

# SILVER CREEK DESIGN

## Lot 7 & 8 Santaquin Peaks Industrial Park

### Santaquin, Utah

## Final Site Plan Submittal

May 2, 2025



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VICINITY MAP  
SCALE: NTS

#### PROJECT NOTES:

1. All work shall be performed in accordance with Santaquin City's Standard Specifications and Plans, adopted Building Codes and the Manufacturer's Installation Recommendations.
2. Contractor is responsible for obtaining all necessary permits including Building Permits, Notices of Intent (NOI).
3. Contractor shall be solely responsible for complying with all federal, state and local safety requirements including Occupational Safety and Health Act of 1970. The contractor shall exercise precaution always for the protection of persons (including employees) and property.
4. Contractor shall verify the location of all existing utilities including cables, conduits, pipes, water lines, gas lines, etc. and shall take proper precautions to avoid damage to such components.

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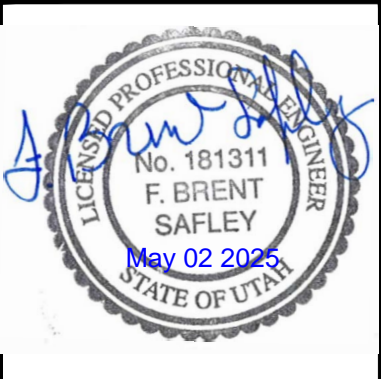


JOB #	24-003
PROJECT:	SILVER CREEK WAREHOUSE
STREET:	44 N Peaks Way
	Lot 7 & 8 Santaquin Peaks Industrial Park
CITY:	SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS	
DO NOT SCALE	
SHEET SIZE:	ARCH D 24X36

COVER SHEET

DATE	10/18/2024
PLAN SUBMITTAL DATES	
DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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DRAWN BY:	C. WINGER
ENGINEER:	B. SAFLEY

SHEET #  
**C-01**

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PROJECT NOTES

1.

City of Santaquin, A.P.W.A, Utah Chapter and Utah Department of Transportation Construction and Material Specifications, current editions, and any supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items unless otherwise noted. If a conflict between specifications is found, the more strict specification will apply as decided by the City Engineer.
2.

The City Engineer will not be responsible for means, methods, procedures, techniques, or sequences of construction that are not specified herein. The City Engineer will not be responsible for safety on the work site, or for failure by the Contractor to perform work according to contract documents.
3.

The Developer or Contractor shall be responsible to obtain all necessary permits including but not limited to Road Cut Permits and Notices of Intent (NOI), Building Permits, etc.
4.

The Contractor shall notify the Santaquin City Public Works Department in writing at least 7 working days prior to beginning construction and request a pre-construction meeting. Bond for public improvements and inspection fees must be paid in full prior to requesting a pre-construction meeting.
5.

The Contractor shall be solely responsible for complying with all federal, state and local safety requirements including the Occupational Safety and Health Act of 1970. The Contractor shall exercise precaution always for the protection of persons (including employees) and property. It shall also be the sole responsibility of the Contractor to initiate, maintain and supervise all safety requirements, precautions and programs in connection with the work, including the requirements for confined spaces per 29 CFR 1910.146.
6.

Following completion of construction of the site improvements and before requesting occupancy, a proof survey shall be provided to the City, Public Works Department, that documents "as \_ built" elevations, dimensions, slopes and alignments of all elements of this project. The proof survey shall be prepared, signed and submitted by the Professional Engineer who sealed the constructions drawings.
7.

The Contractor shall restrict construction activity to public right\_of\_way and areas defined as permanent and/or temporary construction easements, unless otherwise authorized by the City Engineer.
8.

The Contractor shall carefully preserve benchmarks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the Contractor shall be responsible for restorations. Resetting of markers shall be performed by a License Utah Professional Surveyor as approved by the City Engineer.
9.

Non \_rubber tired vehicles shall not be moved on or across public streets or highways without the written permission of the City Engineer.
10.

The Contractor shall restore all disturbed areas to equal or better condition than existed before construction. Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross\_sections that existed before construction.
11.

Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately by the Contractor at no cost to the City. If the Contractor fails to remove said mud, dirt, debris, or spillage, the City reserves the right to remove these materials and clean affected areas, the cost of which shall be the responsibility of the Contractor.
12.

Disposal of excess excavation within Special Flood Hazard Areas (100-year floodplain) must be approved by the City Engineer.
13.

All signs, landscaping, structures or other appurtenances within right-of-way disturbed or damaged during construction shall be replaced or repaired to the satisfaction of the City Engineer. The cost of this work shall be the responsibility of the Contractor.
14.

All field tile broken or encountered during excavation shall be replaced or repaired and connected to the public storm sewer system as directed by the City Engineer. The cost of this work shall be the responsibility of the Contractor.
15.

All precast concrete products shall be inspected at the location of manufacture. Approved precast concrete products will be stamped or have such identification noting that inspection has been conducted by the City Inspector. Precast concrete products without proof of inspection shall not be approved for installation.
16.

All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during nonworking hours.
17.

Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during nonworking hours. Clean up shall follow closely behind the trenching operation.
18.

All trees within the construction area not specifically designated for removal shall be preserved, whether shown or not shown on the approved construction drawings. Trees to be preserved shall be protected with high visibility fencing placed a minimum 15 feet from the tree trunk. Trees 6 - inches or greater at DBH (Diameter Breast Height) must be protected with fencing placed at the critical root zone or 15 feet, whichever is greater.
19.

Trees not indicated on the approved construction drawings for removal may not be removed without prior approval of the Division of Engineering.
20.

Permits to construct in the right-of-way of existing streets must be obtained from the City, Public Works Department before commencing construction.
21.

The Contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of one year from the final acceptance of the work, and shall make any necessary repairs at no cost to the City.
22.

Pavements shall be cut in neat, straight lines the full depth of the existing pavement, or as required by the City Engineer.
23.

The replacement of driveways, handicapped ramps, sidewalks, bike paths, parking lot pavement, etc. shall be provided according to the approved construction drawings and the City Standard Construction Drawings.
24.

Any modification to the work shown on drawings must have prior written approval by the City Engineer.
25.

Traffic control and other regulatory signs shall comply with the Utah Department of Transportation Traffic Control guidelines and MUTCD Manual, current edition
26.

Public street signs shall meet all City Specifications with lettering colored in white displayed over a green background.
27.

Private street signs shall meet all City Specifications with lettering colored in white displayed over a blue background

UTILITIES

1.

The Contractor shall give notice of intent to construct to Blue Stake (telephone number 800\_662-4111) at least 2 working days before start of construction.
2.

The identity and locations of existing underground utilities in the construction area have been shown on the approved construction drawings as accurately as provided by the owner of the underground utility. The City and the City Engineer assumes no responsibility for the accuracy or depths of underground facilities shown on the approved construction drawings. If damage is caused, the Contractor shall be responsible for repair of the same and for any resulting contingent damage.
3.

Location, support, protection and restoration of all existing utilities and appurtenances, whether shown or not shown on the approved construction drawings, shall be the responsibility of the Contractor.
4.

When unknown or incorrectly located underground utilities are encountered during construction, the Contractor shall immediately notify the owner and the City Engineer.

TRAFFIC CONTROL

1.

Traffic control shall be furnished, erected, maintained, and removed by the Contractor according to Utah Department Of Transportation, Traffic Control guidelines or Manual of Uniform Traffic Control Devices, current edition.
2.

All traffic lanes of public roadways shall be fully open to traffic from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM unless authorized differently by the City Engineer.
3.

At all other hours the Contractor shall maintain minimum one \_ lane two \_ way traffic. Traffic circulation must be supervised by a Certified Flagger.
4.

Steady \_ burning, Type "C" lights shall be required on all barricades, drums, and similar traffic control devices in use at night.
5.

Access from public roadways to all adjoining properties for existing residents or businesses shall be maintained throughout the duration of the project for mail, public water and sanitary sewer service, and emergency vehicles.
6.

The Contractor shall provide a traffic control plan detailing the proposed maintenance of traffic procedures. The traffic control plan must incorporate any traffic control details contained herein.
7.

The traffic control plan proposed by the Contractor must be approved by the City Engineer prior to construction.
8.

Traffic Control requiring road closures and/ or detouring must be approved by the City Council.

EROSION AND SEDIMENT CONTROL

1.

The Contractor or Developer is responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
2.

The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity. A project location map must be submitted with the NOI.
3.

A sediment and erosion control plan must be submitted to the City Engineer for approval if a sediment and erosion control plan has not already been included with the approved construction drawings. This plan must be made available at the project site at all times.
4.

A UPDES Storm water Discharge Permit may be required. The Contractor shall be considered the Permittee.
5.

The Contractor shall provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
6.

Accepted methods of providing erosion/sediment control include but are not limited to: sediment basins, silt filter fence, aggregate check dams, and temporary ground cover. Hay or straw bales are not permitted.
7.

The Contractor shall provide adequate drainage of the work area at all times consistent with erosion control practices.
8.

Disturbed areas that will remain un-worked for 30 days or more shall be seeded or protected within seven calendar days of the disturbance.
9.

Other sediment controls that are installed shall be maintained until vegetative growth has been established. The Contractor shall be responsible for the removal of all temporary sediment devices at the conclusion of construction but not before growth of permanent ground cover.

GENERAL WATER & IRRIGATION LINES

1.

All potable and pressurized irrigation line materials shall be provided and installed in accordance with current specifications of the City, Water Department.
2.

Pressure testing shall be performed in accordance with the City, Construction and Material Specifications.
3.

The Contractor shall notify the City, Water Department at least 24 hours before tapping into existing water lines.
4.

All water main stationing shall be based on street centerline stationing.
5.

All bends, joint deflections and fittings shall be backed with concrete per City Standards.
6.

The Contractor shall give written notice to all affected property owners at least 1 working day but not more than 3 working days prior to any temporary interruption of water service. Interruption of water service shall be minimized and must be approved by the City Engineer.

POTABLE WATER

1.

All public water pipe with a diameter 3 inches to 12 inches shall be class C900 DR-18 PVC. Public water pipe 14 inches in diameter or larger shall be C905, DR-18 PVC. Fittings shall be Ductile or Cast Iron with mechanical push on joints with transition gasket.

2.

All potable water lines shall be disinfected according to the City Standard specifications. Special attention is directed to applicable sections of American Water Works Association specification C\_651, particularly for flushing (Section 5) and for chlorinating valves and fire hydrants (Section 7).
3.

When water lines are ready for disinfection, the Contractor shall submit two (2) sets of "as-built" plans, and a letter stating that the water lines have been pressure tested and need to be disinfected, to the City Public Works Department.
4.

No water taps or service connections (e.g., to curb stops or meter pits) may be issued until adjacent public water lines serving the construction site have been disinfected by the City Water Department and have been accepted by the Public Works Department.
5.

All water lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of water line. Water lines shall be set deeper at all points where necessary to clear existing or proposed utility lines or other underground restrictions by a minimum of 18 inches.

PRESSURIZED IRRIGATION

1.

All pressurized irrigation pipe, valves and appurtenances shall be installed in accordance with the City Public Works Department standards and specifications.
2.

All pressurized irrigation pipe with a diameter 3 inches to 12 inches shall be class C900 DR-18 PVC. Public water pipe 14 inches in diameter or larger shall be C905, DR-18 PVC. Fittings shall be Ductile or Cast Iron with mechanical push on joints with transition gasket.
3.

Only fire hydrants conforming to City of Santaquin Standards will be approved for use.
4.

The Contractor shall paint all fire hydrants according to the City of Santaquin Standards. The cost of painting fire hydrants shall be included in the contract unit price for fire hydrants.
5.

Valve boxes on pressurized irrigation systems shall be stamped with the word "IRRIGATION" on the circular shaped lid with the inside being painted purple.

SANITARY SEWER

1.

Sanitary sewage collection systems shall be constructed in accordance with the rules, regulations, standards and specifications of the City of Santaquin, Public Works Department and the Utah Department of Health Code and Regulations.
2.

The minimum requirements for sanitary sewer pipe with diameters 15 inches and smaller shall be reinforced concrete pipe ASTM C76 Class 3, or PVC sewer pipe ASTM D3034, SDR 35.
3.

Pipe for 6-inch diameter house service lines shall be PVC pipe ASTM D3034, SDR 35. PVC pipe shall not be used at depths greater than 28 feet. Pipe materials and related structures shall be shop tested in accordance with City of Santaquin Construction Inspection Division quality control requirements.
4.

All manhole lids shall be provided with continuous self\_sealing gaskets.
5.

The approved construction drawings shall show where bolt\_down lids are required.
6.

Sanitary sewer manholes shall be precast concrete or as approved by the City Engineer and conform to the City of Santaquin sanitary manhole standard drawing. Manhole lids shall include the word SEWER.
7.

All PVC sewer pipes shall be deflection tested no less than 60 days after completion of backfilling operations.
8.

At the determination of the City Engineer, the Contractor may be required to perform a TV inspection of the sanitary sewer system prior to final acceptance by the City. This work shall be completed by the Contractor at his expense.
9.

Visible leaks or other defects observed or discovered during TV inspection shall be repaired to the satisfaction of the Engineer.
10.

Roof drains, foundation drains, field tile or other clean water connections to the sanitary sewer system are strictly prohibited.
11.

All water lines shall be located at least 10 feet horizontally and 18 inches vertically, from sanitary sewers and storm sewers, to the greatest extent practicable.
12.

Where sanitary sewers cross water mains or other sewers or other utilities, trench backfill shall be placed between the pipes crossing and shall be compacted granular material according to the city Standard Specifications. In the event that a water line must cross within 18 inches of a sanitary sewer, the sanitary sewer shall be concrete encased or consist of ductile iron pipe material.
13.

Existing sanitary sewer flows shall be maintained at all times. Costs for pumping and bypassing shall be included in the Contractor's unit price bid for the related items.
14.

The Contractor shall furnish all material, equipment, and labor to make connections to existing manholes.
15.

All sewer lines shall be placed at a minimum depth of 4 feet measured from top of finished grade to top of sewer line.
16.

All sanitary sewer mains and laterals must be inspected and approved by the city inspector before trench backfilling is completed.
17.

All lateral connections shall be insert-a-tee or WYE at ten or two o'clock positioning to the center of the main line.

STORM SEWER

1.

All storm water detention and retention areas and major flood routing swales shall be constructed to finish grade and hydro \_ seeded and hydro \_ mulched according to the City of Santaquin Standard Specifications.
2.

Where private storm sewers connect to public storm sewers, the last run of private storm sewer connecting to the public storm sewer shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
3.

Granular backfill shall be compacted granular material according to Santaquin City Standard Specifications.

4.

All public storm sewers shall be Reinforced Concrete Pipe conforming to ASTM Designation C76, Wall B, Class IV for pipe diameters 12 inches to 15 inches, Class III for 18 inches to 24 inch pipes, and 27 inches and larger pipe shall be Class II, unless otherwise shown on the approved construction drawings.
5.

Headwalls and end walls shall be required at all storm sewer inlets or outlets to and from storm water management facilities. Natural stone and/or brick approved by the City Engineer shall be provided on all visible headwalls and/or end walls surfaces.
6.

Storm inlets or catch basins shall be channelized and have bicycle safe grates. Manhole lids shall include the word STORM.
7.

Storm sewer outlets greater than 18 inches in diameter accessible from storm water management facilities or watercourses shall be provided with safety grates, as approved by the City Engineer.

STRIPING AND SIGNING

1.

All striping must be done following Utah Department of Transportation guidelines and MUTCD Manual recommendations, current edition.
2.

All signing must be done following MUTCD Manual recommendations, current edition.
3.

Only sand-blasting is allowed for removal of existing striping.
4.

Contractor is responsible for removal of conflicting existing striping.
5.

Materials used for striping must comply with the Utah Department of Transportation standard specifications.

MAIL DELIVERY

1.

The Contractor shall be responsible to ensure that US Mail delivery within the project limits is not disrupted by construction operations.
2.

This responsibility is limited to relocation of mailboxes to a temporary location that will allow the completion of the work and shall also include the restoration of mailboxes to their original location or approved new location.
3.

Any relocation of mailbox services must be first coordinated with the US Postal Service and the homeowner.
4.

Before relocating any mailboxes, the Contractor shall contact the U.S. Postal Service and relocate mailboxes according to the requirements of the Postal Service.

USE OF FIRE HYDRANTS

1.

The Contractor shall make proper arrangements with the Santaquin City, Water Department for the use of fire hydrants when used for work performed under this project's approval.



