

US Army Corps  
of Engineers  
Portland District

# THE DALLES LOCK AND DAM ICE AND TRASH SLUICeway SPRAY CONTROL

THIS PROJECT WAS DESIGNED BY THE PORTLAND DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

\_\_\_\_\_  
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CHIEF, DESIGN BRANCH

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CHIEF, ENGINEERING & CONSTRUCTION DIVISION

\_\_\_\_\_  
AARON L. DORF  
COLONEL, CORPS OF ENGINEERS  
DISTRICT COMMANDER

DATE: \_\_\_\_\_

SOLICITATION NUMBER: W9127N19B0031



**US Army Corps  
of Engineers®**  
PORTLAND DISTRICT

DATE 07	DATE 06	DATE 05	DATE 04	DATE 03	DATE 02	DATE 01	DATE	APPR.

								MARK

DESIGNED BY: J. HANSEN, P.E.	DATE:
DRAWN BY: J. ROBERTS	DESIGNED BY: SOLUTIONS: WJZ/THB031
SUBMITTED BY: MATTHEW D. HANSON, P.E.	CONTRACT NO.:
PLOT SCALE: 1"=1'	FILE NAME: DDD1.105_G-002XXX.dgn
ANSI D	DRAWING NUMBER: G-002

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON
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**THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL**  
DRAWING INDEX

SHEET  
IDENTIFICATION  
**G-002**

DISCIPLINE	FILE NAME	DRAWING TITLES	SHEET ACTION No.
GENERAL	DDD1.105_G-001CSD.dgn	G-001 COVER SHEET	6
	DDD1.105_G-002XXX.dgn	G-002 DRAWING INDEX	6
	DDD1.105_G-003XXX.dgn	G-003 GENERAL NOTES, LEGEND, AND ABBREVIATIONS	6
	DDD1.105_G-101XXX.dgn	G-101 DISTRICT BOUNDARY, VICINITY MAP, AND PROJECT PHOTO	6
	DDD1.105_G-102XXX.dgn	G-102 SLUICEWAY ISOMETRICS - EXISTING CONDITIONS	6
STRUCTURAL	DDD1.105_SD101XXX.dgn	SD101 DEMOLITION - PLAN	6
	DDD1.105_SD201XXX.dgn	SD201 DEMOLITION - DEVELOPED EAST WALL ELEVATION	6
	DDD1.105_S-101XXX.dgn	S-101 SLUICEWAY PLAN - PANEL LAYOUT AND ISOMETRIC	6
	DDD1.105_S-201XXX.dgn	S-201 SLUICEWAY - DEVELOPED ELEVATIONS	6
	DDD1.105_S-301.dgn	S-301 SLUICEWAY - TRANSVERSE SECTIONS	6
	DDD1.105_S-501.dgn	S-501 PANEL TO WALL - CONNECTION DETAILS	6
	DDD1.105_S-502.dgn	S-502 PANEL TO PANEL - CONNECTION DETAILS	6
INFORMATIONAL	DDD1-1-4-3.1/25	315 SLUICEWAY I	5
	DDD1-1-4-3.1/26	316 SLUICEWAY II	5
	DDD1-1-4-3.1/27	317 BRIDGE OVER SLUICEWAY	5

**NOTES:**

SHEET ACTION NUMBER IDENTIFICATION KEY SHALL BE AS SHOWN BELOW:

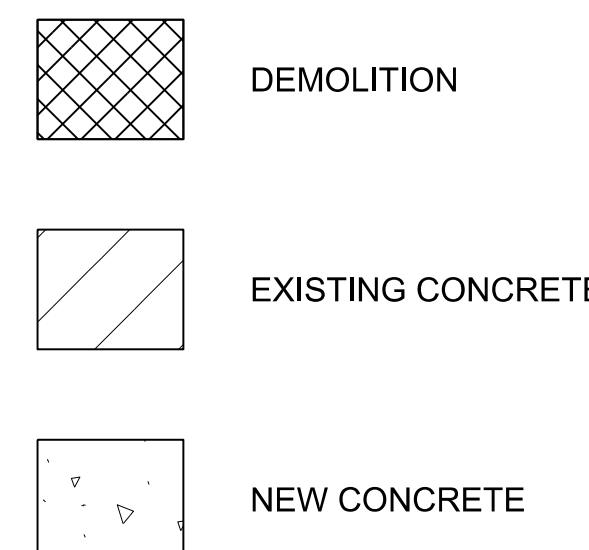
- 1. DENOTES FIO DRAWING IS OBSOLETE AT THE COMPLETION OF THIS CONTRACT.
- 2. DENOTES DRAWING SHALL BE UPDATED AT THE COMPLETION OF THIS CONTRACT BY THE CONTRACTOR.
- 3. DENOTES FIO DRAWING WILL BE SUPERCEDED BY THE FOLLOWING DRAWINGS AT THE COMPLETION OF THIS CONTRACT.
- 4. DENOTES FIO DRAWING WAS REFERENCED BY THE FOLLOWING CONTRACT DRAWINGS.
- 5. DENOTES FIO DRAWING IS FOR REFERENCE ONLY.
- 6. DENOTES ONLY CONTRACTOR REDLINE MARK-UPS ARE REQUIRED.

D  
C  
B  
A

THE FOLLOWING ABBREVIATIONS MAY BE USED ON THE DRAWINGS IN THIS VOLUME

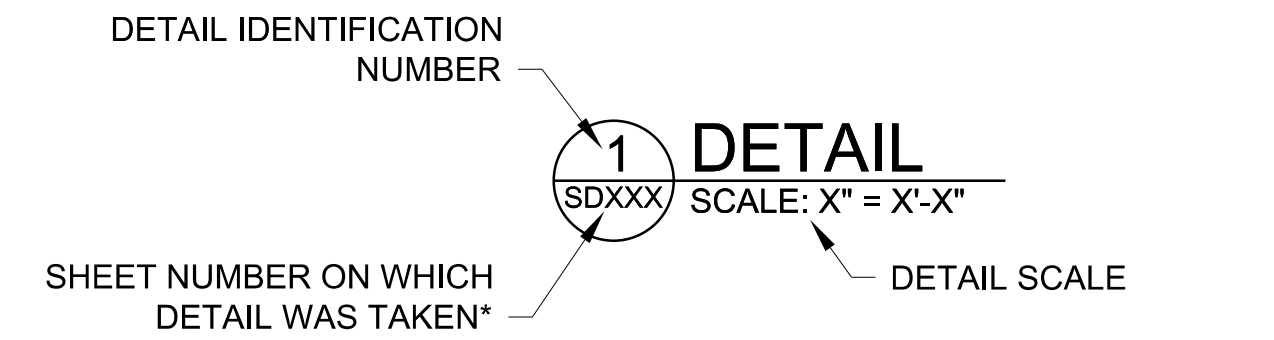
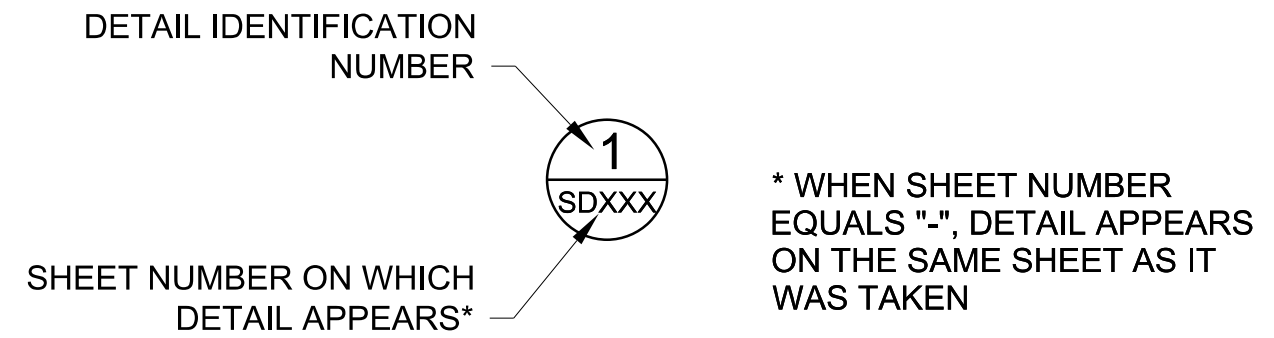
ANCH.	= ANCHOR	MIN	= MINIMUM
A.B.	= ANCHOR BOLT	M.B.	= MACHINE BOLT
AC	= ASPHALT CONCRETE	MECH.	= MECHANICAL
APPROX.	= APPROXIMATE	MK	= MARK
ARCH.	= ARCHITECTURAL	MSE	= MECHANICALLY STABILIZED EARTH
ARV	= AIR RELEASE VALVE	NAT.	= NATURAL
AWS	= ATTRACTION WATER SUPPLY	N.C.	= NO CHAMFER
B.C.	= BOLT CENTERS	NF	= NEAR FACE
B.F.	= BOTTOM FACE	NO.	= NUMBER
BG	= BACK GOUGE	NOM	= NOMINAL
B.H.C.	= BOLT HOLE CIRCLE	NPS	= NOMINAL PIPE SIZE
B.L.	= BOTTOM LAYER	NPT	= NATIONAL PIPE THREAD
B.LDG.	= BUILDING	NTS	= NOT TO SCALE
B.O.	= BOTTOM OF	O.A.L.	= OVERALL LENGTH
BRG	= BEARING	O.C.	= ON CENTER
B TO B	= BACK TO BACK	O.D.	= OUTSIDE DIAMETER
C	= CHANNEL	OF	= OUTSIDE FACE
C TO C	= CENTER TO CENTER	O.L.	= OUTSIDE LAYER
C/E JT	= CONTRACTION JOINT/EXPANSION JOINT	OPP	= OPPOSITE
CBORE	= COUNTERBORE	OS	= OUTSIDE
CF	= CUBIC FEET	OSAY	= OUTSIDE STEM AND YOKE (VALVES)
CI	= CAST IRON	O TO O	= OUT TO OUT
C.J.	= CONSTRUCTION JOINT	PC	= POINT OF CURVATURE
CJP	= COMPLETE JOINT PENETRATION	PCF	= POUNDS PER CUBIC FOOT
CL	= CENTERLINE	PERF	= PERFORATED
CL2	= CHLORINE	PL	= PLATE
CLR	= CLEAR	PLF	= POUNDS PER LINEAR FOOT
CONC.	= CONCRETE	P/N	= PART NUMBER
CONN	= CONNECTION	PRE-FAB	= PREVIOUSLY FABRICATED
CONT	= CONTINUOUS	PSF	= POUNDS PER SQUARE FOOT
CONT. JT.	= CONTRACTION JOINT	PSI	= POUNDS PER SQUARE INCH
C.M.P.	= CORRUGATED METAL PIPE	PSIG	= POUNDS PER SQUARE INCH, GAGE
C.M.U.	= CONCRETE MASONRY UNIT	PSPD	= POST SORT POOL DRAIN
CP	= COMPLETE PENETRATION	PT	= POINT OF TANGENCY (CIVIL SHEETS)
CRES	= CORROSION RESISTING STEEL	PNT	= POINT
CSP	= CORNER SUPPORT PIECE	PTFE	= POLYTETRAFLUROETHYLENE (TEFLON)
CSK	= COUNTERSINK	PVC	= POLYVINYL CHLORIDE
C.T.C.	= CENTER TO CENTER	PVI	= POINT OF VERTICAL INTERSECTION
CU	= COPPER	RAD.	= RADIUS
DET.	= DETAIL	R.H.	= ROUND HEAD
D&G	= DRILL & GROUT	REF	= REFERENCE
DIA.	= DIAMETER	REINF.	= REINFORCEMENT
DI	= DUCTILE IRON	REQ'D	= REQUIRED
DIP	= DUCTILE IRON PIPE	R.O.	= ROUGH OPENING
D/S	= DOWNSTREAM	RT	= RIGHT
DWG	= DRAWING	STR	= STRUCTURAL
DWL'S	= DOWELS	S.B.	= STRUCTURAL BOLT
EA.	= EACH	SCH	= SCHEDULE
EF	= EACH FACE	SH	= SHEET
E.L.	= EACH LAYER	SHIM	= SIMILAR
EL.	= ELEVATION	STAG. SPL.	= STAGGER SPLICE
E.J.	= EXPANSION JOINT	STD	= STANDARD
EQ. SP.	= EQUALLY SPACED	STIR.	= STIRRUP
E.W.	= EACH WAY	STL.	= STEEL
EXAM.	= EXAMINATION	S.F.	= SQUARE FOOT
EXIST.	= EXISTING	SHLDR	= SHOULDER
F.B.	= FLAT BAR	SPS	= SPACES
F.D.	= FLOOR DRAIN	SQ	= SQUARE
F.F.	= FAR FACE	S.S.	= STAINLESS STEEL
FG	= FINISH GRADE	STA.	= STATION
F.H.	= FLAT HEAD	STC	= STEEL TROWELED CONCRETE
FLG	= FLANGE	SYM	= SYMMETRICAL
FT.	= FOOT, FEET	T & B	= TOP AND BOTTOM
F.W.	= FLAT WASHER	T.B.D.	= TO BE DETERMINED
FWS	= FACILITY WATER SUPPLY	T.F.	= TOP FACE
GA.	= GAUGE	T.J.	= TROWELED JOINT
GAC	= GRANULATED ACTIVATED CARBON	T.L.	= TOP LAYER
GALV.	= GALVANIZED	T.O.	= TOP OF
GV	= GATE VALVE	TOC	= TOP OF CONCRETE
H	= HORIZONTAL	TOF	= TOP OF FOOTING
H.D.	= HEAVY DUTY	TOS	= TOP OF SLAB
H.M.	= HOLLOW METAL	TOW	= TOP OF WALL
HSS	= HOLLOW STRUCTURAL SECTION/SHAPE	T.S.	= TUBULAR STEEL
HOR.	= HORIZONTAL	TYP.	= TYPICAL
ID	= INSIDE DIAMETER	UNO	= UNLESS NOTED OTHERWISE
IE	= INVERT ELEVATION	U/S	= UPSTREAM
IF	= INSIDE FACE	V	= VERTICAL
IL.	= INSIDE LAYER	VBS	= VERTICAL BARRIER SCREEN
IN.	= INCH, INCHES	VC	= VERTICAL CURVE
INFO	= INFORMATION	VERT.	= VERTICAL
IS	= INSIDE	W	= WITH
ISO JT	= ISOLATION JOINT	WL	= WATERLINE
IWRC	= INDEPENDENT WIRE ROPE CORE	WP	= WORK POINT
JFR	= JUVENILE FISH RETURN	W.S.	= WATERSTOP
JT.	= JOINT	WSE	= WATER SURFACE ELEVATION
KSI	= KIPS PER SQUARE INCH	WCJ	= WALL CONSTRUCTION JOINT
L	= ANGLE	WWF	= WELDED WIRE FABRIC
LBF	= POUNDS FORCE		
LF.	= LINEAR FEET		
LG.	= LONG		
LT	= LEFT		
LTH	= LENGTH		
LOC.	= LOCATION		
LONG.	= LONGITUDINAL		
LP	= LOW POINT		
MAX.	= MAXIMUM		

LEGEND:

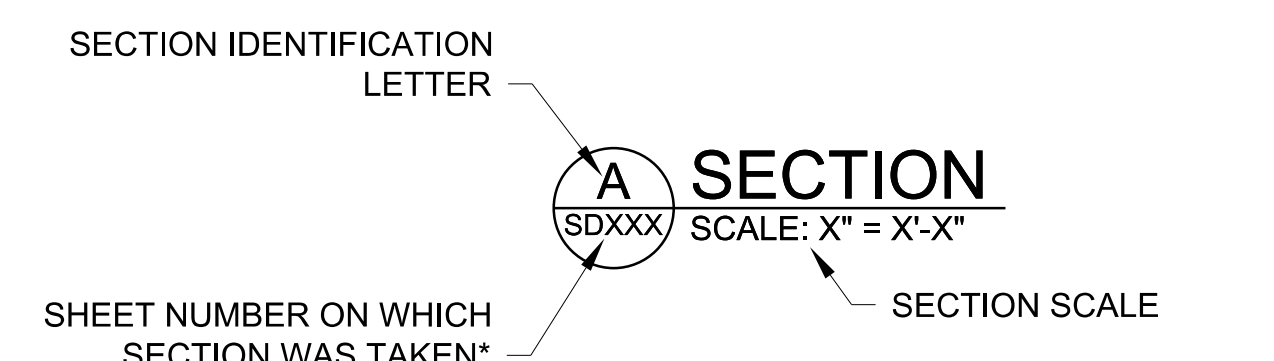
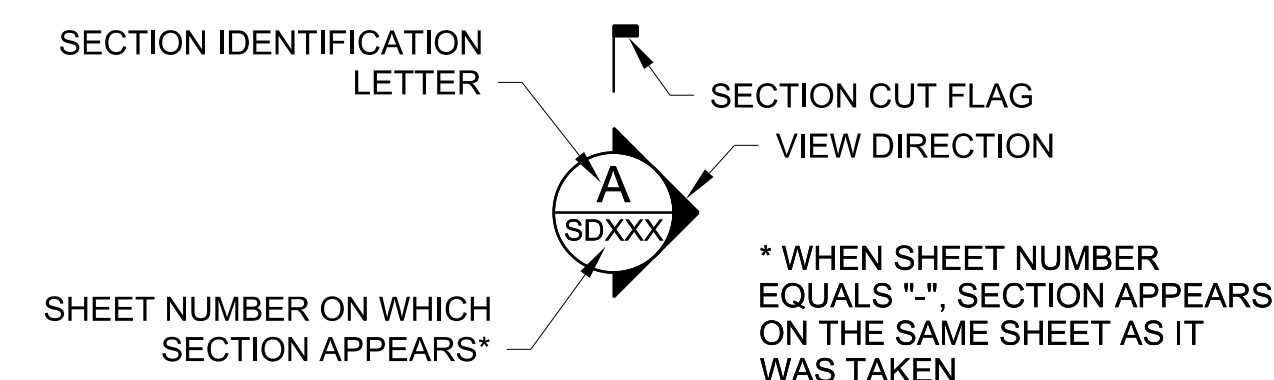


