

# COUNTY OF IMPERIAL

# IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT; COUNTY PROJECT NO. SR6081CED



#### **GENERAL NOTES**

COUNTY ENCROACHMENT PERMIT CONDITIONS AND PROVISIONS SHALL TAKE PRECEDENCE OVER THE APPROVED PLANS AND SPECIFICATIONS FOR ANY CONFLICTS.

THE STRUCTURAL SECTIONS SHALL BE IN ACCORDANCE WITH IMPERIAL COUNTY STANDARDS (OR CALTRANS IF IN STATE ROW) AND AS APPROVED BY THE PUBLIC WORKS DIRECTOR (OR CALTRANS).

APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.

LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISION ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.

#### UTILITIES COORDINATION

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NO LESS THAN 3 WORKING DAYS PRIOR TO ANY EXCAVATION OR TRENCHING, EACH CONTRACTOR DOING SUCH WORK SHALL CONTACT THE FOLLOWING AGENCIES SO THAT EXISTING UNDERGROUND UTILITIES MAY BE LOCATED. THE AGENCY MAY REQUIRE AN INSPECTOR TO BE PRESENT.

IID WATER.	TELEPHONE NO.	(700) 339-9263
AT&T TELEPHONE:	TELEPHONE NO.	(800) 422-4133
CATV:	TELEPHONE NO.	(760) 312-6512
WATER AND SEWER -	COUNTY WATER DIS	
	TELEPHONE NO.	(760) 572-0177
TDS TELECOM	TELEPHONE NO.	(760) 572-7100
TIME WARNER COMM.	TELEPHONE NO.	(760) 694-8670

LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

EXISTING UNDERGROUND UTILITIES
BEFORE EXCAVATING FOR THIS CONTRACT, VERIFY LOCATION OF
UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY
UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE
PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY
NOT REFLECT ALL EXISTING UTILITIES. LOCATION OF ALL EXISTING
UTILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS BY
CONTRACTOR PRIOR TO CONSTRUCTION OF WORK.
CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO
PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING

ACCURATE VERIFICATIONS AS TO SIZE, LOCATION AND DEPTH OF EXISTING UNDERGROUND SERVICES SHALL BE THE CONTRACTORS RESPONSIBILITY. THE CONTRACTOR SHALL NOTIFY THE SOUTHERN CALIFORNIA GAS COMPANY, IMPERIAL IRRIGATION DISTRICT AND ANY OTHER AFFECTED UTILITY AGENCIES PRIOR TO STARTING HIS WORK NEAR SUCH UTILITY FACILITIES AND SHALL COORDINATE HIS WORK WITH UTILITY REPRESENTATIVES. FOR LOCATION OF UNDERGROUND UTILITIES AND APPURTENANCES, CONTACT "UNDERGROUND SERVICE ALERT" AT 811.

IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS AND BEAR THE COST OF RELOCATIONS, IF NEEDED.

CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR SHALL DO ALL NEW STRIPING AND SANDBLASTING OF REDUNDANT STRIPING.

THE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AN ENCROACHMENT PERMIT FROM THE COUNTY OF IMPERIAL DEPARTMENT OF PUBLIC WORKS FOR ANY EXCAVATION OR CONSTRUCTION WITHIN COUNTY ROAD RIGHT-OF-WAY. FOR INSPECTIONS, 48 HOUR MINIMUM NOTICE IS REQUIRED, (442) 265-1818. ADDITIONALLY, UNDERGROUND SERVICE ALERT (USA) MUST BE CALLED TWO WORKING DAYS BEFORE THE CONTRACTOR MAY EXCAVATE. THEIR CONTACT NUMBER IS 811. ALL WORK AND MATERIALS ARE SUBJECT TO THE INSPECTION AND APPROVAL FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS OR THEIR REPRESENTATIVE.

NO REVISIONS OF ANY KIND SHALL BE MADE TO THESE PLANS WITHOUT THE PRIOR WRITTEN APPROVAL OF BOTH THE COUNTY ENGINEER (OR HIS REPRESENTATIVE) AND THE ENGINEER OF RECORD. A REPRODUCIBLE AS-BUILT PLAN SET WILL BE PROVIDED TO THE PUBLIC WORKS DEPARTMENT AS A CONDITION OF SUBSTANTIAL CONSTRUCTION COMPLETION AND PRIOR TO ACCEPTANCE.

ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS, THE IMPERIAL COUNTY DEPARTMENT OF PUBLIC WORKS STANDARDS, DIVISION OF BOATING AND WATERWAYS (DBW) GUIDELINES, AND ENCROACHMENT PERMIT CONDITIONS, ANY REFERENCED STANDARDS AND SPECIFICATIONS AND THE SPECIFICATIONS & THE REQUIREMENTS OF THE AGENCIES REFERRED TO HEREIN. ALL WORK SHOWN OR INDICATED BY THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE STANDARDS, POLICIES AND REGULATIONS OF IMPERIAL COUNTY; WHERE, OR IF, CONFLICTS OCCUR, THEN THE IMPERIAL COUNTY REQUIREMENTS SHALL GOVERN.

UNLESS SPECIFICALLY INDICATED OTHERWISE METHODS
EMPLOYED AND MATERIAL USED IN THE CONSTRUCTION OF ALL
OFFSITE IMPROVEMENTS SHALL CONFORM TO THE APPLICABLE
PROVISIONS OF THE "STATE OF CALIFORNIA, DEPARTMENT OF
TRANSPORTATION STANDARD SPECIFICATIONS DATED MAY 2006".
ALL WORK IS SUBJECT TO INSPECTION AND APPROVAL AS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DIVISION OF SAFETY AND TO ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS AND STANDARDS.

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT WORK AREA TRAFFIC CONTROL HANDBOOK OR AS DIRECTED BY THE IMPERIAL COUNTY TRAFFIC ENGINEER.

ANY EXISTING SURVEY MONUMENTS OR COUNTY RECOGNIZED BENCHMARKS SHALL BE PROTECTED BY THE CONTRACTOR. SHOULD ANY SUCH MONUMENTS OR BENCHMARKS BE REMOVED, DAMAGED, OBLITERATED OR ALTERED BY THE CONTRACTORS OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER RESETTING OF THE SAME AS PER THE SUBDIVISION MAP ACT, THE PROFESSIONAL LAND SURVEYORS ACT AND THE SATISFACTION OF THE COUNTY SURVEYOR/DIRECTOR OF PUBLIC WORKS. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY AS APPROPRIATE SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER.

DUST SHALL BE CONTROLLED BY THE CONTRACTOR IN ACCORDANCE WITH ALL IMPERIAL COUNTY AIR POLLUTION CONTROL DISTRICT (APCD) FUGITIVE DUST CONTROL RULES AND REGULATIONS AND SHALL COMPLY WITH THEIR PERMITTING REQUIREMENTS, IF APPLICABLE.

THE NOTES LISTED ABOVE ARE A MINIMUM LIST. THIS DOES NOT RELIEVE THE ENGINEER FROM COMPILING ADDITIONAL NOTES THAT MAY BE REQUIRED FOR THE PROJECT.

#### PROJECT INFORMATION

#### FUNDED BY:

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION DIVISION OF BOATING AND WATERWAYS

#### CONSTRUCTION ADMINISTRATION BY:

COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT

#### FACILITIES MAINTENACE BY:

COUNTY OF IMPERIAL

SCOPE:

DEMOLITION AND REMOVAL OF THE EXISTING CONCRETE ABUTMENT, SIDEWALK, A.C. PAVEMENT AND EXISTING SHADE STRUCTURES. CONSTRUCT NEW SHADE STRUCTURES, STEEL FRAME FLOATING SYSTEM, CONCRETE ABUTMENT, MODIFICATIONS TO EXISTING RESTROOM, INSTALL RIP-RAP, GRIND AND OVERLAY EXISTING ASPHALT, INSTALL SIGNAGE AND STRIPING AND INSTALL PROJECT CREDIT SIGN.

#### NOTE TO CONTRACTOR

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

#### ENGINEER'S NOTE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

#### DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THE PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF IMPERIAL IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

CARLOS BELTRAN, P.E.
DYNAMIC CONSULTING ENGINEERS, INC
2415 IMPERIAL BUSINESS PARK DR. STE. B
IMPERIAL, CA 92251
(760) 545-0162

CARLOS BELTRAN, P.E.

R.C.E. # 69121

DATE



# VICINITY MAP JOSHUA TREE NATIONAL MONUMENT DESERT CENTER SALTON BOMBAY SALTON BEACH SALTON BEACH SITE RIZONA BOMBAY SALTON BOMBAY SALTON BEACH SITE RIZONA BOMBAY SALTON BEACH SITE RIZONA BOMBAY SALTON BEACH SITE RIZONA BOMBAY PROJECT SITE BRAWLEY BOMBAY BEACH SITE RIZONA BOMBAY PROJECT SITE BRAWLEY BOMBAY BEACH SITE RIZONA BOMBAY PROJECT SITE BRAWLEY BOMBAY BEACH BRAWLEY BOMBAY BRAWLEY BOMBAY BRAWLEY BOMBAY BEACH BRAWLEY BOMBAY BRAWLEY BRAWLEY

#### **ABBREVIATIONS**

AGG.	AGGREGATE	MIN	MINIMUM
APPROX.	APPROXIMATE	N	NORTH
Asph.	ASPHALT	N/O	NORTH OF
B.M.	BENCHMARK	N.T.S.	NOT TO SCALE
C OR CL	CENTERLINE	OHE	OVER HEAD ELECTRIC
CLR	CLEARANCE	PROP.	PROPOSED
CONC.	CONCRETE	R/W OR ROW	RIGHT-OF-WAY
E	EAST	RD	ROAD
E/O	EAST OF	STA.	STATION
E.P.	EDGE OF PAVEMENT	S	SEWER
EL. OR ELEV.	ELEVATION	SD	STORM DRAIN
EX. OR EXIST.	and the second s	T.P.	TOP OF PAVEMENT
F.L.	FLOW LINE	THK.	THICK
F.S.	FINISH SURFACE	TYP	TYPICAL
L.F.	LINEAL FEET	W	WATER
MAX	MAXIMUM	W/O	WEST OF

#### BENCHMARK

#### PROJECT BENCHMARK

THE PROJECT BENCHMARK IS A STANDARD DISK SET IN AN IMPERIAL IRRIGATION DISTRICT CONCRETE HEAD WALL OF A CONCRETE BOX CULVERT. TO REACH THE BENCHMARK, GO 3.55 MILES NORTH ALONG BEST ROAD FROM THE CROSSING OF MAIN STREET IN BRAWLEY TO THE INTERSECTION OF A DIRT ROAD, THEN GO 0.34 MILES WEST ALONG A PRIVATE ROAD JUST BEFORE THE RAILROAD CROSSING, IN THE TOP OF THE EAST CONCRETE HEAD WALL OF A CONCRETE BOX CULVERT, 2.8 FEET SOUTH OF THE NORTH END OF THE HEAD WALL, 7.8 FEET EAST OF THE EAST RAIL, 16.5 FEET SOUTH OF THE CENTER LINE OF THE ROAD, AND ABOUT 6-INCHES HIGHER THAN THE TRACK.

PROJECT ELEVATION: 854.63' (NAVD 88 + 1000)

#### SYMBOLS ITEM NO. ITEM SYMBOL STREET R/W LINE STREET C/L CABLE TV DRAIN (FIELD) EX. EDGE OF ASPHALT PROP. EDGE OF ASPHALT EX. ASPHALT CONCRETE PROP. ASPHALT CONCRETE EDGE OF DIRT CONCRETE SECTION ROAD STRIPING CONTOURS - MAJOR CONTOURS - MINOR CONTROL A N-17 SPOT ELEVATION × 961.44 BENCHMARK (SEE DESCRIPTION) **BORROW PIT ELEVATIONS**

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PROPOSED BORROW PIT

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- 24'x80' SHADE STRUCTURE
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- 11. 24'x140' SHADE STRUCTURE SECTION
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- 25. EXISTING AND PROPOSED UTILITIES

NOTE:
TOPOGRAPHICAL SURVEY CONDUCTED
BY DYNAMIC CONSULTING ENGINEERS

ON MAY 2015.



REVISION DATE COMMENTS	CARLOS BELTRAN No. 69121  PREPARED UNDER THE DIRECT	69121 R.C.E. No.	Dynamic CONSULTING ENGINEERS	PUBLIC WORKS DEPARTMENT	GAY GAY Shu Odg	62028	DATE 6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	TITLE SHEET
	EXP 6-30-24 *  OF CALIFORNIA  DATE	06/30/24	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., MPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163	COUNTY OF IMPERIAL	No. 62028 S JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  OF CALLY OF CALL	R.C.E. No. 09/30/23 REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 1 OF

#### **GENERAL NOTES**

- 1. CONTRACTOR SHALL, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS WORK. AT THE COMPLETION OF THE WORK REMOVE ALL RUBBISH, TOOLS, AND SURPLUS MATERIALS, AND LEAVE THE JOB IN A BROOM CLEAN CONDITION. 2. SELECTIVE DEMOLITION SHALL BE DONE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS,
- REPAIR ANY DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. RETURN STRUCTURES AND SURFACES TO THE CONDITION PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION. REPAIR ADJACENT CONSTRUCTION OR SURFACES, SOILED OR DAMAGED, BY SELECTIVE DEMOLITION WORK. 3. A LOCATION FOR THE CONTRACTOR'S CORPORATION YARD WILL BE DESIGNATED WITHIN THE SITE
- BY THE COUNTY. CONTRACTOR IS PERMITTED TO FENCE THIS AREA TO PROTECT OFFICES, STORED MATERIAL, AND EQUIPMENT. CONTRACTOR IS RESPONSIBLE FOR SECURING HIS/HER EQUIPMENT FROM THEFT OR VANDALISM.
- 4. THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. WORKER AND PEDESTRIAN PROTECTION SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY, INCLUDING BUT NOT LIMITED TO OSHA REQUIREMENTS. FOR INFORMATION PLEASE CONTACT THE STATE INDUSTRIAL SAFETY DEPARTMENT (916-455-5818)
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR THE PROTECTION AND REPAIR OF DAMAGE TO THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITIES AS TO THE LOCATION OF ALL UNDERGROUND FACILITIES CALL "UNDERGROUND SERVICE ALERT" 811, 48 HOURS BEFORE DIGGING. ALSO CALL AND NOTIFY THE ENGINEER 48 HOURS PRIOR TO DIGGING.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR SITE CONDITIONS DURING WORKING HOURS, INCLUDING PUBLIC SAFETY, DUST CONTROL, AND EROSION AND SEDIMENT CONTROL.
- 7. THE CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR THE MAINTENANCE OR REPAIR OF OFFSITE STREET SURFACES WHERE DAMAGE HAS BEEN SUSTAINED BECAUSE OF THE CONSTRUCTION TRAFFIC.
- 8. CONSTRUCTION NOISE SHALL BE IN COMPLIANCE WITH COUNTY REQUIREMENTS, CONSULT THE
- COUNTY FOR SPECIFIC RESTRICTIONS AND HOURS OF OPERATION.
- 9. THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL APPROVED DEVIATIONS FROM THE PLANS BEFORE AND DURING CONSTRUCTION. UPON COMPLETION OF WORK, ONE SET OF RED-LINED AS-BUILT PLANS SHALL BE SUBMITTED TO THE COUNTY FOR REVIEW AND ACCEPTANCE. 10. NO SOILS REPORT PROVIDED. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING SOIL CONDITIONS
- 11. THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WHERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDER-GROUND UTILITIES. HOWEVER THE COUNTY
- SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECT OR UTILITIES WHICH MAY BE ENCOUNTERED BUT ARE NOT SHOWN NOR IDENTIFIED ON THESE DRAWINGS. 12. SIGN CALLOUTS REFERENCE THE CALIFORNIA MANUAL IN UNIFORM TRAFFIC CONTROL DEVICES

CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OUR ACCURACY OF THE DELINEATION OF

- 13. ALL PIPE LENGTHS ARE TO THE CENTERLINES OF STRUCTURES. 14. THE CONTRACTOR SHALL LEAVE A MINIMUM OF 12 INCHES OF MANHOLE WALL UNDISTURBED BETWEEN CORINGS FOR PIPE TIE-INS. IF THIS CANNOT BE ACCOMPLISHED, THE CONTRACTORS SHALL NOTIFY THE ENGINEER AND A LARGER MANHOLE SHALL BE USED, THE CONTRACTOR SHALL ALSO LEAVE THE MINIMUM WALL CLEARANCE FOR DROP INLETS AS REQUIRED BY THE MANUFACTURER SELECTED. SHOULD A PIPE SIZE EXCEED THE MAXIMUM ALLOWED BY THE MANUFACTURER, A LARGER INLET SHALL BE USED.
- 15. ALL FLATWORK AND CURBS SHALL BE CONSTRUCTED TO COMPLY WITH CURRENT TITLE 24 ADA ACCESSIBILITY LAWS AND 2010 ADA STANDARDS. THIS REQUIRES "EXTRA EFFORT" IN ACHIEVING THE ACCURACY OF THE GRADES AND SLOPES REQUIRED (FINISHED GRADES OF CONCRETE IN TITLE 24 FOR ACCESSIBLE DESIGN AREAS SHALL BE WITHIN A TOLERANCE OF ±1/8" OF PROPOSED GRADES,) PRIOR TO PORING ANY CURB OR FLATWORK AROUND THE PERIMETER OF ANY BUILDING, THE CONCRETE CONTRACTOR SHALL VERIFY THAT THE GRADE OF THE FINISHED FLOOR AND THE FLATWORK/CURB FORMS ARE IN THE PROPER GRADE DIFFERENTIAL PRIOR TO POURING CONCRETE TO ANY TITLE 24 STANDARDS ROUTE OF ACCESS. IF ANY DIFFERENCES ARE FOUND NOTIFY THE PROJECT ENGINEER IMMEDIATELY PRIOR TO PROCEEDING.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE COUNTY 48-HOURS PRIOR TO COMMENCING WORK AND 24-HOURS PRIOR TO RESUMPTION AFTER INTERRUPTION, REQUEST FOR INSPECTION SHALL BE GIVEN 72-HOURS IN ADVANCE, AND BE PERFORMED BY THE STATE ENGINEER OR THE AUTHORIZED REPRESENTATIVE.
- 17. IT IS POSSIBLE THAT PREVIOUS ACTIVITIES HAVE OBSCURED SURFACE EVIDENCE OF CULTURAL RESOURCES OR THAT PREVIOUSLY UNDISCOVERED CULTURAL RESOURCES OR THAT PREVIOUSLY UNDISCOVERED CULTURAL RESOURCES ARE ENCOUNTERED DURING EARTH-MOVING ACTIVITIES, ALL CONSTRUCTION ACTIVITY WITHIN 100 FEET OF THE RESOURCES SHALL BE HALTED IMMEDIATELY AND THE APPROPRIATE AUTHORITIES NOTIFIED. IF SUSPECTED HUMAN REMAINS ARE ENCOUNTERED THE COUNTY CORONER AND THE DIVISION OF BOATING AND WATERWAYS SHOULD BE NOTIFIED IMMEDIATELY. IF PREHISTORIC OR HISTORIC ERROR SOURCES ARE ENCOUNTERED THE DIVISION OF BOATING AND WATERWAYS AND A QUALIFIED ARCHAEOLOGIST SHOULD BE NOTIFIED IMMEDIATELY
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO THE COUNTY IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE COUNTY, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. AND COSTS INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- 19. APPROVAL OF THESE PLANS DOES NOT AUTHORIZE OR APPROVE ANY OMISSIONS OR DEVIATION FROM APPLICABLE REGULATIONS, FINAL APPROVAL IS SUBJECT TO FIELD INSPECTION, ONE SET OF APPROVED PLANS AND SPECIFICATIONS SHALL BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES
- 20. PLANS ARE TO BE PER THE LATEST EDITION OF THE LAYOUT DESIGN AND CONSTRUCTION HANDBOOK FOR SMALL CRAFT BOAT LAUNCHING FACILITIES BY THE STATE OF CALIFORNIA DIVISION OF BOATING AND WATERWAYS.

#### TESTING REQUIREMENTS

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EARTHWORK COMPACTION TESTING. THE COUNTY SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE OF ANY SCHEDULED COMPACTION TESTING BEING PERFORMED ON THE SITE. ALL COMPACTION TESTING SHALL BE PERFORMED BY REGISTERED SOIL ENGINEER IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR, RESULTS OF THIS TEST SHALL BECOME THE PROPERTY OF THE STATE, ANY RETESTING DEEMED NECESSARY BY THE STATE ENGINEER SHALL BE PAID FOR THE CONTRACTOR.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL AGGREGATE BASE COMPACTION TESTING, THE COUNTY SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE OF ANY SCHEDULED COMPACTION TESTING BEING PERFORMED ON THE SITE. ALL COMPACTION TESTING SHALL BE PERFORMED BY A REGISTERED SOIL ENGINEER IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SHALL BE PAID FOR BY THE CONTRACTOR, RESULTS OF THESE TESTS SHALL BECOME THE PROPERTY OF THE COUNTY ANY RETESTING DEEMED NECESSARY BY THE COUNTY SHALL BE PAID FOR BY THE CONTRACTOR
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AGGREGATE CONCRETE TESTING DEEMED NECESSARY BY THE COUNTY. THE COUNTY SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE OF ANY SCHEDULED PAVING OPERATIONS BEING PERFORMED ON THE
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EMPLOYING A TESTING AGENCY TO PERFORM CONCRETE TESTING AT THEIR EXPENSE. ALL RESULTS OF THE CONCRETE TESTING SHALL BECOME PROPERTY OF THE COUNTY, THE CONTRACTOR SHALL SUPPLY ONE (1) SET OF FOUR (4) STANDARD CYLINDERS FOR EVERY 20 CUBIC YARDS OF CONCRETE PLACED, OR FOR EACH MAJOR PLACEMENT DURING THE DAY. ONE SPECIMEN SHALL BE TESTED AT SEVEN (7) DAYS, TWO (2) SPECIMENS TESTED AT 28 DAYS, AND ONE (1) SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED. COMPRESSIVE STRENGTH TESTS SHALL BE PERFORMED AS PER REQUIREMENTS SET FORTH IN THE PROJECT SPECIFICATIONS, THE STATE ENGINEER SHALL BE NOTIFIED AT LEAST 72-HOURS IN ADVANCE OF ANY SCHEDULED CONCRETE POURING BEING PERFORMED ON THE SITE. PRIOR TO ANY CONCRETE PLACEMENT, FORMWORK, AND REBAR PLACEMENT MUST BE INSPECTED AND APPROVED BY THE STATE ENGINEER, FAILURE TO RECEIVE APPROVAL BY THE STATE ENGINEER ON FORMWORK AND REBAR PLACEMENT PRIOR TO POURING CONCRETE MAY RESULT IN THE CONTRACTOR DEMOLISHING IMPROVEMENTS AT THEIR EXPENSE.
- 5. V-GROOVE CONSTRUCTION, PRIOR TO BEGINNING CONCRETE WORK ON THE ACTUAL LAUNCHING RAMP, THE CONTRACTOR SHALL MAKE A 4'X8'X4" V-GROOVE CONCRETE TEST PANELS ON FLAT GROUND AT THE CONSTRUCTION SITE. UPON APPROVAL AND ACCEPTANCE OF THE TEST PANEL BY THE ENGINEER OR INSPECTOR, THE CONTRACTOR MAY BEGIN CONSTRUCTION OF THE V-GROOVES FORMED ON THE ACTUAL LAUNCHING RAMP. V-GROOVES SHALL BE CONSTRUCTED PER THE CA DEPARTMENT OF BOATING AND WATERWAYS, BOATING FACILITIES DIVISION, LAYOUT, DESIGN AND CONSTRUCTION HANDBOOK SECTION 202.

#### UTILITY NOTES

GENERAL UTILITY SERVICE NOTE 1. SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA PLUMBING CODE (UPC). THE CONTRACTOR SHALL COMPLY WITH THE MOST CONSERVATIVE AND STRINGENT GUIDANCE IF A CONFLICT SHOULD ARISE. 2. THE CONTRACTOR MAY SUBSTITUTE PIPE MATERIAL AS ALLOWED BY THE CODE AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

SANITARY SEWER SERVICE NOTES 1. AS APPLICABLE, ALL SANITARY SEWER CLEANOUT SUBJECTED TO VEHICULAR WHEEL LOADING SHALL BE CONSTRUCTED WITH A TRAFFIC RATED LID AND COVER (HS20 LOADING) 2. PIPE MATERIAL FOR SEWER SERVICES SHALL BE PER CPC.

WATER SERVICE NOTES 1. AS APPLICABLE, ALL WATER SERVICE BOXES, LIDS, COVER AND ETC SUBJECTED TO VEHICULAR WHEEL LOADING SHALL BE CONSTRUCTED

WITH A TRAFFIC RATED LID & COVER (HS 20 LOADING) 2. PIPE MATERIAL FOR WATER SERVICES SHALL BE PER CBC.

#### ACCESSIBILITY NOTES

- 1. ALL FLATWORK AND CURBS SHALL BE CONSTRUCTED TO COMPLY WITH CURRENT TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS (CCR) OF THE AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY LAWS 2010 ADA STANDARDS. THIS REQUIRES "EXTRA EFFORT" IN ACHIEVING THE ACCURACY OF THE GRADES AND SLOPES REQUIRED (FINISHED GRADES OF CONCRETE IN TITLE 24 AREAS SHALL BE WITHIN A TOLERANCE OF +- 1/8" OF PROPOSED GRADES.) PRIOR TO POURING ANY CURB OR FLATWORK AROUND THE PERIMETER OF ANY BUILDING, THE CONCRETE CONTRACTOR SHALL VERIFY THAT THE GRADE OF THE FINISHED FLOOR AND THE FLATWORK/CURB FORMS ARE IN THE PROPER GRADE DIFFERENTIAL PRIOR TO POURING CONCRETE ON ANY TITLE 24 2010 ADA STANDARDS ROUTE OF ACCESS. IF ANY DIFFERENCES ARE FOUND, NOTIFY THE PROJECT ENGINEER IMMEDIATELY PRIOR TO PROCEEDING.
- 2. PARKING A. SURFACE SLOPES FOR PARKING SPACES FOR PERSONS WITH PHYSICAL DISABILITIES
- SHALL NOT EXCEED 2% IN ANY DIRECTION.

4. WALKS AND SIDEWALKS

- A. A CURB RAMP SHALL BE A MINIMUM OF 4 FEET IN WIDTH AND SHALL LIE GENERALLY IN A SINGLE SLOPED PLANE WITH A MINIMUM OF SURFACE WARPING AND CROSS SLOPE. B. BUILT-UP CURB RAMPS, IF SHOWN, SHALL BE LOCATED SO THAT THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES
- C. CURB RAMPS AT MARKED CROSSING SHALL BE WHOLLY CONTAINED WITHIN MARKINGS EXCLUDING ANY FLARED SIDES.
- D. THE SLOPES OF CURB RAMP SHALL NOT EXCEED 8.3% ON EITHER THE RAMP OR THE FLARED SIDES.
- E. A LEVEL LANDING 4 FEET DEEP SHALL BE PROVIDED AT THE UPPER END OF EACH CURB RAMP OVER ITS FULL WIDTH TO PERMIT SAFE EGRESS FROM THE RAMP SURFACE, OR THE SLOPE OF THE FANNED OR FLARED SIDES OF THE CURB RAMP SHALL NOT EXCEED 8.3% F. THE LOWER END OF EACH CURB RAMP SHALL NOT HAVE A LIP AND BE CONSTRUCTED WITH A FLUSH TRANSITION.
- G. ALL CURB RAMPS SHALL HAVE A GROOVED BORDER 12 INCHES WIDE AT THE LEVEL SURFACE OF THE SIDEWALK ALONG THE TOP AND EACH SIDE WITH 3/4" GROOVES APPROXIMATELY 3/4" ON CENTER PER ADA GUIDELINES. ALL CURB RAMPS CONSTRUCTED BETWEEN THE FACE OF THE CURB AND THE STREET SHALL HAVE DETECTABLE WARNINGS (TRUNCATED DOMES).
- A. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/4 INCH OR UP TO A 1/2 INCH IF BEVELED, AND SHALL BE A MINIMUM OF 4 FEET IN WIDTH B. SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4 INCH PER FOOT C. WALKS SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE OF GRATING 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 IN TRAFFIC FLOW. THE LONG DIMENSION OF GRATING OPENINGS SHALL BE PERPENDICULAR TO THE PEDESTRIAN ROUTE.
- D. ALL WALKS SHALL HAVE LESS THAN 2% CROSS SLOPE AND LESS THAN 5% RUNNING SLOPE WHEN PART OF AN ACCESSIBLE ROUTE. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL IT SHALL COMPLY WITH THE ADA PROVISIONS FOR PEDESTRIAN RAMPS.
- E, ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL BE AVOIDED. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL NOT EXCEED 1/2 INCH AND BEVELED WITH A SLOPE OF NO GREATER THAN 1:2 EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4 INCHES MAY BE VERTICAL WHEN CHANGES IN LEVEL GREAT THAN 1/2 INCH ARE NECESSARY, COMPLY WITH THE REQUIREMENTS FOR CURB RAMPS.
- F. WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 60 INCHES AT A DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 48 INCHES WIDE BY 44 INCHES DEEP THAT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK, SUCH WALKS SHALL EXTEND 24 INCHES TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK.
- G. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE LEVEL AREAS OF AT LEAST 5 FEET IN LENGTH AT INTERVALS OF AT LEAST EVERY 400 FEET.
- H. IF A WALK CROSSES OR ADJOINS A VEHICULAR TRAVEL WAY, AND THE WALKING SURFACES ARE NOT SEPARATED BY CURBS, RAILINGS OR OTHER ELEMENTS BETWEEN THE PEDESTRIAN AREAS AND VEHICULAR AREAS, THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A CONTENTIOUS DETECTABLE WARNING WHICH IS 36 INCHES WIDE, CONSISTING OF TRUNCATED DOMES.
- 5. RAMPS A. ANY PATH OF TRAVEL SHALL BE CONSIDERED A RAMP IF ITS SLOPE IS GREATER THAN
- B. RAMPS WITH A RISE GREATER THAN 6 INCHES AND A HORIZONTAL PROJECTION GREATER
- THAN 72 INCHES SHALL HAVE HANDRAILS ON BOTH SIDES. C. THE TOP LANDING ON A RAMP MUST BE AT LEAST 60 INCHES IN DEPTH. D. IF A DOOR SWINGS ONTO A TOP LANDING, THE MINIMUM LANDING DIMENSION SHALL BE
- NOT LESS THAN 60 INCHES CLEAR PLUS THE WIDTH OF THE DOOR. E. INTERMEDIATE LANDINGS SHALL BE PROVIDED AT TURNS AND WHENEVER THE CHANGE IN LEVEL EXCEEDS 30 INCHES.
- F. INTERMEDIATE LANDINGS ON STRAIGHT RAMPS SHALL HAVE A DEPTH OF NOT LESS THAN 5'-0" INTERMEDIATE LANDINGS ON RAMPS THAT TURN GREATER THAN 30° SHALL BE
- NOT LESS THAN 6'-0" G. RAMPS SHALL BE NOT LESS THAN 4'-0" WIDE, RAMPS SERVING A PRIMARY ENTRANCE FOR AN OCCUPANT LOAD OF 300 OR MORE PEOPLE SHALL BE NOT LESS THAN 5'-0" WIDE. H. HANDRAILS SHALL BE PLACED ON EACH SIDE OF EACH RAMP AND SHALL BE CONTINUOUS THE FULL LENGTH OF THE RAMP. HANDRAILS SHOULD BE 34 TO 38 INCHES ABOVE THE RAMP SURFACE AND EXTEND A MINIMUM OF 1 FOOT BEYOND THE TOP AND BOTTOM OF THE RAMP. THE HANDRAILS SHOULD BE CONSISTENT IN HEIGHT THROUGH THE ENTIRE RAMP.
- L SURFACES OF RAMPS SHALL BE SLIP RESISTANT (MEDIUM BROOM FINISH) J. RAMP SLOPES ARE NOT GREATER THAN 1:12 AND NO LESS THAN 1:20 WHEN PART OF AN ACCESSIBLE ROUTE.
- 6. STAIRS A. STAIRWAYS WITH MORE THAN 1 STEP SHALL HAVE HANDRAILS ON EACH SIDE, AS SHOWN ON THE PLANS. HANDRAILS MUST BE 1-1/4 INCHES IN EITHER CROSS SECTIONAL DIMENSION AND 1-1/2 INCHES CLEAR FROM THE WALL EDGES AND SHALL HAVE A MINIMUM
- B. CAST IRON ( NON-SKID STAIR NOSING, MINIMUM 2" WIDE WITH A CONTRASTING COLOR STRIP AT UPPER APPROACH AND AT EVERY TREAD SHALL BE INSTALLED ON ALL EXTERIOR

