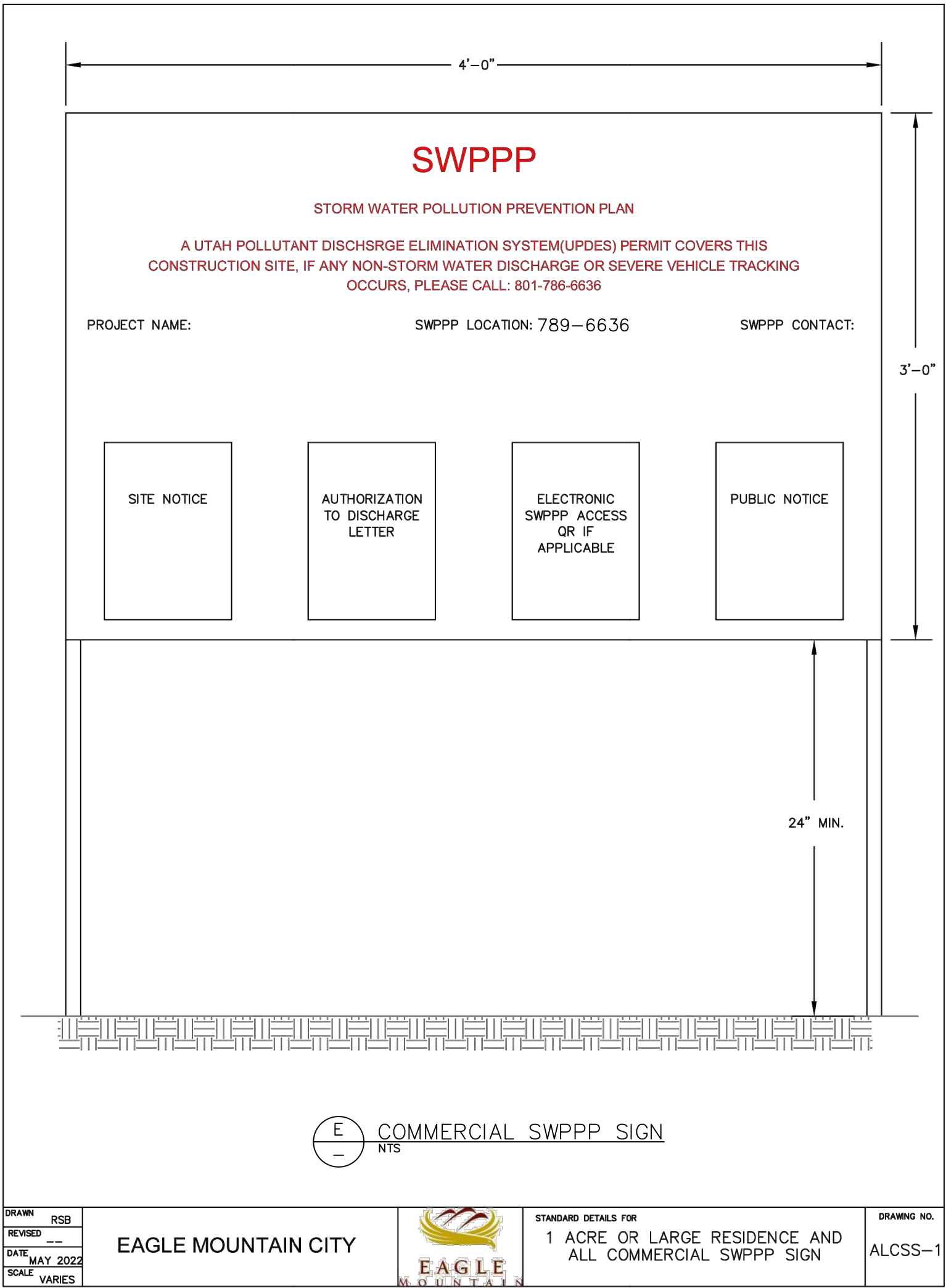
Rev.	Date	Comment
A	05.17.24	CITY COMMENTS

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PROFESSIONAL ENGINEER
No. 5149785
CRAIG B. LARSEN
STATE OF UTAH

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SWPPP
C400



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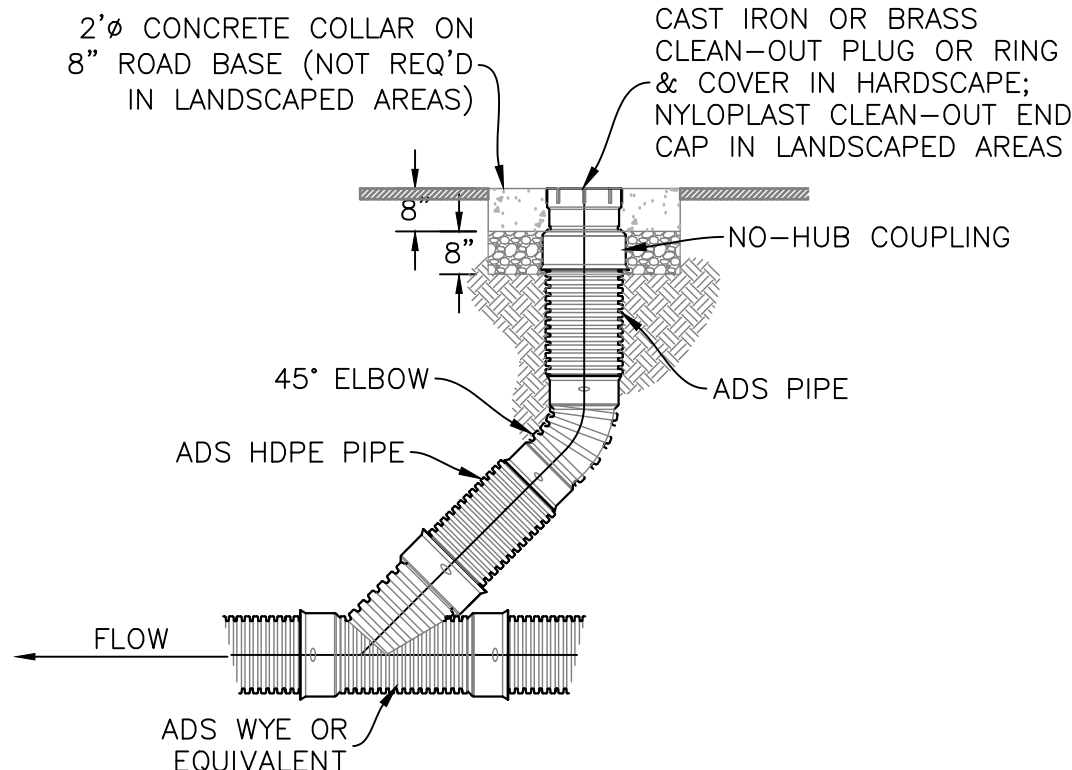
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SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH

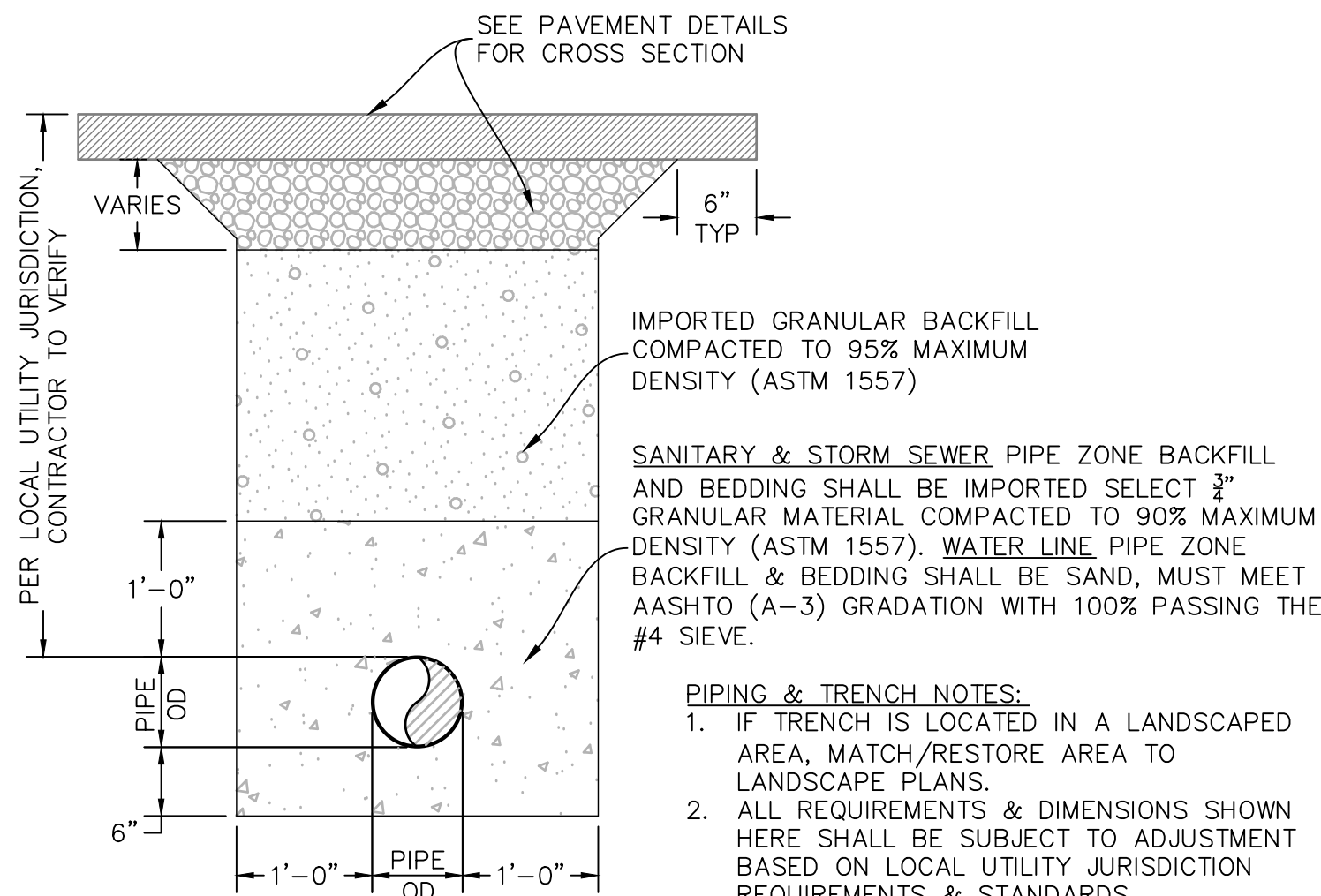
USE CRETEX 6X3 PRECAST BOX MANHOLE W/MANHOLE
ACCESS & FRAME & GRATE INLET:
INLET: USE NEENAH R-3067-C OR EQUAL
W/REQ'D GRADE RINGS; FRAME & GRATE TO
RECEIVE CONCRETE COLLAR AND ALIGN WITH CURB
& GUTTER.

MANHOLE: NEENAH R-1764 FRAME & GRATE OR
EQUAL W/REQ'D GRADE RINGS; FRAME & GRATE
TO RECEIVE CONCRETE COLLAR WHEN IN
HARDESCAPED AREA

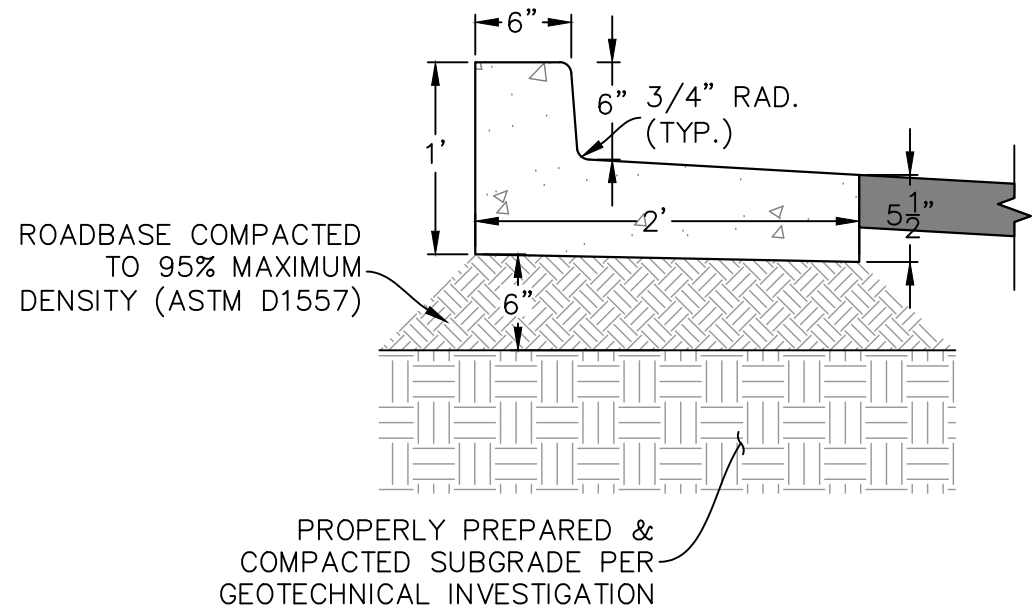
1 COMBINATION INLET BOX
- NTS



2 STORMDRAIN CLEANOUT
- NTS



3 STANDARD TRENCH DETAIL
- NTS: SEE GEOTECHNICAL INVESTIGATION FOR SPECIAL TRENCH REQ'TS



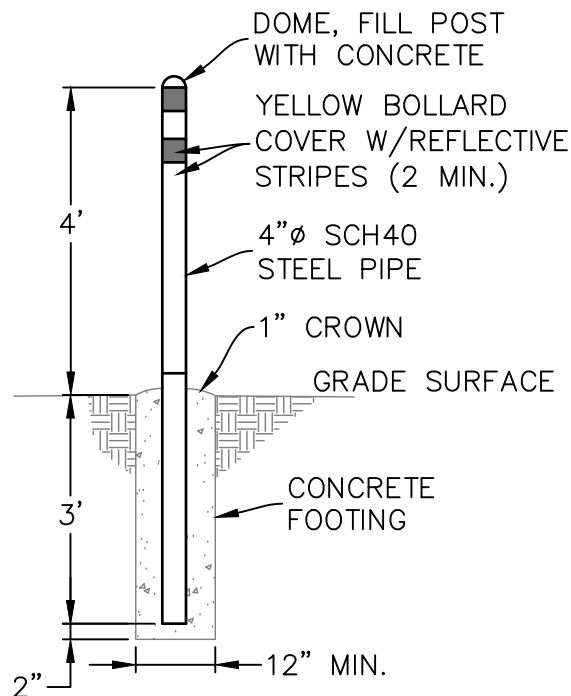
4 24" SPILL CURB & GUTTER
- NTS

USE CRETEX 2X3 PRECAST INLET W/REQ'D GRADE
RINGS WITH NEENAH FRAME & GRATE:
CURB APPLICATION: USE NEENAH R-3067-C,
FRAME & GRATE TO RECEIVE CONCRETE COLLAR
AND ALIGN WITH CURB & GUTTER.

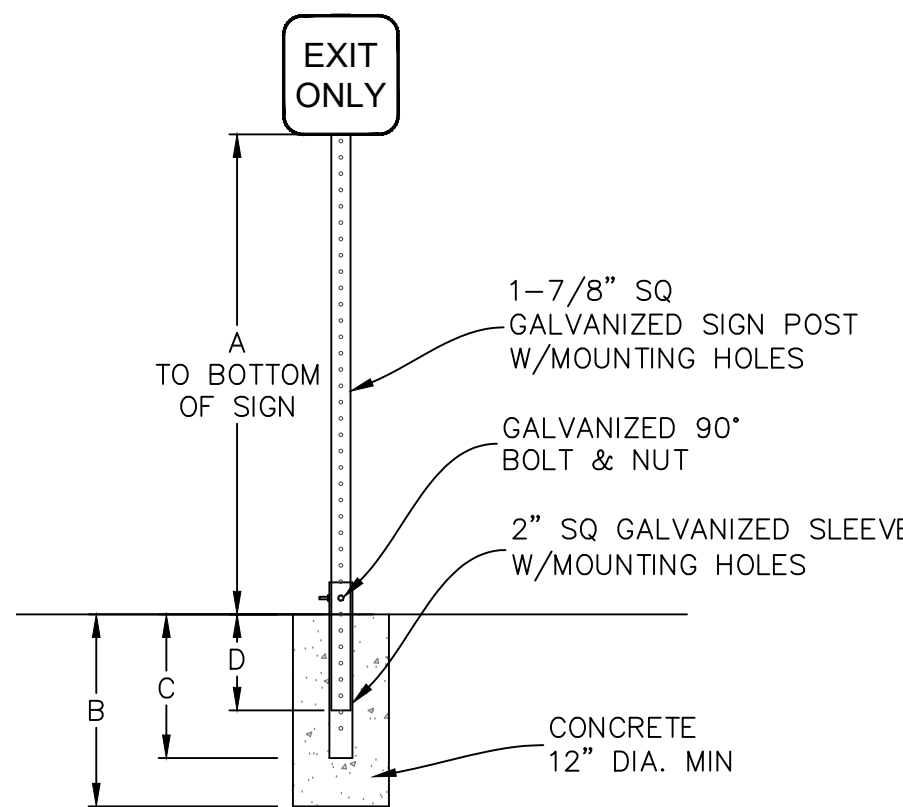
WATERWAY OR LANDSCAPE APPLICATION: USE
NEENAH R-3382, FRAME & GRATE TO RECEIVE
CONCRETE COLLAR & ALIGN WITH WATERWAY.

ASPHALT APPLICATION: USE NEENAH R-3406,
FRAME & GRATE TO RECEIVE CONCRETE COLLAR
& ALIGN WITH SIDEWALK.

5 2x3 INLET BOX
- NTS

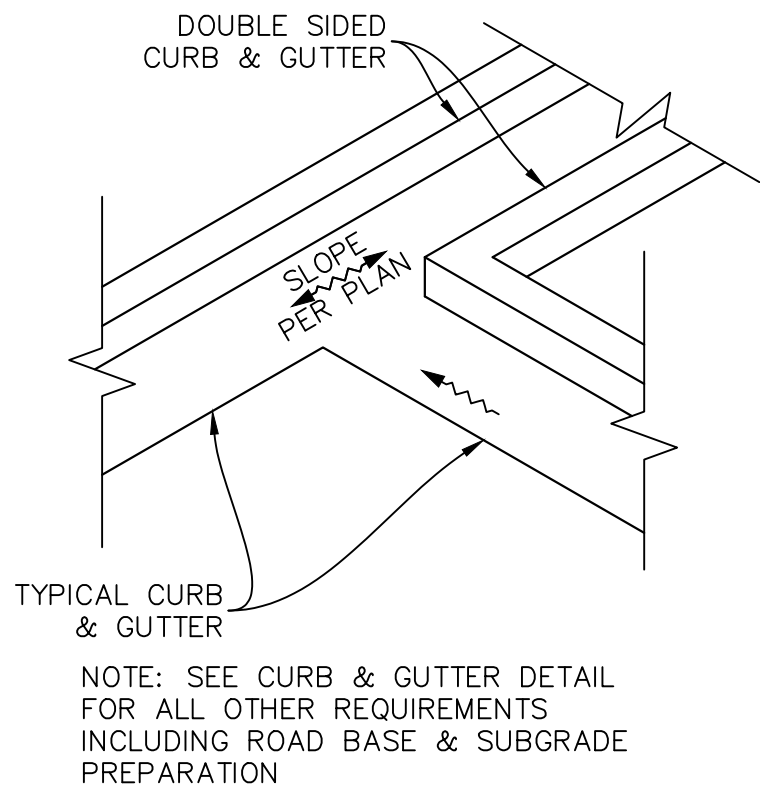


6 BOLLARD
- NTS

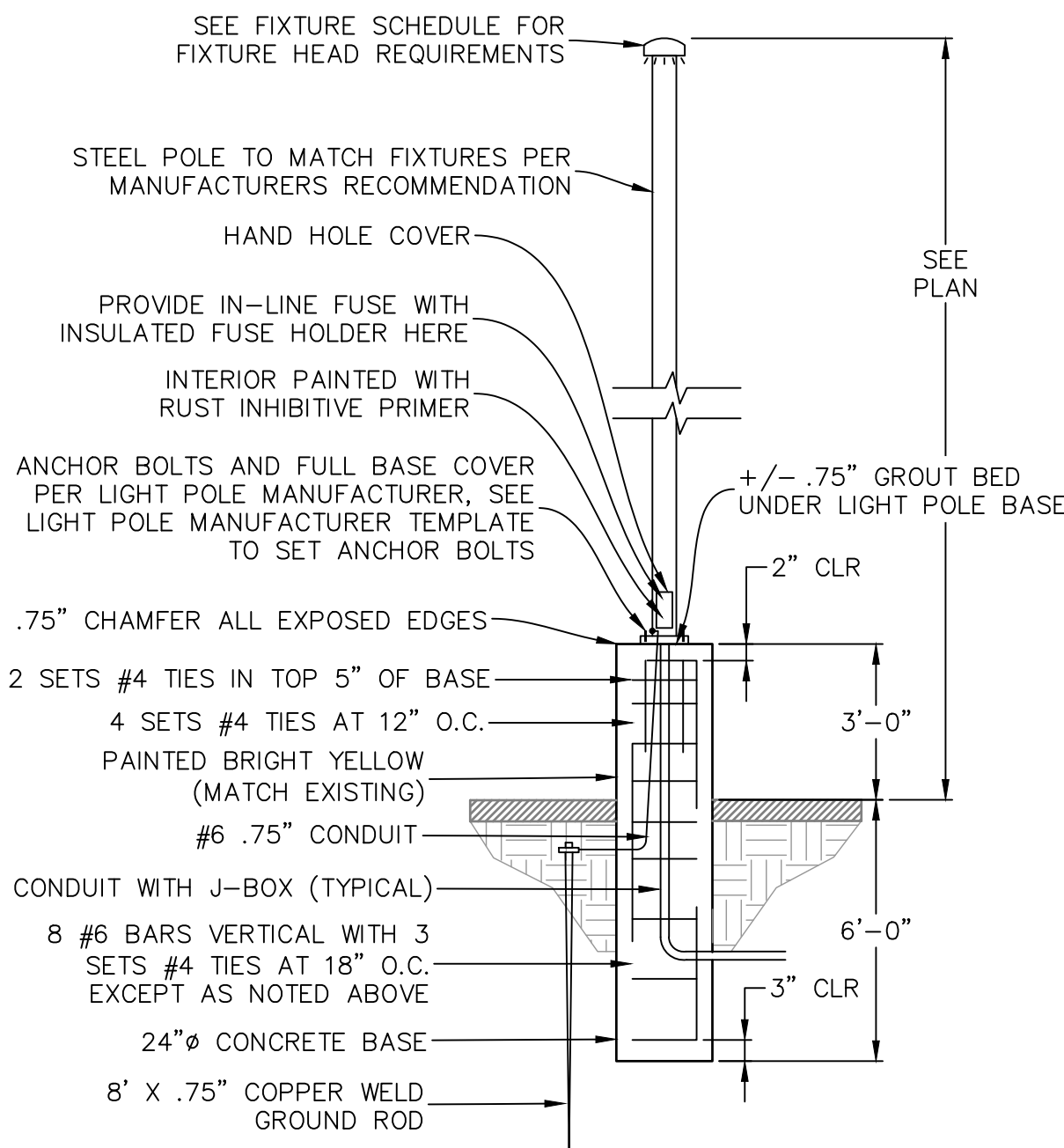


SIGN BASE DIMENSIONS			
A	B	C	D
7'-10"	2'-6"	2'-0"	1'-3"
< 7'	1'-6"	1'-0"	0'-8"

