

# CITY OF ANN ARBOR

# ARGO DAM & GEDDES DAM COATING AND MISCELLANEOUS REPAIRS

January 2013

ITB#: 4261

File #: 13001

Stantec Project Number: 2075116502

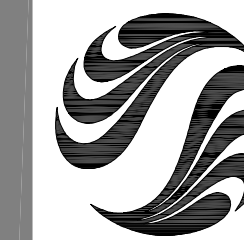
BID SET

DRAWING INDEX:

DWG	SHEET	TITLE
G-001	01	COVER SHEET
G-002	02	GENERAL NOTES AND SITE DETAILS
1C-101	03	ARGO DAM EXISTING CONDITIONS/SITE PROTECTION
1C-102	04	ARGO DAM SITE WORK
1M-401	05	ARGO DAM SPILLWAY REPAIRS I
1M-402	06	ARGO DAM SPILLWAY REPAIRS II
1M-501	07	ARGO DAM REPAIRS DETAILS
2C-101	08	GEDDES DAM EXISTING CONDITIONS/SITE PROTECTION
2C-102	09	GEDDES DAM SITE WORK
2M-401	10	GEDDES DAM SPILLWAY REPAIRS I
2M-402	11	GEDDES DAM SPILLWAY REPAIRS II
2M-501	12	GEDDES DAM REPAIRS DETAILS







Stantec Consulting Michigan Inc.  
 3754 Ranchero Drive  
 Ann Arbor MI U.S.A.  
 48108-2771  
 Tel. 734.761.1010  
 Fax. 734.761.1200  
 www.stantec.com

Copyright Reserved  
 The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
 The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes  
 SURVEY DATUM: NGVD 29

Revision	By	Appd.	YY.MM.DD
BID SET	PJM	GRW	13.01.07
MDEO PERMIT SET	PJM	GRW	12.12.21
95% CLIENT REVIEW	PJM	GRW	12.12.14
MDEO PERMIT	PJM	GRW	12.12.04
60% CLIENT REVIEW	PJM	GRW	12.11.08
Issued	By	Appd.	YY.MM.DD

File Name:	116502-1C-101.DWG	BWAFDA	PJM	PJM	12.10.11
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

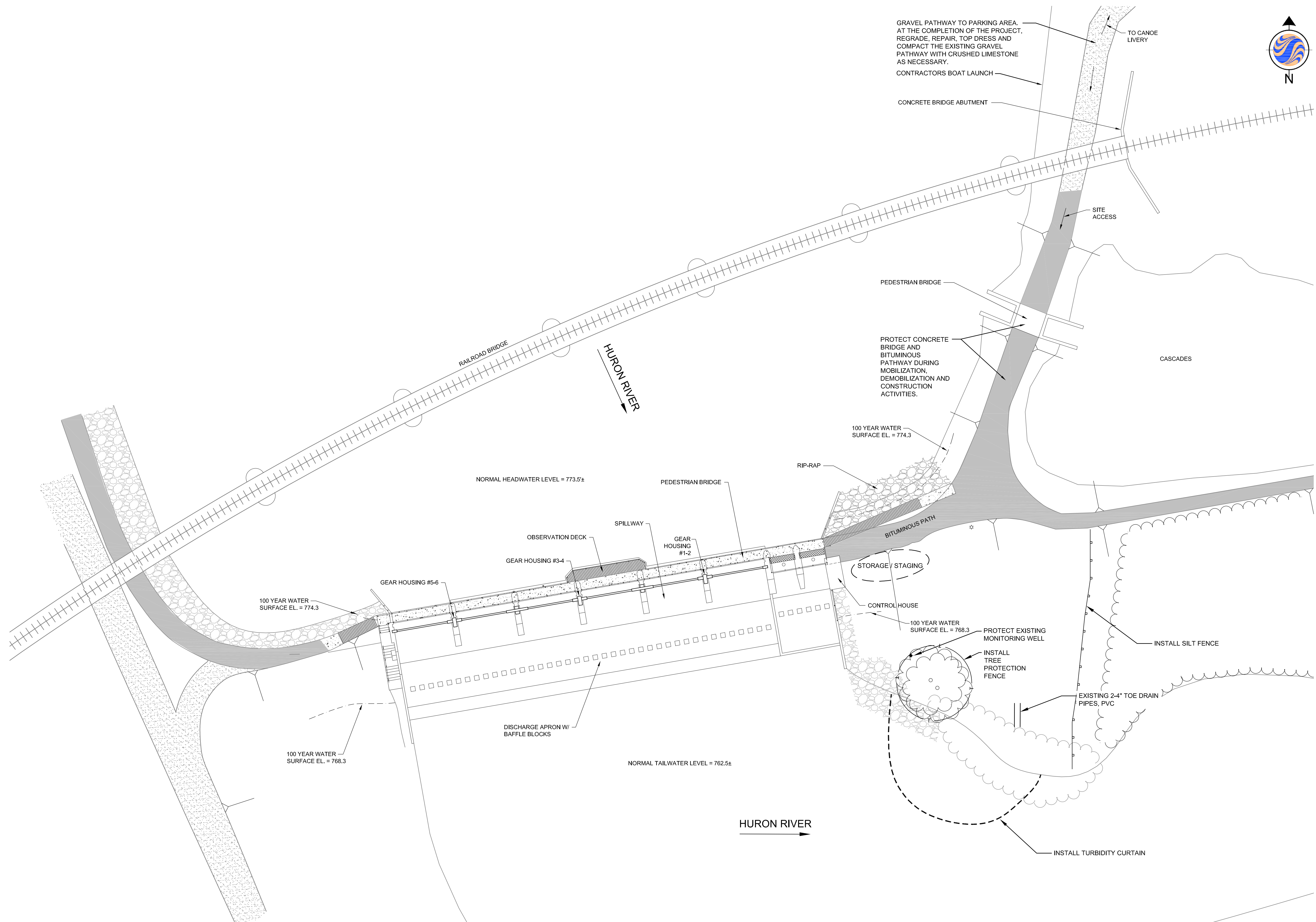
Client/Project  
 CITY OF ANN ARBOR

ARGO DAM & GEDDES DAM  
 COATING AND MISCELLANEOUS REPAIRS  
 Ann Arbor, Michigan

Title  
 ARGO DAM  
 EXISTING CONDITIONS/  
 SITE PROTECTION

Project No. 2075116502	Scale 1:20	Sheet 3 of 12	Revision 0
---------------------------	---------------	------------------	---------------

1C-101 3 of 12 0

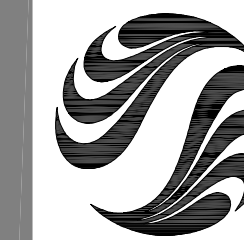


**811**  
 Know what's below.  
 Call before you dig.

**NOTE:**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

W:\2075116502\2075116502.dwg 11/10/2011 11:00:00 AM 11/10/2011 11:00:00 AM





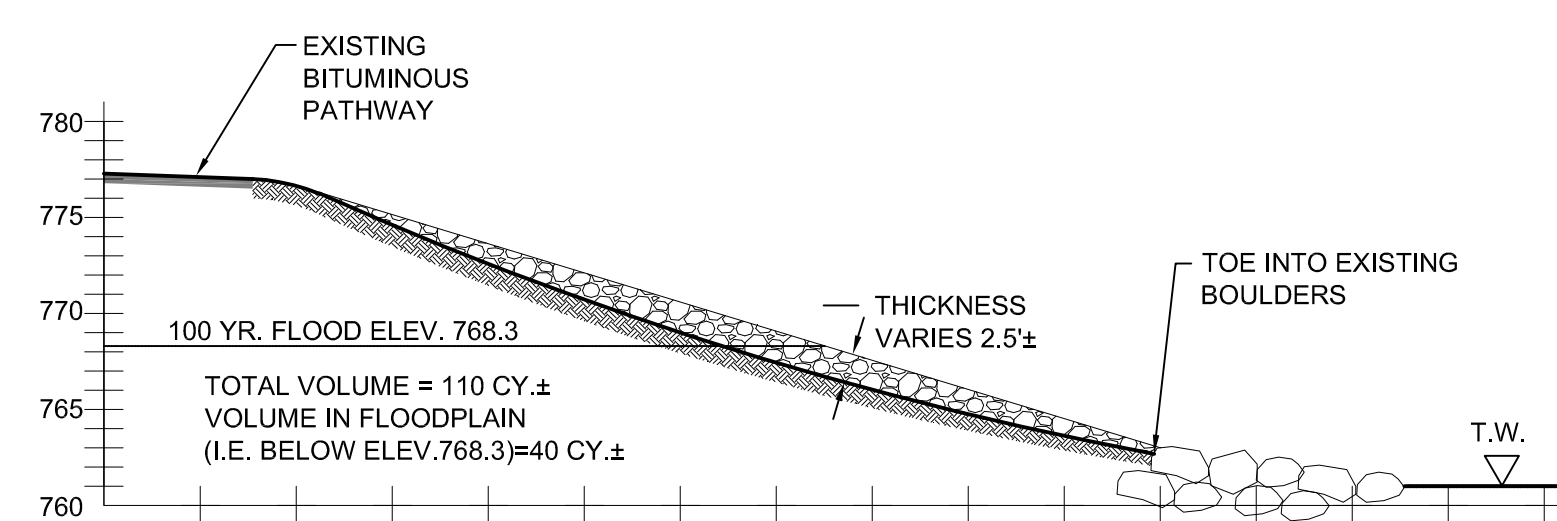
Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
 The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

