

DANE COUNTY DEPARTMENT OF PUBLIC WORKS

BABCOCK AND LAFOLLETTE PARKS - LOCKS AND DAMS RENOVATION PHASE 2 - LOCK AND DAM REPAIRS AND UPGRADES



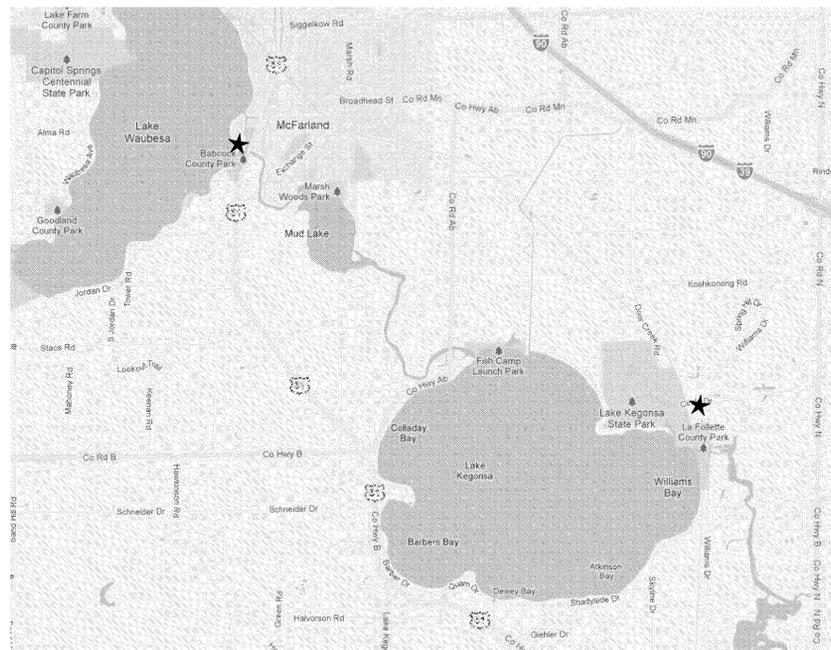
Dane County
Department of Public Works
Highway and Transportation
1919 Alliant Energy Center Way
Madison, Wisconsin 53173
(608)-266-4018



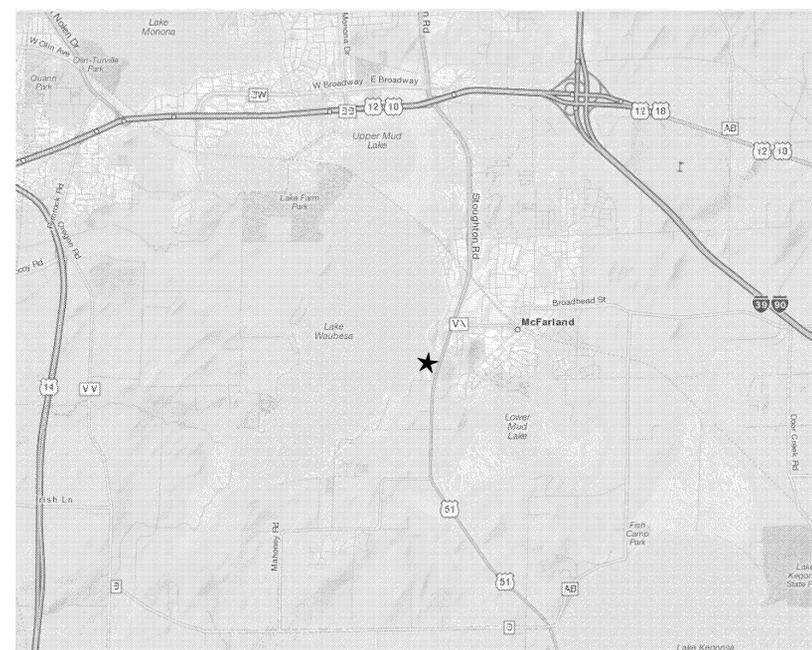
One Honey Creek Corporate Center
125 South 84th Street,
Suite 401
Milwaukee, WI 53214-1470
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

LOCATION MAPS

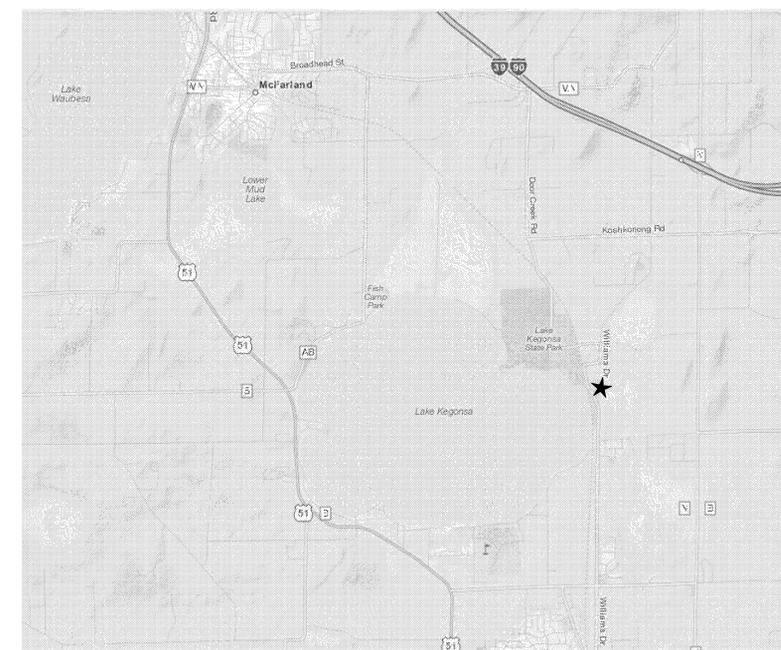
PROJECT NO 312001



COMBINED LOCATION PLAN



BABCOCK LOCK AND DAM LOCATION PLAN



LAFOLLETTE LOCK AND DAM LOCATION PLAN



DRAWING INDEX

COVER SHEET

CIVIL

- C-1 EXISTING SITE PLAN - BABCOCK LOCK AND DAM
- C-2 PROPOSED SITE PLAN - BABCOCK LOCK AND DAM
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- E-2 SCHEDULES - BABCOCK LOCK AND DAM
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ADDENDUM No. 1 02-28-12 MJH

collaborate

formulate

innovate

GENERAL NOTES

- 1) NEW WORK SHOWN IS BOLD.
- 2) EXISTING WORK TO REMAIN SHOWN LIGHTER.
- 3) NIC = NOT IN CONTRACT.
- 4) NEW TRANSFORMER BY ALLIANT ENERGY.

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 LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

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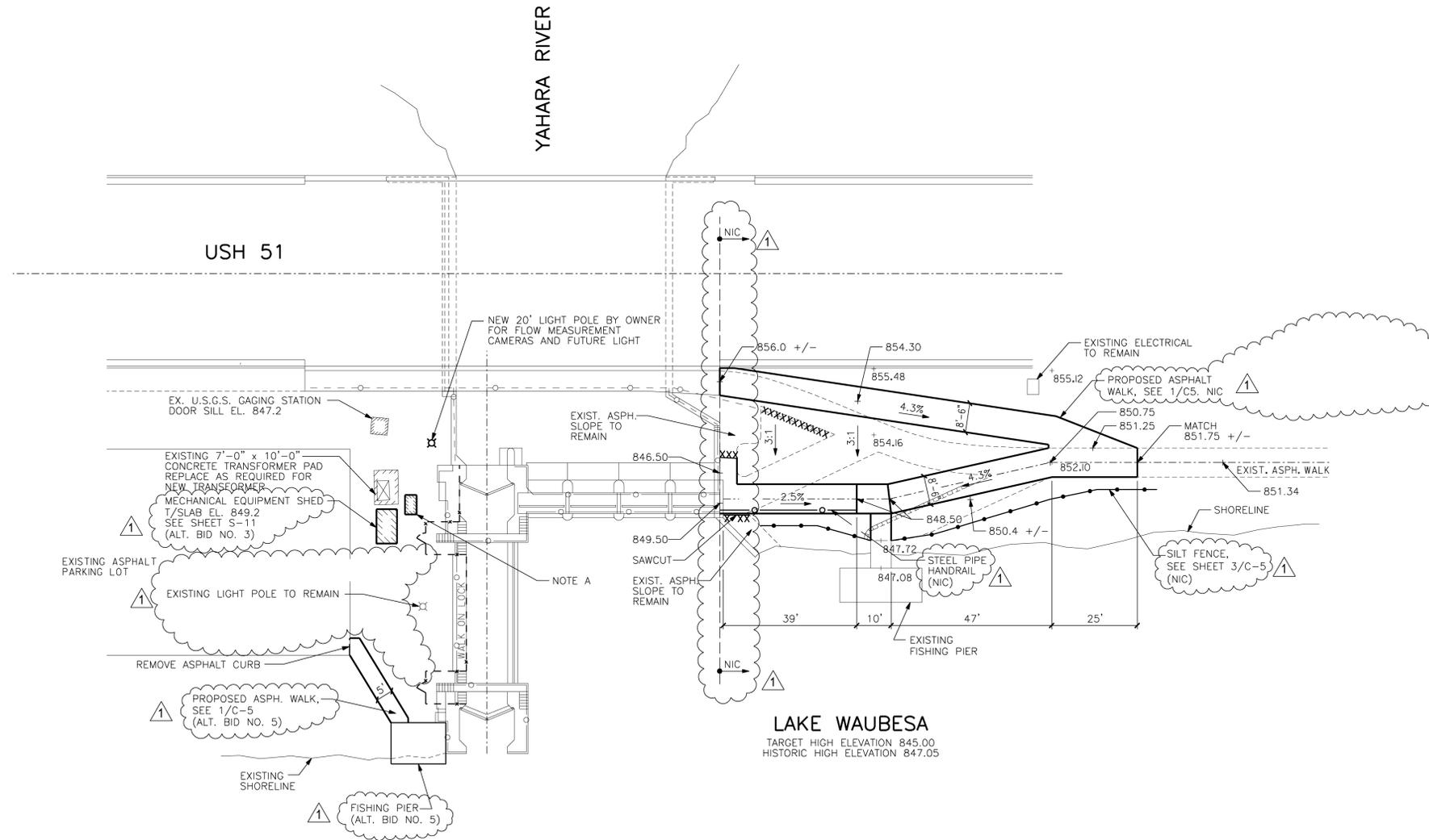
PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:

PROPOSED SITE PLAN -
 BABCOCK LOCK AND DAM

SHEET NUMBER:



PROPOSED SITE PLAN – BABCOCK LOCK AND DAM

PLAN NOTES

- NOTE A = PROVIDE 36"x48"x10" ELECTRICAL CABINET ON (2) 4x4 POSTS FOR BASE BID.
- PROVIDE 72"x60"x30" ELECTRICAL CABINET ON 6" CONCRETE PAD FOR ALTERNATE BID No. 1
- PROVIDE MECHANICAL SHED FOR ALTERNATE BID No. 7

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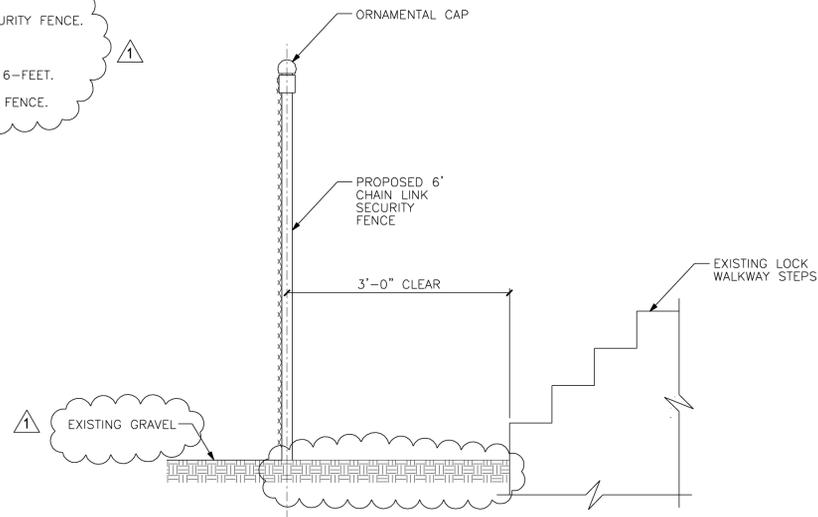
SHEET TITLE:

FENCE DETAILS

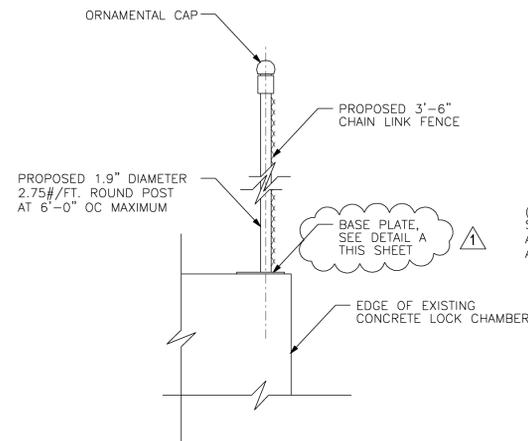
SHEET NUMBER:

GENERAL NOTES

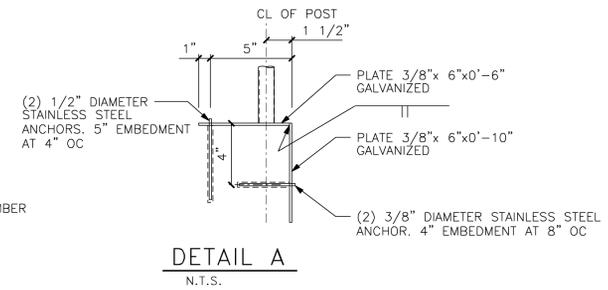
1. USE BOTTOM TENSION WIRE FOR 6-FOOT SECURITY FENCE.
2. USE BOTTOM RAIL FOR ALL OTHER FENCES.
3. USE KNUCKLED SELVAGE FOR FENCES UNDER 6-FEET.
4. USE TWISTED SELVAGE FOR 6-FOOT SECURITY FENCE.



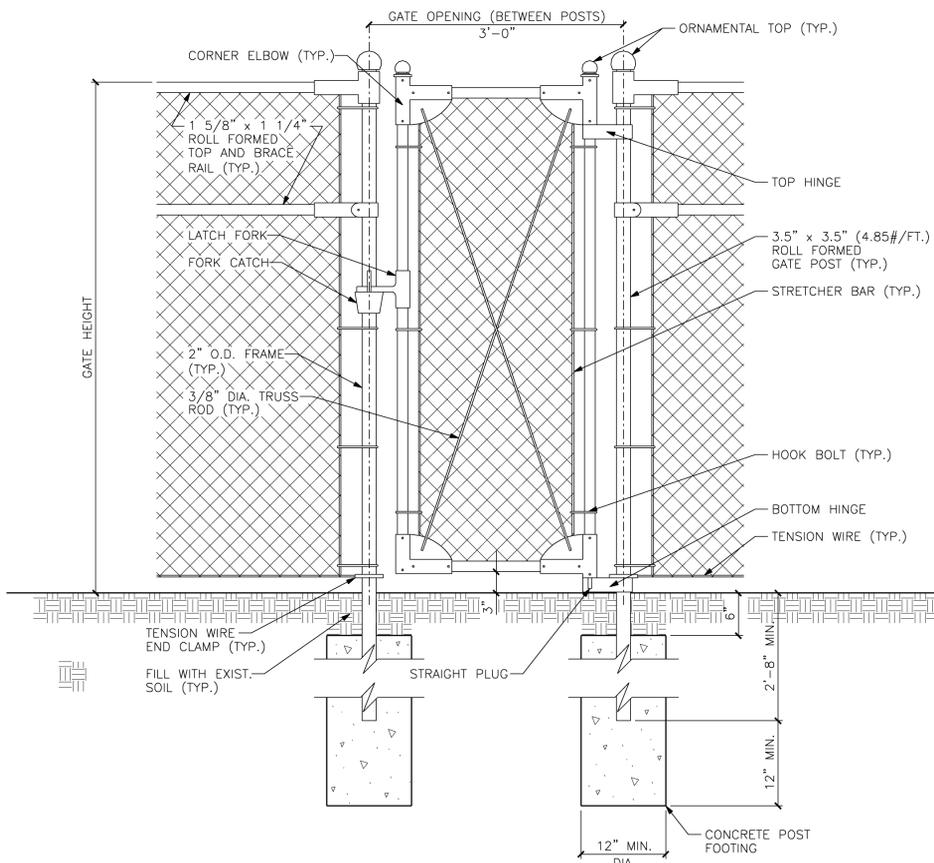
1 SECTION
C-6 N.T.S.



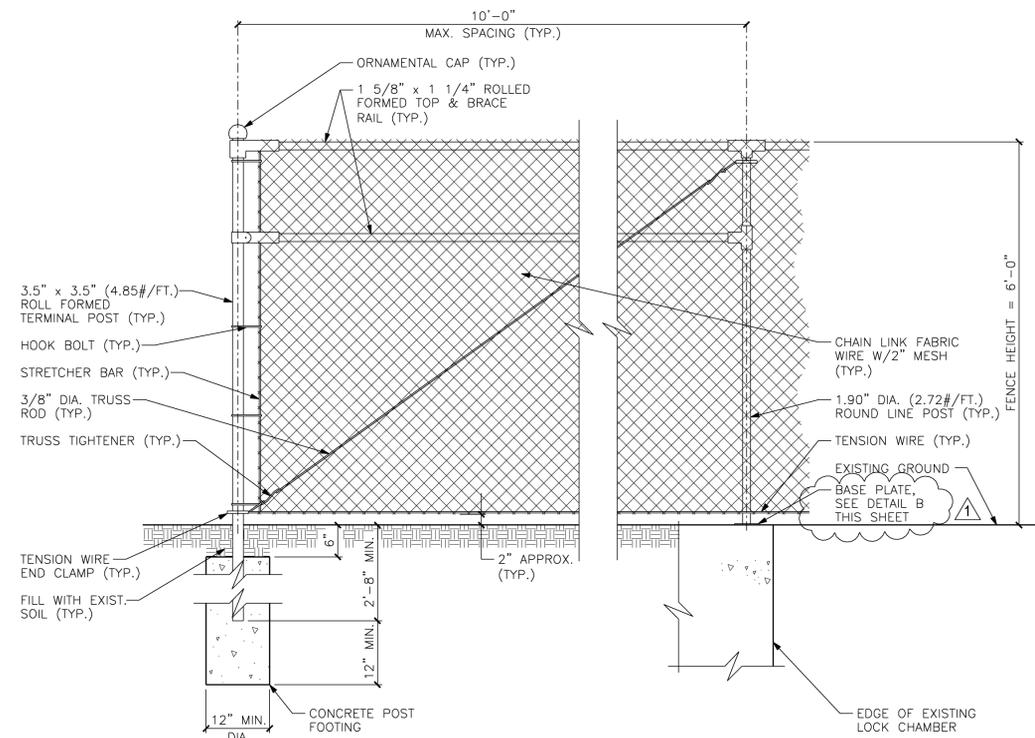
2 SECTION
C-6 N.T.S.



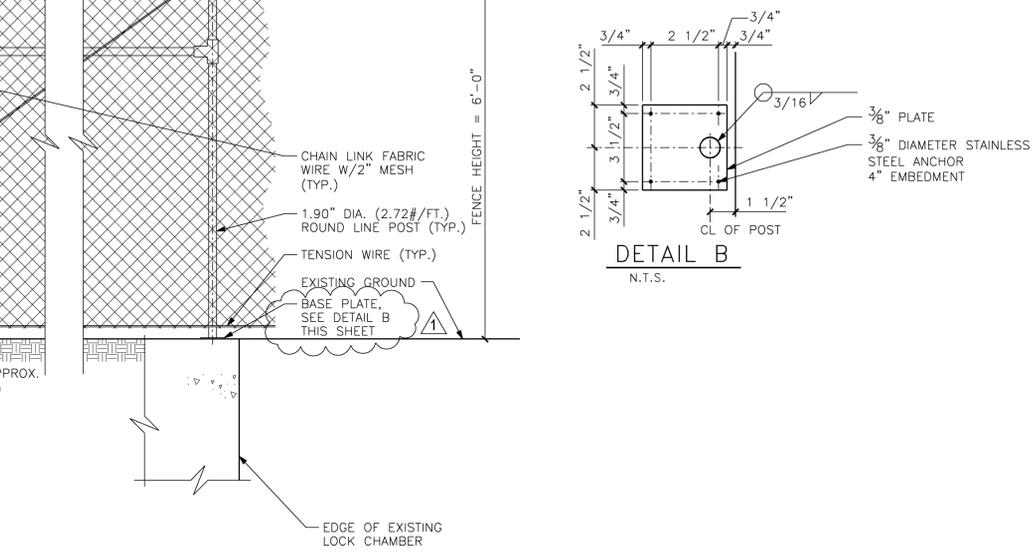
DETAIL A
N.T.S.



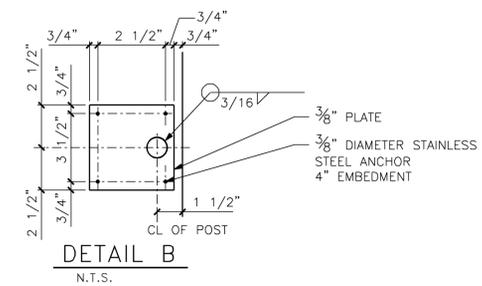
3 GATE DETAIL
C-6 N.T.S.



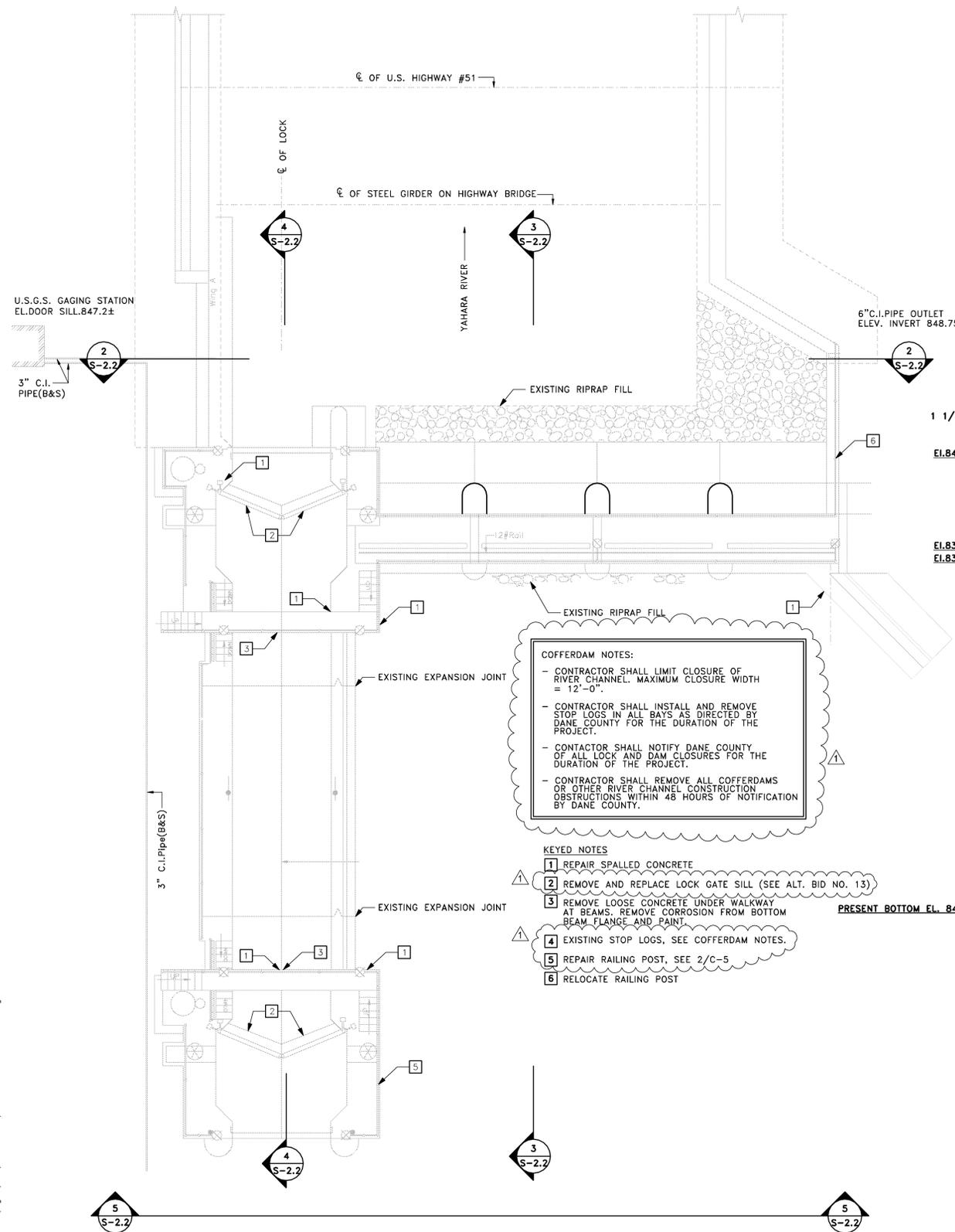
4 TYPICAL TERMINAL POST FOOTING
C-6 N.T.S.



5 TYPICAL LINE POST FOOTING
C-6 N.T.S.



DETAIL B
N.T.S.



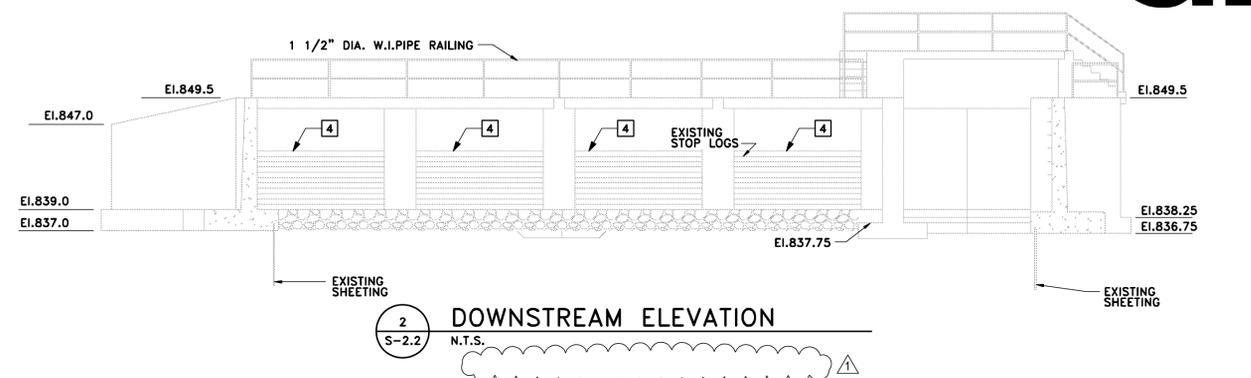
COFFERDAM NOTES:

- CONTRACTOR SHALL LIMIT CLOSURE OF RIVER CHANNEL. MAXIMUM CLOSURE WIDTH = 12'-0".
- CONTRACTOR SHALL INSTALL AND REMOVE STOP LOGS IN ALL BAYS AS DIRECTED BY DANE COUNTY FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL NOTIFY DANE COUNTY OF ALL LOCK AND DAM CLOSURES FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL REMOVE ALL COFFERDAMS OR OTHER RIVER CHANNEL CONSTRUCTION OBSTRUCTIONS WITHIN 48 HOURS OF NOTIFICATION BY DANE COUNTY.