#### **EROSION CONTROL NOTES**

- 1. ALL EROSION & SEDIMENT CONTROL BMP'S SHALL BE IN ACCORDANCE WITH:
- A. CALTRANS STORM WATER QUALITY HANDBOOK, CONSTRUCTION SITE BMP'S MANUAL, LATEST EDITION B. CALTRANS STORM WATER QUALITY HANDBOOK, CONSTRUCTION
- CONTRACTORS GUIDE AND SPECIFICATIONS, LATEST EDITION 2. ALL WORK EQUIPMENT SHALL BE WASHED AT A LOCATION OFF THE
- PROJECT SITE. 3. CONTRACTOR SHALL PERFORM LITER REMOVAL IN CONJUNCTION
- WITH CONSTRUCTION ACTIVITIES. 4. STRAW WATTLES SHALL BE PLACED IN APPROPRIATE AREAS TO PREVENT SILT/SEDIMENT FROM ENTERING THE WATER BODY AT ALL TIMES DURING CONSTRUCTION.
- 5. EROSION CONTROL BEST MANAGEMENT PRACTICE (BMP'S) SHALL BE INSTALLED AND MAINTAINED DURING THE WET SEASON (OCTOBER 1THROUGH APRIL 30). SEDIMENT CONTROL BMP'S SHALL BE INSTALLED AND MAINTAINED ALL YEAR ROUND.
- 6. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE PROTECTED FROM EROSION DURING THE WET SEASON (OCTOBER 1 THROUGH APRIL 30). HYDROSEED, IF UTILIZED, MUST BE PLACED BY SEPTEMBER 15. HYDROSEED PLACED DURING THE WET SEASON SHALL USE A SECONDARY EROSION PROTECTION METHOD SUCH AS STRAW MULCH, SOIL BINDER OR EROSION CONTROL BLANKETS/MATS.
- 7. NO WORK SHALL TAKE PLACE DURING RAIN EVENTS, AND IN PREPARATION FOR SUCH EVENTS, ANY LOOSE SEDIMENTS/SILT OR OTHER MATERIALS SHALL BE COVERED WITH WOVEN FABRIC AND SURROUNDED BY STRAW WATTLES.
- 8. EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT SHALL BE IN COMPLIANCE AT ALL TIMES WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT IN ACCORDANCE WITH THE STATE OF CALIFORNIA GENERAL CONSTRUCTION PERMIT, THIS PERMIT REQUIRES THAT THE SWPPP BE KEPT UP TO DATE TO REFLECT THE CHANGING SITE CONDITIONS AND THE SWPPP IS TO BE AVAILABLE ON SITE AND ACCESSIBLE AT ALL TIMES FOR INSPECTION AND REVIEW BY THE STATE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL DURING ALL PHASES OF CONSTRUCTION. WATER OR OTHER APPROVED METHODS SHALL BE USED TO CONTROL WINDBLOWN DUST AND PARTICLES. DUST AND PARTICLES SHALL NOT LEAVE THE CONSTRUCTION SITE. DUST CONTROL SHALL BE UTILIZED OVERALL DISTURBED AREAS (UNLESS SUITABLY STABILIZED) REGARDLESS OF WHETHER ACTIVE WORK IS UNDERWAY. THE FOLLOWING MEASURES SHALL BE IMPLEMENTED:
- A. WATER EXPOSED SURFACES, GRADED AREAS, STORAGE PILES, AND HAUL ROADS AT LEAST TWICE DAILY. B. MINIMIZE THE AMOUNT OF DISTURBED AREA, THE AMOUNT OF MATERIAL ACTIVELY WORKED, AND THE AMOUNT OF MATERIAL
- C. LIMIT ON SIGHT CONSTRUCTION VEHICLE SPEEDS TO 15 MPH. D. SWEEP OR WASH PAVED STREETS ADJACENT TO PROJECT CONSTRUCTION SITES AT LEAST ONCE A DAY TO REMOVE ACCUMULATED DUST / DEBRIS.
- E. MAINTAIN AT LEAST TWO FEET OR FREEBOARD WHEN TRANSPORTING SOIL OR OTHER MATERIAL BY TRUCK. 10. THE CONTRACTOR SHALL STAMP ALL STORM DRAIN INLETS WITH THE WORDS "NO DUMPING" AND "FLOWS TO RIVER" WITH A MINIMUM OF 2 - INCH BLOCK LETTERING PERCEPTION 1/4" DEEP IN THE CURB OR WITHIN TWO INCH DISTANCE OF THE CURB ADJACENT

#### CODES AND STANDARDS

TO THE DRAIN INLET.

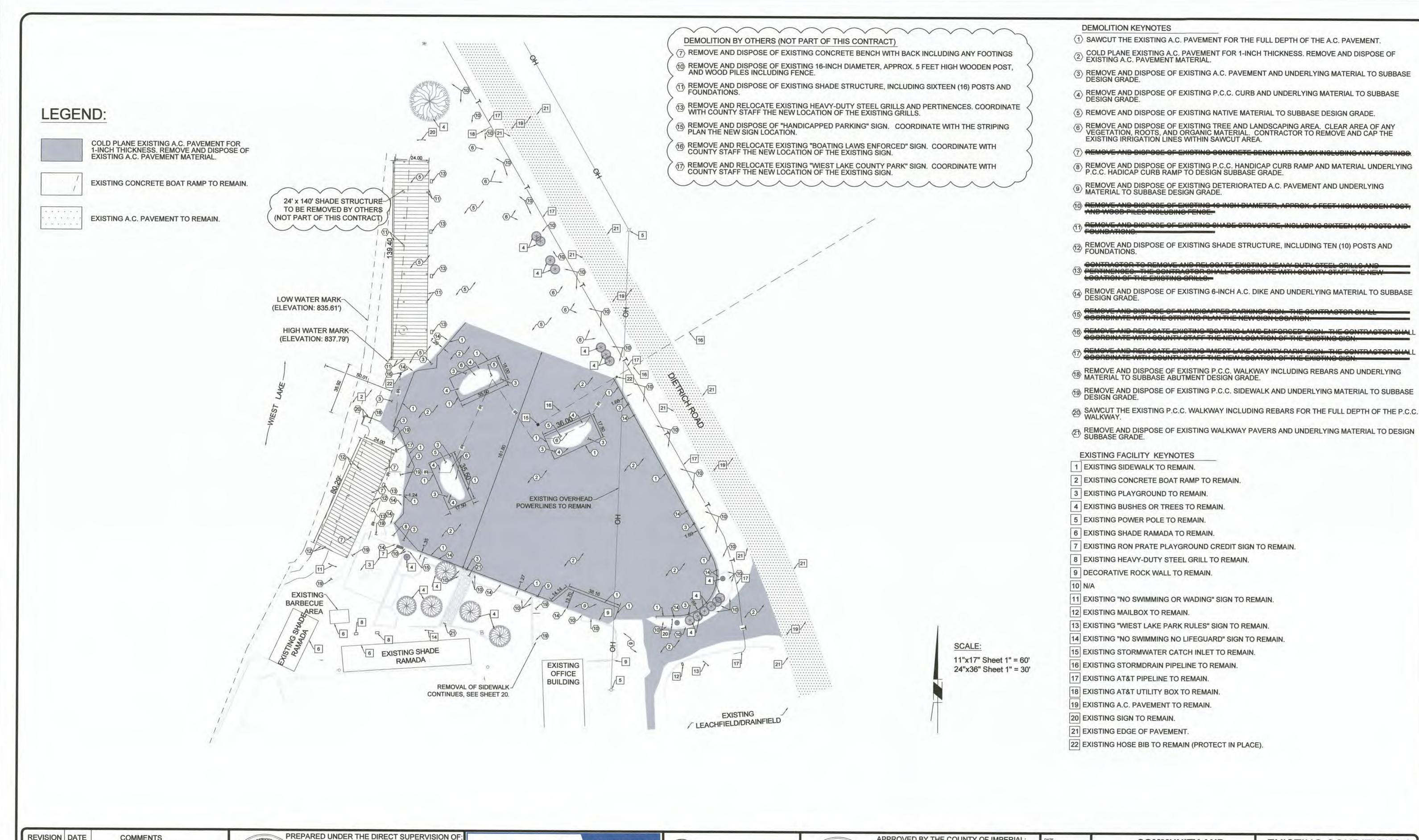
- 2016 CALIFORNIA BUILDING CODE (CBC), TITLE 24 PART 2 2016 CALIFORNIA ELECTRICAL CODE, TITLE 24 PART 3 2016 CALIFORNIA MECHANICAL CODE, TITLE 24 PART 4 2016 CALIFORNIA PLUMBING CODE, TITLE 24 PART 5 2016 CALIFORNIA BUILDING ENERGY CODE, TITLE 24 PART 6 2016 CALIFORNIA FIRE CODE, TITLE 24 PART 9 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
- ACI AMERICAN CONCRETE INSTITUTE, ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
- ACI AMERICAN CONCRETE INSTITUTE, ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
- 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
- AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, "STEEL CONSTRUCTION MANUAL, 13TH EDITION"

SHEET 2 OF 26

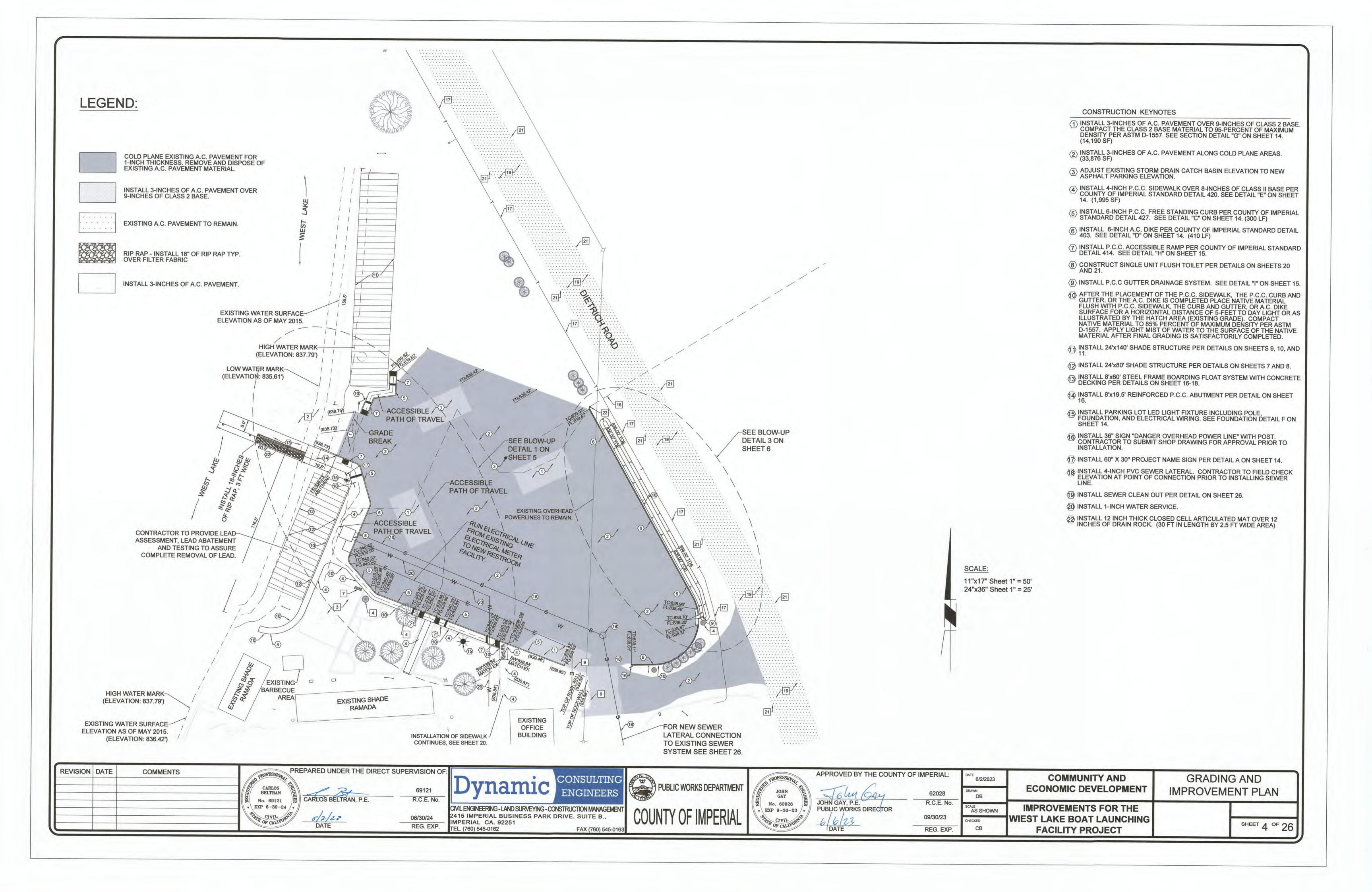
#### CODE SUMMARY:

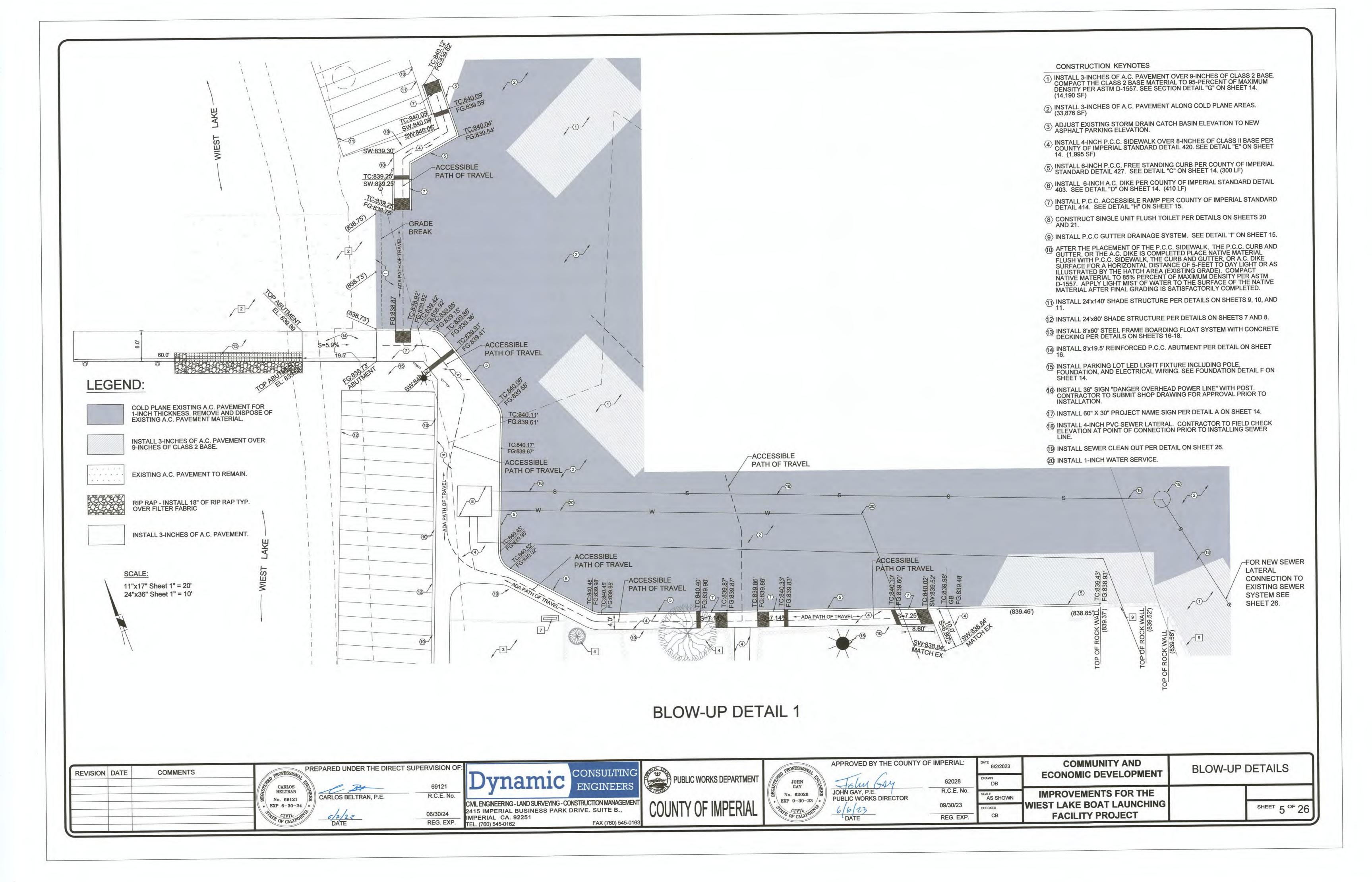
OCCUPANCY TYPE: U - UTILITY AND MISCELLANEOUS CONSTRUCTION: MASONRY AREA ALLOWABLE: 51.11 SQ FT HEIGHT: † STORY HEIGHT ALLOWABLE: N/A OCCUPANT LOAD: 1

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SU	UPERVISION OF:	Dynamic CONSULTING	PUBLIC WORKS DEPARTMENT	PROFESSIONAL TOHN	APPROVED BY THE COUNTY	OF IMPERIAL:	DATE 6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	GENERAL	NOTES
	BELTRAN No. 69121 EXP 6-30-24  CARLOS BELTRAN, P.E.  CTVIL OF CALIFORNIA  DATE	06/30/24 24	MILENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., MPERIAL CA. 92251 EL. (760) 545-0162  FAX (760) 545-0163	COUNTY OF IMPERIAL	No. 62028 EXP 9-30-23  CIVIL OF CALIFORNIA	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  6 6 12 DATE	R.C.E. No. 09/30/23 REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT		SHEET 2 OF



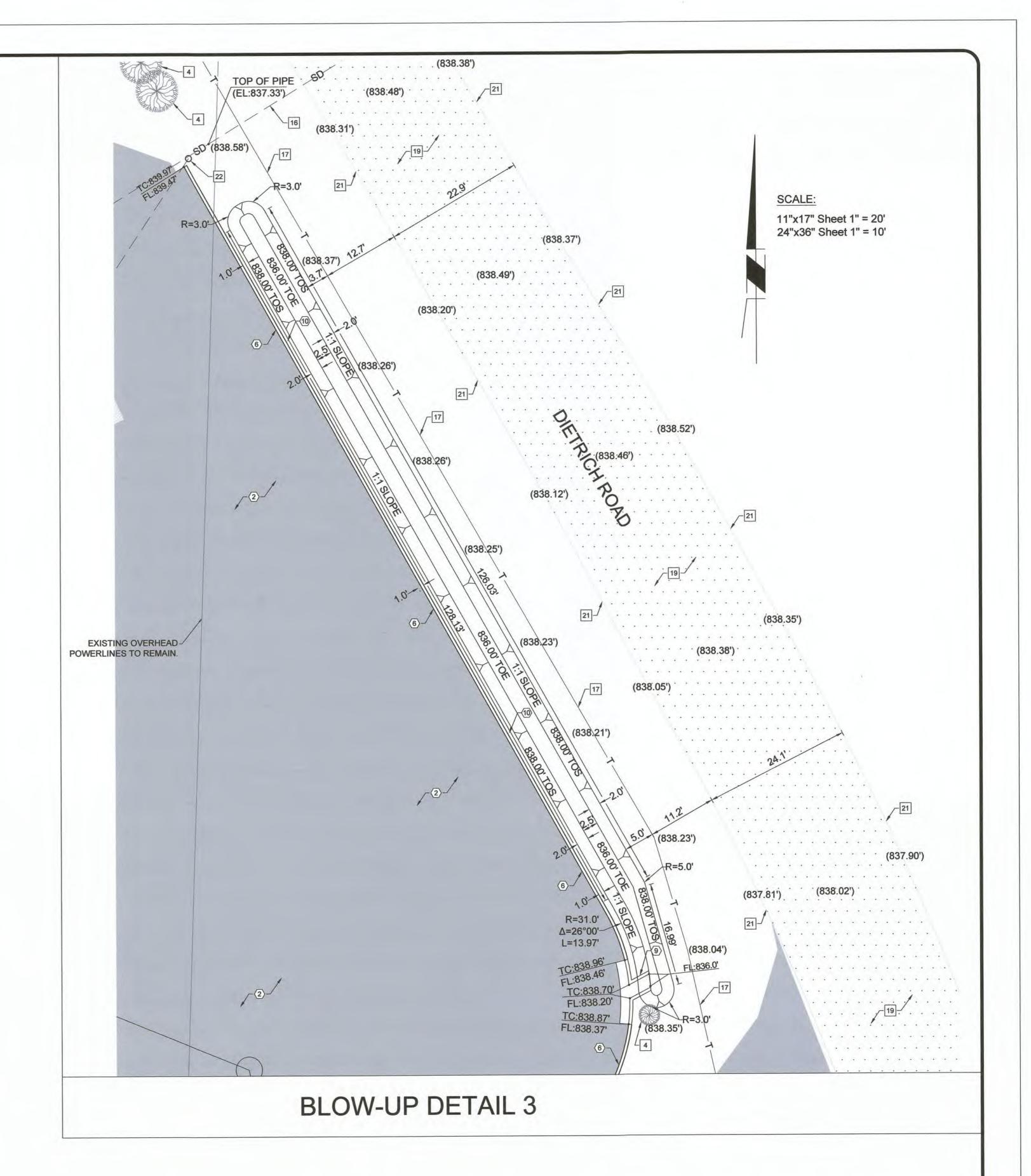
CARLOS BELTRAN P.E.	69121 R.C.E. No.	Dynamic CONSULTING PUBLIC WORKS DEPARTMENT OF THE PUBLIC WORKS	ENT JOHN GAY TOLM GAY	62028	6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	EXISTING CONDITIONS 8 DEMOLITION PLAN
No. 69121 S CARLOS BELTRAN, P.E.  * EXP 6-30-24 *  * OF CALIFORNIT 6/2/23  DATE		CVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163	No. 62028 S JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  OF CALLED OF CAL	R.C.E. No. 09/30/23 REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 3 OF 26



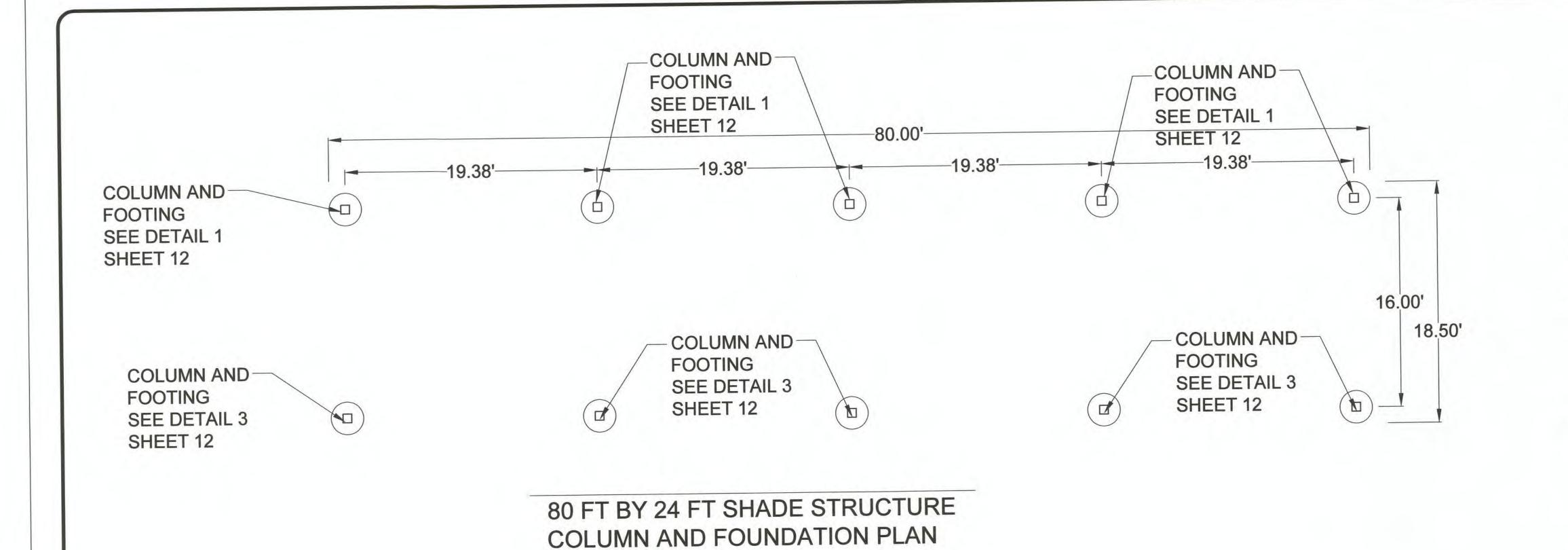


#### CONSTRUCTION KEYNOTES

- 1 INSTALL 3-INCHES OF A.C. PAVEMENT OVER 9-INCHES OF CLASS 2 BASE. COMPACT THE CLASS 2 BASE MATERIAL TO 95-PERCENT OF MAXIMUM DENSITY PER ASTM D-1557. SEE SECTION DETAIL "G" ON SHEET 14. (14.190 SF)
- 2 INSTALL 3-INCHES OF A.C. PAVEMENT ALONG COLD PLANE AREAS. (33,876 SF)
- $\ensuremath{\ensuremath{\,\otimes}}$  ADJUST EXISTING STORM DRAIN CATCH BASIN ELEVATION TO NEW ASPHALT PARKING ELEVATION.
- (4) INSTALL 4-INCH P.C.C. SIDEWALK OVER 8-INCHES OF CLASS II BASE PER COUNTY OF IMPERIAL STANDARD DETAIL 420. SEE DETAIL "E" ON SHEET 14. (1,995 SF)
- 5 INSTALL 6-INCH P.C.C. FREE STANDING CURB PER COUNTY OF IMPERIAL STANDARD DETAIL 427. SEE DETAIL "C" ON SHEET 14. (300 LF)
- 6 INSTALL 6-INCH A.C. DIKE PER COUNTY OF IMPERIAL STANDARD DETAIL 403. SEE DETAIL "D" ON SHEET 14. (410 LF)
- 7 INSTALL P.C.C. ACCESSIBLE RAMP PER COUNTY OF IMPERIAL STANDARD DETAIL 414. SEE DETAIL "H" ON SHEET 15.
- (8) CONSTRUCT SINGLE UNIT FLUSH TOILET PER DETAILS ON SHEETS 20
- (9) INSTALL P.C.C GUTTER DRAINAGE SYSTEM. SEE DETAIL "I" ON SHEET 15.
- AFTER THE PLACEMENT OF THE P.C.C. SIDEWALK, THE P.C.C. CURB AND GUTTER, OR THE A.C. DIKE IS COMPLETED PLACE NATIVE MATERIAL FLUSH WITH P.C.C. SIDEWALK, THE CURB AND GUTTER, OR A.C. DIKE SURFACE FOR A HORIZONTAL DISTANCE OF 5-FEET TO DAY LIGHT OR AS ILLUSTRATED BY THE HATCH AREA (EXISTING GRADE). COMPACT NATIVE MATERIAL TO 85% PERCENT OF MAXIMUM DENSITY PER ASTM D-1557. APPLY LIGHT MIST OF WATER TO THE SURFACE OF THE NATIVE MATERIAL AFTER FINAL GRADING IS SATISFACTORILY COMPLETED.
- 1) INSTALL 24'x140' SHADE STRUCTURE PER DETAILS ON SHEETS 9, 10, AND
- 12 INSTALL 24'x80' SHADE STRUCTURE PER DETAILS ON SHEETS 7 AND 8.
- 13 INSTALL 8'x50' STEEL FRAME BOARDING FLOAT SYSTEM WITH CONCRETE DECKING PER DETAILS ON SHEETS 16-18.
- INSTALL 8'x19.5' REINFORCED P.C.C. ABUTMENT PER DETAIL ON SHEET 16.
- 15 INSTALL PARKING LOT LED LIGHT FIXTURE INCLUDING POLE, FOUNDATION, AND ELECTRICAL WIRING. SEE FOUNDATION DETAIL F ON SHEET 14.
- 16 INSTALL 36" SIGN "DANGER OVERHEAD POWER LINE" WITH POST. CONTRACTOR TO SUBMIT SHOP DRAWING FOR APPROVAL PRIOR TO INSTALLATION.
- 17 INSTALL 60" X 30" PROJECT NAME SIGN PER DETAIL A ON SHEET 14.
- 18 INSTALL 4-INCH PVC SEWER LATERAL. CONTRACTOR TO FIELD CHECK ELEVATION AT POINT OF CONNECTION PRIOR TO INSTALLING SEWER LINE.
- 19 INSTALL SEWER CLEAN OUT PER DETAIL ON SHEET 26.
- 20 INSTALL 1-INCH WATER SERVICE.



REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUPERVISION  CARLOS  69121	Dynamic CONSULTING PUBLIC	WORKS DEPARTMENT  SEED PROFESSIONAL JOHN GAY	APPROVED BY THE COUNTY OF IMPERIAL:  62028	6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	BLOW-UP DETAILS
	BELTRAN No. 69121 EXP 6-30-24  OF CALLEORED DATE  BELTRAN, P.E.  R.C.E. N  06/30/24  REG. EX	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251	OF IMPERIAL  No. 62028  EXP 9-30-23  *  OF CALIFORNIA	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  6/6/23  DATE  R.C.E. No.  09/30/23  REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 6 OF 26



NOTE:
DETAILS 1, 2, 3, 4 AND 5
FOR THIS SHEET ARE
FOUND ON SHEET 12.