JOB # 24-003

PROJECT: SILVER CREEK WAREHOUSE

STREET: 44 N Maple Way  
Lot 7 & 8 Santaquin Peaks Industrial Park  
CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS

DO NOT SCALE

SHEET SIZE: ARCH D  
24X36

GENERAL NOTES

DATE 10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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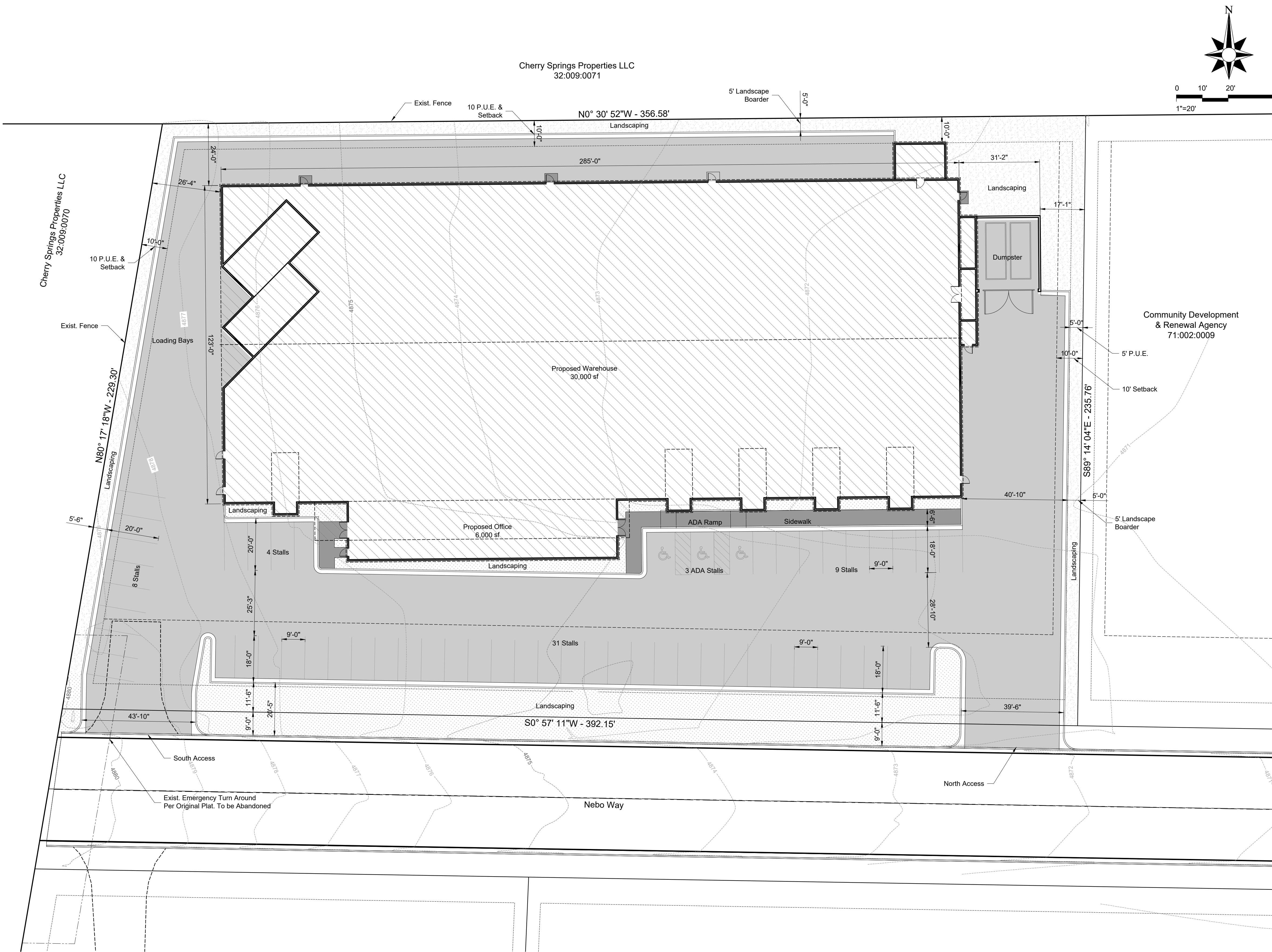
DRAWN BY: C. WINGER  
ENGINEER: B. SAFLEY

SHEET #

C-02

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PROPOSED SITE PLAN  
SCALE: 1"=20'-0"

Development Summary

Zoning Requirements		Current Zone		I-1 (Industrial)	
Setbacks	Front	35 ft to Building 20 ft to Parking			
	Side	10 ft / min. 20' Both Sides 25 ft on Corner Lot			
	Rear	10 ft no zone restrictions			
	Max. Height	48 ft Purchase Agreement no restrictions			
	Min. Area				
Total Development Area					
Lot #7		42,788 sf	0.98 acres		
Lot #8		43,671 sf	1.00 acres		
Total		86,459	1.98 acres		
Land Usage Summary:		Area		% of Land Use	
Buildings		38,380 sf		44.4%	
Hardscape:		37,410 sf		43.3%	
Landscape		10,669 sf		12.3%	
Buildings Summary		Area		% of Bldg Use	
Warehouse		32,266 sf		84.1%	
Office		3,959 sf		10.3%	
Rest Room/Storage		2,155 sf		5.6%	
Total		38,000 sf		100.0%	
Parking Requirements		Ratio		# of Stalls	
Warehouse		1 per / 1,000 sf		33	
Office		5 per / 1,000 sf		20	
Total Required				53	
Provided Parking Stalls		ADA Stalls		3	
		Standard Stalls		52	
Total Provided				55	

General Notes

- All construction to be performed in accordance with City Standards and Specifications.
- Not all utilities are shown on this plan. Verify the location of all existing utilities including cables, conduits, pipes, water lines, gas lines, etc. by contacting a utility locating service such as Blue Stakes to mark utility locations prior to construction.
- Protect existing utilities, structures, and street improvements which are to remain in place, from damage. Any utilities, structures or improvements damaged due to construction shall be repaired or replaced to the cities standards.

Construction Notes

- Contractor shall be responsible for submitting a Notice of Intent (NOI) to be reviewed and approved by the Utah DWQ.
- The NOI must be submitted to DWQ 45 days prior to the start of construction and may entitle coverage under the Utah DWQ General Permit for Storm Water Discharges associated with construction activity.
- A UPDES Storm Water Discharge Permit may be required. The Contractor shall be considered the Permittee.
- Provide sediment control at all points where storm water runoff leaves the site, including waterways, overland sheet flow, and storm sewers.
- Place sand or gravel bags around existing storm drain collection systems to protect from sediment and debris.
- Construction access shall be constructed with a minimum 6" deep gravel (3" to 6" size) to prevent tracking of mud offsite and in a manner that will protect existing utilities, sidewalks, curb and gutter from damage. No dirt or debris shall be placed over the sidewalk or curb & gutter.
- Tracking or spilling mud, dirt or debris upon streets, residential or commercial drives, sidewalks or bike paths is prohibited. Any such occurrence shall be cleaned up immediately.
- A lined concrete wash out area must be provided at the site for all concrete, paint, stucco, or masonry work. Washout on ground is prohibited. Washout area can be used for any type of tool or equipment cleanup.
- A chemical toilet is required to be on site during construction and located on a pervious surface.
- Building site is to be cleaned on a regular basis.
- All erosion control Best Management Practices shall be inspected and maintained regularly and after every storm event.

Site Grading Notes

- All storm water and dirt will be kept on site during construction until final landscaping is finished.
- Existing drainage patterns along property lines shall remain as is. Berms, swales, and/or silt fences may be required to prevent storm water from flowing onto adjacent lots.
- Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross-sections that existed prior to construction.
- Slope finish grade away from existing structures and foundations a minimum of 2% and maximum of 5% for 10 feet (3 to 6 inches). Provide all necessary horizontal and vertical transitions between new construction and existing surfaces for proper drainage.
- All grading, excavation and backfilling work shall conform to the geotechnical soils report approved for this site. The report must include soil classification, soil bearing pressure and lateral equivalent fluid pressure. A geotechnical engineer must inspect excavations prior to any fill or concrete being placed.

Legend

	Building Area
	Parking Area
	Sidewalk
	Landscape



JOB # 24-003

PROJECT: SILVER CREEK WAREHOUSE  
STREET: 41 N Main Way  
Lot 7 & 8 Santaquin Peaks Industrial Park  
CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS

DO NOT SCALE

SHEET SIZE: ARCH D  
24X36

PROPOSED SITE PLAN

DATE 10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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DRAWN BY: C. WINGER  
ENGINEER: B. SAFLEY

SHEET #

C-03



Know what's below.

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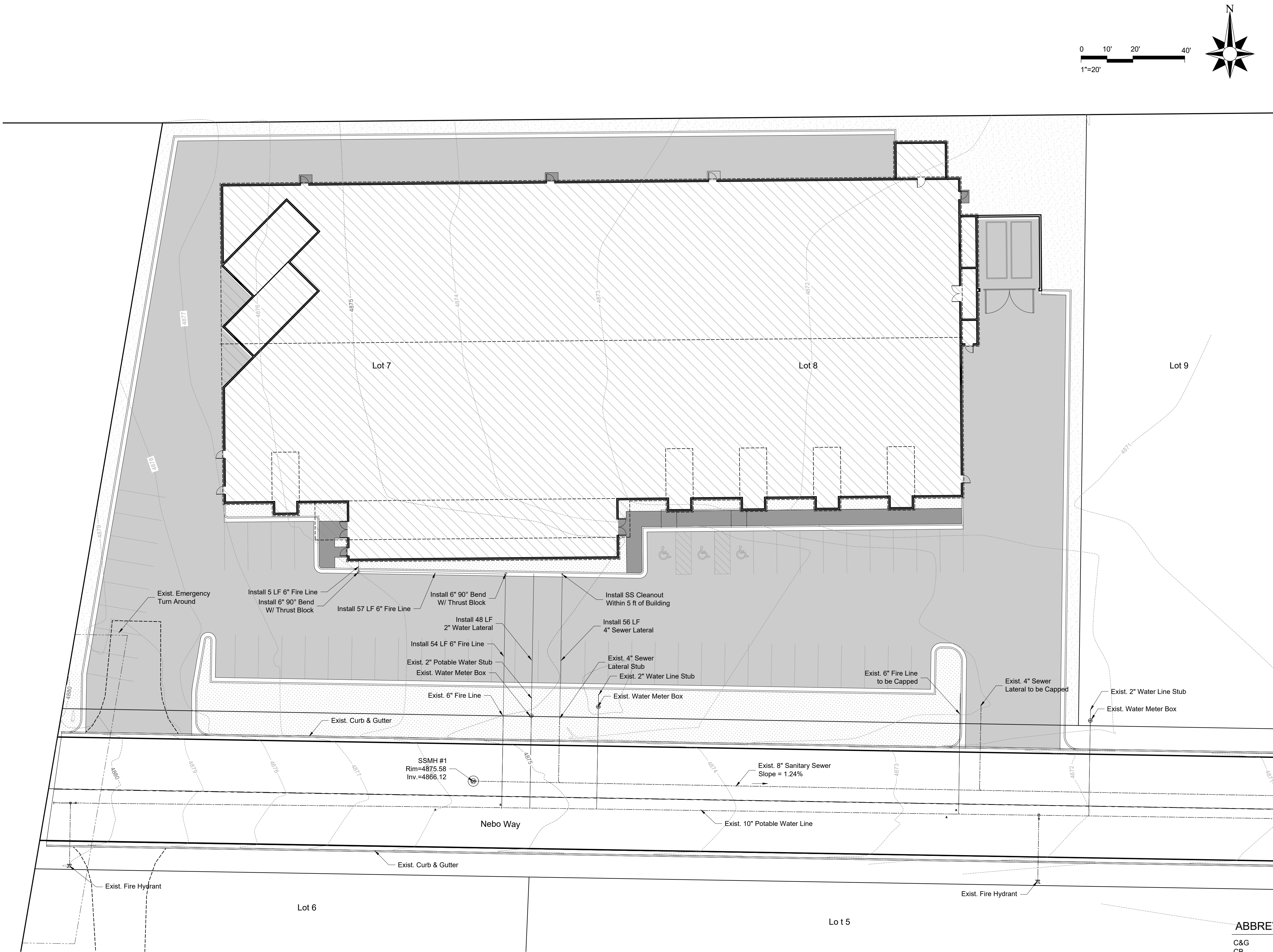


BLUE STAKES OF UTAH

UTILITY NOTIFICATION CENTER, INC.

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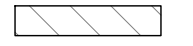
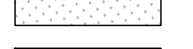













UTILITY PLAN  
SCALE: 1"=20'-0"

ABBREVIATIONS

C&G	Curb and Gutter
CB	Catch Basin
CIB	Curb Inlet Box
CO	Sanitary Sewer Cleanout
Exist.	Existing
FH	Fire Hydrant
FL	Flow Line
GB	Grade Break
HYD	Fire Hydrant
LF	Linear Feet
P	Pavement
PIV	Pressurized Irrigation
PVC	Pressurized Irrigation Valve
RCP	Polyvinyl Chloride Pipe
SD	Reinforced Concrete Pipe
SF	Storm Drain
SS	Square Feet
SSMH	Sanitary Sewer
TBC	Sanitary Sewer Manhole
TOC	Top Back of Curb
W	Top of Concrete
WM	Water Line
WV	Water Meter
	Water Valve

LEGEND

	Building Area
	Grass
	Sidewalk
	Asphalt
	Exist. Major Contour Line
	Exist. Minor Contour Line
	Exist. Water Line
	Exist. Irrigation Line
	Exist. Sanitary Sewer
	Exist. Storm Drain
	Exist. Fire Hydrant
	Exist. Water Valve
	Exist. SS Manhole

Utility Notes

- All construction to conform to Santaquin City Standards and Specifications and APWA Standards.
- Refer to Additional notes on the General Note Sheet C-02.
- The Contractor shall be responsible for obtaining all permits required to perform the work indicated on this document.
- Prior to beginning construction the contractor is responsible for contacting the Utility Notification Center of Utah and having all existing utilities marked and located on the ground. Call Blue Stakes 1-800-662-4111. The contractor shall be responsible for any damage or repairs to any existing underground utilities.
- Existing utilities shown on these plans are located based on record documents of the various utility companies and, where possible, measurements taken in the field. The information shown is not intended to be exact or complete. The Contractor shall be responsible to verify the location and elevation of all utilities prior to beginning construction. Notify the Engineer of Record of any discrepancies or conflicts prior to making corrections.
- All sanitary sewer laterals must be inspected and approved by the city inspector prior to trench backfilling.
- All trench backfill shall be tested and certified by the site geotechnical engineer.
- Where utilities are placed in existing asphalt surfaces, the existing asphalt shall be saw cut on both sides of the trench in clean straight lines the full width of the trench plus 12 inches. The existing asphalt, base and subgrade shall be removed and replaced with new compacted materials. The trench shall be backfilled with an approved granular material and placed in 8" lifts and compacted to 95% of standard proctor or in accordance with the geotechnical engineers recommendations.
- Where new asphalt will be placed next to existing asphalt, contractor shall cut the existing asphalt a minimum of 1 feet from the existing edge in a straight line. Existing asphalt, base and subgrade shall be removed and replaced with new compacted materials.
- Prior to placing asphalt surface contractor shall coordinate with other trades and utility companies and insure required conduits have been placed within the asphalt surface area. Primarily the landscape/irrigation contractor, power, gas, and cable utility providers.
- Contractor shall create, keep and provide record documents of the utilities as built.



DESIGN & ENGINEERING FIRM

893 S. Auto Mall Dr. #3

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(801) 742-8611

www.dkefirm.com

JOB # 24-003

PROJECT: SILVER CREEK WAREHOUSE

STREET:  
41 N Nebo Way  
Lot 7 & 8 Santaquin Peaks Industrial Park  
CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL  
CONDITIONS & DIMENSIONS

DO NOT SCALE  
SHEET SIZE: ARCH D  
24X36

UTILITY PLAN

DATE 10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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DRAWN BY: C. WINGER  
ENGINEER: B. SAFLEY


SHEET #


C-04

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Know what's below.

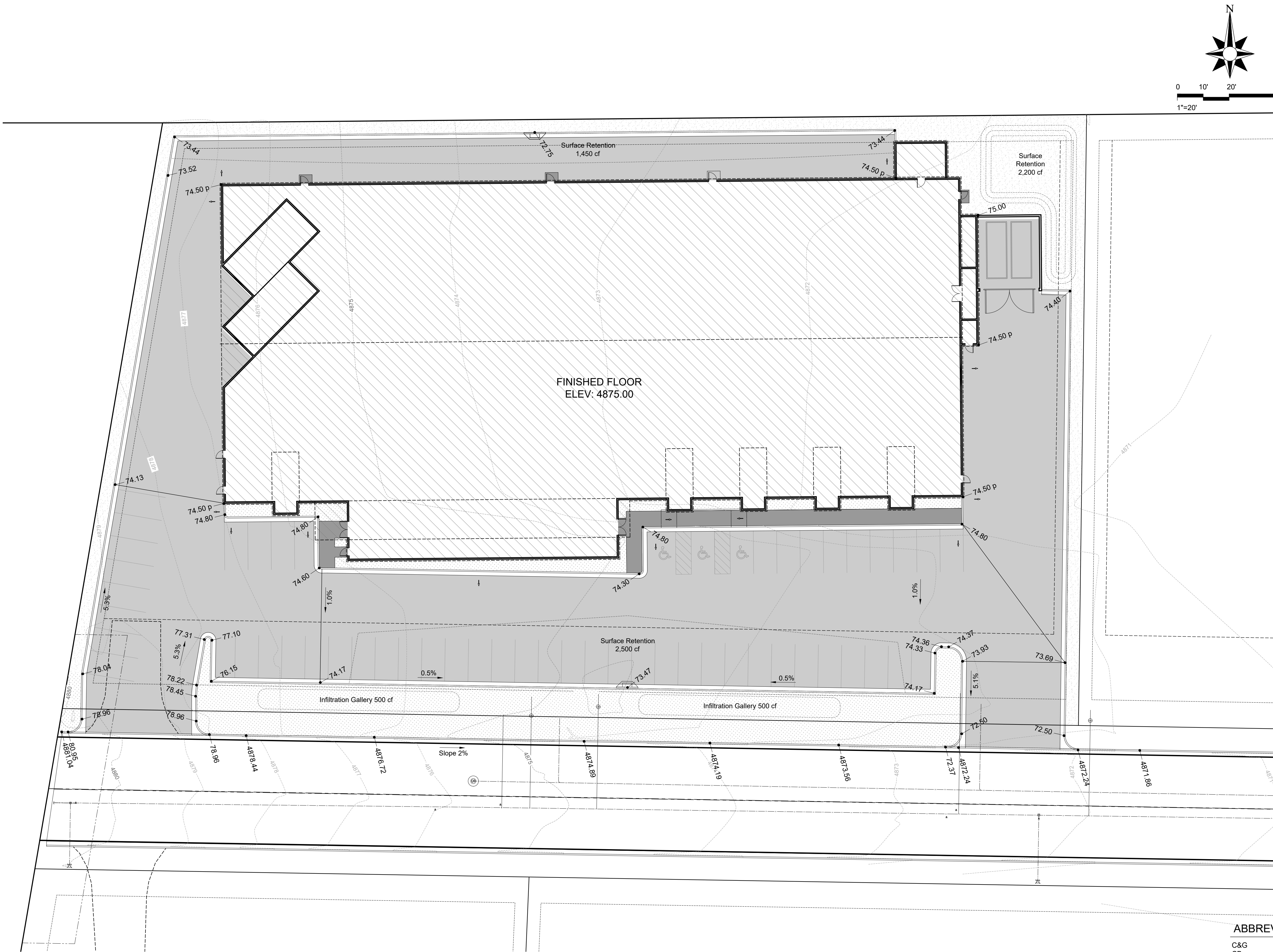
Call  before you dig.

