

Iowa Department of Natural Resources
Construction Document

Derecho Repairs
for
Big Creek State Park

Polk County, IA
Project #21-02-77-10
Plans prepared by
Land and Waters Bureau
Conservation and Recreation Division

AUTHORIZATION TO BID

BUREAU CHIEF - LAND AND WATERS		DATE	PARKS WILDLIFE FISHERIES LAW ENFORCEMENT		DATE
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DIRECTORY

Architect		DNR Inspector	
COMPANY	Iowa Department of Natural Resources	COMPANY	Iowa Department of Natural Resources
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THE DERECHO OF 2020 DAMAGED THE OFFICE BUILDING ROOF AND MANY SHELTERS AND RESTROOMS THROUGHOUT BIG CREEK STATE PARK. THIS PROJECT WILL BE TO DEMOLISH THE MODEL AIRPLANE AND FIREFLY RESTROOMS, REPAIR THE ROOFS AT CADET RESTROOM AND SHELTER, JOLLY BOAT SHELTER AND THE OFFICE AT BIG CREEK. THE OFFICE WILL ALSO RECEIVE NEW GUTTERS AND DOWNSPOUTS.



I hereby certify that this architectural document was prepared by me or under my direct personal supervision and that I am a duly Registered Professional Architect under the laws of the State of Iowa.

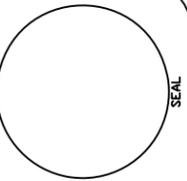
RYAN E. RICHEY

DATE

My license renewal date is June 30, 2023.

Pages or sheets covered by this seal:

A-001 - A-202



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NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
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Derecho Repairs for:
Big Creek State Park
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Polk City, IA 50226