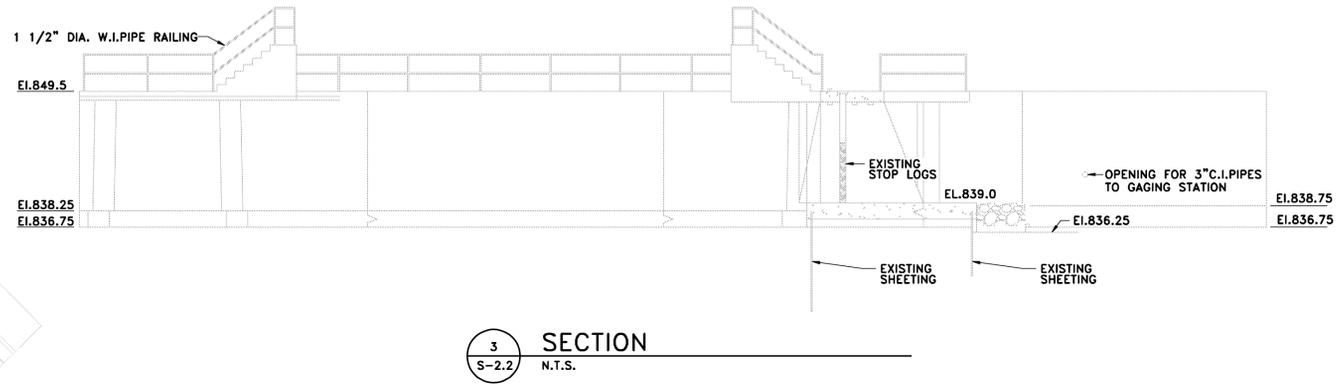
KEYED NOTES

- 1 REPAIR SPALLED CONCRETE
- 2 REMOVE AND REPLACE LOCK GATE SILL (SEE ALT. BID NO. 13)
- 3 REMOVE LOOSE CONCRETE UNDER WALKWAY AT BEAMS. REMOVE CORROSION FROM BOTTOM BEAM FLANGE AND PAINT.
- 4 EXISTING STOP LOGS, SEE COFFERDAM NOTES.
- 5 REPAIR RAILING POST, SEE 2/C-5
- 6 RELOCATE RAILING POST

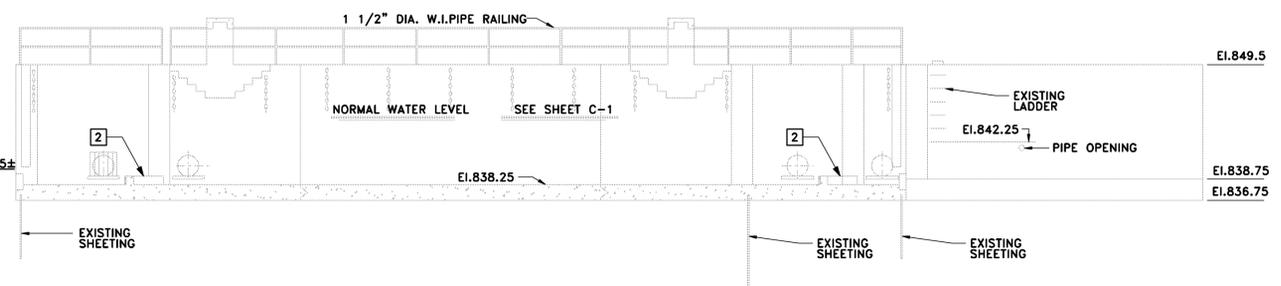
1 S-2.2 PLAN OF LOCK AND DAM N.T.S.



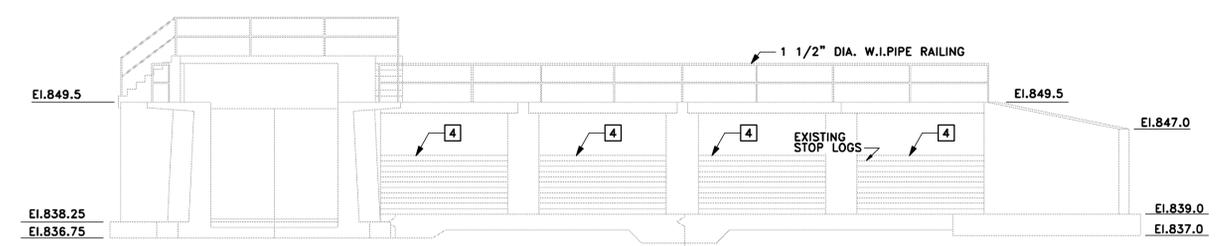
2 S-2.2 DOWNSTREAM ELEVATION N.T.S.



3 S-2.2 SECTION N.T.S.



4 S-2.2 SECTION N.T.S.



5 S-2.2 UPSTREAM ELEVATION N.T.S.

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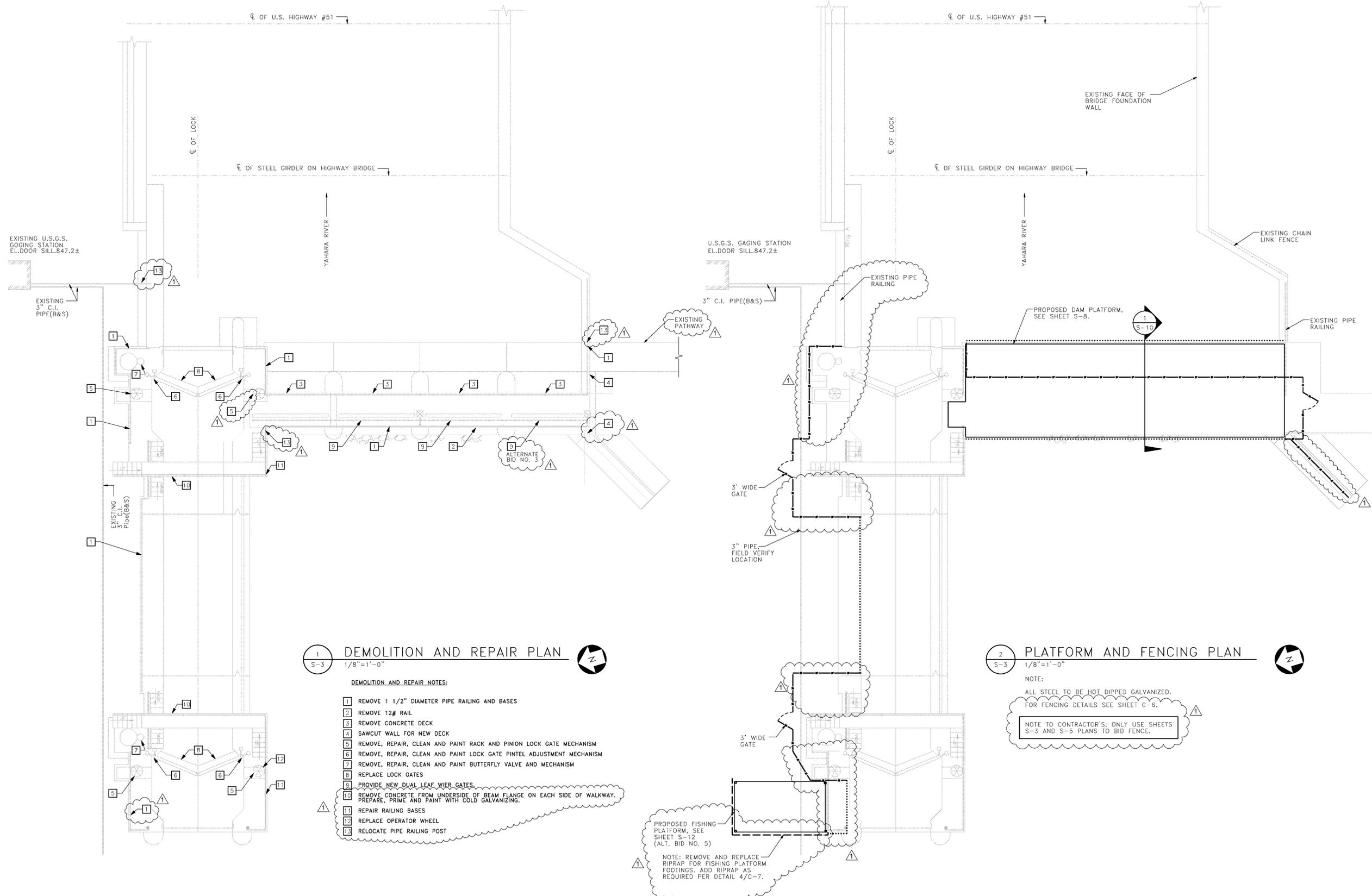
PROJECT NUMBER: 2011-5012
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SHEET TITLE:

RENOVATION PLANS -
 BABCOCK LOCK AND DAM

SHEET NUMBER:

FENCE LEGEND	
	6'-0" HIGH FENCE
	RAILING
	3'-6" HIGH FENCE



1
 S-3
 1/8"=1'-0"

DEMOLITION AND REPAIR PLAN

DEMOLITION AND REPAIR NOTES:

- 1 REMOVE 1 1/2" DIAMETER PIPE RAILING AND BASES
- 2 REMOVE 12# RAIL
- 3 REMOVE CONCRETE DECK
- 4 SAWCUT WALL FOR NEW DECK
- 5 REMOVE, REPAIR, CLEAN AND PAINT RACK AND PINION LOCK GATE MECHANISM
- 6 REMOVE, REPAIR, CLEAN AND PAINT LOCK GATE PINTEL ADJUSTMENT MECHANISM
- 7 REMOVE, REPAIR, CLEAN AND PAINT BUTTERFLY VALVE AND MECHANISM
- 8 REPLACE LOCK GATES
- 9 PROVIDE NEW DUAL LEAF WIER GATES
- 10 REMOVE CONCRETE FROM UNDERSIDE OF BEAM FLANGE ON EACH SIDE OF WALKWAY. PREPARE, PRIME AND PAINT WITH COLD GALVANIZING.
- 11 REPAIR RAILING BASES
- 12 REPLACE OPERATOR WHEEL
- 13 RELOCATE PIPE RAILING POST

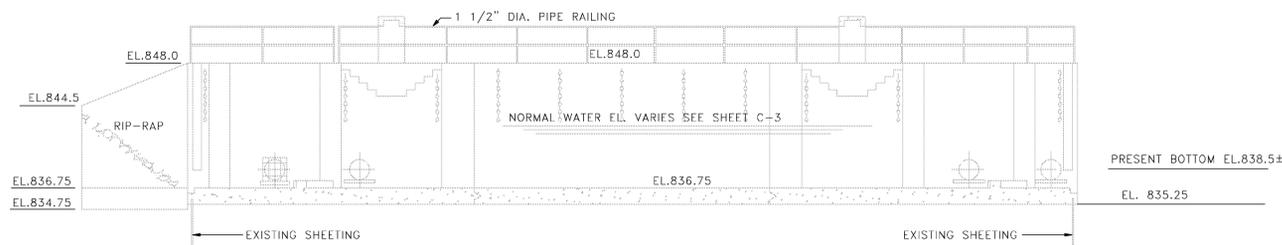
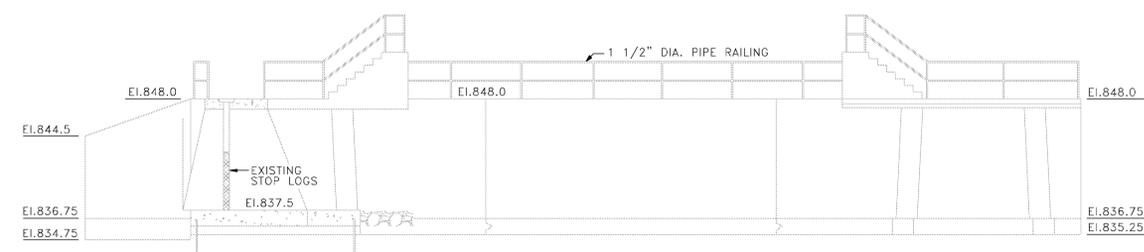
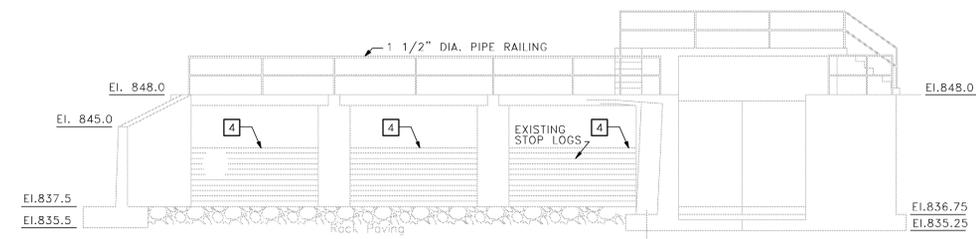
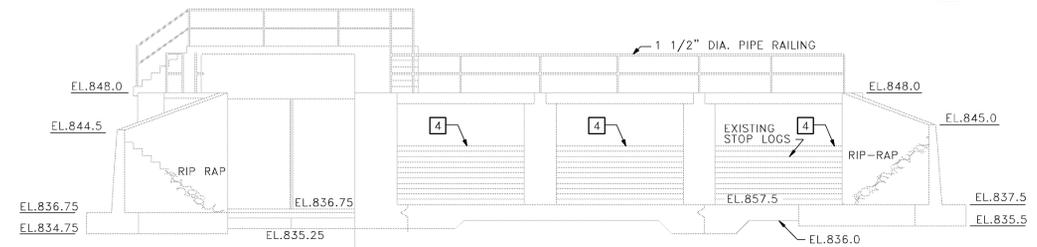
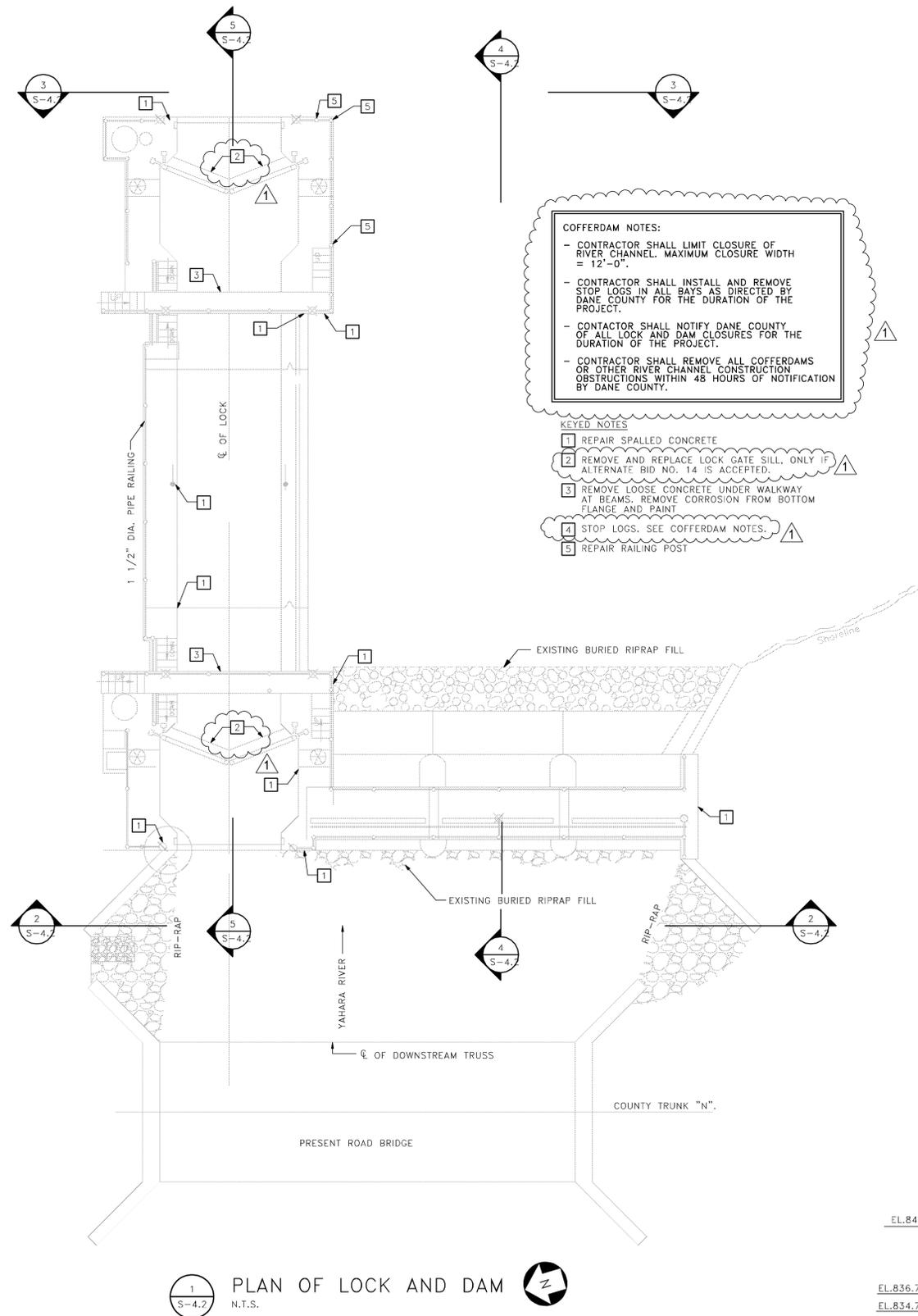
2
 S-3
 1/8"=1'-0"

PLATFORM AND FENCING PLAN

NOTE:
 ALL STEEL TO BE HOT DIPPED GALVANIZED.
 FOR FENCING DETAILS SEE SHEET C-6.

NOTE TO CONTRACTOR'S: ONLY USE SHEETS
 S-3 AND S-5 PLANS TO BID FENCE.

PROPOSED FISHING
 PLATFORM. SEE
 SHEET S-12
 (ALT. BID NO. 5)
 NOTE: REMOVE AND REPLACE
 RIPRAP FOR FISHING PLATFORM
 FOOTINGS. ADD RIPRAP AS
 REQUIRED PER DETAIL 4/C-7.



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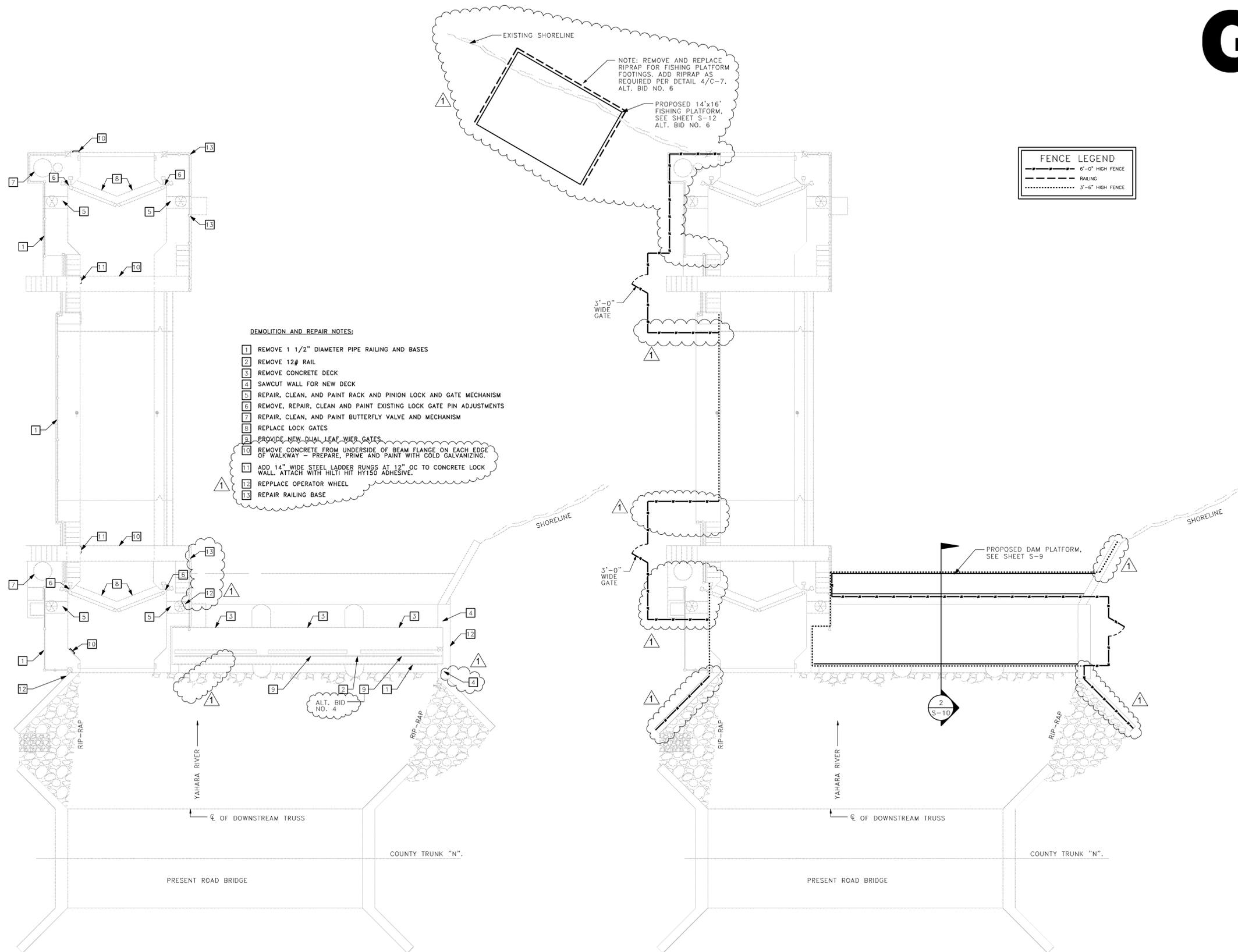
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SHEET TITLE:

RENOVATION PLANS -
 LA FOLLETTE LOCK AND DAM

SHEET NUMBER:



- DEMOLITION AND REPAIR NOTES:**
- 1 REMOVE 1 1/2" DIAMETER PIPE RAILING AND BASES
 - 2 REMOVE 12# RAIL
 - 3 REMOVE CONCRETE DECK
 - 4 SAWCUT WALL FOR NEW DECK
 - 5 REPAIR, CLEAN, AND PAINT RACK AND PINION LOCK AND GATE MECHANISM
 - 6 REMOVE, REPAIR, CLEAN AND PAINT EXISTING LOCK GATE PIN ADJUSTMENTS
 - 7 REPAIR, CLEAN, AND PAINT BUTTERFLY VALVE AND MECHANISM
 - 8 REPLACE LOCK GATES
 - 9 PROVIDE NEW DUAL LEAF WIER GATES
 - 10 REMOVE CONCRETE FROM UNDERSIDE OF BEAM FLANGE ON EACH EDGE OF WALKWAY - PREPARE, PRIME AND PAINT WITH COLD GALVANIZING.
 - 11 ADD 14" WIDE STEEL LADDER RUNGS AT 12" OC TO CONCRETE LOCK WALL. ATTACH WITH HILTI HIT HY150 ADHESIVE.
 - 12 REPLACE OPERATOR WHEEL
 - 13 REPAIR RAILING BASE

NOTE: REMOVE AND REPLACE RIPRAP FOR FISHING PLATFORM FOOTINGS. ADD RIPRAP AS REQUIRED PER DETAIL 4/C-7. ALT. BID NO. 6

PROPOSED 14'x16' FISHING PLATFORM. SEE SHEET S-12. ALT. BID NO. 6



1 DEMOLITION AND REPAIR PLAN
 1/8"=1'-0"

2 PLATFORM AND FENCING PLAN
 1/8"=1'-0"

NOTES:
 ALL STEEL TO BE HOT DIPPED GALVANIZED.
 FOR FENCING DETAILS SEE SHEET C-6.

NOTE TO CONTRACTOR'S: ONLY USE SHEETS S-3 AND S-5 PLANS TO BID FENCE.

