



**ARCHITECTURAL REVIEW
COMMISSION AGENDA
APRIL 23, 2024
VETERAN'S CONFERENCE ROOM
CITY HALL, 205 SECOND AVENUE NW
1:00 PM
WWW.CITYOFMANDAN.COM**

The public may access the Zoom meeting online at:

Join Zoom Meeting

<https://us06web.zoom.us/j/88004298914?pwd=YV3fw8ljkj7uMqTNjG8Q1YaNDWirOi.1>

Meeting ID: 880 0429 8914

Dial 1 312 626 6799

Passcode: 615520

A. ROLL CALL

B. MINUTES

1. March 26, 2024 Minutes

C. OLD BUSINESS

D. NEW BUSINESS

1. Proposal for Shop Building at Centre Inc. at 1006 6th Ave SE, Mandan
2. Eide KIA Landscape Updates

E. OTHER BUSINESS

1. Board Member Angel Resignation

F. ADJOURN

MARC Members

Lee Pierce, ICON Architechts - President
Victoria Vayda-Hammond - Vice President
Jordan Singer - Building Official
Jarek Wigness - City Engineer

Kendra Rennich - Resident
Logan Caldwell - Resident

Support Staff (City of Mandan)

Architectural Review
Commission Agenda]
April 23, 2024
Page 2 of 2

Mitch Bitz - Fire Chief
Shane Weltikol - Resident
Jason Angel - Resident

Madison Cermak - Business Development
Shasta Reindl - Administrative Asst.

Please note: If any commission member would like additional information, please feel free to contact the Building Inspections Department at 667-3230 prior to the meeting.

A. ROLL CALL

1. *Roll Call of Committee Members.* Chair Pierce called the meeting to order. Those present were Lee Pierce, Victoria Vayda Hammond, Shane Weltikol, Mitch Bitz, Jordan Singer, Jarek Wigness, Madison Cermak, Andrew Stromme, Shasta Reindl, Kari Schmidt, Matt Ervin, Chris Tritsis, Richard (Ben) Holmes, Jason H

B. MINUTES

1. *Consider approval of February 13th MARC Minutes.* Building Official Singer moved and Vayda Hammond seconded to approve the minutes as presented. Roll Call vote: Aye 6, Nay 0, Absent Caldwell, Angel, Rennich. The motion passed.

C. OLD BUSINESS

D. NEW BUSINESS

1. *Proposal for The Avalon at 1300 Colins Ave NE.* The applicant presented a request for a parking variance for the property located at 1300 Collins Avenue NE. This is a 25-unit building, with up to three bedrooms and is ADA-compliant. This property includes a community room and a leasing office. The exterior includes: composite asphalt shingles, navy blue siding, white trim, gray doors and leather-wrapped stone along the bottom part of the building. There is also an additional metal roof over the exterior doors for protection from inclement weather. Garbage and other outdoor enclosures will match the aesthetic of the building.

The applicant presented a request for a parking variance through Planning & Zoning due to a tight site and tight grade with easements. The applicant requested this so they could use exterior parking as a buffer. They are four stalls short of the code requirement of the required 50. Asked about the distance from the street to handicapped spots. Situated on the east end, in front of ADA units on the corners of the building, tucked in on the east side. The fire department addressed the need for trucks to be able to turn around. Also asked if it is a fully sprinkled building. It is not and the applicant believes for the type of building that it is that it does not need to be fully sprinkled. Access requirements need to be met all around the building if not fully sprinkled. Chair Pierce asked if there was a landscaping plan or proposal around neighbors. Building Official Singer responded that Collins Avenue is front loaded with landscaping. Wigness mentioned he would need an official analysis for review of the stormwater plan. The applicant said he could submit these items.

Public Works Director Bitz moved and Vayda Hammond seconded to approve with contingencies for a stormwater plan. Roll Call vote: Aye 6, Nay 0, Absent Caldwell, Angel, Rennich. The motion passed.

2. *Proposal by Richard Holmes for a new coffee shop located at 2701 Memorial Hwy SE.* Holmes will be requesting a parking variance through Planning & Zoning to allow an abundance of access in and out of the new commercial property located at 2701 Memorial Hwy SE. This new business will include a double-sided drive-thru, which can stack four to five cars on each side. The exterior includes foam board EFIS and an aluminum awning. The exterior is also surrounded by three inch foam with a vegetation appearance on the back of the building. A metal sign will be glued and stapled with fiberglass and a sealant along the back side of 24th Avenue. Chair Pierce asked if any other signage was planned. A sign is planned to be installed on a freestanding taller pole in front of the property and also a

potential sign on 3rd Street that is approximately knee-high. Interior materials include porcelain walls for easy wipe down and manageable wear and tear. This business is drive-thru only, no sit down or inside space for customers. It will have a walk-up window which will be beneficial for the anticipated foot traffic in the summer months. Chair Pierce asked if there were any concerns about traffic stacking. Utilizing the double window will help with the speed of customers. Chair Pierce asked if there were any other questions or concerns from the committee. It was mentioned that a landscape and stormwater plan is needed.

Weltikol moved and Public Works Director Bitz seconded to approve with contingencies of landscape and stormwater plans. Roll Call vote: Aye 6, Nay 0, Absent Caldwell, Angel, Rennich. The motion passed.

E. OTHER BUSINESS

F. UNFINISHED BUSINESS

G. ADJOURN There being no further business, the meeting is adjourned.



ARCHITECTURAL REVIEW COMMISSION APPLICATION

Applications need to be submitted to the Building Inspections Department no later than 12 p.m. (noon) on the Wednesday prior to the scheduled meeting at which consideration is desired. Digital submittals will be accepted. If paper copies are submitted a copy of the following information is required. They shall be no larger than 11 x 17 and need to have complete sets, drawn to scale. Incomplete applications will not be accepted. If you have any question call the Building Inspections department at 701-667-3230.

1. Description of Proposed Activity: Construct stand alone outbuilding for vehicle storage, workshop, one office, restroom & mechanical room
2. Name of Owner: Josh Helmer - Centre Inc.
Mailing Address: 100 6th Ave SE, Mandan, ND
Phone (Cell) 701-361-9300 (Office) 701-373-8315
3. Name of Architect if applicable: Troy Mallow - Olaf Anderson Construction Inc.
Mailing Address: 4102 19th Ave N, Fargo, ND
Phone (Cell) 701-238-4741 Office) 701-237-3605
4. Name of Contractor: Chad Manthie - Olaf Anderson Construction Inc.
Mailing Address: 4102 19th Ave N, Fargo, ND
Phone (Cell) 701-330- 4823 (Office) 701-237-3605
5. Parcel Address: 100 6th Ave SE, Mandan, ND
6. Legal Description:
Lot _____ Block _____ Addition _____
Section _____ Township _____ Range _____
7. Zoning: CB - Business Commercial
8. Special Purpose District: 1806 south from Main Street to extraterritorial jurisdiction
9. Existing Land Use: RESIDENTIAL GROUP HOME
10. Lot Size (Sq Ft) 77,707 SF
Existing Bldg Area (Sq Ft) 14,702 SF
Proposed Bldg Area (Sq Ft) 1100 SF
11. Estimated Cost of Project: \$475,000
➤ Is this project receiving incentives from the City of Mandan? Yes ___ No X
If you are receiving incentives please indicate which programs have been applied for.

I understand the procedures for Architectural Review and have received the checklist (see attached sheet) to be followed for approval as set forth in Chapter 111-1 of the Mandan City Code.

Approvals are subject to compliance with Federal, State and Local regulations.

Applicant: Trent Ochsner Date: 4-3-2024



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Print Name: Trey Mawson
Signature: [Signature]
Date: 3-15-24 License # 1468

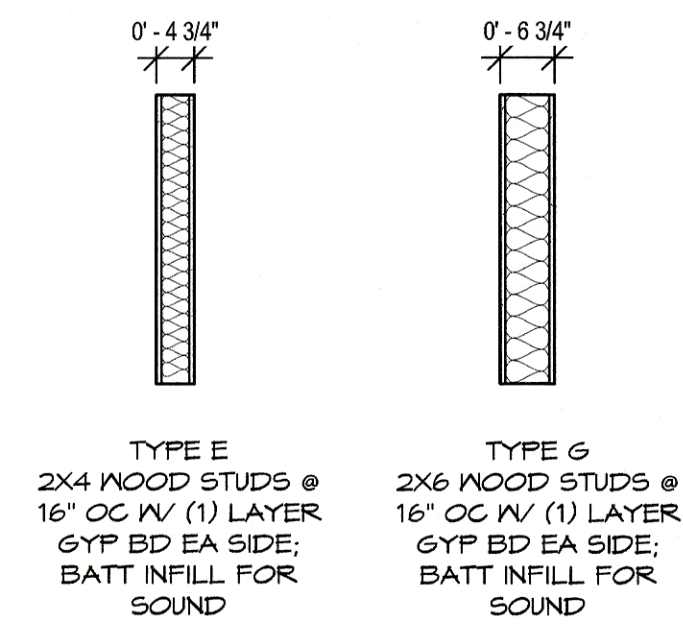
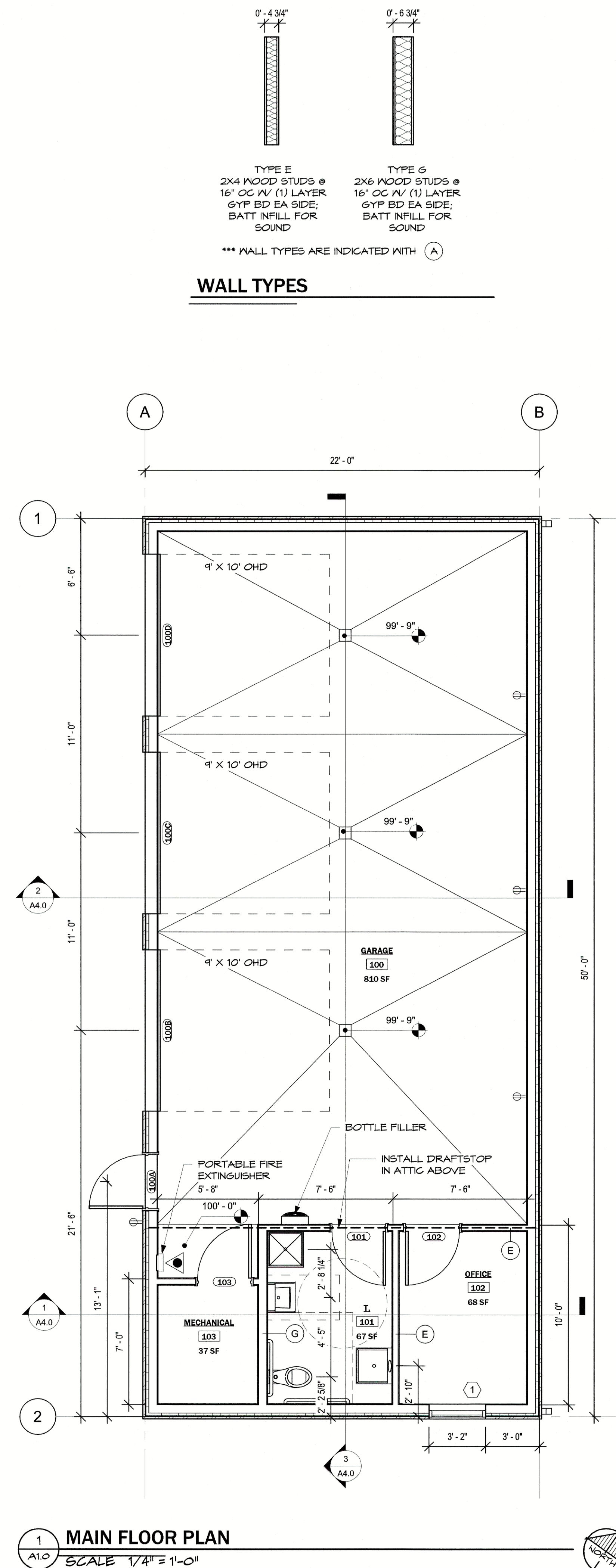
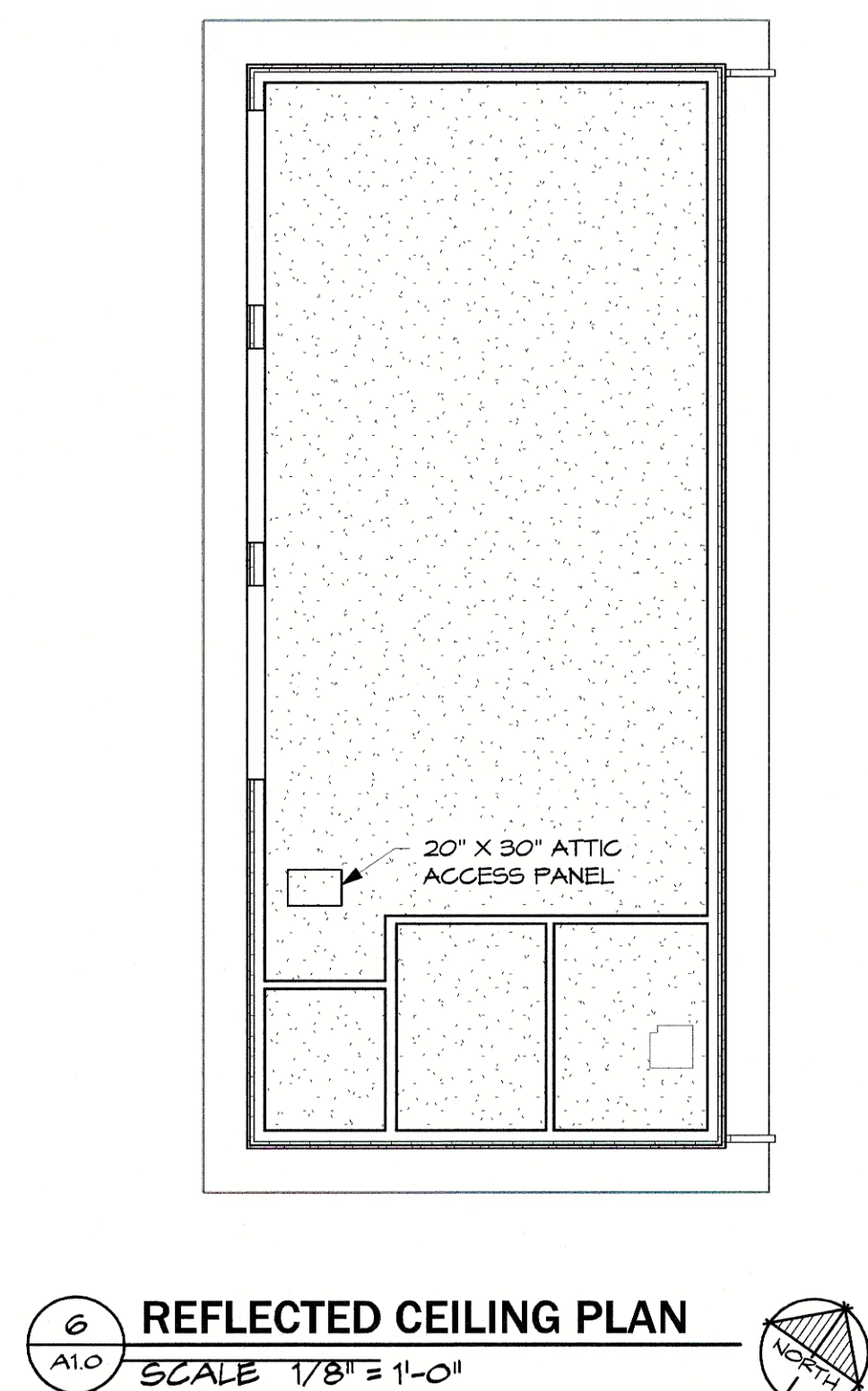
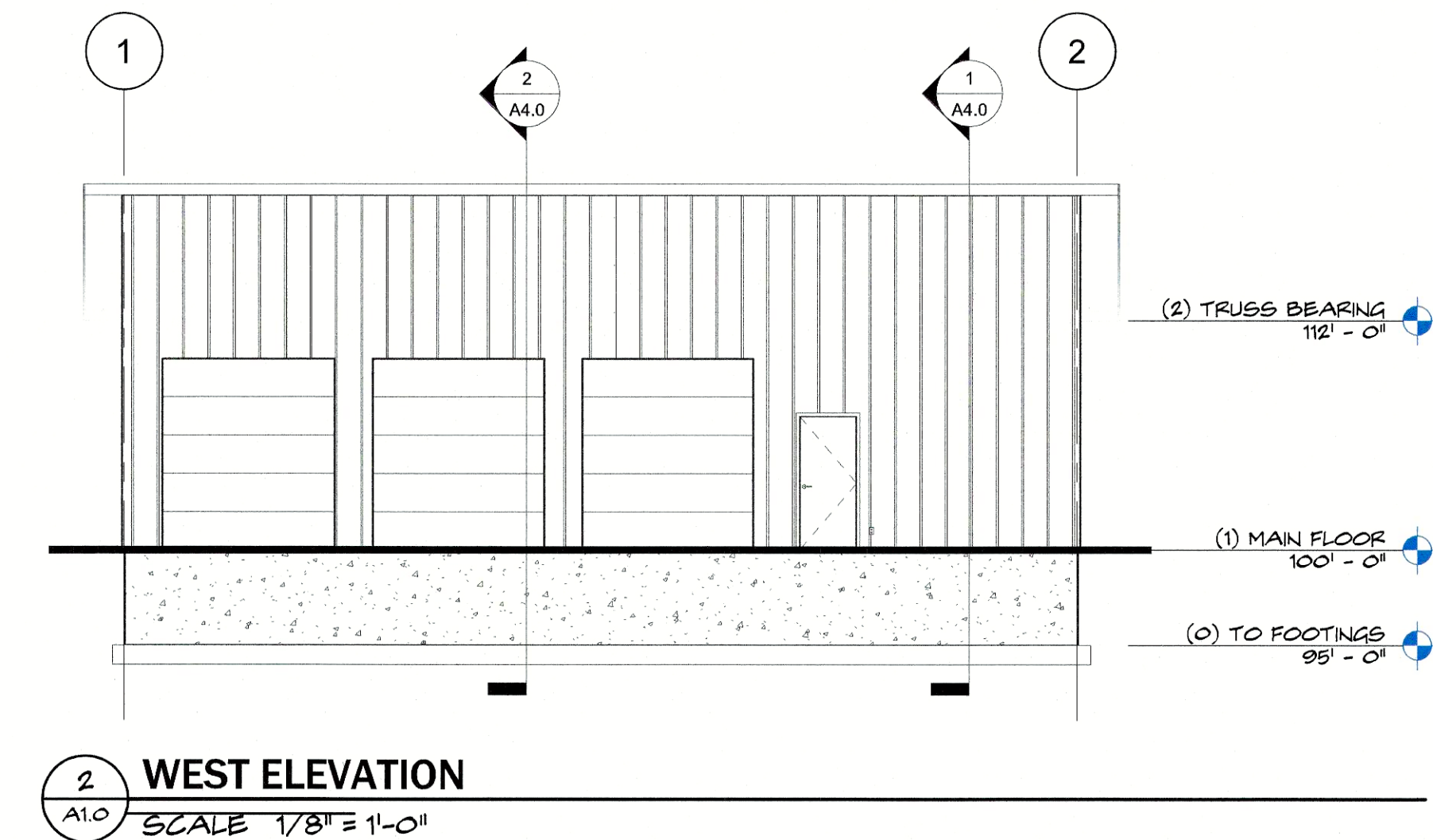
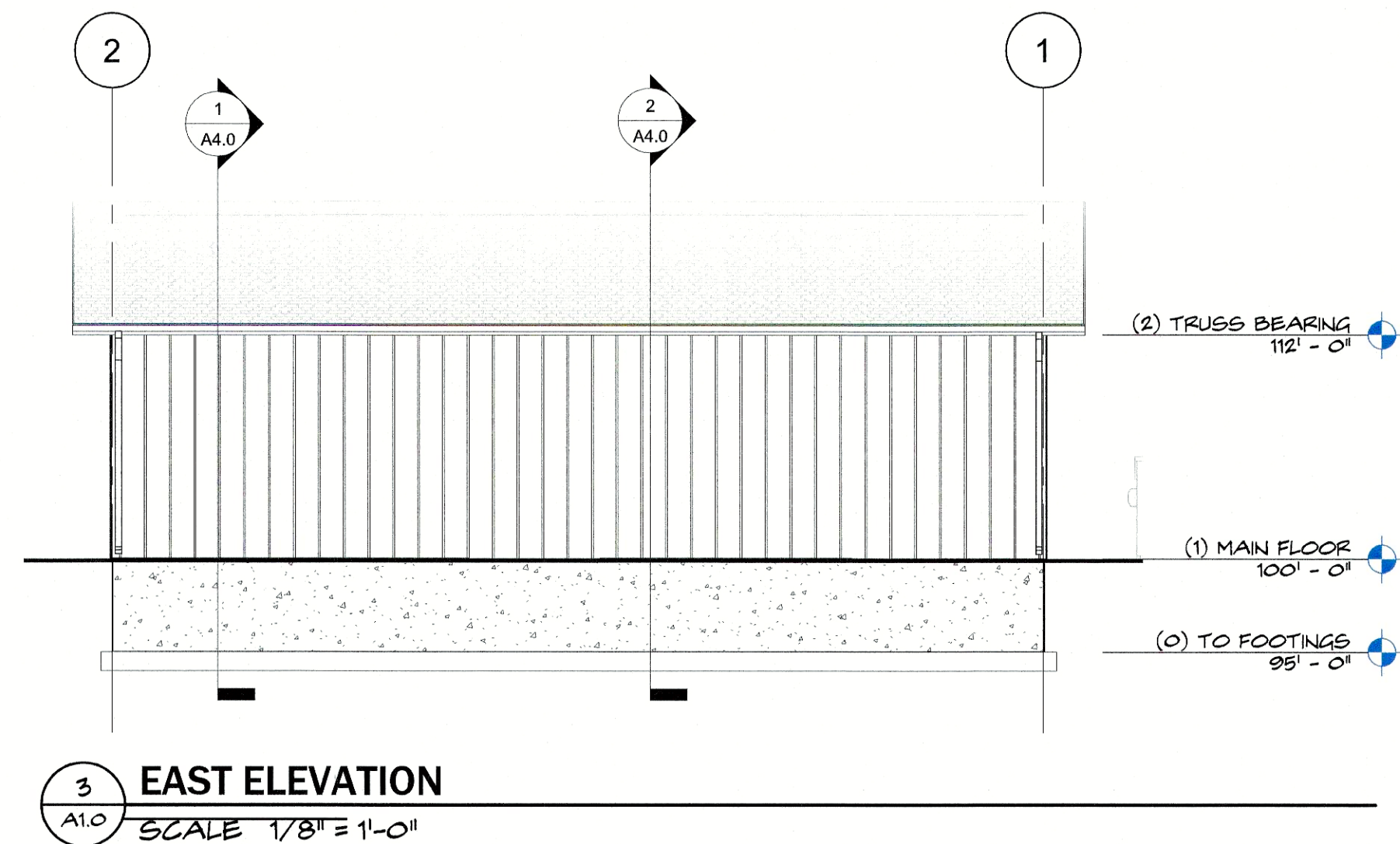
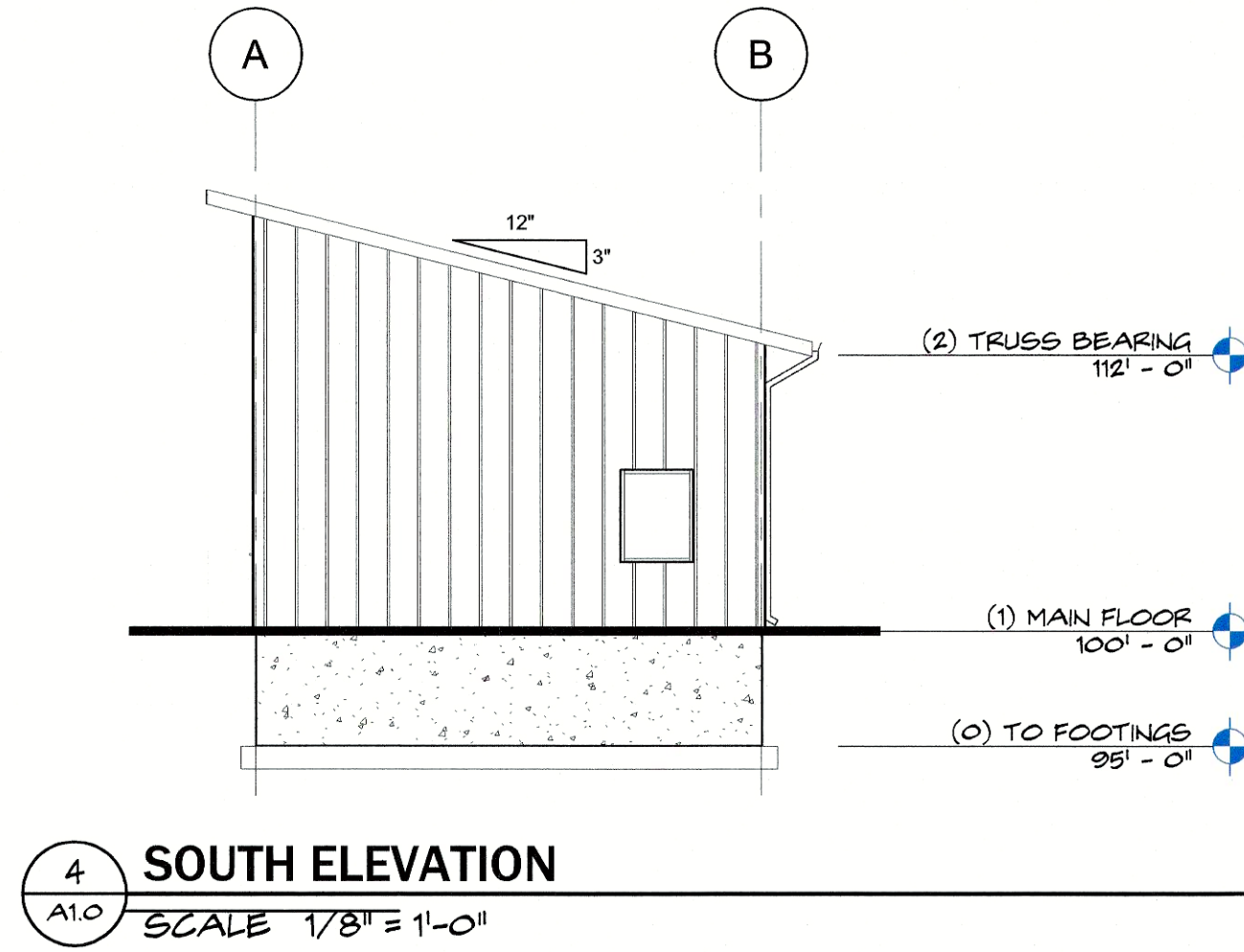
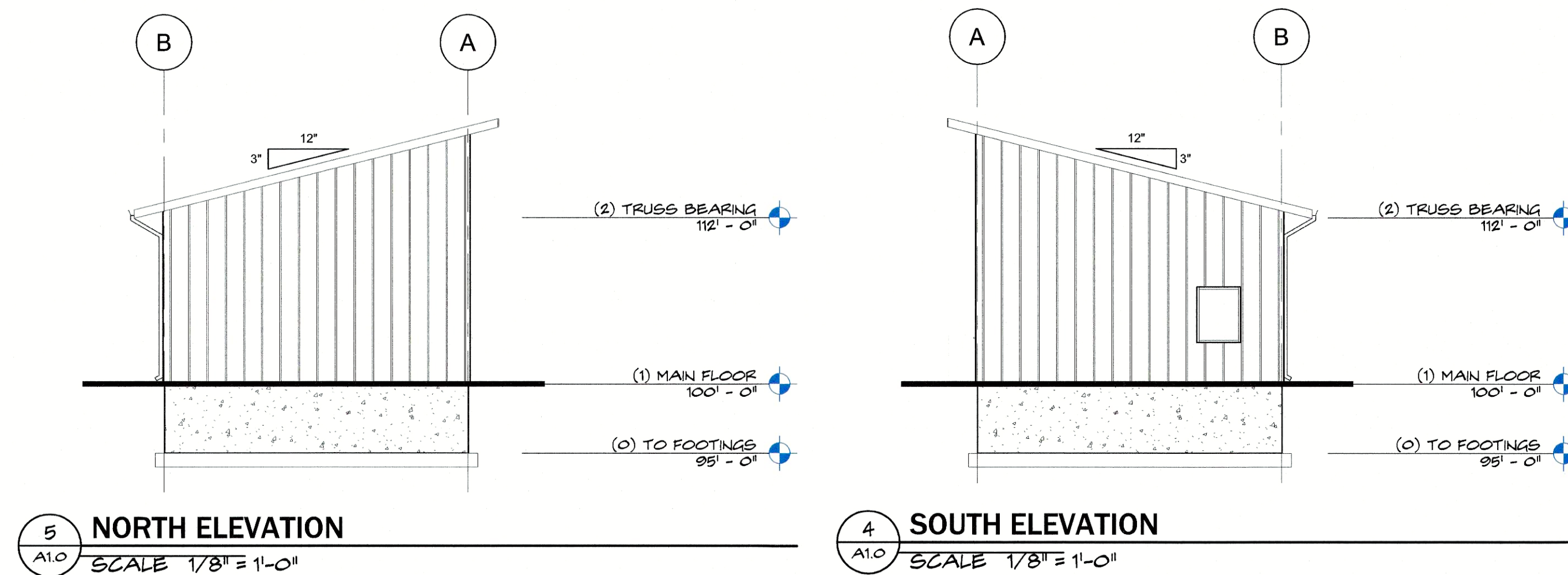
DATE: 6-26-2023
DRAWN BY: TWO
E NAME: 2023-014
REVISIONS:

