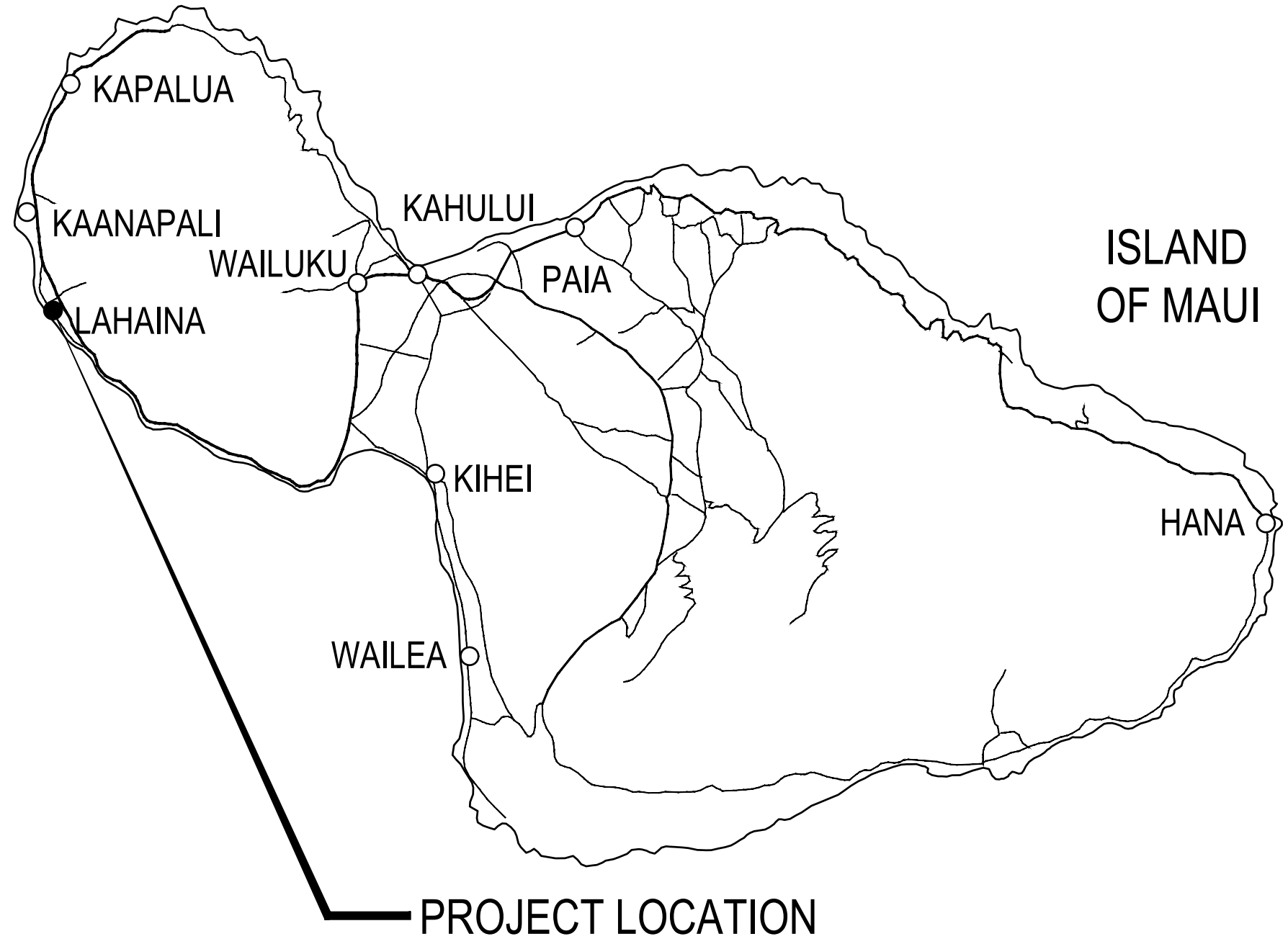
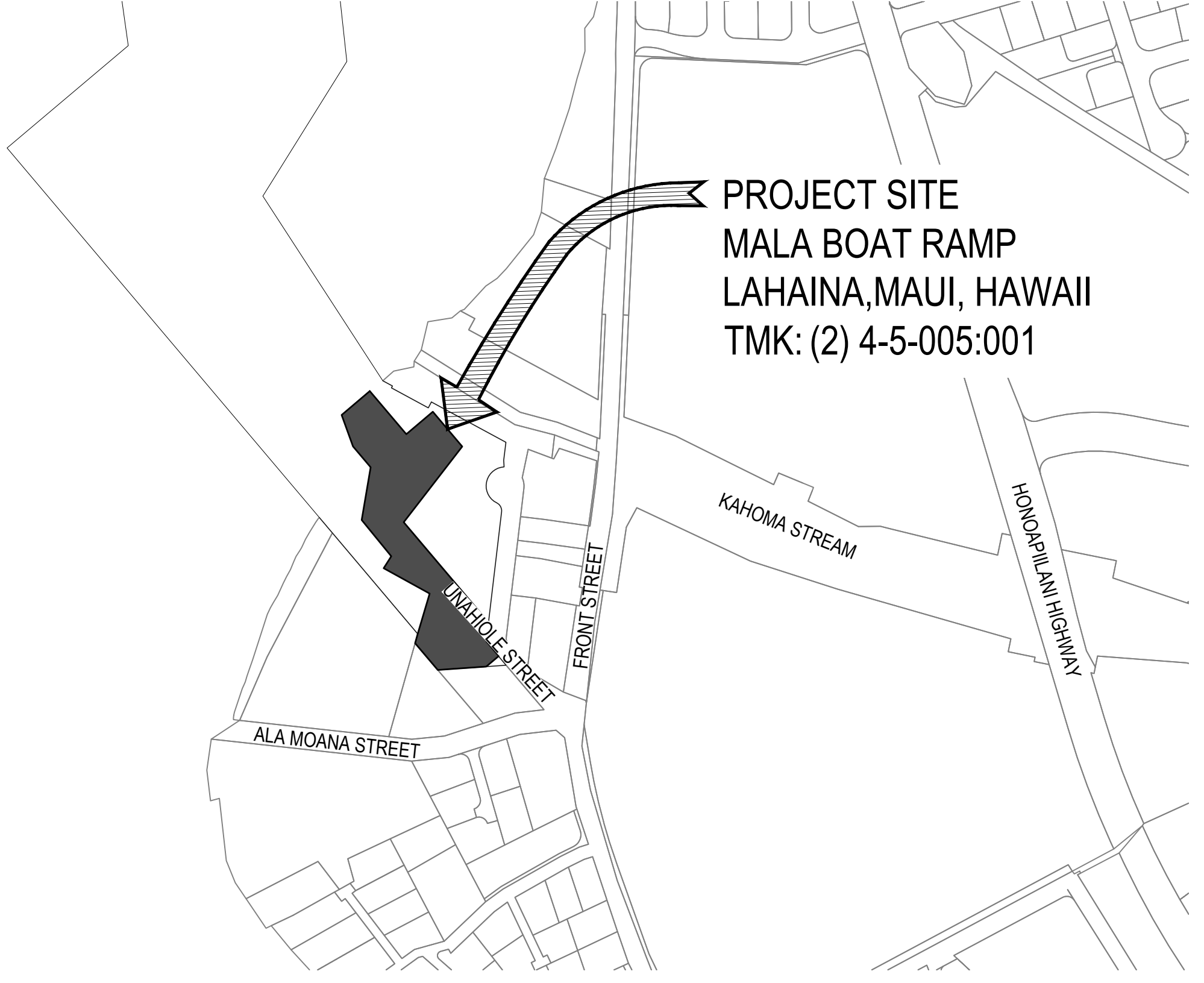


STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 DIVISION OF BOATING AND OCEAN RECREATION

JOB NO. B48CM75A  
**MALA BOAT RAMP SITE IMPROVEMENTS**  
 LAHAINA, MAUI, HAWAII  
 TMK: (2) 4-5-005:001



**LOCATION MAP**  
 NOT TO SCALE



**SITE MAP**  
 NOT TO SCALE

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APPROVED: \_\_\_\_\_ DATE: 05/15/2026  


MEGHAN L. STATTS  
 ADMINISTRATOR  
 DIVISION OF BOATING AND OCEAN RECREATION  
 DEPARTMENT OF LAND AND NATURAL RESOURCES

DRAWING NO.  
**T-1**

CAD DWG NO.: B48CM75A - T-1 TITLE SHEET.dwg 4/10/26 16:01

## GENERAL CONSTRUCTION NOTES

- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISION OF THE FOLLOWING:
  - STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", DATED 2005;
  - THE COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER 1986
  - "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII, WHERE APPLICABLE
  - THE APPLICABLE STATE BUILDING CODES AS ADOPTED BY THE STATE BUILDING CODE COUNCIL.
- EXISTING TOPOGRAPHIC SURVEY WAS CONDUCTED ON APRIL 15, 2025 BY KN SURVEYING, LLC. THIS TOPOGRAPHIC SURVEY WAS BASED ON THE BEST AVAILABLE INFORMATION AND ACCURACY MUST BE VERIFIED PRIOR TO STARTING CONSTRUCTION.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR DIRECTION. COMMENCEMENT OF CONSTRUCTION SHALL INDICATE CONTRACTOR'S ACCEPTANCE OF EXISTING SITE CONDITIONS.
- DURING THE PERFORMANCE PERIOD OF THIS CONTRACT, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE CONTROL AND RESPONSIBILITY OF THE JOBSITE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE SITE SAFETY CONDITIONS FOR ALL PERSONS ENTERING THE JOBSITE, THE CONDITION OF THE SITE AND ALL EXISTING IMPROVEMENTS, AND FOR ALL MATERIAL AND EQUIPMENT STORED AT THE PROJECT SITE.
- NO HARD BASALT ROCK IS EXPECTED TO BE ENCOUNTERED NEAR OR AT THE SITE.
- BLASTING IS NOT ALLOWED.
- THE MALA BOAT RAMP SHALL REMAIN OPEN DURING THE CONSTRUCTION PERIOD. MAINTAIN SAFE PEDESTRIAN AND VEHICLE ACCESS TO THE FACILITY AS REQUIRED. PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC, ACCORDING TO THE LATEST VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE FOR STREETS AND HIGHWAYS", AND TO THE RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORKSITES AND/OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND THE U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".
- EXISTING PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN A PASSABLE CONDITION OR PROVIDE FOR ALTERNATE/TEMPORARY ACCESSIBLE PEDESTRIAN ACCESS ROUTES AND FACILITIES PER THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN CHAPTER 2, ADAAG 201.3, AND ADAAG 206.1.
- DO NOT PERFORM ANY CONSTRUCTION ACTIVITIES THAT CAUSE ROCKS, SOIL, OR DEBRIS IN ANY FORM TO FALL, SLIDE, OR FLOW ONTO ADJOINING PROPERTIES, STREETS, OR NATURAL WATER COURSES. FINES DUE TO VIOLATIONS AND ANY NECESSARY REMEDIAL ACTIONS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- AS APPLICABLE, COORDINATE CONSTRUCTION ACTIVITIES WITH ADJACENT CONSTRUCTION SITE(S). AVOID CAUSING ANY DELAYS OR HINDERANCE OF WORK OR PERFORMANCE TO THE ADJACENT CONSTRUCTION SITE(S).
- LOCATION OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. VERIFY THE LOCATIONS AND DEPTHS OF THE UTILITIES. EXERCISE PROPER CARE AND CAUTION WHEN EXCAVATING. ANY AND ALL DAMAGES SHALL BE IMMEDIATELY REPAIRED AND/OR RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT HIS/HER COST.
- COORDINATE ALL SITE UTILITY WORK WITH "THE ONE CALL CENTER" AT (866) 423-7287 AT LEAST 5 WORKING DAYS PRIOR TO THE START OF EXCAVATION OR TRENCHING.
- VERIFY AND COORDINATE THE ACTUAL LOCATION OF ALL SITE UTILITIES WITH THE RELATED AGENCIES AND UTILITY COMPANIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- WHEN CONNECTING NEW UTILITIES TO EXISTING, EXPOSE THE EXISTING UTILITY LINES AT THE DENOTED CONNECTION POINT TO VERIFY CHARACTERISTICS PRIOR TO COMPLETING EXCAVATION FOR NEW UTILITIES.
- IF WATER, SEWAGE OR ELECTRICAL SERVICES ARE PLANNED TO BE INTERRUPTED FOR MORE THAN 1 HOUR, PROVIDE FOR TEMPORARY WATER, SEWAGE, AND ELECTRICAL SERVICES DURING THE INTERRUPTION AT NO ADDITIONAL COST TO THE STATE.
- MAKE ARRANGEMENTS FOR TEMPORARY CONSTRUCTION SITE UTILITIES SUCH AS ELECTRICITY, WATER, ETC. AT NO ADDITIONAL COST TO THE STATE.
- ALL EXISTING UTILITIES, SHOWN ON THE PLANS OR UNCOVERED, SHALL BE PROTECTED AT ALL TIMES DURING CONSTRUCTION.
- ANY UTILITIES DAMAGED, AS A RESULT OF CONTRACTOR OPERATIONS WHETHER OR NOT SHOWN ON THE DRAWINGS, SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST TO THE STATE.
- WHEN TRENCHING OR EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES OR IN THE ROADWAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDER-PINNING TO FULLY PROTECT THEM FROM DAMAGE.
- ADJUST MANHOLE AND /OR VALVE BOX FRAMES AND COVERS AS REQUIRED BY THE UTILITY COMPANIES AND AGENCIES.
- CONFORM WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, HAWAII ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF HEALTH.
- PLAN, CONSTRUCT AND UTILIZE ALL BEST MANAGEMENT PRACTICES (BMP) AS REQUIRED TO COMPLY WITH THE LAWS, STANDARDS, RULES, AND /OR POLICIES OF THE COUNTY, STATE, OR FEDERAL REGULATORY AGENCIES.
- OBTAIN AND PAY FOR ALL REQUIRED PERMITS FROM THE APPROPRIATE GOVERNMENT AGENCIES.
- RESTORE ALL AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES, TO EQUAL OR BETTER CONDITION(S), INCLUDING BUT NOT LIMITED TO VEGETATION, PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALKWAYS, WALLS, FENCES, ETC. AT NO ADDITIONAL EXPENSE TO THE STATE.
- DO NOT START ANY GROUND DISTURBANCE UNTIL ALL REQUIREMENTS OF THE NPDES PERMIT, AS REQUIRED, ARE MET. PROVIDE A WRITTEN COPY OF THE NPDES PERMIT TO THE APPROPRIATE COUNTY OR STATE OR FEDERAL AGENCY PER THEIR REQUIREMENTS.