LEGEND

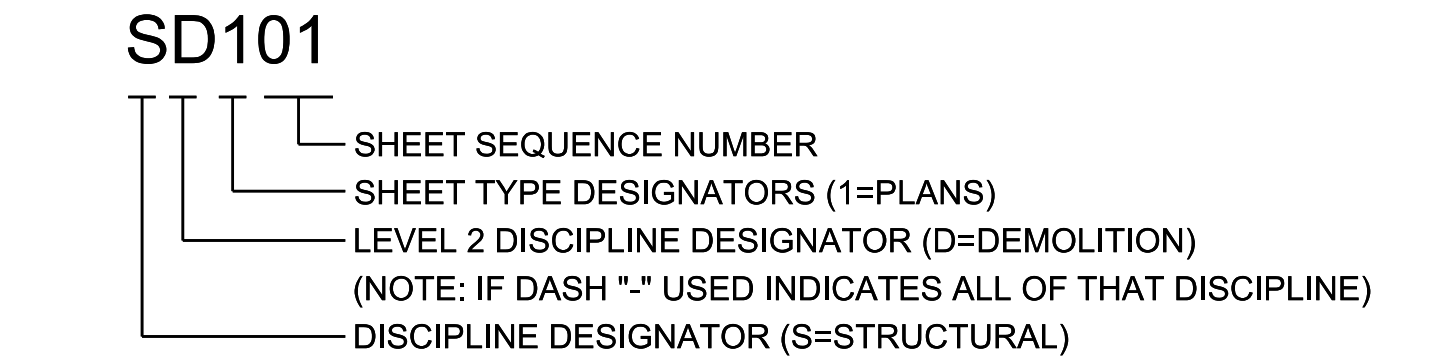
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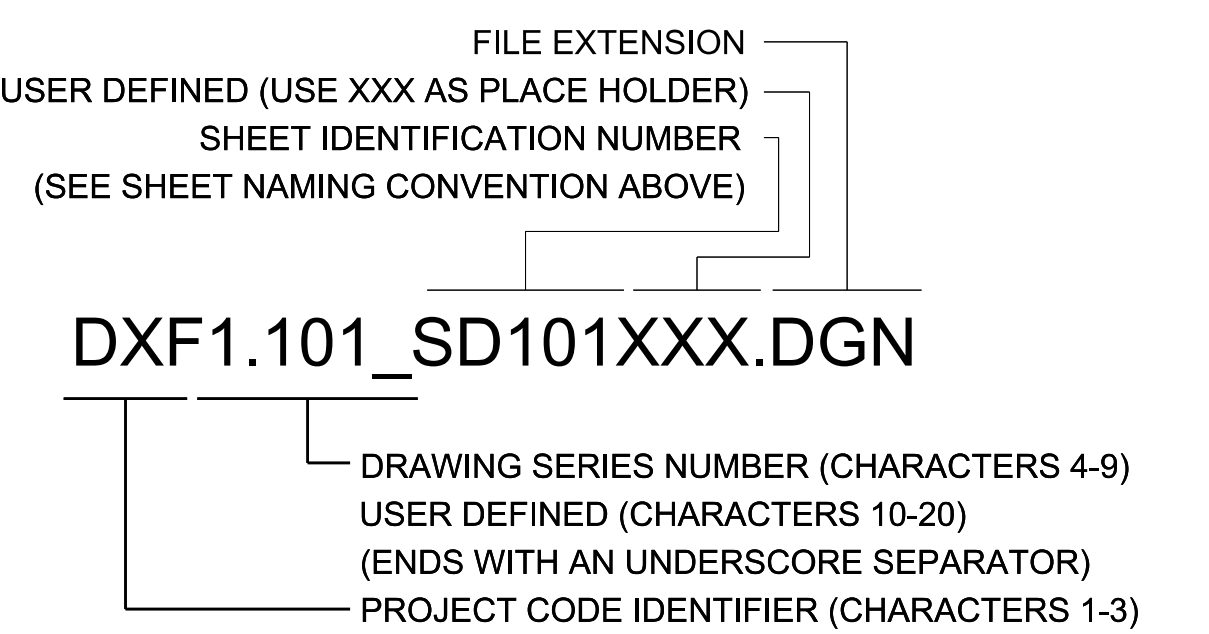
2. SECTIONING CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:



3. SHEET IDENTIFICATION CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW: (5 CHARACTERS EXACTLY NO MORE, NO LESS)



4. FILE NAME CONVENTION SHALL BE INTERPRETED AS SHOWN BELOW:

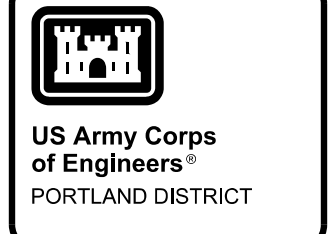


5. AREA FEATURE DESIGNATOR FOR ALL SHEETS SHALL BE AS SHOWN BELOW:

- DENOTES GENERAL FEATURES
- D DENOTES DEMO

GENERAL NOTES

- ALL PRE-CAST PANELS SHALL BE DESIGNED BY MANUFACTURER.
- ALL PRE-CAST PANEL CONNECTIONS TO EXISTING STRUCTURE SHALL BE DESIGNED BY MANUFACTURER. ALL CONNECTIONS DETAILED IN THIS PACKAGE ARE FOR SUGGESTION ONLY.
- ALL PRE-CAST PANEL AND CONNECTION DESIGN DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED AND APPROVED PRIOR TO COMMENCEMENT OF PANEL FABRICATION.
- ALL PRE-CAST PANELS SHALL BE LATERALLY RESTRAINED AT THE EAST END AND FREE TO SLIP AT THE WEST END. PROVIDE MINIMUM 1/2" CLEAR FOR SLIPPAGE IN EITHER DIRECTION.
- ALL EXPOSED STEEL SHALL BE GALVANIZED.
- ALL EXISTING REINFORCEMENT EXPOSED DURING DEMOLITION SHALL BE COATED PER PROJECT SPECIFICATIONS.

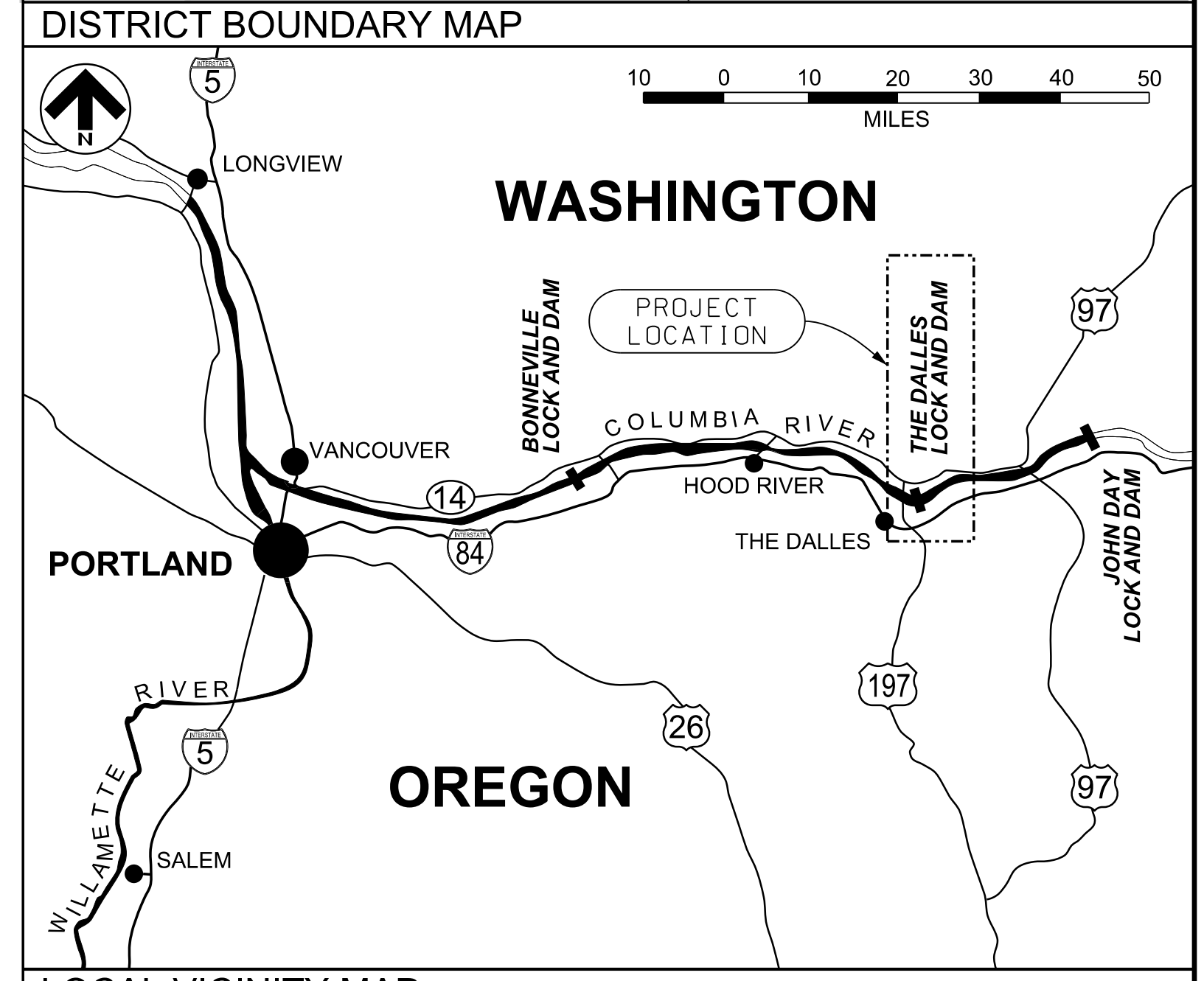
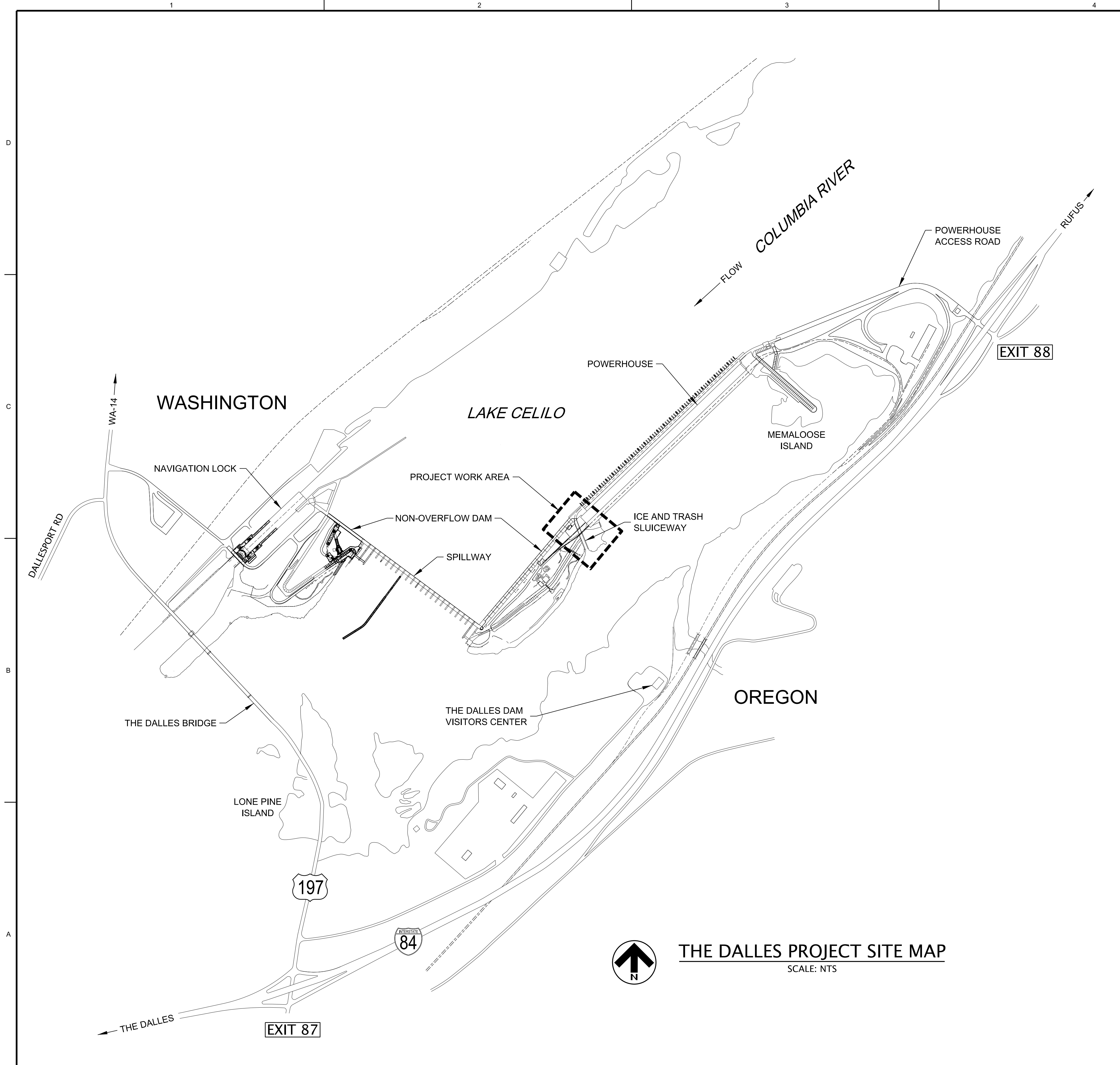


DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE

DESIGNED BY: J. ROBERTS	DRAWN BY: J. ROBERTS	CHECKED BY: M. HANSON	DATE: 01/15/11
DESIGNED BY: J. ROBERTS	DRAWN BY: J. ROBERTS	CHECKED BY: M. HANSON	DATE: 01/15/11
SUBMITTED BY: MATTHEW D. HANSON	CONTRACT NO.:	DRAWING NUMBER: G-003	FILE NAME: DD1.101_G-003XXX.dgn
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT PORTLAND, OREGON			

THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL  
GENERAL NOTES, LEGEND,  
AND ABBREVIATIONS

SHEET IDENTIFICATION  
**G-003**



**US Army Corps of Engineers**  
PORTLAND DISTRICT

DATE	DESCRIPTION	MARK
DATE 07		
DATE 06		
DATE 05		
DATE 04		
DATE 03		
DATE 02		
DATE 01		
DATE		

DESIGNED BY: P.E. J. LINN  
 DRAWN BY: J. ROBERTS  
 SUBMITTED BY: MATTHEW D. HANSON, P.E.  
 DATE: 10/27/2011  
 CONTRACT NO.: G-101  
 PLOT SCALE: 1" = 100'  
 FILE NAME: DDD1105\_G-101XXX.dgn  
 SIZE: 11" x 17"

U.S. ARMY CORPS OF ENGINEERS  
 PORTLAND DISTRICT  
 PORTLAND, OREGON

**THE DALLES LOCK AND DAM  
 ICE AND TRASH SLUICeway  
 SPRAY CONTROL**

DISTRICT BOUNDARY, VICINITY MAP,  
 AND PROJECT PHOTO

SHEET IDENTIFICATION  
**G-101**

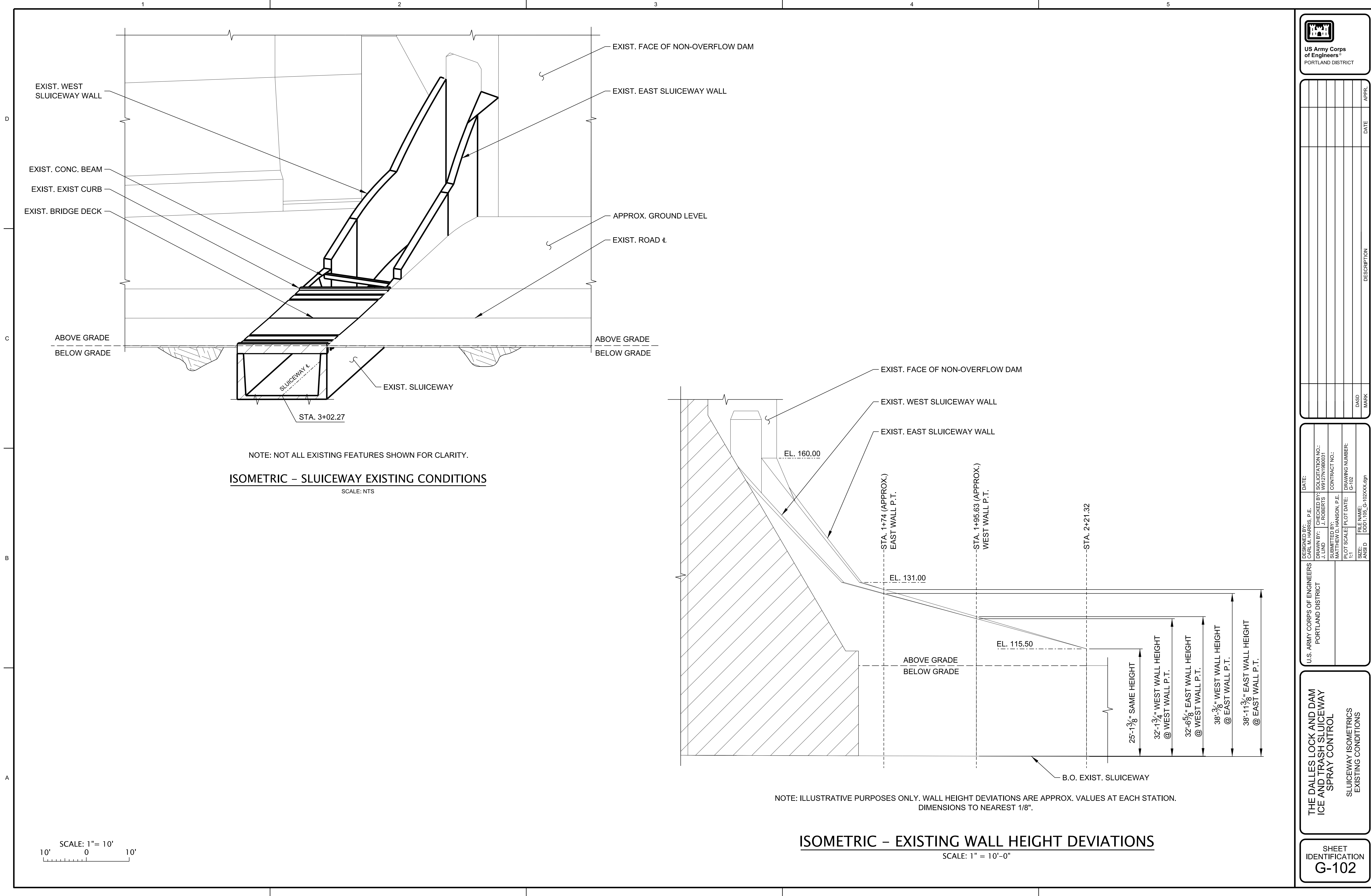
DATE	DESCRIPTION

DESIGNED BY: P. E. J. ROBERTS	DATE: 
DRAWN BY: J. ROBERTS	SUBMITTED BY: MATTHEW D. HANSON, P.E.
CONTRACT NO.: 	FILE NAME: DDDT1105_G-102xxx.dgn
CONTRACT NO.: 	SIZE: ANSI D

THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL

SLUICeway ISOMETRICS  
EXISTING CONDITIONS

SHEET  
IDENTIFICATION  
**G-102**



EXIST. WEST  
SLUICeway WALL

EXIST. CONC. BEAM

EXIST. EXIST CURB

EXIST. BRIDGE DECK

EXIST. FACE OF NON-OVERFLOW DAM

EXIST. EAST SLUICeway WALL

APPROX. GROUND LEVEL

EXIST. ROAD &

ABOVE GRADE

BELOW GRADE

NOTE: NOT ALL EXISTING FEATURES SHOWN FOR CLARITY.

**ISOMETRIC - SLUICeway EXISTING CONDITIONS**

SCALE: NTS

SCALE: 1" = 10'

10' 0 10'

NOTE: ILLUSTRATIVE PURPOSES ONLY. WALL HEIGHT DEVIATIONS ARE APPROX. VALUES AT EACH STATION. DIMENSIONS TO NEAREST 1/8".

**ISOMETRIC - EXISTING WALL HEIGHT DEVIATIONS**

SCALE: 1" = 10'-0"

EXIST. FACE OF NON-OVERFLOW DAM

EXIST. WEST SLUICeway WALL

EXIST. EAST SLUICeway WALL

EL. 160.00

EL. 131.00

EL. 115.50

-STA. 1+74 (APPROX.)  
EAST WALL P.T.

-STA. 1+95.63 (APPROX.)  
WEST WALL P.T.

-STA. 2+21.32

ABOVE GRADE

BELOW GRADE

B.O. EXIST. SLUICeway

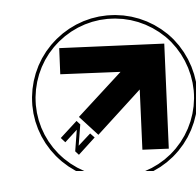
25'-1<sup>3</sup>/<sub>8</sub>" SAME HEIGHT

32'-1<sup>3</sup>/<sub>8</sub>" WEST WALL HEIGHT @ WEST WALL P.T.