[illegible]

CENTRE INC.
SHOP
100 6TH AVE SE
MANDAN, ND

SITE PLAN

SP1.0



*** WALL TYPES ARE INDICATED WITH (A)

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Signature below indicates my understanding and acceptance of all content of this drawing.

ame _____

tle _____

gnature _____

DATE: 6-26-2023
DRAWN BY: TWO
FILE NAME: 2023-014
REVISIONS:

CENTRE INC.
SHOP
100 6TH AVE SE
MANDAN, ND

1.0

DOOR SCHEDULE											
AD	ACCESS DOOR	HC	HOLLOW CORE	SC	SOLID CORE	AFB	AUTOMATIC FLUSH BOLT	HD	HEAVY DUTY HDWR.	P	PASSAGE
ALM	ALUMINUM	HML	HOLLOW METAL	SD	SIDING DOOR	BS	BOTH SIDES	KP	KEYED	PRL	PRIVACY LOCK
AS	ASTRAGAL	INSL	INSULATED	SL	SIDE LIGHT	C	CLOSURE	KF	KICK PLATE	P/P	PUSH/PULL
BL	BOTTOM LOUVER	KPF	KNOCK DOWN FRAME	TG	TEMPERED GLASS	CL	CYLINDRICAL LOCK	KS	KICK STAND	SG	SMOKE GASKET
E0	ELECTRIC OPENER	MO	MANUAL OPERATOR	VL	VISION LITE	DB	DEAD BOLT	KN	KNOB	SH	STD. HARDWARE
FD	FOLDING DOOR	NAL	NARROW LIGHT	WF	WELDED FRAME	DG	DOOR GASKET	L	LEVER	SB	SURFACE BOLTS
FR	FIRE RATED	OHD	OVERHEAD DOOR	WMG	WIRE MESH GLASS	DH	DOOR HOLDER	LS	LOCKSET	TH	THRESHOLD
FRD	FRENCH DOOR	PL	PLASTIC LAMINATE	WD	WOOD DOOR	ED	EXIST DEVICE	MH	MAGNETIC HOLDER	TL	TUBULAR LOCK
FG	FULL GLASS	RPD	ROLLING PANEL DOOR	ZPD	BH-FOLD DOOR	ES	ELECTRIC STRIKE	ML	MORTISE LOCKSET	WS	WALL STOP
FL	FULL GLASS	RMV	REMOVABLE MULTILIN	4FD	FOUR-FOLD DOOR	FB	FLUSH BOLT	NL	NIGHT LATCH	WE	WEATHERSTRIPPING
FV	FULL VERTICAL	RFD	RAISED FIRE DOOR			FLS	FLOOR STOP	OHS	OVERHEAD STOP		
HG	HALF GLASS	SGD	SCREEN DOOR			FS	FLOOR SWEEP	PEP	PANIC EXIT DEVICE		
DOOR #	SIZE	DOOR TYPE	DOOR MAT.	GLASS	FIRE RATING	FRAME TYPE	FRAME MAT.	REMARKS			
100A	36" x 84"	A	HM				HM	C.FS,K.L,TH,WE			
100B	9'W X 10'H	OHD			-		EO				
100C	9'W X 10'H	OHD			-		EO				
100D	9'W X 10'H	OHD			-		EO				
101	36" x 84"	A	HM				HM	C,L,PRL			
102	36" x 84"	A	HM				HM	K,L			
103	36" x 84"	A									

[illegible]

WINDOW SCHEDULE				
TYPE	QUANTITY	MATERIAL	FINISH	GLASS
1	1	ALM	CLEAR ANODIZED	LOW-E INSUL



DOOR TYPES

OLAF ANDERSON
GENERAL CONTRACTORS

PHONE: 701.237.3605 FAX: 701.232.0562

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STAMPS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Print Name: Tracy Malcom

Signature: [Signature]

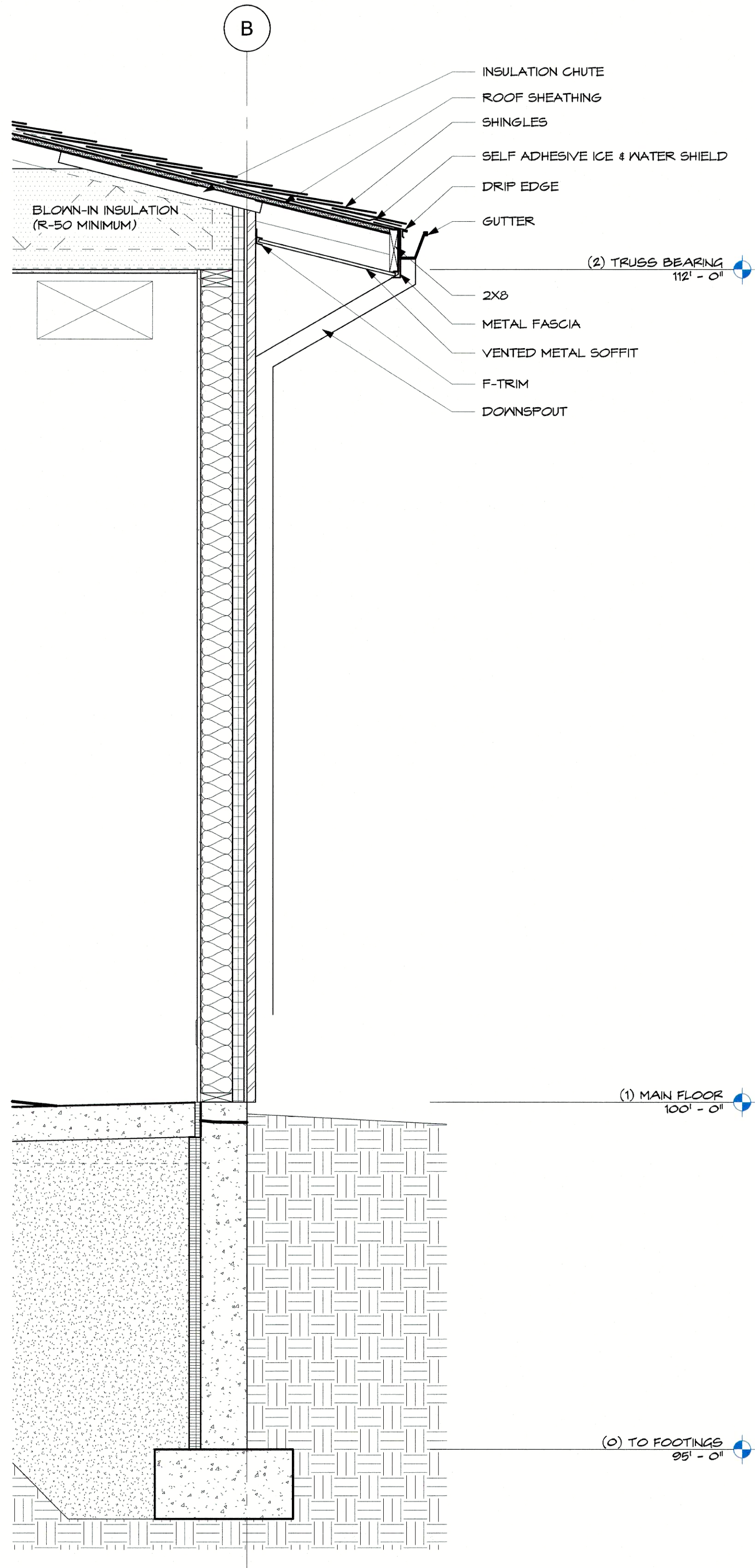
Date 3.15.24 License # 1468

Name
Title
Signature

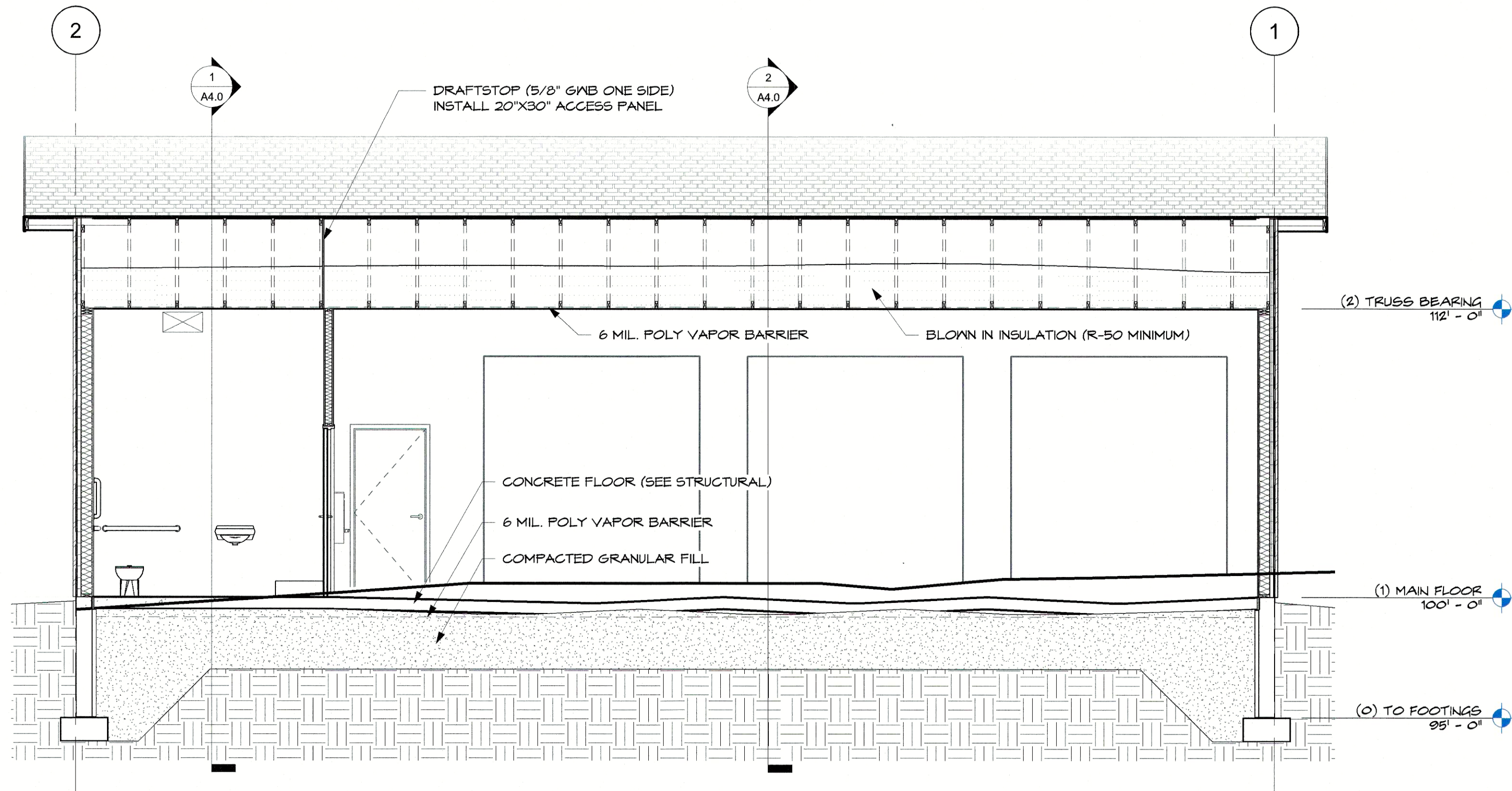
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CENTRE INC.
SHOP
100 6TH AVE SE
MANDAN, ND

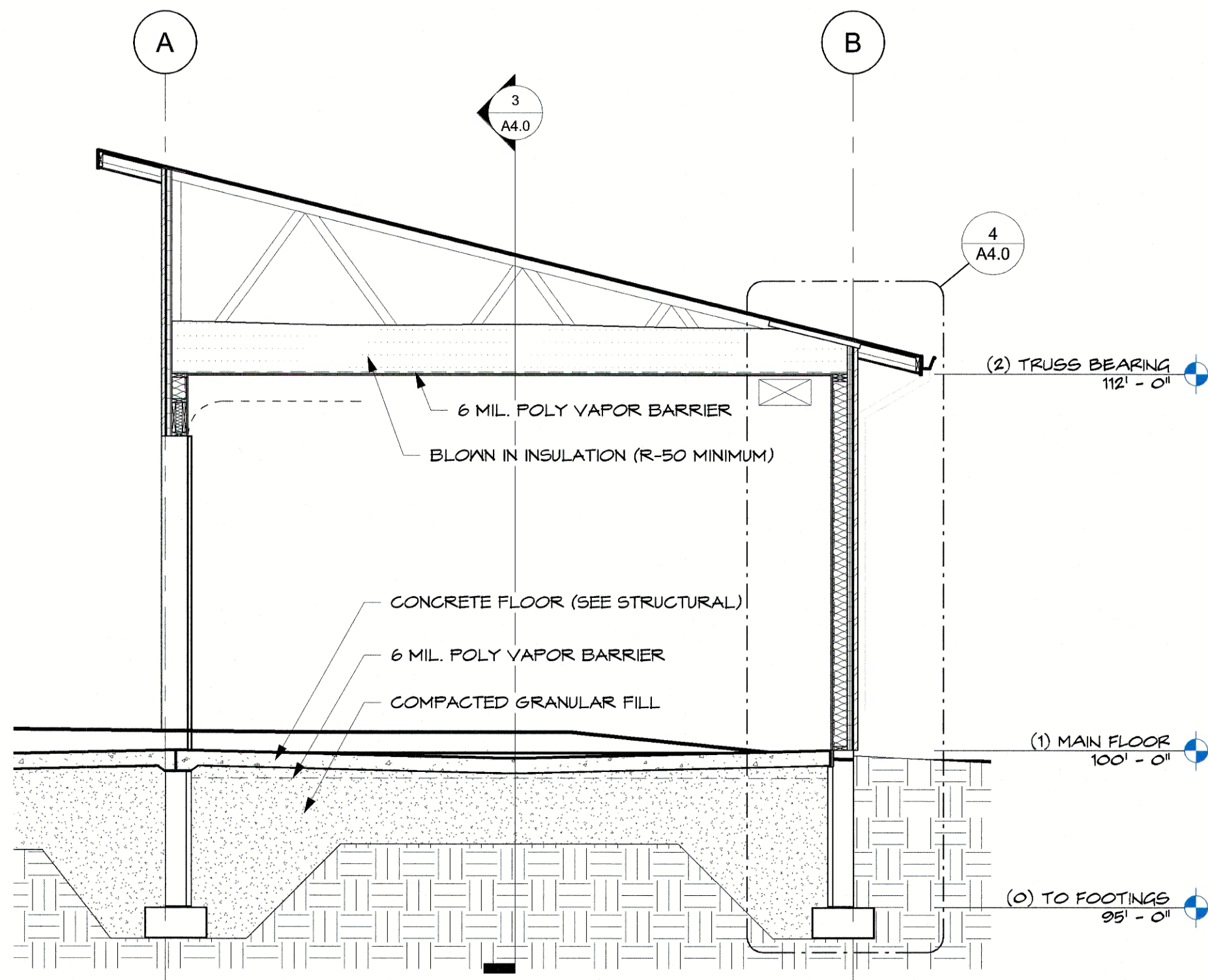
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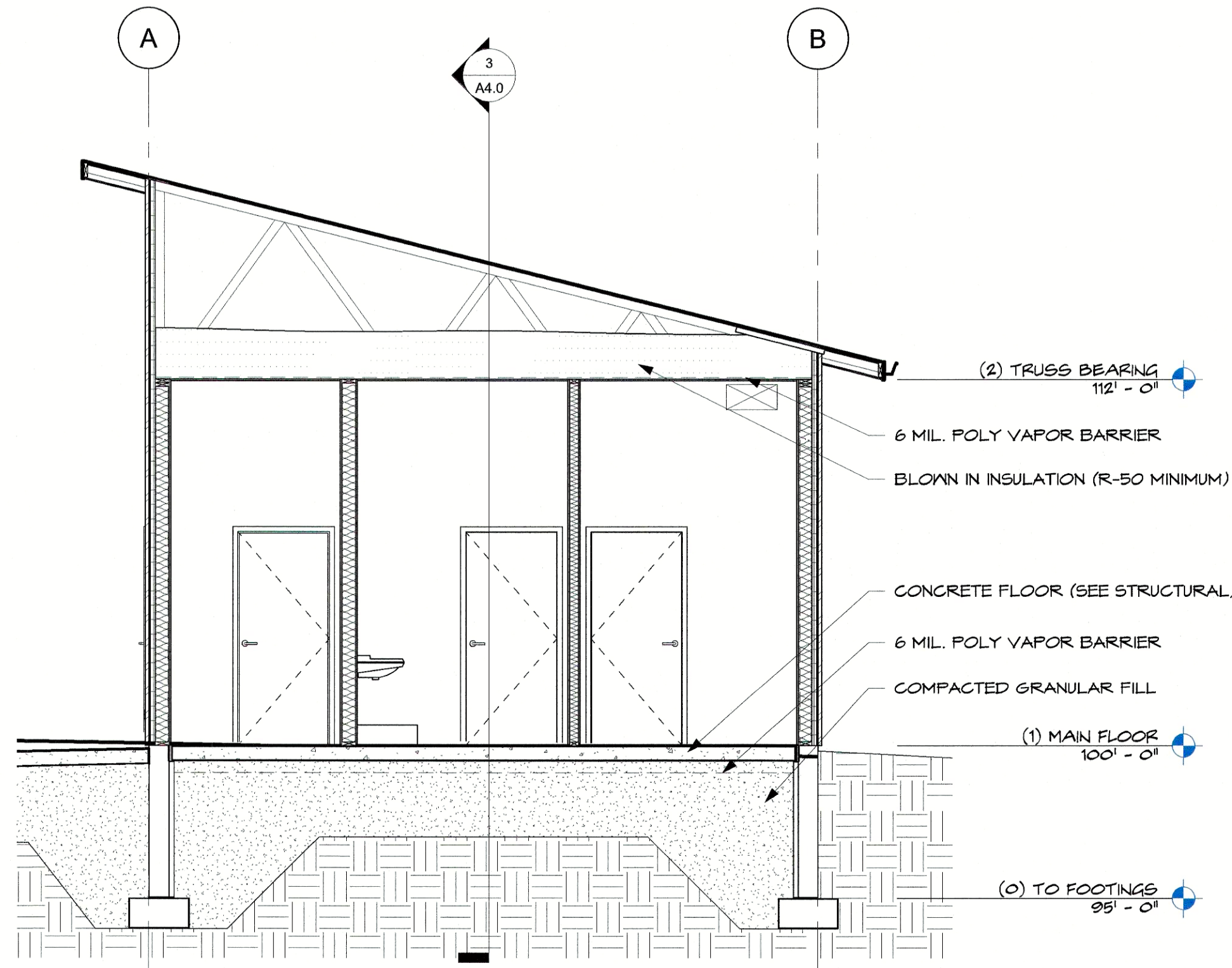
4 WALL SECTION
A4.0 SCALE 3/4" = 1'-0"



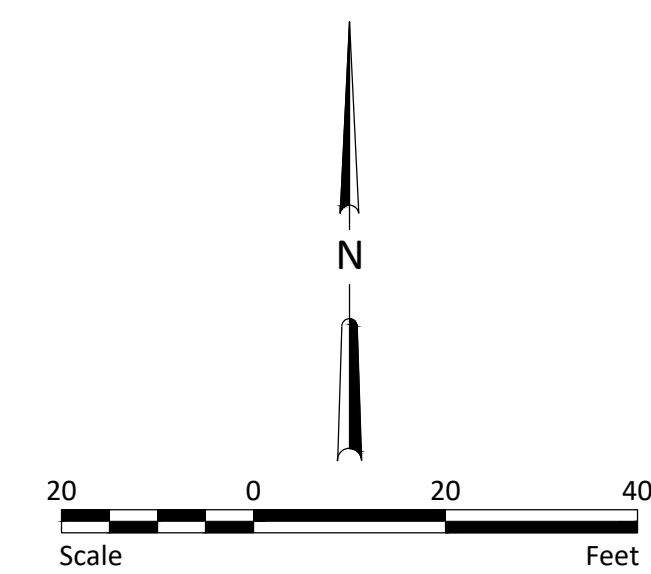
3 SECTION N-S
A4.0 SCALE 1/4" = 1'-0"



2 SECTION E-W 1
A4.0 SCALE 1/4" = 1'-0"

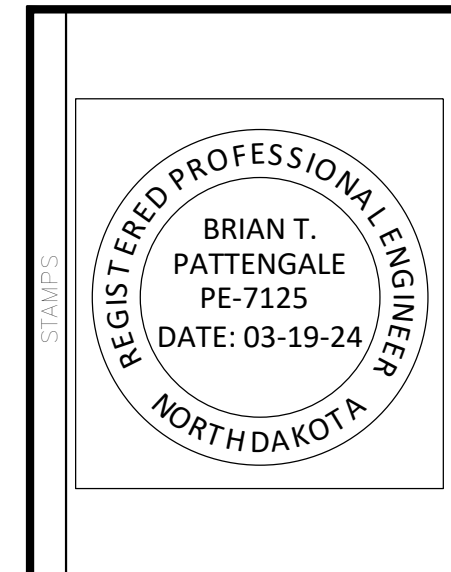


1 SECTION E-W 2
A4.0 SCALE 1/4" = 1'-0"



WATER MAIN	— W —
SANITARY SEWER MAIN	— SS —
STORM SEWER MAIN	— STS —
STORM INLET	
SANITARY MANHOLE	SS
STORM MANHOLE	ST
CLEANOUT	
FIRE HYDRANT	
WELL	
TELEPHONE RISER	
UNDERGROUND FIBER OPTIC	— FO —
GAS MAIN	— G —
DECIDUOUS TREE	
SHRUB	
SIGN	
GUARD POST	
VINYL FENCE	— Xv — Xv — Xv —
WOOD FENCE	— wXw — wXw — wXw —
SPOT ELEVATION	
STANDARD CURB & GUTTER	
BUILDING	
IRON MONUMENT FOUND	●
IRON MONUMENT SET	○

THE UNDERGROUND UTILITIES HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, AS-BUILT MAPS AS PROVIDED BY MUNICIPALITIES OR UTILITY COMPANIES, AND/OR EXISTING DRAWINGS. THERE IS NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, NOR IS THERE A GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY RESULT FROM ITS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.



Signature below indicates my understanding and acceptance of all content of this drawing.

