

MARINA del REY

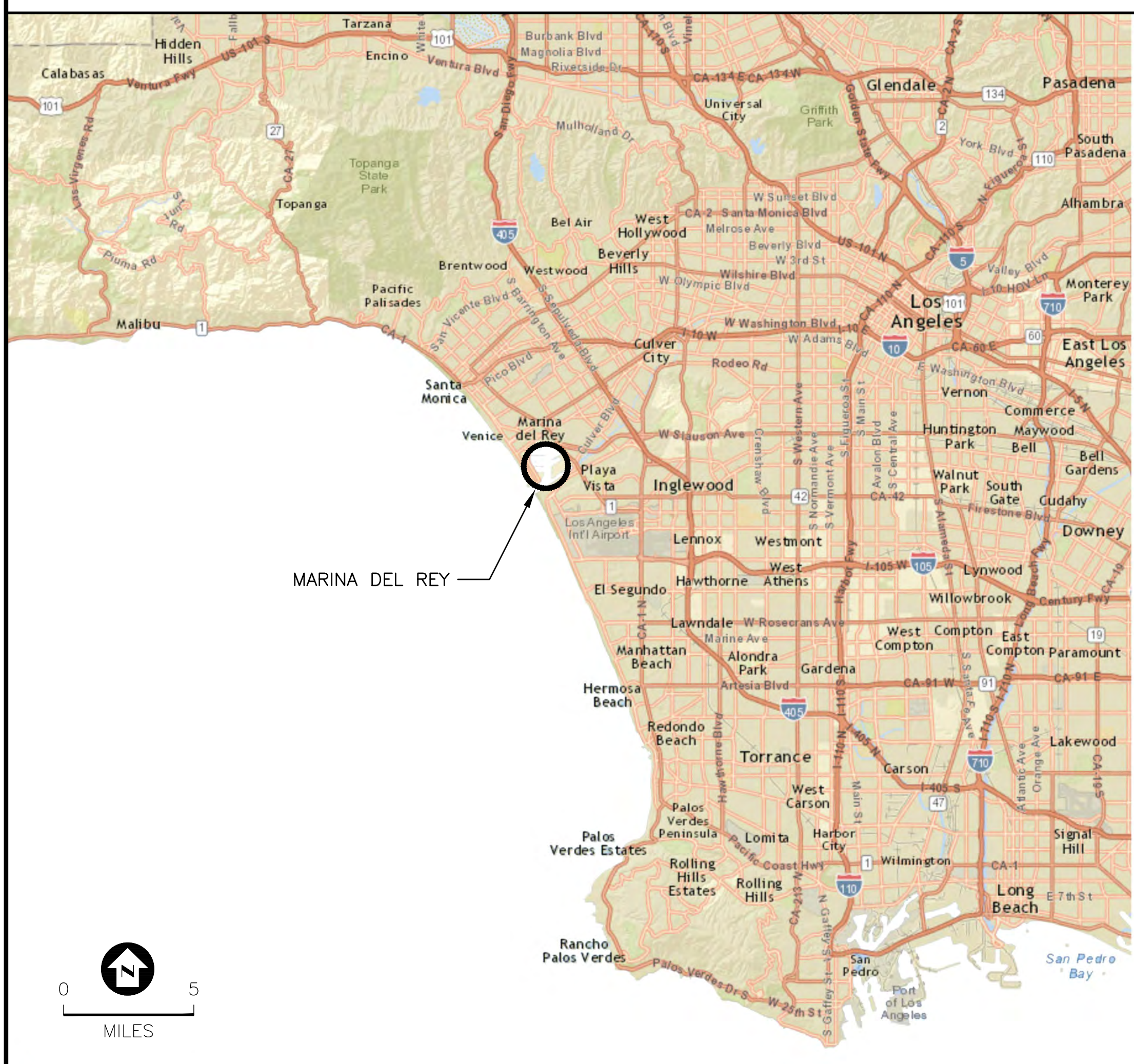
BOAT LAUNCH FACILITY RENOVATION

13477 FIJI WAY, MARINA DEL REY, CA 90292

SPEC. NO. 7663 ; C.P. NO. 8A078



SITE LOCATION MAP

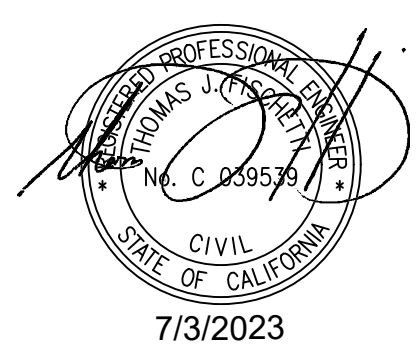


VINCINITY MAP

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BID SET

NOBLE CONSULTANTS | **GEC**

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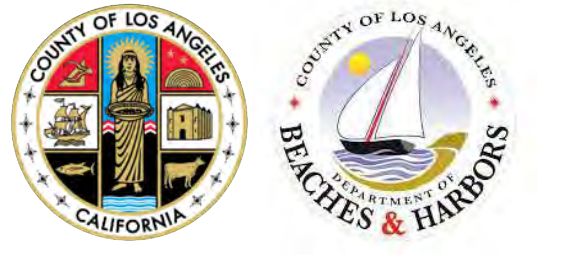
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NOTE:
SHEET NOS. 9 THROUGH 13 ARE ORIGINAL CONSTRUCTION DRAWINGS OF EXISTING LAUNCH RAMP FOR CONTRACTOR INFORMATION. SHEET NOS. 26 AND 27 ARE ORIGINAL CONSTRUCTION DRAWINGS OF THE SITE DRAINAGE IMPROVEMENTS.

ABBREVIATIONS

A/E	ARCHITECT/ENGINEER
AC	ASBESTOS CEMENT
ADA	AMERICANS WITH DISABILITIES ACT
ALUM	ALUMINUM
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWWA	AMERICAN WATER WORKS ASSOCIATION
BMP	BEST MANAGEMENT PRACTICES
C.P. NO.	CAPITAL PROJECT NUMBER
CB	CARRIAGE BOLT
CBC	CALIFORNIA BUILDING CODE
CFC	CALIFORNIA FIRE CODE
CFR	CODE OF FEDERAL REGULATION
CI	CAST IRON
CL	CENTER LINE
CLR	CLEAR
CO	CLEAN OUT
CW	CLEAT WASHER
DBH	DEPARTMENT OF BEACHES & HARBORS
DBL	DOUBLE
DIA	DIAMETER
DPW	DEPARTMENT OF PUBLIC WORKS
EA	EACH
EHW	EXTREME HIGH WATER
ELEV	ELEVATION
ELW	EXTREME LOW WATER
EQ	EQUAL
FB	FLAT BAR
FDC	FIRE DEPARTMENT CONNECTION
FH	FLAT HEAD
FT	FEET
FW	FLAT WASHER
GA	GAGE
HDG	HOT DIP GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
HN	HEX NUT
HSS	HOLLOW STRUCTURAL SECTION
LACO	LOS ANGELES COUNTY LAYOUT & DESIGN GUIDELINES FOR MARINE BERTHING FACILITIES
LDGMBF	LOCK WASHER
LW	LOCK WASHER
MAX	MAXIMUM
MB	MACHINE BOLT
MH	MANHOLE
MIN	MINIMUM
MLLW	MEAN LOWER LOW WATER
MSL	MEAN SEA LEVEL
N/A	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONSTRUCTION
NO	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTS	NOT TO SCALE
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
PCC	PORTLAND CEMENT CONCRETE
PIP	PROTECT IN PLACE
PL	PLATE
POC	POINT OF CONNECTION
PVC	POLYVINYL CHLORIDE
PW	PLATE WASHER
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
SCE	SOUTHERN CALIFORNIA EDISON COMPANY
SCHED	SCHEDULE
SMSATC	SPECIFICATIONS & MINIMUM STANDARDS FOR ARCHITECTURAL TREATMENT & CONSTRUCTION SPECIFICATION NUMBER
SPEC. NO.	SPECIFICATION NUMBER
SPS	SPACED
SS	STAINLESS STEEL
SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
STA	STATION
STD	STANDARD
THK	THICK
TOW	TOP OF WALL
TYP.	TYPICAL
UHMW	ULTRA-HIGH MOLECULAR WEIGHT
UNO	UNLESS NOTED OTHERWISE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
W/	WITH
WV	WATER VALVE



NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET
			JTM	TITLE SHEET	1 OF 64
			JTM		JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023

GENERAL NOTES

- 1. ALL GRADING AND CONSTRUCTION SHALL CONFORM TO THE 2020 COUNTY OF LOS ANGELES BUILDING CODES AND THE STATE MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE UNLESS SPECIFICALLY NOTED ON THESE PLANS.
2. ANY MODIFICATIONS OF OR CHANGES TO APPROVED GRADING PLANS MUST BE APPROVED BY THE BUILDING OFFICIAL.
3. NO GRADING SHALL BE STARTED WITHOUT FIRST NOTIFYING THE BUILDING OFFICIAL. A PRE-GRADING MEETING AT THE SITE IS REQUIRED BEFORE THE START OF THE GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST, COUNTY GRADING INSPECTOR(S) OR THEIR REPRESENTATIVES, AND WHEN REQUIRED THE ARCHEOLOGIST OR OTHER JURISDICTIONAL AGENCIES. PERMITTEE OR HIS AGENT ARE RESPONSIBLE FOR ARRANGING PRE-GRADE MEETING AND MUST NOTIFY THE BUILDING OFFICIAL AT LEAST TWO BUSINESS DAYS PRIOR TO PROPOSED PRE-GRADE MEETING.
4. APPROVAL OF THESE PLANS REFLECT SOLELY THE REVIEW OF PLANS IN ACCORDANCE WITH THE COUNTY OF LOS ANGELES BUILDING CODES AND DOES NOT REFLECT ANY POSITION BY THE COUNTY OF LOS ANGELES OR THE DEPARTMENT OF PUBLIC WORKS REGARDING THE STATUS OF ANY TITLE ISSUES RELATING TO THE LAND ON WHICH THE IMPROVEMENTS MAY BE CONSTRUCTED. ANY DISPUTES RELATING TO TITLE ARE SOLELY A PRIVATE MATTER NOT INVOLVING THE COUNTY OF LOS ANGELES OR THE DEPARTMENT OF PUBLIC WORKS.
5. ALL GRADING AND CONSTRUCTION ACTIVITIES SHALL COMPLY WITH COUNTY OF LOS ANGELES CODE, TITLE 12, SECTION 12.12.030 THAT CONTROLS AND RESTRICTS NOISE FROM THE USE OF CONSTRUCTION AND GRADING EQUIPMENT FROM THE HOURS OF 8:00 PM TO 6:30 AM, AND ON SUNDAYS AND HOLIDAYS. (MORE RESTRICTIVE CONSTRUCTION ACTIVITY TIMES MAY GOVERN, AS REQUIRED BY THE DEPARTMENT OF REGIONAL PLANNING AND SHOULD BE SHOWN ON THE GRADING PLANS WHEN APPLICABLE.)
6. CALIFORNIA PUBLIC RESOURCES CODE (SECTION 5097.98) AND HEALTH AND SAFETY CODE (SECTION 7050.5) ADDRESS THE DISCOVERY AND DISPOSITION OF HUMAN REMAINS. IN THE EVENT OF DISCOVERY OR RECOGNITION OF ANY HUMAN REMAINS IN ANY LOCATION OTHER THAN A DEDICATED CEMETERY, THE LAW REQUIRES THAT GRADING IMMEDIATELY STOPS AND NO FURTHER EXCAVATION OR DISTURBANCE OF THE SITE, OR ANY NEARBY AREA WHERE HUMAN REMAINS MAY BE LOCATED, OCCUR UNTIL THE FOLLOWING HAS BEEN MEASURED TO BE TAKEN:
6.1. THE COUNTY CORONER HAS BEEN INFORMED AND HAS DETERMINED THAT NO INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED, AND
6.2. IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN, THE DESCENDANTS FROM THE DECEASED NATIVE AMERICANS HAVE MADE A RECOMMENDATION FOR THE MEANS OF TREATING OR DISPOSING, WITH APPROPRIATE DIGNITY, OF THE HUMAN REMAINS AND ANY ASSOCIATED GRAVE GOODS.
7. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITTEE.
8. ALL EXPORT OF MATERIAL FROM THE SITE MUST GO TO A PERMITTED SITE APPROVED BY THE BUILDING OFFICIAL OR A LEGAL DUMPSITE. RECEIPTS FOR ACCEPTANCE OF EXCESS MATERIAL BY A DUMPSITE ARE REQUIRED AND MUST BE PROVIDED TO THE BUILDING OFFICIAL UPON REQUEST.
9. A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
10. SITE BOUNDARIES, EASEMENTS, DRAINAGE DEVICES, RESTRICTED USE AREAS SHALL BE LOCATED PER CONSTRUCTION STAKING BY FIELD ENGINEER OR LICENSED SURVEYOR. PRIOR TO GRADING, AS REQUESTED BY THE BUILDING OFFICIAL, ALL PROPERTY LINES, EASEMENTS, AND RESTRICTED USE AREAS SHALL BE STAKED.
11. NO GRADING OR CONSTRUCTION SHALL OCCUR WITHIN THE PROTECTED ZONE OF ANY OAK TREE AS REQUIRED PER TITLE CHAPTER 22.56 OF THE COUNTY OF LOS ANGELES ZONING CODE. THE PROTECTED ZONE SHALL MEAN THAT AREA WITHIN THE DRIP LINE OF AN OAK TREE EXTENDING THERE FROM A POINT AT LEAST FIVE FEET OUTSIDE THE DRIP LINE, OR 15 FEET FROM THE TRUNK(S) OF A TREE, WHICHEVER IS GREATER.
12. A PREVENTIVE PROGRAM TO PROTECT THE SLOPES FROM POTENTIAL DAMAGE FROM BURROWING RODENTS IS REQUIRED PER SECTION J101.8 OF THE COUNTY OF LOS ANGELES BUILDING CODE. OWNER IS TO INSPECT SLOPES PERIODICALLY FOR EVIDENCE OF BURROWING RODENTS AND A FIRST EVIDENCE OF THEIR EXISTENCE SHALL EMPLOY AN EXTERMINATOR FOR THEIR REMOVAL.
13. WHERE A GRADING PERMIT IS ISSUED AND THE BUILDING OFFICIAL DETERMINES THAT THE GRADING WILL NOT BE COMPLETED PRIOR TO NOVEMBER 1, THE OWNER OF THE SITE ON WHICH THE GRADING IS BEING PERFORMED SHALL, ON OR BEFORE OCTOBER 1, FILE OR CAUSE TO BE FILED WITH THE BUILDING OFFICIAL AN ESCP PER SECTION J110.8.3 OF THE COUNTY OF LOS ANGELES BUILDING CODE.
14. TRANSFER OF RESPONSIBILITY: IF THE FIELD ENGINEER, THE SOILS ENGINEER, OR THE ENGINEERING GEOLOGIST OF RECORD IS CHANGED DURING GRADING, THE WORK SHALL BE STOPPED UNTIL THE REPLACEMENT HAS AGREED IN WRITING TO ACCEPT THEIR RESPONSIBILITY WITHIN THE AREA OF TECHNICAL COMPETENCE FOR APPROVAL UPON COMPLETION OF THE WORK. IT SHALL BE THE DUTY OF THE PERMITTEE TO NOTIFY THE BUILDING OFFICIAL IN WRITING OF SUCH CHANGE PRIOR TO THE RECOMMENCEMENT OF SUCH GRADING.

INSPECTION NOTES

- 15. THE PERMITTEE OR HIS AGENT SHALL NOTIFY THE BUILDING OFFICIAL AT LEAST ONE WORKING DAY IN ADVANCE OF REQUIRED INSPECTIONS AT FOLLOWING STAGES OF THE WORK. (SECTION J105.7 OF THE BUILDING CODE.)
15.1. PRE-GRADE - BEFORE THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION.
15.2. INITIAL - WHEN THE SITE HAS BEEN CLEARED OF VEGETATION AND UNAPPROVED FILL HAS BEEN SCARIFIED, BENCHED OR OTHERWISE PREPARED FOR FILL. FILL SHALL NOT BE PLACED PRIOR TO THIS INSPECTION. NOTE: PRIOR TO ANY CONSTRUCTION ACTIVITIES, INCLUDING GRADING, ALL STORM WATER POLLUTION PREVENTION MEASURES INCLUDING EROSION CONTROL DEVICES WHICH CONTAIN SEDIMENTS MUST BE INSTALLED.
15.3. ROUGH - WHEN APPROXIMATE FINAL ELEVATIONS HAVE BEEN ESTABLISHED; DRAINAGE TERRACES, SWALES AND BERMS INSTALLED AT THE TOP OF THE SLOPE; AND THE STATEMENTS REQUIRED IN THIS SECTION HAVE BEEN RECEIVED.
15.4. FINAL - WHEN GRADING HAS BEEN COMPLETED; ALL DRAINAGE DEVICES INSTALLED; SLOPE PLANTING ESTABLISHED, IRRIGATION SYSTEMS INSTALLED AND THE AS-BUILT PLANS, REQUIRED STATEMENTS, AND REPORTS HAVE BEEN SUBMITTED AND APPROVED.
16. IN ADDITION TO THE INSPECTION REQUIRED BY THE BUILDING OFFICIAL FOR GRADING, REPORTS AND STATEMENTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL IN ACCORDANCE WITH SECTION J105 OF THE COUNTY OF LOS ANGELES BUILDING CODE.
17. UNLESS OTHERWISE DIRECTED BY THE BUILDING OFFICIAL, THE FIELD ENGINEER FOR ALL ENGINEERED GRADING PROJECTS SHALL PREPARE ROUTINE INSPECTION REPORTS AS REQUIRED UNDER SECTION J105.11 OF THE COUNTY OF LOS ANGELES BUILDING CODE. THESE REPORTS, KNOWN AS "REPORT OF GRADING ACTIVITIES", SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AS FOLLOWS:
17.1. BI-WEEKLY DURING ALL TIMES WHEN GRADING OF 400 CUBIC YARDS OR MORE PER WEEK IS OCCURRING ON THE SITE;
17.2. MONTHLY, AT ALL OTHER TIMES; AND
17.3. AT ANY TIME WHEN REQUESTED IN WRITING BY THE BUILDING OFFICIAL. SUCH "REPORT OF GRADING ACTIVITIES" SHALL CERTIFY TO THE BUILDING OFFICIAL THAT THE FIELD ENGINEER HAS INSPECTED THE GRADING SITE AND RELATED ACTIVITIES AND HAS FOUND THEM IN COMPLIANCE WITH THE APPROVED GRADING PLANS AND SPECIFICATIONS,

THE BUILDING CODE, ALL GRADING PERMIT CONDITIONS, AND ALL OTHER APPLICABLE ORDINANCES AND REQUIREMENTS. THIS FORM IS AVAILABLE AT THE FOLLOWING WEBSITE HTTP://DPW.LACOUNTY.GOV/BSO/DG/DEFAULT.ASPX. "REPORT OF GRADING ACTIVITIES" MAY BE SCANNED AND UPLOADED AT THE WEBSITE OR FAXED TO (310) 530-5482. FAILURE TO PROVIDE REQUIRED INSPECTION REPORTS WILL RESULT IN A "STOP WORK ORDER."
18. ALL GRADED SITES MUST HAVE DRAINAGE SWALES, BERMS, AND OTHER DRAINAGE DEVICES INSTALLED PRIOR TO ROUGH GRADING APPROVAL PER SECTION J105.7 OF THE COUNTY OF LOS ANGELES BUILDING CODE.
19. THE GRADING CONTRACTOR SHALL SUBMIT THE STATEMENT TO THE GRADING INSPECTOR AS REQUIRED BY SECTION J105.12 OF THE COUNTY OF LOS ANGELES BUILDING CODE AT THE COMPLETION OF ROUGH GRADING.
20. FINAL GRADING MUST BE APPROVED BEFORE OCCUPANCY OF BUILDINGS WILL BE ALLOWED PER SECTION J105 OF THE COUNTY OF LOS ANGELES BUILDING CODE.

DRAINAGE NOTES

- 21. PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.
22. ALL STORM DRAIN WORK IS TO BE DONE UNDER CONTINUOUS INSPECTION BY THE FIELD ENGINEER. STATUS REPORTS REQUIRED UNDER NOTE 18 AND SECTION J105.11 OF THE COUNTY OF LOS ANGELES BUILDING CODE SHALL INCLUDE INSPECTION INFORMATION AND REPORTS ON THE STORM DRAIN INSTALLATION.

AGENCY NOTES

- 23. ALL CONSTRUCTION/DEMOLITION, GRADING, AND STORAGE OF BULK MATERIALS MUST COMPLY WITH THE LOCAL AQMD RULE 403 FOR FUGITIVE DUST. INFORMATION ON RULE 403 IS AVAILABLE AT AQMD'S WEBSITE HTTP://WWW.AVAQMD.COM.

GENERAL GEOTECHNICAL NOTES

- 24. ALL WORK MUST BE IN COMPLIANCE WITH THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL CONSULTANT'S REPORT(S) AND THE APPROVED GRADING PLANS AND SPECIFICATIONS.
25. GRADING OPERATIONS MUST BE CONDUCTED UNDER PERIODIC INSPECTIONS BY THE GEOTECHNICAL CONSULTANTS WITH MONTHLY INSPECTION REPORTS TO BE SUBMITTED TO THE GEOLOGY AND SOILS SECTION. (900 S. FREMONT, ALHAMBRA CA 91803 - 3RD FLOOR)
26. THE SOIL ENGINEER SHALL PROVIDE SUFFICIENT INSPECTIONS DURING THE PREPARATION OF THE NATURAL GROUND AND THE PLACEMENT AND COMPACTION OF THE FILL TO BE SATISFIED THAT THE WORK IS BEING PERFORMED IN ACCORDANCE WITH THE PLAN AND APPLICABLE CODE REQUIREMENTS.
27. ROUGH GRADING MUST BE APPROVED BY A FINAL ENGINEERING GEOLOGY AND SOILS ENGINEERING REPORT. AN AS-BUILT GEOLOGIC MAP MUST BE INCLUDED IN THE FINAL GEOLOGY REPORT. PROVIDE A FINAL REPORT STATEMENT THAT VERIFIES WORK WAS DONE IN ACCORDANCE WITH REPORT RECOMMENDATIONS AND CODE PROVISIONS (SECTION J105.12 OF THE COUNTY OF LOS ANGELES BUILDING CODE). THE FINAL REPORT(S) MUST BE SUBMITTED TO THE GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION FOR REVIEW AND APPROVAL.

FILL NOTES

- 28. ALL FILL SHALL BE COMPACTED TO THE FOLLOWING MINIMUM RELATIVE COMPACTION CRITERIA:
28.1. 90 PERCENT OF MAXIMUM DRY DENSITY WITHIN 40 FEET BELOW FINISH GRADE. THE RELATIVE COMPACTION SHALL BE DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D1557-91 WHERE APPLICABLE: WHERE NOT APPLICABLE, A TEST ACCEPTABLE TO THE BUILDING OFFICIAL SHALL BE USED. (SECTION J107.5 OF THE COUNTY OF LOS ANGELES BUILDING CODE.)
28.2. 95 PERCENT OF MAXIMUM DRY DENSITY IS REQUIRED FOR ALL FIRE LANES UNLESS OTHERWISE APPROVED BY THE FIRE DEPARTMENT.
29. FIELD DENSITY SHALL BE DETERMINED BY A METHOD ACCEPTABLE TO THE BUILDING OFFICIAL. (SECTION J107.5 OF THE COUNTY OF LOS ANGELES BUILDING CODE.) HOWEVER, NOT LESS THAN 10% OF THE REQUIRED DENSITY TEST, UNIFORMLY DISTRIBUTED, AND SHALL BE OBTAINED BY THE SAND CONE METHOD.
30. SUFFICIENT TESTS OF THE FILL SOILS SHALL BE MADE TO DETERMINE THE RELATIVE COMPACTION OF THE FILL IN ACCORDANCE WITH THE FOLLOWING MINIMUM GUIDELINES:
30.1. ONE TEST FOR EACH TWO-FOOT VERTICAL LIFT.
30.2. ONE TEST FOR EACH 1,000 CUBIC YARDS OF MATERIAL PLACED.
30.3. ONE TEST AT THE LOCATION OF THE FINAL FILL SLOPE FOR EACH BUILDING SITE (LOT) IN EACH FOUR-FOOT VERTICAL LIFT OR PORTION THEREOF.
30.4. ONE TEST IN THE VICINITY OF EACH BUILDING PAD FOR EACH FOUR-FOOT VERTICAL LIFT OR PORTION THEREOF.
31. SUFFICIENT TESTS OF FILL SOILS SHALL BE MADE TO VERIFY THAT THE SOIL PROPERTIES COMPLY WITH THE DESIGN REQUIREMENTS, AS DETERMINED BY THE SOIL ENGINEER INCLUDING SOIL TYPES, SHEAR STRENGTHS PARAMETERS AND CORRESPONDING UNIT WEIGHTS IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:
31.1. PRIOR AND SUBSEQUENT TO PLACEMENT OF THE FILL, SHEAR TESTS SHALL BE TAKEN ON EACH TYPE OF SOIL OR SOIL MIXTURE TO BE USED FOR ALL FILL SLOPES STEEPER THAN THREE (3) HORIZONTAL TO ONE VERTICAL.
31.2. SHEAR TEST RESULTS FOR THE PROPOSED FILL MATERIAL MUST MEET OR EXCEED THE DESIGN VALUES USED IN THE GEOTECHNICAL REPORT TO DETERMINE SLOPE STABILITY REQUIREMENTS. OTHERWISE, THE SLOPE MUST BE REEVALUATED USING THE ACTUAL SHEAR TEST VALUE OF THE FILL MATERIAL THAT IS IN PLACE.
31.3. FILL SOILS SHALL BE FREE OF DELETERIOUS MATERIALS.
32. FILL SHALL NOT BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND INSTALLATION OF SUBDRAIN (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOIL ENGINEER. THE BUILDING OFFICIAL MAY REQUIRE A "STANDARD TEST METHOD FOR MOISTURE, ASH, ORGANIC MATTER, PEAT OR OTHER ORGANIC SOILS" ASTM D-2974-87 ON ANY SUSPECT MATERIAL. DETRIMENTAL AMOUNTS OF ORGANIC MATERIAL SHALL NOT BE PERMITTED IN FILLS. SOIL CONTAINING SMALL AMOUNTS OF ROOTS MAY BE ALLOWED PROVIDED THAT THE ROOTS ARE IN A QUANTITY AND DISTRIBUTED IN A MANNER THAT WILL NOT BE DETRIMENTAL TO THE FUTURE USE OF THE SITE AND THE SOILS ENGINEER APPROVES THE USE OF SUCH MATERIAL.
33. ROCK OR SIMILAR MATERIAL GREATER THAN 12 INCHES IN DIAMETER SHALL NOT BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE SOIL ENGINEER AND APPROVED IN ADVANCE BY THE BUILDING OFFICIAL. LOCATION, EXTENT, AND ELEVATION OF ROCK DISPOSAL AREAS MUST BE SHOWN ON AN "AS BUILT" GRADING PLAN.
34. CONTINUOUS INSPECTION BY THE SOIL ENGINEER, OR A RESPONSIBLE REPRESENTATIVE, SHALL BE PROVIDED DURING ALL SUBDRAIN INSTALLATION. (SECTION J107.2 OF THE COUNTY OF LOS ANGELES BUILDING CODE)
35. ALL SUBDRAIN OUTLETS ARE TO BE SURVEYED FOR LINE AND ELEVATION. SUBDRAIN INFORMATION MUST BE SHOWN ON AN "AS BUILT" GRADING PLAN.
36. FILL SLOPES IN EXCESS OF 2:1 STEEPNESS RATIO ARE TO BE CONSTRUCTED BY THE PLACEMENT OF SOIL AT SUFFICIENT DISTANCE BEYOND THE PROPOSED FINISH SLOPE TO ALLOW COMPACTION EQUIPMENT TO BE OPERATED AT THE OUTER LIMITS OF THE FINAL SLOPE SURFACE. THE EXCESS FILL IS TO BE REMOVED PRIOR TO COMPLETION OF ROUGH GRADING. OTHER CONSTRUCTION PROCEDURES MAY BE USED WHEN IT IS DEMONSTRATED TO THE SATISFACTION OF THE BUILDING OFFICIAL THAT THE ANGLE OF SLOPE, CONSTRUCTION METHOD AND OTHER FACTORS WILL HAVE EQUIVALENT EFFECT. (SECTION J107.5 OF THE COUNTY OF LOS ANGELES BUILDING CODE.)

BEST MANAGEMENT PRACTICE NOTES

- 1. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
2. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
3. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
9. I CERTIFY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ENSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUBMITTED IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT SUBMITTING FALSE AND/ OR INACCURATE INFORMATION, FAILING TO UPDATE THE ESCP TO REFLECT CURRENT CONDITIONS, OR FAILING TO PROPERLY AND/ OR ADEQUATELY IMPLEMENT THE ESCP MAY RESULT IN REVOCATION OF GRADING AND/ OR OTHER PERMITS OR OTHER SANCTIONS PROVIDED BY LAW."

PRINT NAME THOMAS FISCHETTI
(OWNER OR AUTHORIZED AGENT OF THE OWNER)

SIGNATURE [Signature] DATE 23 JUL 2023
(OWNER OR AUTHORIZED AGENT OF THE OWNER)

THE FOLLOWING Bmps AS OUTLINED IN, BUT NOT LIMITED TO, THE LATEST EDITION OF THE CASQA CONSTRUCTION BMP ONLINE HANDBOOK OR CALTRANS STORMWATER QUALITY HANDBOOKS (CONSTRUCTION SITE BMP MANUAL), MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE PROJECT ENGINEER OR THE BUILDING OFFICIAL)

EROSION CONTROL

- EC1 - SCHEDULING
EC2 - PRESERVATION OF EXISTING VEGETATION
EC3 - HYDRAULIC MULCH
EC4 - HYDROSEEDING
EC5 - SOIL BINDERS
EC6 - STRAW MULCH
EC7 - GEOTEXTILES & MATS
EC8 - WOOD MULCHING
EC9 - EARTH DIKES AND DRAINAGE SWALES
EC10 - VELOCITY DISSIPATION DEVICES
EC11 - SLOPE DRAINS
EC12 - STREAMBANK STABILIZATION
EC13 - RESERVED
EC14 - COMPOST BLANKETS
EC15 - SOIL PREPARATION/ROUGHENING
EC16 - NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL

- SE1 - SILT FENCE
SE2 - SEDIMENT BASIN
SE3 - SEDIMENT TRAP
SE4 - CHECK DAM
SE5 - FIBER ROLLS
SE6 - GRAVEL BAG BERM
SE7 - STREET SWEEPING AND VACUUMING
SE8 - SANDBAG BARRIER
SE9 - STRAW BALE BARRIER
SE10 - STORM DRAIN INLET PROTECTION
SE11 - ACTIVE TREATMENT SYSTEMS
SE12 - TEMPORARY SILT DIKE
SE13 - COMPOST SOCKS & BERMS
SE14 - BIOFILTER BAGS
SE15 - WIND EROSION CONTROL
WE1 - WIND EROSION CONTROL

EQUIPMENT TRACKING CONTROL

- TC1 - STABILIZED CONSTRUCTION ENTRANCE EXIT
TC2 - STABILIZED CONSTRUCTION ROADWAY
TC3 - ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT

- NS1 - WATER CONSERVATION PRACTICES
NS2 - DEWATERING OPERATIONS
NS3 - PAVING AND GRINDING OPERATIONS
NS4 - TEMPORARY STREAM CROSSING
NS5 - CLEAR WATER DIVERSION
NS6 - ILLICIT CONNECTION/DISCHARGE
NS7 - POTABLE WATER/IRRIGATION
NS8 - VEHICLE AND EQUIPMENT CLEANING
NS9 - VEHICLE AND EQUIPMENT FUELING
NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
NS11 - PILE DRIVING OPERATIONS
NS12 - CONCRETE CURING
NS13 - CONCRETE FINISHING

- NS14 - MATERIAL AND EQUIPMENT USE
NS15 - DEMOLITION ADJACENT TO WATER
NS16 - TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL

- WM1 - MATERIAL DELIVERY AND STORAGE
WM2 - MATERIAL USE
WM3 - STOCKPILE MANAGEMENT
WM4 - SPILL PREVENTION AND CONTROL
WM5 - SOLID WASTE MANAGEMENT
WM6 - HAZARDOUS WASTE MANAGEMENT
WM7 - CONTAMINATION SOIL MANAGEMENT
WM8 - CONCRETE WASTE MANAGEMENT
WM9 - SANITARY/SEPTIC WASTE MANAGEMENT
WM10 - LIQUID WASTE MANAGEMENT

The following project information and grading notes as applicable must be shown on all grading plans. PROJECT INFORMATION: (Required on Title Sheet of all Grading Plans)

(General Information)

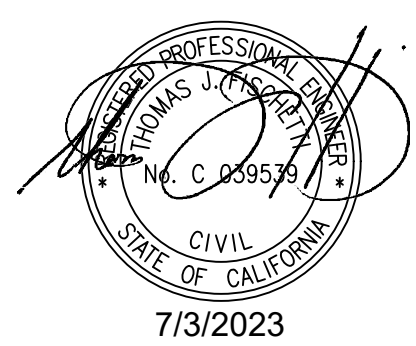
- Grading Permit Application No. GR 20010300008 *
Earthwork Volumes Cut 416.4 (cy), Fill 231.5 (cy) *
Over Excavation/ Alluvial Removal & Compaction 0 (cy) *
Export 416.4 (cy), Export Location: off-site *
Total Disturbed Area 0.08 (Acres) *
Total Proposed Landscape Area 0 Square Feet *
Total Turf Area 0 % (Percent of Total Proposed Landscaping) *
Total Drought Tolerant Landscaping Area 0 % (Percent of Total Proposed Landscaping) *
Pre-Development Impervious area 0.01 (Acres) *
Post-Development Impervious area 0.01 (Acres) *
Waste Discharge Identification Number (WDID #) N/A
Construction & Demolition Debris Recycling and Reuse Plan (RPP ID) *
Post-construction BMP feature(s) GPS coordinates x , y

(Property Information)

- Property Address 13477 Fiji Way, Marina Del Rey, CA 90292 (if exist *)
Tract / Parcel Map No. N/A Lot/Parcel No. 49R
Property Owner County of Los Angeles *
Assessors ID Number(s) AIN 4224010900 *

(Zoning, Regional Planning, and other Agency Information)

- Property Zoning: Specific Plan (SP) *
Intended Land Use: Same as existing *
(For proposed graded areas - i.e. ... Single Family Residence)
Certificate of Compliance: CC NO.
Plot Plan Number: PP NO.
Conditional Use Permit: CUP NO. Expiration Date:
Oak Tree Permit Number: OTP NO. N/A Expiration Date: N/A
Community Standards District: N/A
California Coastal Commission Area: X Yes, No Approved volume: (cy)
Coastal Development Permit CDP 5-11-131 Expiration Date:
Fish & Wildlife, Army Corp of Engineers, Regional Water Control Board, AQMD & Other Agency Permits should be added as applicable. (Permit Number, APOE: SPL-2011-01173-GS, Expiration Date)
Note: Items marked * are required on all grading plans.



BID SET



2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

Table with columns: NO., DATE, REVISION. Includes rows for DESIGNED BY (JTM), DRAWN BY (JTM), CHECKED BY (TJF), and APPROV. BY (JTM).

Table with columns: SHEET (2 of 64), JOB NO. (928-79), SCALE (AS SHOWN), DATE (23 JUL 2023). Includes project title: MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION.

GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE 2021 EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" EXCEPT AS MODIFIED OR SPECIFICALLY NOTED OTHERWISE BY THESE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE JOB SITE CONDITIONS OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS RESPONSIBILITY SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES PER AVAILABLE RECORD DRAWINGS OBTAINED DURING DESIGN. THE CONTRACTOR SHALL CONTACT APPROPRIATE AGENCIES TO OBTAIN REVISED, UPDATED OR AS-BUILT INFORMATION AVAILABLE JUST PRIOR TO CONSTRUCTION.
- AT LEAST SEVEN (7) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE REGIONAL NOTIFICATION CENTER (UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA U.S.A. AT 1-800-422-4133) TO OBTAIN AN INQUIRY IDENTIFICATION NUMBER AND TO REQUEST THE UTILITY OWNERS TO MARK OR OTHERWISE INDICATE THE LOCATION OF THEIR SUBSURFACE FACILITIES. THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DEPTH OF ALL UTILITIES, INCLUDING ALL SERVICE CONNECTIONS, WHICH HAVE BEEN MARKED BY THE RESPECTIVE OWNERS AND WHICH MAY AFFECT OR BE AFFECTED BY ITS OPERATIONS. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL UTILITIES AND ALL STRUCTURES FOUND AT THE SITE.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO STARTING WORK SO THAT INSPECTION CAN BE PROVIDED.
- THE CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS SHOWN WHEN IT IS OBVIOUS THAT UNKNOWN CONDITIONS AND/OR OBJECTS EXIST THAT MAY NOT HAVE BEEN KNOWN DURING THE PREPARATION OF THESE PLANS AND BROUGHT TO THE ATTENTION OF THE COUNTY. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- SITE ACCESS IS LIMITED. THE CONTRACTOR SHALL VERIFY ACCESSIBILITY AND MAKE ALLOWANCES IN HIS BID FOR REQUIRED CONSTRUCTION EQUIPMENT AND MATERIALS.
- ALL CURVES TO BE SMOOTH AND CONTINUOUS.
- CONTRACTOR TO MAKE MINOR ADJUSTMENTS FROM PLANS AS REQUIRED TO INSURE ALIGNMENT WITH WALL, CURBS, ENTRIES, FENCING, CURVES, ETC. AT NO ADDITIONAL EXPENSE TO THE COUNTY. ALL ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- ALL MANUFACTURED EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS, AND/OR SPECIFICATIONS UNLESS OTHERWISE INDICATED. CONTRACTOR TO SUBMIT MANUFACTURER'S RECOMMENDATIONS, AND/OR SPECIFICATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENFORCEMENT OF SAFETY MEASURES AND REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS AND REGULATIONS.
- UPON COMPLETION OF EACH DAY'S WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE WORK AREA FREE OF HAZARDS AND SHALL PROVIDE ALL NECESSARY TEMPORARY SIGNS, WARNING DEVICES, AND BARRICADES.
- THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. THE CONTRACTOR SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING, SPRINKLING WITH WATER, USING DUST FENCES, OR OTHER METHODS AS DIRECTED BY THE COUNTY THROUGHOUT THE CONSTRUCTION OPERATION.
- THE CONTRACTOR SHALL KEEP ACCURATE, LEGIBLE, AND STRICT RECORDS OF ALL CHANGES OF WORK WHICH OCCUR DURING CONSTRUCTION ON A SET OF PROJECT PRINTS. PRIOR TO FINAL ACCEPTANCE, OF THE PROJECT, THE CONTRACTOR SHALL DELIVER AN APPROVED SET OF CERTIFIED "AS-BUILT" PLANS TO THE COUNTY.
- ANY AND ALL DAMAGE CAUSED TO COUNTY FACILITIES, PUBLIC STREETS INCLUDING HAUL ROUTES, OR PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR TO THE ENGINEER'S SATISFACTION.

PERMIT REQUIREMENTS:

- THE CONTRACTOR SHALL FULLY COMPLY WITH ALL OF THE REQUIREMENTS IN SECTION 1000.3 OF THE SPECIAL PROVISIONS OF THESE CONTRACT DOCUMENTS.
- IN ACCORDANCE WITH SPECIAL CONDITION NO. 3 OF COASTAL DEVELOPMENT PERMIT NO 5-11-131, THE COUNTY SHALL CONDUCT ALL EEL GRASS SURVEYS AS REQUIRED.
- PER SPECIAL CONDITION NO. 2 OF COASTAL DEVELOPMENT PERMIT NO. 5-11-131, THE COUNTY SHALL PERFORM A PRE-CONSTRUCTION CAULERPA TAXIFOLIA SURVEY OF THE PROJECT SITE. THE SURVEY SHALL BE PERFORMED NO EARLIER THAN NINETY (90) DAYS AND NO LATER THAN THIRTY (30) DAYS PRIOR TO THE SCHEDULED DATE FOR ISSUANCE OF THE CONTRACTOR'S NOTICE TO PROCEED. CAULERPA HAS NEVER BEEN FOUND IN MARINA DEL REY.
- THE CONTRACT IS ADVISED OF THE SPECIAL CONTRACT REQUIREMENTS, PAYMENT PROVISIONS, AND CONTINGENCY CONTRACT TERMINATION CONDITIONS SPECIFIED IN

SECTION 900-17 OF THESE SPECIAL PROVISIONS THAT SHALL APPLY DURING THE CONDUCT OF THE CAULERPA TAXIFLORA SURVEY, REVIEW OF THE CAULERPA TAXIFLORA SURVEY REPORT, AND IN THE EVENT THAT CAULERPA TAXIFLORA IS FOUND AT THE PROJECT SITE.

- THE CONTRACTOR SHALL INSTALL AND CONTINUOUSLY MAINTAIN AN APPROVED SILT CURTAIN AT ALL TIMES TO CONTAIN TURBIDITY IN CONFORMANCE WITH SPECIAL CONDITION NO. 6 OF COASTAL DEVELOPMENT PERMIT NO 5-11-131. SUBMIT SILT CURTAIN DESIGN TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

NPDES NOTES:

- IN CASE OF EMERGENCY, CALL THE MARINA DEL REY HARBOR PATROL OFFICE PHONE NUMBER AT 310-482-6000.
- SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.
- STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
- FOR THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPs) AS DESCRIBED IN THE BMP FACT SHEETS PUBLISHED BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION'S (CASQA) CONSTRUCTION BMP HANDBOOK AND AS MODIFIED BY ATTACHMENT A OF THE LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD'S CERTIFICATION (FILE NO. 20-061):
 - TEMPORARY EROSION CONTROL EC-1, EC-2, EC-7, WE-1;
 - TEMPORARY SEDIMENT CONTROL SE-5, SE-6, SE-7, SE-8, SE-10
 - TEMPORARY NON-STORMWATER NS-1, NS-2 AS MODIFIED BELOW, NS-3, NS-5, NS-6, NS-8, NS-9, NS-10, NS-11, NS-12, NS-13, NS-14, NS-15;
 - TEMPORARY MATERIALS MANAGEMENT WM-1, WM-2, WM-3, WM-4, WM-5, WM-6, WM-8, WM-9.

BMP NS-2 SHALL BE IMPLEMENTED BY DISCHARGING ALL WATER REMOVED DURING DEWATERING OF THE COFFERDAM INTO AN ADJACENT AREA IMMEDIATELY OUTSIDE OF THE COFFERDAM AND WITHIN A SILT CURTAIN CONTAINMENT SPACE APPROVED BY THE ENGINEER. THE SILT CURTAIN SHALL BE INSTALLED AND MAINTAINED AT ALL TIMES SO THAT ALL SEDIMENT ENTRAINED DURING THE DEWATERING OPERATION SHALL BE COMPLETELY CONTAINED WITHIN THE CONFINED SPACE AND NOT ALLOWED TO FLOW OR MIGRATE INTO VENTURA HARBOR WATERS. AT THE COMPLETION OF THE DEWATERING OPERATION, THE CONTRACTOR SHALL SURVEY THE CONTAINMENT AREA AND REMOVE AND DISPOSE OF ANY SEDIMENT THAT MAY HAVE ACCUMULATED FROM THE DEWATERING DISCHARGES. THE CONTRACTOR SHALL EMPLOY A CERTIFIED HYDROGRAPHIC SURVEYOR TO PERFORM A PRECISION PRE-DEWATERING AND POST-DEWATERING SURVEY OF THE DEWATERING DISCHARGE CONFINEMENT AREA AS THE BASIS FOR DETERMINING THE AMOUNT OF SEDIMENT REMOVAL THAT MAY BE REQUIRED. ADDITIONAL SURVEYS SHALL BE CONDUCTED AS REQUIRED TO VERIFY THAT ACCUMULATED SEDIMENT HAS BEEN REMOVED. THE COST OF PERFORMING ALL SURVEYS, MAPPING RESULTS, AND COMPUTING VOLUME PRISMS SHALL BE AT THE CONTRACTOR'S EXPENSE.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTAMINANT-FREE WATER BEHIND THE COFFERDAM DURING THE ENTIRE DEWATERING OPERATION. NO DISCHARGE OF ANY POLLUTANT INTO MARINA DEL REY HARBOR WATERS SHALL BE ALLOWED.
- FAILURE TO PROPERLY MAINTAIN APPROVED DEWATERING OPERATIONS SHALL BE GROUNDS FOR IMMEDIATE WORK STOPPAGE UNTIL THE OPERATION IS BROUGHT BACK INTO COMPLIANCE.
- ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.
- POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS' ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL DISPOSE OF SUCH MATERIALS IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

- DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED.
- GRADED AREAS SHALL DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE SHALL BE DIRECTED TOWARD DESILTING FACILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
- THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO ONE DUMPS CHEMICALS INTO THE STORM DRAIN SYSTEM OR WATERSHED AT ANYTIME.
- EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
- SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.

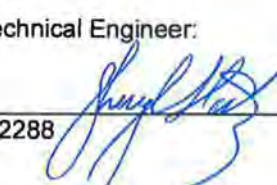
SITE ACCESS


- REPRESENTATIVES OF LOS ANGELES COUNTY, ITS CONSULTANTS, AND THE CALIFORNIA DIVISION OF BOATING AND WATERWAYS SHALL BE ALLOWED ACCESS TO ALL PARTS OF THE CONSTRUCTION SITE AT ANY AND ALL TIMES.

WATER QUALITY BMP AREAS					
TYPE	SUB-TYPE	LOCATION	SUB-LOCATION	AREA [FT ²]	AREA [ACRE]
PERMANENT	NEW	NEW ACCESSIBLE BOARDING FLOAT	FLOATING DOCK	1,392	0.03
			(4) SUBMERGED GUIDE PILES	6	0.00
			x	514	0.01
			NEW ACCESSIBLE GANGWAY (EXCLUDES ARE OVER BOARDING FLOAT)		
	EXISTING (TO BE REPLACED)	NEW CONCRETE ACCESSIBLE GANGWAY PLATFORM	CONCRETE PLATFORM	48	0.00
			(3) PILES	3	0.00
		RAMP	ABOVE MEAN HIGH TIDE LINE	12,551	0.29
			BELOW MEAN HIGH TIDE LINE	11,570	0.27
		BOARDING FLOATS (EXCLUDES AREA OVER RAMP AND SLOPE PROTECTION)	x	2,750	0.06
			(3) BOARDING FLOATS	2,550	0.06
			(12) EXISTING PILES	17	0.00
			(9) NEW PILES	13	0.00
			TOTAL PERMANENT SUBMERGED AT HTL:	14,320	0.33
			¹TOTAL PERMANENT SUBMERGED & PROJECTED ABOVE WATER AT HTL:	18,824	0.43
TEMPORARY	² NET ADDITIONAL RAMP WORK TURBIDITY CURTAIN / COFFERDAM CONTAINED AREA	PHASE 1	1,045	0.02	
		PHASE 2	615	0.01	
	³ NET ADDITIONAL SLOPE PROTECTION WORK TURBIDITY CURTAIN CONTAINED AREA	x	1,089	0.03	
		TOTAL ADDITIONAL TEMPORARY:	2,749	0.06	

¹OVERLAPPING AREAS ARE NOT DOUBLE-COUNTED IN THE TOTAL, SO THE TOTAL IS NOT A DIRECT SUM OF ALL ROWS ABOVE
²AREA OVERLAPS WITH SOME PERMANENT STRUCTURE AREAS, SO ONLY THE NET ADDITIONAL AREA IS INCLUDED HERE
³AREA OVERLAPS WITH TEMPORARY RAMP WORK AND SOME PERMANENT STRUCTURES, SO ONLY THE NET ADDITIONAL AREA IS INCLUDED HERE

This plan has been reviewed by Gorian and Associates, Inc. and appears to be in general conformity with the geotechnical recommendations in our reports dated 4-17-2019, 8-21-2020, and 1-29-2021; Gorian and Associates, Inc., makes no representation as to the accuracy of dimensions, measurements, calculations, or any portion of the design other than geotechnical.

Geotechnical Engineer:
 GE # 2288  Date: June 9, 2021




BID SET

NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION	DESIGNED BY <u>JTM</u>	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET <u>3</u> OF <u>64</u>
			DRAWN BY <u>JTM</u>	GENERAL NOTES	JOB NO. <u>928-79</u>
			CHECKED BY <u>TJF</u>		SCALE <u>AS SHOWN</u>
			APPROV. BY <u>JTM</u>		DATE <u>23 JUL 2023</u>
				MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- X CONTOUR LABEL
- X.XX SURVEY POINT
- ⊙ SURVEY CONTROL

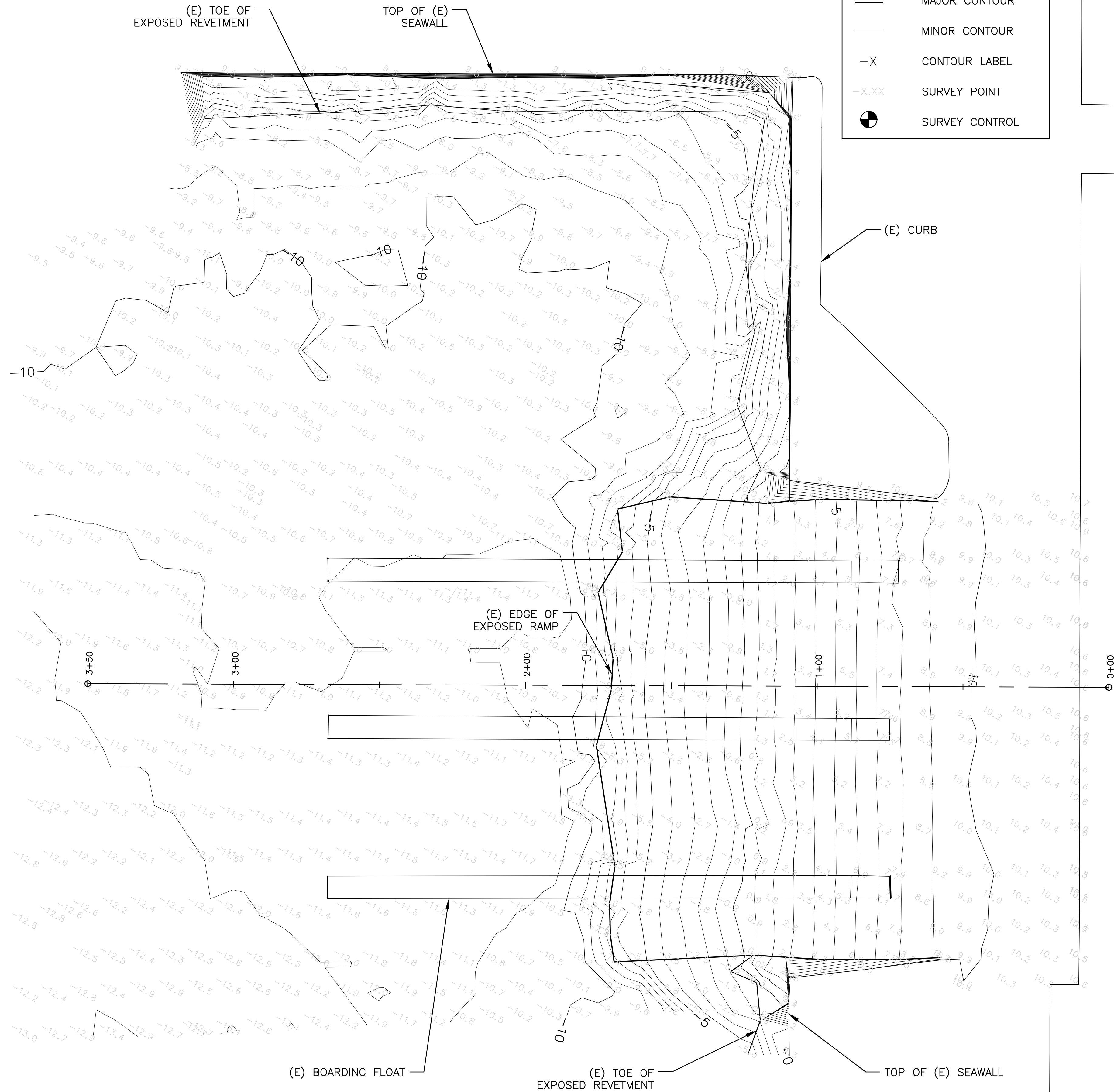
CONTROL				
POINT	NORTHING	EASTING	ELEVATION	
MONUMENT 941 0813 TIDAL 4	1,813,002.50	6,426,533.14	15.09	
AERIAL MARKER POINT #1	1,814,758.86	6,427,131.55	10.43	
AERIAL MARKER #2	1,815,346.98	6,428,150.50	17.97	
AERIAL MARKER POINT #3	1,814,591.53	6,428,672.52	18.73	
AERIAL MARKER POINT #4	1,813,924.50	6,427,670.40	15.60	
AERIAL MARKER POINT #5	1,814,674.93	6,427,957.93	12.16	

NOTES:

1. THIS DRAWING PRESENTS THE RESULTS OF TOPOGRAPHIC AND SINGLE-BEAM BATHYMETRIC SURVEYS CONDUCTED ON NOVEMBER 2 AND 6, 2015.
2. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD 83) STATE PLANE COORDINATE SYSTEM (SSCS), CALIFORNIA ZONE 5 BASED ON NGS MONUMENT 941 0813 TIDAL 4.
3. VERTICAL DATUM: NAVD 88 BASED ON NGS MONUMENT 941 0813 TIDAL 4.
4. CONTOUR INTERVAL IS 1 FOOT.
5. UNITS: US SURVEY FOOT.
6. SEE SHEET 17 FOR BOAT LAUNCH RAMP GRADING PLAN.

ELEVATION INFORMATION FOR SANTA MONICA, CA
TIDE GAUGE STA ID 9410840

HIGHEST OBSERVED (1983)	8.497
MHW	5.423
MHW	4.685
MSL	2.785
NGVD 29	2.649
MLW	0.928
NAVD 88	0.187
MLLW	0.0
LOWEST OBSERVED (1933)	-2.844



BRASS DISK #100
N: 1,814,662.03
E: 6,427,905.27
Z: 11.61

BRASS DISK #99
N: 1,814,609.88
E: 6,427,935.13
Z: 11.51

AERIAL TARGET POINT #5
N: 1,814,674.93
E: 6,427,657.93
Z: 12.16

BRASS DISK #98
N: 1,814,581.30
E: 6,427,951.63
Z: 11.52



BID SET

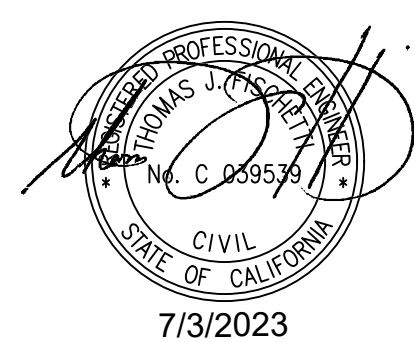
ENGINEER'S/SURVEYOR'S STATEMENT REGARDING THE PRESENCE OF MONUMENTS WITHIN PROJECT LIMITS

I HEREBY ATTEST THAT I HAVE LOCATED AND REFERENCED ON THESE PLANS THE MONUMENTS EXISTING PRIOR TO CONSTRUCTION TO ENSURE PERPETUATION OF THEIR LOCATION IN ACCORDANCE WITH SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE. I FURTHER ATTEST THAT I HAVE PERFORMED A RECORD SEARCH AND FIELD INSPECTION TO IDENTIFY EXISTING MONUMENTS; SHALL SET SUFFICIENT CONTROLLING, WITNESS, AND PERMANENT MONUMENTS; AND SHALL FILE THE REQUISITE CORNER RECORD OR RECORD OF SURVEY OF THE REFERENCES WITH THE COUNTY SURVEYOR.

ENGINEER/SURVEYOR SEAL & SIGNATURE

23 JUL 2023
DATE

1 BATHYMETRIC SURVEY PLAN
4 SCALE: 1" = 20'
0 20 FEET



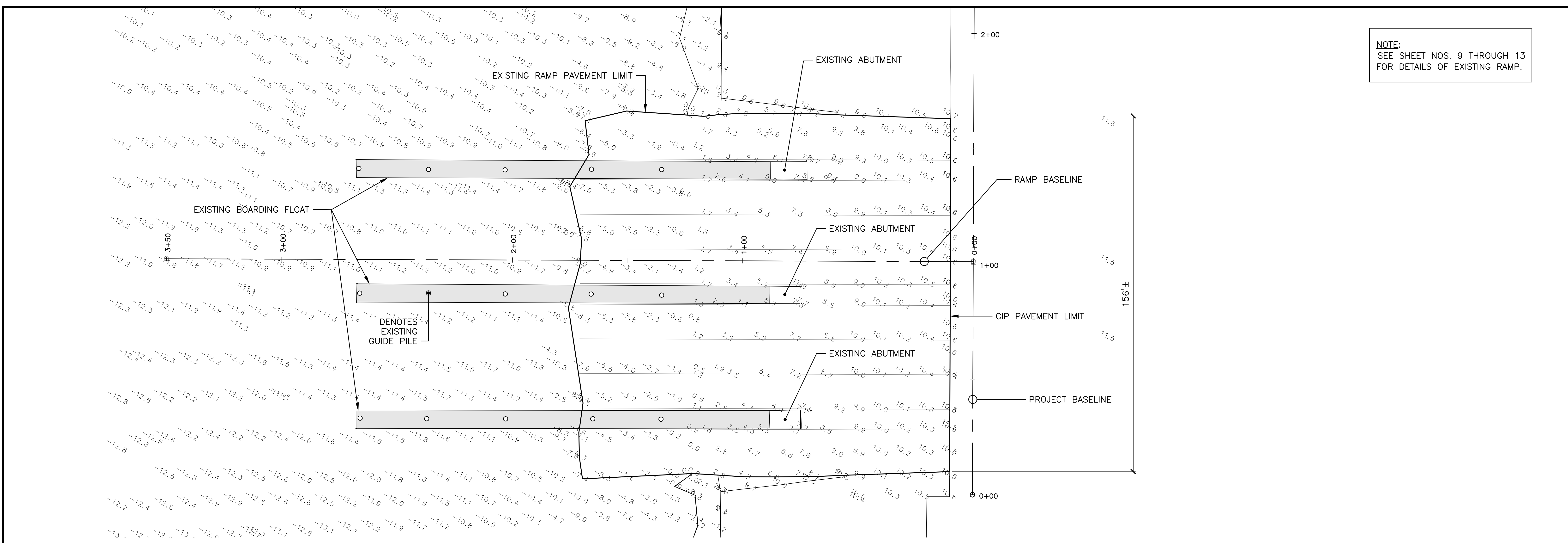
BID SET

NOBLE CONSULTANTS **GEC**

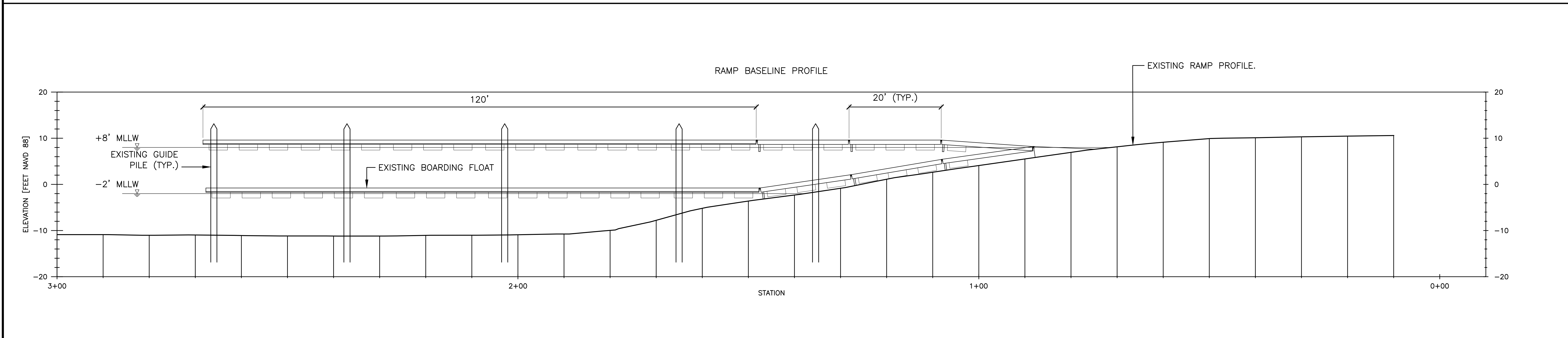
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949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET
			JTM	BATHYMETRIC SURVEY	4 OF 64
			JTM		JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023

NOTE:
SEE SHEET NOS. 9 THROUGH 13
FOR DETAILS OF EXISTING RAMP.



1
5 EXISTING RAMP PLAN
SCALE: 1" = 20'



A
5 EXISTING RAMP PROFILE (TYP.)
SCALE: 1" = 10'



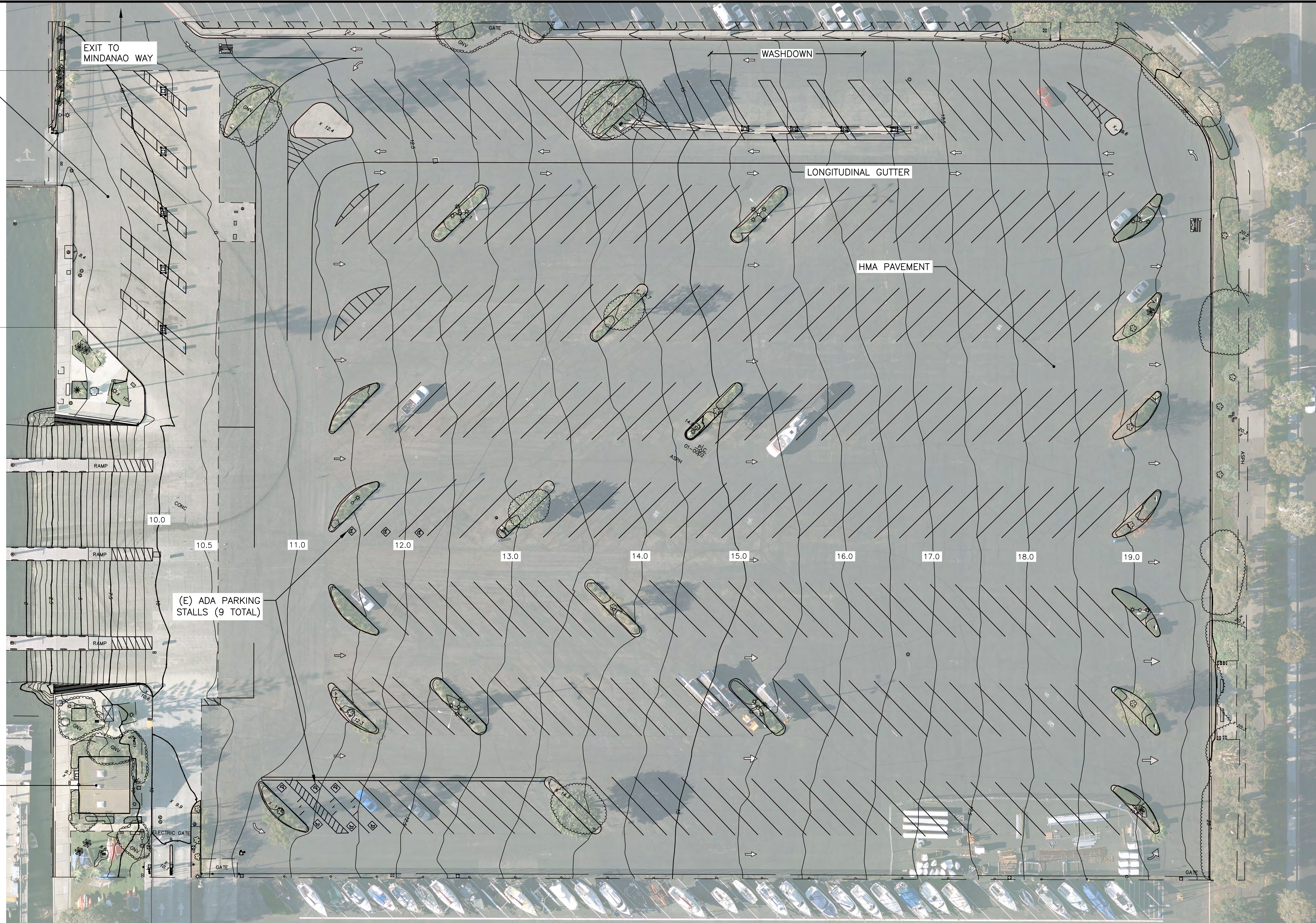
BID SET

NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

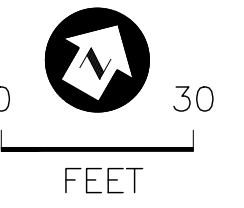
NO.	DATE	REVISION

DESIGNED BY: <u>JTM</u>	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET <u>5</u> OF <u>64</u>
DRAWN BY: <u>JTM</u>	EXISTING RAMP PLAN	JOB NO. <u>928-79</u>
CHECKED BY: <u>TJF</u>		SCALE <u>AS SHOWN</u>
APPROV. BY: <u>JTM</u>	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE <u>23 JUL 2023</u>



ENTRANCE 24'± NOTE: CONTOURS IN FT NAVD88, 0.5 FT INTERVALS

1 EXISTING PARKING LOT PLAN
6 SCALE: 1" = 30'



BID SET

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IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

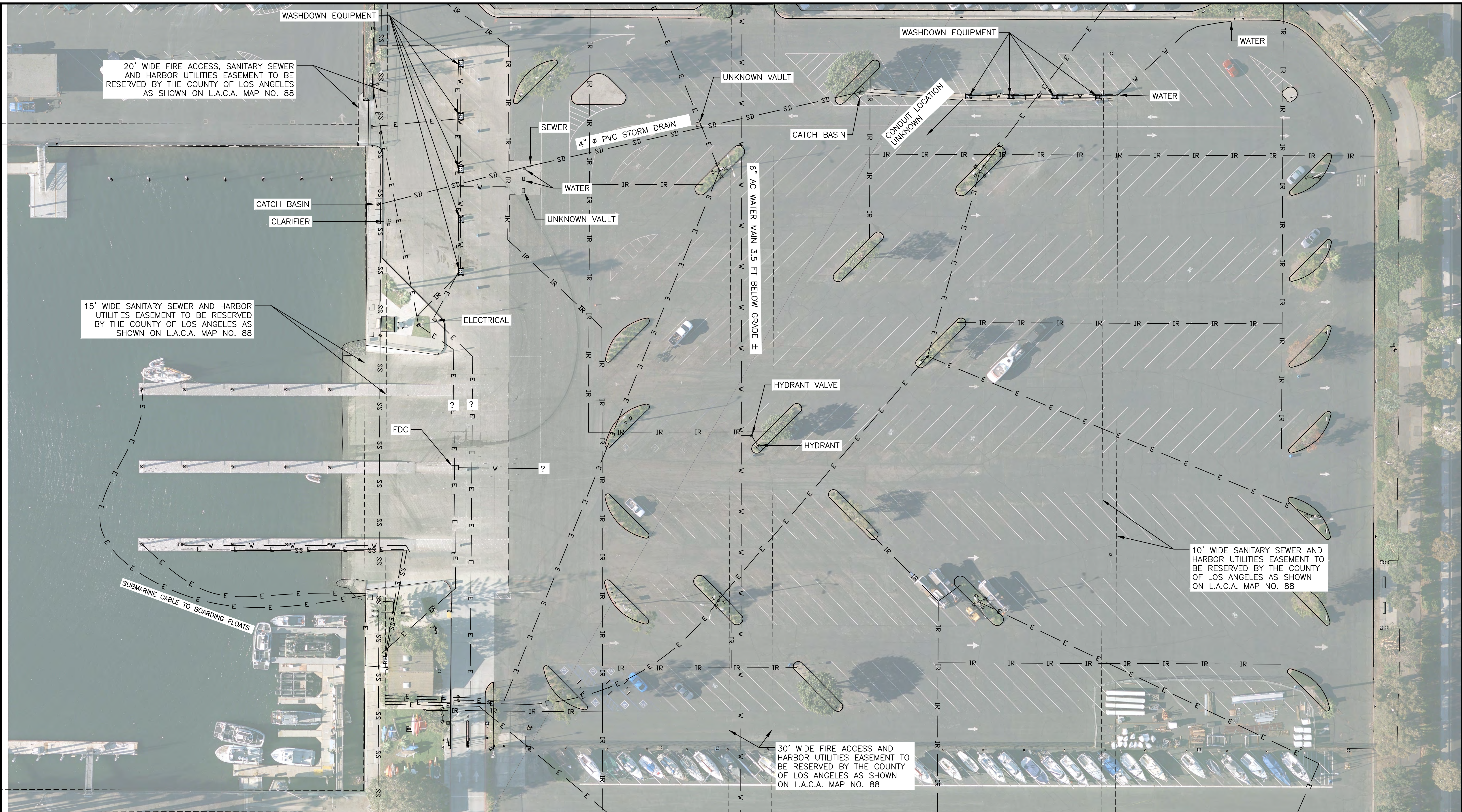
DESIGNED BY JTM
DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

EXISTING PARKING LOT PLAN

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 6 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



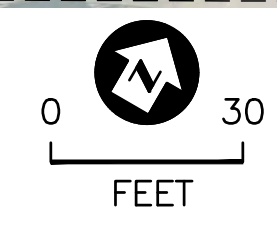
20' WIDE FIRE ACCESS, SANITARY SEWER AND HARBOR UTILITIES EASEMENT TO BE RESERVED BY THE COUNTY OF LOS ANGELES AS SHOWN ON L.A.C.A. MAP NO. 88

15' WIDE SANITARY SEWER AND HARBOR UTILITIES EASEMENT TO BE RESERVED BY THE COUNTY OF LOS ANGELES AS SHOWN ON L.A.C.A. MAP NO. 88

10' WIDE SANITARY SEWER AND HARBOR UTILITIES EASEMENT TO BE RESERVED BY THE COUNTY OF LOS ANGELES AS SHOWN ON L.A.C.A. MAP NO. 88

30' WIDE FIRE ACCESS AND HARBOR UTILITIES EASEMENT TO BE RESERVED BY THE COUNTY OF LOS ANGELES AS SHOWN ON L.A.C.A. MAP NO. 88

1
7 EXISTING UTILITIES PLAN
SCALE: 1" = 30'



NOTES:

1. LOCATION OF UTILITIES SHOWN ARE APPROXIMATE AND BASED UPON LIMITED INFORMATION FROM AVAILABLE COUNTY DESIGN DRAWINGS DATING TO 1966.
2. CONTRACTOR SHALL FIELD-VERIFY LOCATIONS OF WATER SHUTOFF VALVES.
3. UTILITIES SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY AND SEPARATE PERMITS MAY BE REQUIRED.

LEGEND		
— E —	— E —	ELECTRICAL
— IR —	— IR —	IRRIGATION
— SD —	— SD —	STORM DRAIN
— SS —	— SS —	SEWER
— W —	— W —	WATER



BID SET

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IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS		SHEET <u>7</u> OF <u>64</u>
EXISTING UTILITIES PLAN		JOB NO. <u>928-79</u>
		SCALE <u>AS SHOWN</u>
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION		DATE <u>23 JUL 2023</u>



DEMOLITION SCHEDULE

NO.	ITEM
D1	REMOVE AND DISPOSE OF PCC LAUNCH RAMP PAVEMENT SLAB AND FOOTINGS.
D2	REMOVE AND DISPOSE OF PCC ABUTMENTS (3 TOTAL).
D3	REMOVE WASHDOWN EQUIPMENT ENCLOSURES (4), BOLLARDS, AND CURB ISLANDS. CAP WATER SERVICE, TERMINATE ELECTRICAL, AND PROTECT IN (N) PRECAST UTILITY VAULT.
D4	REMOVE WASHDOWN EQUIPMENT ENCLOSURES (5), BOLLARDS, AND CURB ISLANDS. PROTECT WATER AND POWER POINTS OF CONNECTION IN PLACE.
D5	COMPLETELY REMOVE AND DISPOSE ALL (15) PRESTRESSED CONCRETE GUIDE PILES.
D6	REMOVE AND DISPOSE OF (2) 6"Ø STEEL BOLLARDS.
D7	REMOVE AND DISPOSE OF TIMBER BOARDING FLOATS INCLUDING ALL DECKING, STRUCTURAL FRAMING, HARDWARE, PIPE, AND ANCILLARY IMPROVEMENTS AND ATTACHMENTS.
D8	REMOVE AND DISPOSE OF EXISTING CDS STORMWATER TREATMENT UNIT.
D9	CONTRACTOR SHALL REMOVE CONFLICTING AND ABOVE-GRADE PORTION OF SEWER PIPE AND ABANDON REMAINING PIPE IN PLACE. ABANDONED PIPE TO BE GROUT-FILLED. CAP SEWER PIPE CONNECTION AT BUILDING.
D10	CONTRACTOR SHALL REMOVE SIGNAGE FROM (E) PILES AND RE-MOUNT ON (N) PILES AT SAME LOCATIONS WITH SIMILAR METAL STRAPS.
D11	CONTRACTOR SHALL REMOVE AND DISPOSE OF ±185' PORTION OF (E) 42" CHAIN-LINK FENCE, POST, RAIL, AND FABRIC ALONG SEAWALL WITHIN LIMITS SHOWN.
D12	CONTRACTOR SHALL DEMOLISH AND REPLACE APPROX. 620 LINEAL FEET OF RAISED OR DAMAGED PARKING LOT ISLAND CURB AT LOCATIONS SHOWN.
D13	REMOVE AND REPLACE IN KIND (E) CATCH BASIN. ADJUST INLET GRATE TO GRADE.
D14	REMOVE AND REPLACE (E) PCC PAVEMENT AT WASHDOWN AREA.
D15	REMOVE AND REPLACE (E) PCC SIDEWALK AND CURB AT WASHDOWN AREA.
D16	REMOVE AND REPLACE (E) PCC RIBBON GUTTER.
D17	TEMPORARILY REMOVE AND RE-SET BOLLARD AND ELECTRICAL EQUIPMENT
D18	REMOVE AND REPLACE (E) CATCH BASIN

ITEMS TO PROTECT IN PLACE

NO.	ITEM
P1	GUIDE PILES
P2	SEAWALL
P3	FLOATING DOCKS
P4	PCC CURB ISLANDS (WHERE NOT SPECIFICALLY MARKED FOR DEMOLITION AND REPLACEMENT), LANDSCAPING, AND IRRIGATION
P5	LIGHT POLE AND LUMINAIRE
P6	PCC SIDEWALK AND CURB
P7	EXISTING FENCE, GATES, AND ADJACENT PROPERTY
P8	EXISTING FDC VALVE BOX
P9	HYDRANT VALVE
P10	EXISTING WATER AND SEWER VALVE BOXES
P11	EXISTING TREES, LANDSCAPE, AND IRRIGATION
P12	EXISTING RESTROOM
P13	EXISTING ENTRY GATES, PCC PAVEMENT, AND CURB
P14	(2) UTILITY CABLE
P15	(2) BOLLARDS AND GATE ACCESS KEYPAD STAND
P16	VALVE BOX
P17	UTILITY VAULT AND COVER
P18	VALVE BOX AND COVER
P19	CATCH BASIN

ANCHORAGE AREA AVAILABLE FOR TEMPORARY STORAGE OF NEW BOARDING FLOATS. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFELY AND SECURELY MOORING AND ANCHORING FLOATS AND MAINTAINING THEIR TEMPORARY ANCHOR SYSTEM FOR THE DURATION OF CONSTRUCTION UNDER ALL WEATHER, WIND, WAVE, AND CURRENT CONDITIONS. PRIOR TO PERFORMING DOCK WORK SUBMIT TEMPORARY ANCHOR PLAN TO THE PROJECT MANAGER FOR INFORMATION.

INSIDE OF THE PROJECT AREA THERE ARE NO EASEMENTS

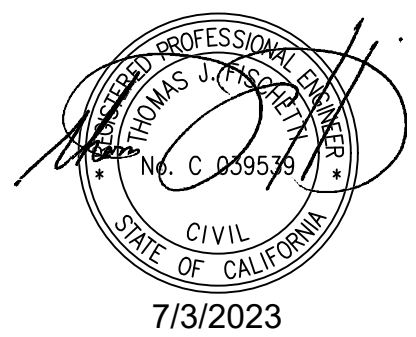
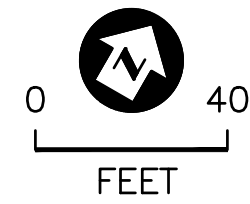
DEMOLITION NOTES:

- CONTRACTOR SHALL PROVIDE SHORING AS REQUIRED TO PREVENT DAMAGE OR MOVEMENT TO STRUCTURES AND IMPROVEMENTS THAT ARE TO REMAIN.
- CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN BARRICADES, GUARD RAILS, AND FENCING TO PROTECT THE GENERAL PUBLIC, WORKERS, AND ADJACENT PROPERTY TO THE SATISFACTION OF THE ENGINEER.
- REMOVE ALL SPECIFIED ITEMS IN THEIR ENTIRETY U.N.O.
- NEAT STRAIGHT LINE SAWCUTS SHALL BE PROVIDED FOR REMOVAL OF EXISTING PAVEMENT. REMOVE EXISTING PAVEMENT AND CURB AS SPECIFIED IN DEMOLITION PLAN.
- REMOVE AND TRANSPORT DEBRIS AND RUBBISH IN A MANNER THAT WILL PREVENT SPILLAGE ON SITE, STREETS, AND ADJACENT AREAS. DEMOLISHED ITEMS AND DEBRIS OTHER THAN SOIL SHALL NOT BE LEFT ON THE JOB SITE FOR MORE THAN THREE DAYS. ALL REMOVED MATERIALS BECOME THE PROPERTY OF THE CONTRACTOR. CONTRACTOR SHALL DISPOSE OF SUCH MATERIALS OFF THE JOB SITE AT CONTRACTOR'S EXPENSE. DISPOSE OF DEBRIS IN ACCORDANCE WITH SPECIFICATIONS.
- REMOVE EXISTING LAUNCH RAMP AND BOARDING FLOATS INCLUDING PILES AND MISCELLANEOUS IMPROVEMENTS AS SPECIFIED IN THIS DEMOLITION PLAN. SEE SHEET NOS. 9, AND 10 FOR APPROXIMATE RAMP LIMITS, AND SEE SHEET NOS. 11, 12, AND 13 FOR EXISTING RAMP SECTIONS AND DETAILS BASED UPON ORIGINAL CONSTRUCTION PLANS.
- SEE SHEET 16 FOR CONSTRUCTION SEQUENCE AND PUBLIC ACCESS TO LAUNCH RAMP REQUIREMENTS DURING CONSTRUCTION.
- SEE SHEET 38 FOR ADDITIONAL PAVEMENT (AC) REMOVAL DETAILS.

LEGEND

- DENOTES LOCATION OF DEMOLITION SCHEDULE ITEM
- DENOTES LOCATION OF PROTECT IN PLACE SCHEDULE ITEM
- PARKING LOT CURB ISLAND TO BE DEMOLISHED AND REPLACED

1 DEMOLITION PLAN
8 SCALE: 1" = 40'



BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 8 OF 64
DRAWN BY: JTM	DEMOLITION PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023

LOS ANGELES COUNTY MARINA DEL REY LAUNCH RAMP & SAILBOAT LAUNCH DOCK RECONSTRUCTION

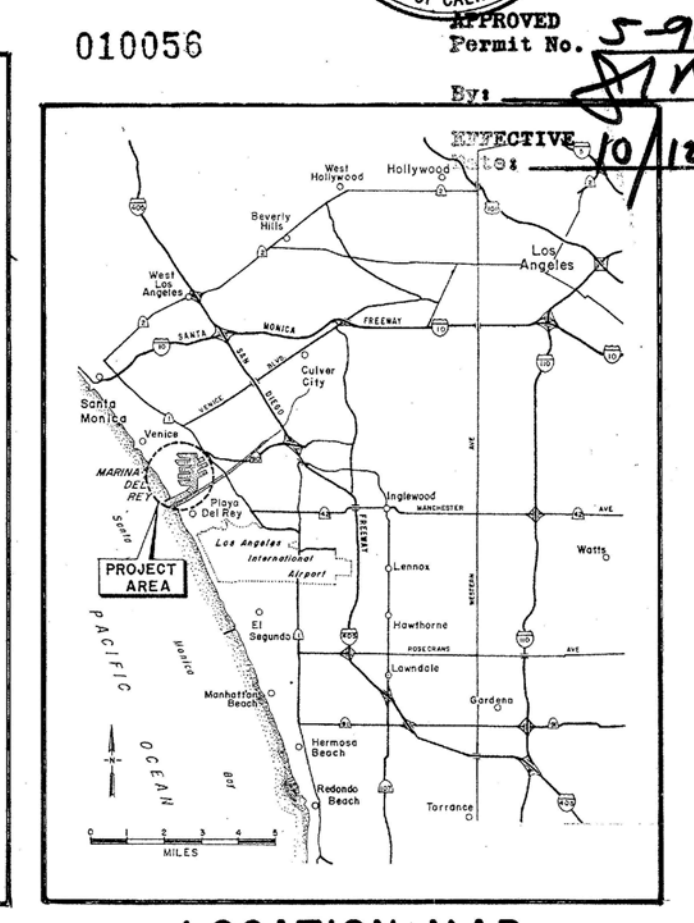
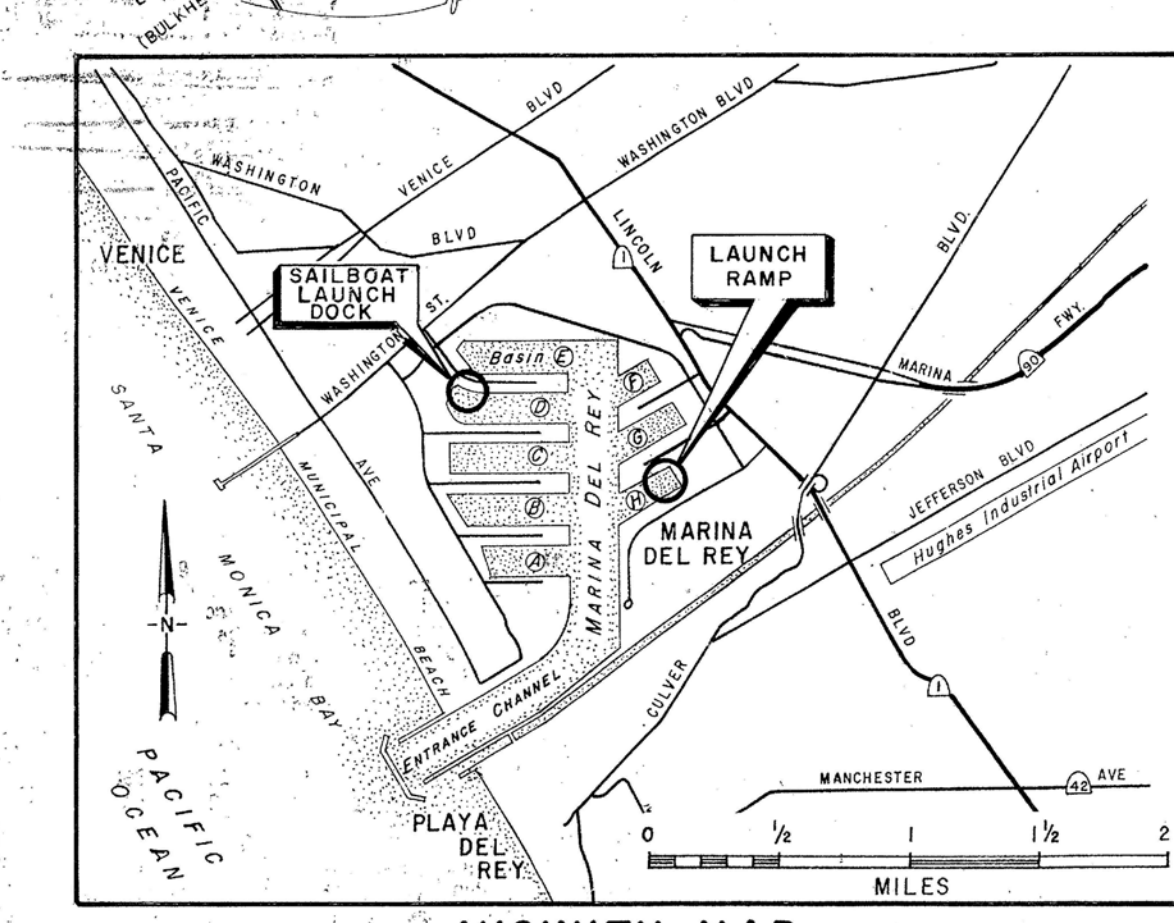
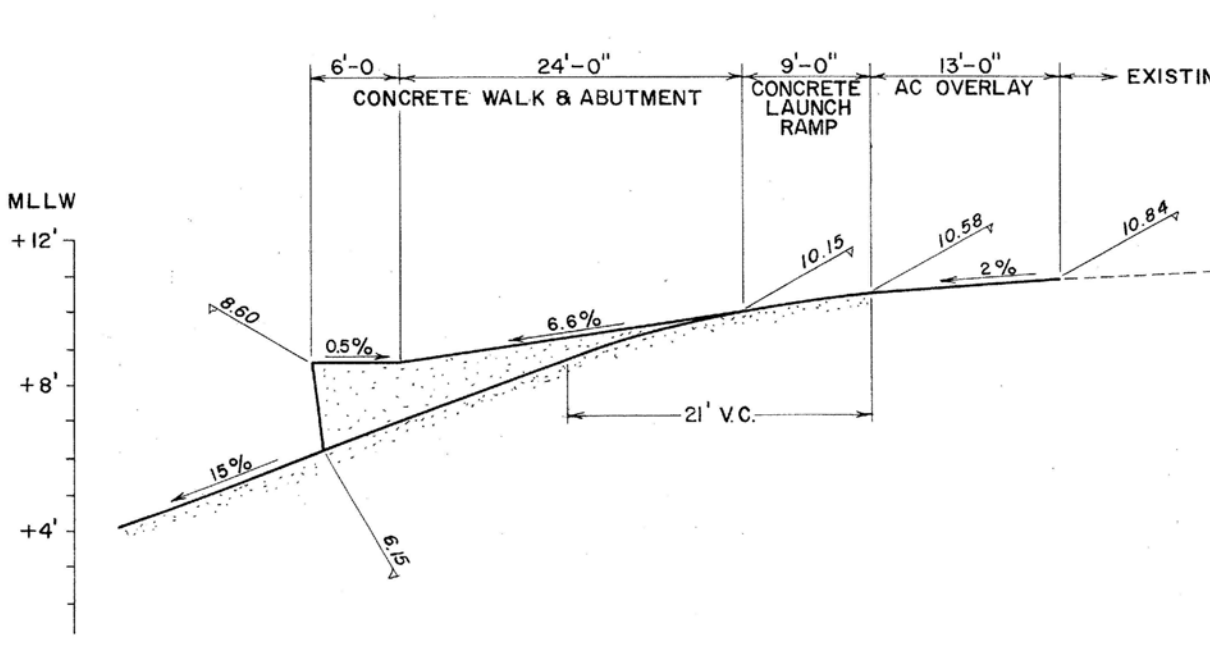
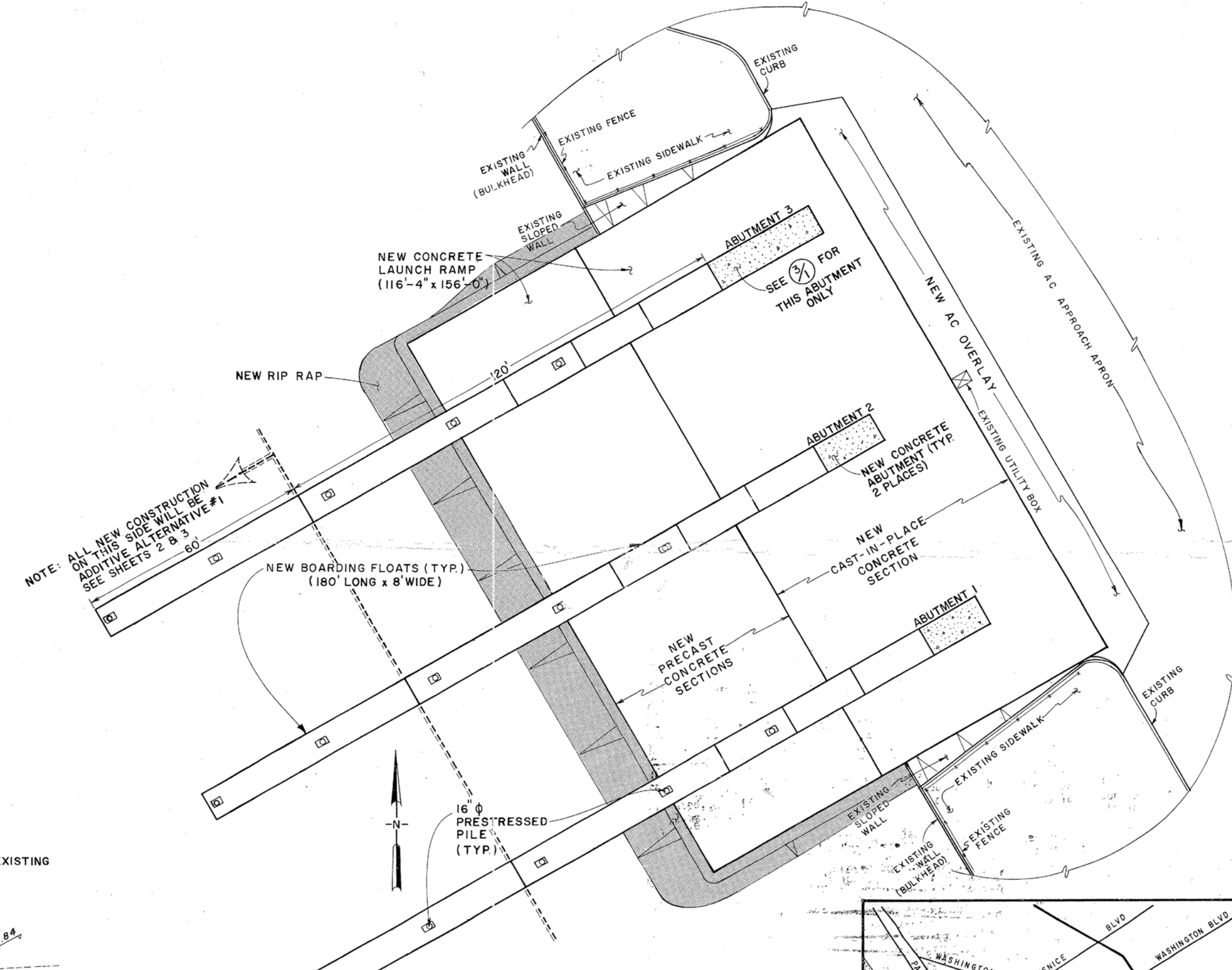
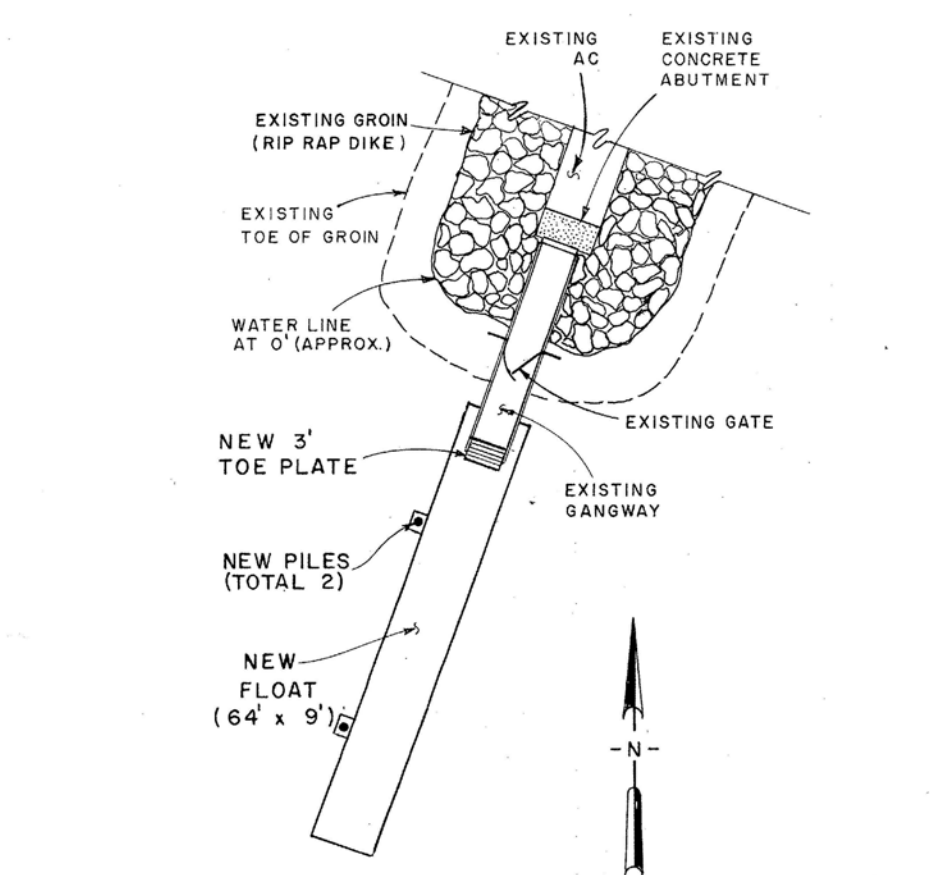
CP 70343
SPEC. 4836 R-1

INDEX OF SHEETS

1. TITLE SHEET
2. LAUNCH RAMP IMPROVEMENT PLAN
3. LAUNCH RAMP PROFILES
4. LAUNCH RAMP SECTIONS
5. BOARDING FLOAT DETAILS
6. SAILBOAT LAUNCH DOCK IMPROVEMENTS

Materials	Specifications
1. Lumber	Douglas Fir, coast region, S4S Dense No. 1, WWPA; kiln dried to a moisture content of less than 19%; pressure treated, AWPJ Standard LP-22 (0.6 PCF) (ACZA).
2. Glulam Timbers	Douglas Fir minimum 16F-V4 Table A-1, ATC 117-79; pressure treated AWPJ Standard LP-22 (0.6 PCF retention) (ACZA).
3. Concrete	4,000 psi or as shown; ACI-301-84, Type II Cement; water/cement ratio 0.45 (per ACI-301-84, 3.4.2).
4. Reinforcing Steel	Section 52, Standard Specifications; grade 60, epoxy coated, per ASTM A-775.
5. Floor Mat	Polystyrene foam core, Federal Specification HH-1-824C, .95 - 1.05 pounds per cubic foot, maximum 10% recycled. Water absorption .10 pounds per cubic foot maximum; foam enclosure rotationally molded cross linked polyethylene, black; thickness, 0.2 inches maximum.
6. Hardware	Hot dip galvanized, ASTM 123, ASTM 153 and 75-1.05 Galvanizing, Cal Trans Standard Specifications (Jan. 1988).

NOTE: Specifications and/or drawings will take precedence over this table. See specifications and/or drawings for complete product requirements and for products not listed here.



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COASTAL COMMISSION
SOUTH COAST DISTRICT

APPROVED
Format No. 5-90-261
BY: [Signature]

DATE	DESCRIPTION	BY	APP.

LOS ANGELES COUNTY
MARINA DEL REY
LAUNCH RAMP & SAILBOAT LAUNCH DOCK RECONSTRUCTION
TITLE SHEET
CP 70343
SPEC. 4836 R-1

010056

CONNMASS
CONSULTING CIVIL ENGINEERS
507 CENTER AVENUE, SUITE 300
MIRAMONTE, CALIFORNIA 91305
(818) 372-8222

BY: JH & KJ
CHECKED: KJ
DATE: 5/22/90
SCALE: AS SHOWN
JOB: 389111
SHEET 1 OF 6

PAVEMENT DEMOLITION NOTES:

1. 1990 CONSTRUCTION PLANS FOR LAUNCH RAMP REHABILITATION INDICATE THAT PRECAST CONCRETE PANELS WERE PLACED UNDER WATER.
2. UNDER WATER DIVER INSPECTION PERFORMED BY HARBOR OFFSHORE, INC. IN 2015 DID NOT CONFIRM THE EXISTENCE OF PRECAST CONCRETE PANELS WITHIN THE EXISTING RAMP PAVEMENT. PAVEMENT APPEARED TO BE CAST-IN-PLACE CONCRETE WITH JOINTING ON AN APPROXIMATE 15-FT BY 15-FT GRID SPACING.
3. THE CONTRACTOR IS REFERRED TO HARBOR OFFSHORE'S INSPECTION REPORT. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING ABOVE WATER AND UNDER WATER CONCRETE RAMP PAVEMENT, AND BE SOLELY RESPONSIBLE TO REMOVE CONCRETE PAVEMENT OF EVERY DESCRIPTION WITHIN THE LIMITS SHOWN.

1 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 1
9 SCALE: AS SHOWN

NOTE:
THIS SHEET PROVIDES DETAILS OF THE EXISTING LAUNCH RAMP'S CONSTRUCTION AS OBTAINED FROM RECORD CONSTRUCTION PLANS. IT IS NOT KNOWN IF ALL DETAILS REPRESENT AS-BUILT CONDITIONS. THIS MATERIAL IS PROVIDED FOR INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY AS NECESSARY PRIOR TO PERFORMING ANY DEMOLITION WORK. DRAWING REDUCED TO 75% OF ORIGINAL SIZE.

SOURCE:
MARINA DEL REY LAUNCH RAMP & LAUNCH DOCK CONSTRUCTION PLANS, CP 70343, SPEC 4836 R-1. PREPARED BY CONNMASS CONSULTING CIVIL ENGINEERS, 22 MAY 1990.

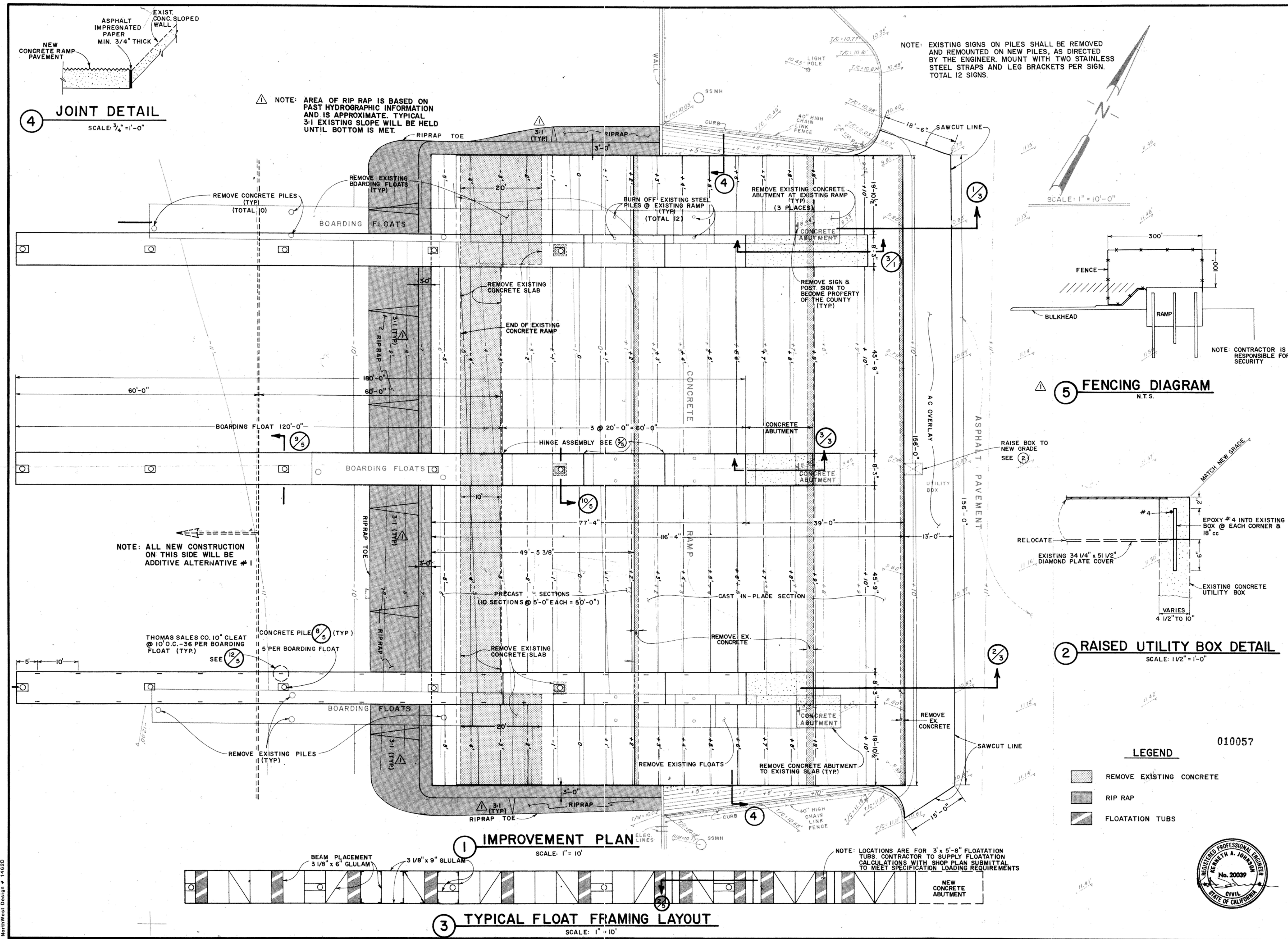


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NOBLE CONSULTANTS **GEC**

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949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION	DESIGNED BY	LOU ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET
			JTM	1990 LAUNCH RAMP RECONSTRUCTION PLAN - 1	9 OF 64
			JTM		JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023



DATE	DESCRIPTION	BY	APP.

LOS ANGELES COUNTY
MARINA DEL REY LAUNCH RAMP RECONSTRUCTION
LAUNCH RAMP IMPROVEMENT PLAN
 CP 70343
 SPEC. 4836
 CALIFORNIA
 MARINA DEL REY

010057

Legend

BY: J B K J
 CHECKED: K J
 DATE: 5/22/90
 SCALE: AS SHOWN
 JOB: 389111

commass
 CONSULTING CIVIL ENGINEERS
 557 CENTER AVENUE, SUITE 300
 IRVINE, CALIFORNIA 92615
 (949) 972-6222

STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER
 No. 20039
 CIVIL
 STATE OF CALIFORNIA

SHEET **2** OF **6**

1 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 2
 10 SCALE: AS SHOWN

NOTE:
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SOURCE:
 MARINA DEL REY LAUNCH RAMP & LAUNCH DOCK CONSTRUCTION PLANS, CP 70343, SPEC 4836 R-1. PREPARED BY COMMASS CONSULTING CIVIL ENGINEERS, 22 MAY 1990.



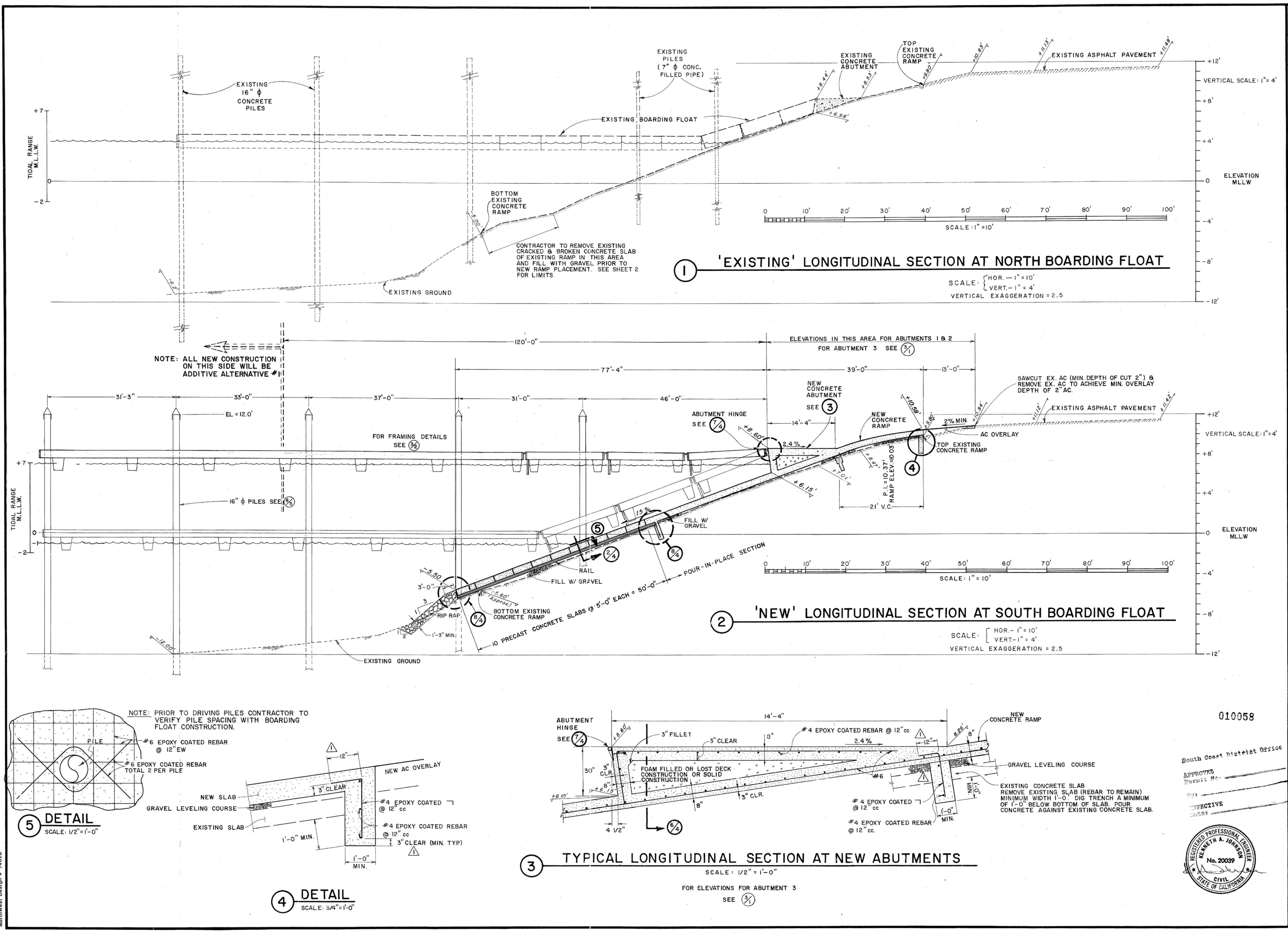
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 949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 10 OF 64
DRAWN BY: JTM	1990 LAUNCH RAMP RECONSTRUCTION PLAN - 2	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



NO.	DATE	DESCRIPTION	BY	APP.

LOS ANGELES COUNTY
MARINA DEL REY LAUNCH RAMP RECONSTRUCTION
LAUNCH RAMP PROFILES
 CP 70343
 SPEC. 4836 R-1
 MARINA DEL REY
 CALIFORNIA

Connmass
 CONSULTING CIVIL ENGINEERS
 2045 CENTURY AVENUE, SUITE 200
 IRVINE, CALIFORNIA 92614
 (949) 372-8222

010058

South Coast Hattelot Office
 APPROVED
 Permit No. _____
 EFFECTIVE DATE _____

BY: JH & KJ
 CHECKED: K.J.
 DATE: 5/22/90
 SCALE: AS SHOWN
 JOB: 38911

3
 OF **6**

1 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 3
 11 SCALE: AS SHOWN

NOTE:
 THIS SHEET PROVIDES DETAILS OF THE EXISTING LAUNCH RAMP'S CONSTRUCTION AS OBTAINED FROM RECORD CONSTRUCTION PLANS. IT IS NOT KNOWN IF ALL DETAILS REPRESENT AS-BUILT CONDITIONS. THIS MATERIAL IS PROVIDED FOR INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY AS NECESSARY PRIOR TO PERFORMING ANY DEMOLITION WORK. DRAWING REDUCED TO 75% OF ORIGINAL SIZE.

SOURCE:
 MARINA DEL REY LAUNCH RAMP & LAUNCH DOCK CONSTRUCTION PLANS, CP 70343, SPEC 4836 R-1. PREPARED BY CONNMASS CONSULTING CIVIL ENGINEERS, 22 MAY 1990.



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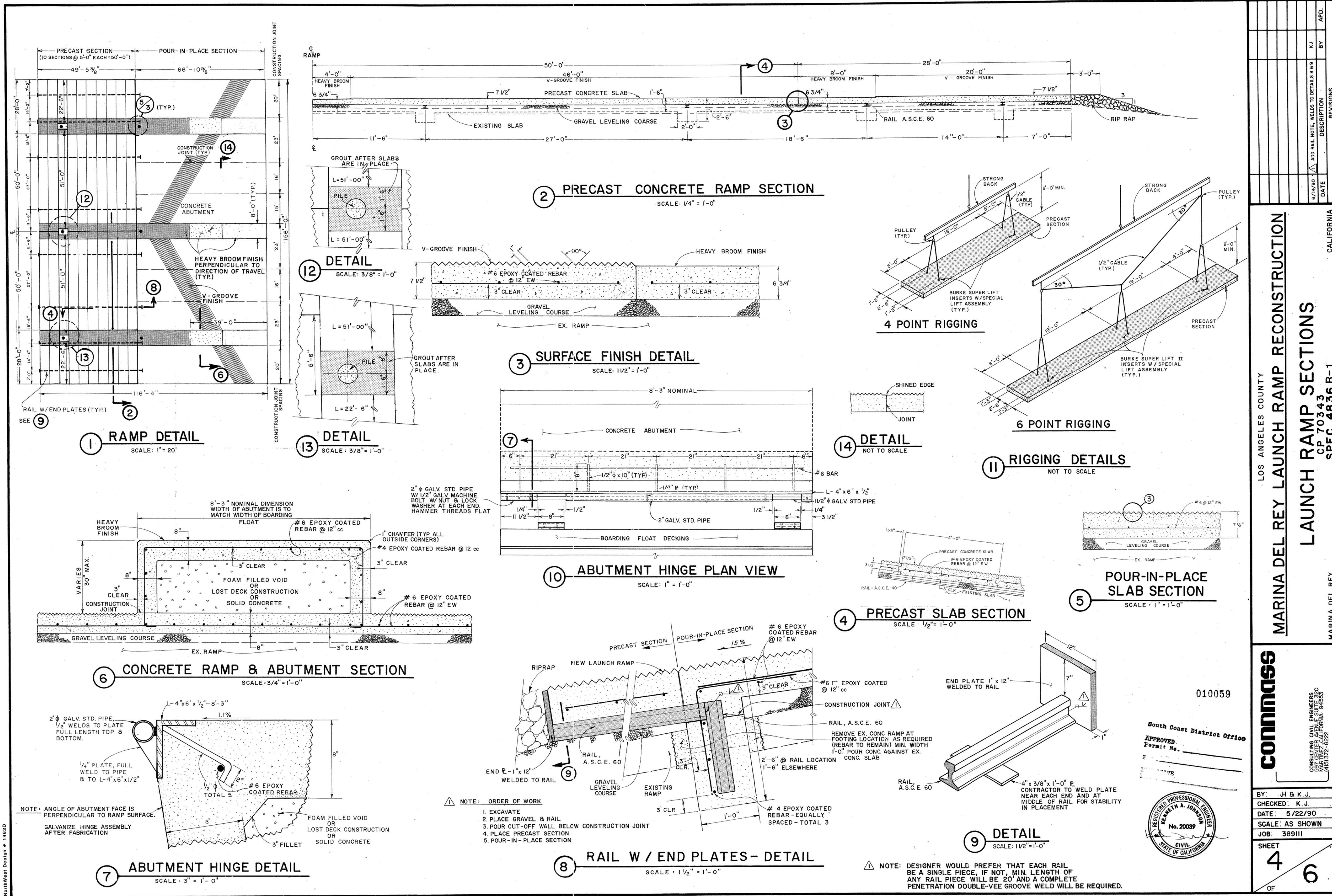
2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: **JTM**
 DRAWN BY: **JTM**
 CHECKED BY: **TJF**
 APPROV. BY: **JTM**

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 3
 MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET **11** OF **64**
 JOB NO. **928-79**
 SCALE **AS SHOWN**
 DATE **23 JUL 2023**



1 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 4
12 SCALE: AS SHOWN

NOTE:
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SOURCE:
MARINA DEL REY LAUNCH RAMP & LAUNCH DOCK CONSTRUCTION PLANS, CP 70343, SPEC 4836 R-1. PREPARED BY CONNMASS CONSULTING CIVIL ENGINEERS, 22 MAY 1990.



BID SET



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949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY **JTM**
DRAWN BY **JTM**
CHECKED BY **TJF**
APPROV. BY **JTM**

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
1990 LAUNCH RAMP RECONSTRUCTION PLAN - 4
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

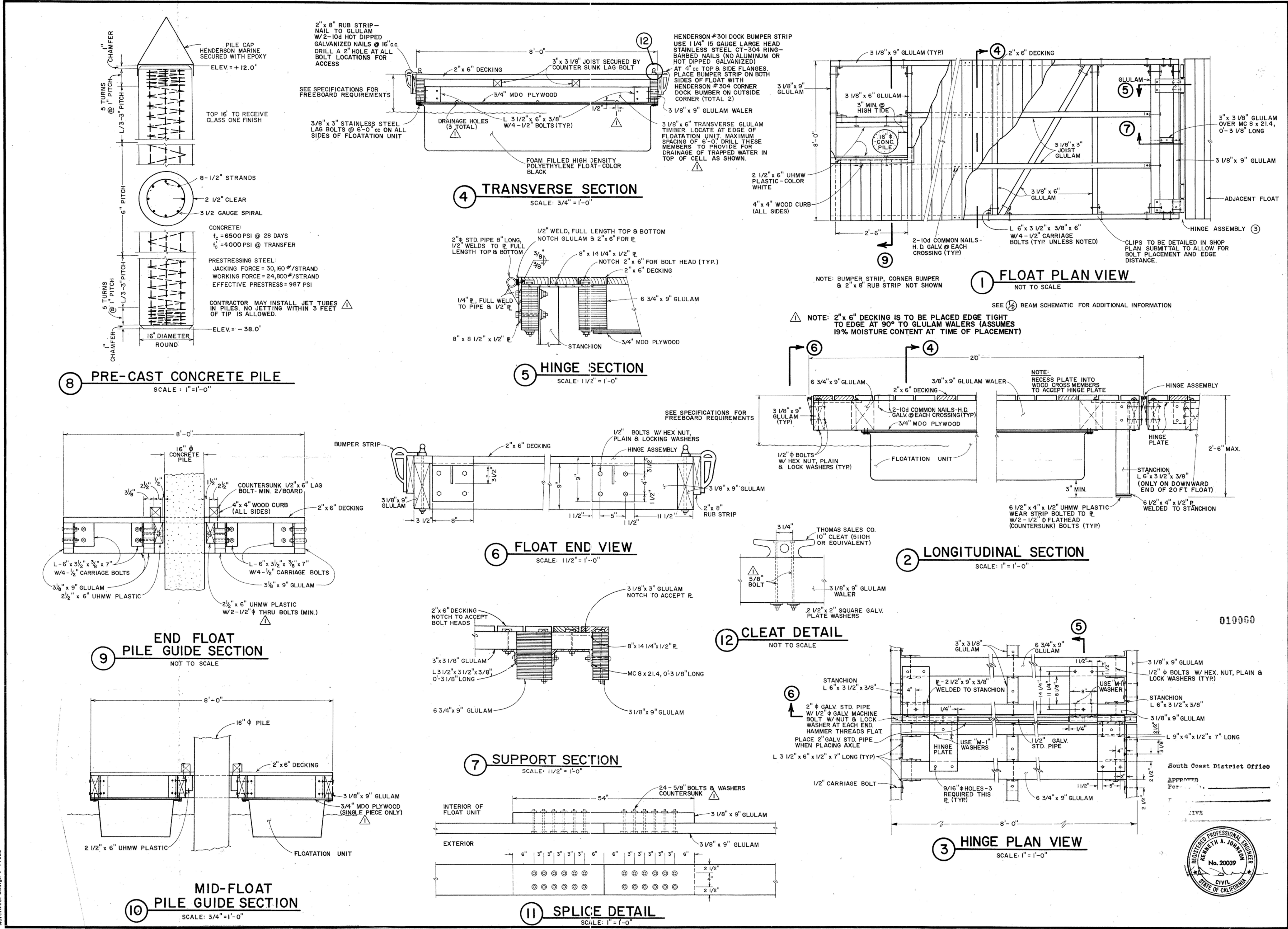
SHEET **12** OF **64**
JOB NO. **928-79**
SCALE **AS SHOWN**
DATE **23 JUL 2023**

LOS ANGELES COUNTY
MARINA DEL REY LAUNCH RAMP RECONSTRUCTION
LAUNCH RAMP SECTIONS
CP 70343
SPEC. 4836 R-1

CONNMASS
CONSULTING CIVIL ENGINEERS
5977 CENTER AVENUE, SUITE 330
IRVINE, CALIFORNIA 92618
PH: 949-752-1530
FAX: 949-752-8381

010059
South Coast District Office
APPROVED Form No. _____
DATE: 5/22/90
SCALE: AS SHOWN
JOB: 389111
SHEET **4** OF **6**

BY: JH & KJ
CHECKED: K.J.
DATE: 5/22/90
SCALE: AS SHOWN
JOB: 389111
SHEET 4 OF 6



8 PRE-CAST CONCRETE PILE
SCALE: 1"=1'-0"

4 TRANSVERSE SECTION
SCALE: 3/4"=1'-0"

5 HINGE SECTION
SCALE: 1/2"=1'-0"

1 FLOAT PLAN VIEW
NOT TO SCALE

6 FLOAT END VIEW
SCALE: 1/2"=1'-0"

2 LONGITUDINAL SECTION
SCALE: 1"=1'-0"

9 END FLOAT PILE GUIDE SECTION
NOT TO SCALE

12 CLEAT DETAIL
NOT TO SCALE

10 MID-FLOAT PILE GUIDE SECTION
SCALE: 3/4"=1'-0"

7 SUPPORT SECTION
SCALE: 1/2"=1'-0"

11 SPLICE DETAIL
SCALE: 1"=1'-0"

3 HINGE PLAN VIEW
SCALE: 1"=1'-0"

1 1990 LAUNCH RAMP RECONSTRUCTION PLAN - 5
13 SCALE: AS SHOWN

NOTE:
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SOURCE:
MARINA DEL REY LAUNCH RAMP & LAUNCH DOCK CONSTRUCTION PLANS, CP 70343, SPEC 4836 R-1. PREPARED BY CONNMASS CONSULTING CIVIL ENGINEERS, 22 MAY 1990.