32'-6<sup>5</sup>/<sub>8</sub>" EAST WALL HEIGHT @ WEST WALL P.T.

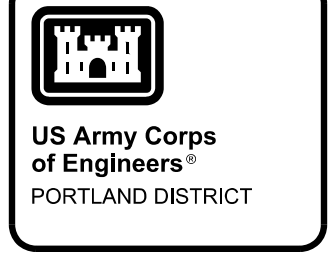
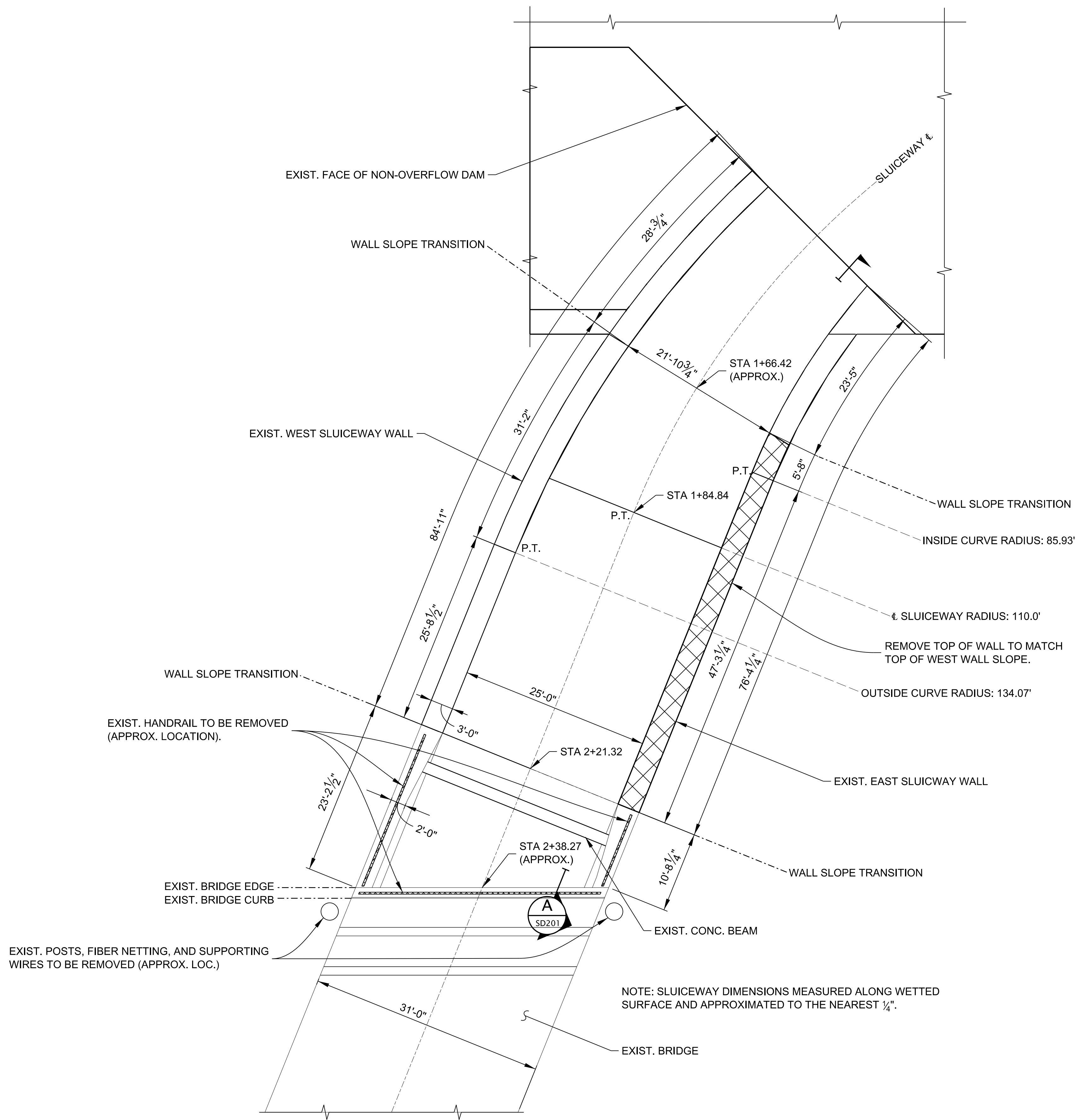
38'-3<sup>3</sup>/<sub>8</sub>" WEST WALL HEIGHT @ EAST WALL P.T.

38'-11<sup>3</sup>/<sub>8</sub>" EAST WALL HEIGHT @ EAST WALL P.T.



**PLAN - SLUICEWAY**  
SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"  
5' 0 5' 10'



DATE	DESCRIPTION	DATE	DESCRIPTION
DATE 07		DATE 01	
DATE 06		DATE 02	
DATE 05		DATE 03	
DATE 04		DATE 04	
DATE 03		DATE 05	
DATE 02		DATE 06	
DATE 01		DATE 07	
DATE		DATE	

DESIGNED BY: P.E. J. LIN	DATE:	SOLUTION NO.: W0127A/B0031
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: J. ROBERTS	DRAWING NUMBER:	SD101
DESIGNED BY: P.E. MATTHEW D. HANSON	FILE NAME:	DDDT1105_SD101XXX.dwg
DATE:	ANSI D	

THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICEWAY  
SPRAY CONTROL  
DEMOLITION PLAN

SHEET IDENTIFICATION  
**SD101**

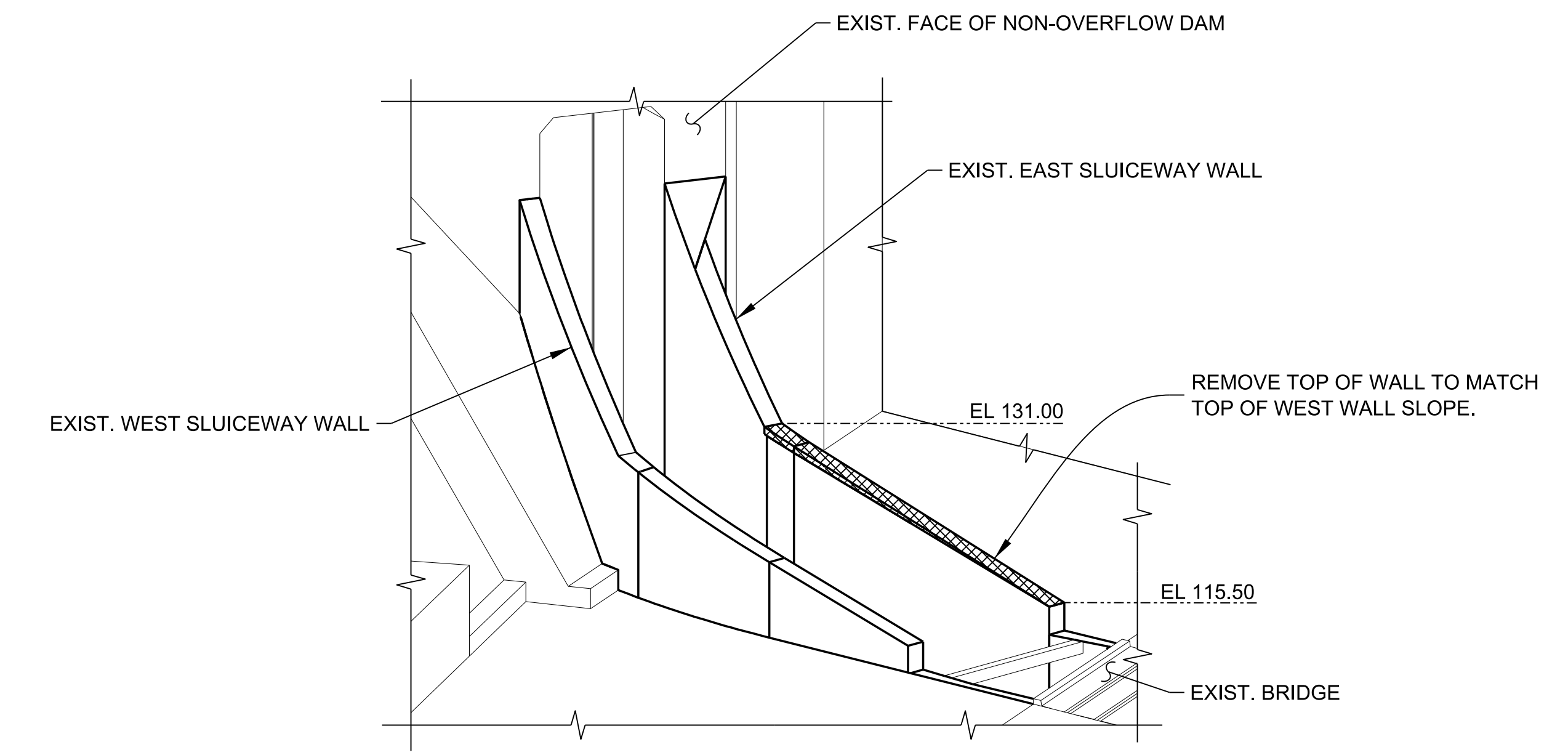
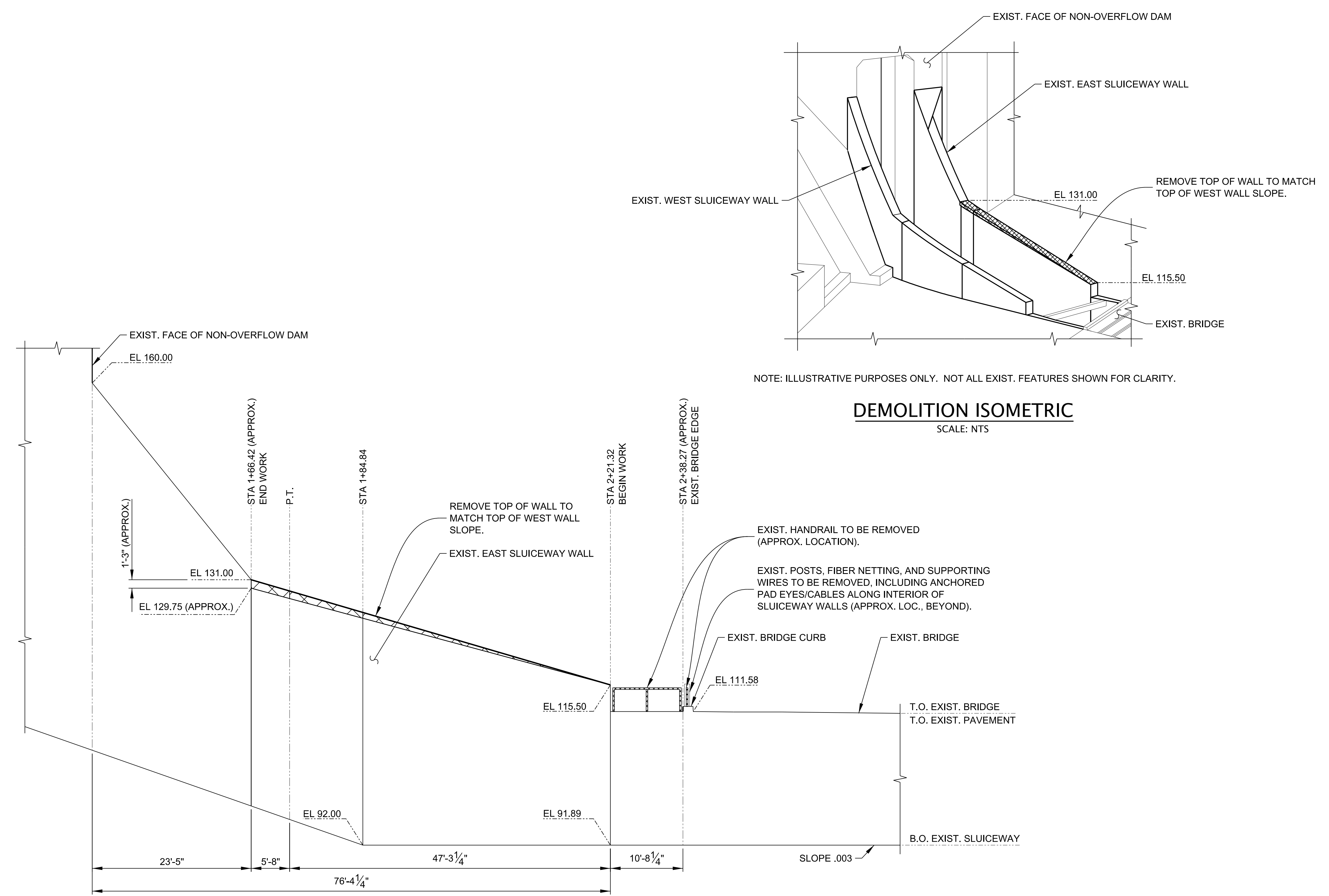
DATE	DESCRIPTION
DASD MARK	

DESIGNED BY: J. ROBERTS DRAWN BY: J. ROBERTS	DATE: 1/10/20	SOLUTION NO.: W12NFB0031	CONTRACT NO.:
SUBMITTED BY: MATTHEW D. HANSON, P.E.	PLOT DATE: SD201	DRAWING NUMBER: SD201	FILE NAME: DDD1_105_SD201XXX.dgn

THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL

DEMOLITION  
DEVELOPED EAST WALL ELEVATION

SHEET  
IDENTIFICATION  
SD201



NOTE: ILLUSTRATIVE PURPOSES ONLY. NOT ALL EXIST. FEATURES SHOWN FOR CLARITY.

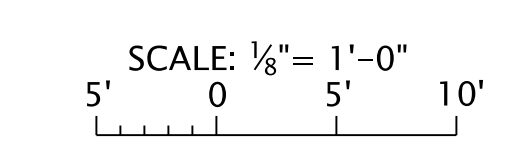
### DEMOLITION ISOMETRIC

SCALE: NTS

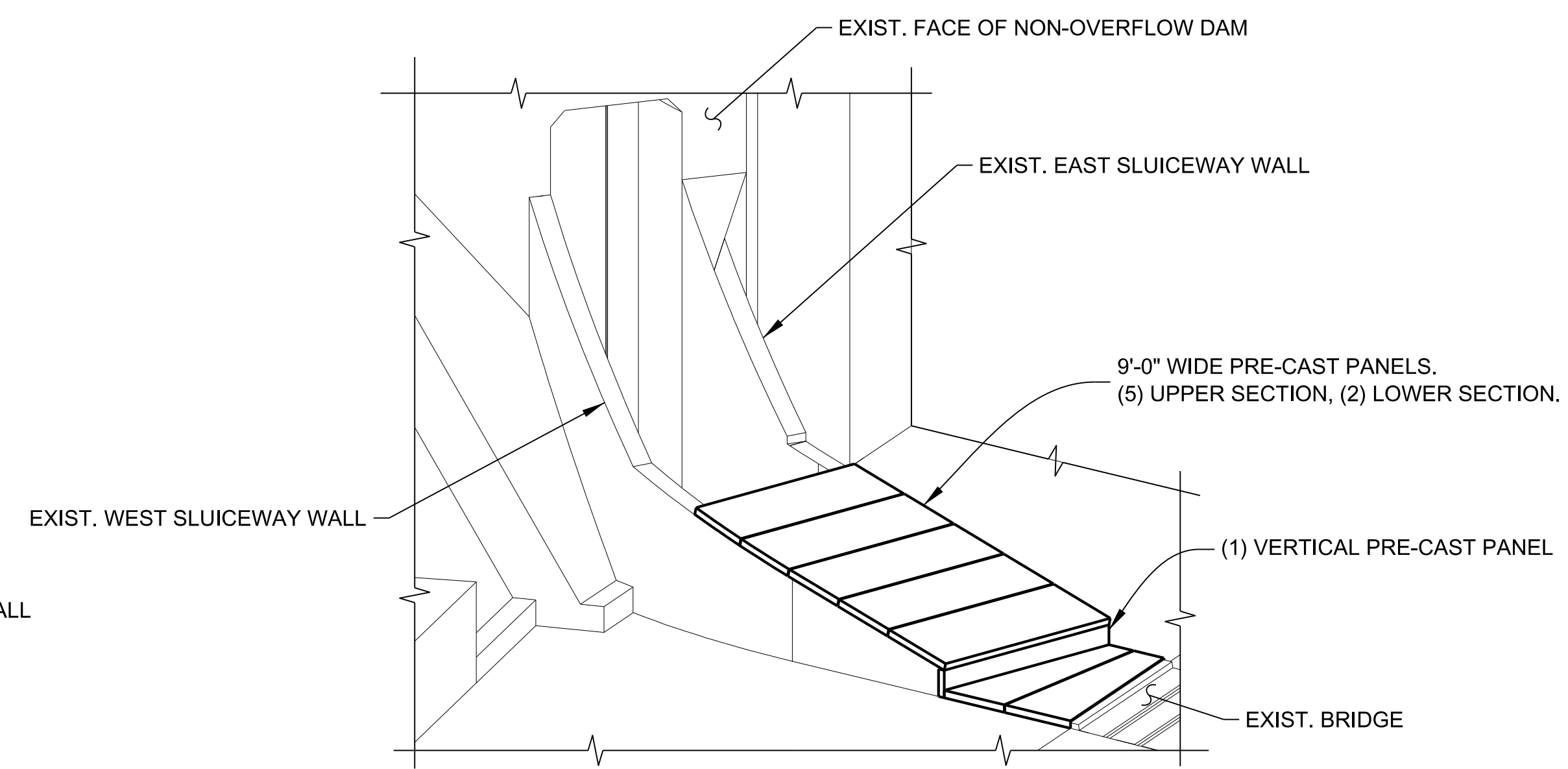
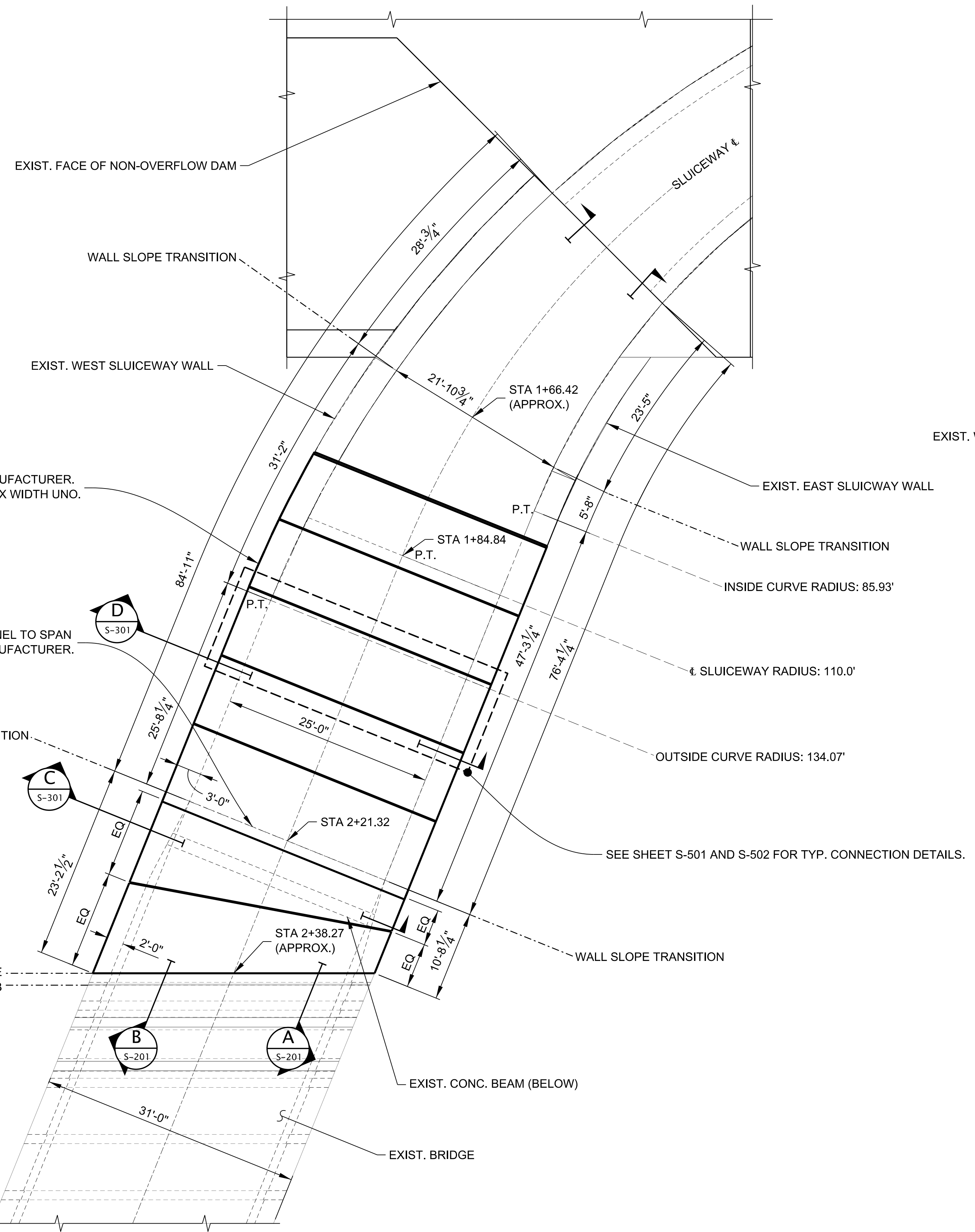
NOTE: DEMOLITION VALUES ARE APPROX. CONTRACTOR SHALL FIELD VERIFY.