Name

Title

Signature

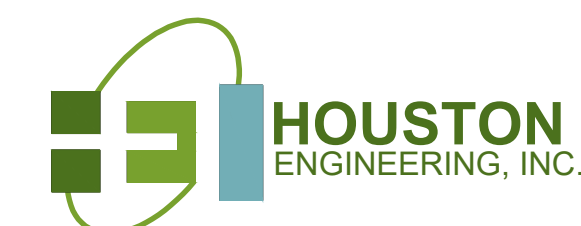
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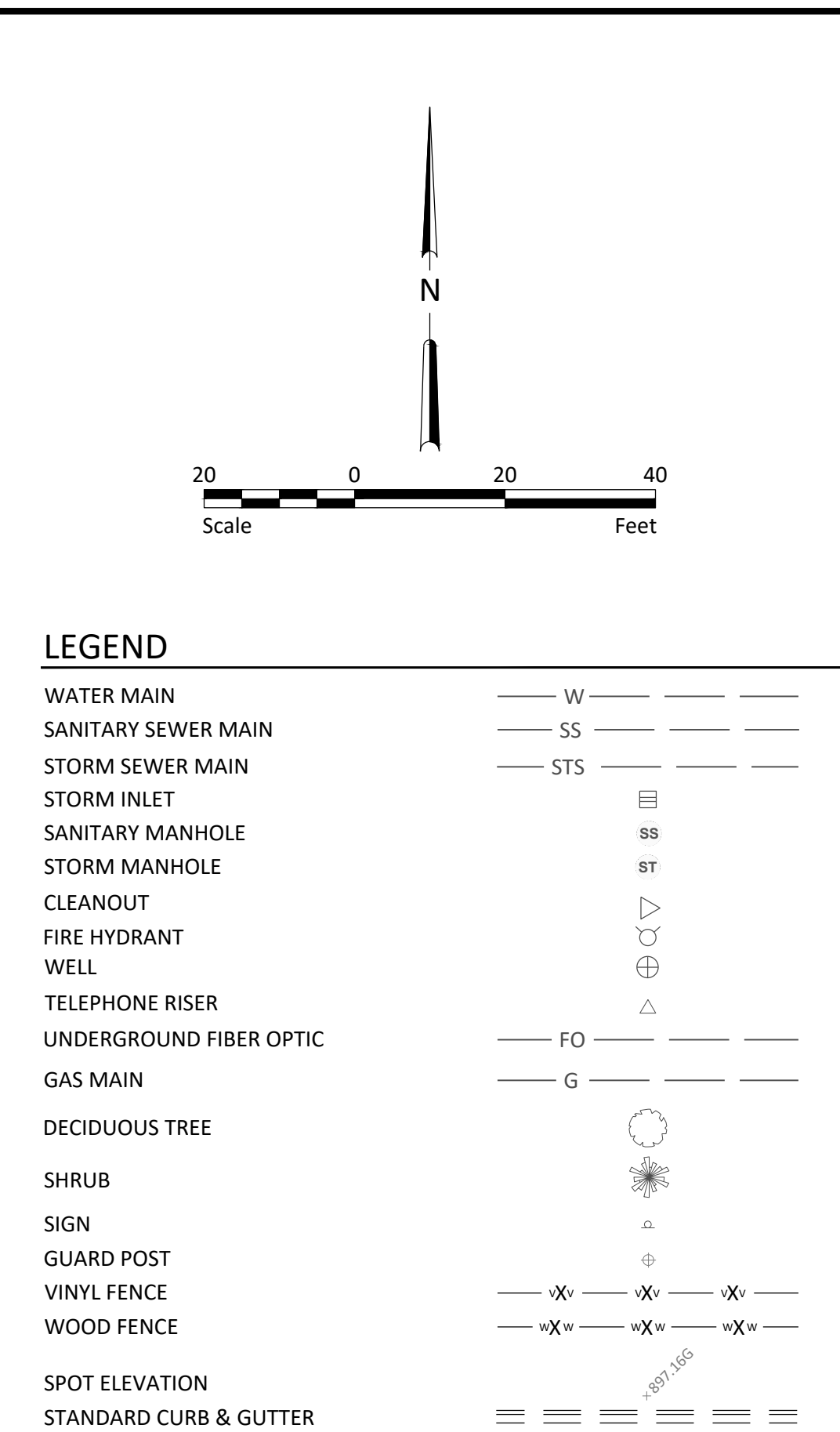
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100 6TH AVE SE
MANDAN, NORTH DAKOTA

TOPOGRAPHIC SURVEY

C1.0





WATER MAIN	_____ W _____
SANITARY SEWER MAIN	_____ SS _____
STORM SEWER MAIN	_____ STS _____
STORM INLET	
SANITARY MANHOLE	
STORM MANHOLE	
CLEANOUT	
FIRE HYDRANT	
WELL	
TELEPHONE RISER	
UNDERGROUND FIBER OPTIC	_____ FO _____
GAS MAIN	_____ G _____
DECIDUOUS TREE	
SHRUB	
SIGN	
GUARD POST	
VINYL FENCE	_____ vXv _____
WOOD FENCE	_____ wXw _____
SPOT ELEVATION	
STANDARD CURB & GUTTER	_____

BUILDING

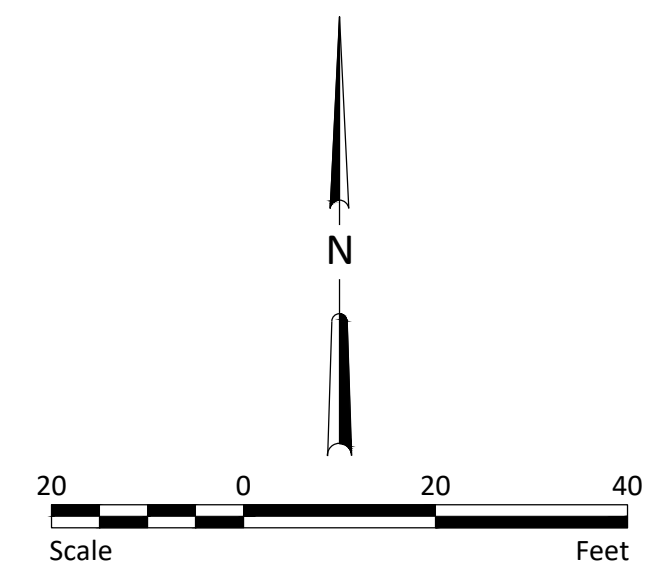
IRON MONUMENT FOUND

IRON MONUMENT SET

ASPHALT REMOVAL

UTILITY REMOVAL

TREE REMOVAL



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Title

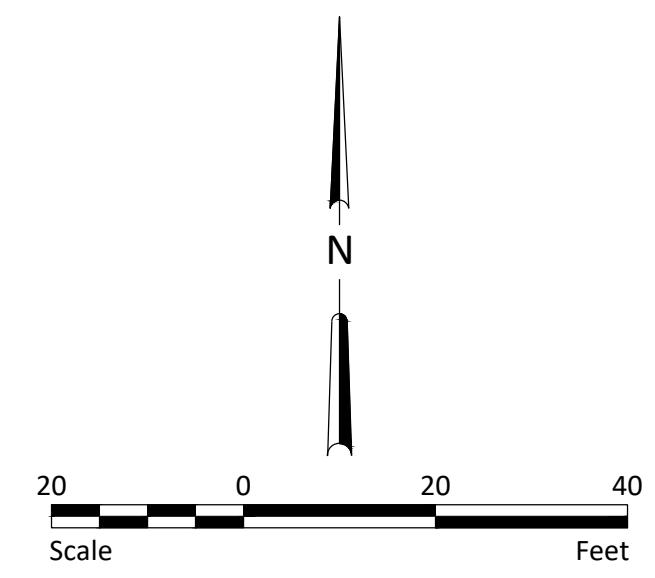
Signature

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CENTRE INCORPORATED

DEMOLITION PLAN

C1.1

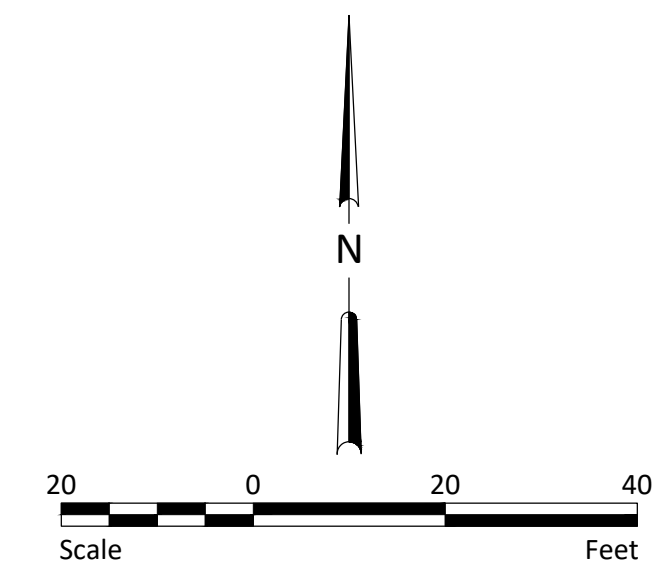


UTILITY NOTES:

1. ALL DISTANCES AND SLOPES ARE CALCULATED ON CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
2. EITHER MONOLITHIC MANHOLE STYLE BOOT CONNECTOR FACTORY INSTALLED OR CONCRETE TO PVC PIPE ADAPTORS SHALL BE USED TO CONNECT PVC PIPE TO THE MANHOLE. PVC MANHOLE ADAPTER SHALL BE A GPK PRODUCT OR APPROVED EQUIVALENT.
3. THE CONTRACTOR SHALL CONFIRM EXACT LOCATION, INVERT, AND SIZE OF BUILDING SERVICES WITH MECHANICAL ENGINEER PRIOR TO THE START OF CONSTRUCTION.
4. ALL WORK DONE IN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF MANDAN STANDARD SPECIFICATIONS.
5. REMOVE AND REPLACE EXISTING PAVEMENT, CURB AND GUTTER, AND SIDEWALK AS NECESSARY TO INSTALL UTILITIES.
6. EXCAVATION OR OTHER WORK IN THE RIGHT OF WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. THIS PLAN IS REQUIRED BEFORE ANY PERMITS TO WORK IN THE RIGHT OF WAY WILL BE ISSUED.
7. EXISTING SANITARY SEWER LINE DEPTH SIZE & MATERIAL UNKNOWN. CONTRACTOR SHALL POTHOLE EXISTING LINE TO VERIFY DEPTH, LOCATION & MATERIAL PRIOR TO THE START OF CONSTRUCTION.

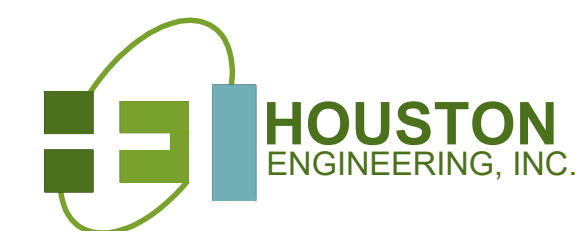
UTILITY PLAN

C2.0



GRADING NOTES:

1. ALL SIDEWALKS SHALL HAVE A MAXIMUM 2% CROSS SLOPE AND LONGITUDINAL SLOPE OF 5% EXCEPT CURB RAMPS WHICH SHALL HAVE A MAXIMUM SLOPE OF 1:12; REFER TO DETAIL.
2. ALL CURB RAMPS SHALL HAVE DETECTABLE WARNING PANELS INSTALLED.
3. ALL WORK DONE IN THE RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF MANDAN STANDARD SPECIFICATIONS.
4. ALL HANDICAPPED STALLS SHALL HAVE SIGNING INSTALLED PER DETAILS.
5. ALL HANDICAPPED STALLS SHALL BE STRIPED PER DETAIL.
6. EXCAVATION OR OTHER WORK IN THE RIGHT OF WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. THIS PLAN IS REQUIRED BEFORE ANY PERMITS TO WORK IN THE RIGHT OF WAY WILL BE ISSUED.



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Name

Title

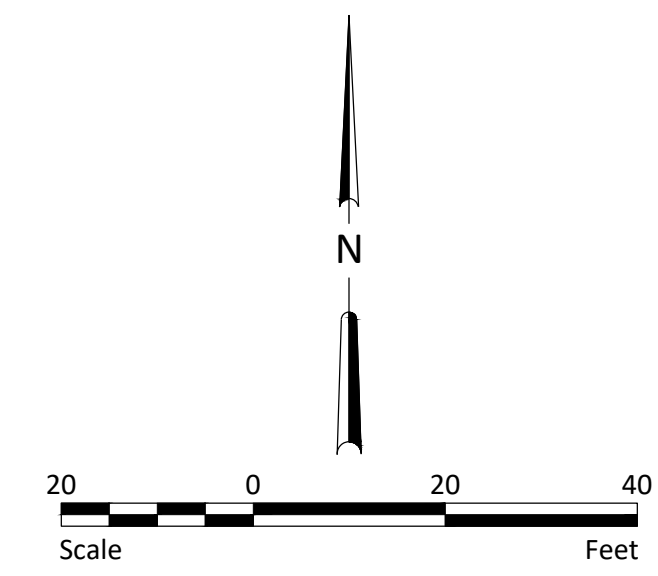
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CENTRE INCORPORATED

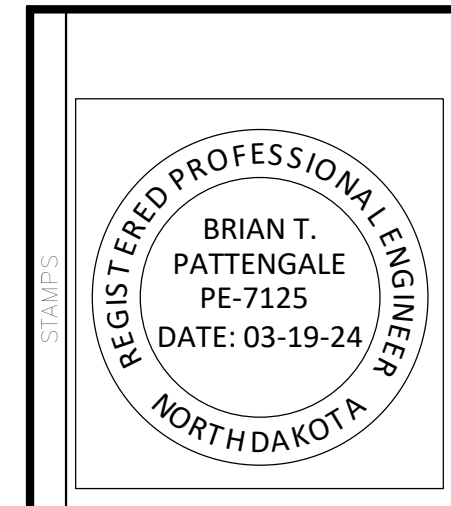
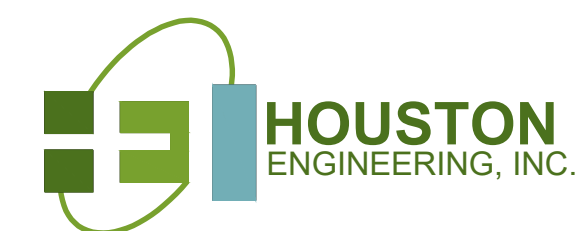
GRADING PLAN

C3.0



LEGEND	EXISTING	NEW
WATER MAIN	— W —	— SS —
SANITARY SEWER MAIN	— SS —	
STORM SEWER MAIN	— STS —	
STORM INLET		
SANITARY MANHOLE		
STORM MANHOLE		
CLEANOUT		
FIRE HYDRANT		
GATE VALVE		
WELL		
TELEPHONE RISER		
UNDERGROUND FIBER OPTIC	— FO —	
GAS MAIN	— G —	
SIGN		
GUARD POST		
VINYL FENCE	— V'X' —	
WOOD FENCE	— W'X'W —	
SPOT ELEVATION		
BUILDING		
NEW ASPHALT		
NEW CONCRETE		
THICKENED EDGE SIDEWALK		
DRAINAGE DIRECTION		
IRON MONUMENT FOUND		
IRON MONUMENT SET		

- PAVING NOTES:**
1. ALL WORK DONE IN THE RIGHT OF WAY SHALL CONFORM TO THE CITY OF MANDAN STANDARD SPECIFICATIONS.
 2. ALL HANDICAPPED STALLS SHALL HAVE SIGNING INSTALLED PER DETAIL.
 3. HANDICAPPED STALLS SHALL BE STRIPE PER DETAIL.
 4. SLOPE IN HANDICAP LOADING/UNLOADING ZONES SHALL NOT EXCEED 2% CROSS SLOPE AND ON ANY HANDICAP ACCESSIBLE ROUTE SHALL NOT EXCEED 2%.
 5. ALL CURB RAMPS SHALL HAVE DETECTABLE WARNING PANELS INSTALLED.
 6. ALL DISTANCES SHOWN ARE TO BACK OF CURB..
 7. EXCAVATION OR OTHER WORK IN THE RIGHT OF WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. THIS PLAN IS REQUIRED BEFORE ANY PERMITS TO WORK IN THE RIGHT OF WAY WILL BE ISSUED.



Signature below indicates my understanding and acceptance of all content of this drawing.

Name

Title

Signature

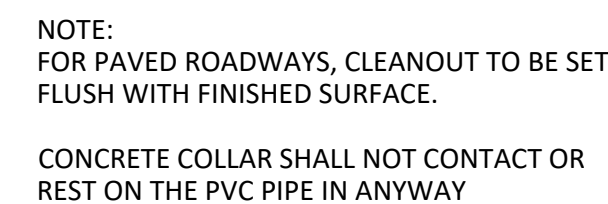
DATE: 3-19-24
DRAWN BY: RLA
FILE NAME: 2020-052

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CENTRE INCORPORATED

PAVING PLAN

C4.0

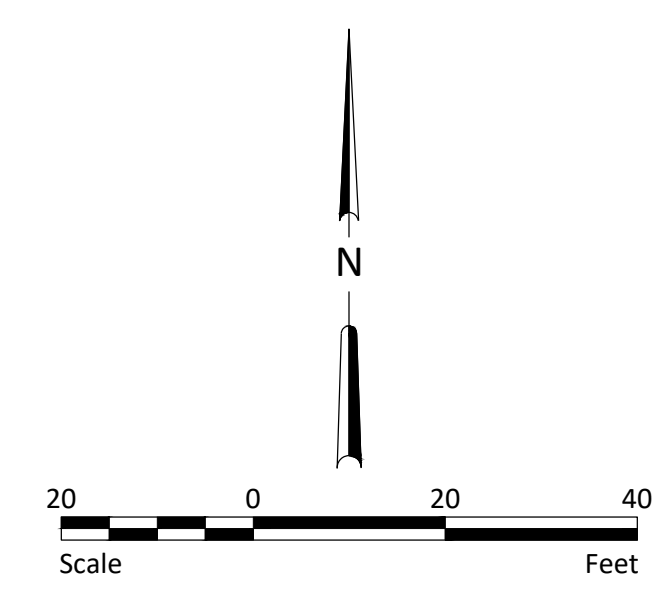


NOT TO SCALE



NOT TO SCALE





LEGEND

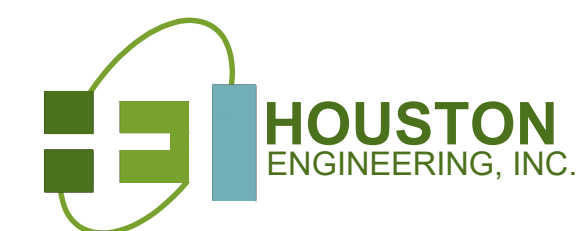
BIOROLL

SEED AND MULCH



The legend consists of two entries. The first entry, 'BIOROLL', is represented by a thick black dashed line. The second entry, 'SEED AND MULCH', is represented by a rectangular box containing a grid of small black dots.

- SWPPP NOTES:**
1. THE CONTRACTOR SHALL INSTALL INLET PROTECTION AND ROCK CONSTRUCTION ENTRANCE PRIOR TO BEGINNING SITE WORK.
 2. THE CONTRACTOR SHALL INSTALL PERIMETER CONTROL AROUND DISTURBED AREAS AND LIMIT ACCESS TO THE ROCK CONSTRUCTION ENTRANCE.
 3. THE CONTRACTOR SHALL INSTALL TEMPORARY SOIL STABILIZATION MEASURES SUCH AS COVER CROPS, EROSION CONTROL BLANKETS, MULCH, ETC. AS NEEDED WHEN AREAS ARE NOT ACTIVELY BEING WORKED AND WILL NOT BE DISTURBED FOR A PERIOD OF GREATER THAN 14 DAYS. THIS INCLUDES STOCKPILED SOIL.
 4. IF SITE WORK OR GRADING ACTIVITIES ARE STOPPED OVER THE WINTER DUE TO COLD WEATHER THE CONTRACTOR SHALL PROVIDE TEMPORARY SOIL STABILIZATION MEASURES PRIOR TO STOPPING WORK DUE TO COLD WEATHER.
 5. THE CONTRACTOR SHALL PROVIDE TEMPORARY OR PERMANENT SOIL STABILIZATION TO AREAS THAT HAVE BEEN FINISH GRADED WITHIN 14 DAYS OF THE COMPLETION OF WORK.
 6. STORM SEWER INLETS WILL BE PROTECTED AT ALL TIMES WITH APPROPRIATE INLET PROTECTION AND SHALL BE INSTALLED PRIOR TO DISTURBANCE IN THAT AREA.
 7. MULTIPLE APPLICATIONS OF TEMPORARY SOIL STABILIZATION MEASURES SHOULD BE ANTICIPATED BY THE CONTRACTOR.
 8. TEMPORARY MULCHING AND PERMANENT SEEDING SHALL CONFORM TO THE CITY OF MANDAN STANDARD SPECIFICATIONS. AREAS TO BE SEEDDED SHALL BE SEEDDED WITH A TYPE B SEED MIXTURE AND SHALL HAVE TYPE 1 (HYDRO MULCH) APPLIED PER THE SPECIFICATIONS.
 9. THE CONTRACTOR SHALL MINIMIZE SITE DISTURBANCE AND PHASE THE CONSTRUCTION TO MINIMIZE THE AMOUNT OF OPEN DISTURBED SOIL AS PRACTICAL.
 10. THIS PLAN SHOWS THE TYPE AND GENERAL PLACEMENT OF SEDIMENT AND EROSION CONTROL MEASURES. NOT EXACT PLACEMENT.
 11. THE CONTRACTOR SHALL MODIFY THE SWPPP AS NEEDED TO PREVENT DISCHARGE OF SEDIMENT FROM THE SITE, THIS INCLUDES DUST, RUNOFF FROM THE CONCRETE WASH WATER, AND RUNOFF FROM SAW CUTTING OF CONCRETE.
 12. THE CONTRACTOR SHALL MAINTAIN AND UPDATE THE SWPPP AS NEEDED TO ENSURE THAT THE SITE CONDITIONS MATCH WHAT IS SHOWN ON THE SWPPP DOCUMENTS.
 13. TYPE C INLET PROTECTION INSTALLED IN CITY OF MANDAN RIGHT OF WAY SHALL BE WIMCO, LANGE IPD, FLEXSTORM, OR APPROVED EQUIVALENT PER CITY OF MANDAN STANDARD SPECIFICATIONS.
 14. EXCAVATION OR OTHER WORK IN THE RIGHT OF WAY SHALL REQUIRE A TRAFFIC CONTROL PLAN THAT MEETS ALL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS. THIS PLAN IS REQUIRED BEFORE ANY PERMITS TO WORK IN THE RIGHT OF WAY WILL BE ISSUED.



OLAF ANDERSON
GENERAL CONTRACTORS

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Signature below indicates my understanding and acceptance of all content of this drawing.

Name

Title

Signature

[illegible]

CENTRE INCORPORATED

SWPPP

C6.0

THE PROJECT CONSISTS OF A NEW DOCK-HIGH WAREHOUSE BUILDING, RAIL SPUR, TRUCK DOCKS, AND ASSOCIATED PARKING AREAS. THE 10.41-ACRE SITE IS LOCATED WEST OF 47TH STREET BETWEEN 15TH & 16TH AVENUE NORTH, FARGO, NORTH DAKOTA.

THE EXISTING SITE IS MOSTLY PVIOUSLY CONSISTING OF UNDEVELOPED LAND. THE SITE IS FAIRLY FLAT AND GENERALLY DRAINS TO THE EAST WITH A GRADUAL GRADE.

THE ON-SITE SOILS ARE ANTICIPATED TO BE A FAT CLAY TYPICAL FOR THE AREA AND SHOULD BE ONLY MODERATELY SUSCEPTIBLE TO WIND EROSION IF KEPT MOIST. THE SITE TOPOGRAPHY IS FLAT AND SHOULD NOT RECEIVE ANY RUNOFF FROM OFF-SITE AREAS. THE ULTIMATE DISCHARGE POINT IS THE RED RIVER OF THE NORTH AND IS NOT AN IMPAIRED WATER FOR ANY CONSTRUCTION-RELATED ACTIVITIES. THE PROJECT AREA IS APPROXIMATELY 8.42 ACRES WITH AN ESTIMATED DISTURBANCE OF 8.42 ACRES. THIS EXCLUDES ANY OFF-SITE BORROW AREAS.

THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE SWPPP AS REQUIRED BY THE NDDEQ. THE PLAN PROVIDES STRUCTURAL CONTROLS AND/OR STABILIZATION PRACTICES DESIGNED TO MINIMIZE POLLUTANTS IN THE STORMWATER DISCHARGE (INCLUDING SOIL SEDIMENT), TO MINIMIZE EROSION ON THE SITE, AND TO ELIMINATE TRACKING OF SOIL OFF SITE BY VEHICLES.

A REGULAR PROGRAM OF INSPECTION AND MAINTENANCE OF THE EROSION AND POLLUTION CONTROLS ARE REQUIRED BY THE NDDEQ. BASED ON THESE INSPECTIONS, THE EROSION AND POLLUTION CONTROLS WILL BE MAINTAINED, MAY BE MODIFIED, AND MAY BE SUPPLEMENTED BY ADDITIONAL MEASURES IN ORDER TO ADEQUATELY MINIMIZE POLLUTANTS.

THE CONTRACTOR AND THE OWNER ARE JOINTLY REQUIRED TO SUBMIT TO THE NDEQ A NOTICE OF TERMINATION (NOT) AFTER THE SITE HAS BEEN STABILIZED, CONSTRUCTION HAS ENDED, AND TEMPORARY EROSION CONTROL MEASURES HAVE BEEN REMOVED.

THE FOLLOWING IS A SUGGESTED SEQUENCE OF CONSTRUCTION FOR THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS AND IS NOT INTENDED TO BE A DEFINITIVE CONSTRUCTION SCHEDULE.

1. INSTALL TEMPORARY CONSTRUCTION ENTRANCES, AS REQUIRED, AND INLET PROTECTION.
2. INSTALL PERIMETER SEDIMENT CONTROL ON DISTURBED AREA.
3. EXCAVATE AND CONSTRUCT BUILDING FOUNDATION.
4. STOCKPILE EXCESS MATERIAL FOR SITE GRADING.
5. INSTALL TEMPORARY SOIL STABILIZATION ON DISTURBED AREAS, AS NEEDED.
6. INSTALL UTILITIES, STORM SEWERS, SANITARY SEWER, AND WATER.
7. INSTALL INLET PROTECTION AFTER COMPLETING STORM DRAINAGE AND OTHER UTILITY INSTALLATION.
8. COMPLETE FINAL GRADING.
9. COMPLETE FINAL PAVING.
10. MULCH AND SEED DISTURBED AREAS AS SPECIFIED WITHIN 14 DAYS OF COMPLETION OF TOPSOIL PLACEMENT.
11. RESEED AREAS DISTURBED BY REMOVAL ACTIVITIES.

THE STORMWATER POLLUTION PREVENTION PLAN CONTACT SHALL BE AN INDIVIDUAL WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION AND SEDIMENT CONTROL BMPs, WHO WILL OVERSEE THE IMPLEMENTATION AND THE INSTALLATION OF THE SWPPP AND INSPECTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL BMPs BEFORE AND DURING CONSTRUCTION. THE SWPPP PLAN CONTACT IS LISTED BELOW:

SWPPP CONTACT: _____ PHONE: _____
TITLE: _____

THE CONTRACTOR (OPERATOR) AS SHOWN ON THE NOTICE IS LISTED BELOW. THE CONTRACTOR SHALL HAVE OPERATIONAL CONTROL OF THE SWPPP AND IS RESPONSIBLE FOR ITS IMPLEMENTATION.