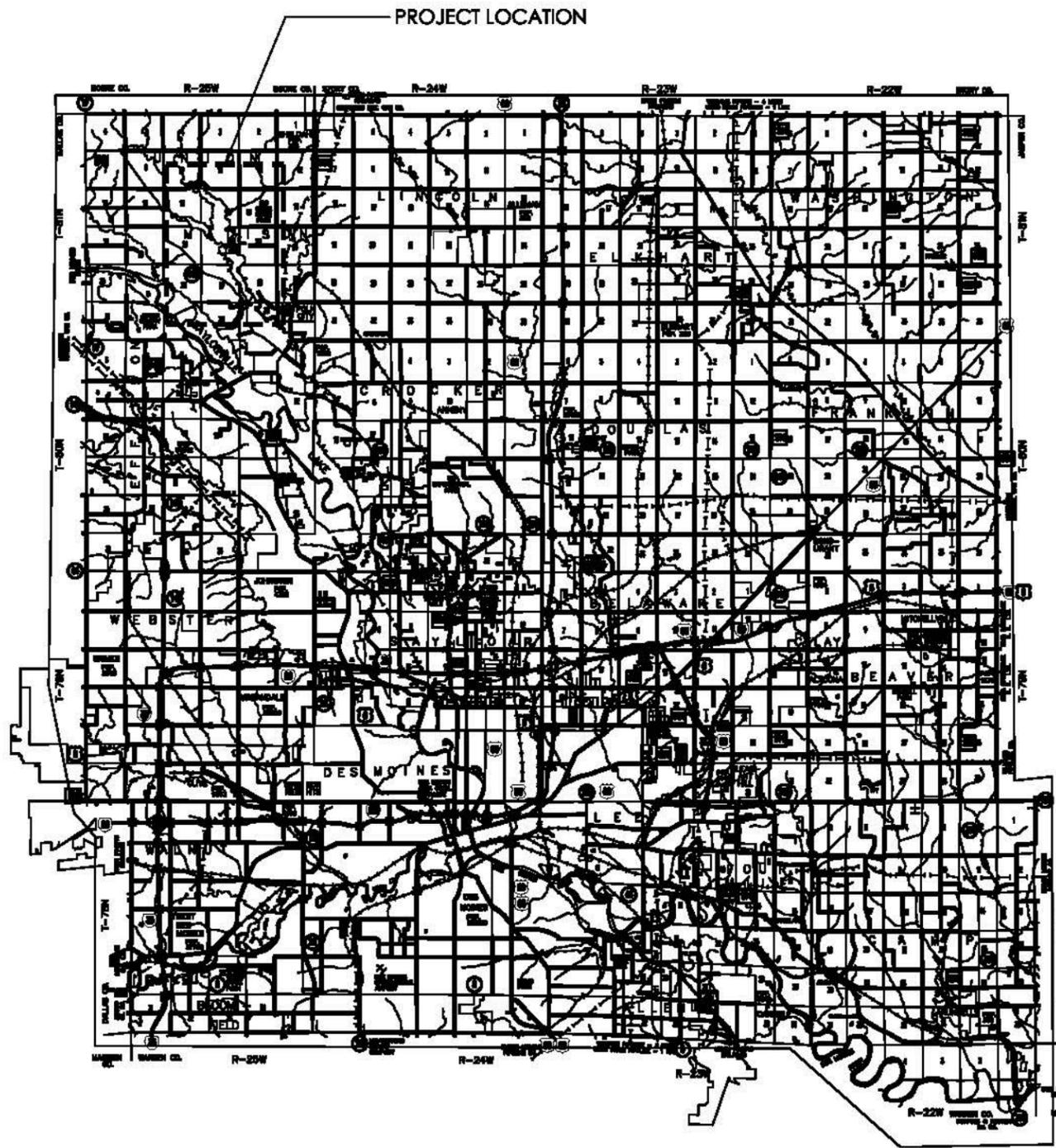
SHEET INDEX

SHEET NO.	SHEET TITLE
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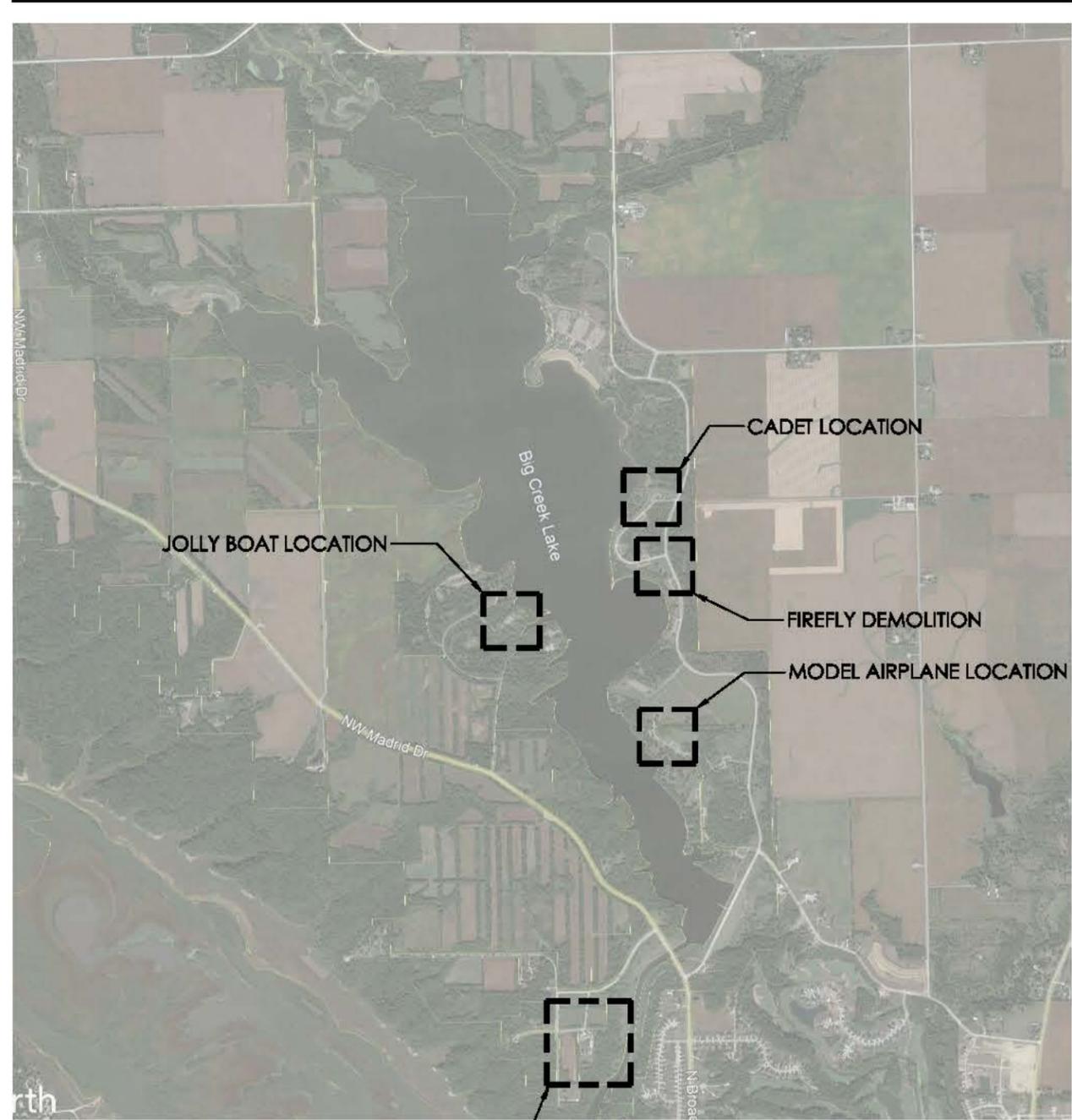
BID ITEMS

ITEM #	ITEM DESCRIPTION	ITEM NUMBER
1	Restroom Demolitions	2 Each
2	Roofing Demolition	Lump Sum
3	4x8 OSB Roof Sheathing	10 Each
4	Asphalt Roofing and Associated Items	Lump Sum
5	Office Gutters and Downspouts	Lump Sum
6	Restroom, and Shelter Siding and Associated Items	3 Each
7	Mobilization	Lump Sum

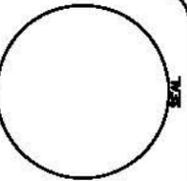
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21-02-77-10
DATE: 01.18.2022
SHEET No: **A-001**



02 POLK COUNTY – BIG CREEK STATE PARK
SCALE: NTS



01 BIG CREEK STATE PARK – PROJECT LOCATIONS
SCALE: NTS



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DATE	PROJECT NUMBER
01.18.2022	21-02-77-10
SHEET #	
A-002	

GENERAL CONSTRUCTION NOTES

VERIFY ACTUAL LOCATIONS AND ELEVATIONS WITH DNR ENGINEER.

ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

THE CONTRACTOR SHALL VISIT THE SITE AND INSPECT THE PROJECT AREA AND THOROUGHLY FAMILIARIZE THEMSELVES WITH THE ACTUAL JOB CONDITIONS PRIOR TO BIDDING AND THE START OF WORK. FAILURE TO VISIT THE PROJECT SITE SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING THE WORK IN ACCORDANCE TO THE PLANS, SPECIFICATION, SPECIAL PROVISIONS AND CONTRACT.

THE CONTRACTOR SHALL VERIFY, AT THE SITE, ALL DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS AND SHALL NOTIFY THE DNR ENGINEER OF ANY DISCREPANCIES, OMISSIONS, AND/OR CONFLICTS PRIOR TO PROCEEDING WITH THE WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACED WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE DNR ENGINEER.

THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE DNR ENGINEER.

WHERE UTILITIES AND FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE DNR ENGINEER OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE AFFORDED ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

THE CONTRACTOR SHALL SHAPE GRADED AREA TO MAINTAIN SURFACE DRAINAGE. ALL ELEVATIONS ARE TO FINISH GRADE.

THE CONTRACTOR IS EXPECTED TO HAVE MATERIALS, EQUIPMENT, AND LABOR AVAILABLE ON A DAILY BASIS TO INSTALL AND MAINTAIN EROSION CONTROL FEATURES ON THE PROJECT. THIS MAY INVOLVE SEEDING, SILT FENCE, ROCK DITCH CHECKS, SILT BASINS OR SILT DIKES.

GENERAL NOTES

- A. REMOVE ALL EXISTING ROOFING MATERIAL DOWN TO THE SHEATHING, PREP ROOF DECK FOR NEW ROOFING MATERIAL.
- B. REMOVE ALL GUTTERS AND DOWN-SPOUTS, INSTALL NEW 6" ALUMINUM SEAMLESS GUTTERS AND DOWNS, COLOR TO MATCH ROOF STEEL.
- C. REPLACE ALL FLASHING AND BOOTING AT ROOF PENETRATIONS PER MANUFACTURER'S RECOMMENDATIONS.
- D. INSTALL SHINGLES AND ALL UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATIONS. INCLUDE ALL ASSOCIATED ITEMS NEEDED FOR A COMPLETE ROOF PRODUCT.
- E. ALL EXISTING ROOF PENETRATIONS, TO REMAIN IN PLACE, AND TO BE PROPERLY FLASHED AND BOOTED, WITH NEW MATERIAL, PER MANUFACTURER'S RECOMMENDATIONS.

*DIVISIONS 20-41 OF THE STANDARD SPECIFICATIONS FOR BRIDGE AND HIGHWAY CONSTRUCTION, CURRENT EDITION WITH GS-15011 SHALL APPLY TO THIS PROJECT.

PROJECT NARRATIVE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL ITEMS WITHIN THIS NARRATIVE, THE DRAWINGS, AND PROJECT MANUAL UNLESS SPECIFICALLY NOTED OTHERWISE. THIS NARRATIVE IS NOT MEANT TO BE A COMPREHENSIVE ACCOUNT OF ALL ITEMS TO BE COVERED BY THE CONTRACT, REVIEW ALL DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS AND ESTABLISHING ALL QUANTITIES THAT ARE DICTATED AS "LUMP SUM".

THIS PROJECT, FOR BIG CREEK STATE PARK – DERECHO REPAIR, SHALL COMMENCE WHEN ALL CONTRACTS ARE EXECUTED AND IN PLACE AND SHALL BE COMPLETED NO LATER THAN AUGUST 31, 2022.