## GENERAL CONSTRUCTION NOTES (CONT)

- PROVIDE THEFT-RESISTANT FASTENERS FOR ALL MOUNTING ACCESSORIES.
- PROVIDE STAINLESS STEEL, THEFT-RESISTANT FASTENERS IN ALL PUBLICLY EXPOSED AREAS.
- PROVIDE ALL INCIDENTAL AND NECESSARY MATERIALS AND LABOR TO COMPLETE THE PROJECT.
- THE JOB SITE SHALL BE LEFT IN A SAFE AND SECURE CONDITION AT THE END OF EACH WORKDAY. CLEAN UP AND REMOVE ALL RUBBISH FROM THE JOB SITE ON A DAILY BASIS. MAINTAIN THE WORK AREA AND PREMISES IN A CLEAN ORDERLY CONDITION AT ALL TIMES.
- PRIOR TO ACCEPTANCE OF THE PROJECT BY THE STATE, CLEAN UP AND REMOVE ALL RUBBISH AND DEBRIS FROM THE ENTIRE JOB SITE.
- DUE TO LIMITED SPACE AT THE JOB SITE, THE STATE RECOGNIZES THE NEED FOR A CONSTRUCTION STAGING AREA FOR TEMPORARY STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIAL. LOCATIONS OF POSSIBLE EQUIPMENT AND MATERIALS STAGING AREAS ARE SHOWN ON THE OVERALL SITE PLAN - STAGING AREAS ON SHEET G-3. COORDINATE WITH THE HARBOR MASTER FOR USE OF THE ONSITE STAGING AREA(S) AT LEAST 30 DAYS PRIOR TO ANTICIPATED OCCUPANCY. THE STATE IS NOT OBLIGATED TO PROVIDE STAGING AREAS AS SPACE AVAILABILITY AT THE FACILITY WILL CHANGE FROM TIME TO TIME. SUBMIT A STAGING AREA(S) USE REQUEST AS SOON AS POSSIBLE. THE HARBOR MASTER DETERMINES THE STAGING AREA'S CONDITIONS OF USE. CONTRACTOR IS RESPONSIBLE FOR ARRANGEMENT OF ANY OFFSITE STAGING AREAS.
- TAKE ALL MEASURES TO MINIMIZE DISTURBING OR DAMAGING EXISTING NATIVE PLANT SPECIES DURING CONSTRUCTION.
- PRIOR TO ENTERING THE JOB SITE, ALL EQUIPMENT AND FOOTWEAR SHALL BE WASHED WITH POTABLE WATER TO PREVENT EXOTIC PLANTS AND SEEDS FROM BEING INTRODUCED TO THE JOB SITE/AREA.
- INSPECT AND CLEAN ALL EQUIPMENT, GEAR, AND VEHICLES (PERSONAL AND PROJECT) THAT ENTER OR EXIT THE JOB SITE.
- ENSURE THAT ALL EQUIPMENT, GEAR, AND VEHICLES ARE FREE OF ANY PLANT, ANIMAL, OR EARTHEN MATERIALS PRIOR TO ENTERING THE JOB SITE. ALL EQUIPMENT, GEAR, AND VEHICLES SHALL BE INSPECTED AND CLEANED BEFORE ENTERING THE JOB SITE, AND BEFORE LEAVING ANY WELD INFECTED/CONTAMINATED AREA TO PREVENT TRACKING IN HARMFUL ORGANISMS (E.G.: WEEDS, INSECTS, PESTS). EQUIPMENT TO INSPECT AND CLEAN INCLUDE BUT IS NOT LIMITED TO:
  - ROACHES, ANTS AND OTHER PESTS ON EQUIPMENT & SUPPLIES-TOOLS, TOOL BAGS, BACKPACKS & BAGS (FOLDS, POCKETS, VELCRO), WOOD AND BUILDING MATERIALS, FENCING MATERIALS, BOTTOMS OF PLASTIC BUCKETS, CARDBOARD BOXES, OPEN FOOD AND WATER CONTAINERS, TENTS, HAMMOCKS, TARPS, HELICOPTER SLING NETS, CHAINSAW BLADES.
  - VEHICLES - THE INSIDE OF THE VEHICLES SHOULD BE VACUUMED AND THE TRUCK BEDS SWEEPED OUT REGULARLY, ESPECIALLY IF USED OFF-ROAD. CLEAN PLACES SUCH AS THE INSIDE LIP OF BUMPERS, SEATS, FLOORS, DASHBOARDS, DOOR JAMBS, TIRES (ESPECIALLY TIRE TREADS), AND THE UNDERCARRIAGE.
  - HEAVY EQUIPMENT, TRUCKS, ALL TYPES OF EARTHMOVING CONSTRUCTION EQUIPMENT AND GENERAL CONSTRUCTION EQUIPMENT AND SUPPLIES.
  - OTHER- ENSURE SOIL IS STERILE AND FREE OF INSECTS, WEEDS, AND PATHOGENS. ANYTHING SUSPICIOUS SHOULD NOT BE TAKEN ONTO THE JOB SITE.
- HAWAIIAN HOARY BATS OR 'ŌPE'APE'A (LASIURUS CINEREUS SEMOTUS) ARE KNOWN TO RESIDE IN THE VICINITY OF THE PROJECT AREA AND MAY ROOST IN NEARBY TREES. ANY SITE CLEARING SHOULD BE TIMED TO AVOID DISTURBING THE BAT'S BIRTHING AND PUP REARING SEASON (JUNE 1 THROUGH SEPTEMBER 15). IF THIS CANNOT BE AVOIDED, WOODY PLANTS GREATER THAN 15 FEET (4.6 METERS) IN HEIGHT SHOULD NOT BE DISTURBED, REMOVED, OR TRIMMED WITHOUT CONSULTING DOFAW AND STATE'S CONSTRUCTION REPRESENTATIVE. BARBED WIRE IS NOT ALLOWED DUE TO DOCUMENTED BAT MORTALITIES BY ENSNAREMENT.
- NIGHT WORK REQUIRING OUTDOOR LIGHTING SHOULD BE AVOIDED DURING THE SEABIRD FLEDGING SEASON FROM SEPTEMBER 15 THROUGH DECEMBER 15. ARTIFICIAL LIGHTING DISORIENTS SEABIRDS RESULTING IN COLLISION WITH MANMADE ARTIFACTS OR CAUSE GROUNDING. PROVIDE FULLY SHIELDED LIGHTS FOR ANY REQUIRED NIGHT WORK.
- ON A DAILY BASIS, PACK AND REMOVE ALL TRASH, INCLUDING ANY DISCARDED FOOD, FROM THE JOB SITE TO PREVENT NEGATIVELY AFFECTING THE FLORA AND FAUNA AT THE FIELD SITE. (\*DISCARDED FOOD MAY CONTAIN UNSEEN INSECTS, FUNGUS, BACTERIA, AND PARASITES; AND IS AN ATTRACTANT FOR INVASIVE INSECTS).
- FOLLOW METHODS OF CLEANING SPECIFIED IN HAWAII INTERAGENCY BIOSECURITY HANDOUT. SPECIFIED METHODS OF CLEANING INCLUDE:
  - WATER & HOSE, BRUSH, TWEEZERS, CLEAN RAG, KNIFE EDGE, BLEACH RINSE AND/OR INSECTICIDE.
  - CLEANING SHALL BE PERFORMED AWAY FROM THE FOREST IN A DOFAW DESIGNATED AREA WITH A NEARBY RECEPTACLE FOR DISPOSAL.
  - LAUNDERING OF WASHABLE ITEMS SHALL BE PERFORMED AFTER EACH TRIP.
  - IF ITEMS CANNOT BE CLEANED, THEY CANNOT BROUGHT INTO THE FOREST.
  - IF CONTAMINATED SUPPLIES ARE DISCOVERED, THEY MUST BE IMMEDIATELY REMOVED AND PROPERLY DISPOSED, AWAY FROM THE H.E.T.F.
- CLEAN AND DISINFECT EQUIPMENT PRIOR TO MOBILIZATION TO JOB SITE.

## PUBLIC HEALTH, SAFETY, AND CONVENIENCE NOTES

- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF THE PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR, AT HIS OWN EXPENSE SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION ACTIVITY SO AS TO CAUSE FALLING ROCK, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC. THE CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT WITH A NOISE POLLUTION CONTROL PLAN.

## HISTORICAL PRESERVATION NOTES

- IF CULTURAL MATERIALS ARE DISCOVERED DURING CONSTRUCTION, ALL EARTH-MOVING ACTIVITY WITHIN AND AROUND THE IMMEDIATE DISCOVERY AREA SHALL BE DIVERTED UNTIL A QUALIFIED ARCHAEOLOGIST CAN ASSESS THE NATURE AND SIGNIFICANCE OF THE FIND.
- IF PREVIOUSLY UNIDENTIFIED NON-BURIAL HISTORIC PROPERTIES, OR UNANTICIPATED EFFECTS ARE DISCOVERED, THE CONTRACTOR SHALL FOLLOW HAWAII ADMINISTRATIVE RULES (HAR) §13-280 "RULES GOVERNING GENERAL PROCEDURES FOR INADVERTENT DISCOVERIES OF HISTORIC PROPERTIES DURING A PROJECT COVERED BY THE HISTORIC PRESERVATION REVIEW PROCESS."
- IF HUMAN REMAINS ARE DISCOVERED, HAR §13-300 STATES THAT FURTHER DISTURBANCES AND ACTIVITIES SHALL CEASE IN ANY AREA OR NEARBY AREA SUSPECTED TO OVERLIE REMAINS AND THE SHPD AND THE POLICE DEPARTMENT WILL BE CONTACTED. THE APPROPRIATE PROCESS WOULD THEN PROCEED IN CONFORMANCE WITH HAR §13-300, SUBCHAPTER 4 "PROCEDURES FOR PROPER TREATMENT OF BURIAL SITES AND HUMAN SKELETAL REMAINS."
- IN THE EVENT HISTORIC REMAINS, SUCH AS ARTIFACTS, BURIALS, OR CONCENTRATIONS OF SHELL OR CHARCOAL ARE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL IMMEDIATELY CEASE IN THE VICINITY OF THE ENCOUNTER. NOTIFY THE STATE HISTORIC PRESERVATION DIVISION AT (808) 692-8015, FOR AN ASSESSMENT OF THE ENCOUNTER AND RECOMMENDATIONS ON MITIGATION MEASURES.

## WATER POLLUTION AND EROSION CONTROL NOTES

### GENERAL:

- THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SECTION 209-WATER POLLUTION AND EROSION CONTROL, IN THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 2005, AS AMENDED. SECTION 209 DESCRIBES BUT IS NOT LIMITED TO: SUBMITTAL REQUIREMENTS; SCHEDULING OF A WATER POLLUTION AND EROSION CONTROL CONFERENCE WITH THE ENGINEER; CONSTRUCTION REQUIREMENTS; METHOD OF MEASUREMENTS; AND BASIS OF PAYMENT. NO WORK SHALL COMMENCE WITHOUT A BMP PLAN APPROVED BY THE DEPARTMENT OF HEALTH.
- ALL WORK SHALL BE IN ACCORDANCE WITH CHAPTER 20 - ENVIRONMENTAL PROTECTION, OF THE MAUI COUNTY CODE, AND AS SHOWN ON THE APPROVED PLANS.
- THE CONTRACTOR SHALL KEEP A COPY OF THE APPROVED BMP, NOI, ETC. ON THE PROJECT SITE. THE BMP SHALL BE UPDATED TO REFLECT ANY CHANGES MADE DURING THE COURSE OF CONSTRUCTION FOR THE DURATION OF THE PROJECT.
- THE STATE MAY ASSESS LIQUIDATED DAMAGES OF UP TO \$27,000 FOR NONCOMPLIANCE OF EACH BMP REQUIREMENT AND EACH REQUIREMENT STATED IN SECTION 209, FOR EVERYDAY OF NON-COMPLIANCE. THERE IS NO MAXIMUM LIMIT ON THE AMOUNT ASSESSED PER DAY.
- THE STATE MAY DEDUCT THE COST FROM THE PROGRESS PAYMENT FOR ALL CITATIONS RECEIVED FOR NON COMPLIANCE, OR THE CONTRACTOR SHALL REIMBURSE THE STATE, AND/OR COUNTY FOR THE FULL AMOUNT OF THE OUTSTANDING COST INCURRED BY THE STATE. WHICHEVER IS GREATER.

### WASTE DISPOSAL:

- WASTE MATERIALS: ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER THAT DOES NOT BREAK/LEAK. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL CONSTRUCTION TRASH AND DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER SHALL BE EMPTIED A MINIMUM OF TWICE PER WEEK OR AS OFTEN AS IS DEEMED NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ONSITE. THE CONTRACTOR'S SUPERVISORY PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES SHALL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR SHALL BE RESPONSIBLE TO SEE THAT THESE PROCEDURES ARE FOLLOWED.
- SANITARY WASTE: ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK, OR MORE FREQUENTLY AS REQUIRED.

### EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS FOLLOWING ANY RAINFALL OF 0.5 INCHES OR GREATER.
- ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS AFTER THE INSPECTION.
- BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT BARRIER AND FILTER SOCKS, WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE BARRIER.
- SILT BARRIER SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO VERIFY THAT THE FABRIC IS SECURED TO THE SANDBAGS.
- TEMPORARY AND PERMANENT SEEDING AND PLANTING SHALL BE INSPECTED FOR BARE SPOTS, WASH OUTS AND HEALTHY GROWTH.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A MAINTENANCE INSPECTION REPORT PROMPTLY AFTER EACH WEEKLY INSPECTION.
- THE CONTRACTOR SHALL SELECT A MINIMUM OF THREE PERSONNEL WHO SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- PERSONNEL SELECTED FOR THE INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL RECEIVE TRAINING FROM THE CONTRACTOR. THEY SHALL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING CONDITIONS.
- ALL SLOPES AND EXPOSED AREAS SHALL BE GRASSED OR PERMANENTLY STABILIZED AS FINAL GRADES HAVE BEEN ESTABLISHED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA IN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED OR EXPOSED FOR MORE THAN 15 DAYS SHALL BE GRASSED OR PERMANENTLY STABILIZED IN ORDER TO PREVENT DUST, EROSION, AND SILT RUNOFF. AREAS WITH IMPORTED SOILS SHALL BE GRASSED OR PERMANENTLY STABILIZED NO MORE THAN 5 WORKING DAYS AFTER THE FINAL GRADES HAVE BEEN ESTABLISHED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN PLACE AND ESTABLISHED.

## WATER POLLUTION AND EROSION CONTROL NOTES (CONT)

### GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES

#### MATERIALS POLLUTION PREVENTION PLAN:

- APPLICABLE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION. OTHER MATERIALS AND SUBSTANCES NOT LISTED BELOW SHALL BE ADDED TO THE INVENTORY OR TO THE CONSTRUCTION CONTRACTOR'S SITE-SPECIFIC BMP PLAN.
 

CONCRETE	FERTILIZER
DETERGENTS	PETROLEUM BASED PRODUCTS
PAINTS (ENAMEL AND LATEX)	CLEANING SOLVENTS
METAL STUDS	WOOD
TAR	MASONRY BLOCKS
- MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCTS AS IS REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE.
- PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- A PRODUCT SHALL BE USED UP COMPLETELY BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURER'S RECOMMENDATION FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

### HAZARDOUS MATERIAL POLLUTION PREVENTION PLAN:

- PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT REUSABLE.
- ORIGINAL LABELS AND MATERIALS SAFETY DATA SHEETS (MSDS) SHALL BE RETAINED AND MADE AVAILABLE TO ENGINEER UPON REQUEST.
- SURPLUS PRODUCTS SHALL BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR LOCAL AND STATE RECOMMENDED ACTIONS.

### ONSITE AND OFFSITE PRODUCT SPECIFIC PLANS:

- PETROLEUM BASED PRODUCTS: ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE SHALL BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATION.

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

- THIS PROJECT DISTURBS ONE (1) ACRE OR MORE OF LAND. COMPLY WITH ALL REQUIREMENTS OF THE NPDES GENERAL PERMIT FOR DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES, AS ADMINISTERED BY THE DEPARTMENT OF HEALTH, STATE OF HAWAII (DOH) PURSUANT TO HAR CHAPTER 11-55 APPENDICES A AND C.
  - DO NOT COMMENCE CONSTRUCTION UNTIL NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM DOH.
  - A SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED FOR THIS PROJECT. THE CONTRACTOR SHALL IMPLEMENT, MAINTAIN, AND INSPECT ALL BEST MANAGEMENT PRACTICES (BMPs) AS DETAILED IN THE SWPPP AND SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS.
  - A COPY OF THE NOTICE OF INTENT (NOI), NGPC, AND SWPPP SHALL BE KEPT ON-SITE AT ALL TIMES AND MADE AVAILABLE UPON REQUEST.
  - DOCUMENT MODIFICATIONS TO BMPs AND CHANGES IN SITE CONDITIONS IN THE SWPPP IN ACCORDANCE WITH PERMIT REQUIREMENTS.
  - THE CONTRACTOR SHALL ENSURE THAT NO UNAUTHORIZED NON-STORMWATER OR POLLUTED STORM WATER DISCHARGES LEAVE THE PROJECT SITE.
- PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL ADDITIONAL DOH PERMITS REQUIRED DUE TO CONTRACTOR OPERATIONS. THESE MAY INCLUDE, BUT ARE NOT LIMITED TO: NPDES NOTICE OF INTENT AND GENERAL PERMIT COVERAGE FOR DISCHARGES OF HYDROTESTING WATERS AND DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY DEWATERING.

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b>					
<b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>					
<b>DIVISION OF BOATING AND OCEAN RECREATION</b>					
<b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
GENERAL NOTES					
<b>KAULA AE, LLC</b>					
DESIGNED: AT			SUBMITTED:		
DRAWN: JL			DATE:		
CHECKED: JN			SCALE: NONE		
APPROVED:					DRAWING NO.
ADMINISTRATOR					<b>G-1</b>
DATE					

### GRADING NOTES

- ALL GRADING WORK SHALL CONFORM TO CHAPTER 20.08 OF THE MAUI COUNTY CODE.
- REMOVE ALL SILT AND DEBRIS DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS RESULTING FROM HIS WORK. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE OWNER SHALL BE PAYABLE BY THE CONTRACTOR.
- AT CONTRACTOR'S OWN EXPENSE, KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFIRMATIVE WITH APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 55, WATER POLLUTION CONTROL AND CHAPTER 54, WATER QUALITY STANDARDS, AND THE SOIL EROSION AND SEDIMENTATION CONTROL STANDARDS AND GUIDELINES OF THE DEPARTMENT OF PUBLIC WORKS, MAUI COUNTY.
- INFORM DLNR OF THE LOCATIONS OF THE DISPOSAL AND/OR BORROW SITE(S) REQUIRED FOR THIS PROJECT. THE DISPOSAL AND/OR BORROW SITE(S) MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR APPROVAL FROM THE DLNR DOBOR. GRADING WORK ON NORMAL WORKING DAYS SHALL BE BETWEEN THE HOURS OF 7:00 AM TO 3:30 PM.
- FILLS FOR ROADWAY SHALL BE COMPACTED TO 90 PERCENT (90%) OF MAXIMUM DENSITY PER ASTM D1557 TEST.
- VERIFY ALL LINES, LEVELS, ELEVATIONS, AND IMPROVEMENTS INDICATED ON THE DRAWINGS BEFORE ANY CLEARING, EXCAVATION OR CONSTRUCTION BEGINS. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER AND ANY CHANGE SHALL BE MADE IN ACCORDANCE WITH HIS INSTRUCTION. STARTING OF CLEARING AND GRUBBING OPERATIONS SHALL BE CONSTRUED TO MEAN THE CONTRACTOR AGREES THAT THE EXISTING GRADES AND IMPROVEMENTS ARE ESSENTIALLY CORRECT AS SHOWN. THE CONTRACTOR SHALL NOT BE ENTITLED TO EXTRA PAYMENT IF EXISTING GRADES AND IMPROVEMENTS ARE IN ERROR AFTER HIS VERIFICATION THEREOF, OR IF HE FAILS TO REPORT THE DISCREPANCIES BEFORE PROCEEDING WITH ANY WORK WHETHER WITHIN AREA AFFECTED OR NOT.

### ABBREVIATIONS

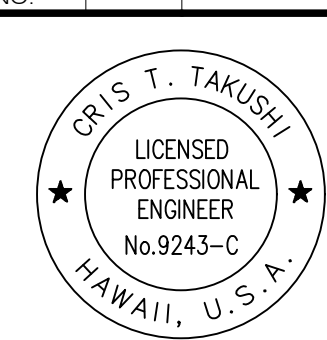
AC	ASPHALT CONCRETE	N	NORTHING
ADA	AMERICANS WITH DISABILITY ACT	NIC	NOT IN CONTRACT
APPROX	APPROXIMATE	NTS	NOT TO SCALE
ARV	AIR RELEASE VALVE	OC	ON CENTER
AWWA	AMERICAN WATERWORKS ASSOCIATION	OD	OUTSIDE DIAMETER
B	BOLE / BOTTOM	OH/U	OVERHEAD UTILITY
BC	BOTTOM OF CURB	PAVT	PAVEMENT
BB	BOTTOM BANK	PC	POINT OF CURVATURE
BLDG	BUILDING	PCC	POINT OF COMPOUND CURVE
BM	BENCHMARK		PORTLAND CEMENT CONCRETE
BMP	BEST MANAGEMENT PRACTICES	PI	POINT OF INTERSECTION
BOT	BOTTOM	PRC	POINT OF REVERSE CURVE
BV	BOTTOM VERTICAL	PT	POINT OF TANGENCY, POINT
BVC	BEGIN VERTICAL CURVE	PVI	POINT OF VERTICAL INTERSECTION
BW	BOTTOM WALL	PVC	POLYVINYL CHLORIDE
		PSI	POUNDS PER SQUARE INCH
C / CONC	CONCRETE	R	RADIUS, RIDGE
CCJ	CRACK CONTROL JOINTS	RCJ	REINFORCED CONCRETE JACKET
ε	CENTERLINE	REINF	REINFORCED
CF	CUBIC FEET	REQD	REQUIRED
CH	CHORD LENGTH (CURVE)	RP	RADIUS POINT
CLF	CHAIN LINK FENCE	RPM	RAISED PAVEMENT MARKER
CMU	CONCRETE MASONRY UNIT	Rt	RIGHT
CO	CLEANOUT	ROW	RIGHT-OF-WAY
CONT.	CONTINUOUS	S=	SLOPE
CP	CONTROL POINT	SF	SQUARE FEET
CRM	CONCRETE ROCK MASONRY	SMH	SEWER MANHOLE
CY	CUBIC YARD	SN	SIGN
		STD	STANDARD
Ø, DIA	DIAMETER	STA	STATION / CONTROL
DI	DUCTILE IRON	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
DLNR	DEPARTMENT OF LAND AND NATURAL RESOURCE	SY	SQUARE YARD
DOBOR	DIVISION OF BOATING AND OCEAN RECREATION	T	TOP
DOFAW	DIVISION OF FORESTRY AND WILDLIFE	TC	TOP OF CURB
DPW	DEPARTMENT OF PUBLIC WORKS	TD	TOP DIRT
DWG(S)	DRAWINGS	TMK	TAX MAP KEY
DWS	DEPARTMENT OF WATER SUPPLY	TN	TRUE NORTH
D/W	DRIVEWAY	TRANS.	TRANSITION
E	EAST, EASTING	TS	TOP OF STEM
EA	EACH	TW	TOP WALL
EC	END CURVE	TYP	TYPICAL
EG	EXISTING GROUND	UBX	UTILITY BOX
ELEC	ELECTRIC, ELECTRICAL	UL	UNDERWRITERS LABORATORIES
ELEV, EL	ELEVATION	UP	UTILITY POLE
EM	ELECTRIC METER	USPL	UTILITY POLE WITH STREET LIGHT
EPIM	EDGE OF PAVEMENT MARKING	V, VER, VERT	VERTICAL
EVC	END VERTICAL CURVE	VC	VERTICAL CURVE
EW	EACH WAY	W	WIDTH
EXIST	EXISTING	W/	WITH
EXP JT	EXPANSION JOINT	WD	WOOD
EQ	EQUAL	WL	WATERLINE
		WM	WATER METER
FF	FINISH FLOOR	W.W.F.	WELDED WIRE FABRIC
FG	FINISH GRADE	WV	WATER VALVE
FH	FIRE HYDRANT		
FT	FEET		
G, GRD	GROUND		
GB	GRADE BREAK		
GP	GUARD POST / BOLLARDS		
GUY	GUY WIRE ANCHOR		
H	HEIGHT		
H=	APPROXIMATE HEIGHT		
HORIZ	HORIZONTAL		
IBX	IRRIGATION BOX		
ICV	IRRIGATION CONTROL VALVE		
ID	INSIDE DIAMETER		
IN	INCH(ES)		
INV	INVERT		
ISA	INTERNATIONAL SYMBOL OF ACCESS		
L	LEFT, LENGTH		
LB	POUND		
Lc	LENGTH OF CURVE (CURVE LENGTH)		
LF	LINEAR FEET		
LP	LIGHT POLE		
MAX	MAXIMUM		
MIN	MINIMUM		
MON	MONUMENT		