"I, _____, CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN. BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINES AND IMPRISONMENT.

HOUSEKEEPING

1. ONLY NEEDED PRODUCTS WILL BE STORED ON-SITE BY THE CONTRACTOR.
2. EXCEPT FOR BULK MATERIALS, THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS.
3. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED.
4. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
5. WHEN POSSIBLE, ALL PRODUCTS WILL BE COMPLETELY USED BEFORE PROPERLY DISPOSING OF THE CONTAINERS OFF SITE.
6. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED.
7. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIAL STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.
8. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER.
9. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RESEALABLE.
2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION.
3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED.
4. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DEGREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND.
5. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.
6. POTENTIAL PH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION, WASHOUT AREAS WILL BE PROPERLY STABILIZED.

1. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

2. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON SITE. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEANUP PURPOSES.

3. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY.

4. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

5. AFTER A SPILL, A REPORT WILL BE PREPARED DESCRIBING THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES TAKEN. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING, AS WELL AS CLEANUP INSTRUCTIONS IN THE EVENT OF REOCCURRENCES.

6. THE CONTRACTOR'S SITE SUPERINTENDENT, RESPONSIBLE FOR DAY-TO-DAY OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

THE PRIMARY OBJECTIVE IN RESPONDING TO A SPILL IS TO QUICKLY CONTAIN THE MATERIAL(S) AND PREVENT OR MINIMIZE MIGRATION INTO STORMWATER RUNOFF AND CONVEYANCE SYSTEMS. IF THE RELEASE HAS IMPACTED ON-SITE STORMWATER, IT IS CRITICAL TO CONTAIN THE RELEASED MATERIALS ONSITE AND PREVENT THEIR RELEASE INTO RECEIVING WATERS. IF A SPILL OF POLLUTANTS THREATENS STORMWATER OR SURFACE WATER AT THE SITE, THE SPILL RESPONSE PROCEDURES OUTLINED BELOW MUST BE IMPLEMENTED IN A TIMELY MANNER TO PREVENT THE RELEASE OF POLLUTANTS.

1. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE NOTIFIED IMMEDIATELY WHEN A SPILL OR THE THREAT OF A SPILL IS OBSERVED. THE SUPERINTENDENT WILL ASSESS THE SITUATION AND DETERMINE THE APPROPRIATE RESPONSE.
2. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING EROSION AND SEDIMENT CONTROLS AND ENTERING RECEIVING WATERS, PERSONNEL WILL BE DIRECTED TO RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.
3. SPILL KITS CONTAINING APPROPRIATE MATERIALS AND EQUIPMENT FOR SPILL RESPONSE AND CLEANUP WILL BE MAINTAINED BY THE CONTRACTOR AT THE SITE.
4. IF OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G., SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
5. IF A SPILL OCCURS, THE SUPERINTENDENT OR THE SUPERINTENDENT'S DESIGNEE WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE NDOEQ.
6. PERSONNEL WITH PRIMARY RESPONSIBILITY FOR SPILL RESPONSE AND CLEANUP WILL RECEIVE TRAINING BY THE CONTRACTOR'S SITE SUPERINTENDENT OR DESIGNEE. THE TRAINING MUST INCLUDE IDENTIFYING THE LOCATION OF THE SPILL KITS AND OTHER SPILL RESPONSE EQUIPMENT AND THE USE OF SPILL RESPONSE MATERIALS.
7. SPILL RESPONSE EQUIPMENT WILL BE INSPECTED AND MAINTAINED AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

IN THE EVENT OF A SPILL, THE CONTRACTOR'S SITE SUPERINTENDENT WILL MAKE THE APPROPRIATE NOTIFICATION(S), CONSISTENT WITH THE FOLLOWING PROCEDURES:

REPORT ANY SPILL THAT MAY SERIOUSLY ENDANGER HEALTH OR THE ENVIRONMENT AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS FROM THE TIME OF BECOMING AWARE OF THE SPILL. THE REPORT MUST BE MADE TO EPA-REGION 8, EMERGENCY RESPONSE BRANCH AT 800-424-8802, AND THE STATE OF NORTH DAKOTA DIVISION OF HOMELAND SECURITY AT 800-472-2121.

REPORTABLE SPILLS ARE THOSE THAT:

1. THREATEN OR ARE IN A POSITION TO THREATEN WATERS OF THE STATE, SUCH AS SURFACE OR GROUND WATER.
2. CAUSE IMMEDIATE DANGER TO HUMAN HEALTH OR SAFETY.
3. CAUSE HARM OR THREATEN TO HARM WILDLIFE OR AQUATIC LIFE.
4. ARE RELEASES OF OIL OR HAZARDOUS SUBSTANCES IN EXCESS OF REPORTABLE QUANTITIES UNDER SECTION 311 OF THE HAZARDOUS WATER ACT (SEE 40 CFR 110.10 AND CFR 117.21) OR SECTION 102 OF CERCLA (SEE 40 CFR 302.4).

NOONE RELEASES MAY REQUIRE IMMEDIATE RESPONSE BY TRAINED EMERGENCY PERSONNEL. THIS MAY BE COORDINATED THROUGH THE NNDQ, DEPARTMENT OF EMERGENCY SERVICES, AND ANY OTHER STATE OR LOCAL EMERGENCY RESPONSE AGENCIES THAT MAY BE NEEDED. IF THERE IS ANY QUESTION AS TO PROPER RESPONSE, CALL THE DEPARTMENT OF ENVIRONMENTAL QUALITY AT 701-328-5150 OR THE NORTH DAKOTA HAZARDOUS MATERIAL EMERGENCY ASSISTANCE AND SPILL REPORTING NUMBER 800-472-2121, AND PROVIDE ALL RELEVANT INFORMATION ABOUT THE INCIDENT.

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY:

DIVISION OF WATER QUALITY 701-328-5210
DIVISION OF WASTE MANAGEMENT 701-328-5166
DIVISION OF AIR QUALITY 701-328-5188
DIVISION OF MUNICIPAL FACILITIES 701-328-5211

NORTH DAKOTA HAZARDOUS MATERIALS EMERGENCY ASSISTANCE AND SPILL REPORTING:

800-472-2121 (24-HOUR HOTLINE)

NONEMERGENCY RELEASES MAY BE REPORTED BY FILLING OUT THE ONLINE ENVIRONMENTAL INCIDENT REPORT FORM AT
SPILL.ND.GOV

1. THE CONTRACTOR SHALL REMOVE ALL WASTES COMPOSED OF BUILDING MATERIALS, FLOATING DEBRIS, PAPER, FABRIC, AND OTHER WASTES FROM THE SITE FOR DISPOSAL IN LICENSED DISPOSAL FACILITIES. NO BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIAL SHALL BE BURIED, DUMPED, OR DISCHARGED TO THE WATERS OF THE STATE AT THE SITE. ALL WASTES SHALL BE DISPOSED OF PROPERLY AND MUST COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS.

2. THE CONTRACTOR SHALL PROVIDE CONTAINMENT AROUND FUELING AND CHEMICAL STORAGE AREAS TO ENSURE THAT SPILLS IN THESE AREAS DO NOT REACH WATERS OF THE STATE. CONTINGENCIES SHALL BE PROVIDED FOR THE TREATMENT AND/OR DISPOSAL OF CONTAMINATION BY ACTS OF VANDALISM.

3. CONCRETE WASH WATER, GRINDINGS, AND SLURRY SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, STORM SEWER SYSTEMS, OR ALLOWED TO DRAIN ONTO ADJACENT PROPERTIES. DESIGNATED CONCRETE WASHOUTS SHALL BE CONSTRUCTED.

4. CONCRETE WASHOUTS SHALL BE CLEANED BY THE CONTRACTOR WHEN THEY REACH 80% OF THEIR CAPACITY. ALL MATERIAL REMOVED FROM THE STRUCTURE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF AND SHALL NOT BE DISPOSED OF ON SITE.

1. NO PERSON MAY CAUSE OR PERMIT THE HANDLING, TRANSPORTING OR STORING OF ANY MATERIAL IN A MANNER WHICH ALLOWS OR MAY ALLOW CONTROLLABLE PARTICULATE MATTER TO BECOME AIRBORNE. EXCEPT AS OTHERWISE NOTED, THE CONTRACTOR MAY NOT CAUSE NOR PERMIT THE CONSTRUCTION, REPAIR, DEMOLITION, OR USE OF UNPAVED OR UNTREATED AREAS WITHOUT FIRST PUTTING INTO EFFECT AN ONGOING PROGRAM USING THE BEST PRACTICAL METHODS TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE.

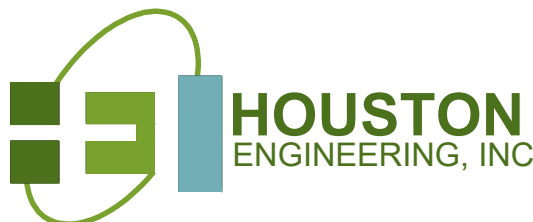
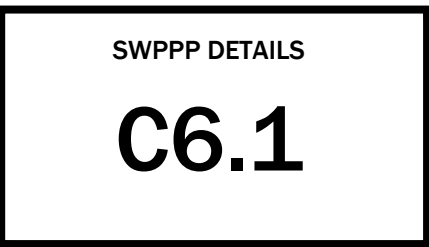
2. THE CONTRACTOR SHALL DEVELOP A DUST CONTROL PLAN, ADMINISTERED BY THE SWPPP CONTACT PERSON THAT USES ALL REASONABLE PRECAUTIONS TO PREVENT DUST EMISSIONS FOR THE ENGINEER'S APPROVAL.

3. THE PLAN MUST:
- 3.1 IDENTIFY ALL POTENTIAL FUGITIVE DUST EMISSION SOURCES.
 - 3.2 ASSIGN DUST CONTROL METHODS.
 - 3.3 DETERMINE FREQUENCY OF APPLICATION.
 - 3.4 RECORD ALL DUST CONTROL ACTIVITIES.
 - 3.5 MONITOR YOUR DUST CONTROL EFFORTS.

4. THE PLAN SHALL HAVE PROVISIONS FOR NOTIFYING SUBCONTRACTORS AND OTHERS ACCESSING THE DISTURBED AREAS OF THEIR RESPONSIBILITIES TO CONTROL FUGITIVE DUST (I.E., OBSERVING ON-SITE VEHICLE SPEED LIMITS, TRACK OUT, BEST PRACTICAL METHODS OF DUST CONTROL BEING USED ON SITE WHEN WORKING ON PAVEMENTS AND IN DISTURBED AREAS, KEEPING OFF DISTURBED AREAS THAT HAVE BEEN STABILIZED, ETC.).

5. THE PLAN SHALL ADDRESS THE TYPE OF BEST PRACTICAL METHODS OF FUGITIVE DUST CONTROL TO BE USED BY CONTRACTOR TO CONTROL FUGITIVE DUST IN DETAIL. MORE THAN ONE TYPE OF FUGITIVE DUST CONTROL METHOD MAY BE NECESSARY TO PREVENT FUGITIVE DUST GENERATION, AND USE OF MULTIPLE FUGITIVE DUST METHODS MUST BE ADDRESSED, IF APPLICABLE. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE PROVISIONS CONTAINED IN THEIR DEVELOPED PLAN.

6. THE PLAN SHALL HAVE PROVISIONS FOR UPDATING THE PLAN IN THE EVENT CHANGES TO THE PROJECT OCCUR AND RESUBMITTAL OF THE PLAN TO THE PROJECT ENGINEER IS NECESSARY.



0. NO EARTHWORK OPERATIONS SHALL BEGIN PRIOR TO ALL TEMPORARY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES BEING INSTALLED.
2. AGGREGATE CONSTRUCTION ENTRANCES SHALL BE PROVIDED AT ALL ACCESS POINTS TO THE CONSTRUCTION SITE. LOCATIONS OF CONSTRUCTION ENTRANCES ARE APPROXIMATE AND SHALL BE FIELD LOCATED. ANY SEDIMENT TRACKED OR DEPOSITED ONTO OFF-SITE PAVED SURFACES SHALL BE REMOVED WITHIN 24 HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING TO REMOVE ANY ACCUMULATED SEDIMENT FROM OFF-SITE PAVED SURFACES.
3. SEDIMENT ACCUMULATED BEHIND FIBER ROLLS AND SILT FENCE SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE FIBER ROLL OR SILT FENCE. ANY INEFFECTIVE (DECOMPOSED, TORN, COLLAPSED) FIBER ROLLS OR SILT FENCE SHALL BE REPLACED IMMEDIATELY.
4. ALL STORM DRAIN INLETS WITHIN THE PROJECT LIMITS AND IN THE IMMEDIATE VICINITY OF THE SITE SHALL HAVE SEDIMENT PROTECTION MEASURES. THIS INCLUDES INLETS AFFECTED BY SEDIMENT TRACKED FROM THE SITE.
5. VEGETATIVE BUFFERS SHALL HAVE A MINIMUM WIDTH OF 25 FEET FOR EVERY 125 FEET OF DISTURBED AREA THAT DRAINS TO THE BUFFER. FOR EACH ADDITIONAL 5 FEET OF DISTURBANCE, AN ADDITIONAL 1 FOOT OF BUFFER MUST BE ADDED. THE BUFFER SHALL HAVE A MAXIMUM 5 PERCENT SLOPE AND CONCENTRATED FLOWS TO THE BUFFER SHALL BE MINIMIZED.
6. VEGETATIVE BUFFER SHALL CONSIST OF DENSE GRASS VEGETATION 3 TO 12 INCHES TALL WITH UNIFORM COVERAGE OVER 90 PERCENT OF THE BUFFER. NO MORE THAN 10 PERCENT OF THE BUFFER MAY CONSIST OF WOODY VEGETATION.
7. ALL DISTURBED AREAS THAT HAVE BEEN FINAL GRADED OR ARE NOT ACTIVELY BEING WORKED SHALL BE STABILIZED AS SOON AS POSSIBLE BUT NO LATER THAN 14 DAYS AFTER COMPLETION OF THE WORK. USE SEEDING AND MULCHING, EROSION CONTROL MATTING, AND/OR SODDING AND STAKING IN GREEN SPACE AREAS. USE EARLY APPLICATION OF GRAVEL BASE IN PAVED AREAS.
8. AREAS WHERE CONSTRUCTION ACTIVITY WILL RESUME WITHIN 15 DAYS OF THE TIME CONSTRUCTION ACTIVITY TEMPORARILY CEASES NEED NOT BE STABILIZED.
9. FIBER ROLLS OR SILT FENCE SHALL BE INSTALLED ON ALL DISTURBED AREAS WITH SLOPES STEEPER THAN 3:1 AND LENGTHS GREATER THAN 75 FEET. ANY SLOPE EXHIBITING RILLS, SIGNIFICANT EROSION, OR EVIDENCE OF CONCENTRATED FLOW SHALL BE REGRADED TO PLAN GRADES AND FIBER ROLLS OR OTHER TEMPORARY EROSION CONTROL MEASURE INSTALLED TO PREVENT FUTURE EROSION.
10. ALL TEMPORARY OR PERMANENT DRAINAGE DITCHES, SWALES, OR STORM SEWER DISCHARGE POINTS SHALL HAVE THEIR NORMAL WETTED PERIMETER STABILIZED WITHIN 200 LINEAL FEET OF THE PROPERTY EDGE OR POINT OF DISCHARGE TO A SURFACE WATER. STABILIZATION SHALL BE ACCOMPLISHED BY THE USE OF EROSION CONTROL BLANKETS, SODDING, APPLICATION OF RIPRAP, OR OTHER METHOD OF STABILIZATION.
11. ALL TEMPORARY OR PERMANENT DRAINAGE DITCHES, SWALES, OR STORM SEWER DISCHARGE POINTS SHALL BE STABILIZED WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER, INCLUDING STORM SEWER SYSTEMS.
12. TEMPORARY SOIL STOCKPILES SHALL BE SURROUNDED BY SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND SHALL NOT BE PLACED IN SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.
13. Dewatering or basin drainage related to construction shall be discharged to a temporary or permanent sedimentation basin. If the water cannot be discharged to a temporary or permanent sedimentation basin, it shall be treated with one of the dewatering structures shown. All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in wetlands causing significant adverse impact to the wetland.
14. Dewatering is limited to stormwater and groundwater that may collect on site, and the following allowable non-stormwater sources: fire-fighting, fire hydrant flushing, potable water line flushing, infrequent building and equipment wash down without detergents, uncontaminated foundation drains, springs, lawn watering, and air conditioning condensate. The operation must not lead to sediment deposits within storm sewers, ditches, and surface waters. The operation must not cause or potentially cause a visible plume in a surface water.
15. TEMPORARY SEDIMENTATION BASINS SHALL BE PROVIDED WHEN 10 OR MORE ACRES OF DISTURBED AREA DRAIN TO A COMMON LOCATION. THE BASIN MUST BE PROVIDED PRIOR TO RUNOFF LEAVING THE SITE OR ENTERING SURFACE WATERS.
16. ANY SEDIMENT ACCUMULATION IN SURFACE WATERS, INCLUDING DRAINAGEWAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS, SHALL BE REMOVED AND THE AREA STABILIZED WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOILS. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. THE CONTRACTOR IS RESPONSIBLE FOR CONTRACTING ALL OF THE APPROPRIATED AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
17. TEMPORARY EROSION AND SEDIMENT CONTROLS IN ADDITION TO THOSE SHOWN ON THE PLANS SHALL BE INSTALLED IF DEEMED NECESSARY OR AT THE DIRECTION OF THE ENGINEER/OWNER'S REPRESENTATIVE.
18. REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, NON-BIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AFTER THE SITE HAS UNDERGONE FINAL STABILIZATION AND PERMANENT VEGETATION HAS BEEN ESTABLISHED. MINIMUM VEGETATION ESTABLISHMENT IS 70% COVER. MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES UNTIL 70% ESTABLISHED COVER IS ACHIEVED.
19. STORMWATER CONTROLS ARE EXPECTED TO WITHSTAND AND FUNCTION PROPERLY UP TO A TWO-YEAR, 24-HOUR PRECIPITATION EVENT VISIBLE EROSION AND/OR OFF-SITE SEDIMENT DEPOSITS SHOULD BE MINIMAL.

1. TEMPORARY SEDIMENTATION BASINS SHALL PROVIDE A MINIMUM OF 3,600 CUBIC FEET OF STORAGE FOR EVERY ACRE OF DISTURBED AREA DRAINING TO THE BASIN OR A STORAGE VOLUME EQUAL TO THE RUNOFF FROM A TWO-YEAR, 24-HOUR STORM EVENT PLUS 1,800 CUBIC FEET OF STORAGE FOR EACH DISTURBED ACRE THAT DRAINS TO THE BASIN, WHICHEVER IS GREATER.
2. BASINS SHALL BE DESIGNED TO PREVENT THE DISCHARGE OF FLOATING DEBRIS AND PROVIDE A MEANS FOR COMPLETE DRAWDOWN FOR MAINTENANCE ACTIVITIES.
3. THE BASIN SHALL HAVE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY.

1. ALL SOIL-DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A MINIMUM DENSITY OF 70 PERCENT OF THE NATIVE COVER FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES OR EQUIVALENT PERMANENT STABILIZATION MEASURES (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEOTEXTILES) HAVE BEEN ACHIEVED.
2. FOR SOIL-DISTURBING ACTIVITIES ON LAND USED FOR AGRICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO ITS PRE-DISTURBANCE AGRICULTURAL USE. AREAS DISTURBED THAT WERE NOT PREVIOUSLY USED FOR AGRICULTURAL ACTIVITIES, SUCH AS BUFFER STRIPS IMMEDIATELY ADJACENT TO WATERS OF THE STATES, AND AREAS NOT BEING RETURNED TO THEIR PRE-DISTURBANCE AGRICULTURAL USE MUST MEET THE FINAL STABILIZATION CRITERIA ABOVE.
3. FINAL STABILIZATION HAS BEEN ACHIEVED WHEN THE ABOVE CRITERIA HAS BEEN MET AND:
 - 3.1 ALL DRAINAGE DITCHES CONSTRUCTED TO DRAIN WATER FROM THE SITE FOLLOWING CONSTRUCTION HAVE BEEN STABILIZED TO PREVENT EROSION.
 - 3.2 ALL TEMPORARY, SYNTHETIC, AND STRUCTURAL EROSION AND SEDIMENT CONTROLS HAVE BEEN REMOVED.
 - 3.3 ANY ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM ALL STORMWATER CONVEYANCES AND BASINS USED FOR PERMANENT WATER QUALITY MANAGEMENT. ANY REMOVED SEDIMENT THAT EXPOSES SOIL MUST BE STABILIZED TO PREVENT EROSION.

1. A COPY OF THE COMPLETED AND SIGNED NOTICE OF INTENT, COVERAGE LETTER FROM THE NORTH DAKOTA DEPARTMENT OF HEALTH, STORMWATER POLLUTION PREVENTION PLAN (SWPPP), SITE INSPECTION RECORDS, AND THE GENERAL PERMIT SHALL BE KEPT ON SITE DURING CONSTRUCTION. IF NO REASONABLE ON-SITE LOCATION IS AVAILABLE, THE DOCUMENTS MAY BE RETAINED AT A READILY AVAILABLE ALTERNATIVE LOCATION. ALL RECORDS SHALL BE RETAINED FOR A PERIOD OF THREE YEARS AFTER THE SUBMISSION OF THE NOTICE OF TERMINATION.
2. THE CONTRACTOR SHALL PROVIDE AT LEAST ONE INDIVIDUAL PRESENT ON THE PERMITTED PROJECT SITE (OR AVAILABLE TO THE PROJECT SITE IN 72 HOURS) THAT IS TRAINED BY LOCAL, STATE, OR FEDERAL AGENCIES; PROFESSIONAL ORGANIZATIONS, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, OR PERMANENT STORMWATER MANAGEMENT. THE INDIVIDUAL SHALL BE KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) AND SHALL BE FAMILIAR WITH THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPs.
3. INSPECTION SHALL BE PERFORMED BY, OR UNDER THE DIRECTION OF, THE PERMITEE AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.25 INCHES OF RAIN PER 24-HOUR PERIOD DURING ACTIVE CONSTRUCTION. THE PERMITEE SHALL USE A RAIN GAUGE NEAR THE SITE OR UTILIZE THE NEAREST NATIONAL WEATHER SERVICE PRECIPITATION GAUGE STATION. ANY GAUGE USED SHALL BE LOCATED WITHIN 5 MILES OF THE STORMWATER DISCHARGE.
4. ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION SHALL BE RECORDED IN WRITING AND THESE RECORDS SHALL BE RETAINED. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
 - 4.1. DATE AND TIME OF INSPECTION.
 - 4.2. NAME OF PERSON(S) CONDUCTING INSPECTIONS.
 - 4.3. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS.
 - 4.4. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES).
 - 4.5. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.25 INCH IN 24 HOURS.
 - 4.6. DOCUMENTATION THAT THE SWPPP PLAN HAS BEEN AMENDED WHEN SUBSTANTIAL CHANGES ARE MADE TO THE EROSION AND SEDIMENT CONTROLS OR OTHER BMPs IN RESPONSE TO INSPECTIONS.
5. INSPECTIONS SHALL INCLUDE THE FOLLOWING:
 - 5.1. ALL EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWPPP MUST BE INSPECTED TO ENSURE THEY ARE OPERATING CORRECTLY AND IN SERVICEABLE CONDITIONS.
 - 5.2. SURFACE WATERS, DRAINAGE DITCHES, AND CONVEYANCE SYSTEMS, INCLUDING STORM SEWER, MUST BE INSPECTED FOR SEDIMENT DEPOSITS AND/OR VISIBLE PLUMES.
 - 5.3. EXIT POINTS FROM THE CONSTRUCTION SITE ONTO PAVED SURFACES MUST BE INSPECTED FOR SEDIMENT BEING TRACKED BY VEHICLES OR EQUIPMENT.
 - 5.4. VEGETATIVE BUFFERS MUST BE INSPECTED FOR PROPER DISTRIBUTION OF FLOWS, SEDIMENT ACCUMULATION, AND SIGNS OF RILL FORMATION.
6. EROSION AND SEDIMENT CONTROLS FOUND IN NEED OF MAINTENANCE BETWEEN INSPECTIONS NEED TO BE REPAIRED OR SUPPLEMENTED WITH APPROPRIATE MEASURES WITHIN 48 HOURS OF DISCOVERY.



