AMERICAN FORK CITY
DEVELOPMENT REVIEW COMMITTEE AGENDA

Regular Session
March 16, 2026
Monday 9:00 AM

American Fork City Public Works Building

275 East 200 North

American Fork City, UT 84003

https://www.americanfork.gov/AgendaCenter

Development Review Committee Members

Patrick O'Brien, Dev. Services Director

Sam Kelly, Public Works Director

Aaron Brems, Fire Chief

Notice is hereby given that the American Fork City Development Review Committee will meet in regular session on March 16th, 2026, at the American Fork City Public Works building, 275 East 200 North commencing at 9:00 AM. The agenda shall be as follows:

1. **<u>Regular Session</u>**
    a. Roll Call

2. **<u>Public Comments</u>**
    a. Up to a 10-minute public comment period to receive public comments. Each speaker is limited to two minutes.

3. **<u>Common Consent Agenda</u>** (Common Consent is that class of DRC action that requires no further discussion or which is routine in nature. All items on the Common Consent Agenda are adopted by a single motion unless removed from the Common Consent Agenda).
    a. Approval of the March 9th, 2026, Development Review Committee minutes.

4. **<u>Action Items</u>** (Action Items is that class of DRC action that requires further discussion on Preliminary Plans, Final Plats, and Amended Commercial Site Plans. The Development Review Committee Board will have authority to approve Preliminary Plans and Final Plats but make a recommending action on Commercial Site Plans.)
    a. Review and action on an application for a Preliminary Plan, known as Maker Acre, located at 520 E 200 N, American Fork City. The Preliminary Plan consists of 1 acre and is in the R-2-7500 Residential Zone.
    b. Review and recommendation on an application for a Commercial Site Plan, known as Rockport Industrial, located at 205 W Frontage Rd, American Fork City. The Commercial Site Plan consists of 1.43 acres and will be in the Planned Industrial (PI-1) Zone.

5. **<u>Adjournment</u>**

Dated this 12th day of March 2026

Patrick O'Brien

Development Services Director

**The order of agenda items may change at the discretion of the Development Review Committee*

AMERICAN FORK CITY

DEVELOPMENT REVIEW COMMITEE REGULAR SESSION

March 9, 2026

The American Fork City Development Review Committee met in a regular session on March 9th, 2025, at the American Fork Public Works Building, 275 East 200 North, commencing at 9:00 a.m.

Development Review Committee:

Development Services Director: Patrick O'Brien

Fire Chief: Aaron Brems

Assistant Public Works Director: Allister Scott

Staff Present:

Cody Opperman	Planner II
Annie Reed	Planner I
Ben Hunter	City Engineer
Mat Sacco	Fire Marshall
Carolyn Lloyd	Administrative Assistant

Others Present:

Derek Rindlisbacher

Cedar Jordan

Public Comments (10-minute public comment period - 2 minutes per person)

Open Public Comments:

Closed Public Comments

REGULAR SESSION

Roll Call

COMMON CONSENT AGENDA

Minutes of March 2nd 2026, Development Review Committee Regular Session.

Patrick O'Brien motioned to approve the Common Consent agenda

Aaron Brems seconded the motion

Voting was as follows:

Patrick O'Brien	**AYE**
Allister Scott	**AYE**
Aaron Brems	**AYE**

The motion passed

PUBLIC HEARING

a. **Public hearing on an application for an Amended Final Plat, known as Walton Lot, located at approximately 794 W 1000 N Circle, American Fork City. The Amended Final Plat consists of approximately 2.35 acres and is in the R1-12000 and RA-1 Zone.**

Public Hearing Open

Public Hearing Closed

ACTION ITEMS

a. **Review and action on an application for a Final Plat, known as Climb Concrete, located at approximately 300 E 1700 S, American Fork City. The Final Plat consists of 5 acres and is in the I-1 Industrial Zone.**

Cody Opperman indicated that the proposed development is located in the I-1 (Industrial) Zone of the city, southeast of and adjacent to Utah Lake. The project consists of an office warehouse building with outdoor storage located behind the structure. A portion of the property closer to Utah Lake will remain undeveloped and is outside of the designated outdoor storage area. Staff noted conditions of approval requiring the lift station to be brought into compliance with code requirements prior to issuance of a certificate of occupancy, as previously discussed. Additionally, a Final Plat for post-entitlement review is currently being processed. The proposal meets the requirements of the I-1 Zone under Section 17.45.030 and the Final Plat requirements outlined in Section 17.72.070.

Ben Hunter stated that he did not have any concerns at this time regarding the lift station.

Aaron Brems moved to approve the proposed Final Plat, located at 300 E 1700 S American Fork City, in the I-1 Industrial Zone, subject to any conditions found in the staff report.

Allister Scott seconded the motion

Voting was as follows:

Patrick O'Brien	**AYE**
Allister Scott	**AYE**
Aaron Brems	**AYE**

The motion passed

b. Review and action on an application for a Final Plat, known as High Pointe Apartments, located at 620 S 740 E, American Fork City. The Final Plat consists of 3.46 acres and is in the PC Planned Community Zone.

Cody Opperman stated that this item is a Final Plat for a project that previously received Preliminary Plat approval. The proposal includes the development of an apartment and townhome project consisting of 144 apartment units and 16 townhome units. The property is located within the Lake City Road Development Agreement area and is zoned PC (Planned Community). Cody indicated there are no conditions of approval associated with the Final Plat. The proposal meets the requirements of Section 17.44.070 for the PC Plan Community Zone and follows the approval process outlined in Section 17.72.070.

A discussion between Aaron Brems, Ben Hunter, and Allister Scott addressed details of the proposed development. Staff clarified that the project consisted of 144 apartment units and 16 townhome units. The Final Plat will establish the lot configuration and subdivide the internal roads for this portion of the development. Additional project details will be reviewed during a subsequent Commercial Site Plan application. The internal roads will remain privately maintained and managed by the development, and the project includes a roadway connection through 740 East.

Patrick O'Brien moved to approve the proposed Final Plat, located at 620 S 740 E, American Fork City, in the PC Planned Community Zone, as the plat meets the requirements of Section 17.72.0211.

Aaron Brems seconded the motion

Voting was as follows:

Patrick O'Brien	**AYE**
Allister Scott	**AYE**
Aaron Brems	**AYE**

The motion passed

Other Business

There was no other business to discuss

Adjournment

Patrick O'Brien motioned to adjourn the meeting.

Aaron Brems seconded the motion.

Voting was as follows:

Patrick O'Brien	**AYE**
Allister Scott	**AYE**
Aaron Brems	**AYE**

The motion passed

Meeting adjourned at 9:10 AM

Carolyn Lloyd

Administrative Assistant

The order of agenda items may change to accommodate the needs of the committee, public, and staff.

Development Review Committee Staff Report
Meeting Date: March 16th, 2026

Agenda Topic

Review and action on an application for a Preliminary Plan, known as Maker Acre, located at 520 E 200 N, American Fork City. The Preliminary Plan consists of 1 acre and is in the R-2-7500 Residential Zone.

BACKGROUND INFORMATION		
Location:		520 E 200 N American Fork UT
Parcel ID:		12:067:0151
Project Type:		Attached Residential
Applicants:		Kirk and Shannon Magleby Family
Land Use:		Residential Medium Density
Surrounding Land Use:	North	Residential Medium Density
	South	Residential Medium Density
	East	Residential Medium Density
	West	Residential Medium Density
Zoning:		R-2-7500
Surrounding Zoning:	North	R-2-7500
	South	R-2-7500
	East	R-2-7500
	West	R-2-7500
Square Footage (By Use)		12,000 sq. Ft lots Proposed with Amended Lot lines
Total Number of Units		6 units

Background

The applicant has applied for a Preliminary Plat to develop a Residential Subdivision. The project looks to build 3 two-family dwellings to provided a total of 6 homes to the area. As the

project has completed it's third review of a residential subdivision, it must come forward for determination of approval.

Sec 17.8.201 Subdivider Confers With Development Review Committee

A. The subdivider may meet with the Development Review Committee in a pre-application meeting to discuss the basic concept of the proposed subdivision and to obtain information pertaining to the general plan and zoning classification of the area proposed for subdivision, city requirements and standards for design and construction of streets, utilities and other requirements affecting the land proposed to be subdivided.
B. The purpose of the conference(s) is to provide informal assistance to the subdivider in the preparation of the plans early in the process. The Development Review Committee may suggest changes in the proposed layout so the project is more fully consistent with the city's general plan and also with the city's development regulations and policies. The recommendations from the Development Review Committee prior to the subdivision application shall be purely advisory and in no way shall the conference be construed to constitute approval of the plan.

Sec 17.8.202 Subdivider Prepares And Submits Preliminary Plat And Supporting Materials

After the pre-submittal conference, if applicable, the subdivider shall prepare and submit to the Development Services Department a preliminary plat submittal packet containing the following:

A. An application for approval of the subdivision project, together with copies of plans and materials showing the layout of the proposed project, including the location, size and dimensions of all lots; the placement and cross-section of all proposed streets; the location of all public utility easements; the intended treatment of drainage; and the intended treatment of any other essential features of the proposed subdivision.
B. A geotechnical report for the subdivision area.
C. Evidence of payment of the required review fee.
D. Evidence of water right proposed to be conveyed to the city.
E. Evidence of review of the proposed subdivision of required public utility agencies.
F. Other materials deemed by city staff to be essential for an adequate understanding of the proposed project.

Sec 17.8.203 DRC Reviews Preliminary Plans, Documents, And Statements

Upon receipt of the preliminary plan submittal packet from the subdivider the Development Services Director or assignee shall review the plans, documents, and materials for completeness

and for conformance with city requirements and standards and the general plan, and submit said plans, documents and statements or portions thereof to the Development Review Committee for their review and recommendation.

Sec 17.8.204 Development Review Committee Reports Results Of Review Of Preliminary Plans, Documents, And Statements To Subdivider

A. The Development Review Committee shall conduct a Development Review Conference to review and discuss the materials submitted by the subdivider.
B. Upon completion of review, the Development Review Committee shall provide the results of the review and comments to the Development Services Director or assignee. The results and comments shall be compiled and provided to the subdivider.
C. The Development Review Committee may suggest changes in order for the preliminary plan materials to be more consistent with the objectives of the general plan and development regulations and policies.

Sec 17.8.206 Development Review Committee Takes Action On Preliminary Plans And Supporting Materials

A. After considering the recommendation of all Development Review Committee members, the DRC, acting as the administrative land use authority, may table the matter, deny, or grant approval, including granting approval upon conditions stated.
B. Approval of the Preliminary Plan by DRC shall not constitute final approval of the project, but shall be deemed as approval to proceed with preparation of a final plat, detailed engineering and supporting materials.

Project Conditions of Approval

1. Applicant has provided documents that they are working with Utah County Recorder's office to correct some existing overlaps. Prior to approval of the final plat, the overlap will need to be cleaned up with recorded documents at the Utah County Recorder's Office. If overlaps cannot be resolved, a new application for a Preliminary Plat will need to be submitted into review to address lot requirements for two-family dwellings.
2. Minor notes, recent PUE changes and text issues will need to be corrected in the Final Plat Application submittal documents.
3. Address any remaining DRC comments in your final application submittal.

Development Review Committee Staff Report
Meeting Date: March 16th, 2026

Findings of Fact

1. The Preliminary Plat meets the requirements of Section 17.4.206.
2. The Preliminary Plat meets the requirements of Section 17.8.202.

Project Map



Engineering Development Checklist Completion

APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with the Engineering Development Checklist prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior to, throughout and after scheduling a pre-construction meeting. All recording shall take place at the Utah County Recorder's Office.

Staff Recommendation

The Preliminary Plat meets the requirements of Section 17.7.206. Staff recommends APPROVING the application WITH CONDITIONS.

Potential Motions – Preliminary Plat

Approval

I move to approve the proposed Preliminary Plat, located at 520 E 200 N, American Fork City, in the R-2-7500 Residential Zone, subject to any conditions found in the staff report.

Denial

I move to deny the proposed Preliminary Plat, located at 520 E 200 N, American Fork City, in the R2-7500 Residential Zone.

Table

I move to table action for the proposed Preliminary Plat, located at 520 E 200 N, American Fork City, in the R-2-7500 Residential Zone and instruct staff/developer to……..

MAKER ACRE SUBDIVISION

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 13,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

American Fork City Development Review	
	Planning and Zoning Reviewed Areed 03/11/2026
Sewer/Storm Drain Division Reviewed ahardy 03/11/2026	Nothing for fire to review
EC/LID Reviewed tmezenen 03/11/2026	Engineering Division Reviewed rburkhill 03/10/2026
	Streets Division Reviewed ehyde 03/11/2026
Public Infrastructure Reviewed cscott 03/09/2026	Water/PI Division Reviewed jbrems 03/10/2026

See Comments

Address comments

Next Step

Proceed to the Development Review Committee on 03/16/2026

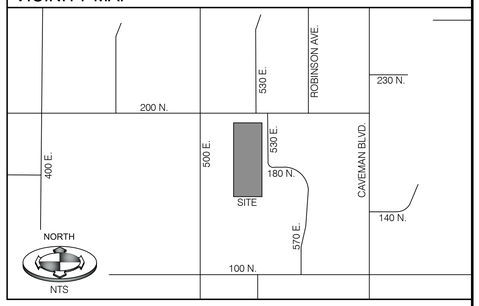
NORTH

GRAPHIC SCALE

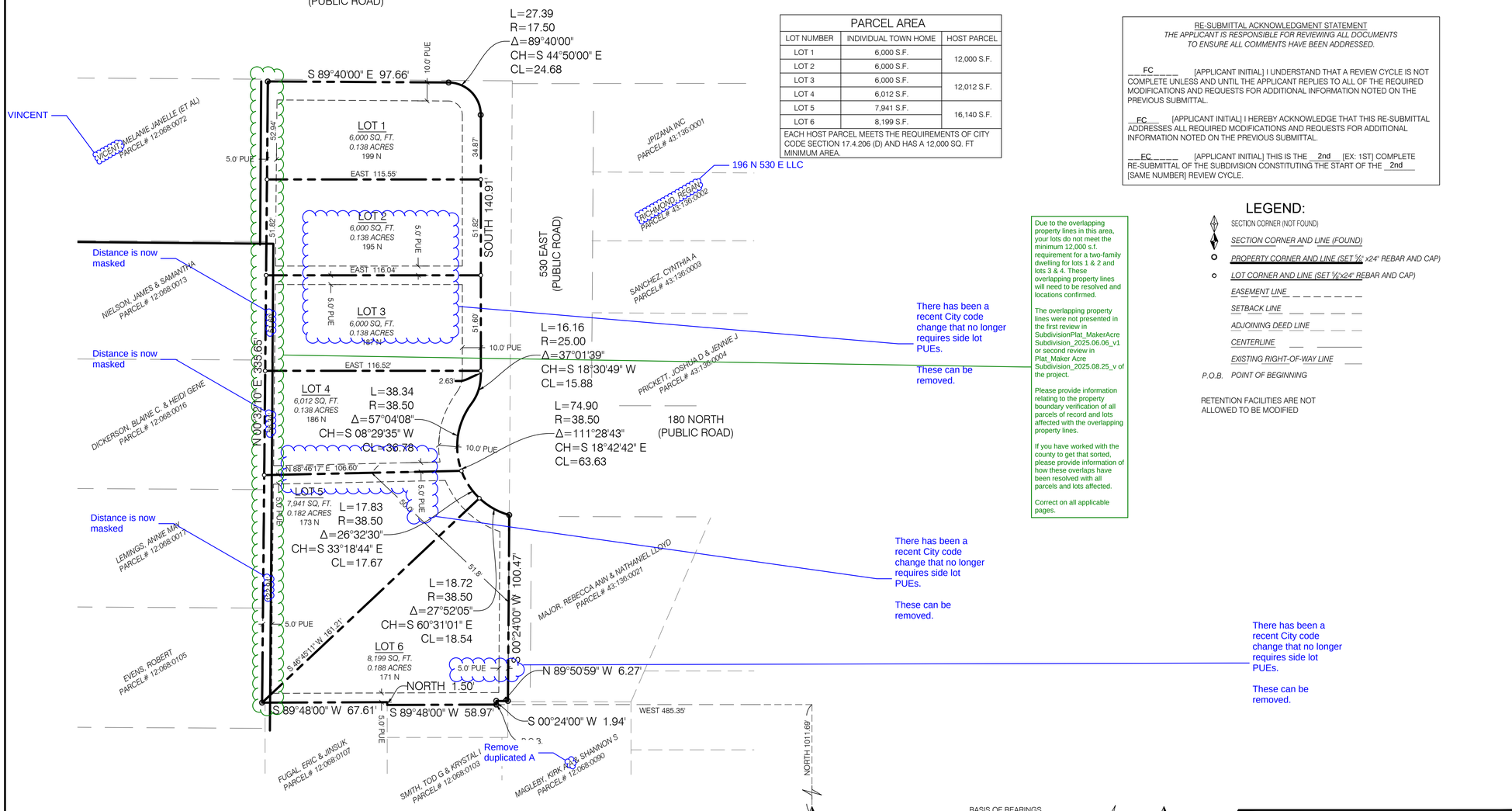
30 0 15 30 60

(IN FEET)
1 inch = 30ft.

VICINITY MAP



200 NORTH
(PUBLIC ROAD)



PARCEL AREA		
LOT NUMBER	INDIVIDUAL TOWN HOME	HOST PARCEL
LOT 1	6,000 S.F.	12,000 S.F.
LOT 2	6,000 S.F.	
LOT 3	6,000 S.F.	12,012 S.F.
LOT 4	6,012 S.F.	
LOT 5	7,941 S.F.	16,140 S.F.
LOT 6	8,199 S.F.	
EACH HOST PARCEL MEETS THE REQUIREMENTS OF CITY CODE SECTION 17.4.206 (D) AND HAS A 12,000 SQ. FT MINIMUM AREA.		

There has been a recent City code change that no longer requires side lot PUEs.

These can be removed.

Due to the overlapping property lines in this area, your lots do not meet the minimum 12,000 s.f. requirement for a two-family dwelling for lots 1 & 2 and lots 3 & 4. These overlapping property lines will need to be resolved and locations confirmed.

The overlapping property lines were not presented in the first review in SubdivisionPlat_MakerAcre Subdivision_2025.06.06_v1 or second review in Plat_Maker Acre Subdivision_2025.08.25_v of the project.

Please provide information relating to the property boundary verification of all parcels of record and lots affected with the overlapping property lines.

If you have worked with the county to get that sorted, please provide information of how these overlaps have been resolved with all parcels and lots affected.

Correct on all applicable pages.

There has been a recent City code change that no longer requires side lot PUEs.

These can be removed.

There has been a recent City code change that no longer requires side lot PUEs.

These can be removed.

RE-SUBMITTAL ACKNOWLEDGMENT STATEMENT

THE APPLICANT IS RESPONSIBLE FOR REVIEWING ALL DOCUMENTS TO ENSURE ALL COMMENTS HAVE BEEN ADDRESSED.

__FC__ [APPLICANT INITIAL] I UNDERSTAND THAT A REVIEW CYCLE IS NOT COMPLETE UNLESS AND UNTIL THE APPLICANT REPLIES TO ALL OF THE REQUIRED MODIFICATIONS AND REQUESTS FOR ADDITIONAL INFORMATION NOTED ON THE PREVIOUS SUBMITTAL.

__FC__ [APPLICANT INITIAL] I HEREBY ACKNOWLEDGE THAT THIS RE-SUBMITTAL ADDRESSES ALL REQUIRED MODIFICATIONS AND REQUESTS FOR ADDITIONAL INFORMATION NOTED ON THE PREVIOUS SUBMITTAL.

__FC__ [APPLICANT INITIAL] THIS IS THE __2nd__ [EX: 1ST] COMPLETE RE-SUBMITTAL OF THE SUBDIVISION CONSTITUTING THE START OF THE __2nd__ [SAME NUMBER] REVIEW CYCLE.

LEGEND:

- SECTION CORNER (NOT FOUND)
- *SECTION CORNER AND LINE (FOUND)*
- *PROPERTY CORNER AND LINE (SET ⅝" x24" REBAR AND CAP)*
- *LOT CORNER AND LINE (SET ⅝"x24" REBAR AND CAP)*
- *EASEMENT LINE*
- *SETBACK LINE*
- *ADJOINING DEED LINE*
- *CENTERLINE*
- *EXISTING RIGHT-OF-WAY LINE*
- *P.O.B. POINT OF BEGINNING*

RETENTION FACILITIES ARE NOT ALLOWED TO BE MODIFIED

SURVEYOR'S CERTIFICATE

I, DALE K. BENNETT, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NO. 103381, IN ACCORDANCE WITH TITLE 58, CHAPTER 22, OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS ACT; I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS SUBDIVISION PLAT IN ACCORDANCE WITH SECTION 17-23-17, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS AND STREETS, TOGETHER WITH EASEMENTS, HEREAFTER TO BE KNOWN AS CLARK SUBDIVISION AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AN MONUMENTED ON THE GROUND AS SHOWN ON THIS PLAT.

BOUNDARY DESCRIPTION

A TRACT OF LAND OF **LOCATED IN THE SOUTHWEST QUARTER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN**. SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT BEING NORTH 1011.69 FEET AND WEST 485.35 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN AND RUNNING THENCE SOUTH 89°48'00" WEST 58.97 FEET; THENCE NORTH 1.50 FEET; THENCE SOUTH 89°48'00" WEST 67.61 FEET TO A POINT ON THE EAST PROPERTY LINE OF DONNA EVENS;THENCE NORTH 00°32'10" EAST ALONG THE EAST PROPERTY LINES OF DONNA EVENS, ANNIE MAY LEMINGS, BLAIN & HEIDI DICKERSON, JAMES & SAMANTHA NIELSON AND BRYCE & SHANNON BOYER 335.65 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF 200 NORTH STREET, A PUBLIC ROAD; THENCE SOUTH 89°40'00" EAST ALONG THE SAID LINE 97.66 FEET TO A POINT OF CURVATURE; THENCE SOUTHEASTERLY AND SOUTHERLY THE FOLLOWING FOUR (4) COURSES ALONG THE WESTERLY RIGHT OF WAY LINE OF 530 EAST STREET, A PUBLIC ROAD:1) SOUTHEASTERLY 27.39 FEET ALONG THE ARC OF A 17.50 FOOT RADIUS CURVE TO THE RIGHT, CHORD BEARS SOUTH 44°50'00" EAST 24.68 FEET, 2) SOUTH 00°00'00" EAST 140.91 FEET TO A POINT OF CURVATURE, 3) SOUTHWESTERLY 16.16 FEET ALONG THE ARC OF A 25.00 FOOT RADIUS CURVE TO THE RIGHT, CHORD BEARS SOUTH 18°30'49" WEST 15.88 FEET TO A POINT OF REVERSE CURVE, 4) SOUTHEASTERLY 74.90 FEET ALONG THE ARC OF A 38.00 FEET RADIUS REVERSE CURVE TO THE LEFT, CHORD BEARS SOUTH 18°42'42" EAST 63.63 FEET; THENCE SOUTH 00°24'00" WEST 100.47 FEET; THENCE NORTH 89°50'59" WEST 6.27 FEET; THENCE SOUTH 00°24'00" WEST 1.94 FEET TO THE POINT OF BEGINNING.

CONTAINS 40,152 SQ FT OR 0.922 ACRES, MORE OR LESS
6 LOTS

FOR REVIEW ONLY

DALE K. BENNETT No. 103381 2/25/2026 — PROFESSIONAL LAND SURVEYOR — STATE OF UTAH

OWNER'S DEDICATION

KNOW ALL BY THESE PRESENTS THAT THE UNDERSIGNED ARE THE OWNER(S) OF THE ABOVE DESCRIBED TRACT OF LAND, AND HEREBY CAUSE THE SAME TO BE DIVIDED INTO LOTS, PARCELS AND STREETS, TOGETHER WITH EASEMENTS AS SET FORTH TO BE HEREAFTER KNOWN AS

MAKER ACRE SUBDIVISION

AND DO HEREBY DEDICATE FOR PERPETUAL USE OF THE PUBLIC ALL ROADS AND OTHER AREAS SHOWN ON THIS PLAT AS INTENDED FOR PUBLIC USE. THE UNDERSIGNED OWNER(S) HEREBY CONVEYS TO ANY AND ALL PUBLIC UTILITY COMPANIES A PERPETUAL, NON EXCLUSIVE EASEMENT OVER THE PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT, THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF UTILITY LINES AND FACILITIES. THE UNDERSIGNED OWNER(S) ALSO HEREBY CONVEY ANY OTHER EASEMENT AS SHOWN AND/OR NOTED ON THIS PLAT TO THE PARTIES INDICATED AND FOR THE PURPOSES SHOWN AND/OR NOTED HEREON.
THIS _____DAY OF_____, A.D. 20____.

KSM FAMILY, LLC

_____
SIGNATURE

(PRINT NAME):_____

TITLE: _____

LLC ACKNOWLEDGMENT

ON THE _____ DAY OF _____, A.D. 2026, PERSONALLY APPEARED BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC, IN AND SAID COUNTY OF _____ IN SAID STATE OF UTAH, WHOSE IDENTITY IS PERSONALLY KNOWN TO ME (OR PROVEN ON THE BASIS OF SATISFACTORY EVIDENCE) AND IS THE _____ OF KSM FAMILY, LLC, A UTAH LIMITED LIABILITY COMPANY AND WHO DULY ACKNOWLEDGED TO ME THAT HE/SHE SIGNED THE ABOVE OWNER'S DEDICATION FREELY AND VOLUNTARILY AND FOR THE USES AND PURPOSES THEREIN MENTIONED FOR AND BEHALF OF GDKL INVESTMENTS, LLC, A UTAH LIMITED LIABILITY COMPANY.

MY COMMISSION EXPIRES: _____ (DATE)

COMMISSION NUMBER:_____

_____
NOTARY PUBLIC
COMMISSIONED IN UTAH

ACCEPTANCE BY DEVELOPMENT REVIEW COMMITTEE APPROVAL AUTHORITY

THE DEVELOPMENT REVIEW COMMITTEE APPROVAL AUTHORITY OF AMERICAN FORK CITY, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____, A.D. _____.

_____
DEVELOPMENT SERVICES DIRECTOR

_____
PUBLIC WORKS DIRECTOR

_____
FIRE CHIEF

BENCHMARK CIVIL

BENCHMARK ENGINEERING & LAND SURVEYING
9130 SOUTH STATE STREET SUITE # 100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION

A RESIDENTIAL SUBDIVISION LOCATED IN THE SOUTHWEST QUARTER OF SECTION 13,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

SHEET 1 OF 1

SURVEYOR'S SEAL	NOTARY PUBLIC SEAL	AMERICAN FORK RECORDER SEAL

RECORDED # _____

STATE OF UTAH, COUNTY OF UTAH, RECORDED AND FILED AT THE REQUEST OF _____
DATE_____TIME _____ BOOK _____ PAGE_____

FEE $ _____

_____
UTAH COUNTY RECORDER

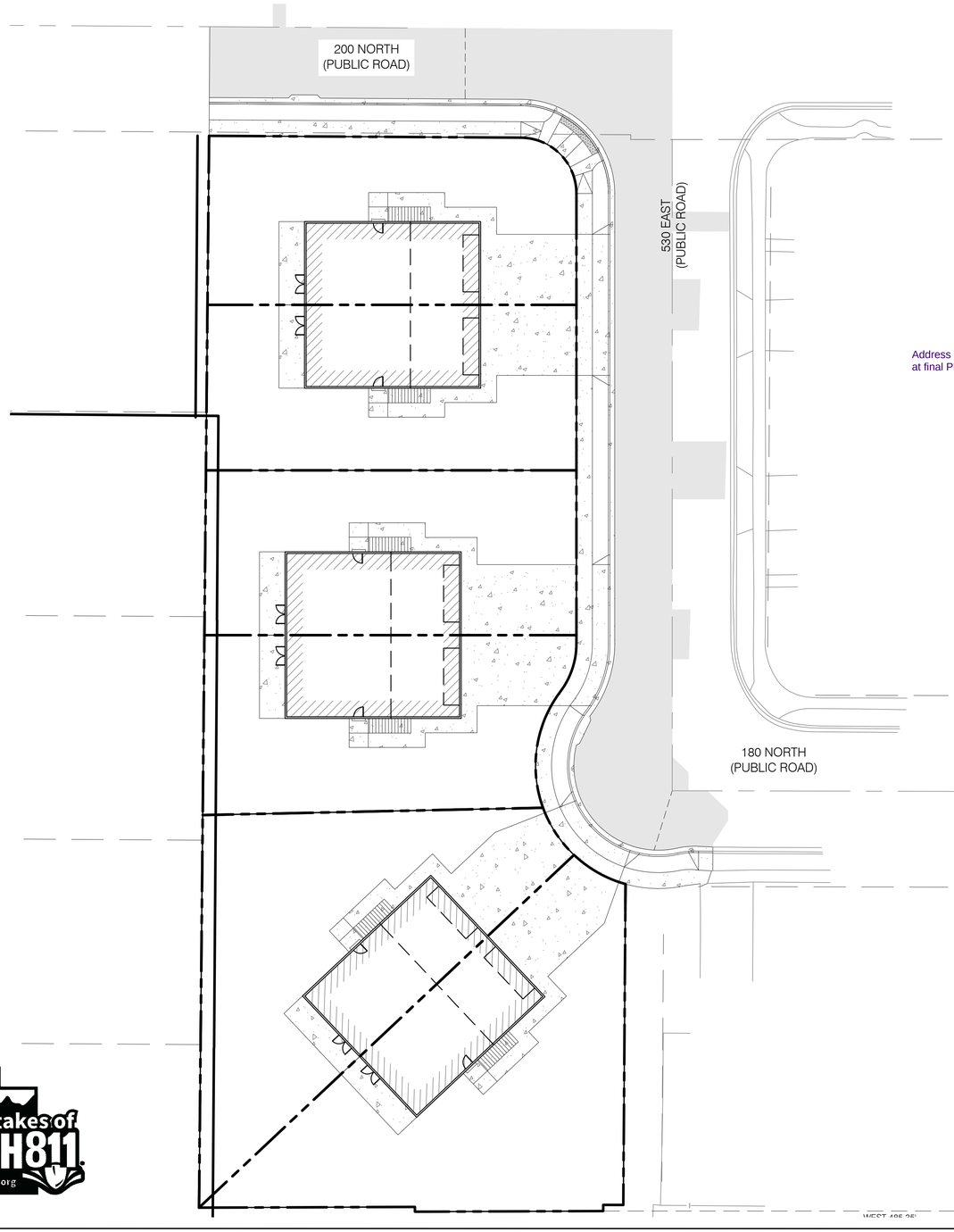
FOR REVIEW ONLY

2402023sp.dwg

MAKER ACRE SUBDIVISION

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 13,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

△2 530 EAST 200 NORTH STREET



RE-SUBMITTAL ACKNOWLEDGMENT STATEMENT
THE APPLICANT IS RESPONSIBLE FOR REVIEWING ALL DOCUMENTS TO ENSURE ALL COMMENTS HAVE BEEN ADDRESSED.

___FC_____ [APPLICANT INITIAL] I UNDERSTAND THAT A REVIEW CYCLE IS NOT COMPLETE UNLESS AND UNTIL THE APPLICANT REPLIES TO ALL OF THE REQUIRED MODIFICATIONS AND REQUESTS FOR ADDITIONAL INFORMATION NOTED ON THE PREVIOUS SUBMITTAL.

___FC___ [APPLICANT INITIAL] I HEREBY ACKNOWLEDGE THAT THIS RE-SUBMITTAL ADDRESSES ALL REQUIRED MODIFICATIONS AND REQUESTS FOR ADDITIONAL INFORMATION NOTED ON THE PREVIOUS SUBMITTAL.

△2

___FC_____ [APPLICANT INITIAL] THIS IS THE __2nd___ [EX: 1ST] COMPLETE RE-SUBMITTAL OF THE SUBDIVISION CONSTITUTING THE START OF THE __2nd__ [SAME NUMBER] REVIEW CYCLE.

American Fork City Development Review

Sewer/Storm Drain Division Reviewed ahardy 03/11/2026	Water/PI Division Reviewed jbrems 03/11/2026
EC/LID Reviewed tmezenen 03/11/2026	Fire Reviewed M. Sacco March 10, 2026 — No comments
	Engineering Division Reviewed rburkhill 03/10/2026 — Address comment
Communications Reviewed MHunsaker 03/11/2026	Streets Division Reviewed ehyde 03/11/2026
Public Infrastructure Reviewed cscott 03/09/2026 — Address Comments at final Plat	Planning and Zoning Reviewed Areed 03/11/2026 — See Comments on CSP.01

Next Step

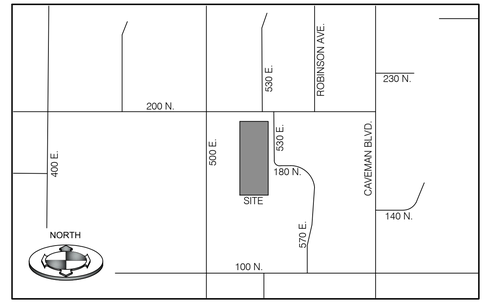
Proceed to the Development Review Committee on 03/16/2026

NORTH

GRAPHIC SCALE

30 0 10 20 40

(IN FEET)
1 inch = 20ft.



VICINITY MAP
N.T.S

CONTACT LIST		
UTILITY	COMPANY NAME	PHONE #
WATER UTILITY COMPANY	AMERICAN FORK CITY WATER DIVISION	801-763-3060
SEWER COMPANY	AMERICAN FORK CITY SEWER DIVISION	801-763-3060
STORM DRAIN COMPANY	AMERICAN FORK CITY STORM WATER DIVISION	801-763-3060
PRESSURIZED IRRIGATION	AMERICAN FORK CITY PRESSURIZED IRRIGATION DIVISION	801-763-3060
PUBLIC WORKS	AMERICAN FORK CITY PUBLIC WORKS DEPARTMENT	801-763-3060
ELECTRICAL	ROCKY MOUNTAIN POWER	1-888-221-7070
TELEPHONE	CENTURY LINK	800-603-6000
NATURAL GAS	ENBRIDGE GAS	1-800-323-5517
GARBAGE/RECYCLING	AMERICAN FORK CITY UTILITY BILLING	801-763-3000
SWMP MANAGER	STORM WATER MANAGER, AMERICAN FORK,TYLER MEZENEN	801-404-7167

AREA TABLE		
PARTICULARS	S.F.	%
IMPERVIOUS	16,237	40.4
LANDSCAPE	23,915	59.6
TOTAL*	40,152	100.0
△2 IMPERVIOUS RATIO		67.8

*AREA TABLE DOES NOT INCLUDE ROW IMPROVEMENTS

NOTE:
PER THE FEMA ONLINE DATA, THE SITE IS LOCATED WITHIN ZONE X, 'AREA OF MINIMAL FLOOD HAZARD'. THE FLOOD MAP FOR THE SELECTED AREA IS NUMBER 49049C0168F, EFFECTIVE ON 06/19/2020.
100-YEAR FLOOD ELEVATION = 4633.73

BASIS OF BEARING:
THE BASIS OF BEARINGS FOR THIS SURVEY IS NAVD 88 DATUM, SOUTH 89°45'24" EAST, AS SHOWN ON THE ALTA SURVEY.

OWNER/DEVELOPER: KSM FAMILY LLC
KIRK & SHANNON MAGLEBY
801-636-9027
shannonmagleby@hotmail.com
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PRELIMINARY CIVIL PLANS
NOT FOR CONSTRUCTION

BENCHMARK CIVIL
PRELIMINARY PLAN
PROFESSIONAL ENGINEER 2/17/26 No. 11366633 ALLISON G. ALBERT STATE OF UTAH
BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE # 100
SANDY, UTAH 84070 (801) 542-7192
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MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

DRAFT: AD	DESIGN: AD	CHECK: AGA
DATE: 10/08/2024	DATE: 01/02/2025	DATE: 02/12/2024

PROJECT NO. 2402023

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

COVER

BENCHMARK ENGINEERING CONTACT: ALLISON G. ALBERT, PE

Blue Stakes of UTAH811 Bluestakes.org

LINETYPES:

NEW	EXISTING	
		SECTION LINE
		PROPERTY LINE
		ADJACENT PL or LOT LINES
		RIGHT-OF-WAY LINE
		CENTERLINE of ROAD
		EASEMENT LINE
		CURB & GUTTER
		EDGE OF ASPHALT
		FENCE / WALL, STONE
		FENCE, BLOCK
		FENCE, BRICK
		FENCE, CHAIN
		FENCE, IRON
		FENCE, VINYL
		FENCE, WIRE
		FENCE, WOOD
4475	4475	INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
XX.XX		SPOT ELEVATION
SS	SS	SANITARY SEWER LINE
SD	SD	STORM DRAIN LINE
W	W	WATER LINE
IRR	IRR	IRRIGATION LINE
OHP	OHP	OVERHEAD POWER LINE
UG	UG	UNDERGROUND POWER LINE
GAS	GAS	GAS LINE
T	T	TELEPHONE LINE
CATV	CATV	CABLE TELEVISION LINE
		DRAINAGE / DITCH CENTERLINE
		TREE LINE EDGE
FO	FO	FIBER OPTIC LINE
		PROPOSED ASPHALT
		PROPOSED CONCRETE

TOC

SYMBOLS:

NEW	EXISTING	
		SECTION CORNER (FOUND)
		SECTION CORNER (NOT FOUND)
		STREET MONUMENT (FOUND)
		STREET MONUMENT (NOT FOUND)
		BRASS CAP MONUMENT
		POWER POLE & OVERHEAD POWER
		LIGHT POLE
		GUY WIRE
T	T	TELEPHONE MANHOLE
S	S	SANITARY SEWER MANHOLE
D	D	STORM DRAIN MANHOLE
		CATCH BASIN
		DIRECTION OF DRAINAGE
W	W	WATER MANHOLE
		WATER VALVE
		WATER METER
		FIRE HYDRANT
		IRRIGATION VALVE
G	G	GAS MANHOLE
		TREE

ABBREVIATIONS

BC	BAR & CAP
BOW	BOTTOM OF VISIBLE WALL
COR.	SECTION CORNER
CB	CATCH BASIN
CF	CUBIC FEET
D	DELTA ANGLE
EG	EXISTING GROUND
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EX	EXISTING
FFE	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GB	GRADE BREAK
GW	GUY WIRE
HW	HEAD WALL
I.E.	INVERT ELEVATION
LIP	LENGTH OF CURVE
L	LIP OF CURB
LF	LINEAR FEET
LP	LOW POINT
M-M	MONUMENT TO MONUMENT
MH	MANHOLE
MON.	SURVEY MONUMENT
OHP	OVERHEAD POWER
PVC	POINT OF CURVATURE
PVI	POINT OF INTERSECTION
PP	POWER POLE
PVT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS OF CURVE
RR	RAILROAD
ROW	RIGHT-OF-WAY
R/W	RIGHT-OF-WAY
SCO	SEWER CLEANOUT
SSMH	SEWER MANHOLE
SD	STORM DRAIN
SF	SQUARE FEET
TBC	TOP BACK OF CURB
TMH	TELEPHONE MANHOLE
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOE	TOE OF SLOPE
TOG	TOP OF GRATE
TOP	TOP OF SLOPE
TOW	TOP OF WALL
TR	TELEPHONE RISER
UGP	UNDERGROUND POWER
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WM	WATER METER
WV	WATER VALVE

CONSTRUCTION NOTES

RESPONSIBLE DISTRICTS OR AGENCIES AND APPLICABLE STANDARDS
CITY OR COUNTY- AMERICAN FORK CITY
WATER UTILITY COMPANY- AMERICAN FORK CITY
SEWER- AMERICAN FORK CITY
STORM DRAIN/GROUNDWATER- AMERICAN FORK CITY
ELECTRICAL- ROCKY MOUNTAIN POWER
TELEPHONE- CENTURY LINK
NATURAL GAS- ENBRIDGE GAS UTAH

APPLICABLE STANDARDS: APWA 2025 STANDARDS

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NOTE:

IN THE EVENT THAT THE CONSTRUCTION NOTES CONFLICT WITH RESPONSIBLE DISTRICT OR AGENCY STANDARDS NOTES AND SPECIFICATIONS, THE DISTRICT OR AGENCY STANDARD NOTES AND SPECIFICATIONS GOVERN.

CAUTION NOTICE TO CONTRACTORS

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

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AN HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

GENERAL

1. ALL MATERIALS AND CONSTRUCTION IN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

2. CONTRACTOR AND APPLICABLE SUBCONTRACTORS SHALL ATTEND ALL PRE-CONSTRUCTION CONFERENCES AND PERIODIC PROGRESS MEETINGS. PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT RESPONSIBLE DISTRICT OR AGENCY FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE APPROPRIATE PROJECT CONTACTS (48) HOURS IN ADVANCE OF SAID MEETING.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC SAFETY AND OSHA STANDARDS.

4. THE CONTRACTOR SHALL FAMILIARIZE HIM/HER SELF WITH THE PLANS, THE GEOLOGY REPORTS AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL INSPECT THE SITE OF WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

5. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION UTAH CHAPTER (APWA) MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION AND THE MANUAL OF STANDARD PLANS 2017 EDITION. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

6. THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT THE PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE.

THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN REGULAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS FOR THIS PROJECT. THE CONTRACTOR SHALL ASSUME THAT THE NECESSARY RIGHT-OF-WAY, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN APPROPRIATE PERMITS AND PAY FOR ANY WORK PERFORMED WITHIN RIGHT-OF-WAY OR EASEMENTS FROM THE CITY AND/OR UDOT. CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMUNICATING THE WORK, OR AS REQUIRED BY SAID PERMITS.

8. CONCRETE PLACEMENTS SHALL BE CONTINUOUS BETWEEN CONSTRUCTION JOINTS. CONTRACTION JOINTS SHALL BE PLACED FOR SLAB-ON-GRADE SUCH THAT THE MAXIMUM DISTANCE BETWEEN JOINTS IS 20 FEET IN EITHER DIRECTION FOR LIGHT DUTY TRAFFIC AND 12 FEET IN EITHER DIRECTION FOR HEAVY DUTY TRAFFIC.

9. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEERS INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ENGINEER.

10. ALL WORK OUTSIDE THE SCOPE OF THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RESPONSIBLE DESIGN. THESE PLANS DO NOT REPLACE ANY STRUCTURAL, ARCHITECTURAL, OR MECHANICAL PLANS. SHOULD A DISCREPANCY ARISE BETWEEN THESE PLANS AND ANOTHER PLAN SET, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BOTH PARTIES TO DETERMINE WHAT SHOULD BE CONSTRUCTED.

11. ALL STAIRS AND RAILINGS ARE DESIGNED BY OTHERS AND MUST COMPLY WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. SAID STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

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

13. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS AND ANYTHING THAT HAS ALREADY BEEN CONSTRUCTED. THERE WILL BE NO EXTRA COST DUE THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTORS EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

14. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL, ELECTRICAL AND INSTRUMENTATION EQUIPMENT; PIPING AND CONDUITS; STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOXES, AND WIRE SIZES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

15. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATION REDLINES AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

UTILITIES

16. CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE, AND INDIVIDUAL UTILITY CODES.

17. ALL UTILITES INSTALLED IN ACCORDANCE WITH THE RESPONSIBLE DISTRICTS OR AGENCIES STANDARDS AND SPECIFICATIONS.

18. COORDINATE ALL SERVICE LATERAL AND BUILDING CONNECTIONS WITH CORRESPONDING ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWING FOR LOCATION AND ELEVATION. NOTIFY ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE ENCOUNTERED.

19. ALL STORM DRAIN MANHOLES AND CATCH BASINS ARE TO BE PRECAST CONCRETE FROM APPROVED LOCAL MANUFACTURER UNLESS OTHERWISE NOTED. AND COMPLY WITH CITY/COUNTY STANDARD

20. ALL STORM WATER CONVEYANCE PIPING TO BE RCP - CLASS 3 OR ADS HDPE PIPE OR EQUAL UNLESS OTHERWISE NOTED.

21. ALL ELECTRICAL CONDUITS/LINES TO BE PVC SCH 40 OR BETTER.

22. ALL GAS LINES TO BE HDPE WITH COPPER TRACER WIRE AND DETECTA TAPE. TERMINATE TRACER WIRE AT APPROVED LOCATIONS.

23. ALL GAS LINE TAPS, VALVES AND CAPS TO BE FUSED USING ELECTRO - FUSION TECHNOLOGY.

24. ALL PHONE AND TV CONDUITS TO BE PVC SCH 40 OR BETTER.

25. NO GROUNDWATER OR DEBRIS TO BE ALLOWED TO ENTER THE NEW PIPE DURING CONSTRUCTION. THE OPEN END OF ALL PIPES IS TO BE COVERED AND EFFECTIVELY SEALED AT THE END OF EACH DAYS WORK.

26. THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE AND SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 - EXCAVATIONS, AND SECTION 69 - TRENCHES. ALONG WITH ANY LOCAL CODES OR ORDINANCES.

27. PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

28. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS FOR H-20 LOAD REQUIREMENTS.

29. ACTUAL CONNECTIONS TO EXISTING WATER LINES WILL NOT BE PERMITTED PRIOR TO THE COMPLETION OF STERILIZATION AND TESTING OF NEW WATER MAINS. ALL EXISTING WATER VALVES TO BE OPERATED UNDER THE DIRECTION OF THE CITY/COUNTY PUBLIC WORKS DEPARTMENT PERSONNEL ONLY.

30. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE, INSPECTED, TESTED, AND APPROVED BY AUTHORITIES HAVING JURISDICTION PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK, AND STREET PAVING.

31. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY COMPANIES FOR THE INSTALLATION OF ALL NEW AND THE REMOVAL, RELOCATION, AND/OR BURIAL OF ALL EXISTING DRY UTILITIES INCLUDING BUT NOT LIMITED TO POWER, GAS, AND COMMUNICATION LINES. IF THERE IS A CONFLICT WITH AN EXISTING DRY UTILITY THE CONTRACTOR SHALL COORDINATE THE REMOVAL OR RELOCATION OF THE EXISTING UTILITY WITH THE RESPONSIBLE DISTRICT OR AGENCY. ALL WORK FOR DRY UTILITIES SHALL BE COORDINATED WITH AND COMPLETED TO THE STANDARDS AND REQUIREMENTS OF THE RESPONSIBLE DISTRICT OR AGENCY.

SEWER

32. ALL SEWER LINE TO BE FLUSHED, PRESSURE TESTED TO 5 PSI VIDEO INSPECTED AND OTHERWISE TESTED IN ACCORDANCE WITH DISTRICT STANDARDS PRIOR TO PLACING IN SERVICE.

33. ALL SEWER PIPES ARE TO BE SDR-35 PVC PIPE.

34. SEWER MANHOLES, LATERALS AND CLEANOUTS TO BE INSTALLED PER RESPONSIBLE DISTRICT OR AGENCY STANDARDS. THE UNIT COST OF THE SEWER LATERAL INCLUDES CONNECTION TO THE SEWER MAIN. THE CLEANOUT RISER FOR EACH SERVICE SHALL BE INSTALLED BY THE CONTRACTOR.

35. SEWER CLEANOUTS MUST BE INSTALLED AT A MINIMUM OF EVERY 90 L.F. FOR 4 INCH Ø LATERALS AND EVERY 100 L.F. FOR 6 INCH Ø LATERALS, OR PER THE RESPONSIBLE DISTRICT OR AGENCY STANDARDS, WHICHEVER IS MORE FREQUENT.

36. A SEWER CLEANOUT MUST BE INSTALLED 5 L.F. TO 10 L.F. FROM ANY PROPOSED STRUCTURE, OR PER THE RESPONSIBLE DISTRICT OR AGENCY STANDARDS.

37. ALL SEWER LATERAL BENDS AND ANGLES TO BE INSTALLED AS SWEEPING BENDS WITH SEWER CLEANOUTS.

38. DURING CONSTRUCTION OF THE SEWERLINE, WYES NEED TO BE INSTALLED FOR THE LATERALS. LATERALS ARE 4" AND NEED TO COME IN AT THE TOP OF THE PIPE WITH A WYE. (SEE RESPONSIBLE DISTRICT OR AGENCY STANDARDS)

39. IT IS THE INTENT ON THESE PLANS THAT ALL SEWER PIPES SHALL SLOPE TO AN EXISTING SEWER CONNECTION VIA GRAVITY FLOW. CONTRACTOR TO START AT THE LOW END OF GRAVITY UTILITY LINES AND VERIFY THAT ALL INVERT ELEVATIONS PROVE SLOPE TO EXISTING CONNECTION VIA GRAVITY. SLOPES MUST MEET OR EXCEED THE SEWER DISTRICTS MINIMUM STANDARDS. NOTIFY ENGINEER IF THERE ARE DISCREPANCIES THAT WOULD CAUSE THE SEWER UTILITY NOT TO DRAIN VIA GRAVITY ON THE SITE.

WATER

40. WATERLINES TO BE PVC C-900, WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS. CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18' VERTICAL OR TEN FEET HORIZONTAL SEPARATION FROM SEWERLINE

41. ALL WATERLINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS OTHERWISE NOTED.

42. WATER SERVICE LATERALS TO INCLUDE ALL BRASS SADDLE: CORP, STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE, AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

43. ALL WATERLINES SHALL BE 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL VALVE BOXES AND MANHOLES SHALL BE RAISED OR LOWERED TO FINISH GRADE AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS. ALL WATER LINES SHALL BE LOOPED AROUND GRAVITY LINES OR ROPED PER RESPONSIBLE DISTRICT OR AGENCY INSPECTOR.

44. CONTRACTOR TO NOTIFY RESPONSIBLE DISTRICT OR AGENCY FOR CHLORINE TEST PRIOR TO FLUSHING LINES, CHLORINE LEFT IN PIPE 24 HRS. MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACTERIA TESTING, ETC. TO BE COORDINATED WITH RESPONSIBLE DISTRICT OR AGENCY. ALL TESTS TO BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

45. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4 INCHES ABOVE BACK OF CURB ELEVATION. HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET RESPONSIBLE DISTRICT OR AGENCY STANDARDS, UNLESS OTHERWISE NOTED ON PLANS.

EXISTING UTILITIES

46. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES SHOWN OR NOT SHOWN. THE INFORMATION SHOWN ON THE PLANS WITH REGARDS TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS WAS DERIVED FROM FIELD INVESTIGATION AND/OR RECORD INFORMATION. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE FACILITIES SHOWN AND ANY OTHER FACILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. PRIOR TO CONSTRUCTION OR FABRICATION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENT AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING THE UTILITIES SO, THAT THE EXACT LOCATION, ELEVATION, MATERIAL, ETC. CAN BE VERIFIED AND DOCUMENTED. THE COST ASSOCIATED TO PERFORM THIS WORK SHALL BE INCLUDED IN EITHER THE LUMP SUMP CLEARING COST OR IN THE VARIOUS ITEMS OF WORK. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION BE MADE PRIOR TO CONSTRUCTION.

47. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

48. ALL MANHOLE RIMS, LAMPHOLES, VALVE BOX COVERS, MONUMENT BOXES AND CATCH BASIN GRATES ARE TO BE ADJUSTED TO FIT THE FINISHED GRADE AFTER PAVING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAID FACILITIES.

49. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ALL PIPES, WALLS, ETC. ARE ADEQUATELY BRACED DURING CONSTRUCTION.

CLEARING AND GRADING

50. CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH APWA 2017 STANDARD DRAWINGS AND STANDARD SPECIFICATIONS AND THE RECOMMENDED EARTHWORK SPECIFICATION FOUND IN THE PROFESSIONALLY PREPARED REPORT OF GEOTECHNICAL INVESTIGATION.

51. THE CONTRACTOR SHALL REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SITE UNLESS NOTED OTHERWISE: ALL EXISTING WELLS AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL REGULATIONS. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

52. SUBSOIL INVESTIGATIONS MUST BE CONDUCTED AT THE SITE OF THE WORK. ALL FOOTING, FOUNDATION OR STRUCTURAL WALL CONSTRUCTION MUST ADHERE TO THE RECOMMENDATIONS DETAILED BY THE PROFESSIONAL REPORT OF THESE INVESTIGATIONS, CREATED BY A LICENSED GEOTECHNICAL ENGINEER.

53. SOIL INVESTIGATIONS MUST BE CONDUCTED BY A LICENSED GEOTECHNICAL ENGINEER FOR DESIGN PURPOSES ONLY, AND THE DATA SHOWN IN THE REPORTS ARE FOR SUBSURFACE CONDITIONS FOUND AT THE TIME OF THE INVESTIGATION. THE OWNER AND ENGINEER DISCLAIM RESPONSIBILITY FOR THE INTERPRETATION BY THE CONTRACTOR OF DATA, SUCH PROJECTION OR EXTRAPOLATION, FROM THE TEST HOLES TO OTHER LOCATIONS ON THE SITE OF THE WORK, SOIL BEARING VALUES AND PROFILES, SOIL STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER FOR SUBSURFACE CONDITIONS DURING CONSTRUCTION OPERATIONS.

54. ALL PROPOSED ELEVATIONS SHOWN ON THE GRADING PLAN ARE TO FINISHED SURFACE, THE CONTRACTOR IS RESPONSIBLE TO DEDUCT THE THICKNESS OF THE PAVEMENT STRUCTURAL SECTION FOR TOP OF SUB GRADE ELEVATIONS.

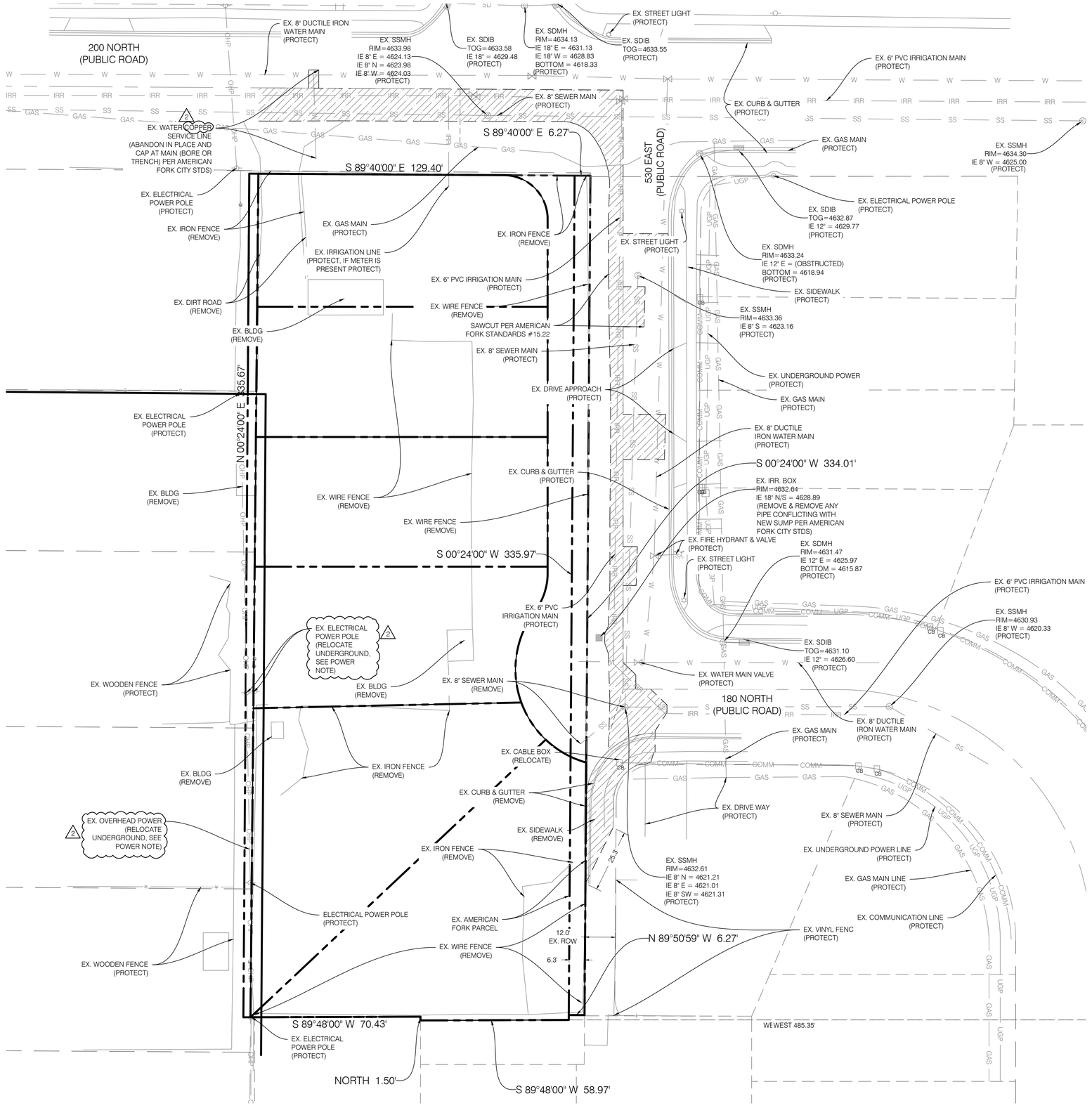
55. IF AT ANY TIME DURING CONSTRUCTION ANY UNFAVORABLE GEOLOGICAL CONDITIONS ARE ENCOUNTERED, WORK IN THAT AREA WILL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED FROM THE ENGINEER.

56. UNSUITABLE MATERIAL, SUCH AS TOP SOIL, WEATHERED BED ROCK, ETC., SHALL BE REMOVED AS REQUIRED BY THE SOILS ENGINEER (AND/OR ENGINEERING GEOLOGIST, WHERE EMPLOYED) FROM ALL AREAS TO RECEIVE COMPACTED FILL OR DRAINAGE STRUCTURES.

57. NO TREES SHALL BE REMOVED OR DAMAGED WITHOUT SPECIFIC WRITTEN AUTHORIZATION FROM PROPERTY OWNER.

58. THE EXISTING TOPOGRAPHY ON THESE PLANS IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY BENCHMARK ENGINEERING AND LAND SURVEYING ON 04/03/2024 AND MAY HAVE BEEN MODIFIED SINCE THIS SURVEY WAS PERFORMED.

59. FILLS IN EXCESS OF 4 FEET IN THICKNESS AND BENEATH ALL FOUNDATIONS OR PAVEMENT SECTIONS SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D-1557 COMPACTION CRITERIA. ALL OTHER STRUCTURAL FILL LESS THAN 4 FEET IN THICKNES



NORTH

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

POWER NOTE:
OVERHEAD POWER IS 7,200 VOLTS PER LETTER FROM ROCKY MOUNTAIN POWER, BELOW TO 12,470 VOLTS, THE OVERHEAD POWER LINES NEEDS TO BE RELOCATED UNDERGROUND PER CITY CODE 17.8.409. CONTRACTOR TO COORDINATE WITH ROCKY MOUNTAIN POWER COMPANY

NOTE:
SAWCUT WIDTH, LOCATIONS AND TIE-IN ELEVATIONS TO EXISTING GRADE ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION, EXTENT OF SAWCUTTING, AND TIE-IN SLOPES TO EXISTING GRADE PRIOR TO CONSTRUCTION. IT IS THE INTENT ON THESE PLANS THAT ALL PAVEMENT SHALL TIE INTO EXISTING GRADE PER SLOPES LISTED ON CGN.01 NOTE 70. SEE NOTES 66, 70, 82, & 83 ON CGN.01 FOR FURTHER DETAIL.

No.	DATE	DESCRIPTION
1	09/25/2025	REVISED PER CITY COMMENTS
2	12/17/2025	REVISED PER CITY COMMENTS

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: AD
CHECKED BY: AGA
FIELD CREW: KO
DATE: 06/03/2025
DWG FILE: 2402023_SITE

PRELIMINARY PLAN

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

NOT FOR CONSTRUCTION

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

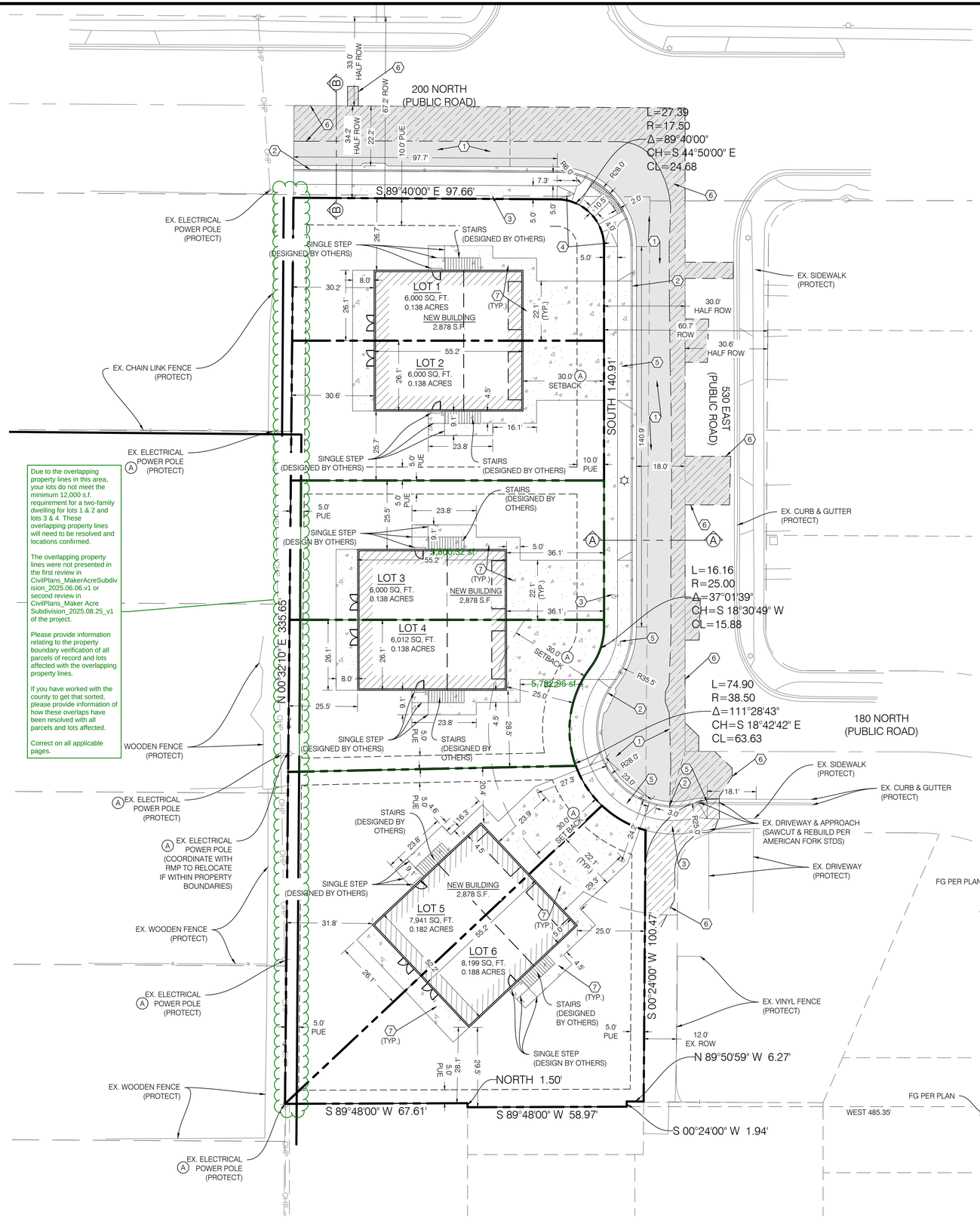
MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

Blue Stakes of UTAH 811
Bluestakes.org

PROJECT NO. 2402023

DEMO PLAN

CDP.01
3 OF 12



Due to the overlapping property lines in this area, your lots do not meet the minimum 12,000 s.f. requirement for a two-family dwelling for lots 1 & 2 and lots 3 & 4. These overlapping property lines will need to be resolved and locations confirmed.

The overlapping property lines were not presented in the first review in CivilPlans_MakerAcreSubdivision_2025.06.06.v1 or second review in CivilPlans_Maker Acre Subdivision_2025.08.25_v1 of the project.

Please provide information relating to the property boundary verification of all parcels of record and lots affected with the overlapping property lines.

If you have worked with the county to get that sorted, please provide information of how these overlaps have been resolved with all parcels and lots affected.

Correct on all applicable pages.

NORTH

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

PARCEL AREA		
LOT NUMBER	INDIVIDUAL TOWN HOME	HOST PARCEL
LOT 1	6,000 S.F.	12,000 S.F.
LOT 2	6,000 S.F.	
LOT 3	6,000 S.F.	12,012 S.F.
LOT 4	6,012 S.F.	
LOT 5	7,941 S.F.	16,140 S.F.
LOT 6	8,199 S.F.	
EACH HOST PARCEL MEETS THE REQUIREMENTS OF CITY CODE SECTION 17.4.206 (D) AND HAS A 12,000 SQ. FT MINIMUM AREA.		

2 POWER NOTE: (A)
OVERHEAD POWER IS 7,200 VOLTS PER LETTER FROM ROCKY MOUNTAIN POWER, BELOW TO 12,470 VOLTS, THE OVERHEAD POWER LINES NEEDS TO BE RELOCATED UNDERGROUND PER CITY CODE 17.8.409. CONTRACTOR TO COORDINATE WITH ROCKY MOUNTAIN POWER COMPANY

CONSTRUCTION KEY NOTE REFERENCE		
NO.	DESCRIPITON	DETAIL
1	ASPHALT PAVEMENT PER AMERICAN FORK STDS	1/CDT.01
2	CONCRETE CURB & GUTTER PER AMERICAN FORK #15.1 TYPE 'E'	2/CDT.01
3	SIDEWALK PER APWA #231 STDS	
4	ADA RAMP WITH TRUNCATED DOME PER AMERICAN FORK STDS #15.18	1/CDT.02
5	DRIVE APPROACH PER AMERICAN FORK STDS #15.9	6/CDT.01
6	SAWCUT PER AMERICAN FORK STDS #15.22	2/CDT.02
7	CONCRETE PAVEMENT WITH GRANULAR BASE	5/CDT.02

NOTE:
SLOPE ACROSS THE ACCESSIBLE PARKING STALLS & ACCESS ISLE SHALL NOT EXCEED A 1:48 (2.00%) SLOPE, THE MAX GRADE DIFFERENCE BETWEEN THE ASPHALT SURFACE, ACCESSIBLE RAMP, AND SIDEWALK SHALL NOT EXCEED 1/4 INCH VERTICAL OR 1/2 INCH WHEN BEVELED. THE ACCESSIBLE MEANS OF EGRESS INCLUDING THE DRIVEWAY PORTION SHALL NOT EXCEED A SLOPE OF 1:20 (5.0%) & A CROSS SLOPE OF 1:48 (2.0%). ALL EXTERIOR DOOR WAY ACCESS REQUIRE AN EXTERIOR LANDING 60 INCHES IN LENGTH WITH A SLOPE NOT EXCEEDING A 1:48 (2.0%) SLOPE

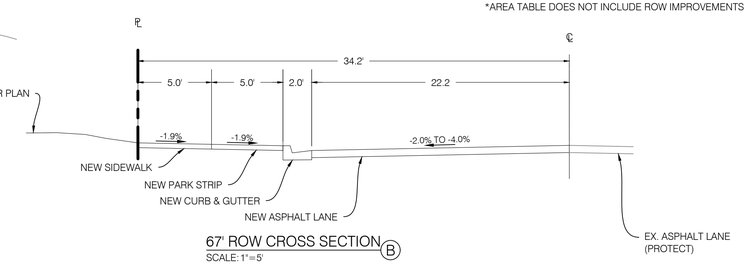
NOTE:
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NOTE:
ALL WORK WITHIN PUBLIC ROADS TO BE DONE IN STRICT ACCORDANCE WITH AMERICAN FORK STANDARDS AND SPECIFICATIONS

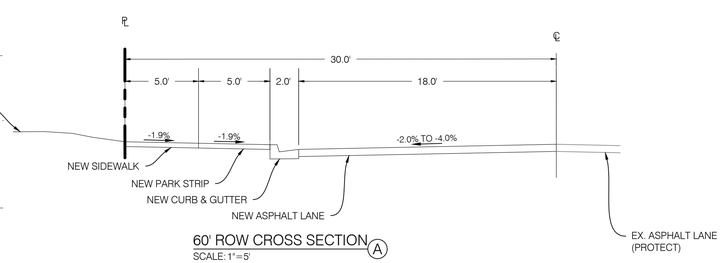
SETBACK NOTE (A)
THE BUILDING SETBACKS ARE SHOWN FOR REFERENCE ONLY. THE SETBACKS FOLLOW THE CURRENT AMERICAN FORK CITY CODE, HOWEVER BENCHMARK ENGINEERING MAKES NO GUARANTEES OF CORRECTNESS. ALL BUILDING SETBACKS MUST BE VERIFIED BY OWNER/DEVELOPER PRIOR TO A BUILDING PERMIT BEING OBTAINED FOR ACCURACY.