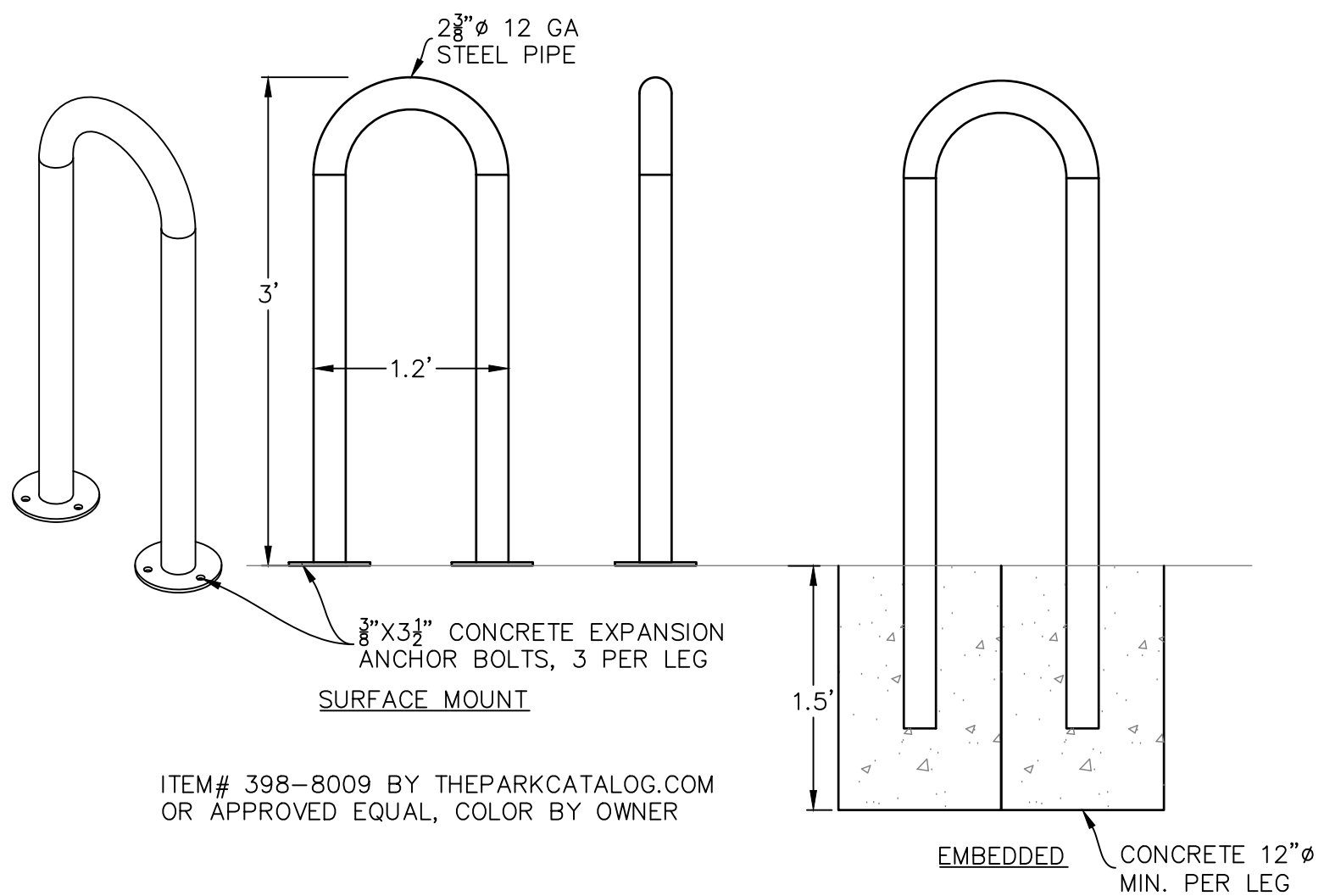
7 SIGN BASE
- NTS



8 DOUBLE CURBED GUTTER
- NTS



9 PARKING LOT LIGHT POLE BASE
- NTS

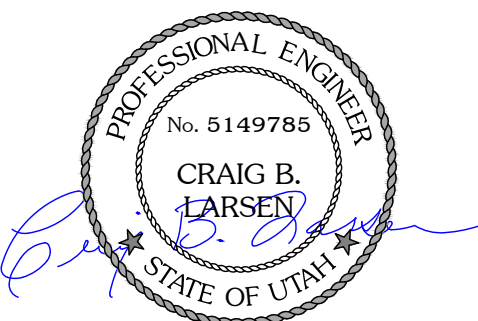


10 BICYLCE RACK
- NTS



Rev.	Date	Comment
B	06.03.24	CITY COMMENTS

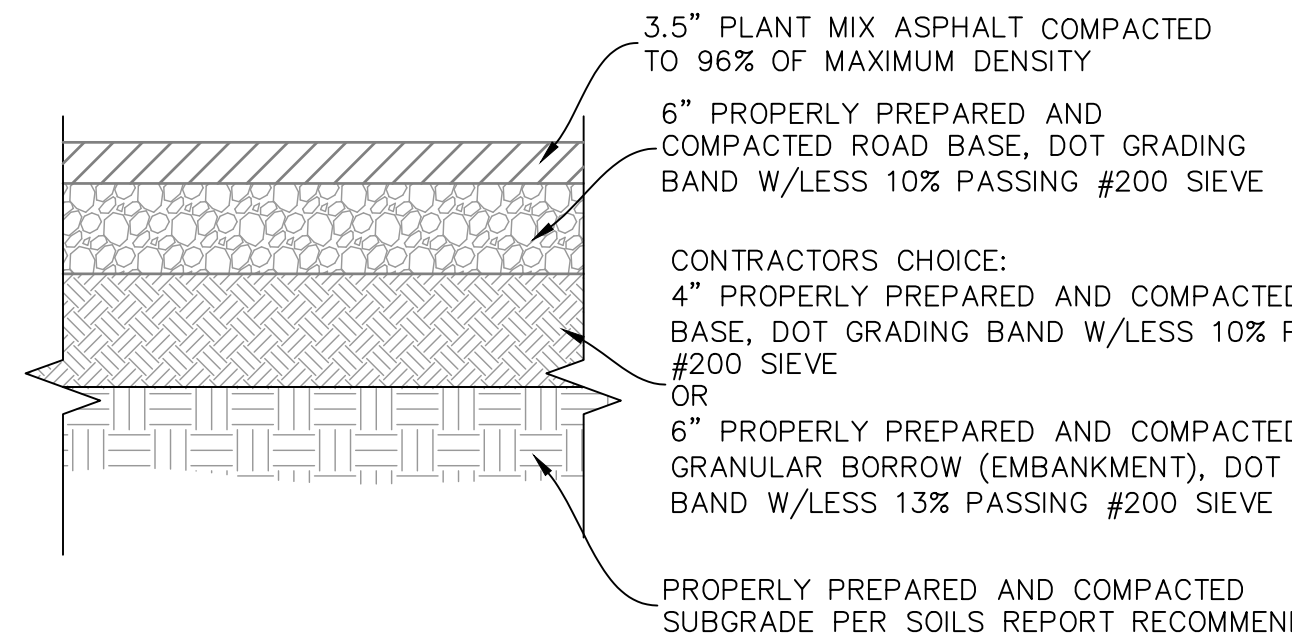
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ORIG. ISSUE DATE: MAR. 20, 2024



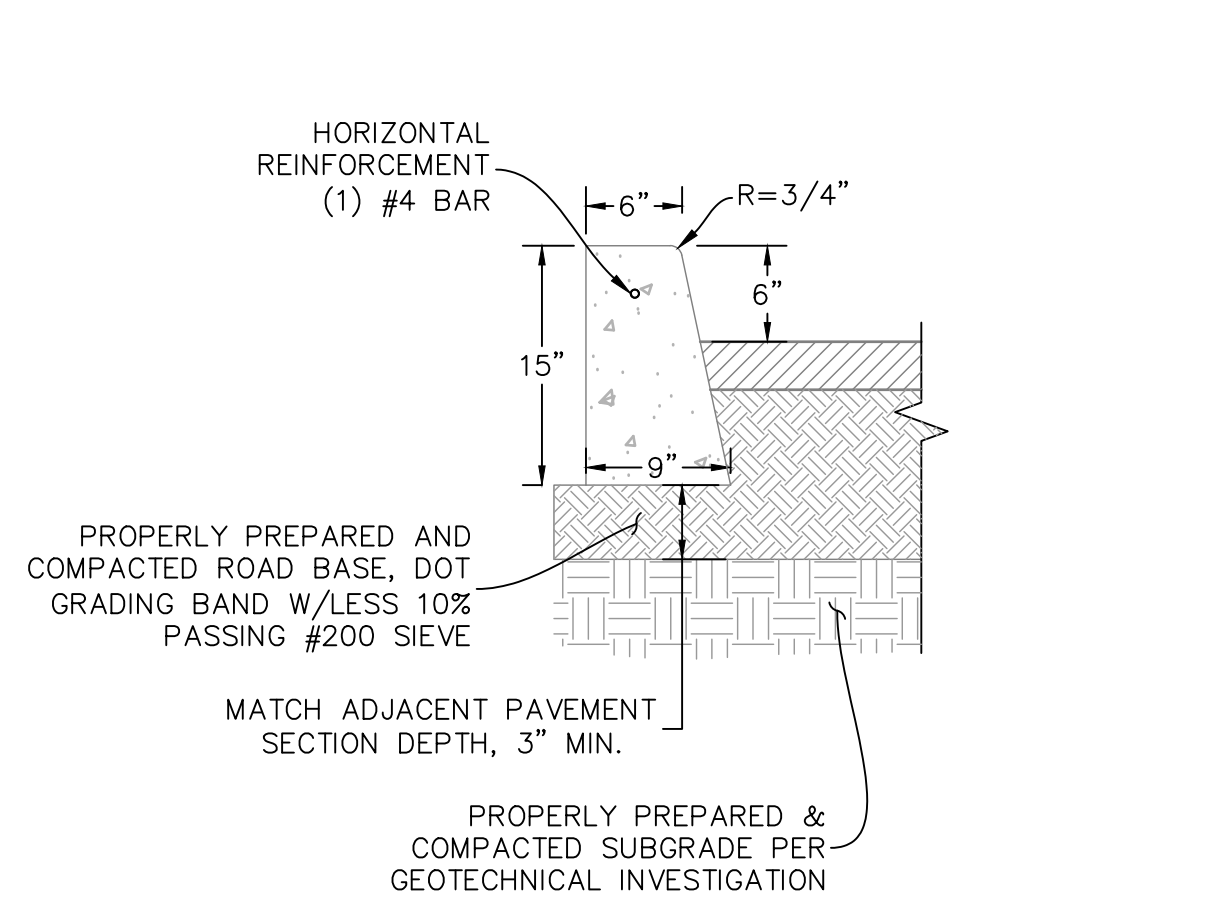
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CIVIL
DETAILS
C500

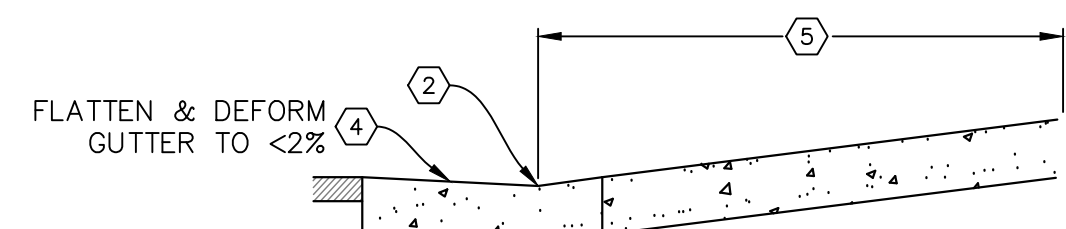
NOTES:
PROOF ROLLING REQUIRED ON ALL SECTIONS OF ROAD: I.E.
SUB-GRADE, SUB-BASE, & CURB BASE & ROAD BASE.
CURB STAKES REQUIRED FOR SUB-GRADE INSPECTION &
STRING LINE REQUIRED FOR SUB-BASE & ROAD BASE
INSPECTION.



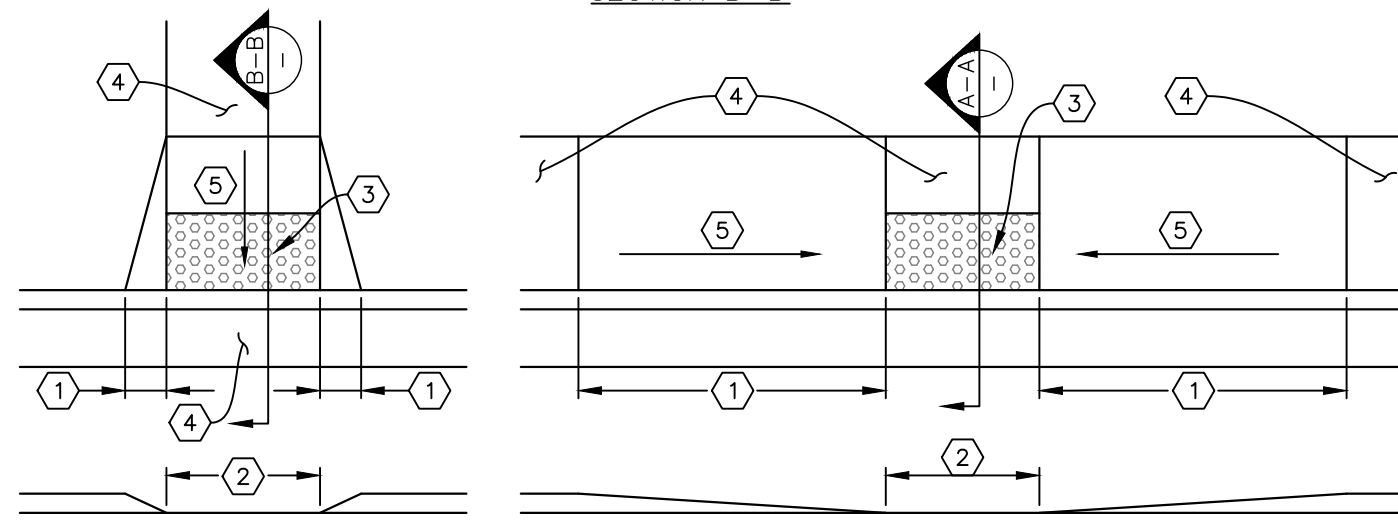
1 FLEXIBLE PAVEMENT SECTION
 - NTS PAVEMENT SECTION TO MEET SOILS REPORT REQUIREMENTS



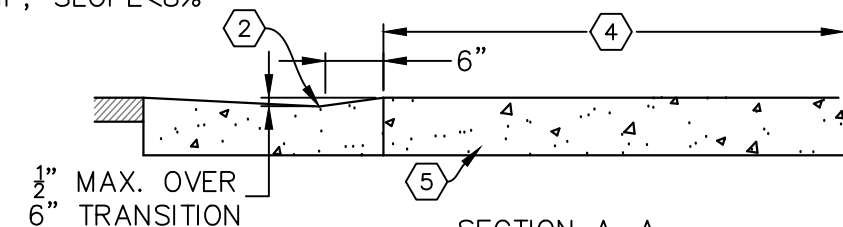
5 CONCRETE CURB WALL
- NTS



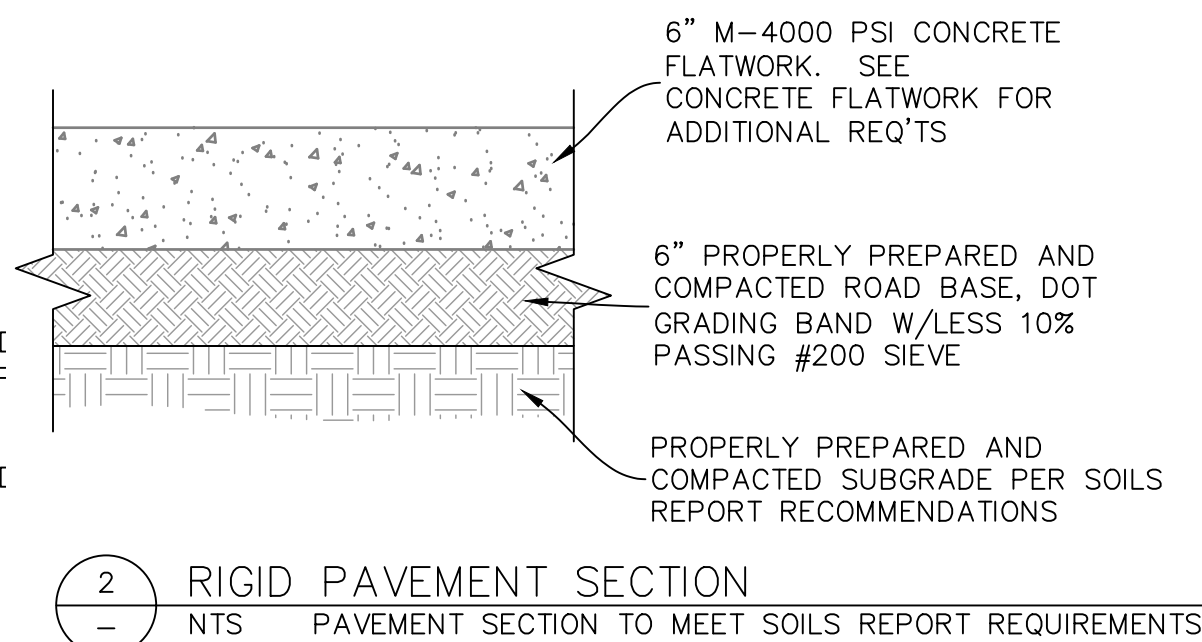
SECTION B-B



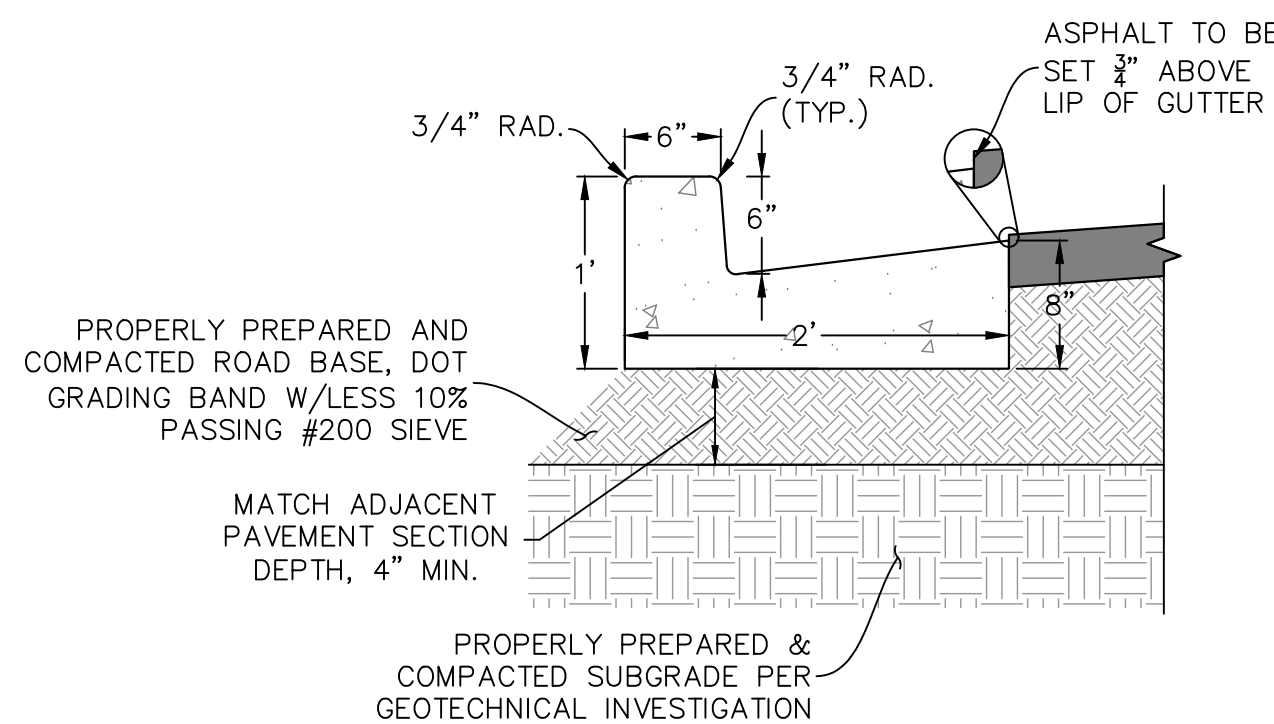
- ① TRANSITION TO LOWBACK CURB/ZERO REVEAL; L=RAMP LENGTH IF PARALLEL TO RAMP, 18" MIN. OTHERWISE
- ② LOWBACK CURB/ZERO REVEAL, SEE SITE PLAN FOR LENGTH
- ③ TRUNCATED DOMES MEETING ADA REQ'TS ALONG ENTIRE DISTANCE OF LOWBACK CURB
- ④ LANDING; SLOPE<2% FOR 60" MIN. IN DIRECTION OF TRAVEL
- ⑤ RAMP; SLOPE<8%



