



## PLANNING COMMISSION

Thursday, June 12, 2025 at 6:30 PM  
Council Chambers, 60 West Main, Hyrum, Utah

### AGENDA

Public notice is hereby given of a Hyrum Planning Commission to be held in the Council Chambers, 60 West Main, Hyrum, Utah at 6:30 PM, June 12, 2025. The proposed agenda is as follows:

- 1. ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. INVOCATION**
- 4. APPROVAL OF MINUTES**
  - A. May 8, 2025
- 5. AGENDA APPROVAL**
- 6. PUBLIC HEARING**
  - A. To receive public comment regarding a temporary land use regulation governing short-term rentals and similar transient housing uses pursuant to Utah Code 10-9a-504.
- 7. SCHEDULED DELEGATIONS**
  - A. Hyrum City - To consider the approval of an ordinance establishing a temporary land use regulation governing short-term rentals and similar transient housing uses pursuant to Utah Code 10-9a-504.
  - B. Carlyle Greger, Carlyle Machine - To request site plan approval for a new 10,950 sq. ft. building to manufacture prototypes in the medical industry located at 1671 East 145 South, consisting of approximately 1.00 acres.
- 8. ADJOURNMENT**

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**Shara Toone**  
**Secretary**

Commission Members may participate in the meeting via telephonic communication. If a Commission Member does participate via telephonic communication, the Commission Member will be on speakerphone. The speakerphone will be amplified so that the other Commission

Members and all other persons present in the Commission Chambers will be able to hear all discussions. In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Hyrum City Planning Commission at 435-245-6033 at two working days before the meeting.

**CERTIFICATE OF POSTING** - The undersigned, duly appointed and acting City Secretary of Hyrum City, Utah, does hereby certify that a copy of the foregoing Notice was posted on the Utah Public Notice Website and Hyrum City's Website, provided to each member of the governing body, and posted at the City Offices, 60 West Main, Hyrum, Utah, this 10th day of June, 2025. Shara Toone, Secretary



## PLANNING COMMISSION STAFF EVALUATION – FIRST REVIEW

**APPLICATION NO:** 25-024A

**APPLICANT:** Hyrum City

**PROPERTY OWNER:** NA

**PROPERTY ADDRESS:** NA

**PARCEL NUMBER:** NA

**PARCEL AREA:** NA

**CURRENT ZONE:** NA

**DATE:** June 10, 2025

**PLANNING COMMISSION MEETING:** June 12, 2025

**PLANNING COMMISSION ROLE:** Recommending Body to City Council

**APPLICATION TYPE:** Ordinance Adoption - Legislative

### **NATURE OF REQUEST:**

To consider the approval of an ordinance establishing a temporary land use regulation governing short-term rentals and similar transient housing uses pursuant to Utah Code 10-9a-504

### **OVERVIEW:**

The current Hyrum City Zoning Ordinance lacks specific land use regulations governing Short-Term Rentals (“STRs”), including those listed on platforms such as Airbnb, Vrbo, and similar services. The increasing presence of unregulated STRs raises concerns related to parking, noise, public safety, housing availability, neighborhood stability, code enforcement, and equitable taxation. Staff has determined that a temporary land use regulation is necessary to preserve the existing character of residential neighborhoods and to prevent potentially incompatible land uses while the City undertakes a formal planning and public input process.

### **PLANNING COMMISSION RESPONSIBILITY:**

1. The Planning Commission hold the required public hearing.
2. The Planning Commission have a thorough discussion on the draft ordinance, and recommends approval, approval with modification, disapproval, or request additional information to make a recommendation to the City Council.

### **STAFF RECOMMENDATIONS:**

1. Support the temporary land use regulation.

### **STIPULATIONS:**

1. This amendment is initiated by Hyrum City.

### **FINDINGS OF FACT:**

1. The Public Hearing was noticed per Utah Code and City Code.

### **ATTACHMENTS:**

1. Prepared Ordinance

**HYRUM CITY  
ORDINANCE NO. [2025-XX]**

**AN ORDINANCE ESTABLISHING A TEMPORARY LAND USE REGULATION  
GOVERNING SHORT-TERM RENTALS AND SIMILAR TRANSIENT HOUSING USES  
PURSUANT TO UTAH CODE § 10-9a-504**

WHEREAS, Hyrum City, Utah (“City”) is a municipal corporation and political subdivision of the State of Utah, authorized under Title 10, Chapter 9a of the Utah Code to enact land use regulations to promote the health, safety, and welfare of its residents; and

WHEREAS, Utah Code § 10-9a-504 authorizes the City Council to enact temporary land use regulations for any part or all of the area within the municipality if the City Council makes a finding of compelling, countervailing public interest or where the area is unregulated; and

WHEREAS, The City currently lacks specific land use regulations governing Short-Term Rentals (“STRs”), including those listed on platforms such as Airbnb, Vrbo, and similar services; and

WHEREAS, The increasing presence of unregulated STRs raises concerns related to parking, noise, public safety, housing availability, neighborhood stability, code enforcement, and equitable taxation; and

WHEREAS, The City Council finds that these concerns constitute a compelling, countervailing public interest, and that immediate action is required to study and regulate STRs appropriately while maintaining the status quo; and

WHEREAS, A temporary land use regulation is necessary to preserve the existing character of residential neighborhoods and to prevent potentially incompatible land uses while the City undertakes a formal planning and public input process.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF HYRUM, UTAH, that:

**SECTION 1: Title**

This ordinance shall be known as the Short-Term Rental Temporary Land Use Regulation Ordinance.

**SECTION 2: Definitions**

For purposes of this Ordinance:

- “Short-Term Rental” (STR) means the rental of any dwelling unit, or portion thereof, intended for a period of thirty (30) consecutive days or less, whether advertised or offered through online platforms or by other means.

- “Owner-Occupied STR” means a short-term rental where the owner resides on the premises during the guest's stay.
- “Non-Owner-Occupied STR” means a short-term rental where the owner does not reside on the premises during the guest's stay.

### SECTION 3: Temporary Regulation Imposed

Upon passage of this Ordinance, and for a period not to exceed six (6) months, the following temporary land use regulations are imposed:

1. Prohibition of New STRs: No new short-term rentals, whether owner-occupied or non-owner-occupied, shall be established or operated within the City.
2. Suspension of Licensing and Permits: The City shall not issue any new business licenses, conditional use permits, building permits, or other land use approvals for STRs during the term of this Ordinance.
3. Existing STRs: Properties lawfully operating as STRs prior to the effective date of this Ordinance may continue to operate, provided they:
  - Are current on all required licensing and tax obligations;
  - Do not expand operations or increase occupancy limits; and
  - Do not change ownership or use during the moratorium period.

### SECTION 4: Exceptions

This Ordinance shall not apply to:

1. Hotels, motels, or bed and breakfasts that are already regulated under existing zoning;
2. Long-term rentals (more than 30 consecutive days);
3. Home-sharing arrangements that do not meet the definition of a STR as defined herein.

### SECTION 5: Purpose of the Moratorium

The purpose of this temporary land use regulation is to:

- Conduct a comprehensive review of the City's land use regulations and zoning ordinances;
- Study the impact of STRs on neighborhoods, housing affordability, public infrastructure, and community character;
- Develop appropriate regulations, if any, for the licensing, zoning, taxation, and enforcement of STRs;

- Solicit public input and consider policy options in consultation with stakeholders.

#### SECTION 6: Duration

This temporary regulation shall remain in effect for one hundred eighty (180) days from the effective date of this Ordinance, unless sooner repealed or extended by the City Council pursuant to Utah Code § 10-9a-504(2).

#### SECTION 7: Severability

If any section, subsection, sentence, clause, or phrase of this Ordinance is held to be unconstitutional or invalid by a court of competent jurisdiction, the remainder shall not be affected and shall remain in full force and effect.

#### SECTION 8: Effective Date

This Ordinance shall become effective immediately upon adoption.

PASSED AND ADOPTED by the Hyrum City Council this \_\_\_\_ day of \_\_\_\_\_, 2025.

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Stephanie Miller, Mayor

ATTEST:

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Stephanie Fricke, City Recorder



## PLANNING COMMISSION STAFF EVALUATION - FIRST REVIEW

**APPLICATION NO:** 25-023A

**APPLICANT:** Carlyle Creger, Carlyle Machine

**PROPERTY OWNER:** Carlyle Creger LLC

**PROPERTY ADDRESS:** 1671 East 145 South

**PARCEL NUMBER:** 01-170-0002

**PARCEL AREA:** 1.00 Acres

**CURRENT ZONE:** Manufacturing Zone M-2

**DATE:** June 10, 2025

**PLANNING COMMISSION MEETING:** June 12, 2025

**PLANNING COMMISSION ROLE:** Recommending Body to City Council

**APPLICATION TYPE:** Site Plan Approval

### NATURE OF REQUEST:

Permitted Use – Manufacturing (no excessive noise, dust, smoke or odor).

### CURRENT ZONING DISTRICT:

The purpose of this zone is to provide an area where medium to heavy manufacturing can occur. It allows higher levels of noise, dust, smoke and odor than is permitted in the M-1 Zone. Restrictions may be applied on proposed businesses whose levels of noise, dust, smoke or odor may be considered excessive by the planning commission. Design and landscaping requirements may also be imposed on businesses proposed for this zone.

### OVERVIEW:

The applicant desires to construct a new 10,950 sq. ft. metal building. 7,950 sq. ft. will be used by the applicant to manufacture prototypes in the medical industry that are typically within the scale of two-inch (2") square. The remaining 3,000 sq. ft. of the building will be lease space. The 1-acre lot will be improved with an asphalt parking lot with landscaping areas on the south side and rock landscaping on the other remaining sides.

**UTILITIES:** Existing Power, Sewer, Water.

### STAFF COMMENTS:

#### Planning and Zoning:

1. Each site plan shall include a lighting plan that is designed to discourage crime, enhance the safety of the project, and the parking lot and structure shall be well lit while preventing glare onto adjacent properties with dark-sky initiatives. Please submit the required lighting plan for Site Plan Approval. See HCC 17.49.022.
2. "Landscape Design By Others" is identified on Site & Utility Plan Sheet 1.1 but not provided for Site Plan Approval. Please submit the required landscape plan and appropriate maintenance plan for Site Plan Approval. See HCC 17.49.025.
3. Staff supports the parking proposed parking count, provided the property maintains compliance with HCC 17.49.060 Off-Street Parking – Specific Requirements to provide one (1) space for

each employee working on the highest employment shift for manufacturing, processing or repair uses; and the remaining 3,000 sq. ft. future tenant improvements maintains:

- a. Storage or warehouse: one (1) space for each five thousand (5,000) square feet of floor area;
- b. Manufacturing, processing or repair: one (1) space for each employee working on the highest employment shift; the City Council may adjust this requirement if sufficient justification is provided.
4. The driveway widths proposed are forty feet (40') wide. Each roadway shall not be more than thirty-six feet (36') in width. See HCC 17.49.090.
5. A pedestrian opening on one wall of the enclosure for employee access to the dumpster shall be required. See HCC 17.49.105.
6. A building permit will be required through a separate application. See HCC Title 15 Building and Construction for building permit requirements.
7. A sign permit will be required through a separate application if the applicant desires to advertise on the site. See HCC 17.72 Signs for sign requirements.
8. All construction shall be coordinated and conform to Hyrum City Design Standards and Construction Specifications for Public Works when applicable.