BLUE STAKES OF UTAH

UTILITY NOTIFICATION CENTER, INC.

www.bluestakes.org

1-800-662-4111



GRADING PLAN  
SCALE: 1"=20'-0"

- ### Grading Notes
- All construction to conform to Santaquin City Standards and Specifications and APWA Utah Chapter Construction and Material Specifications and in accordance with the project Geotechnical Study.
  - Refer to additional notes on the General Note Sheet C-02.
  - The Contractor shall be responsible for obtaining all permits required to perform the work indicated on this document.
  - Contractor shall contact Santaquin Public Works/Engineering Department for any Special Permits and Bonding requirements.
  - Prior to beginning construction the Contractor is responsible for contacting the Utility Notification Center of Utah and having all existing utilities marked and located on the ground.
  - The Contractor is responsible for protecting existing utilities, structures, fences, trees, etc. which are to remain in place. Contractor shall be responsible for any damage or repairs to any existing underground utilities whether shown on the plans or not. Repairs shall be required to meet current city standards.
  - Cut and/or Fill slopes shall be no steeper than 2 horizontal to 1 vertical, Slope 2:1.
  - Fills shall be compacted in accordance with the geotechnical report prepared for the project and certified by the geotechnical engineer.
  - Compaction Reports shall be submitted to the city engineering inspector on a weekly basis.
  - The final compaction report and certification from the geotechnical engineer shall contain the type of field testing performed. Each test shall be identified with the method of obtaining the in-place density, whether sand cone or drive ring and shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
  - The Contractor shall be responsible for submitting an Erosion Sedimentation Control Plan to the Public Works Department along with a Land Disturbance Permit.
  - Approved protective measures and temporary drainage provisions must be used to protect adjoining properties and existing storm drain and sanitary sewer infrastructure during construction.
  - Contractor shall provide on-site Fire Protection while grading.
  - The site shall be cleared and grubbed of all vegetation and deleterious matter prior to grading.
  - Elevations on curb and gutter are the top back of curb elevations unless denoted with a "P" for pavement elevations.
  - Standard curb and gutter shall be installed except where the drainage is directed away from the curb, then open face curb and gutter shall be installed.
  - Open face gutter locations are denoted on this plan. Transitions between standard and open face gutters are to be smooth and hand formed.
  - Roof drains shall be collected and piped into the on site storm drain system.
  - All storm water and dirt will be kept on site during construction until final landscaping is finished.
  - Existing drainage patterns along property lines shall remain as is. Berms, swales, and/or silt fences maybe required to prevent storm water from flowing onto adjacent lots.
  - Drainage ditches or watercourses that are disturbed by construction shall be restored to the grades and cross-sections that existed prior to construction.
  - Slope finish grade away from buildings, structures, and foundations a minimum of 2% and maximum of 5% for 10 feet (3 to 6 inches). Provide all necessary horizontal and vertical transitions between new construction and existing surfaces for proper drainage.
  - All grading, excavation and backfilling work shall conform to the geotechnical soils report approved for this site. The report must include soil classification, soil bearing pressure and lateral equivalent fluid pressure. A geotechnical engineer must inspect excavations prior to any fill or concrete being place.

Storm Water Calculations

Description	Area	C Factor
Building	38,380	0.70
Hardscape	37,410	0.90
Landscape	10,669	0.15
Total	86,459 sf	0.72 weighted C

90th Percentile Calculations

Soil Group A  
Percent of Imperviousness = 0.88  
80th Percentile Precipitation Depth = 0.7"  
WQV = 661 cf storage required on site

Storm Water On-site Storage Calculations  
Allowable Discharge Rate 0.2 cfs/acre

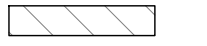









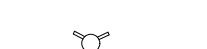


Time (m)	Intensity (in/hr)	Flow Rate (cfs)	Volume (cf)	Allowable Discharge (cf)	Required Storage (cf)
5	4.3	6.13	1,840	0	1,179
10	3.27	4.66	2,799	0	2,137
15	2.70	3.85	3,466	0	2,805
30	1.82	2.60	4,673	0	4,012
60	1.13	1.61	5,803	0	5,141
120	0.673	0.96	6,912	0	6,250
180	0.446	0.64	6,871	134	6,076
360	0.255	0.36	7,857	929	6,267
720	0.154	0.22	9,490	2,519	6,310
1440	0.098	0.14	12,078	5,699	5,718


Required on Site Storage 6,310 cf  
Provided on Site Storage 7,150 cf

ABBREVIATIONS

C&G	Curb and Gutter
CB	Catch Basin
CIB	Curb Inlet Box
CO	Sanitary Sewer Cleanout
Exist.	Existing
FH	Fire Hydrant
FL	Flow Line
GB	Grade Break
HYD	Fire Hydrant
LF	Linear Feet
P	Pavement
PI	Pressurized Irrigation
PIV	Pressurized Irrigation Valve
PVC	Polyvinyl Chloride Pipe
RCP	Reinforced Concrete Pipe
SD	Storm Drain
SF	Square Feet
SS	Sanitary Sewer
SSMH	Sanitary Sewer Manhole
TBC	Top Back of Curb
TOC	Top of Concrete
W	Water Line
WM	Water Meter
WV	Water Valve

LEGEND

	Building Area
	Grass
	Sidewalk
	Asphalt
	Exist. Major Contour Line
	Exist. Minor Contour Line
	Exist. Water Line
	Exist. Irrigation Line
	Exist. Sanitary Sewer
	Exist. Storm Drain
	Exist. Fire Hydrant
	Exist. Water Valve
	Exist. SS Manhole

DKE

DESIGN & ENGINEERING FIRM

993 S. Apple Mall Dr. #3

American Fork, UT 84003

(801) 742-8611

www.dkefirm.com

JOB # 24-003

PROJECT: SILVER CREEK WAREHOUSE

STREET: 441 N. Main Way

Lot 7 & 8 Santaquin Peaks Industrial Park

CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS

DO NOT SCALE


SHEET SIZE: ARCH D 24X36

GRADING PLAN

DATE 10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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DRAWN BY: C. WINGER

ENGINEER: B. SAFLEY

SHEET #

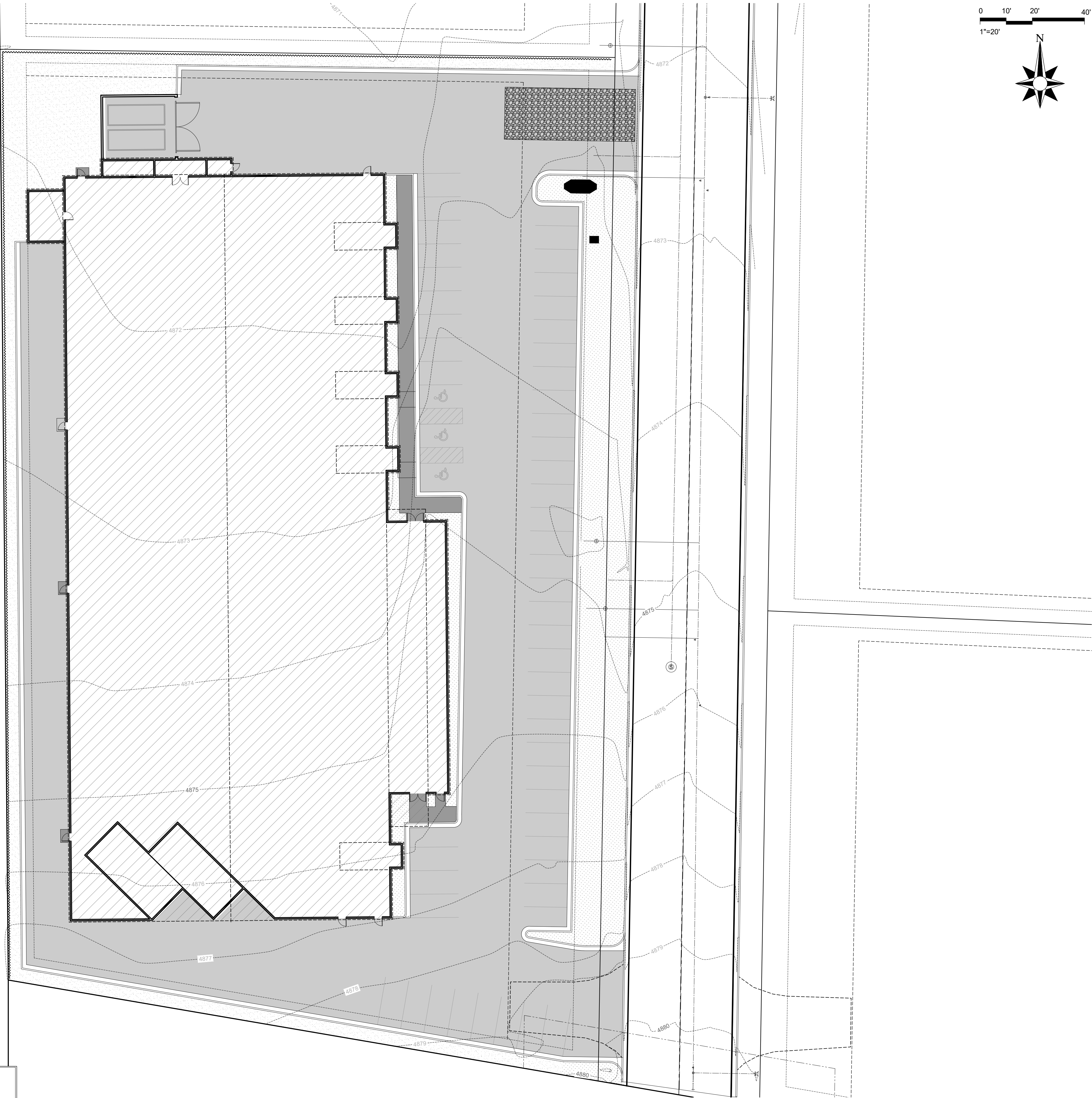
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SWPP DATA:

1. CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF BMP'S DURING CONSTRUCTION.
2. THE PROJECT CONSISTS OF APPROXIMATELY 2.04 ACRES. PLANNED ACTIVITIES INCLUDE BUILDING UNDERGROUND UTILITIES, AND ASSOCIATED CONSTRUCTION ACTIVITIES.
3. OBTAIN UPDES "NOI" PERMIT AND ANY OTHER REQUIRED STORM WATER PERMITS PRIOR TO BEGINNING CONSTRUCTION.
4. CONTRACTOR WILL BEGIN EXCAVATION AND INSTALLATION OF UTILITY IMPROVEMENTS AND ROADS. AS NEW DRAINAGE ELEMENTS ARE COMPLETED, CONTRACTOR SHALL IMPLEMENT THE USE OF PROPER BMP'S AS OUTLINED IN SECTION 3.5.18 IN THE UPDES PERMIT REGULATIONS.
5. SITE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION ACTIVITIES MUST BE FINISHED WITHIN 14 DAYS OF COMPLETION OF CONSTRUCTION AND PRIOR TO OBTAINING "NOT" PERMIT.
6. UPON PROJECT COMPLETION AND OBTAINING "NOT" PERMIT, CLEAR SITE OF NON-ESSENTIAL MATERIALS AND CLEAN STREETS AND ASSOCIATED GUTTERS. REMOVE TEMPORARY STORM WATER MEASURES AND PERFORM REQUIRED STORM DRAIN SYSTEM MAINTENANCE PRIOR TO RELEASE OF SYSTEM TO THE OWNER.
7. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
8. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
9. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

ADDITIONAL BMP NOTES:

1. CONTRACTOR TO WATER SITE AT LEAST WEEKLY OR MORE FREQUENTLY AS NEEDED TO CONTROL DUST POLLUTION IN ACCORDANCE WITH BMP DC.
2. SWEEP EXISTING STREETS AS NEEDED, SEE BMP SC.
3. STORE ALL HAZARDOUS, TOXIC AND CHEMICAL MATERIALS IN ACCORDANCE WITH BMP'S MS, HMS.
4. ANY SPILLED MATERIALS SHALL BE CLEANED UP IN ACCORDANCE WITH BMP SCU.
5. ALL CONSTRUCTION DEBRIS AND OR WASTE SHALL BE REMOVED FROM THE PROJECT SITE IN ACCORDANCE WITH BMP WD.

