



LAKE HAVASU CITY, ARIZONA

ADDENDUM NO. 1



EXPIRATION DATE: 09/30/24

**Mulberry WWTP Aeration Basin, Structural and MCC Upgrades
Project No.: PW-107018-500388**

July 19, 2023

Attention is called to the following changes, additions, clarifications and/or deletions to the original solicitation and they shall be taken into account in preparing submissions:

There is no change in the opening date. **Submissions are due no later than 3:00 p.m., Arizona Time, July 26, 2023**, at the City Clerk's Office, 2330 McCulloch Blvd. N., Lake Havasu City, AZ 86403.

In accordance with the Information for Bidders, Section 00100 -16, Addenda and Interpretations, the following revisions to the Plans and Specifications shall become a part of the Contract Documents and each bidder shall acknowledge receipt thereof on page 00300-1 of the Bid Proposal.

1. Specification Section 01030-Summary of Work, Part 1 – General, Section 1.09; add the following paragraph as 1.09.F.:
 - F. The CONTRACTOR shall plan construction activities between work hours as defined in the Lake Havasu City Code of Ordinances, Section 9.30.070., Paragraph B.2:
 - May 1 to September 30: 5:00 a.m. thru 10:00 p.m.
 - October 1 to April 30: 6:00 a.m. thru 10:00 p.m
2. Specification Section 01040-Order of Construction, Part 3 – Execution, in Paragraph A; replace each occurrence of “300” with “240”.
3. On Drawing Sheet C-02; for the call out – “AERATION BASIN REHABILITATION WORK UNDER THIS PROJECT – SEE SHEETS M-01 AND M-02.” add an arrow from the callout to the Existing Aeration Basin No.1.

4. Delete Drawing Sheet M-03 in its entirety and replace it with the Drawing Sheet M-03 attached to this Addendum No.1.
5. Delete Drawing Sheet E-401 in its entirety and replace it with the Drawing Sheet E-401 attached to this Addendum No.1.
6. Delete Drawing Sheet E-501 in its entirety and replace it with the Drawing Sheet E-501 attached to this Addendum No.1.

