

ISSUED FOR
CONSTRUCTION

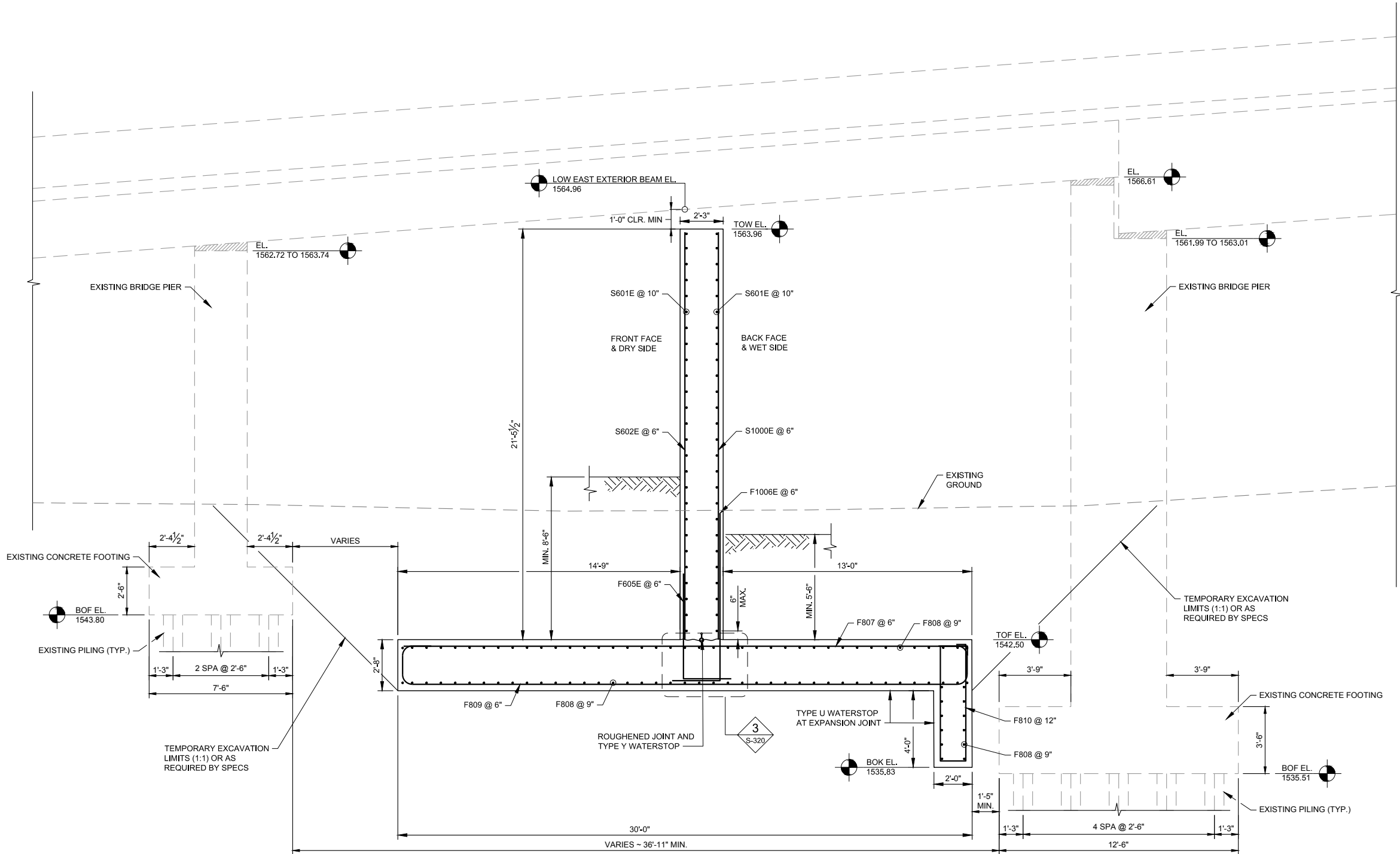
CADD USER: Bjorn Berg FILE: H:\FARGO\JEN300831\14_8313_010\CAD\PLANS\FINAL\352901_S_300 FLOODWALL DETAILS.DWG PLOT SCALE: 1:7985449 PLOT DATE: 12/27/2017 12:46 PM