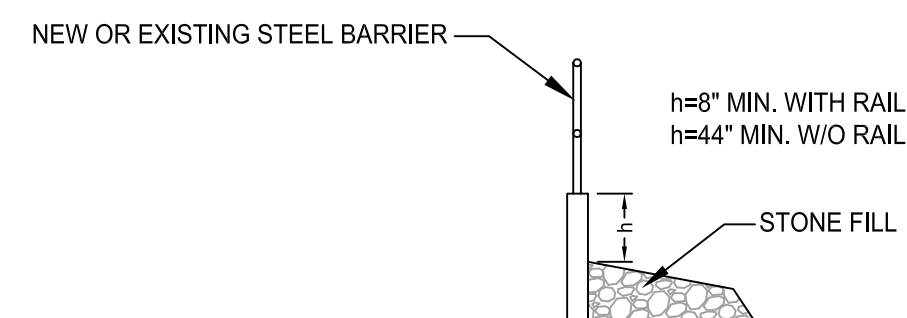
Consultants

Legend

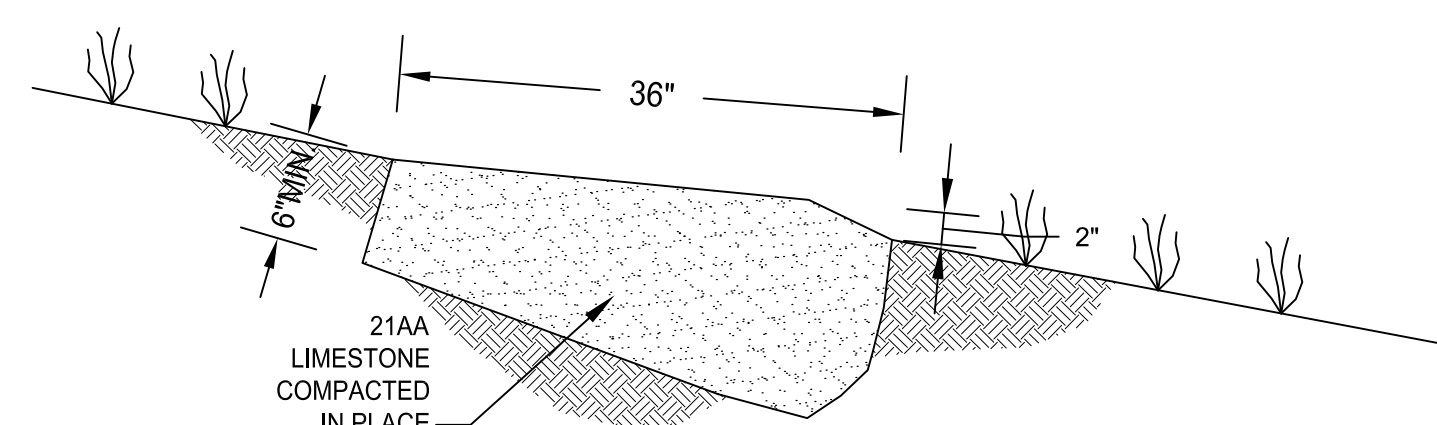
Notes



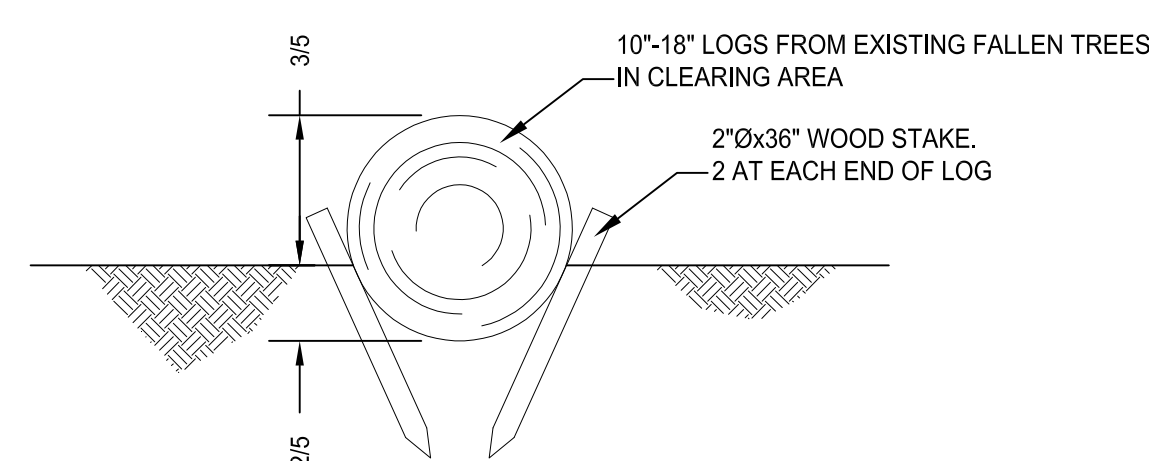
SECTION C1  
SCALE: 1" = 10'



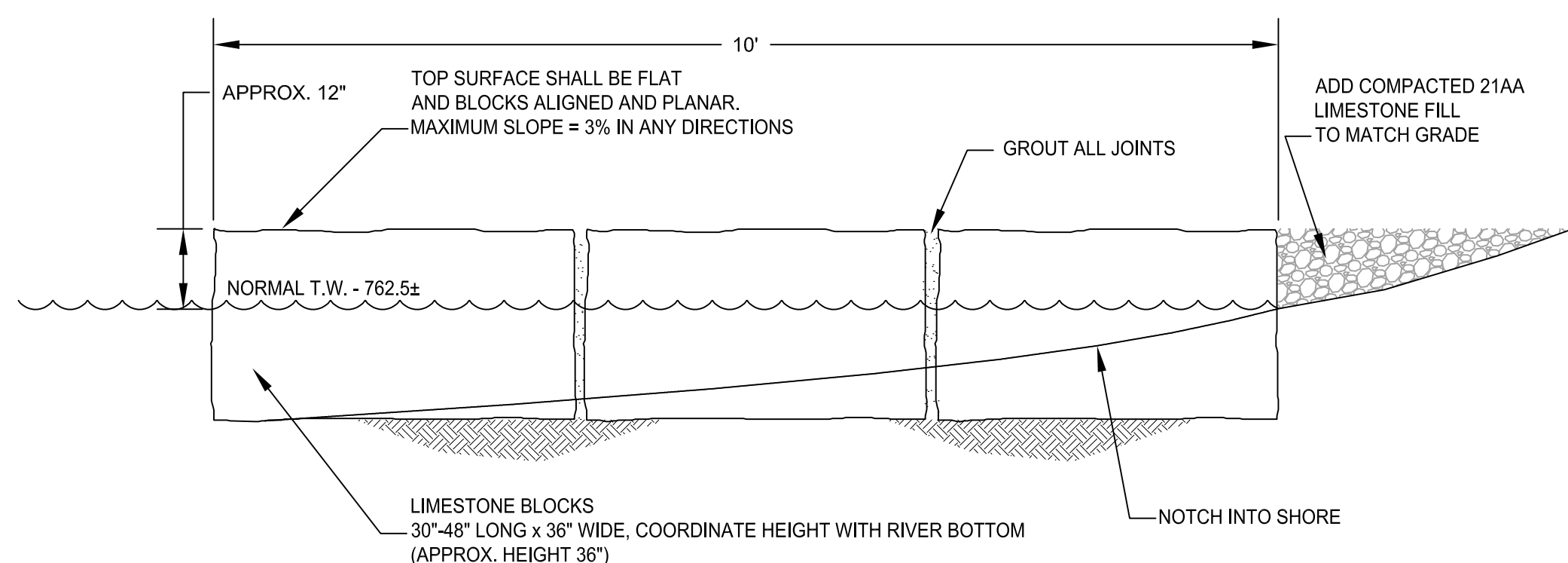
SECTION C2  
SCALE: 1/2" = 1'-0"