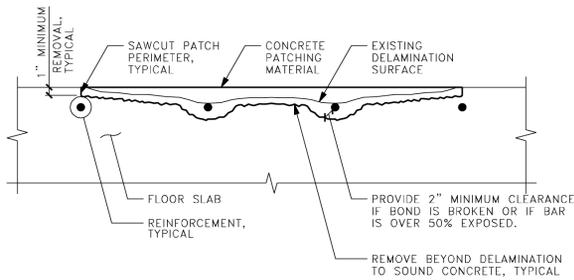
GENERAL NOTES

1) NIC = NOT IN CONTRACT

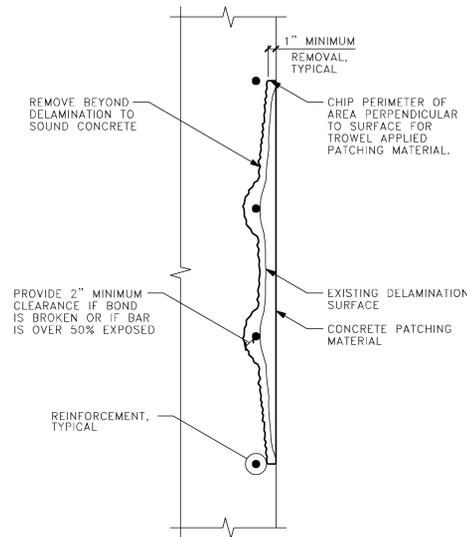
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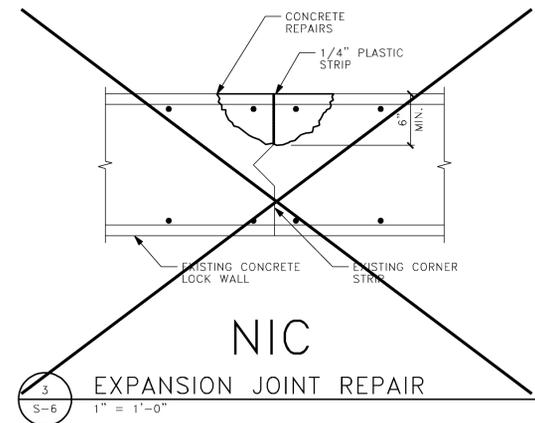
CONSULTANTS:



1
TYPICAL HORIZONTAL SPALL REPAIR DETAIL
S-6 N.T.S.

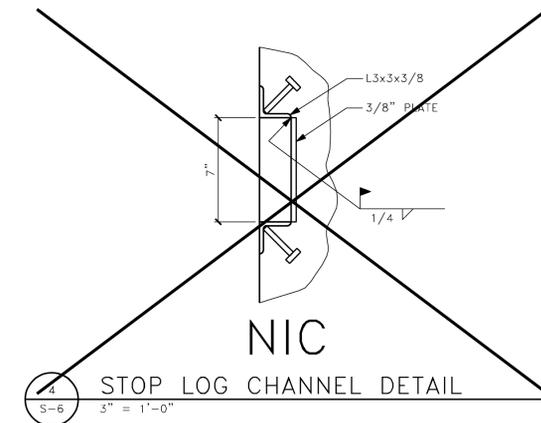


2
TYPICAL VERTICAL SPALL REPAIR
S-6 N.T.S.

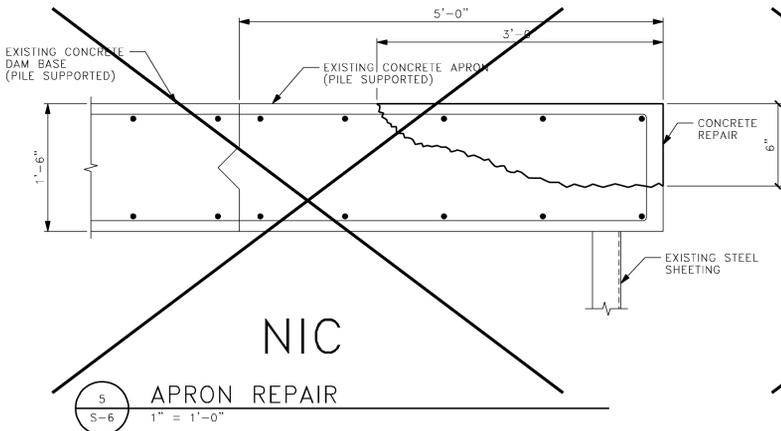


3
EXPANSION JOINT REPAIR
S-6 1\"/>

NOTE: EXPANSION JOINT SPALLS APPROXIMATELY 5'-0" TALL

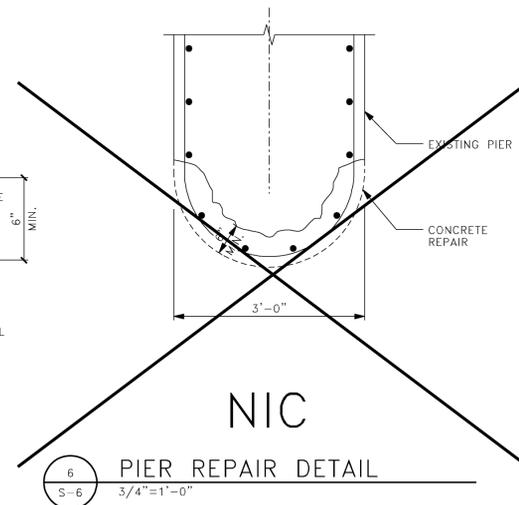


4
STOP LOG CHANNEL DETAIL
S-6 3\"/>



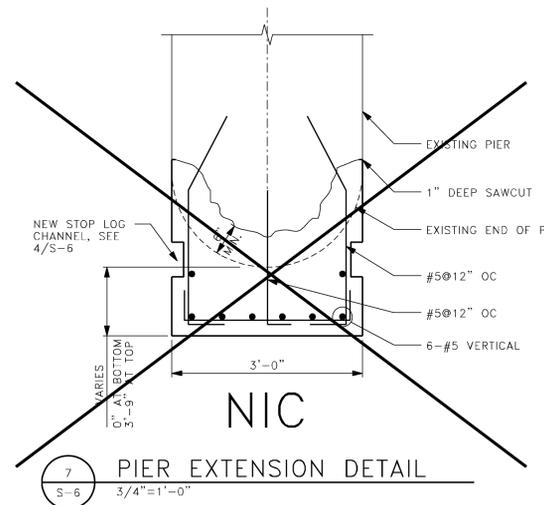
5
APRON REPAIR
S-6 1\"/>

NOTE: DETERIORATED CONCRETE APPROXIMATELY 4'-0" LONG



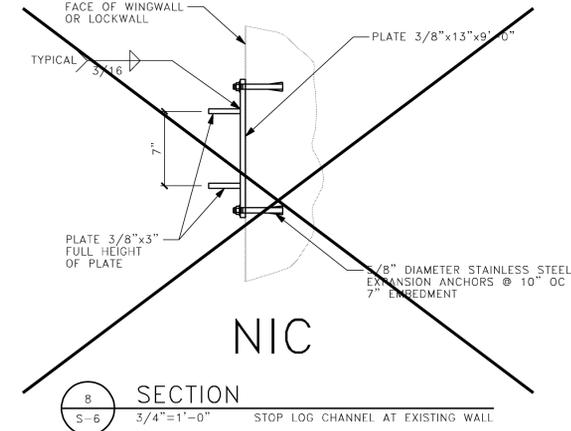
6
PIER REPAIR DETAIL
S-6 3/4\"/>

NOTE: PIER SPALLS APPROXIMATELY 5'-0" TALL



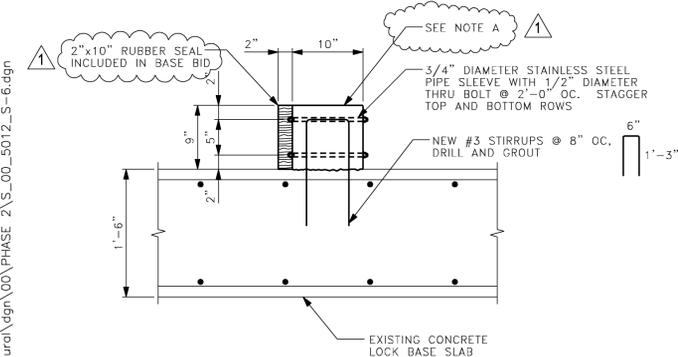
7
PIER EXTENSION DETAIL
S-6 3/4\"/>

DRILL AND GROUT BAR MINIMUM 8" INTO EXISTING PIER OR BASE SLAB



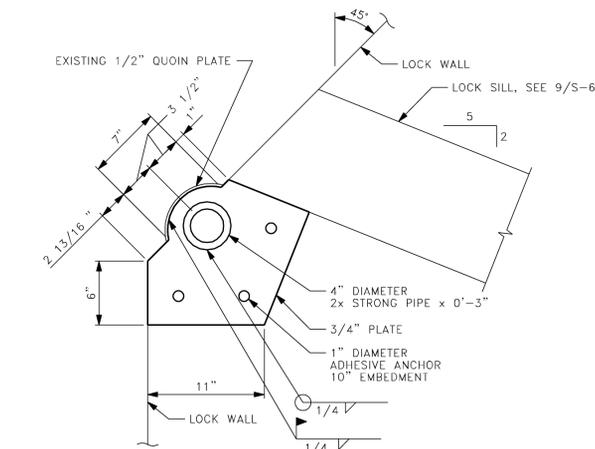
8
SECTION
S-6 3/4\"/>

NOTES:
- 4 STOP LOG CHANNELS REQUIRED.
- STOP LOG ASSEMBLY TO BE HOT DIPPED GALVANIZED WITH 2.0 OZ/SF COATING.



9
SILL REPAIR
S-6 1\"/>

NOTE A:
PROVIDE IN BASE BID AT BABCOCK LOCK
PROVIDE IN ALTERNATE BID 14 AT LAFOLLETTE LOCK



10
DETAIL
S-6 1 1/2\"/>

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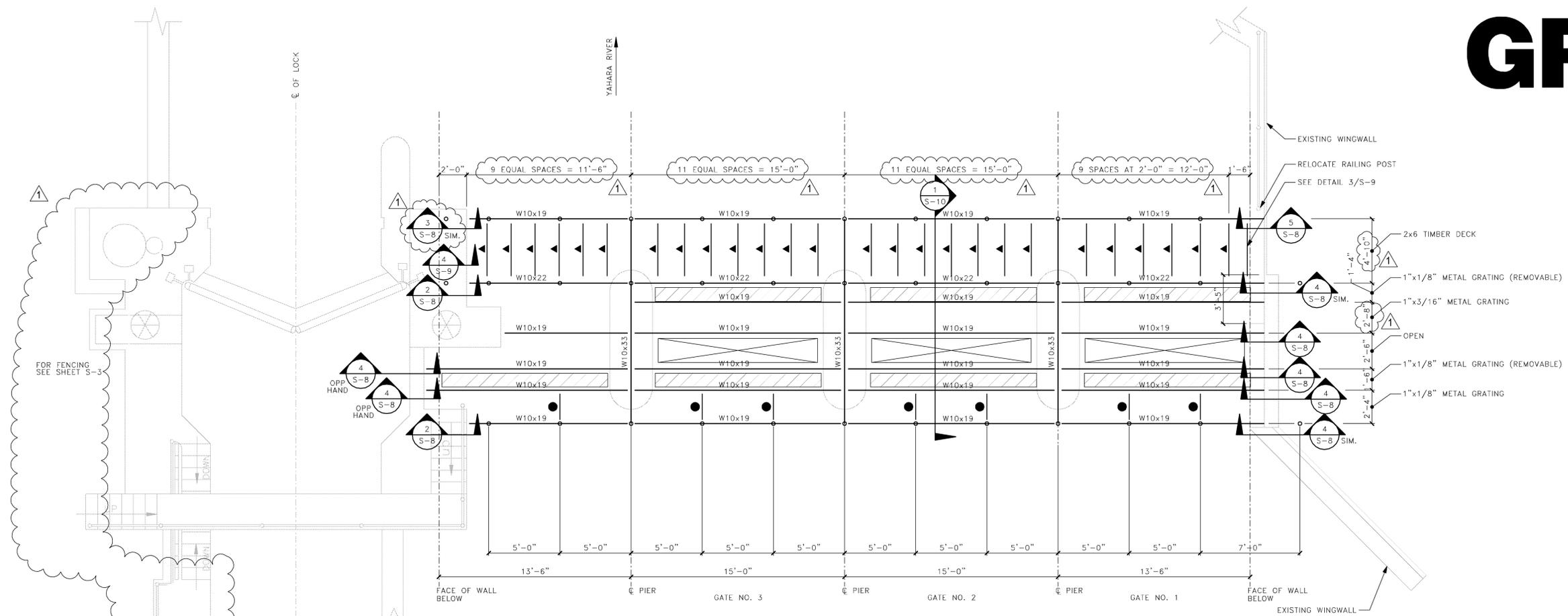
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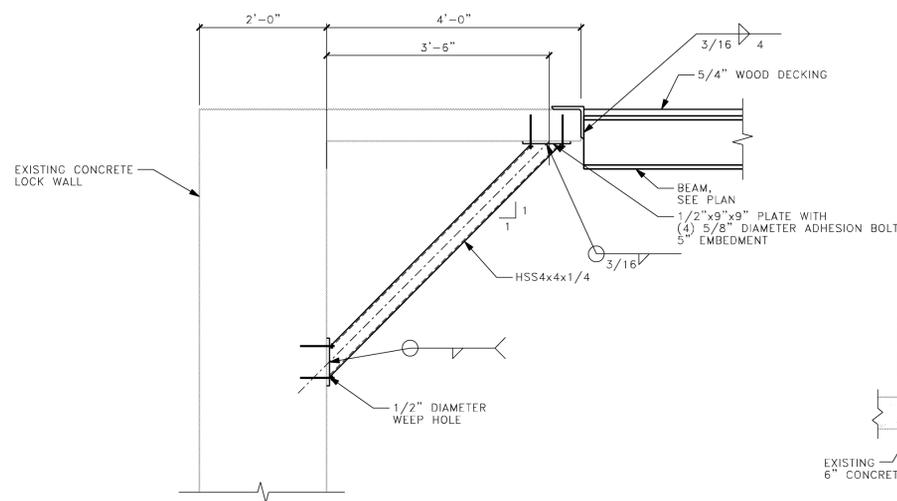
DAM PLATFORM - BABCOCK

SHEET NUMBER:

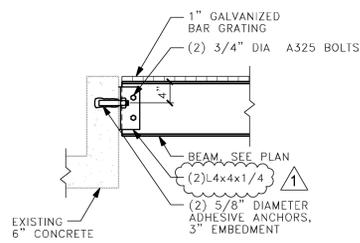


1 DECK FRAMING PLAN AT BABCOCK
 1/4"=1'-0"

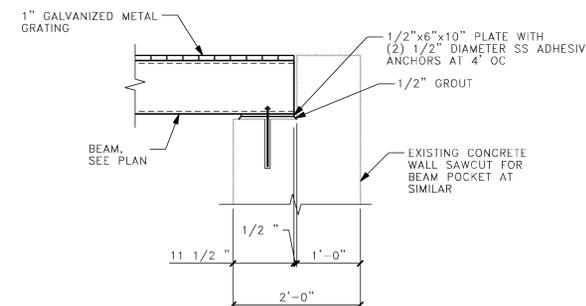
- T/GRATING ELEVATION 849'-6"
- ▲ = C5x6.7
- ○ = RAILING POST
- □ = REMOVEABLE GRATING
- ● = 1.5x3x3/16
- ALL STEEL GALVANIZED 2.0 OZ/SQ.FT.



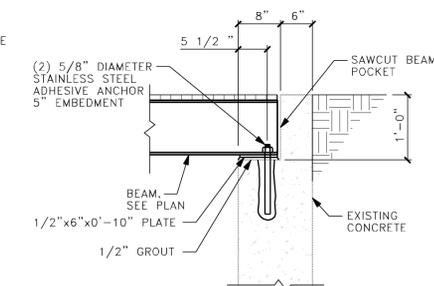
2 SECTION
 3/4"=1'-0"



3 SECTION
 3/4"=1'-0"



4 SECTION
 3/4"=1'-0"



5 SECTION
 3/4"=1'-0"

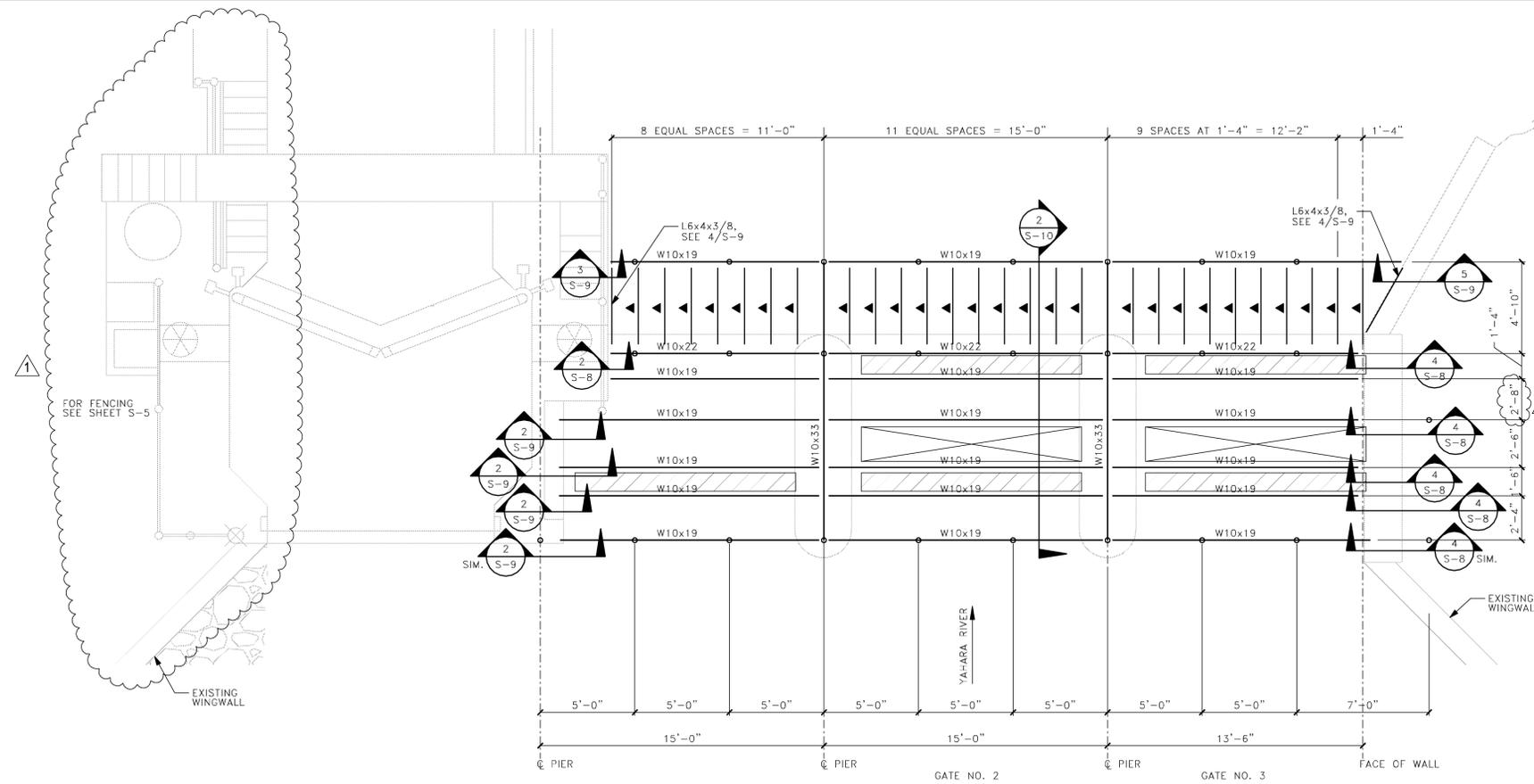
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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

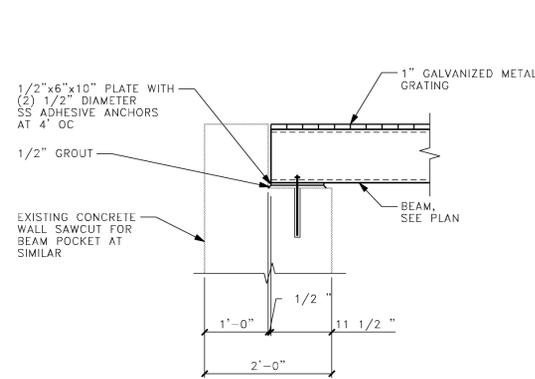
ISSUE:

ADDENDUM No. 1 02-28-12 MJH

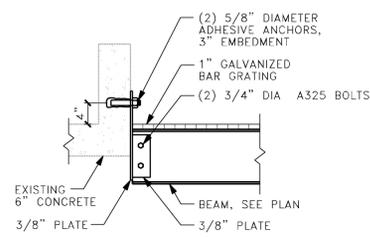


1 DECK FRAMING PLAN AT LAFOLLETTE

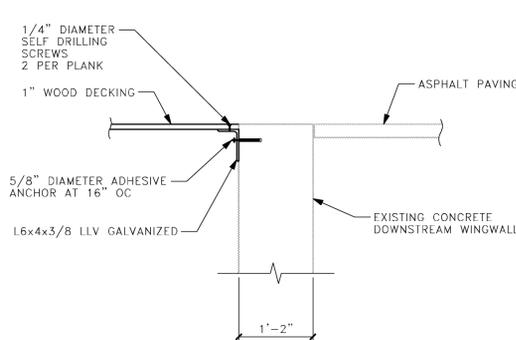
- T/GRATING ELEVATION 848'-0"
- ▲ = C5x6.7
- ○ = RAILING POST
- [] = REMOVEABLE GRATING
- ALL STEEL GALVANIZED 2.0 OZ./SQ.FT.



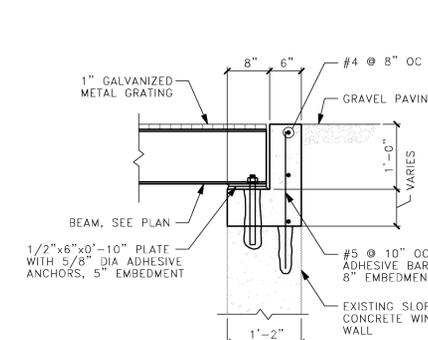
2 SECTION 3/4"=1'-0"



3 SECTION 3/4"=1'-0"



4 SECTION 3/4"=1'-0"



5 SECTION 3/4"=1'-0"

PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
DATE: 02-02-2012
DRAWN BY: AMZ
CHECKED BY: MH
APPROVED BY: MH
SCALE: AS SHOWN

SHEET TITLE:

DAM PLATFORM - LAFOLLETTE

SHEET NUMBER:

GENERAL NOTES

1) ALL SHEET PLAN SECTIONS AND DETAILS ARE ONLY FOR ALTERNATE BID NO. 7.

One Honey Creek Corporate Center
125 South 84th Street,
Suite 401
Milwaukee, WI 53214-1470
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS -
LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

ADDENDUM No. 1 02-28-12 MJH

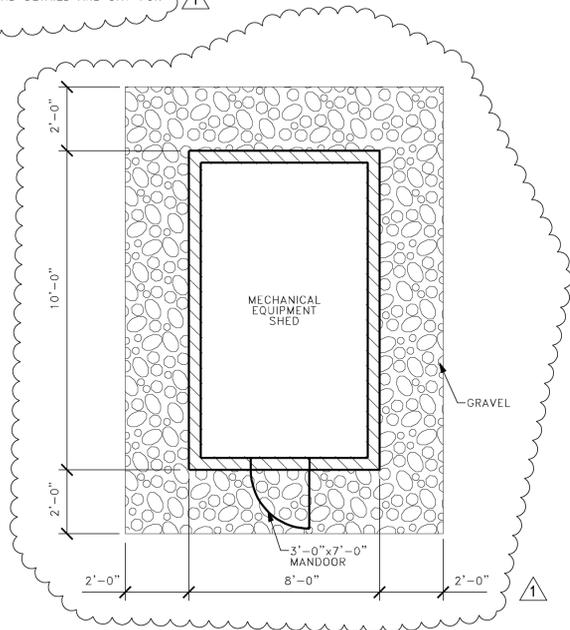
PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
DATE: 02-02-2012
DRAWN BY: AMZ
CHECKED BY: MH
APPROVED BY: MH
SCALE: AS SHOWN

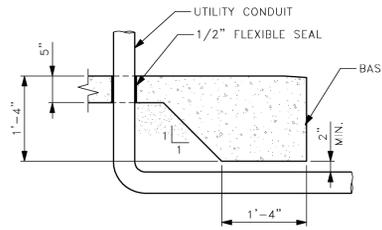
SHEET TITLE:

EQUIPMENT SHED
SECTIONS AND DETAILS - BABCOCK

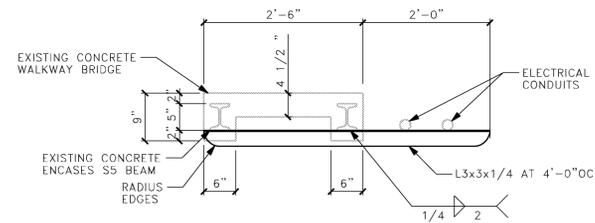
SHEET NUMBER:



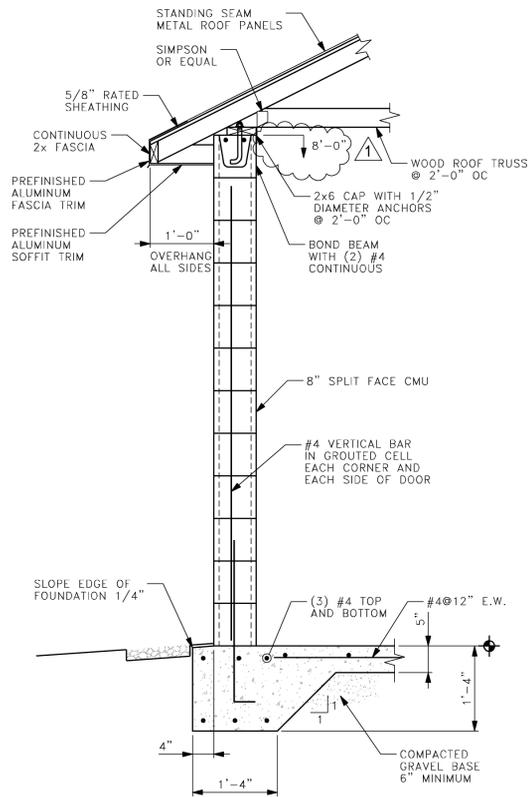
1 BUILDING PAD
N.T.S.