LEGEND

SYMBOL	DESCRIPTION
~~~~~	SILT FENCE
	STRAW BALE SEDIMENT BARRIER, BMP-STB
	INLET PROTECTION, BMP-IPS
	OUTLET PROTECTION, BMP-OP
	SAND BAG BARRIER, BMP-SBB
	CONSTRUCTION ACCESS, BMP-SCEWA
	CONCRETE WASHOUT, BPM-CWM
	PORTABLE TOILETS, BMP-PT
	TRASH BINS, BMP-WD
	MATERIALS STORAGE, BMP-MS
	FUEL TANK STORAGE, BMP VEC & VEF

ABBREVIATIONS

C&G	Curb and Gutter	PVC	Polyvinyl Chloride Pipe
CB	Catch Basin	RCP	Reinforced Concrete Pipe
CIB	Curb Inlet Box	SD	Storm Drain
CO	Sanitary Sewer Cleanout	SF	Square Feet
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GB	Grade Break	TOC	Top of Concrete
HYD	Fire Hydrant	W	Water Line
LF	Linear Feet	WM	Water Meter
P	Pavement	WV	Water Valve
PI	Pressurized Irrigation		
PIV	Pressurized Irrigation Valve		

SWMP CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PE Stamp, Sign and Date



PROPOSED GRADING & DRAINAGE PLAN  
SCALE: 1"=20'-0"

DESIGN & ENGINEERING FIRM  
993 S. Auto Mall Dr. #3  
American Fork, UT 84003  
(801) 742-8611  
www.dkefirm.com

PROJECT: SILVER CREEK WAREHOUSE  
JOB # 24-003  
STREET: 41 N Main Way  
Lot 17 & 8 Santaquin Peaks Industrial Park  
CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS  
DO NOT SCALE  
SHEET SIZE: ARCH D 24X36

SUPP PLAN

DATE 10/18/2024

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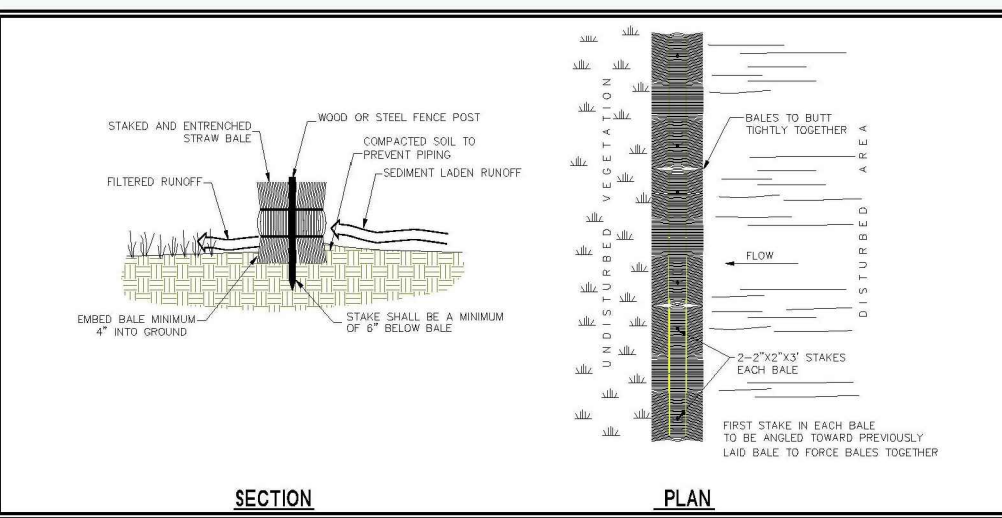
DRAWN BY: C. WINGER  
ENGINEER: B. SAFLEY

SHEET #  
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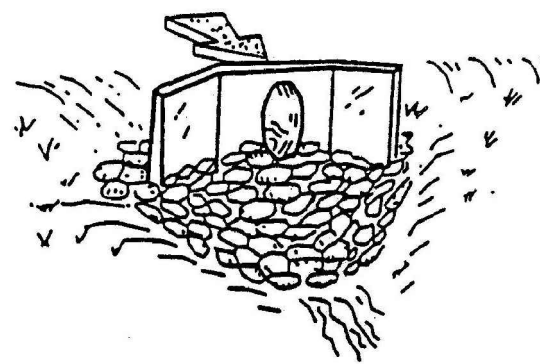
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BMP: Silt Fence		SF
		<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input type="checkbox"/> Minimize Disturbed Areas</li> <li><input type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input type="checkbox"/> Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.</p> <p><b>APPLICATION:</b></p> <ul style="list-style-type: none"> <li>▫ Perimeter control: place barrier at downgradient limits of disturbance</li> <li>▫ Sediment barrier: place barrier at toe of slope or soil stockpile</li> <li>▫ Protection of existing waterways: place barrier near top of stream bank</li> <li>▫ Inlet protection: place fence surrounding catchbasins</li> </ul> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>▫ Place silt fence apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.</li> <li>▫ Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.</li> <li>▫ Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.</li> <li>▫ Backfill trench over filter fabric to anchor.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>▫ Recommended maximum drainage area of 0.5 acre per 100 feet of fence</li> <li>▫ Recommended maximum upgradient slope length of 150 feet</li> <li>▫ Recommended maximum uphill grade of 2:1 (50%)</li> <li>▫ Recommended maximum flow rate of 0.5 cfs</li> <li>▫ Ponding should not be allowed behind fence</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>▫ Inspect immediately after any rainfall and at least daily during prolonged rainfall.</li> <li>▫ Look for runoff bypassing ends of barriers or undercutting barriers.</li> <li>▫ Repair or replace damaged areas of the barrier and remove accumulated sediment.</li> <li>▫ Reanchor fence as necessary to prevent shortcutting.</li> <li>▫ Remove accumulated sediment when it reaches ½ the height of the fence.</li> </ul>		<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li>■ Nutrients</li> <li>■ Toxic Materials</li> <li>■ Oil &amp; Grease</li> <li>■ Floatable Materials</li> <li>■ Other Waste</li> </ul> <p><b>IMPLEMENTS REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>■ High Impact</li> <li>■ Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul> <p>▫ Capital Costs</p> <p>▫ O&amp;M Costs</p> <p>▫ Maintenance</p> <p>▫ Training</p> <p>■ High    ■ Medium    □ Low</p>

BMP: Straw Bale Barrier	STB
	<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input type="checkbox"/> Minimize Disturbed Areas</li> <li><input type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input checked="" type="checkbox"/> Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>Temporary sediment barrier consisting of a row of entrenched and anchored straw bales.</p> <p><b>APPLICATION:</b></p> <ul style="list-style-type: none"> <li>• Perimeter Control: place barrier at downgradient limits of disturbance.</li> <li>• Sediment barrier: place barrier at toe of slope or soil stockpile.</li> <li>• Protection of existing waterways: place barrier near top of stream bank.</li> <li>• Inlet Protection.</li> </ul> <p><b>INSTALLATION /APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>• Excavate a 4-inch minimum deep trench along contour line, i.e. parallel to slope, removing all grass and other material that may allow underflow.</li> <li>• Place bales in trench with ends tightly abutting, fill any gaps by wedging loose straw into openings.</li> <li>• Anchor each bale with 2 stakes driven flush with the top of the bale.</li> <li>• Backfill around bale and compact to prevent piping, backfill on uphill side to be built up 4-inches above ground at the barrier.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>• Recommended maximum area of 0.5 acre per 100 feet barrier</li> <li>• Recommended maximum upgradient slope length of 150 feet</li> <li>• Recommended maximum uphill grade of 2:1 (50%)</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>• Inspect immediately after any rainfall and at least daily during prolonged rainfall, look for runoff bypassing ends of barriers or undercutting barriers.</li> <li>• Repair or replace damaged areas of the barrier and remove accumulated sediment.</li> <li>• Realign bales as necessary to provide continuous barrier and fill gaps.</li> <li>• Recompact soil around barrier as necessary to prevent piping.</li> </ul>	<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Sediment</li> <li><input checked="" type="checkbox"/> Nutrients</li> <li><input type="checkbox"/> Toxic Materials</li> <li><input type="checkbox"/> Oil &amp; Grease</li> <li><input type="checkbox"/> Volatile Materials</li> <li><input type="checkbox"/> Other Waste</li> </ul> <p><input checked="" type="checkbox"/> High Impact  <input type="checkbox"/> Medium Impact  <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Capital Costs</li> <li><input checked="" type="checkbox"/> O&amp;M Costs</li> <li><input checked="" type="checkbox"/> Maintenance</li> <li><input checked="" type="checkbox"/> Training</li> </ul> <p><input checked="" type="checkbox"/> High    <input checked="" type="checkbox"/> Medium    <input type="checkbox"/> Low</p>

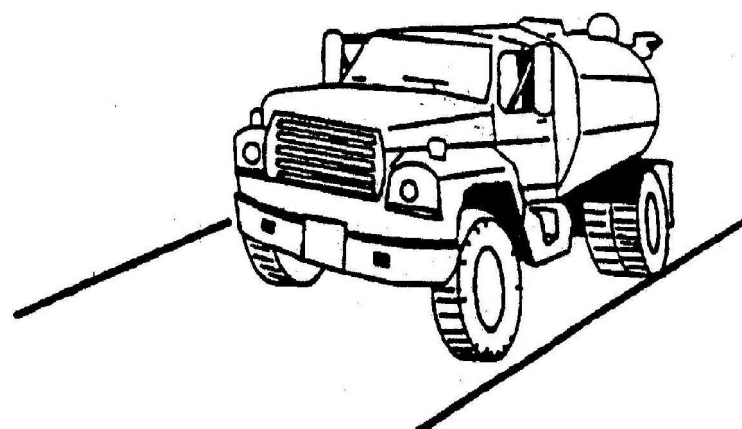
BMP: Inlet Protection - Silt Fence or Straw Bale		IPS
<p align="center"><b>INLET PROTECTION</b></p> <p align="center"><b>STRAW BALE BARRIER</b>      <b>SILT FENCE</b></p> <p align="center"><small>SEE INDIVIDUAL BMP INFORMATION SHEETS FOR INSTRUCTIONS FOR CONSTRUCTION OF STRAW BALE BARRIER AND SILT FENCE.</small></p>	<p align="center"><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input type="checkbox"/> Minimize Disturbed Areas</li> <li><input type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input type="checkbox"/> Control Internal Erosion</li> </ul>	
<p><b>DESCRIPTION:</b> Sediment barrier erected around storm drain inlet.</p> <p><b>APPLICATION:</b> Construct at storm drainage inlets located downgradient of areas to be disturbed by construction (for inlets in paved areas see other information sheets for inlet protection).</p> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>• Provide upgradient sediment controls, such as silt fence during construction of inlet.</li> <li>• When construction of inlet is complete, erect straw bale barrier or silt fence surrounding perimeter of inlet. Follow instructions and guidelines on individual BMP information sheets for straw bale barrier and silt fence construction.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>• Recommended maximum contributing drainage area of one acre.</li> <li>• Limited to inlets located in open unpaved areas.</li> <li>• Requires shallow slopes adjacent to inlet.</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>• Inspect inlet protection following storm event and at a minimum of once monthly.</li> <li>• Remove accumulated sediment when it reaches 4-inches in depth.</li> <li>• Repair or realign barrier/fence as needed.</li> <li>• Look for bypassing or undercutting and recompact soil around barrier/fence as required.</li> </ul>	<p>Adapted from Sall Lake County BMP Fact Sheet</p> <p align="center"><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li>■ Nutrients</li> <li>■ Toxic Materials</li> <li>■ Oil &amp; Grease</li> <li>■ Floatable Materials</li> <li>■ Other Waste</li> </ul> <p align="center"><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>■ Capital Costs</li> <li>■ O&amp;M Costs</li> <li>■ Maintenance</li> <li>■ Training</li> </ul> <p align="right"> <input type="checkbox"/> High    <input type="checkbox"/> Medium    <input type="checkbox"/> Low         </p>	



BMP: Outlet Protection		OP
		<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input type="checkbox"/> Minimize Disturbed Areas</li> <li><input type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input type="checkbox"/> Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>A rock outlet protection is a physical device composed of rock, grouted riprap, or concrete rubble which is placed at the outlet of a pipe to prevent scour of the soil caused by high pipe flow velocities, and to absorb flow energy to produce non-erosive velocities.</p> <p><b>APPLICATIONS:</b></p> <ul style="list-style-type: none"> <li>• Wherever discharge velocities and energies at the outlets of culverts, conduits, or channels are sufficient to erode the next downstream reach,</li> <li>• Rock outlet protection is best suited for temporary use during construction because it is usually less expensive and easier to install than concrete aprons or energy dissipators,</li> <li>• A sediment trap below the pipe outlet is recommended if runoff is sediment laden,</li> <li>• Permanent rock riprap protection should be designed and sized by the engineer as part of the culvert, conduit or channel design,</li> <li>• Grouted riprap should be avoided in areas of freeze and thaw because the grout will break up.</li> </ul> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <p>Rock outlet protection is effective when the rock is sized and placed properly. When this is accomplished, rock outlets do much to limit erosion at pipe outlets. Rock size should be increased for high velocity flows. Best results are obtained when sound, durable, angular rock is used.</p> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>• Large storms often wash away the rock outlet protection and leave the area susceptible to erosion,</li> <li>• Sediment captured by the rock outlet protection may be difficult to remove without removing the rock,</li> <li>• Outlet protection may negatively impact the channel habitat.</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>• Inspect after each significant rain for erosion and/or disruption of the rock, and repair immediately,</li> <li>• Grouted or wire-tied rock riprap can minimize maintenance requirements.</li> </ul>		<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li>■ Nutrients</li> <li>■ Toxic Materials</li> <li>■ Oil &amp; Grease</li> <li>■ Floatable Materials</li> <li>■ Other Waste</li> </ul> <ul style="list-style-type: none"> <li>■ High Impact</li> <li>■ Medium Impact</li> <li>■ Low or Unknown Impact</li> </ul> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>■ Capital Costs</li> <li>■ O&amp;M Costs</li> <li>■ Maintenance</li> <li>■ Training</li> </ul> <p>■ High    ■ Medium    □ Low</p>

BMP: Sand Bag Barrier		SBB