#### **DESIGN CRITERIA:**

WIND LOADING:

RISK CATEGORY: 1

EXPOSURE: C

BASIC WIND SPEED: 100 MPH

(ASCE 7-10) FIGURE 26.5-IC

SEISMIC LOADING:

RISK CATEGORY:

SITE CLASSIFICATION:

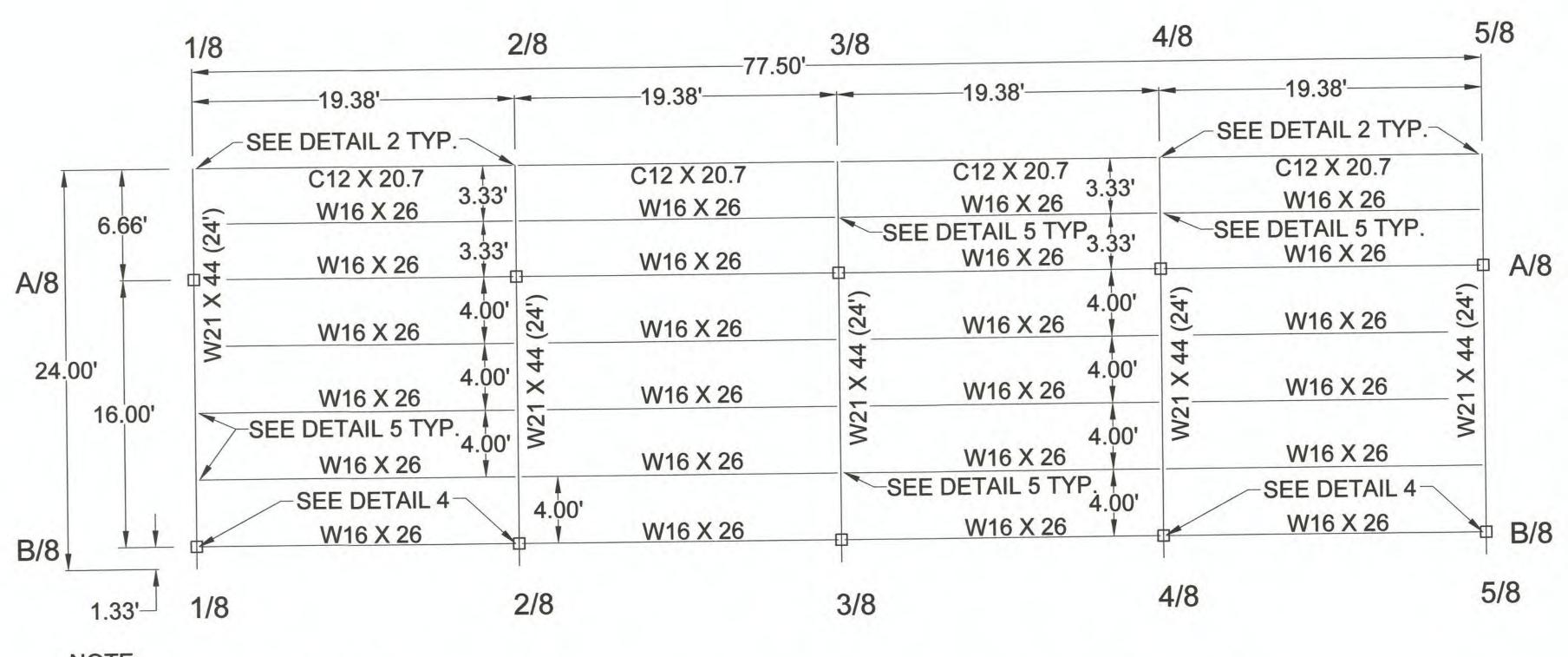
PEAK GROUND ACCELERATION (PGA):

Fa:

SDS:

1.0

1.0



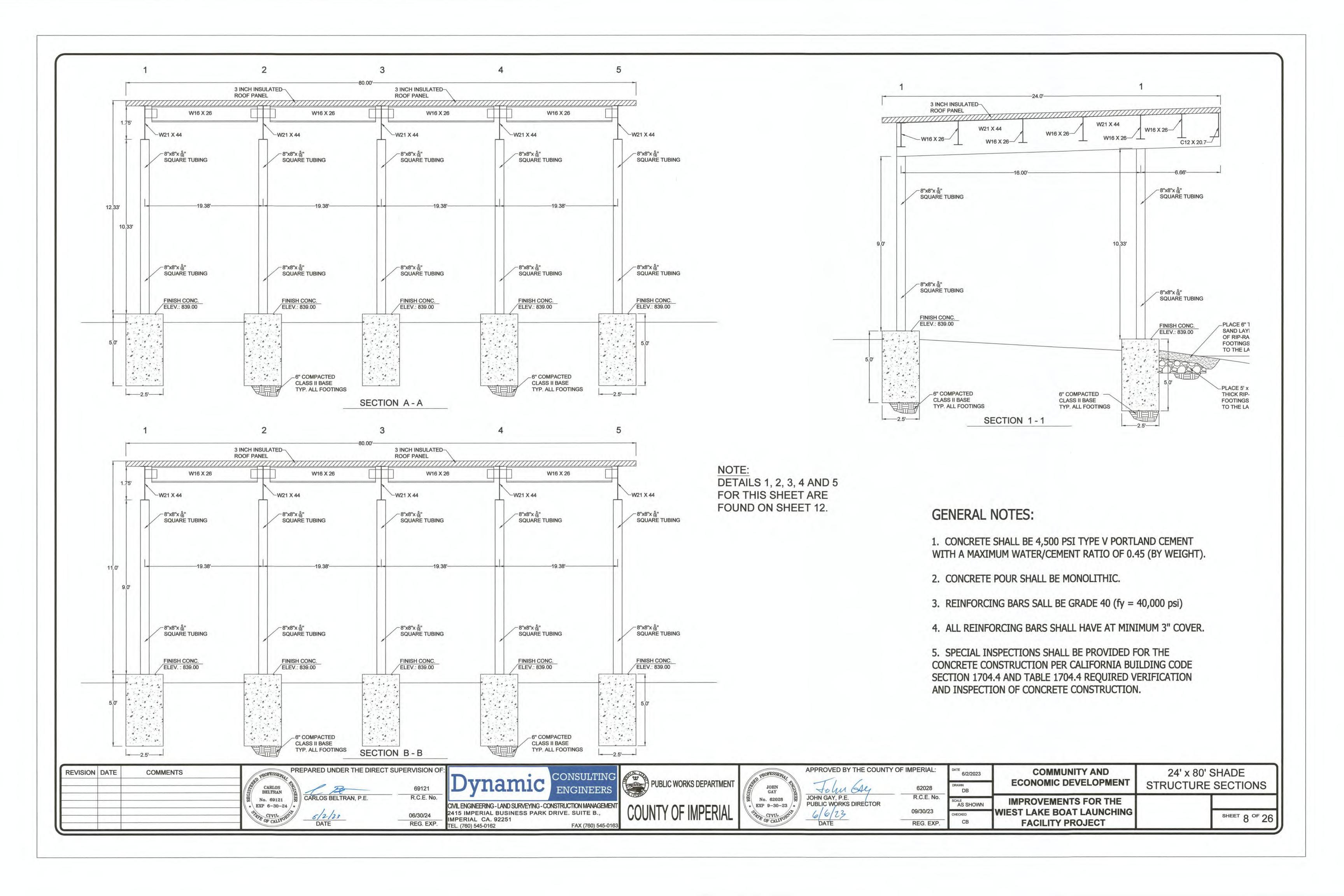
NOTE:
DETAILS 1, 2, 3, 4 AND 5
FOR THIS SHEET ARE
FOUND ON SHEET 12.

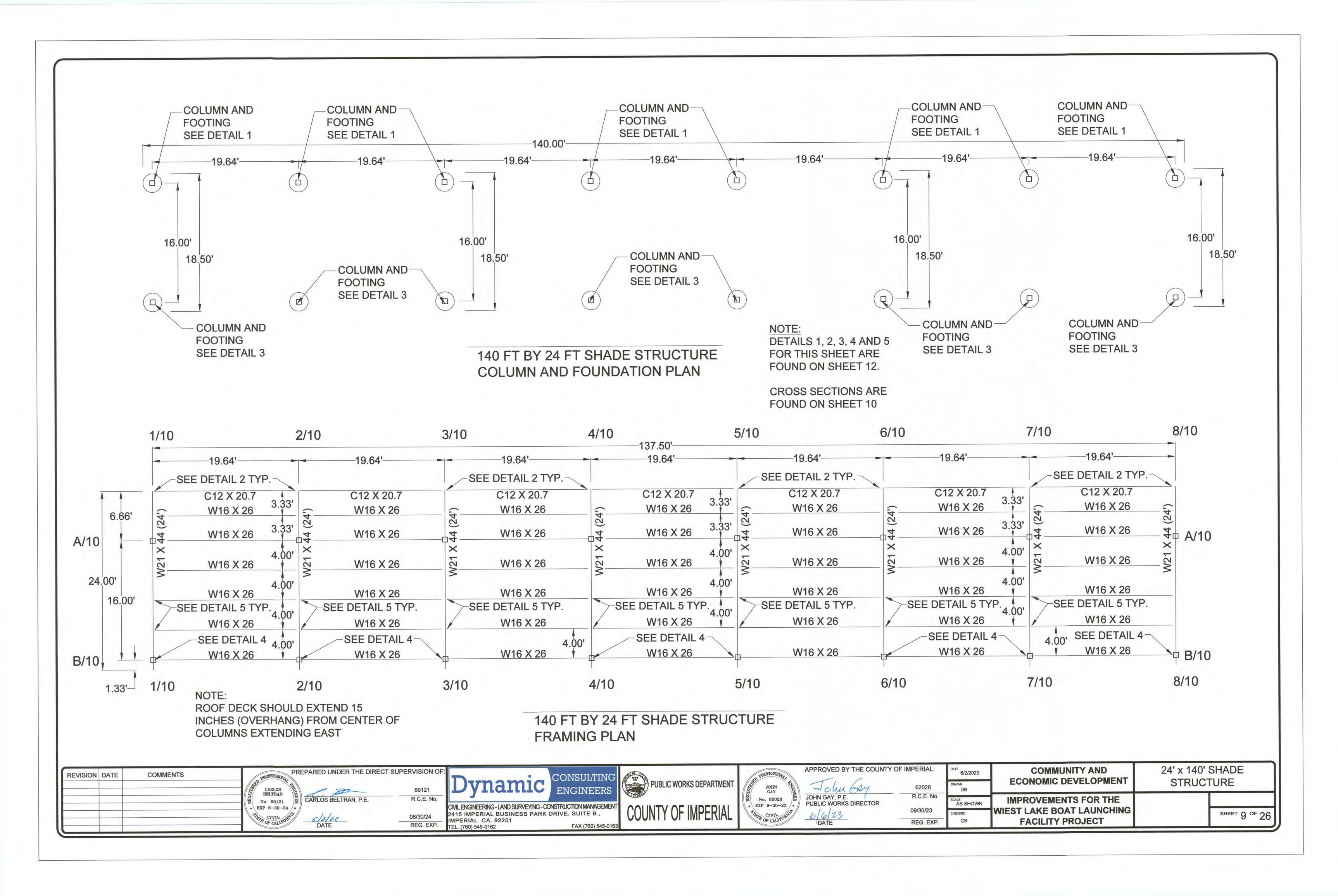
CROSS SECTIONS ARE FOUND ON SHEET 8

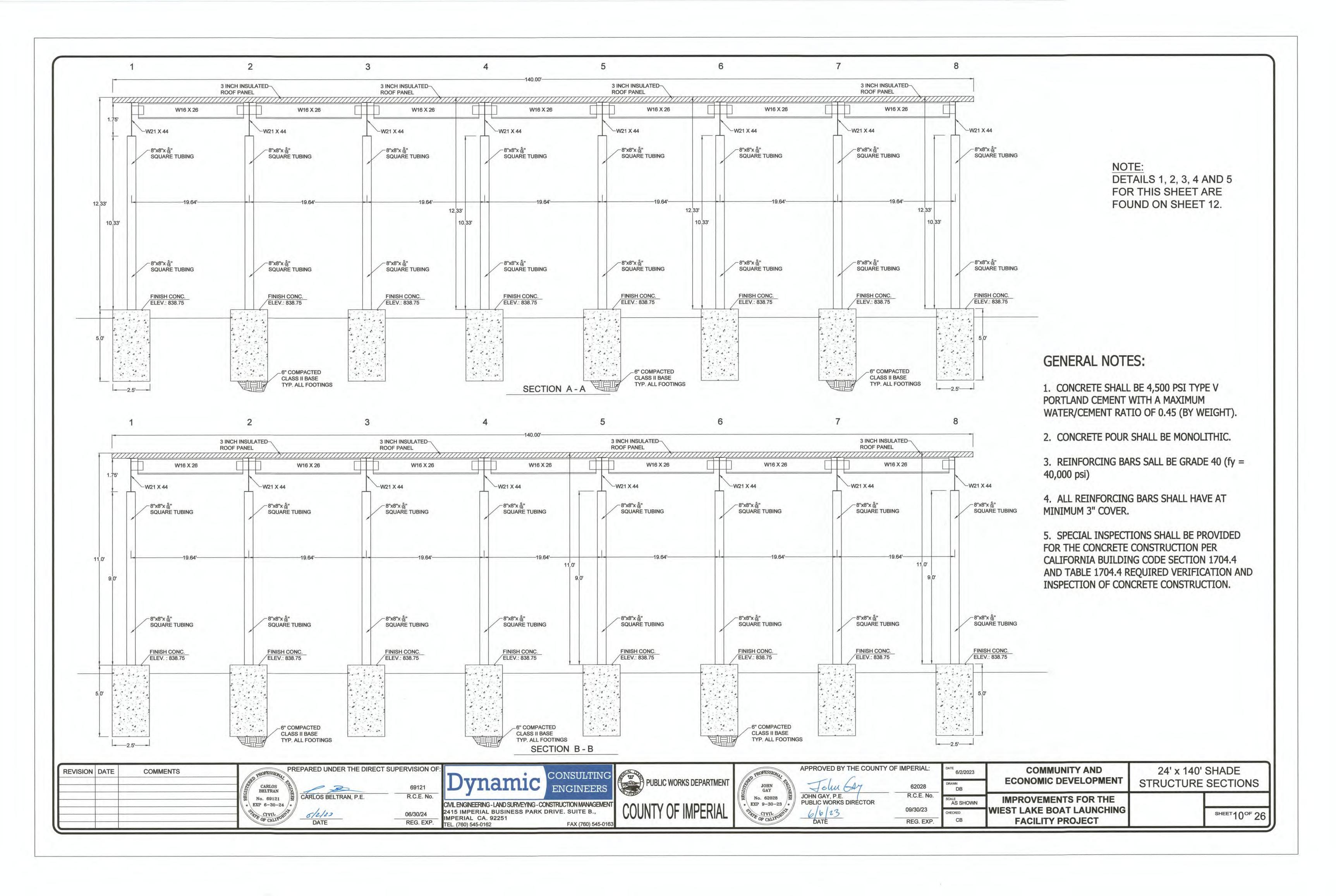
NOTE:
ROOF DECK SHOULD EXTEND 15
INCHES (OVERHANG) FROM CENTER OF
COLUMNS EXTENDING EAST

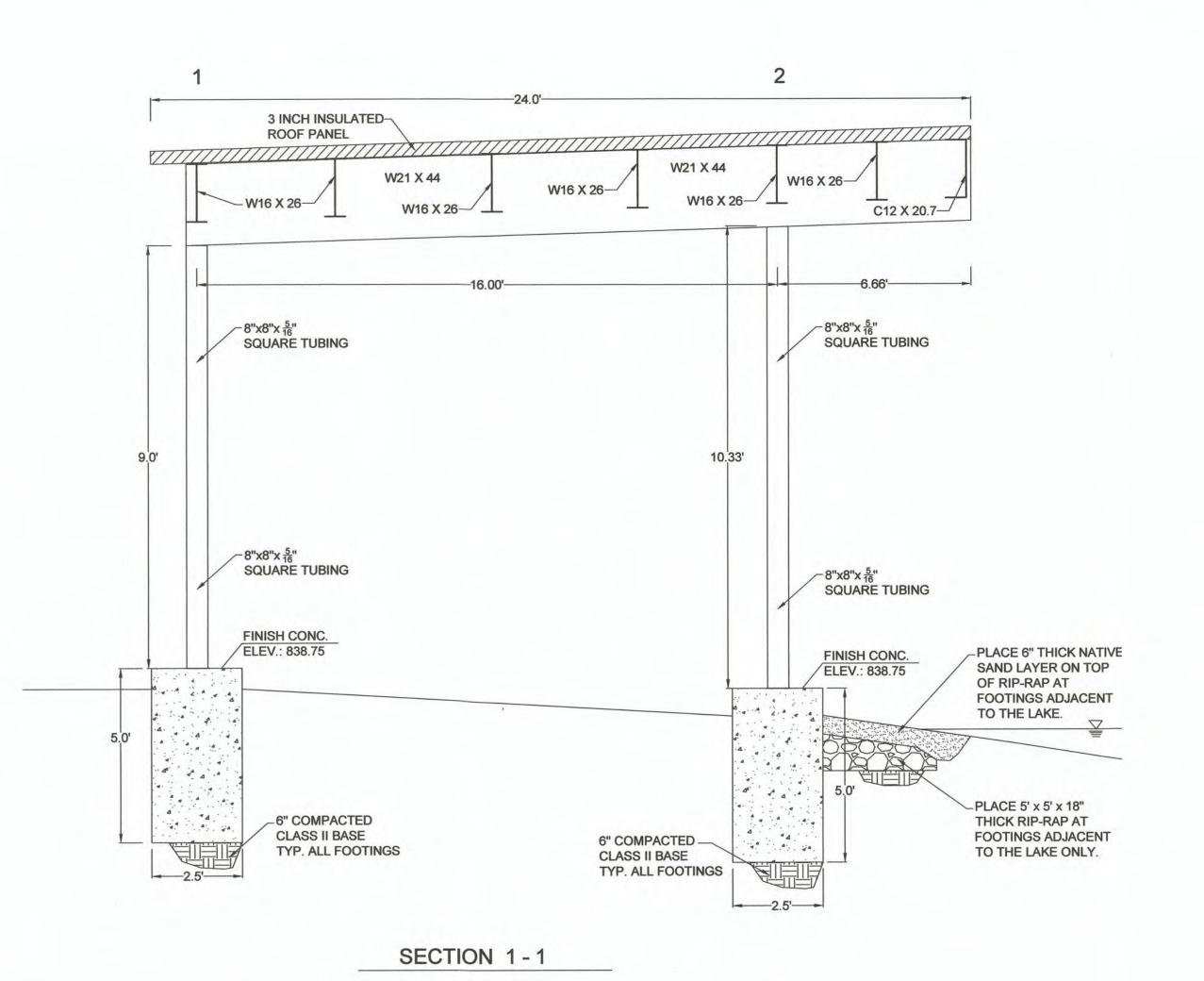
80 FT BY 24 FT SHADE STRUCTURE FRAMING PLAN

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUPERVISION OF	Dynamic CONSULTING PUBLIC WORKS DEPARTMENT	APPROVED BY THE COUNTY OF IMPERIAL:  62028	DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	24' x 80' SHADE STRUCTURE
	CARLOS BELTRAN, P.E.  No. 69121  EXP 6-30-24  OF CALLE OR THE CIVIL OR THE CONTROL OF CALLE OR CALLED AND CALL	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163	No. 62028  EXP 9-30-23  FUBLIC WORKS DIRECTOR  O9/30/23  REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 7 OF 26





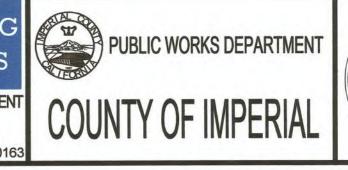




NOTE:
DETAILS 1, 2, 3, 4 AND 5
FOR THIS SHEET ARE
FOUND ON SHEET 12.

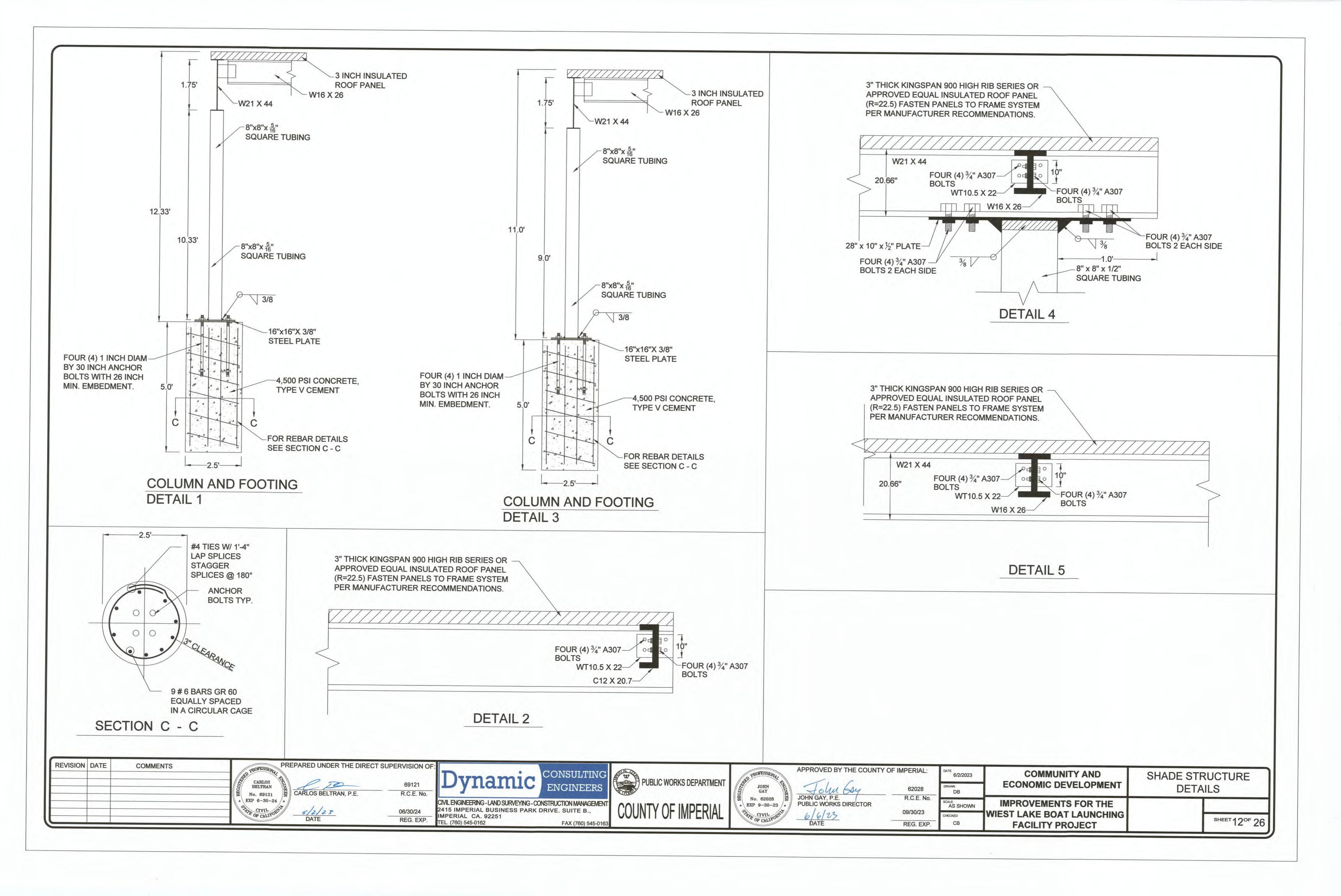
REVISION	DATE	COMMENTS	PREPARED UNDER THE DIRECT SU	JPERVISION OF:
			CARLOS BELTRAN, P.E.  EXP 6-30-24	69121 R.C.E. No.
			OF CALIFORNIE DATE	06/30/24 REG. EXP.





DED PROFESSIONAL EL	APPROVED BY THE COUNTY	OF IMPERIAL:
JOHN GAY No. 62028	Folm Lor	62028
No. 62028 F +	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR	R.C.E. No
OF CALIFORNIA	6/6/23	09/30/23
OF CALIFO.	DATE	REG. EXP

:	DATE 6/2/2023	COMMUNITY AND	24' x 140' SHADE
	DRAWN DB	ECONOMIC DEVELOPMENT	STRUCTURE SECTIONS
lo.	SCALE AS SHOWN	IMPROVEMENTS FOR THE	
(P.	CHECKED CB	WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 11 OF 2



THE CONTRACTOR SHALL FURNISH MATERIAL, FABRICATE, AND INSTALL, THE STRUCTURAL STEEL FRAMING AND ALL APPURTENANT METAL PARTS REQUIRED FOR PERMANENT CONNECTION OF THE STRUCTURAL STEEL.

#### REFERENCE SPECIFICATIONS, CODES AND STANDARDS

COMPLY WITH THE CURRENT PROVISIONS OF THE FOLLOWING CODES AND STANDARDS.

AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"

AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND INCLUDING THE "COMMENTARY OF THE AISC SPECIFICATION"

AISC "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" APPROVED BY THE RESEARCH COUNCIL OF RIVETED AND BOLTED STRUCTURAL JOINTS OF THE ENGINEERING

AISC STRUCTURAL WELDING CODE AWS D1.1-96 AND "STANDARD QUALIFICATION PROCEDURE"

ASTM A36 - STANDARD SPECIFICATION FOR CARBON STRUCTURAL STEEL

ASTM A992 - STANDARD SPECIFICATION FOR STRUCTURAL STEEL

ASTM A53 - STANDARD SPECIFICATION FOR, PIPE, STEEL, BLACK AND HOT-DIPPED, ZINC-COATED, WELDED AND SEAMLESS

ASTM A123 - STANDARD SPECIFICATION FOR ZINC COATING (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS

ASTM A153 - STANDARD SPECIFICATION FOR ZINC COATING (HOT-DIP) ON IRON AND STEEL

ASTM A193 - STANDARD SPECIFICATION FOR ALLOY-STEEL AND STAINLESS STEEL BOLTING MATERIALS FOR HIGH-TEMPERATURE SERVICE

ASTM A 194 - STANDARD SPECIFICATION FOR CARBON AND ALLOY STEEL NUTS FOR BOLTS FOR HIGH PRESSURE AND HIGH TEMPERATURE SERVICE

ASTM A307 - STANDARD SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH

ASTM A325 - STANDARD SPECIFICATION FOR STRUCTURAL BOLTS, STEEL, HEAT TREATED, 120/105 KSI MINIMUM TENSILE STRENGTH

ASTM A490 - STANDARD SPECIFICATION FOR STRUCTURAL BOLTS, STEEL, 150 KSI MINIMUM TENSILE STRENGTH

ASTM A500 - STANDARD SPECIFICATION FOR COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES

ASTM A501 - STANDARD SPECIFICATION FOR HOT-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING

#### SHOP DRAWINGS

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL CONFORM TO AISC RECOMMENDATIONS AND SPECIFICATIONS AND SHALL SHOW ALL HOLES, ETC. REQUIRED FOR OTHER WORK. DRAWINGS SHALL INCLUDE COMPLETE DETAILS SHOWING ALL MEMBERS AND THEIR CONNECTIONS, ANCHOR BOLT LAYOUTS, FIELD WELDS, SCHEDULES FOR FABRICATION PROCEDURES, AND DIAGRAMS SHOWING THE SEQUENCE OF ERECTION. MEMBERS AND CONNECTIONS FOR ANY PORTION OF THE STRUCTURE NOT SHOWN ON THE DRAWINGS SHALL BE DETAILED BY THE FABRICATOR AND INDICATED ON THE SHOP DRAWINGS. ALL WELDS SHALL BE INDICATED BY STANDARD WELDING SYMBOLS OF THE AWS. SHOP DRAWINGS SHALL SHOW REFERENCE MARKS AND CROSS REFERENCES TO DRAWINGS. FABRICATOR SHALL BE RESPONSIBLE FOR CORRECT INTERPRETATION OF DRAWINGS AND SHALL CALL TO THE ENGINEER'S ATTENTION ANY DISCREPANCIES FOUND ON DRAWINGS.

CERTIFIED ALLOY TEST REPORTS SHALL BE FURNISHED FOR ALL MATERIALS SPECIFIED HEREIN UPON REQUEST OF THE ENGINEER.

WELDER CERTIFICATIONS SHALL BE SUBMITTED FOR SHOP AND FIELD WELDERS IN TRIPLICATE, DIRECTLY TO THE ENGINEER FROM A RECOGNIZED TESTING LABORATORY, WITH COPIES TO THE CONTRACTOR AND OTHERS AS REQUIRED.

COPIES OF REPORTS OF TESTS AND INSPECTION CONDUCTED ON SHOP AND FIELD WELDED AND BOLTED CONNECTIONS SHALL BE SUBMITTED TO THE ENGINEER.

#### **OUALITY ASSURANCE**

FABRICATION SHOPS SHALL BE AISC CERTIFIED: SHOP INSPECTION MAY BE REQUIRED BY THE CITY AT THE CITY'S OWN EXPENSE. THE CONTRACTOR SHALL GIVE AMPLE NOTICE TO THE ENGINEER PRIOR TO THE BEGINNING OF ANY FABRICATION WORK SO THAT INSPECTION MAY BE PROVIDED. THE CONTRACTOR SHALL FURNISH ALL FACILITIES FOR THE INSPECTION OF MATERIALS AND WORKMANSHIP IN THE SHOP AND ENGINEER SHALL BE ALLOWED FREE ACCESS TO THE NECESSARY PARTS OF THE WORK. ENGINEER SHALL HAVE THE AUTHORITY TO REJECT ANY MATERIALS OR WORK NOT MEETING THE REQUIREMENTS OF THESE SPECIFICATIONS.

INSPECTION AT THE SHOP IS INTENDED AS A MEANS OF FACILITATING THE WORK AND AVOIDING CLARIFICATION PRIOR TO STARTING FABRICATION. ERRORS, BUT IT IS EXPRESSLY UNDERSTOOD THAT IT WILL IN NO WAY RELIEVE THE CONTRACTOR FROM ITS RESPONSIBILITY FOR FURNISHING PROPER MATERIALS OR WORKMANSHIP UNDER THIS FABRICATION SPECIFICATION.

HIGH-STRENGTH BOLTS SHALL BE INSPECTED USING ONE OF THE PROCEDURES SET FORTH IN THE CURRENT AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.

TEN PERCENT OF ALL BUTT AND BEVEL WELDS WHICH EXTEND CONTINUOUSLY FOR 24 INCHES OR LESS SHALL BE COMPLETELY TESTED IN ACCORDANCE WITH AWS D1.1-96, PART B, RADIOGRAPHIC TESTING ALL STEEL AND MISCELLANEOUS FERROUS METAL ITEMS SHALL BE CAREFULLY FABRICATED OF WELDS, CHAPTER 6. ALL BUTT AND BEVEL WELDS WHICH EXTEND CONTINUOUSLY FOR MORE THAN TO TRUE DIMENSIONS WITHOUT WARP OR TWIST. 24 INCHES SHALL BE SPOT TESTED AT INTERVALS NOT EXCEEDING 36 INCHES.

WELDS THAT ARE REQUIRED BY THE ENGINEER TO BE CORRECTED SHALL BE CORRECTED OR REDONE AND RETESTED AS DIRECTED, AT THE CONTRACTORS EXPENSE, AND TO THE SATISFACTION OF THE

#### FIELD INSPECTIONS AND TESTING

THE ENGINEER AND THE RESIDENT PROJECT REPRESENTATIVE RESERVE THE RIGHT TO INSPECT THE WORK AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE TEMPORARY LADDERS, STEPS, SCAFFOLDING, PLANKING, ETC., NECESSARY FOR SAFE ACCESS TO THE WORK TO BE INSPECTED.

#### MATERIALS

ALL STRUCTURAL STEEL SHAPES, PLATES, BARS, RODS AND THEIR PRODUCTS SHALL BE ASTM 36 OR ASTM A992 UNLESS OTHERWISE INDICATED.

ALL STEEL SHALL BE DELIVERED CLEAN AND FREE FROM MILL SCALE, RUST OR PITTING.

CERTIFIED COPIES OF MILL TEST REPORTS SHALL BE FURNISHED TO THE ENGINEER WHEN REQUESTED.

STRUCTURAL STEEL PIPE SHALL BE ASTM A501, OR ASTM A53, TYPE E OR S.

STRUCTURAL TUBING SHALL BE ASTM A500, GRADE B WITH FY=46 KSI.

BOLTS SHALL HAVE HEXAGONAL HEADS AND NUTS. THREADS SHALL BE CLEAN CUT OF AMERICAN STANDARD SIZE.

HIGH STRENGTH BOLTS FOR STRUCTURAL FRAMING CONNECTIONS SHALL BE ASTM A325 OR A490: USE A325 UNLESS OTHERWISE SHOWN, BOLTS USED TO CONNECT DISSIMILAR METALS SHALL BE ASTM AL 93, TYPE 316 STAINLESS STEEL

NUTS SHALL BE COMPATIBLE WITH, AND HAVE THE SAME FINISH AS, THE ATTACHED BOLT AND SHALL BE ASTM A563, GRADE DH OR ASTM A194

ALL BOLTS, NUTS, STUDS AND FASTENERS EXPOSED TO WATER, GROUNDWATER, SEWAGE, SEWER GAS OR ENCLOSED AREAS ABOVE SEWAGE SHALL BE TYPE 316 STAINLESS STEEL.

STEEL BOLTS, NUTS, WASHERS, STUDS AND FASTENERS FOR GENERAL USE SHALL CONFORM TO ASTM A307 AND SHALL BE HOT-DIP GALVANIZED PER ASTM A153.

TIGHTENING. HARDENED FLAT WASHERS SHALL BE PROVIDED UNDER THE BOLT HEAD AND BE BORNE BY THE CONTRACTOR. NUT FOR BOLTS IN SLOTTED HOLES.

ALL BOLTS, NUTS, WASHERS, AND FASTENERS USED IN CONTACT WITH ALUMINUM SHALL BE TYPE 304 OR TYPE 316 STAINLESS STEEL

BOLTS REQUIRED TO BE BENT SHALL BE BENT COLD. THE BEND RADII'S SHALL NOT BE LESS THAN TWICE THE BOLT DIAMETER.

