

Iowa Department of Natural Resources
Construction Document

Visitor Center Water Mitigation
for
Lewis and Clark State Park
Monona County, IA

Project #21-01-67-05
Plans prepared by
Land and Waters Bureau
Conservation and Recreation Division



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.

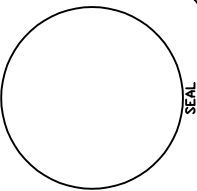
RYAN E. RICHEY

DATE

My license renewal date is June 30, 2025.

Pages or sheets covered by this seal:

A-001 - A-101



IOWA DEPARTMENT OF
NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034
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AUTHORIZATION TO BID			
BUREAU CHIEF - LAND AND WATERS		DATE	PARKS WILDLIFE FISHERIES LAW ENFORCEMENT
		DATE	

DIRECTORY			
Architect		DNR Inspector	
COMPANY	Iowa Department of Natural Resources	COMPANY	Iowa Department of Natural Resources
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Lewis and Clark State Park has a Visitor Center built in 2009, the north side of the building leaks water through a side-wall pipe entrance. The side door area and sidewalk is heaved and in need of replacement. This project will waterproof the incoming pipe, install new subgrade drain pipes and backfill, and concrete sidewalks and stoop footings.

BID ITEMS		
ITEM #	ITEM DESCRIPTION	ITEM QUANTITY
1	Mobilization	Lump Sum
2	Demolition and Excavation	Lump Sum
3	Pipe Caulking	Lump Sum
4	4" Perforated Drain Tile	140 LF
5	6" Dual Wall Pipe	190 LF
6	8" Dual Wall Pipe	40 LF
7	HDPE Pipe Fittings	Lump Sum
8	Pea Gravel Backfill	100 CY
9	EPDM Membrane and Filter Fabric	Lump Sum
10	5" PCC Sidewalk and Subbase	55 SY
11	Site Restoration	Lump Sum

Visitor Center Water Mitigation for:

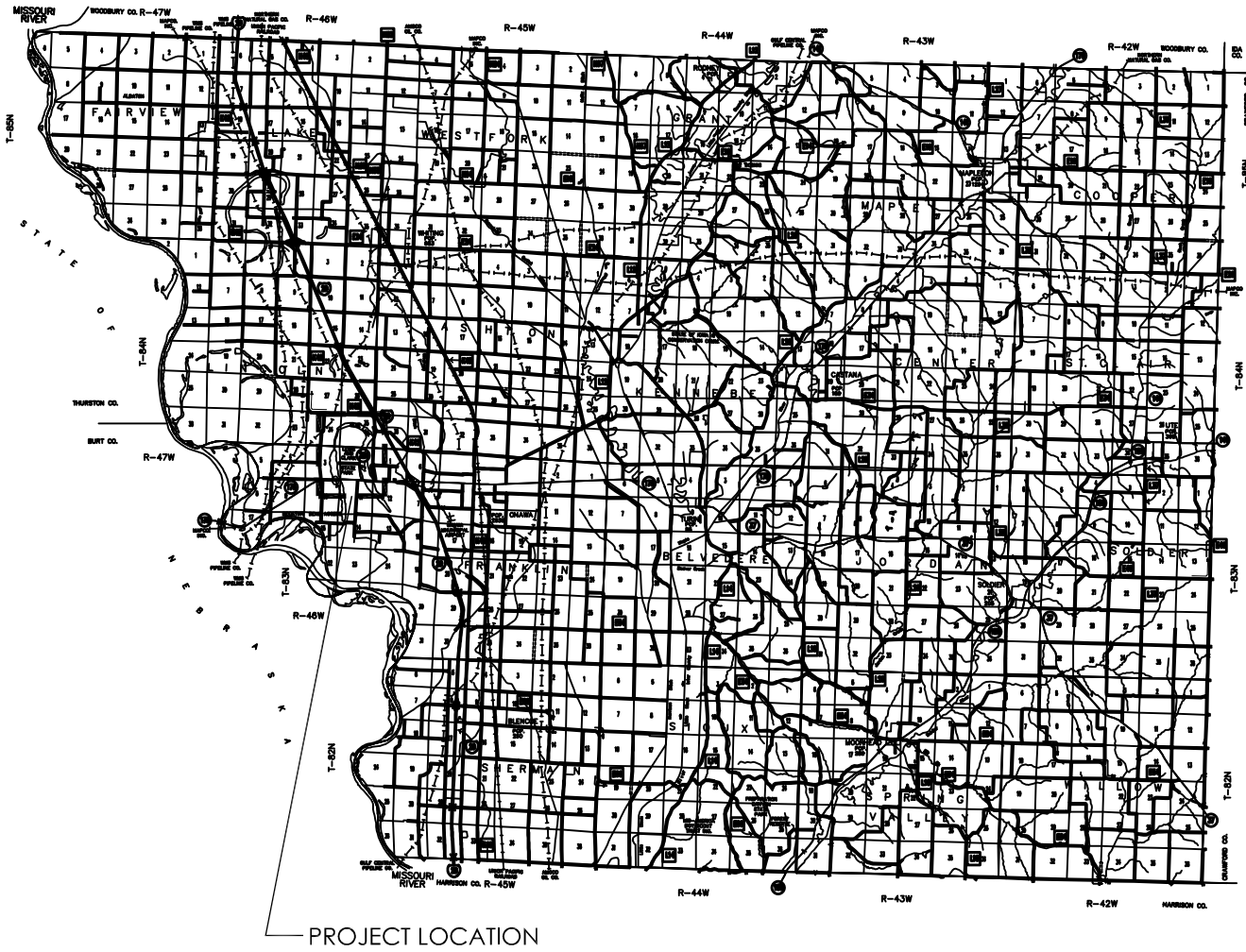
Lewis and Clark State Park

21914 Park Loop Onawa, IA 51040

DRAWN BY: PROJECT NUMBER: 21-01-67-05

DATE: 01.23.2024

SHEET No: **A-001**



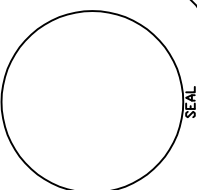
PROJECT LOCATION

02 MONONA COUNTY – LEWIS AND CLARK STATE PARK
SCALE: NTS



VISITOR CENTER
PROJECT LOCATION

01 LEWIS AND CLARK STATE PARK – PROJECT LOCATION
SCALE: NTS



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SHEET No
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.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATEWIDE URBAN STANDARD DESIGN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS). ALL CONSTRUCTION TESTING TO BE IN ACCORDANCE WITH SUDAS AND IS THE EXPENSE OF THE CONTRACTORS.

GENERAL NOTES

- A. CONTRACTOR TO FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO WORK COMMENCING.
- B. CONTRACTOR SHALL CAULK ALL CONCRETE EXPANSION JOINTS WITH FLOWABLE URETHANE SEALANT, COLOR TO BE GRAY.
- C. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WHEN PROJECT IS COMPLETE.

PROJECT NARRATIVE

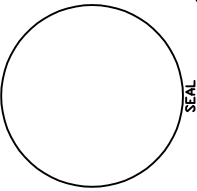
The contractor shall be responsible for providing and installing all items within this narrative, the drawings, and project manual unless specifically noted otherwise. This narrative is not meant to be a comprehensive account of all items to be covered by the contract, review all documents. Contractor is responsible for field verifying all dimensions and establishing all quantities that are dictated as "lump sum".

This project, for Lewis and Clark State Park – Visitor Center Water Mitigation, shall commence when all contracts are executed and in place.

The Contractor shall demolish the sidewalks and stoop area of Northwest Visitor Center doors as shown on the plans. The contractor shall excavate down to the existing sidewall pipe and caulk this pipe completely with water-proofing sealant. The contractor shall then install a rubber water-proofing membrane, attached to the sidewall of the building and drape down the foundation wall to above existing pipe elevation. The contractor shall install a perforated drain tile and solid-wall drain tile from that area and daylight in the ditch to the north of the Visitor Center. Contractor shall backfill with pea gravel and wrap this backfill with filter fabric. The Contractor shall then install a concrete sidewalk with subbase and stoop footing in front of the NW doors. Contractor shall restore site when complete.