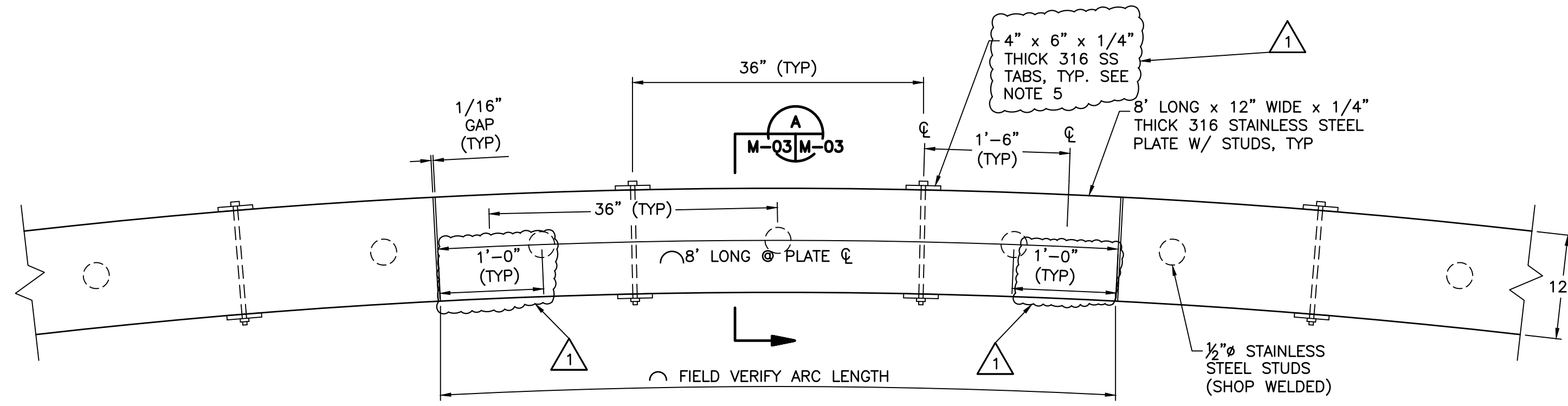
BIDDER'S ACKNOWLEDGEMENT

DATE: _____

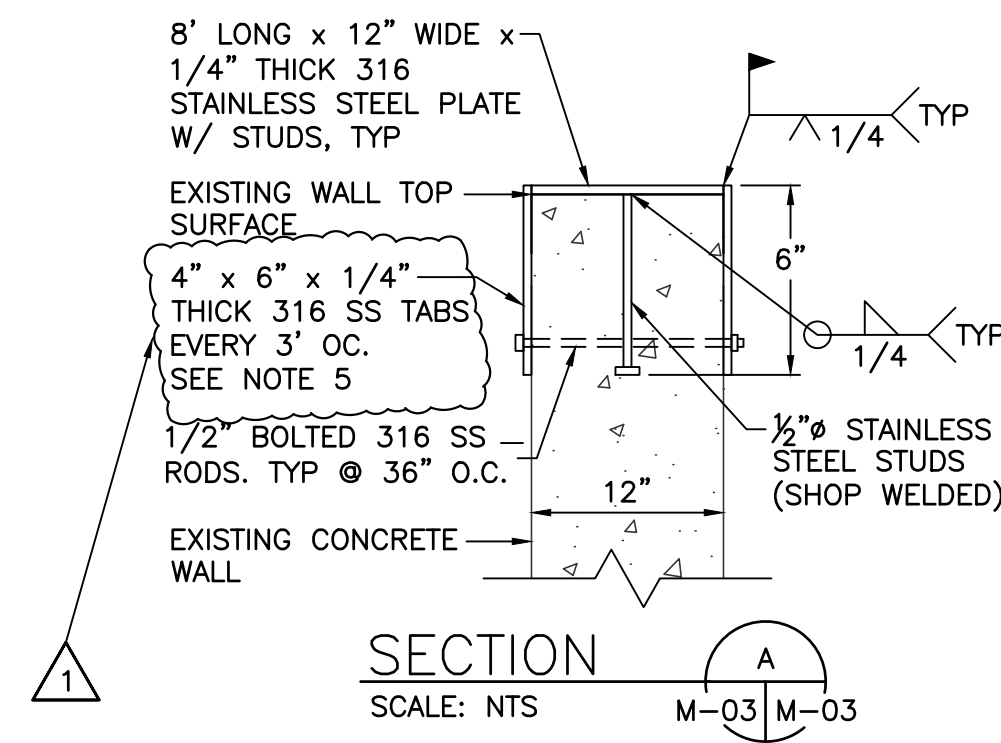
BY: _____

Name: _____

Title: _____



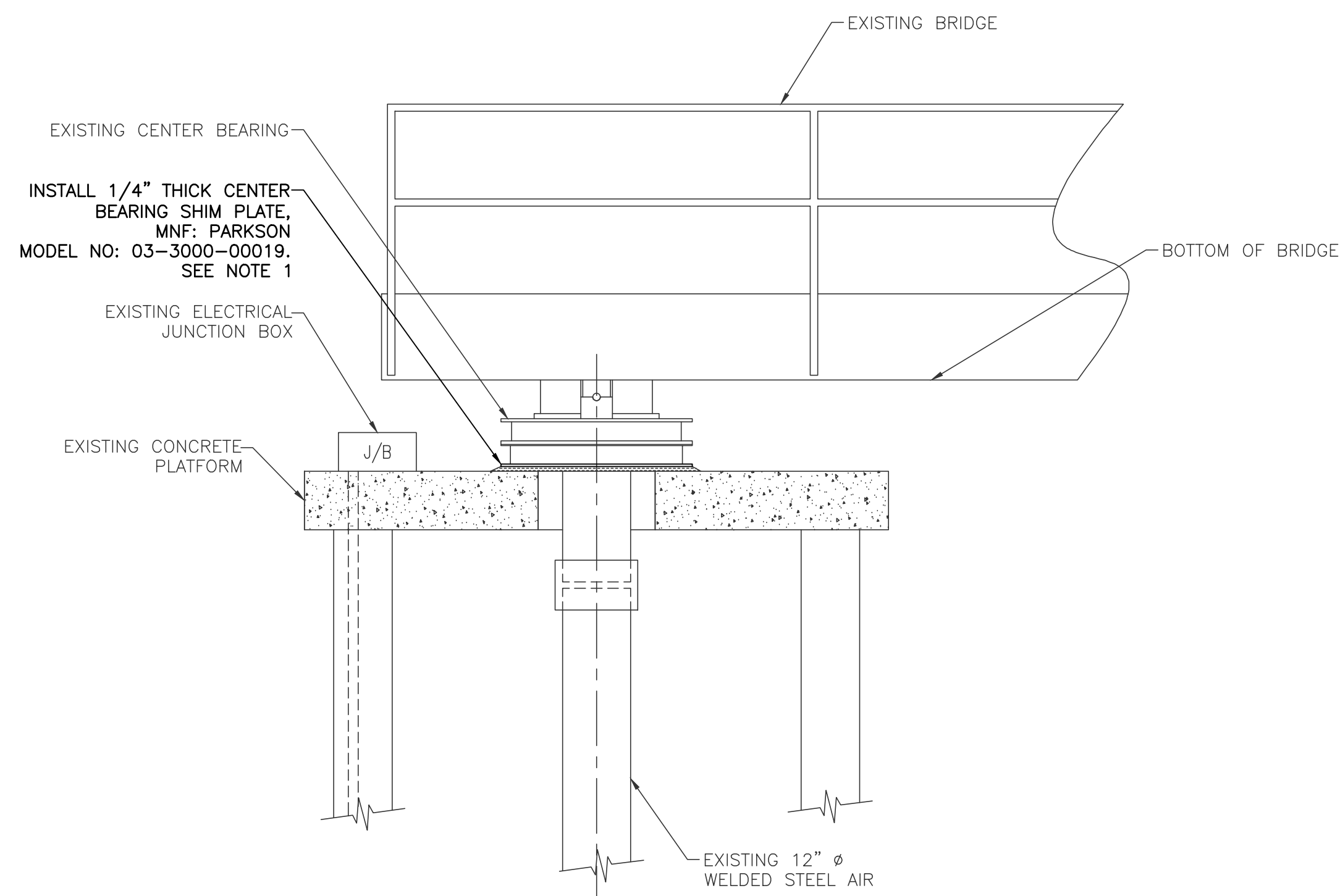
AERATION BASIN PARTIAL PLAN VIEW
SCALE: NTS



SECTION
SCALE: NTS

STEEL PLATE INSTALLATION DETAIL 1
SCALE: NTS

- NOTES:**
1. DRILL 5/8" x 7" LONG HOLES TO ACCOMMODATE THE 1/2" SS STUDS.
 2. PRIOR TO INSTALLING EPOXY, BRUSH CLEAN AND AIR BLOW HOLES TO REMOVE DUST OR LOOSE MATERIAL.
 3. DURING THE SS PLATES INSTALLATION, CONTRACTOR SHOULD REMOVE ANY EXCESSIVE EPOXY UNDERNEATH THE PLATES.
 4. ADJACENT PLATES SHOULD BE AT SAME LEVEL (ELEVATION).
 5. FOR THE AREAS WHERE THE BASINS' WALL EXTERIOR EXPOSED SURFACE DEPTH IS LESS THAN 8", PROVIDE 1/2" x 4" LONG STAINLESS STEEL CONCRETE WEDGE ANCHORS.



CENTER BEARING SHIM PLATE INSTALLATION DETAIL 2
SCALE: NTS

- NOTE:**