STRUCTURAL STEEL SHALL BE CLEANED, SHARP EDGES AND CORNERS REMOVED, AND COATED WITH ASHOP PAINT PRIMER; EXCEPT, THAT PRIMER SHALL BE OMITTED FOR SURFACES TO BE GALVANIZED, OR WELDED OR EMBEDDED IN CONCRETE WITH NO FURTHER COATING.

MATERIAL TO BE GALVANIZED SHALL HAVE NO CORNER WITH A RADIUS OF LESS THAN 1/16

ALL STRUCTURAL MEMBERS SHALL BE FURNISHED FULL LENGTH WITHOUT SPLICES UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER. GENERAL

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL STEEL AND MISCELLANEOUS FERROUS CONTINUOUS SEAL WELDS SHALL BE APPLIED ON STRUCTURAL STEEL DESIGNED TO BE EXPOSED TO STRUCTURAL STEEL FOR BUILDINGS", WHEREVER APPLICABLE, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS NECESSARY TO PROPERLY FIT THE WORK IN THE FIELD.

DAMAGED STRUCTURAL STEEL SHALL BE REPLACED. USE OF SALVAGED, REPROCESSED, OR SCRAP MATERIALS SHALL NOT BE PERMITTED.

DISSIMILAR METALS SHALL BE PROTECTED FROM GALVANIC CORROSION BY MEANS OF PRESSURE TAPES, COATINGS, OR ISOLATORS.

#### **MEASUREMENTS**

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES, ELEVATIONS, JOB CONDITIONS, AND SHALL MAKE ANY FIELD MEASUREMENTS NECESSARY AND SHALL BE FULLY RESPONSIBLE FOR ACCURACY AND LAYOUT OF WORK. THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER FOR

SPECIFICATIONS, AND AS INDICATED ON THE FINAL REVIEWED SHOP DRAWINGS. SPECIFIED BY THE CITY OF BRAWLEY. FABRICATION AND ASSEMBLY SHALL BE DONE IN THE SHOP TO THE GREATEST EXTENT POSSIBLE.

PROPERLY MARK AND MATCHMARK MATERIALS FOR FIELD ASSEMBLY.

WHERE FINISHING IS REQUIRED, COMPLETE THE ASSEMBLY, INCLUDING BOLTING AND WELDING OF UNITS, BEFORE START OF FINISHING OPERATIONS.

#### CONNECTIONS

WELD OR BOLT SHOP CONNECTIONS AS SHOWN UNLESS OTHERWISE NOTED. BOLT FIELD CONNECTIONS, EXCEPT WHERE WELDED CONNECTIONS OR OTHER CONNECTIONS ARE SHOWN OR SPECIFIED. ALL CONNECTIONS UNLESS SHOWN OTHERWISE SHALL DEVELOP FULL STRENGTH

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, MINIMUM BEAM FRAMING CONNECTIONS SHALL BE IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION. ALL CONNECTIONS OF BEAMS, EXCEPT HANDRAILS, LADDERS AND GIRT CONNECTIONS, SHALL BE BOLTED WITH HIGH-STRENGTH BOLTS TO PROVIDE SLIP CRITICAL TYPE CONNECTIONS USING DIRECT TENSIONS LOAD INDICATOR WASHERS OR TENSION SET BOLTS. BEAM CONNECTIONS SHALL HAVE A MINIMUM OF TWO 3/4-INCH HIGH-STRENGTH BOLTS UNLESS OTHERWISE INDICATED. ALL CONNECTIONS UNLESS SHOWN OTHERWISE SHALL DEVELOP FULL STRENGTH OF MEMBERS JOINED AND SHALL CONFORM TO AISC STANDARD CONNECTIONS. INSTALLATION OF BOLTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325.

DOUBLE-ANGLE MEMBERS SHALL BE CONNECTED TOGETHER IN ACCORDANCE WITH AISC STANDARD PRACTICE, AND WITH SPECIFIED REQUIREMENTS SPECIFICATION, WITH A 3/4-INCH DIAMETER, HIGH-STRENGTH BOLT AND A FILLER PLATE OR WELDED FILLER PLATE SPACED AS INDICATED ON THE DRAWINGS.

COLUMN ENDS SHALL BE SQUARE AND MILLED TO HAVE FULL BEARING AT SPLICES AND AT BASE

THE CONTRACTOR SHALL NOTIFY THE RESIDENT PROJECT REPRESENTATIVE TO MAKE ARRANGEMENTS TO INSPECT HIGH STRENGTH BOLTED CONNECTIONS AND WELDED CONNECTIONS AND TO PERFORM TESTING AND PREPARE TEST REPORTS. THIS INSPECTION SHALL BE IN ADDITION TO THE INSPECTION SPECIFIED IN THIS SPECIFICATION.

#### WELDED CONSTRUCTION

ALL WELDING SHALL COMPLY WITH THE CURRENT AWS D1.1 CODE FOR PROCEDURES, APPEARANCE, AND QUALITY OF WELDS AND WELDERS, AND METHODS USED IN CORRECTING WELDING WORK.

WELDERS, WELDING OPERATIONS AND TACKERS SHALL BE PREQUALIFIED IN ACCORDANCE WITH THE SPECIFICATIONS OF AWS D1.1 AND SHALL PRODUCE WRITTEN EVIDENCE OF QUALIFICATION A HARDENED FLAT WASHER SHALL BE PROVIDED UNDER THE NUT OR BOLT HEAD TURNED IN SATISFACTORY TO THE ENGINEER. ALL COSTS ASSOCIATED WITH QUALIFICATION OF WELDERS SHALL

> WELDING PROCEDURES SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO THE BEGINNING OF CONSTRUCTION. CERTIFICATION THAT WELDING PROCEDURES, WELDERS AND WELDING OPERATORS THAT THE CONTRACTOR INTENDS TO USE MEET THE ASME REQUIREMENTS SHALL ALSO BE SUBMITTED TO THE ENGINEER PRIOR TO THE BEGINNING OF CONSTRUCTION. ANY WELDING NOT TRACEABLE TO THE WELDER PERFORMING THE WORK SHALL BE CAUSE FOR REJECTION BY THE ENGINEER, THE ENGINEER SHALL BE NOTIFIED OF ANY WELD REPAIRS AND PROPOSED REPAIR PROCEDURES.

> SHARP OR HAZARDOUS OBSTRUCTIONS SHALL BE ROUNDED OFF AND GROUND SMOOTH, WELDED CLOSURES SHALL BE NEATLY MADE; AND WHERE WELD MATERIAL INTERFERES WITH FIT, OR IS UNSIGHTLY IN APPEARANCE, IT SHALL BE GROUND OFF SMOOTH.

> STAINLESS STEEL WELDING SHALL CONFORM TO THE DETAILS AND STANDARDS OF WORKMANSHIP OF THIS SPECIFICATION AND AWS D1.1, EXCEPT THE PRE-QUALIFIED WELDS FOR CARBON STEEL ARE NOT APPLICABLE TO STAINLESS STEEL. WELDERS AND WELD PROCEDURES FOR STAINLESS STEEL SHALL BE SPECIFICALLY QUALIFIED PER AWS B2.1 FOR THE TYPE OF STAINLESS STEEL TO BE WELDED. WELDERS AND WELD PROCEDURES FOR WELDING OF STAINLESS STEEL TO CARBON STEEL SHALL BE QUALIFIED PER AWS B2.1.

METAL ITEMS AS SHOWN ON PLANS. ALL FABRICATION AND ERECTION OF STEEL ITEMS SHALL WEATHER OR SUBMERGED IN WATER OR WASTEWATER, CONTINUOUS SEAL WELDS SHALL BE APPLIED CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF ON BOTH SIDES OF STRUCTURAL STEEL DESIGNED TO BE SUBMERGED IN WATER OR WASTEWATER.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS BEFORE STARTING ANY SHOP OF FIELD WELDING. WELDS SHALL BE INSPECTED BY RADIOGRAPHIC OR OTHER MEANS. WELDS FOUND NOT IN ACCORDANCE WITH THIS SPECIFICATION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE NEW WELD SHALL BE INSPECTED AND AN ADDITIONAL 2 WELDS SELECTED AT RANDOM SHALL BE RE-INSPECTED.

WELDERS FOUND PERFORMING UNSATISFACTORY WORK SHALL BE REMOVED FROM THE WELDING PROCESS.

#### COATING AND GALVANIZING

APPLY SHOP PAINT PRIMER IN ACCORDANCE WITH PROTECTIVE COATING REQUIREMENTS. OMIT SHOP APPLIED PRIMER IN THE FOLLOWING CASES: AT FIELD WELD LOCATIONS, FOR THE PORTION OF A MEMBER TO BE EMBEDDED IN CONCRETE, AND WHERE GALVANIZING WITH NO FURTHER COATING IS REQUIRED. REMOVE ALL SLAG FROM WELDS BEFORE PAINTING.

FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH THE DRAWINGS, AISC THE CONTRACTOR SHALL FINISH PAINT STEEL AND MISCELLANEOUS FERROUS METAL ITEMS AS

STEEL OR IRON SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION AND SHALL CONFORM TO ASTM A123.

AREAS OF GALVANIZING DAMAGED BY WELDING OR BURNING OR OTHERWISE DAMAGED SHALL BE REPELLED USING METHOD APPROVED BY THE ENGINEER.

STRUCTURAL STEEL COMPLETELY ENCASED IN CONCRETE SHALL NOT BE PAINTED OR GALVANIZED AND SHALL HAVE A CLEAN SURFACE FOR BONDING TO CONCRETE.

#### PRODUCT DELIVERY, STORAGE, AND HANDLING

LOAD STRUCTURAL MEMBERS IN SUCH A MANNER THAT THEY MAY BE TRANSPORTED AND UNLOADED WITHOUT BEING EXCESSIVELY STRESSED, DEFORMED, OR OTHERWISE DAMAGED.

PROTECT STRUCTURAL STEEL MEMBERS AND PACKAGED MATERIALS FROM CORROSION AND DETERIORATION. MATERIAL SHALL BE STORED IN A DRY AREA AND SHALL NOT BE PLACED IN DIRECT CONTACT WITH THE GROUND. DO NOT PLACE MATERIALS ON THE STRUCTURE IN A MANNER THAT MIGHT CAUSE DISTORTION OR DAMAGE TO THE MEMBERS OR THE SUPPORTING STRUCTURES. REPAIR OR REPLACE DAMAGED MATERIALS OR STRUCTURES AS DIRECTED.

THE CONTRACTOR SHALL COMPLY WITH THE AISC SPECIFICATIONS AND CODE OF

HIGH-STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS. THE CONNECTIONS SHALL BE THE BEARING TYPE WITH THREADS EXCLUDED FROM THE SHEAR PLANE UNLESS NOTED OTHERWISE.

ANCHOR BOLTS AND OTHER CONNECTORS REQUIRED FOR SECURING STRUCTURAL STEEL TO IN-PLACE WORK, AND TEMPLATES AND OTHER DEVICES FOR PRESETTING BOLTS AND OTHER ANCHORS TO ACCURATE LOCATIONS SHALL BE FURNISHED.

#### FIELD ASSEMBLY

SET STRUCTURAL FRAMES ACCURATELY TO THE LINES AND ELEVATIONS INDICATED ALIGN AND ADJUST THE VARIOUS MEMBERS TO FORM A PART OF A COMPLETE FRAME OR STRUCTURE BEFORE PERMANENTLY FASTENING. CLEAN BEARING SURFACES AND OTHER SURFACES WHICH WILL BE IN PERMANENT CONTACT BEFORE ASSEMBLY PERFORM NECESSARY ADJUSTMENTS TO COMPENSATE FOR DISCREPANCIES IN ELEVATIONS AND ALIGNMENT.

LEVEL AND PLUMB INDIVIDUAL MEMBERS OF THE STRUCTURE WITHIN SPECIFIED AISC TOLERANCES. CONTRACTOR SHALL PROVIDE AND INSTALL ALL TEMPORARY BRACING NECESSARY TO CARRY CONSTRUCTION LOADS UNTIL THE STRUCTURE HAS BEEN COMPLETED.

ESTABLISH REQUIRED LEVELING AND PLUMBING MEASUREMENTS AT THE MAIN OPERATING TEMPERATURE OF THE STRUCTURE.

#### MISFITS AT BOLTED CONNECTIONS

WHERE MISFITS IN ERECTION BOLTING ARE ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. THE CONTRACTOR SHALL SUBMIT A METHOD TO REMEDY THE MISFIT FOR REVIEW BY THE ENGINEER. THE ENGINEER WILL DETERMINE WHETHER THE REMEDY IS ACCEPTABLE OR IF THE MEMBERS MUST BE REFABRICATED. METHODS OF REMEDY MAY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

REAM HOLES THAT MUST BE ENLARGED TO ADMIT BOLTS AND USE OVERSIZED BOLTS.

PLUG-WELD MISALIGNED HOLES AND REDRILL HOLES TO ADMIT STANDARD SIZE

DRILL ADDITIONAL HOLES IN THE CONNECTION, CONFORMING WITH AISC STANDARDS FOR BOLT SPACING AND END AND EDGE DISTANCES, AND ADD ADDITIONAL BOLTS.

REJECT THE IMPROPERLY FABRICATED MEMBER AND FABRICATE A NEW MEMBER TO ENSURE PROPER FIT.

MID-SIZED OR MISALIGNED HOLES IN MEMBERS SHALL NOT BE ENLARGED BY BURNING OR BY THE USE OF DRIFT PINS.

FABRICATED ITEMS SHALL NOT BE COCKED OUT OF ALIGNMENT, REDRILLED, RESHAPED OR FORCE FIT.

#### MISFITS AT ANCHOR BOLTS

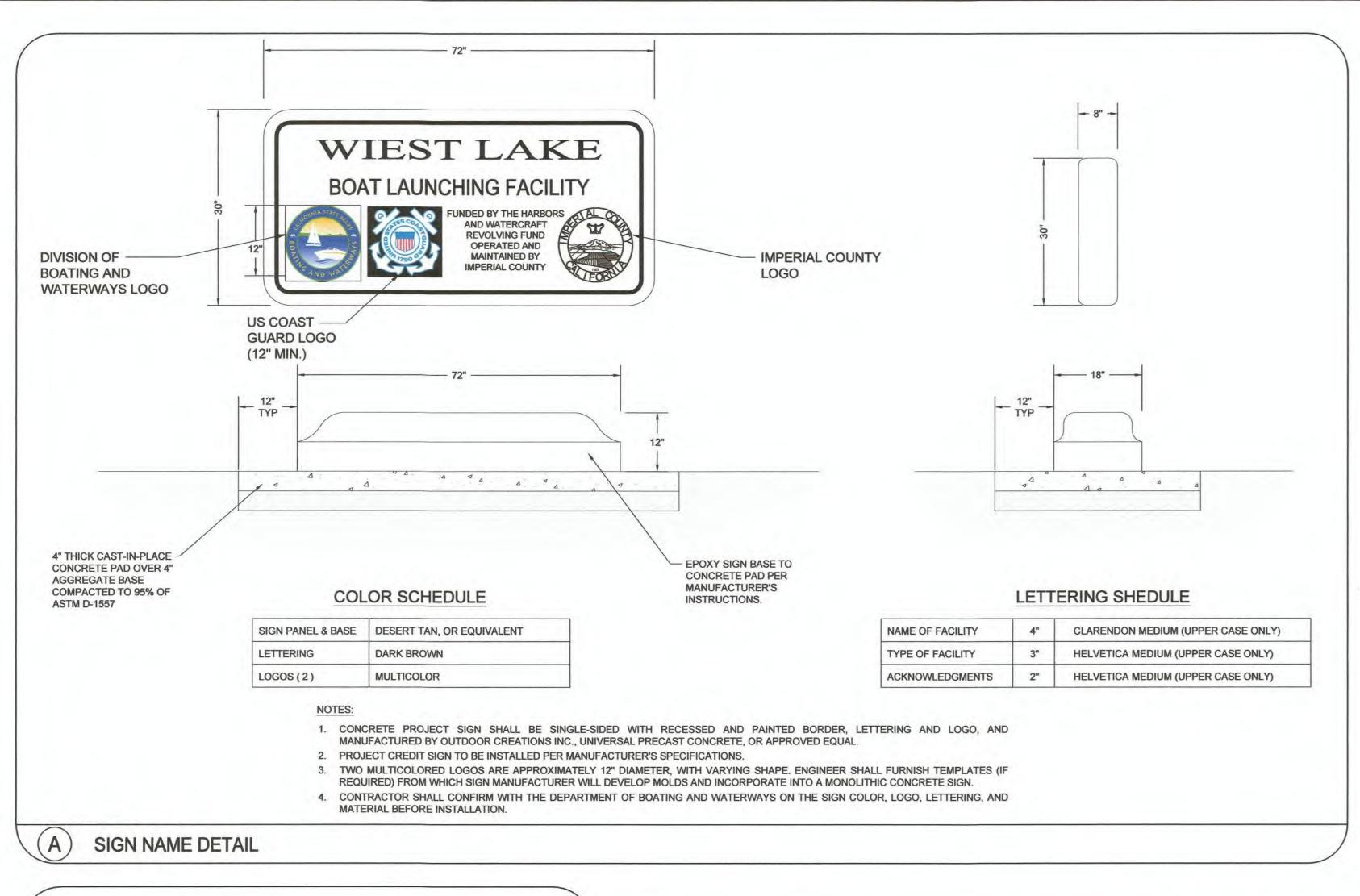
WHERE MISALIGNMENT BETWEEN ANCHOR BOLTS AND BOLT HOLES IN STEEL MEMBERS ARE ENCOUNTERED. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED. THE CONTRACTOR SHALL SUBMIT A METHOD TO REMEDY THE MISALIGNMENT FOR REVIEW BY THE ENGINEER.

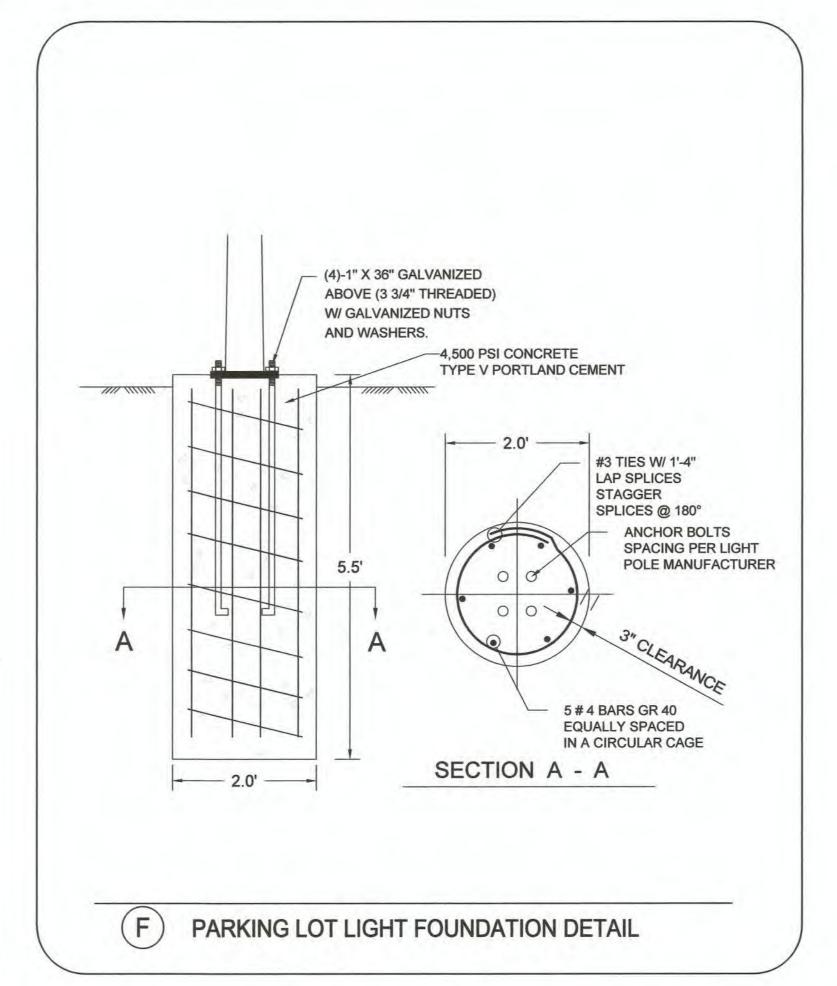
IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PLACE ANCHOR BOLTS OR OTHER ANCHORING DEVICES ACCURATELY AND TO MAKE ANY SURFACES WHICH BEAR AGAINST STRUCTURAL ITEMS SMOOTH AND TRUE TO LEVEL TO PRECLUDE THE NECESSITY OF ANY SPRINGING, REDRILLING OR RESHAPING.

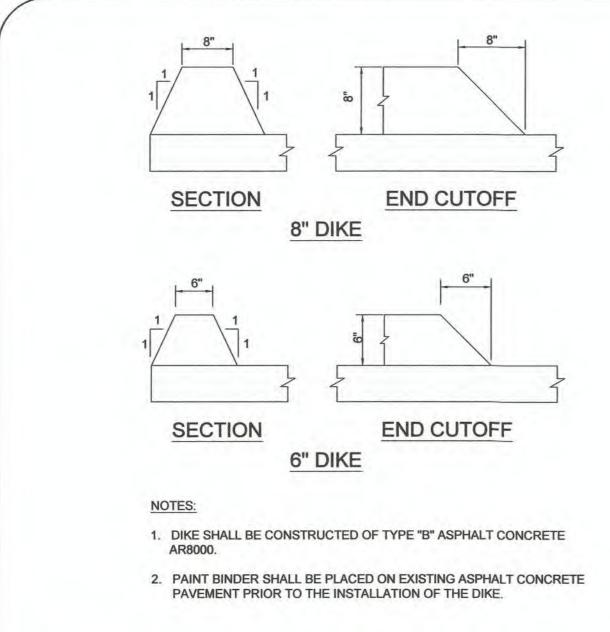
#### **GAS CUTTING**

DO NOT USE GAS CUTTING TORCHES IN THE FIELD FOR CORRECTING FABRICATION ERRORS IN THE STRUCTURAL FRAMING, EXCEPT ON SECONDARY MEMBERS WHICH ARE NOT UNDER STRESS AND WILL BE CONCEALED IN THE FINISHED STRUCTURE AND WHEN APPROVED BY THE ENGINEER. FINISH GAS-CUT SECTIONS EQUAL TO A SHEARED APPEARANCE.

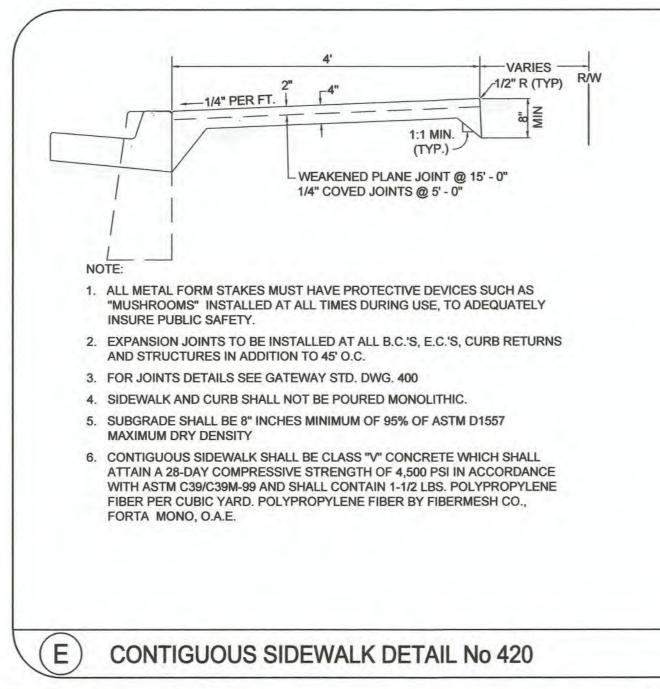
ENGINEER AND/OR APPROVED INDEPENDENT TESTING LAB. APPROVED BY THE COUNTY OF IMPERIAL: **COMMUNITY AND** SHADE STRUCTURE PREPARED UNDER THE DIRECT SUPERVISION OF REVISION DATE COMMENTS 6/2/2023 CONSULTING **ECONOMIC DEVELOPMENT SPECIFICATIONS** PUBLIC WORKS DEPARTMENT 62028 CARLOS 69121 **ENGINEERS** DB BELTRAN R.C.E. No R.C.E. No JOHN GAY, P.E. CARLOS BELTRAN, P.E. **IMPROVEMENTS FOR THE** No. 62028 PUBLIC WORKS DIRECTOR AS SHOWN EXP 9-30-23 CIVIL ENGINEERING - LAND SURVEYING - CONSTRUCTION MANAGEMEN EXP 6-30-24 09/30/23 WIEST LAKE BOAT LAUNCHING 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., **SHEET 13 OF 26** 6/2/23 06/30/24 IMPERIAL CA. 92251 **FACILITY PROJECT** CB REG. EXP. DATE REG. EXP. DATE EL. (760) 545-0162 FAX (760) 545-0163

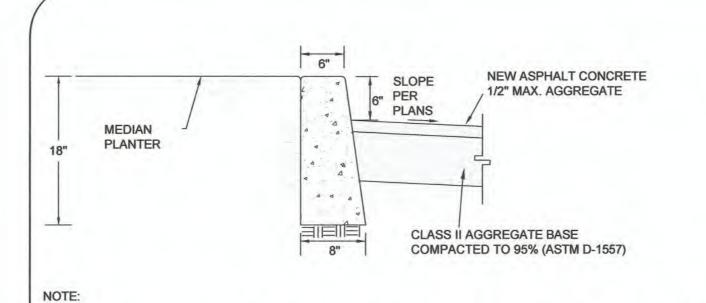






ASPHALT CONCRETE DIKE DETAIL No 403

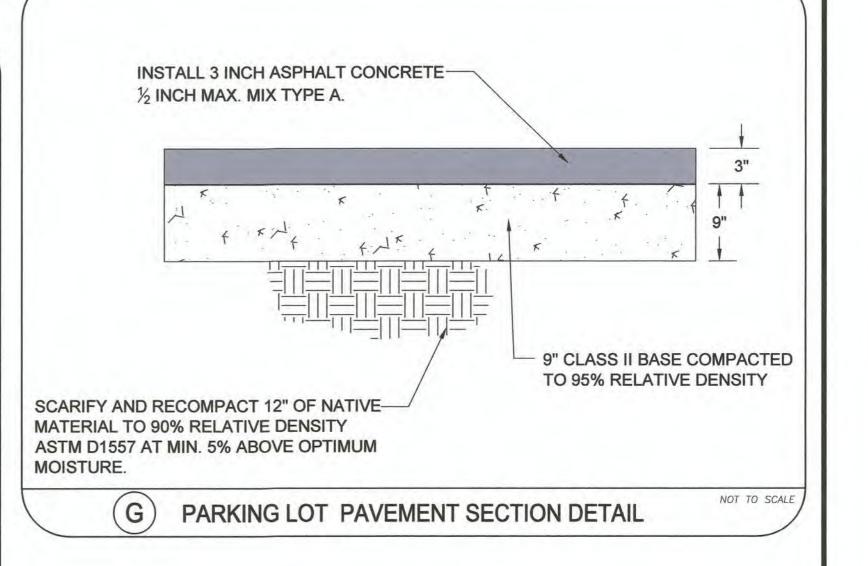




- ALL METAL FORM STAKES MUST HAVE PROTECTIVE DEVICES SUCH AS "MUSHROOMS" INSTALLED AT ALL TIMES DURING USE, TO ADEQUATELY INSURE PUBLIC SAFETY.
- 2. PLACE WEAKENED PLANE JOINTS EVERY 15' (LINEAR FEET) ALONG THE CURB.
- PLACE EXPANSION JOINTS EVERY 45' (FEET) EXPANSION JOINT MATERIAL TO BE COMPOSED OF 1/4" FIBER BOARD INSTALLED ACROSS SECTION OF CURB.
- THE CURB EDGES SHALL BE PLACED TRUE TO LINE AND GRADE. VERTICAL ELEVATIONS SHALL NOT VARY MORE THAN 0.01' WITH A MAXIMUM VARIANCE OF 0.02' FROM DESIGN GRADE OCCURRING IN ANY GIVEN 100 FOOT SECTION. THE HORIZONTAL CURB EDGES SHALL NOT VARY MORE THAN 1/4" IN ANY GIVEN 100 FOOT SECTION.
   THE PCC SHALL CONTAIN 6 SACKS OF CEMENT PER CUBIC YARD AND ATTAIN A COMPRESSIVE STRENGTH OF
- 4,500 PSI AFTER 28 DAYS CURING
  6. THE STANDING CURB WILL HAVE THE SAME CONDITIONS FOR CONSTRUCTION ADJACENT TO THE PROPOSED
- PLANTERS.

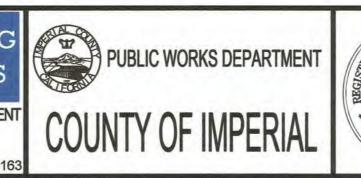
  7. FREE STANDING CURB SHALL BE CLASS "V" CONCRETE WHICH SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI IN ACCORDANCE WITH ASTM C39/C39M-99 AND SHALL CONTAIN 1-1/2 LBS. POLYPROPYLENE FIBER PER CUBIC YARD. POLYPROPYLENE FIBER BY FIBERMESH CO., FORTA MONO, O.A.E.

C FREE STANDING CURB DETAIL No 427



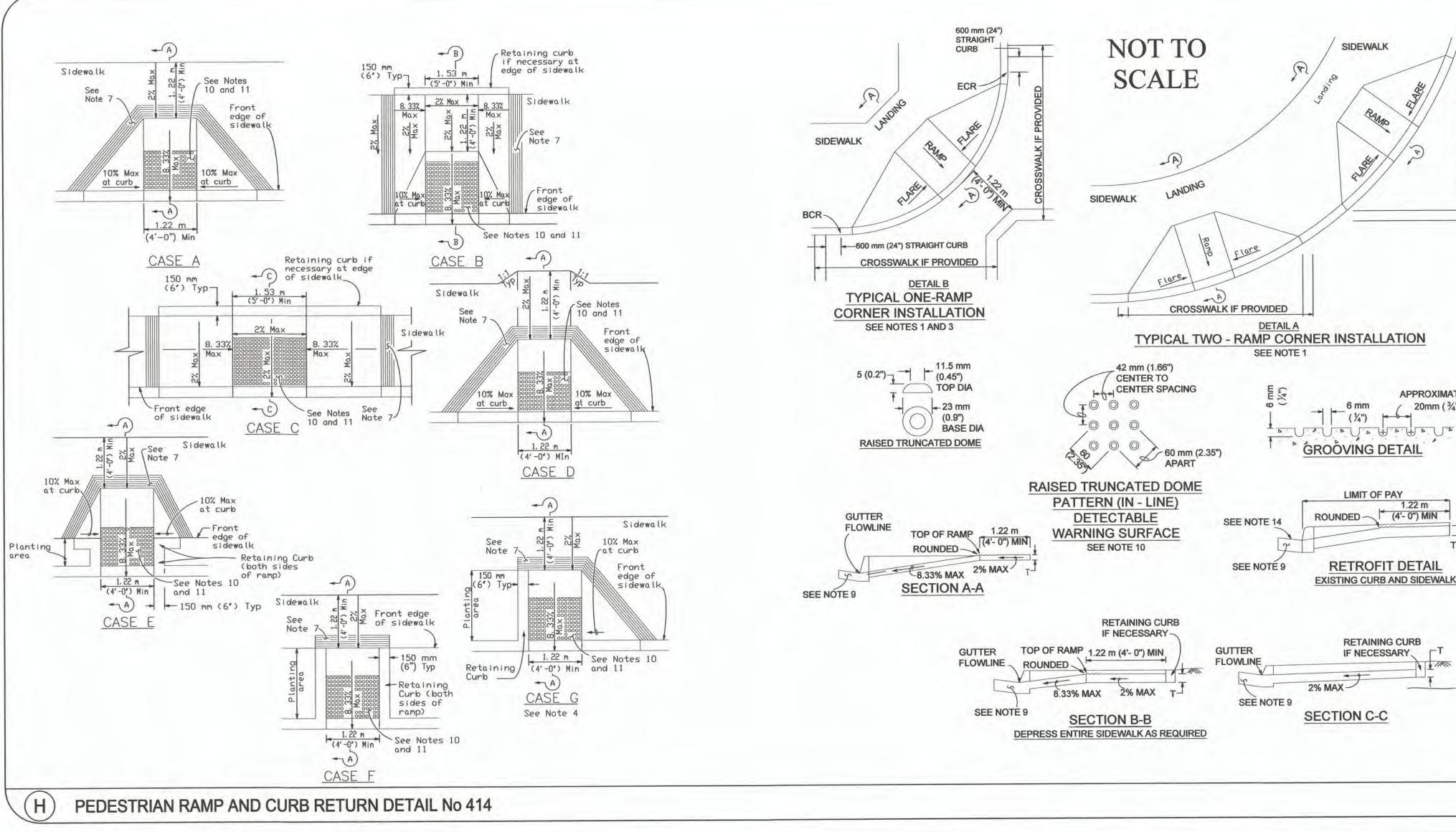
REVISION	DATE	COMMENTS	PREPARED UNDER THE DIRECT	SUPERVISION OF
			CARLOS BELTRAN, P.E.	69121
			No. 69121 GARLOS BELTRAN, P.E.	R.C.E. No.
			* EXP 6-30-24 *  OF CALIFORNIA  DATE	06/30/24
			DATE	REG. EXP.