AREA TABLE		
PARTICULARS	S.F.	%
BUILDING	8,634	21.5
HARDSCAPE	7,603	18.9
LANDSCAPE	23,915	59.6
TOTAL*	40,152	100.0

*AREA TABLE DOES NOT INCLUDE ROW IMPROVEMENTS



67' ROW CROSS SECTION (B)
SCALE: 1"=5'



60' ROW CROSS SECTION (A)
SCALE: 1"=5'

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: AD
CHECKED BY: AGA
FIELD CREW: KO
DATE: 06/03/2025
DWG FILE: 2402023_SITE

PRELIMINARY PLAN
2/17/26
PROFESSIONAL ENGINEER
No. 11368633
ALLISON G. ALBERT
STATE OF UTAH
NOT FOR CONSTRUCTION

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
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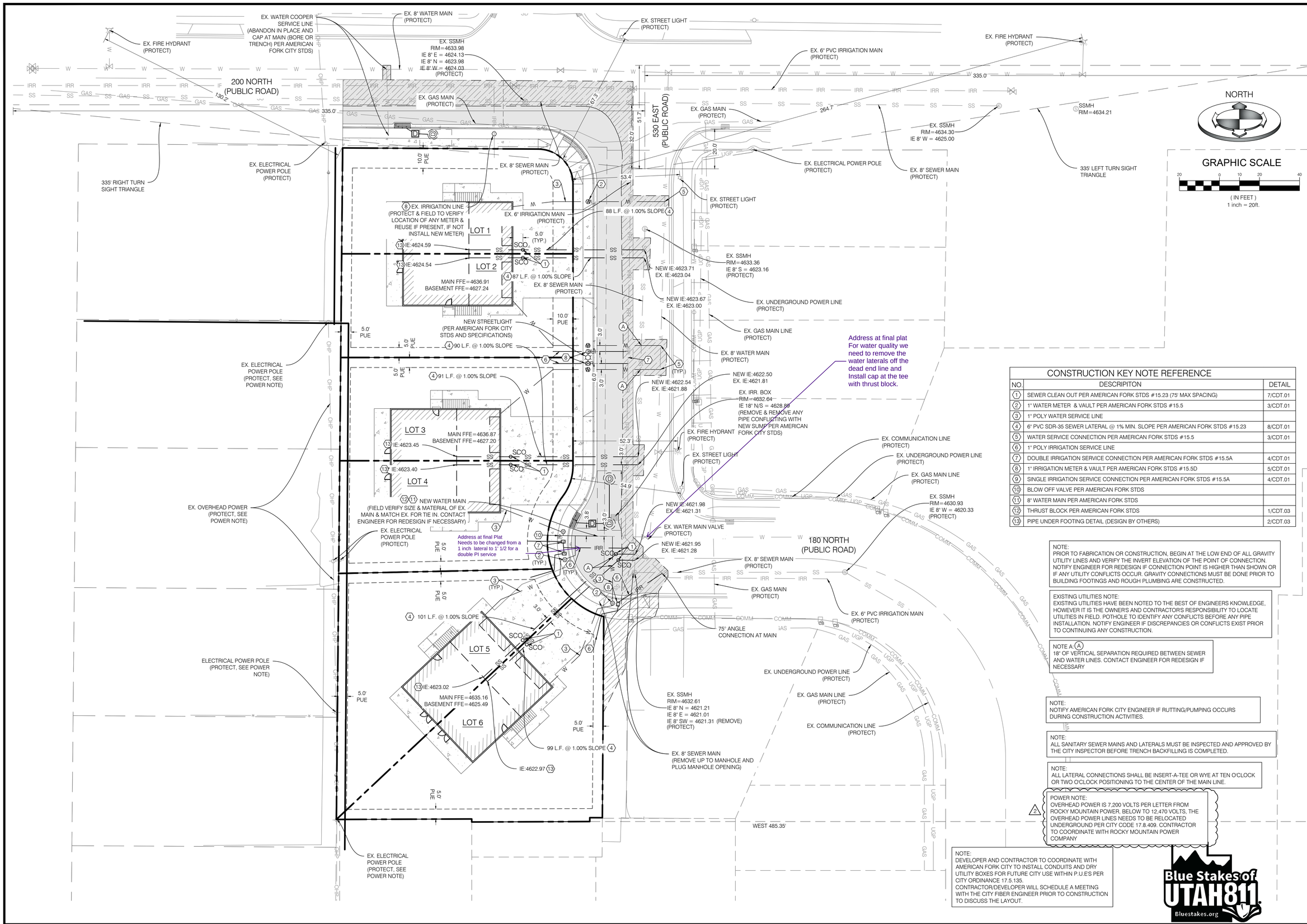
MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

Blue Stakes of UTAH 811
Bluestakes.org

PROJECT NO. 2402023

SITE PLAN

CSP.01
4 OF 12



CONSTRUCTION KEY NOTE REFERENCE		
NO.	DESCRIPITON	DETAIL
1	SEWER CLEAN OUT PER AMERICAN FORK STDS #15.23 (75' MAX SPACING)	7/CDT.01
2	1" WATER METER & VAULT PER AMERICAN FORK STDS #15.5	3/CDT.01
3	1" POLY WATER SERVICE LINE	
4	6" PVC SDR-35 SEWER LATERAL @ 1% MIN. SLOPE PER AMERICAN FORK STDS #15.23	8/CDT.01
5	WATER SERVICE CONNECTION PER AMERICAN FORK STDS #15.5	3/CDT.01
6	1" POLY IRRIGATION SERVICE LINE	
7	DOUBLE IRRIGATION SERVICE CONNECTION PER AMERICAN FORK STDS #15.5A	4/CDT.01
8	1" IRRIGATION METER & VAULT PER AMERICAN FORK STDS #15.5D	5/CDT.01
9	SINGLE IRRIGATION SERVICE CONNECTION PER AMERICAN FORK STDS #15.5A	4/CDT.01
10	BLOW OFF VALVE PER AMERICAN FORK STDS	
11	8" WATER MAIN PER AMERICAN FORK STDS	
12	THRUST BLOCK PER AMERICAN FORK STDS	1/CDT.03
13	PIPE UNDER FOOTING DETAIL (DESIGN BY OTHERS)	2/CDT.03

NOTE:
PRIOR TO FABRICATION OR CONSTRUCTION, BEGIN AT THE LOW END OF ALL GRAVITY UTILITY LINES AND VERIFY THE INVERT ELEVATION OF THE POINT OF CONNECTION. NOTIFY ENGINEER FOR REDESIGN IF CONNECTION POINT IS HIGHER THAN SHOWN OR IF ANY UTILITY CONFLICTS OCCUR. GRAVITY CONNECTIONS MUST BE DONE PRIOR TO BUILDING FOOTINGS AND ROUGH PLUMBING ARE CONSTRUCTED.

EXISTING UTILITIES NOTE:
EXISTING UTILITIES HAVE BEEN NOTED TO THE BEST OF ENGINEERS KNOWLEDGE, HOWEVER IT IS THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITIES IN FIELD. POTHOLE TO IDENTIFY ANY CONFLICTS BEFORE ANY PIPE INSTALLATION. NOTIFY ENGINEER IF DISCREPANCIES OR CONFLICTS EXIST PRIOR TO CONTINUING ANY CONSTRUCTION.

NOTE A: (A)
18" OF VERTICAL SEPARATION REQUIRED BETWEEN SEWER AND WATER LINES. CONTACT ENGINEER FOR REDESIGN IF NECESSARY

NOTE:
NOTIFY AMERICAN FORK CITY ENGINEER IF RUTTING/PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.

NOTE:
ALL SANITARY SEWER MAINS AND LATERALS MUST BE INSPECTED AND APPROVED BY THE CITY INSPECTOR BEFORE TRENCH BACKFILLING IS COMPLETED.

NOTE:
ALL LATERAL CONNECTIONS SHALL BE INSERT-A-TEE OR WYE AT TEN O'CLOCK OR TWO O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE.

2 POWER NOTE:
OVERHEAD POWER IS 7,200 VOLTS PER LETTER FROM ROCKY MOUNTAIN POWER, BELOW TO 12,470 VOLTS, THE OVERHEAD POWER LINES NEEDS TO BE RELOCATED UNDERGROUND PER CITY CODE 17.8.409. CONTRACTOR TO COORDINATE WITH ROCKY MOUNTAIN POWER COMPANY

NOTE:
DEVELOPER AND CONTRACTOR TO COORDINATE WITH AMERICAN FORK CITY TO INSTALL CONDUITS AND DRY UTILITY BOXES FOR FUTURE CITY USE WITHIN P.U.E'S PER CITY ORDINANCE 17.5.135. CONTRACTOR/DEVELOPER WILL SCHEDULE A MEETING WITH THE CITY FIBER ENGINEER PRIOR TO CONSTRUCTION TO DISCUSS THE LAYOUT.

Blue Stakes of UTAH811 Bluestakes.org

No.	DATE	DESCRIPTION
1	06/25/2025	REVISED PER CITY COMMENTS
2	09/17/2025	REVISED PER CITY COMMENTS

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY	AD
CHECKED BY	AGA
FIELD CREW	KO
DATE	06/03/2025
DRG. FILE	2402023_SITE

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION

530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

PROJECT NO. 2402023

UTILITY PLAN

CUP.01
5 OF 12

STORM DRAINAGE CALCULATIONS FOR LOTS

LOT 1

Retention Pond Area
Area 1 (A1)= 241 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 45 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	65
Pavement =	185		
Landscaping =	1,143		
D3 Sum:	2047.14 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	2,047 sf	*Granato Method*
Impervious Area:	904 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.44	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.15	
Required Water Quality Volume, WQV:	13 cf	
Provided Water Quality Volume, WQV:	65 cf	YES

Is there adequate storage? Storage Provided = 65 cf
Req. Storage = 13 cf YES

LOT 2

Retention Pond Area
Area 1 (A1)= 236 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 90 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	78
Pavement =	401		
Landscaping =	2,319		
D3 Sum:	3439.77 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	3,440 sf	*Granato Method*
Impervious Area:	1,121 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.33	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.12	
Required Water Quality Volume, WQV:	18 cf	
Provided Water Quality Volume, WQV:	78 cf	YES

Is there adequate storage? Storage Provided = 78 cf
Req. Storage = 18 cf YES

LOT 3

Retention Pond Area
Area 1 (A1)= 235 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 44 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	63
Pavement =	401		
Landscaping =	2,027		
D3 Sum:	3147.89 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	3,148 sf	*Granato Method*
Impervious Area:	1,121 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.36	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.13	
Required Water Quality Volume, WQV:	17 cf	
Provided Water Quality Volume, WQV:	63 cf	YES

Is there adequate storage? Storage Provided = 63 cf
Req. Storage = 17 cf YES

LOT 4

Retention Pond Area
Area 1 (A1)= 258 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 48 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	70
Pavement =	401		
Landscaping =	2,320		
D3 Sum:	3440.7 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	3,441 sf	*Granato Method*
Impervious Area:	1,121 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.33	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.12	
Required Water Quality Volume, WQV:	18 cf	
Provided Water Quality Volume, WQV:	70 cf	YES

Is there adequate storage? Storage Provided = 70 cf
Req. Storage = 18 cf YES

LOT 5

Retention Pond Area
Area 1 (A1)= 258 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 48 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	70
Pavement =	329		
Landscaping =	5,039		
D3 Sum:	6087.55 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	6,088 sf	*Granato Method*
Impervious Area:	1,049 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.17	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.09	
Required Water Quality Volume, WQV:	23 cf	
Provided Water Quality Volume, WQV:	70 cf	YES

Is there adequate storage? Storage Provided = 70 cf
Req. Storage = 23 cf YES

LOT 6

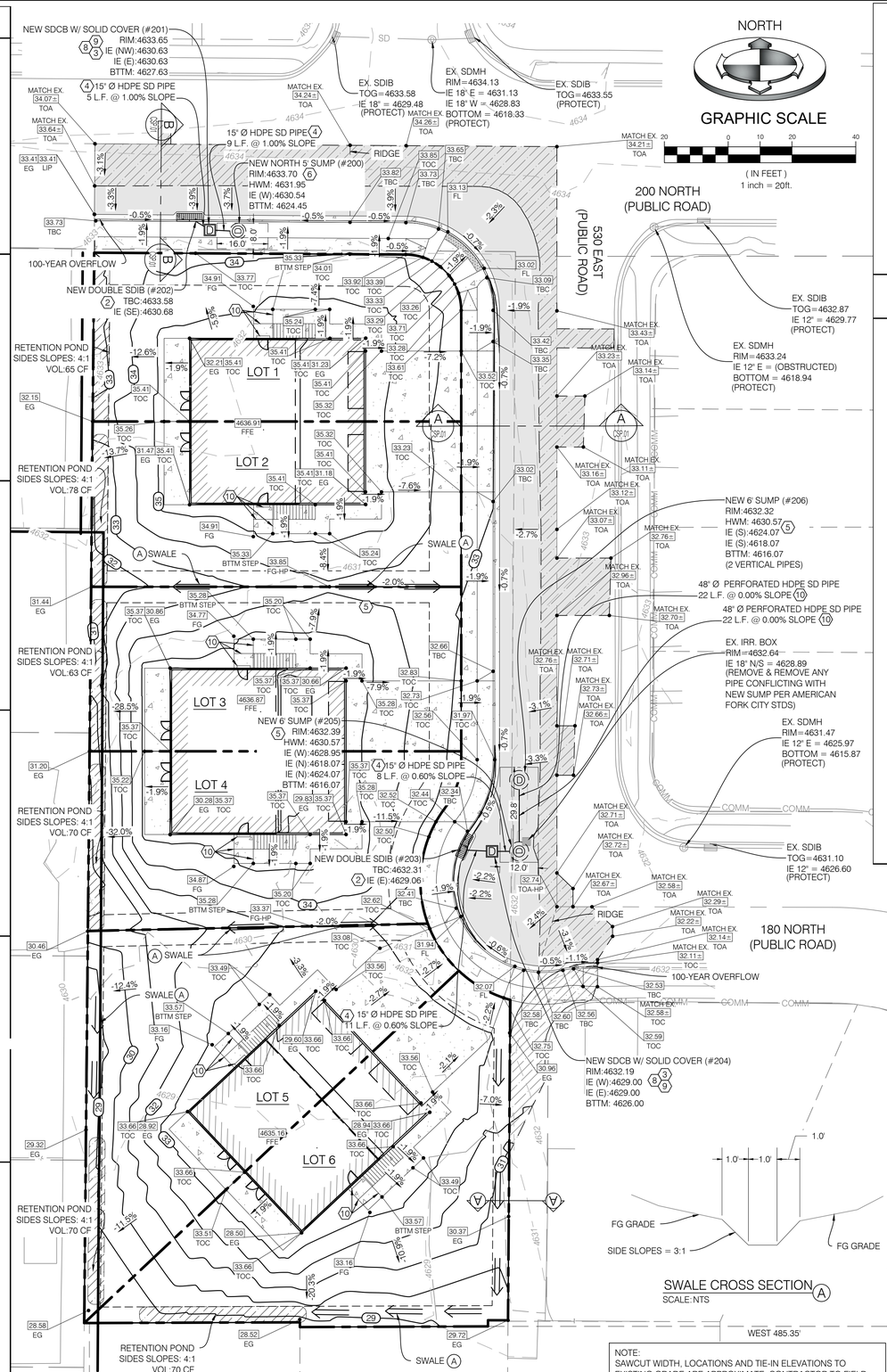
Retention Pond Area
Area 1 (A1)= 258 s.f. Basin Depth (H): 0.50 ft
Area 2 (A2)= 48 s.f.

Roof =	719	Frustum of Pyramid: V=h/3[A1+A2+ (A1*A2) ^1/2] =	70
Pavement =	518		
Landscaping =	5,377		
D3 Sum:	6614.61 S.F.		

80th Percentile Retention Volume

Tributary Area, A:	6,615 sf	*Granato Method*
Impervious Area:	1,238 sf	$R_V\,(i < 0.55) = 0.225 * i + 0.05$
Imperviousness:	0.19	$R_V\,(i \geq 0.55) = 1.14 * i - 0.371$
80th Percentile Storm Depth, d:	0.50 in	WQV= $R_V * d * A$
Volumetric Runoff Coefficient, Rv:	0.09	
Required Water Quality Volume, WQV:	25 cf	
Provided Water Quality Volume, WQV:	70 cf	YES

Is there adequate storage? Storage Provided = 70 cf
Req. Storage = 25 cf YES



DRAINAGE AREA 1 (EAST SUMP)
Rational Method (Q=1.25CIA)*

Drainage Area 1 (D1)		Rational Coefficient (C)	1.25*C*A
Roof =	4,387	0.85	4661.1344 S.F.
Pavement =	13,971	0.92	16067.191 S.F.
Landscaping =	5,326	0.2	1331.4675 S.F.
D1 Sum:	23684.29 S.F.	D1 Sum:	27574.74 S.F.

AM. FORK 100-YEAR DESIGN STORM				Allowable Discharge =	0.08 cfs
Time	Intensity	Rainfall	Rainfall Excess	Allowed Discharge	Volume to Detain
(min)	(in/hr)	(inches)	(cu.ft.)	(cu.ft)	(cu.ft)
15	4.01	1.003	2304	69	2235
30	2.70	1.350	3102	138	2964
60	1.67	1.670	3837	276	3562
120	0.91	1.822	4187	551	**3636**
180	0.62	1.851	4253	827	3427
360	0.33	1.992	4577	1653	2924
720	0.19	2.292	5267	3307	1960
1440	0.10	2.352	5405	6614	0

Pipe Volume			SDB #	VOL (CF)
15 in. Pipe	Length =	**19 lf**	#203	9.2
	Volume =	**23 cf**	#204	39.0

SUMP DESIGN:

$$Q = \frac{S(sf)}{P(sec/ft)}$$

$$S = 2(WH + LH) + WL$$

Percolation surface area	
Concrete sump with rectangular gravel wrap	
Sump inner diameter	6.00 ft
Sump wall thickness	0.50 ft
Sump outer diameter	7.00 ft
Sump inner depth	14.50 ft
Depth of gravel wrap (Under Sump)	1.00 ft
Effective sump width (W)	12.00 ft
Effective sump length (L)	29.80 ft
Effective sump depth (H)	15.50 ft
Percolation surface area per sump (S)	1,653.40 sf
Sumps provided (Conc. Structures)	2
Total percolation surface area	1,653.40 sf
Discharge	
Percolation rate (P)*	30.00 min/in
Percolation surface area (S)	1,653.40 sf
Allowed Discharge (Q)	**0.08 cfs**

***Per coordination with Patrick R. Emery, if the structure is 4' or more, it's recommended to use an infiltration rate of 30 min/in.**

Sump retention volume $V = \left(WLH - \frac{\pi D^2}{4}(h+t)sump - \frac{\pi D^2}{4}(h+t)pipe\right)e + \frac{\pi d^2}{4}h(sump) + \frac{\pi d^2}{4}h(pipe)$

Sump inner depth (h)	14.50 ft
Sump inner diameter (d)	6.00 ft
Sump outer diameter (D)	7.00 ft
Sump wall thickness (t)	0.50 ft
Sump volume	409.98 cf
Sumps provided	2
Total sump volume	819.96 ft
Perforated Pipe Diameter (d)	48.00 in
Perforated Pipe Length (l)	44.00 ft
Perforated Pipe Volume	552.92 ft
Total Structure Volume (Sump+Pipe)	1,372.88 ft
Effective sump width (W)	12.00 ft
Effective sump length (L)	29.80 ft
Effective sump depth (H)	15.50 ft
Void area (e)	40%
Wrap gravel volume	2,207 cf
Is there adequate storage? Storage Provided =	**3,652 cf**
Req. Storage =	**3,636 cf**
	YES

DRAINAGE AREA 2 (NORTH SUMP)
Rational Method (Q=1.25CIA)*

Drainage Area 2 (D2)		Rational Coefficient (C)	1.25*C*A
Roof =	0	0.85	0 S.F.
Pavement =	2,580	0.92	2966.6 S.F.
Landscaping =	1,755	0.2	438.75 S.F.
D2 Sum:	4334.62 S.F.	D2 Sum:	4256.7 S.F.

AM. FORK 100-YEAR DESIGN STORM (D2)				Allowable Discharge =	0.02 cfs
Time	Intensity	Rainfall	Rainfall Excess	Allowed Discharge	Volume to Detain
(min)	(in/hr)	(inches)	(cu.ft.)	(cu.ft)	(cu.ft)
15	4.01	1.003	356	22	333
30	2.70	1.350	479	45	434
60	1.67	1.670	592	89	**503**
120	0.91	1.822	646	179	468
180	0.62	1.851	657	268	389
360	0.33	1.992	707	536	171
720	0.19	2.292	813	1072	0
1440	0.10	2.352	834	2144	0

Pipe Volume			SDB #	VOL (CF)
15 in. Pipe	Length =	**14 lf**	#201	27
	Volume=	**17 cf**	#202	9.4

SUMP DESIGN

$$Q = \frac{S(sf)}{P(sec/ft)}$$

$$S = 2(WH + LH) + WL$$

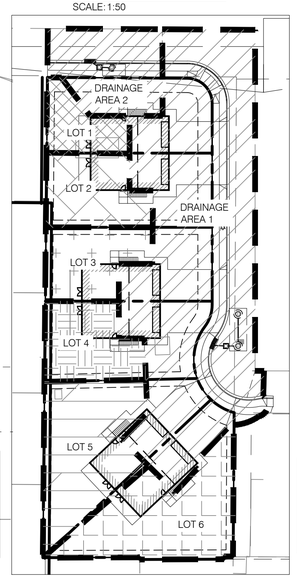
Percolation surface area	
Concrete sump with rectangular gravel wrap	
Sump inner diameter	5.00 ft
Sump wall thickness	0.50 ft
Sump outer diameter	6.00 ft
Sump inner depth	7.50 ft
Width of gravel wrap	1.00 ft
Length of gravel wrap	5.00 ft
Depth of gravel wrap	1.00 ft
Effective sump width (W)	8.00 ft
Effective sump length (L)	16.00 ft
Effective sump depth (H)	8.50 ft
Percolaton surface area per sump (S)	536.00 sf
Sumps provided	1
Total percolation surface area	536.00 sf
Discharge	
Percolation rate (P)*	30.00 min/in
Percolation surface area (S)	536.00 sf
Allowed Discharge (Q)	**0.02 cfs**

***Per coordination with Patrick R. Emery, if the structure is 4' or more, it's recommended to use an infiltration rate of 30 min/in.**

Sump retention volume $V = \left(WLH - \frac{\pi D^2}{4}(h+t)\right)e + \frac{\pi d^2}{4}h$

Sump inner depth (h)	7.50 ft
Sump inner diameter (d)	5.00 ft
Sump volume	147.26 cf
Sump outer diameter (D)	6.00 ft
Sump wall thickness (t)	0.50 ft
Wrap width (W)	8.00 ft
Wrap length (L)	16.00 ft
Wrap depth (H)	8.50 ft
Void area (e)	40%
Wrap gravel volume	344.72 cf
Total volume per sump (V)	491.98 cf
Sumps provided	1
Total sump volume	**492 cf**
Is there adequate storage? Storage Provided =	**546 cf**
Req. Storage =	**503 cf** YES

DRAINAGE AREA MAP
SCALE: 1:50



GRADING AND DRAINAGE KEY NOTE REFERENCE

NO.	DESCRIPITON	DETAIL
1	GRADE SITE TO ELEVATIONS SHOWN ON PLAN	
2	DOUBLE STORM DRAIN INLET BOX PER APWA STDS #315.2	
3	18F SNOUT	6/CDT.02
4	15" Ø HDPE ADS N-12 STORM DRAIN LINE	4/CDT.02
5	NEW EAST 6' Ø CONCRETE SUMP PER AMERICAN FORK STDS #15.14 & D1 CALCS.	4/CDT.02
6	NEW NORTH 5' Ø CONCRETE SUMP PER AMERICAN FORK STDS #15.14 & D2 CALCS.	3/CDT.02
7	SINGLE STEP (DESIGNED BY OTHERS)	
8	TURBO PLATES SEPARATOR DEVICE	4/CDT.03
9	3'X3' CATCH BASIN WITH SOLID COVER	3/CDT.03
10	48" Ø PERFORATED HDPE ADS N-12 STORM DRAIN LINE	

ALL HDPE/RCP CLASS III PIPE TO HAVE SOIL TIGHT JOINTS

EXISTING UTILITIES NOTE:
EXISTING UTILITIES HAVE BEEN NOTED TO THE BEST OF ENGINEERS KNOWLEDGE, HOWEVER IT IS THE OWNERS AND CONTRACTORS RESPONSIBILITY TO LOCATE UTILITIES IN FIELD. POTHOLE TO IDENTIFY ANY CONFLICTS BEFORE ANY PIPE INSTALLATION. NOTIFY ENGINEER IF DISCREPANCIES OR CONFLICTS EXIST PRIOR TO CONTINUING ANY CONSTRUCTION.

SURVEY CONTROL NOTE:
THE CONTRACTOR OR SURVEYOR PERFORMING THE CONSTRUCTION SURVEYING SHALL BE RESPONSIBLE TO PROVIDE CONSTRUCTION LAYOUT PER THE APPROVED PLANS ONLY. THE SURVEYOR SHALL ALSO BE RESPONSIBLE FOR VERIFYING HORIZONTAL CONTROL FROM THE SURVEY MONUMENTS AND FOR VERIFYING ANY ADDITIONAL CONTROL POINTS SHOWN ON THE SURVEY OR IMPROVEMENTS PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. THE SURVEYOR SHALL ALSO USE THE BENCHMARKS AS SHOWN ON THE PLAN, AND VERIFY THEM AGAINST NO LESS THAN THREE EXISTING HARD IMPROVEMENT ELEVATIONS INCLUDED ON THESE PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. IF ANY DISCREPANCIES ARE ENCOUNTERED, THE SURVEYOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND RESOLVE THE DISCREPANCIES BEFORE PROCEEDING WITH ANY CONSTRUCTION SURVEYING. IT IS ALSO THE RESPONSIBILITY OF THE SURVEYOR TO VERIFY ANY ELECTRONIC DATA WITH THE APPROVED STAMPED AND SIGNED PLANS AND NOTIFY THE ENGINEER WITH ANY DISCREPANCIES.

NOTE:
PRIOR TO FABRICATION OR CONSTRUCTION, BEGIN AT THE LOW END OF ALL GRAVITY UTILITY LINES AND VERIFY THE INVERT ELEVATION OF THE POINT OF CONNECTION. NOTIFY ENGINEER FOR REDESIGN IF CONNECTION POINT IS HIGHER THAN SHOWN OR IF ANY UTILITY CONFLICTS OCCUR. GRAVITY CONNECTIONS MUST BE DONE PRIOR TO BUILDING FOOTINGS AND ROUGH PLUMBING ARE CONSTRUCTED.

Blue Stakes of UTAH811 Bluestakes.org

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: AD
CHECKED BY: AGA
FIELD VIEW: KO
DATE: 06/03/2025
DWG FILE: 2402023_SITE

PRELIMINARY PLAN
PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH
NOT FOR CONSTRUCTION

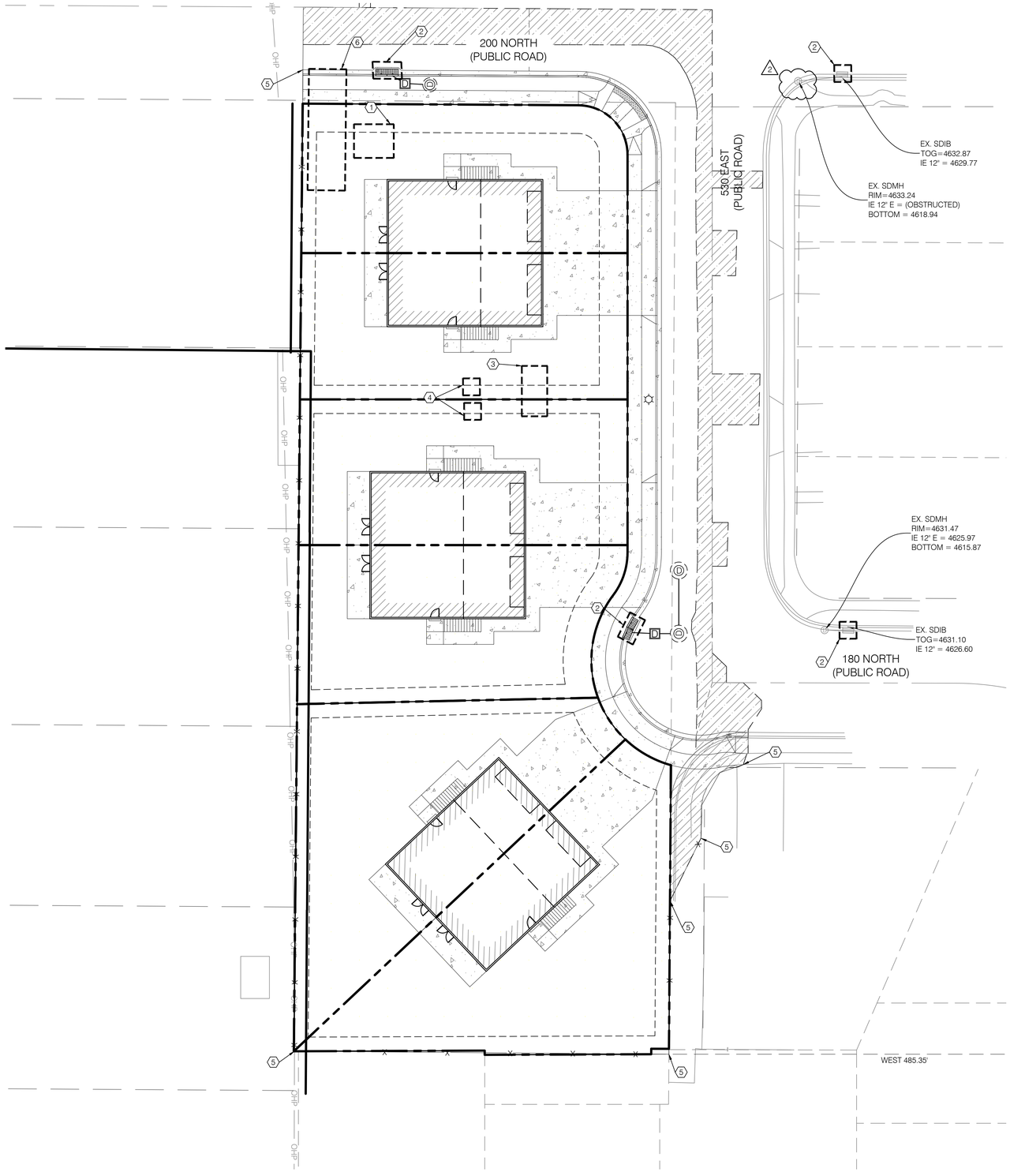
BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

PROJECT NO. 2402023

GRADING & DRAINAGE PLAN

CGD.01
6 OF 12



NORTH

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20ft.

SWPPP KEY NOTES REFERENCE

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

NO.	DESCRIPTION	DETAIL
1	CONCRETE WASTE MANAGEMENT	1/CEP.02
2	INLET PROTECTION WATTLE	2/CEP.02
3	MATERIALS STORAGE	3/CEP.02
4	PORTABLE TOILETS	4/CEP.02
5	SILT FENCE	6/CEP.02
6	TEMPORARY CONSTRUCTION ENTRANCE	7/CEP.02

NOTE:
CONTRACTOR SHALL INSTALL EROSION CONTROLS (SILT FENCES, STRAW BALES, ETC) AS REQUIRED BY REGULATORY AGENCIES. SAID CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH AGENCY STANDARDS AND FOLLOWING BEST MANAGEMENT PRACTICES FOR ACTUAL PLACEMENT ON SITE. STRAW BALES SHOWN ON THESE DRAWINGS ARE INTENDED AS A MINIMUM REQUIREMENT. ADDITIONAL CONTROLS REQUESTED BY AGENCY INSPECTORS SHALL BE REQUIRED. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTORS EXPENSE. TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

SCALE MEASURES 1"INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

0 0.5 1

DRAWN BY AD
CHECKED BY AGA
FIELD CREW KO
DATE 06/03/2025
DWG FILE 2402023_SITE

PRELIMINARY PLAN

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

NOT FOR CONSTRUCTION

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
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530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

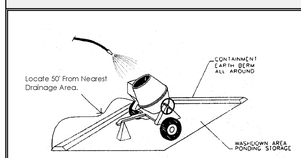
PROJECT NO. 2402023

EROSION CONTROL PLAN

CEP.01
8 OF 12

Blue Stakes of UTAH 811
Bluestakes.org

BMP: Concrete Waste Management



DESCRIPTION:
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

APPLICATIONS:
This technique is applicable to all types of sites.

INSTALLATION/APPLICATION CRITERIA:
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet.)
- Train employees and subcontractors in proper concrete waste management.

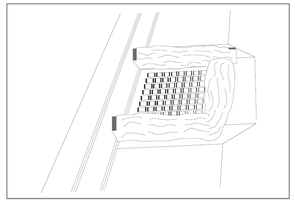
LIMITATIONS:
- Off-site washout of concrete wastes may not always be possible.

MAINTENANCE:
- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

CONCRETE WASTE MANAGEMENT 1
SCALE: NTS

BMP: Inlet Protection – Wattle

IP-W
CONSTRUCTION



DESCRIPTION:
Sediment barrier erected around storm drain inlet.

APPLICATION:
Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction.

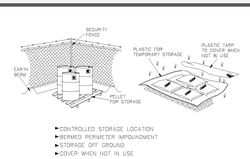
INSTALLATION/APPLICATION CRITERIA:
- Provide up-gradient sediment controls, such as silt fence during construction of inlet
- When construction of curb and gutter and roadways is complete, install gravel filled wattles around perimeter of inlet

LIMITATIONS:
- Recommended maximum contributing drainage area of one acre
- Requires shallow slopes adjacent to inlet

MAINTENANCE:
- Inspect inlet protection following storm event and at a minimum of once every 14 days.
- Remove accumulated sediment when it reaches 4 inches in depth.
- Look for bypassing or undercutting and repair or realign as needed.

INLET PROTECTION WATTLE 2
SCALE: NTS

BMP: Materials Storage



DESCRIPTION:
Controlled storage of on-site materials.

APPLICATION:
- Storage of hazardous, toxic, and all chemical substances.
- Any construction site with outside storage of materials.

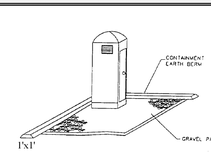
INSTALLATION/APPLICATION CRITERIA:
- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.
- For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

LIMITATIONS:
- Does not prevent contamination due to mishandling of products.
- Spill Prevention and Response Plan still required.
- Only effective if materials are actively stored in controlled location.

MAINTENANCE:
- Inspect daily and repair any damage to perimeter impoundment or security fencing.
- Check materials are being correctly stored (i.e. standing upright, in labeled containers, tightly capped) and that no materials are being stored away from the designated location.

MATERIALS STORAGE 3
SCALE: NTS

BMP: Portable Toilets



DESCRIPTION:
Temporary on-site sanitary facilities for construction personnel.

APPLICATION:
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

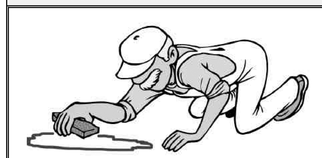
INSTALLATION/APPLICATION CRITERIA:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS:
No limitations.

MAINTENANCE:
- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

PORTABLE TOILETS 4
SCALE: NTS

BMP: Spill Clean-Up



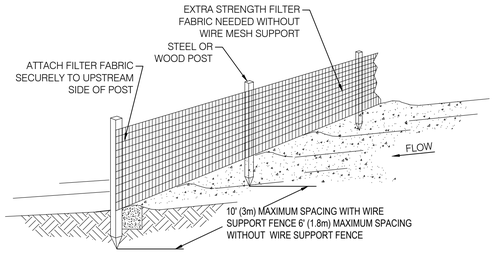
DESCRIPTION:
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

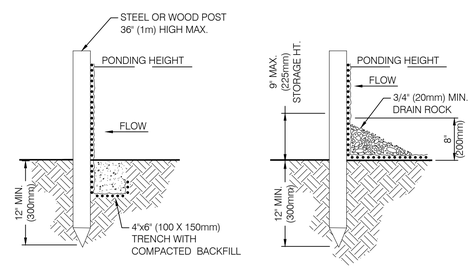
APPLICATION:
All sites

GENERAL:
- Store controlled materials within a storage area.
- Educate personnel on prevention and clean-up techniques.
- Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

METHODS:
- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #536-4100) for any spill of reportable quantity.

SPILL CLEAN UP 5
SCALE: NTS





TRENCH DETAIL

INSTALLATION WITHOUT TRENCHING

NOT TO SCALE

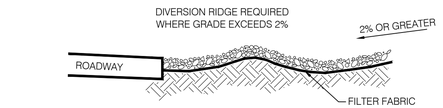
NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.

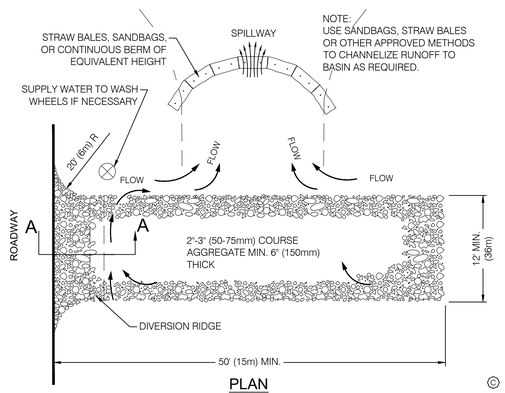
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

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SILT FENCE 6
SCALE: NTS



SECTION A - A



PLAN

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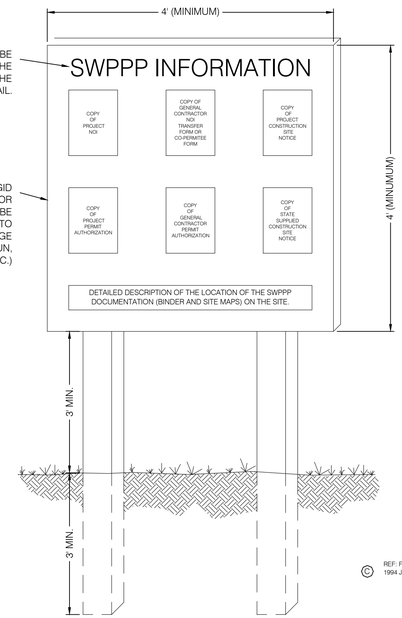
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT 7
SCALE: NTS

Blue Stakes of UTAH811 Bluestakes.org



NOTES:
1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.

2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-TO TERMINATION (NOT) IS FILED FOR THE PERMIT.

3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.

4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.

5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY IF THE SWPPP INFORMATION SIGN.

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SWPPP INFORMATION SIGN 8
SCALE: NTS

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

SCALE MEASURES 1/INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DRAWN BY: AD
CHECKED BY: AGA
FIELD CREW: KO
DATE: 06/03/2025
SCALE: 2402023 SITE

PRELIMINARY PLAN

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

NOT FOR CONSTRUCTION

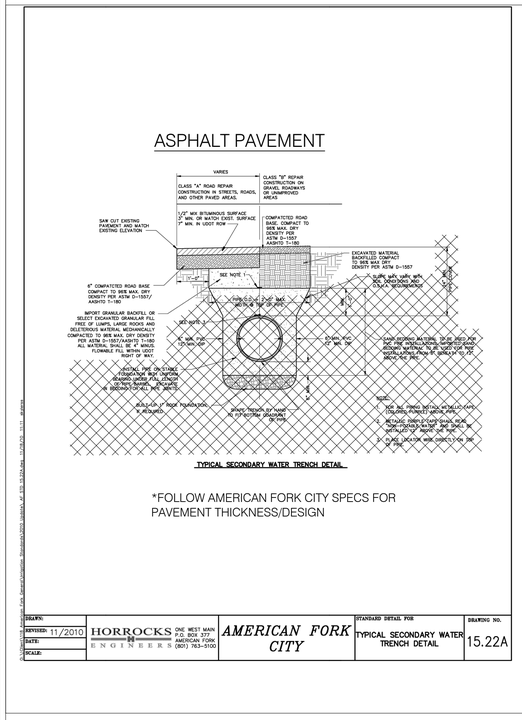
BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

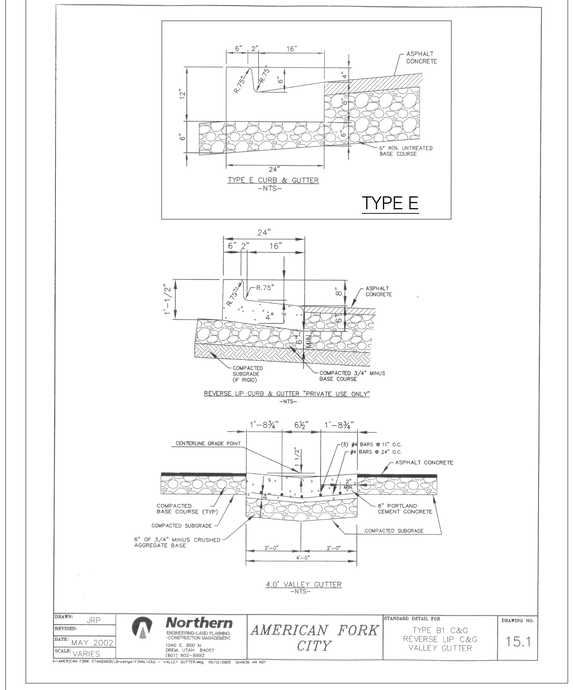
PROJECT NO. 2402023

EROSION CONTROL DETAILS

CEP.02
9 OF 12

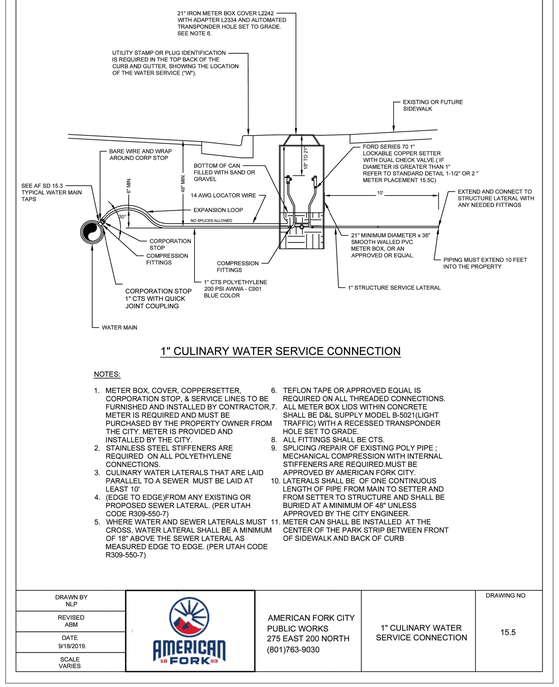


PAVEMENT SECTIONS (1)
SCALE: NTS



DRAWN: JRP
REVISED:
DATE: MAY 2002
SCALE: VARIES
Northern ENGINEERING-LAND PLANNING-CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8952
AMERICAN FORK CITY
STANDARD DETAIL FOR: TYPE B1 C&G REVERSE LIP C&G VALLEY GUTTER
DRAWING NO. 15.1

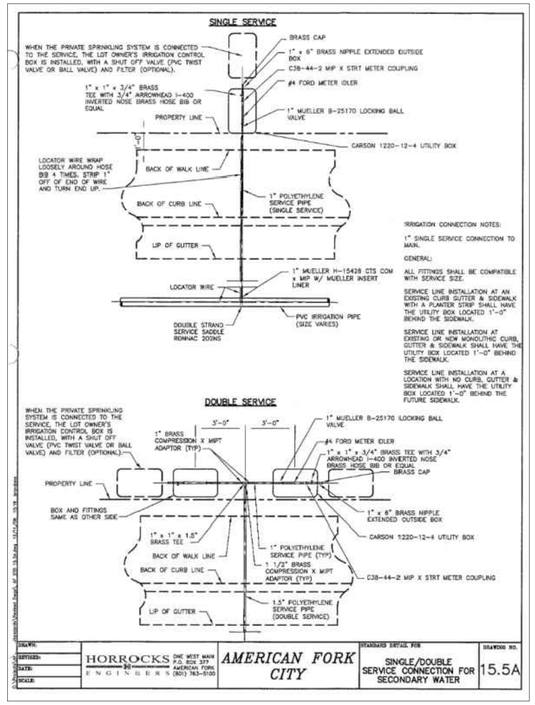
CURB & GUTTER (2)
SCALE: NTS



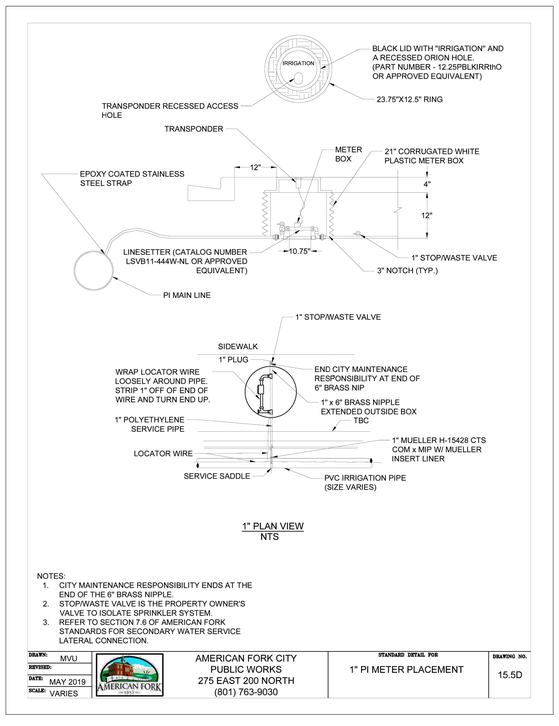
NOTES:
1. METER BOX, COVER, COPPERSETTER, CORPORATION STOP, & SERVICE LINES TO BE FURNISHED AND INSTALLED BY CONTRACTOR.7. METER IS REQUIRED AND MUST BE PURCHASED BY THE PROPERTY OWNER FROM THE CITY. METER IS PROVIDED AND INSTALLED BY THE CITY.
2. STAINLESS STEEL STIFFENERS ARE REQUIRED ON ALL POLYETHYLENE CONNECTIONS.
3. CULINARY WATER LATERALS THAT ARE LAID PARALLEL TO A SEWER MUST BE LAID AT LEAST 10' (EDGE TO EDGE)FROM ANY EXISTING OR PROPOSED SEWER LATERAL. (PER UTAH CODE R309-550-7)
5. WHERE WATER AND SEWER LATERALS MUST CROSS, WATER LATERAL SHALL BE A MINIMUM OF 18" ABOVE THE SEWER LATERAL AS MEASURED EDGE TO EDGE. (PER UTAH CODE R309-550-7)
6. TEFLON TAPE OR APPROVED EQUAL IS REQUIRED ON ALL THREADED CONNECTIONS. ALL METER BOX LIDS WITHIN CONCRETE SHALL BE D&L SUPPLY MODEL B-502(LIGHT TRAFFIC) WITH A RECESSED TRANSPONDER HOLE SET TO GRADE.
8. ALL FITTINGS SHALL BE CTS.
9. SPLICING /REPAIR OF EXISTING POLY PIPE:, MECHANICAL COMPRESSION WITH INTERNAL STIFFENERS ARE REQUIRED.MUST BE APPROVED BY AMERICAN FORK CITY.
10. LATERALS SHALL BE OF ONE CONTINUOUS LENGTH OF PIPE FROM MAIN TO SETTER AND FROM SETTER TO STRUCTURE AND SHALL BE BURIED AT A MINIMUM OF 48" UNLESS APPROVED BY THE CITY ENGINEER.
11. METER CAN SHALL BE INSTALLED AT THE CENTER OF THE PARK STRIP BETWEEN FRONT OF SIDEWALK AND BACK OF CURB

DRAWN BY: NLP
REVISED: ABM
DATE: 9/18/2019
SCALE: VARIES
AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801)763-9030
1" CULINARY WATER SERVICE CONNECTION
DRAWING NO: 15.5

1" WATER METER & SERVICE CONNECTION (3)
SCALE: NTS



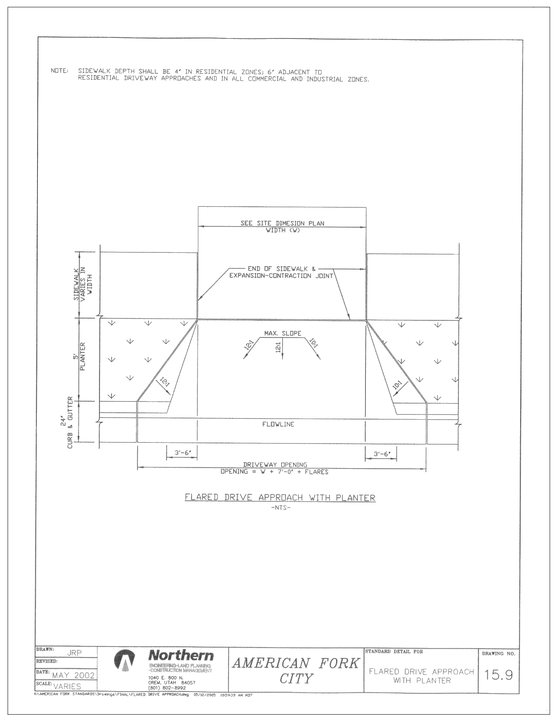
IRRIGATION SERVICE CONNECTION (4)
SCALE: NTS



NOTES:
1. CITY MAINTENANCE RESPONSIBILITY ENDS AT THE END OF THE 6" BRASS NIPPLE.
2. STOP/WASTE VALVE IS THE PROPERTY OWNER'S VALVE TO ISOLATE SPRINKLER SYSTEM.
3. REFER TO SECTION 7.6 OF AMERICAN FORK STANDARDS FOR SECONDARY WATER SERVICE LATERAL CONNECTION.

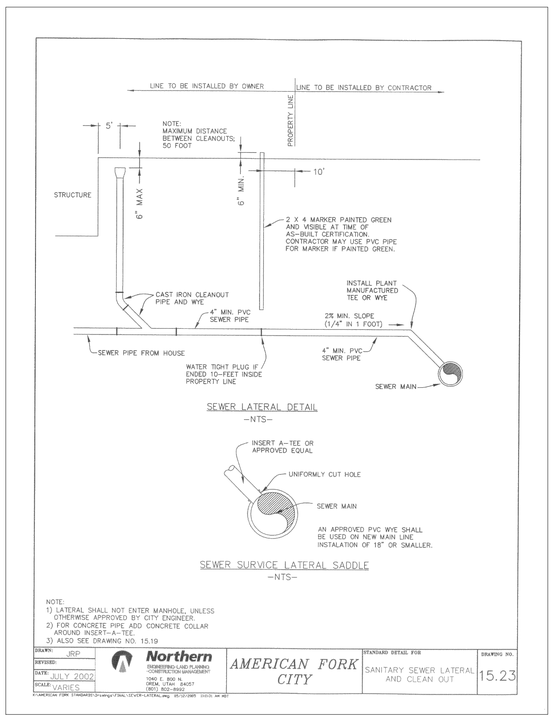
DRAWN: MVU
REVISED:
DATE: MAY 2019
SCALE: VARIES
AMERICAN FORK CITY PUBLIC WORKS 275 EAST 200 NORTH (801) 763-9030
STANDARD DETAIL FOR: 1" PI METER PLACEMENT
DRAWING NO. 15.5D

1" IRRIGATION METER (5)
SCALE: NTS



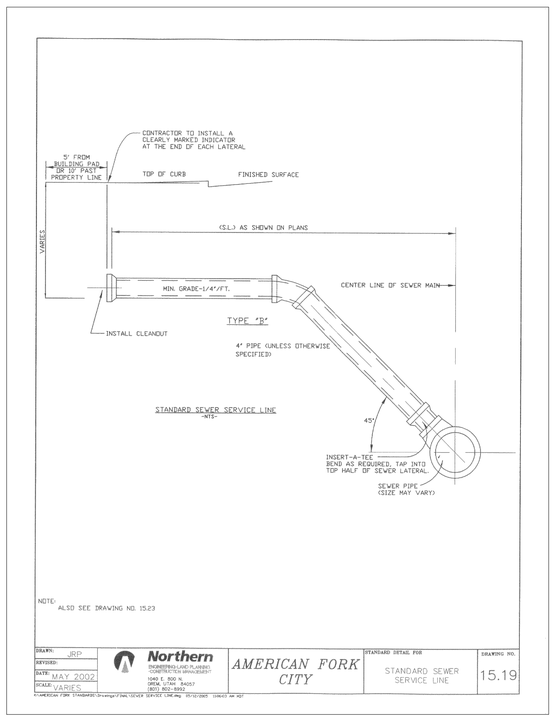
DRAWN: JRP
REVISED:
DATE: MAY 2002
SCALE: VARIES
Northern ENGINEERING-LAND PLANNING-CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8952
AMERICAN FORK CITY
STANDARD DETAIL FOR: FLARED DRIVE APPROACH WITH PLANTER
DRAWING NO. 15.9

DRIVE APPROACH (6)
SCALE: NTS



DRAWN: JRP
REVISED:
DATE: JULY 2002
SCALE: VARIES
Northern ENGINEERING-LAND PLANNING-CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8952
AMERICAN FORK CITY
STANDARD DETAIL FOR: SANITARY SEWER LATERAL AND CLEAN OUT
DRAWING NO. 15.23

SEWER CLEAN OUT (7)
SCALE: NTS



DRAWN: JRP
REVISED:
DATE: MAY 2002
SCALE: VARIES
Northern ENGINEERING-LAND PLANNING-CONSTRUCTION MANAGEMENT 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8952
AMERICAN FORK CITY
STANDARD DETAIL FOR: STANDARD SEWER SERVICE LINE
DRAWING NO. 15.19

SEWER SERVICE CONNECTION (8)
SCALE: NTS

No.	DATE	DESCRIPTION
1	08/05/2025	REVISED PER CITY COMMENTS
2	03/17/2026	REVISED PER CITY COMMENTS

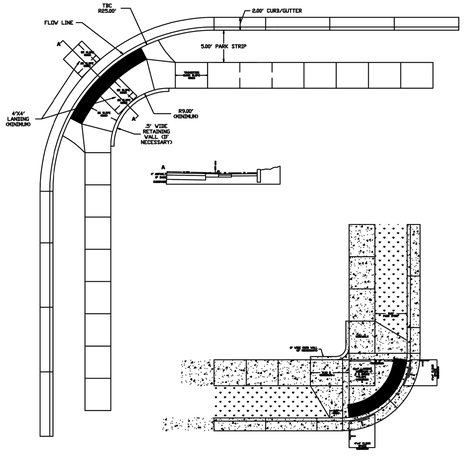
DRAWN BY: AD
CHECKED BY: AGA
FIELD CREW: KO
DATE: 06/03/2025
DWG FILE: 2402023_SITE
SCALE MEASURES 1INCH ON FULL SIZE SHEETS ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1"

PRELIMINARY PLAN
PROFESSIONAL ENGINEER 3/17/26 No. 11366633 ALISON G. ALBERT STATE OF UTAH
NOT FOR CONSTRUCTION

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com
BENCHMARK CIVIL

MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET, AMERICAN FORK CITY UTAH

PROJECT NO. 2402023
DETAIL SHEET
CDT.01
10OF 12



NOTES:

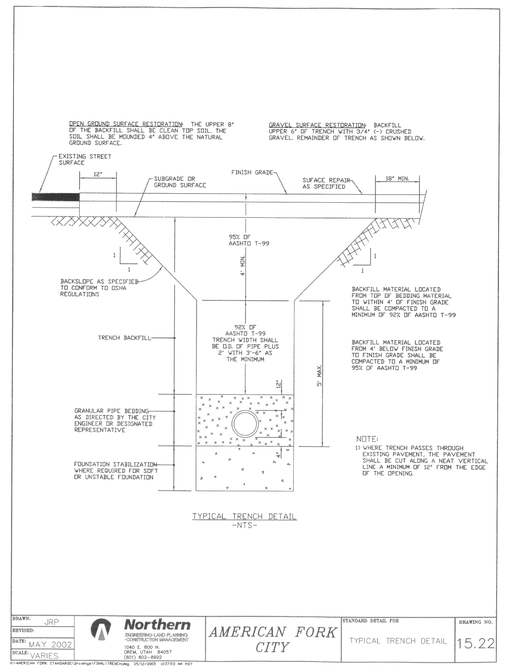
1. THE RAMP SHALL BE CONSTRUCTED USING CAST IRON TACTILE DOMES CAST TO MATCH THE RADIUS OF CURVE OR EQUAL AS APPROVE BY THE CITY ENGINEER.

2. PROVIDE DETECTABLE WARNING AREA PER APWA/ADAAG SPECIFICATIONS.

3. SEE APWA PLAN #235 FOR CONSTRUCTION DETAILS, SLOPES, ETC.

DRAWN: R.A.		STANDARD DETAIL FOR	DRAWING NO.
REVISED:	AMERICAN FORK CITY	SIDEWALK RAMP	15.18
DATE: APR. 2012			
SCALE: VARIES			

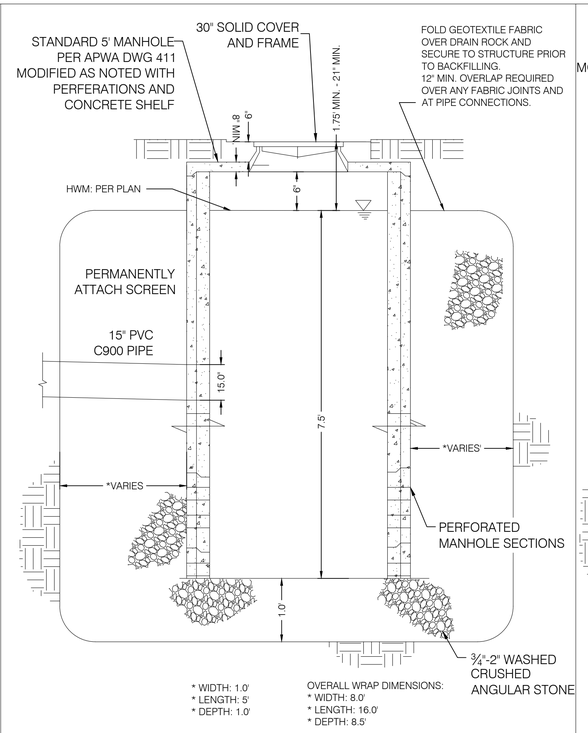
ADA RAMP (1)
SCALE: NTS



TYPICAL TRENCH DETAIL
-NTS-

DRAWN: JRP	Northern ENGINEERING / LAND PLANNING -CONSTRUCTION MANAGEMENT- 1040 E. 800 N. OREM, UTAH 84057 (801) 802-8900	AMERICAN FORK CITY	STANDARD DETAIL FOR	DRAWING NO.
REVISED:			TYPICAL TRENCH DETAIL	15.22
DATE: MAY 2002				
SCALE: VARIES				

SAWCUT (2)
SCALE: NTS

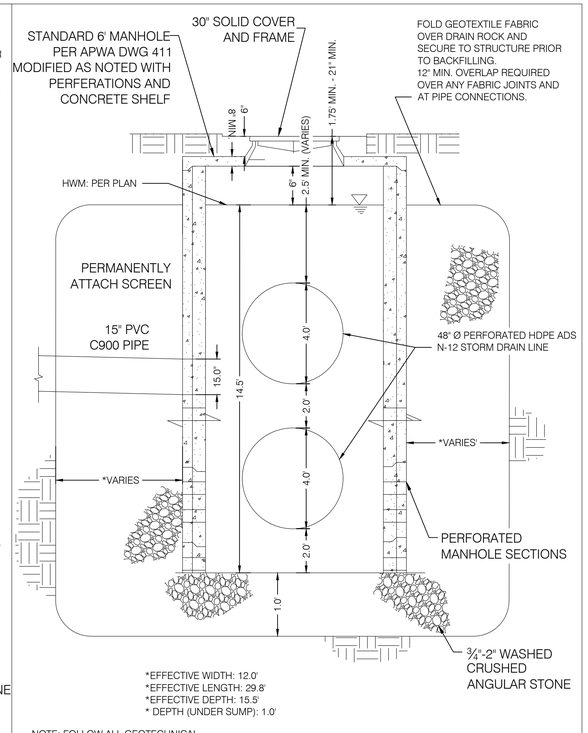


* WIDTH: 1.0'
* LENGTH: 5'
* DEPTH: 1.0'

OVERALL WRAP DIMENSIONS:
* WIDTH: 8.0'
* LENGTH: 16.0'
* DEPTH: 8.5'

NOTE: FOLLOW ALL GEOTECHNICAL RECOMMENDATIONS PER SOIL PREPARATION

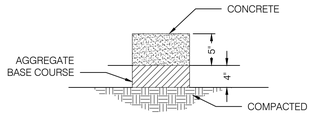
NORTH 5' CONCRETE SUMP (3)
SCALE: NTS



*EFFECTIVE WIDTH: 12.0'
*EFFECTIVE LENGTH: 29.8'
*EFFECTIVE DEPTH: 15.5'
* DEPTH (UNDER SUMP): 1.0'

NOTE: FOLLOW ALL GEOTECHNICAL RECOMMENDATIONS PER SOIL PREPARATION

EAST 6' CONCRETE SUMP (4)
SCALE: NTS

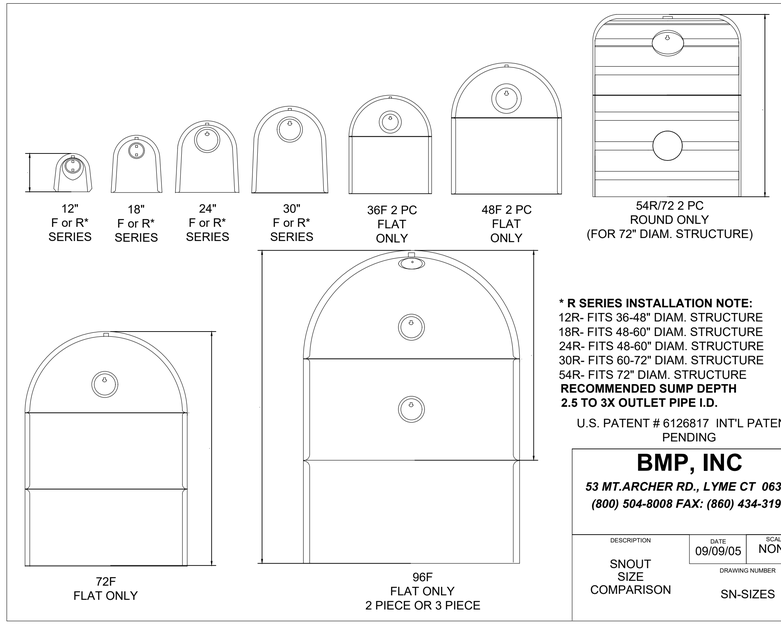


STANDARD DUTY PAVEMENT

STANDARD DUTY PAVEMENT

NOTE:
1. FOR REINFORCEMENT DESIGN OF PCC PAVEMENT SECTIONS SEE STRUCTURAL ENGINEER
2. FOR DOWEL DESIGN OF PCC PAVEMENT SECTIONS SEE GEOTECHNICAL ENGINEER.

CONCRETE PAVEMENT (5)
SCALE: NTS



*** R SERIES INSTALLATION NOTE:**
12R- FITS 36-48" DIAM. STRUCTURE
18R- FITS 48-60" DIAM. STRUCTURE
24R- FITS 48-60" DIAM. STRUCTURE
30R- FITS 60-72" DIAM. STRUCTURE
54R- FITS 72" DIAM. STRUCTURE
RECOMMENDED SUMP DEPTH
2.5 TO 3X OUTLET PIPE I.D.

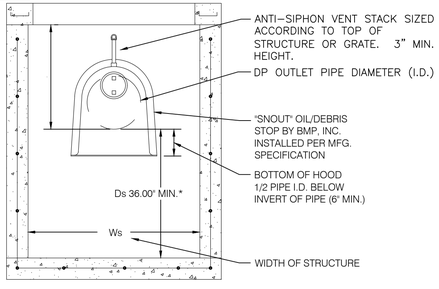
U.S. PATENT # 6126817 INT'L PATENTS PENDING

BMP, INC
53 MT.ARCHER RD., LYME CT 06371
(800) 504-8008 FAX: (860) 434-3195

DESCRIPTION	DATE	SCALE
SNOUT SIZE COMPARISON	09/09/05	NONE
	DRAWING NUMBER	
	SN-SIZES	

18F SNOUT DETAILS (6)
SCALE: NTS

DESIGN PARAMETER GUIDELINES FOR WATER QUALITY IMPROVEMENT



RULE # 1- AT AN ABSOLUTE MINIMUM, STRUCTURE INTERNAL DIMENSIONS MUST BE AT LEAST LARGE ENOUGH TO ACCOMODATE EXTERNAL DIMENSIONS OF THE SNOUT, AND ALLOW FOR A PERSON TO INSTALL IT. REFER TO BMP, INC. CAD DETAILS FOR PART DIMENSIONS.

RULE #2- USE ONLY "F" SERIES SNOUTS FOR RECTANGULAR OR SQUARE STRUCTURES, AVAILABLE IN 12", 18", 24", 30", 48", 72" AND 96" SIZES. USE ONLY "R" SERIES SNOUTS FOR ROUND STRUCTURES, AVAILABLE IN 12", 18", 24", 30", AND 54" SIZES.

*SUMP DEPTH (Ds)- SUMP DEPTH SHOULD BE A MINIMUM OF 36" FOR ANY NEW CONSTRUCTION FOR PIPES 12" AND LESS. FOR 15"-18" PIPE MIN. DEPTH SHOULD BE 48". OPTIMAL SIZING IS AT LEAST 2.5X TO 3X OUTLET PIPE DIAMETER (Dp) FOR MAXIMUM POLLUTANT REMOVAL EFFICIENCY AND MINIMAL CLEANOUT FREQUENCY.

STRUCTURE DIMENSIONS- PLAN DIMENSIONS FOR A STRUCTURE SHOULD BE UP TO 7X AREA OF OUTLET PIPE FOR MAXIMUM POLLUTANT REMOVAL EFFICIENCY AND MINIMAL CLEANOUT FREQUENCY.
(SEE "MAINTENANCE CONSIDERATIONS" DOCUMENT FOR MORE INFORMATION)

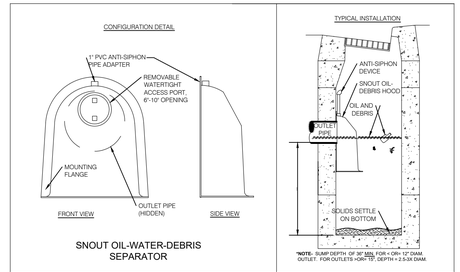
IMPORTANT NOTICE: DO NOT CONFUSE PIPE O.D WITH PIPE I.D. A SNOUT FITS OVER A PIPE, NOT IN IT. THUS, SNOUT MUST BE SIZED TO FIT OVER PIPE OPENING IN STRUCTURE. SNOUTS ARE AVAILABLE FOR ROUND STRUCTURES TO ACCOMODATE PIPES OF 54" O.D. MAX. FOR PIPES 54" O.D. AND ABOVE, USE SQUARE OR RECTANGULAR STRUCTURES.

SIZING EXAMPLES:

OUTLET HOLE SIZE	SNOUT SIZE
11.9" O.D. OR LESS	12 F or R (R FITS 36"-48" DIAM STRUCTURE)
12.0"-17.9" O.D.	18 F or R (R FITS 48"-60" DIAM STRUCTURE)
18.0"-23.9" O.D.	24 F or R (R FITS 48"-60" DIAM STRUCTURE)
24.0"-29.9" O.D.	30 F or R (R FITS 60"-72" DIAM STRUCTURE)
30.0"-35.9" O.D.	36F
30.0"-47.9" O.D.	48 F
30.0"-53.9" O.D.	54R/72 (FITS 72" DIAM STRUCTURE ONLY)
48.0"-71.9" O.D.	72F
72"-95.9" O.D.	96 F

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
SNOUT SIZING CHART	09/09/05	NONE
	DRAWING NUMBER	
	SP-SI	



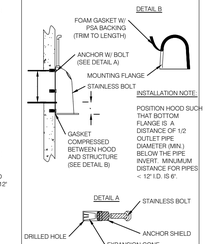
SNOUT OIL-WATER-DEBRIS SEPARATOR

*NOTE- SUMP DEPTH OF 30" MIN. FOR < OR= 12" DIAM OUTLET FOR OUTLETS >OR="15", DEPTH = 2.5-3X DIAM.

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY: BEST MANAGEMENT PRODUCTS, INC. 53 MT. ARCHER RD. LYME, CT 06371 (860) 434-0277, (860) 434-3195 FAX TOLL FREE: (800) 504-8008 OR (888) 354-7585 WEB SITE: www.bestmp.com OR PRE-APPROVED EQUAL.
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES < 12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 24" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

US Patent # 6126817



HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL- DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/08/00	NONE
	DRAWING NUMBER	
	SP-SN	

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	02/17/2026	REVISED PER CITY COMMENTS

DRAWN BY: AD	DATE: 06/03/2025
CHECKED BY: AGA	DWG FILE: 2402023 SITE
FIELD CREW: KO	

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1"

PRELIMINARY PLAN

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

NOT FOR CONSTRUCTION

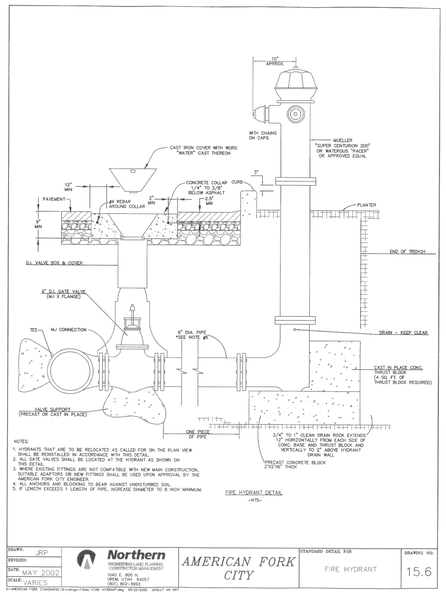
BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

PROJECT NO. 2402023

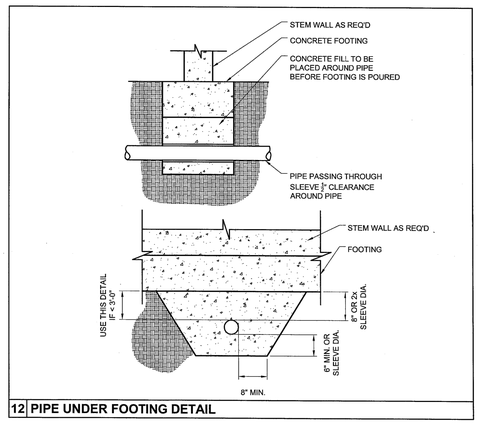
DETAIL SHEET

CDT.02
11 OF 12



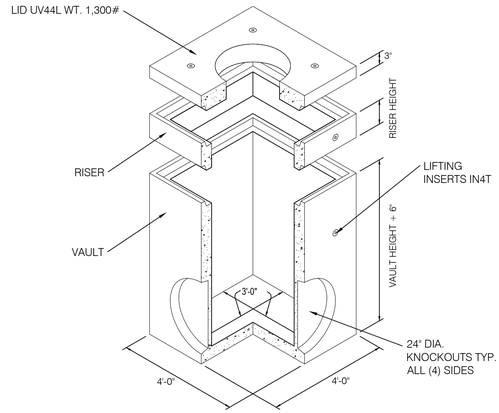
THRUST BLOCK (1)
SCALE: NTS

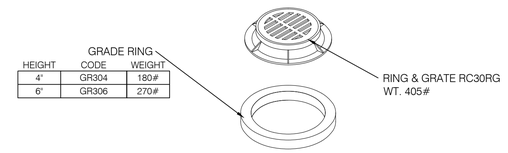
* PIPE UNDER FOOTING DETAIL IS FOR REFERENCE ONLY AND CONSTRUCTION SPECIFICATIONS MUST BE VERIFIED WITH STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION OF FABRICATION.