KEYNOTES

1. DEMOLISH CONCRETE SIDEWALKS AND STOOP AREA ON NORTHWEST SIDE OF BUILDING, APPROXIMATELY 55 SQUARE YARDS.
2. EXCAVATE ALONG BUILDING TO EXISTING SIDEWALL PIPE DEPTH. CONTRACTOR SHALL EXCAVATE TRENCHES FOR NEW DRAIN LINES TO THE DITCH, MAINTAINING PROPER SLOPE FOR DRAINAGE.
3. CUT DOWNSPOUTS AND EXTEND TO SUBGRADE DRAIN TILE BELOW.
4. EXISTING BUILDING TO REMAIN.
5. 8'-0" WIDE X LENGTH OF DRAIN, 40 MIL EPDM WATERPROOFING MEMBRANE. CONTRACTOR TO REMOVE EXISTING STONE FROM BUILDING AS NEEDED TO INSTALL RUBBER MEMBRANE. INSTALL BASE "L" FLASHING AND WEEP SCREED, REINSTALL STONE A MINIMUM OF 2" ABOVE SIDEWALK. ENSURE MEMBRANE DRAPES UNDER PEA-GRAVEL BACKFILL AND DRAIN TILE A MINIMUM OF 3'-0". AROUND CORNERS, TRIM AND LAP WITH MORE MATERIAL, SEAL WITH EPDM SEALANT.
6. 6'-0" x 6'-0" x 4'-0" DEEP, STOOP FOOTING AT THE EXISTING EGRESS DOOR, REFER TO DETAIL 01/A-101.
7. 5" THICK PCC SIDEWALK WITH #4 REBAR 24" O.C. OVER 5" SUBBASE. MATCH LAYOUT FROM EXISTING SIDEWALK. AT STOOP FOOTING, DOWEL IN SIDEWALK TO STOOP WITH #4 - 12" LONG DOWELS AT 18" O.C. REFER TO ALL DETAILS ON SHEET A-101.
8. 1/2" EXPANSION JOINT MATERIAL WITH FLOWABLE EXTERIOR POLYURETHANE CAULK, CONTINUOUS.
9. CUT EXISTING DOWNSPOUTS AND CONNECT WITH SOLID-WALL DRAIN PIPE, WITH A REDUCER FITTING, TO DRAIN TILE BELOW, SLEEVE THROUGH CONCRETE SIDEWALK.
10. CAULK AROUND EXISTING SIDEWALL PIPE CONTINUOUS AND COMPLETELY WITH SIKA SWELL S-2 OR APPROVED EQUAL. ENSURE ALL AREAS AROUND PIPE RECEIVES ADEQUATE S-2 APPLICATION, FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS.
11. 4" HDPE PERFORATED TILE, WITH SOCK, ENTIRE LENGTH OF NORTH SIDE OF BUILDING.
12. 6" DUAL-WALL HDPE PIPE FROM WYE TO DRAINAGE DITCH ALONG ENTRANCE ROAD.
13. 3'-0" WIDE X DEPTH OF EXCAVATION, BACKFILL DRAIN TILE TRENCH WITH PEA GRAVEL, COMPACT, AND WRAP WITH FILTER FABRIC.
14. COMPACTED FILL FROM EXCAVATION.
15. 12" LONG #4 DOWEL FROM SIDEWALK INTO STOOP FOOTING, 18" O.C.
16. 6" HDPE PIPE TO DOWNSPOUT REDUCER ADAPTER TO HDPE PIPE TO DRAIN TILE, SLEEVE THROUGH CONCRETE SIDEWALK.
17. RODENT GUARD ON END OF HDPE PIPE.
18. 6" HDPE WYE FROM DRAIN PIPE, TIE TO DOWNSPOUTS AND PERFORATED DRAIN TILE.
19. 6" HDPE ELBOW FROM DOWNSPOUTS, TIE INTO WYE.
20. 8" X 6" HDPE WYE WITH 6" CLEANOUT.
21. 8" DUAL-WALL HDPE PIPE, FROM WYE TO DRAINAGE DITCH ALONG ENTRANCE ROAD.