DAT	OF IMPERIAL:	APPROVED BY THE COUNTY	O PROFESSIONAL
DRA	62028	Folm Gry	JOHN GAY No. 62028
SCA	R.C.E. No.	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR	No. 62028
CHE	09/30/23	6/6/13	EXP 9-30-23 *
1	REG. EXP.	DATE	OF CALIFOR

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	DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	DETAILS				
	SCALE AS SHOWN	IMPROVEMENTS FOR THE					
	CHECKED	WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 14°F 26				

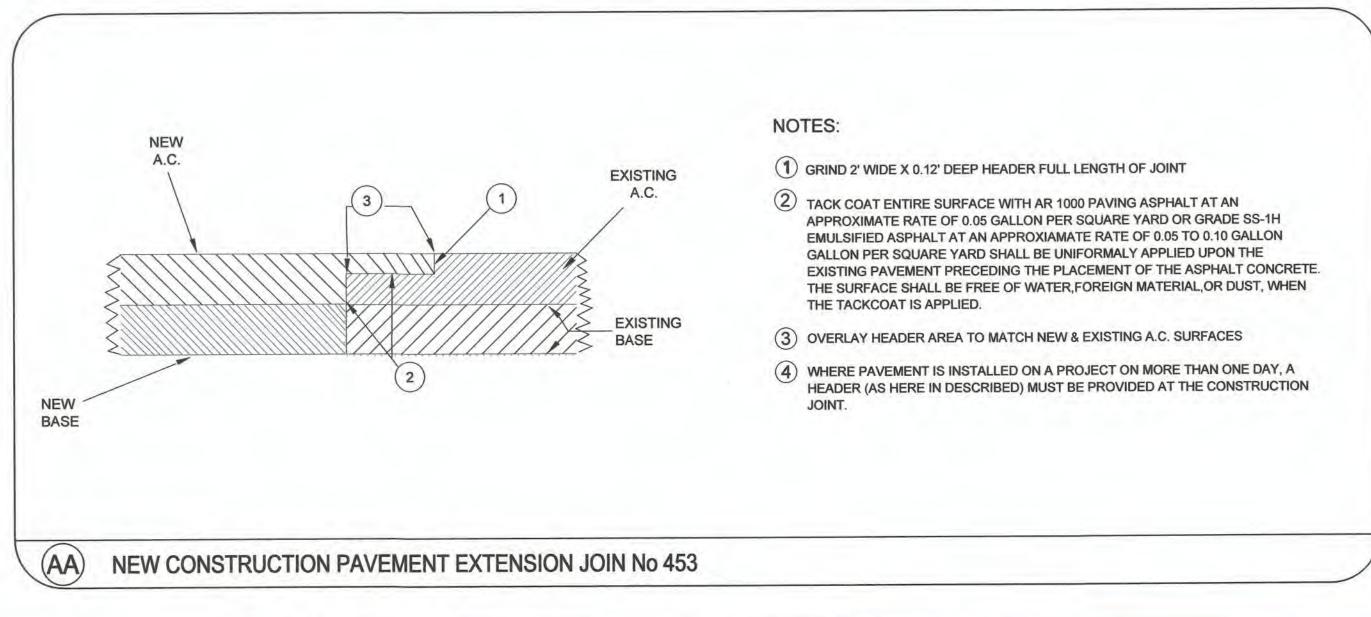


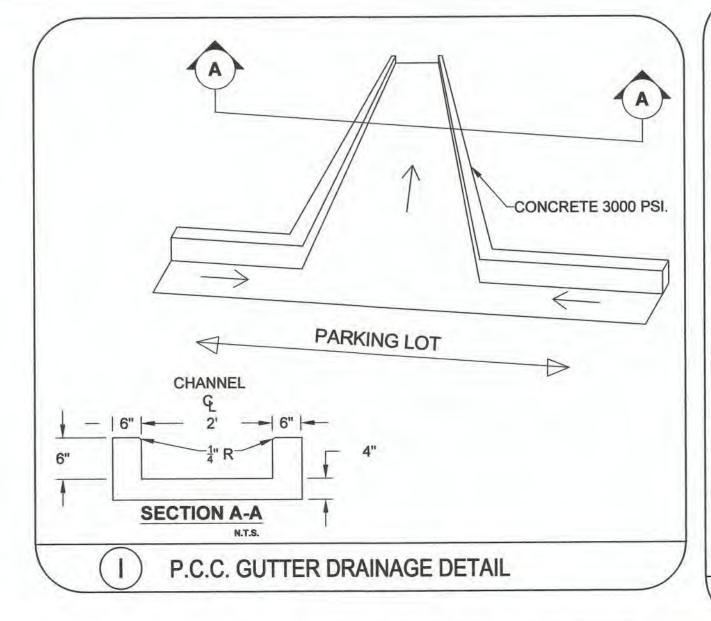
#### NOTES:

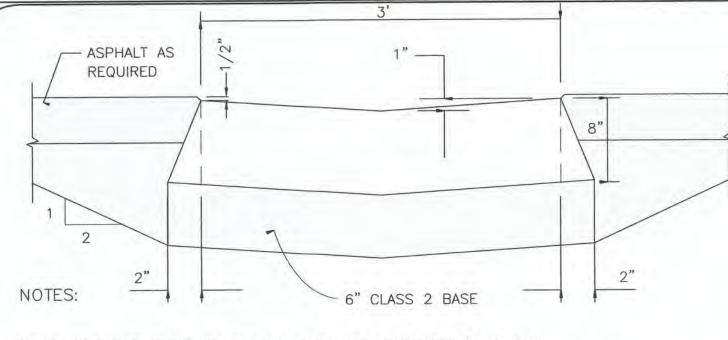
APPROXIMATELY

20mm (3/4")

- 1. AS SITE CONDITIONS DICTATE, CASE A THROUGH CASE G CURB RAMPS MAY BE USED FOR CORNER INSTALLATIONS SIMILAR TO THOSE SHOWN IN DETAIL A AND DETAIL B. THE CASE OF CURB RAMPS USED IN DETAIL A DO NOT HAVE TO BE THE SAME. CASE A THROUGH THE SAME CASE G CURB RAMPS ALSO MAY BE USED AT MID BLOCK LOCATIONS, ON SITE CONDITIONS DICTATE.
- 2. IF DISTANCE FROM CURB TO BACK OF SIDEWALK IS TOO SHORT TO ACCOMMODATE RAMP AND 1.22 M (4'-0") PLATFORM (LANDING) AS SHOWN IN CASE A, THE SIDEWALK MAY BE DEPRESSED LONGITUDINALLY AS IN CASE B, OR C OR MAY BE WIDENED AS IN CASE D.
- 3. WHEN RAMP IS LOCATED IN CENTER OF CURB RETURN, CROSSWALK CONFIGURATION MUST BE SIMILAR TO THAT SHOWN FOR DETAIL B.
- 4. AS SITE CONDITIONS DICTATE, THE RETAINING CURB SIDE AND THE FLARED SIDE OF THE CASE G RAMP SHALL BE CONSTRUCTED IN REVERSED POSITION.
- 5. IF LOCATED ON A CURVE, THE SIDES OF THE RAMP NEED NOT BE PARALLEL, BUT THE MINIMUM WIDTH OF THE RAMP SHALL BE 1.22 M (4'-0").
- 6. SIDE SLOPE OF RAMP FLARES VARY UNIFORMLY FROM A MAXIMUM OF 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP, EXCEPT IN CASE C AND CASE F.
- 7. THE RAMP SHALL HAVE A 12" WIDE BORDER WITH 1/4" GROOVES APPROXIMATELY 3/4" ON CENTER. SEE
- 8. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT
- 9. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP AND CONTINUOUS PASSAGE TO THE CURB RAMP SHALL NOT EXCEED 5 PERCENT WITHIN 1.22 M (4'-0") OF THE TOP OR BOTTOM OF THE CURB RAMP.
- 10. CURB RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND 914 MM (3'-0") DEPTH OF THE RAMP. DETECTABLE WARNING SURFACES SHALL CONFORM TO THE DETAILS ON THIS PLAN AND THE REQUIREMENTS IN THE SPECIAL PROVISIONS. INSTALLATION OF E-Z SET POLYMER CONCRETE PANEL IN LIEU OF THE RAISED TRUNCATED DOME SHALL BE DONE ACCORDING TO THE DRAWING AND SPECIFICATION OF THE MANUFACTURER. PLACEMENT MUST BE PRIOR TO SETTING OF CONCRETE.
- 11. THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE STREET SHALL BE BETWEEN 150 MM (6") AND 205 MM (8") FROM THE GUTTER FLOWLINE.
- 12. UTILITY PULL BOXES, MANHOLES, VAULTS AND ALL OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP WILL BE RELOCATED OR ADJUSTED TO GRADE BY THE OWNER PRIOR TO, OR IN CONJUNCTION WITH, CURB RAMP CONSTRUCTION.
- 13. ACCESS RAMP SHALL BE CONSTRUCTED WITH 5" THICK 4000 PSI PORTLAND CEMENT CONCRETE OVER CLASS 2 AGG. BASE OR PIT RUN GRAVEL SAND W/SAND EQUIVALENT >30. (FOR LEVELING PURPOSES).
- 14. RAMPS LOCATED OTHER THAN SHOWN SHALL BE APPROVED BY THE COUNTY ENGINEER.
- 15. SUBGRADE (8" MINIMUM) TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY (ASTM D1557) AND MAINTAIN A MOISTURE CONTENT OF 18% (+/- 2%) FOR CLAY SOILS ONLY FOR ALL LOCATIONS UNDERNEATH CONCRETE STRUCTURES.
- 16. PEDESTRIAN RAMP AND CURB RETURN SHALL BE CLASS "3" CONCRETE WHICH SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI IN ACCORDANCE WITH ASTM C39/C39M-99 AND SHALL CONTAIN 1-1/2 LBS. POLYPROPYLENE FIBER PER CUBIC YARD. POLYPROPYLENE FIBER BY FIBERMESH CO., FORTA MONO,



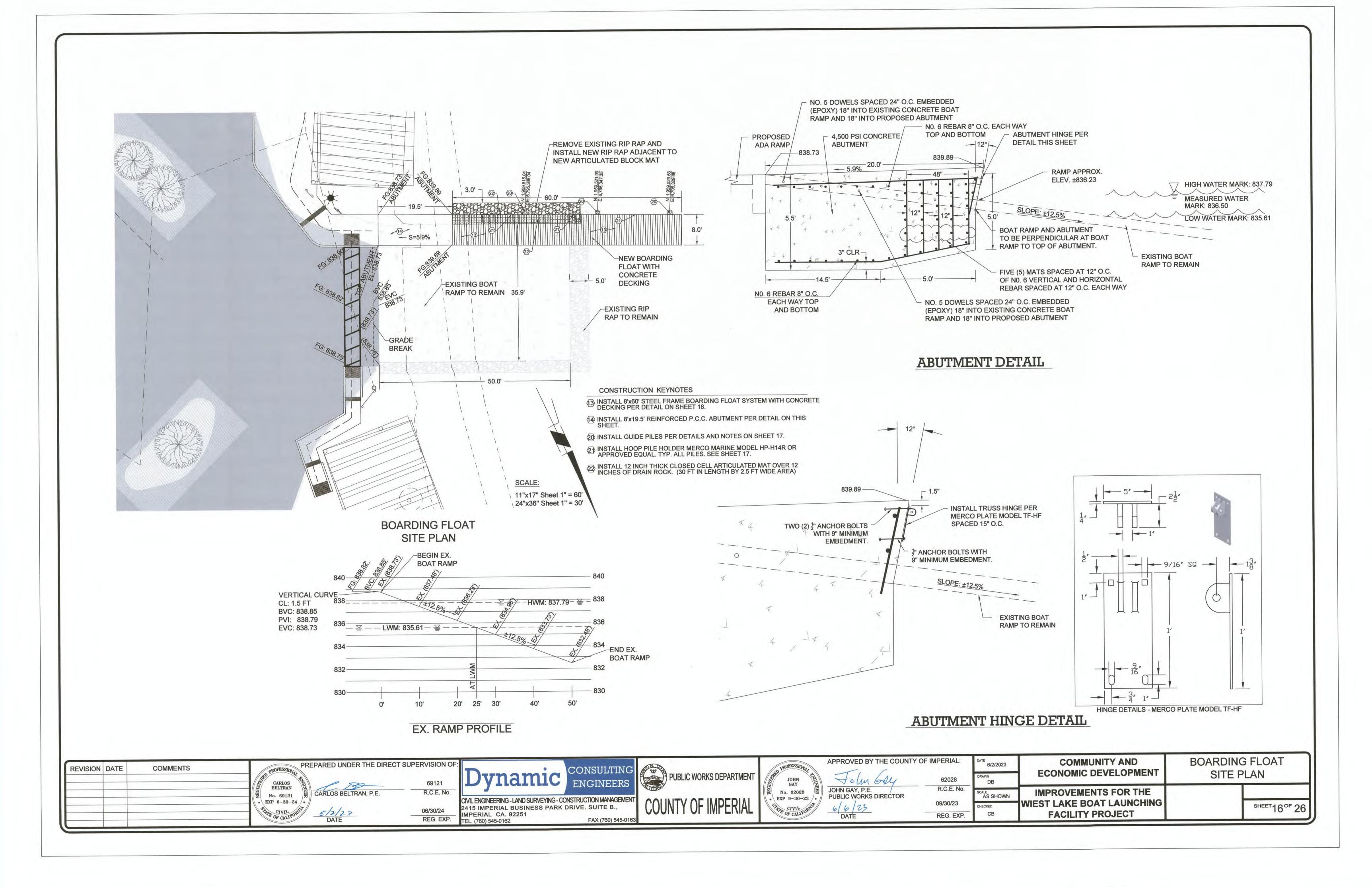


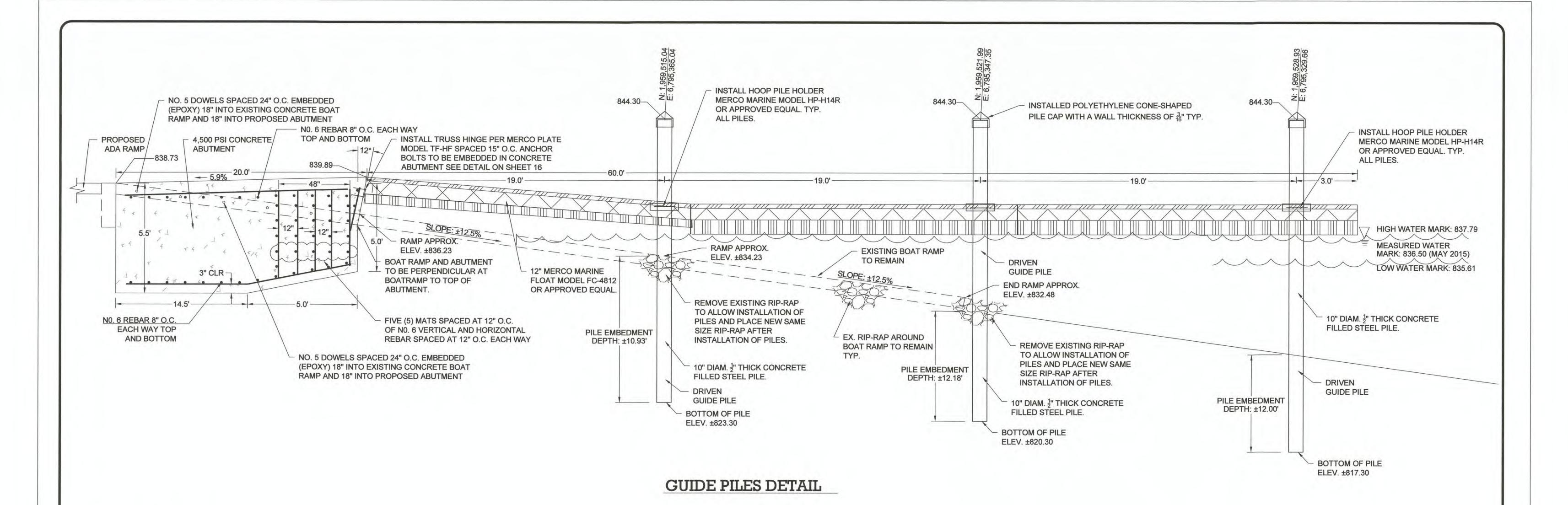


- MINIMUM DRAINAGE SLOPE OF GUTTER SHALL BE AS SHOWN ON PLANS.
- . RIBBON GUTTER SHALL BE CLASS "V" CONCRETE WHICH SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 4,500 PSI IN ACCORDANCE WITH ASTM C39/C39M-99 AND SHALL CONTAIN 1-1/2 LBS. POLYPROPYLENE FIBER PER CUBIC YARD. POLYPROPYLENE FIBER BY FIBERMESH CO., FORTA MONO, O.A.E.
- CURING COMPOUND SHALL BE CURE—TREAT (CONCRETE CONDITIONER AND CURING AIDE) AS MANUFACTURED BY W.R. MEADOWS, INC. OR APPROVED EQUAL. COMPOUND SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATION.
- 4. WEAKENED PLANE JOINT 20' O.C.
- 5. CLASS 2 BASE MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY PER ASTM D-1557.
- 6. ALL METAL FORM STAKES MUST HAVE PROTECTIVE DEVICES SUCH AS "MUSHROOMS" INSTALLED AT ALL TIMES DURING USE, TO ADEQUATELY INSURE THE PUBLIC SAFETY.
- . CONCRETE SHALL BE MEDIUM BROOMED FINISHED AND TROWELED SMOOTH 8" WIDE ALONG THE FLOWLINE.

P.C.C. RIBBON GUTTER DETAIL

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT	T SUPERVISION OF:	Dynamic CONSULTING PUBLIC WORKS DEPARTMENT	APPROVED BY THE COUNTY  JOHN GAY  JOHN GAY	OF IMPERIAL: 62028	DATE 6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	DETAILS
	No. 69121 CARLOS BELTRAN, P.E.	R.C.E. No.	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251  COUNTY OF IMPERIAL CA. 92251	No. 62028 EXP 9-30-23 PUBLIC WORKS DIRECTOR	R.C.E. No. 09/30/23	SCALE AS SHOWN CHECKED	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING	SHEET 15 OF 26
	DATE	06/30/24 REG. EXP.	IMPERIAL CA. 92251 TEL. (760) 545-0162  FAX (760) 545-0163	DATE	REG. EXP.	СВ	FACILITY PROJECT	





#### **GUIDE PILES AND PILE YOKES:**

PILE SHALL HAVE A ROUND CROSS SECTIONAL SHAPE. PILE SHALL BE  $\frac{1}{2}$ " THICK MADE OF STEEL FILLED WITH CONCRETE.

AFTER PILES HAVE BEEN DRIVEN AND CUT OFF TO THE PROPER ELEVATION, THEY SHOULD BE CAPPED WITH FIBERGLASS OR POLYETHYLENE CONE-SHAPED WHITE PILE CAPS WITH A WALL THICKNESS OF NOT LESS THAN 1/8".

THE PILE CUTOFF ELEVATION SHALL BE HIGH WATER PLUS 6.5'.

IF STEEL PILES ARE USED, THE CONTRACTOR SHALL PROVIDE THE PROPER ALLOY AND PILE COATING TO INSURE A MINIMUM 20 YEAR PILE SERVICE LIFE.

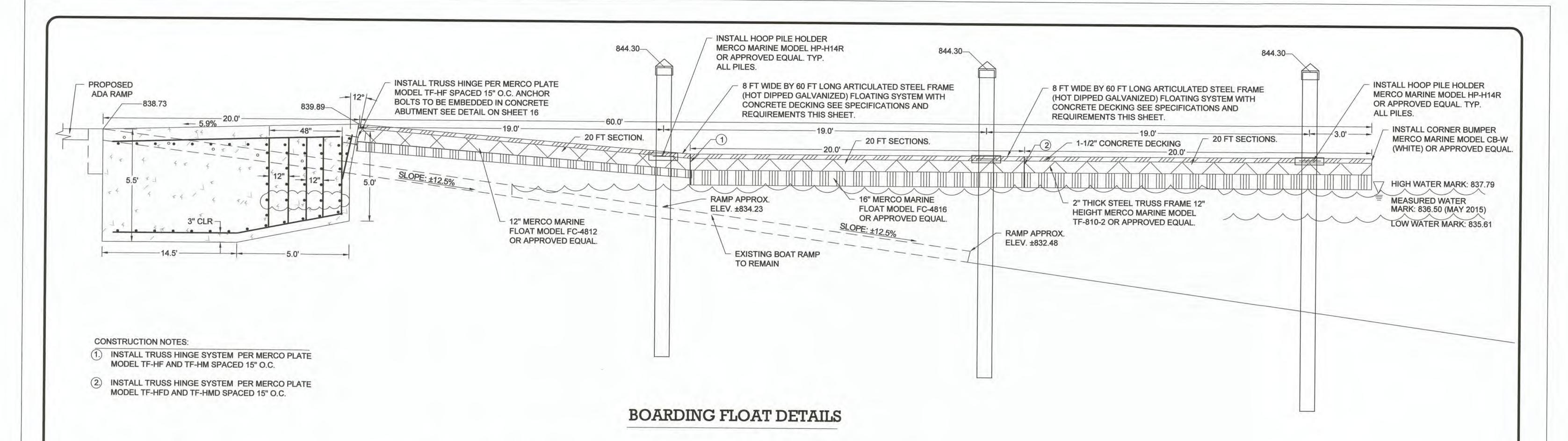
IN APPLICATIONS WHERE STEEL PILES AND STEEL PILE YOKES ARE USED TOGETHER, IT WILL BE NECESSARY TO ATTACH UHMW RUB STRIPS TO EITHER THE PILES OR TO THE YOKES TO PREVENT ABRASIVE WEAR, AND TO MINIMIZE THE BANGING NOISE THAT WILL OCCUR BECAUSE OF WIND AND WAVES.

PILES ARE TO BE DRIVEN STRAIGHT AND PLUMB WITHIN A TOLERANCE OF 1" IN 10'.

#### PILE YOKES:

- EXTERIOR YOKES SHOULD ONLY BE USED WHERE THEY WILL NOT INTERFERE WITH THE SAFE AND CONVENIENT PASSAGE OF BOATS AND TRAILERS. THE YOKES MUST BE DESIGNED TO ELIMINATE ALL SHARP CORNERS AND EDGES WHICH COULD CAUSE PERSONAL INJURY, OR PUNCTURE THE HULL OF A BOAT ON IMPACT.
- INTERNAL YOKES SHOULD ONLY BE USED WHERE THEY WILL NOT INTERFERE WITH THE SAFE AND CONVENIENT PASSAGE OF PEDESTRIANS ON THE BOARDING FLOAT.
- IT IS RECOMMENDED THAT ULTRA HIGH MOLECULAR WEIGHT (UHMW) POLYETHYLENE BE
- USED ON PILE YOKES AS WEAR STRIPS. STRIPS 1" OR THICKER.
- ADEQUATE CAPACITY MUST BE PROVIDED INSIDE THE YOKE FOR THE RELATIVE MOVEMENT BETWEEN THE PILE AND YOKE. RECOMMENDED CLEARANCES BETWEEN THE PILE AND YOKE ARE 1" ALONG THE SIDES AND 4" AT EACH END.

REVISION	DATE	COMMENTS	CARLOS BELTRAN	PREPARED UNDER THE DIRECT S	69121		SULTING PUBLIC WORKS DEPARTMEN	JOHN GAY	APPROVED BY THE COUNTY OF IMPERIA	6/2/2023 DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	GUIDE PILE	DETAILS
			No. 69121 * EXP 6-30-24 * CIVIL OF CALIFORNIA	CARLOS BELTRAN, P.E.  6/2/23 DATE	06/30/24	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION 2415 IMPERIAL BUSINESS PARK DRIVE. SUI IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX		No. 62028  * EXP 9-30-23  *  CIVIL ORIGINAL CONTROL OF CALIFORNIA	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  6 6 23 DATE  R.C.E. 09/30/2 REG. B	AS SHOWN	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT		SHEET 17 OF 26



#### **BOARDING FLOAT SYSTEM:**

CONTRACTOR TO SUBMIT SHOP DRAWINGS TO COUNTY/ENGINEER (OR THIRD PARTY PLAN CHECKER) FOR REVIEW AND APPROVAL OF THE BOARDING FLOAT SYSTEM WITH THE FOLLOWING DESIGN CRITERIA AND REQUIREMENTS:

ARTICULATED BOARDING FLOAT SHALL BE 8 FT WIDE BY 60 FT LONG STEEL FRAME FLOAT (HOT DIPPED GALVANIZED) WITH CONCRETE DECKING.

MINIMUM CLEAR TRAVEL WIDTH SHOULD BE NOT LESS THAN 5'0" (60") BETWEEN CLEATS, BULL RAILS, RINGS OR OTHER MOORING HARDWARE MOUNTED ALONG THE EDGES OF THE BOARDING FLOAT, NOR SHOULD ANY PART OF THE HARDWARE BE MOUNTED MORE THAN 6" IN FROM THE EDGE OF THE BOARDING FLOAT.

IN CASES WHERE GUIDE PILES ARE LOCATED ALONG THE CENTERLINE OF THE BOARDING FLOAT, THE MINIMUM OVERALL WIDTH SHOULD BE 8'0" (96"), AND THE MINIMUM CLEAR DISTANCE BETWEEN THE FACE OF THE PILE AND THE EDGE OF THE FLOAT SHOULD BE 3'2" (38").

WHERE ARTICULATED (HINGED) BOARDING FLOATS ARE INSTALLED, THE INDIVIDUAL FLOAT SECTIONS SHOULD BE NOT MORE THAN 20' NOR LESS THAN 16' IN LENGTH WITH 20' BEING THE RECOMMENDED STANDARD.

MAXIMUM OVERALL HEIGHT OF BOARDING FLOATS SHALL NOT EXCEED 30" WHERE FLOAT SECTIONS WILL COME TO REST ON THE UPPER REACHES OF A LAUNCHING RAMP SURFACE DURING PERIODS OF LOW WATER, AND WHERE THE "RESTING" FLOAT SECTIONS ARE USED FOR PEDESTRIAN ACCESS TO FLOAT SECTIONS WHICH ARE IN THE WATER.

#### DESIGN CRITERIA:

DEAD LOAD ONLY (DL): BOARDING FLOATS ARE TO FLOAT LEVEL IN THE WATER WITHIN THE FOLLOWING LIMITS:

LENGTH: 1/8" PER FOOT OVER THE LENGTH OF AN INDIVIDUAL BOARDING FLOAT SECTION, NOT TO EXCEED 1" IN 10'.

WIDTH: 1" MAXIMUM OVER THE WIDTH OF THE BOARDING FLOAT.

#### UNIFORM LIVE LOAD (ULL)

 20 LB/SQFT STANDARD UNIFORM LIVE LOAD FOR LAUNCHING RAMP BOARDING FLOATS, IN SERVICE, IN THE WATER.

#### LIVE POINT LOAD (LPL): 650 LBS

A LIVE POINT LOAD MAY BE APPLIED AT ANY POINT ON THE BOARDING FLOAT DECK NOT CLOSER THAN 12" FROM THE EDGE OF THE FLOAT.

#### FREEROARD:

FREEBOARD:
A) DEAD LOAD ONLY (DL)

14" MINIMUM / 20" MAXIMUM TO TOP OF DECK.
 4" MINIMUM TO BOTTOM OF FENDERBOARD.

#### **BOARDING FLOAT SYSTEM CONTINUE:**

- B) DEAD LOAD PLUS UNIFORM LIVE LOAD (DL + ULL)
   10" MINIMUM TO TOP OF DECK.
- C) DEAD LOAD PLUS LIVE POINT LOAD (DL + LPL)
   13" MINIMUM TO TOP OF DECK.
- D) DEAD LOAD PLUS UNIFORM LIVE LOAD PLUS LIVE POINT LOAD (DL + ULL+ LPL) 8" MINIMUM TO TOP OF DECK.

BOARDING FLOATS ARE TO BE DESIGNED TO WITHSTAND WIND, WAVE, CURRENT AND IMPACT LOADINGS, APPLIED TO BOTH FLOATS AND TIED UP BOATS, THAT MAY REASONABLY OCCUR DURING THE LIFE OF THE STRUCTURE AS THE RESULT OF ITS LOCATION AND EXPOSURE. BOARDING FLOATS SHALL BE DESIGN PER THE LOADING CRITERIA STATED ON SECTION 301 OF THE CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS BOATING FACILITIES DIVISION LAYOUT, DESIGN AND CONSTRUCTION HANDBOOK.

FRAMING BOLTS SHOULD BE NOT LESS THAN 3/8" DIAMETER, AND BE EITHER HOT DIPPED GALVANIZED OR STAINLESS STEEL.

ALL FERROUS METALS USED ARE TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

ALL METAL PLATES USED TO FABRICATE CLIPS, BRACKETS AND OTHER STRUCTURAL PARTS FOR BOARDING FLOATS ARE TO BE MADE FROM MATERIAL NOT LESS THAN 1/4" IN THICKNESS.

CLEATS FOR BOAT LINES SHOULD BE PROVIDED ALONG THE EDGE(S) OF BOARDING FLOATS ON 10'

- CLEATS SHOULD BE CAST DUCTILE IRON, 8" OR 10" IN LENGTH, HAVE A BASE NOT LESS THAN 23"X4",
  AND BE DESIGNED TO RECEIVE TWO (2) HEX HEAD GALVANIZED MACHINE BOLTS NOT LESS THAN 7/16"
  IN DIAMETER. THE BOLT HEADS SHOULD FIT FLUSH INTO RECESSES IN THE TOP OF THE CLEAT.
- CLEATS SHOULD BE HOT-DIP GALVANIZED AFTER THEY HAVE BEEN THOROUGHLY CLEANED WITH A
  WIRE WHEEL AND HAD ALL BURRS AND ROUGH SPOTS GROUND SMOOTH TO PREVENT CHAFING OF
  BOAT LINES.

LEGS OR OTHER PROTECTIVE DEVICES SHOULD BE INSTALLED TO PROTECT THE FLOTATION PONTOONS ON ALL BOARDING FLOATS THAT PERIODICALLY COME TO REST ON THE LAUNCHING RAMP SURFACE. PLASTIC PADS OF 1/2" OR THICKER ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMW) SHOULD BE ATTACHED TO THE BOTTOM OF THE LEGS TO PREVENT DAMAGE TO THE LAUNCHING RAMP SURFACE. THE THICKNESS OF THE PADS MUST BE CONSIDERED IN THE OVERALL HEIGHT OF THE BOARDING FLOATS IN ORDER TO AVOID EXCEEDING 30".