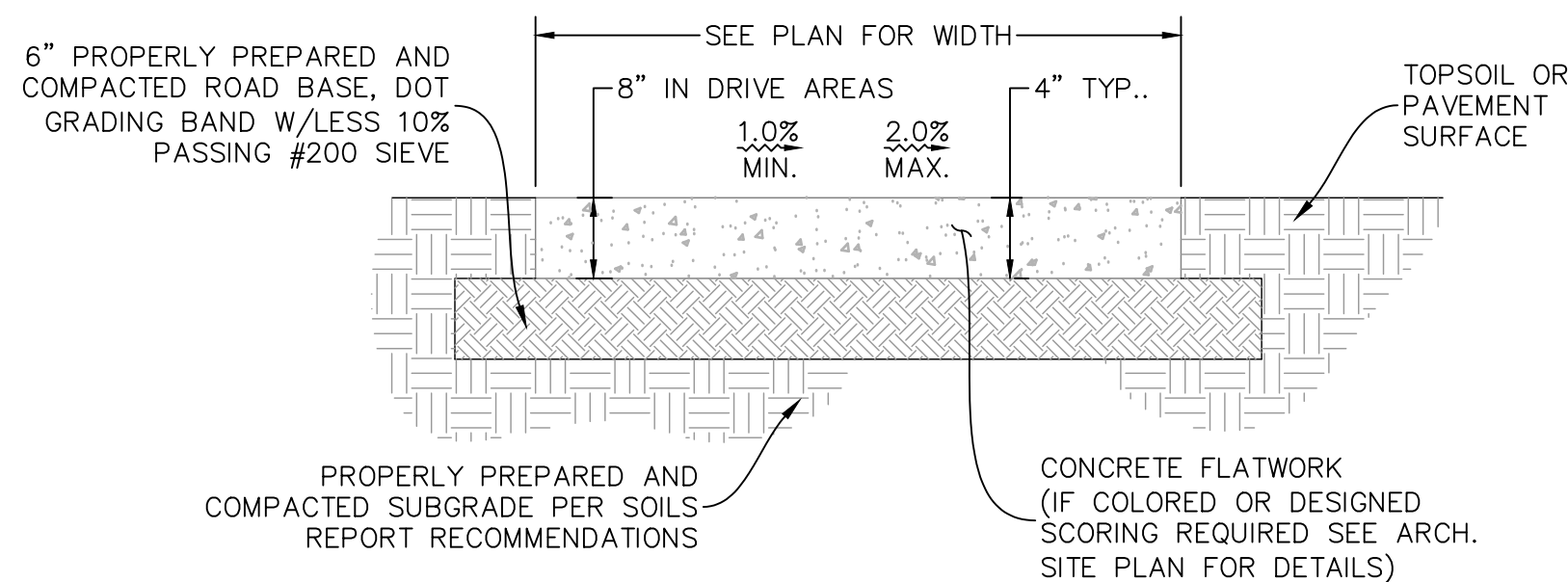
8	ADA	RAMP
-	NTS	



2	RIGID PAVEMENT SECTION
-	NTS PAVEMENT SECTION TO MEET SOILS REPORT REQUIREMENTS

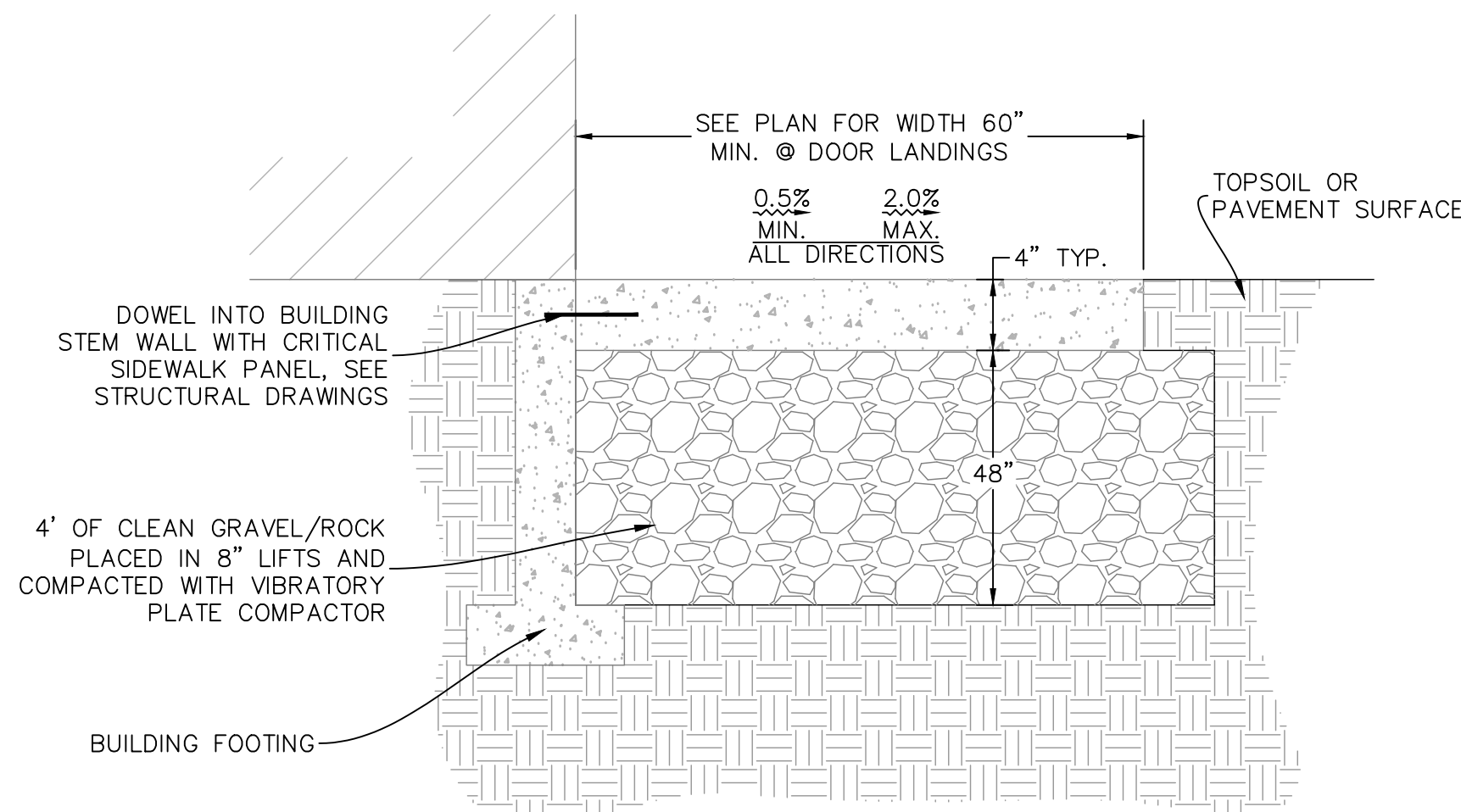


3	24" CURB & GUTTER
-	NTS



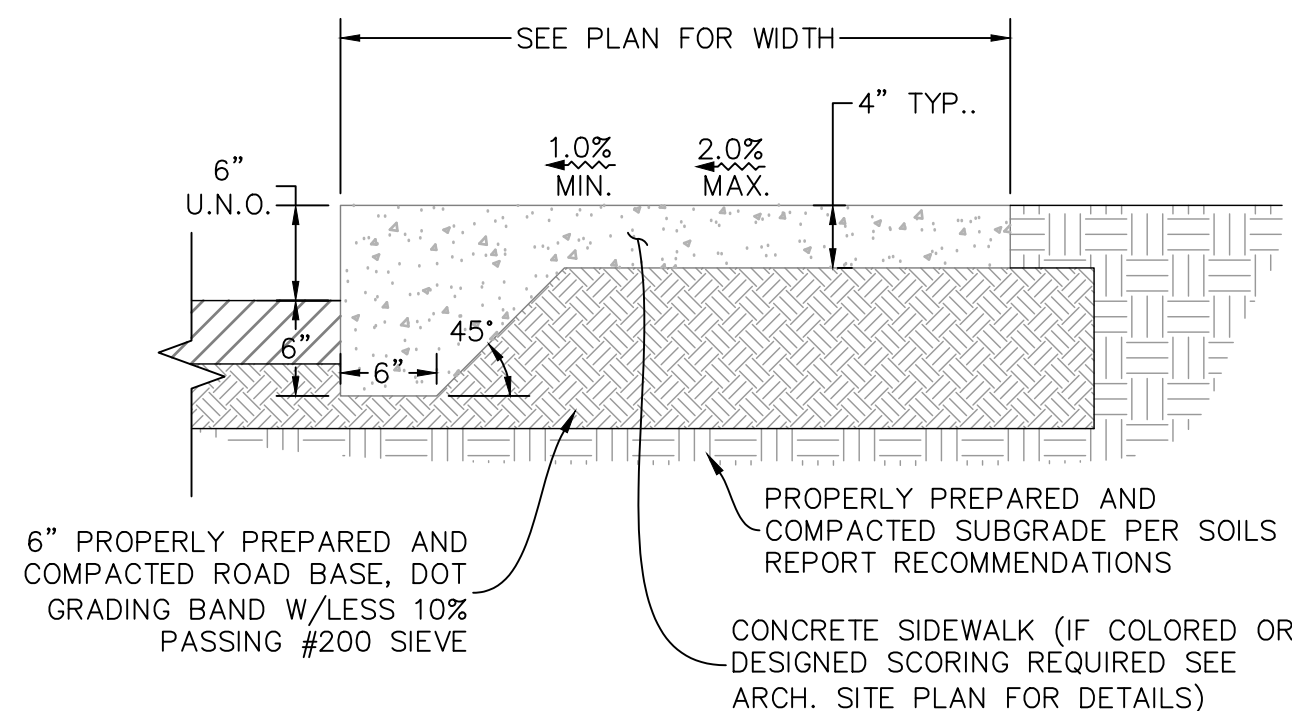
- NOTES:**
1. PLACE CONCRETE ON 6" OF ROAD BASE COMPACTED TO 95% MAXIMUM PROCTOR DENSITY AS DETERMINED BY ASTM D-1557.
 2. EXPANSION JOINTS EVERY 100 FEET, AT ALL CHANGES IN DIRECTION AND AT ALL LOCATIONS WHERE SLAB ABUTS OTHER CONCRETE OR SOLID OBJECT.
 3. PLACE SCORE LINES SPACED NOT GREATER THAN WIDTH OF SLAB OR SIDEWALK, MAX=8".
 4. SIDEWALK TO BE 8" THICK WHEN PLACED IN DRIVE APPROACH.
 5. USE FINE HAIR TO FINISH WALKS ON GRADES UNDER 6% AND ROUGH HAIR ON GRADES OVER 6%.

6 TYPICAL CONCRETE SIDEWALK & FLATWORK
- NTS



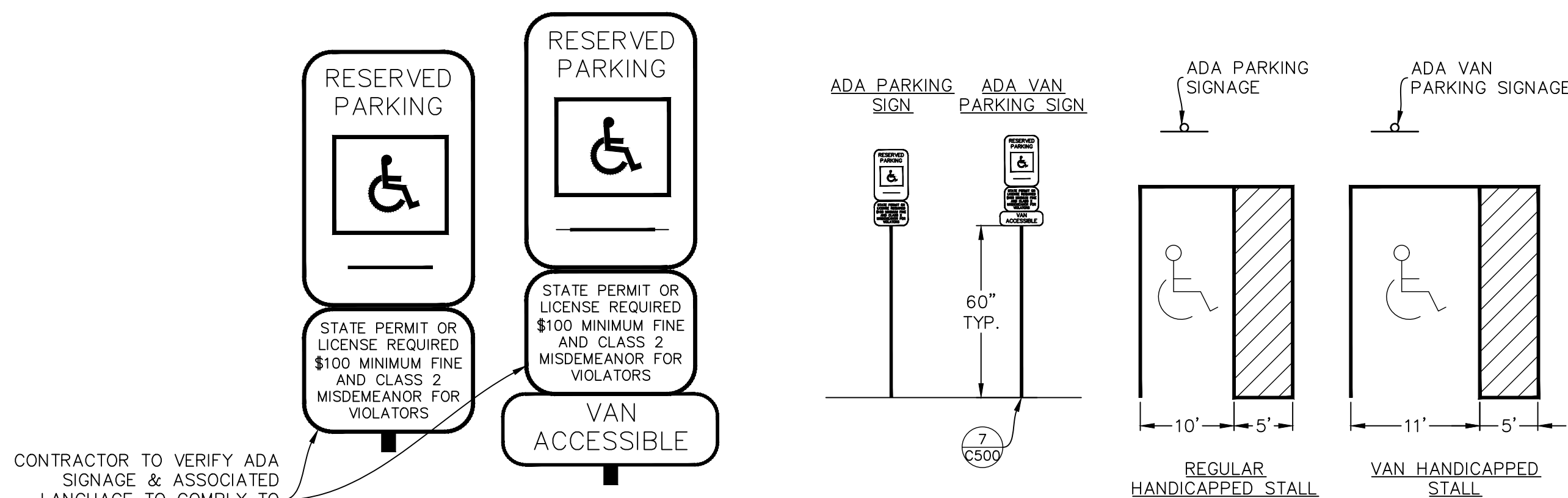
- NOTES:
1. MINIMUM SIDEWALK: 60" IN DIRECTION OF TRAVEL
 2. PLACE EXPANSION JOINT BETWEEN CRITICAL PANEL & ADJACENT CONCRETE & SIDEWALK.
 3. SEE "TYPICAL CONCRETE FLATWORK" DETAIL FOR ADD'L REQ'TS.
 4. CRITICAL CONCRETE SIDEWALK PANEL TO BE USED AT ALL SIDEWALK PANELS ADJACENT TO EXTERIOR BUILDING DOORS.
 5. DO NOT EXCEED MAX SLOPE OF 2% IN ALL DIRECTIONS PER ADA REQUIREMENTS.

4 CRITICAL SIDEWALK PANEL & LANDING
- NTS



- NOTES:
1. SEE "TYPICAL CONCRETE SITEWORK & FLATWORK" DETAIL FOR ADD'L REQ'TS.

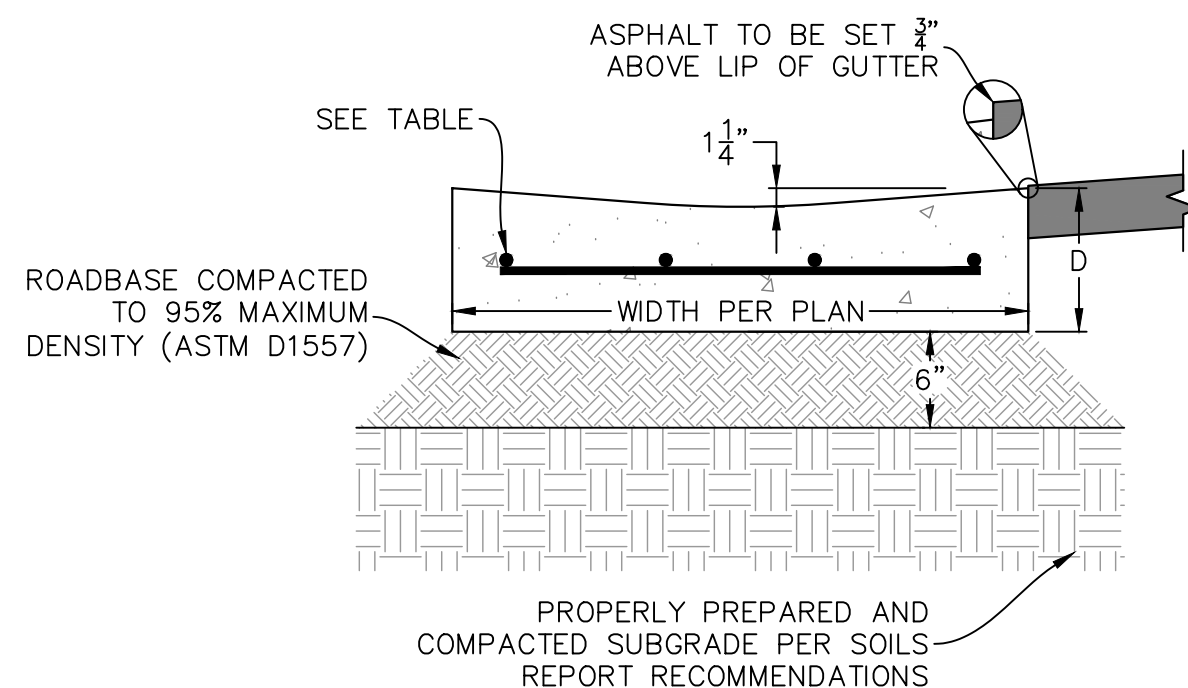
7	THICKENED EDGE SIDEWALK
-	NTS



- NOTES:
1. TWO REGULAR STALLS CAN SHARE ONE ACCESS AISLE.
 2. TWO VAN STALLS CAN SHARE ONE ACCESS AISLE.
 3. PARKING SPACE AND LOADING ZONE TO HAVE MAX. SLOPE OF 2% IN ALL DIRECTIONS.
 4. HANDICAPPED SIGNAGE SHALL BE PROVIDED FOR ALL HANDICAP STALLS ACCORDING TO ADA REQUIREMENTS. "VAN ACCESSIBLE" SIGN SHALL ALSO BE PROVIDED FOR ALL STALLS ADJACENT TO AN 8', OR LARGER, LOADING AREA. BOTTOM
 5. SIGNAGE SHALL BE 60" ABOVE FINISHED GRADE OF STALL.
 6. SEE GRADING PLAN FOR SIDEWALK GRADING ELEVATIONS, RAMP SLOPES TO BE 1:12 MAX PER ADA REQUIREMENTS.
 7. CONTRACTOR TO VERIFY, & MODIFY IF NECESSARY, ADA SIGNAGE TO ASSURE LOCAL COMPLIANCE REQUIREMENTS ARE MET.

9	ADA PARKING STALLS
-	NTS

WATERWAY DIMENSION TABLE		
WIDTH	D	STEEL
24"	7"	3 No. 4 BARS
36"	8"	4 No. 4 BARS TIED AT 24" O.C. W/No. 4 BARS
48"	8"	5 No. 4 BARS TIED AT 24" O.C. W/No. 4 BARS



10 CONCRETE WATERWAY
- NTS

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EAGLE 11 LLC.

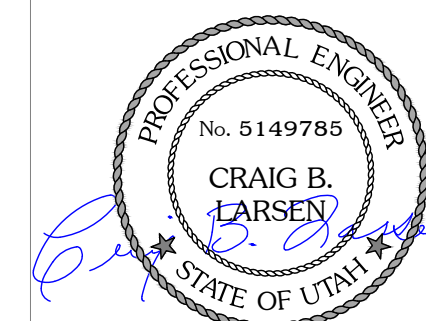
DRIVE THRU
AT
RANCHES
CROSSING

CLEAR ROCK RD.

SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH

Rev.	Date	Comment
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DESIGN BY: CBL
ORIG. ISSUE DATE: MAR. 20, 2024



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OWNER:
EAGLE 11 LLC.

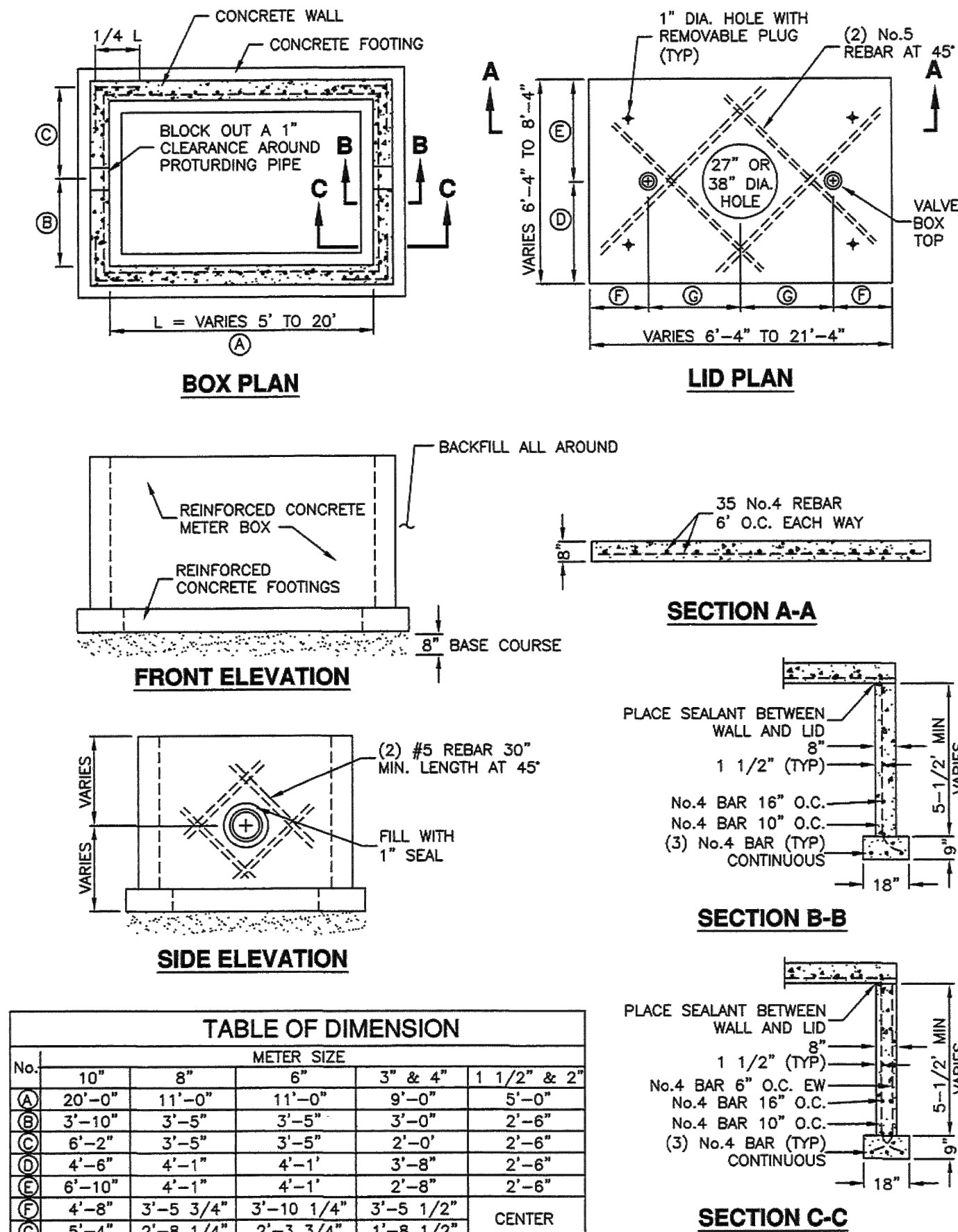
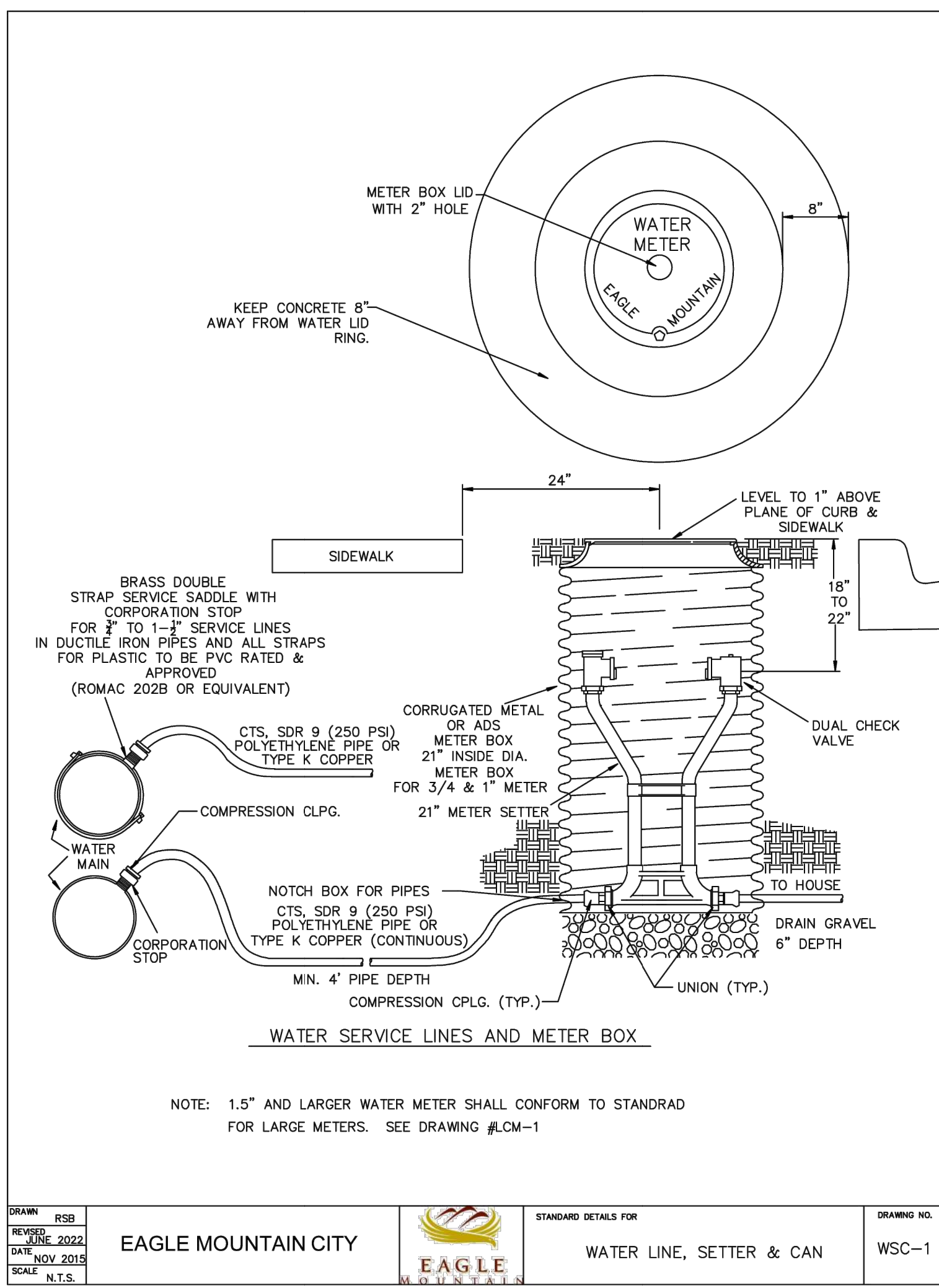
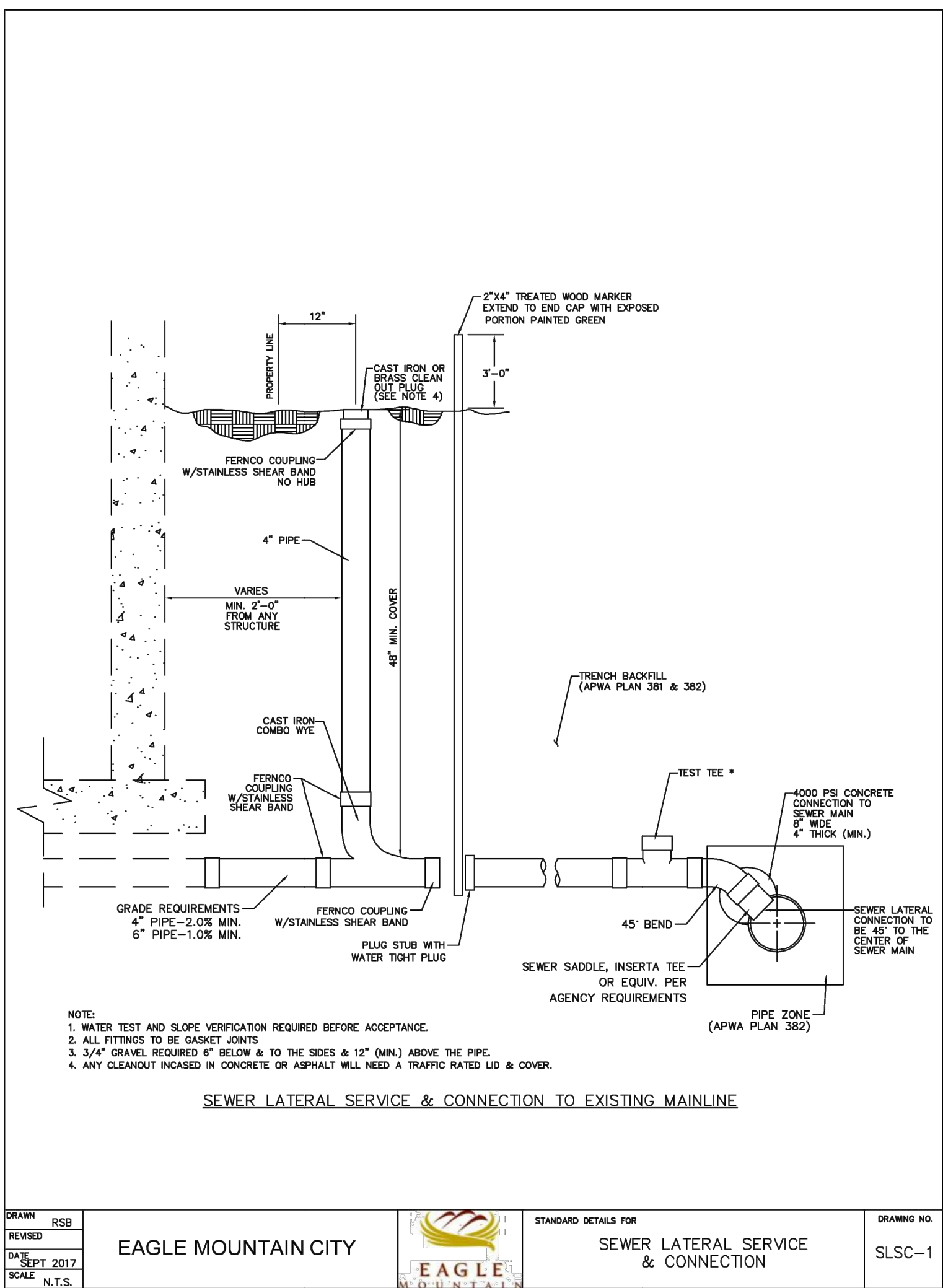
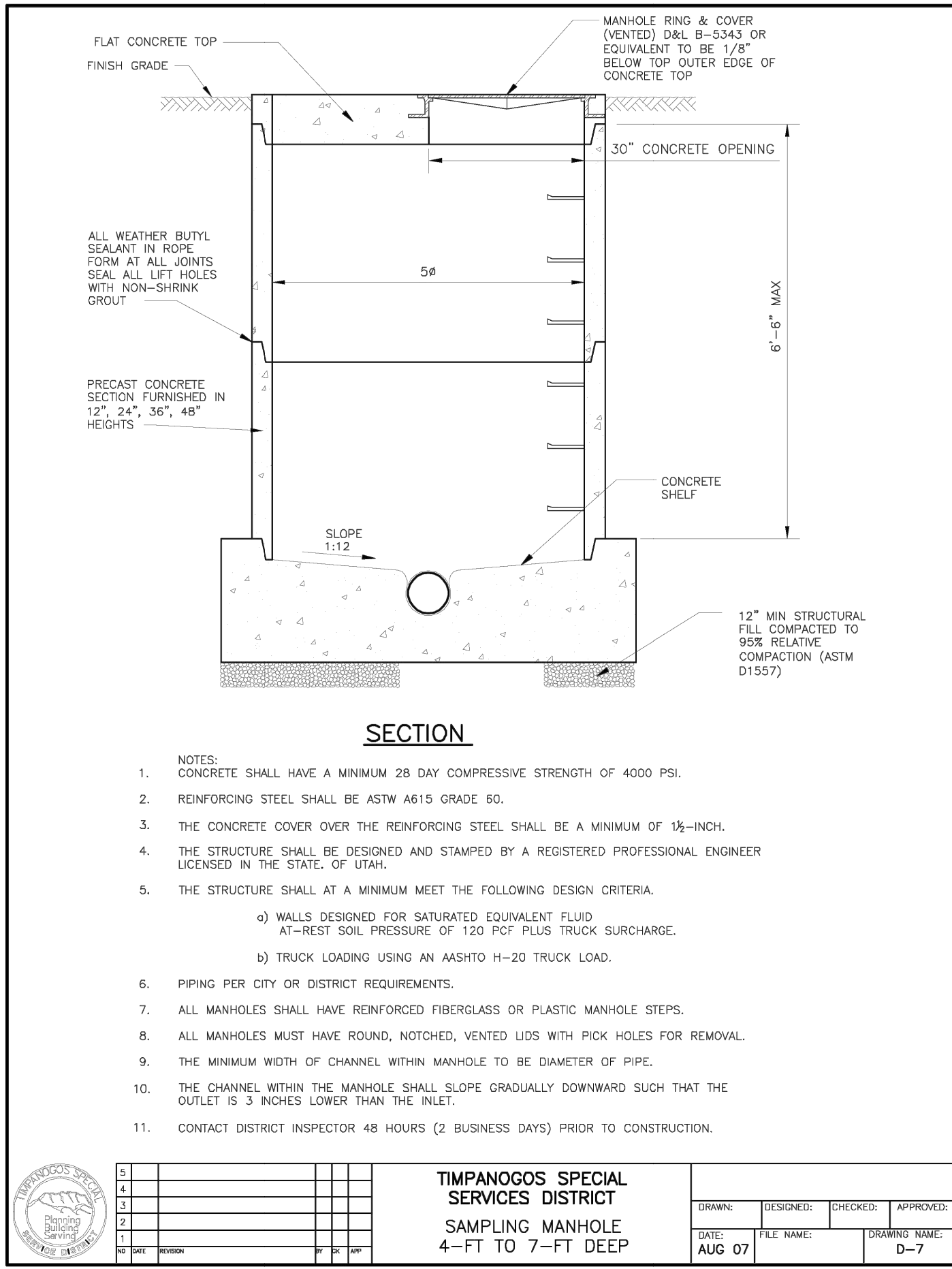
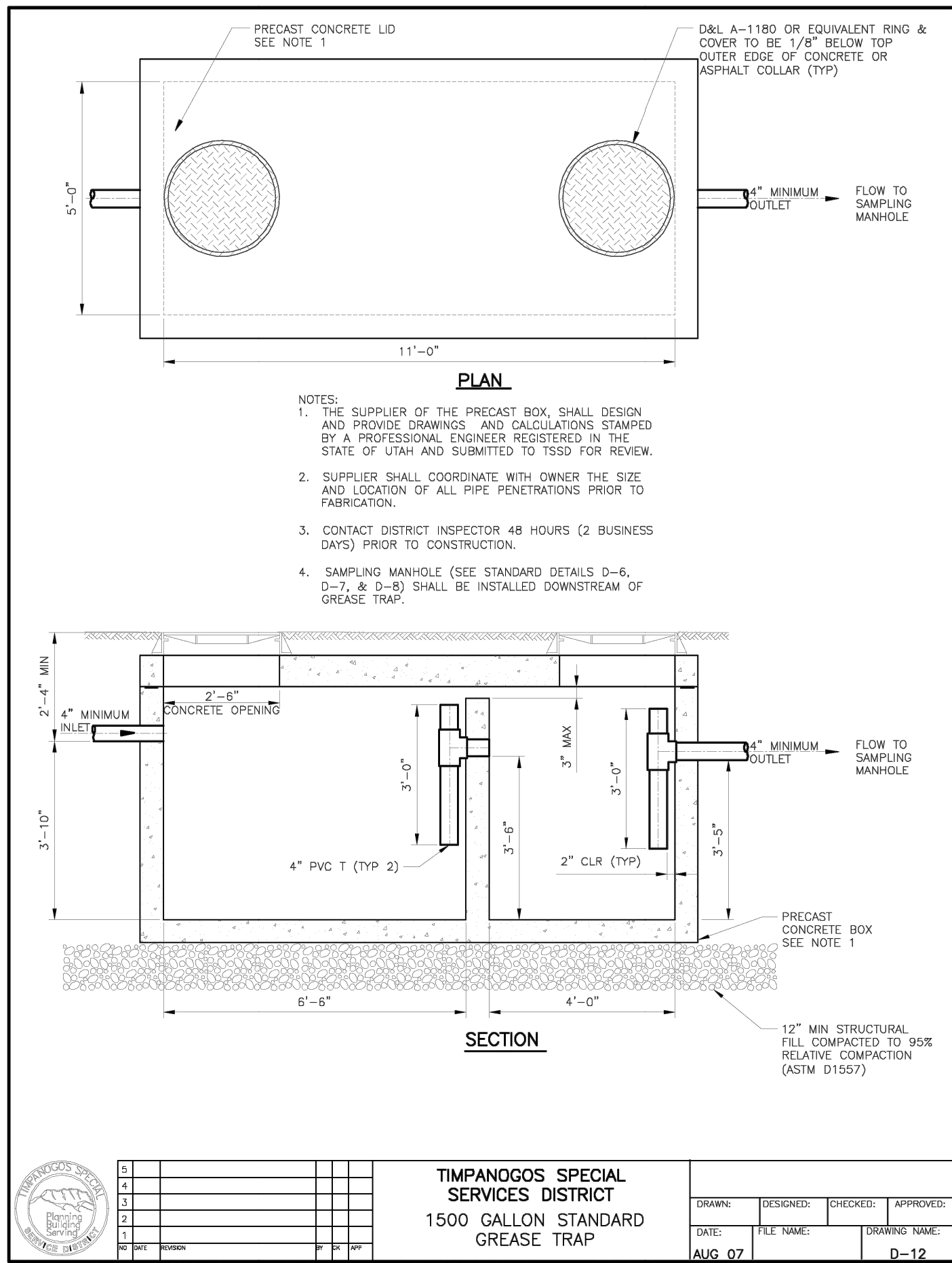
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SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH

Concrete meter boxes

- GENERAL**
 - Before backfilling secure inspection of installation by ENGINEER.
- PRODUCTS**
 - Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
 - Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
 - Concrete: Class 4000, APWA Section 03 30 04. Use type II cement (low alkali).
 - Reinforcement: Deformed, 60 ksi yield grade steel, ASTM A615.
- EXECUTION**
 - Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
 - Concrete Placement: APWA Section 03 30 10. Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.
 - Fill annular space around pipe wall penetrations with waterproof sealer.
 - Place frame and cover directly over valve or meter location.
 - Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.







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:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - 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 450 LBS/FT³%. 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.

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

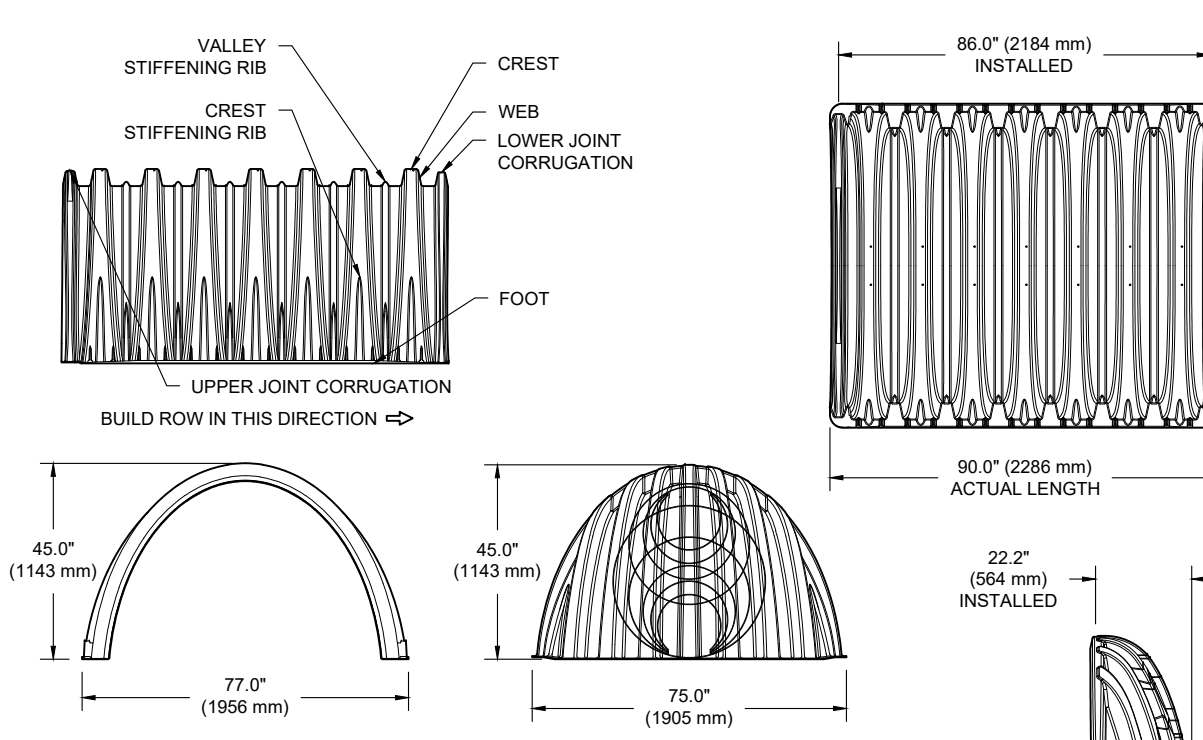
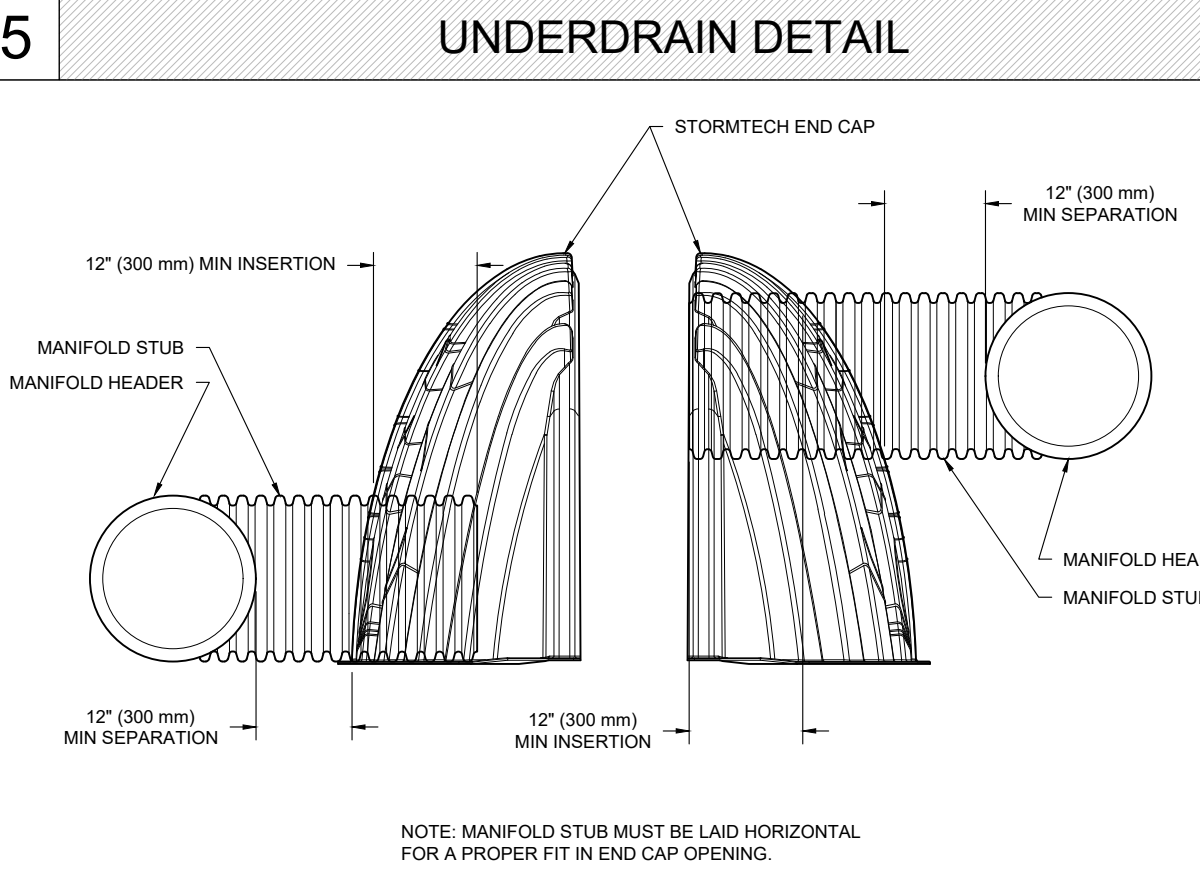
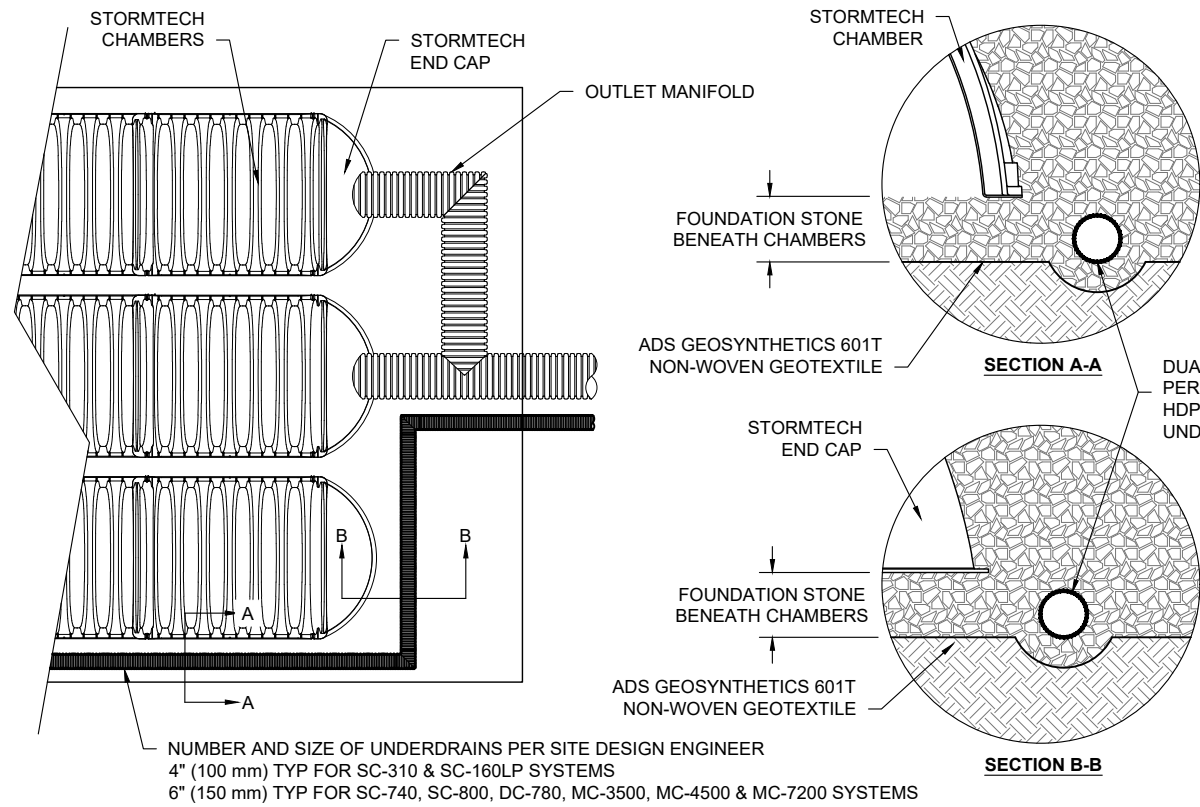
- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONES/HOTTER 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.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6" (150 mm)
- MAINTAIN MINIMUM SPACING BETWEEN THE CHAMBER ROWS.
- 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 MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- 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

- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 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".
- 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 WARRANTY.

CONTACT STORMTECH AT 1-888-892-2684 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

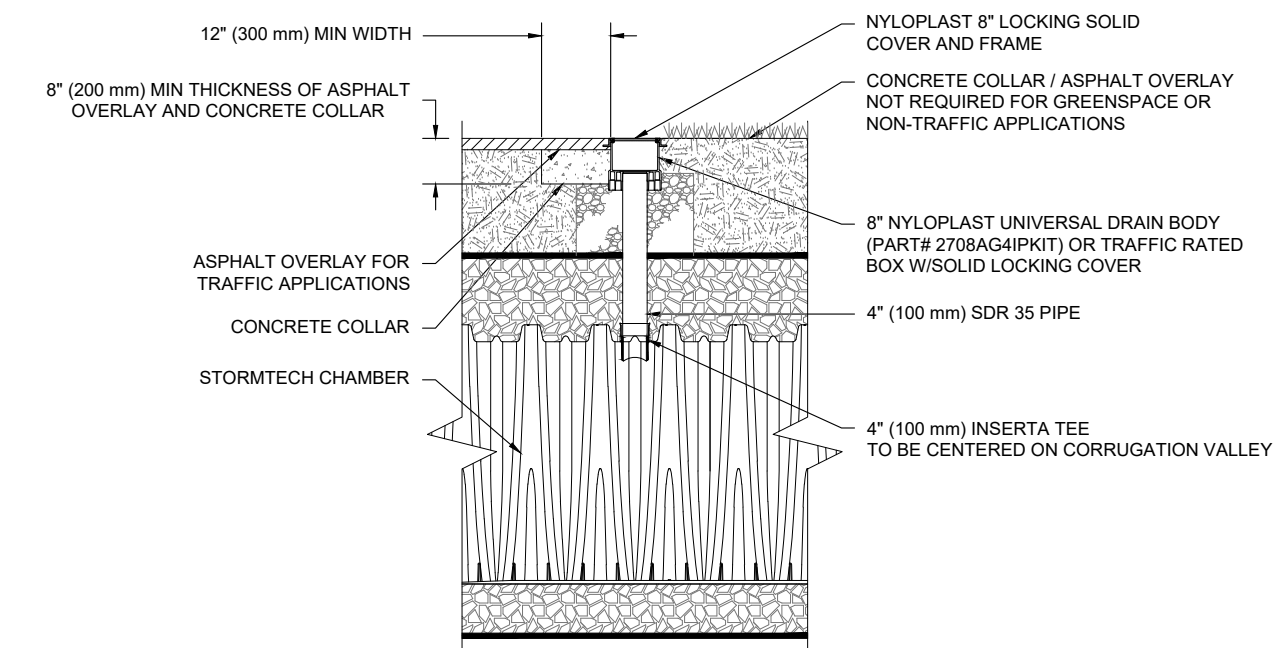


PART #	STUB	B	C
MC3500EPP08T	6" (150 mm)	33.21" (844 mm)	0.66" (17 mm)
MC3500EPP08B	6" (150 mm)	31.16" (791 mm)	---
MC3500EPP08T	8" (200 mm)	---	0.81" (21 mm)
MC3500EPP10T	10" (250 mm)	29.04" (738 mm)	0.93" (24 mm)
MC3500EPP10B	10" (250 mm)	26.36" (670 mm)	---
MC3500EPP12T	12" (300 mm)	---	1.35" (34 mm)
MC3500EPP12B	12" (300 mm)	23.38" (594 mm)	---
MC3500EPP15T	15" (375 mm)	---	1.50" (38 mm)
MC3500EPP15B	15" (375 mm)	20.03" (509 mm)	---
MC3500EPP18T	18" (450 mm)	---	1.77" (45 mm)
MC3500EPP18B	18" (450 mm)	14.48" (368 mm)	---
MC3500EPP18W	18" (450 mm)	---	2.06" (52 mm)
MC3500EPP24T	24" (600 mm)	---	2.75" (70 mm)
MC3500EPP24B	24" (600 mm)	---	---
MC3500EPP24W	24" (600 mm)	---	---
MC3500EPP30B	30" (750 mm)	---	---

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T" END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W" END CAPS WITH A WELDED CROWN PLATE END WITH "C"

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

MC-3500 ISOLATOR ROW PLUS DETAIL



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - 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 FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - 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.

NOTES

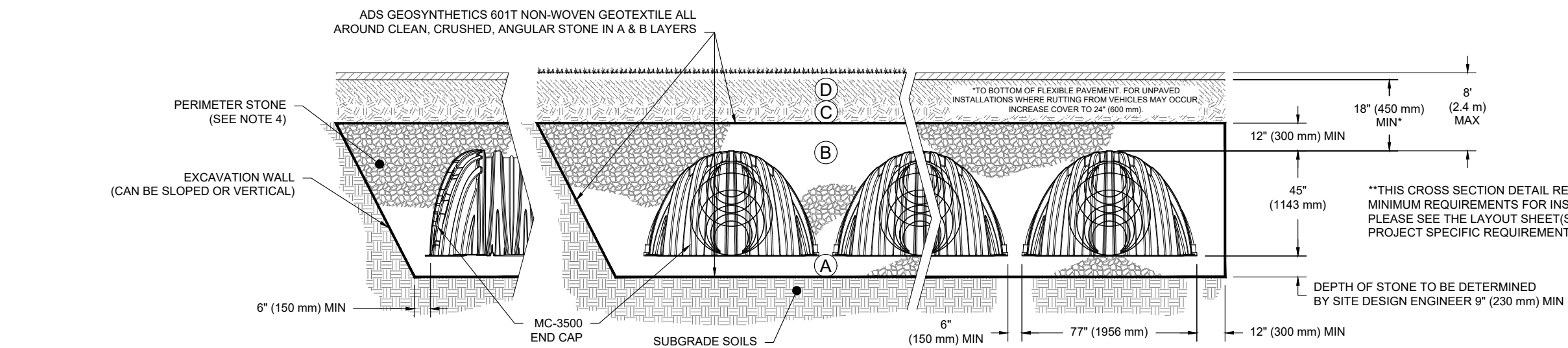
- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

MC-SERIES END CAP INSERTION DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 88, 9, 10	BEGIN COMPACTIONS AFTER 18" (450 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- 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 DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD 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".