12 PIPE UNDER FOOTING DETAIL

PIPE UNDER FOOTING DETAIL (2)
SCALE: NTS





HEIGHT	CODE	WEIGHT
4"	GR304	180#
6"	GR306	270#

RISER

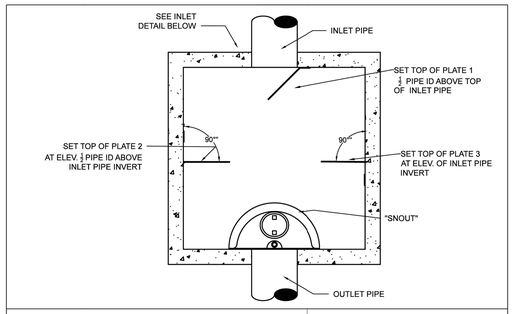
HEIGHT	CODE	WEIGHT
1'	UV441R	1,350#
2'	UV442R	2,700#
3'	UV443R	4,050#
4'	UV444R	5,400#
5'	UV445R	6,750#
6'	UV446R	8,100#

VAULT

HEIGHT	CODE	WEIGHT
3'	CB443	3,225#
4'	CB444	4,575#
5'	CB445	5,925#
6'	CB446	7,275#

NOTES:
1. CATCH BASINS ARE DESIGNED TO MEET ASTM C859 WITH AASHTO HS-20 LOADING.
2. OPENINGS MAY BE SIZED AND LOCATED AS REQUIRED.
3. OPTIONAL GRATING OR COVER MATERIAL MAY BE CAST IN AS REQUIRED.
4. CHECK HARDWARE SECTION FOR OPTIONAL ACCESSORIES.

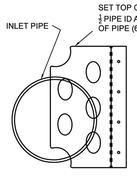
3'x3' CATCH BASIN WITH SOLID LID (3)
SCALE: NTS



NOTES:

1. ALL ANTI-TURBULENCE PLATES (TURBO PLATES) FOR WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY:
   BEST MANAGEMENT PRODUCTS, INC.
   9 MATTHEWS DRIVE UNITS A1-A2
   EAST HADDAM, CT 06423
   (860) 434-0277, (877) 434-3197 FAX
   TOLL FREE: (800) 504-8008
   WEB SITE: www.bmpinc.com
   OR PRE-APPROVED EQUAL
2. ALL ANTI-TURBULENCE PLATES SHALL BE CONSTRUCTED OF 7-10 GA. STAINLESS STEEL GRADE T304
3. THE SIZE AND POSITION OF THE PLATES SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SEE INLET DETAIL)
4. THE TOP OF PLATE 1 ADJACENT TO THE INLET PIPE SHALL BE SET AT ½ PIPE ID (OR MIN OF 6") ABOVE THE TOP OF THE INLET PIPE. THE TOP OF PLATE 2 SHALL EXTEND DOWNWARD FROM THE HORIZONTAL CENTERLINE OF THE INLET PIPE. THE TOP OF PLATE 3 SHALL EXTEND DOWNWARD FROM THE INLET PIPE INVERT.
5. THE SURFACE OF THE STRUCTURE WHERE THE PLATES ARE MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL.
6. THE PLATES SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
7. THE STRUCTURE IMMEDIATELY UPSTREAM OF ANTI-TURBULENCE PLATE-EQUIPED STRUCTURE SHALL BE EQUIPPED WITH SUMP AND BMP SNOUT HOOD PER MANUFACTURER'S RECOMMENDATION.
8. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
   INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. 3/8"X 3" STAINLESS STEEL WEDGE ANCHORS

THE SNOUT IS PROTECTED BY
US Patent # 6126817, 7857966, 7951294,
8512556 TURBO PLATE PATENT
PENDING



INLET DETAIL

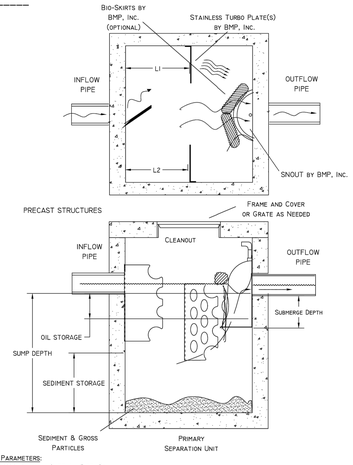
SPECIFICATION FOR ANTI-TURBULENCE PLATE FOR WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
TURBO PLATE SPECIFICATION AND INSTALLATION (TYPICAL F)	01/27/19	NONE
	DRAWING NUMBER	
	SP-TPF	

TURBO PLATES DETAIL (4)
SCALE: NTS

PROJECT:_____
LOCATION:_____
STRUCTURE: _____

SNOUT TURBO PLATE-OIL-GRIT SEPARATOR



DESIGN PARAMETERS:
SNOUT MODEL: _____ OUTFLOW PIPE ID: ____
STRUCTURE DIAM. (INSIDE): _____
SUMP DEPTH TOTAL/VOL: _____
SUBMERGE DEPTH: ____
SEDIMENT STORAGE DEPTH/VOL: _____
OIL STORAGE DEPTH/VOL: _____
BIO-SKIRTS: ____
TURBO PLATES _____ (SNOUT RECOMMENDED UPSTREAM)
TOP OF PLATE 1 ELEV. SET AT ½ PIPE ID ABOVE PIPE INVERT
TOP OF PLATE 2 ELEV. AT TOP OF PIPE ID; L1:_____
TOP OF PLATE 3 ELEV. AT PIPE INVERT; L2: _____

BMP, INC. MANUFACTURES INTERNAL STRUCTURE COMPONENTS ONLY. THE DESIGN SUGGESTIONS ARE PRESENTED FOR INFORMATIONAL PURPOSES ONLY. BMP, INC. MAKES NO WARRANTY EXPRESSED OR IMPLIED AS TO SYSTEM PERFORMANCE. STRUCTURE DESIGNS AND INSTALLATION SHOULD BE CERTIFIED BY A PROFESSIONAL ENGINEER.

BEST MANAGEMENT PRODUCTS, INC.
9 MATTHEWS DR., A1-A2,
E. HADDAM , CT. 06423
(800) 504-8008 FAX: (877)434-3197
U.S.PATENT #s 6126817,7857966,7951294, 8512556 + PENDING

	DATE	SCALE
SINGLE TURBO PLATE OIL-GRIT SEPARATOR	01/27/19	NONE
	DRAWING NUMBER	
	TURBO-SINGLE F	

No.	DATE	DESCRIPTION
1	08/25/2025	REVISED PER CITY COMMENTS
2	09/17/2025	REVISED PER CITY COMMENTS

DRAWN BY: AD
CHECKED BY: AGA
FIELD CREW: KO
DATE: 06/03/2025
SURV. FILE: 2402023 SITE

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
1 0 0.5 1

PRELIMINARY PLAN

PROFESSIONAL ENGINEER
2/17/26
No. 11366633
ALLISON G. ALBERT
STATE OF UTAH

NOT FOR CONSTRUCTION

BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

MAKER ACRE SUBDIVISION
530 EAST 200 NORTH STREET,
AMERICAN FORK CITY UTAH

PROJECT NO: 2402023

DETAIL SHEET

CDT.03
12 OF 12

ALTA/NSPS LAND TITLE SURVEY

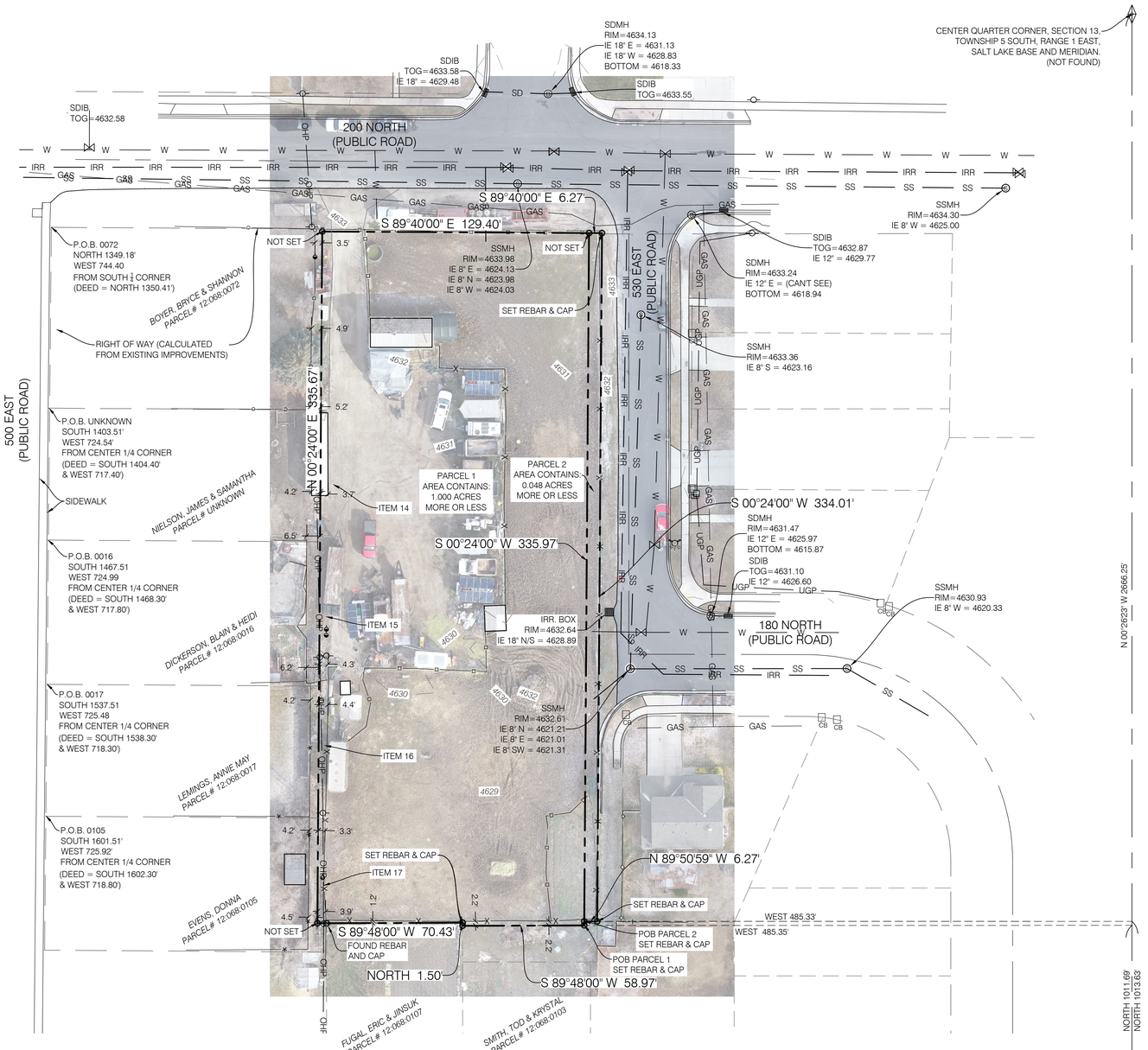
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 13,
TOWNSHIP 5 SOUTH, RANGE 1 EAST,
SALT LAKE BASE AND MERIDIAN
AMERICAN FORK CITY, UTAH COUNTY, UTAH

NORTH

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30ft.



SURVEYOR'S CERTIFICATE

TO: FIRST AMERICAN TITLE INSURANCE COMPANY
KSM FAMILY, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 5, 8, 11 AND 13 OF TABLE 'A' THEREOF. THE FIELDWORK WAS COMPLETED ON FEBRUARY 27, 2024.

DALE K. BENNETT No. 103381 07/18/2025
REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF UTAH

LEGAL DESCRIPTION PER TITLE REPORT

PARCEL 1:
COMMENCING NORTH 1011.69 FEET AND WEST 485.35 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; AND RUNNING THENCE SOUTH 89°48'00" WEST 58.97 FEET; THENCE NORTH 1.5 FEET; THENCE SOUTH 89°48'00" WEST 70.43 FEET; THENCE NORTH 0°24'00" EAST 335.67 FEET; THENCE SOUTH 89°40'00" EAST 129.41 FEET; THENCE SOUTH 0°24'00" WEST 335.94 FEET TO BEGINNING.

PARCEL NO. 12-067-0151

PARCEL 2:
COMMENCING NORTH 1013.63 FEET AND WEST 485.33 FEET FROM THE SOUTH QUARTER CORNER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN; AND RUNNING THENCE NORTH 0°24'00" EAST 333.99 FEET; THENCE SOUTH 89°40'00" EAST 6.26 FEET; THENCE SOUTH 0°24'00" WEST 333.97 FEET; THENCE NORTH 89°52'21" WEST 6.26 FEET TO BEGINNING.

PARCEL NO. 12-068-0094

NARRATIVE OF SURVEY

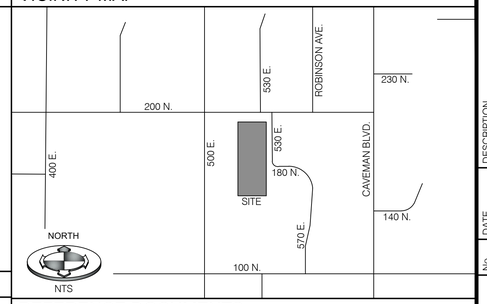
SCOPE
BENCHMARK ENGINEERING & LAND SURVEYING, LLC WAS RETAINED BY KSM FAMILY LLC TO PERFORM AN ALTA/NSPS SURVEY OF SUBJECT PROPERTY AS SHOWN HEREON.

BASIS OF BEARING
THE BASIS OF BEARINGS FOR THIS SURVEY IS SOUTH 89°45'24" EAST, AS SHOWN HEREON.

BENCHMARK
SOUTH QUARTER CORNER OF SECTION 13, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE AND MERIDIAN.
ELEVATION = 4614.85

NARRATIVE
THE LEGAL DESCRIPTIONS OF THE ADJACENT PARCELS TO THE WEST OVERLAP WITH THE LEGAL DESCRIPTION OF THE SUBJECT PROPERTY. IT APPEARS THAT THIS OVERLAP IS CAUSED BY INCORRECT TIES TO THE PROPERTIES ON THE WEST. WHEN SHIFTED TO THE WEST, THE BOUNDARIES OF THE WESTERLY PROPERTIES COINCIDE WITH BOTH THE WESTERLY PROPERTY LINE OF THE SUBJECT PARCEL, AND WITH THE IMPROVEMENTS IN THE RIGHT OF WAY OF 500 EAST STREET. EFFORTS WERE MADE TO DETERMINE THE RIGHT OF WAY WIDTH OF SAID STREET WERE NOT FOUND. BASED ON THE RIGHT OF WAY IMPROVEMENTS, THE RIGHT OF WAY WIDTH OF 500 EAST STREET WAS DETERMINED TO BE 60 FEET. SAID 60 FOOT RIGHT OF WAY LINE FALL 0.75 FEET EAST MORE OR LESS FROM THE BACK OF THE WALK ON BOTH SIDES OF 500 EAST STREET.

VICINITY MAP



REFERENCE DOCUMENTS

R1) COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NO. 59148, EFFECTIVE DATE JANUARY 30, 2024.

R2) JOLIET PLAT "A" SUBDIVISION, RECORDED JUNE 17, 2004 AS ENTRY NO. 69787:2004 AT THE OFFICE OF THE UTAH COUNTY RECORDER.

R3) RECORD OF SURVEY, PREPARED BY APEX LAND SURVEYORS INC., DATED JANUARY 8, 2004 AS SURVEY NO. 04-033 AT THE OFFICE OF THE UTAH COUNTY SURVEYOR.

TITLE EXCEPTIONS

THIS SURVEY IS BASED UPON THE COMMITMENT FOR TITLE INSURANCE ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT NO. 59148, EFFECTIVE DATE JANUARY 30, 2024.

NOTES PERTAINING TO EXCEPTIONS TO COVERAGE, SCHEDULE B-2 OF REFERENCED COMMITMENT:

ITEMS 1-11 NOT ADDRESSED IN THIS SURVEY

ITEM 12 RIGHTS OF WAY FOR ANY ROADS, DITCHES, CANALS, OR UTILITY LINES NOW EXISTING OVER, UNDER, OR ACROSS THE LAND.
(SURVEY FINDINGS: AFFECTS SUBJECT PROPERTY, EXISTING FEATURES AS SHOWN)

ITEM 13 NOT ADDRESSED IN THIS SURVEY

ITEM 14 THE LEGAL DESCRIPTION CONTAINED IN THAT CERTAIN WARRANTY DEED EXECUTED BY JOHN A. ROSENDAHL, AN UNMARRIED MAN, IN FAVOR OF JAMES NIELSON AND SAMANTHA NIELSON, HUSBAND AND WIFE, AS JOINT TENANTS, RECORDED APRIL 23, 1992 AS ENTRY NO. 19407 IN BOOK 2923 AT PAGE 902 OF OFFICIAL RECORDS, OVERLAPS AND CONFLICTS WITH THE LAND DESCRIBED HEREIN.
(SURVEY FINDINGS: AFFECTS SUBJECT PROPERTY, AS SHOWN)

ITEM 15 THE LEGAL DESCRIPTION CONTAINED IN THAT CERTAIN WARRANTY DEED EXECUTED BY HEIDI GENE DICKERSON, IN FAVOR OF BLAINE C. DICKERSON AND HEIDI GENE DICKERSON, HUSBAND AND WIFE, AS JOINT TENANTS, RECORDED MARCH 16, 2015 AS ENTRY NO. 21015:2015 OF OFFICIAL RECORDS, OVERLAPS AND CONFLICTS WITH THE LAND DESCRIBED HEREIN.
(SURVEY FINDINGS: AFFECTS SUBJECT PROPERTY, AS SHOWN)

ITEM 16 THE LEGAL DESCRIPTION CONTAINED IN THAT CERTAIN WARRANTY DEED EXECUTED BY ARTALEE T. LARSEN, IN FAVOR OF ANNIE MAY LEMINGS, A SINGLE WOMAN, RECORDED SEPTEMBER 28, 2012 AS ENTRY NO. 84143:2012 OF OFFICIAL RECORDS, OVERLAPS AND CONFLICTS WITH THE LAND DESCRIBED HEREIN.
(SURVEY FINDINGS: AFFECTS SUBJECT PROPERTY, AS SHOWN)

ITEM 17 THE LEGAL DESCRIPTION CONTAINED IN THAT CERTAIN QUIT CLAIM DEED EXECUTED BY DONNA KATHLEEN EVANS A.K.A. DONNA KATHELEEN EVANS AND CHRISTINE ANN EVANS A.K.A. CHRISTINE MAXWELL, IN FAVOR OF DONNA K. EVANS, TRUSTEE (AND TO HER SUCCESSORS IN TRUST) OF THE DONNA K. EVANS FAMILY TRUST U/A/D JANUARY 12, 1999, RECORDED MARCH 11, 1999 AS ENTRY NO. 29431 IN BOOK 5008 AT PAGE 129 OF OFFICIAL RECORDS, OVERLAPS AND CONFLICTS WITH THE LAND DESCRIBED HEREIN.
(SURVEY FINDINGS: AFFECTS SUBJECT PROPERTY, AS SHOWN)

GENERAL NOTES

1) SURVEYOR'S OBSERVATIONS REGARDING POSSIBLE ENCROACHMENTS.
A - THE FENCES ON THE WEST AND SOUTH PROPERTY LINES, AS SHOWN.
B - THE STRUCTURE ON THE WEST PROPERTY LINE, AS SHOWN.
2) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN AND BLUESTAKE MARKINGS FOUND AT THE SITE MAY NOT DEPICT UNDERGROUND FEATURES ACCURATELY. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED.
3) NO OBSERVED EVIDENCE OF ANY CEMETERIES AND/OR BURIAL GROUNDS CONTAINED WITHIN PROPERTY.
4) THE SUBJECT PROPERTY HAS DIRECT ACCESS TO 200 NORTH STREET.
5) THERE ARE SEVERAL OVERLAPS ON THE WEST PROPERTY LINE WERE FOUND.

LEGEND AND ABBREVIATIONS

- SECTION CORNER & LINE (FOUND)
- PROPERTY CORNER (PLAT NOTED)
- ADJACENT PL or LOT LINES
- EXISTING RIGHT-OF-WAY LINE
- CENTERLINE of ROAD
- CURB & GUTTER
- EDGE OF EXISTING ASPHALT
- FENCE, CHAIN
- FENCE, IRON
- FENCE, VINYL
- FENCE, WIRE
- FENCE, WOOD
- SANITARY SEWER MANHOLE & PIPE (SS)
- STORM DRAIN MANHOLE & PIPE (SD)
- CULINARY PIPE LINE (W)
- WATER VALVE & WATER METER
- FIRE HYDRANT
- IRRIGATION VALVE & PIPE LINE (IRR)
- POWER POLE & OVERHEAD POWER (OHP)
- UNDERGROUND POWER (UGP)
- GAS LINE (GAS)
- GUY WIRE
- GAS METER
- TELECOMM PEDESTAL
- STORM DRAIN INLET BOX
- SECTION CORNER (NOT FOUND)

SDMH STORM DRAIN MANHOLE
SSMH SANITARY SEWER MANHOLE
SD STORM DRAIN
CB CATCH BASIN
IE INVERT ELEVATION
TOG TOP OF GRATE
POB POINT OF BEGINNING

No.	DESCRIPTION	DATE

DRAWN BY AO
CHECKED BY DKB
FIELD CREW AO
JOB NO. 07/18/2025
DWG FILE 2402023.dwg

SCALE MEASURES 1-INCH ON FULL SIZE SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS
0 0.5 1

BENCHMARK ENGINEERING & LAND SURVEYING
9108 SOUTH STATE STREET SUITE # 100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

KSM FAMILY LLC

520 EAST 200 NORTH STREET,
AMERICAN FORK CITY, UTAH

PROJECT NO. 2402023

ALTA/NSPS LAND TITLE SURVEY

SVA.01
1 OF 1

Development Review Committee Staff Report
Meeting Date: March 16, 2026

Agenda Topic

Review and recommendation on an application for a Commercial Site Plan, known as Rockport Industrial, located at 205 W Frontage Rd, American Fork City. The Commercial Site Plan consists of 1.43 acres and will be in the Planned Industrial (PI-1) Zone.

BACKGROUND INFORMATION		
Location:		205 W Frontage Road
Parcel ID:		13:047:0027
Project Type:		Preliminary Plat
Applicants:		Nate Heaps
Existing Land Use:		Transit Oriented Development
Surrounding Land Use:	North	Major Transportation Facilities
	South	Residential Low Density; Residential Medium Density
	East	Design Industrial
	West	Transit Oriented Development
Existing Zoning:		PI-1
Surrounding Zoning:	North	PF
	South	R2-7500
	East	PI-1
	West	PF
Square Footage (By Use)		4,000 s.f. office space 16,000 s.f. warehouse
Total Number of Units		N/A

Parking Requirement	Office = 4 spaces per 1,000 s.f. = 16 stalls req. Warehouse = 1 space per 1,000 s.f. = 16 stalls req. Total Parking stalls provided = 50

Background

The applicant has applied for a Preliminary Plan to develop an office/warehouse development located at 205 W Frontage Road. The project looks to provide 4,000 s.f. of office space and 16,000 s.f. of warehouse space for the area for a total of 20,000 s.f. for the building. Within the building, the applicant is proposing a 17-unit office/warehouse environment where each unit is a little over 1,000 s.f.

Sec 17.6.101 Administrative Site Plan Review

1. **When Required**. Site plans shall be required for any proposed development, construction upon, revision or addition to or other improvement to a property or site in a nonresidential zone, a nonresidential use in a residential zone, or to obtain a conditional use permit in any zone. Additionally, a site plan shall be required whenever the terms of the American Fork Municipal Code otherwise require. No development, construction, revision, or additions shall take place on the site until the site plan has been approved by the City, final plats if required have been recorded, the necessary bonds have been posted, and the appropriate permits have been obtained. All applicable development, construction, revisions, or additions shall take place in compliance with an approved site plan for that specific property.

2. No proposed development, construction, revision or additions, or other improvements to a property or site shall be placed over property lines. Any proposal that does so, shall seek a final plat, or an amended final plat approval prior to a site plan approval.

3. **Submittal**. Site plan applications shall be submitted to the Development Services Department on the forms provided by the City and shall be accompanied by maps and drawings, to scale, showing the following, unless otherwise required by City Engineer or Development Services Director:
    a. ALTA Survey (identify Geodetic Datum used)
    b. Civil Engineering Design Plan Set using NAVD 88 vertical datum and including the following:
    c. Cover sheet, General Notes, Site Plan, Grading and Drainage Plan, Utility Plan showing all existing and proposed wet and dry utilities (including street lights), Plan and Profile sheet for all proposed public utilities, Erosion Control Plan, American Fork Standard Details.
    d. Application Fees
    e. Drainage Report identifying drainage sub-basins
    f. Phasing Plan
    g. Timpanogos Special Service District Form
    h. Title Report (Dated within 60 days of date of application)
    i. Zoning Clearance Letter
    j. The location of all existing and proposed buildings and structures on the site with full dimensions showing the distance between buildings and distances from buildings to adjacent property lines.
    k. The location of all parking spaces, driveways, and points of vehicular ingress and egress.
    l. A landscaping plan showing the location, types, percentages, and initial sizes of all planting materials to be used together with the location of fences, walls, hedges, and decorative materials.
    m. Preliminary elevations of main buildings showing the general appearance and types of external materials to be used and including dimension height.
    n. The locations of solid waste receptacles and trash pick-up areas. Include preliminary elevations of solid waste receptacles showing the general appearance, types of external materials to be used, and dimensions.
    o. Geotechnical Report (require each phase being planned to have test pits identified within the specific phases that will be brought forward). Geotechnical Report must be dated within 3 years of date of application, or a new Geotechnical Report is required. Geotechnical report shall include percolation rates, identify liquefaction hazards, wetlands, groundwater elevations and information required to confirm the existence or non-existence of sensitive lands as identified in the Sensitive Lands

Ordinance. Boring depths up to 70' deep may be required as per the Sensitive Lands Ordinance.

p. A traffic study prepared by an independent, professional traffic engineer if a site plan proposes any of the following: i) seventy-five (75) or more parking stalls; ii) a drive-up window; iii) more than two drive approaches from dedicated streets; iv) a corner lot where one or more of the streets is a collector or arterial street; or as required based on requirements set forth in the Traffic Impact Study requirements
    1. The final approving authority may impose traffic mitigation requirements based on the impacts identified by a traffic study prepared by the applicant, the City or any qualified independent traffic consultant. Nothing in this Section shall preclude the City from performing its own traffic study.
    2. The Development Services Director, after consultation with the Public Works Director, may waive the requirements of a traffic study if a new traffic study would be unnecessarily cumulative or otherwise not add to the information already available to the Development Services Director.

    Upon determination of a complete submittal, the site plan application shall be provided to the Development Review Committee for review.

4. **Determination of Required Documents**.

    a. Required Documents. Required submittal documents as outlined in Section 17.6.101.B shall be determined by the Development Services Director and Public Works Director after the mandatory Concept Plan Meeting is held.
        1. Upon determination of a complete submittal, the application shall be provided to the Development Review Committee for full review and determination of the appropriate approval process as outlined in Subsection D.

5. **Approval**. After full review of the site plan application, the DRC shall take action to (1) administratively approve the site plan application, or (2) move the proposed site plan to the final approval authority, as applicable. DRC shall only administratively approve or move forward a proposed site plan if it complies fully with the American Fork General Plan and the American Fork City Code, City ordinances, resolutions, and policies.
    a. DRC Administrative Approval. A concept plan meeting shall be scheduled through the Development Services Department to determine if proposed modifications to a

site qualify for an a amended administrative site plan approval process. The Development Review Committee may exercise administrative approval authority for amendments to existing site plans, or for site or structure alterations to existing buildings and sites that do not have a site plan under the following conditions:

1. The proposed amendments to the existing site plan are minor in nature and enhance the overall site, as determined by the DRC. Minor amendments include, but are not limited to, the following:

    1. Increasing the amount of parking;
    2. Restriping the parking areas;
    3. Reducing building size;
    4. Change of use in an existing building;
    5. Building additions, including new structures, where the proposed additions do not exceed 10% of the original approved site plan approved by Planning Commission;
    6. Relocating on site utility services;
    7. Installing new utility services;
    8. Minor modifications to on-site grading;
    9. Altering the exterior site lighting;
    10. Increasing the amount of landscaping;
    11. Modifying existing landscaping to water efficient standards;
    12. Altering or relocating covered parking stalls;
    13. Changing the exterior finishing materials from one acceptable material to another; and
    14. Additions to an existing building that do not increase the Gross Floor Area of the building such as awnings, canopies, decks, patios, and architectural features designed solely to enhance the aesthetic appeal of the building provided that the value of the proposed addition does not exceed five percent (5%) of the replacement value of the building.
    15. Increase in internal floor area by introducing additional floors lofts, mezzanines, etc. in an existing structure or shell.
    16. Cell tower upgrades
    17. As determined by the Development Services Director, in consultation with the Public Works Director to be a minor enough amendment as to not constitute a full site plan review.

b. **Planning Commission to Approve**. Except as otherwise specified in this subsection C.1, the Planning Commission, acting in an administrative capacity, shall be the final approval authority for all proposed site plans forwarded by the Development Review Committee and shall have the power to approve, approve with conditions if granted the authority by City ordinance, or deny a proposed site plan.

6. **Considerations**. The recommending authority and approval authority for the site plan shall consider all of the following items when reviewing a proposed site plan:
    a. Whether the proposed site plan complies with the American Fork City General Plan, the American Fork City Code, ordinances, resolutions, and policies.
    b. Whether the proposed site plan promotes the health, safety and welfare of the community. In making this determination, the recommending authority and the final approving authority for the site plan, shall consider, among other things, the overall safety of the site, the impact the site will have on traffic and on surrounding properties, and the adequacy of police, fire, and utility services that can be provided to the site.

7. **Appeals permitted**. Any person aggrieved by a determination of the Development Review Committee or the Planning Commission may request a hearing before the city council who shall have the authority to reverse, affirm or modify any decision of the underlying approval authority. Any such appeal shall be filed within ten days of the decision being appealed.

8. **Issuance of a permit**. A building permit shall not be issued for any building or structure or external alterations thereto until the provisions of this section have been complied with. Any construction not in conformance with an approved site plan shall be considered a violation of this code. Any building permit issued shall ensure that development is undertaken and completed in conformity with the plans as approved.

9. **Expiration of Site Plan Approval.**
    a. An application for site plan approval shall expire if the application has not been approved or scheduled for review and approval by the approving authority within twelve (12) months after the date it was submitted.
    b. A site plan approval issued pursuant to this section shall expire and have no further force or effect if the building, activity, construction, or occupancy authorized by the approval is not commenced within twelve (12) months of the date of the

approval. The approval authority that granted the original site plan approval may, at its discretion and upon written request submitted prior to the expiration date, grant an extension of up to six (6) months of the site plan approval.

Project Conditions of Approval

1. Update contact information as noted from DRC staff comments

Findings of Fact

1. The Commercial Site Plan meets the requirements of Section 17.4.502 PI-1 Planned Industrial Zones and 17.7.701 Planned Industrial Parks.
2. The Commercial Site Plan meets the requirements of Section 17.6.101.

Project Map



Engineering Development Checklist Completion

APPLICANT is responsible and shall submit/post/obtain all necessary documentation and evidence to comply with the Engineering Development Checklist prior to any platting, permitting, or any other form of authorization by the City including plat recording or other property conveyance to the City and prior to, throughout and after scheduling a pre-construction meeting. All recording shall take place at the Utah County Recorder's Office.

1.

Staff Recommendation

The Commercial Site Plan meets the requirements of Section 17.6.101. Staff recommends APPROVING the application.

Scope of Approval

This is not a public hearing item, as it is considered an action item. The public may speak on the matter but should understand that if a proposal meets all code requirements and criteria, the property owner has the right to develop. In some cases, public may suggest conditions to mitigate potential negative impacts.

Potential Motions – Commercial Site Plan

Approval

I move to recommend approval for the proposed Commercial Site Plan, located at 205 W Frontage Road, American Fork City, in the PI-1 Zone, , as the Commercial Site Plan meets the requirements of Section 174.502, 17.7.701 and Section 17.6.101.

Denial

I move to deny the proposed Commercial Site Plan, located at 205 W Frontage Road, American Fork City, in the PI-1 Zone, , as the Commercial Site Plan does not meet the requirements of Section 174.502, 17.7.701 and Section 17.6.101.

Table

I move to table action for the proposed Commercial Site Plan, located at 205 W Frontage Road, American Fork City, in the PI-1 Planned Industrial Zone and instruct staff/developer to……..

No comments

The comment to the left will be determined by the Planning Commission

Next Step

Proceed to the Development Review Committee on 03/16/2026

Contacts
Ben Hunter
City Engineer
bhunter@americanfork.gov

JJ Hsu
Project Engineer
jhsu@americanfork.gov

Chad Scott
Infrastructure Manager
dhoward@americanfork.gov
cscott@americanfork.gov

GIS
Rob Autrey
GIS Supervisor
rautrey@americanfork.gov

Aaron Brems
Fire Chief
abrems@americanfork.gov

Mat Sacco
Fire Marshal
msacco@americanfork.gov

Planning Department
275 E 200 N
American Fork, UT
84003
Phone:
801-763-3060

Public Works Department
275 E 200 N
American Fork, UT
84003
Phone:
801-763-3060
Fax: 801-763-3005

Police Department
75 E 80 N
American Fork, UT
84003

Emergency: 911
Non-Emergency:
801-763-3020

The Applicant is seeking a variance to the street frontage landscaping requirement from the Planning Commission during their Site Plan Application as their street frontage landscaping is less than 14' wide. This comment will be for all applicable pages throughout the Applicant's applications.

The minimum dimension allowed for the parking lot perimeter landscape strip is six feet unless adjacent to a public right-of-way where a minimum of fourteen feet is required. The width of a landscape strip can be modified by the planning commission, provided a finding that the intent of this section is met. This is mentioned within Section 17.5.121 (G)(2) and (I)(1). The 14' landscaped street frontage will be followed from the property line. Anything less that 14' will need to be approved by Planning Commission.

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

205 W Frontage Rd, American Fork, UT 84003

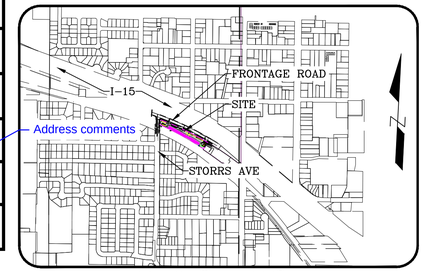
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

American Fork City Development Review

Planning and Zoning Reviewed copperman 03/09/2026	Fire Reviewed M. Sacco March 10, 2026
EC/LID Reviewed tmezenen 03/11/2026	Engineering Division Reviewed rburkhill 03/10/2026
Communications Reviewed MHunsaker 03/11/2026	Streets Division Reviewed ehyde 03/11/2026
Public Infrastructure Reviewed cscott 03/09/2026	Water/PI Division Reviewed jbrems 03/10/2026

Address comments

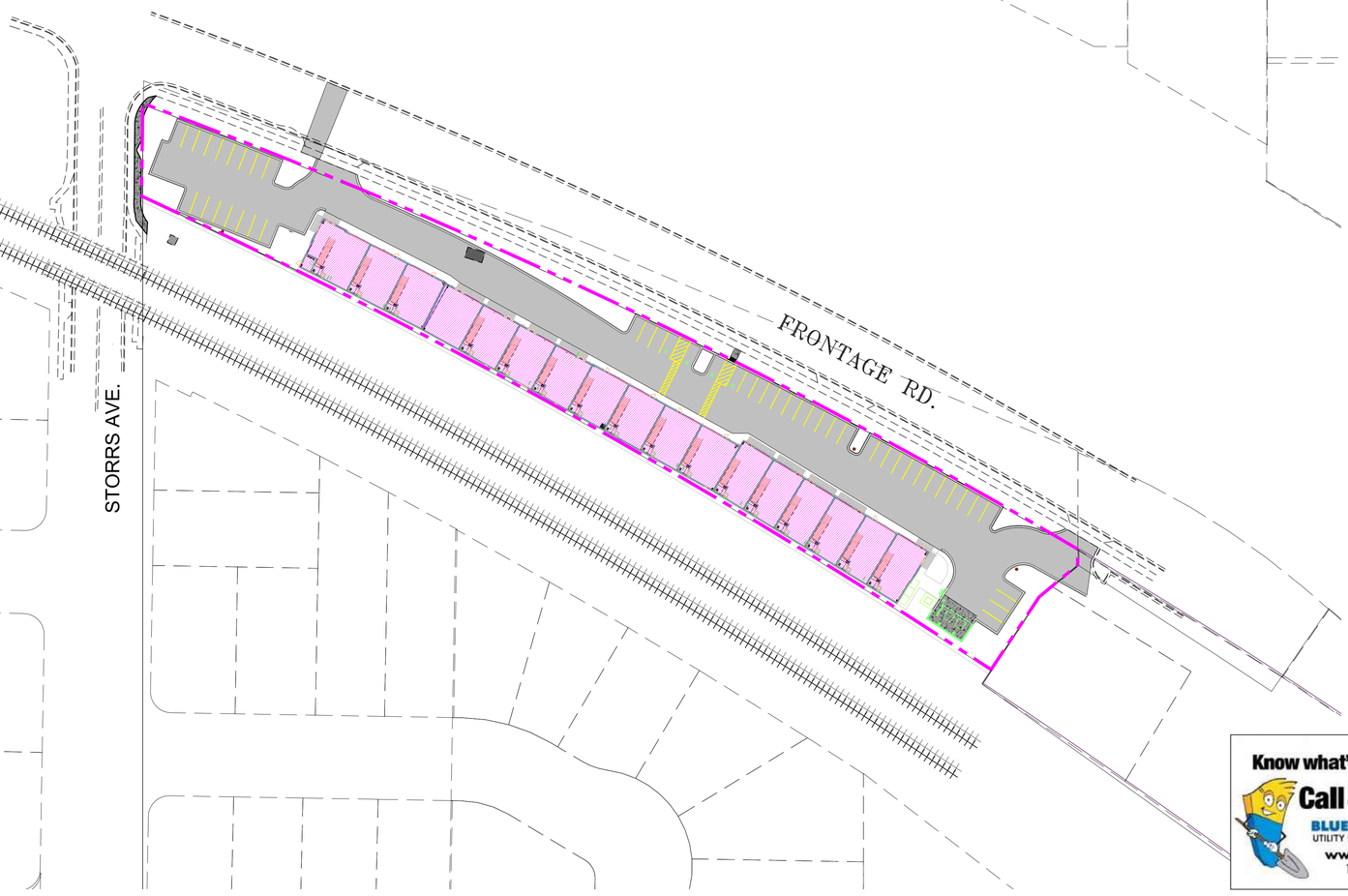
VICINITY MAP



SCALE 1" = 1000'

PARKING CALCULATIONS						
USE	AREA	FORMULA per City Code	SPACES REQUIRED		SPACES PROVIDED	ADA SPACES per IBC Table 1106.1
WAREHOUSE	16,000 SF	1 SPACE per 1000 Sq Ft	16			
OFFICE	4,000 SF	4 SPACE per 1000 Sq Ft	16	32	50	4 REQUIRED 4 PROVIDED

SITE TABULATION TABLE		
	AREA	PERCENTAGE
BUILDING	19,926 SF	32
LANDSCAPE	10,177 SF	16
HARDSCAPE	32,188 SF	52
TOTAL SITE	62,291 SF	100



-INDEX OF PLAN SHEETS-

SHEET	DESCRIPTION
CS-01	COVER SHEET
CS-02 thru CS-04	CONSTRUCTION NOTES
EX-01	EXISTING SITE PLAN
ALTA	ALTA SURVEY FINAL PLAT
SP-01 thru SP-02	SITE PLANS
UP-01 thru UP-02	UTILITY PLANS
GR-01 thru GR-02	GRADING PLANS
EC-01 thru EC-02	EROSION CONTROL PLAN & DETAILS
DT-01-DT-03	TYPICAL DETAILS
OS-01 thru OS-02	OFFSITE DITCH DESIGN
OS-03 thru OS-04	OFFSITE DITCH (EXISTING)

ALL IMPROVEMENTS AND DETAILS PER AMERICAN FORK CITY CONSTRUCTION STANDARDS

THE BASIS OF BEARING IS BETWEEN SOUTH ¼ CORNER AND THE NORTH ¼ CORNER OF SECTION 23, T5S, R1E, SALT LAKE BASE & MERIDIAN N.0°01'09"E. 1320.19'
DATUM = NAVD88 S ¼ COR - 4541.72

FEMA FLOOD NOTES
ZONE X – AREA OF MINIMAL FLOOD HAZARD
FIRMETTE # – 49049C0306F
DATED – JUNE 19, 2020
PANEL – 490152 – MAP 0306

0 25 50 100 150

(24"x36")
SCALE 1" = 50'
(11"x17")
SCALE 1" = 100'



PROJECT DEVELOPER
NATE HEAPS
CALETA CAPITAL
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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:
1
2
3

SHEET NAME: COVER SHEET & NOTES
SHEET: CS-01

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General Construction

DIVISION 3 GENERAL CONSTRUCTION REQUIREMENTS

Sec 15.01.190 General Description

Prior to commencing construction on any improvements in a development or within public right-of-way of any streets or proposed streets of American Fork City, or any work that will connect with any city public utility, the city public works department shall be notified and appropriate permits obtained so that the proper inspection may be provided, and so that it might be determined that the work has been approved. Certain types of construction shall have continuous inspection (at the discretion of the city public works director) while others may have only periodic inspections.

1. Periodic inspections shall be required on the following:
   1. Street grading and gravel base.
   2. Excavations for curb and gutter and sidewalks.
   3. Excavations for structures.
   4. Trenches for laying pipe.
   5. Forms for curb and gutter, sidewalks and structures.
2. Continuous inspection shall be required on the following types of work:
   1. Laying of street surfacing.
   2. Placing of concrete for curb and gutter, sidewalks and other structures.
   3. Laying, of water pipe, valves, hydrants, drainage pipe, sewer pipe, and testing.

On construction requiring continuous city represented inspection, no work shall be started except in the presence of a city inspector. No construction requiring inspection shall be performed on city holidays, Saturday, Sunday or non-business hours, unless prior arrangements are made with the city public works department. Appropriate scheduling may be required during months where city staff works four-day work week.

It shall be unlawful to do any construction, excavation work on any street, curb, gutter, sidewalk, sewer line, water line or other infrastructure addition or improvement in American Fork City without a public works permit from the city to do so.

(Ord. No. 2007-07-31, § 2.1, 7-10-2007)

Sec 15.01.200 Requests For Inspection

Requests for inspections shall be made to the city public works director by the person responsible for the construction. Requests for inspection on work requiring continuous inspection shall be made three days prior to the commencing of the work. Notice shall also be given one day in advance of the starting of work requiring periodic inspection.

Prior to construction, the following data (five complete copies) shall be furnished to the city inspector: "cut sheets" for sewer and curb and gutter work, samples of road base material to be used, projected time schedules for completion of the work and shop drawings for materials, etc., to be installed.

No work which may be defective in its construction, or deficient in any of the requirements of these specifications will be accepted. Failure of any officers of the city or the inspector to point out such defects or deficiencies during construction shall not relieve the contractor of his responsibility to comply with the specifications, and the contractor shall correct any imperfect work, settlement, etc., wherever discovered, before the final acceptance of the work by the city.

(Ord. No. 2007-07-31, § 2.2, 7-10-2007)

Sec 15.01.210 Construction Completion Inspection

An inspection shall be made by the city public works department after all construction work is completed. Any faulty or defective work shall be corrected by the persons responsible for the work within a period of thirty days of the date of public works department inspection report defining the faulty or defective work.

(Ord. No. 2007-07-31, § 2.3, 7-10-2007)

Sec 15.01.220 Guarantee Of Work

The improvements outlined in this chapter shall be guaranteed per section 17.9.200. All public improvements shall be completed prior to acceptance by the city and release of the final construction bond.

(Ord. No. 2007-07-31, § 2.4, 7-10-2007)

HISTORY
Amended by Ord. 2020-06-30 on 6/9/2020

Sec 15.01.230 Building Permits

The untreated gravel base must be placed and graded, sewer, and storm drain lines and water lines, and inlet boxes completed and tested before any building permits will be issued.

(Ord. No. 2007-07-31, § 2.5, 7-10-2007)

Sec 15.01.240 Barricades

Maintain proper and sufficient barricades, signals, or warnings as needed at every construction site to give warning of and protect against accidents. Comply with requirements of the Manual Uniform Traffic Control Devices (MUTCD) for all traffic control on public streets.

(Ord. No. 2007-07-31, § 2.6, 7-10-2007)

Sec 15.01.250 Occupancy Permits

Occupancy permits shall be obtained from the building official as outlined in the construction permit.

Sites requesting temporary occupancy permit in excess of a single two-week period shall provide the city a performance guarantee per the provisions of the Development Code in the estimated amount of the work to be completed as approved by city chief building official or city engineer as appropriate for the items.

(Ord. No. 2007-07-31, § 2.7, 7-10-2007; Ord. No. 2011-06-17, § 1, 6-28-2011)

Earthworks

Sec 15.01.260 General Description

This division defines the requirements for excavation and backfill for structures, construction requirements of earthen embankments and fills, and subgrade preparation for pavements and other preparation required by the standard drawings and specifications.

(Ord. No. 2007-07-31, § 3.1, 7-10-2007)

Sec 15.01.270 Excavation Permit Requirements

Before any excavation in a city street can begin, an excavation permit with required fee must be obtained from the city. The applicant must show proof that a competent licensed contractor will do the work, present evidence of sufficient public liability insurance, and post required liability bonds.

(Ord. No. 2007-07-31, § 3.2, 7-10-2007)

Sec 15.01.280 Clearing And Grubbing

The ground within the right-of-way shall be cleared of all trees, stumps, brush, weeds, roots and other objectionable materials. All branches of trees close enough to the roadway surface to be considered an obstruction to traffic or sight distance shall be carefully removed. All trees, stumps, roots, etc., are to be removed to a depth of not less than three feet below the subgrade.

All excavations made by removal of trees, stumps, etc., shall be filled with suitable material, which shall be compacted and consolidated to ninety-five percent of dry density as measured by AASHTO T-99 so as to make the surface at this point conform in contour and density to that of the surrounding ground.

(Ord. No. 2007-07-31, § 3.3, 7-10-2007)

Sec 15.01.290 Excavation For Structures

When suitable subgrade soils exist, structures shall be founded on undisturbed original subsoil. All authorized excavation below the specified structure subgrade shall be replaced with concrete; monolithic with that of the slab above or with coarse gravel material conforming to classification A-1-a AASHTO designation and compacted to ninety-five percent of maximum dry density as measured by AASHTO T-99.

Subgrade soil for all structures, regardless of type or location, shall be firm, dense, thoroughly compacted and consolidated; shall be free from mud and muck and free from organic material, roots, limbs, etc.; shall be compacted to ninety-five percent of dry density as measured by AASHTO T-99; and shall be sufficiently stable to remain firm and intact under the feet of the workmen engaged in subgrade surfacing, laying, reinforcing steel, and depositing concrete. Coarse gravel or crushed stone may be used for subsoil reinforcement if results satisfactory to the city engineer can be obtained thereby. Such material shall be applied in thin layers, not exceeding six inches, each layer being embedded in the subsoil by thorough tamping.

(Ord. No. 2007-07-31, § 3.4, 7-10-2007)

Sec 15.01.300 Backfill Around Structures

After completion of foundation footings and walls and other construction below the elevation of the final grades, and prior to backfilling, all forms shall be removed and the excavation shall be cleaned of all trash and debris. No backfilling around or behind structures shall be initiated until the concrete is fully cured for seven days. Material for backfilling shall consist of excavated material or borrow of sand, gravel, or other suitable material, and shall be placed in layers not exceeding six inches in uncompacted thickness. Each layer shall be compacted by suitable method to a density equal to ninety-five percent of maximum dry density as measured by AASHTO T-99. Backfill around curb and gutter in fill sections shall extend eighteen inches beyond outside of the concrete gutter.

(Ord. No. 2007-07-31, § 3.5, 7-10-2007)

Sec 15.01.310 Construction Of Embankments And Fills

Earth foundation surfaces shall be graded to remove surface irregularities and void of any organic material. Where suitable materials occur, after stripping, the foundation shall be scarified to a depth of not less than six inches, and the loosened material shall be moistened and compacted as hereinafter specified for each layer. All materials in embankments and fills shall be placed, moistened, and compacted as provided in the following paragraphs.

When the embankment or fill exceeds the amount of excavation, sufficient additional material shall be obtained from borrow pits provided by the contractor. All material proposed to be imported shall be subject to the review and approval of the city engineer prior to starting of hauling operations.

The materials used for embankment and fill construction shall be free from sod, grass, trash, frozen earth, rocks larger than six inches in diameter, and all other material unsuitable for construction of compacted fills.

(Ord. No. 2007-07-31, § 3.6, 7-10-2007)

Sec 15.01.320 Compacting Earth Materials

Import fill shall be deposited in horizontal layers having a thickness of not more than six inches after being compacted as hereinafter specified. The distribution of materials shall be such that the compacted material will be homogeneous and free from lenses, pockets, or other imperfections.

Prior to and during compaction operations, the material shall have the optimum moisture content required for the purpose of compaction and the moisture content shall be uniform throughout the layers, insofar as practicable. Moistening of the material shall be performed at the site of excavation, but such moistening shall be supplemented, as required by sprinkling at the site of construction. If the moisture content is greater than optimum for compaction, the compaction operations shall be delayed until such time as the material has dried to the optimum moisture content. When the material has been conditioned as hereinbefore specified, the backfill or embankment shall be compacted as follows:

1. Under roadways and extending one foot beyond the proposed curb line the fill or embankment material shall be compacted to a density equal to not less than ninety-five percent of maximum dry density as measured by AASHTO T-99.
2. Under the sidewalks, driveways and other structures the fill or embankment material (to at least one foot each side of the edge of the slab) shall be compacted to a density equal to not less than ninety-five percent of maximum dry density as measured by AASHTO T-99.
3. Other fills and embankments not listed above shall be compacted to a density equal to not less than ninety-two percent of maximum dry density as measured by AASHTO T-99.

(Ord. No. 2007-07-31, § 3.7, 7-10-2007)

Sec 15.01.330 Slopes

The slopes of excavations and/or fills shall be shaped to meet safety requirements dependent on soil types, but in no case shall the finished slope be in excess of 3:1 for cut areas or 3:1 for fill areas except as approved otherwise by the city engineer.

(Ord. No. 2007-07-31, § 3.8, 7-10-2007)

Sec 15.01.340 Road Subgrade Preparation

Rough subgrades shall be shaped and graded to within a tolerance of one-tenth foot of design grade, and drainage shall be maintained at all times. Following roadway excavation, the subgrade shall be proof rolled by running moderate-weight rubber-tire-mounted equipment uniformly over the surface.

During the rolling operation, moisture content of the subgrade layer shall be maintained at not less than ninety-seven percent or more than one hundred five percent of optimum moisture content. Rolling shall be continued until the entire roadbed is compacted to the specific density to a minimum depth of eight inches.

(Ord. No. 2007-07-31, § 3.9, 7-10-2007)

DIVISION 7 SEWER/DRAINAGE LINES

Sec 15.01.520 General Description

This division covers the requirements for piping materials and installation in the American Fork City sewer and drainage collection system. All materials and workmanship shall strictly comply with the Utah State Plumbing Code and the Utah State Health Department criteria.

(Ord. No. 2007-07-31, § 6.1, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.530 Pipe Laying

Different pipe materials have different requirements for proper installation. Therefore, each pipe material has specific pipe laying instructions.

(Ord. No. 2007-07-31, § 6.2, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.540 Installation Requirements For Line And Grade

All pipe shall be installed accurately to the defined line and grade with the following limits: Variance from established line and grade shall not be greater than one-sixteenth inch per inch of pipe diameter in ten feet, and not to exceed one-half inch in ten feet, provided that such variation does not result in a level or reverse sloping invert; provided also that variation in the invert elevation between adjoining ends of pipe, due to non-concentricity of joining surface and pipe interior surfaces, does not exceed one-sixty-fourth inch per inch of pipe diameter, or one-half inch maximum.

(Ord. No. 2007-07-31, § 6.3, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.550 Sewer Grades

Unless otherwise approved by the city engineer, all sewer grades shall be established by the use of an approved laser beam method. An above ground method shall not be used. Tolerance shall be ± one-half foot of actual grade. Above ground methods may be acceptable for storm drain lines with the required tolerance of ± one-half foot of actual grade being adhered to.

(Ord. No. 2007-07-31, § 6.4, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.560 Reinforced Concrete Pipe

Reinforced concrete pipe (RCP) shall comply with the requirements of ASTM C-76 with bell and spigot rubber gasket type joints for sanitary sewers and storm drain lines. For hydraulic design considerations, a Mannings n value of 0.012 for storm drain and 0.013 for sewer shall be used.

1. RCP bell and spigot joints. Bell and spigot joints, including rubber gaskets, shall conform to the requirements of the latest revision of ASTM Designation C-443. The pipe joint shall be so designed as to provide for self-centering, and when assembled, to compress the gasket to form a watertight seal. The gasket shall be confined in a groove on the spigot, so that pipe movement or hydrostatic pressure cannot displace the gasket.
2. RCP pipe installation. All pipe installation shall precede upgrade on a stable foundation, with joints closely and accurately fitted. Rubber gaskets shall be fitted properly in place, and care shall be taken in joining the pipe units to avoid twisting of gaskets. Joints shall be clean and dry and a joint lubricant as recommended by the pipe supplier shall be applied uniformly to the mating joint surfaces to facilitate easy positive joint closure.
   Pipe shall be installed with uniform bearing under the full length of the barrel, with suitable excavations being made to receive pipe bells.
   Select material shall be compacted around the pipe to firmly bed the pipe in position. If adjustment of position of a pipe length is required after being laid, it shall be removed and rejointed as for a new pipe. When laying is not in progress, the ends of the pipe shall be closed with a tight fitting stopper to prevent the entrance of foreign material.
   In addition to the above requirements, all pipe installation shall comply with the specific requirements of the pipe manufacturer.
   Where pipe product is provided with a joint system intended to allow for segmental installation of piping materials, joints shall be closed tightly such that gasket system is fully engaged and no more than one-half inch of gap section between overlapping joint material (bell and spigot or another approved method) is visible via a televised inspection methods. Contractor shall meet with city designated inspection representative prior any construction commencing to review city standards relative to installation of piping system.
3. Gravel foundation for RCP pipe. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe and superimposed load, and/or where groundwater must be drained, the subgrade shall be excavated to such depth as may be necessary and replaced with gravel compacted into place.
   Gravel for concrete pipe foundation shall be clean gravel with one hundred percent passing a one-and-one-half-inch screen and five percent passing a three-fourths-inch sieve.
4. RCP pipe bedding. All pipe sewers and drains shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded.
   A groove shall be excavated in the bottom of the trench to receive the bottom quadrant of the pipe. Before preparing the groove, the trench bottom shall be excavated or filled and compacted to an elevation sufficiently above the grade of the pipe so that, when completed, the pipe will be true to line and grade. Bell holes shall be excavated so that only the barrel of the pipe receives bearing from the trench bottom.
   Pipe bedding materials placed at any point below the mid-point of the pipe shall be deposited and compacted in layers not to exceed eight inches in uncompacted depth.
   Deposition and compaction of bedding materials shall be done simultaneously and uniformly on both sides of the pipe. Compaction shall be accomplished with hand mechanical compactors. All bedding materials shall be placed in the trench with hand tools or other approved method in such a manner that they will be scattered alongside the pipe and not dropped into the trench in compact masses. Bedding materials shall be loose earth, free from lumps, sand or gravel, free from rocks larger than three-inch diameter, with all materials free from roots, sod, or other organic matter.
   In the event trench materials are not satisfactory for pipe bedding, modified bedding will be required. Modified bedding shall consist of placing compacted granular material on each side of and to the level of twelve inches above the top of the pipe.
   Modified bedding material shall be graded as follows: one hundred percent passing a one-inch screen and no more than five percent passing a No. 4 sieve.

(Ord. No. 2007-07-31, §§ 6.5—6.5.4, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2011-06-17, § 1, 6-28-2011)

Sec 15.01.570 PVC Plastic Pipe

This section covers the requirements for rigid polyvinyl chloride pipe and fittings, hereinafter called PVC pipe and PVC fittings. The pipe and fittings and installation in sanitary sewer, storm drain and other gravity line construction, shall meet or exceed all of the requirement ASTM Specification D-3034 Type PSM for SDR 35 pipe for diameters from four inches to fifteen inches and ASTM F679 for eighteen inches to twenty-four inches with integral bell gasket joints, and be supplied in maximum twenty-foot lengths. This pipe shall be homogeneous throughout and free from cracks, holes, foreign inclusions or other defects. The pipe shall be as uniform as commercially practical in color.

All PVC sewer pipe shall be made from clean, virgin, Type 1, Grade 1, PVC conforming to ASTM resin specification D-1784. All pipe joints shall be bell and spigot type with rubber ring gasket conforming to ASTM D-1869, to permit expansion and contraction. Pipe and fittings must be assembled with nontoxic lubricant.

Four-inch and six-inch diameter pipe may be the solvent weld type provided an expansion joint is provided if the length of run exceeds one hundred lineal feet. All pipes shall be less than twenty feet in length.

Spigot ends will have fifteen degree tapered ends with memory mark around the diameter of the pipe to indicate proper insertion depth.

Wyes shall be of the same material as the pipe, and in no case shall have thinner walls than that of the pipe furnished. Sample wyes must be submitted for the engineer's approval, and his approval must be obtained before purchase of the wyes.

For hydraulic design considerations, a Mannings n value of 0.012 for storm drain and 0.013 for sewer shall be used.

1. PVC fittings. Fittings shall be made of PVC plastic conforming to ASTM-D1784, have a cell classification as outlined in ASTM D-3034.
2. PVC pipe installation. Pipe installation shall be in accordance with ASTM Recommended Practice D-2321 and the manufacturer's requirements. All pipe installation shall proceed upgrade on a stable foundation, with joints closely and accurately fitted.
   PVC pipe is a flexible pipe and requires deflection testing as per Section 15.01.630.
   Pipe shall be installed with uniform bearing under the full length of the barrel, with suitable excavations being made to receive pipe joints
   Select material shall be compacted around the pipe to firmly bed the pipe in position. Haunching material (bed to springline) should be carefully worked under the haunches by hand as per ASTM D2321. The bedding shall be compacted from the pipe to the trench wall to ensure support. If adjustment of position of a pipe length is required after being laid, it shall be removed and re-jointed as for a new pipe. When laying is not in progress, the ends of the pipe shall be closed with a tight-fitting stopper to prevent the entrance of foreign material.
   As per ASTM D2321, trench box installations will require a subtrench below the trench box or a trench box will not be allowed. Subtrenchs can not be deeper than twenty-four inches by OSHA Standards. Therefore, pipe diameters in excess of twenty-four inches will need to be installed without a trench box and with side slopes laid back to meet OSHA requirements. It is the contractors responsibility to follow OSHA guidelines for safe practices.
   In addition to the above requirements, all pipe installation shall rigidly adhere to the specific requirements of the pipe manufacturer.
   Where pipe product is provided with a joint system intended to allow for segmental installation of piping materials, joints shall be closed tightly such that gasket system is fully engaged and no more than one-half inch of gap section between overlapping joint material (bell and spigot or another approved method) is visible via a televised inspection methods. Contractor shall meet with city designated inspection representative prior any construction commencing to review city standards relative to installation of piping system.
3. PVC pipe construction loads. To preclude damage to the pipe and disturbance to the embedment zone, a minimum depth of backfill should be maintained before allowing vehicles or heavy construction equipment to traverse the pipe trench.
   The minimum depth of cover should be established by the project engineer based on the specific project requirements.
   In the absence of such a detailed investigation, the installer shall meet the following minimum cover requirements before allowing vehicles or construction equipment to traffic the trench surface, assuming that the minimum embedment zone densities are prepared as per ASTM D2321:
   Provide minimum cover of at least twenty-four inches or one pipe diameter (whichever is larger) where Class I embedment materials have been utilized, or provide minimum cover of at least thirty-six inches or one pipe diameter (whichever is larger) where Class II or lower embedment materials have been utilized, and allow at least forty-eight inches of cover before using a hydrohammer for compaction directly over the pipe. Where construction loads may be excessive (e.g. cranes, earth moving equipment, etc.) consult with the project engineer to determine minimum operating cover requirements.
4. Gravel foundation for PVC pipe. The pipe foundation shall be a minimum of four inches in the compacted condition. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe and superimposed load, it shall be excavated to such depth as may be necessary and replaced with crushed rock or gravel compacted into place. Gravel foundation material for pipe shall be placed only when, and to the depth, requested by the engineer or specified on the drawings.
   Gravel for PVC pipe foundations shall be clean crushed rock or gravel with one hundred percent passing a one-and-one-half-inch screen and maximum of five percent passing a three-fourths-inch sieve.
5. PVC pipe embedment. All pipe shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded in suitable embedment material. The bottom of the trench shall be of stable materials. In general, coarse-grained soils, free of rocks and stones, such as graded crushed rock, gravel, sand, and other granular materials, are considered stable materials. A stable material shall be placed and compacted under the pipe haunches and up to the spring-line in uniform layers not exceeding eight inches in depth. When bedding is required, the same material should be used for both bedding and haunching. The same material shall be used to backfill the trench from the springline of the pipe to a point at least twelve inches above the top of the pipe. Each eight-inch layer of bedding, haunching and initial backfill shall be placed, then carefully and uniformly compacted to ninety-five percent of AASHTO T-180 (ASTM D-1557) density. Extra-fine sand, clay, silt, or large soil lumps shall not be allowed as bedding, haunching or initial backfill material.
   The remaining backfill over the top of the initial backfill shall be placed in accordance with Section 15.01.430.
   Modified bedding material shall be graded as follows: one hundred percent passing a one-and-one-half inch screen and five percent passing a No. 4 sieve.

(Ord. No. 2007-07-31, §§ 6.6—6.6.5, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2011-06-17, § 1, 6-28-2011)

Sec 15.01.580 Corrugated High Density Polyethylene Pipe (HDPE)

1. Scope. This Specification covers the manufacture and installation of the corrugated high density polyethylene pipe (HDPE) detailed in the project plans.
2. HDPE pipe. HDPE pipe may be used for storm drains of size less than twenty-four inches. HDPE shall not be used within city roadway right-of-way unless approved by the city planning commission. Pipe manufactured for this specification shall comply with the requirements for test methods, dimensions and markings found in AASHTO Designations M252, M294, and MP7. Pipe and fittings shall be made from virgin PE compounds which conform with the applicable current edition of the AASHTO Material Specifications for cell classifications as defined and described in ASTM D3350. Pipe supplied shall be AASHTO Type S and shall have a full circular cross section, with an outer corrugated pipe wall and an essentially smooth inner wall. Pipe and resin producers shall be certified according to the PPI/CPPA Third Party Certification Program. All corrugated polyethylene pipe, twelve inches in diameter and larger, shall contain the appropriate program mark, either an official label or permanent affixation prior to shipment.
   For hydraulic design considerations, a Mannings n value of 0.017 for storm drain shall be used. The higher n value is due to the corrugation growth that can be seen inside the pipe liner over time.
3. HDPE pipe joints. Soil tight joints shall have a bell and spigot design with an elastomeric gasket meeting the requirements of ASTM F477. Watertight joints shall meet a laboratory test pressure of 10.8 psi per ASTM D3212 and shall have a bell and spigot or bell-bell design with an elastomeric gasket meeting the requirements of ASTM F477.
4. HDPE pipe fittings. The fittings shall not reduce or impair the overall integrity or function of the pipeline. Fittings may be either molded or fabricated. Common corrugated fittings include couplers, reducers, tees, wyes, and end caps. These fittings may be installed by various methods such as snap-on, bell and spigot, bell-bell and wrap around couplers. Only fittings supplies or recommended by the manufacturer shall be used.
5. HDPE pipe installation. Pipe installation shall be in accordance with ASTM Recommended Practice D-2321 and the manufacturer's requirements. All pipe installation shall proceed upgrade on a stable foundation, with joints closely and accurately fitted.
   Pipe shall be installed with uniform bearing under the full length of the barrel, with suitable excavations being made to receive pipe joints.
   Select material shall be compacted around the pipe to firmly bed the pipe in position. Haunching material (bed to springline) should be carefully worked under the haunches by hand as per ASTM D2321. The bedding shall be compacted from the pipe to the trench wall to ensure support. If adjustment of position of a pipe length is required after being laid, it shall be removed and re-jointed as for a new pipe. When laying is not in progress, the ends of the pipe shall be closed with a tight-fitting stopper to prevent the entrance of foreign material.
   As per ASTM D2321, trench box installations will require a subtrench below the trench box or a trench box will not be allowed. Subtrenchs can not be deeper than twenty-four inches by OSHA Standards. Therefore, pipe diameters in excess of twenty-four inches will need to be installed without a trench box and with side slopes laid back to meet OSHA requirements. It is the contractors responsibility to follow OSHA guidelines for safe practices.
   In addition to the above requirements, all pipe installation shall rigidly adhere to the specific requirements of the pipe manufacturer.
   Where pipe product is provided with a joint system intended to allow for segmental installation of piping materials, joints shall be closed tightly such that gasket system is fully engaged and no more than one-half inch of gap section between overlapping joint material (bell and spigot or another approved method) is visible via a televised inspection methods. Contractor shall meet with city designated inspection representative prior any construction commencing to review city standards relative to installation of piping system.
6. HDPE pipe construction loads. To preclude damage to the pipe and disturbance to the embedment zone, a minimum depth of backfill should be maintained before allowing vehicles or heavy construction equipment traverse the pipe trench.
   The minimum depth of cover should be established by the project engineer based on the specific project requirements.
   In the absence of such a detailed investigation, the installer shall meet the following minimum cover requirements before allowing vehicles or construction equipment to traffic the trench surface, assuming that the minimum embedment zone densities are prepared as per ASTM D2321:
   Provide minimum cover of at least twenty-four inches or one pipe diameter (whichever is larger) where Class I embedment materials have been utilized, or provide minimum cover of at least thirty-six inches or one pipe diameter (whichever is larger) where Class II or lower embedment materials have been utilized, and allow at least forty-eight inches of cover before using a hydrohammer for compaction directly over the pipe. Where construction loads may be excessive (e.g. cranes, earth moving equipment, etc.) consult with the project engineer to determine minimum operating cover requirements.
7. Gravel foundation for HDPE pipe. The pipe foundation shall be a minimum of four inches in the compacted condition. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe and superimposed load, it shall be excavated to such depth as may be necessary and replaced with crushed rock or gravel compacted into place. Gravel foundation material for pipe shall be placed only when, and to the depth, requested by the engineer or specified on the drawings.
   Gravel for PVC pipe foundations shall be clean crushed rock or gravel with one hundred percent passing a one-and-one-half-inch screen and maximum of five percent passing a three-fourths-inch sieve.
8. HDPE pipe embedment. All pipe shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded in suitable embedment material. The bottom of the trench shall be of stable materials. In general, coarse-grained soils, free of rocks and stones, such as graded crushed rock, gravel, sand, and other granular materials, are considered stable materials. A stable material shall be placed and compacted under the pipe haunches and up to the spring-line in uniform layers not exceeding eight inches in depth. When bedding is required, the same material should be used for both bedding and haunching. The same material shall be used to backfill the trench from the springline of the pipe to a point at least twelve inches above the top of the pipe. Each eight-inch layer of bedding, haunching and initial backfill shall be placed, then carefully and uniformly compacted to ninety-five percent of AASHTO T-180 (ASTM D-1557) density. Extra-fine sand, clay, silt, or large soil lumps shall not be allowed as bedding, haunching or initial backfill material.
   The remaining backfill over the top of the initial backfill shall be placed in accordance with Section 15.01.430.
   Modified bedding material shall be graded as follows: one hundred percent passing a one-and-one-half inch screen and five percent passing a No. 4 sieve.