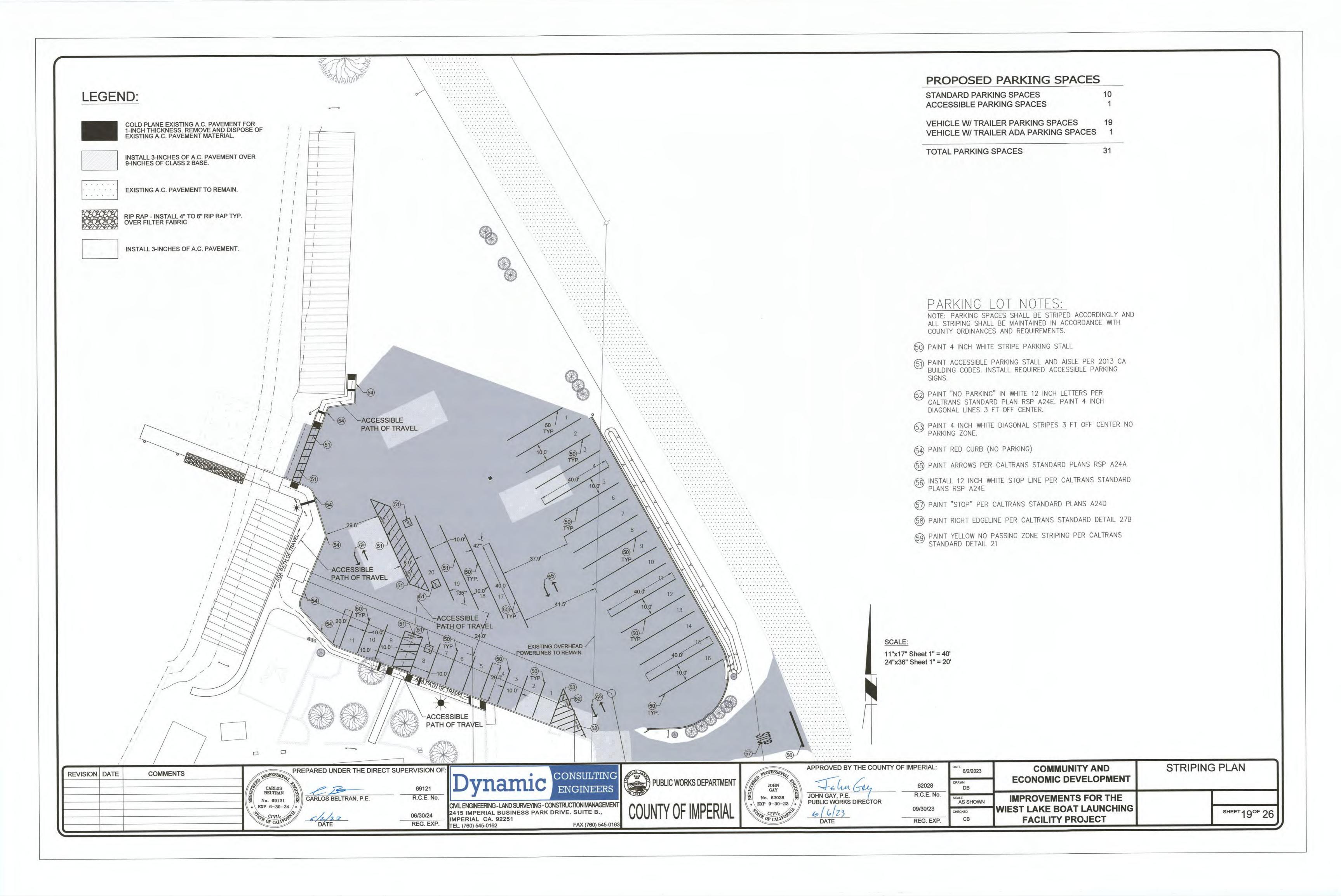
PONTOONS FOR FLOTATION SHOULD CONSIST OF A RIGID VESSEL FILLED WITH MARINE GRADE FLOTATION FOAM. THE RIGID VESSELS ARE TYPICALLY RECTANGULAR TUBS OR CIRCULAR CULVERT PIPES MADE OF POLYETHYLENE.

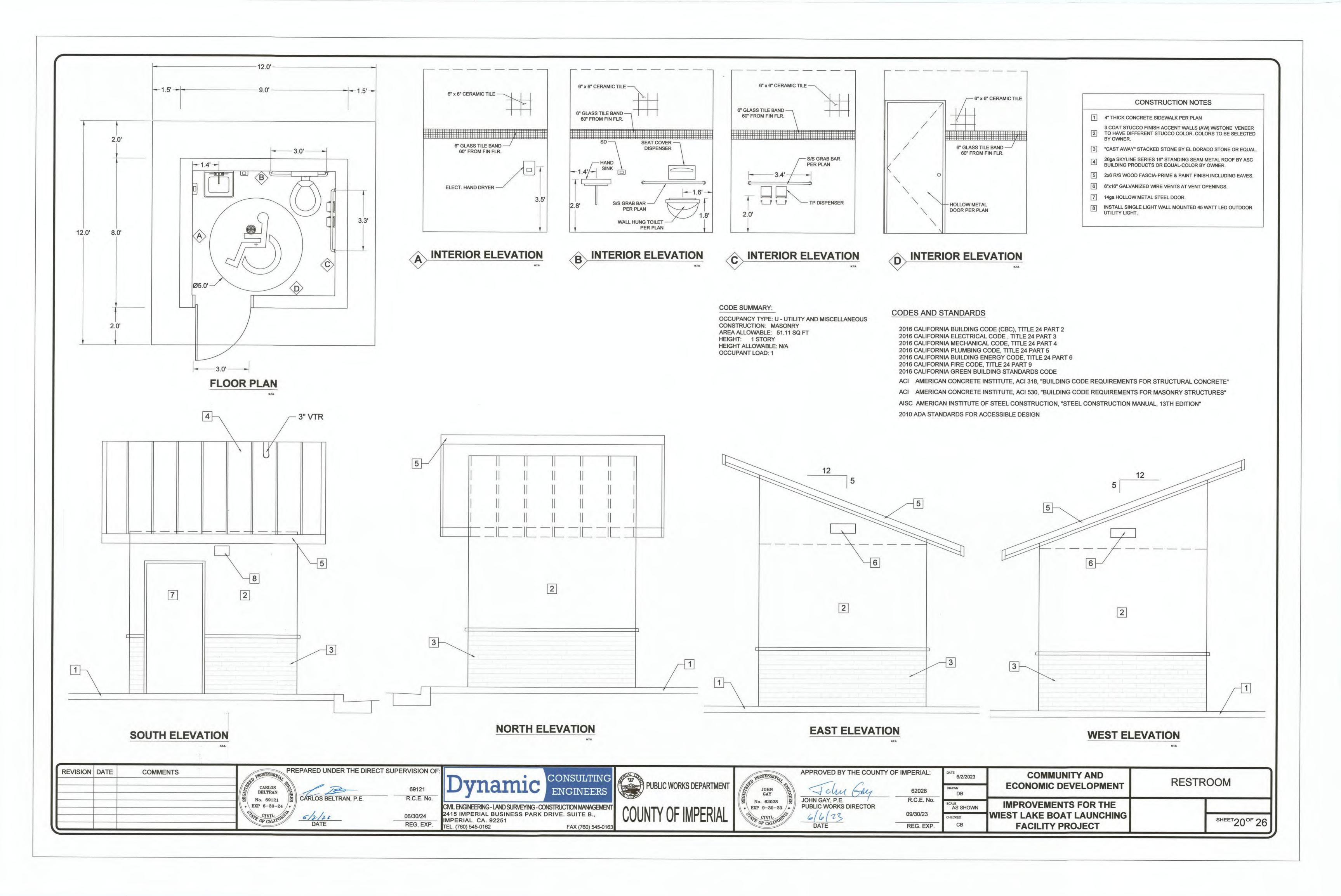
TUBS FOR FLOTATION PONTOONS SHOULD BE BLACK IN COLOR, HAVE A MINIMUM WALL THICKNESS OF 0.20", AND BE MANUFACTURED OF CROSS LINKED ROTATIONALLY MOLDED POLYETHYLENE (CL-200). THE TOPS OF THE TUBS MUST BE SEALED TO PREVENT WATER FROM ENTERING THE PONTOONS AND FILLING

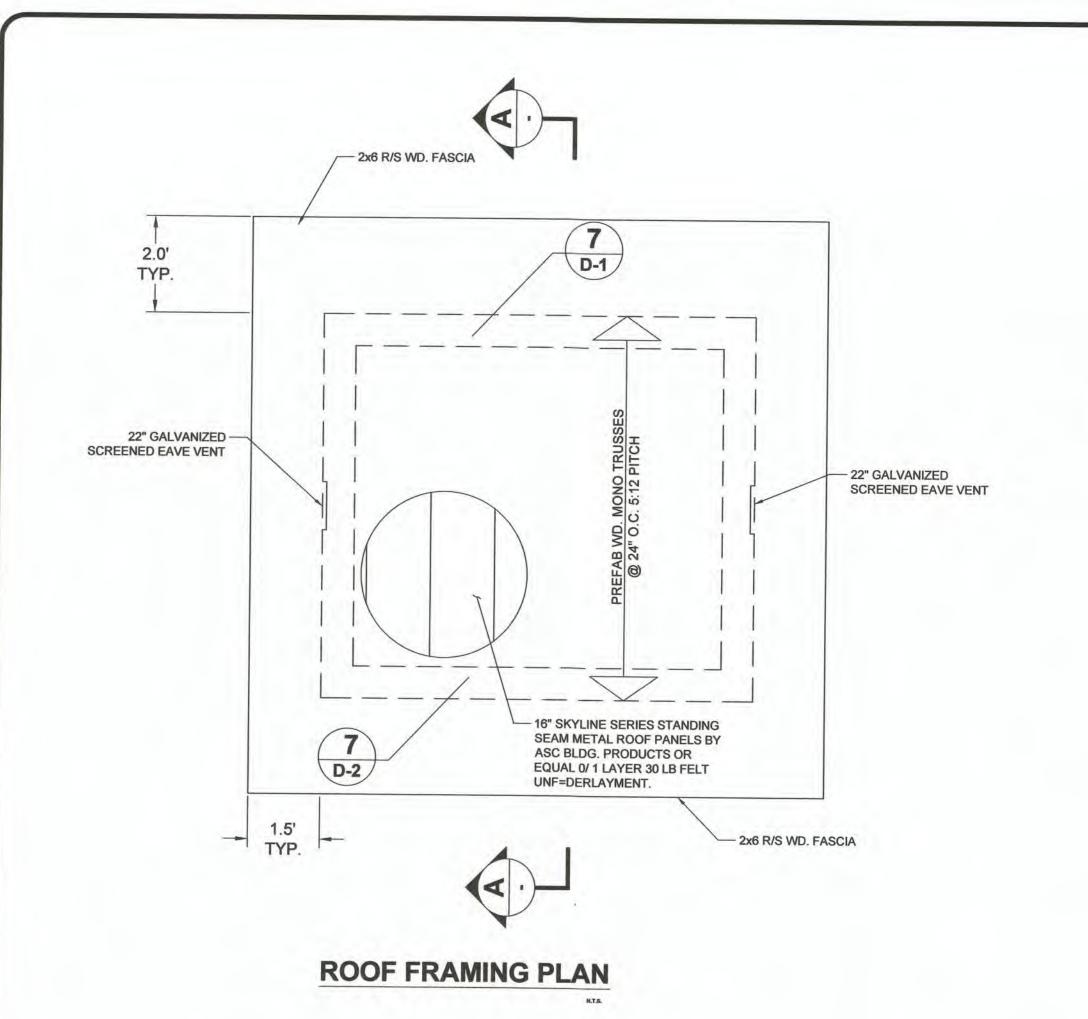
#### **BOARDING FLOAT SYSTEM CONTINUE:**

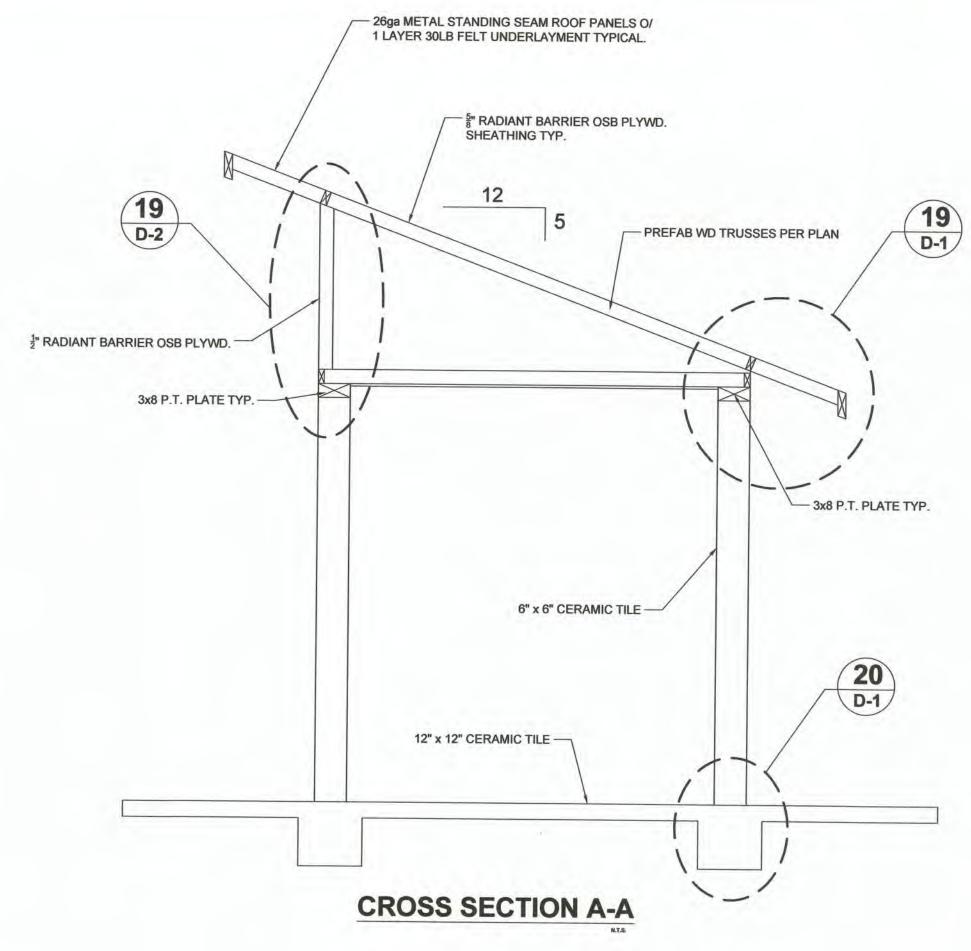
HINGES USED TO CONNECT BOARDING FLOATS TO AN ABUTMENT SHOULD BE HOT DIPPED GALVANIZED SCHEDULE 80 STEEL PIPE. THE HINGES SHOULD BE CONTINUOUS, WITHOUT ANY GAPS, AND CUT FLUSH WITH OR SLIGHTLY INSIDE THE ALIGNMENT OF THE SIDES OF THE ABUTMENT AND THE BOARDING FLOATS. THE TOP SURFACE OF THE BARREL OF THE HINGE SHOULD BE FLUSH WITH THE TOP OF BOTH THE ABUTMENT AND THE DECK OF THE BOARDING FLOATS.

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUI  CARLOS BELTRAN No. 69121  CARLOS BELTRAN, P.E.	PERVISION OF:  69121  R.C.E. No.	CONSULTING PUBLIC WORKS DEPARTMENT OF THE PUBLIC WORKS DEPARTM	NT JOHN GAY	APPROVED BY THE COUNTY OF IMPERIAL:  62028	6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	8' x 60' BOA FLOAT SY	
	* EXP 6-30-24 *  OF CALIFORNIA  DATE	CIVIL ENGINEERING-LAND SURVEYING-CON 2415 IMPERIAL BUSINESS PARK D IMPERIAL CA. 92251 TEL. (760) 545-0162		1101 010000	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  Col (col 23)  DATE  R.C.E. No. 09/30/23  REG. EXP.	AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT		SHEET 18 OF 26

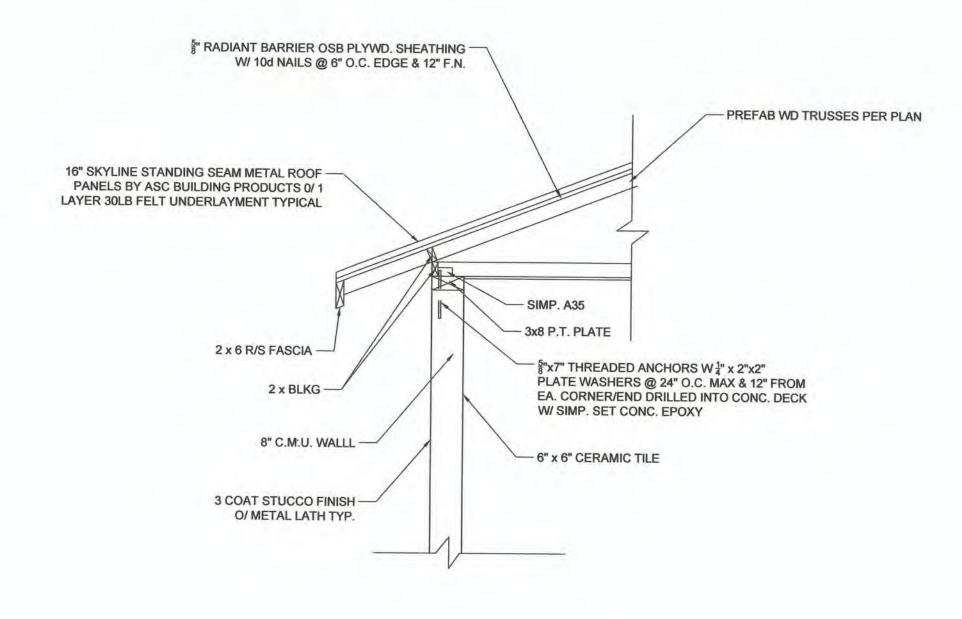








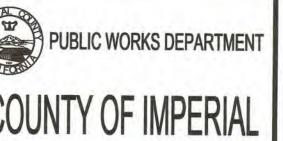
#### - 16" SKYLINE STANDING SEAM METAL ROOF PANELS BY ASC BUILDING PRODUCTS 0/1 LAYER 30LB FELT UNDERLAYMENT TYPICAL - 5" RADIANT BARRIER OSB PLYWD. SHEATHING W/ 10d NAILS @ 6" O.C. EDGE & 12" F.N. - 10d NAILS @ 6" O.C. - GABLE FLASHING PREFAB WD TRUSSES PER PLAN -- 2x6 R/S FASCIA 1" RADIANT BARRIER OSB PLYWD. SHEATHING W/ 10d NAILS @6" O.C. EDGES & 12": O.C.F.N. @ GABLE ENDS 3x8 P.T. PLATE - 5"x7" THREADED ANCHORS W 1" x 2"x2" PLATE WASHERS @ 24" O.C. MAX & 12" FROM 8" CMU WALL EA. CORNER/END DRILLED INTO CONC. DECK W/ SIMP. SET CONC. EPOXY - 3 COAT STUCCO FINISH SEMI-GLOSS PAINT FINISH -O/ METAL LATH TYP. (CER. TILE @ RESTROOM)



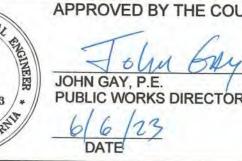












APPROVED BY THE COUNTY OF IMPERIAL: 62028 R.C.E. No. 09/30/23 REG. EXP.

6/2/2023 DB AS SHOWN CHECKED CB

**COMMUNITY AND ECONOMIC DEVELOPMENT** IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING

**FACILITY PROJECT** 

RESTROOM

SHEET 21 OF 26

#### MATERIALS

GENERAL SPECIFICATIONS

- 1. ALL RAMP SECTIONS, PLATFORMS, STEPS, LEGS, AND GUARDRAILS ARE CONSTRUCTED OF MILL FINISH ALUMINUM EXTRUSIONS AND MILL FINISH ALUMINUM SHEET, EXTRUSIONS ARE EITHER 6061-T6, 6063-T52, OR 6005-T5 ALUMINUM ALLOY AND ALL ALUMINUM SHEET IS
- 2. WELDED ASSEMBLIES ARE FABRICATED IN ACCORDANCE WITH ANSI WELDING STANDARD AWS D1.2/D1.2M:2013 STRUCTURAL WELDING

DESIGN BASED ON ADA ACCESSIBILITY GUIDELINES (ADAAG) FOR RAMPS AND STEPS SECTIONS 4.8 & 4.9 AND THE INTERNATIONAL BUILDING

ALL MECHANICAL FASTENERS ARE 18-8 STAINLESS STEEL.

CODE (IBC) FOR RAMPS AND STAIRWAYS - SECTIONS 1009-1010 AND ADA STANDARDS

#### **ENGINEERING**

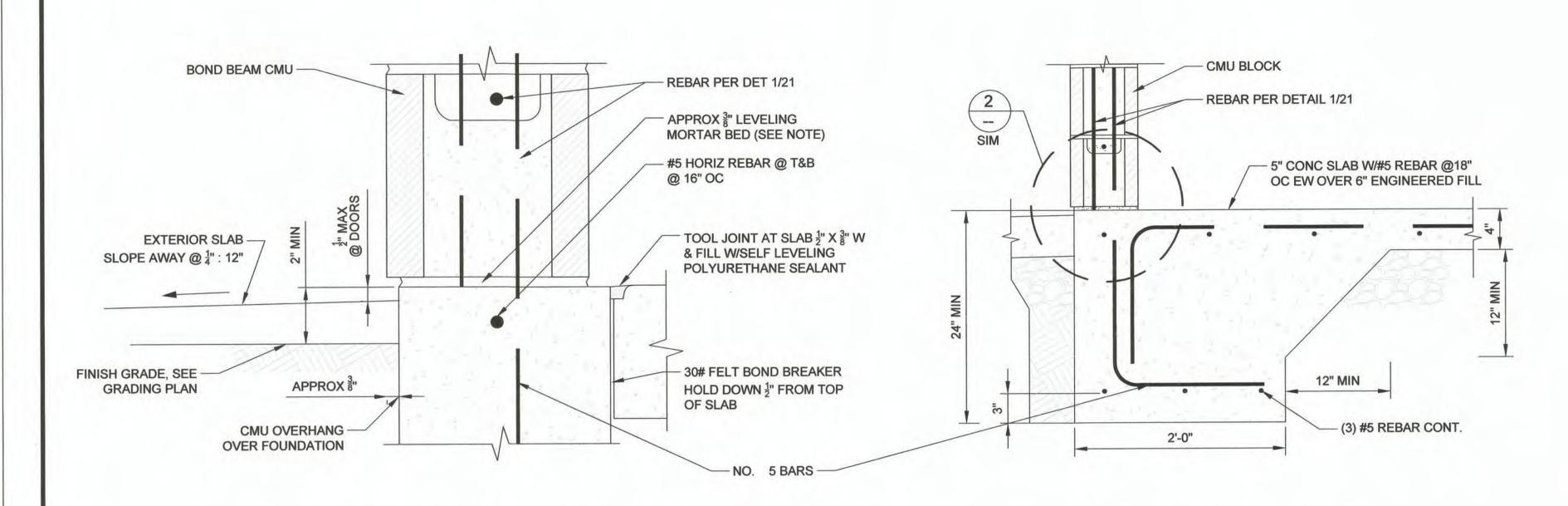
- 1. THE RAMP, STEP, AND PLATFORM SYSTEM IS DESIGNED TO BE A RIGID, FREE STANDING STRUCTURE. ALL FOOTPLATES SHOULD BE FASTENED SECURELY TO A CONCRETE SURFACE OR 12" MINIMUM DIAMETER FOOTINGS IN ORDER TO ACHIEVE FULL STRUCTURAL INTEGRITY. FOOTING DEPTH WILL DEPEND ON LOCAL BUILDING CODE. FASTENING ALL PLATFORMS ADJACENT TO THE BUILDING OR MODULAR BUILDING WITH LAG SCREWS IS HIGHLY RECOMMENDED.
- 2. ALL WALKING SURFACES ARE DESIGNED TO CARRY A UNIFORM LIVE LOAD OF 100 POUNDS PER SQUARE FOOT AND A CONCENTRATED VERTICAL LOAD OF 300 POUNDS IN AN AREA OF ONE SQUARE FOOT.
- 3. ALL RAMP AND STEP HANDRAILS, AND RAMP, PLATFORM, AND STEP GUARDRAILS ARE DESIGNED TO WITHSTAND A CONCENTRATED LOAD OF 200 POUNDS APPLIED IN ANY DIRECTION ON THE TOP OF THE RAIL.
- 4. ALL BALUSTERS ARE DESIGNED TO WITHSTAND A LOAD OF 50 POUNDS IN THE HORIZONTAL DIRECTION APPLIED IN AN AREA OF ONE SQUARE FOOT.
- 5. ALL PLATFORM WALKING SURFACES ARE DESIGNED TO HAVE A COEFFICIENT OF FRICTION NO LESS THAN 0.50 IN ALL DIRECTIONS OF TRAVEL. ALL RAMP AND STEP WALKING SURFACES ARE DESIGNED TO HAVE A COEFFICIENT OF FRICTION NO LESS THAN 0.50 IN THE NORMAL DIRECTION OF TRAVEL.

#### DIMENSION CODE COMPLIANCE

- 1. ALL RAMP SECTIONS ARE DESIGNED TO ALLOW A MAXIMUM SLOPE OF 1:12 OR 1" OF RISE FOR EVERY 12" OF RUN.
- 2. RAMP LAYOUT DRAWINGS PROVIDED DO NOT ALLOW FOR ANY RAMP TO TRAVEL A DISTANCE OF 30 FEET (30"VERTICALLY) WITHOUT INCLUDING A RESTING PLATFORM. ALL RAMPS, STEPS, AND PLATFORMS SHOULD BE INSTALLED ACCORDING TO THE SUPPLIED
- 3. ALL RAMP SECTIONS AND STAIRS ARE DESIGNED TO ALLOW A CLEARANCE OF 48" BETWEEN HANDRAILS.
- 4. ALL PLATFORMS ARE DESIGNED TO BE WIDER THAN THE RAMP SECTION OR STEP LEADING UP TO THEM AND AT LEAST 60" LONG IN THE
- 5. ALL PLATFORMS ARE DESIGNED TO ALLOW AT LEAST A 60" DIAMETER AREA OF CLEARANCE FREE OF OBSTRUCTIONS.
- 6. ALL GUARDRAILS WILL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH IN ANY AREA.
- 7. RAMP AND PLATFORM GUARDRAILS ARE ALL DESIGNED TO BE 42" HIGH MEASURED VERTICALLY FROM THE WALKING SURFACE TO THE TOP OF THE RAIL. STEPS OVER 30" HIGH ARE ALSO DESIGNED TO HAVE A 42" GUARDRAIL MEASURED FROM THE TOP OF THE STEP NOSING TO THE TOP OF THE RAIL.
- 8. GUARDRAILS AND HANDRAILS ARE PROVIDED ON BOTH SIDES OF ALL RAMPS AND STEPS.
- 9. ALL RAMP AND STEP HANDRAILS ARE DESIGNED TO BE CONTINUOUS ALONG RAMP RUNS AND IN BETWEEN THE INSIDE CORNER OF 90° AND 180° TURNS IN RAMP DIRECTIONS. HANDRAILS ARE NOT INTERRUPTED BY POSTS OR OTHER OBSTRUCTIONS.
- 10. ALL HANDRAILS HAVE A CLEARANCE OF 2-1/4" BETWEEN THE HANDRAIL AND POST. HANDRAILS ARE CONSTRUCTED OF 1-1/4" SCH 40 PIPE WITH AN OUTSIDE DIAMETER OF 1.66"
- 11. RAMP HANDRAILS ARE DESIGNED TO BE 36" HIGH MEASURED VERTICALLY FROM THE WALKING SURFACE TO THE TOP OF THE RAIL. RAMP HANDRAILS EXTEND 12" PAST THE END OF THE SLOPE PARALLEL TO THE GROUND SURFACE AND RETURN TO THE CLOSEST RAIL POST OR WALL, IF NEEDED, DUE TO DOOR SWING INTERFERENCE AT THE TOP OF THE RAMP.
- 12. STEP HANDRAILS ARE DESIGNED TO BE 36" HIGH MEASURED VERTICALLY FROM THE TIP OF THE STEP NOSING TO THE TOP OF THE RAIL. STEP HANDRAILS EXTEND 12" PAST THE TOP STEP NOSING PARALLEL TO THE GROUND SURFACE AND RETURN TO THE CLOSEST RAIL POST OR WALL IF NEEDED, DUE TO DOOR SWING INTERFERENCE AT THE TOP OF THE STEP. STEP HANDRAILS ALSO EXTEND ONE TREAD WIDTH PAST THE BOTTOM STEP TREAD (11") AND RETURNED TO THE CLOSEST RAIL POST.
- 13. ALL RAMP SECTIONS ARE DESIGNED TO INCORPORATE A 3-1/4" HIGH CURB ADJACENT TO THE WALKING SURFACE TO THE CLOSEST RAIL
- 14. ALL STEP TREADS ARE DESIGNED TO HAVE A UNIFORM DEPTH OF 12" WITH A 1" NOSING FOR AN EFFECTIVE RUN OF 11" PER STEP. ALL STEP TREADS ARE ALSO DESIGNED TO HAVE A UNIFORM HEIGHT OF EITHER 6", 6-1/2" OR 7" (WITHIN CODE TOLERANCES) DEPENDING ON THE OVERALL HEIGHT OF THE STEP ASSEMBLY. ALL STEP RISERS ARE CLOSED IN BETWEEN TREADS.
- 15. ALL STEP NOSINGS HAVE A UNIFORM RADIUS OF 1/4" AND AN UNDERSIDE ANGLE OF 60° FROM THE HORIZONTAL.

REVISION	DATE	COMMENTS	PREPARED UNDER THE DIRECT SUPERVISION OF THE
			CARLOS BELTRAN P.E. 69121  CARLOS BELTRAN, P.E. R.C.E. No.
			No. 69121 CARLOS BELTRAN, P.E. R.C.E. No.
			OF CALIFORNIE 6/2/2 06/30/24
			DATE REG. EXP.

CIVIL ENGINEERING - LAND SURVEYING - CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163

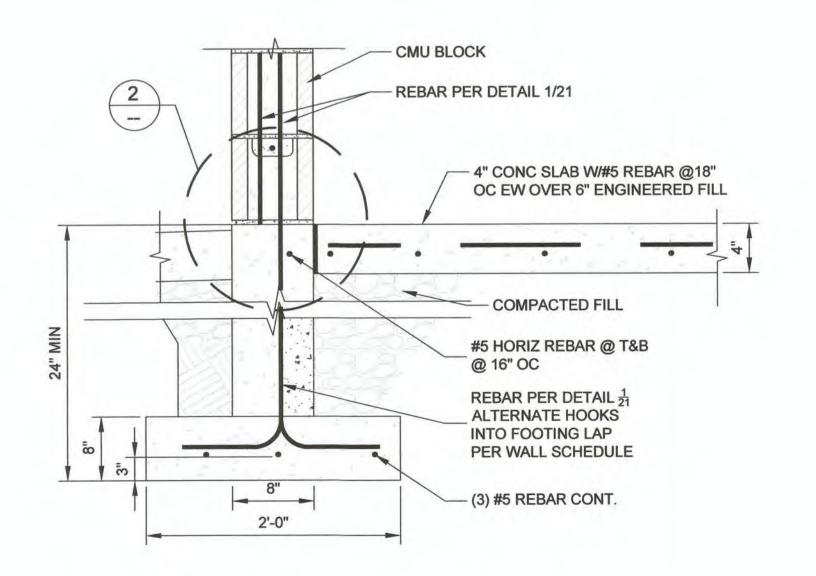


MAKE SAWCUT 1  $\frac{1}{2}$ " DEEP WITHIN 24 HRS OF POUR. FILL W/EXPANDING JOINT COMPOUND. AT INSTALLER'S OPTIONS, CONTROL JOINT MAY BE TOOLED DURING CONCRETE FINISHING. COMPACTED FILL

3 SAWCUT JOINT

WALL-SLAB CONNECTION
N.T.S.