ROOF REPLACEMENTS:

THE CONTRACTOR SHALL REMOVE ALL SHINGLES, DRIP EDGE, UNDERLAYMENT OSB DECKING THAT IS DAMAGED AND REPLACE WITH OSB ROOF DECKING OF SIMILAR DIMENSION. CONTRACTOR TO INSPECT ALL ROOF DECKING FOR DAMAGE AND NOTIFY DNR INSPECTOR OF ANY DAMAGE THAT NEEDS TO BE ADDRESSED. CONTRACTOR SHALL REPLACE ALL BOOTS AND FLASHING AROUND ALL ROOF PENETRATIONS. CONTRACTOR SHALL PREP ROOF DECK AND INSTALL NEW 40MIL WATER AND ICE SHIELD (OFFICE ONLY) OR 30LB ROOFING FELT (SHELTERS AND RESTROOM) OVER ENTIRE ROOF. CONTRACTOR SHALL INSTALL NEW BOOTS AROUND ALL ROOF PIPE PENETRATIONS PER MANUFACTURER'S RECOMMENDATION. INSTALL NEW ALUMINUM DRIP EDGE ON THE ENTIRE PERIMETER OF ALL ROOF SECTIONS, COLOR TO BE BROWN. CONTRACTOR SHALL THEN INSTALL SHINGLES, (SEE LIST BELOW) OVER ALL ROOF SECTIONS, PER SHINGLE MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL REPLACE ALL GUTTERS AND DOWNSPOUTS ON THE OFFICE AND SHOP LOCATION WITH NEW 6" SEAMLESS ALUMINUM OR STEEL GUTTERS AND DOWNS IN THE SAME COLOR AS THE DRIP EDGE. THE CONTRACTOR SHALL SUPPLY AND INSTALL MINIMUM 4'-0" LONG EXTENSIONS ON THE END OF THE DOWNS.

RESTROOM AND SHELTER REPAIRS (JOLLY BOAT RESTROOM, CADET RESTROOM AND SHELTER), INSTALL LP SMARTSIDE, COMPOSITE WOOD SIDING, OR APPROVED EQUAL, ON ALL VERTICAL FACES OF THE ROOF STRUCTURE, AS SHOWN.

RESTROOM DEMOLITION:

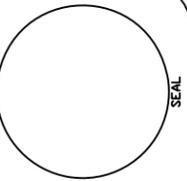
THE CONTRACTOR SHALL DEMOLISH, IN THEIR ENTIRETY, FIREFLY AND MODEL AIRPLANE RESTROOMS. THE CONTRACTOR SHALL REMOVE ALL FOOTINGS, CUT AND CAP ALL UTILITIES RUNNING TO THE RESTROOMS, AND FILL HOLES WITH DIRT AND RESTORE BY SEEDING THE DEMOLITION LOCATIONS. CONTRACTOR SHALL REMOVE ALL BUILDING MATERIAL FROM THE PARK AND THAT MATERIAL SHALL BE THE CONTRACTOR'S PROPERTY.

APPROVED LIST OF SHINGLES – CONTRACTOR MUST SUBMIT ON THE INTENDED SHINGLE TO BE USED.

- CERTAINEED – LANDMARK PRO – WEATHERED WOOD
- OWENS CORNING – DURATION DESIGNER – SUMMER HARVEST
- ATLAS – PINNACLE PRISTINE – MAJESTIC SHAKE

KEYNOTES

1. REMOVE ALL ROOFING MATERIAL DOWN TO THE SHEATHING. INSPECT ROOF FOR DAMAGE AND PREP DECK FOR NEW ROOFING MATERIAL.
2. ALUMINUM DRIP-EDGE AROUND ENTIRE PERIMETER OF ROOF.
3. COVER ALL ROOF DECKS WITH 40MIL WATER AND ICE SHIELD (OFFICE ONLY) OR 30LB FELT (SHELTERS AND RESTROOM) UNDERLAYMENT, PER MANUFACTURER'S INSTRUCTIONS. INSTALL SHINGLES AND SHINGLE ROOF CAPS PER MANUFACTURER'S RECOMMENDATIONS.
4. ALL ROOF PENETRATIONS TO BE PROPERLY FLASHED AND/OR BOOTED, WITH NEW BOOTING AND FLASHING MATERIAL, PER MANUFACTURER'S RECOMMENDATIONS (RESTROOMS AND OFFICE ONLY).
5. INSTALL NEW 6" SEAMLESS ALUMINUM OR LINED STEEL GUTTERS AND DOWNSPOUTS ON THE OFFICE/SHOP BOTH SIDES OF THE ROOF AND AWNING ROOF AT ENTRANCE. MATCH COLOR TO DRIP EDGE.
6. INSTALL WEATHER-RESISTIVE BUILDING WRAP OVER ALL VERTICAL FACES OF ROOF, ALL FOUR (4) SIDES.
7. LP SMARTSIDE STAGGERED CEDAR SHAKE SIDING OVER ALL VERTICAL FACES OF ROOF, ALL FOUR (4) SIDES, OR APPROVED EQUAL. PAINT TWO COATS OF EXTERIOR ACRYLIC LATEX PAINT, COLOR TBD.
8. LP SMARTSIDE 3.5" 440 SERIES CEDAR TEXTURE TRIM, OR APPROVED EQUAL, ON BOTTOM AND TOP EDGE OF ROOF, AS SHOWN. PAINT TWO COATS OF EXTERIOR ACRYLIC LATEX PAINT, COLOR TBD. INSTALL FLASHING PER MANUFACTURER'S INSTRUCTIONS ALONG BOTTOM TRIM SECTION.
9. EXISTING STRUCTURE TO REMAIN.
10. DEMOLISH THE RESTROOM AND THE FOOTINGS IN IT'S ENTIRETY. REMOVE ALL MATERIALS FROM THE PARK. CUT AND CAP ALL UTILITIES PRIOR TO DEMO AND RESTORE ALL AREAS OF DISTURBANCE.
11. SHINGLE RIDGE CAP, PER MANUFACTURER'S RECOMMENDATIONS. (VENTED AT OFFICE, NON-VENTED ALL OTHERS)



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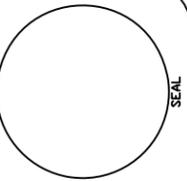
Derecho Repairs for:
Big Creek State Park
Polk City, IA 50226

8794 NW 125th Ave.

DRAWN BY: PROJECT NUMBER:
21-02-77-10

DATE: 01.18.2022

SHEET No: **A-003**



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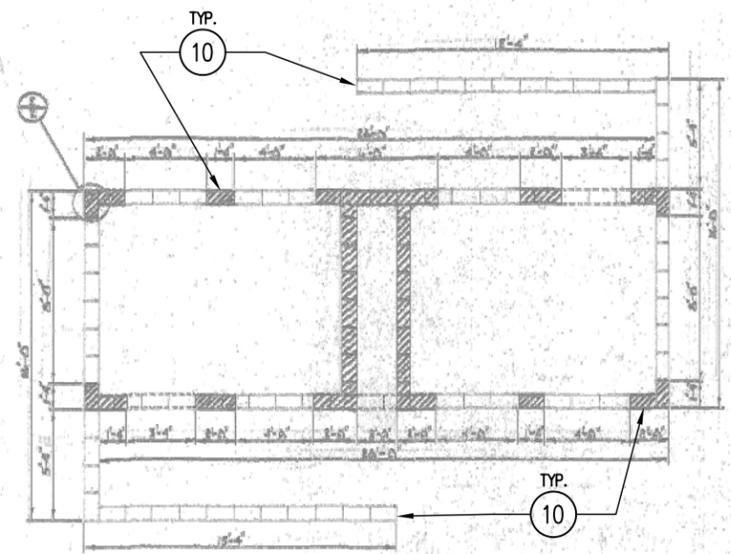
A-050

DESIGN CRITERIA

ROOFING BEARING CAPACITY	= 8000 LBS / SQ. FT.
LIVE LOAD	= 30 LBS / SQ. FT.
WIND LOAD	= 25 LBS / SQ. FT.
UNIFORM	= 15 LBS / SQ. FT.