(Ord. No. 2007-07-31, §§ 6.7—6.7.8, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2011-06-17, § 1, 6-28-2011)

Sec 15.01.590 Corrugated Metal (CMP) Storm Sewer Pipe

1. CMP general description. This specification covers the manufacture and installation of corrugated metal pipe, for use in storm drains. CMP shall not be used within city road right-of-way unless approved by the city engineer and/or city public works director.
   For hydraulic design considerations, a Mannings n value from the following table shall be used for helical two and two-thirds × one-half inch corrugations.
2. Mannings n values for other corrugated pipe types and sizes can be found through the National Corrugated Steel Pipe Association web site at: (http://www.ncspa.org/pdf/hydraulics.pdf)
3. CMP material. The steel coils shall conform to the applicable requirements of AASHTO M 274 or ASTM A 929.
4. CMP pipe. Pipe size shall not exceed twenty-four inches in diameter. The pipe sizes, and gauges shall be as shown on the project plans. Gauges shall be a minimum of fourteen gauge.
5. Handling and assembly. Shall be in accordance with NCSPA's (National Corrugated Steel Pipe Association) recommendations.
6. Installation. Shall be in accordance with AASHTO Standard Specifications for Highway Bridges, Section 26, Division II or ASTM A 798 and in conformance with the project plans and specifications. In general, granular (non-plastic) backfill will be required a minimum of twelve inches beyond the pipe O.D. with twelve-inch cover over the top of the pipe. Granular fills must meet AASHTO A-1, A-2, or A-3 and be no larger than one and one-half inches in size. If there are any inconsistencies or conflicts, the contractor must bring them to the attention of the project engineer.
   It is the contractor's responsibility to follow OSHA guidelines for safe practices.
   Where pipe product is provided with a joint system intended to allow for segmental installation of piping materials, joints shall be closed tightly such that gasket system is fully engaged and no more than one-half inch of gap section between overlapping joint material (bell and spigot or another approved method) is visible via a televised inspection methods. Contractor shall meet with city designated inspection representative prior any construction commencing to review city standards relative to installation of piping system.
7. Construction loads. Construction loads may be higher than final loads, follow the manufacturer's or NCSPA's guidelines.
8. CMP pipe joints. Joints shall be made with re-rolled annular ends, with bolt, bar and strap connector, including O-ring gaskets.
9. CMP pipe laying. All pipe installation shall proceed upgrade on a stable foundation, with joints closely and accurately fitted.
   Pipe shall be installed with uniform bearing under the full length of the barrel, with suitable excavations being made to install the gasketed strap connector.
   Corrugated metal pipe shall be so laid that flow is over the lap of the sheets.
   Select material shall be compacted around the pipe to firmly bed the pipe in position. Haunching material (bed to springline) should be carefully worked under the haunches of the pipe and compacted from the pipe to the trench wall (with minimum trench widths sufficient to provide ninety percent compaction). In embankment conditions two and one-half pipe diameters on each side of the pipe will be required to ensure support. If adjustment of position of a pipe length is required after being laid, it shall be removed and re-jointed as for a new pipe. When installation is not in progress, the ends of the pipe shall be closed with a tight-fitting stopper to prevent the entrance of foreign material.
   In addition to the above requirements, all pipe installation shall rigidly adhere to the specific requirements of the pipe manufacturer.
   All pipe shall be unloaded and handled with reasonable care. Pipe shall not be rolled or dragged over gravel or rock and shall be prevented from striking rock or other hard objects during placement of the bedding. Pipe with protective coatings shall be handled with special care to avoid damage. Interior denting of the pipe that shows violation of this requirement shall cause the pipe to be removed and replaced at the contractors sole expense.
10. Gravel foundation for CMP pipe. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe and superimposed load, and where groundwater must be drained, the subgrade shall be excavated to such depth as may be necessary and replaced with crushed rock or gravel compacted into place.
    Gravel for pipe foundation shall be clean crushed rock or gravel with one hundred percent passing a one-inch screen and no more than five percent passing a three-fourths-inch sieve.
11. CMP pipe bedding. All pipe sewers and drains shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded.
    A groove shall be excavated in the bottom of the trench to receive the bottom quadrant of the pipe. Before preparing the groove, the trench bottom shall be excavated or filled and compacted to an elevation sufficiently above the grade of the pipe so that, when completed, the pipe will be true to line and grade.
    Pipe bedding materials placed at any point below the mid-point of the pipe shall be deposited and compacted in layers not to exceed six inches in uncompacted depth. Deposition and compaction of bedding materials shall be done simultaneously and uniformly on both sides of the pipe. Compaction shall be accomplished with hand or mechanical compactors. All bedding materials shall be placed in the trench with hand tools or other approved method in such a manner that they will be scattered alongside the pipe and not dropped into the trench in compact masses. Bedding materials shall be loose earth, free from lumps; sand or gravel, free from rocks larger than one-and-one-half inch diameter; with all materials free from roots, sod, or other vegetable matter.
    In the event trench materials are not satisfactory for pipe bedding, modified bedding will be required. Modified bedding shall consist of placing compacted granular material on each side of and to the level of twelve inches above the top of the pipe.
    Modified bedding material shall be graded as follows: One hundred percent passing a three-fourths-inch sieve and forty to seventy percent passing a No. 4 sieve and ten to twenty percent passing a No. 50 sieve and less than ten percent passing a No. 200 sieve.
    The haunching area of the pipe shall be installed with the modified bedding (See ASTM B788) with compaction being accomplished by hand, without the use of mechanical compaction equipment.
    When soft material is encountered and must be removed in order to maintain pipe on grade during construction, it must be removed for at least three pipe widths.
12. Manhole connections. Manhole riser connections shall be made with re-rolled annular ends, with bolt, bar and strap connector, including O-ring gaskets.
13. Special considerations. Hydrating cement, grout or concrete mixtures are not allowed to come in contact with the aluminized steel pipe under any circumstances. Noncompliance with this requirement shall cause the contractor to remove and replace the impacted pipe section(s).

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ROCKPORT INDUSTRIAL
COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1
EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:

1	
2	
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SHEET NAME:
COVER SHEET & NOTES

SHEET:
CS-02

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(Ord. No. 2007-07-31, §§ 6.8--6.8.12, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2011-06-17, § 1, 6-28-2011)

Sec 15.01.600 Subsurface Drain Pipe

1. General requirements. Buried drainpipe with open joints or perforated pipe shall be provided for the drains in the locations shown on the drawings and as approved by the city engineer. The contractor shall furnish and lay the drainpipe.
2. Material. Drainpipe may be perforated PVC pipe (ASTM D-178), perforated or non-perforated concrete pipe. Corrugated polyethylene piping per ASTM F-405-77a may also be used if installed with direct burial laser grade control equipment Perforated pipe shall be PVC, extra-strength non-reinforced concrete pipe (ASTM C-14) or reinforced concrete pipe (ASTM C-76). All of which shall have one-fourth-inch diameter perforations or as approved by the city engineer. Concrete pipe shall be furnished with bell-and-spigot.
3. Laying pipe. When an open joint or perforated drainage system is utilized, a gravel backfill shall be placed under and over the pipe to the minimum depth as shown on the drawings. Approved filter fabric shall be used to separate the gravel liner from the native material. This fabric must entirely enclose the gravel and provide a complete overlap at the top of the pipe section. The pipe shall be laid carefully on the gravel in a workmanlike manner and to the lines and grades shown on the drawings or established by the city engineer.
   The maximum allowable departure from grade shall not exceed one-tenth of a foot. The finished bed for all pipe shall be made smooth, including removal of material under the bell, so that the full length of pipe will be evenly and uniformly supported. The pipe shall be laid and completed with adjacent ends closely abutted and with the bell ends upgrade. Any pipe that is broken, cracked, or otherwise unsuitable, as determined by the city engineer, shall be removed and replaced at the contractor's expense. The water level in the trench area where the pipe is being laid shall be held to a minimum. During placement of the pipe the water level in the trench shall not exceed fifty percent of the diameter of the pipe above the invert of the pipe. Water may be removed by permitting the water in the trench to flow down the previously installed drain pipe, provided that a screen cover is kept continuously in place over the exposed end of the pipe at all times, except when additional pipe is actually being placed. The screen used for this purpose shall be approved by the city engineer and shall have maximum mesh openings of one-eighth inch. The pipe shall not be covered with backfill until it has been inspected and approved by the city engineer. After approval, the trench shall be backfilled as prescribed in Section 15.01.430.
   The contractor shall keep the pipe drain and manholes free from deposits of mud, sand, gravel, or other foreign matter and in good working condition until the construction is complete and accepted. Any methods used by the contractor to remove deposits of mud, sand, gravel, or other foreign matter from the drains, such as use of water or air pressure, shall be subject to the approval of the city engineer.

(Ord. No. 2007-07-31, §§ 6.9--6.9.3, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.610 Manholes

1. General requirements. The contractor shall furnish and install watertight cast-in-place or precast concrete manholes at the locations shown on the drawings approved by the city engineer. Manholes shall be furnished complete with cast iron rings and covers. Manholes placed on longitudinal slopes greater than five percent, require "Precision Cover Systems, Inc." manhole risers and lids. Manhole spacing shall not exceed four hundred lineal feet unless otherwise approved by the city engineer. All manholes and mainline cleanouts shall be accessible with a mechanical pump truck for scheduled maintenance by the city.
2. Foundation preparation. Dewatering of the site shall conform to the requirements for sewer trench dewatering in these specifications. Adequate foundation for all manhole structures shall be obtained by removal and replacement of unsuitable material with stabilization material; or by tightening with coarse ballast rock, or by such other means as provided for foundation preparation of the connected sewers, or as required by the city engineer. Where water is encountered at the site, all cast in place bases shall be placed on a one-piece waterproof membrane, so placed as to prevent any movement of the water into the fresh concrete. Precast base sections shall be placed on a well graded granular bedding course conforming to the requirements for sewer bedding but not less than eight inches in thickness and extending either to the limits of the excavation or to a minimum of twelve inches outside the outside limits of the base section. In the latter case, the balance of the excavated area shall be filled with select material well tamped to the level of the top of the bedding to positively prevent any lateral movement of the bedding when the weight of the manhole is placed upon it. The bedding coarse shall be firmly tamped and made smooth and level to assure uniform contact and support of the precast elements.
3. Bases. All manhole bases shall be pre-cast and shall have pipe inverts and a resilient connection between pipe and manhole for each pipe connecting to the manhole unless otherwise noted and approved by city engineer. The rubber gasket boot PSX Series Six, or approved equal, shall be installed outside of the manhole and shrink-proof grout pipe connection will be put on the inside of the manhole. Cast-in-place bases shall be at least nine inches in thickness and shall extend at least six inches radially outside of the outside dimension of the manhole section. Precast bases shall be a minimum of nine inches in thickness. Concrete bases shall be placed upon a minimum of six inches of compacted one-inch minus gravel.
   The concrete base shall be constructed so the first section of the precast manhole has a uniform bearing throughout the full circumference of the manhole wall. Sufficient mortar shall be deposited on the concrete base to provide a water tight seal between the base and the manhole wall. Concrete used in the construction of the base shall conform to six and one-half bag, four thousand psi concrete as specified in the concrete section of these specifications.
   Where sewer lines pass through or enter manholes, the invert channels shall be smooth and semi-circular in cross section conforming to the details shown on the drawing, incorporating a minimum two-tenths-foot (0.20-foot) drop through the manhole. Changes of direction of flow within the manholes shall be made with a smooth curve with as long a radius as possible. The floor of the manhole outside the flow channels shall be made with a smooth curve with as long a radius as possible. The floor of the manhole outside the flow channels shall be smooth and slope toward the channel at not less than one inch per foot.
   Concrete pipe connections to manholes shall be achieved by use of manhole coupling adapters, rubber gaskets (ASTM C923 specifications), positive seal gasket system, or grouting a bell or spigot pipe at the appropriate location.
   Upon written approval of the City Engineer, connecting boots may be used consisting of neoprene compound meeting ASTM C-443 specifications. The boot shall have a wall thickness of three-eighths-inch. The boot shall either be "cast-in-place" in the precast base or attached to the precast base by means of an internal expanding band. When the boot is attached to the precast base, a watertight seal between the boot and the precast base must be accomplished. An external band shall be supplied and used to clamp and seal the boot to the pipe. The band shall be made of 300 series non-magnetic corrosion-resistant steel. After the band has been placed, it shall be completely coated with a bituminous material approved by the city engineer.
   The maximum size pipe that can be used in a forty-eight-inch manhole is PVC at fifteen-inch or concrete twelve-inch; all others shall be sixty-inch inside diameter. All manholes with three or more pipes entering the base shall be sixty-inch inside diameter.
   All concrete for manhole bases shall comply with city approved specifications.
4. Wall and cone sections. All manholes shall be precast, sectional, reinforced concrete pipe of either forty-eight-inch or sixty-inch inside diameter as specified. Both cylindrical and taper sections shall conform to all requirements of ASTM Designation C-76 for reinforced concrete culvert pipe with the following exceptions:
   1. The throat section of the manhole shall be adjustable, by use of pipe sections up to forty-eight inches in height.
   2. The taper section shall be a maximum of thirty-six inches in height, for forty-eight-inch diameter manholes and thirty-nine inches in height for sixty-inch diameter manholes, shall be of eccentric conical design, and shall taper uniformly to thirty inches inside diameter.
   3. The pipe used in the base section shall be furnished in section lengths of one, two, three and four feet as required.
   4. Reinforcing steel shall consist of a circular cage with a minimum cross sectional area of three-tenths of a square inch of steel per foot in both directions. All joint surfaces of precast sections and the face of the manhole base shall be thoroughly cleaned and wet prior to setting precast sections. All joints, including grade rings, shall be set in butyl rubber gasket that is permanently flexible and non-shrinking. All joints shall be water tight and free from appreciable irregularities in the interior wall surface.
   5. Pipe connections. All pipes entering or leaving the manhole shall be placed on firmly compacted bedding, particularly within the area of the manhole excavation, which normally is deeper than that of the sewer trench. Special care shall be taken to see that the openings through which pipes enter the structure are completely and firmly rammed full of mortar to ensure water tightness.
   6. Backfill. Backfill around the manhole and extending at least one pipe length into each trench shall be hand placed and hand tamped with select material up to an elevation of one foot above the top of each pipe, regardless of the specifications for backfilling the sewer trenches adjacent thereto. The balance of the backfill shall conform to the requirements for trench backfilling.
   7. Covers and frames. All iron castings shall conform to the requirements of ASTM A 48 (Class 30) for gray iron castings. Rings and covers shall be thirty inches in diameter with machined bearing surfaces and with minimum cover weight of one hundred fifty pounds and minimum ring weight of two hundred thirty-three pounds. Any cover which tends to rock or tip will be rejected. In addition to the foundry name and year of manufacture, the cover shall be marked "SEWER" or "STORM DRAIN" as appropriate.
      All manhole rings shall be carefully set to the grade shown on the approved drawings or as directed by the city engineer. The manhole covers shall be so installed to match the street profile. Where work is in paved streets, not less than six inches or more than eighteen inches shall be provided between the top of the cone or slab and the underside of the manhole casting ring for adjustment of the casting ring to street grade.
   8. Manhole steps. No steps shall be incorporated in manhole sections. All pre-fabricated holes for steps shall be filled in with shrink-proof grout.

(Ord. No. 2007-07-31, §§ 6.10--6.10.8, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.620 Cleaning And Testing Sanitary Sewer Lines

1. Cleaning. After the sewer lines have been laid and the trench backfilled, they shall be thoroughly cleaned and tested for leakage and alignment in the presence of the city engineer or the city inspector before acceptance by the owner. Laterals and trunk lines shall be flushed by water to remove all foreign material. Wastewater and debris shall not be permitted to enter sewer lines in service, but shall be removed at the lowest manhole of the excavation. The scouring action shall be accomplished by hydraulic or jet cleaning. Other methods may be used upon approval of the city engineer. After the lines have been thoroughly cleaned, they shall be tested between all manholes for displacement.
2. Displacement test. The displacement test shall be supervised a conducted by the city engineer or the city inspector and shall consist of both of the following:
   (1) A light will be flashed between the manholes, or if the manholes have not as yet been constructed, between the locations of the manholes, by means of a flashlight or by reflecting sunlight with a mirror. If the illuminated interior of the pipe shows broken, misaligned or displaced pipe, or other defects, the defects designated by the city engineer shall be remedied by the contractor; (2) After sub base has been placed and compacted, prior to asphalt placement, the sewer line will be televised by the contractor. The contractor will supply and provide the city with a tape copy of the inspection along with a schematic plan identifying key locations on the video. The initial inspection shall be provided at no cost to the city. If the pipeline is found to be unacceptable, the problem shall be corrected by the contractor and re-televised. Television inspection must be scheduled at least one week in advance of date inspection is requested.
3. Exfiltration test. As required by the public works director or city engineer, each section of the sewer shall be tested between adjacent manholes by closing the lower end of the sewer to be tested and the inlet sewer of the upper manhole with stoppers. The pipe and manhole shall be filled with water to a point approximately four feet above the invert of the sewer at the center of the upper manhole or to four feet above the natural groundwater level, whichever is higher. All manhole and pipe sections shall also be required to pass an air test as described herein.
   The maximum allowable exfiltration shall not exceed one hundred fifty gallons per inch diameter per mile per twenty-four hours for all installed sewer pipe.
   A test may include an air pressure test at 4.0 PSI between adjacent manholes.
   If the leakage from the sewer as shown by the test is in excess of the maximum allowable, the contractor will make the necessary corrections to reduce the exfiltration to within permissive limits.
   Where the difference in elevation between inverts of adjacent manholes exceeds ten feet, the exfiltration leakage test will be modified as directed by the city engineer.
   House surface laterals shall be considered part of the main line sewer to which they are connected and shall be tested with the main line sewer.
4. Infiltration test. In addition to the exfiltration test, the newly laid sewer system shall also comply with the following infiltration requirements. Infiltration tests shall be conducted by placing an approved calibrated V-notch weir in the line just above the next lower manhole and plugging the line just above the next higher manhole. Sufficient time shall be allowed for the water level behind the weir to stabilize before reading. Dislodge any foreign material obstructing the weir before reading. Take successive readings until consistent results are obtained.
   Whenever the rate of infiltration is found to exceed the maximum, conduct electronic or photographic visual inspection of the interior of the pipeline. Make repairs and continue to test the conduit until it is within specified limits prior to proceeding with further construction. Make repairs at all manholes to exclude all infiltration occurring, whether or not they are within specified limits.
   The maximum allowable infiltration for any section of the system shall be as follows, subject to the limitations described hereafter:
   I = 150 gallons/mile/inch/diameter/day.
   Upon completion of all sectionalized testing, the total project infiltration of the newly constructed system shall be measured and recorded. This value shall be limited to one hundred twenty-five gallons/mile/inch/diameter/day. Make repairs and continue to test for total project infiltration until it is within this specified limit.

(Ord. No. 2007-07-31, §§ 6.11--6.11.4, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2012-05-15, § 1, 5-8-2012)

Sec 15.01.630 Deflection Testing Flexible Sewer And Storm Drain Lines

1. "Go/No-Go" mandrel proof testing. Not less than thirty days after installation of the flexible sewer or drain pipe, the contractor shall test the buried pipe to insure that ring-deflection of the pipe does not exceed five percent of the pipe's specified minimum inside diameter (ID). This proof test shall establish that the contractor has installed the flexible pipe in full compliance with the project specifications thereby providing required pipe/soil structural strength.
   The contractor, with inspector present, shall pull a "Go/No-Go" mandrel, inspected and approved by the engineer, through the full length of installed flexible pipe. The mandrel shall be fabricated from suitable metal with a minimum of nine properly sized radial fins mounted upon a center pulling shaft. In any case, the mandrel shall be provided with an odd number of rigidly mounted radial fins. The mandrel shall be provided with a proof-sizing ring that can demonstrate that the mandrel's minimum outside diameter (OD) is not less than ninety-five percent of the actual minimum inside diameter of the installed flexible pipe. The mandrel shall be pulled by the contractor through one hundred percent of the installed flexible pipe without using mechanical equipment. Failure of the mandrel to pass through a pipeline shall be deemed evidence of inadequate installation by the contractor not in compliance with the project specifications.
   The engineer may require, if deemed appropriate or necessary, additional proof testing of designated lengths of the buried flexible pipe approximately one year after installation but prior to the expiration of the contractor's maintenance bond. The flexible pipeline shall be cleaned adequately prior to performing the "Go/No-Go" mandrel ring deflection proof test. The contractor, with inspector present, shall pull a mandrel, approved by the engineer, through the designated length of pipeline without using mechanical equipment. Failure of the mandrel to pass through the pipeline shall be deemed evidence of inadequate installation by the contractor not in compliance with the project specifications. If pipeline deflection exceeds five percent during proof testing, the pipeline shall be removed and replaced at the contractor's expense.

(Ord. No. 2007-07-31, §§ 6.12, 6.12.1, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

DIVISION 9 STORM WATER PRE-TREATMENT SUMPS

Sec 15.01.690 General Description; Scope

This specification governs furnishing of materials for installation of storm water pre-treatment sumps.

(Ord. No. 2007-07-31, § 8.1, 7-10-2007)

Sec 15.01.700 Storm Water Pre-Treatment Sump

Pre-treatment sumps shall be located as staked in the field and indicated on the plans. They shall be to the grade indicated by the cut sheets and as staked in the field. Excavation and backfill shall conform to Division 4 of these specifications. If the sump is located in an area where the earth is stratified with gravel layers, care shall be taken during backfill to be sure that these layers are not sealed off from the sump beginning two feet below the bottom of the sump up to the top of the subgrade. One and one-half to two-inch diameter drain rock shall be used. The original material shall be removed and the total backfill done with imported drain rock (no slag). The design storage requirements for storm water may account for up to thirty percent of the volume of the drain rock volume.
After backfilling is completed, the entire excavation shall be thoroughly flooded to insure that settlement is complete. Grates shall be set in place and adjusted for final elevation and alignment. Geotextile a fabric barrier is required between the drain rock and road base (or other backfill) preventing the possibility of road base or native material migrating into the void space of drain rock. (See Standard Drawing No. 15.14 (Section 15.01.1500)).
Pre-treatment sumps shall be constructed of reinforced concrete, precast sections and shall meet the requirements of ASTM C478-73 in accordance with standard detail drawing. All grates located within the roadway section or parking lot shall meet all HS20 loading design requirements.

(Ord. No. 2007-07-31, § 8.2, 7-10-2007)

DIVISION 10 WATER LINES

Sec 15.01.710 General Description

This section covers the requirements for piping materials and installation in the American Fork City water distribution system. All materials and workmanship shall strictly comply with the current revisions of the Utah State Rules for Public Drinking Water Systems (USRPDWS) and the Uniform Plumbing Code (UPC). In the event of conflict between this section, USRPDWS and the UPC, they shall rank in the following order of precedence: (1) this code section, (2) USRPDWS, (3) UPC.
The end of water lines shall be covered when work is not in progress to prevent debris, animals, etc., from entering the line. All culinary water lines shall be of eight-inch pipe size unless otherwise approved by the city engineer.
If the size of any piping or fitting is not evident in the drawings, the contractor shall request instructions from the city engineer as to the proper sizing. Any changes resulting from the failure to contact the engineer to request clarification shall be at the contractor's expense.

(Ord. No. 2007-07-31, § 9.1, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.720 Concrete Thrust Blocking

All fittings at bends and branches in water pipe lines shall be provided with concrete thrust blocking as shown on the American Fork City Standard Details. Blocking shall be constructed so the bearing surface is in direct line with the major force created by the pipe or fitting. Concrete shall be poured in place and shall bear against solid undisturbed earth at the sides and bottom of the trench excavation and shall be shaped so as to not obstruct access to the joints of the pipe or fitting. The concrete mixture shall have a minimum twenty-eight-day compressive strength of 2,500 pounds per square inch and shall comply with the requirements of Class C concrete as outlined in Division 13. All fittings shall be covered with plastic or other approved materials prior to pouring the thrust block. The blocking shall be so placed that the pipe and the fittings will be accessible for repair.

(Ord. No. 2007-07-31, § 9.2, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.730 Pipe Laying

Install pipe with bell ends facing the direction of laying. Where pipe is laid on a grade of ten percent or greater, proceed uphill with the installation with the bell ends facing upgrade. Make gradual pipe elevation changes as practicable to clear existing obstructions.
The pipeline shall be installed so that a positive or negative grade is maintained between high and low points to avoid air pockets. Provide air vents as required. If permanent air vents are not required, record location of all high points so they may be readily located.

(Ord. No. 2007-07-31, § 9.3, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.740 Ductile Iron Pipe

1. General requirements. Ductile iron pipe shall be Class 50 for slip-on or mechanical joint piping (Class 51 for eight-inch size and under) and Class 53 for flanged joint piping unless otherwise required by the city engineer due to loadings, site conditions, etc.
2. Materials. Ductile iron pipe for the transmission and distribution of water shall be manufactured in accordance with AWWA C151 and ANSI A-21.51 "American Standard for Ductile-Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds, for Water or Other Liquids."
   All pipe shall be made of good quality ductile cast iron and of such chemical composition and structure as is required to meet the physical and mechanical property requirements of the standard.
3. Joints. Ductile iron pipe shall be of the following types, as indicated on the approved plans.
   1. Mechanical joints and the rubber gaskets and lubricant for ductile iron pipe, shall comply with the requirements and be dimensioned in accordance with AWWA C-151 and C-111. All gasket surfaces shall be smooth and free from imperfections. All mechanical joint gaskets shall be armor guard type gaskets and shall conform to tests in accordance with construction specifications and shall be less than one year old. Lubricant shall be non-toxic and have no deteriorating effects on gasket materials. Lubricants shall not impart taste, odor, or flavor to water in the pipe.
   2. Rubber gasket push-on joints, and the rubber gaskets and lubricant for ductile iron pipe shall comply with the general requirements of AWWA C- 111 of latest revision. Gaskets shall be free from defects and not over one year old. Lubricant shall be non-toxic and have no deteriorating effects on gasket materials. Lubricants shall not impart taste, odor, or flavor to water in the pipe.
   3. Cast iron pipe flanges, and bolts and nuts therefore, shall be dimensioned in accordance with ASA B16.2 for Class 150, and ANSI A21.10. Threads for screwed on flange pipe shall comply with ASA B-2.1. Flange joints shall be bolted firmly with machine, stud or cap bolts of proper size. Flange shall be faced and drilled in accordance with ANSI A21.10.
4. Fittings.
   1. Mechanical joint fittings. Mechanical joint fittings shall conform to the provisions of ANSI/AWWA C110/A21.10-82 or C153/A21.53-58.
   2. Push-on fittings. Push-on fittings shall conform to ANSI A 21.10 with bells, sockets, and plain ends per ANSI A 21.11.
   3. Flanged fittings. Flanged fittings shall conform to ANSI/AWWA "American Standard for Cast Iron Fittings."
      All flanges shall be faced and drilled. Where cap screws or stud bolts are needed, flanges shall be tapped to support cap screws or stud bolts.
5. Lining and coating. The waterway surfaces of all ductile iron water pipe and fittings shall be completely covered with a uniform thickness of cement-mortar or covered with a bituminous seal coat, all in accordance with AWWA C-104, and AWWA C-151. Ductile iron pipe or fittings lined in the field will not be accepted as conforming to AWWA C-104.
   The outside surface of all "buried" ductile iron pipe shall be coated with a bituminous coating in accordance with AWWA C-151 requirements.
6. Corrosion protection and soil tests. When a public works engineer determines that a corrosive conditions exists such as poor drainage or reactive soils, pipe and fittings shall be encased in polyethylene wrap as described in subsection G.
7. Polyethylene encasement. The outside surface of all ductile iron pipe and fittings shall be encased with polyethylene film in tube or sheet form unless otherwise approved by the city engineer.
   The polyethylene film shall be manufactured of virgin polyethylene material conforming to the requirements of ASTM Standard Specification D-1248-68-Polyethylene Plastics Molding and Extrusion Materials. The film shall have a minimum nominal thickness of 0.008" (8 mils) with a minus tolerance not exceeding ten percent of the nominal thickness.
   The polyethylene encasement shall prevent contact between the pipe and the surrounding backfill and bedding material but is not intended to be a completely air and watertight enclosure. Overlaps shall be secured by the use of polyethylene plastic tape, plastic string, or other materials capable of holding the polyethylene encasement in place under light tension until backfilling operations are completed.
   Repair any rips, punctures, or other damage to the polyethylene with polyethylene plastic tape or with a short length of polyethylene tube cut open, wrapped around the pipe, and secured in place.
   Cover bends, reducers, offsets, and other pipe-shaped appurtenances with polyethylene in the same manner as the pipe.
   When valves, tees, crosses, and other odd-shaped pieces cannot be wrapped practically in a tube, wrap with a flat sheet or split length of polyethylene tube by passing the sheet under the appurtenance and bringing it up around the body. Make seams by bringing the edges together, folding over twice, and taping down. Tape polyethylene securely in place at valve stem and other penetrations.
   Provide openings for branches, service taps, blow-offs, air valves, and similar appurtenances by making an X-shaped cut in the polyethylene and temporarily folding back the film. After the appurtenance is installed, tape the slack securely to the appurtenance and repair the cut, as well as any other damaged areas in the polyethylene, with tape.
   Where polyethylene-wrapped pipe joins an adjacent pipe that is not wrapped, extend the polyethylene wrap to cover the adjacent pipe for a distance of at least two feet. Secure the end with circumferential turns of tape.
   All polyethylene-wrapped pipe, fittings, and valves shall be inspected for proper wrapping by the city engineer or public works director before backfilling operations.
8. Pipe installation. All pipe shall be laid as specified in AWWA Standard for "Installation of Water Mains" C-600, except as modified herein and in special conditions approved by the city engineer.
   Tees, elbows, crosses, and reducers shall be used for changes in direction and outlets, unless otherwise specified on the approved detail drawings.
   Anchors, thrust bolts and thrust blocks shall be placed at valves, elbows, tees, etc., as shown on the approved detail drawings or as directed by the city engineer.
   All ductile iron pipe installation shall proceed on a stable foundation, with joints closely and accurately fitted. Joints shall be clean and dry, and a non-toxic joint lubricant, as recommended by the pipe supplier, shall be applied uniformly to the mating joint and gasket surfaces to facilitate easy, positive joint closure. All push-on joints shall-have brass wedges as supplied by the pipe manufacturer, and installed as per standard push-on joint specifications unless otherwise directed by the city engineer.
   All pipe shall be installed with uniform bearing under the full length of the barrel, with suitable excavations being made to receive pipe bells and fittings.
   Select bedding material shall be compacted around the pipe to firmly bed the pipe in position. If adjustment of position of a pipe length is required after being laid, it shall be removed and rejoined as for new pipe installation. In addition to the above requirements, all pipe installation shall comply with the specific requirements of the pipe manufacturer.
   Each pipe shall be laid true to line and grade and in such a manner as to form a close concentric joint with adjoining pipe and to prevent sudden offsets to the flow line. All joint offsets shall be made as specified in AWWA Standard for "Installation of Water Mains" C-600, except as modified herein and in special conditions approved by the city engineer. As work progresses, the interior of the pipe shall be cleared of dirt and superfluous materials. Where cleaning after laying is difficult because of small pipe size, a suitable swab or drag shall be kept in the pipe and pulled forward past each joint immediately after jointing has set, and pipe shall not be laid when conditions of the trench or weather is unsuitable for such work. At all times when work is in progress, all open ends of the pipe and fittings shall be securely closed to the satisfaction of the city engineer, so that no water, earth, or other substance will enter the pipe or fittings.
9. Gravel foundation for pipe used. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe, the superimposed load, and where groundwater must be drained, the subgrade shall be excavated to such depth as may be necessary and replaced with crushed rock, gravel or other suitable material as approved by city engineer, all such material shall be compacted into place.
   Gravel for ductile iron pipe foundations shall be clean gravel with one hundred percent passing a one-and-one-half-inch screen and five percent passing a three-fourths-inch sieve.
10. Pipe bedding. All pipes shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded. A groove shall be excavated in the bottom of the trench to receive the bottom quadrant of the pipe. Before preparing the groove, the trench bottom shall be excavated or filled, with approved bedding material, and compacted to an elevation sufficiently above the grade of the pipe so that, when completed, the pipe will be true to line and grade. Bell holes and pipe fitting holes shall be excavated so that only the barrel of the pipe and bottom quadrant of the fitting receive bearing from the trench bottom.
    Pipe bedding materials placed at any point below the midpoint of the pipe shall be deposited and compacted in layers not to exceed eight inches in uncompacted depth. Deposition and compaction of bedding materials shall be done simultaneously and uniformly on both sides of the pipe. Compaction shall be accomplished with hand or mechanical compactors. All bedding materials shall be placed into the trench with hand tools or other approved method in such a manner that they will be scattered alongside the pipe and not dropped or pushed into the trench in compact masses. Bedding materials shall be loose earth, free from lumps, boulders or other debris; and/or sand materials free from roots, sod, or other vegetable matter. All bedding materials shall be approved by the city engineer.
    In the event trench materials are not satisfactory for pipe bedding, modified bedding materials will be required. Modified bedding shall consist of placing compacted granular material on each side of and to the level of twelve inches above the top of the pipe.
    Modified bedding materials shall be graded as follows: one hundred passing a one-inch screen and five percent passing a No. 4 sieve. All modified bedding materials shall be approved by the city engineer.
11. Cleaning and flushing. The contractor shall take every precaution to remove dirt, grease and all other foreign matter from each length of piping before making connections in the field. After each section of piping is installed, it shall be thoroughly cleaned to remove rocks, dirt, and other foreign matter by washing, sweeping, scraping, or other method that will not harm the lining, or pipe.
    Water required for flushing shall be furnished by the contractor. All temporary connections for flushing and drainage shall be furnished, installed, and subsequently removed by the contractor.
    All open ends of pipes shall be bulkheaded or plugged when workmen are not on the job or in the immediate area to prevent rocks or other foreign matter from entering the pipe.
    All new water systems or extensions to existing systems shall be thoroughly flushed before being placed in service. Flushing shall be accomplished through hydrants, or end of the line blow-off assemblies.

(Ord. No. 2007-07-31, §§ 9.4--9.4.11, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010; Ord. No. 2012-05-15, § 1, 5-8-2012)

Sec 15.01.745 PVC Pipe And Tubing

1. General requirements. PVC pipe shall either be AWWA C900 or AWWA C909 for pipe four inches through twelve inches. PVC pipe fourteen inches through thirty-six inches shall be AWWA C905 pipe.
   Polyethylene tubing used in secondary water services shall be polyethylene CTS (copper tube size) tubing. Polyethylene CTS tubing shall be manufactured in accordance with the standard specification for Polyethylene (PEP plastic tubing as issued by the American Standard for Testing Materials under ASTM D2737 and AWWA C901).
2. Materials. Pipe for the transmission and distribution of water shall be manufactured in accordance with AWWA C900 (latest revision), "AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4-inch through 12-inch, for Water Distribution" or AWWA C909 (latest revision), "AWWA Standard for Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4-inch through 12-inch, for Water Distribution." The PVC pipe shall have a cast iron pipe equivalent outside diameter. PVC pipe 14 inches and larger shall be manufactured in accordance with AWWA C905 (latest revision), "AWWA Standard for Polyvinyl Chloride (PVC) Water Transmission Pipe, Nominal Diameters 14-inch through 36-inch". All PVC pipe four inches and larger shall be DR 18 with a working pressure of one hundred fifty psi. Pipe smaller than four inches shall be schedule 40 PVC.
   All PVC pipe shall be purple in color.
   All polyethylene tubing shall be polyethylene PE 3408, SDR 9 – two hundred psi pressure rating, purple in color.
3. Joints. Joints shall be push or rubber gasket type. Lubrication shall be water soluable, non-toxic, non-objectionable in taste and odor imparted to the water, non-supporting of bacteria growth, and have no deteriorating effect on the PVC pipe or rubber gaskets.
4. Fittings.
   1. Mechanical Joint Fittings: Mechanical joint fittings shall conform to the provisions of ANSI/AWWA C110/A21.10-82 or C153/A21.53-58.
   5. Locator wire and warning tape. All pipe shall have 14AWG locator wire and metallic tape installed with it. The locator wire and tape shall be installed in the pipeline trench approximately two inches to six inches above the pipe. The locator wire shall be brought up in the valve boxes to permit connecting to when doing line location. The metallic tape shall be purple in color and shall read, "NON-POTABLE WATER."
   6. Pipe installation. All pipe shall be laid as specified in AWWA Standard for "Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water" C-605, except as modified herein and in special conditions approved by the city engineer. As work progresses, the interior of the pipe shall be cleared of dirt and superfluous materials. Where cleaning after laying is difficult because of small pipe size, a suitable swab or drag shall be kept in the pipe and pulled forward past each joint immediately after jointing has set; and pipe shall not be laid when conditions of the trench or weather is unsuitable for such work. At all times when work is in progress, all open ends of the pipe and fittings shall be securely closed to the satisfaction of the City Engineer; so that no water, earth, or other substance will enter the pipe or fittings.
   7. Gravel foundation for pipe used. Wherever the subgrade material does not afford a sufficiently solid foundation to support the pipe, the superimposed load, and where groundwater must be drained, the subgrade shall be excavated to such depth as may be necessary and replaced with crushed rock, gravel or other suitable material as approved by city engineer. All such material shall be compacted into place (Section 15.01.1585).
   Gravel for PVC pipe foundations shall be clean gravel with one hundred percent passing a one-and-one-half-inch screen and five percent passing a three-fourths-inch sieve.
   8. Pipe bedding. All pipes shall be protected from lateral displacement and possible damage resulting from impact or unbalanced loading during backfilling operations by being adequately bedded. A groove shall be excavated in the bottom of the trench to receive the bottom quadrant of the pipe. Before preparing the groove, the trench bottom shall be excavated or filled, with approved bedding material, and compacted (Section 15.01.1585) to an elevation sufficiently above the grade of the pipe so that, when completed, the pipe will be true to line and grade. Bell holes and pipe fitting holes shall be excavated so that only the barrel of the pipe and bottom quadrant of the fitting receive bearing from the trench bottom.
    Pipe bedding materials placed at any point below the midpoint of the pipe shall be deposited and compacted (Section 15.01.1585) in layers not to exceed eight inches in uncompacted depth. Deposition and compaction of bedding materials shall be done simultaneously and uniformly on both sides of the pipe. Compaction shall be accomplished with hand or mechanical compactors. All bedding materials shall be placed into the trench with hand tools or other approved method in such a manner that they will be scattered alongside the pipe and not dropped or pushed into the trench in compact masses. Bedding materials shall be loose earth, free from lumps, boulders or other debris; and/or sand materials free from roots, sod, or other vegetable matter. All bedding materials shall be approved by the city engineer.
    In the event trench materials are not satisfactory for pipe bedding, modified bedding materials will be required. Modified bedding shall consist of placing compacted granular material on each side of and to the level of twelve inches above the top of the pipe.
    Modified bedding materials shall be graded as follows: one hundred percent passing a one-inch screen and five percent passing a No. 4 sieve. All modified bedding materials shall be approved by the city engineer.
   9. Cleaning and flushing. The contractor shall take every precaution to remove dirt, grease and all other foreign matter from each length of piping before making connections in the field. After each section of piping is installed, it shall be thoroughly cleaned to remove rocks, dirt, and other foreign matter by washing, sweeping, scraping, or other method that will not harm the lining or pipe.
    Water required for flushing shall be furnished by the contractor. All temporary connections for flushing and drainage shall be furnished, installed, and subsequently removed by the contractor.
    All open ends of pipes shall be bulkheaded or plugged when workmen are not on the job or in the immediate area to prevent rocks or other foreign matter from entering the pipe.
    All new water systems or extensions to existing systems shall be thoroughly flushed before being placed in service. Flushing shall be accomplished through hydrants or end-of-the-line blow-off assemblies.
   10. Line and grade. All secondary water lines shall be laid with adequate grade to allow for yearly drainage of the lines, and proper filling and emptying of the system. At locations where line and grade cannot be maintained, appropriate measures will need to be implemented to ensure the proper drainage of the lines: Permanent drains to storm drains or to ditches shall be installed at all low points in the pipeline and air-release stations shall be installed at all high points in the pipeline.

(Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.750 Valves

Valves shall be of cast iron body, bronze-mounted, double disc, parallel seat, non-rising stem design with O-ring seals.

1. Gate valves. Gate valves shall conform to AWWA Specification C500. Unless otherwise shown or specified, valves shall be of mechanical joint connection design for buried service. Buried valves shall have two-inch operating nuts. AR gate valves twelve inches and smaller shall be of resilient seat type. Valves shall have a minimum working pressure of one hundred fifty psi.
2. Butterfly valves. Butterfly valves shall conform to AWWA Specification C504 Class 150B. Both valved ends shall be mechanical joint per AWWA Specification C-111, and accessories (bolts, glands, and gaskets) shall be included.
3. Valve boxes. All buried valves shall be installed complete with a cast iron, two-piece, slip top, five-and-one-fourth-inch shaft valve box. The word "Water" shall be cast on the cover for all culinary valves. AR valve boxes located in streets shall be installed as nearly to street grade as possible.

(Ord. No. 2007-07-31, §§ 9.5--9.5.3, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

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PROFESSIONAL ENGINEER — STATE OF UTAH — 12/19/25

ROCKPORT INDUSTRIAL
COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:

1	
2	
3	

SHEET NAME: COVER SHEET & NOTES
SHEET: CS-03

Sec 15.01.760 Fire Hydrants

1. General requirements. Fire hydrants shall conform to AWWA C-502, "Fire Hydrants for Ordinary Water Works Service" and shall be designed for a working pressure of one hundred fifty psi. Hydrants shall be Mueller "Super Centurion 200" or Waterous "Pacer" or approved equal.
2. Hydrant details. The hydrant shall be of the dry barrel design. All hydrants shall be so designed as to allow the flanges at sidewalk level to separate without material damage to the main barrel section when struck by a large object, such as a car. All hydrants shall have a minimum six-inch barrel and be furnished with two two-and-one-half-inch National Standard Thread Hose Nozzles and one four-and-one-half-inch National Standard Thread Pumper Nozzle. All nozzles shall be furnished with a cap and gasket with attaching chain.
   The drip valve shall be located near the bottom of the hydrant. It shall be positive in operation and shall work directly from the main stem. It must be so designed that all water will drain away from the working parts when the hydrant is closed.
   Hydrant cover must be designed so as to be weather proof as possible. Provisions must be made for oiling, both for lubrication and to prevent corrosion. A reasonably tight fit should be made around the stem. On the cover an arrow and the word "OPEN" shall be placed in raised characters to indicate direction to turn to open the hydrant.
   The hydrant must be marked with the name or particular mark of the manufacturer. The size of the hydrant shall also be cast in the barrel. All lettering to be above the ground or sidewalk flange.
3. Auxiliary valve. All hydrants shall be supplied complete with a flange by mechanical joint end auxiliary gate valve with armor guard gasket, and shall be installed at the water main as outlined on approved construction drawings unless otherwise approved by the city engineer. All buried auxiliary valves shall have two-inch operating nuts unless otherwise specified.
4. Valve boxes. All buried auxiliary valves shall be installed complete with two piece, cast iron, slip type, five-and-one-fourth-inch valve box. All valve boxes shall be carefully inspected for proper fit between each section, ring and lid, and shall be set to the grade with a concrete collar as shown.
5. Hydrant installation. All fire hydrants shall be installed with a one cubic yard gravel sump and concrete thrust blocking. As defined in Section 15.01.720. Concrete shall not be placed around joints, bolts or drain holes. Cover all metal contact areas with a poly wrap material prior to concrete placement. All hydrants shall be installed with the upper safety flange at least two inches and not more than six inches above ground level. All hydrants shall be installed with the steamer nozzle facing the street unless otherwise approved by the city engineer.

(Ord. No. 2007-07-31, §§ 9.6--9.6.5, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.770 Backflow Prevention Devices

Backflow prevention devices shall be installed on all culinary service connections in conformance with requirements of the Uniform Plumbing Code Chapter 10 (Appendix J). All testing, maintenance, and/or repair shall be performed by certified backflow assembly technicians.

(Ord. No. 2007-07-31, § 9.7, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.780 Culinary Water Line Construction Near Sewer Or Wastewater Lines

(Applicable public health department criteria)

1. Water/sewer line horizontal separation. A culinary water main must be laid at least ten feet horizontally from any existing or proposed sewer or wastewater leach line. Separation distances shall be measured pipe edge to pipe edge.
   Should local conditions prevent a lateral separation of ten feet, a culinary water main may be laid closer than ten feet to sewer lines (but not leach lines) provided:
   1. The main is laid in a separate trench; or
   2. The main is laid on an undisturbed earth shelf on one side of the sewer line trench; or
   3. The main is laid in a sewer or drain line trench which has been backfilled and compacted not less than ninety-five percent of maximum laboratory density. (The density shall be determined in accordance with the procedures given by ASTM Standard D-690).
      In each of the above cases, the bottom of the culinary water line shall be at least 18 inches above the top of the sewer line. At the same time, the culinary water line must be sufficiently buried to prevent freezing.
2. Exception to horizontal separation. When it is impossible to obtain the proper horizontal and vertical separation as stipulated above, both the water main and sewer line shall be constructed of cast iron, ductile iron, galvanized steel or protected steel pipe having mechanical joints. Other types of joints of equal or greater integrity may be used at the discretion of the city engineer. Thermoplastic pipe may be used provided mechanical or solvent weld pipe joints are used. These lines shall be pressure-tested to assure water tightness before backfilling.
3. Culinary water/sewer line crossings. Whenever culinary water mains must cross sanitary sewers, the water main shall be laid at such an elevation that the bottom of the water main is eighteen inches above the top of the sewer. This vertical separation should be maintained for the portion of the water main located within ten feet horizontally of any sewer it crosses. The ten feet is to be measured as the perpendicular distance from the sewer line to the water line.
4. Inability to provide vertical separation. Where conditions prevent the minimum vertical separation as set forth above from being maintained, or when it is necessary for the culinary water main to pass under a sewer, both the culinary water main and the sewer line shall be constructed of cast iron, ductile iron, galvanized steel or protected steel pipe, having mechanical joints. Thermoplastic pipe may be used provided mechanical or solvent weld type joints are used. The mechanical joint pipe shall extend on each side of the crossing until the perpendicular distance from the sewer line to the culinary water line is at least ten feet. In making such crossings, it is preferable to center a length of culinary water main so that the joints will be equidistant from the sewer and as remote there from as possible.
   Where a culinary water main must cross under a sewer, a vertical separation of at least eighteen inches between the bottom of the sewer and the top of the culinary water main shall be maintained with adequate support for the larger sized sewer lines to prevent them from settling on and breaking the culinary water main.
   In the case where a new culinary water line must be routed under an existing sewer line, and it is desired not to disturb the sewer line, the city engineer may grant an exception to the above requirements. The designer must then propose a method for protecting the culinary line. Such a proposal must be deemed acceptable in writing by the city engineer.

(Ord. No. 2007-07-31, §§ 9.8--9.8.4, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.790 Testing Water Lines

1. General requirements. Any and all water lines that are replaced, installed, or repaired, to include fire hydrants, shall be tested and flushed as outlined in this section.
2. Testing. Tests shall be made upon completion of system installation, replacement, repair, or any valved portion thereof All tests shall be made at the expense of the contractor and in the presence of the city engineer or the city water superintendent.
   Lines shall be slowly filled with water venting off all air. If required, taps shall be provided at line high points to bleed off the air and after testing these shall be plugged. A minimum pressure fifty percent in excess of the maximum line operating pressure shall be maintained on the portion being tested for a minimum period of two hours, using hydraulic means to maintain the pressure. Maximum leakage during the test shall not exceed one-half gallon per inch of diameter per one thousand feet of pipe. Suitable means shall be provided by the contractor for determining the quantity of water lost by leakage under the test pressure. No pipe installation will be accepted until the leakage is less than the allowable.
3. Flushing. After pressure testing all pipelines shall be flushed. Flushing shall be accomplished through hydrants or, if a hydrant does not exist at the end of the line, the contractor shall install a tap of sufficient size to provide for a two and one-half foot per second flushing velocity in the line. The following is the flow quantity required to provide a two and one-half foot per second flushing velocity:

(Ord. No. 2007-07-31, §§ 9.9--9.9.3, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

Sec 15.01.800 Disinfection Of Culinary Water Lines

1. General requirements. All culinary water lines shall be disinfected by chlorination prior to use as outlined in this section. Chlorination. After flushing, all culinary water lines shall be disinfected by chlorination. Chlorination shall provide a minimum of twenty-five ppm residual after twenty-four hours contact in the pipeline. This may be expected with an application of fifty ppm although some conditions may require more. Chlorine, in the form of one percent slurry of high test calcium hypochlorite (HTH, Perchloron, Pittchlor, etc. which are seventy percent available chlorine by weight) shall be fed into the pipeline in such a manner as to mix with the water flowing in the pipeline. (A one percent slurry results from mixing one pound of the calcium hypochlorite with eight and four-tenths gallons of water.)
   The following table provides information as to the required quantity of slurry to be used per one hundred feet of pipe to provide a chlorine concentration of fifty ppm:
2. During the process of chlorinating the pipeline all valves, fire hydrants, and other pipeline appurtenances shall be operated several times to provide sufficient contact with the chlorinating agent. Following chlorination, the water line shall be drained and thoroughly flushed and, if necessary, re-chlorinated until a satisfactory bacteriological test is obtained. After twenty-four hours of chlorination, the contractor shall obtain a water sample, upon which the contractor will have a bacteriological test performed. The lab will provide a copy of the test to the city. The contractor shall pay the cost of the bacteriological test.
   Disinfection shall conform to the requirements of AWWA C651-86 (or latest edition).

(Ord. No. 2007-07-31, §§ 9.10--9.10.2, 7-10-2007; Ord. No. 2010-11-24, § 2, 11-23-2010)

DIVISION 14 ASPHALT PAVING

Sec 15.01.1250 General Description

This division covers the requirements for bituminous surface paving on roads. All streets shall be surfaced in accordance with the following:

1. Six-inch minimum or more (based on pavement design) crushed gravel base course over prepared subgrade.
2. Three-inch minimum or more (based on pavement design) compacted thickness plant mix asphalt surfacing.
3. One-inch minimum or more (based on pavement design) compacted thickness plant mix asphalt overlay, as required by the public works department.
4. Pavements in arterial or collector roads in non-sensitive lands areas shall be a minimum of four-inch asphalt with ten-inch base course or equivalent pavement structural number as approved by city engineer. Sensitive Lands Areas shall include a minimum of ten inches sub-base course. Arterial/Collector road pavements shall be designed for the twenty-year ADT forecasts per the latest version of the City Transportation Master Plan with a minimum of five percent trucks or greater as determined by city engineer for the given roadway. Alternative pavement structure may be approved by city engineer based upon a review of detailed pavement design by a qualified, licensed geotechnical engineer.
5. Pavements in sensitive lands ordinance areas shall be a minimum of three-inch asphalt, eight-inch base course, and twelve inches subbase course for local roads; four-inch asphalt, nine-inch base course, and thirteen-inch subbase course for collector roads; and five-inch asphalt, ten-inch base course, and sixteen-inch subbase course for arterial roads. Pavements shall be designed for the twenty-year ADT forecasts per the latest version of the City Transportation Master Plan or development traffic study where no master plan data is available with a minimum of three percent trucks or greater as determined by city engineer for the given roadway. Alternative pavement structure may be approved by city engineer based upon a review of detailed pavement design by a qualified, licensed geotechnical engineer.
6. Existing roadways not having pavement structural number equivalent to design requirements shall be reconstructed to centerline of roadway by development abutting the roadway frontage.

(Ord. No. 2007-07-31, § 13.1, 7-10-2007; Ord. No. 2012-05-15, § 1, 5-8-2012)

Sec 15.01.1260 Road Subgrade Preparation

If the pavement design does not require any sub-base materials, the subgrade shall be scarified to a depth of eight inches the full width of roadway section, and the loosened material shall be moistened and compacted to the equivalent of ninety-five percent of the maximum dry density as measured by AASHTO T-99. If the pavement design or trench conditions require sub-base imported materials, the subgrade shall be over-excavated to the depth specified across the full width of roadway section and replaced with select granular material as defined in Section 15.01.340 and be moistened and compacted as above.
No organic material, soft clay, spongy material, frozen earth, or other deleterious material will be permitted in the scarified or imported subgrade layer. Rough subgrades shall be shaped and graded to within a tolerance of one-tenth feet of design grade and drainage shall be maintained at all times.
During the rolling operation, moisture content of the subgrade layer shall be maintained at not less than ninety-seven percent or more than one hundred five percent of optimum moisture content. Rolling shall be continued until the entire road bed is compacted to the specified density to a minimum depth of eight inches.

(Ord. No. 2007-07-31, § 13.2, 7-10-2007)

Sec 15.01.1270 Base Course

Base for all streets shall consist of select material, either natural or crushed, placed on a prepared subgrade in conformance with the lines, grades and dimensions shown on the plans.

Unless otherwise approved by the city engineer, the road base material shall be crushed rock or gravel and shall conform to one of the following gradations by weight:

All materials shall be secured from approved sources. It shall be uniform in quality and well graded from course to fine.

Before placing the road base, the supplier or contractor furnishing the material shall submit, if required by the city engineer, sieve analysis of stock-piled material showing that it meets the above requirements.

The material shall be deposited and spread in uniform layer, without segregation of size with such depth that when compacted the layer will have the required thickness.

Each layer shall be compacted for the full width and depth by rolling with a pneumatic roller weighing at least ten tons. Alternate grading and rolling will be required to provide a smooth, even and uniformly compacted course true to cross section and grade. Places inaccessible to rolling shall be compacted with mechanically operated hand tampers.

The gravel base shall be compacted to not less than ninety-five percent maximum dry density as determined by AASHTO T-180 surfaces shall be true to the established grade with thickness being not less than one-fourth inch from the required layer thickness and with the surface elevation varying not more than three-eighth inch in ten feet from the true profile and cross section.

(Ord. No. 2007-07-31, § 13.3, 7-10-2007)

Sec 15.01.1280 Bituminous Surface Course

Over the dry, dust free, compacted base course, the contractor shall place and compact a bituminous asphalt cement surface course. The surface course shall consist of a mixture of mineral aggregate and binder. Gradation of aggregate shall conform to one of the following:

The contractor shall establish a mix gradation and the amount of bituminous material shall be subject to the approval of the city engineer and shall meet the requirements of the gradation selected. The asphalt content by weight shall be between four and one-half and seven percent. Regardless of the bituminous content there shall not be more than three percent voids in the aggregate.

The bituminous material for surface course shall be, AC 10, or penetration asphalt cement conforming to the requirements of ASTM M20-60. The bituminous material shall be free of water and will contain no mineral matter other than that naturally contained in the asphalt.

The bituminous surface course shall be mixed at a mixing plant and spread and compacted on the prepared base in conformance with the lines and dimensions shown on the plans and in accordance with these specifications. All structure edges (curbs, etc.) shall receive a "tack" coat.

All traffic shall be kept off the completed surface for a minimum of twenty-four hours, unless otherwise authorized by the city engineer or public works director.

(Ord. No. 2007-07-31, § 13.4, 7-10-2007)

Sec 15.01.1290 Construction Methods And Equipment

The methods employed in performing the work, all equipment, tools, and machinery and other appliances used in handling the materials and executing the work shall be the responsibility of the contractor. The contractor shall make such changes in the methods employed and in the equipment used as are necessary whenever the bituminous material being produced does not meet the specifications herein established.

(Ord. No. 2007-07-31, § 13.5, 7-10-2007)

Sec 15.01.1300 Spreading And Compaction

The bituminous mixtures shall be spread with self-propelled mechanical spreading and conditioning equipment capable of distributing at least a twelve-foot width. Unless otherwise designated or directed by the city engineer, bituminous base course more than three inches in total compacted thickness shall be spread in two or more courses, with no courses exceeding three inches in compacted thickness and no courses less than one inch in thickness. The mixture shall be spread and struck off in such a manner that the finished surface shall result in a uniform smooth surface. The longitudinal joints in succeeding courses shall be off-set at least six inches transversely to avoid a vertical joint through more than one course.

The temperature of the bituminous mix shall be between two hundred seventy degrees Fahrenheit and three hundred twenty-five degrees when placing.

After the mixture has been spread, the surface shall be rolled with a power driven roller, weighing not less than ten tons, in longitudinal direction commencing at the outside edge or lower side and proceeding to the higher side. Each pass of the roller shall overlap the preceding pass at least one-half the width of the roller. Rolling shall continue until ninety-five percent of the laboratory density as determined in accordance with ASTM Designation D-1559 (Marshall Test) for the bituminous mixture being used has been obtained. Density tests shall be done following the procedures of ASTM D2950.

Rolling operations shall be conducted in such a manner that shoving or distortion will not develop beneath the roller.

The surface of the pavement, after compaction, shall be uniform and true to the established crown and grade. When tested with a ten-foot straight edge placed parallel to the centerline of the pavement, the surface of the pavement at any point shall not deviate from the lower edge of the straight edge by more than one-eighth of an inch. All high and low spots shall be remedied immediately by removing the wearing course material over the affected areas and replacing it with fresh, hot wearing course and surface finish material and immediately compacting it to conform with the surrounding area.

The contractor shall be responsible to keep all traffic off the completed surface for a minimum period of twenty-four hours.

No bituminous surface course shall be placed when the temperature of the air (measured in the shade) or roadbed is fifty degrees Fahrenheit or below, during rainy weather, when the base is wet or frozen, or during any other unfavorable weather conditions as determined by the city engineer or public works director.

(Ord. No. 2007-07-31, § 13.6, 7-10-2007)

Sec 15.01.1310 Bituminous Plant Mix Seal Coat

The contractor shall place and compact a bituminous plant mix seal coat over the bituminous surface course as required by the city. The seal coat shall consist of a mixture of mineral aggregate and bituminous binder. Gradation of the aggregate shall conform to the following:

The contractor shall establish a mix gradation, and the amount of bituminous material shall be subject to the approval of the city engineer and shall meet the requirements of the gradation selected. Regardless of the bituminous content, there shall not be more than three percent voids in the mix.

The bituminous material shall be AC-10 asphalt cement conforming to the requirements of AASHTO M-226.

A tack coat shall be applied to all existing pavement prior to pouring the plant mix seal coat. The bituminous material shall be Grade SS-1H Emulsion applied at the rate of five-one-hundredths gallons per square yard.

The bituminous plant mix seal coat shall be mixed at a mixing plant and spread and compacted on the prepared pavement in accordance with the lines and dimensions shown on the plans and in accordance with these specifications. The seal coat shall be spread with self-propelled mechanical spreading and conditioning equipment capable of distributing at least a twelve-foot width. Locate longitudinal joints within six inches of lane lines.

After the mixture has been spread, the surface shall be rolled with a power driven roller, weighing not less than ten tons, in longitudinal direction commencing at the outside edge or lower side and proceeding to the higher side. Each pass of the roller shall overlap the preceding pass at least one-half the width of the roller. Rolling shall continue until ninety-five percent of the laboratory density as determined in accordance with ASTM Designation D-1559 (Marshall Test) for the bituminous mixture being used has been obtained.

(Ord. No. 2007-07-31, § 13.7, 7-10-2007)

Sec 15.01.1320 Weather Limitations

No bituminous surface shall be placed when the temperature of the air or road bed is below fifty degrees Fahrenheit, during rainy weather when the base is wet, or during other unfavorable weather conditions as determined by the city engineer.

No bituminous plant mix seal coat shall be placed when the temperature of the air or roadbed is less than seventy degrees Fahrenheit during rainy weather when the pavement surface is wet, or during unfavorable weather conditions as determined by the city engineer. The air temperature shall be measured in the shade.

(Ord. No. 2007-07-31, § 13.8, 7-10-2007)

Sec 15.01.1330 Flagging

Flagmen shall be required to facilitate the safe control of traffic over highways and streets under construction. Flagging shall be performed by adequately trained and equipped flagmen. All flagging shall be done as described in the safety orders covering flagmen of the Industrial Commission of Utah.

(Ord. No. 2007-07-31, § 13.9, 7-10-2007)

DIVISION 17 ACCESS MANAGEMENT REQUIREMENTS

The Access Management Manual can be found at http://afcity.org/719/Engineering

HISTORY
Amended by Ord. 2022-12-60 on 12/13/2022

Sec 15.01.1830 Introduction

The requirements set forth in this section are intended to protect the functional integrity of roadways, maintain and preserve traffic mobility, provide efficient and necessary access, while protecting the public health, safety, and welfare.

(Ord. No. 2012-05-15, § 2, 5-8-2012)

HISTORY
Amended by Ord. 2022-12-60 on 12/13/2022

Sec 15.01.1840 Access Provisions

1. This section discusses the types of accesses permitted on the various types of roadways within American Fork. The roadway network and land use are interconnected, therefore allowing certain types of land use and accesses adjacent to certain types of roadways will lead to the correct type of access and mobility that would be expected for a certain type of road. Table 1 shows the allowable accesses for each roadway classification.

A. The feasibility of these recommendations is also highly dependent upon land use and transportation planning for American Fork City. If it is determined by the City Engineer that a variance from the standards in Table 1 is in the best interest of the public health safety and welfare of the residents of the City, a design that meets the purposes of this rule, is based on desirable nationally accepted standards, and is approved by the City Council, it may be permitted.

(Ord. No. 2012-05-15, § 2, 5-8-2012)

Sec 15.01.1850 Intersection And Access Spacing

1. The minimum signalized, public street and private access spacing shall be as set forth in Table 2 below:

B. If it is determined that a parcel of land existing and within the boundaries of the city at the time of adoption of this ordinance cannot meet the design standards set forth in Table 2, a design that meets the purposes of this rule, is based on desirable nationally accepted standards, and is determined acceptable to the City Engineer and approved by the City Council, it may be permitted.

C. If it is determined by the City Engineer that a variance from the standards in Table 2 is in the best interest of the public health safety and welfare of the residents of the City, a design that meets the purposes of this rule, is based on nationally accepted standards, and is approved by the City Council, it may be permitted.

(Ord. No. 2012-05-15, § 2, 5-8-2012)

HISTORY
Amended by Ord. 2022-12-60 on 12/13/2022

Sec 15.01.1860 Corner Clearance Requirements

The corner clearance requirements are the same as the minimum access spacing requirements as were shown previously in Table 2. In general, minimum corner clearance can be shorter on the downstream leg of the minor street at an intersection, especially if the access is a RIRO access. This distance can be as low as one hundred twenty feet. For all other corner clearance distances, the values in Table 2 for minimum access spacing apply.

(Ord. No. 2012-05-15, § 2, 5-8-2012)

Sec 15.01.1870 Cross Access (Shared Access) Requirements

Access to private property from the public transportation network cannot be prohibited. However, when parcels have small frontages, especially along major collectors and arterials, it is highly recommended that the cross access and/or shared access be utilized where practical. Where adjoining parcels have the same ownership, American Fork City should require the use of cross or shared access in order to maintain the recommended access spacing requirements as previously discussed. When adjacent parcels do not have common ownership, incentives should be provided to promote shared and cross access.

(Ord. No. 2012-05-15, § 2, 5-8-2012)

Sec 15.01.1880 Intersection Alignment/Offsets

Where possible, accesses on opposite sides of the street should be lined up directly across from each other. Sometimes this is not possible due to site restrictions or property lines. If accesses cannot be lined up across from one another, the preferable offset is so that left turns entering each respective access do not overlap. Table 3 shows the minimum offset for intersections on opposite sides of the street when the potential for overlap does occur. However, a traffic impact study may determine that a larger offset is required depending on the level of queuing that may occur at the intersections. Table 3. Minimum Access Offset Requirements

(Ord. No. 2012-05-15, § 2, 5-8-2012)

Sec 15.01.1890 On-Street Parking

Permitting on-street parking can be a tool to make a corridor more pedestrian friendly as parked vehicles provide a buffer between through traffic and pedestrians on the sidewalks. Vehicles parking and un-parking along a roadway may cause side friction that can result in through traffic being slowed down or impeded. To determine whether or not a road should have permitted on-street parking depends primarily on what the function of the roadway is. As was discussed previously, the purpose of most arterial type roads is to provide mobility, not access, whereas the purpose of a local street is to provide access and not mobility. However, another important factor is adjacent land use. A roadway in a core business area, even if classified as an arterial, can benefit from having on-street parking, where a lower classified road, such as a minor collector within an industrial area, may not need on-street parking, therefore the cost to build and maintain this type of road will be less expensive by prohibiting on-street parking. Finally, the available cross section width should also be considered when determining whether on-street parking should be permitted. A minimum of seven feet of cross section width should be provided for on-street parking. Table 4 shows recommended on-street parking provisions based on functional classification. Figure 1 shows on-street parking on Main Street in American Fork. Although this road is classified as an arterial, the adjacent land use supports on-street parking. All parking within American Fork City should be parallel except for Church Street, Center Street and Merchant Street between Main Street and Pacific Drive and Main Street from 200 East to 460 East.

region Engineering & Surveying
1776 N. State St. #110
Orem, UT 84057
P: 801.376.2245
regiondesignllc.com

PROFESSIONAL ENGINEER
STATE OF UTAH
R. 387703
Ryan L. Lyman
2/3/26
MY COMMISSION EXPIRES

ROCKPORT INDUSTRIAL
COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1
EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

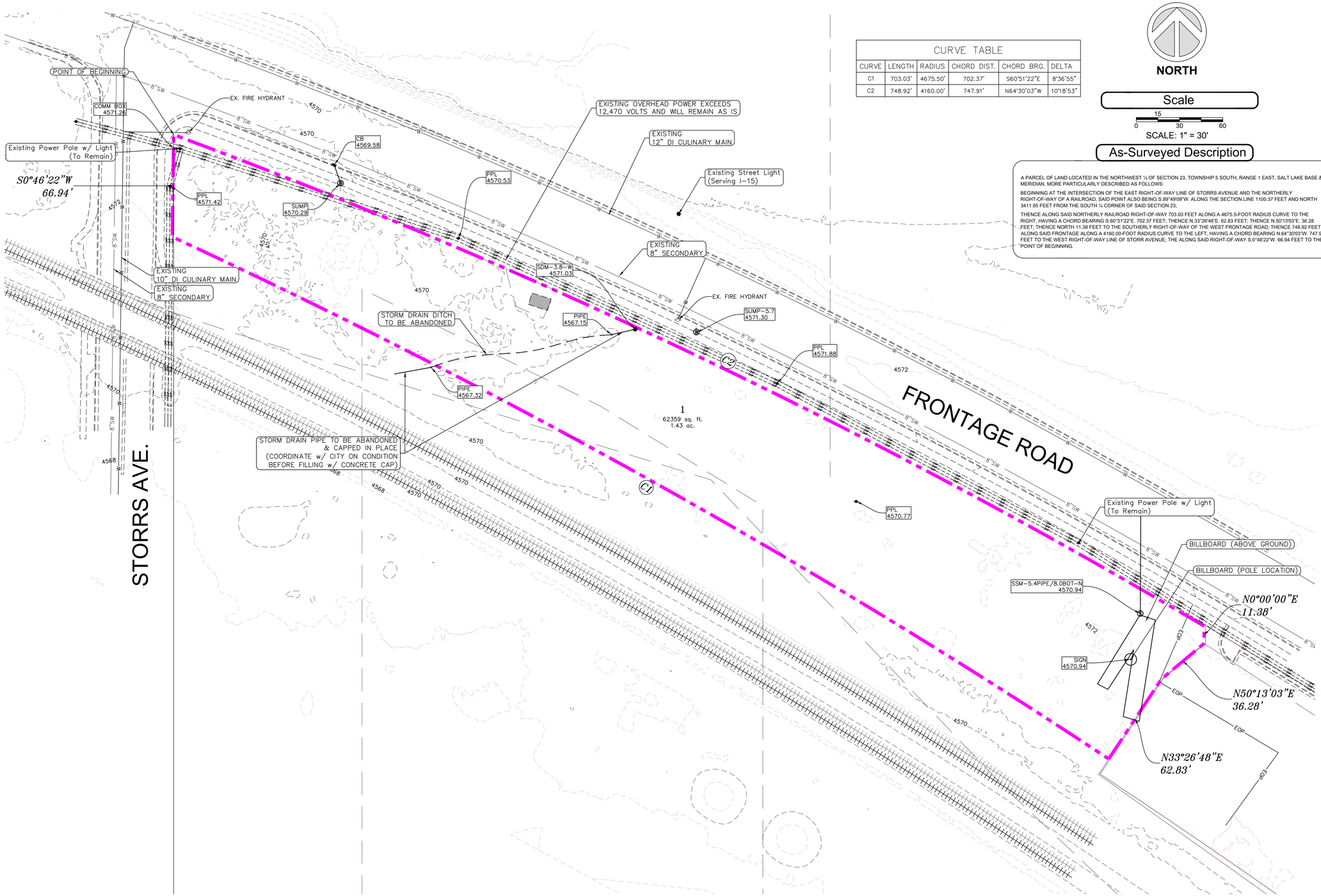
DATE: 2/3/26
PROJECT #

REVISIONS:

1	
2	
3	

SHEET NAME: COVER SHEET & NOTES
SHEET: CS-04

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CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	703.03'	4675.50'	702.37'	S60°51'22"E	8°36'55"
C2	748.92'	4160.00'	747.91'	N64°30'03"W	10°18'53"

NORTH

Scale

15
0 30 60

SCALE: 1" = 30'

As-Surveyed Description

A PARCEL OF LAND LOCATED IN THE NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF STORRS AVENUE AND THE NORTHERLY RIGHT-OF-WAY OF A RAILROAD, SAID POINT ALSO BEING S.89°49'09"W. ALONG THE SECTION LINE 1100.37 FEET AND NORTH 3411.95 FEET FROM THE SOUTH ¼ CORNER OF SAID SECTION 23;

THENCE ALONG SAID NORTHERLY RAILROAD RIGHT-OF-WAY 703.03 FEET ALONG A 4675.5-FOOT RADIUS CURVE TO THE RIGHT, HAVING A CHORD BEARING S.60°51'22"E. 702.37 FEET; THENCE N.33°26'48"E. 62.83 FEET; THENCE N.50°13'03"E. 36.28 FEET; THENCE NORTH 11.38 FEET TO THE SOUTHERLY RIGHT-OF-WAY OF THE WEST FRONTAGE ROAD; THENCE 748.92 FEET ALONG SAID FRONTAGE ALONG A 4160.00-FOOT RADIUS CURVE TO THE LEFT, HAVING A CHORD BEARING N.64°30'03"W. 747.91 FEET TO THE WEST RIGHT-OF-WAY LINE OF STORR AVENUE; THE ALONG SAID RIGHT-OF-WAY S.0°46'22"W. 66.94 FEET TO THE POINT OF BEGINNING.

region Engineering & Surveying
1776 N. State St. #110
Orem, UT 84057
P: 801.376.2245
regiondesignllc.com

PROFESSIONAL ENGINEER — STATE OF UTAH — 12/19/25

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:

1	
2	
3	

SHEET NAME: EXISTING CONDITIONS

SHEET: EX-01

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Surveyor's Certification

The undersigned, being a registered surveyor of the State of **Utah** certifies Cottonwood Title,

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS. The field work was completed on February 14, 2024.