**Engineering:**

1. See attachments.

**Fire Department:**

1. Supports the site plan.

**Power Department:**

1. Light & Power request that both the general contractor and the electrical contractor meet with department staff regarding expectations and installation standards of electrical utility and equipment.
2. Previous communication with Mr. Creger has taken place and some discussion on the transformer has happened, transformer is ordered and paid for.
3. Location of transformer and metering equipment looks acceptable.
4. There will need to be a 3-phase junction can installed on east side of property in the park strip to accommodate the connection of the transformer.
5. Associated costs relevant to the project, excluding the previously paid for transformer, will be updated.

**Water & Roads:**

1. Please verify that the lateral and meter pit is not already stubbed into site before excavation of the road (most parcels in this area were pre-installed). For installation, please follow Hyrum city standards and remember sewer and water must maintain 10 feet of horizontal separation.
2. The water meter pit shall provide and maintain three feet (3') clearance from the back of the concrete curb, bank of detention pond, and landscape planting materials such as shrubs and trees.

**Water Reclamation:**

1. A lateral cleanout is located outside of structure per standard; however, cleanouts need to be installed at 50' intervals on 4" laterals which is not shown on the drawing. Refer to Construction Standard, 5.2.2.F.
2. If a cleanout must be placed in asphalted streets, a cast iron frame and cover should be used. Refer to drawing 5-36.

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**PLANNING COMMISSION RESPONSIBILITY:**

1. The Planning Commission should have a thorough discussion of the site plan, staff comments, and specifying conditions and requirements for approval.

**STAFF RECOMMENDATION:**

1. Staff recommends the Planning Commission include in their motion the lighting plan required by HCC 17.49.022 prior to the City Council meeting.
2. Staff recommends the Planning Commission include in their motion the landscaping plan and appropriate maintenance plan required by HCC 17.49.025 prior to the City Council meeting.
3. Staff recommends the Planning Commission make a motion specifying conditions and requirements, and staff comments to the City Council.

**STIPULATIONS:**

1. The City Council may approve, disapprove, approve with additional conditions and requirements, or require the requestor to return to the Planning Commission with revisions; or require the applicant to return revisions to the City Council.
2. The applicant is required to include a lighting plan to the City Council.
3. The applicant is required to include a landscape plan and appropriate maintenance plan to the City Council.

**FINDINGS OF FACT:**

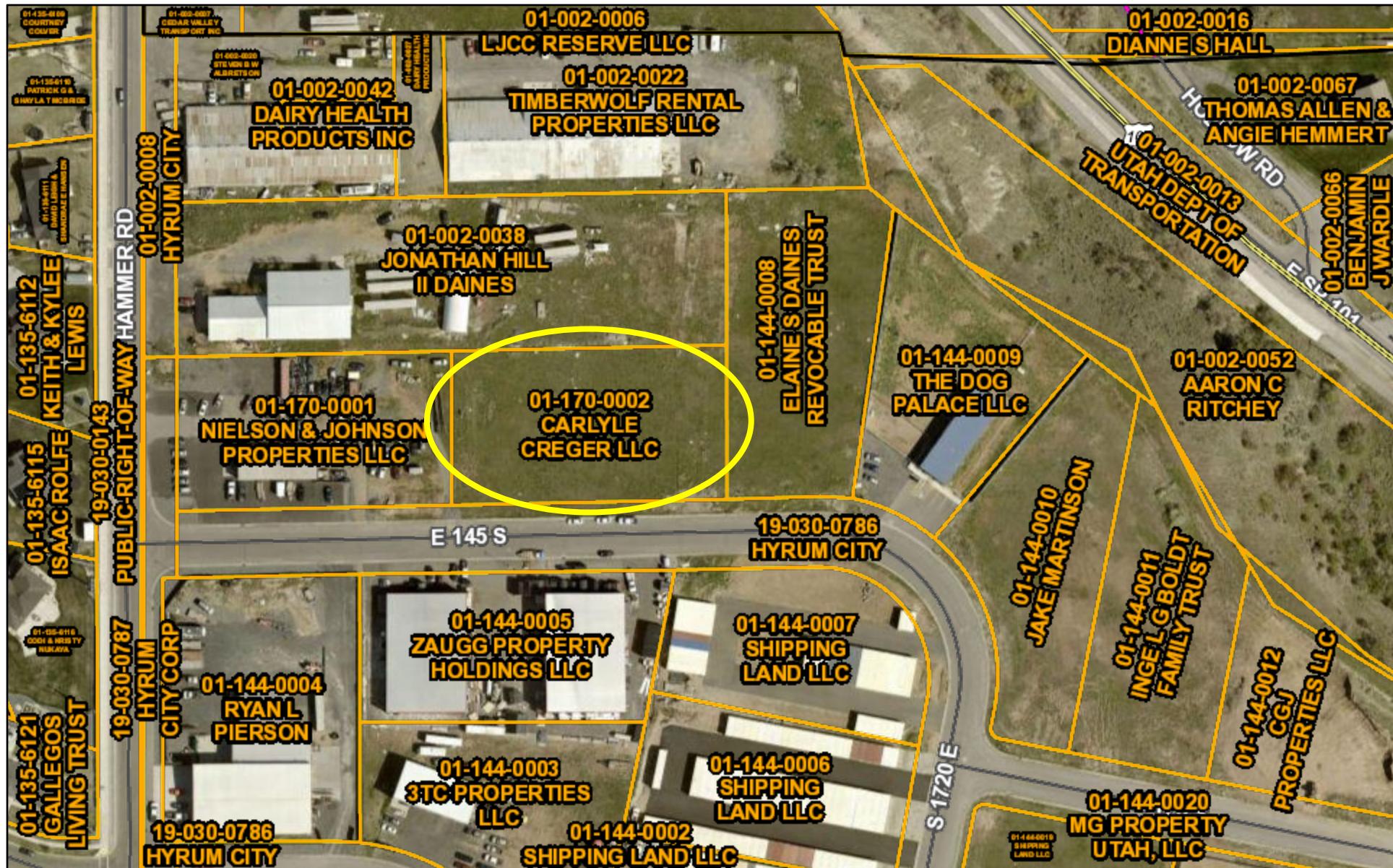
1. Manufacturing (no excessive noise, dust, smoke or odor) is a Permitted Use in the Manufacturing Zone M-2.

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**ATTACHMENTS:**

1. ArcGIS Web Map
2. Main Floor Plan and Building Elevations
3. Site Plans
4. Erosion Control Plan
5. Stormwater Calculations
6. Soils Resource Report

## ArcGIS Web Map



5/20/2025, 3:40:31 PM

1:2,257

A number line representing distance. The line starts at 0 and ends at 0.09. It has tick marks at intervals of 0.01. The labels are 0, 0.01, 0.03, 0.05 mi, and 0.09 km. The tick marks between the labeled points are evenly spaced.

Maxar, Microsoft

1

2

3

4

5

KEYNOTES

CARTWRIGHT

ARCHITECTS &amp; ENGINEERS

635 SOUTH 100 EAST  
LOGAN, UT 84341  
T435 753.2850  
F435 753.2851  
©2024 CARTWRIGHT

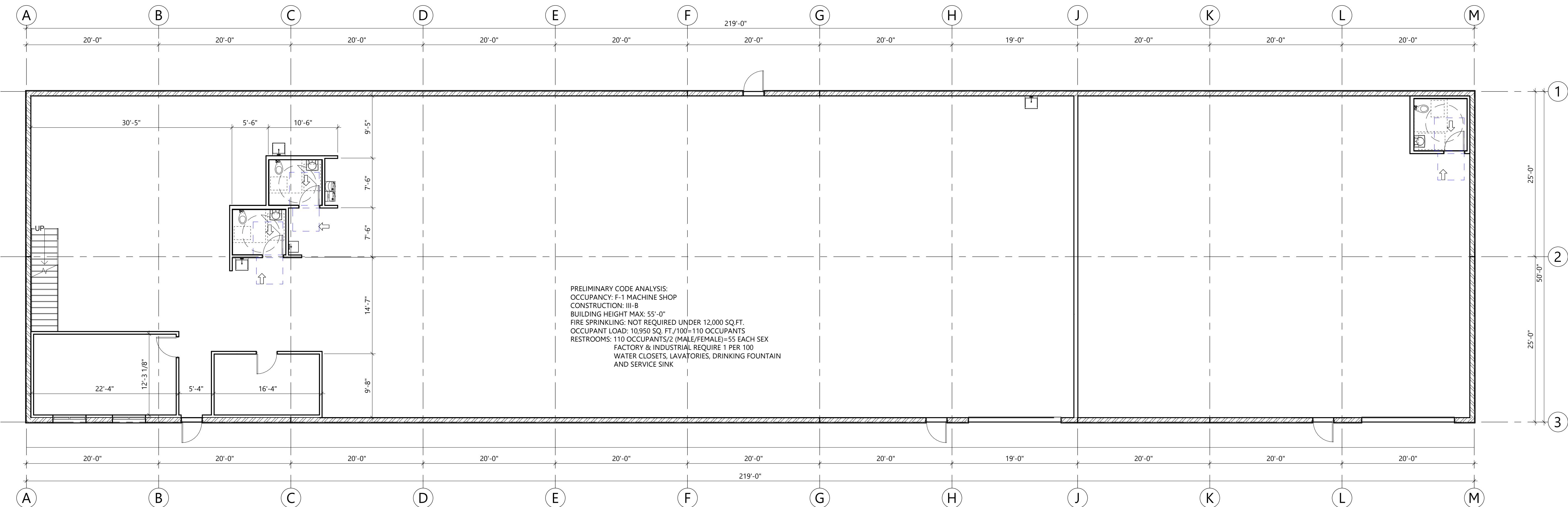
http://www.cartwright-aec.com

PROFESSIONAL STAMP

AGENCY APPROVAL

1671 E. 145 S. HYRUM, UT

## CREGER MACHINE



CARTWRIGHT PROJECT # 125017  
DATE: 03/12/2025  
DRAWN BY: CW  
CHECKED BY: CW  
APPROVED BY: JC

REVISIONS

DATE DESCRIPTION

FLOOR PLAN

A101

4/15/2025 3:28:27 PM

FOR PERMIT

1

2

3

4

5

## KEYNOTES

CARTWRIGHT

ARCHITECTS &amp; ENGINEERS

635 SOUTH 100 EAST  
LOGAN, UT 84341  
T435 753 2850  
F435 753 2851  
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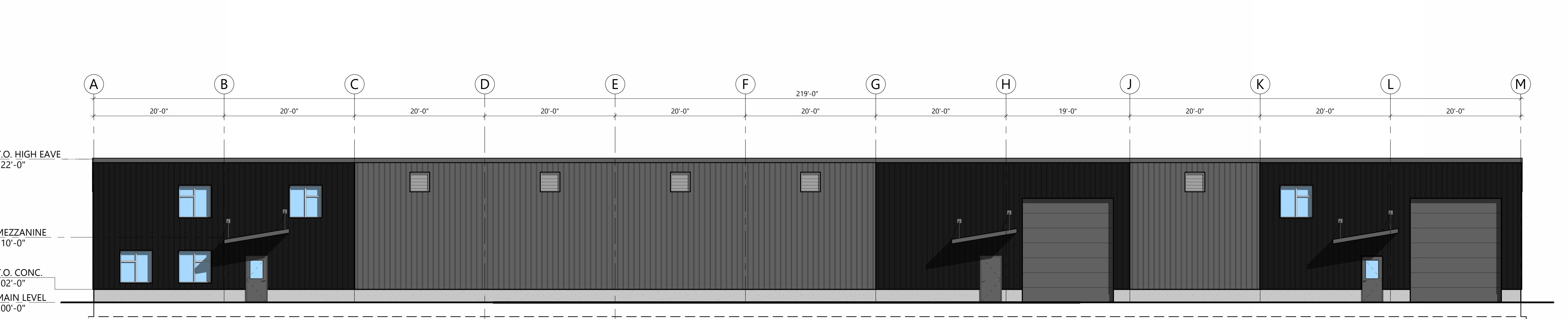
http://www.cartwright-aec.com