### A DEMOLITION - DEVELOPED ELEVATION EAST WALL

SD101 SCALE: 1/8" = 1'-0"



DATE	DATE	DATE	DATE	DATE	DATE	DATE	APPR.



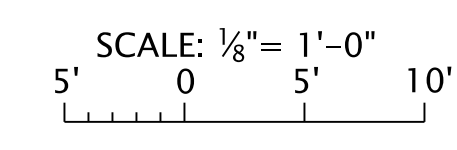
NOTE: ILLUSTRATIVE PURPOSES ONLY.  
**SLUICEWAY - PRE-CAST PANELS ISOMETRIC**  
SCALE: NTS

- NOTES:**
- PANELS WEIGHT NOT TO EXCEED 48,000 LBS.
  - SLUICEWAY DIMENSIONS MEASURED ALONG WETTED SURFACE AND APPROXIMATED TO THE NEAREST 1/4".

DESIGNED BY:	DATE:	CONTRACT NO.:

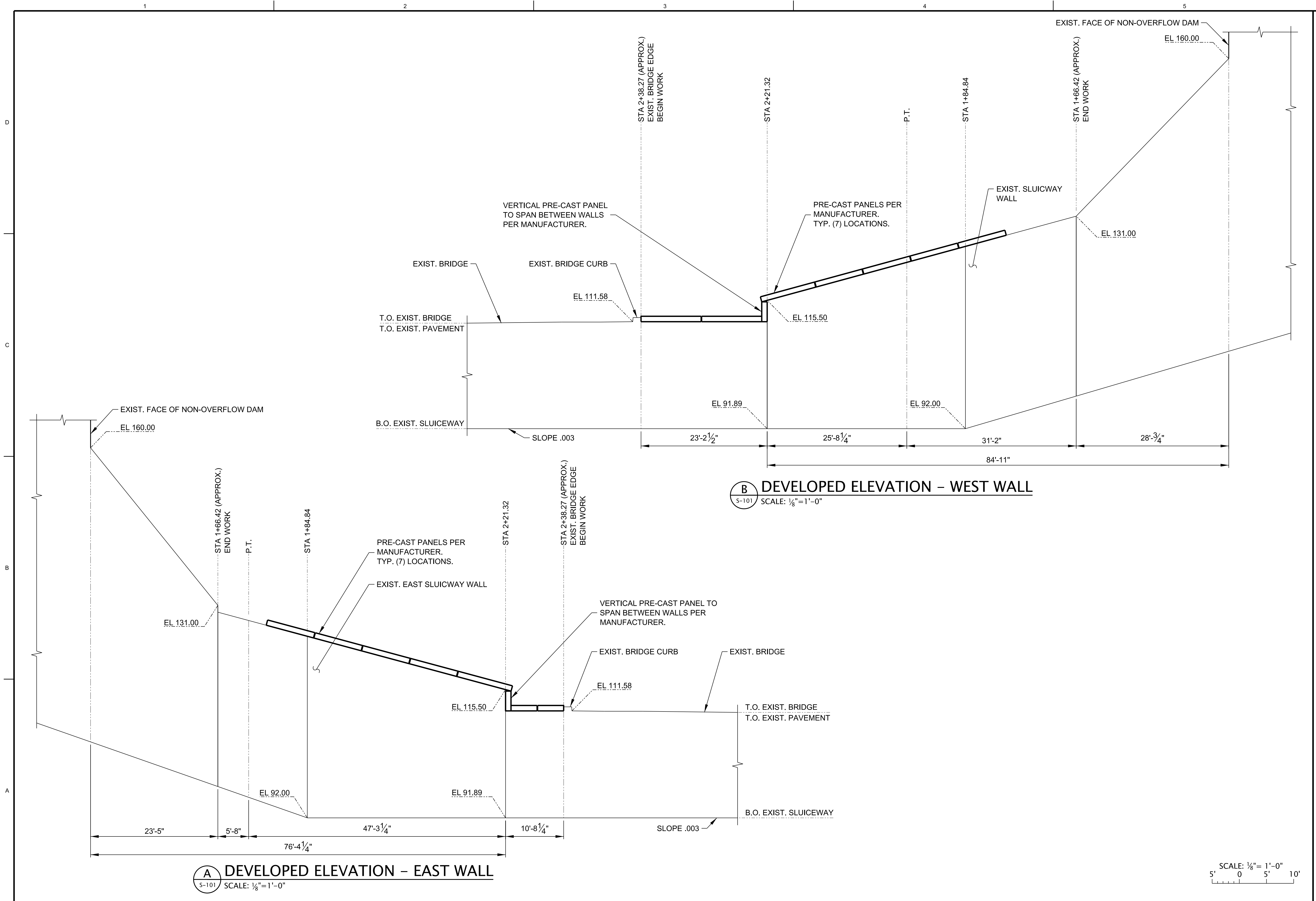
U.S. ARMY CORPS OF ENGINEERS	PORTLAND DISTRICT


**THE DALLEES LOCK AND DAM**  
**ICE AND TRASH SLUICEWAY**  
**SPRAY CONTROL**  
SLUICEWAY PLAN  
PANEL LAYOUT AND ISOMETRIC



SHEET IDENTIFICATION  
**S-101**







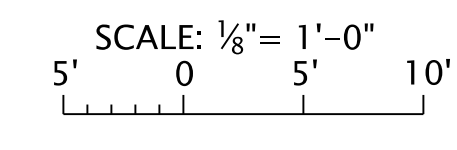
US Army Corps of Engineers  
PORTLAND DISTRICT

DATE	DESCRIPTION	APP. MARK

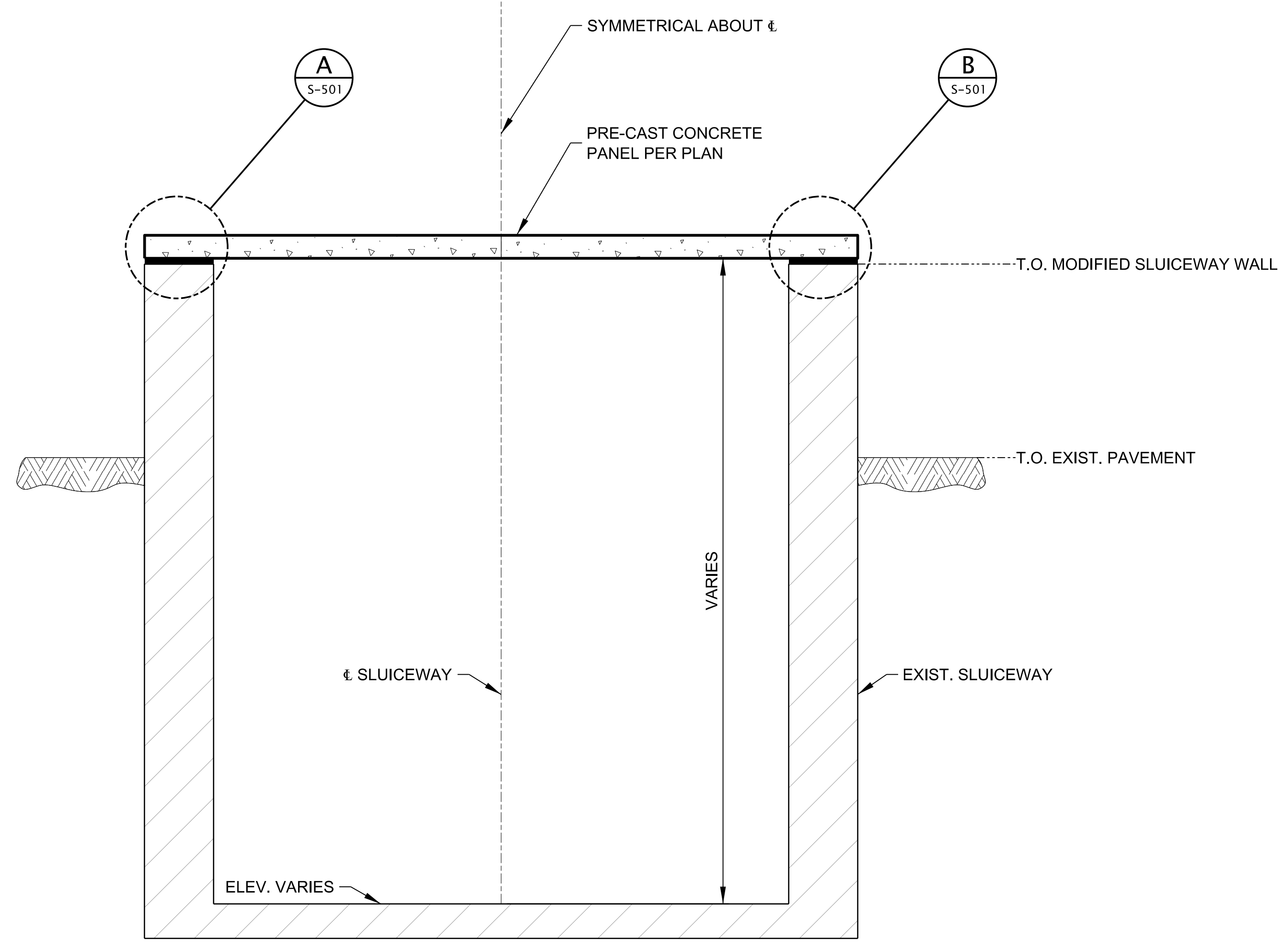
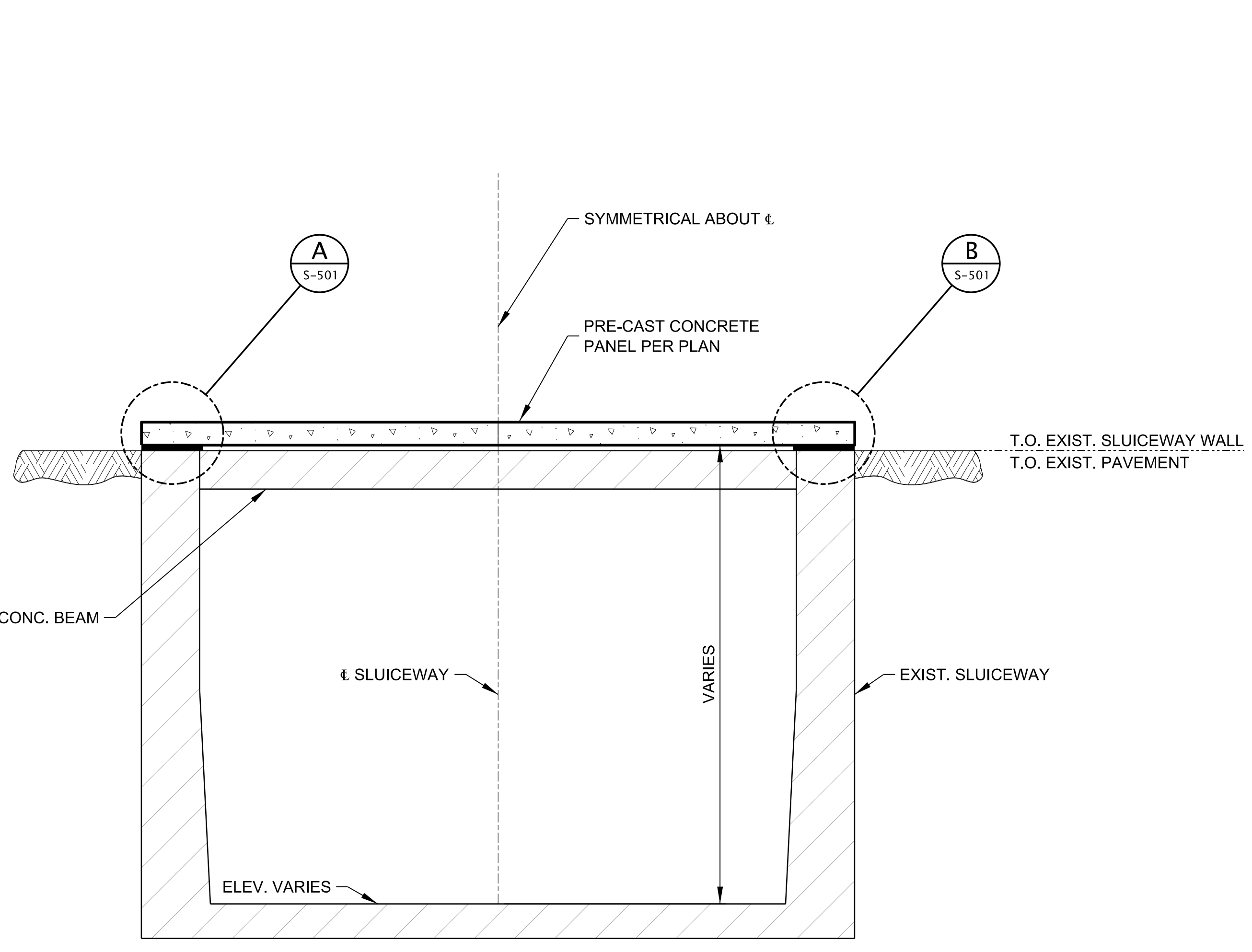
DESIGNED BY: J. ROBERTS	DATE: 1/1/01
DRAWN BY: J. ROBERTS	SUBMITTED BY: MATTHEW D. HANSON, P.E.
CONTRACT NO.: W127A-FB0031	FILE NAME: DDD11105_S-201XXX.dgn
CONTRACT NO.:	SIZE: 11"
DRAWING NUMBER: S-201	PLOT SCALE: 1/8" = 1'-0"
DIST. MARK	ANSI D

THE DALLE LOCK AND DAM  
ICE AND TRASH SLUICWAY  
SPRAY CONTROL  
SLUICWAY DEVELOPED ELEVATIONS

SHEET IDENTIFICATION  
**S-201**



D  
  
C  
  
B  
  
A



**(C) SECTION - SLUICEWAY**  
S-101 SCALE: 1/4" = 1'-0"

**(D) SECTION - SLUICEWAY**  
S-101 SCALE: 1/4" = 1'-0"

- NOTES:**
- EXIST. SLUICEWAY DIMENSIONS PER PLAN.
  - CONTRACTOR TO ENSURE MIN. 1 1/2" CLEAR BETWEEN EXIST. CONC. BEAM AND PRE-CAST PANEL.

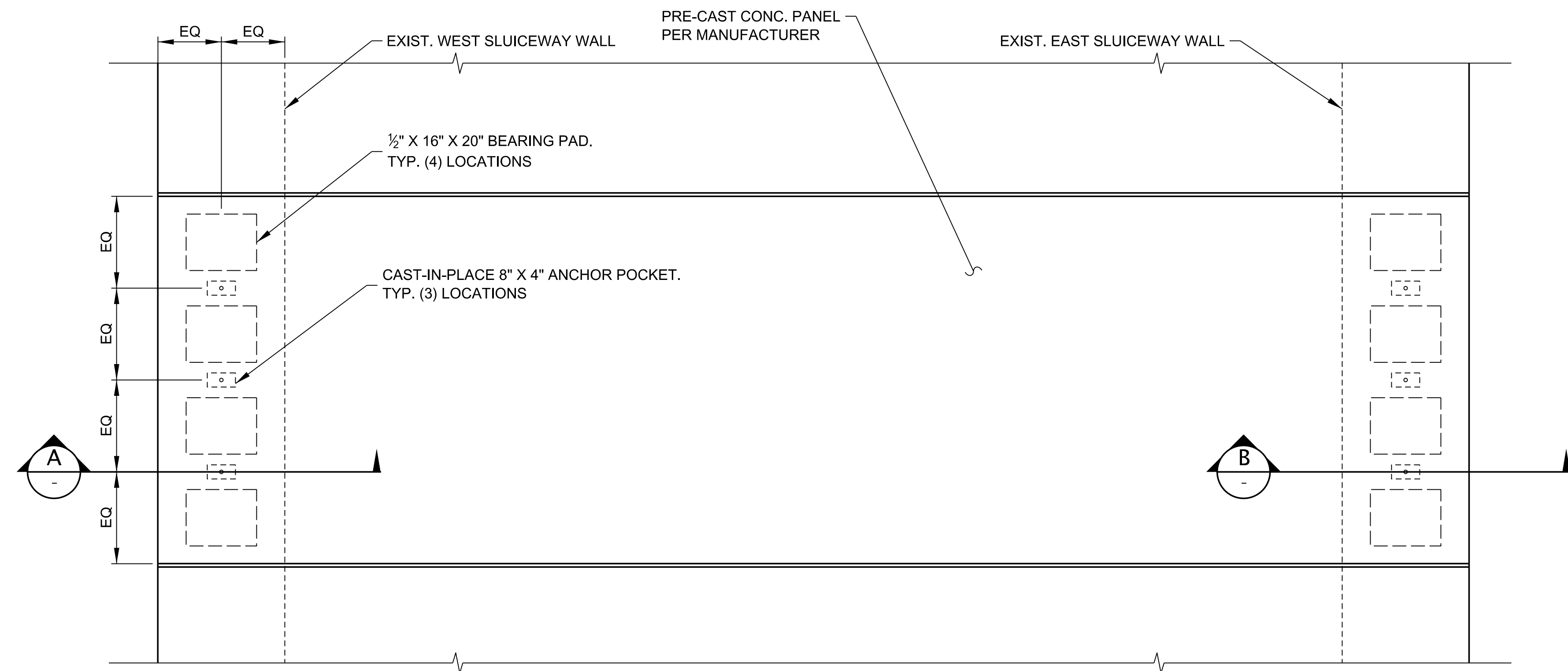
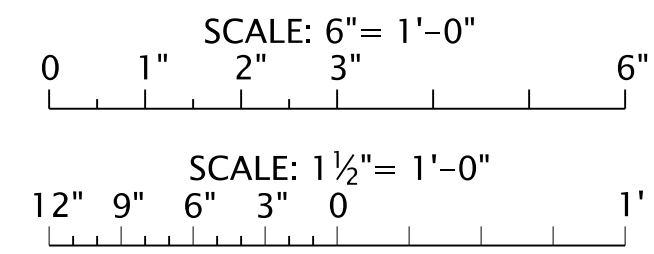
SCALE: 1/4" = 1'-0"  
12" 0 5'