Date of Plat or Map:
December 20, 2024

Robbin J Mullen, PLS
(Name of Surveyor)

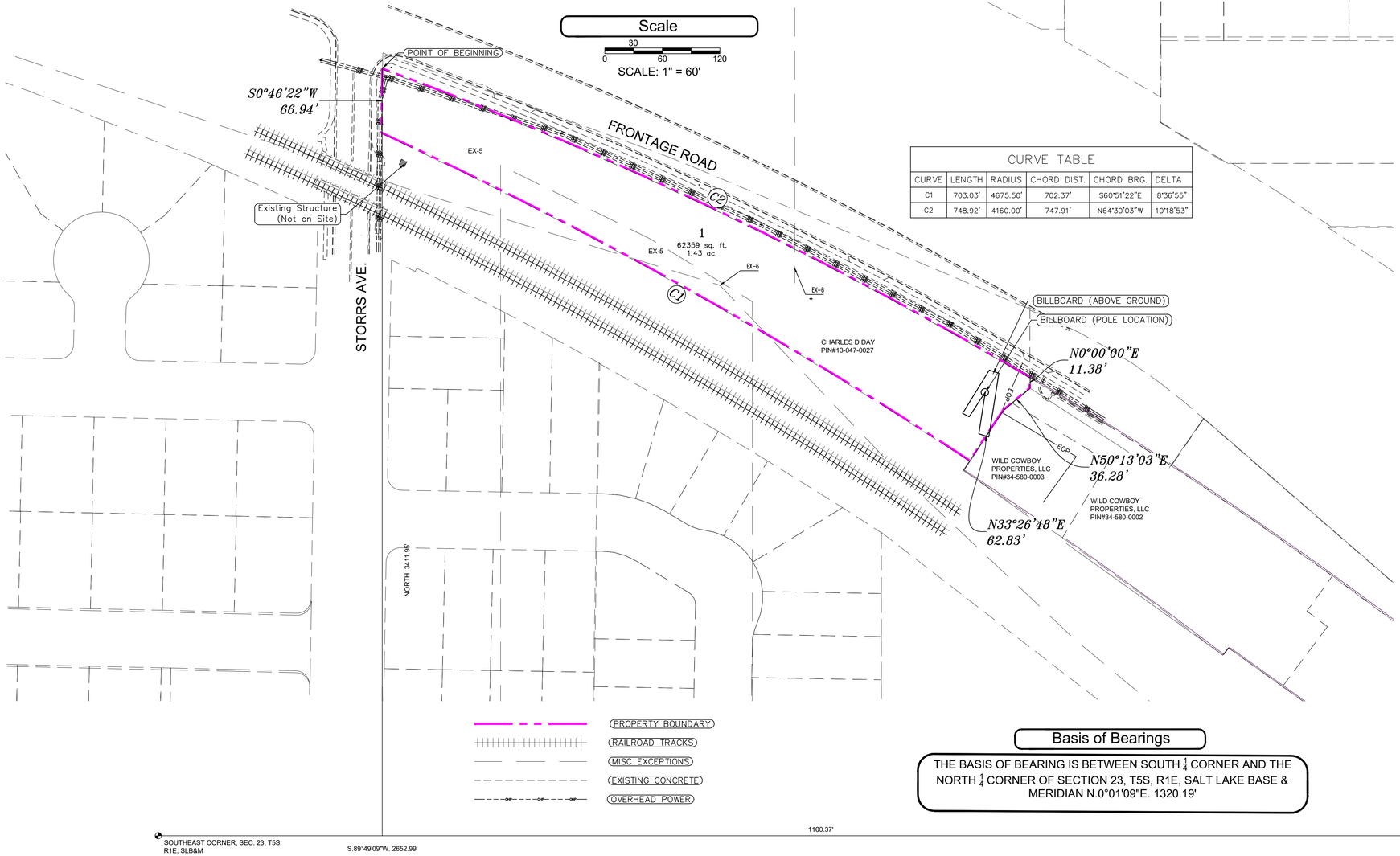
Registration No.368356

PROFESSIONAL LAND SURVEYOR
No. 368356
ROBBIN J.
MULLEN
12/20/2024
STATE OF UTAH

NORTH

Scale

30
0 60 120
SCALE: 1" = 60'



CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	703.03'	4675.50'	702.37'	S60°51'22"E	8°36'55"
C2	748.92'	4160.00'	747.91'	N64°30'03"W	10°18'53"

Basis of Bearings

THE BASIS OF BEARING IS BETWEEN SOUTH $\frac{1}{4}$ CORNER AND THE NORTH $\frac{1}{4}$ CORNER OF SECTION 23, T5S, R1E, SALT LAKE BASE & MERIDIAN N.0°01'09"E. 1320.19'

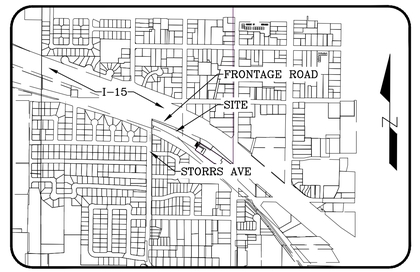
LAND AREA

TOTAL AREA 62,359 SF OR 1.43 ACRES OF LAND.

Surveyor's Notes

1. ALL DISTANCES AND DIMENSIONS SHOWN ON THIS SURVEY ARE THE SAME AS SHOWN ON THE PLAT CALLED OUT IN THE TITLE REPORT.
2. ALL OFFSITE EASEMENTS SHOWN IN THE TITLE REPORT ARE SHOWN ON PLAT.
3. ABOVE GROUND EVIDENCE OF UTILITIES ARE SHOWN.
4. THE PROPERTY SHOWN ON THIS PLAT IS THE SAME AS THE TITLE DESCRIPTION.

VICINITY MAP



SCALE 1" = 1000'

Title Description

A tract of land situate in Section 23, Township 5 South, Range 1 East, Salt Lake Base and Meridian, Utah County, Utah more particularly described as follows:
Beginning at a point which is the intersection of the East right of way line of Storrs Avenue (300 West Street) and the Southerly right of way line of a 50 foot wide freeway frontage road, which beginning point is located West 1100.12 feet and North 3425.73 feet (based on the Utah State Plane Coordinate System, Central Zone, bearing of section lines - NAD 27) from the South Quarter corner of Section 23, Township 5 South, Range 1 East, Salt Lake Base and Meridian; thence along the Northerly line of the Union Pacific Railroad property by the following three courses and distances: (1) along a line parallel with and 50 feet distant Southerly from the Southeasterly right of way line of Interstate Highway I-15 South 70°00'37" East 286.82 feet; (2) thence 61.20 feet along the arc of a 975.00 foot radius curve to the right whose chord bears South 68°48'55" East 61.19 feet; (3) thence South 67°04'43" East 378.07 feet more or less to the Easterly line of the Union Pacific Railroad property; thence along the Easterly line of said railroad property by the following three (3) courses and distances: (1) South 83.20 feet; (2) thence South 50°14'11" West 36.28 feet; (3) thence South 33°26'06" West 62.83 feet; thence leaving said Easterly property line and continuing on a line 50 feet distant Northeasterly from and parallel with the centerline of the existing railroad tracks, 703.07 feet along the arc of a 4675.50 foot radius curve to the left whose chord bears North 60°51'22" West 702.37 feet; to the Easterly fenced right of way line of Storrs Avenue (300 West Street); thence along said street line North 00°46'22" East 84.20 feet to the point of beginning.
LESS AND EXCEPTING that portion of land conveyed to UDOT by that Final Judgment of Condemnation, recorded January 16, 2013 as Entry No. 5034:2013, described as follows:
A parcel of land in fee, being part of an entire tract of property, situate in the Southeast Quarter Northwest Quarter of Section 23, Township 5 South, Range 1 East, Salt Lake Base and Meridian. The boundaries of said parcel of land are described as follows:
Beginning at the intersection of the Easterly right of way line of Storrs Avenue (300 West Street) and the Southwesterly highway right of way line of the Southwest Frontage Road of Interstate 15, which point is 1100.12 feet West and 3425.73 feet North from the South Quarter corner of said Section 23; thence running along said highway right of way line the following three (3) courses and distances: (1) thence South 70°00'37" East 286.82 feet; (2) thence Easterly 61.20 feet along the arc of a 975.00 foot radius curve to the right, (chord bears South 68°48'55" East 61.19 feet); (3) thence South 67°04'43" East 378.07 feet to the Easterly boundary line of said entire tract; thence South 71.82 feet along said boundary line to a point 182.86 feet radially distant Southwesterly from the centerline of said project, opposite approximate Engineers Station 4339+69.24; thence Northwesterly 748.91 feet along the arc of a 4160.00 foot radius curve to the left, (chord bears North 64°30'03" West 747.90 feet) to said Storrs Avenue Easterly right of way line; thence North 00°46'22" East 17.26 feet along said right of way line to the point of beginning.

As-Surveyed Description

A PARCEL OF LAND LOCATED IN THE NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF STORRS AVENUE AND THE NORTHERLY RIGHT-OF-WAY OF A RAILROAD, SAID POINT ALSO BEING S.89°49'09"W. ALONG THE SECTION LINE 1100.37 FEET AND NORTH 3411.95 FEET FROM THE SOUTH ¼ CORNER OF SAID SECTION 23;

THENCE ALONG SAID NORTHERLY RAILROAD RIGHT-OF-WAY 703.03 FEET ALONG A 4675.5-FOOT RADIUS CURVE TO THE RIGHT, HAVING A CHORD BEARING S.60°51'22"E. 702.37 FEET; THENCE N.33°26'48"E. 62.83 FEET; THENCE N.50°13'03"E. 36.28 FEET; THENCE NORTH 11.38 FEET TO THE SOUTHERLY RIGHT-OF-WAY OF THE WEST FRONTAGE ROAD; THENCE 748.92 FEET ALONG SAID FRONTAGE ALONG A 4160.00-FOOT RADIUS CURVE TO THE LEFT, HAVING A CHORD BEARING N.64°30'03"W. 747.91 FEET TO THE WEST RIGHT-OF-WAY LINE OF STORR AVENUE; THE ALONG SAID RIGHT-OF-WAY S.0°46'22"W. 66.94 FEET TO THE POINT OF BEGINNING.

Title Information

COTTONWOOD TITLE, File Number 185160-TOB, With an effective date of November 27, 2024 at 7:30 a.m.

Schedule "B" Items

1-4. GENERAL EXCEPTIONS, NO EASEMENTS

5. Right of Way Easement in favor of the Mountain States Telephone and Telegraph Company, to construct, operate, maintain and remove communication equipment and other facilities and incidental purposes, from time to time, upon, over, under and across a portion of the subject Land, recorded November 5, 1942, as Entry No. 9024, in Book 370, at Page 410. (exact location not disclosed) (SURVEYOR NOTES: AFFECTS PROPERTY, SHOWN ON PLAT)

6. Easement in favor of Utah Power and Light Company to construct, reconstruct, operate, maintain and repair electric transmission and other equipment and incidental purposes, over, under and across a portion of the subject Land. Said Easement recorded October 18, 1960, as Entry No. 14454, in Book: 857, at Page 43. (SURVEYOR NOTES: AFFECTS PROPERTY, SHOWN ON PLAT)

7. REMOVED

8. Agreement, Grant of Access to DEQ and Covenants Not to Sue Utah Transit Authority recorded April 15, 2002 as Entry No. 42079:2002. Amendment to Agreement, Grant of Access to DEQ and Covenants Not to Sue Utah Transit Authority recorded October 3, 2005 as Entry No. 111621:2005. (SURVEYOR NOTES: AFFECTS PROPERTY, BLANKET EASEMENT, NOT SHOWN ON PLAT)

9. Reservations and exceptions as shown in that certain Quitclaim Deed recorded March 31, 2005 as Entry No. 33568:2005. (SURVEYOR NOTES: AFFECTS PROPERTY, BLANKET EASEMENT, NOT SHOWN ON PLAT)

10. Notice of Claim of Interest in favor of Reagan Outdoor Advertising pursuant to an outdoor advertising lease agreement. Said Notice recorded April 19, 2010 as Entry No. 31183:2010.
Amended Notice of Claim of Interest recorded March 18, 2016 as Entry No. 23105:2016. (SURVEYOR NOTES: AFFECTS PROPERTY, BLANKET EASEMENT, NOT SHOWN ON PLAT)
NOTE: Said Outdoor Advertising Lease Agreement contains a right of first refusal in favor of R.O.A. General, Inc. dba Reagan Outdoor Advertising.

11-12. GENERAL EXCEPTIONS, NO EASEMENTS

ALTA/NSPS Land Title Survey

Sheet 1 of 1

Surveyor Title Block

Surveyors Name:
Region Engineering & Surveying

Address: 1776 N. State Street,
Orem, UT 84057

Telephone Number:
801-367-5274

Drawn by: RJM	Survey Ref. No:2024_012
Approved by:	Field Date: 3/07/2024
Revision Box	
Date:	Revision:

Copy Sent Date: 2/3/26

Prepared For:

Client Ref. No: 0001

Project Address: 205 WEST FRONTAGE ROAD	Project Name:
Project Location: AMERICAN FORK, UTAH	Job Number: 2024_005

ROCKPORT INDUSTRIAL PLAT 'A'

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

CURVE TABLE					
CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	748.92'	4160.00'	747.91'	S64°30'03"E	10°18'53"
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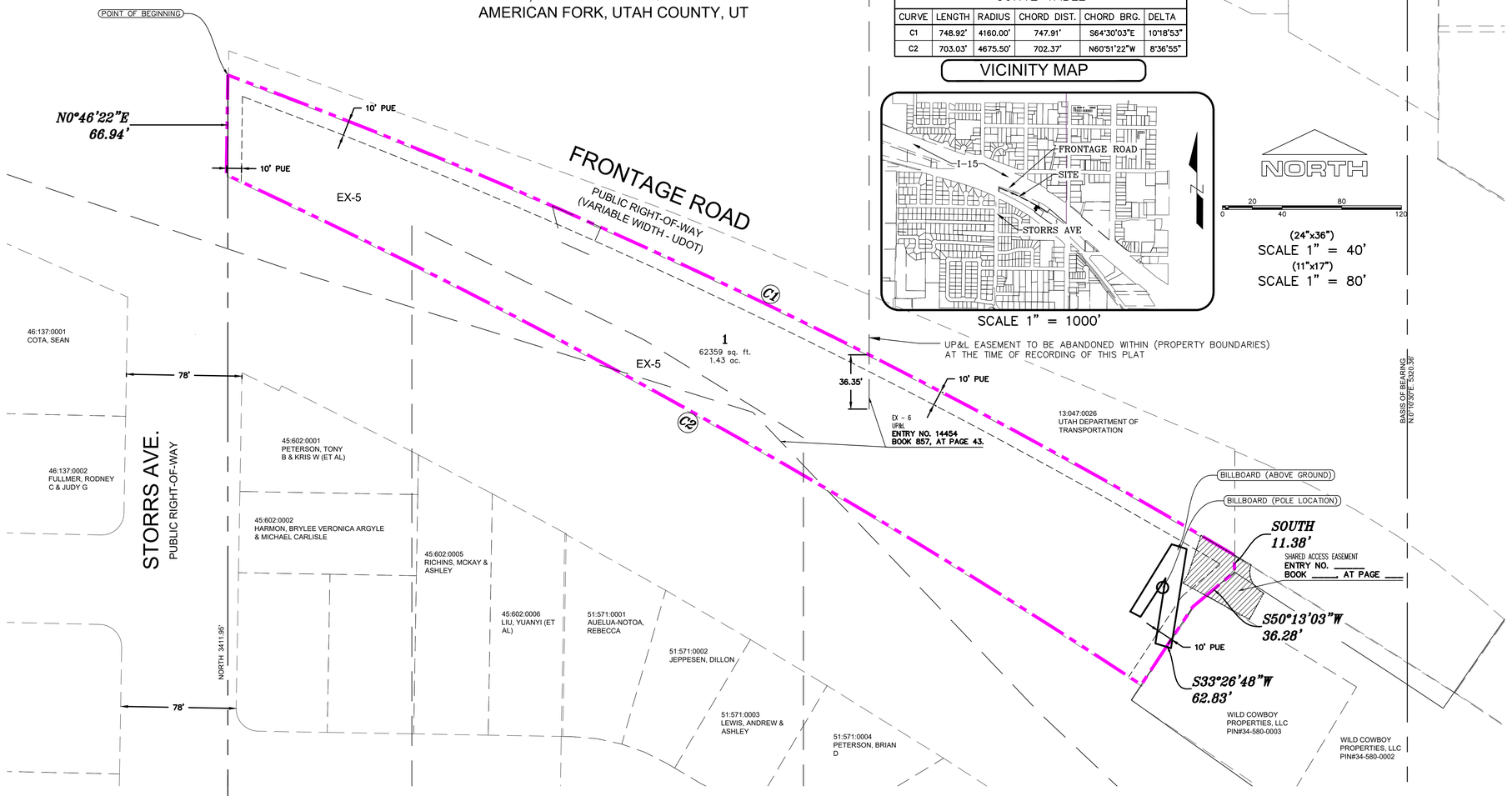
VICINITY MAP

SCALE 1" = 1000'

NORTH

0 20 40 80 120

(24"x36")
SCALE 1" = 40'
(11"x17")
SCALE 1" = 80'



MISC NOTES

1. OFFSET-PINS TO BE PLACED IN THE BACK OF THE CURB AND ⅜" BY 24" REBAR WITH NUMBERED SURVEY CAP TO BE PLACED AT ALL LOTS REAR CORNERS PRIOR TO OCCUPANCY
2. BUILDING PERMITS WILL NOT BE ISSUED FOR ANY DWELLING UNTIL UNTIL FIRE HYDRANTS ARE INSTALLED, APPROVED BY THE FIRE MARSHAL AND CHARGED WITH CULINARY WATER.
3. LOWEST FLOOR SLAB ELEVATION MUST BE A MINIMUM OF 3 FEET ABOVE WATER LEVEL MEASURED DURING SPRING SEASON.

EASEMENT NOTES

EX-5 – RIGHT OF WAY EASEMENT IN FAVOR OF THE MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY, TO CONSTRUCT, OPERATE, MAINTAIN AND REMOVE COMMUNICATION EQUIPMENT AND OTHER FACILITIES AND INCIDENTAL PURPOSES, FROM TIME TO TIME, UPON, OVER, UNDER AND ACROSS A PORTION OF THE SUBJECT LAND, RECORDED NOVEMBER 5, 1942, AS ENTRY NO. 9024, IN BOOK 370, AT PAGE 410. (EXACT LOCATION NOT DISCLOSED) (SURVEYOR NOTES: AFFECTS PROPERTY, SHOWN ON PLAT)

EX-6 – EASEMENTS AS CONTAINED IN THAT CERTAIN FINAL JUDGMENT OF CONDEMNATION RECORDED JANUARY 16, 2013 AS ENTRY NO. 5034:2013. (SURVEYOR NOTES: AFFECTS PROPERTY, SHOWN ON PLAT)

NOTICE OF CLAIM OF INTEREST IN FAVOR OF REAGAN OUTDOOR ADVERTISING PURSUANT TO AN OUTDOOR ADVERTISING LEASE AGREEMENT. SAID NOTICE RECORDED APRIL 19, 2010 AS ENTRY NO. 31183:2010.

AMENDED NOTICE OF CLAIM OF INTEREST RECORDED MARCH 18, 2016 AS ENTRY NO. 23105:2016. (SURVEYOR NOTES: AFFECTS PROPERTY, BLANKET EASEMENT, NOT SHOWN ON PLAT)

NOTE: SAID OUTDOOR ADVERTISING LEASE AGREEMENT CONTAINS A RIGHT OF FIRST REFUSAL IN FAVOR OF R.O.A. GENERAL, INC. DBA REAGAN OUTDOOR ADVERTISING.

LEGEND

- FOUND SECTION COR. AS NOTED
- SET 5/8" IRON PIN TO BE SET AT ALL LOT CORNERS
- FOUND CLASS I STREET MONUMENT
- SET STREET MONUMENT
- PROPERTY BOUNDARY
- CENTERLINE
- PUBLIC UTILITY EASEMENT
- SECTION LINE
- CALCULATED POINT (NOT SET)
- SHARED ACCESS/UTILITY EASEMENT

FEMA FLOOD NOTES
ZONE X – AREA OF MINIMAL FLOOD HAZARD
FIRMETTE # – 49049C0306F
DATED – JUNE 19, 2020
PANEL – 490152 – MAP 0306

ZONING INFORMATION

THIS PROJECT IS LOCATED WITHIN THE PI-1 (PLANNED INDUSTRIAL) ZONE.
THE LAND USE DESIGNATION IS TOD (TRANSIT ORIENTED DEVELOPMENT)

REFERENCE DOCUMENTS

NOTICE OF INTEREST, BUILDING REQUIREMENTS, AND ESTABLISHMENT OF RESTRICTIVE COVENANTS; RECORDED IN THE OFFICE OF THE UTAH COUNTY RECORDER AS ENTRY: _____

PROJECT ENGINEER & SURVEYOR	PROJECT DEVELOPER
REGION ENGINEERING & SURVEYING 1776 NORTH STATE STREET #110 OREM, UTAH 84057 PH - 801.376.2245	NATE HEAPS CALETA CAPITAL 801.362.1496 NATE@CALETACAPITAL.COM

SEWER & WATER AUTHORITY APPROVAL

APPROVED THIS _____ DAY OF _____ A.D. _____, 20____. BY THE WATER AUTHORITY.

SEWER & WATER AUTHORITY

Surveyor's Certificate

I, ROBBIN J. MULLEN DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 368356 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH, IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL LAND SURVEYORS LICENSING ACT. I FURTHER CERTIFY BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF SAID TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, IN ACCORDANCE WITH SECTION 17-73-504, AND HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS, AND EASEMENTS AND THAT THE SAME HAS BEEN CORRECTLY SURVEYED AND MONUMENTS PLACED AS REPRESENTED ON THE PLAT.

Boundary Description

A PARCEL OF LAND LOCATED IN THE NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A NON-TANGENT CURVE AT THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF STORRS AVENUE AND THE NORTHERLY RIGHT-OF-WAY OF A RAILROAD, SAID POINT ALSO BEING S.89°49'09"W. ALONG THE SECTION LINE 1100.37 FEET AND NORTH 3411.95 FEET FROM THE SOUTH ¼ CORNER OF SAID SECTION 23;

SAID CURVE TURNING TO THE RIGHT THROUGH AN ANGLE OF 10° 18' 53", HAVING A RADIUS OF 4160.00 FEET, AND WHOSE LONG CHORD BEARS S 64° 30' 03" E FOR A DISTANCE OF 747.91 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE; THENCE, SOUTH FOR A DISTANCE OF 11.38 FEET TO A POINT ON A LINE; THENCE, S 50° 13' 03" W FOR A DISTANCE OF 36.28 FEET TO A POINT ON A LINE; THENCE, S 33° 26' 48" W FOR A DISTANCE OF 62.83 FEET TO THE BEGINNING OF A NON-TANGENTIAL CURVE, SAID CURVE TURNING TO THE LEFT THROUGH AN ANGLE OF 08° 36' 55", HAVING A RADIUS OF 4675.50 FEET, AND WHOSE LONG CHORD BEARS N 60° 51' 22" W FOR A DISTANCE OF 702.37 FEET TO A POINT OF INTERSECTION WITH A NON-TANGENTIAL LINE; THENCE N 00° 46' 22" E A DISTANCE OF 66.94 FEET TO THE POINT OF BEGINNING

CONTAINS 1.43 ACRES (62,359± sq ft) AND 1 LOT

PROJECT BASED ON STATE PLANE COORDINATES, NAD83

PROFESSIONAL LAND SURVEYOR
No. 368356
ROBBIN J. MULLEN
STATE OF UTAH

February 13, 2026
DATE

SURVEYOR

OWNERS DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL OF THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, BLOCKS, STREETS AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS, EASEMENTS, PUBLIC UTILITY EASEMENTS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____

Nathan S. Heaps,
Manager, Rockport LLC

Tyson Williamson,
Manager, Rockport LLC

ACKNOWLEDGMENT

STATE OF UTAH
S.S.
COUNTY OF UTAH

ON THIS _____ DAY OF _____, A.D. 20____ PERSONALLY APPEARED BEFORE ME, WHOSE IDENTITY IS PERSONALLY KNOWN TO ME OR PROVEN ON THE BASIS OF SATISFACTORY EVIDENCE, AND WHO BY ME DULY SWORN/AFFIRMED, DID SAY THAT HE/SHE IS THE _____ OF _____, A UTAH LIMITED LIABILITY COMPANY, AND THAT SAID DOCUMENT WAS SIGNED BY HIM/HER ON BEHALF OF SAID LIMITED LIABILITY COMPANY BY AUTHORITY OF ITS OPERATING AGREEMENT OR RESOLUTION OF ITS MEMBERS, AND HE/SHE ACKNOWLEDGED TO ME THAT HE/SHE EXECUTED THE ROCKPORT INDUSTRIAL PLAT 'A' SUBDIVISION PLAT.

MY COMMISSION EXPIRES _____

A NOTARY PUBLIC COMMISSIONED IN UTAH

COMMISSION NUMBER

PRINTED FULL NAME OF NOTARY

ACCEPTANCE BY DEVELOPMENT REVIEW COMMITTEE APPROVAL AUTHORITY

THE DEVELOPMENT REVIEW COMMITTEE APPROVAL AUTHORITY OF AMERICAN FORK CITY, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS AND EASEMENTS FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____, A.D. _____.

DEVELOPMENT SERVICES DIRECTOR

PUBLIC WORKS DIRECTOR

FIRE CHIEF

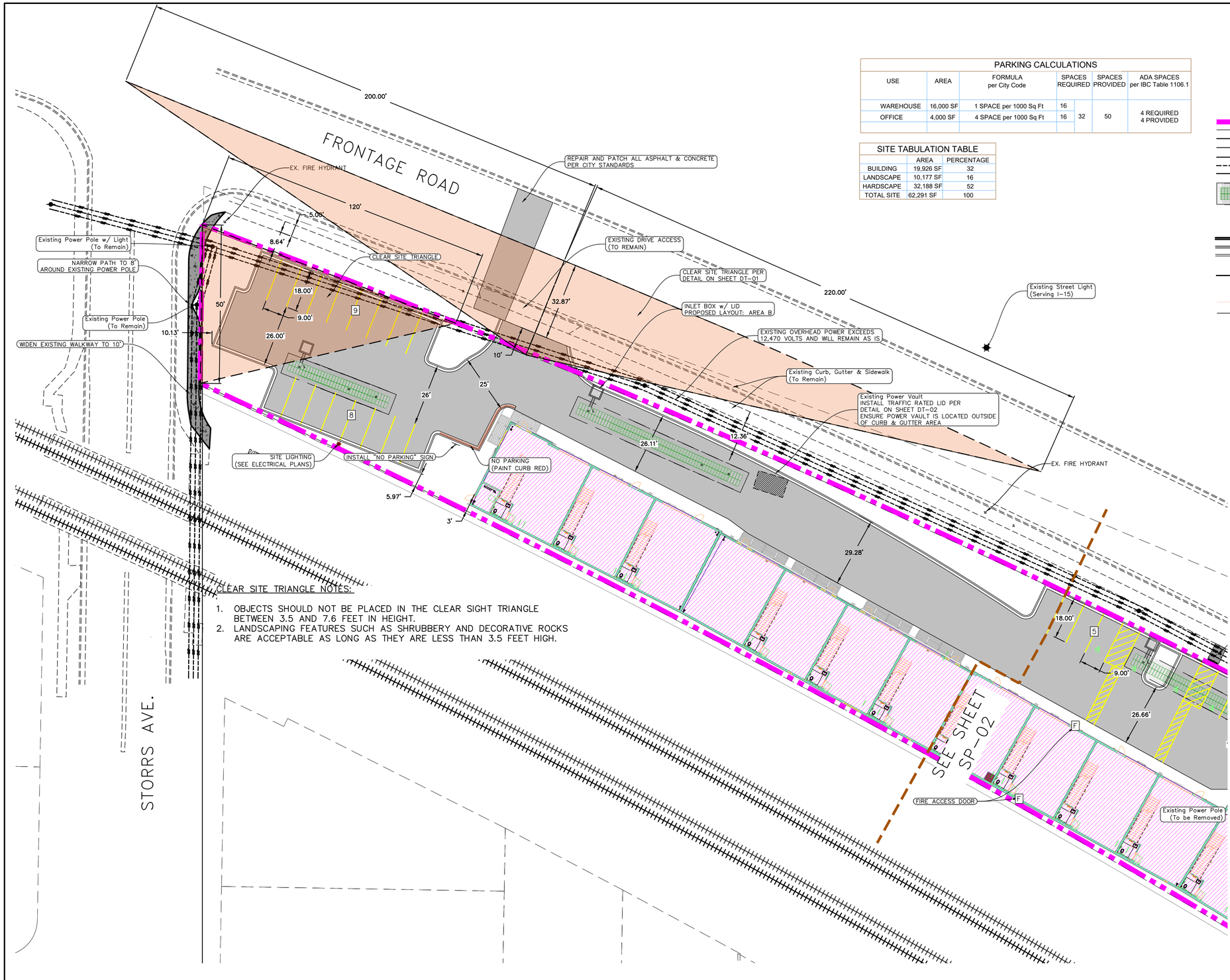
ROCKPORT INDUSTRIAL PLAT 'A'

AMERICAN FORK UTAH COUNTY, UTAH

SCALE: 1" = 40 FEET

CITY CLERK SEAL		UTAH COUNTY RECORDER SEAL

This form approved by Utah County and the municipalities therein.



PARKING CALCULATIONS

USE	AREA	FORMULA per City Code	SPACES REQUIRED		SPACES PROVIDED	ADA SPACES per IBC Table 1106.1
WAREHOUSE	16,000 SF	1 SPACE per 1000 Sq Ft	16			
OFFICE	4,000 SF	4 SPACE per 1000 Sq Ft	16	32	50	4 REQUIRED 4 PROVIDED

SITE TABULATION TABLE

	AREA	PERCENTAGE
BUILDING	19,926 SF	32
LANDSCAPE	10,177 SF	16
HARDSCAPE	32,188 SF	52
TOTAL SITE	62,291 SF	100

LEGEND

- EXISTING POWER POLE
- PROPOSED STREET LIGHT
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPOSED STOP/STREET SIGN
- PROPOSED WATER METER
- PROPERTY BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY LINE
- LOT LINE
- EDGE OF PAVEMENT
- EXISTING OVER HEAD POWER
- EXISTING FENCE LINE
- PROPOSED STORM DRAIN LID SYSTEM
- PROPOSED SEWER W/MH
- PROPOSED CULINARY WATERLINE
- PROPOSED SECONDARY WATERLINE
- PROPOSED CULINARY LATERAL
- PROPOSED SANITARY SEWER LATERAL
- PROPOSED SECONDARY LATERAL
- EXISTING WATER LINE
- EXISTING PI LINE
- PROPOSED ASPHALT
- PROPOSED SIDEWALK

CLEAR SITE TRIANGLE NOTES:

1. OBJECTS SHOULD NOT BE PLACED IN THE CLEAR SIGHT TRIANGLE BETWEEN 3.5 AND 7.6 FEET IN HEIGHT.
2. LANDSCAPING FEATURES SUCH AS SHRUBBERY AND DECORATIVE ROCKS ARE ACCEPTABLE AS LONG AS THEY ARE LESS THAN 3.5 FEET HIGH.

NORTH

0 10 20 40 60

(24"x36")
SCALE 1" = 20'
(11"x17")
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NOTES TO CONTRACTOR:

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region Engineering & Surveying
1776 N. State St. #110
Orem, UT 84057
P: 801.376.2245
regiondesignllc.com

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

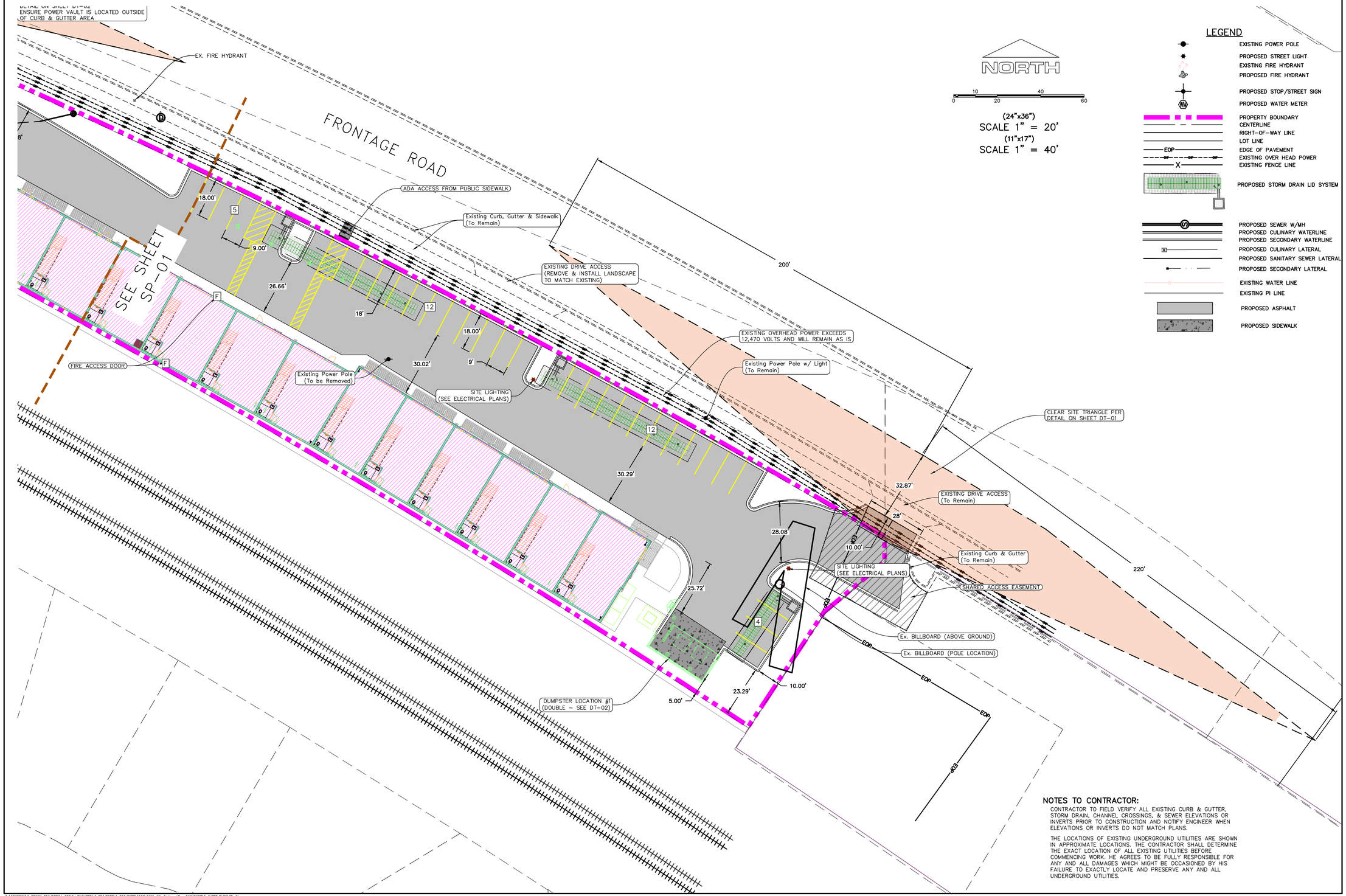
DATE: 2/3/26
PROJECT #

REVISIONS:

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3	

SHEET NAME: SITE PLAN

SHEET: SP-01



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AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

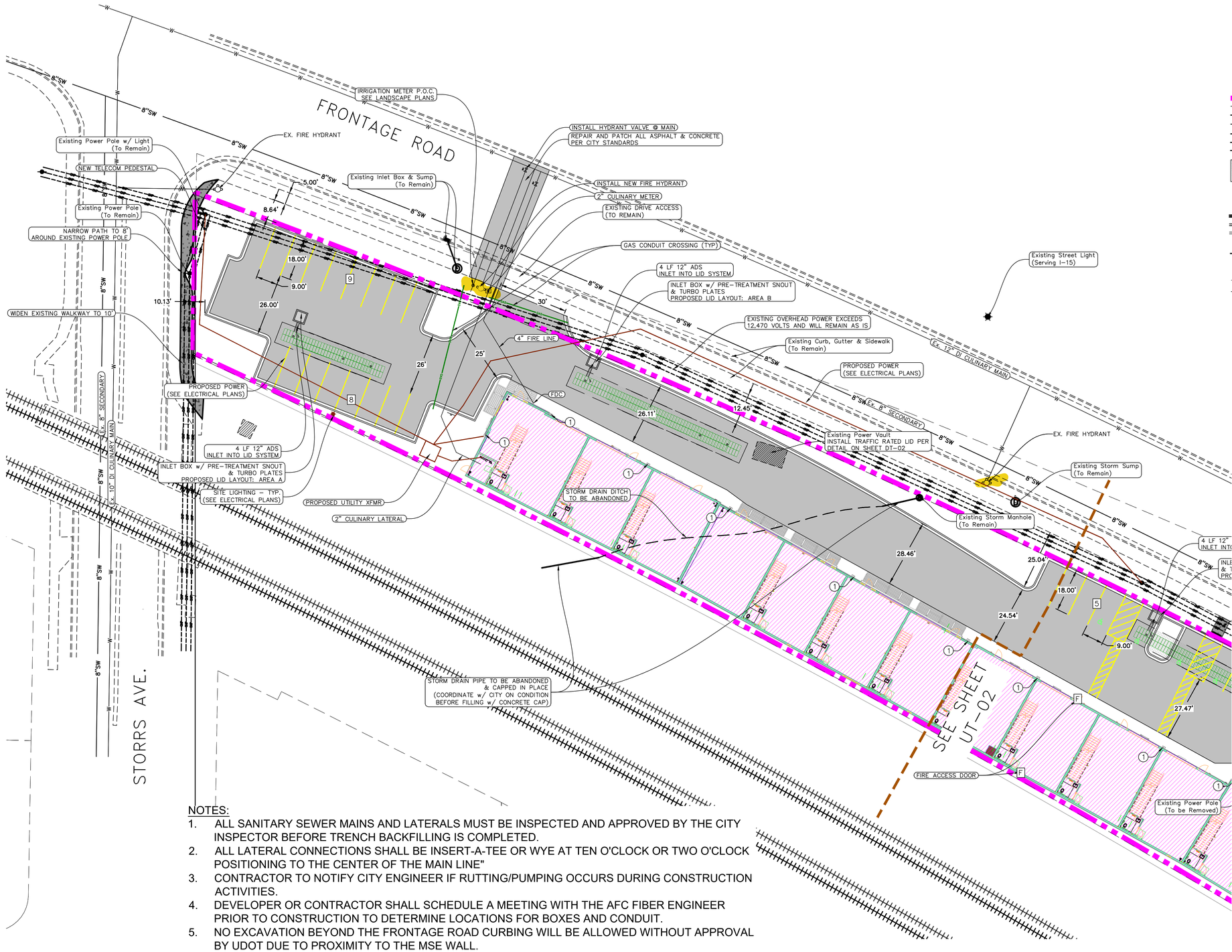
REVISIONS:

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SHEET NAME: SITE PLAN

SHEET: SP-02

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LEGEND

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① ROOF SCUPPER AND DOWNSPOUT; TO CONNECT TO STORM DRAIN,

NOTES:

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2. ALL LATERAL CONNECTIONS SHALL BE INSERT-A-TEE OR WYE AT TEN O'CLOCK OR TWO O'CLOCK POSITIONING TO THE CENTER OF THE MAIN LINE"
3. CONTRACTOR TO NOTIFY CITY ENGINEER IF RUTTING/PUMPING OCCURS DURING CONSTRUCTION ACTIVITIES.
4. DEVELOPER OR CONTRACTOR SHALL SCHEDULE A MEETING WITH THE AFC FIBER ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE LOCATIONS FOR BOXES AND CONDUIT.
5. NO EXCAVATION BEYOND THE FRONTAGE ROAD CURBING WILL BE ALLOWED WITHOUT APPROVAL BY UDOT DUE TO PROXIMITY TO THE MSE WALL.

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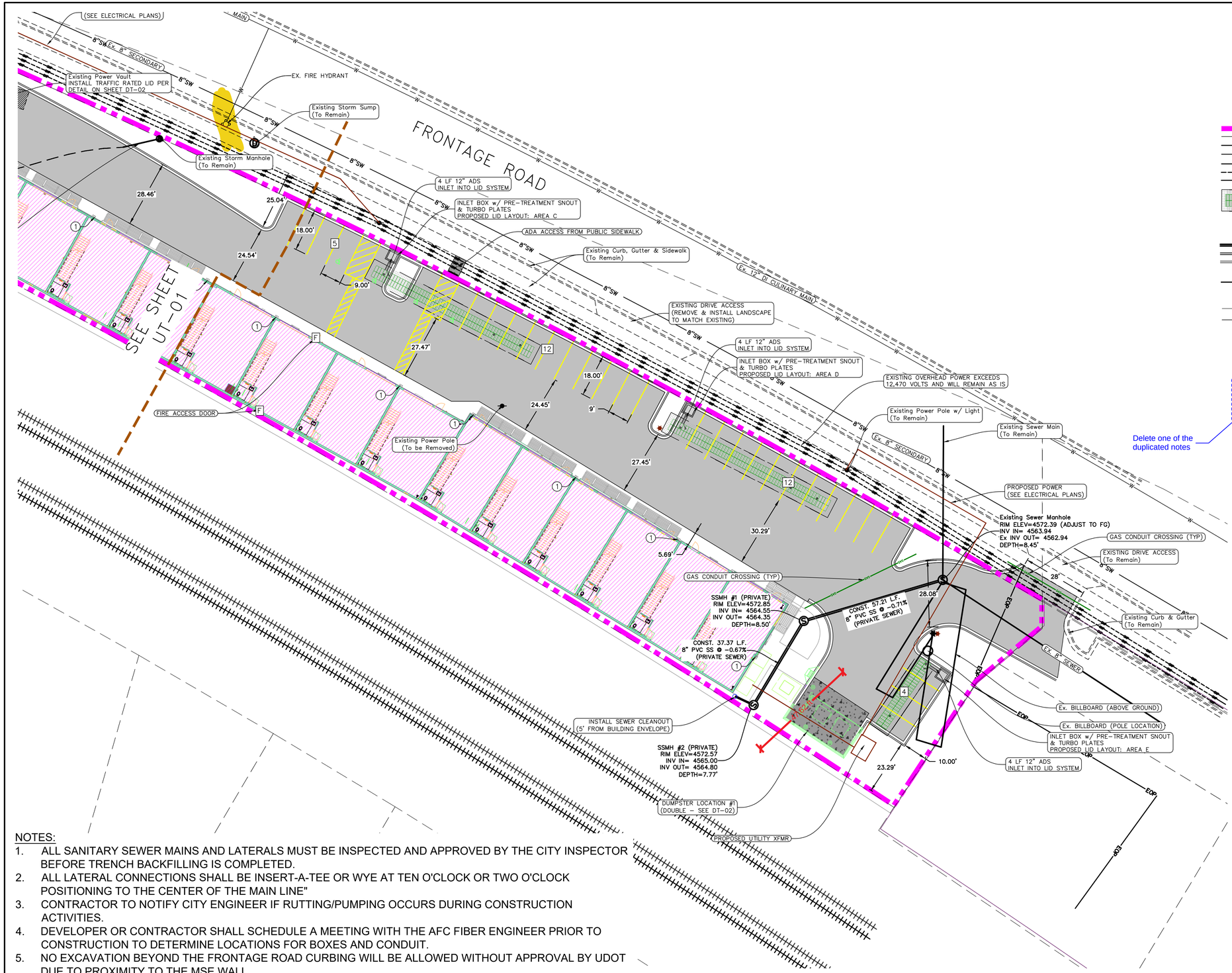
ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:
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SHEET NAME: UTILITY PLAN
SHEET: UT-01

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Delete one of the duplicated notes

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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

REVISIONS:

1	
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3	

SHEET NAME: UTILITY PLAN

SHEET: UT-02

1. THE DEVELOPER AND THE GENERAL CONTRACTOR UNDERSTAND THAT IT IS HIS/HER RESPONSIBILITY TO ENSURE THAT ALL IMPROVEMENTS INSTALLED WITHIN THIS DEVELOPMENT ARE CONSTRUCTED IN FULL COMPLIANCE WITH ALL STATE AND CITY CODES, ORDINANCES AND STANDARDS. THESE PLANS ARE NOT ALL INCLUSIVE OF ALL MINIMUM CODES, ORDINANCES AND STANDARDS. THIS FACT DOES NOT RELIEVE THE DEVELOPER OR GENERAL CONTRACTOR FROM FULL COMPLIANCE WITH ALL MINIMUM STATE AND CITY CODES, ORDINANCES AND STANDARDS."
2. ALL SPEED & TRAFFIC REGULATION SIGNS TO BE DETERMINED AND INSTALLED BY CITY. DEVELOPER TO PAY SIGN EXPENSES WITH DEVELOPMENT BOND.
3. ALL RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT DATED _ JULY 23, 2025 _ PREPARED BY _ GORDON GEOTECHNICAL _ FOR THIS DEVELOPMENT SHALL BE FOLLOWED EXPLICITLY DURING CONSTRUCTION OF BUILDINGS AND SITE IMPROVEMENTS. – PROJECT NO. 1421-001-25 –
4. 18" MIN. VERTICAL SEPARATION BETWEEN CULINARY WATER AND PI, STORM DRAIN, OR SANITARY SEWER AT ALL CROSSINGS. CULINARY WATER TO HAVE 4' MIN. COVER AS PER CITY STANDARD.

EARTHWORK QUANTITIES

RAW EARTHWORK QUANTITIES SHOWN BELOW ARE FROM EXISTING GRADE TO DESIGN FINISH GRADE AND DO NOT ACCOUNT FOR MATERIAL LOSE DUE TO LARGE ROCKS, ORGANIC MATERIAL, PAVEMENT AREAS, SIDE WALK AREAS, ETC.

RAW CUT VOLUME:	657.91 CU.FT.
FILL VOLUME:	1543.45 CU.FT.
IMPORT VOLUME:	885.54 CU.FT.

GRADING ABBREVIATIONS:

EG	EXISTING GRADE
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
TA	TOP OF ASPHALT
TC	TOP OF CONCRETE
TBC	TOP BACK OF CURB

NOTES:
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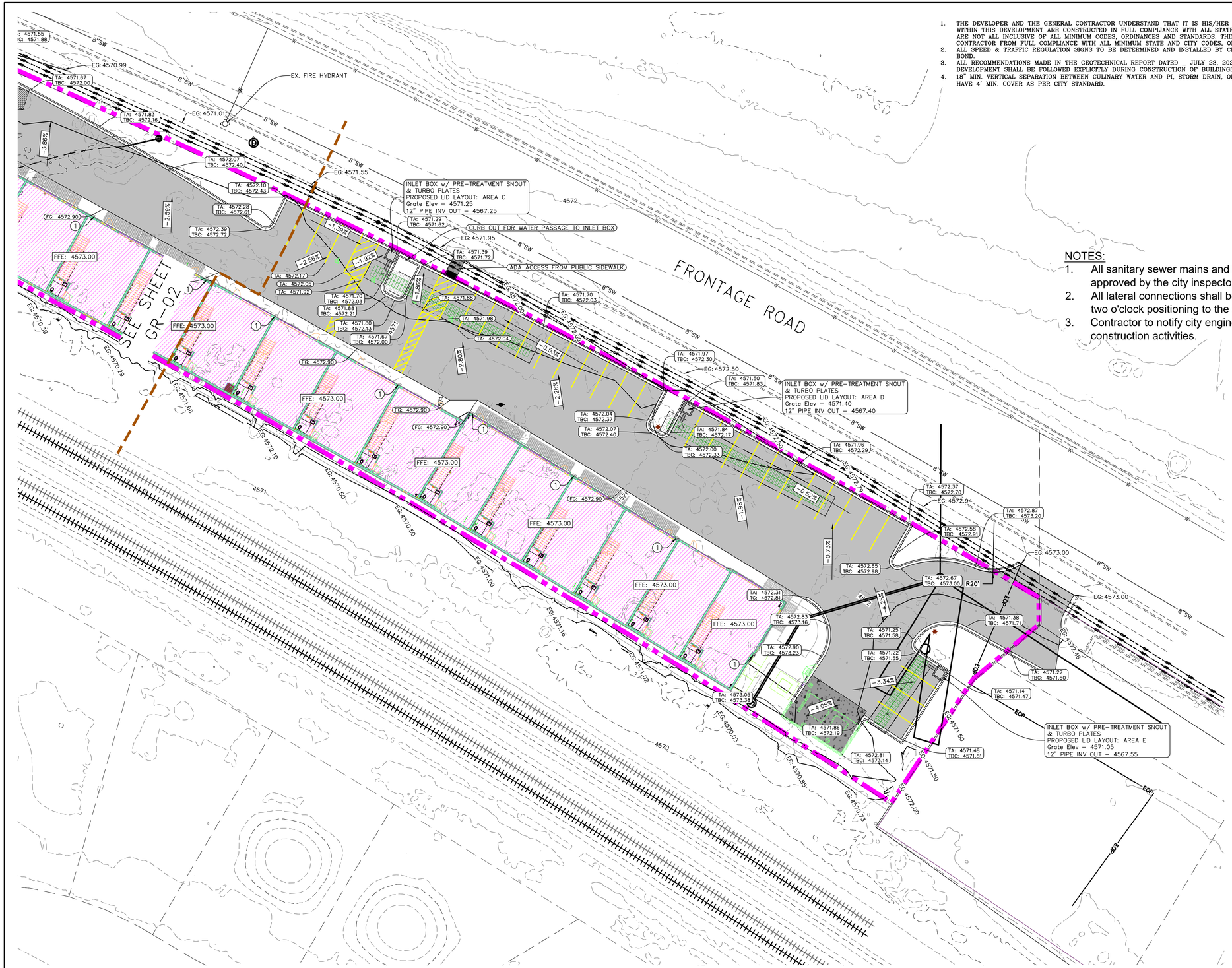
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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #
REVISIONS:
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SHEET NAME: GRADING PLAN
SHEET: GR–01

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PROFESSIONAL ENGINEER — STATE OF UTAH — 10187703 — BRIAN L. LUNDELL — 2/3/26

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

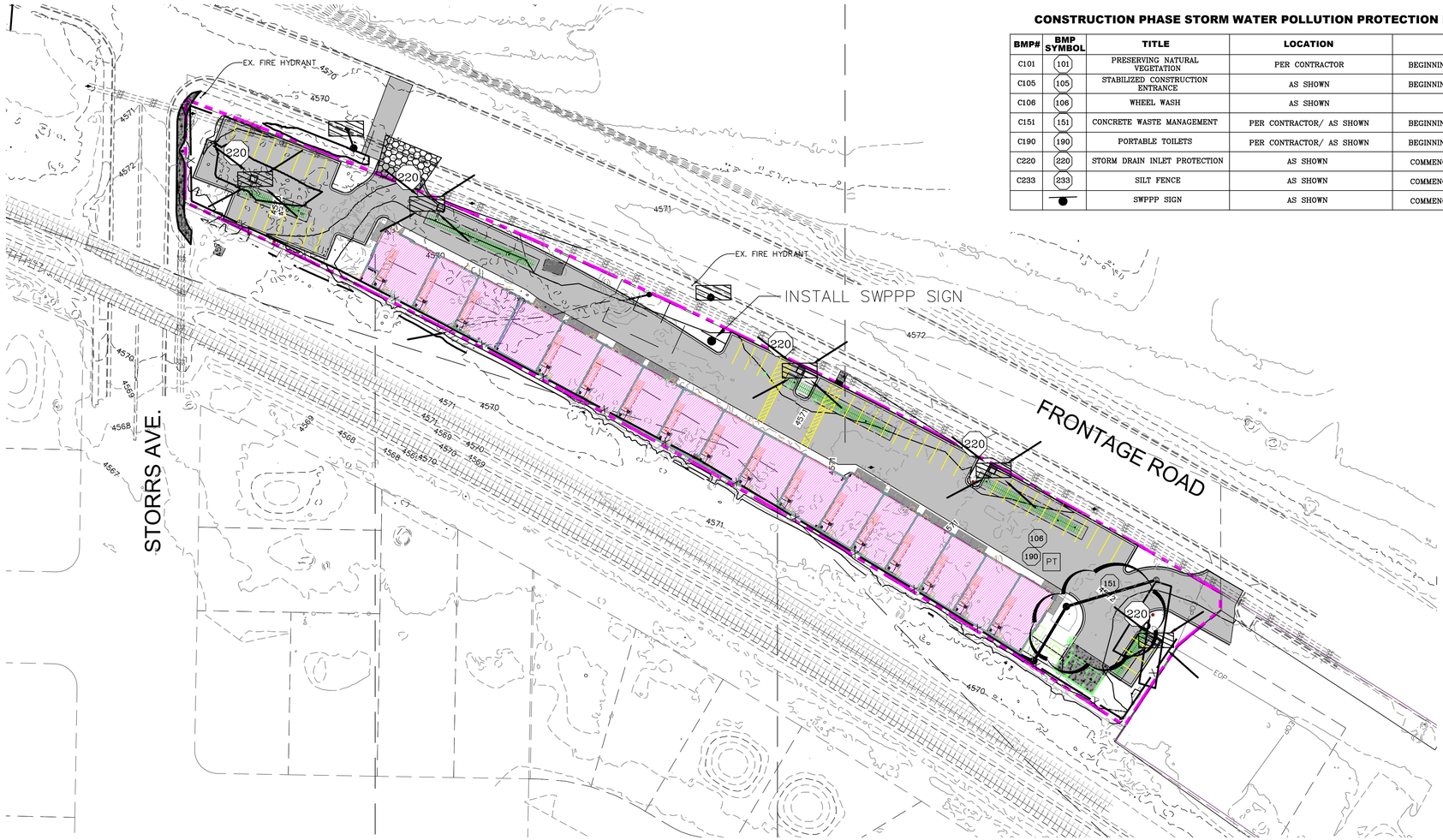
DATE: 2/3/26
PROJECT #
REVISIONS:
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SHEET NAME: GRADING PLAN
SHEET: GR–02

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NOTES:

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER IS TO BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR IS TO TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING IS TO BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
6. ALL CUT AND FILL SLOPES ARE TO BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
7. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSED INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
8. THE CONTRACTOR IS TO MAINTAIN THE STREETS, SIDEWALKS, AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS IS TO BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC IS TO BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
9. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE ENGINEERING DEPARTMENT. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.



PROJECT INFORMATION SIGN

ANY ACTIVITY THAT REQUIRES A GRADING PERMIT SHALL INSTALL AND MAINTAIN A PROJECT INFORMATION SIGN IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

1. THE SIGN SHALL BE INSTALLED PRIOR TO BEGINNING ACTUAL CONSTRUCTION ACTIVITIES OR INITIATING ANY TYPE OF EARTH-MOVING OPERATIONS.
2. THE SIGN SHALL BE INSTALLED AT A PROMINENT LOCATION ON THE PROPERTY NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE. TRAFFIC VISIBILITY SHALL BE MAINTAINED BY PLACING THE SIGN BACK FROM THE MAIN INGRESS/ EGRESS LOCATION AND AT ANY APPLICABLE INTERSECTION FOR PROPER SIGHT TRIANGLE CLEARANCES.
3. 3. THE SIGN MAY BE REMOVED ONCE FINAL STABILIZATION HAS BEEN ACHEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERSON IS RESPONSIBLE AND IS APPROVED BY THE CITY.
4. THE SIGN SHALL BE A MINIMUM OF 48" x 48" AND THE FOLLOWING INFORMATION SHALL BE DISPLAYED ON THE SIGN WITH THE DESIGNATED ALPHA AND NUMERIC DIMENSIONS. SIGN BOARDS WRITTEN IN LONGHAND ARE UNACCEPTABLE.

DEVELOPERS NAME
(4" Uppercase Bold Letters)

PROJECT NAME
(4" Uppercase Bold Letters)
PERMIT NUMBER
(4" Bold Numbers)

FOR PROJECT SITE CONCERNS CONTACT
(6" Uppercase Bold Letters)

Office Phone Contact ###-###-####
(4" Bold Numbers)
Cell Phone Contact ###-###-####
(4" Bold Numbers)

IF NO RESPONSE PLEASE CONTACT CITY OFFICE AT
XXX-XXX-XXXX
(3" Uppercase Bold Letters and 3" Bold Numbers)

5. THE TEXT HEIGHT SHALL BE A MINIMUM AS SHOWN ON THE TEMPLATE ABOVE, AND MUST CONTRAST WITH LETTERING, TYPICALLY BLACK TEXT WITH WHITE BACKGROUND.
6. THE LOWER EDGE OF THE SIGN BOARD MUST BE A MINIMUM OF THREE (3) FEET AND A MAXIMUM OF FIVE (5) FEET ABOVE GRADE. SIGN MAY BE POSTED ON A TRAILER OF IT MEETS THESE REQUIREMENTS..

LEGEND:

- PROPOSED SILT FENCE (SEE SHEET EC-02)
- FLOW ARROW
- PROPOSED VEHICLE TRACKING CONTROL (SEE SHEET EC-02)
- PROPOSED CURB INLET PROTECTION (SEE SHEET EC-02)
- PORTABLE TOILETS

CONSTRUCTION PHASE STORM WATER POLLUTION PROTECTION PLAN BEST MANAGEMENT PRACTICES (BMP)

BMP#	BMP SYMBOL	TITLE	LOCATION	DURATION
C101	101	PRESERVING NATURAL VEGETATION	PER CONTRACTOR	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C105	105	STABILIZED CONSTRUCTION ENTRANCE	AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF ASPHALT IMPROVEMENTS
C106	106	WHEEL WASH	AS SHOWN	AS NECESSARY
C151	151	CONCRETE WASTE MANAGEMENT	PER CONTRACTOR/ AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C190	190	PORTABLE TOILETS	PER CONTRACTOR/ AS SHOWN	BEGINNING OF CONSTRUCTION THROUGH COMPLETION OF SITE IMPROVEMENTS
C220	220	STORM DRAIN INLET PROTECTION	AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS
C233	233	SILT FENCE	AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS
		SWPPP SIGN	AS SHOWN	COMMENCEMENT OF GRADING THROUGH COMPLETION OF SITE IMPROVEMENTS

NORTH

0 20 40 80 120

(24"x36")
SCALE 1" = 40'
(11"x17")
SCALE 1" = 80'

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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

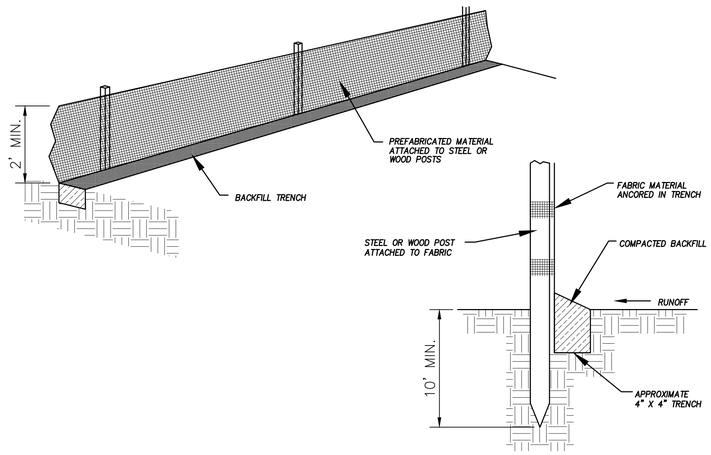
DATE: 2/3/26
PROJECT #

REVISIONS:

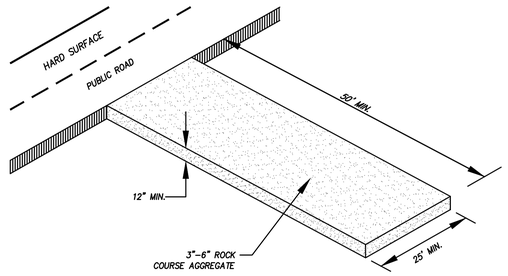
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SHEET NAME: EROSION CTL PLAN
SHEET: EC-01

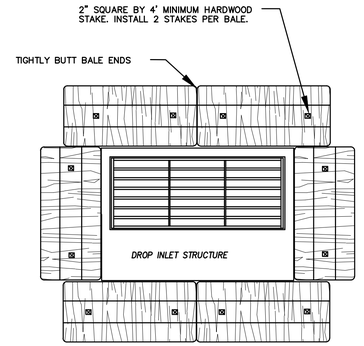
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DETAIL–A
SILT FENCE DETAIL
–NTS–

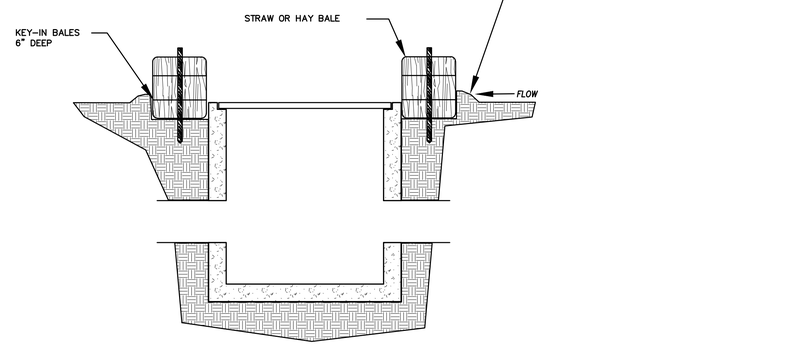


DETAIL–B
VEHICLE TRACKING DETAIL
NOT TO SCALE



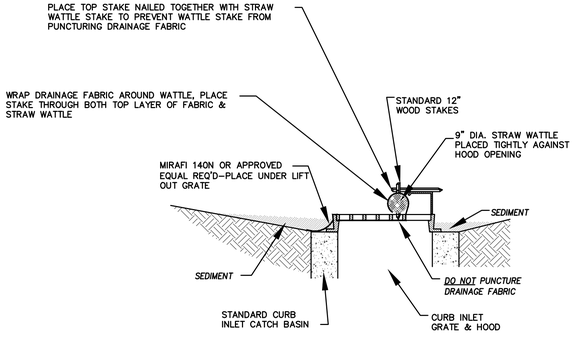
PLAN VIEW

NOTES:
1. KEY–IN BALES IN AN EXCAVATED TRENCH AROUND THE PERIMETER OF THE DROP INLET STRUCTURE THAT IS 6" DEEP BY A BALES WIDTH WIDE.
2. OVERLAP ON CORNERS MUST BE AT LEAST HALF A BALE WIDE.
3. DEPENDING ON THE SIZE OF THE INLET STRUCTURE, MORE BALES THAN SHOWN MAY BE REQUIRED.
4. IN MEDIAN AREAS, CONSTRUCT SO THAT THE TOPS OF THE BALES ARE NOT HIGHER THAN THE ADJACENT ROADWAY.
5. MAINTAIN A PROPERLY FUNCTIONING SEDIMENT BARRIER THROUGHOUT CONSTRUCTION OR UNTIL DISTURBED AREAS CONTRIBUTING TO THE INLET HAVE BEEN PAVED OR VEGETATED.
6. REMOVE SEDIMENT AS IT ACCUMULATES AND PLACE IT IN A STABLE AREA APPROVED BY THE ENGINEER.

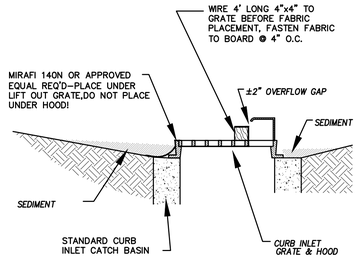


SECTION

DETAIL–C
STRAW BALE DROP INLET PROTECTION DETAIL
–NTS–



CROSS SECTION A–A
OPTION A



CROSS SECTION B–B
OPTION B

* CATCH BASIN INLET PROTECTIONS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL ALL CONSTRUCTION IS COMPLETED AT THE SITE.

DETAIL–D
CURB INLET PROTECTION
DETAIL FOR EXISTING CATCH BASINS
ANY OF THE ABOVE OPTIONS MAY BE USED
NOT TO SCALE

EROSION CONTROL NOTES

1. CONTROLLING SEDIMENT TRANSPORT AND PREVENTING AND/OR CORRECTING PROBLEMS ASSOCIATED WITH EROSION AND RUNOFF PROCESSES THAT COULD OCCUR BOTH DURING AND AFTER PROJECT CONSTRUCTION WILL BE CLOSELY MONITORED. PERIODIC MAINTENANCE AND INSPECTION OF SEDIMENT CONTROL DEVICES WILL BE SCHEDULED. PARTICULAR ATTENTION SHALL BE GIVEN TO EXISTING DRAINAGE PATTERNS THAT RUN THROUGH DISTURBED AREAS AND OVER EXTREME SLOPES. THESE PATTERNS WILL BE IDENTIFIED TO ISOLATE PROBLEM AREAS WHERE WATER WILL CONCENTRATE. PROVISIONS SHALL BE MADE TO CHANNEL RUNOFF AWAY FROM NEW OR EXISTING IMPROVEMENTS TO PREVENT UNDERMINING AND GENERAL SITE EROSION. THESE PROVISIONS SHALL BE STABILIZED AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT STORM DRAINAGE FACILITIES ARE INSTALLED AND FUNCTIONAL.
2. EROSION CONTROL – A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE PREPARED IN ACCORDANCE WITH THE UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMIT FOR CONSTRUCTION, OUTLINING HOW EROSION AND SILTATION WILL BE CONTROLLED. A NOTICE OF INTENT (NOI) WILL BE SUBMITTED TO OBTAIN THE UPDES CONSTRUCTION PERMIT. A COPY OF THE PLAN MUST BE ON SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE PLAN AND INSTALLING AND MAINTAINING THE EROSION CONTROL FACILITIES WITH EACH PHASE OF WORK. SHOULD SILT LEAVE THE SITE OR EROSION OCCURS, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO TAKE CORRECTIVE ACTION AND REPAIR ANY DAMAGE CAUSED BY THE SILT OR EROSION IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE MODIFICATION AND APPROVAL OF THE PLAN WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. BEFORE CONSTRUCTION BEGINS, THE LIMITS OF DISTURBANCE (LOD) BOUNDARY SHALL BE STAKED ON SITE AND APPROVED BY THE OWNER'S REPRESENTATIVE AND THE ENGINEER.
4. EXCAVATION AND EMBANKMENT OPERATIONS SHALL PROCEED IN SUCH A MANNER SO THAT FINISHING OF SLOPES, INCLUDING REVEGETATION SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER ROUGH GRADING. ALL SLOPES 2:1 OR FLATTER SHALL BE SCARIFIED WITH HEAVY EQUIPMENT, LEAVING TRACKS PERPENDICULAR TO THE SLOPES. SLOPES OVER 1:1 SHALL UTILIZE EROSION CONTROL/REVEGETATION MATTING.
5. CUT AND FILL SLOPES SHALL BE CONDUCTED PER THE GEOTECHNICAL REPORT. THE TOPS OF ALL CUT SLOPES IN SOIL SHALL BE ROUNDED FOR A HORIZONTAL DISTANCE OF THREE (3) FEET BEYOND THE CATCH POINT. SLOPE ROUNDING SHALL OCCUR AS THE SLOPE IS BEING BROUGHT DOWN. THE OVERALL SHAPE, HEIGHT AND GRADE OF ANY CUT AND/OR FILL SLOPE SHALL BE DEVELOPED IN CONCERT WITH EXISTING NATURAL CONTOURS, SCALE AND VEGETATION OF NATURAL TERRAIN.
6. EXISTING VEGETATION SHOULD BE PRESERVED WHEREVER POSSIBLE AND DISTURBED PORTIONS OF THE SITE SHALL BE STABILIZED. STABILIZATION PRACTICES MAY INCLUDE, BUT NOT LIMITED TO, TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SOD STABILIZATION, VEGETATION BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF NATURAL VEGETATION AND OTHER APPROPRIATE MEASURES. USE OF IMPERVIOUS SURFACES FOR STABILIZATION SHALL BE AVOIDED. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED. FOR MORE INFORMATION, SEE SHEET 7.
7. SPECIFICALLY OUTLINED DISTURBED AREAS, BOTH ON AND OFF–SITE SHALL BE REVEGETATED. THESE AREAS SHALL BE INCLUDE, BUT NOT BE LIMITED TO, ALL UNSURFACED AREAS WITHIN THE STAKED LOD, STAGING AND STORAGE AREAS, MATERIAL WASTE AREAS, UNDERGROUND UTILITY CONSTRUCTION AREAS, BENCHED AREAS, INCLUDING RETAINING WALL BENCHES, AND TEMPORARY OR EXISTING ACCESS ROADS USED FOR CONSTRUCTION ACTIVITIES.
8. CONTROLLED OUTLETS SHALL DIRECT COLLECTED RUNOFF THROUGH SILT FENCES, STRAW BALES, OR WATTLE.
9. TYPICAL FUGITIVE DUST SHALL BE CONTROLLED BY WATERING AND/OR CHEMICAL STABILIZATION, PROVIDING VEGETATIVE OR SYNTHETIC COVER AND WIND BREAKS CONSISTENT WITH UTAH STATE DIVISION OF AIR QUALITY STANDARDS.
10. ANY SEDIMENT TRACKED OFF–SITE SHALL BE REMOVED PRIOR TO THE END OF THE WORK SHIFT OR PRIOR TO SUNSET, WHICHEVER COMES FIRST.
11. CONTRACTOR MAY ADJUST THE LOCATIONS OF THE CONSTRUCTION FENCE, CONSTRUCTION TRAILERS, AND CONSTRUCTION MATERIALS RECEIVING AND STORAGE AREAS, AS NEEDED TO ACCOMPLISH THE CONSTRUCTION. ALL CHANGES SHALL BE NOTATED ON THE EROSION CONTROL PLAN.
12. THE CONTRACTOR SHALL CONDUCT PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES, AS REQUIRED AND NOTATED IN THE SWPPP. THE CONTRACTOR WILL MAINTAIN A LOG ON–SITE OF ALL INSPECTIONS WITH THE SWPPP.
13. ALL DITCHES AND SWALES GREATER THAN 5% SHALL BE ARMORED WITH AN APPROPRIATE EROSION CONTROL/REVEGETATION STABILIZATION MAT TO PROMOTE REVEGETATION.
14. CONTRACTOR MAY ADJUST THE LOCATION OF CONCRETE WASHOUT AREAS AS NEEDED TO ACCOMPLISH THE CONSTRUCTION.