PROFESSIONAL STAMP

AGENCY APPROVAL

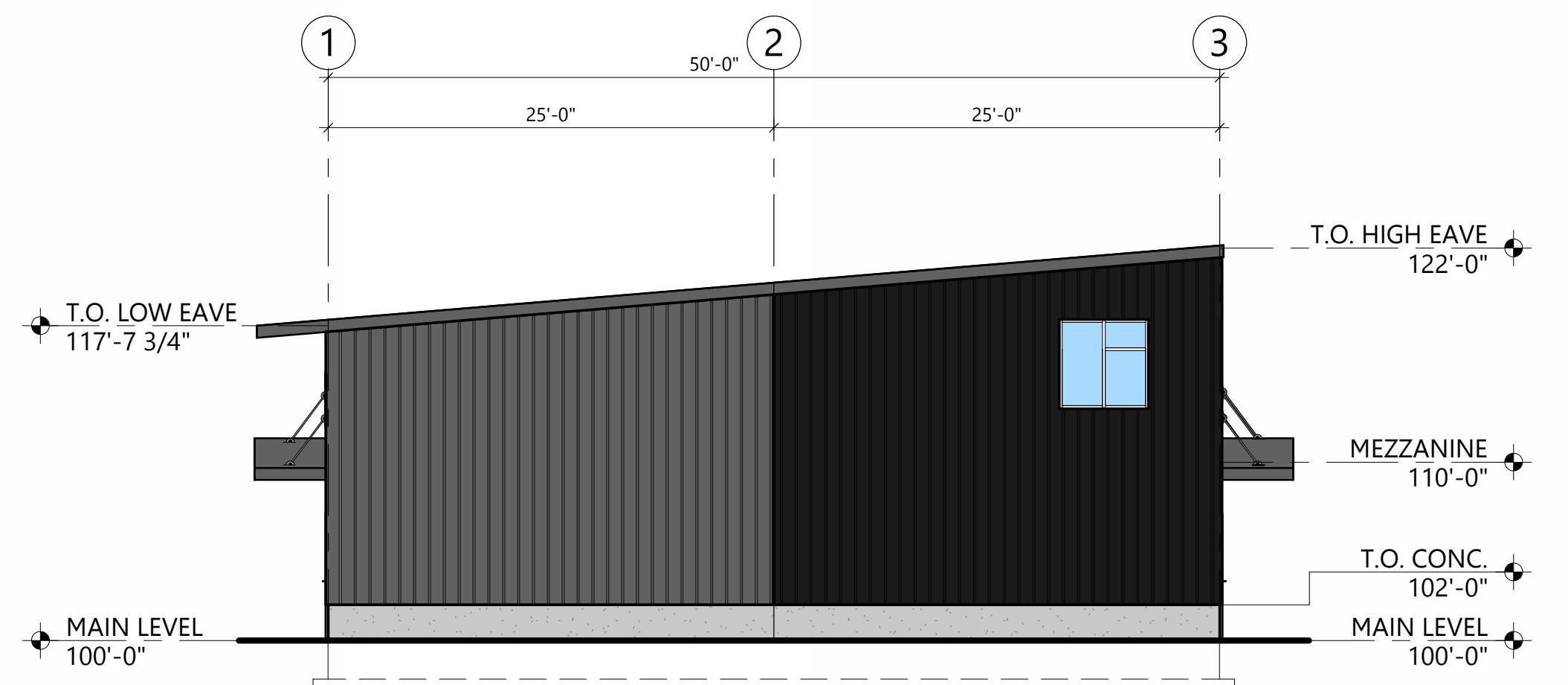
1671 E 145 S HYRUM, UT

## CREGER MACHINE



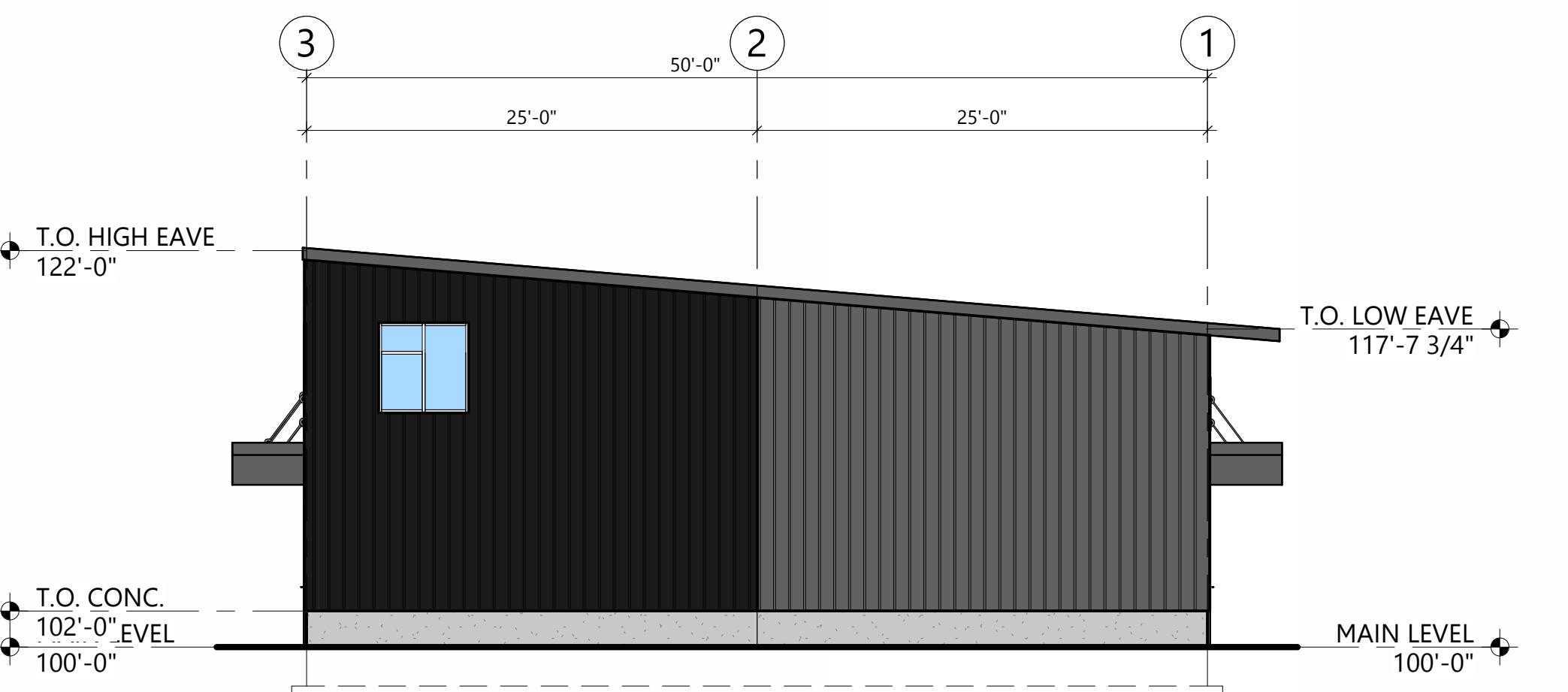
(C3) SOUTH EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



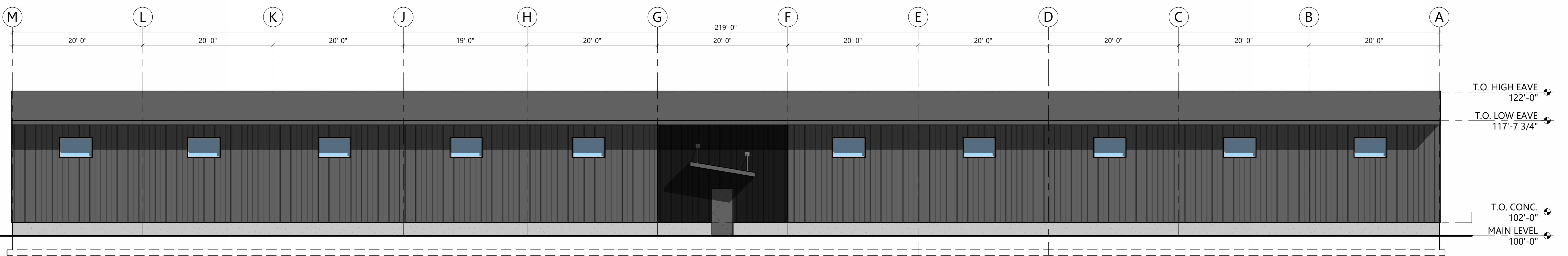
(B2) WEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



(B5) EAST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



(A3) NORTH EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"

CARTWRIGHT PROJECT # 125017  
DATE: 03/12/2025  
DRAWN BY: CW  
CHECKED BY: CW  
APPROVED BY: CW

REVISIONS

DATE DESCRIPTION

ARCHITECTURAL ELEVATIONS

A201

PARKING DATA:  
17 STANDARD PARKING SPACES  
1 VAN ACCESSIBLE ADA SPACE  
18 TOTAL PARKING SPACES

**SITE COVERAGE DATA:**

TOTAL SITE AREA:	43,560 SQ. FT. (1.00 AC)
BUILDING FOOTPRINT:	10,950 SQ. FT.
CONCRETE SIDEWALK:	3,260 SQ. FT.
CONCRETE APRONS:	1,075 SQ. FT.
RIBBON CURB:	321 SQ. FT.
ROLL CURB	180 SQ. FT.
ASPHALT PAVEMENT:	12,628 SQ. FT.
LANDSCAPING:	17,956 SQ. FT.

% HARDSCAPE: 61.9%  
% SOFTSCAPE: 38.1%

Recommended move  
Van Accessible Sign to  
mount on building to  
prevent it getting run  
over by bumper.

LANDSCAPE DESIGN BY OTHERS

PROPERTY LINE

VAN ACCESSIBLE ADA PARKING STALL AND SIGN

Diagram illustrating parking space dimensions and accessibility requirements. A van is shown in a parking space, with a dimension line indicating a space width of 11 feet. A car is shown in an adjacent space, with a dimension line indicating a space width of 9 feet. A legend on the left specifies: "Space width for van: 11 feet (although it may be eight feet wide if its access aisle is eight feet wide)." and "Space width for car: eight feet". A callout box on the right specifies: "Access aisle: Width: five feet (if aisle serves car and van spaces) Length: full length of parking space". A red line labeled "ROLL" is drawn across the top of the diagram. A red box on the right contains the text: "Roll gutter should be considered in access aisle".

**CLEANOUTS WILL NEED TO BE PLACED AT 50' INTERVALS. ANY IN DRIVE SURFACES WILL NEED TO HAVE A DOLY RATED COVER.**

PROPERTY LINE

32.00' SETBACK

40.00' CONCRETE PAD

20.00' 5.00' GRAVEL LANDSCAPING AREA

SIDEWALK

119 SOUTH SUBDIVISION PLAT  
LOT 2  
1671 EAST 145 SOUTH

PROPOSED BUILDING  
(10,950 SQ. FT.)