NOTES:

- 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".
- 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.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - 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 AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT³%. 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.

MC-3500 CROSS SECTION DETAIL

OWNER:
EAGLE 11 LLC.

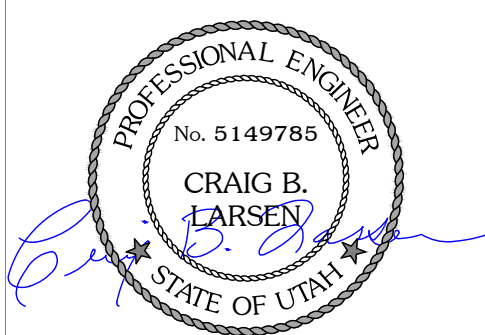
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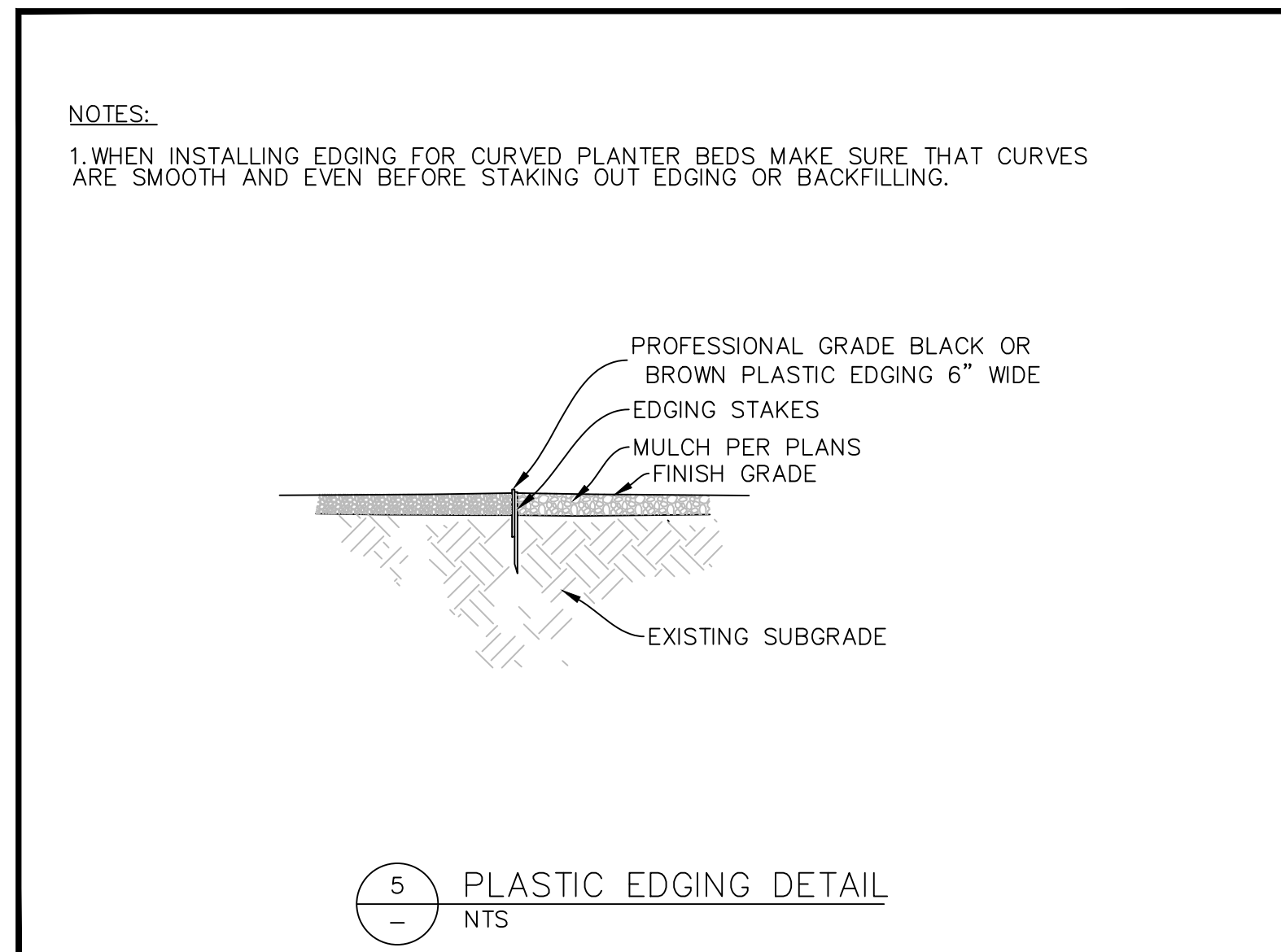
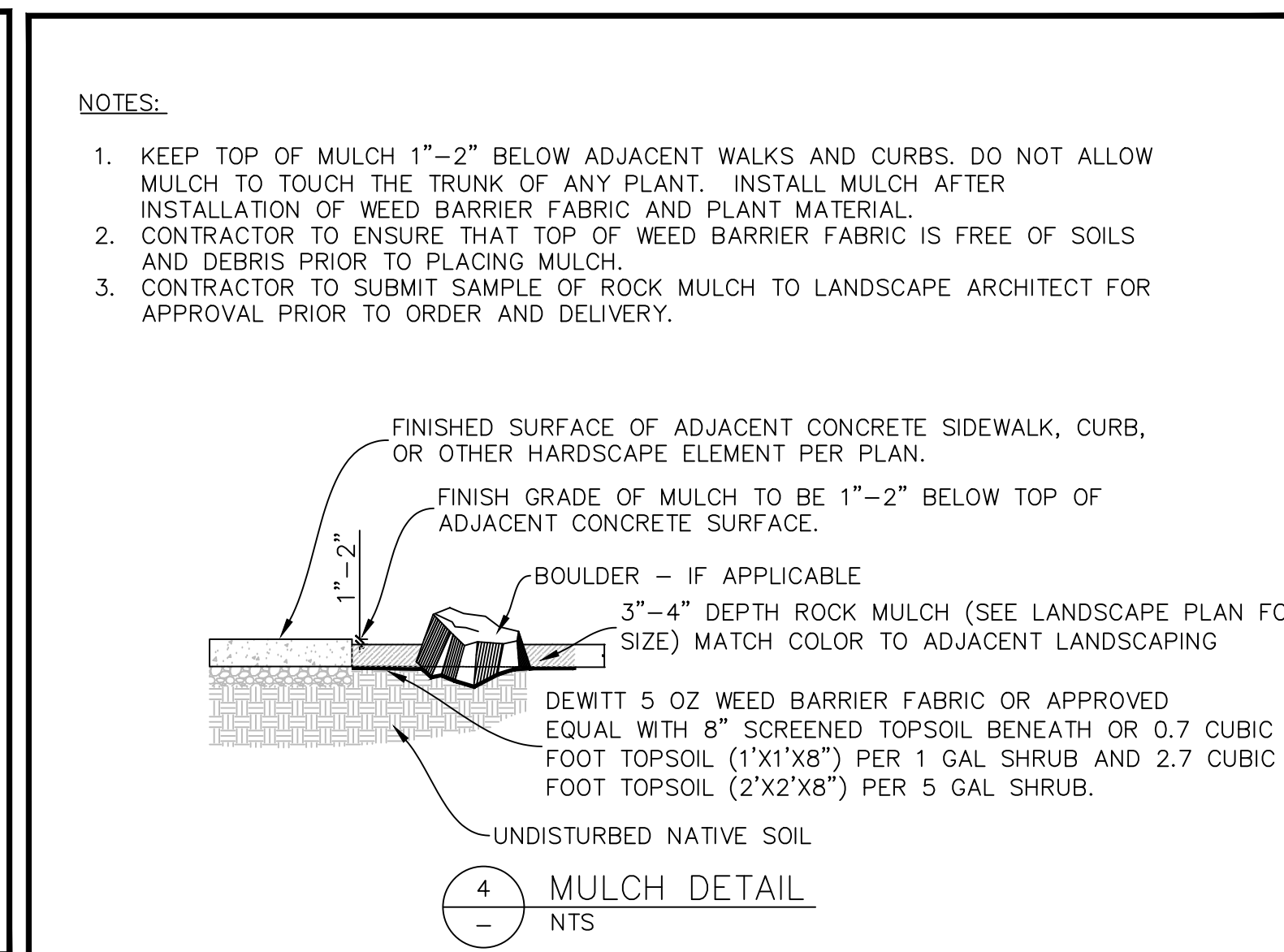
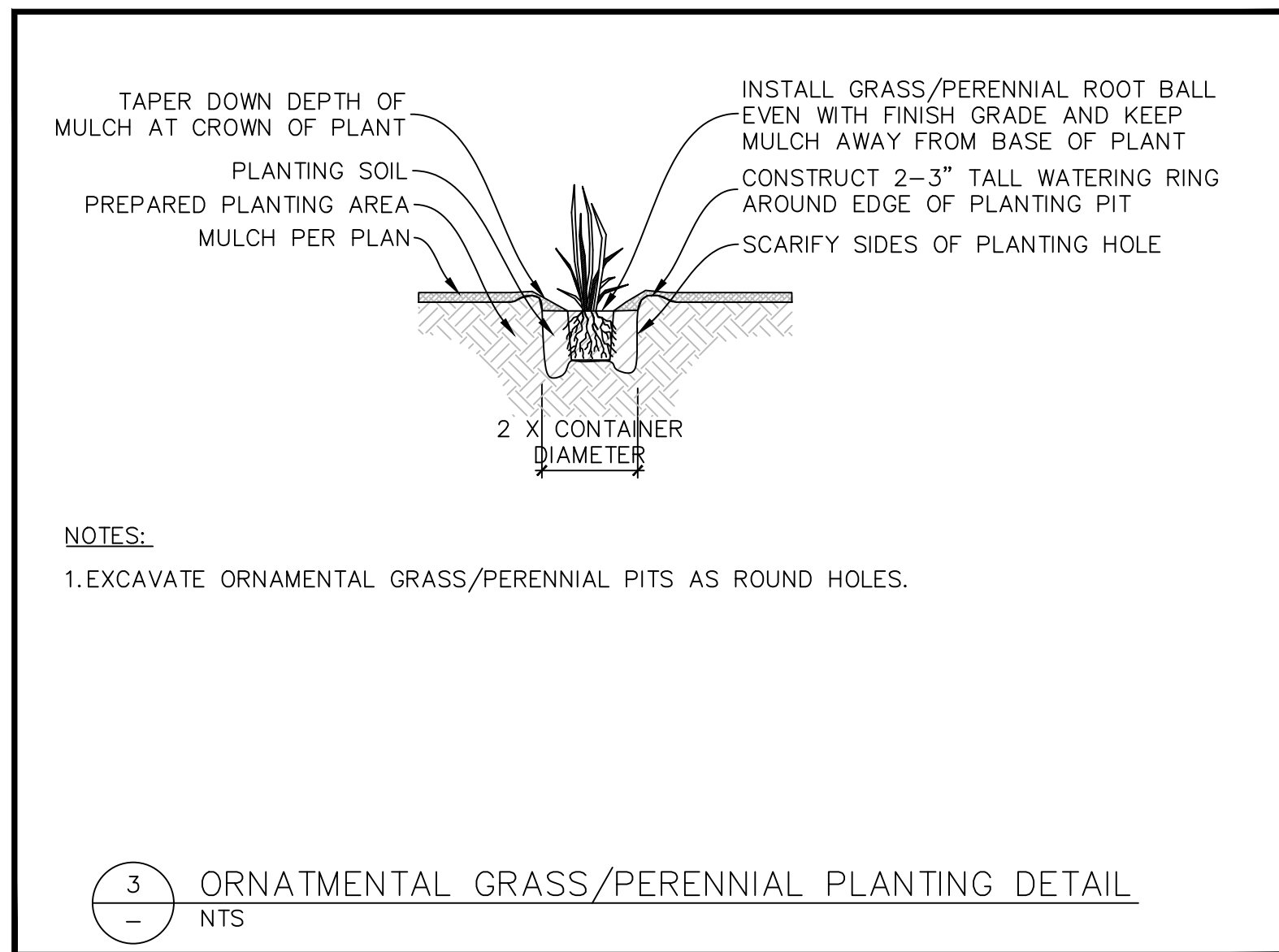
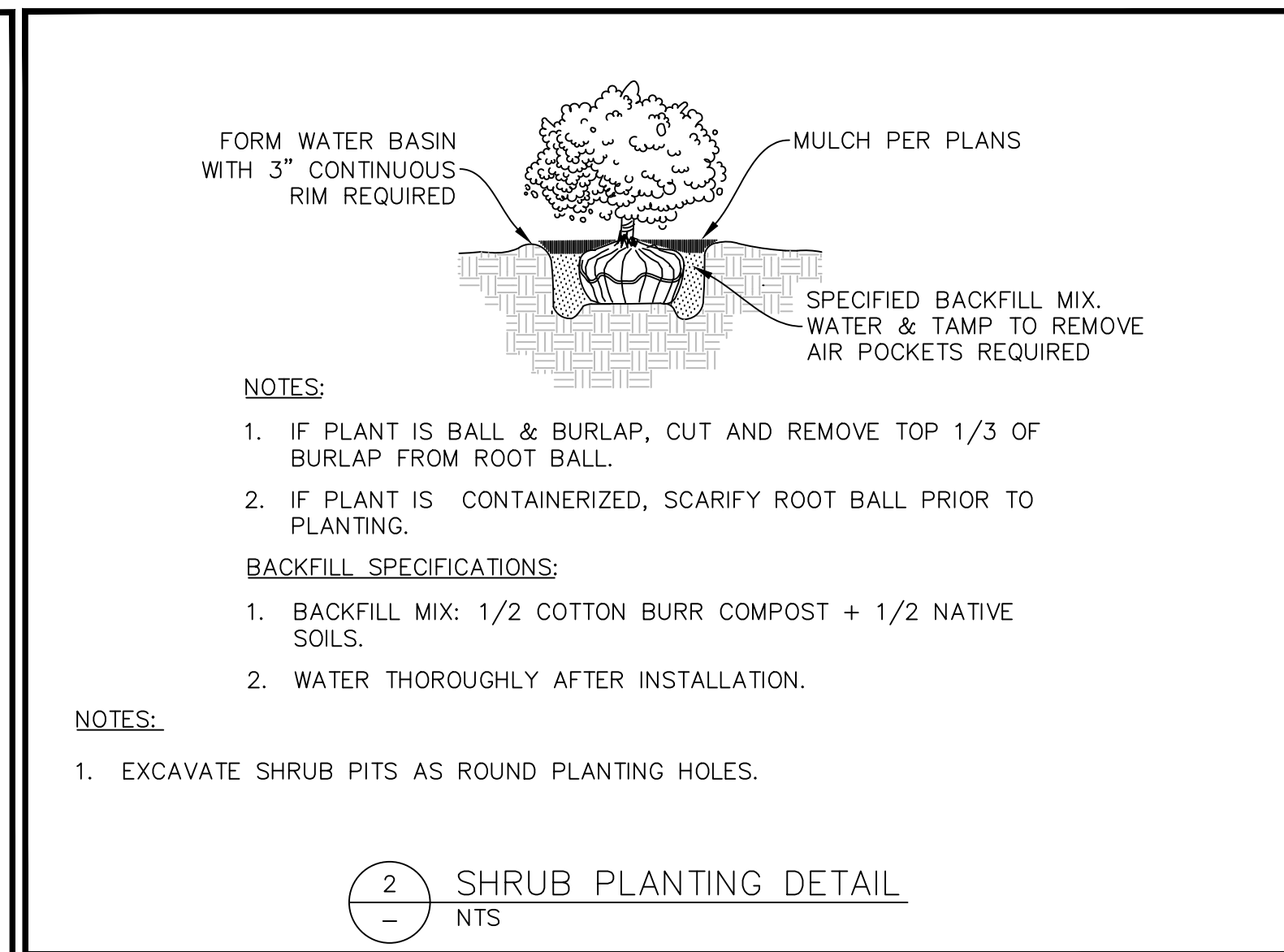
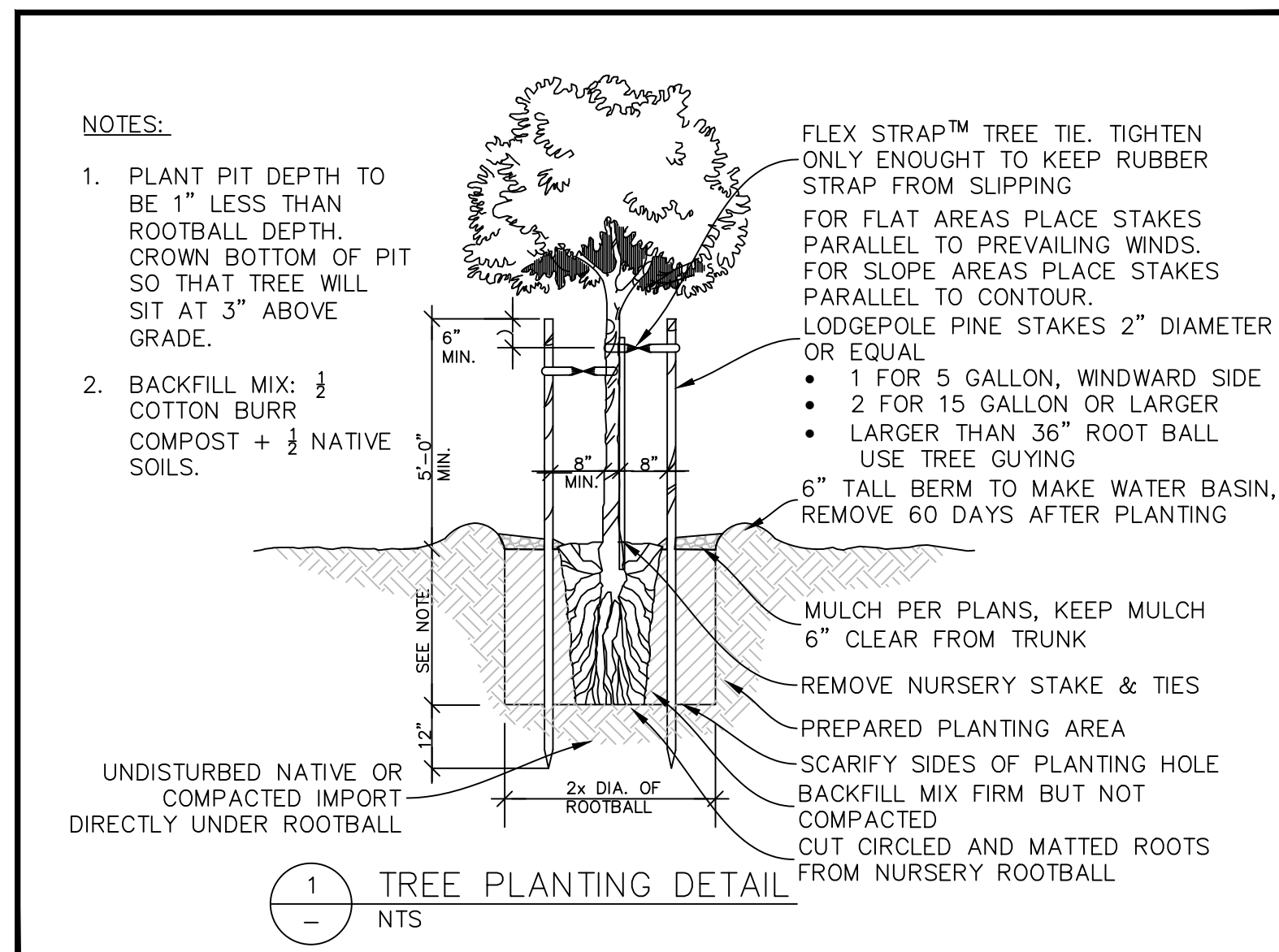
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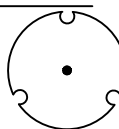
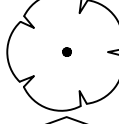
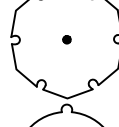
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DETAILS
C504





PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER		QTY	REMARKS
TREES								
	SYR ORJ	Syringa reticulata 'Summer Storm'	Summer Storm Japanese Tree Lilac	1.5" Cal.	B&B		1	
DROUGHT TOLERANT TREES								
	CER HOG	Cercis canadensis 'Hearts of Gold' 10' Tall	Hearts of Gold Eastern Redbud	1.5" Cal.	B&B		3	10' Tall
	GLE IMP	Gleditsia tricanthos inermis 'Impcole' 30'-40' Tall	Imperial Honeylocust	1.5" Cal.	B&B		4	30'-40' Tall
	PYR TRI	Pyrus calleryana 'Trinity' 25'-30' Tall	Trinity Flowering Pear	1.5" Cal.	B&B		8	25'-30' Tall
	ZEL GRE	Zelkova serrata 'Green Vase' 60'-80' Tall	Green Vase Sawleaf Zelkova	1.5" Cal.	B&B		2	60'-80' Tall
DROUGHT TOLERANT GRASSES								
	CAL ED2	Calamagrostis x acutiflora `Eldorado` 3'-4' Tall	Eldorado Feather Reed Grass	1 gal.	Pot		20	3'-4' Tall
	PEN HAM	Pennisetum alopecuroides 'Hameln' 18"-30" Tall	Hameln Fountain Grass	1 gal.	Pot		40	18"-30" Tall
DROUGHT TOLERANT PERENNIALS								
	GER CAN	Geranium x cantabrigiense `Biokovo` 6"-12" Tall	Biokovo Cranesbill	1 gal.	Pot		5	6"-12" Tall
DROUGHT TOLERANT SHRUBS								
	ARC CLR	Arctostaphylos x coloradensis 10"-24" Tall	Mock Bearberry Manzanita	3 gal.	Pot		5	10"-24" Tall
	BUD BHR	Buddleja davidii 'TOBUD1202' 3.5'-4' Tall	Buzz™ Hot Raspberry Butterfly Bush	5 gal.	Pot		11	3.5'-4' Tall
	COT ACK	Cotinus coggygia 'COTSIDH5' TM 3.5'-4' Tall	Velveteeny Smoke Tree	3 gal.	Pot		6	3.5'-4' Tall
	HIB EUU	Hibiscus syriacus 'SHIMRV24' TM 3.5'-4' Tall	Lil' Kim Violet Rose of Sharon	2 gal.	Pot		29	3.5'-4' Tall
	JUN MOO	Juniperus sabina 'Monard' TM 6"-12" Tall	Moor-Dense Juniper	5 gal.	Pot		10	6"-12" Tall
	MAH COM	Mahonia aquifolium 'Compacta' 2'-3' Tall	Compact Oregon Grape	5 gal.	Pot		23	2'-3' Tall
	PER NYJ	Perovskia atriplicifolia 'Blue Jean Baby' 2'-3' Tall	Blue Jean Baby Russian Sage	1 gal.	Pot		27	2'-3' Tall
	PHI SN3	Philadelphus x 'Snowbelle' 3.5'-4' Tall	Snowbelle Mock Orange	3 gal.	Pot		8	3.5'-4' Tall
	PHY GOL	Physocarpus opulifolius 'Golden Nugget' 3.5'-6' Tall	Golden Nugget Ninebark	5 gal.	Pot		23	3.5'-6' Tall
	ROS K32	Rosa x 'Radsunny' TM 3'-4' Tall	Sunny Knock Out Yellow Rose	5 gal.	Pot		6	3'-4' Tall
	ROS PMR	Rosa x 'WEKphom' TM 2'-3' Tall	Pink Home Run Rose	5 gal.	Pot		5	2'-3' Tall
PERENNIALS/GROUND COVER								
	HOS FOR	Hosta fortunei 'Aureomarginata' 24" Tall	Gold Crown Hosta	1 gal.	Pot		7	24" Tall
SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	QTY	REMARKS
GROUND COVERS								
	NAT SED	Native Seed Mix	Ranches Golf Course Native Seed Mix	---			1,938 sf	
	ROC MUL	Rock Mulch	1"-2" Charcoal Grey Rock Mulch 3" Depth	---			4,871 sf	



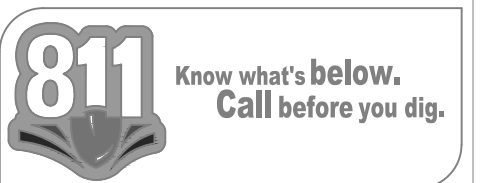
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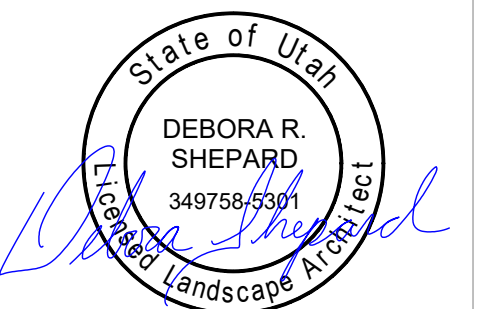
CLEAR ROCK RD.

SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
EAGLE MOUNTAIN,
UTAH COUNTY, UTAH



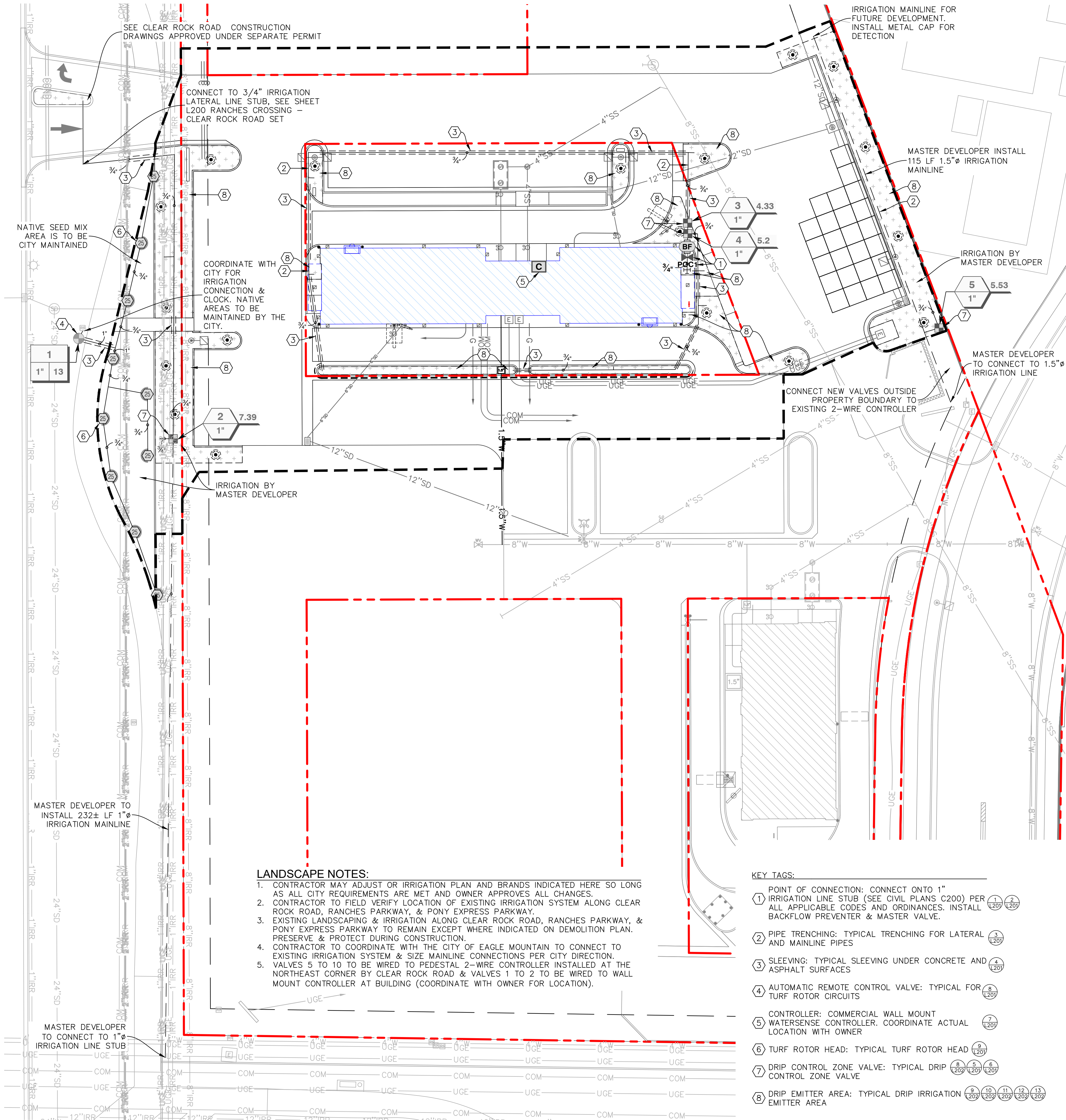
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B	06.03.24	CITY COMMENTS

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LANDSCAPE
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L101



LANDSCAPE NOTES:

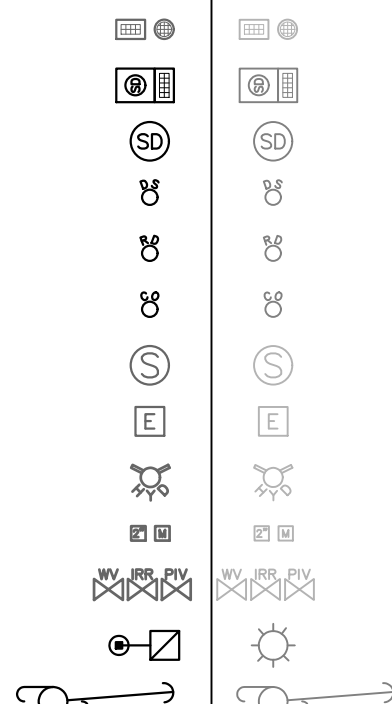
- CONTRACTOR MAY ADJUST OR IRRIGATION PLAN AND BRANDS INDICATED HERE SO LONG AS ALL CITY REQUIREMENTS ARE MET AND OWNER APPROVES ALL CHANGES.
- CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING IRRIGATION SYSTEM ALONG CLEAR ROCK ROAD, RANCHES PARKWAY, & PONY EXPRESS PARKWAY.
- EXISTING LANDSCAPING & IRRIGATION ALONG CLEAR ROCK ROAD, RANCHES PARKWAY, & PONY EXPRESS PARKWAY TO REMAIN EXCEPT WHERE INDICATED ON DEMOLITION PLAN. PRESERVE & PROTECT DURING CONSTRUCTION.
- CONTRACTOR TO COORDINATE WITH THE CITY OF EAGLE MOUNTAIN TO CONNECT TO EXISTING IRRIGATION SYSTEM & SIZE MAINLINE CONNECTIONS PER CITY DIRECTION.
- VALVES 5 TO 10 TO BE WIRED TO PEDESTAL 2-WIRE CONTROLLER INSTALLED AT THE NORTHEAST CORNER BY CLEAR ROCK ROAD & VALVES 1 TO 2 TO BE WIRED TO WALL MOUNT CONTROLLER AT BUILDING (COORDINATE WITH OWNER FOR LOCATION).

KEY TAGS:

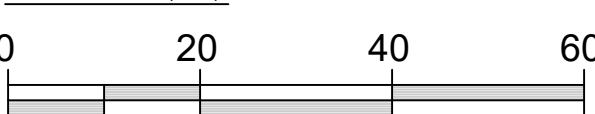
- POINT OF CONNECTION: CONNECT ONTO 1" IRRIGATION LINE STUB (SEE CIVIL PLANS C200) PER ALL APPLICABLE CODES AND ORDINANCES. INSTALL BACKFLOW PREVENTER & MASTER VALVE.
- PIPE TRENCHING: TYPICAL TRENCHING FOR LATERAL AND MAINLINE PIPES
- SLEEVING: TYPICAL SLEEVING UNDER CONCRETE AND ASPHALT SURFACES
- AUTOMATIC REMOTE CONTROL VALVE: TYPICAL FOR TURF ROTOR CIRCUITS
- CONTROLLER: COMMERCIAL WALL MOUNT WATERSENSE CONTROLLER. COORDINATE ACTUAL LOCATION WITH OWNER
- TURF ROTOR HEAD: TYPICAL TURF ROTOR HEAD
- DRIP CONTROL ZONE VALVE: TYPICAL DRIP CONTROL ZONE VALVE
- DRIP EMITTER AREA: TYPICAL DRIP IRRIGATION EMITTER AREA

LEGEND

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SS	SS
W	W
OHE	OHE
UGE	UGE
COM	COM
G	G
COND	COND

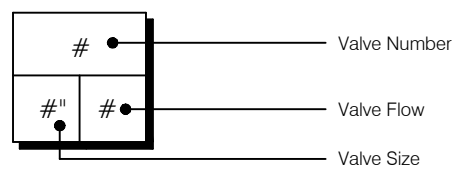


SCALE (FT.)



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
	Rain Bird 3504-PC 4.0 Turf Rotor, 4.0" Pop-Up. Adjustable and Full Circle.	4	45	4.13	35'
	Rain Bird 5006-PL-PC-SAM-R-NP-MPR 25 Turf Rotor, 6in. Pop-Up, Plastic Riser, with Flow Shut-Off Device. Matched Precipitation Rotor (MPR Nozzle), Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Check Valve, In-Stem Pressure Regulator, and Non Potable Purple Cap.	10	25		23'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird XCZ-100-PRB-COM 1" Wide Flow Drip Control Kit for Commercial Applications. 1" Ball Valve with 1" PESB Valve and 1" Pressure Regulating 40psi Quick-Check Basket Filter. 0.3gpm to 20gpm.	4			
	Drip Emitter .9 GPH @ 12" O.C. APPROX. 20 L.F. OF TUBING PER TREE RAINBIRD XFD BROWN DRIPLINE TUBING WITH IN-LINE EMITTER 18" AND 36" FROM TREE BASE, SEE DETAIL	18			
	Area to Receive Drip Emitters Rain Bird XB-PC Single Outlet, Pressure Compensating Drip Emitters. Flow rates of 0.5gph=blue, 1.0gph=black, and 2.0gph=red. Comes with a self-piercing barb inlet x barb outlet. Emitter Notes: 2.0 GPH emitters (2 assigned to each 1 gal. plant) 2.0 GPH emitters (3 assigned to each 5 gal. plant) 2.0 GPH emitters (2 assigned to each 2 gal. plant) 2.0 GPH emitters (2 assigned to each 3 gal. plant) 2.0 GPH emitters (3 assigned to each 1.5" Cal. plant)	4,958 s.f.			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird PEB-PRS-D 1" 1", 1-1/2", 2" Plastic Industrial Valves. Low Flow Operating Capability, Globe Configuration. With Pressure Regulator Module.	1			
	Zurn Wilkins 720A 1" Reduced Pressure Backflow preventer, install per WaterPro requirements	1			
	Rain Bird ESP8LXMEF 8 Station WaterSense Commercial Controller. Wall mount, Flow sensing	1			
	Point of Connection 1"	1			
-----	Irrigation Lateral Line: PVC Schedule 40 3/4"	839.4 l.f.			
-----	Irrigation Lateral Line: PVC Schedule 40 1"	92.9 l.f.			
-----	Irrigation Mainline: PVC Schedule 40	386.4 l.f.			
-----	Irrigation Mainline: PVC Schedule 40 3/4"	17.6 l.f.			
-----	Pipe Sleeve: PVC Class 200 SDR 21	274.6 l.f.			



OWNER:
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SECTION 20, TOWNSHIP 5
SOUTH, RANGE 1 WEST
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Rev.	Date	Comment
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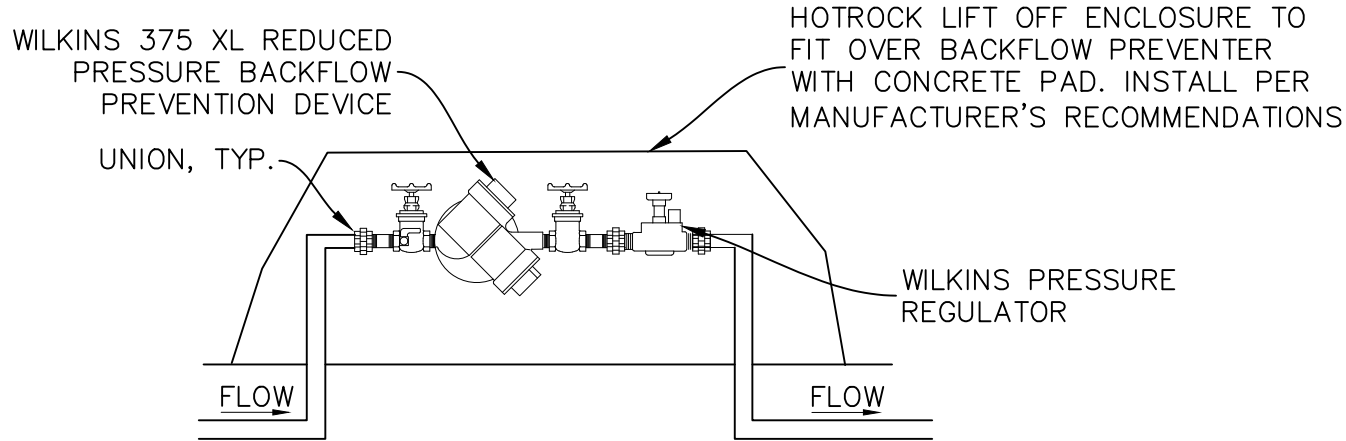


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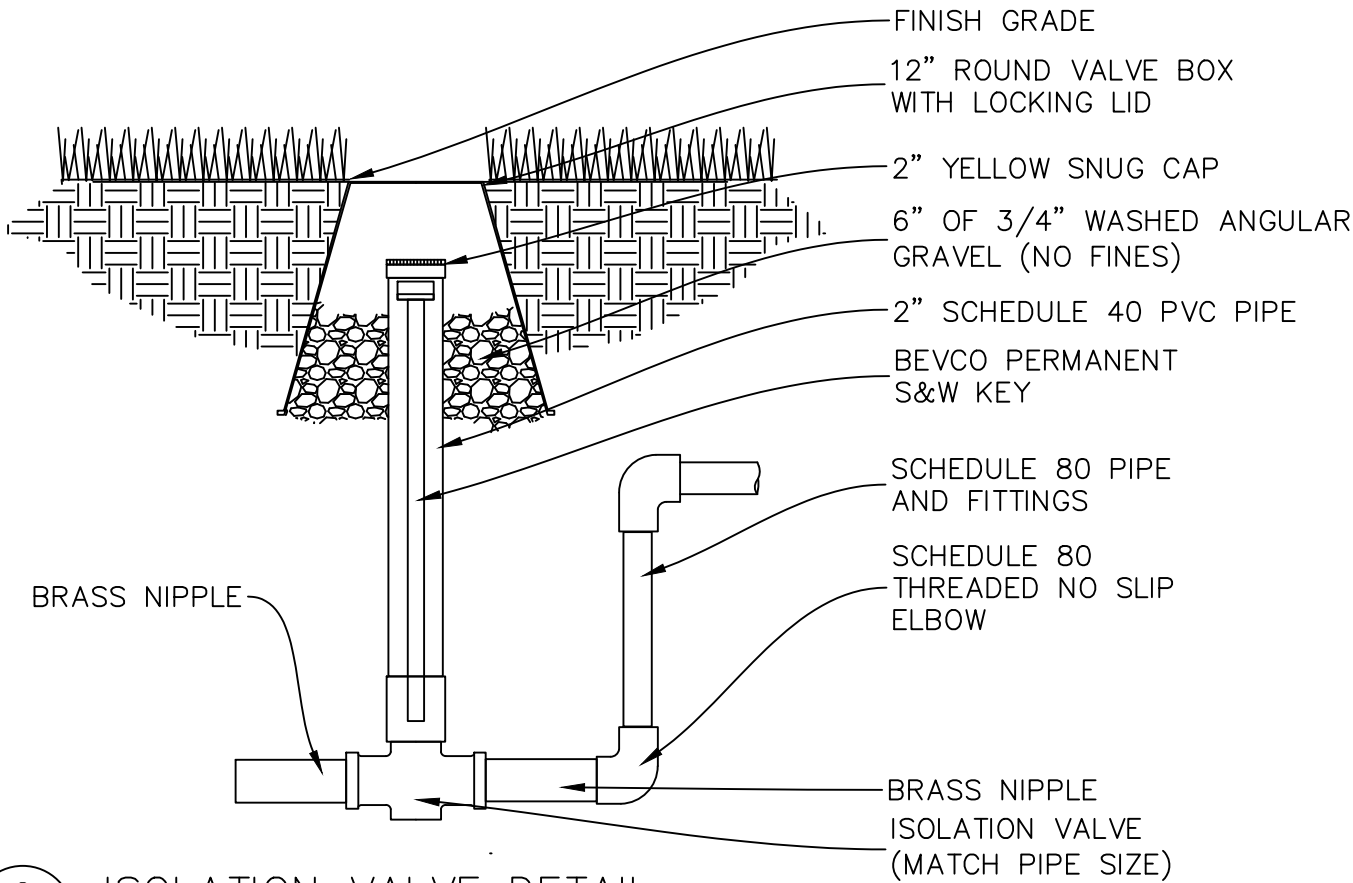
IRRIGATION
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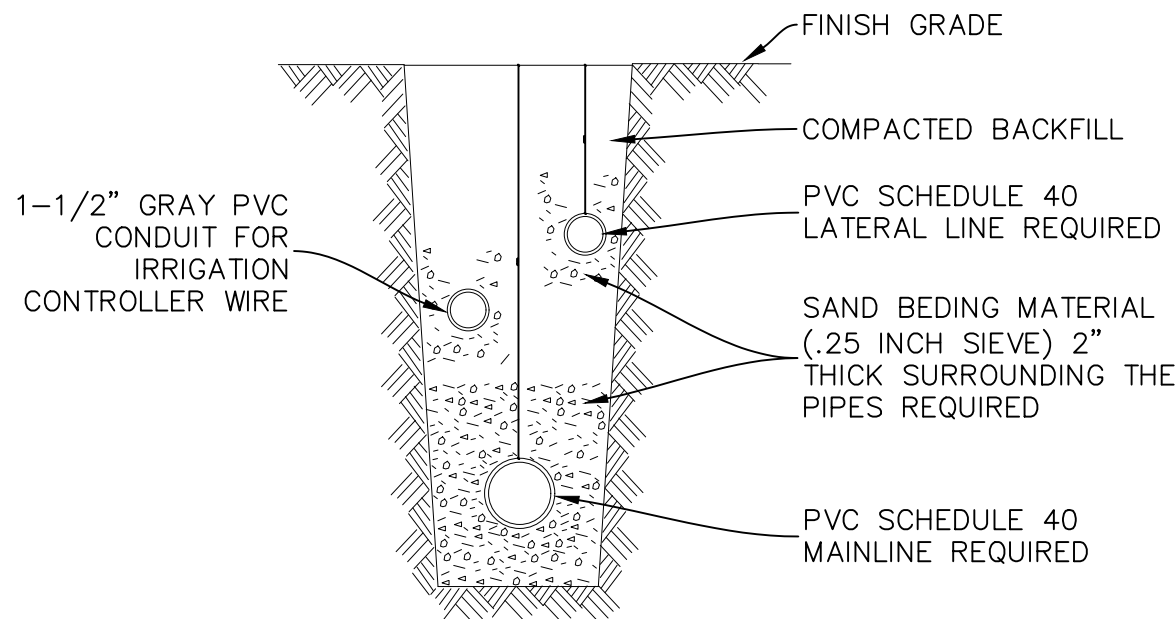
1. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. WHEREVER AN IRON BASED MATERIAL ADJOINS A BRASS BASED MATERIAL A DIELECTRIC UNION IS REQUIRED. SIZE AS NECESSARY.
3. WRAP ALL THREADS WITH TEFLON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
4. MAIN LINE PIPE SIZE SHALL BE PER PLAN, 1" MIN..



1 BACKFLOW DETAIL
- NTS



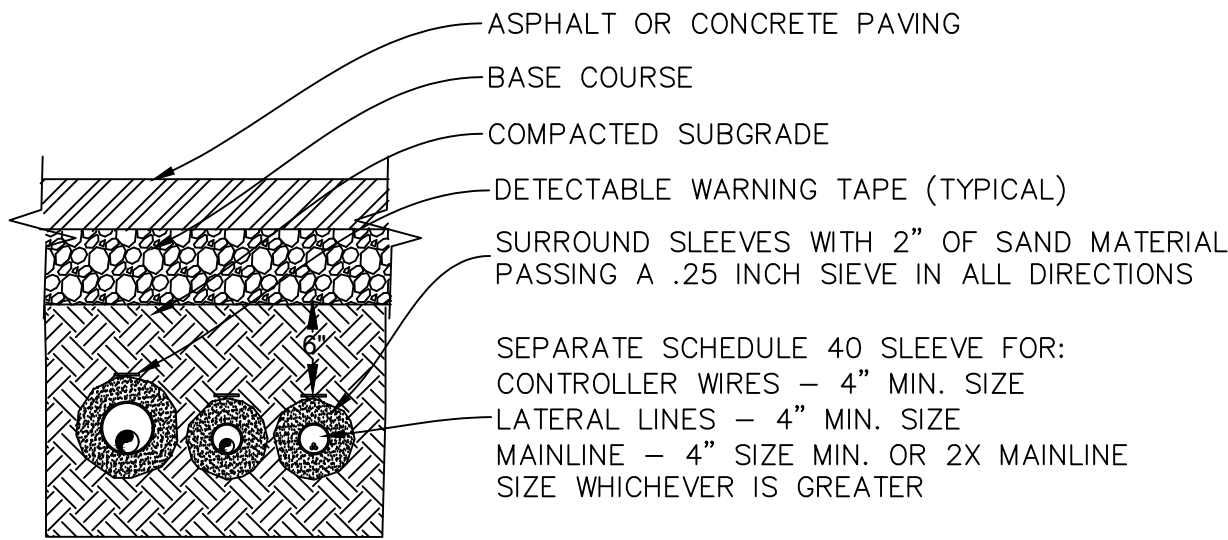
2 ISOLATION VALVE DETAIL
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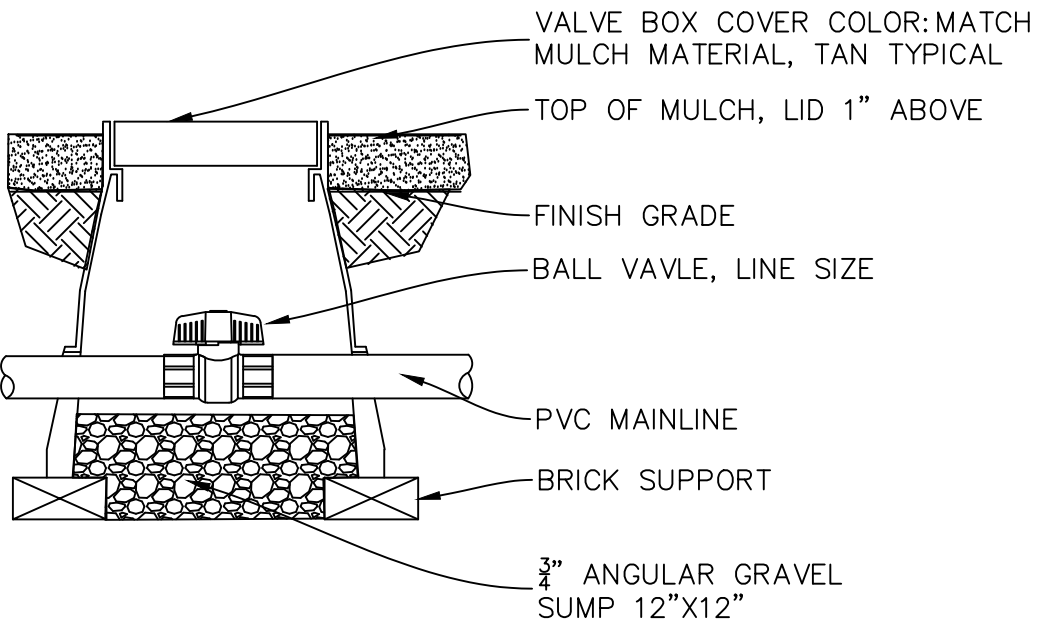
3 PIPE LAYOUT AND TRENCHING DETAIL
- NTS

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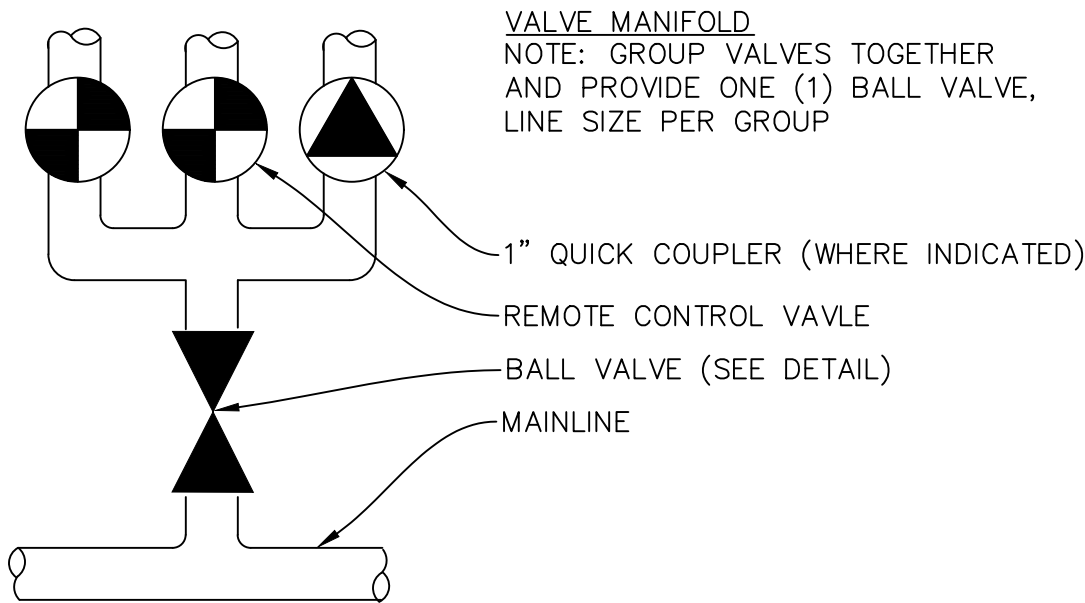
1. WHEN MULTIPLE PIPES OCCUR IN ONE TRENCH ADD MULTIPLE SLEEVES.
2. WIRES SHALL BE IN SEPARATE SLEEVE.
3. EXTEND ALL SLEEVING 8" MINIMUM BEYOND EDGE OF PAVING.