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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
PROJECT #

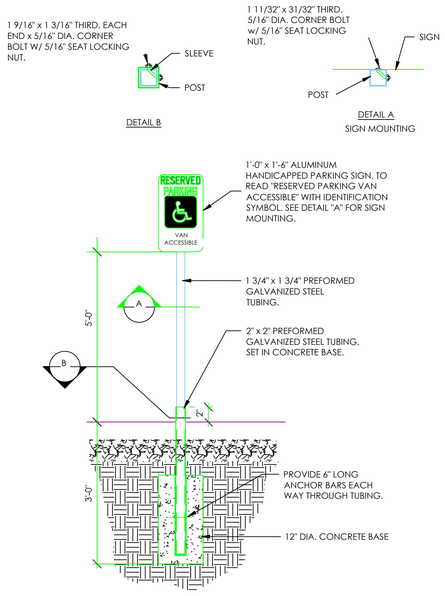
REVISIONS:

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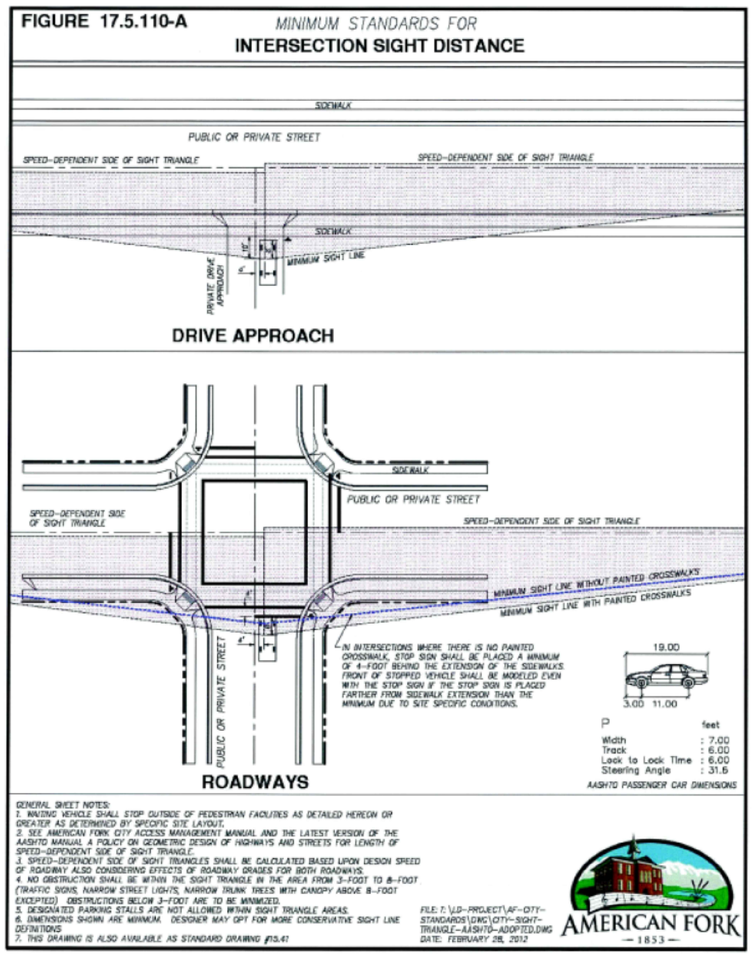
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EROSION CTL DTL

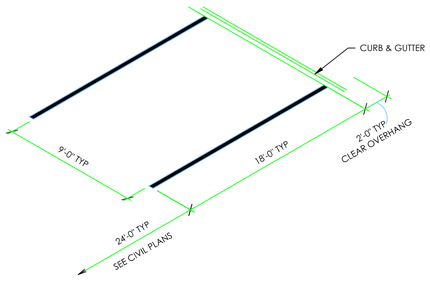
SHEET:
EC–02

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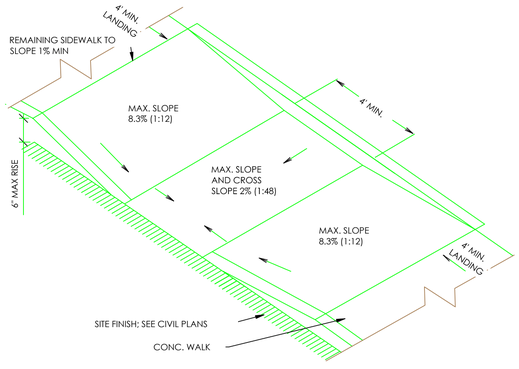


B3 **HANDICAPPED PARKING SIGN**
1" = 1'-0"

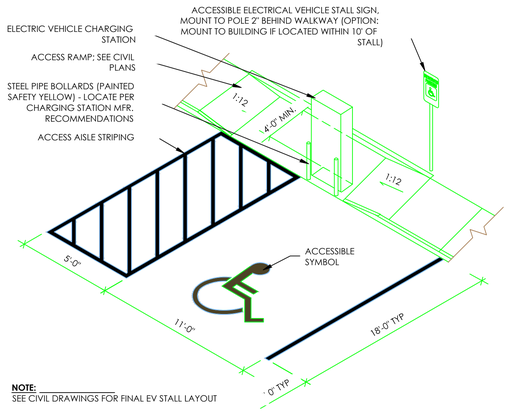




A4 **TYPICAL 90 DEG. PARKING STALL**
N.T.S

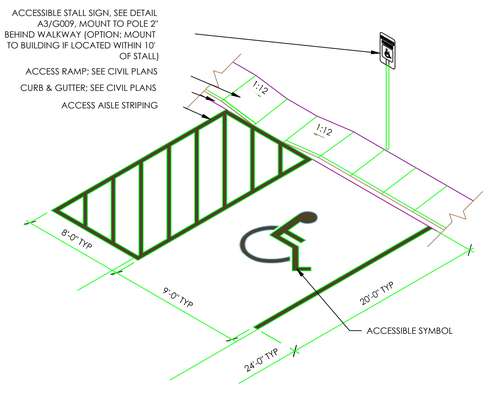


A3 **ACCESSIBLE RAMP DETAIL**
N.T.S



NOTE:
SEE CIVIL DRAWINGS FOR FINAL EV STALL LAYOUT

A2 **ACCESSIBLE ELECTRIC VEHICLE PARKING STALL**
N.T.S



A1 **ACCESSIBLE PARKING STALL**
N.T.S

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NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

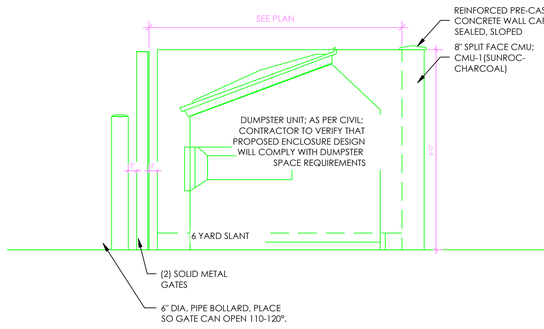
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PROJECT #

REVISIONS:

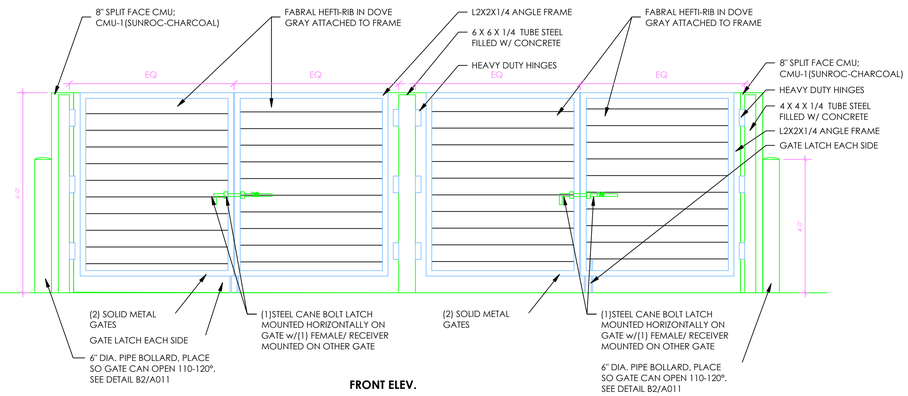
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SHEET NAME: DETAILS
SHEET: DT-01

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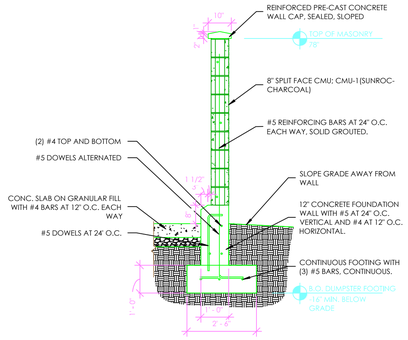
SIDE ELEV.



FRONT ELEV.

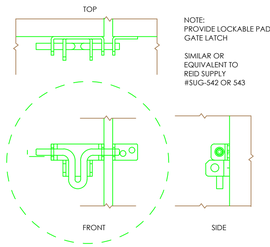
D3 / A010 DUMPSTER ENCLOSURE ELEVATIONS

1/2" = 1'-0"



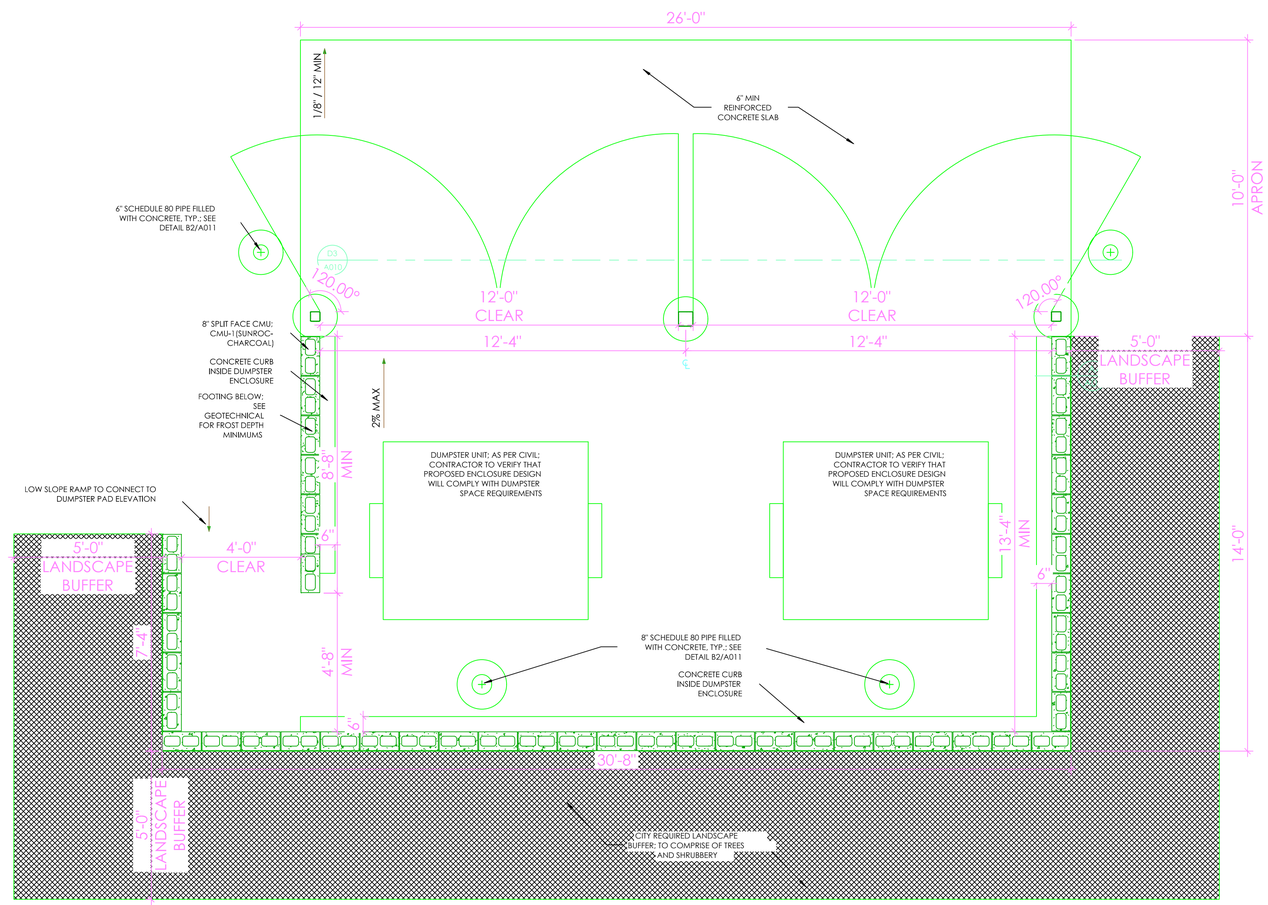
C5 / A010 TRASH ENCLOSURE WALL

1/2" = 1'-0"



C4 / A010 GATE LATCH DETAIL

1/2" = 1'-0"



A2 / A010 DUMPSTER ENCLOSURE

1/2" = 1'-0"

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DONALD L. LYNN # 187725 REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR STATE OF UTAH

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

DATE: 2/3/26
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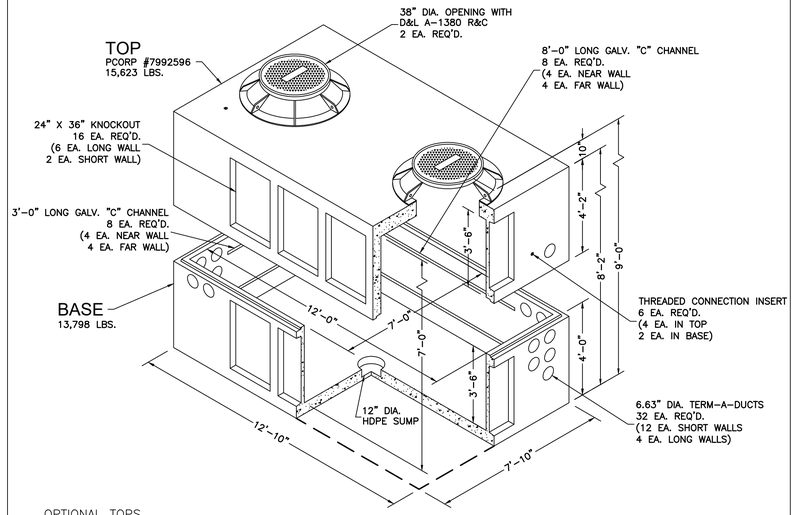
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SHEET NAME: DETAILS

SHEET: DT–02

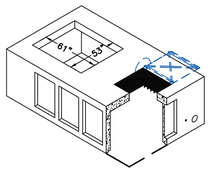
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7' X 12' MANHOLE
–FULL TRAFFIC VAULT, STOCK ITEM 7992596
–INCIDENTAL TRAFFIC VAULT, STOCK ITEM 7992597
–15 kV, 600 AMPS, AIR INSULATED SWITCHGEAR PADVAULT, STOCK ITEM 7992598–STOCK ITEM 1720663
–25 kV, 600 AMPS, AIR INSULATED SWITCHGEAR PADVAULT, STOCK ITEM 7992599–STOCK ITEM 1720673



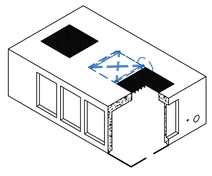
OPTIONAL TOPS

15kV, 600 AMPS, AIR INSULATED SWITCHGEAR PADVAULT



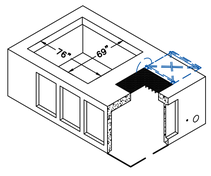
PCORP #7992598 – SI #1720663
13,526 LBS.

INCIDENTAL TRAFFIC VAULT



PCORP #7992597
14,871 LBS.

25kV, 600 AMPS, AIR INSULATED SWITCHGEAR PADVAULT



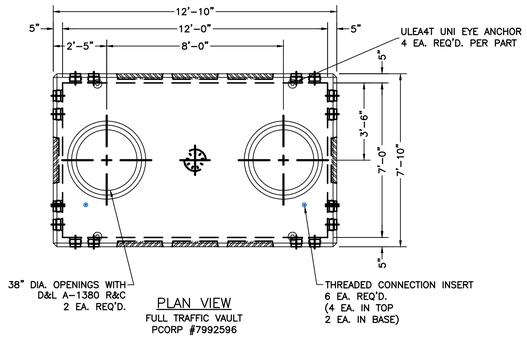
PCORP #7992599 – SI #1720673
12,130 LBS.

Oldcastle Precast
801 West 12th Street, Ogden, Utah 84404
Phone: 801–399–1171 Fax: 801–392–7849

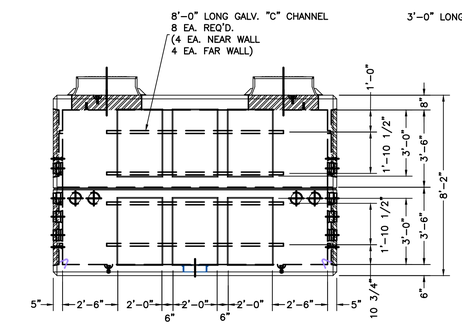
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ISSUE DATE: 4/2008
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7' x 12' Padvault Traffic / Switchgear Pacificorp

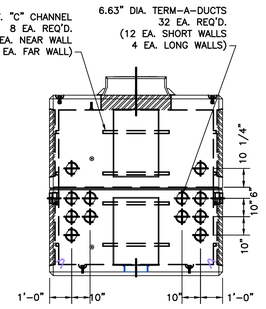
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PLAN VIEW
FULL TRAFFIC VAULT
PCORP #7992596



ELEVATION VIEW



END VIEW

*LIFTING DEVICE TYPE & LOCATION MAY CHANGE WITHOUT NOTICE.

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Orem, UT 84057
P: 801.376.2245
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ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT

NORTHWEST ¼ OF SECTION 23, TOWNSHIP 5 SOUTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN
AMERICAN FORK, UTAH COUNTY, UT

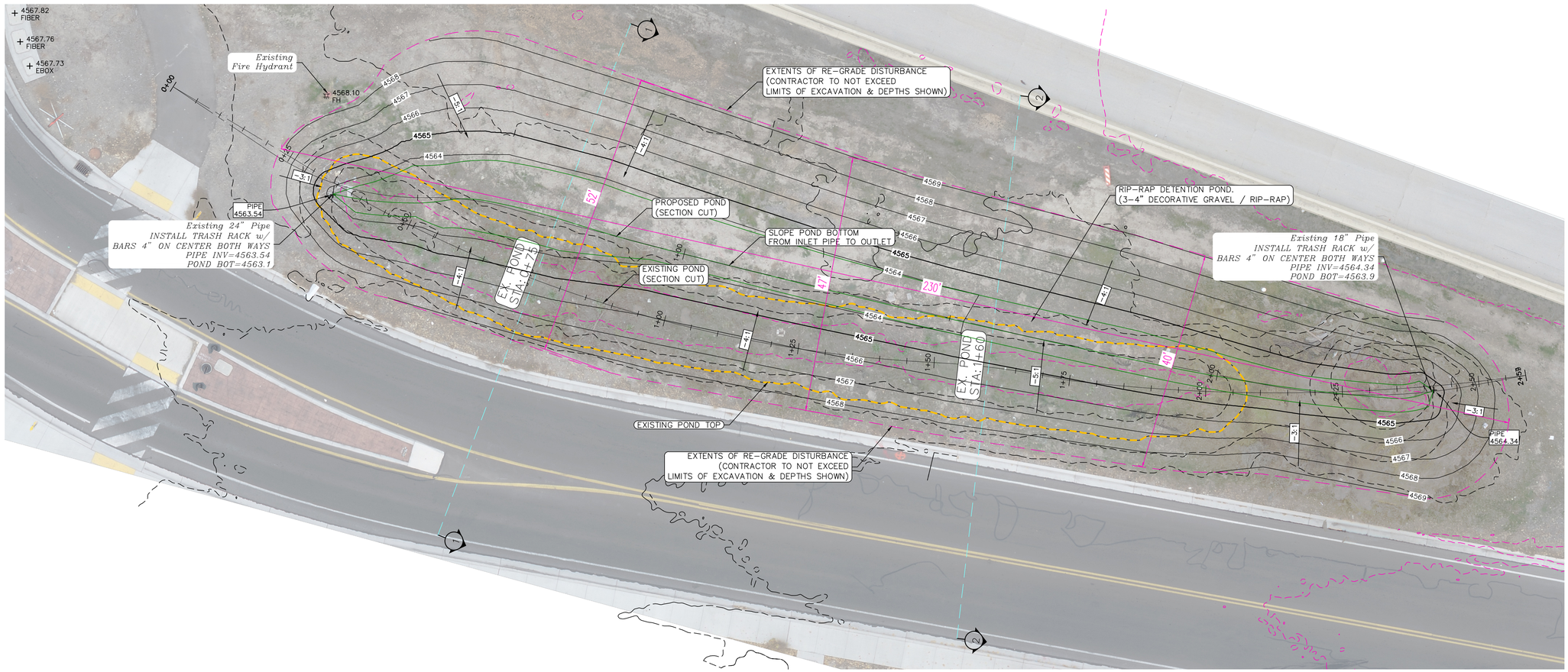
DATE: 2/3/26
PROJECT #

REVISIONS:

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3	

SHEET NAME: DETAILS

SHEET: DT–03



NORTH

0 5 10 20 30

(24"x36")
SCALE 1" = 10'
(11"x17")
SCALE 1" = 20'

region Engineering & Surveying
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Orem, UT 84057
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DATE:2.3.2026

PROJECT #

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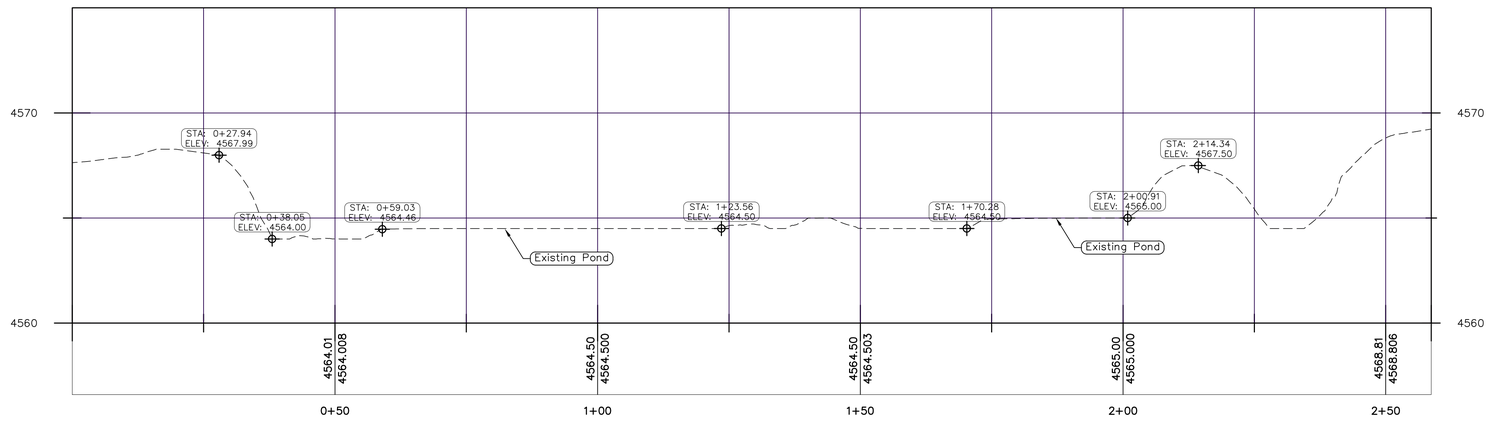
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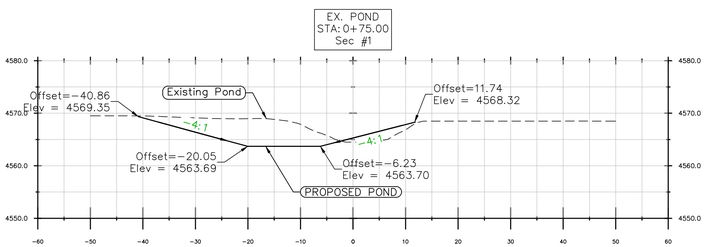
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OS-01

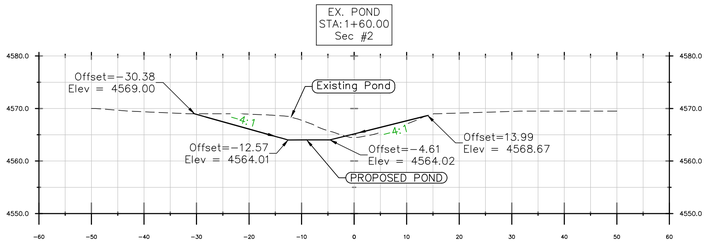
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SCALE: 2
DATUM: 4560.00

NOT TO SCALE

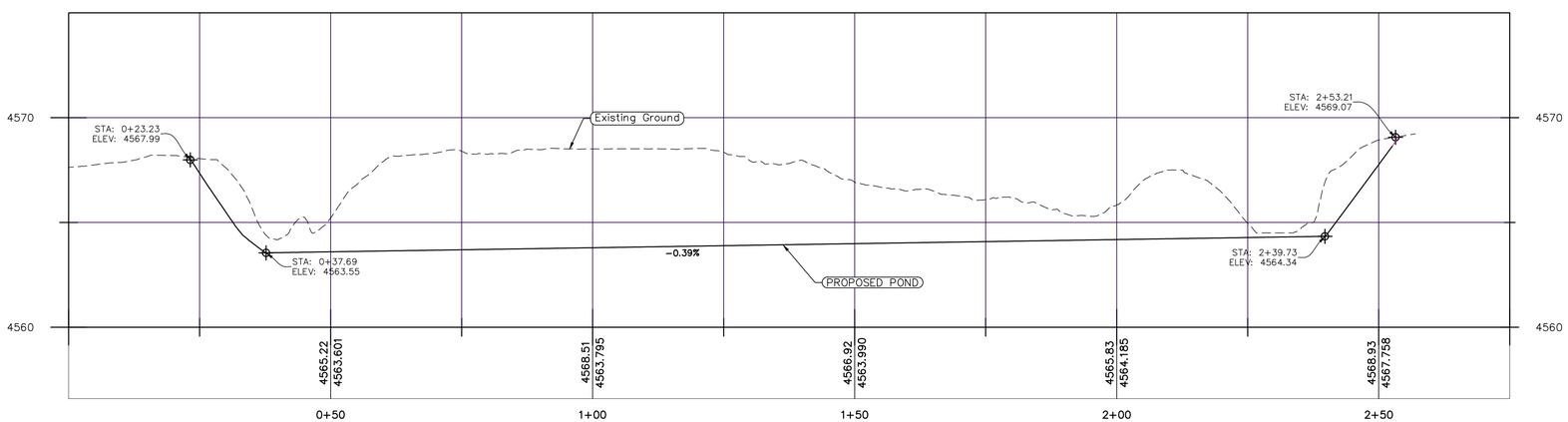






PROFILE VIEW: NEW POND – 2+75
SCALE: 2
DATUM: 4560.00

NOT TO SCALE



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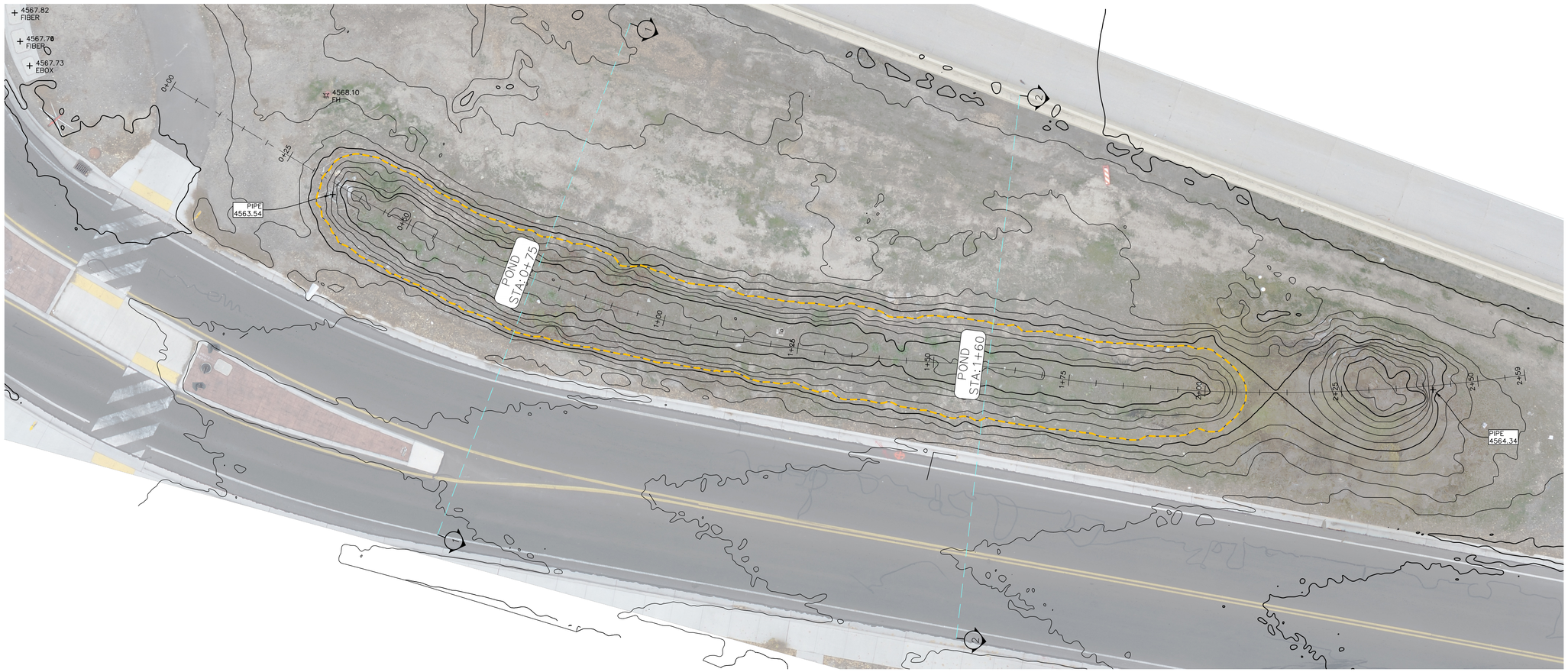
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4,565.50	1,638	0.50	709.94	1021.79	707.14	953.99
4,566.00	2,039	0.50	919.30	1941.09	917.46	1871.46
4,566.50	2,461	0.50	1125.06	3066.15	1123.41	2994.87
4,567.00	2,863	0.50	1331.09	4397.24	1329.82	4324.69



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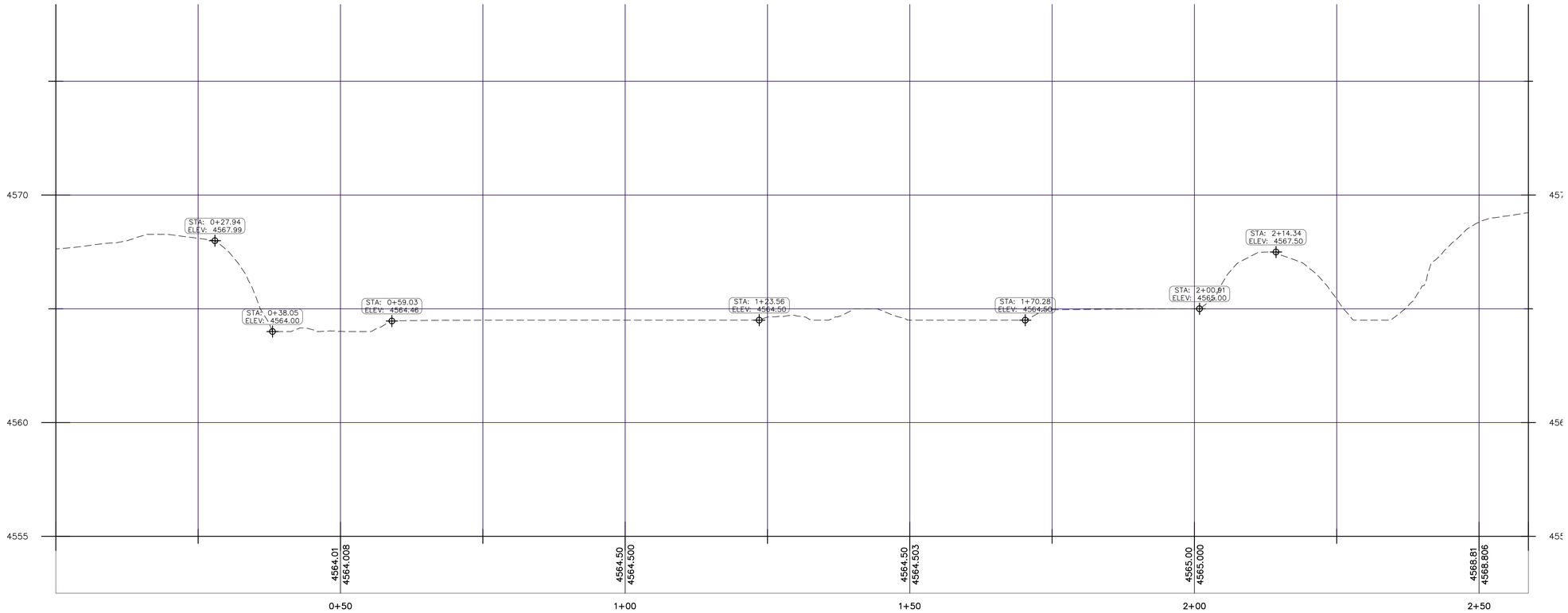
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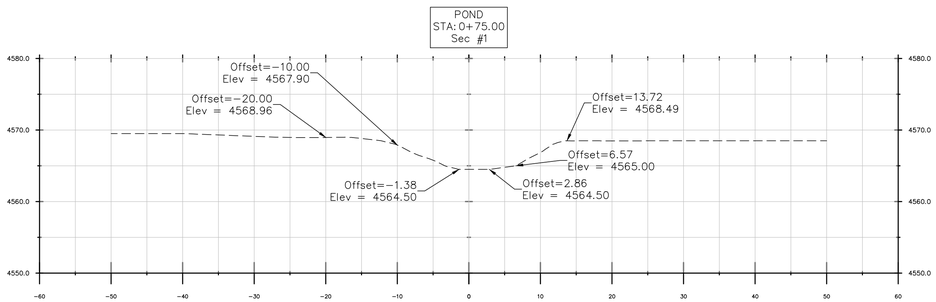
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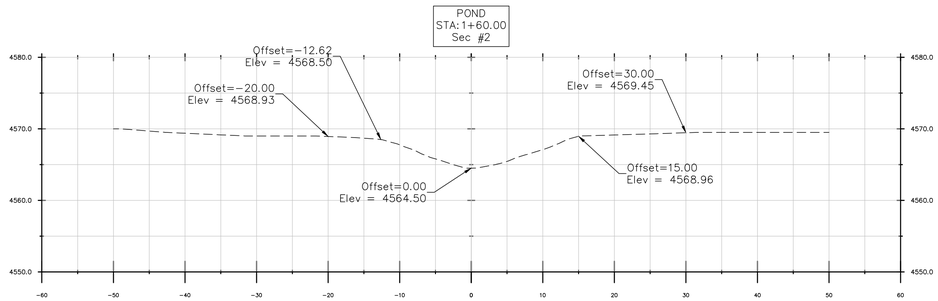
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OS-03

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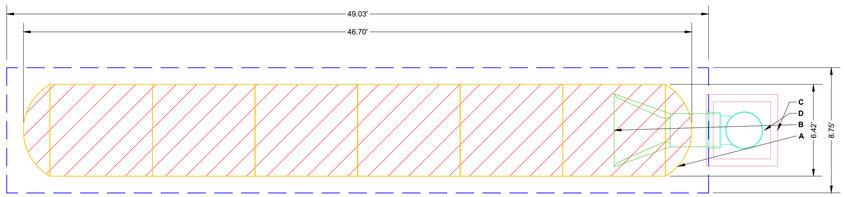
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PROPOSED LAYOUT: AREA A		PROPOSED ELEVATIONS: AREA A	
6	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4575.47
2	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4569.47
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4568.97
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4568.97
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4568.97
1358	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	4568.47
		TOP OF MC-3500 CHAMBER:	4567.47
		24" ISOLATOR ROW PLUS INVERT:	4563.89
		24" ISOLATOR ROW PLUS INVERT:	4563.89
429	SYSTEM AREA (SF)	BOTTOM OF MC-3500 CHAMBER:	4563.72
115.6	SYSTEM PERIMETER (ft)	BOTTOM OF STONE:	4562.97

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP. PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
	B	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		
NYLOPLAST (INLET W/ ISO PLUS ROW)	D	30" DIAMETER (24.00" SUMP MIN)		



ISOLATOR ROW PLUS (SEE DETAIL)

NO WOVEN GEOTEXTILE

BED LIMITS

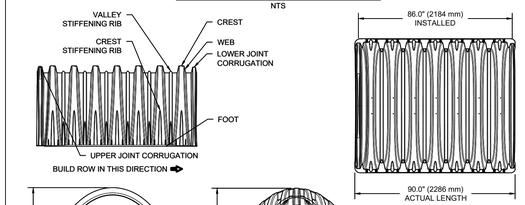
NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

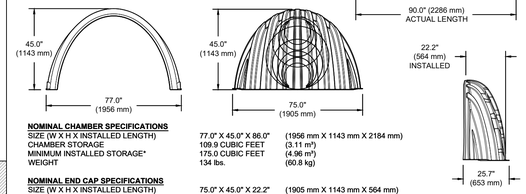
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MC-3500 TECHNICAL SPECIFICATION

NTS





NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

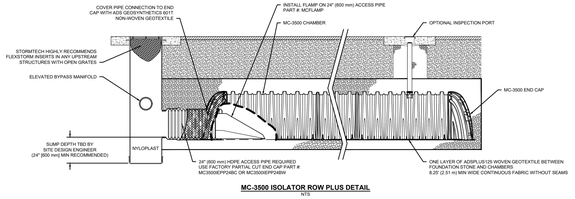
STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED 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.

2 MC-3500 TECHNICAL SPECIFICATION



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

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

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

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

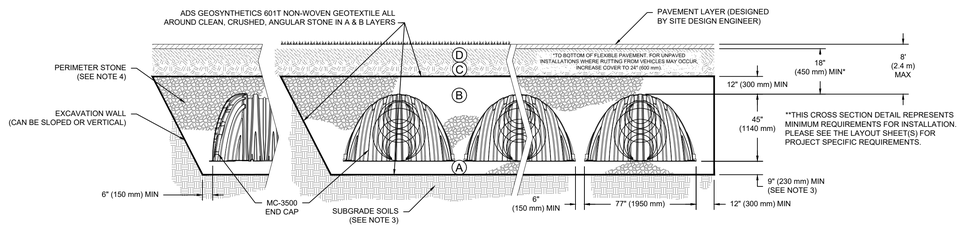
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-3500 ISOLATOR ROW PLUS 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	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	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 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. 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".
2. 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.
3. 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.
4. 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.
5. 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".

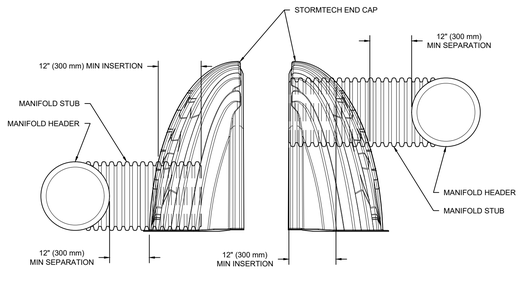


NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

4 MC-SERIES END CAP INSERTION DETAIL

1 MC-3500 CROSS SECTION DETAIL

DRAWN: WA | DATE: 06/17/2025
CHECKED: N/A | PROJECT #:
REV: | NOT TO SCALE

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
AMERICAN FORK, UT, USA

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StormTech®
Chamber System
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HILLIARD, OH 43026
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ADS.

SHEET
1 OF 5

PROPOSED LAYOUT: AREA B

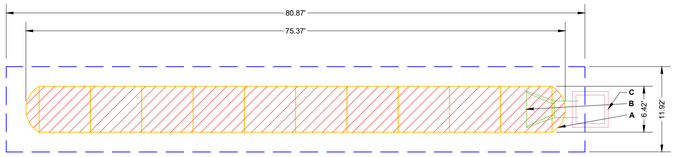
10	STORMTECH MC-3500 CHAMBERS	
2	STORMTECH MC-3500 END CAPS	
12	STONE ABOVE (in)	
9	STONE BELOW (in)	
40	STONE VOID	
2798	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	
964	SYSTEM AREA (SF)	
185.6	SYSTEM PERIMETER (ft)	

PROPOSED ELEVATIONS: AREA B

MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4577.29
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4571.29
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4570.79
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4570.79
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4570.79
TOP OF STONE:	4570.29
TOP OF MC-3500 CHAMBER:	4569.29
24" ISOLATOR ROW PLUS INVERT:	4565.71
BOTTOM OF MC-3500 CHAMBER:	4565.54
SYSTEM AREA (SF)	
BOTTOM OF STONE:	4564.79

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
FLAMP	B	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		



ISOLATOR ROW PLUS (SEE DETAIL)

NO WOVEN GEOTEXTILE

BED LIMITS

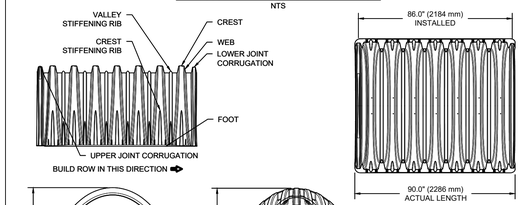
NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

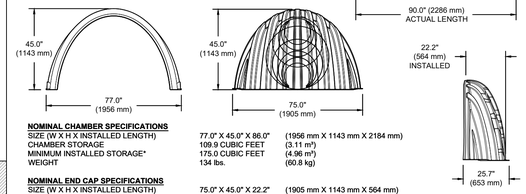
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MC-3500 TECHNICAL SPECIFICATION

NTS





NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

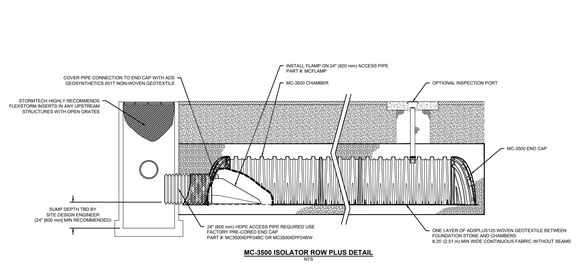
STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A WELDED CROWN PLATE END WITH "C"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PRECORED 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.

2 MC-3500 TECHNICAL SPECIFICATION



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

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

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

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

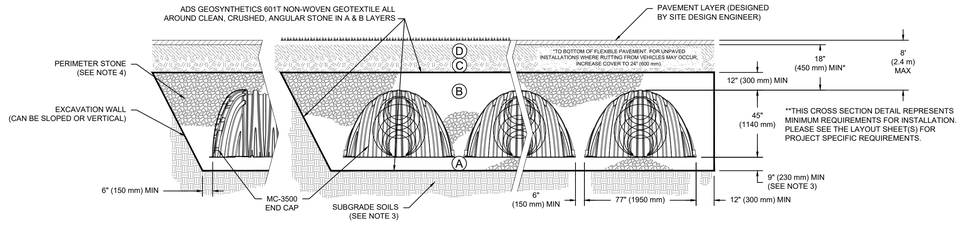
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-3500 ISOLATOR ROW PLUS 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	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	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 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[4] A-1, A-2-4, A-3 OR AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. 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".
2. 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.
3. 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.
4. 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.
5. 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".



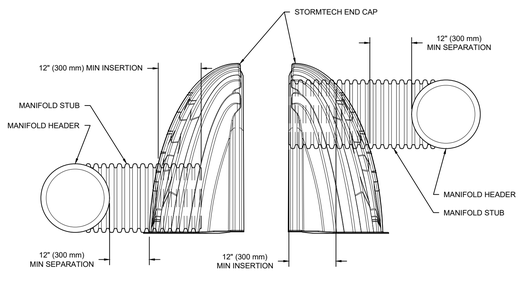
NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 MC-3500 CROSS SECTION DETAIL

MC-SERIES END CAP INSERTION DETAIL

NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

4 MC-SERIES END CAP INSERTION DETAIL

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DRAWN: WA
CHECKED: N/A
DATE: 06/17/2025
PROJECT #:
REV:
NOT TO SCALE

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
AMERICAN FORK, UT, USA

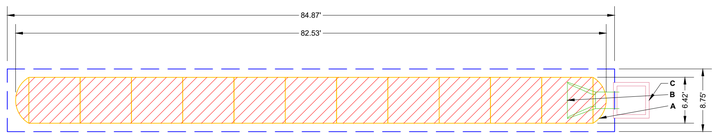
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PROPOSED LAYOUT: AREA C		PROPOSED ELEVATIONS: AREA C	
11	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4577.45
2	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4571.45
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4570.95
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4570.95
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4570.95
2377	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	4570.25
		TOP OF MC-3500 CHAMBER:	4569.45
		24" ISOLATOR ROW PLUS INVERT:	4565.87
		BOTTOM OF MC-3500 CHAMBER:	4565.70
743	SYSTEM AREA (SF)	BOTTOM OF STONE:	4564.95
187.2	SYSTEM PERIMETER (ft)		

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP, PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
FLAMP	B	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		



ISOLATOR ROW PLUS (SEE DETAIL)

NO WOVEN GEOTEXTILE

BED LIMITS

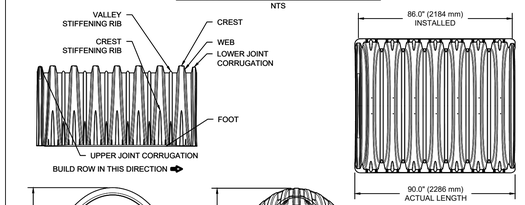
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MC-3500 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
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MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

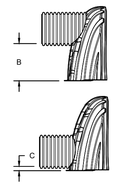
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MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

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

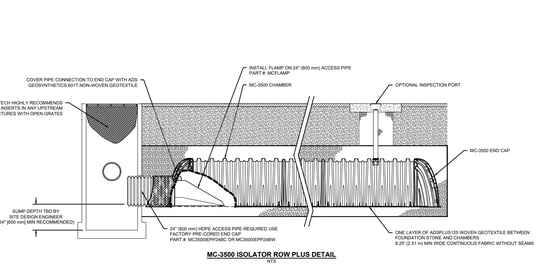
PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PRECORED 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.

2 MC-3500 TECHNICAL SPECIFICATION



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

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

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

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

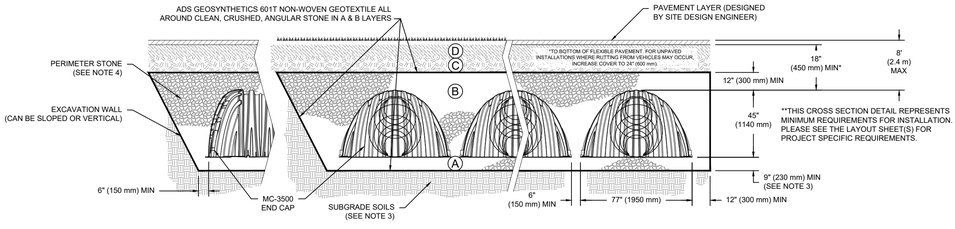
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-3500 ISOLATOR ROW PLUS 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	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	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 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[4] A-1, A-2-4, A-3 OR AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. 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".
2. 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.
3. 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.
4. 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.
5. 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".

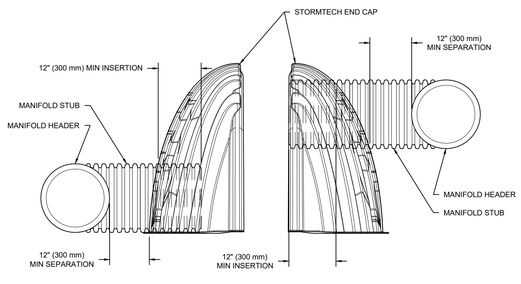


NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

4 MC-SERIES END CAP INSERTION DETAIL

1 MC-3500 CROSS SECTION DETAIL

DRAWN: WA | DATE: 06/17/2025
CHECKED: N/A | PROJECT #:
REV: | NOT TO SCALE

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
AMERICAN FORK, UT, USA

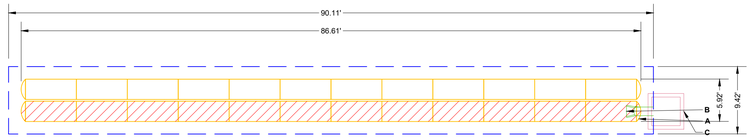
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PROPOSED LAYOUT: AREA D		PROPOSED ELEVATIONS: AREA D	
24	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4577.66
4	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4571.50
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4571.00
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4571.05
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4571.05
1004	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	4570.16
		TOP OF SC-310 CHAMBER:	4569.66
		12" ISOLATOR ROW PLUS INVERT:	4568.40
		BOTTOM OF SC-310 CHAMBER:	4568.33
849	SYSTEM AREA (SF)	BOTTOM OF STONE:	4567.83
199.0	SYSTEM PERIMETER (ft)		

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED EZ END CAP	A	12" BOTTOM PREFABRICATED EZ END CAP. PART#: SC310ECEZ / TYP OF ALL 12" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	0.90"	
	B	INSTALL FLAMP ON 12" ACCESS PIPE / PART#: SC31012RAMP		
CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		



ISOLATOR ROW PLUS (SEE DETAIL)

NO WOVEN GEOTEXTILE

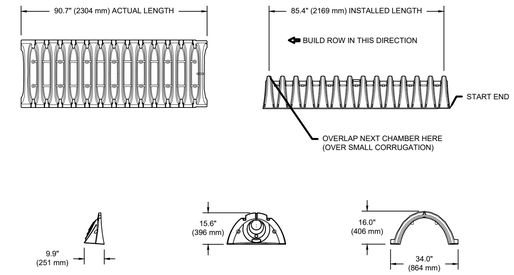
BED LIMITS

NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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SC-310 TECHNICAL SPECIFICATION
NTS

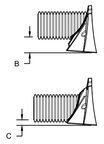


NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	29.3 CUBIC FEET	(0.83 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND 3" (75 mm) BETWEEN CHAMBERS

PART #	STUB	B	C
SC310EPE06TPC	6" (150 mm)	5.8" (147 mm)	---
SC310EPE06BPC		---	0.5" (13 mm)
SC310EPE08TPC	8" (200 mm)	3.5" (89 mm)	---
SC310EPE08BPC		---	0.6" (15 mm)
SC310EPE10TPC	10" (250 mm)	1.4" (36 mm)	---
SC310EPE10BPC		---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	---	0.9" (23 mm)

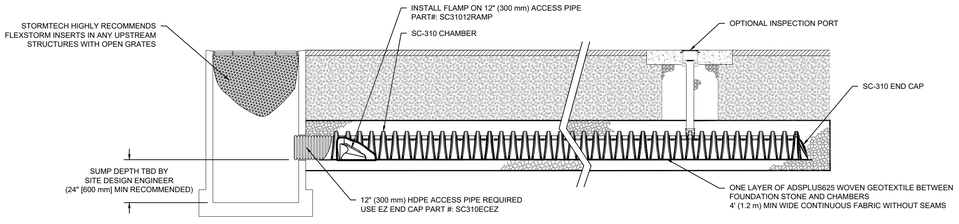


ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL; PRE-CORED END CAPS END WITH "PC"

2 SC-310 TECHNICAL SPECIFICATION



SC-310 ISOLATOR ROW PLUS DETAIL
NTS

3 SC-310 ISOLATOR ROW PLUS DETAIL

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INSPECTION & MAINTENANCE

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

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

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

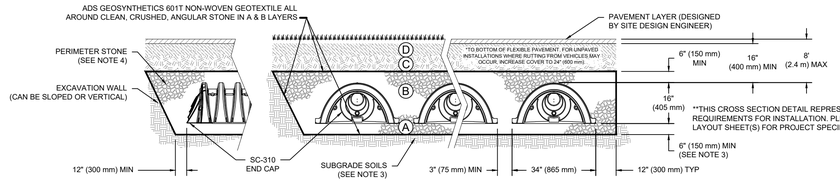
NOTES

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

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 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.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	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" (400 mm)** ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE5	AASHTO M43[1] 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE5	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. 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".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. 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.
4. 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.
5. 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:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 325 LBS/FT/% THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-310 CROSS SECTION DETAIL

DRAWN: WA | DATE: 06/17/2025
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REV: | NOT TO SCALE

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
AMERICAN FORK, UT, USA

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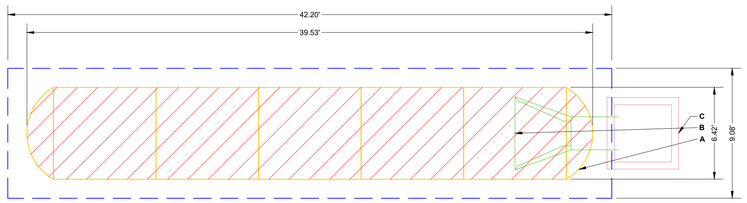
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PROPOSED LAYOUT: AREA E		PROPOSED ELEVATIONS: AREA E	
5	STORMTECH MC-3500 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	4577.30
2	STORMTECH MC-3500 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	4571.30
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	4570.80
9	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	4570.80
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	4570.80
1191	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	4570.30
		TOP OF MC-3500 CHAMBER:	4569.30
		24" ISOLATOR ROW PLUS INVERT:	4565.72
		BOTTOM OF MC-3500 CHAMBER:	4565.55
383	SYSTEM AREA (SF)	BOTTOM OF STONE:	4564.80
102.6	SYSTEM PERIMETER (ft)		

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PRE-CORED END CAP. PART#: MC3500IEPP24BC / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.06"	
	B	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
CONCRETE STRUCTURE	C	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		



ISOLATOR ROW PLUS (SEE DETAIL)

NO WOVEN GEOTEXTILE

BED LIMITS

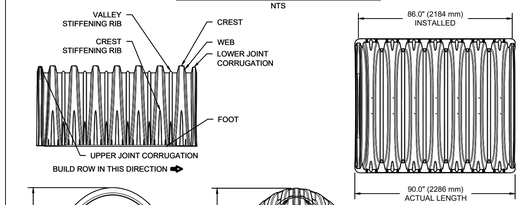
NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

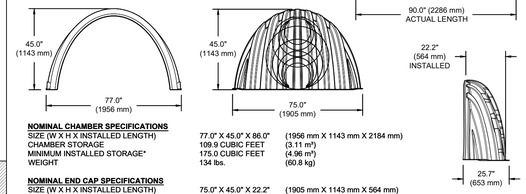
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MC-3500 TECHNICAL SPECIFICATION

NTS





NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	77.0" X 45.0" X 86.0"	(1956 mm X 1143 mm X 2184 mm)
CHAMBER STORAGE	109.9 CUBIC FEET	(3.11 m³)
MINIMUM INSTALLED STORAGE*	175.0 CUBIC FEET	(4.96 m³)
WEIGHT	134 lbs.	(60.8 kg)

NOMINAL END CAP SPECIFICATIONS

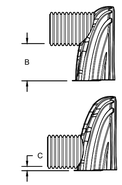
SIZE (W X H X INSTALLED LENGTH)	75.0" X 45.0" X 22.2"	(1905 mm X 1143 mm X 564 mm)
END CAP STORAGE	14.9 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	45.1 CUBIC FEET	(1.28 m³)
WEIGHT	49 lbs.	(22.2 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION, 6" SPACING BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

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

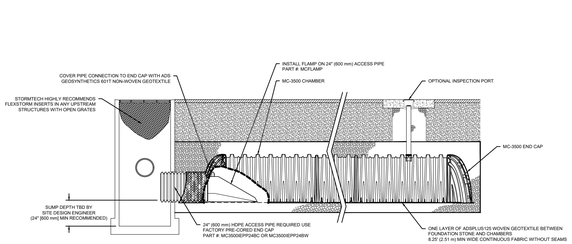
PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B		---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B		---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B		---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	---
MC3500IEPP12B		---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B		---	1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	---
MC3500IEPP18TW			
MC3500IEPP18BC		---	1.77" (45 mm)
MC3500IEPP18BW			
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	---
MC3500IEPP24TW			
MC3500IEPP24BC		---	2.06" (52 mm)
MC3500IEPP24BW			
MC3500IEPP30BC	30" (750 mm)	---	2.75" (70 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PRECORED 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.

2 MC-3500 TECHNICAL SPECIFICATION



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

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

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

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

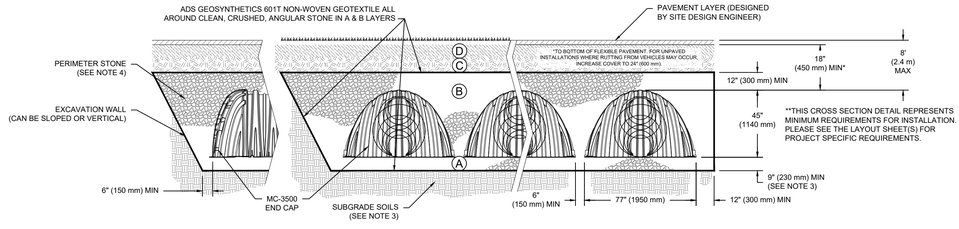
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-3500 ISOLATOR ROW PLUS 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	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	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 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 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.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

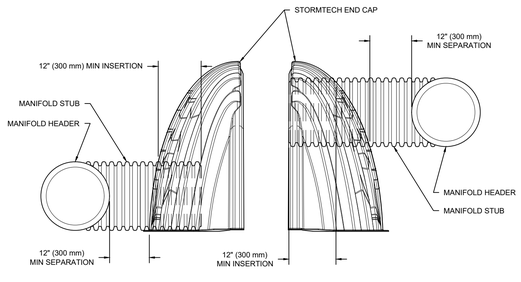
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE; "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. 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.
4. 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.
5. 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:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%, THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

MC-SERIES END CAP INSERTION DETAIL
NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

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4 MC-SERIES END CAP INSERTION DETAIL

1 MC-3500 CROSS SECTION DETAIL

ROCKPORT INDUSTRIAL COMMERCIAL DEVELOPMENT
AMERICAN FORK, UT, USA

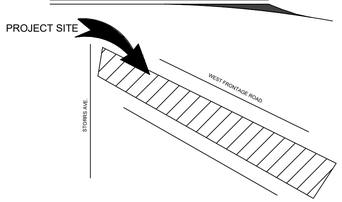
DATE: 06/17/2025
PROJECT #:
REV: NOT TO SCALE
DRAWN: WA
CHECKED: N/A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS/STORMTECH UNDER THE DIRECTION OF THE PROJECT'S ENGINEER OF RECORD ('EOR') OR OTHER PROJECT REPRESENTATIVE. THIS DRAWING IS NOT INTENDED FOR USE IN BIDDING OR CONSTRUCTION WITHOUT THE EOR'S PRIOR APPROVAL. EOR SHALL REVIEW THIS DRAWING PRIOR TO BIDDING AND/OR CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE EOR TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

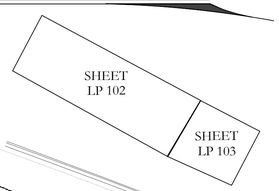
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ADS.

SHEET
5 OF 5

VICINITY MAP



SHEET INDEX



The Applicant is seeking a variance to the street frontage landscaping requirement from the Planning Commission during their Site Plan Application as their street frontage landscaping is less than 14' wide. This comment will be for all applicable pages throughout the Applicant's applications.

The minimum dimension allowed for the parking lot perimeter landscape strip is six feet unless adjacent to a public right-of-way where a minimum of fourteen feet is required. The width of a landscape strip can be modified by the planning commission, provided a finding that the intent of this section is met. This is mentioned within Section 17.5.121 (G)(2) and (I)(1). The 14' landscaped street frontage will be followed from the property line. Anything less that 14' will need to be approved by Planning Commission.

Next Step

Proceed to the Development Review Committee on 03/16/2026

No comments

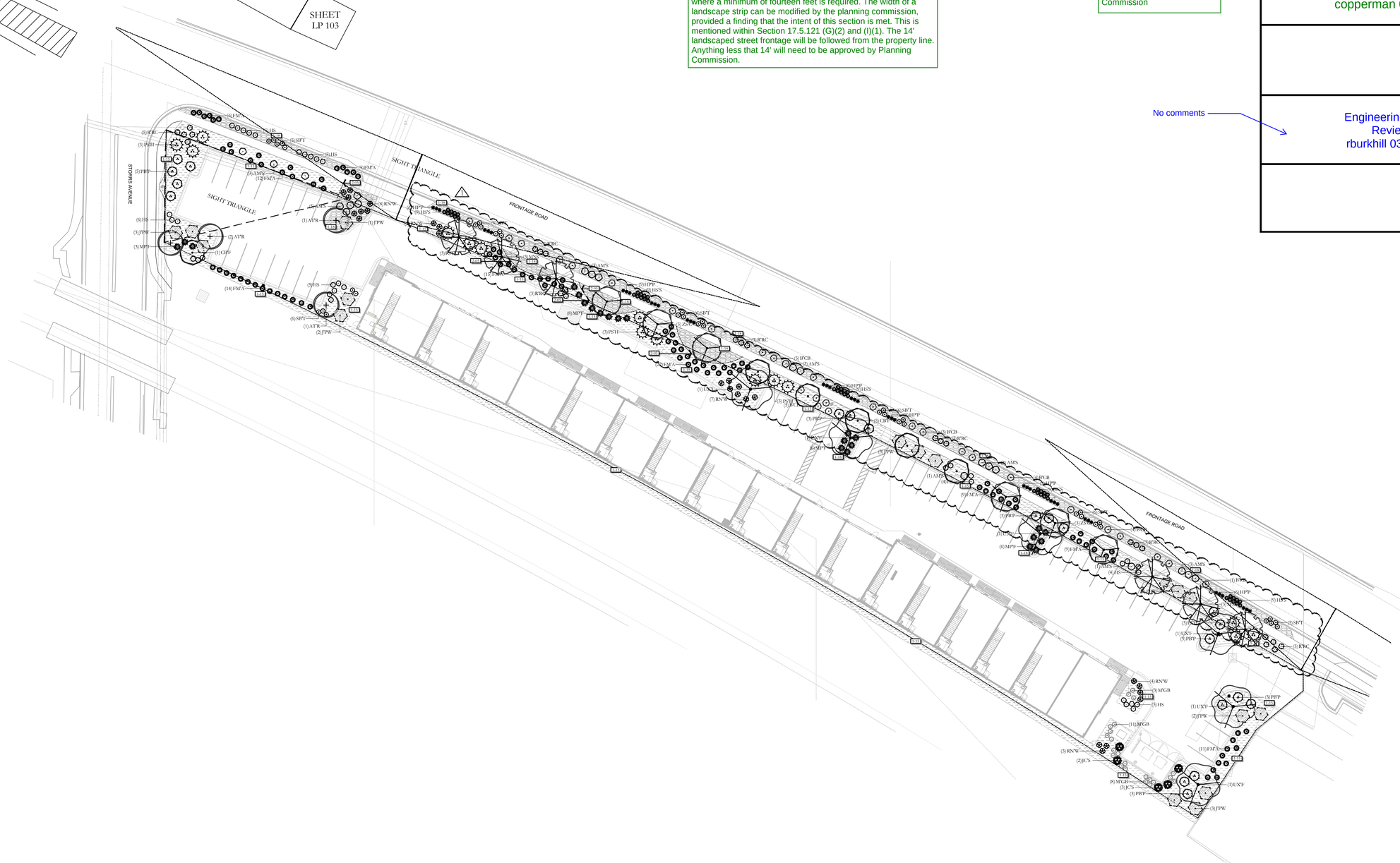
The comment to the left will be determined by the Planning Commission

American Fork City
Development Review
Committee

Planning and Zoning
Reviewed
copperman 03/09/2026

No comments

Engineering Division
Reviewed
rburkhill 03/10/2026



ISSUE DATE	PROJECT NUMBER
10/16/2025	UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-15-2025
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

** THIS PRINT FROM PKJ DESIGN GROUP IS BASED ON CIVIL AND ARCHITECT INFORMATION ISSUED ON 10/15/25

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 15' 30' 60' 120'
GRAPHIC SCALE: 1" = 30'

PROJECT INFORMATION

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
ATT: NATE HEAPS
801-362-1496
NATE@CALETACAPITAL.COM

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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture & Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 995-2217
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
STATE OF UTAH
8738747-5301
10/16/2025
REGISTERED

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/16/2025

LANDSCAPE OVERALL PLAN

CITY PERMIT SET

LP-100

LANDSCAPE PLAN SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

A. THIS SECTION INCLUDES LANDSCAPE PROCEDURES FOR THE PROJECT INCLUDING ALL LABOR, MATERIALS, AND INSTALLATION NECESSARY, BUT NOT LIMITED TO, THE FOLLOWING:

1. SITE CONDITIONS
2. GUARANTEES
3. MAINTENANCE
4. SOIL AMENDMENTS
5. FINE GRADING
6. LANDSCAPE EDGING
7. FURNISH AND INSTALLING PLANT
8. TURF PLANTING
9. WEED BARRIER

1.2 SITE CONDITIONS

A. EXAMINATION: BEFORE SUBMITTING A BID, EACH CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS; SHALL VISIT THE SITE OF THE WORK; SHALL FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS; AND SHALL INCLUDE IN THE BID THE COST OF ALL ITEMS REQUIRED BY THE CONTRACT DOCUMENTS ARE AT A VARIANCE WITH THE APPLICABLE LAWS, BUILDING CODES, RULES, REGULATIONS, OR CONTAIN OBVIOUS ERRONEOUS OR UNCOORDINATED INFORMATION, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE PROJECT REPRESENTATIVE AND THE NECESSARY CHANGES SHALL BE ACCOMPLISHED BY ADDENDUM.

B. PROTECTION: CONTRACTOR TO CONDUCT THE WORK IN SUCH A MANNER TO PROTECT ALL EXISTING UNDERGROUND UTILITIES OR STRUCTURES. CONTRACTOR TO REPAIR OR REPLACE ANY DAMAGED UTILITY OR STRUCTURE USING IDENTICAL MATERIALS TO MATCH EXISTING AT NO EXPENSE TO THE OWNER.

C. IRRIGATION SYSTEM: DO NOT BEGIN PLANTING UNTIL THE IRRIGATION SYSTEM IS COMPLETELY INSTALLED, IS ADJUSTED FOR FULL COVERAGE AND IS COMPLETELY OPERATIONAL.

1.3 PERMITS

A. BLUE STAKE/ DIG LINE: WHEN DIGGING IS REQUIRED, "BLUE STAKE" OR "DIG LINE" THE WORK SITE AND IDENTIFY THE APPROXIMATE LOCATION OF ALL KNOWN UNDERGROUND UTILITIES OR STRUCTURES.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. UNAUTHORIZED SUBSTITUTIONS WILL NOT BE ACCEPTED. IF PROOF IS SUBMITTED THAT SPECIFIC PLANTS OR PLANT SIZES ARE UNOBTAINABLE, WRITTEN SUBSTITUTION REQUESTS WILL BE CONSIDERED FOR THE NEAREST EQUIVALENT PLANT OR SIZE. ALL SUBSTITUTION REQUESTS MUST BE MADE IN WRITING AND PREFERABLY BEFORE THE BID DUE DATE.

1.5 FINAL INSPECTION

A. ALL PLANTS WILL BE INSPECTED AT THE TIME OF FINAL INSPECTION PRIOR TO RECEIVING A LANDSCAPE SUBSTANTIAL COMPLETION FOR CONFORMANCE TO SPECIFIED PLANTING PROCEDURES, AND FOR GENERAL APPEARANCE AND VITALITY. ANY PLANT NOT APPROVED BY THE PROJECT REPRESENTATIVE WILL BE REJECTED AND REPLACED IMMEDIATELY.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A SUBSTANTIAL COMPLETION CERTIFICATE WILL ONLY BE ISSUED BY THE PROJECT REPRESENTATIVE FOR "LANDSCAPE AND IRRIGATION" IN THEIR ENTIRETY. SUBSTANTIAL COMPLETION WILL NOT BE PROPORTIONED TO BE DESIGNATED AREAS OF A PROJECT.

1.7 MAINTENANCE

A. PLANT MATERIAL: THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL PLANTED MATERIALS IN A HEALTHY AND GROWING CONDITION FOR 30 DAYS AFTER RECEIVING A LANDSCAPE SUBSTANTIAL COMPLETION AT WHICH TIME THE GUARANTEE PERIOD COMMENCES. THIS MAINTENANCE IS TO INCLUDE MOWING, WEEDING, CULTIVATING, FERTILIZING, MONITORING WATER SCHEDULES, CONTROLLING INSECTS AND DISEASES, RE-GUYING AND STAKING, AND ALL OTHER OPERATIONS OF CARE NECESSARY FOR THE PROMOTION OF ROOT GROWTH AND PLANT LIFE SO THAT ALL PLANTS ARE IN A CONDITION SATISFACTORY AT THE END OF THE GUARANTEE PERIOD. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR FAILURE TO MONITOR WATERING OPERATIONS AND SHALL REPLACE ANY AND ALL PLANT MATERIAL THAT IS LOST DUE TO IMPROPER APPLICATION OF WATER.

1.8 GUARANTEE

A. GUARANTEE: A GUARANTEE PERIOD OF ONE YEAR SHALL BEGIN FROM END OF MAINTENANCE PERIOD AND FINAL ACCEPTANCE FOR TREES, SHRUBS, AND GROUND COVERS. ALL PLANTS SHALL GROW AND BE HEALTHY FOR THE GUARANTEE PERIOD AND TREES SHALL LIVE AND GROW IN ACCEPTABLE UPRIGHT POSITION. ANY PLANT NOT ALIVE, IN POOR HEALTH, OR IN POOR CONDITION AT THE END OF THE GUARANTEE PERIOD WILL BE REPLACED IMMEDIATELY. ANY PLANT WILL ONLY NEED TO BE REPLACED ONCE DURING THE GUARANTEE PERIOD. CONTRACTOR TO PROVIDE DOCUMENTATION SHOWING WHERE EACH PLANT TO BE REPLACED IS LOCATED. ANY OUTSIDE FACTORS, SUCH AS VANDALISM OR LACK OF MAINTENANCE ON THE PART OF THE OWNER, SHALL NOT BE PART OF THE GUARANTEE

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. TREE STAKING: ALL TREES SHALL BE STAKED FOR ONE YEAR WARRANTY PERIOD. ALL TREES NOT PLUMB SHALL BE REPLACED. STAKED TREES SHALL USE VINYL TREE TIES AND TREE STAKES TWO (2) INCH BY TWO (2) BY EIGHT (8) FOOT COMMON PINE STAKES USED AS SHOWN ON THE DETAILS.

B. TREE WRAP: TREE WRAP IS NOT TO BE USED.

C. MULCH/ROCK: SEE PLANS. ALL PLANTER BEDS TO RECEIVE A MINIMUM 3" LAYER FOR TREES, SHRUBS, AND PERENNIALS AND 1" FOR GROUNDCOVERS.

D. WEED BARRIER: DEWITT 5 OZ. WEED BARRIER FABRIC. MANUFACTURED BY DEWITT COMPANY, DEWITTCOMPANY.COM OR APPROVED EQUAL.

E. TREE, SHRUB, AND GRASS BACKFILL MIXTURE; BACKFILL MIXTURE TO BE 80% NATIVE SOIL AND 20% TOPSOIL, THOROUGHLY MIXED TOGETHER PRIOR TO PLACEMENT.