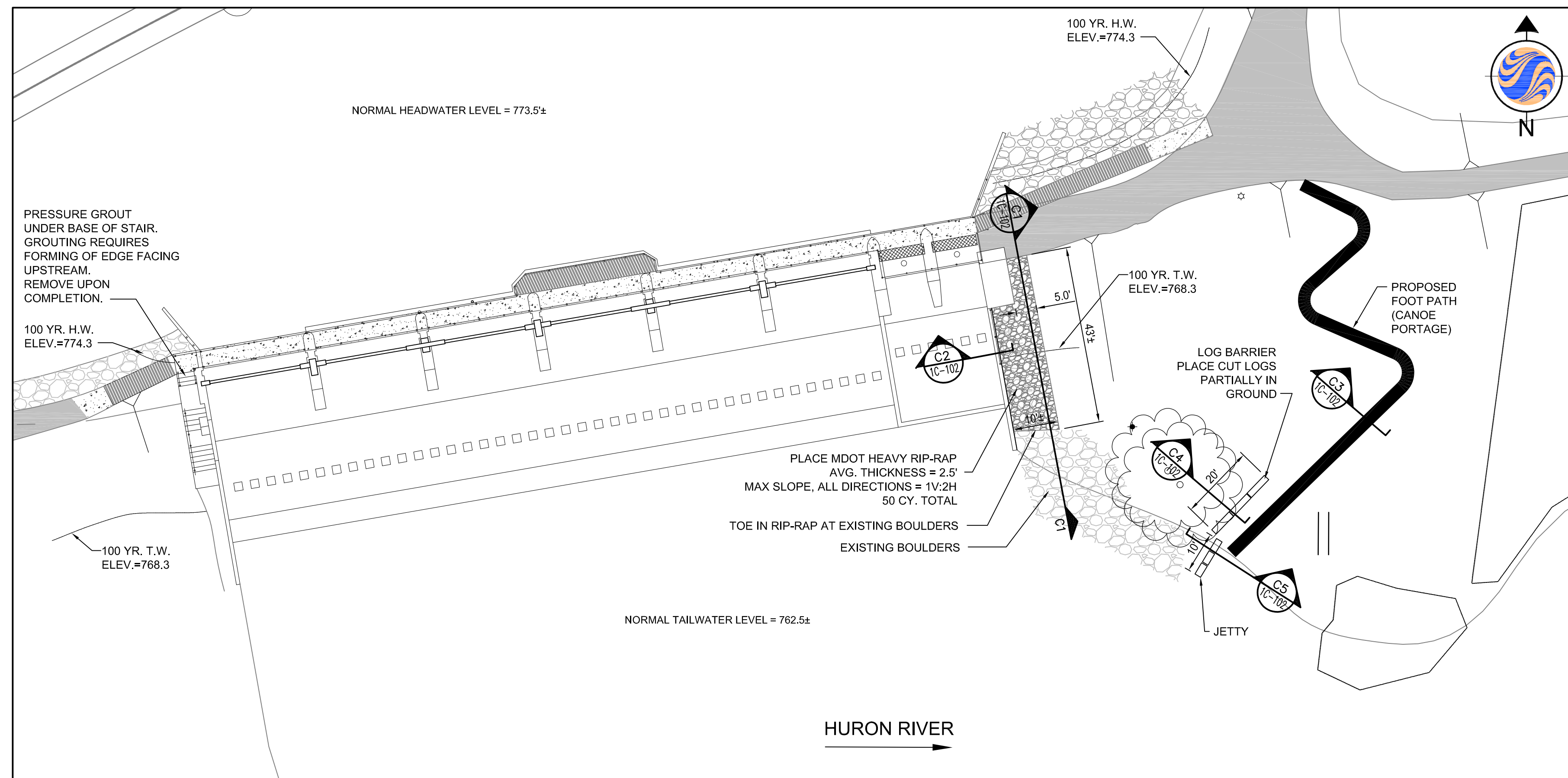
SECTION C3-GRAVEL PATH  
SCALE: NONE



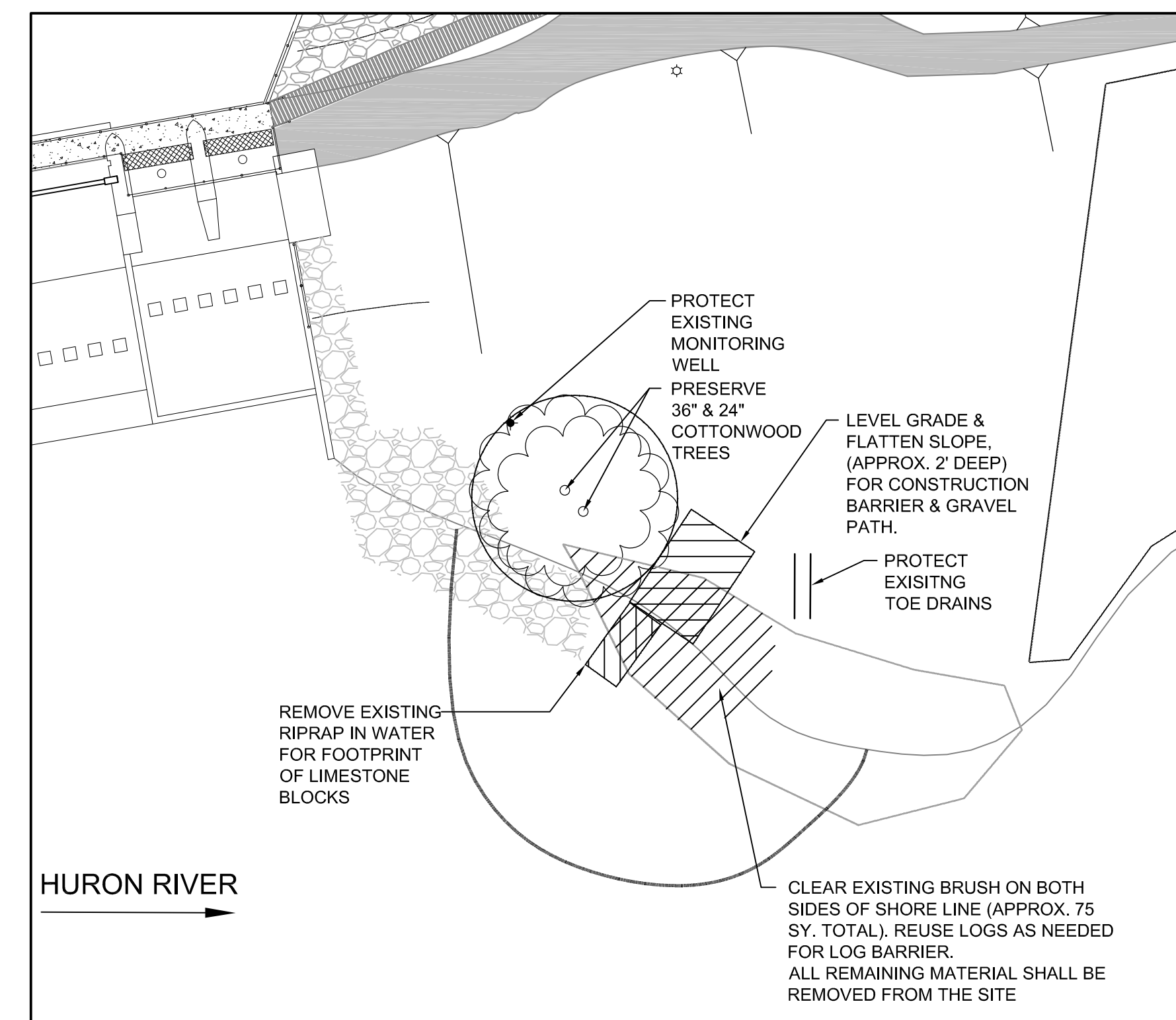
SECTION C4-LOG BARRIER  
SCALE: NONE



SECTION C5-JETTY  
SCALE: NONE



PROPOSED PLAN



CLEARING PLAN

**811**  
 Know what's below.  
 Call before you dig.

NOTE:  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

Revision	By	Appd.	YY.MM.DD
BID SET	PJM	GRW	13.01.07
MDOE PERMIT SET	PJM	GRW	12.12.21
95% CLIENT REVIEW	PJM	GRW	12.12.14
MDOE PERMIT	PJM	GRW	12.12.04
60% CLIENT REVIEW	PJM	GRW	12.11.08
Issued	By	Appd.	YY.MM.DD

File Name	BWA/FDA	PJM	PJM	12.10.11
116502-1C-102.DWG	Dwn.	Chkd.	Dsgn.	YY.MM.DD

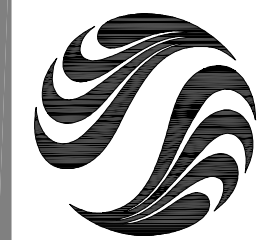
Client/Project  
 CITY OF ANN ARBOR  
 ARGO DAM & GEDDES DAM  
 COATING AND MISCELLANEOUS REPAIRS  
 Ann Arbor, Michigan

Title  
 ARGO DAM  
 SITE WORK

Project No.	Scale	Sheet	Revision
2075116502	1:20	4 of 12	0

Drawing No. 1C-102





Stantec Consulting Michigan Inc.  
 3754 Ranchero Drive  
 Ann Arbor MI U.S.A.  
 48108-2771  
 Tel. 734.761.1010  
 Fax. 734.761.1200  
 www.stantec.com

**Stantec**

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
 The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

- ITEMS TO BE PAINTED UNDER BASE BID
- DEMOLISH

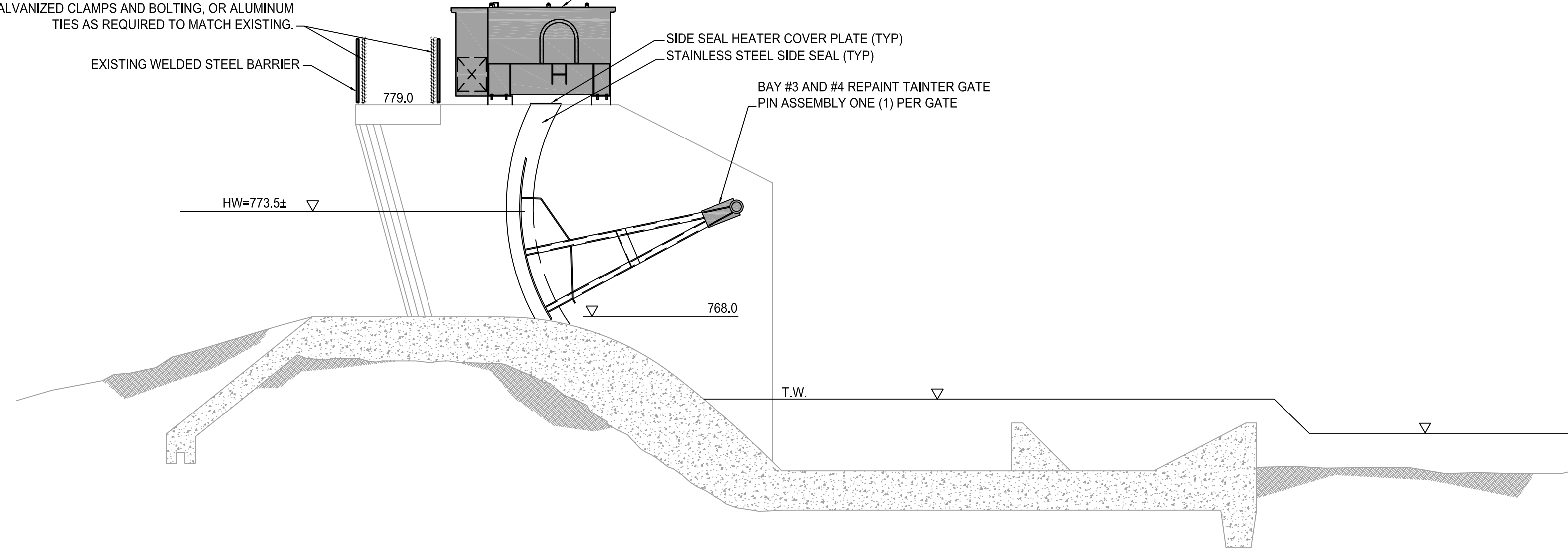
Notes

RELOCATE EXISTING FENCE PANELS TO OUTSIDE OF EXISTING STEEL BARRIER. FASTEN PANELS WITH STAINLESS STEEL HARDWARE. SIZE AND LOCATION TO MATCH EXISTING. BOLTS AND TIES SHALL FACE OUT FROM THE DECK. TRIM BOLTS TO WITHIN 1/4" OF TIGHTENED NUT. SMOOTHEN CUT BOLT END. REFASTEN FENCE FABRIC AS NEEDED USING GALVANIZED CLAMPS AND BOLTING, OR ALUMINUM TIES AS REQUIRED TO MATCH EXISTING.