5.00' SIDEWALK

30.06' SETBACK

LANDSCAPE DESIGN BY OTHERS

PROPERTY LINE

36.75' SETBACK

30.06' SETBACK

LANDSCAPE DESIGN BY OTHERS

NO PARKING

9 ft

6.5 ft

9.00' TYP.

20.00' TYP.

5.00'

SIDEWALK

SIDEWALK

NO PARKING

NO PARKING

NO PARKING

ASPHALT PAVEMENT MIN. 3" THICK  
OR PER THE GEOTECHS RECOMMENDATION

1' RIBBON CURB

GRAVEL LANDSCAPE AREA

GRAVEL LANDSCAPE AREA

GRAVEL LANDSCAPE AREA

LANDSCAPE DESIGN BY OTHERS

1' RIBBON CURB

PROPERTY/ROW LINE

5' CONCRETE APPROACH

EXISTING HYDRANT

5' CONCRETE APPROACH

EXISTING TBC

EX. WATER MAIN

EXISTING TBC

EX. 8" SEWER

EX. SEWER MH  
RIM: 4836.54  
INV IN: 4827.89 8" E  
INV OUT: 4827.69 8" W

40.00' ENTRY

40.00' ENTRY

150.23' LANDSCAPE

145 SOUTH

4" SEWER LATERAL  
2% MIN. SLOPE

25.23' LANDSCAPE BUFFER

ROLL GUTTER should not be considered in access aisle

NEED MINIMUM 3' CLEAR SPACE AROUND TRANSFORMER. ADJUST DUMPSTER ENCLOSURE.Q

DRIVEWAY WIDTH RESTRICTED TO 36' PER HCC  
17.49.090 (Motor Vehicle Access Regulations)

0 12 24 Feet

S

ALL SITE WORKS COMPLY WITH STANDARDS AND SPECIFICATIONS.

YRUM DOES NOT HAVE A STANDARD TYPICAL DETAIL, CONTRACTOR TO FOLLOW ALL APWA STANDARDS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ALL PUBLIC AND PRIVATE ENTITIES WHILE INSTALLING ALL UTILITIES. .



The legend includes the following entries:

- EX. MAJOR CONTOUR (dashed line)
- EX. MINOR CONTOUR (dash-dot line)
- PROP. MAJOR CONTOUR (red line)
- PROP. MINOR CONTOUR (cyan line)
- PROP. EDGE OF ASPHALT (dash-dot-dot line)
- EX. EDGE OF ROAD (solid line)
- PROP. SHOULDER (dashed line)
- FL. SWALE (arrow symbol)
- EXISTING SEWER MAIN (SS symbol)
- EXISTING WATER MAIN (W symbol)

## REVISIONS



**CALL BLUE  
STAKES PRIOR  
TO DIGGING**

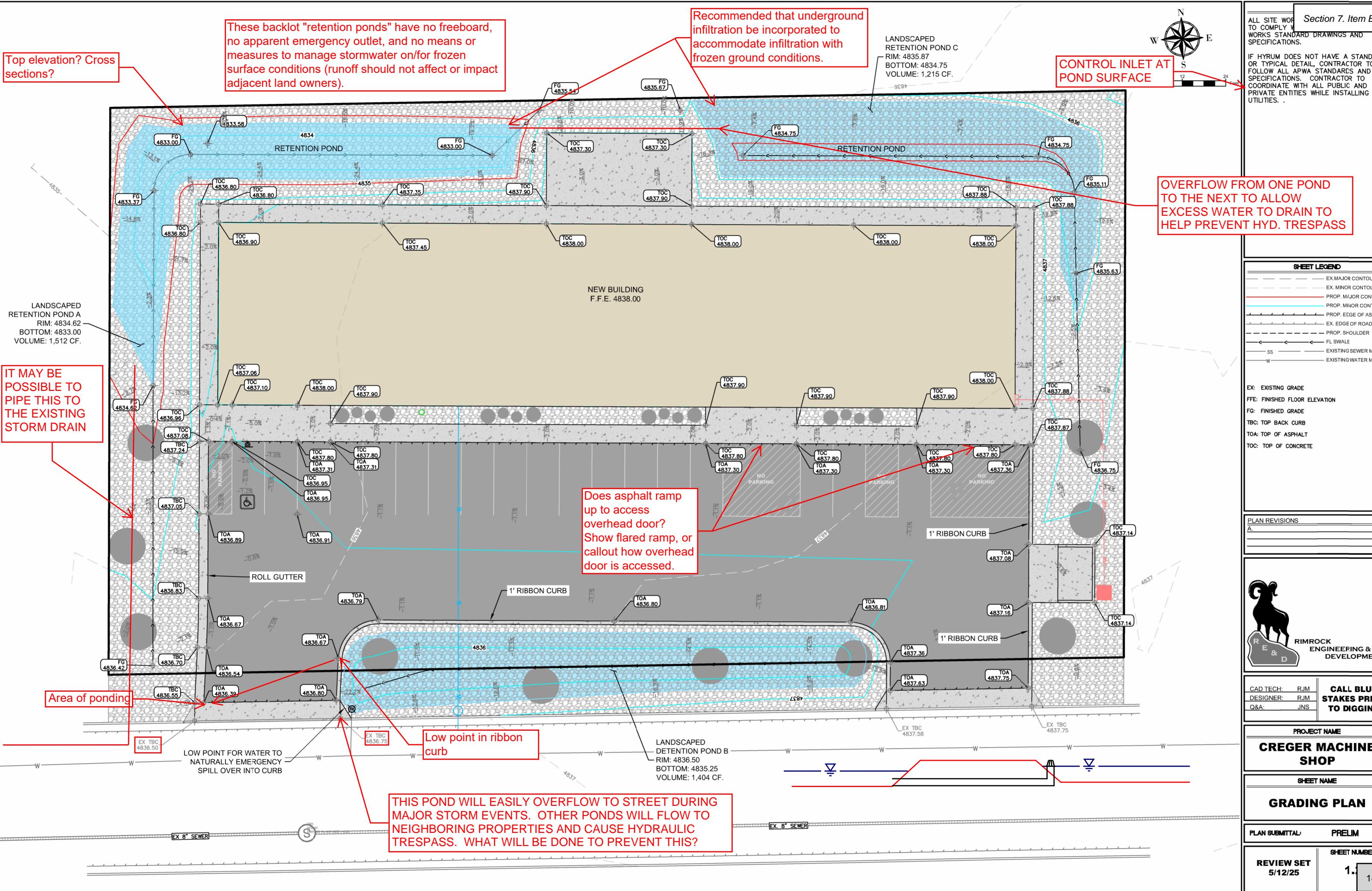
**PROJECT NAME**

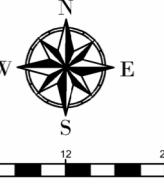
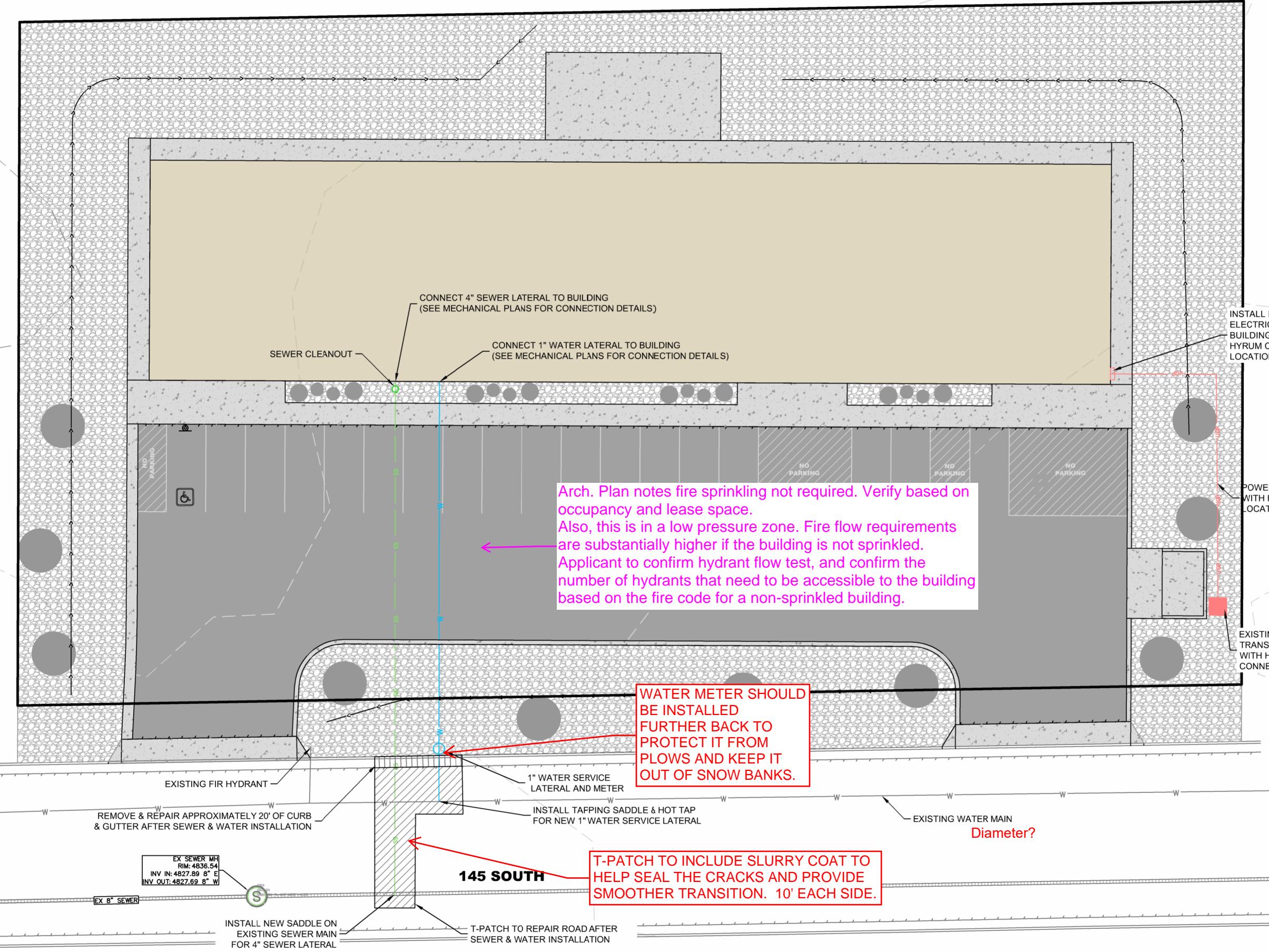
**SHOP**

**SHEET NAME**

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IN SUBMITTAL: PRELIM





Section 7. Item B.

ALL SITE WORK TO COMPLY WITH WORKS STANDARD DRAWINGS AND SPECIFICATIONS.

IF HYRUM DOES NOT HAVE A STANDARD OR TYPICAL DETAIL, CONTRACTOR TO FOLLOW ALL APWA STANDARDS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ALL PUBLIC AND PRIVATE ENTITIES WHILE INSTALLING ALL UTILITIES. .

**SHEET LEGEND**

EX. MAJOR CONTOUR	EX. MINOR CONTOUR
PROP. MAJOR CONTOUR	PROP. MINOR CONTOUR
EX. EDGE OF ASPHALT	PROP. EDGE OF ROAD
EX. EDGE OF ROAD	PROP. SHOULDER
FL SWALE	EXISTING SEWER MAIN
SS	EXISTING WATER MAIN
W	1" WATER SERVICE LAT.
SS	4" SEWER SERVICE LAT.
UQP	UNDER GROUND POWER

**PLAN REVISIONS**

A.