Name _____

Title _____

Signature _____

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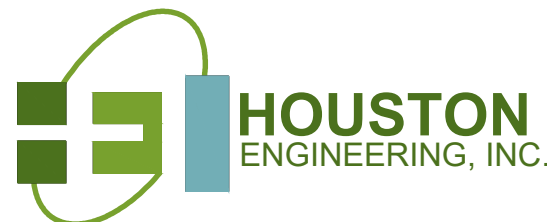
CENTRE INCORPORATED

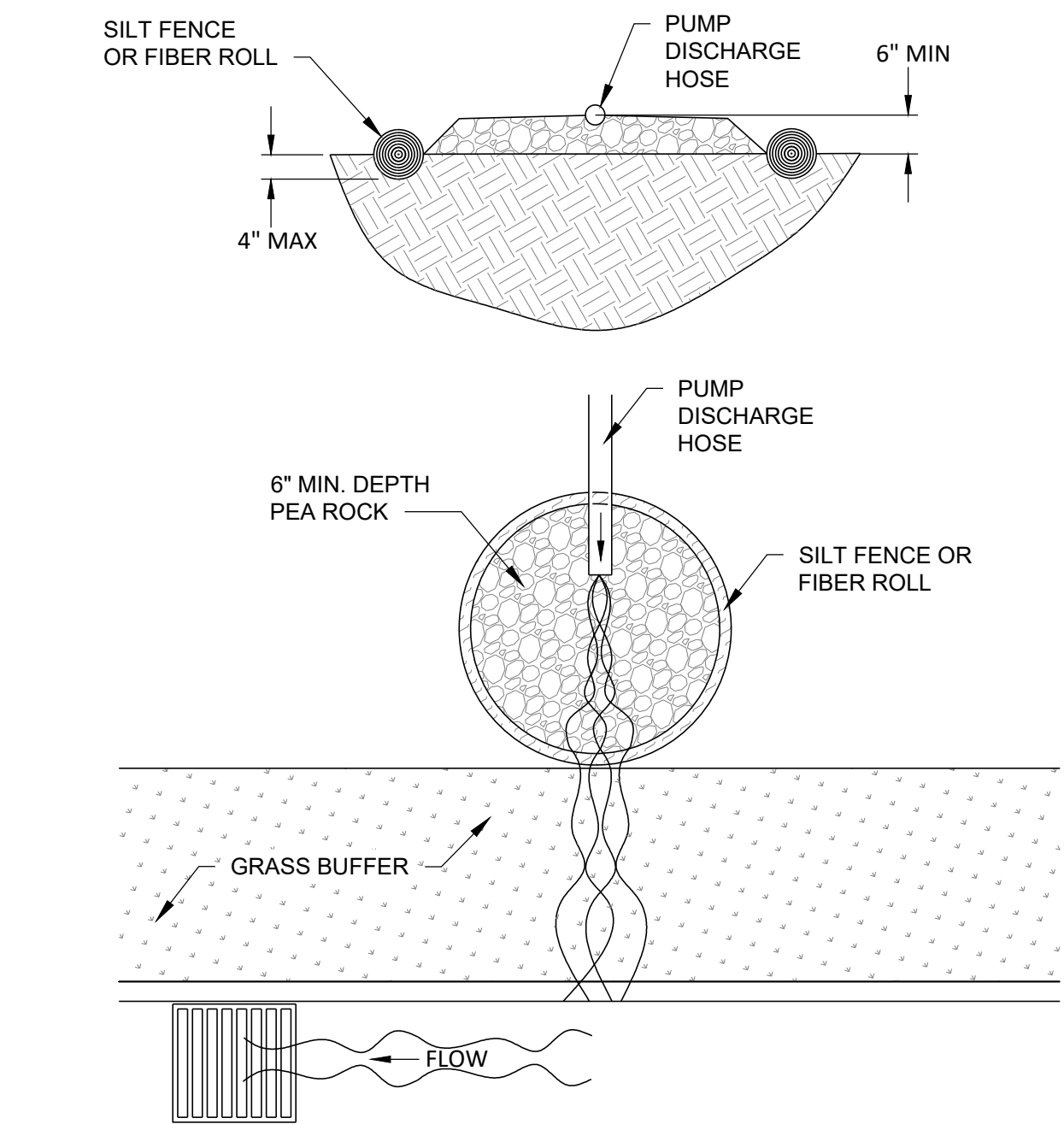
100 6TH AVE SE

MANDAN, NORTH DAKOTA

SWPPP DETAILS

C6.2

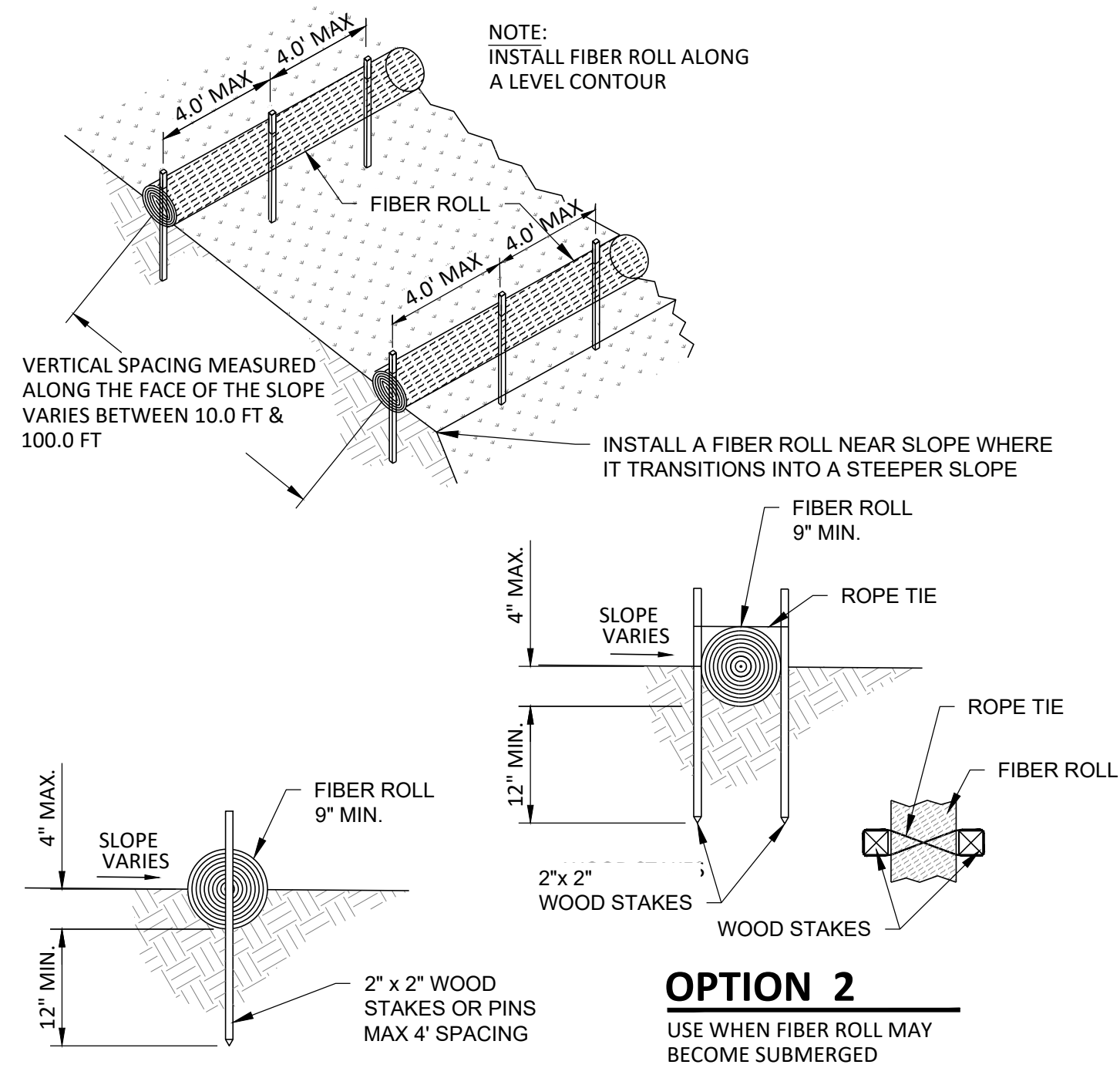




- NOTES:
1. DISCHARGE WATER ONTO A GRASS LINE SWALE, GRASS FIELD, OR INTO A SECONDARY SEDIMENT CONTAINMENT SYSTEM.
 2. DISCHARGE WATER MUST FLOW AWAY FROM THE CONSTRUCTION AREA.
 3. THE PEA ROCK MAY BE PLACED ON GRASS OR ENGINEERING FABRIC MAY BE USED: DEWATERING STRUCTURE SHALL NOT BE PLACED ON BARE SOIL.
 4. THE CAPACITY OF THE STRUCTURE SHALL BE ADEQUATE TO HANDLE THE DEWATERING PUMP DISCHARGE.

DEWATERING STRUCTURE OPTION #1

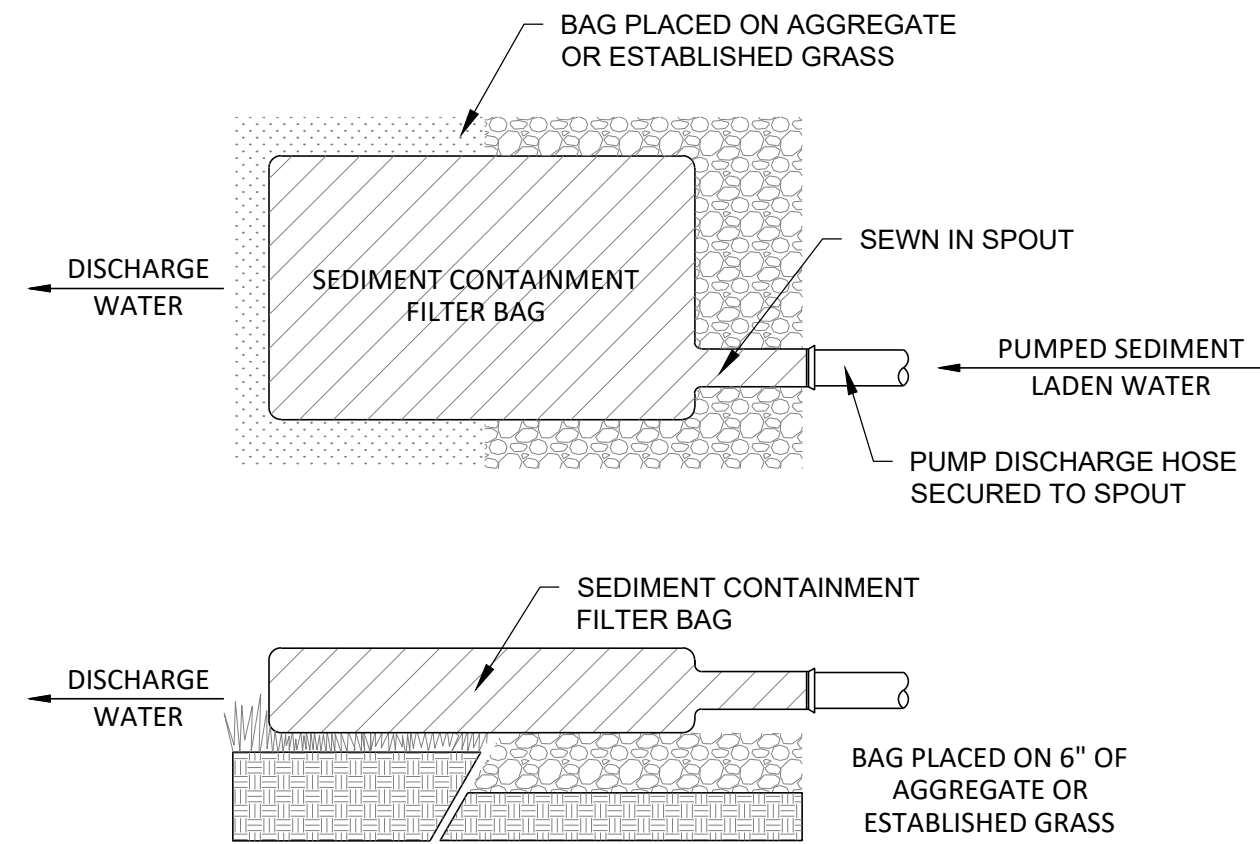
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OPTION 1

FIBER ROLL INSTALLATION

NOT TO SCALE

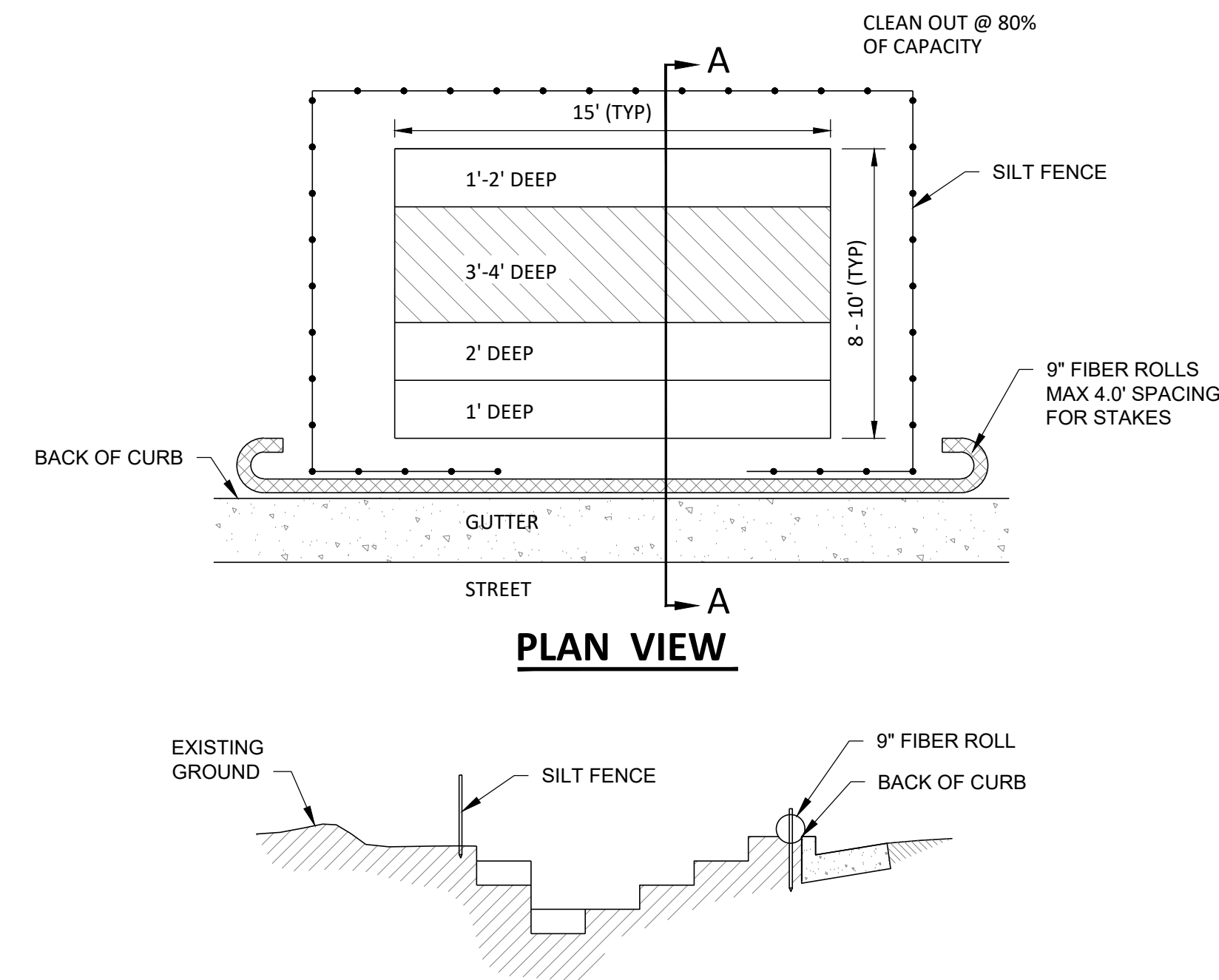


SEDIMENT FILTER BAG

- NOTES
1. DISCHARGE WATER ONTO A GRASS LINE SWALE, GRASS FIELD, OR INTO A SECONDARY SEDIMENT CONTAINMENT SYSTEM.
 2. DISCHARGE WATER MUST FLOW AWAY FROM THE CONSTRUCTION AREA.
 3. SEDIMENT CAPTURED BY THE FILTER BAG MUST BE REMOVED AND STABILIZED.
 4. THE FILTER BAG SHOULD BE CONSTRUCTED OF NON-WOVEN GEOTEXTILE MATERIAL THAT WILL PROVIDE ADEQUATE FILTERING ABILITY TO CAPTURE THE LARGER SOIL PARTICLES FROM THE PUMPED WATER.
 5. THE BAG MAY BE PLACED ON WELL ESTABLISHED GRASS OR 6" MINIMUM OF AGGREGATE. FILTER BAG SHALL NOT BE PLACED ON BARE SOIL.
 6. THE CAPACITY OF THE FILTER BAG SHALL BE ADEQUATE TO HANDLE THE DEWATERING PUMP DISCHARGE, AND SHOULD BE BASED ON THE BAG MFG.'S RECOMMENDATION.
 7. WHEN USED IN CONJUNCTION WITH A STRAW BALE/SILT FENCE PIT, A FILTER BAG MAY BE OPERATED UNTIL THE WATER IN THE PIT REACHES THE CREST OF THE EMERGENCY OVERFLOW. THE PUMP MUST BE SHUT OFF AT THIS POINT.
 8. REMOVE SEDIMENT FROM FILTER BAG, REGRADE IN PLACE, AND IMMEDIATELY STABILIZE.

DEWATERING STRUCTURE OPTION #2

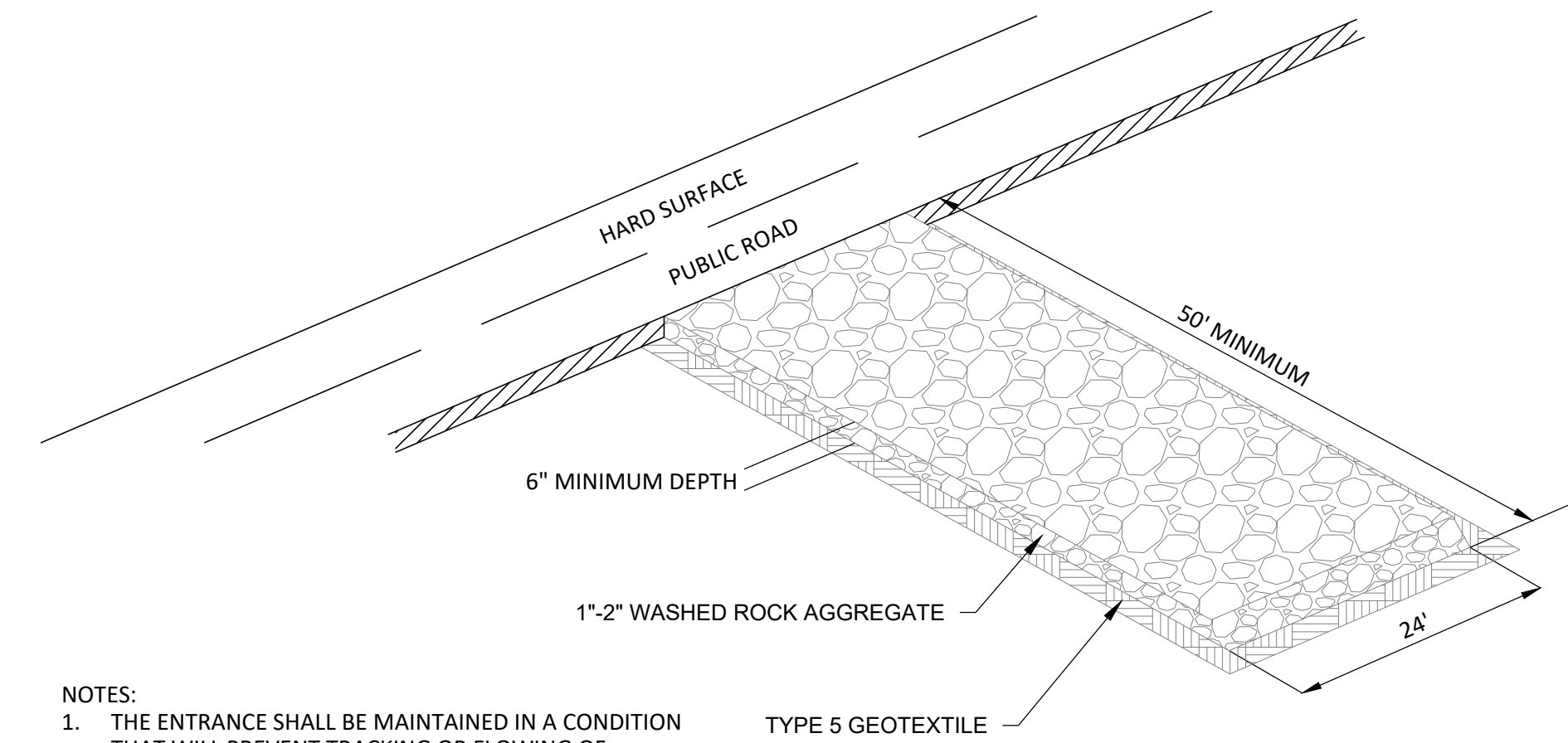
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SECTION A - A

CONCRETE WASHOUT

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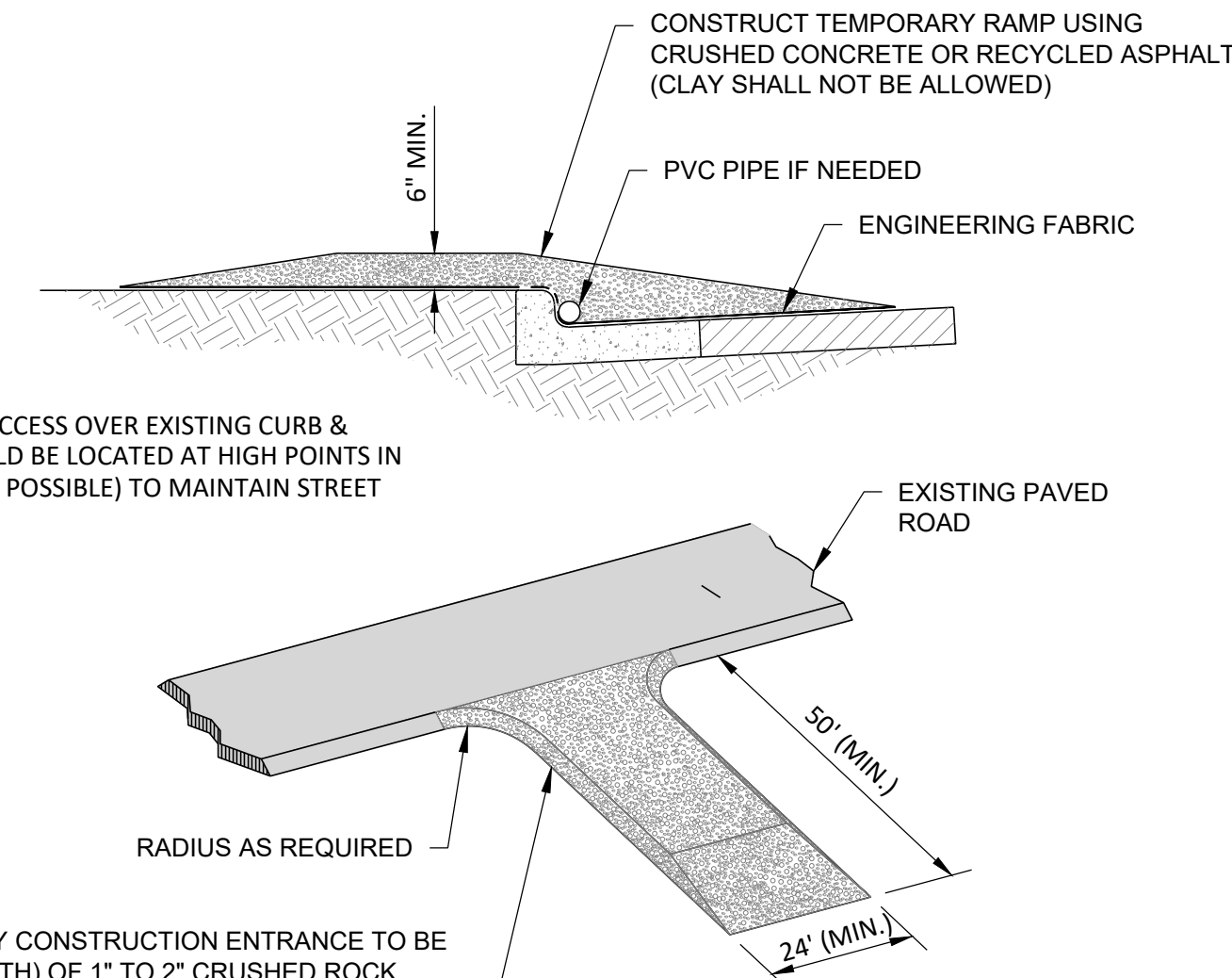


- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY ROCK OR WOOD CHIP

CONSTRUCTION ENTRANCE

NOT TO SCALE



NOTE:
TEMPORARY ACCESS OVER EXISTING CURB & GUTTER SHOULD BE LOCATED AT HIGH POINTS IN THE STREET (IF POSSIBLE) TO MAINTAIN STREET DRAINAGE

TEMPORARY CONSTRUCTION ENTRANCE TO BE 6" (MIN. DEPTH) OF 1" TO 2" CRUSHED ROCK, CRUSHED CONCRETE OR WOOD MATERIAL (5" OR LESS PARTICLE SIZE) ON TOP OF ENGINEERING FABRIC

- NOTES:
1. A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT ALL LOCATIONS WHERE CONSTRUCTION VEHICLES OR EQUIPMENT ENTER OR EXIT THE CONSTRUCTION SITES THAT ARE OVER 5 ACRES AND MAY BE REQUIRED BETWEEN 1 AND 5 ACRES AS DIRECTED BY THE ENGINEER.
 2. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE THE TEMPORARY CONSTRUCTION ENTRANCE UNLESS NOTED OTHERWISE, AND THE SITE SHALL BE RESTORED TO ITS PREVIOUS CONDITION.
 3. ENTRANCES SHALL BE MAINTAINED IN A MANNER TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PAVED SURFACES.
 4. THE LOCATION OF TEMPORARY ENTRANCES SHALL BE AS SHOWN ON THE PLANS. IF NOT SHOWN ON THE PLANS, THE CONTRACTOR SHALL COORDINATE THE LOCATIONS WITH THE ENGINEER.
 5. COSTS ASSOCIATED WITH CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TEMPORARY ENTRANCES SHALL BE INCLUDED IN THE BID ITEM "TEMPORARY CONSTRUCTION ENTRANCE".

TEMP. CONSTRUCTION ENTRANCE

NOT TO SCALE

Signature below indicates my understanding and acceptance of all content of this drawing.

Name
Title
Signature

DATE: 3-19-24
DRAWN BY: RLA
FILE NAME: 2020-052

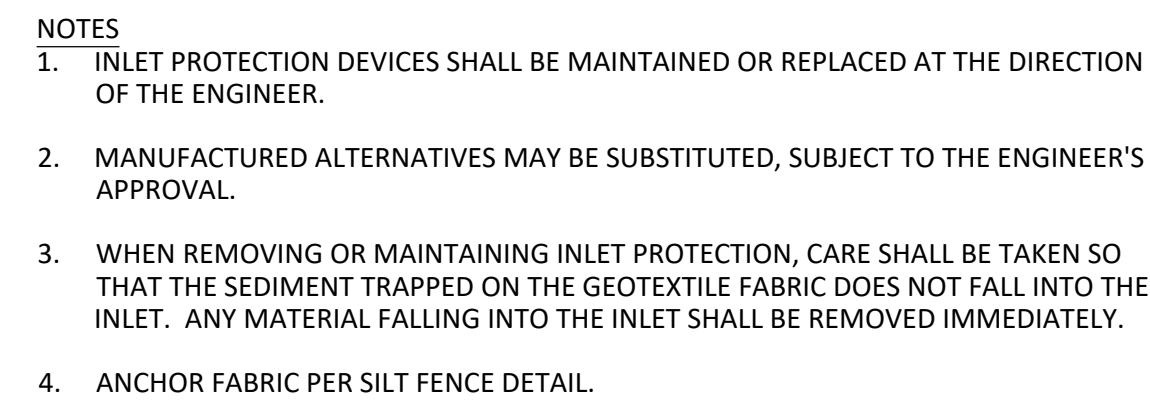
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100 6TH AVE SE
MANDAN, NORTH DAKOTA

SWPPP DETAILS

C6.3



NOTES

1. ALTERNATIVE INLET PROTECTION DEVICES MAY BE ALLOWED SUBJECT TO ENGINEER'S APPROVAL.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN TO INSURE THAT SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO INLET. ANY MATERIAL FALLING INTO INLET SHALL BE IMMEDIATELY REMOVED.
3. ANY INLET PROTECTION USED SHALL BE EQUIPPED WITH AN EMERGENCY OVERFLOW TO MINIMIZE THE THREAT OF STREET FLOODING DURING AN INTENSE RAINFALL EVENT.