REMOVE AND REPAINT GEAR HOUSING AND RELATED EQUIPMENT (TYP. OF 3) SEE DETAILS ON DWG 1M-402

SIDE SEAL HEATER COVER PLATE (TYP)  
 STAINLESS STEEL SIDE SEAL (TYP)

BAY #3 AND #4 REPAINT TAINTER GATE PIN ASSEMBLY ONE (1) PER GATE



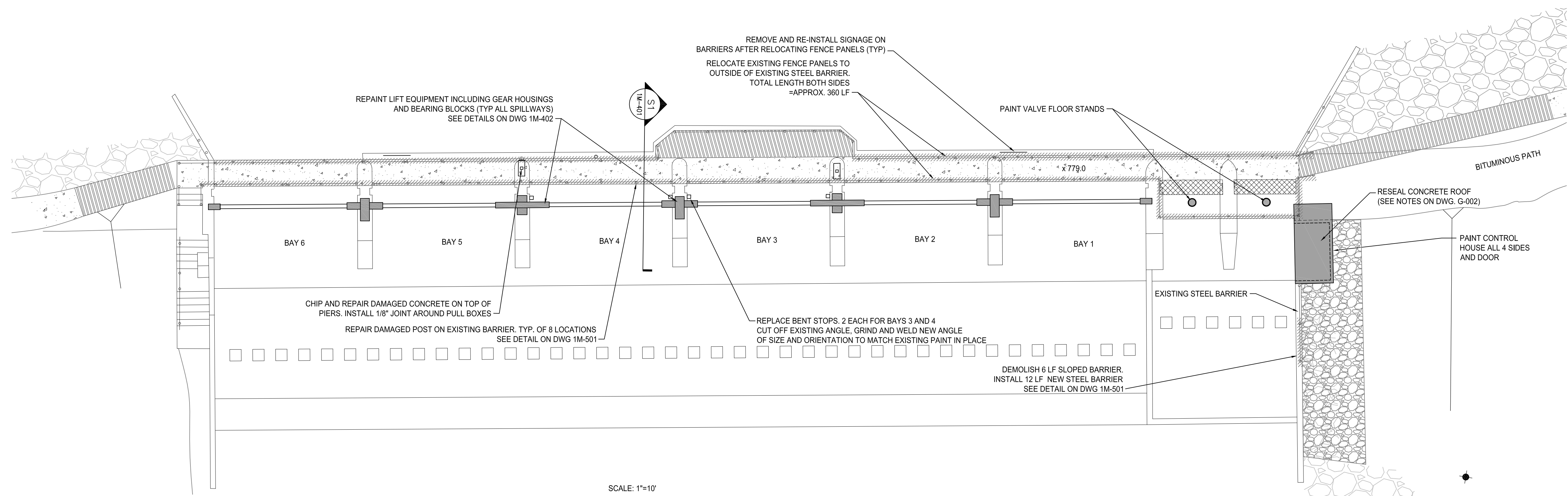
**SECTION S1**  
 SCALE: 1/2" = 1'-0"

REPAINT LIFT EQUIPMENT INCLUDING GEAR HOUSINGS AND BEARING BLOCKS (TYP ALL SPILLWAYS) SEE DETAILS ON DWG 1M-402

REMOVE AND RE-INSTALL SIGNAGE ON BARRIERS AFTER RELOCATING FENCE PANELS (TYP)

RELOCATE EXISTING FENCE PANELS TO OUTSIDE OF EXISTING STEEL BARRIER. TOTAL LENGTH BOTH SIDES = APPROX. 360 LF

PAINT VALVE FLOOR STANDS



RESEAL CONCRETE ROOF (SEE NOTES ON DWG. G-002)

PAINT CONTROL HOUSE ALL 4 SIDES AND DOOR

CHIP AND REPAIR DAMAGED CONCRETE ON TOP OF PIERS. INSTALL 1/8" JOINT AROUND PULL BOXES

REPAIR DAMAGED POST ON EXISTING BARRIER. TYP. OF 8 LOCATIONS SEE DETAIL ON DWG 1M-501

REPLACE BENT STOPS. 2 EACH FOR BAYS 3 AND 4 CUT OFF EXISTING ANGLE. GRIND AND WELD NEW ANGLE OF SIZE AND ORIENTATION TO MATCH EXISTING PAINT IN PLACE

DEMOLISH 6 LF SLOPED BARRIER. INSTALL 12 LF NEW STEEL BARRIER SEE DETAIL ON DWG 1M-501

SCALE: 1"=10'

Revision	By	Appd.	YY.MM.DD
BID SET	PJM	GRW	13.01.07
MDEO PERMIT SET	PJM	GRW	12.12.21
95% CLIENT REVIEW	PJM	GRW	12.12.14
MDEO PERMIT	PJM	GRW	12.12.04
60% CLIENT REVIEW	PJM	GRW	12.11.08
Issued	By	Appd.	YY.MM.DD

File Name:	BWA	PJM	PJM	12.10.11
116502-1M-401.DWG	Dwn.	Chkd.	Dsgn.	

Client/Project  
 CITY OF ANN ARBOR

ARGO DAM & GEDDES DAM  
 COATING AND MISCELLANEOUS REPAIRS  
 Ann Arbor, Michigan

Title  
 ARGO DAM SPILLWAY  
 REPAIRS I

Project No.	Scale	
2075116502	AS NOTED	
Drawing No.	Sheet	Revision

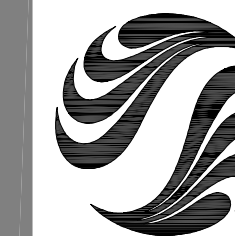
1M-401 5 of 12 0



Know what's below.  
 Call before you dig.

NOTE:

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.



**Stantec**

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
 The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

- ITEMS TO BE PAINTED UNDER BASE BID
- DEMOLISH / REPAIR

Notes

1. EQUIPMENT IS SHOWN WITH APPROXIMATE GEOMETRY AND DIMENSION ONLY.
2. ALL REFURBISHED EQUIPMENT SHALL RECEIVE NEW 304 S.S. BOLTS, TO MATCH EXISTING SIZE AND SPACING.

Revision	By	Appd.	YY.MM.DD
BID SET	PJM	GRW	13.01.07
MDEO PERMIT SET	PJM	GRW	12.12.21
95% CLIENT REVIEW	PJM	GRW	12.12.14
MDEO PERMIT	PJM	GRW	12.12.04
60% CLIENT REVIEW	PJM	GRW	12.11.08
Issued	By	Appd.	YY.MM.DD

File Name:	BWAFDA	PJM	PJM	12.10.11
	Dwn.	Chkd.	Dsgn.	YY.MM.DD
116502-1M-402.DWG				

Permit-Seal

Client/Project

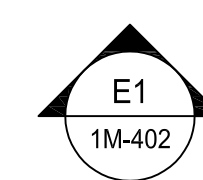
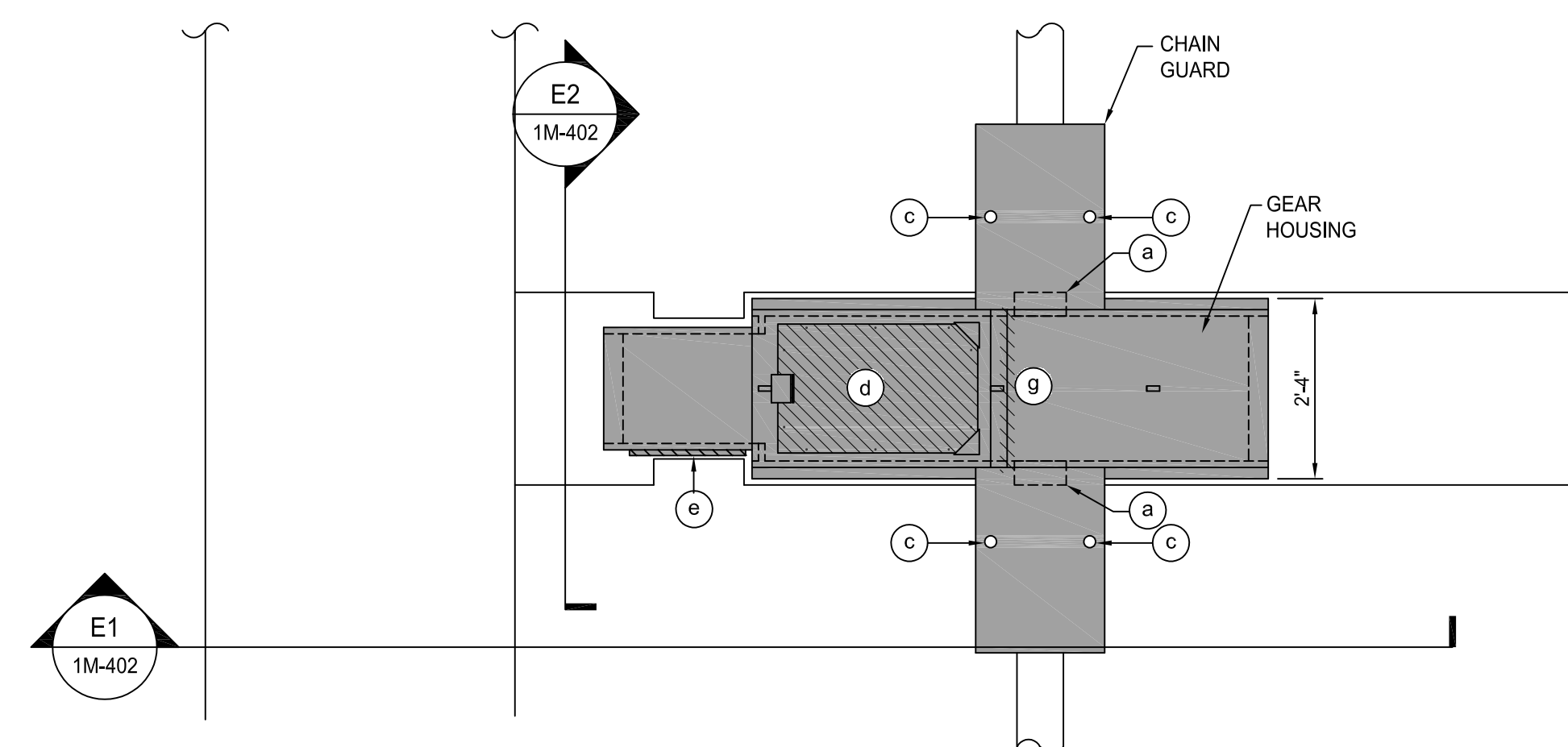
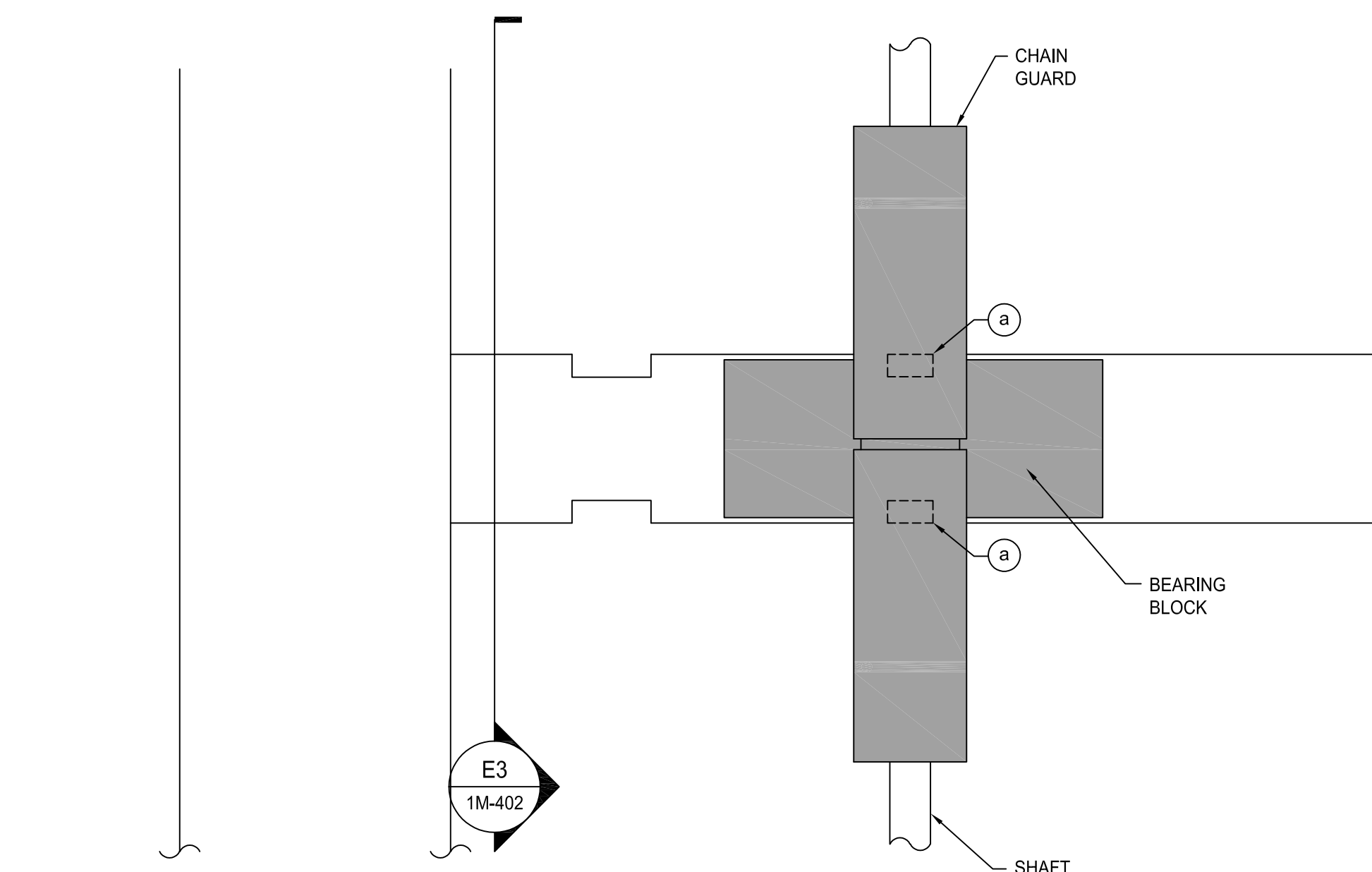
CITY OF ANN ARBOR