		<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input type="checkbox"/> Minimize Disturbed Areas</li> <li><input type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input checked="" type="checkbox"/> Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>Stacking sand bags along a level contour creates a barrier which detains sediment-laden water, ponding water upstream of the barrier and promoting sedimentation.</p>		<p>Adapted from Salt Lake County BMP Fact Sheet</p>
<p><b>APPLICATION:</b></p> <ul style="list-style-type: none"> <li>▸ Along the perimeter of the site.</li> <li>▸ May be used in drainage areas up to 5 acres.</li> <li>▸ Along streams and channels</li> <li>▸ Across swales with small catchments.</li> <li>▸ Around temporary spoil areas.</li> <li>▸ Below the toe of a cleared slope.</li> </ul>		
<p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>▸ Install along a level contour.</li> <li>▸ Base of sand bag barrier should be at least 48 inches wide.</li> <li>▸ Height of sand bag barrier should be at least 18 inches high.</li> <li>▸ 4 inch PVC pipe may be installed between the top layer of sand bags to drain large flood flows.</li> <li>▸ Provide area behind barrier for runoff to pond and sediment to settle.</li> <li>▸ Place below the toe of a slope.</li> </ul>		
<p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>▸ Sand bags are more expensive than other barriers, but also more durable.</li> <li>▸ Burlap should not be used.</li> </ul>		<p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li><input type="checkbox"/> Nutrients</li> <li><input type="checkbox"/> Toxic Materials</li> <li><input type="checkbox"/> Oil &amp; Grease</li> <li><input type="checkbox"/> Flammable Materials</li> <li><input type="checkbox"/> Other Waste</li> </ul>
<p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>▸ Inspect after each rain.</li> <li>▸ Reshape or replace damaged sand bags immediately.</li> <li>▸ Replace sediment when it reaches six inches in depth.</li> </ul>		<p><input checked="" type="checkbox"/> High Impact  <input type="checkbox"/> Medium Impact  <input type="checkbox"/> Low or Unknown Impact</p>
		<p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>■ Capital Costs</li> <li><input type="checkbox"/> O&amp;M Costs</li> <li><input type="checkbox"/> Maintenance</li> <li><input type="checkbox"/> Training</li> </ul>
		<p>■ High    ☒ Medium    □ Low</p>


BMP: Infiltration		IN
		<p><b>CONSIDERATIONS</b></p> <ul style="list-style-type: none"> <li>☑ # Soils</li> <li>☑ Area Required</li> <li>☑ Slope</li> <li>☐ Water Availability</li> <li>☐ Aesthetics</li> <li>☐ Hydraulic Head</li> <li>☑ Environmental Side Effects</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>A family of systems in which the majority of the runoff from small storms is infiltrated into the ground rather than discharged to a surface water body. Infiltration systems include: ponds, vaults, trenches, dry wells, porous pavement, and concrete grids.</p> <p><b>APPLICATION:</b></p> <p>Suitable site soils and geologic conditions; low potential for long-term erosion in the watershed.</p> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>☑ Volume sized to capture a particular fraction of annual runoff.</li> <li>☑ Pretreatment is necessary in fine soils.</li> <li>☑ Emergency overflow or bypass for larger storms is needed.</li> <li>☑ Observation wells are required in trenches.</li> <li>☑ Infiltration surface must be protected during construction.</li> <li>☑ Pond sides need vegetation to prevent erosion.</li> <li>☑ During construction frequent inspection for clogging is necessary.</li> <li>☑ Une sides of trench with permeable filter fabric</li> <li>☑ Trench should be filled with clean washed stone or gravel. (1.5-3.0 in.)</li> <li>☑ A six inch sand filter layer; cloth lines the bottom of trench.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>☑ Loss of infiltrative capacity and high maintenance cost in fine soils.</li> <li>☑ Low removal of dissolved pollutants in very coarse soils.</li> <li>☑ Not suitable on fill sites or steep slopes.</li> <li>☑ The risk of ground water contamination in very coarse soils, may require ground water monitoring.</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>☑ Remove sediment at a frequency appropriate to avoid excessive concentrations of pollutants and loss of infiltrative capacity.</li> <li>☑ Frequent cleaning of porous pavements is required.</li> <li>☑ Maintenance is difficult and costly for underground trenches.</li> </ul>		<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>☑ Sediment</li> <li>☑ Nutrients</li> <li>☑ Heavy Metals</li> <li>☑ Toxic Materials</li> <li>☑ Oxygen Demanding Substances</li> <li>☑ Oil &amp; Grease</li> <li>☑ Flammable Materials</li> <li>☑ Bacteria &amp; Viruses</li> </ul> <p>☑ High Impact ☑ Medium Impact ☐ Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>☑ Capital Costs</li> <li>☑ O&amp;M Costs</li> <li>☑ Maintenance</li> <li>☐ Training</li> </ul> <p>☑ High ☑ Medium ☐ Low</p>


<b>BMP: Stabilized Construction Entrance and Wash Area</b>		<b>SCEWA</b>
		<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li>☒ Housekeeping Practices</li> <li>☐ Contain Waste</li> <li>☐ Minimize Disturbed Areas</li> <li>☐ Stabilize Disturbed Areas</li> <li>☐ Protect Slopes/Channels</li> <li>☒ Control Site Perimeter</li> <li>☐ Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface. The area can be used to spray off vehicles before they leave the site.</p> <p><b>APPLICATIONS:</b></p> <p>At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.</p> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>▶ Clear and grub area and grade to provide maximum slope of 2%.</li> <li>▶ Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).</li> <li>▶ Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.</li> <li>▶ Provide water to the area that can be used to spray off vehicles as needed to prevent the tracking of mud off of the construction site. This may not be needed during dry periods of work, but is needed when construction is proceeding under wet conditions.</li> <li>▶ Provide berming as needed to prevent sediment laden wash water from entering storm water facilities or other water bodies, or leaving the site.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>▶ Requires periodic top dressing with additional stones.</li> <li>▶ Should be used in conjunction with street sweeping on adjacent public right-of-way.</li> <li>▶ Must be situated such that waste water does not run off site.</li> </ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"> <li>▶ Inspect daily for loss of gravel or sediment buildup.</li> <li>▶ Inspect adjacent roadway for sediment deposit and clean by shoveling and sweeping.</li> <li>▶ Repair entrance and replace gravel as required to maintain control in good working condition.</li> <li>▶ Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.</li> </ul>		<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li>☒ Nutrients</li> <li>☐ Toxic Materials</li> <li>☐ Oil &amp; Grease</li> <li>☐ Floatable Materials</li> <li>☐ Other Waste</li> </ul> <ul style="list-style-type: none"> <li>■ High Impact</li> <li>☒ Medium Impact</li> <li>☐ Low or Unknown Impact</li> </ul> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>☒ Capital Costs</li> <li>☒ O&amp;M Costs</li> <li>☒ Maintenance</li> <li>☐ Training</li> </ul> <p>■ High    ☒ Medium    ☐ Low</p>

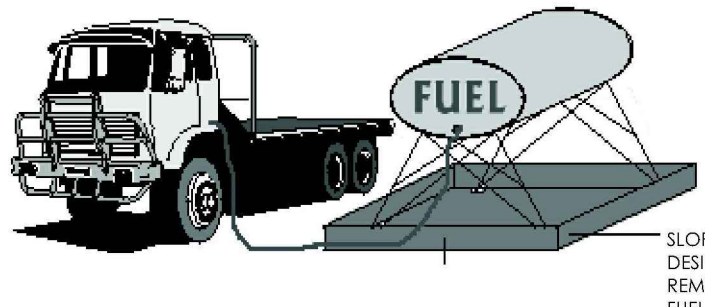
BMP: Dust Controls		DC
		<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Housekeeping Practices</li> <li><input type="checkbox"/> Contain Waste</li> <li><input checked="" type="checkbox"/> Minimize Disturbed Areas</li> <li><input checked="" type="checkbox"/> Stabilize Disturbed Areas</li> <li><input type="checkbox"/> Protect Slopes/Channels</li> <li><input type="checkbox"/> Control Site Perimeter</li> <li><input type="checkbox"/> Control Internal Erosion</li> </ul>
<p><b>DESCRIPTION:</b></p> <p>Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.</p> <p><b>APPLICATION:</b></p> <p>Dust control is useful in any process area, loading and unloading area, material handling areas, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.</p> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"> <li>• Two kinds of street sweepers are common; brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.</li> <li>• Mechanical collection should be operated according to the manufacturers' recommendations and should be inspected regularly.</li> <li>• Water may be sprayed on the ground surface to moisten dry soils, making it less susceptible to wind erosion.</li> </ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"> <li>• Street sweeping is labor and equipment intensive and may not be effective for all pollutants.</li> <li>• Water sprayed from water trucks must be done at a rate such that the water is absorbed in the soil; if excessive amounts of water are used, it may run off, carrying soil with it.</li> </ul> <p><b>MAINTENANCE:</b></p> <p>If excess water results from water spraying, dust-contaminated waters should not be allowed to run off site. Areas may need to be resprayed to keep dust from spreading.</p>		<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"> <li>■ Sediment</li> <li><input type="checkbox"/> Nutrients</li> <li><input type="checkbox"/> Toxic Materials</li> <li><input type="checkbox"/> Oil &amp; Grease</li> <li><input type="checkbox"/> Flammable Materials</li> <li><input type="checkbox"/> Other Waste</li> </ul> <ul style="list-style-type: none"> <li>■ High Impact</li> <li><input type="checkbox"/> Medium Impact</li> <li><input type="checkbox"/> Low or Unknown Impact</li> </ul>
		<p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Capital Costs</li> <li><input type="checkbox"/> O&amp;M Costs</li> <li><input checked="" type="checkbox"/> Maintenance</li> <li><input checked="" type="checkbox"/> Training</li> </ul>
		<p>■ High    <input checked="" type="checkbox"/> Medium    <input type="checkbox"/> Low</p>

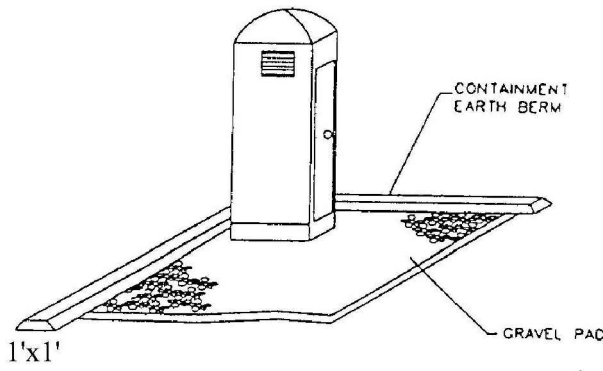
<div style="display: flex; justify-content: space-around; align-items: center;"><div style="text-align: center;"> <b>DKE</b></div><div style="text-align: center;"><b>DESIGN &amp; ENGINEERING FIRM</b> 526 S. Auto Mall Dr #3 American Fork, UT 84003 (801) 742-8611 www.dkefirm.com</div></div>	
JOB # 24-003	
<div style="display: flex; justify-content: space-between;"><div style="width: 45%;"><p>PROJECT: <b>SILVER CREEK WAREHOUSE</b></p></div><div style="width: 50%; text-align: right;"><p>STREET: 411N Nido Way Lot 7 &amp; 8 Santaquin Peaks Industrial Park</p><p>CITY: SANTAQUIN, UTAH</p></div></div>	
CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS	
DO NOT SCALE	
SHEET SIZE:	ARCH D 24X36
BYP	
DATE	10/18/2024
<u>PLAN SUBMITTAL DATES</u>	
DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
	
DRAWN BY:	C. WINGER
ENGINEER:	B. SAFLEY
<div style="display: flex; justify-content: space-between;"><div>SHEET #</div><div style="font-size: 48px; font-weight: bold;">CS2</div></div>	




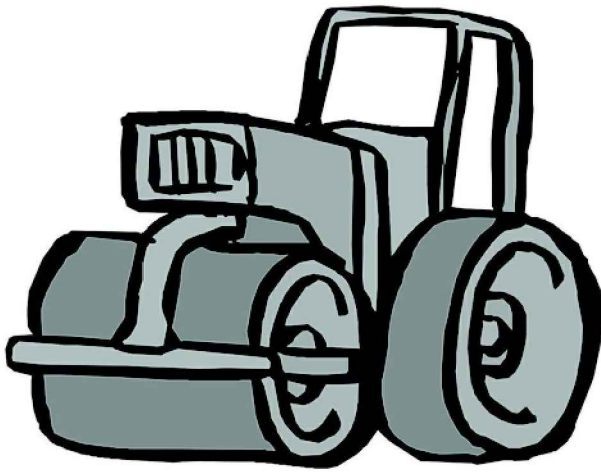
BMP: Concrete Waste Management		CWM