4 SLEEVING DETAIL
- NTS



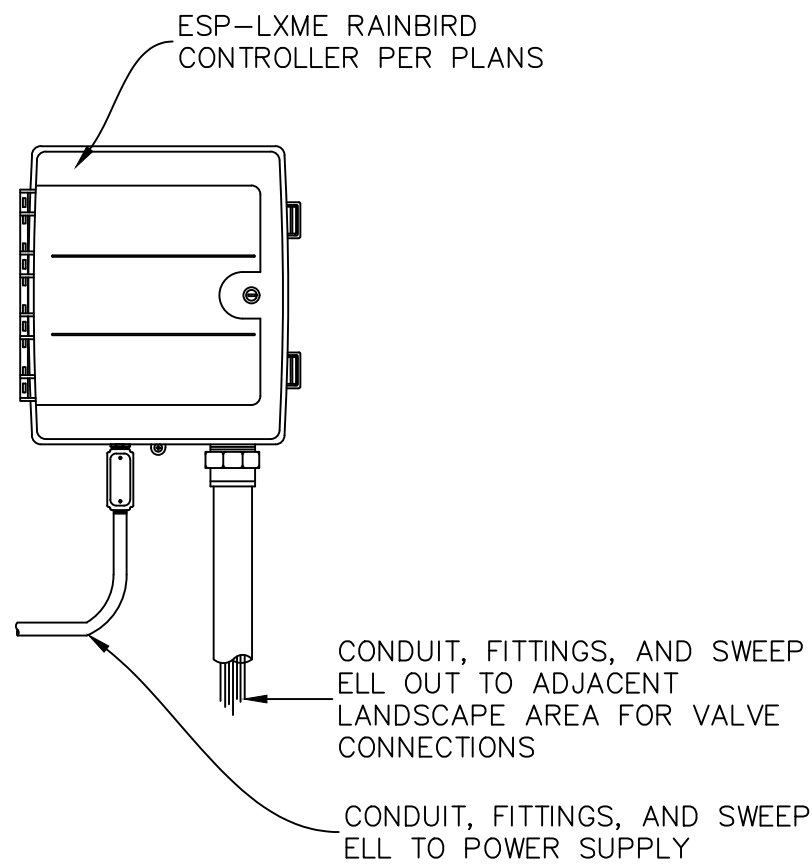
5 BALL VALVE DETAIL
- NTS



6 VALVE MANIFOLD DETAIL
- NTS

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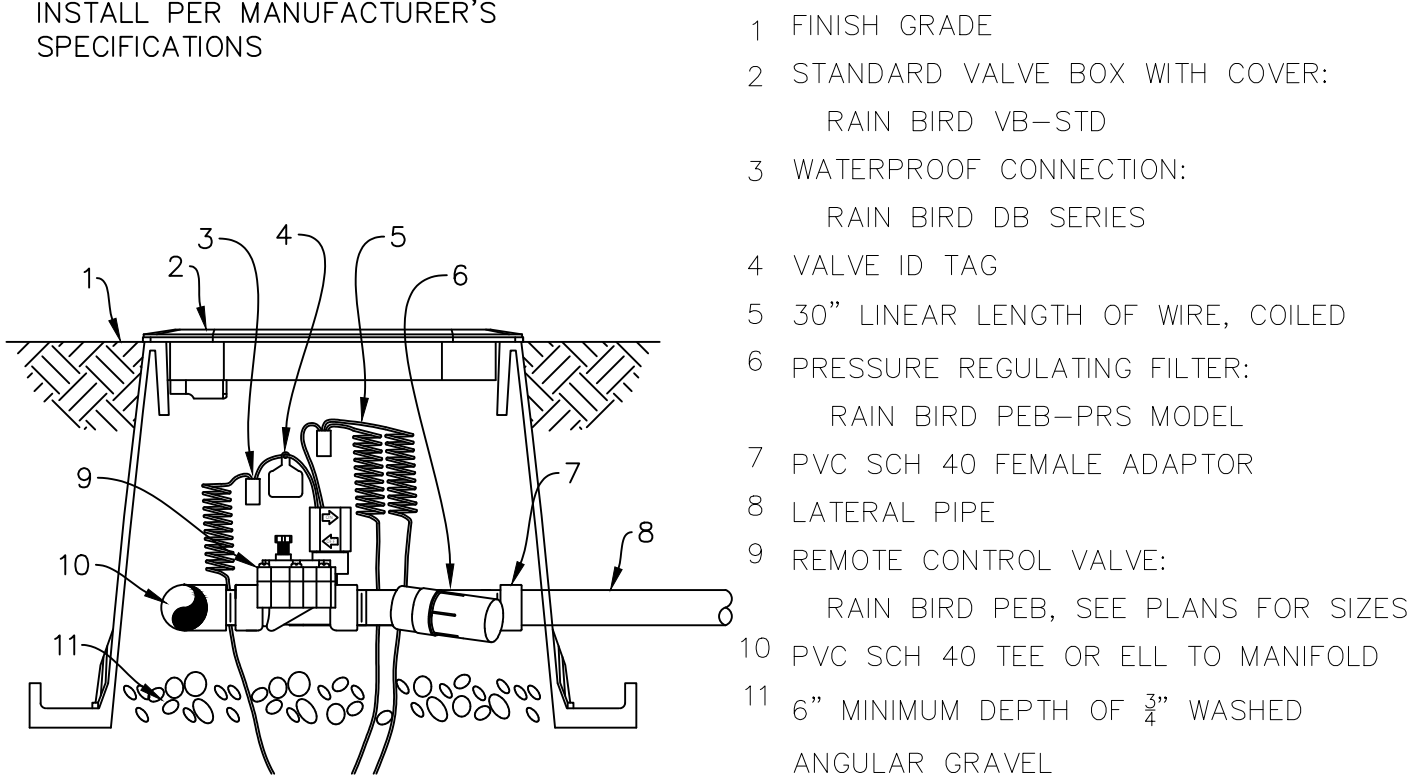
1. WALL MOUNT CONTROLLER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL LOCAL CODES. EXACT LOCATION TO BE APPROVED BY OWNER. GROUND CONTROLLER PER MANUFACTURERS RECOMMENDATION AND SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL GROUND CONTROLLER AND PROVIDE SLEEVING FROM ADJACENT LANDSCAPE AREA TO CONTROLLER LOCATION.
2. CONNECT CONTROLLER TO POWER AND VALVES.
3. LANDSCAPE CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR TO ENSURE PROPER GROUNDING OF CONTROLLER TO BUILDING GROUNDING GRID.



7 WALL MOUNT IRRIGATION CONTROLLER DETAIL
- NTS

NOTES:

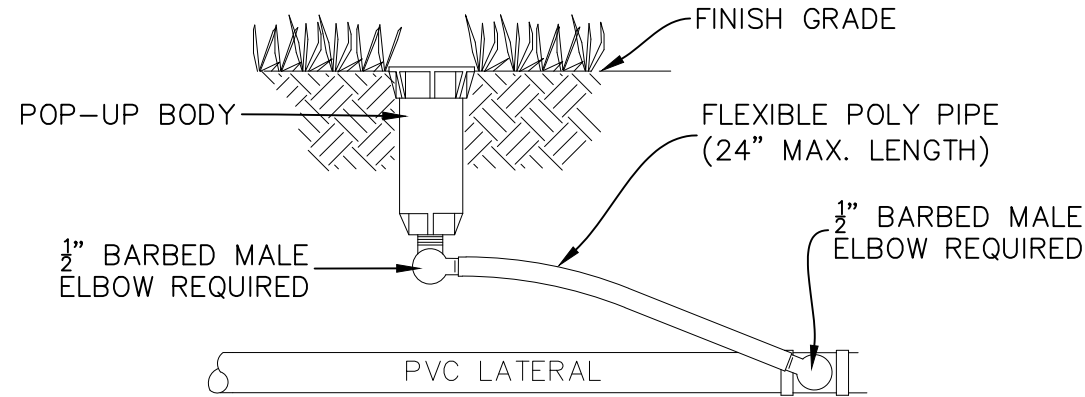
1. INSTALL PER MANUFACTURER'S SPECIFICATIONS



8 AUTOMATIC CONTROL VALVE DETAIL
- NTS

NOTES:

1. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
2. INSTALL 2" AWAY FROM HARDSCAPES.



9 ROTOR HEAD DETAIL
- NTS

OWNER:
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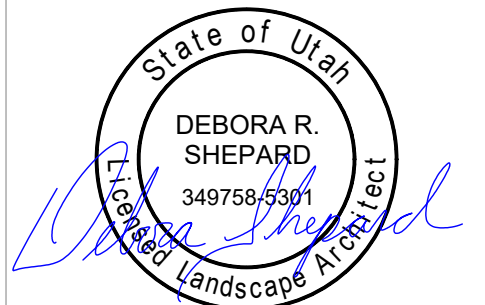
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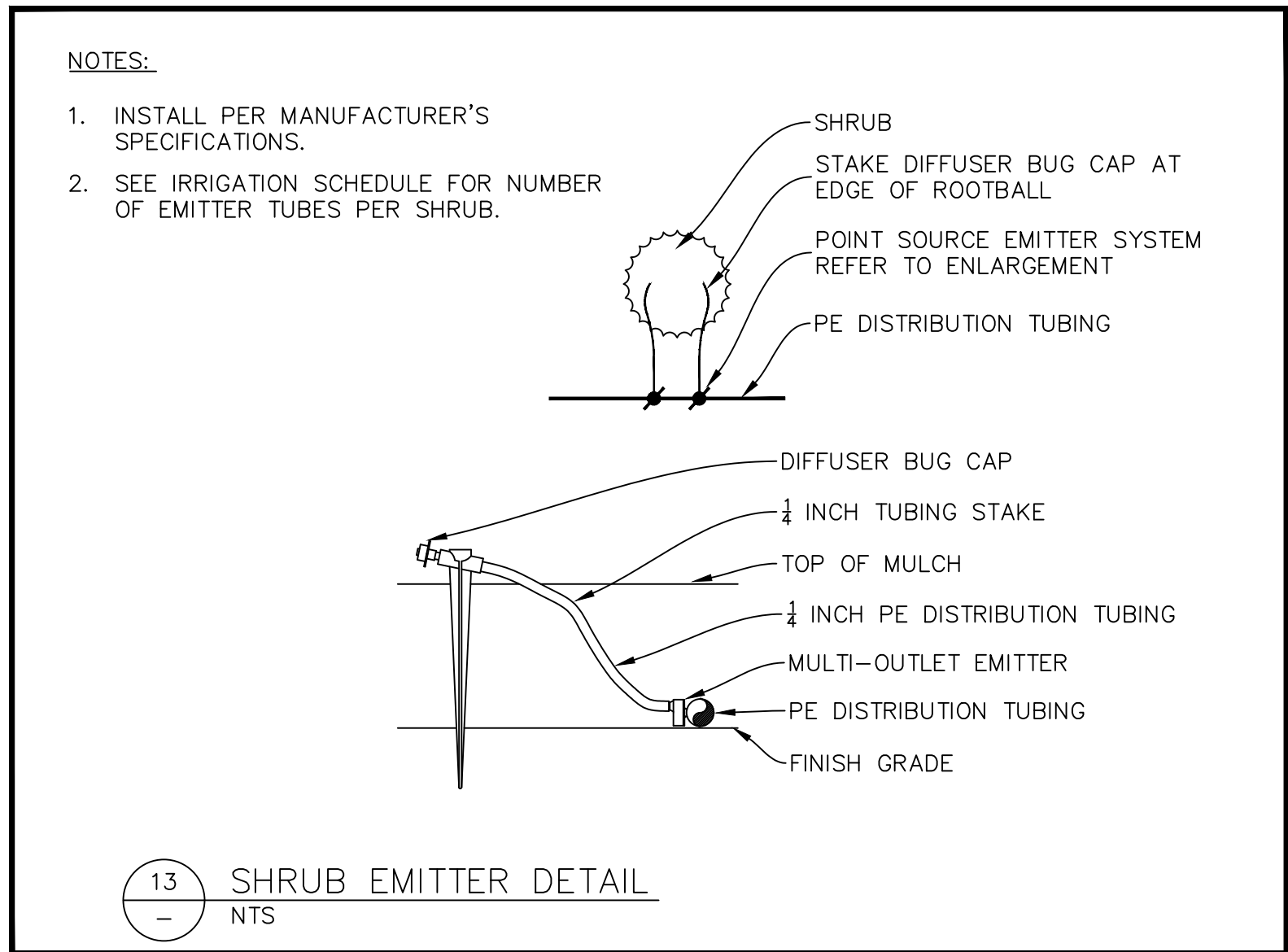
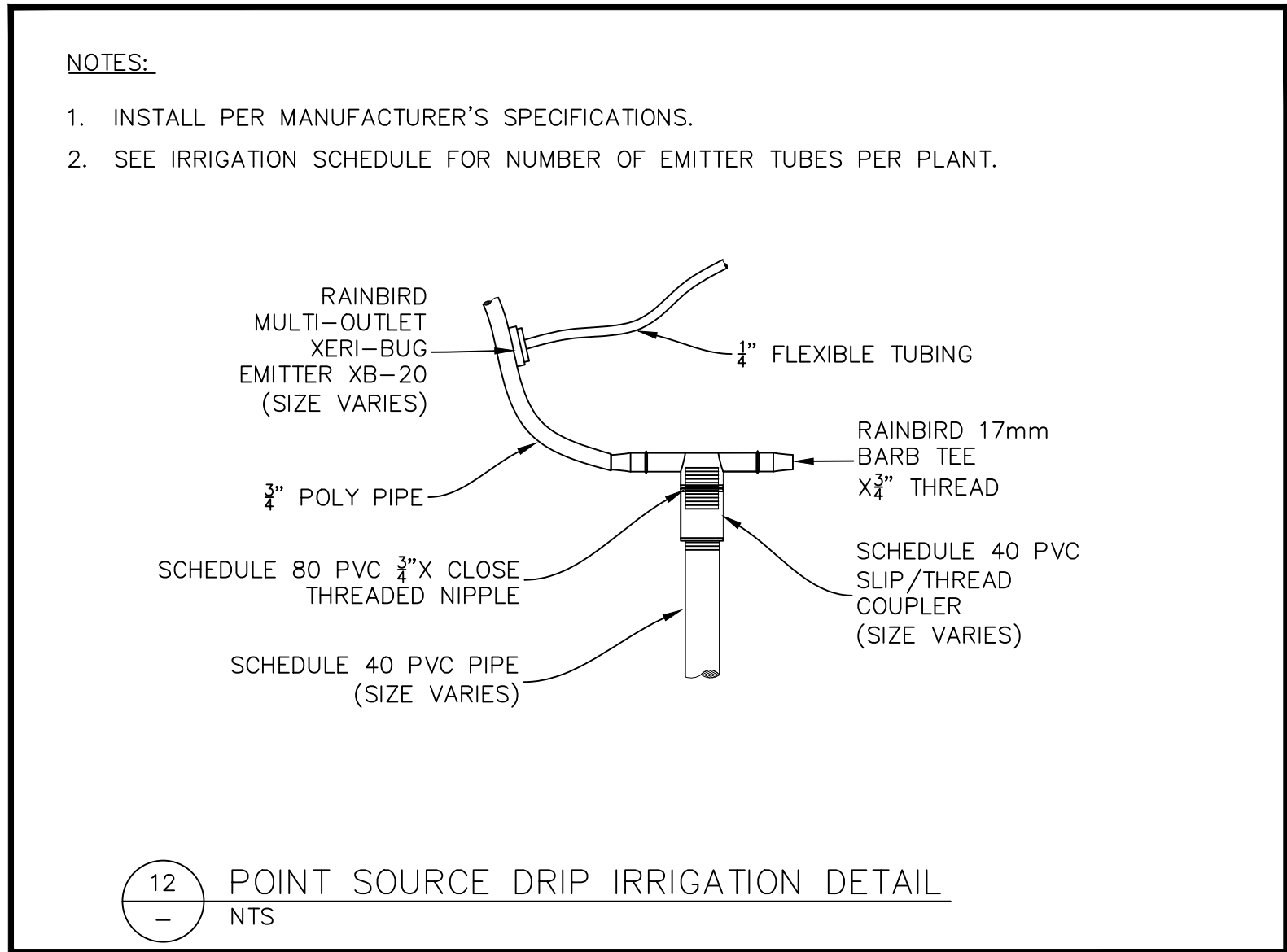
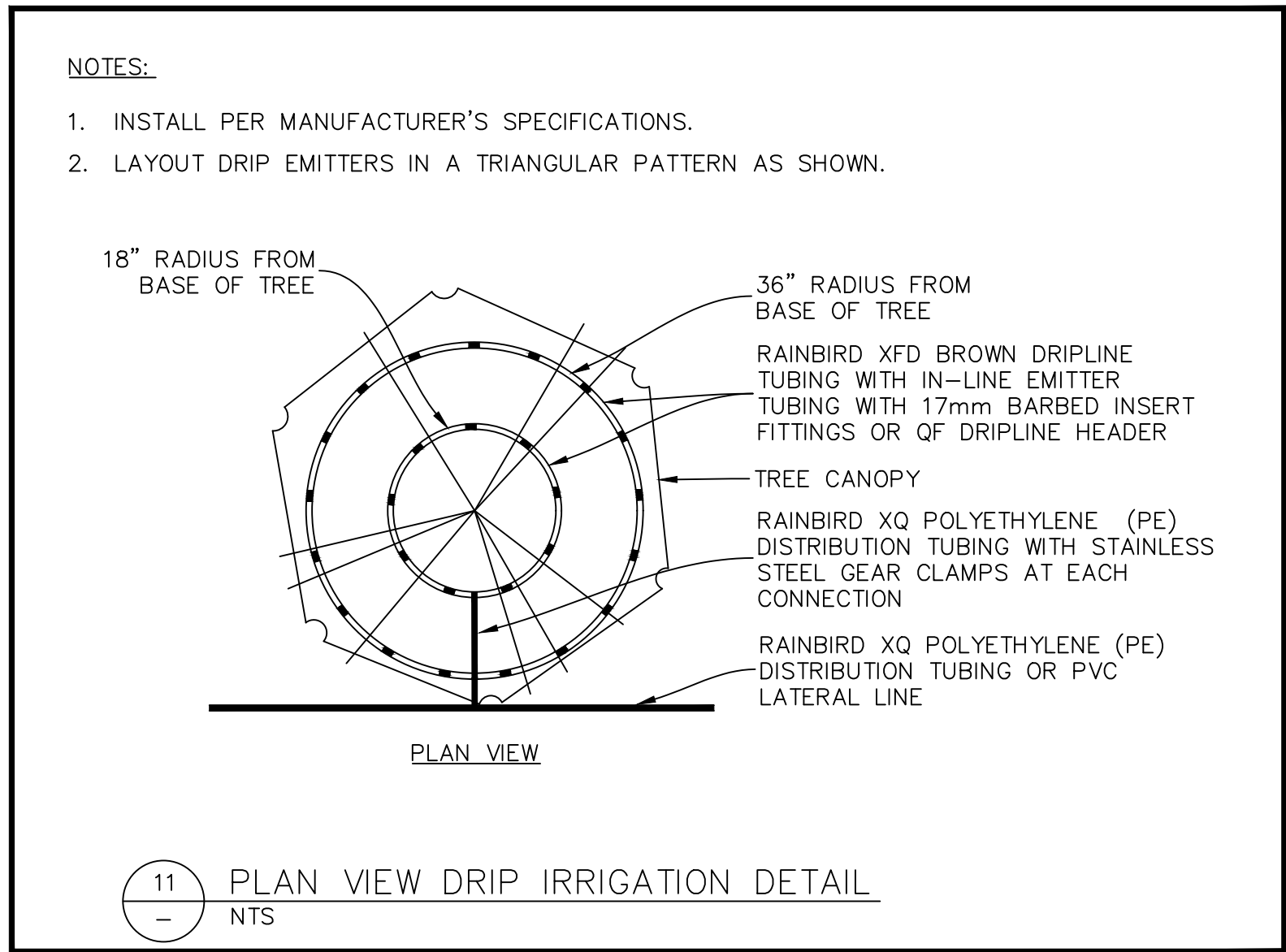
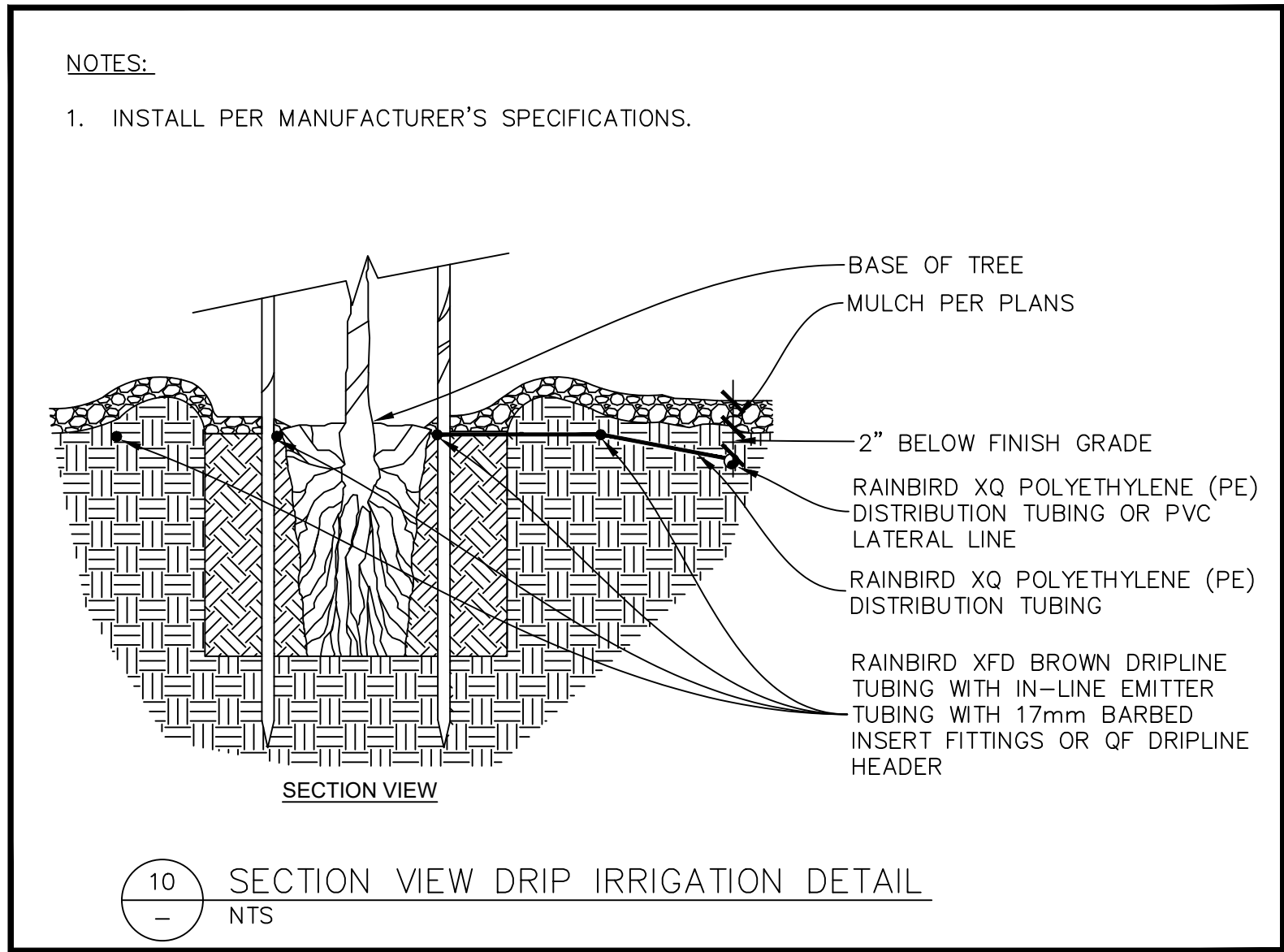
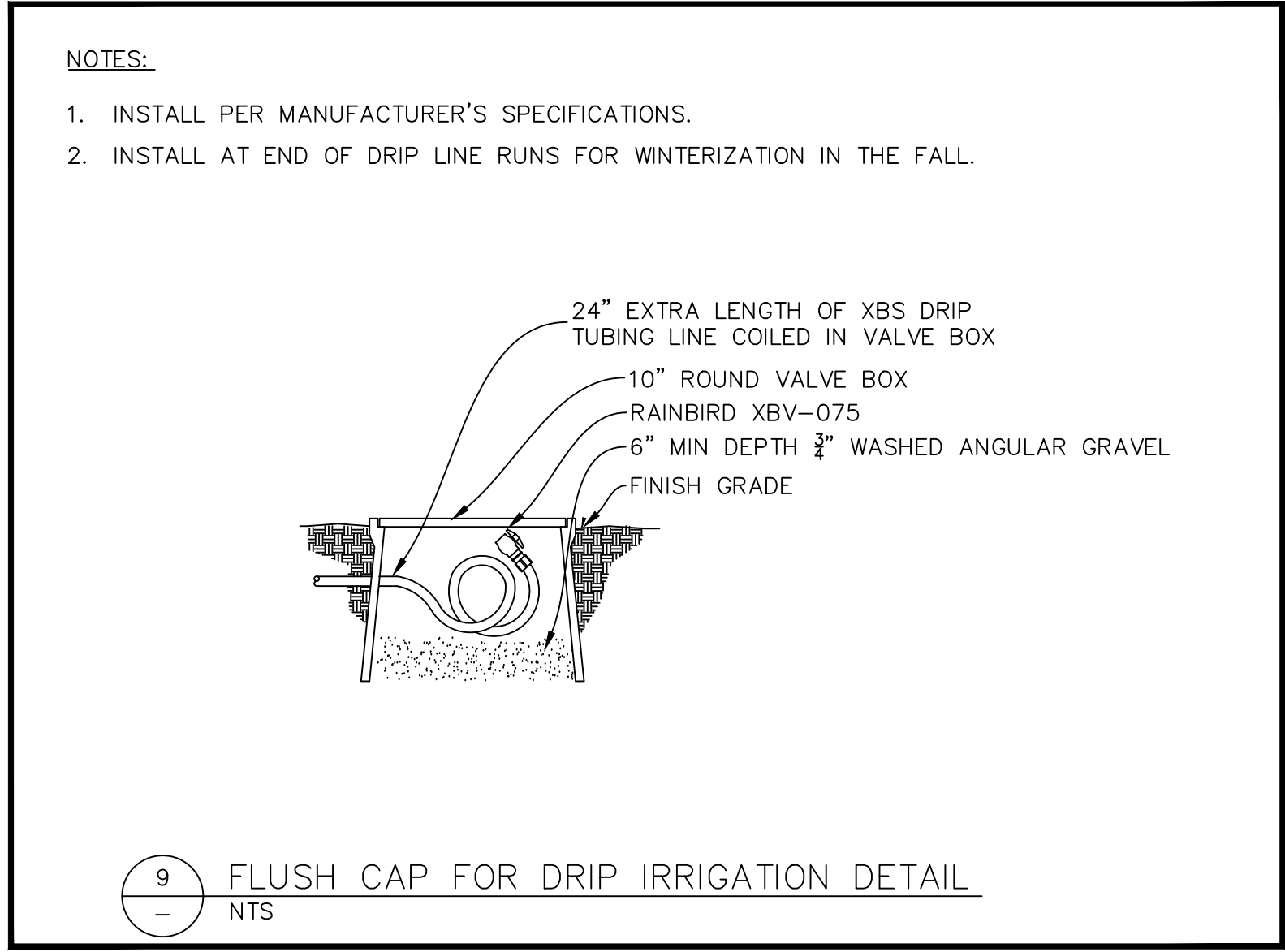
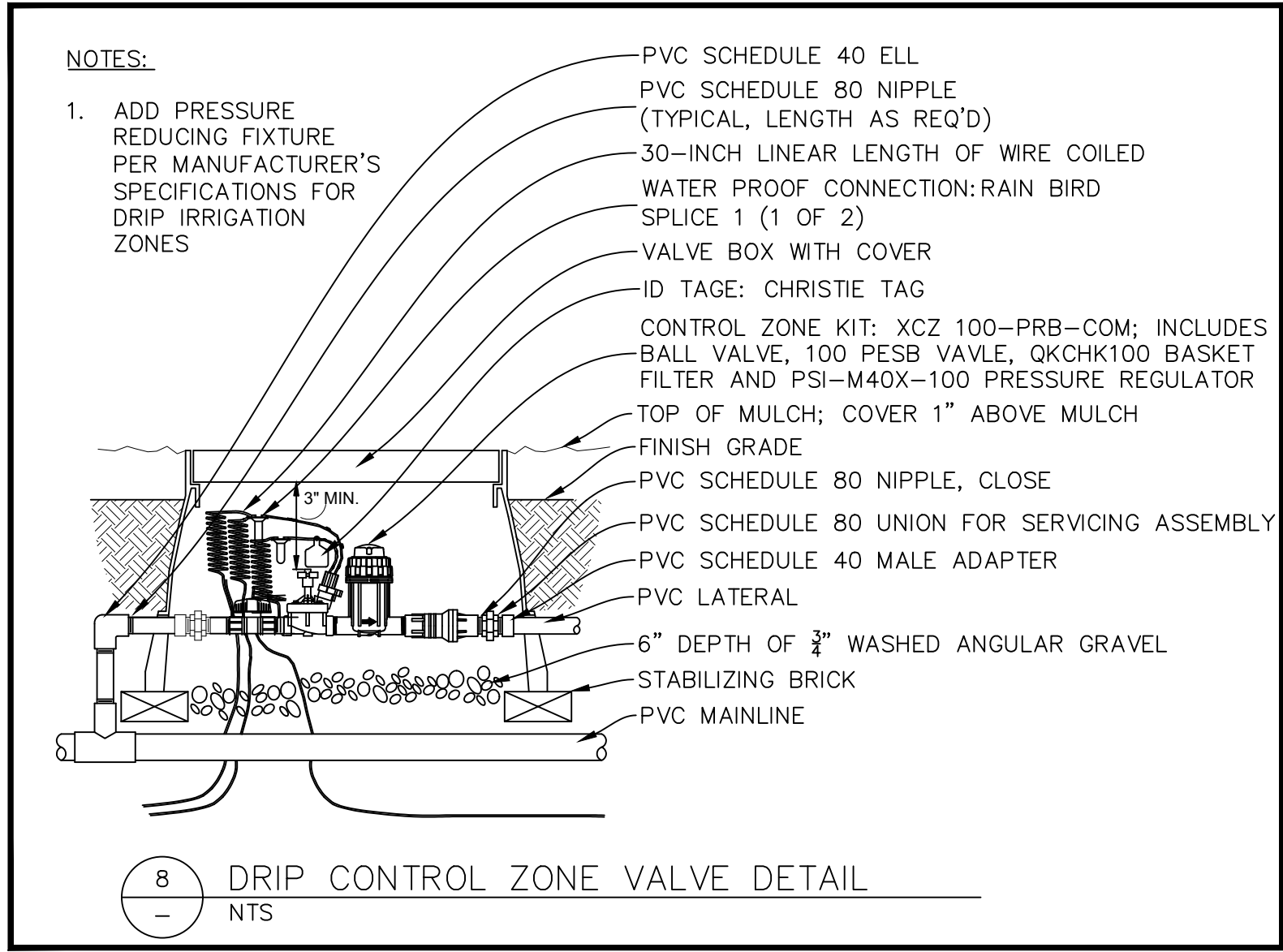
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IRRIGATION
DETAILS
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IRRIGATION NOTES