ARGO DAM & GEDDES DAM  
 COATING AND MISCELLANEOUS REPAIRS  
 Ann Arbor, Michigan

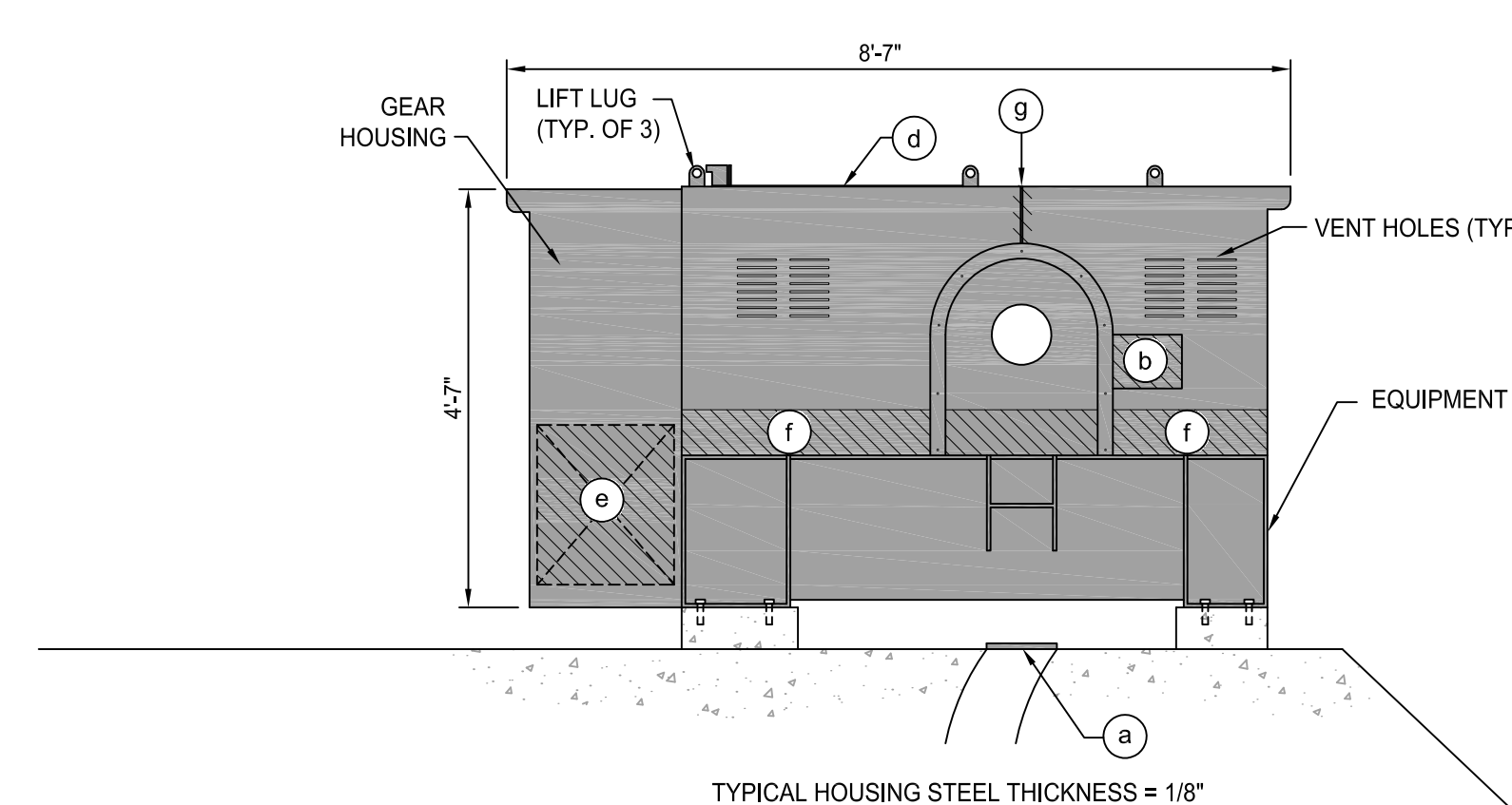
Title

ARGO DAM  
 REPAIRS II

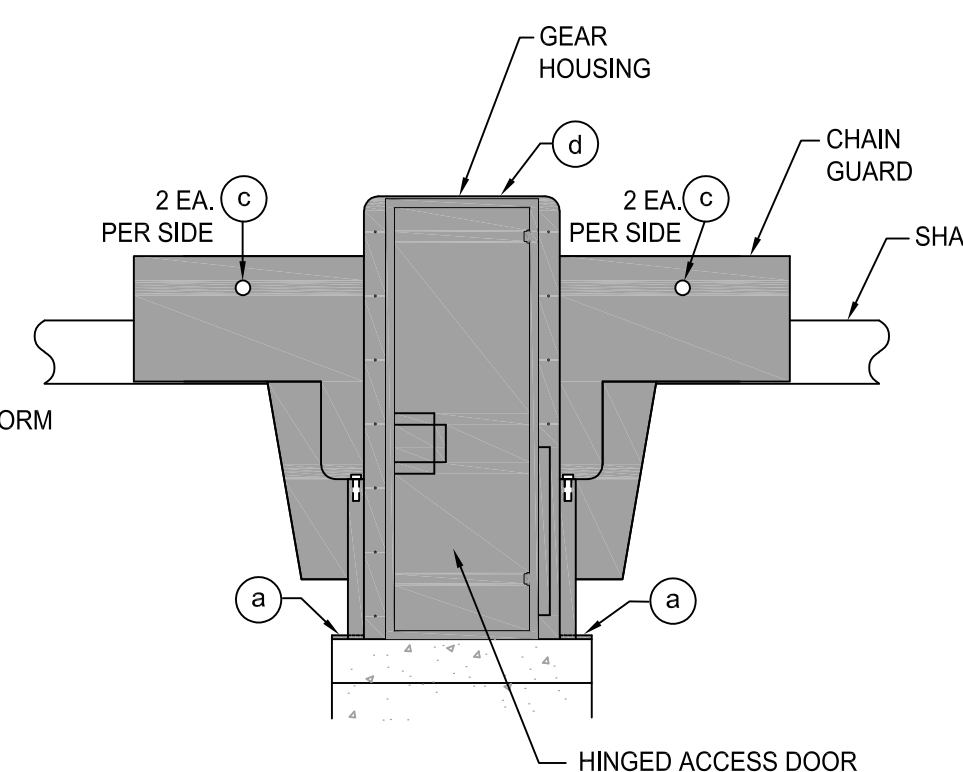
Project No.	Scale	
Drawing No.	Sheet	Revision
2075116502	AS NOTED	
1M-402	6 of 12	0