CALL BLUE  
STAKES PRIOR  
TO DIGGING

**PROJECT NAME**

**CREGER MACHINE  
SHOP**

**SHEET NAME**

**UTILITY PLAN**

**PLAN SUBMITTAL:** PRELIM

**SHEET NUMBER**

**REVIEW SET** 5/12/25

1. 15



## Section 7. Item B.

ALL SITE WORK TO COMPLY WITH WORKS STANDARD DRAWINGS AND SPECIFICATIONS.

IF HYRUM DOES NOT HAVE A STANDARD OR TYPICAL DETAIL, CONTRACTOR TO FOLLOW ALL APWA STANDARDS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ALL PUBLIC AND PRIVATE ENTITIES WHILE INSTALLING ALL UTILITIES. .

## SHEET LEGEND

## PLAN REVISIONS

A.



RIMROCK  
ENGINEERING &  
DEVELOPMENT

CALL BLUE  
STAKES PRIOR  
TO DIGGING

## PROJECT NAME

**CREGER MACHINE  
SHOP**

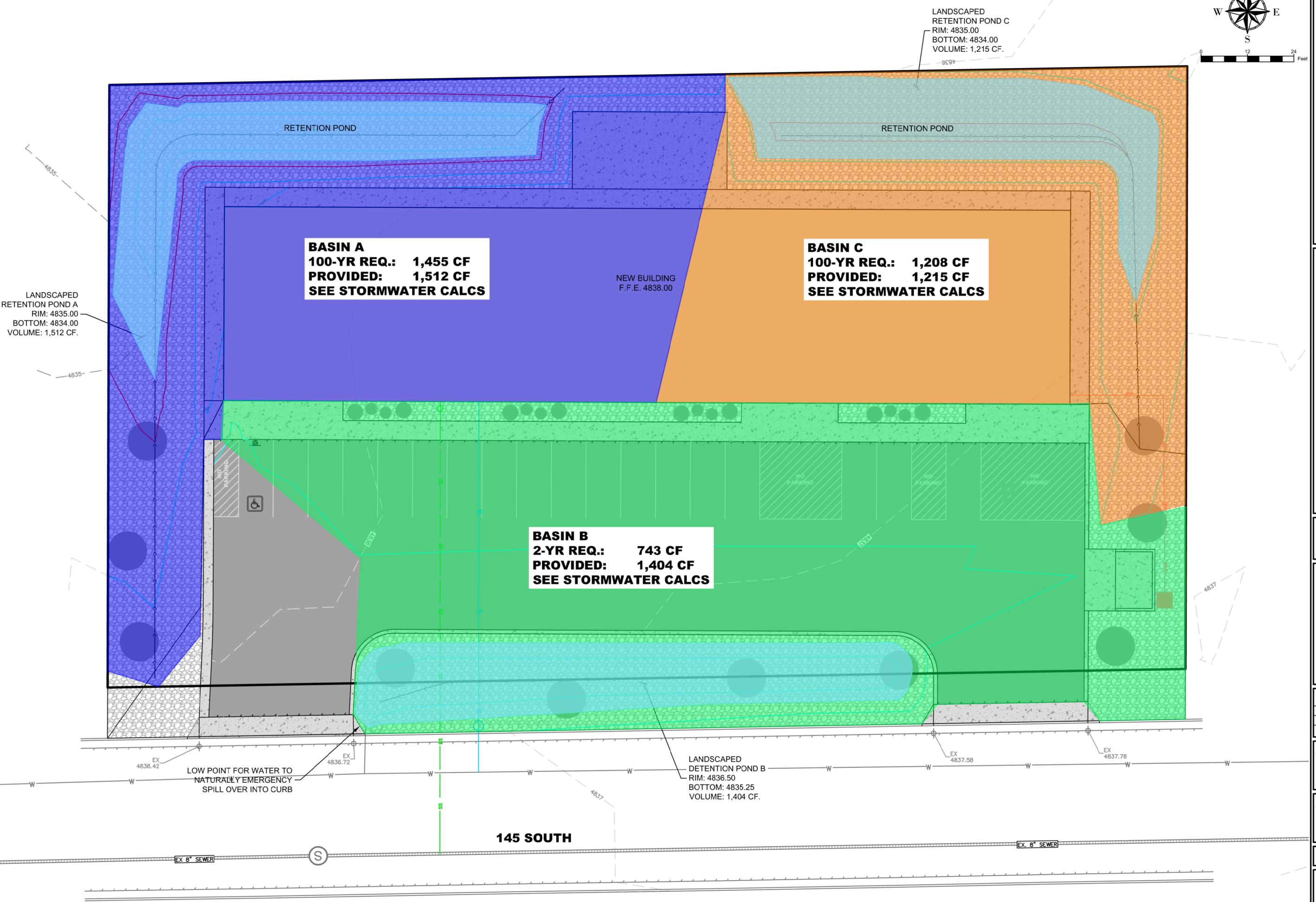
## SHEET NAME

**STORM WATER PLAN**

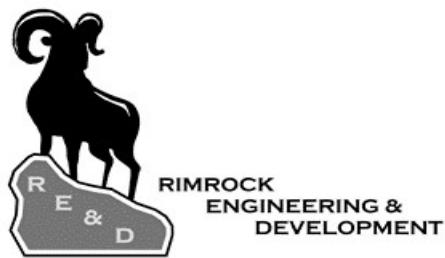
PLAN SUBMITTAL: PRELIM

REVIEW SET  
5/9/25

1.4  
16



PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER JRC  
 REVIEWED BY: DSE



STORM DURATION	NOAA ATLAS 14 PRECIPITATION DEPTH (INCHES)						
	RECURRANCE INTERVAL (YEARS)						
	1	2	5	10	25	50	100
5-min:	0.116	0.147	0.202	0.252	0.332	0.403	0.488
10-min:	0.177	0.224	0.308	0.384	0.504	0.614	0.742
15-min:	0.219	0.277	0.382	0.476	0.625	0.761	0.92
30-min:	0.295	0.373	0.514	0.641	0.842	1.02	1.24
60-min:	0.364	0.462	0.636	0.793	1.04	1.27	1.53
2-hr:	0.478	0.599	0.785	0.956	1.23	1.48	1.76
3-hr:	0.567	0.706	0.895	1.07	1.34	1.59	1.88
6-hr:	0.786	0.97	1.2	1.4	1.7	1.96	2.24
12-hr:	1.04	1.29	1.57	1.82	2.19	2.48	2.8
24-hr:	1.39	1.72	2.09	2.4	2.84	3.19	3.55

STORM DURATION	NOAA ATLAS 14 PRECIPITATION INTENSITY (INCHES/HOUR)						
	RECURRANCE INTERVAL (YEARS)						
	1	2	5	10	25	50	100
5-min:	1.39	1.76	2.42	3.02	3.98	4.84	5.86
10-min:	1.06	1.34	1.85	2.30	3.02	3.68	4.45
15-min:	0.88	1.11	1.53	1.90	2.50	3.04	3.68
30-min:	0.59	0.75	1.03	1.28	1.68	2.04	2.48
60-min:	0.36	0.46	0.64	0.79	1.04	1.27	1.53
2-hr:	0.24	0.30	0.39	0.48	0.62	0.74	0.88
3-hr:	0.19	0.24	0.30	0.36	0.45	0.53	0.63
6-hr:	0.13	0.16	0.20	0.23	0.28	0.33	0.37
12-hr:	0.09	0.11	0.13	0.15	0.18	0.21	0.23
24-hr:	0.06	0.07	0.09	0.10	0.12	0.13	0.15

PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER: JRC  
 REVIEWED BY: DSE  
**BASIN A**



RUNOFF VOLUME CALCULATIONS BASED ON NOAA ATLAS 14 PRECIPITATION DATA & THE RATIONAL METHOD FOR FLOW RATES

RECURRANCE INTERVAL	100	YEARS	
DURATION	1440	MINUTES	24 HOURS
C-VALUE	0.93	UNITLESS	
AREA	0.33	ACRES	
TIME OF CONCENTRATION	10.00	MINUTES	

Infiltration rate and  
should be verified  
onsite

LOSSES					
CONTROLLED RELEASE			INFILTRATION		
ALLOWABLE DISCHARGE	0	CFS	PERC RATE	60	MINUTES/INCH
DURATION OF OUTFLOW	ENTIRE DURATION		SURFACE AREA	2850	
WATER QUALITY VOLUME	0	CU. FT.	FLOW RATE	0.066	CFS

TIME ELAPSED (MINUTES)	TIME ELAPSED (HOURS)	C	RAINFALL INTENSITY (INCHES/HOUR)	AREA (ACRES)	FLOW RATE (CFS)	VOLUME IN (CU. FT.)	VOLUME OUT CONTROLLED RELEASE (CU. FT.)	VOLUME OUT - INFILTRATION (CU. FT.)	NET VOLUME (CU. FT)
5	0.08	0.93	5.86	0.33	1.78	535	0	20	515
10	0.17	0.93	4.45	0.33	1.36	814	0	40	774
15	0.25	0.93	3.68	0.33	1.12	1009	0	59	950
30	0.50	0.93	2.48	0.33	0.76	1360	0	119	1241
60	1.00	0.93	1.53	0.33	0.47	1678	0	238	1440
120	2.00	0.93	0.88	0.33	0.27	1930	0	475	1455
180	3.00	0.93	0.63	0.33	0.19	2062	0	713	1349
360	6.00	0.93	0.37	0.33	0.11	2457	0	1425	1032
720	12.00	0.93	0.23	0.33	0.07	3071	0	2850	221
1440	24.00	0.93	0.15	0.33	0.05	3893	0	5700	0

PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER: JRC  
 REVIEWED BY: DSE  
**BASIN A**



#### POST-DEVELOPMENT CONDITIONS

TIME OF CONCENTRATION - FAA <del>METHOD</del>	
STORM EVENT (RECURRANCE INTERVAL)	100 YEARS
TOP ELEVATION	4838 FT
BOTTOM ELEVATION	4833 FT
LENGTH OF LONGEST FLOW PATH	165 FT
AVERAGE SLOPE OF WATERCOURSE	0.03030303 FT/FT
C VALUE	0.93 UNITLESS
TIME OF CONCENTRATION	<b>10.00</b> MINUTES

The FAA does not have a specific, universally used method for stormwater runoff calculations. It simply provides guidance on using various methods, including the Rational Method, Soil Conservation Service (SCS) TR-55, and USGS regression equations in its Advisory Circular 150/5320-5C, Surface Drainage Design.