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NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY	JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	13	OF	64
DRAWN BY	JTM	1990 LAUNCH RAMP RECONSTRUCTION PLAN - 5	JOB NO.	928-79	SCALE	AS SHOWN
CHECKED BY	TJF		MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE	23 JUL 2023	
APPROV. BY	JTM					

LOS ANGELES COUNTY

CONNMASS

MARINA DEL REY LAUNCH RAMP RECONSTRUCTION

BOARDING FLOAT DETAILS

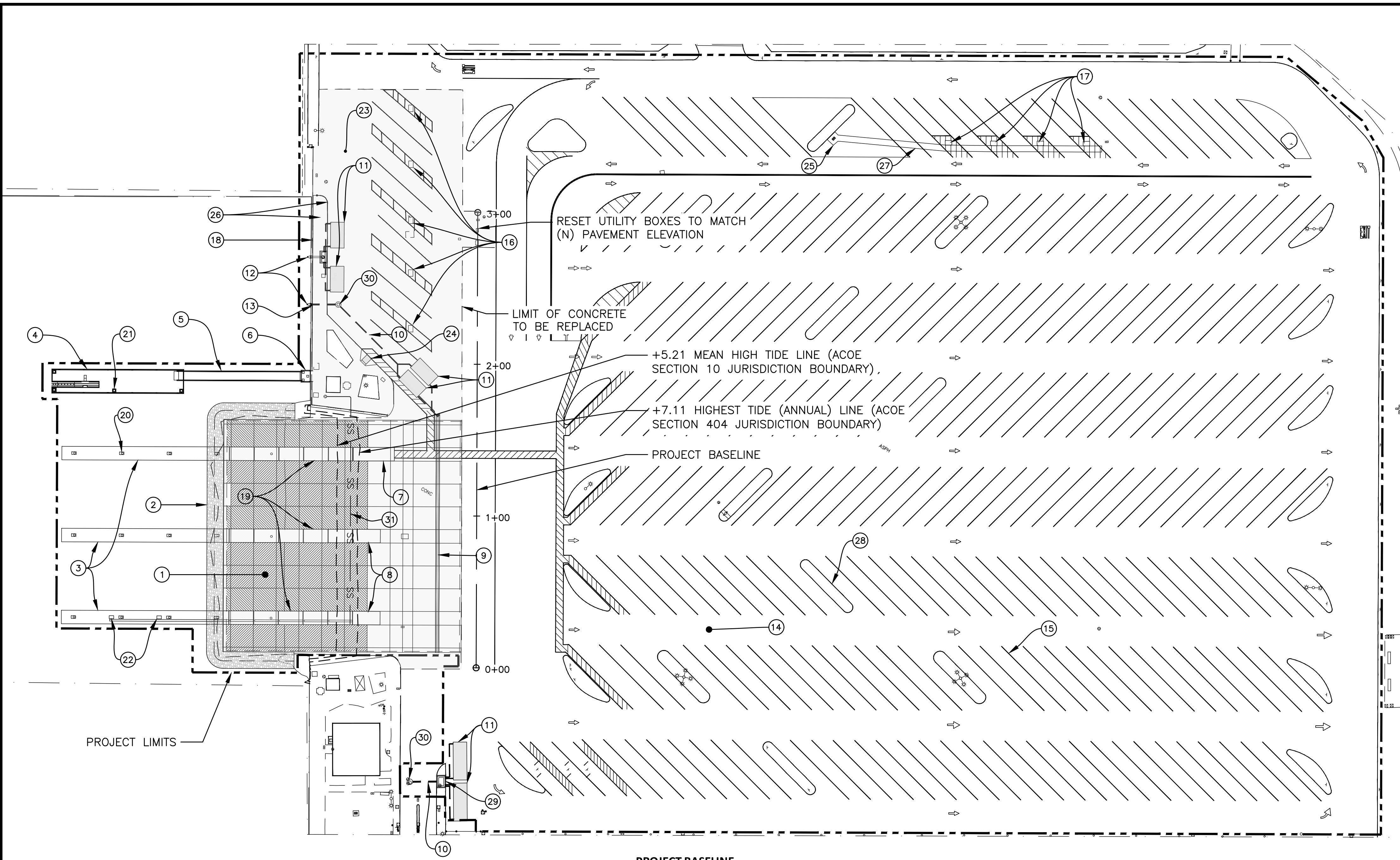
CP 70343 SPEC. 4836 R-1

MARINA DEL REY

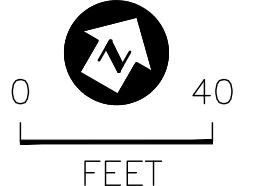
DATE	DESCRIPTION	BY	APP.

CONSULTING CIVIL ENGINEERS
MARINA DEL REY, CALIFORNIA 90230
(405) 972-8222

BY: JH & KJ
CHECKED: K.J.
DATE: 5/22/90
SCALE: AS SHOWN
JOB: 389111
SHEET: 5 OF 6



1 PROJECT PLAN
14 SCALE: 1" = 40'



SCOPE OF WORK:

1. DEMOLISH AND DISPOSE OF EXISTING LAUNCH RAMP PAVEMENT, SLOPE PROTECTION, GUIDE PILES, AND BOARDING FLOATS.
2. CONSTRUCT TEMPORARY SHEET PILE COFFERDAM FOR LAUNCH RAMP CONSTRUCTION. FINISH GRADE AND PREPARE SUBGRADE AND COMPACTED BASE. PLACE 8" REINFORCED PCC PAVEMENT WITH THICKENED EDGES ALL AROUND. RAMP RECONSTRUCTION WORK SHALL BE PHASED TO KEEP AT LEAST TWO LANES OPEN TO THE PUBLIC AT ALL TIMES. PERFORM ALL LAUNCH RAMP CONSTRUCTION WORK IN THE DRY. SEE DETAILS ON SHEET 15.
3. FURNISH AND INSTALL THREE NEW BOARDING FLOAT ASSEMBLIES COMPRISED OF PERMANENTLY FLOATING AND MULTIPLE HINGED SECTIONS FABRICATED FROM STRUCTURAL RECYCLED PLASTIC LUMBER. FURNISH AND INSTALL NEW 16"Ø PRECAST CONCRETE GUIDE PILES. CONSTRUCT THREE NEW PCC BOARDING FLOAT ABUTMENTS. FURNISH AND INSTALL NEW ACCESSIBLE ALUMINUM GANGWAY.
4. FURNISH AND INSTALL CLASS IV (LIGHT CLASS) QUARRY STONE SLOPE PROTECTION OVER SPECIFIED GEOTEXTILE FABRIC AROUND PERIMETER OF LAUNCH RAMP PAVEMENT.
5. FURNISH AND INSTALL NEW CONCRETE FLOATING DOCK WITH INTEGRAL ACCESSIBLE KAYAK LAUNCH RAMP. FURNISH AND INSTALL NEW PCC GANGWAY LANDING PLATFORM SUPPORTED BY THREE 14-IN SQUARE PRECAST CONCRETE PILES.
6. PERFORM MISCELLANEOUS GUARDRAIL AND SITE WORK CONNECTING ACCESSIBLE GANGWAY LANDING AND ACCESSIBLE PATH TO NEW BOARDING FLOAT.
7. COLD MILL EXISTING PARKING LOT TO REMOVE 1.5 TO 2.0 INCHES OF THE EXISTING HMA PAVEMENT. REPAIR PAVEMENT CRACKS, AND DIG OUT AND PATCH SPECIFIED DAMAGED AREAS. OVERLAY PARKING LOT WITH 1.5 TO 2.0 INCHES OF SPECIFIED HMA PAVEMENT OVER SPECIFIED GEOTEXTILE PAVEMENT FABRIC. PERFORM PAVEMENT WORK IN PHASES TO MAINTAIN PUBLIC ACCESS TO LAUNCH RAMP FACILITIES. STRIPE AND STENCIL PARKING SPACES, TRAFFIC LANES, AND DIRECTION OF TRAVEL. PAINT, FURNISH, AND INSTALL SIGNAGE TO DELINEATE ACCESSIBLE PARKING SPACES AND PATHS.
8. REMOVE EXISTING VACUUM BOAT PUMPOUT SYSTEM. FURNISH AND INSTALL NEW PERISTALTIC PUMPS ON NEW BOARDING FLOAT. INSTALL NEW HDPE FORCE MAIN TO SEWER DISCHARGE POINT OF CONNECTION.
9. FURNISH AND INSTALL NEW BIOFILTRATION STORMWATER TREATMENT SYSTEM AT THREE LOCATIONS. REMOVE EXISTING CDS TREATMENT UNITS, AND MISCELLANEOUS PIPE. MODIFY EXISTING CATCH BASINS TO INCLUDE DVERT FLOW SYSTEM. EXCAVATE, INSTALL TREATMENT VAULTS, MANHOLES, PIPE, AND OUTFALLS AS SPECIFIED. BACKFILL AND REPLACE ADJACENT PAVEMENT SECTIONS WITH INKIND CROSS SECTION.
10. REMOVE EXISTING BOAT WASHDOWN EQUIPMENT, CURB ISLANDS, AND BOLLARDS. CONSTRUCT (N) CURB ISLANDS AND BOLLARDS. PROTECT FOUR STATIONS IN UNDERGROUND UTILITY VAULTS. REPLACE FIVE STATIONS WITH NEW CONTROL MODULES, COIN BOXES, AND PLUMBING CONNECTIONS WITHIN NEW FABRICATED METAL ENCLOSURE.
11. PERFORM MISCELLANEOUS PLUMBING AND ELECTRICAL WORK TO CONNECT WASHDOWN EQUIPMENT AND NEW BOAT PUMPOUT EQUIPMENT.
12. FURNISH AND INSTALL ALL INCIDENTAL BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS AS DESCRIBED IN NPDES NOTE 4 ON SHEET 3.
13. DEMOLISH AND REPLACE APPROX. 620 LINEAL FEET OF RAISED OR DAMAGED PARKING LOT ISLAND CURB.

PROJECT BASELINE

PI Station	Northing	Easting	Distance	Direction
0+00.00	1,814,493.241'	6,427,934.741'		
			300'	N29°47'32.81"W
3+00.00	1,814,753.590'	6,427,785.683'		

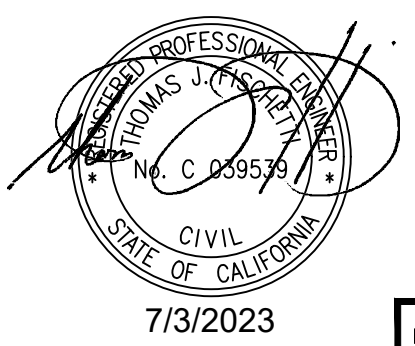
INSIDE OF THE PROJECT AREA
THERE ARE NO EASEMENTS

CONSTRUCTION NOTES:

ITEM	DESCRIPTION	SHEET REF	SPECIAL PROV. REF
1	8" THICK PCC RAMP PAVEMENT WITH V-GROOVE SURFACE FINISH AND APRON PAVEMENT OVER 12" OF COMPACTED BASE MATERIAL ON PREPARED SUBGRADE.	1/17 - 1/18	32.13.01
2	LIGHT CLASS STONE TOE PROTECTION.	1/23	31.35.27
3	NEW BOARDING FLOATS.	1/41	06.02.01
4	ACCESSIBLE BOARDING FLOAT.	1/42	13.37.01
5	ACCESSIBLE 80-FT LONG BY 4-FT WIDE GANGWAY.	1/46	05.14.01
6	ACCESSIBLE GANGWAY LANDING PLATFORM.	5/44	03.30.01/05.14.01
7	ACCESSIBLE PCC BOARDING FLOAT ABUTMENT.	1/22	03.30.01
8	BOARDING FLOAT ABUTMENT.	1/22	03.30.01
9	PCC LATERAL TRENCH DRAIN.	1/32	31.35.27
10	STORM DRAIN PIPING.	1/25	31.35.27
11	BIOFILTRATION STORMWATER TREATMENT UNITS.	1/25	31.35.27
12	TIDEFLEX CHECK VALVE.	1/25	31.35.27
13	CORE OPENING IN EXISTING SEAWALL FOR OUTFALL.	2/32	31.35.27
14	(N) PARKING LOT PAVEMENT: MILL & OVERLAY ENTIRE PARKING LOT, DIGOUT & PATCH SPECIFIED DAMAGED AREAS.	1/38	32.12.01
15	PAVEMENT STRIPING AND MARKINGS.	1/39	32.17.01
16	(N) CURB ISLANDS, BOLLARDS, AND WASHDOWN CABINETS.	3/33 - 3/34	26.57.01
17	(N) CURB ISLANDS AND BOLLARDS, WASHDOWN UTILITIES TO BE CUT AND PROTECTED IN UNDERGROUND VAULT FOR FUTURE USE.	3/33 - 3/34	03.30.01/26.57.01
18	FURNISH AND INSTALL 42" ALUMINUM PIPE GUARDRAIL SYSTEM (APPROX. 180').	1/37	05.52.01
19	NEW HINGED BOARDING FLOATS.	1/47	06.02.01
20	16"Ø GUIDE PILE (12 REQUIRED).	1/41 - 1/42	31.62.01
21	16"Ø GUIDE PILE (4 REQUIRED).	1/41 - 1/42	31.62.01
22	BOAT PUMPOUT SYSTEM.	1/58 - 1/60	22.68.01
23	WASHDOWN AREA PCC REPLACEMENT (±18,300 SF). MATCH (E) SLOPES & ELEVATIONS, FLUSH WITH (N) PARKING LOT PAVEMENT.	1/33	03.30.01
24	CURB RAMP.	1/38	
25	CATCH BASIN TO BE REPLACED IN KIND.		
26	SIDEWALK AND CURB AND GUTTER REPLACEMENT (±2,662 SF) IN WASHDOWN AREA. MATCH (E) SLOPES & ELEVATIONS.	2/33 - 2/37	03.30.01
27	4'-0" PCC RIBBON GUTTER AT (N) LOCATION OUTSIDE OF CONCRETE ISLAND.	3/32	
28	DEMOLISH AND REPLACE APPROX. 620 LINEAL FEET OF RAISED OR DAMAGED PARKING LOT ISLAND CURB AT LOCATIONS SHOWN.	4/36 - 1/38	
29	CATCH BASIN.	1/25	
30	STORM DRAIN MANHOLE.	1/25	
31	(N) SS PIPING TO (E) MANHOLE	1/58	22.68.01

PROJECT DEFERRED SUBMITTAL ITEMS:

1. THE FOLLOWING DEFERRED SUBMITTAL ITEMS SHALL BE FURNISHED BY CONTRACTOR:
 - 1.1. GANGWAY AND GANGWAY PLATFORMS (PER SECTION 05 14 01 - ALUMINUM GANGWAYS OF THE PROJECT SPECIFICATIONS SPECIAL PROVISIONS)
 - 1.2. ADA CONCRETE FLOATING DOCK SYSTEM (PER SECTION 13 37 01 - CONCRETE FLOATING DOCK OF THE PROJECT SPECIFICATIONS SPECIAL PROVISIONS)
 - 1.3. FLOATING DOCK DOMESTIC WATER AND SEWER UTILITIES (PER SECTION 22 68 01 - PLUMBING FOR BOARDING FLOAT OF THE PROJECT SPECIFICATIONS SPECIAL PROVISIONS)
 - 1.4. ALL 16"Ø CONCRETE GUIDE PILES, AND ALL 14" SQUARE CONCRETE AXIAL PILES SHALL BE DEFERRED PER SECTION 31 62 01 - CONCRETE PILES OF THE PROJECTS SPECIFICATIONS SPECIAL PROVISIONS.
2. FOR DEFERRED SUBMITTAL ITEMS, CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARATION OF THE FINAL DESIGN AND DELIVERY OF ALL FINAL CONSTRUCTION PLANS AND ENGINEERING CALCULATIONS REQUIRED BY THE LOS ANGELES COUNTY DEPARTMENT OF BUILDING AND SAFETY AND RESPONDING TO ANY AND ALL COMMENTS AND ATTENDING MEETINGS WITH THE BUILDING OFFICIAL OR HIS AUTHORIZED REPRESENTATIVES TO OBTAIN ALL BUILDING PERMITS REQUIRED IN ACCORDANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE.



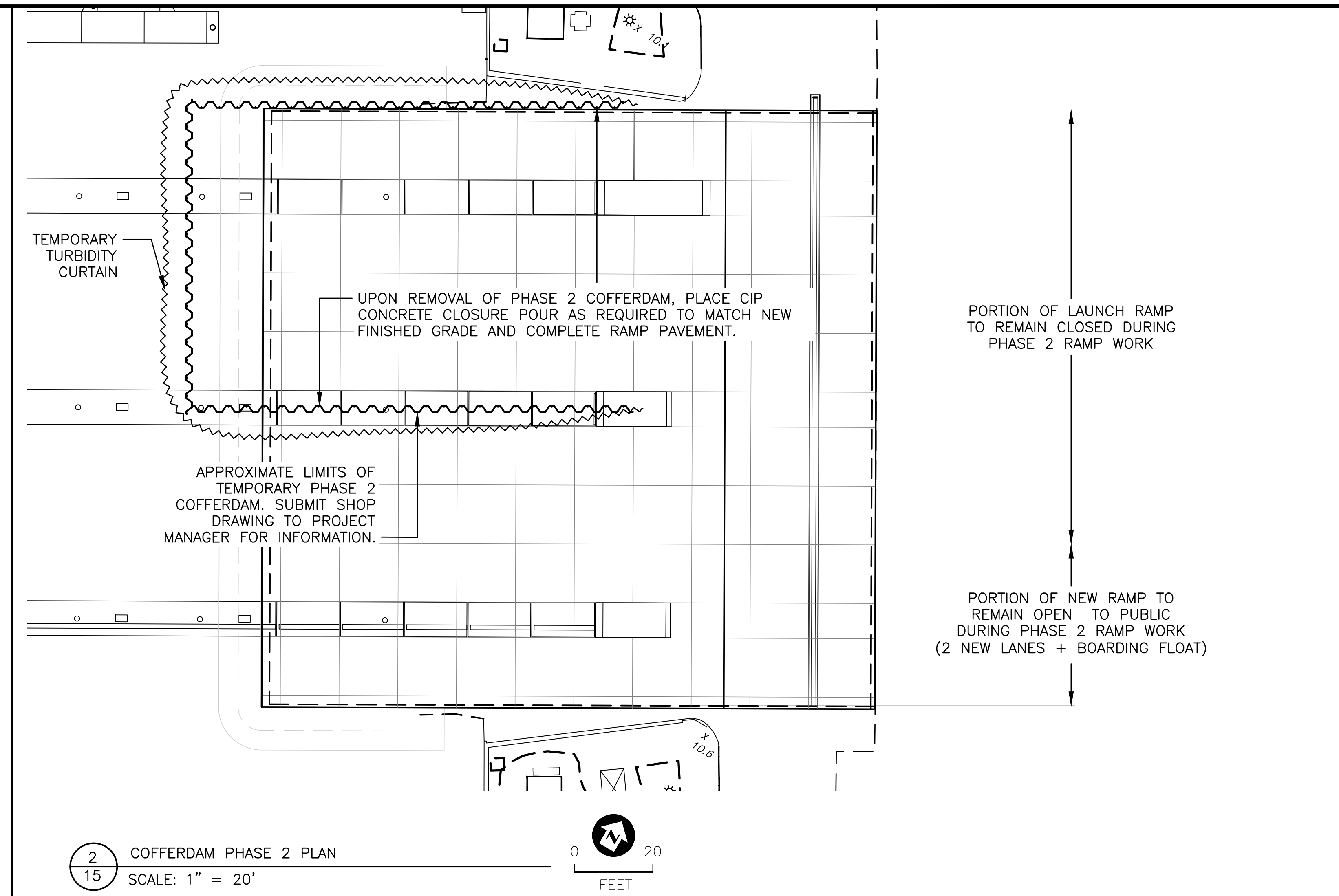
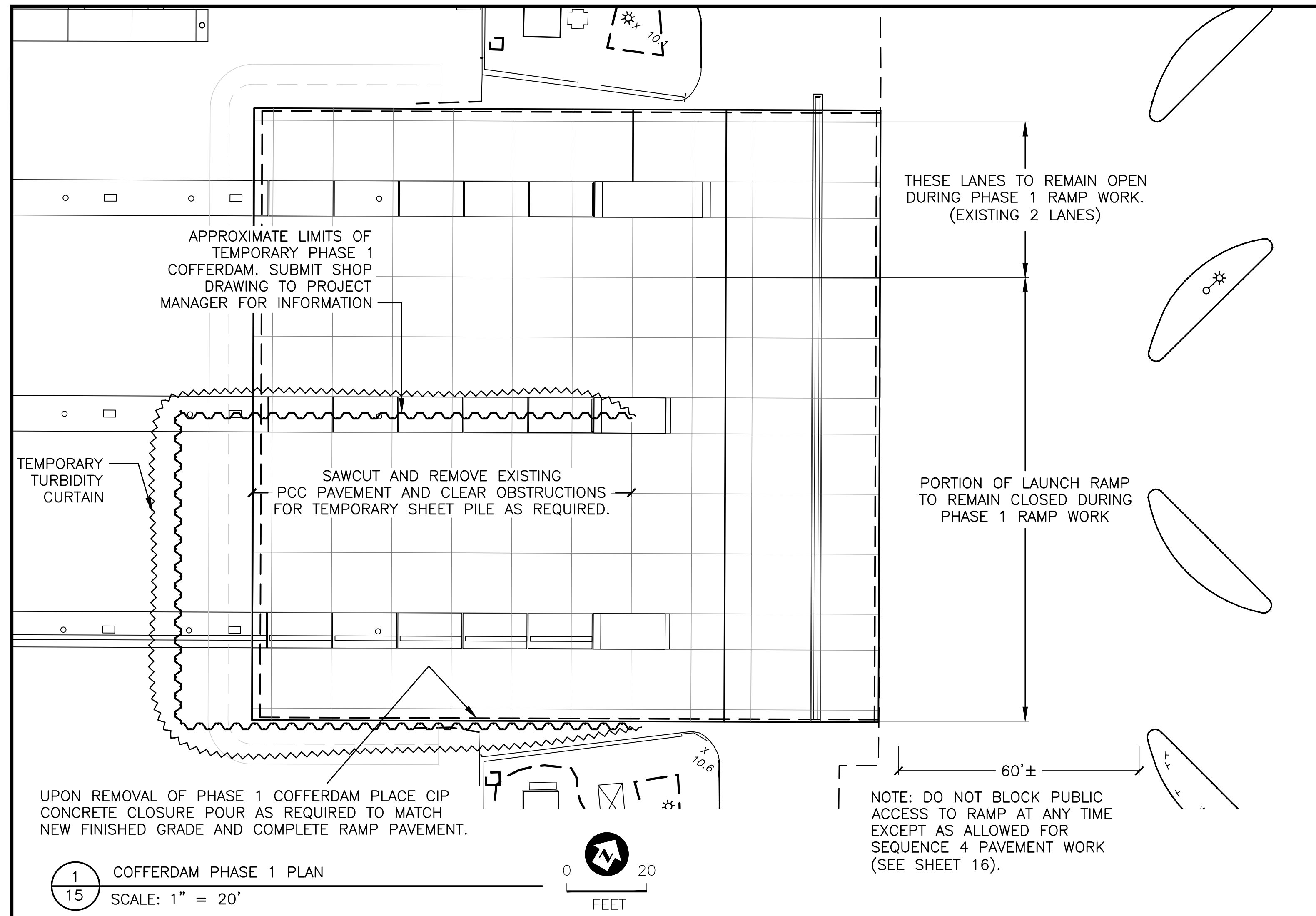
BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY	JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	14	OF	64
DRAWN BY	JTM	PROJECT PLAN	JOB NO.	928-79		
CHECKED BY	TJF		SCALE	AS SHOWN		
APPROV. BY	JTM		DATE	23 JUL 2023		
		MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION				



LAUNCH RAMP CONSTRUCTION NOTES:

1. LAUNCH RAMP SHALL BE CONSTRUCTED IN TWO (2) PHASES AS SHOWN ON THE PLANS. LAUNCH RAMP FACILITY TO REMAIN OPEN TO THE PUBLIC FOR USE AT ALL TIMES DURING CONSTRUCTION WORK, WITH THE EXCEPTION OF THE PARKING LOT PAVEMENT WORK SEQUENCE 4 PERIOD DETAILED ON SHEET 16.
2. TWO (2) RAMP LANES AND ONE BOARDING FLOAT SHALL BE OPEN TO THE PUBLIC AT ALL TIMES.
3. COORDINATE RAMP CONSTRUCTION WITH PARKING LOT ACCESS AND VEHICLE INGRESS AND EGRESS ACCESS REQUIREMENTS PER SHEET 16.



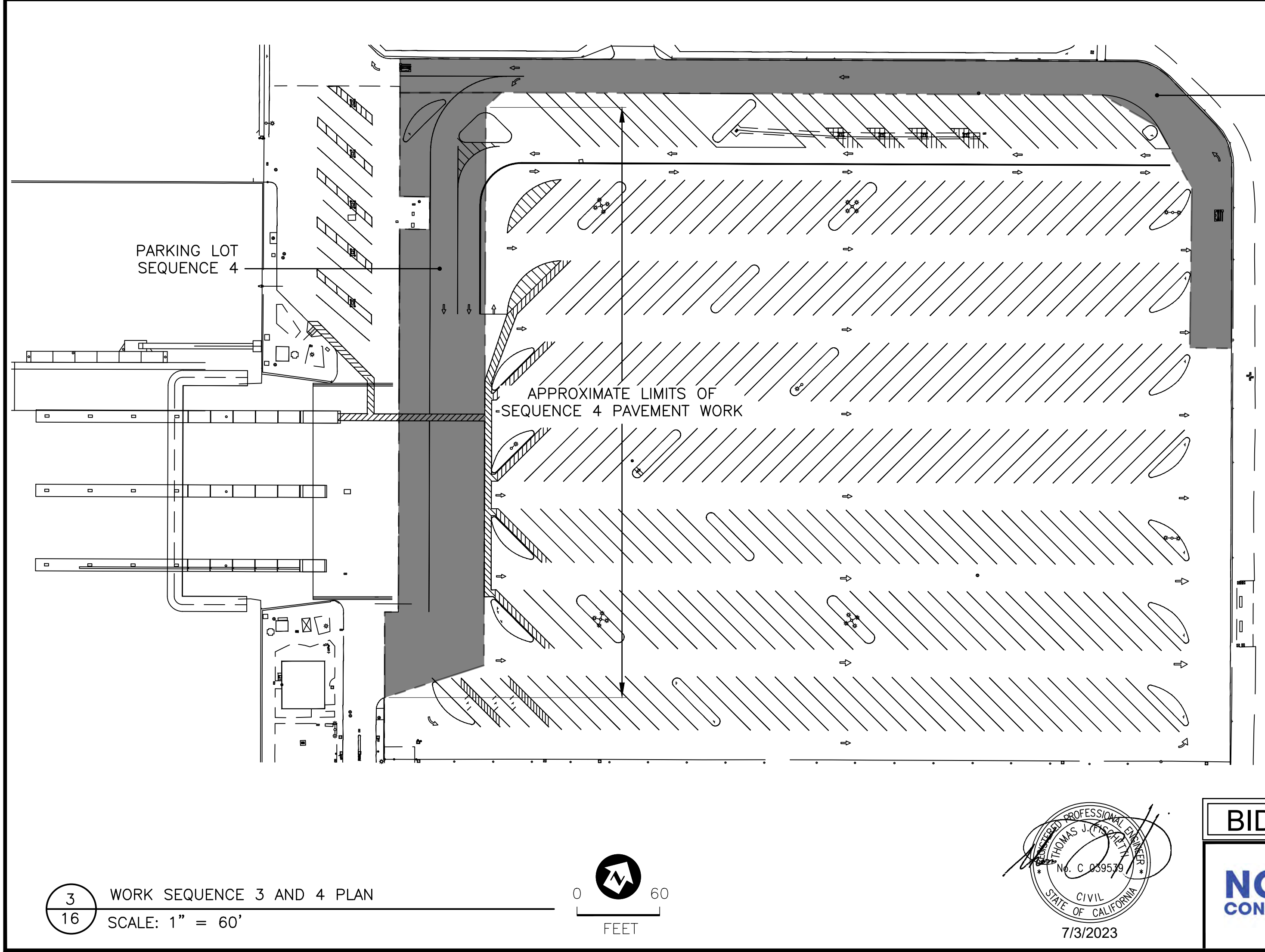
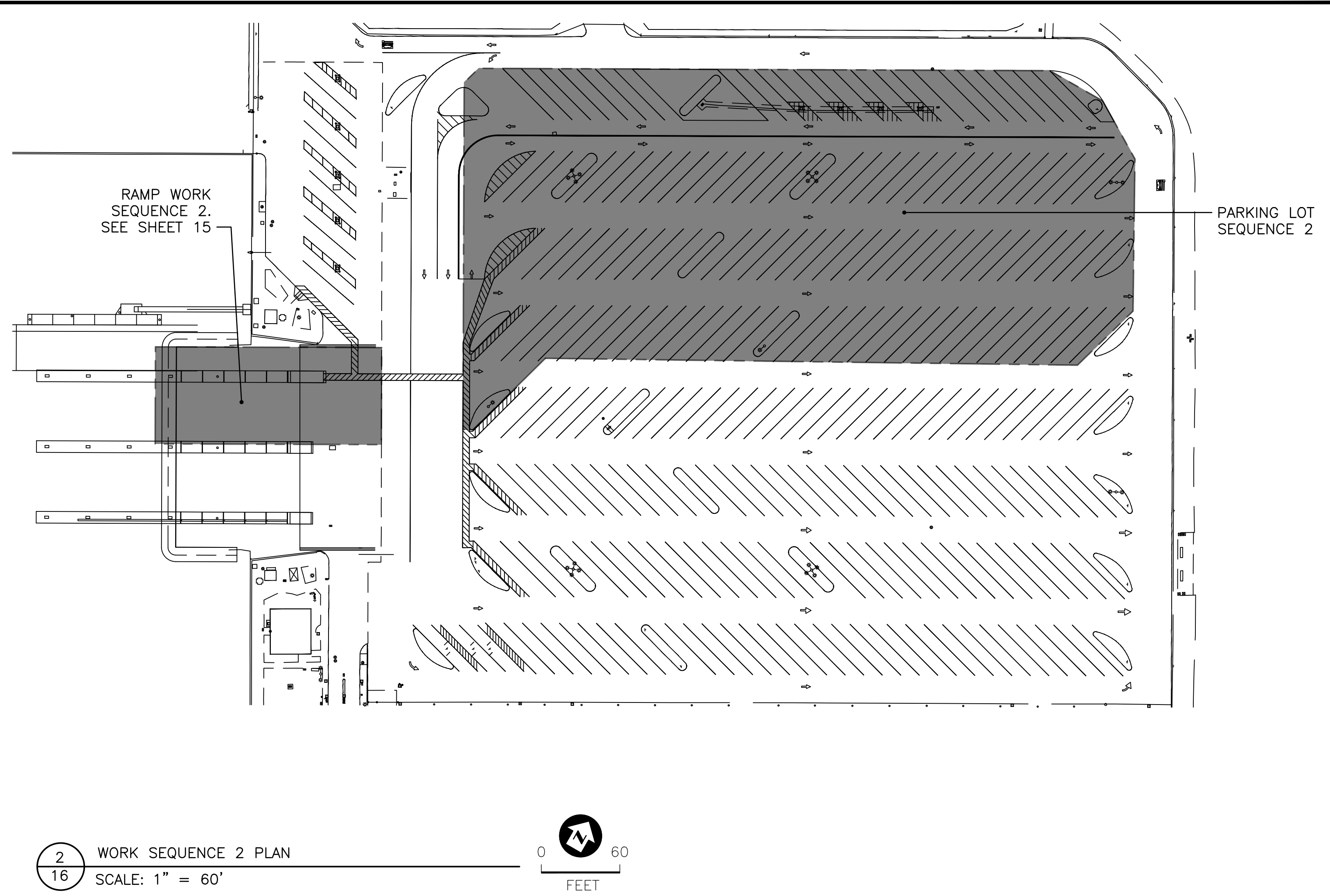
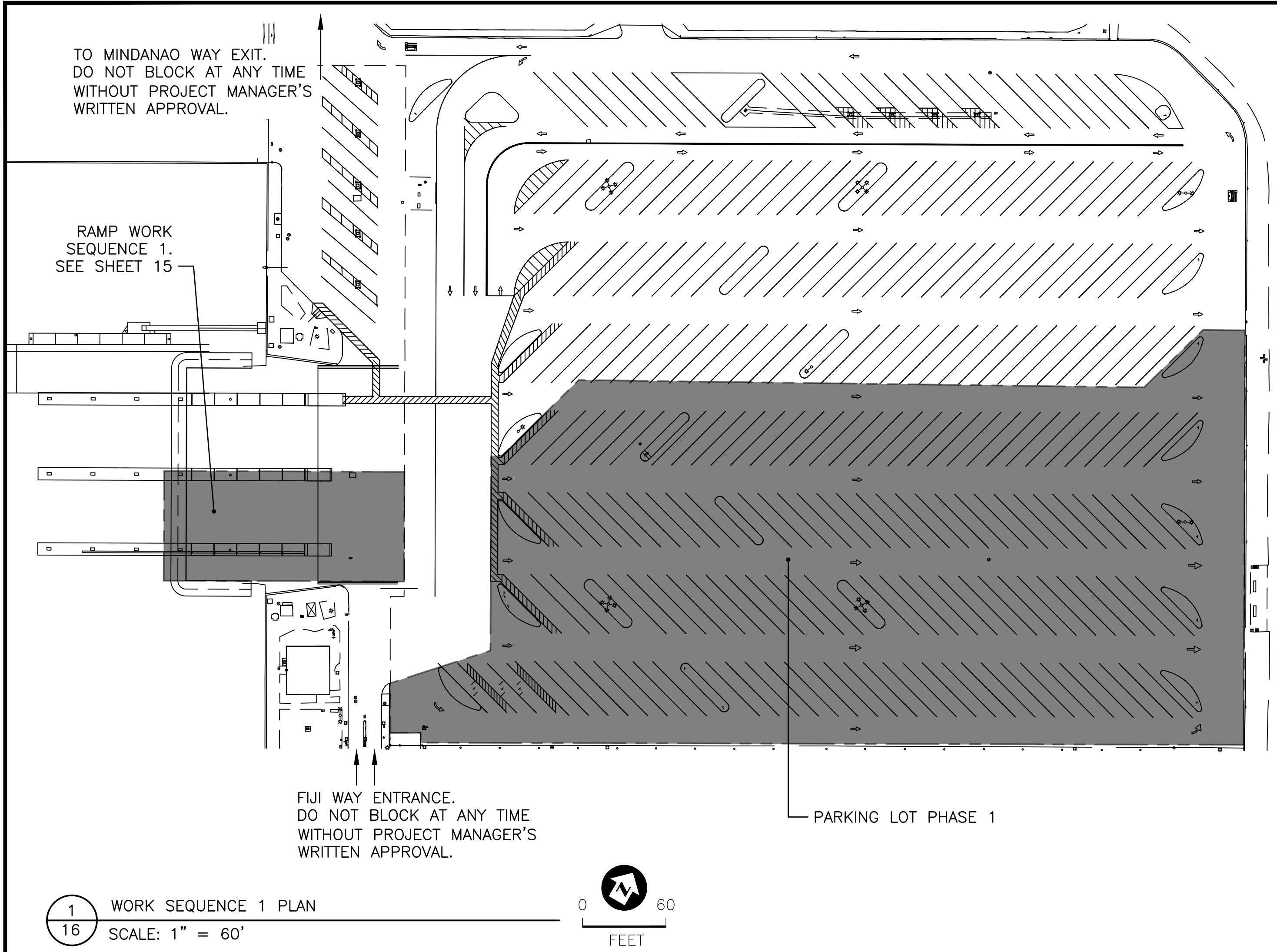
BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 15 OF 64
DRAWN BY: JTM	RAMP WORK SEQUENCE PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



WORK PHASING NOTES:

1. THE BOAT LAUNCH RAMP SHALL REMAIN OPEN TO THE PUBLIC AT ALL TIMES EVERY DAY DURING THE CONSTRUCTION WORK EXCEPT FOR SEQUENCE 4 PAVEMENT RE-SURFACING AS INDICATED BELOW.
2. PAVEMENT RE-SURFACING WORK SHALL BE PERFORMED AFTER COMPLETION OF ALL LAUNCH RAMP WORK AND SCHEDULED AND PERFORMED IN SEQUENCES TO THE APPROXIMATE LIMITS SHOWN ON THE PLANS TO ALLOW FOR APPROXIMATELY ONE-HALF OF THE PARKING LOT TO REMAIN OPEN AT ALL TIMES, AND TO MAINTAIN VEHICLE CIRCULATION TO AND FROM OPEN PARKING AREAS AND THE BOAT LAUNCH RAMP, INGRESS FROM FIJI WAY, AND EGRESS TO MINDANAO WAY.
3. PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL SUBMIT A WORK SEQUENCE AND TRAFFIC CIRCULATION PLAN TO THE PROJECT MANAGER FOR APPROVAL THAT PROVIDES A DETAILED NARRATIVE DESCRIPTION AND PLAN TO ILLUSTRATE HOW THE RAMP CONSTRUCTION, PAVEMENT SURFACING, AND STRIPING WORK SHALL BE SCHEDULED, AND TRAFFIC CIRCULATION MAINTAINED AT ALL TIMES TO PROVIDE FOR THE SPECIFIED PUBLIC ACCESS.
4. THE SEQUENCE 4 PAVEMENT RE-SURFACING WORK ADJACENT TO THE LAUNCH RAMP APRON, FIJI WAY INGRESS, AND MINDANAO EGRESS SHALL BE SCHEDULED FOR COMPLETION WITHIN A CONTINUOUS 5-CALENDAR DAY MONDAY THROUGH FRIDAY TIME PERIOD AFTER ALL OTHER PAVEMENT WORK HAS BEEN COMPLETED. THE CONTRACTOR MAY CLOSE THE LAUNCH RAMP FOR NO MORE THAN ONE DAY TO COLD MILL THE SEQUENCE 4 PAVEMENT AREA AND PREPARE THE SURFACE TO RECEIVE HOT MIX ASPHALT OVERLAY. THE LAUNCH RAMP MAY BE CLOSED FOR NO MORE THAN ONE MORE DAY TO PERFORM THE OVERLAY WORK WITHIN THE SEQUENCE 4 PAVEMENT AREA.
5. PERMISSION TO CLOSE THE BOAT LAUNCH FACILITY FOR SEQUENCE 4 PAVEMENT WORK SHALL REQUIRE A WRITTEN REQUEST TO THE PROJECT MANAGER FOURTEEN (14) DAYS PRIOR TO PERFORMING THE WORK SO THAT ADVANCE PUBLIC NOTICE CAN BE MADE.
6. CONTRACTOR TO PROVIDE TRAFFIC CONTROL AND CIRCULATION AS PART OF THE PHASING SCOPE OF WORK.

3 WORK SEQUENCE 3 AND 4 PLAN
16 SCALE: 1" = 60'

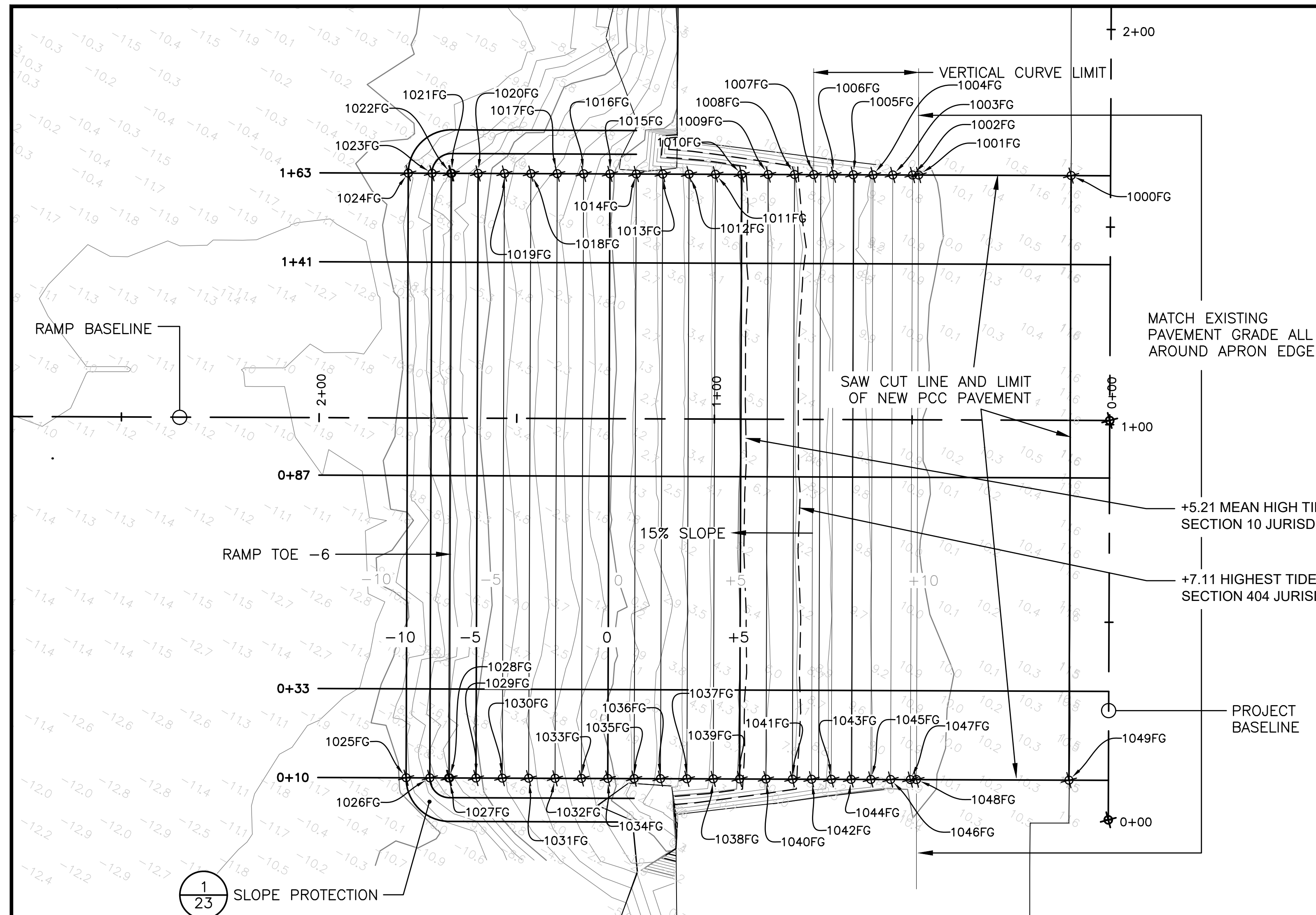
BID SET

NOBLE CONSULTANTS | GEC

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 16 OF 64
DRAWN BY: JTM	PAVEMENT WORK SEQUENCE PLAN	JOB NO. 928-79
CHECKED BY: TJP		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023

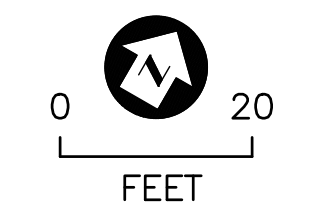


LEGEND	
—	(N) MAJOR CONTOUR
—	(N) MINOR CONTOUR
—	(E) MAJOR CONTOUR
—	(E) MINOR CONTOUR
-X	(N) CONTOUR LABEL
-X	(E) CONTOUR LABEL
+	(E) SURVEY POINT
+	SURVEY CONTROL
+	SPOT ELEVATION

FINISHED GRADE POINT TABLE			
POINT NO.	ELEVATION	NORTHING	EASTING
1000	10.60	1,814,629.73	6,427,845.08
1001	9.92	1,814,610.57	6,427,811.60
1002	9.89	1,814,609.80	6,427,810.27
1003	9.71	1,814,607.32	6,427,805.93
1004	9.41	1,814,604.83	6,427,801.59
1005	8.98	1,814,602.35	6,427,797.25
1006	8.42	1,814,599.87	6,427,792.91
1007	7.73	1,814,597.38	6,427,788.57
1008	7.00	1,814,594.97	6,427,784.36
1009	6.00	1,814,591.66	6,427,778.58
1010	5.00	1,814,588.34	6,427,772.79
1011	4.00	1,814,585.03	6,427,767.00
1012	3.00	1,814,581.71	6,427,761.21
1013	2.00	1,814,578.40	6,427,755.42
1014	1.00	1,814,575.09	6,427,749.63
1015	0.00	1,814,571.77	6,427,743.84
1016	-1.00	1,814,568.46	6,427,738.06
1017	-2.00	1,814,565.14	6,427,732.27
1018	-3.00	1,814,561.83	6,427,726.48
1019	-4.00	1,814,558.52	6,427,720.69
1020	-5.00	1,814,555.20	6,427,714.90
1021	-6.00	1,814,551.89	6,427,709.11
1022	-7.00	1,814,551.76	6,427,708.90
1023	-7.00	1,814,549.40	6,427,704.78
1024	-10.00	1,814,546.42	6,427,699.57

FINISHED GRADE POINT TABLE			
POINT NO.	ELEVATION	NORTHING	EASTING
1033	-1.00	1,814,435.68	6,427,814.08
1025	-10.00	1,814,413.64	6,427,775.59
1026	-7.00	1,814,416.63	6,427,780.79
1027	-7.00	1,814,418.99	6,427,784.92
1028	-6.00	1,814,419.11	6,427,785.13
1029	-5.00	1,814,422.42	6,427,790.92
1030	-4.00	1,814,425.74	6,427,796.71
1031	-3.00	1,814,429.05	6,427,802.50
1032	-2.00	1,814,432.37	6,427,808.29
1034	0.00	1,814,438.99	6,427,819.86
1035	1.00	1,814,442.31	6,427,825.65
1036	2.00	1,814,445.62	6,427,831.44
1037	3.00	1,814,448.94	6,427,837.23
1038	4.00	1,814,452.25	6,427,843.02
1039	5.00	1,814,455.56	6,427,848.81
1040	6.00	1,814,458.88	6,427,854.60
1041	7.00	1,814,462.19	6,427,860.38
1042	7.73	1,814,464.60	6,427,864.59
1043	8.42	1,814,467.09	6,427,868.93
1044	8.98	1,814,469.57	6,427,873.27
1045	9.41	1,814,472.06	6,427,877.61
1046	9.71	1,814,474.54	6,427,881.95
1047	9.89	1,814,477.02	6,427,886.29
1048	9.92	1,814,477.79	6,427,887.62
1049	10.60	1,814,496.95	6,427,921.10

17 GRADING PLAN
SCALE: 1" = 20'



- NOTES:
- SEE SHEET 4 FOR EXISTING CONTOURS
 - SEE SHEET 22 FOR ABUTMENT PLAN
 - SEE SHEET 40 FOR SITE ACCESSIBILITY REQUIREMENTS
 - SEE SHEET 25 FOR DRAINAGE IMPROVEMENTS
 - SEE SHEETS 28, 29, AND 30 FOR FLOW ELEVATIONS OF DRAINAGE DEVICES

EARTHWORK NOTES:

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 300 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY THESE SPECIAL PROVISIONS AND THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- MATERIAL OF EVERY DESCRIPTION SHALL BE REMOVED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- REMOVE LOOSE, POTENTIALLY COMPRESSIBLE SOIL AND CLAYEY SUBGRADE SOILS TO A DEPTH OF ONE (1) FOOT OR MORE BELOW EXISTING GRADE.
- REMOVE DELETERIOUS MATERIALS AND OVERSIZE ROCKS OR HARD LUMPS GREATER THAN THREE (3) INCHES IN DIMENSION.
- CONSTRUCT EXCAVATIONS IN ACCORDANCE WITH OSHA SAFETY GUIDELINES.
- DEWATER AS REQUIRED TO MAINTAIN DRY SUBGRADE.
- PREPARED SUBGRADE SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT OF FILL MATERIAL.
- SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF EIGHT (8) INCHES, BROUGHT TO NEAR OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 90 PERCENT OR GREATER RELATIVE DENSITY PER ASTM D-1557. SOIL WITHIN ONE FOOT OF PAVEMENT SUBGRADE SURFACES SHALL BE COMPACTED TO 95 PERCENT RELATIVE DENSITY.
- REMOVE AND DISPOSE OF EXCAVATED MATERIAL NOT SUITABLE OR USED FOR BACKFILL.
- FILL SOILS SHALL NOT BE PLACED IN INDIVIDUAL LOOSE LIFT THICKNESS IN EXCESS OF EIGHT (8) INCHES.
- CONTRACTOR SHALL VERIFY LOCATIONS OF UTILITIES PRIOR TO EXCAVATION.

LAUNCH RAMP CONSTRUCTION NOTES:

- ALL LAUNCH RAMP SUBGRADE PREPARATION, AGGREGATE BASE PLACEMENT AND COMPACTION, AND CONCRETE PAVEMENT WORK SHALL BE DONE IN THE DRY. THE ENTIRE PAVEMENT FOOTPRINT AREA SHALL BE KEPT DRY CONTINUOUSLY AT ALL TIMES UNTIL ALL LAUNCH RAMP PAVEMENT WORK IS COMPLETE AND ALL CONCRETE HAS CURED A MINIMUM OF SEVEN (7) DAYS.
- PRIOR TO PERFORMING ANY LAUNCH RAMP WORK THE CONTRACTOR SHALL SUBMIT A COFFERDAM AND DEWATERING PLAN TO THE ENGINEER FOR INFORMATION. THE PLAN SHALL BE PREPARED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA EXPERIENCED IN THE DESIGN OF MARINE COFFERDAMS.

VERTICAL DATUM NOTE:

ALL ELEVATIONS SHOWN IN THESE DRAWINGS ARE RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) UNLESS NOTED OTHERWISE.

UTILITIES NOTE (FROM COUNTY GRADING REVIEW COMMENTS):

UTILITIES, SUCH AS WATER, ELECTRICAL, PLUMBING, MECHANICAL, AND SEWER SHOWN ON GRADING PLANS MAY REQUIRE A SEPARATE PERMIT AND ARE PROVIDED FOR REFERENCE ONLY.

BASELINE CONTROL

PROJECT BASELINE

PI Station	Northing	Easting	Distance	Direction
0+00.00	1,814,493.241'	6,427,934.741'		
			300.00'	N29° 47' 32.81"W
3+00.00	1,814,753.590'	6,427,785.683'		

RAMP BASELINE

PI Station	Northing	Easting	Distance	Direction
0+00.00	1,814,580.941'	6,427,884.530'		
			350.00'	S60° 12' 27.19"W
3+50.00	1,814,407.041'	6,427,580.789'		

AS CIVIL ENGINEER/LAND SURVEYOR OF THIS PROJECT, I HAVE IDENTIFIED THE LOCATION OF ALL EASEMENTS WHICH ARE DEPICTED ON THESE PLANS. I HAVE REVIEWED THE EASEMENT DOCUMENTS AND VERIFIED THE PROPOSED CONSTRUCTION DOES NOT CONFLICT OR INTERFERE WITH THE INTENDED EASEMENT USE.

[Signature] 23 JUL 2023
CIVIL ENGINEER/ LAND SURVEYOR DATE
(STAMP AND SIGNATURE)



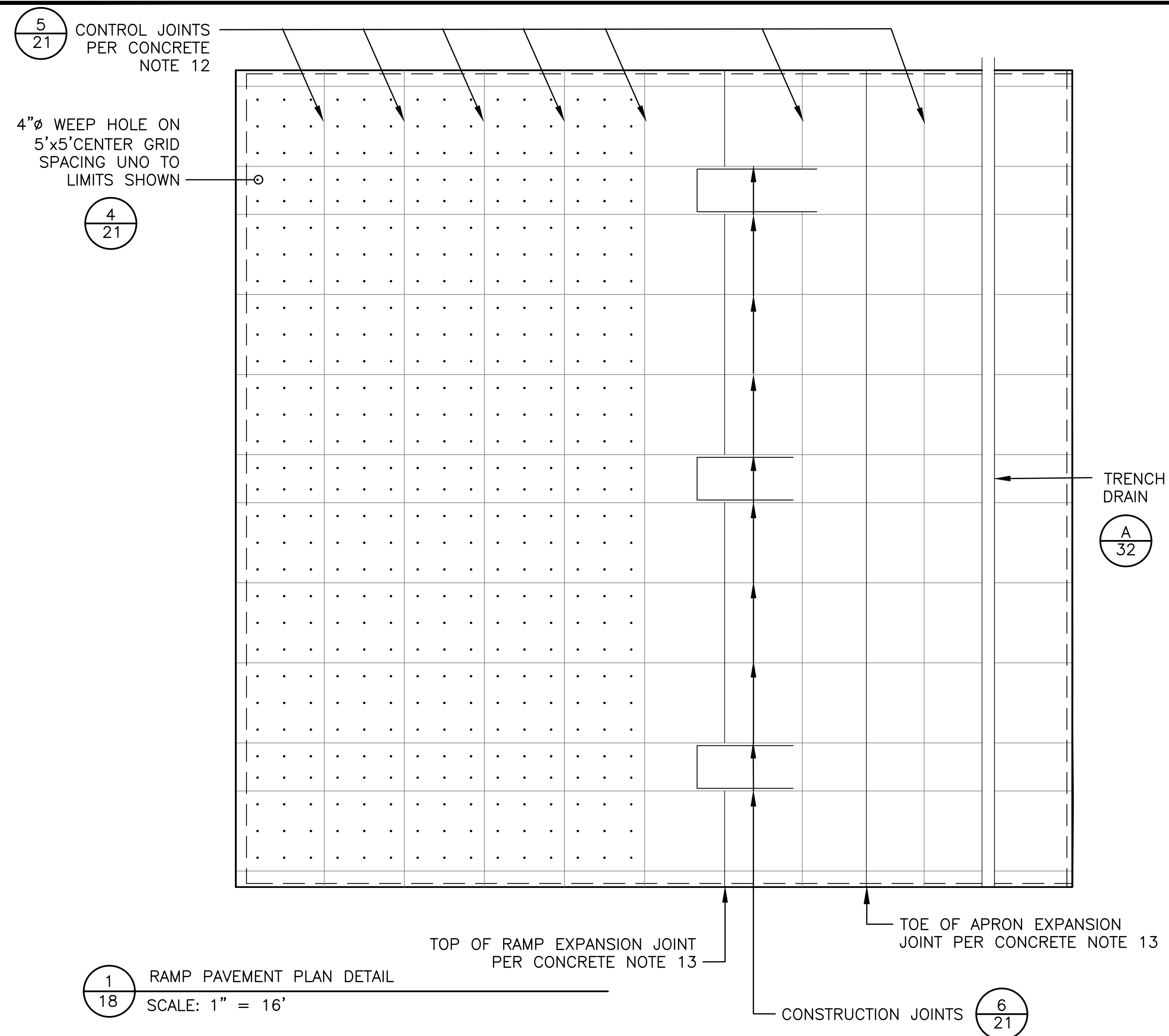
BID SET

NOBLE CONSULTANTS **GEC**

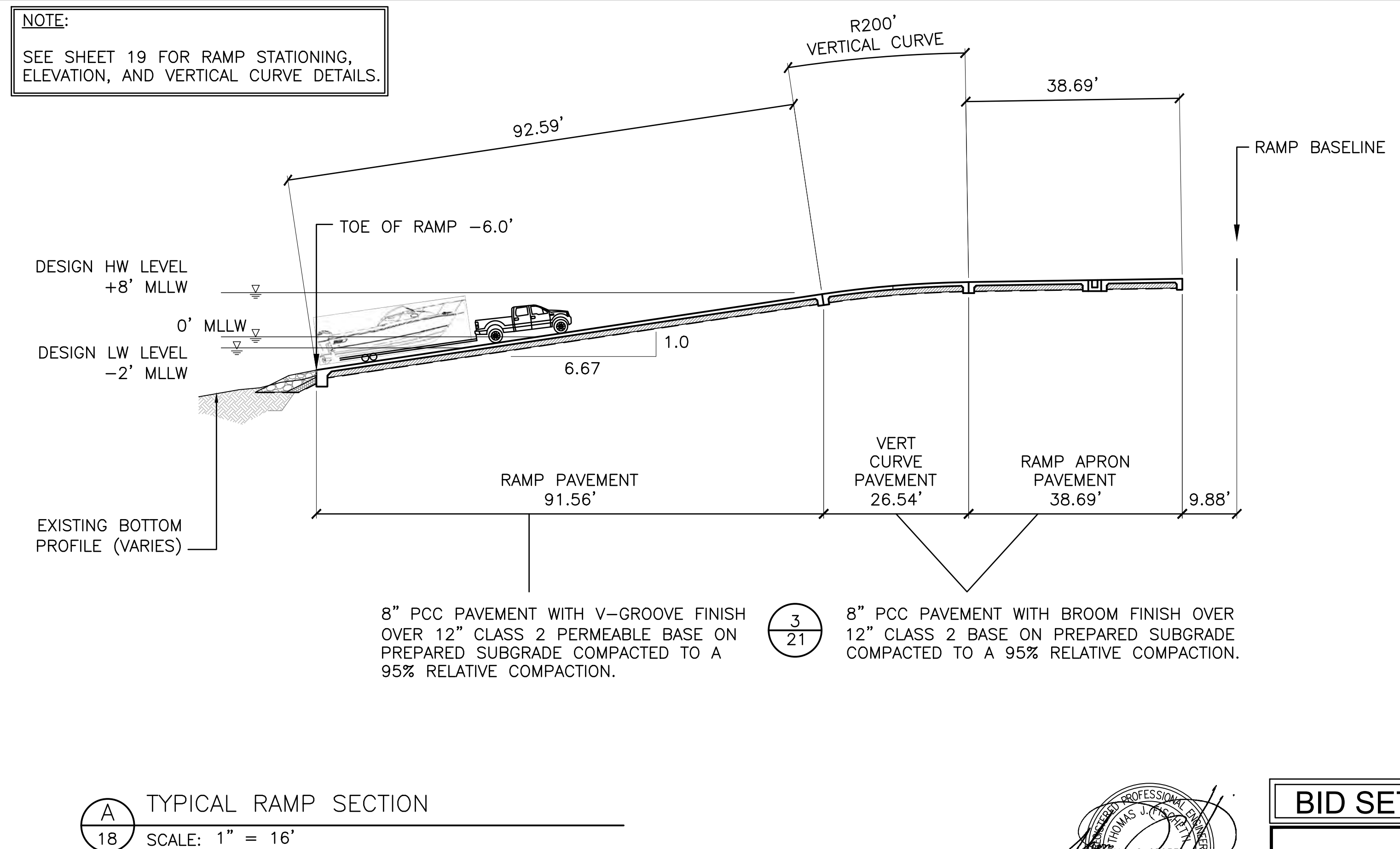
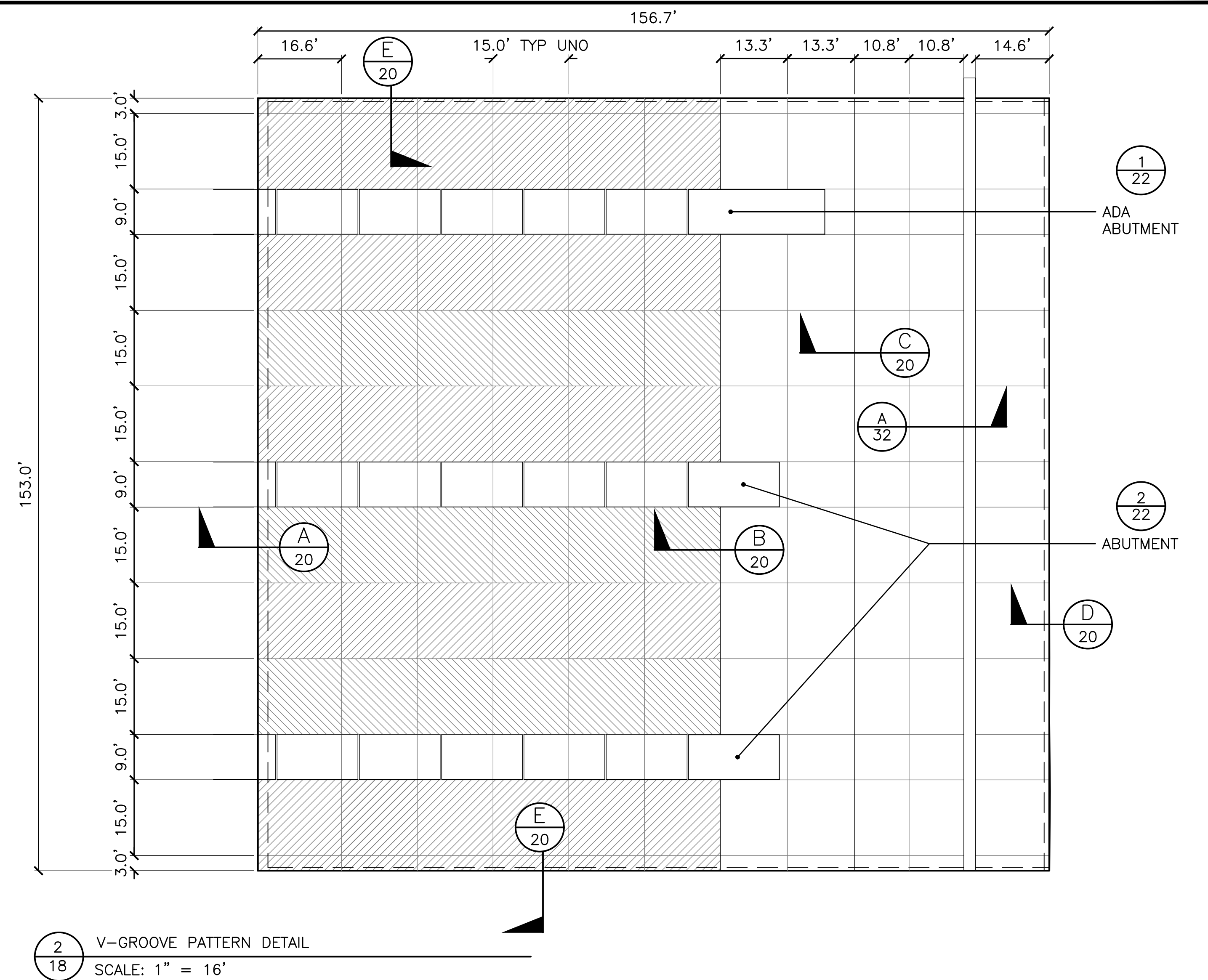
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 17 OF 64
DRAWN BY: JTM	GRADING PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



- NOTES:
1. ALL WORK ON THE BOAT RAMP SHALL BE DONE IN THE DRY. CONTRACTOR SHALL SUBMIT HIS PROPOSED COFFERDAM DESIGN TO THE ENGINEER FOR INFORMATION.
 2. ALL BOAT RAMP WORK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE 1991 EDITION OF THE CALIFORNIA DIVISION OF BOATING AND WATERWAYS LAYOUT, DESIGN, AND CONSTRUCTION HANDBOOK FOR SMALL CRAFT LAUNCHING FACILITIES AS DETAILED HEREIN.
 3. PRIOR TO PERFORMING ANY BOAT RAMP WORK, THE CONTRACTOR SHALL SUBMIT A CONCRETE PLACEMENT PLAN TO THE ENGINEER FOR APPROVAL.
 4. NO PLACEMENT OR V-GROOVING OF CONCRETE FOR BOATING LAUNCHING RAMPS SHALL BE ALLOWED UNTIL CONTRACTOR DEMONSTRATES PROFICIENCY IN CREATING A SATISFACTORY V-GROOVED SURFACE BY PREPARING A 4'x6'x4" CONCRETE TEST PANEL. A DIVISION OF BOATING AND WATERWAYS REPRESENTATIVE MUST ACCEPT THE TEST PANEL IN WRITING BEFORE THE CONTRACTOR IS ALLOWED TO PLACE OR V-GROOVE CONCRETE FOR BOAT LAUNCHING RAMPS.



- CONCRETE NOTES FOR ALL PROJECT AREAS:
1. ALL CONCRETE WORK FOR RAMP PAVEMENT, SIDEWALK, CURB, WASHDOWN AREA PCC PAVEMENT, AND MISCELLANEOUS CAST-IN-PLACE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 302-6 AND 303-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EXCEPT AS MODIFIED BELOW. PERFORM WORK IN CONFORMANCE WITH ALL ADA REQUIREMENTS OF THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE.
 2. PORTLAND CEMENT SHALL BE ASTM C150 TYPE II/V.
 3. AGGREGATES SHALL BE GRADING C IN CONFORMANCE WITH SECTION 201-1.3.2 OF THE STANDARD SPECIFICATIONS. MAXIMUM SIZE SHALL NOT EXCEED 3/4".
 4. ALL CONCRETE PAVEMENT PLACING, FINISHING, JOINTING, AND CURBING WORK SHALL BE SUPERVISED ON SITE BY AN ACI CERTIFIED FLATWORK FINISHER.
 5. CONCRETE FOR BOAT LAUNCH RAMP, ABUTMENTS, AND WASHDOWN AREA PCC PAVEMENT SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI 6 SACK CEMENT WITH WATER TO CEMENTITIOUS MATERIAL RATIO NO GREATER THAN 0.4 PER ACI 318, SECTION 4.1. AIR ENTRAINMENT SHALL BE 5% BY VOLUME.
 6. CONCRETE FOR SIDEWALK AND CURB SHALL BE CLASS 560-C-2500 PER SECTION 201-1.1.2 OF THE STANDARD SPECIFICATIONS. CONCRETE FOR ALL OTHER MISCELLANEOUS CAST-IN-PLACE WORK SHALL BE CLASS 560-B-3200 UNO.
 7. CONCRETE SLUMP FOR BOAT LAUNCH RAMP AND WASHDOWN AREA PCC PAVEMENT SHALL BE BETWEEN THREE (3) TO FOUR (4) INCHES PER STATE DIVISION OF BOATING AND WATERWAYS GUIDELINES.
 8. ALL CONCRETE: CALCIUM NITRATE CORROSION INHIBITOR DCI, MANUFACTURED BY W.R. GRACE & COMPANY OR RHEOCRETE CNI, MANUFACTURED BY BASF COMPANY, SHALL BE ADDED AT THE RATE OF FOUR (4) GALLONS PER CUBIC YARD OF CONCRETE. THE CORROSION INHIBITOR SHALL CONTAIN THIRTY-TWO (32) PERCENT OF CALCIUM NITRATE BY WEIGHT.
 9. POZZOLAN CONFORMING TO ASTM C618 TYPE F MAY COMPRISE 15 TO 20 PERCENT OF ALL CEMENTITIOUS MATERIAL.
 10. ALL CONCRETE EXCEPT CONCRETE FOR V-GROOVED RAMP PAVEMENT SHALL CONTAIN MICROFIBER AS MANUFACTURED BY W.R. GRACE & CO. APPLIED AT A RATE OF ONE (1) POUND PER CUBIC YARD OF CONCRETE OR APPROVED EQUAL FOR CRACK CONTROL AND IMPACT RESISTANCE.
 11. REINFORCEMENT FOR CONCRETE SHALL BE ASTM A615 GRADE 60. ALL BARS SHALL BE EPOXY COATED PER SECTION 52-1.02B OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS. MINIMUM CONCRETE COVER AT TOP AND BOTTOM SURFACES AND EDGES SHALL BE THREE (3) INCHES UNO.
 12. WEAKENED PLANE JOINTS FOR CONCRETE PAVEMENT SHALL BE CONSTRUCTED PER SECTION 302-6.5.4 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EXCEPT THAT ALL CONCRETE SHALL BE COMPLETELY JOINTED WITHIN TWELVE (12) HOURS OF PLACEMENT.
 13. SEE SHEET 20 FOR EXPANSION JOINT DETAILS.
 14. ALL CONCRETE FOR SIDEWALK, CURB, AND MISCELLANEOUS CAST IN PLACE CONCRETE SHALL BE CURED BY APPLICATION OF CURING COMPOUND IN CONFORMANCE WITH SECTION 90-7.01B OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS. CURING COMPOUND SHALL BE ASTM C 309 TYPE 2, WHITE PIGMENTED AND APPLIED IN TWO APPLICATIONS AT A TOTAL CUMULATIVE RATE OF ONE (1) GALLON PER 100 SQUARE FEET.
 15. ALL CONCRETE RAMP AND WASHDOWN AREA PCC PAVEMENT SHALL BE CURED BY THE WATER METHOD PER SECTION 90-7.01A OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS.
 16. V-GROOVE RAMP FINISH SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE STATE DIVISION OF BOATING AND WATERWAYS LAYOUT, DESIGN AND CONSTRUCTION HANDBOOK FOR SMALL CRAFT LAUNCHING FACILITIES, JULY 2005 EDITION. V-GROOVE FINISH WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE COUNTY PROJECT MANAGER AND THE STATE DIVISION OF BOATING AND WATERWAYS.
 17. BROOM FINISH GANGWAY LANDING SURFACE, SIDEWALK, AND WASHDOWN AREA PAVEMENT.



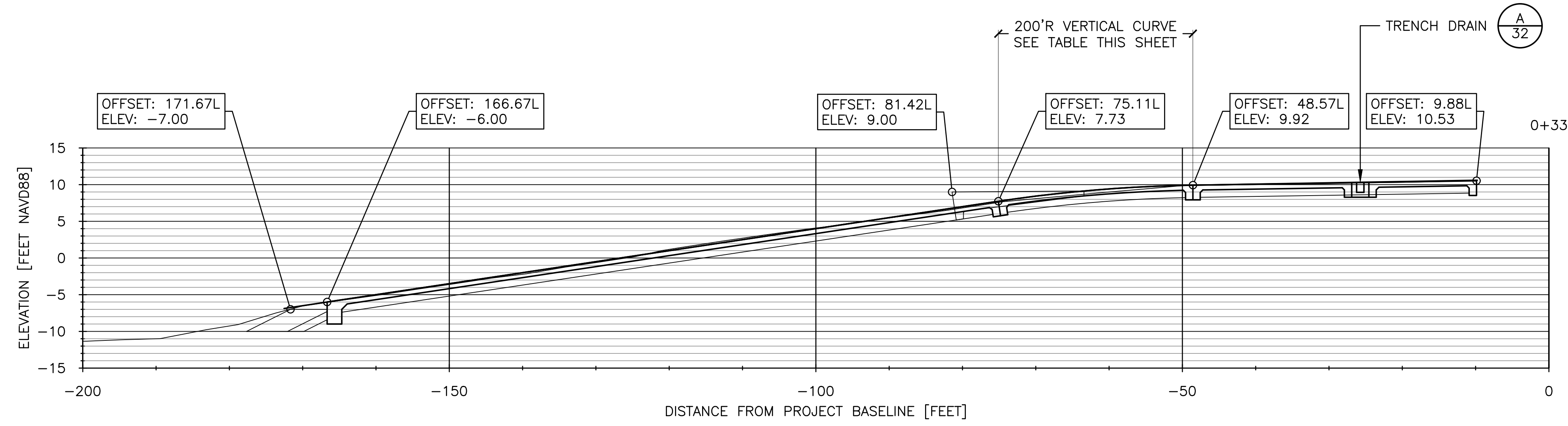
BID SET

NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

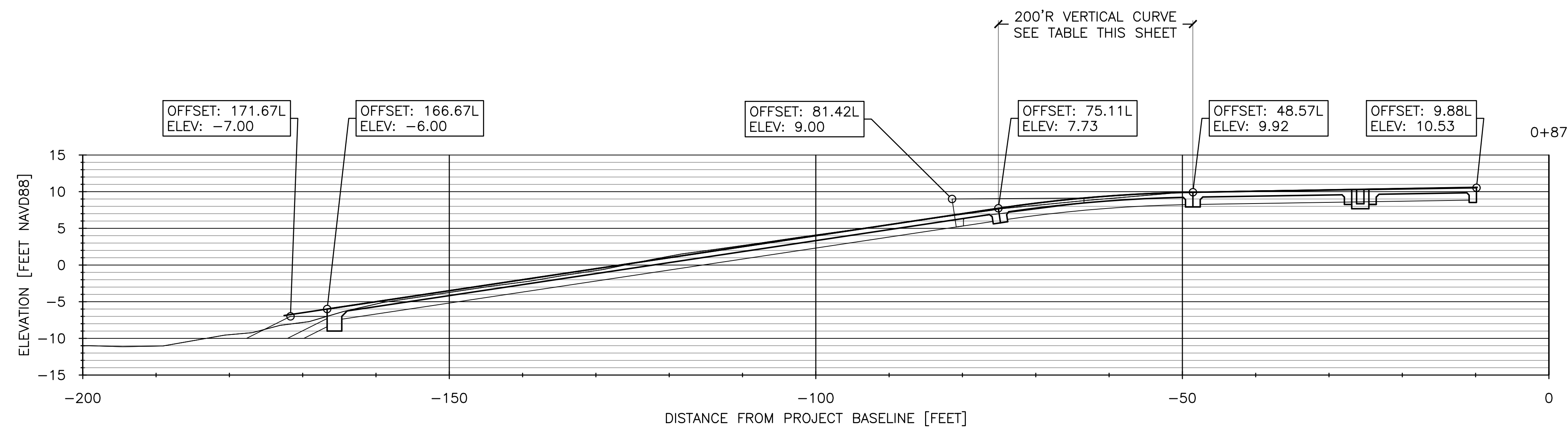
7/3/2023

NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	18	OF	64	
			JTM	RAMP PAVEMENT PLAN & PROFILE	JOB NO.	928-79			
			JTM		SCALE	AS SHOWN			
			TJF		MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE	23 JUL 2023		
			JTM						

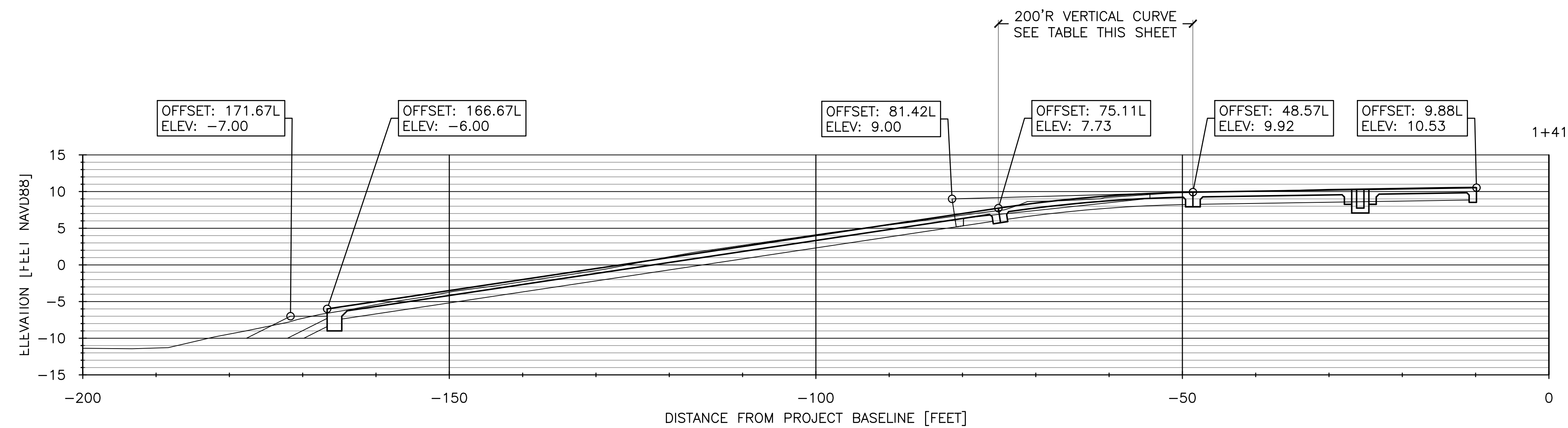


VERTICAL CURVE DATA		
STA	OFFSET	ELEV
BVC	48.57L	9.92
PI	61.91L	9.71
PT	75.11L	7.73
R = 200'		
L = 26.65'		
$\Delta = 7.63'$		

A RAMP SECTION STA 0+33
19 SCALE: 1" = 10'



B RAMP SECTION STA 0+87
19 SCALE: 1" = 10'



C RAMP SECTION STA 1+41
19 SCALE: 1" = 10'



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NO.	DATE	REVISION

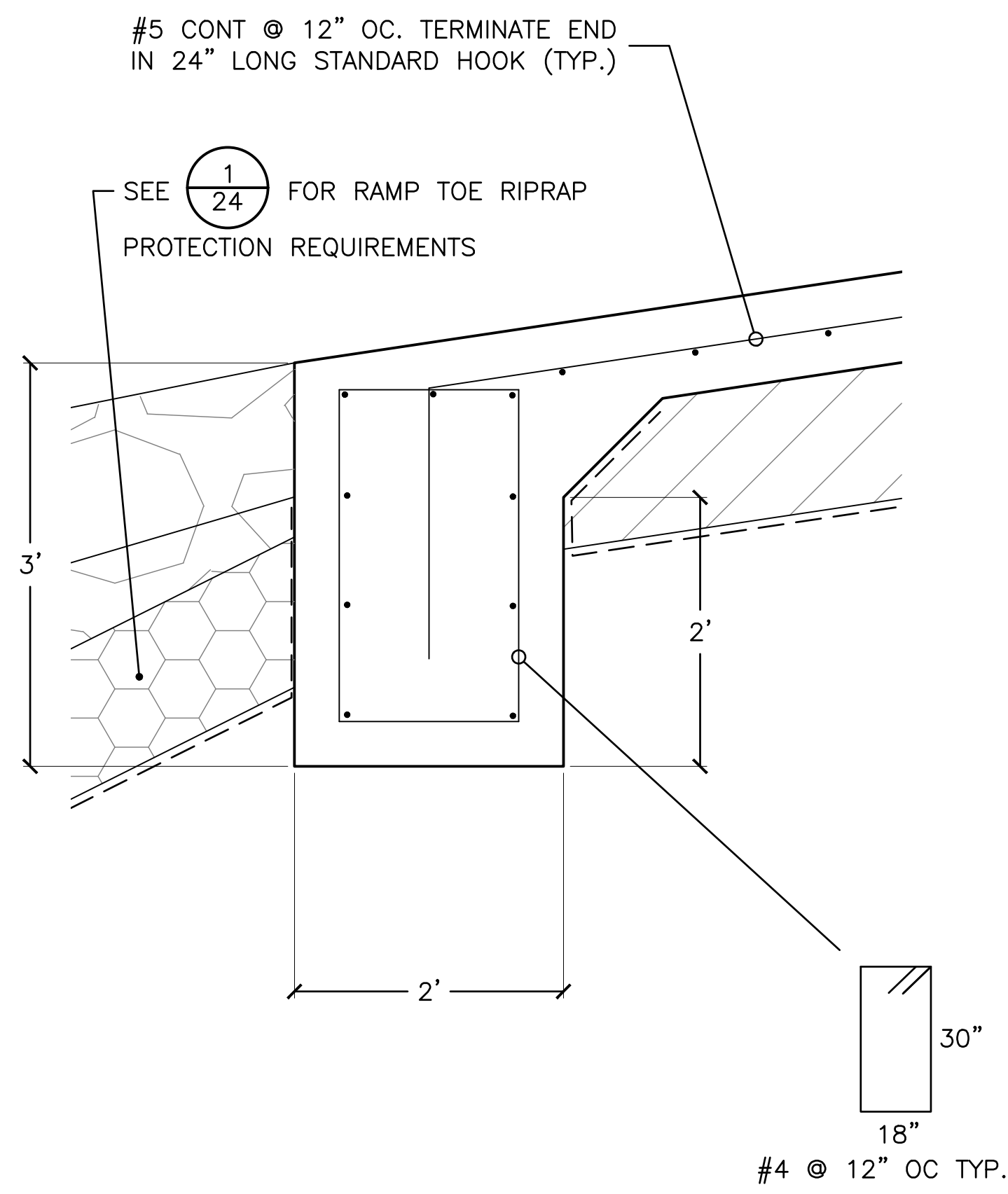
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

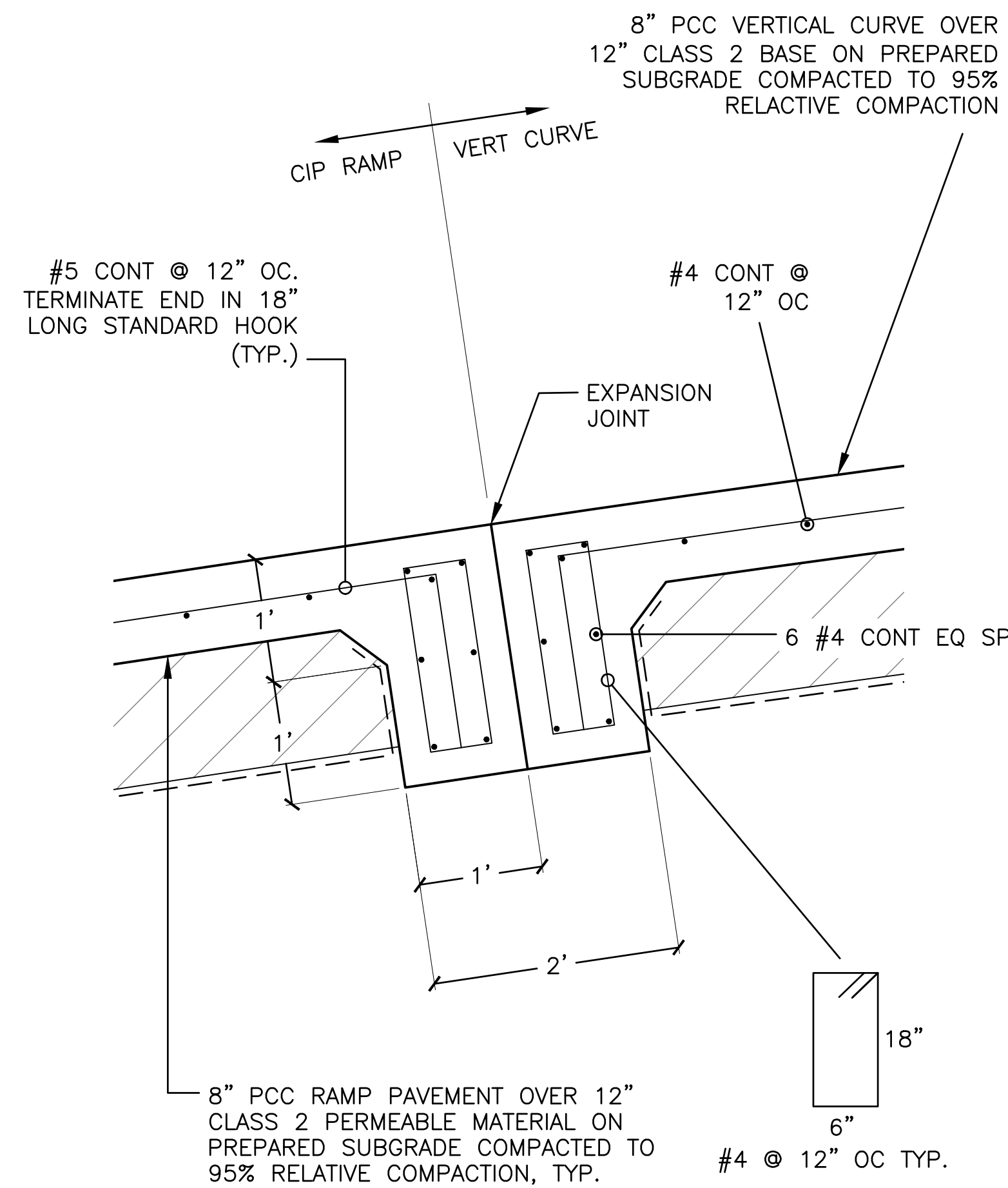
RAMP SECTIONS

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

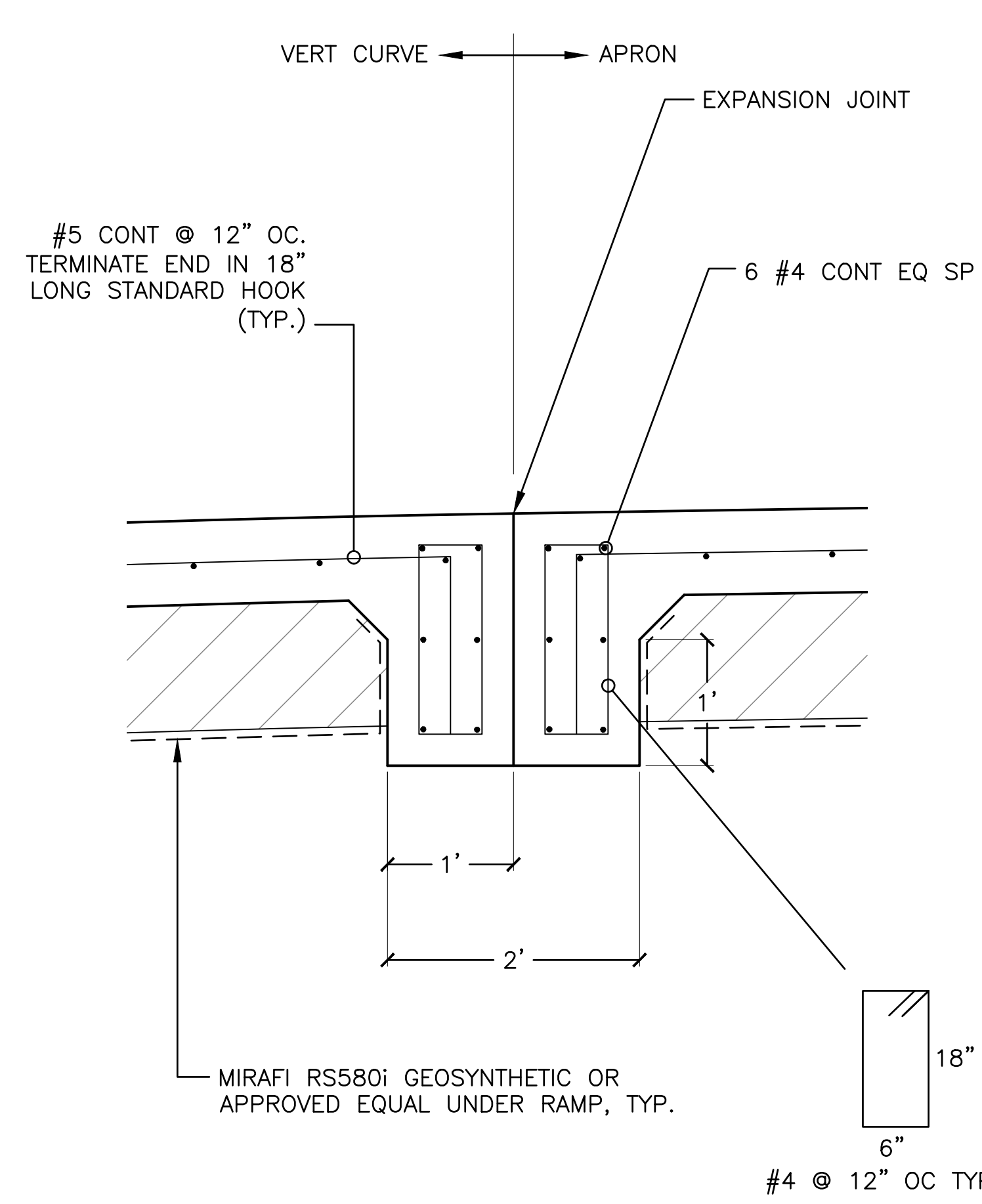
SHEET **19** OF **64**
JOB NO. **928-79**
SCALE **AS SHOWN**
DATE **23 JUL 2023**



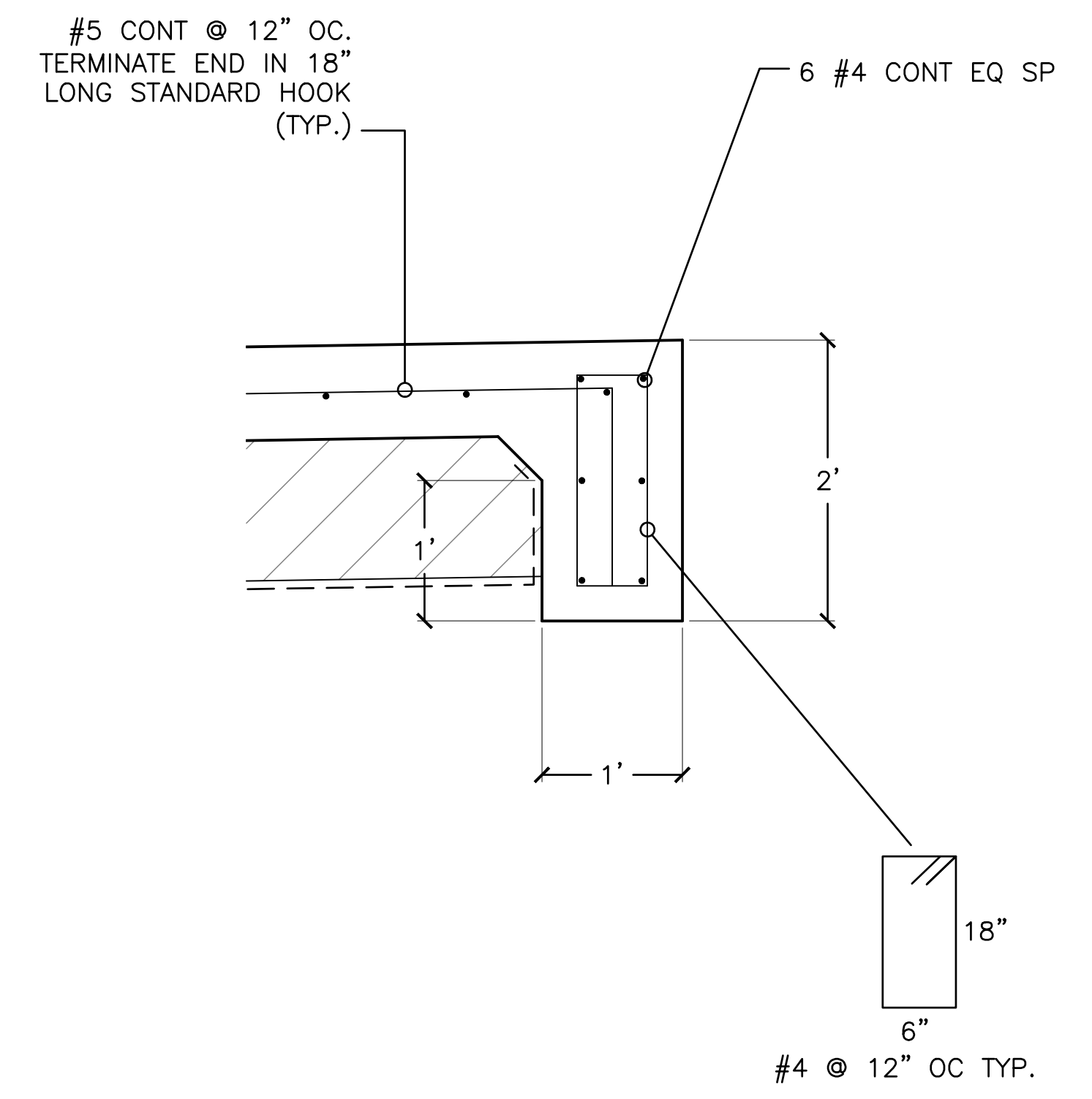
A TOE OF RAMP DETAIL
SCALE: 1" = 1'-0"



B TOP OF RAMP DETAIL
SCALE: 1" = 1'-0"

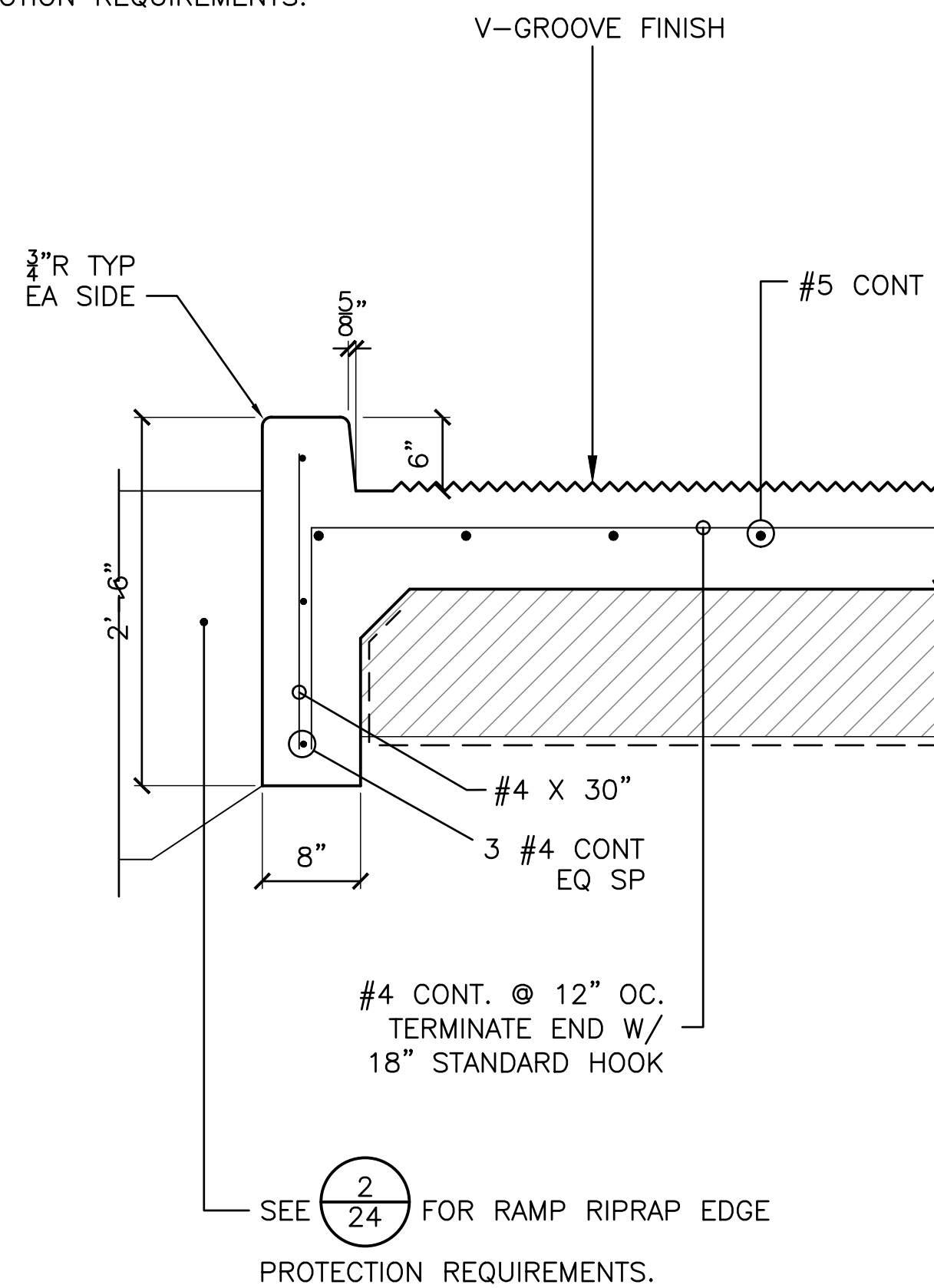


C TOE OF APRON DETAIL
SCALE: 1" = 1'-0"

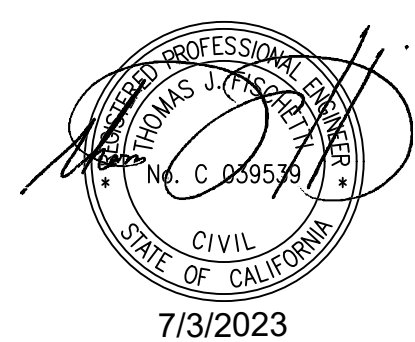


D TOP OF APRON DETAIL
SCALE: 1" = 1'-0"

NOTE:
SEE SHEET 22 FOR SLOPE
PROTECTION REQUIREMENTS.



E RAMP EDGE DETAIL
SCALE: 1" = 1'-0"



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NO.	DATE	REVISION

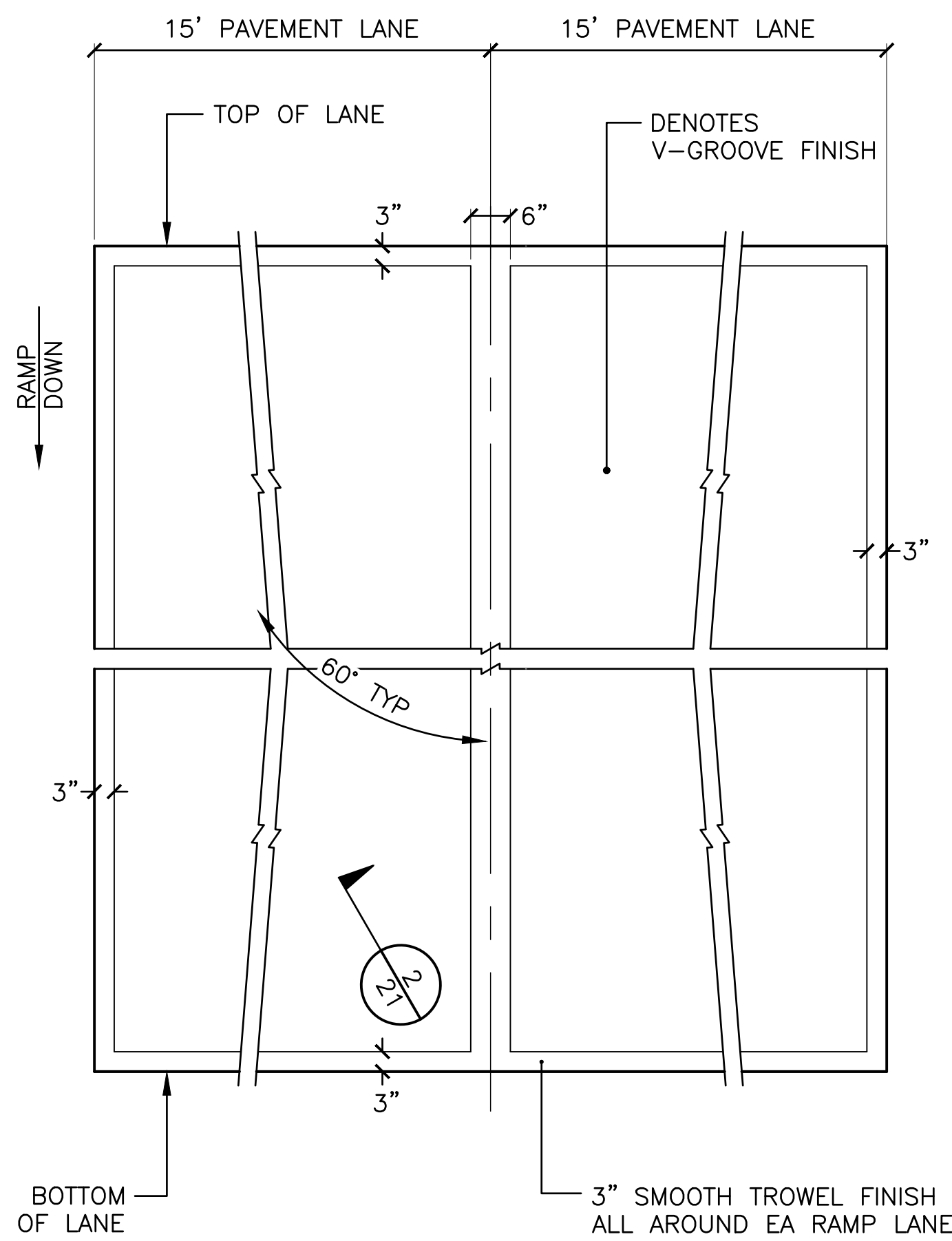
DESIGNED BY: **JTM**
DRAWN BY: **JTM**
CHECKED BY: **TJF**
APPROV. BY: **JTM**

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

LAUNCH RAMP DETAILS - 1

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

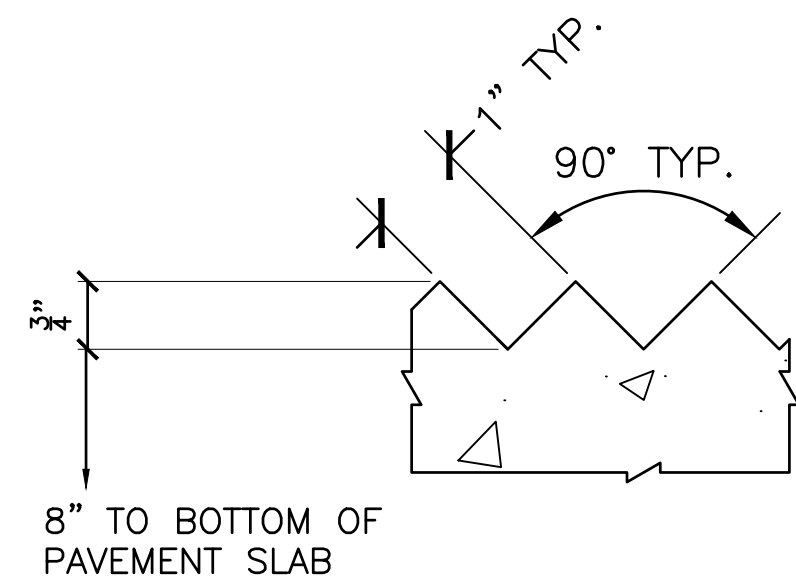
SHEET **20** OF **64**
JOB NO. **928-79**
SCALE **AS SHOWN**
DATE **23 JUL 2023**



NOTE: SEE $\frac{2}{18}$ FOR ORIENTATION OF V-GROOVE PATTERN EA LANE.

1 V-GROOVE PATTERN DETAIL
SCALE: N.T.S.

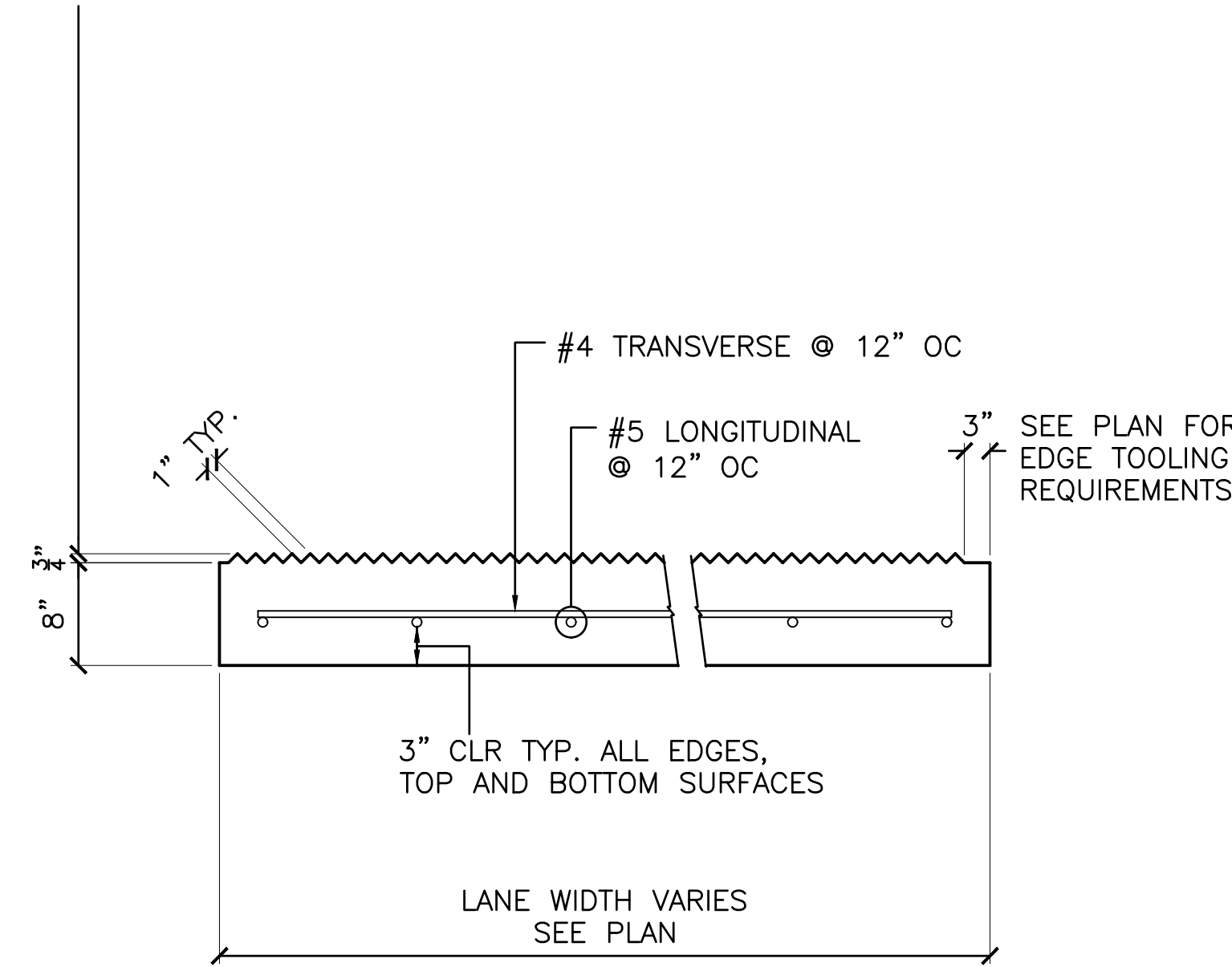
NOTE: PRIOR TO PLACEMENT OF ANY LAUNCH RAMP PAVEMENT CONTRACTOR SHALL DEMONSTRATE V-GROOVE CONSTRUCTION FINISH WORK ON A 4'X6'X4" CONCRETE TEST PANEL FOR APPROVAL BY DIVISION OF BOATING AND WATERWAYS REPRESENTATIVE (SEE NOTE SHEET 18).



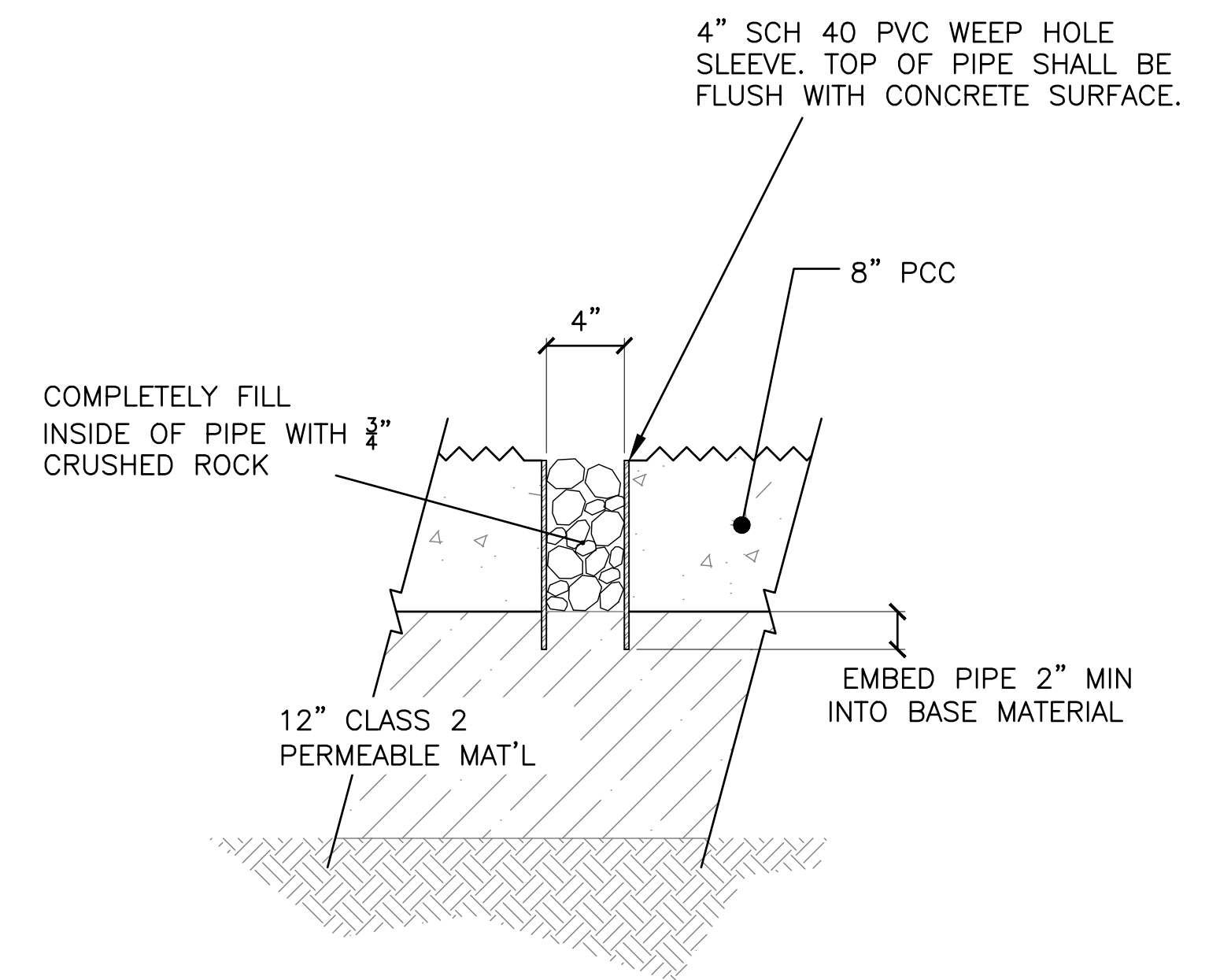
NOTE: PAVEMENT WITH UNSATISFACTORY V-GROOVE FINISH SHALL BE COMPLETELY REMOVED AND DISPOSED OFF SITE AT THE CONTRACTOR'S EXPENSE. NEW PAVEMENT SHALL BE PLACED TO THE SATISFACTION OF THE ENGINEER AND REPRESENTATIVES FROM THE DIVISION OF BOATING AND WATERWAYS.

2 V-GROOVE DETAIL
SCALE: N.T.S.

NOTE: PAVEMENT WITH V-GROOVE FINISH SHALL BE TOTAL OF 8 1/2" THICK. PAVEMENT WITH BROOM FINISH SHALL BE 8" THICK.

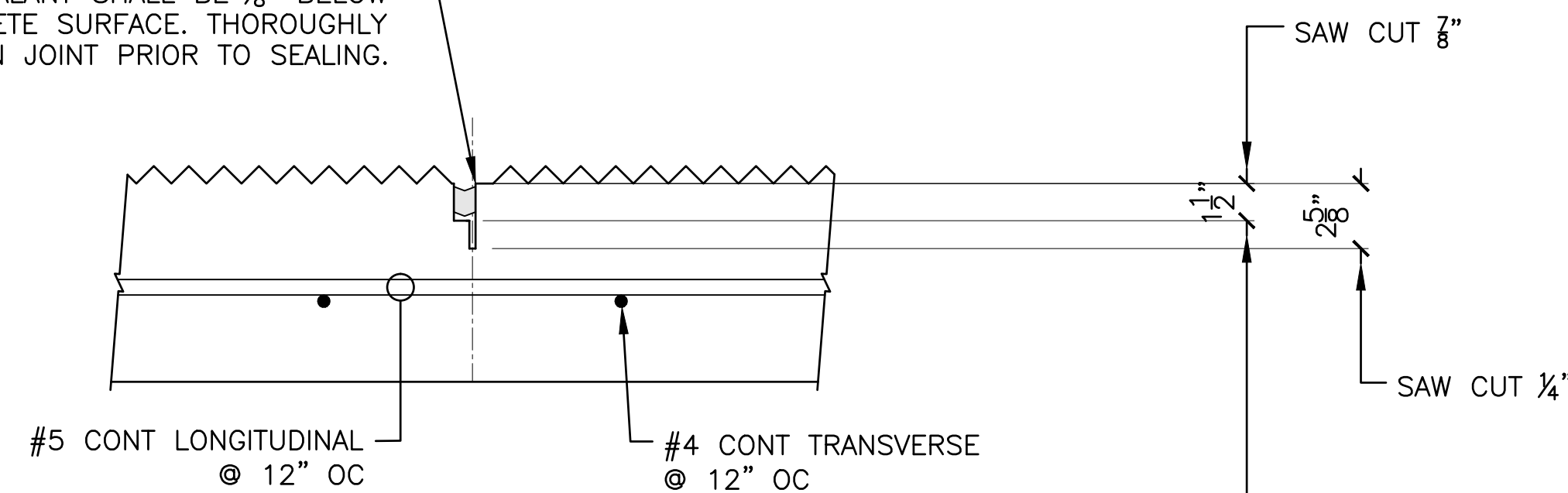


3 RAMP PAVEMENT SECTION DETAIL
SCALE: 1" = 1'-0"



4 WEEP HOLE DETAIL
SCALE: 1 1/2" = 1'-0"

J-100 PREFORMED JOINT SEALING SYSTEM AS MANUFACTURED BY D.S. BROWN COMPANY OR APPROVED EQUAL. TOP OF SEALANT SHALL BE 1/8" BELOW CONCRETE SURFACE. THOROUGHLY CLEAN JOINT PRIOR TO SEALING.

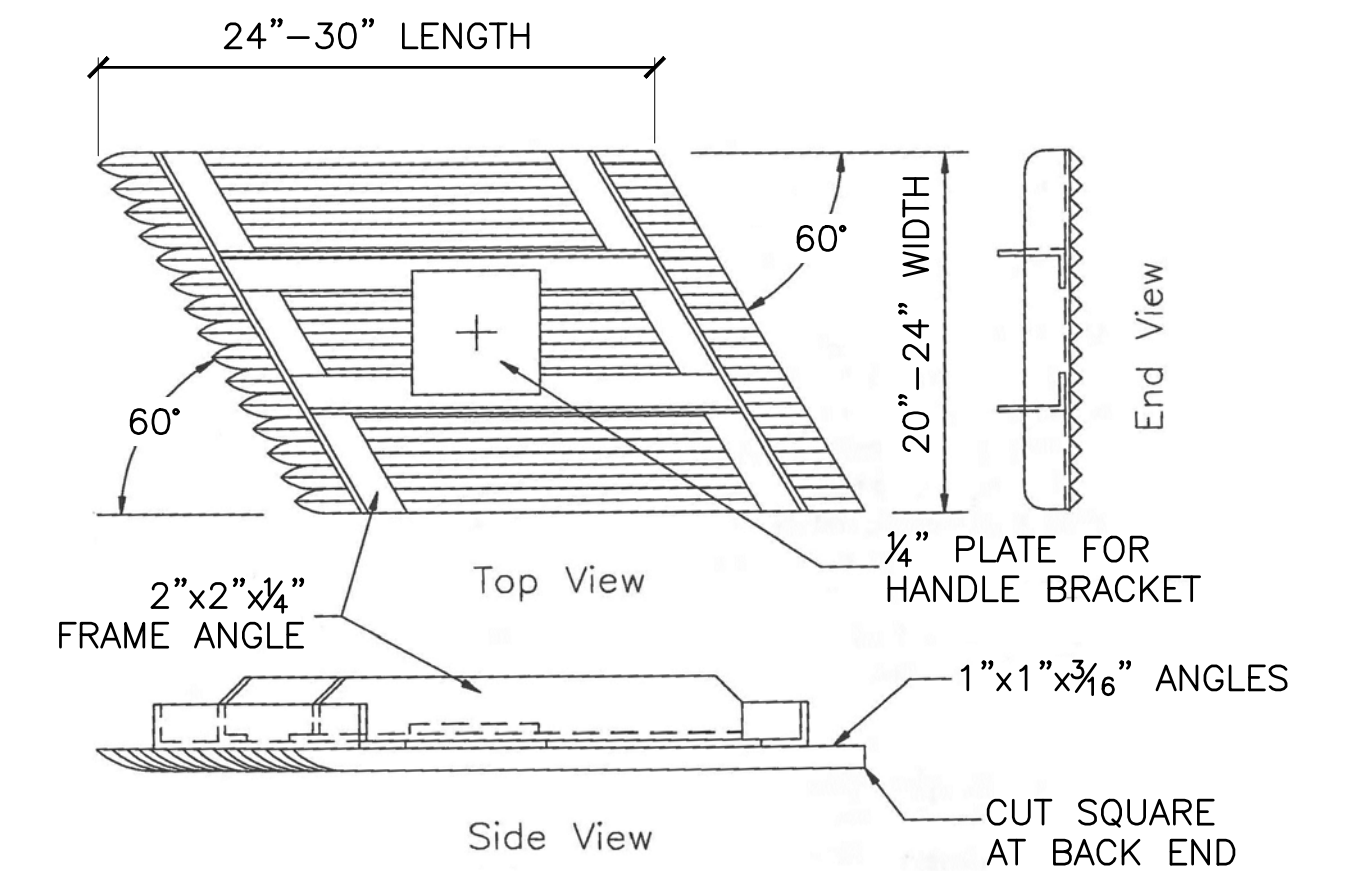


NOTE: ADJUST DEPTH OF JOINT SEAL RESERVOIR SAW CUT AS REQUIRED PER MANUFACTURER'S WRITTEN RECOMMENDATIONS (TYP.)

5 CONTROL JOINT DETAIL
SCALE: 1" = 6"

JOINT SEAL NOTES:

- ALL RAMP PAVEMENT JOINTS SHALL BE SEALED WITH THE J-100 PREFORMED SEALANT SYSTEM AS MANUFACTURED BY D.S. BROWN COMPANY OR APPROVED EQUAL.
- THE PREFORMED JOINTS SHALL BE GLUED IN PLACE WITH A HIGH STRENGTH, TWO-PART EPOXY-BASED STRUCTURAL ADHESIVE SPECIFICALLY DESIGNED FOR SECURING THE PREFORMED SEAL IN PLACE TO CONCRETE SO THAT HYDROSTATIC PRESSURE WILL NOT DISLODGE THE SEAL.
- THE JOINT SEAL SYSTEM SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS INCLUDING SAW CUT WIDTH AND DEPTH FOR THE JOINT RESERVOIR.
- JOINTS SHALL BE PREPARED IN A TWO-STAGE SAWING OPERATION. THE FIRST CUT SHALL BE COMPLETED WITHIN TWELVE (12) HOURS OF CONCRETE PLACEMENT TO CONTROL CRACKING. THE SECOND SAW CUT TO FORM THE RESERVOIR FOR THE PREFORMED JOINT SEAL SHALL NOT BE MADE UNTIL THE CONCRETE HAS CURED FOR A MINIMUM OF SEVEN (7) DAYS.
- PRIOR TO PLACEMENT OF JOINT SEALANT MATERIAL, JOINTS SHALL BE FLUSHED WITH WATER TO REMOVE SAWING SLURRY, ALLOWED TO DRY, AND THOROUGHLY CLEANED TO REMOVE ANY REMAINING SAWING RESIDUE. FINAL CLEANING SHALL BE PERFORMED WITH HIGH PRESSURE (90 PSI MINIMUM) OIL FREE COMPRESSED AIR ON THE SAME DAY THAT THE JOINT SEALANT IS INSTALLED.
- PRIOR TO PERFORMING ANY PAVEMENT WORK, SUBMIT TO THE ENGINEER FOR APPROVAL MANUFACTURER'S TECHNICAL CATALOGUE INFORMATION FOR THE JOINT SEAL SYSTEM AND THE MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR ITS INSTALLATION AT THE MARINA DEL REY PROJECT SITE.

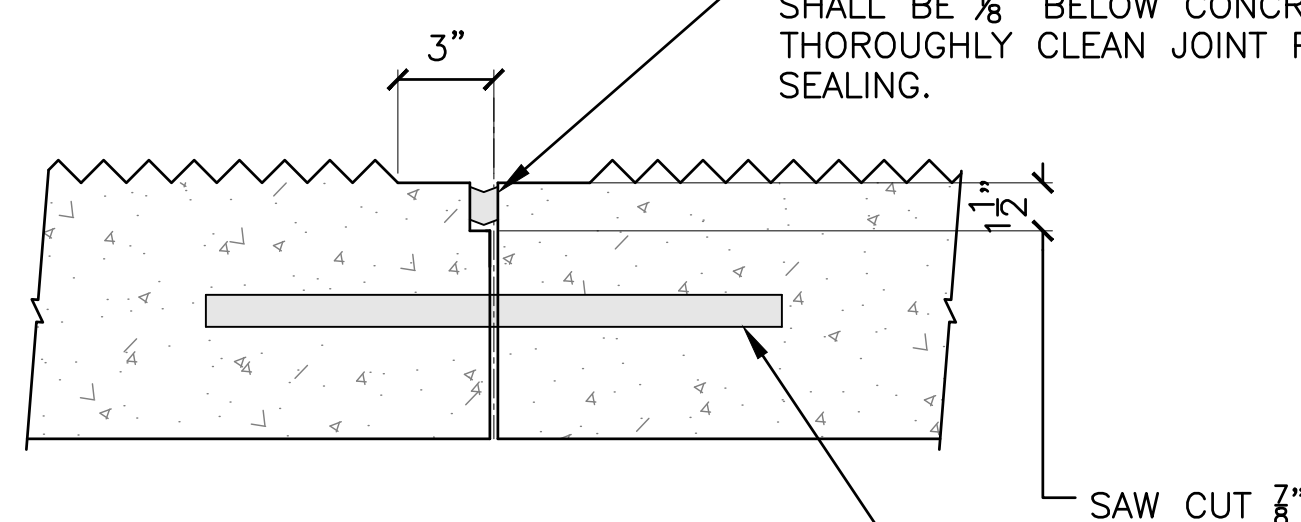


TOTAL WEIGHT = 22#-25#

NOTE: THE CONTRACTOR IS ADVISED TO REVIEW SECTIONS 202 D, E, AND F OF THE CALIFORNIA DIVISION OF BOATING AND WATERWAYS "LAYOUT, DESIGN AND CONSTRUCTION HANDBOOK FOR SMALL CRAFT LAUNCHING FACILITIES", 1991 EDITION. SUGGESTED MEANS AND METHODS TO CONSTRUCT V-GROOVE FINISH IS DESCRIBED THEREIN. SUGGESTED DETAILS FOR CUSTOM V-GROOVE TOOL DESIGN IS DISCUSSED IN SECTION E AND REPRODUCED FROM THE HANDBOOK IN THIS DETAIL FOR INFORMATION. CONTRACTOR, AT HIS OPTION, MAY ELECT TO USE ALTERNATIVE MEANS AND METHODS AND TOOLS TO PERFORM V-GROOVE FINISH WORK.

