

LAKE HAVASU CITY LONDON BRIDGE

PIER D REPAIRS

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PREPARED BY:

Kimley»Horn

PROJECT ENGINEER

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DAVID LANE
JENI COKE
JIM DOLAN
MICHELE LIN
NANCY CAMPBELL
CAMERON MOSES

MAYOR
VICE MAYOR
COUNCIL MEMBER
COUNCIL MEMBER
COUNCIL MEMBER
COUNCIL MEMBER

PROJECT MANAGER

JASON HART, PROJECT MANAGER

UTILITY CONTACTS

LAKE HAVASU CITY (WASTEWATER) (928) 855-3999

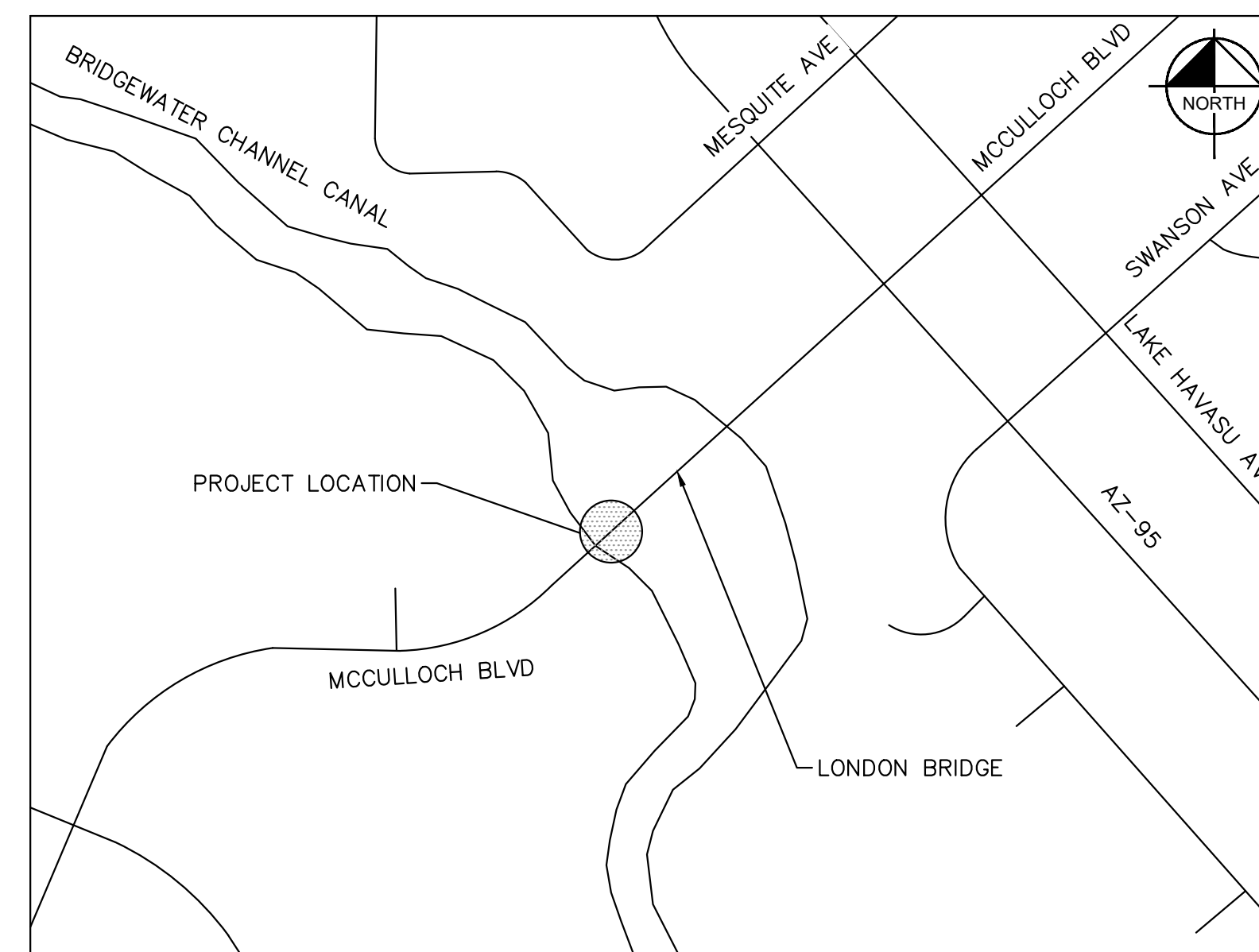
LAKE HAVASU CITY (WATER) (928) 855-2618

SUDDEN LINK (928) 855-9855

FRONTIER COMMUNICATION (928) 358-1977

UNISOURCE ENERGY SERVICES (GAS) (928) 505-7002

UNISOURCE ENERGY SERVICES (ELECTRIC) (928) 505-7002



LOCATION MAP

SCALE: N.T.S.



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LAKE HAVASU CITY
LONDON BRIDGE
PIER D REPAIRS

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Date:	6/19/23
Dwg. scale:	-

COVER SHEET

BID DOCUMENTS

Sheet Number:

CV01

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GENERAL NOTES

DESIGN AND CONSTRUCTION SPECIFICATIONS

DESIGN SPECIFICATIONS – 2018 INTERNATIONAL BUILDING CODE (IBC)
 CONSTRUCTION SPECIFICATIONS – ARIZONA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2021 EDITION.

DOCUMENTS AND LIMITATIONS

THE DRAWINGS, CALCULATIONS, SPECIFICATIONS, AND REPRODUCTIONS, RELATING TO THE STRUCTURAL PART OF THE PROJECT, ARE INSTRUMENTS OF SERVICE TO BE USED ONLY FOR THIS PROJECT.

IT IS UNDERSTOOD THAT THE STRUCTURAL ENGINEER OF RECORD MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO FINDINGS, DESIGNS, RECOMMENDATIONS, SPECIFICATIONS, OPINION, OR PROFESSIONAL ADVICE, EXCEPT THAT THESE INSTRUMENTS OF SERVICE HAVE BEEN PREPARED IN ACCORDANCE WITH THE CURRENT GENERALLY ACCEPTED PROFESSIONAL ENGINEER PRACTICES.