LEGEND

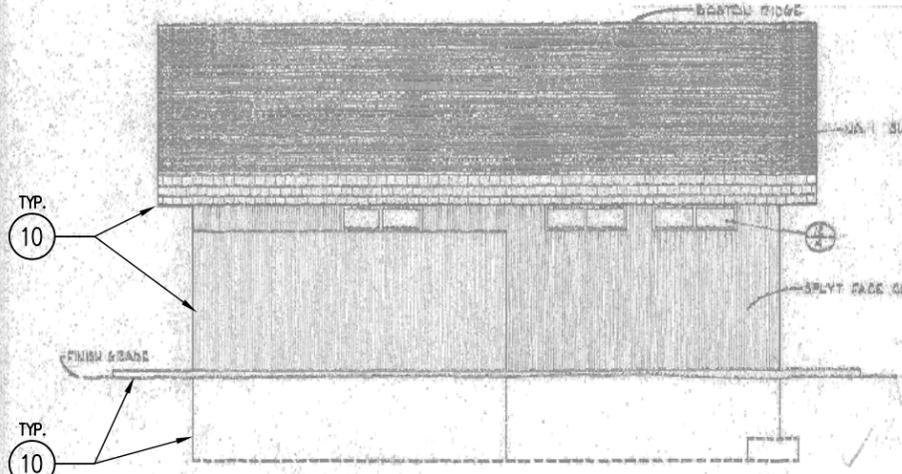
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(B)	SHEET NUMBER



1 BLOCK COURSING
SCALE: 1/4" = 1'-0"

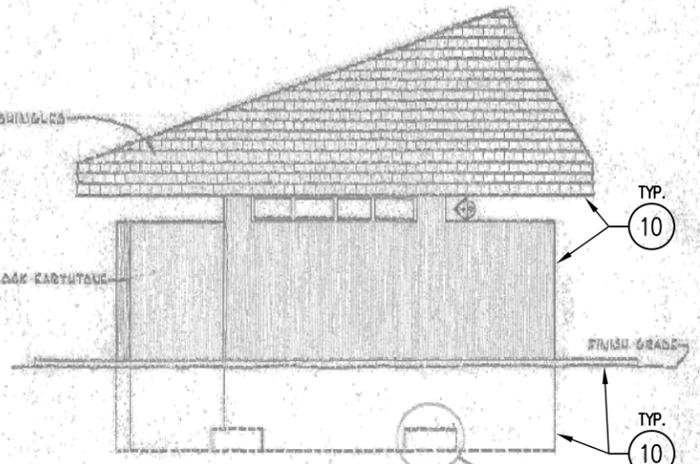
NOTE: WATER CLOSET FOR HANDICAPPED STALL TO BE A HIGHLINE KENKO CB

NOTE: PLACE 1/2" PREMOULDED BITUMINOUS JOINT MATERIAL AND SANDSTRENGTH JOINT SEALANT 1/2" DEPTH (WIDTH) ALONG ALL WALLS AND IN SLABS AS SHOWN

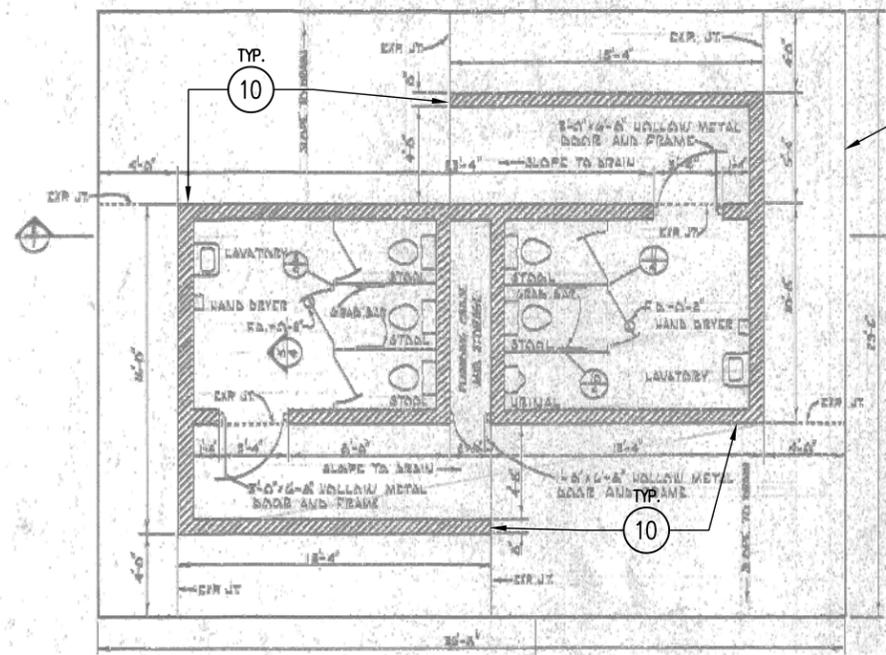


2 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

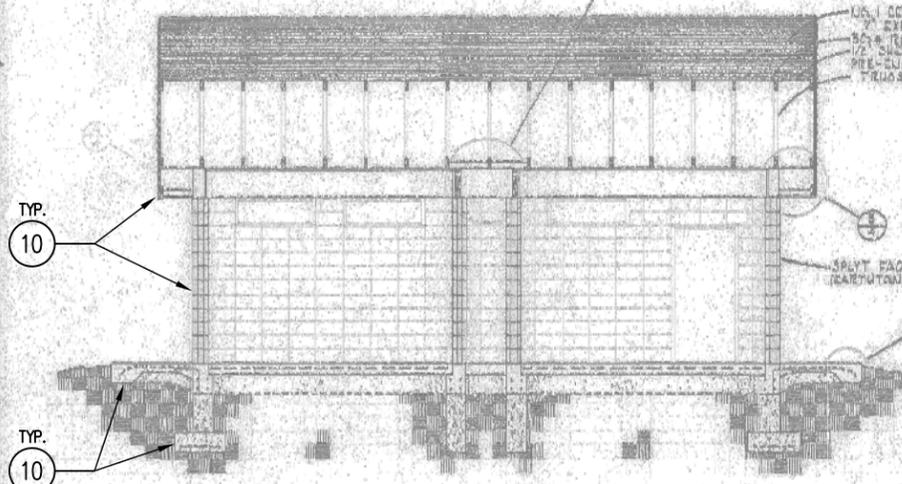
NOTE: WATER IS TO BE WIPED FLUSH WITH FACE OF BLOCK. THE MASON SHALL FOLLOW THE COURSE OF THE RISER OF THE BRICK TO GIVE THE APPEARANCE OF A CONTINUOUS VERTICAL SID.