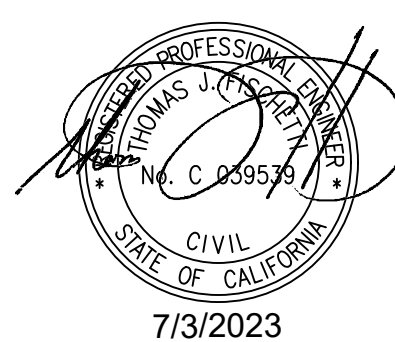
7 V-GROOVE TOOL FABRICATION
SCALE: N.T.S.

J-100 PREFORMED SEALING SYSTEM AS MANUFACTURED BY D.S. BROWN COMPANY OR APPROVED EQUAL. TOP OF SEALANT SHALL BE 1/8" BELOW CONCRETE SURFACE. THOROUGHLY CLEAN JOINT PRIOR TO SEALING.



6 CONSTRUCTION JOINT DETAIL
SCALE: 1" = 6"

#8x18" EPOXY COATED DOWEL
@ 12" OC CENTERED @ JT.



BID SET



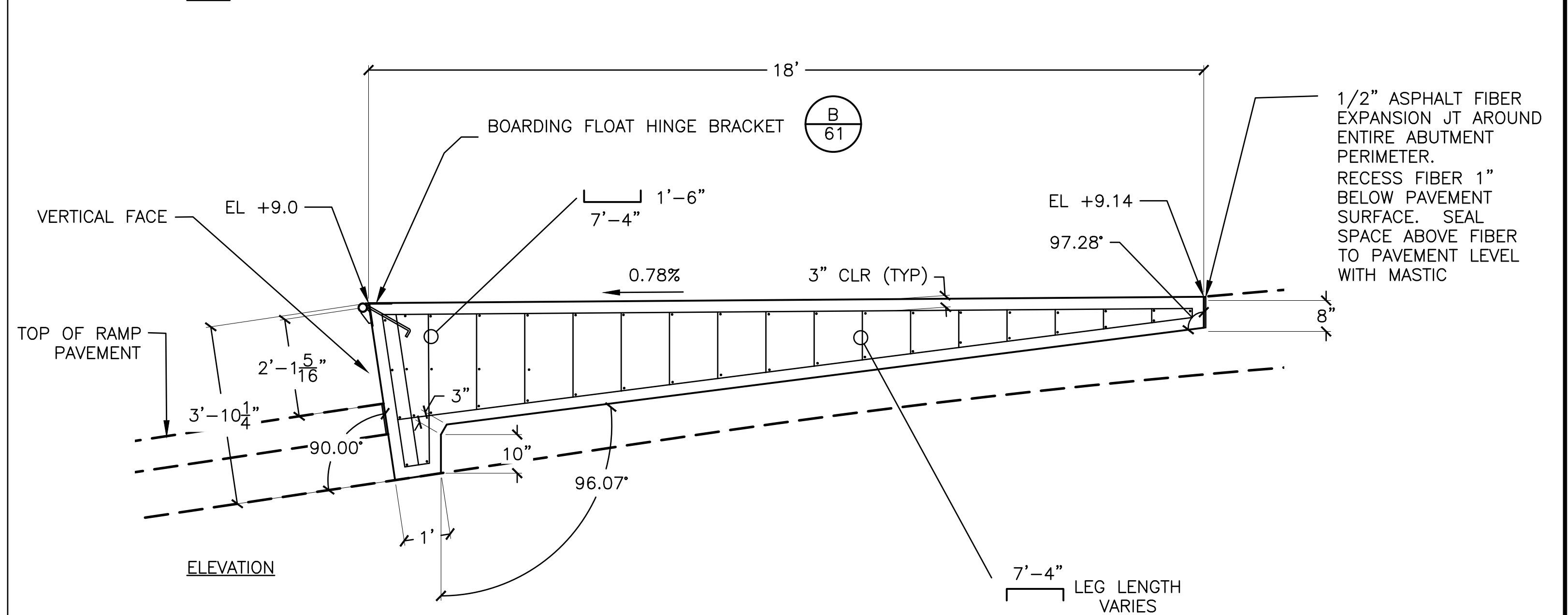
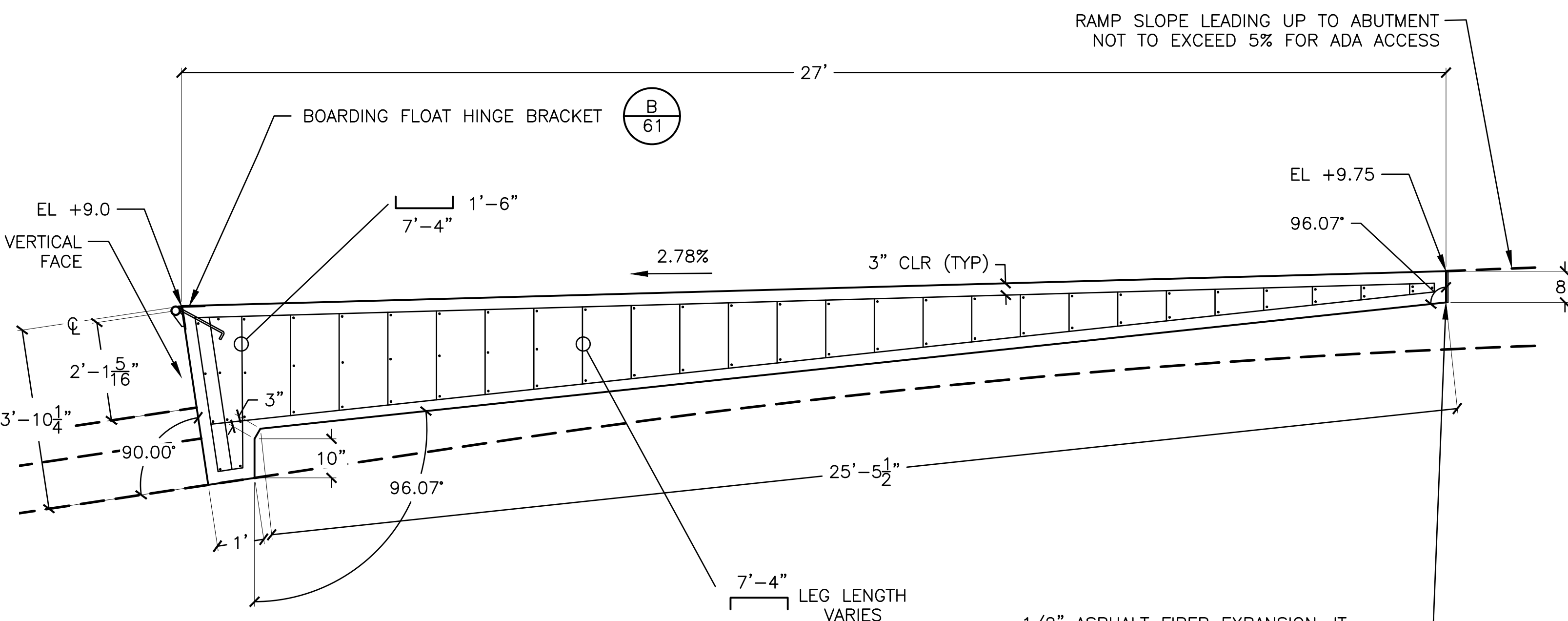
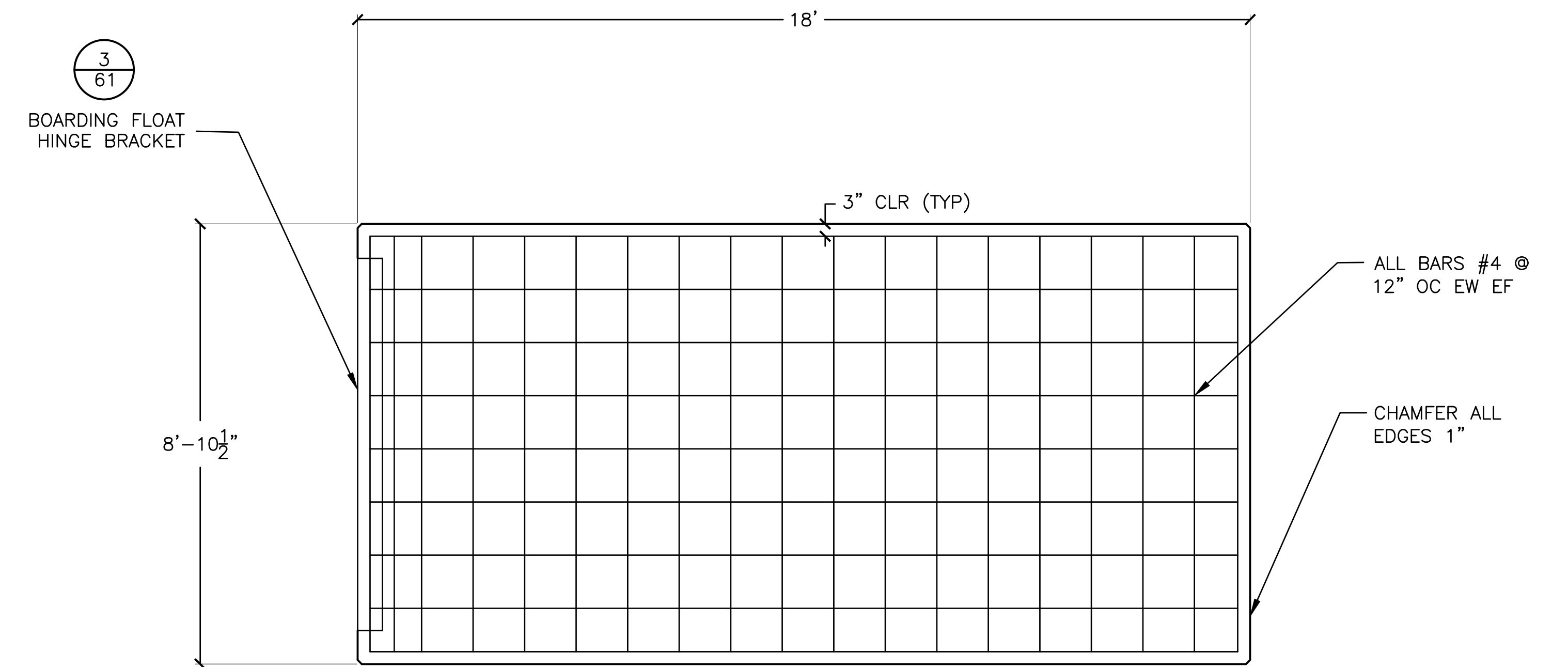
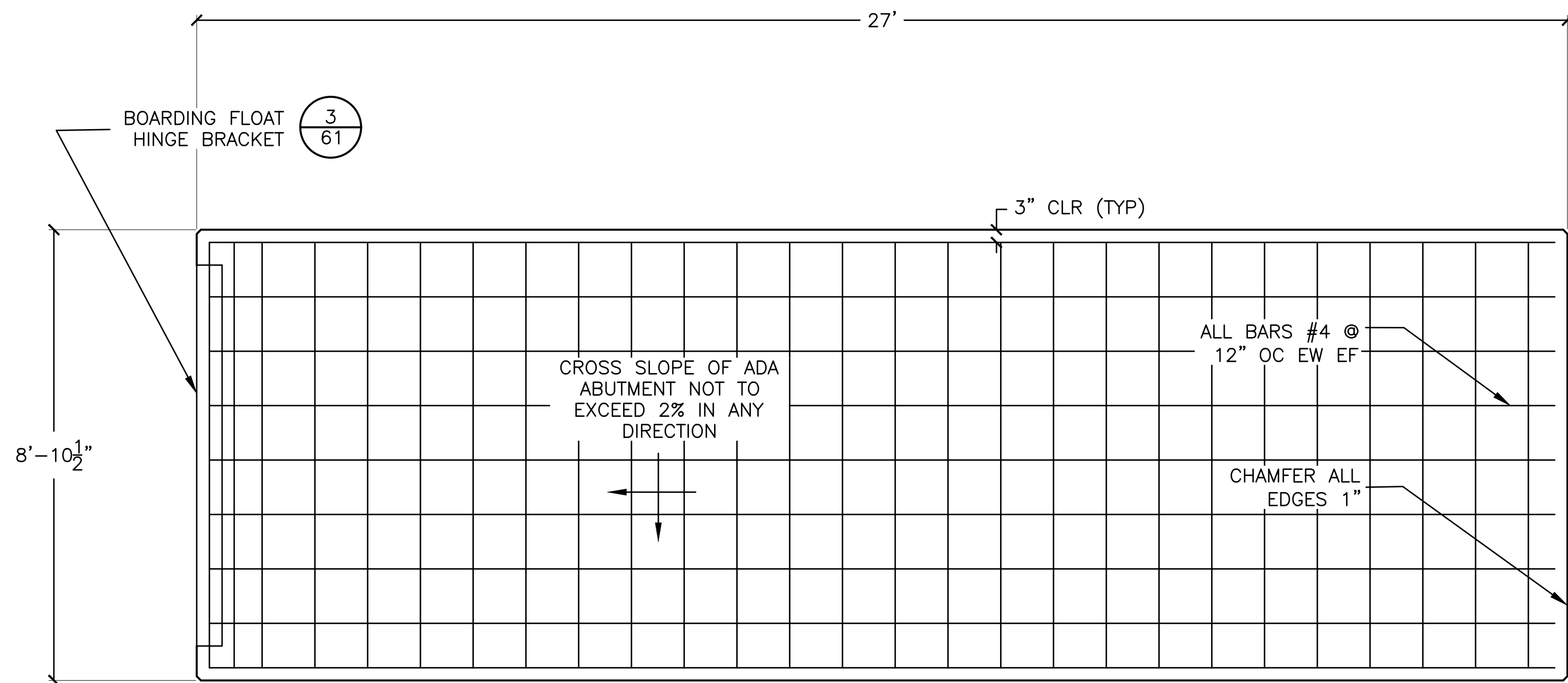
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
LAUNCH RAMP DETAILS - 2
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

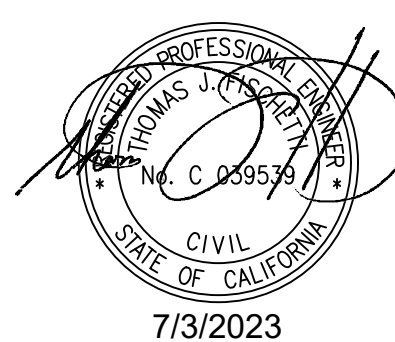
SHEET 21 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



1 BOARDING FLOAT 1 ADA ABUTMENT DETAILS
22 SCALE: 1" = 2'-0"

2 BOARDING FLOATS 2 & 3 ABUTMENT DETAILS
22 SCALE: 1" = 2'-0"

NOTE: ALL STEEL REINFORCEMENT SHALL BE EPOXY COATED IN CONFORMANCE WITH SECTION 52-1.02B OF THE STATE STANDARD SPECIFICATIONS.



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NO.	DATE	REVISION

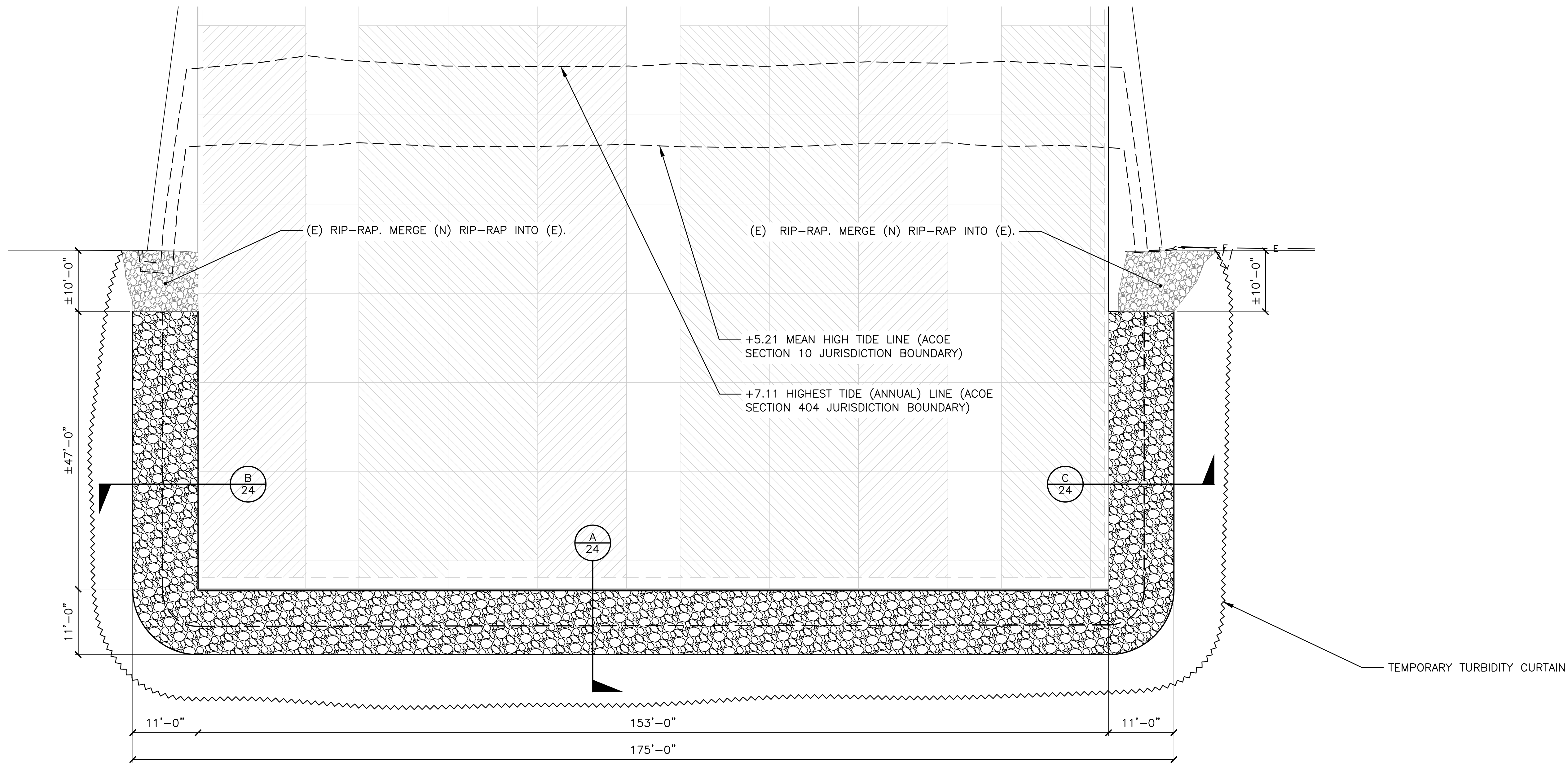
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
ABUTMENT DETAIL
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

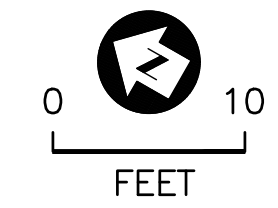
SHEET 22 OF 64
JOB NO. 928-79
SCALE 1" = 2'-0"
DATE 23 JUL 2023

SLOPE PROTECTION NOTES:

1. PLACE FILTER FABRIC STRIPS NORMAL TO SLOPE CONTOUR. FILTER FABRIC SHALL BE CAREFULLY PLACED AND SECURED SO THAT THE MATERIAL IS NOT DISLODGED, BUNCHED, TORN, OR DISPLACED DURING PLACEMENT OF STONE LAYERS. MIN OVERLAP OF FILTER FABRIC STRIPS SHALL BE THREE (3) FEET. FABRIC STRIPS SHALL CONSIST OF ONE CONTINUOUS PIECE THAT EXTENDS FROM TOP OF SLOPE TO TOE OF SLOPE. NO STRIPS SHALL BE SPLICED. SECURE ALL LONGITUDINAL SEAMS WITH APPROVED PINS PLACED 3FT OC (MAX).
2. FILTER FABRIC SHALL BE MIRAFI FW700 OR APPROVED EQUAL.
3. ALL STONE SHALL BE CAREFULLY PLACED STARTING AT THE BOTTOM OF SLOPE AND PROCEEDING UPWARD TO TOP OF SLOPE. STONE SHALL NOT BE DROPPED OR DUMPED.
4. ALL BEDDING STONE SHALL BE NO. 3 BACKING IN CONFORMANCE WITH SECTION 72-2.01 OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS.
5. CLASS IV (LIGHT CLASS) STONE SHALL CONFORM TO THE GRADATION REQUIREMENTS OF SECTION 72-2.01 OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS EXCEPT THAT NO STONE SHALL BE LARGER THAN 1/4-TON.



1
23 SLOPE PROTECTION PLAN
SCALE: 1" = 10'-0"



BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
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NO.	DATE	REVISION

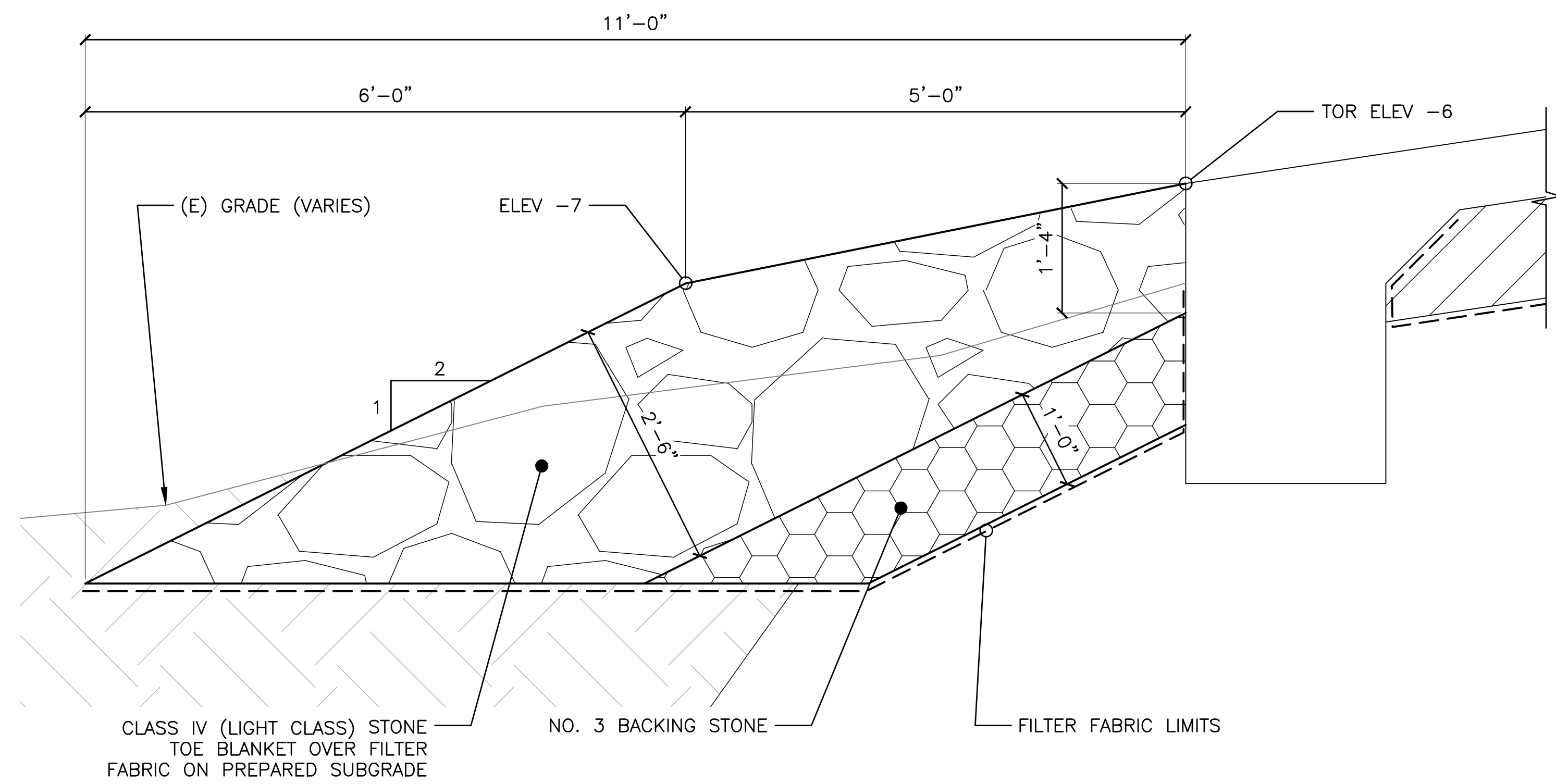
DESIGNED BY JTM
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LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

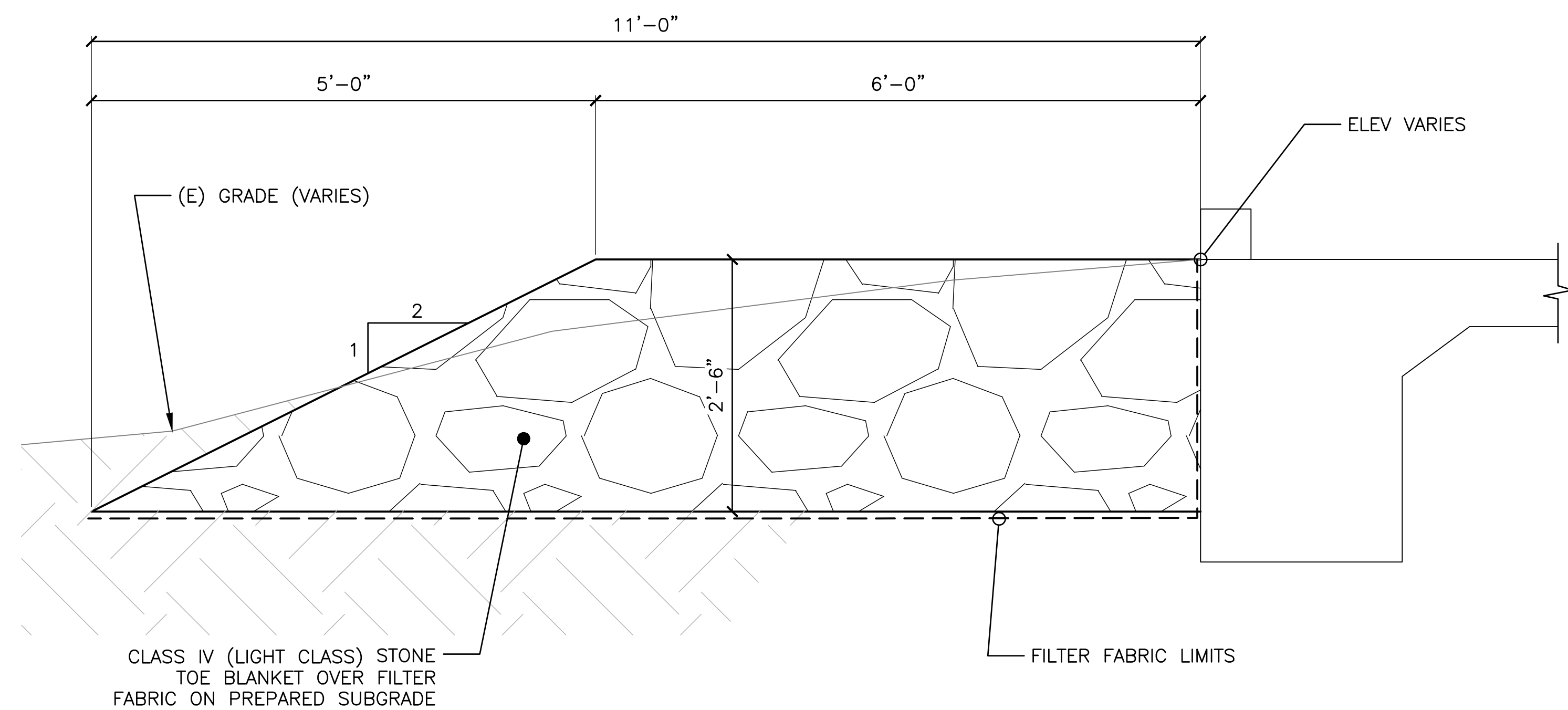
SLOPE PROTECTION PLAN

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

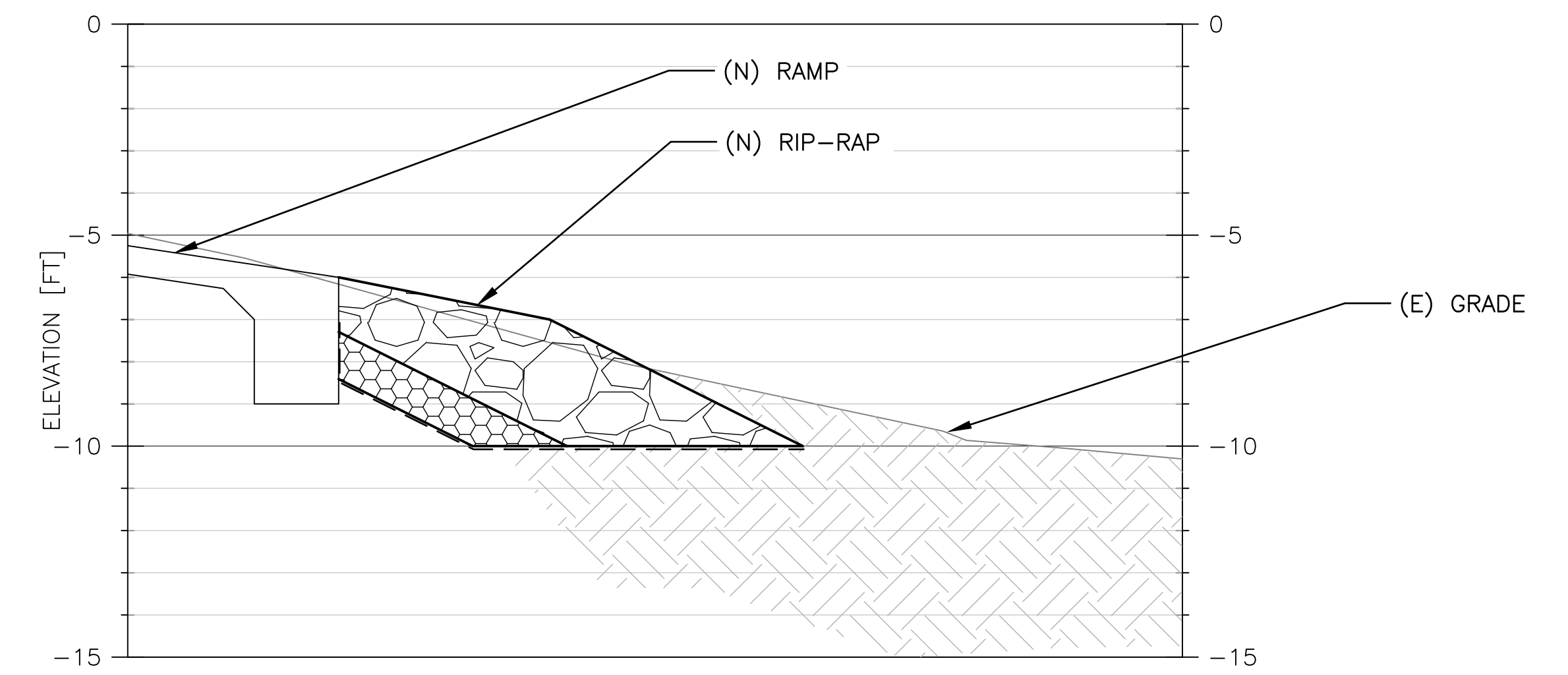
SHEET 23 OF 64
JOB NO. 928-79
SCALE 1" = 10'
DATE 23 JUL 2023



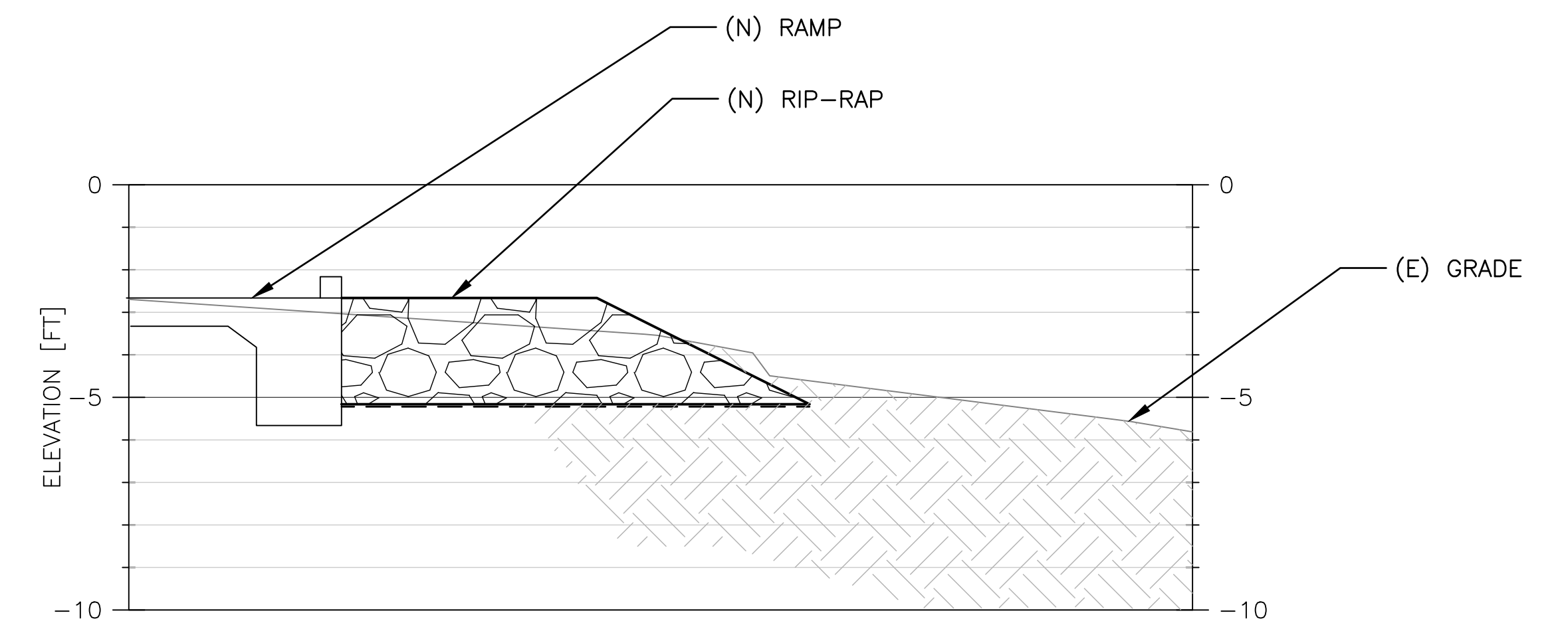
1 (TYP) RAMP TOE SECTION DETAIL
SCALE: 1" = 1'-0"



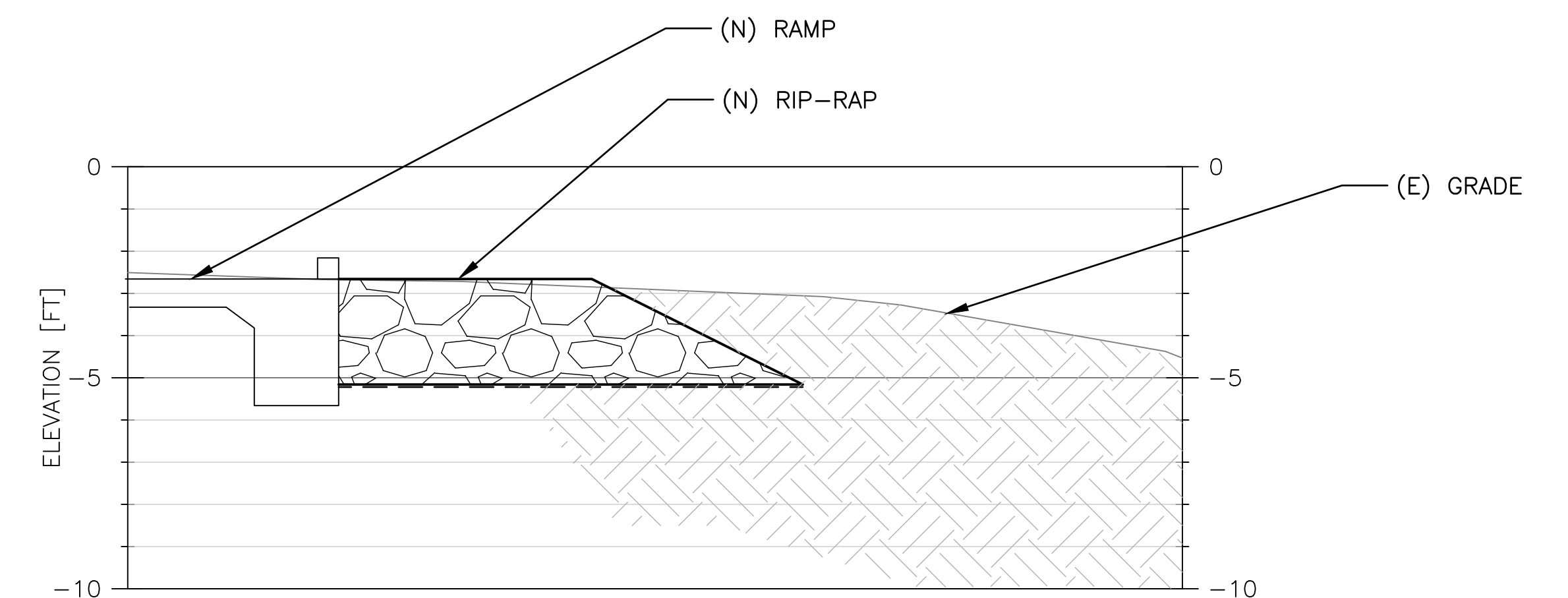
2 (TYP) RAMP EDGE SECTION DETAIL
SCALE: 1" = 1'-0"



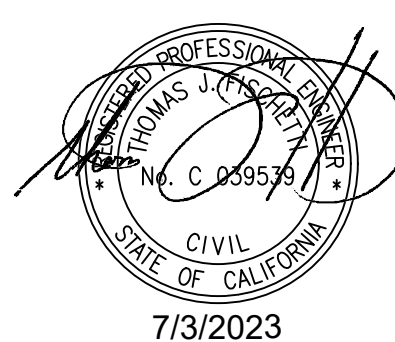
A RAMP TOE SECTION - PROJECT BASELINE STA 1+00
SCALE: 1" = 3'-0"



B RAMP NORTH END SECTION - RAMP BASELINE STA 2+00
SCALE: 1" = 3'-0"



C RAMP SOUTH END SECTION - RAMP BASELINE STA 2+00
SCALE: 1" = 3'-0"



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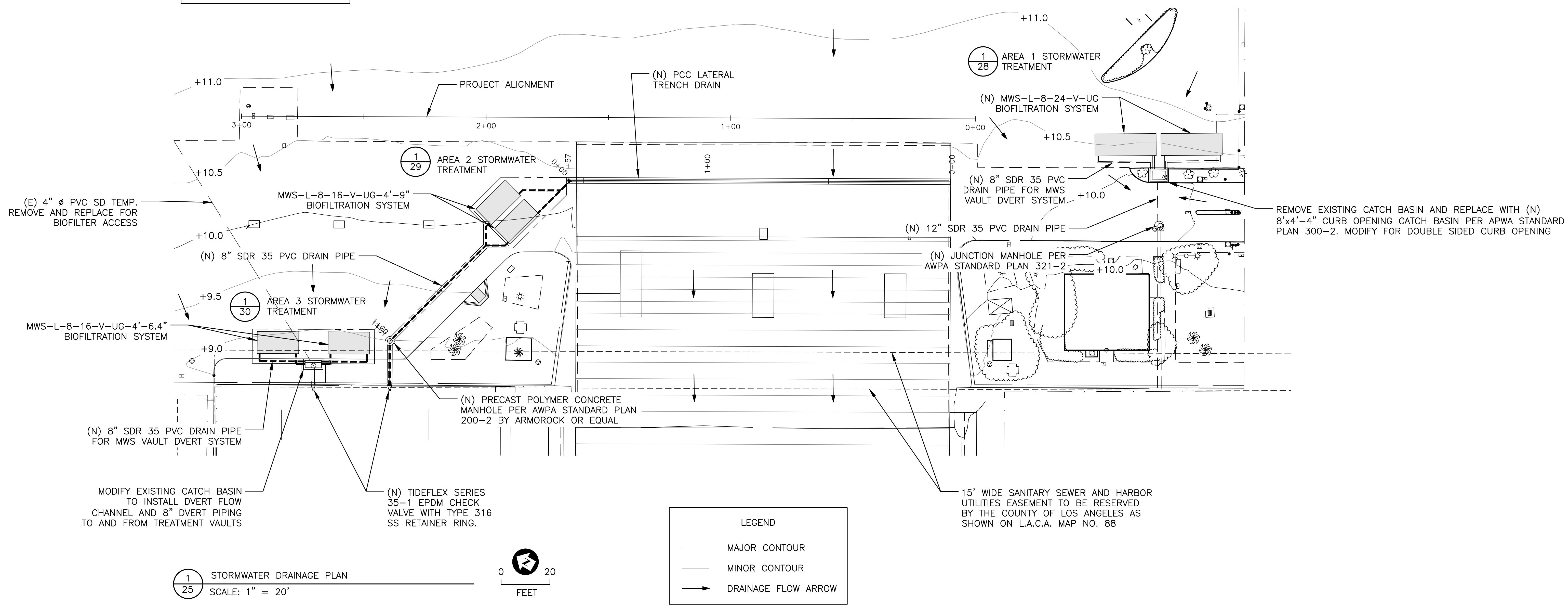
NO.	DATE	REVISION

DESIGNED BY: JTM
DRAWN BY: PGM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION
SLOPE PROTECTION DETAILS

SHEET 24 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023

NOTE:
LOCATE AND POT HOLE EXISTING
UTILITIES WITHIN STORM DRAIN
ALIGNMENT PRIOR TO EXCAVATION



NOTE: BIOFILTRATION AND DIVERT SYSTEMS AS MANUFACTURED BY BIO CLEAN. MWS SOIL MIX SHALL CONFORM TO BIO-1 IN THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS LOW IMPACT DEVELOPMENT MANUAL.



BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM

DRAWN BY: JTM

CHECKED BY: TJF

APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

SITE DRAINAGE PLAN

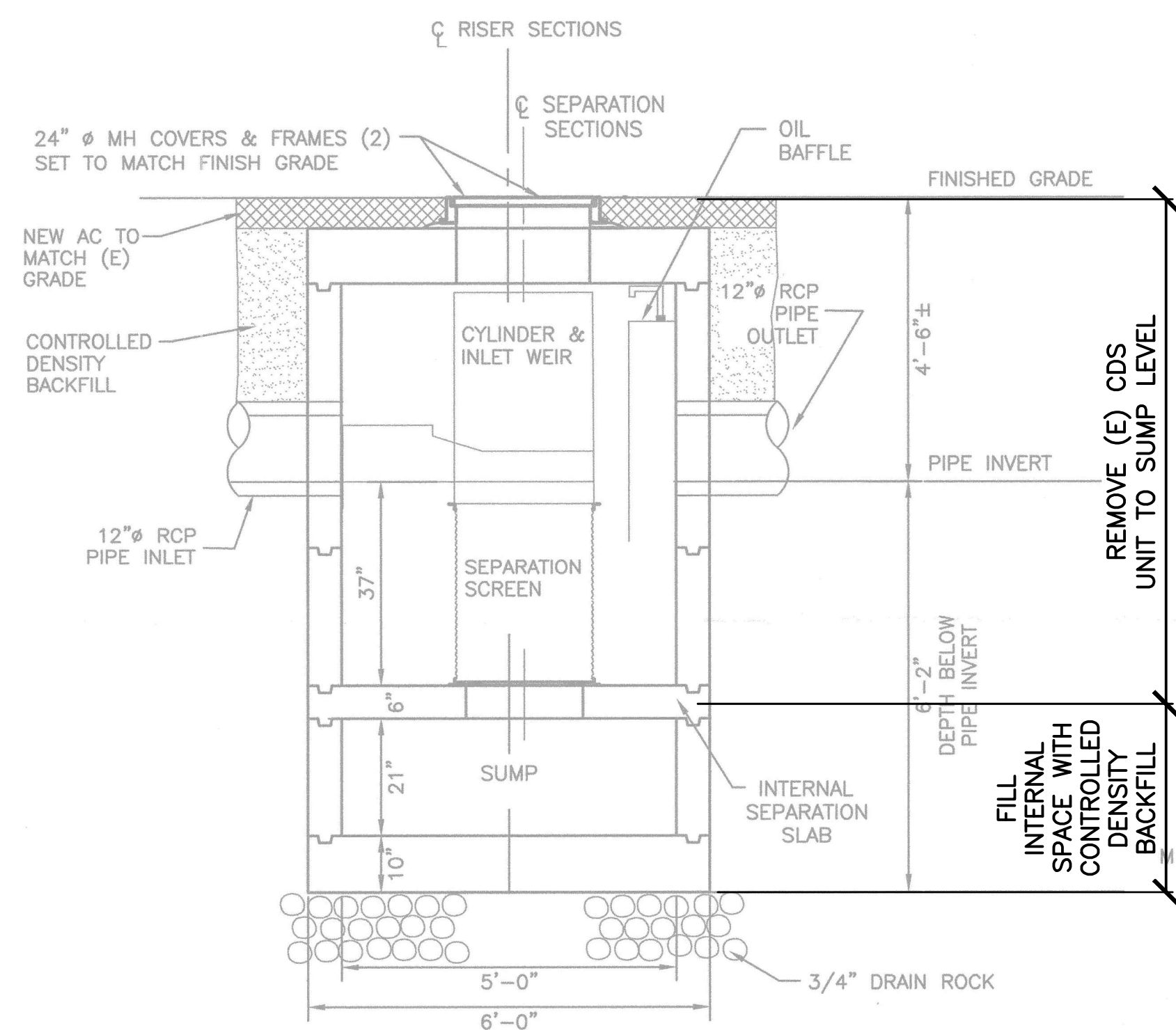
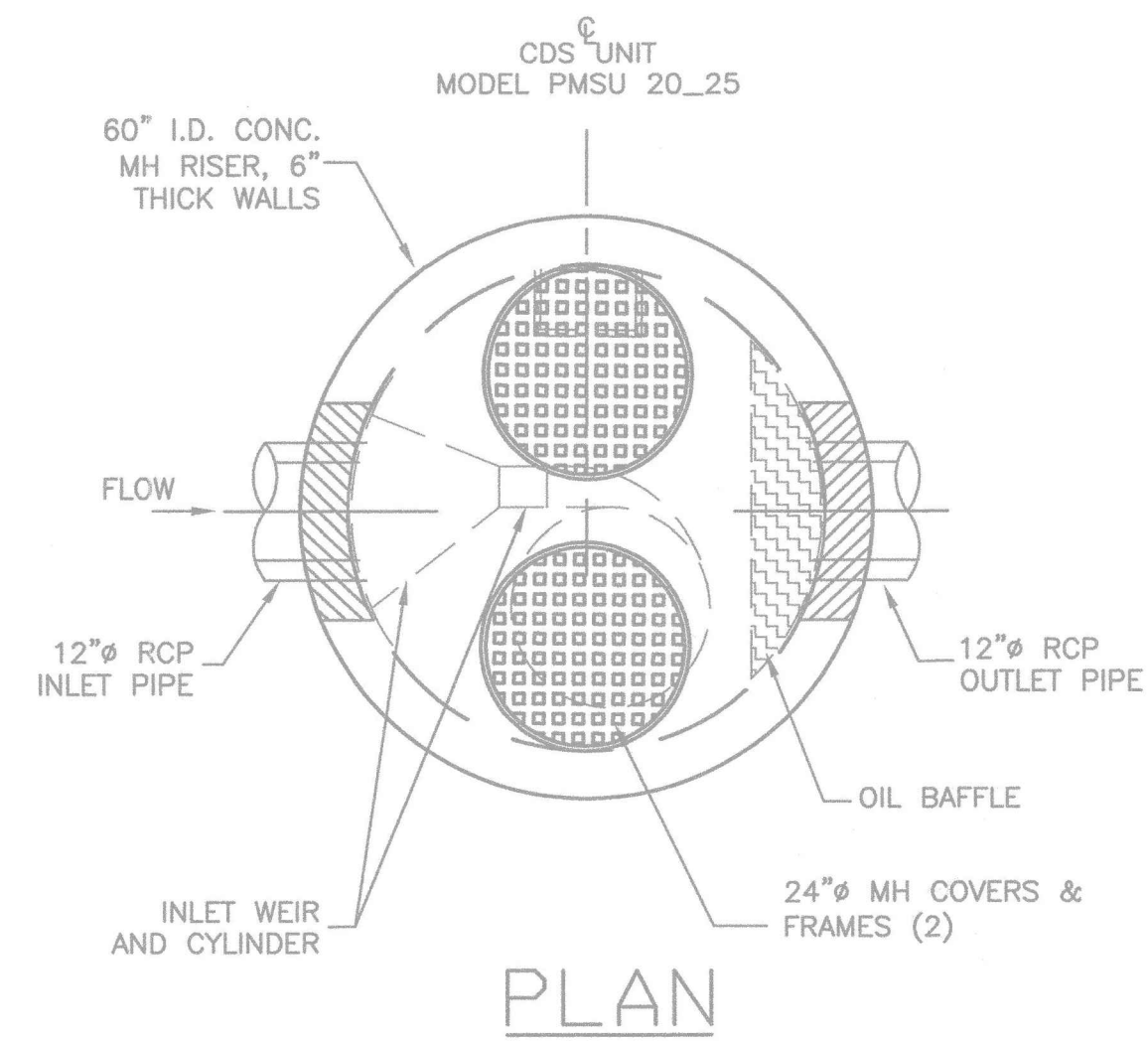
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 25 OF 64

JOB NO. 928-79

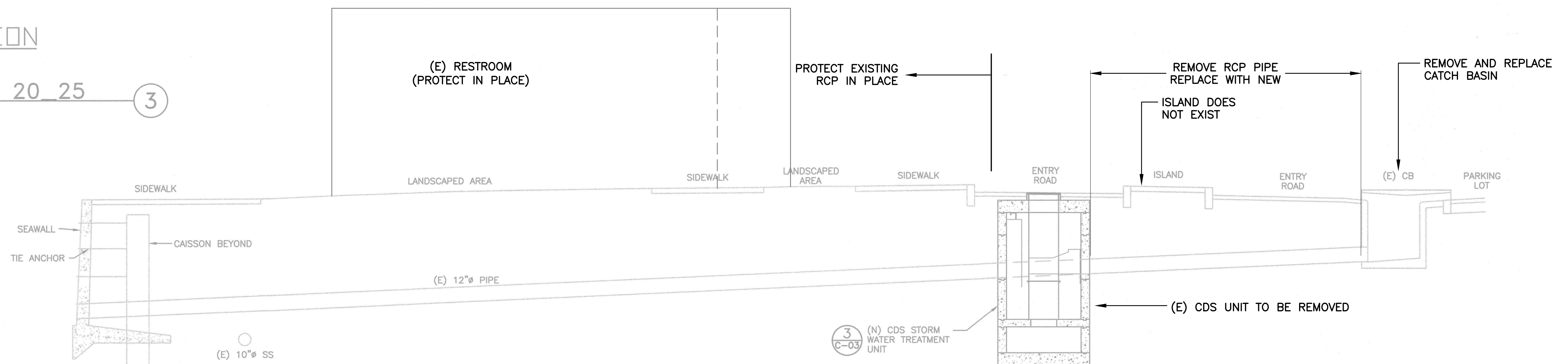
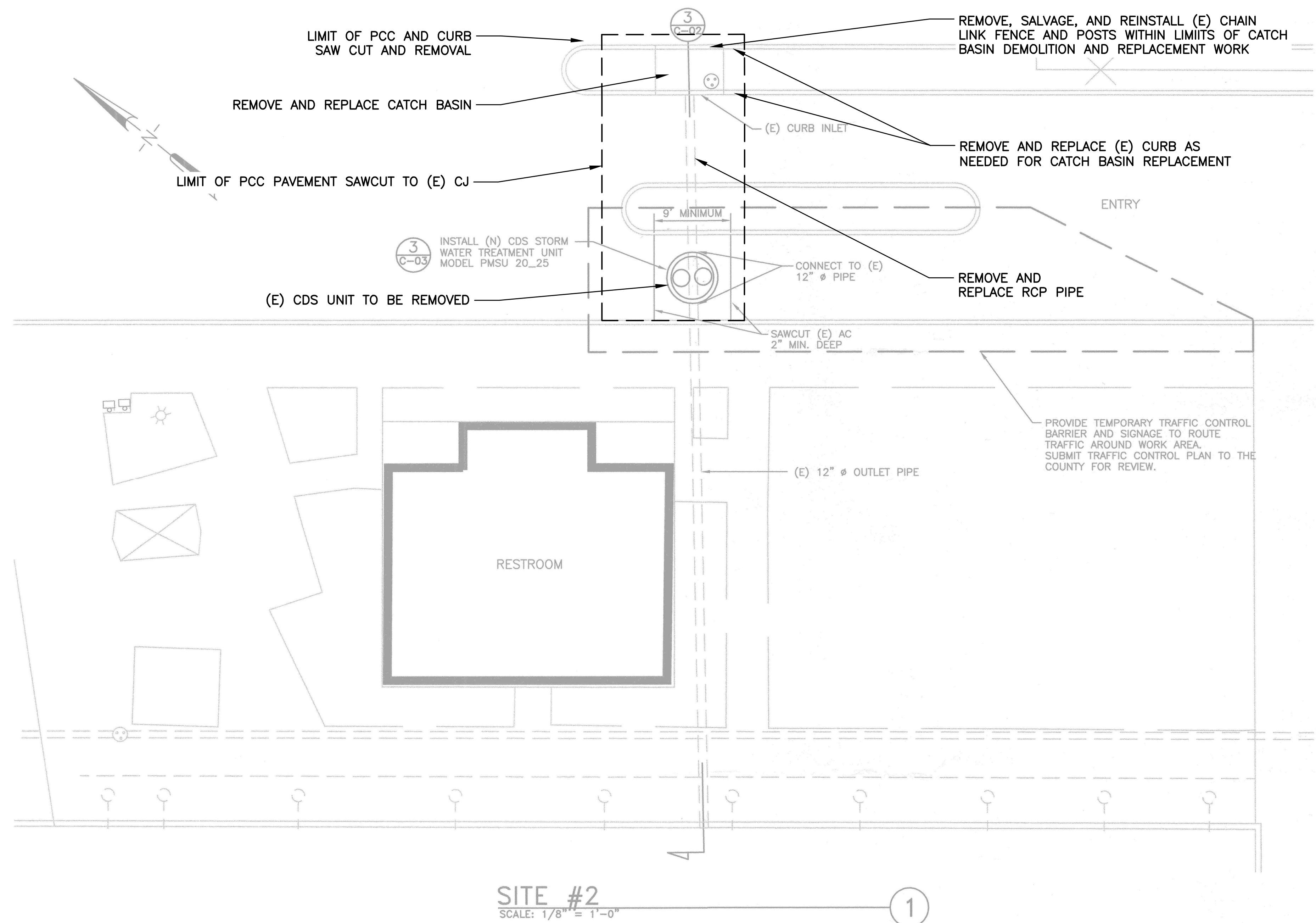
SCALE AS SHOWN

DATE 23 JUL 2023



CDS MODEL PMSU 20_25

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



1
26

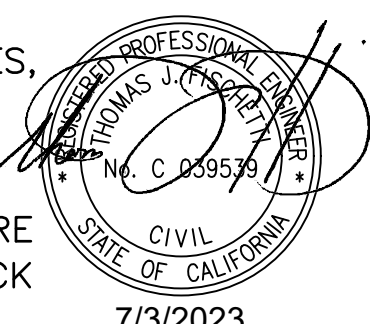
AREA 1 EXISTING STORMWATER IMPROVEMENTS

SCALE: AS SHOWN

SOURCE: DRAWING FROM CONCEPT MARINE ASSOCIATES, INC., MARCH 26, 2002. PARKING LOT #2 STORMWATER IMPROVEMENTS, SHEET C-03.

NOTE: ON THIS SHEET, LINES, TEXT, ETC. IN GRAY ARE FROM EXISTING DRAWINGS, AND THOSE IN BLACK ARE FOR THIS CURRENT PROJECT.

7/3/2023



BID SET

NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM

DRAWN BY: JTM

CHECKED BY: TJF

APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

AREA 1 STORM DRAIN DEMOLITION DETAIL

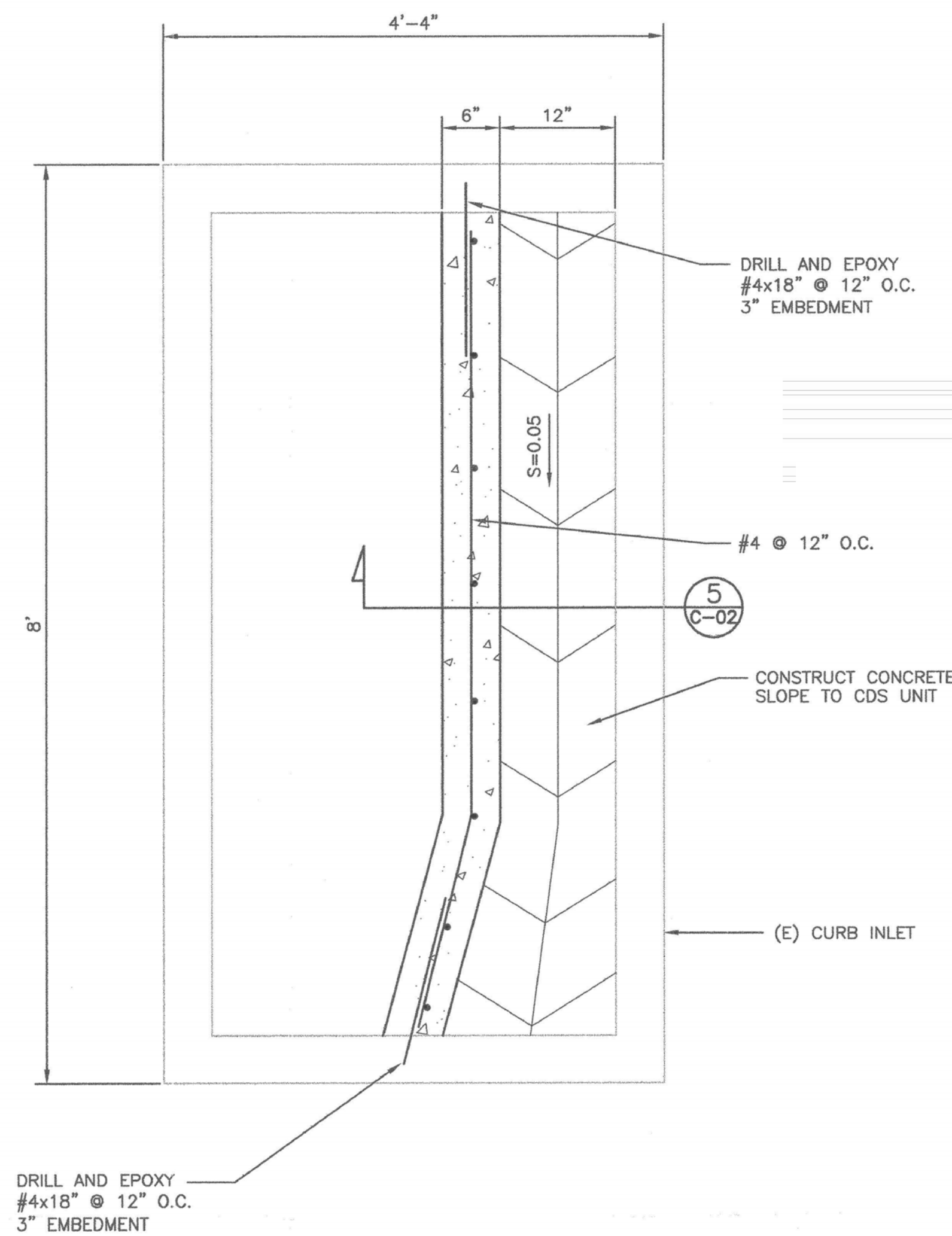
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 26 OF 64

JOB NO. 928-79

SCALE AS SHOWN

DATE 23 JUL 2023

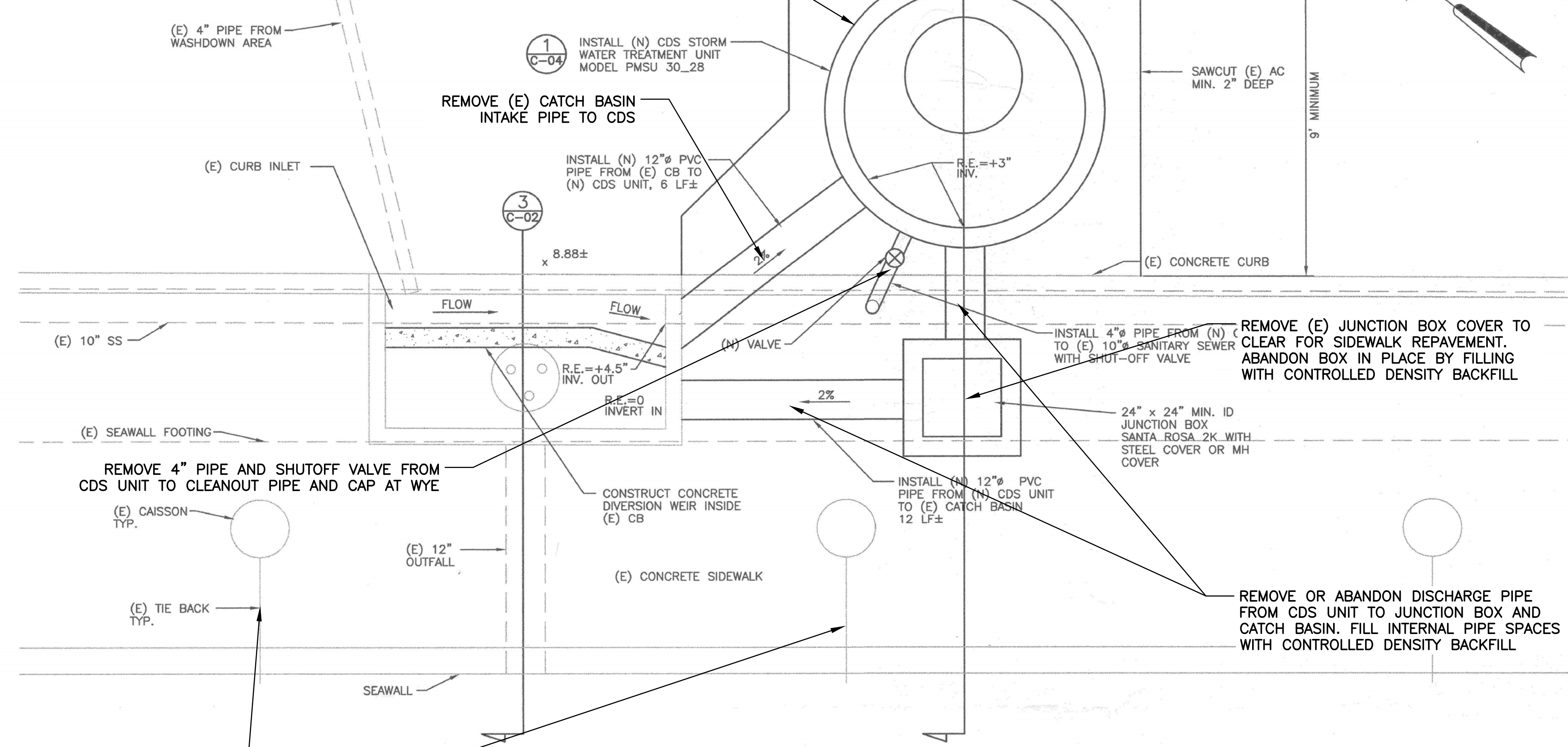


DIVERSION WEIR PLAN

SCALE: 1" = 1'-0"

4

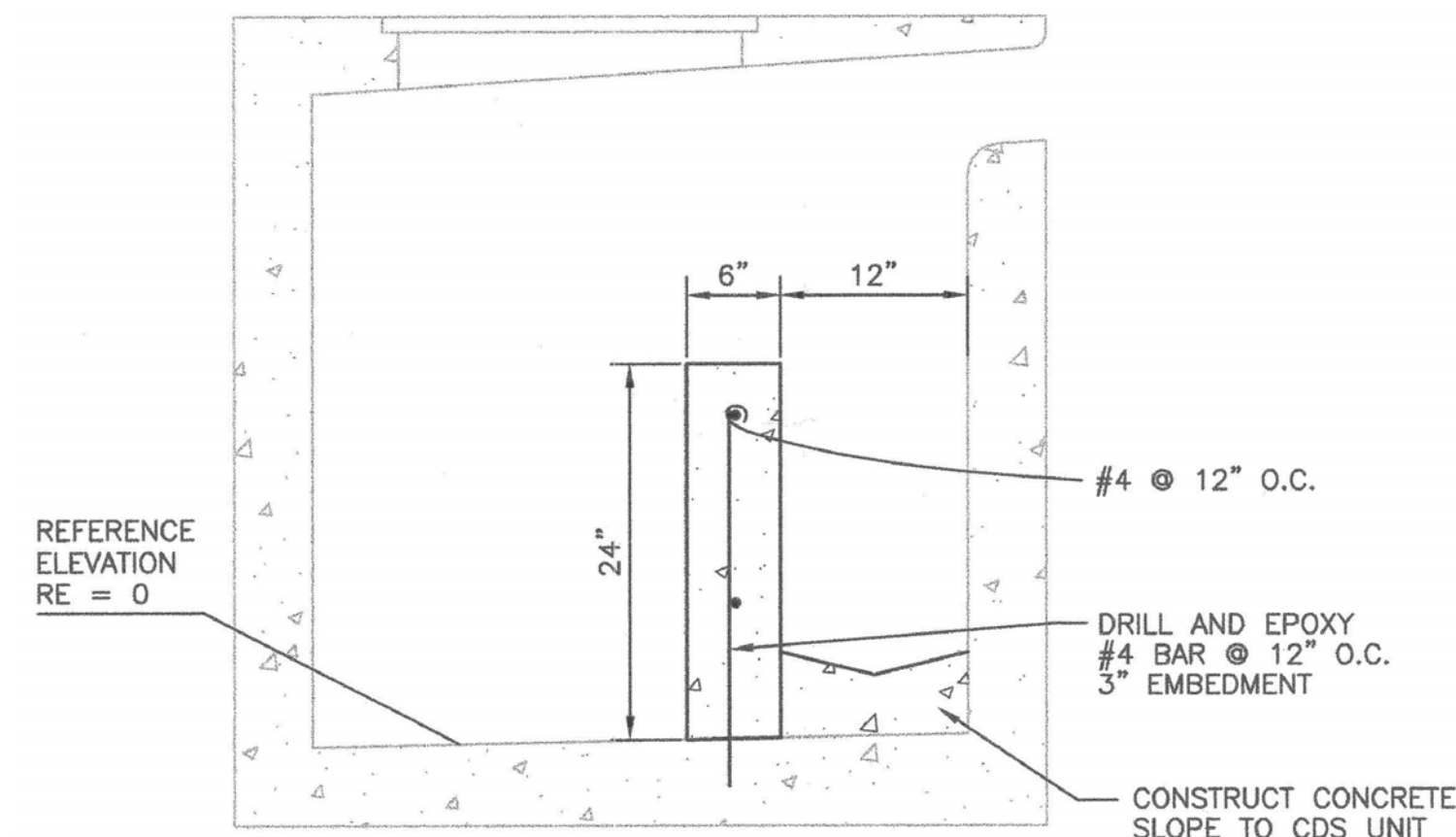
REMOVE CDS MH, VAULT LID, AND INTERNAL TREATMENT CYLINDERS TO SUMP LEVEL. REMOVE OUTER PRECAST RINGS TO SUMP LEVEL TO CLEAR FOR NEW MWS STORMWATER TREATMENT VAULT. ABANDON SUMP IN PLACE AND COMPLETELY FILL INTERNAL SPACE WITH CONTROLLED DENSITY BACKFILL.



SITE #1

SCALE: 1" = 2'

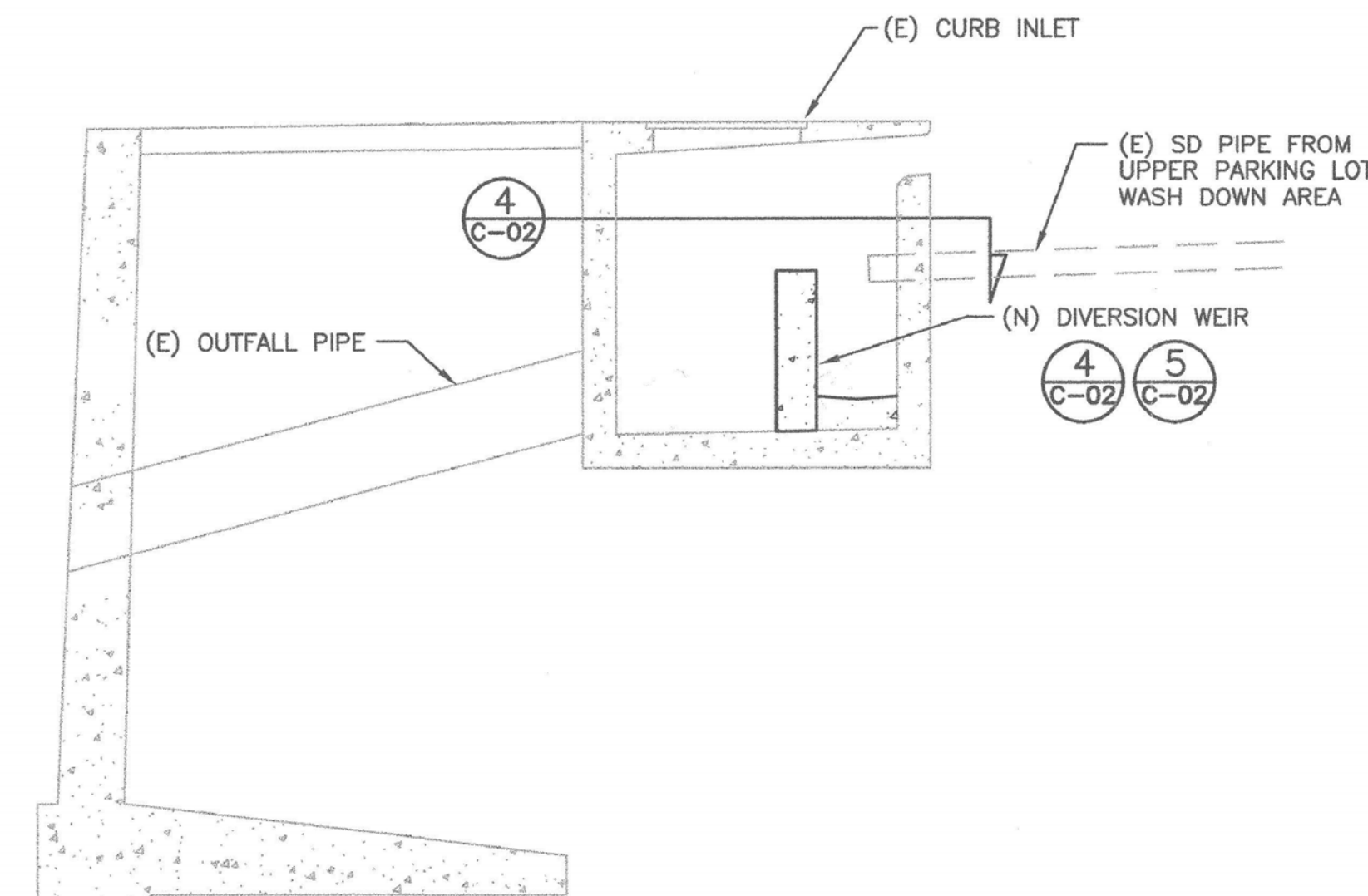
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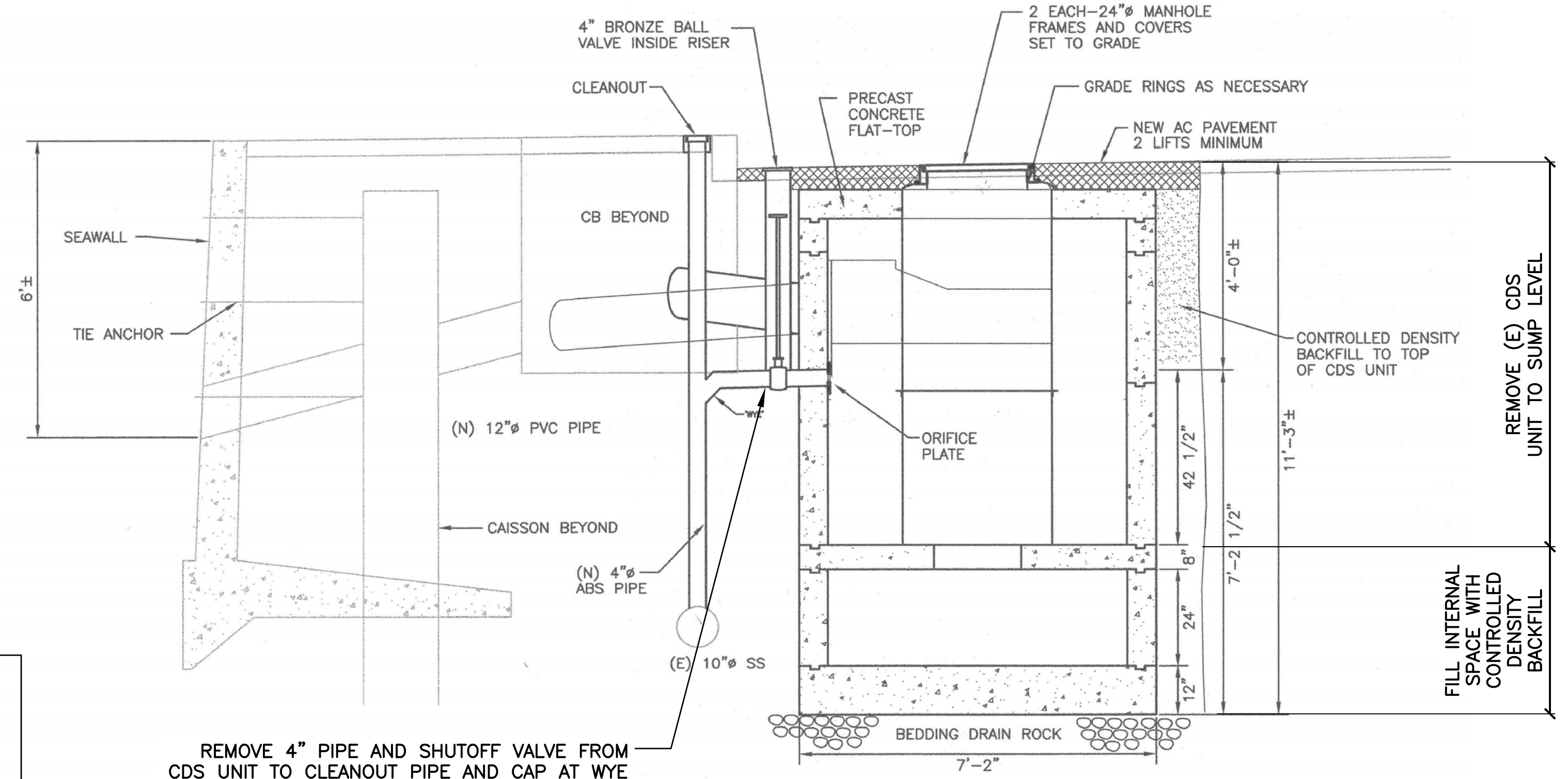
DIVERSION WEIR SECTION

SCALE: 1" = 1'-0"

5



NOTE: CONTRACTOR IS ADVISED TO USE CARE AND CAUTION WHEN EXCAVATING AND REMOVING CATCH BASIN AND OUTFALL PIPE SO AS NOT TO DAMAGE EXISTING CIDH SEAWALL TIEBACKS AND TIERS, CATHODIC PROTECTION CONDUCTOR, AND OTHER BURIED UTILITIES BAYWARD OF CATCH BASIN.

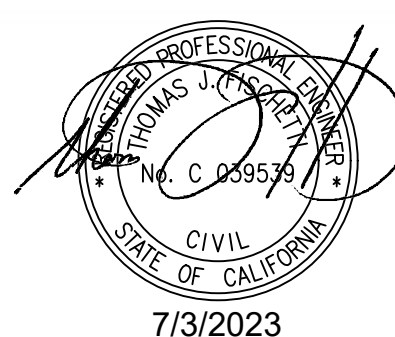


REMOVE 4" PIPE AND SHUTOFF VALVE FROM CDS UNIT TO CLEANOUT PIPE AND CAP AT WYE

1 AREA 3 DEMOLITION DETAIL
27 SCALE: AS SHOWN

SOURCE: DRAWING FROM SHEET 2 OF PARKING LOT #2 STORMWATER IMPROVEMENTS BY CONCEPT MARINE ASSOCIATES, INC., MARCH 26, 2002.

NOTE: ON THIS SHEET, LINES, TEXT, ETC. IN GRAY ARE FROM EXISTING DRAWINGS, AND THOSE IN BLACK ARE FOR THIS CURRENT PROJECT.



BID SET



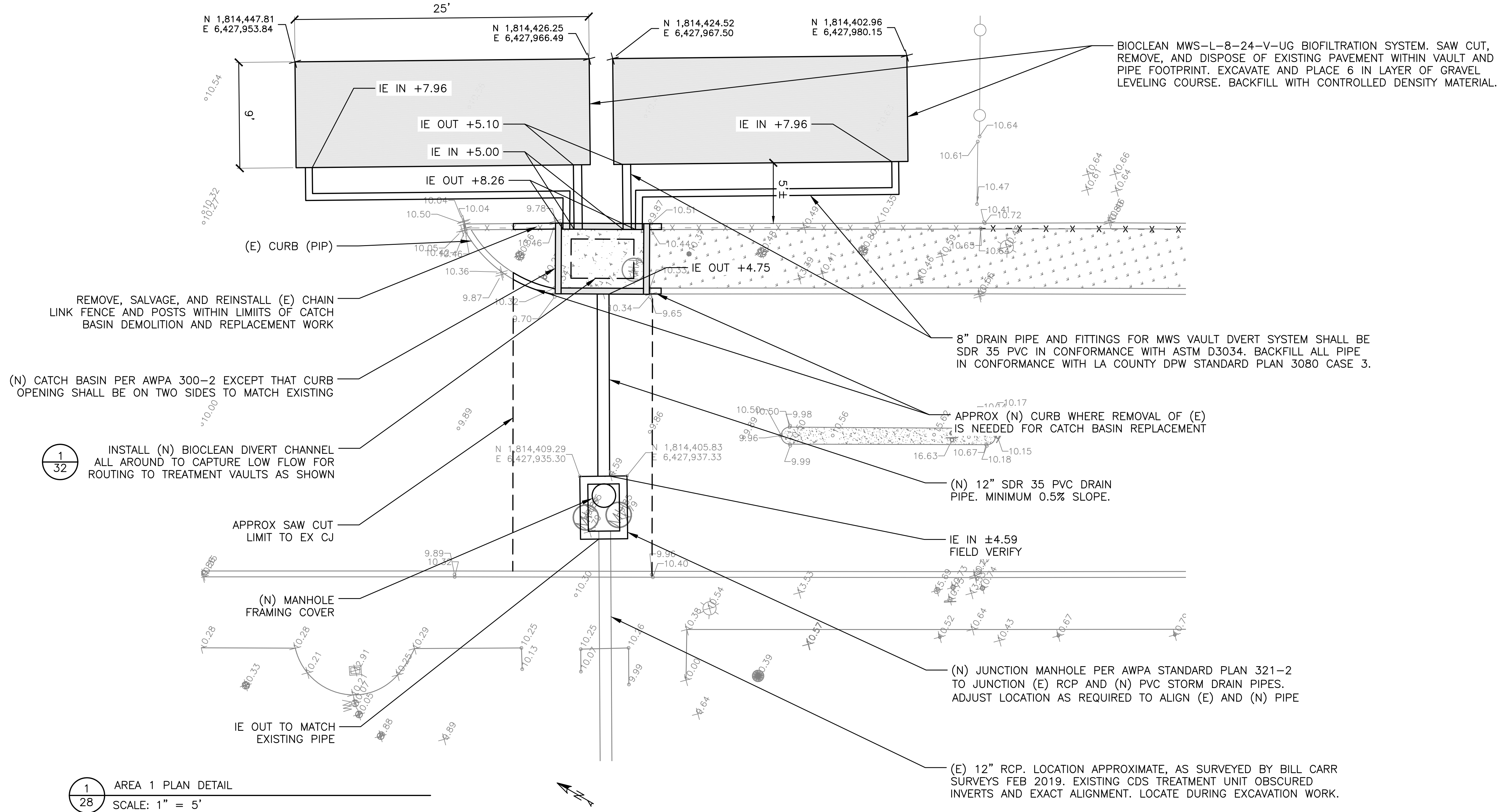
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
AREA 3 STORM DRAIN DEMOLITION DETAIL
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

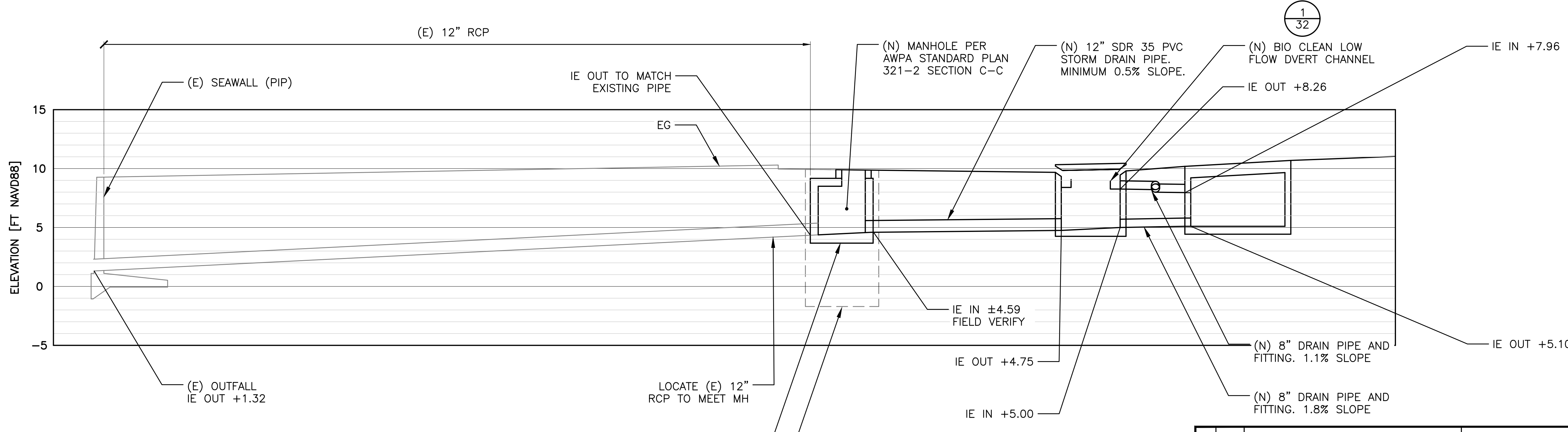
SHEET 27 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



1
32

INSTALL (N) BIODESIGN DIVERT CHANNEL ALL AROUND TO CAPTURE LOW FLOW FOR ROUTING TO TREATMENT VAULTS AS SHOWN

1
28
SCALE: 1" = 5'



2
28
SCALE: 1" = 5'

ADJUST LOCATION OF MANHOLE AS REQUIRED TO FIT STRAIGHT ALIGNMENT OF EXISTING 12" RCP AND NEW 12" PVC PIPE

(E) CDS UNIT TO BE REMOVED



BID SET

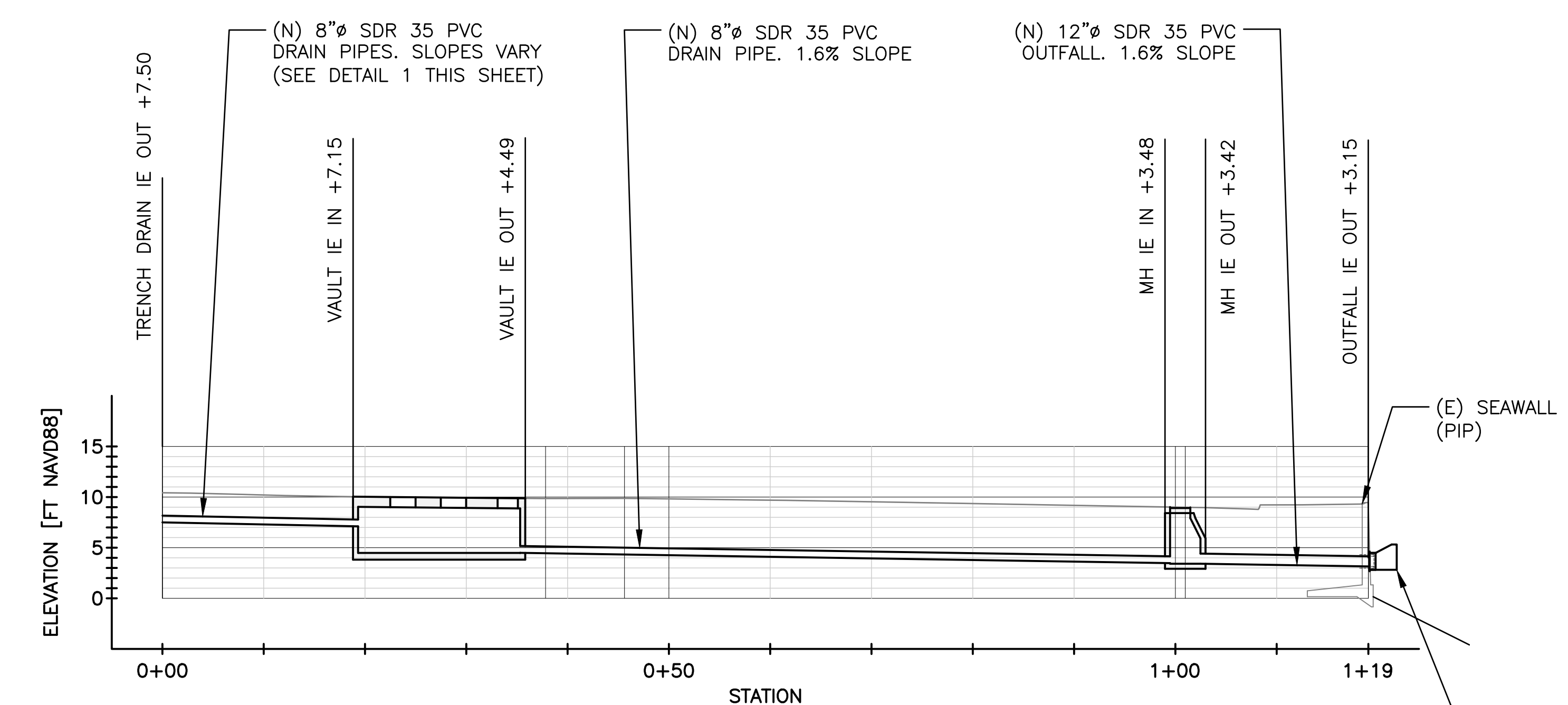
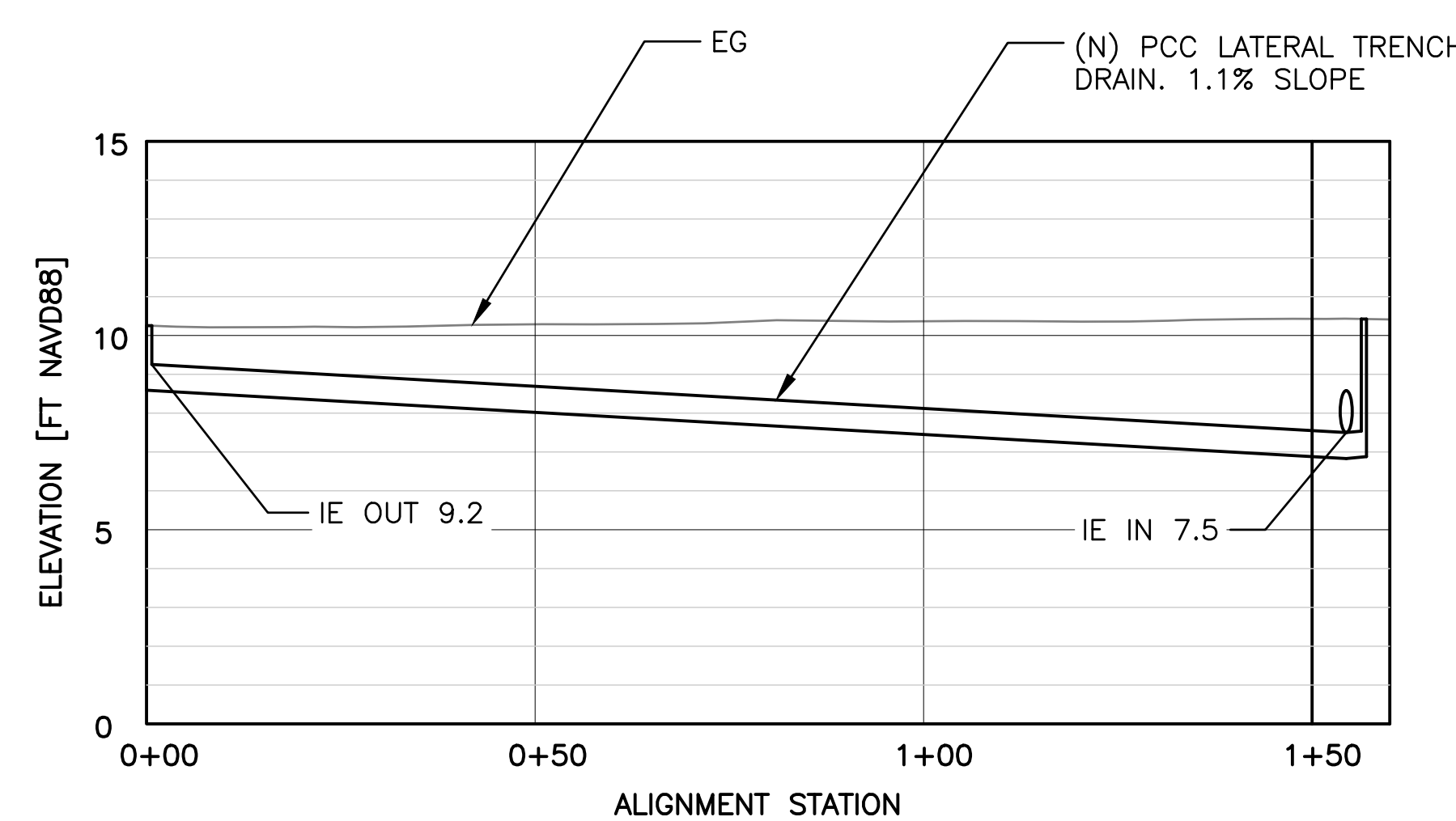
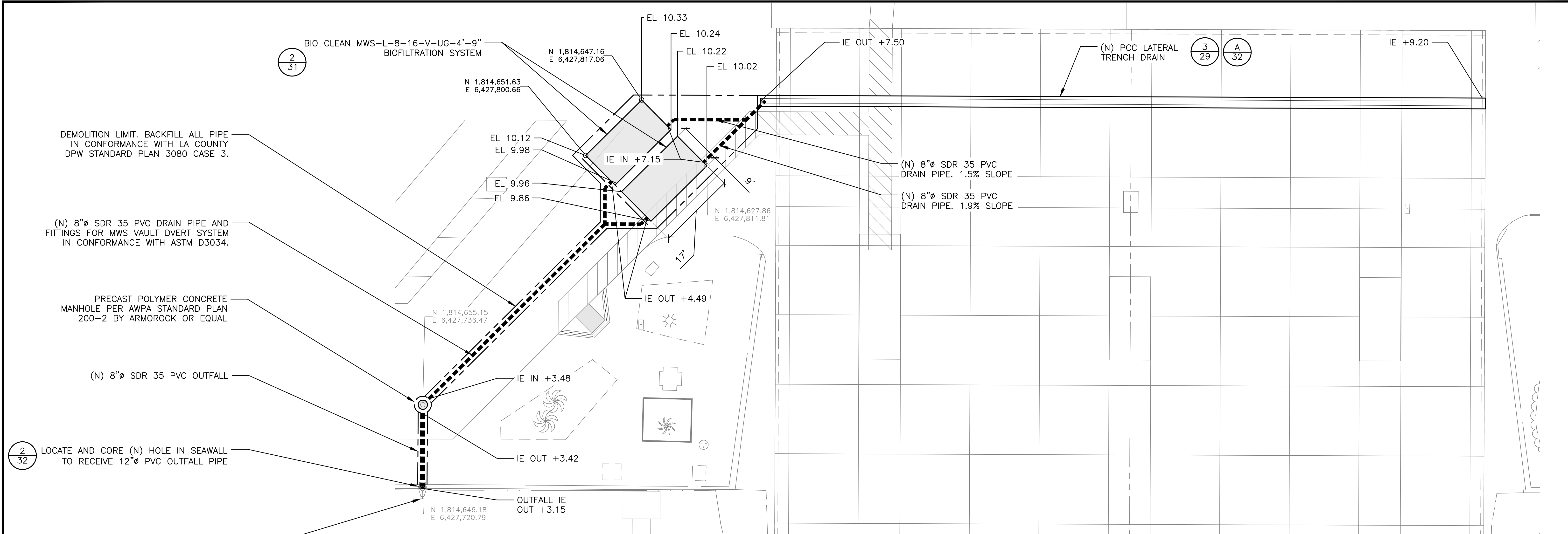
NOBLE CONSULTANTS | **GEC**
 2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM
 DRAWN BY: JTM
 CHECKED BY: TJF
 APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
AREA 1 STORM DRAINAGE PLAN DETAIL
 MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

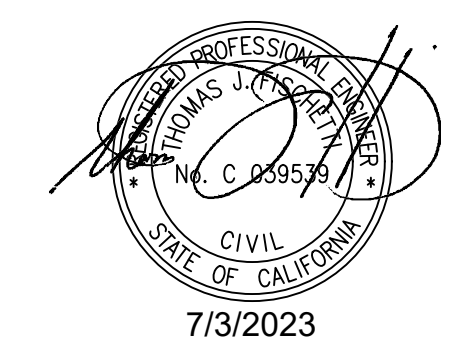
SHEET 28 OF 64
 JOB NO. 928-79
 SCALE AS SHOWN
 DATE 23 JUL 2023



3 TRENCH DRAIN PROFILE
SCALE: 1" = 20' (H) : 1" = 4' (V)

2 AREA 2 PROFILE
SCALE: 1" = 10'

NOTE: LOCATE AND RE-ROUTE EXISTING IRRIGATION AND ELECTRICAL UTILITIES AS REQUIRED TO AVOID CONFLICT WITH VAULTS AND PIPE. SEE SHEET 7 FOR APPROXIMATE LOCATIONS OF KNOWN UTILITY LINES.

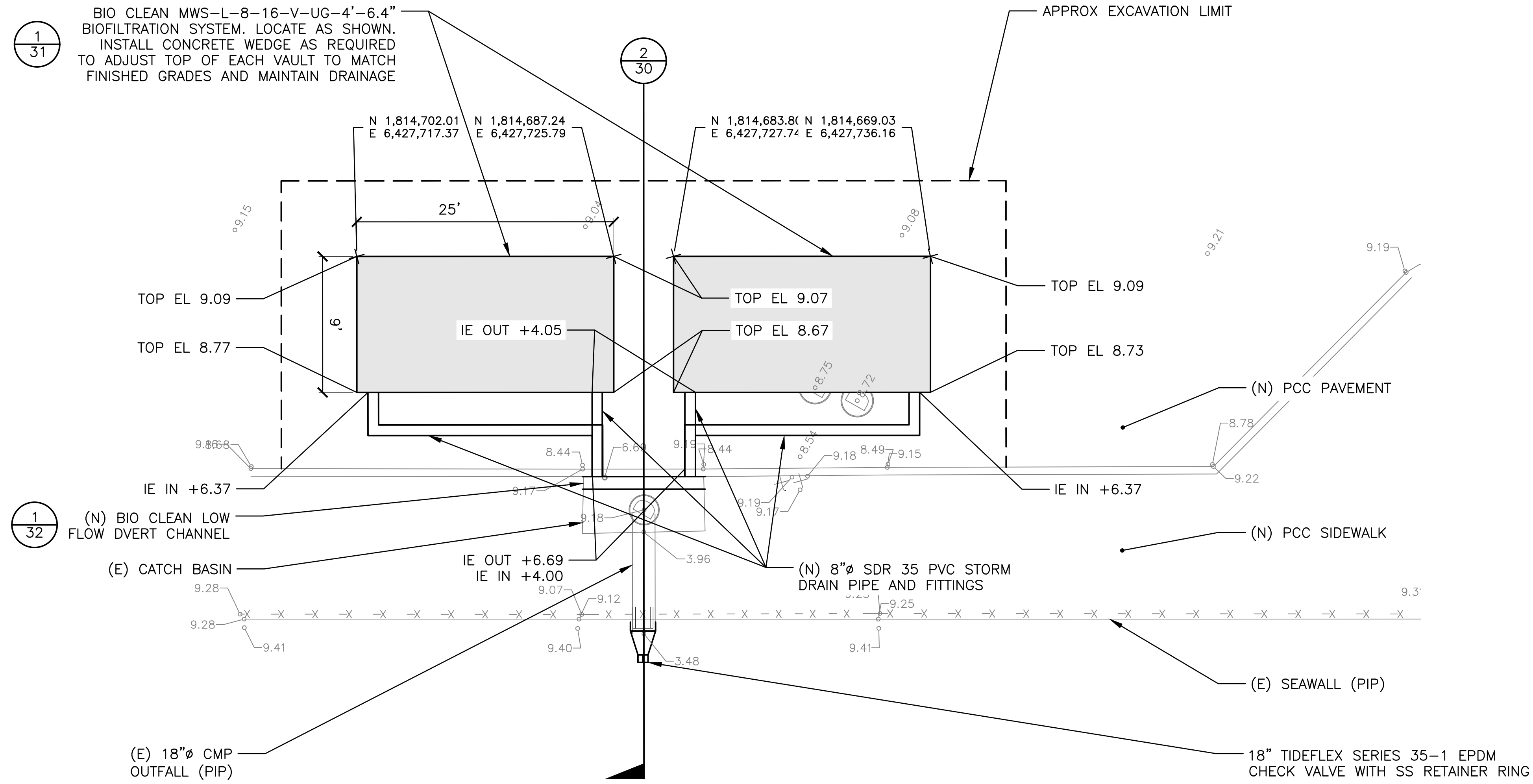


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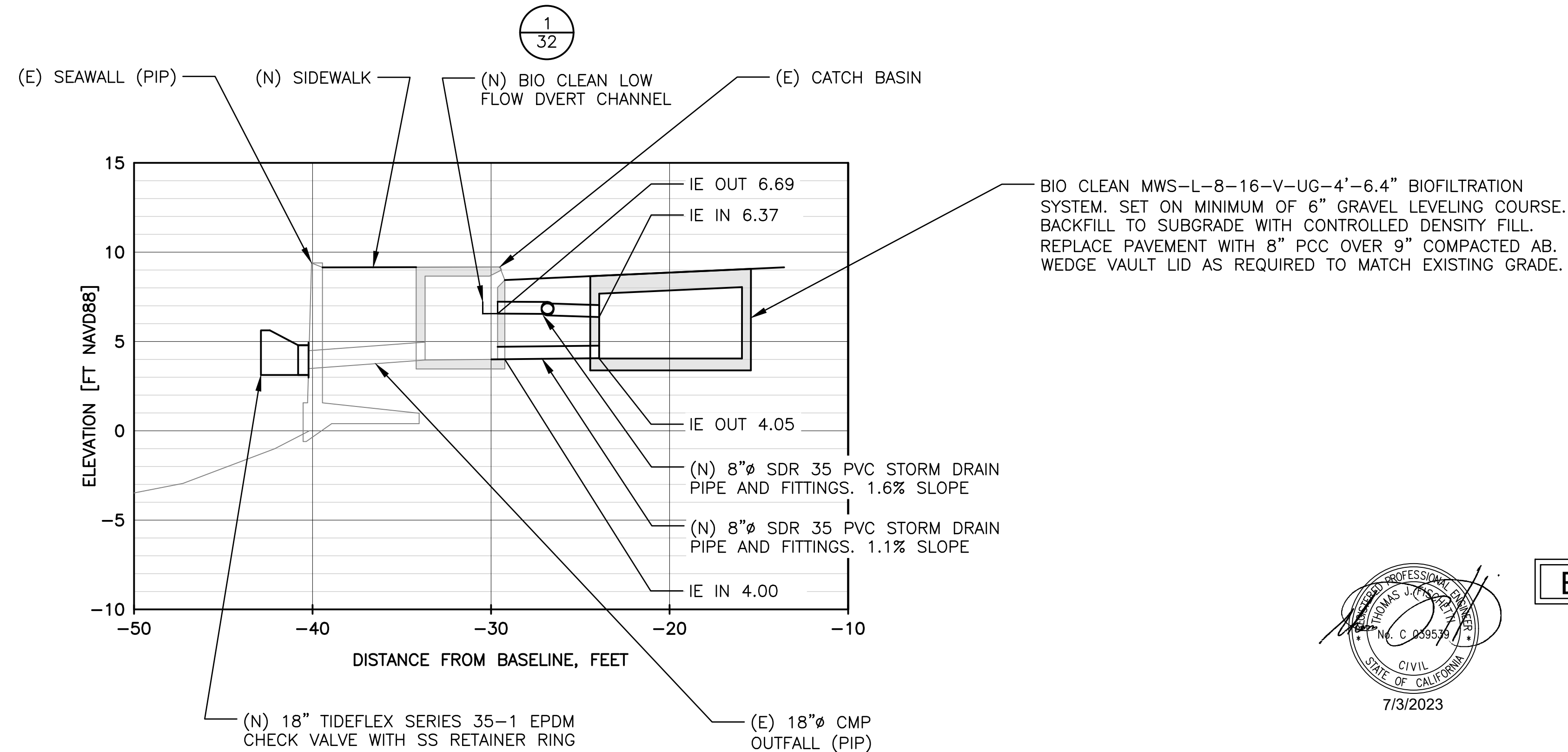
NOBLE CONSULTANTS **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

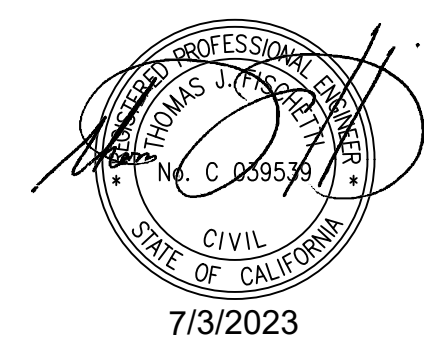
NO.	DATE	REVISION	DESIGNED BY	LOA	SHEET
			JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	29 OF 64
			JTM	AREA 2 STORM DRAINAGE PLAN DETAIL	JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023
				MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	



1
30
 AREA 3 PLAN DETAIL
 SCALE: 1" = 5'



2
30
 AREA 3 SECTION
 SCALE: 1" = 5'



BID SET

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 2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

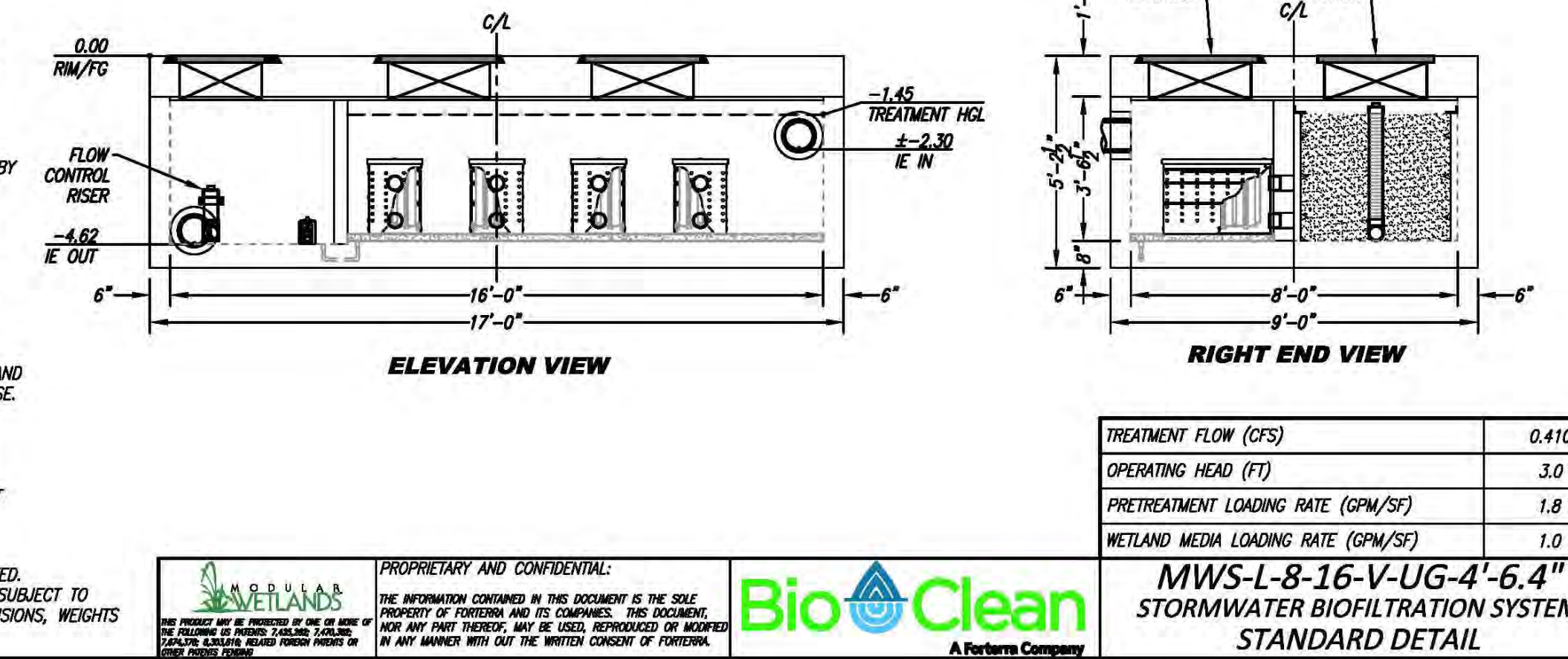
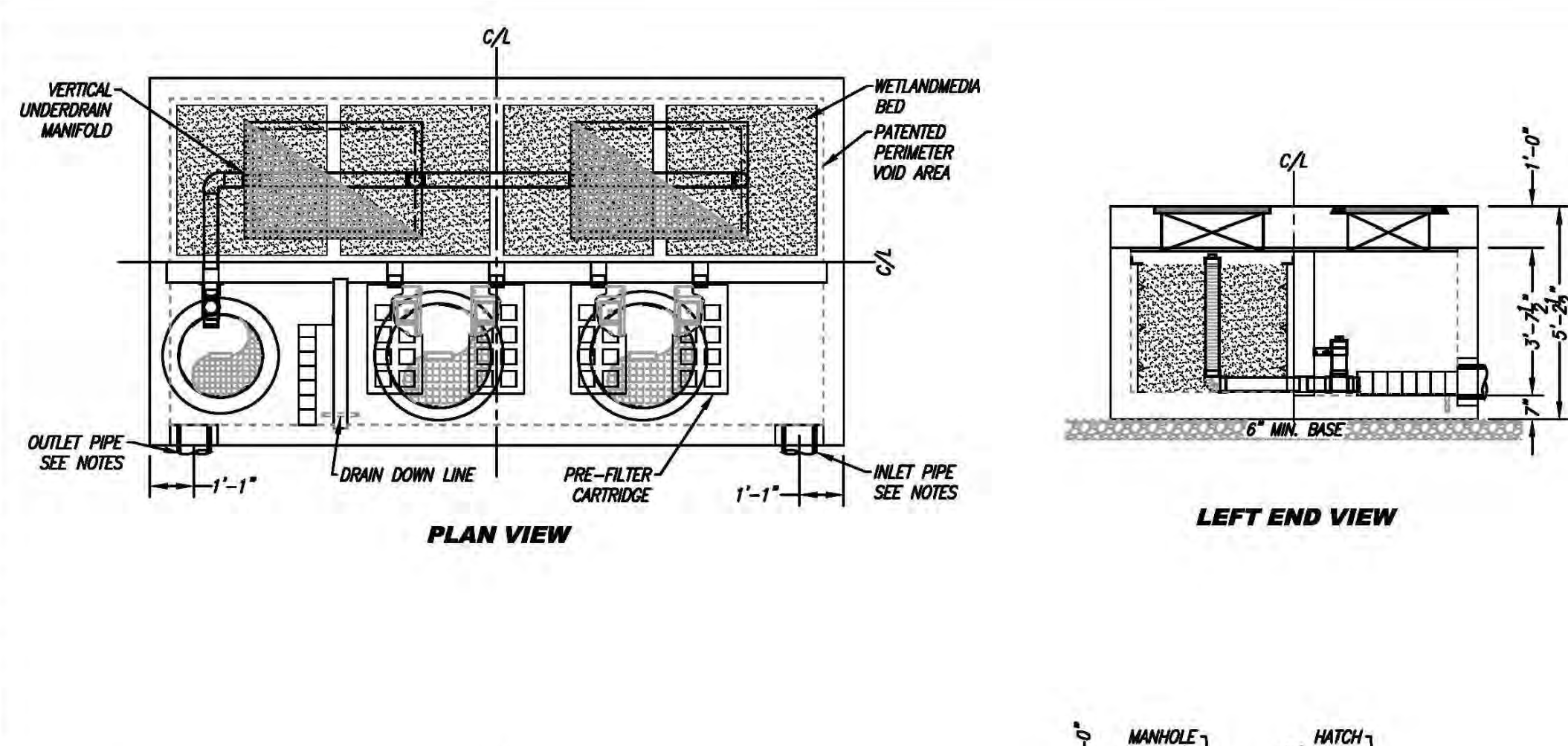
NO.	DATE	REVISION

DESIGNED BY: JTM
 DRAWN BY: JTM
 CHECKED BY: TJF
 APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET <u>30</u> OF <u>64</u>
AREA 3 STORM DRAINAGE PLAN DETAIL	JOB NO. <u>928-79</u>
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	SCALE <u>AS SHOWN</u>
	DATE <u>23 JUL 2023</u>

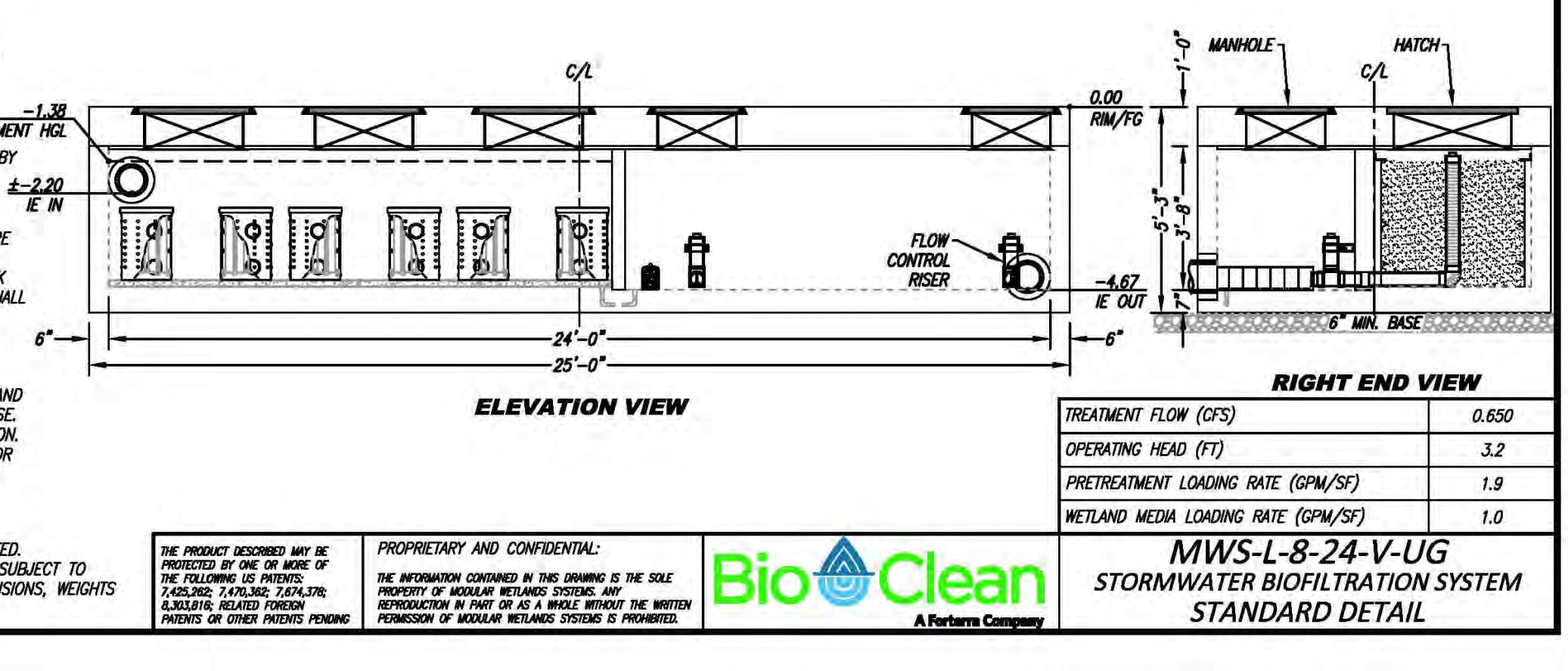
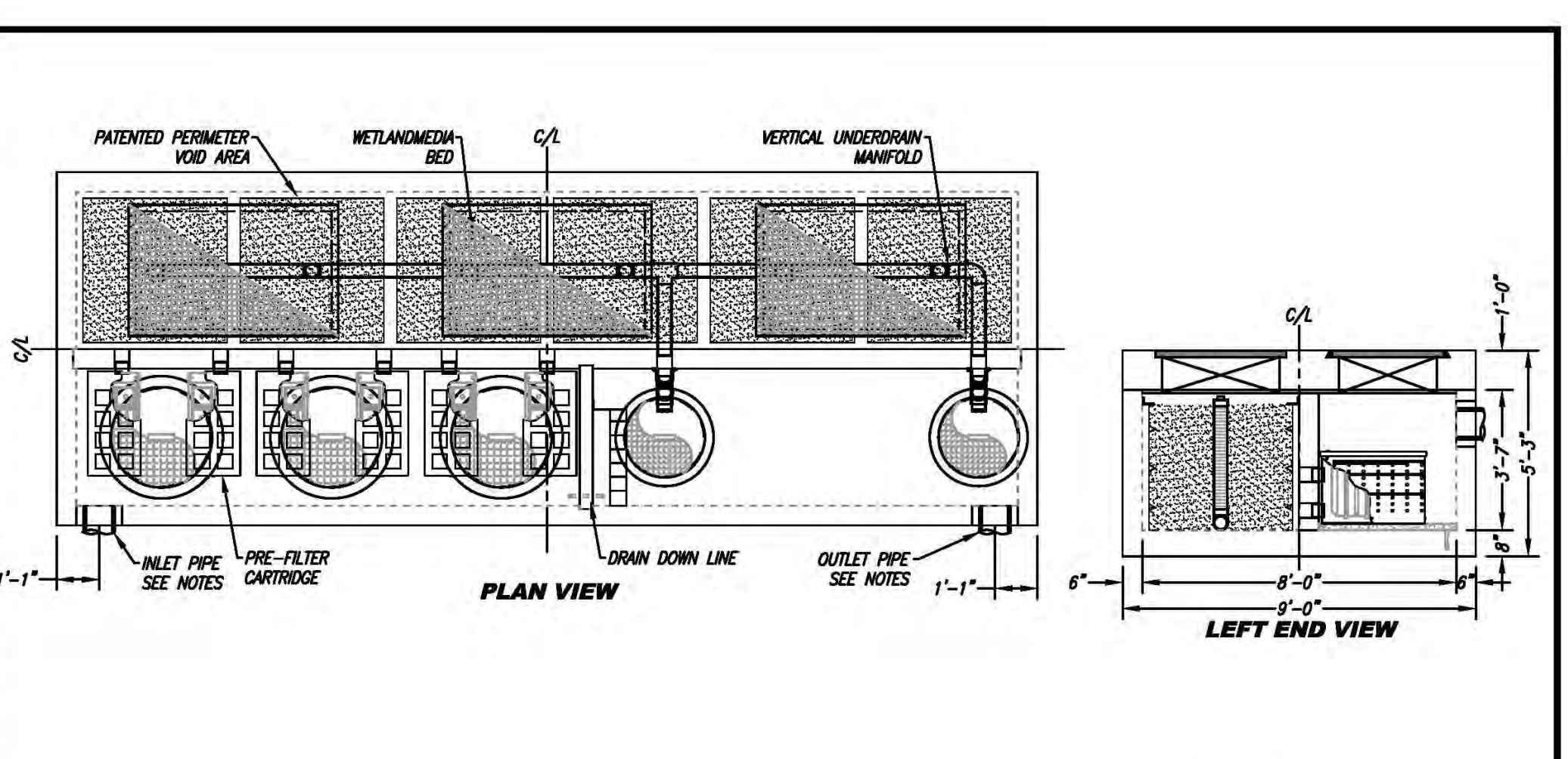
SITE SPECIFIC DATA			
PROJECT NUMBER	7382		
ORDER NUMBER	-----		
PROJECT NAME	MARINA DEL REY BOAT LAUNCH FACILITY		
PROJECT LOCATION	MARINA DEL REY, CA		
STRUCTURE ID	AREA 3		
TREATMENT REQUIRED			
VOLUME BASED (CF)	FLOW BASED (CFS)		
N/A	0.410		
TREATMENT HGL AVAILABLE (FT)	3.0		
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE	DVERT		
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	±-2.30	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	-4.62	PVC	8"
PRETREATMENT		BIOFILTRATION	DISCHARGE
RIM ELEVATION	0.00	0.00	0.00
SURFACE LOAD	TBD	TBD	TBD
FRAME & COVER	2EA #30"	2EA 2.5' X 4'	#24"
WETLANDMEDIA VOLUME (CY)	10.75		
ORIFICE SIZE (DIA. INCHES)	#2.98"		

- NOTES: PRELIMINARY NOT FOR CONSTRUCTION. 2 IDENTICAL UNITS. MIRRORED UNITS. DVERT TO OUTLET CATCH BASIN @ -2.11. DVERT TO BYPASS @ -1.43.
- INSTALLATION NOTES**
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
 - UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
 - CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER TIGHT PER MANUFACTURERS STANDARD CONNECTION DETAIL.
 - CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
 - VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
 - CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.
- GENERAL NOTES**
- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



SITE SPECIFIC DATA			
PROJECT NUMBER	7382		
ORDER NUMBER	-----		
PROJECT NAME	MARINA DEL REY BOAT LAUNCH FACILITY		
PROJECT LOCATION	MARINA DEL REY, CA		
STRUCTURE ID	AREA 1		
TREATMENT REQUIRED			
VOLUME BASED (CF)	FLOW BASED (CFS)		
N/A	0.650		
TREATMENT HGL AVAILABLE (FT)	3.2		
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE	DVERT		
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	±-2.20	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	-4.67	PVC	8"
PRETREATMENT		BIOFILTRATION	DISCHARGE
RIM ELEVATION	0.00	0.00	0.00
SURFACE LOAD	TBD	TBD	TBD
FRAME & COVER	3 EA #30"	3 EA 3' X 5'	2 EA #24"
WETLANDMEDIA VOLUME (CY)	TBD		
WETLANDMEDIA DELIVERY METHOD	PER CONTRACT		
ORIFICE SIZE (DIA. INCHES)	TBD		

- NOTES: PRELIMINARY NOT FOR CONSTRUCTION. 2 IDENTICAL UNITS. CATCH BASIN TC = 0.5. DVERT TO OUTLET CATCH BASIN @ -2.05. DVERT TO BYPASS @ -1.38.
- INSTALLATION NOTES**
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
 - UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER TREATMENT HGL RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
 - ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL GAPS AROUND PIPES SHALL BE SEALED WATER TIGHT WITH A NON-SHRINK GROUT PER MANUFACTURERS STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
 - CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES.
 - CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
 - DRIP OR SPRAY IRRIGATION REQUIRED ON ALL UNITS WITH VEGETATION.
 - CONTRACTOR RESPONSIBLE FOR CONTACTING MODULAR WETLANDS FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A MODULAR WETLANDS REPRESENTATIVE.
- GENERAL NOTES**
- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT MANUFACTURER.