F. TOPSOIL: REQUIRED FOR TURF AREAS, PLANTER BEDS AND BACKFILL MIXTURE. ACCEPTABLE TOPSOIL SHALL MEET THE FOLLOWING STANDARDS:

a. PH: 5.5-7.5
b. EC (ELECTRICAL CONDUCTIVITY): < 2.0 MMHOS PER CENTIMETER
c. SAR (SODIUM ABSORPTION RATIO): < 3.0
d. % OM (PERCENT ORGANIC MATTER): >1%
e. TEXTURE (PARTICLE SIZE PER USDA SOIL CLASSIFICATION): SAND <70%; CLAY < 30%; SILT < 70%, STONE FRAGMENTS (GRAVEL OR ANY SOIL PARTICLE GREATER THAN TWO (2) MM IN SIZE) < 5% BY VOLUME.

G. TURF SOD: ALL SOD SHALL BE 18 MONTH OLD AS SPECIFIED ON PLANS (OR APPROVED EQUAL) THAT HAS BEEN CUT FRESH THE MORNING OF INSTALLATION. ONLY SOD THAT HAS BEEN GROWN ON A COMMERCIAL SOD FARM SHALL BE USED. ONLY USE SOD FROM A SINGLE SOURCE.

H. LANDSCAPE CURB EDGING: SIX (6) INCHES BY FOUR (4) INCHES EXTRUDED CONCRETE CURB MADE UP OF THE FOLLOWING MATERIALS:

a. WASHED MORTAR SAND FREE OF ORGANIC MATERIAL.
b. PORTLAND CEMENT (SEE CONCRETE SPEC. BELOW FOR TYPE)
c. REINFORCED FIBER - SPECIFICALLY PRODUCED FOR COMPATIBILITY WITH AGGRESSIVE ALKALINE ENVIRONMENT OF PORTLAND CEMENT-BASED COMPOSITES.
d. ONLY POTABLE WATER FOR MIXING.

I. LANDSCAPE METAL EDGING: 5.5" ALUMINUM EDGING WITH 15" DOWELS INTO THE GROUND FOR STABILIZATION.

PART III - EXECUTION

3.1 GRADING

A. TOPSOIL PREPARATION: GRADE PLANTING AREAS ACCORDING TO THE GRADING PLAN. ELIMINATE UNEVEN AREAS AND LOW SPOTS. PROVIDE FOR PROPER GRADING AND DRAINAGE.

B. TOPSOIL PLACEMENT: SLOPE SURFACED AWAY FROM BUILDING AT TWO (2) PERCENT SLOPE WITH NO POCKETS OF STANDING WATER. ESTABLISH FINISH GRADES OF ONE (1) INCHES FOR PLANTERS BELOW GRADE OF ADJACENT PAVED SURFACED. PROVIDE NEAT, SMOOTH, AND UNIFORM FINISH GRADES. REMOVE SURPLUS SUB-SOIL AND TOPSOIL FROM THE SITE.

C. COMPACTION: COMPACTION UNDER HARD SURFACE AREAS (ASPHALT PATHS AND CONCRETE SURFACES) SHALL BE NINETY-FIVE (95) PERCENT. COMPACTION UNDER PLANTING AREAS SHALL BE BETWEEN EIGHTY-FIVE (85) AND NINETY (90) PERCENT.

3.2 TURF GRADING

A. THE SURFACE ON WHICH THE SOD IS TO BE LAID SHALL BE FIRM AND FREE FROM FOOTPRINTS, DEPRESSIONS, OR UNDULATIONS OF ANY KIND. THE SURFACE SHALL BE FREE OF ALL MATERIALS LARGER THAN 1/2" IN DIAMETER.

B. THE FINISH GRADE OF THE TOPSOIL ADJACENT TO ALL SIDEWALKS, MOW-STRIPS, ETC. PRIOR TO THE LAYING OF SOD, SHALL BE SET SUCH THAT THE CROWN OF THE GRASS SHALL BE AT THE SAME LEVEL AS THE ADJACENT CONCRETE OR HARD SURFACE. NO EXCEPTIONS.

3.3 PLANTING OPERATIONS

A. REVIEW THE EXACT LOCATIONS OF ALL TREES AND SHRUBS WITH THE PROJECT REPRESENTATIVE FOR APPROVAL PRIOR TO THE DIGGING OF ANY HOLES. PREPARE ALL HOLES ACCORDING TO THE DETAILS ON THE DRAWINGS.

B. WATER PLANTS IMMEDIATELY UPON ARRIVAL AT THE SITE. MAINTAIN IN MOIST CONDITION UNTIL PLANTED.

C. BEFORE PLANTING, LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. DO NOT PLACE PLANTS ON OR NEAR UTILITY LINES.

D. THE TREE PLANTING HOLE SHOULD BE THE SAME DEPTH AS THE ROOT BALL, AND TWO TIMES THE DIAMETER OF THE ROOT BALL.

E. TREES MUST BE PLACED ON UNDISTURBED SOIL AT THE BOTTOM OF THE PLANTING HOLE. BEGINNING AND BACKFILLING OPERATIONS. DO NOT USE PLANTING STOCK IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.

I. APPLY VITAMIN B-1 ROOT STIMULATOR AT THE RATE OF ONE (1) TABLESPOON PER GALLON.

J. UPON COMPLETION OF BACKFILLING OPERATION, THOROUGHLY WATER TREE TO COMPLETELY SETTLE THE SOIL AND FILL ANY VOIDS THAT MAY HAVE OCCURRED. USE A WATERING HOSE, NOT THE AREA IRRIGATION SYSTEM. IF ADDITIONAL PREPARED TOPSOIL MIXTURE NEEDS TO BE ADDED. IT SHOULD BE A COURSER MIX AS REQUIRED TO ESTABLISH FINISH GRADE AS INDICATED ON THE DRAWINGS.

K. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES. ALL CUTS, SCARS, AND BRUISES SHALL BE PROPERLY TREATED ACCORDING TO THE DIRECTION OF THE PROJECT REPRESENTATIVE. PROPER PRUNING TECHNIQUES SHALL BE USED. DO NOT LEAVE STUBS AND DO NOT CUT THE LEADER BRANCH. IMPROPER PRUNING SHALL BE CAUSE FOR REJECTION OF THE PLANT MATERIAL.

L. PREPARE A WATERING CIRCLE OF 2' DIAMETER AROUND THE TRUNK. FOR CONIFERS, EXTEND THE WATERING WELL TO THE DRIP LINE OF THE TREE CANOPY. PLACE MULCH AROUND THE PLANTED TREES.

4. TURF - SOD LAYING

A. TOP SOIL AMENDMENTS: PRIOR TO LAYING SOD, COMMERCIAL FERTILIZER SHALL BE APPLIED AND INCORPORATED INTO THE UPPER FOUR (4) INCHES OF THE TOPSOIL AT A RATE OF FOUR POUNDS OF NITROGEN PER ONE THOUSAND (1,000) SQUARE FEET. ADJUST FERTILIZATION MIXTURE AND RATE OF APPLICATION AS NEEDED TO MEET RECOMMENDATIONS GIVEN BY TOPSOIL ANALYSIS. INCLUDE OTHER AMENDMENTS AS REQUIRED.

B. FERTILIZATION: THREE WEEKS AFTER SOD PLACEMENT FERTILIZE THE TURF AT A RATE OF ½ POUND OF NITROGEN PER 1000 SQUARE FEET. USE FERTILIZER SPECIFIED ABOVE. ADJUST FERTILIZATION MIXTURE AND RATES TO MEET RECOMMENDATIONS GIVEN BY TOPSOIL ANALYSIS.

C. SOD AVAILABILITY AND CONDITION: SOD IS TO BE DELIVERED TO THE SITE IN GOOD CONDITION. IT IS TO BE INSPECTED UPON ARRIVAL AND INSTALLED WITHIN 24 HOURS. SOD IS TO BE MOIST AND COOL TO ENSURE THAT DECOMPOSITION HAS NOT BEGUN AND IS TO BE FREE OF PESTS, DISEASES, OR BLEMISHES. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE EXISTING CONDITIONS PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR FURNISHING AND LAYING ALL SOD REQUIRED ON THE PLANS. HE SHALL FURNISH NEW SOD AS SPECIFIED ABOVE AND LAY IT SO AS TOO COMPLETELY SATISFY THE INTENT AND MEANING OF THE PLANS AND SPECIFICATION AT NO EXTRA COST TO THE OWNER. IN THE CASE OF ANY DISCREPANCY IN THE AMOUNT OF SOD TO BE REMOVED OR AMOUNT TO BE USED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPORT SUCH TO THE PROJECT REPRESENTATIVE PRIOR TO COMMENCING THE WORK.

D. SOD LAYING: THE SURFACE UPON WHICH THE NEW SOD TO BE LAID WILL BE PREPARED AS SPECIFIED IN THE DETAIL AND BE LIGHTLY WATERED BEFORE LAYING. AREAS WHERE SOD IS TO BE LAID SHALL BE CUT TRIMMED, OR SHAPED TO RECEIVE FULL WIDTH SOD (MINIMUM TWELVE (12) INCHES). NO PARTIAL STRIP OR PIECES WILL BE ACCEPTED.

E. SOD SHALL BE TAMPED LIGHTLY AS EACH PIECE IS SET TO ENSURE THAT GOOD CONTACT IS MADE BETWEEN EDGES AND ALSO THE GROUND. IF VOIDS OR HOLES ARE DISCOVERED, THE SOD PIECE(S) IS (ARE) TO BE RAISED AND TOPSOIL IS TO BE USED TO FILL IN THE AREAS UNTIL LEVEL. SOD LAID ON ANY SLOPED AREAS SHALL BE ANCHORED WITH WOODEN DOWELS OR OTHER MATERIALS WHICH ARE ACCEPTED BY THE GRASS SOD INDUSTRY.

F. SOD SHALL BE ROLLED WITH A ROLLER THAT IS AT LEAST 50% FULL IMMEDIATELY AFTER INSTALLATION TO ENSURE THE FULL CONTACT WITH SOIL IS MADE.

G. APPLY WATER DIRECTLY AFTER LAYING SOD. RAINFALL IS NOT ACCEPTABLE.

H. WATERING OF THE SOD SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR BY WHATEVER MEANS NECESSARY TO ESTABLISH THE SOD IN AN ACCEPTABLE MANNER TO THE END OF THE MAINTENANCE PERIOD. IF AN IRRIGATION SYSTEM IS IN PLACE ON THE SITE, BUT FOR WHATEVER REASON, WATER IS NOT AVAILABLE IN THE SYSTEM. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO WATER THE SOD BY WHATEVER MEANS, UNTIL THE SOD IS ACCEPTED BY THE PROJECT REPRESENTATIVE.

I. PROTECTION OF THE NEWLY LAID SOD SHALL BE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ACCEPTABLE VISUAL BARRIERS, TO INCLUDE BARRICADES SET APPROPRIATE DISTANCES WITH STRINGS OR TAPES BETWEEN BARRIERS, AS AN INDICATION OF NEW WORK. THE CONTRACTOR IS TO RESTORE ANY DAMAGED AREAS CAUSED BY OTHERS (INCLUDING VEHICULAR TRAFFIC), EROSION, ETC, UNTIL SUCH TIME AS THE LAWN IS ACCEPTED BY THE OWNER.

J. ALL SOD THAT HAS NOT BEEN LAID WITHIN 24 HOURS SHALL BE DEEMED UNACCEPTABLE AND WILL BE REMOVED FROM THE SITE.

3.5 WEED BARRIER

A. FOR THE HEALTH OF THE SOIL AND THE MICROORGANISMS, WEED BARRIER IS NOT RECOMMENDED. IF USE IS REQUIRED OR REQUESTED, DO NOT PLACE IN ANNUAL OR GRASS AREAS.

B. CUT WEED BARRIER BACK TO THE EDGE OF THE PLANT ROOTBALL.

C. OVERLAP ROWS OF FABRIC MIN. 6"

D. STABLE FABRIC EDGES AND OVERLAPS TO GROUND.

END OF SECTION

GENERAL LANDSCAPE NOTES

GRADING AND DRAINAGE REQUIREMENTS

- AS PER CODE, ALL GRADING IS TO SLOPE AWAY FROM ANY STRUCTURE. SURFACE OF THE GROUND WITHIN 10' FEET OF THE FOUNDATION SHOULD DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6"
- AS PER CODE, FINISHED GRADE WILL NOT DRAIN ON NEIGHBORING PROPERTIES
- A MINIMUM OF 6" OF FOUNDATION WILL BE LEFT EXPOSED AT ALL CONDITIONS
- LANDSCAPE CONTRACTOR TO MAINTAIN OR IMPROVE FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY EXCAVATOR, INCLUDING BUT NOT LIMITED TO ANY MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY DAMAGED OR IMPROPER WATERFLOW OF ALL SWALES, BERMS, OR GRADE
- DEVICES FOR CHANNELING ROOF RUN-OFF SHOULD BE INSTALLED FOR COLLECTION AND DISCHARGE OF RAINWATER AT A MINIMUM OF 10' FROM THE FOUNDATION, OR BEYOND THE LIMITS OF FOUNDATION WALL BACKFILL; WHICHEVER DISTANCE IS GREATER

GENERAL LANDSCAPE NOTES

- LANDSCAPE CONTRACTOR SHALL HAVE ALL UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT CONTRACTORS EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
- DURING THE BIDDING AND INSTALLATION PROCESS, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
- ALL PLANT MATERIAL SHALL BE PLANTED ACCORDING TO ANSI STANDARDS WITH CONSIDERATION TO INDIVIDUAL SOIL AND SITE CONDITIONS, AND NURSERY CARE AND INSTALLATION INSTRUCTIONS.
- SELECTED PLANTS WILL BE ACCORDING TO THE PLANT LEGEND. IF SUBSTITUTIONS ARE NECESSARY, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO LAYING SOD.
- SHOULD THE SITE REQUIRE ADDITIONAL TOPSOIL, REFER TO SOIL TEST WHEN MATCHING EXISTING SOIL. IF A MATCHING SOIL IS NOT LOCATABLE, A 6" DEPTH OF SANDY LOAM TOPSOIL MIXED PRIOR TO SPREADING WITH 1% ORGANIC MATTER) CAN BE INCORPORATED INTO THE EXISTING SOIL USING THE FOLLOWING DIRECTIONS: SCARIFY TOP 6" OF EXISTING SUBSOIL AND INCORPORATE 3" OF NEW COMPOST ENRICHED TOPSOIL. SPREAD REMAINING TOPSOIL TO REACH FINISHED GRADE.
- EDGING, AS INDICATED ON PLAN, IS TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS. ANY TREES LOCATED IN LAWN MUST HAVE A 4-6' TREE RING OF THE SAME EDGING.

LAWN/GRASS AREA

- SOD
  - O ALL LAWN AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED HYDROSEEDING. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD ALL. LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH, NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.
- SEED
  - O **SOIL:** TEST SOIL FOR ADEQUATE FERTILITY. ANY WEEDS CURRENTLY ON THE SITE SHALL BE REMOVED BY EITHER MECHANICAL MEANS SUCH AS HAND PULLING OR SPRAYING WITH AN HERBICIDE SUCH AS GLYPHOSATE MIXED WITH A SURFACTANT. HERBICIDES SHOULD BE APPLIED BY A CERTIFIED PESTICIDE APPLICATOR . COMPACTED SOIL SHALL BE SCARIFIED TO A DEPTH OF 18 INCHES BEFORE ADDING 6" OF WEED FREE TOPSOIL WITH HIGH ORGANIC MATTER. FINE LEVEL ALL AREAS PRIOR TO HYDROSEEDING AND SET THE GRADE FOR POSITIVE DRAINAGE. TOPSOIL SHOULD BE SOFT AT TIME OF APPLICATION. FERTILIZER IS TO BE ADDED WHEN HYDROSEEDING. REFER TO SOIL TEST RESULTS AND HYDROSEEDING CONTRACTOR FOR APPLICATION RATES.
  - O **SEED**: USE SEED MIXES AS SPECIFIED BY LANDSCAPE ARCHITECT OF PURE LIVE SEED (PLS) ON A BASIS/ACRE. THE OPTIMUM TIME TO PANT IS IN NOVEMBER BEFORE THE FIRST SNOW. DO NOT SOW OVER HEAVY SNOWPACK. SEED WILL LAY DORMANT AND BE READY TO GERMINATE ONCE THE GROUND THAWS AND WARMS IN LATE WINTER. IF SEEDING IN LATE FALL IS NOT POSSIBLE, SEED BEFORE APRIL 1. CONTACT SUMMIT SEED. DARRELL@SUMMITSEEDING.COM 435-709-8003.
  - O **APPLICATION**: HYDROSEEDING SHALL CONSIST OF SEED, TACKIFIER, WOOD FIBER MULCH AND FERTILIZER IN A WATER BASED SLURRY. TANK MOUNTED TRUCK SHALL HAVE CONTINUOUS AGITATION. THE PUMP ON THE TRUCK WILL FORCE THE SLURRY THROUGH A TOP-MOUNTED DISCHARGE NOZZLE (TOWER). USE 2000 POUNDS WOOD FIBER MULCH AND 50-100 POUNDS OF TACKIFIER PER ACRE.
  - O **IRRIGATION**: ALL AREAS MUST BE KEPT MOIST WITHOUT PUDDLES OR RUNOFF USING FREQUENT DAYTIME WATER CYCLES. ADJUST AND MONITOR SPRINKLERS AND CLOCK TO ACHIEVE PROPER IRRIGATION.

- IF PERMANENT IRRIGATION IS NOT PLANNED, TEMPORARY IRRIGATION IS REQUIRED AT THE FOLLOWING SCHEDULE: FOR 8 WEEKS SOIL SHALL REMAIN DAMP DURING ESTABLISHMENT PERIOD WITHOUT PUDDLING ON SOIL SURFACE. APPLY WATER APPROXIMATELY THREE TIMES A DAY FOR 5-7 MINUTES FOR EACH IRRIGATION EVENT DEPENDING ON TEMPERATURE AND TIME OF YEAR. A SPARSE DENSITY IS EXPECTED. CONTINUE TEMPORARY IRRIGATION FOR ONE YEAR EVENTUALLY REDUCING WATER APPLICATION TO ONCE A WEEK, THEN ONCE EVERY TWO WEEKS TO FINALLY ONCE A MONTH. MONITOR PROGRESS OF ESTABLISHMENT AND ADJUST SPRINKLERS ACCORDINGLY. THE GOAL IS TO CREATE A HEALTHY STAND OF GRASSES WITH LITTLE TO NO IRRIGATION.
  - O **WEED CONTROL AND MAINTENANCE:** MANDATORY WEED CONTROL IS REQUIRED TO REDUCE COMPETITION AND WEED SEED PRODUCTION. WEEDS MUST BE KEPT UNDER CONTROL BY MECHANICALLY PULLING OR CHEMICALLY SPRAYING AS DIRECTED BY THE APPLICATOR. APPLY A BROADLEAF HERBICIDE BIANNUALLY AND ESTABLISH A CONSISTENT REGIMEN OF MOWING AND FERTILIZING TO PREVENT WEEDS FROM PRODUCING SEED. MOW ONCE IN THE SPRING AND ONCE IN THE FALL BEFORE FERTILIZATION. FERTILIZER OPTION IS SUSTAIN 4-6-4 DEPENDING ON SOIL FERTILITY. DO NOT MOW SHORTER THAN 4 INCHES. BAG ALL CUTTINGS TO REMOVE WEED SEED FROM PROPERTY. KEEP WEEDS CUT DOWN AND DO NOT LET THEM GO TO SEED. WEED SEED PRODUCTION IS THE GAUGE FOR WHEN TO MOW, WHICH GENERALLY OCCURS IN APRIL OR MAY AS WELL AS EARLY FALL DEPENDING ON TEMPERATURE AND MOISTURE. THIS PROCEDURE WILL BE REQUIRED UNTIL A HEALTHY STAND OF GRASSES IS EVIDENT AND COMPETING WELL WITH WEEDS. EXPECT FROM 1 TO 3 YEARS.
  - O **PROGANICS BIOTIC SOIL MEDIA**: WHERE CONDITIONS MAY PROHIBIT ADDING TOPSOIL, PROGANICS BIOTIC SOIL MEDIA SHOULD BE APPLIED BY HYDROSEEDER AT 3500LBS/ACRE WITH SEED AND FERTILIZER PRIOR TO THE APPLICATION OF WOOD MULCH(2000LBS/ACRE) COMBINED WITH TACKIFIER (50-100 LBS/ACRE.)
  - O **ADDING FORBS**: SHRUBS AND PERENNIALS, BY SEED OR CONTAINER, CAN BE ADDED ONCE WEEDS ARE UNDER CONTROL AND HERBICIDE IS NO LONGER NEEDED. USUALLY 1-2 YEARS AFTER HYDROSEEDING.

MULCH

- ORGANIC
  - O PLANTING AREAS TO BE FREE OF WEEDS AND RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. PROVIDE 3" DEPTH OF ORGANIC MULCH TOP DRESSING. KEEP MULCH AWAY FROM TOP OF ROOT BALL OF ALL PLANT MATERIAL.
  - O IF REQUIRED BY CITY, INSTALL DEWITT 5OZ WEED BARRIER LANDSCAPE FABRIC UNDER ALL MULCH AREAS. KEEP WEED BARRIER 1 FOOT AWAY FROM EDGE OF ROOT BALL OF ALL PLANT MATERIAL. IF WEED BARRIER IS NOT REQUIRED OR INSTALLED, AT OWNER'S APPROVAL, USE TREFLAN 10 AS A PRE-EMERGENT. APPLY ACCORDING TO LABEL DIRECTIONS BY CERTIFIED PESTICIDE APPLICATOR AFTER PLANTING AND AFTER APPLYING MULCH.
  - O IF USING TREFLAN 10 WITHOUT WEED BARRIER, THIS AREA WILL ALSO NEED AN YEARLY MANAGEMENT PROGRAM. SUBMIT PROGRAM TO OWNER.
  - O ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL (ORGANIC MULCH). NO MULCH SHALL BE PLACED WITHIN 12" OF TREE TRUNK AND 6" WITHIN BASE OF SHRUBS AND PERENNIALS. DO NOT COVER LOW BRANCHES OF SHRUBS WITH ROCK.
- INORGANIC
  - O ROCK MULCH PLANTING AREAS TO BE FREE OF WEEDS AND RECEIVE MIN. 12" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS. WHERE PLANTING IS SPARSE (GREATER THAN 4' DISTANCE BETWEEN PLANTS OR 20' BETWEEN GROUPINGS), ADDITIONAL TOPSOIL IS NOT NECESSARY EXCEPT FOR BACKFILLING PLANTING HOLE. PREPARE A HOLE TWICE THE WIDTH OF THE CONTAINER, WATER IN PLANT, BACKFILL WITH A 4:1 RATIO OF SOIL TO COMPOST. TAMP LIGHTLY AND WATER AGAIN. KEEP ROCK 12" AWAY FROM TRUNK OF TREES AND 6" AWAY FROM BASE OF SHRUBS AND PERENNIALS. DO NOT COVER LOW BRANCHES OF SHRUBS WITH ROCK.
  - O IF REQUIRED BY CITY, INSTALL DEWITT 5OZ WEED BARRIER LANDSCAPE FABRIC UNDER ALL ROCK AREAS. KEEP WEED BARRIER 1 FOOT AWAY FROM EDGE OF ROOT BALL OF ALL PLANT MATERIAL. IF WEED BARRIER IS NOT REQUIRED OR INSTALLED, AT OWNER'S APPROVAL, USE TREFLAN 10 AS A PRE-EMERGENT. APPLY ACCORDING TO LABEL DIRECTIONS BY CERTIFIED PESTICIDE APPLICATOR AFTER PLANTING AND AFTER APPLYING MULCH.
  - O IF USING TREFLAN 10 WITHOUT WEED BARRIER, THIS AREA WILL ALSO NEED AN YEARLY MANAGEMENT PROGRAM. SUBMIT PROGRAM TO OWNER. UPON REQUEST, A PLANT GUIDE IS AVAILABLE WITH OUR RECOMMENDATIONS REGARDING WEED BARRIER, PLANT CARE AND MAINTENANCE.

GENERAL IRRIGATION NOTES

- A NEW UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED BY CONTRACTOR IN ALL LANDSCAPED AREAS. LAWN AREAS TO RECEIVE AT LEAST 100% HEAD TO HEAD COVERAGE AND PLANTER AREAS TO RECEIVE A FULL DRIP SYSTEM TO EACH TREE AND SHRUB. POINT SOURCE DRIP OR IN-LINE DRIP TUBING TO BE SECURED AT CENTER OF ROOT BALL, NOT AGAINST TRUNK. SEE IRRIGATION PLAN.

INSTALLER RESPONSIBILITIES AND LIABILITIES

- THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. LANDSCAPE CONTRACTOR IS REQUIRED TO USE TRADE KNOWLEDGE FOR IMPLEMENTATION. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS, MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR INSTALLATION OF ALL LANDSCAPING AND IRRIGATION SYSTEMS INCLUDING CODE REQUIREMENTS, TIME EXECUTIONS, INSTALLED PRODUCTS AND MATERIALS.

SITE MATERIALS LEGEND

NOTE: SITE MATERIALS QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.

SYMBOL	CODE	DESCRIPTION	QTY
1 LANDSCAPE			
	1.15	1" MINUS GREY CRUSHED ROCK. SUBMIT SAMPLES FOR LANDSCAPE ARCHITECT AND OWNER APPROVAL. PROVIDE 3" DEPTH OF ROCK MULCH TOP DRESSING. SEE INORGANIC MULCH LANDSCAPE NOTES FOR ADDITIONAL INFORMATION. SHEET LP-101.	14,676 sf
	1.18	2-4" TAN CRUSHED ROCK. SUBMIT SAMPLES FOR LANDSCAPE ARCHITECT AND OWNER APPROVAL. PROVIDE 4" DEPTH OF ROCK MULCH TOP DRESSING. SEE INORGANIC MULCH LANDSCAPE NOTES FOR ADDITIONAL INFORMATION. SHEET LP-101.	5,044 sf
2 HARDSCAPE			
----------	2.05	5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	145 lf

SITE REQUIREMENT CALCULATIONS

STREET FRONTAGE	REQUIRED:	PROVIDED:
265 W		
1 CLASS II TREE / 40 FT (692 LN FT)	17	17
STORRS AVENUE		
1 CLASS II TREE / 40 FT (78 LN FT)	2	2
AT LEAST 75% PLANT COVERAGE		
AT MATURITY	75%	75%
1 SHADE TREE PER 6 PARKING STALLS	9	9

*STREET TREES MUST BE SELECTED FROM DOCUMENT TITLED "STREET TREE SELECTION GUIDE FOR PARKING STR

PLANT LEGEND

NOTE: PLANT QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.

CONIFERS

	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	JC'S	5	Juniperus chinensis `Spartan` Spartan Juniper low, 15x6; sun; z4; Utah Lake water tolerant	B & B	6`

DECIDUOUS TREES

	AT'R	4	Acer tataricum 'JFS-KW2' TM Rugged Charm Tatarian Maple moderate; 28x15; sun to partial shade; z3	B & B	2"Cal
	CB'F	6	Carpinus betulus `Franz Fontaine` Franz Fontaine Hornbeam moderate; 35x15; full to part sun; z4	B & B	2"Cal
	M'SS	6	Malus x `Spring Snow` Spring Snow Crab Apple low; 25x22; sun; z4; Utah Lake water tolerant	B & B	2"Cal
	UX'F	6	Ulmus x `Frontier` Frontier Elm Td3; 35x25; AV 490; sun; z4; Utah Lake water tolerant	B & B	2"Cal
	ZS'C	6	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova Td4; 24x18; AV 490; sun; z5; Utah Lake water tolerant	B & B	2"Cal

DECIDUOUS SHRUBS

	AM'S	22	Aronia melanocarpa 'SMNAMPEM' Low Scape Snowfire™ Black Chokeberry Moderate water; 3-4' x 3-4'; sun to part shade; z3;	5 gal
	B'CB	28	Berberis thunbergii 'Monomb' TM Cherry Bomb Japanese Barberry Sd3' 3-4x3-4; AV 28; full to part sun; z4; Utah Lake water tolerant	5 gal
	HS	35	Diervilla x splendens 'El Madrigal' Firefly Nightglow Bush Honeysuckle	5 gal
	PB'P	20	Prunus besseyi `P011S` 'Pawnee Buttes' Pawnee Buttes Sand Cherry Sd1; 1.5 x 6; AV19.5; sun; z4;	5 gal
	SB'T	39	Spiraea betulifolia 'Tor' Birchleaf Spirea moderate; 2-3 x 2-3; sun to part sun; z4	5 gal

EVERGREEN SHRUBS

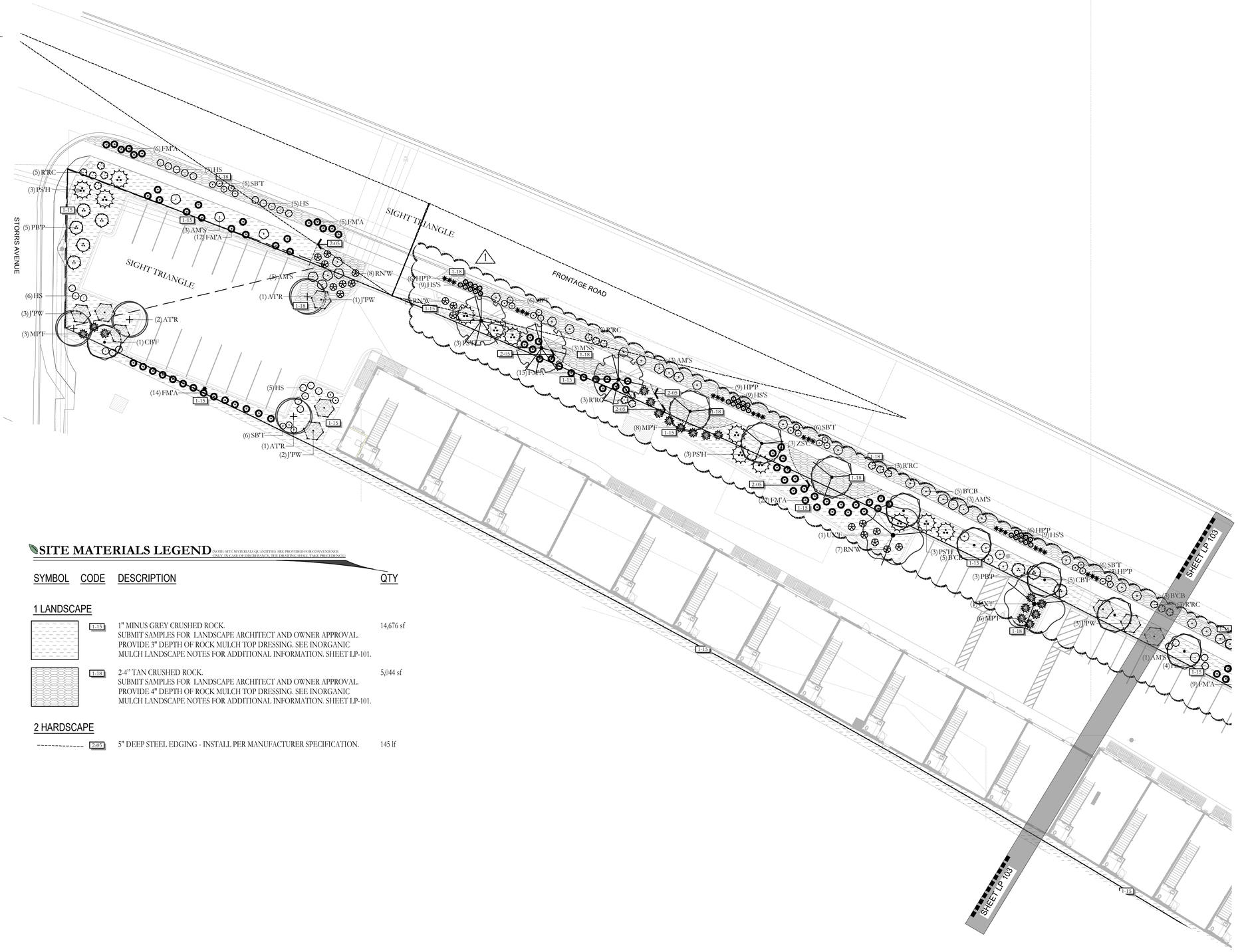
	HP'P	39	Hesperaloe parviflora `Perpa` TM Brakelights Red Yucca P1; 2x2; AV 7; sun; z5; Utah Lake water tolerant	5 gal
	J'PW	17	Juniperus horizontalis 'Prince of Wales' Prince Of Wales Juniper 6-8" x 3-10'; low water; sun; z3; Utah Lake water tolerant	5 gal
	PS'H	15	Pinus sylvestris `Hillside Creeper` Hillside Creeper Scotch Pine moderate; 2x8; sun; z3	5 gal

GRASSES

	FM'A	103	Festuca mairei Atlas Fescue low; 3x3; sun; z5; Utah Lake water tolerant	1 gal
	HS'S	45	Helictotrichon sempervirens `Sapphire` Blue Oat Grass Tw1; 4x2; AV 3; sun to part shade; z4; Utah Lake water tolerant	1 gal
	M'GB	22	Miscanthus sinensis `Gold Bar` Gold Bar Maiden Grass Tw2; 5x3; AV 9; sun; z5, Utah Lake water tolerant	1 gal
	MP'F	23	Miscanthus purpurascens Flame Grass moderate; 4-5x4-5; sun to light shade; z5; Utah Lake water tolerant	1 gal

ROSES

	R'RC	25	Rosa x `Noare` TM Flower Carpet Red Groundcover Rose moderate; 1-2 x 2-3; sun; z5; Utah Lake water tolerant	5 gal
	RN'W	25	Rosa x `Noaschnee` TM Flower Carpet White Groundcover Rose moderate; 2x3; sun; z5; Utah Lake water tolerant	5 gal



SITE MATERIALS LEGEND

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	2-05	5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	145 lf

ISSUE DATE	PROJECT NUMBER
10/16/2025	UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-15-2025
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

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UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

LP-102 / LP-103

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
ATT: NATE HEAPS
801-362-1496
NATE@CALETACAPITAL.COM

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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture // Planning &Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 995-2217
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT — JEREMY ANDREWS HEATH — 8129171-5301 — 10/16/2025 — ELECTRONIC SEAL — STATE OF UTAH

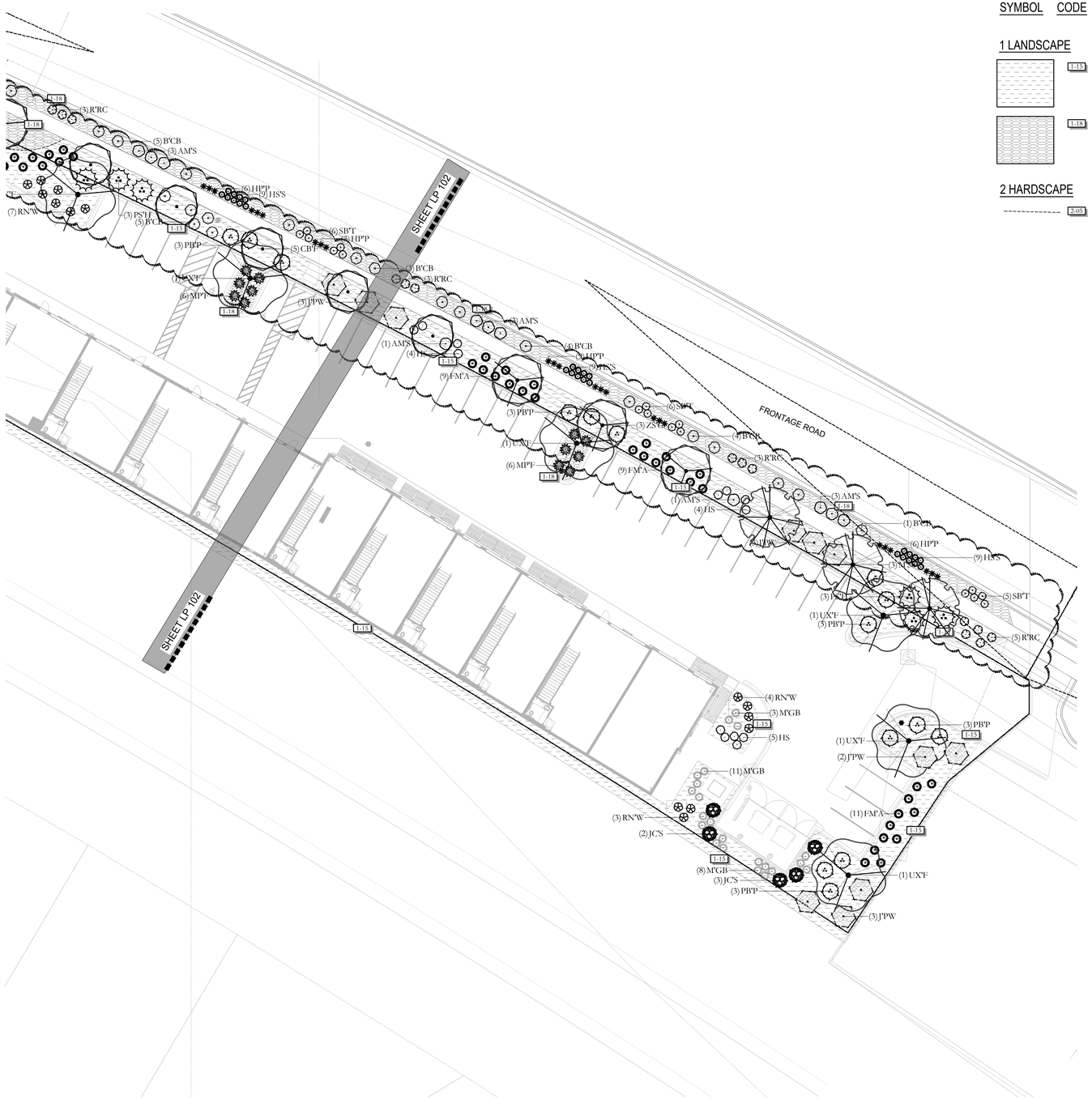
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PLOT DATE:	10/16/2025

LANDSCAPE PLAN

CITY PERMIT SET

LP-102



SITE MATERIALS LEGEND

(NOTE: SITE MATERIALS QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.)

SYMBOL	CODE	DESCRIPTION	QTY
1 LANDSCAPE			
	1-15	1" MINUS GREY CRUSHED ROCK. SUBMIT SAMPLES FOR LANDSCAPE ARCHITECT AND OWNER APPROVAL. PROVIDE 3" DEPTH OF ROCK MULCH TOP DRESSING. SEE INORGANIC MULCH LANDSCAPE NOTES FOR ADDITIONAL INFORMATION. SHEET LP-101.	14,676 sf
	1-18	2-4" TAN CRUSHED ROCK. SUBMIT SAMPLES FOR LANDSCAPE ARCHITECT AND OWNER APPROVAL. PROVIDE 4" DEPTH OF ROCK MULCH TOP DRESSING. SEE INORGANIC MULCH LANDSCAPE NOTES FOR ADDITIONAL INFORMATION. SHEET LP-101.	5,044 sf
2 HARDSCAPE			
	2-05	5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	145 lf

PLANT LEGEND

(NOTE: PLANT QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.)

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
CONIFERS				
	JC'S	5	Juniperus chinensis `Spartan` Spartan Juniper low, 15x6; sun; z4; Utah Lake water tolerant	B & B 6'
DECIDUOUS TREES				
	AT'R	4	Acer tataricum 'JFS-KW2' TM Rugged Charm Tatarian Maple moderate; 28x15; sun to partial shade; z3	B & B 2"Cal
	CB'F	6	Carpinus betulus `Franz Fontaine` Franz Fontaine Hornbeam moderate; 35x15; full to part sun; z4	B & B 2"Cal
	M'SS	6	Malus x `Spring Snow` Spring Snow Crab Apple low; 25x22; sun; z4; Utah Lake water tolerant	B & B 2"Cal
	UX'F	6	Ulmus x `Frontier` Frontier Elm Td3; 35x25; AV 490; sun; z4; Utah Lake water tolerant	B & B 2"Cal
	ZS'C	6	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova Td4; 24x18; AV 490; sun; z5; Utah Lake water tolerant	B & B 2"Cal
DECIDUOUS SHRUBS				
	AM'S	22	Aronia melanocarpa 'SMNAMPEM' Low Scape Snowfire™ Black Chokeberry Moderate water; 3-4' x 3-4'; sun to part shade; z3;	5 gal
	B'CB	28	Berberis thunbergii 'Monomb' TM Cherry Bomb Japanese Barberry Sd3' 3-4x3-4; AV 28; full to part sun; z4; Utah Lake water tolerant	5 gal
	HS	35	Diervilla x splendens 'El Madrigal' Firefly Nightglow Bush Honeysuckle	5 gal
	PB'P	20	Prunus besseyi `P011S` 'Pawnee Buttes' Pawnee Buttes Sand Cherry Sd1; 1.5 x 6; AV19.5; sun; z4;	5 gal
	SB'T	39	Spiraea betulifolia `Tor` Birchleaf Spirea moderate; 2-3 x 2-3; sun to part sun; z4	5 gal
EVERGREEN SHRUBS				
	HP'P	39	Hesperaloe parviflora `Perpa` TM Brakelights Red Yucca P1; 2x2; AV 7; sun; z5; Utah Lake water tolerant	5 gal
	JPW	17	Juniperus horizontalis 'Prince of Wales' Prince Of Wales Juniper 6-8" x 3-10'; low water; sun; z3; Utah Lake water tolerant	5 gal
	PS'H	15	Pinus sylvestris `Hillside Creeper` Hillside Creeper Scotch Pine moderate; 2x8; sun; z3	5 gal
GRASSES				
	FM'A	103	Festuca mairei Atlas Fescue low; 3x3; sun; z5; Utah Lake water tolerant	1 gal
	HS'S	45	Helictotrichon sempervirens `Sapphire` Blue Oat Grass Tw1; 4x2; AV 3; sun to part shade; z4; Utah Lake water tolerant	1 gal
	M'GB	22	Miscanthus sinensis `Gold Bar` Gold Bar Maiden Grass Tw2; 5x3; AV 9; sun; z5, Utah Lake water tolerant	1 gal
	MP'F	23	Miscanthus purpurascens Flame Grass moderate; 4-5x4-5; sun to light shade; z5; Utah Lake water tolerant	1 gal
ROSES				
	R'RC	25	Rosa x `Noare` TM Flower Carpet Red Groundcover Rose moderate; 1-2 x 2-3; sun; z5; Utah Lake water tolerant	5 gal
	RN'W	25	Rosa x `Noaschnee` TM Flower Carpet White Groundcover Rose moderate; 2x3; sun; z5; Utah Lake water tolerant	5 gal

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LICENSED LANDSCAPE ARCHITECT
JEREMY THOMAS ANDREWS
8128727-5301
10/16/2025
ELECTRONIC SIGN
STATE OF UTAH

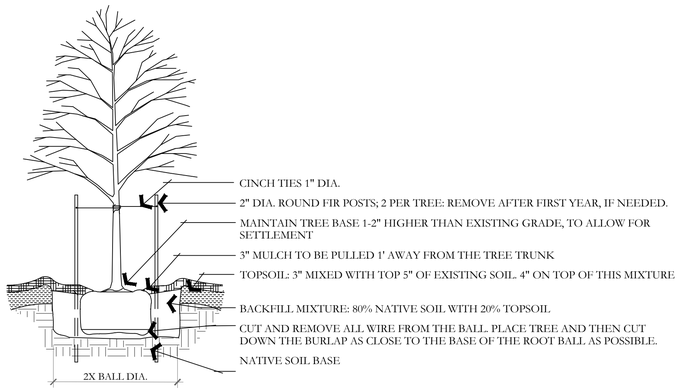
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PM: JTA
DRAWN: ACP
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PLOT DATE: 10/16/2025

LANDSCAPE PLAN

CITY PERMIT SET

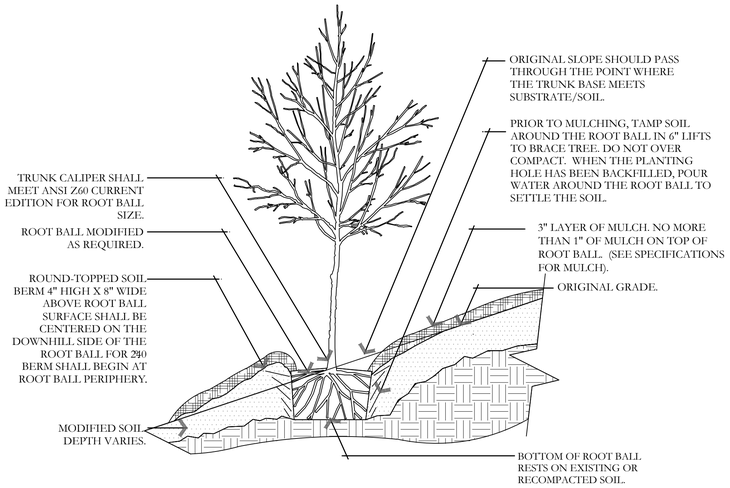
LP-103



A DECIDUOUS TREE PLANTING

NOT TO SCALE

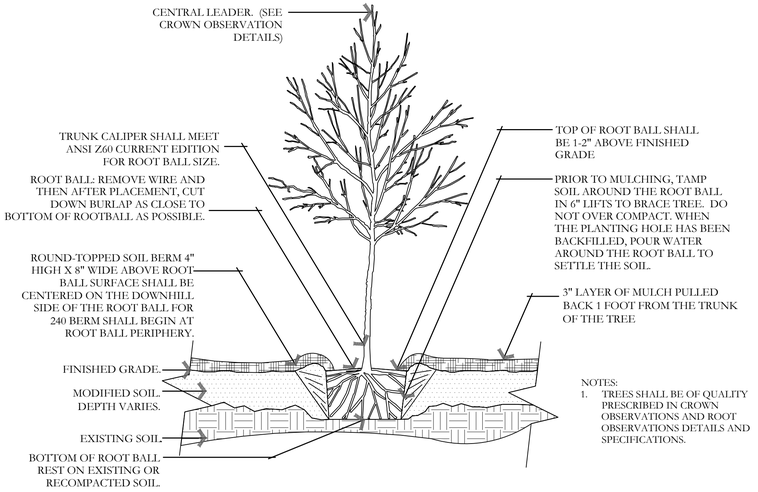
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B TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE

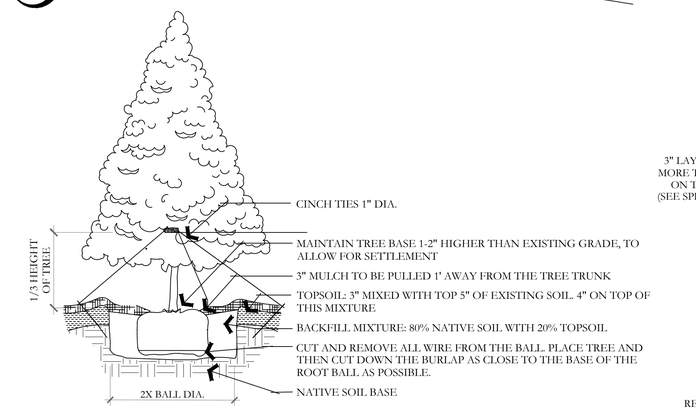
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C TREE W/ BERM (EXISTING SOIL MODIFIED)

NOT TO SCALE

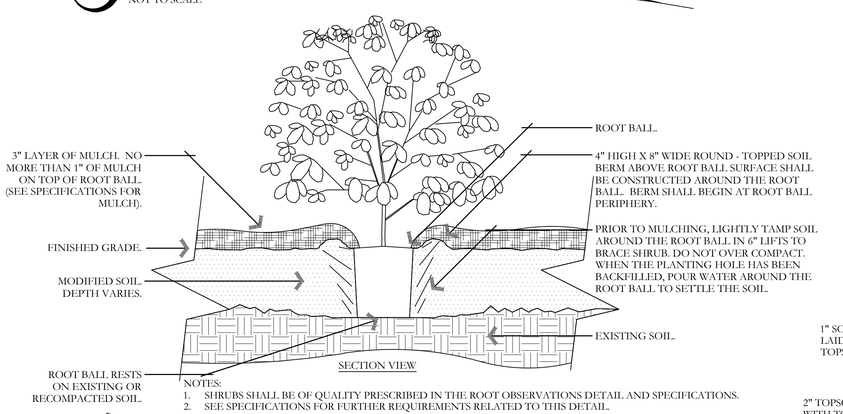
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D EVERGREEN TREE PLANTING

NOT TO SCALE

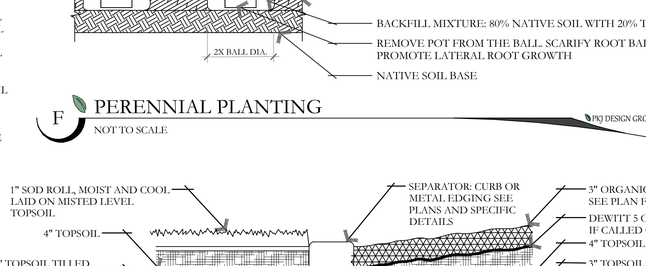
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E SHRUB - MODIFIED SOIL

NOT TO SCALE

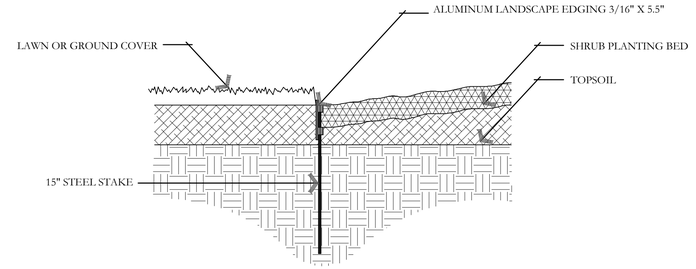
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F PERENNIAL PLANTING

NOT TO SCALE

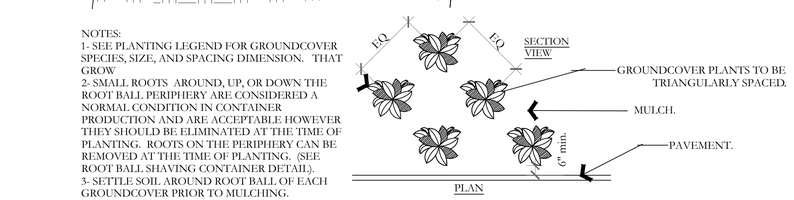
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G METAL EDGING DETAIL

NOT TO SCALE

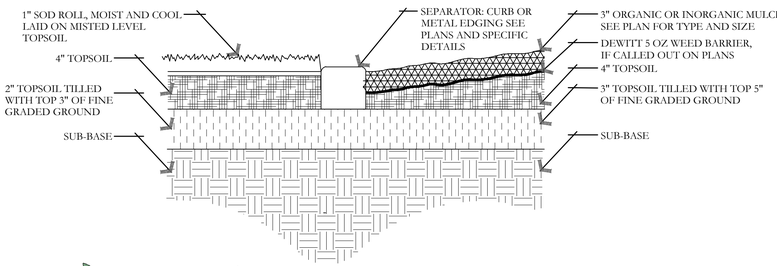
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H PERENNIAL/GROUNDCOVER PLANTING

NOT TO SCALE

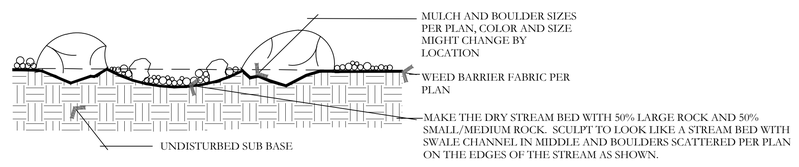
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I SOD LAYING/MULCH DETAIL

NOT TO SCALE

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J BOULDER AND DRY STREAM BED DETAIL

NOT TO SCALE

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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
10/15/2025
REGISTERED
STATE OF UTAH

DRAWING INFO

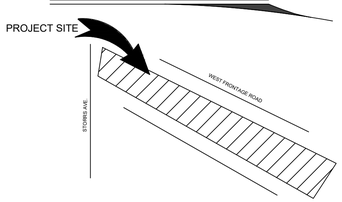
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LANDSCAPE DETAILS

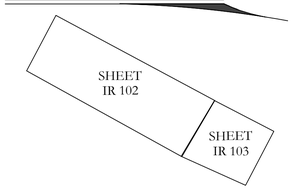
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LP-501

VICINITY MAP



SHEET INDEX



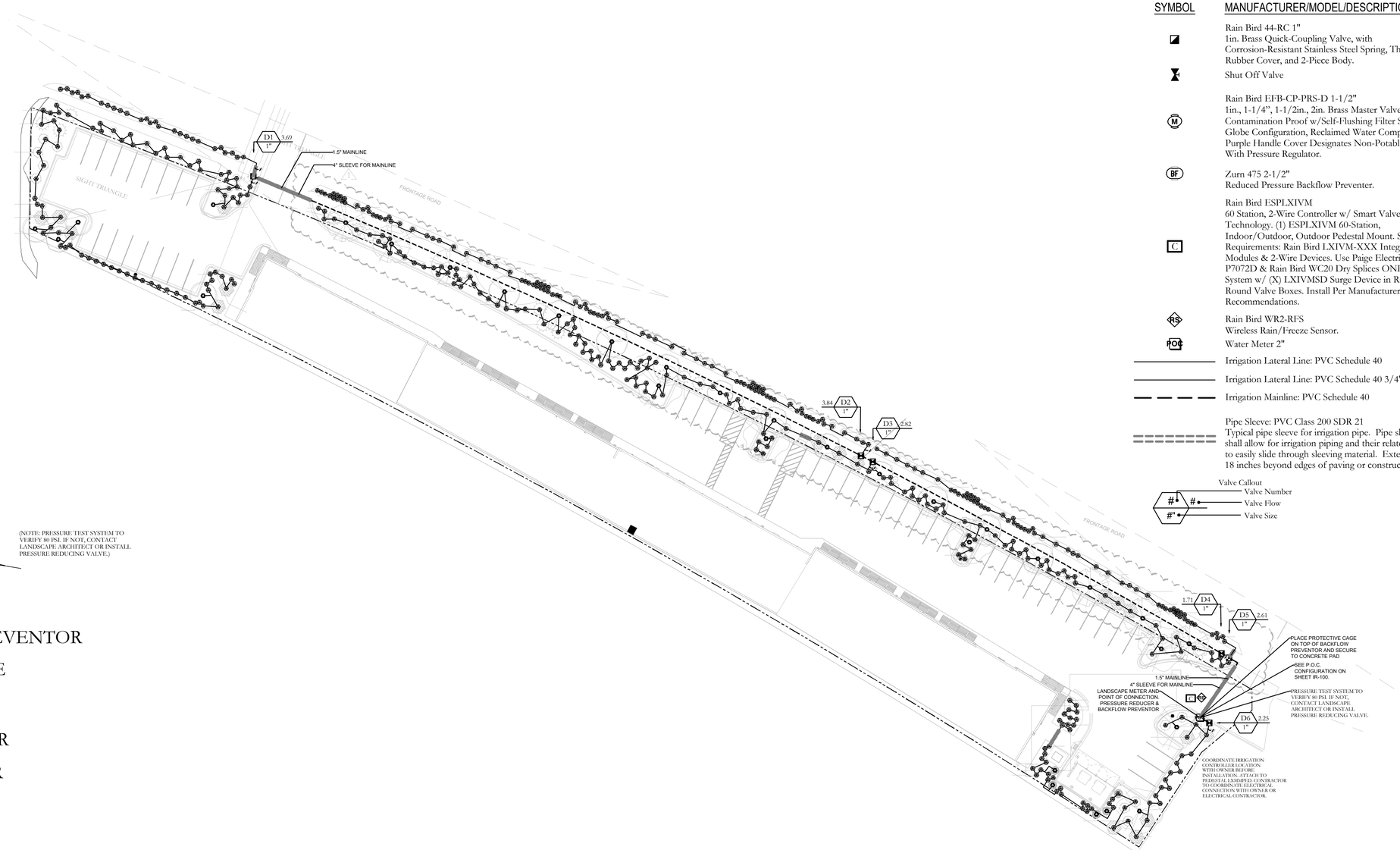
IRRIGATION LEGEND

NOTE: PLANT QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.) IF YOU NEED HELP WITH A WATER AUDIT CONSULTATION, OR A PLANT MAINTENANCE SCHEDULE, CONTACT PKJ@PKJDESIGNGROUP.COM)

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-100-IVMQ (2) 1" Wide Flow IVM Drip Control Kit for Commercial Applications. 1in. Ball Valve with 1in. PESBIVM Smart Valve w/ factory installed IVM-SOL 0.3-20 gpm and 1in. Pressure Regulating 40psi Quick-Check Basket Filter 0.3-20 gpm	6
	Rain Bird XFS-09-18 Drip Ring(SHRUB)	461
	Rain Bird XFS-09-18 Drip Ring(TREE)	32

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird 44-RC 1" 1in. Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Thermoplastic Rubber Cover, and 2-Piece Body.	1
	Shut Off Valve	1
M	Rain Bird EFB-CP-PRS-D 1-1/2" 1in., 1-1/4", 1-1/2in., 2in. Brass Master Valve, that is Contamination Proof w/Self-Flushing Filter Screen. Globe Configuration, Reclaimed Water Compatible, and Purple Handle Cover Designates Non-Potable Water Use. With Pressure Regulator.	1
BF	Zurn 475 2-1/2" Reduced Pressure Backflow Preventer.	1
C	Rain Bird ESPLXIVM 60 Station, 2-Wire Controller w/ Smart Valve Technology. (1) ESPLXIVM 60-Station, Indoor/Outdoor, Outdoor Pedestal Mount. System Requirements: Rain Bird LXIVM-XXX Integrated Valve Modules & 2-Wire Devices. Use Paige Electric Cable P7072D & Rain Bird WC20 Dry Splices ONLY. Ground System w/ (X) LXIVMSD Surge Device in Rain Bird Round Valve Boxes. Install Per Manufacturers Recommendations.	1
FS	Rain Bird WR2-RFS Wireless Rain/Freeze Sensor.	1
POC	Water Meter 2"	1
	Irrigation Lateral Line: PVC Schedule 40	637.8 lf
	Irrigation Lateral Line: PVC Schedule 40 3/4"	1,997 lf
	Irrigation Mainline: PVC Schedule 40	650.4 lf
	Pipe Sleeve: PVC Class 200 SDR 21 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	90.0 lf

Valve Callout
- Valve Number
- Valve Flow
- Valve Size



P.O.C. CONFIGURATION

(NOTE: PRESSURE TEST SYSTEM TO VERIFY 80 PSI. IF NOT, CONTACT LANDSCAPE ARCHITECT OR INSTALL PRESSURE REDUCING VALVE.)

- 1 SOURCE DATA
- BF BACKFLOW PREVENTOR
- SHUTOFF VALVE
- M MASTER VALVE
- FS 1" FLOW SENSOR
- QUICK COUPLER

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8129717-5301
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ELECTRONIC SIG
STATE OF UTAH

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IRRIGATION OVERALL PLAN

CITY PERMIT SET

IR-100

IRRIGATION PLAN SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Remove and dispose of any existing sprinkler system components which are disturbed during the construction process and are not to be saved. Restoration of any altered or damaged existing landscape to original state and condition.

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, sleeving and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pope and wire in sleeving under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

B. Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto hardscape, buildings or other features.

C. Layout of Irrigation Components: During layout and staking, consult with Owner Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components, and to provide Contractor recommendations for changes where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.

1.3 DEFINITIONS

A. Water Supply: Secondary water piping and components, furnished and installed by others to provide irrigation water to this Project, including but not limited to filter, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require filter, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

A. The following standards will apply to the work of this Section:

a. ASTM-American Society for Testing and Materials

b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.

1.5 SUBMITTALS

A. At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in three ring binders or other similar bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have need reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.

B. Operation and Maintenance Manual:

a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:

i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.

ii. Parts list for each operating element of the system

iii. Manufacturer printed literature on operation and maintenance of operating elements of the system.

iv. Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.

b. Project Record Copy

i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.

ii. Completed Project As-Built Drawings

1. Prior to final inspection, prepare and submit to OAR accurate as-built drawings
2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.
3. Field dimension locations of sleeving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.
4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.
5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services: indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work in this section prior to acceptance by OAR.

B. Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.

C. Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by this Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.

D. Workmanship and Materials:

a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.

b. All work shall be performed in accordance with the best standards of practice relating to the trade.

E. Contractor Qualifications:

a. Contractor shall provide document or resume including at least the following items:

i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.

ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.

iii. Contractor is bondable for the work to be performed.

iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.

v. Listing of suppliers where materials will be obtained for use on this Project.

vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the Irrigation Association. This person shall be on Project site at least 75% of each working day.

vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.

viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall have certificates designated below.

1.7 DELIVERY-STORAGE-HANDLING

A. During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, vandalism, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new at Contractor's expense.

1.8 SEQUENCING

A. Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleeving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.

1.9 WARRANTY

A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settled from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.

1.10 OWNER'S INSTRUCTION

A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.

1.11 MAINTENANCE

A. Furnish the following items to Owner's Representative:

a. Two quick coupler keys with hose swivels.

b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.

B. Provide the following services:

a. Winterize entire irrigation system installed under this contract. Winterize by 'blow-out' method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuating system of all water pressure regulation devices. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

PART 2 - PRODUCTS

2.1 GENERAL NOTES

A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.

2.2 POINT OF CONNECTION

A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection. Contractor shall install new main line as indicated.

2.3 CONNECTION ASSEMBLY

A. Secondary water shall be used on this Project. Install filter and RPZ as needed.

2.4 CONTROL SYSTEM

A. Power supply to the irrigation controller shall be provided for by this Contract.

B. Controller shall be as specified in the drawings. Controller shall be surge protected.

a. Installation of wall-mount/ground pedestal timer controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount/ground pedestal timer controllers shall be 120 VAC unless otherwise noted.

b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Paige Electric Co., LP specification number P7079D.

a. A minimum of 24" of additional wire shall be left at each valve, each splice box and at each controller.

b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare/extra wire (3 ft.) shall be looped within each valve box of the grouping it is to service.

D. RCV wire splicing connectors shall be 3M brand DBY or DBR. Where splices occur between controller and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped 'WIRE SPLICE' or 'WS' on box lid.

2.5 SLEEVING

A. Contractor shall be responsible to protect existing underground utilities and components. Sleeving minimum size shall be 2". Sleeving 2" through 4" in size shall be S/40 PVC solvent weld. Sleeving 6" and larger shall be CL 200 PVC gasketed. Sleeve diameter shall be at least two times the diameter of the pipe within the sleeve. Sleeves shall be extended 6" minimum beyond walk or edge of pavement. Wire or cable shall not be installed in the same sleeve as piping, but shall be installed in separate sleeves. Sleeve ends on sleeve sizes 4" and larger shall be capped with integral corresponding sized PVC slip cap, pressure fit, until used, to prevent contamination. Sleeves shall be installed at appropriate depths for main line pipe or lateral pipe.

2.6 MAIN LINE PIPE

A. All main line pipe 4" and larger shall be Class 200 gasketed bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4"	8 GPM
1"	12 GPM
1-1/2"	30 GPM
2"	53 GPM
2-1/2"	75 GPM
3"	110 GPM
4"	180 GPM

b. Main line pipe shall be buried with 24" cover

2.7 MAIN LINE FITTINGS

A. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.

2.8 ISOLATION VALVES

A. Isolation valves 3" and larger shall be Waterous brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.

B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valves shall be installed with S/80 PVC TOE Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the 'off' position.

2.9 MANIFOLDS

A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the box without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold isolation valve as shown in details. Manifold Main Line (or Sub-Main Line) and all manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A. Quick coupler valve shall be attached to the manifold sub-main line using a Lasco G17S212 swing joint assembly with snap-lock outlet and brass stabilizer elbow. Quick coupler valve shall be placed within a Carson 10" round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in ½" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12-18" of cover typically. Lateral pipe shall be ¼", 1", 1 ¼", 1 ½" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

A. All lateral line fittings shall be S/40 PVC

2.14 SPRAY SPRINKLERS

A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

A. Rainbird valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they cover. Valve box shall be sized large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or barked areas. Contractor shall provide extensions or stack additional valve boxes as necessary to bring valve box pit to proper grade.

2.16 IMPORT BACKFILL

A. All main line pipe, lateral line pipe and other irrigation elements shall be bedded and backfilled with clean soil, free of rocks 1" and larger. Contractor shall furnish and install additional backfill material as necessary due to rocky conditions. Trenches and other elements shall be compacted and/or water settled to eliminate settling. Debris from trenching operations un-usable for fill shall be removed from project and disposed of properly by Contractor.

2.17 OTHER PRODUCTS

A. Substitution of equivalent products is subject to the OAR's approval and must be designated as accepted in writing.

a. The Contractor shall provide materials to make the system complete and operational.

PART 3 - EXECUTION

3.1 PREPARATION

A. Contractor shall repair or replace work damaged by irrigation system installation. If damaged work is new, repair or replacement shall be performed by the original installer of that work. The existing landscape of this Project shall remain in place. Contractor shall protect and work around existing plant material. Coordination of trench and valve locations shall be laid out for the OAR prior to any excavation occurring. Plant material deemed damaged by the OAR shall be replaced with new plant material at Contractor's expense. Contractor shall not cut existing tree roots larger than 2" to install this Project. Route pipe, wire and irrigation elements around tree canopy drip line to minimize damage to tree roots. Contractor shall have no part of existing system used by other portions of site landscape without water for more than 24 hours at a time.

3.2 TRENCHING AND BACKFILLING

A. Pulling of pipe shall not be permitted on this project. Over excavate trenches both in width and depth. Ensure base of trench is rock or debris free to protect pipe and wire. Grade trench base to ensure flat, even support of piping. Backfill with clean soil or import material. Contractor shall backfill no less than 2" around entire pipe with clean, rock free fill. Main line piping and fittings shall not be backfilled until OAR has inspected and pipe has passed pressure testing. Perform balance of backfill operation to eliminate any settling.

3.3 SLEEVING

A. Sleeve all piping and wiring that pass under paving or hardscape features. Wiring shall be placed in separate sleeving from piping. Sleeves shall be positioned relative to structures or obstructions to allow for pipe or wire within to be removed if necessary.

3.4 GRADES AND DRAINAGE

A. Place irrigation pipe and other elements at uniform grades. Winterization shall be by evacuation with compressed air. Automatic drains shall not be installed on this Project. Manual drains shall only be installed at POC where designated on Construction Drawings.

3.5 PVC PIPE

A. Install pipe to allow for expansion and contraction as recommended by pipe manufacturer.

B. Install main line pipes with 18" of cover, lateral line pipes with 12" of cover.

C. Drawings show diagrammatic or conceptual location of piping - Contractor shall install piping to minimize change of direction, avoid placement under large trees or large shrubs, avoid placement under hardscape features.

D. Plastic pipe shall be cut squarely. Burrs shall be removed. Spigot ends of pipes 3" and larger shall be beveled.

E. Pipe shall not be glued unless ambient temperature is at least 50 degrees F. Pipe shall not be glued in rainy conditions unless properly tented. All solvent weld joints shall be assembled using IPS 711 glue and P70 primer according to manufacturer's specification, no exceptions. All workers performing glue operations shall provide evidence of certification. Glued main line pipe shall cure a minimum of 24 hours prior to being energized. Lateral lines shall cure a minimum of 2 hours prior to being energized and shall not remain under constant pressure unless cured for 24 hours.

F. Appropriate thrust blocking shall be performed on fittings 3" and larger. All threaded joints shall be wrapped with Teflon tape or paste unless directed by product manufacturer or sealing by o-ring.

3.6 CONTROLLERS

A. All grounding for pedestal controllers shall be as directed by controller manufacturer and ASIC guidelines, not to exceed a resistance reading of 5 OHMs.

B. Locate controllers in protected, inconspicuous places, when possible. Coordinate location of pedestal controllers with Landscape Architect to minimize visibility.

C. Coordinate location of wall mount controllers with building or electrical Contractor to facilitate electrical service and future maintenance needs. Wall mount shall be securely fastened to surface. If exterior mounted, wall mount controllers shall have electrical service wire and field control wire in separate, appropriate sized weatherproof electrical conduit, PVC pipe shall not be used.

D. Wiring under hardscape surfaces shall be placed continuously in conduit. Contractor shall be responsible to coordinate sleeving needs for conduit or sweeps elbows from exterior to interior of building.

E. Pedestal controllers shall be placed upon VIT-Strong Box Quick Pad as per manufacturer's recommendations. Controllers shall be oriented such that Owner's Representative maintenance personnel may access easily and perform field system tests efficiently.

F. Place Standard valve box at base of controller or nearby to allow for three to five feet of slack field control wire to be placed at each controller. This Contractor shall provide conduit access if needed for Electrical Contractor. Electrical supply and installation, as well as hook-up to controller shall be by this Contractor.

G. Electrical contractor is in charge of providing 1.5" conduit from controller to outside landscape area. Provide power and room for controller. Provide ethernet to hardwire power into the controller.

3.7 VALVES

A. Isolation valves, remote control valves, and quick coupler valves shall be installed according to manufacturer recommendation and Contract Specifications and Details.

B. Valve boxes shall be set over valves so that all parts of the valve can be reached for service.

C. Valve box and lid shall be set to be flush with finished grade. Only one remote control valve may be installed in a valve box. Place a minimum of 4" of ¼" washed gravel beneath valve box for drainage. Bottom of remote control valve shall be a minimum of 2" above gravel.

3.8 SPRINKLER HEADS

A. No sprinkler shall be located closer than 6" to walls, fences, or buildings.

B. Heads adjacent to walks, curbs, or paths shall be located at grade and 2" away from hardscape.

C. Control valves shall be opened. Then fully flush lateral line pipe and swing joints prior to installation of sprinklers.

D. Spray heads shall be installed and flushed again prior to installation of nozzles.

E. Contractor shall be responsible for adjustment if necessary due to grade changes during landscape construction.

3.9 FIELD QUALITY CONTROL

A. Main line pipes shall not be backfilled or accepted until the system has been tested for 2 hours at 100 psi.

B. Main line pressure test shall include all pipe and components from the point of connection to the upstream side of remote control valves. Test shall include all manifold components under constant pressure. Piping may be tested in sections that can be isolated.

C. Contractor shall provide pressurized water pump to increase or boost pressure where existing static pressure is less than 100 psi.