ALL NON-STRUCTURAL ELEMENTS INDICATED ON THE STRUCTURAL DRAWINGS HAVE BEEN SHOWN IN GENERAL TO THE RELATIONSHIP TO THE STRUCTURAL ELEMENTS. ACCORDINGLY, THEY SHALL NOT BE ASSUMED TO BE ACCURATE AND REFERENCE MUST BE MADE TO THE APPROPRIATE CONSULTANT(S) PLANS AND SPECIFICATIONS.

INFORMATION RELATING TO AS-DESIGNED CONDITIONS SHOWN HAVE BEEN REPRODUCED FROM AVAILABLE AS-BUILTS AND ARE FOR REFERENCE ONLY. ACTUAL CONDITIONS MAY DIFFER FROM THE INFORMATION SHOWN. CONTRACTOR IS TO VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

CONSTRUCTION SAFETY

IT IS UNDERSTOOD THAT THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK ON THE PROJECT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PERSONS AND PROTECT THEM AGAINST INJURY. LIKEWISE, THE CONTRACTOR SHALL PROTECT ALL PROPERTY AGAINST DAMAGE OR LOSS.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY.

THE CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS THE WORK IS SATISFACTORILY COMPLETED, AND THE ENGINEER HAS ISSUED A NOTICE TO THAT EFFECT TO THE OWNER AND THE CONTRACTOR.

DIMENSIONS

BEFORE STARTING WORK, CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE SITE, AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.

THE CONTRACTOR, BEFORE STARTING ANY WORK, SHALL CHECK ALL DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS. IF ANY DISCREPANCY IS NOTICED, IT SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER, AND WORK SHALL NOT COMMENCE UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.

THE CONTRACTOR SHALL REFER TO THE ENGINEER FOR HIS INSTRUCTIONS FOR ANY DIMENSION NOT GIVEN ON OR OBTAINABLE FROM THE DRAWINGS. THE CONTRACTOR SHALL NOT USE SCALE TO OBTAIN OR VERIFY ANY DIMENSION SHOWN ON THESE DRAWINGS.

SHOP DRAWINGS

REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS LIMITED TO COMPLIANCE OF THE COMPLETED STRUCTURE WITH THE DESIGN CONCEPT AND INFORMATION GIVEN IN THE PROJECT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS, QUANTITIES, PERFORMANCE, SAFETY, COORDINATION WITH OTHER WORKS, AND ALL OTHER REQUIREMENTS OF THE PROJECT DOCUMENTS. REVIEW DOES NOT AUTHORIZE CHANGES TO CONTRACT.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR HIS REVIEW IN ACCORDANCE WITH A SCHEDULE OF SUBMITTALS ACCEPTABLE TO THE ENGINEER. THESE SHOP DRAWINGS SHALL HAVE BEEN CHECKED BY, AND STAMPED WITH THE APPROVAL OF THE CONTRACTOR, AND IDENTIFIED AS THE ENGINEER MAY REQUIRE. THE DATA SHOWN ON THE SHOP DRAWINGS SHALL BE COMPLETE WITH RESPECT TO DIMENSIONS, DESIGN CRITERIA, AND DULY SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN ARIZONA (WHERE APPLICABLE).

DE-WATERING PROCESS

EQUIPMENT SIZE WILL BE LIMITED TO EXISTING HATCH OPENING DIMENSIONS. NO MODIFICATIONS MAY BE MADE TO THESE OPENINGS. MODIFICATIONS TO THE EXISTING RAMPS WITHIN THE STRUCTURE MAY BE UNDERTAKEN BY THE CONTRACTOR AS NECESSARY TO ACCOMMODATE PROPOSED EQUIPMENT AND AS APPROVED BY THE ENGINEER.

A DE-WATERING PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF WORK. THE PLAN SHALL INCLUDE EQUIPMENT TO BE USED, A TRAFFIC CONTROL PLAN, A GENERAL OUTLINE OF WORK, INCLUDING APPROACHES TO ACCESSING THE BRIDGE, TRANSPORTING AND POSITIONING THE EQUIPMENT, AND A WORK SCHEDULE.

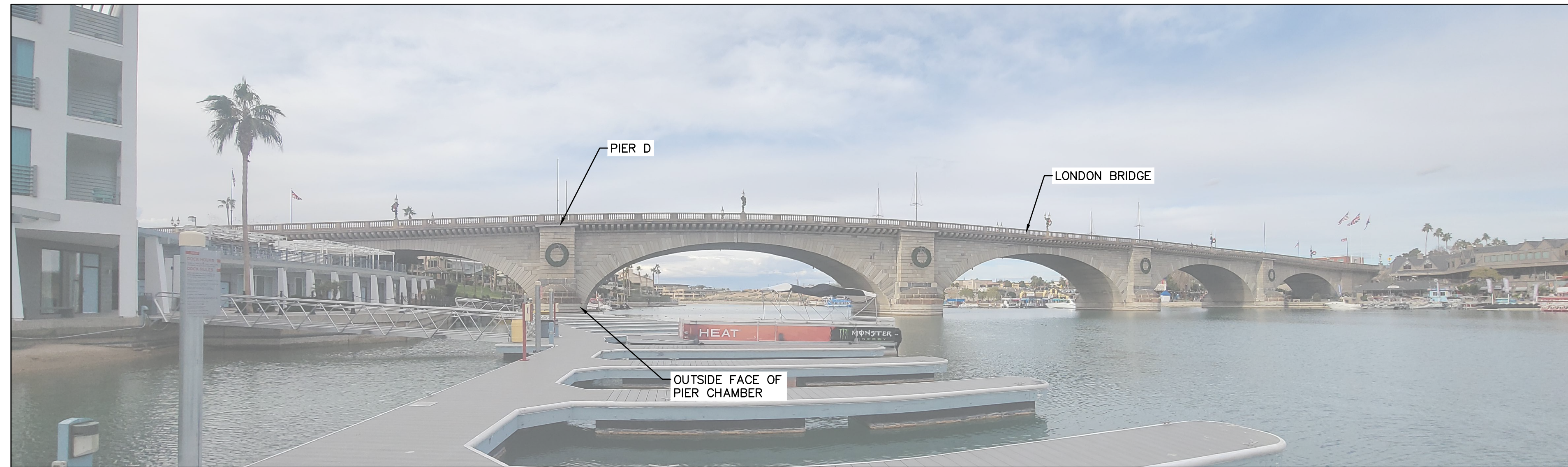
WATER PUMPED FROM THE BEARING CHAMBER MAY NOT BE DISCHARGED INTO THE COLORADO RIVER. WATER SHALL BE CONTAINED AND TRANSPORTED TO A RECEIVING FACILITY. COORDINATION WITH THE RECEIVING FACILITY IS THE RESPONSIBILITY OF THE CONTRACTOR.