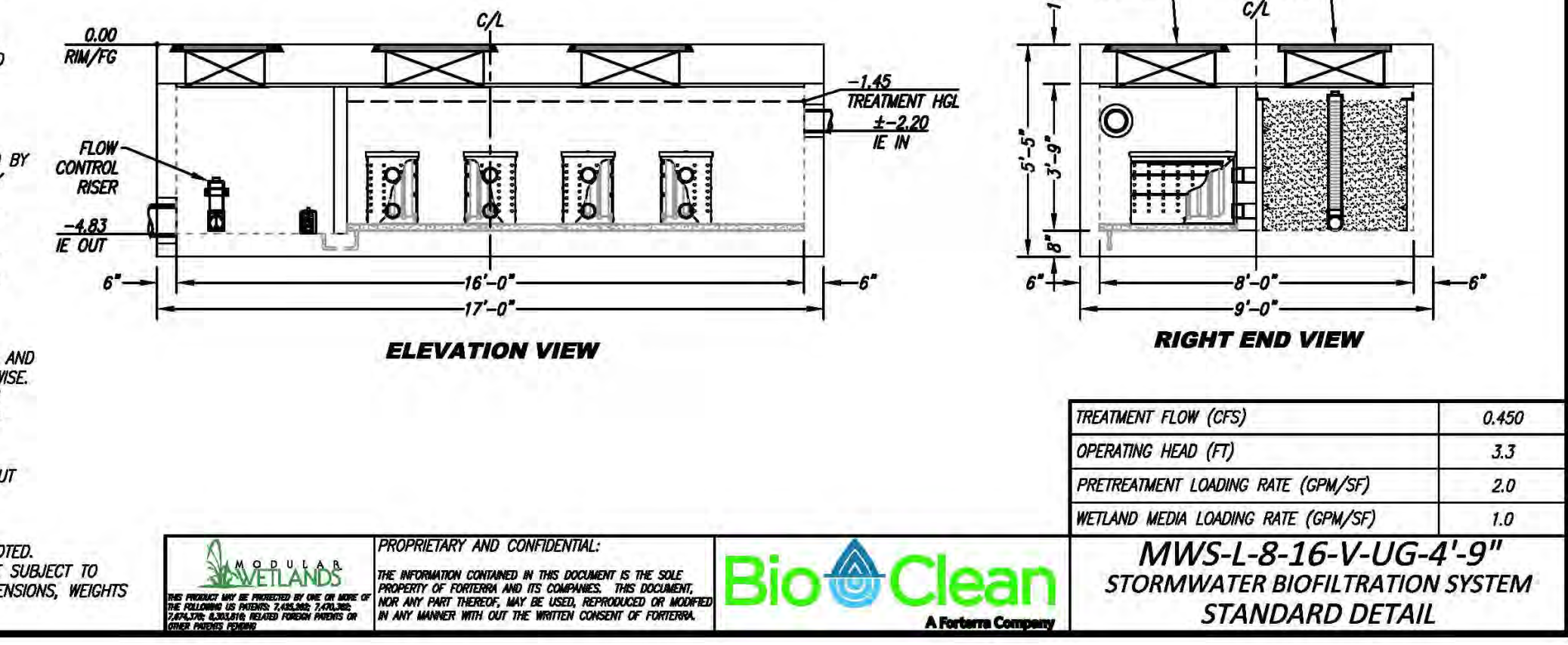
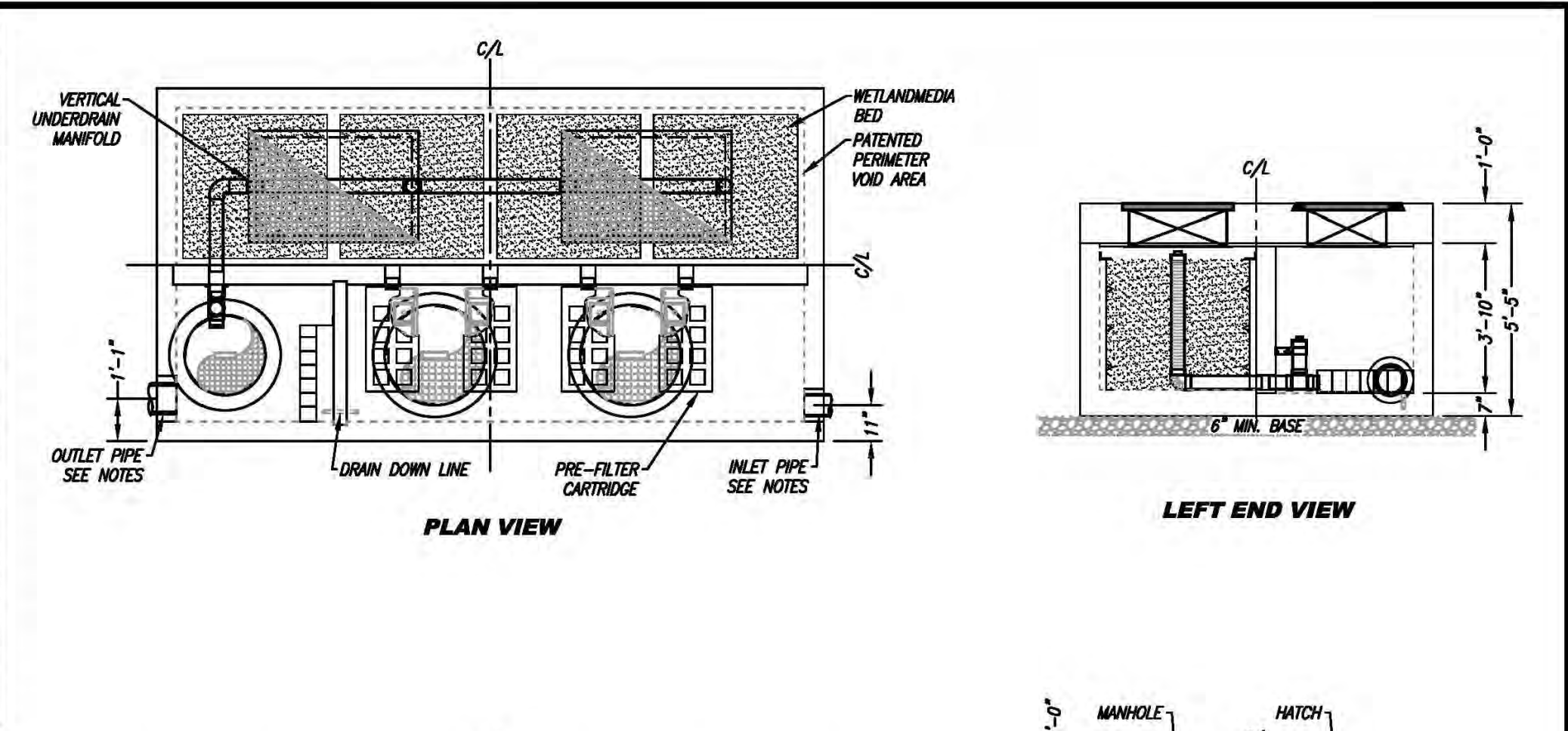
1 MWS-L-8-16-V-UG-4.53FT
31 SCALE: N.T.S.

NOTE: BIOFILTRATION AND DVERT SYSTEMS AS MANUFACTURED BY BIO CLEAN. MWS SOIL MIX SHALL CONFORM TO BIO-1 IN THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS LOW IMPACT DEVELOPMENT MANUAL.

3 MWS-L-8-24-V-UG
31 SCALE: N.T.S.

SITE SPECIFIC DATA			
PROJECT NUMBER	7382		
ORDER NUMBER	-----		
PROJECT NAME	MARINA DEL REY BOAT LAUNCH FACILITY		
PROJECT LOCATION	MARINA DEL REY, CA		
STRUCTURE ID	AREA 2		
TREATMENT REQUIRED			
VOLUME BASED (CF)	FLOW BASED (CFS)		
N/A	0.450		
TREATMENT HGL AVAILABLE (FT)	3.3		
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE	N/A		
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	±-2.20	PVC	8"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	-4.83	PVC	8"
PRETREATMENT		BIOFILTRATION	DISCHARGE
RIM ELEVATION	0.00	0.00	0.00
SURFACE LOAD	TBD	TBD	TBD
FRAME & COVER	2EA #30"	2EA 2.5' X 4'	#24"
WETLANDMEDIA VOLUME (CY)	11.25		
ORIFICE SIZE (DIA. INCHES)	#3.05"		

- NOTES: PRELIMINARY NOT FOR CONSTRUCTION. 2 IDENTICAL UNITS.
- INSTALLATION NOTES**
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
 - UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
 - CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER TIGHT PER MANUFACTURERS STANDARD CONNECTION DETAIL.
 - CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
 - VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
 - CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.
- GENERAL NOTES**
- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
 - ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.

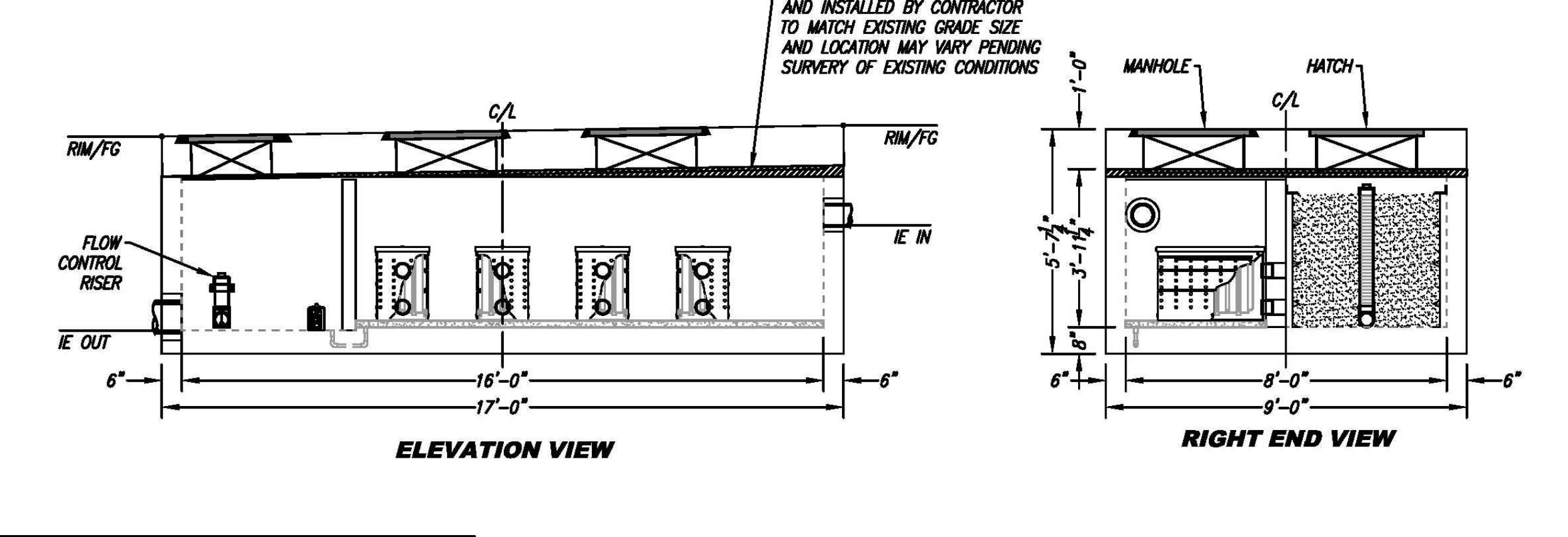
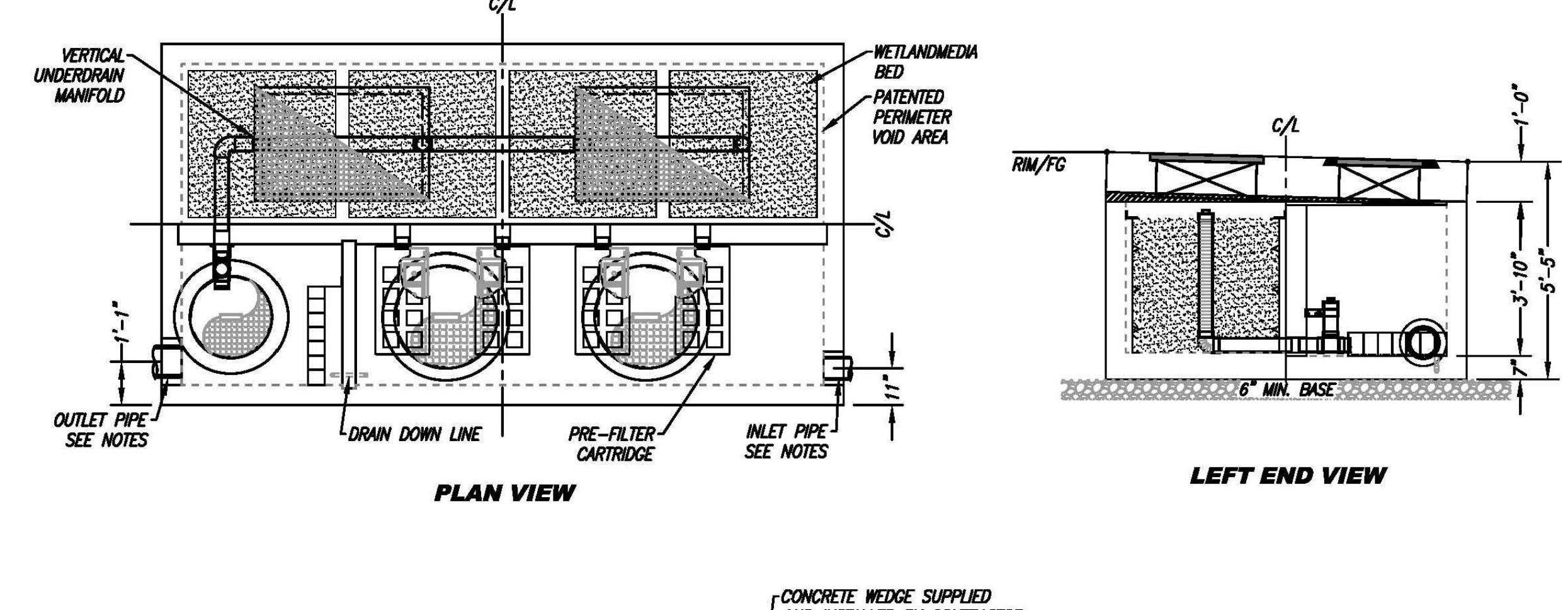


2 MWS-L-8-16-V-UG-4.75FT
31 SCALE: N.T.S.



BID SET

4 WEDGE DETAIL
31 SCALE: N.T.S.



NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET
			JTM		31 OF 64
			JTM		JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023

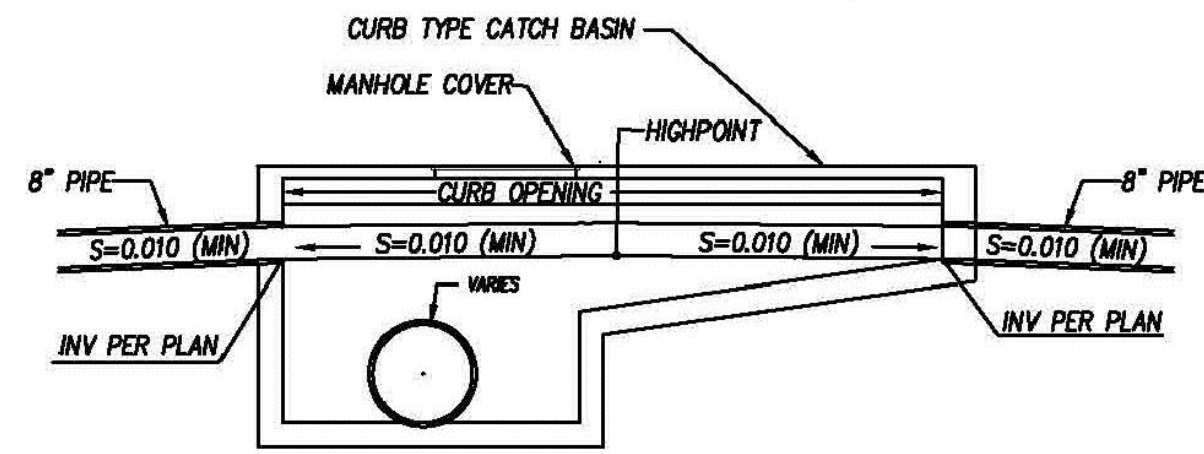


2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

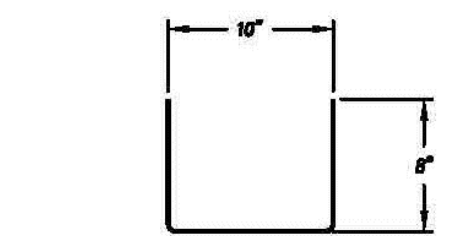
SITE DRAINAGE DETAILS - 1
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

DVERT™

MODULAR WATER QUALITY DIVERSION WEIR SYSTEM

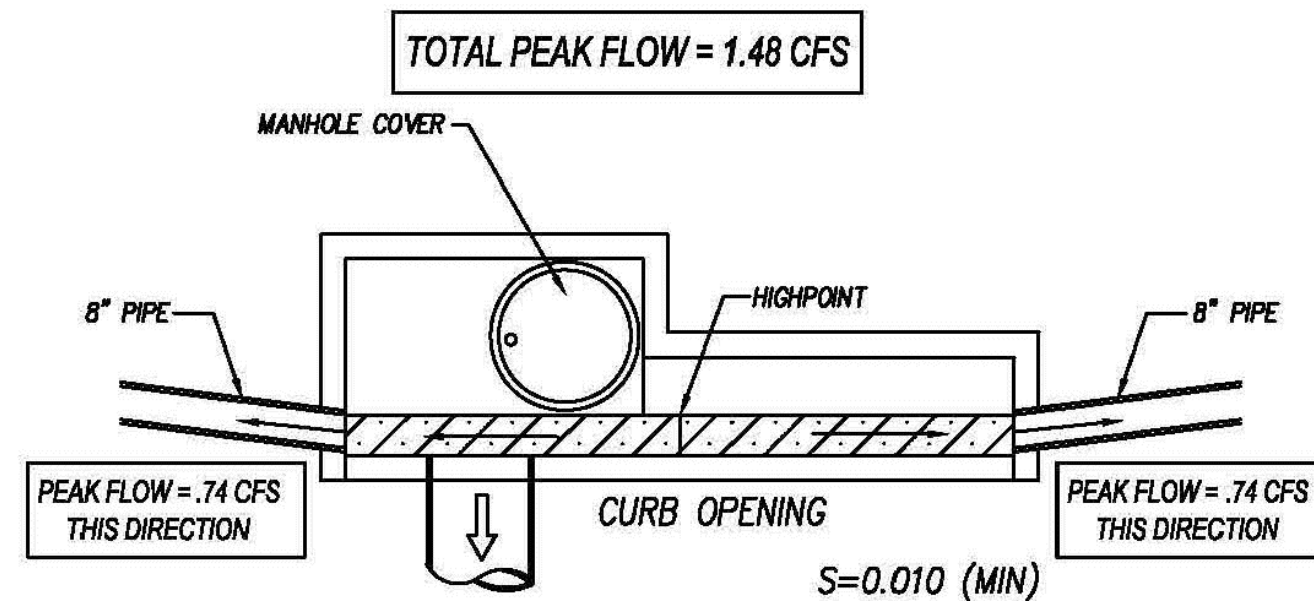


PROFILE - CATCH BASIN

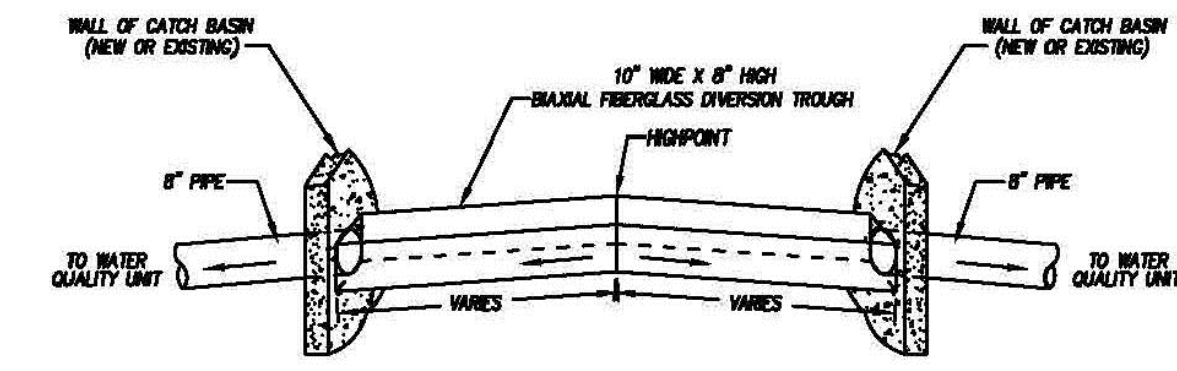


TROUGH END VIEW

TROUGH/PIPE FLOW RATE	
PIPE SIZE DIA. (Inches)	8
STATIC HEAD (Inches)	8
SAFETY FACTOR	2
FLOW RATE (cfs)	.74



TOP VIEW - CATCH BASIN



TROUGH ISOMETRIC VIEW

DRAWINGS NOT TO SCALE

PATENT PENDING

- INSTALLATION NOTES:
- TROUGH TO BE CONNECTED TO CONCRETE BELOW CURB OPENING USING 1/2" x 1-1/2" 316 STAINLESS STEEL SPIKE MUSHROOM HEAD DRIVE ANCHORS SPACED 12" ON CENTER.
 - USE DAP CONCRETE WATERTIGHT FILLER & SEALANT TO SEAL SEAM BETWEEN FIBERGLASS WEIR & CONCRETE WALL OF CATCH BASIN.

MODULAR WETLAND SYSTEMS INC.
P.O. BOX 869
OCEANSIDE, CA 92049
www.ModularWetlands.com

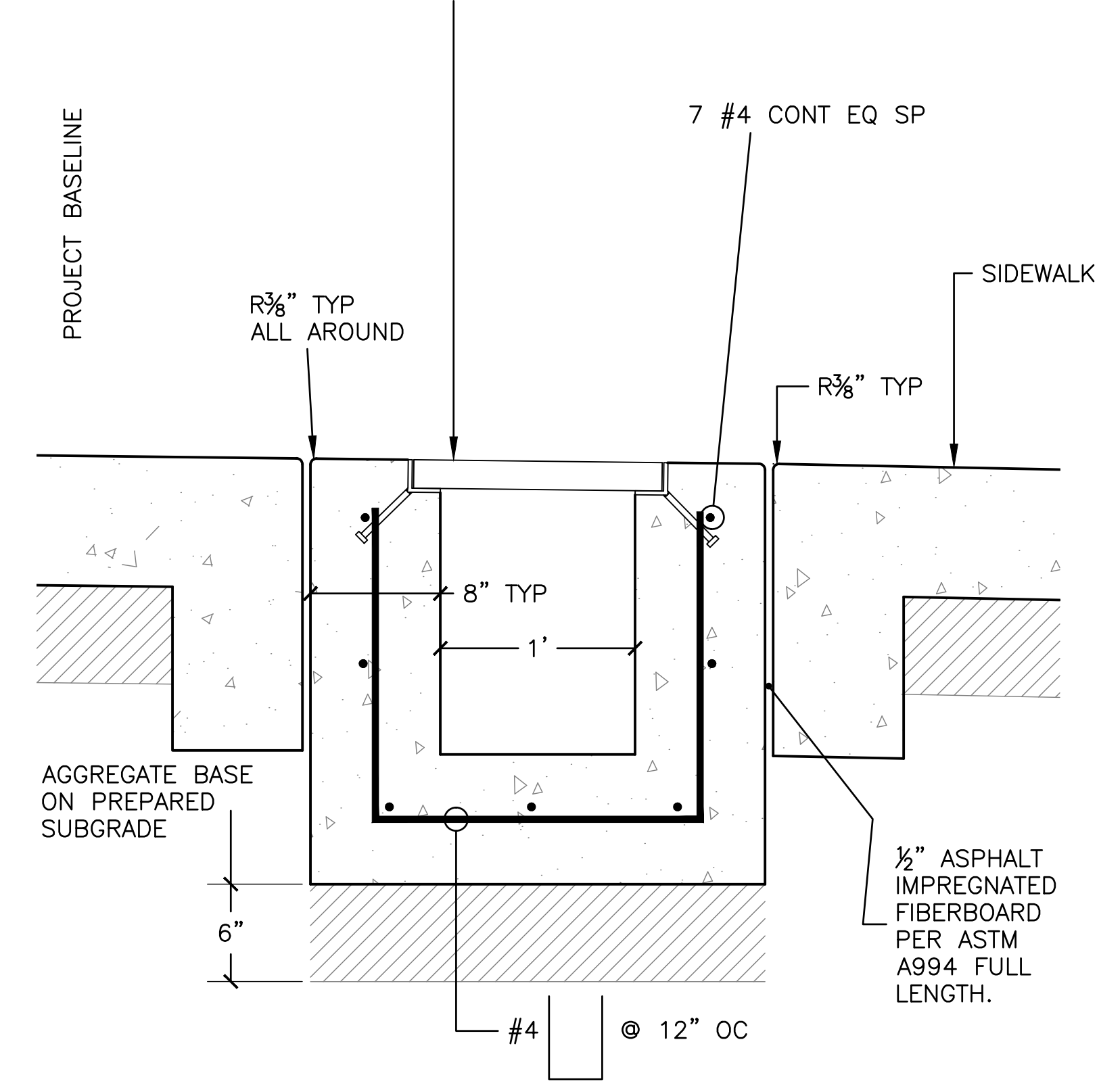
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MODULAR WETLAND SYSTEMS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MODULAR WETLAND SYSTEMS INC. IS PROHIBITED.

NAME	DATE	TITLE
DRAWN		DVERT SYSTEM
EDITED		
COMMENTS		

SCALE: N.T.S. | UNITS: INCHES | SHEET 1 OF 1

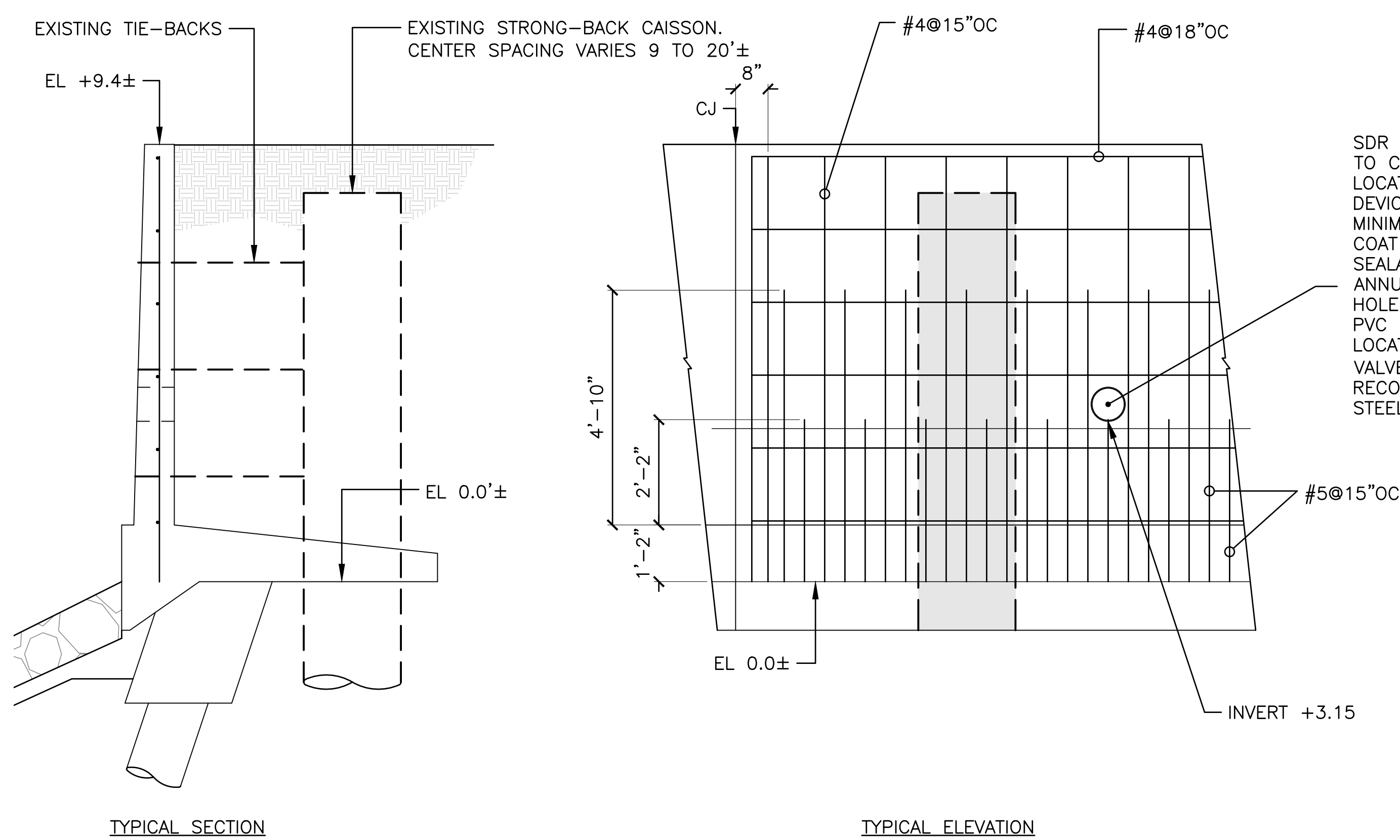
1
32 DIVERT SCHEMATIC DETAIL
SCALE: N.T.S.

GRATING PACIFIC TRENCH GRATE AND FRAME SYSTEM MODEL THA-12-LB OR APPROVED EQUAL. FRAME SHALL HAVE 3/8"x4" ANCHOR STUDS @ 12" OC. GRATE SHALL BE ADA ACCESSIBLE AND FITTED WITH TAMPER RESISTANT BOLTS. ALL COMPONENTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. SET FRAME AND GRATE TO MATCH RAMP PAVEMENT GRADE AND SLOPE.

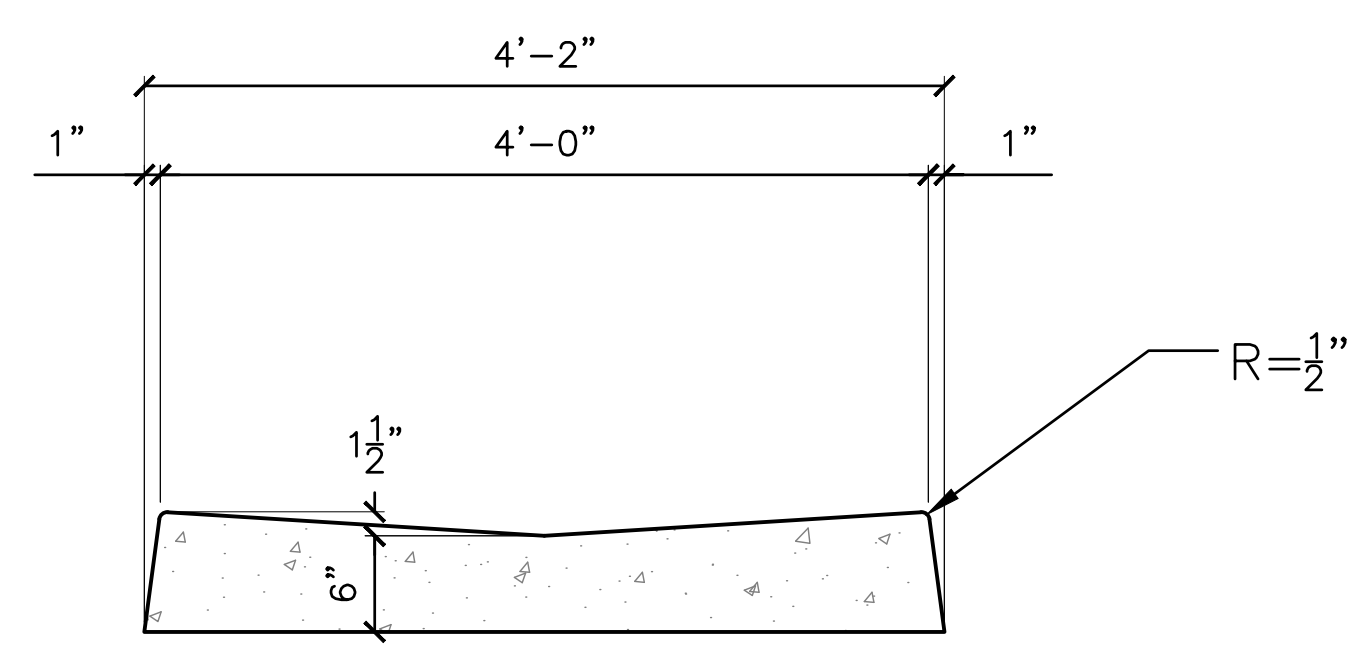


A
32 TRENCH DRAIN SECTION
SCALE: 1-1/2" = 1'-0"

NOTE:
ALL REBAR SHALL BE EPOXY COATED AND 3" CLR EF SIDES AND BOTTOM



SDR 35 PVC OUTFALL PIPE. PRIOR TO CORING FOR PIPE MAP AND LOCATE EXISTING REBAR USING GPR DEVICE. LOCATE CORE HOLE TO MINIMIZE CUTTING OF EXISTING BARS. COAT ANY EXPOSED BAR WITH EPOXY SEALANT. COMPLETELY FILL THE ANNULAR SPACE BETWEEN CORE HOLE AND EXTERIOR SURFACE OF PVC PIPE WITH NON-SHRINK GROUT. LOCATE AND PLACE TIDEFLEX CHECK VALVE PER MANUFACTURER'S RECOMMENDATIONS USING STAINLESS STEEL HARDWARE AND FLANGE.



3
32 (N) LONGITUDINAL GUTTER DETAIL
SCALE: 1" = 1'-0"

NOTE: DIMENSIONS FROM CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS STANDARD PLAN S-410-2

2
32 OUTFALL DETAIL
SCALE: 1" = 2'

NOTE:
LOCATION OF REBAR IS APPROXIMATE AND SUMMARIZED FROM 1959 COUNTY DESIGN DRAWINGS.



BID SET



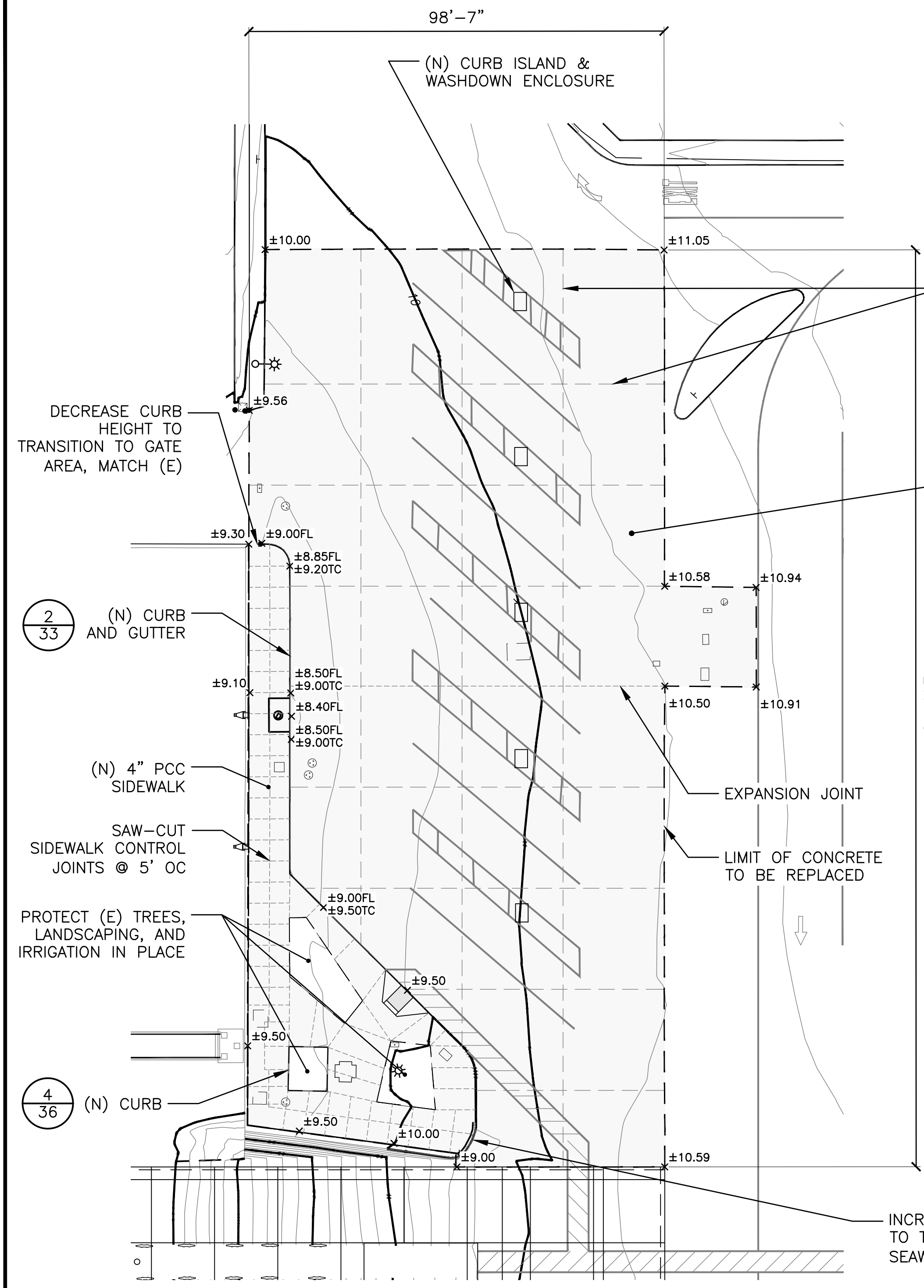
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

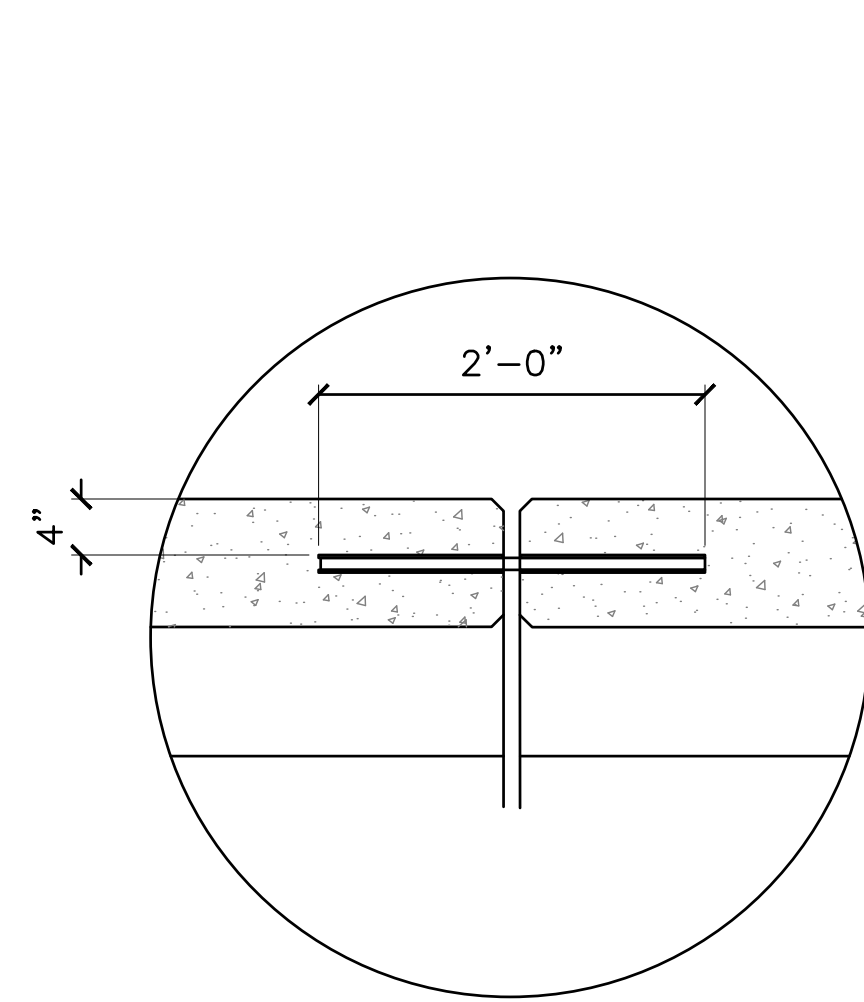
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
SITE DRAINAGE DETAILS - 2
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

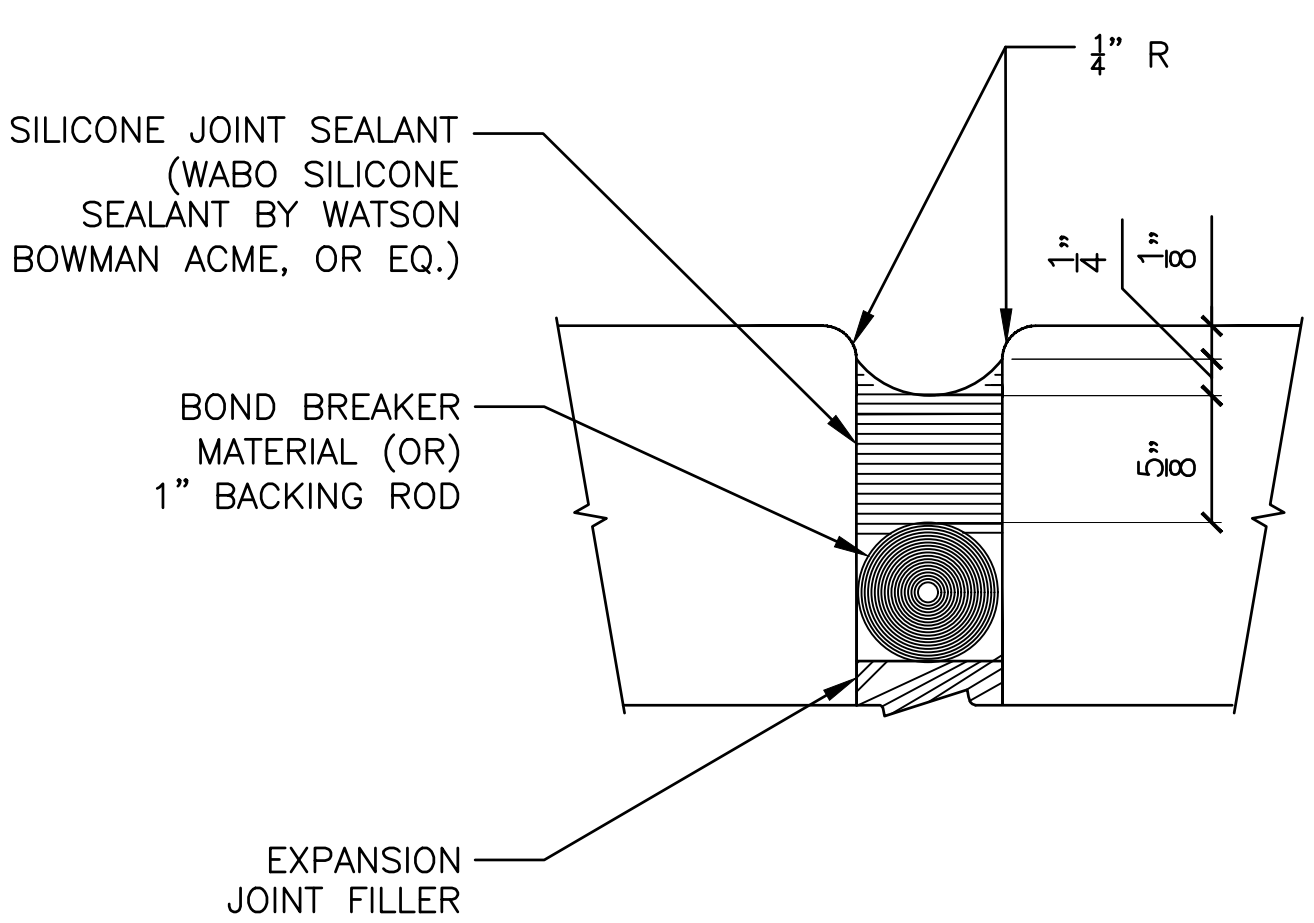
SHEET 32 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



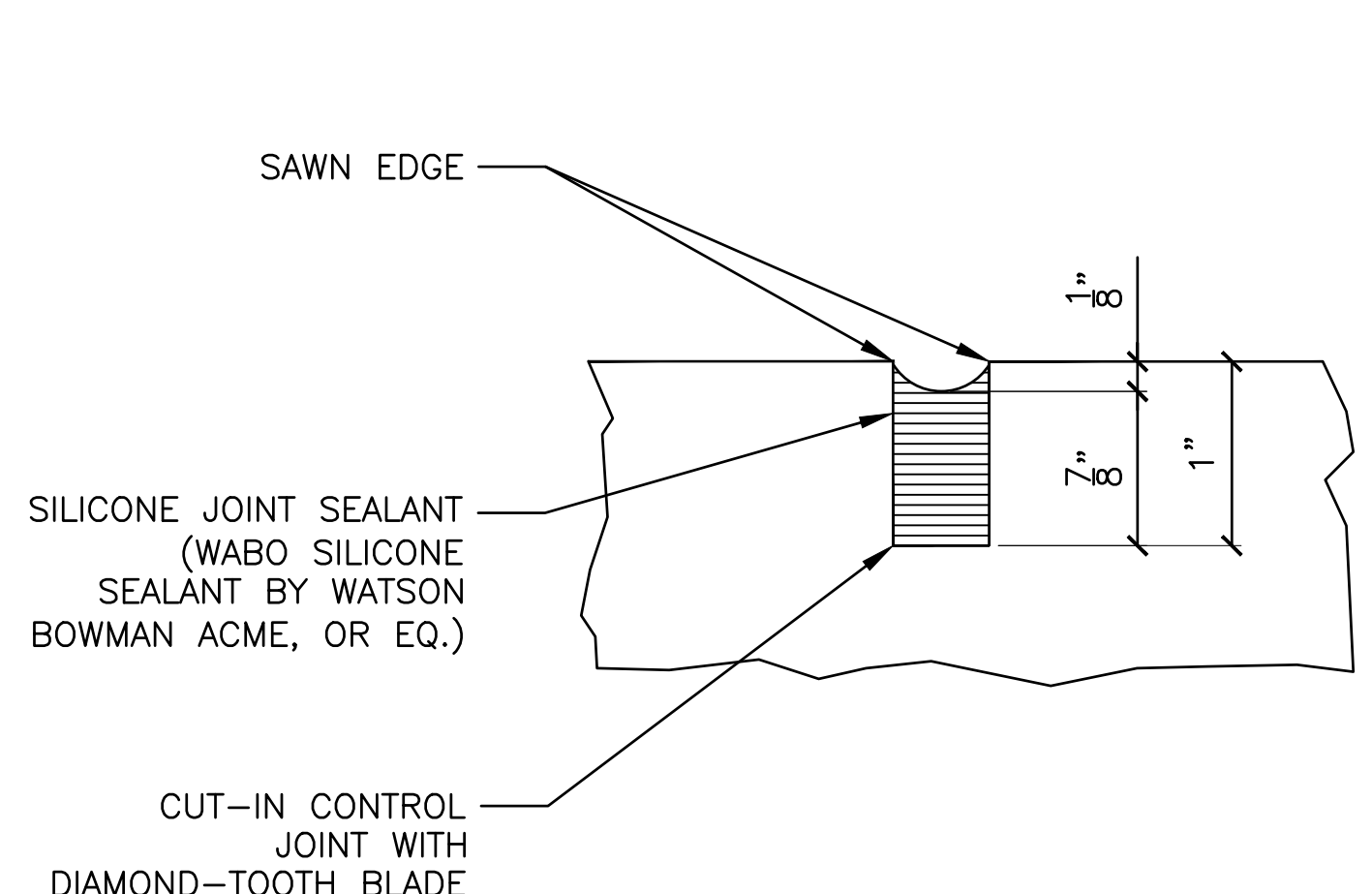
1 WASHDOWN AREA PLAN
SCALE: 1" = 20'-0"



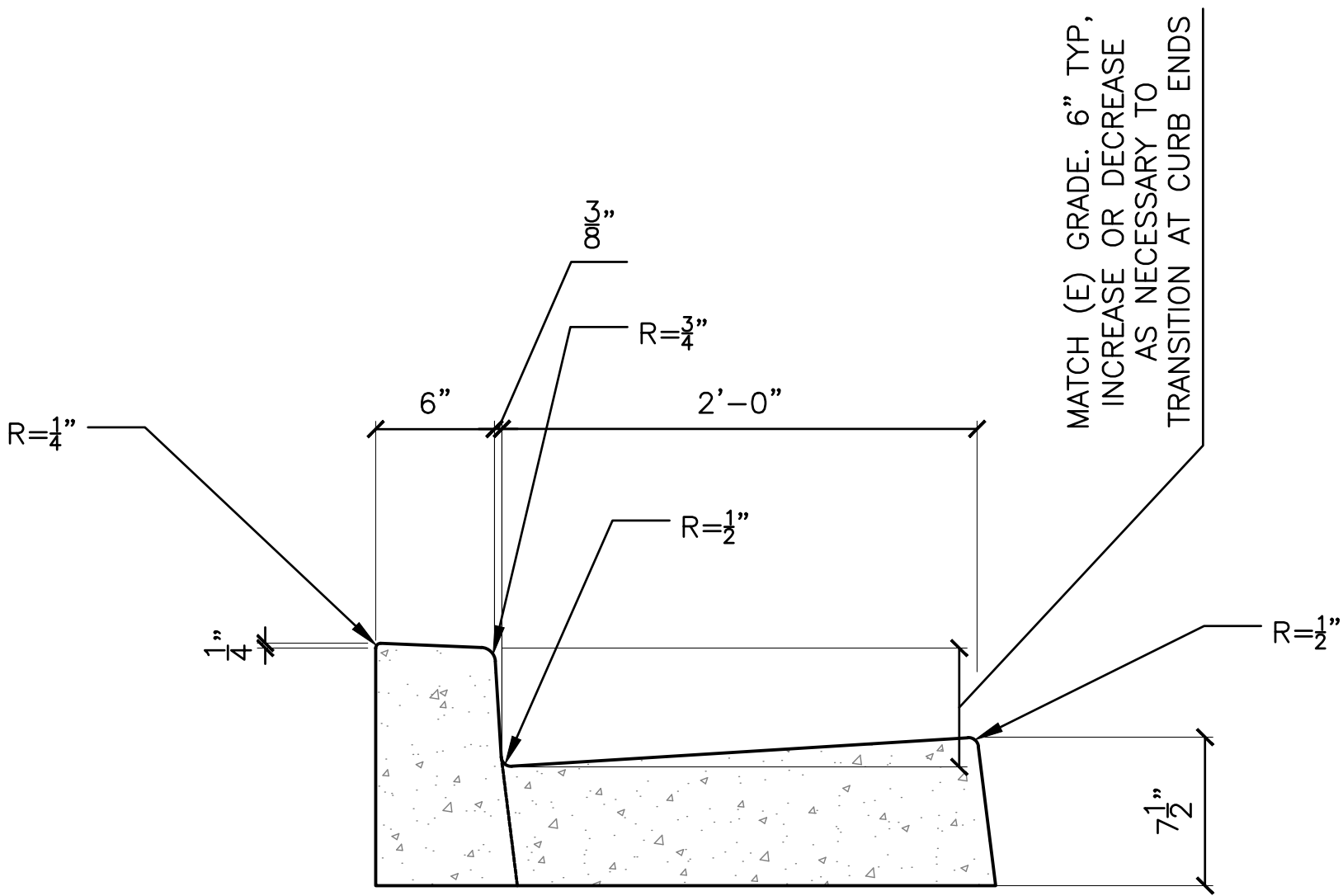
EXPANSION JOINT SEAL DETAIL
NTS



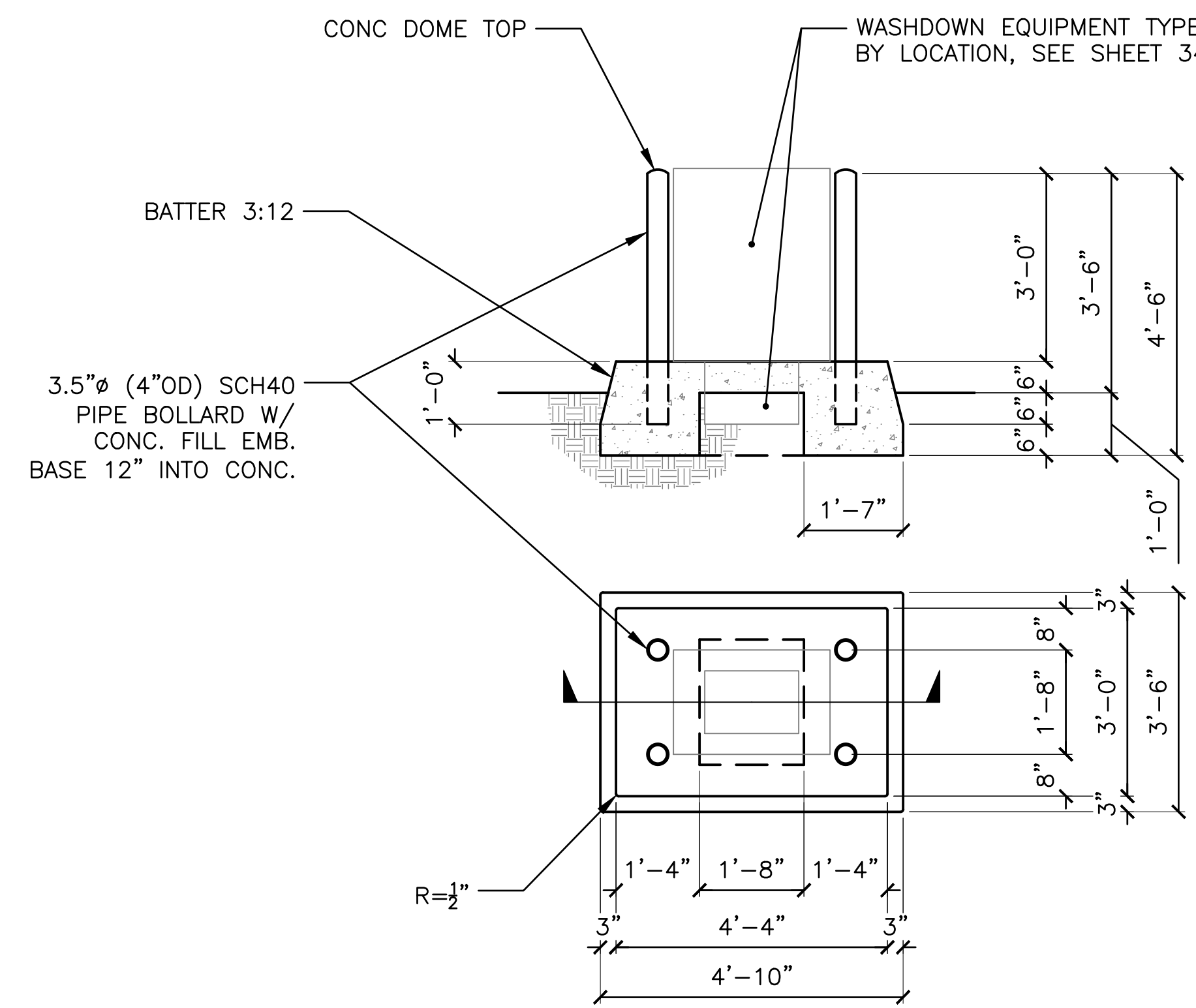
EXPANSION JOINT SEAL DETAIL
NTS



CONTROL JOINT SEALANT DETAIL



2 (N) CURB AND GUTTER
SCALE: 1-1/2" = 1'-0"



3 (N) WASHDOWN CURB ISLAND
SCALE: 1" = 1'-0"

NOTES:
1. SEE SHEET 18 FOR CONCRETE NOTES.
2. ALL SIDEWALK AND WASHDOWN AREA PCC PAVEMENT SLOPES AND SURFACE ELEVATIONS SHALL MATCH EXISTING UNLESS NOTED OTHERWISE.

NOTE: DIMENSIONS FROM CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS STANDARD PLAN S-410-2 CURB AND GUTTER - TYPE C

NOTE: (N) CONCRETE CURB ISLAND AND BOLLARD LAYOUT TYP AT ALL 9 WASHDOWN EQUIPMENT LOCATIONS, BUT (N) WASHDOWN EQUIPMENT TYPE VARIES BY LOCATION, SEE SHEET 34.

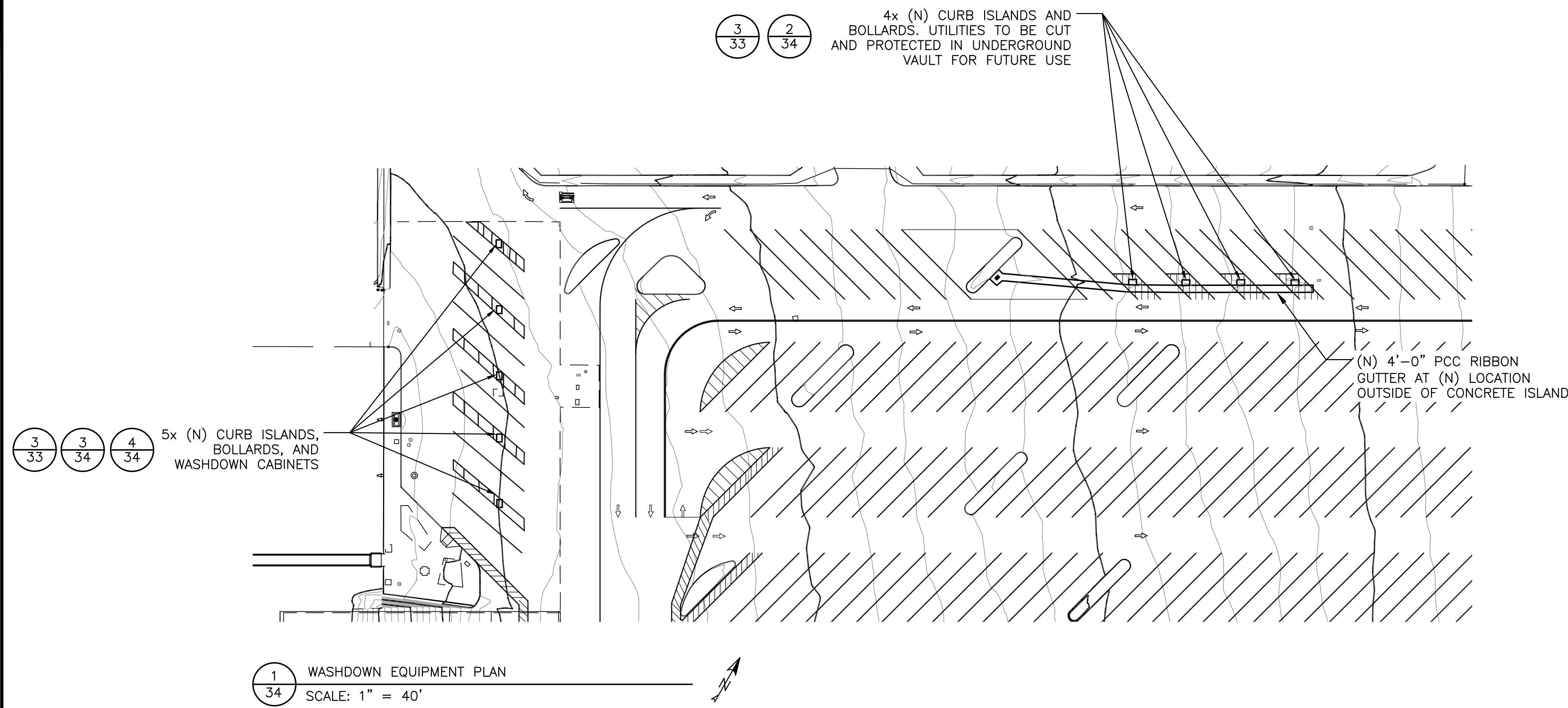


BID SET

NOBLE CONSULTANTS **GEC**

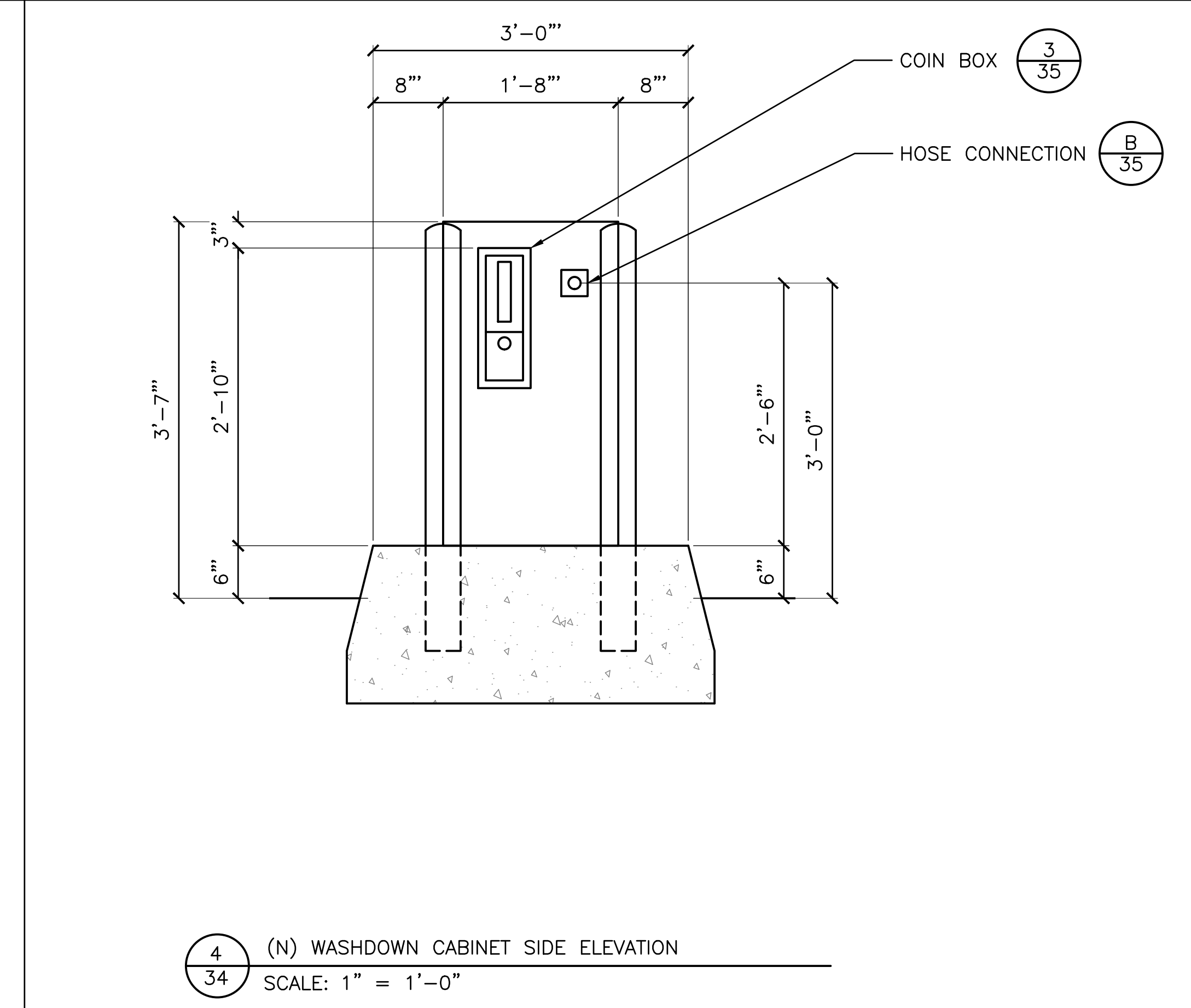
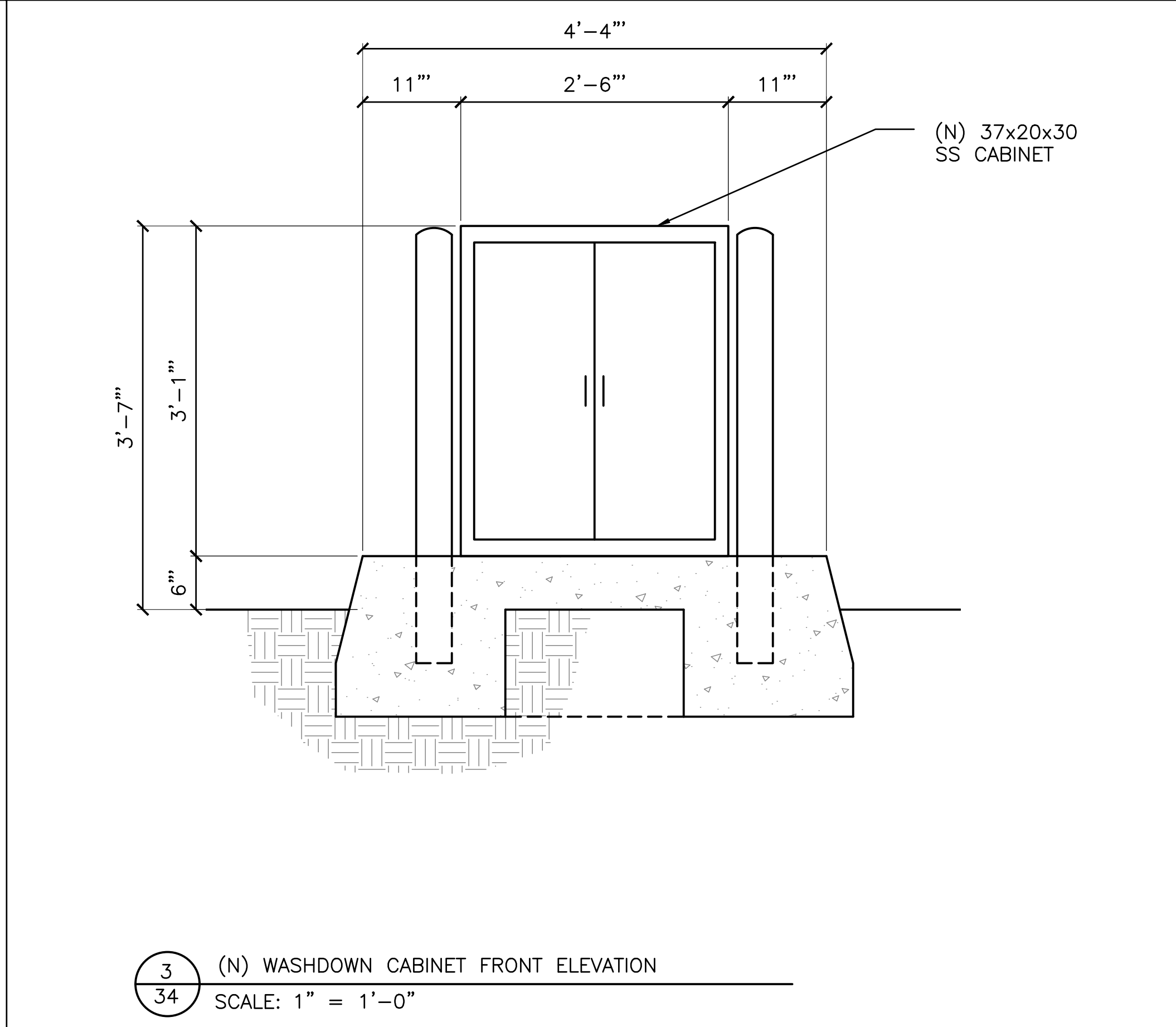
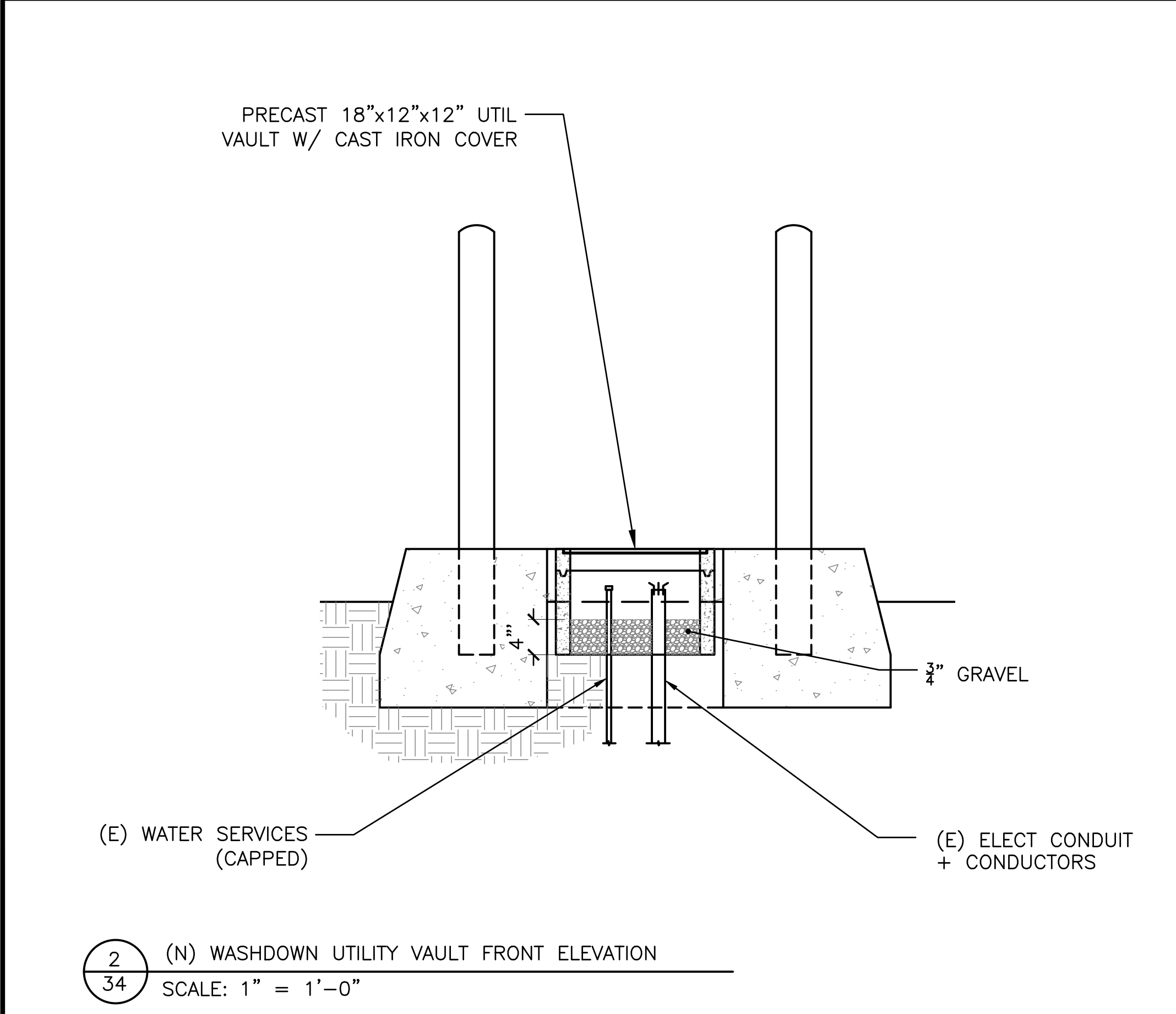
2201 DUPONT DRIVE, SUITE 830
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949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	OF
			TJF	WASHDOWN AREA PLAN	33	64
			PGM		JOB NO.	928-79
			TJF		SCALE	AS SHOWN
			TJF		DATE	23 JUL 2023



WASHDOWN EQUIPMENT NOTES:

1. WASHDOWN ENCLOSURE TO BE CUSTOM 20"Dx30"Wx37"H FLOOR-MOUNT SS WASHDOWN CABINET FABRICATED BY G2 AUTOMATED TECHNOLOGIES, LLC. OR APPROVED EQUAL, AND SHOP-MODIFIED TO ACCOMMODATE NEW ELECTRICAL CONTROLS, COIN BOX PLUMBING, & ASSOCIATED HARDWARE.
2. PRIOR TO MANUFACTURE & SHOP MODIFICATION OF CABINETS SUBMIT SHOP DRAWINGS TO PROJECT MANAGER FOR APPROVAL.
3. CONTROL MODULE TO BE SECURECOIN INC. CASHMASTER 4-CHANNEL CONTROL MODULE UNIT CCM-321 AS MANUFACTURED BY WATER CONSERVATION SERVICES, SANTA BARBARA, CA OR APPROVED EQUAL.
4. COIN BOX ENCLOSURE TO BE SECURECOIN INC. CASHMETER SYSTEM 3 PART NO. CMSS-121-1 OR APPROVED EQUAL. COIN MECHANICAL DEVICE TO BE IMONEX Z3.
5. REMOVE & DISPOSE OF EXISTING CABINETS & HARDWARE.
6. REMOVE (E) BOLLARDS & CONCRETE CURB ISLANDS.
7. FURNISH & INSTALL FOUR (4) ANCHOR BOLTS 1/2" ALL THREAD TO SECURE CABINET AT CORNERS.
8. LEVEL CABINET WITH NUTS & DRY PACK ENTIRE PERIMETER OF BASE TO MAKE WATER-TIGHT.
9. PAINT (N) BOLLARDS SAFETY YELLOW, AND (N) PCC CURB ISLANDS BLUE COLOR TO MATCH (E).



NOTE: CUT (E) UTIL. BELOW GRADE IN UTIL VAULT



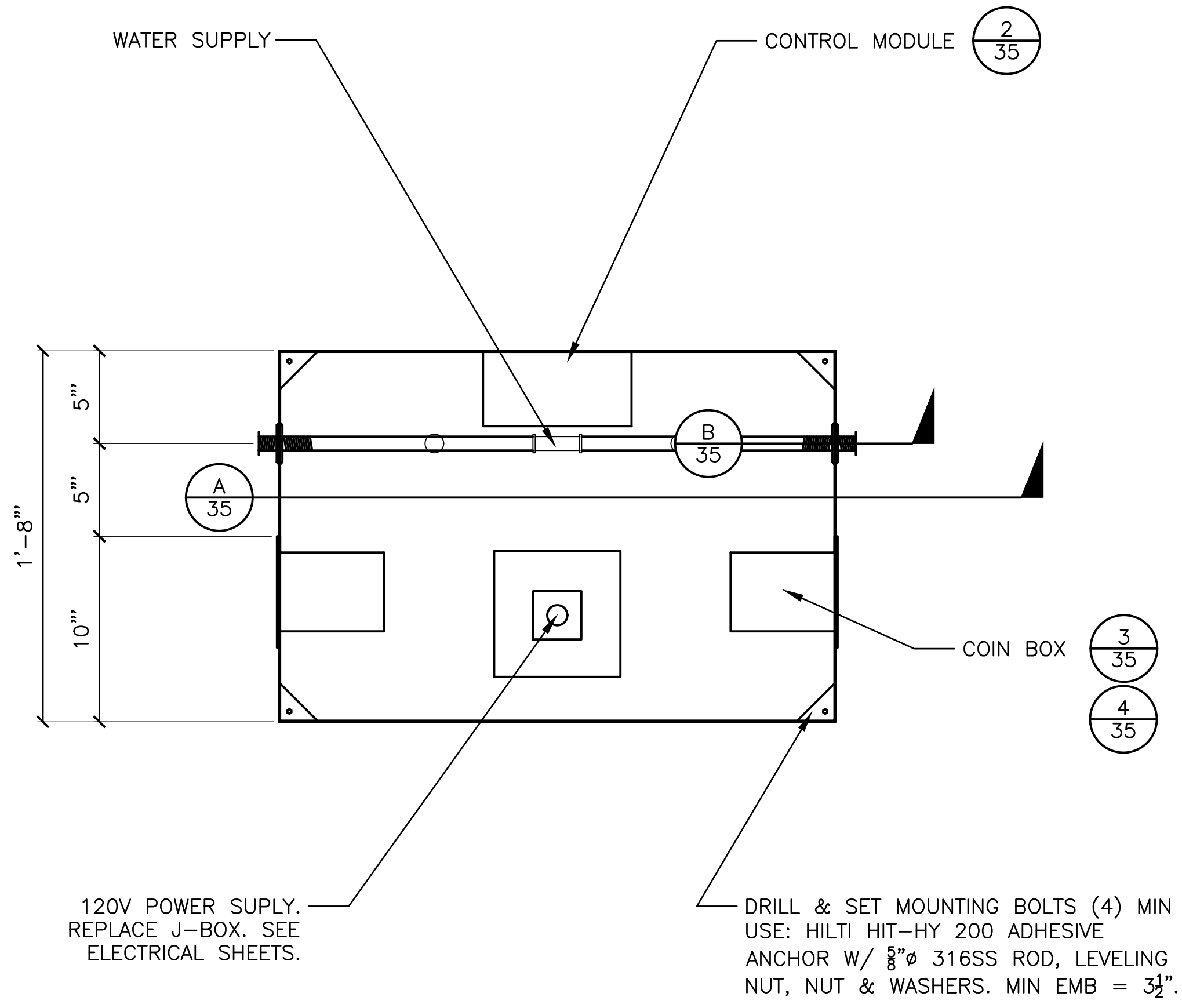
BID SET

NOBLE CONSULTANTS **GEC**

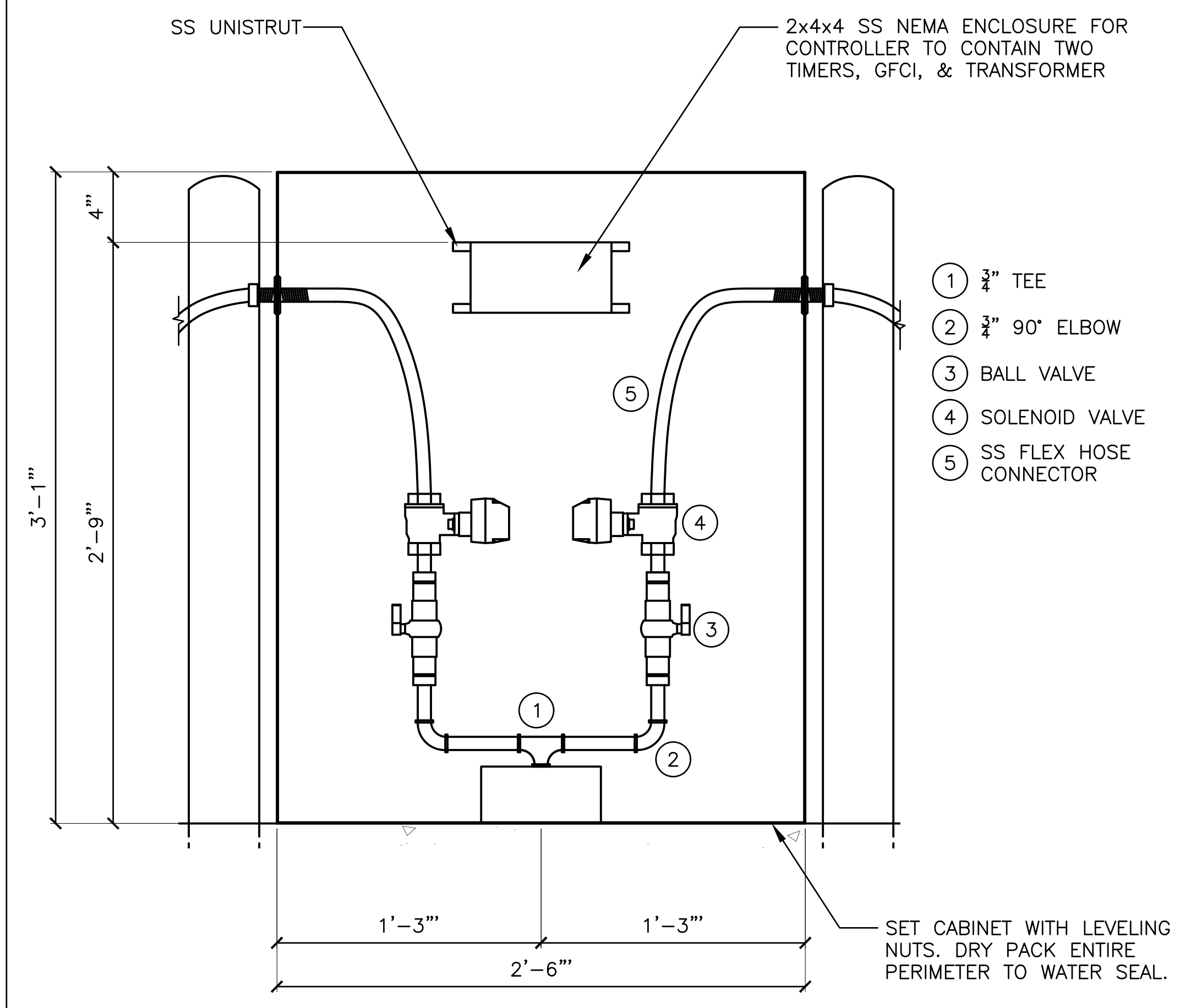
2201 DUPONT DRIVE, SUITE 830
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NO.	DATE	REVISION

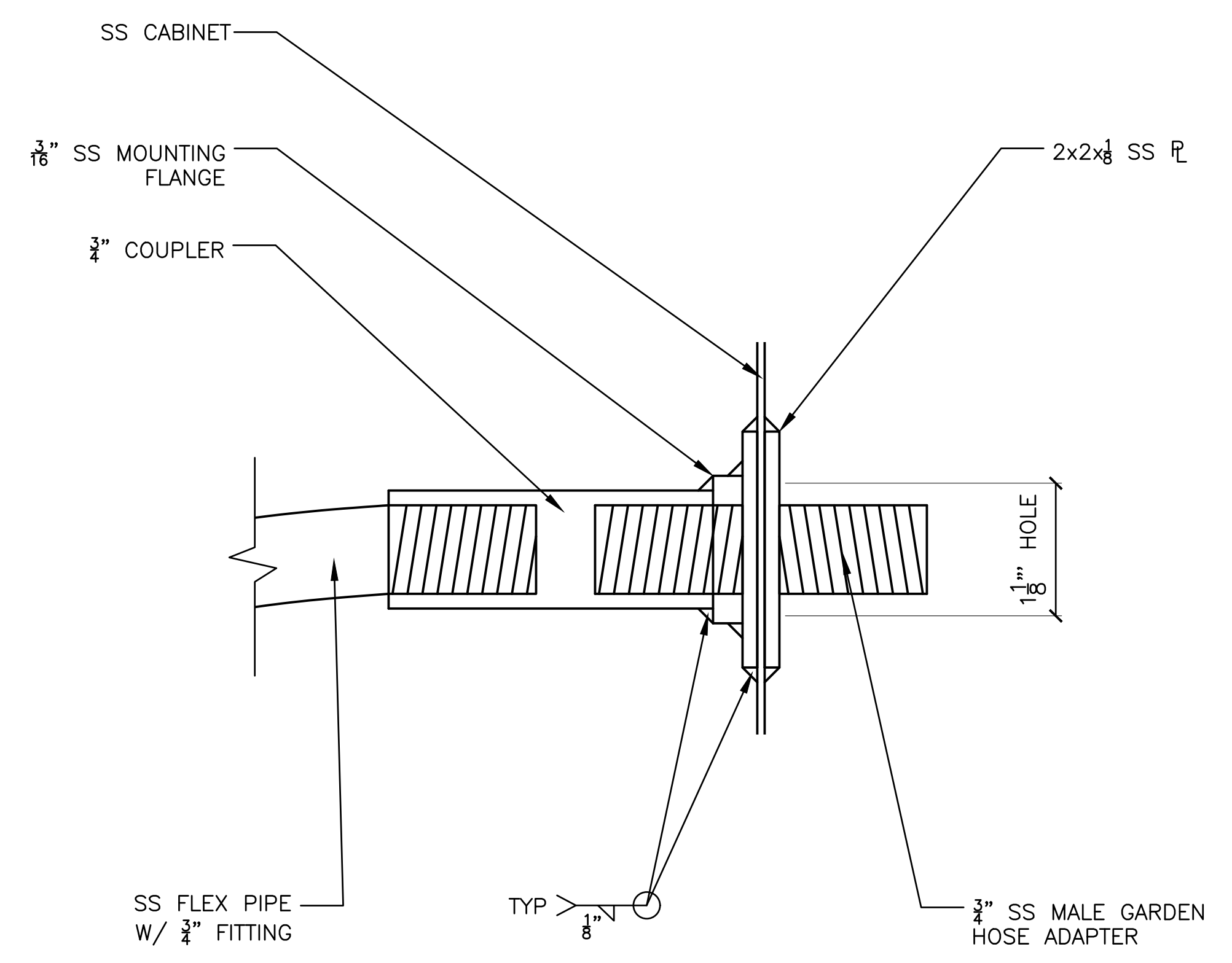
DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 34 OF 64
DRAWN BY: PGM	WASHDOWN EQUIPMENT	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



$\frac{1}{35}$ INTERIOR CABINET PLAN
SCALE: 2" = 1'-0"



$\frac{A}{35}$ INTERIOR PLUMBING ELEVATION
SCALE: 2" = 1'-0"



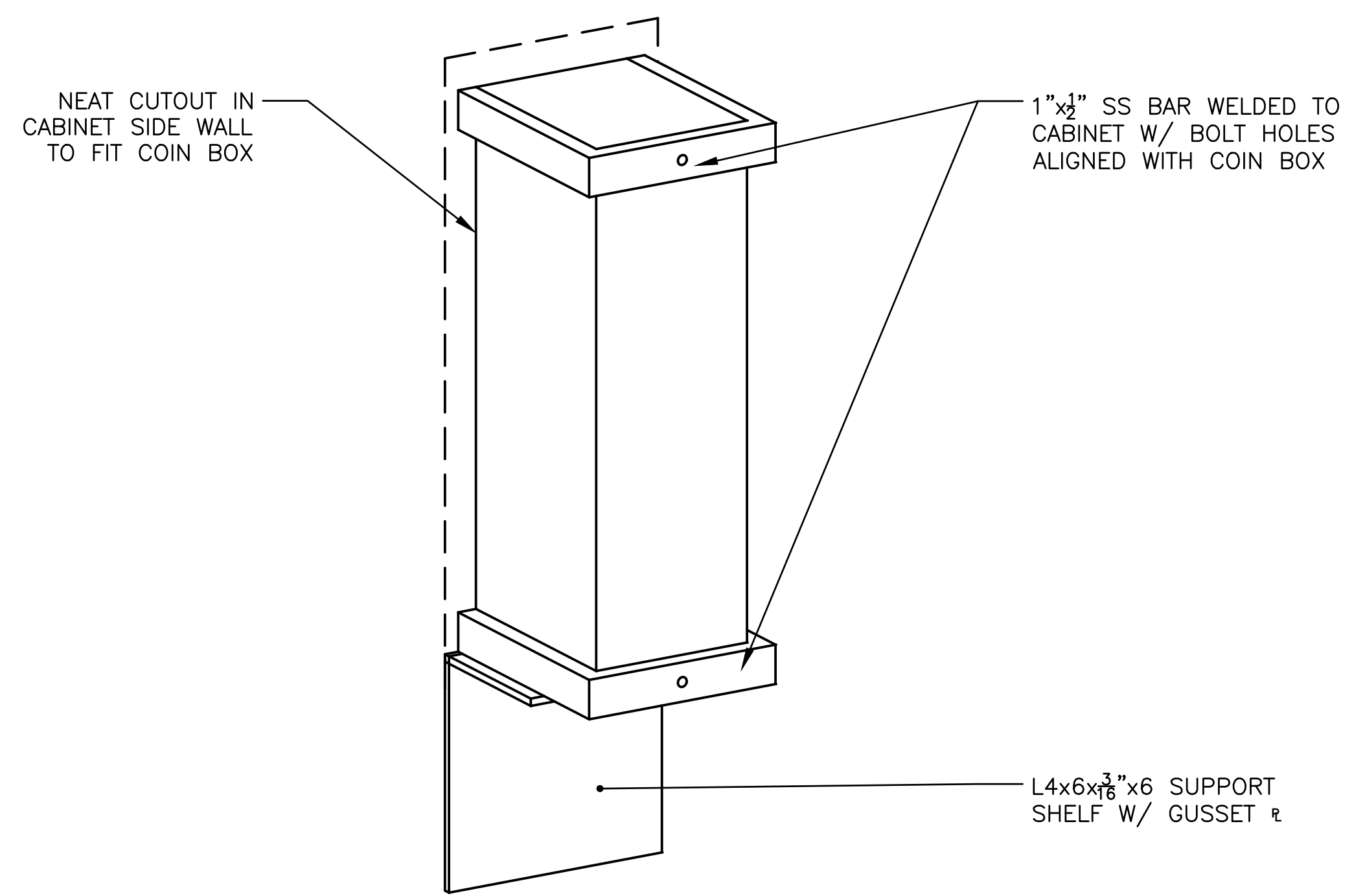
$\frac{B}{35}$ HOSE CONNECTION DETAIL
SCALE: 6" = 1'-0"



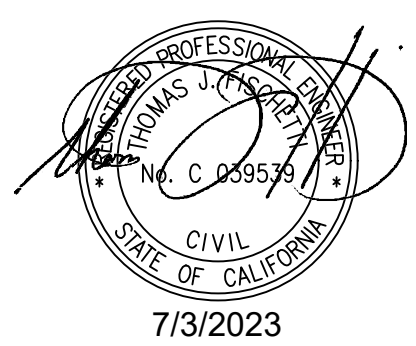
$\frac{2}{35}$ CASHMETER CONTROL MODULE
SCALE: N.T.S.



$\frac{3}{35}$ COIN BOX ENCLOSURE
SCALE: N.T.S.



$\frac{4}{35}$ COIN BOX CONNECTION DETAIL
SCALE: N.T.S.



BID SET

NOBLE CONSULTANTS **GEC**

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NO.	DATE	REVISION

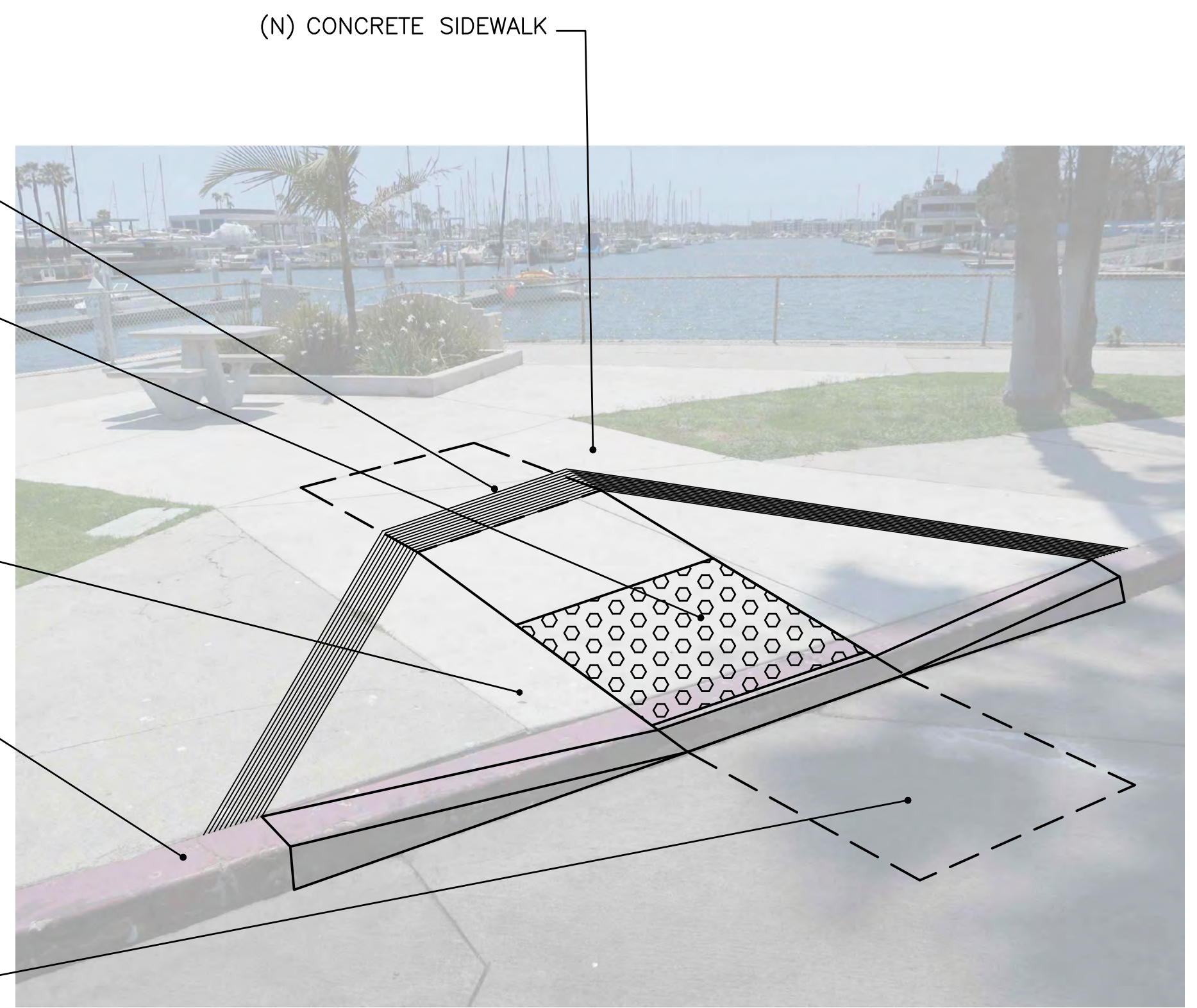
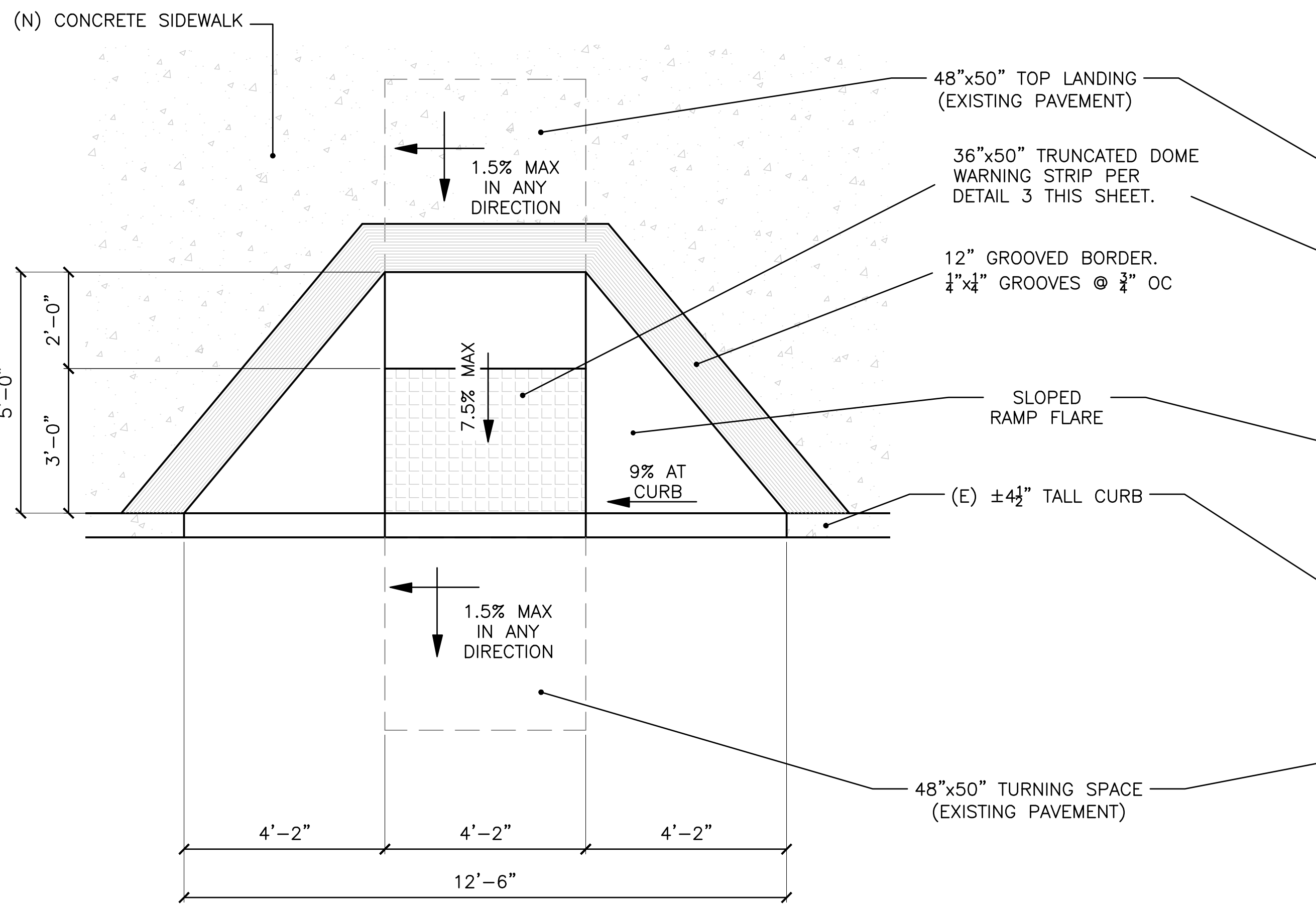
DESIGNED BY JTM
DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

WASHDOWN EQUIPMENT DETAILS

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

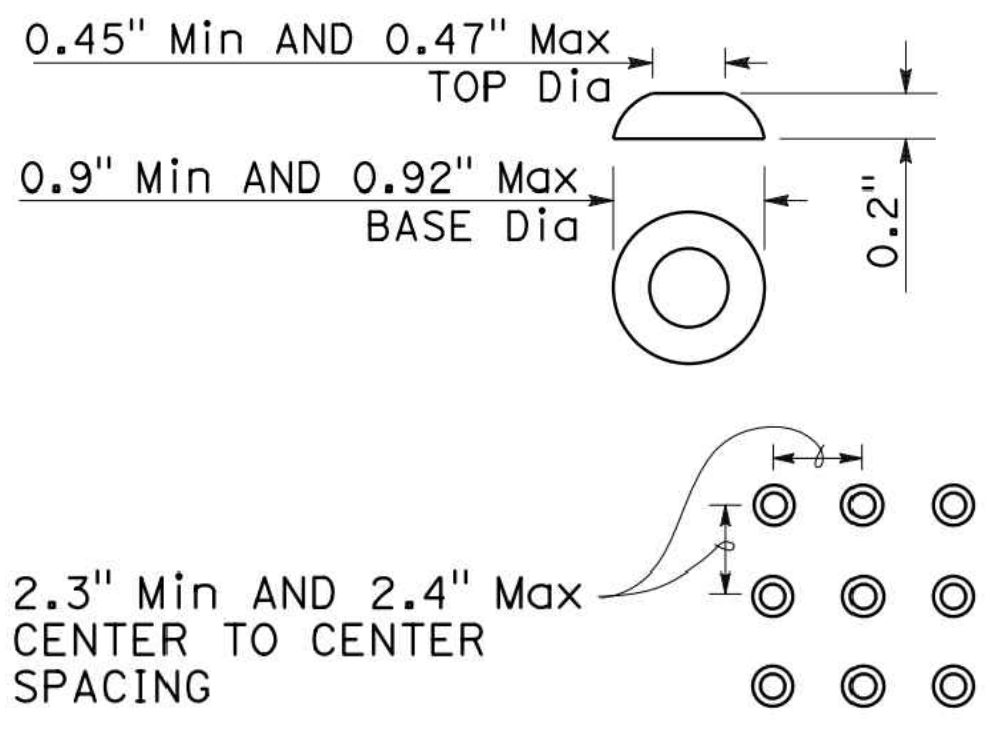
SHEET 35 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



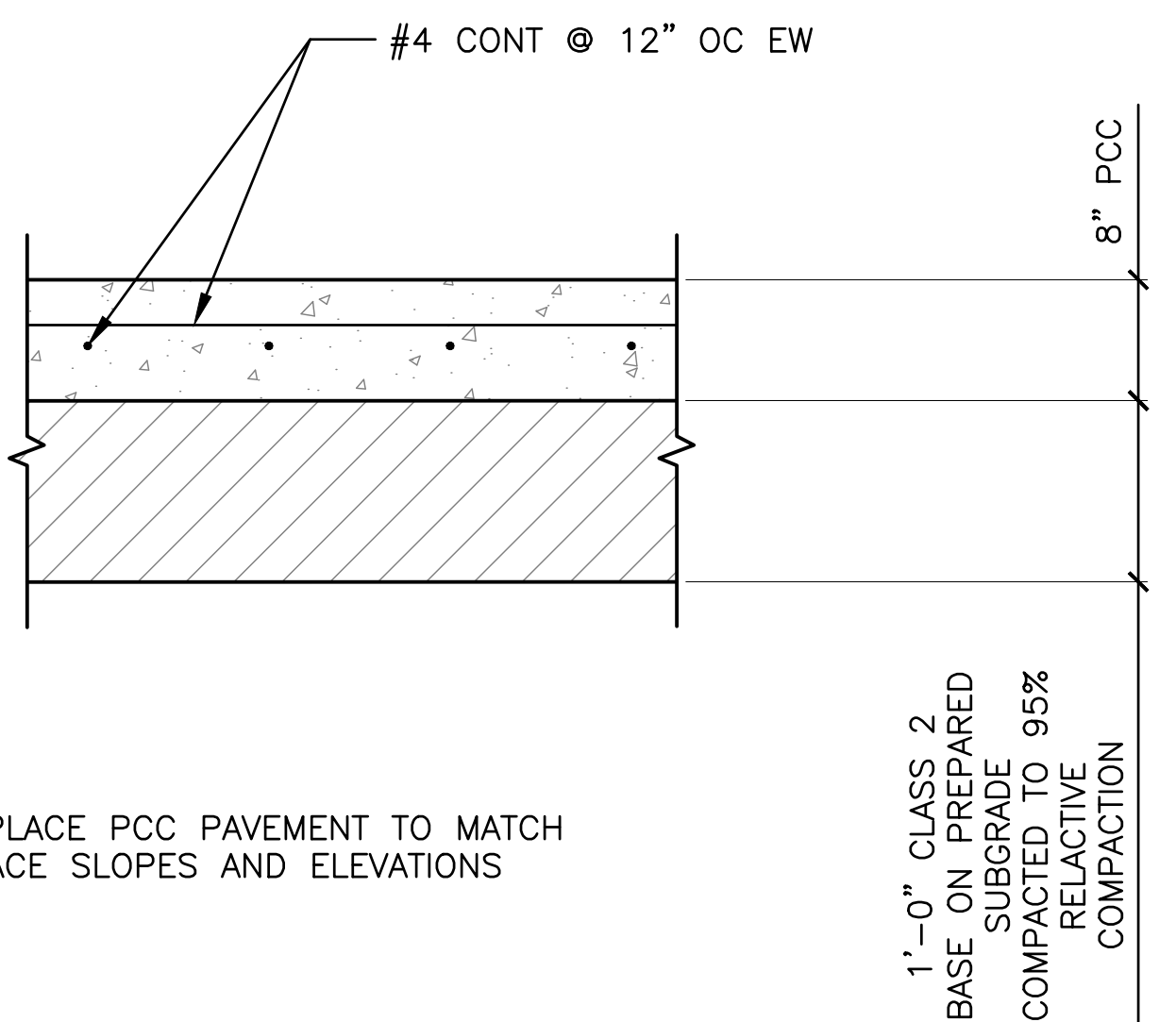
- CURB RAMP NOTES:**
- CURB RAMP DESIGN SHALL CONFORM TO THE REQUIREMENTS OF CBC 2019 CH. 11B & STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLAN RSP A88A DATED MAY 31, 2018.
 - CURB RAMP CONSTRUCTION REQUIREMENTS:
 - THE CLEAR WIDTH OF THE CURB RAMP RUN SHALL BE 48" MIN (CBC 2019 11B-406.5.2).
 - THE RISE FOR ANY RAMP RUN SHALL BE 30" MAX (CBC 2019 11B-405.6).
 - RAMP RUN SLOPE SHALL NOT EXCEED 1:12 IN DIRECTION OF TRAVEL (CBC 2019 11B-406.3.1).
 - RAMP RUN CROSS SLOPES SHALL NOT EXCEED 1:48 (CBC 2019 11B-406.5.7)
 - TOP LANDING SHALL BE AT LEAST AS WIDE AS CURB RAMP, & 48" MIN IN THE DIRECTION OF PATH OF TRAVEL. LANDING SLOPES IN ALL DIRECTIONS SHALL NOT EXCEED: 1:48 (CBC 2019 11B-406.5.3).
 - CURB RAMP FLARES SLOPES SHALL NOT EXCEED 1:10 (CBC 2019 11B-406.2.2).
 - THE TURNING SPACE AT BOTTOM OF RAMP SHALL BE 48" MIN x 48" MIN. SLOPES IN ALL DIRECTIONS SHALL NOT EXCEED: 1:48 (CBC 2019 11B-406.3.2).
 - DETECTABLE WARNING DESIGN CONSTRAINTS:
 - DETECTABLE WARNINGS AT CURB RAMPS SHALL EXTEND 36" IN THE DIRECTION OF TRAVEL FOR THE FULL WIDTH OF THE RAMP RUN LESS 2" MAX ON EITHER SIDE, EXCLUDING FLARED SIDES. DETECTABLE WARNINGS SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 6" MIN & 8" MAX FROM THE LINE AT THE FACE OF THE CURB MARKING THE TRANSITION BETWEEN THE CURB & THE STREET (CBC 2019 11B-705.1.2.2).
 - TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9" MIN - 0.92" MAX, A TOP DIAMETER OF 0.45" MIN - 0.47" MAX., & A HEIGHT OF 0.2" (CBC 2019 11B-705.1.1.1).
 - CENTER-TO-CENTER SPACING OF 2.3" MIN - 2.4" MAX, & A BASE-TO-BASE SPACING OF 0.65" MIN (CBC 2019 11B-705.1.1.2).
 - SURFACES SHALL BE EITHER YELLOW AND APPROXIMATE FS 33538 OF FEDERAL STANDARD 595C. DETECTABLE WARNING SURFACES SHALL PROVIDE A 70 PERCENT MINIMUM VISUAL CONTRAST WITH ADJACENT WALKING SURFACES. (CBC 2019 11B-705.1.1.3).

1 CURB RAMP PLAN DETAIL
36 SCALE: 1/2" = 1'-0"

2 CURB RAMP SITE VIEW
36 SCALE: N.T.S.

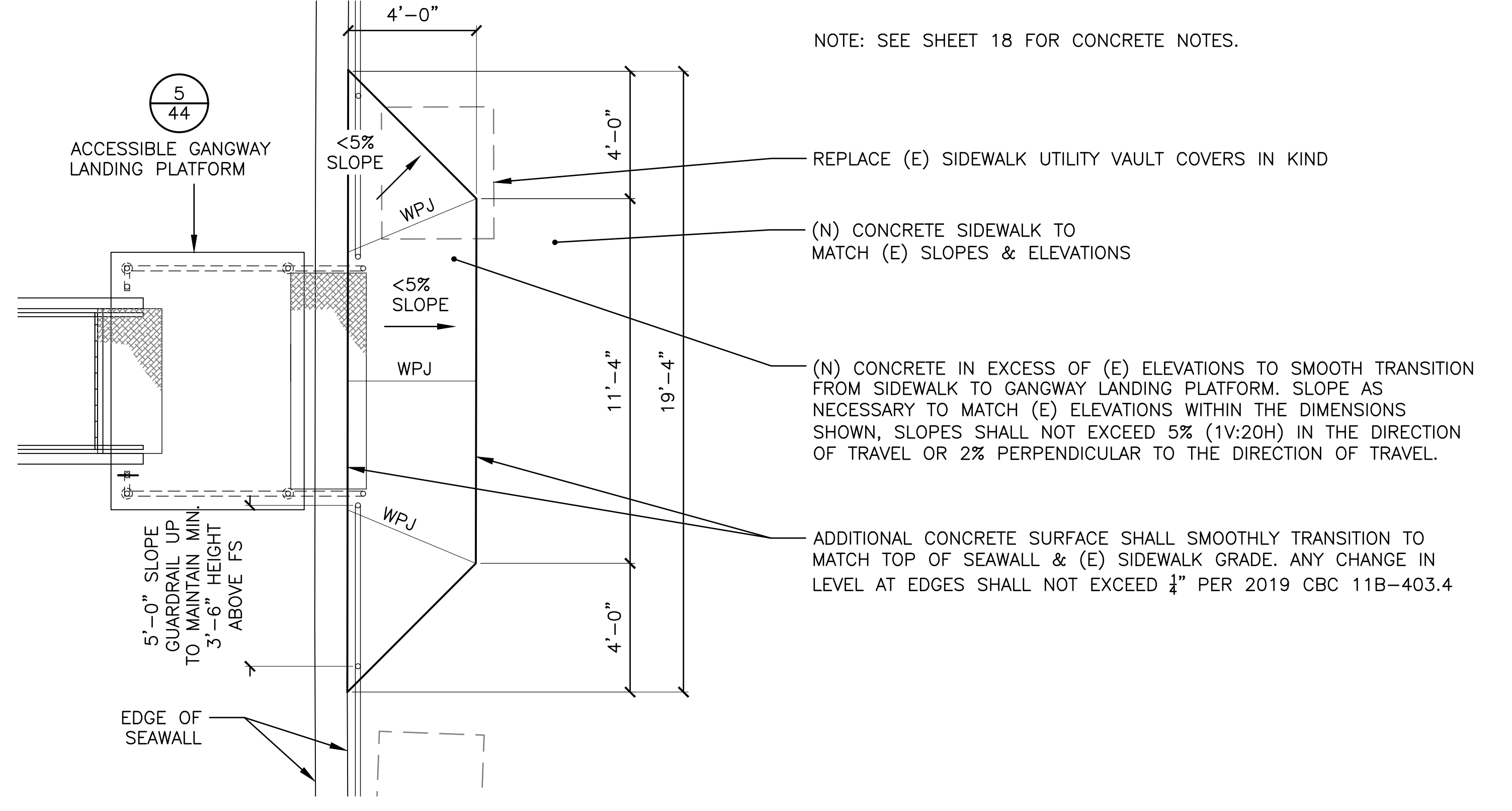


3 TRUNCATED DOME DETAIL
36 SCALE: N/A



NOTE: DEMO AND REPLACE PCC PAVEMENT TO MATCH EXISTING SURFACE SLOPES AND ELEVATIONS

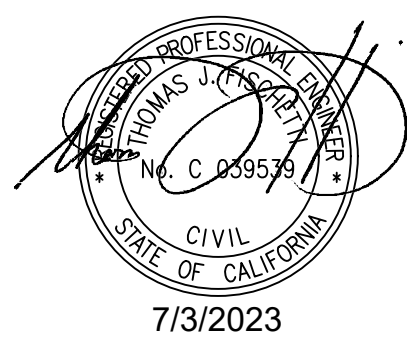
5 WASHDOWN AREA (N) CONCRETE PAVEMENT SECTION
36 SCALE: 1" = 1'-0"



NOTE: SEE SHEET 18 FOR CONCRETE NOTES.