INSTALLATION

1. REMOVE THE INLET GRATE.
2. STAND THE GRATE UPRIGHT. INSTALL THE GRATE BETWEEN THE LIFTING HANDLES.
3. PLACE THE BAG IN THE INLET & LOWER THE BAG AND GRATE USING THE LIFTING STRAPS.

NOTES

1. ALTERNATIVE INLET PROTECTION DEVICES MAY BE ALLOWED SUBJECT TO ENGINEER'S APPROVAL.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN TO INSURE THAT SEDIMENT DOES NOT FALL INTO INLET. ANY MATERIAL FALLING INTO INLET SHALL BE IMMEDIATELY REMOVED.
3. ANY INLET PROTECTION USED SHALL BE EQUIPPED WITH AN EMERGENCY OVERTFLOW TO MINIMIZE THE THREAT OF STREET FLOODING DURING AN INTENSE RAINFALL EVENT.
4. THIS STYLE MAY BE USED ONLY IN THE PROPERTY LINES. TYPE C INSTALLED IN RIGHT OF WAY SHALL CONFORM WITH CITY OF FARGO SPECIFICATIONS AND BE FROM WIMCO, LANGE IPD, FLEXSTORM, OR APPROVED EQUIVALENT.

GENERAL STRUCTURAL NOTES:

- THE GOVERNING BUILDING CODE IS THE INTERNATIONAL BUILDING CODE (IBC) 2021 EDITION AS APPROVED AND AMENDED BY THE CITY OF MANDAN, ND.
- CONTRACT DOCUMENTS INCLUDE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS, BUT DO NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR OTHER SUBMITTALS BY THE CONTRACTOR.
- CONTRACTOR SHALL CROSS VERIFY ALL CONTRACT DOCUMENTS, ELEVATIONS, DIMENSIONS, AND EXISTING CONDITIONS PRIOR TO STARTING WORK. DISCREPANCIES OR CONFLICTS SHALL BE NOTED TO THE EOR IMMEDIATELY FOR REMEDIATION. SPECIFIC NOTES AND DETAILS SHALL PRESIDE OVER GENERAL NOTES AND SPECIFICATIONS.
- THE DIMENSIONS, LOCATIONS, AND DETAILS SHOWN ON THE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF THE DRAWINGS BEING ISSUED. DEVIATIONS WHICH ARE NECESSARY OR WHICH CONFLICT SHALL BE REPORTED TO THE EOR. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR DEVIATIONS NOT APPROVED BY THE EOR.
- COSTS OF ADDITIONAL DESIGN WORK DUE TO THE SELECTION OF AN OPTION OR DUE TO ERRORS OR OMISSION IN CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. THE STRUCTURAL DRAWINGS REFLECT THE COMPLETED STRUCTURE. BRACING, SHORING, AND PROTECTION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURE SHALL NOT BE LOADED WITH CONSTRUCTION MATERIALS AND EQUIPMENT THAT EXCEEDS THE DESIGN LOADS.
- PENETRATIONS NOT SHOWN ON THE DRAWINGS MUST BE APPROVED BY THE EOR BEFORE PLACING THROUGH STRUCTURAL ELEMENTS. CONTRACTOR SHALL PROVIDE A CAST-IN SLEEVE FOR ALL HORIZONTAL ELEMENTS THAT EXTEND THROUGH FOOTING AND FOUNDATION WALL, SUCH AS DRAIN TILE, CONDUIT, PIPING, ETC. COORDINATE SLEEVES WITH EOR. SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR ALL PENETRATIONS AND EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- CONTRACTOR TO VERIFY ALL WEIGHTS, LOCATIONS & DIMENSIONS OF MECH. EQUIPMENT SHOWN AND NOTIFY THE EOR OF ANY DISCREPANCIES. COORDINATE THIS INFORMATION WITH ALL NECESSARY INDIVIDUALS.
- PERIODIC SITE OBSERVATION BY REPRESENTATIVES OF SANDMAN STRUCTURAL ENGINEERS IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DRAWINGS. A LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR. ALL MATERIALS AND WORKMANSHIP ARE SUBJECT TO THE REVIEW OF THE EOR.
- SEE THE FOLLOWING DETAILS FOR STANDARD DETAILS:
CIP CONCRETE & FOUNDATION: 1/IS3.1
WOOD FRAMING: 1/54.1

SHOP DRAWING & DEFERRED DESIGN SUBMITTAL NOTES:

- CONTRACTOR TO FURNISH COMPLETE AND DETAILED SHOP DRAWINGS & SUBMITTALS FOR REVIEW AND APPROVAL BY THE EOR. THE FOLLOWING ARE REQUIRED FOR THIS PROJECT.

SHOP DRAWINGS OR SUBMITTAL	NOTES/COMMENTS
CONCRETE MIX DESIGNS	BY 3RD PARTY TESTING AGENCY
CONCRETE REINFORCEMENT	-
METAL PLATE CONNECTED WOOD TRUSSES	DEFERRED SUBMITTAL: SEE NOTE #4
LUMBER MATERIAL GRADE & DOWEL-TYPES FASTENERS	-
- CONTRACT DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. ALL SHOP DRAWINGS MUST BEAR THE REVIEW STAMP OF THE CONTRACTOR BEFORE THEY ARE REVIEWED BY THE EOR.
- SHOP DRAWINGS SHALL SHOW ALL FIELD DETAILS AND ADDITIONAL INFORMATION NEEDED FOR THE CONTRACTOR TO CONSTRUCT THE BUILDING PER THE CONTRACT DOCUMENTS.
- STRUCTURAL COMPONENTS/SYSTEMS DESIGNATED AS A "DEFERRED SUBMITTAL" OR AS "DELEGATED DESIGN", "DESIGNED BY OTHERS", OR "PRE-ENGINEERED" MUST INCLUDE A CALCULATION PACKAGE THAT IS STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE THE PROJECT WILL BE CONSTRUCTED, PRIOR TO SUBMITTAL FOR APPROVAL TO THE EOR.
- SHOP DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE DURING TIMES OF INSPECTION AND SHALL BE CLEARLY INDICATED THAT THEY HAVE BEEN REVIEWED AND APPROVED BY THE EOR.
- REVIEW OF SUBMITTALS AND SHOP DRAWINGS BY THE EOR DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK ALL SUBMITTALS AND SHOP DRAWINGS BEFORE SUBMITTING TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR THE ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- ALL HANDRAIL AND GUARDRAIL SYSTEMS SHALL BE DESIGNED TO RESIST ASCE 7 CHAPTER 4 DESIGN LOADING CRITERIA AND TO TRANSFER THESE LOADS THROUGH THE SUPPORTS TO THE STRUCTURE.
- STEEL STAIR ASSEMBLIES TO SUPPORT MINIMUM UNIFORM LIVE LOAD OF 100 PSF AND CONCENTRATED LIVE LOAD OF 300 LB AS PER ASCE-7.

FOUNDATION NOTES:

- FOOTINGS ARE DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF FOR STRIP FOOTINGS AND 2000 PSF FOR PAD FOOTINGS. THESE VALUES ARE PER THE GEOTECHNICAL REPORT BY TERRACON ISSUED ON JULY 25, 2023, REPORT #PR2235549.
- PROTECT FOOTING EXCAVATIONS FROM WATER, MOISTURE, OR FROST INFILTRATION. PRIOR TO PLACEMENT OF FOOTING CONCRETE, CLEAN FOOTING EXCAVATIONS OF SNOW, WATER, MUD, DIRT, AND DEBRIS. DO NOT PLACE FOOTINGS OR BACKFILL ON FROZEN SUB GRADE.
- FROST COVER FOR FOOTINGS SHALL BE PER RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. SEE PLAN FOR TOP OF FOOTING ELEVATIONS AND DETAILS FOR FOOTING STEP REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE EOR IMMEDIATELY OF ANY SPECIAL SOIL OR WATER CONDITIONS THAT EXIST ON SITE.
- BACKFILL & COMPACTION SHALL BE INSPECTED AND TESTED BY A LICENSED GEOTECHNICAL ENGINEER OR QUALIFIED FIELD TECH. THE SUBMITTAL OF TESTING REPORTS SHALL BE PER SPECIAL INSPECTION REQUIREMENTS.
- BACKFILL SHALL BE COMPACTED BY MECHANICAL MEANS. WATER INFILTRATION SHALL NOT BE ALLOWED. BACKFILL SHALL BE PLACED IN ALTERNATING LIFTS ON EACH SIDE OF THE FDN WALLS FOR STABILITY.
- UNLESS SPECIFICALLY PRESCRIBED IN A GEOTECHNICAL REPORT, BACKFILL SHALL BE PLACED AND COMPACTED IN LOOSE LIFTS WITH THICKNESS OF 6" OR LESS. MOISTURE CONTENT AT THE TIME OF COMPACTION SHOULD BE +/- 3% OF OPTIMUM MOISTURE AND IT IS RECOMMENDED ALL ENGINEERED FILL BELOW FOOTINGS BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAX DENSITY (ASTM D698-03b).
- WALL FOOTINGS ARE TO BE CENTERED ON WALLS UNO PAD FOOTINGS ARE TO BE CENTERED ON COLUMNS UNO.
- CONTRACTOR TO COORDINATE INTERIOR & EXTERIOR TOP OF FOOTINGS WITH MEP CONTRACTORS. PRIOR TO START OF CONSTRUCTION, PLUMBING TO BE ROUTED ABOVE FOOTINGS UNLESS APPROVED BY EOR. FOOTINGS MAY NEED TO BE LOCALLY LOWERED TO ACCORD FOR ADJACENT PLUMBING LINES OR BASINS THAT COULD UNDERMINE SUPPORTING SOIL ALONGSIDE OR BELOW FOOTINGS.
- IF SHOWN ON FOUNDATION PLAN, DRAINTILE IS FOR GRAPHICAL REPRESENTATION ONLY. SIZE AND LAYOUT TO BE CONFIRMED WITH MEP CONTRACTOR AND CIVIL DRAWINGS.

DESIGN CRITERIA/DESIGN LOADS:

SNOW LOAD DESIGN CRITERIA				
GROUND SNOW LOAD	Pg	35 PSF	-	
SNOW IMPORTANCE FACTOR	Is	1.0	-	
EXPOSURE FACTOR	Ce	1.0	-	
THERMAL FACTOR	Ct	1.1	TYPICAL	
SLOPED ROOF FACTOR	Cs	1.0	TYPICAL	
RAIN LOAD DESIGN CRITERIA				
RAIN INTENSITY	I	6.8 IN/HR	-	
ROOF DESIGN LOADS				
LOAD TYPE	NOTATION	LOAD	NOTES	
SNOW LOAD	S	30 PSF	*INCLUDES 5 PSF RAIN ON SNOW SURCHARGE	
LIVE LOAD	RLl	20 PSF	-	
DEAD LOAD	D	20 PSF	D TC = 12 PSF D BC = 8 PSF	
NOTES: ALL ROOF COMPONENTS SHALL BE DESIGNED FOR DRIFT LOADS AND BALANCED & UNBALANCED SNOW LOADING PER ASCE 7. SEE PLAN FOR SNOW DRIFT LOADS				
WIND LOAD DESIGN CRITERIA				
ULT. DESIGN WIND SPEED	V-ult	115 MPH	-	
NOMINAL DESIGN WIND SPEED	V-asd	89.1 MPH	-	
RISK CATEGORY	-	II	-	
EXPOSURE CATEGORY	-	C	-	
INTERNAL PRESSURE COEF.	Gcpi	+/- 0.18	-	
C & C BASE PRESSURE	qh - ult	27.6 PSF	-	
END ZONE WIDTH	a	3 FT	-	
SEISMIC DESIGN CRITERIA				
RISK CATEGORY	-	II	-	
IMPORTANCE FACTOR (Ie)	-	I	-	
SITE CLASS	-	D	-	
MAPPED SPECTRAL RESPONSE (Ss)	-	0.057	-	
MAPPED SPECTRAL RESPONSE (S1)	-	0.018	-	
SPECTRAL RESPONSE COEFFICIENT (SDS)	-	0.052	-	
SPECTRAL RESPONSE COEFFICIENT (SD1)	-	0.026	-	
SEISMIC DESIGN CATEGORY	-	A	-	
BASIC SEISMIC FORCE-RESISTING SYSTEM	-	R=6.5	(SYSTEM DESCRIPTION)	
DESIGN BASE SHEAR (V)	-	0.01 W	-	
SEISMIC RESPONSE COEFFICIENT (Cs)	-	0.01	-	
ANALYSIS PROCEDURE USED	-	-	EQUIVALENT LATERAL FORCE	

CONCRETE AND STEEL REINFORCEMENT NOTES:

- CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO AMERICAN CONCRETE INSTITUTION (ACI) CODES AND SPECIFICATIONS, LATEST EDITION.

	ACI 301	"SPECIFICATIONS FOR STRUCTURAL CONCRETE"
ACI 315	"DETAILS & DETAILING OF CONCRETE REINFORCEMENT"	
ACI 318	"BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"	
ACI 308R	"COLD WEATHER CONCRETING"	
- CAST-IN-PLACE CONCRETE COMPRESSIVE STRENGTHS REQUIRED (28 DAY):

	FOOTINGS	4000 PSI*	INTERIOR SLABS	4000 PSI
	FOUNDATION WALLS <th>4000 PSI*</th> <th>EXTERIOR SLABS</th> <th>4500 PSI*</th>	4000 PSI*	EXTERIOR SLABS	4500 PSI*
	*MAX W/C RATIO OF 0.55			
	**MAX W/C RATIO OF 0.45; MIX DESIGN TO BE AIR ENTRAINED PER ACI TABLE 19.3.3.1			
- SUBMIT CONCRETE MIX DESIGN & STRENGTH DATA TO EOR FOR APPROVAL. ALL ADMIXTURES ARE THE RESPONSIBILITY OF THE CONCRETE SUPPLIER'S ENGINEER.
- CAST-IN-PLACE CONCRETE SHALL BE SUBJECT TO TESTING BY AN INDEPENDENT TESTING LABORATORY, SEE SPECS AND SPECIAL INSPECTION REQUIREMENTS.
- ALL CONCRETE SHALL BE PLACED PER ACI & THOROUGHLY CONSOLIDATED BY MEANS OF A VIBRATOR, PARTICULARLY AROUND REINFORCEMENT STEEL AND CORNERS OF FORM WORK.
- REINFORCING STEEL SHALL BE GRADE 60 DEFORMED, BILLET-STEEL, ASTM A615, UNO.
- WELDED REINFORCING STEEL SHALL BE GRADE 60, LOW CARBON, ASTM A706, WHICH IS SPECIALLY MANUFACTURED TO BE WELDABLE.
- WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A82 AND A185 STANDARDS AND SHALL BE PLACED IN THE CENTER OF THE SLAB, UNO. LAP JOINTS A MINIMUM OF 6". EXTEND FABRIC TO BE WITHIN 1" OF SLAB EDGES.
- PROVIDE ADEQUATE BOLSTERS, HIGH CHAIRS, SUPPORT BARS, ETC TO MAINTAIN THE SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING STEEL AND WELDED WIRE FABRIC.
- PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 8" SQUARE OR ROUND. PROVIDE (2) #5 BARS @ 3" OC FOR EACH MAT OF BARS, AT EACH SIDE AND CORNER OF OPENING EXTENDING MINIMUM 18" PAST CORNER OF THE OPENING. PLACE 2" CLEAR FROM OPENING.
- SEE DETAILS FOR REINFORCING LAP SPlice SCHEDULE, UNO ON PLAN OR DETAILS.
- CAST DOWELS, WITH STD 90 DEGREE HOOK, IN FOOTINGS FOR CONCRETE PIERS AND WALLS ABOVE. DOWELS SHALL BE THE SAME SIZE AND QTY AS THE VERTICAL REINFORCING (UNO)
- SUPPLY 100 FEET EXTRA OF #5 REBAR FOR MISC. PLACEMENT AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL INCLUDE LABOR ALLOWANCE FOR PLACEMENT.
- EXTERIOR SLABS SHALL DRAIN FREELY AWAY FROM THE BUILDING. SEE CIVIL AND ARCH. DRAWINGS FOR ELEVATIONS AND SLOPES.
- CONTROL SAWCUT JOINTS ARE TO BE EXECUTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM DISLODGING BY SAW AND PRIOR TO SHRINKAGE STRESS CRACKING. SEE DETAIL 1/IS3.1 FOR SLAB CONSTRUCTION JOINTS (CCJ) AND FOR SLAB CONTROL JOINTS (CJ). CONTRACTOR SHALL SUBMIT A PROPOSED JOINT LAYOUT TO ARCH/ENG FOR APPROVAL PRIOR TO SLAB PLACEMENT.

- CONTROL JOINTS SHALL BE ON COLUMNS LINES AND @ RE-ENTRANT CORNERS TO THE GREATEST EXTENT POSSIBLE WITH SPAONING LESS THAN 12" OC BETWEEN CONSTRUCTION JOINTS SHALL BE LOCATED SO AS NOT TO ALLOW A SINGLE SLAB POUR TO EXCEED 4000 SQUARE FEET UNLESS ALTERNATE MEASURES ARE TAKEN TO CONTROL SLAB CURLING & SHRINKAGE.
- PROVIDE CJ OR CCJ JOINTS SO AS NOT TO EXCEED A SLAB UNIT ASPECT RATIO OF 1.5:1.
- SYNTHETIC FIBERS, WHERE SPECIFIED ON PLAN FOR SLAB-ON-GRADE APPLICATIONS, TO BE MICROFIBER TYPE AND COMPLY WITH ASTM D7508 FOR USE IN PRODUCING TYPE III SYNTHETIC FIBER-REINFORCED CONCRETE MEETING THE REQUIREMENTS OF ASTM C1116 & ACI 544. MICROFIBER PERFORMANCE INTENT IS FOR REDUCTION OF PLASTIC SHRINKAGE CRACKS ONLY. MICROFIBERS ARE NOT INTENDED TO PROVIDE SECONDARY REINFORCEMENT FOR HARDENED CONCRETE CRACK CONTROL. HARDENED CONCRETE CRACK CONTROL TO BE ACCOMPLISHED BY USING ACI RECOMMENDED PRACTICES FOR MIX-DESIGN, PLACEMENT, CURING, AND CONTROL JOINT PLACEMENT. DOSAGE OF MICROFIBER TO BE DETERMINED BY CONCRETE MIX DESIGNER FOR THE SPECIFIC PROJECT APPLICATIONS. MINIMUM DOSAGE TO BE 1.5LB/CUBIC YARD. FIBER SELECTION AND CONCRETE PLACEMENT TO COMPLY WITH REQUIRED SLAB FINISHES IN PROJECT SPECIFICATIONS.
- SEE ARCH DRAWINGS FOR DIMENSIONS OF STOOPS, FOUNDATION WALL HOLDOUTS, SLAB RECESSES, SLOPED SLABS & FOUNDATION WALL INSULATION. REFER TO ARCH DRAWINGS FOR BELOW GRADE VAPOR BARRIER REQUIREMENTS.

WOOD FRAMING NOTES:

- WOOD AND TIMBER CONSTRUCTION SHALL COMPLY WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) STANDARD SPECIFICATIONS.
- WOOD CONSTRUCTION SHALL CONFORM TO CHAPTER 23 (SECTIONS 2301, 2302, 2303, 2304, 2305, & 2306) OF THE 2021 IBC FOR MINIMUM REQUIREMENTS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. FOR MINIMUM FASTENING REFER TO TABLE 16C.2304.3.1. PER SECTION 2301.2, THE STRUCTURAL DESIGN OF THIS STRUCTURE HAS BEEN IN ACCORDANCE WITH THE "ALLOWABLE STRESS DESIGN" METHOD. PROVISIONS WITHIN SECTION 2308 "CONVENTIONAL LIGHT-FRAME CONSTRUCTION" DO NOT APPLY TO THIS STRUCTURE.
- ALL FRAMING LUMBER SHALL BE INSTALLED WITH MOISTURE CONTENT OF 19% OR LESS INDICATING "S-DRY" ON THE GRADE STAMP.
- ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED WITH WATERPROOFING TREATMENT, 28% MAX. MOISTURE CONTENT.
- ALL SIMPSON STRONG-TIE CONNECTORS USED WITH PRESSURE TREATED LUMBER SHALL BE "Z-MAX" COATED AS A MINIMUM OR REQUIRED COATING TO PROTECT CONNECTORS FROM SURFACE CHEMICALS. PROVIDE A PRESERVATIVE-TREATED BARRIER BETWEEN TREATED PLATES AND HOLD-DOWNS.
- LUMBER SHALL COMPLY WITH NATIONAL DESIGN SPECIFICATION (NDS), LATEST EDITION SUPPLEMENT FOR MINIMUM ALLOWABLE DESIGN STRESS VALUES FOR LUMBER GRADES SHOWN BELOW. ALL LUMBER FRAMING SHALL BE MARKED WITH A GRADE STAMP.

MINIMUM LUMBER DESIGN VALUES, UNO ON PLAN OR DETAILS (PSI), DESIGN VALUES TAKEN FROM NDS SUPPLEMENT, TABLES 4A, 4B, & 4D						
SPECIES & GRADE	Fb	Ft	Fv	FoP	Fc	E
LOAD BEARING WALL STUDS						
SPF #1#2	875	450	135	425	1150	1,400,000
HEADERS/BEAMS/JOISTS						
HEM FIR #2	850	525	150	405	1300	1,300,000
TREATED BEAMS/JOISTS						
SOUTHERN PINE #1	1000	650	175	565	1400	1,600,000
TOP PL/HEADER PL/ABOVE GROUND SILL PL						
SPF #1#2	875	450	135	425	1150	1,400,000
TREATED SILL PL						
SOUTHERN PINE #2	1000	600	175	565	1400	1,400,000
TREATED POSTS (KDAT)						
SOUTHERN PINE #2	850	550	165	375	525	1,200,000
NON-TREATED POSTS						
DOUG FIR #2	750	475	170	625	700	1,300,000
FLOOR TRUSS END RIBBONS						
SPF #1#2	875	450	135	425	1150	1,400,000

IF ALTERNATIVE GRADE OR SPECIES OF LUMBER IS DESIRED THAT IS EQUAL OR GREATER THAN THE ABOVE REQUIREMENTS, CONTRACTOR TO SUBMIT REQUEST TO ENGINEER FOR APPROVAL PRIOR TO ORDERING OF MATERIAL. SPF-S #2 IS SPRUCE-PINE-FIR SOUTH & IS NOT EQUIVALENT TO SPF #1#2.

ANCHOR TREATED SILL PLATES TO CONCRETE/MASONRY WITH 1/2"x2" GALV A R S 4" OC MINIMUM, UNO ON PLAN. HOOKED ROD WITH MINIMUM EMBED = 7"; SEE STANDARD DETAILS. THERE SHALL BE A MINIMUM OF (2) ANCHORS PER PIECE OF SILL PLATE W/ (1) BOLT LOCATED NO MORE THAN 12" OR LESS THAN 4" FROM END OF EACH SILL PLATE PIECE.

A 1/2"x5" SIMPSON TITEN HD (GALV) MAY BE DIRECTLY SUBSTITUTED FOR CIP SILL PLATE ANCHORS.

- DIMENSIONAL LUMBER USED FOR HEADERS SHALL HAVE NO SPLITS OR CHECKS.
- PROVIDE STD CUT WASHERS PER STRUCTURAL DETAILS FOR ALL BOLTS IN WOOD MEMBERS. RE-TORQUE NUTS 48 HOURS AFTER FIRST TIGHTENING. SEE DRAWINGS FOR LOCATIONS OF SQ. PLATE WASHERS.
- NOTCHING OR CUTTING OF STRUCTURAL WOOD MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM ENGINEER. HOLES BORED IN WALL STUDS OR JOISTS SHOULD BE IN THE CENTER HALF OF THE MEMBER AND SHALL NOT BE LARGER THAN 1/4 OF THE DEPTH OF THE MEMBER. ALLOWABLE CUTTING, NOTCHING, AND BORED HOLE PROVISIONS OF IBC SECTION 2308 DO NOT APPLY TO THIS STRUCTURE.
- LOAD BEARING STUD WALLS TO BE 2x6 @ 1'-4" OC UNO. SEE TABLE ABOVE FOR SPECIES & GRADE.
- EXTERIOR WALLS AND LOAD BEARING WALLS SHALL BE CAPPED WITH DOUBLE TOP PLATES. THE PLATES SHALL OVERLAP AT CORNERS AND AT INTERSECTIONS WITH OTHER LOAD BEARING WALLS. SEE STANDARD DETAILS.
- STRUCTURAL WALL STUDS TO BE CONTINUOUS FROM FLOOR LEVEL TO UNDERSIDE OF DIRECT TRUSS BEARING OR FLOOR/ROOF SHEATHING ABOVE. STRUCTURAL WALLS WITH INTERMEDIATE SPLICES WITHIN WALL HEIGHT ARE NOT PERMITTED. SPECIAL CONDITIONS AND PROVISIONS WILL BE SHOWN IN SPECIFIC STRUCTURAL DETAILS.
- POSTS AND BEARING STUDS (JACKSKINGS) FOR BEAMS AND HEADERS SHALL BE CONTINUOUS TO THE FOUNDATION LEVEL. PROVIDE SQUASH BLOCKING BETWEEN FLOOR LEVELS TO MATCH THE WIDTH OF THE POST/STUD ASSEMBLY FROM ABOVE.
- TOP FLANGE OF ALL RAFTERS, JOISTS AND BEAMS TO BE Laterally SUPPORTED @ 24" OC MIN. PROVIDE BRIDGING FOR TOP FLANGE AS REQUIRED TO NEAREST FRAMING MEMBER OR PROVIDE ADEQUATELY SUPPORTED PLYWOOD DECKING.
- PROVIDE SLIP BLOCKING AT BEARING POINTS OF ALL 2x JOISTS.
- METAL FRAMING ANCHORS AND HARDWARE SHOULD BE AS NOTED IN DETAILS. ALTERNATIVE HARDWARE THAT IS EQUAL OR GREATER IN CAPACITY MUST BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. THIS INCLUDES NAILS, TIMBER RIVETS, SILL ANCHORS, WOOD SCREWS, THRU BOLTS, AND LAG SCREWS.
- STRUCTURAL LOAD BEARING OR LATERAL LOAD RESISTING WALLS ARE SHOWN ON THE PLAN. SEE ARCH DRAWINGS FOR PARTITION WALLS. PROVIDE NECESSARY CONNECTION/ALLOWANCE OF PARTITION WALLS TO UNDERSIDE OF FLOOR AND ROOF FRAMING TO ACCOUNT FOR FRAMING DEFLECTION.
- DRILL BOLT/TANCHOR HOLES IN WOOD 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT. REPAIR OVERSIZED HOLES WITH BEARING PLATE WASHERS.
- ALL JOISTS, TRUSSES, HEADERS, AND BEAMS SHALL HAVE FULL BEARING UNO NOTED ON THE DETAILS.