MONOLITHIC SLAP OPTION



CMU BLOCK REBAR PER DETAIL 1/21 4" CONC SLAB W/#5 REBAR @18" OC EW OVER 6" ENGINEERED FILL COMPACTED FILL #5 HORIZ REBAR @ T&B @ 16" OC REBAR PER DETAIL 1 ALTERNATE HOOKS INTO FOOTING LAP PER WALL SCHEDULE

**CMU STEM WALL OPTION** 

2'-0"

1'-0"

#### CONCRETE STEM WALL FOOTING OPTION

## TOUNDATION DETAIL NTS.

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUPERVISION OF CARLOS CAR	Dynamic CONSULTING PUBLIC WORKS DEPARTMENT	APPROVED BY THE COUNTY OF IMPERIAL:  JOHN GAY  62028	6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	RESTROOM FOUNDATION DETAILS
	BELTRAN No. 69121 EXP 6-30-24  CARLOS BELTRAN, P.E.  R.C.E. No.  06/30/24  REG. EXP.	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163	No. 62028  EXP 9-30-23  FOR CIVIL PORTS  DATE    No. 62028   F.C.E. No.   PUBLIC WORKS DIRECTOR   O9/30/23	AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 22°F 26

- (3) #5 REBAR CONT.

#### CODES AND STANDARDS

2016 CALIFORNIA BUILDING CODE (CBC), TITLE 24 PART 2 2016 CALIFORNIA ELECTRICAL CODE, TITLE 24 PART 3 2016 CALIFORNIA MECHANICAL CODE, TITLE 24 PART 4 2016 CALIFORNIA PLUMBING CODE, TITLE 24 PART 5 2016 CALIFORNIA BUILDING ENERGY CODE, TITLE 24 PART 6 2016 CALIFORNIA FIRE CODE, TITLE 24 PART 9 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE

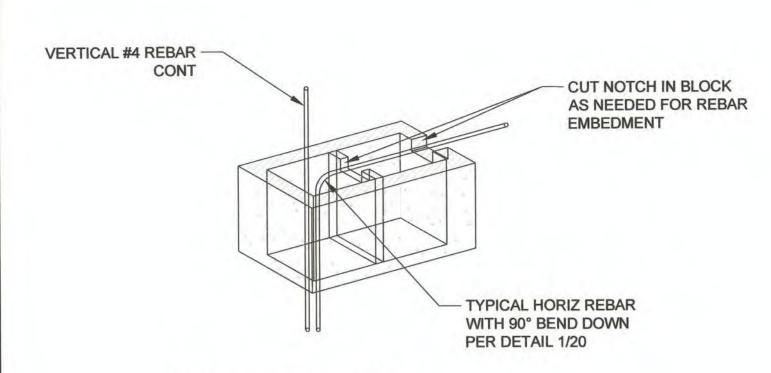
ACI AMERICAN CONCRETE INSTITUTE, ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI AMERICAN CONCRETE INSTITUTE, ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"

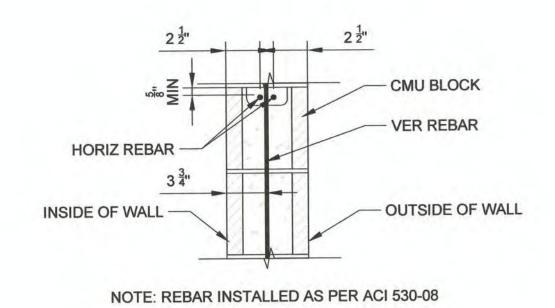
AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION, "STEEL CONSTRUCTION MANUAL, 13TH EDITION"

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

#### CODE SUMMARY:

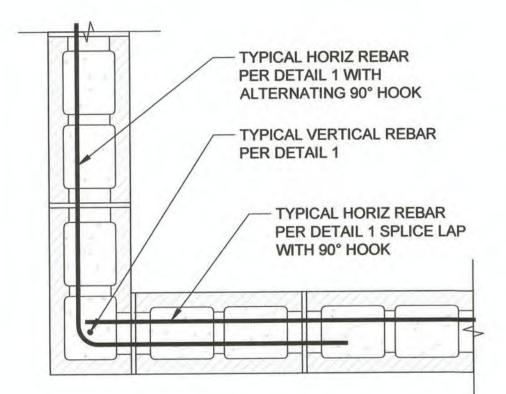
OCCUPANCY TYPE: U - UTILITY AND MISCELLANEOUS CONSTRUCTION: MASONRY AREA ALLOWABLE: 51.11 SQ FT HEIGHT: 1 STORY HEIGHT ALLOWABLE: N/A OCCUPANT LOAD: 1

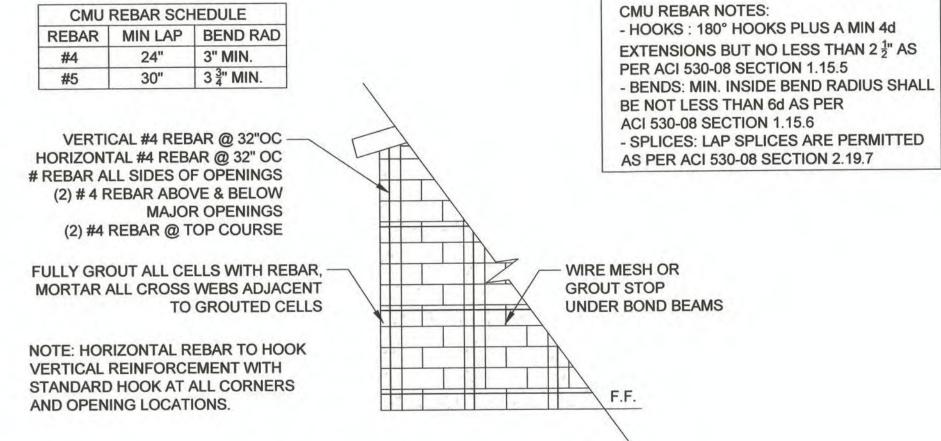




# MORTAR JOINT CMU WALL END DETAIL N.T.S.

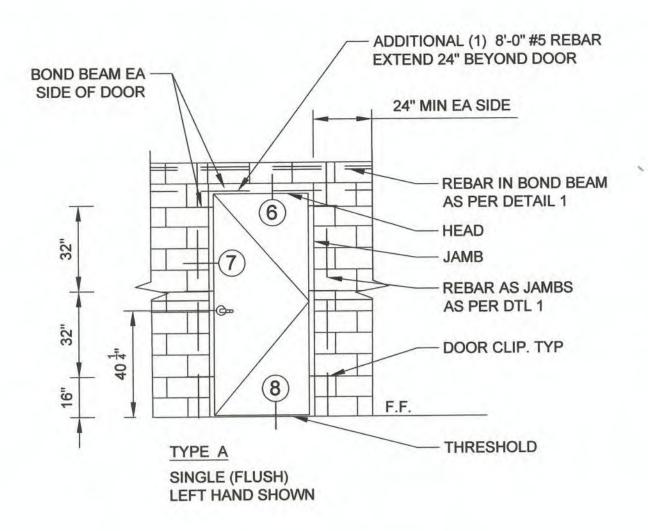


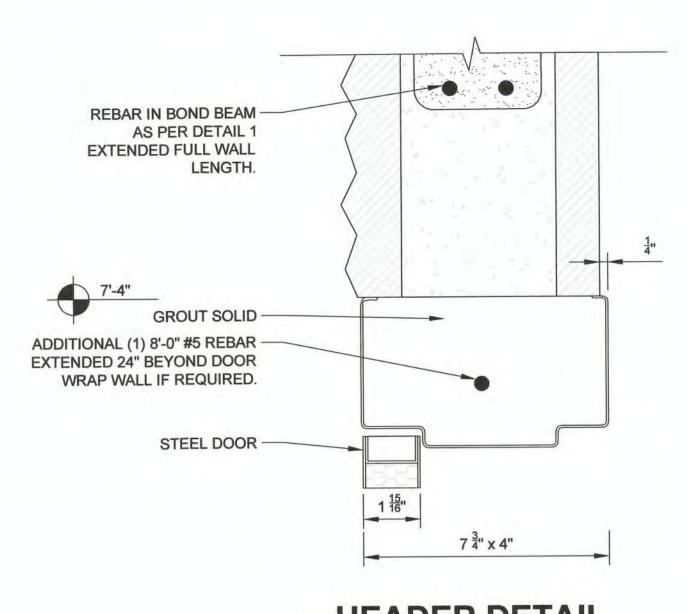




MORTAR JOINT
CMU CORNER DETAIL

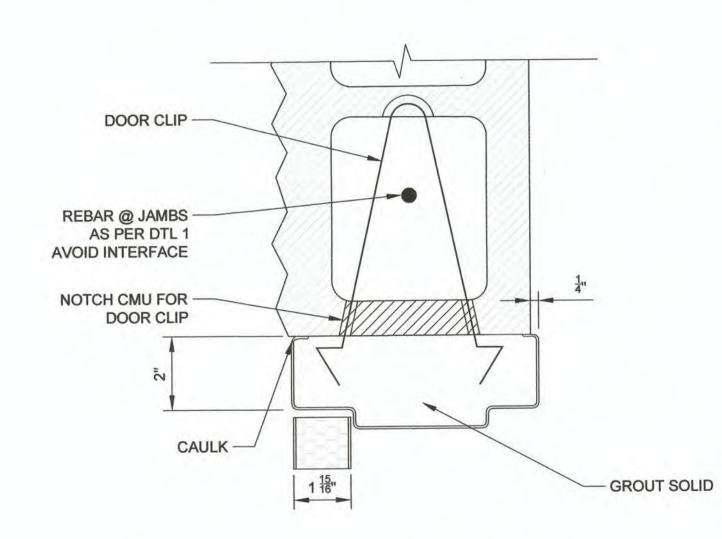
1 CMU REBAR LAYOUT DTL

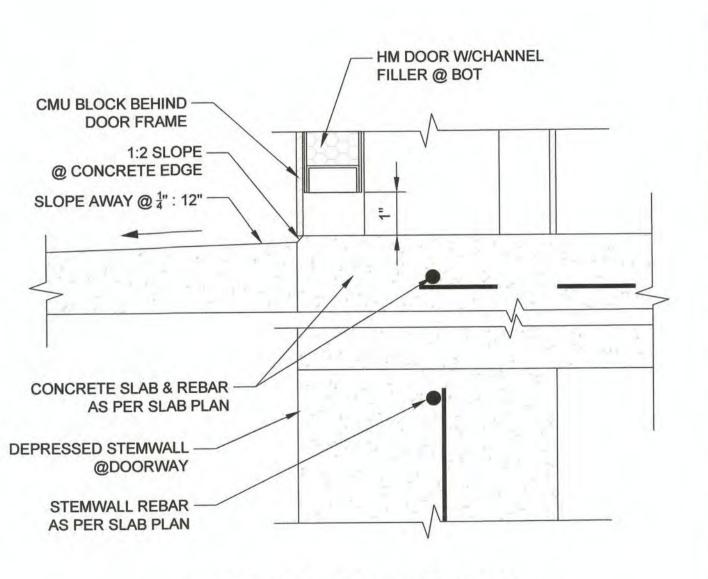




5 DOOR DETAIL



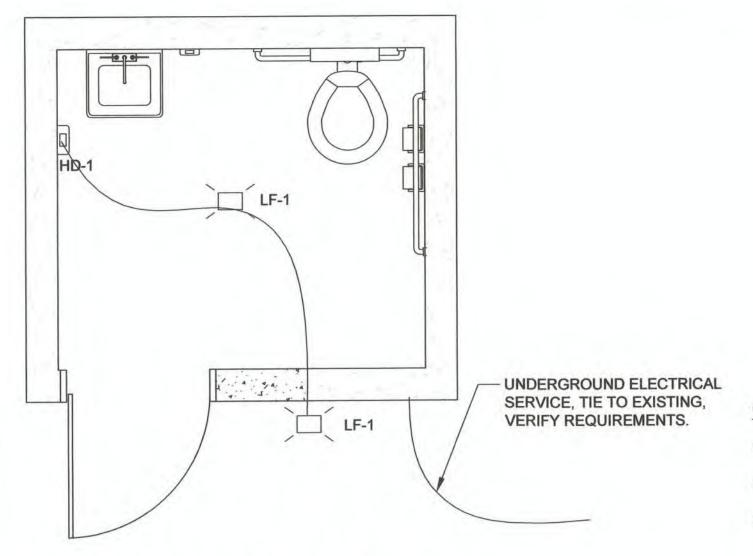




7 JAMB DETAIL

8 THRESHOLD DETAIL

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUPERVISION OF:	Dynamic CONSULTING ENGINEERS	PUBLIC WORKS DEPARTMENT	APPROVED BY THE COUNTY OF IM	PERIAL: DATE 6/2/2023 62028 DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	RESTROOM FOUNDATION DETAILS
	BELTRAN  No. 69121  EXP 6-30-24  CARLOS BELTRAN, P.E.  R.C.E. No.  06/30/24	CIVIL ENGINEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT 2415 IMPERIAL BUSINESS PARK DRIVE. SUITE B., IMPERIAL CA. 92251 TEL. (760) 545-0162 FAX (760) 545-0163	COUNTY OF IMPERIAL	* EXP 9-30-23 * PUBLIC WORKS DIRECTOR  OF THE CIVIL OCENTY  G(6/23)	R.C.E. No.  SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 23°F 26

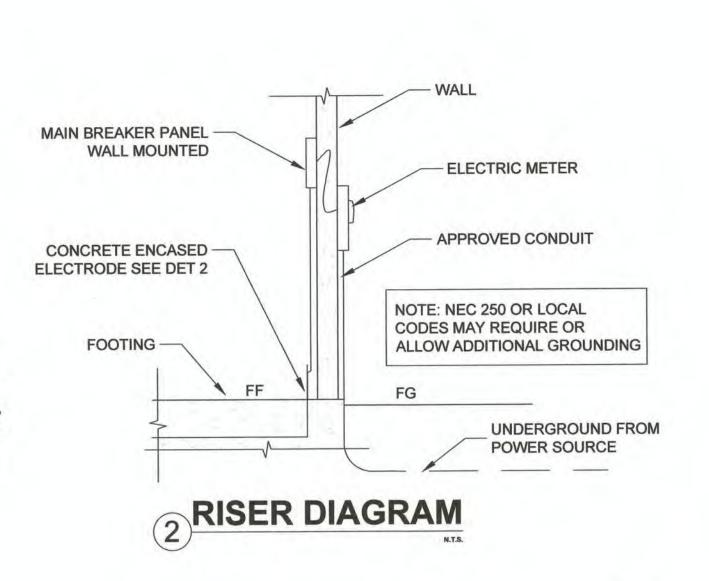


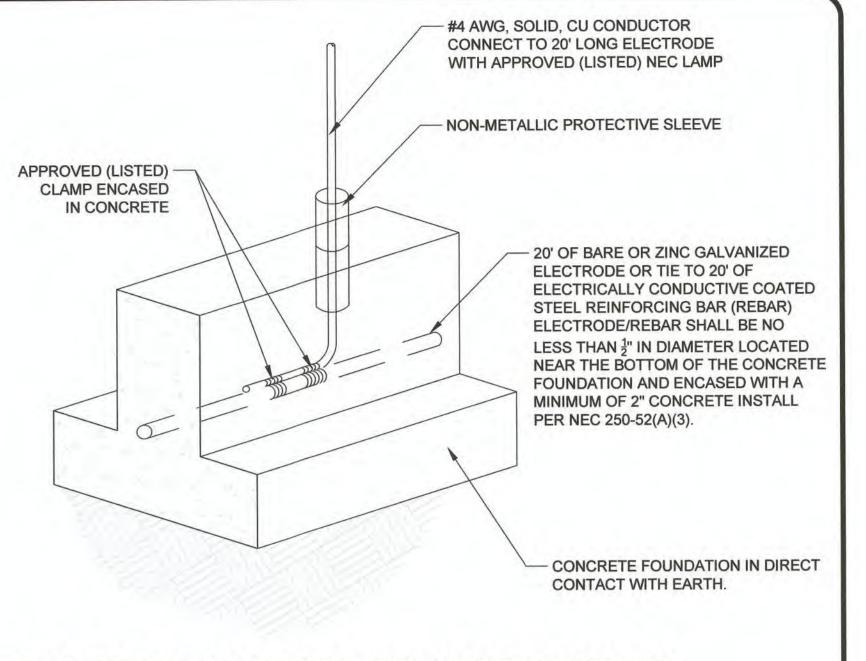
1 ELECTRICAL PLAN

**PLUMBING PLAN** 

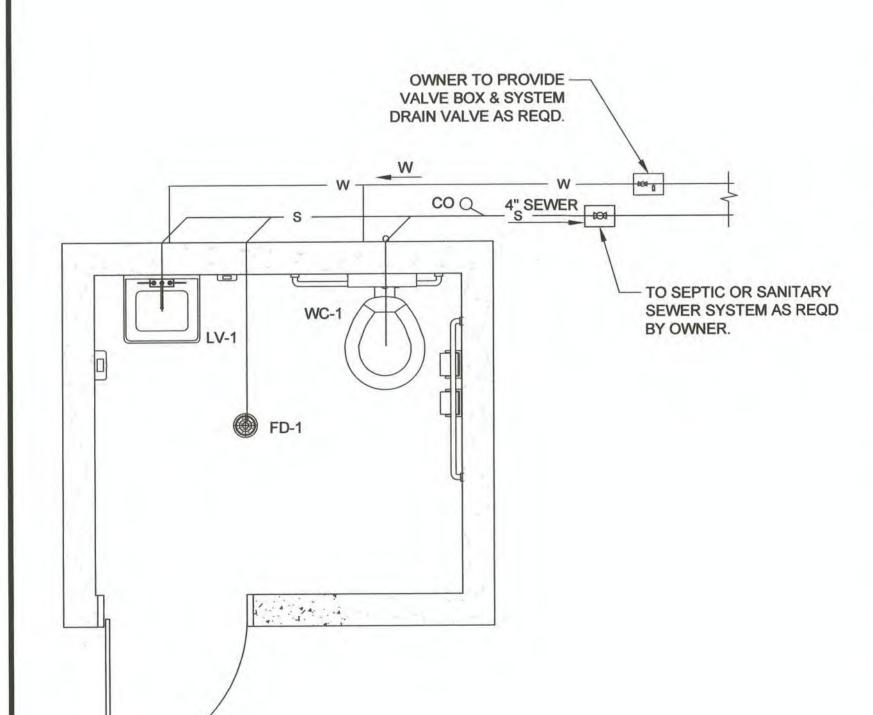
#### GENERAL ELECTRICAL NOTES.

- 1. ALL WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES.
- 2. OWNER TO PROVIDE TEMPORARY POWER AS REQUIRED DURING COURSE OF CONSTRUCTION
- THE INSTALLER SHALL FURNISH & INSTALL SPECIFICATION GRADE CIRCUIT BREAKERS, WIRING, CONDUIT, GFI RECEPTACLES THROUGHOUT, SWITCHES, AND STAINLESS STEEL COVERPLATES.
- ELECTRICAL CONDUIT IS TO BE RUN WITHIN THE WALL WHEN POSSIBLE, EXCEPT IN THE MECH ROOM.





CONCRETE ENCASED SERVICE GROUND

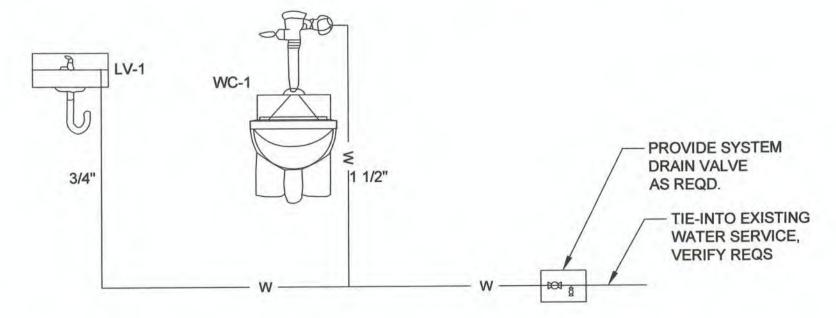


PLU	MBING SCHEE	ULE		
SYM	FIXTURE	SS	V	CW
WC-1	ADA TOILET	3"	2"	1 1/2"
LV-1	HAND SINK	2"	1 1/2"	1/2"
FD-1	FLOOR DRAIN	2"	1 1/2"	

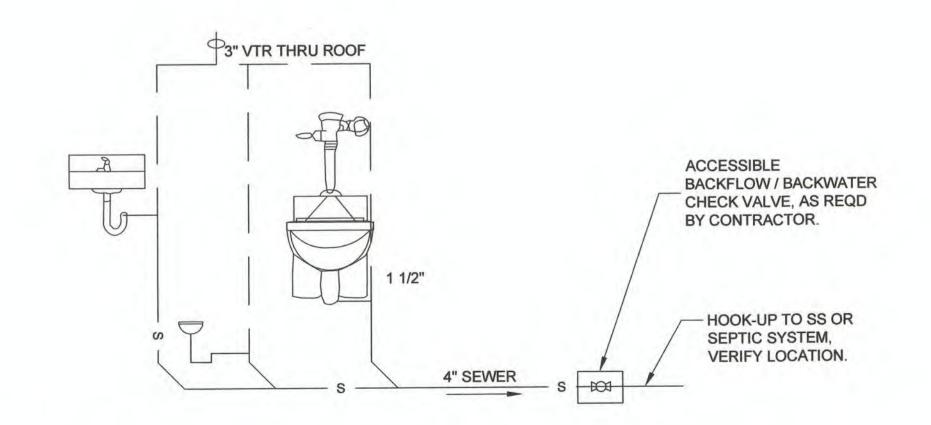
NOTE: PROVIDE CLEAN-OUT BENEATH SINK AS REQUIRED BY CODE

#### GENERAL PLUMBING NOTES:

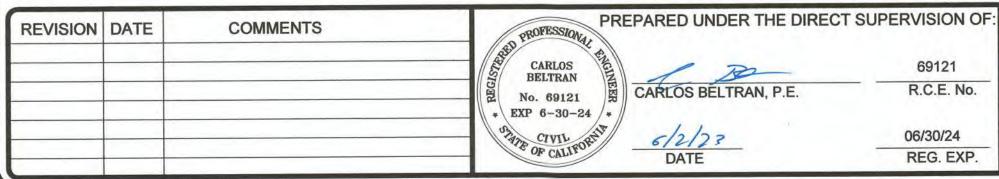
- 1. ALL PIPE (WATER, SEWER, VENT), JOINTS, AND WORK SHALL CONFORM TO UNIFORM PLUMBING CODE, STATE CODES, COUNTY AND LOCAL CODES AND ORDINANCES.
- 2. CONTRACTOR TO CONFIRM LOCATIONS OF SEWER AND WATER TIE-INS.
- CONTRACTOR TO SOLIDLY BRACE ALL PIPING TIGHT AGAINST WALLS, FOR LONG OR COM[PLICATED RUNS, SECURELY MOUNT USING UNI-STRUT, IN STRAIGHT AND UNIFORM MANNER FOR FINISHED APPEARANCE, PIPING SHOWN IS DIAGRAMMATIC ONLY AND ACTUAL DESIGN BY CONTRACTOR.
- CONTRACTOR RESPONSIBLE FOR PIPE SIZING AND SHALL PROVIDE ADEQUATE WATER PRESSURE TO ALL PLUMBING FIXTURES.
- 5. CONTRACTOR TO DETERMINE AND PROVIDE MEANS FOR DRAINING INTERIOR WATER AND SANITARY SEWER SYSTEMS, AS WELL AS SHUTOFF OF ALL FIXTURES, BUILDING SEWER SHALL BE RUN WITH UNIFORM SLOPE OF NOT LESS THAN ONE-FOUTH OF AN INCH. (2%)
- PRESSURE REDUCING VALVE BY CONTRACTOR.
- 7. PLUMBING TO BE DRAINED BY GRAVITY TO SHUTOFF VALVE BOX.
- 8. FLUSHOMETERS ASSOCIATED WITH TOILETS USE NO MORE THAN 1.28 GALLONS PER FLUSH. THE ABOVE SHALL MEET PERFORMANCE STANDARDS BY ANSI A112.19.2 H&S CODE, SECTION 17921.3(b).



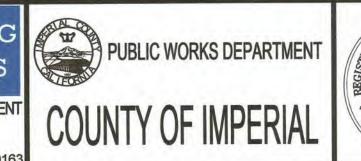
# WATER SUPPLY RISER SCHEMATIC DIAGRAM



### SANITARY SEWER RISER SCHEMATIC DIAGRAM







PROFESSIONAL	APPROVED BY THE COUNTY	OF IMPERIAL:	DA
JOHN GAY No. 62028	Folin Gry	62028	DR
	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR	R.C.E. No.	SC
* EXP 9-30-23 *	6/6/23	09/30/23	СН
OF CALIFORNIA	DATE	REG. EXP.	

	DATE 6/2/2023	COMMUNITY AND ECONOMIC DEVELOPMENT	RESTROOM FOUNDATION DETAILS
	DB		1 OUNDATION DE TAILE
0.	SCALE AS SHOWN	IMPROVEMENTS FOR THE	
P.	СВ	WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	SHEET 24 OF

#### ADA REQUIREMENTS:

- NEW BATHROOM SHALL COMPLY WITH ALL THE REQUIREMENTS OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 6 "PLUMBING ELEMENTS AND FACILITIES" LATEST EDITION.
- 2. THE WATER CLOSET SHALL BE POSITIONED WITH A WALL OR PARTITION TO THE REAR AND TO ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 16 INCHES MINIMUM TO 18 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION, EXCEPT THAT THE WATER CLOSET SHALL BE 17 INCHES MINIMUM AND 19 INCHES MAXIMUM FROM THE SIDE WALL OR PARTITION IN THE AMBULATORY ACCESSIBLE TOILET COMPARTMENT SPECIFIED IN 604.8.2. WATER CLOSETS SHALL BE ARRANGED FOR A LEFT-HAND OR RIGHT-HAND APPROACH.
- CLEARANCE AROUND A WATER CLOSET SHALL BE 60 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE SIDE WALL AND 56 INCHES MINIMUM MEASURED PERPENDICULAR FROM THE REAR WALL.
- 4. THE SEAT HEIGHT OF A WATER CLOSET ABOVE THE FINISH FLOOR SHALL BE
  17 INCHES MINIMUM AND 19 INCHES MAXIMUM MEASURED TO THE TOP OF
  THE SEAT. SEATS SHALL NOT BE SPRUNG TO RETURN TO A LIFTED
  POSITION
- GRAB BARS FOR WATER CLOSETS SHALL COMPLY WITH 609. GRAB BARS SHALL BE PROVIDED ON THE SIDE WALL CLOSEST TO THE WATER CLOSET AND ON THE REAR WALL.
- THE SIDE WALL GRAB BAR SHALL BE 42 INCHES LONG MINIMUM, LOCATED 12 INCHES MAXIMUM FROM THE REAR WALL AND EXTENDING 54 INCHES MINIMUM FROM THE REAR WALL.
- THE REAR WALL GRAB BAR SHALL BE 36 INCHES LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES MINIMUM ON ONE SIDE AND 24 INCHES MINIMUM ON THE OTHER SIDE
- 8. FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309. FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET EXCEPT IN AMBULATORY ACCESSIBLE COMPARTMENTS COMPLYING WITH 604.8.2.
- 9. TOILET PAPER DISPENSERS SHALL COMPLY WITH 309.4 AND SHALL BE 7 INCHES MINIMUM AND 9 INCHES (230 MM) MAXIMUM IN FRONT OF THE WATER CLOSET MEASURED TO THE CENTERLINE OF THE DISPENSER. THE OUTLET OF THE DISPENSER SHALL BE 15 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISH FLOOR AND SHALL NOT BE LOCATED BEHIND GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW.
- LAVATORIES AND SINKS SHALL COMPLY WITH 606.
- A CLEAR FLOOR SPACE COMPLYING WITH 305, POSITIONED FOR A FORWARD APPROACH, AND KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.
- 12. LAVATORIES AND SINKS SHALL BE INSTALLED WITH THE FRONT OF THE HIGHER OF THE RIM OR COUNTER SURFACE 34 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

#### STRUCTURAL GENERAL NOTES:

#### **GENERAL INFORMATION:**

- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND TEMPORARY SUPPORTS
  TO ENSURE THE STABILITY OF THE PORTIONS OF THE STRUCTURE BEING CONSTRUCTED,
  THE CONTRACTOR SHALL RETAIN A CALIFORNIA REGISTERED ENGINEER TO DESIGN ALL
  NECESSARY SHORING AND TEMPORARY SUPPORTS.
- 2. DESIGN LOADS ARE FOLLOWS:

ROOF LIVE LOAD 20 PSF
ROOF DEAD LOAD 30 PSF
WALL DEAD LOAD 140 PSF
IBC SEISMIC DESIGN CATEGORY D
DESIGN WIND SPEED 90 MPH
ALLOWABLE SOIL BEARING 2,000 PSF

- REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS FOR INSERTS, SLEEVES, CURBS, PADS, PLAN ETC., THAT AFFECT STRUCTURAL WORK. SEE TYPICAL DETAILS FOR FRAMING AROUND MISC. OPENINGS.
- CONTRACTOR TO VERIFY LOCATIONS OF ALL BURIED UTILITY PIPES PRIOR TO EXCAVATION
  FOR THE BUILDING FOUNDATIONS. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF
  POTENTIAL CONFLICTS BETWEEN THE FOUNDATIONS AND ANY BURIED UTILITY PIPES.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING ANY MATERIALS, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER WHERE CONDITIONS VARY FROM WHAT ARE SHOWN ON THE DRAWINGS.

#### REINFORCED CONCRETE:

- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10 SPECIFICATIONS FOR STRUCTURA. CONCRETE AS WELL AS ACI 318-08.
- SHOP DRAWINGS SHOWING ALL FABRICATION DIMENSIONS AND LOCATIONS FOR PLACING OF THE REINFORCING STEEL AND ACCESSORIES SHALL BE SUBMITTED FOR REVIEW TO THE ENGINEER, NO FABRICATION SHALL BEGIN UNTIL SHOP DRAWINGS ARE REVIEWED AND APPROVED.
- UNLESS NOTED OTHERWISE, DETAILS OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315, MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, AND CRSI MSP-1, MANUAL OF STANDARD PRACTICE, LATEST EDITIONS.
- 4. CONCRETE:

UNLESS NOTED OTHERWISE, 28 DAY COMPRESSIVE STRENGTH OF CAST-IN-PLACE CONCRETE FOR EACH PORTION OF STRUCTURE SHOULD BE AS FOLLOWS:

FOOTINGS, SLAB ON GRADE . . . . . 4,000 PSI
CONCRETE BEAMS / COLUMNS. . . . 4,000 PSI
CONCRETE SLUMP . . . . . . . 3" MIN. TO 5" MAX.

#### 5. REINFORCING STEEL:

- A. BARS: ASTM A615 GRADE 60 U.N.O
- B. WELDED WIRE FABRIC: ASTM A185.C. ALL CONCRETE SHALL BE REINFORCED UNLESS SPECIFICALLY MARKED "NOT REINFORCED"
- OR "UNREINFORCED".

  D. CONTRACTOR SHALL DETAIL AND PLACE ALL REINFORCEMET IN ACORDANCE WITH ACI SP-66,
- ACI 301-10, ACI 318-08, AND CRSI MSP-1 MANUAL OF STANDARD PRACTICE.
- E. MINIMUM CONCRETE CLEAR COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
- (1) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3".
- (2) CONCRETE EXPOSED TO EARTH OR WEATHER: #6 THROUGH #11 BARS 2"; #5 ANS SMALLER BARS, WELDED WIRE FABRIC 1 ½".
- F. EMBEDMENT AND LAP SPLICE LENGTHS FOR ALL REINFORCING STEEL BARS SHALL CONFORM TO THE FOLLOWING PROVISIONS, UNLESS NOTED OTHERWISE.

(1)	MINIM	UM STRAIGHT EMB	EDMENT LENGTHS:	
	(A)	#3 - 11"	#6 - 22"	#9 -41"
	(B)	#4 - 15"	#7 - 32"	# 10 - 46"
	(C)	#5 - 18"	#8 - 36"	# 11 - 51"
(2)	MINIM	UM LAP SPLICE LEN	IGTHS:	
	(A)	#3 - 14"	#6 - 28"	#9 -53"
	(B)	#4 - 19"	#7 - 41"	# 10 - 59"
	(C)	#5 - 24"	#8 - 47"	# 11 - 66"
(3)	MINIM	UM HOOK EMBEDM	ENT LENGTHS:	
				G0 20 TO 20

#6 - 15"

#7 - 17"

(C) #5 - 12" #8 - 19" #11 - 27"

(4) HORIZONTAL BARS HAVING MORE THAN 12" OF CONCRETE PLACED BELOW THEM SHALL BE CONSIDERED TOP REINFORCEMENT AND SHALL HAVE MINIMUM STRAIGHT EMBEDMENT AND LAP SPLICE LENGTHS INCREASED BY NOT LESS THAN 30% OVER THOSE GIVE ABOVE.