PUMP EQUIPMENT SHALL REMAIN ON-SITE TO PROVIDE CONTINUOUS WATER REMOVAL UNTIL THE APPROPRIATE REPAIRS CAN BE MADE TO THE PIER D BEARING CHAMBER.

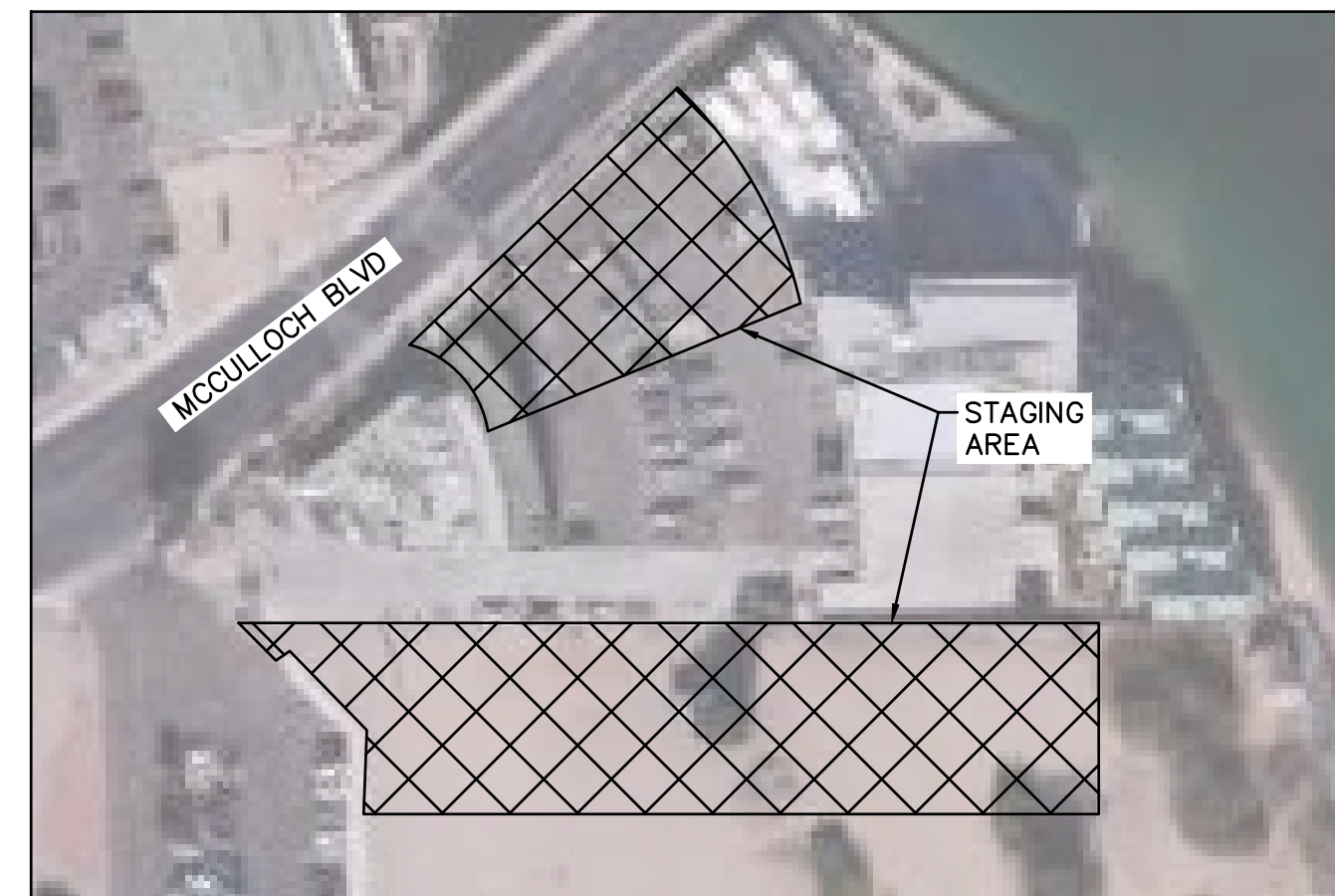
THE ENGINEER SHALL BE NOTIFIED A MINIMUM OF ONE WEEK PRIOR TO THE SCHEDULED DE-WATERING SO THAT AN INSPECTION CAN BE MADE AFTER THE WATER IS REMOVED. THIS INSPECTION IS INTENDED TO VERIFY THE APPROACHES OUTLINED IN THE BEARING CHAMBER REPAIR DETAILS.

ACRONYMS/ABBREVIATIONS

MIN..... MINIMUM
 NTS..... NOT TO SCALE
 TYP..... TYPICAL



BRIDGE ELEVATION LOOKING NORTH
 NTS



STAGING PLAN
 NTS



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**GENERAL NOTES AND
 STAGING PLAN**

BID DOCUMENTS

Sheet Number:

GN01

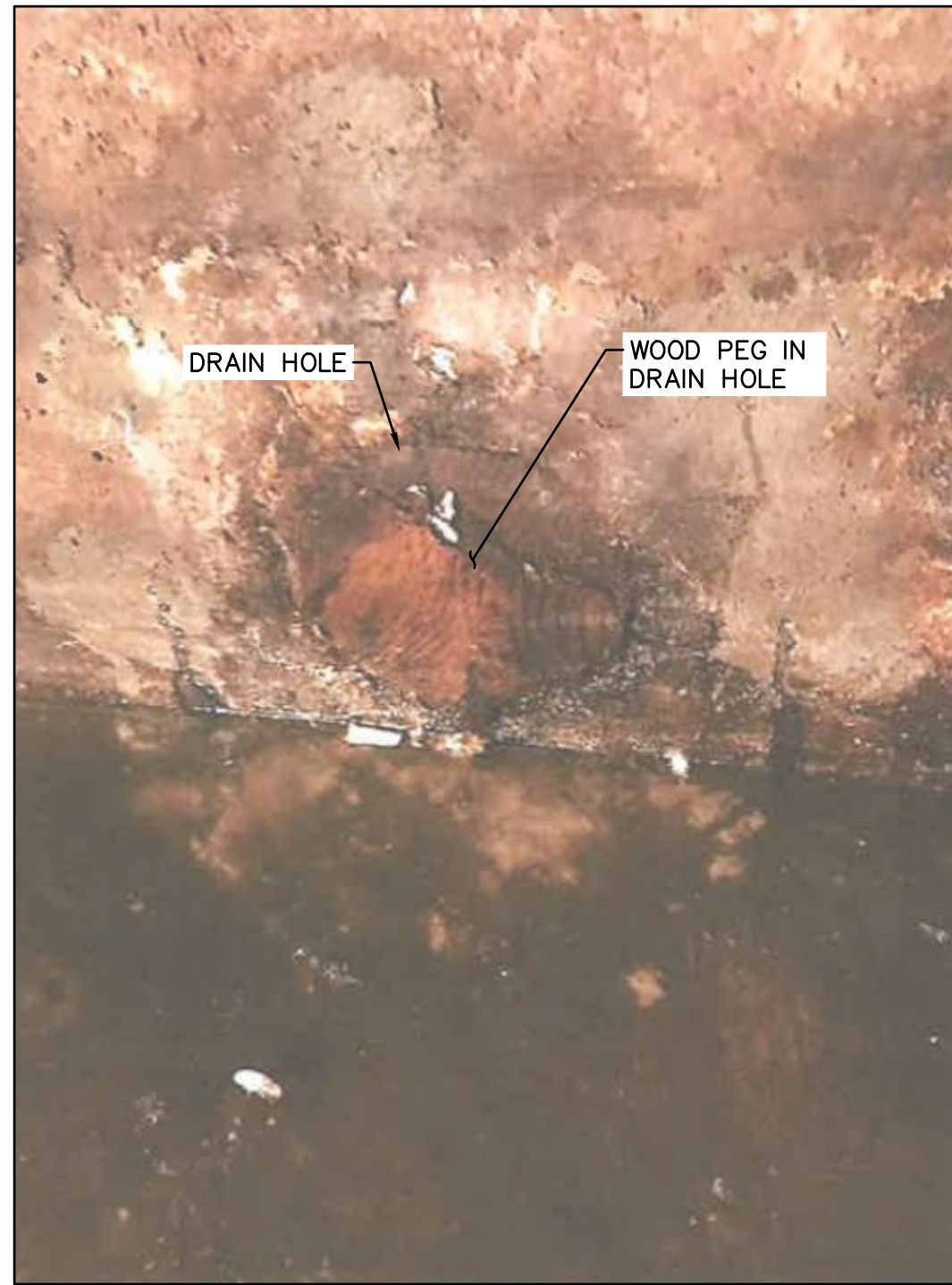
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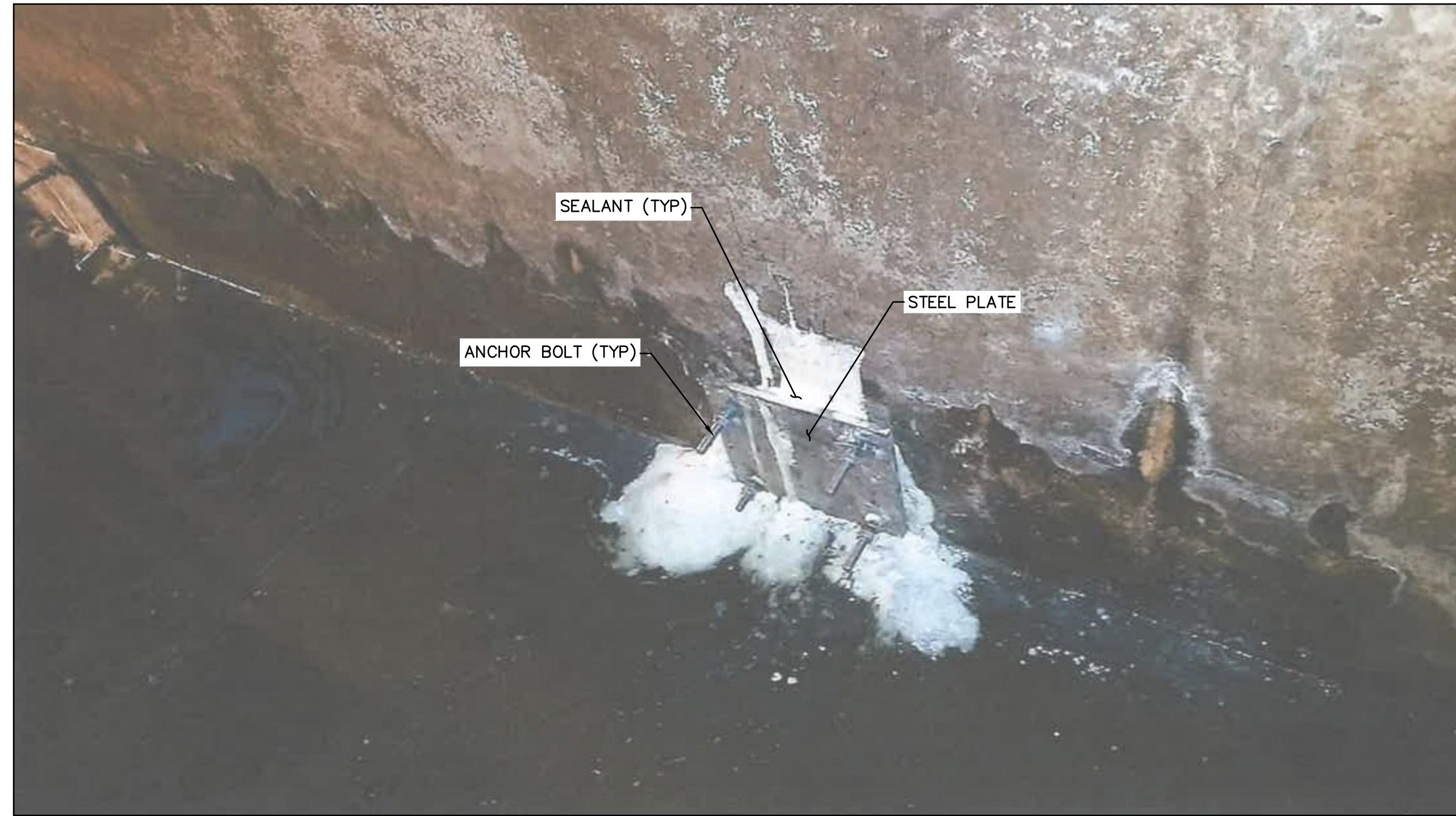
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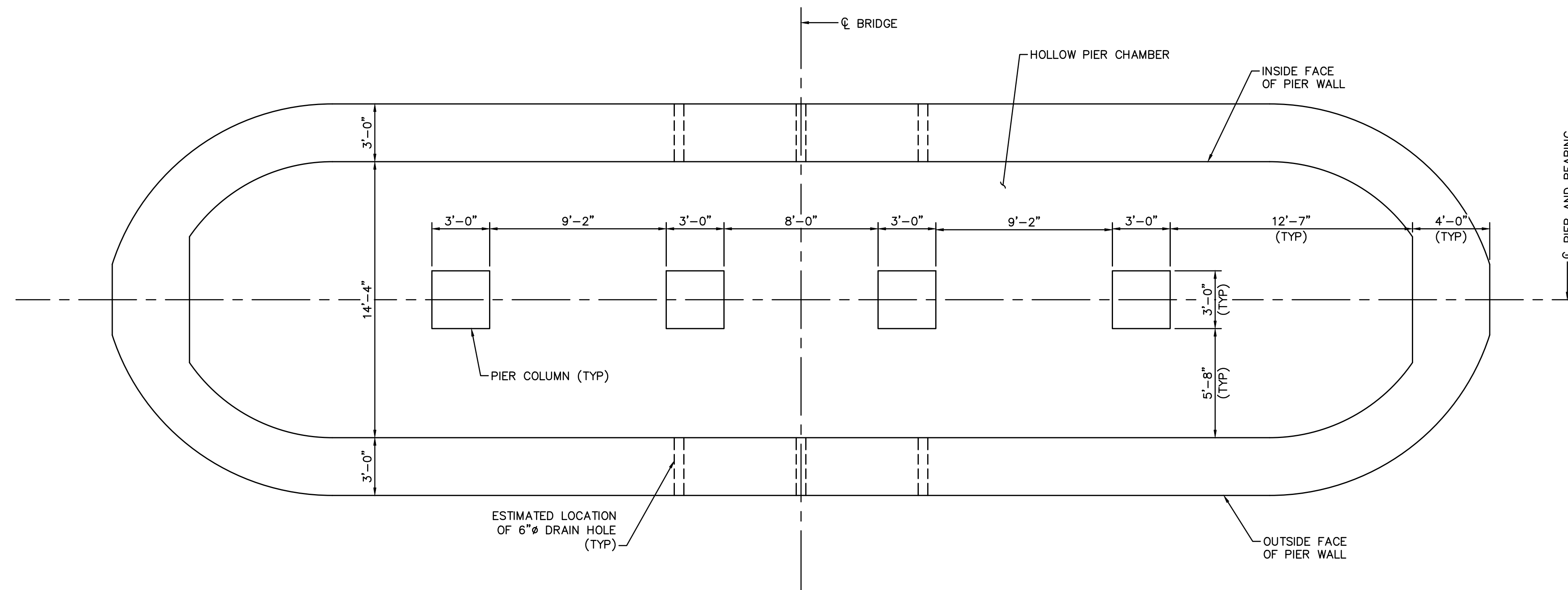
TYPICAL WOOD PEG IN HOLE
NTS