1. REMOVE AND REINSTALL DRIVE EQUIPMENT AS NECESSARY.



APPENDIX NO. 1 - MODIFIED DIMENSIONS	07/19/2023	DATE
1		NO.
		REVISIONS / SUBMISSIONS

LAKE HAVASU CITY
MULBERRY WWTP
AERATION BASINS, STRUCTURAL
AND MCC UPGRADES

Designed by: SB	Drawn by: KWB	Checked by: RN	Date: 01-10-23	Dwg scale: AS NOTED
-----------------	---------------	----------------	----------------	---------------------

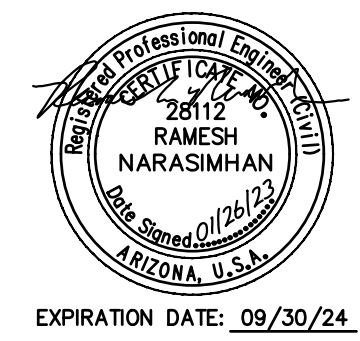
**SS PLATE
INSTALLATION
DETAILS**

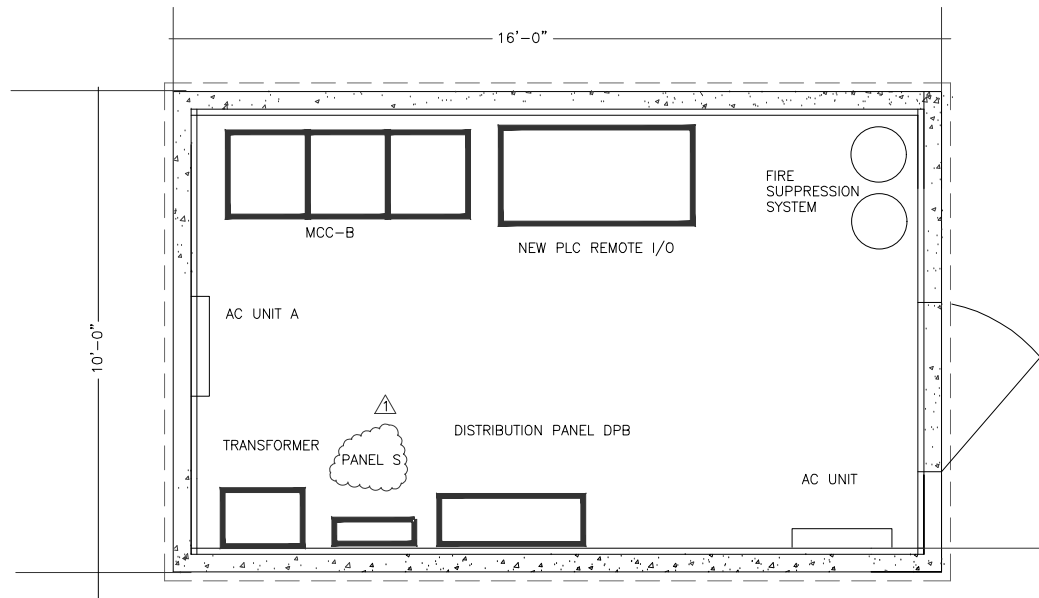


Sheet Number:

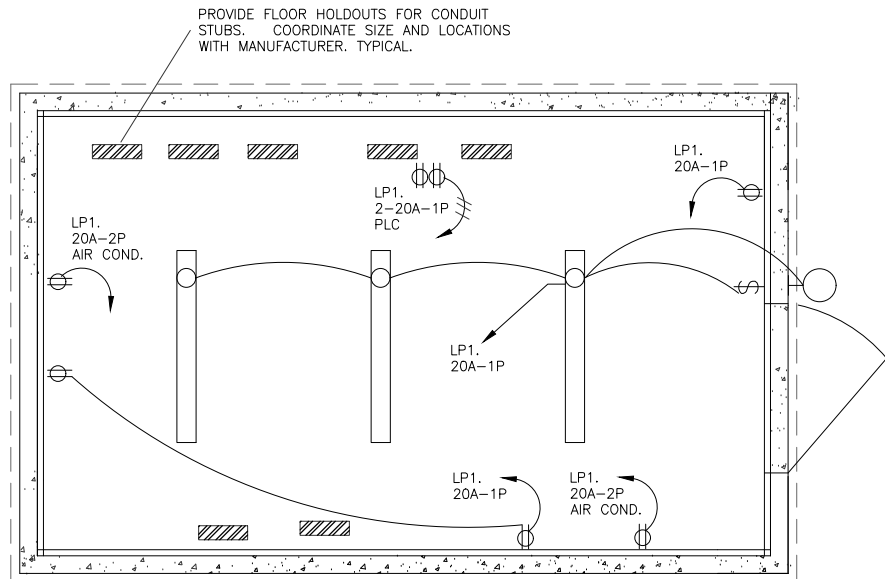
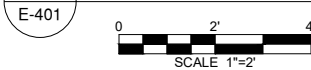
M-03

Sheet 8 of 8

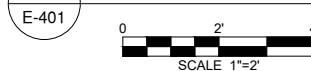




1 PREFABRICATED EQUIPMENT SHELTER - PLAN VIEW



2 FLOOR SLAB HOLD OUT & CONVENIENCE ELECTRICAL



PLAN NOTES:

- ① PROVIDE 4' SURFACE LED FIXTURE. EQUAL TO LITHONIA.
- ② PROVIDE 18W LED WALLPACK WITH PHOTOCELL. EQUAL TO LITHONIA.