### LEGEND

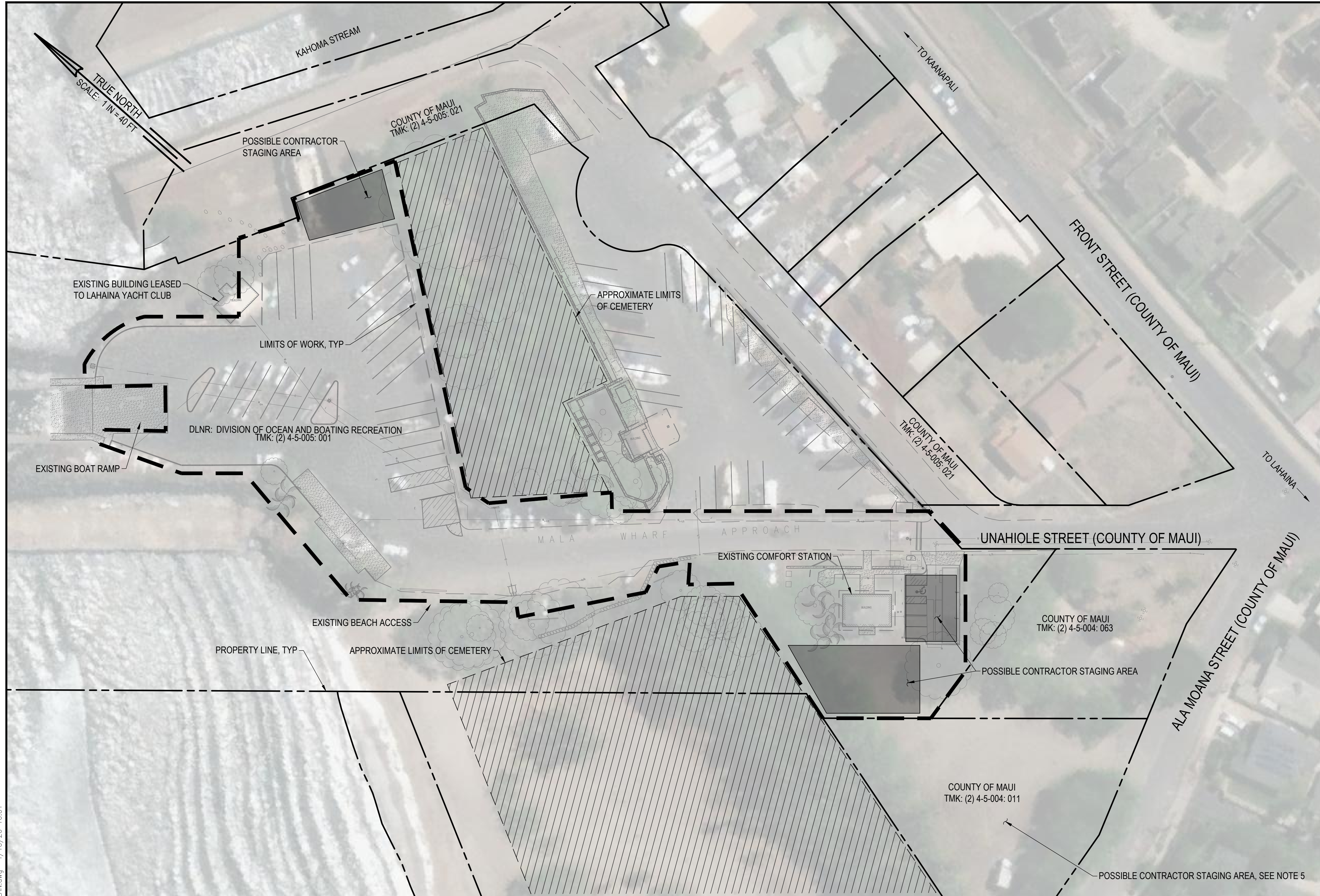
	EXISTING	NEW
PROPERTY LINE	---	---
BENCHMARK	△	△
LIMITS OF WORK	---	---
CONTOUR	--- 10 ---	--- 10 ---
SPOT ELEVATION	9.14	9.50 PAVT
BUILDING	[Hatched Box]	[Hatched Box]
AC PAVEMENT	[Pattern]	[Pattern]
CONCRETE PAVEMENT	[Pattern]	[Pattern]
CONCRETE ROCK MASONRY WALL	[Pattern]	[Pattern]
CONCRETE JERSEY BARRIER	[Pattern]	[Pattern]
SIGN	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
TREE	[Symbol]	[Symbol]
OVERHEAD	o/h	o/h
SEWER LINE W/ SIZE	S <sub>4</sub>	S <sub>4</sub>
SEWER MANHOLE	[Symbol]	[Symbol]
DRAIN LINE W/ SIZE	D <sub>6</sub>	D <sub>6</sub>
DRAIN MANHOLE	[Symbol]	[Symbol]
TRENCH DRAIN	[Symbol]	[Symbol]
WATER MANHOLE	[Symbol]	[Symbol]
WATER VALVE	[Symbol]	[Symbol]
WATER SERVICE LINE W/ SIZE	W <sub>3/4</sub>	W <sub>1-1/2</sub>
HOSE BIBB	[Symbol]	[Symbol]
BACKFLOW PREVENTER	[Symbol]	[Symbol]
FIRE HYDRANT	[Symbol]	[Symbol]

CAD DWG. NO.: B48CM75A - G-2 NOTES, LEGEND AND ABBREVIATIONS.dwg 4/10/26 16:01

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b>					
<b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
GENERAL NOTES, LEGEND AND ABBREVIATIONS					
<b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	NONE		
APPROVED:			DRAWING NO.		<b>G-2</b>
ADMINISTRATOR			DATE		



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 BY: *Cris Takushi*  
 DATE: APRIL 13, 2026  
 APRIL 30, 2028  
 EXPIRATION DATE OF THE LICENSE



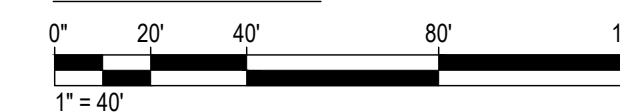
**PHASING AND ACCESS NOTES:**

1. PHASE AND SEQUENCE THE WORK TO MAINTAIN PUBLIC ACCESS TO THE BOAT RAMP DURING CONSTRUCTION. MINIMIZE THE EXTENT AND DURATION OF TIME THE BOAT RAMP WILL BE INACCESSIBLE. PROVIDE AT LEAST 14 DAYS WRITTEN NOTICE TO DLNR DOBOR PRIOR TO ANY SHUTDOWN ACTIVITY. PROPOSED ACTIVITY SHALL NOT PROCEED WITHOUT WRITTEN ACCEPTANCE FROM DLNR DOBOR.
2. SUBMIT A WRITTEN NARRATIVE AND CONSTRUCTION SCHEDULE IDENTIFYING THE WORK SEQUENCE AT LEAST 30 DAYS PRIOR TO COMMENCING WORK.
3. COORDINATE TEMPORARY STAGING AND LAYDOWN AREA(S) WITH DLNR DOBOR DISTRICT MANAGEMENT.
4. RESTORE STAGING AND LAYDOWN AREAS TO EXISTING OR BETTER CONDITION.
5. OBTAIN ANY REQUIRED APPROVALS AND PERMITS FOR USE OF STAGING AND LAYDOWN AREA ON LAND NOT OWNED BY DLNR DOBOR.
6. DURING COMFORT STATION RENOVATIONS WHEN RESTROOM FACILITIES ARE UNAVAILABLE FOR PUBLIC USE, PROVIDE TEMPORARY PORTABLE TOILETS FACILITIES AT THE DIRECTION OF THE ENGINEER. COORDINATE WITH DLNR DOBOR DISTRICT MANAGEMENT.

**PHASING, ACCESS AND STAGING PLAN**

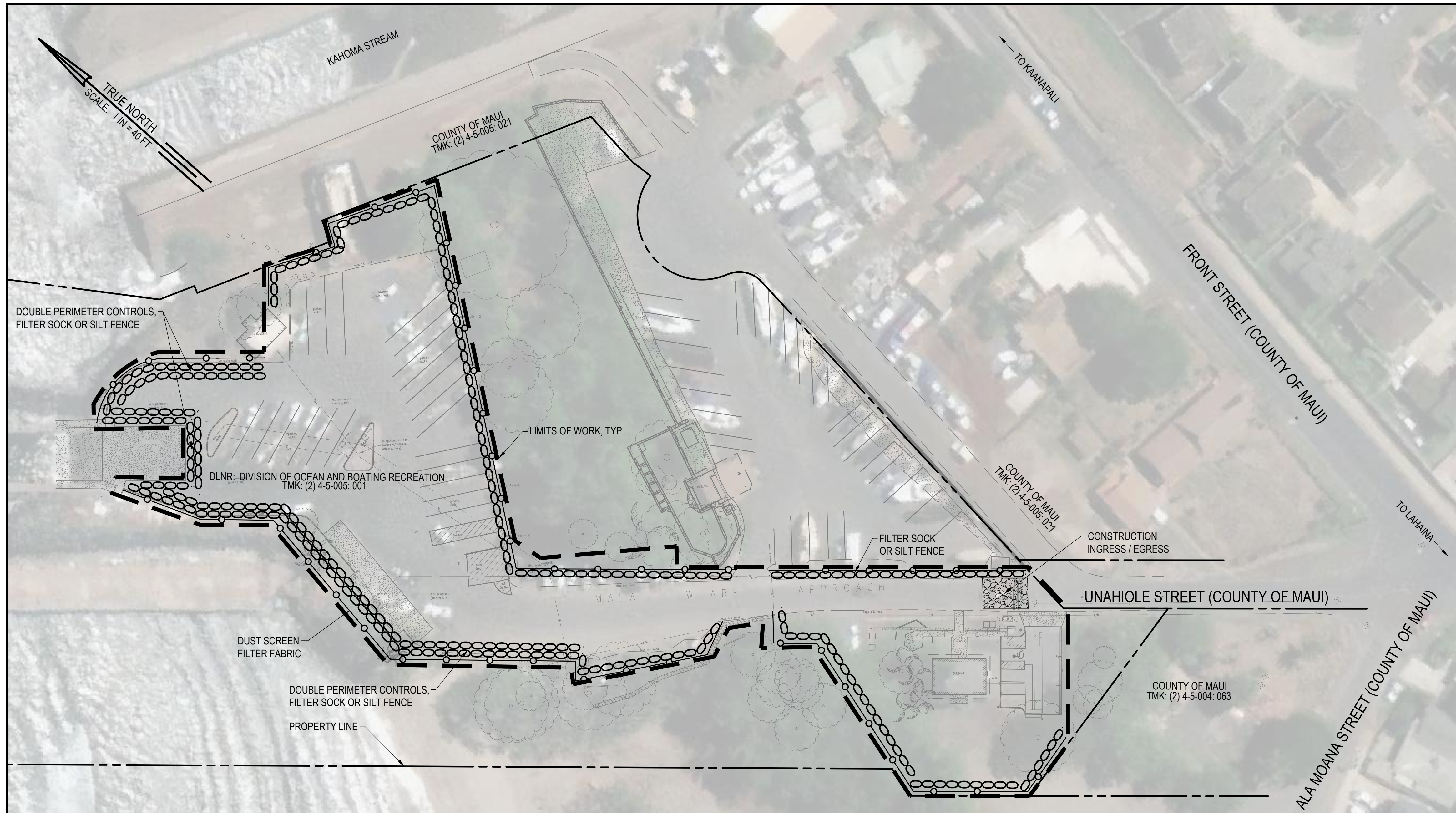
SCALE: 1" = 40'

**GRAPHIC SCALE**



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<p><b>STATE OF HAWAII</b>  <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>  <b>DIVISION OF BOATING AND OCEAN RECREATION</b></p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p><b>PHASING, ACCESS AND STAGING PLAN</b></p> <p><b>KAULA AE, LLC</b></p>					
<p>DESIGNED: AT</p> <p>DRAWN: JL</p> <p>CHECKED: JN</p> <p>APPROVED: _____</p> <p>ADMINISTRATOR</p>			<p>SUBMITTED: _____</p> <p>DATE: _____</p> <p>SCALE: 1" = 40'</p> <p>DATE: _____</p> <p>DATE</p>		
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.</p> <p>BY: <i>Cris Takushi</i></p> <p>DATE: APRIL 13, 2026</p> <p>APRIL 30, 2028</p> <p>EXPIRATION DATE OF THE LICENSE</p>					<p>DRAWING NO.</p> <p><b>G-3</b></p>

CAD DWG NO.: B48CM75A - G-3 PHASING, ACCESS AND STAGING PLAN.dwg 4/10/26 16:01

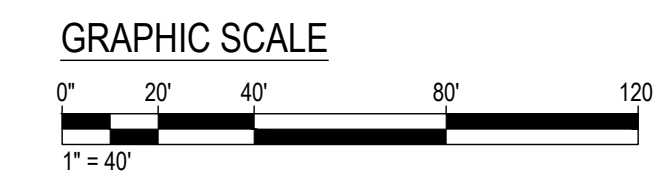


**LEGEND**

	PROPERTY LINE
	EXISTING CONTOUR
	PROPOSED DRAINAGE FLOW
	AREA OF WORK / LIMITS OF DISTURBANCE
	STABILIZED CONSTRUCTION ENTRANCE / EXIT
	PERIMETER CONTROL FILTER SOCK / SILT FENCE
	DUST SCREEN FILTER FABRIC