6 ACCESSIBLE GANGWAY LANDING PLATFORM AND GATE AREA DETAIL
36 SCALE: 1" = 3'-0"

4 STANDARD CURB DETAIL (GREENBOOK 120-1)
36 SCALE: 1-1/2" = 1'-0"



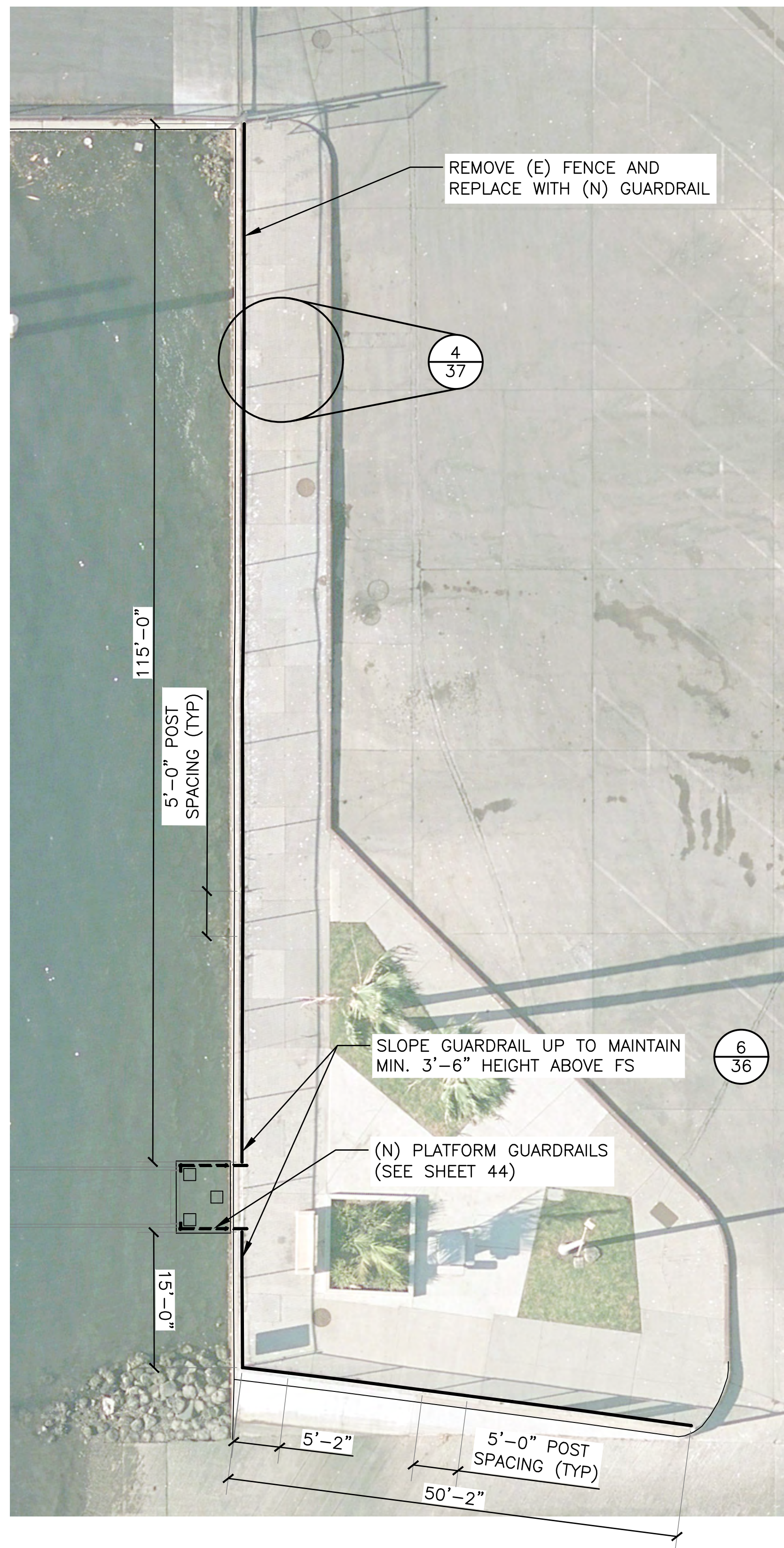
BID SET



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949-752-1530
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NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 36 OF 64
DRAWN BY: PGM	SITE DETAILS	JOB NO. 928-79
CHECKED BY: TJP		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



1 GUARDRAIL PLAN
SCALE: 1" = 10'-0"

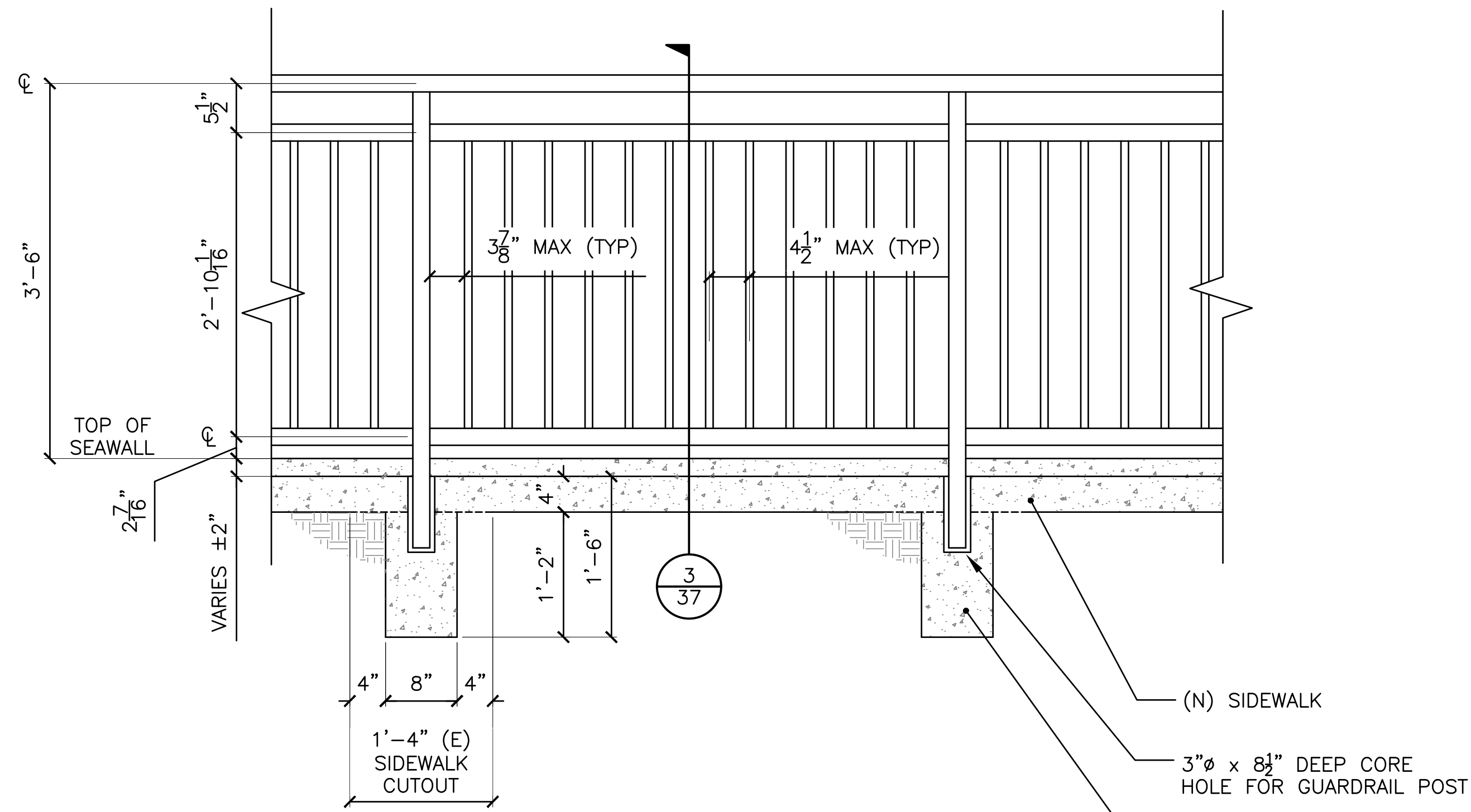
REMOVE (E) FENCE AND REPLACE WITH (N) GUARDRAIL

4
37

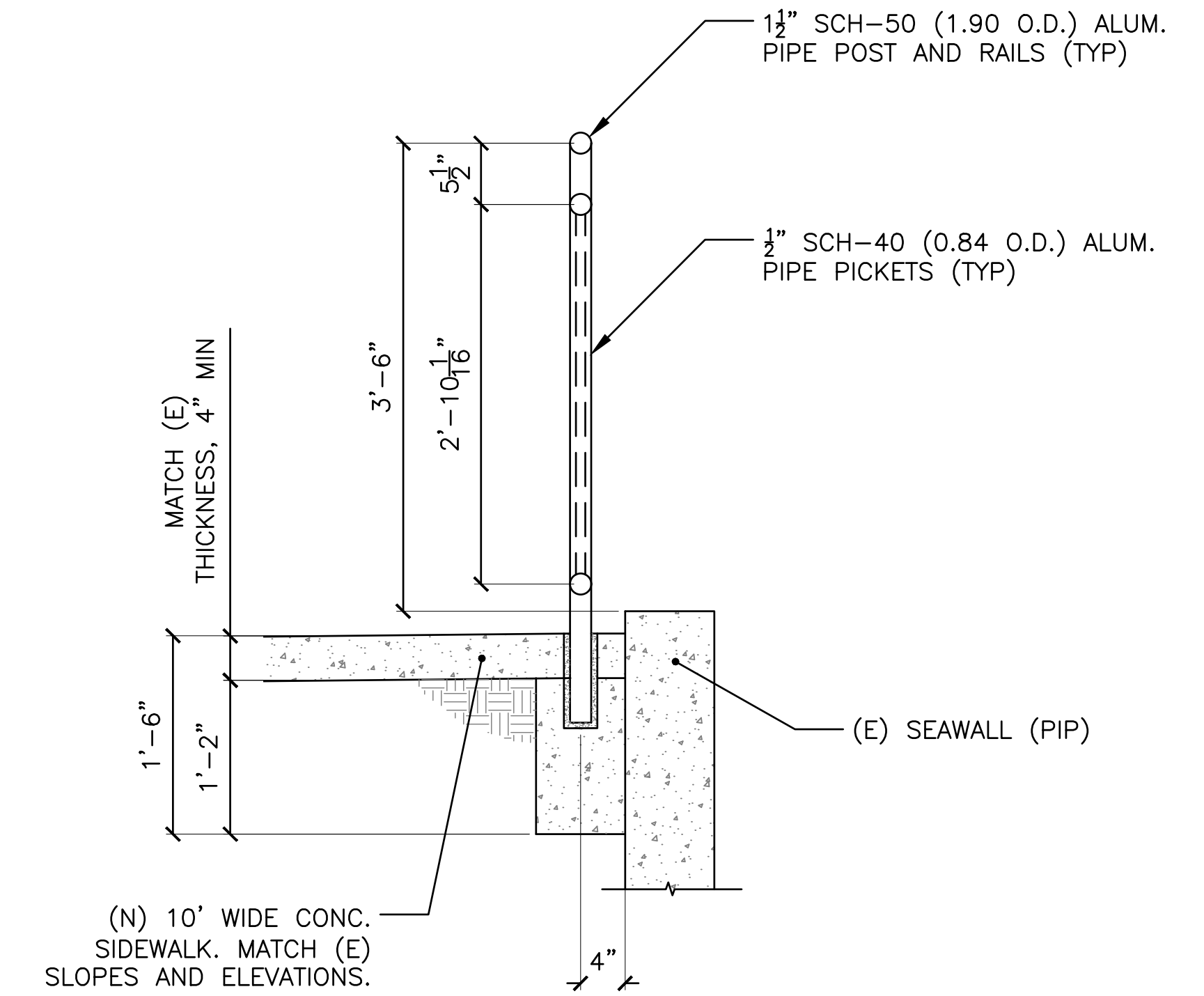
SLOPE GUARDRAIL UP TO MAINTAIN MIN. 3'-6" HEIGHT ABOVE FS

6
36

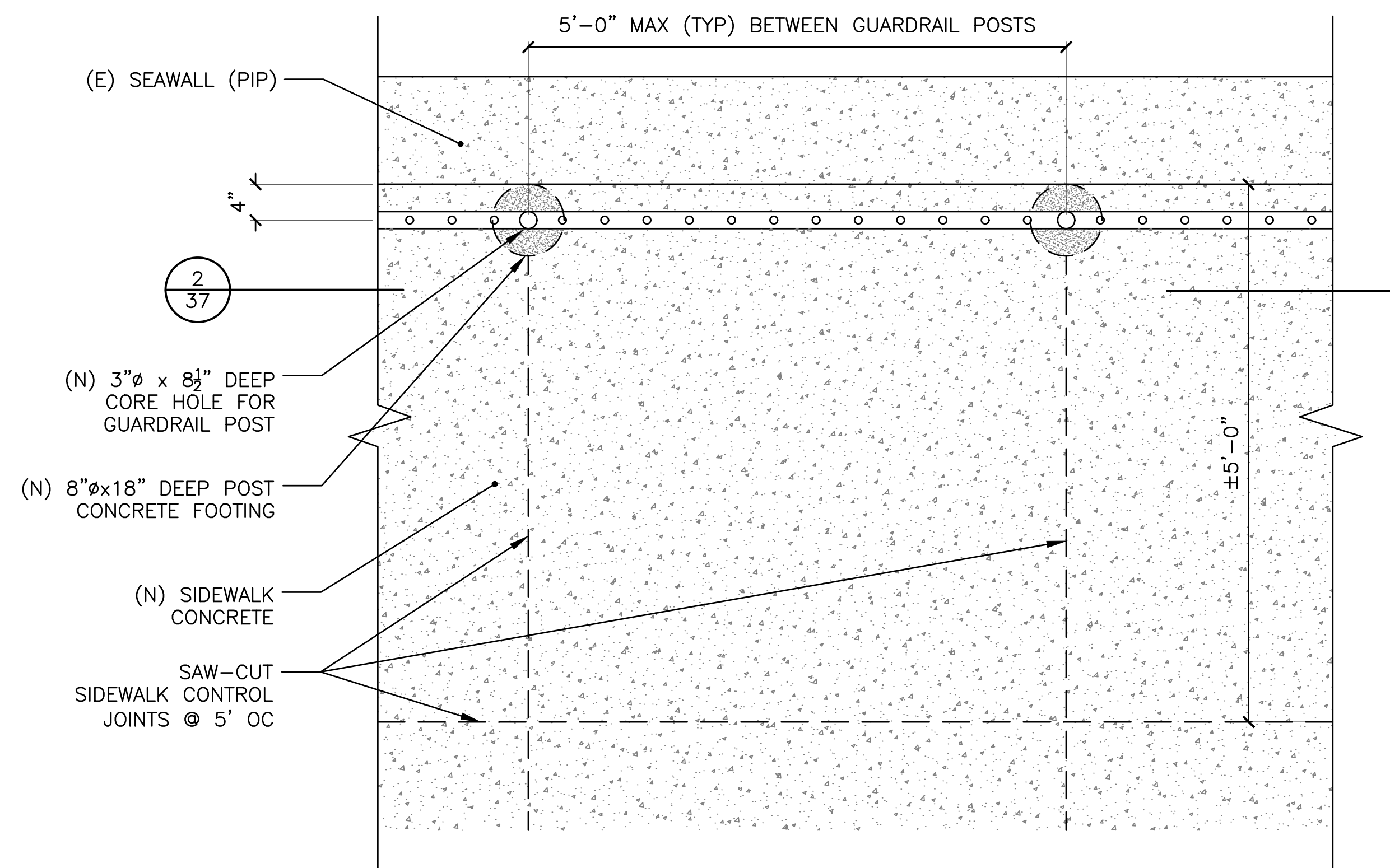
(N) PLATFORM GUARDRAILS (SEE SHEET 44)



2 TYP. ALUM. GUARDRAIL PLAN VIEW DETAIL
SCALE: 1" = 1'-0"



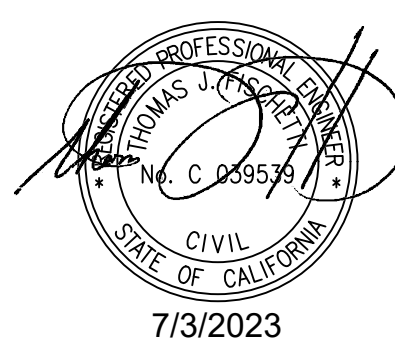
3 TYP. ALUM. GUARDRAIL SECTION VIEW DETAIL
SCALE: 1" = 1'-0"



4 TYP. ALUM. GUARDRAIL ELEVATION VIEW DETAIL
SCALE: 1" = 1'-0"

GUARDRAIL NOTES:

- ALL GUARDRAIL SHALL MATCH (E) RAIL AT ANCHORAGE 47, AS MANUFACTURED BY CRANEVEYOR CORP., OR APPROVED EQUAL.
- ALL PORTIONS OF (N) GUARDRAIL SYSTEM SHALL COMPLY WITH SECTION 1015 OF THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE. GUARDRAIL LAYOUT/DIMENSIONS SHALL BE ADJUSTED AS NECESSARY TO MEET ALL REGULATORY DESIGN STANDARDS.
- ALL GUARDRAIL SHALL BE DESIGNED FOR A UNIFORM HORIZONTAL LOAD APPLIED TO THE TOP RAIL OF FIFTY (50) POUNDS PER LINEAR FOOT OR A 200 POUND POINT LOAD.
- GUARDRAIL SHALL BE CLEAR HARD COAT ANODIZED ALUMINUM FINISH CONFORMING TO AA-M12-C22-A41. ANODIZED FINISH SHALL BE NONSPECULAR AS FABRICATED, WITH A CLEAR (NATURAL) ARCHITECTURAL CLASS I ANODIC COATING, WITH AN ETCHED MEDIUM MATTE CHEMICAL FINISH.
- ITEMS SHALL BE FABRICATED FROM ALUMINUM ALLOY 6063-T6 OR EQUIVALENT.
- INSULATE ALL EMBEDDED ALUMINUM SURFACES IN CONTACT WITH CONCRETE WITH MATERIAL APPROVED BY ENGINEER.
- EXPOSED SURFACE CONDITION OF ALL ALUMINUM MATERIALS SHALL BE FREE OF ROLL MARKS, SCRATCHES, KINKS, STAINS, PITS, ORANGE PEEL, DIE MARKS, STRUCTURAL STREAKS, AND ANY OTHER DEFECTS WHICH WILL EFFECT UNIFORM APPEARANCE OF FINISHED SURFACES.
- CAP EXPOSED ENDS OF ALUMINUM PIPE WITH 0.125" PLATE WELDED FLUSH TO MATCH.
- PRIOR TO FABRICATION OF ANY GUARDRAIL, SUBMIT DETAILED SHOP DRAWINGS TO ENGINEER FOR APPROVAL.
- PRIOR TO FABRICATION OF ANY GUARDRAIL, SUBMIT STRUCTURAL CALCULATIONS PREPARED BY A CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER FOR THE GUARDRAIL TO VERIFY COMPLIANCE WITH SECTION 1607 OF THE CALIFORNIA BUILDING CODE.
- REFER TO DETAIL 113-1 IN THE GREENBOOK FOR SIDEWALK REPLACEMENT
- GUARDRAIL POST FOOTING CONCRETE SHALL BE F'c=2,500 PSI
- 3"Ø x 8 1/2" DEEP CORE HOLE FOR GUARDRAIL POST SHALL BE FILLED W/ NON-SHRINK GROUT. NON-SHRINK GROUT TO BE "KWIKSET" CEMENT, OR APPROVED EQUAL
- (E) GUARDRAIL / FENCE SHALL BE COMPLETELY REMOVED WITHIN THE LIMITS OF THE (N) GUARDRAIL SHOWN ON THIS SHEET. ANY VOIDS FROM REMOVAL OF (E) GUARDRAIL POSTS ARE TO BE FILLED WITH F'c=2,500 PSI CONCRETE.
- WHERE POSSIBLE, COORDINATE (N) GUARDRAIL POST LOCATIONS WITH (E) POSTS TO MINIMIZE CONCRETE REPAIR AREAS.



BID SET

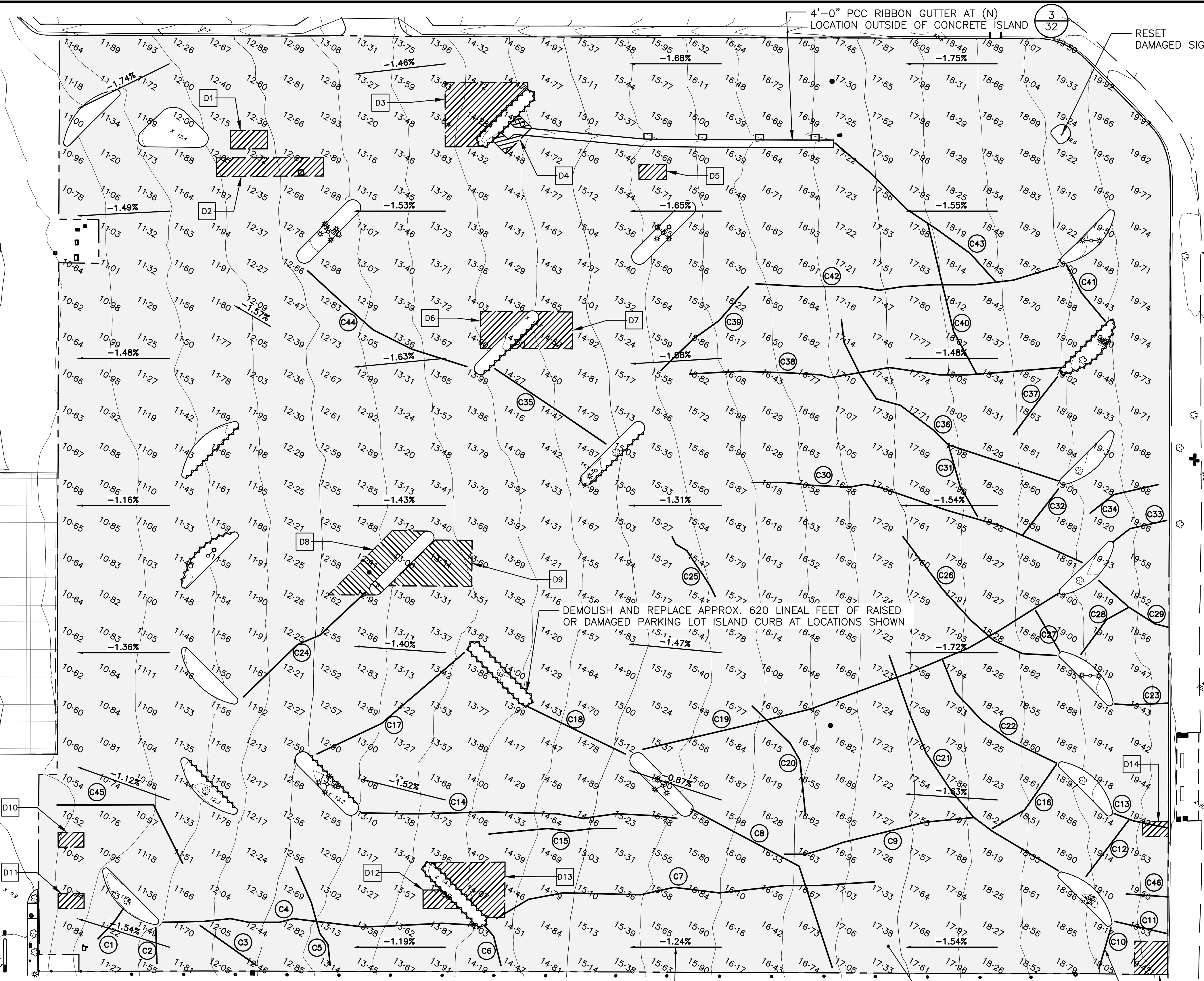


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NO.	DATE	REVISION

DESIGNED BY: JTM
DRAWN BY: PGM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 37 OF 64
SIDEWALK & GUARDRAIL DETAILS	JOB NO. 928-79
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	SCALE AS SHOWN
DATE 23 JUL 2023	



SCHEDULE OF WORK

CRACK REPAIR		DIGOUT AND PATCH	
LOCATION	QUANTITY [LF]	LOCATION	QUANTITY [SF]
C1	29	D1	200
C2	24	D2	580
C3	31	D3	1056
C4	174	D4	133
C5	45	D5	120
C6	26	D6	322
C7	204	D7	493
C8	130	D8	637
C9	105	D9	817
C10	25	D10	112
C11	32	D11	112
C12	40	D12	148
C13	30	D13	752
C14	153	D14	112
C15	40	D15	325
C16	54	TOTAL:	5,919
C17	104		
C18	63		
C19	247		
C20	70		
C21	153		
C22	83		
C23	30		
C24	88		
C25	41		
C26	110		
C27	24		
C28	37		
C29	46		
C30	194		
C31	40		
C32	29		
C33	32		
C34	40		
C35	73		
C36	142		
C37	57		
C38	211		
C39	66		
C40	80		
C41	38		
C42	171		
C43	110		
C44	103		
C45	88		
C46	23		
TOTAL:	3,735		

ALL AREAS	SF	297,684	APPROXIMATE HMA REQUIRED IN TONS
			@ 1.5" THICK
			@ 2" THICK
		2,698	3,597

LEGEND

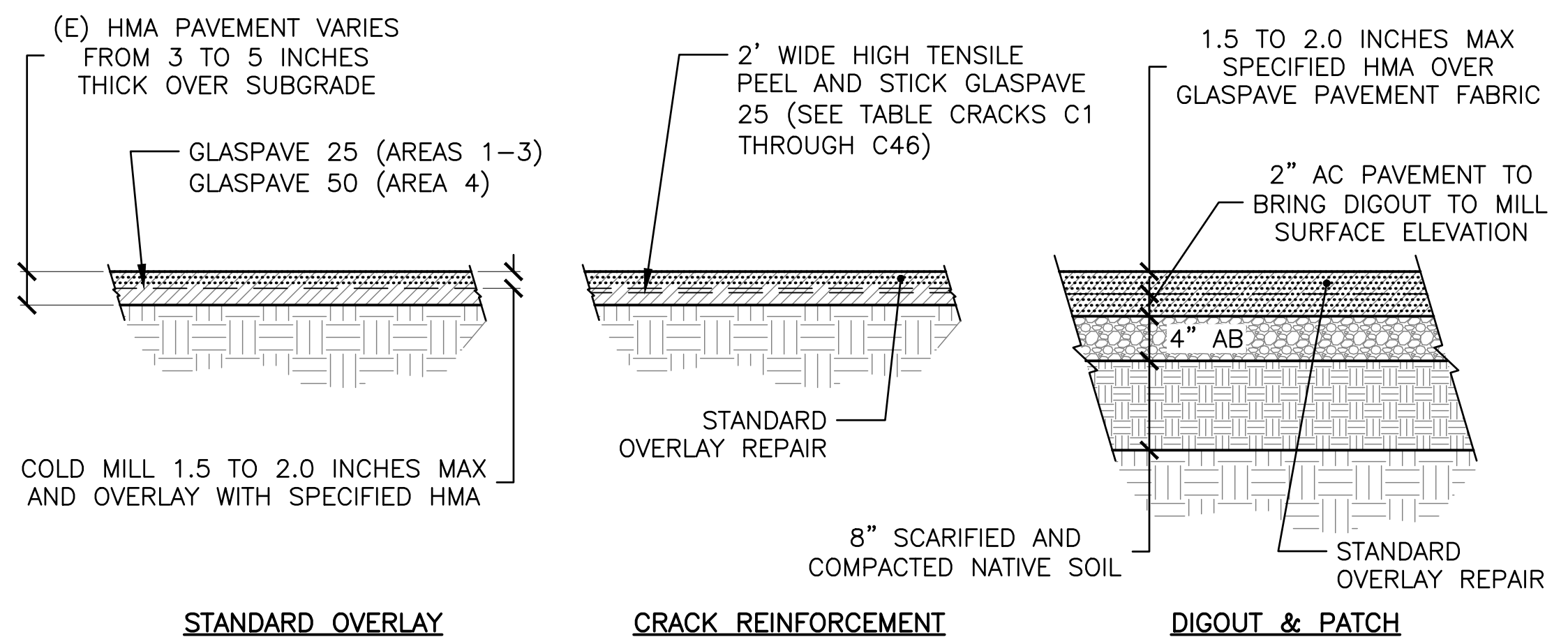
- CRACK REPAIR
- MAJOR CONTOUR
- MINOR CONTOUR
- DIGOUT & PATCH
- (N) PAVEMENT
- CURB REPAIR

1 PARKING LOT PAVEMENT PLAN
SCALE: 1" = 30'

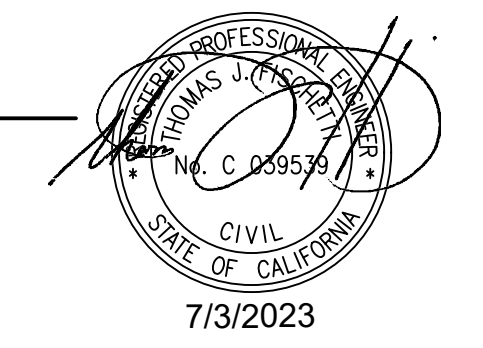
- PAVEMENT NOTES:
- MILL THE EXISTING PAVEMENT 1.5 TO 2" WITH A "SMOOTH" MILL. MILLING MACHINE SHALL BE EQUIPPED WITH PROPER PIK (TEETH) SPACING AND OPERATE AT A SPEED TO ACHIEVE A SURFACE TEXTURE WITH NO SHARP VERTICAL EDGES GREATER THAN 1/4".
 - DIGOUT AND PATCH AREAS WHERE INDICATED ON THE PLANS. REMOVE EXISTING MATERIALS TO 8" BELOW FINISH GRADE. SCARIFY 8" OF SUBGRADE AND COMPACT TO 90% (ASTM D1557). INSTALL 4" AB AND 2 TO 2.5" AC TO MATCH ADJACENT MILLED PARKING LOT SURFACE. SEE NOTE 6 FOR ADDITIONAL FINAL AC OVERLAY.
 - CLEAN THOROUGHLY TO REMOVE ALL LOOSE DIRT AND DEBRIS FROM MILLING OPERATION.
 - PRE-TREAT ALL THE LONG LARGER EXPANSIVE CRACKS BY APPLYING A 2"+ WIDE TACK COAT APPLICATION CENTERED OVER THE CRACK

- FOLLOWED BY A 2" WIDE HIGH TENSILE PEEL AND STICK RAPID REPAIR GLASPAVE 25 GLASS PATCH PRODUCT AS MANUFACTURED BY TENSAR CORPORATION.
- FOLLOW CRACK PRE-TREAT WITH GLASPAVE 25 OR GLASPAVE 50 AS MANUFACTURED BY TENSAR CORPORATION INSTALLED IN HOT PG ASPHALT BINDER TACK PER MANUFACTURER'S WRITTEN INSTALLATION GUIDE.
- GLASPAVE 25 PAVEMENT FABRIC SHALL BE USED FOR OVERLAY IN WORK SEQUENCE AREAS 1, 2, AND 3. GLASPAVE 50 SHALL BE USED FOR HMA OVERLAY IN WORK SEQUENCE AREA 4 (SEE SHEET 15 FOR WORK SEQUENCE AREA LIMITS.)
- OVERLAY WITH MIN. 1.5" TO 2" COMPACTED HMA IN ALL AREAS AND PROFILED TO MAINTAIN EXISTING DRAINAGE.

38 DENOTES LOCATION OF EXISTING VISIBLE SURFACE CRACK. WIDTHS VARY. PRE-TREAT THE WIDER EXPANSIVE CRACKS AFTER COLD MILLING PER NOTE 3.



A PAVEMENT SECTIONS
SCALE: 1" = 1'-0"



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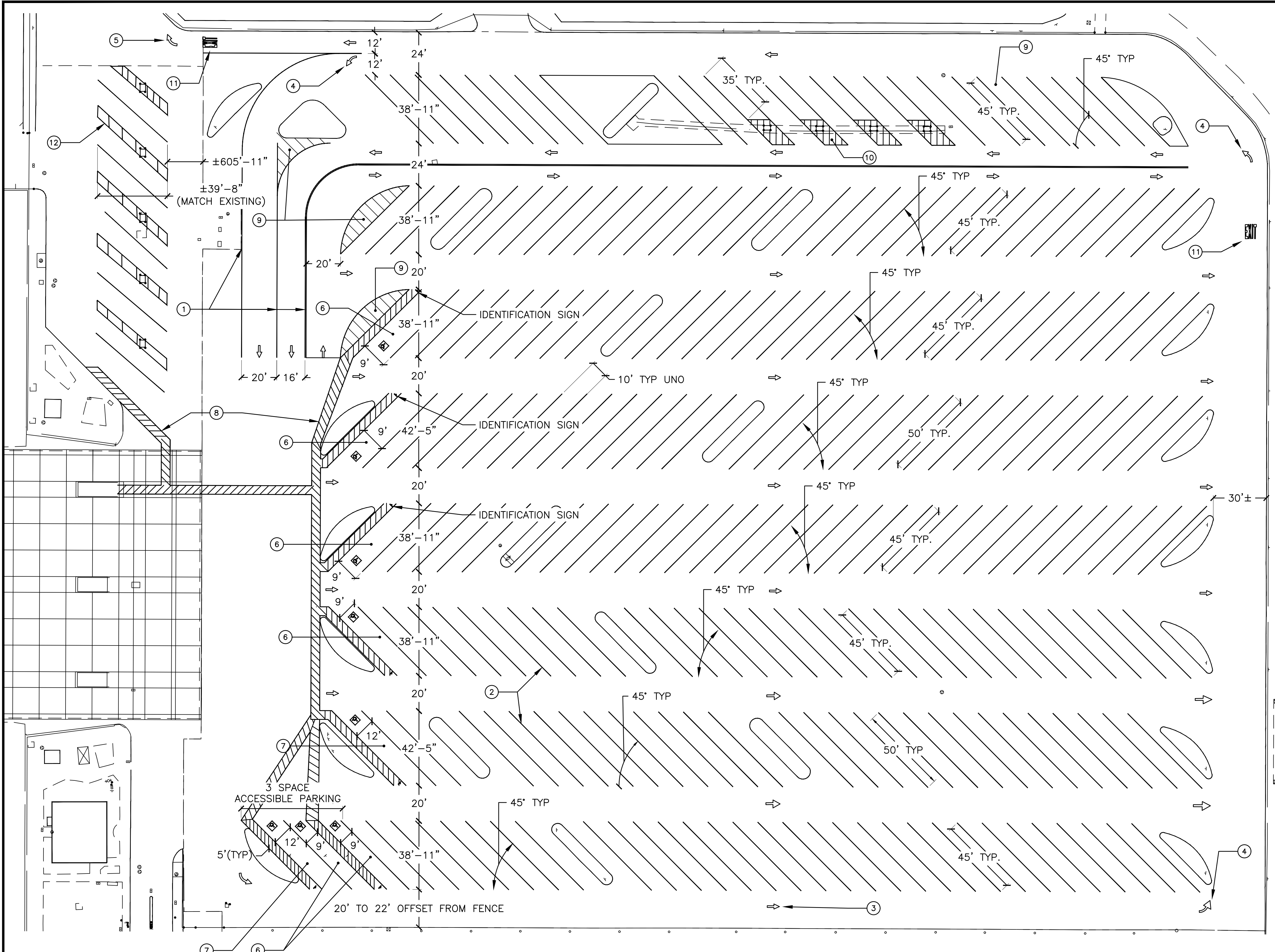
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DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

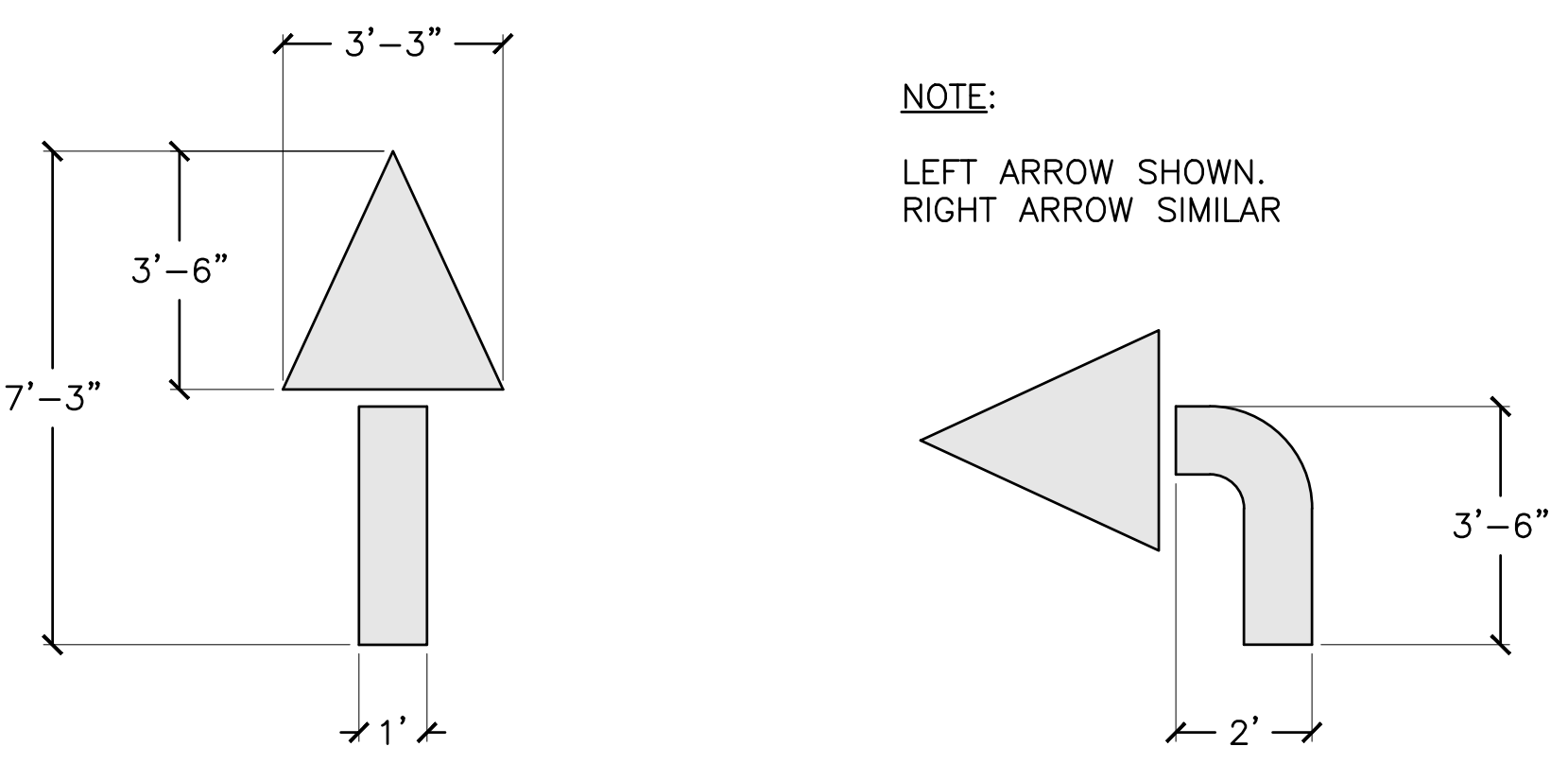
LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
PARKING LOT PAVEMENT PLAN
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 38 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



- PAVEMENT STRIPING NOTES**
1. PAINT FOR STRIPING SHALL BE AN ACRYLIC EMULSION OR ALKYD, NON-REFLECTORIZED IN CONFORMANCE WITH SECTION 214 OF THE STANDARD SPECIFICATIONS. COLOR SHALL BE WHITE EXCEPT AS REQUIRED BLUE BY CALTRANS STANDARD PLAN RSP A90A. SUBMIT TO ENGINEER FOR APPROVAL PRIOR TO PERFORMING STRIPING WORK.
 2. PERFORM STRIPING WORK IN CONFORMANCE WITH SECTION 84 OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BELOW.
 3. PAVEMENT SURFACES TO RECEIVE PAINT SHALL BE FREE OF GREASE AND LOOSE DIRT PARTICLES. PERFORM LAYOUT WITH CHALK OR LUMBER CRAYON ONLY.
 4. LINE WIDTHS SHALL BE 4" PLUS OR MINUS 1/4" UNLESS NOTED OTHERWISE.
 5. PROVIDE ONE COAT APPLICATIONS WITH COVERAGE OF 75 SQUARE FEET PER GALLON OF PAINT.
 6. REMOVE DRIPS, OVERSPRAYS, IMPROPER MARKINGS, AND PAINT MATERIAL TRACKED BY TRAFFIC BY SAND BLASTING OR OTHER METHOD APPROVED BY PROJECT MANAGER PRIOR TO PERFORMANCE.
 7. SEE SHEET 40 FOR ACCESSIBLE PARKING STALL STRIPING & SIGNAGE DETAILS.

- PAVEMENT STRIPING AND STENCIL SCHEDULE**
1. LANE DELINEATOR STRIPE
 2. PARKING STALL STRIPE
 3. STRAIGHT ARROW STENCIL AT ALL LOCATIONS SHOWN (34 REQ'D)
 4. LEFT ARROW STENCIL (3 REQ'D)
 5. RIGHT ARROW STENCIL (1 REQ'D)
 6. ACCESSIBLE VEHICLE/TRAILER PARKING STALL (6 REQ'D)
 7. VAN ACCESSIBLE VEHICLE/TRAILER PARKING STALL (2 REQ'D)
 8. ACCESSIBLE PATH DELINEATION
 9. TRAFFIC SEPARATION
 10. NO PARKING DELINEATION
 11. EXIT STENCIL (2 REQ'D SIMILAR TO CALTRANS STANDARD PLAN A24D)
 12. WASHDOWN LANE STRIPING TO MATCH EXISTING



1 PAVEMENT STRIPING PLAN
39 SCALE: 1" = 30'

PARKING SPACE SCHEDULE

TYPE	NO.
35' VEHICLE	4
45' VEHICLE/TRAILER	170
50' VEHICLE/TRAILER	59
SUBTOTAL	233
ACCESSIBLE VEHICLE/TRAILER	6
VAN ACCESSIBLE VEHICLE/TRAILER	2
SUBTOTAL	8
TOTAL	241

2 ARROW DETAILS
39 SCALE: 3/8" = 1'-0"



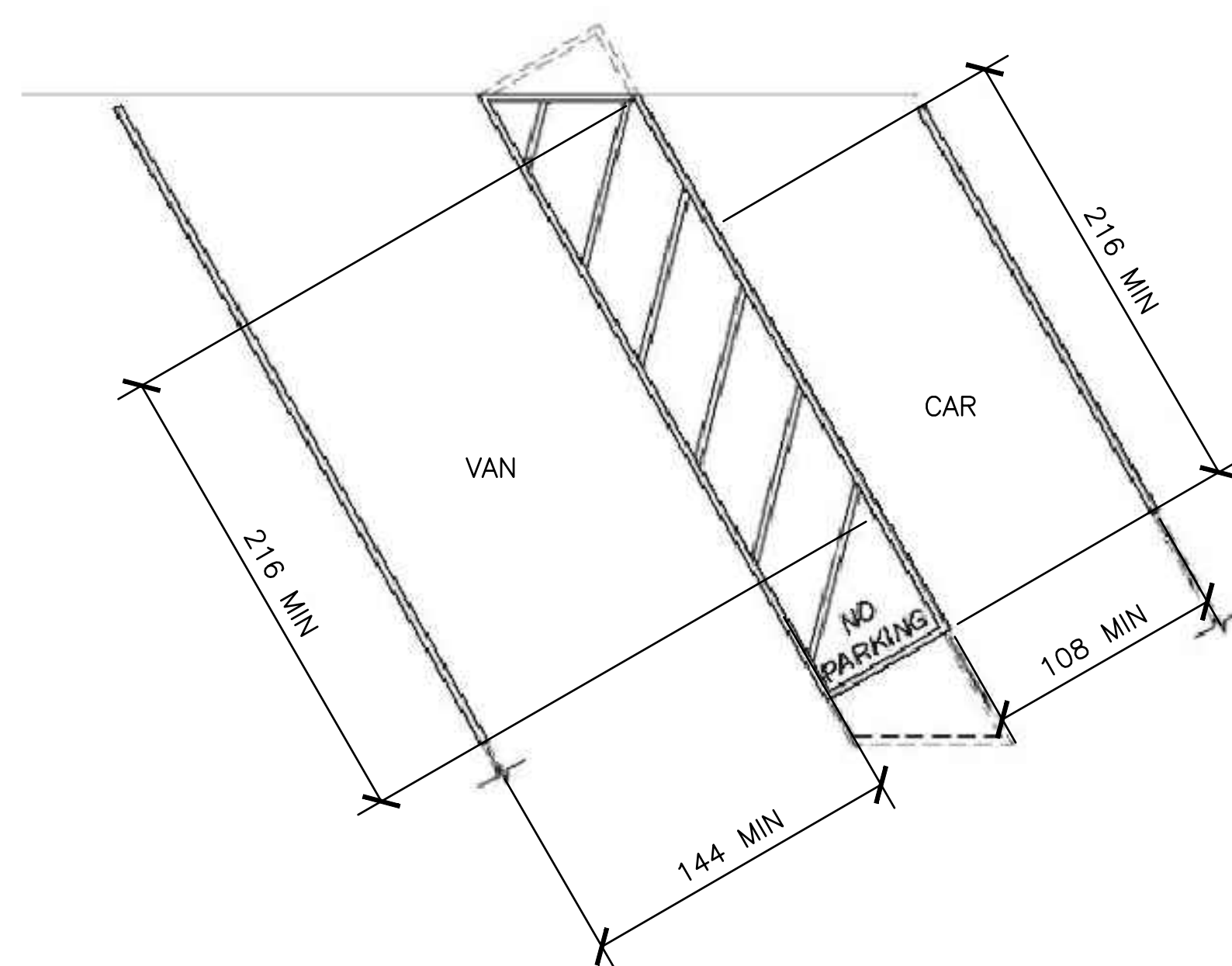
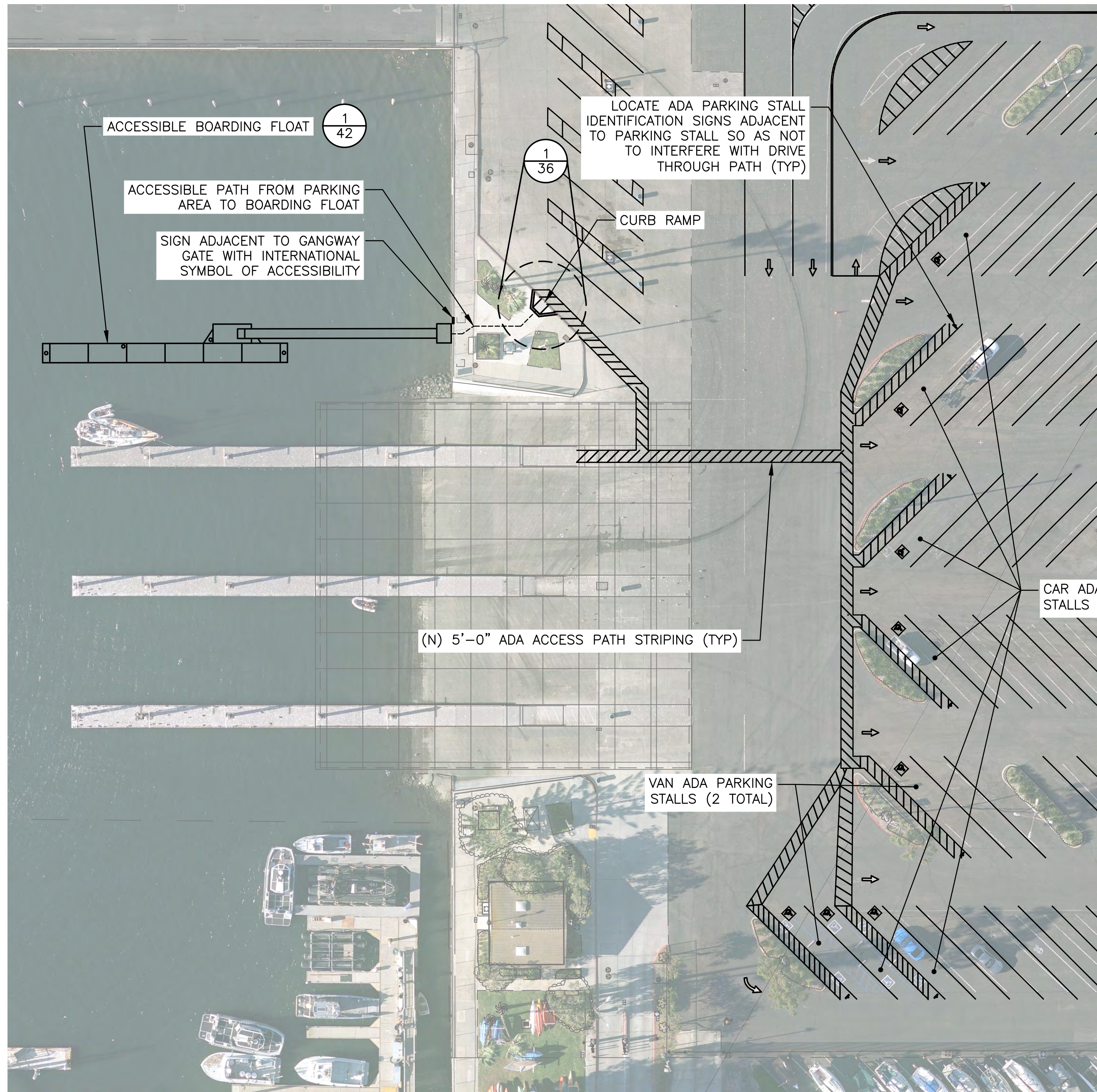
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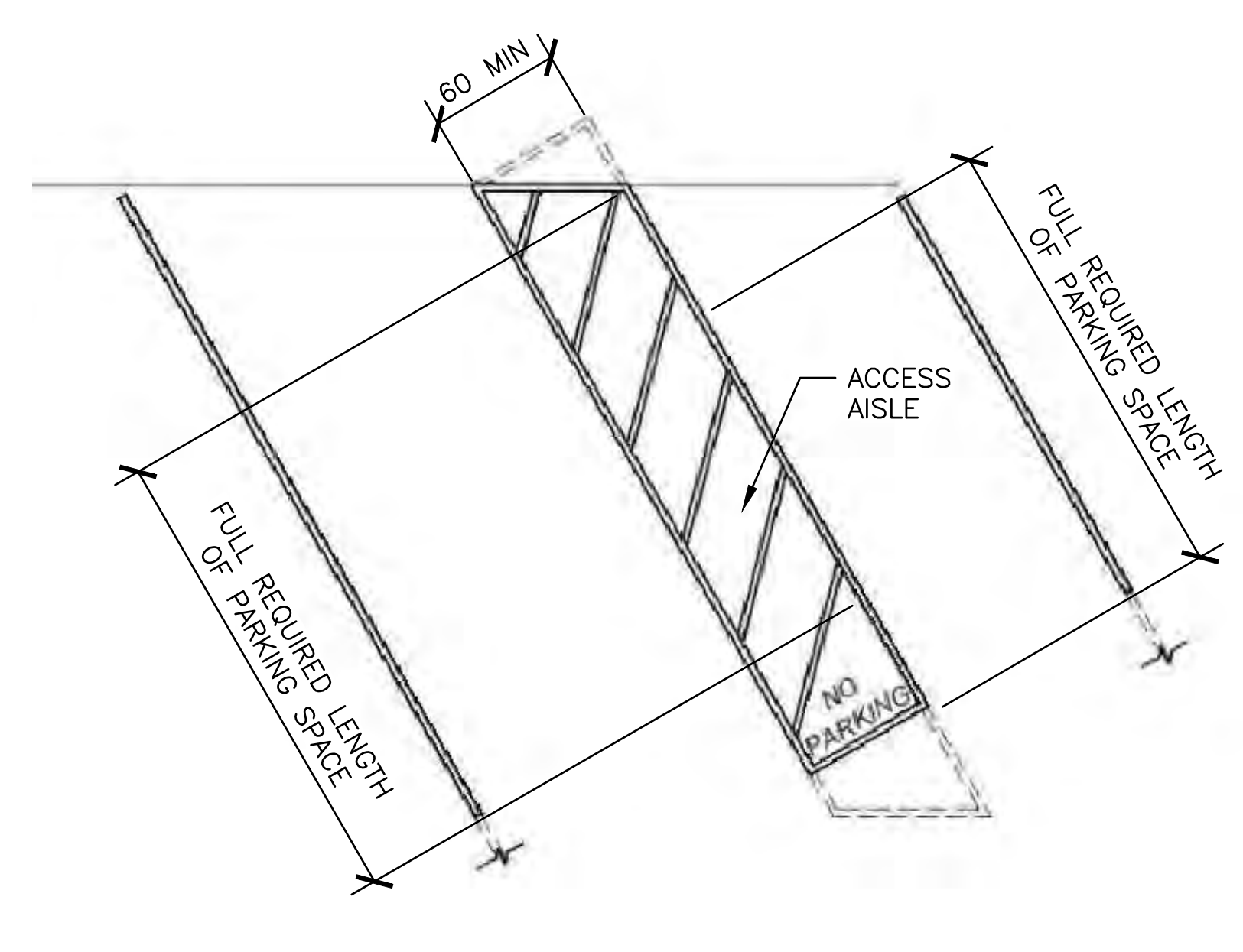
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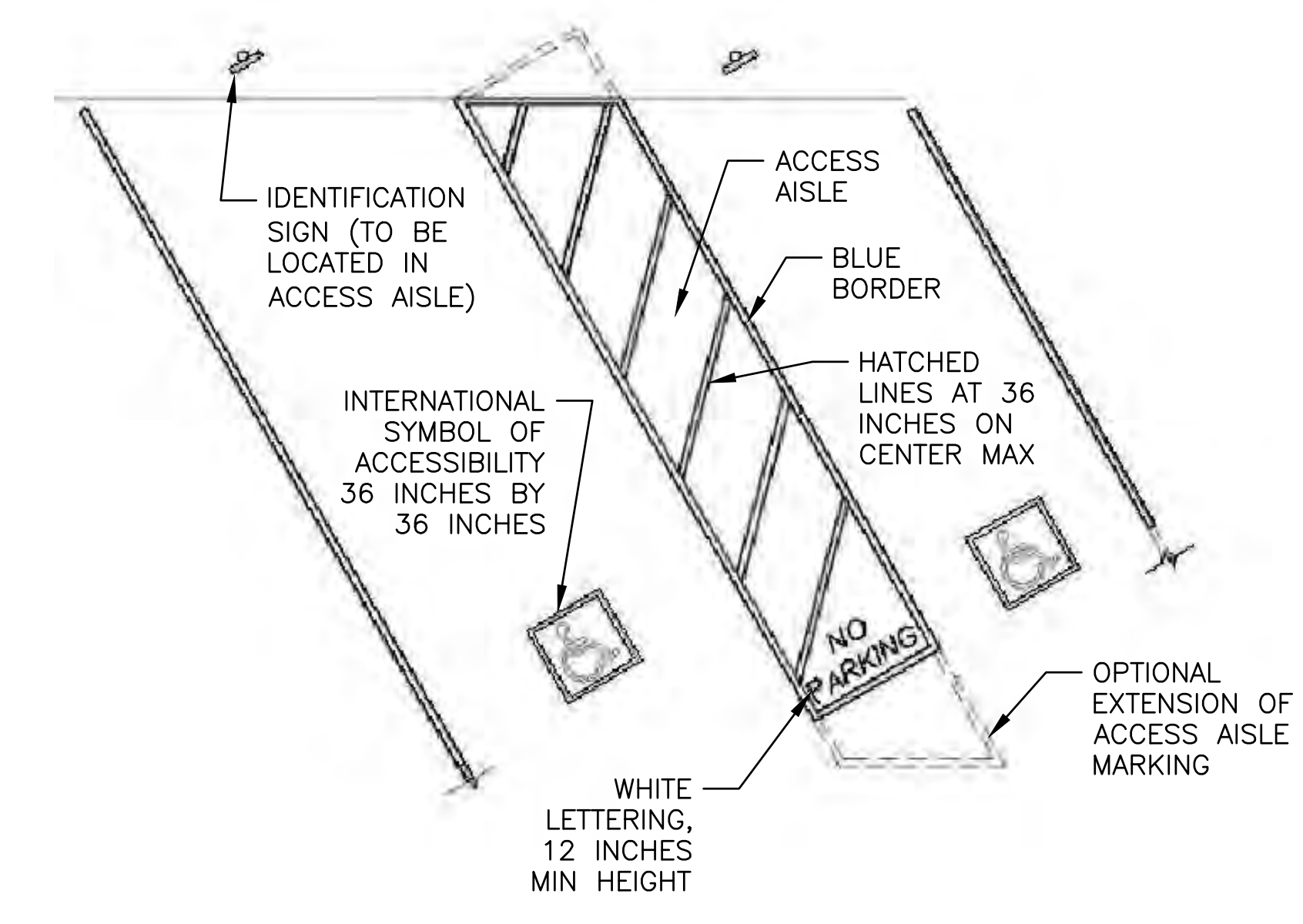
DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 39 OF 64
DRAWN BY: JTM	PAVEMENT STRIPING PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



2 ADA VEHICLE PARKING SPACES DETAIL
40 SCALE: AS SHOWN



3 ADA PARKING SPACE ACCESS AISLE DETAIL
40 SCALE: AS SHOWN



4 ADA PARKING IDENTIFICATION DETAIL
40 SCALE: AS SHOWN



ADA PARKING SIGN - CAR



ADA PARKING SIGN - VAN

1 SITE ACCESSIBILITY PLAN
40 SCALE: 1" = 30'

SITE ACCESSIBILITY NOTES:

- ALL COMPONENTS OF THE ADA PARKING AND ACCESSIBLE PATH SHALL COMPLY WITH CHAPTER 11B OF THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE.
- THE CLEAR WIDTH FOR SIDEWALKS AND WALKS SHALL BE 48 INCHES MINIMUM. (CBC 2019 11B-403.5.1)
- PARKING SPACES AND ACCESS AISLES SERVING THEM SHALL NOT HAVE CHANGES IN LEVEL GREATER THAN A 2% SLOPE. (CBC 2019 11B-502.4)
- PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH SECTION 11B-703.7.2.1 IN WHITE ON A BLUE BACK-GROUND. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN ADDITIONAL LANGUAGE OR AN ADDITIONAL SIGN WITH THE DESIGNATION "VAN ACCESSIBLE". SIGNS SHALL BE 60 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN. (CBC 2019 11B-502.6)
- PARKING IDENTIFICATION SIGNS SHALL BE REFLECTORIZED WITH A MINIMUM AREA OF 70 SQUARE INCHES. (CBC 2019 11B-502.6.1)
- ADDITIONAL LANGUAGE OR AN ADDITIONAL SIGN BELOW THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL STATE "MINIMUM FINE \$250". (CBC 2019 11B-502.6.2)
- A PARKING IDENTIFICATION SIGN SHALL BE VISIBLE FROM EACH PARKING SPACE. SIGNS SHALL BE PERMANENTLY POSTED IMMEDIATELY ADJACENT TO THE PARKING SPACE. (CBC 2019 11B-502.6.3)

- PROVIDE A BUMPER OR CURB IN EACH PARKING AREA TO PREVENT ENCROACHMENT OF CARS OVER THE REQUIRED WIDTH OF WALKWAYS. (11B-502.2, FIG 11B-502.2, 11B-502.3 & 11B-502.3.3)
- PROVIDE A CONTINUOUS COMMON SURFACE FOR WALKS AND SIDEWALKS, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2". (11B-403.4) SHOULD CHANGE NOT EXCEEDING 1/2" OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE UNIT VERTICAL TO 2 UNITS HORIZONTAL (50 PERCENT), EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL. (11B-403.4, FIG 11B-303.2 & 11B-303.3)
- WALK AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4" PER FOOT (2%). (11B-403.3)
- WALKS, SIDEWALKS, AND PEDESTRIAN WAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE LIMITED TO 1/2" IN THE DIRECTION OF TRAFFIC FLOW. IF GRATINGS HAVE ELONGATED OPENINGS, THEY SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL. (11B-302.3, FIG 11B-302.3)

- MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE, SHALL NOT EXCEED ONE UNIT VERTICAL TO 20 UNITS HORIZONTAL (5 PERCENT SLOPE) WITH 4 FEET OF THE TOP AND BOTTOM OF THE CURB RAMP. (11B-406.4.1) THE SLOPE OF THE FANNED OR PARALLEL CURB RAMPS SHALL NOT EXCEED ONE UNIT VERTICAL TO 12 HORIZONTAL (8.3 PERCENT SLOPE). (11B-406.2.1 & 11B-406.3.1)
- THE MAXIMUM SLOPE OF A RAMP THAT SERVES ANY EXIT WAY, PROVIDES ACCESS FOR PERSONS WITH PHYSICAL DISABILITIES, OR IS IN THE ACCESSIBLE ROUTE OF TRAVEL SHALL BE 1 FOOT RISE IN 12 FEET OF HORIZONTAL RUN (8.3 PERCENT GRADIENT). THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. (11B-405.2)

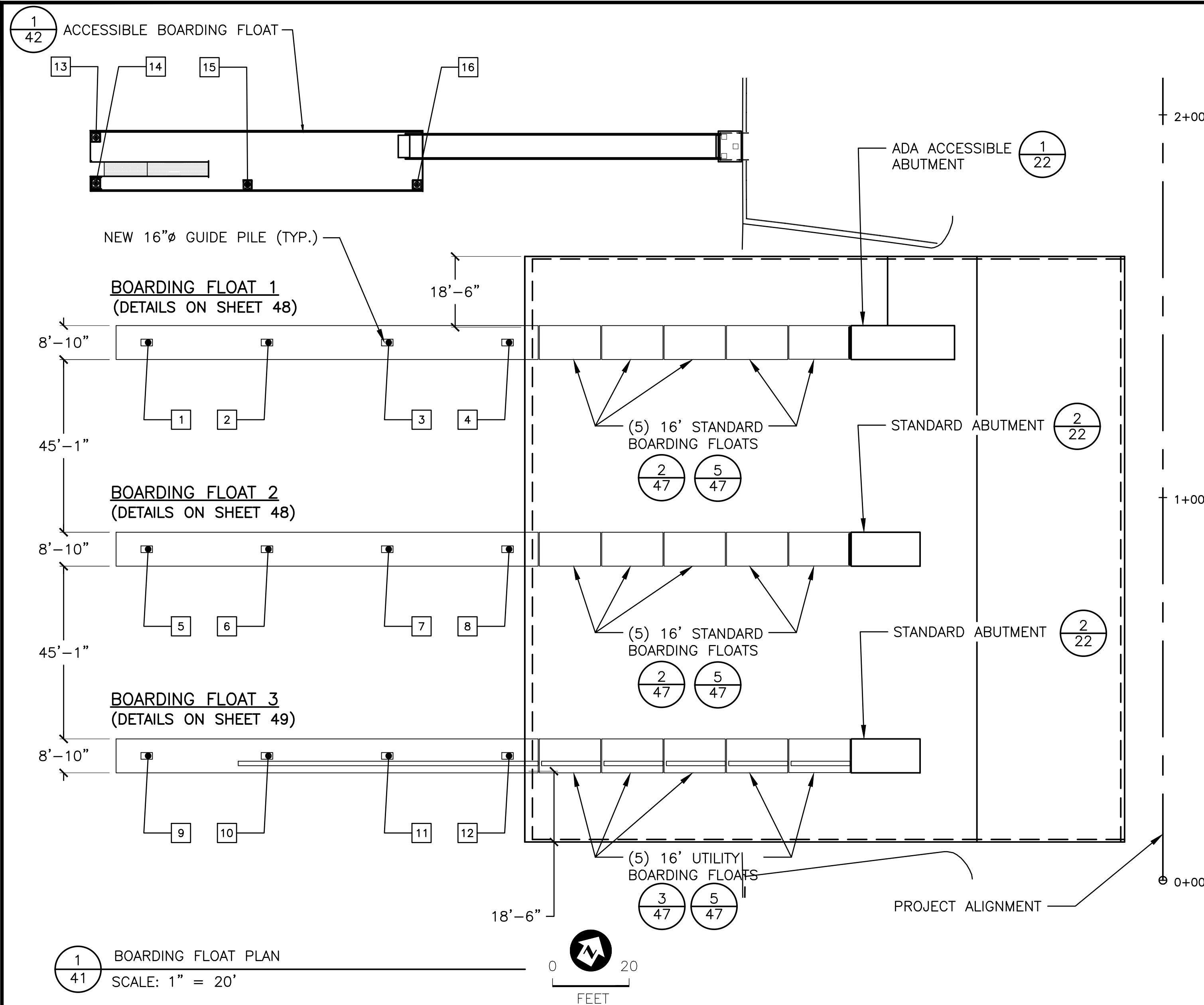


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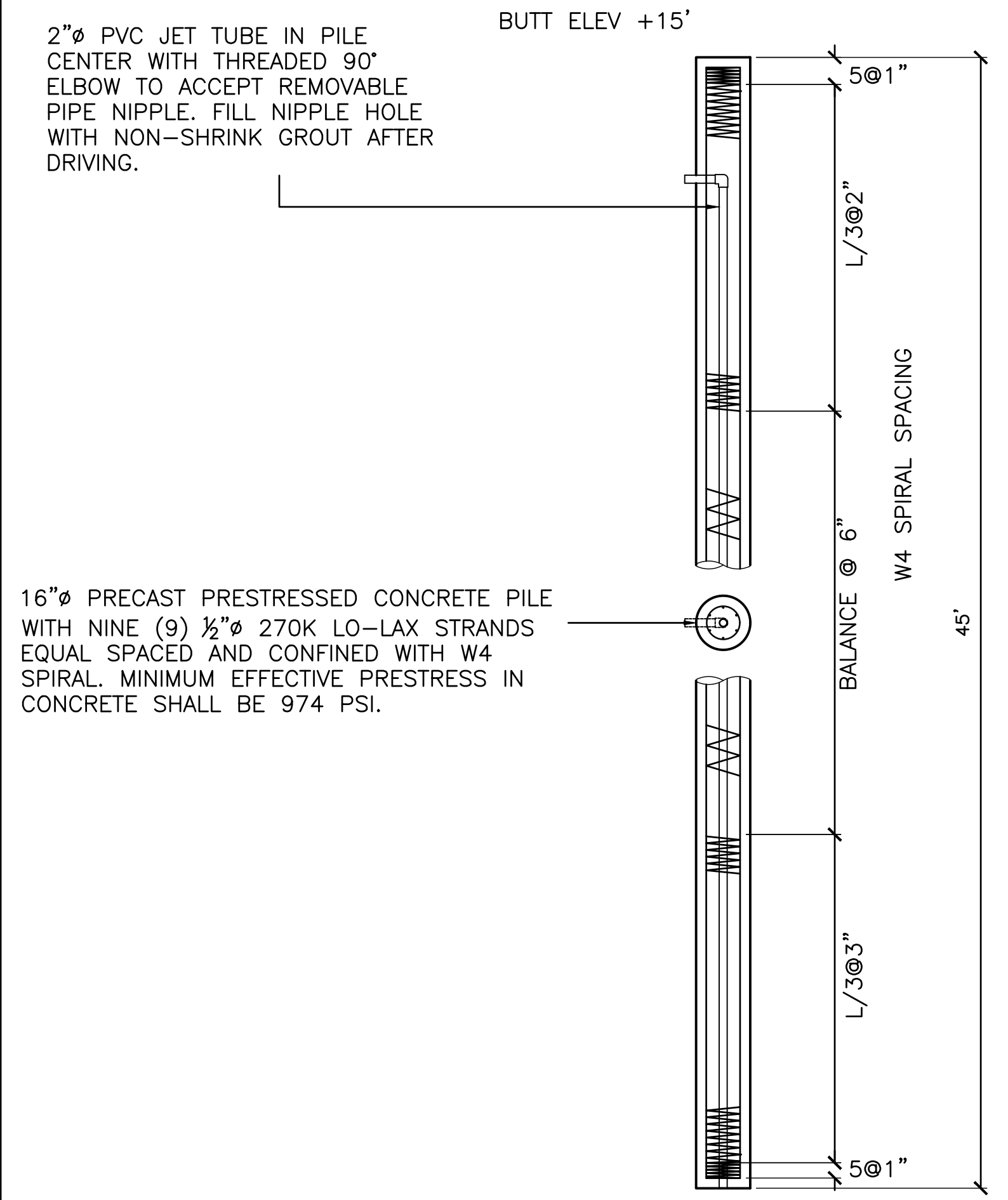
DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 40 OF 64
DRAWN BY: JTM	SITE ACCESSIBILITY PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



GUIDE PILE SCHEDULE

PILE NO.	STATION	OFFSET	BUTT ELEV	TIP ELEV.
1	1+40.50	2+65.03	15.0	-30.0
2	1+40.50	2+33.62	15.0	-30.0
3	1+40.50	2+02.20	15.0	-30.0
4	1+40.50	1+70.78	15.0	-30.0
5	0+86.50	2+65.03	15.0	-30.0
6	0+86.50	2+33.62	15.0	-30.0
7	0+86.50	2+02.20	15.0	-30.0
8	0+86.50	1+70.78	15.0	-30.0
9	0+32.50	2+65.03	15.0	-30.0
10	0+32.50	2+33.62	15.0	-30.0
11	0+32.50	2+02.20	15.0	-30.0
12	0+32.50	1+70.78	15.0	-30.0
13	1+94.06	2+78.66	15.0	-30.0
14	1+82.15	2+78.66	15.0	-30.0
15	1+82.15	2+39.08	15.0	-30.0
16	1+82.15	1+94.83	15.0	-30.0

NOTE: PRIOR TO PILE DRIVING, FIELD VERIFY ABOVE PILE LOCATIONS BASED UPON LOCATIONS OF NEW BOARDING FLOATS. ADJUST DIMENSIONS AS REQUIRED TO FIT.

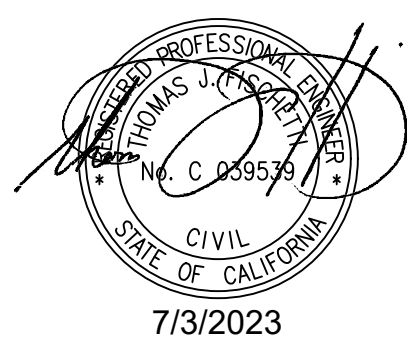
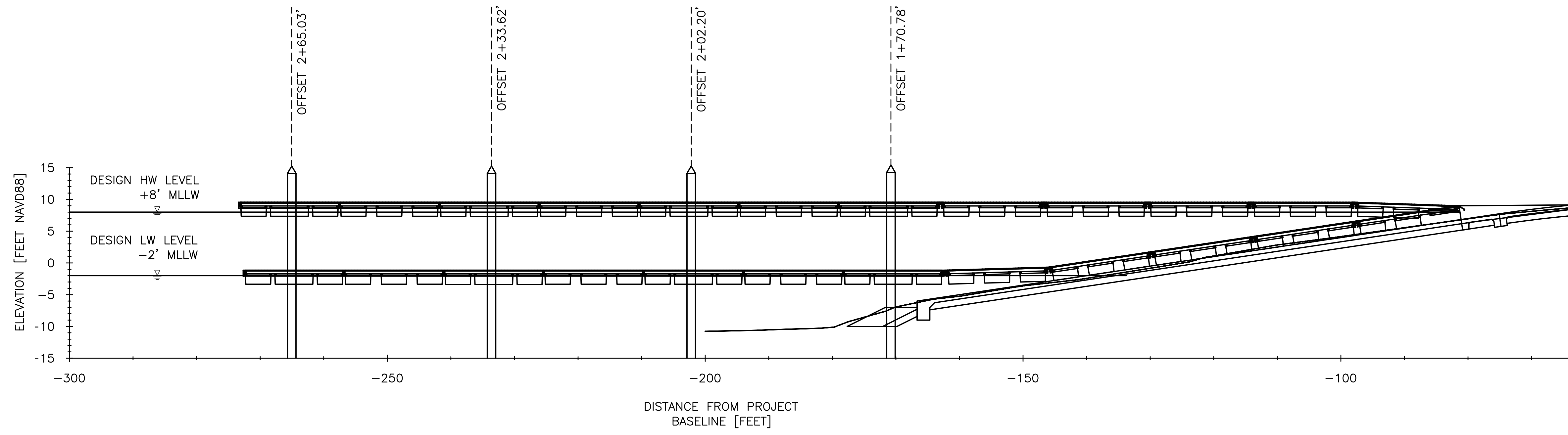


3
41

GUIDE PILE ELEVATION

SCALE: 1" = 3'

- GUIDE PILE NOTES:
- SEE SHEET 5 FOR MUDLINE DEPTHS AT GUIDE PILE LOCATIONS. MINIMUM PILE EMBEDMENT SHALL BE TWENTY (20) FEET BELOW EXISTING MUDLINE. PILE LENGTH SPECIFIED CORRESPONDS TO MUDLINE DEPTH OF -10 FEET. CONTRACTOR MAY PROPOSE SHORTER LENGTH PILES FOR REVIEW AND APPROVAL AT LOCATIONS IN SHALLOWER DEPTH PROVIDED THAT MINIMUM PILE EMBEDMENT CRITERIA IS ACHIEVED.
 - SUBMIT PILE DRIVING PLAN AND PILE SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION OF ANY PILES. SEE SPECIFICATIONS FOR REQUIREMENTS.
 - TOP ALL GUIDE PILES WITH HENDERSON MARINE 11-03516 WHITE HEAVY DUTY POLYETHYLENE PILE CAP OR APPROVED EQUAL. SECURE CAP SNUG TO PILE BUTT WITH APPROVED ADHESIVE.
 - EXTENT OF (E) SLOPE PROTECTION STONE IS NOT KNOWN. CONTRACTOR IS ADVISED THAT HE MAY ENCOUNTER SHALLOW SUBSURFACE RIPRAP OBSTRUCTIONS, ESPECIALLY AT MORE SHALLOW WATER DEPTH PILE LOCATIONS. CONTRACTOR SHALL REMOVE ANY OBSTRUCTION AS REQUIRED TO INSTALL PILES TO SPECIFIED EMBEDMENT DEPTHS.
 - MINIMUM COVER OVER PILE SPIRAL SHALL BE TWO AND A HALF (2½) INCHES.
 - CONCRETE FOR PILES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 6,000 PSI. CONCRETE SHALL CONTAIN DCI CORROSION INHIBITOR AS MANUFACTURED BY W.R. GRACE OR APPROVED EQUAL AT THE RATE OF TWO (2) GALLONS PER CUBIC YARD.
 - PRIOR TO PILE FABRICATION SUBMIT SHOP DRAWING, STRUCTURAL ENGINEERING CALCULATIONS VERIFYING SPECIFIED PILE CAPACITY, AND CONCRETE MIX DESIGN PREPARED BY CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
 - MINIMUM SERVICE PILE MOMENT CAPACITY SHALL BE 40.2 FT-KIPS.
 - A MINIMUM OF THE UPPER TWENTY FEET OF PILE SHALL HAVE A CLASS "A" FINISH.



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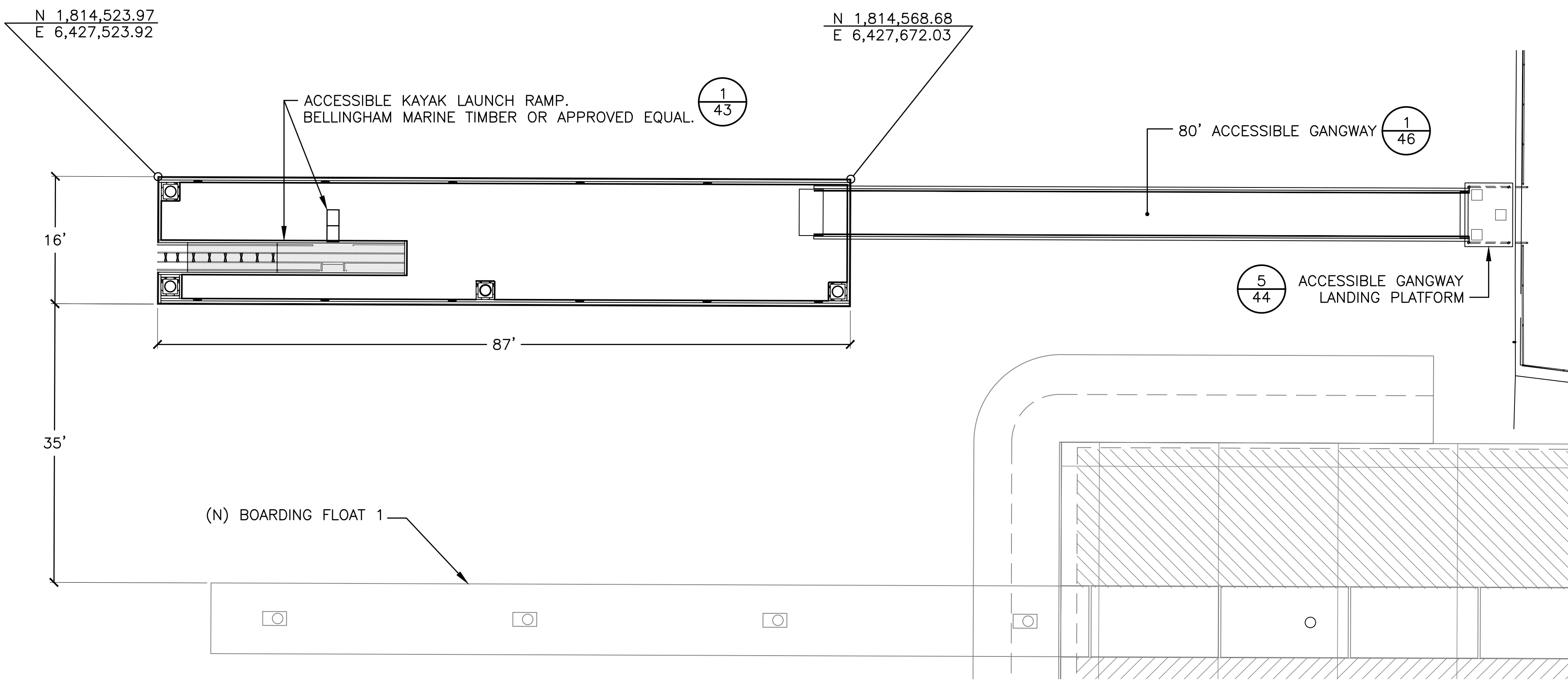
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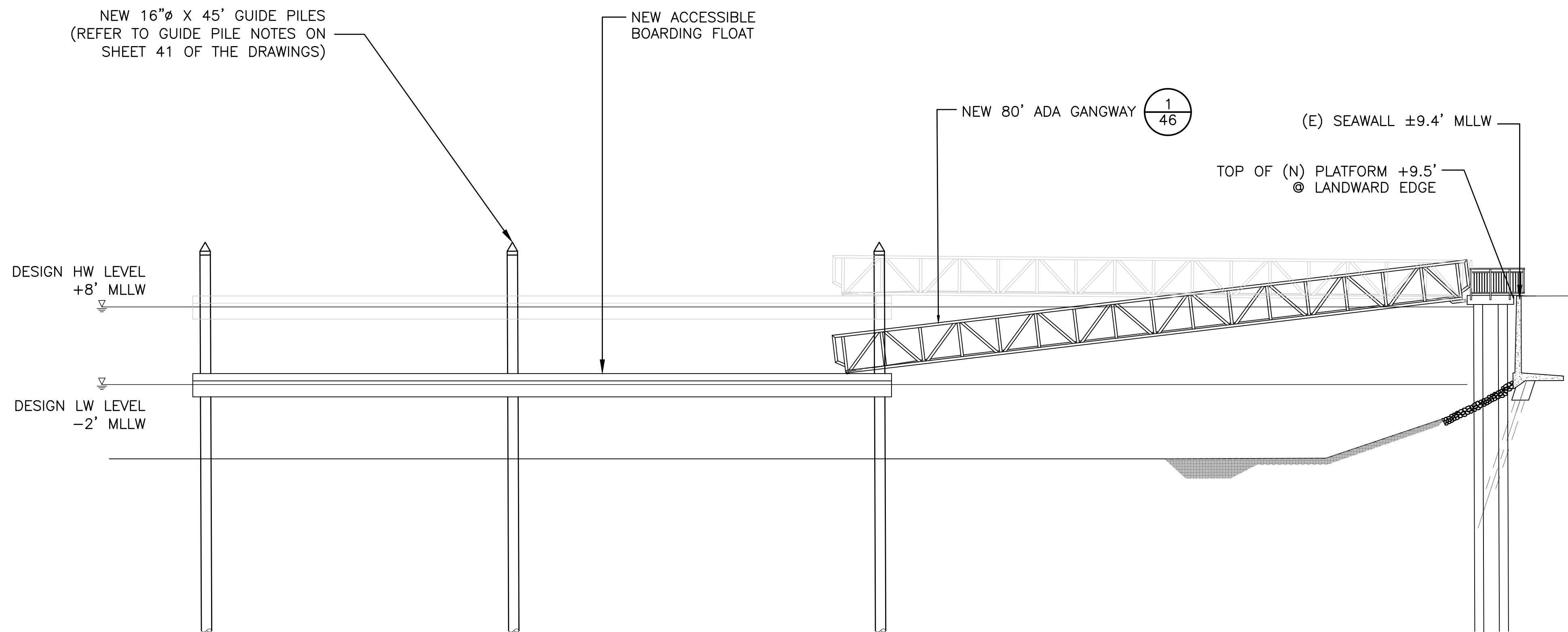
7/3/2023

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 41 OF 64
DRAWN BY: JTM	BOARDING FLOAT PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



1 ACCESSIBLE BOARDING FLOAT PLAN
42 SCALE: 1" = 10'



2 ACCESSIBLE BOARDING FLOAT ELEVATION
42 SCALE: 1" = 10'

ACCESSIBLE BOARDING FLOAT CONSTRUCTION NOTES:

- ACCESSIBLE BOARDING FLOAT SHALL BE PROPRIETARY PRECAST CONCRETE DOCK SYSTEM DESIGNED AND MANUFACTURED BY EITHER BELLINGHAM MARINE INDUSTRIES, INC. OR IMF SYSTEMS/KIE-CON, INC.
- THE FLOATING DOCK SHALL BE MINIMUM FIVE-SIDED MONOLITHIC STRUCTURALLY REINFORCED CONCRETE MODULAR SYSTEM CONNECTED BY USE OF PROPRIETARY TIMBER WALE, THRU-ROD, AND SHEAR KEY SYSTEMS OR BEARING PAD/STRUCTURAL BOLT SYSTEMS DETERMINED BY THE APPROVED DESIGN/BUILD STRUCTURAL DESIGN. THE INNER SPACE ENCLOSED BY EACH CONCRETE SHELL SHALL BE COMPLETELY FILLED WITH A VIRGIN BEAD EXPANDED POLYSTYRENE FOAM BILLET CORE. MODULES NOT CAST WITH AN INTEGRAL CONCRETE BOTTOM SURFACE SHALL HAVE AN APPROVED WATERPROOF MEMBRANE COVER TO SEAL THE INTERNAL FOAM BILLET CORE.
- PRIOR TO ANY DOCK FABRICATION THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS AND STRUCTURAL ENGINEERING CALCULATIONS IN A SINGLE PACKAGE TO THE ENGINEER FOR REVIEW AND APPROVAL. THE SUBMITTAL PACKAGE SHALL INDICATE THE DETAILED DOCK DESIGN AND FABRICATION LAYOUT, CONNECTION DETAILS, SECTIONS, FINISHES, METHODS FOR ATTACHING UTILITIES AND ACCESSORIES, PILE LOCATIONS, PILE GUIDES, UTILITIES ROUTING AND COMPONENTS, METAL AND PLASTIC FABRICATIONS, AND ALL OTHER DETAILS PERTINENT TO THE SPECIFIED FLOATING DOCK SYSTEM. THE DOCK DESIGN, SHOP DRAWINGS, AND STRUCTURAL CALCULATIONS SHALL BE PREPARED UNDER THE SUPERVISION OF, SEALED, AND SIGNED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
- THE FABRICATOR OF THE CONCRETE FLOAT SYSTEM SHALL HOLD EITHER A CURRENT AND VALID PCI MANAGEMENT PROGRAM CERTIFICATION FOR QUALITY CONTROL AND ASSURANCE OR INTERNATIONAL STANDARDS ORGANIZATION (ISO) 9000 CERTIFICATE OF COMPLIANCE FOR THE DESIGN AND MANUFACTURE OF FLOATING DOCKS.
- CONCRETE FOR DOCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28-DAYS OF 4,000 PSI PER ASTM AC-94.
- MINIMUM REINFORCEMENT FOR CONCRETE MODULES SHALL BE HDG WWF 2X2-14/14 IN THE DECK AND BOTTOM SECTIONS, AND CONTINUOUS GRADE 40 OR 60 BAR PLACED LONGITUDINALLY ALONG TOP AND BOTTOM EDGES. CONCRETE DECK SHALL CONTAIN SECONDARY POLYPROPYLENE FIBER REINFORCEMENT FOR CRACK CONTROL.
- FLOAT FORMS SHALL HAVE A TOLERANCE OF NO MORE THAN 1/8 INCH FROM DIMENSIONS SHOWN ON THE PLANS.
- HORIZONTAL GAPS BETWEEN ADJACENT FLOAT MODULES SHALL NOT EXCEED 1/2 INCH. VERTICAL CHANGES IN LEVEL ANYWHERE IN THE DECK SURFACE SHALL NOT EXCEED 1/4 INCH.
- THE WEIGHT OF COMPLETED FLOATS SHALL NOT VARY FROM THE THEORETICAL WEIGHT OR MEAN WEIGHT OF SIMILAR CAST UNITS BY MORE THAN SIX (6) PERCENT.
- MINIMUM THRU-ROD DIAMETER SHALL BE 20 MM. ALL THRU-RODS SHALL BE ENCASED BY PVC SLEEVES NO LARGER THAN 7/8 INCH ID. ALL THRU-RODS SHALL BE FRP HIGH STRENGTH PULTRUDED ROD. TENSION BOLTS AND RODS FOR MODULE CONNECTOR BLOCKS SHALL BE MINIMUM HDG 3/4 INCH CONFORMING TO ASTM A325.
- ALL CAST IN INSERTS SHALL BE TYPE 316 STAINLESS STEEL.
- LUMBER FOR TIMBER WALE, RUB RAILS, AND COVERBOARDS SHALL BE COAST REGION DF NO. 1 OR BETTER PER WEST COAST LUMBER INSPECTION BUREAU GRADING RULES NO. 16. SET ALL TIMBER SUBJECT TO FOOT TRAFFIC FLUSH WITH CONCRETE DECK SURFACE AND CHAMFER OR BULL NOSE THE TOP EDGES OF COVERBOARDS. ALL LUMBER SHALL BE PRESSURE TREATED TO 0.6 PCF RETENTION WITH ACZA OR ACQ PER APPLICABLE AWPA STANDARDS.
- ALL STRUCTURAL STEEL CHANNEL, ANGLE, AND PLATE FOR MODULE TO MODULE FRAME CONNECTIONS, TRIANGLE KNEE FRAMES, PILE GUIDE FRAMES, UTILITY SUPPORT STANDS, AND OTHER MISCELLANEOUS STRUCTURAL STEEL DOCK FABRICATIONS SHALL BE HDG ASTM A-36. NO FIELD MODIFICATIONS SHALL BE ALLOWED.
- TRIANGLE FRAME COVERS AND OTHER DECK SURFACE FILLERS BETWEEN CONCRETE MODULES SHALL BE KING STARBOARD OR APPROVED EQUAL. COLOR SHALL BE DOLPHIN GRAY AND HAVE A MINIMUM THICKNESS OF 5/8 INCHES.
- ALL HARDWARE AND FASTENERS SHALL BE HDG OR SS PER APPROVED SHOP DRAWING SPECIFICATIONS.

DESIGN CRITERIA:

- ALL WALKING SURFACES OF CONCRETE FLOATS SHALL BE LEVEL AND FLUSH TO ADJACENT MODULES. MAXIMUM DECK SLOPE SHALL NOT EXCEED ONE (1) INCH PER TEN (10) FEET IN ANY DIRECTION.
- FREEBOARD UNDER ONLY DEAD LOAD SHALL BE SIXTEEN (16) INCHES ONE YEAR FROM THE DATE OF ACCEPTANCE. FREEBOARD SHALL NOT EXCEED SEVENTEEN (17) INCHES AT THE TIME OF INSTALLATION. FINAL LEVELING, IF NECESSARY, SHALL BE ACCOMPLISHED THROUGH THE USE OF ADDED SUPPLEMENTAL FLOTATION THAT IS FULLY PROTECTED IN A MOLDED POLYETHYLENE SHELL. SUPPLEMENTAL FLOTATION SHALL BE PLACED IN LARGE ENOUGH SIZES OR WITH MECHANICAL METHODS THAT INSURE IT WILL NOT BE DISLODGED FOR THE LIFE OF THE DOCK SYSTEM. PRIOR TO FABRICATION AND INSTALLATION OF FINAL DOCK LEVELING FLOTATION SUBMIT LEVELING PLAN TO ENGINEER FOR APPROVAL. THE TOTAL AREA OF UNDER WATER SUPPLEMENTAL FLOTATION IF REQUIRED SHALL NOT EXCEED TEN (10) PERCENT OF THE TOTAL ABOVE WATER DECK SURFACE AREA.
- THE DOCK AND ANCHORAGE SYSTEM SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM LOAD CONDITIONS:
 - DEAD LOAD - ACTUAL WEIGHT OF ALL PERMANENT COMPONENTS OF THE DOCK STRUCTURE INCLUDING UTILITIES, GANGWAYS, AND OTHER ATTACHED PARTS.
 - UNIFORMLY DISTRIBUTED LIVE DECK LOAD OF 40 POUNDS PER SQUARE FOOT STRUCTURALLY AND 25 POUNDS PER SQUARE FOOT FOR FLOTATION.
 - CONCENTRATED LIVE LOAD OF 400 POUNDS APPLIED ANYWHERE ON THE DECK SURFACE.
 - LATERAL WIND PRESSURE IN CONFORMANCE WITH ASCE 7-10 EXPOSURE C UNIFORMLY DISTRIBUTED AND APPLIED PERPENDICULAR AND BROADSIDE TO THE DOCK.
 - VERTICAL LOAD CORRESPONDING TO ONE (1) FOOT WAVE HEIGHT AND WAVE LENGTH OF FORTY (40) FEET.
 - BOAT IMPACT BERTHING LOAD CORRESPONDING TO A DISPLACED WEIGHT OF $12 \times (\text{BOAT LENGTH})^2$ APPROACHING THE DOCK AT A TEN (10) DEGREE ANGLE AT A SPEED OF TWO (2) FEET PER SECOND.
- THE MAXIMUM LATERAL LOAD TRANSFERRED BY THE DOCK SYSTEM TO ANY GUIDE PILE SHALL NOT EXCEED THE STRUCTURAL CAPACITY OF THE GUIDE PILE RESTRAINT SYSTEM.
- THE MINIMUM WALL THICKNESS FOR ANY CONCRETE MODULE SHALL BE 2 1/2 INCHES TOP AND 1 1/2 INCHES SIDES, ENDS, AND BOTTOM. CONTRACTOR SHALL DETERMINE REQUIRED WALL THICKNESS FOR ALL CONCRETE FLOATS BASED UPON STRUCTURAL DESIGN AND SERVICE LIFE DURABILITY REQUIREMENTS. INCLUDE MODULE CROSS SECTION DIMENSIONS AND WALL THICKNESS CALCULATIONS AS PART OF SHOP DRAWING SUBMITTAL FOR REVIEW AND APPROVAL BY ENGINEER.



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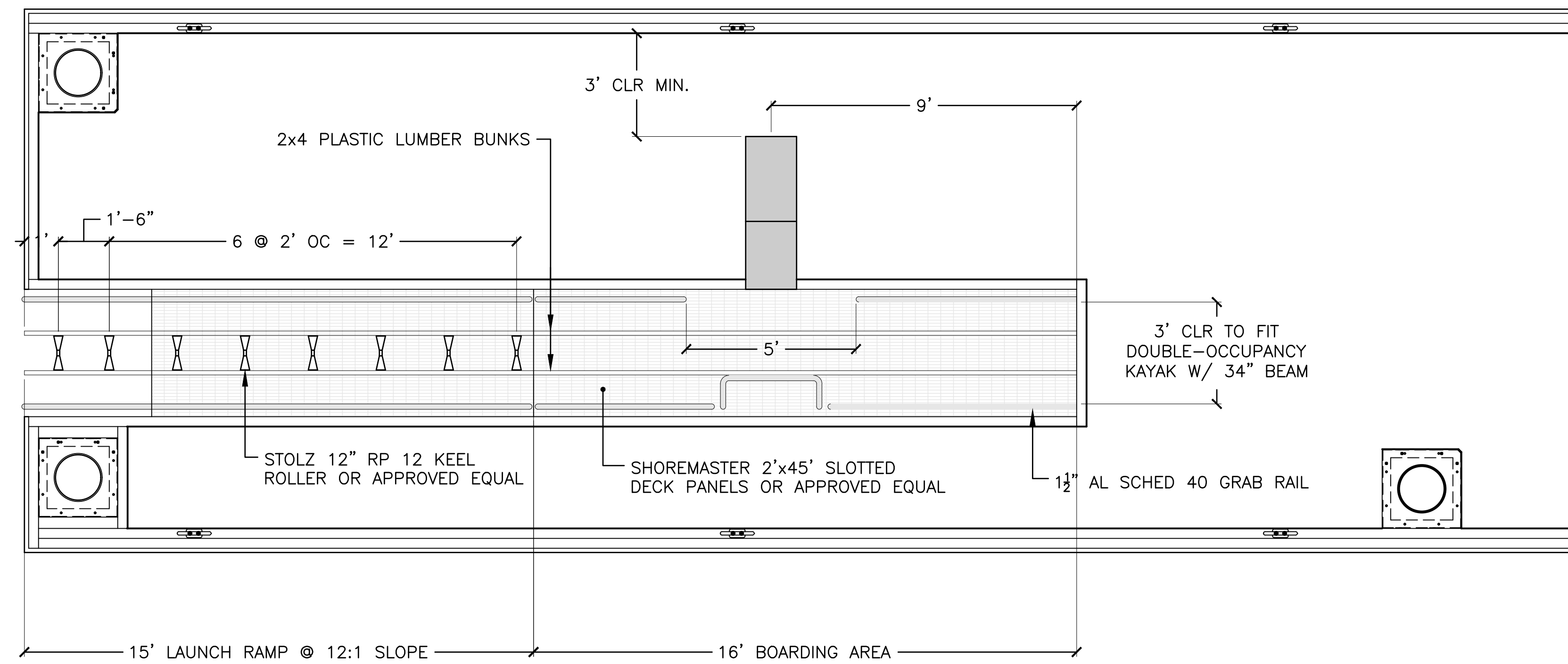
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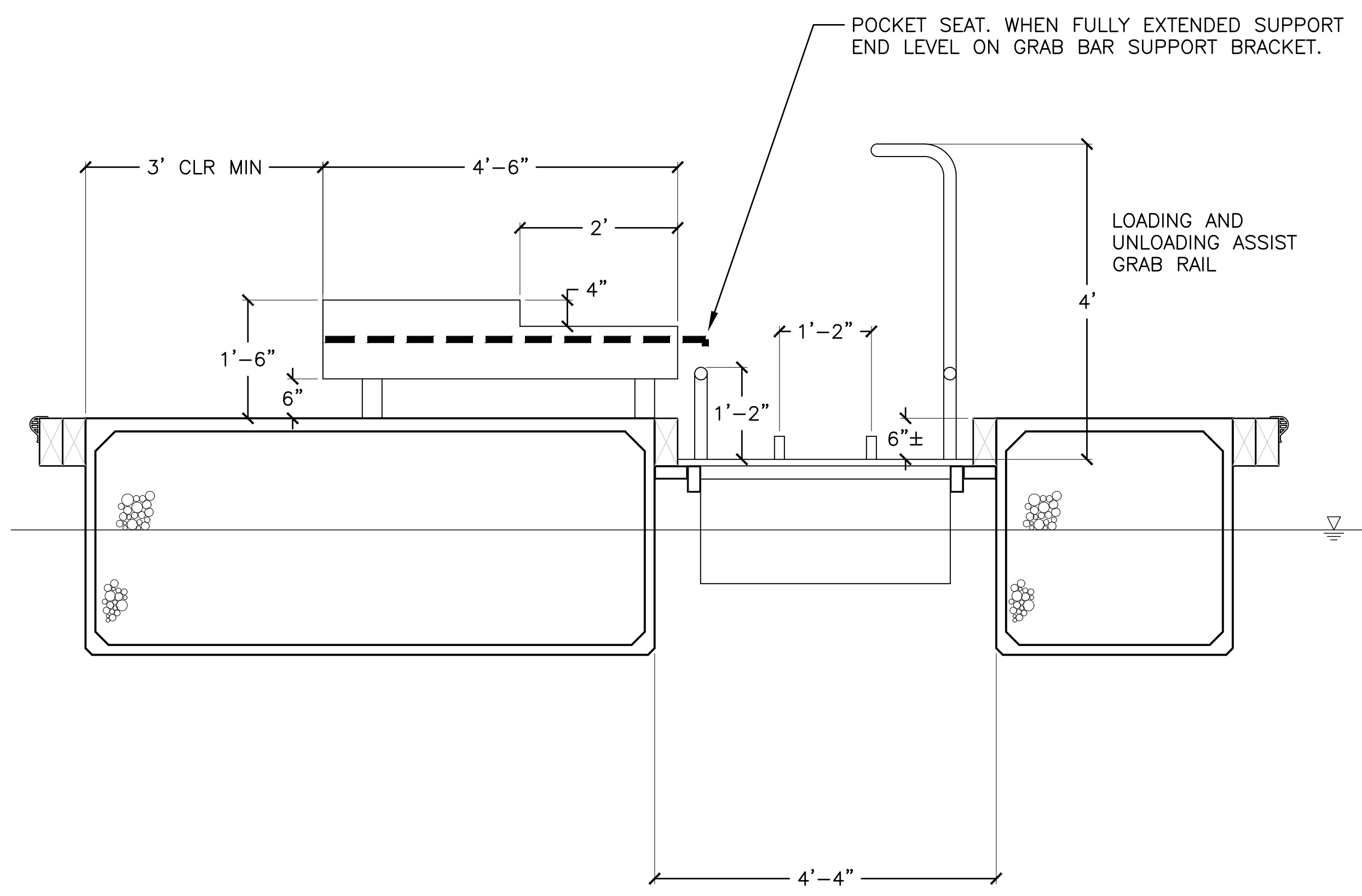
NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET
			JTM	ACCESSIBLE BOARDING FLOAT PLAN & PROFILE	42 OF 64
			JTM		JOB NO. 928-79
			TJF		SCALE AS SHOWN
			JTM		DATE 23 JUL 2023

ACCESSIBLE KAYAK RAMP NOTES:

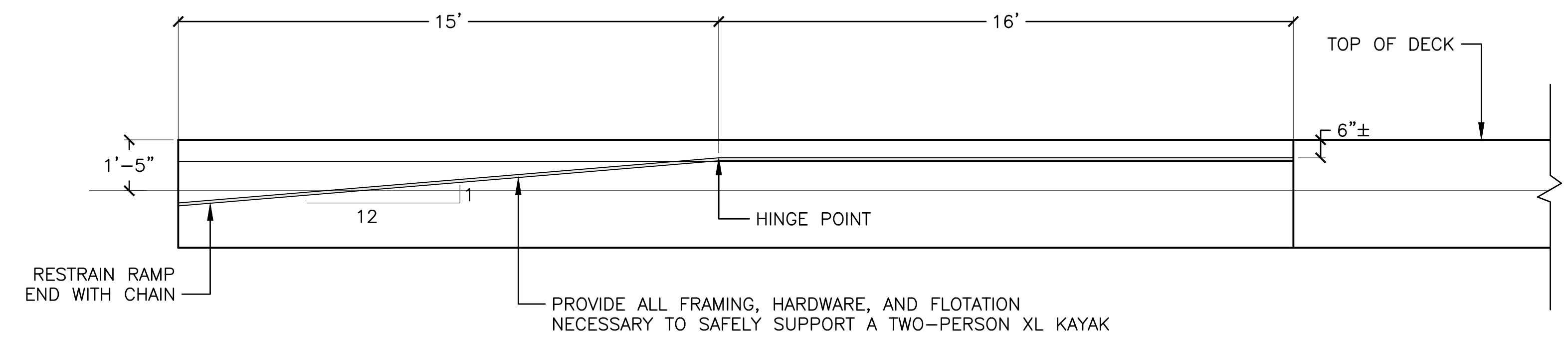
1. CONTRACTOR SHALL DESIGN, FABRICATE, AND INSTALL THE ACCESSIBLE KAYAK BOARDING AND LAUNCH RAMP AS AN INTEGRAL FEATURE OF THE CONCRETE FLOATING DOCK. RAMP SHALL BE BELLINGHAM MARINE TIMBER OR APPROVED EQUAL PRODUCT.
2. THE RAMP SHALL ACCOMMODATE LOADING, LAUNCH, RETRIEVAL, AND UNLOADING OF A TWO-PERSON KAYAK SIMILAR TO AN OCEAN MALIBU XL2. MINIMUM CLEAR DISTANCE BETWEEN GRAB RAILS SHALL BE 36 INCHES.
3. PRIOR TO FABRICATION OF THE LAUNCH RAMP MODULE, THE CONTRACTOR SHALL SUBMIT A DETAILED SHOP DRAWING TO THE PROJECT MANAGER FOR APPROVAL.
4. THE FINISHED PRODUCT SHALL BE ADA COMPLIANT.



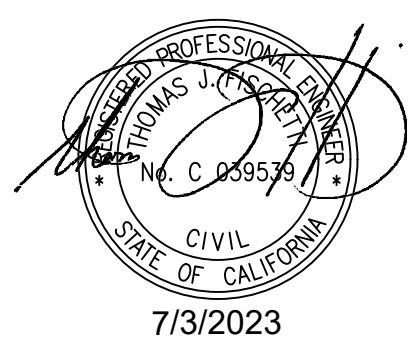
1
43 ACCESSIBLE BOARDING FLOAT PLAN DETAIL
SCALE: 3/8" = 1'-0"



A
43 ACCESSIBLE BOARDING FLOAT SECTION
SCALE: 3/4" = 1'-0"



B
43 KAYAK RAMP PROFILE
SCALE: 3/8" = 1'-0"



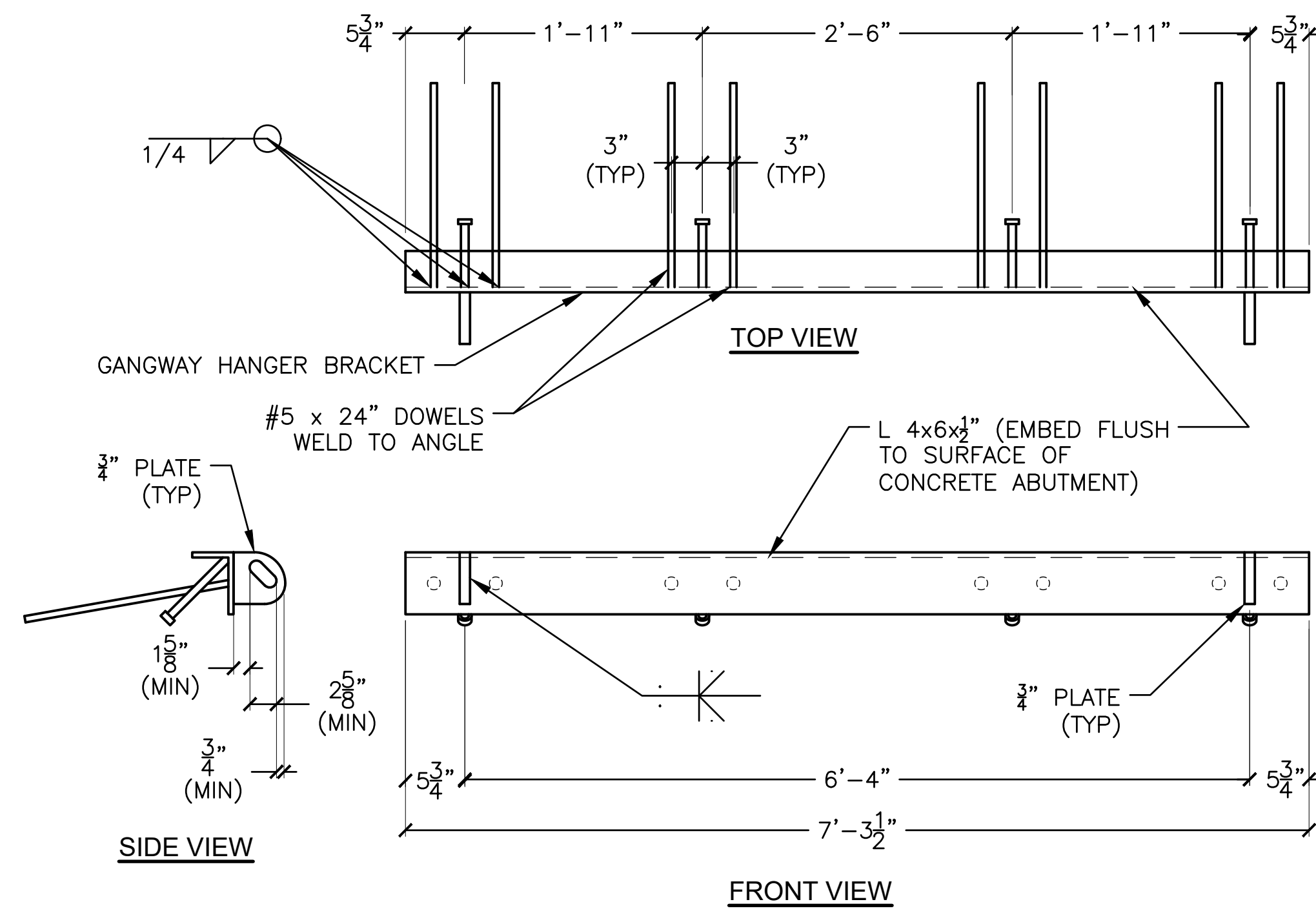
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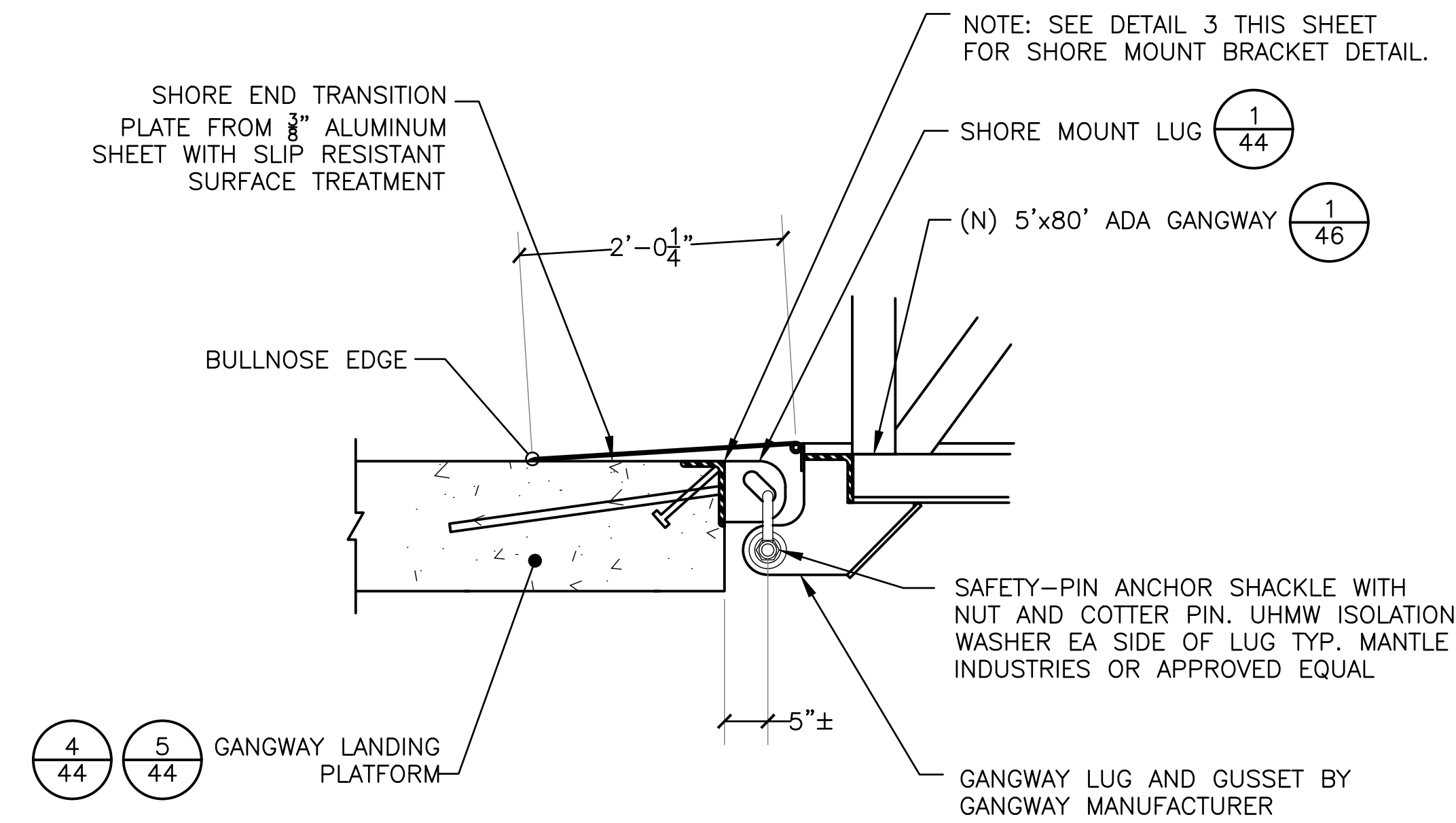
NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 43 OF 64
DRAWN BY: JTM	ACCESSIBLE BOARDING FLOAT DETAILS	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023

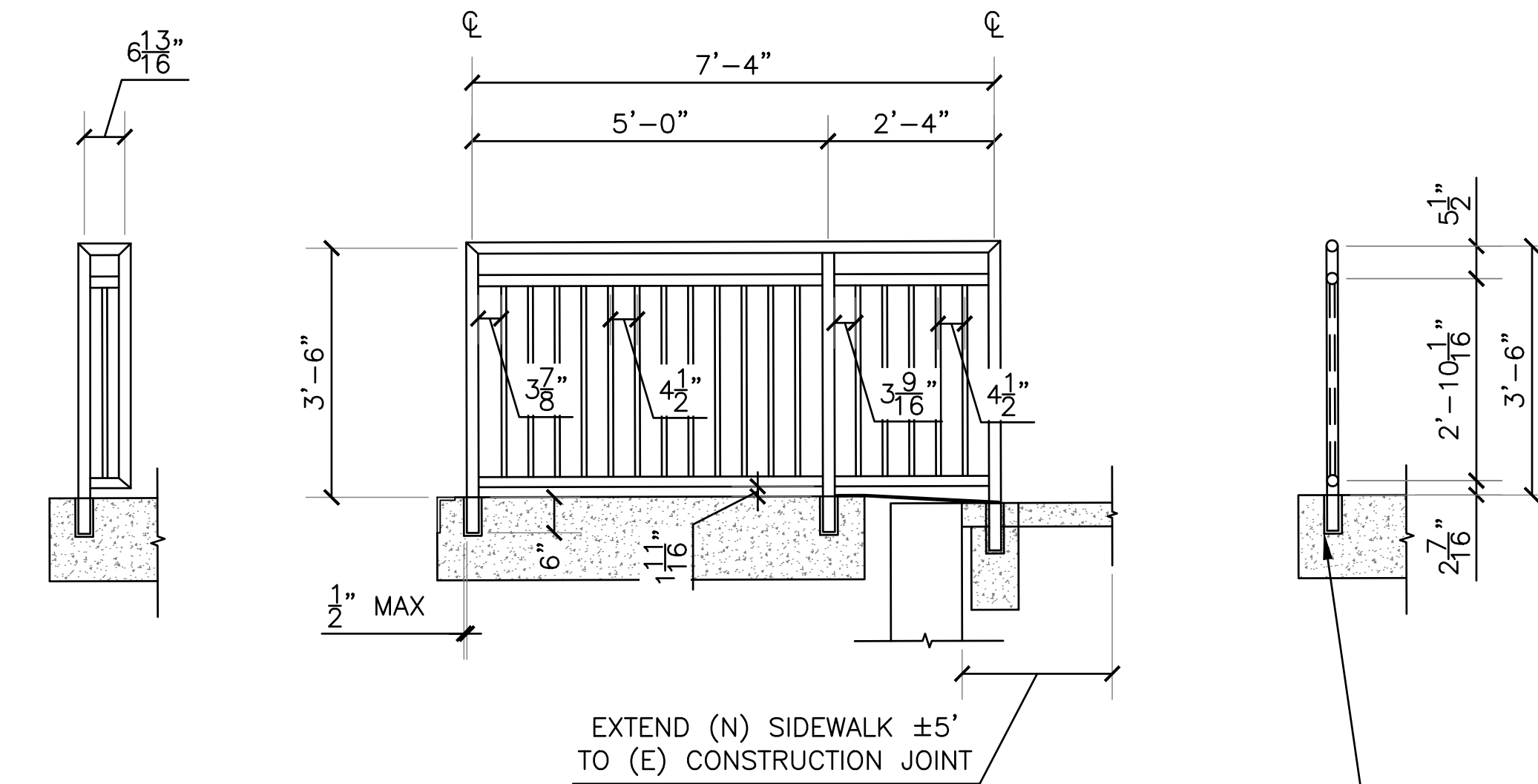


NOTE: COORDINATE GANGWAY BRACKET WITH GANGWAY FABRICATOR

1 HANGER BRACKET
44 SCALE: 1" = 10'-0"



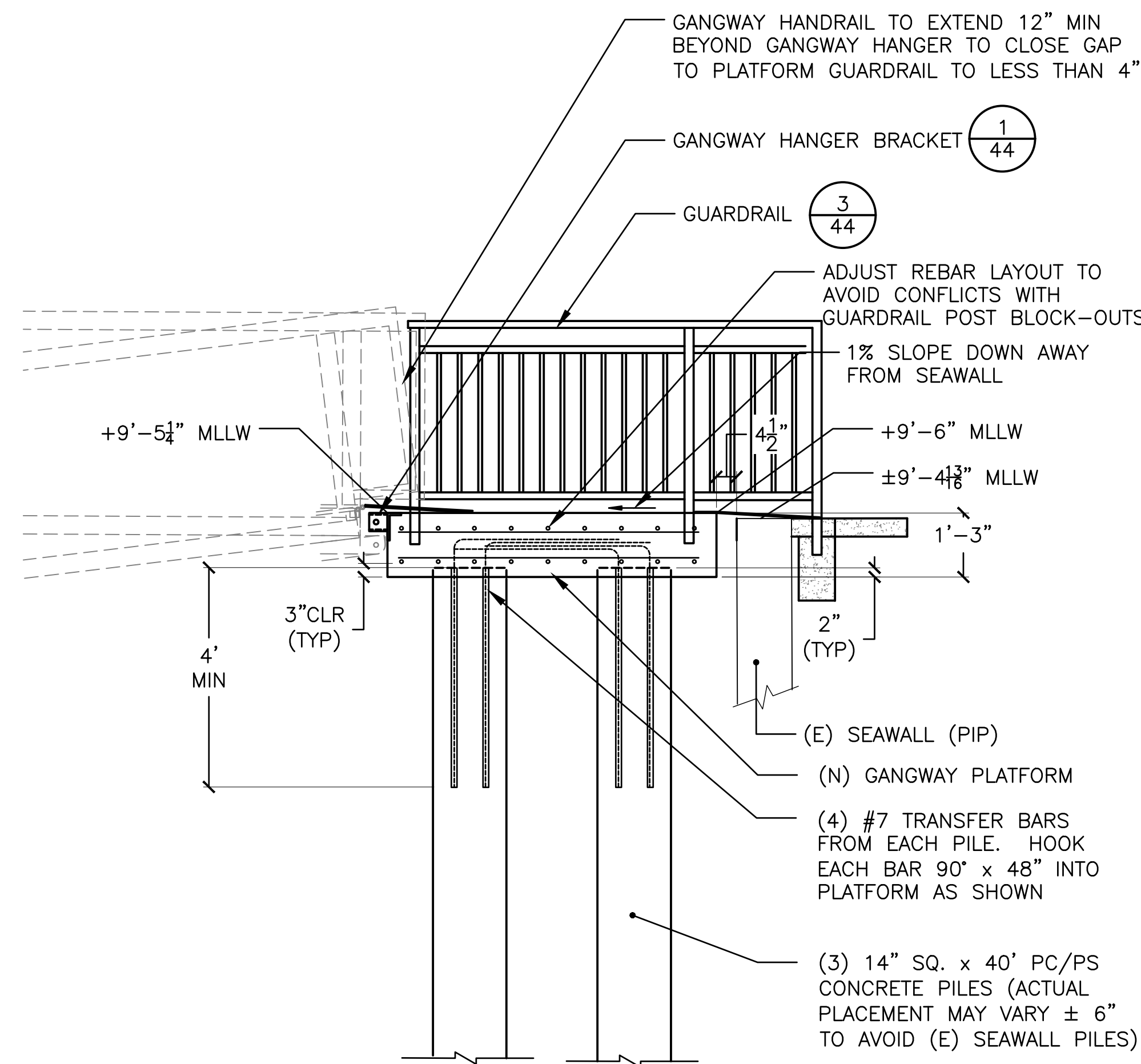
2 GANGWAY HANGER
44 SCALE: 1" = 1'-0"



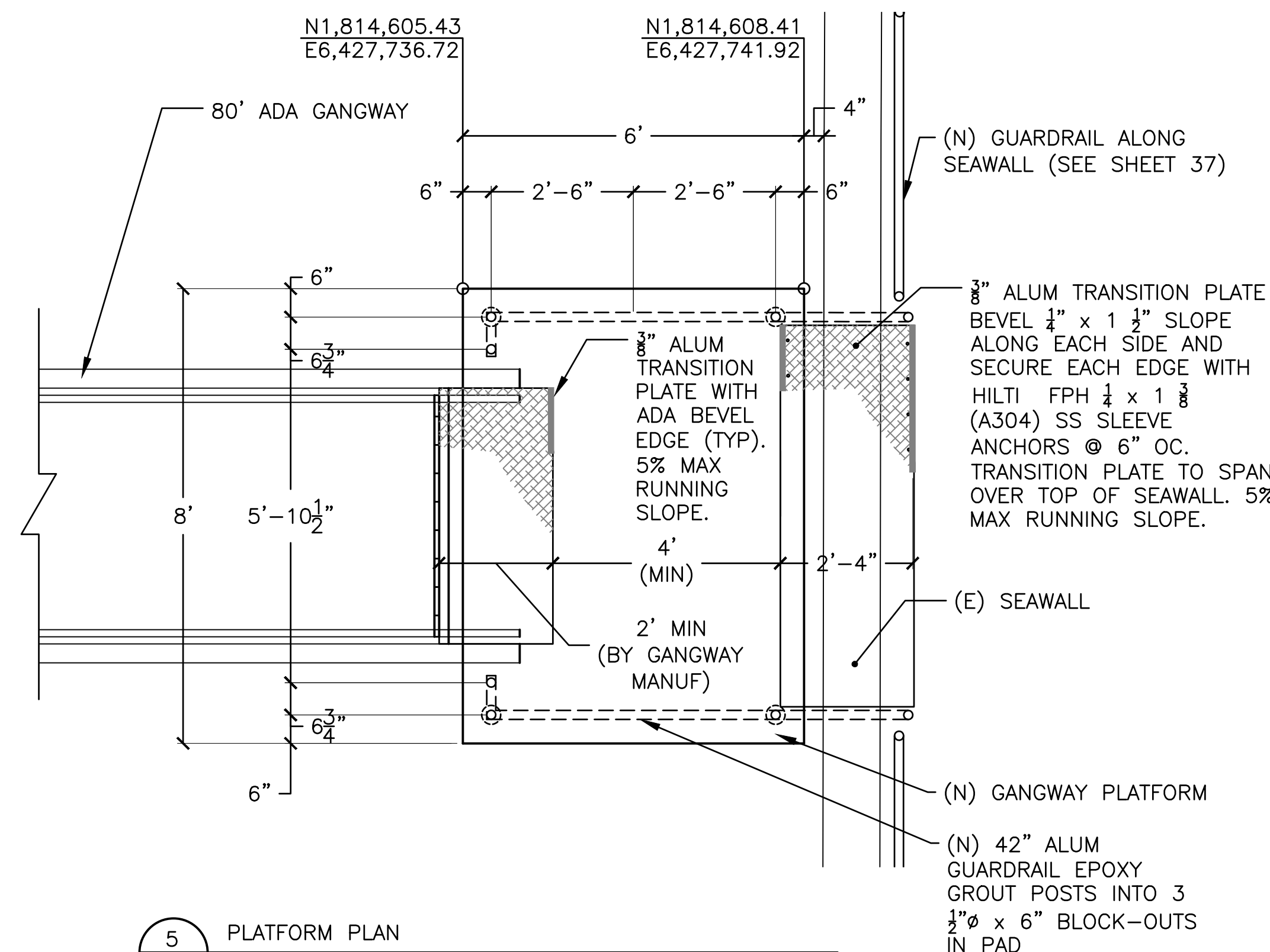
*SEE SHEET 37 FOR GUARDRAIL NOTES

POST SET IN BLOCK OUT HOLES WITH SIKAGRout 212 OR APPROVED EQUAL

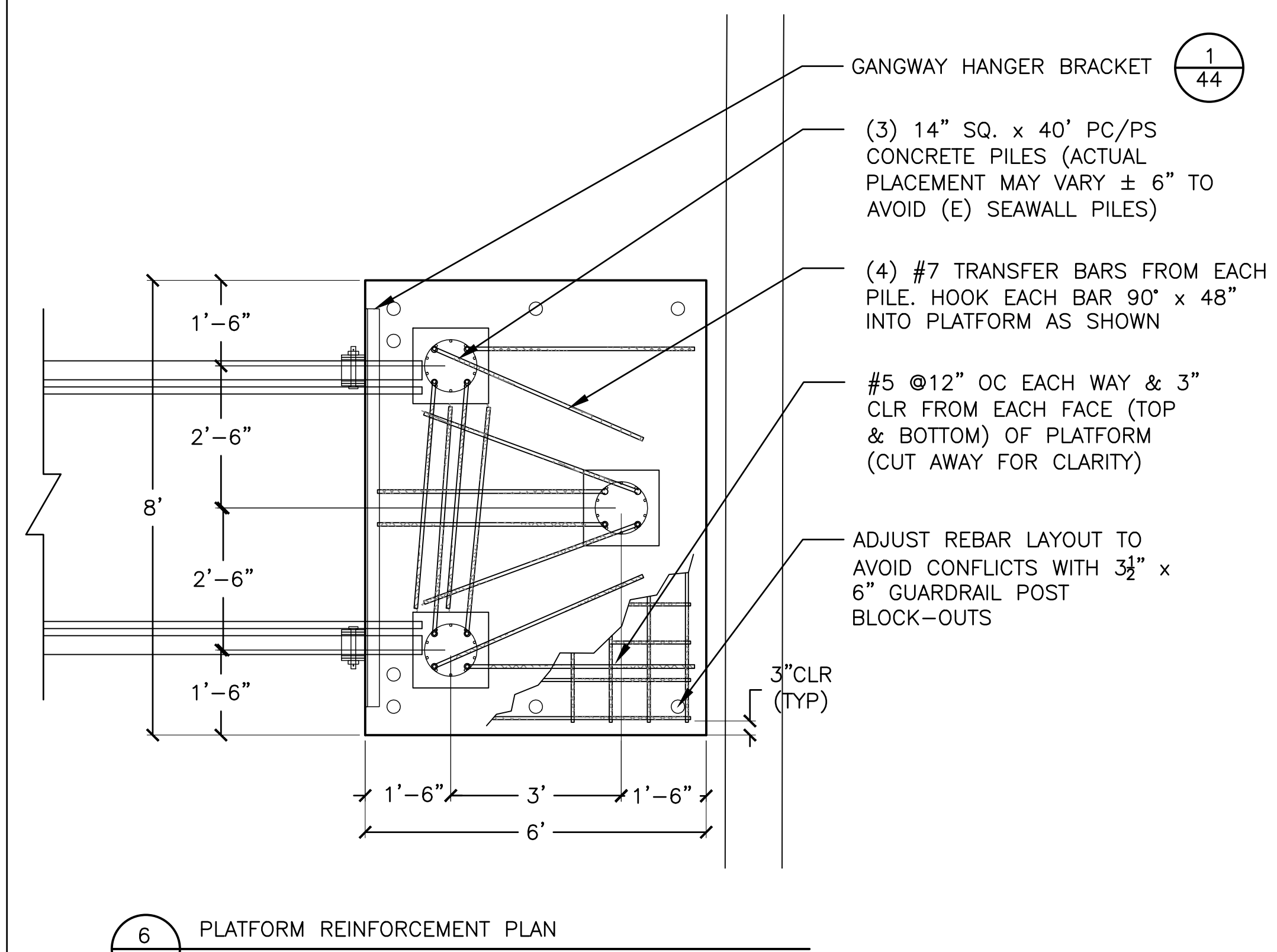
3 GUARDRAIL DETAIL
44 SCALE: 1/2" = 1'-0"



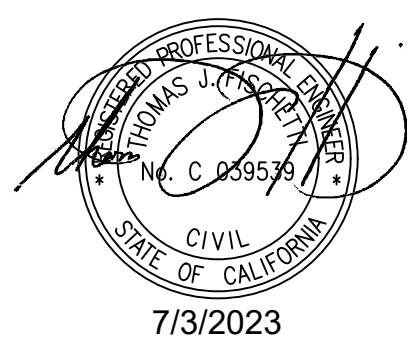
4 PLATFORM SECTION
44 SCALE: 1/2" = 1'-0"



5 PLATFORM PLAN
44 SCALE: 1/2" = 1'-0"



6 PLATFORM REINFORCEMENT PLAN
44 SCALE: 1/2" = 1'-0"

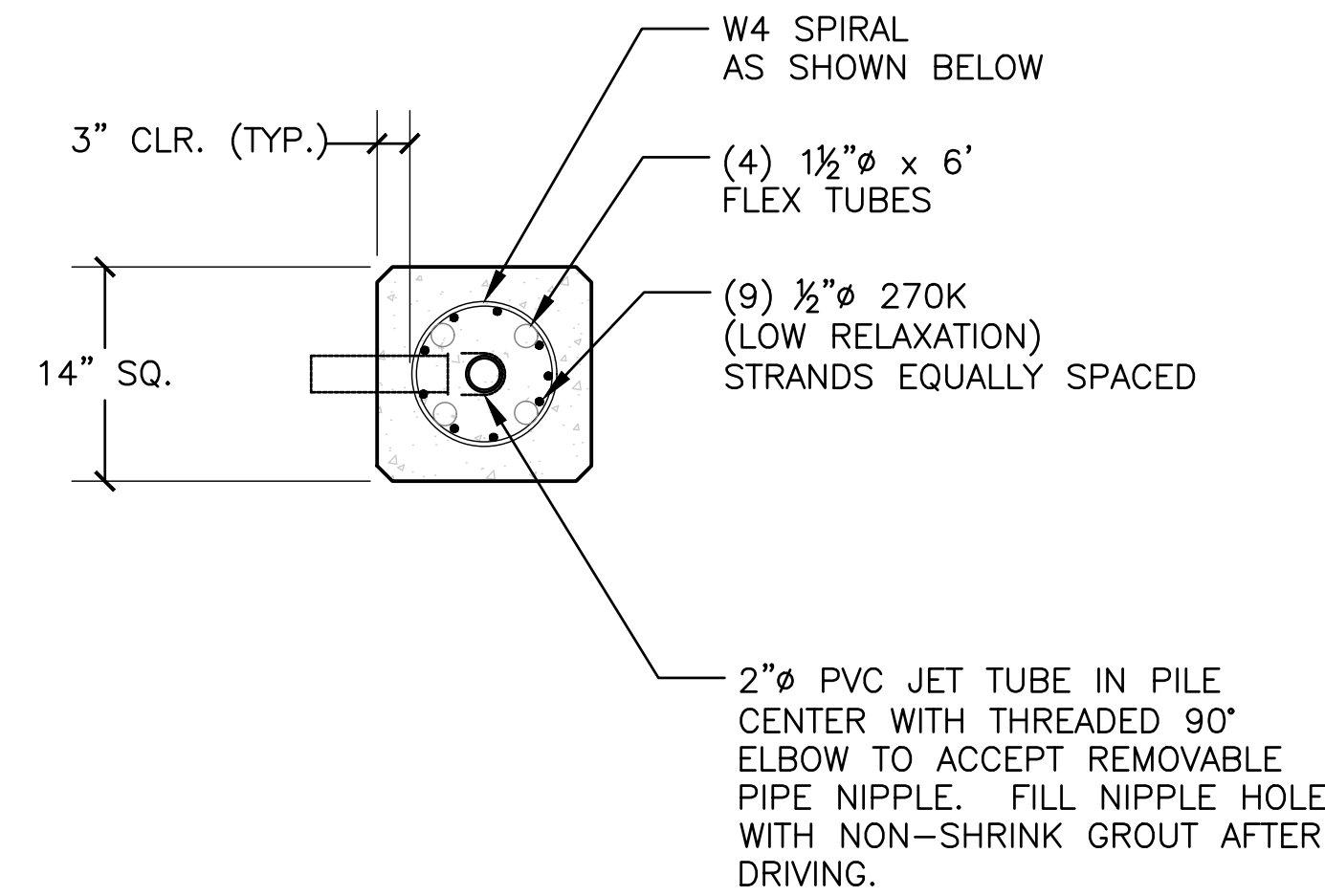
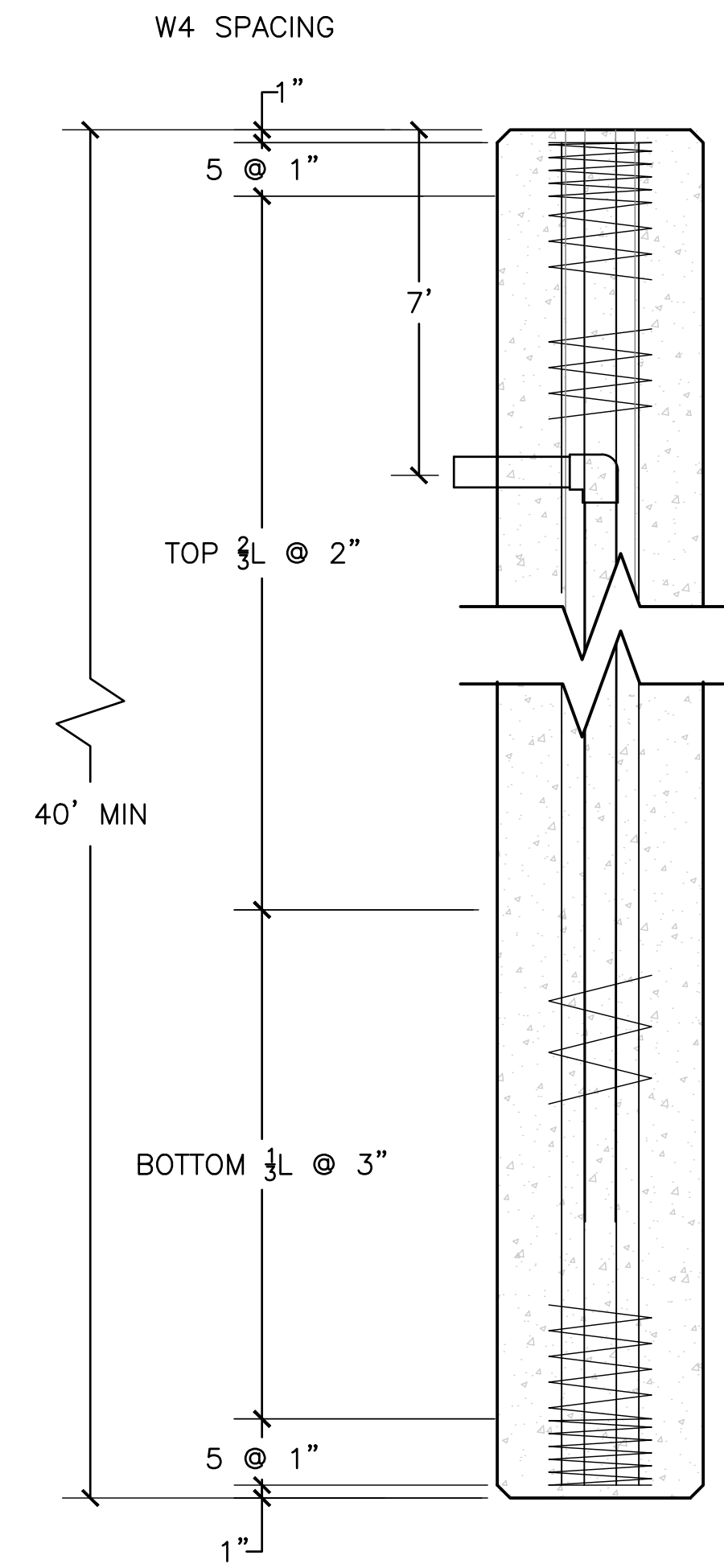


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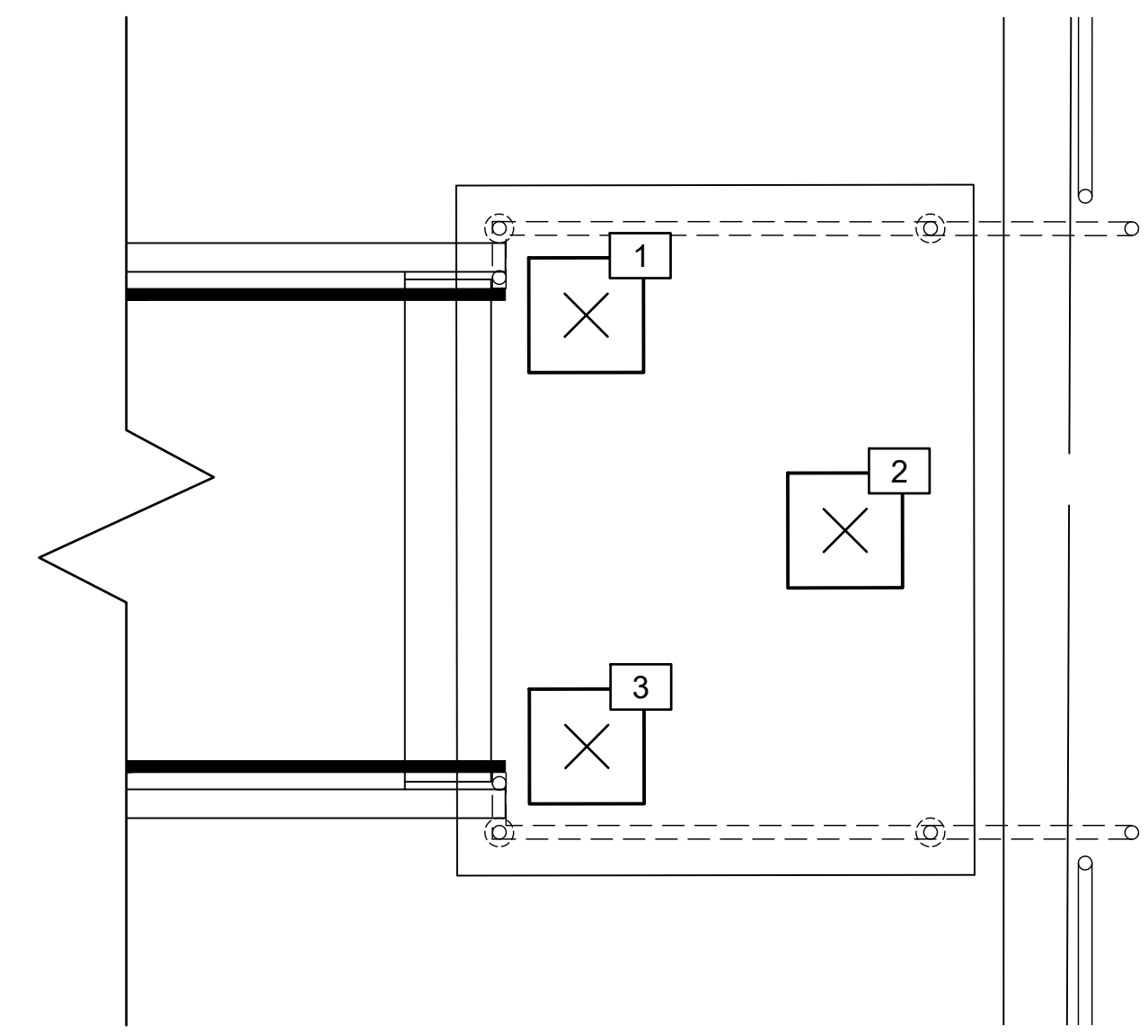
NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	44	OF	64
			JTM	ACCESSIBLE BOARDING FLOAT PLATFORM	JOB NO.	928-79		
			JTM		SCALE	AS SHOWN		
			TJF		MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE	23 JUL 2023	
			JTM					



1 AXIAL PILE SECTION
45 SCALE: NTS

PLATFORM PILE SCHEDULE				
PILE NO.	STATION	OFFSET	BUTT ELEV	TIP ELEV.
1	1+94.24	114.60L	15.0	-30.0
2	1+91.75	111.60L	15.0	-30.0
3	1+89.24	114.60L	15.0	-30.0

- NOTES:
- STATION AND OFFSET RELATIVE TO PROJECT BASELINE. SEE SHEET 14 FOR BASELINE COORDINATES.
 - PRIOR TO PILE DRIVING, FIELD VERIFY ABOVE PILE LOCATIONS BASED UPON LOCATIONS OF NEW PLATFORM AND ACCESSIBLE BOARDING FLOAT. ADJUST DIMENSIONS AS REQUIRED TO FIT.
 - SEE NOTES THIS SHEET FOR AXIAL PILE REQUIREMENTS FOR GANGWAY LANDING PLATFORM.