DATE	DESCRIPTION	DASD MARK

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT	DESIGNED BY: P.E. J. L. ROBERTS	DATE:
	CHECKED BY: J. ROBERTS	APPROVED BY: J. ROBERTS
	FILE NAME: DDDT.1.05.S-301.XXX.dgn	
	CONTRACT NO.:	
	DRAWING NUMBER:	S-301
	PROJECT DATE:	

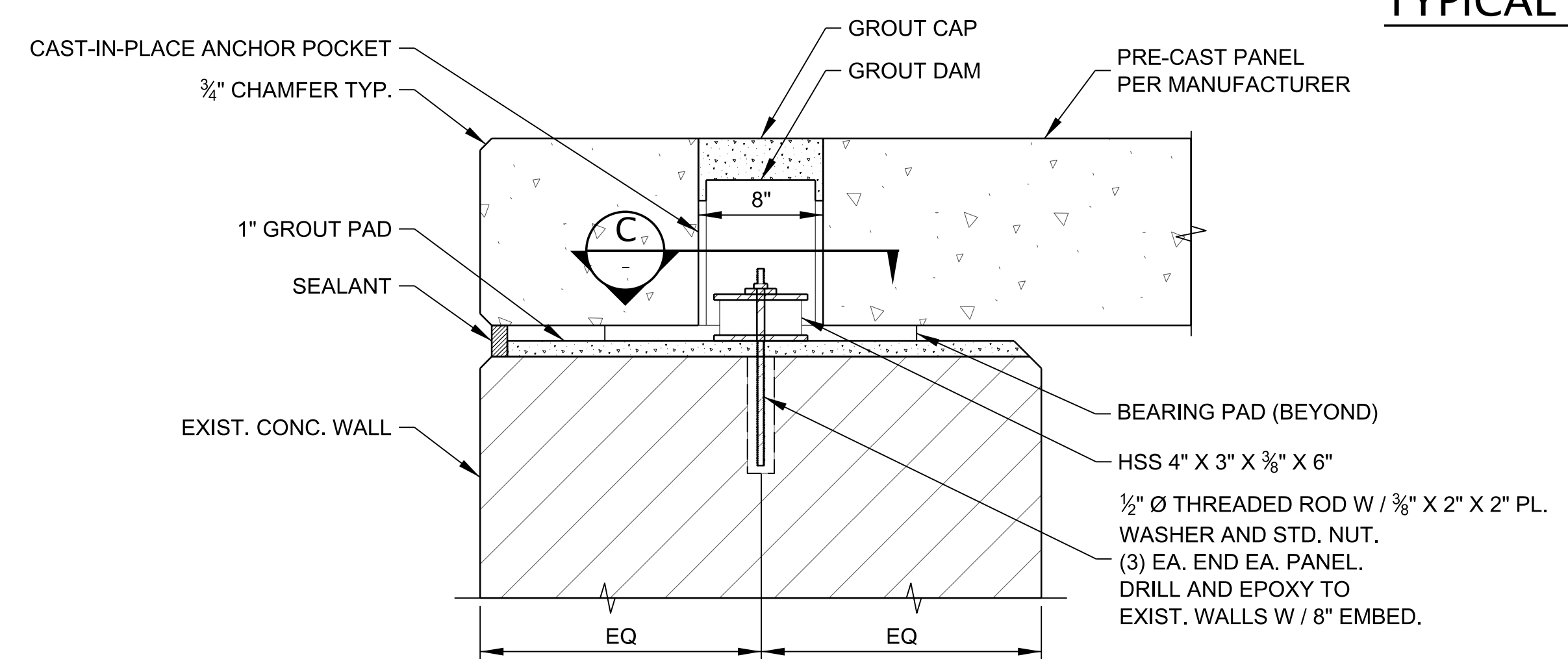
THE DALLES LOCK AND DAM  
ICE AND TRASH SLUICEWAY  
SPRAY CONTROL  
SLUICEWAY TRANSVERSE SECTIONS

SHEET IDENTIFICATION  
**S-301**

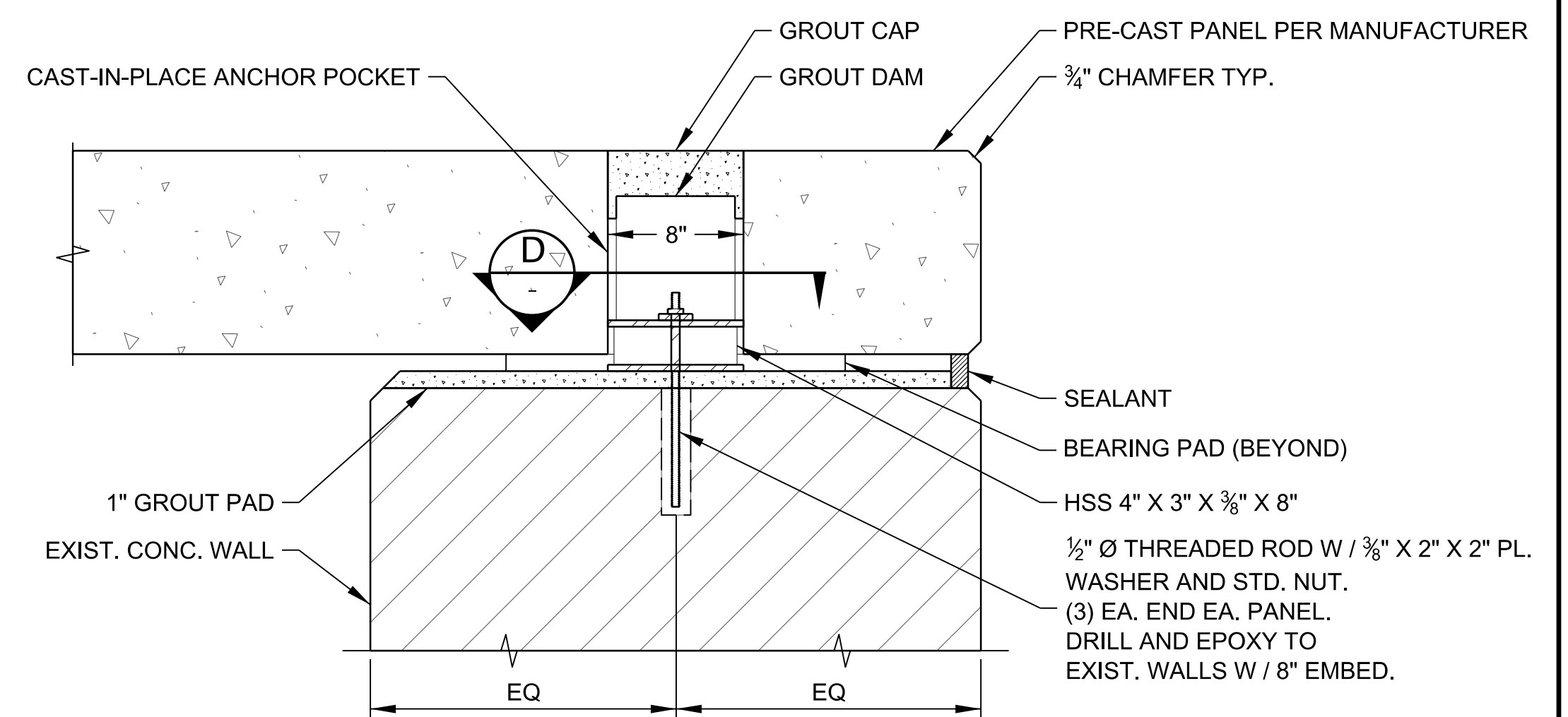


**TYPICAL PANEL CONNECTION LAYOUT**

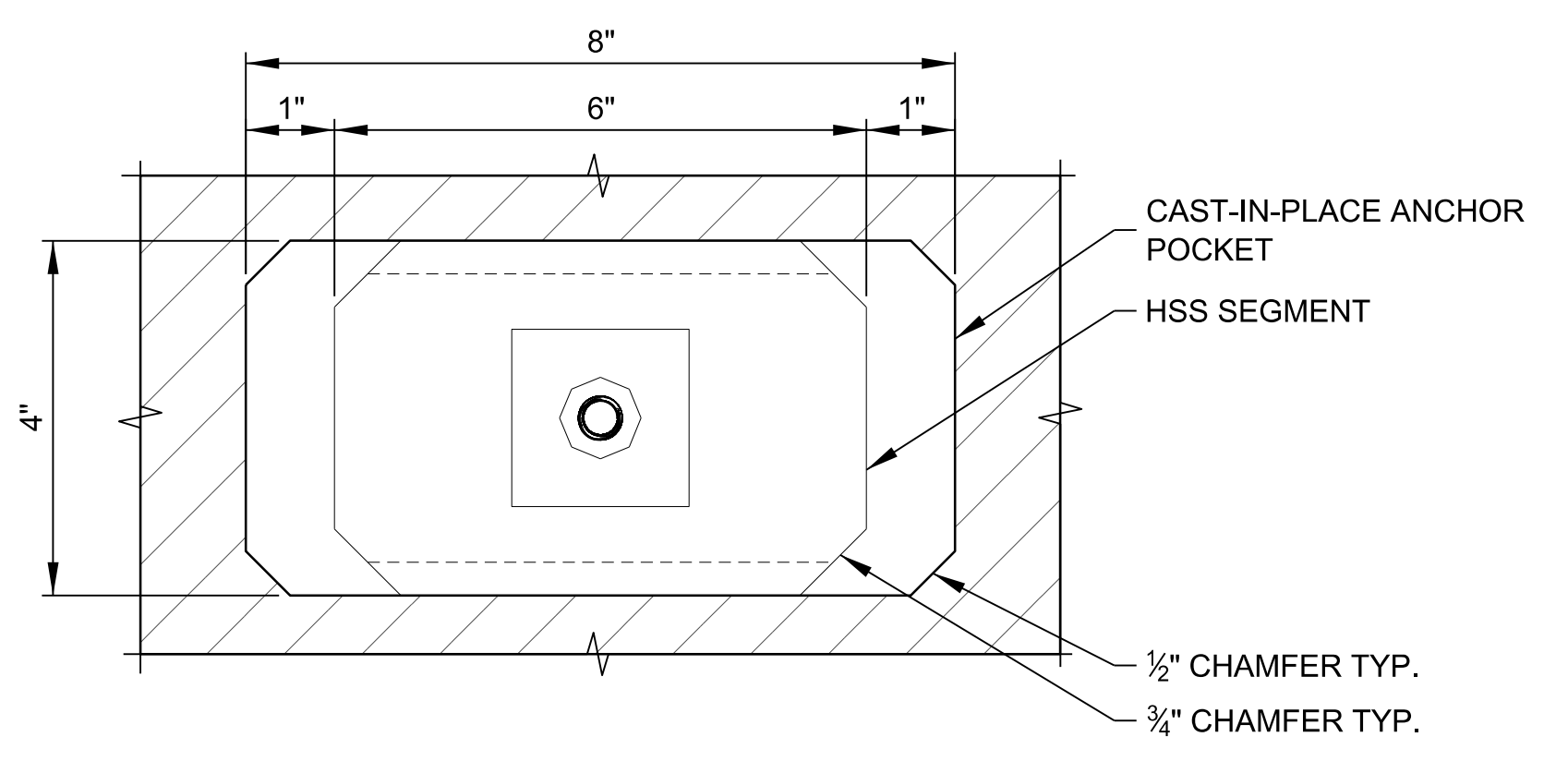
SCALE: 1 1/2"=1'-0"



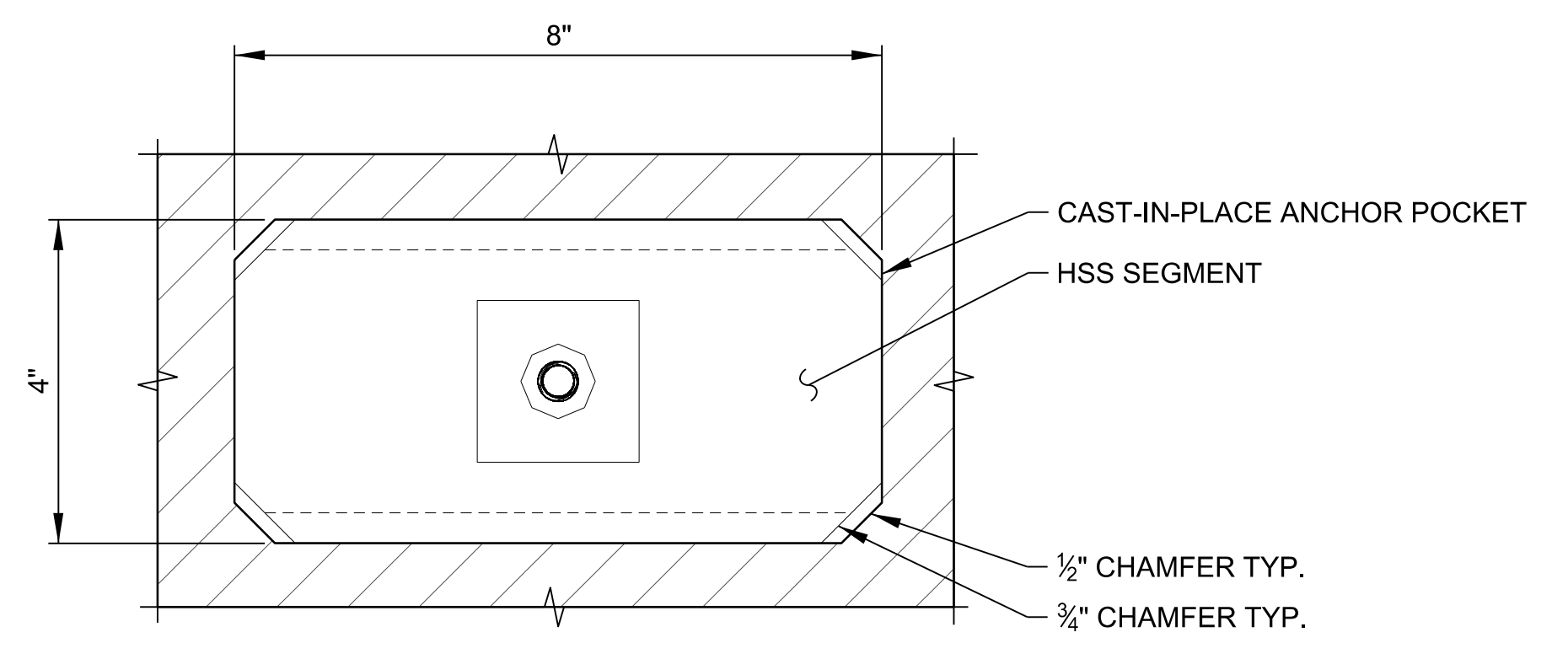
**A SLIP CONNECTION**  
SCALE: 1 1/2"=1'-0"



**B RESTRAINED CONNECTION**  
SCALE: 1 1/2"=1'-0"



**C SECTION**  
SCALE: 6"=1'-0"



**D SECTION**  
SCALE: 6"=1'-0"

**NOTES:**

1. ALL DETAILED CONNECTIONS ARE RECOMMENDATIONS ONLY. ALL CONNECTIONS SHALL BE DESIGNED BY THE PRE-CAST PANEL MANUFACTURER AND SUBMITTED FOR GOVERNMENT APPROVAL.
2. RECOMMENDED CONNECTION DETAILING FOR VERTICAL PRE-CAST PANEL AT WALL SLOPE TRANSITION IS NOT SHOWN OR NOTED IN THIS PACKAGE.
3. RECOMMENDED CONNECTION DETAILING FOR LOWER HORIZONTAL TRAPEZOIDAL PRE-CAST PANELS (2 LOCATIONS) IS NOT SHOWN OR NOTED IN THIS PACKAGE.
4. ALL STEEL CONNECTION COMPONENTS SHALL BE HOT-DIP-GALVANIZED.
5. IT IS ANTICIPATED THAT THE ANCHOR RODS AND HSS SEGMENTS WILL BE INSTALLED AFTER THE PANEL IS SET IN PLACE.

NO.	DATE	DESCRIPTION	APPR.