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input type="checkbox"/> Housekeeping Practices</li><li><input checked="" type="checkbox"/> Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>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.</p></div> <div>APPLICATIONS:<p>This technique is applicable to all types of sites.</p></div> <div>INSTALLATION/APPLICATION CRITERIA:<ul style="list-style-type: none"><li>Store dry and wet materials under cover, away from drainage areas.</li><li>Avoid mixing excess amounts of fresh concrete or cement on-site.</li><li>Perform washout of concrete trucks off-site or in designated areas only.</li><li>Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.</li><li>Do not allow excess concrete to be dumped on-site, except in designated areas.</li><li>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.)</li><li>Train employees and subcontractors in proper concrete waste management.</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>Off-site washout of concrete wastes may not always be possible.</li></ul></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Inspect subcontractors to ensure that concrete wastes are being properly managed.</li><li>If using a temporary pit, dispose hardened concrete on a regular basis.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input checked="" type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input type="checkbox"/> Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li><input checked="" type="checkbox"/> Maintenance</li><li><input checked="" type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	

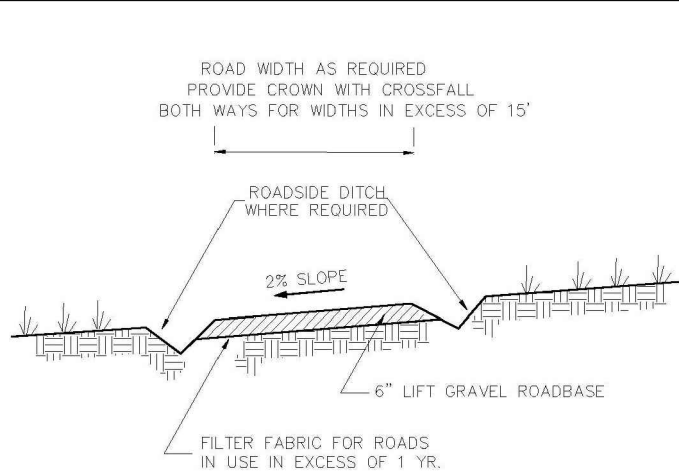
BMP: Vehicle And Equipment Cleaning		VEC
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and/or training employees and subcontractors.</p></div> <div>INSTALLATION/APPLICATION:<ul style="list-style-type: none"><li>Use off-site commercial washing businesses as much as possible. Washing vehicles and equipment outdoors or in areas where wash water flows onto paved surfaces or into drainage pathways can pollute storm water. If you wash a large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.</li><li>If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.</li><li>Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades.</li><li>Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance.</li></ul></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Minimal, some berm repair may be necessary.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input checked="" type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	


BMP: Vehicle And Equipment Fueling		VEF
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Prevent fuel spills and leaks, and reduce their impacts to storm water by using off-site facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors.</p></div> <div>INSTALLATION/APPLICATION:<ul style="list-style-type: none"><li>Use off-site fueling stations as much as possible. Fueling vehicles and equipment outdoors or in areas where fuel may spill/leak onto paved surfaces or into drainage pathways can pollute storm water. If you fuel a large number of vehicles or pieces of equipment, consider using an off-site fueling station. These businesses are better equipped to handle fuel and spills properly. Performing this work off-site can also be economical by eliminating the need for a separate fueling area at your site.</li><li>If fueling must occur on-site, use designated areas, located away from drainage courses, to prevent the runoff of storm water and the runoff of spills. Discourage "topping-off" of fuel tanks.</li><li>Always use secondary containment, such as a drain pan or drop cloth, when fueling to catch spills/leaks. Place a stockpile of spill cleanup materials where it will be readily accessible. Use adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent materials promptly and dispose of properly.</li><li>Carry out all Federal and State requirements regarding stationary above ground storage tanks (40 CF Sub. J). Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and perhaps forklifts, most vehicles should be able to travel to a designated area with little lost time. Train employees and subcontractors in proper fueling and cleanup procedures.</li></ul></div> <div>LIMITATIONS:<p>Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance.</p></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Keep ample supplies of spill cleanup materials on-site.</li><li>Inspect fueling areas and storage tanks on a regular schedule.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input checked="" type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	


BMP: Portable Toilets		PT
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Temporary on-site sanitary facilities for construction personnel.</p></div> <div>APPLICATION:<p>All sites with no permanent sanitary facilities or where permanent facility is too far from activities.</p></div> <div>INSTALLATION/APPLICATION CRITERIA:<ul style="list-style-type: none"><li>Locate portable toilets in convenient locations throughout the site.</li><li>Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.</li><li>Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.</li><li>Stake toilets to prevent them from tipping.</li></ul></div> <div>LIMITATIONS:<p>No limitations.</p></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.</li><li>Regular waste collection should be arranged with licensed service.</li><li>All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input checked="" type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input checked="" type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input checked="" type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	

BMP: Grading Practices		GP
 <p>Soils exposed from land grading activities are very vulnerable to erosion</p>	<div>OBJECTIVES<ul style="list-style-type: none"><li><input type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input checked="" type="checkbox"/> Minimize Disturbed Areas</li><li><input checked="" type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Control soil erosion by minimizing the exposure of bare soil to erosive forces. This is done by</p><ol style="list-style-type: none"><li>limiting the amount of land disturbed at one time in preparation for construction</li><li>limiting the amount of time between the disturbance of soil and protection or stabilization of disturbed soils, and</li><li>using grading practices to protect exposed soils susceptible to storm water runoff.</li></ol><p>Related practices include construction sequencing, preservation of existing vegetation, erosion control practices and sediment control practices.</p></div> <div>APPROACH:<ul style="list-style-type: none"><li>Limit the area of disturbance to those areas requiring grading. This preserves existing vegetation and reduces the vulnerability of soil to erosion.</li><li>Based on erosion potential and sediment control measures on the site, establish what areas are to be graded at one time.</li><li>An undisturbed buffer zone containing vegetation at the lowest elevation of a construction site can reduce the transport of sediment off site.</li><li>Initiate soil protection measures during the course of work to minimize the length of time soil is exposed to erosive forces.</li><li>Conduct work in stages so that construction or soil stabilization occurs promptly after disturbance of soil.</li><li>Establish a schedule governing the stabilization of disturbed slopes, both in terms of passage of time since commencement and completion of disturbance and in terms of planting season.</li><li>Leaving the surface of the disturbed soil graded in a roughened condition (not smooth) can reduce the quantity and velocity of storm water runoff.</li><li>Prevent storm water runoff from running onto steep slopes from above.</li><li>Avoid long, steep cut or fill slopes that allow runoff water of sufficient quantity or velocity to cut into and erode the slope.</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>The specific approach to grading on a particular site depends on the conditions of the site and surrounding land; engineering judgment is required to design the approach best suited for each site.</li></ul></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Practices may need to vary from the approved plan if erosion problems appear when storm water runoff occurs.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input type="checkbox"/> Heavy Metals</li><li><input type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oxygen Demanding Substances</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Bacteria &amp; Viruses</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input checked="" type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	

BMP: Compaction		CP
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input checked="" type="checkbox"/> Minimize Disturbed Areas</li><li><input checked="" type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Use of rolling, tamping, or vibration to stabilize fill materials and control erosion by increasing the soil density. Increasing the density of soil improves soil strength, reduces long-term soil settlement, and provides resistance to erosion.</p></div> <div>APPLICATIONS:<ul style="list-style-type: none"><li>Stabilize fill material placed around various structures.</li><li>Improve soil in place as foundation support for roads, parking lots, and buildings.</li></ul></div> <div>INSTALLATION/APPLICATION CRITERIA:<ul style="list-style-type: none"><li>Make sure soil moisture content is at optimum levels.</li><li>Use proper compaction equipment.</li><li>Install sediment control and storm water management devices below compacted areas and runoff interceptor devices above these areas. Drainage from compacted areas must be carefully planned to protect adjacent uncompacted soils.</li><li>The surface of compacted areas should be scarified and seeded or mulched and seeded to increase the effectiveness of compaction.</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>Compaction tends to increase runoff.</li><li>Over-compaction will hamper revegetation efforts.</li></ul></div> <div>MAINTENANCE:<p>No maintenance required.</p></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input checked="" type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	

BMP: Construction Road Stabilization		CR
	<div>OBJECTIVES<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Housekeeping Practices</li><li><input type="checkbox"/> Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input checked="" type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul></div>	
<div>DESCRIPTION:<p>Temporary stabilization of on-site roadway by placement of gravel roadbase.</p></div> <div>APPLICATION:<ul style="list-style-type: none"><li>On-site roadways used daily by construction traffic (may not apply to gravelly type soils)</li><li>Parking or staging areas susceptible to erosion due to traffic use</li></ul></div> <div>INSTALLATION/APPLICATION CRITERIA:<ul style="list-style-type: none"><li>Grade temporary access road with 2% cross fall, for two-way width provide crown.</li><li>Provide roadside ditch and outlet controls where required.</li><li>Place 6 inches of 2-inch to 4-inch crushed rock on driving area</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>May require removal of gravel roadbase at completion of activities if final cover is not impervious</li><li>May require controls for surface storm water runoff</li></ul></div> <div>MAINTENANCE:<ul style="list-style-type: none"><li>Inspect after major rainfall events and at least monthly.</li><li>Place additional gravel as needed and repair any damaged areas.</li><li>Maintain any roadside drainage controls.</li></ul></div>	<div>Adapted from Salt Lake County BMP Fact Sheet</div> <div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Other Waste</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input checked="" type="checkbox"/> O&amp;M Costs</li><li><input type="checkbox"/> Maintenance</li><li><input type="checkbox"/> Training</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	

BMP: BMP Inspection and Maintenance		BMPIM
	<div>APPLICATIONS<ul style="list-style-type: none"><li><input type="checkbox"/> Manufacturing</li><li><input checked="" type="checkbox"/> Material Handling</li><li><input checked="" type="checkbox"/> Vehicle Maintenance</li><li><input type="checkbox"/> Construction</li><li><input type="checkbox"/> Commercial Activities</li><li><input type="checkbox"/> Roadways</li><li><input checked="" type="checkbox"/> Waste Containment</li><li><input checked="" type="checkbox"/> Housekeeping Practices</li></ul></div>	