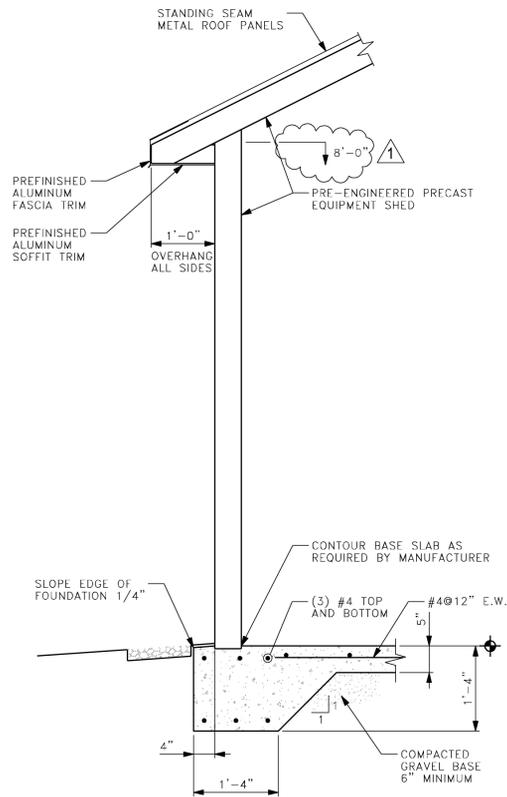
3 SECTION
3/4"=1'-0" 0 1 2



4 SECTION
3/4"=1'-0" 0 1 2

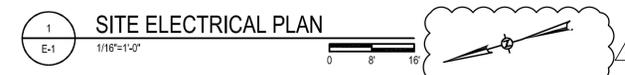
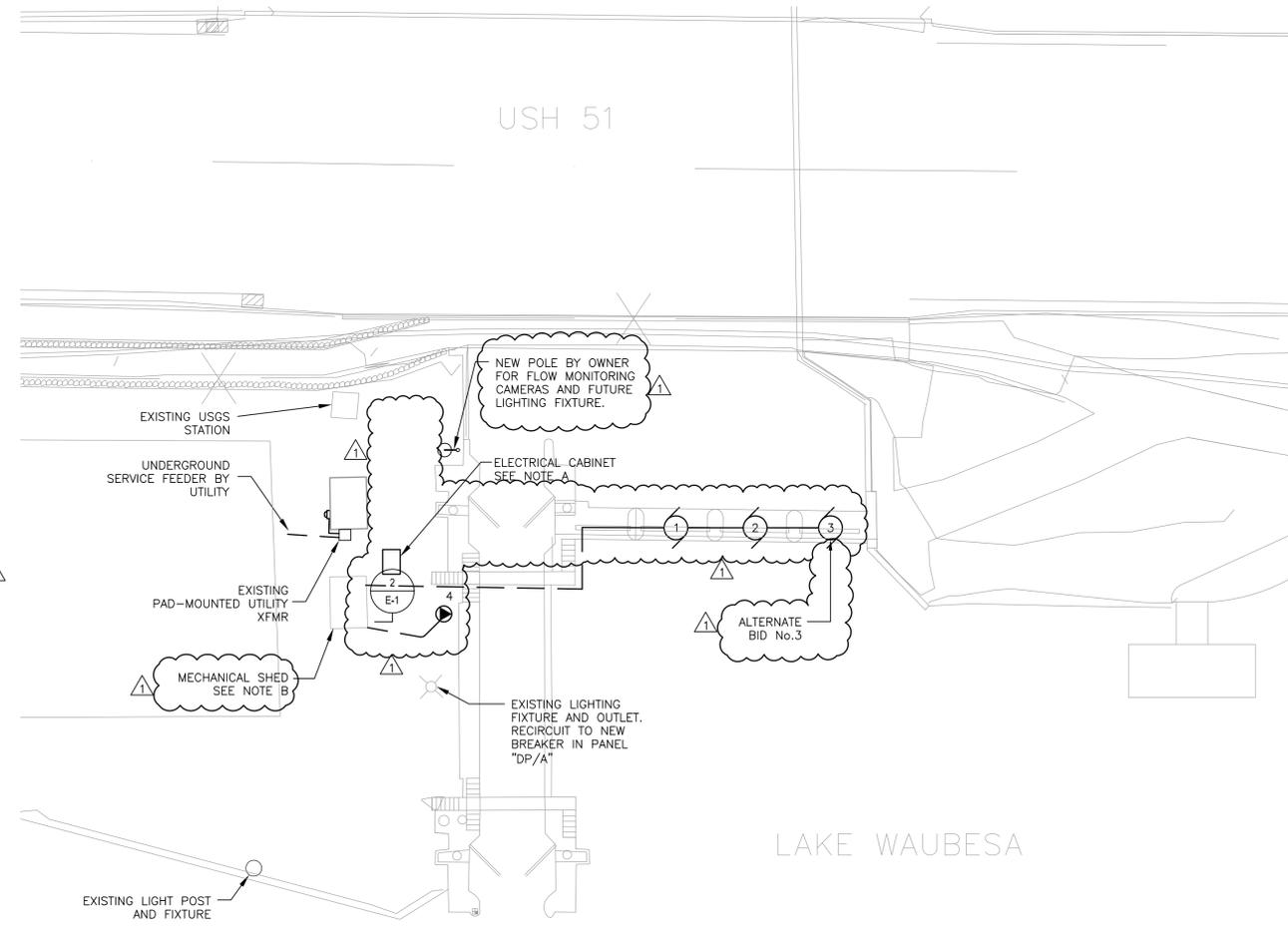
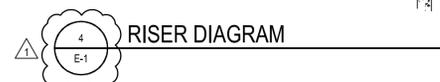
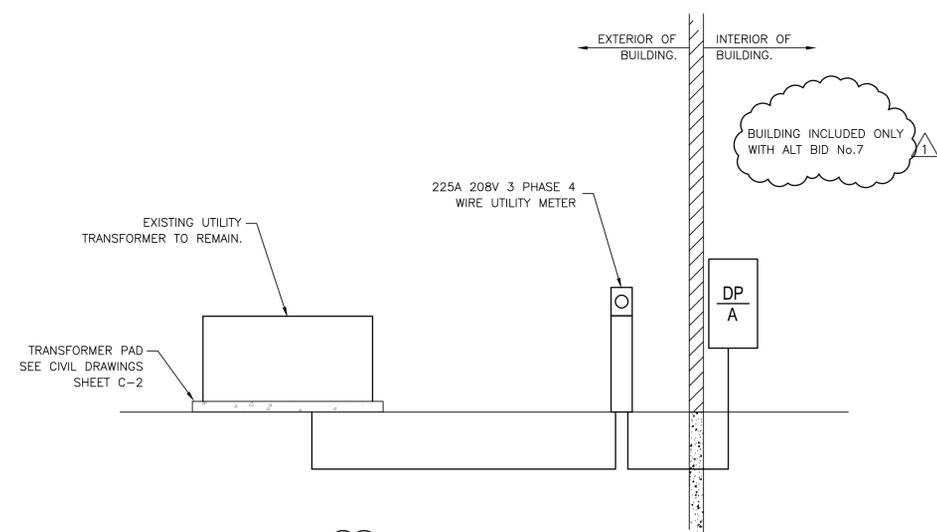
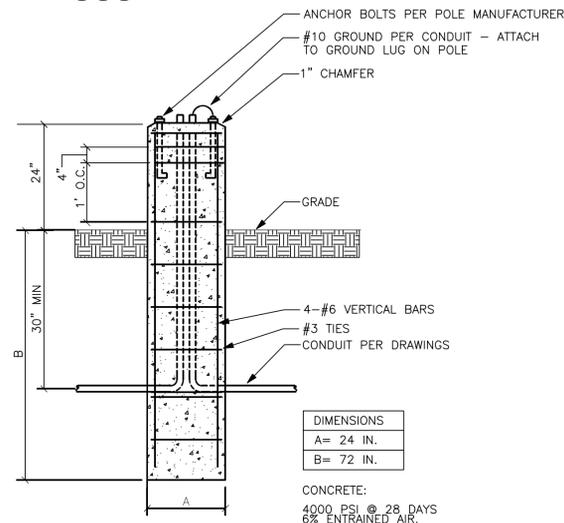
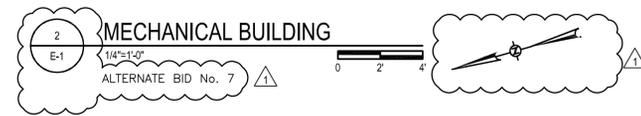
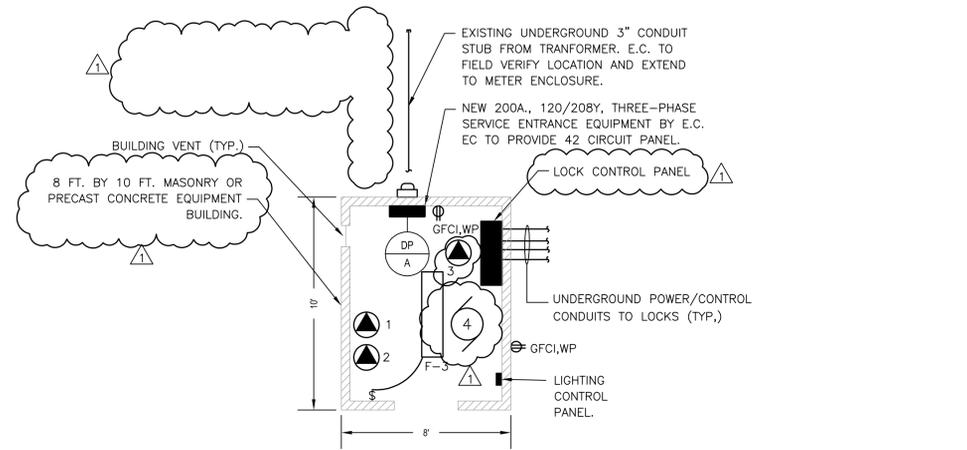


2A WALL SECTION
3/4"=1'-0" 0 1 2
MASONRY OPTION



2B WALL SECTION
3/4"=1'-0" 0 1 2
PRECAST OPTION

2/29/2012 3:09:19 PM I:\Jobs\2011\20115012\CAD\Structural\dgn\00\PHASE 2\NS_00_5012_5-11.dgn



PLAN NOTES:
 NOTE A. PROVIDE: 36"x48"x10" NEMA 4X CABINET ON (2) 4x4 WOOD POST FOR BASE BID.
 PROVIDE 72"x60"x30" NEMA4X CABINET ON 6" CONCRETE CONCRETE SLAB FOR ALTERNATE BID #1.
 NOTE B. PROVIDE MECHANICAL SHED FOR ALTERNATE BID #7.

FLOW MONITORING CAMERA SYSTEM
 CONTRACTOR SHALL PROVIDE DESIGN BUILD SYSTEM INCLUDING 2 CAMERAS, WIRING, P.C., ROUTER AND CAMERA VIEWING SOFTWARE AT BABCOCK DAM IN BASE BID.

One Honey Creek Corporate Center
 125 South 84th Street,
 Suite 401
 Milwaukee, WI 53214-1470
 414 / 259 1500
 414 / 259 0037 fax
 www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:

DANE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 BABCOCK AND LAFOLLETTE PARKS -
 LOCKS AND DAMS RENOVATION
 PHASE 2
 LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

ADDENDUM No. 1 02-28-12 MJH

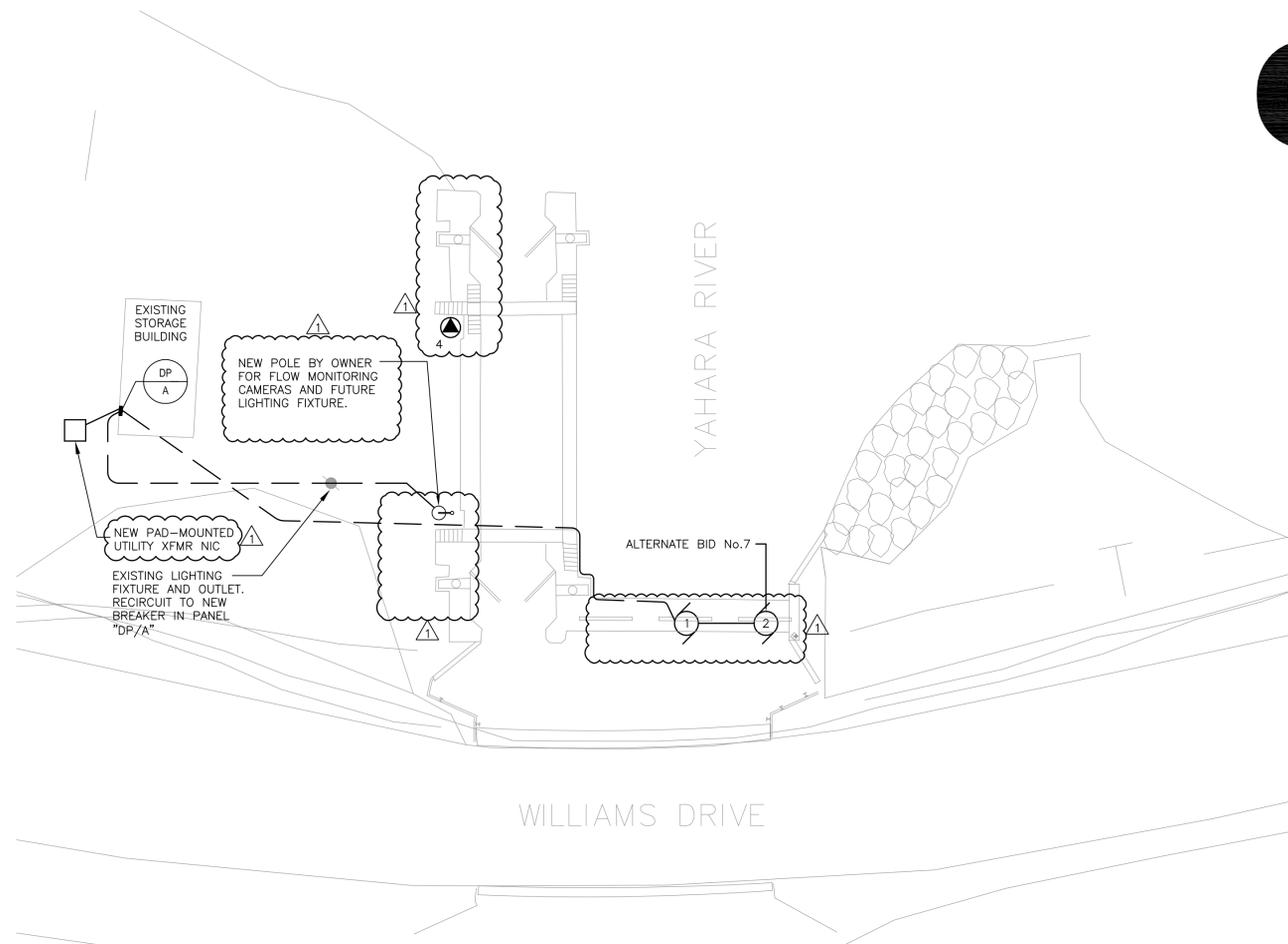
PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AAS/JAH
 CHECKED BY: ASS
 APPROVED BY: ASS
 SCALE: AS SHOWN

SHEET TITLE:

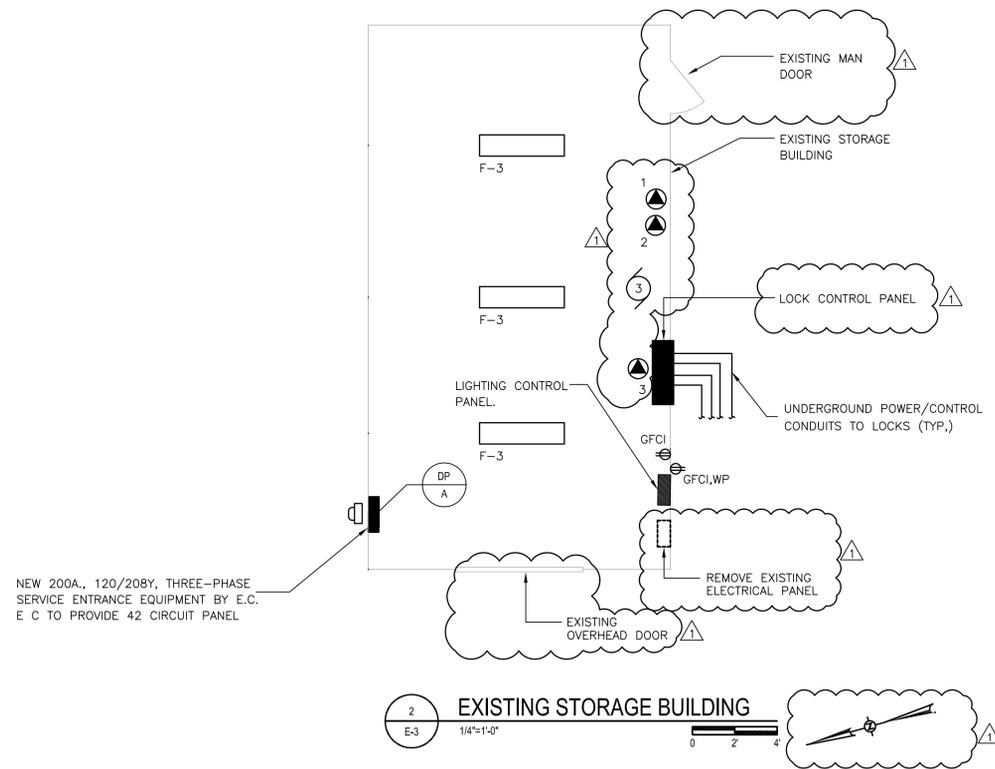
SITE ELECTRICAL PLAN AND DETAILS
 LAFOLLETTE LOCK AND DAM

SHEET NUMBER:

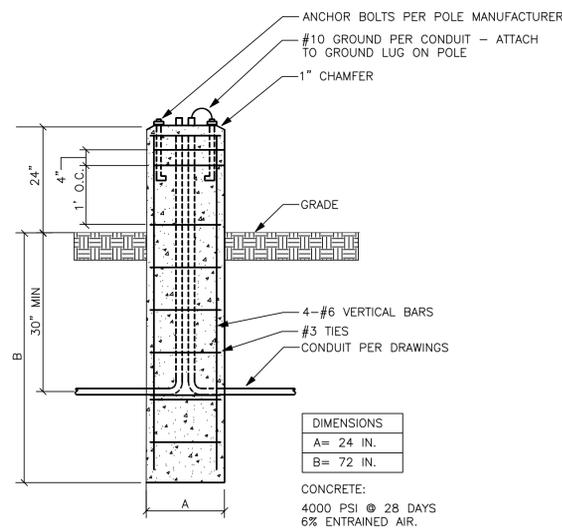


1 SITE ELECTRICAL PLAN
 1/16"=1'-0"
 0 8 16'

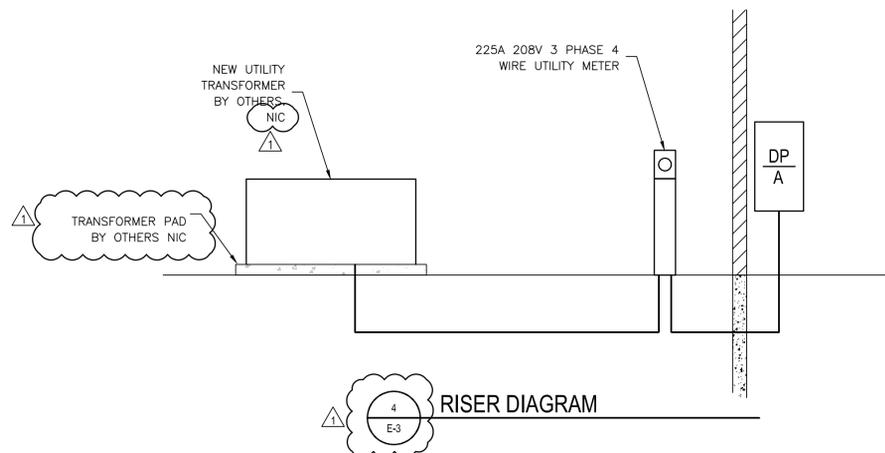
FLOW MONITORING CAMERA SYSTEM
 CONTRACTOR SHALL PROVIDE DESIGN BUILD SYSTEM INCLUDING 2 CAMERAS, WIRING, P.C., ROUTER AND CAMERA VIEWING SOFTWARE AT LAFOLLETTE DAM IN BASE BID.



2 EXISTING STORAGE BUILDING
 1/4"=1'-0"
 0 2 4'



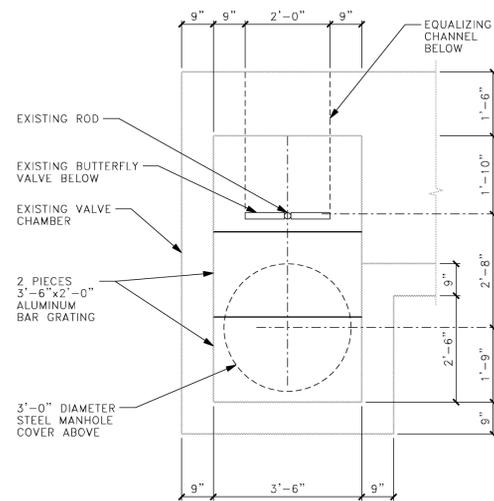
3 LIGHT POLE BASE DETAIL
 BY OWNER N.T.S.



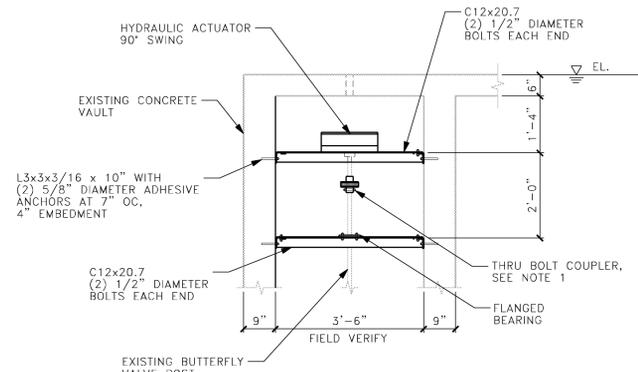
4 RISER DIAGRAM
 E-3

GENERAL NOTES

1) ALL SHEET SECTIONS AND DETAILS ARE FOR ALTERNATE BID NO. 7 AT BABCOCK LOCK AND BID NO. 8 AT LAFOLLETTE LOCK.

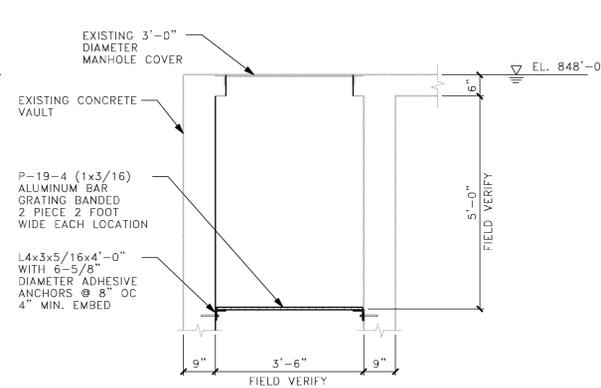


1 SECTION
M-2 1/2"=1'-0" 0 1 2'

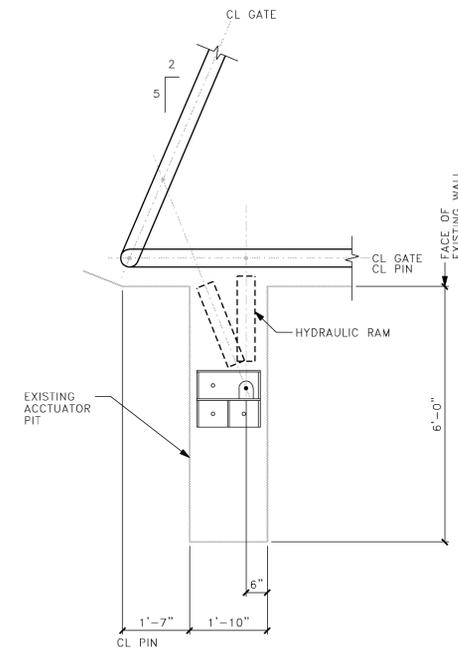


NOTE 1: FIELD DRILL EXISTING SHAFT FOR BOLTED COUPLER

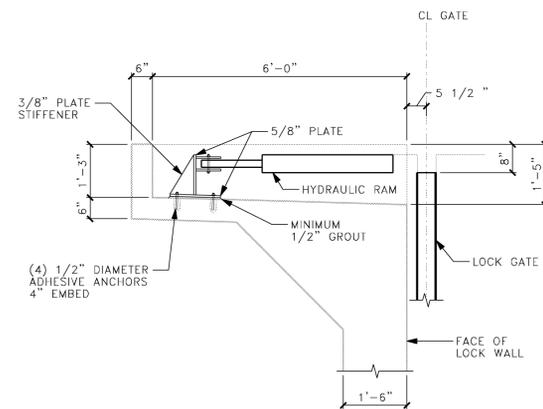
2 SECTION
M-2 1/2"=1'-0" 0 1 2'



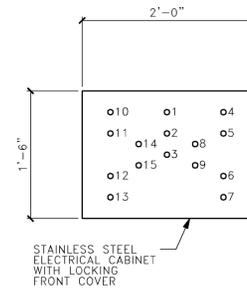
3 SECTION
M-2 1/2"=1'-0" 0 1 2'