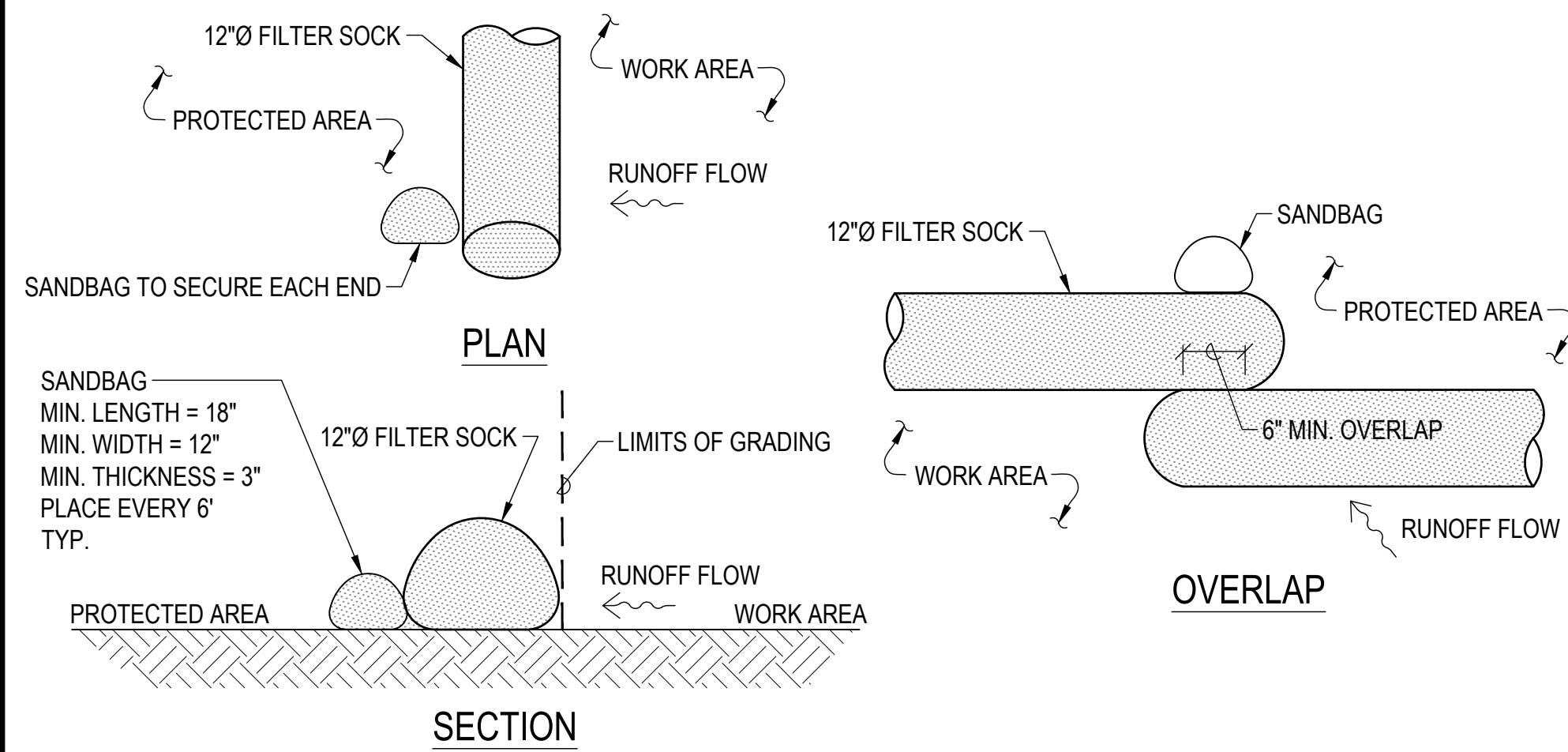
- EROSION & SEDIMENT CONTROL NOTES:**
- CONTRACTOR SHALL COORDINATE WITH DLNR DOBOR DISTRICT MANAGEMENT TO ENSURE THE WORK AND EROSION AND SEDIMENT CONTROL MEASURES ACCOMMODATE BOAT RAMP OPERATIONS AND BEACH ACCESS.
  - ADD ADDITIONAL BMPs TO FACILITATE DIFFERENT PHASES OF CONSTRUCTION OR TO ACCOMMODATE CONTRACTOR'S MEANS AND METHODS. TRACK ADDITIONAL BMPs AND DIFFERENT PHASES IN THE PROJECT'S SWPPP.
  - DURING CONSTRUCTION, PROVIDE INLET PROTECTION FOR THE TRENCH DRAIN, SEE DETAIL

**EROSION AND SEDIMENT CONTROL PLAN**  
SCALE: 1" = 40'

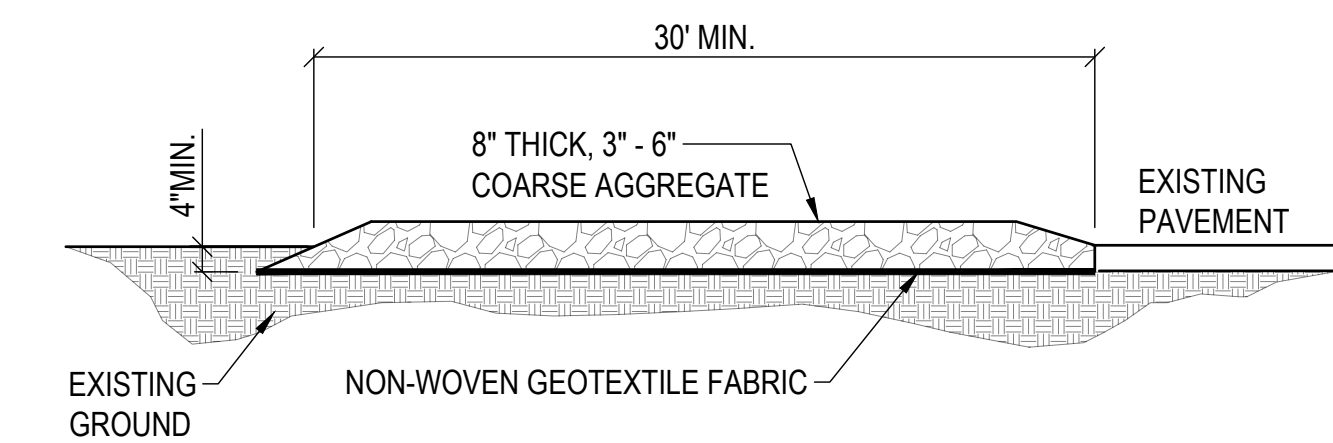


CAD DWG NO.: B48CM75A - G-4 EROSION AND SEDIMENT CONTROL PLAN.dwg 4/10/26 16:02

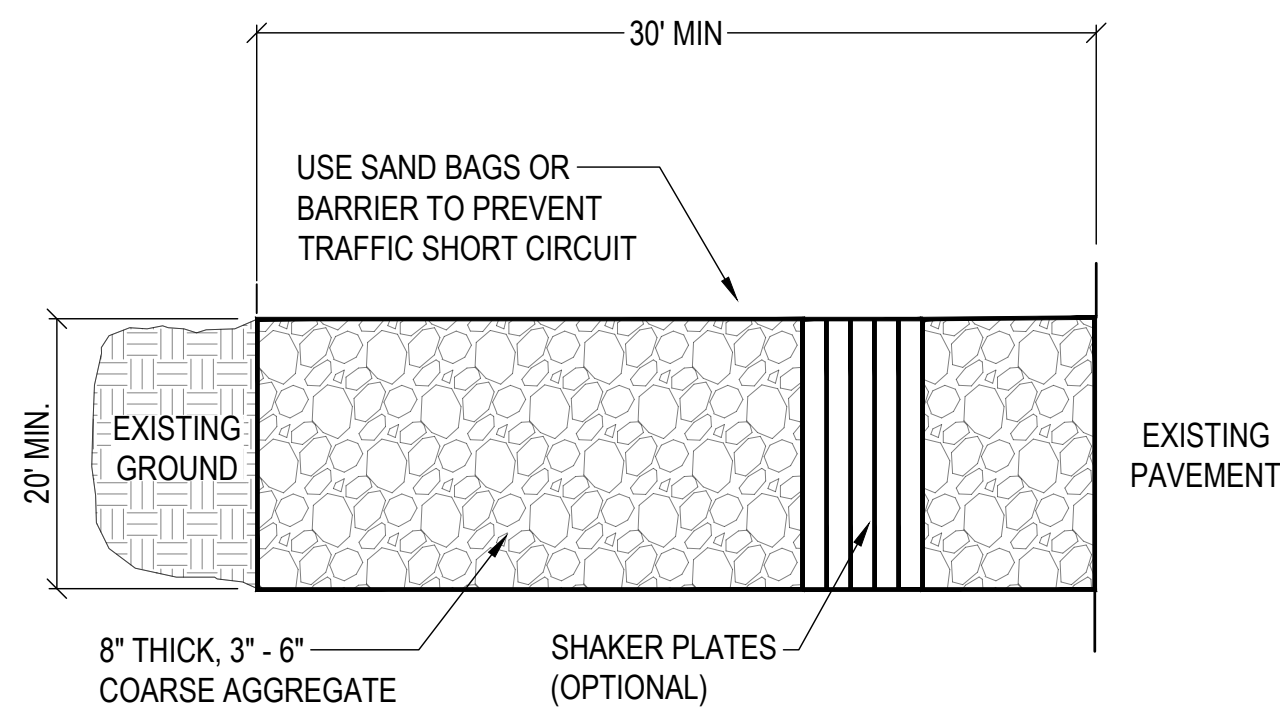
REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<p><b>STATE OF HAWAII</b>  <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>  <b>DIVISION OF BOATING AND OCEAN RECREATION</b></p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p><b>EROSION AND SEDIMENT CONTROL PLAN</b></p> <p><b>KAULA AE, LLC</b></p>					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.</p> <p>BY: <i>Cris Takushi</i></p> <p>DATE: APRIL 13, 2026</p> <p>APRIL 30, 2028</p> <p>EXPIRATION DATE OF THE LICENSE</p>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	1" = 40'		
APPROVED:					DRAWING NO.
ADMINISTRATOR					<b>G-4</b>
				DATE	



**1 FILTER SOCK DETAIL**  
SCALE: NTS



PROFILE

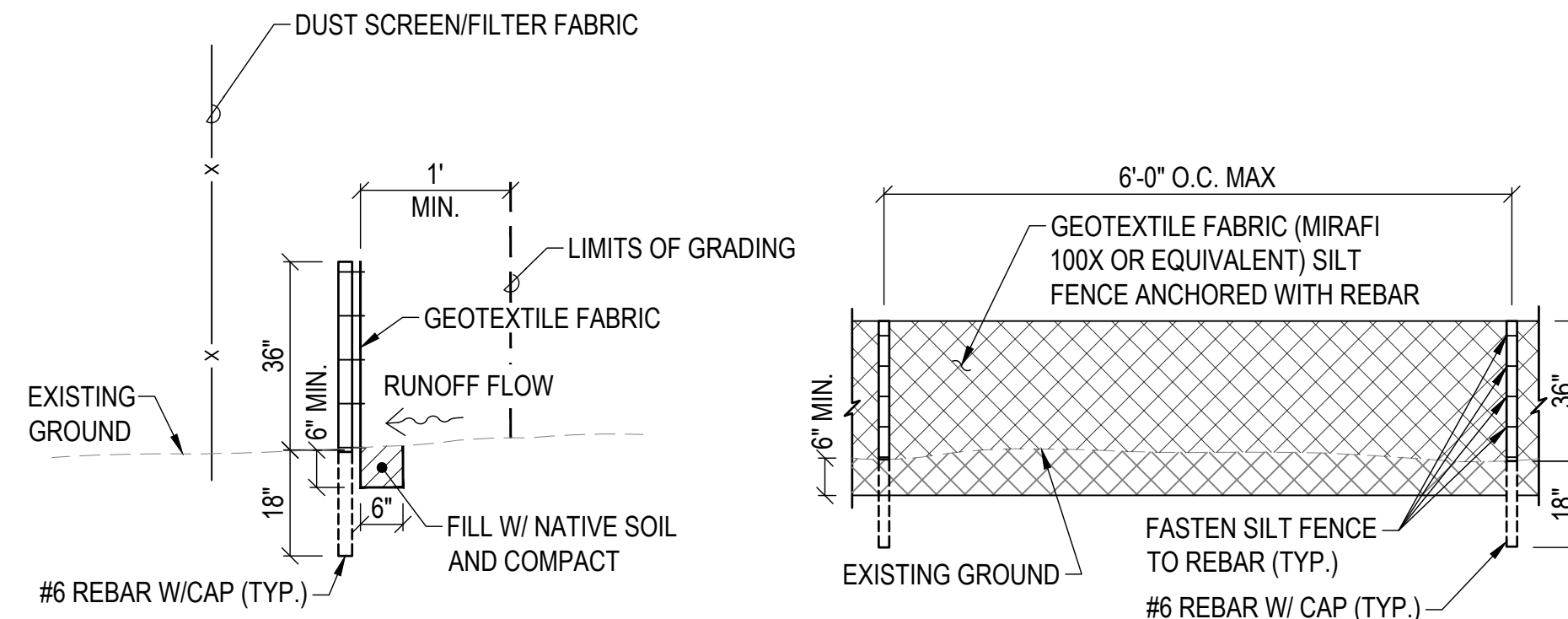


PLAN VIEW

**NOTES:**

1. STONE - 3"-6" COARSE AGGREGATE.
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 30 FEET.
3. WIDTH - AS EFFECTIVE, BUT NOT LESS THAN 20 FEET.
4. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO ADJACENT PAVED AREAS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ADJACENT PAVED AREAS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT OR CONSTRUCTION MATERIALS SPILLED, DROPPED, WASHED OR TRACKED ONTO ADJACENT PAVED ROAD SURFACES MUST BE REMOVED IMMEDIATELY.