2 PLATFORM PILE LAYOUT
45 SCALE: 1" = 2'-0"

GANGWAY LANDING PILE NOTES:

- CONCRETE
f'c = 4000 PSI @ TRANSFER
f'c = 6000 PSI @ 28 DAYS & TIME OF DRIVING
- REINFORCING
PRESTRESSING STEEL SHALL CONFORM TO ASTM A-416 GRADE 270 SPIRAL / ASTM A-82
- SECTION PROPERTIES
14" SQUARE PILE
AREA = 196 SQ.IN.
As = 8 STRAND X .153 SQ.IN. = 1.224 SQ.IN.
- LOAD CAPACITY (SERVICE LOADS)

Fx	Vy	Vz	Mx	My	Mz	Remark
K	K	K	K-ft	K-ft	K-ft	
-53.72	0.00	0.00	0.00	0.00	0.00	Max Compression
-28.42	-3.75	-0.42	0.00	6.19	46.68	Max Moment-Z
-15.66	0.24	-4.47	0.00	55.93	-2.26	Max Moment-Y
23.21	1.09	2.34	0.00	-28.13	-14.34	Max Tension

NOTE: REFER TO PILE FORCE/MOMENT LEGEND.

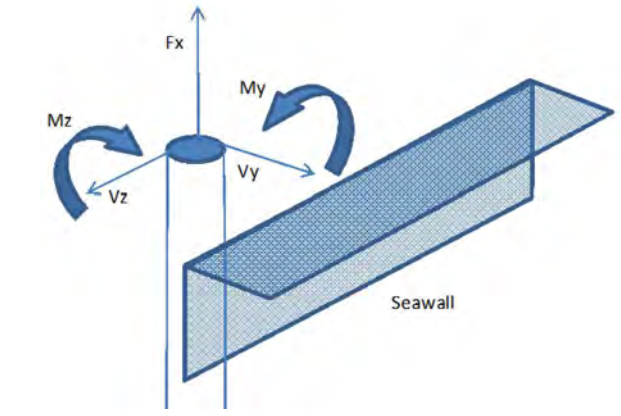
NOTE: PILE IS DESIGNED TO BE FIXED AT CAP. PILES SHALL DEVELOP THE ABOVE MOMENT CAPACITY IN COMBINATION WITH EITHER TENSION OR COMPRESSION LOAD IN UPPER HALF OF PILE LENGTH. THE PILE MOMENT CAPACITY MAY UNIFORMLY DIMINISH TO ZERO IN THE LOWER HALF OF THE PILE.

FOR ULTIMATE STRENGTH DESIGN, A LOAD FACTOR OF 1.6 SHALL BE USED FOR THE SERVICE LOADS LISTED ABOVE.

- LAPPED SPLICES IN SPIRAL PILE REINFORCEMENT SHALL BE LAPPED 80 WIRE DIAMETERS MINIMUM. SPIRAL SPLICES AND ENDS SHALL BE TERMINATED BY A 135° HOOK WITH 6" TAIL HOOKED AROUND STRAND.
- STEEL PILE REINFORCEMENT SHALL BE EPOXY COATED IN CONFORMANCE WITH ASTM D 3963. STRANDS SHALL NOT BE EPOXY COATED.
- CONCRETE SHALL BE ASTM C 150, TYPE II/V WITH MAXIMUM ALKALI CONTENT OF 0.6 PERCENT. CONCRETE MIXTURE SHALL CONTAIN A MINIMUM OF SEVEN (7) SACKS OF CEMENT PER CUBIC YARD.
- CONCRETE FOR PILES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 6,000 PSI. CONCRETE SHALL CONTAIN DCI CORROSION INHIBITOR AS MANUFACTURED BY W.R. GRACE OR APPROVED EQUAL AT THE RATE OF TWO (2) GALLONS PER CUBIC YARD.
- SUBMIT PILE DRIVING PLAN AND PILE SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION OF ANY PILES. SEE SPECIFICATIONS FOR REQUIREMENTS.
- PILE MANUFACTURER SHALL INCLUDE, IN THE PILE DESIGN SUBMITTAL, CALCULATIONS FOR ALL CAPACITY CASES, PILE HANDLING DESIGN AND DETAILS.
- REMOVE MINIMUM AMOUNT OF SLOPE PROTECTION STONE IN ORDER TO DRIVE PILES, THEN PLACE GEOTEXTILE FABRIC IN EXPOSED AREA AROUND PILE AND REFILL WITH SLOPE PROTECTION STONE IN ORDER TO INSURE SUFFICIENT SLOPE PROTECTION.
- PRIOR TO PILE FABRICATION SUBMIT SHOP DRAWING, STRUCTURAL ENGINEER CALCULATIONS VERIFYING SPECIFIED PILE CAPACITY, AND CONCRETE MIX DESIGN PREPARED BY CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
- IN ACCORDANCE WITH SMSATC, NO EXTERNAL PILE JETTING SHALL BE ALLOWED. INTERNAL JETTING WILL BE ALLOWED ONLY WHEN THE PILE TIP HAS BEEN DRIVEN BELOW THE MUDLINE SURFACE. CONTRACTOR SHALL ONLY USE JETTING EQUIPMENT THAT IS CAPABLE OF DEVELOPING A MINIMUM FLOW OF 300 GALLONS PER MINUTE IN THE JET TUBE.

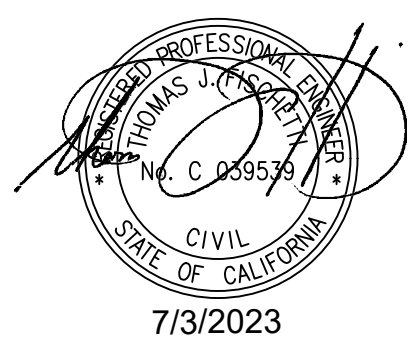
PILE DRIVING OPERATION NOTES:

- THE AMOUNT OF SOIL/ROCK REMOVED FROM THE RIP RAP PRIOR TO PILE DRIVING: SOIL SHOULD NOT BE REMOVED. THE PILES HAVE A MINIMUM EMBEDMENT DEPTH WHICH SHOULD BE INTO FIRM SOILS. RIP RAP REMOVAL SHOULD BE MINIMIZED. AFTER PILE DRIVING THE RIP RAP SHOULD BE REPLACED.
- THE AMOUNT OF JETTING: OVER JETTING SHOULD BE AVOIDED. THE PILE SHOULD BE DRIVEN A MINIMUM OF THE LAST EIGHT (8) FEET, THEREFORE JETTING SHOULD BE TERMINATED BEFORE THIS DEPTH IS ACHIEVED.
- THE HEIGHT OF THE HAMMER DROP WITH RESPECT TO DISTANCE DRIVEN: THE INITIAL HAMMER DROP SHOULD BE ON THE ORDER OF FIVE (5) FEET. IF BLOW COUNTS ARE TOO HIGH(>40) THE HAMMER HEIGHT MAY BE INCREASED. CONVERSELY IF THE PILE IS BEING DRIVEN MORE THAN ONE-HALF FOOT PER BLOW THE HAMMER HEIGHT SHOULD BE DECREASED.
- DROPPING THE PILE IN ORDER TO DRIVE THE PILE UNDER ITS OWN WEIGHT: UNDER NO CIRCUMSTANCES SHOULD THE PILE BE LIFTED UP AND DROPPED TO DRIVE IT UNDER ITS OWN WEIGHT.



ADA GANGWAY PLATFORM NOTES:

- STEEL: HSS TUBES, ASTM A500, GRADE B (Fy=42 KSI); PLATE, ASTM A36. ALL STEEL TO BE HOT DIPPED GALVANIZED PER ASTM A123.
- CONCRETE: 28-DAY COMPRESSIVE STRENGTH (F'c): 5,000 PSI. REFER TO SPECIFICATIONS SECTION 1003, CAST IN PLACE CONCRETE, FOR ADDITIONAL REQUIREMENTS. CONTRACTOR MAY SUBSTITUTE PRE-CAST PLATFORM. SUBMIT CALCULATIONS AND SHOP DRAWING STAMPED BY A CALIFORNIA REGISTERED PROFESSIONAL ENGINEER FOR APPROVAL.
- REINFORCEMENT: REBAR ASTM A615, GRADE 60; EPOXY COATED PER ASTM A775.
- ANCHOR BOLTS: ASTM F1554 (GRADE 36), J-BOLT, NUT AND WASHER HOT DIPPED GALVANIZED.



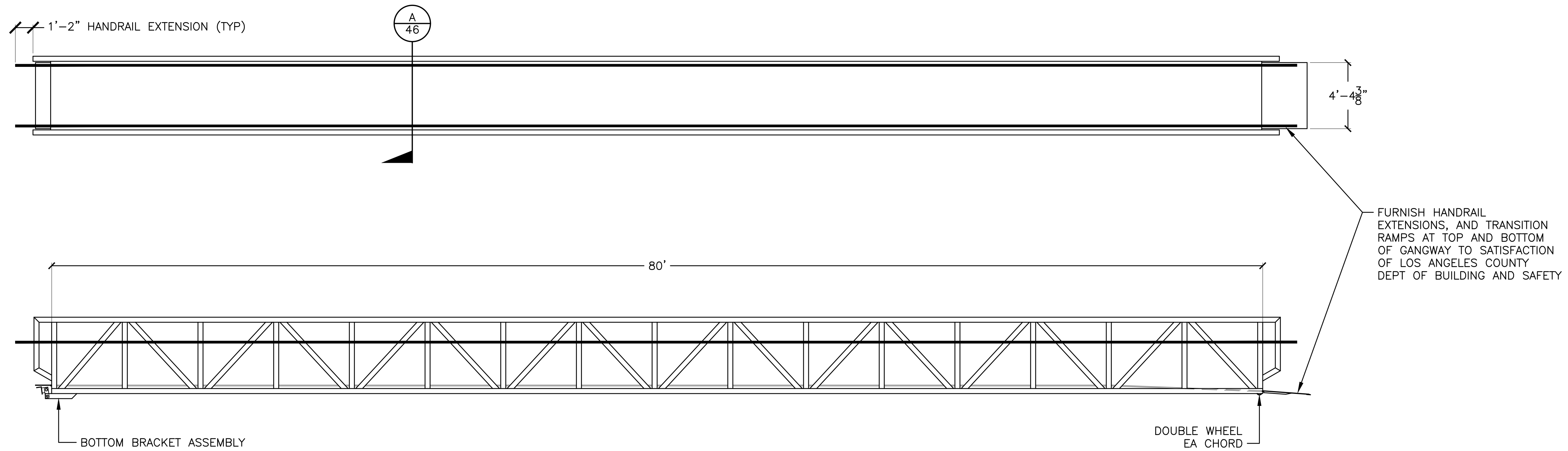
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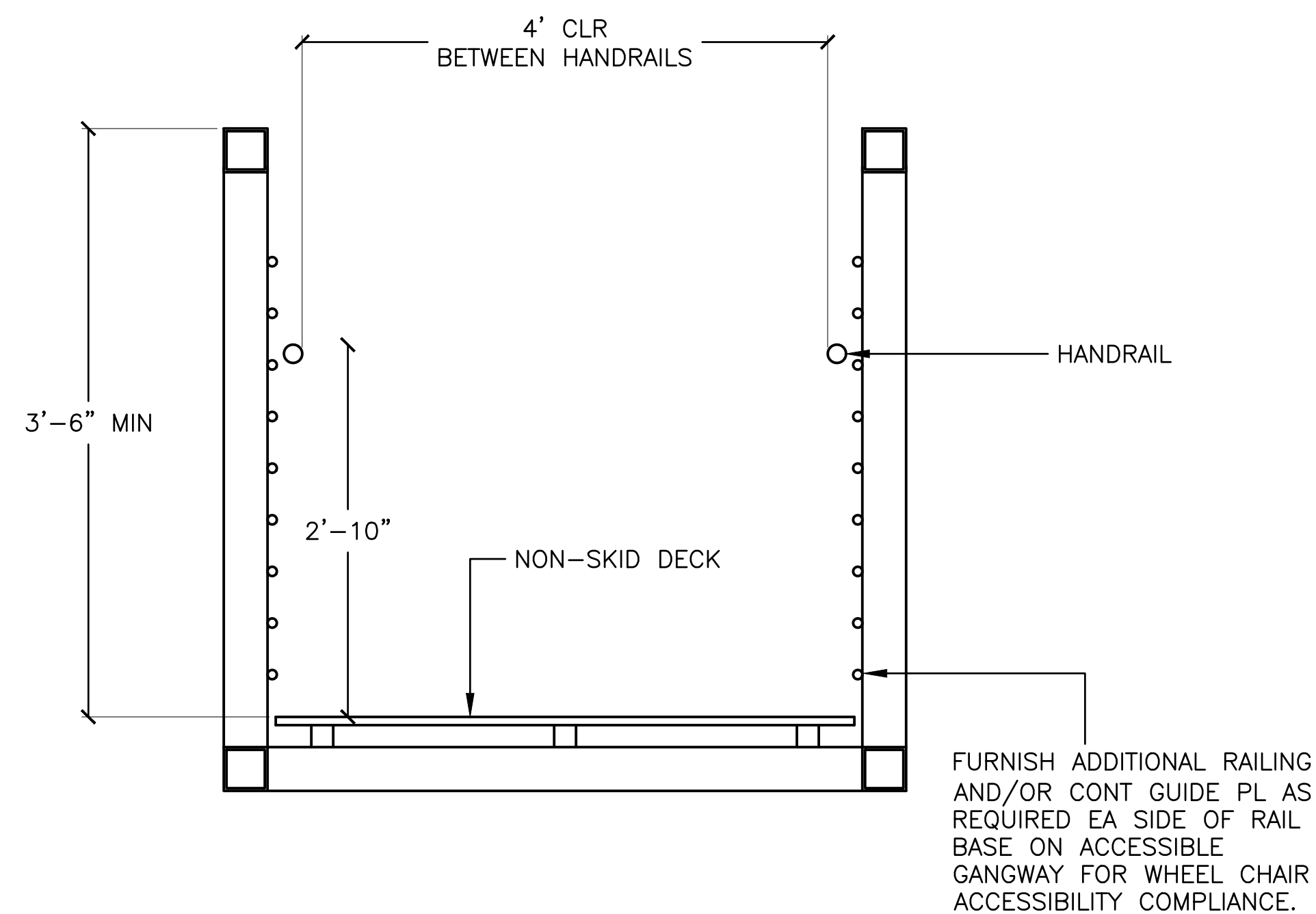
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NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 45 OF 64
DRAWN BY: JTM	ACCESSIBLE BOARDING FLOAT PLATFORM DETAILS	JOB NO. 928-79
CHECKED BY: TJP	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	SCALE AS SHOWN
APPROV. BY: JTM		DATE 23 JUL 2023



1 ACCESSIBLE GANGWAY PLAN AND ELEVATION
46 SCALE: 1/4" = 1'-0"

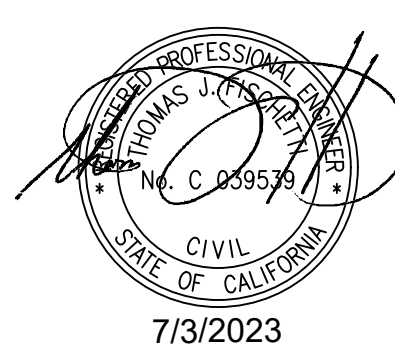


A ACCESSIBLE GANGWAY SECTION
46 SCALE: 1" = 1'

NOTE:
GANGWAYS SHALL CONFORM TO THE REQUIREMENTS SPECIFIED HEREIN. PRIOR TO GANGWAY FABRICATION SUBMIT DETAILED SHOP DRAWINGS AND STRUCTURAL CALCULATIONS FOR APPROVAL BY PROJECT MANAGER. DRAWINGS SHALL INDICATE CONFORMANCE WITH THE FOLLOWING ACCESSIBILITY REQUIREMENTS OF THE 2019 CALIFORNIA BUILDING CODE:
GUARDRAIL - SECTION 1015
HANDRAIL - SECTION 11B-505
WHEEL GUIDE CURB OR RAIL - SECTION 11B-405.9

GANGWAY NOTES:

- GANGWAYS SHALL BE ALUMINUM AND A DESIGN/BUILD ELEMENT OF THE PROJECT. THE CONTRACTOR SHALL USE THE GANGWAY PLANS AND DETAILS SHOWN ON THE PLANS FOR REFERENCE ONLY. THE CONTRACTOR SHALL PRODUCE ALL DETAILED DRAWINGS AND CALCULATIONS NECESSARY TO COMPLY WITH THE PROVISIONS OF THE PLANS AND THESE SPECIAL PROVISIONS. GANGWAYS SHALL BE DESIGNED AND MANUFACTURED BY EITHER HALLSTEN CORPORATION, MANTLE INDUSTRIES, INC., OR TOPPER INDUSTRIES, INC.
- THE GANGWAY SHALL BE DESIGNED TO SUPPORT A NORMAL SERVICE LOAD THE DEAD WEIGHT OF THE GANGWAY PLUS A DISTRIBUTED LIVE LOAD OF FIFTY POUNDS PER SQUARE FOOT WITH A MID-SPAN DEFLECTION OF L/360. THE GANGWAY DESIGN CALCULATIONS SHALL SHOW EVIDENCE THAT ALLOWABLE STRESSES IN THE STRUCTURAL COMPONENTS WILL BE WITHIN ALLOWABLE LIMITS FOR A UNIFORM LIVE LOAD OF 100 POUNDS PER SQUARE FOOT. ALL GANGWAY COMPONENTS SHALL BE DESIGNED WITH MINIMUM SAFETY FACTOR ON WORKING STRESS AS SPECIFIED BY THE ALUMINUM ASSOCIATION'S "SPECIFICATIONS FOR ALUMINUM STRUCTURES". SIMILAR FACTORS OF SAFETY SHALL APPLY FOR NON-ALUMINUM STRUCTURAL COMPONENTS.
- ELECTRICAL AND MECHANICAL CONDUIT, CONDUCTOR, AND PIPE SHALL BE MOUNTED ALONG THE UNDERSIDE OF THE GANGWAY BOTTOM FRAME WITH UNISTRUT PIPE STRAPS TO ENABLE EASY REMOVAL AND REPLACEMENT OF CONDUIT AND PIPING FOR MAINTENANCE.
- THE ENTIRE WALKING SURFACE OF THE GANGWAY DECK MATERIAL AND RAMPS SHALL BE SKID RESISTANT TO PREVENT SLIPPAGE DURING MAXIMUM GANGWAY SLOPE AND WET CONDITIONS.
- GAP AT THE TOP OF GANGWAY SHALL NOT EXCEED 1/2 INCH.
- TRANSITION PLATES AT THE TOP AND BOTTOM OF GANGWAYS SHALL BE DESIGNED TO LIMIT MID-SPAN DEFLECTION TO L/360. TRANSITION PLATES SHALL BE STIFFENED AS REQUIRED AND ENDS SHALL BE BEVELED TO COMPLY WITH ACCESSIBILITY REQUIREMENTS PER STATE OF CALIFORNIA TITLE 24 GUIDELINES.
- GANGWAYS SHALL BE STRUCTURAL TRUSS DESIGNS CONSISTENT WITH THE STRUCTURAL AND ARCHITECTURAL GEOMETRY AND FEATURES SHOWN ON THE PLANS.
- GANGWAY FLOOR DECK SHALL BE NON-SKID DIAMONDBACK TREADPLATE AS MANUFACTURED BY ALCO ENGINEERED PRODUCTS OR APPROVED EQUAL.
- A HINGED TOE RAMP SHALL BE PROVIDED AT THE TOP AND BOTTOM OF THE GANGWAY TO MAKE A SMOOTH WALKING TRANSITION BETWEEN THE GANGWAY LANDING, GANGWAY DECK, AND DOCK LANDING. THE TOE RAMP SHALL BE DESIGNED TO SLIDE ON THE DOCK SURFACE WITHOUT DAMAGING IT. THE SLOPE OF THE TRANSITION RAMPS SHALL BE 12 (HORIZONTAL) TO 1 (VERTICAL) OR FLATTER. THE NOSES OF ALL TRANSITION PLATES SHALL BE SPECIALLY FITTED WITH FULL WIDTH UHMW WEAR PLATE TAPERED AND BEVELED TO FIT RAMP ENDS AND COMPLY WITH STATE OF CALIFORNIA TITLE 24 THRESHOLD REQUIREMENTS.
- THE GANGWAY TOE SHALL BE SUPPORTED BY MULTIPLE WHEELS CONNECTED TO DOUBLER PLATES WELDED TO THE FRAME. WHEELS SHALL BE INSTALLED IN PAIRS AND RESTRAINED BY A CENTER UHMW GUIDE TRACK LOCATED BETWEEN WHEEL PAIRS AND CONNECTED TO THE DOCK DECK.
- HANDRAILS AND SIDE TRUSS GUARDRAILS SHALL BE DESIGNED TO SUPPORT A MINIMUM DISTRIBUTED LOAD OF 50 POUNDS PER LINEAR FOOT OF RAIL APPLIED PERPENDICULAR TO THE TOP RAIL WITHOUT PERMANENT DEFORMATION. HANDRAIL SHALL ALSO SUPPORT A 250 POUND VERTICAL POINT LOAD APPLIED ANYWHERE ON THE RAIL.
- GUARDRAIL HEIGHT SHALL BE A MINIMUM OF 42 INCHES. THE GUARDRAIL SHALL BE FABRICATED WITH MULTIPLE HORIZONTAL MEMBERS SO THAT A SPHERE FOUR INCHES IN DIAMETER SHALL NOT PASS THROUGH THE RAILING AT ANY POINT.
- HANDRAIL HEIGHT SHALL BE 34 INCHES ABOVE THE WALKING SURFACE. HANDRAIL SHALL BE 1 1/4 INCH DIAMETER ROUND ALUMINUM PIPE. HANDRAIL ON E DOCK SHALL BE FABRICATED WITH END LOOPS AT THE TOP AND BOTTOM OF THE GANGWAY THAT EXTEND TWELVE INCHES BEYOND THE GANGWAY OR RAMP END. ALL RAILING AND RAIL END DETAILS SHALL COMPLY WITH THE REQUIREMENTS OF THE STATE OF CALIFORNIA TITLE 24 ACCESSIBILITY GUIDELINES.
- THE ACCESSIBLE GANGWAY SHALL BE DESIGNED AND MANUFACTURED BY EITHER TOPPER INDUSTRIES, MANTLE INDUSTRIES, OR HALLSTEN CORPORATION.



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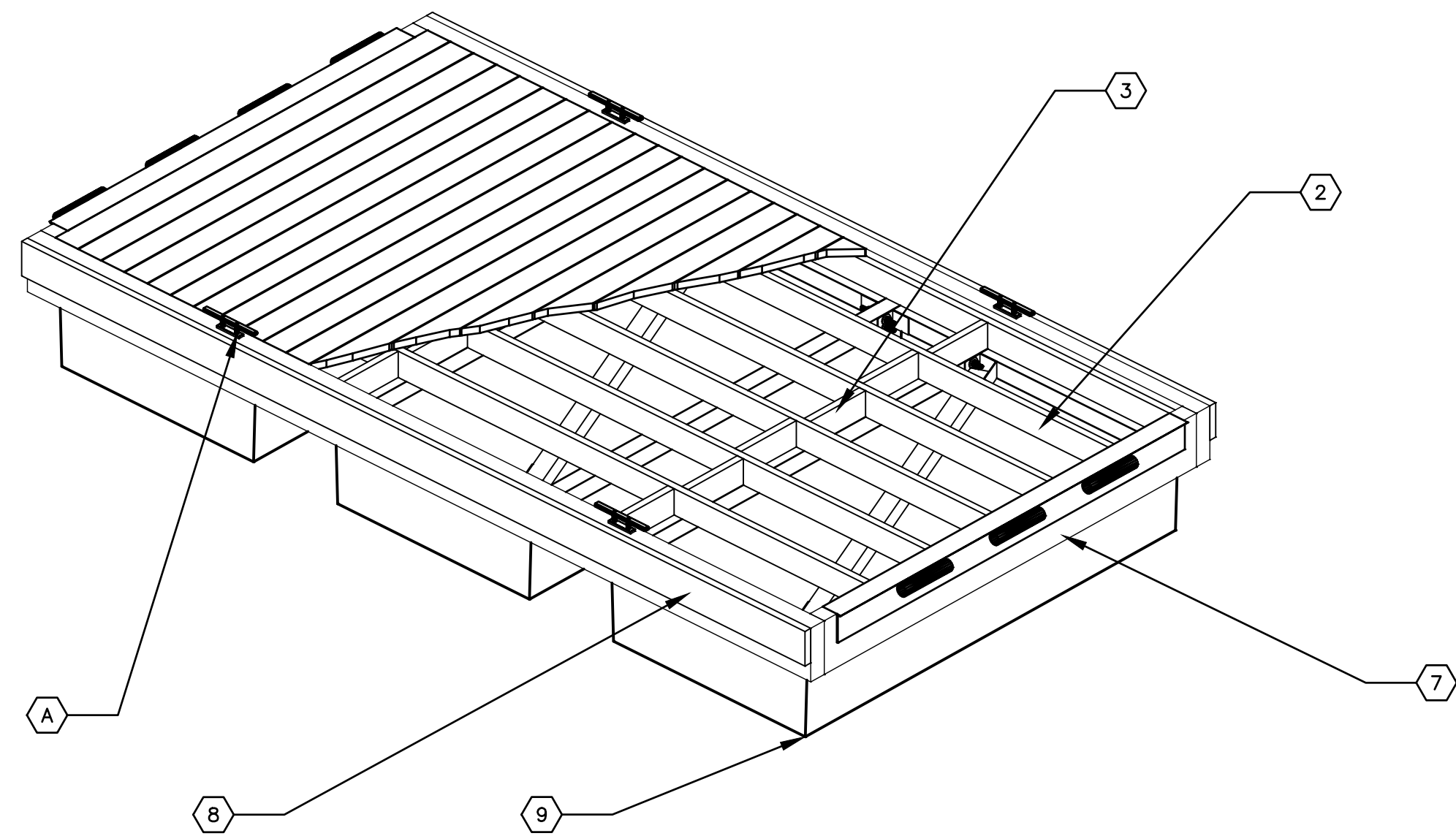
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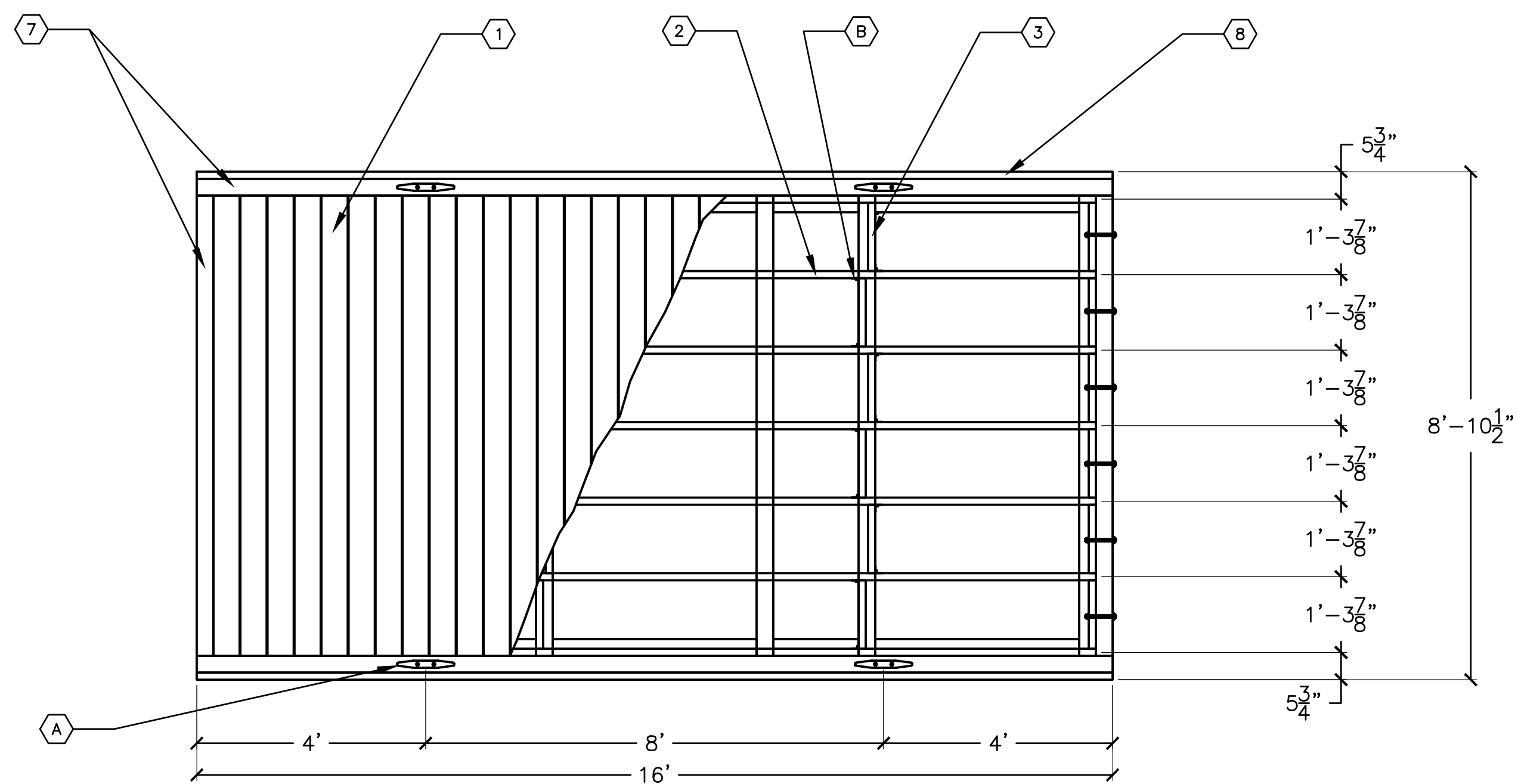
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DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION
GANGWAY DETAILS

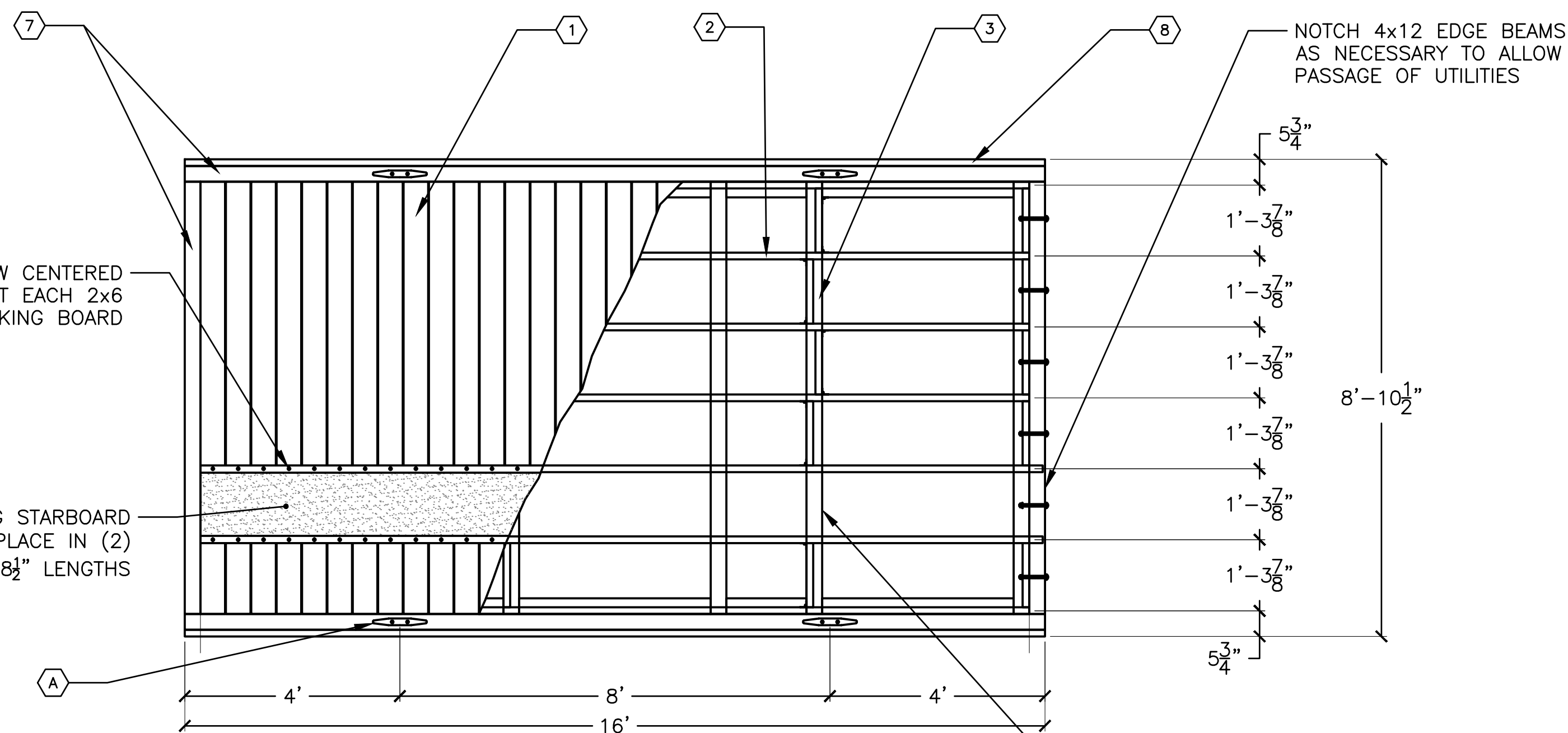
SHEET 46 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



1 16' BOARDING FLOAT DECKING AND JOISTS 3D VIEW - BOARDING FLOATS 1 & 2
SCALE: N/A

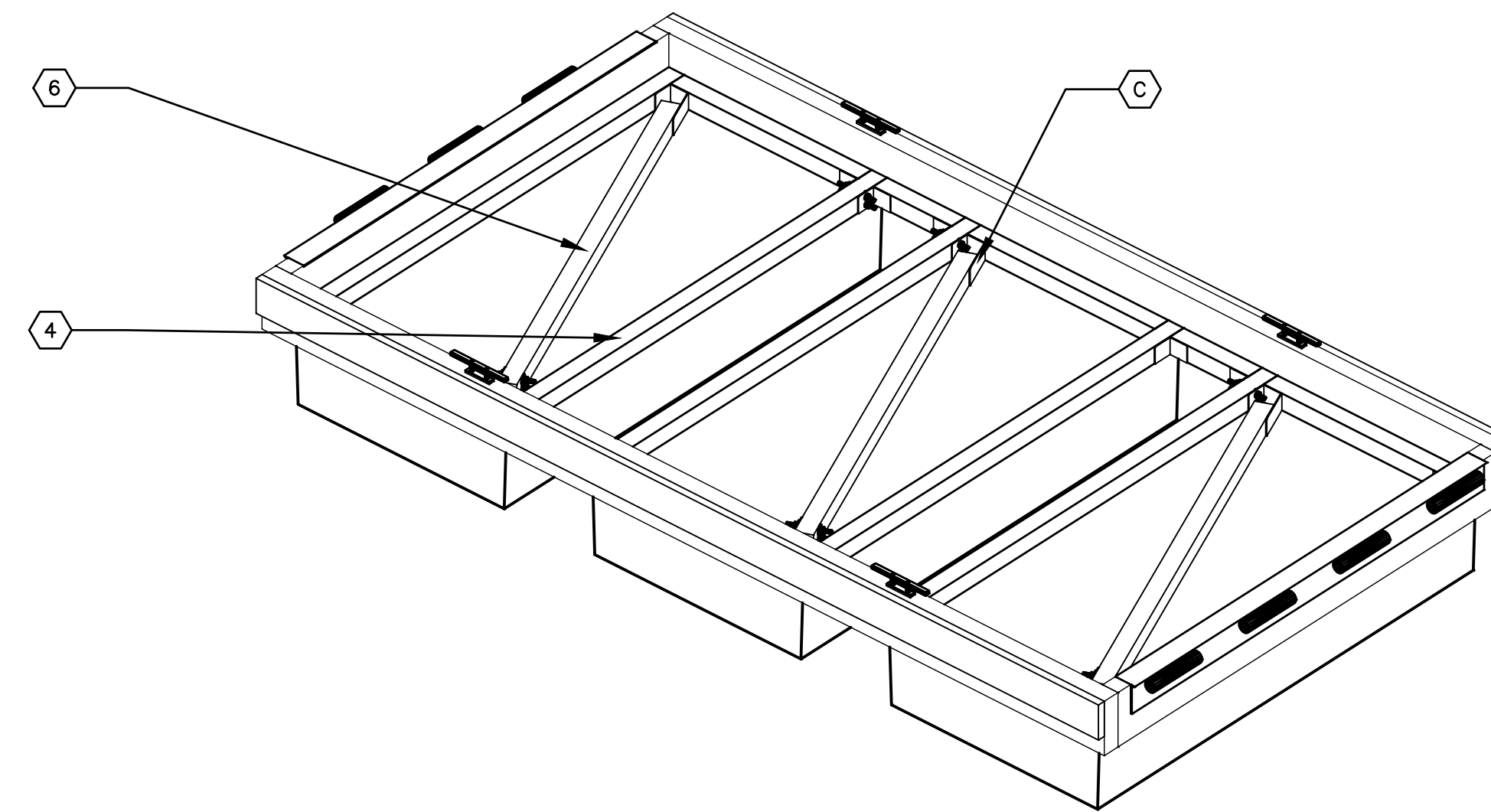


2 16' BOARDING FLOAT DECKING AND JOISTS PLAN - BOARDING FLOATS 1 & 2
SCALE: 1" = 2'-0"

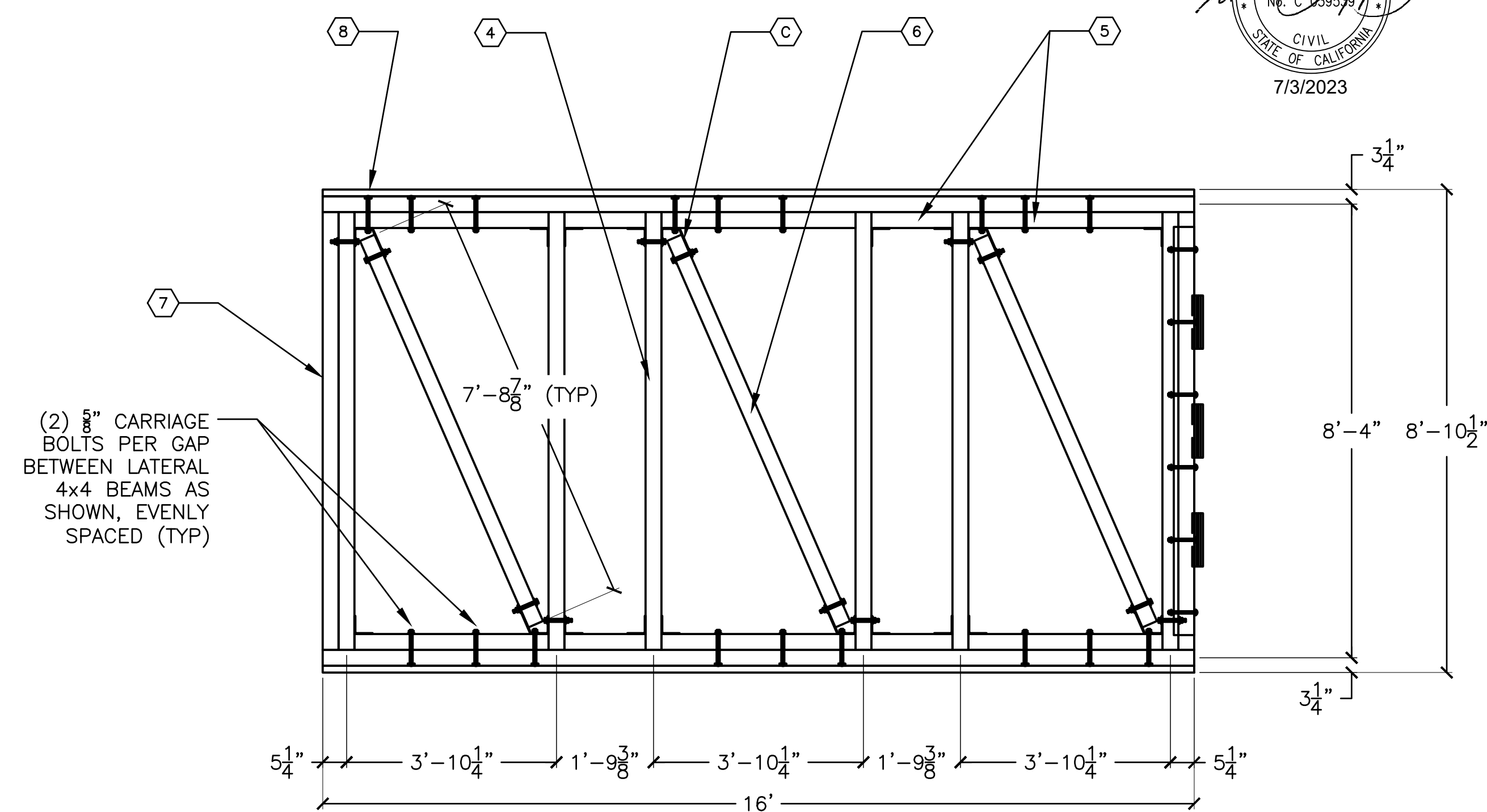


3 16' BOARDING FLOAT DECKING AND JOISTS PLAN - BOARDING FLOAT 3
SCALE: 1" = 2'-0"

NO JOIST BLOCKING WITHIN UTILITY TRENCH (TYP)



4 16' BOARDING FLOAT BEAM FRAMING 3D VIEW - BOARDING FLOATS 1-3
SCALE: N/A



5 16' BOARDING FLOAT BEAM FRAMING PLAN - BOARDING FLOATS 1-3
SCALE: 1" = 2'-0"



BID SET

FRAMING SCHEDULE

1. 2x6 PT DF DECKING
2. 2x6 BEDFORD FIBERFORCE PLASTIC JOISTS
3. 2x6 BEDFORD FIBERFORCE PLASTIC JOIST BLOCKING
4. 4x4 BEDFORD BARFORCE PLASTIC BOTTOM BEAM
5. 4x4 BEDFORD BARFORCE PLASTIC BOTTOM BEAM BLOCKING
6. 4x4 BEDFORD BARFORCE PLASTIC BRACING
7. 4x12 BEDFORD BARFORCE PLASTIC PERIMETER BEAM
8. 2x8 BEDFORD FIBERFORCE PLASTIC EDGE BUMPER BOARD
9. 4x8x16 HENDREN PLASTICS EAGLE FLOAT

HARDWARE SCHEDULE

- A. 12" HOT DIPPED GALVANIZED IRON HEX HEAD DOCK CLEAT
- B. A35SS JOIST ANGLE
- C. FRAMING HARDWARE

3/62

BOARDING FLOAT CONSTRUCTION NOTES:

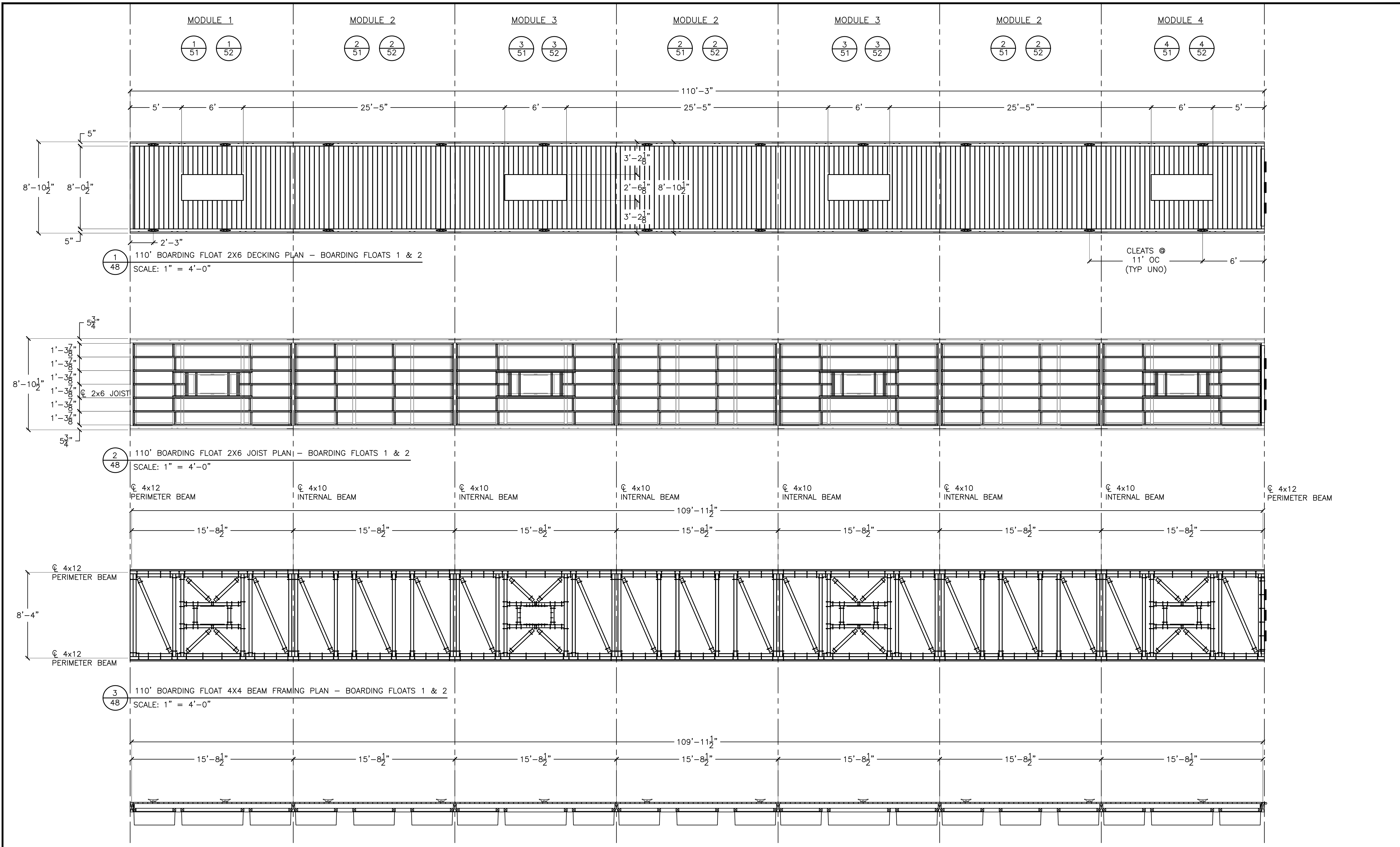
1. PRIOR TO BOARDING FLOAT FABRICATION SUBMIT A SHOP DRAWING TO THE PROJECT MANAGER FOR APPROVAL.
2. ALL DOCK FRAMING LUMBER OTHER THAN THE 2x6 DECKING TO BE BEDFORD PLASTIC LUMBER AS DETAILED IN THE FRAMING SCHEDULE.
3. TIMBER DECKING SHALL BE PRESSURE TREATED WITH AMMONIACAL COPPER ZINC ARSENATE (ACZA) TO A MINIMUM NET RETENTION OF 0.60 POUNDS PER CUBIC FOOT BY ASSAY PER AWPA STANDARDS U1-13 AND T1-13 IN CONFORMANCE WITH USE CATEGORY UC4C.
4. ALL HARDWARE, NUTS, BOLTS, WASHERS, SCREWS, AND FABRICATED METAL ITEMS SHALL BE TYPE 316L STAINLESS STEEL.

NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	OF
			JTM	16' BOARDING FLOAT DETAILS	47	64
			JTM		JOB NO.	928-79
			TJF		SCALE	AS SHOWN
			JTM		DATE	23 JUL 2023



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MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION



1
48
110' BOARDING FLOAT 2X6 DECKING PLAN - BOARDING FLOATS 1 & 2
SCALE: 1" = 4'-0"

2
48
110' BOARDING FLOAT 2X6 JOIST PLAN - BOARDING FLOATS 1 & 2
SCALE: 1" = 4'-0"

3
48
110' BOARDING FLOAT 4X4 BEAM FRAMING PLAN - BOARDING FLOATS 1 & 2
SCALE: 1" = 4'-0"

4
48
110' BOARDING FLOAT ELEVATION - BOARDING FLOATS 1 & 2
SCALE: 1" = 4'-0"

NOTE: ONLY TOP BOLTS ARE SHOWN



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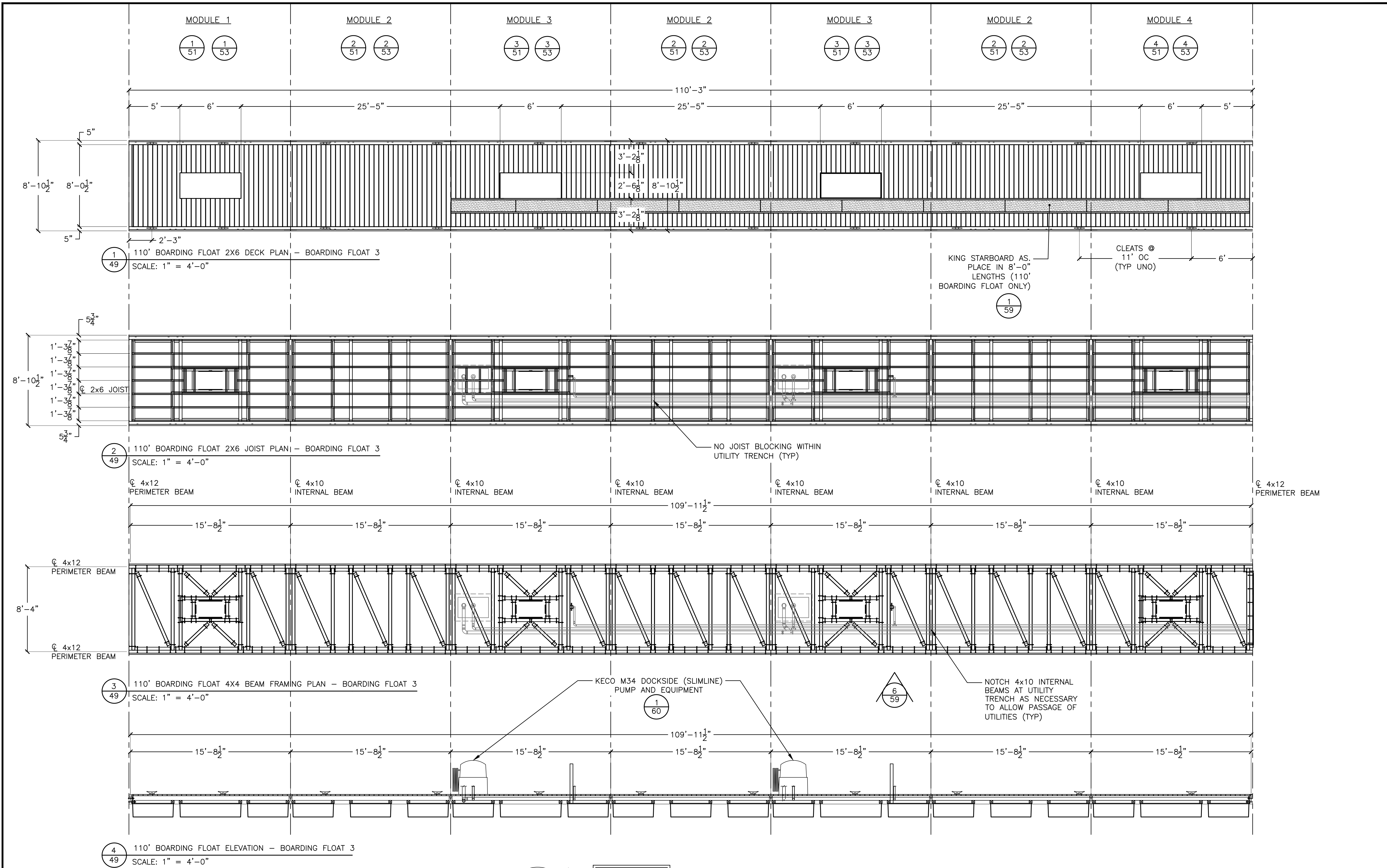
DESIGNED BY: JTM
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CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

110' BOARDING FLOAT PLAN & ELEVATION
- BOARDING FLOATS 1 & 2

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 48 OF 64
JOB NO. 928-79
SCALE 1" = 4'-0"
DATE 23 JUL 2023



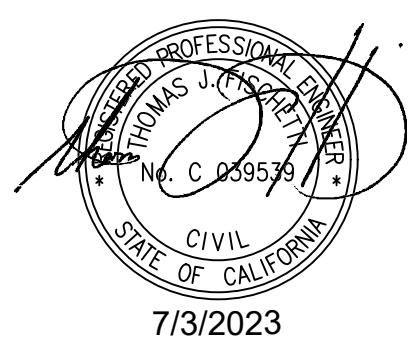
1 110' BOARDING FLOAT 2X6 DECK PLAN - BOARDING FLOAT 3
SCALE: 1" = 4'-0"

2 110' BOARDING FLOAT 2X6 JOIST PLAN - BOARDING FLOAT 3
SCALE: 1" = 4'-0"

3 110' BOARDING FLOAT 4X4 BEAM FRAMING PLAN - BOARDING FLOAT 3
SCALE: 1" = 4'-0"

4 110' BOARDING FLOAT ELEVATION - BOARDING FLOAT 3
SCALE: 1" = 4'-0"

NOTE: PONTOON PLAN AND DETAILS SAME FOR BOARDING FLOATS 1, 2, & 3. SEE SHEET 50 FOR DETAILS.



BID SET

NOBLE CONSULTANTS **GEC**

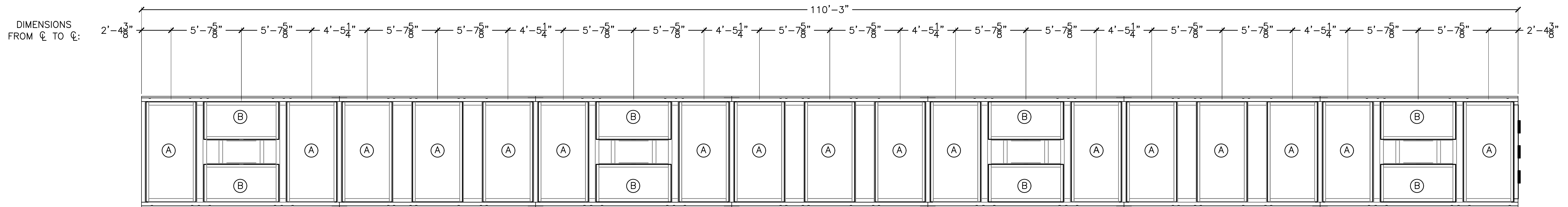
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

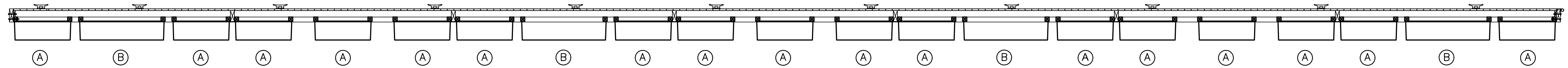
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS		SHEET 49 OF 64
110' BOARDING FLOAT PLAN & ELEVATION - BOARDING FLOAT 3		JOB NO. 928-79
		SCALE 1" = 4'-0"
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION		DATE 23 JUL 2023

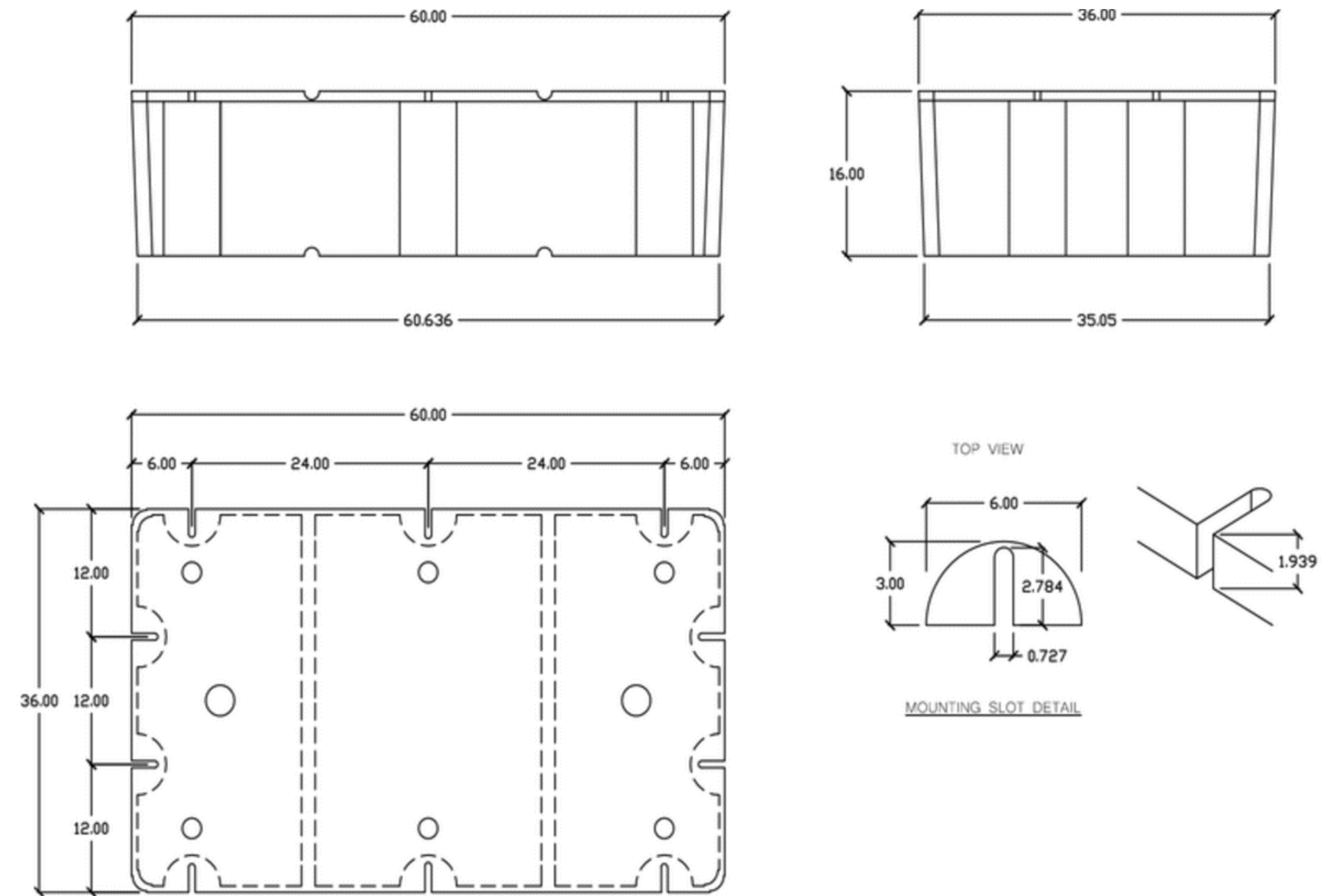
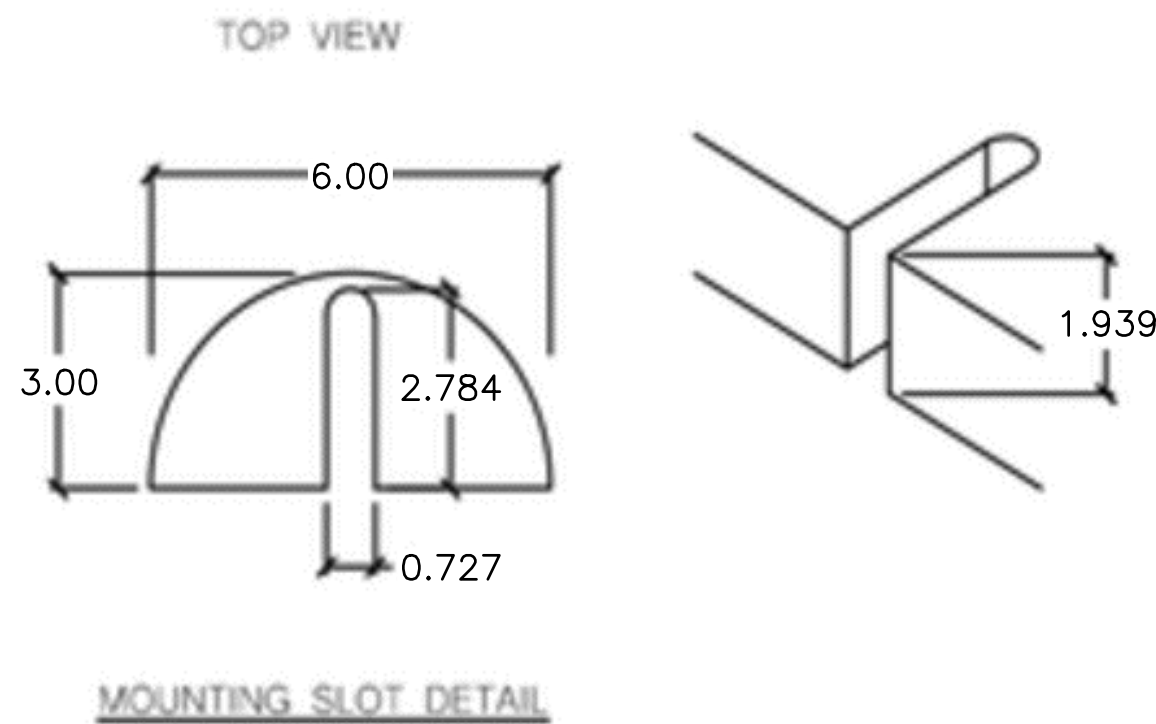
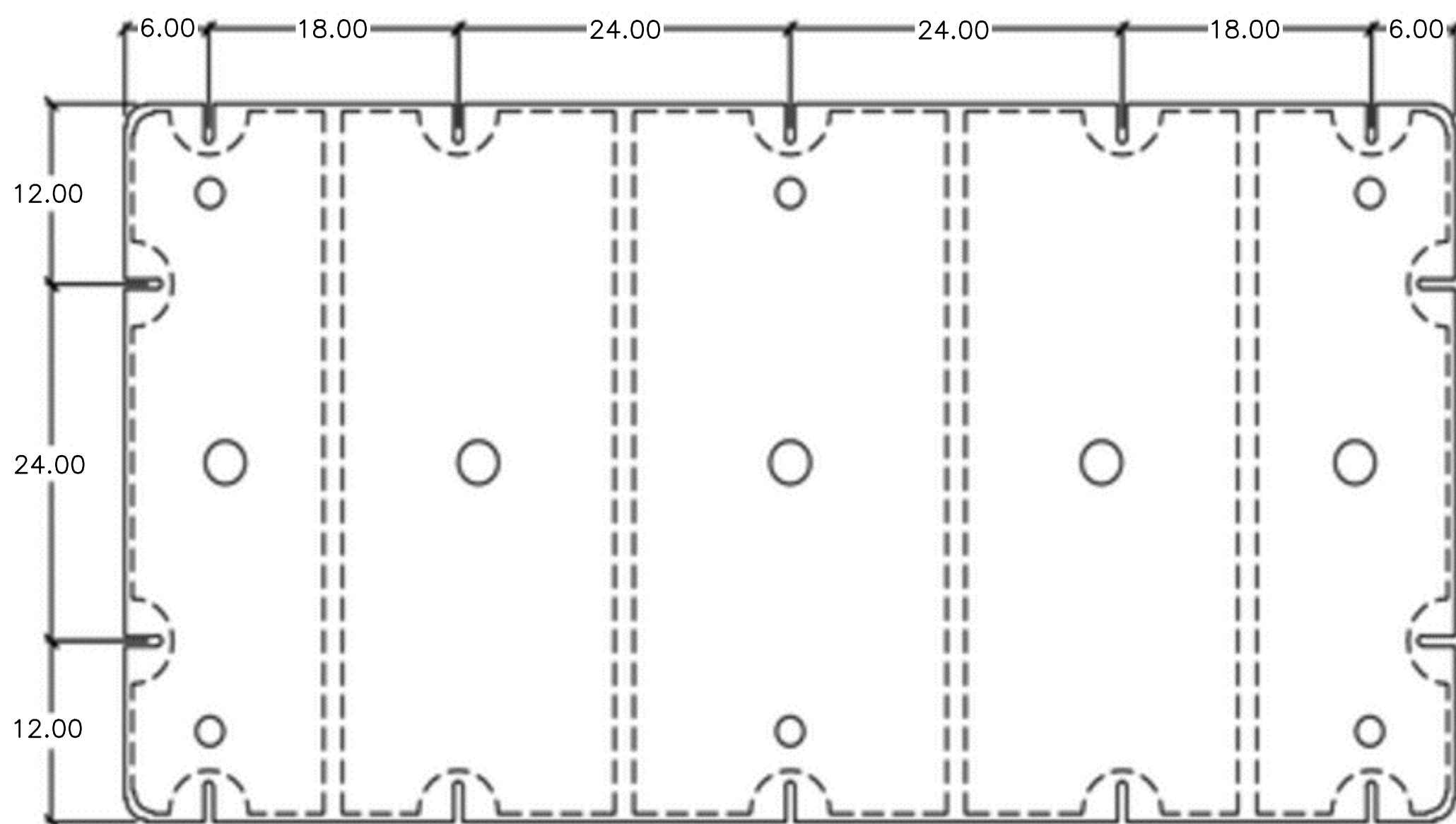
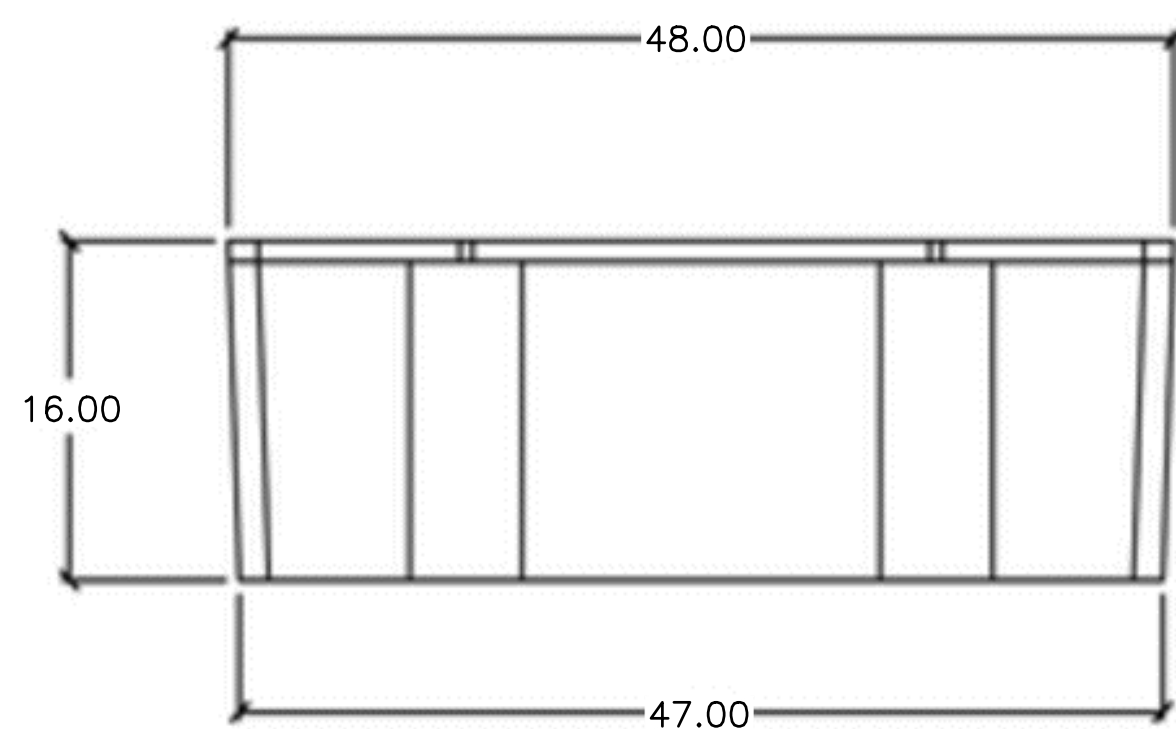
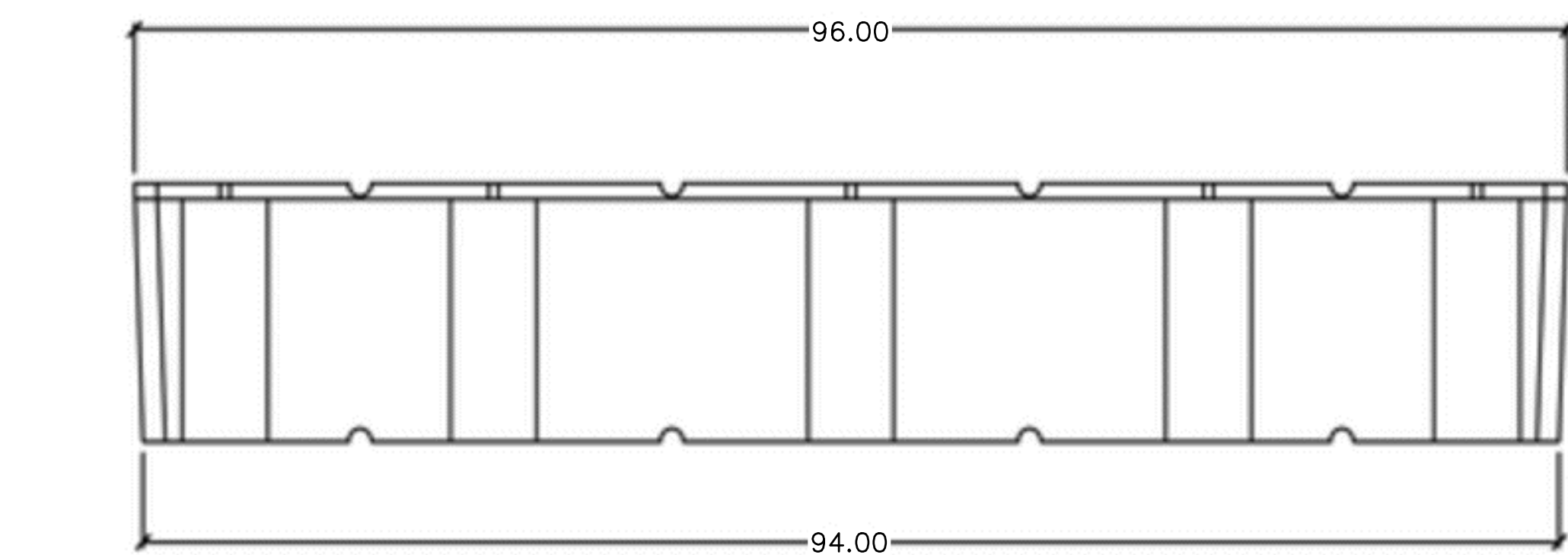
TYPE (A) PONTOON = 48" x 96" x 16"
 TYPE (B) PONTOON = 36" x 60" x 16"



1 110' BOARDING FLOAT PONTOON PLAN
 50 SCALE: 1" = 4'



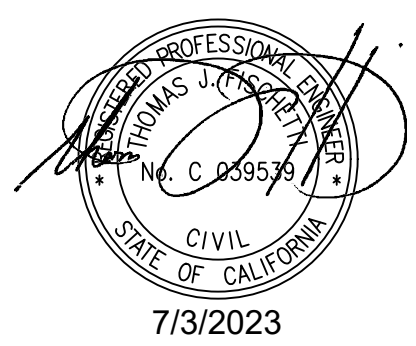
2 110' BOARDING FLOAT PONTOON ELEVATION
 50 SCALE: 1" = 4'



4 36 X 60 X 16 PONTOON DETAILS
 50 SCALE: N/A

- NOTES:
- FLOATS TO BE EAGLE FLOATS MANUFACTURED BY HENDREN PLASTICS INC. MINIMUM WALL THICKNESS SHALL BE 1/2" TO FULLY SUPPORT BOARDING FLOAT DL+LL.
 - FLOATS TO BE BOLTED TO 4x4 BOTTOM BEAMS WITH 1/2" MB (316SS).

3 48 X 96 X 16 PONTOON DETAILS
 50 SCALE: N/A



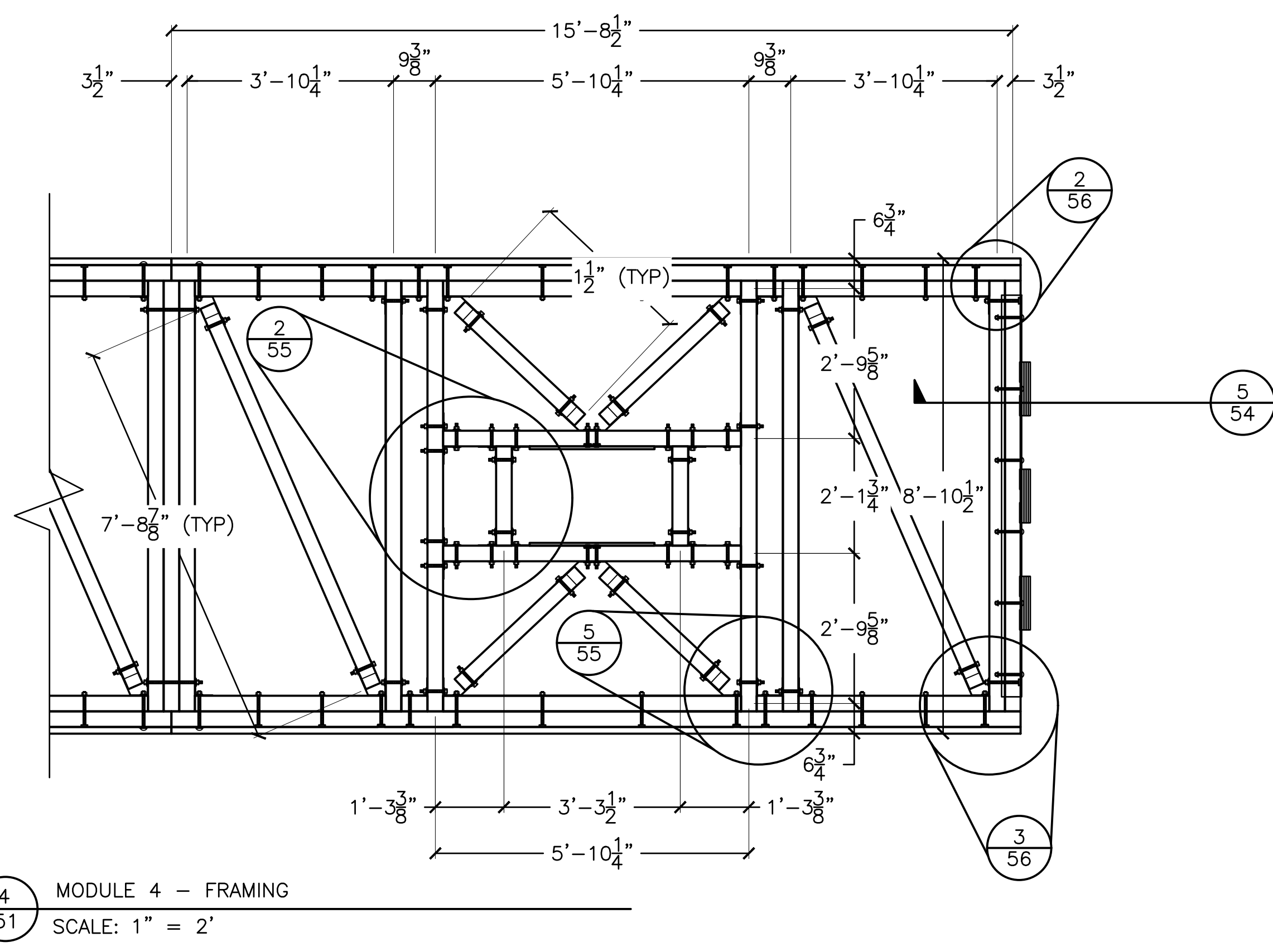
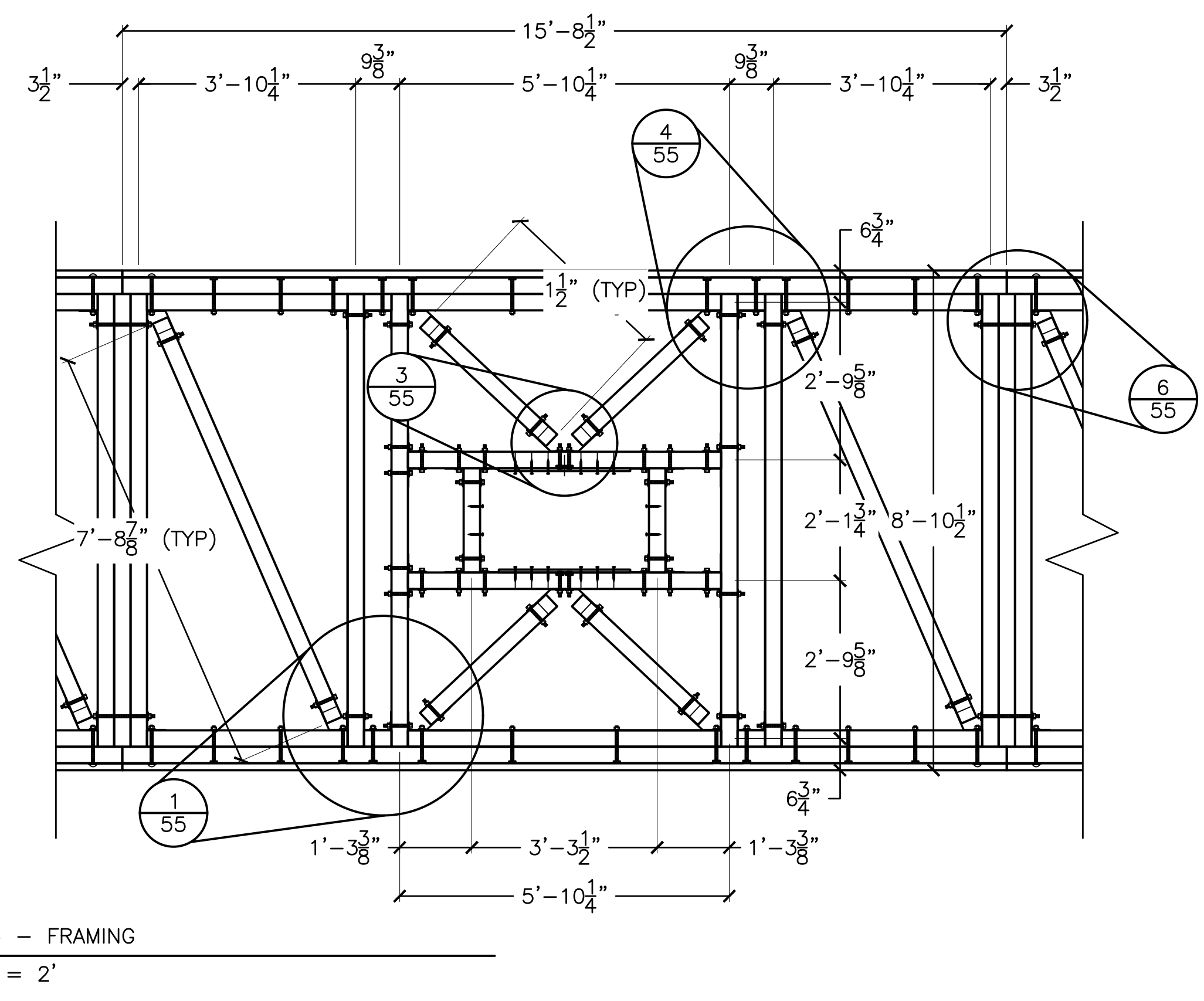
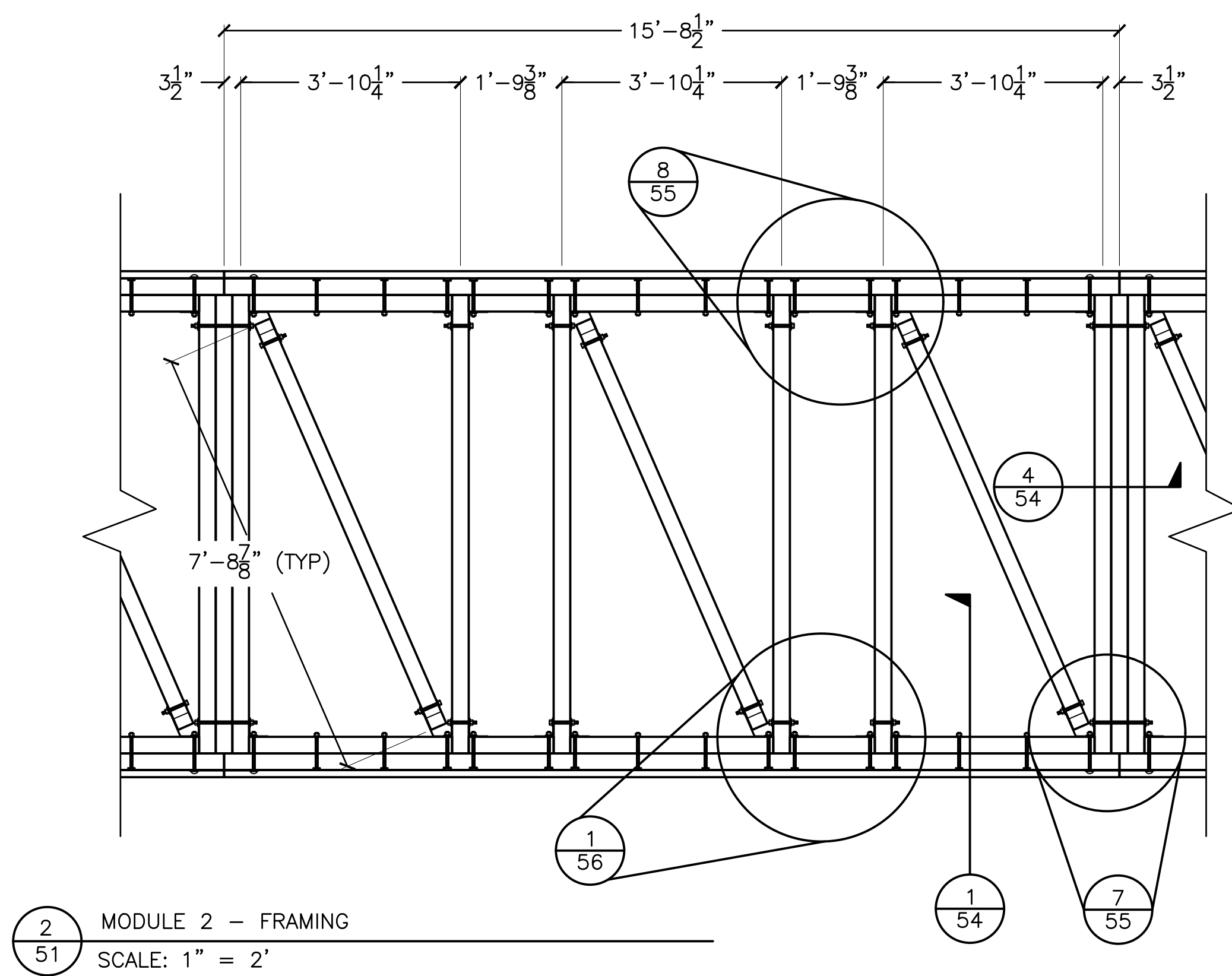
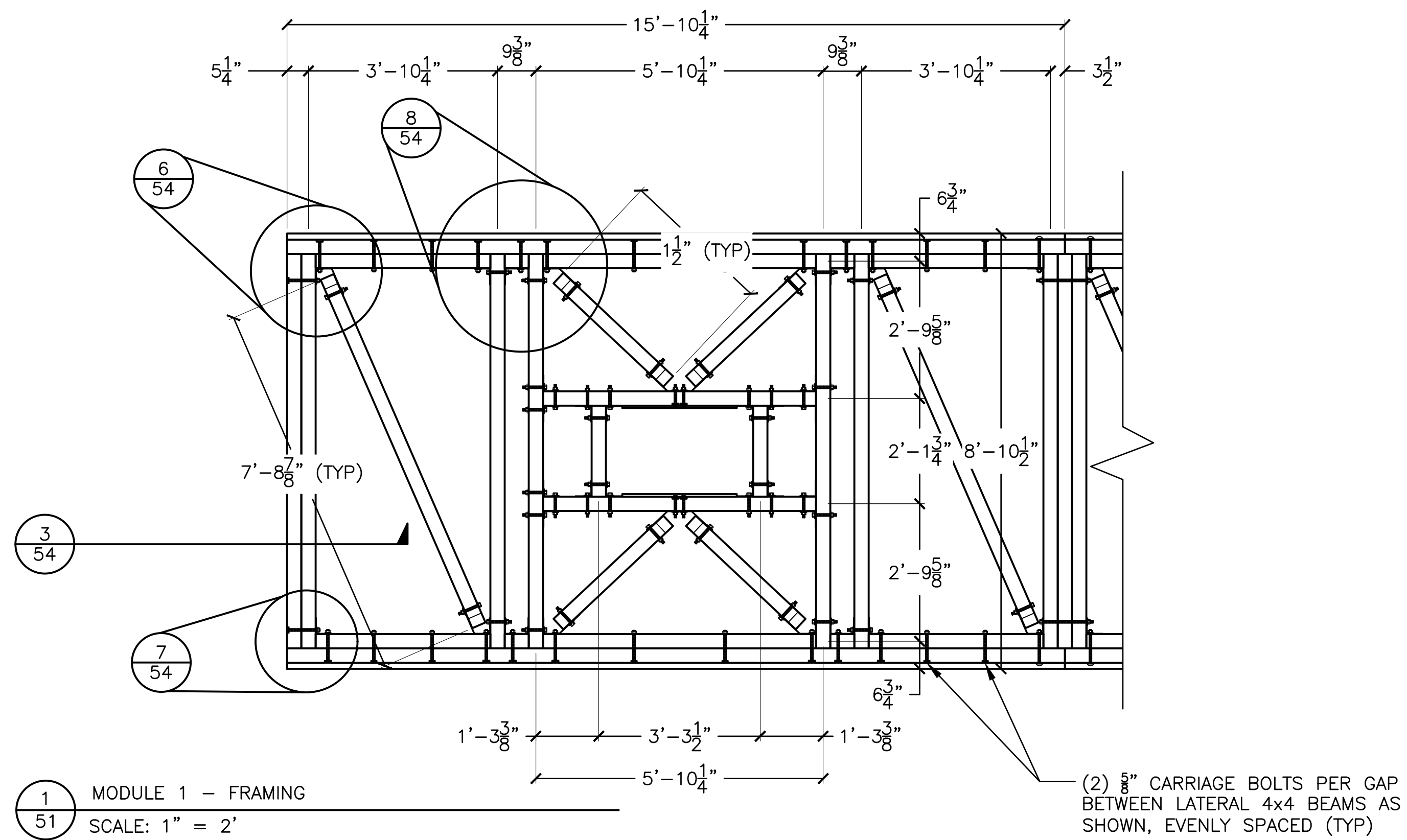
BID SET

NOBLE CONSULTANTS **GEC**

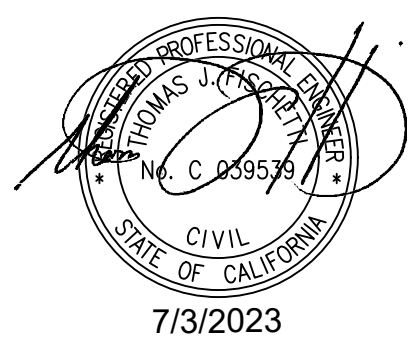
2201 DUPONT DRIVE, SUITE 830
 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 50 OF 64
DRAWN BY: JTM	110' BOARDING FLOAT PONTOON PLAN & DETAILS	JOB NO. 928-79
CHECKED BY: TJF		SCALE AS SHOWN
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



NOTE: ONLY TOP BOLTS ARE SHOWN



BID SET

NOBLE CONSULTANTS **GEC**

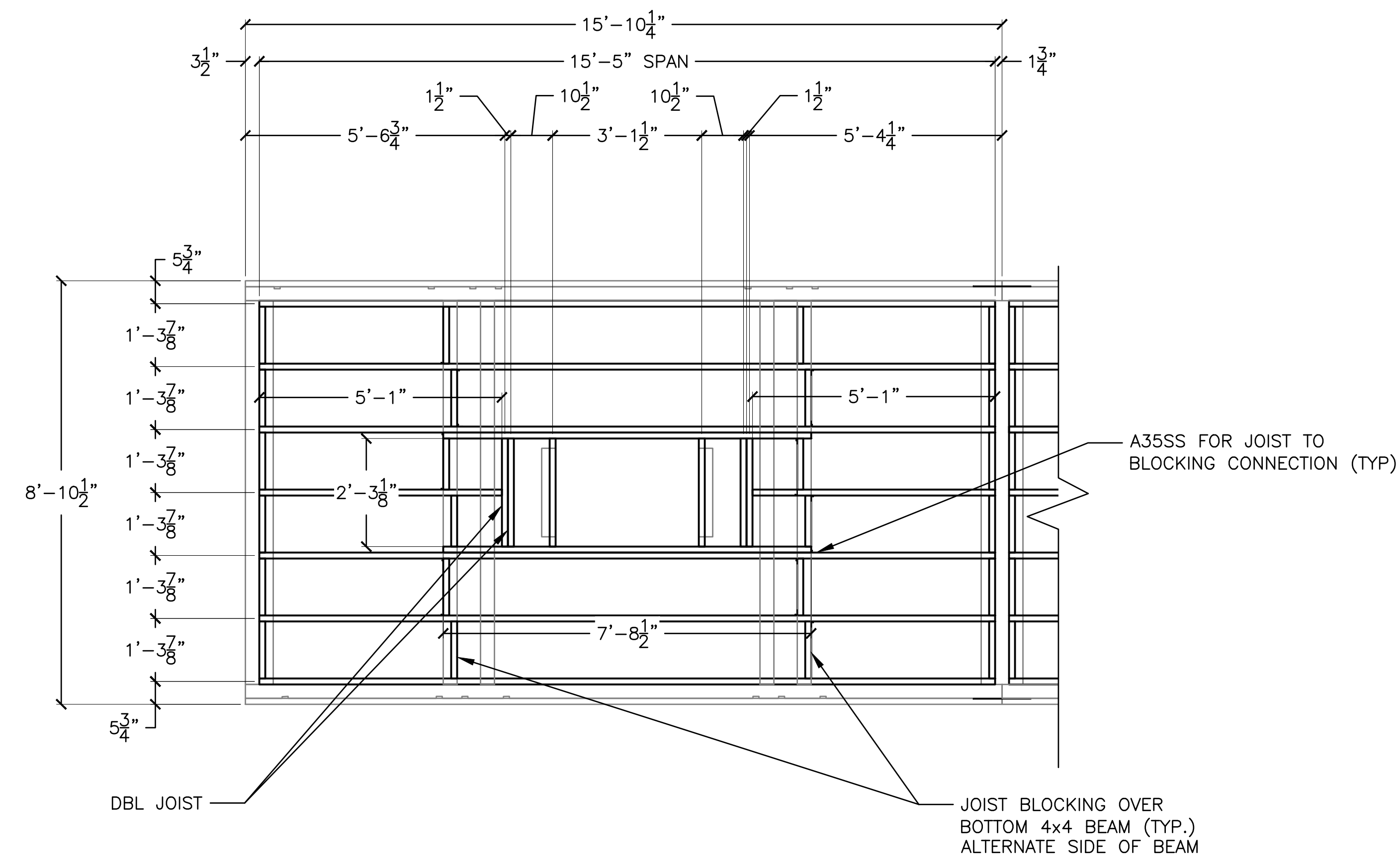
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 IRVINE, CA. 92612
 949-752-1530
 949-752-8381 (FAX)

NO.	DATE	REVISION

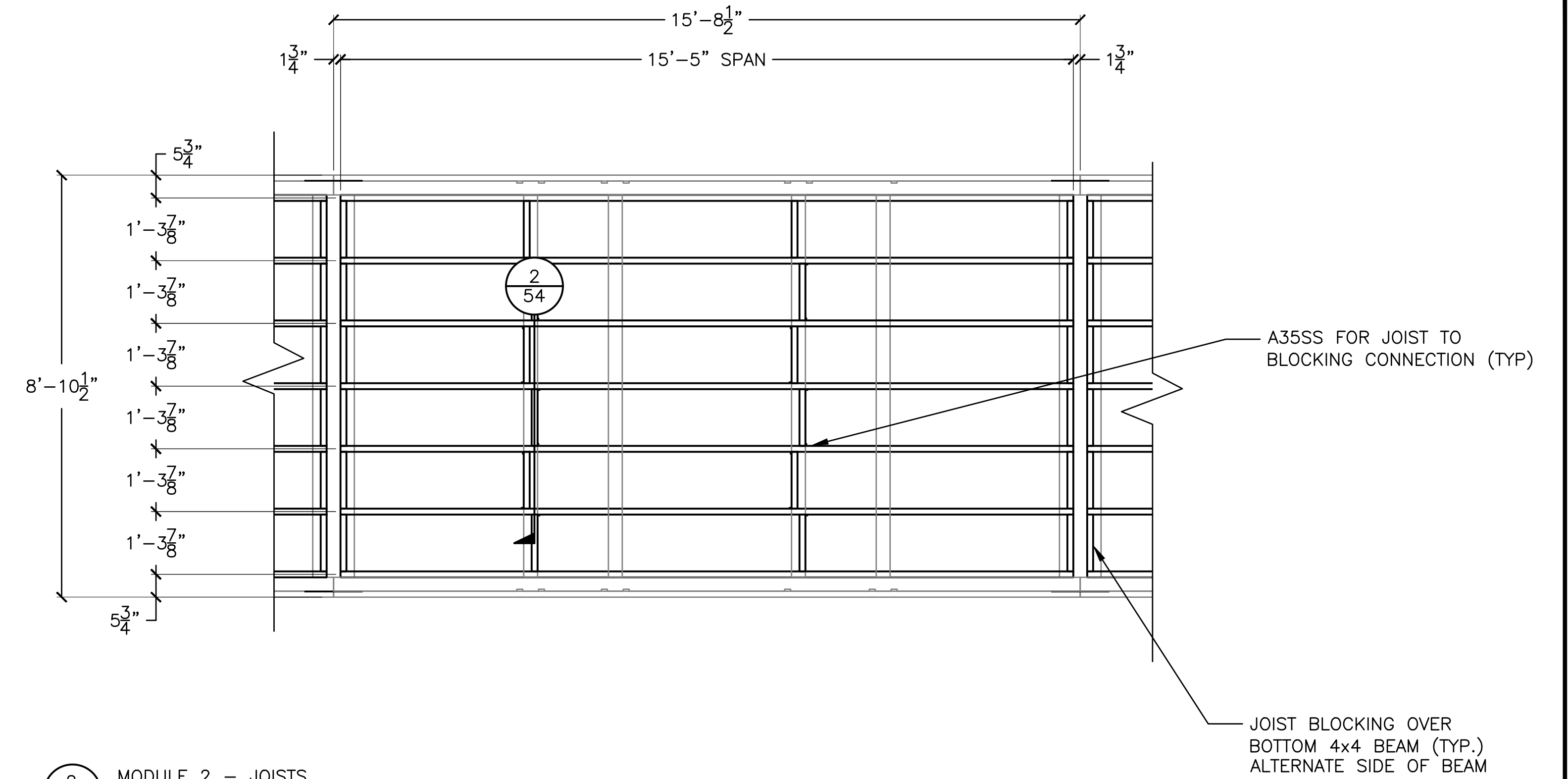
DESIGNED BY JTM
 DRAWN BY JTM
 CHECKED BY TJF
 APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
 110' BOARDING FLOAT FRAMING DETAILS
 MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

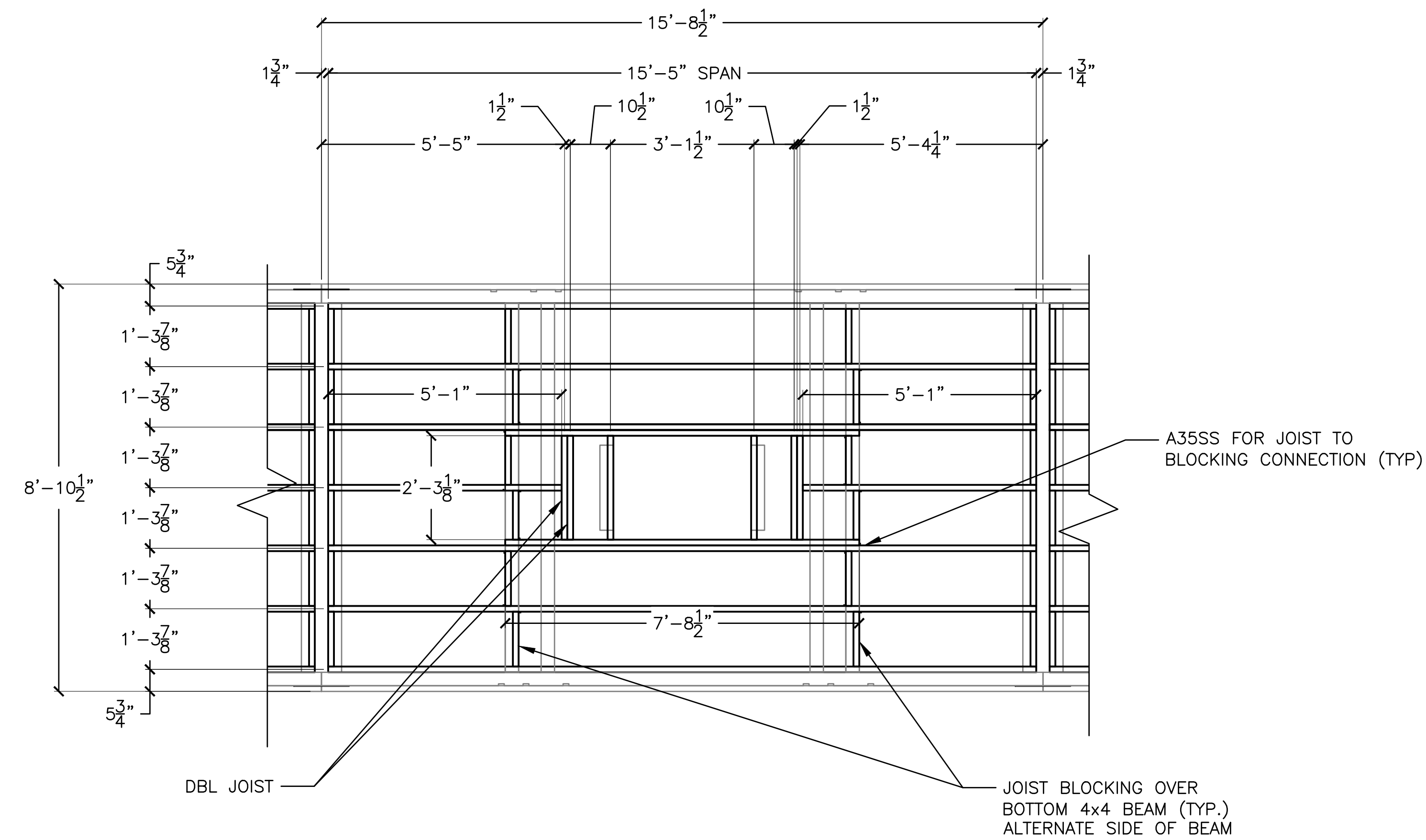
SHEET 51 OF 64
 JOB NO. 928-79
 SCALE 1" = 2'-0"
 DATE 23 JUL 2023



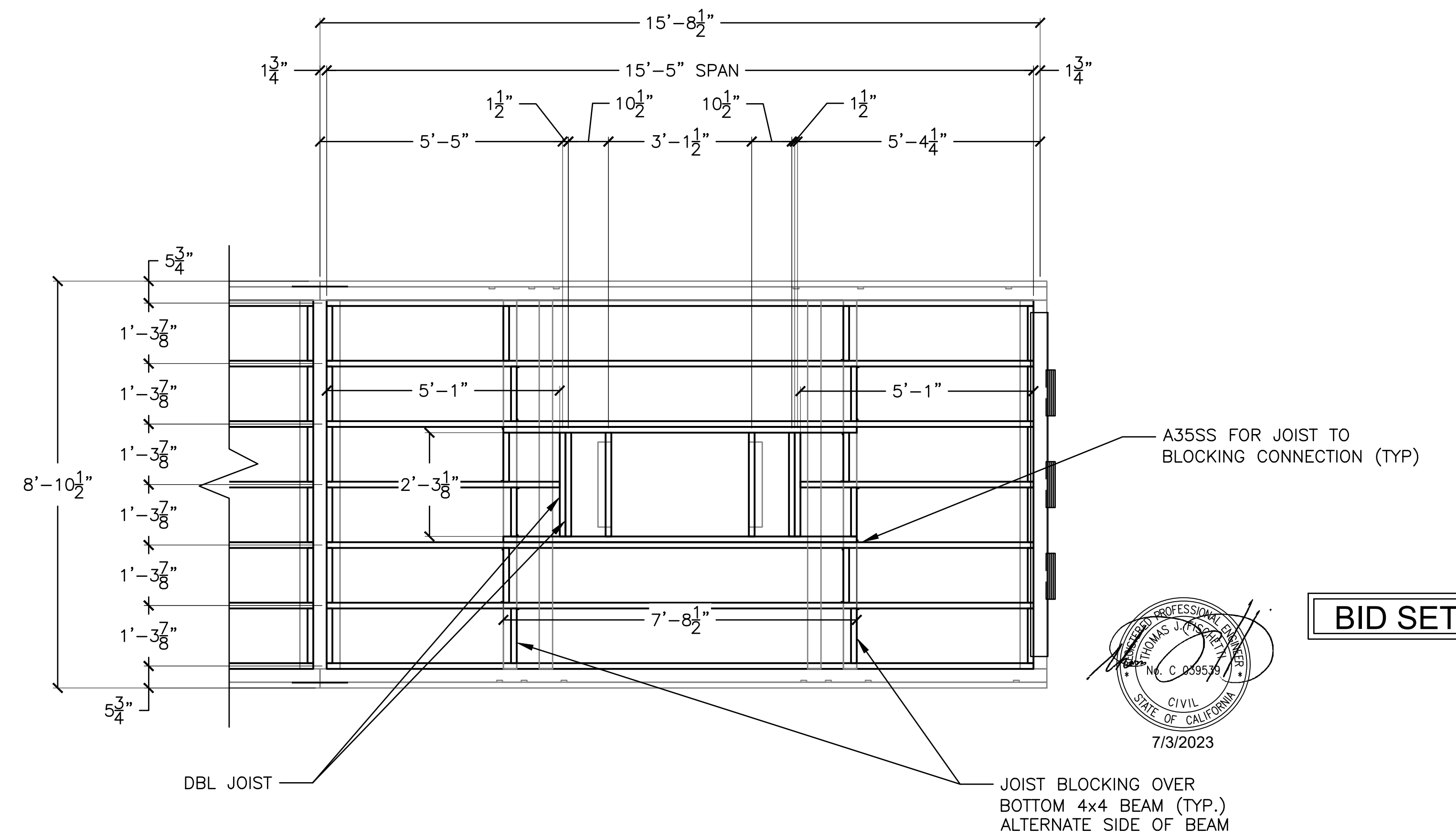
1
52 MODULE 1 - JOISTS
SCALE: 1" = 2'-0"



2
52 MODULE 2 - JOISTS
SCALE: 1" = 2'-0"



3
52 MODULE 3 - JOISTS
SCALE: 1" = 2'-0"



4
52 MODULE 4 - JOISTS
SCALE: 1" = 2'-0"



BID SET

NOTE: ALL JOISTS AND JOIST BLOCKING TO BE 2x6 BEDFORD FIBERFORCE PLASTIC



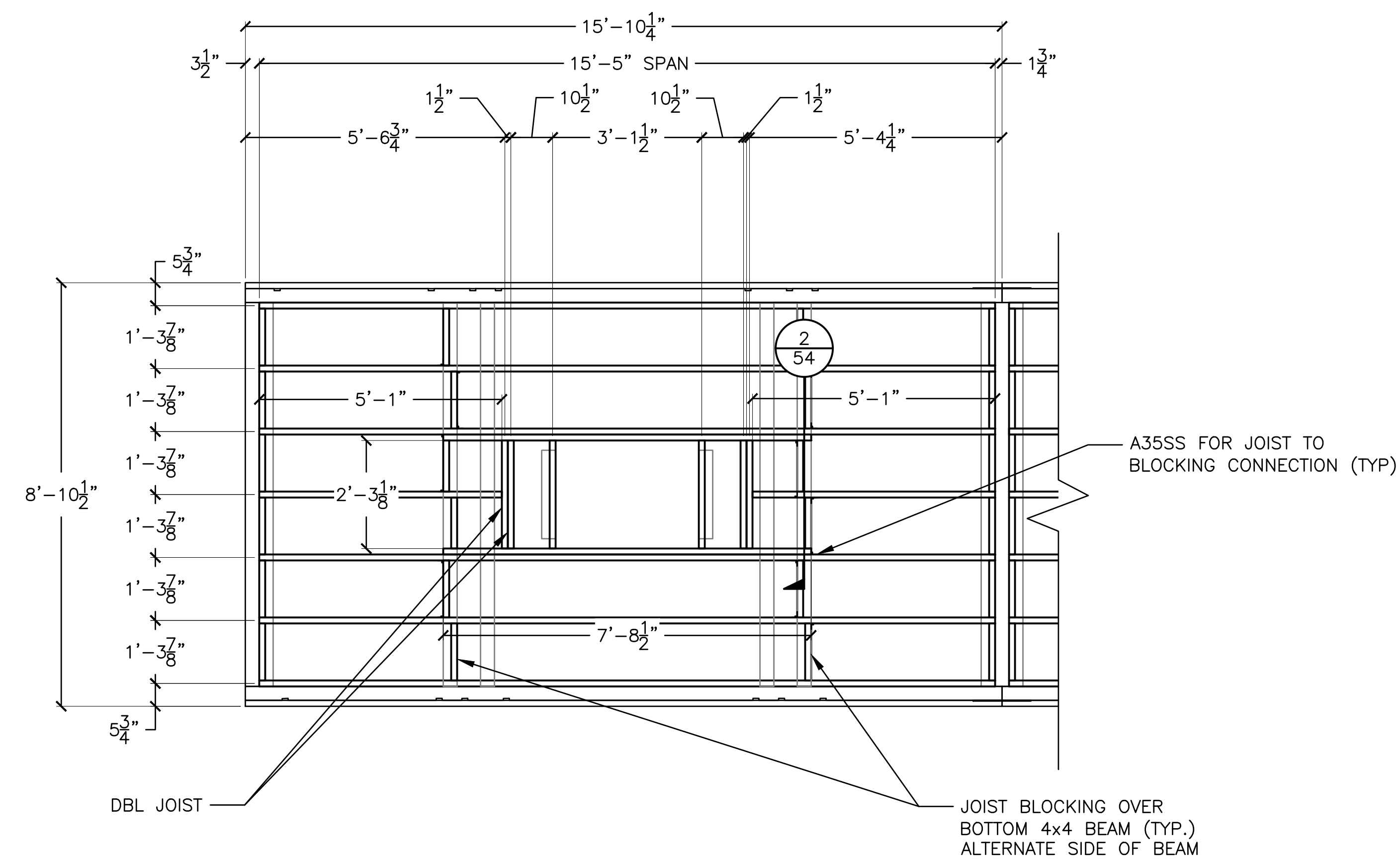
2201 DUPONT DRIVE, SUITE 830
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949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

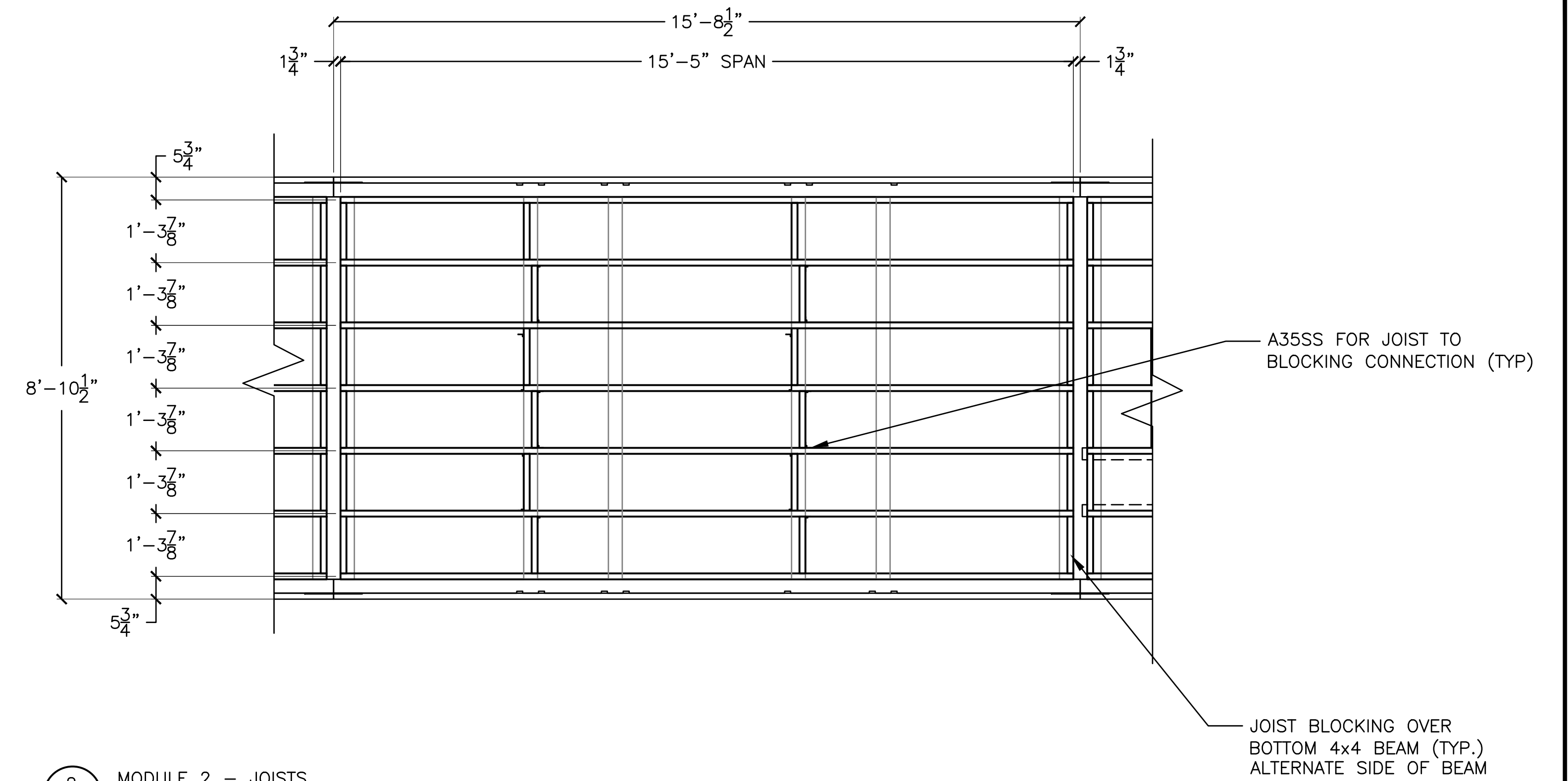
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
110' BOARDING FLOAT JOIST
DETAILS - BOARDING FLOATS 1 & 2
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