TYPICAL PREVIOUS DRAIN HOLE REPAIR
NTS

REMOVAL OF PREVIOUS DRAIN HOLE REPAIR

1. REMOVE ANCHORS AND STEEL PLATE.
2. REMOVE WOOD PEG.
3. REMOVE PREVIOUS SEALANT MATERIAL AND CLEAN DRAIN HOLE.



PIER PLAN VIEW AT PIER FLOOR
SCALE: 1/4" = 1'-0"



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DEMOLITION

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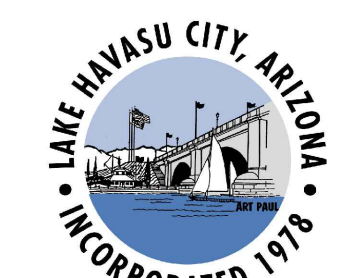
DP01

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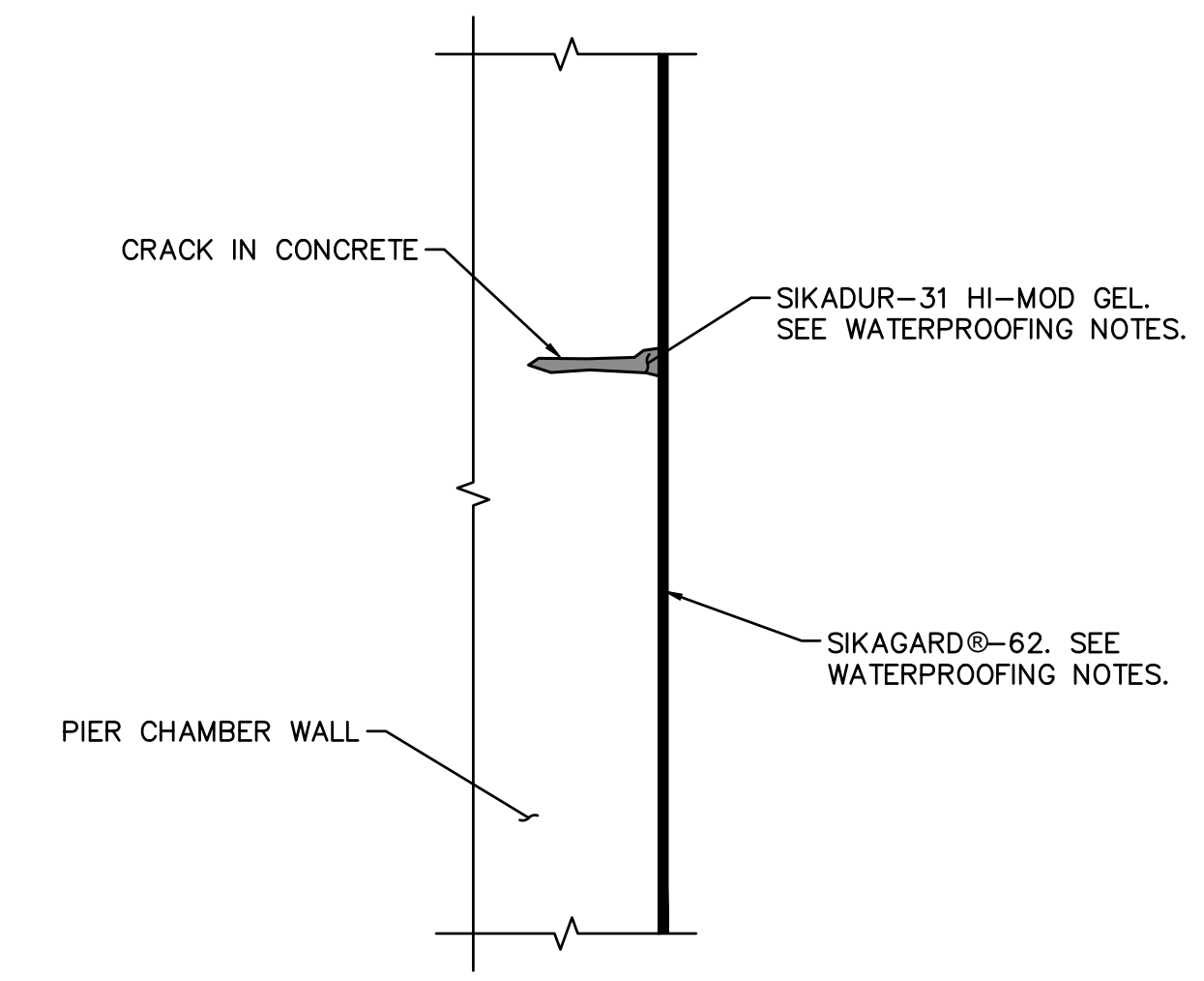
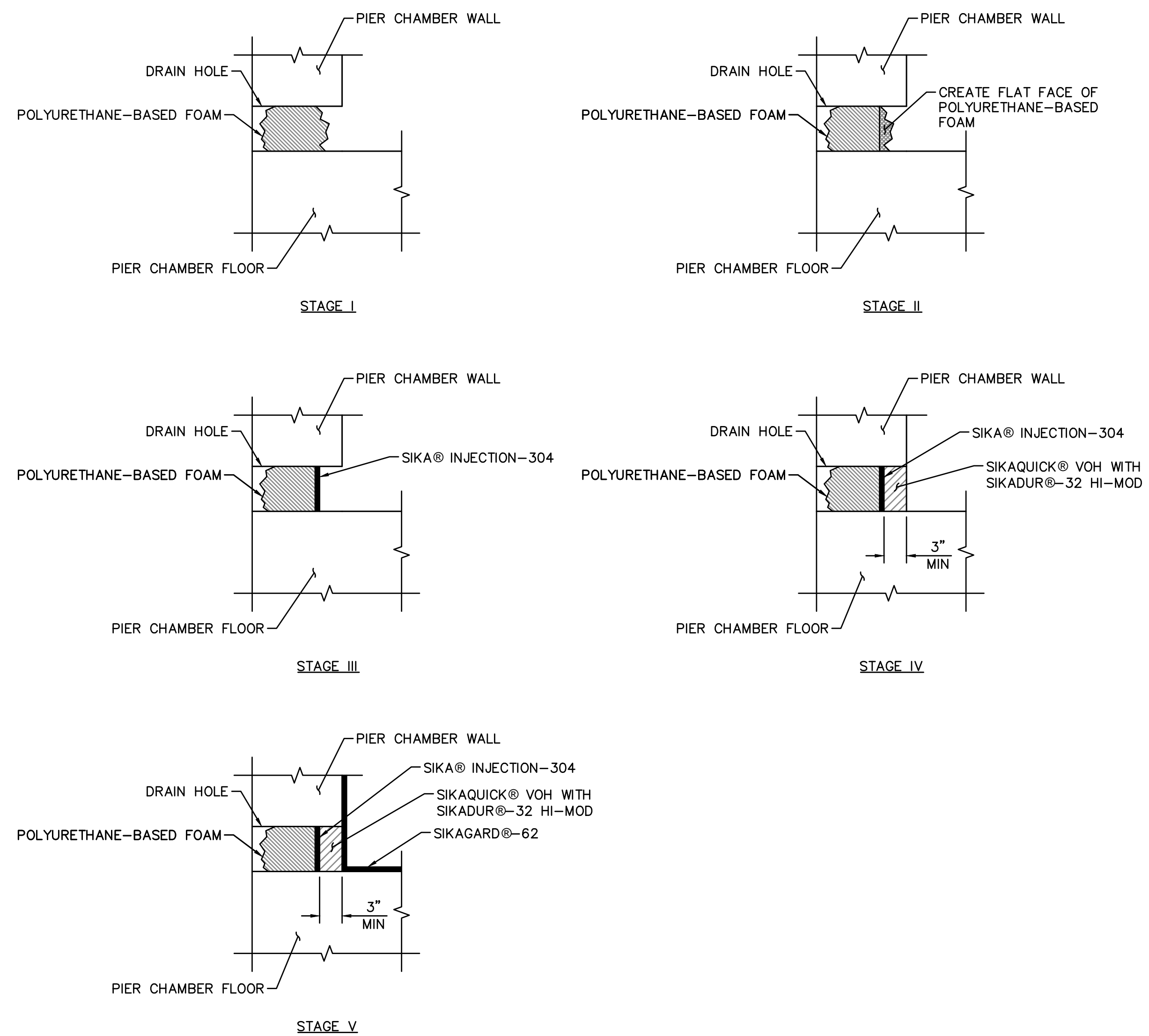
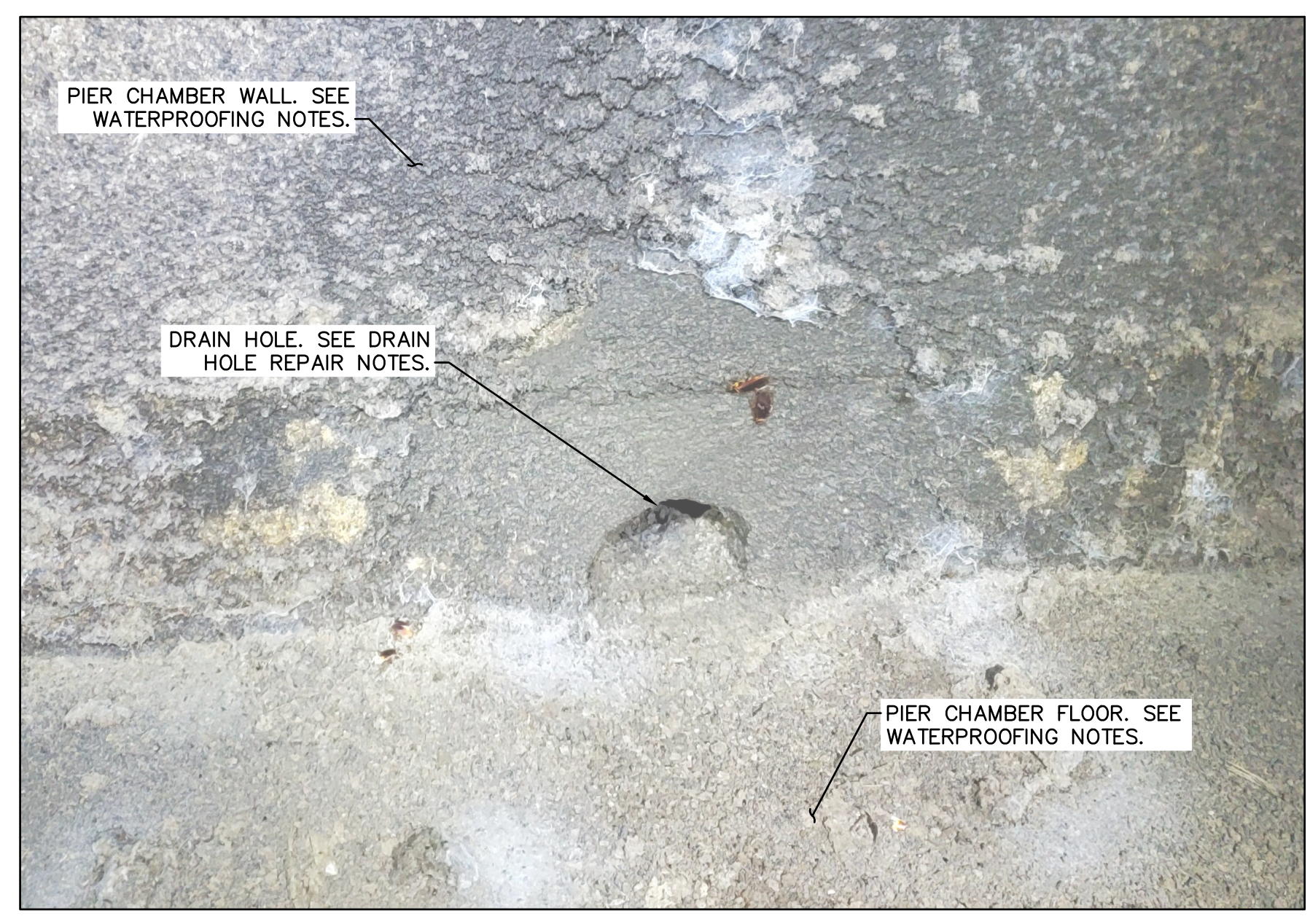
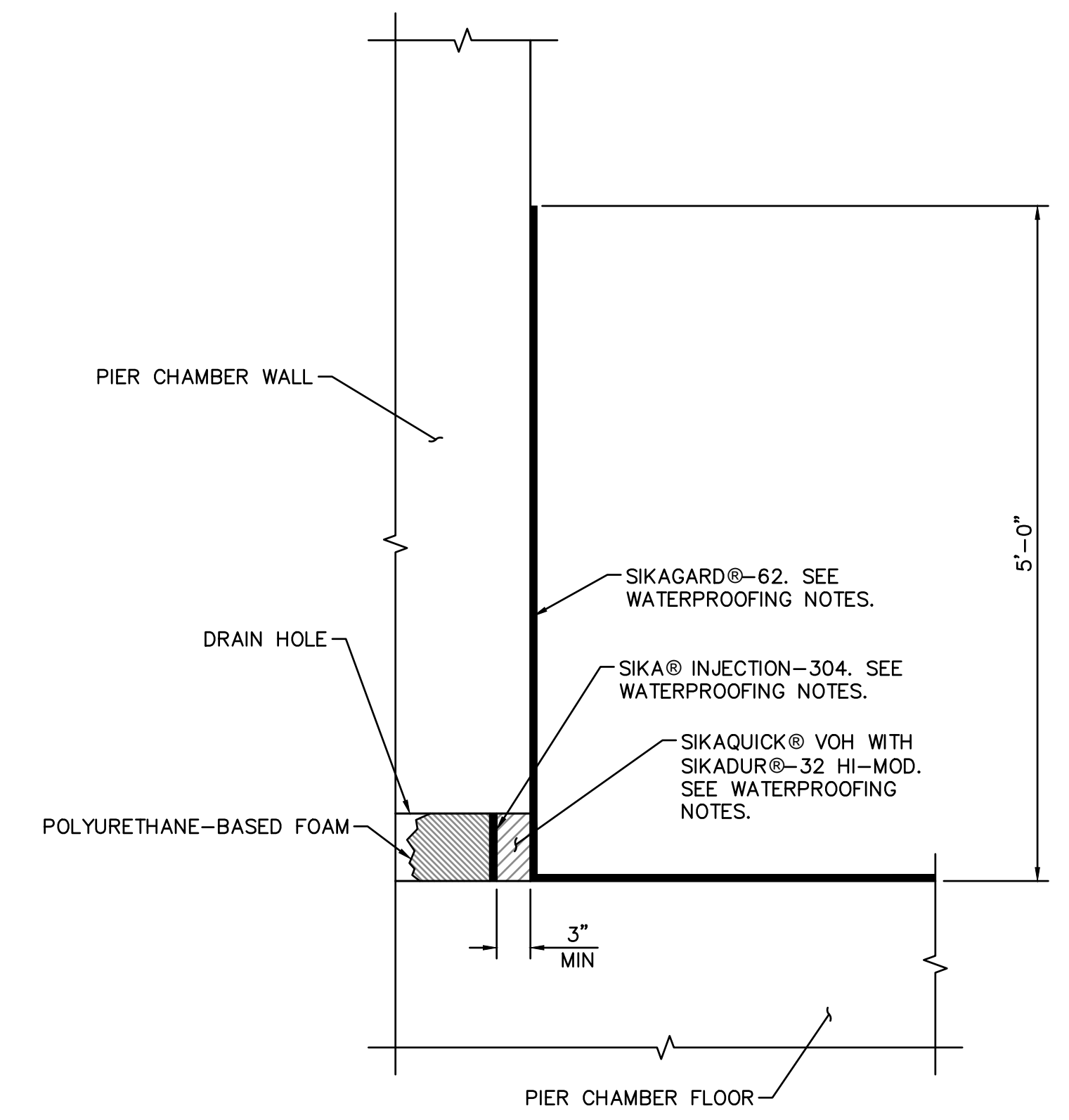
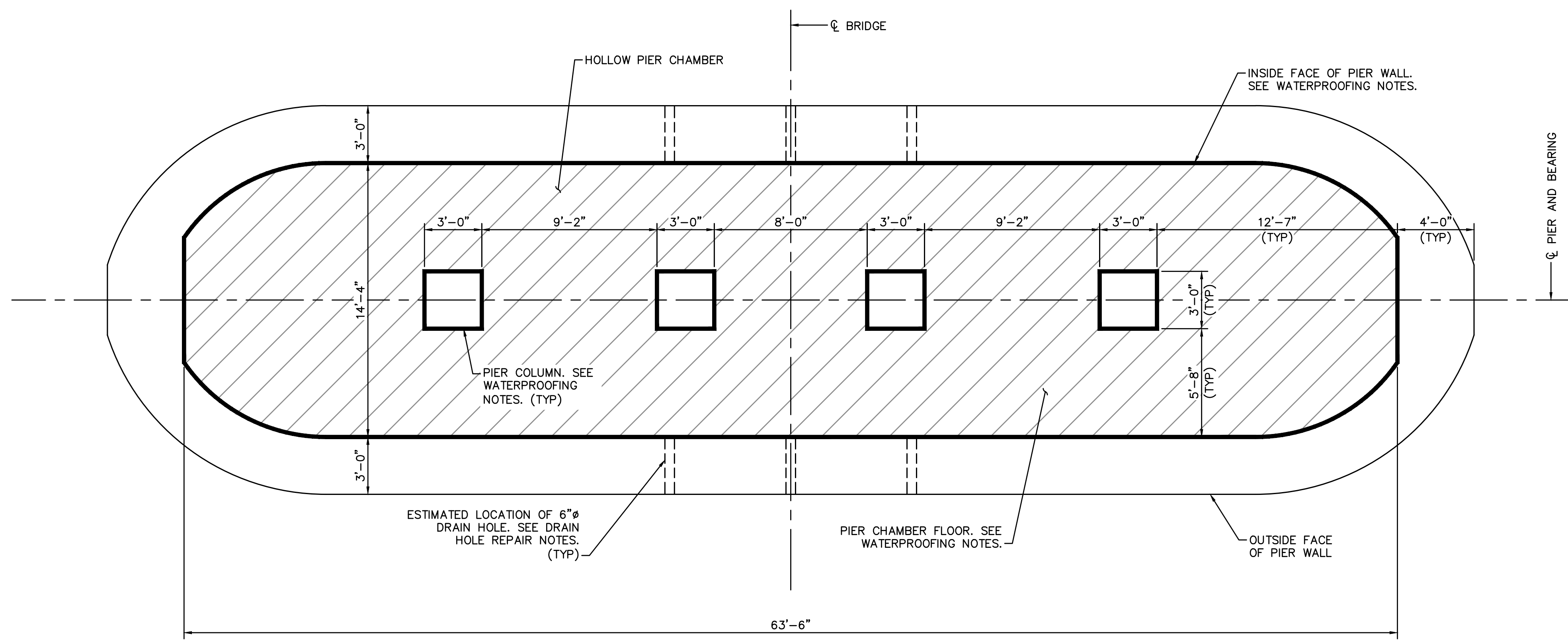
REPAIR DETAILS