4 SECTION
M-2 1/2"=1'-0" 0 1 2'

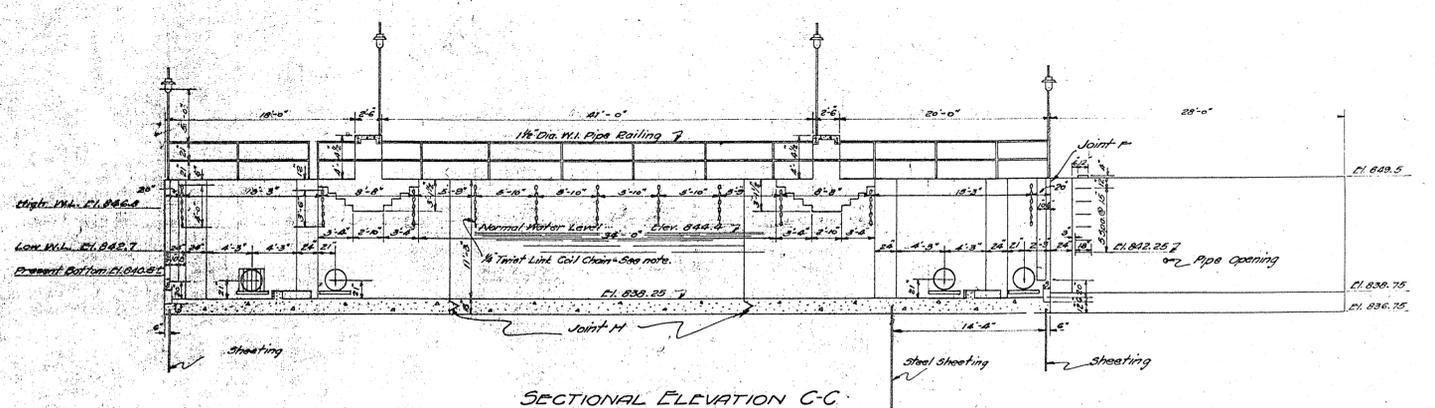
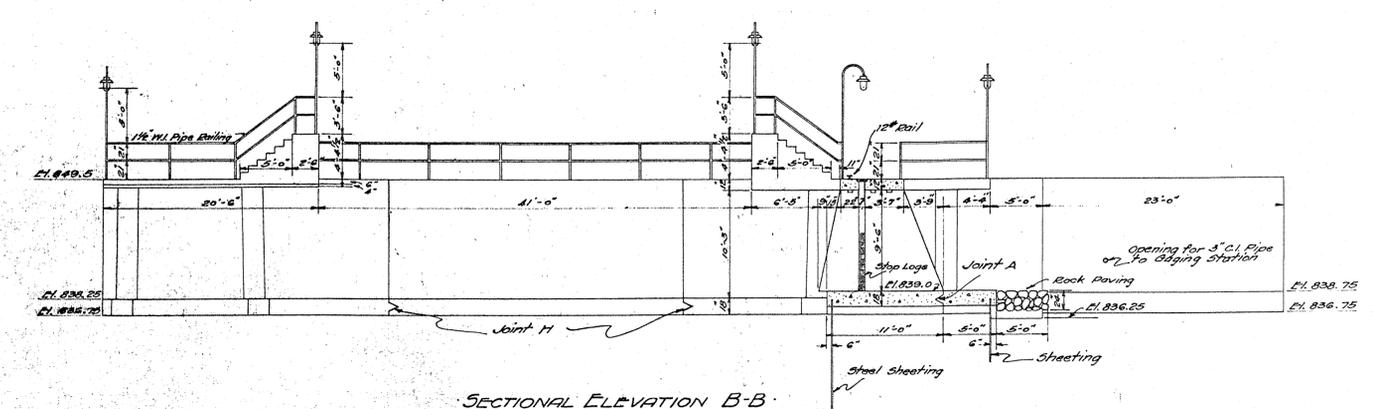
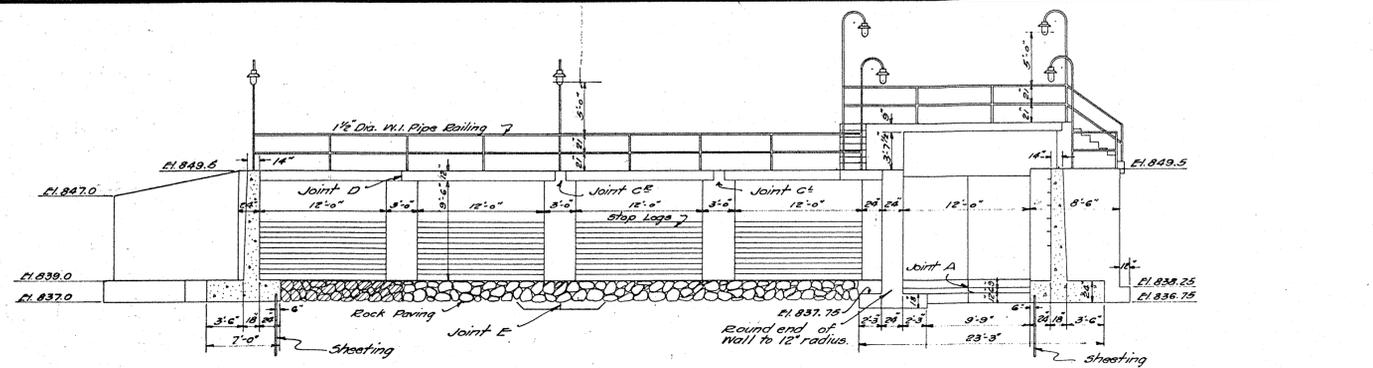
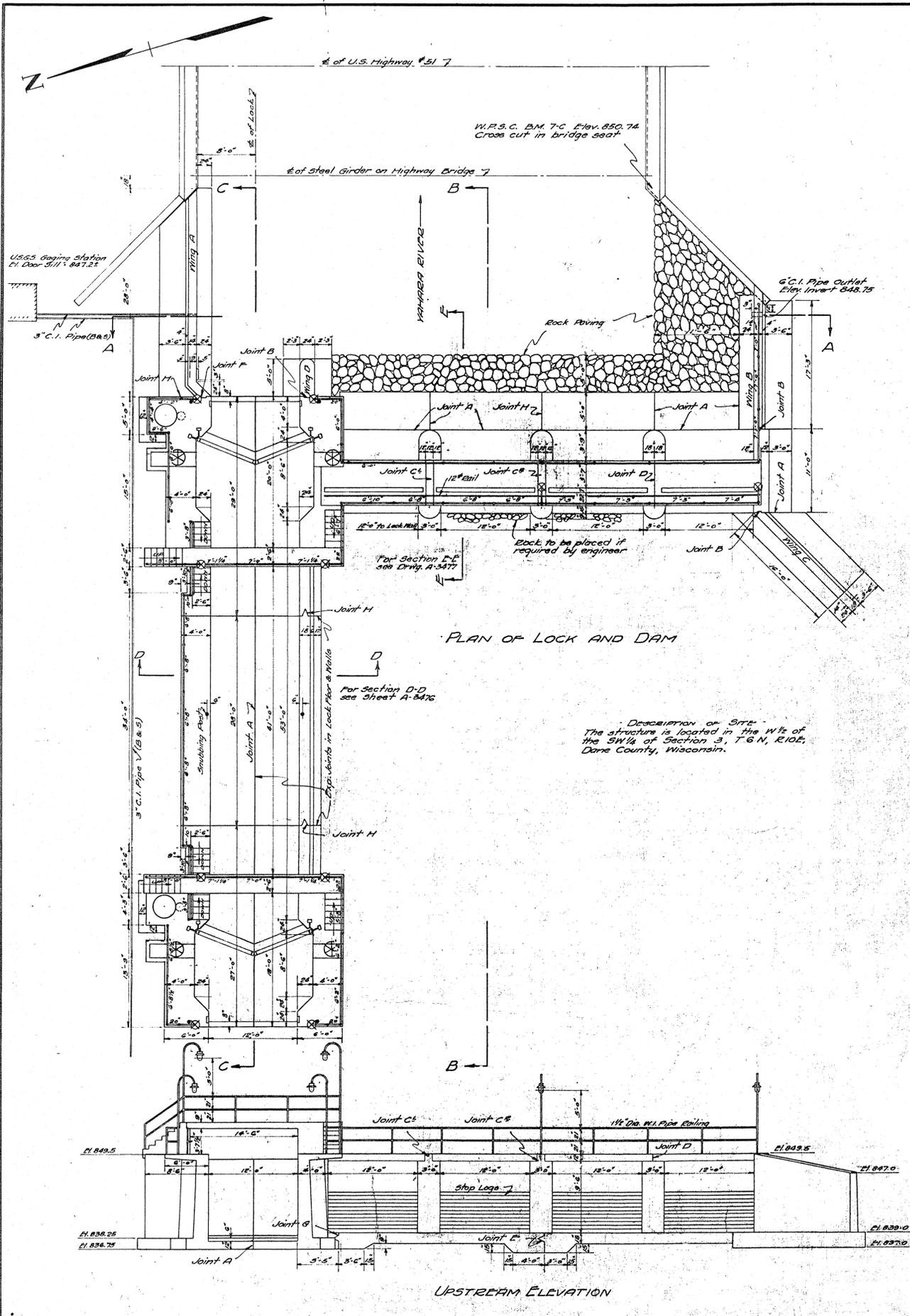


5 SECTION
M-2 1/2"=1'-0" 0 1 2'



6 DETAIL - CONTROL PANEL
M-2 1"=1'-0" 0 1'

- 1 - KEY LOCK
- 2 - HYDRAULIC POWER ON
- 3 - HYDRAULIC POWER OFF
- 4 - UPSTREAM RIGHT GATE OPEN
- 5 - UPSTREAM RIGHT GATE CLOSE
- 6 - UPSTREAM LEFT GATE OPEN
- 7 - UPSTREAM LEFT GATE CLOSE
- 8 - UPSTREAM EQUALIZER VALVE OPEN
- 9 - UPSTREAM EQUALIZER VALVE CLOSE
- 10 - DOWNSTREAM RIGHT GATE OPEN
- 11 - DOWNSTREAM RIGHT GATE CLOSE
- 12 - DOWNSTREAM LEFT GATE OPEN
- 13 - DOWNSTREAM LEFT GATE CLOSE
- 14 - DOWNSTREAM EQUALIZER VALVE OPEN
- 15 - DOWNSTREAM EQUALIZER VALVE CLOSE



Note: See Drwg. A-3475 for layout of wood piles and steel sheeting. All electric conduits for lighting system which are to be imbedded in concrete to be installed during construction. Balance of lighting to be completed at some future time. Dimensions shown on railing are c/c of posts. The 1/4" Twist Link Coil Chains are anchored to lock wall by 1/2" eye bolts with 1/2" eyes. Chains to be placed on both sides of lock. Bar steel reinforcement not shown.

ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

GENERAL PLAN AND ELEVATIONS
OF
LOCK AND DAM AT OUTLET
OF
LAKE WAUBESA
FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN

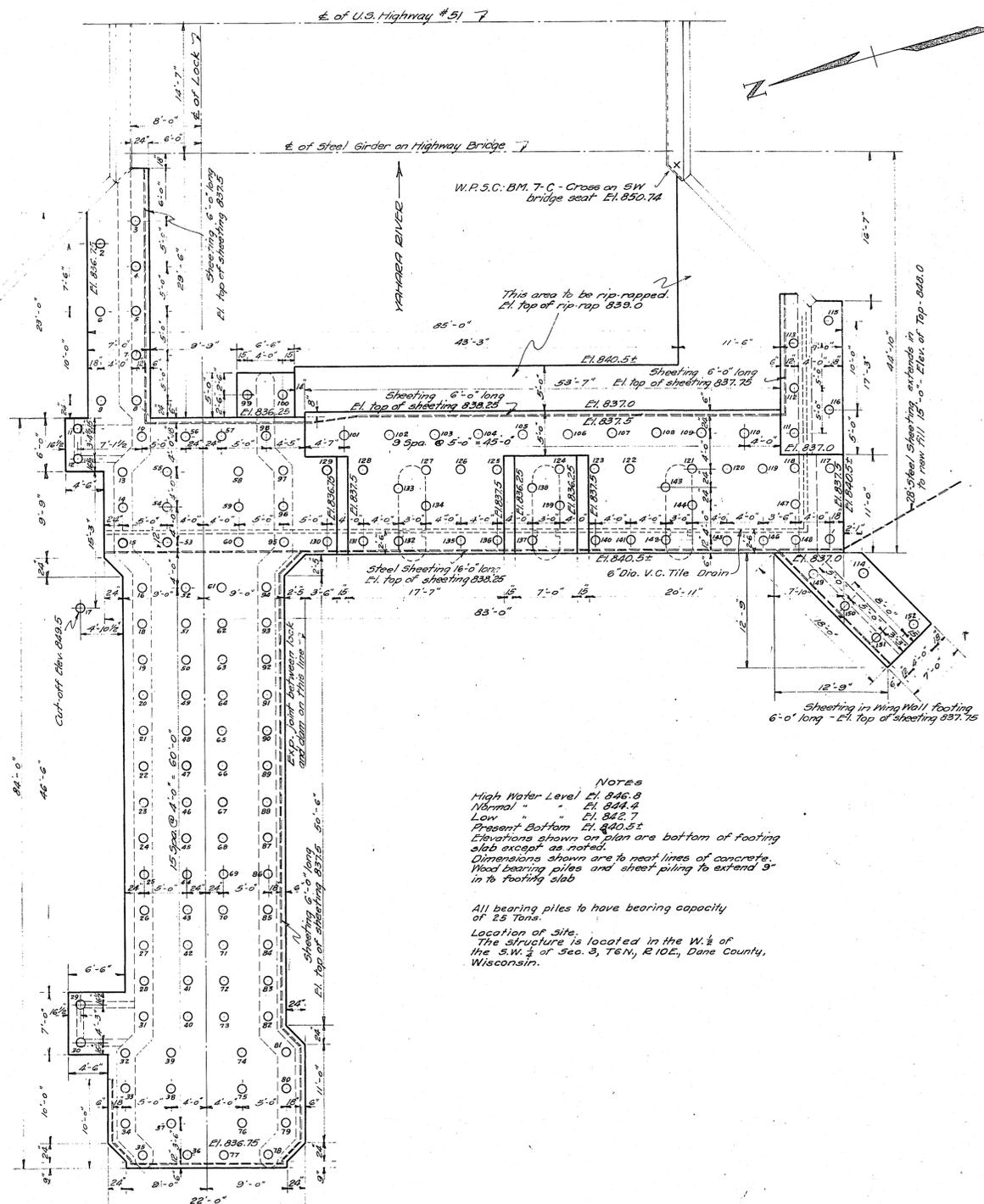
SCALE 1/8" = 1'-0"

DES. BY J. A. H.
DR. J. W. M. C.
TR. J. W. P. C.
CH. J. A. H.
APP. J. W. P. C.

MEAD WARD AND HUNT
CONSULTING ENGINEERS
MADISON, WISCONSIN

DATE - DECEMBER 1926

A-3474

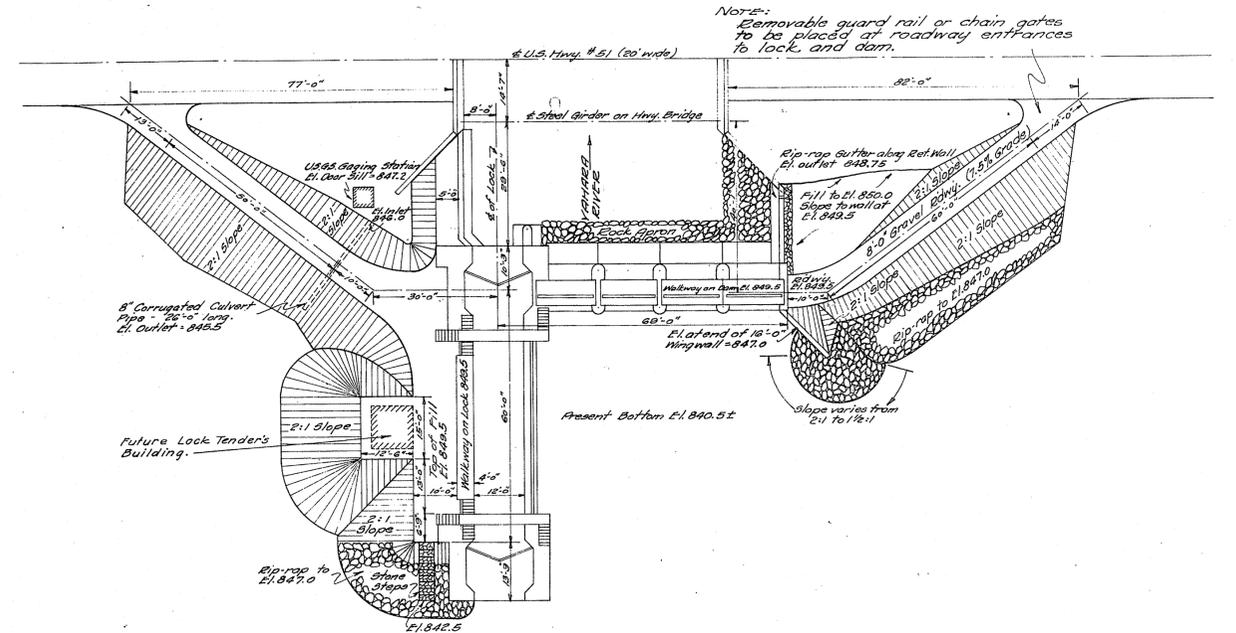


Notes
 High Water Level El. 846.8
 Normal " El. 844.4
 Low " El. 842.7
 Present Bottom El. 840.5
 Elevations shown on plan are bottom of footing slab except as noted.
 Dimensions shown are to neat lines of concrete.
 Wood bearing piles and sheet piling to extend 9' in to footing slab.

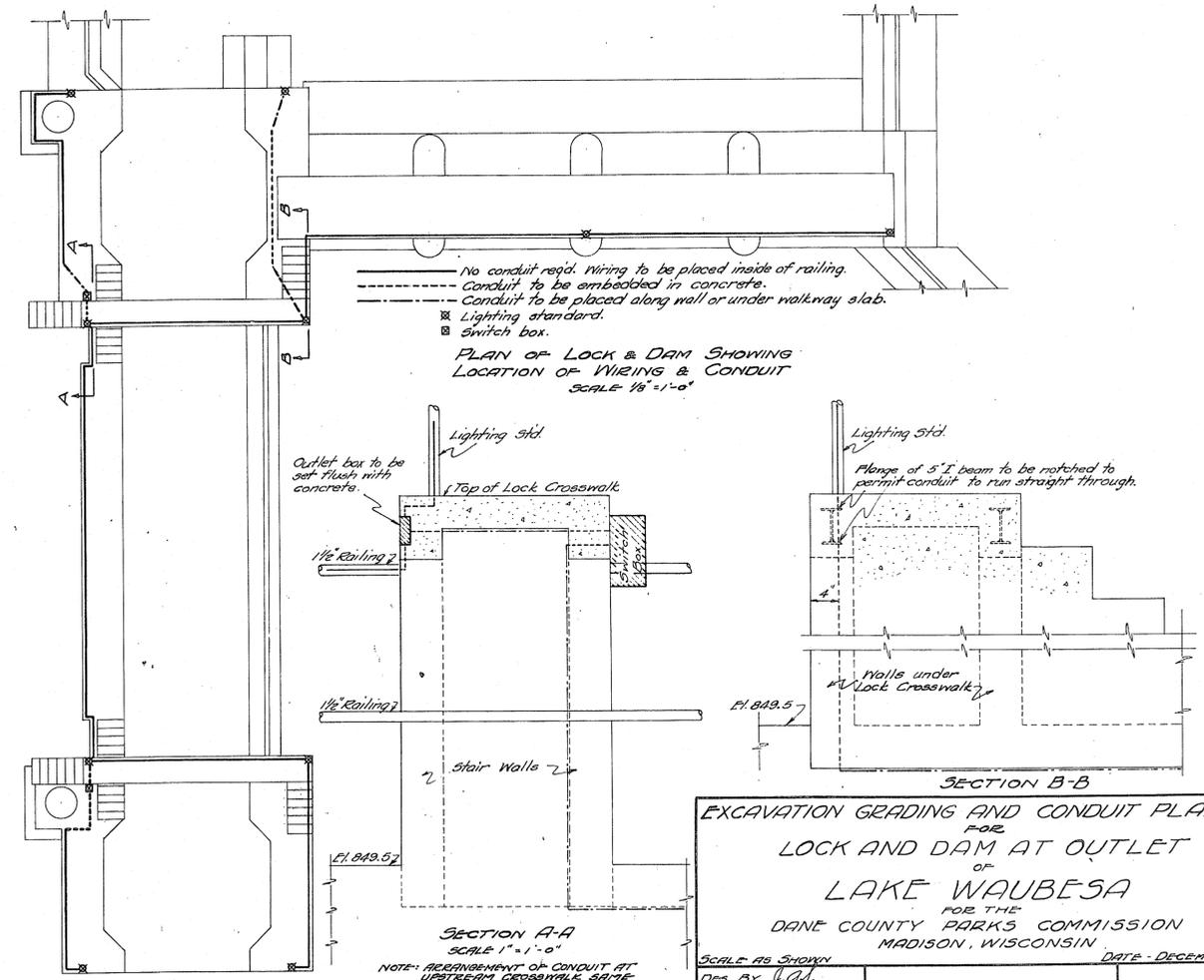
All bearing piles to have bearing capacity of 25 Tons.

Location of Site:
 The structure is located in the W. 1/4 of the S.W. 1/4 of Sec. 3, T6N, R10E, Dane County, Wisconsin.

EXCAVATION PLAN
 SHOWING LOCATION OF WOOD BEARING PILES AND SHEET PILING
 SCALE 1/8" = 1'-0"



GRADING PLAN
 SCALE 1" = 20'-0"



PLAN OF LOCK & DAM SHOWING LOCATION OF WIRING & CONDUIT
 SCALE 1/8" = 1'-0"

SECTION A-A
 SCALE 1" = 1'-0"

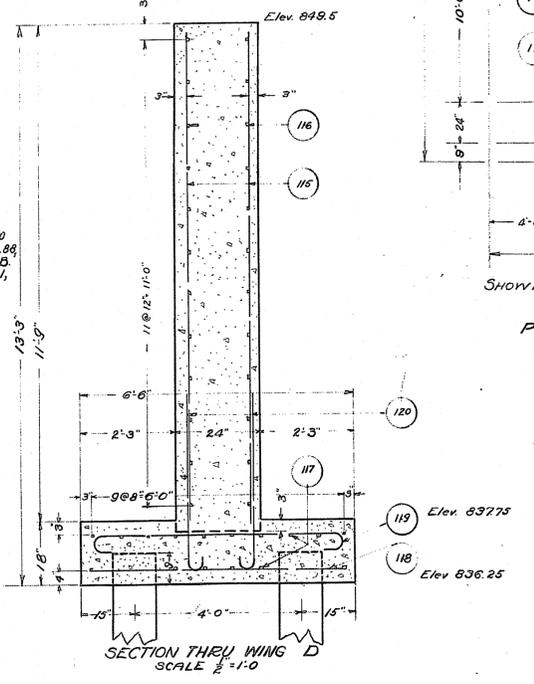
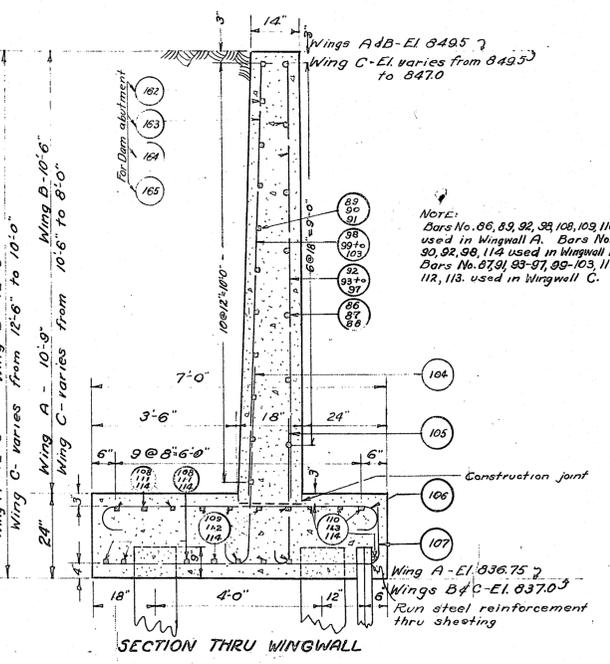
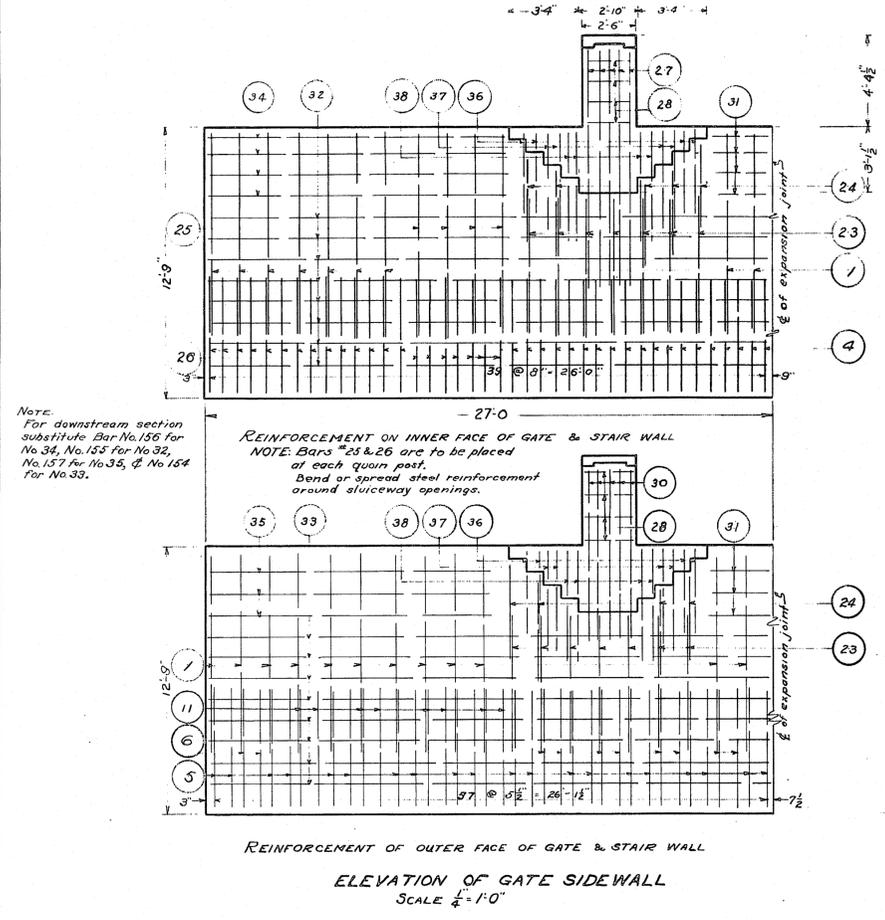
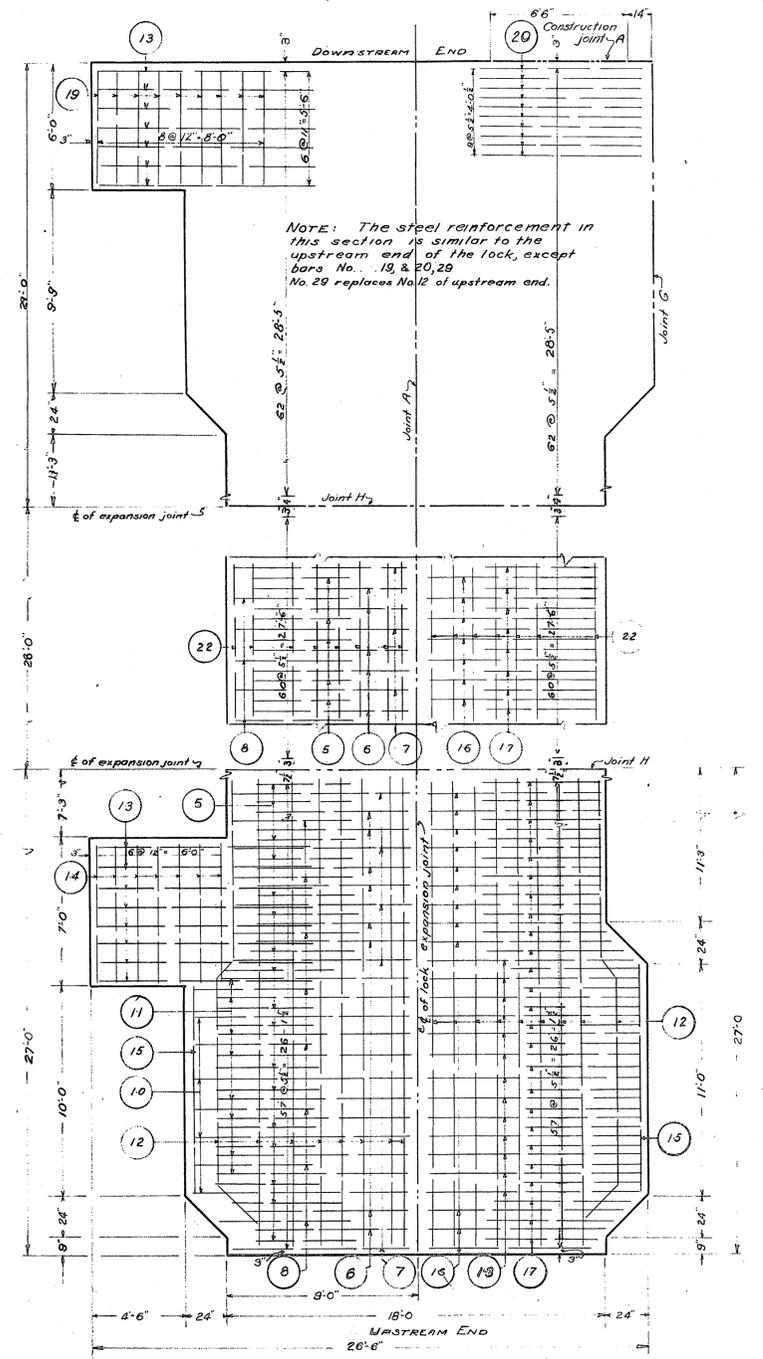
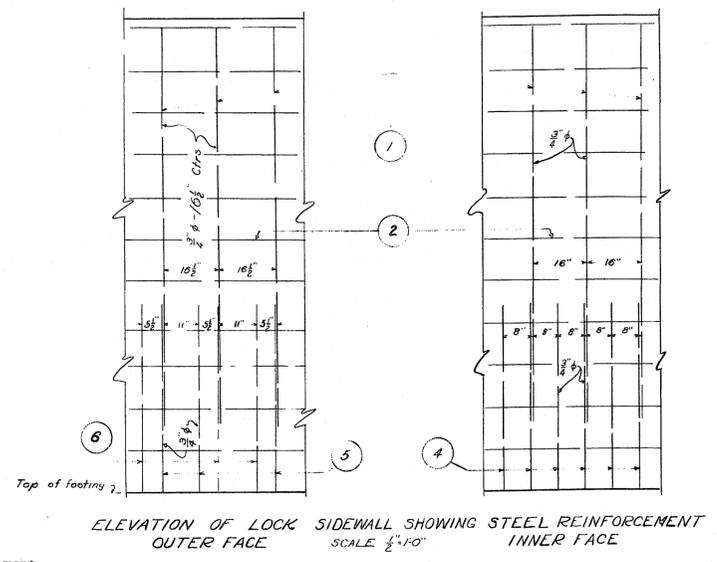
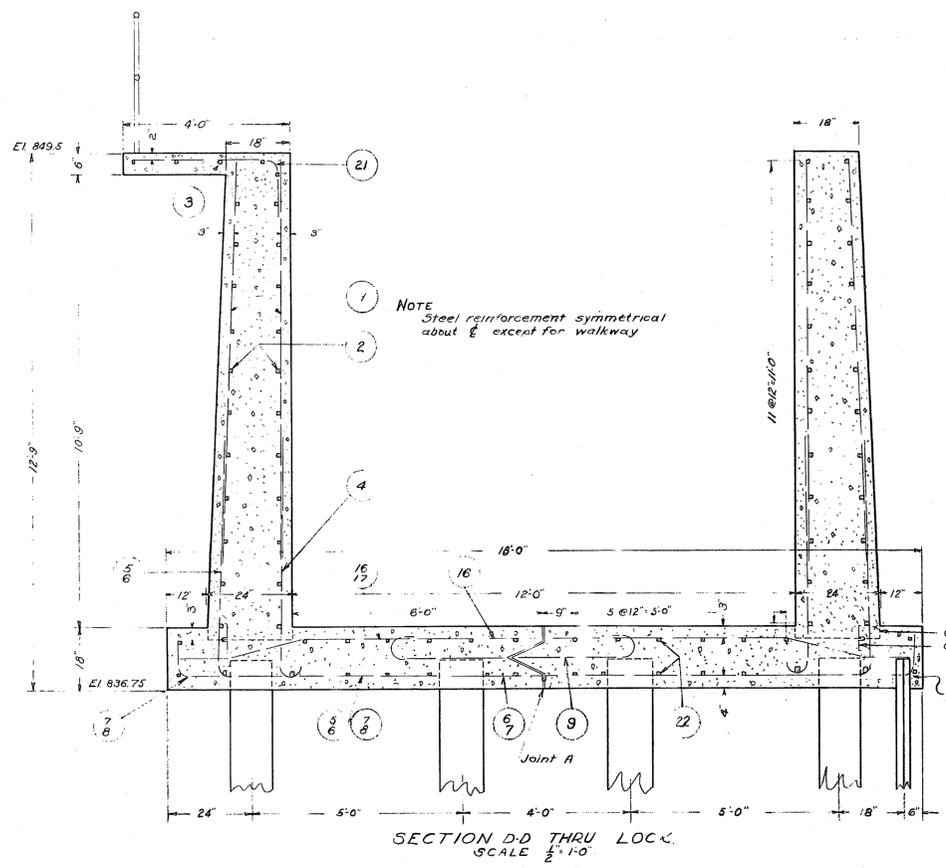
SECTION B-B