LAND COVER DESCRIPTION	AREA (SQ. FT.)	AREA (ACRES)	C-VALUE	ADJUSTMENT FACTOR	ADJUSTED C-VALUE
HEAVY COMMERCIAL	14250	0.33	0.75	1.25	0.93
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
TOTAL	14250	0.33	0.75		<b>0.93</b>

PEAK RUNOFF (RATIONAL METHOD, Q=CI <sub>A</sub> )		
C	0.93	
i	4.45	INCHES/HOUR
A	0.33	ACRES
Q	<b>1.36</b>	CFS

SCS TR-55 Runoff curve numbers should be used for each cover type and the hydrologic soil group shown in the site plan to create a composite CN value

C VALUE FACTOR TABLE	
RECURRANCE INTERVAL	FACTOR
2	1
10	1
25	1.1
50	1.2
100	1.25

PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER JRC  
 REVIEWED BY: DSE  
**BASIN B**



## RUNOFF VOLUME CALCULATIONS BASED ON NOAA ATLAS 14 PRECIPITATION DATA &amp; THE RATIONAL METHOD FOR FLOW RATES

RECURRENCE INTERVAL 2 YEARS  
 DURATION 1440 MINUTES 24 HOURS  
 C-VALUE 1.00 UNITLESS  
 AREA 0.41 ACRES  
 TIME OF CONCENTRATION 10.00 MINUTES

LOSSES									
CONTROLLED RELEASE				INFILTRATION					
ALLOWABLE DISCHARGE	0	CFS	AFTER WQV MET	PERC RATE	60	SURFACE AREA	1400	MINUTES/INCH	
WATER QUALITY VOLUME	0	CU. FT.		FLOW RATE	0.032			CFS	

TIME ELAPSED (MINUTES)	TIME ELAPSED (HOURS)	C	RAINFALL INTENSITY (INCHES/HOUR)	AREA (ACRES)	FLOW RATE (CFS)	VOLUME IN (CU. FT.)	VOLUME OUT CONTROLLED RELEASE (CU. FT.)	VOLUME OUT - INFILTRATION (CU. FT.)	NET VOLUME (CU. FT.)
5	0.08	1.00	1.764	0.41	0.73	219	0	10	209
10	0.17	1.00	1.344	0.41	0.56	333	0	19	314
15	0.25	1.00	1.108	0.41	0.46	412	0	29	383
30	0.50	1.00	0.746	0.41	0.31	555	0	58	497
60	1.00	1.00	0.462	0.41	0.19	687	0	117	571
120	2.00	1.00	0.2995	0.41	0.12	891	0	233	658
180	3.00	1.00	0.235333333	0.41	0.10	1050	0	350	700
360	6.00	1.00	0.161666667	0.41	0.07	1443	0	700	743
720	12.00	1.00	0.1075	0.41	0.04	1919	0	1400	519
1440	24.00	1.00	0.071666667	0.41	0.03	2559	0	2800	0

PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER: JRC  
 REVIEWED BY: DSE  
**BASIN C**



#### POST-DEVELOPMENT CONDITIONS

TIME OF CONCENTRATION - FAA METHOD	
STORM EVENT (RECURRANCE INTERVAL)	100 YEARS
TOP ELEVATION	4838 FT
BOTTOM ELEVATION	4835 FT
LENGTH OF LONGEST FLOW PATH	165 FT
AVERAGE SLOPE OF WATERCOURSE	0.018181818 FT/FT
C VALUE	1.00 UNITLESS
TIME OF CONCENTRATION	<b>10.00</b> MINUTES

LAND COVER DESCRIPTION	AREA (SQ. FT.)	AREA (ACRES)	C-VALUE	ADJUSTMENT FACTOR	ADJUSTED C-VALUE
HEAVY COMMERCIAL	11666	0.27	0.90	1.25	1.00
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
		0.00		1.25	0.00
TOTAL	11666	0.27	0.90		<b>1.00</b>

PEAK RUNOFF (RATIONAL METHOD, Q=CiA)		
C	1.00	
i	4.45	INCHES/HOUR
A	0.27	ACRES
Q	<b>1.19</b>	CFS

C VALUE FACTOR TABLE	
RECCURANCE INTERVAL	FACTOR
2	1
10	1
25	1.1
50	1.2
100	1.25

PROJECT NAME: CREGER MACHINE SHOP  
 PROJECT LOCATION: HYRUM, UTAH  
 DATE: 5/9/2025  
 USER: JRC  
 REVIEWED BY: DSE  
**BASIN C**



RUNOFF VOLUME CALCULATIONS BASED ON NOAA ATLAS 14 PRECIPITATION DATA & THE RATIONAL METHOD FOR FLOW RATES

RECURRANCE INTERVAL	100	YEARS	
DURATION	1440	MINUTES	24 HOURS
C-VALUE	1.00	UNITLESS	
AREA	0.27	ACRES	
TIME OF CONCENTRATION	10.00	MINUTES	

LOSSES					
CONTROLLED RELEASE			INFILTRATION		
ALLOWABLE DISCHARGE	0	CFS	PERC RATE	60	MINUTES/INCH
DURATION OF OUTFLOW	ENTIRE DURATION		SURFACE AREA	3205	
WATER QUALITY VOLUME	0	CU. FT.	FLOW RATE	0.074	CFS

TIME ELAPSED (MINUTES)	TIME ELAPSED (HOURS)	C	RAINFALL INTENSITY (INCHES/HOUR)	AREA (ACRES)	FLOW RATE (CFS)	VOLUME IN (CU. FT.)	VOLUME OUT CONTROLLED RELEASE (CU. FT.)	VOLUME OUT - INFILTRATION (CU. FT.)	NET VOLUME (CU. FT)
5	0.08	1.00	5.86	0.27	1.57	470	0	22	448
10	0.17	1.00	4.45	0.27	1.19	715	0	45	671
15	0.25	1.00	3.68	0.27	0.99	887	0	67	820
30	0.50	1.00	2.48	0.27	0.66	1196	0	134	1062
60	1.00	1.00	1.53	0.27	0.41	1475	0	267	1208
120	2.00	1.00	0.88	0.27	0.24	1697	0	534	1163
180	3.00	1.00	0.63	0.27	0.17	1813	0	801	1011
360	6.00	1.00	0.37	0.27	0.10	2160	0	1603	557
720	12.00	1.00	0.23	0.27	0.06	2700	0	3205	0
1440	24.00	1.00	0.15	0.27	0.04	3423	0	6410	0



**NOAA Atlas 14, Volume 1, Version 5**  
**Location name: Hyrum, Utah, USA\***  
**Latitude: 41.6296°, Longitude: -111.8121°**  
**Elevation: 4836 ft\*\***  
 \* source: ESRI Maps  
 \*\* source: USGS



### POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerials](#)

#### PF tabular

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.39 (1.22-1.58)	1.76 (1.56-2.03)	2.42 (2.12-2.78)	3.02 (2.63-3.46)	3.98 (3.40-4.57)	4.84 (4.02-5.59)	5.86 (4.74-6.83)	7.03 (5.51-8.33)	8.92 (6.66-10.8)	10.6 (7.60-13.1)
10-min	1.06 (0.930-1.21)	1.34 (1.19-1.54)	1.85 (1.62-2.11)	2.30 (2.00-2.63)	3.02 (2.59-3.48)	3.68 (3.06-4.25)	4.45 (3.61-5.20)	5.35 (4.19-6.34)	6.79 (5.06-8.23)	8.08 (5.78-10.0)
15-min	0.876 (0.772-0.996)	1.11 (0.984-1.27)	1.53 (1.34-1.75)	1.90 (1.65-2.17)	2.50 (2.14-2.88)	3.04 (2.53-3.51)	3.68 (2.98-4.30)	4.42 (3.46-5.24)	5.61 (4.18-6.80)	6.68 (4.78-8.26)
30-min	0.590 (0.518-0.670)	0.746 (0.662-0.856)	1.03 (0.902-1.18)	1.28 (1.11-1.46)	1.68 (1.44-1.94)	2.05 (1.70-2.36)	2.48 (2.01-2.89)	2.98 (2.33-3.53)	3.78 (2.82-4.58)	4.50 (3.22-5.56)
60-min	0.364 (0.321-0.415)	0.462 (0.410-0.530)	0.636 (0.558-0.728)	0.793 (0.689-0.906)	1.04 (0.890-1.20)	1.27 (1.05-1.46)	1.53 (1.24-1.79)	1.84 (1.44-2.18)	2.34 (1.74-2.83)	2.78 (1.99-3.44)
2-hr	0.239 (0.214-0.267)	0.299 (0.268-0.335)	0.392 (0.348-0.439)	0.478 (0.420-0.536)	0.614 (0.529-0.691)	0.738 (0.623-0.836)	0.881 (0.725-1.01)	1.05 (0.835-1.22)	1.31 (0.994-1.57)	1.55 (1.13-1.90)
3-hr	0.188 (0.171-0.210)	0.235 (0.213-0.263)	0.298 (0.270-0.332)	0.356 (0.320-0.398)	0.447 (0.395-0.502)	0.529 (0.459-0.598)	0.624 (0.528-0.714)	0.733 (0.602-0.852)	0.908 (0.713-1.08)	1.06 (0.804-1.30)
6-hr	0.131 (0.120-0.144)	0.161 (0.148-0.178)	0.200 (0.182-0.221)	0.234 (0.211-0.260)	0.284 (0.254-0.316)	0.326 (0.287-0.365)	0.373 (0.323-0.421)	0.426 (0.361-0.486)	0.517 (0.425-0.602)	0.596 (0.477-0.707)
12-hr	0.086 (0.079-0.095)	0.106 (0.097-0.117)	0.130 (0.119-0.144)	0.151 (0.137-0.166)	0.181 (0.162-0.201)	0.206 (0.182-0.230)	0.232 (0.202-0.261)	0.260 (0.222-0.296)	0.302 (0.252-0.350)	0.337 (0.274-0.396)
24-hr	0.057 (0.052-0.063)	0.071 (0.064-0.078)	0.087 (0.078-0.095)	0.100 (0.090-0.110)	0.118 (0.106-0.130)	0.132 (0.119-0.146)	0.148 (0.131-0.163)	0.163 (0.145-0.180)	0.185 (0.162-0.204)	0.202 (0.176-0.224)
2-day	0.034 (0.031-0.038)	0.042 (0.038-0.047)	0.051 (0.046-0.057)	0.059 (0.053-0.065)	0.069 (0.062-0.077)	0.078 (0.070-0.087)	0.087 (0.077-0.097)	0.096 (0.085-0.107)	0.109 (0.095-0.122)	0.119 (0.103-0.134)
3-day	0.025 (0.023-0.028)	0.031 (0.028-0.035)	0.038 (0.034-0.042)	0.044 (0.039-0.049)	0.052 (0.047-0.058)	0.058 (0.052-0.065)	0.065 (0.058-0.073)	0.072 (0.064-0.080)	0.082 (0.071-0.092)	0.090 (0.077-0.100)
4-day	0.021 (0.019-0.023)	0.026 (0.023-0.029)	0.032 (0.028-0.035)	0.036 (0.033-0.041)	0.043 (0.039-0.048)	0.049 (0.043-0.054)	0.054 (0.048-0.060)	0.060 (0.053-0.067)	0.068 (0.059-0.076)	0.075 (0.065-0.084)
7-day	0.014 (0.013-0.016)	0.018 (0.016-0.020)	0.022 (0.020-0.025)	0.026 (0.023-0.029)	0.030 (0.027-0.034)	0.034 (0.030-0.038)	0.038 (0.034-0.043)	0.042 (0.037-0.048)	0.048 (0.042-0.054)	0.052 (0.045-0.059)
10-day	0.011 (0.010-0.013)	0.014 (0.013-0.016)	0.018 (0.016-0.020)	0.020 (0.018-0.023)	0.024 (0.021-0.027)	0.027 (0.024-0.030)	0.030 (0.026-0.033)	0.033 (0.029-0.036)	0.037 (0.032-0.041)	0.040 (0.035-0.045)
20-day	0.007 (0.007-0.008)	0.009 (0.008-0.010)	0.011 (0.010-0.012)	0.013 (0.012-0.014)	0.015 (0.014-0.016)	0.016 (0.015-0.018)	0.018 (0.016-0.020)	0.019 (0.018-0.021)	0.021 (0.019-0.024)	0.023 (0.020-0.025)
30-day	0.006 (0.005-0.006)	0.007 (0.007-0.008)	0.009 (0.008-0.010)	0.010 (0.009-0.011)	0.012 (0.011-0.013)	0.013 (0.012-0.014)	0.014 (0.013-0.016)	0.016 (0.014-0.017)	0.017 (0.016-0.019)	0.019 (0.017-0.021)
45-day	0.005 (0.004-0.005)	0.006 (0.006-0.007)	0.007 (0.007-0.008)	0.008 (0.008-0.009)	0.010 (0.009-0.010)	0.010 (0.010-0.011)	0.011 (0.010-0.012)	0.012 (0.011-0.013)	0.013 (0.012-0.015)	0.014 (0.013-0.016)
60-day	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.007 (0.007-0.008)	0.008 (0.007-0.009)	0.009 (0.008-0.010)	0.010 (0.009-0.010)	0.010 (0.009-0.011)	0.011 (0.010-0.012)	0.012 (0.011-0.013)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