#9 - 22"

# 10 - 25"

- (5) HOOK EMBEDMENT IS THE MINIMUM STRAIGHT LINE DISTANCE FROM THE CRITICAL SECTION OF THE BAR TO THE FARTHEST EDGE OF THE HOOK.
- (6) WELDING OR TACK WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED EXCEP AS AUTHORIZED OR DIRECTED BY THE4 STRUCTURAL ENGINEER OR HIS REPRESENTATIVE.

#### 6. FORMWORK:

(A) #3 - 8"

(B) #4 - 10"

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, ENGINEERING AND STRUCTURAL ADEQUACY AND CONSTRUCTION OF ALL CONCRETE FORMWORK IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- B. COORDINATE ALL CONCRETE WORK WITH THE PLACEMENT OF PIPING, INSERTS, FLOOR DRAINS AND OTHER EMBEDDED ITEMS INDICATED ON THE CONTRACT DRAWINGS OR IN THE CONTRACT SPECIFICATIONS.
- C. ALL NEW OR EXISTING PIPING OR UTILITIES PASSING THROUGH NEW CONCRETE SHALL BE CAST-IN, UNLESS NOTED OTHERWISE.
- D. PROVIDE 3/4" CHAMFER STRIPS ON ALL EDGES OF EXPOSED CONCRETE, UNLESS NOTED OTHERWISE.
- E. WITH THE EXPLICIT PRIOR APPROVAL IN WRITING OF THE ENGINEER, COLUMN FOOTINGS MAY BE EARTH-FORMED USING UNDISTURBED NATIVE SOIL. PROVIDE A MINIMUM EXCAVATION WIDTH 4" GREATER THAN INDICATED, AND A DEPTH 2" GREATER THAN INDICATED.

#### 7. JOINTS:

- A. LOCATE ALL CONSTRUCTION, CONTRACTION, ISOLATION, EXPANSION, AND OTHER JOINTS AS INDICATED OR SPECIFIED, OR OTHERWISE APPROVED BY THE ENGINEER.
- B. SURFACES OF ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS SHALL BE CLEANED OF LAITANCE AND SHALL EXPOSE CLEAN COARSE AGGREGATE SOLIDLY EMBEDDED IN MORTAR MIX. JUST PRIOR TO DEPOSITING CONCRETE, SURFACE OF CONSTRUCTION JOINT SHALL BE THOROUGHLY CLEANED AND WETTED.
- C. SAWCUT CONTROL JOINTS AS SOON AS POSSIBLE AFTER INITIAL SET.

#### MASONRY:

- MATERIALS, TESTING OF MATERIALS AND STORAGE OF MATERIALS SHALL CONFORM TO ACI STANDARD "SPECIFICATIONS FOR MASONRY STRUCTURES AND BUILDING CODE REQUI-REMENTS FOR MASONRY STRUCTURES" (ACI 530-08 AND 530.1-05).
- ALL CONCRETE MASONRY UNITS ARE TO BE GRADE N-2, CONFORMING TO ASTM C-90.
  WITH A NET AREA MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 1,900 PSI. MORTAR
  SHALL BE TYPE S WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI. MINIMUM
  GROUT STRENGTH SHALL BE 2500 PSI.
- MORTAR JOINTS SHALL NOT EXCEED 5/8" THICKNESS IN CONCEALED AREAS AND WITHIN SPECIFIED TOLERANCES IN AREAS EXPOSED TO VIEW. WHERE VERTICAL AND HORIZONTAL ALIGNMENT WOULD CAUSE MORTAR JOINTS TO BE LESS THAN 1/4" OR MORE THAN 5/8" THICK IT SHALL BE CORRECTED PRIOR TO COMMENCING MASONRY CONSTRUCTION.
- 4. PIPES OR CONDUITS MAY PENETRATE HORIZONTALLY THROUGH MASONRY WALLS BY MEANS OF A GALVANIZED STEEL SLEEVE NO THINNER THAN STANDARD WEIGHT (SCHEDULE 40), ASTM A53, SOLIDLY SET IN PLACE, PLACE SLEEVES NOT CLOSER THAN THREE DIAMETERS ON CENTER, MAXIMUM SIZE OF SLEEVE SHALL DE 12".
- MAXIMUM SIZE OF EMBEDDED VERTICAL PIPE OR CONDUIT IN A BEARING WALL SHALL NOT EXCEED 1/3 OF WALL THICKNESS PIPES SHALL NOT BE PLACED CLOSER THAN THREE DIAMETERS ON CENTER.
- HORIZONTAL JOINT REINFORCEMENT SHALL BE 8 GAGE DEFORMED, GALVANIZED, LADDER TYPE AND SPACED 16" O.C. UNLESS NOTED OTHERWISE, JOINT REINFORCEMENT SHALL BE FULLY EMBEDDED IN MORTAR WITH MINIMUM COVER OF 5/8".
- USE A MINIMUM LAP OF 48" BAR DIAMETERS FOR ALL MASONRY REINFORCING, FILL ALL
  REINFORCED CELLS WITH GROUT FOR FULL HEIGHT. ALL CELLS LOCATED BELOW GRADE SHALL
  BE FILLED WITH GROUT. REINFORCED CELLS ADJACENT TO DOOR, AND DOOR OPENINGS IN
  ACCORDANCE WITH PLANS.
- ALIGN VERTICAL CORE EVENLY FOR THE FULL HEIGHT WHERE CELLS ARE TO BE GROUTED.
  GROUT IN VERTICAL CORES SHALL NOT BE PLACED IN LIFTS GREATER THAN 5 FEET. PROVIDE
  CLEANOUTS WHEN GROUTING BLOCK CELLS.
- MASONRY WALLS MUST BE BRACED DURING ERECTION FOR WIND AND CONSTRUCTIONS LOADS. BRACES MUST BE DESIGNED CONSTRUCTED AND ERECTED IN A FASHION AS TO PREVENT PERMANENT SCARRING OF MASONRY SURFACES AT THE EXPOSED CONDITIONS.

#### ALL MASONRY WORK SHALL BE INSPECTED.

#### STRUCTURAL STEEL:

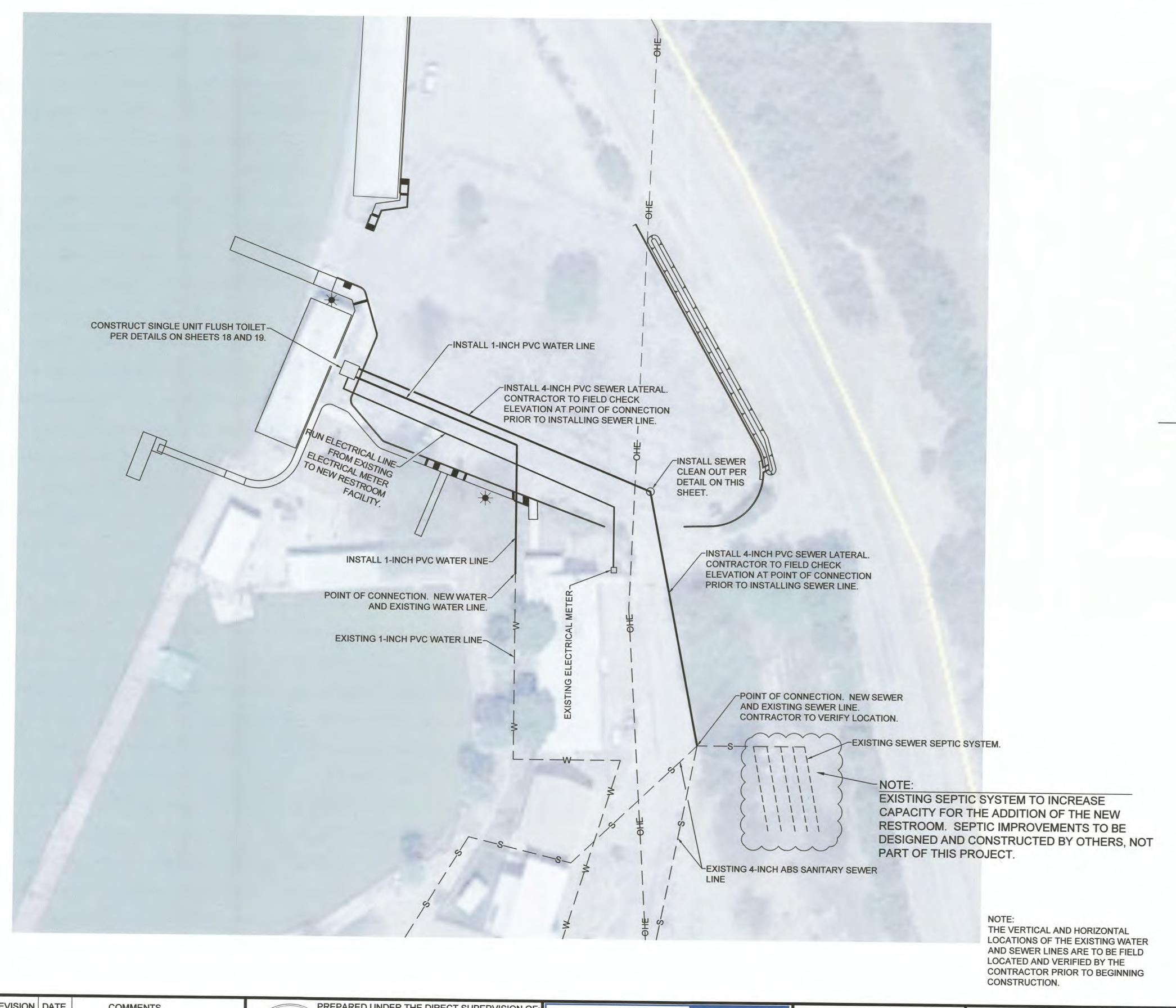
- SHALL CONFORM TO ASTM A36, PROVIDE ONE SHOP OF RUST INHIBITING PAINT (MINIMUM 3 MIL. DRY FILM THICKNESS) ON STRUCTURAL STEEL, WHICH SHALL BE FABRICATED ARE ERECTED IN ACCORDANCE WITH THE PROVISIONS OF THE AISC "STEEL CONSTRUCTION MANUAL", LATEST EDITION. SUBMIT SHOP DRAWINGS. ALL TUBING TO HAVE A YIELD STRENGTH OF Fy=46 KSI AND CONFORM RO ASTM A500 GRADE B.
- ALL WENDING IS TO BE PERFORMED BY CERTIFIED WELDERS. IMMEDIATELY AFTER ERECTION, CLEAN WELDS AND TOUCH UP PAINTING (MIN. 4 MIL. FILM THICKNESS). ELECTRODES SHALL BE E-70 SERIES, LOW HYDROGEN, STORED IN ACCORDANCE WITH A.W.S. REQUIREMENTS. ALL WELDS SHALL BE CONTINUOUS. WELDING PROCEDURES ARE REQUIRED TO BE SUBMITTED AND APPROVED BY STRUCTURAL ENGINEER.
- PROTECTIVE COATING: ALL STRUCTURAL STEEL SHALL BE PAINTED W/SELF-CURING INORGANIC ZINC COATING SYSTEM.

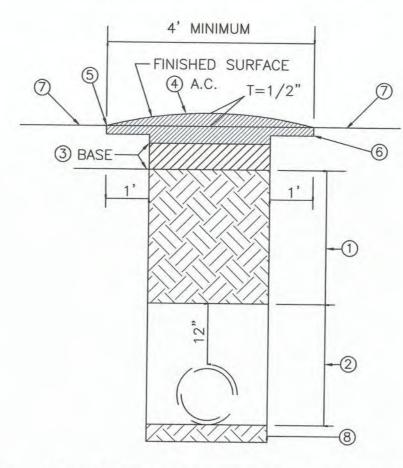
#### STRUCTURAL SUBMITTALS:

#### . SHOP DRAWINGS.

- THE FOLLOWINGS SHOP DRAWINGS SHALL BE SUBMITTED:
- A. REINFORCING STEEL.
- B. EMBEDDED ITEMS.C. CONCRETE MIX DESIGN.
- D. STRUCTURAL STEEL.
- 2. CONTRACTOR SHALL SUPPLY SHOP DRAWINGS, SUBMIT MINIMUM TWO SETS TO ENGINEER FOR REVIEW. INDICATE ISSUE DATE OR LATEST REVISION DATE OR RELATED STRUCTURAL PLAN (S) AND NAME OF PERSON RESPONSIBLE FOR CHECKING, SHOP DRAWINGS SHALL BEAR CONTRACTOR'S SIGNED STAMP CERTIFYING OF APPROVAL OF SUBMITTAL, VERIFICATIONS, AND COORDINATION OF THE SUBMITTAL WITH REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SUPPLIES OF THE DIR	Dynamic CONSULTY  69121  Dynamic CONSULTY  ENGINEE	PUBLIC WORKS DEPARTMENT	APPROVED BY THE COUNTY OF I	MPERIAL: 6/2/2023  62028 DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	RESTROOM SPECIFICATIONS
	No. 69121 CARLOS BELTRAN, P.E.	R.C.E. No.  CIVIL ENGINEERING - LAND SURVEYING - CONSTRUCTION MANAGEMENT - LAND SURVEYING - CONSTRUCTION - LAND SURVEYING - LAND SU	H / '/ \	No. 62028 JOHN GAY, P.E. PUBLIC WORKS DIRECTOR	R.C.E. No. SCALE AS SHOWN 09/30/23	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING	
	OF CALIFORNIA 6/2/27 DATE	06/30/24	COUNTY OF IMPERIAL	OF CALIFORNIA DATE	REG. EXP.	FACILITY PROJECT	SHEET 25°F 26

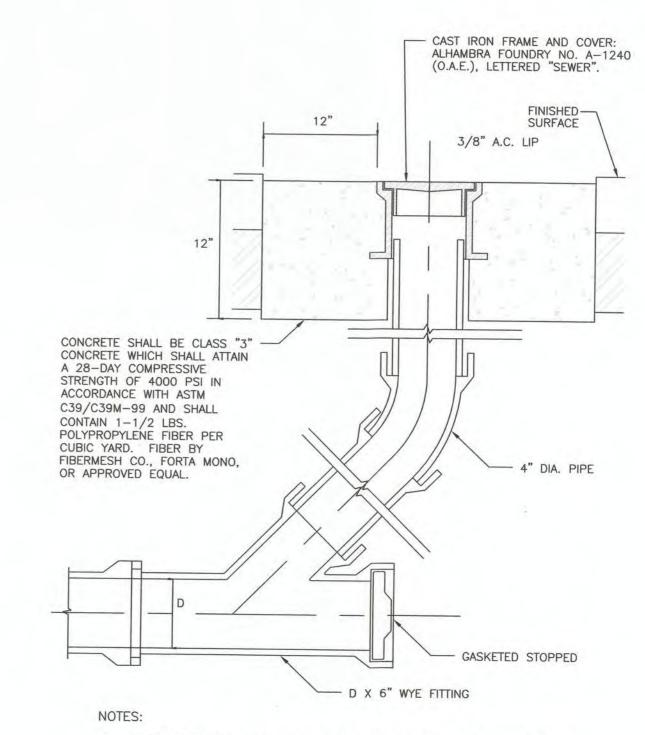




NOTES:

- 1) BACKFILL NATIVE OR IMPORT, COMPACTED TO 90% RELATIVE DENSITY. IF NOT IN A ROADWAY, 90% RELATIVE DENSITY IS REQUIRED TO FINISHED SURFACE.
- 2 PIPE BEDDING COMPACT TO 85% RELATIVE DENSITY. BEDDING MATERIAL SHALL MEET CALTRANS SPECIFICATIONS 26-1.02A & 26-1.02B, 100% PASSING 19MM SIEVE, SAND EQUIVALENT 25 MIN.
- 3 A MINIMUM 6" OF AGGREGATE BASE CLASS 2 TO BE COMPACTED TO 95% RELATIVE DENSITY IN PAVED SECTIONS.
- 4 A.C. PAVING MATCH EXISTING THICKNESS WITH NEW A.C., MIN. 4" 2 LIFTS.
- (5) TRENCH OVERLAY SHALL EXTEND A MIN. OF 1 FT. OUTSIDE THE TRENCH CUT. IN NO CASE SHALL THE FINISHED PAVING BE LESS THAN 4 FT. IN WIDTH.
- 6 GRIND 1' x 0.12' HEADER EACH SIDE OF TRENCH. APPLY TACK COAT TO ENTIRE SURFACE.
- THE COUNTY MAY DIRECT THAT REMAINING PORTIONS OF A.C. PAVEMENT ADJACENT TO TRENCH EDGE, MEASURING LESS THAN 6 FEET IN ANY DIMENSION, BE REMOVED AND REPLACED.
- (8) OVEREXCAVATION BELOW PIPE LAYING GRADE SHALL BE RECOMPACTED TO 90% MAXIMUM DENSITY, INSPECTED AND APPROVED PRIOR TO PIPE PLACEMENT.

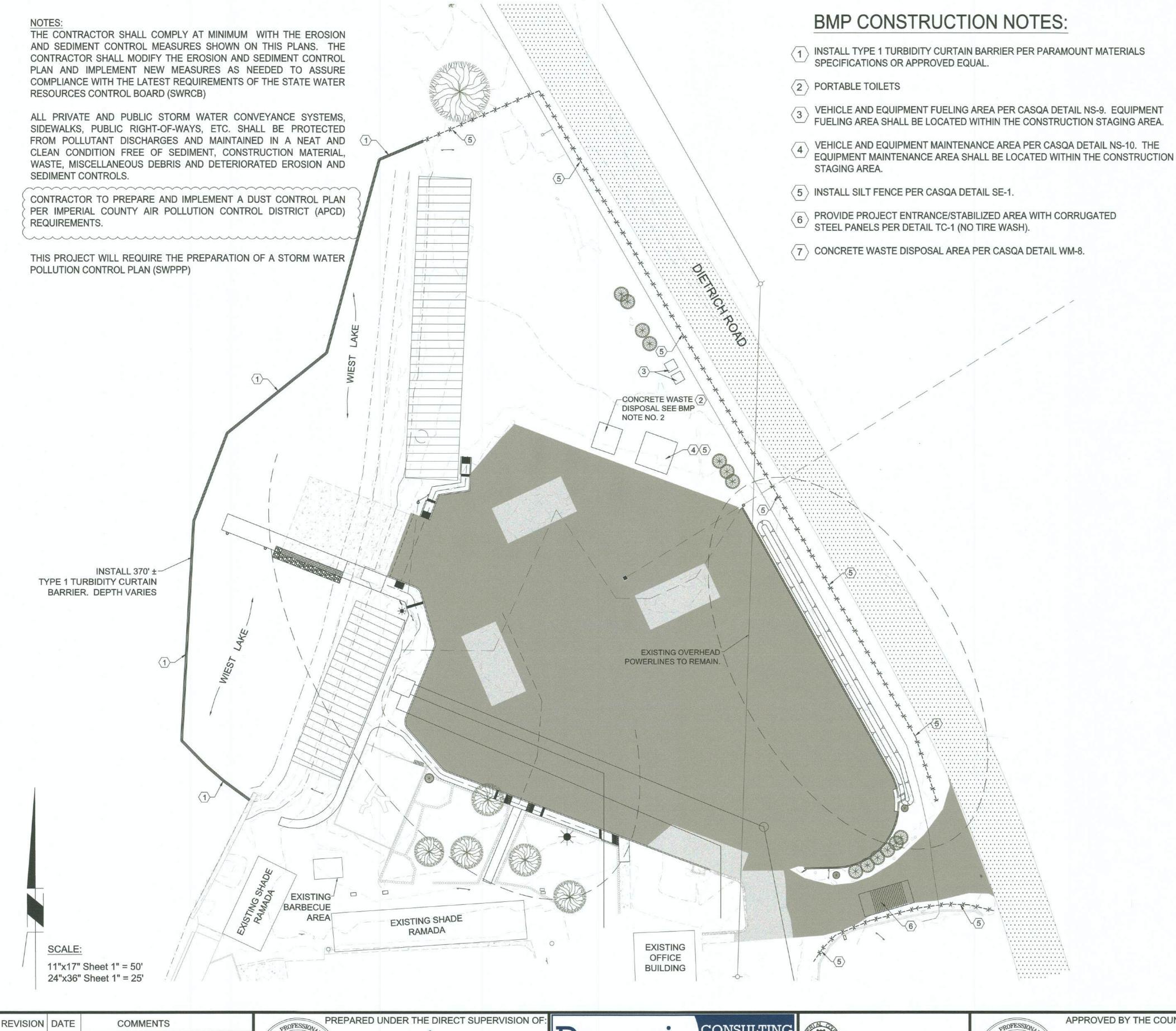
TRENCH REPLACEMENT DETAIL (FOR NEW UTILITIES)



- CLEANOUT RING AND COVER SHALL BE RAISED TO FINISHED GRADE AND SUPPORT COLLAR INSTALLED AFTER PAVING OR FINE GRADING.
- 2. D= DIAMETER OF MAIN LINE PIPE.

#### STANDARD CLEANOUT

REVISION DATE COMMENTS	CARLOS BELTRAN No. 69121 PREPARED UNDER THE DIRECT	T SUPERVISION OF:  69121  R.C.E. No.	CONSULTING PUBLIC WORKS DE	GAY GAY	APPROVED BY THE COUNTY OF IMPERIAL:  62028	DATE 6/2/2023  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	EXISTING A	
	* EXP 6-30-24 *  OFFICALIFORNITY  OF CALIFORNITY  DATE		RVEYING-CONSTRUCTION MANAGEMENT COUNTY OF IMP	ERIAL  No. 62028 EXP 9-30-23  *  CIVIL OF CALIFORNIA  OF CALIFORNIA	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  6623  DATE  R.C.E. No.  09/30/23  REG. EXP.	AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT	S	SHEET 26° F 26



#### **EROSION AND SEDIMENT CONTROL NOTES:**

- FILTERED RUNOFF. ALL RUNOFF SHALL BE FILTERED PRIOR TO DISCHARGING FROM A SITE OR TO ANY TYPE OF PRIVATE OR PUBLIC STORM WATER CONVEYANCE SYSTEM (NATURAL WATERCOURSES, STREETS, GUTTERS, CONCRETE-LINED V-DITCHES, STORM DRAINS, FLOW-LINES, INLETS, OUTLETS, ETC.). ALL NON-PERMITTED DISCHARGES ARE PROHIBITED FROM ENTERING ANY STORM WATER CONVEYANCE SYSTEM YEAR-ROUND
- BEST MANAGEMENT PRACTICES (BMP'S). POLLUTION PREVENTION MEASURES, ALSO KNOWN AS BEST MANAGEMENT PRACTICES (BMP'S), MUST BE INSTALLED PRIOR TO ANY FIELD ACTIVITIES. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR ESC (EROSION AND SEDIMENT CONTROL) MEASURES THROUGHOUT THE DURATION OF THE PROJECT FOR ALL CLEARING, DISKING, GRADING, EXCAVATING AND STOCKPILING ACTIVITIES, AND ON ALL EXPOSED SLOPES AND INACTIVE PADS THROUGHOUT THE ENTIRE SITE. THE DEVELOPER/CONTRACTOR IS ALSO RESPONSIBLE FOR ANY DISCHARGES FROM SUBCONTRACTORS.
- EROSION AND SEDIMENT CONTROLS. ALL ESC MEASURES SHALL BE INSPECTED, RESTORED, REPAIRED OR MODIFIED YEAR-ROUND THROUGHOUT THE SITE TO PROTECT PERIMETERS, ADJACENT PROPERTIES, ENVIRONMENTALLY SENSITIVE AREAS AND ALL PRIVATE/PUBLIC STORM WATER CONVEYANCE SYSTEMS. IF ANY EROSION OR SEDIMENT CONTROLS FAIL DURING ANY RAIN EVENT, MORE EFFECTIVE ONES WILL BE REQUIRED IN THEIR PLACE.
- a. <u>EROSION CONTROLS</u>. EROSION CONTROLS SHALL INCLUDE, BUT ARE NOT LIMITED TO APPLYING AND ESTABLISHING:
  VEGETATIVE COVER, WOOD MULCH, STAPLED OR PINNED BLANKETS (STRAW, COCONUT OR OTHER), PLASTIC SHEETING
  (MINIMUM 10-MIL), POLYPROPYLENE MATS, SPRAY-ON CONTROLS TO ALL DISTURBED AREAS OR OTHER MEASURES APPROVED
  BY THE COUNTY PUBLIC WORKS DEPARTMENT. JUTE NETTING SHALL NOT BE USED AS A STAND-ALONE EROSION CONTROL. FOR
  SLOPES GREATER THAN 4:1, PROVIDE FIBER ROLLS AND EITHER A BONDED FIBER MATRIX PRODUCT APPLIED TO A RATE OF 3500
  LB/ACRE OR A STABILIZED FIBER MATRIX PRODUCT APPLIED TO A RATE OF 10 GAL/ACRE. THE COUNTY PUBLIC WORKS
  DEPARTMENT MAY APPROVE DIFFERENT APPLICATION RATES FOR SLOPES LESS THAN 4:1.
- b. <u>SEDIMENT CONTROLS</u>. SEDIMENT CONTROLS SHALL INCLUDE, BUT ARE NOT LIMITED TO: DESILTING BASINS, GRADED BERMS, FIBER ROLLS, SILT FENCES, GRAVEL BAG CHEVRONS (FILLED WITH MINIMUM 3A" GRAVEL), CHECK DAMS, DRAINAGE INLET PROTECTION, ETC. FIBER ROLLS SHALL BE INSTALLED IN 15-FOOT INCREMENTS MEASURED ALONG THE FACE OF THE SLOPE. SILT FENCE SHALL BE INSTALLED ALONG INTERIOR STREETS AND COMBINED WITH GRAVEL-BAG OR SILT FENCE CHEVRONS INSIDE THE SIDEWALK RIGHT-OF-WAY OR BACK OF CURBS.
- 4. STATE CONSTRUCTION GENERAL PERMIT. IF THE PROJECT DISTURBS, EXPOSES OR STOCKPILES ONE ACRE OR MORE OF SOIL, THE SITE MUST BE COVERED UNDER THE STATE CONSTRUCTION GENERAL PERMIT. A WASTE DISCHARGE IDENTIFICATION (WDID) NUMBER, A RISK LEVEL DETERMINATION NUMBER AND THE QUALIFIED "STORM WATER POLLUTION PREVENTION PLAN" (SWPPP) DEVELOPER (QSD) SHALL BE PROVIDED TO THE COUNTY PRIOR TO ISSUANCE OF A GRADING PERMIT.
- PERIMETER PROTECTION. PERIMETER PROTECTION MUST BE INSTALLED PRIOR TO ANY CLEARING ACTIVITIES. CLEARING SHALL BE LIMITED TO AREAS THAT WILL BE IMMEDIATELY GRADED OR DISTURBED. A COMBINATION OF ESC MEASURES SHALL BE IMPLEMENTED IN AREAS THAT HAVE BEEN CLEARED. ALL DISTURBED AREAS OF AN INACTIVE SITE SHALL ALSO BE PROTECTED.
- 6. CONSTRUCTION ACCESS POINTS. CONSTRUCTION ACCESS POINTS SHALL BE STABILIZED WITH A COMBINATION OF ROCK AND SHAKER PLATES TO PREVENT TRACK-OUT. INTERIOR ACCESS POINTS (ALL PROPOSED DRIVEWAYS, MATERIAL STORAGE AND STAGING AREA ENTRANCES/EXITS, ETC.) SHALL ALSO BE PROTECTED WITH ROCK TO PREVENT TRACK-OUT ONTO INTERIOR STREETS. ROUTINE STREET SWEEPING SHALL BE PERFORMED ON ALL PAVED STREETS WHERE TRACKING IS OBSERVED. VACUUM SWEEPERS SHALL BE USED WHEN STREET SWEEPING BECOMES INEFFECTIVE. CONTROLLED STREET WASHING SHALL ONLY BE ALLOWED PRIOR TO THE APPLICATION OF ASPHALT SEAL COATS, AND ONLY WHEN ALL PERTINENT DRAINAGE INLETS ARE PROTECTED.
- 7. MATERIAL STORAGE. MATERIAL STORAGE AND STAGING AREAS SHALL BE ESTABLISHED. FUEL TANKS, PORTABLE TOILETS, LIQUIDS, GELS, POWDERS, LANDSCAPE MATERIALS AND STOCKPILES OF SOIL SHALL BE STORED AWAY FROM ALL PRIVATE/PUBLIC STORM WATER CONVEYANCE SYSTEMS, SIDEWALKS, RIGHT-OF-WAYS AND FLOW-LINES AND SHALL HAVE SECONDARY CONTAINMENT. INACTIVE STOCKPILES OF SOIL SHALL BE COVERED AT ALL TIMES. ACTIVE STOCKPILES SHALL BE COVERED PRIOR TO A FORECAST RAIN.
- 8. CONSTRUCTION WASTE. CONSTRUCTION WASTE AND MISCELLANEOUS DEBRIS SHALL BE PLACED IN WATER-TIGHT BINS. WIRE MESH RECEPTACLES SHALL NOT BE ALLOWED. WASH-OUT STATIONS SHALL BE PROVIDED FOR CONCRETE, PAINTS, STUCCO AND OTHER LIQUID WASTE, AND SHALL BE LINED WITH PLASTIC AND LOCATED AWAY FROM PUBLIC RIGHT-OF-WAYS, FLOW LINES, ETC. PRIOR TO ANY FORECAST RAIN, BINS AND WASH-OUTS SHALL BE COVERED WITH LIDS OR PLASTIC TARPS.
- 9. MAINTENANCE. ALL ONSITE AND OFFSITE FLOW LINES (I.E., V- AND BROW-DITCHES, TERRACE DRAINS, RIBBON GUTTERS, CURB GUTTERS, ETC.), STORM WATER CONVEYANCE SYSTEMS, CHECK DAMS, CHEVRONS, SILT FENCES AND DESILTING BASINS SHALL BE FREE OF SEDIMENT, CONSTRUCTION MATERIALS, WASTE, MISCELLANEOUS DEBRIS AND DETERIORATED ESC MEASURES YEAR-ROUND.
- 10. OBSTRUCTIONS. NO OBSTRUCTIONS, OTHER THAN BMP'S, SHALL BE ALLOWED WITHIN ANY STORM WATER CONVEYANCE SYSTEM, UNLESS ALTERNATIVE DRAINAGE FACILITIES HAVE BEEN APPROVED BY THE COUNTY PUBLIC WORKS DEPARTMENT.

REVISION DATE COMMENTS	PREPARED UNDER THE DIRECT SU  CARLOS BELTRAN  EXAMPLE 13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	69121 <b>Dy</b>	namic CONSULTING ENGINEERS	PUBLIC WORKS DEPARTMENT	JOHN GAY	APPROVED BY THE COUNTY OF II	62028	DATE 4/26/2024  DRAWN DB	COMMUNITY AND ECONOMIC DEVELOPMENT	EROSION AND CONTROL	
	No. 69121  * EXP 6-30-26  * OF CALLEON BELTRAN, P.E.  4/26/2024  DATE	R.C.E. No.  CIVIL ENGINE 2415 IMPE IMPERIAL TEL. (760) 54	NEERING-LAND SURVEYING-CONSTRUCTION MANAGEMENT PERIAL BUSINESS PARK DRIVE. SUITE B., L CA. 92251 545-0162 FAX (760) 545-0163	COUNTY OF IMPERIAL	No. 62028  * EXP 9-30-25  *  *  *  *  *  *  *  *  *  *  *  *  *	JOHN GAY, P.E. PUBLIC WORKS DIRECTOR  12 11 24 DATE	R.C.E. No. 09/30/25 REG. EXP.	SCALE AS SHOWN CHECKED CB	IMPROVEMENTS FOR THE WIEST LAKE BOAT LAUNCHING FACILITY PROJECT		SHEET 27 OF 27