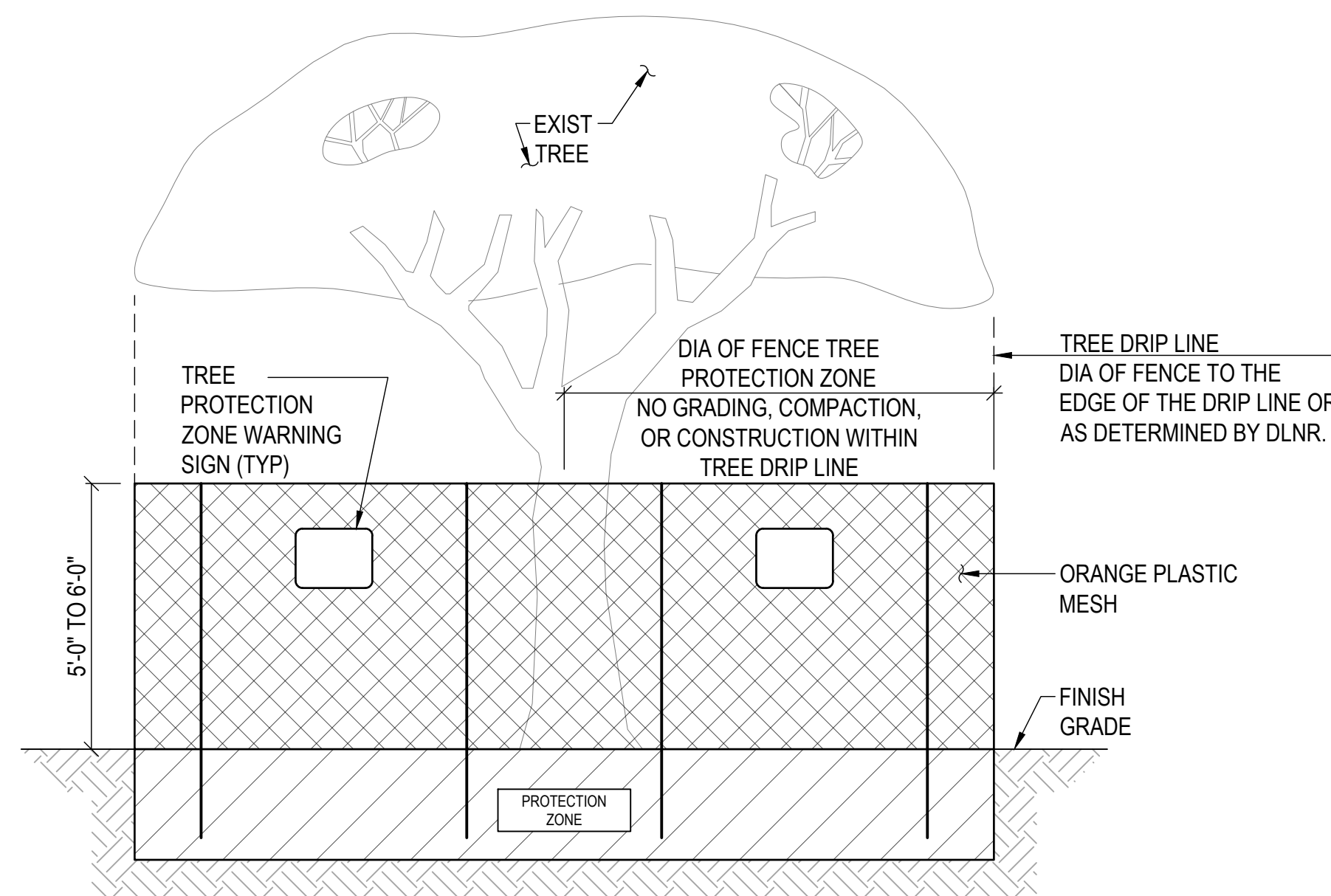
**3 STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
SCALE: NTS



SECTION

ELEVATION

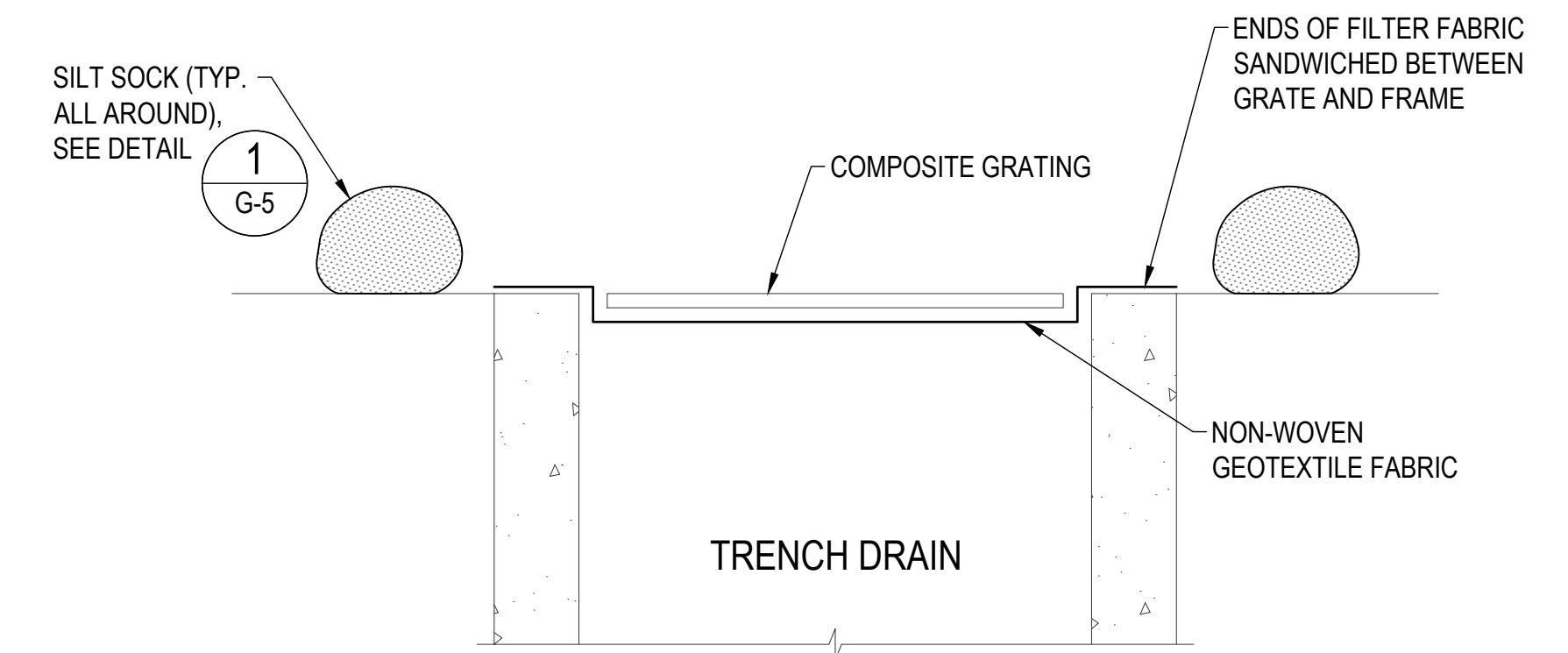
**2 SILT FENCE DETAIL**  
SCALE: NTS



**TREE PROTECTION ZONE FENCE NOTES:**

1. FOR TREES THAT ARE IN NARROW PLANTING STRIPS, THE ENTIRE PLANTING STRIP SHALL BE ENCLOSED.
2. FOR TREE WELLS AND SMALL PLANTER AREAS THAT ARE FULL OF ROOTS, USE PLASTIC TRAFFIC BARRICADES (WATER FILLABLE) MINIMUM (3) EACH, OR TYPE 1 OR TYPE 2 BARRICADES, MINIMUM (4) EACH OR AS DETERMINED BY DLNR.
3. TREE WILL REQUIRE SUPPLEMENTAL WATERING.
4. IF THE FENCE IS INSIDE THE DRIP LINE, PLYWOOD BOARDS OR STEEL PLATES OR HEAVY DUTY GROUND PROTECTION MATS OVER AN 8" MULCH LAYER WILL BE REQUIRED TO PROTECT THE TREE ROOTS AND CONSTRUCTION EQUIPMENT VEHICLES.
5. 2" GALVANIZED IRON POSTS, DRIVEN INTO THE GROUND TO MIN. 24" DEPTH, AT NO MORE THAN 10' SPACING.
6. AVOID DAMAGING ROOTS DURING FENCE POST INSTALLATION.

**4 TREE PROTECTION DETAIL**  
SCALE: NTS



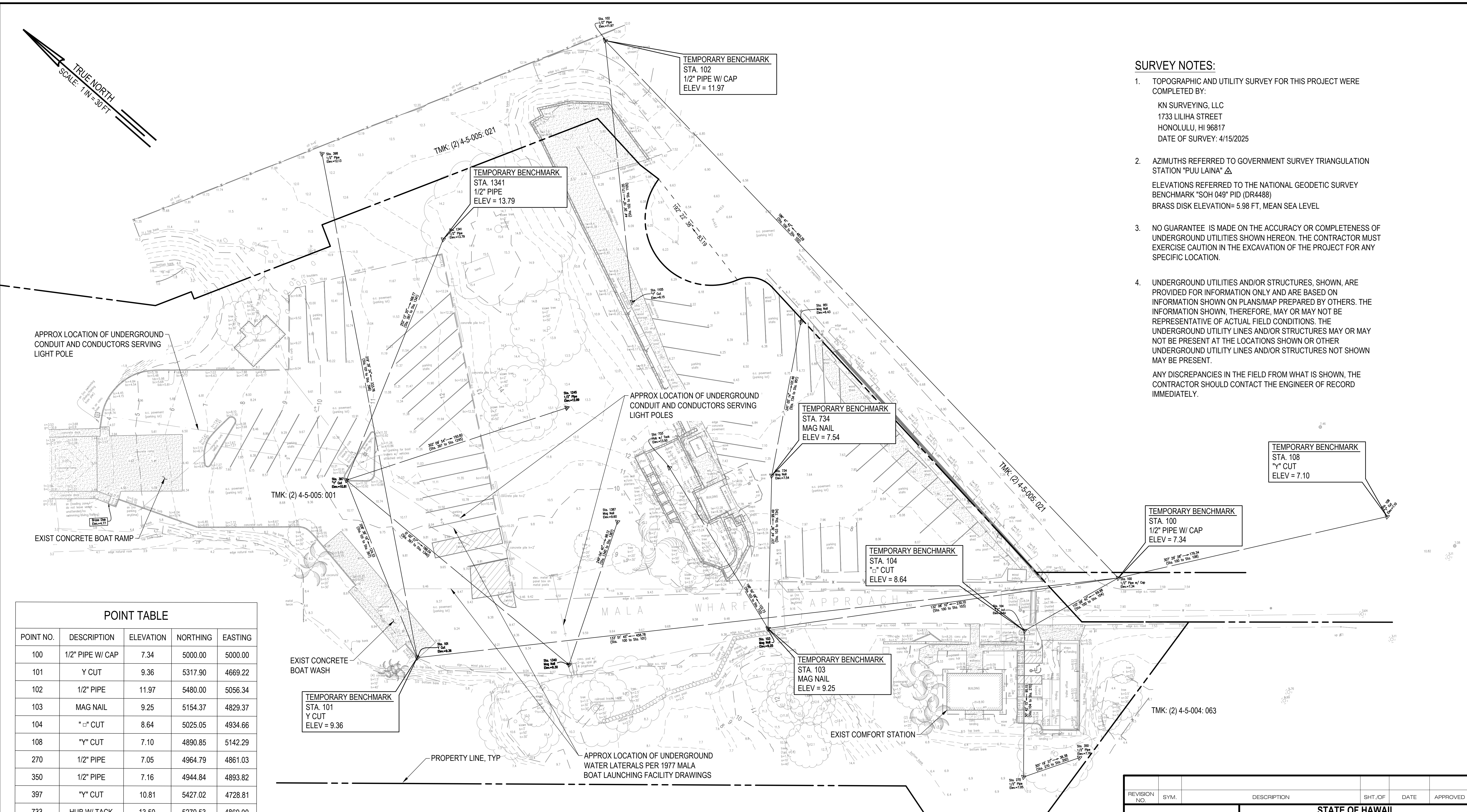
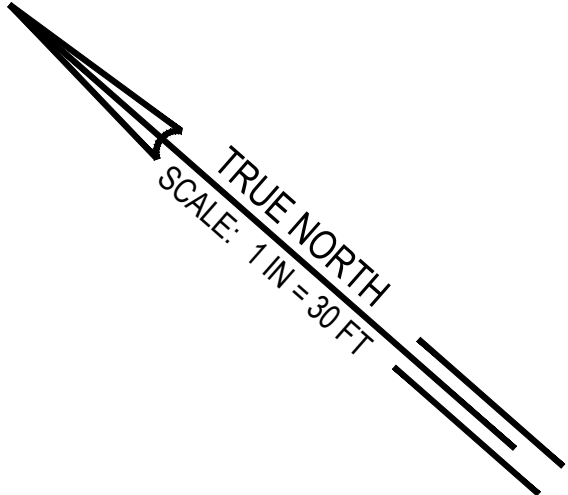
**NOTES:**

1. INSTALL THE SEDIMENT CONTROL FILTERS ONE DAY PRIOR TO EXCAVATION WORK NEAR THE TRENCH DRAIN AND WHEN THE TRENCH DRAIN MAY RECEIVE RUNOFF FROM ANY GROUND DISTURBANCE WORK. REMOVE THE SEDIMENT CONTROL FILTERS AFTER COMPLETION OF FINAL PAVING AND PERMANENT SEDIMENT CONTROL MEASURES ARE COMPLETE AND GRASSING IS FULLY ESTABLISHED.
2. CHECK THE CONDITION OF THE FILTER AT THE BEGINNING AND END OF EACH WORK DAY AND REPAIR/CLEAN AS NECESSARY.
3. REMOVE FILTERS AT TIMES OF ABOVE NORMAL RAINFALL EVENTS AND REPLACE THEM WHEN EVENT HAS PASSED.