Provide Spare Conduit Stubs to 5' exterior of building:
 MCC: 3 ea. 2" Spare.
 Distribution Panel: 3 ea. 2" Spare
 Panel S: 3 ea. 1" Spare
 PLC Remote I/O: 3 ea. 1" Spare

PRECAST EQUIPMENT SHELTER NOTES AND SPECIFICATIONS

PROVIDE NEW PRECAST CONCRETE EQUIPMENT SHELTER. EQUAL TO 'OLDCASTLE PRECAST' OR 'ROCKWAY PRECAST'. CUSTOM TAN COLOR SELECTED BY OWNER.

SPECIFICATIONS:
 MINIMUM EXTERIOR DIMENSIONS = 10'-6" WIDE X 16'-6" LONG X 10'-1" HEIGHT.
 2" OVERHANG AT ALL WALLS.
 SLOPE ROOF FROM 10'-1" TO 10'-0" FOR RUNOFF.
 SINGLE ENTRY 3'-6" WIDE X 84" COMMERCIAL DOOR WITH LOUVER AND FILTER.
 DOOR HARDWARE TO INCLUDE COMMERCIAL GRADE PUSH-TO-EGRESS HANDLE, AND DEADBOLT LOCK WITH INTERNAL KNOB.

EQUIPMENT TO BE PROVIDED WITH PRECAST EQUIPMENT SHELTER:

REMOVABLE THROUGH WALL AIR CONDITIONING UNITS 2 EACH.
 EQUIPMENT HEAT LOAD = 7,500 BTU/H
 BUILDING LOAD = 12,500 BTU/H
 TOTAL LOAD = 20,000 BTU/H MINIMUM AC SIZE = 24,000BTU/H = 2.0 TONS
 240V 1 PHASE CORD CONNECTION.

PROVIDE FIRE SUPPRESSION SYSTEM INCLUDING DETECTORS, HEADS, PIPING, CONTROL PANEL AND SUPPRESSION CANISTERS. CONNECT DETECTION TO EXTERIOR RED LIGHT. PROVIDE CONTACTS FOR CONNECTION TO REMOTE ANNUNCIATION.

PROVIDE PHOTOELECTRIC SMOKE DETECTOR WITH AUDIBLE ALARM.

PROVIDE BLOCK-OUTS IN FLOOR TO ACCOMMODATE CABLE AND DUCT ENTRY. COORDINATE OPENINGS AND DIMENSIONS AT TIME OF SHOP DRAWINGS.

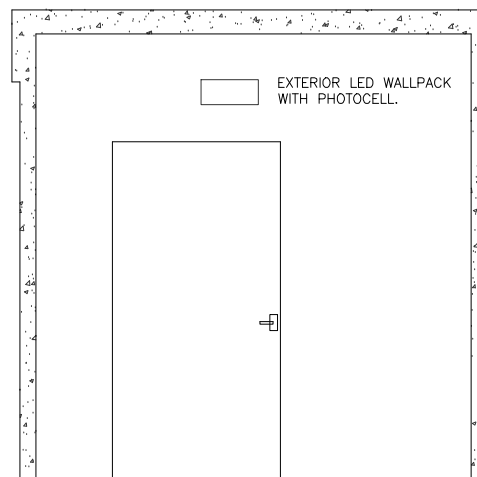
PROVIDE ALL ELECTRICAL CONNECTIONS WITH EQUIPMENT.

DESIGN LOADS: LIVE LOAD 250 PSF
 ROOF LOAD 65 PSF
 WIND LOAD 110 MPH, EXP.'C'
 SEISMIC ZONE 4

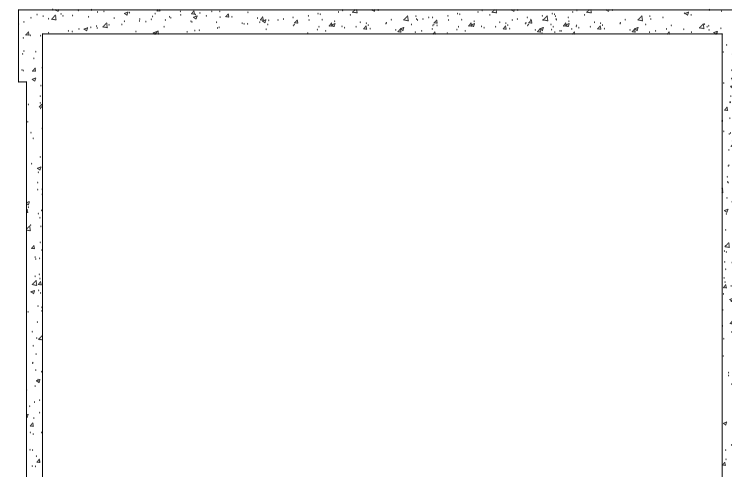
DESIGN CODE: 2020 IBC

MATERIALS: PRECAST CONCRETE OPTION
 CONCRETE: 5000 PSI @ 28 DAYS
 REBAR: ASTM A-615 GRADE 60 MESH:
 ASTM A-496 AND A-497

⚠️ PREFABRICATED METAL OR IN PLACE MASONRY BUILDINGS ARE NOT ACCEPTED SUBSTITUTIONS

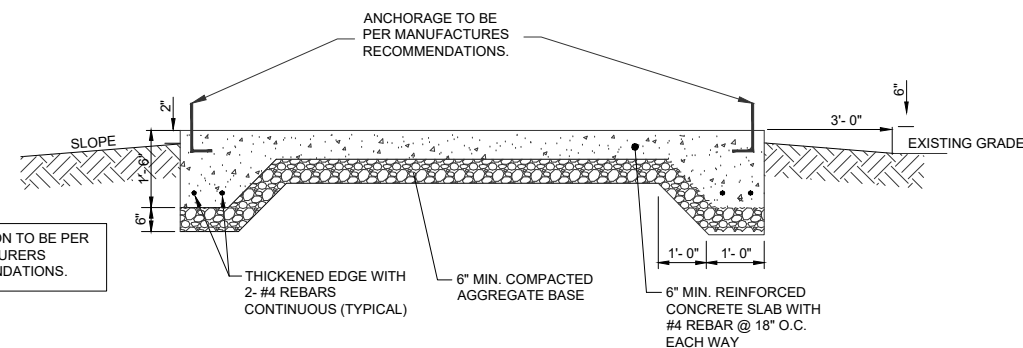
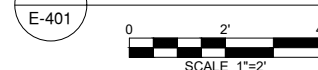


END VIEW



SIDE VIEW

4 PREFABRICATED EQUIPMENT SHELTER ELEVATIONS



3 FOUNDATION DETAILS FOR PREFABRICATED EQUIPMENT SHELTER

3

E-401



315 North 5th Street Suite 100
 Fargo, North Dakota 58102
 Phone: 701.365.0917
 Fax: 701.365.0920
 jk-engineers.com



202 E. Eorll Drive Suite 110
 Phoenix, AZ 85012
 Phone (602)629-0206
 www.ncseng.com

NO.	REVISIONS / SUBMISSIONS	DATE
1	ADDENDUM 07-19-2023	7/19/23

LAKE HAVASU CITY
 MULBERRY WWTP
 AERATION BASINS, STRUCTURAL
 AND MCC UPGRADES

Designed by: JAK	Drawn by: RBB	Checked by: JAK	Date: 06-01-2023	Drawn scale: AS SHOWN
------------------	---------------	-----------------	------------------	-----------------------

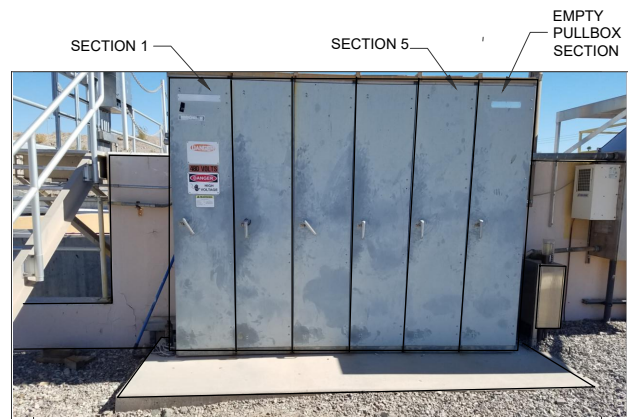
PREFABRICATED EQUIPMENT BUILDING



Sheet Number:

E-401

Sheet of



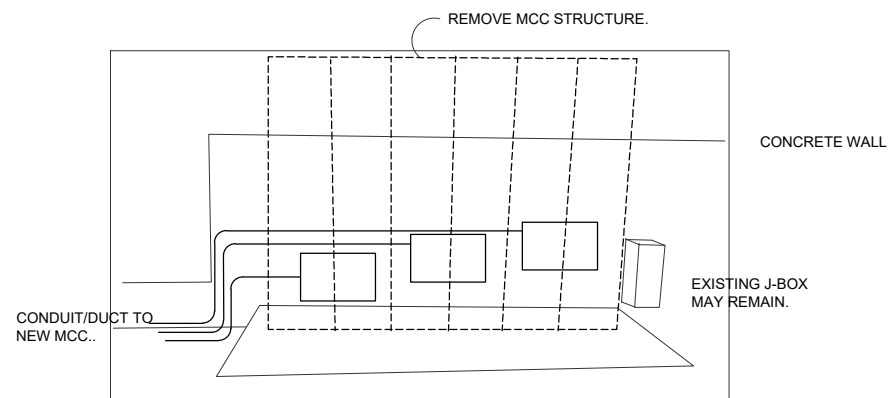
1 PHOTO 1 - EXISTING MCC-B ELEVATION
E-501 NO SCALE



3 PHOTO 2 - EXISTING REMOTE I/O CABINET
E-501 NO SCALE



4 PHOTO 3 - ELECTRICAL MANHOLE
E-501 NO SCALE



EXISTING CIRCUITS TO FIELD PENETRATE THROUGH CONCRETE SLAB. PROVIDE JUNCTION BOX ENCLOSURES TO TRANSITION TO NEW CONDUITS TO NEW MCC.