BID DOCUMENTS

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DT01

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DRAIN HOLE REPAIR NOTES

1. REMOVE ANY DEBRIS FROM THE DRAIN HOLE AND CLEAN THE WALLS OF THE DRAIN HOLE.
2. PLACE POLYURETHANE-BASED FOAM IN THE DRAIN HOLE. ONCE EXPANDED, CREATE A FLAT FACE.
3. PLACE SIKA® INJECTION-304 ON THE FLAT FACE OF THE POLYURETHANE-BASED FOAM.
4. PLACE SIKAQUICK® VOH WITH SIKADUR®-32 HI-MOD AS A BONDING AGENT INSIDE OF THE DRAIN HOLE.
5. ONCE THE SIKAQUICK® VOH HAS DRIED, PLACE WATERPROOFING PER WATERPROOFING NOTES BELOW.
6. PREPARE ALL SURFACES AND INSTALL ALL PRODUCTS PER MANUFACTURER'S INSTRUCTIONS.

WATERPROOFING NOTES

1. DRY INSIDE OF PIER CHAMBER.
2. FOR ANY OBSERVED CRACKS, PLACE SIKADUR®-31 HI-MOD GEL IN THE CRACKS.
3. PLACE SIKAGARD®-62 ON THE INSIDE FACE OF THE PIER WALLS, ON THE PIER CHAMBER FLOOR, AND ON THE FACE OF THE PIER COLUMNS.
4. PREPARE ALL SURFACES AND INSTALL ALL PRODUCTS PER MANUFACTURER'S INSTRUCTIONS.



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