EXCAVATION GRADING AND CONDUIT PLANS FOR LOCK AND DAM AT OUTLET OF LAKE WAUBESA FOR THE DANE COUNTY PARKS COMMISSION MADISON, WISCONSIN
 DATE - DECEMBER 1936

DES. BY J.A.S.
 DR. BY W.M.C.
 TR. BY W.M.C.
 CH. BY J.A.S.
 APP. BY G.B.T.H.

MEAD WARD AND HUNT CONSULTING ENGINEERS MADISON, WISCONSIN

A-3475



ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

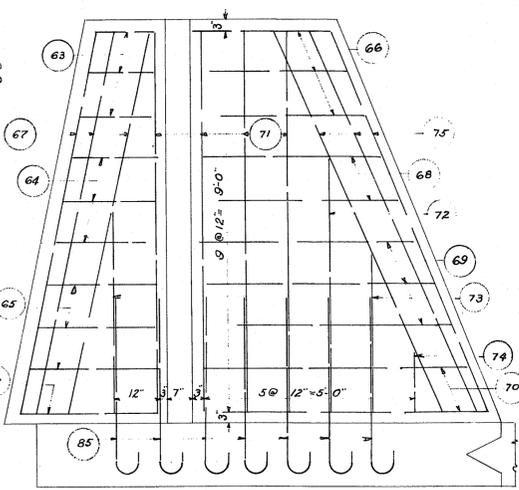
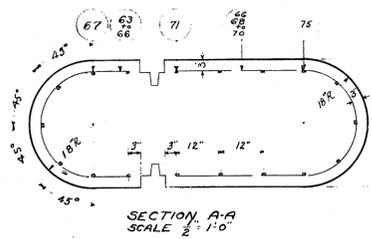
**LOCK AND WINGWALL REINFORCEMENT
OF
LOCK AND DAM AT OUTLET
OF
LAKE WAUBESA**

FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN

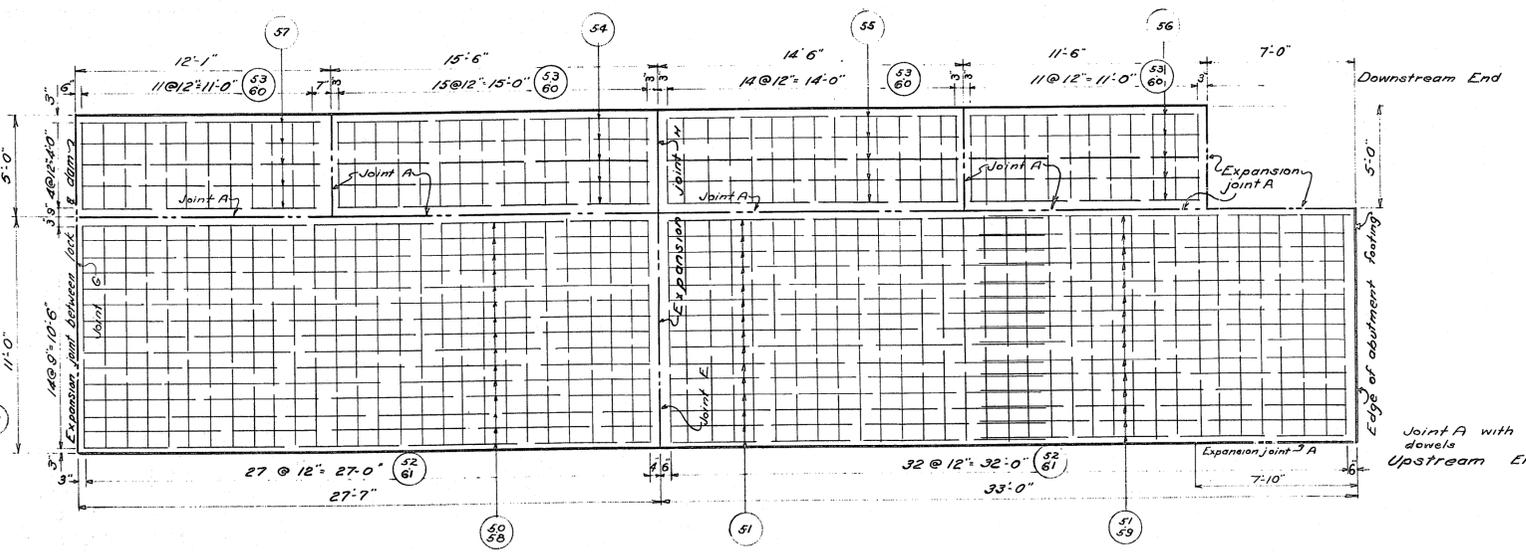
SCALE - AS SHOWN
DES. BY J.D.H.
DR. J.D.H.
TR. J.D.H.
CH. J.D.H.
APP. J.D.H.

MEAD WARD AND HUNT
CONSULTING ENGINEERS
MADISON WISCONSIN

DATE - JANUARY 1937
A-3476

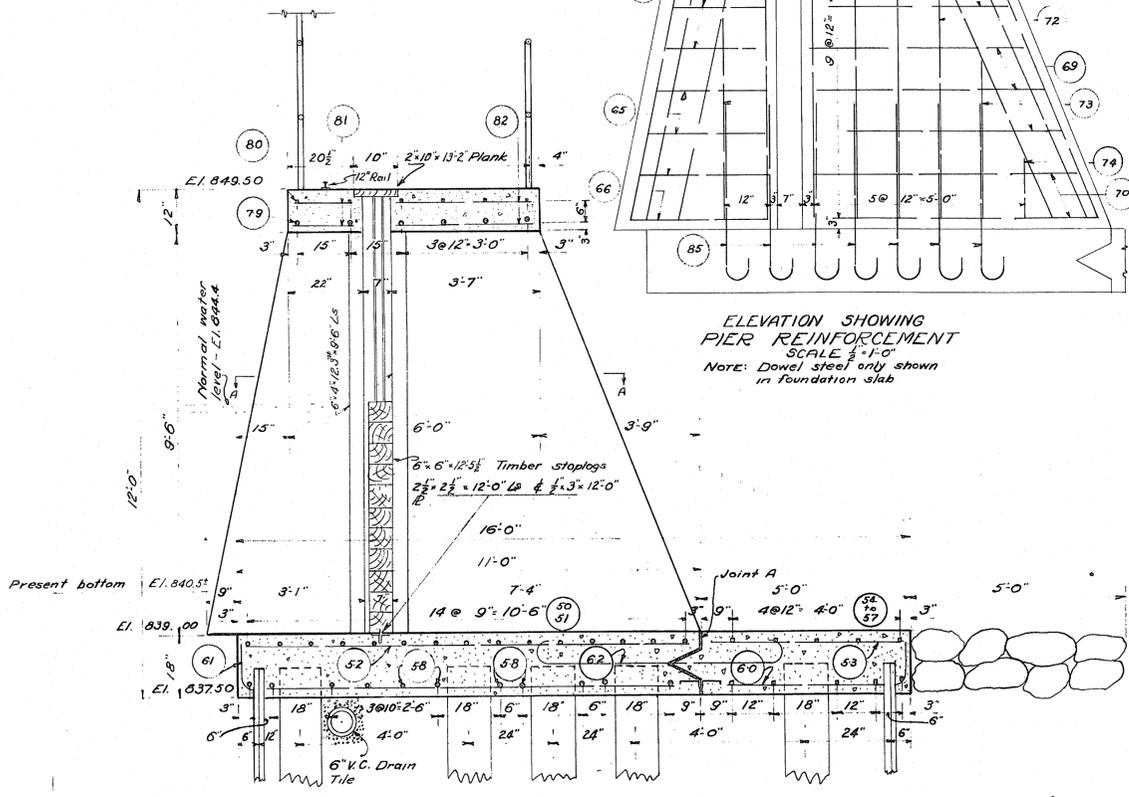


ELEVATION SHOWING PIER REINFORCEMENT
SCALE 1/2"=1'-0"
NOTE: Dowel steel only shown in foundation slab

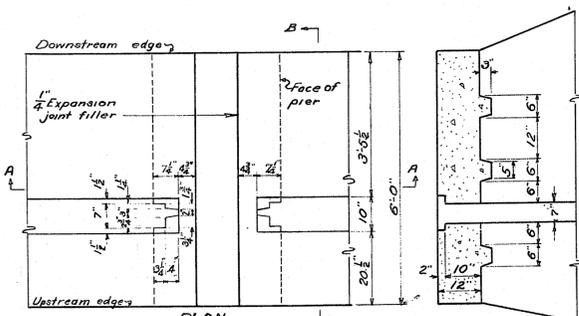


PLAN OF STEEL REINFORCEMENT IN DAM FOUNDATION SLAB
SCALE 1/4"=1'-0"

NOTE: - Bars No. 50 to 53 inc. are in top of slabs.
Bars No. 54 to 57 inc. are in top and bottom of slabs.
Bars No. 58 to 61 inc. are in bottom of slabs.
For dowel steel, Bar No. 62, see Section D-D

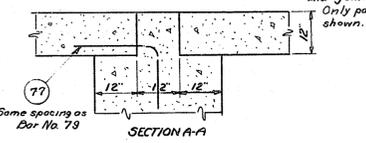


SECTION E-E
SCALE 1/2"=1'-0"

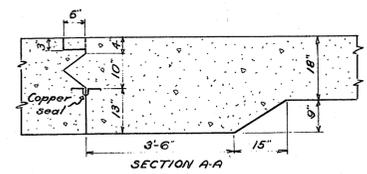


PLAN JOINT C
SCALE 1/2"=1'-0"

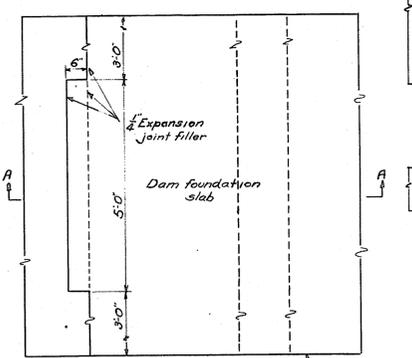
NOTE: Joint C same as C except dowel bars and joint filler reversed. Only partial reinforcement shown.



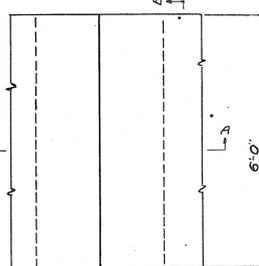
SECTION A-A



SECTION A-A

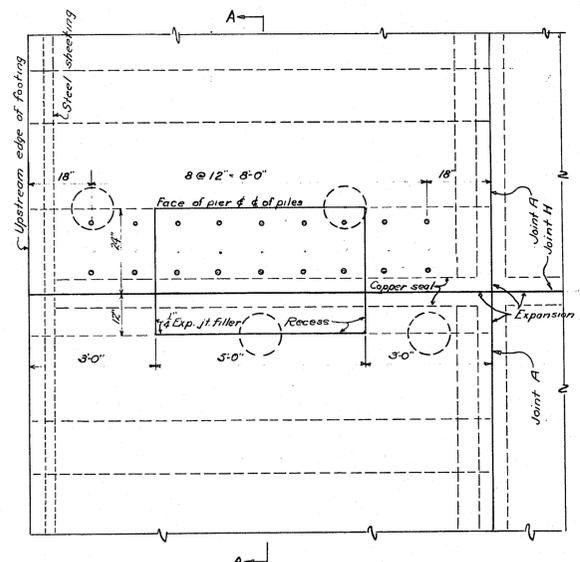


PLAN JOINT G
SCALE 1/2"=1'-0"

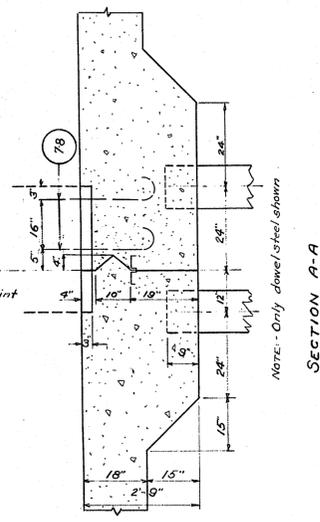


PLAN JOINT D
SCALE 1/2"=1'-0"

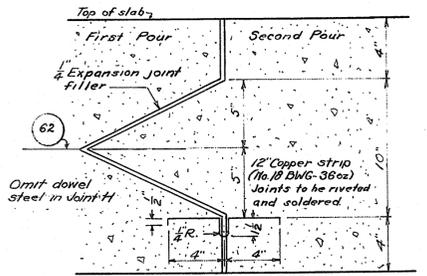
SECTION A-A NOTE: For Section BB see Joint C



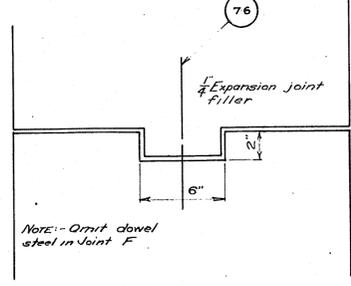
DETAIL OF EXPANSION JOINT E UNDER CENTER PIER
SCALE 1/2"=1'-0"



SECTION A-A



JOINT A & H
SCALE 2"=1'-0"



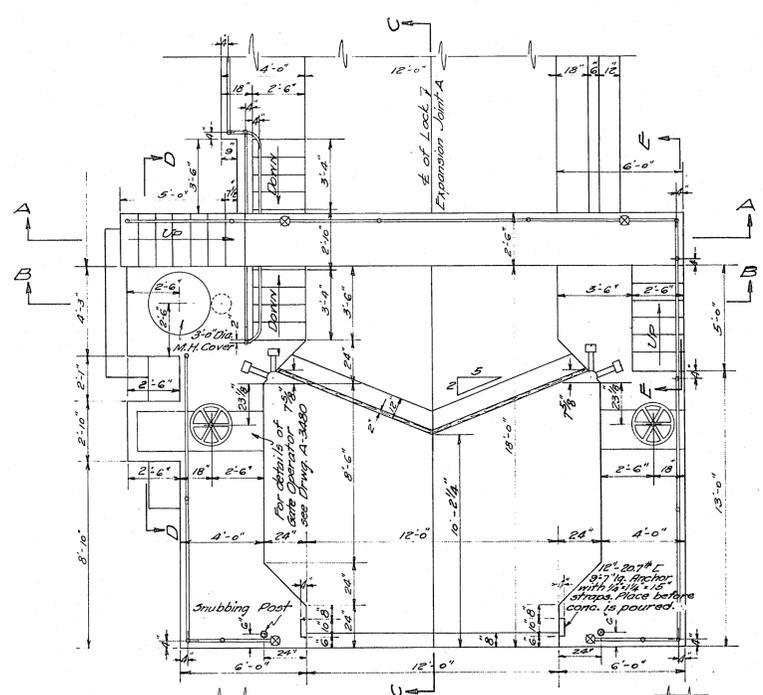
PLAN JOINT B JOINT F
SCALE 2"=1'-0"

NOTE See sheet A-3484 for detail of tile underdrain.

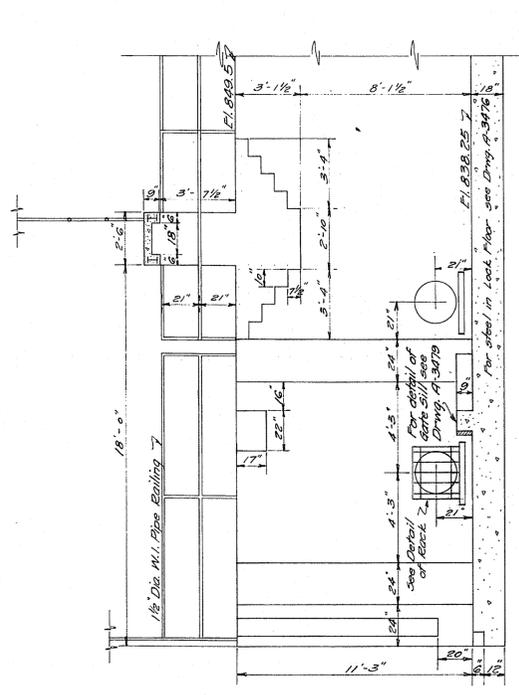
ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

DAM REINFORCEMENT AND EXPANSION JOINTS FOR
LOCK AND DAM AT OUTLET OF
LAKE WAUBESA
FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN
DATE JANUARY 1937.

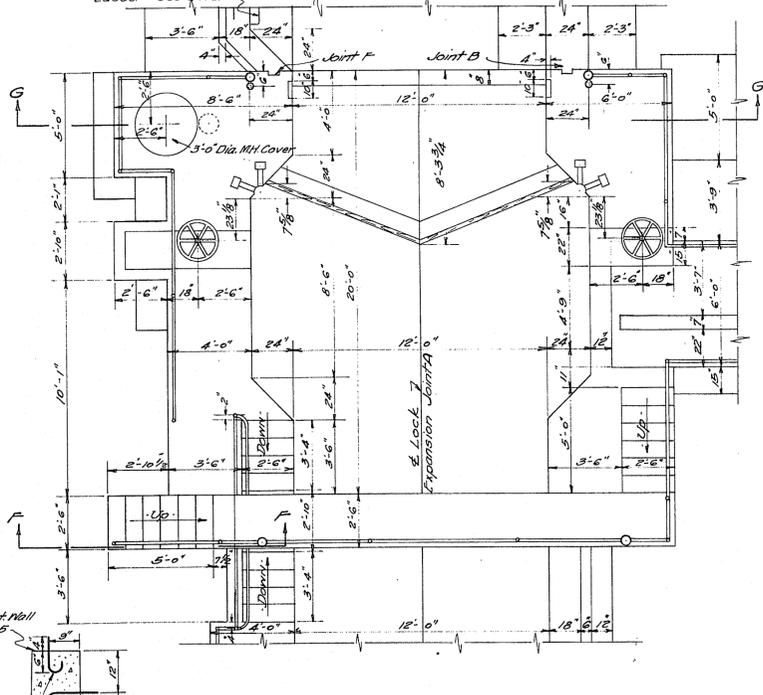
DES. BY DR. TR. CH. APP.	MEAD WARD AND HUNT. CONSULTING ENGINEERS. MADISON WISCONSIN.	A-3477
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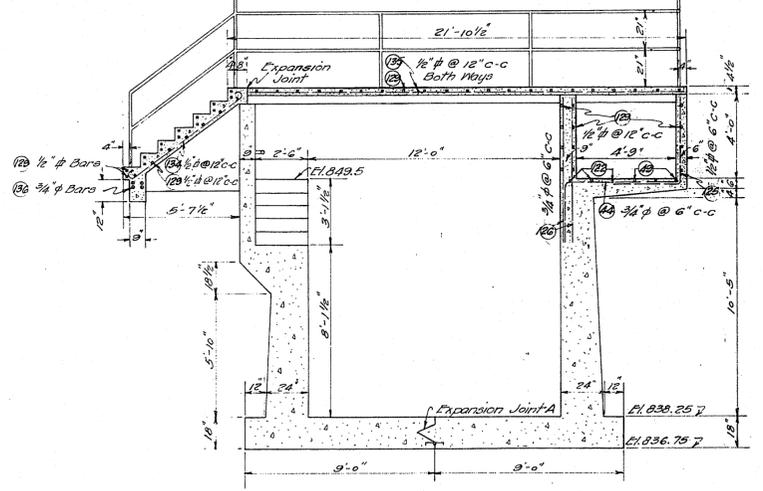
PLAN OF UPSTREAM END OF LOCK