<div>DESCRIPTION:<p>Inspect and maintain all structural BMP's (both existing and new) on a routine basis to remove pollutants from entering storm drain inlets. This includes the establishment of a schedule for inspections and maintenance.</p></div> <div>APPROACH:<p>Regular maintenance of all structural BMP's is necessary to ensure their proper functionality.</p><ul style="list-style-type: none"><li>Annual inspections.</li><li>Prioritize maintenance to clean, maintain, and repair or replace structures in areas beginning with the highest pollutant loading.</li><li>Clean structural BMP's in high pollutant areas just before the wet season to remove sediments and debris accumulated during the summer and fall.</li><li>Keep accurate logs of what structures were maintained and when they were maintained.</li><li>Record the amount of waste collected.</li></ul></div> <div>LIMITATIONS:<ul style="list-style-type: none"><li>Availability of trained staff</li></ul></div>	<div>TARGETED POLLUTANTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Sediment</li><li><input checked="" type="checkbox"/> Nutrients</li><li><input type="checkbox"/> Heavy Metals</li><li><input type="checkbox"/> Toxic Materials</li><li><input type="checkbox"/> Oxygen Demanding Substances</li><li><input checked="" type="checkbox"/> Oil &amp; Grease</li><li><input checked="" type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Bacteria &amp; Viruses</li></ul></div> <div><div><input checked="" type="checkbox"/> High Impact</div><div><input checked="" type="checkbox"/> Medium Impact</div><div><input type="checkbox"/> Low or Unknown Impact</div></div> <div>IMPLEMENTATION REQUIREMENTS<ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Capital Costs</li><li><input checked="" type="checkbox"/> O&amp;M Costs</li><li><input checked="" type="checkbox"/> Maintenance</li><li><input checked="" type="checkbox"/> Staffing</li><li><input type="checkbox"/> Training</li><li><input type="checkbox"/> Administrative</li></ul></div> <div><div><input checked="" type="checkbox"/> High</div><div><input checked="" type="checkbox"/> Medium</div><div><input type="checkbox"/> Low</div></div>	



DESIGN & ENGINEERING FIRM  
895 S. 4000 Main Dr. #3  
American Fork, UT 84003  
(801) 742-8611  
www.dkefirm.com

PROJECT: SILVER CREEK WAREHOUSE

STREET: 441 N. Main Way  
Lot 7 & 8 Saratoga Peaks Industrial Park  
CITY: SALT LAKE CITY, UT 84143

JOB # 24-003

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS


DO NOT SCALE

SHEET SIZE: ARCH D 24X36

DATE 10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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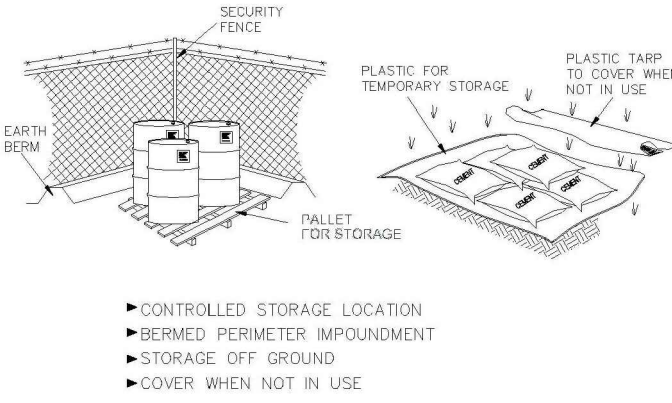
DRAWN BY: C. WINGER  
ENGINEER: B. SAFLEY


SHEET # CS3

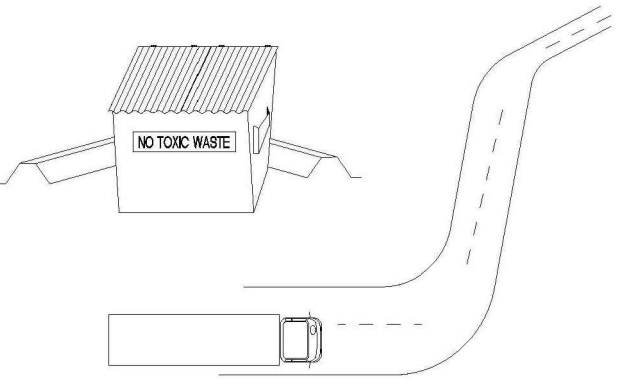
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BMP: Hazardous Waste Management		HWM	
	<p><b>PROGRAM ELEMENTS</b></p> <ul style="list-style-type: none"><li>☒ New Development</li><li>☒ Residential</li><li>☒ Commercial Activities</li><li>☒ Industrial Activities</li><li>☒ Municipal Facilities</li><li>☒ Illegal Discharges</li></ul>		
<p><b>DESCRIPTION:</b></p> <p>Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees. Another important aspect of this BMP is to insure the use of sub-consultants who are properly licensed and trained.</p> <p><b>APPLICATION:</b></p> <p>Many of the chemicals used on-site can be hazardous materials which become hazardous waste upon disposal. These wastes may include:</p> <ul style="list-style-type: none"><li>• Paints and solvents; petroleum products such as oils; fuels and greases; herbicides and pesticides; acids for cleaning masonry; and concrete curing compounds.</li></ul> <p>In addition, sites with existing structures may contain wastes which must be disposed of in accordance with federal, state and local regulations, including:</p> <ul style="list-style-type: none"><li>• Sandblasting grit mixed with lead, cadmium or chromium based paints, asbestos, and PCBs.</li></ul> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <p>The following steps will help reduce storm water pollution from hazardous wastes:</p> <ul style="list-style-type: none"><li>• Use all of the product before disposing of the container.</li><li>• Do not remove the original product label, it contains important safety and disposal information.</li><li>• Do not over-apply herbicides and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried off-site by runoff. Do not apply these chemicals just before it rains. People applying pesticides must be certified in accordance with federal and state regulations.<p><b>LIMITATIONS:</b></p><p>Hazardous waste that cannot be reused or recycled must be disposed of by a licensed hazardous waste collector.</p><p><b>MAINTENANCE:</b></p><ul style="list-style-type: none"><li>• Inspect hazardous waste receptacles and areas regularly.</li><li>• Arrange for regular hazardous waste collection.</li></ul></li></ul>	<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li><input type="checkbox"/> Heavy Metals</li><li>■ Toxic Materials</li><li><input type="checkbox"/> Oxygen Demanding Substances</li><li>☒ Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Bacteria &amp; Viruses</li></ul> <p>■ High Impact ☒ Medium Impact <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Capital Costs</li><li>☒ O&amp;M Costs</li><li>☒ Regulatory</li><li>☒ Training</li><li>☒ Staffing</li><li>☒ Administrative</li></ul> <p>■ High    ☒ Medium    <input type="checkbox"/> Low</p>		

BMP: Materials Storage		MS	
	<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"><li>☒ Housekeeping Practices</li><li>☒ Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul>		
<p><b>DESCRIPTION:</b></p> <p>Controlled storage of on-site materials.</p> <p><b>APPLICATION:</b></p> <ul style="list-style-type: none"><li>• Storage of hazardous, toxic, and all chemical substances.</li><li>• Any construction site with outside storage of materials.</li></ul> <p><b>INSTALLATION/APPLICATION CRITERIA:</b></p> <ul style="list-style-type: none"><li>• Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.</li><li>• Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.</li><li>• Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.</li><li>• 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.</li></ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"><li>• Does not prevent contamination due to mishandling of products.</li><li>• Spill Prevention and Response Plan is required.</li><li>• Only effective if materials are actively stored in controlled location.</li></ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"><li>• Inspect daily and repair any damage to perimeter impoundment or security fencing.</li><li>• Verify that 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.</li></ul>	<p>Adapted from Salt Lake City BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li>■ Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li>☒ Other Waste</li></ul> <p>■ High Impact ☒ Medium Impact <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"><li>☒ Capital Costs</li><li>☒ O&amp;M Costs</li><li>☒ Maintenance</li><li>■ Training</li></ul> <p>■ High    ☒ Medium    <input type="checkbox"/> Low</p>		

BMP: Spill Clean-Up		SCU	
	<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"><li>☒ Housekeeping Practices</li><li>☒ Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul>		
<p><b>DESCRIPTION:</b></p> <p>Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.</p> <p><b>APPLICATION:</b></p> <p>All sites</p> <p><b>GENERAL:</b></p> <ul style="list-style-type: none"><li>• Store controlled materials within a storage area.</li><li>• Educate personnel on prevention and clean-up techniques.</li><li>• Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.</li><li>• Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.</li></ul> <p><b>METHODS:</b></p> <ul style="list-style-type: none"><li>• Clean-up spills/leaks immediately and remediate cause.</li><li>• Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.</li><li>• Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.</li><li>• Document all spills with date, location, substance, volume, actions taken and other pertinent data.</li><li>• Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #801-536-4100) for any spill of reportable quantity.</li></ul>	<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li>■ Toxic Materials</li><li>☒ Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li><input type="checkbox"/> Other Waste</li></ul> <p>■ High Impact ☒ Medium Impact <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"><li>☒ Capital Costs</li><li><input type="checkbox"/> O&amp;M Costs</li><li>☒ Maintenance</li><li>■ Training</li></ul> <p>■ High    ☒ Medium    <input type="checkbox"/> Low</p>		

BMP: Waste Disposal		WD	
	<p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"><li>☒ Housekeeping Practices</li><li>☒ Contain Waste</li><li><input type="checkbox"/> Minimize Disturbed Areas</li><li><input type="checkbox"/> Stabilize Disturbed Areas</li><li><input type="checkbox"/> Protect Slopes/Channels</li><li><input type="checkbox"/> Control Site Perimeter</li><li><input type="checkbox"/> Control Internal Erosion</li></ul>		
<p><b>DESCRIPTION:</b></p> <p>Controlled storage and disposal of solid waste generated by construction activities.</p> <p><b>APPLICATION:</b></p> <p>All construction sites.</p> <p><b>INSTALLATION:</b></p> <ul style="list-style-type: none"><li>• Designate one or several waste collection areas with easy access for construction vehicles and personnel. Ensure no waterways or storm drainage inlets are located near the waste collection areas.</li><li>• Construct compacted earthen berm (See Earth Berm Barrier BMP Fact Sheet), or similar perimeter containment around collection area for impoundment in the case of spills and to trap any windblown trash.</li><li>• Use water light containers with covers to remain closed when not in use. Provide separate containers for different waste types where appropriate and label clearly.</li><li>• Ensure all on site personnel are aware of and utilize designated waste collection area properly and for intended use only (e.g. all toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste).</li><li>• Arrange for periodic pickup, transfer and disposal of collected waste at an authorized disposal location. Include regular Porto-potty service in waste management activities.</li></ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"><li>• On-site personnel are responsible for correct disposal of waste.</li></ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"><li>• Discuss waste management procedures at progress meetings.</li><li>• Collect site trash daily and deposit in covered containers at designated collection areas.</li><li>• Check containers for leakage or inadequate covers and replace as needed.</li><li>• Randomly check disposed materials for any unauthorized waste (e.g. toxic materials).</li><li>• During daily site inspections check that waste is not being incorrectly disposed of on-site (e.g. burial, burning, surface discharge, discharge to storm drain).</li></ul>	<p>Adapted from Salt Lake City BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Sediment</li><li><input type="checkbox"/> Nutrients</li><li>■ Toxic Materials</li><li><input type="checkbox"/> Oil &amp; Grease</li><li><input type="checkbox"/> Floatable Materials</li><li>■ Other Waste</li></ul> <p>■ High Impact ☒ Medium Impact <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"><li>■ Capital Costs</li><li>■ O&amp;M Costs</li><li>☒ Maintenance</li><li>■ Training</li></ul> <p>■ High    ☒ Medium    <input type="checkbox"/> Low</p>		