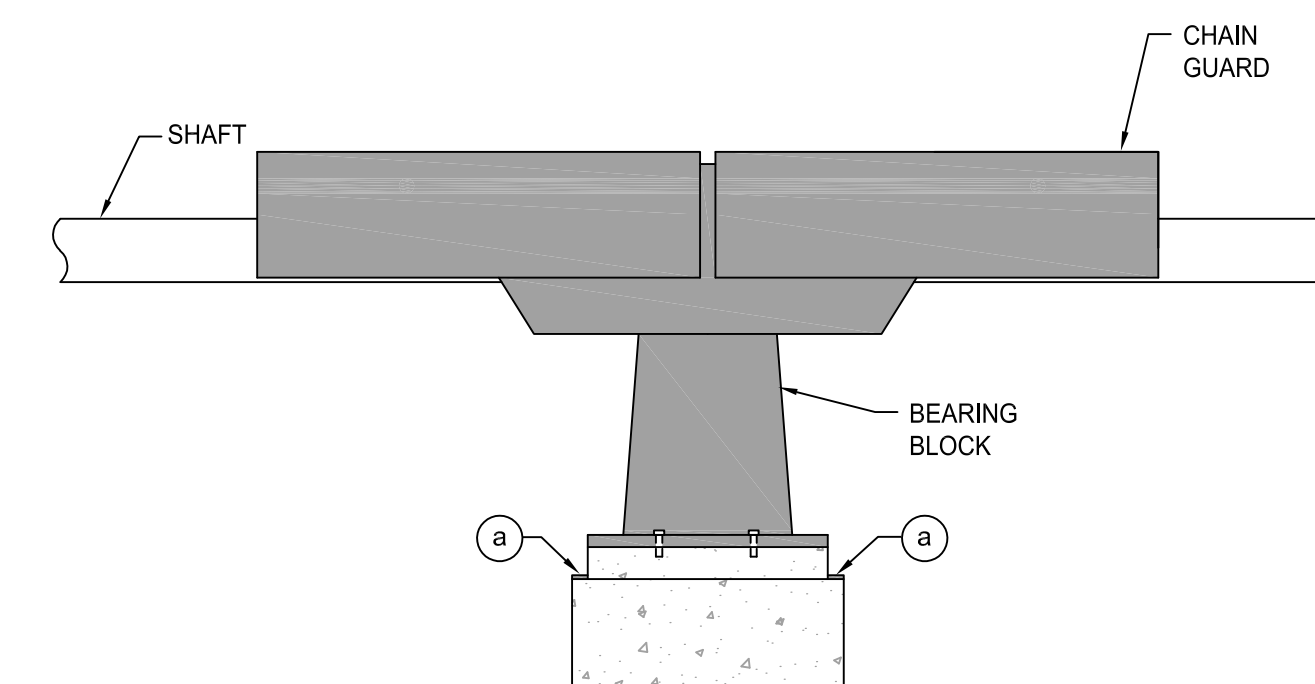
PLAN



ELEVATION E1



ELEVATION E2



ELEVATION E3

**LIFT EQUIPMENT**

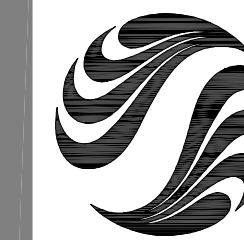
SCALE: 1/2" = 1'-0"

**REPAIR SCHEDULE - BASE BID**

GEAR HOUSING 1-2	GEAR HOUSING 3-4	GEAR HOUSING 5-6
(a) 4 EA.	(a) 1 S.F.	(a) 4 EA.
(c) 4 EA.	(b) 4 EA.	(c) 4 EA.
(d) 1 EA.	(c) 10 L.F.	(d) 5 L.F.
(e) 10 L.F.	(d) 1 EA.	
(f) 5 L.F.	(e) 1 EA.	
(g) 5 L.F.	(f) 10 L.F.	
	(g) 5 L.F.	

**KEY NOTES:**

- (a) INSTALL NEW 1/16" EDPM GASKETS ON ALL SIDE SEAL HEATER COVER PLATES AND PAINT COVER PLATES (2 EACH PER BAY).
- (b) REPLACE CORRODED STEEL PLATE. SEE DETAIL ON DWG. 1M-501 (QUANTITY SHOWN IN SCHEDULE).
- (c) PROVIDE NEW GREASE PORTS. SEE DETAIL ON DWG. 1M-501 (1 EA. PER CHAIN GUARD).
- (d) DEMOLISH OLD TOP ACCESS COVER AND FABRICATE NEW PER DETAIL ON DWG. 1M-501 (1 EACH PER HOUSING).
- (e) DEMOLISH SIDE ACCESS COVER AND WELD CLOSED WITH 11 GA PLATE PER DETAIL DWG. 1M-501 (QUANTITY SHOWN IN SCHEDULE).
- (f) REPLACE CORRODED STEEL AND BOTTOM FLANGE. SEE DETAIL ON DWG. 1M-501 (QUANTITY SHOWN IN SCHEDULE).
- (g) REPLACE CORRODED STEEL PANEL JOINT. SEE DETAIL ON DWG. 1M-501 (QUANTITY SHOWN IN SCHEDULE).



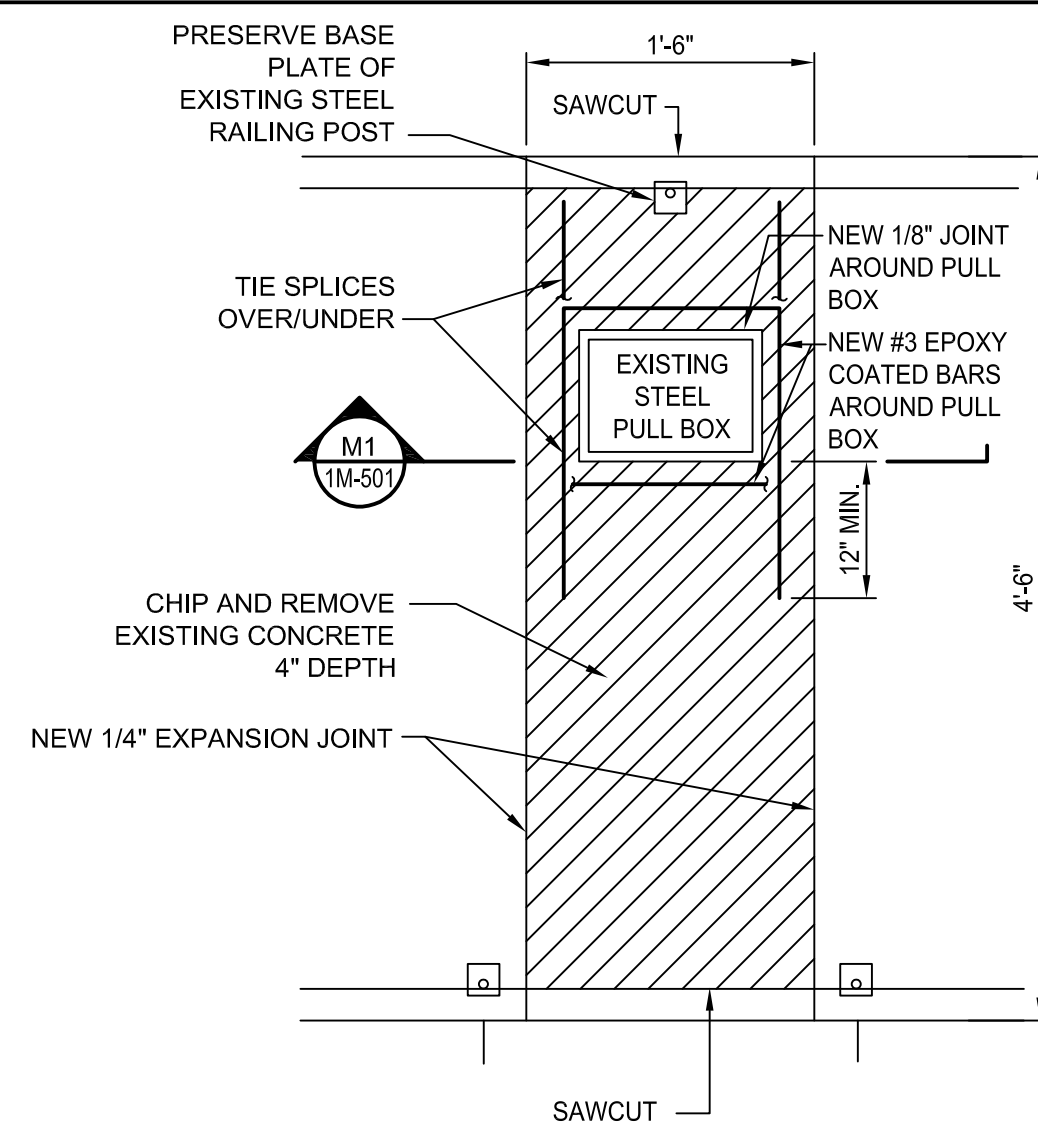
Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
 The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