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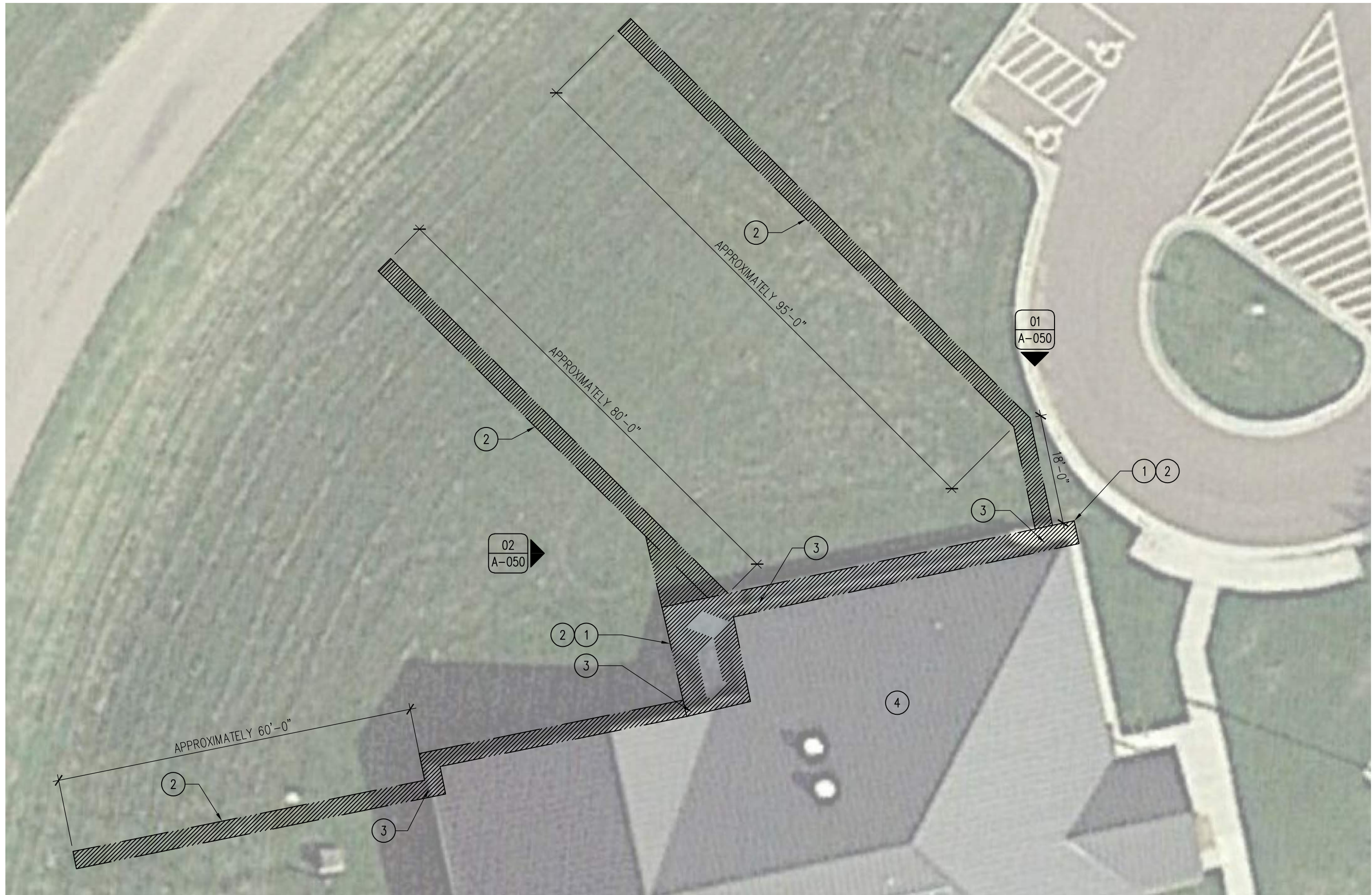