**5 TRENCH DRAIN INLET PROTECTION**  
SCALE: NTS

CAD DWG. NO.: B48CM75A - G-5 EROSION CONTROL DETAILS.dwg 4/10/26 16:02

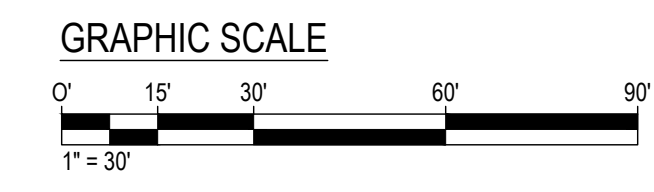
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b> <b>EROSION CONTROL DETAILS</b> <b>KAULA AE, LLC</b>					
DESIGNED: AT DRAWN: JL CHECKED: JN APPROVED: _____ ADMINISTRATOR			SUBMITTED: _____ DATE: _____ SCALE: NONE DATE: _____ DATE		
DATE: APRIL 13, 2026 APRIL 30, 2028 EXPIRATION DATE OF THE LICENSE					<b>DRAWING NO.</b> <b>G-5</b>



- SURVEY NOTES:**
- TOPOGRAPHIC AND UTILITY SURVEY FOR THIS PROJECT WERE COMPLETED BY:  
KN SURVEYING, LLC  
1733 LILIHA STREET  
HONOLULU, HI 96817  
DATE OF SURVEY: 4/15/2025
  - AZIMUTHS REFERRED TO GOVERNMENT SURVEY TRIANGULATION STATION "PUU LAINA" Δ  
ELEVATIONS REFERRED TO THE NATIONAL GEODETIC SURVEY BENCHMARK "SOH 049" PID (DR4488)  
BRASS DISK ELEVATION= 5.98 FT, MEAN SEA LEVEL
  - NO GUARANTEE IS MADE ON THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN HEREON. THE CONTRACTOR MUST EXERCISE CAUTION IN THE EXCAVATION OF THE PROJECT FOR ANY SPECIFIC LOCATION.
  - UNDERGROUND UTILITIES AND/OR STRUCTURES, SHOWN, ARE PROVIDED FOR INFORMATION ONLY AND ARE BASED ON INFORMATION SHOWN ON PLANS/MAP PREPARED BY OTHERS. THE INFORMATION SHOWN, THEREFORE, MAY OR MAY NOT BE REPRESENTATIVE OF ACTUAL FIELD CONDITIONS. THE UNDERGROUND UTILITY LINES AND/OR STRUCTURES MAY OR MAY NOT BE PRESENT AT THE LOCATIONS SHOWN OR OTHER UNDERGROUND UTILITY LINES AND/OR STRUCTURES NOT SHOWN MAY BE PRESENT.  
ANY DISCREPANCIES IN THE FIELD FROM WHAT IS SHOWN, THE CONTRACTOR SHOULD CONTACT THE ENGINEER OF RECORD IMMEDIATELY.

POINT TABLE				
POINT NO.	DESCRIPTION	ELEVATION	NORTHING	EASTING
100	1/2" PIPE W/ CAP	7.34	5000.00	5000.00
101	Y CUT	9.36	5317.90	4669.22
102	1/2" PIPE	11.97	5480.00	5056.34
103	MAG NAIL	9.25	5154.37	4829.37
104	"C" CUT	8.64	5025.05	4934.66
108	"Y" CUT	7.10	4890.85	5142.29
270	1/2" PIPE	7.05	4964.79	4861.03
350	1/2" PIPE	7.16	4944.84	4893.82
397	"Y" CUT	10.81	5427.02	4728.81
733	HUB W/ TACK	13.50	5270.53	4869.00
734	MAG NAIL	7.54	5215.97	4907.49
951	MAG NAIL	6.43	5265.02	4996.30
1105	"Y" CUT	6.15	5357.87	4936.59
1190	1/2" PIPE	12.13	5574.80	4882.18
1245	1/2" PIPE	12.89	5346.73	4856.49
1340	MAG NAIL	9.30	5238.99	4728.76
1341	1/2" PIPE	13.79	5478.54	4889.52
1387	MAG NAIL	9.60	5274.02	4820.41

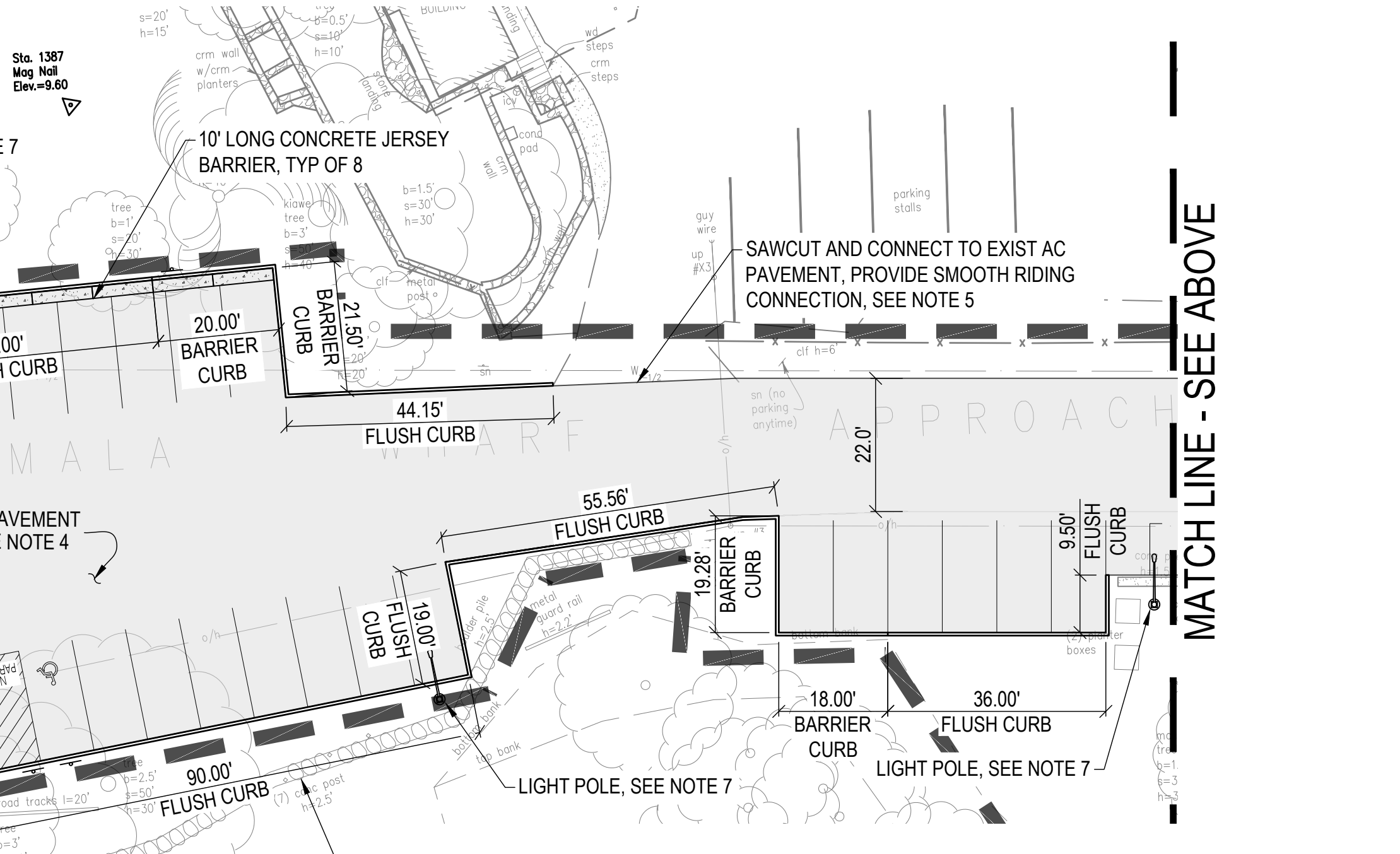
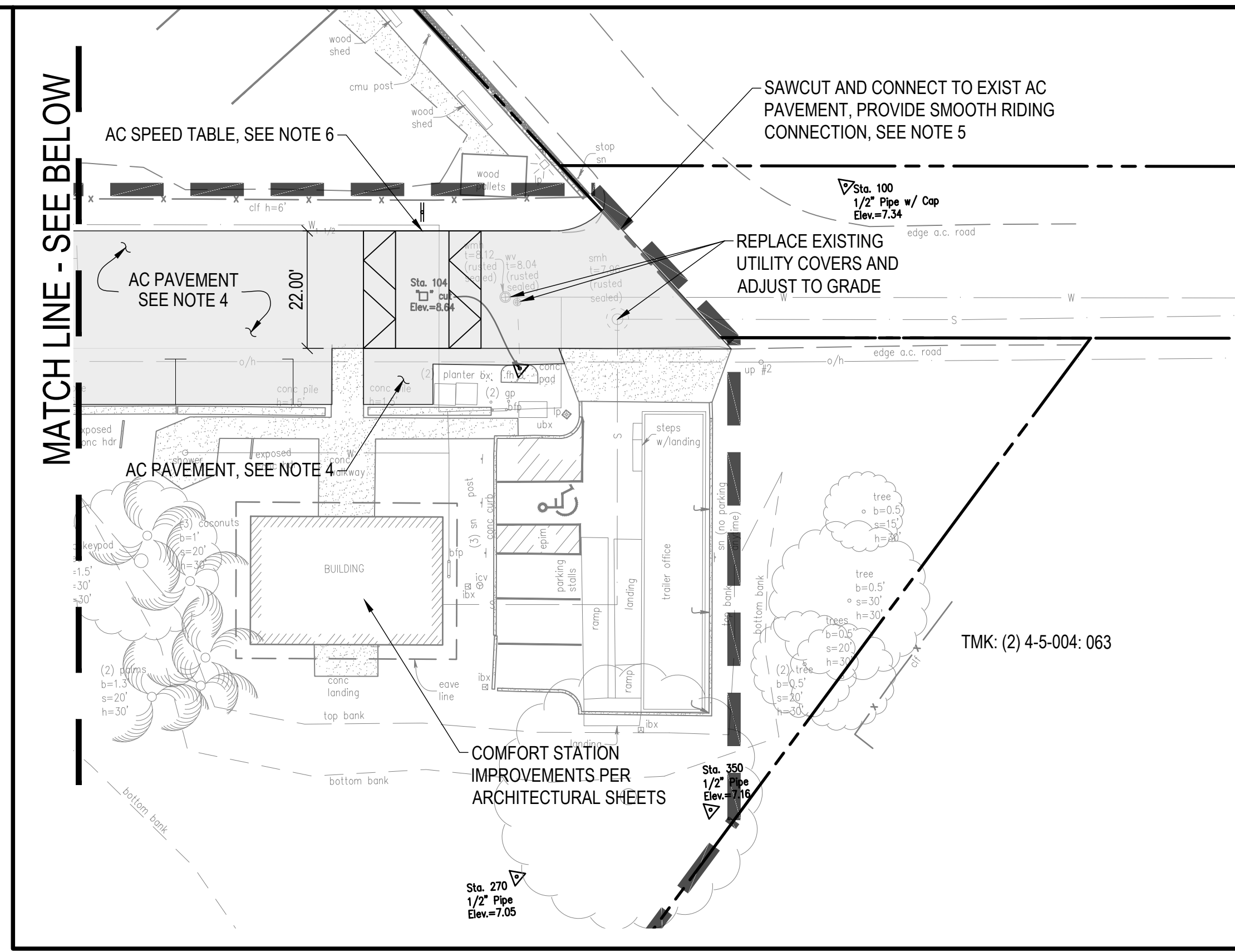
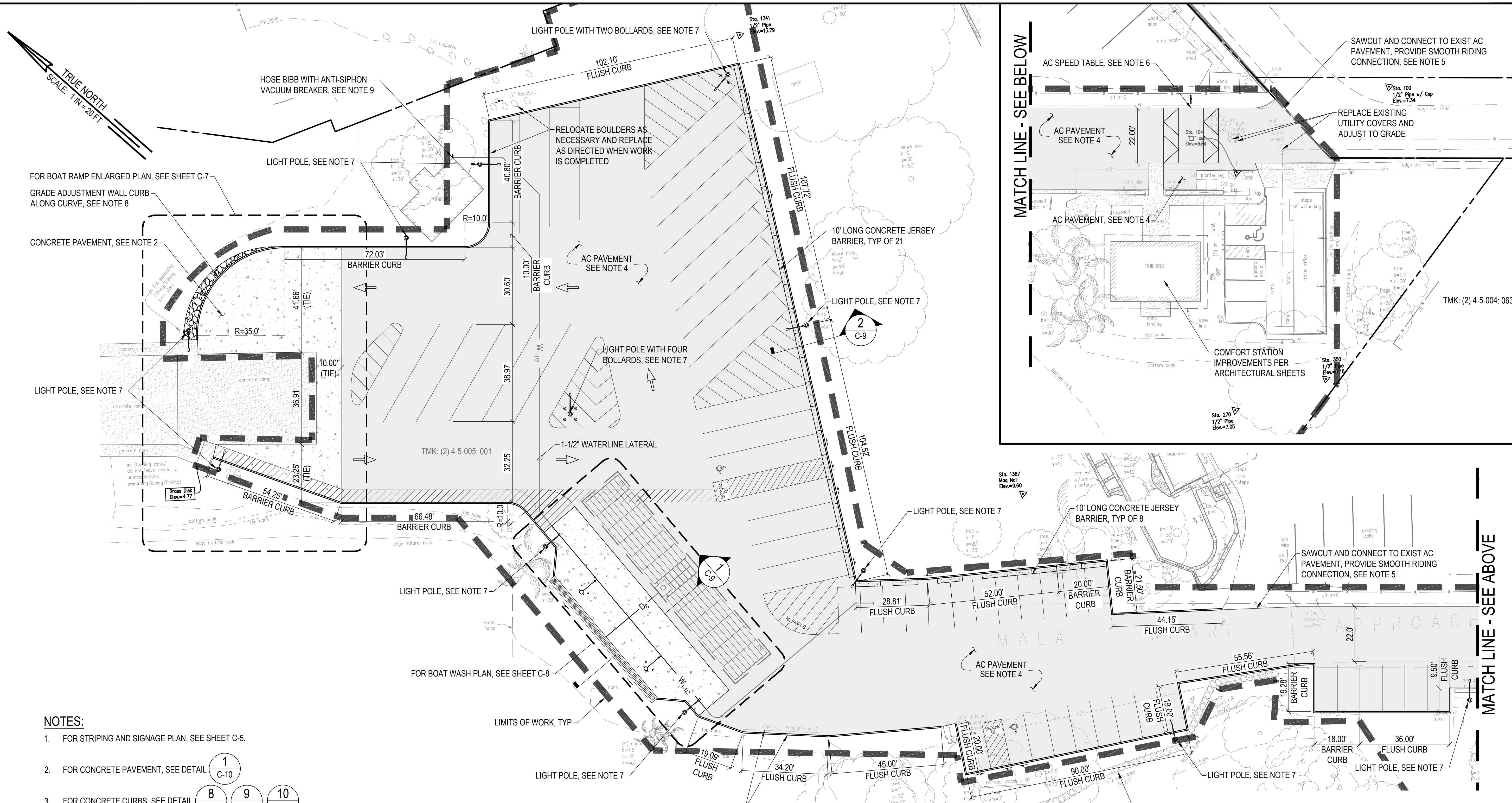
**EXISTING SITE PLAN - SURVEY CONTROLS**  
SCALE: 1" = 30'