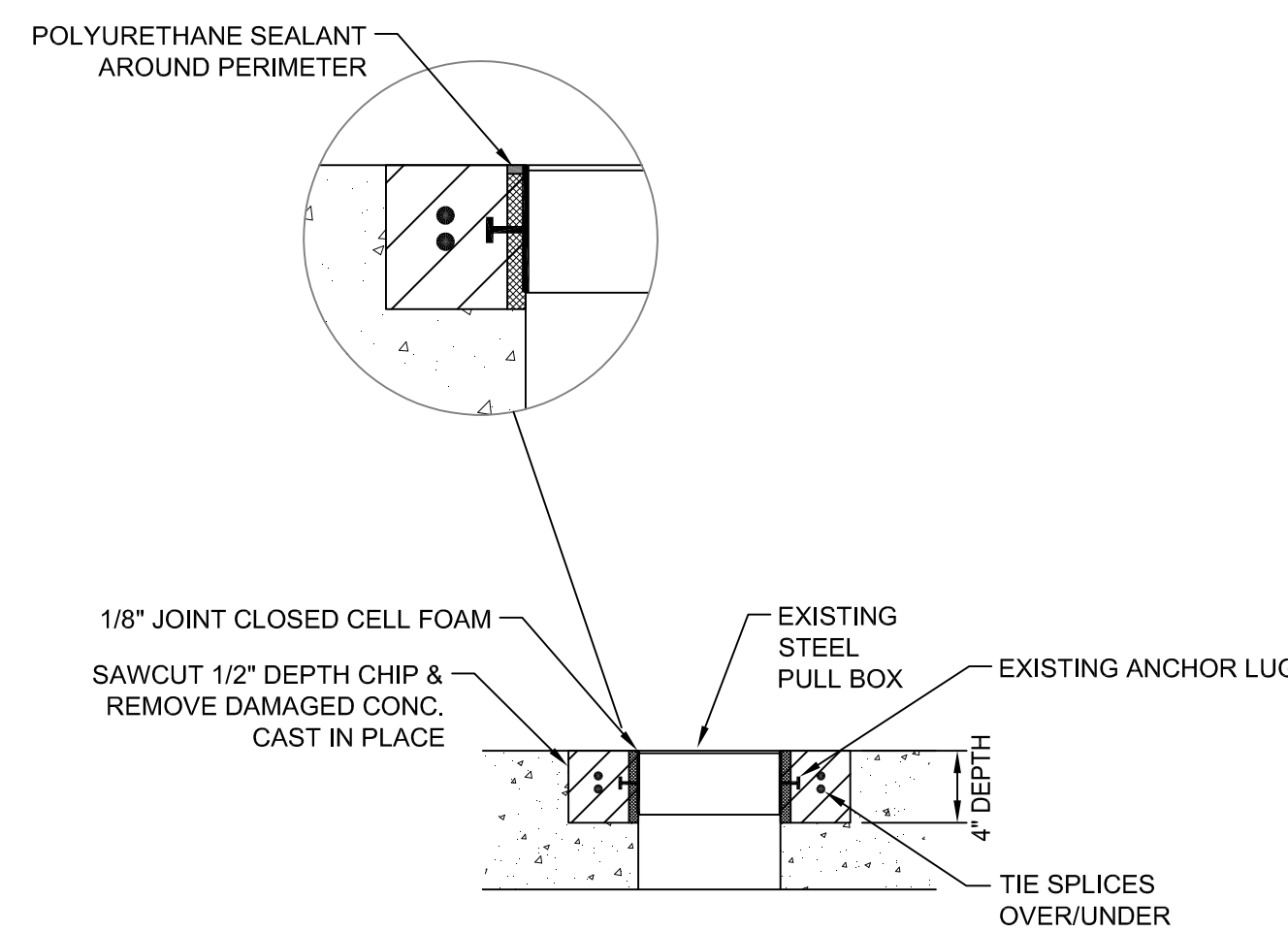
Consultants

Legend

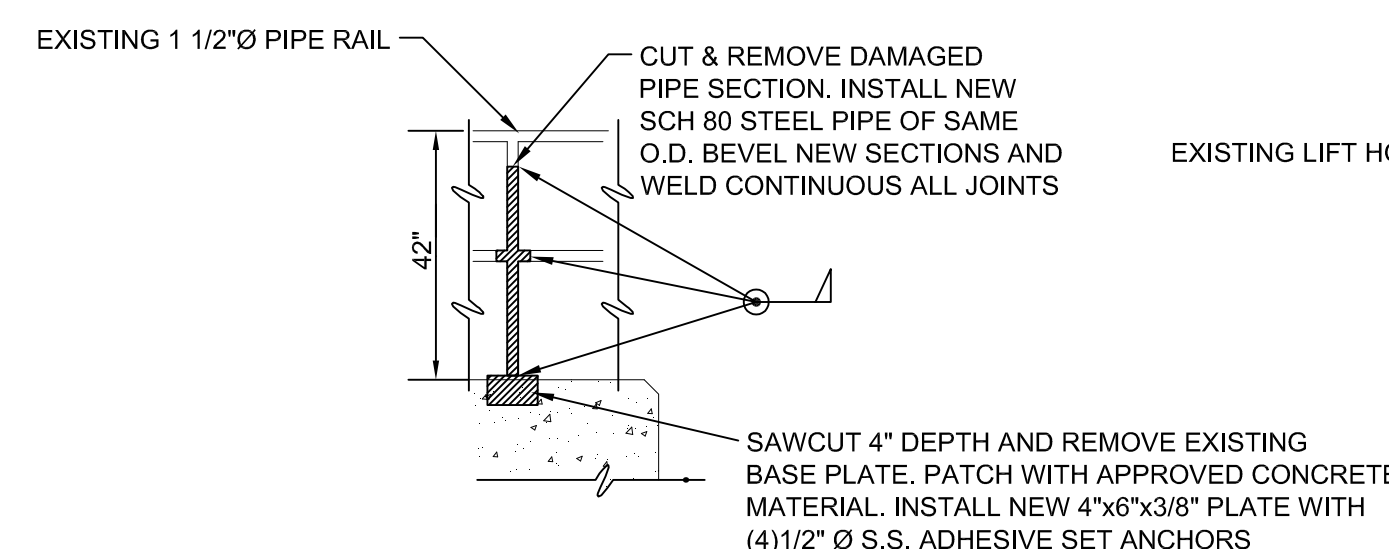
Notes



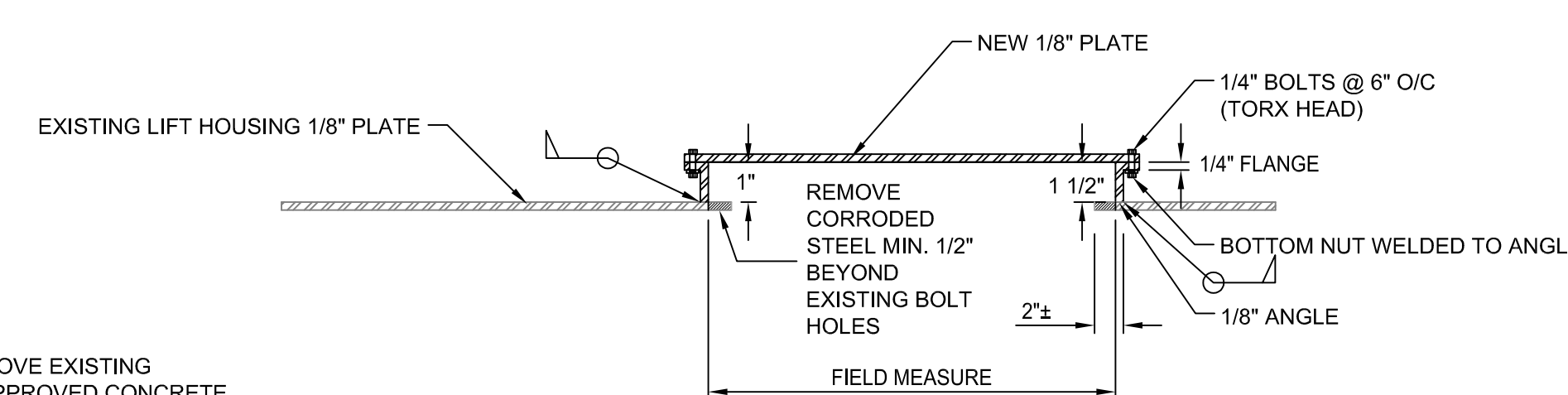
**REPAIR OF CONCRETE DECK**  
SCALE: NONE