MINIMUM DESIGN VALUES FOR ENGINEERED WOOD MATERIALS UNO ON PLAN OR DETAILS (PSI)			
MATERIAL AND FUNCTION	Fb	FoI	E
LVL BEAMS	2600	N/A	2,000,000
LSL BEAMS	2325	N/A	1,550,000
PSL BEAMS	2900	N/A	2,000,000
PSL COLUMNS	N/A	2500	1,800,000

MINIMUM DIMENSIONS OF FASTENERS, UNO [NDS APPENDIX L] UNITS = INCHES							
FASTENER TYPE	L	D	H	FASTENER TYPE	L	D	H
NAIL: 6d	2	0.113	0.266	NAIL: 16d	3 1/2	0.162	0.344
NAIL: 8d	2 1/2	0.131	0.281	NAIL: 30d	4 1/2	0.207	0.438
NAIL: 10d	3	0.148	0.312	#6 TYPE S OR W DRYWALL SCREW	1 7/8"	N/A	N/A

L = LENGTH, D = DIAMETER, H = HEAD DIAMETER

METAL PLATE CONNECTED WOOD TRUSS NOTES:

- METAL PLATE CONNECTED WOOD TRUSSES SHALL BE ENGINEERED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECT. A SEALED COVER SHEET SHALL BE SUBMITTED WITH THE SHOP DRAWINGS AT THE TIME OF SUBMITTAL. SHOP DRAWING DESIGN SUBMITTAL TO COMPLY WITH IBC SECTION 2303.4.
- WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", APFA, AND "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION."
- TRUSSES TO BE DESIGNED TO SATISFY THE FOLLOWING DEFLECTION REQUIREMENTS. TRUSS SUPPLIER TO PROVIDE CAMBER AS NECESSARY TO COUNTER DEFLECTIONS.
ROOF TL = L/360 FLOOR TL = L/360
ROOF LL = L/480 FLOOR LL = L/480

PER TI DEFLECTION TOTAL LOAD (TL) = Kx(DL+LL [NOTE: "LL" TO BE EITHER SNOW, RAIN, WIND, OR LIVE], PER TI CREEP FACTOR (K) TO BE 1.0 (NON-WOOD FRAMING), 1.5 (SOLID SAWN OR SCL WOOD, DRY USE), OR 2.0 (METAL PLATE CONNECTED WOOD TRUSSES, DRY USE). PARTITION WALLS BELOW TRUSSES TO BE FRAMED TO ALLOW FOR THIS EXPECTED DEFLECTION.
- TRUSS SUPPLIER TO MAKE EVERY EFFORT TO FOLLOW FRAMING SCHEME AS THE LOADS HAVE BEEN DISTRIBUTED TO THE FOUNDATION ACCORDINGLY. IF REVISED FRAMING DIRECTIONS ARE DESIRED BY SUPPLIER, PLAN MUST BE SUBMITTED FOR APPROVAL PRIOR TO FOUNDATION CONSTRUCTION.
- UNO ON DRAWINGS, EOR HAS NOT PROVIDED STRUCTURAL SHEATHING BENEATH THE BOTTOM CHORD OF ROOF OR FLOOR TRUSSES FOR BRACING.
- ALL HARDWARE (BOLTS, HANGERS, STRAPS, ETC) REQUIRED FOR CONNECTIONS BETWEEN TRUSSES SHALL BE DESIGNED AND SUPPLIED BY THE TRUSS ENGINEER AND SUPPLIER.
- UNO, ROOF TRUSSES SHALL BE ATTACHED TO THE TOP PLATE AT ALL BEARING CONDITIONS WITH SIMPSON H2.5T CLIPS OR SDWC15600 TRUSS SCREWS INSTALLED PER MANUFACTURER'S INSTRUCTIONS. GIRDSERS AND ROOF BEAMS SHOULD BE ATTACHED TO BEARING SUPPORTS WITH (2) H2.5T CLIPS. TRUSS SUPPLIER TO PROVIDE BEARING BLOCKS AS REQUIRED BY DESIGN.
- DO NOT CUT OR REMOVE TRUSS MEMBERS OR MAKE FIELD ALTERATIONS TO THE TRUSSES.
- LAYOUT AND SPACING GUIDELINES ON PLAN ARE FOR REFERENCE ONLY UNLESS SPECIFICALLY DIMENSIONED OR DETAILD.
- GIRDER TRUSSES SHALL BE SUPPORTED BY SAME NUMBER OF STUDS AS TRUSS PILES (MIN OF 2 STUDS) WITH CONTINUOUS SOLID BEARING TO THE FOUNDATION. AVOID BEARING GIRDER TRUSSES OVER WALL OPENINGS, UNLESS OTHERWISE DIMENSIONED ON PLAN.
- THE GUIDELINES SET FORTH BY THE TRUSS PLATE INSTITUTE (TPI) & SOBA PUBLICATION BSCI "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" SHALL BE FOLLOWED BY THE TRUSS INSTALLER.
- THE METAL PLATE CONNECTED WOOD TRUSS SUPPLIER SHALL SUPPLY THE CURRENT BCSI B-SERIES SUMMARY SHEETS WITH THE TRUSS ERECTION DRAWINGS OUTLINING THE PROPER HANDLING, ERECTING, AND BRACING OF TRUSSES.
- ERECTION BRACING OF WOOD TRUSSES IS THE RESPONSIBILITY OF THE TRUSS INSTALLER. THE TRUSS INSTALLER SHALL PROVIDE TEMPORARY DIAGONAL, LATERAL, & CROSS BRACING (PER BSCI GUIDE) UNTIL ROOF SHEATHING, CEILING & PERMANENT BRACING CAN BE APPLIED & SHEARWALLS COMPLETED.
- PERMANENT BRACING OF WOOD TRUSSES SHALL BE INSTALLED BY THE TRUSS INSTALLER, WHERE INDICATED BY THE TRUSS ERECTION DRAWINGS. MINIMUM BRACING REQUIREMENTS FOR TOP CHORD, BOTTOM CHORD, & WEB MEMBER PLANES SHALL BE IN ACCORDANCE WITH BSCI GUIDE UNLESS REQUIREMENTS NOTED ON THE PLAN ARE MORE STRICT.
- SEE METAL PLATE CONNECTED WOOD TRUSS SHOP DRAWINGS FOR PERMANENT WEB AND CHORD BRACING LOCATIONS AND REQUIREMENTS.

POST INSTALLED ANCHOR NOTES:

- POST INSTALLED ANCHORS NOTED ON PLAN AND/OR DETAILS NOTED SHALL BE AS FOLLOWS (UNO). IF ALTERNATIVE ANCHORS ARE DESIRED, CONTRACTOR MUST SUBMIT PRODUCT DATA FOR APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO ORDERING OF MATERIALS. ANCHORS USED TO TRANSFER STRUCTURAL LOADS MUST HAVE BEEN APPROVED BY METHODS OF ACI 308 APPENDIX D FOR MECHANICAL ANCHORS AND ICC-ES AC308 FOR ADHESIVE AND TORQUE-CONTROLLED ANCHORS. ADHESIVES USED IN COLD WEATHER MUST MEET ALL WEATHER REQUIREMENTS AND CODE REQUIREMENTS STATED ABOVE.

	INJECTION ADHESIVE ANCHORS:	SIMPSON SET-3G ADHESIVE. THREADED RODS TO BE A193 GRADE BY WITH EMBEDDED END CUT @ 45° ANGLE.
EXPANSION ANCHORS:	ANCHOR	SIMPSON STRONG-BOLT 2
SCREW ANCHORS:	ANCHOR	SIMPSON TITEN HD
POWDER ACTUATED FASTENERS (PAF):	ANCHOR	0.157"Ø STEEL-TO-STEEL, THRU BASE METAL, 1/2" MIN. EDGE DISTANCE. 0.157"Øx1 1/4" STEEL TO CONCRETE & MASONRY. 3" MIN. CONCRETE EDGE DISTANCE (UNO).
- POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO USING POST INSTALLED ANCHORS FOR MISSING OR MISPLACED CIP ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS. ANCHORS AND ADHESIVE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

WOOD STRUCTURAL PANEL WALL SHEATHING (WOOD FRAMING):

- ALL PANELS SHALL HAVE A GRADE STAMP BY AN AMERICAN PLYWOOD ASSOCIATION (APA) APPROVED AGENCY MEETING THE PROJECT REQUIREMENTS. ALL PANELS SHALL BE EXPOSURE 1, MINIMUM.
- TYPICAL SHEAR WALL SHEATHING, UNO : NOMINAL THICKNESS = 2 1/2" ZIP SYSTEM R SHEATHING OR EQUIVALENT.
- PANEL JOINTS SHALL BE AT STUD CENTERLINE AND SHALL BE OFFSET FROM ADJACENT PANELS. EDGES TO BE BUTT TIGHT @ JOINTS. PANELS LESS THAN 12" WIDE SHALL NOT BE USED.
- FASTENERS SHALL BE SPACED @ 6" OC ALONG ALL PANEL EDGES & @ 12" OC IN THE FIELD OF THE PANELS. FASTENERS TO BE LOCATED NOT LESS THAN 3/8" IN FROM THE EDGE OF THE PANEL.
- MINIMUM FASTENERS SHALL BE: 8d COMMON NAILS, WITH A MINIMUM 1 3/8" PENETRATION, FLUSH DRIVEN, UNO.
- IN SHEARWALL APPLICATIONS, IF PRE-FABRICATED PANELS ARE USED, WALL SHEATHING MUST SPURCE @ STUD CENTERLINE AND NOT AT A JOINT BETWEEN WALL PANELS. IF SPICE DOES HAPPEN BETWEEN WALL PANELS, AN ALTERNATE CONNECTION OF PANELS IS TO FASTEN END STUDS OF PANELS TOGETHER W/ 16d NAILS @ 6" OC STAGGERED FROM BOTH SIDES. IN BOTH CASES, FIELD INSTALL UPPER TOP PLATE FOR WALL CONTINUITY PER STANDARD DETAILS.
- IN SHEARWALL APPLICATIONS, PANEL EDGES TO BE UNLOCKED, UNO. PANELS SHALL NOT BE LESS THAN 4x8, EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING, WALL OPENINGS, SUCH AS WINDOWS AND DOORS, DO NOT CONSTITUTE CHANGES IN FRAMING.
- FASTENING REQUIREMENTS SHALL APPLY TO ALL STUDS, TOP & BOTTOM PLATES, & BLOCKING.
- MINIMUM SPACING OF NAILS TO BE 3" OC FOR 2X LUMBER.
- PROPOSED PENETRATIONS THROUGH SHEARWALL SHEATHING NEEDS TO BE SUBMITTED TO EOR. FOR APPROVAL PRIOR TO CUTTING IN THE FIELD.

ROOF/FLOOR WOOD SHEATHING DIAPHRAGM NOTES (WOOD FRAMING):

- ALL PANELS SHALL HAVE A GRADE STAMP BY AN AMERICAN PLYWOOD ASSOCIATION (APA) APPROVED AGENCY MEETING THE PROJECT REQUIREMENTS. ALL PANELS SHALL BE EXPOSURE 1, MINIMUM. IF PANELS ARE EXPOSED TO WEATHER FOR EXTENDED PERIOD OF TIME, EXTERIOR GRADE PANEL ARE RECOMMENDED. OSB PANELS TO BE PROTECTED FROM EXCESSIVE MOISTURE IF USED HORIZONTAL SURFACES SUCH AS ROOF AND FLOOR PANELS.
- PITCHED ROOF PANEL: NOMINAL THICKNESS = 1/2", SPAN RATING 3/216 UNO
FLAT ROOF PANEL: NOMINAL THICKNESS = 5/8", SPAN RATING 40/20 UNO
FLOOR PANEL: NOMINAL THICKNESS = 3/4", SPAN RATING 48/24 UNO
- MINIMUM FASTENER REQUIREMENTS SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE ON PLAN:
8d COMMON NAILS FOR 1/2" SHEATHING, 10d COMMON NAILS FOR 5/8" SHEATHING, AND 10d COMMON NAILS FOR 3/4" SHEATHING. NAILS ARE TO BE LOCATED 3/8" FROM PANEL EDGES, WITH A MINIMUM OF 1 3/8" PENETRATION FOR 1/2" SHEATHING & 1 1/2" PENETRATION FOR 5/8" AND 3/4" SHEATHING. FASTENERS ARE TO BE FLUSH DRIVEN. FASTEN PANE S @ 8" OC AT SUPPORTED PANEL EDGES, AND 12" OC IN THE FIELD OF THE PANEL. IF 8d/10d COOLER, DEFORMED, AND SMOOTH NAILS ARE USED AND INSTALLED WITH NAIL-GUN, MINIMUM FASTENING SPACING IS TO BE 4" OC AT SUPPORTED PANEL EDGES AND 8" OC IN THE FIELD OF THE PANEL.
- AT ROOF OVERHANGS MINIMUM FASTENING TO BE: 8d COMMON, 6" OC IN FIELD & @ PANEL EDGES. IF INSTALLED WITH NAIL GUN USE 8d COOLER, DEFORMED, SMOOTH @ 4" OC IN FIELD AND @ PANEL EDGES.
- PANEL JOINTS SHALL

THIS PROJECT REQUIRES SPECIAL INSPECTION AND TESTING IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE, 2021 EDITION. THESE NOTES AND THE STATEMENT OF SPECIAL INSPECTIONS PREPARED FOR THE PROJECT OWNER ARE INTENDED TO INFORM THE CONTRACTOR OF THE QUALITY ASSURANCE PROGRAM AND THE EXTENT OF THE CONTRACTOR'S RESPONSIBILITIES. CONTRACTOR SHALL REFERENCE PROJECT MANUAL FOR ADDITIONAL INFORMATION. THE TESTING AND INSPECTION SERVICES SECTION WILL CLARIFY WHO SHALL EMPLOY AND PAY FOR SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM ALL INSPECTIONS, SPECIAL INSPECTIONS, AND TESTING FOR PROJECT.

1. THE SPECIAL INSPECTION AND TESTING PROGRAM IS A QUALITY ASSURANCE PROGRAM INTENDED TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY TO COMPLY WITH THE OFFICIAL CONTRACT DOCUMENTS. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DRAWINGS. THE SPECIAL INSPECTION DOES NOT REPLACE THE RESPONSIBILITY OF THE BUILDING OFFICIAL FOR THE QUALITY CONTROL RESPONSIBILITIES AND PERSONNEL OF THE CONTRACTOR. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
3. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE IBC SECTION 110 AND SPECIFIC STRUCTURAL OBSERVATION AS MAY BE REQUIRED BY THE CODE.
4. THOUGH NOT REQUIRED BY CODE, SPECIAL INSPECTORS AND/OR INSPECTION AGENCIES CAN DOCUMENT ACCEPTANCE OF THEIR RESPONSIBILITIES AND SCOPE OF WORK FOR A PROJECT BY SIGNING AN AGREEMENT THAT INCLUDES A DETAILED SCHEDULE OF SERVICES, COMMONLY KNOWN AS THE SPECIAL INSPECTION AND TESTING AGREEMENT AND THE SPECIAL INSPECTION AND TESTING SCHEDULE. THIS DOCUMENT MAY REFERENCE THIS SHEET AS THE "STATEMENT OF SPECIAL INSPECTIONS", (SSI).
5. THE STRUCTURAL DESIGN METHODS AND/OR ASSUMPTIONS UTILIZED ARE BASED UPON THE SPECIAL INSPECTIONS REQUIRED WITHIN THE CONTRACT DOCUMENTS.

1. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PROVIDING ADEQUATE NOTICE TO THE SPECIAL INSPECTORS FOR ALL INSPECTIONS. THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE REQUIRED ITEMS PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF WORK.
2. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO THE APPROVED CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER. THIS CURRENT SET OF DOCUMENTS SHALL BE AVAILABLE AT THE JOB SITE.
3. THE CONTRACTOR IS TO CORRECT DISCREPANCIES AND DEVIATIONS AS DETERMINED BY SPECIAL INSPECTOR. ALL DISCREPANCIES AND DEVIATIONS OBSERVED SHALL BE RE-INSPECTED UNTIL THE SPECIAL INSPECTOR DEEMS CONSTRUCTION TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. THE CONTRACTOR IS TO RETAIN SPECIAL INSPECTION RECORDS COMPLETED BY THE SPECIAL INSPECTORS AT THE JOB SITE.

1. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
2. SPECIAL INSPECTORS SHALL NOTIFY CONTRACTOR PERSONNEL OF THEIR PRESENCE AND RESPONSIBILITIES AT THE JOBSITE.
3. THE SPECIAL INSPECTOR/TESTING SPECIALIST SHALL BE INDEPENDENT OF THE CONTRACTOR TO AVOID CONFLICT OF INTEREST.
4. THE SPECIAL INSPECTOR IS OBLIGATED TO BOTH THE OWNER AND THE BUILDING OFFICIAL FOR OBSERVING THAT THE WORK IS EXECUTED IN ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDUMS, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER.
5. SPECIAL INSPECTORS SHALL KEEP ORGANIZED RECORDS OF INSPECTIONS AND SUBMIT INSPECTION REPORTS WITH A MINIMUM WEEKLY FREQUENCY TO THE CONTRACTOR, BUILDING OFFICIAL, ENGINEERS, AND ARCHITECTS INDIVIDUALLY. REPORTS SHOULD INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION TO THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THEY SHOULD BE REPORTED TO THE BUILDING OFFICIAL AND TO THE ENGINEER OF RECORD.
6. A FINAL SIGNED REPORT IS TO BE SUBMITTED AT THE END OF THE PROJECT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES. THIS REPORT SHOULD STATE THAT ALL ITEMS REQUIRING SPECIAL INSPECTION AND TESTING WERE FULFILLED AND REPORTED TO THE APPLICABLE OF THEIR KNOWLEDGE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND THE APPLICABLE PROVISIONS OF THE IBC. ITEMS NOT IN CONFORMANCE, UNRESOLVED ITEMS, OR ANY DISCREPANCIES IN INSPECTION COVERAGE SHOULD BE SPECIFICALLY ITEMIZED.
7. THE FOLLOWING ARE THE QUALIFICATIONS FOR INDIVIDUALS PERFORMING SPECIFIC INSPECTIONS OR TESTS INCLUDING IN THIS PROJECT'S SSI:
 - A. AMERICAN CONCRETE INSTITUTE (ACI):
 - CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 (ACI-CFTT)
 - CONCRETE CONSTRUCTION INSPECTOR (ACI-COI)
 - LABORATORY TESTING TECHNICIAN - GRADE 1 OR 2 (ACI-LT1)
 - STRENGTH TESTING TECHNICIAN (ACI-STT)
 - B. AMERICAN WELDING SOCIETY (AWS):
 - CERTIFIED WELDING INSPECTOR (AWS-CWI)
 - CERTIFIED STRUCTURAL STEEL INSPECTION (AWS/ASCS-SSI)
 - C. AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT)
 - NON-DESTRUCTIVE TESTING TECHNICIAN - LEVEL II OR III (ASNT)
 - D. INTERNATIONAL CODE COUNCIL (ICC):
 - STRUCTURAL MASONRY SPECIAL INSPECTOR (ICC-SMSI)
 - STRUCTURAL, STEEL, AND BOLTING SPECIAL INSPECTOR (ICC-SSSI)
 - STRUCTURAL WELDING SPECIAL INSPECTOR (ICC-SWI)
 - PRESTRESSED CONCRETE SPECIAL INSPECTOR (ICC-PCSI)
 - REINFORCED CONCRETE SPECIAL INSPECTOR (ICC-RCSI)
 - SOILS SPECIAL INSPECTOR (ICC-SSI)
 - E. PROFESSIONAL STATE LICENSING:
 - PROFESSIONAL ENGINEER (PE)

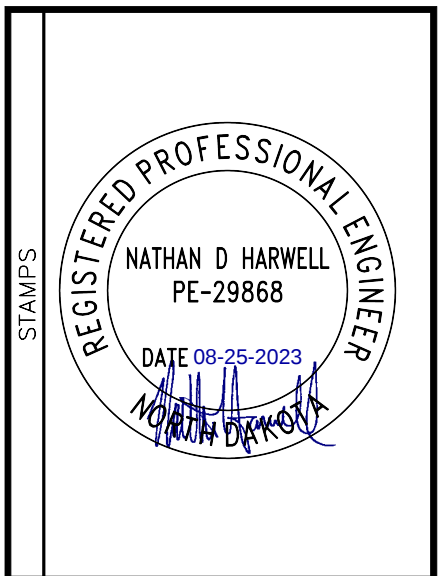
THE FOLLOWING TABLES INDICATED THE MINIMUM SPECIFIC SPECIAL INSPECTION AND TESTING TO BE PERFORMED ON THIS PROJECT AND THE QUALIFICATIONS OF THE INDIVIDUAL INSPECTORS AND TESTING TECHNICIANS.

1. CONTINUOUS SPECIAL INSPECTION: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. 100% OF THE WORK MUST BE INSPECTED AND IT MUST BE INSPECTED AS THE WORK IS BEING PERFORMED.
2. PERIODIC SPECIAL INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN, OR IS BEING, PERFORMED AND AT THE COMPLETION OF WORK.
3. YES: THIS INSPECTION AND/OR TESTING IS REQUIRED BY THE BUILDING CODE AND MUST BE PERFORMED.
4. NO: THIS INSPECTION AND/OR TESTING IS NOT APPLICABLE TO THE PROJECT, AND NEED NOT BE PERFORMED.
5. SUGGESTED: THIS INSPECTION AND/OR TESTING IS NOT REQUIRED BY THE BUILDING CODE. HOWEVER, THE ENGINEER OF RECORD RECOMMENDS IMPLEMENTING THEM FOR QUALITY ASSURANCE. A POTENTIAL EXISTS FOR THESE MEASURES TO BE A VALUE ADDED SERVICE FOR THE OWNER TO ENSURE PROPER PROJECT COMPLETION.

SPECIAL INSPECTIONS - SOILS AND FOUNDATIONS					
<u>VERIFICATION AND INSPECTION</u>	<u>AGENCY QUALIFICATION</u>	<u>SCOPE</u>	<u>REFERENCED STANDARD</u>	<u>FREQUENCY OF INSPECTION</u>	<u>REQUIRED ON PROJECT</u>
1. Shallow Foundations	ICC-SSI PE-GEOTECH.	Inspect Soils below footings for adequate bearing capacity and consistency with geotechnical report.	N/A	Periodic testing to verify compliance with project specifications & geotechnical report.	YES
2. Controlled Structural Fill	ICC-SSI PE-GEOTECH.	Perform applicable sieve tests and modified Proctor tests of each source of fill. Inspect placement, lift thickness, and compaction. Test density of each lift. Verify extent and slope of fill placement.	Applicable ASTM Specs	Periodic testing to verify compliance with project specifications & geotechnical report.	YES
3. Deep Foundation: Driven Piles	PE-GEOTECH.	Inspect and log pile driving operations. Record pile driving resistance and verify compliance with driving criteria. Inspect piles for damage from driving and plumbness. Verify pile size, length and accessories.	-	Continuous	NO
4. Deep Foundations: Drilled Pier Foundations	PE-GEOTECH.	Inspect installation and maintain complete records for each pier. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitable of each bearing strata.	-	Continuous	NO

SPECIAL INSPECTION - CAST-IN-PLACE CONCRETE CONSTRUCTION					
<u>VERIFICATION AND INSPECTION</u>	<u>AGENCY QUALIFICATION</u>	<u>SCOPE</u>	<u>REFERENCED STANDARD</u>	<u>FREQUENCY OF INSPECTION</u>	<u>REQUIRED ON PROJECT</u>
1. Mix Design	ACI-CCI ICC-RCSI	Review concrete batch tickets and verify compliance with approved mix design. Verify that water added on site does not exceed that allowed by the mix design.	ACI 318	Prior to start of concrete construction on project. Periodic	YES
2. Material Certification	STRUCTURAL ENGINEER OF RECORD	Verify that concrete supplier's concrete components meet requirements set forth by applicable ASTM standards.	Applicable ASTM & ACI Specs	Prior to start of concrete construction on project	YES
3. Reinforcement Installation	ACI-CCI ICC-RCSI	Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters.	Applicable ACI Specs	Prior to each casting	YES
4. Welding of Reinforcing	AWS-CWI	Visually inspect all reinforcing steel welds. Verify weldability of reinforcing steel. Inspect preheating of steel when required.	Applicable ASTM & ACI Specs	Continuous	YES
5. Anchor Rods	ACI-CCI ICC-RCSI	Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.	Applicable ASTM & ACI Specs	Prior to each casting	YES
6. Concrete Placement	ACI-CCI ICC-RCSI	Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.	Applicable ACI Specs	Periodic	YES
7. Sampling and Testing of Concrete	ACI-CFTT ACI-LTT ACI-STT	Test Concrete compressive strength, slump, air content and temperature.	Applicable ACI and ASTM Specs	Not less than once a day, nor less than once for every 150 cubic yard, nor less than once for every 5000 SF of surface area for slabs or walls	YES
8. Curing and Protection	ACI-CCI ICC-RCSI	Inspect curing, cold weather protection and hot weather protection procedures.	Applicable ACI Specs	Monitor on site after each casting	YES
9. Post-Installed Anchors	ACI-CCI ICC-RCSI	Inspect installation for type of anchor, embedment, edge distance & adhesive required.	ACI & Supplier's Specs	Continuous	YES
Exceptions per IBC 1704.4: Special Inspections are not required for the following unless otherwise required by the Building Official or Structural Engineer of the Record.					
1. Nonstructural concrete slabs supported directly on the ground.					
2. Concrete patios, driveways and sidewalks, on grade.					