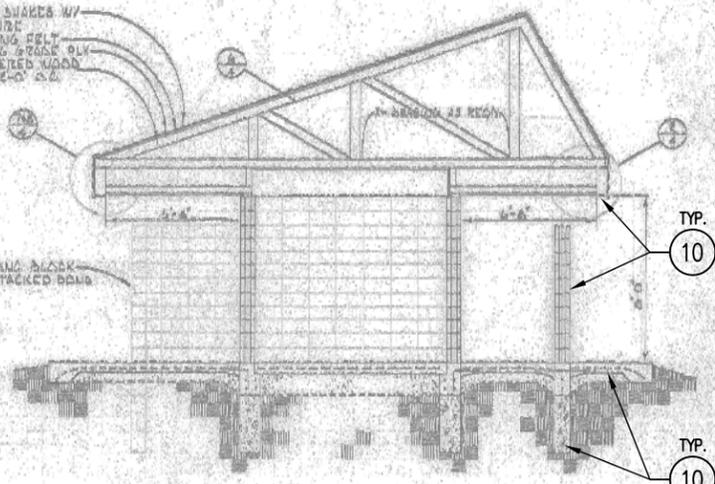
3 SIDE ELEVATION
SCALE: 1/4" = 1'-0"



4 FLOOR PLAN
SCALE: 1/4" = 1'-0"



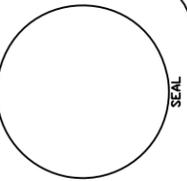
5 BUILDING SECTION
SCALE: 1/4" = 1'-0"



6 BUILDING SECTION
SCALE: 1/4" = 1'-0"

TITLE, LAYING, PLANS, SECTIONS AND ELEV. DRAWN BY: DJK DATE: 12/18/21
PROJECT: BIG CREEK STATE PARK COUNTY: POLK FROM: HOU-17-2021

01 EXISTING PLANS - BIG CREEK RESTROOMS
SCALE: NTS



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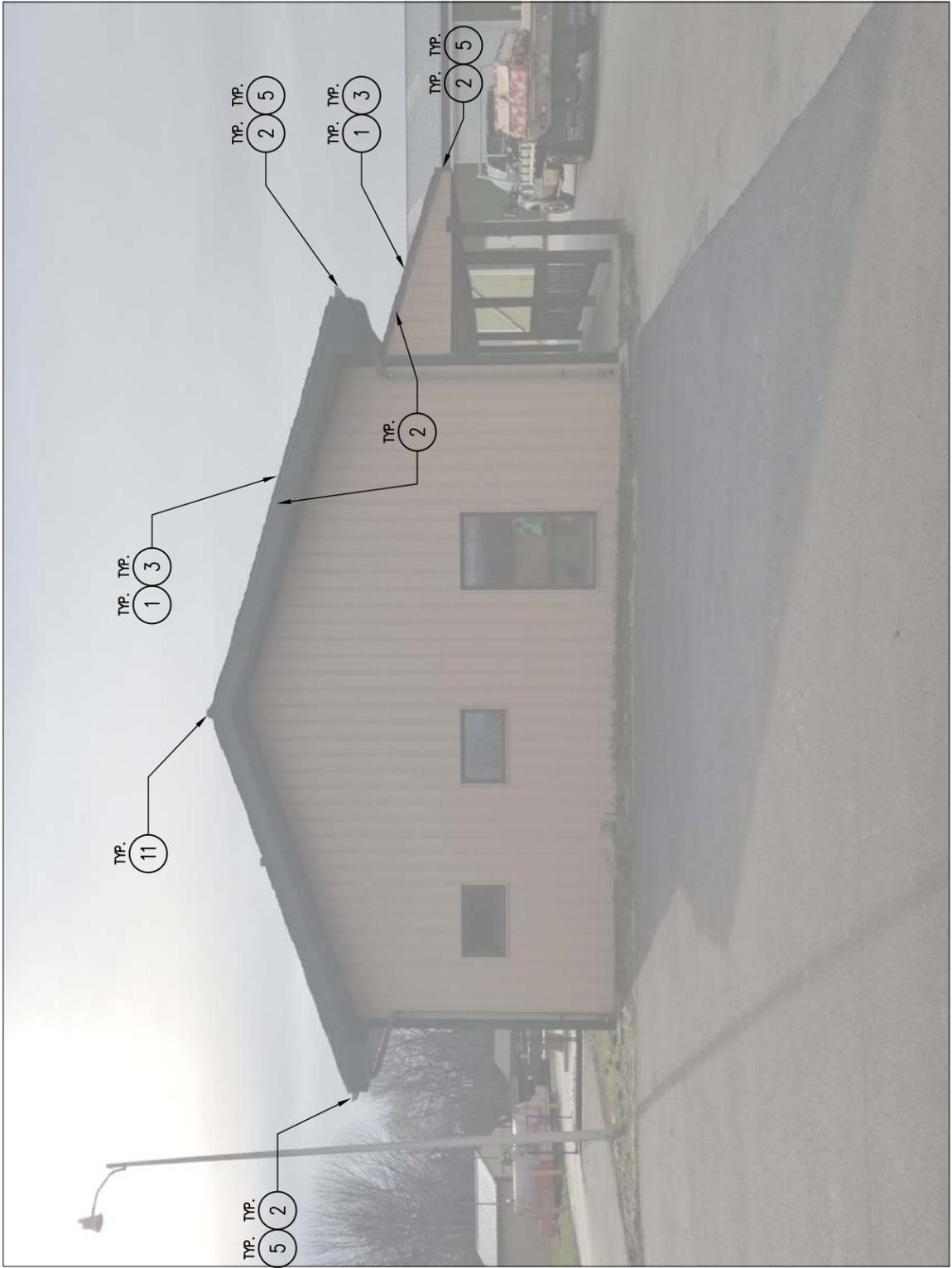


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A-100

01 PHOTO - SHOP AND OFFICE ROOF
SCALE: NTS



02 PHOTO – SHOP AND OFFICE – NORTH
SCALE: NTS



01 PHOTO – SHOP AND OFFICE – WEST
SCALE: NTS

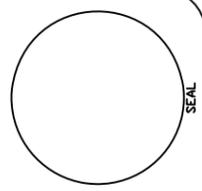
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A-101

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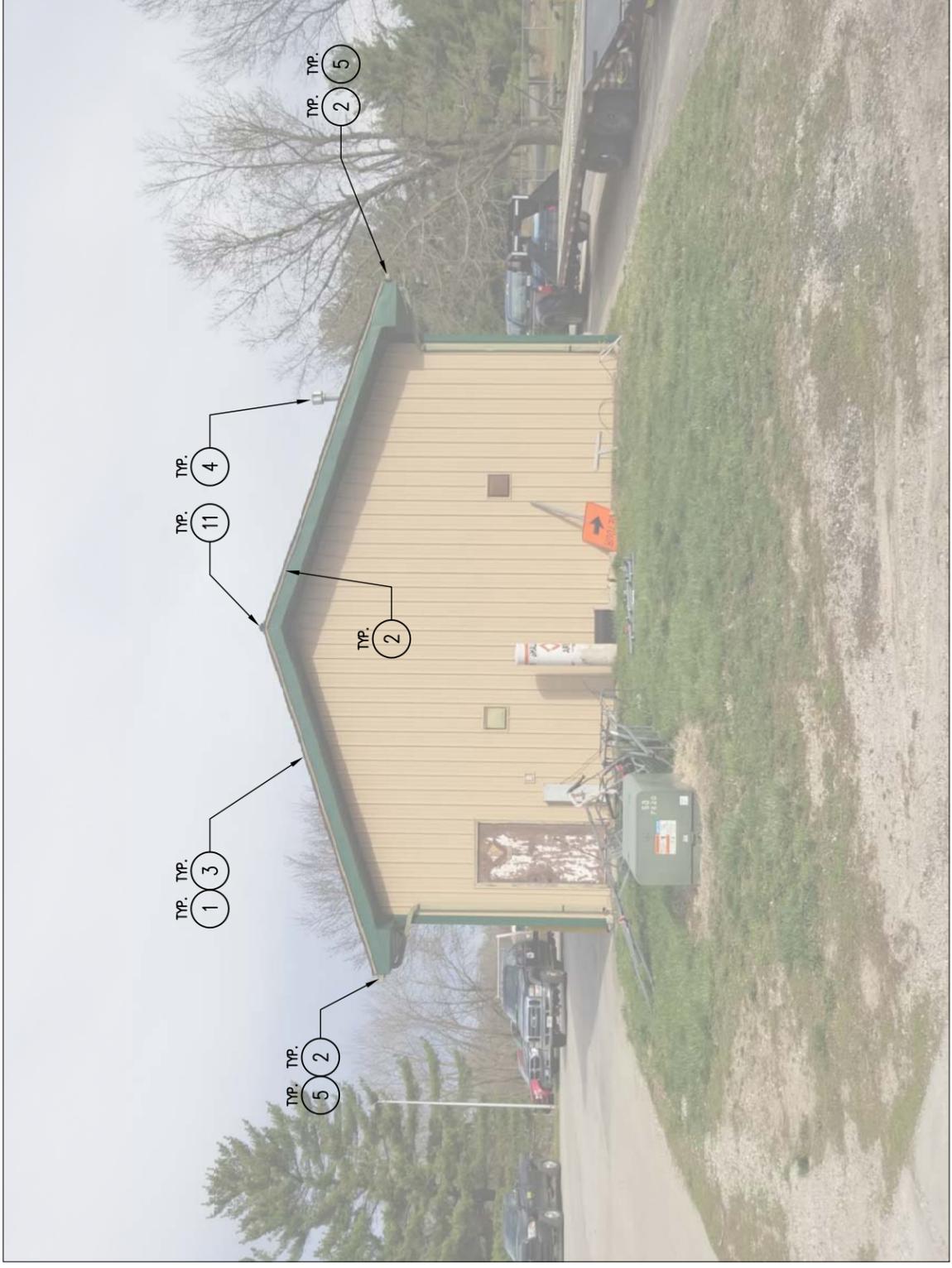