**SECTION M1 REPAIR OF CONCRETE DECK**  
SCALE: NONE

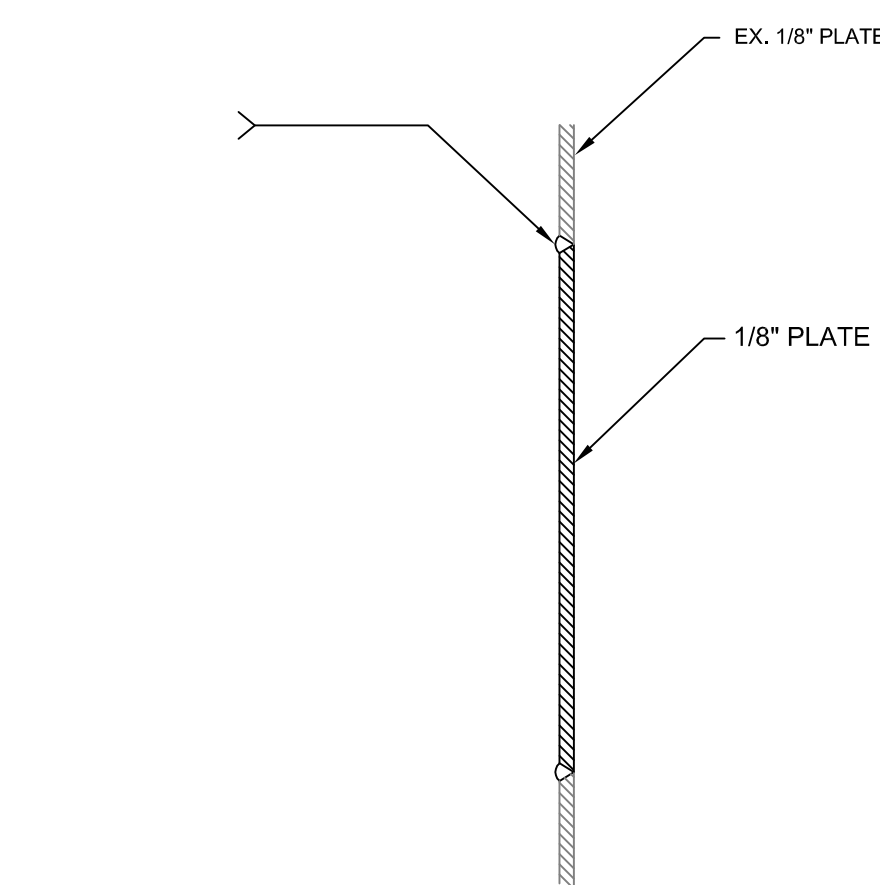


**REPAIR OF EXISTING STEEL BARRIER**  
SCALE: NONE

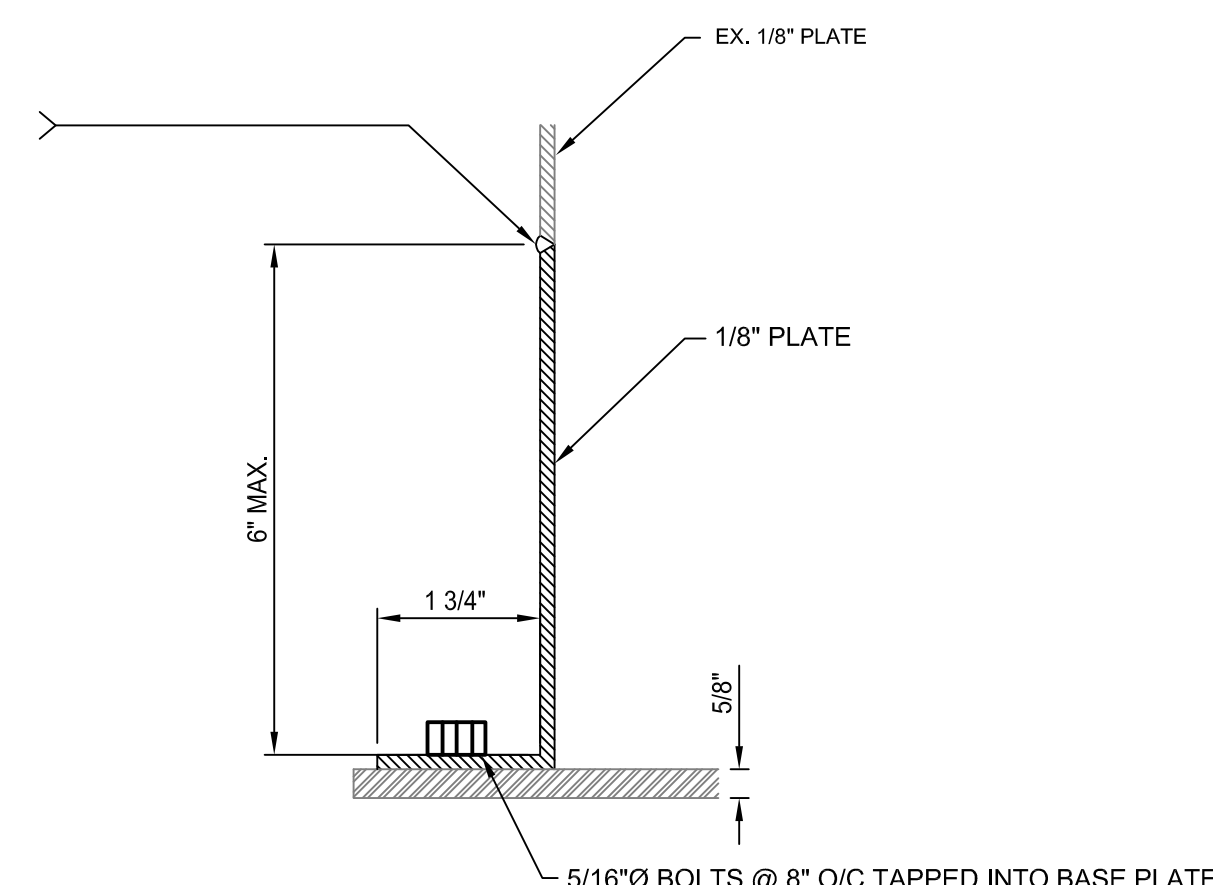


NOTE: INSTALL 1/16" EPDM GASKET BETWEEN COVER PLATE AND FLANGE.

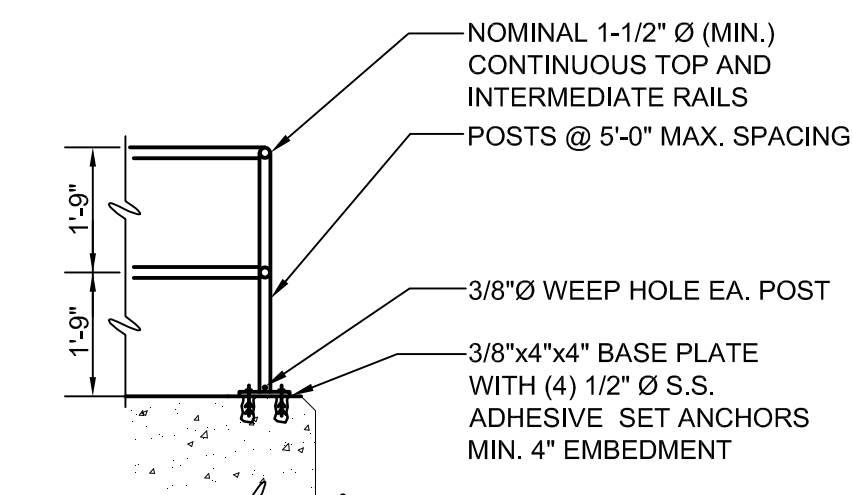
**GEAR HOUSING TOP COVER REPLACEMENT DETAIL**  
SCALE: NONE



**PLATE REPLACEMENT DETAIL**  
SCALE: NONE



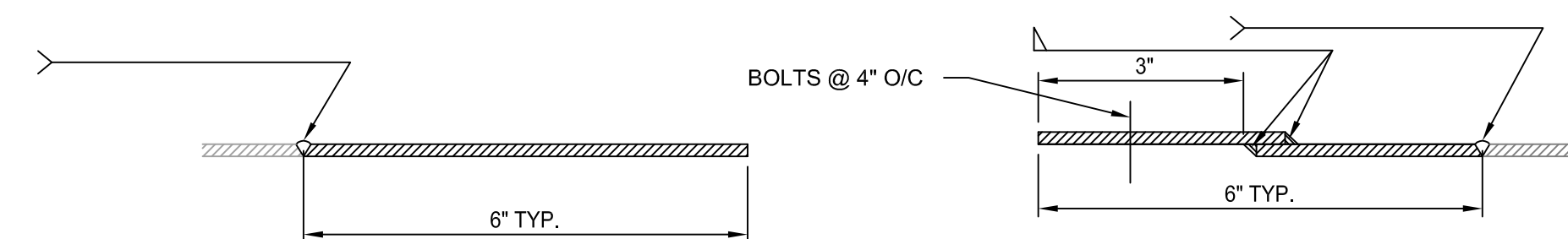
**BOTTOM FLANGE REPAIR DETAIL**  
SCALE: NONE



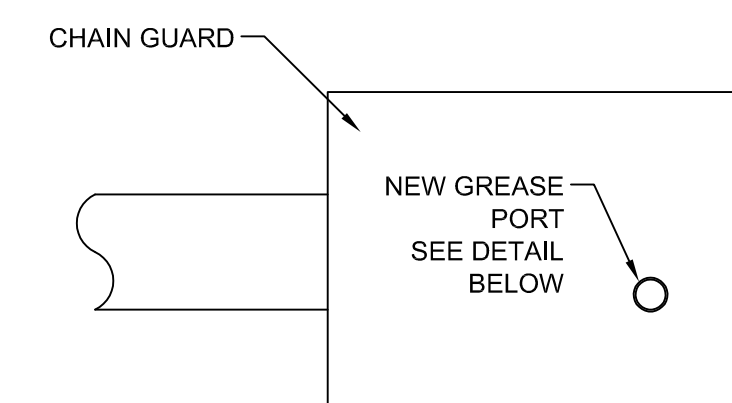
**GENERAL NOTES**

1. ALL BARRIERS SHALL RESIST LOADING CRITERIA CONFORMING TO REQUIREMENTS OF INTERNATIONAL BUILDING CODE 2003.
2. ALL POST AND RAIL SHALL BE SCH 80, PAINTED STEEL.
3. FIELD MEASUREMENTS SHALL BE INCLUDED IN THE SHOP DRAWING SUBMITTAL.
4. PROVIDE BITUMINOUS COATING ON BOTTOM OF BASE PLATE TO SERVE AS DIELECTRIC BREAK BETWEEN CONCRETE & STEEL.

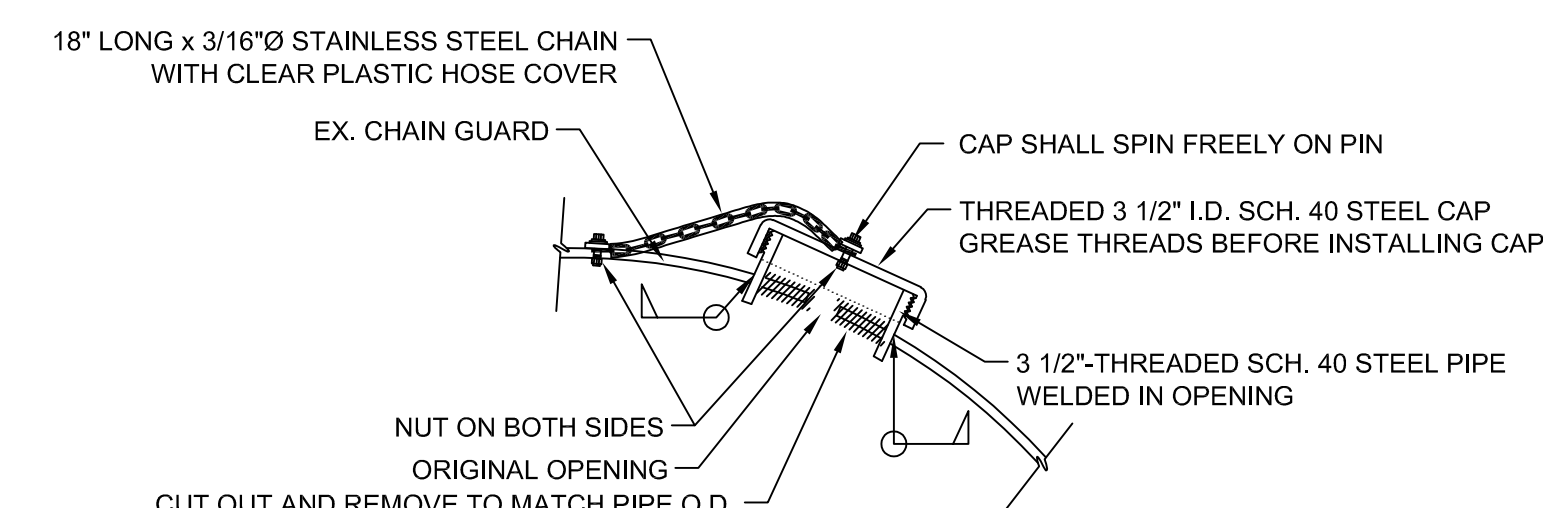
**NEW STEEL BARRIER DETAILS**  
SCALE: NONE



**PANEL JOINT DETAIL**  
SCALE: NONE



**PLAN**



**SECTION DETAIL**

**GREASE PORT DETAIL**  
SCALE: NONE


Revision	By	Appd.	YY.MM.DD
BID SET	PJM	GRW	13.01.07
MDEO PERMIT SET	PJM	GRW	12.12.21
95% CLIENT REVIEW	PJM	GRW	12.12.14
MDEO PERMIT	PJM	GRW	12.12.04
60% CLIENT REVIEW	PJM	GRW	12.11.08
Issued	By	Appd.	YY.MM.DD

File Name:	116502-1M-501.DWG	BWAFDA	PJM	PJM	12.10.11
		Desn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

CITY OF ANN ARBOR

ARGO DAM & GEDDES DAM  
 COATING AND MISCELLANEOUS REPAIRS  
 Ann Arbor, Michigan

Title

ARGO DAM REPAIRS  
 DETAILS

Project No.	Scale	
2075116502	AS NOTED	
Drawing No.	Sheet	Revision
1M-501	7 of 12	0