LEGEND

EXISTING 3RD ST. BRIDGE

NOTES:

- FLOODWALL DIMENSIONS SHOWN ARE NOMINAL AND DO NOT INCLUDE FORMLINER.
- SEE NOTES ON SHEET S-301 FOR REBAR CLEARANCES.
- F605E AND F1006E TO MATCH VERTICAL WALL REINFORCEMENT.
- TOW = TOP OF WALL
- TOF = TOP OF FOOTING
- BOF = BOTTOM OF FOOTING
- BOK = BOTTOM OF KEY
- SEE SHEETS C-302 TO C-304 FOR GRADING ALONG WALL. ANY CHANGES IN GRADING ALONG THE WALL FROM THESE SHEETS SHALL BE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL VERIFY BEAM ELEVATIONS PRIOR TO FORMING. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER AND CONSTRUCTION SHALL STOP UNTIL THE ENGINEER HAS BEEN NOTIFIED AND HAS GRANTED APPROVAL TO PROCEED.
- EXISTING PILING SHALL NOT BE EXPOSED. CARE SHALL BE TAKEN TO MINIMIZE EXCAVATION NEXT TO PIERS.



1 WALL REINFORCEMENT SEGMENT A - MODIFIED UNDER 3RD ST. BRIDGE
(STA. 67+68.66 TO STA. 68+28.66)



MREFP PROJECT DATUM:
HORIZONTAL: NORTH DAKOTA STATE PLANE (NAD83), NORTH, US FT
VERTICAL: NAVD 88

THIS DOCUMENT WAS
ORIGINALLY ISSUED AND
SEALED BY LUKE J.
BECKERMANN, REGISTRATION
NUMBER PE-10087 ON 07-10-17
AND THE ORIGINAL DOCUMENT
IS STORED AT HOUSTON
ENGINEERING INC., 1401 21ST
AVE. N. FARGO, ND 58102

CLIENT	10/22/15	07/25/16	10/24/16						
AGENCY	10/22/15	07/25/16	10/24/16						
BID	-	-	-	07/10/17					
CONSTRUCTION	-	-	-	11/29/17					
RELEASED TO/FOR	A	B	C	0	1	2	3		
	DATE RELEASED								