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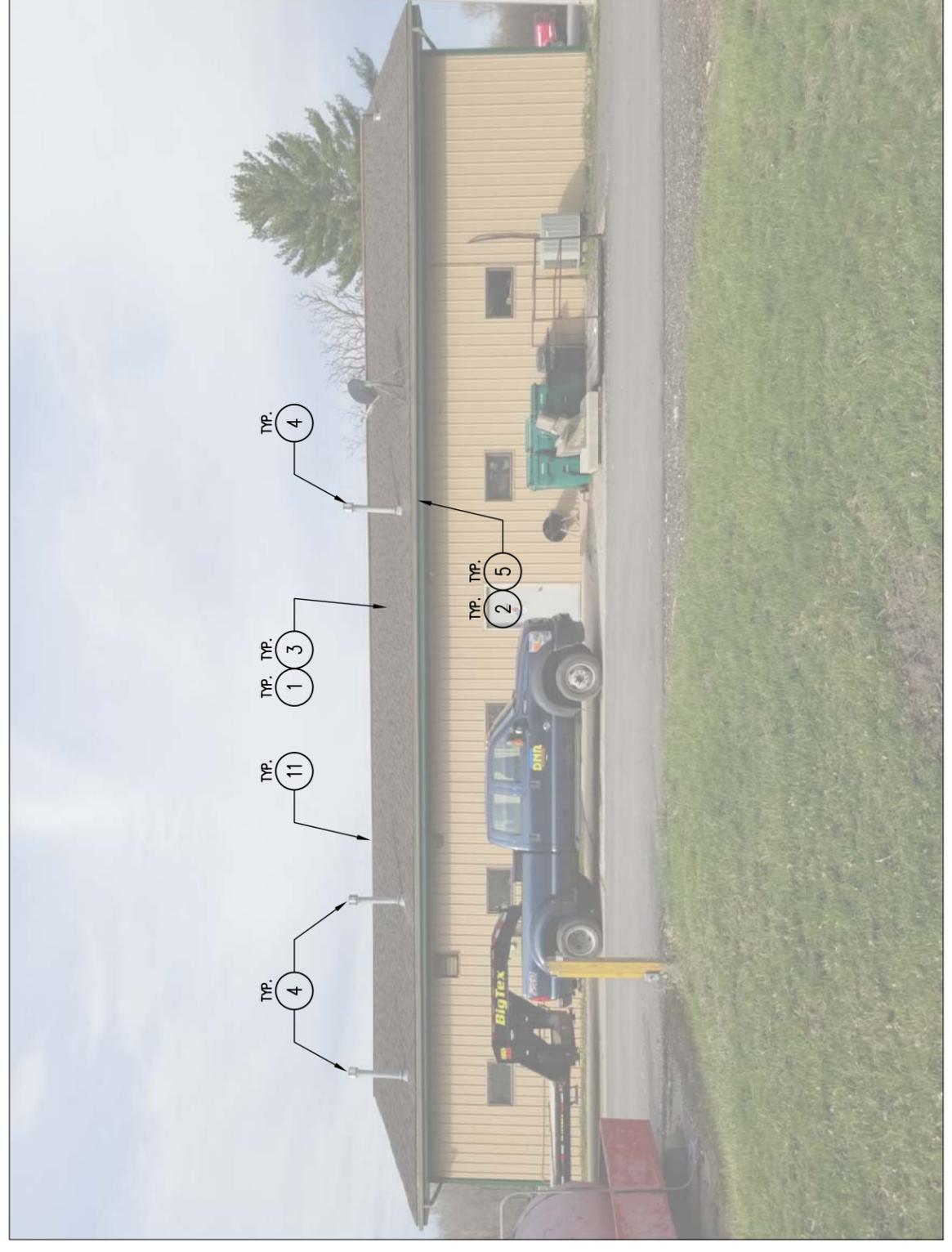
02

PHOTO - SHOP AND OFFICE - SOUTH
SCALE: NTS



01

PHOTO - SHOP AND OFFICE - EAST
SCALE: NTS



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SHEET No:	01.18.2022

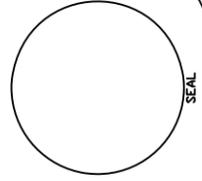
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SEAL