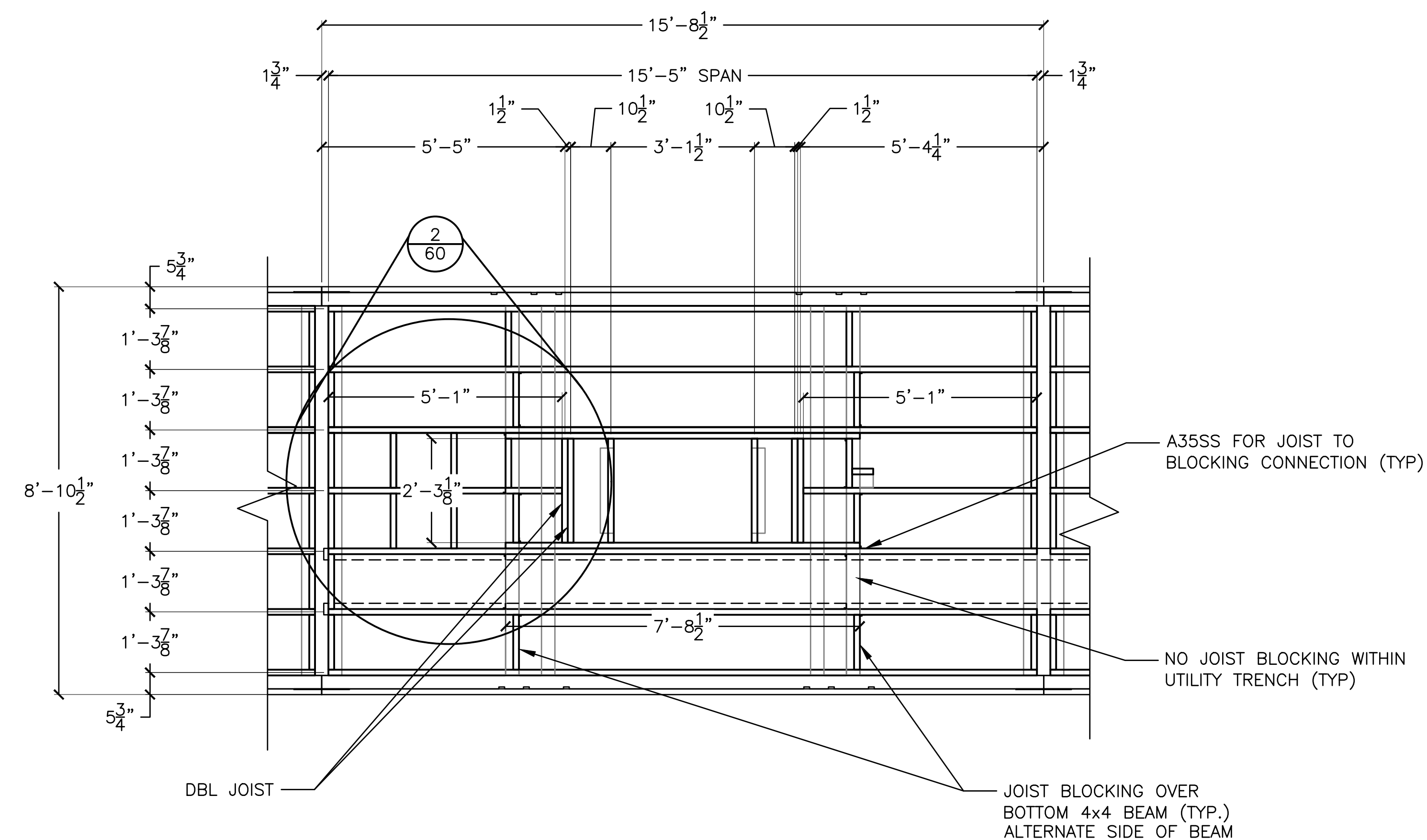
SHEET 52 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



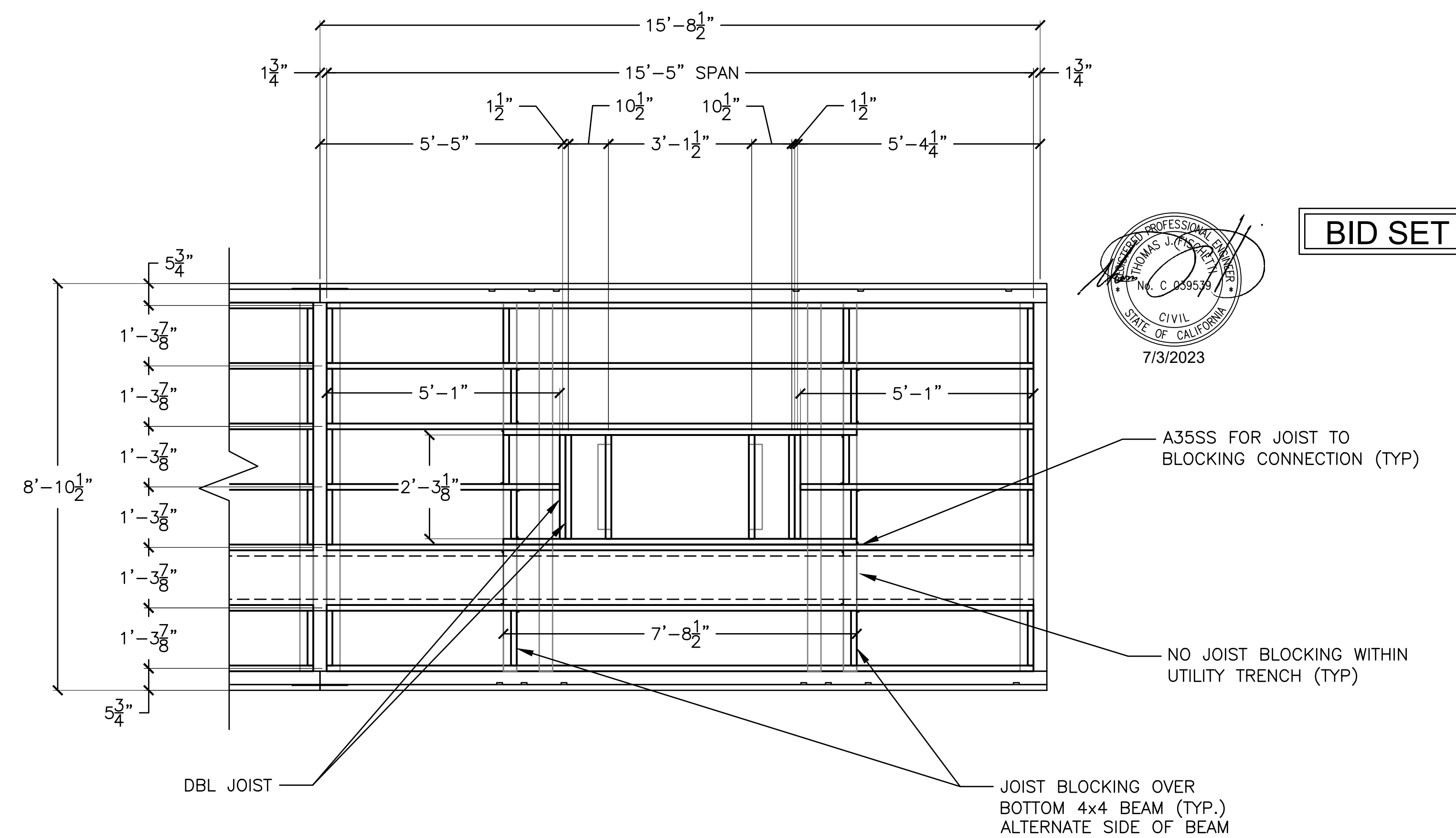
1
53 MODULE 1 - JOISTS
SCALE: 1" = 2'-0"



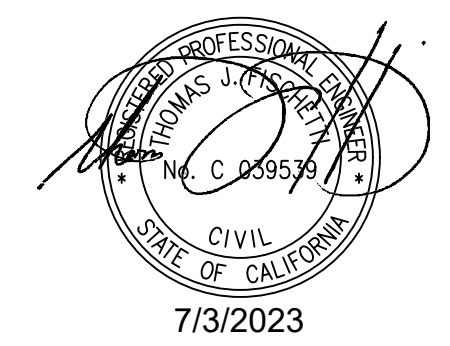
2
53 MODULE 2 - JOISTS
SCALE: 1" = 2'-0"



3
53 MODULE 3 - JOISTS
SCALE: 1" = 2'-0"



4
53 MODULE 4 - JOISTS
SCALE: 1" = 2'-0"



BID SET

NOTE:

1. ALL JOISTS AND JOIST BLOCKING TO BE 2x6 BEDFORD FIBERFORCE PLASTIC
2. BOARDING FLOAT 3 JOIST FRAMING SIMILAR TO BOARDING FLOATS 1 & 2 EXCEPT NO JOIST BLOCKING IN THE UTILITY TRENCH AND ADDITIONAL BLOCKING AT THE PUMP



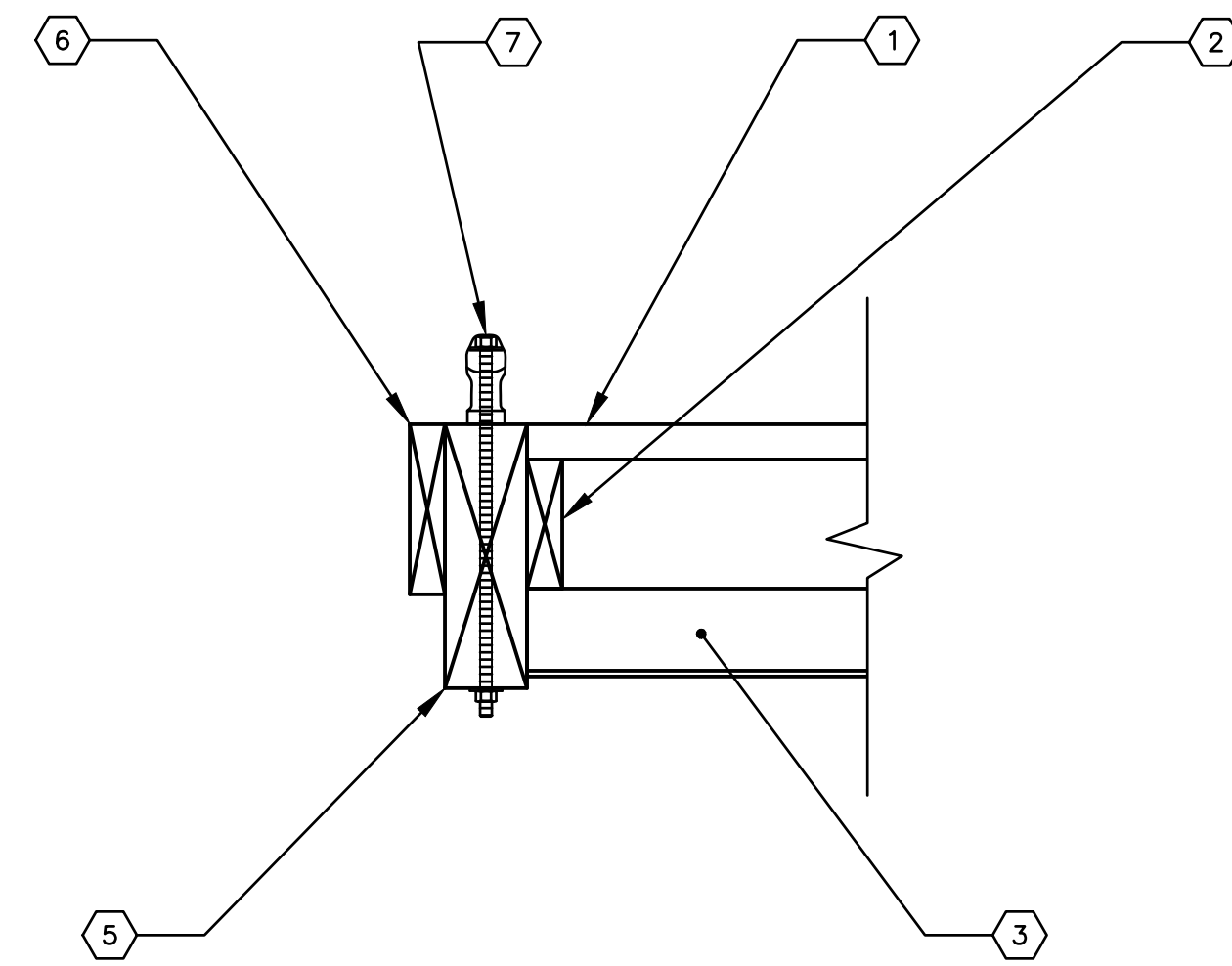
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

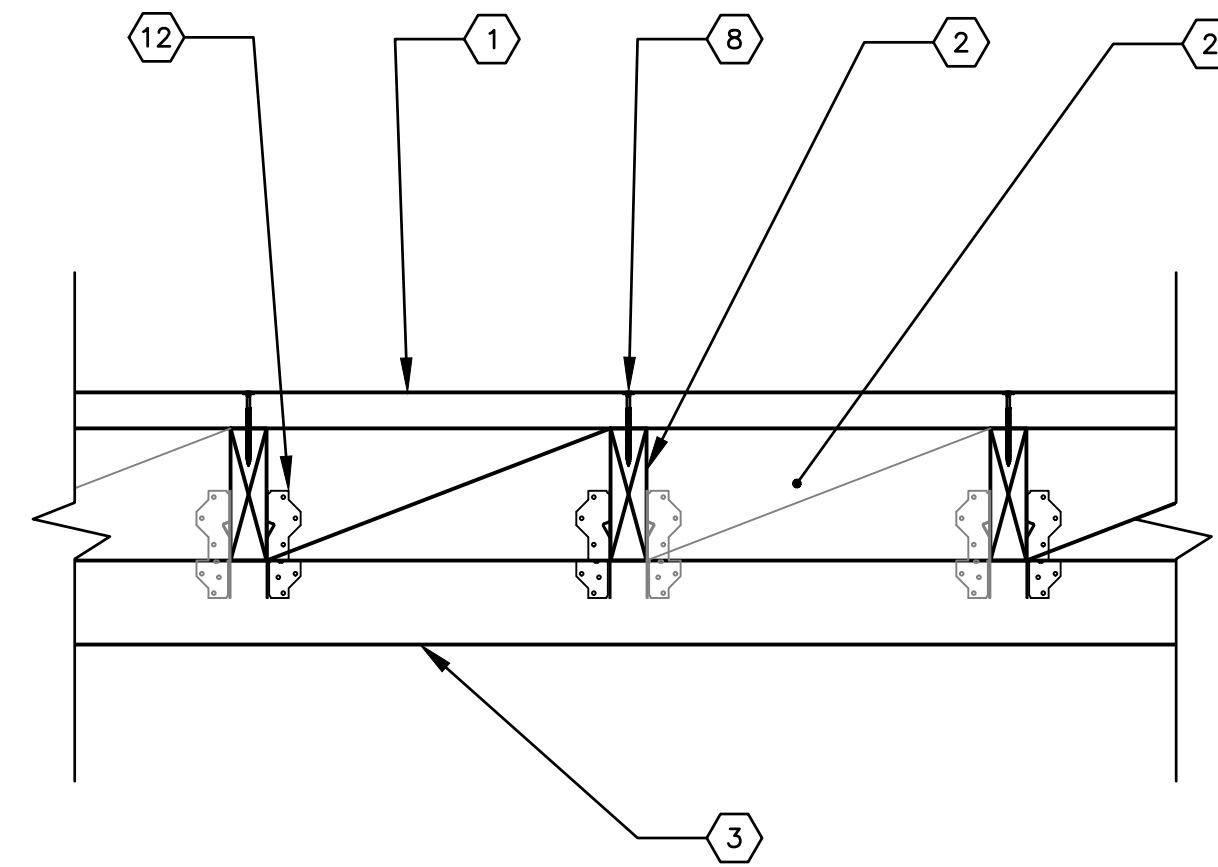
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJF
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
110' BOARDING FLOAT JOIST
DETAILS - BOARDING FLOAT 3
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 53 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023

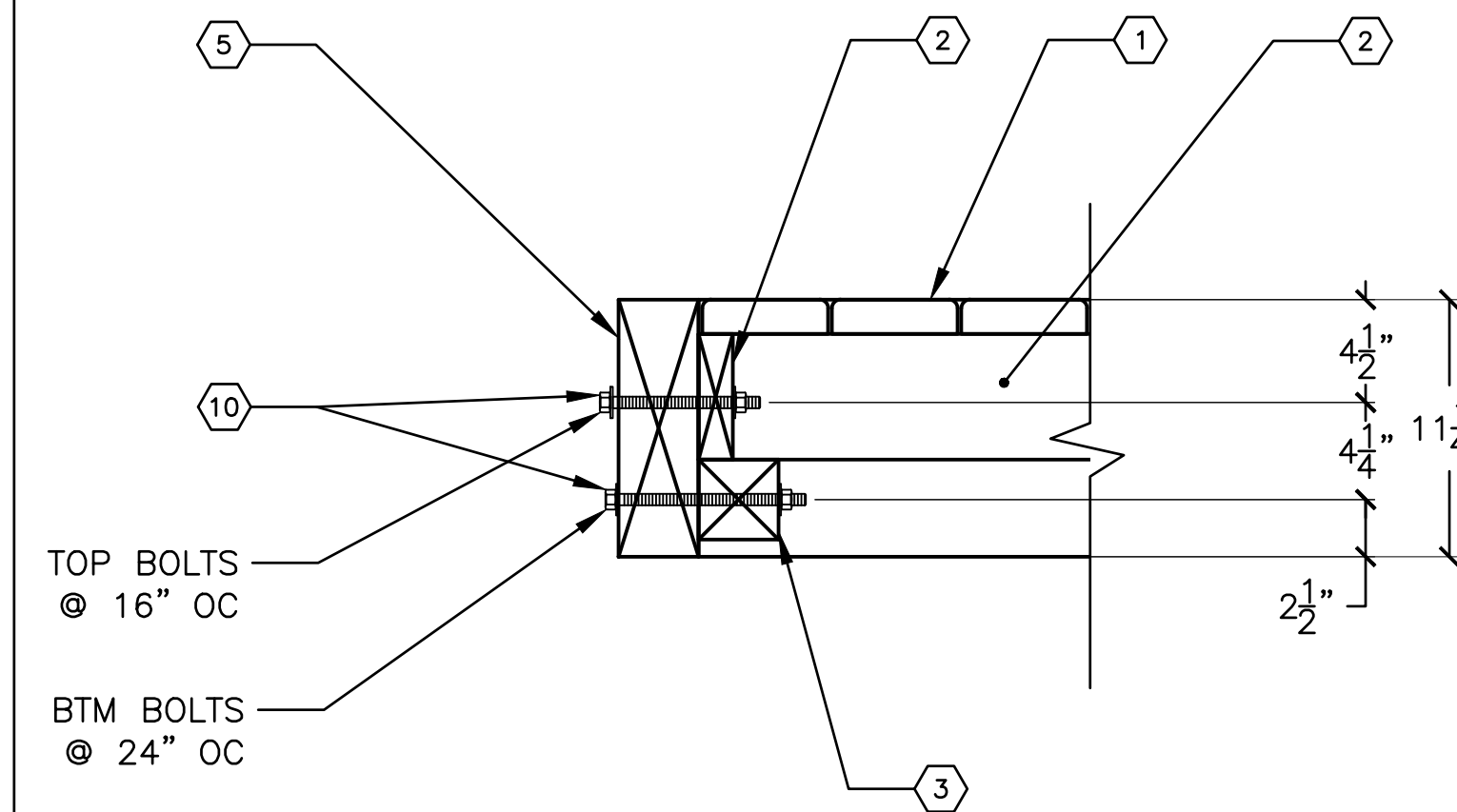


1 EDGE FRAME CONNECTION DETAIL
54 SCALE: 1-1/2" = 1'-0"



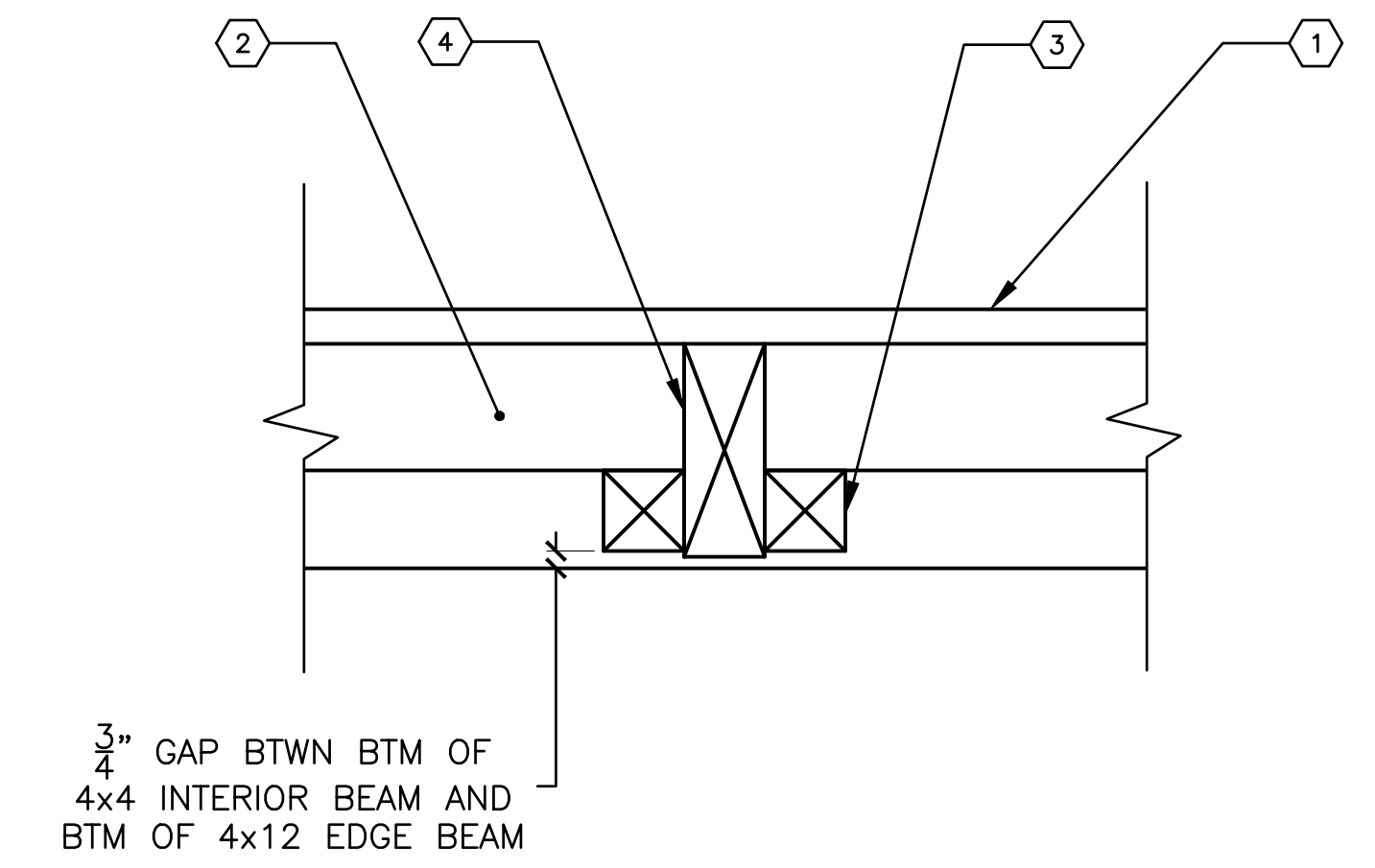
NOTES:
1. (2) A35SS PER BLOCK
2. (2) DECK SCREWS PER CONTACT

2 DECK AND JOIST CONNECTION DETAIL
54 SCALE: 1-1/2" = 1'-0"



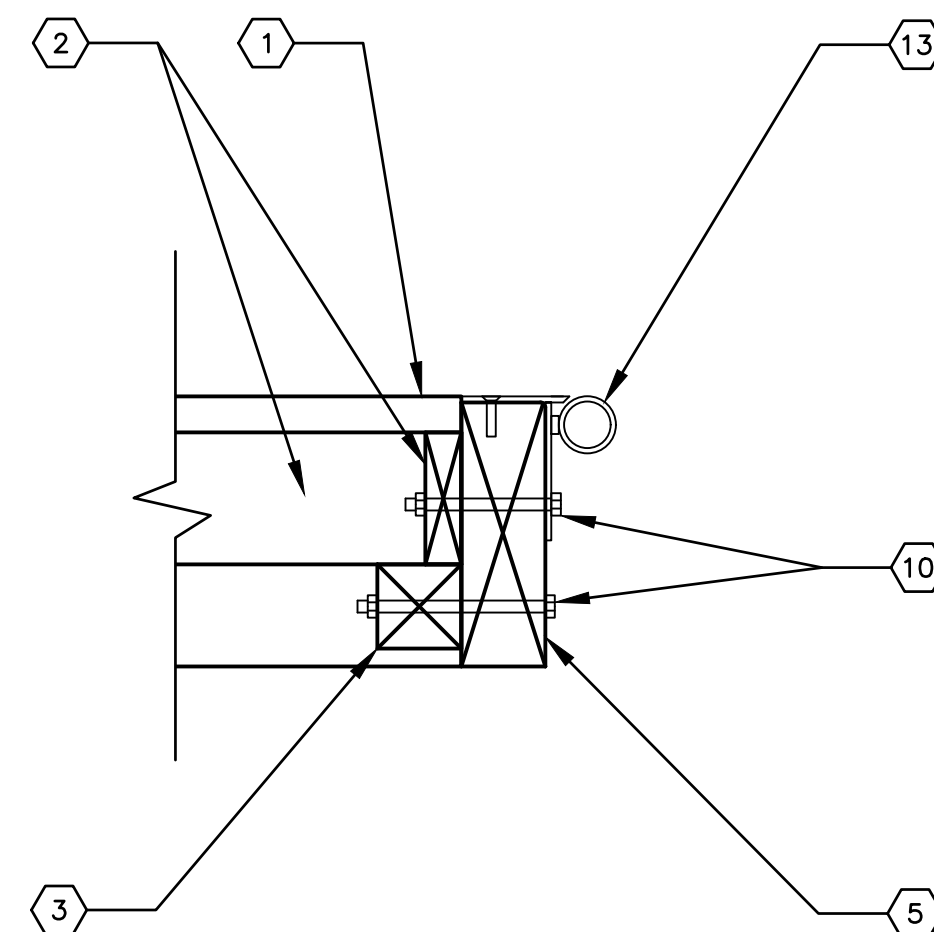
TOP BOLTS
@ 16" OC
BTM BOLTS
@ 24" OC

3 END BEAM CONNECTION DETAIL - WATERSIDE
54 SCALE: 1-1/2" = 1'-0"

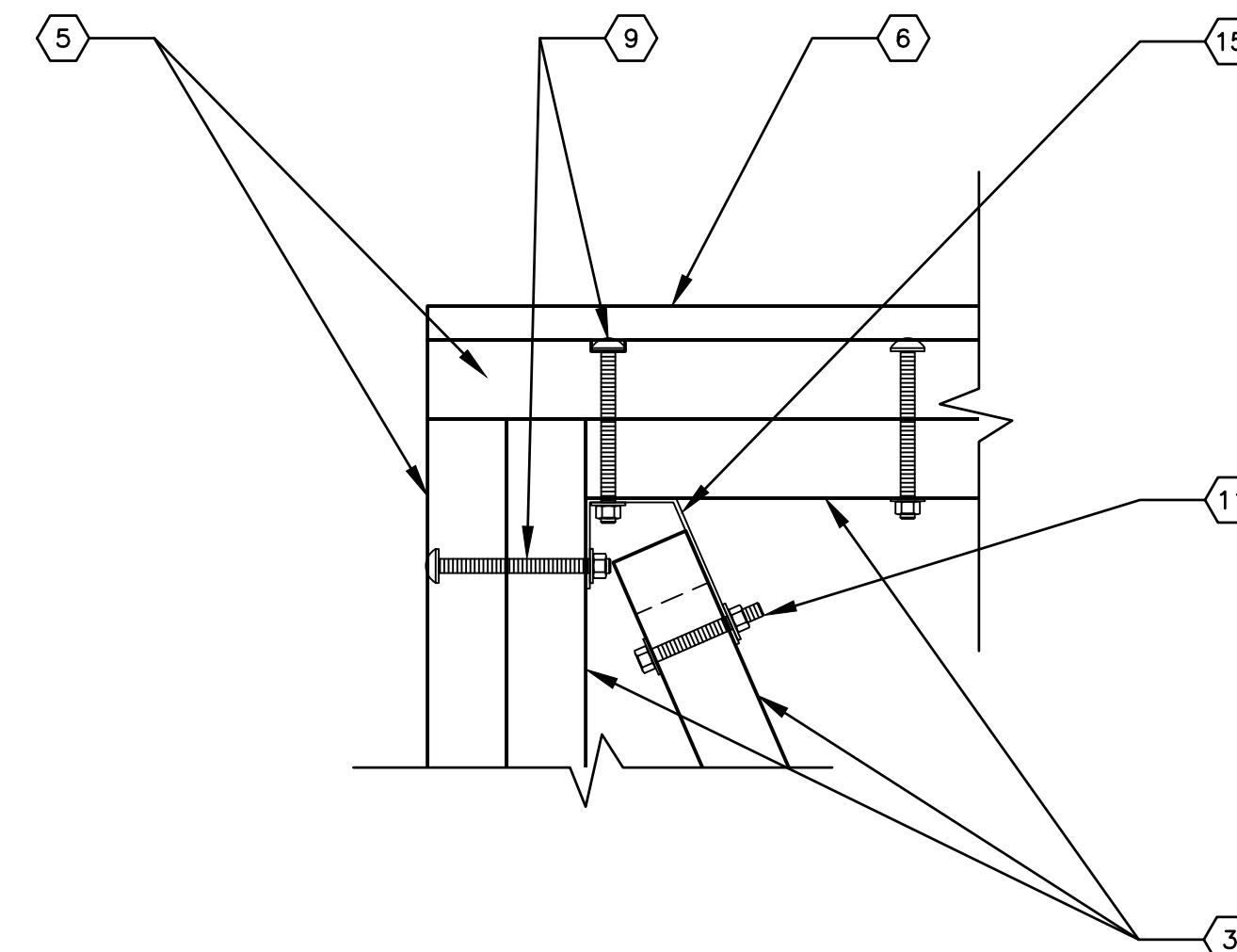


3/4" GAP BTWN BTM OF
4x4 INTERIOR BEAM AND
BTM OF 4x12 EDGE BEAM

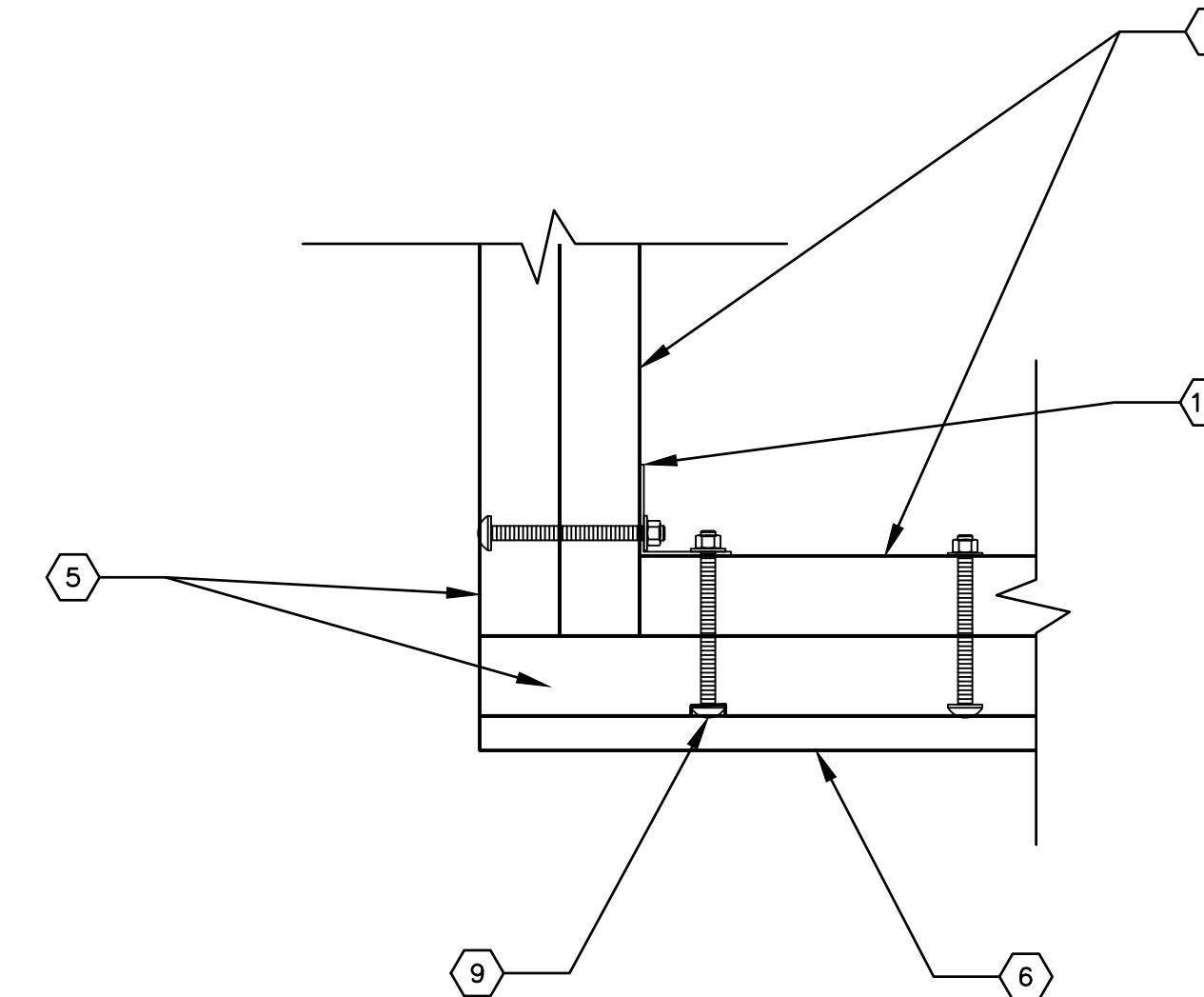
4 FRAMING CONNECTION DETAIL - INTERNAL BEAM
54 SCALE: 1-1/2" = 1'-0"



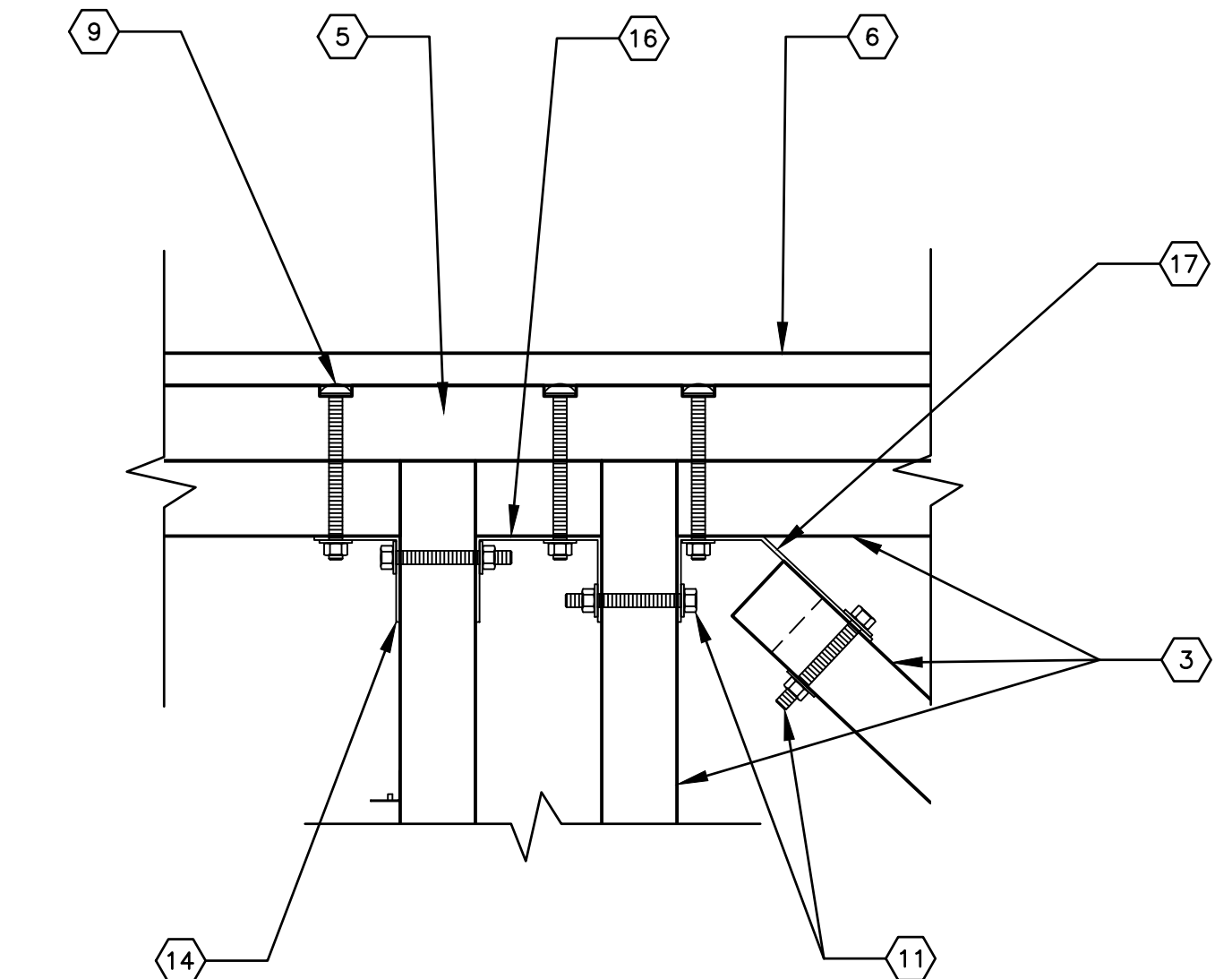
5 END BEAM CONNECTION DETAIL - LANDSIDE
54 SCALE: 1-1/2" = 1'-0"



6 FRAMING CONNECTION DETAIL
54 SCALE: 1-1/2" = 1'-0"



7 FRAMING CONNECTION DETAIL
54 SCALE: 1-1/2" = 1'-0"



8 FRAMING CONNECTION DETAIL
54 SCALE: 1-1/2" = 1'-0"

FRAMING SCHEDULE

1. 2x6 PT DF DECKING
2. 2x6 BEDFORD FIBERFORCE PLASTIC JOISTS AND JOIST BLOCKING
3. 4x4 BEDFORD BARFORCE PLASTIC BOTTOM BEAM, BEAM BLOCKING, AND BRACING
4. 4x10 BEDFORD BARFORCE PLASTIC INTERIOR BEAM
5. 4x12 BEDFORD BARFORCE PLASTIC PERIMETER BEAM
6. 2x8 BEDFORD FIBERFORCE PLASTIC EDGE BUMPER BOARD
7. 12" HOT DIPPED GALVANIZED IRON HEX HEAD DOCK CLEAT BOLTED WITH 1/2" MB (316SS)
8. #10 x 3 IN SS DECK SCREWS
9. 5/8" SS CARRIAGE BOLT (TYP AT EDGES OF BOARDING FLOAT)
10. 1/2" SS CARRIAGE BOLT (TYP AT END OF BOARDING FLOAT)
11. 5/8" SS THRU BOLT (TYP AT BOARDING FLOAT INTERIOR)
12. A35SS ANGLE

13. FRAMING HARDWARE (1/61)
14. FRAMING HARDWARE (1/62)
15. FRAMING HARDWARE (3/62)
16. FRAMING HARDWARE (4/62)
17. FRAMING HARDWARE (6/62)



BID SET



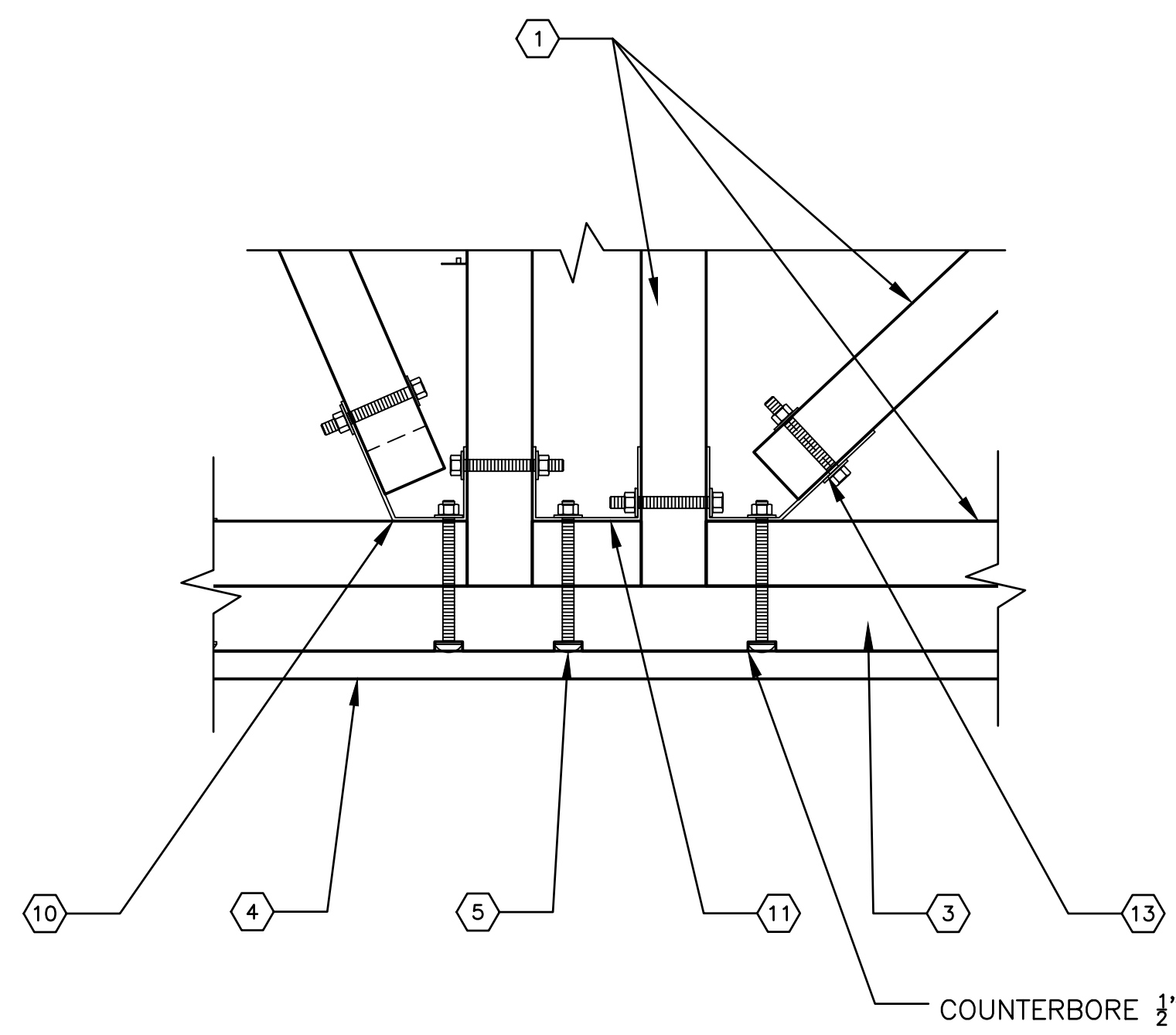
2201 DUPONT DRIVE, SUITE 830
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949-752-1530
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NO.	DATE	REVISION

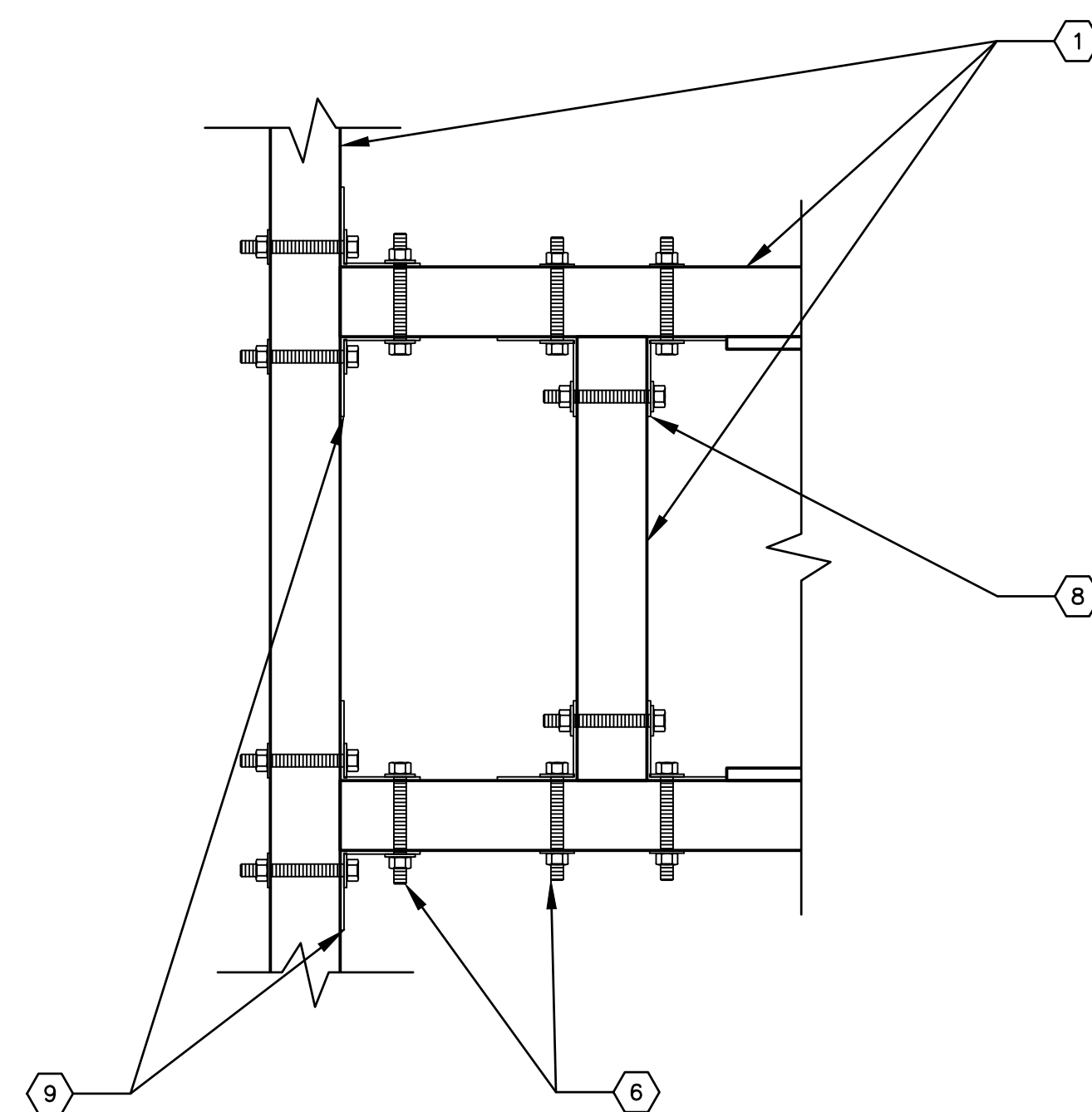
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DRAWN BY JTM
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APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
110' BOARDING FLOAT DETAILS - 1
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

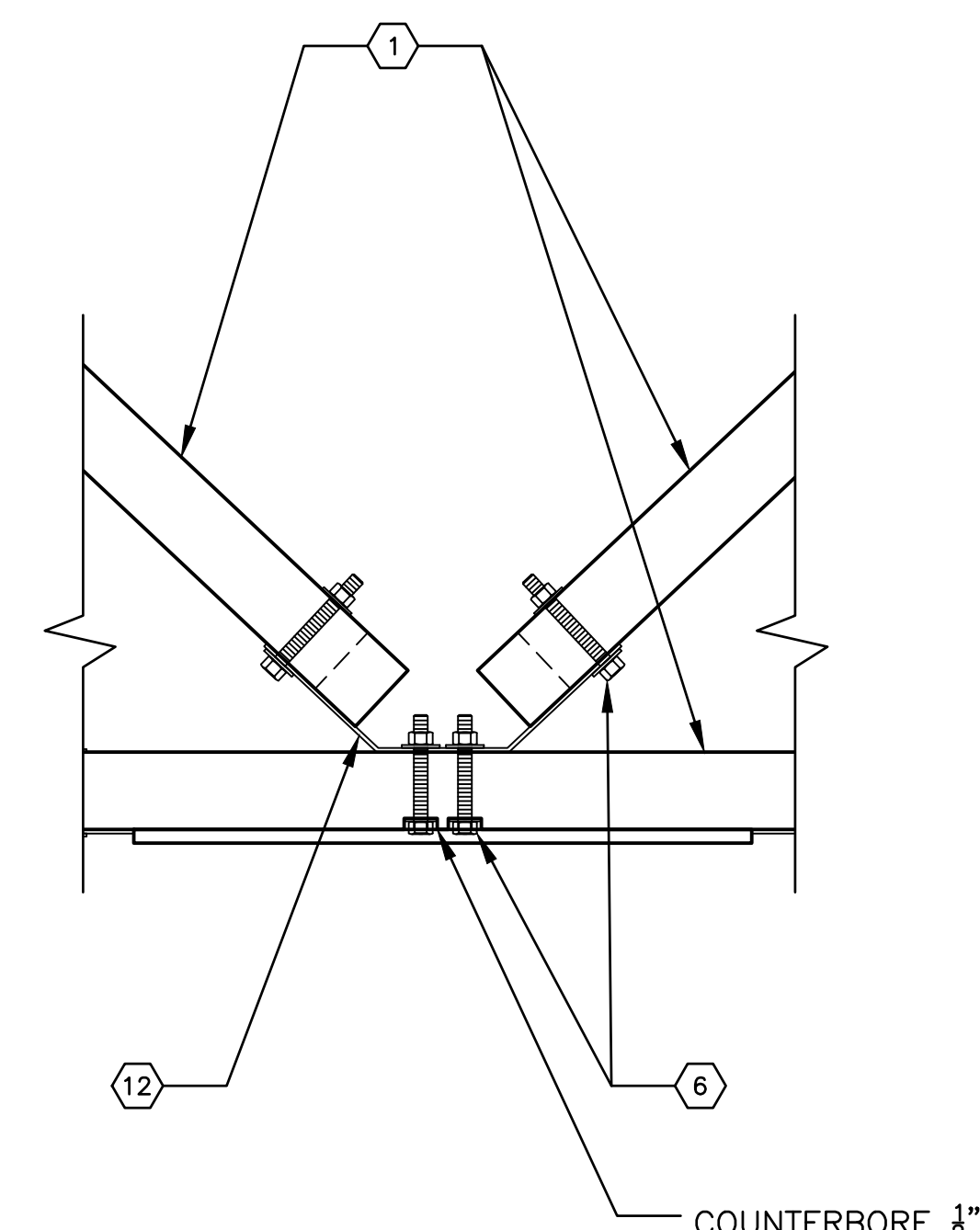
SHEET 54 OF 64
JOB NO. 928-79
SCALE 1-1/2"=1'-0"
DATE 23 JUL 2023



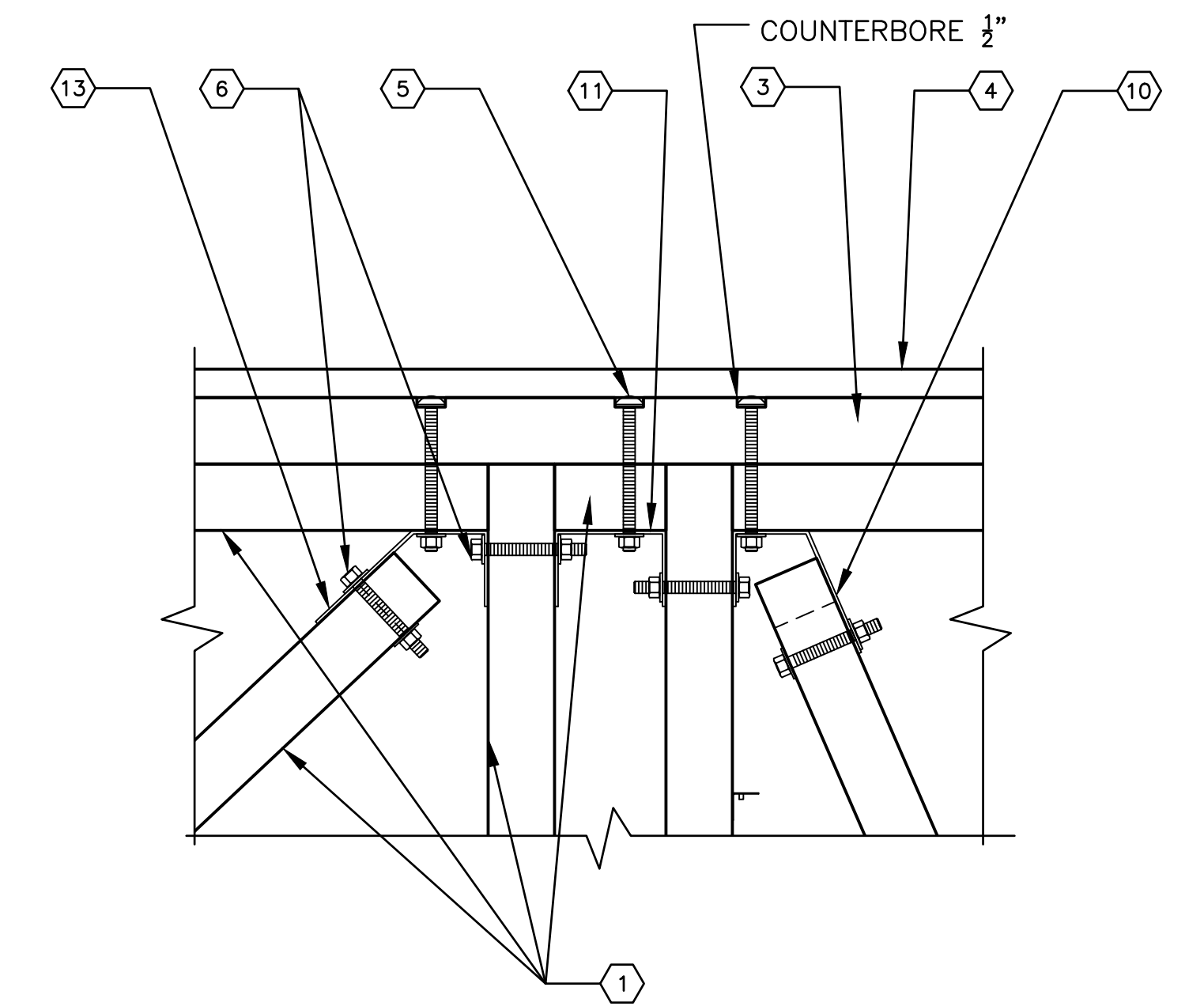
1 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



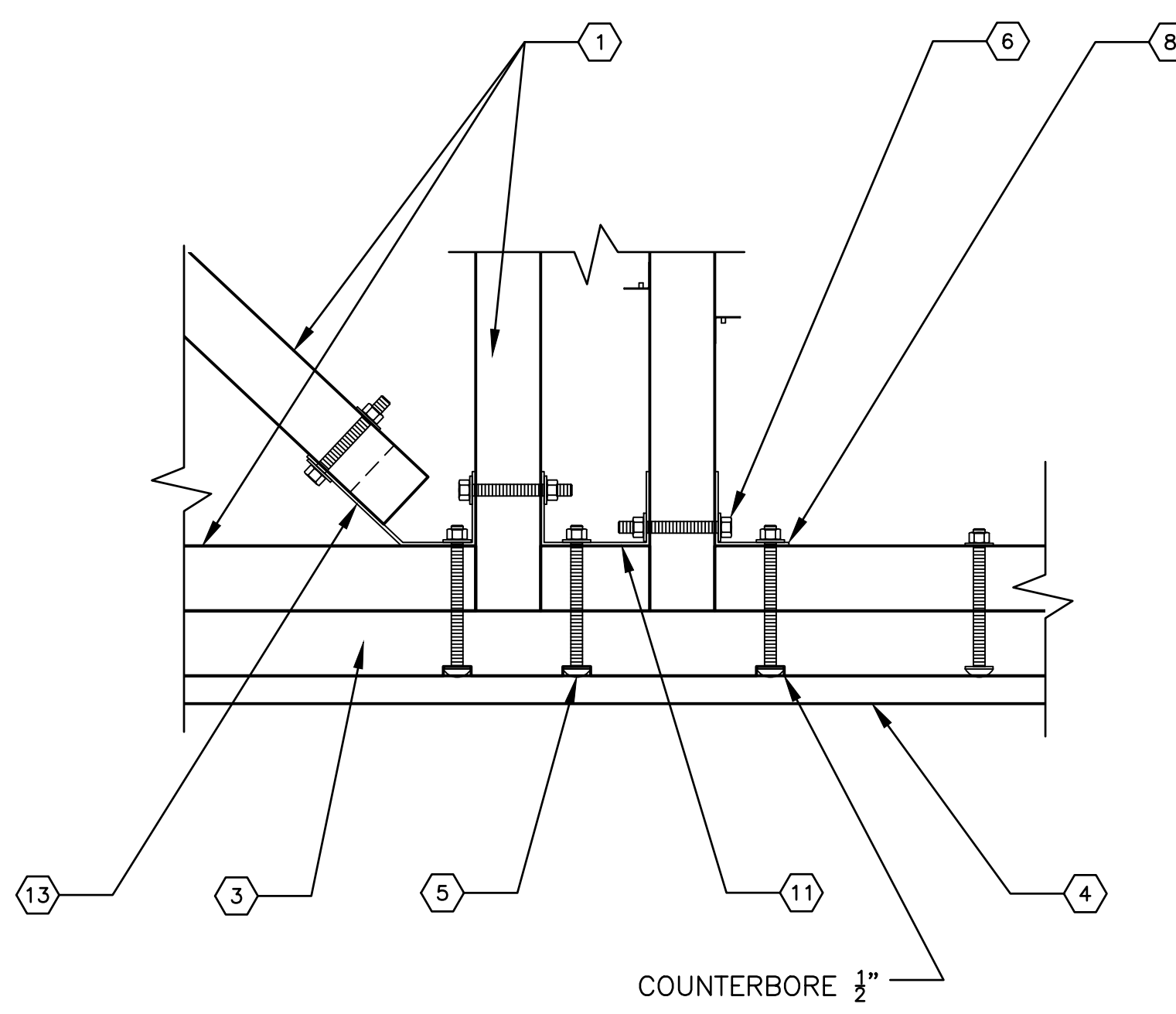
2 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



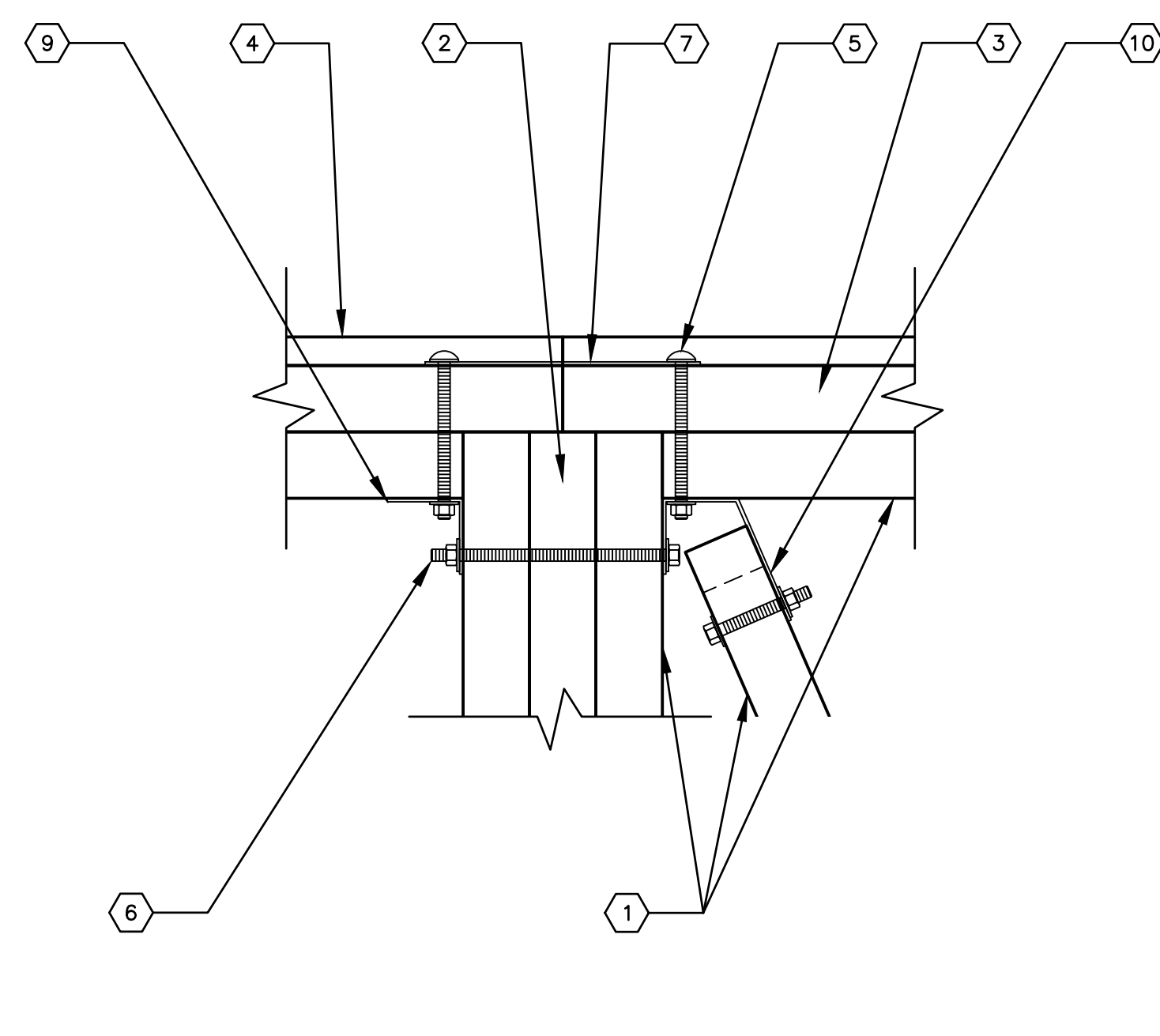
3 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



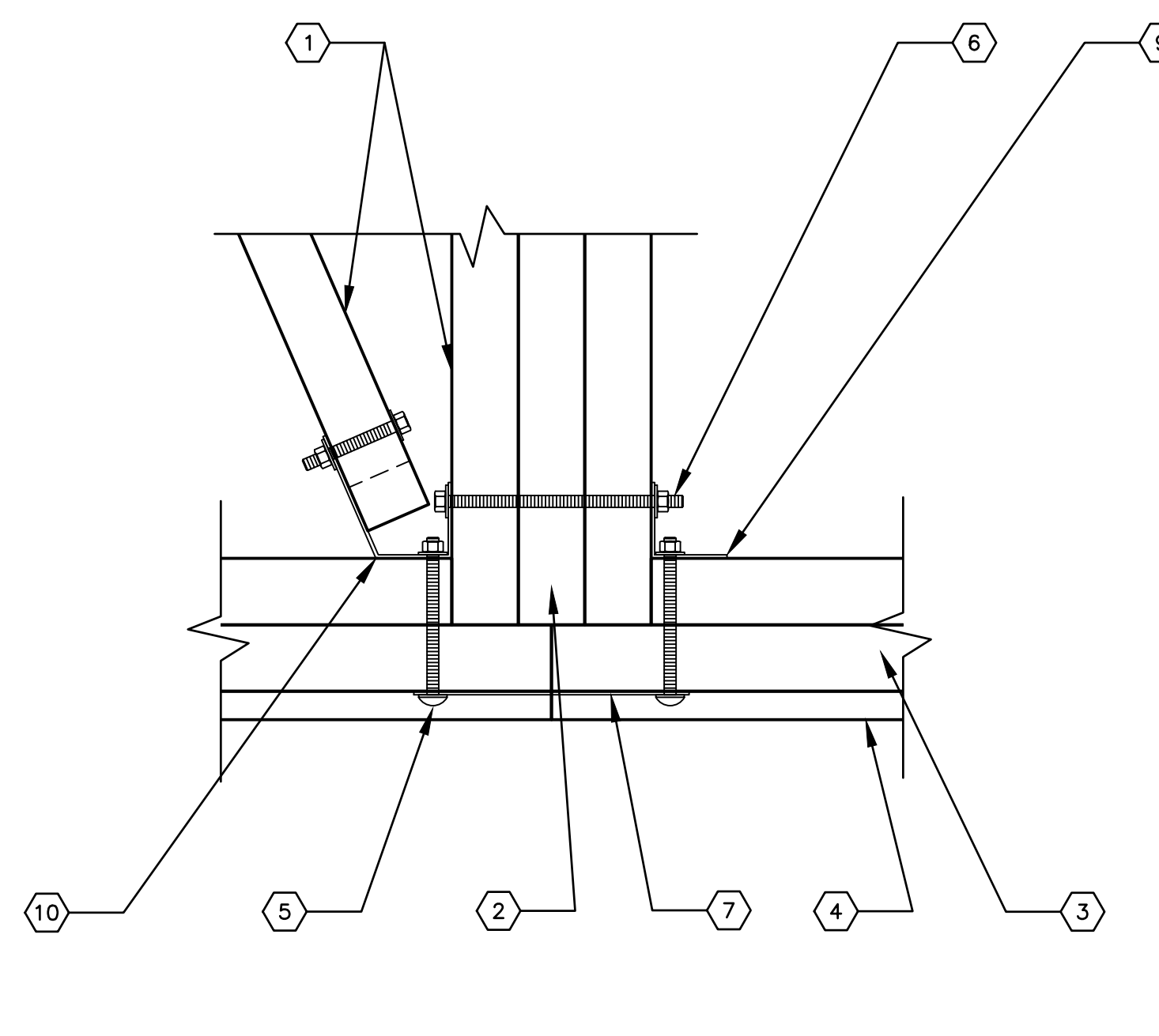
4 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



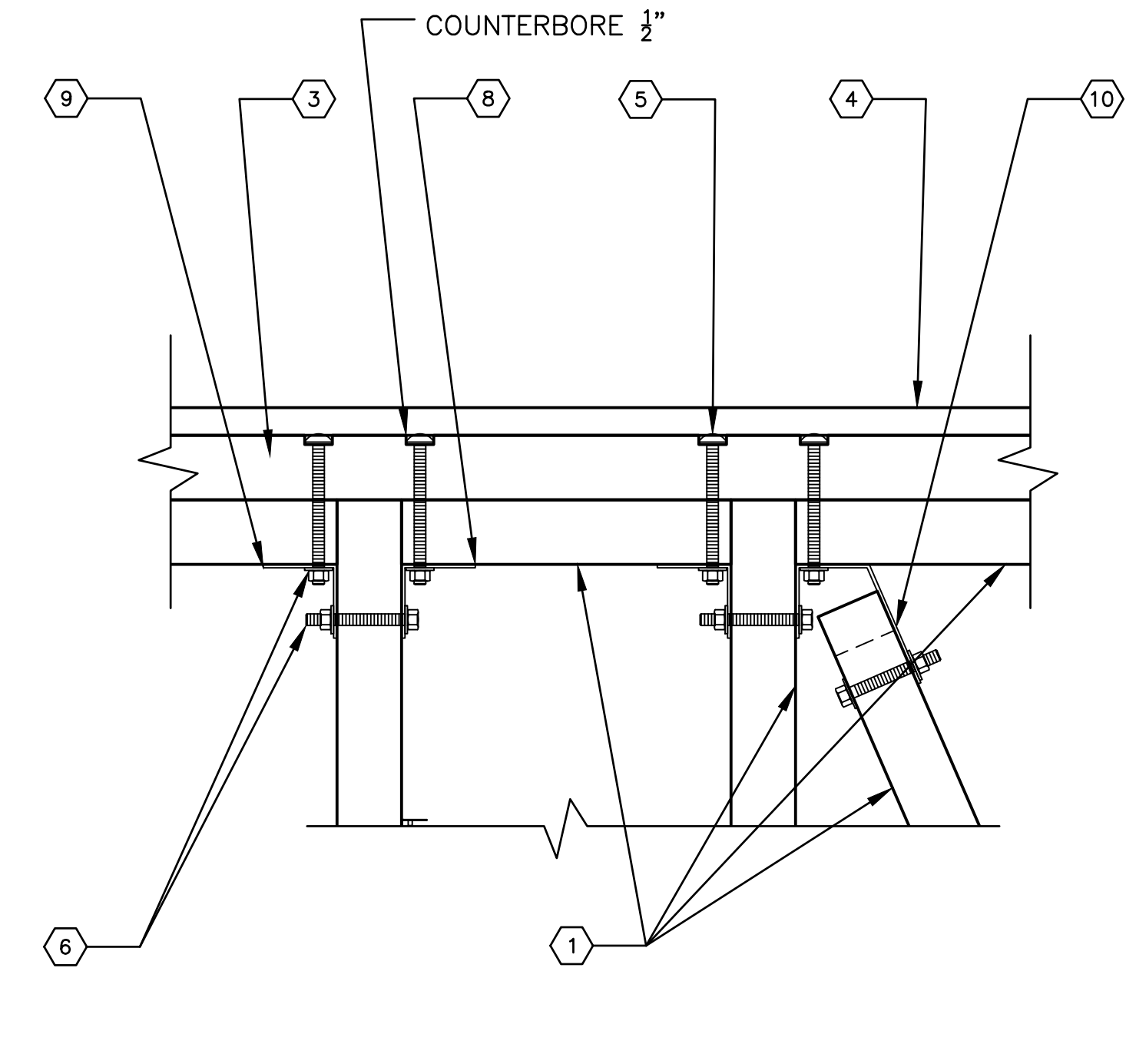
5 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



6 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



7 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"



8 FRAMING CONNECTION DETAIL
55 SCALE: 1-1/2" = 1'-0"

FRAMING SCHEDULE

- 1. 4x4 BEDFORD BARFORCE PLASTIC BOTTOM BEAM, BEAM BLOCKING, AND BRACING
- 2. 4x10 BEDFORD BARFORCE PLASTIC INTERIOR BEAM
- 3. 4x12 BEDFORD BARFORCE PLASTIC PERIMETER BEAM
- 4. 2x8 BEDFORD FIBERFORCE PLASTIC EDGE BUMPER BOARD
- 5. 5/8" SS CARRIAGE BOLT (TYP AT EDGES OF BOARDING FLOAT)
- 6. 5/8" SS THRU BOLT (TYP AT BOARDING FLOAT INTERIOR)
- 7. 3/16"x31/2"x141/2"L SS SPLICE PLATE
- 8. FRAMING HARDWARE

- 9. FRAMING HARDWARE
- 10. FRAMING HARDWARE
- 11. FRAMING HARDWARE
- 12. FRAMING HARDWARE
- 13. FRAMING HARDWARE

2
62

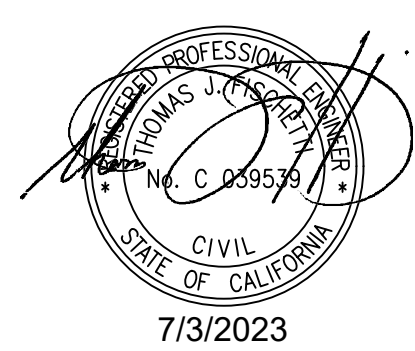
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62

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62

6
62

1
62



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NO.	DATE	REVISION

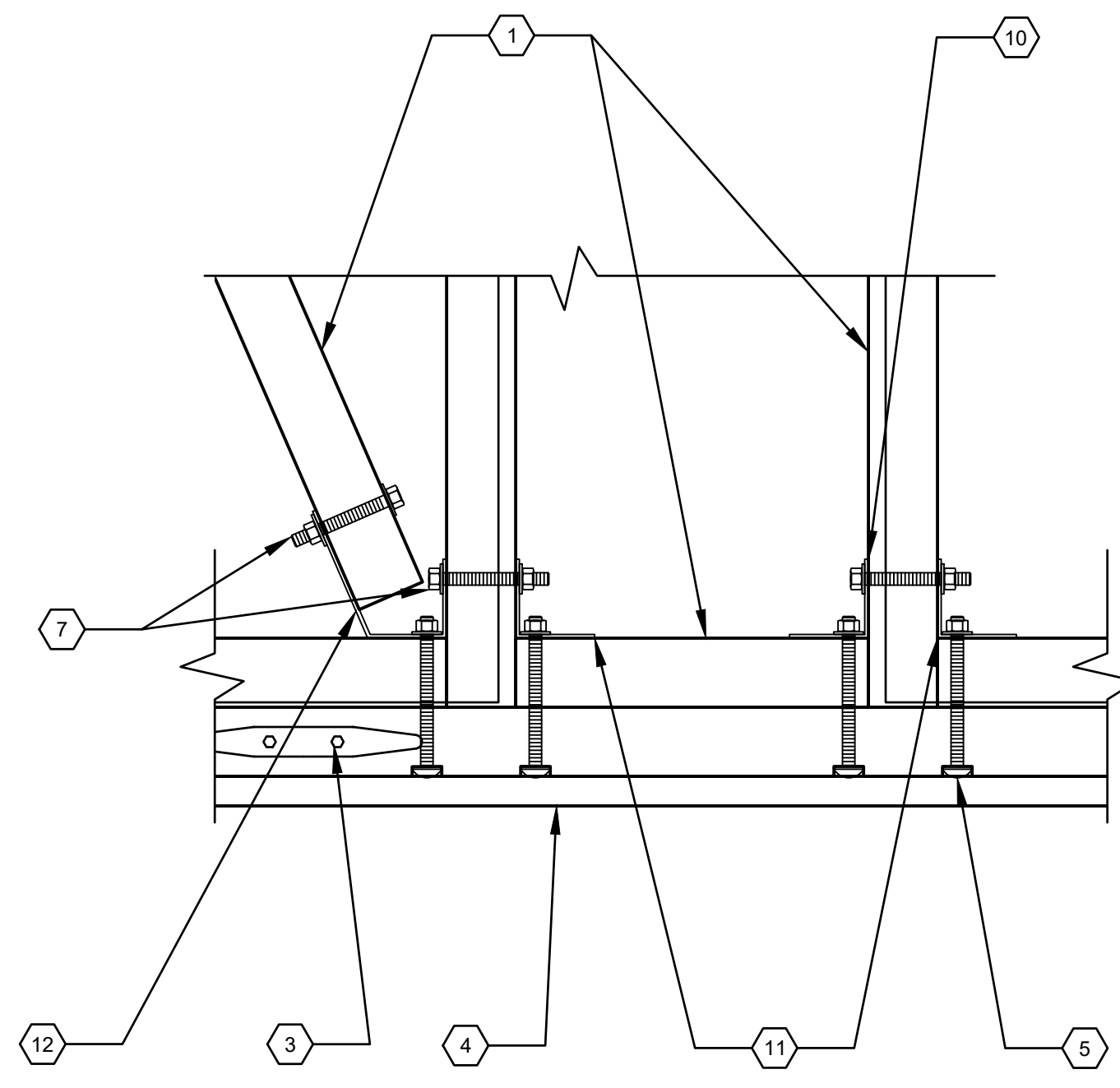
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DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

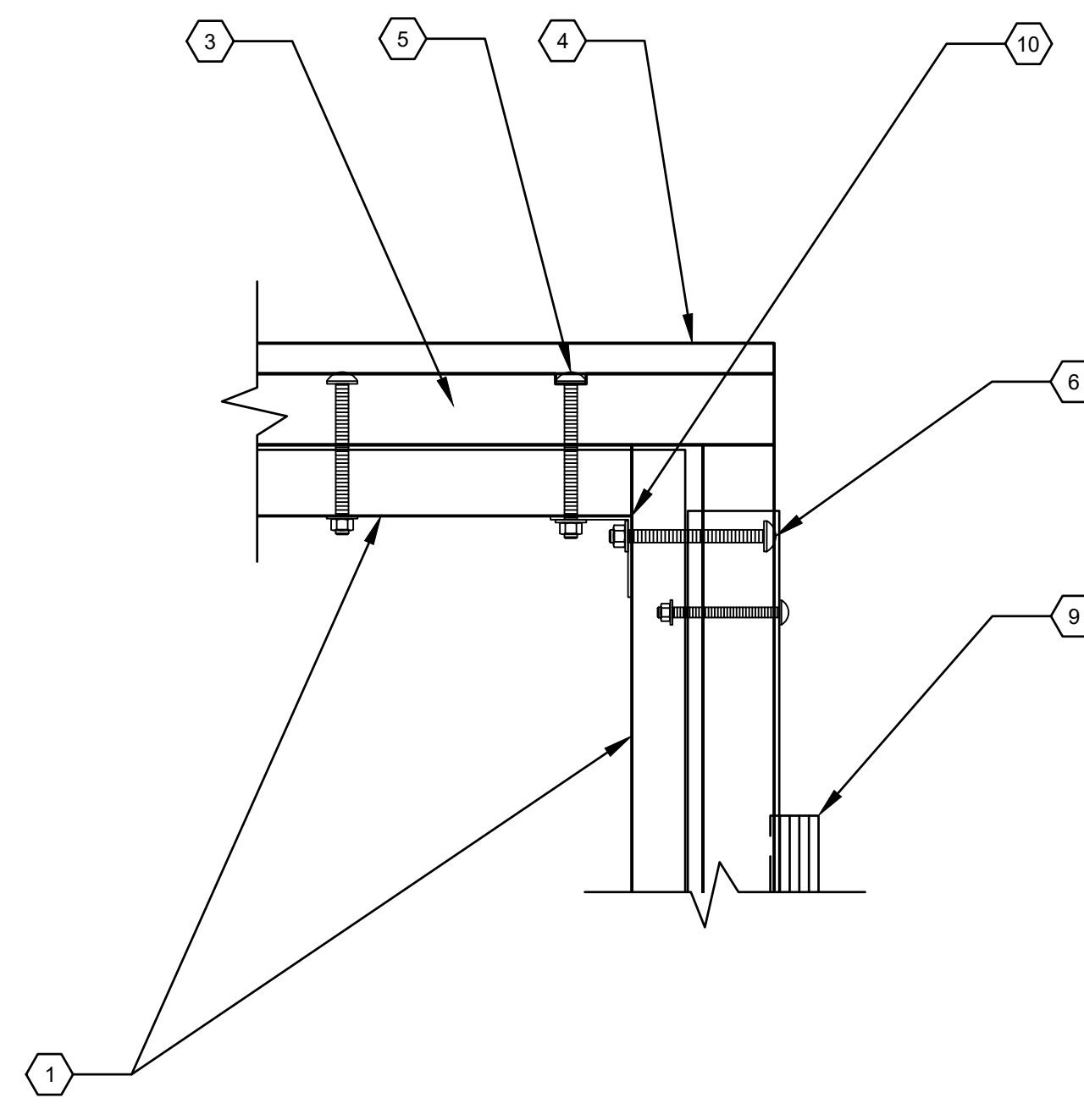
110' BOARDING FLOAT DETAILS - 2

MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

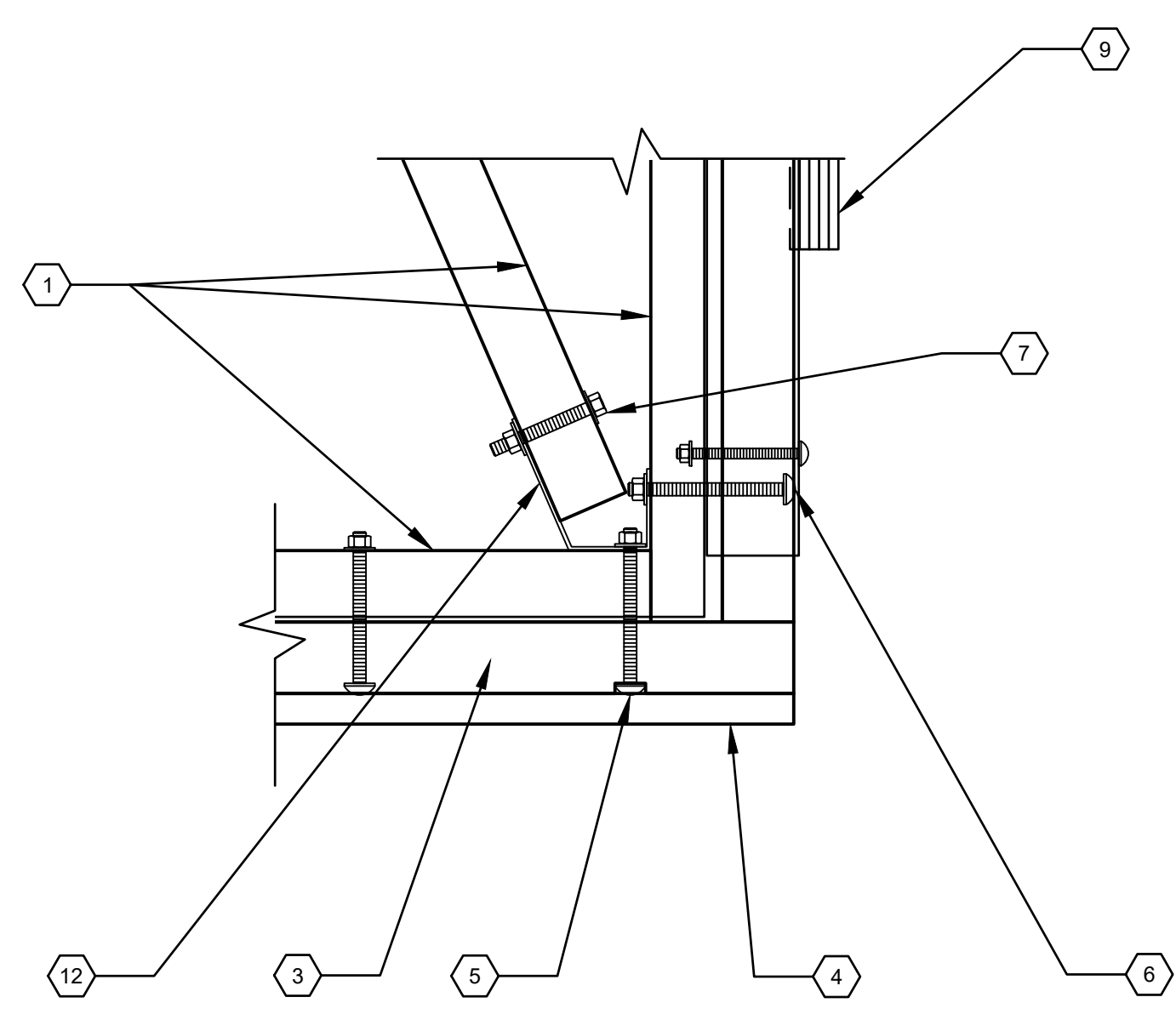
SHEET 55 OF 64
JOB NO. 928-79
SCALE 1-1/2"=1'-0"
DATE 23 JUL 2023



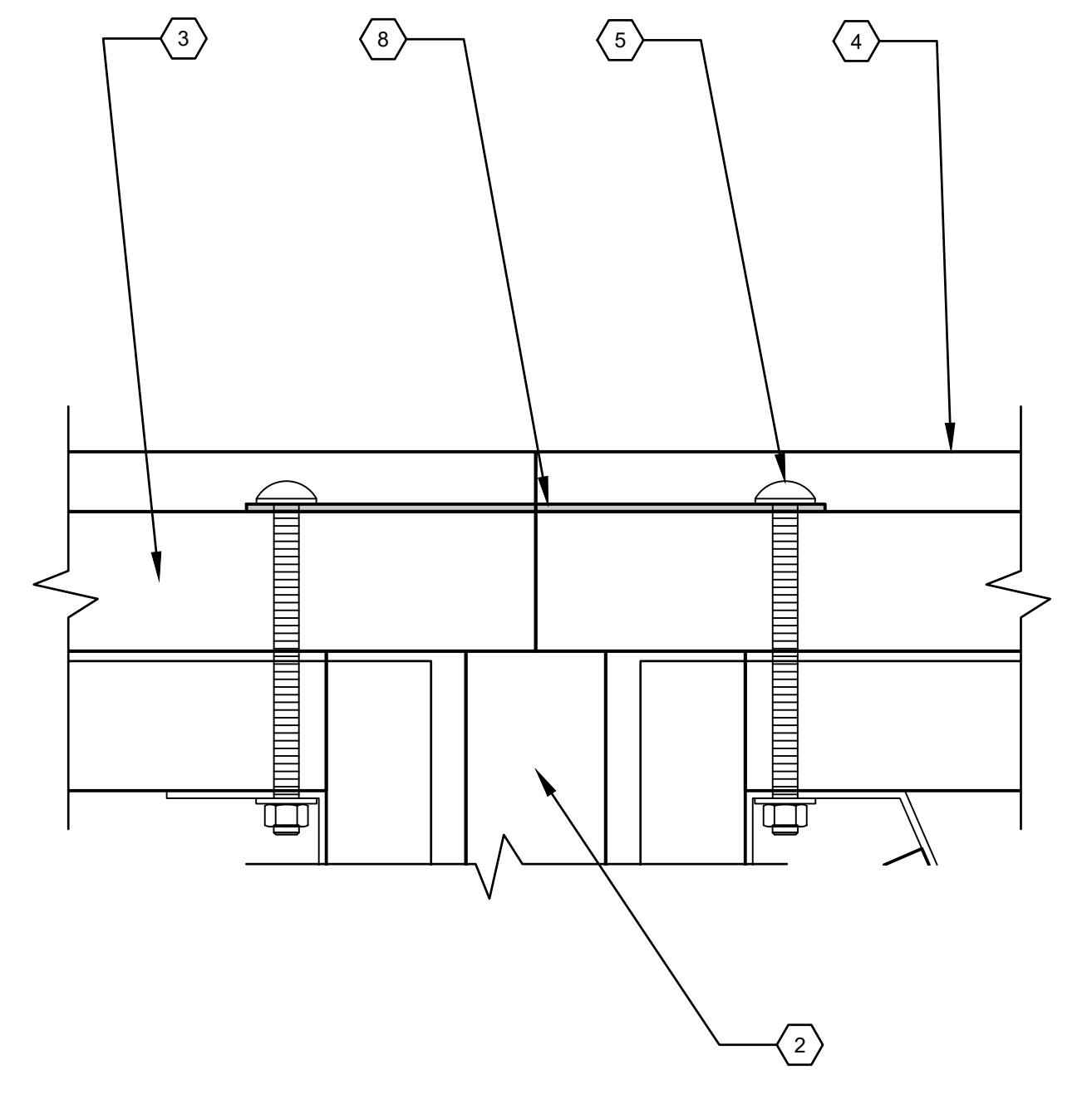
1 FRAMING CONNECTION DETAIL
 56 SCALE: 1-1/2" = 1'-0"



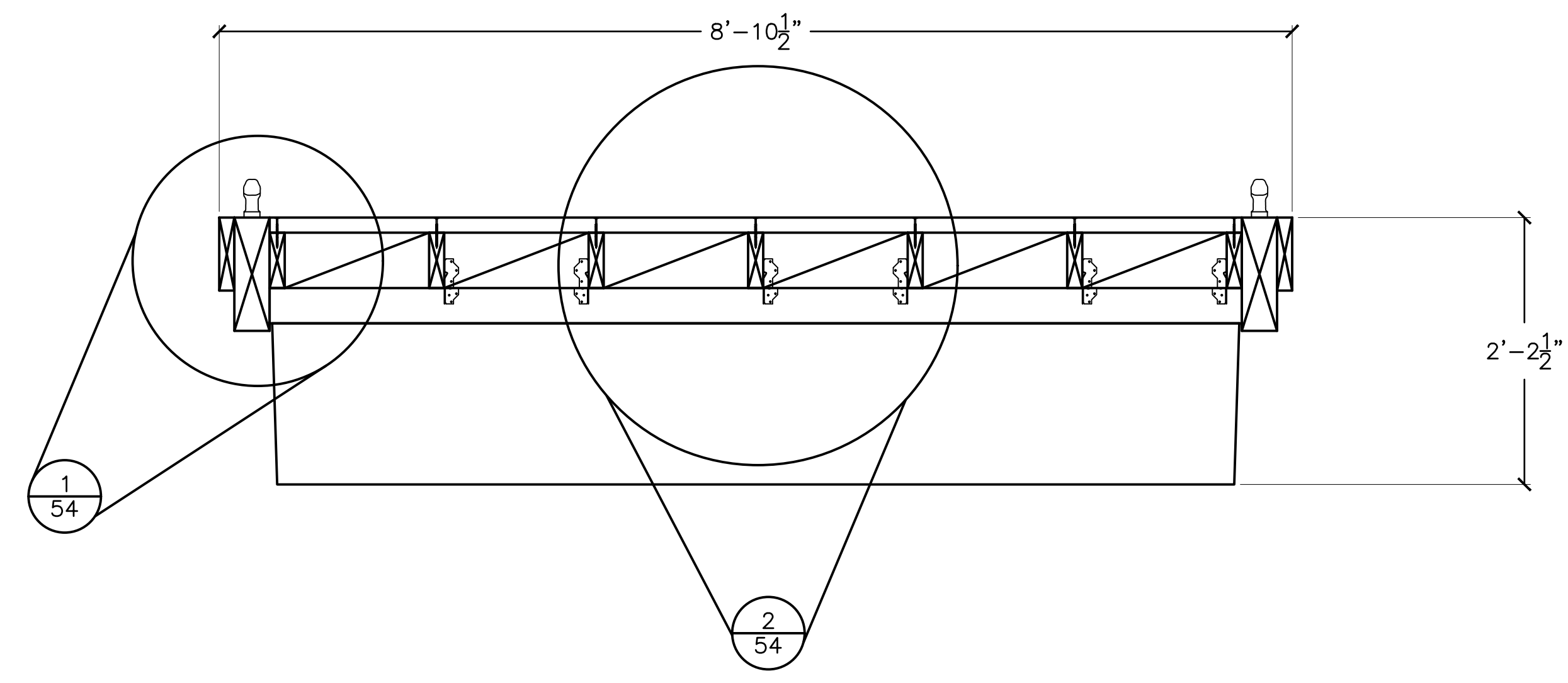
2 FRAMING CONNECTION DETAIL
 56 SCALE: 1-1/2" = 1'-0"



3 FRAMING CONNECTION DETAIL
 56 SCALE: 1-1/2" = 1'-0"



4 EDGE BEAM SPLICE DETAIL
 56 SCALE: 3" = 1'-0"



5 TYPICAL BOARDING FLOAT SECTION
 56 SCALE: 1" = 2'-0"

FRAMING SCHEDULE

1. 4x4 BEDFORD BARFORCE PLASTIC BOTTOM BEAM, BEAM BLOCKING, AND BRACING
2. 4x10 BEDFORD BARFORCE PLASTIC INTERIOR BEAM
3. 4x12 BEDFORD BARFORCE PLASTIC PERIMETER BEAM
4. 2x8 BEDFORD FIBERFORCE PLASTIC EDGE BUMPER BOARD
5. 5/8" SS CARRIAGE BOLT (TYP AT EDGES OF BOARDING FLOAT)
6. 1/2" SS CARRIAGE BOLT (TYP AT END OF BOARDING FLOAT)
7. 5/8" SS THRU BOLT (TYP AT BOARDING FLOAT INTERIOR)
8. 3/16"x3 1/2"x14 1/2" L SS SPLICE PLATE

9. FRAMING HARDWARE (1/61)
10. FRAMING HARDWARE (1/62)
11. FRAMING HARDWARE (2/62)
12. FRAMING HARDWARE (3/62)



BID SET



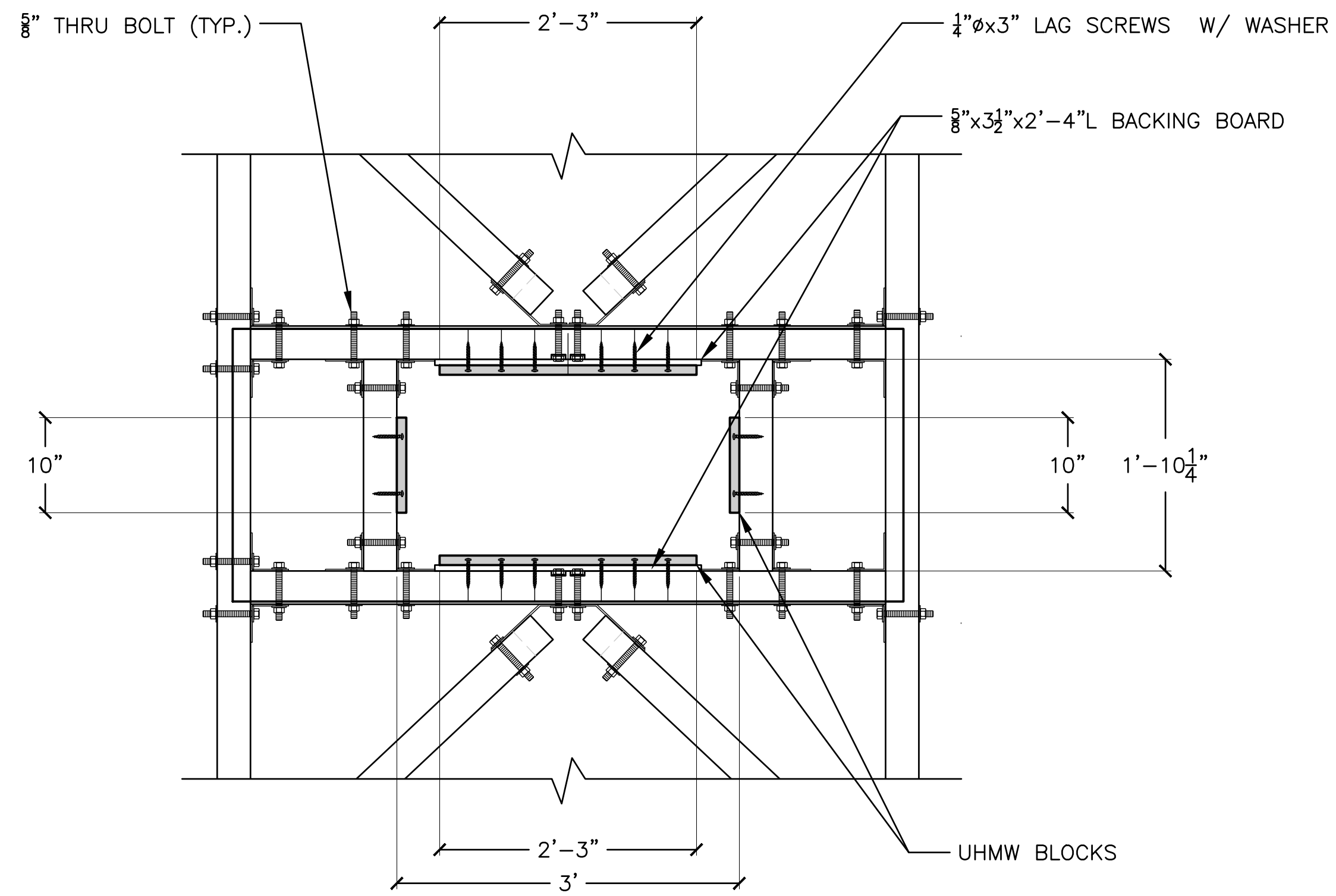
2201 DUPONT DRIVE, SUITE 830
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NO.	DATE	REVISION

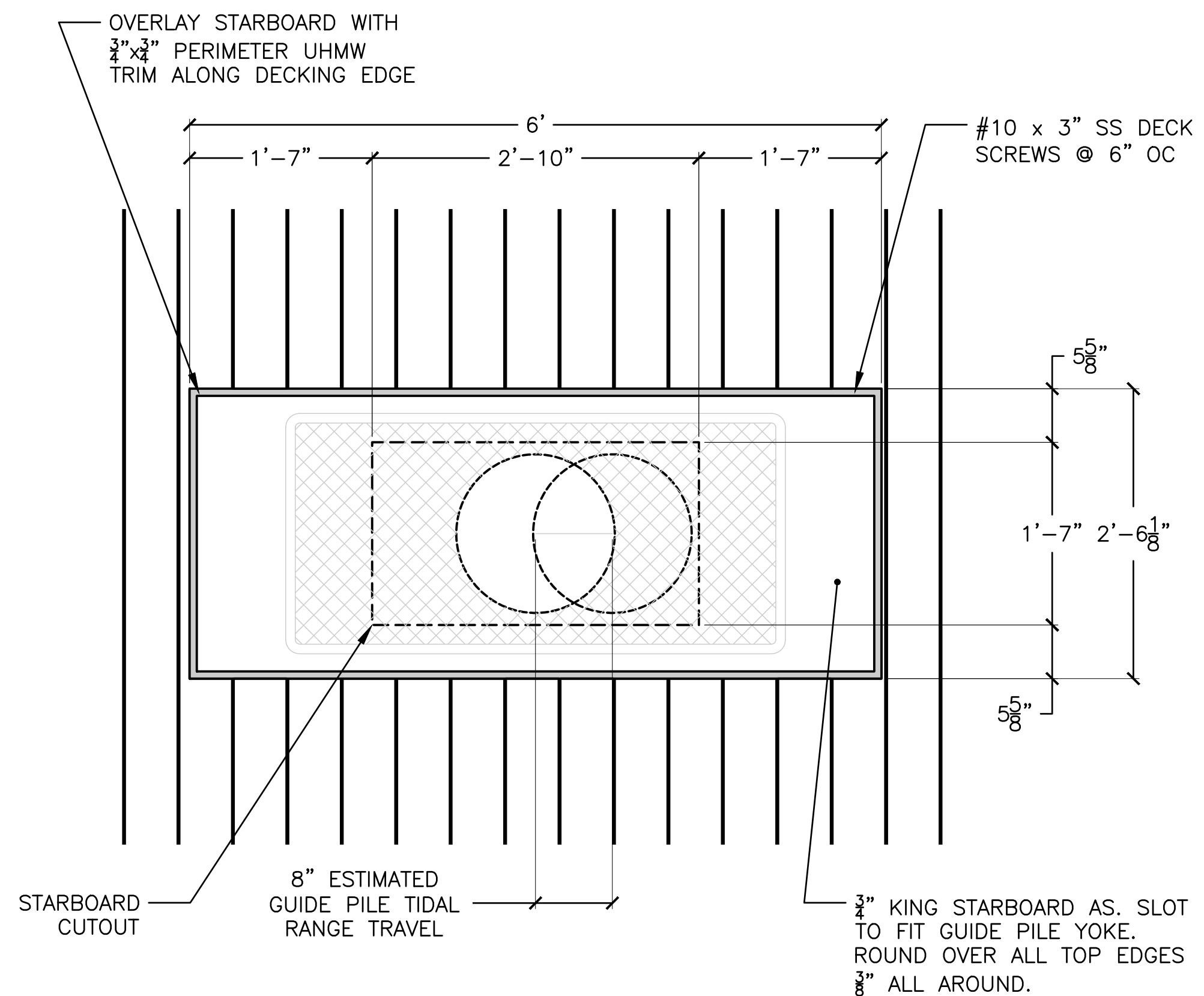
DESIGNED BY JTM
 DRAWN BY JTM
 CHECKED BY TJF
 APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
 110' BOARDING FLOAT DETAILS - 3
 MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

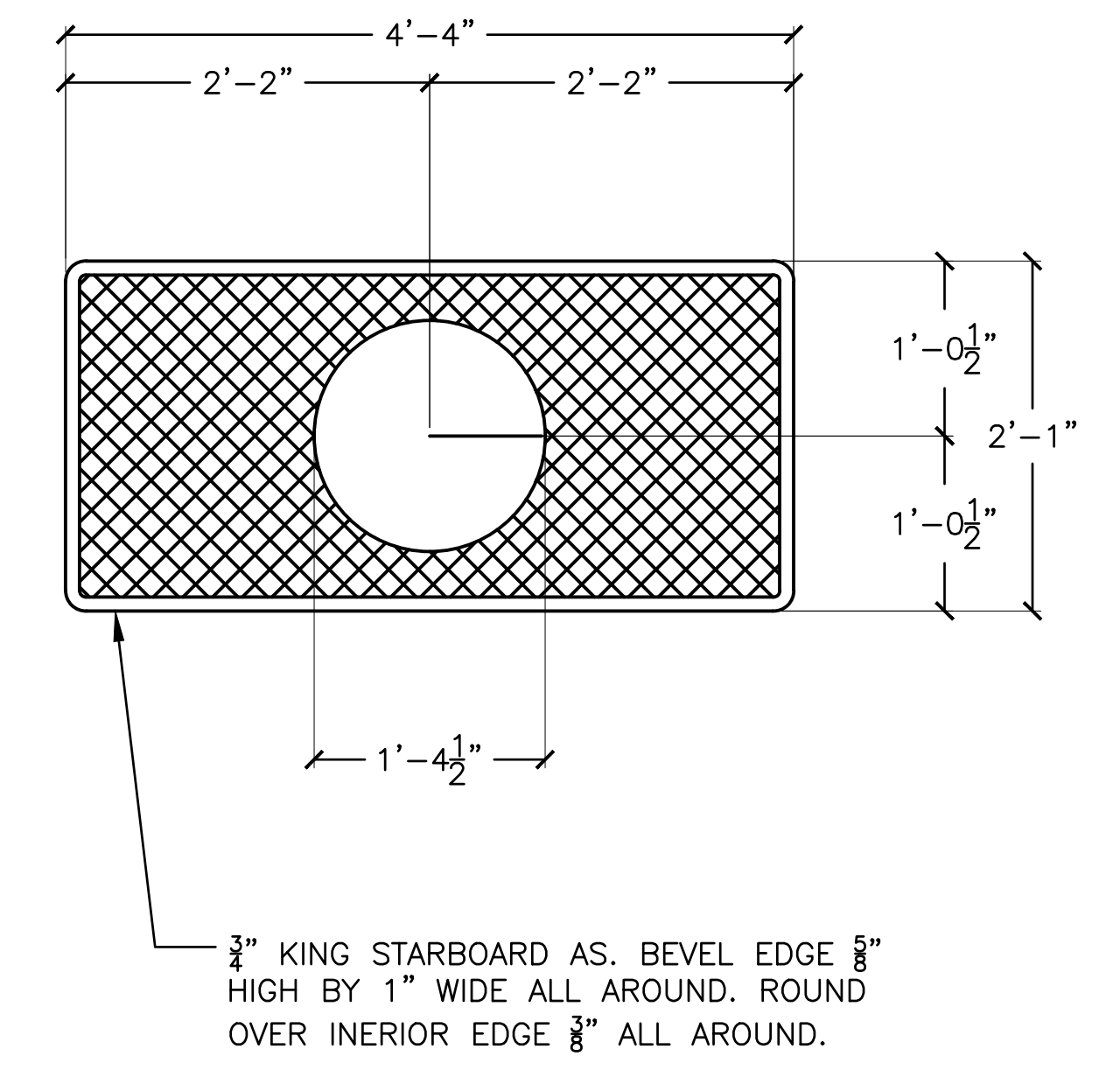
SHEET 56 OF 64
 JOB NO. 928-79
 SCALE AS SHOWN
 DATE 23 JUL 2023



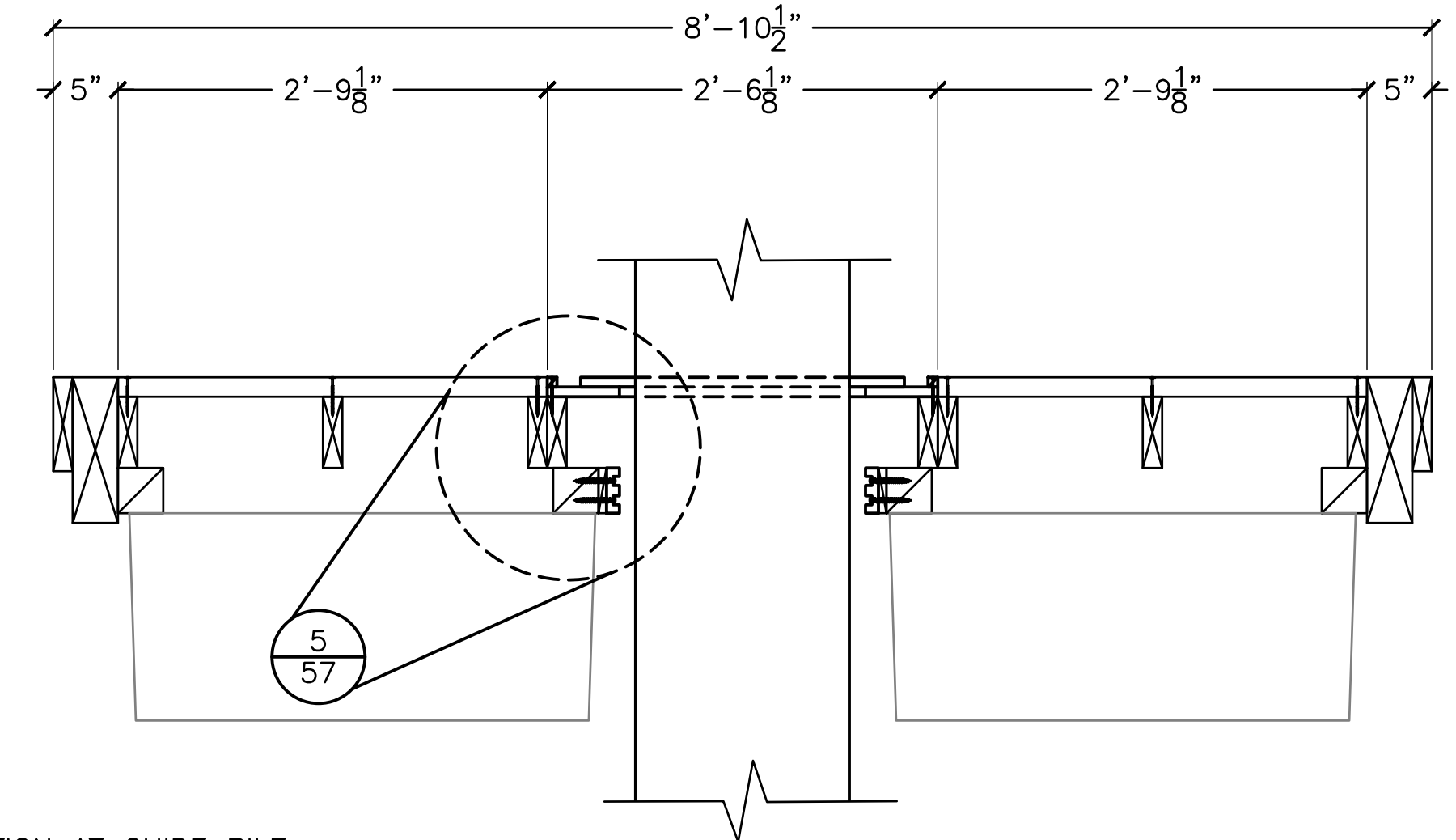
1 GUIDE PILE FRAMING DETAIL
SCALE: 1" = 1'-0"



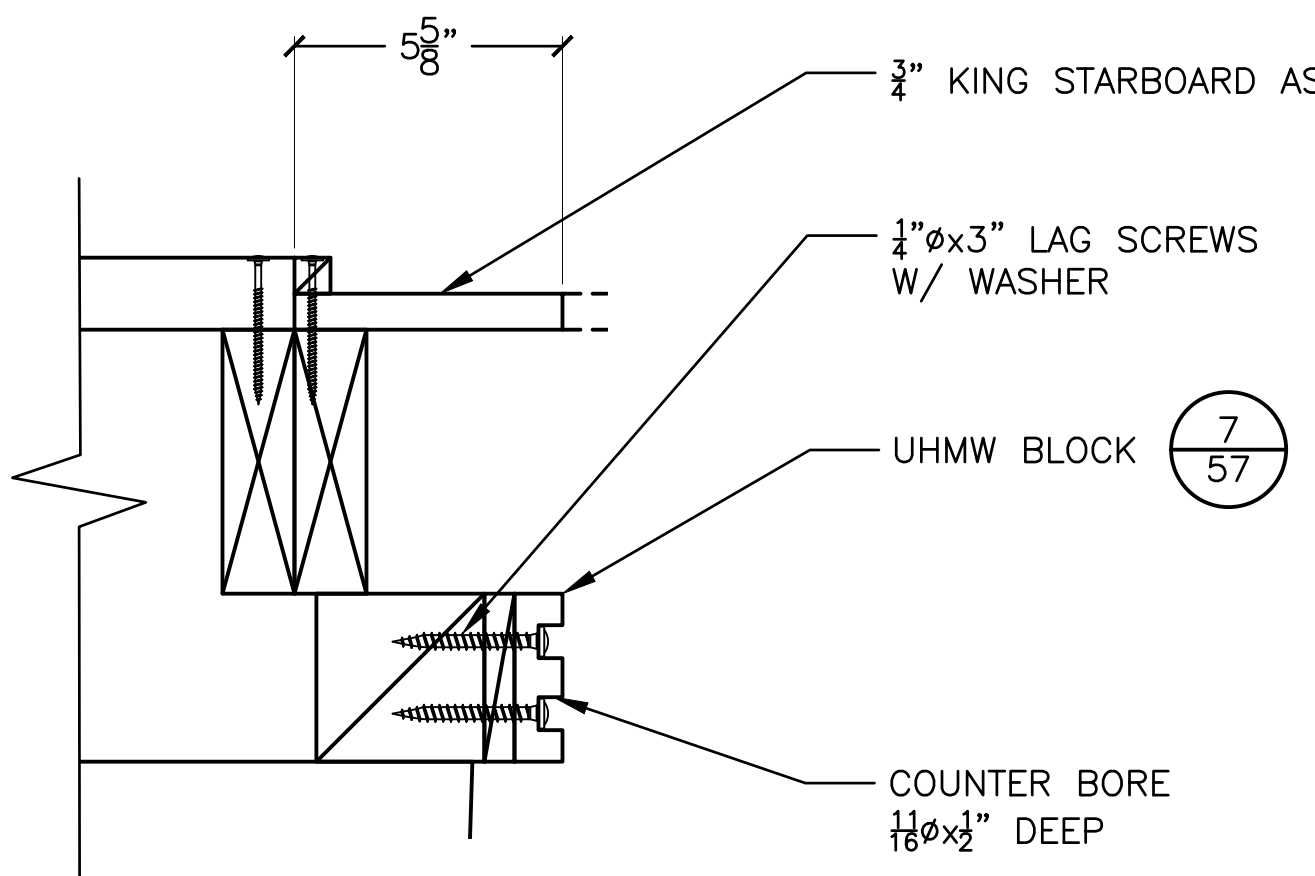
2 GUIDE PILE DECK DETAIL
SCALE: 1" = 1'-0"



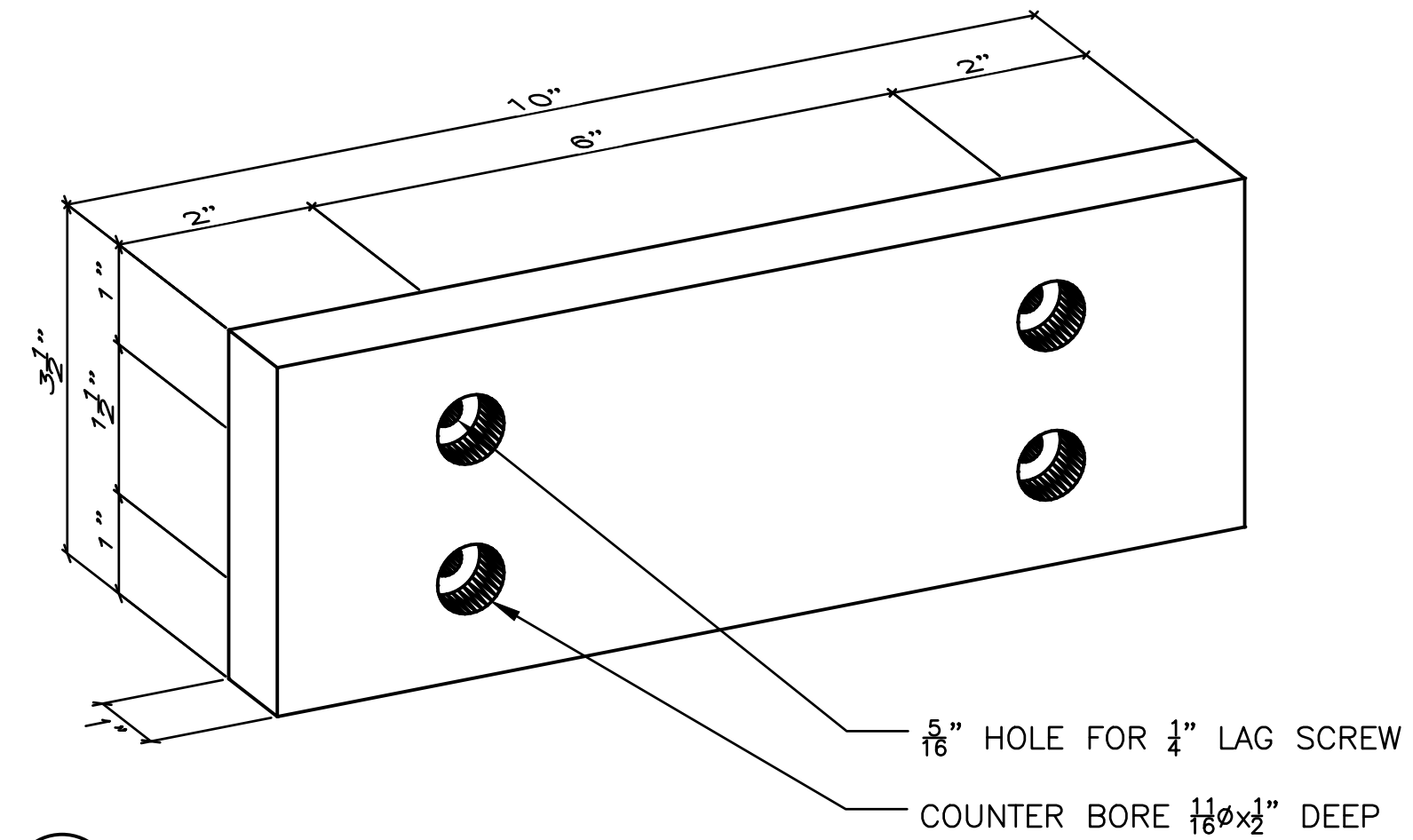
3 GUIDE PILE COVER DETAIL
SCALE: 1" = 1'-0"



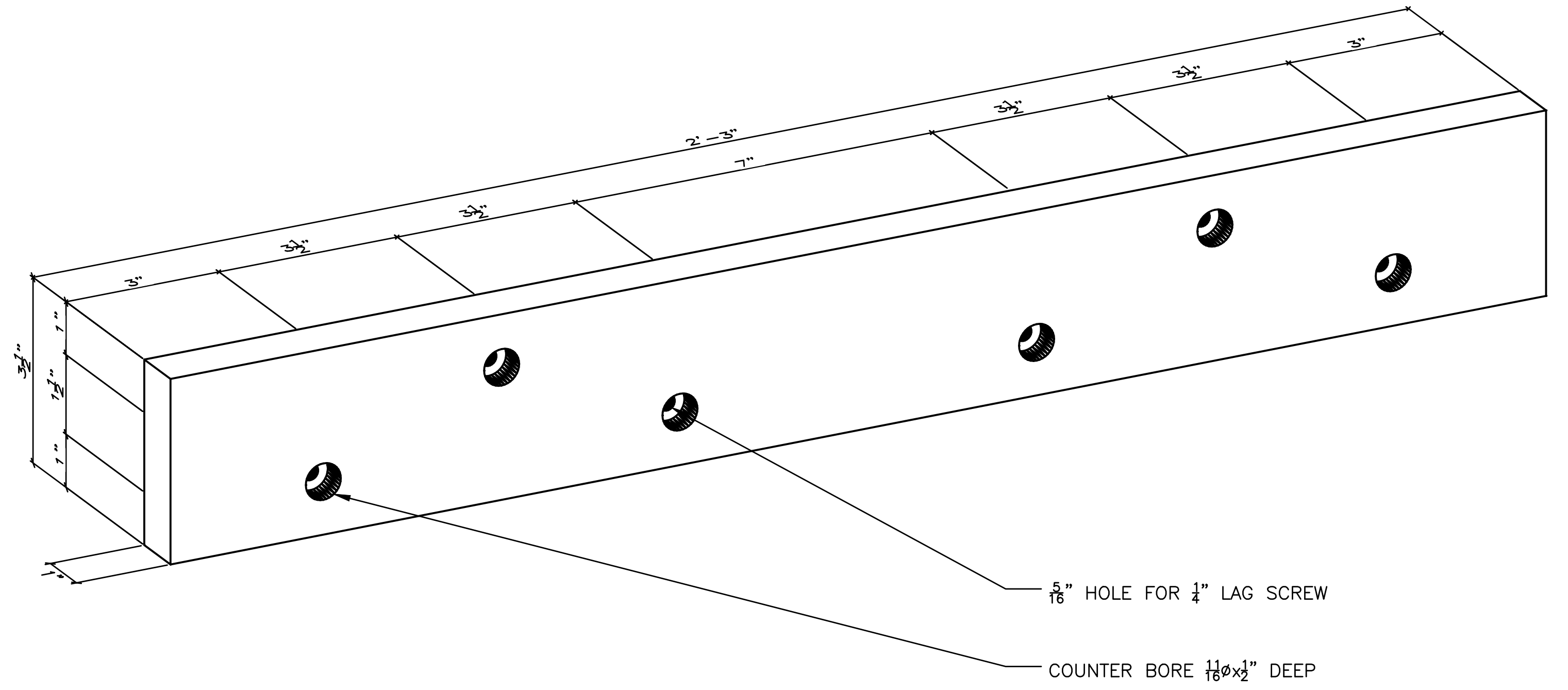
4 BOARDING FLOAT SECTION AT GUIDE PILE
SCALE: 1" = 1'-0"



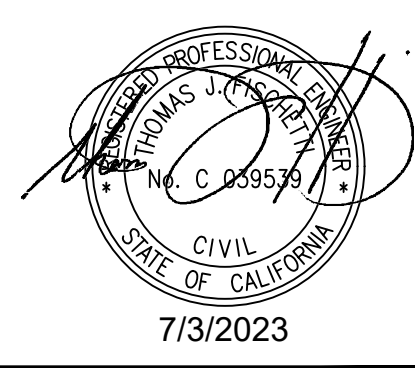
5 GUIDE PILE FRAMING CONNECTION DETAIL
SCALE: 3" = 1'-0"



6 10 INCH UHMW BLOCK DETAIL
SCALE: N/A



7 27 INCH UHMW BLOCK DETAIL
SCALE: N/A



BID SET



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IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

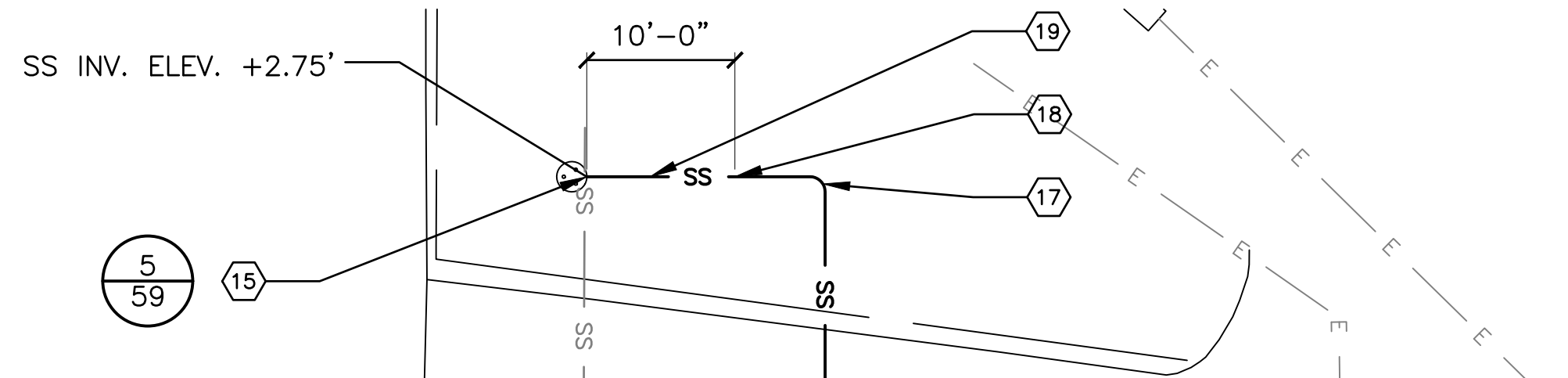
DESIGNED BY JTM
DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
110' BOARDING FLOAT DETAILS - 4
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 57 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023

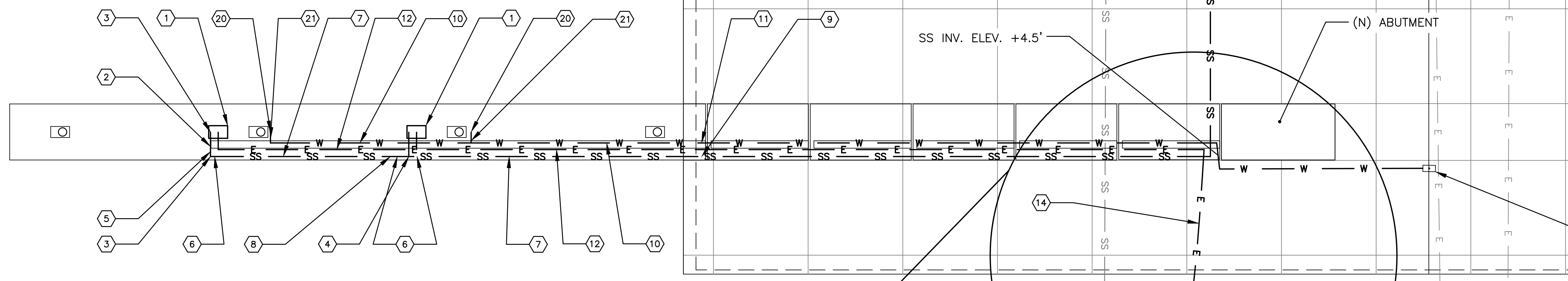
PUMPOUT CONSTRUCTION NOTES

1. FURNISH AND INSTALL TWO (2) KECO 900 SERIES M34 2HP SLIMLINE PERISTALTIC PUMPS.
2. 3"Ø (3.50" OD) SS PIPE. BUTT FUSE ALL HDPE TO HDPE CONNECTIONS. ALL OTHER CONNECTIONS SHALL BE SS VICTAULIC.
3. 3"Ø SS VICTAULIC NO. 410 90° LONG RADIUS ELBOW.
4. 3"Øx3"Ø SS 45° LATERAL WYE WITH GROOVED END PIPE AND FITTINGS.
5. 3"Ø SS VICTAULIC NO. 412 22½" ELBOW.
6. 3"Ø HDPE TO SS POLY-CAM TRANSITION FITTING.
7. 3"Ø HDPE IPS PIPE DR11 (200 PSI).
8. 3"Ø MATCO-NORCA 521 BRASS CHECK VALVE.
9. 3"Ø PLICORD SUPER BLACK FLEXWING FLEXIBLE HOSE SAP# 20017560.
10. 1½"Ø (1.9" OD) SDR11 HDPE 3408 PIPE (WATER).
11. 1½" PLICORD GRAY FOOD FLEXIBLE HOSE.
12. 2"Ø (2.375" OD) FLEXIBLE LIQUID-TIGHT ELECTRICAL TUBING (SEE ELECTRICAL PLANS).
13. PLACE PIPE AND CONDUIT 24" MIN BELOW FINISHED GRADE. INSTALL PIPE BY EXCAVATION/BACKFILL, DIRECTIONAL DRILLING METHODS, OR OTHER MEANS AS REQUIRED.
14. SEE ELECTRICAL PLAN FOR POWER LINE TERMINATION.
15. TERMINATE SS IN EXISTING MH. SEE DETAIL 5 ON SHEET 59.
16. LOCATE EXISTING WATER LINE AND CONNECT TO NEW LINE
17. 3"Ø HDPE IPS PIPE DR11 90° SWEEP BEND (200 PSI).
18. 3"x6" ECCENTRIC REDUCER HDPE IPS PIPE DR11 (200 PSI).
19. 6"Ø HDPE IPS PIPE DR11 (200 PSI).
20. 1"Ø SS STANDPIPE SECURED TO 4x4 BEDFORD BARFORCE PLASTIC POST FOR WATER HOSE BIBB (2 TOTAL). SEE DETAIL 6 ON SHEET 59.
21. 1½" TO 1" REDUCER AT WATER STANDPIPES (2 TOTAL).