NOTE: ALL CONDUIT ABOVE GRADE TO BE PVC COATED RIGID STEEL CONDUIT.

INSTALL NEW J-BOXES TO TRANSITION TO THE EXISTING FIELD CONDUITS AND BRANCH CIRCUITS. LABEL ALL CONDUCTORS. UTILIZE TERMINATION BLOCKS FOR ALL SPLICES. WIRENUTS AND SPLIT BOLT CONNECTORS ARE NOT ALLOWED.

EXTEND CONDUIT PENETRATING FROM CONCRETE TO J-BOXES. PROVIDE PHYSICAL PROTECTION FOR THESE DUCTS. FABRICATE STAINLESS STEEL METAL COVERS FOR DUCTS. MOUNT TO CONCRETE.

THE EXISTING MCC ENCLOSURE IS PRESENTLY IN THE WAY THE J-BOXES. CONTRACTOR IS TO COORDINATE PHYSICAL REMOVAL OF MCC AND THE INSTALLATION OF THESE NEW J-BOXES. PROVIDE INTERIM TEMPORARY BRANCH CONDUCTORS FOR ANY AND ALL FIELD CIRCUITS UNTIL THE EXISTING MCC IS REMOVED. PROVIDE PHYSICAL PROTECTION OF THESE INTERIM TEMPORARY BRANCH CIRCUITS, SUCH AS PVC CONDUIT OR PVC COATED FLEXIBLE STEEL CONDUIT. CIRCUITS MAY BE COMBINED IN THE INTERIM DUCTS.

2 J-BOX ELEVATION DETAIL AT EXISTING MCC
E-501 NO SCALE

jk
ENGINEERS INC
North Dakota : Arizona
315 North 5th Street Suite 100
Fargo, North Dakota 58102
Phone: 701.365.0917
Fax: 701.365.0920
jk-engineers.com

NCS
Engineers
202 E. Earl Drive Suite 110
Phoenix, AZ 85012
Phone (602)629-0206
www.ncseng.com

JOEL A. KATH
Professional Engineer
No. 52187
Exp. 6-01-2023
ARIZONA U.S.A.
Expires 3-31-2025

LAKE HAVASU CITY, ARIZONA
INCORPORATED 1978

NCS
Engineers
202 E. Earl Drive Suite 110
Phoenix, AZ 85012
Phone (602)629-0206
www.ncseng.com

NO.	REVISIONS / SUBMISSIONS	DATE
1	ADDENDUM 07-19-2023	7/19/23

LAKE HAVASU CITY
MULBERRY WWTP
AERATION BASINS, STRUCTURAL
AND MCC UPGRADES

Designed by: JAK	Drawn by: RBB	Checked by: JAK	Date: 06-01-2023	Dwg. scale: AS SHOWN
------------------	---------------	-----------------	------------------	----------------------

EXISTING CONDITION PHOTOGRAPHS

CELEBRATING
25
YEARS

Sheet Number:
E-501
Sheet of



Questions & Answers

Mulberry WWTP Aeration Basin, Structural and MCC Upgrades Project No.: PW-107018-500388

Date Issued: July 19, 2023

A Non-Mandatory Pre-Submittal meeting was held for this IFB on July 12, 2023. All inquiries were due in writing no later than July 14, 2023.

Questions Received:

1. There appears to be a gap on the drawings between each steel plate. Is this to be left opened?
 - A. Yes, the gap was provided to accommodate the thermal expansion of the stainless steel plates.
2. There seems to be a conflict on the actual overall dimension of each steel plate. On page M-03 we see a note that states they are 8' feet long but the plan view shown shows dimensions that equal on 7'. Which is it?
 - A. The correct length of the plates is 8 ft. The steel plate installation detail on Sheet M-03 is now corrected. See Addendum No.1.
3. Sheet E-401; Is a metal building an option instead of precast?
 - A. No.
4. Sheet E-401; Is a masonry building an option instead of precast?
 - A. No.
5. Sheet E-401; Oldcastle Precast Model #1122 is not offered anymore.
 - A. Modified the precast notes, see Addendum No.1.
6. Door is called out as 4' wide but no height given – 7' or do you need a 1' transom added?
 - A. Door height is now added to the Sheet E-401, see Addendum No.1.

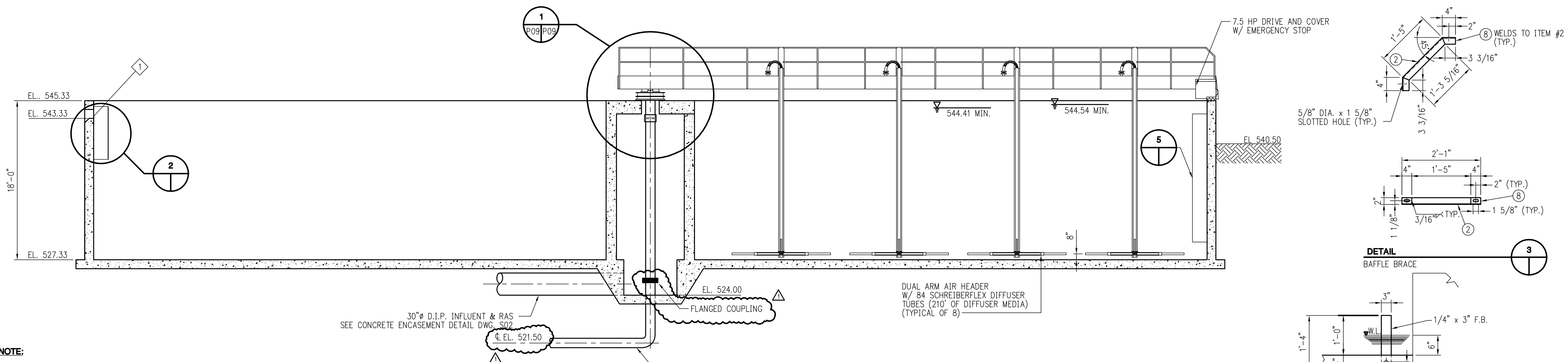
7. Can it be an option to supply the Engineered Prefabricated Building with a floor consisting of prescribed block outs for conduits?
 - A. Yes, see notes on Sheet E-401.
8. Sheets E-302, E-401; Building layout show Panel B but on the one-line diagram is shown as Panel S. I think it was just a typo on the building layout & should be Panel S – please confirm.
 - A. On Sheet E-401, “Panel B” is now renamed as “Panel S”. See Addendum No.1
9. Sheets C-02, M-01, M-02; On Sheet C-02 Site Plan it indicates and points to Aeration Basin No 2 as "AERATION BASIN REHABILITATION WORK UNDER THIS PROJECT". Yet on Sheets M-01 and M-02 you show both Basin No. 1 and number 2 requiring work. Will both basins require work to be performed as shown on M-01 and M-02?
 - A. Yes, rehabilitation work shall be performed on both Aeration Basins No.1 and No.2, see Addendum No.1.
10. Is it the intent of the project to place a continuous Stainless Steel cap around the perimeter of each tank? (no dimensions are shown of total length)?
 - A. Yes, the intent of the project is to install stainless steel plates continuously on top of each basin. A call out on Sheet M-02 indicates there will be 50 – 8’ long plates.
11. When was the last time the Bearing Shim Plate was changed?
 - A. The Aeration Basins No.1 and No.2 were constructed in 1992 and 2003, respectively. The existing bearing shim plates were installed as part of the original construction.
12. Steel Plate Installation Detail 1/ M-02 M-03; can we modify the work and assembly to achieve the cities intentions?
 - A. No alternative approaches shall be considered at this time. As per the Contract Documents, alternates may be considered once the bid is awarded.
13. Steel Plate Installation Detail 1/ M-02 M-03; Has the city performed any GPR to help with the installation of this Detail?
 - A. No.
14. Please confirm Actual diameters and thickness of the tanks (already stated is it true to drawings)
 - A. As shown on Sheet M-01; the Aeration Basins are 126’ in diameter and the wall thickness is 12”. However, the CONTRACTOR has to field verify the dimensions.
15. Overall condition to the top of the tanks as well as the affected work areas (the sides) we will be welding / drilling. How bad are they?
 - A. Overall, the basins’ walls are relatively in good condition.