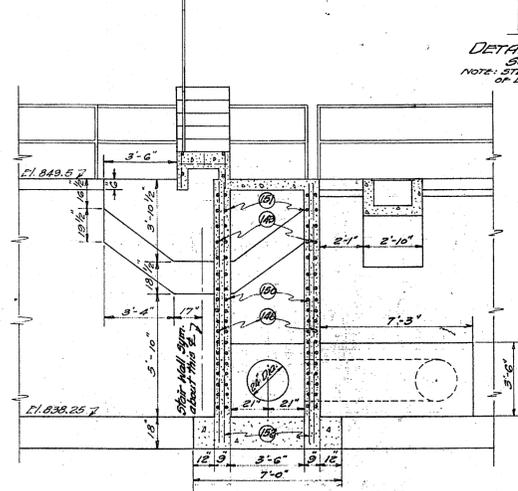
SECTIONAL ELEVATION C-C



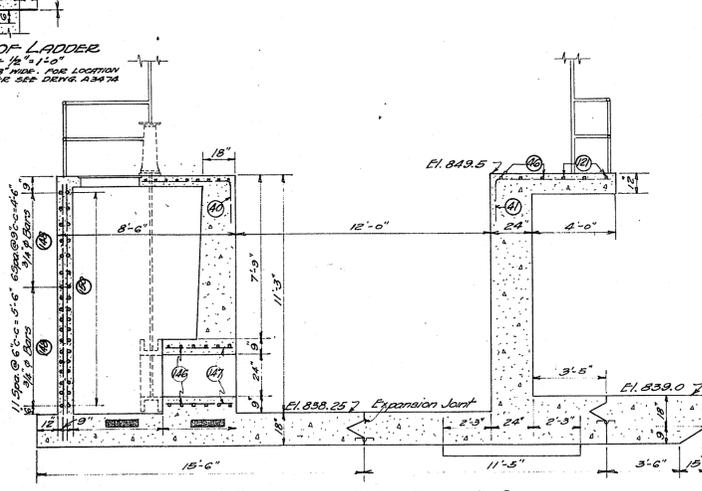
PLAN OF DOWNSTREAM END OF LOCK



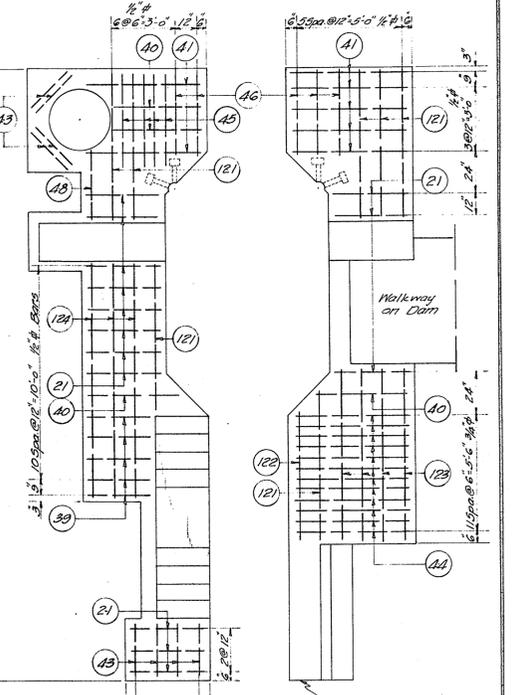
SECTIONAL ELEVATION A-A



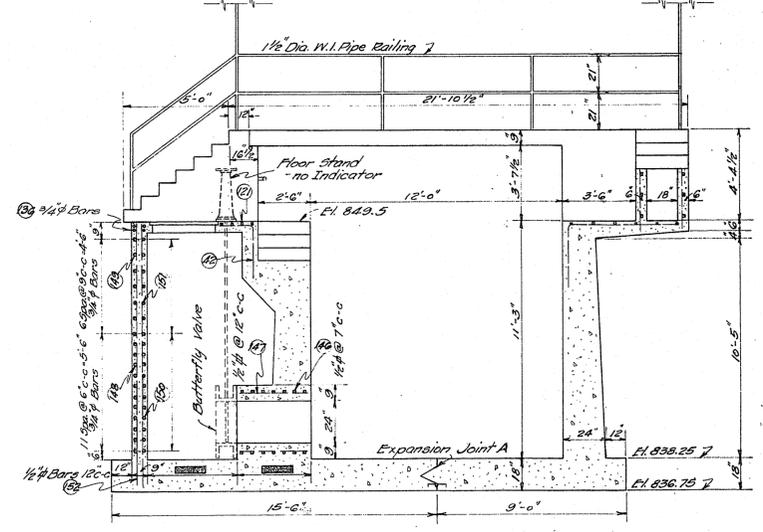
SECTIONAL ELEVATION D-D



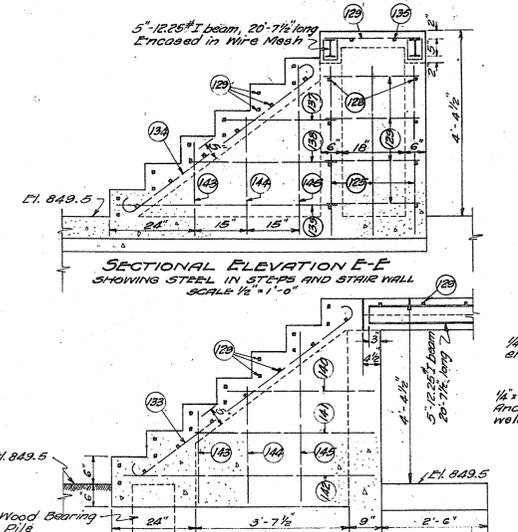
SECTIONAL ELEVATION G-G



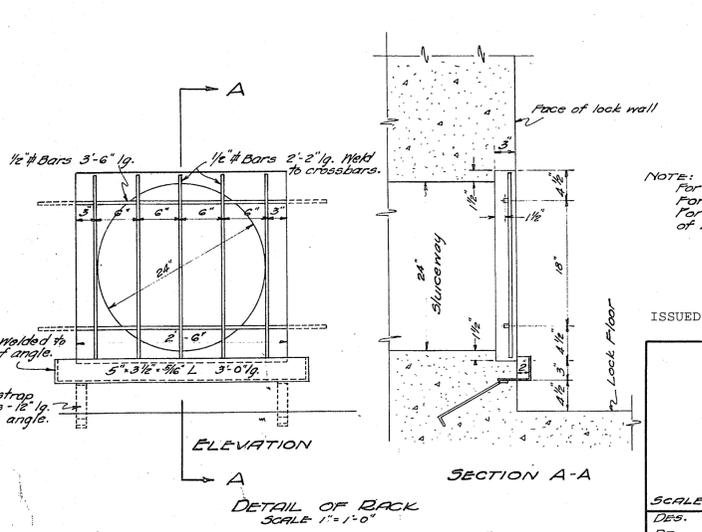
PLAN SHOWING REINFORCEMENT IN WALKWAYS AT ENDS OF LOCK



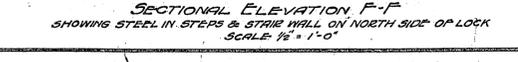
SECTIONAL ELEVATION B-B



SECTIONAL ELEVATION E-E SHOWING STEEL IN STEPS AND STAIR WALL



SECTION A-A DETAIL OF BACK



SECTIONAL ELEVATION F-F SHOWING STEEL IN STEPS & STAIR WALL ON NORTH SIDE OF LOCK

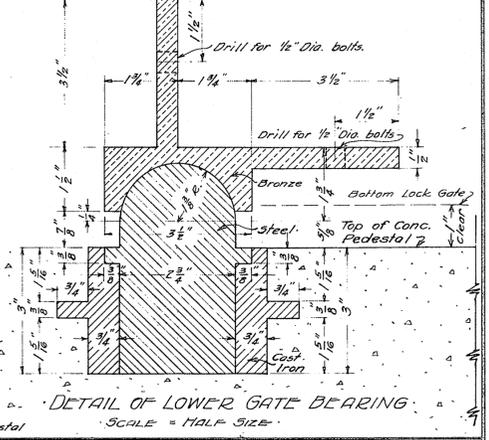
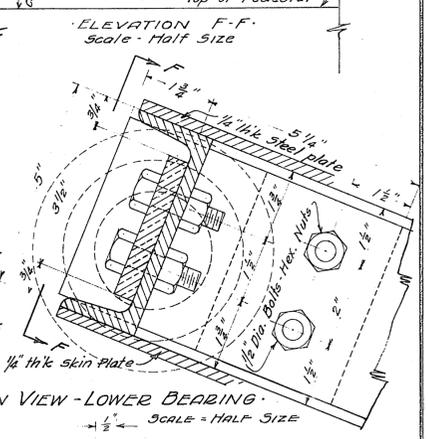
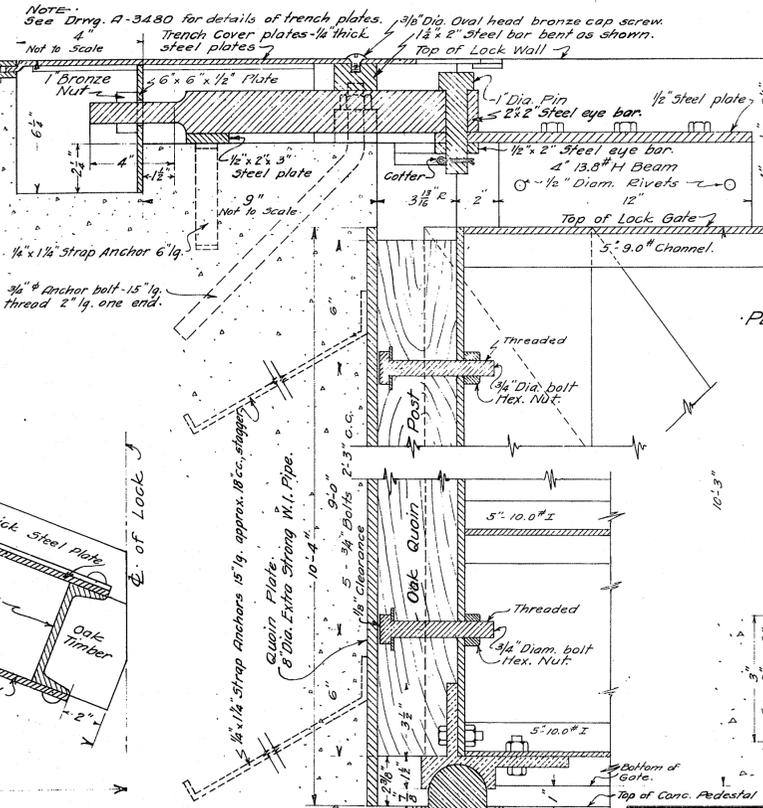
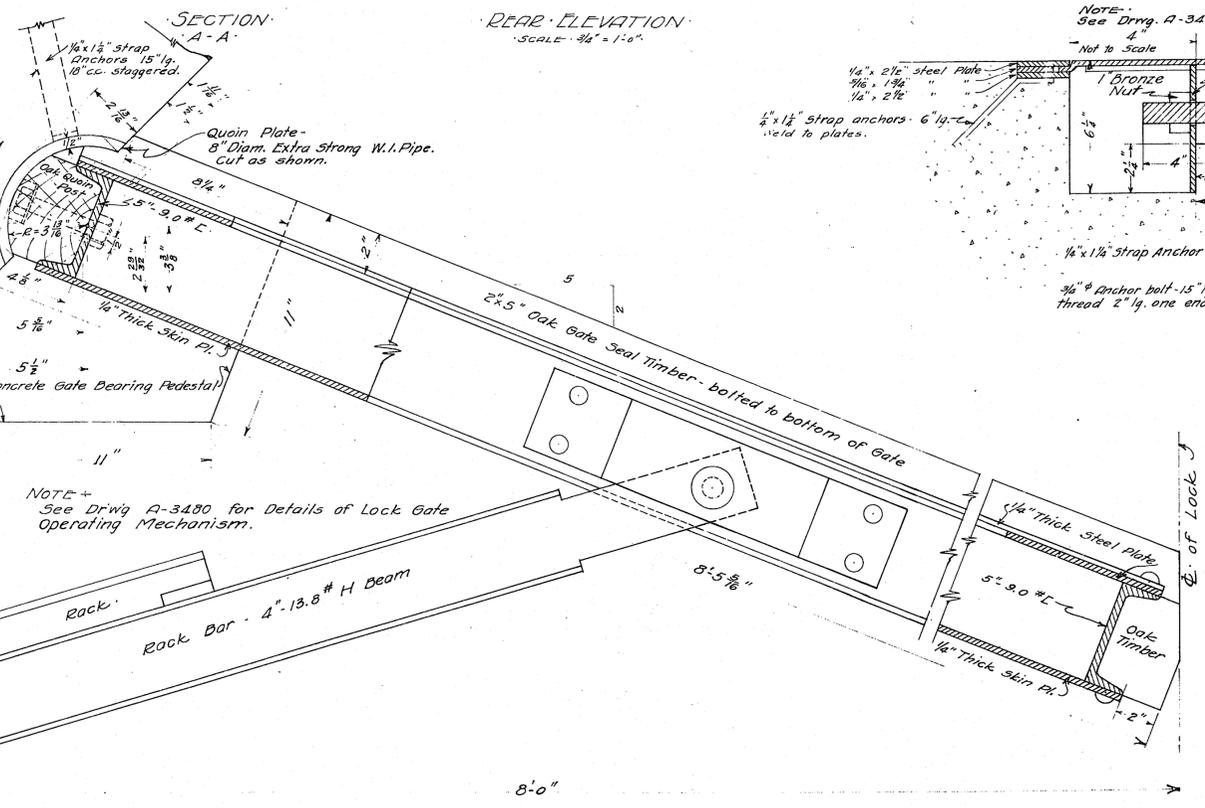
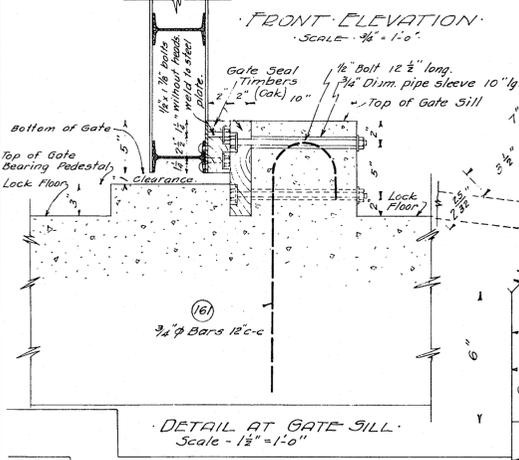
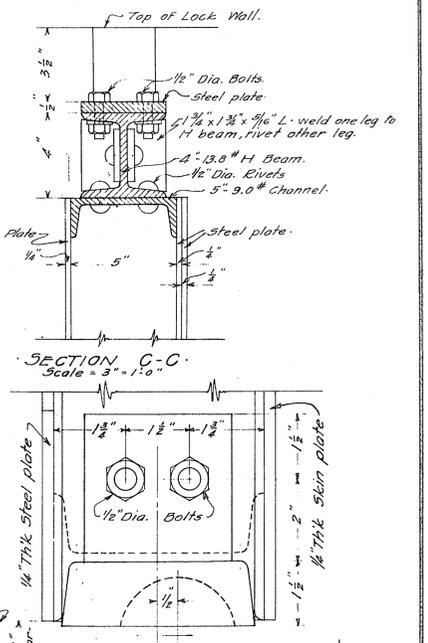
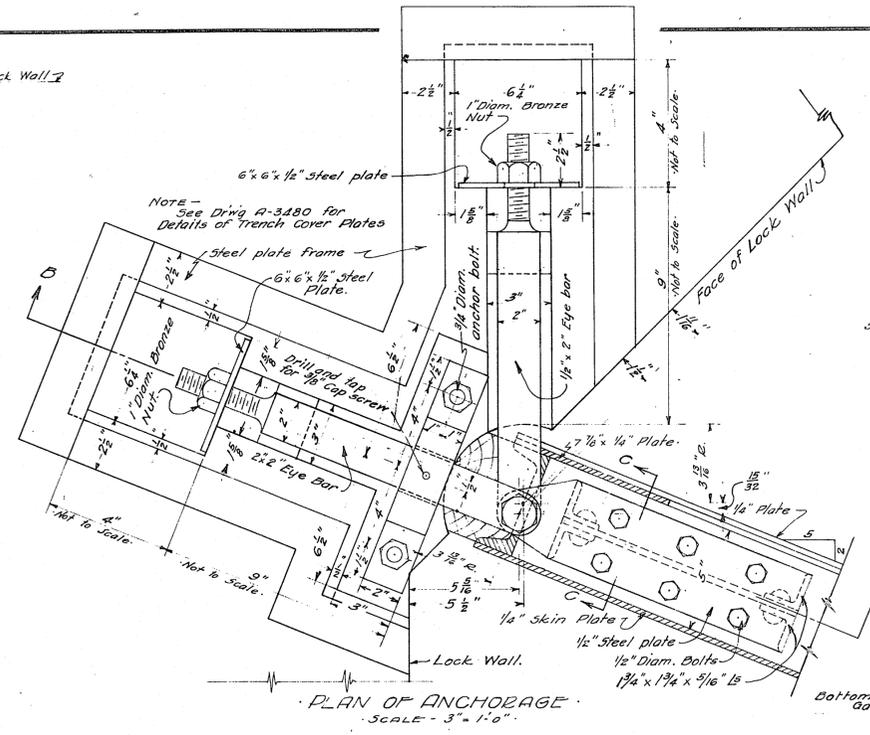
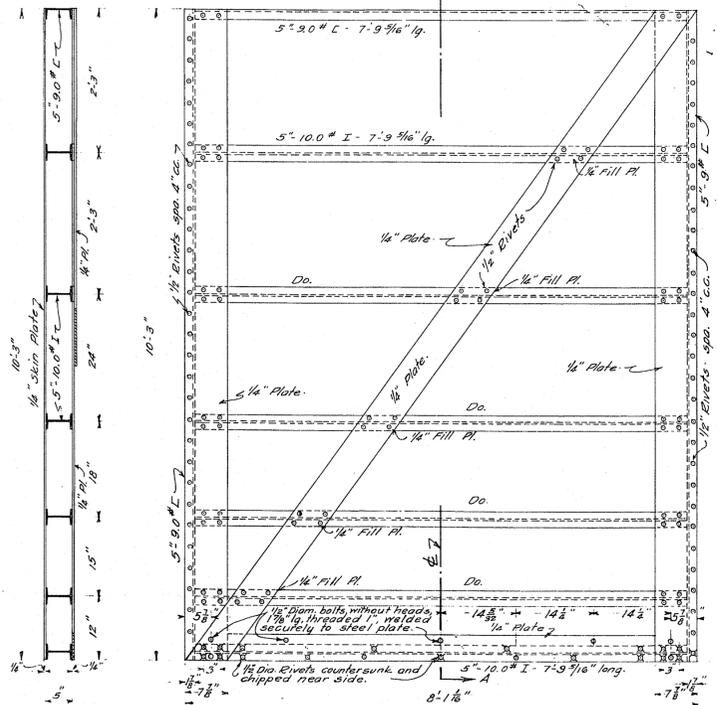
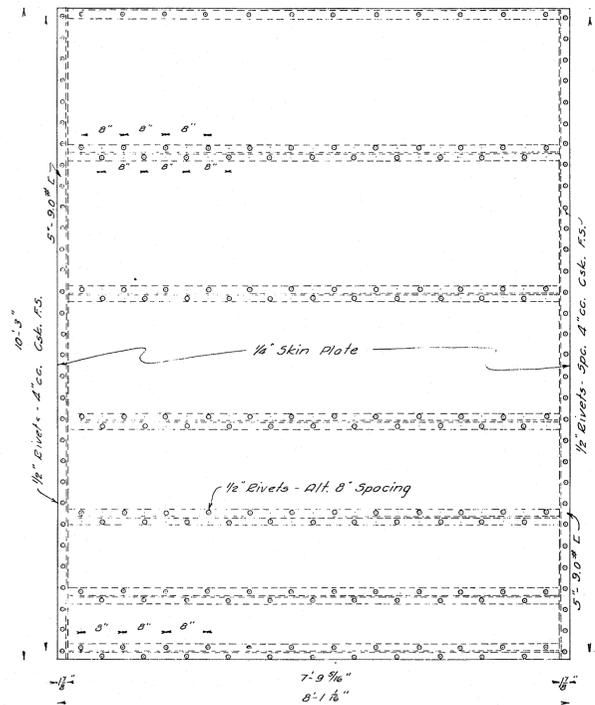
NOTE:
For reinforcement in Lock Walls and Floor see Drwg. A-3476.
For detail of Sluiceway see Drwg. A-3485 of Lake Kegonsa plans.
For detail of Needles for unwatering lock see Drwg. A-3485 of Lake Kegonsa plans.

ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

DETAILS OF ENDS OF LOCK OF LOCK AND DAM AT OUTLET OF LAKE WAUBESA FOR THE DANE COUNTY PARKS COMMISSION MADISON, WISCONSIN

SCALE 1/4" = 1'-0" EXCEPT AS NOTED DATE JANUARY 1937

DES. BY	W.M.C.	MEAD WARD AND HUNT CONSULTING ENGINEERS MADISON, WISCONSIN	A-3478
DR.	W.M.C.		
CR.	J.F.S.		
APP.	A.W.H.		



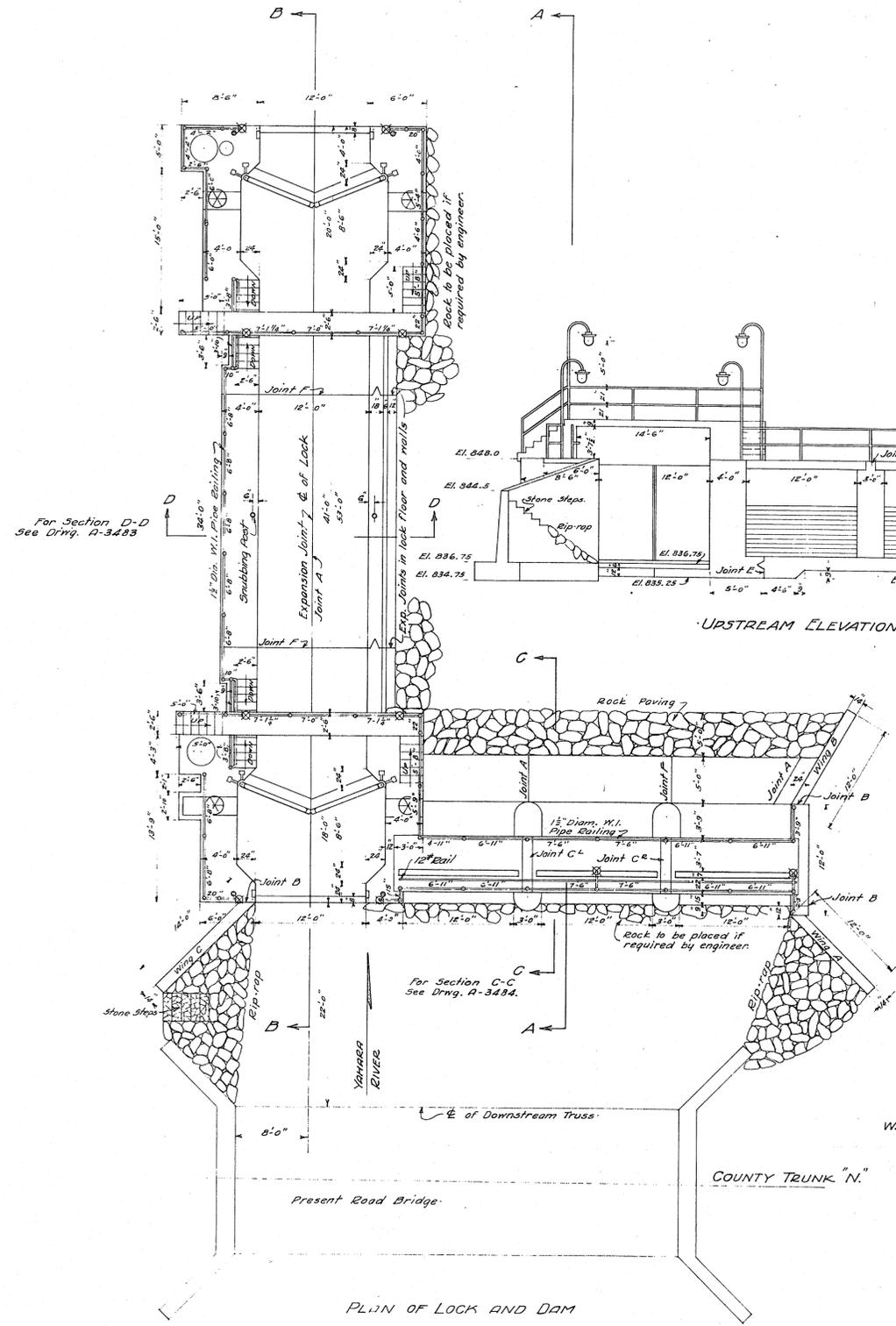
DETAILS OF MITRE GATES
FOR
LOCKS AND DAMS AT OUTLETS
OF
LAKES WAUBESA AND KEGONSA
FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN.

SCALE - AS SHOWN
DES. BY W.M.C.
D.E. - W.M.C.
T.E. - M.R.R.
C.H. - M.H.H.
APP. - B.V.D.

MEAD WARD AND HUNT
CONSULTING ENGINEERS
MADISON WISCONSIN.

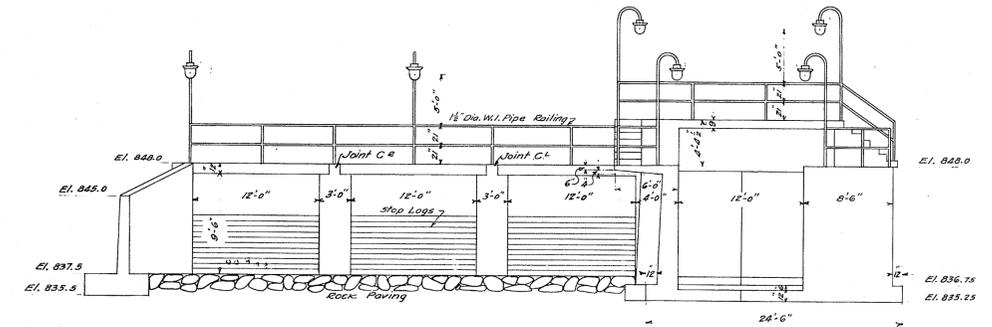
A-3479

DATE - DECEMBER, 1936.

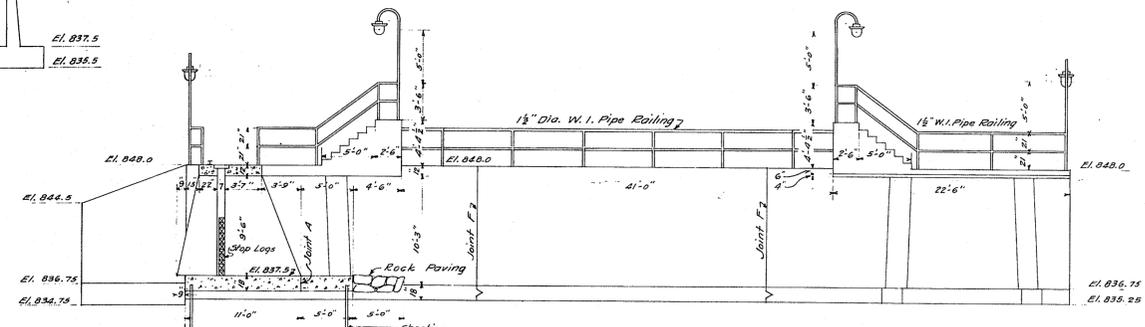


Note:
 See Drwg. A-3482 for layout of wood piles and steel sheeting.
 All electric conduits for lighting system which are to be imbedded in concrete to be installed during construction. Balance of lighting to be completed at some future time.
 Dimensions shown on railings are c-c of posts. The 1/2" Twist Link Coil Chains are anchored to lock wall by 1/2" eye bolts with 1/2" eyes. Chains to be placed on both sides of lock.
 Arrangement of wiring & conduit similar to that shown on Drwg. A-3475 of Lake Waubesa Plans. Conduit to be imbedded in concrete around end of walkway on Dam.
 Legal description of Site:
 The structure is located in the NW 1/4 of the SE 1/4 of Section 20, T6N, R11E, Dane County, Wisconsin.