02 PHOTO – TYPICAL SHELTER
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01 PHOTO – TYPICAL SHELTER
SCALE: NTS

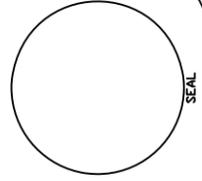
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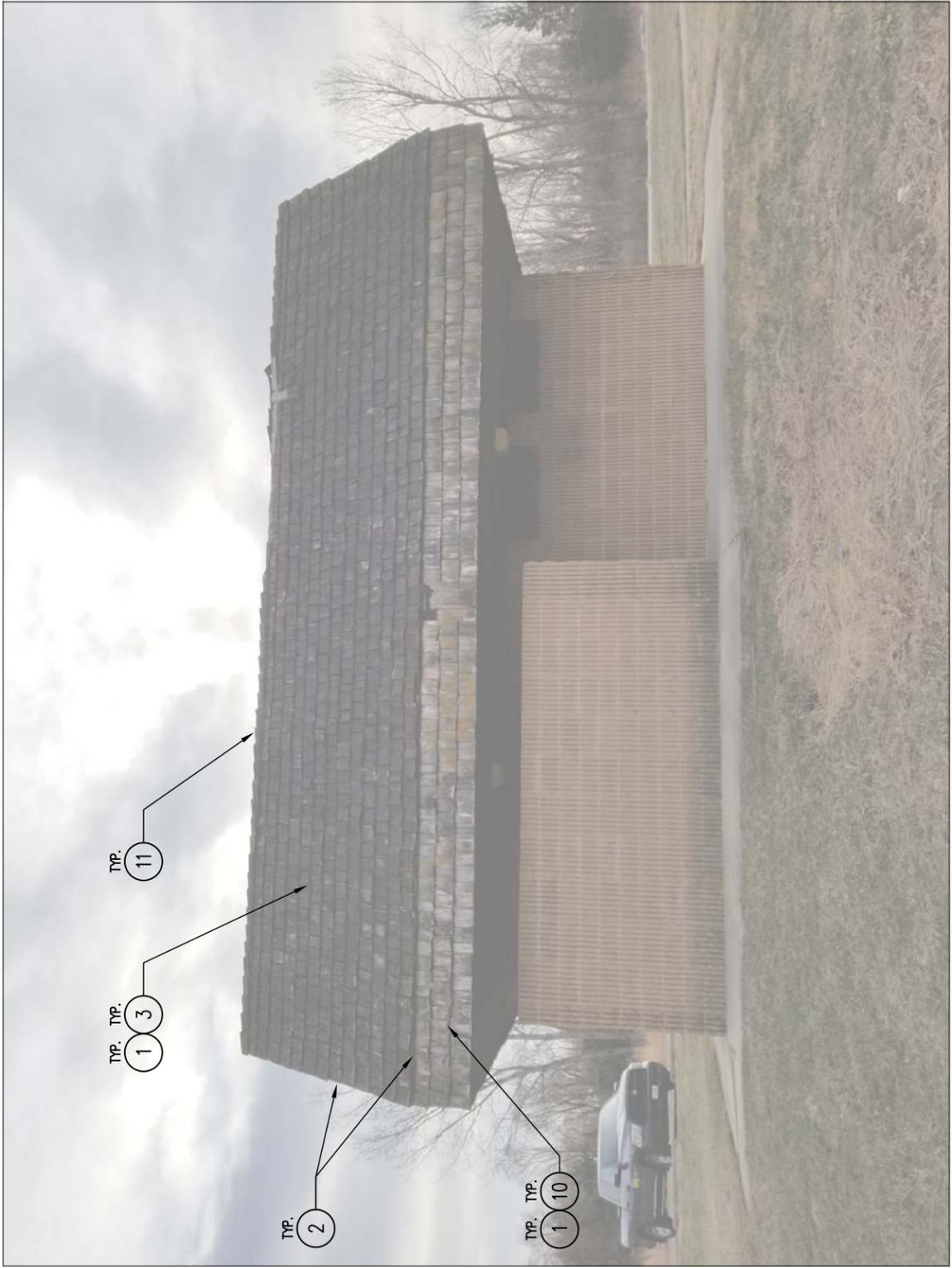
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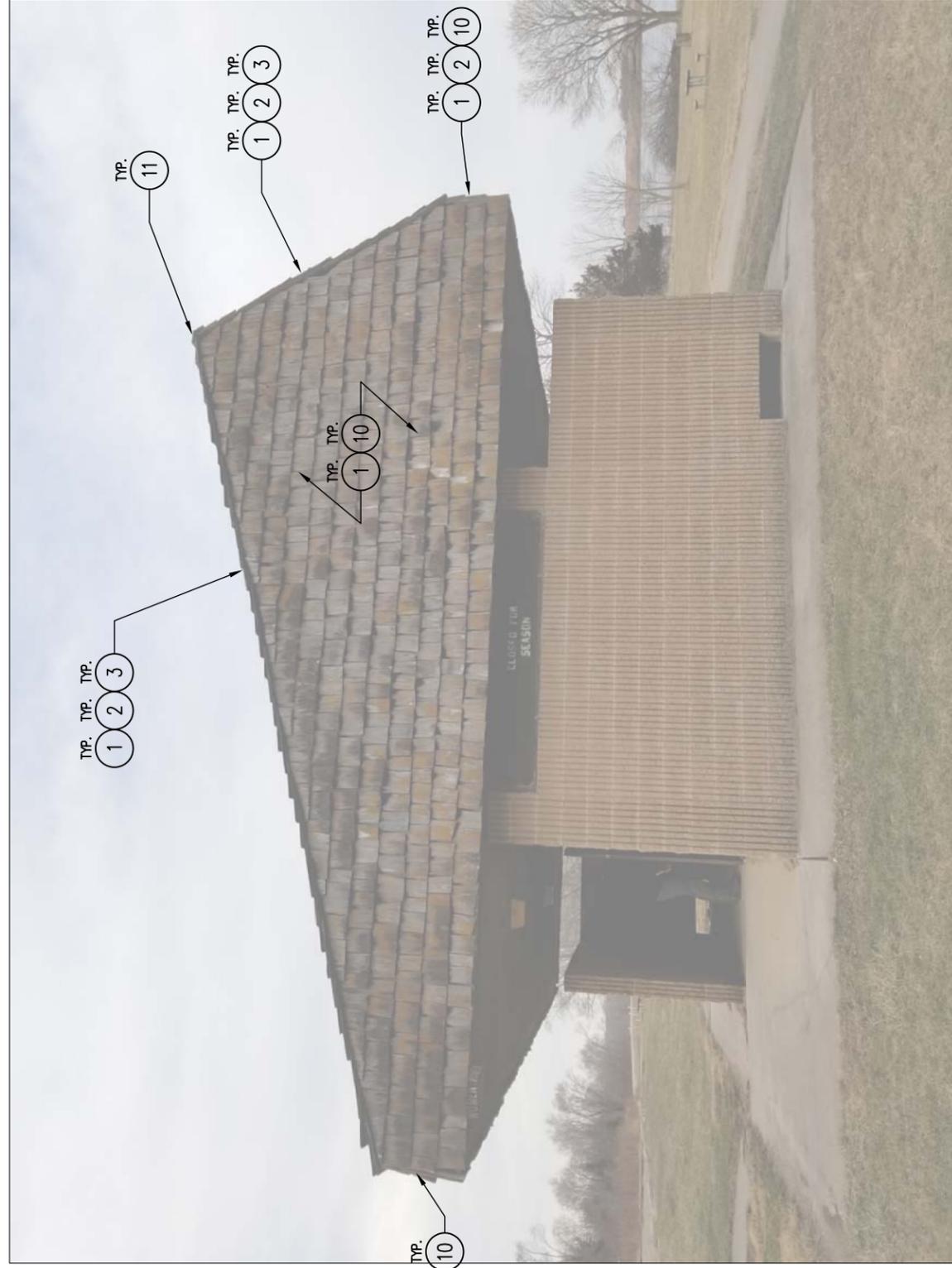


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02 PHOTO – TYPICAL RESTROOM
SCALE: NTS