16. Please provide additional information on the tanks, such as Elevations to top of tanks, will we get some elevation views?
- A. See attached as-built drawing from the original construction of the aeration basins. This sheet is provided for information purposes only.
17. Please confirm access to the work site all the way around each clarifier.
- A. A pre-bid and walk-thru was conducted for all interested parties to evaluate the access around the basins.
18. Please confirm actual hours we would be allowed to work once onsite.
- A. Work Hours are now included in Specification Section 01030 – SUMMARY OF WORK, see Addendum No.1.
19. Will the tanks be GPR for rebar.
- A. No.
20. What are the requirements for contact with rebar once we start drilling the tank walls?
- A. There are no special requirements if rebar is present.
21. Please clarify the welded areas required on the Stainless Steel Plate atop the two basins.
- A. See Section A on Sheet M-03.
22. Are Xray and radiographic tests required and in what frequency on the welds? (Per the attached Reference).
- A. No Xray and radiographic tests are required. However, the ENGINEER's welding inspector will perform a visual inspection of the welds.
23. Stainless Cap Installation in area between both tanks; where there is no access to the face of tank and through drilling for bolt holes will not work, can wedge anchors be considered?
- A. Yes, concrete wedge anchors installation is acceptable where the exposed face of the basin is less than 8" depth. See Addendum No.1
24. What will the effluent level be in each basin during construction, and will the aeration traveler be stationary?
- A. During the construction, the subject aeration basin will be drained and the bridge drive will kept out of service. See Specification Section 01040 – ORDER OF CONSTRUCTION.
25. The uniformity in the width of the concrete basin tops varies from the 12 inches stated. How shall we compensate for the stainless steel fabrication width?
- A. The new stainless steel plates shall be centered on the existing aeration basins' wall and the width shall be fixed at 12" of the plate. However, the Contractor shall field verify all dimensions prior to the fabrication of the stainless steel plates. Any significant deviations will be addressed during construction.

26. Per the bid documents, the project has a 240-day completion. Motor Control Centers are currently at 36–52-week lead times depending upon the manufacturer. Will the completion date be extended to accommodate these lead times.

A. The project duration time is 240 days. Prior to issuance of the Notice to Proceed (NTP), CONTRACTOR shall coordinate with the CITY/ENGINEER on any long lead items delivery that would impact the project schedule. Proper documentation shall be submitted to the CITY/ENGINEER for review and approval. If necessary, a separate NTP will be issued for the materials procurement only prior to the construction NTP.

END OF DOCUMENT



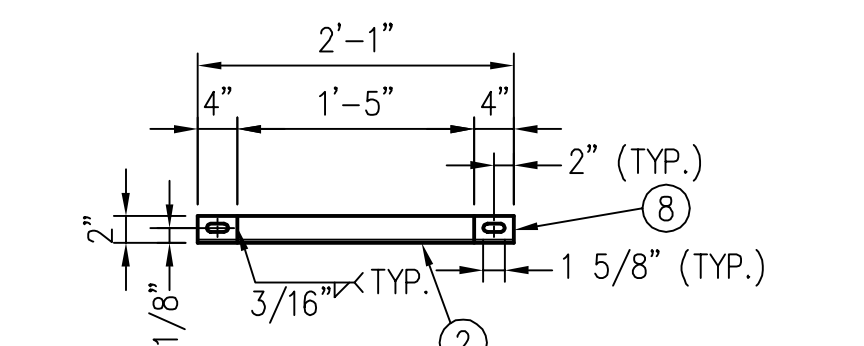
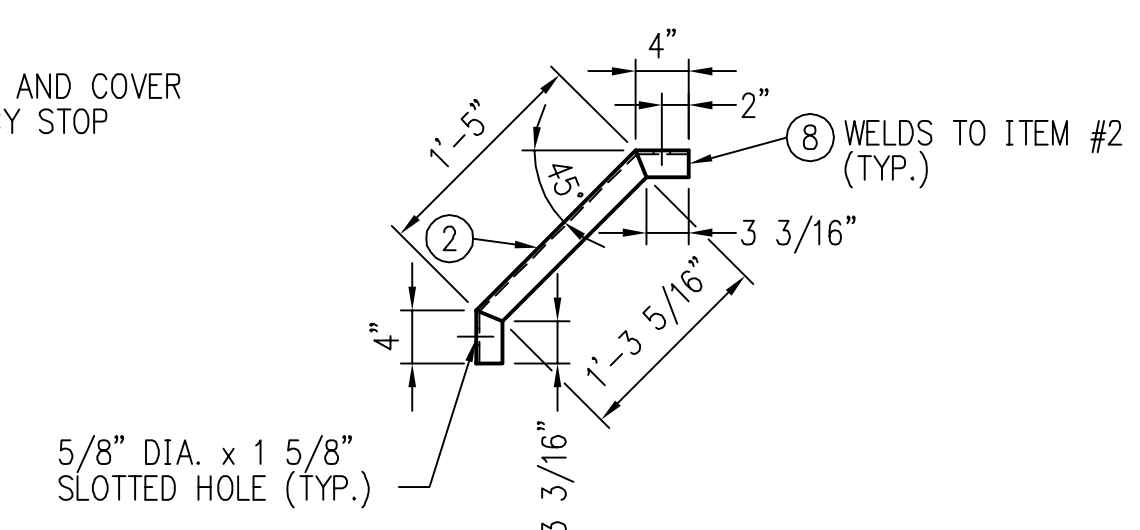
NOTE:

1 CONTRACTOR TO INSTALL WEIR AT SAME ELEVATION AS EXISTING WEIR PLATE IN EXISTING BASIN.

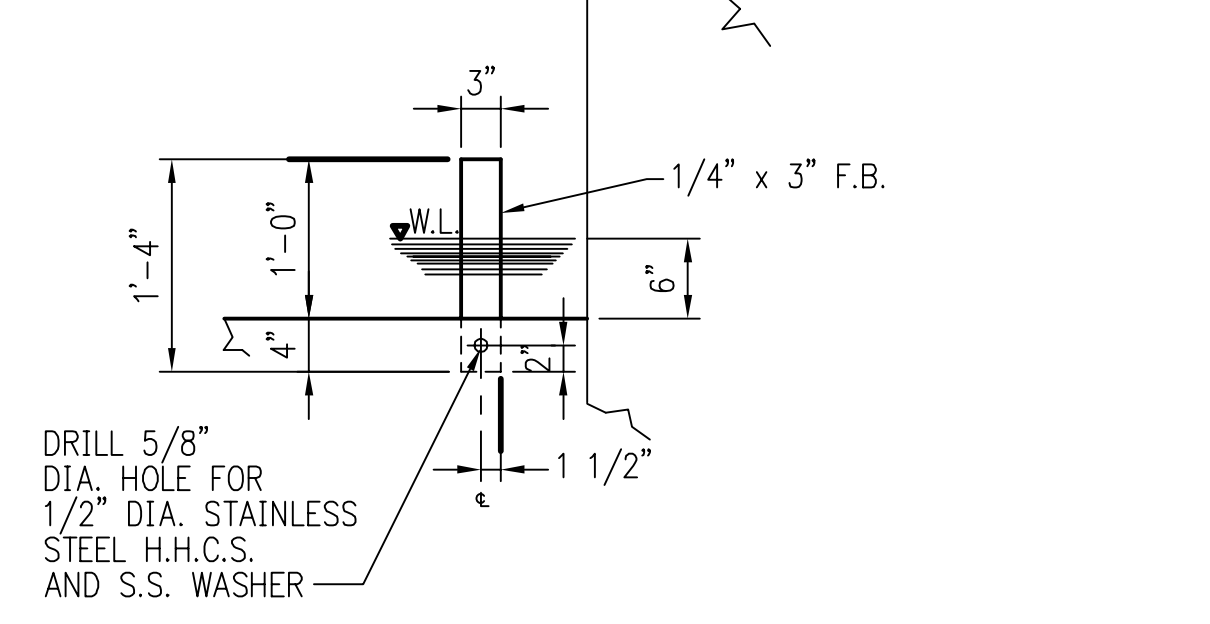
2 CONTRACTOR TO BRING PLAIN END AIR MAIN TO 2'-0" BELOW TOP OF CENTER PIER; EQUIP. MFG. TO FURNISH REMAINING PIPING & COUPLING. AIR LINE SHALL BE ALIGNED WITH CENTER OF BASIN AND BE SUITABLY BRACED INTO POSITION TO AVOID TRANSMITTING STRESS TO COUPLING.