DESIGNED BY: P.E. J. ROBERTS	DATE: 10/27/2011	SOLUTION NO.: W0127R0001
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: M. HANSON	CONTRACT NO.:	
SUBMITTED BY: MATTHEW D. HANSON, P.E.	FILE NAME: DDD1105_S-501XXXX.dgn	
DESIGNED BY: P.E. J. ROBERTS	DATE: 10/27/2011	SOLUTION NO.: W0127R0001
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: M. HANSON	CONTRACT NO.:	
SUBMITTED BY: MATTHEW D. HANSON, P.E.	FILE NAME: DDD1105_S-501XXXX.dgn	
DESIGNED BY: P.E. J. ROBERTS	DATE: 10/27/2011	SOLUTION NO.: W0127R0001
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: M. HANSON	CONTRACT NO.:	
SUBMITTED BY: MATTHEW D. HANSON, P.E.	FILE NAME: DDD1105_S-501XXXX.dgn	

U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT	DATE: 10/27/2011	SOLUTION NO.: W0127R0001
DESIGNED BY: P.E. J. ROBERTS	CONTRACT NO.:	
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: M. HANSON	CONTRACT NO.:	
SUBMITTED BY: MATTHEW D. HANSON, P.E.	FILE NAME: DDD1105_S-501XXXX.dgn	
DESIGNED BY: P.E. J. ROBERTS	DATE: 10/27/2011	SOLUTION NO.: W0127R0001
DRAWN BY: J. ROBERTS	CONTRACT NO.:	
CHECKED BY: M. HANSON	CONTRACT NO.:	
SUBMITTED BY: MATTHEW D. HANSON, P.E.	FILE NAME: DDD1105_S-501XXXX.dgn	

THE DALLE LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL  
PANEL TO WALL  
CONNECTION DETAILS

1

2

3

4

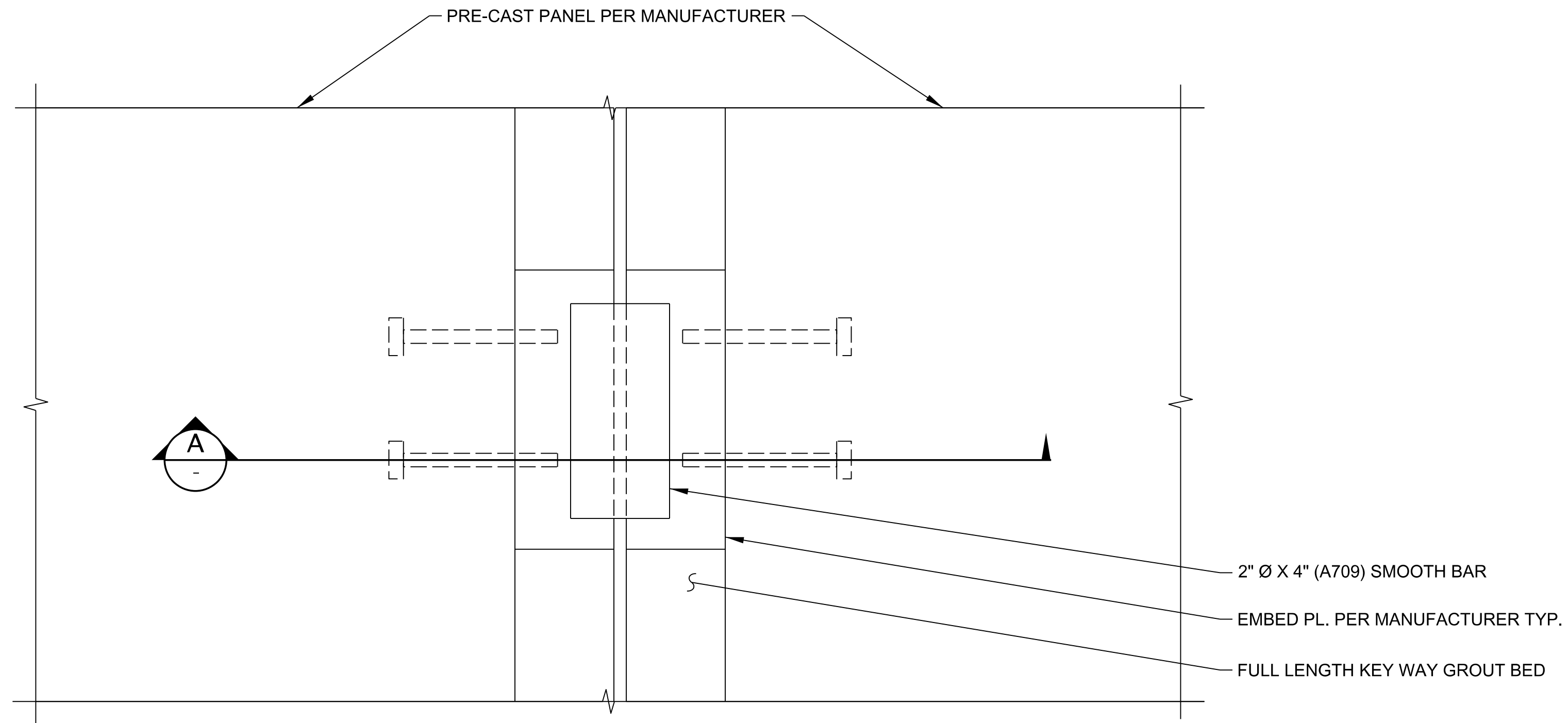
5

D

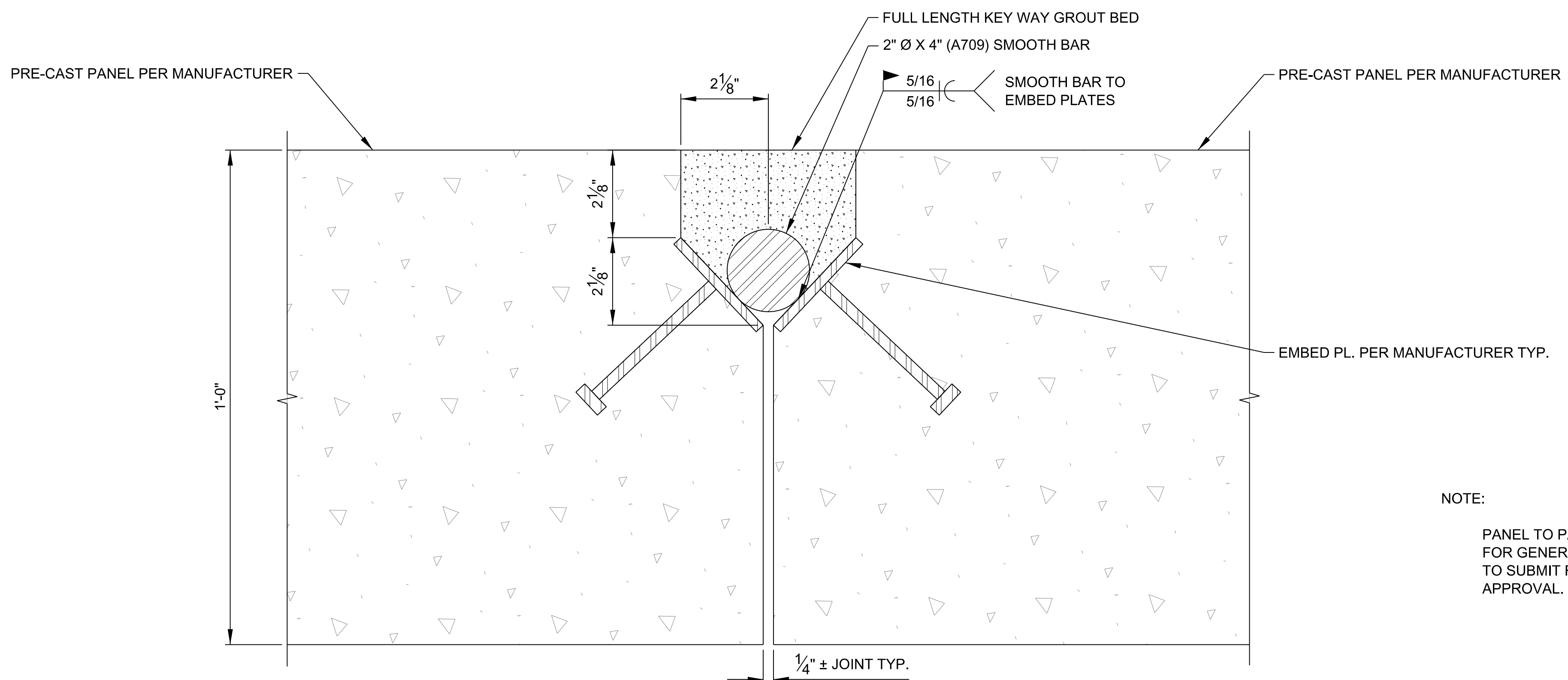
C

B

A

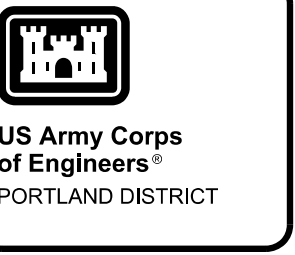
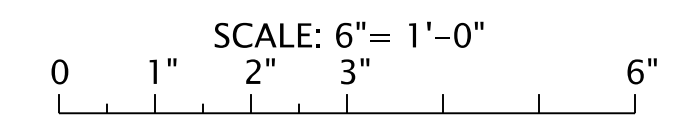


**PLAN**  
SCALE: 6" = 1'-0"



**A** **TYPICAL SECTION - PANEL TO PANEL CONNECTION**  
SCALE: 6" = 1'-0"

NOTE:  
PANEL TO PANEL CONNECTION SHOWN HERE IS FOR GENERAL GUIDANCE ONLY. MANUFACTURER TO SUBMIT FULLY DETAILED CONNECTION FOR APPROVAL.

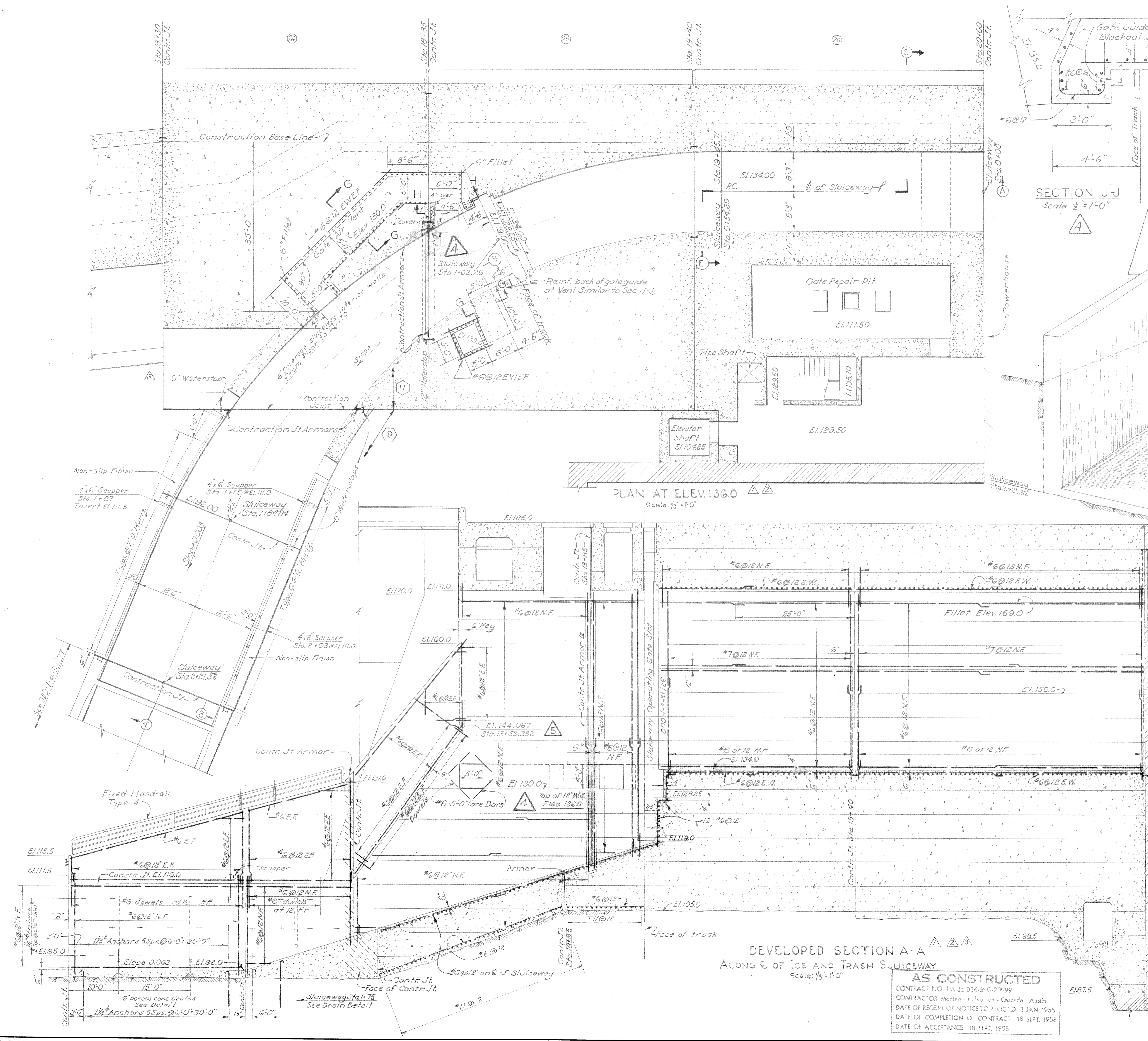


DATE	DESCRIPTION	APPR.

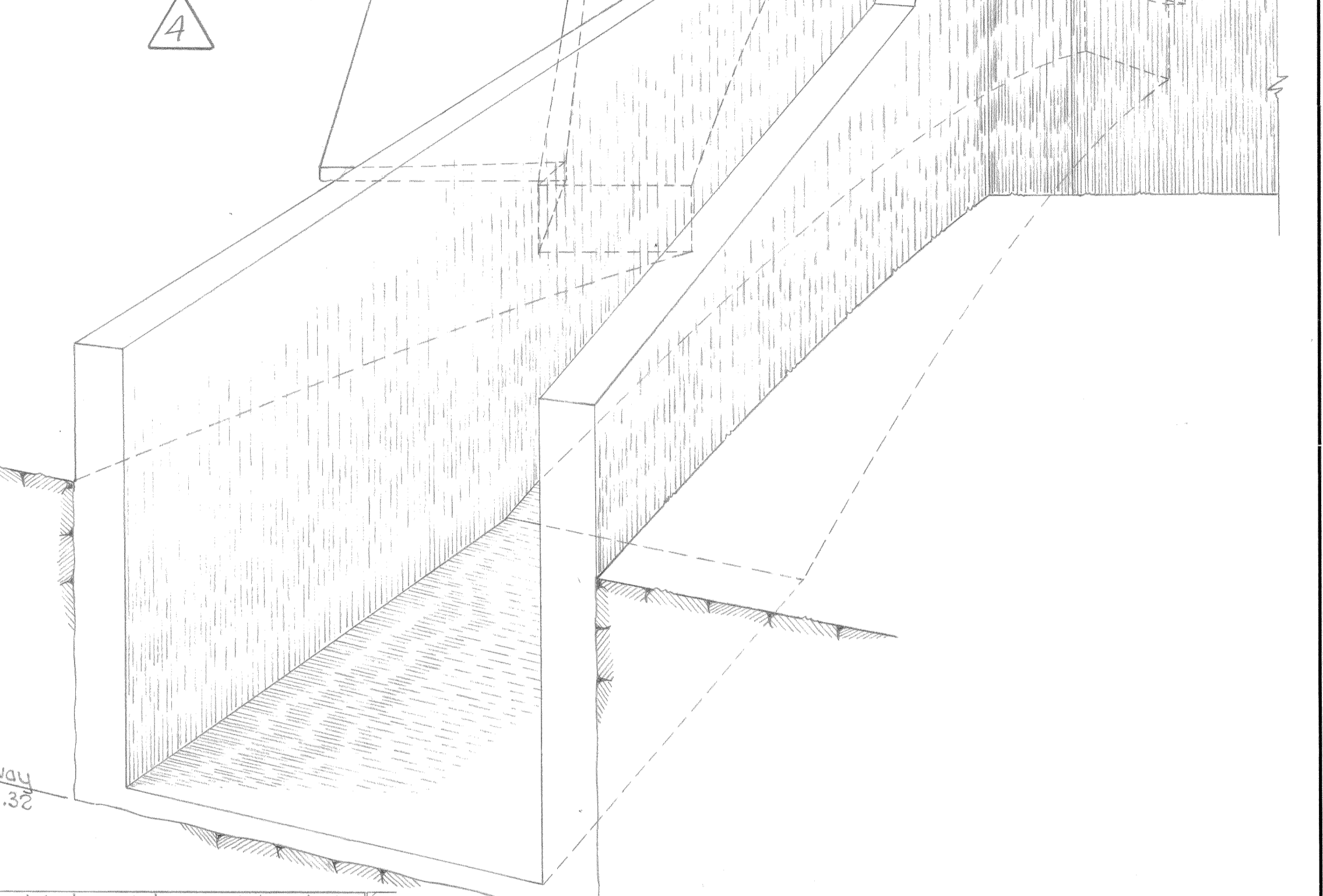
DESIGNED BY: P.E.	DATE:
DRAWN BY: J. ROBERTS	CONTRACT NO.:
FILE NAME:	DRAWING NUMBER:
ANSI D	S-502
U.S. ARMY CORPS OF ENGINEERS PORTLAND DISTRICT	

THE DALLAS LOCK AND DAM  
ICE AND TRASH SLUICeway  
SPRAY CONTROL  
PANEL TO PANEL  
CONNECTION DETAILS

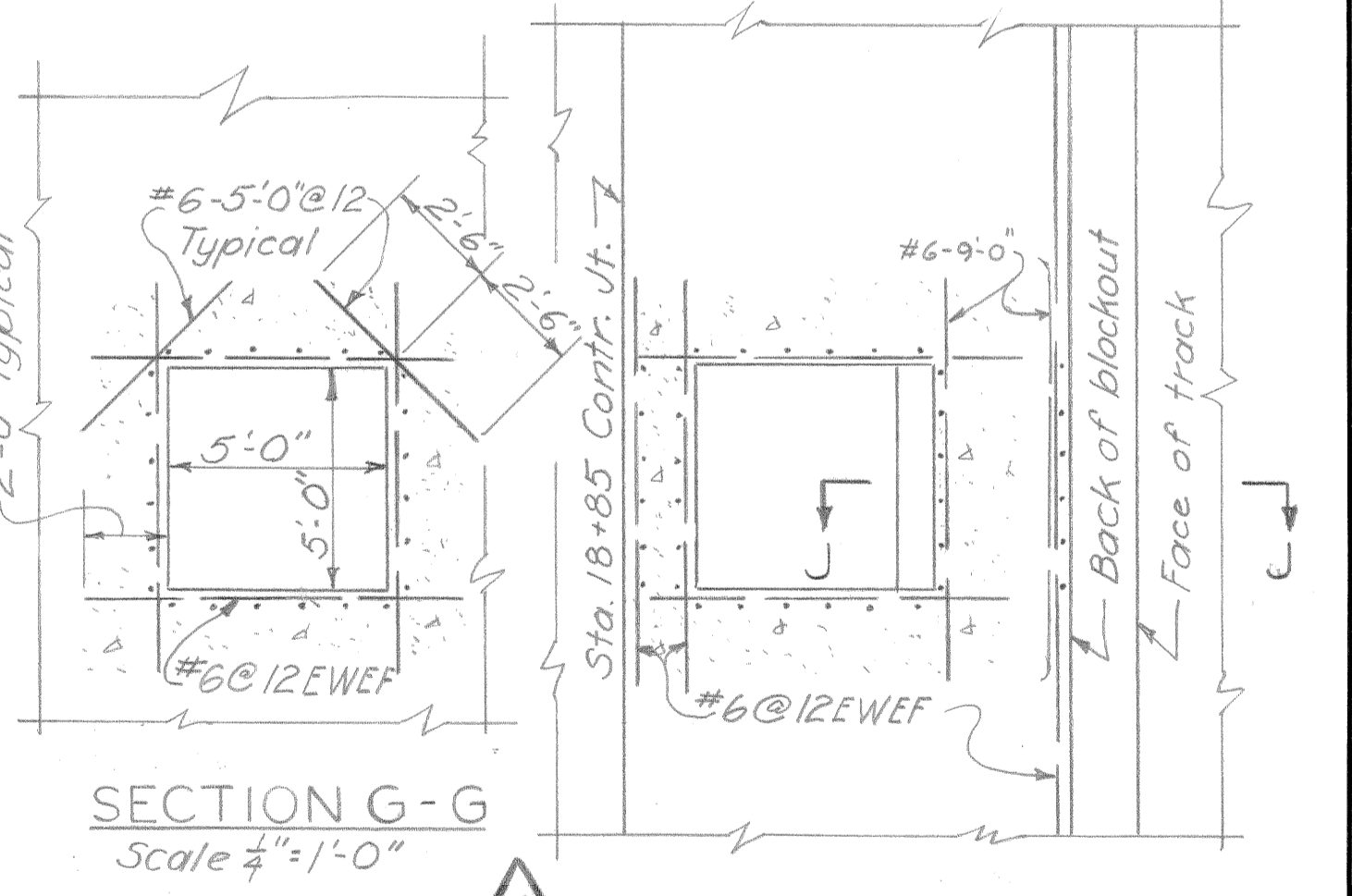
SHEET IDENTIFICATION  
**S-502**



SECTION J-J  
Scale 1/2" = 1'-0"



PERSPECTIVE OF SLUICWAY



SECTION G-G Scale 1/4" = 1'-0"  
SECTION H-H Scale 1/4" = 1'-0"

NOTES

- For General Notes See DDD-1-4-3.1/3
  - Work this drawing with DDD-1-4-3.1/26
  - Handrails DDD-1-4-3.1/36
  - Contraction Joint Protection Armor DDD-1-4-3.1/35
- | REVISION | DATE     | DESCRIPTION   | BY |
|----------|----------|---|----|
| 25       | Apr 63   | Revised As Constructed.                                 |    |
| 26       | 55       | Added Air Vents   | AW |
| 27       | 5-16-55  | Rev toe of dam, contraction jt. armor, etc. Mana. 25-26 | AW |
| 28       | 11/17/54 | Added WS @ Sta. 18+85, changed coverage in sluiceway.   | AW |
| 29       | 10/11/54 | Revised reinf. & added scuppers                         | AW |