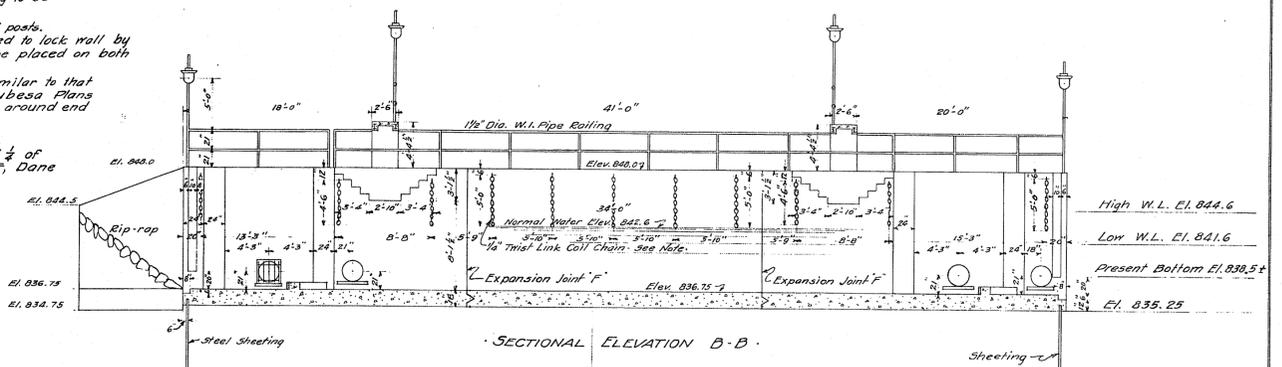
W.P.S.C., B.M. 13, Elev. 846.37.
 Cross cut in river corner of upstream northwest obtusment of railroad bridge over outlet of Lake Kegonsa.



DOWNSTREAM ELEVATION



SECTIONAL ELEVATION A-A



SECTIONAL ELEVATION B-B

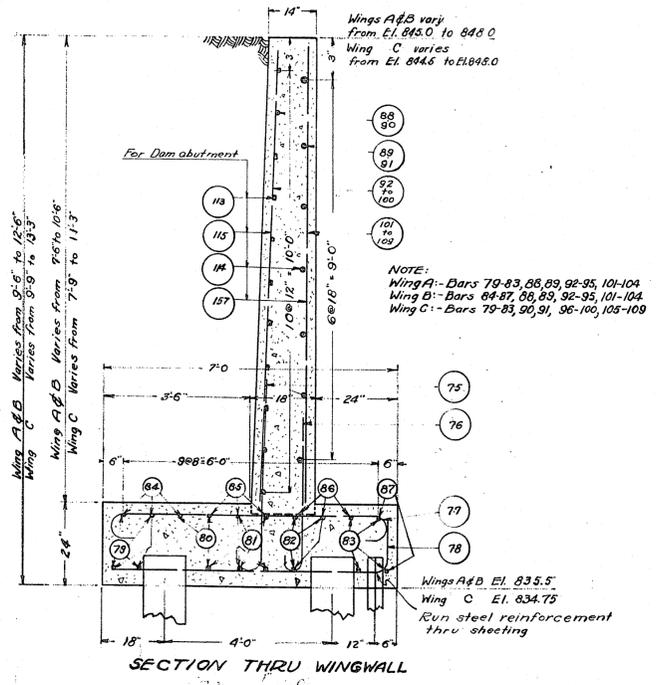
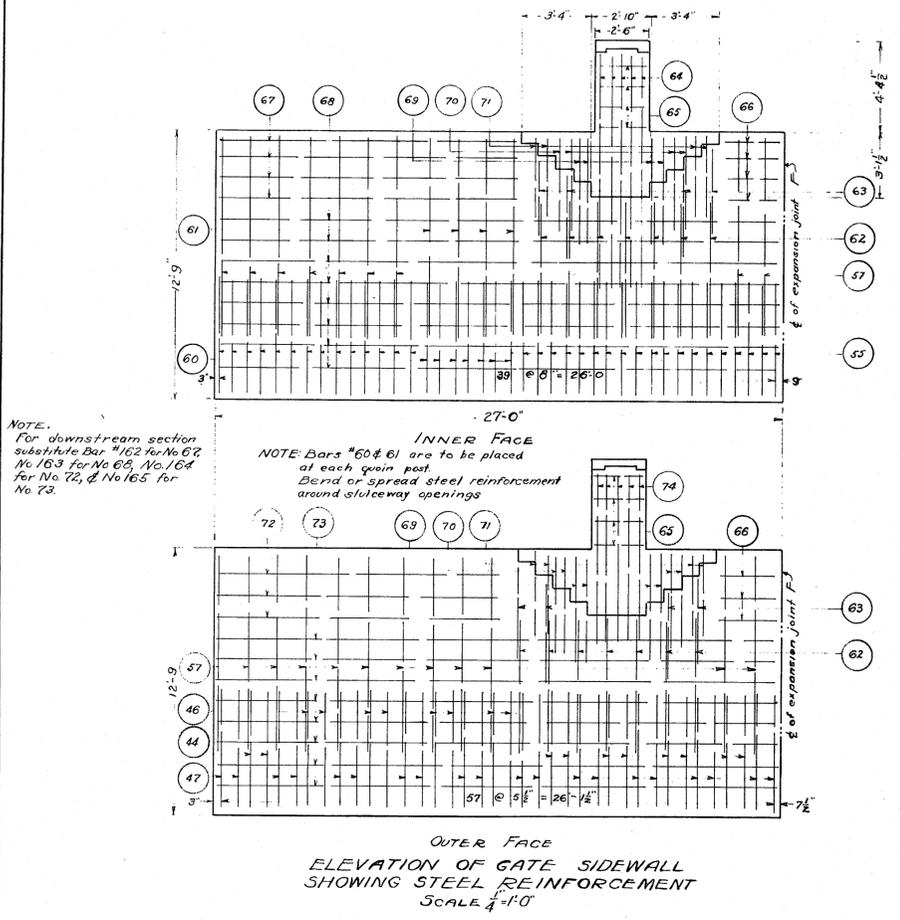
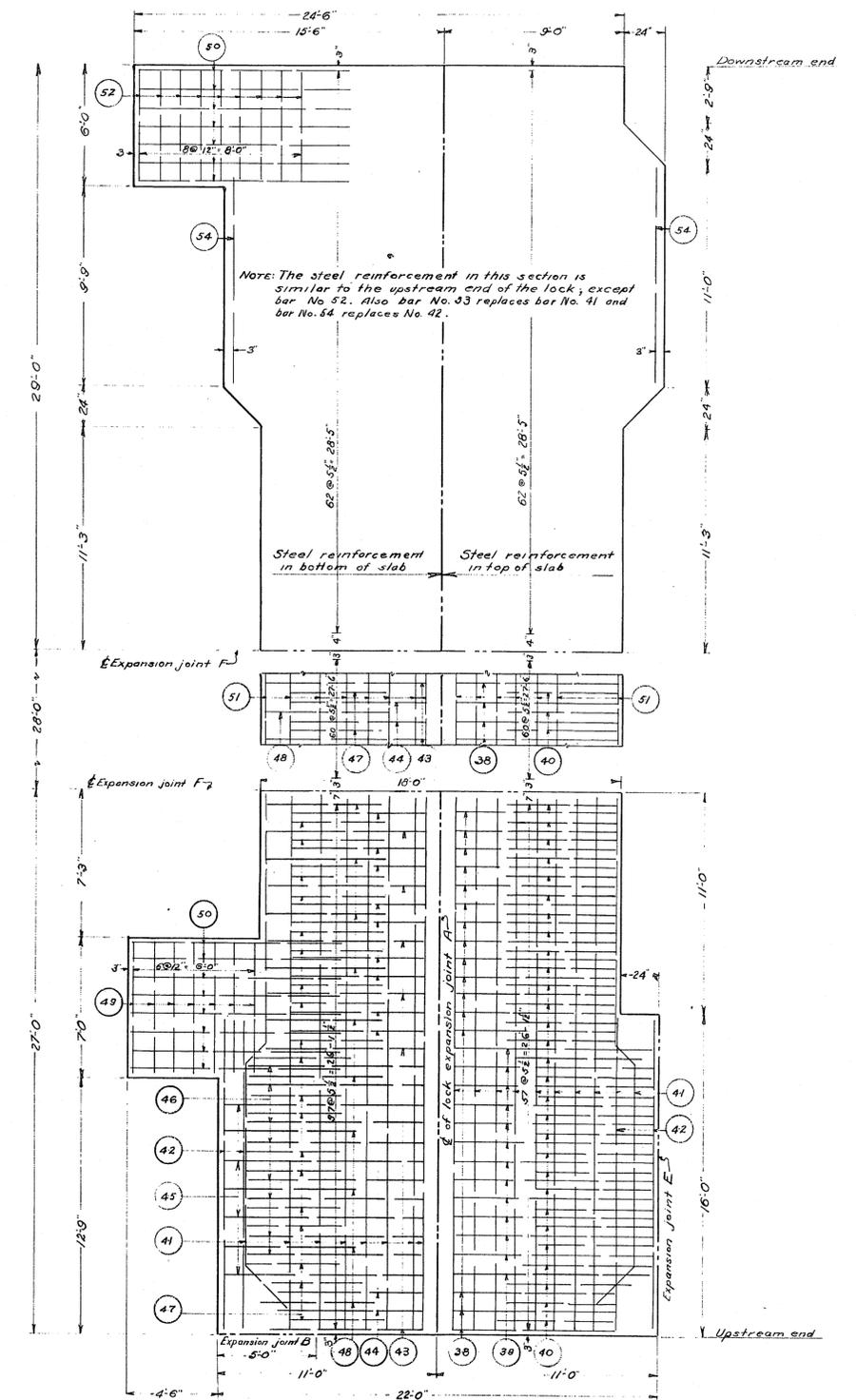
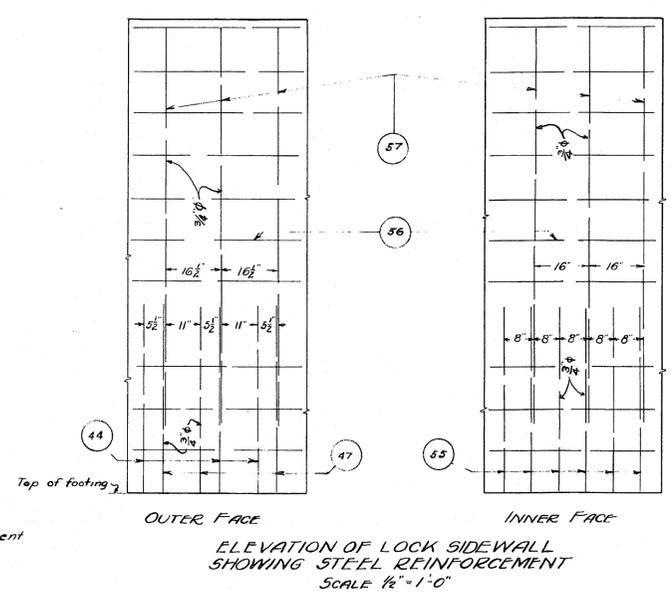
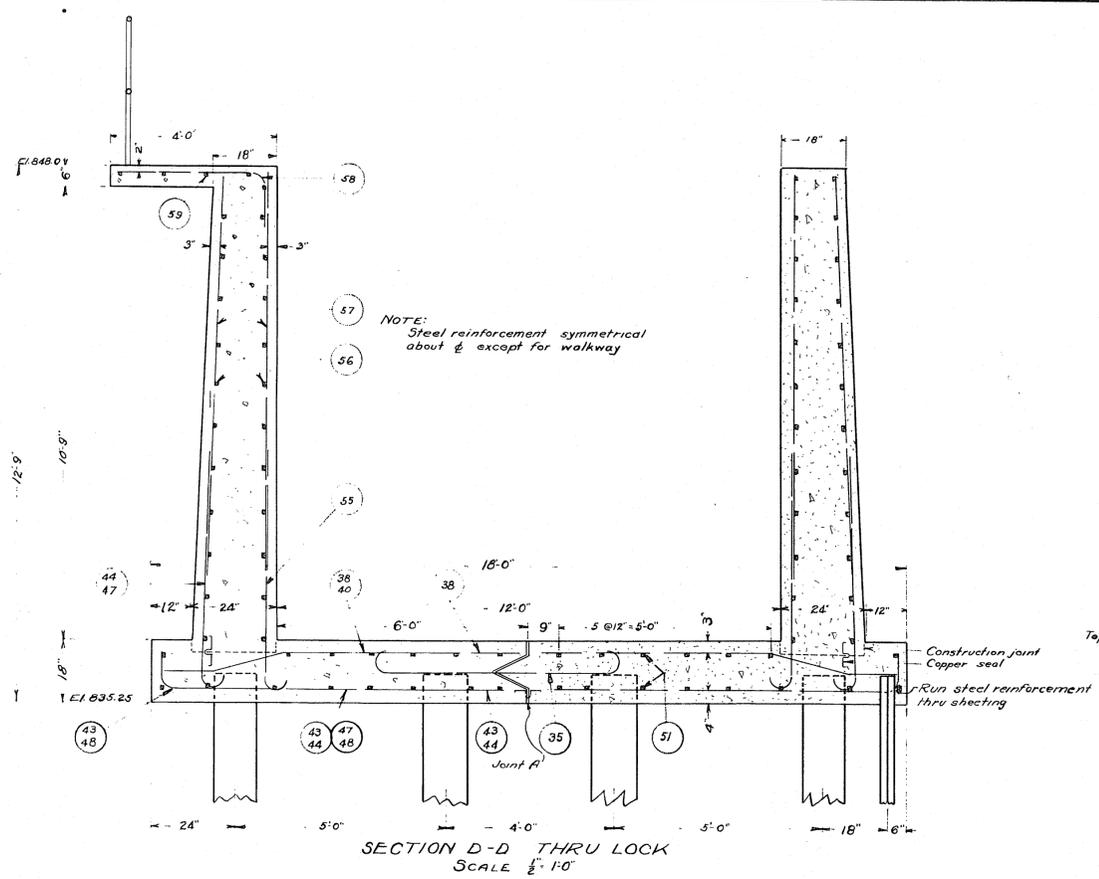
ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

GENERAL PLAN AND ELEVATIONS
 OF
LOCK AND DAM AT OUTLET
 OF
LAKE KEGONSA
 FOR THE
DANE COUNTY PARKS COMMISSION
 MADISON, WISCONSIN

SCALE: 1/4" = 1'-0"
 DES. BY J.A.S.
 DR. "M.R.K.
 TR. "M.R.K.
 CH. "J.A.S.
 APP. "G.W.M.

MEAD WARD AND HUNT
 CONSULTING ENGINEERS
 MADISON, WISCONSIN

DATE: DECEMBER 1936.
A-3481



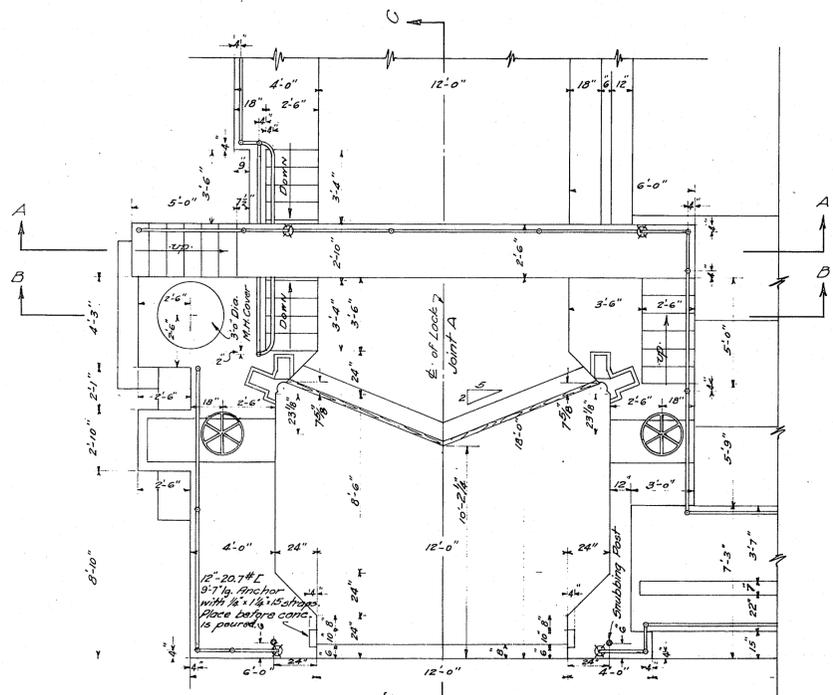
NOTE: Steel reinforcement is symmetrical about center of lock except manhole reinforcement. Reinforcement is similar at each end of lock except as noted. Dowel steel in longitudinal & shown in Sec. only.

LOCK AND WINGWALL REINFORCEMENT
OF
LOCK AND DAM AT OUTLET
OF
LAKE KEGONSA
FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN

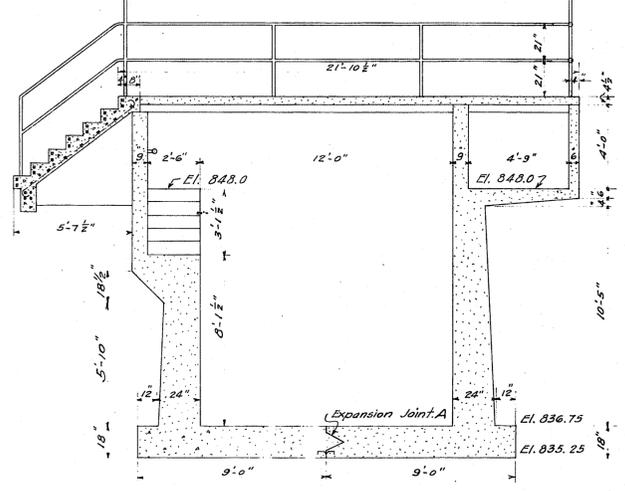
SCALE - AS SHOWN DATE - JANUARY 1937

DES.	BY	MEAD WARD AND HUNT CONSULTING ENGINEERS MADISON WISCONSIN
DR.	...	
TR.	...	
CH.	...	

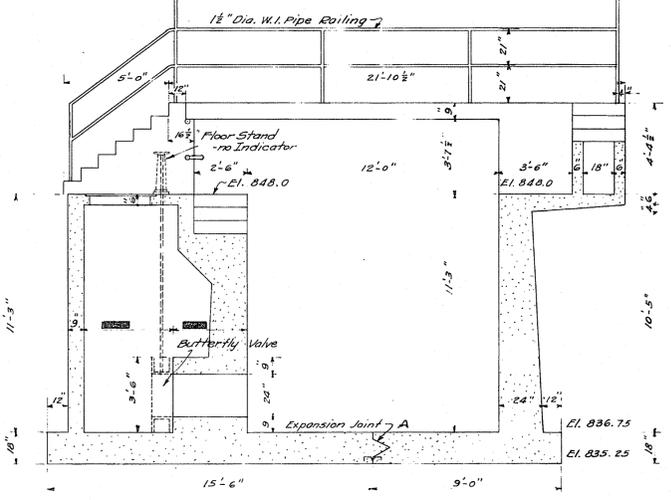
A-3483



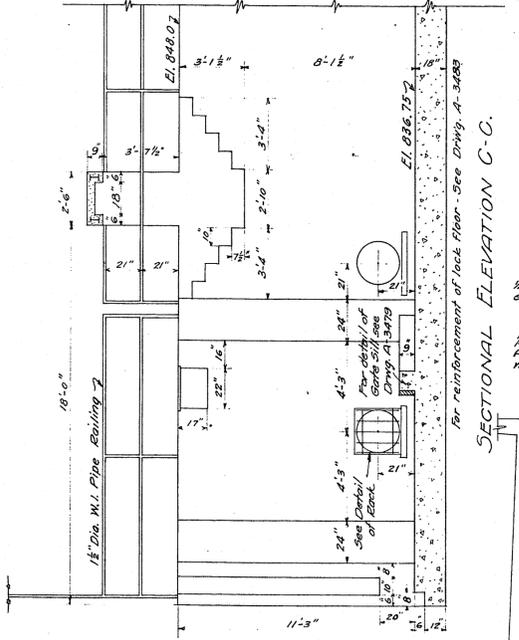
PLAN OF UPSTREAM END OF LOCK.



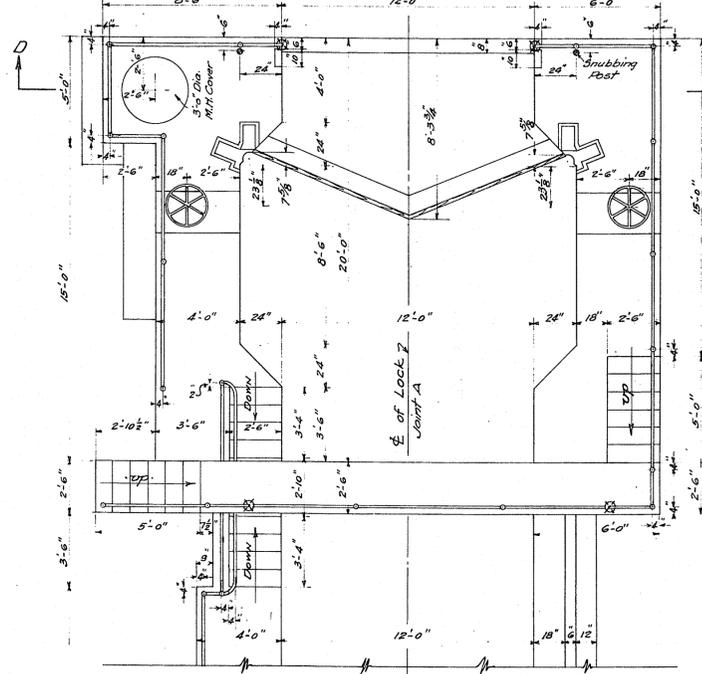
SECTIONAL ELEVATION - A-A.



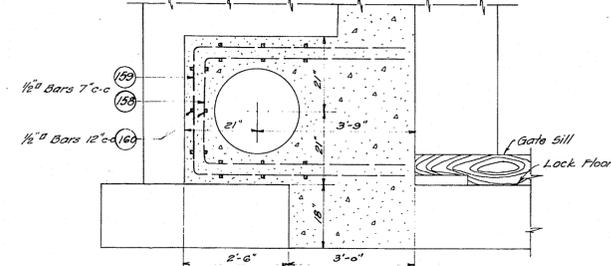
SECTIONAL ELEVATION - B-B.



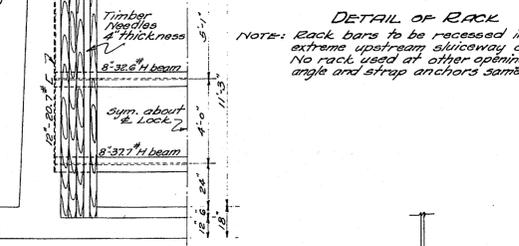
SECTIONAL ELEVATION C-C.



PLAN OF DOWNSTREAM END OF LOCK.

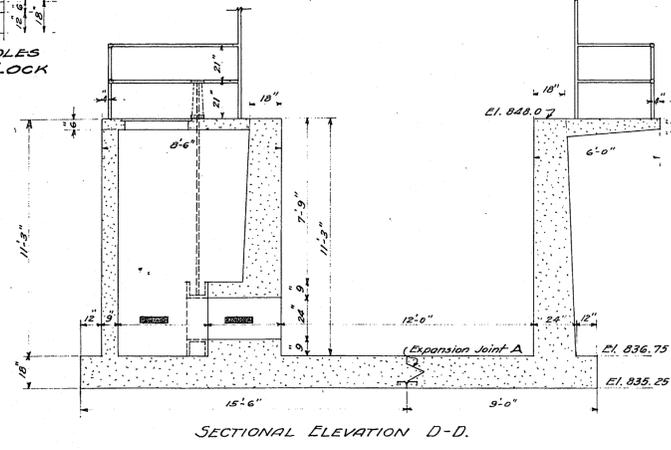


SECTIONAL ELEVATION A-A THROUGH SLUCEWAY

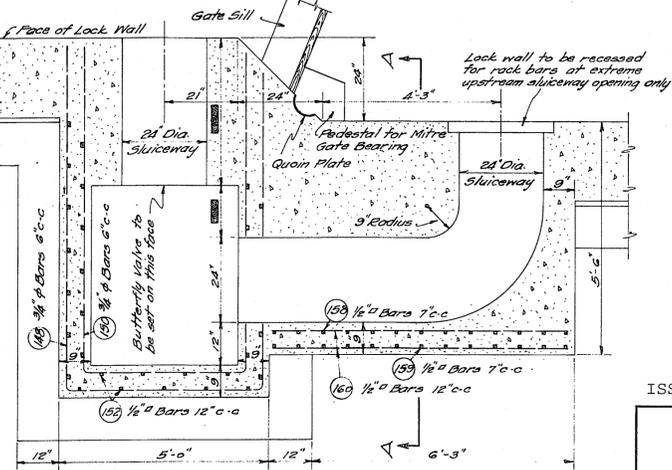


DETAIL OF RACK

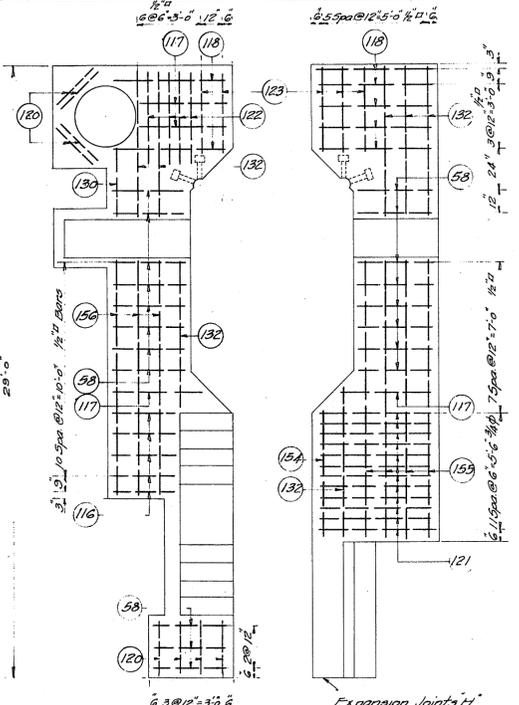
DETAIL OF NEEDLES FOR UNWATERING LOCK



SECTIONAL ELEVATION D-D.



SECTIONAL PLAN AT E OF SLUCEWAY



PLAN SHOWING REINFORCEMENT IN WALKWAYS AT ENDS OF LOCK

NOTE: For reinforcement in Lock walls and Floor see Drwg. A-3483. For reinforcement in Manhole walls, Lock Crosswalks, Stairs, Stair Walls, and Sluceway inside Manhole see Drwg. A-3478 of Lake Kegonsa plans.

ISSUED WITH ADDENDUM NO. 1 - 02/20/2012

DETAILS OF ENDS OF LOCK
OF
LOCK AND DAM AT OUTLET
OF
LAKE KEGONSA
FOR THE
DANE COUNTY PARKS COMMISSION
MADISON, WISCONSIN.

SCALE: 1/4" = 1'-0" EXCEPT AS NOTED DATE JANUARY 1937

DES. BY	J.A.	MEAD WARD AND HUNT CONSULTING ENGINEERS MADISON, WISCONSIN	A-3485
DR. "	M.R.R.		
TZ. "	M.R.R.		
APP. "	L.P.		