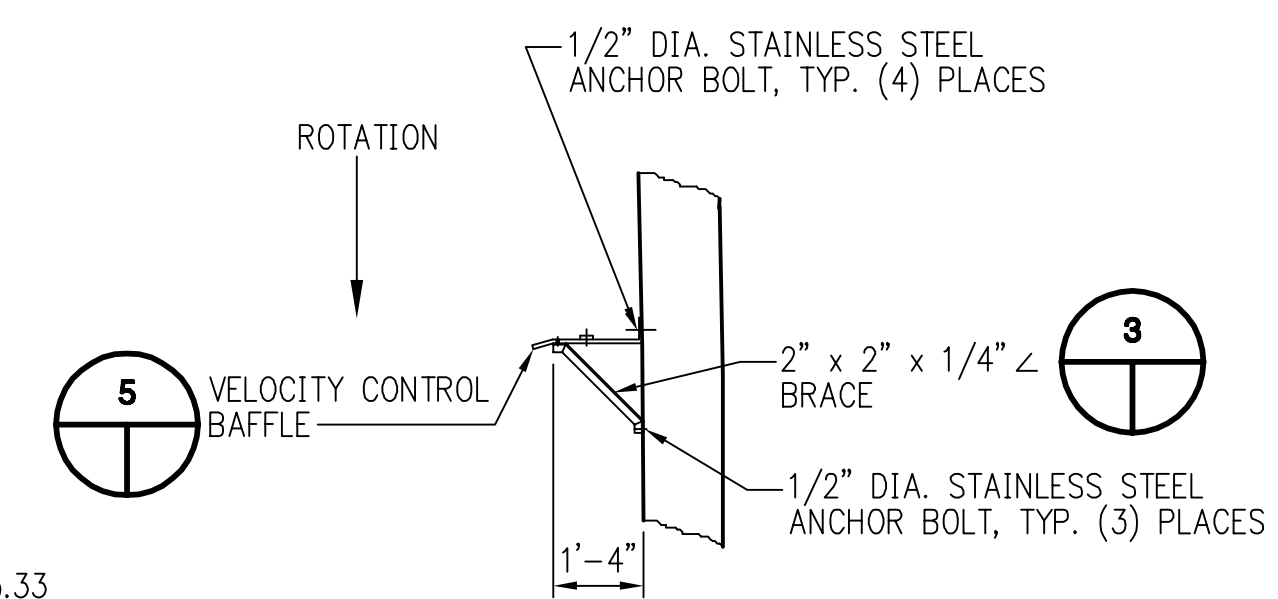
AERATION BASIN



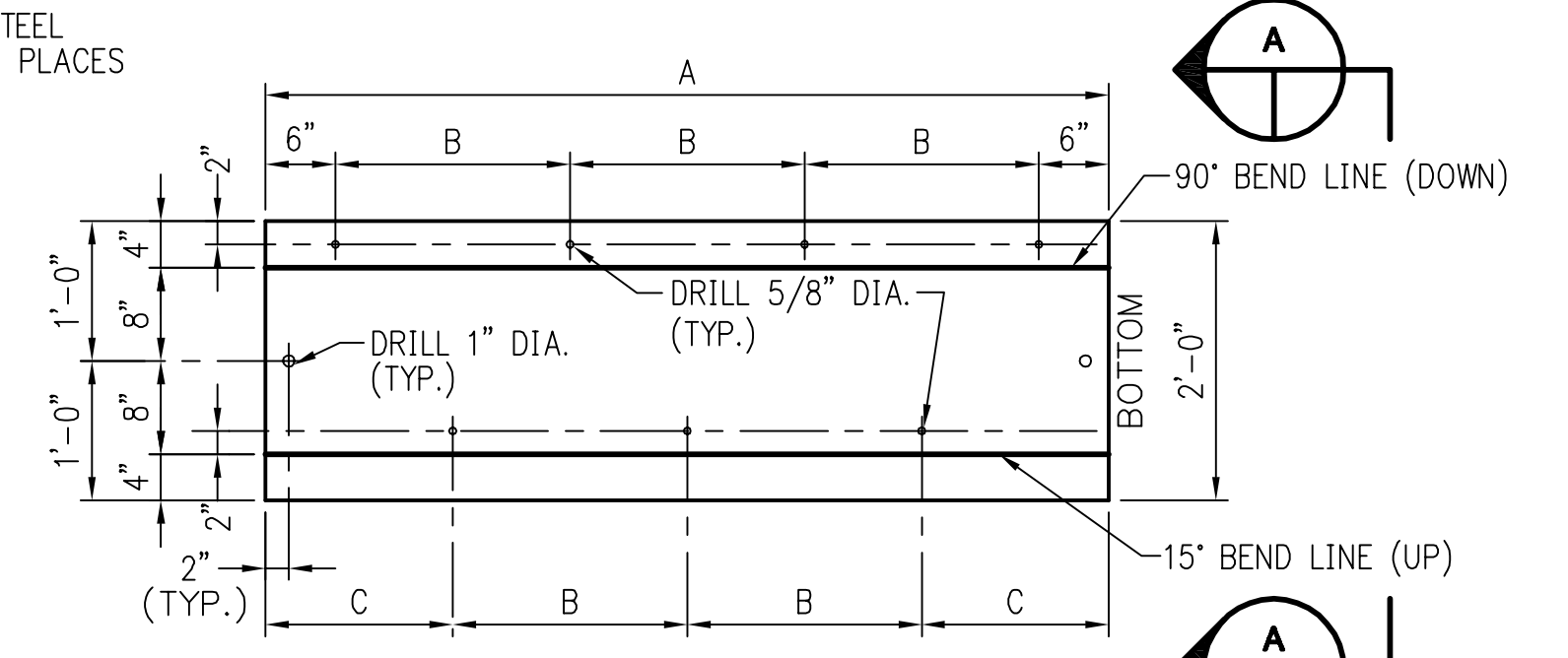
DETAIL 3
BAFFLE BRACE



DETAIL 4
VELOCITY CONTROL BAFFLE

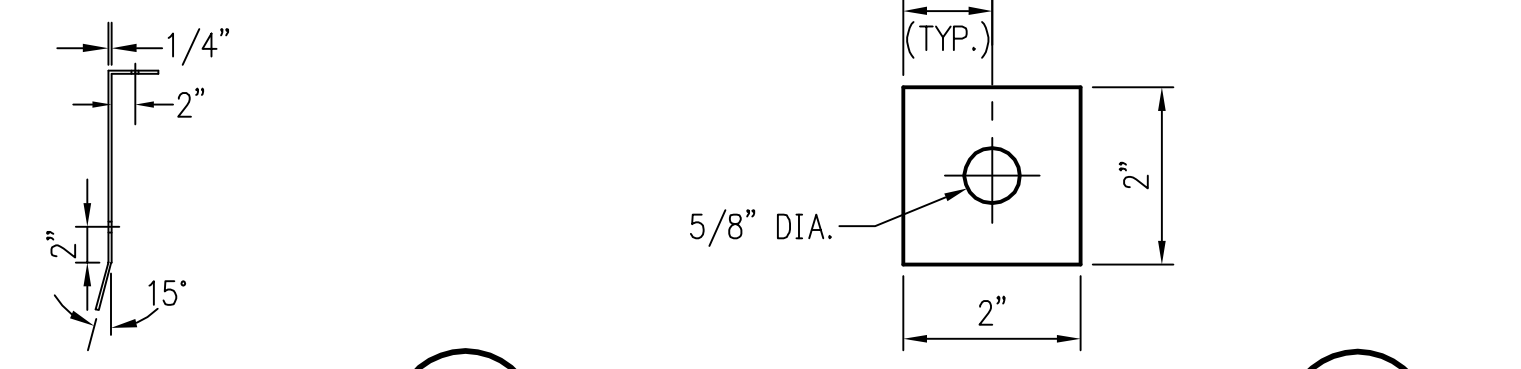


DETAIL 5
VELOCITY CONTROL BAFFLE

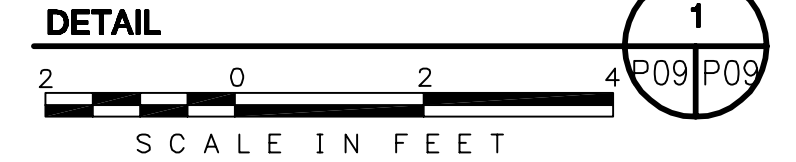
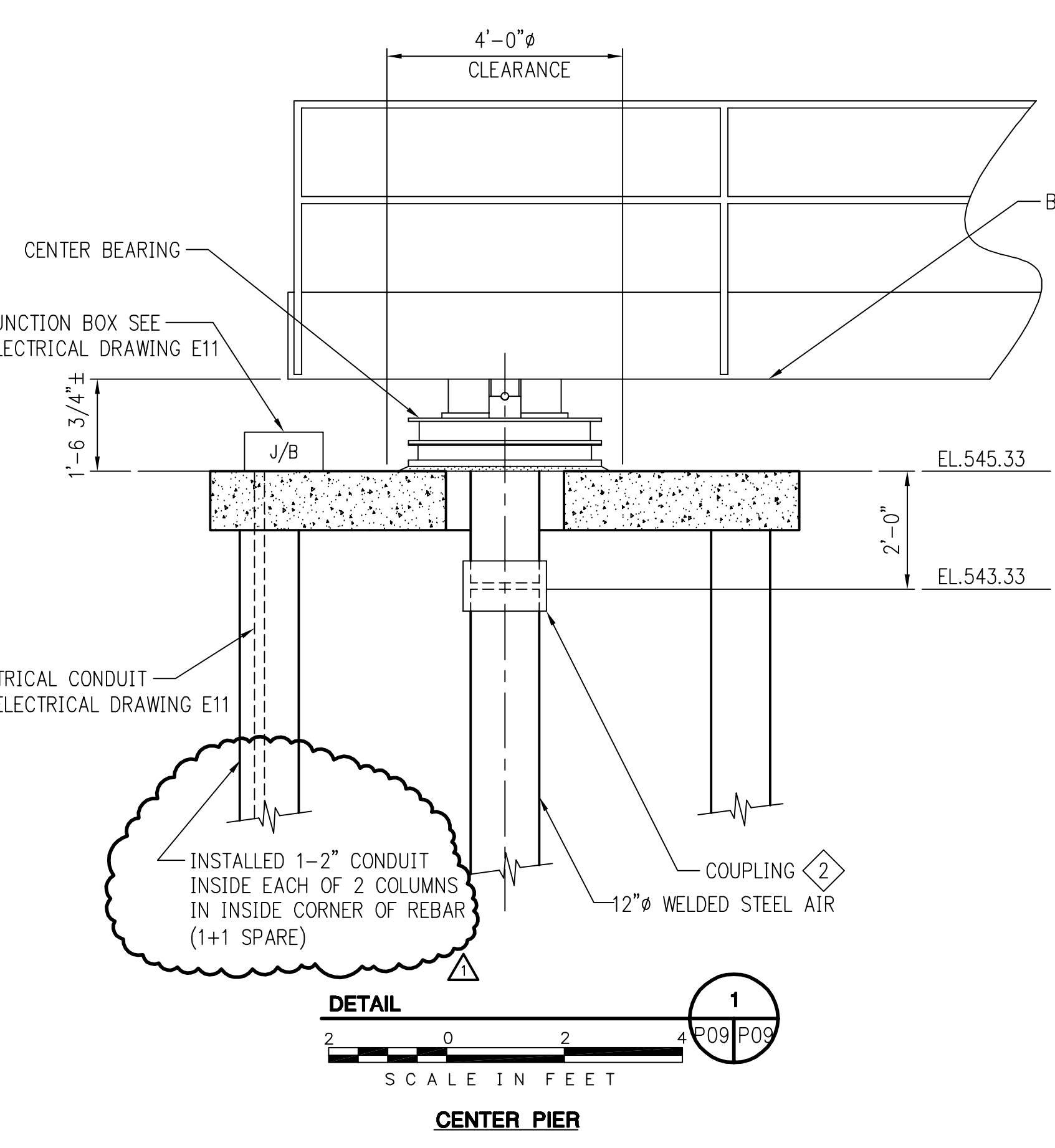