DEVELOPED SECTION A-A  
ALONG C of ICE AND TRASH SLUICWAY  
Scale: 1/8" = 1'-0"

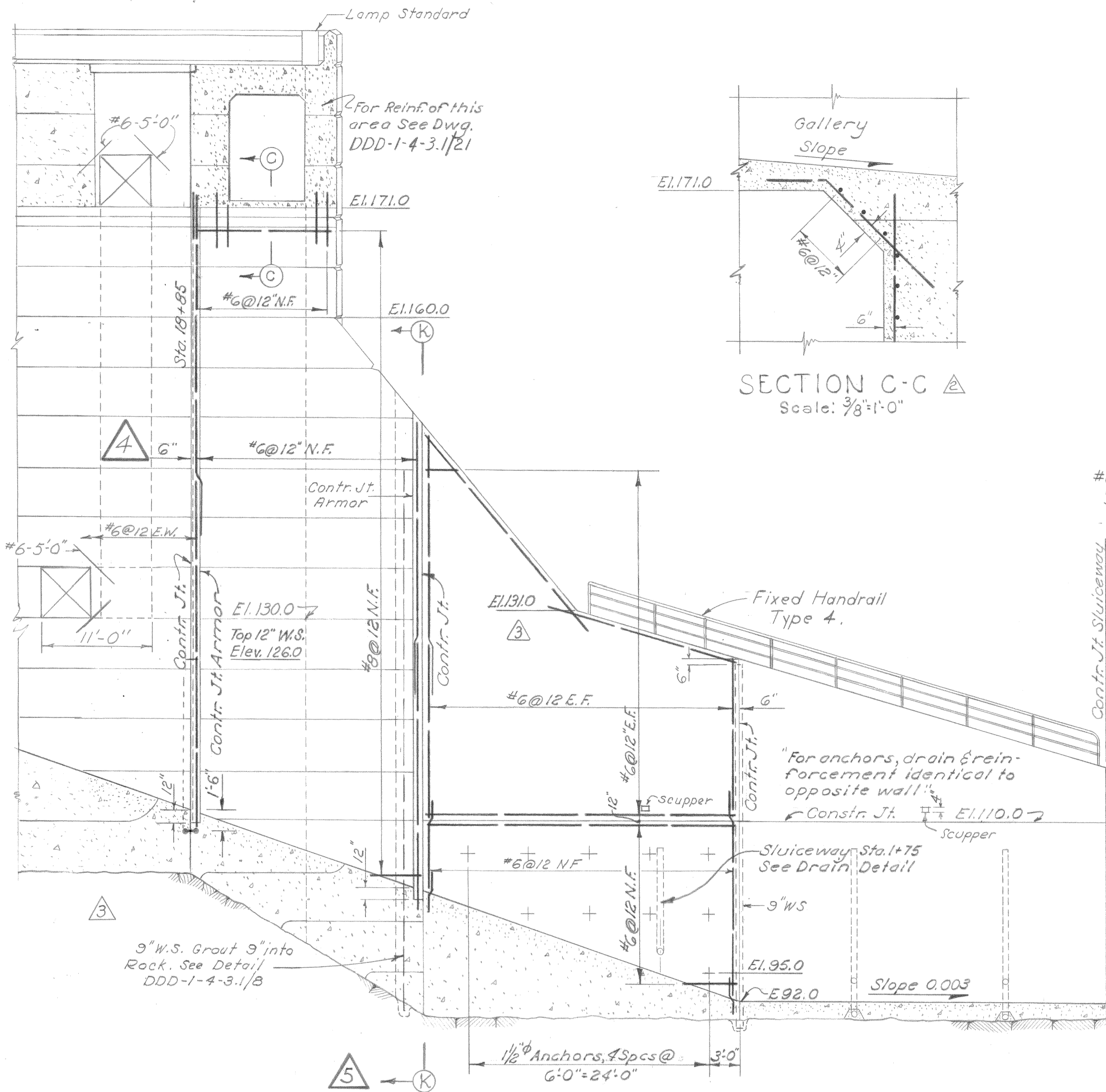
**AS CONSTRUCTED**  
 CONTRACT NO. DA-35-026-ENG-20999  
 CONTRACTOR Montag - Halvorson - Cascade - Austin  
 DATE OF RECEIPT OF NOTICE TO PROCEED 3 JAN. 1955  
 DATE OF COMPLETION OF CONTRACT 18 SEPT. 1958  
 DATE OF ACCEPTANCE 18 SEPT. 1958

CORPS OF ENGINEERS, U. S. ARMY  
 OFFICE OF THE DISTRICT ENGINEER, PORTLAND, OREGON

**THE DALLES DAM**  
 COLUMBIA RIVER WASHINGTON - OREGON  
 NON-OVERFLOW DAM  
 SPILLWAY TO POWERHOUSE  
 SLUICWAY I

DESIGNED: 4.6.0.  
 DRAWN: G.T.O.  
 CHECKED: 4.6.8.  
 REVIEWED: [Signature]  
 SUPERVISED: [Signature]  
 CHIEF SAFETY BRANCH: [Signature]  
 CHIEF STRUCTURES DESIGN SECTION: [Signature]  
 SUBMITTED: [Signature]  
 CHIEF DESIGN BRANCH: [Signature]  
 RECOMMENDED: [Signature]  
 CHIEF ENGINEERING DIVISION: [Signature]

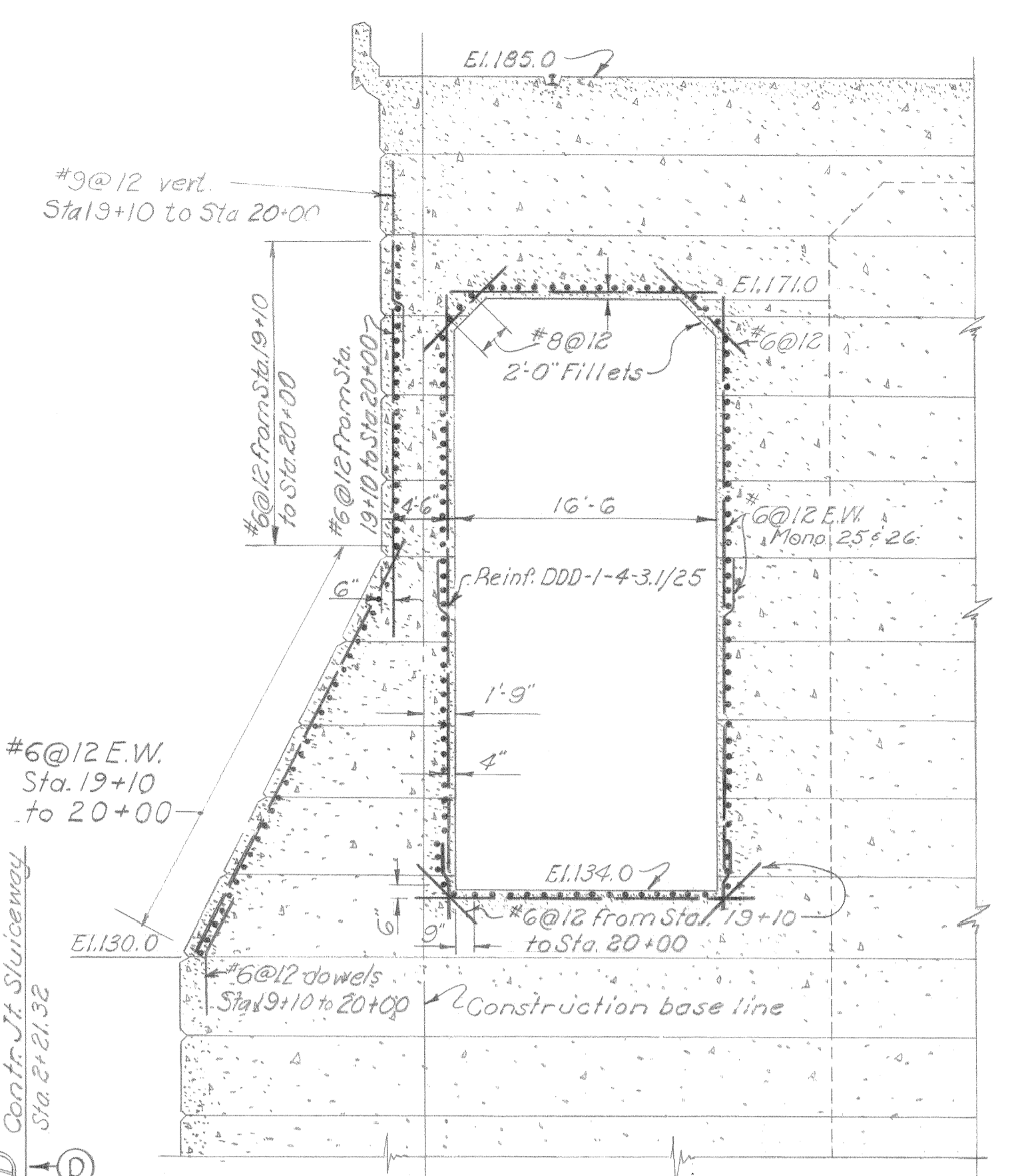
APPROVED: [Signature] DATE: 8-31-54  
 SCALE AS SHOWN SPEC. NO. \_\_\_\_\_  
 SHEET 315 OF DDD-1-4-3.1/25



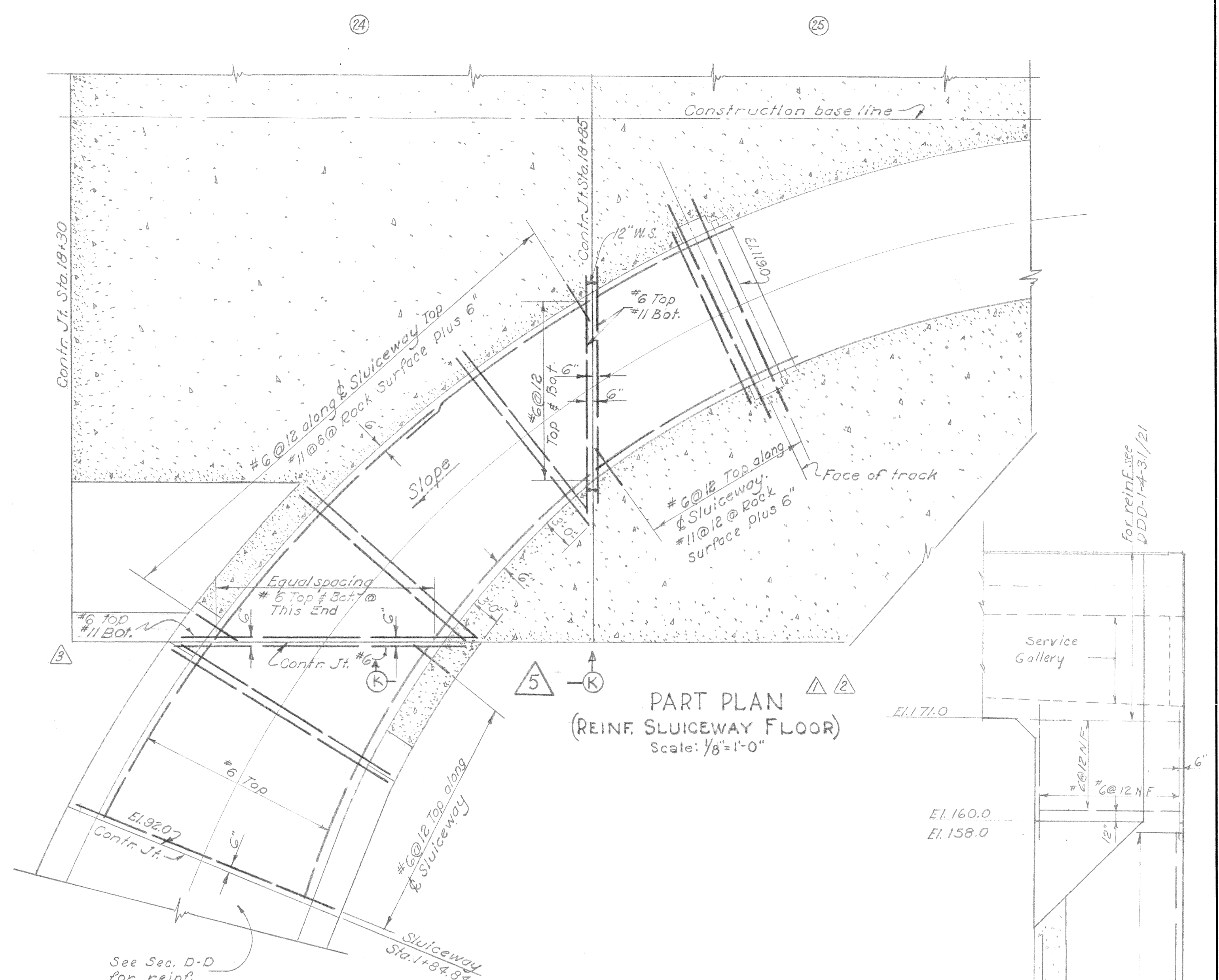
DEVELOPED SECTION B-B (For location see DDP-1-4-3.1/25) Scale: 1/8"=1'-0"



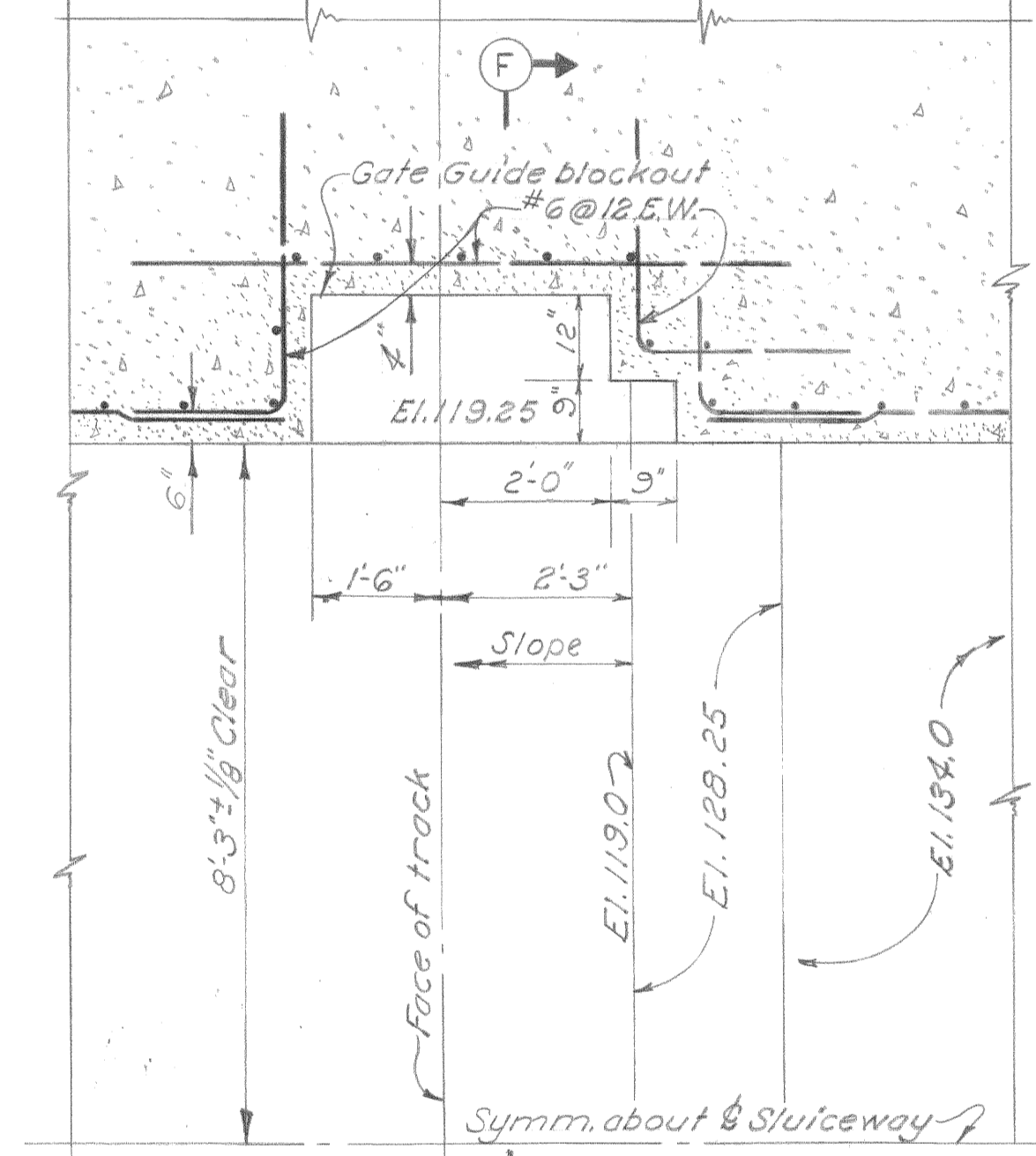
SECTION C-C Scale: 3/8"=1'-0"



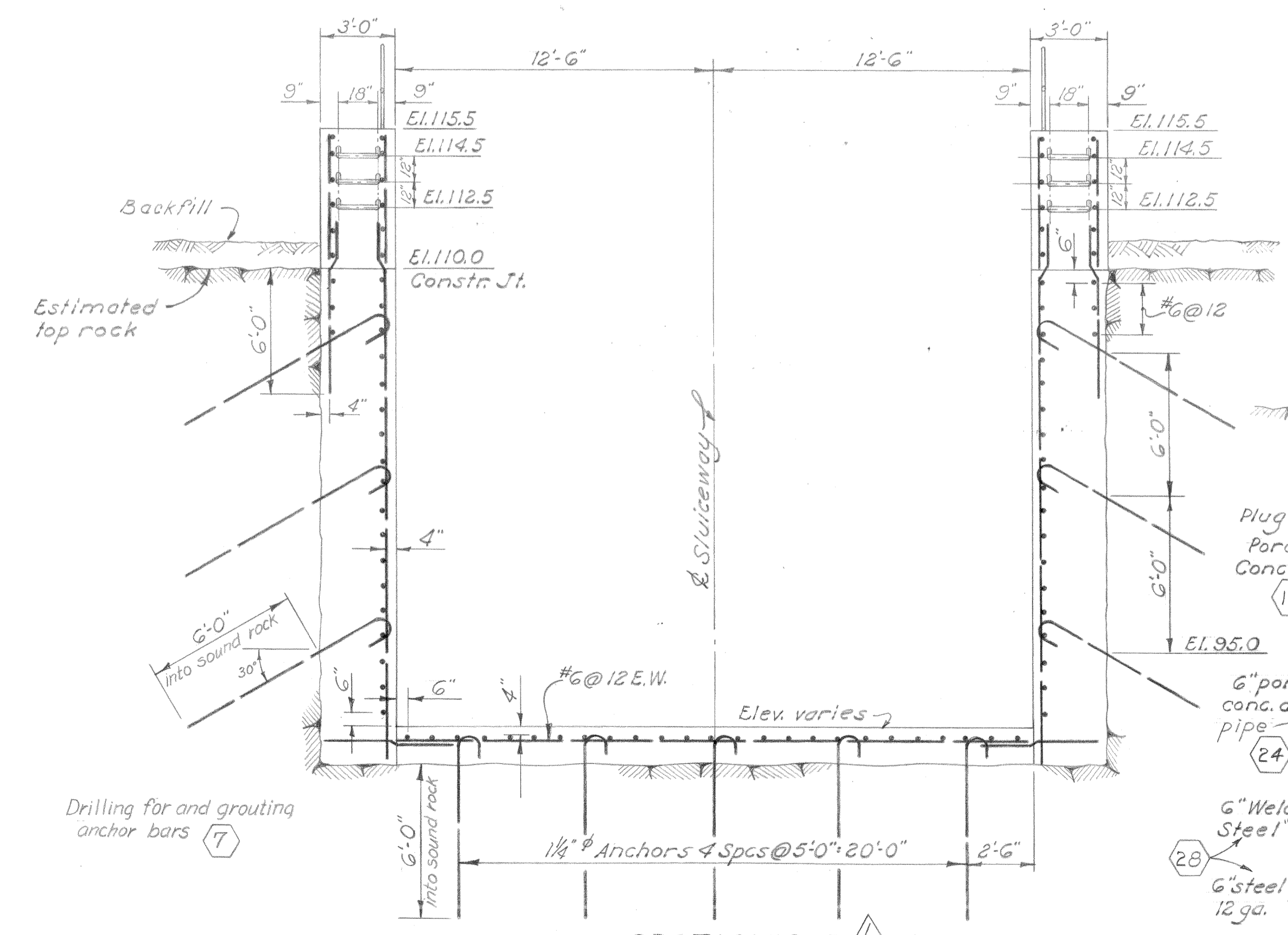
SECTION E-E (See DDD-1-4-3.1/25) Scale: 1/8"=1'-0"