SPECIAL INSPECTION - WOOD CONSTRUCTION					
<u>VERIFICATION AND INSPECTION</u>	<u>AGENCY QUALIFICATION</u>	<u>SCOPE</u>	<u>REFERENCED STANDARD</u>	<u>FREQUENCY OF INSPECTION</u>	<u>REQUIRED ON PROJECT</u>
1. Fabricator Certification/ Quality Control Procedures	-	Fabricated to be enrolled in a nationally accepted inspection program acceptable to the Structural drawings and specifications. The approved fabricator to submit a certification of compliance to a the building official.	-	N/A	YES
2. Material Grading	-	Review sheathing, framing members, wall studs, plates for proper species and grade	Applicable APA & AITC Specs	Prior to Construction & Periodic during construction	YES
3. Connections	-	Inspect connection of framing members. Including nail and bolts for size and spacing. Verify metal hardware connectors for type and proper installation	ANSI/AF&PA & Supplier's Specs	Periodic	YES
4. Framing and Details	-	Inspect framing for plumbness, spacing, bearing length, and size. Verify bracing is installed as required.	ANSI/AF&PA	Periodic	YES
5. Diaphragms and Shearwalls	-	Inspect size, configuration, blocking and fastening of shearwalls and diaphragms. Verify panel grade and thickness. Verify size and installation of hold-downs and straps.	ANSI/AF&PA & Supplier's Specs	Periodic	YES
6. Prefabricated Wood Trusses & I-Joists	-	See Item #1. Inspect installation for location, spacing, bearing length, connectors, and permanent bracing.	ANSI/AF&PA & Supplier's Specs	Periodic	YES



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SPECIAL INSPECTIONS

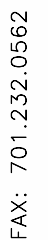
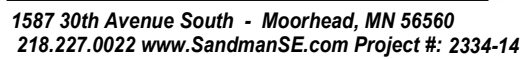
S0.2



1. TYPICAL INTERIOR SLAB ON GRADE, UNO
THICKNESS = 5"
REINFORCEMENT = #4 @1'-6" OC
BASE = MIN OF 6" COMPACTED GRANULAR FILL, UNO BY GEOTECHNICAL REPORT
VAPOR RETARDER/BARRIER = 10 MIL POLY
T.O. SLAB ELEVATION = 100'-0"
SEE ARCH FOR SLOPES AND RECESSES

CONT FOOTING SCHEDULE					
MARK	SIZE	THICKNESS	LONGITUDINAL REINFORCEMENT	TRANSVERSE REINFORCEMENT	NOTES/COMMENTS
CF2	2'-0" CONT	1'-0"	(2) #5 CONT	#4 @ 4'-0" OC	-

CONT FOOTING SCHEDULE					
MARK	SIZE	THICKNESS	LONGITUDINAL REINFORCEMENT	TRANSVERSE REINFORCEMENT	NOTES/COMMENTS
CF2	2'-0" CONT	1'-0"	(2) #5 CONT	#4 @ 4'-0" OC	-



DATE: 8-25-2023

DRAWN BY: HH

FILE NAME:

REVISIONS:

CENTRE INC.

HOP

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MANDAN, ND

FOUNDATION PLAN

S1.1



1. TRUSS BEARING ELEVATION = 112'-0" UNO
2. SEE SHEET \$0.1 FOR TYPICAL EXTERIOR LOAD BEARING WLL STUDS, WALL SHEATHING AND ROOF SHEATHING.
3. TYPICAL WALLS TO BE 2x6 STUDS @ 1'-4" OC

HEADER SCHEDULE				
MARK	SIZE	JACK STUD	KING STUDS	COMMENTS
H1	(2) 2x8	(1) 2x6	(1) 2x6	-
H2	(3) 2x12	(1) 2x6	(2) 2x6	-

SINGLE STORY SHEAR WALL SCHEDULE									
PLAN LABEL	SHEATHING	SIDES	EDGE FASTENING	FIELD FASTENING	SILL PL FASTENING	SILL ANCHOR WASHERS	HOLD-DOWN	HOLD-DOWN ANCHOR	END POST
SW-1	2 1/2" ZIP-R SHEATHING BLOCKED (EXTERIOR)	1	INSULATED SHEATHING: 3" OC	INSULATED SHEATHING: 12" OC	5/8" AR @ 4:0' OC	BPS58-3HDG	DTT22-SDS2.5	1/2"x9 POST-INSTALLED ADHESIVE ANCHOR (10" EMBED)	(2) 2x6
SW-2	2 1/2" ZIP-R SHEATHING BLOCKED (EXTERIOR) + 1/2" GYP BOARD BLOCKED (INTERIOR)	2	INSULATED SHEATHING: 3" OC GYP BOARD: 6" OC	INSULATED SHEATHING: 12" OC GYP BOARD: 12" OC	5/8" AR @ 3:4" OC	BPS58-3HDG	HDU8-SDS2.5	7/8"x9 CAST IN-PLACE ANCHOR ROD (16" EMBED)	(2) 2x6

[illegible]

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ROOF FRAMING PLAN

S2.1



CONCRETE REINFORCEMENT CLEAR COVER, UNO (NON-PRESTRESSED)	
CONDITION AND DESIGNATION	CLEAR COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THRU #18	2"
CONCRETE EXPOSED TO EARTH OR WEATHER: #5 OR SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT W/ EARTH	
SLABS, WALLS, JOISTS: #14 AND #18	1 1/2"
SLABS, WALLS, JOISTS: #11 AND SMALLER	3/4"
BEAMS, COLUMNS (PRIMARY REINF. TIES, STIRRUPS, SPIRALS)	1 1/2"

3. ALL ADJUSTMENT FACTORS THAT APPLY SHALL BE USED TO CALCULATE REQUIRED
SPICE LENGTH

4. UNLESS OTHERWISE NOTED ON PLANS OR DETAILS, LAP THE FOLLOWING BARS AS
DEFINED IN LAP SPICE TABLE

TYPICAL WALL BASE

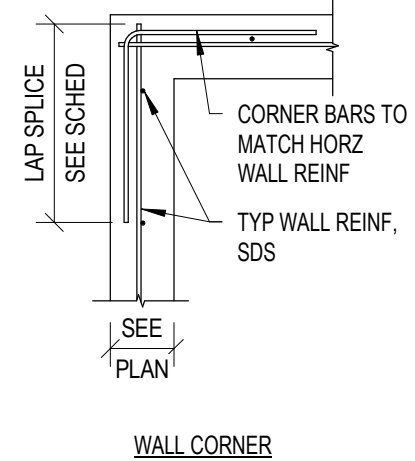
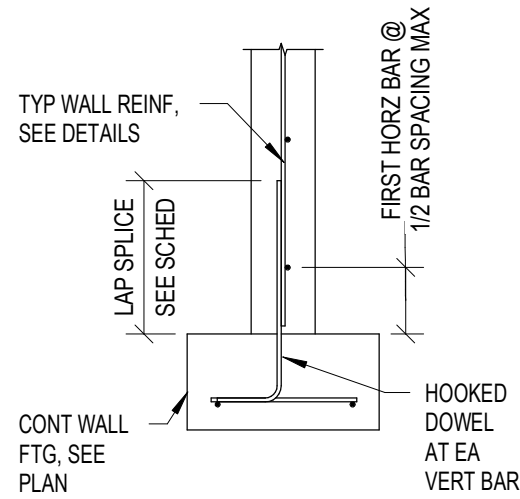
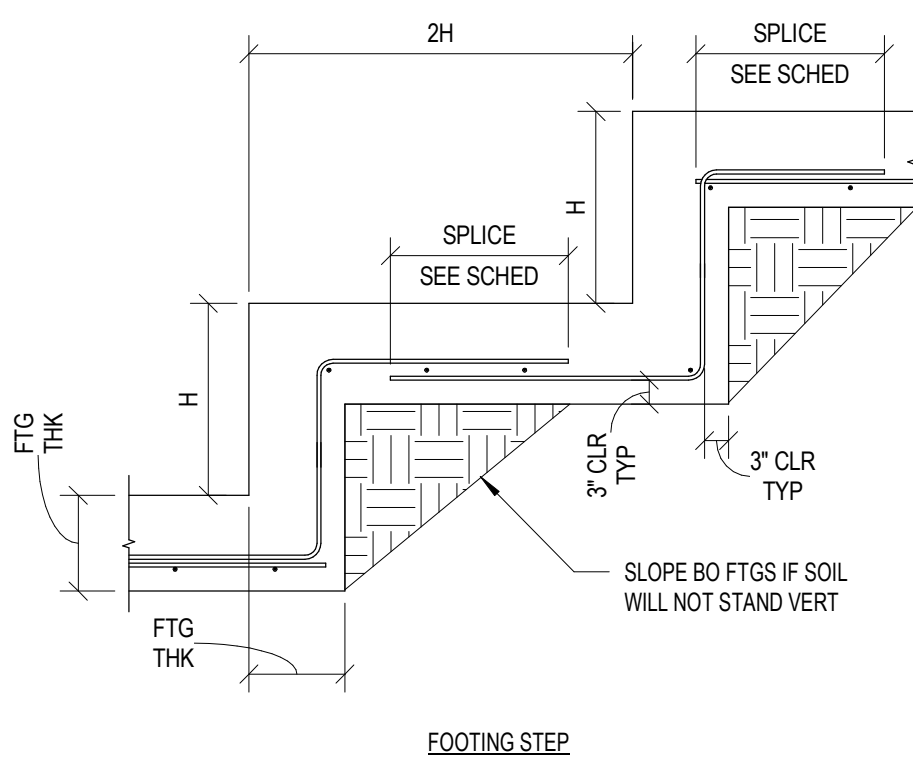
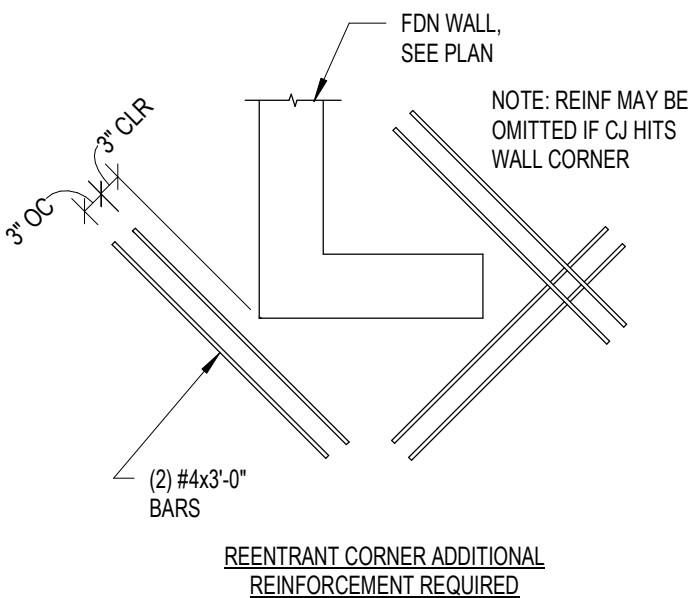


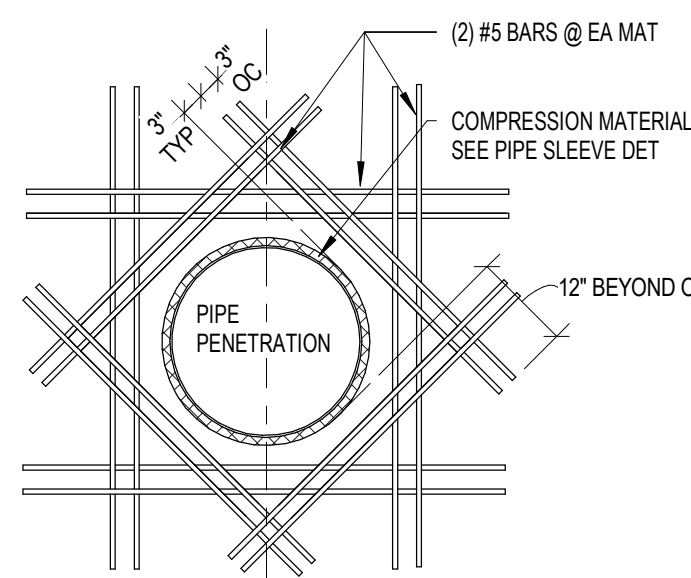
Diagram illustrating the cross-section of a concrete slab with reinforcement details:

- DE SAWCUT
- SEE PLAN
- 1/4 SLAB DEPTH
- SLAB REINF. SEE PLAN
- PLACE R/W 2' CLR FROM TOP OF SLAB
- SEE PLAN
- MATERIAL NOTES
- VAPOR BARRIER, SEE PLAN
- SEE PLAN

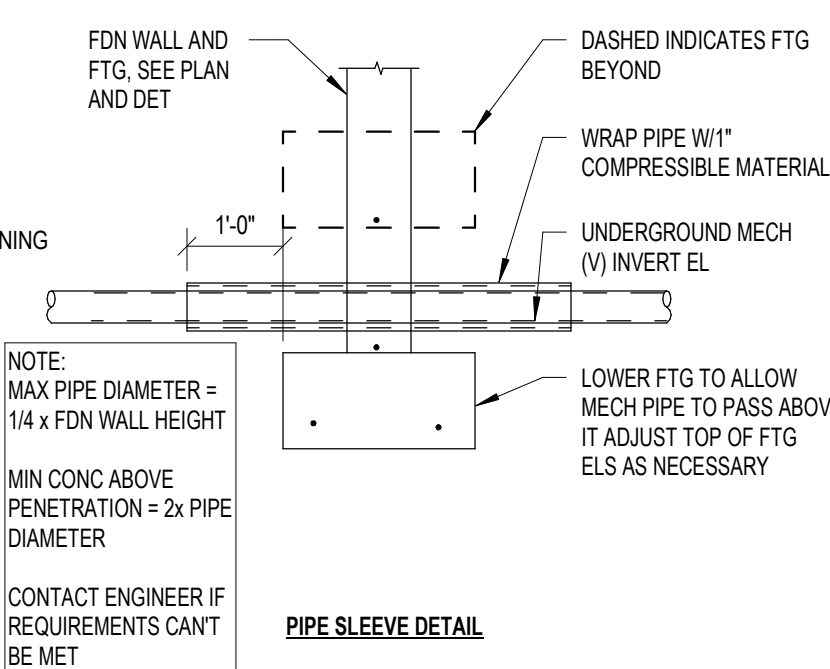
TYP SLAB CONTROL JOINT



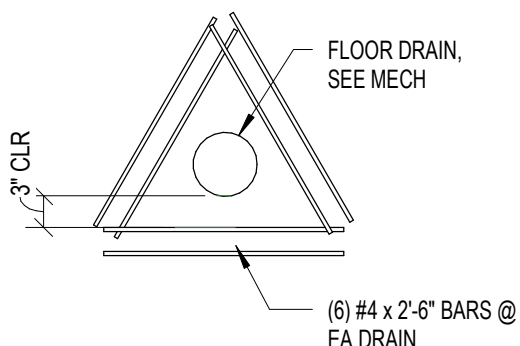
FOOTING CORNER



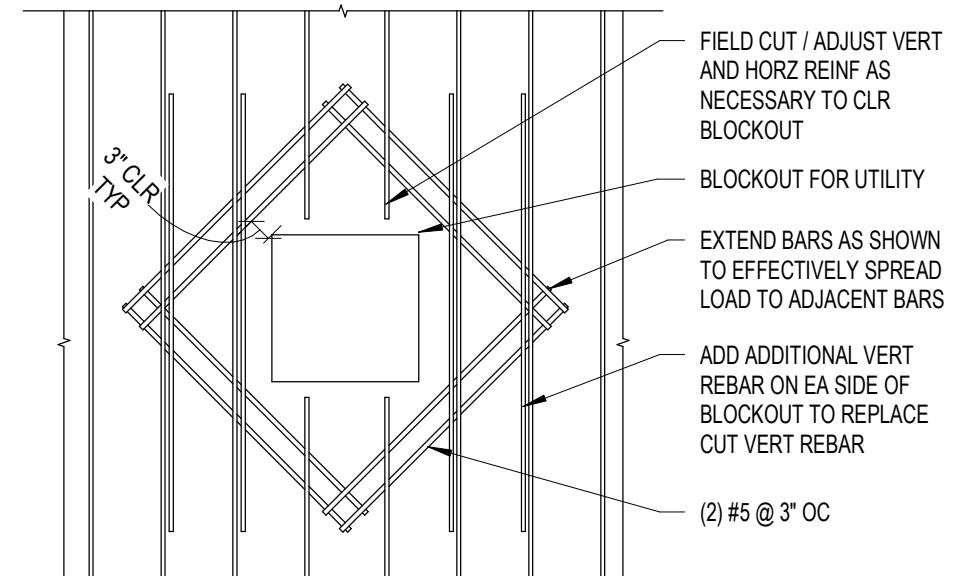
CORNER BARS @ PIPE OPENING



NOTE:
MAX PIPE DIAMETER =
 $1/4 \times \text{FDN WALL HEIGHT}$
MIN CONC ABOVE
PENETRATION = $2 \times \text{PIPE}$
DIAMETER
CONTACT ENGINEER IF
REQUIREMENTS CAN'T
BE MET

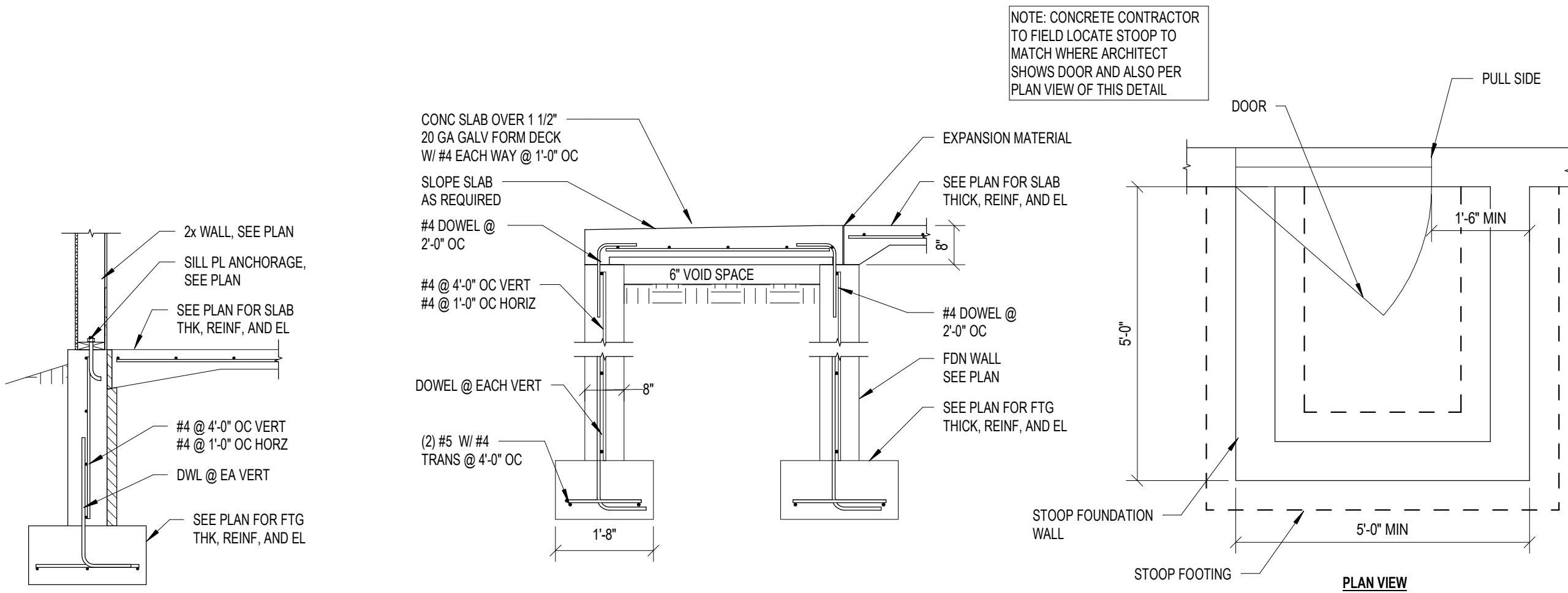


TYPICAL FLOOR DRAIN REINFORCEMENT



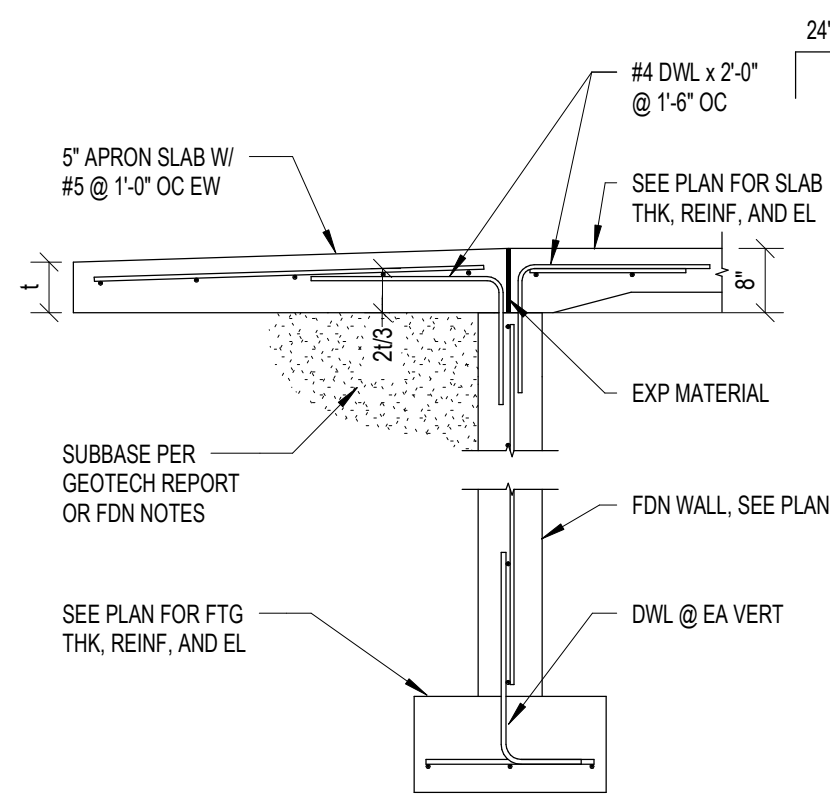
UTILITY BLOCKOUT DETAIL

S3.1 $1/2'' = 1'-0$

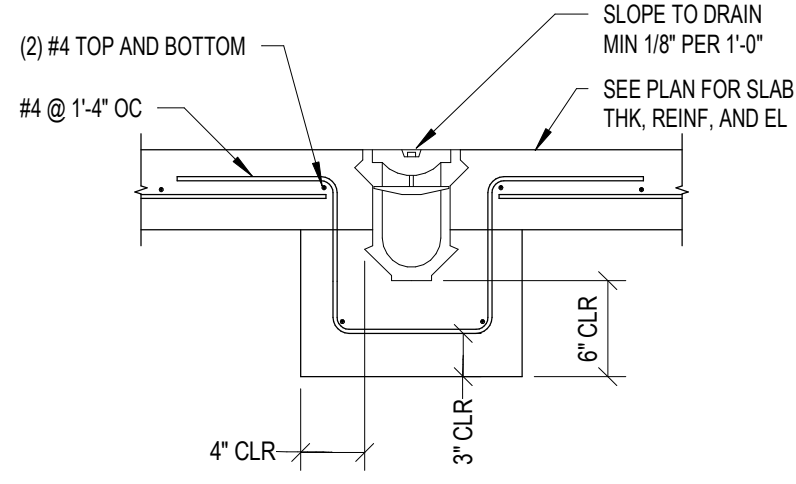


NOTE: CONCRETE CONTRACTOR
TO FIELD LOCATE STOOP TO
MATCH WHERE ARCHITECT
SHOWS DOOR AND ALSO PER
PLAN VIEW OF THIS DETAIL

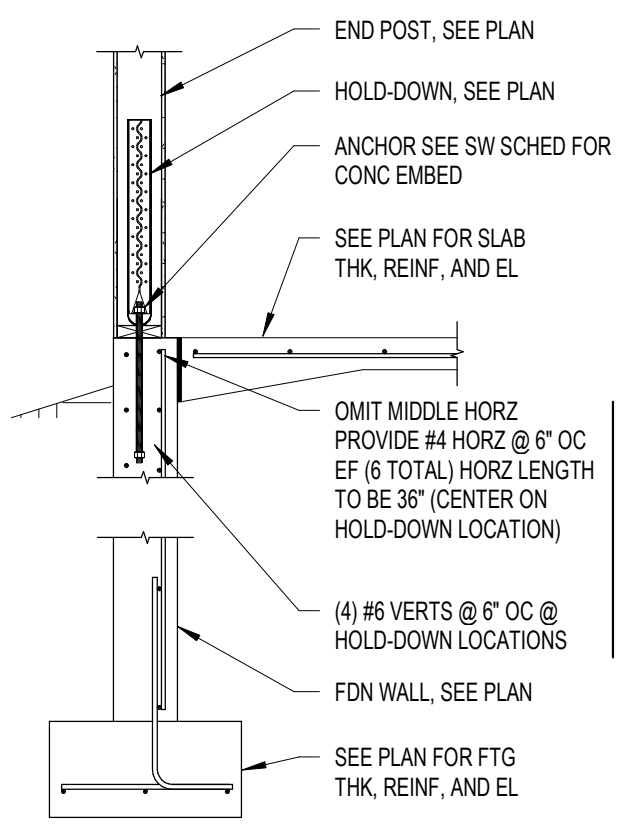
PLAN VIEW



S3.1 $1/2'' = 1'-0''$



S3.1 $1/2'' = 1'-0''$



WHERE HOLD-DOWNS ARE
PLACED @ WALL CORNERS,
PROVIDE A HOOK OF 18" ON
EA HORZ @ TOW

S3.1 $1/2'' = 1'-0''$

Impervious surface setbacks. For multifamily residential, commercial and industrial properties abutting either a gateway or a frontage road abutting a gateway, hard surfaces visible from the gateway used for parking, loading, storage and display shall be set back a distance sufficient to provide green space of a minimum of ten feet wide between the edge of the roadway/sidewalk and the hard surface. The green space may be located in the public right-of-way when space is available. Any planting in the public right-of-way must meet all related city regulations. Only five feet or less of private land will be required for setback, with remaining setback accommodated in the right-of-way or optionally on private land. Total impervious surface setbacks may be reduced to five feet, where a berm (3:1 slope), a wall (brick, stone or concrete), or a decorative railing of at least 2.5 feet in height and approved by the Mandan Architectural Review Commission is provided. Setbacks shall be landscaped with trees and shrubs, where possible, that may be included as part of the plant units required as follows: The minimum plant units for each 1,000 square feet of lot area or fraction thereof shall be four in commercial and multifamily residential districts, and 2.5 in industrial districts. Where hardship is proven, the MARC retains the option to relocate the green space requirement to another part of the lot or to dismiss the requirement in extreme situations.