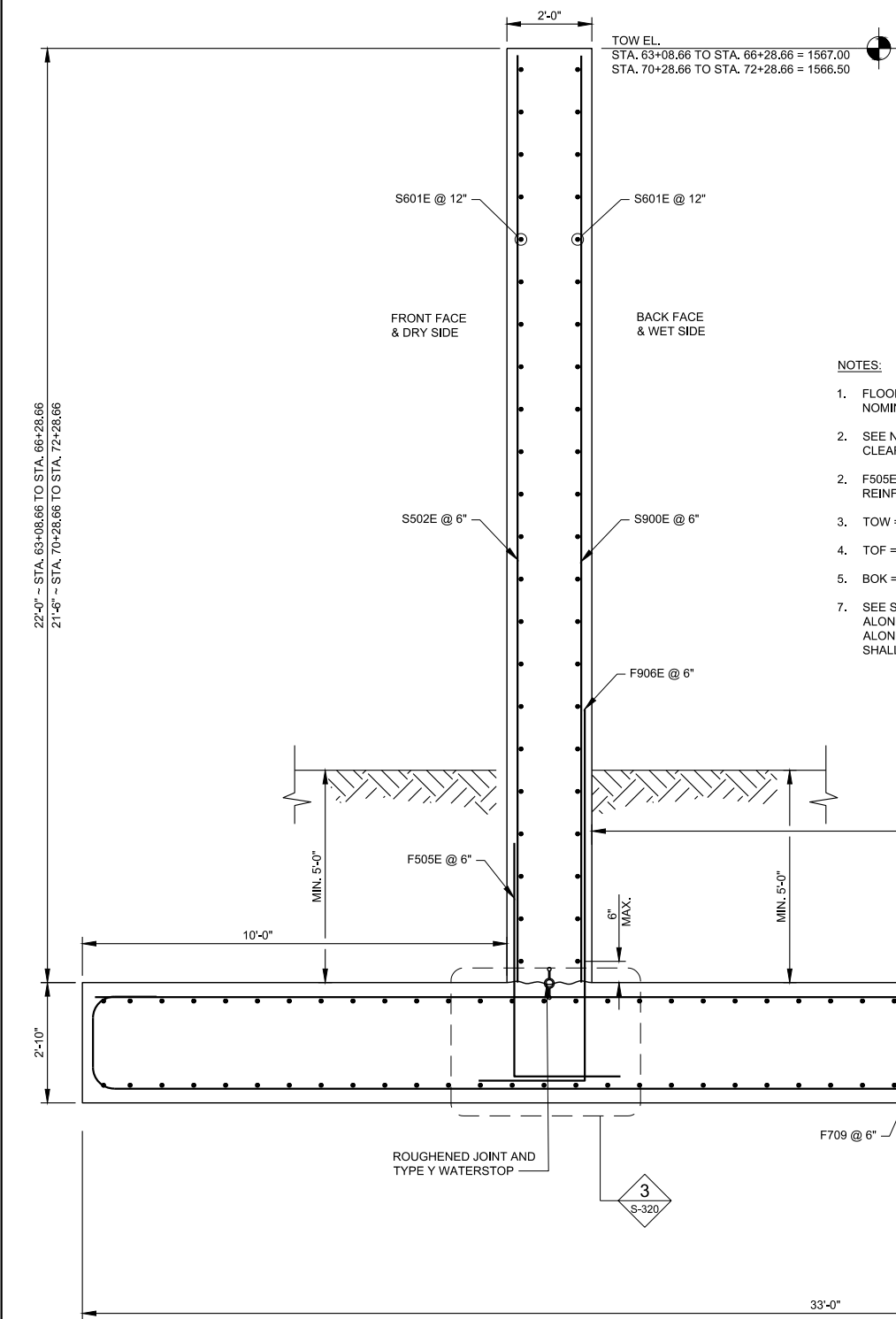
Scale	AS SHOWN
Date	07-10-17
Drawn	JER
Checked	NMI
Designed	LJB
Approved	LJB

SOURIS RIVER JOINT
WATER RESOURCE BOARD
MINOT, NORTH DAKOTA

MOUSE RIVER - PHASE MI-1
ENHANCED FLOOD PROTECTION PROJECT
FLOODWALL SECTION SEGMENT A MODIFIED

ENG. PROJECT No.	8313-010
CLIENT PROJECT No.	3529.1
DWG. No.	S-313
REV. No.	C-0

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- NOTES:
1. FLOODWALL DIMENSIONS SHOWN ARE NOMINAL AND DO NOT INCLUDE FORMLINER.
 2. SEE NOTES ON SHEET S-301 FOR REBAR CLEARANCES.
 2. F505E AND F906E TO MATCH VERTICAL WALL REINFORCEMENT.
 3. TOW = TOP OF WALL
 4. TOF = TOP OF FOOTING
 5. BOK = BOTTOM OF KEY
 7. SEE SHEETS C-302 TO C-304 FOR GRADING ALONG WALL, ANY CHANGES IN GRADING ALONG THE WALL FROM THESE SHEETS SHALL BE APPROVED BY THE ENGINEER.