01 PHOTO – TYPICAL RESTROOM
SCALE: NTS

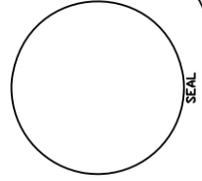
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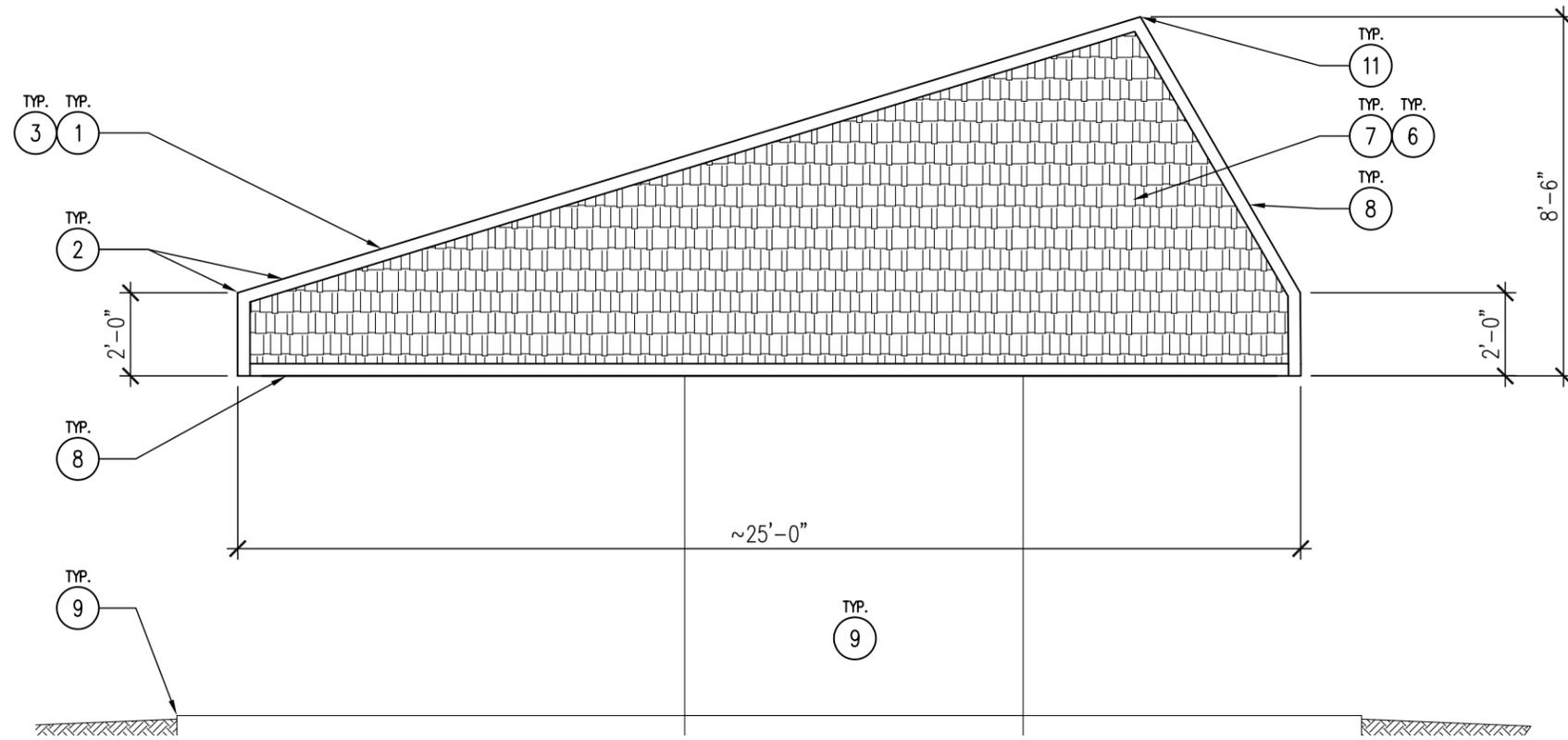
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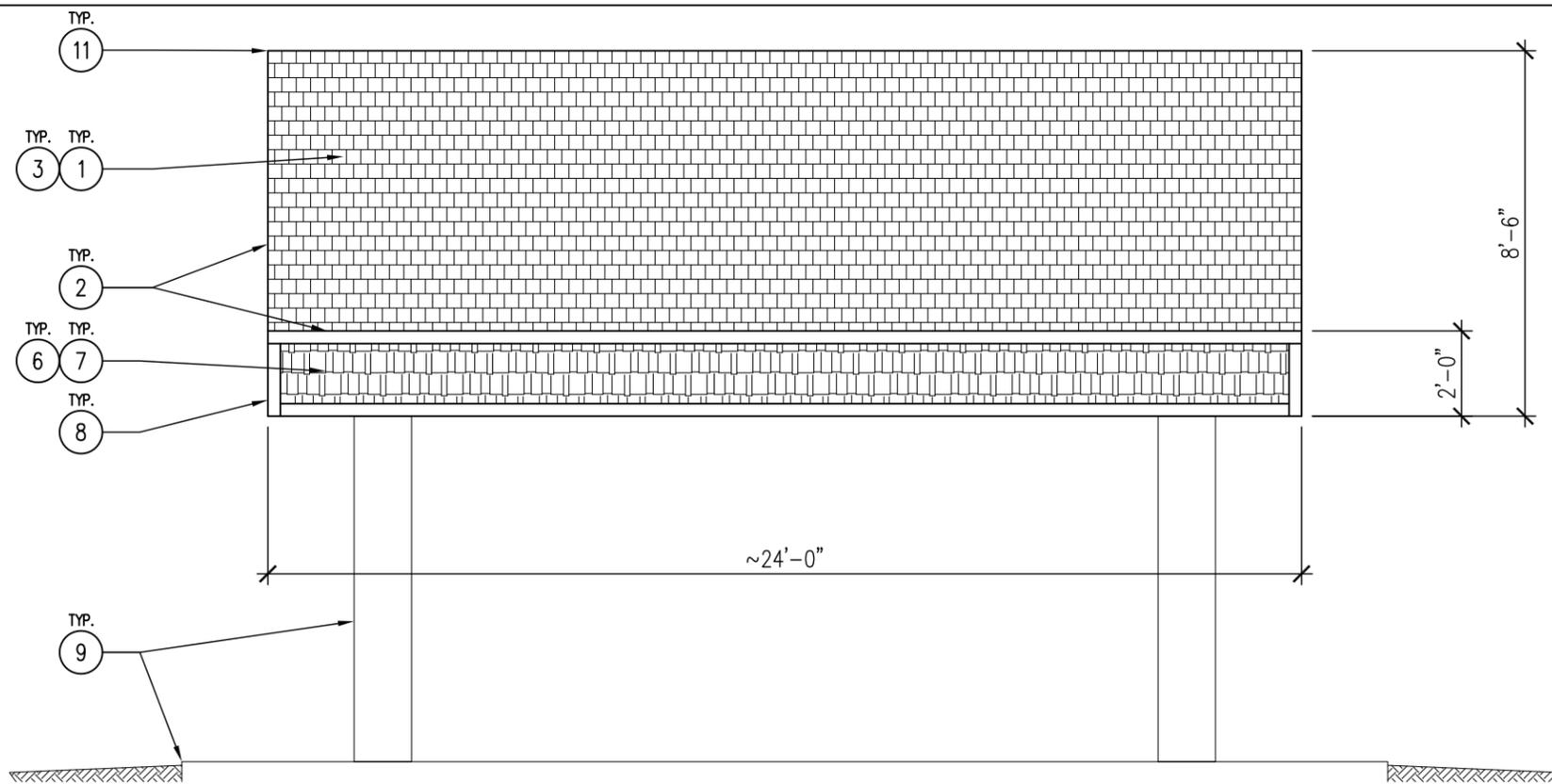


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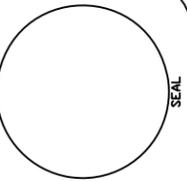




02 ELEVATION – TYPICAL ROOF RESTROOM/SHELTER REPAIR
SCALE: 1/4" = 1'-0"



01 ELEVATION – TYPICAL ROOF RESTROOM/SHELTER REPAIR
SCALE: 1/4" = 1'-0"



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