1. IRRIGATION PLAN IS DIAGRAMMATIC, ALL IRRIGATION EQUIPMENT SHALL BE LOCATED IN PLANTING AREAS ONLY AND ON THE PROPERTY OF THE OWNER, UNLESS NOTED OTHERWISE. REFER TO THE IRRIGATION LEGEND AND DETAILS FOR EQUIPMENT AND INSTALLATION. THE CONTRACTOR IS RESPONSIBLE TO MAKE ADJUSTMENTS AS NEEDED TO ENSURE PROPER COVERAGE OF ALL LANDSCAPED AREAS.
2. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF POINT OF CONNECTION AND THE STATIC WATER PRESSURE AT THAT LOCATION PRIOR TO BEGINNING ANY IRRIGATION WORK. IF THE LOCATION OR WATER PRESSURE IS DIFFERENT THAN EXPRESSED BY THE DRAWINGS OR IF THE PRESSURE APPEARS TO BE UNUSUALLY HIGH OR LOW, THE CONTRACTOR SHALL CONTACT THE OWNERS REP IMMEDIATELY.
3. CONTRACTOR SHALL KEEP THE PREMISES CLEAN AND FREE OF EXCESS EQUIPMENT, MATERIALS, AND RUBBISH INCIDENTAL TO WORK ON THE LANDSCAPE AND IRRIGATION.
4. BACKFLOW PREVENTION DEVICES SHALL BE AS INDICATED ON THE PLANS AND SCHEDULE AND BE INSTALLED AS TO MANUFACTURERS RECOMMENDATIONS.
5. ALL MAINLINE AND LATERAL PIPE TO BE SCHEDULE 40 PVC PIPE. NO POLY PIPE SHALL BE INCLUDED. FITTINGS UP TO 1 1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1 1/2" MUST BE SCHEDULE 80 OR BETTER. MANUAL DRAIN VALVES SHALL BE PLACED ON THE MAINLINE IN LOW SPOTS. ALL MANUAL DRAINS SHALL BE PLACED IN SEPARATE VALVE BOXES.
6. CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO THE UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER.
7. MODIFY LOCATION OF IRRIGATION COMPONENTS TO AVOID PLACING TREES, SHRUBS AND OTHER SITE ELEMENTS DIRECTLY OVER PIPE, PER PLANS. PLANT MATERIAL TO BE PLANTED 12" AWAY FROM IRRIGATION BOXES OR SPRAY HEADS. DO NOT LOCATE VALVE BOXES IN LAWN AREAS UNLESS CLEARLY STATED ON PLANS.
8. CONTRACTOR SHALL INSTALL A 1" THREADED TEE WITH 1" THREADED PLUG AT POINT OF CONNECTION IN ORDER TO BLOW OUT THE SYSTEM WITH AN AIR COMPRESSOR EACH FALL.INSTALL FLUSH CAP AT THE END OF ALL DRIP IRRIGATION LINES TO FACILITATE BLOW-OUT AND MAINTENANCE (SEE DETAIL 11, SHEET L202).
9. LATERAL LINES SHALL BE NO SMALLER THAN 3/4". LANDSCAPE CONTRACTOR TO ENSURE THE FOLLOWING PIPE SIZES DO NOT EXCEED THE SUGGESTED GPM LISTED BELOW:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM

10. INSTALL DRIP IRRIGATION PER PLANS AND DETAILS. INSTALL DRIP RINGS AT ALL TREES. CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY.
11. CONTRACTOR SHALL PROVIDE AND INSTALL SLEEVES FOR ALL PIPES AND WIRES UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE INSIDE. ALL WIRE SHALL BE IN SEPARATE SLEEVES (NOT SHOWN). ALL CONTROL WIRE SHALL BE INSTALLED IN CLASS 200 PIPE. PLACE JUNCTION BOXES WHERE NECESSARY TO MINIMIZE LONG RUNS OR AT DIRECTIONAL CHANGES.
12. WATER LINES AND ELECTRICAL LINES MUST NOT SHARE CONDUITS. ALL WIRE CONNECTIONS MUST BE CONTAINED IN VALVE BOX WITH 3' OF EXTRA WIRE. WIRE TO BE CONNECTED TO MAIN LINE PIPE WHERE POSSIBLE WITH TAPE AT 25' INTERVALS. SLACK IN CONTROL WIRES REQUIRED AT EVERY CHANGE OF DIRECTION. WIRES MUST HAVE SEPARATE COLORS FOR COMMON, CONTROL AND SPARE. MINIMUM 1 SPARE WIRE FOR EVERY 5 VALVES. ALL CONTROL WIRES TO BE INSULATED 14 GAUGE COPPER. ALL SPARE WIRES MUST "HOME RUN" TO CONTROLLER AND SPARE WIRES AVAILABLE AT ALL VALVE MANIFOLDS AND CLUSTERS.
13. ALL SLEEVES INSTALLED SHALL BE DUCT TAPED TO PREVENT DIRT OR OTHER DEBRIS ENTERING PIPE. ALL SLEEVES SHALL BE IDENTIFIED BY WOOD OR PVC STAKES AND BE SPRAY PAINTED WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
14. IRRIGATION SYSTEM MUST CONTAIN CHECK VALVES TO PREVENT LOW POINT DRAINAGE.
15. SPACE ALL SPRAY HEADS 2" AWAY FROM ANY HARDSCAPE.
16. CONTRACTOR SHALL MATCH PRECIPITATION RATES AS MUCH AS POSSIBLE FOR ALL LANDSCAPED AREAS. OVERHEAD IRRIGATION MUST HAVE A MINIMUM DU (DISTRIBUTION UNIFORMITY) OF 60%.
17. IRRIGATION CONTRACTOR SHALL PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING.
18. MAIN LINES SHALL BE 36" DEEP MIN. AND LATERAL LINES 18" DEEP MIN. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
19. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CITY AND/OR COUNTY CODES. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS.
20. IRRIGATION INSTALLATION TO COMPLY WITH APPLICABLE CITY SPECIFICATIONS AND DRAWINGS.
21. CONTRACTOR SHALL INSTALL IRRIGATION SYSTEM WITH HEAD TO HEAD COVERAGE IN ALL TURF AREAS. USE VAN AND/OR U-SERIES NOZZLES AS NECESSARY TO PROVIDE PROPER COVERAGE AND TO KEEP WATER OFF OF BUILDINGS AND HARDSCAPES.
22. POWER TO CONTROLLER TO BE PROVIDED BY OWNER. OWNER TO SPECIFY EXACT LOCATION OF CONTROLLER. INSTALL PER MANUFACTURERS INSTRUCTIONS. IRRIGATION CONTRACTOR SHALL PROVIDE AN AS-BUILT IRRIGATION PLAN UPON COMPLETION OF INSTALLATION AND PRIOR TO FINAL PAYMENT.
23. INSTALL A FLUSH CAP AT THE END OF EACH DRIP LINE PER DETAILS FOR MAINTENANCE.
24. THE PURPOSE OF THE IRRIGATION SYSTEM IS TO PROVIDE SUFFICIENT WATER TO MAINTAIN PLANTS IN OPTIMAL CONDITION DURING DRIER WEATHER CONDITIONS. TIME CLOCKS SHALL BE ADJUSTED CONTINUOUSLY THROUGHOUT THE YEAR TO PROVIDE WATER ONLY WHEN THE SOIL IS DRY AT A DEPTH OF FOUR (4) INCHES THE FIRST INITIAL GROWING SEASON AND SIX (6) INCHES THE FOLLOWING YEARS.
25. IF ANY SUBSURFACE DRAINAGE OR RUN-OFF IS VISIBLE AT LOW AREAS, ACROSS SIDEWALKS, OR AT LOWER PORTIONS OF SLOPES, IMMEDIATELY SHUT THE VALVES OFF TO ALLOW THE AREA TO COMPLETELY DRY OUT. IF THIS CONDITION CONTINUES AFTER SUBSEQUENT WATERINGS THE CONTRACTOR SHALL NOTIFY THE OWNERS REP.
26. INSPECTIONS OF IRRIGATION SYSTEM SHALL BE MADE ON A DAILY BASIS TO OBSERVE AND PROVIDE REPAIRS OR REMEDIES TO THE FOLLOWING UNACCEPTABLE PROBLEMS: OVER-SPRAY ON SIDEWALKS, STREETS, PAVED AREAS, PARKING AREAS, FENCES, WALLS, SIGNS, BUILDINGS, OR STRUCTURES; DRAINAGE OR RUN-OFF ACROSS SIDEWALKS, PAVING, OR STREETS; DAMAGED OR IMPROPERLY OPERATING HEADS, PIPING, VALVES, CONTROLLER, OR OTHER IRRIGATION EQUIPMENT.
27. CONTRACTOR TO PROVIDE 2 HOURS OF TRAINING TO OWNER AT THE END OF THE PROJECT REGARDING OPERATION FOR IRRIGATION SYSTEM. CONTRACTOR WILL SHOW OWNER HOW TO OPERATE THE ISOLATION VALVE, BACKFLOW VALVE, CONTROLLER, AND REMOTE CONTROL VALVES.
28. AT THE TIME OF SUBSTANTIAL COMPLETION (DEFINED AS COMPLETE INSTALLATION AND PROPER FUNCTIONING OF IRRIGATION SYSTEM AND MOWCURB, INSTALLATION OF ALL PLANT MATERIALS INCLUDING STAKING OF TREES, AND PLACEMENT OF SOIL PREP AND MULCH) THE CONTRACTOR SHALL SCHEDULE A WALK THROUGH WITH THE OWNER TO REVIEW COMPLETED WORK AND GENERATE A PUNCH LIST. AT THIS TIME THE WARRANTY PERIOD OF ONE (1) YEAR BEGINS. THE CONTRACTOR HAS THIRTY (30) DAYS TO SATISFY THE ITEMS ON THE PUNCH LIST.
29. IRRIGATION CONTRACTOR SHALL GUARANTEE THE ENTIRE IRRIGATION SYSTEM TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE BY OWNER.

OWNER:
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APPLEBEE'S
AT
RANCHES
CROSSING

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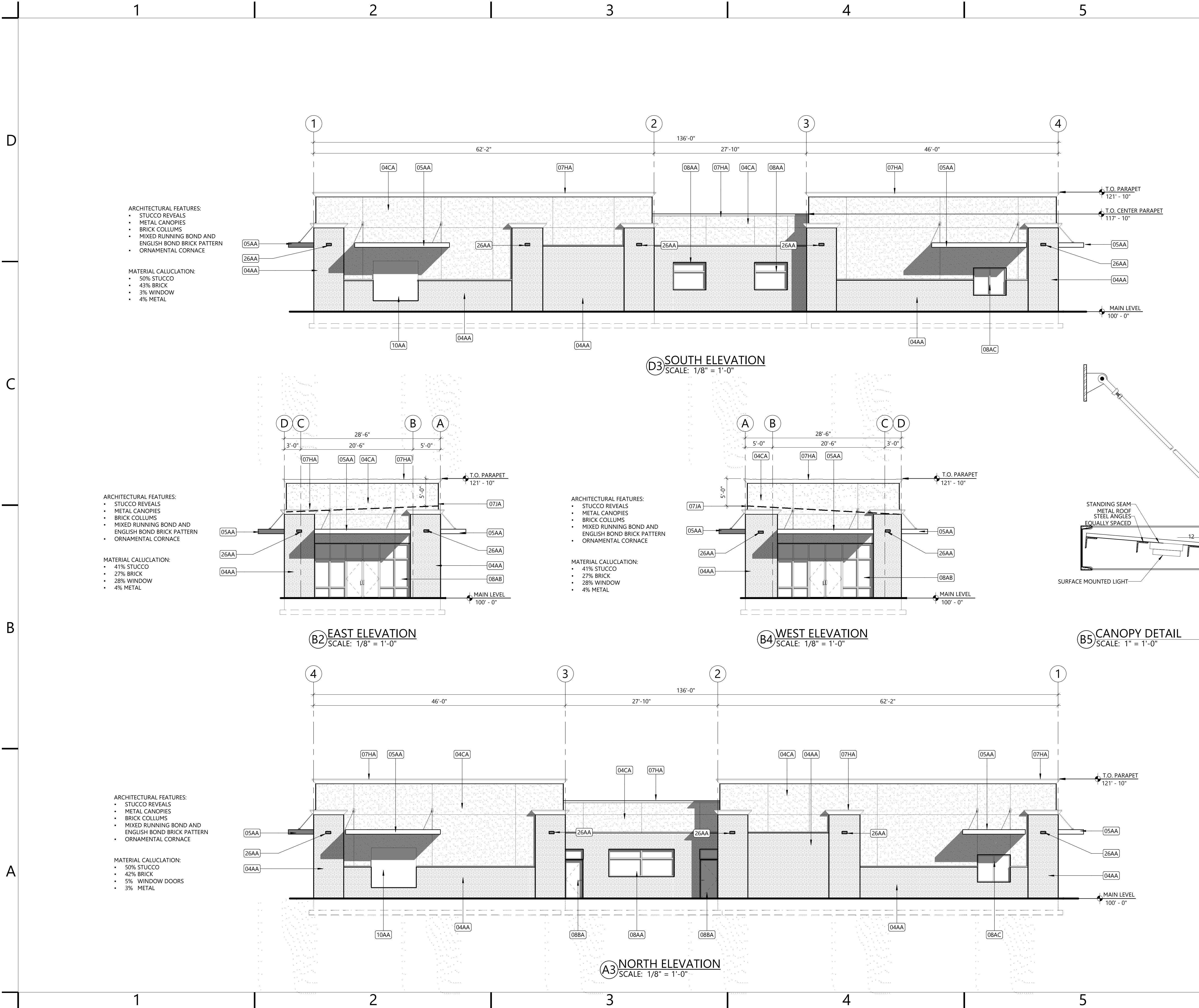
SECTION 20, TOWNSHIP 5
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IRRIGATION
DETAILS
L202



KEYNOTES

#	DESCRIPTION
04AA	MIX AND RUNNING AND ENGLISH BOND BRICK VENEER WITH PRECAST CONCRETE TRIM.
04CA	CEMENT PLASTER.
05AA	PAINTED METAL AWNING. PROVIDE TWO LIGHTS PER CANOPY.
07HA	REFINISHED METAL COPING OVER ARCHITECTURAL CORNICE.
07JA	LINE OF ROOF LINE. PARAPET SCREEN WALL.
08AA	STOREFRONT WINDOW SYSTEM.
08AB	STOREFRONT WINDOW AND DOOR SYSTEM.
08AC	DRIVE-THRU TRANSACTION WINDOW.
08BA	INSULATED METAL EXTERIOR DOOR.
10AA	FUTURE DRIVE-THRU MENU BOARD.
26AA	WALL MOUNTED LIGHT.

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ARCHITECTS & ENGINEERS

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LOGAN, UT 84341
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PROFESSIONAL STAMP

AGENCY APPROVAL

RANCHES RETAIL

CARTWRIGHT PROJECT #	124006
DATE:	2/14/2024
DRAWN BY:	RA
CHECKED BY:	JMC
APPROVED BY:	JMC

DATE	REVISIONS	DESCRIPTION
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ARCHITECTURAL
ELEVATIONS

A201

PRELIMINARY

5/13/2024 6:36:25 PM



C2 NORTHWEST PERSPECTIVE ELEVATION
SCALE: 12" = 1'-0"



A2 SOUTHWEST PERSPECTIVE ELEVATION
SCALE: 12" = 1'-0"

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REVISIONS	
DATE	DESCRIPTION

PERSPECTIVE
ELEVATIONS

A202

PRELIMINARY

5/13/2024 6:36:26 PM

D

C

B

A



C2 NORTHEAST PERSPECTIVE ELEVATION
SCALE: 12" = 1'-0"



A2 SOUTHEAST ELEVATION
SCALE: 12" = 1'-0"

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REVISIONS	
DATE	DESCRIPTION

PERSPECTIVE
ELEVATIONS

A203

PRELIMINARY

5/13/2024 6:36:26 PM