1 WALL REINFORCEMENT SEGMENT B
(STA. 63+08.66 TO STA. 66+28.66)
(STA. 70+28.66 TO STA. 72+28.66)

MREFP PROJECT DATUM:				
HORIZONTAL: NORTH DAKOTA STATE PLANE (NAD83), NORTH, US FT				
VERTICAL: NAVD 88				
1	KNS	KAL	JDB	11/29/17
NO.	BY	CHK	APP.	DATE
REVISION DESCRIPTION				

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BID CONSTRUCTION		-	-	07/10/17	11/29/17				
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		DATE RELEASED							



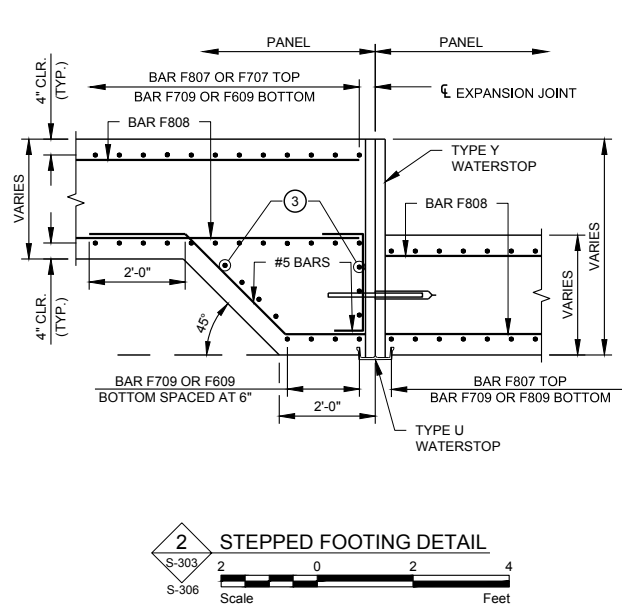
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SOURIS RIVER JOINT
WATER RESOURCE BOARD
MINOT, NORTH DAKOTA

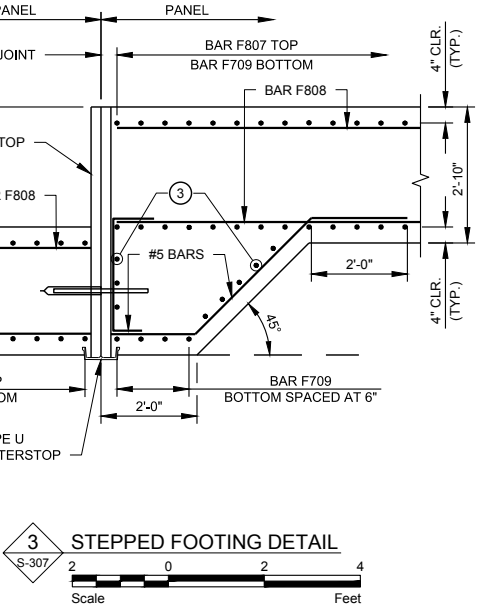
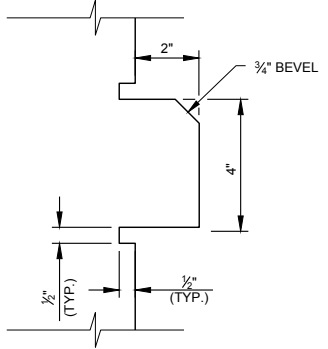
MOUSE RIVER - PHASE MI-1 ENHANCED FLOOD PROTECTION PROJECT	
FLOODWALL SECTION SEGMENT B	

ENG. PROJECT No. 8313-010	
CLIENT PROJECT No. 3529.1	
DWG. No. S-314	REV. No. C-0

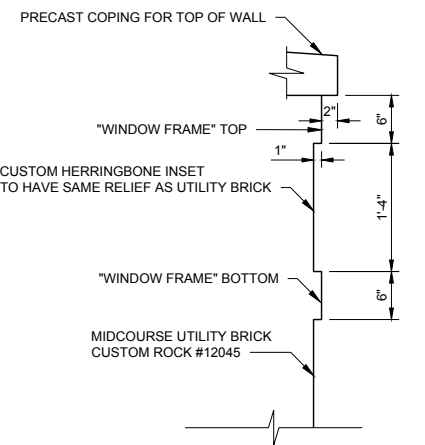
- NOTES:
- 1 ALL BARS RELATED TO STEPPED FOOTING CONSTRUCTION SHALL BE INCIDENTAL TO OTHER ITEMS WITH NO DIRECT COMPENSATION.
 - 2 6" MAX. SPACING. BARS TO BE SAME AS BAR F609 OR F709 OF FOOTING.