B/M NO.	A	B	C	BURN NO.
41-3000-00078	14'-6"	4'-6"	2'-9"	1965 & 1966

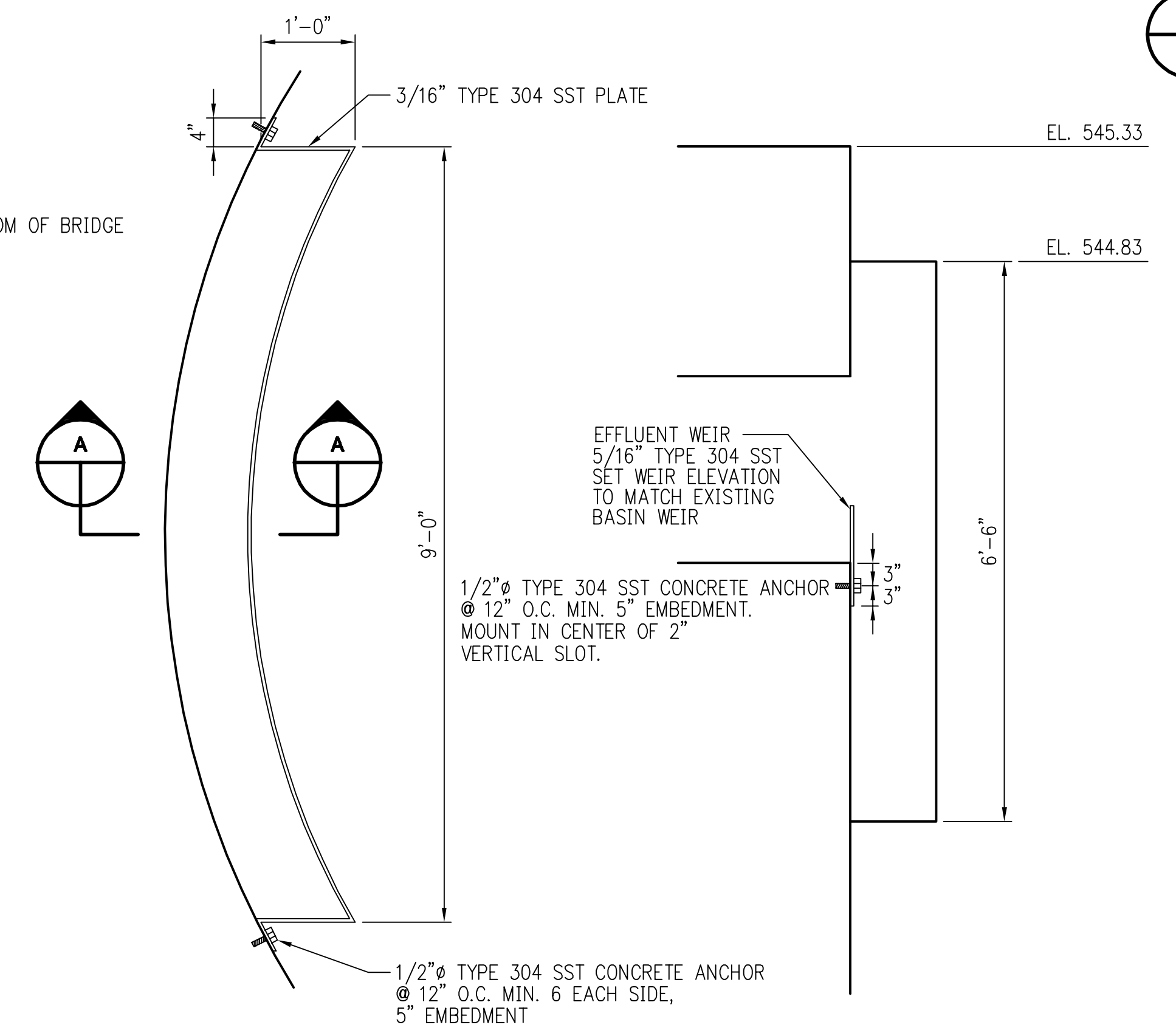
DETAIL 5
VELOCITY BAFFLE



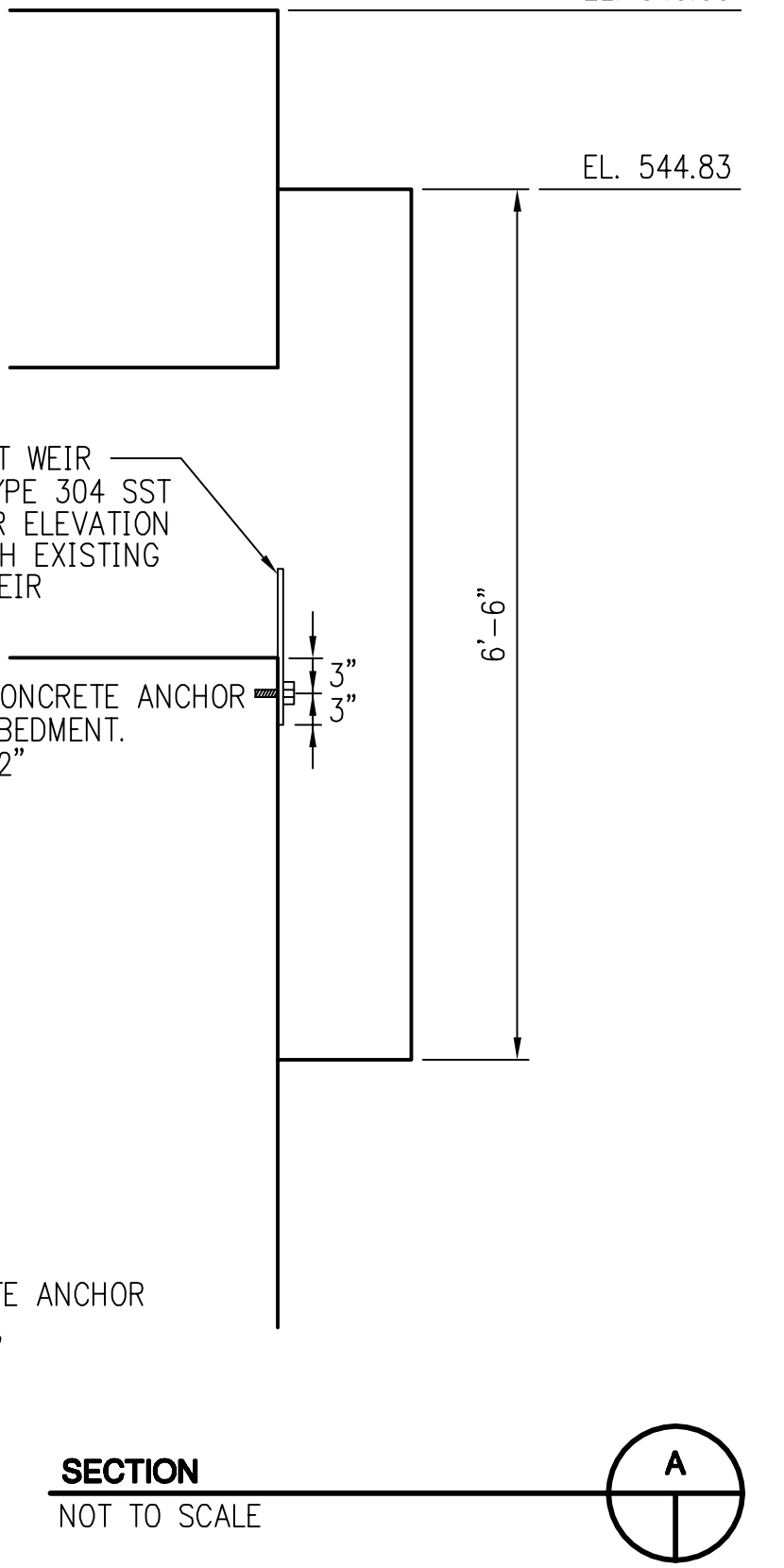
DETAIL 6
S.S. WASHER



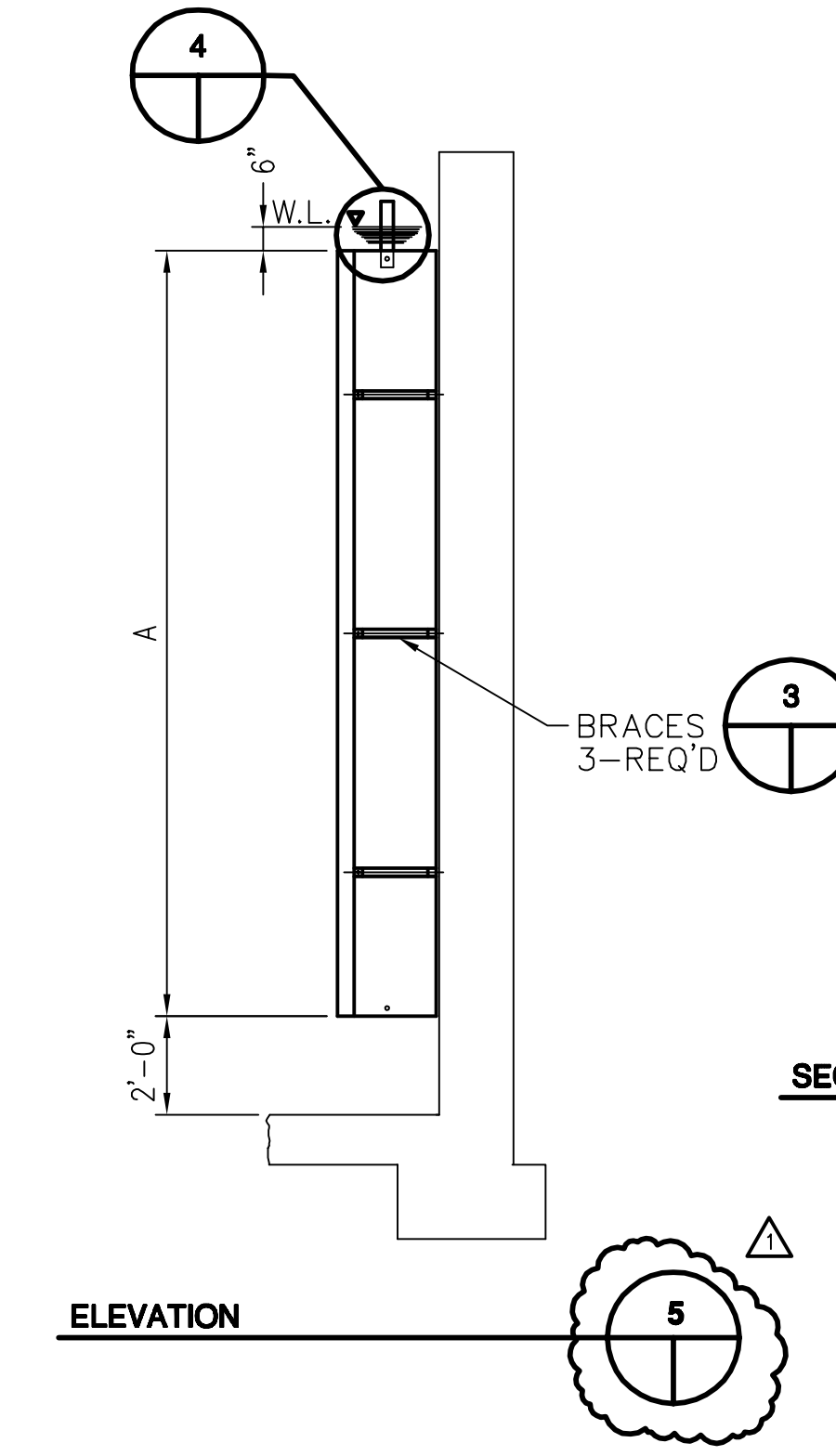
DETAIL 1
CENTER PIER



DETAIL 2
NOT TO SCALE
EFFLUENT BAFFLE PLATE



SECTION A-A
NOT TO SCALE



ELEVATION 5

Scale For Microfilming
Inches
Millimeters
COPYRIGHT © 2005 BURNS AND McDONNELL ENGINEERING COMPANY, INC.

no.	date	by	revision
1	04/29/05	KRE	CONFORMING TO RECORD DRAWINGS

CALL TWO WORKING DAYS BEFORE YOU DIG
1-800-STAKE-IT
1-800-782-5348
(OUTSIDE MARICOPA COUNTY)

THESE RECORD DRAWINGS HAVE BEEN PRODUCED IN PART OR IN WHOLE FROM INFORMATION PROVIDED BY OTHERS. THE ENGINEER MAKES NO WARRANTIES OR GUARANTEES AS TO THE ACCURATENESS OR COMPLETENESS OF THE PORTIONS OF THE RECORD DRAWINGS PRODUCED FROM THE INFORMATION PROVIDED BY OTHERS.

"RECORD DRAWINGS"

Burns & McDonnell
SINCE 1898

date: MARCH 6, 2003
designed: R. GREAVES

detailed: D. REISNER
checked: J.P.M.



MULBERRY WWTP EXPANSION - PHASE 1
ISLAND WWTP UPGRADES - PHASE 1
COUNTER CURRENT AERATION BASIN - SECTION

project	30030	contract	SS1830
drawing	P09	rev.	1
sheet	of	sheets	
file			