D. Schedule testing with OAR 48 hours in advance for approval.

E. Leaks or defects shall promptly be repaired or rectified at the Contractors expense and retested until able to pass testing.

F. Grounding resistance at pedestal controller shall also be tested and shall not exceed 5 OHMs.

3.10 ADJUSTMENT

A. Sprinkler heads shall be adjusted to proper height when installed. Changes in grade or adjustment of head height after installation shall be considered a part of the original contract and at Contractor's expense.

B. Adjust all sprinkler heads for arc, radius, proper trim and distribution to cover all landscaped areas that are to be irrigated.

C. Adjust sprinklers so they do not water buildings, structures, or other hardscape features.

D. Adjust run times of station to meet needs of plant material the station services.

3.11 CLEANING

A. Contractor shall be responsible for cleanliness of jobsite. Work areas shall be swept cleanly and picked up daily.

B. Open trenches or hazards shall be protected with yellow caution tape.

C. Contractor is responsible for removal and disposal of offsite trash and debris generated as a result of this Project.

D. OAR shall perform periodic as well as a final cleanliness inspection.

E. Contractor shall leave Project in at least a 'broom clean' condition.

END OF SECTION

WATERING SCHEDULE

90 Day Establishment Period Irrigation Schedule

Hi/Low Water Use Zones	TYPE	IR HEAD	AMT. H20	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
Hi Water Use	TURF	MP ROTATOR	.5 INCH	45 MIN.	45 MIN.	45 MIN.	45 MIN.	45 MIN.	45 MIN.	45 MIN.	Participate in a water check to determine
Medium to Low Water Use	SHRUBS	DRIP	2 GAL/HR.		2 HOURS			2 HOURS			precipitation rate of sprinkler system.
Xeric Water Use	SHRUBS	DRIP	2 GAL/HR.		2 HOURS						

Note: Begin irrigation 4:00 am. Use cycle and soak method in clay soils-divide into 3 waterings for each turf irrigation event. Shrubs to be watered so soil is moist 6" below root ball. Do not overwater shrubs, allow to dry between waterings especially in clay soils. Watch for water stress.

Regular Irrigation Schedule: Begin Spring Watering May 15 (Turf irrigation event once every 5-7 days; Shrubs 2-4 times/month)

Hi/Low Water Use Zones	TYPE	IR HEAD	AMT. H20	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
Hi Water Use	TURF	MP ROTATOR	5 INCH		60 MIN.						Participate in a water check to determine
Medium to Low Water Use	SHRUBS	DRIP	2 GAL/HR.			2 HOURS					precipitation rate of sprinkler system.
Xeric Water Use	SHRUBS	DRIP	No Water								

Note: Begin irrigation 4:00 am. Use cycle and soak method in clay soils-divide into 3 waterings for each turf irrigation event.
Do not overwater shrubs, allow to dry between waterings especially in clay soils. Watch for water stress. Days of watering may vary based on local restrictions

Regular Irrigation Schedule: Begin Summer Watering June 15 (Turf irrigation event once every 2-3 days; Shrubs 1 time/week)

Hi/Low Water Use Zones	TYPE	IR HEAD	AMT. H20	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
Hi Water Use	TURF	MP ROTATOR	.5 INCH		60 MIN.		60 MIN.		60 MIN.		Participate in a water check to determine
Medium to Low Water Use	SHRUBS	DRIP	2 GAL/HR.			2 HOURS					precipitation rate of sprinkler system.
Xeric Water Use	SHRUBS	DRIP	2 GAL/HR.			1 HOUR					

Note: Begin irrigation 4:00 am. Use cycle and soak method in clay soils-divide into 3 waterings for each turf irrigation event.
Do not overwater shrubs, allow to dry between waterings especially in clay soils. Watch for water stress. Days of watering may vary based on local restrictions
Reference Utah DNR weekly watering guide: https://conservewater.utah.gov/weekly-lawn-watering-guide/

Regular Irrigation Schedule: Begin Fall Watering September 1-End Fall Watering October 15 (Turf irrigation event once every 5-7 days; Shrubs 2-4 time/month)

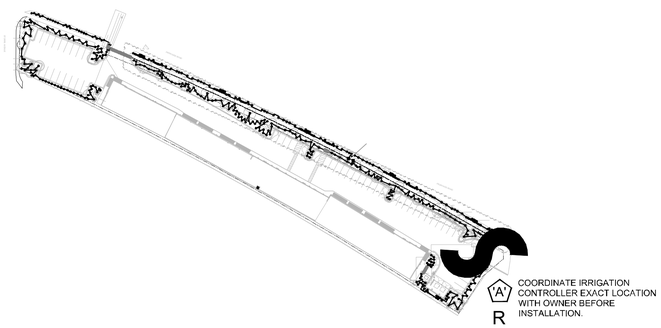
Hi/Low Water Use Zones	TYPE	IR HEAD	AMT. H20	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
Hi Water Use	TURF	MP ROTATOR	.5 INCH		60 MIN.						Participate in a water check to determine
Medium to Low Water Use	SHRUBS	DRIP	2 GAL/HR.			2 HOURS					precipitation rate of sprinkler system.
Xeric Water Use	SHRUBS	DRIP	No Water								

Note: Begin irrigation 4:00 am. Use cycle and soak method in clay soils-divide into 3 waterings for each turf irrigation event.
Do not overwater shrubs, allow to dry between waterings especially in clay soils. Watch for water stress. Days of watering may vary based on local restrictions

IRRIGATION NOTES

1. BEFORE WORK IS TO COMMENCE, BLUE STAKES/DIG LINE IS TO BE CALLED AND NOTIFIED. IF ANY DAMAGE TO UTILITIES HAPPEN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR IT AT THEIR EXPENSE WITH NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR SHALL APPLY AND PAY FOR ALL NECESSARY PERMITS IN ACCORDANCE WITH CITY AND/OR COUNTY CODES AND COMPLY WITH SPECIFICATIONS AND DRAWINGS.
3. INVESTIGATE TO MAKE SURE THAT THE IRRIGATION SYSTEM IS, IN FACT, BEING CONNECTED TO A SECONDARY SYSTEM. IF IT IS NOT CONNECTED TO SECONDARY, CONTACT THE OWNER AND LANDSCAPE ARCHITECT TO COORDINATE A CULINARY SYSTEM AND REQUIRED COMPONENTS. A FUNCTIONING AMIAD FILTER IS TO BE USED AT THE POINT OF CONNECTION.
4. VERIFY THAT THE POINT OF CONNECTION IS IN THE CORRECT LOCATION BEFORE INSTALLATION. ALL CONNECTIONS ON THIS PROJECT ARE TO SECONDARY WATER AND SHOULD BE NOTED AS SUCH; THEREFORE, ALL PARTS MUST MEET WATER STANDARDS THAT PERTAIN TO SECONDARY WATER.USE PURPLE VALVE BOXES FOR SECONDARY WATER SYSTEMS.
5. ON OCCASION AND FOR GRAPHIC PURPOSES ONLY, THE IRRIGATION SYSTEM MIGHT BE SHOWN IN HARDSCAPE AREAS. THIS IRRIGATION IS TO BE PLACED IN LANDSCAPED AREAS ON THE PROPERTY SITE.
6. CONTRACTOR SHALL USE ONLY COMMERCIAL GRADE IRRIGATION PRODUCTS. THIS INCLUDES PIPE TO BE SCHEDULE 40 PVC OR BETTER. NO POLY PIPE IS TO BE USED. FITTINGS UP TO 1-1/2" MUST BE SCHEDULE 40 OR BETTER. FITTINGS LARGER THAN 1-1/2" SHALL BE SCHEDULE 80 OR BETTER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ACCURATE COUNTS AND QUANTITIES OF ALL IRRIGATION MATERIALS FOR BIDDING AND INSTALLATION.
7. MAIN LINES SHALL BE A MINIMUM OF 24" DEEP AND LATERAL LINES A MINIMUM OF 12" DEEP. NO ROCK GREATER THAN 1/2" DIAMETER SHALL BE ALLOWED IN TRENCHES. TRENCHING BACKFILL MATERIAL SHALL BE COMPACTED TO PROPER FINISHED GRADE.
8. NO IRRIGATION MAIN LINE MAY BE LOCATED WITHIN 5 FEET OF ANY STRUCTURE.
9. TO AVOID PIPE DAMAGE, ADJUST LOCATION OF PIPE TO NOT BE DIRECTLY UNDER PLANT MATERIALS. VALVE BOXES ARE PREFERRED TO BE IN PLANTER BEDS INSTEAD OF THE LAWN. SYSTEM IS TO BE WINTERIZED IN THE LATE FALL.
10. PLAN INDICATES 100% OR BETTER HEAD TO HEAD COVERAGE. SHOULD CONTRACTOR FIND DISCREPANCIES DUE TO NECESSARY FIELD ADJUSTMENTS, CONTACT LANDSCAPE ARCHITECT FOR IRRIGATION CORRECTION.
11. DRIP IRRIGATION TO BE INSTALLED PER DETAILS. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS. TUBING SHOULD REST TOWARD OUTER EDGE OF ROOTBALL AND NOT AGAINST TRUNK OF PLANT.
12. A QUICK COUPLER SHALL BE INSTALLED AT POINT OF CONNECTION TO ALLOW BLOW OUT OF SYSTEM BY AIR COMPRESSOR AT END OF EACH SEASON.
13. INSTALL SLEEVES FOR ALL PIPES AND WIRE CONDUIT THAT ARE PLACED UNDER PAVEMENT AND SIDEWALKS. SLEEVES SHALL BE 2 SIZES LARGER THAN PIPE BEING PLACED INTERNALLY. WIRE CONDUIT SHALL BE INSTALLED IN CLASS 200 PIPE. AT ANY DIRECTIONAL CHANGE THAT OCCURS, A JUNCTION BOX IS TO PLACED.
14. CONDUITS CAN NOT BE SHARED BY WATER AND ELECTRICAL LINES. ALL WIRE TO BE PUT IN PVC CONDUIT. ALL WIRE CONNECTIONS TO BE PLACED IN A VALVE BOX. ALL WIRE CONNECTIONS TO USE WATERPROOF WIRE CONNECTORS WITH AT LEAST 3' OF EXTRA WIRE. PROVIDE PLENTY OF EXTRA WIRE AT EVERY DIRECTIONAL CHANGE. INSULATED 14 GAUGE COPPER TO BE USED FOR ALL CONTROL WIRES AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.
15. CONTRACTOR TO INSTALL LIGHTNING ARRESTOR AND GROUNDING RODS ON SITE PER MANUFACTURER'S RECOMMENDATIONS, SEE DETAILS.
16. CONTRACTOR TO SEPARATE SYSTEM (CONTROLLER, VALVES, AND DIFFERENT COLORED WIRE) FROM CITY MAINTAINED PROPERTY AND HOA/OWNER MAINTAINED PROPERTY.
17. DUCT TAPE ALL SLEEVES TO PREVENT SOIL OR OTHER DEBRIS ENTERING PIPE. IDENTIFY ALL SLEEVES BY WOOD OR PVC STAKES AND SPRAY PAINT WITH MARKING PAINT. REMOVE STAKES ONCE IRRIGATION SYSTEM IS COMPLETE.
18. TO PREVENT EROSION AND LOW POINT DRAINAGE CONTRACTOR SHALL INSTALL CHECK VALVES
19. LOCATE SPRAY HEADS NO CLOSER THAN 6" FROM WALLS, FENCES OR BUILDINGS AND 2" AWAY FROM WALKS, PATHS OR CURBS.
20. PRESSURE TEST MAINLINE FOR LEAKS PRIOR TO BACKFILLING. CONTACT LANDSCAPE ARCHITECT/OWNER AT THIS TIME FOR COMPLIANCE.
21. CONTRACTOR TO CONSULT WITH OWNER ON EXACT LOCATION OF CONTROLLER. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR AND OWNER FOR THE POWER SUPPLY. INSTALL ALL PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL INSTALL A RAIN SENSOR WITH THE CONTROLLER UNLESS OTHERWISE DIRECTED BY OWNER OR LANDSCAPE ARCHITECT.
22. WHEN PIPE SIZE IS LARGER THAN 3" MAKE SURE THAT THRUST BLOCKS ARE USED.
23. 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:

I	3/4"	8 GPM
II	1"	12 GPM
III	1-1/2'	30 GPM
IV	2"	53 GPM
V	2-1/2"	75 GPM
VI	3"	110 GPM
VII	4"	180 GPM



2" MAINLINE ROUTING ,CONTROLLER AND P.O.C. LOCATION OVERVIEW

ISSUE DATE	PROJECT NUMBER
10/15/2025	UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-16-2025
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

** THIS PRINT FROM PKJ DESIGN GROUP IS BASED ON CIVIL AND ARCHITECT INFORMATION ISSUED ON 10/15/25

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

N

0' 50' 100' 200' 400'

GRAPHIC SCALE: 1" = 100'

PROJECT INFORMATION

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
ATT: NATE HEAPS
801-362-1496
NATE@CALETACAPITAL.COM

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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 995-2217
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
10/15/2025
ELECTRONIC SEAL
STATE OF UTAH

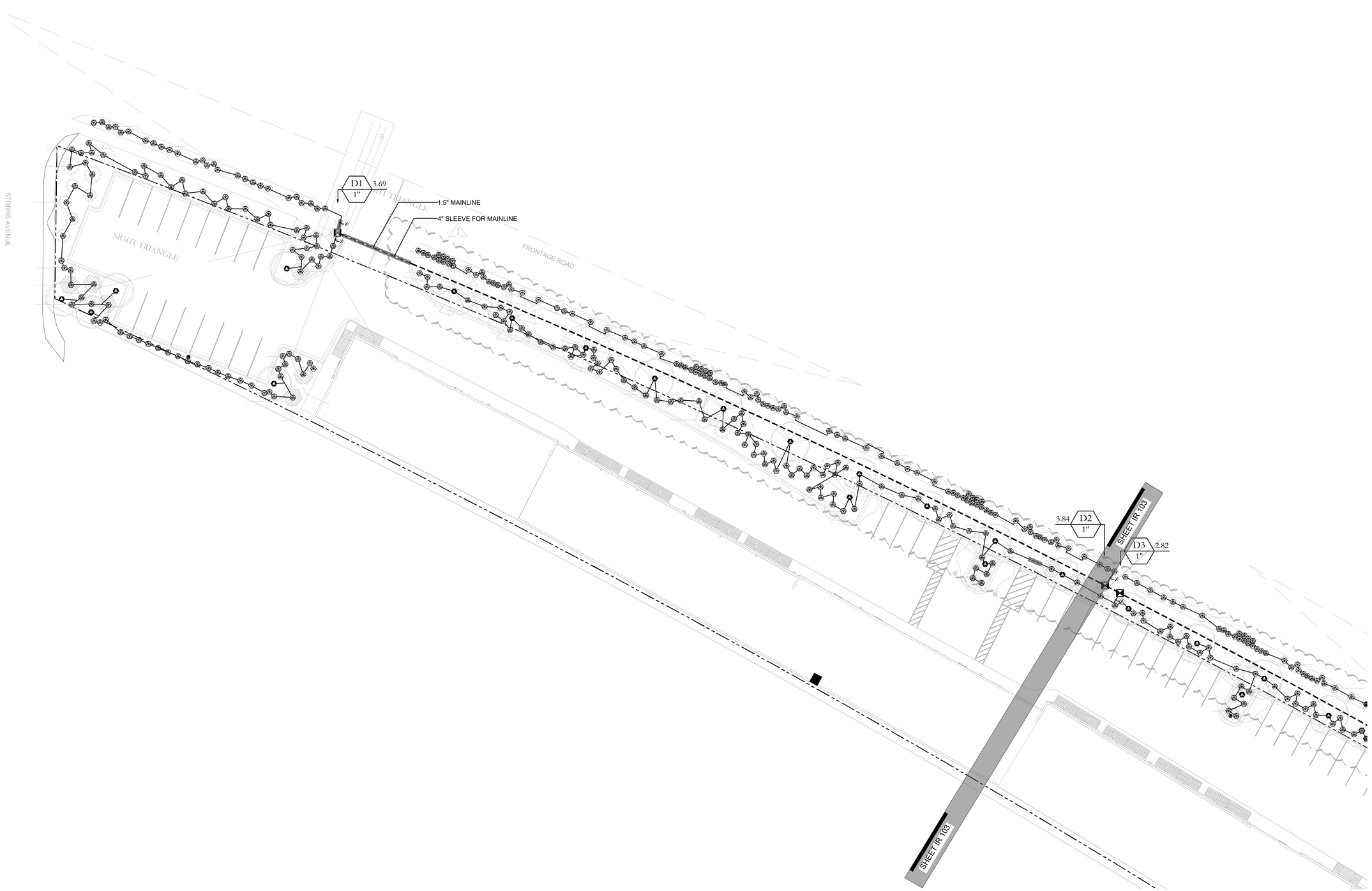
DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/15/2025

IRRIGATION COVER

CITY PERMIT SET

IR-101



ISSUE DATE	PROJECT NUMBER
10/16/2025	UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-16-2025
2		
3		
4		
5		
6		
7		

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N

0' 10' 20' 40' 80'

GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

IR-102
IR-103

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
ATT: NATE HEAPS
801-362-1496
NATE@CALETACAPITAL.COM

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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 995-2217
www.pkjdesigngroup.com

LICENSE STAMP

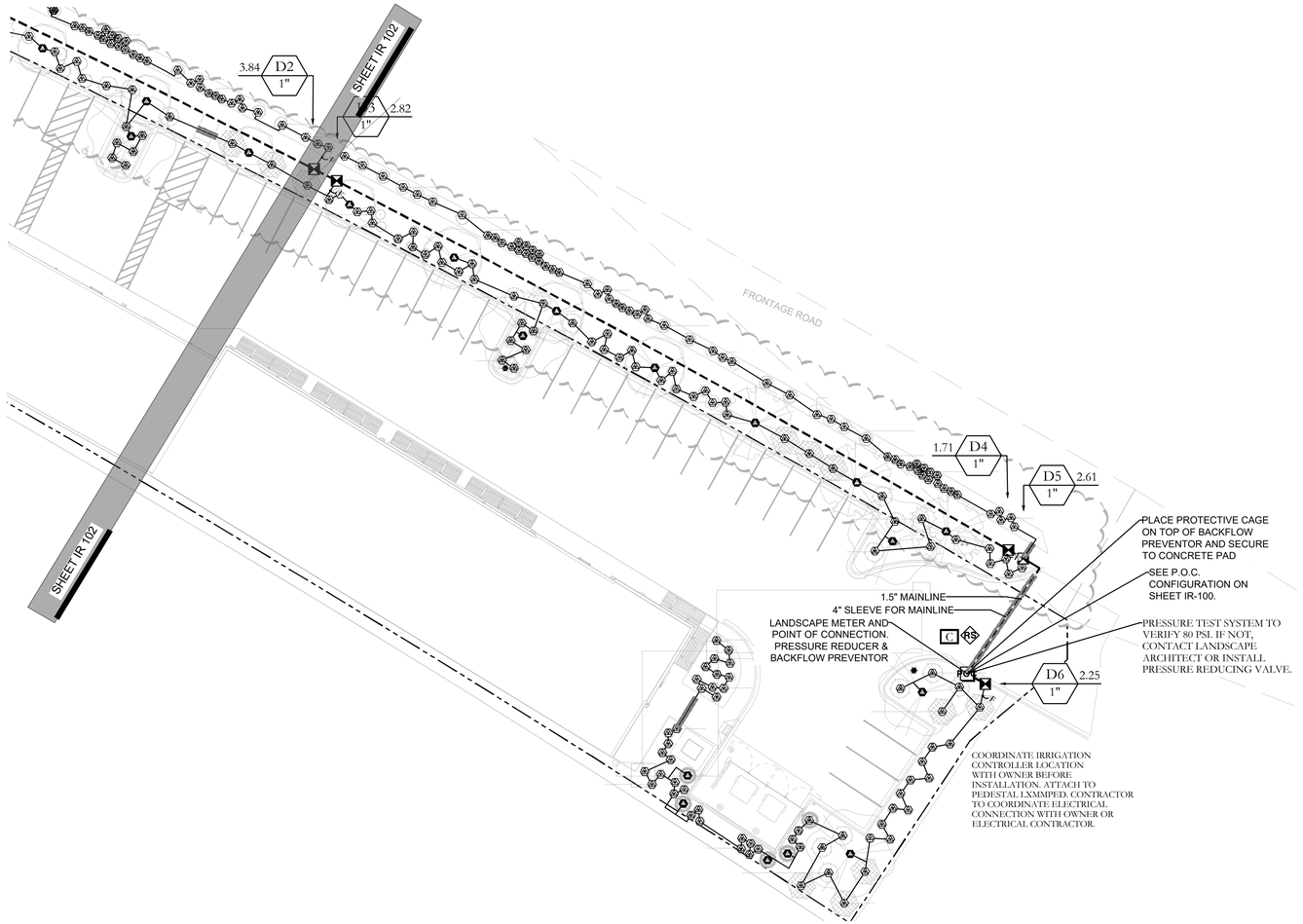
LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
8128121-5301
10/16/2025
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO	
PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/16/2025

IRRIGATION PLAN

CITY PERMIT SET

IR-102



IRRIGATION LEGEND

(NOTE: PLANT QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN CASE OF DISCREPANCY, THE DRAWING SHALL TAKE PRECEDENCE.) IF YOU NEED HELP WITH A WATER AUDIT CONSULTATION, OR A PLANT MAINTENANCE SCHEDULE, CONTACT PKJ@PKJDESIGNGROUP.COM)

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird XCZ-100-IVMQ (2) 1" Wide Flow IVM Drip Control Kit for Commercial Applications. 1in. Ball Valve with 1in. PESBIVM Smart Valve w/ factory installed IVM-SOL 0.3-20 gpm and 1in. Pressure Regulating 40psi Quick-Check Basket Filter 0.3-20 gpm	6
	Rain Bird XFS-09-18 Drip Ring(SHRUB)	461
	Rain Bird XFS-09-18 Drip Ring(TREE)	32

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird 44-RC 1" 1in. Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Thermoplastic Rubber Cover, and 2-Piece Body.	1
	Shut Off Valve	1
M	Rain Bird EFB-CP-PRS-D 1-1/2" 1in., 1-1/4", 1-1/2in., 2in. Brass Master Valve, that is Contamination Proof w/Self-Flushing Filter Screen. Globe Configuration, Reclaimed Water Compatible, and Purple Handle Cover Designates Non-Potable Water Use. With Pressure Regulator.	1
BF	Zurn 475 2-1/2" Reduced Pressure Backflow Preventer.	1
C	Rain Bird ESPLXIVM 60 Station, 2-Wire Controller w/ Smart Valve Technology. (1) ESPLXIVM 60-Station, Indoor/Outdoor, Outdoor Pedestal Mount. System Requirements: Rain Bird LXIVM-XXX Integrated Valve Modules & 2-Wire Devices. Use Paige Electric Cable P7072D & Rain Bird WC20 Dry Splices ONLY. Ground System w/ (X) LXIVMSD Surge Device in Rain Bird Round Valve Boxes. Install Per Manufacturers Recommendations.	1
RS	Rain Bird WR2-RFS Wireless Rain/Freeze Sensor.	1
POC	Water Meter 2"	1
	Irrigation Lateral Line: PVC Schedule 40	637.8 lf
	Irrigation Lateral Line: PVC Schedule 40 3/4"	1,997 lf
	Irrigation Mainline: PVC Schedule 40	650.4 lf
	Pipe Sleeve: PVC Class 200 SDR 21 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	90.0 lf

Valve Callout
- # — Valve Number
- # — Valve Flow
- #" — Valve Size

ISSUE DATE
10/16/2025

PROJECT NUMBER
UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-16-2025
2		
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PLAN INFORMATION

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N

0' 10' 20' 40' 80'
GRAPHIC SCALE: 1" = 20'

PROJECT INFORMATION

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

IR-102
IR-103

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
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LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JEREMY AINSWORTH
812821-5301
10/16/2025
REGISTERED
STATE OF UTAH

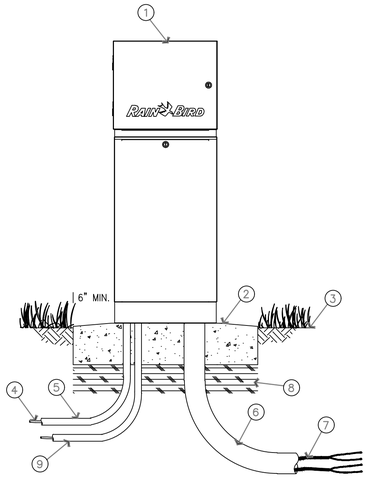
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PLOT DATE:	10/16/2025

IRRIGATION PLAN

CITY PERMIT SET

IR-103



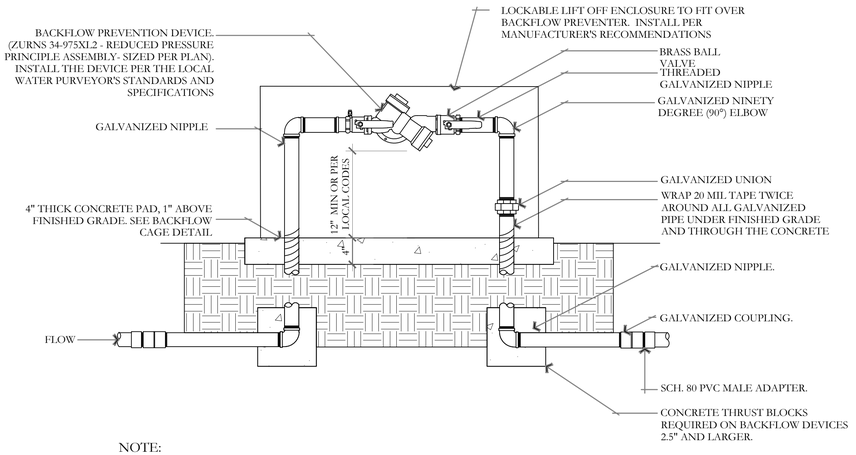
1. TWO-WIRE CONTROLLER: RAIN BIRD ESP-LXIVM/PRO WITH LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
2. CONCRETE PAD: 6-INCH MINIMUM THICKNESS, 6-INCHES LARGER ON ALL SIDES THAN PEDESTAL FOOTPRINT
3. FINISH GRADE
4. POWER SUPPLY WIRE
5. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY
6. 2-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR TWO-WIRE CABLE
7. MAXICABLE TWO-WIRE PATH TO FIELD DEVICES USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.
8. COMPACTED SUBGRADE
9. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR GROUND

NOTES:
1. ESP-LXIVM CONTROLLER IS AVAILABLE IN TWO MODELS. THE LXIVM WITH 60 STATIONS AND THE LMIVM-PRO WITH 240 STATIONS. REFER TO THE CHART BELOW FOR DIFFERENCES BETWEEN THE TWO MODELS.
2. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

KEY SPECIFICATIONS

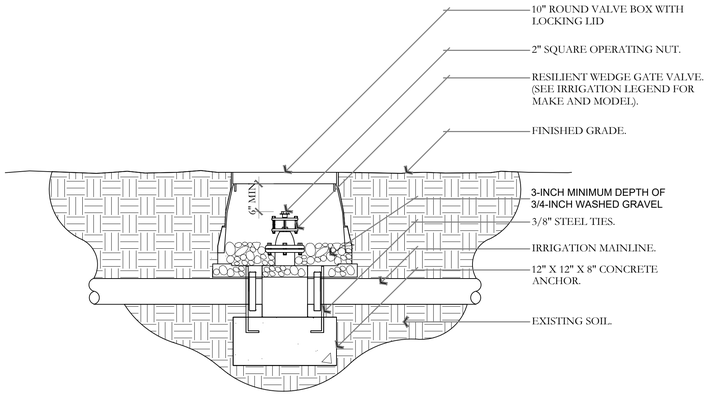
FEATURE / MODEL	MAX PROGRAMS	MAX STATIONS	MAX SIMULSTATIONS	MASTER VALVES	FLOW SENSORS	WEATHER SENSORS
LX-IVM	10	60	8	5	5	4
LX-IVM PRO	40	240	16	10	10	8

A ESP-LXIVM/PRO TWO-WIRE CONTROLLER IN METAL PEDESTAL
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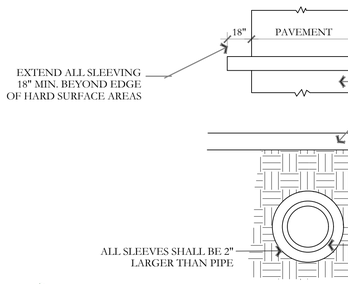
NOTE:
1. GALVANIZED NIPPLE SHALL EXTEND 12" PAST THE EDGE OF THE CONCRETE FOOTING.
2. SCH. 80 PVC MALE ADAPTER SHALL BE USED IN CONNECTION FROM GALVANIZE TO THE MAINLINE.
3. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE LANDSCAPE METER.
4. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED IN PLANTING AREA UNLESS APPROVED BY OWNER'S REPRESENTATIVE.
5. SEE DETAIL FOR BACKFLOW CAGE INSTALLATION.
6. ALL ASSEMBLY PARTS (THREADED NIPPLES, FITTINGS, ETC.) SHALL BE GALVANIZED OR BRASS PER LOCAL CODES AND REQUIREMENTS.
7. ALL BACKFLOW PREVENTION DEVICES SHALL HAVE FREEZE BLANKET INCLUDED UPON INSTALLATION.
8. ALL GALVANIZED CONNECTIONS SHALL TO BE MADE USING PIPE THREAD SEALANT. ALL SCH. 80 PVC TO GALVANIZED CONNECTIONS TO BE MADE USING TEFLON TAPE.

B BACKFLOW PREVENTION DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

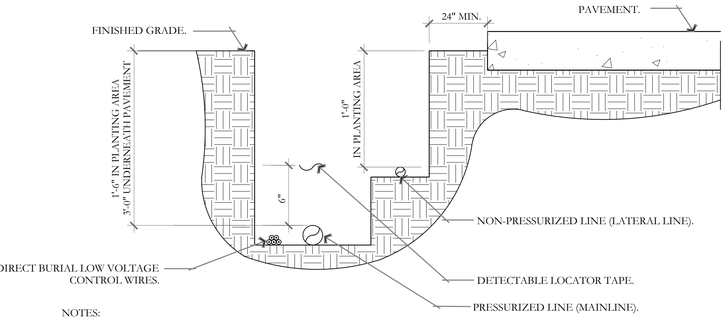


NOTES:
1. INSTALL GATE VALVE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
2. VALVE BOX SHALL BE WRAPPED WITH MINIMUM 3 MIL. THICK PLASTIC AND SECURE IT TO VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. VALVE BOX SHALL BE LOCATED IN PLANTING AREA.

C GATE VALVE AND ANCHOR DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



D TYPICAL SLEEVING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

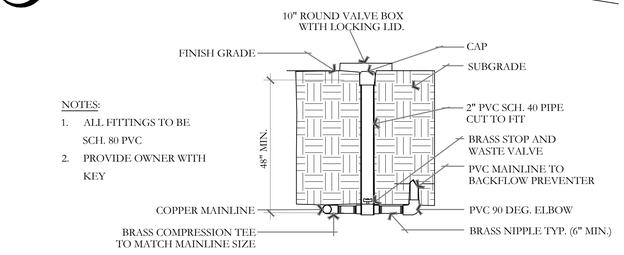


NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

E IRRIGATION TRENCHING DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

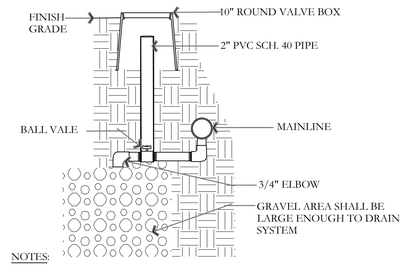
NOTES:
1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

G QUICK COUPLER DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

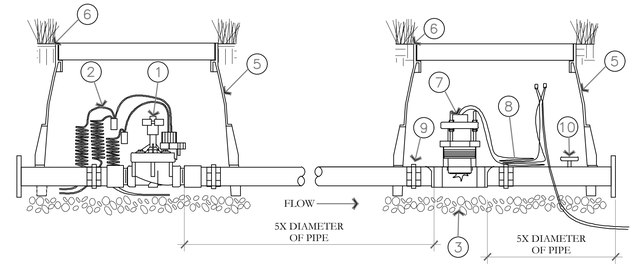
H STOP AND WASTE VALVE ASSEMBLY DETAIL
NOT TO SCALE — PKJ DESIGN GROUP



NOTES:
1. ALL FITTINGS TO BE SCH. 80 PVC
2. PROVIDE OWNER WITH KEY

F MANUAL DRAIN DETAIL
NOT TO SCALE — PKJ DESIGN GROUP

1. NORMALLY CLOSED MASTER VALVE(S)
2. 36-INCH LENGTH OF COILED WIRE TO SATELLITE CONTROLLER SPARE STATION
3. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
4. VALVE BOX WITH COVER - RAINBIRD JUMBO BOX
6. FINISH GRADE
7. RAIN BIRD FS SERIES FLOW SENSOR(S). SEE COVER SHEET FOR SIZE
8. 36-INCH LENGTH OF COILED MAXI-CABLE TO FLOW SENSING
9. PVC PIPE UNION
10. BRASS BALL VALVE



I MASTER VALVE AND FLOW SENSOR DETAIL
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ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
10/15/2025	UT25054	** THIS PRINT FROM PKJ DESIGN GROUP IS BASED ON CIVIL AND ARCHITECT INFORMATION ISSUED ON 10/15/25	ROCKPORT INDUSTRIAL 265 W. FRONTAGE ROAD AMERICAN FORK, UTAH	ROCKPORT, LLC ATT: NATE HEAPS 801-362-1496 NATE@CALETACAPITAL.COM	PKJ DESIGN GROUP Landscape Architecture / Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 995-2217 www.pkjdesigngroup.com	JEREMY ANDWORTH 8128321 6301 10/15/2025 ELECTRONIC SEAL STATE OF UTAH	PM: JTA DRAWN: ACP CHECKED: JMA PLOT DATE: 10/15/2025

NO.	REVISION	DATE
1	CITY COMMENTS	10-16-2025
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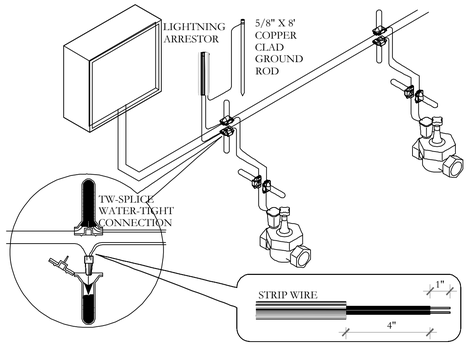
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IRRIGATION DETAILS

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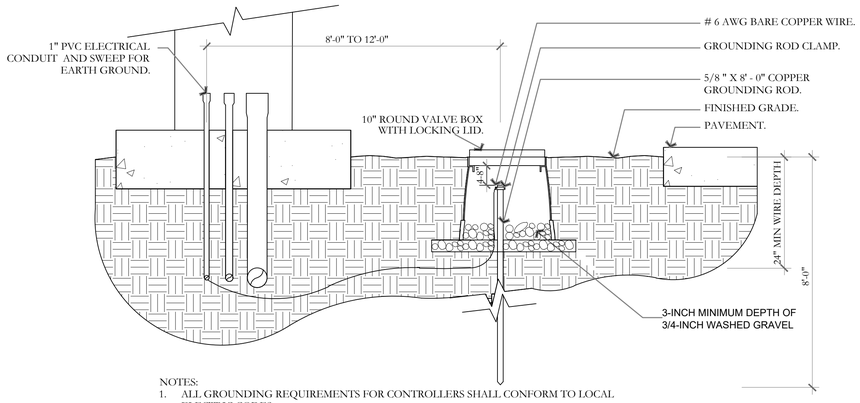
IR-501



J 2-WIRE CONNECTION DETAIL

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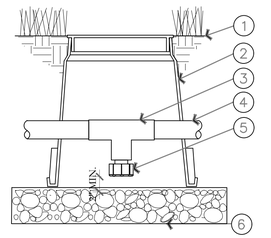


NOTES:
1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS THE IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
4. INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

K GROUNDING ROD DETAIL

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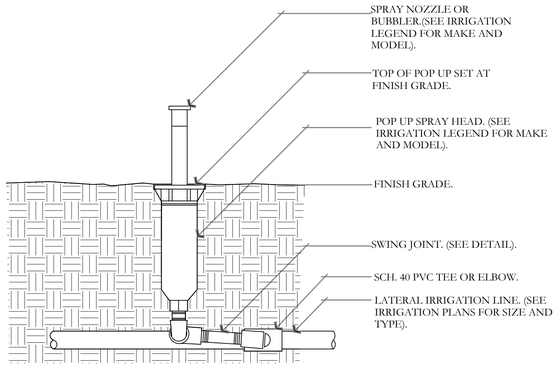


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE: RAIN BIRD 16A-FDV-075
6. 6-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL

L MANUAL LINE DRAIN VALVE DETAIL

NOT TO SCALE

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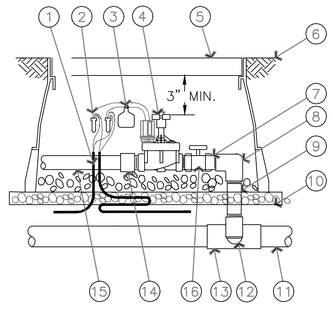


NOTE:
1. 4" POP UPS SHALL BE USED IN TURF AREAS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

O POP UP-SPRAY HEAD DETAIL

NOT TO SCALE

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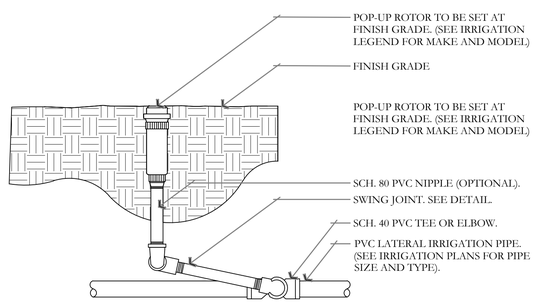


1. 36-INCH LENGTH OF 2-WIRE CABLE
2. WATERPROOF CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM-SOL
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
11. PVC MAINLINE PIPE SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
12. PVC SCH 40 TEE OR ELL
13. PVC SCH 40 MALE ADAPTER
14. PVC LATERAL PIPE
15. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
16. BRASS BALL VALVE

M ELECTRIC REMOTE-CONTROL VALVE PEB OR PESB SERIES WITH IVM-SOL

NOT TO SCALE

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NOTES:
1. ALL THREADED CONNECTION POINTS BETWEEN SCH. 40 PVC AND SCH. 80 PVC FITTING SHALL BE INSTALLED USING TEFLON TAPE.
2. CONTRACTOR SHALL COMPACT SOIL AROUND ROTOR AND RISER PRIOR TO PLANTING, PLUGGING, SEEDING, OR LAYING OF SOD.

N ROTOR HEAD DETAIL

NOT TO SCALE

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ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
10/15/2025	UT25054	** THIS PRINT FROM PKJ DESIGN GROUP IS BASED ON CIVIL AND ARCHITECT INFORMATION ISSUED ON 10/15/25	ROCKPORT INDUSTRIAL 265 W. FRONTAGE ROAD AMERICAN FORK, UTAH	ROCKPORT, LLC ATT: NATE HEAPS 801-362-1496 NATE@CALETACAPITAL.COM	PKJ DESIGN GROUP Landscape Architecture / Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 995-2217 www.pkjdesigngroup.com	LICENSED LANDSCAPE ARCHITECT JEREMY AINSWORTH 8128744-5301 10/15/2025 STATE OF UTAH	PM: JTA DRAWN: ACP CHECKED: JMA PLOT DATE: 10/15/2025

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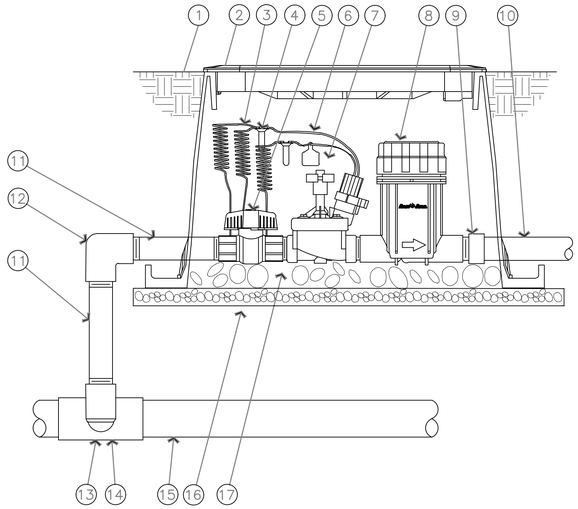
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IRRIGATION DETAILS

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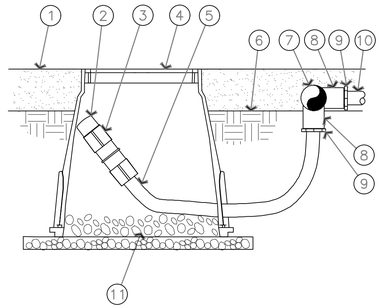


1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
5. 1-INCH BALL VALVE (INCLUDED IN XCZ-PRB-100-COM KIT)
6. ID TAG
7. REMOTE CONTROL VALVE: RAIN BIRD PESB (INCLUCED IN XCZ-PRB-100-COM KIT)
8. PRESSURE REGULATING AND FLOW INDICATING BASKET FILTER: RAIN BIRD XCZ-100-FLOW
9. PVC SCH 40 FEMALE ADAPTOR
10. LATERAL PIPE
11. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
12. PVC SCH 40 ELL
13. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
14. PVC SCH 40 TEE OR ELL
15. MAINLINE PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
17. PVC SCH 80 NIPPLE, CLOSE (INCLUDED IN XCZ-PRB-100-COM KIT)

P DRIP CONTROL ZONE KIT DETAIL

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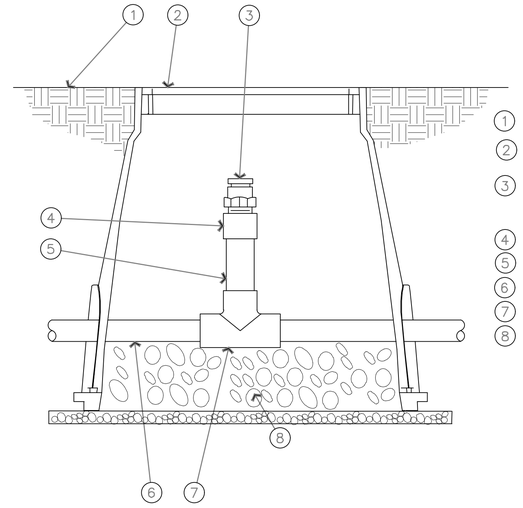
1. MULCH
2. FLUSH CAP FOR EASY FIT COMPRESSION FITTINGS: POTABLE:RAIN BIRD MDCFCAP
3. EASY FIT COUPLING: RAIN BIRD MDCFCOUP
4. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
5. ½" POLYETHYLENE TUBING: RAIN BIRD XF BLANK TUBING
6. FINISH GRADE
7. PVC EXHAUST HEADER
8. PVC SCH 40 TEE OR EL
9. BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
10. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV DRIPLINE
11. 3-INCH MINIMUM DEPTH OF 3/4 " WASHED GRAVEL

NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

Q ON-SURFACE DRIPLINE FLUSH POINT DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

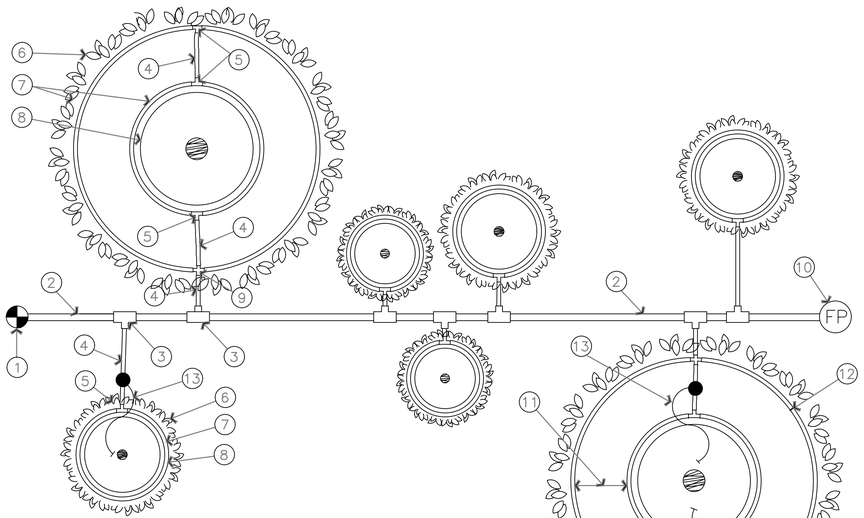


1. FINISH GRADE
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB 7XB
3. ¾" AIR RELIEF VALVE: RAIN BIRD ARV050 TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
4. PVC SCH 40 FEMALE ADAPTER
5. PVC SCH 80 RISER
6. PVC HEADER PIPE
7. PVC SCH 40 TEE
8. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

R AIR RELIEF VALVE DETAIL

NOT TO SCALE

PKJ DESIGN GROUP



1. RAIN BIRD CONTROL ZONE KIT (SIZED TO ACCOMIDATE LATERAL FLOW DEMAND)
2. PVC DRIP LATERAL PIPE
3. PVC SCH 40 TEE OR EL (TYPICAL)
4. ½" POLYETHYLENE TUBING: RAIN BIRD XF SERIES- S FOR COPPER SHEILD (TYPICAL)
5. BARB X BARB INSERT TEE: RAIN BIRD XFF-TEE (TYPICAL)
6. PROJECTED CANOPY LINE OF TREE OR SHRUB (TYPICAL)
7. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFCV SERIES PLACE AS SHOWN (LENGTH AS REQUIRED, TYPICAL)
8. ROOT BALL (TYPICAL)
9. BARB X BARB INSERT CROSS: RAIN BIRD XFD-CROSS (TYPICAL)
10. DRIPLINE FLUSH POINT (SEE RAIN BIRD DETAIL: "XFCV DRIPLINE FLUSH POINT WITH BALL VALVE")
11. SPACING PER SPECIFICATION
12. TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (QUANTITY AS REQUIRED, SEE NOTES 2-3 BELOW)
13. POINT SOURCE EMITTERS FOR ESTABLISHMENT PERIOD. REMOVE AFTER ESTABLISHMENT PERIOD.

NOTES:
1. INSTALL MULTIPLE RINGS AS REQUIRED TO PROVIDE IRRIGATION COVERAGE FROM ROOT BALL TO PROJECTED TREE CANOPY. REFER TO RAIN BIRD DESIGN GUIDELINES AND SPECIFICATIONS FOR RECOMMENDED SPACING BETWEEN RINGS.
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

S ON-SURFACE DRIPLINE TREE/SHRUB DETAIL

NOT TO SCALE

PKJ DESIGN GROUP

ISSUE DATE	PROJECT NUMBER
10/15/2025	UT25054

NO.	REVISION	DATE
1	CITY COMMENTS	10-16-2025
2		
3		
4		
5		
6		
7		

PLAN INFORMATION

** THIS PRINT FROM PKJ DESIGN GROUP IS BASED ON CIVIL AND ARCHITECT INFORMATION ISSUED ON 10/15/25

811 BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
1-800-662-4111
www.bluestakes.org

PROJECT INFORMATION

ROCKPORT INDUSTRIAL
265 W. FRONTAGE ROAD
AMERICAN FORK, UTAH

DEVELOPER / PROPERTY OWNER / CLIENT

ROCKPORT, LLC
ATT: NATE HEAPS
801-362-1496
NATE@CALETACAPITAL.COM

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LANDSCAPE ARCHITECT / PLANNER

PKJ DESIGN GROUP
Landscape Architecture / Planning & Visualization
3450 N. TRIUMPH BLVD. SUITE 102
LEHI, UTAH 84043 (801) 995-2217
www.pkjdesigngroup.com

LICENSE STAMP

LICENSED LANDSCAPE ARCHITECT
JOSEPH T. ANSWORTH
8128121-5301
10/15/2025
ELECTRONIC SEAL
STATE OF UTAH

DRAWING INFO

PM:	JTA
DRAWN:	ACP
CHECKED:	JMA
PLOT DATE:	10/15/2025

IRRIGATION DETAILS

CITY PERMIT SET

IR-503

10/15/2025 8:16:19 AM

ROCKPORT INDUSTRIAL
WILL GROUP - CALETA CAPITAL
AMERICAN FORK, UT

Next Step

Proceed to the Development Review Committee on 03/16/2026

American Fork City Development Review Committee
No comments → Planning and Zoning Reviewed copperman 03/09/2026
No comments → Engineering Division Reviewed rburkhill 03/10/2026



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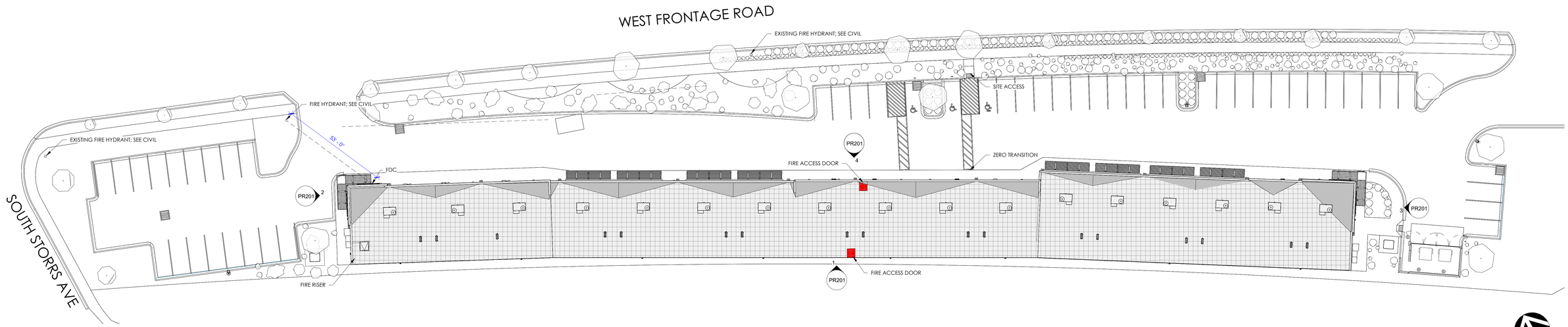
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WEST ELEVATION



EAST ELEVATION



1 PR001 **SITE PLAN**
1" = 20'-0"

NORTH

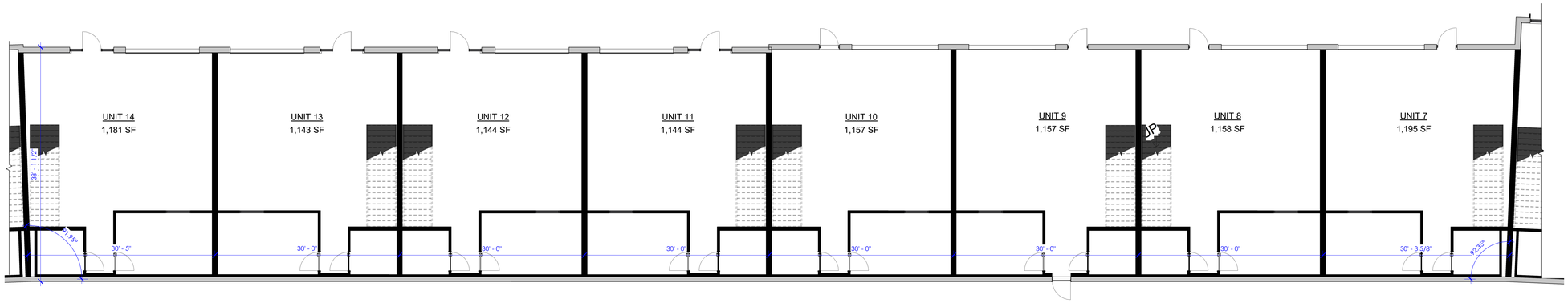
ROCKPORT INDUSTRIAL

SITE PLAN

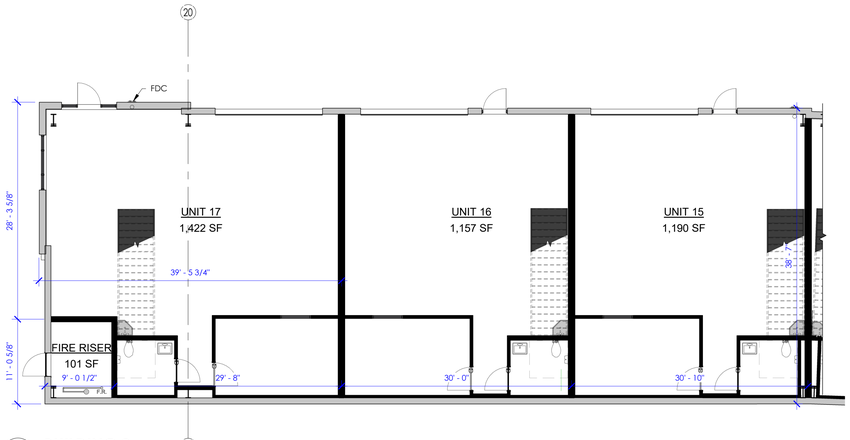
ae urbia ARCHITECTS & ENGINEERS

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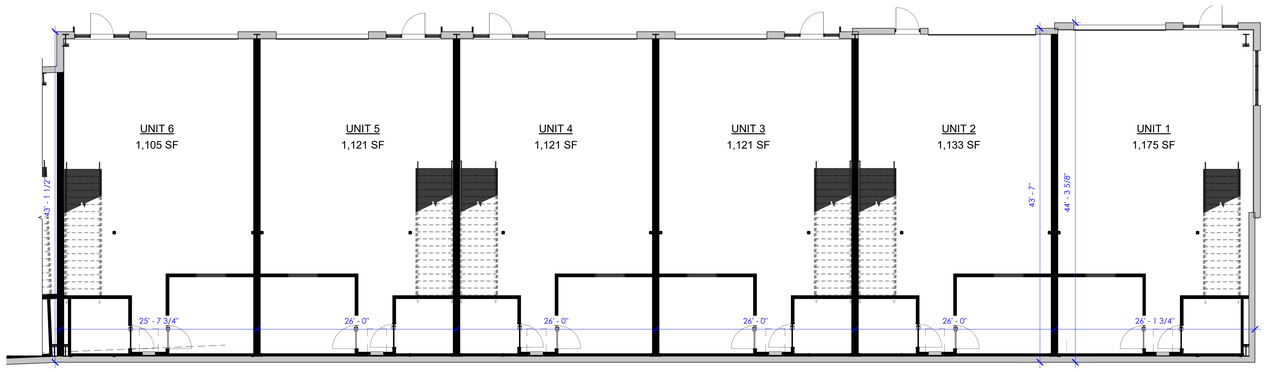
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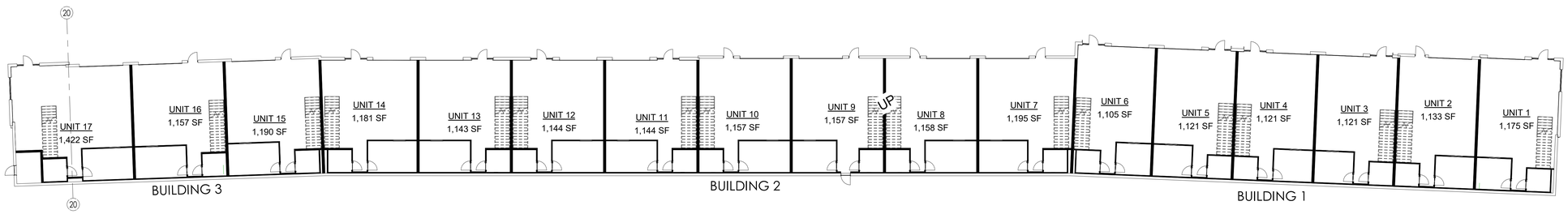
4 PR100 **BUILDING 2**
1/8" = 1'-0"



3 PR100 **BUILDING 3**
1/8" = 1'-0"



02 PR100 **BUILDING 1**
1/8" = 1'-0"



1 PR100 **AREA PLAN**
1/16" = 1'-0"

NOTE: MEZZANINE IS A TENANT OPTION; NOT TO BE CONSTRUCTED UNDER THE SHELL REVIEW
NOTE: OFFICE SPACE IS A TENANT OPTION; NOT TO BE CONSTRUCTED UNDER THE SHELL REVIEW

NORTH

0 8' 16' 32'
GRAPHIC SCALE

INITIAL GROSS AREA

NAME	AREA
UNIT 1	1,175 SF
UNIT 2	1,133 SF
UNIT 3	1,121 SF
UNIT 4	1,121 SF
UNIT 5	1,121 SF
UNIT 6	1,105 SF
UNIT 7	1,195 SF
UNIT 8	1,158 SF
UNIT 9	1,157 SF
UNIT 10	1,157 SF
UNIT 11	1,144 SF
UNIT 12	1,144 SF
UNIT 13	1,143 SF
UNIT 14	1,181 SF
UNIT 15	1,190 SF
UNIT 16	1,157 SF
UNIT 17	1,422 SF
FIRE RISER	101 SF
	19,925 SF

INITIAL AREAS MAY CHANGE

ROCKPORT INDUSTRIAL

AREA PLAN

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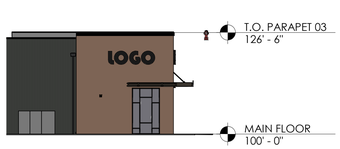
ae urbia ARCHITECTS & ENGINEERS

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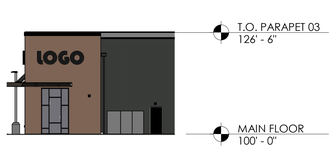


4 PR201 **OVERALL NORTH ELEVATION**
1/16" = 1'-0"





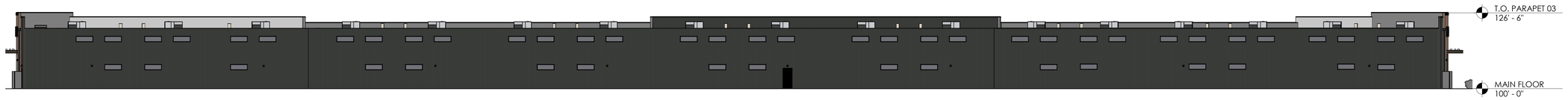
3 PR201 **EAST ELEVATION**
1/16" = 1'-0"





2 PR201 **WEST ELEVATION**
1/16" = 1'-0"





1 PR201 **OVERALL SOUTH ELEVATION**
1/16" = 1'-0"

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ROCKPORT INDUSTRIAL

PRESENTATION ELEVATIONS

ae urbia ARCHITECTS & ENGINEERS

American Fork City
Development Review Committee

No comments

Planning and Zoning
Reviewed
copperman 03/09/2026

Engineering Division
Reviewed
rburkhill 03/10/2026

No comments

Next Step

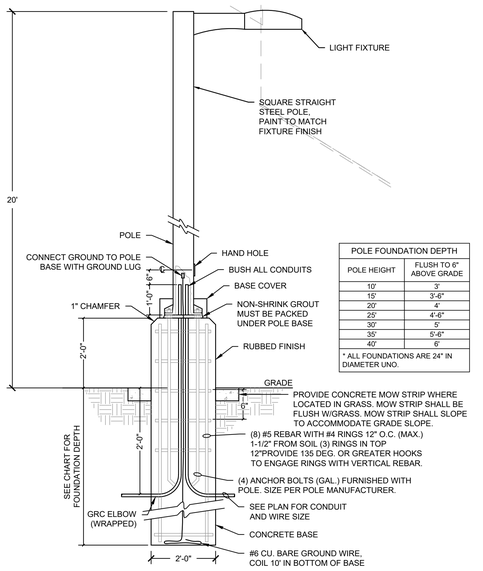
Proceed to the Development Review Committee on 03/16/2026

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Number Lamps	Lumens per Lamp	Wattage
	OP2	1	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON	GALN-SB1A-740-U-T2R-HSS	GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE (1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD	26	155	30.9
	OW1	0	COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)	AXCS2A	2A AXCENT SMALL LED WALLPACK WITH 4000K CCT AND 70 CRI LEDS	1	2560	20.7
	OW2	18	Performance IN Lighting	071500	MIMIK 10 FLAT M 10W 840 A/EW Iron gray	1	810	10
	OW3	12	Performance IN Lighting	071492	MIMIK 10 FLAT M 5W 840 A/EW White	1	473	5
	OP1	1	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON	GALN-SB1A-740-U-SLL-HSS	GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE (1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD	26	139	30.9
	OP3	1	COOPER LIGHTING SOLUTIONS - McGRAW-EDISON	GALN-SB1A-740-U-T4FT-HSS	GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE (1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD	26	138	30.9
1	SL1	2	Lithonia Lighting	DSX2 LED P1 27K 80CRI T5M	D-Series Size 2 Area Luminaire P1 Performance Package 2700K CCT 80 CRI Type 5 Medium	1	17261	134.5
1	SL2	2	Lithonia Lighting	DSX2 LED P1 27K 80CRI T5M	D-Series Size 2 Area Luminaire P1 Performance Package 2700K CCT 80 CRI Type 5 Medium	1	17261	134.5

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Back of Building	+	0.4 fc	2.2 fc	0.0 fc	N/A	N/A
Parking Area	+	0.6 fc	3.5 fc	0.0 fc	N/A	N/A
Property Line	+	0.2 fc	0.6 fc	0.0 fc	N/A	N/A
Security Property Line	+	0.2 fc	2.3 fc	0.0 fc	N/A	N/A
Side Walk Measured Data	+	0.2 fc	0.5 fc	0.0 fc	N/A	N/A
Walkway	+	1.3 fc	6.1 fc	0.0 fc	N/A	N/A

KEYED NOTES

1. LIGHT USED FOR REPRESENSTATION ONLY TO MATCH FOOT CANDLES MEASURED ON SITE.
2. CALCULATION POINT ADJUSTED TO MATCH MEASURED SITE DATA.

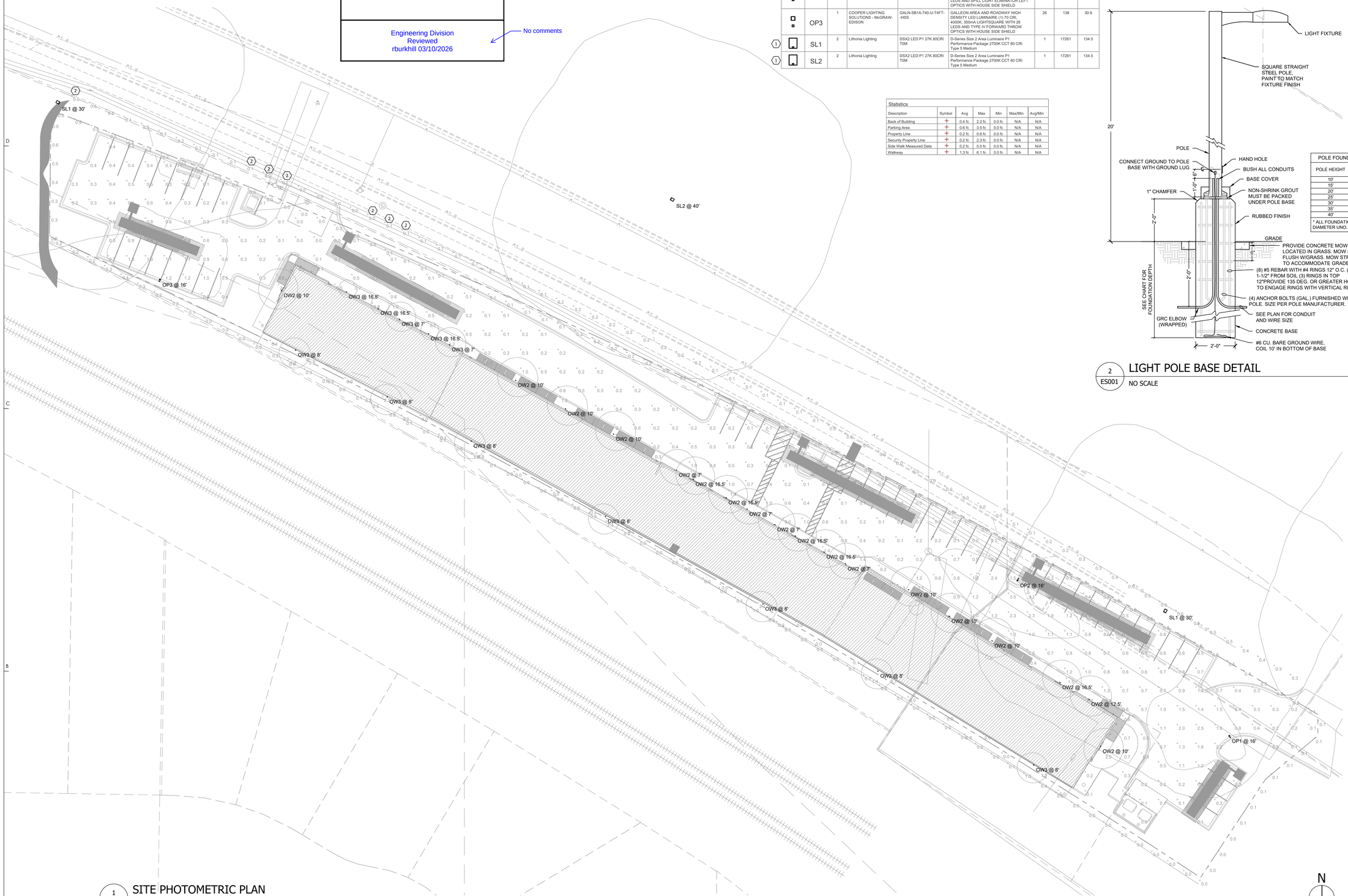


POLE FOUNDATION DEPTH	
POLE HEIGHT	FLUSH TO 6" ABOVE GRADE
10'	3'
15'	3'-6"
20'	4'
25'	4'-6"
30'	5'
35'	5'-6"
40'	6'

* ALL FOUNDATIONS ARE 24" IN DIAMETER UNO.

2 ES001 LIGHT POLE BASE DETAIL

NO SCALE



1 ES001 SITE PHOTOMETRIC PLAN

SCALE: 1" = 20'-0"

N

urbia ARCHITECTS & ENGINEERS
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801.746.0454
www.aeurbia.com

9/10/25
No. 13961352-2202
ANDREW POWELL
STATE OF UTAH

ROCKPORT INDUSTRIAL
WILL GROUP - CALETA CAPITAL
265 WEST FRONTAGE RD
AMERICAN FORK, UT

Revision Schedule		
MARK	DESCRIPTION	Revision Date

AE2024.248

DATE: **PROJECT ISSUE DATE**

SHEET #:

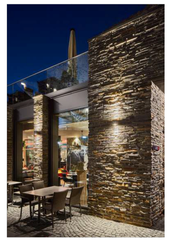
ES001

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187 E 2200 N
Lehi, Utah
(801) 420-2153

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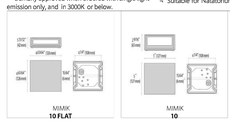
MIMIK 10

Type: OW3/OW2



Wall sconce series. Fixtures consist of:
- Multi-step powder-coat painting process, optimized against UV rays and corrosion.
- Copper-free precision die-cast aluminum housing and mounting plate.
- Extra-clear, flat, tempered silk-screened soda-lime glass diffuser.
- Micro-prismatic patterned, flat, tempered silk-screened soda-lime glass diffuser (FLAT versions).
- Custom molded, anti-aging gasket(s).
- Stainless steel external hardware.
- Custom MCPCB utilized to maximize heat dissipation and promote a long LED life.
- High-transmittance transparent optics.
- DarkSky approved when ordered with single light emission only, and in 3000K or below.
- Single (M) or dual (B) light emission.
- IESNA Type III light distribution (FLAT).
- IESNA Type II light distribution.
- 20° x 20° beam angle (C/I).
- Input voltage: 120-277 V (50 / 60 Hz), integral driver.
- Customizing facade faceplate available (ordered separately).
- Consult factory for dimming options, custom finishes (please specify RAL color), and non-cataloged CCT (Kelvin) options.
- Product meets Buy American Act requirements within AWEA.
- 5-year warranty.
- Marine Grade finish.
- Suitable for Natatorium applications.

FINISHES
- **AN-96** / Iron gray / Textured
- **GR-94** / Aluminum metallic / Textured
- **WH-87** / White / Textured
- **BK-81** / Black / Textured
- **RB-10** / Iron rust / Textured



Scan here for installation instructions

WATTAGE	
MIMIK 10 M T2	5W
MIMIK 10 M T3	10W
MIMIK 10 M C/I	5W
MIMIK 10 M C/I	10W
MIMIK 10 FLAT M	5W
MIMIK 10 FLAT M	10W
MIMIK 10 FLAT B	10W
MIMIK 10 B C/I	10W
MIMIK 10 B C/I+T3	10W

LUMEN OUTPUT		2700K	3000K	3500K	4000K
MIMIK 10 M T3	5W	292	314	336	358
MIMIK 10 M T3	10W	505	542	579	617
MIMIK 10 M C/I	5W	307	349	390	432
MIMIK 10 M C/I	10W	607	653	699	745
MIMIK 10 FLAT M	5W	440	451	462	473
MIMIK 10 FLAT M	10W	751	771	790	810
MIMIK 10 FLAT B	10W	857	880	902	925
MIMIK 10 B C/I	10W	725	779	833	888
MIMIK 10 B C/I+T3	10W	657	707	756	806

Revision 12
04/25

Project		Catalog #		Type	OP1-OP3
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 13

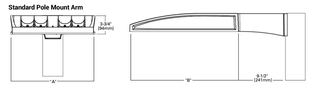
Product Certifications

Quick Facts
- Lumen packages range from 3,300 - 102,700 (33W - 658W)
- 17 optical distributions
- Efficacy up to 178 LPW

Connected Systems
- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern
Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

COOPER Lighting Solutions
+ @signify business

PSS0005082N page 1
May 28, 2025 8:23 PM

AMP
Electrical Engineering, LLC
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PROFESSIONAL ENGINEER
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WILL GROUP - CALETA CAPITAL
265 WEST FRONTAGE RD
AMERICAN FORK, UT

MARK	DESCRIPTION	Revision Date

Revision Schedule

AE2024.248

SITE PHOTOMETRIC SPEC SHEETS

DATE: **PROJECT ISSUE DATE**

SHEET #:

ES002

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