4 CONCRETE LEDGE DETAIL
NOT TO SCALE:

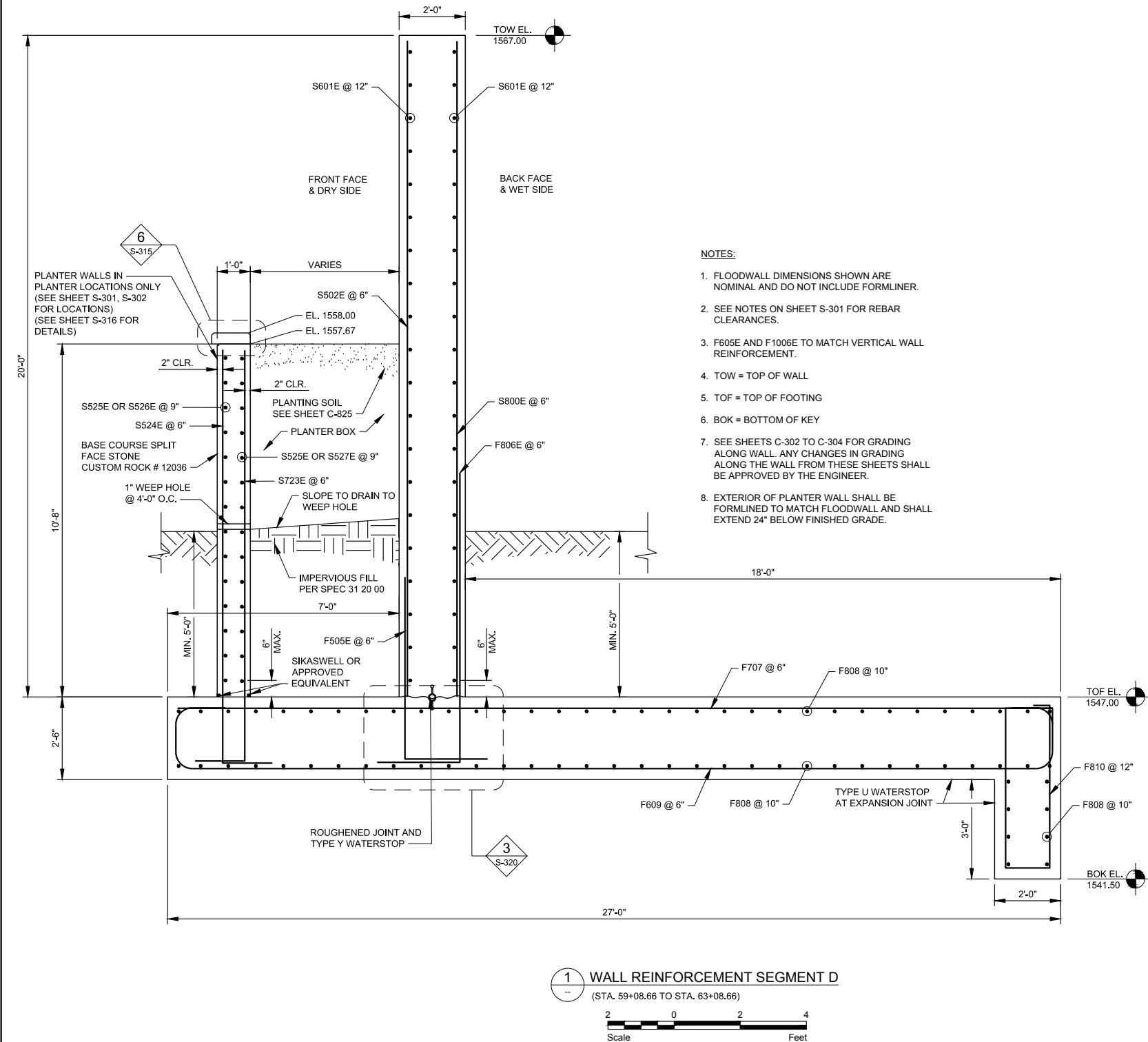


5 HERRINGBONE INSET SECTION