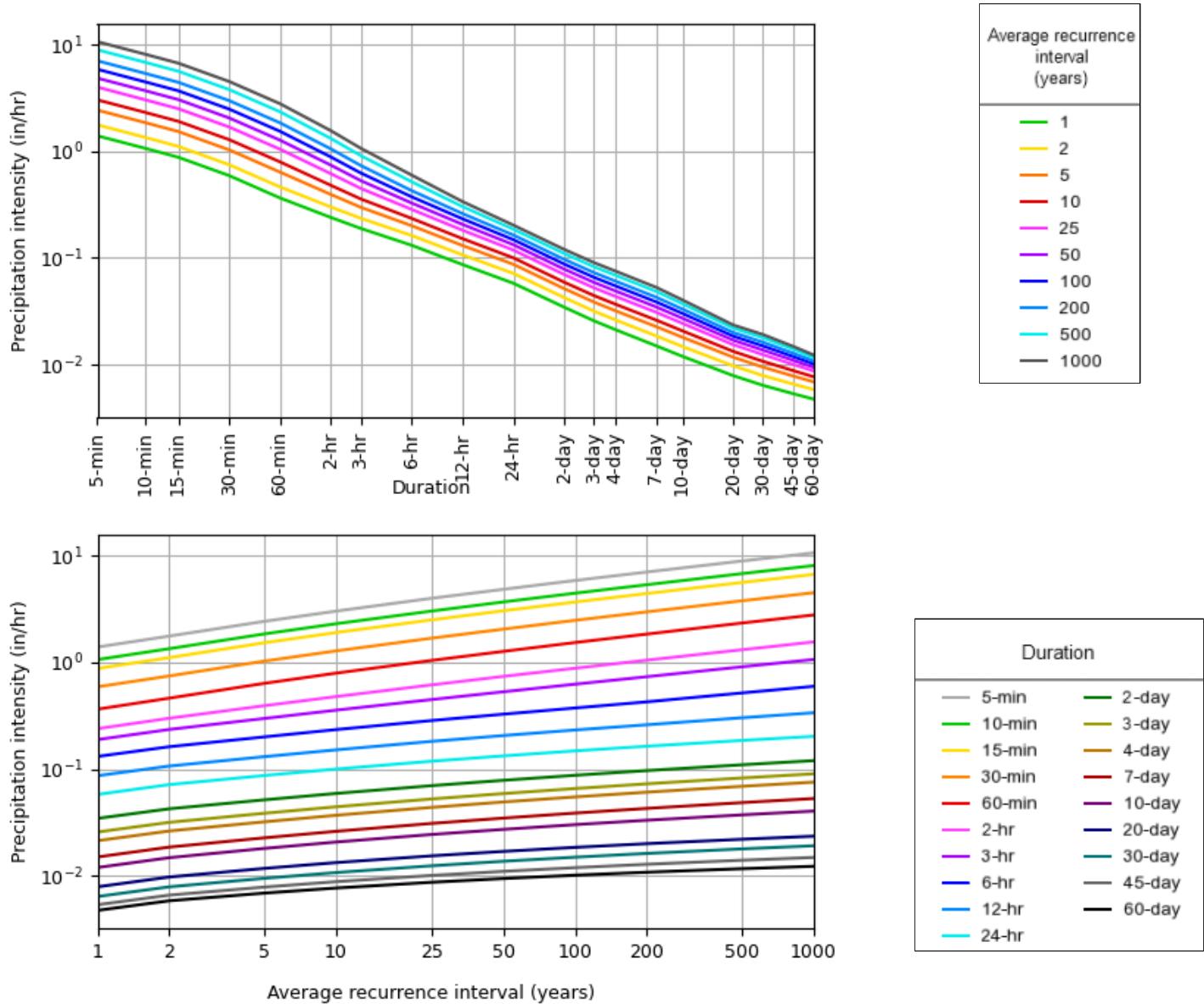
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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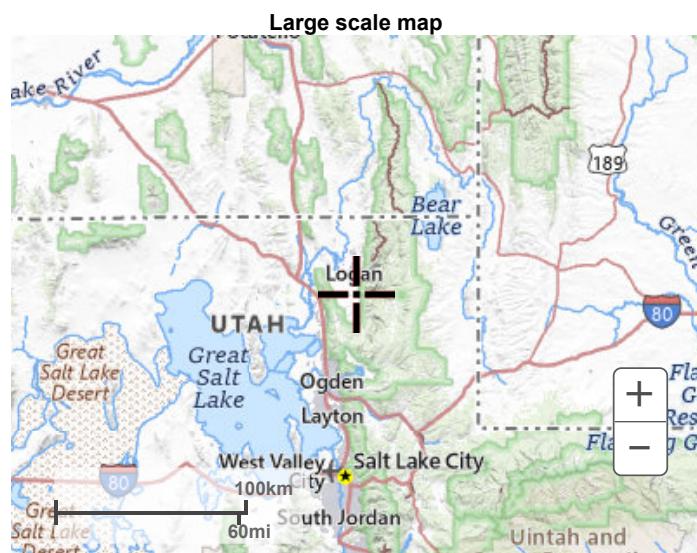
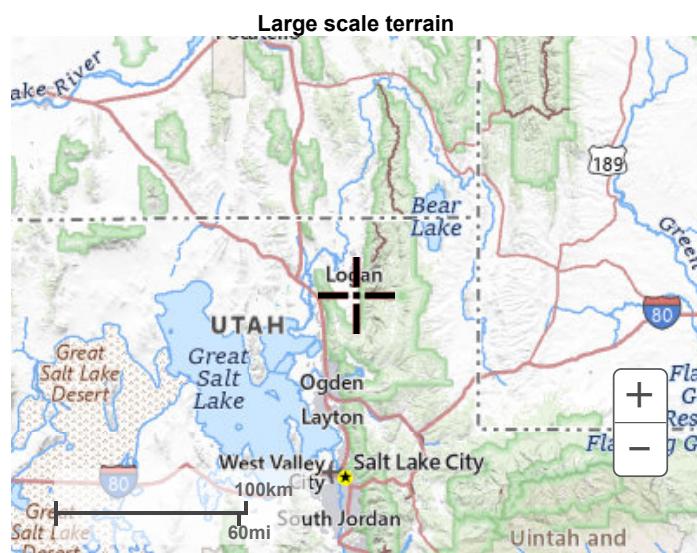
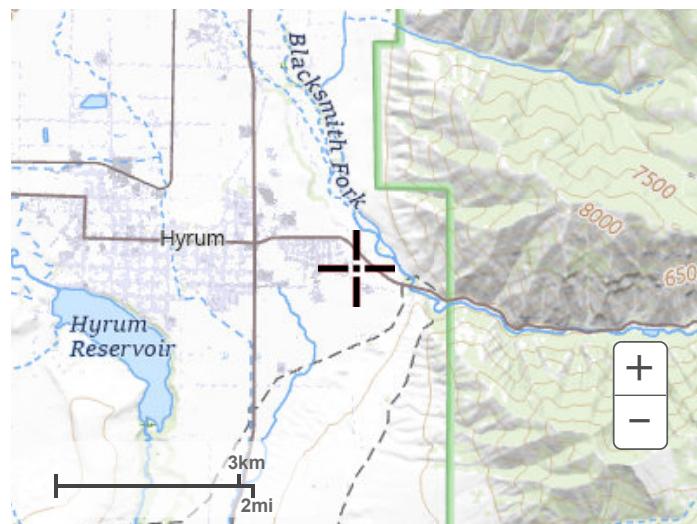
#### PF graphical

PDS-based intensity-duration-frequency (IDF) curves  
Latitude: 41.6296°, Longitude: -111.8121°



## Maps & aerials

[Small scale terrain](#)



Large scale aerial

[Back to Top](#)

[US Department of Commerce](#)  
[National Oceanic and Atmospheric Administration](#)  
[National Weather Service](#)  
[National Water Center](#)  
1325 East West Highway  
Silver Spring, MD 20910  
Questions?: [HDSC.Questions@noaa.gov](mailto:HDSC.Questions@noaa.gov)

[Disclaimer](#)



ALL SITE WORK TO COMPLY WITH WORKS STANDARD DRAWINGS AND SPECIFICATIONS.

IF HYRUM DOES NOT HAVE A STANDARD OR TYPICAL DETAIL, CONTRACTOR TO FOLLOW ALL APWA STANDARDS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ALL PUBLIC AND PRIVATE ENTITIES WHILE INSTALLING ALL UTILITIES. .

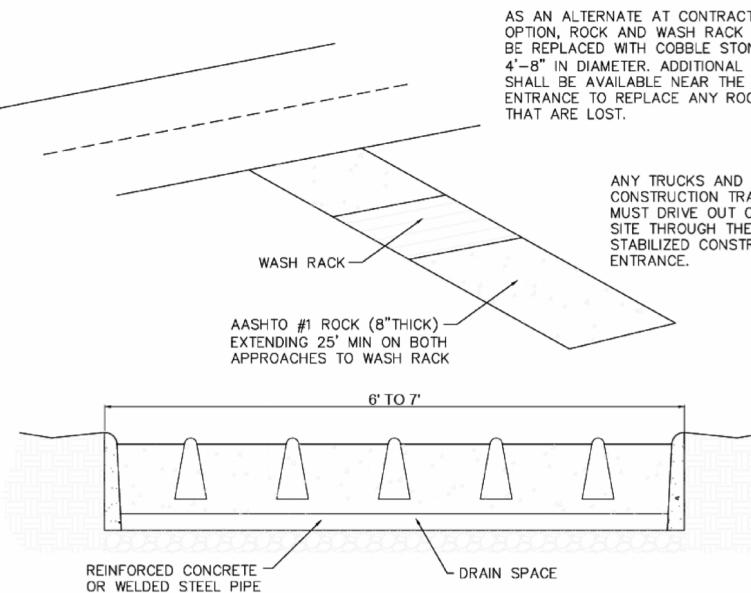
*ction 7. Item B.*

This site plan illustrates the layout for a construction project at 145 South. The site is bounded by a black fence line. A red line with arrows indicates the flow of water or runoff. A cyan line with arrows indicates the flow of concrete washout. A grey shaded area represents the construction & material storage area, which includes a concrete washout and a stabilized construction entrance. The site also features several 'NO PARKING' zones with diagonal hatching. A central area is marked with a 'CONSTRUCTION & MATERIAL STORAGE' label and a 'CONCRETE WASHOUT' label. Two 'PORTABLE TOILET' units are located on the right side. A 'SILT FENCE' is shown at the top and left edges. A 'STABILIZED CONSTRUCTION ENTRANCE' is located at the bottom center. The plan includes a scale bar in the top right corner and a north arrow. The text '145 SOUTH' is centered at the bottom of the plan.

1.