Visitor Center Water Mitigation for:
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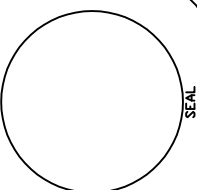
DRAWN BY: PROJECT NUMBER:
21-01-67-05

CHK'D BY: DATE:
01.23.2024

SHEET No:
A-003



01 DEMOLITION SITE PLAN
SCALE: 1/16" = 1'-0"



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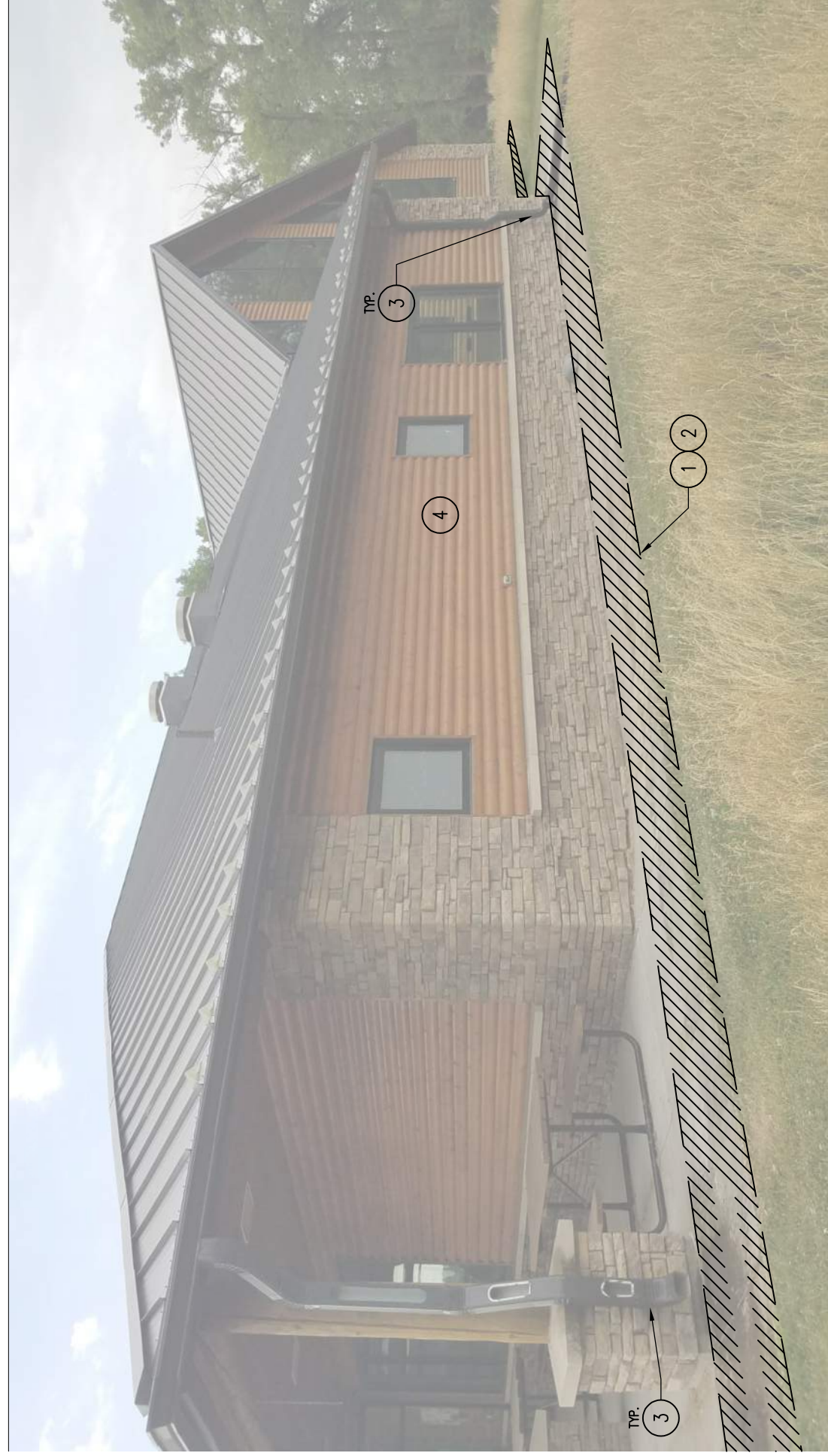
SHEET No:

A-005



02 PHOTO – NORTHWEST ELEVATION

SCALE: NTS



01 PHOTO – NORTHEAST ELEVATION

SCALE: NTS

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Lewis and Clark State Park

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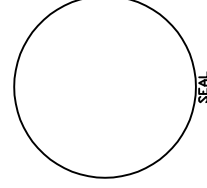
Onawa, IA 51040

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01	01.23.2024

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A-050

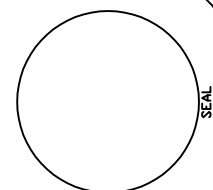


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01 REFERENCE SITE PLAN
SCALE: 1/16" = 1'-0"



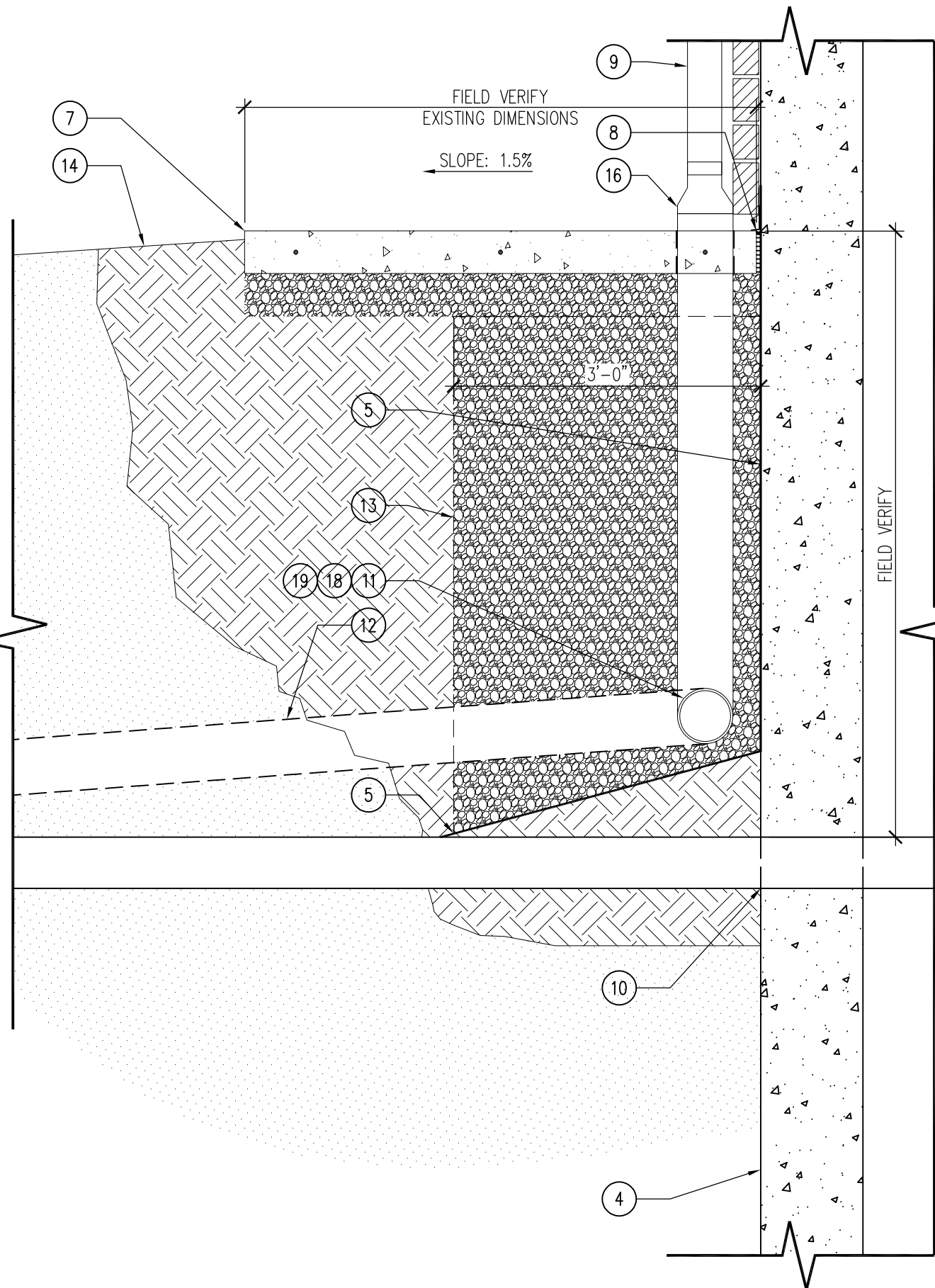
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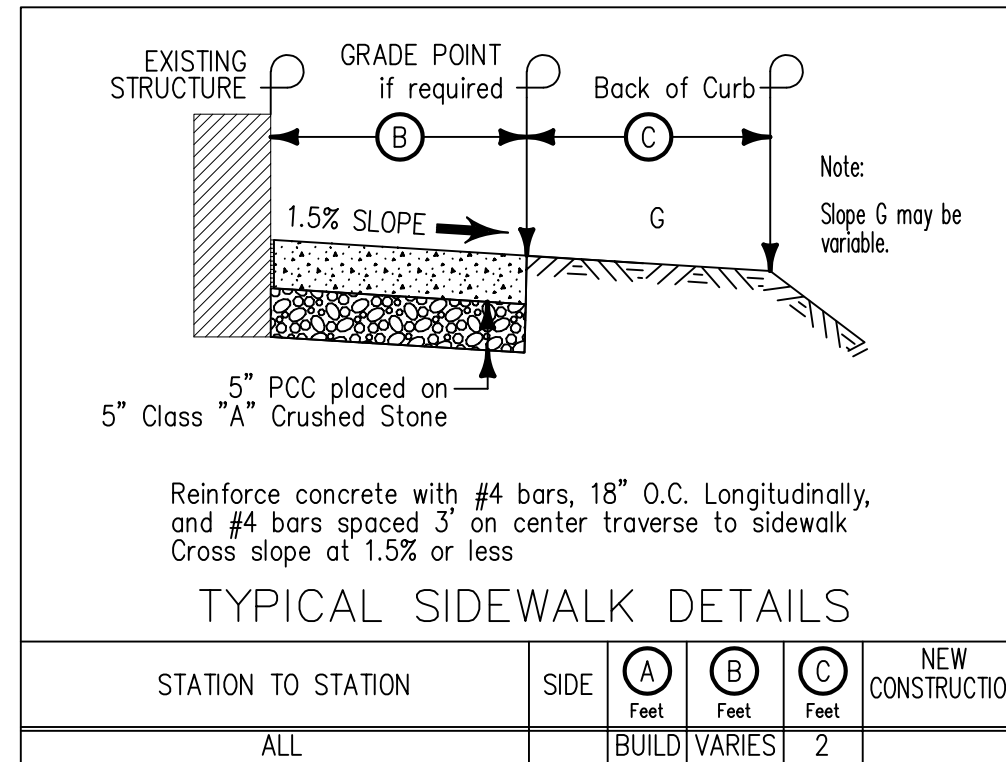
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01	21-01-67-05