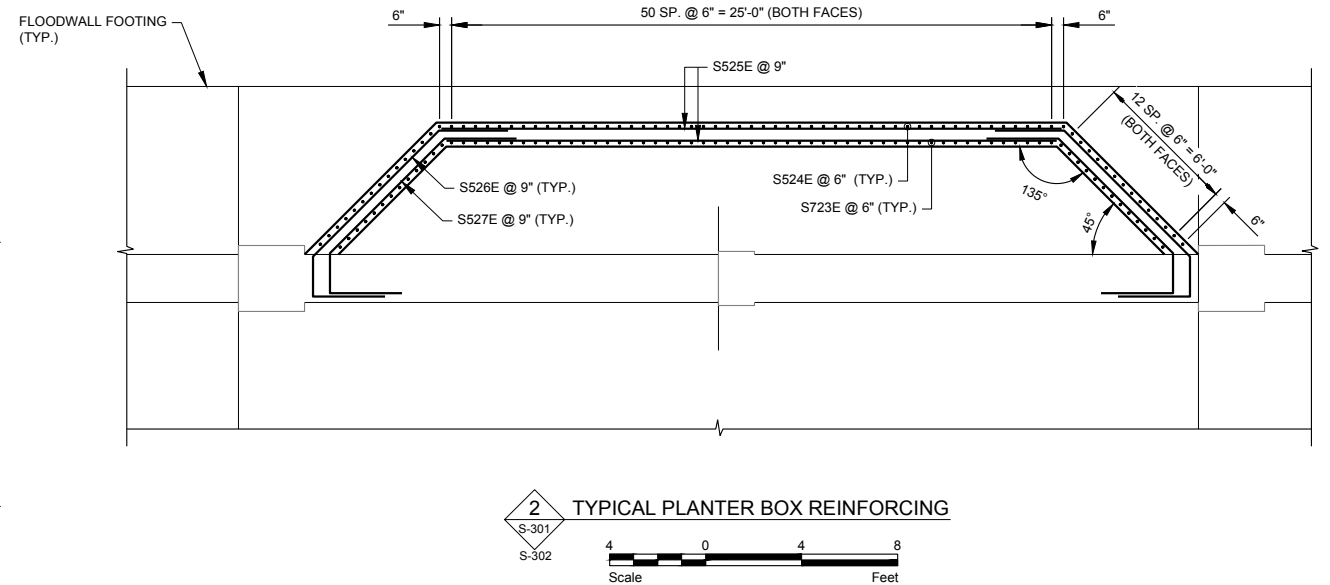
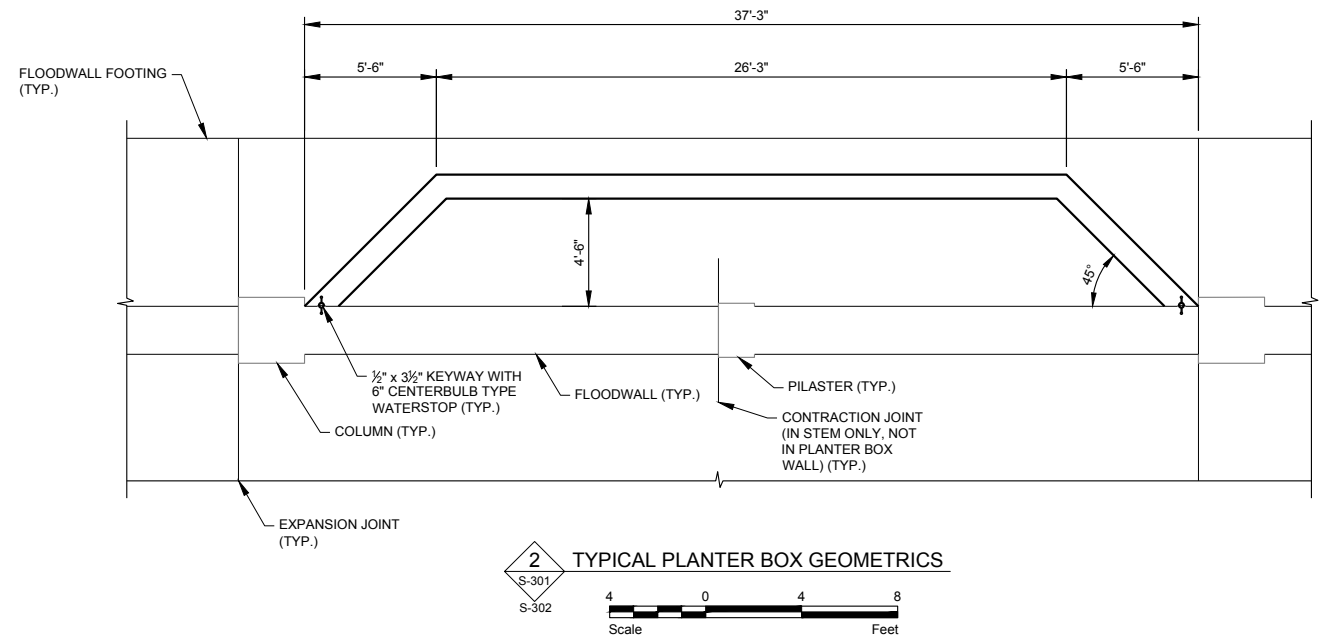
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NOTES:

- FLOODWALL DIMENSIONS SHOWN ARE NOMINAL AND DO NOT INCLUDE FORMLINER.
- SEE NOTES ON SHEET S-301 FOR REBAR CLEARANCES.
- F605E AND F1006E TO MATCH VERTICAL WALL REINFORCEMENT.
- TOW = TOP OF WALL
- TOF = TOP OF FOOTING
- BOK = BOTTOM OF KEY
- SEE SHEETS C-302 TO C-304 FOR GRADING ALONG WALL. ANY CHANGES IN GRADING ALONG THE WALL FROM THESE SHEETS SHALL BE APPROVED BY THE ENGINEER.
- EXTERIOR OF PLANTER WALL SHALL BE FORMLINED TO MATCH FLOODWALL AND SHALL EXTEND 24" BELOW FINISHED GRADE.



MREFP PROJECT DATUM:
HORIZONTAL: NORTH DAKOTA STATE PLANE (NAD83), NORTH, US FT
VERTICAL: NAVD 88

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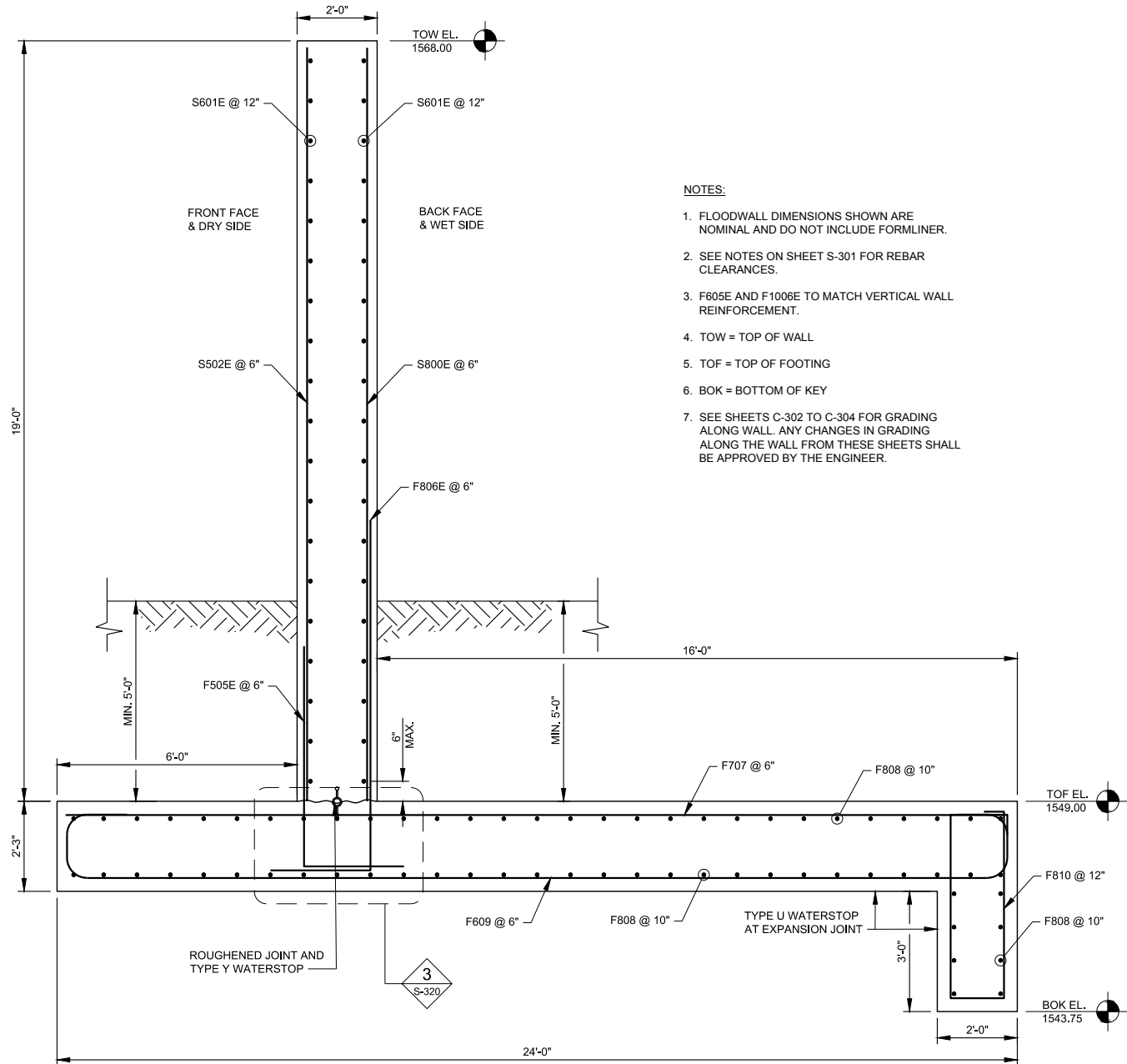
SOURIS RIVER JOINT
WATER RESOURCE BOARD
MINOT, NORTH DAKOTA

MOUSE RIVER - PHASE MI-1
ENHANCED FLOOD PROTECTION PROJECT
FLOODWALL SECTION SEGMENT D

ENG. PROJECT No.	8313-010
CLIENT PROJECT No.	3529.1
DWG. No.	S-316
REV. No.	C-0

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CADD USER: Bjorn Berg FILE: H:\FARGO\JEN83008313\14_8313_010\CADD\PLANS\FINAL\352901_S_300 FLOODWALL DETAILS.DWG PLOT SCALE: 1:7985449 PLOT DATE: 12/27/2017 12:47 PM



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1 WALL REINFORCEMENT SEGMENT E
(STA. 50+00.00 TO STA. 50+48.16)
(STA. 51+16.66 TO STA. 53+48.66)
2 0 2 4
Scale Feet

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VERTICAL: NAVD 88

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SOURIS RIVER JOINT
WATER RESOURCE BOARD
MINOT, NORTH DAKOTA

MOUSE RIVER - PHASE MI-1
ENHANCED FLOOD PROTECTION PROJECT
FLOODWALL SECTION SEGMENT E

ENG. PROJECT No.	8313-010
CLIENT PROJECT No.	3529.1
DWG. No.	S-317
REV. No.	C-0

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