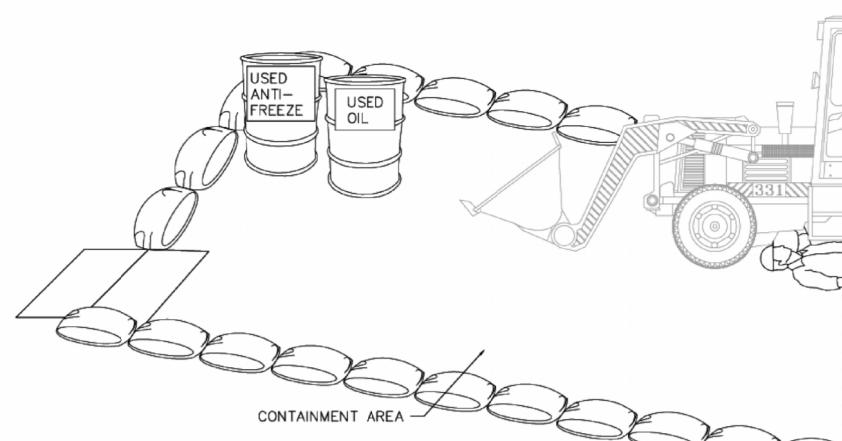
ALL SITE WORK TO COMPLY WITH WORKS STANDARD DRAWINGS AND SPECIFICATIONS.

IF HYRUM DOES NOT HAVE A STANDARD OR TYPICAL DETAIL, CONTRACTOR TO FOLLOW ALL APWA STANDARDS AND SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ALL PUBLIC AND PRIVATE ENTITIES WHILE INSTALLING ALL UTILITIES. .



Maintenance: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stock pile of rock material shall be maintained on site for this purpose. Drain space under wash rack shall be kept open at all time. Damage to the wash rack shall be repaired prior to further use of the rack. At the end of each construction day, any sediment deposited on paved roadways shall be removed and returned to the construction site.

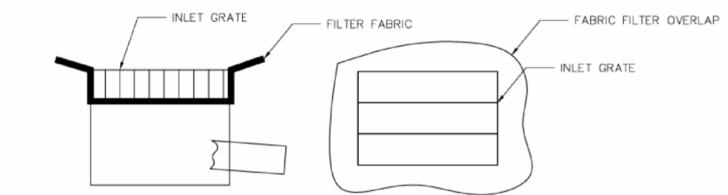
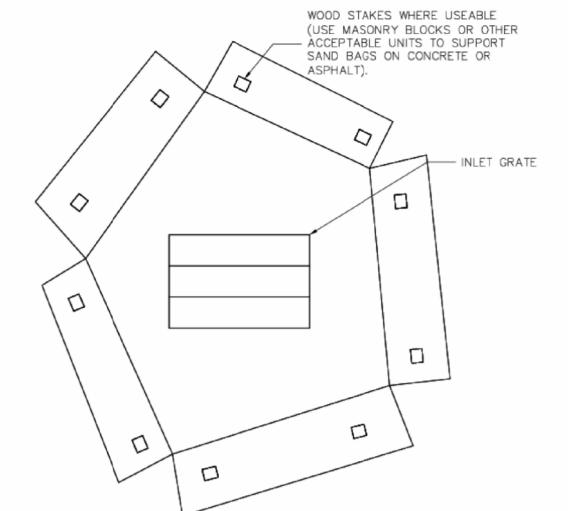
#### A STABILIZED CONSTRUCTION ENTRANCE



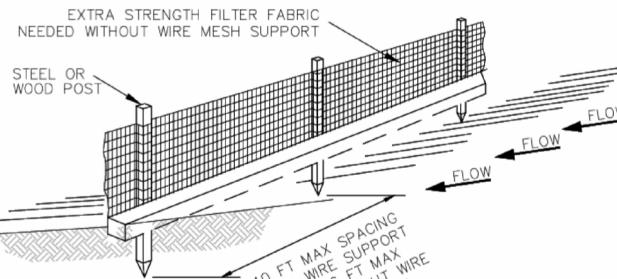
## NOTES:

1. LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT MATERIALS; DO NOT FLUSH WITH WATER.
2. VEHICLES AND EQUIPMENT SHALL BE MAINTAINED, AND REPAIRED ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS.
3. CONTAINMENT DEvised SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
4. DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, AWAY FROM STORM DRAIN INLETS AND WATERCOURSES.
5. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS. LEGALLY DISPOSE OF USED OILS, FLUIDS AND LUBRICANTS.
6. PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
7. MAINTAIN AN ADEQUATE SUPPLY OF ABSORBENT SPILL CLEANUP MATERIALS IN DESIGNATED AREAS.

#### B CONSTRUCTION & MATERIAL STORAGE

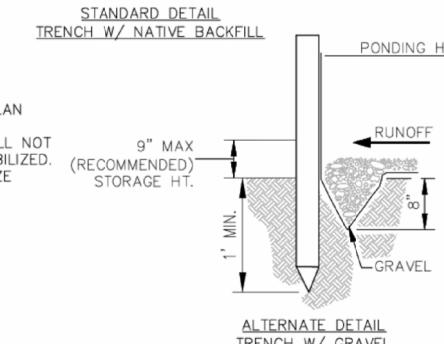
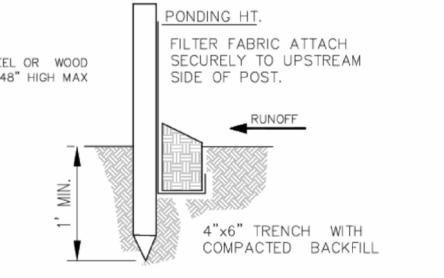


## SHEET LEGEND

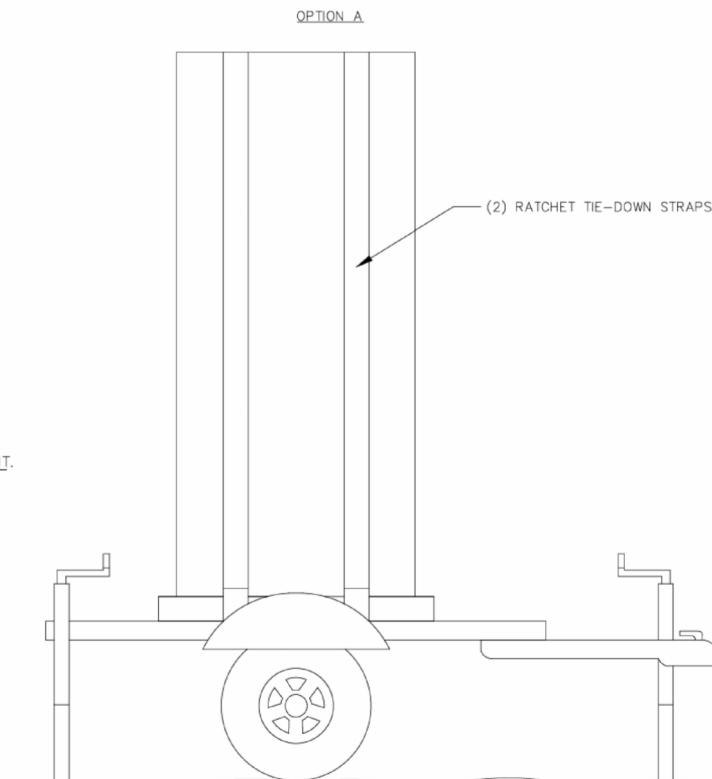


NOTES:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT; SEE PLAN VIEW.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.



#### D LODA/SILT FENCE



#### E PORTABLE TOILET

## PLAN REVISIONS

A.



CAD TECH: RJM  
DESIGNER: RJM  
Q&A: JNS

CALL BLUE STAKES PRIOR TO DIGGING

## PROJECT NAME

**CREGER MACHINE  
SHOP**

## SHEET NAME

## DETAILS

PLAN SUBMITTAL: PRELIM

REVIEW SET  
5/12/25

4.  
28



United States  
Department of  
Agriculture



Natural  
Resources  
Conservation  
Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Cache Valley Area, Parts of Cache and Box Elder Counties, Utah



# Contents

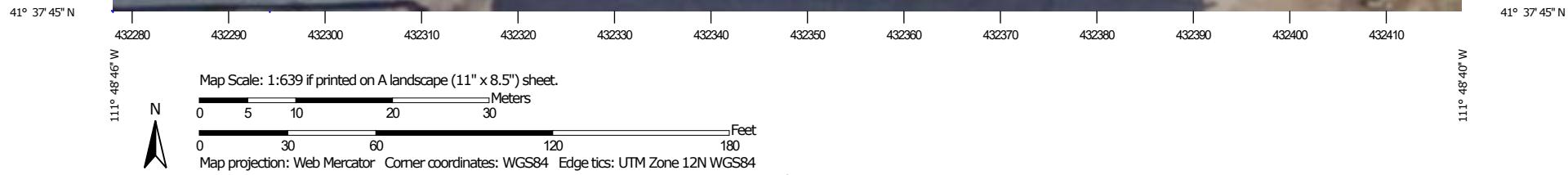
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# Soil Map

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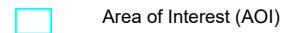
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report  
Soil Map

## Custom Soil Resource Report

## MAP LEGEND

## Area of Interest (AOI)



Area of Interest (AOI)

## Soils



Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

## Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot

## Spoil Area



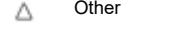
Spoil Area

## Stony Spot



Stony Spot

## Very Stony Spot



Very Stony Spot

## Wet Spot



Wet Spot

## Other



Other

## Special Line Features



Special Line Features

## Water Features

## Streams and Canals



Streams and Canals

## Transportation

## Rails



Rails

## Interstate Highways



Interstate Highways

## US Routes



US Routes

## Major Roads



Major Roads

## Local Roads



Local Roads

## Background

## Aerial Photography



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cache Valley Area, Parts of Cache and Box Elder Counties, Utah

Survey Area Data: Version 17, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 22, 2022—Jul 11, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RhA	RICKS GRAVELLY LOAM, 0 TO 3 PERCENT SLOPES	1.7	100.0%
<b>Totals for Area of Interest</b>		<b>1.7</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Cache Valley Area, Parts of Cache and Box Elder Counties, Utah

### RhA—RICKS GRAVELLY LOAM, 0 TO 3 PERCENT SLOPES

#### Map Unit Setting

*National map unit symbol:* j6dn  
*Elevation:* 4,500 to 5,700 feet  
*Mean annual precipitation:* 15 to 17 inches  
*Mean annual air temperature:* 46 to 48 degrees F  
*Frost-free period:* 130 to 160 days  
*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Ricks and similar soils:* 95 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ricks

##### Setting

*Landform:* Lake terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium and deltaic sediments derived from limestone, sandstone and quartzite

##### Typical profile

*Ap - 0 to 4 inches:* gravelly loam  
*A1 - 4 to 9 inches:* gravelly loam  
*B2 - 9 to 14 inches:* gravelly loam  
*B3ca - 14 to 18 inches:* gravelly sandy loam  
*IIC1ca - 18 to 24 inches:* very gravelly sand  
*IIC2ca - 24 to 60 inches:* very gravelly sand

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 25 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 3.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4s  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* B  
*Ecological site:* R028AY310UT - Upland Loam (Bonneville Big Sagebrush) North  
*Other vegetative classification:* Upland Loam (Mountain Big Sagebrush) (028AY310UT)

Custom Soil Resource Report

*Hydric soil rating:* No

**Minor Components**

**Timpanogos**

*Percent of map unit:* 5 percent