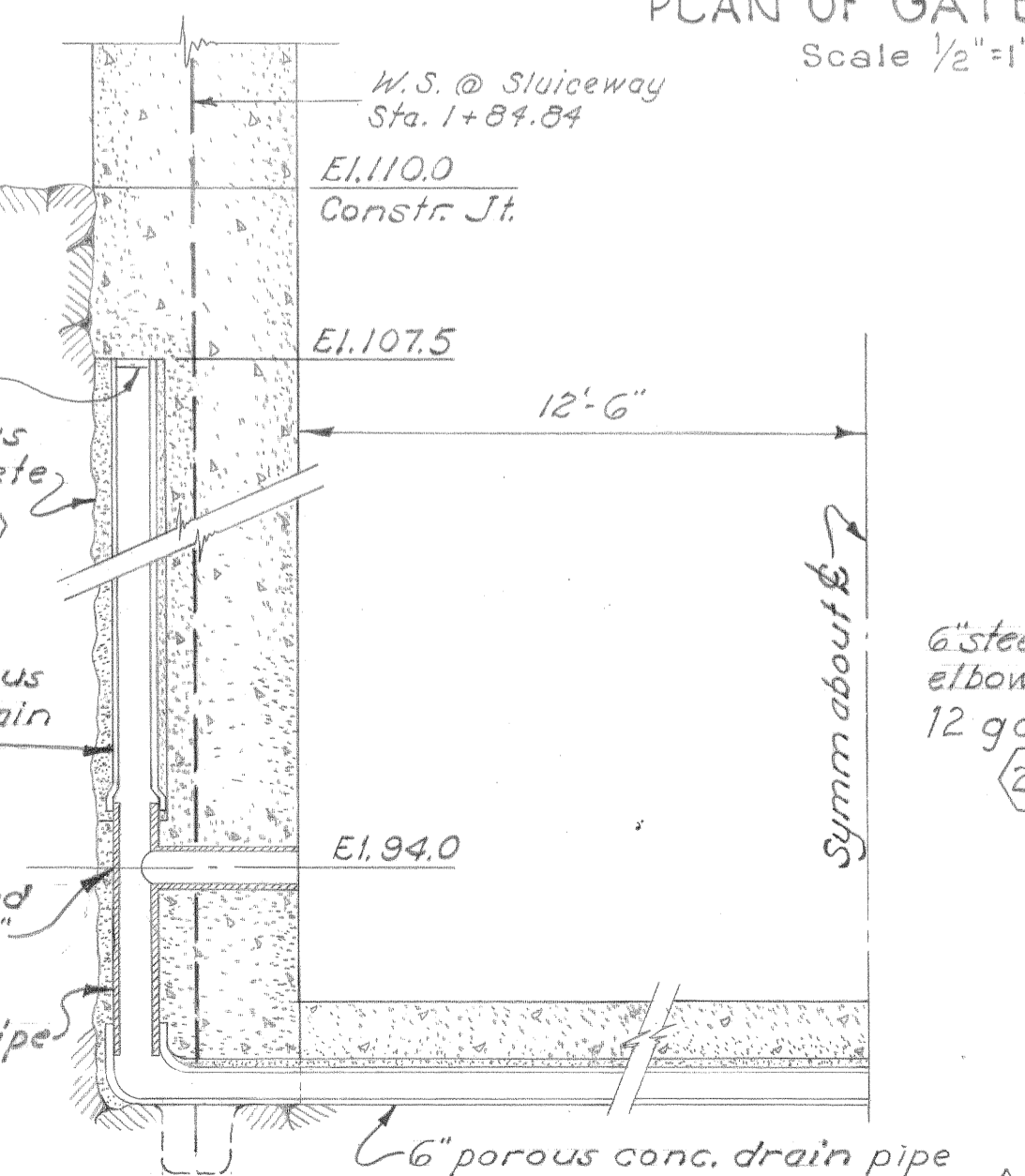
PART PLAN (REINF SLUICWAY FLOOR) Scale: 1/8"=1'-0"



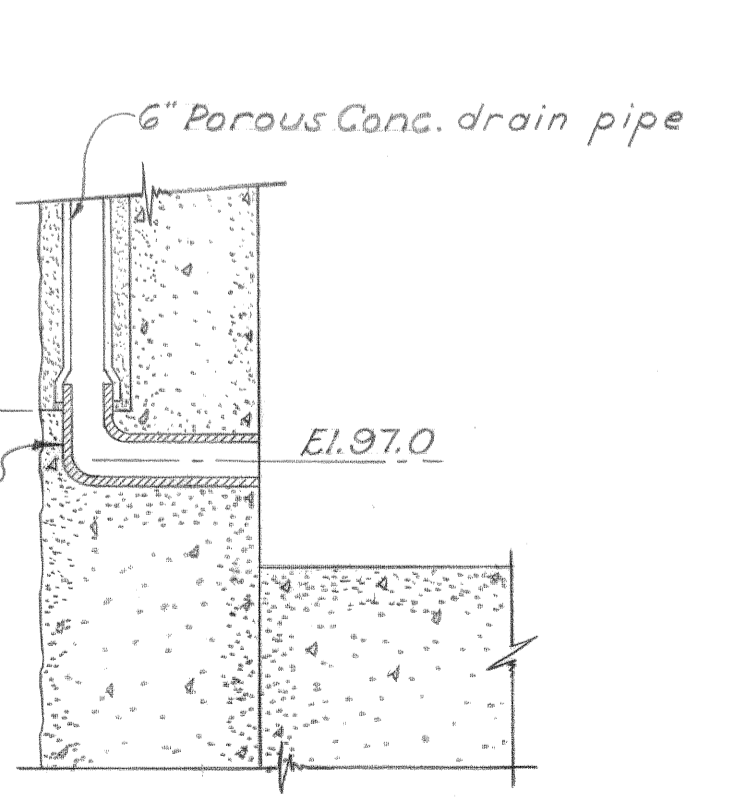
PLAN OF GATE SLOT Scale: 1/2"=1'-0"



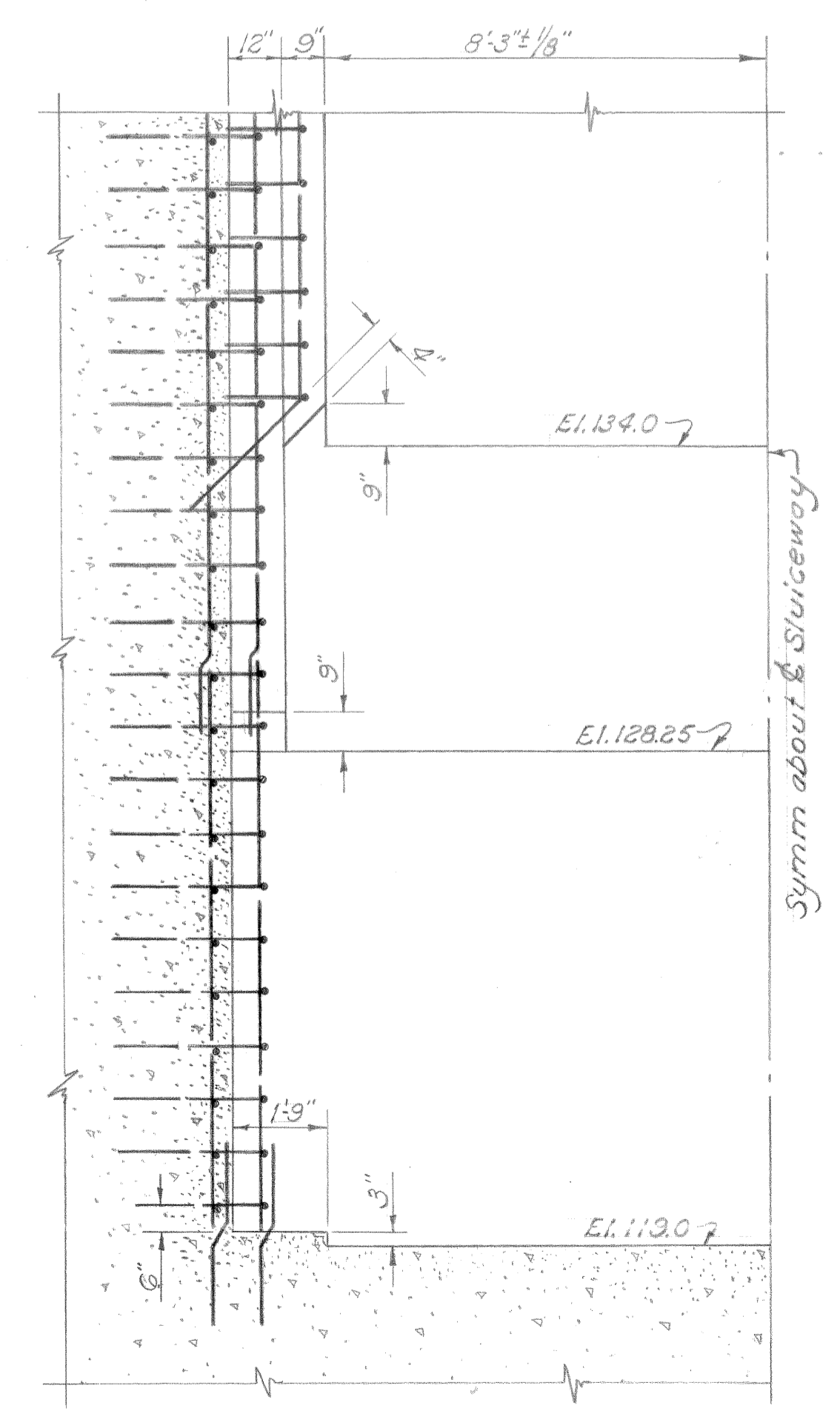
SECTION D-D Scale: 1/4"=1'-0"



TYPICAL DETAIL DRAIN OUTLET Scale: 3/8"=1'-0"



DRAIN OUTLET AT SLUICWAY STA. 1+75



SECTION F-F Scale: 3/8"=1'-0"

**AS CONSTRUCTED**  
 CONTRACT NO. DA-35-026-ENG-205999  
 CONTRACTOR Montag Halvorsen - Cascade - Austin  
 DATE OF RECEIPT OF NOTICE TO PROCEED 3 JAN. 1958  
 DATE OF COMPLETION OF CONTRACT 18 SEPT. 1958  
 DATE OF ACCEPTANCE 18 SEPT. 1958

SECTION K-K Scale: 1/8"=1'-0"

NOTES

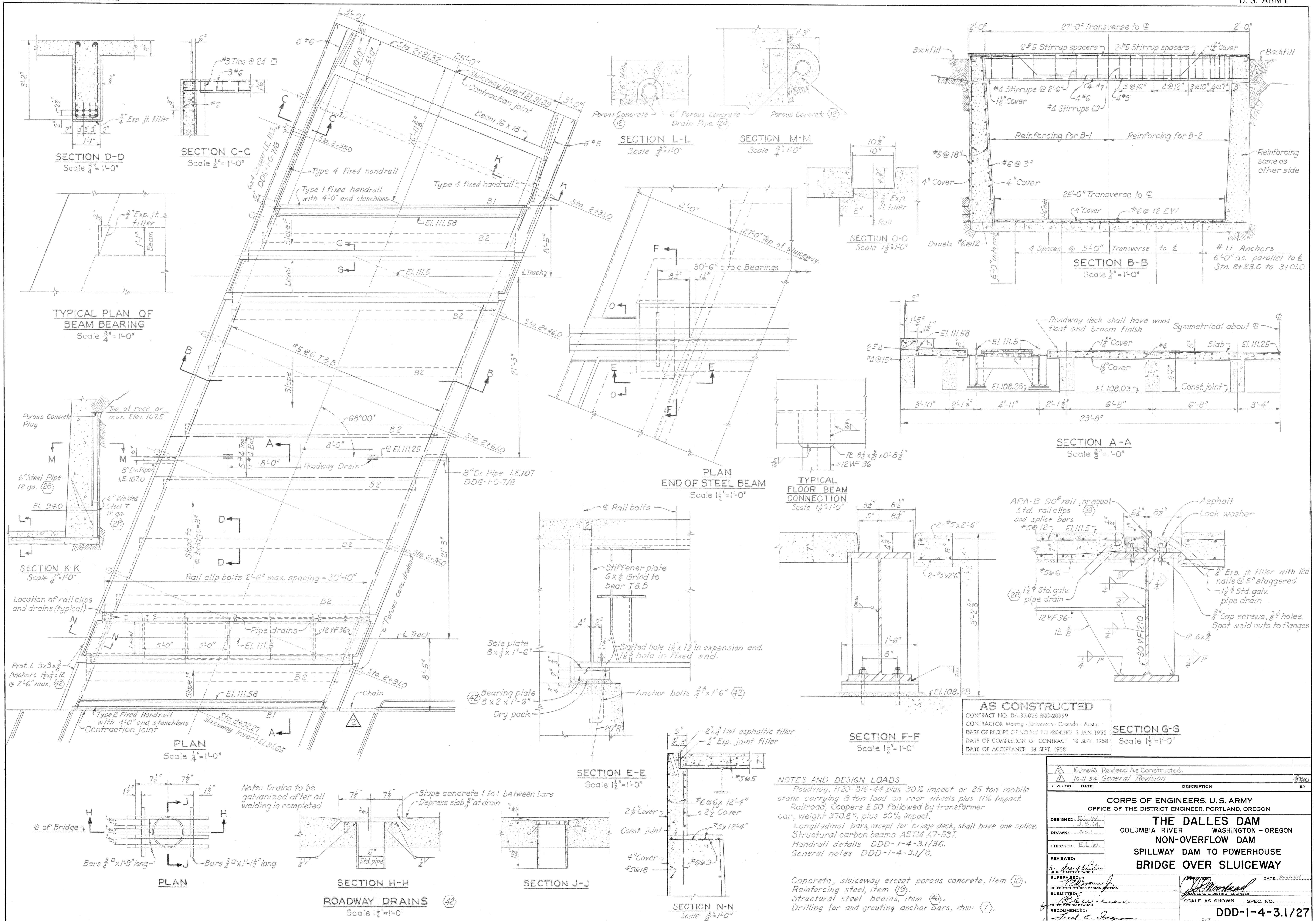
- For General Notes See DDD-1-4-3.1/8.  
 Work this drawing with DDD-1-4-3.1/25  
 Handrails DDD-1-4-3.1/36  
 Sluiceway Gate & Stoplog Guides DDD-1-4-3.1/39
- | REVISION | DATE     | DESCRIPTION  | BY  |
|----------|----------|--|-----|
| 1        | 9-28-58  | Added Section K-K + Reinf.                                       | AWJ |
| 2        | 8-26-58  | Added Gate Air Vent.   | AWJ |
| 3        | 5-16-55  | Rev. Top of Dam, Evert. Sec. B-B; Minor Revisions & Corrections. | AWJ |
| 4        | 11/17/54 | Added W.S. @ Sta. 18+85, changed coverage in sluiceway.          | AWJ |
| 5        | 10/11/54 | Revised Reinf., Added Scuppers.                                  | AWJ |

CORPS OF ENGINEERS, U. S. ARMY  
 OFFICE OF THE DISTRICT ENGINEER, PORTLAND, OREGON

**THE DALLES DAM**  
 COLUMBIA RIVER WASHINGTON - OREGON  
 NON-OVERFLOW DAM  
 SPILLWAY TO POWERHOUSE  
 SLUICWAY II

DESIGNED: W.A.O.  
 DRAWN: J.T.D.  
 CHECKED: J.S.S.  
 REVIEWED: J.A.M. White  
 SUPERVISED: J.A.M. White  
 SUBMITTED: J.A.M. White  
 RECOMMENDED: J.A.M. White  
 APPROVED: J.A.M. White DATE: 8-31-58

SCALE AS SHOWN SPEC. NO. DDD-1-4-3.1/26  
 SHEET 316 OF



**AS CONSTRUCTED**  
 CONTRACT NO. DA-35-024-ENG-20959  
 CONTRACTOR: Montagu - Halverson - Cascade - Austin  
 DATE OF RECEIPT OF NOTICE TO PROCEED: 3 JAN 1955  
 DATE OF COMPLETION OF CONTRACT: 18 SEPT. 1958  
 DATE OF ACCEPTANCE: 18 SEPT. 1958

**NOTES AND DESIGN LOADS**  
 Roadway, H20-816-44 plus 30% impact or 25 ton mobile crane carrying 8 ton load on rear wheels plus 11% impact.  
 Railroad, Coopers E50 followed by transformer car, weight 370.8k, plus 30% impact.  
 Longitudinal bars, except for bridge deck, shall have one splice.  
 Structural carbon beams ASTM A7-53T.  
 Handrail details DDD-1-4-3.1/36.  
 General notes DDD-1-4-3.1/8.

Concrete, sluiceway except porous concrete, item (10).  
 Reinforcing steel, item (19).  
 Structural steel beams, item (40).  
 Drilling for and grouting anchor bars, item (7).

REVISION	DATE	DESCRIPTION	BY
10 June 53		Revised As Constructed.	
10-11-54		General Revision	

**CORPS OF ENGINEERS, U. S. ARMY**  
 OFFICE OF THE DISTRICT ENGINEER, PORTLAND, OREGON

**THE DALLES DAM**  
 COLUMBIA RIVER WASHINGTON - OREGON  
**NON-OVERFLOW DAM**  
 SPILLWAY DAM TO POWERHOUSE  
**BRIDGE OVER SLUICWAY**

DESIGNED: E.L.W.  
 DRAWN: J.S.M.  
 CHECKED: E.L.W.  
 REVIEWED: [Signature]  
 SUPERVISOR: [Signature]  
 CHIEF STRUCTURES DESIGN SECTION: [Signature]  
 SUBMITTED: [Signature]  
 CHIEF DESIGN BRANCH: [Signature]  
 RECOMMENDED: [Signature]  
 CHIEF ENGINEERS DIVISION: [Signature]

DATE: 5-31-58  
 SCALE AS SHOWN SPEC. NO. DDD-1-4-3.1/27  
 SHEET 317 OF