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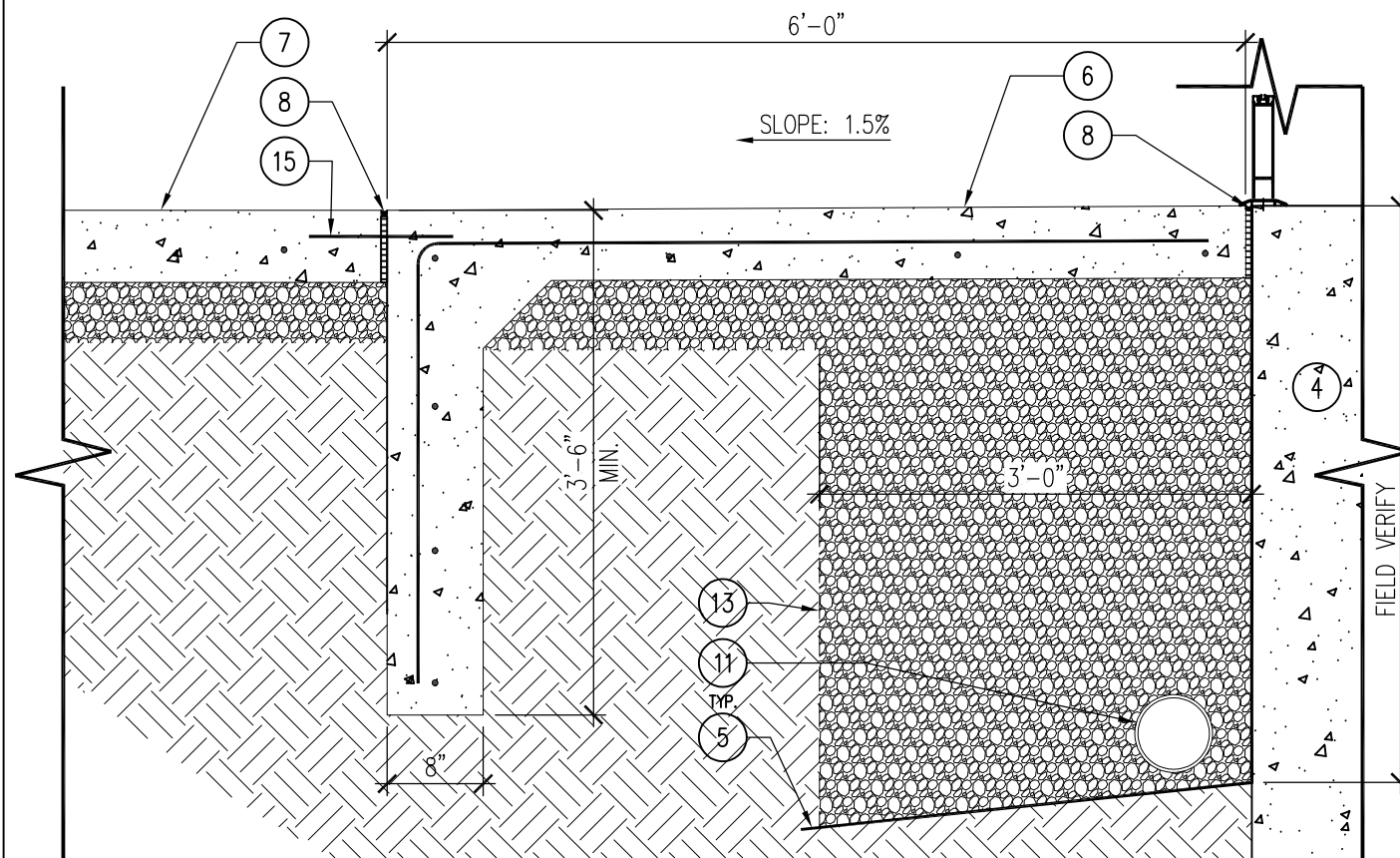
SHEET No. **A-100**



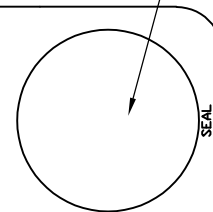
03 DETAIL – SIDEWALL PIPE AND DRAIN TILE
SCALE: 3/4" = 1'-0"



02 DETAIL – SIDEWALK CROSS-SECTION
SCALE: NTS



01 DETAIL – STOOP FOOTING
SCALE: NTS



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SHEET No
A-101