BMP: Street Cleaning		SC	
	<p><b>PROGRAM ELEMENTS</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> New Development</li><li><input type="checkbox"/> Residential</li><li><input type="checkbox"/> Commercial Activities</li><li><input type="checkbox"/> Industrial Activities</li><li>☒ Municipal Facilities</li><li>☒ Illegal Discharges</li></ul>		
<p><b>DESCRIPTION:</b></p> <p>Reduce the discharges of pollutants to stormwater from street surfaces by conducting street cleaning on a regular basis.</p> <p><b>APPROACH:</b></p> <ul style="list-style-type: none"><li>• Prioritize cleaning to use the most sophisticated sweepers, at the highest frequency, and in areas with the highest pollutant loading.</li><li>• Restrict street parking prior to and during sweeping.</li><li>• Increase sweeping frequency just before the rainy season.</li><li>• Proper maintenance and operation of sweepers greatly increase their efficiency.</li><li>• Keep accurate operation logs to track programs.</li><li>• Reduce the number of parked vehicles using regulations.</li><li>• Sweepers effective at removing smaller particles (less than 10 microns) may generate dust that would lead to concerns over worker and public safety.</li><li>• Equipment selection can be key for this particular BMP. There are two types used, the mechanical broom sweepers (more effective at picking up large debris and cleaning wet streets), and the vacuum sweepers (more effective at removing fine particles and associated heavy metals). Many communities find it useful to have a compliment of both types in their fleet.</li></ul> <p><b>LIMITATIONS:</b></p> <ul style="list-style-type: none"><li>• Conventional sweepers are not able to remove oil and grease.</li><li>• Mechanical sweepers are not effective at removing finer sediments.</li><li>• Effectiveness may also be limited by street conditions, traffic congestion, presence of construction projects, climatic conditions and condition of curbs.</li></ul> <p><b>MAINTENANCE:</b></p> <ul style="list-style-type: none"><li>• Replace worn parts as necessary.</li><li>• Install main and gutter brooms of the appropriate weight.</li></ul>	<p>Adapted from Salt Lake County BMP Fact Sheet</p> <p><b>TARGETED POLLUTANTS</b></p> <ul style="list-style-type: none"><li>■ Sediment</li><li><input type="checkbox"/> Nutrients</li><li>■ Heavy Metals</li><li>☒ Toxic Materials</li><li>■ Oxygen Demanding Substances</li><li><input type="checkbox"/> Oil &amp; Grease</li><li>☒ Floatable Materials</li><li><input type="checkbox"/> Bacteria &amp; Viruses</li></ul> <p>■ High Impact ☒ Medium Impact <input type="checkbox"/> Low or Unknown Impact</p> <p><b>IMPLEMENTATION REQUIREMENTS</b></p> <ul style="list-style-type: none"><li>■ Capital Costs</li><li>☒ O&amp;M Costs</li><li>☒ Regulatory</li><li>☒ Training</li><li>■ Staffing</li><li>☒ Administrative</li></ul> <p>■ High    ☒ Medium    <input type="checkbox"/> Low</p>		

DKE

DESIGN & ENGINEERING FIRM

903 S. 400 West Dr. #3  
American Fork, UT 84003  
(801) 742-8611  
www.dkefirm.com

PROJECT:

SILVER CREEK WAREHOUSE

STREET:

44 N. Main Way  
Lot 7 & 8 Santaquin Peaks Industrial Park

CITY:

SANTAQUIN, UTAH

JOB #

24-003

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS

DO NOT SCALE

SHEET SIZE:

ARCH D 24X36

DATE

10/18/2024

PLAN SUBMITTAL DATES

DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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DAVID K. BRENT

REGISTERED PROFESSIONAL ENGINEER

No. 181311

F. BRENT SAFLEY

MAY 02 2025

STATE OF UTAH

DRAWN BY:

C. WINGER

ENGINEER:

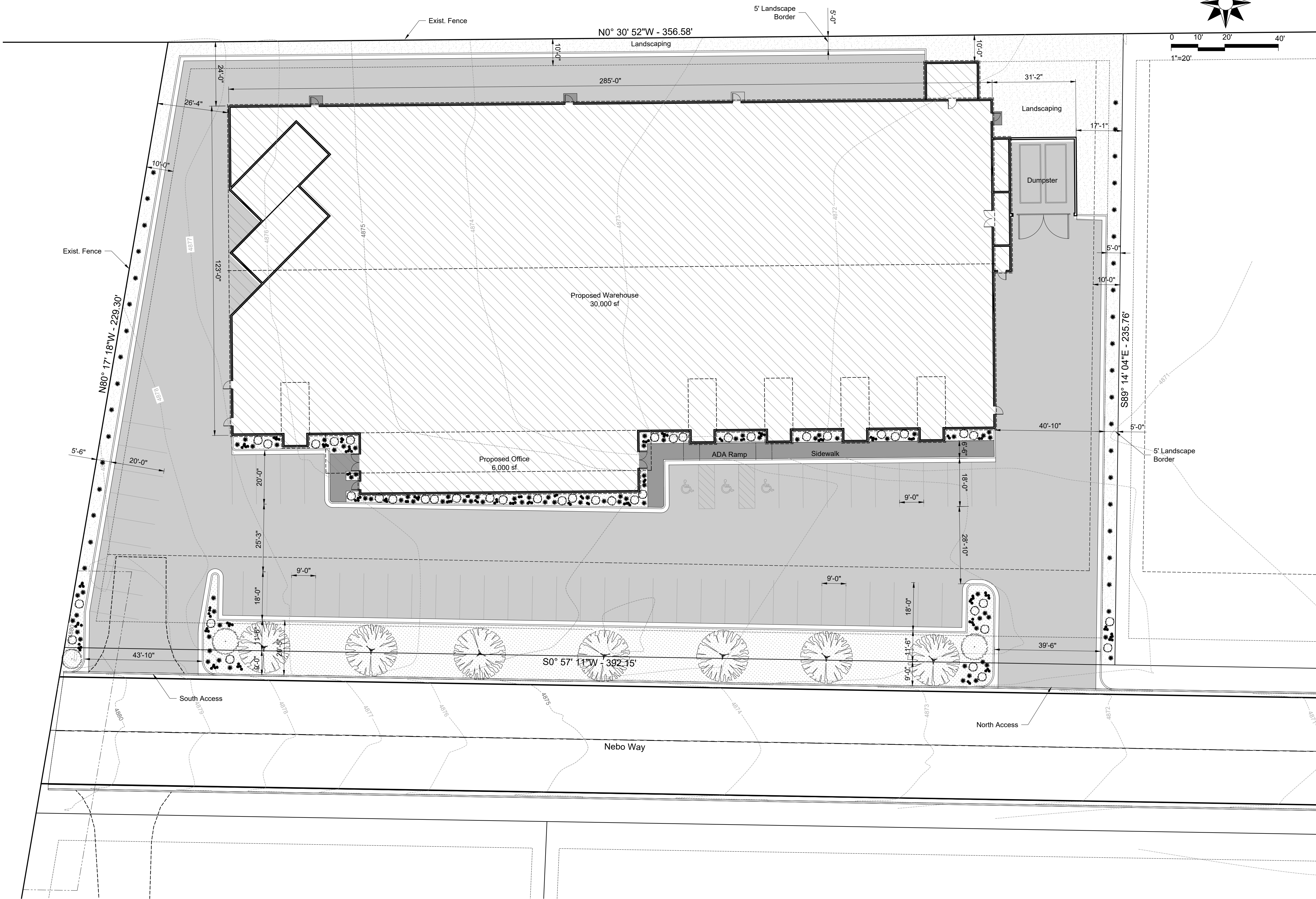
B. SAFLEY

SHEET #

CS4

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PROPOSED LANDSCAPE PLAN  
SCALE: 1"=20'-0"

Site Materials Legend

SYMBOL	LANDSCAPE DESCRIPTION	QTY
	PARKING AREA	
	SIDEWALK	
	2"-4" TAN CRUSHED ROCK.	7,447 SF
	1" MINUS TAN CRUSHED ROCK.	6,044 SF

Plant Legend

SYMBOL	QTY	COMMON NAME / BOTANICAL	CONT	CAL	SIZE
	(7)	QUERCUS ROBUR X ALBA JFS-KW10X TM STREET SPIRE OAK TD4, 45X14; AV 176; SUN; Z4	B & B	2" Cal	
	(3)	JUNIPERUS CHINENSIS SPARTAN SPARTAN JUNIPER LOW, 15X6; SUN; Z4; UTAH LAKE WATER TOLERANT	B & B		5'-6"
	(118)	CALAMAGROSTIS X ACUTIFLORA KARL FOERSTER FEATHER REED GRASS TW2; 4X3; AV 7; SUN; Z4; UTAH LAKE WATER TOLERANT	1 gal		
	(44)	SPIRAEA BETULIFOLIA 'TOR GOLD' TM GLOW GIRL BIRCHLEAF SPIREA MODERATE, 3-4 X 3-4; SUN TO PART SUN; Z3	5 gal		
	(45)	JUNIPERUS HORIZONTALIS MONBER TM ICEE BLUE JUNIPER GV1; 4" X 6"; AV 50; SUN; Z3; UTAH LAKE WATER TOLERANT	5 gal		

LANDSCAPE NOTES:

- LANDSCAPE CONTRACTOR SHALL HAVE UTILITIES BLUE STAKED PRIOR TO DIGGING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S 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 INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) 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 PLACING PLANT MATERIAL.
- 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 2-3" OF QUALITY COMPOST) 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 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.
- IF REQUIRED BY CITY OR OWNER SPECIFIED, DEWIT 5 OZ WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN. WEED BARRIER SHALL BE CUT BACK FROM EACH PLANT TO THE DIAMETER OF THE ROOT BALL. IF WEED BARRIER IS NOT REQUIRED, AT OWNER'S APPROVAL, USE TREGLAN 10 AS A PRE-EMERGENT. APPLY ACCORDING TO LABEL DIRECTIONS AFTER PLANTING AND BEFORE AND AFTER APPLYING MULCH.
- ROCK MULCH (INORGANIC MULCH) TO BE APPLIED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL AID MATERIAL (ORGANIC MULCH). NO MULCH SHALL BE PLACED WITHIN 12" OF BASE OF TREE OR 6" WITHIN BASE OF SHRUBS AND PERENNIALS.
- A NEW UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM IS TO BE INSTALLED BY CONTRACTOR IN ALL LANDSCAPE 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 EDGE OF ROOT BALL, NOT AGAINST TRUNK. SEE IRRIGATION PLAN.
- LANDSCAPING CONTRACTOR IS RESPONSIBLE TO IMPROVE FINAL GRADE AND PROPER DRAINAGE IN PLANTER AREAS, 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 DRAINAGE OF ALL SWALES, BERMS, OR GRADE IN PLANTERS.
- ALL GRADING TO SLOPE AWAY FROM ANY STRUCTURE A MINIMUM OF 10 FEET WITH A MINIMUM 6" FALL.
- FINISHED GRADE SHALL NOT DRAIN ON NEIGHBORING PROPERTIES.
- 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.

DESIGN & ENGINEERING FIRM  
993 S. Auto Mall Dr. #3  
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JOB # 24-003

PROJECT: SILVER CREEK WAREHOUSE

STREET: 41 N Nebo Way  
Lot 17 & 8 Santaquin Peaks Industrial Park

CITY: SANTAQUIN, UTAH

CONTRACTOR TO VERIFY ALL CONDITIONS & DIMENSIONS

DO NOT SCALE

SHEET SIZE: ARCH D  
24X36

PROPOSED LANDSCAPE PLAN

DATE 10/18/2024

PLAN SUBMITTAL DATES	
DATE:	DESCRIPTION:
10-18-2024	SUBMITTAL 1
05-02-2025	SUBMITTAL 2
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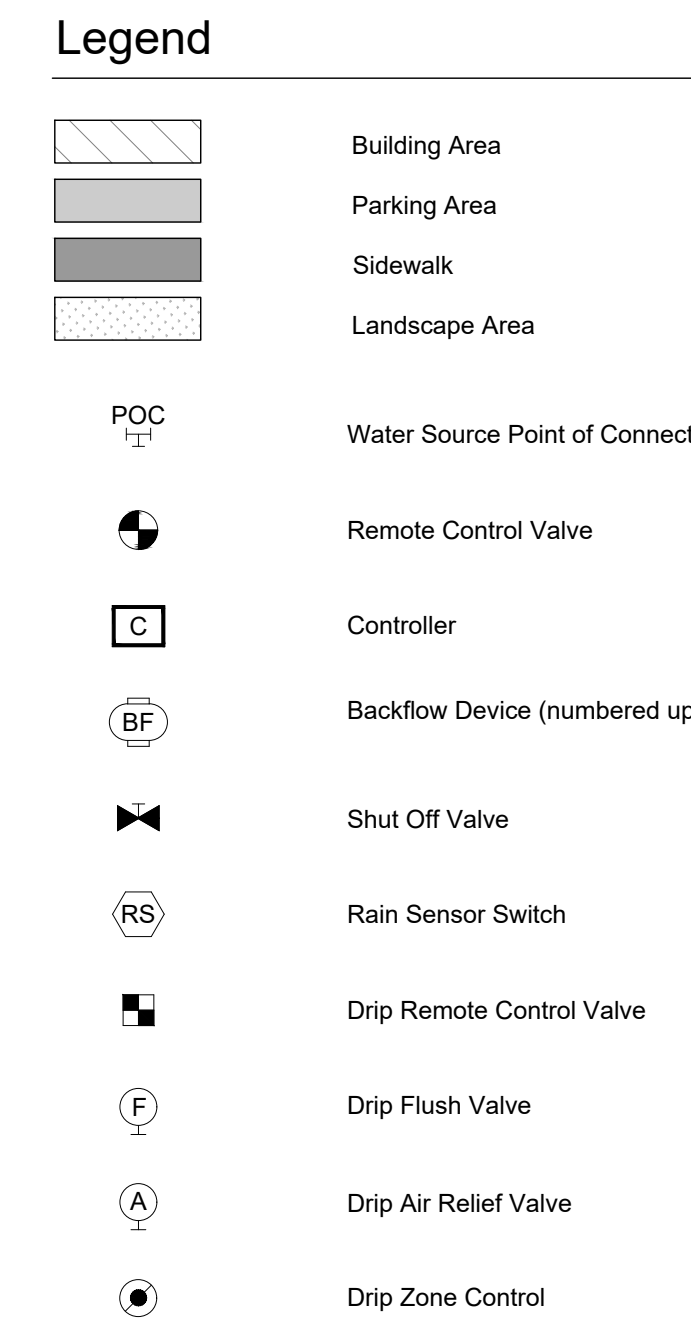
DRAWN BY: C. WINGER

ENGINEER: B. SAFLEY

SHEET #

L-01





PLANT TYPE	DRIPLINE TYPE	EMITTER FLOW	MAX. ZONE FLOW
SHRUBS	RAINBIRD XFS-CV-09-18 OR EQUAL	0.9 GPM	LESS THAN20 GPM
TREES	RAINBIRD XFS-CV-09-18 OR EQUAL	0.9 GPM	LESS THAN20 GPM

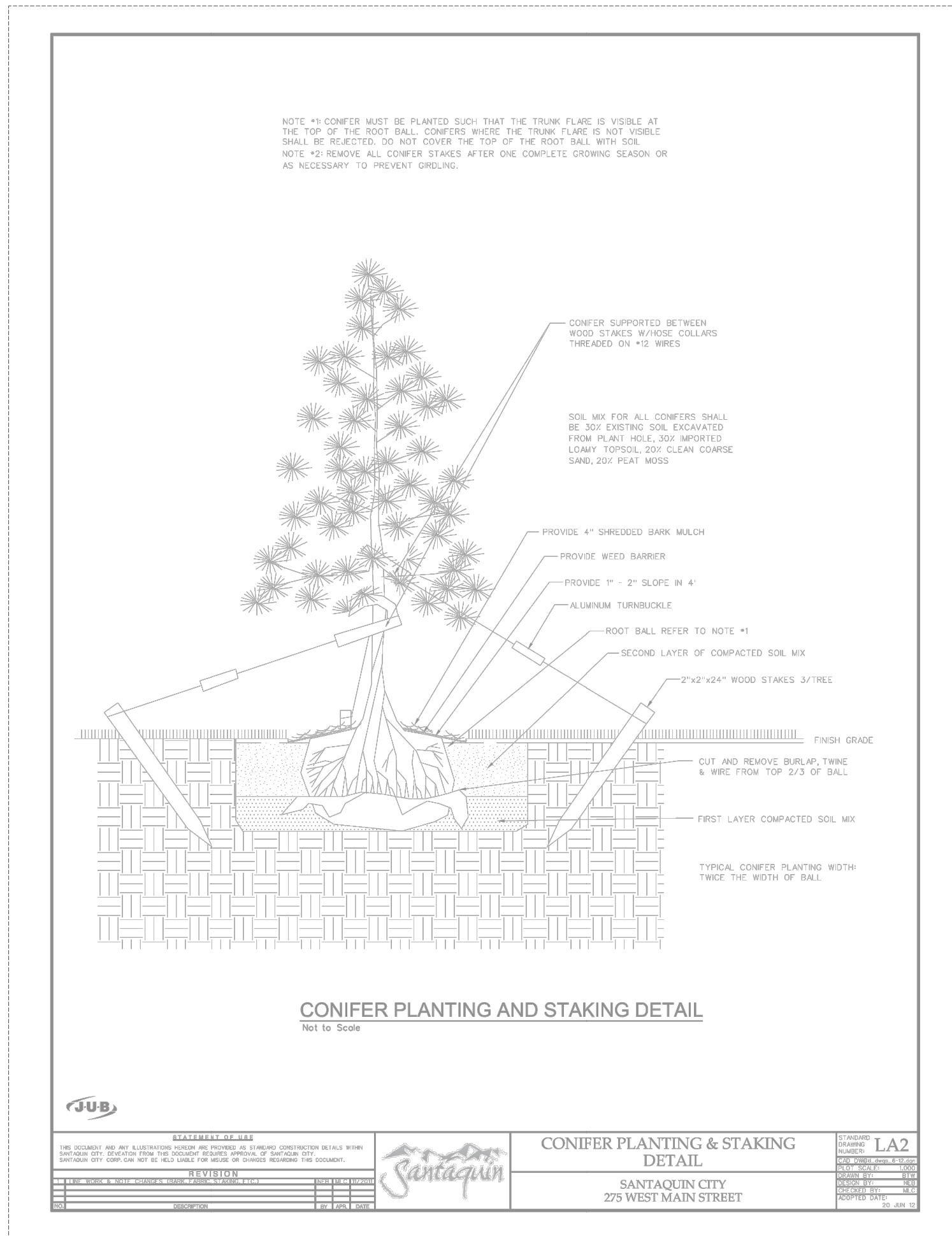
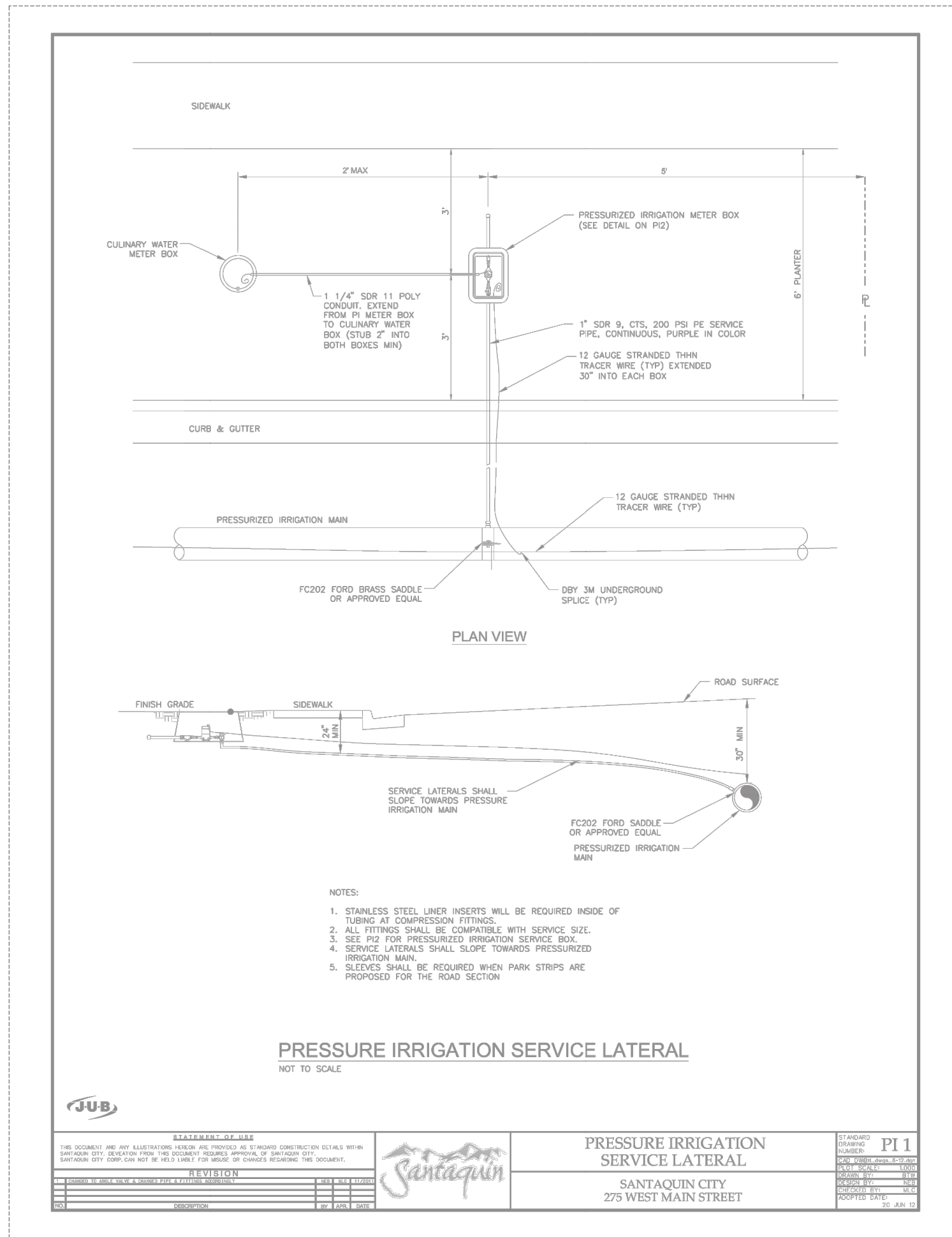
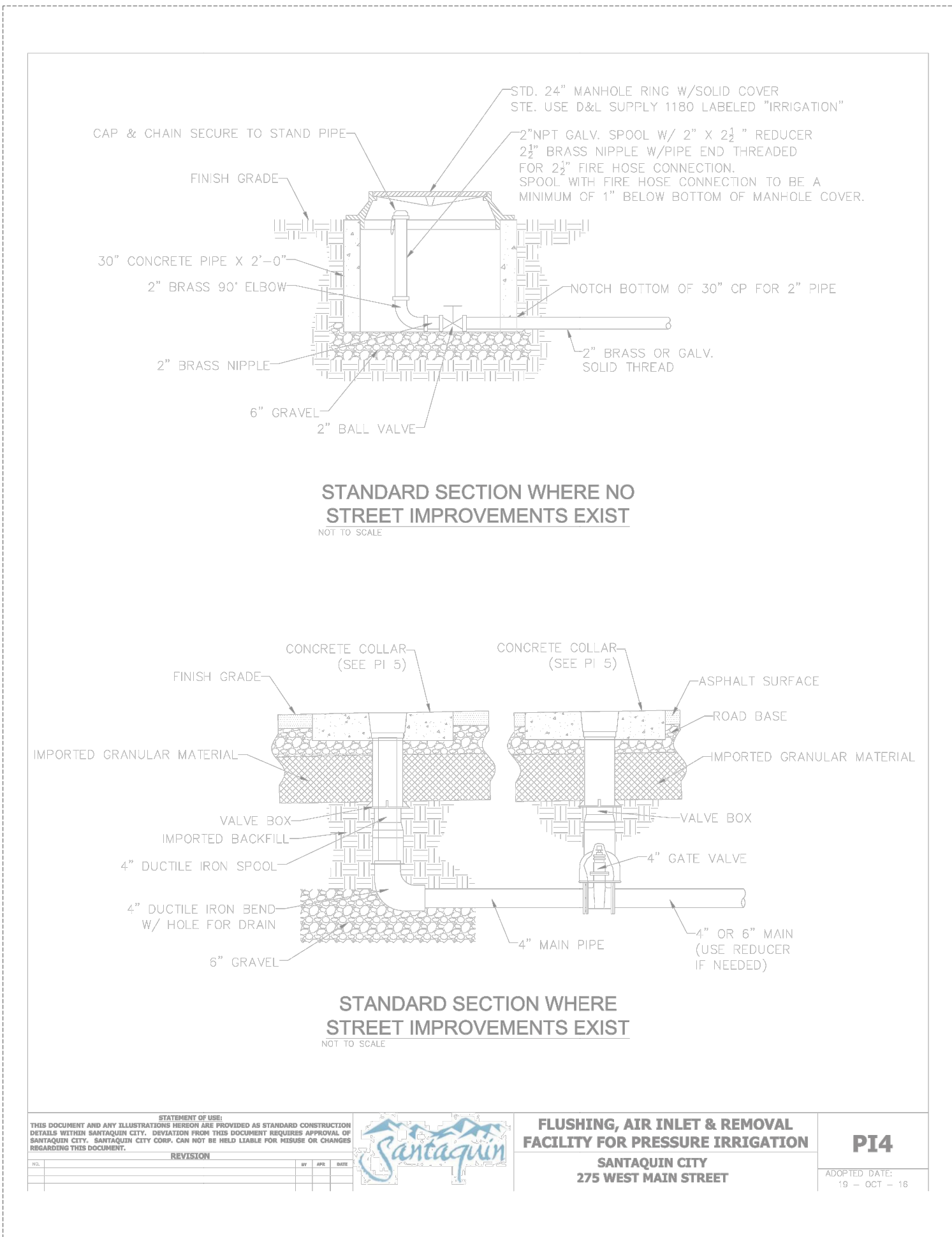
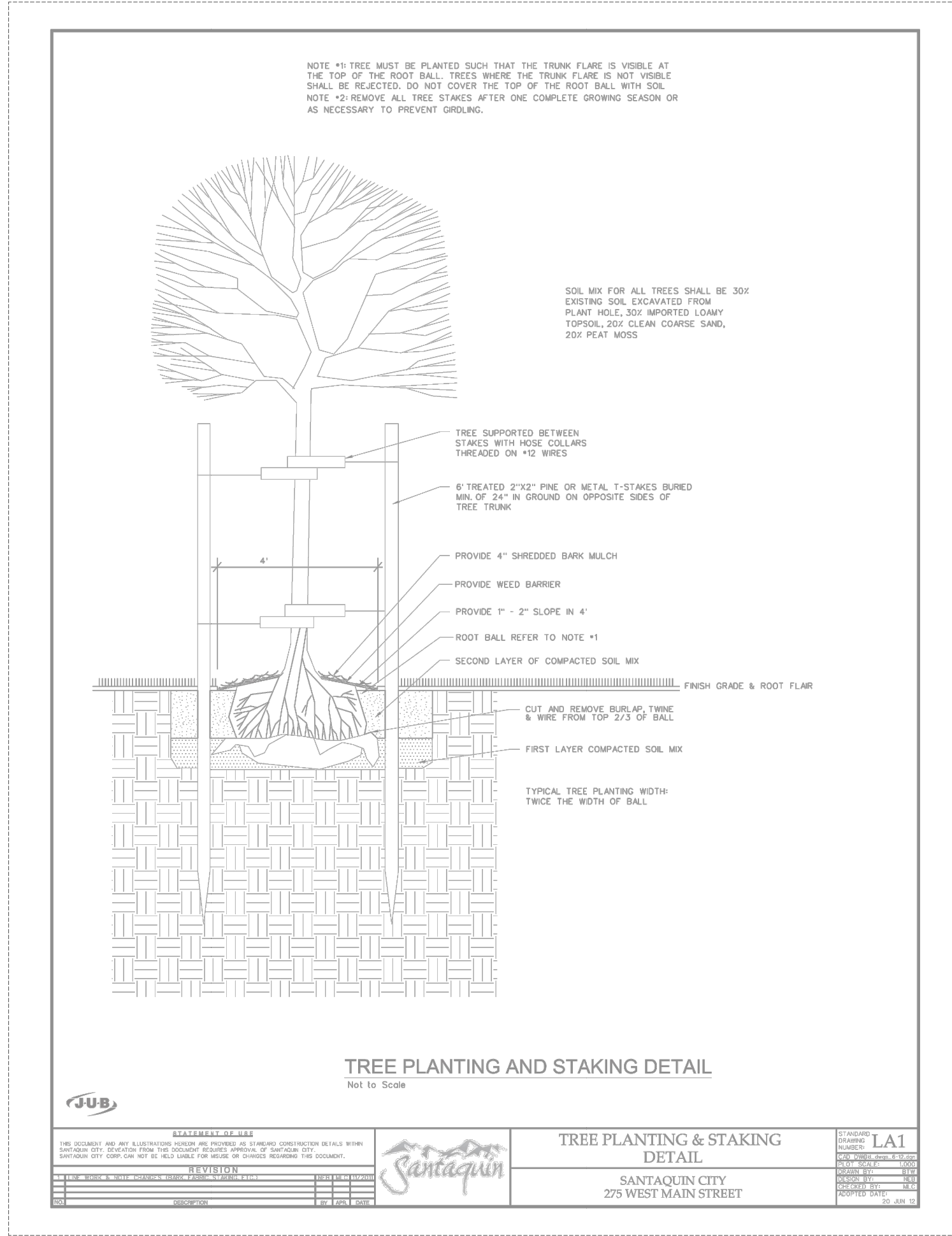
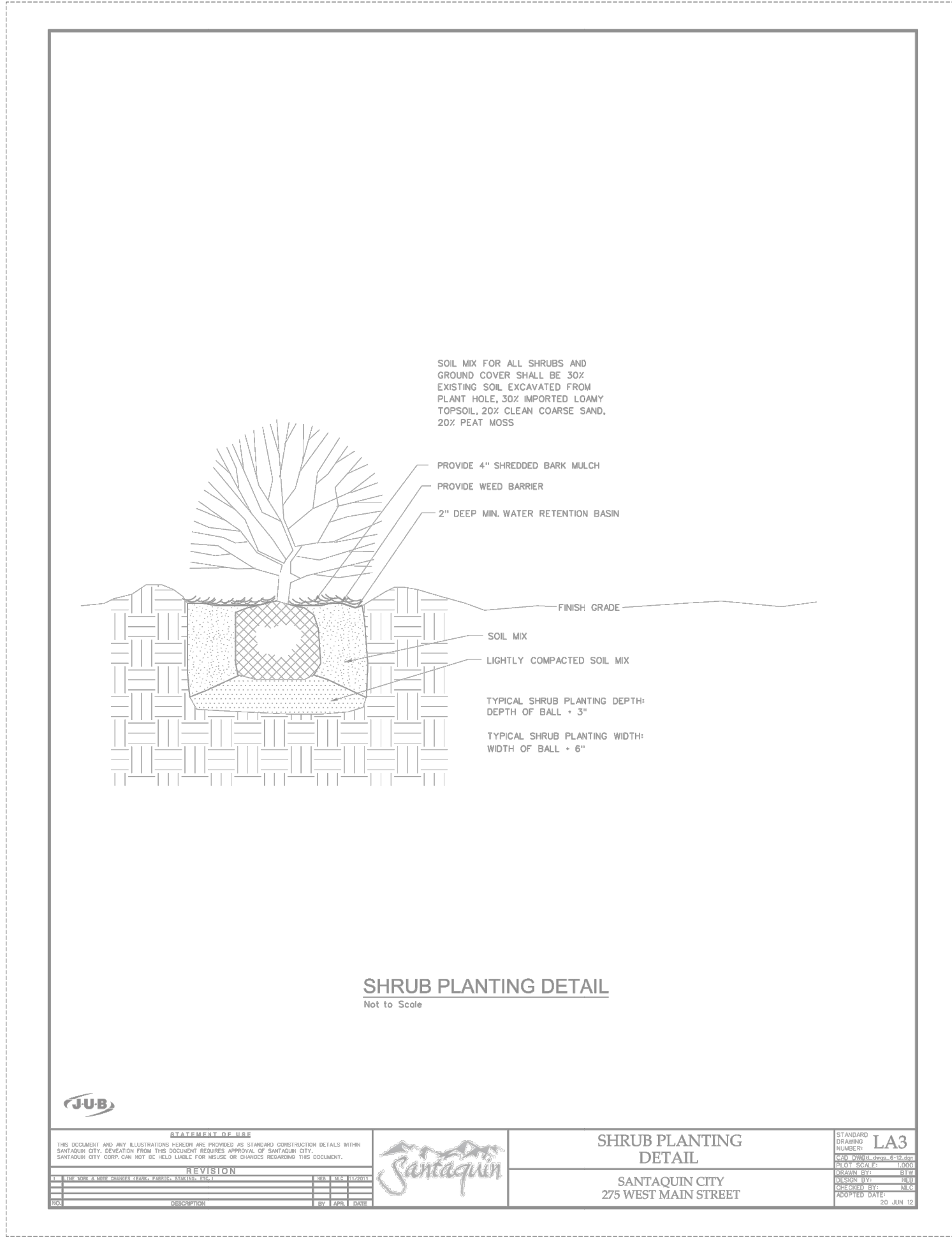
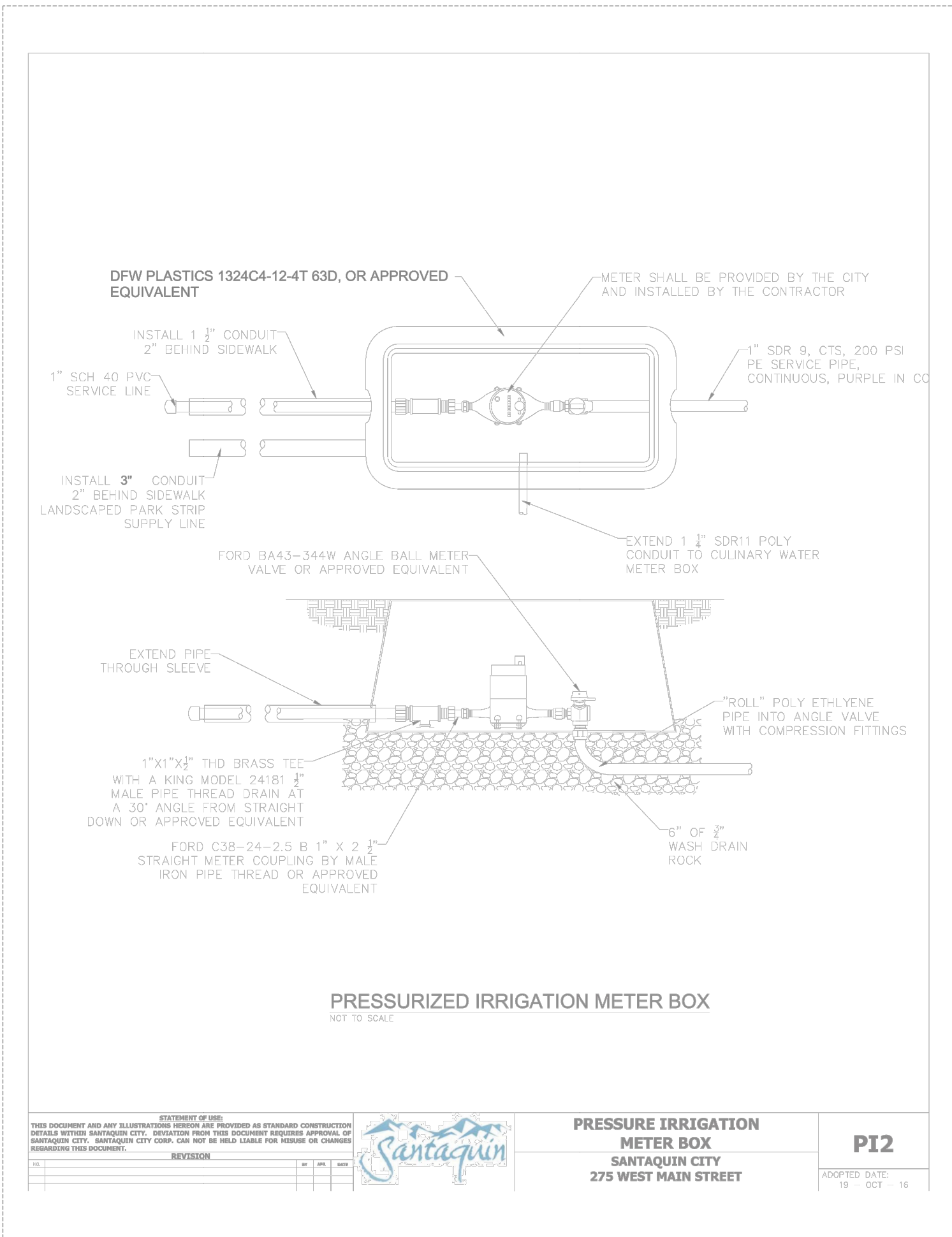
IRRIGATION NOTES:

1. ALL WORK TO BE DONE IN ACCORDANCE WITH SANTAUQUIN CITY STANDARD SPECIFICATIONS.
2. IRRIGATION CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE THE IRRIGATION SYSTEM AS INDICATED ON THE CONSTRUCTION DRAWINGS.
3. IRRIGATION CONTRACTOR TO FURNISH AND INSTALL ALL UNDERGROUND AND ABOVE GROUND PIPING, TUBING, SPRINKLER HEADS, VALVES, VALVE BOXES, CONTROLLERS, WIRES, ETC. TO PROVIDE A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM.
4. CONTRACTOR TO INSTALL PIPING UNDER PAVEMENT AND OR SIDEWALK IN PVC PIPE. ELVEES FOR IRRIGATION PIPE AND CONTROL WIRES. WIRING SHALL BE PIPED IN A SEPARATE SLEEVE FROM PIPING.
5. LAYOUT OF IRRIGATION SYSTEM SHOWN ON THIS PLAN IS SCHEMATICALLY SHOWN. ACTUAL ROUTING OF PIPE, WIRE OR OTHER COMPONENTS MAY BE ALTERED DUE TO SITE CONDITIONS.
6. IRRIGATION CONTRACTOR SHALL CONNECT TO AN EXISTING PRESSURIZED IRRIGATION SYSTEM OR WATER MAIN LINE AS NEEDED FOR POINT(S) OF CONTROL WITH SHUT-OFF VALVE, FILTER, AND RPZ AS REQUIRED.
7. IRRIGATION CONTROLLER SHALL BE PROVIDED FOR AND INSTALLED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR TO COORDINATE SUPPLY POWER WITH THE BUILDING ELECTRICAL CONTRACTOR.
8. CONTROLLER SHALL BE POWERED BY ON ITS OWN BREAKER AND CONNECTED TO A GFCI OUTLET.
9. WIRES CONNECTING TO REMOTE CONTROL VALVES TO THE IRRIGATION CONTROLLER SHALL BE SINGLE CONDUCTORS, TYPE PE. WIRE CONSTRUCTION SHALL INCORPORATE A SINGLE COPPER CONDUCTOR AND POLYETHYLENE (PE) INSULATION WITH A MINIMUM THICKNESS OF 0.045 INCHES.
10. COMMON WIRE SHALL BE WHITE IN COLOR, 12 GAUGE. CONTROL WIRE SHALL BE RED IN COLOR, 14 GAUGE. A SPARE / EXTRA WIRE SHALL BE LOOPED WITHIN EACH VALVE BOX MINIMUM OF 3 FT LENGTH.
11. ALL WIRE SPLICES SHALL BE CONTAINED WITHIN A VALVE BOX. SPLICES SHALL BE 3M BRAND DRY OR DBR CONNECTORS. SPLICES WITHIN A VALVE BOX THAT CONTAINS NO CONTROL WIRES SHALL BE STAMPED "WIRE SPLICE" ON BOX LID.
12. ALL PIPING SHALL BE SCHEDULE 40 PVC SOLVENT WELD BELL END. FITTINGS SHALL BE SCHEDULE 40 PVC SLIP FITTINGS. PIPING SHALL BE SIZED SO THEY DO NOT EXCEED THE FOLLOWING MAXIMUM FLOW RATES:

3/4" PIPE	8 GPM
1" PIPE	12 GPM
1-1/2" PIPE	30 GPM
2" PIPE	53 GPM
2-1/2" PIPE	75 GPM
13. PIPING SHALL BE BURIED WITH 12"-18" OF COVER, BEDDING AND BACKFILL MATERIAL SHALL BE CLEAN SOIL, FREE OF ROCKS 1" AND LARGER, FREE OF FIBRILE MATERIAL.
14. ISOLATION VALVES SHALL BE APOLLO BRAND 70 SERIES BRASS BALL VALVES AND INSTALLED IN CARSON STANDARD SIZE VALVE BOX. VALVES SHALL BE INSTALLED WITH S/80 PVC TEE NOZZLES 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.
15. ACTION MANIFOLD FITTINGS SHALL BE USED TO CREATE UNIONS ON BOTH SIDES OF EACH CONTROL VALVE. A CLOSING VALVE TO BE TO BE REMOVED FROM BOX WITHOUT CUTTING PIPE. VALVE SHALL BE LOCATED IN BOXES WITH AMPLE SPACE SURROUNDING THEM TO ALLOW ACCESS FOR MAINTENANCE AND REPAIR.
16. SPRINKLER HEADS ADJACENT TO WALLS, CURBS, SIDEWALKS, OR PATHS SHALL BE LOCATED AT GRADE AND 6" FROM WALLS, FENCES OR BUILDINGS AND 2 INCH AWAY FROM CURBS OR SIDEWALKS.
17. ALL LINES AND SPRAY HEADS SHALL BE INSTALLED AND FLUSHED PRIOR TO INSTALLATION OF NOZZLES.
18. SPRAY HEADS SHALL BE ADJUSTED TO PROPER HEIGHT WHEN INSTALLED, CHANGES TO GRADE OR ADJUSTMENT OF HEAD HEIGHT AFTER INSTALLATION SHALL BE CONSIDERED A PART OF THE ORIGINAL CONTRACTOR AND AT CONTRACTOR'S EXPENSE.
19. ADJUST ALL SPRAY HEADS FOR ARC, RADIUS, PROPER TRIM AND DISTRIBUTION TO COVER ALL LANDSCAPED AREAS THAT ARE TO BE IRRIGATED.
20. ADJUST ALL SPRAY HEADS SO THEY DO NOT WATER BUILDINGS, STRUCTURES, OR OTHER HARDSCAPE FEATURES.
21. ADJUST RUN TIMES OF EACH ZONE TO MEET NEEDS OF PLANT MATERIAL.
22. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANLINESS OF JOBSITE. WORK AREAS SHALL BE SWEEP CLEANLY AND PICKED UP DAILY.
23. OPEN TRENCHES OR HAZARDS SHALL BE PROTECTED WITH YELLOW CAUTION TAPE.
24. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF OFFSITE TRASH AND DEBRIS GENERATED AS A RESULT OF THE WORK ON THIS SITE.

## PROPOSED LANDSCAPE PLAN





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American Fork, UT 84003

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PROJECT:

SILVER CREEK WAREHOUSE

JOB #

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DAVID KEITH ENGINEERING, PLLC

REGISTERED PROFESSIONAL ENGINEER

NO. 181311

F. BRENT SAFLEY

MAY 02 2025

STATE OF UTAH

DRAWN BY:

C. WINGER

ENGINEER:

B. SAFLEY

SHEET #

L-03

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