BOARDING FLOAT UTILITY NOTES:

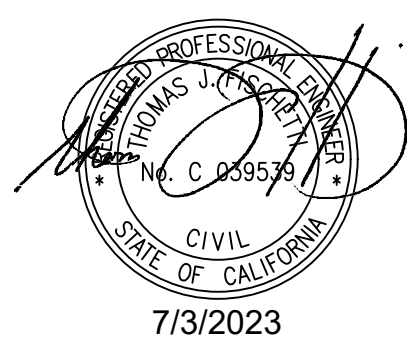
1. LOCATE EXISTING WATER, POWER, AND SEWER LINES AND POINTS OF CONNECTION. UTILITIES SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY AND SEPARATE PERMITS MAY BE REQUIRED.
2. SEE SHEET 60 FOR ELECTRICAL REQUIREMENTS TO PUMPOUT EQUIPMENT.
3. INSTALL NEW 3" SEWER FORCE MAIN FROM BOARDING FLOAT TO EXISTING MANHOLE POINT OF CONNECTION BY COMBINATION OF TRENCHING AND BACKFILL AND/OR HORIZONTAL DIRECTIONAL DRILLING. BREAK INTO EXISTING MANHOLE SIMILAR TO APWA STANDARD PLAN 208-1. SEAL PIPE TO MANHOLE CONNECTION WITH APPROVED GASKET. INSTALL ELBOW AT PIPE TERMINUS AT MANHOLE INVERT SUCH THAT DISCHARGE ALIGNMENT IS NO LESS THAN 135' FROM SEWER MAIN FLOW DIRECTION. ADJUST MANHOLE INVERT AS REQUIRED TO ACCOMMODATE FLOW JUNCTION.
4. ALL SEWER PIPE AND FITTINGS SHALL BE HDPE BUTT FUSED RATED FOR 200 PSI.
5. INSTALL UNDERGROUND PORTION OF POTABLE WATER PIPE IN CONFORMANCE WITH COUNTY OF LOS ANGELES STANDARD PLAN W-46.
6. INSTALL UNDERGROUND PORTION OF SEWER FORCE MAIN IN CONFORMANCE WITH COUNTY OF LOS ANGELES STANDARD PLAN 2022-1.
7. HDPE PIPE SHALL BE AWWA C906 WITH A MINIMUM DR OF 17
8. THRUST BLOCKS SHALL BE PERMITTED ONLY UPON APPROVAL BY THE ENGINEER BASED ON CONSIDERATION OF AVAILABLE SPACE AND ADJACENT FACILITIES. THRUST BLOCK SIZE SHALL BE RESTRICTED TO THE MINIMUM REQUIRED SIZE IN ACCORDANCE WITH THE MOST RECENT EDITION OF DIPRA SPECIFICATIONS. THRUST BLOCKS SHALL BE CONSTRUCTED OF REINFORCED CLASS "A" CONCRETE PLACED AGAINST UNDISTURBED SOIL. BEARING SURFACE AGAINST UNDISTURBED SOIL FOR 4-INCH AND 6-INCH PIPE SHALL HAVE A MINIMUM AREA OF 3 SQUARE FEET, OR AS SHOWN ON THE PLANS.
9. TRENCHES SHALL BE EVEN AND STRAIGHT SO THAT THE PIPE IS CENTERED. TRENCH WIDTH SHALL NOT EXCEED 24 INCHES PLUS THE NOMINAL PIPE SIZE. ROCK OR UNDERLYING SUBGRADE SHALL BE REMOVED TO 12 INCHES BELOW THE PIPE BOTTOM. BEDDING MATERIAL SHALL BE CLEAN SAND IN DRY SOIL CONDITIONS AND, FOR DI AND HDPE PIPE, 3/4-INCH CRUSHED BASE ROCK IN WET SOIL CONDITIONS, PLACED A MINIMUM OF 6 INCHES BELOW THE PIPE'S BOTTOM AND TO 6 INCHES ABOVE TOP OF PIPE. FOR IPVC PIPE, THE BEDDING SHALL BE CLEAN SAND SURROUNDED BY GEOFABRIC. THE BEDDING SHALL BE EVEN SO THAT THE PIPE IS UNIFORMLY SUPPORTED OVER THE ENTIRE LENGTH OF THE PIPE. AT EACH JOINT, THE BEDDING SHALL BE RECESSED IN SUCH A MANNER AS TO RELIEVE THE JOINT OF THE PIPE OF ALL LOADS.
10. PRESSURE SEWERS
 - A. ALL PRESSURE SEWERS AND PIPING SHALL BE HYDROSTATICALLY TESTED. TESTING SHALL TAKE PLACE ONLY AFTER APPROVED THRUST BLOCKS AND TIE DOWNS HAVE BEEN PLACED AND A MINIMUM OF THREE FEET OF BACKFILL COMPACTED OVER THE PIPE.
 - B. TEST SHALL BE CONDUCTED BY ADDING WATER TO THE PIPE SLOWLY VENTING ALL AIR. AFTER THE PIPE IS FILLED WITH WATER, MORE WATER SHALL BE ADDED BY MEANS OF A HAND PUMP OR SUITABLE MEANS TO A PRESSURE OF 1.5 TIMES THE MANUFACTURER'S RATED PRESSURE OF THE PIPE. THE TEST PRESSURE SHALL BE MAINTAINED FOR A PERIOD OF TWO HOURS AT WHICH TIME THE TEST PLUG SHALL BE REMOVED AND THE PIPE AGAIN FILLED WITH WATER. THE AMOUNT OF WATER ADDED TO THE SYSTEM AFTER TESTING SHALL BE MEASURED AND COMPARED WITH THE RECOMMENDED ALLOWABLE LEAKAGE PER 1000 FEET OF PIPE AS SHOWN IN THE DUCTILE IRON PIPE RESEARCH ASSOCIATION'S (DIPRA) INSTALLATION GUIDE FOR DUCTILE IRON PIPE AND AWWA MANUAL M41 DUCTILE IRON PIPE AND FITTINGS.
 - C. IF THE LEAKAGE IS IN EXCESS OF THE ALLOWABLE QUANTITY INDICATED ABOVE, THE PIPE SHALL BE REPAIRED AND, IF NECESSARY, REPLACED OR RELAID AND RETESTED.



LEGEND

(E) ELECTRIC	— E —
(E) SEWER	— SS —
(N) ELECTRIC	— E —
(N) SEWER	— SS —
(N) WATER	— W —

1 BOARDING FLOAT UTILITY PLAN
58 SCALE: 1" = 10'-0"



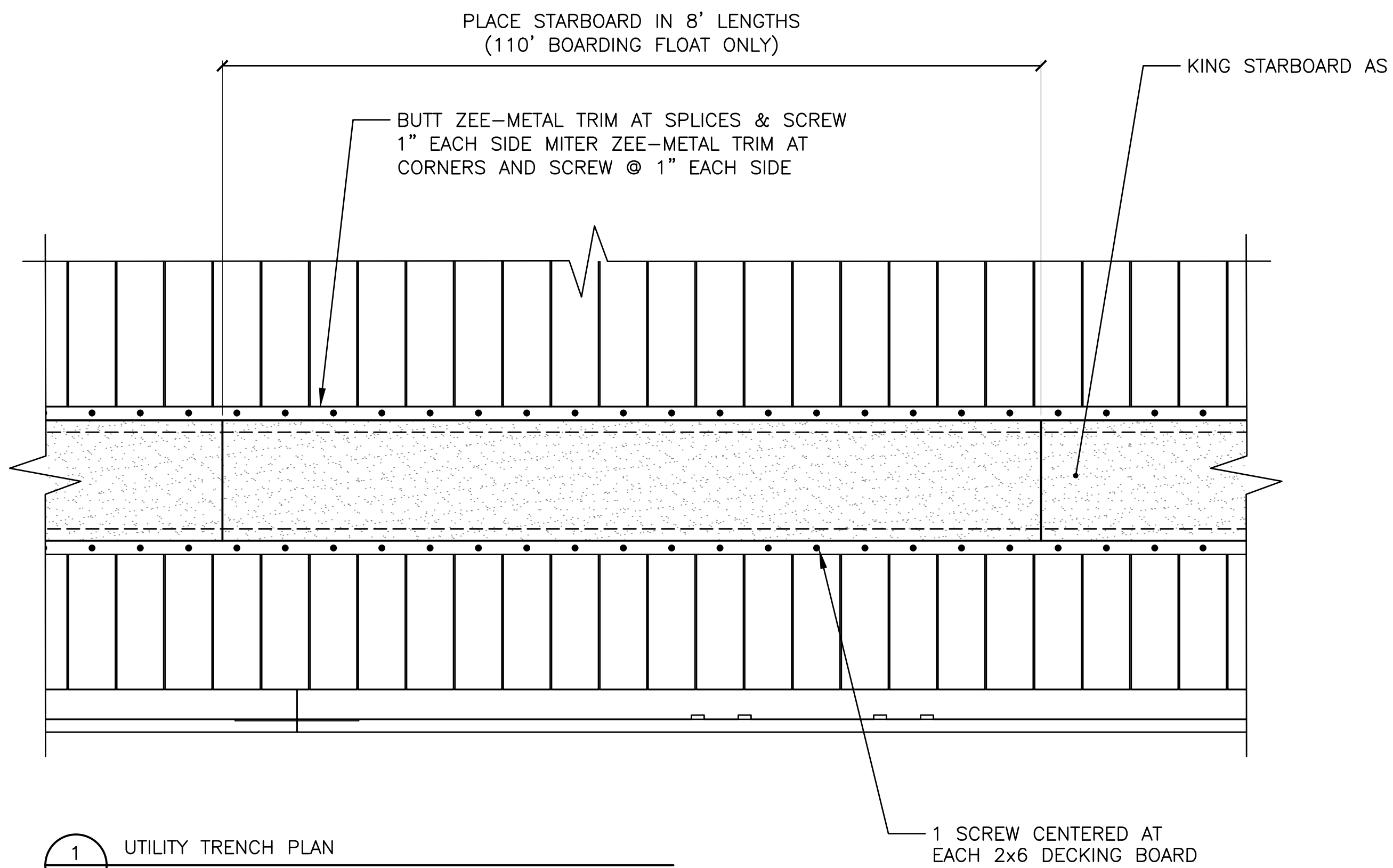
BID SET

NOBLE CONSULTANTS **GEC**

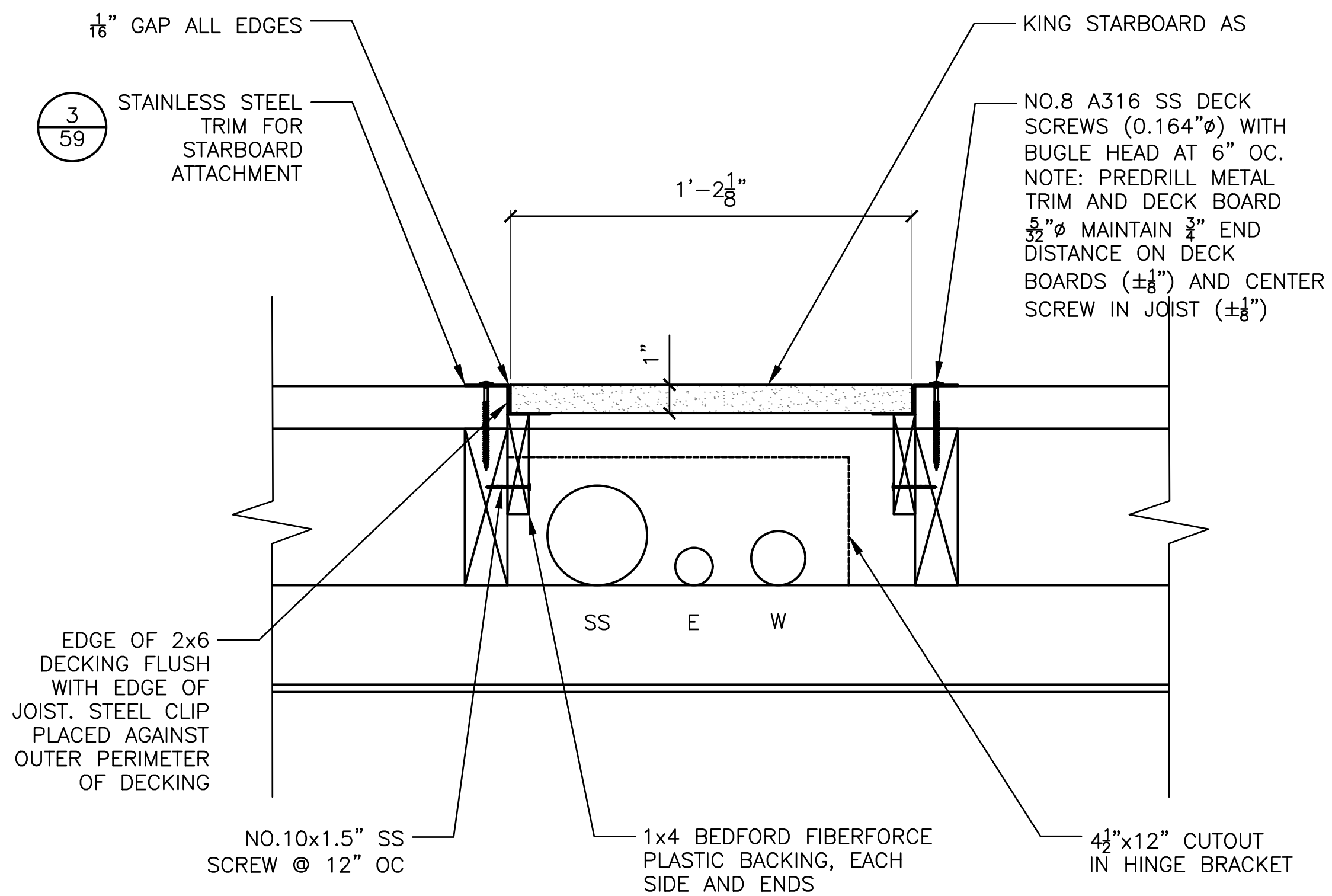
2201 DUPONT DRIVE, SUITE 830
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NO.	DATE	REVISION

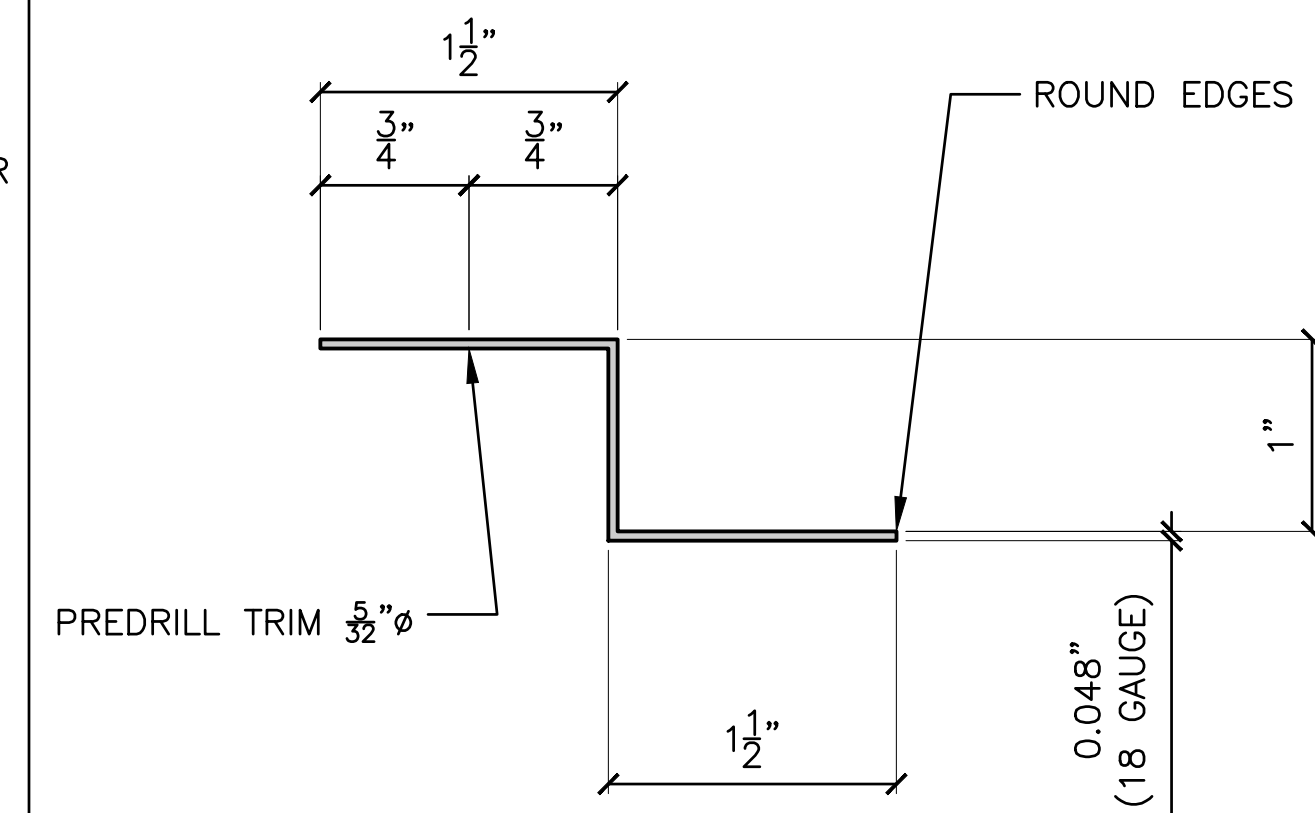
DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 58 OF 64
DRAWN BY: JTM	BOARDING FLOAT UTILITY PLAN	JOB NO. 928-79
CHECKED BY: TJF		SCALE 1" = 10'-0"
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE 23 JUL 2023



1 UTILITY TRENCH PLAN
SCALE: 1" = 1'-0"

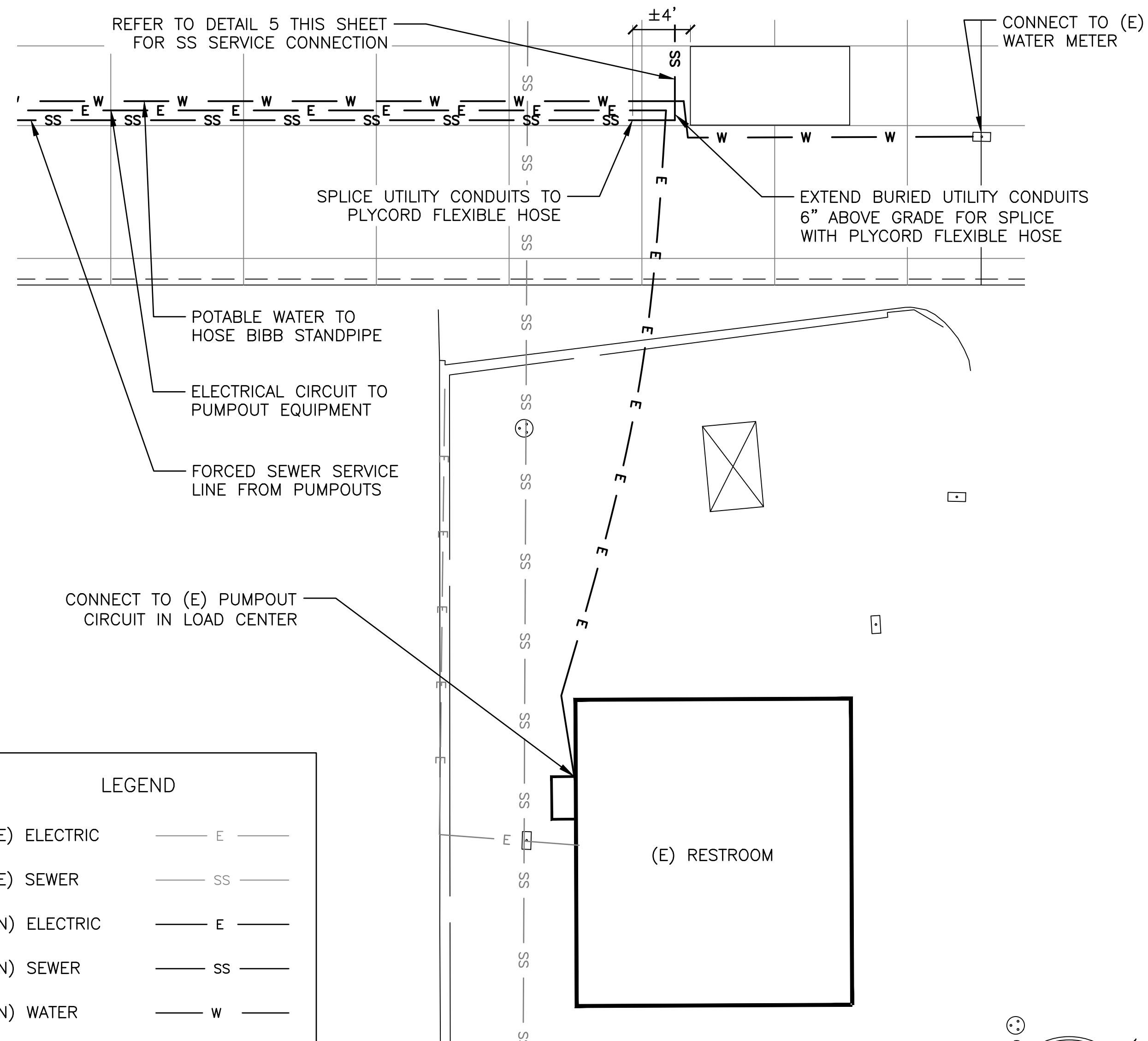


2 TYPICAL UTILITY TRENCH SECTION
SCALE: 3" = 1'-0"



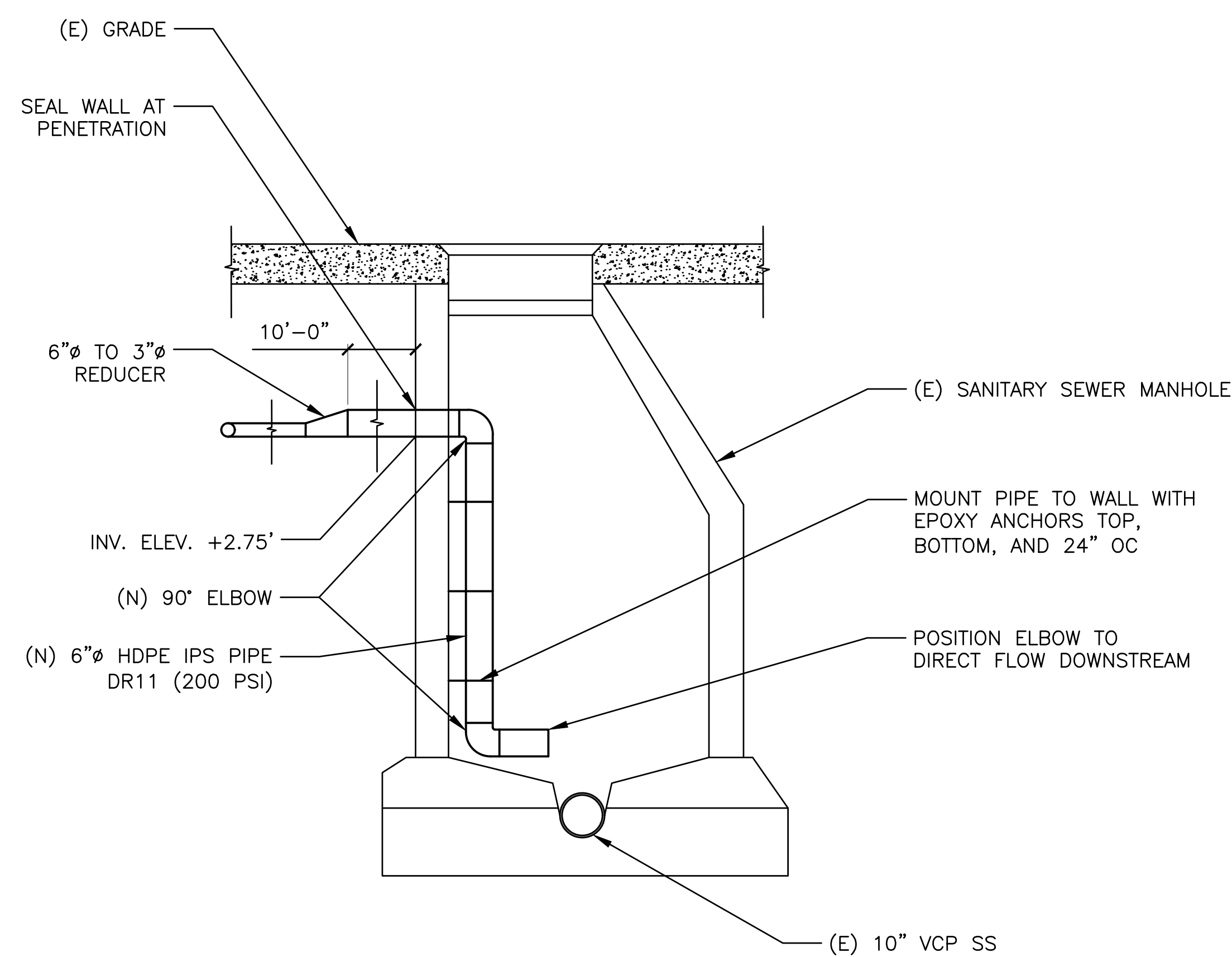
NOTE: CLIP TO BE 18 GAUGE TYPE 316 SS TRIM ZEE PLATE

3 UTILITY TRENCH STARBOARD TRIM DETAIL
SCALE: 1'-0" = 1'-0"

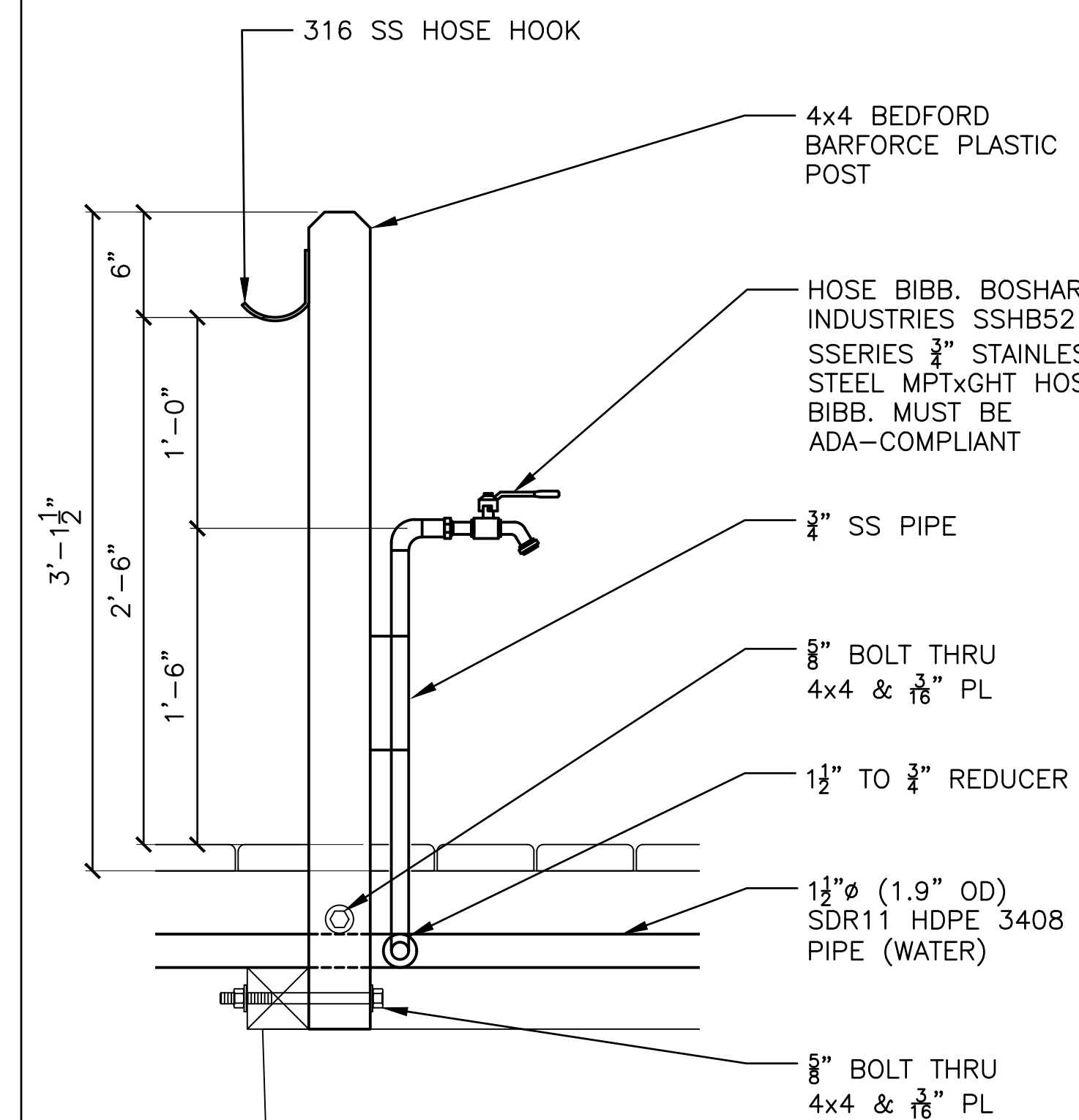


LEGEND	
(E) ELECTRIC	— E —
(E) SEWER	— SS —
(N) ELECTRIC	— E —
(N) SEWER	— SS —
(N) WATER	— W —

4 UTILITY PLAN DETAIL
SCALE: 1" = 10'-0"



5 (N) SS TERMINATION AT MANHOLE DETAIL
SCALE: 1" = 2'-0"



6 WATER STAND PIPE AND POST CONNECTION
SCALE: 1-1/2" = 1'-0"

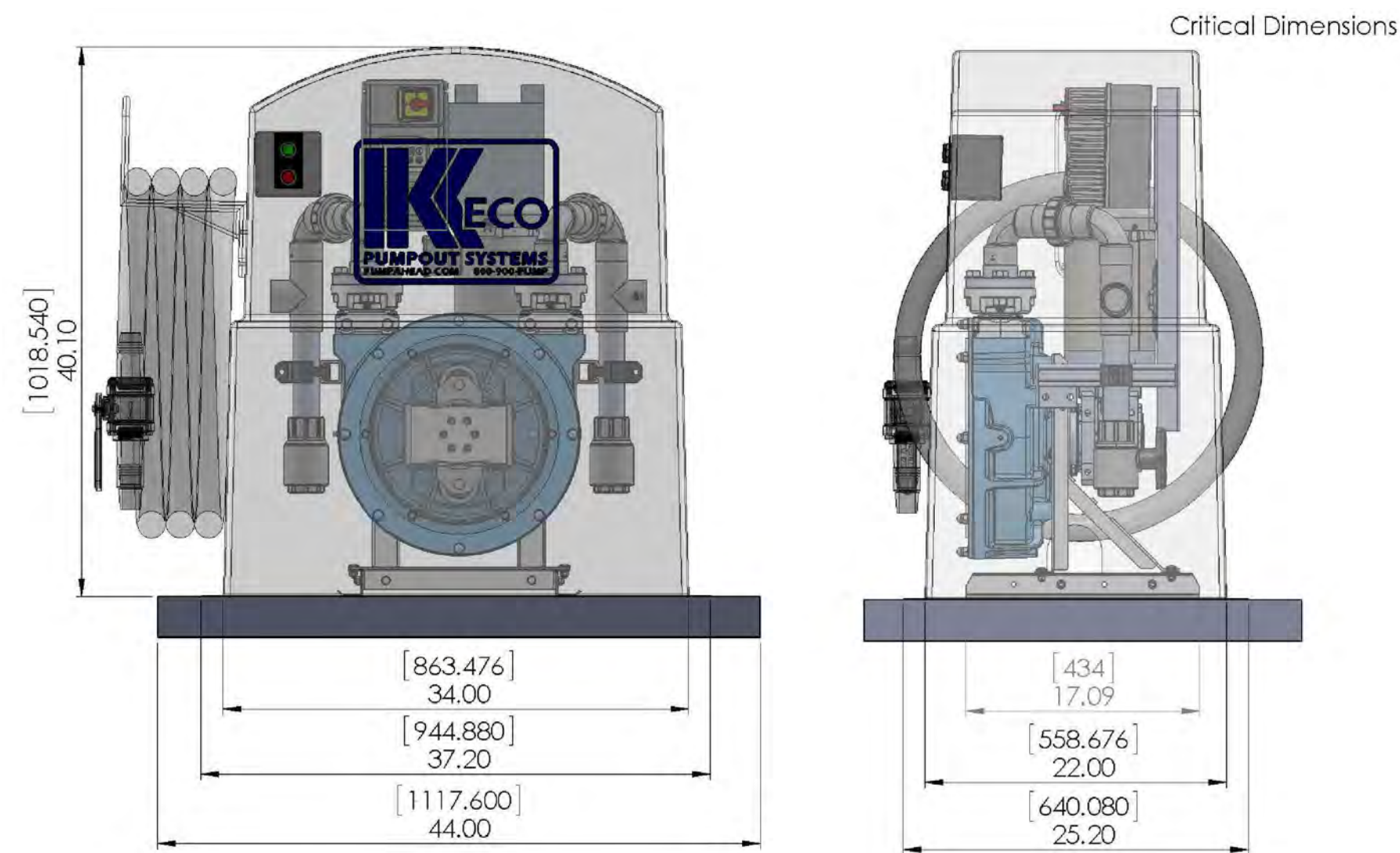


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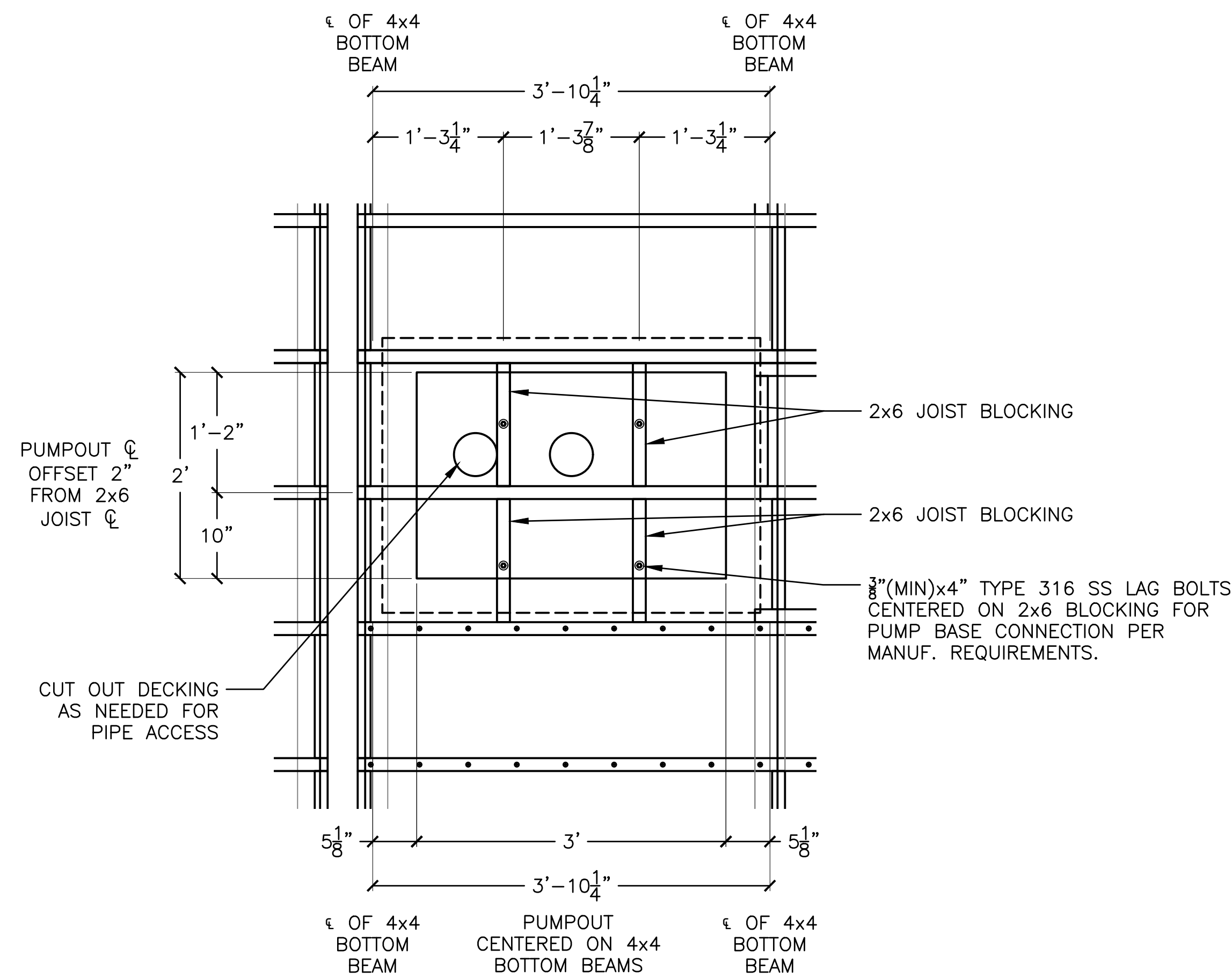
NO.	DATE	REVISION	DESIGNED BY	LOA	SHEET
			JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	59 OF 64
			JTM	BOARDING FLOAT UTILITY DETAILS - 1	JOB NO. 928-79
			TJF	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	SCALE AS SHOWN
			JTM		DATE 23 JUL 2023



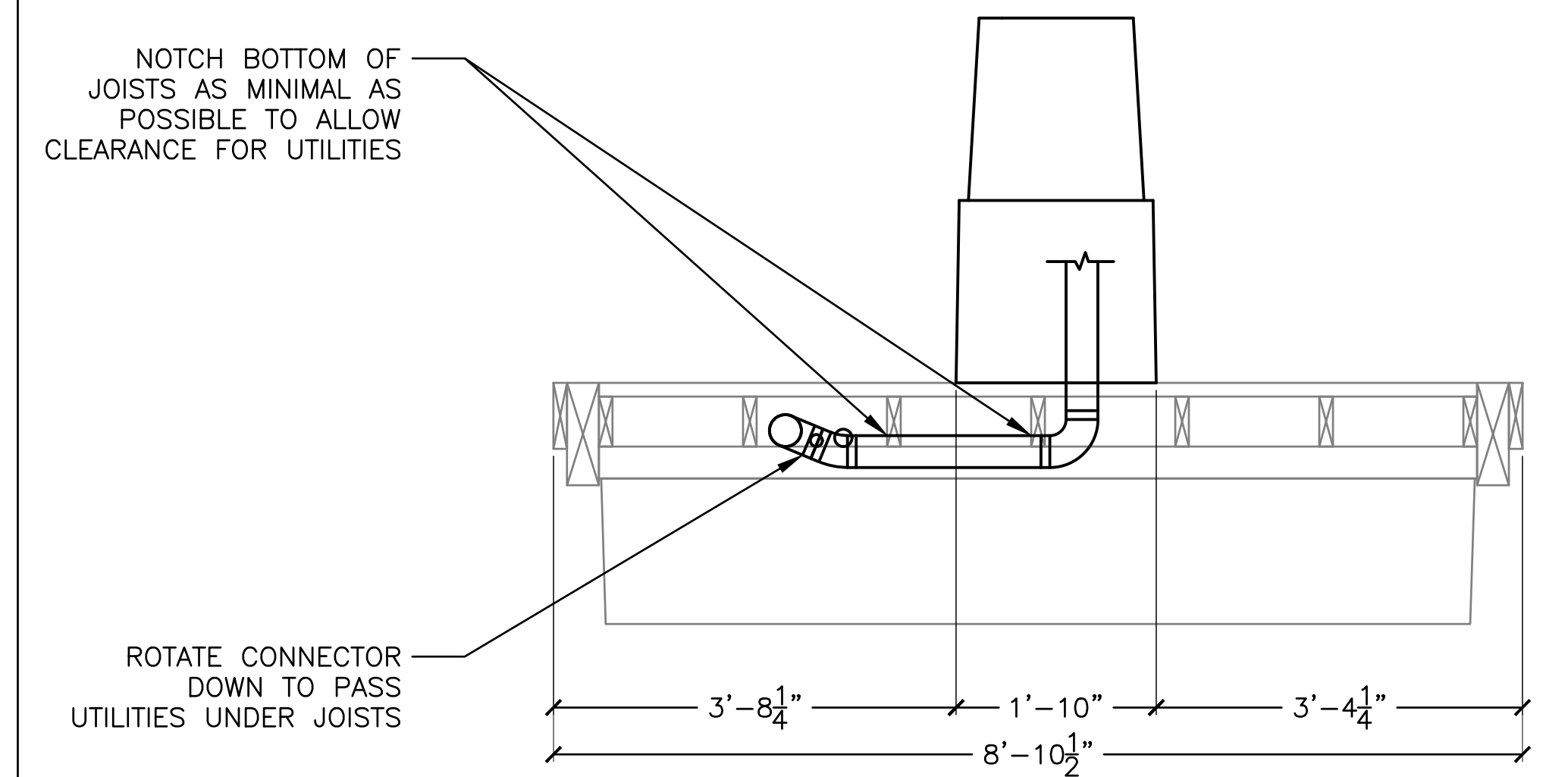
NOTES:

- PUMPOUT TO BE KECO M34 DOCKSIDE (SLIMLINE) PUMP.
- INSTALL EQUIPMENT, PIPE, FITTINGS, AND ELECTRICAL CONNECTIONS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.

1 PERISTALTIC PUMP DETAIL
60 SCALE: N/A



2 PUMP MOUNT DETAIL
60 SCALE: 1" = 1'-0"



3 PUMPOUT SECTION DETAIL
60 SCALE: 3/4" = 1'-0"



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NO.	DATE	REVISION

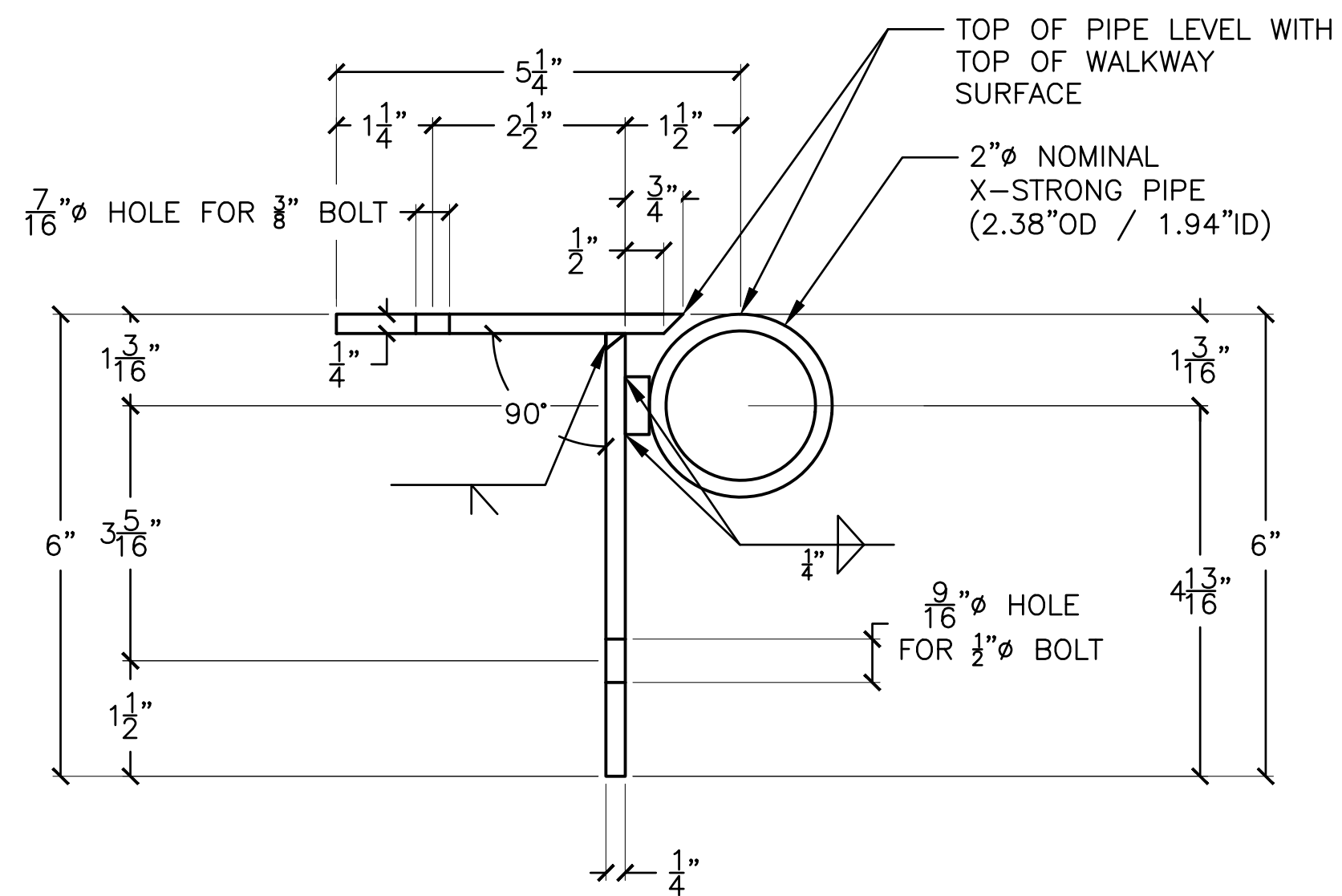
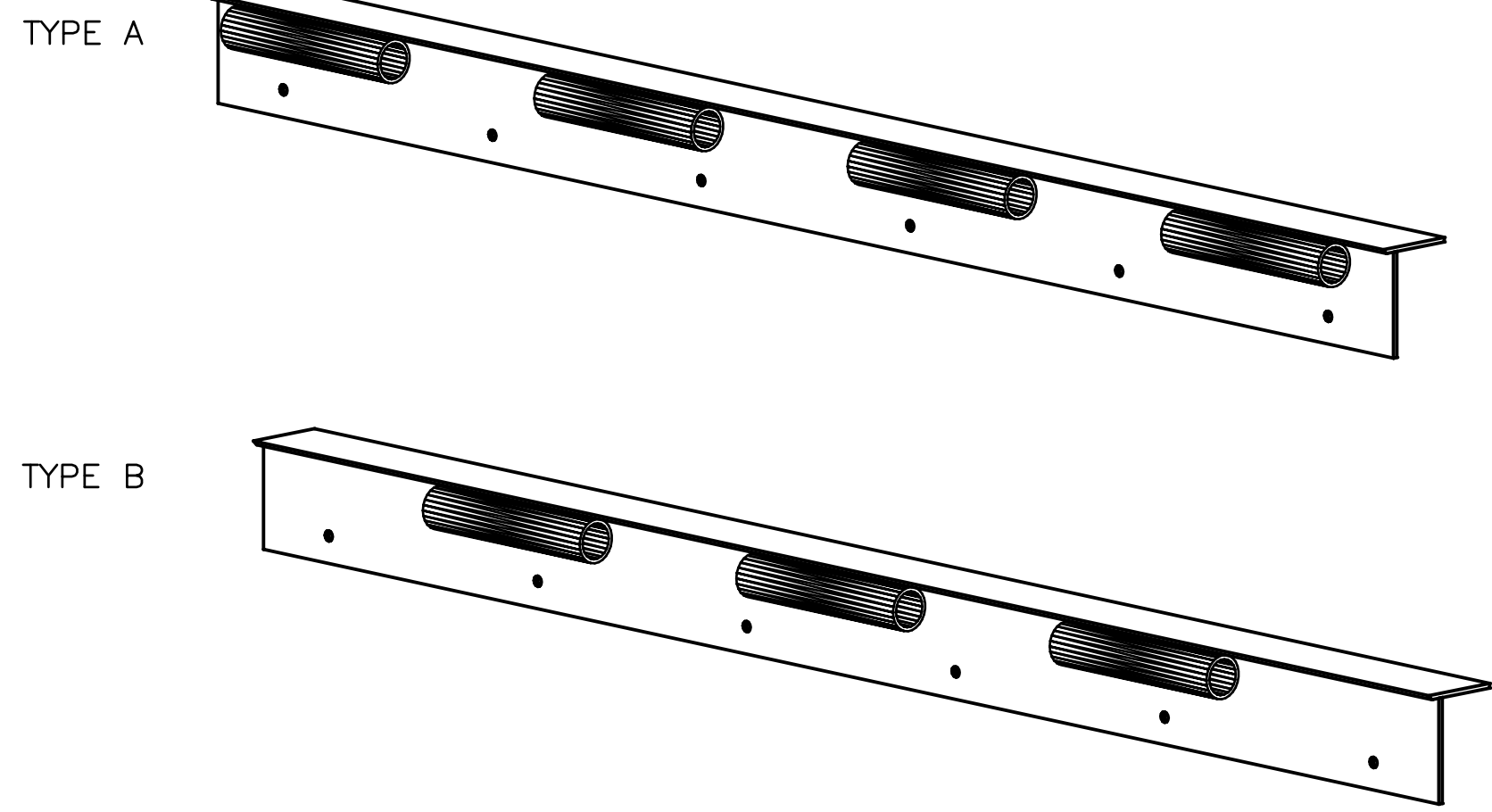
DESIGNED BY JTM
DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS

BOARDING FLOAT UTILITY DETAILS - 2

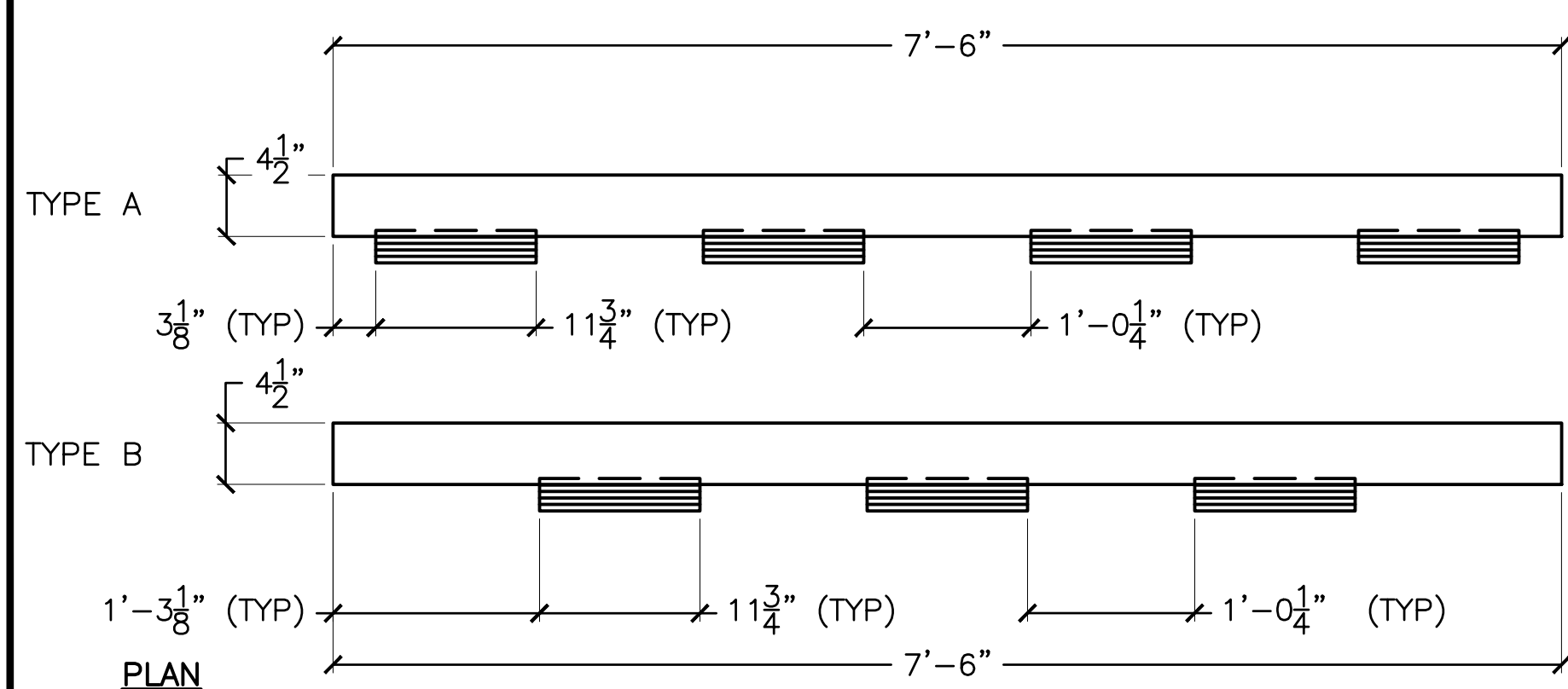
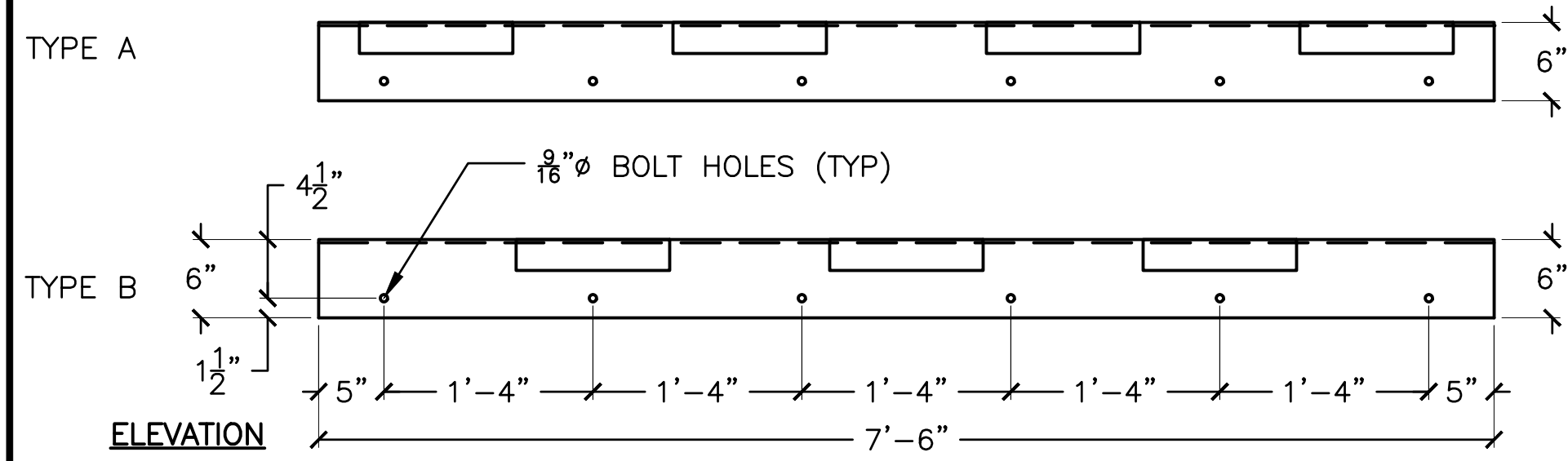
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

SHEET 60 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023

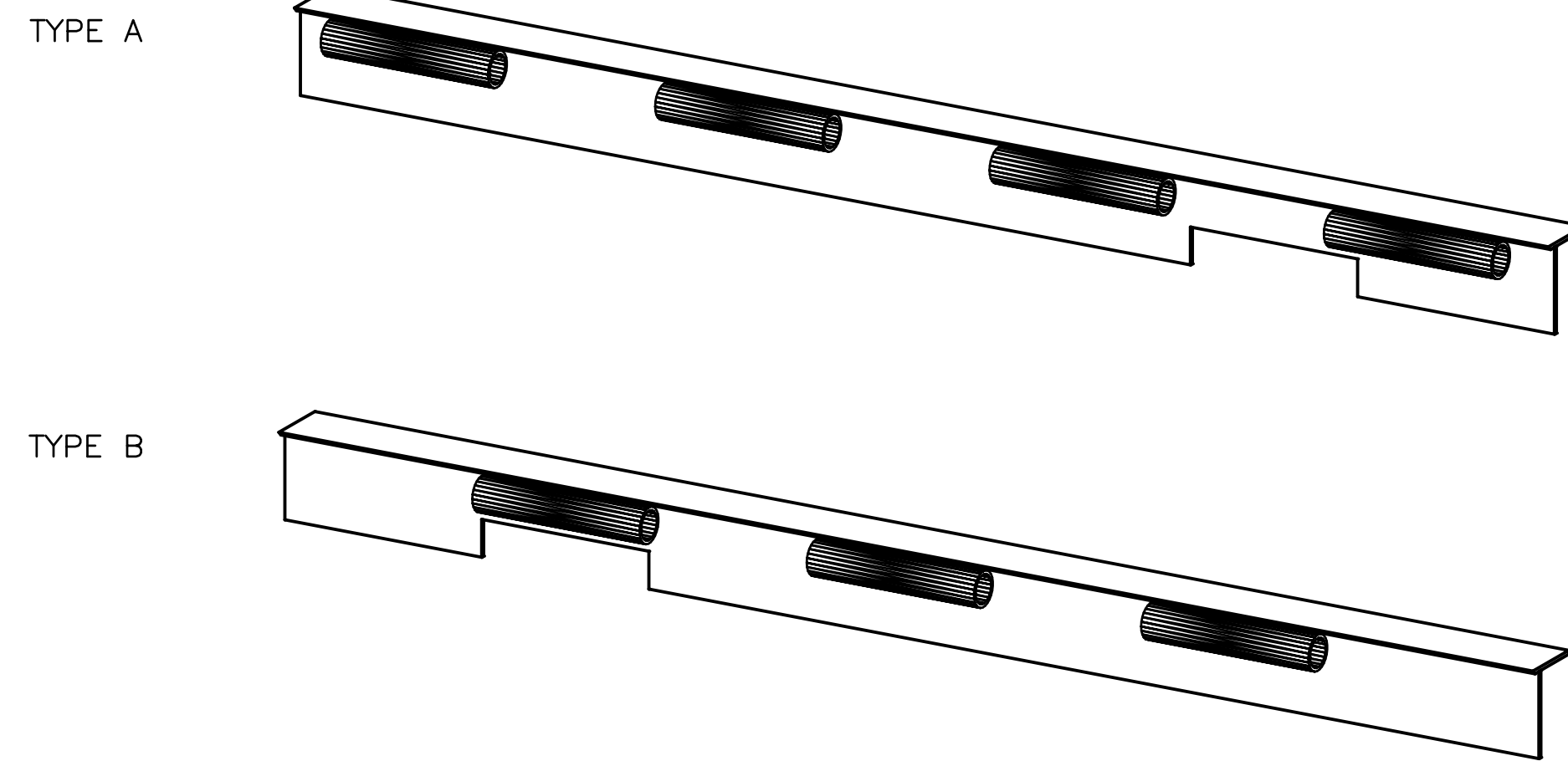


1 TYPICAL DOCK HINGE BRACKET SECTION DETAIL
SCALE: 6" = 1'-0"

NOTE: BASED ON THE DIMENSIONS SHOWN, WHEN TYPE A AND B BRACKETS ARE ALIGNED TO CONNECT THERE SHOULD BE ~1/4" GAP BETWEEN OPPOSING HINGES TO ALLOW FOR ERROR

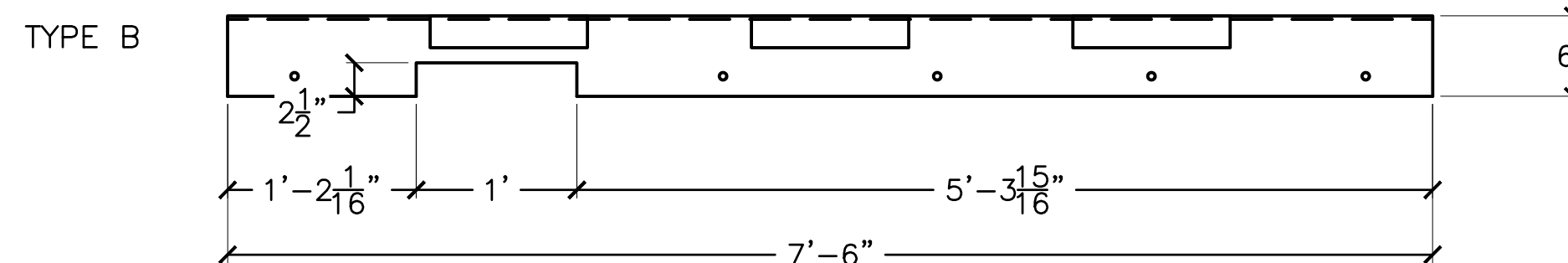
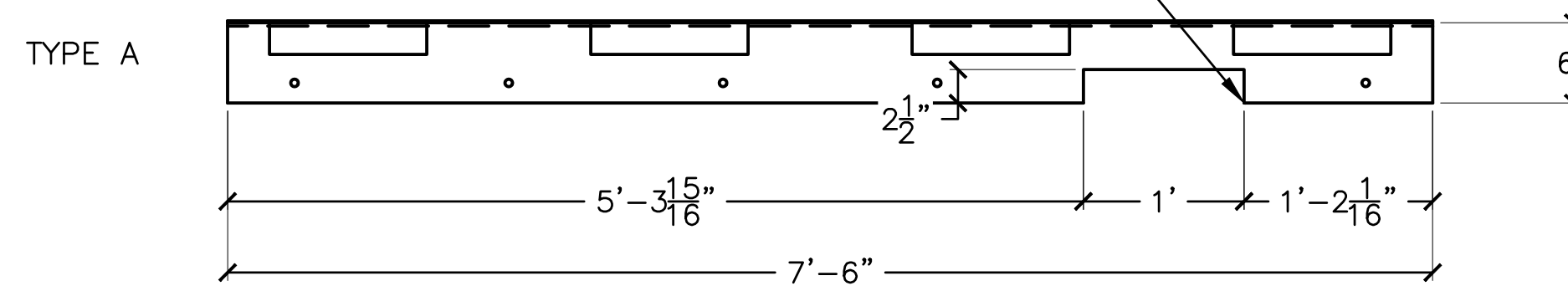


1 TYPICAL DOCK HINGE BRACKET PLAN AND ELEVATION VIEWS
SCALE: 1" = 1'-0"



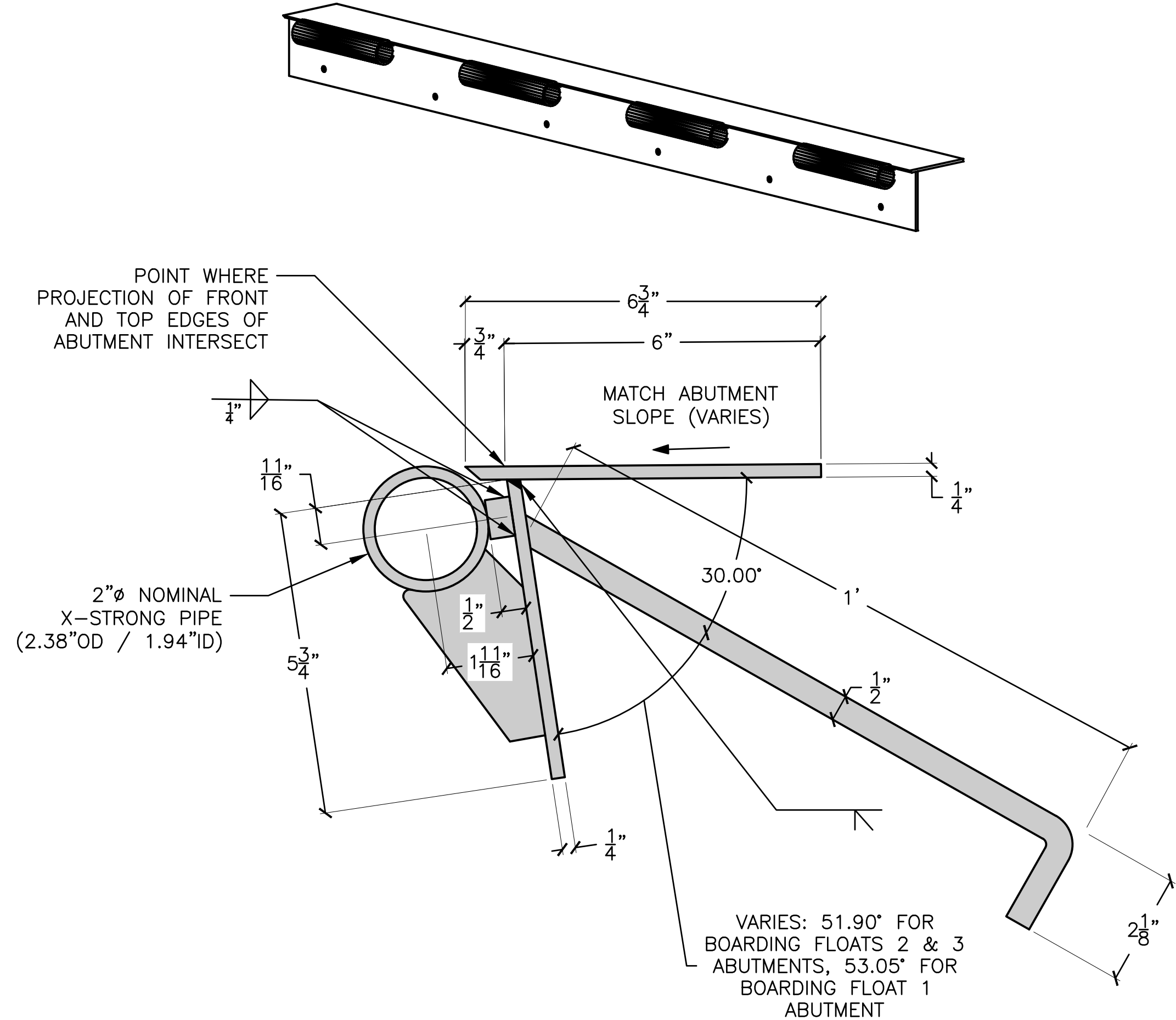
NOTE: SECTION VIEW SAME AS DETAIL A THIS SHEET

RADIUS EDGES AT NOTCH



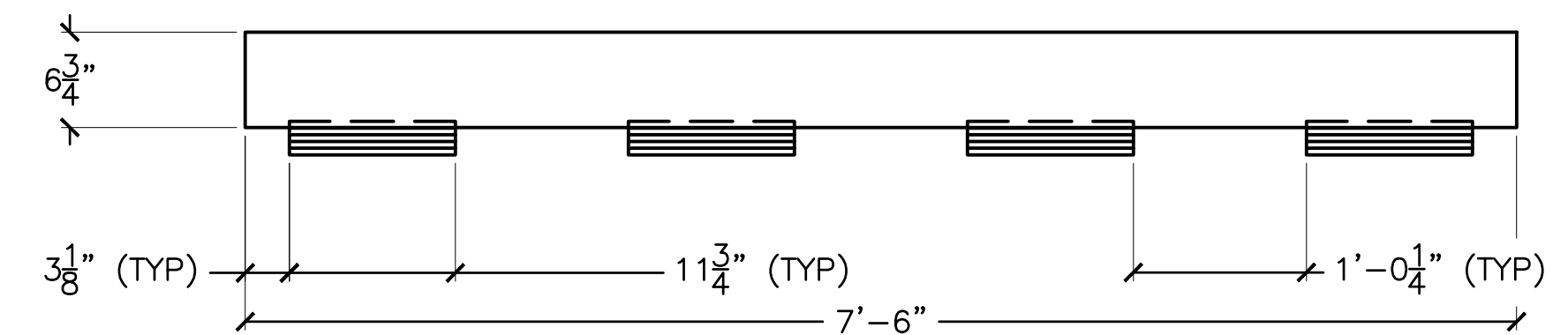
NOTE: PLAN VIEW SAME AS DETAIL 1 THIS SHEET

2 UTILITY BOARDING FLOAT HINGE BRACKET ELEVATION VIEW
SCALE: 1" = 1'-0"

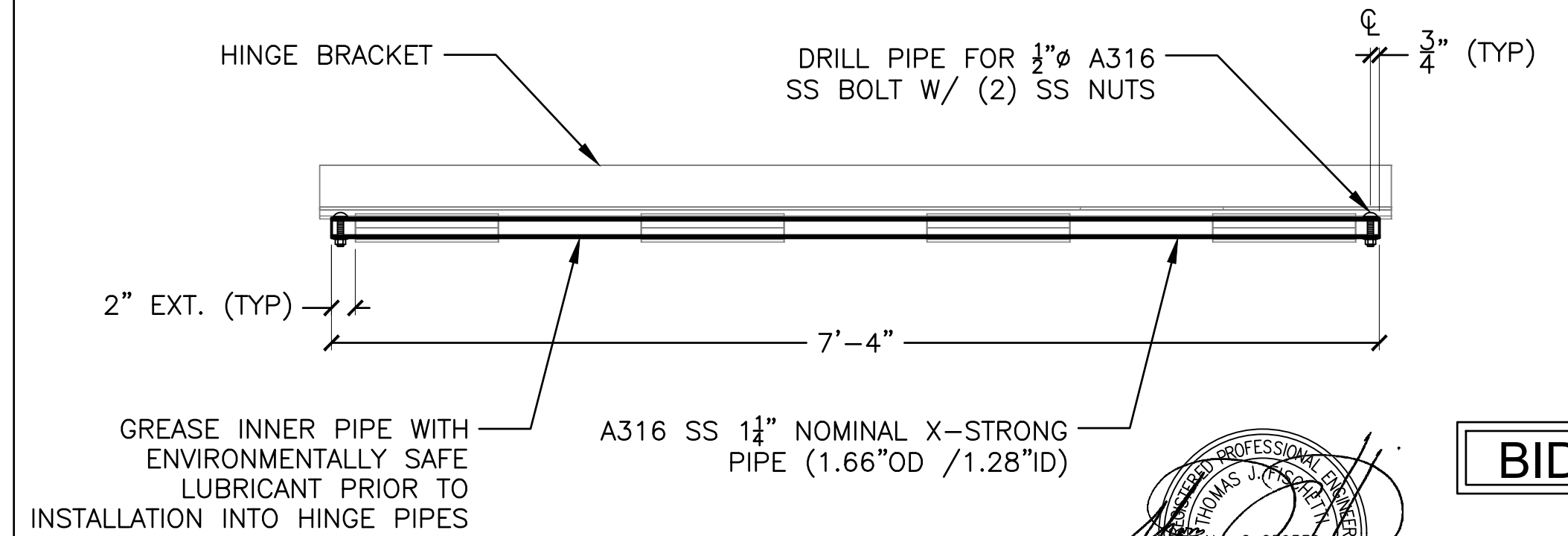


3 TYPICAL ABUTMENT HINGE BRACKET SECTION DETAIL
SCALE: 6" = 1'-0"

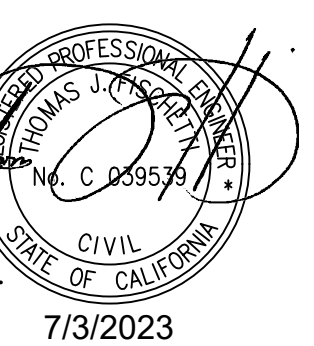
NOTE: ELEVATION VIEW SAME AS DETAIL 1 THIS SHEET, TYPE A



3 TYPICAL ABUTMENT HINGE BRACKET PLAN VIEW
SCALE: 1" = 1'-0"



4 TYPICAL HINGE BRACKET INTERIOR PIPE
SCALE: 1" = 1'-0"



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NOTES:
1. ALL FABRICATED METAL TO BE TYPE 316L SS IN CONFORMANCE WITH ASTM A240.
2. TOP PLATE WALKING SURFACES OF ALL HARDWARE SHOWN ON THIS SHEET SHALL INCORPORATE STAINLESS STEEL GRADE 2 SLIPNOT® ANTI-SLIP FINISH CONSISTING OF A RANDOM HATCH MATRIX AND A BOND STRENGTH OF AT LEAST 2,000 PSI. THE NON-SLIP SURFACE SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.9 ACHIEVED UNDER WET TEST CONDITIONS PER ASTM C1028 AND BE LISTED AS SLIP RESISTANT BY UNDERWRITERS LABORATORIES.



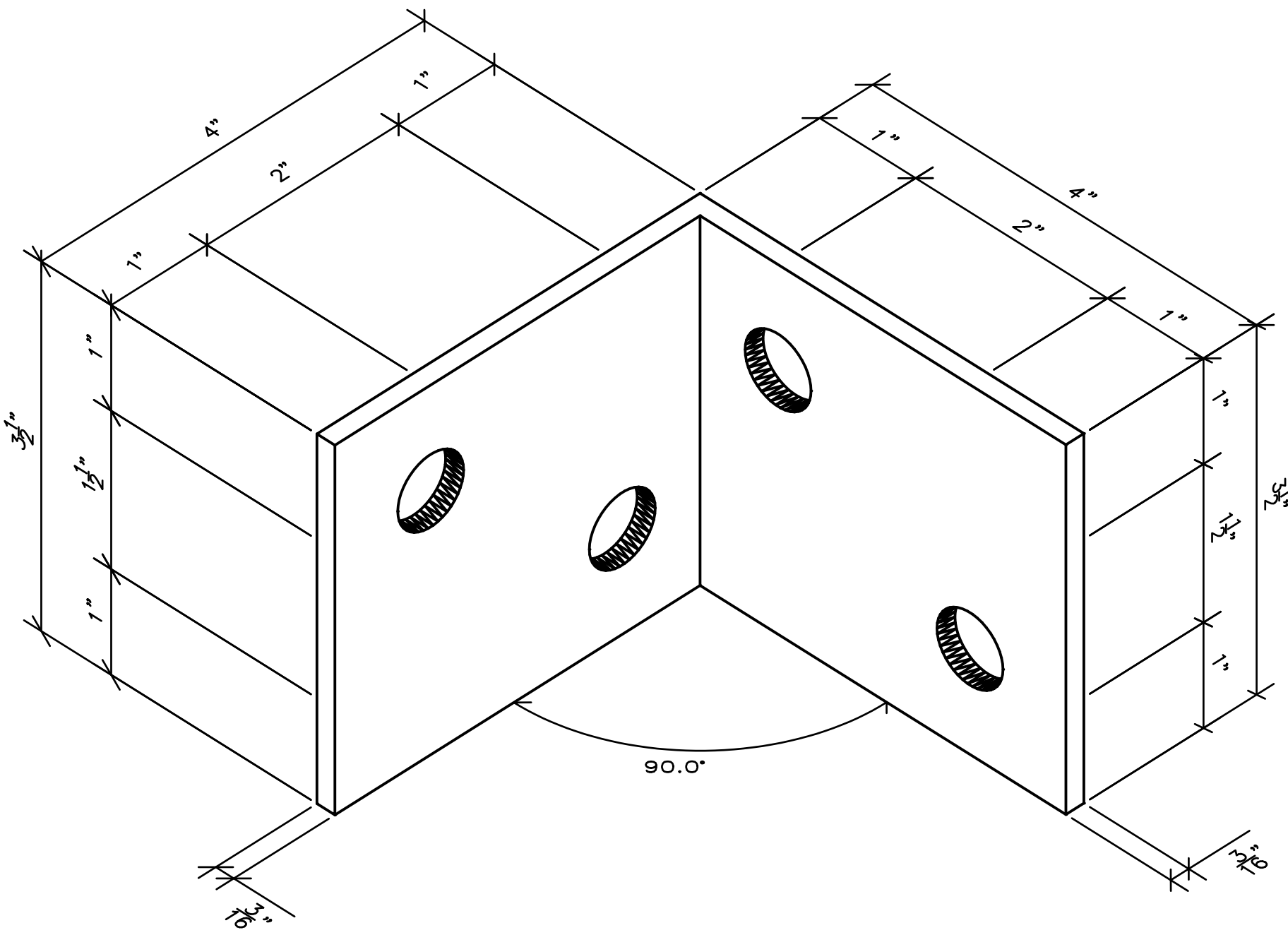
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NO.	DATE	REVISION

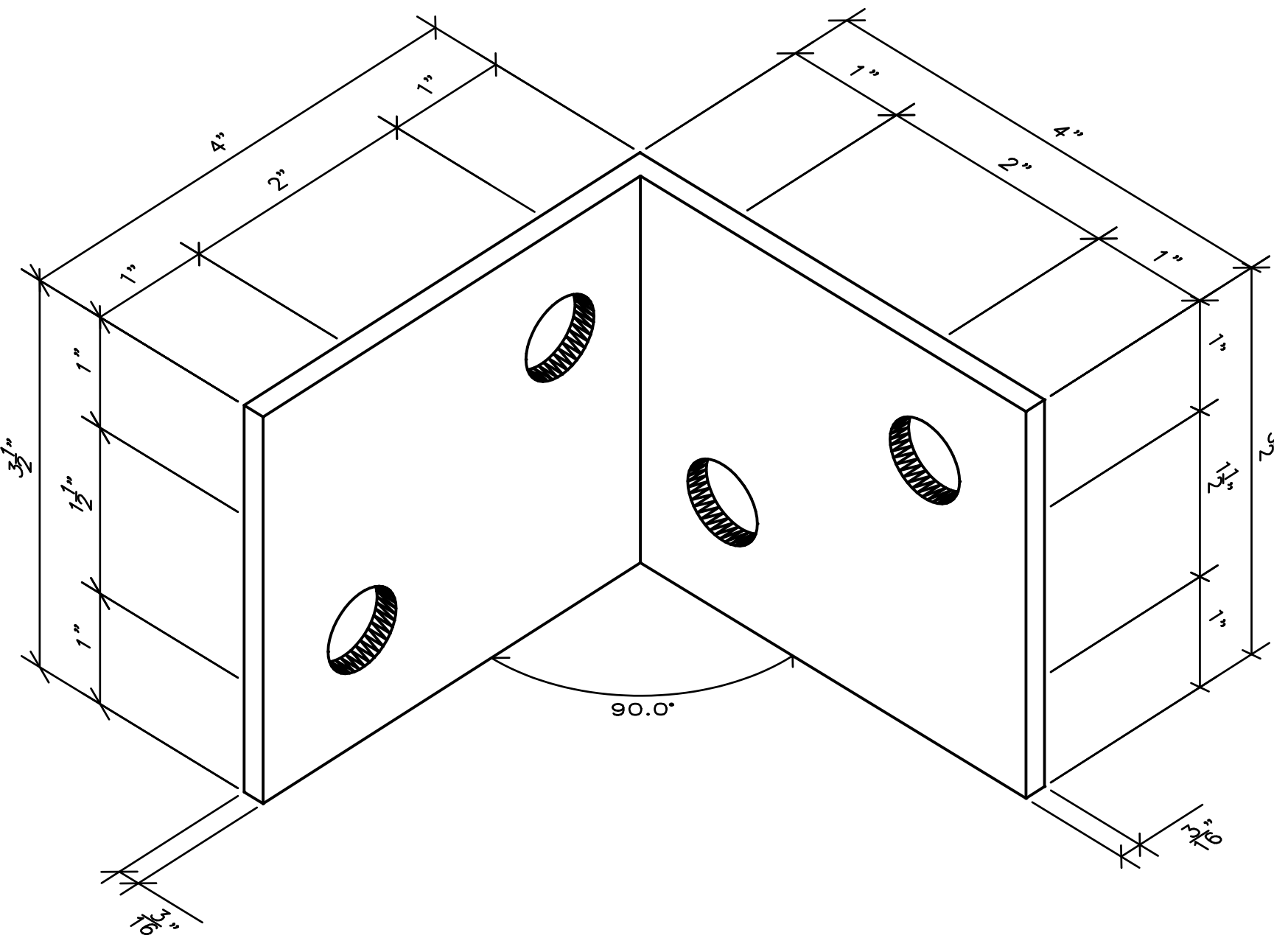
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: TJP
APPROV. BY: JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS
FABRICATED METAL - 1
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION

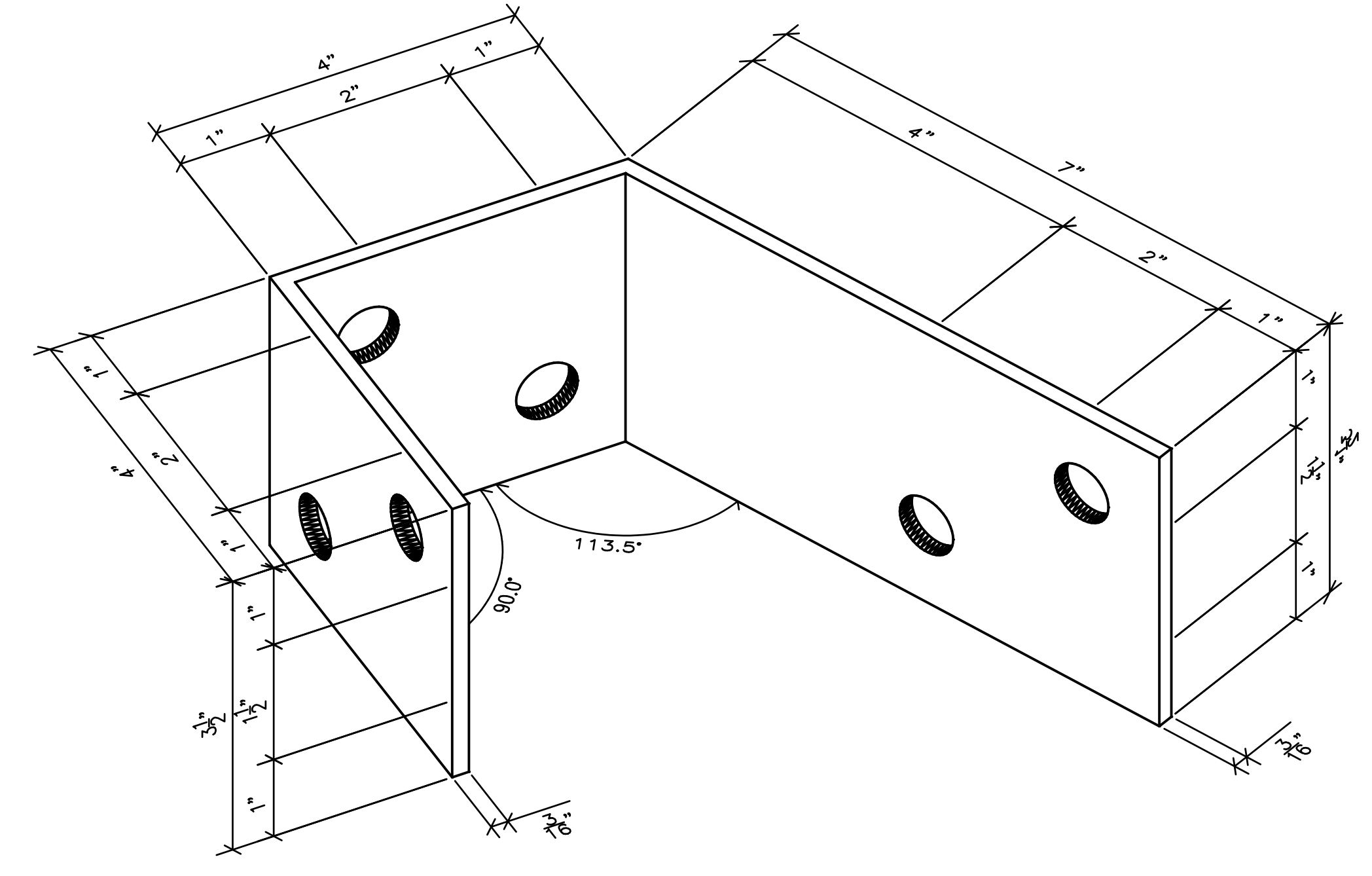
SHEET 61 OF 64
JOB NO. 928-79
SCALE AS SHOWN
DATE 23 JUL 2023



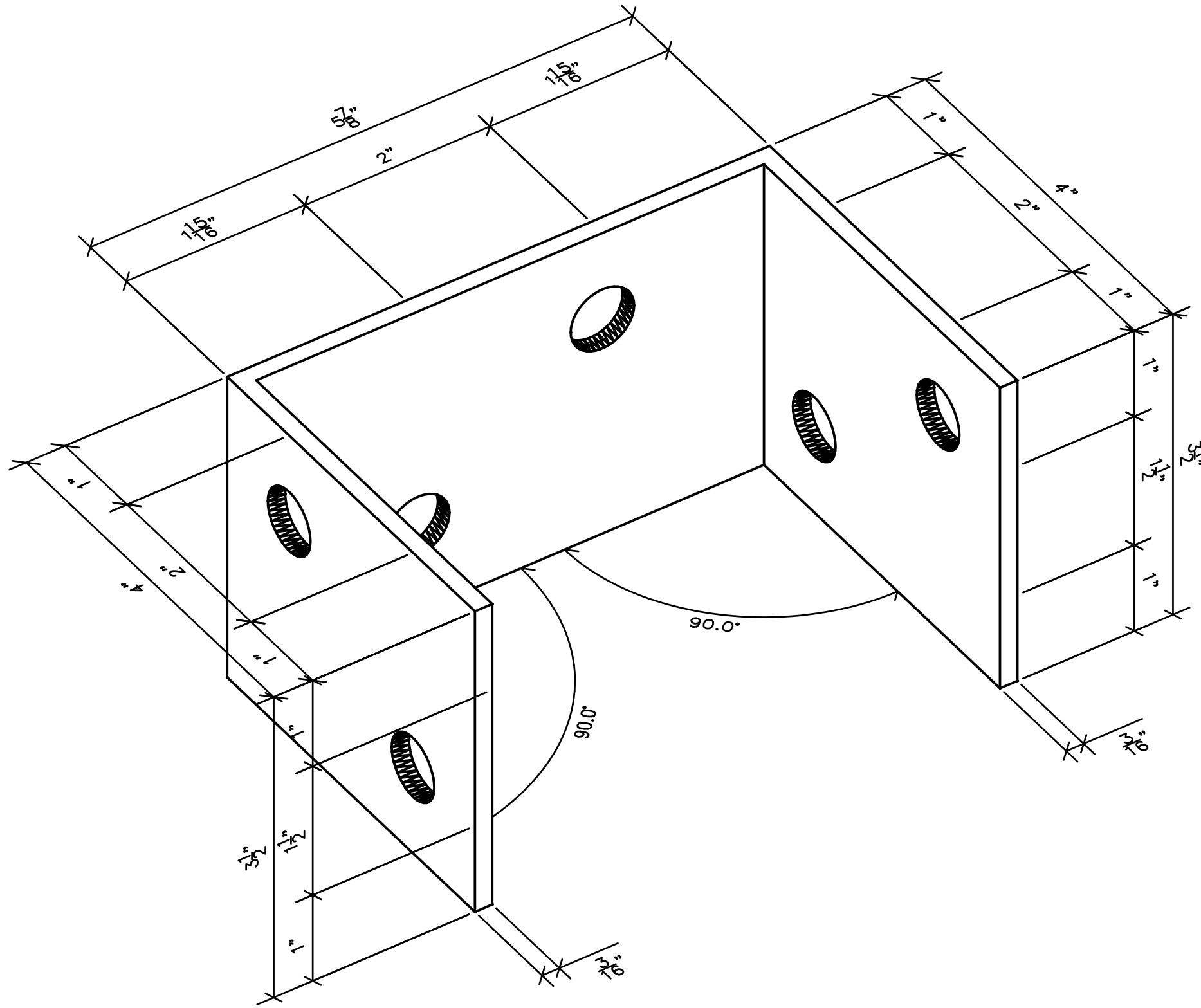
1 BOARDING FLOAT ANGLE - TYPE A
62 SCALE: N/A



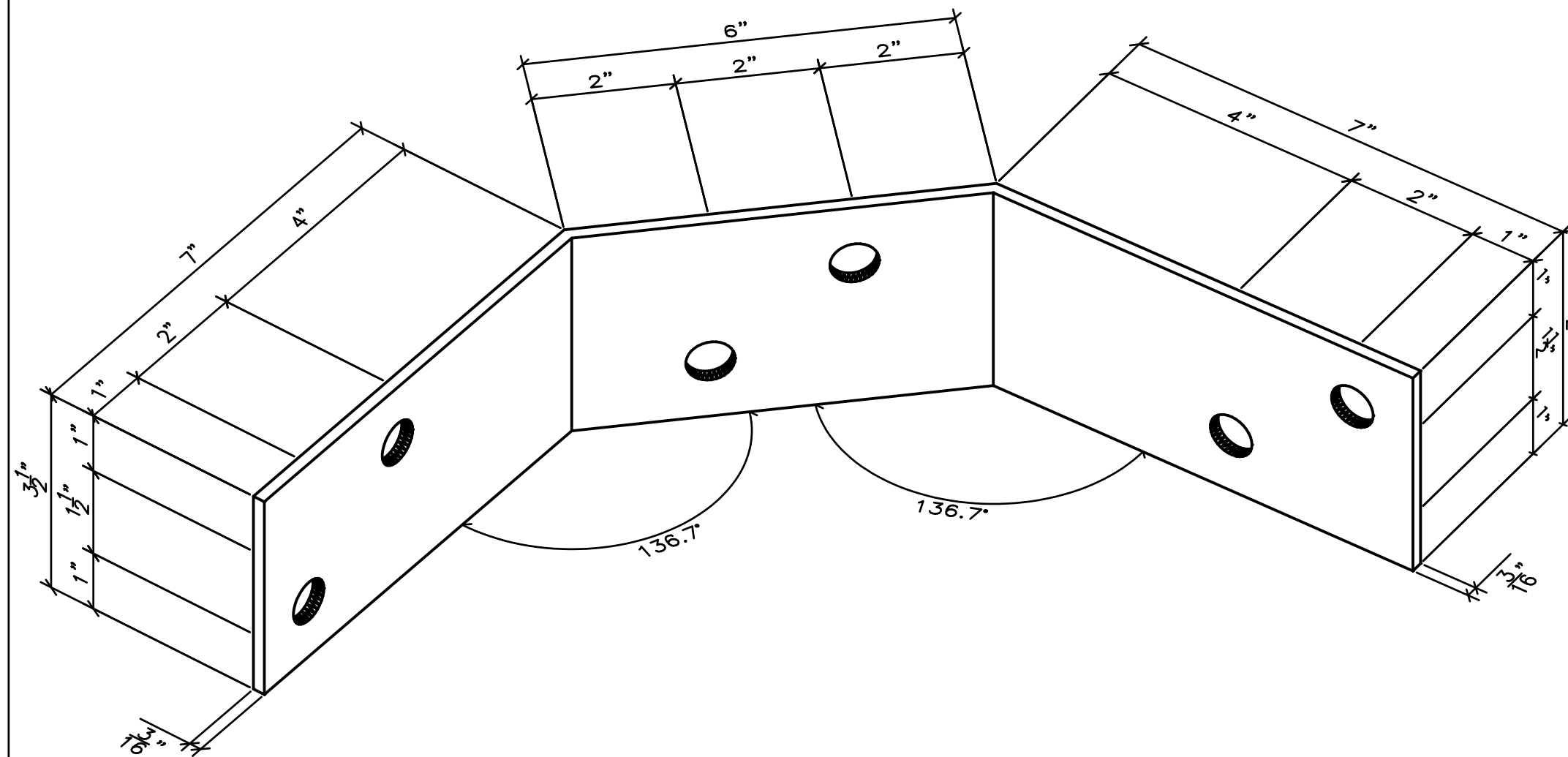
2 BOARDING FLOAT ANGLE - TYPE B
62 SCALE: N/A



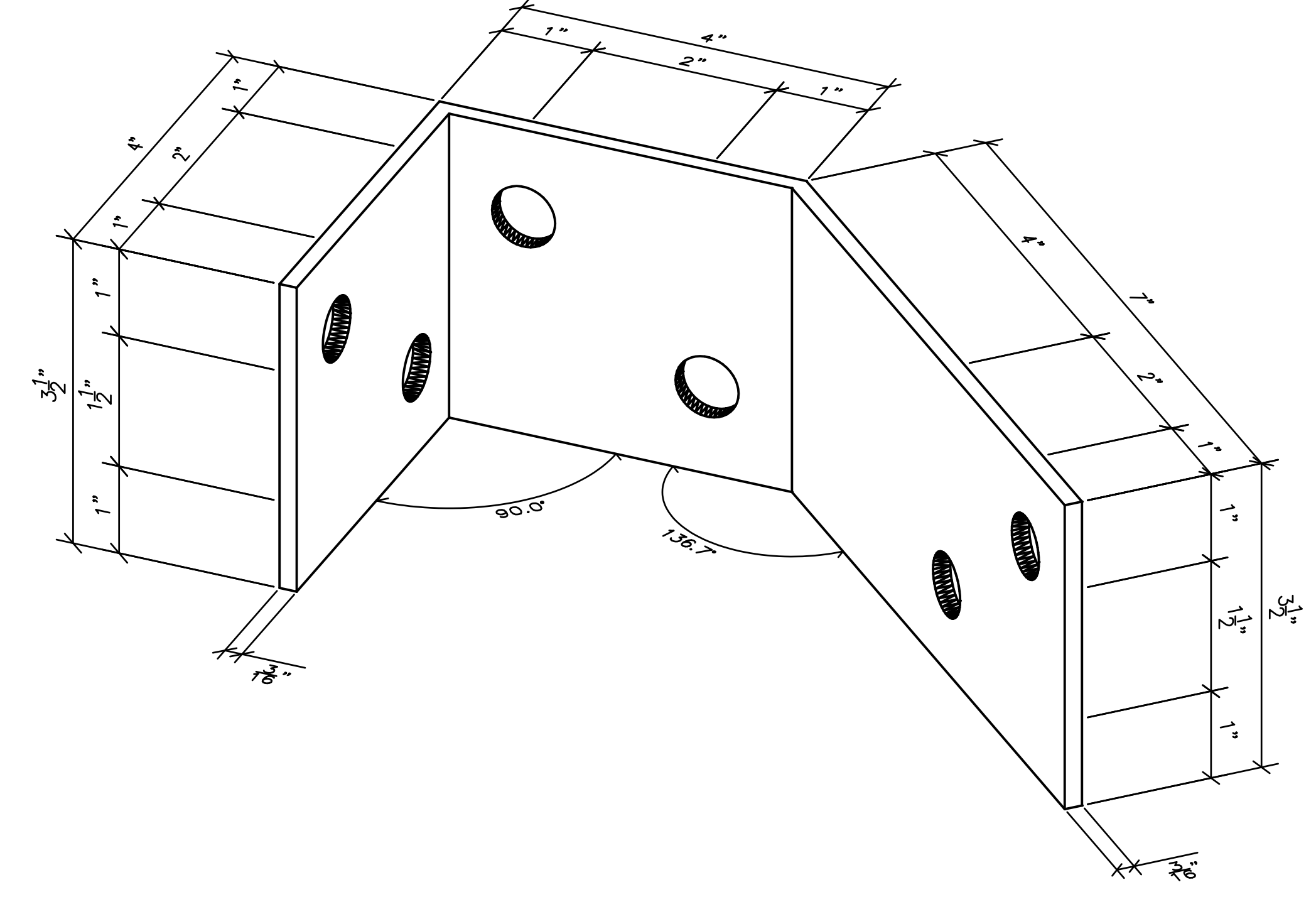
3 BOARDING FLOAT BRACING HARDWARE
62 SCALE: N/A



4 110' BOARDING FLOAT ANGLE
62 SCALE: N/A

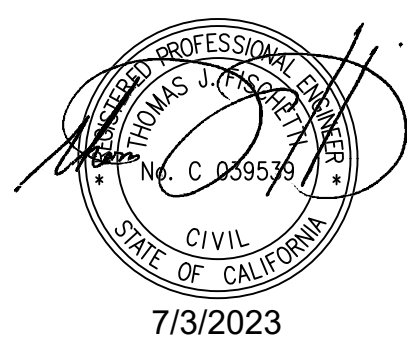


5 BOARDING FLOAT BRACING HARDWARE
62 SCALE: N/A



6 110' BOARDING FLOAT BRACING HARDWARE
62 SCALE: N/A

NOTES:
1. ALL FABRICATED METAL TO BE TYPE 316L SS IN CONFORMANCE WITH ASTM A240.
2. ALL BOLT HOLES TO BE 1 1/8" Ø UNO.



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NO.	DATE	REVISION

DESIGNED BY: JTM	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET: 62 OF 64
DRAWN BY: JTM	FABRICATED METAL - 2	JOB NO.: 928-79
CHECKED BY: TJF		SCALE: N/A
APPROV. BY: JTM	MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	DATE: 23 JUL 2023

	Boat Launch Ramp	Accessible Boarding Float Platform	Guide Piles
STEEL CONSTRUCTION	N/A	N/A	N/A
1. Material identification and testing of high-strength bolts, nuts and washers:			
2. Inspection of high-strength bolting:			
3. Material identification and testing of structural steel and cold-formed steel deck			
4. Material identification of welding consumables and testing of welded elements:			
5. Inspection of welding:			
6. Inspection of steel frame joint details for compliance:			
CONCRETE CONSTRUCTION			
1. Inspect and test reinforcement, including prestressing tendons, and verify placement.	I		
2. Reinforcing bar welding:			
a. Verify weldability of reinforcing bars other than ASTM A706;	I		
b. Inspect single-pass fillet welds, maximum 5/16 and	I		
c. Inspect all other welds.	I		
3. Inspect anchors cast in concrete.			
4. Inspect and test anchors post- installed in hardened concrete members .			
a. Adhesive anchors ins talled in horizontally or upwardly inclined orientations to resist sustained tension loads.	I		
b. Mechanical anchors and adhesive anchors not defined in 4.a.	I		
5. Verify use of required design mix.	I		
6. Prior to and during concrete placement, fabricate specimens for strength tests , perform slump and air content tests, and determine the temperature of the concrete.	I		
7. Inspect concrete and shotcrete placement for proper application techniques.	I		
8. Verify maintenance of specified curing temperature and techniques.	I		
9. Inspect prestressed concrete for:			
a. Application of prestressing forces; and			
b. Grouting of bonded prestressing tendons.			
10. Inspect erection of precast concrete members.	I		
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.			
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	I		
DRIVEN DEEP FOUNDATION ELEMENTS			
1. Verify element materials, sizes and lengths comply with the requirements.	I	I	
2. Determine capacities of test elements and conduct additional load tests, as required.			
3. Inspect driving operations and maintain complete and accurate records for each element.	I	I	
4. Verify placement locations and plumbness, confirm type and size of hammer , record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element.	C	C	
5. For steel elements, perform additional special inspections in accordance with Section 1705.2.			
6. For concrete elements and concrete-filled elements, perform tests and additional special inspections in accordance with Section 1705 .3.			
7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.			
DEEP FOUNDATION ELEMENTS	N/A		
1. Inspect drilling operations and maintain complete and accurate records for each element.			
2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes.			
3. For concrete elements, perform tests and additional special inspections in accordance with Section 1705.3.			

LEGEND:

<input type="checkbox"/>	No Special Inspection Required
<input type="checkbox"/>	Intermittent Special Inspection Required
<input type="checkbox"/>	Continuous Special Inspection Required

**COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
SPECIAL INSPECTION REPORT**

Each inspector must complete this report and mail it to the District Office where the permit was issued.

DAILY WEEKLY FINAL

Report Date _____ Building Permit # _____ District Office # _____

Job Address _____

General Contractor _____ Engineer of Record _____

Inspection Frequency: Continuous Periodic

Type of Inspection: Reinforced Concrete Gunite / Shotcrete Prestressed Concrete Masonry
For any of above types of inspections provide Design Mix _____ PSI _____

Welding High-Strength Bolts Epoxy Other _____

Location on Site _____

Description of Work _____

Discrepancies _____

All work on this job to date HAS / HAS NOT been satisfactorily completed in conformance with the approved plans and requirements of the Los Angeles County Building Code.

Signature _____ LA Co ID # _____ Date _____

Print Full Name _____ Daytime Phone # _____

SI-REPORT Revised 04-29-14

SPECIAL INSPECTION REPORT FORM

**County of Los Angeles
DEPARTMENT OF PUBLIC WORKS BUILDING & SAFETY DIVISION
Los Angeles Regional Uniform Code Program**

STRUCTURAL OBSERVATION REPORT FORM

STRUCTURAL OBSERVATION means the visual observation of the structural system, for general conformance to the approved plans and specifications, at significant construction stages and at completion of the structural system. Structural observation does not include or waive the responsibility for the inspections required by Section 108, 1704 or other sections of the Los Angeles County Building Code. (Sections 106.4.5, 1709)

This report includes all construction work through _____ day of _____, 20____ Page No. _____ of _____

Report No. _____

Project Address: _____ Structural Observer of Record (SOR): _____ SOR Phone No.: _____

Building Permit No.: _____ Structural Observation performed by: _____ Obsrvr Professional Lic./Reg. No.: _____ Observer Phone No.: _____

FOUNDATION	WALL	FRAMES	FLOOR	ELEMENTS/CONNECTION OBSERVATION LOCATION
<input type="checkbox"/> Footing, Stem Walls	<input type="checkbox"/> Concrete	<input type="checkbox"/> Steel Moment Frame	<input type="checkbox"/> Concrete	
<input type="checkbox"/> Mat Foundation	<input type="checkbox"/> Masonry	<input type="checkbox"/> Steel Braced Frame	<input type="checkbox"/> Steel Deck	
<input type="checkbox"/> Caisson, Piles, Grade Beams	<input type="checkbox"/> Wood	<input type="checkbox"/> Concrete Moment Frame	<input type="checkbox"/> Wood	
<input type="checkbox"/> Retaining Foundation	<input type="checkbox"/> Others:	<input type="checkbox"/> Masonry Wall Frame	<input type="checkbox"/> Others:	
<input type="checkbox"/> Hillside Special Anchors				
<input type="checkbox"/> Others:				

NOTED DEFICIENCIES with the proposed corresponding corrective actions with respect to general conformance with the approved plans or in the load path: (A final report by the structural observer which states that all observed deficiencies have been resolved is required before acceptance of the work by the building officials.)

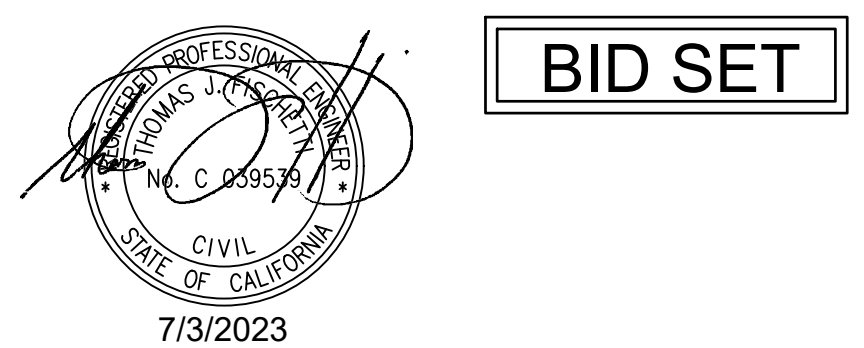
I DECLARE THAT THE FOLLOWING STATEMENTS ARE TRUE TO THE BEST OF MY KNOWLEDGE:

- I AM THE ENGINEER OR ARCHITECT RETAINED BY THE OWNER TO BE IN RESPONSIBLE CHARGE FOR THE STRUCTURAL OBSERVATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE COUNTY OF LOS ANGELES.
- I, OR ANOTHER ENGINEER OR ARCHITECT WHO I HAVE DESIGNATED ABOVE AND IS UNDER MY RESPONSIBLE CHARGE, HAS PERFORMED THE REQUIRED SITE VISITS AT EACH SIGNIFICANT CONSTRUCTION STAGE TO VERIFY IF THE STRUCTURE IS IN GENERAL CONFORMANCE WITH APPROVED PLANS AND SPECIFICATIONS;
- ALL NOTED DEFICIENCIES WHICH REMAIN TO BE CORRECTED HAVE BEEN INDICATED ABOVE;
- I RECOMMEND THAT ACCEPTANCE OF THE STRUCTURAL SYSTEMS BY THE COUNTY OF LOS ANGELES BE WITHHELD UNTIL ALL OBSERVED DEFICIENCIES ARE CORRECTED.

SIGNATURE OF STRUCTURAL OBSERVER _____ DATE _____ (STAMP OF STRUCTURAL OBSERVER)

Version 1.0 (2008 LACBC) Jan. 10 2008

STRUCTURAL OBSERVATION REPORT FORM



BID SET

NOBLE CONSULTANTS | **GEC**

2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION	DESIGNED BY	LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET	OF
			JTM	SPECIAL INSPECTIONS & STRUCTURAL OBSERVATIONS	63	64
			JTM		JOB NO.	928-79
			TJF		SCALE	AS SHOWN
			JTM		DATE	23 JUL 2023

EROSION AND SEDIMENT CONTROL PLAN (ESCP) GENERAL NOTES:

1. IN CASE OF EMERGENCY, CALL (RESPONSIBLE PERSON) AT (24-HOUR TELEPHONE).

I. PLEASE FILL IN NAME AND NUMBER

2. TOTAL DISTURBED AREA 0.08 ACRES

WDID # N/A

1. RISK LEVEL 1 2 3 (CIRCLE ONE AS DETERMINED BY STATE GENERAL PERMIT FOR SITES GREATER THAN 1 ACRE) - N/A NO STATE GENERAL PERMIT

3. A STAND-BY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOVEMBER 1 TO APRIL 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.

4. EROSION CONTROL DEVICES SHOWN ON THIS PLAN MAY BE REMOVED WHEN APPROVED BY THE BUILDING OFFICIAL IF THE GRADING OPERATION HAS PROGRESSED TO THE POINT WHERE THEY ARE NO LONGER REQUIRED.

5. GRADED AREAS ADJACENT TO SLOPES LOCATED AT THE SITE PERIMETER MUST DRAIN AWAY FROM THE TOP OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY. ALL LOOSE SOILS AND DEBRIS THAT MAY CREATE A POTENTIAL HAZARD TO OFF-SITE PROPERTY SHALL BE STABILIZED OR REMOVED FROM THE SITE ON A DAILY BASIS.

6. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.

7. A GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN ANY DEVICE EXCEEDS TWO FEET. THE DEVICE SHALL BE DRAINED OR PUMPED DRY WITHIN 24 HOURS AFTER EACH RAINSTORM. PUMPING AND DRAINING OF ALL BASINS AND DRAINAGE DEVICES MUST COMPLY WITH THE APPROPRIATE BMP FOR DEWATERING OPERATIONS.

8. THE PLACEMENT OF ADDITIONAL DEVICES TO REDUCE EROSION DAMAGE AND CONTAIN POLLUTANTS WITHIN THE SITE IS LEFT TO THE DISCRETION OF THE FIELD ENGINEER. ADDITIONAL DEVICES AS NEEDED SHALL BE INSTALLED TO RETAIN SEDIMENTS AND OTHER POLLUTANTS ON SITE.

9. DESILTING BASINS MAY NOT BE REMOVED OR MADE INOPERABLE BETWEEN NOVEMBER 1 AND APRIL 15 OF THE FOLLOWING YEAR WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.

10. STORM WATER POLLUTION AND EROSION CONTROL DEVICES ARE TO BE MODIFIED, AS NEEDED, AS THE PROJECT PROGRESSES, THE DESIGN AND PLACEMENT OF THESE DEVICES IS THE RESPONSIBILITY OF THE FIELD ENGINEER. PLANS REPRESENTING CHANGES MUST BE SUBMITTED FOR APPROVAL IF REQUESTED BY THE BUILDING OFFICIAL.

11. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORM WATER FROM THE PROJECT SITES AT ALL TIMES.

12. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.

13. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.

14. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

15. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.

16. DEVELOPERS/CONTRACTORS ARE RESPONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES AND BMPs ARE INSTALLED AND FUNCTIONING PROPERLY IF THERE IS A 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL (COPIES OF THE SELF-INSPECTION CHECK LIST AND INSPECTION LOGS ARE AVAILABLE UPON REQUEST).

17. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.

18. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.

19. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

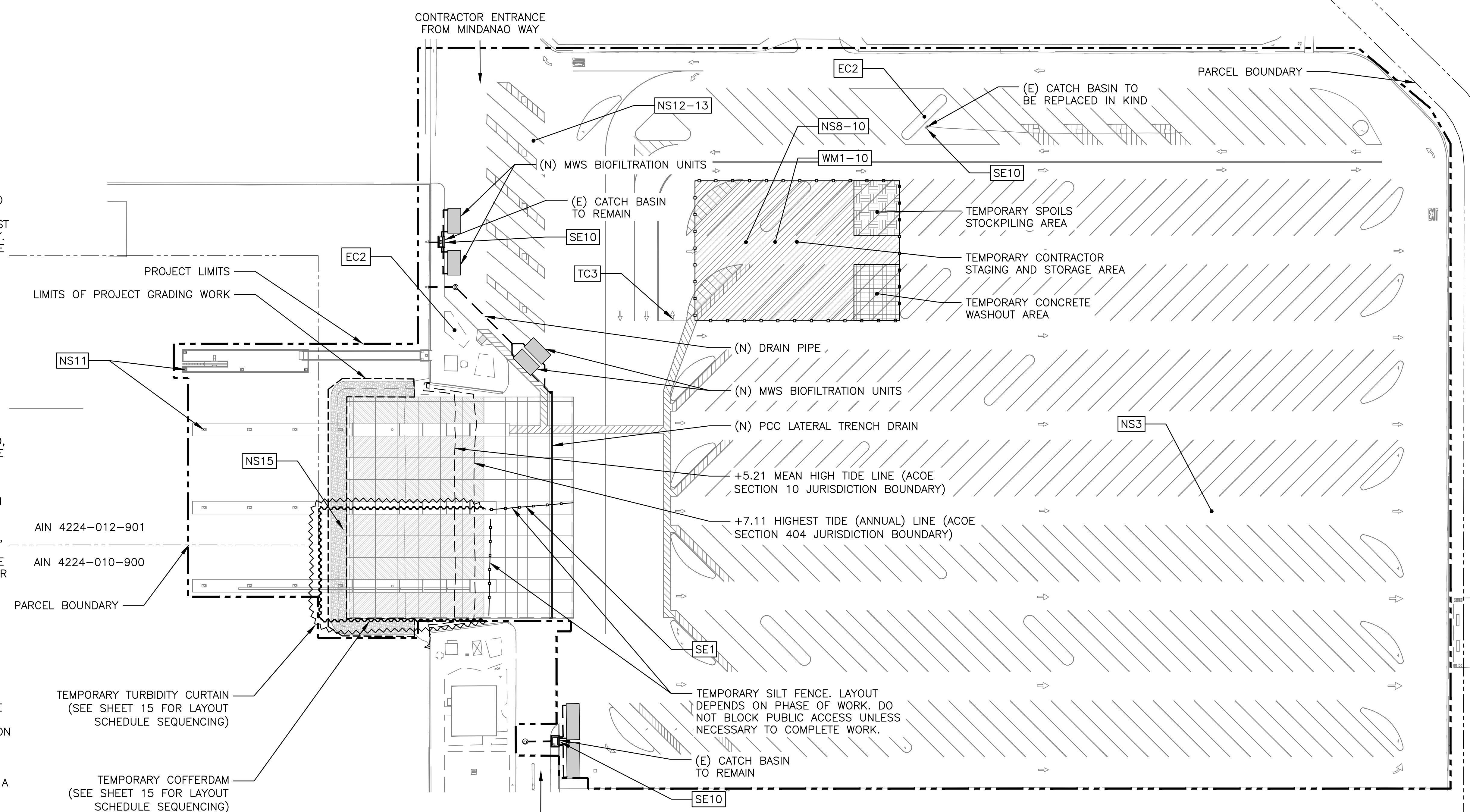
20. AS THE ENGINEER/QSD OF RECORD, I HAVE SELECTED APPROPRIATE BMPs TO EFFECTIVELY MINIMIZE THE NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORM WATER QUALITY. THE PROJECT OWNER AND CONTRACTOR ARE AWARE THAT THE SELECTED BMPs MUST BE INSTALLED, MONITORED, AND MAINTAINED TO ENSURE THEIR EFFECTIVENESS.

[Signature]
23 JUL 2023

CIVIL ENGINEER/QSD SIGNATURE DATE
21. THE FOLLOWING NOTES MUST BE ON THE PLAN:
AS THE PROJECT OWNER OR AUTHORIZED AGENT OF THE OWNER, "I CERTIFY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH THE SYSTEM DESIGNED TO ENSURE THAT A QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE INFORMATION SUBMITTED IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT SUBMITTING FALSE AND/OR INACCURATE INFORMATION, FAILING TO UPDATE THE ESCP TO REFLECT CURRENT CONDITIONS, OR FAILING TO PROPERLY AND/OR ADEQUATELY IMPLEMENT THE ESCP MAY RESULT IN REVOCATION OF GRADING AND/OR OTHER PERMITS OR OTHER SANCTIONS PROVIDED BY LAW."

[Signature]
23 JUL 2023

OWNER OR AUTHORIZED REPRESENTATIVE (PERMITEE) DATE
22. DEVELOPERS/CONTRACTORS ARE RESPONSIBLE TO INSPECT ALL EROSION CONTROL DEVICES AND BMPs ARE INSTALLED AND FUNCTIONING PROPERLY AS REQUIRED BY THE STATE CONSTRUCTION GENERAL PERMIT. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL.



1 EROSION AND SEDIMENT CONTROL PLAN
64 SCALE: 1" = 40'-0"

GENERAL NOTES

- EROSION AND SEDIMENT CONTROL PLANS (ESCP) ARE YEAR-ROUND BMP MEASURES THAT MUST BE INCORPORATED INTO THE CONSTRUCTION PLANS.
- TO CONTROL SITE EROSION AND SEDIMENTS THE ESCP MUST BE SUBMITTED (OR REVISED) EVERY YEAR TO REFLECT SITE CONDITIONS AT THE START OF THE RAINY SEASON OCTOBER 15.
- THE QSD FOR THE PROJECT IS THOMAS FISCHETTI, PE. QSD CERTIFICATE #39539. PHONE # (949)-752-1530.
- OWNER:
- SEE SHEET 25 FOR SITE DRAINAGE PLAN.

BMP NOTES

THE FOLLOWING BMPs AS OUTLINED IN, BUT NOT LIMITED TO, THE LATEST EDITION OF THE CASQA CONSTRUCTION BMP ONLINE HANDBOOK OR CALTRANS STORMWATER QUALITY HANDBOOKS (CONSTRUCTION SITE BMP MANUAL), MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE PROJECT ENGINEER OR THE BUILDING OFFICIAL)

EROSION CONTROL

- EC1 - SCHEDULING
- EC2 - PRESERVATION OF EXISTING VEGETATION
- EC3 - HYDRAULIC MULCH
- EC4 - HYDROSEEDING
- EC5 - SOIL BINDERS
- EC6 - STRAW MULCH
- EC7 - GEOTEXTILES & MATS
- EC8 - WOOD MULCHING
- EC9 - EARTH DIKES AND DRAINAGE SWALES
- EC10 - VELOCITY DISSIPATION DEVICES
- EC11 - SLOPE DRAINS
- EC12 - STREAMBANK STABILIZATION
- EC13 - RESERVED
- EC14 - COMPOST BLANKETS
- EC15 - SOIL PREPARATION/ROUGHENING
- EC16 - NON-VEGETATED STABILIZATION

TEMPORARY SEDIMENT CONTROL

- SE1 - SILT FENCE
- SE2 - SEDIMENT BASIN
- SE3 - SEDIMENT TRAP
- SE4 - CHECK DAM
- SE5 - FIBER ROLLS
- SE6 - GRAVEL BAG BERM
- SE7 - STREET SWEEPING AND VACUUMING

WIND EROSION CONTROL

- WE1 - WIND EROSION CONTROL
- SE8 - SANDBAG BARRIER
- SE9 - STRAW BALE BARRIER
- SE10 - STORM DRAIN INLET PROTECTION
- SE11 - ACTIVE TREATMENT SYSTEMS
- SE12 - TEMPORARY SILT DIKE
- SE13 - COMPOST SOCKS & BERMS
- SE14 - BIOFILTER BAGS

EQUIPMENT TRACKING CONTROL

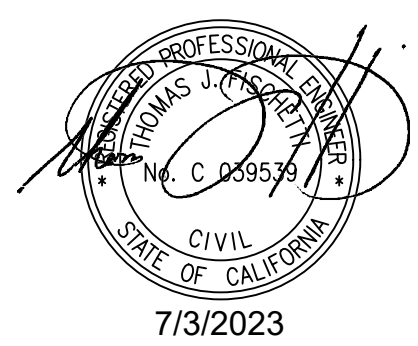
- TC1 - STABILIZED CONSTRUCTION ENTRANCE EXIT
- TC2 - STABILIZED CONSTRUCTION ROADWAY
- TC3 - ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT

- NS1 - WATER CONSERVATION PRACTICES
- NS2 - DEWATERING OPERATIONS
- NS3 - PAVING AND GRINDING OPERATIONS
- NS4 - TEMPORARY STREAM CROSSING
- NS5 - CLEAR WATER DIVERSION
- NS6 - ILLICIT CONNECTION/DISCHARGE
- NS7 - POTABLE WATER/IRRIGATION
- NS8 - VEHICLE AND EQUIPMENT CLEANING
- NS9 - VEHICLE AND EQUIPMENT FUELING

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL

- WM1 - MATERIAL DELIVERY AND STORAGE
- WM2 - MATERIAL USE
- WM3 - STOCKPILE MANAGEMENT
- WM4 - SPILL PREVENTION AND CONTROL
- WM5 - SOLID WASTE MANAGEMENT
- WM6 - HAZARDOUS WASTE MANAGEMENT
- WM7 - CONTAMINATION SOIL MANAGEMENT
- WM8 - CONCRETE WASTE MANAGEMENT
- WM9 - SANITARY/SEPTIC WASTE MANAGEMENT
- WM10 - LIQUID WASTE MANAGEMENT
- NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
- NS11 - PILE DRIVING OPERATIONS
- NS12 - CONCRETE CURING
- NS13 - CONCRETE FINISHING
- NS14 - MATERIAL AND EQUIPMENT USE
- NS15 - DEMOLITION ADJACENT TO WATER
- NS16 - TEMPORARY BATCH PLANTS



BID SET

NOBLE CONSULTANTS | **GEC**
2201 DUPONT DRIVE, SUITE 830
IRVINE, CA. 92612
949-752-1530
949-752-8381 (FAX)

NO.	DATE	REVISION

DESIGNED BY JTM
DRAWN BY JTM
CHECKED BY TJF
APPROV. BY JTM

LOS ANGELES COUNTY - DEPT OF BEACHES & HARBORS	SHEET 64 OF 64
EROSION AND SEDIMENT CONTROL PLAN	JOB NO. 928-79
MARINA DEL REY BOAT LAUNCH FACILITY RENOVATION	SCALE AS SHOWN
DATE 23 JUL 2023	