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<p>STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF BOATING AND OCEAN RECREATION</p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p>EXISTING SITE PLAN - SURVEY CONTROLS</p> <p><b>KAULA AE, LLC</b></p>					
DESIGNED: AT			SUBMITTED:		
DRAWN: JL			DATE:		
CHECKED: JN			SCALE: 1" = 30'		
APPROVED:			DRAWING NO.		
ADMINISTRATOR			<b>C-1</b>		

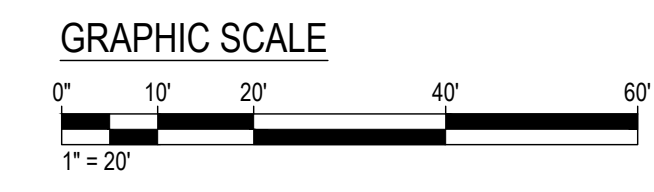
CAD DWG NO.: B48CM75A - C-1 EXISTING SITE PLAN - SURVEY CONTROLS.dwg 4/10/26 16:02





- NOTES:**
- FOR STRIPING AND SIGNAGE PLAN, SEE SHEET C-5.
  - FOR CONCRETE PAVEMENT, SEE DETAIL 1  
C-10
  - FOR CONCRETE CURBS, SEE DETAIL 8  
C-10 9  
C-10 10  
C-10
  - FOR AC PAVEMENT, SEE DETAIL 4  
C-10
  - FOR AC PAVEMENT TRANSITION, SEE DETAIL 5  
C-10
  - FOR AC SPEED TABLE, SEE DETAIL 11  
C-10
  - FOR SOLAR POWERED LIGHT POLE, SEE DETAIL 1  
C-16
  - FOR GRADE ADJUSTMENT WALL CURB, SEE DETAIL 7  
C-10
  - FOR HOSE BIBB, SEE DETAIL 3  
C-15

**SITE PLAN**  
SCALE: 1" = 20'



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<p><b>STATE OF HAWAII</b>  <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>  <b>DIVISION OF BOATING AND OCEAN RECREATION</b></p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p style="text-align: center;">SITE PLAN</p> <p style="text-align: center;"><b>KAULA AE, LLC</b></p>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	1" = 20'		
APPROVED:			DATE:		
ADMINISTRATOR			DATE:		

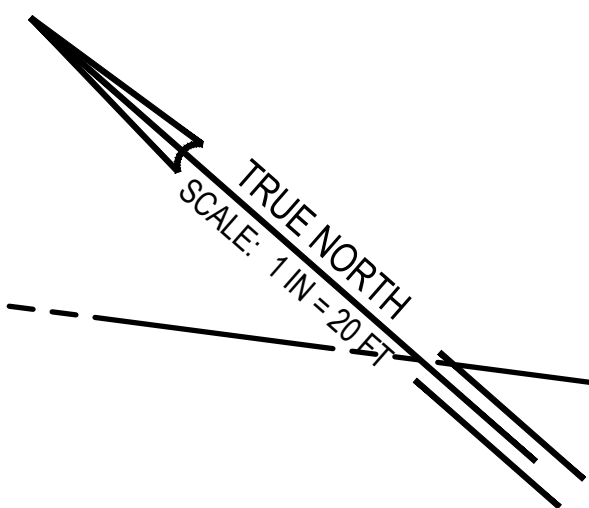
**CRIS T. TAKUSHI**  
 LICENSED PROFESSIONAL ENGINEER  
 No. 9243-C  
 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

BY: *Cris Takushi*

DATE: APRIL 13, 2026  
 APRIL 30, 2028  
 EXPIRATION DATE OF THE LICENSE

CAD DWG NO.: B48CM75A - C-3 SITE PLAN.dwg 4/10/26 16:03



FOR BOAT RAMP ENLARGED PLAN, SEE SHEET C-7

FOR BOAT WASH ENLARGED PLAN, SEE SHEET C-8

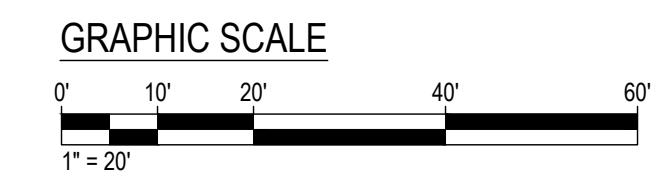
**EARTHWORK SUMMARY:**

CUT = 150 CY  
 FILL = 180 CY  
 GRADING AREA = 54,800 SF (1.3 ACRES)

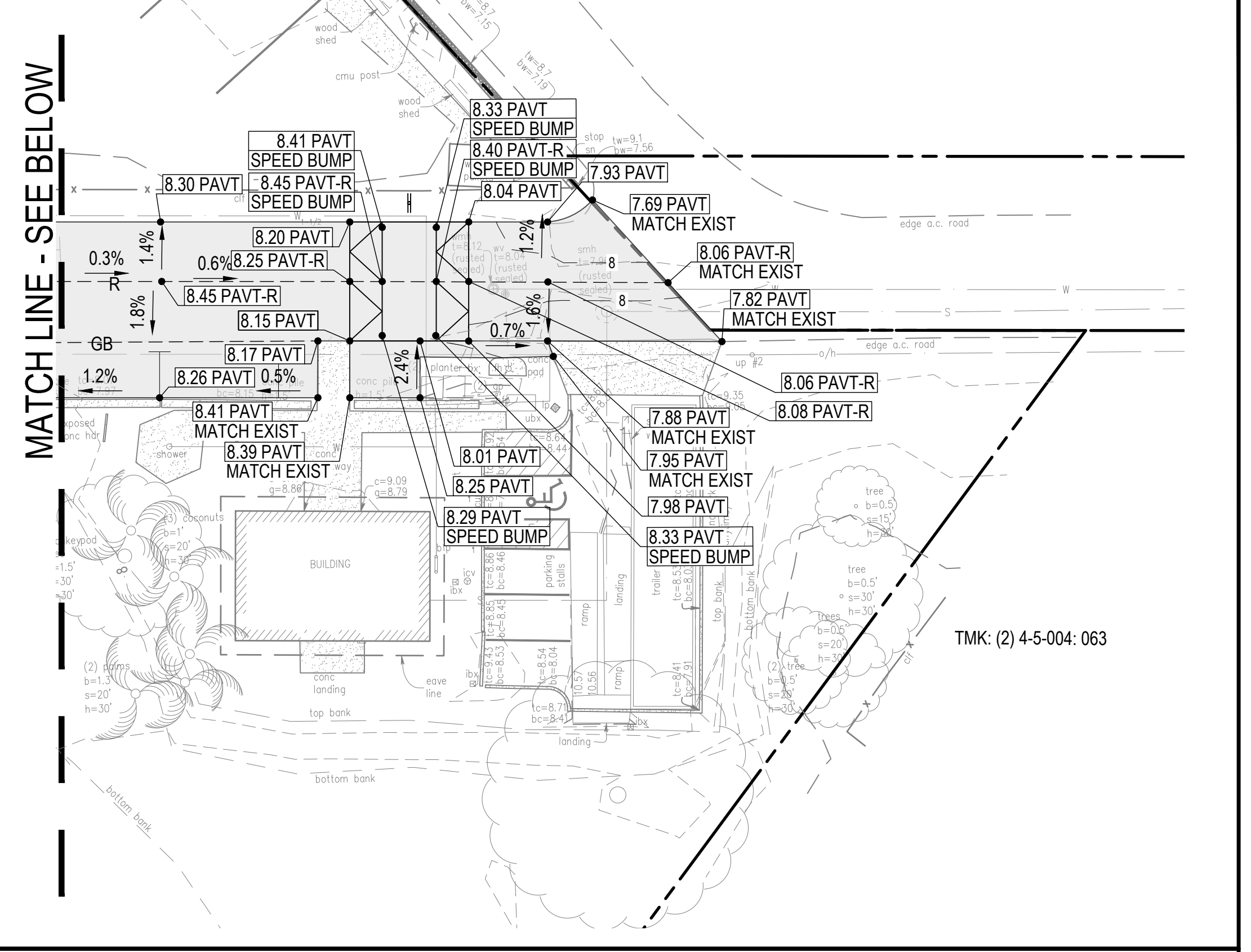
**NOTES:**

1. EARTHWORK QUANTITIES SHOWN WERE TAKEN FROM EXISTING GROUND TO FINISH GRADE. NO ADJUSTMENT FACTOR IS APPLIED TO THE RAW CUT/FILL QUANTITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE EXACT QUANTITIES FOR BIDDING PURPOSES. CONTRACTOR / BIDDER SHALL NOT USE THE EARTHWORK QUANTITIES SHOWN ABOVE FOR BIDDING PURPOSES.
3. REGARDLESS OF THE CUT AND FILL EARTHWORK QUANTITIES SHOWN ABOVE, THE CONTRACTOR IS RESPONSIBLE TO IMPORT OR EXPORT ALL NECESSARY MATERIALS TO COMPLETE THE GRADING WORK AT NO ADDITIONAL COST TO THE OWNER.

**GRADING PLAN**  
 SCALE: 1" = 20'

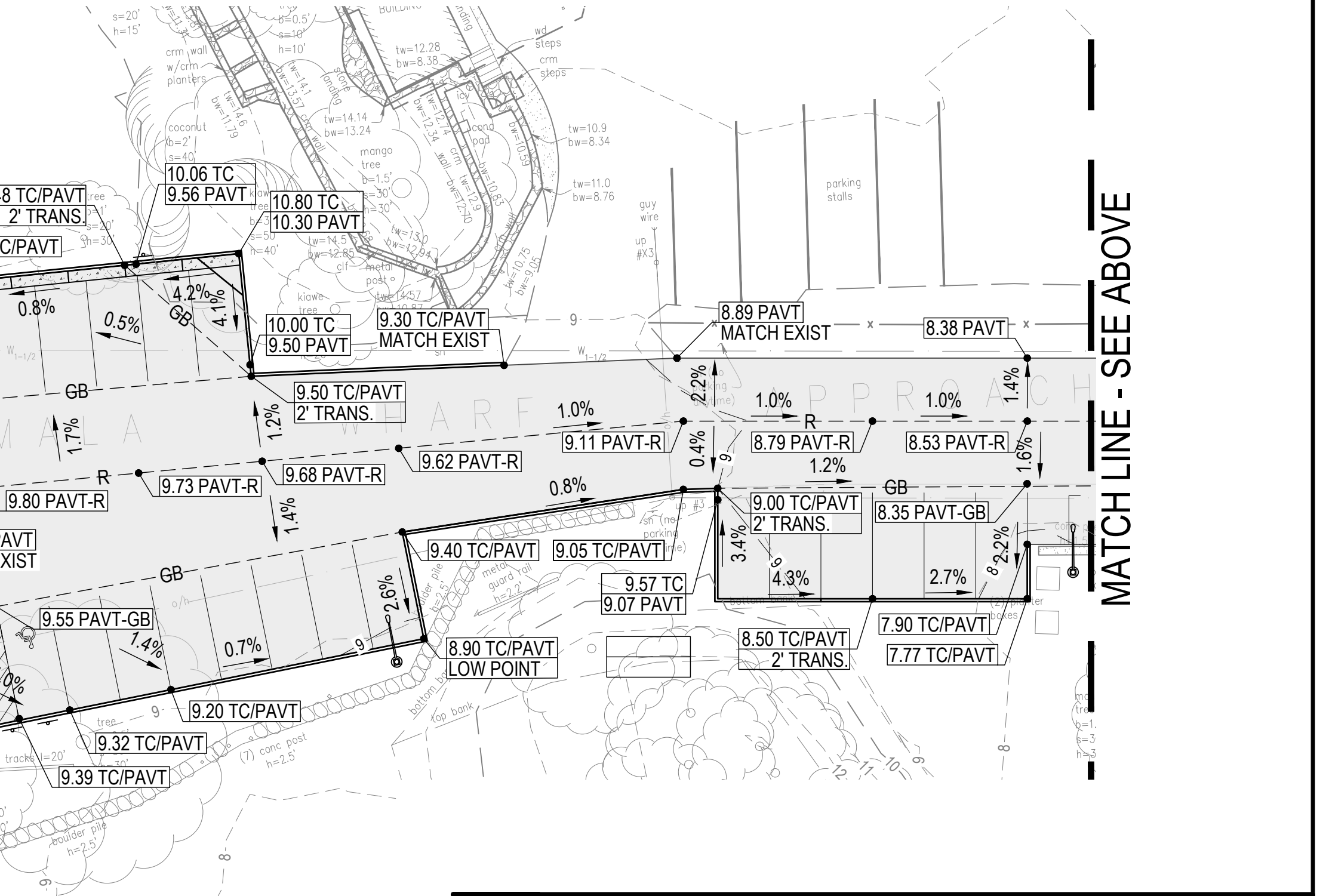


MATCH LINE - SEE BELOW

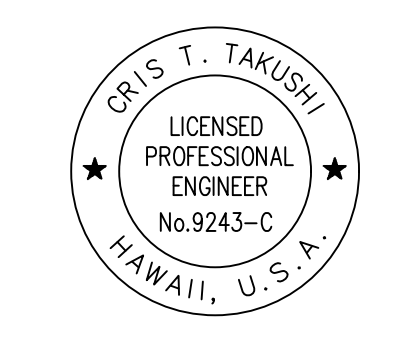


TMK: (2) 4-5-004: 063

MATCH LINE - SEE ABOVE



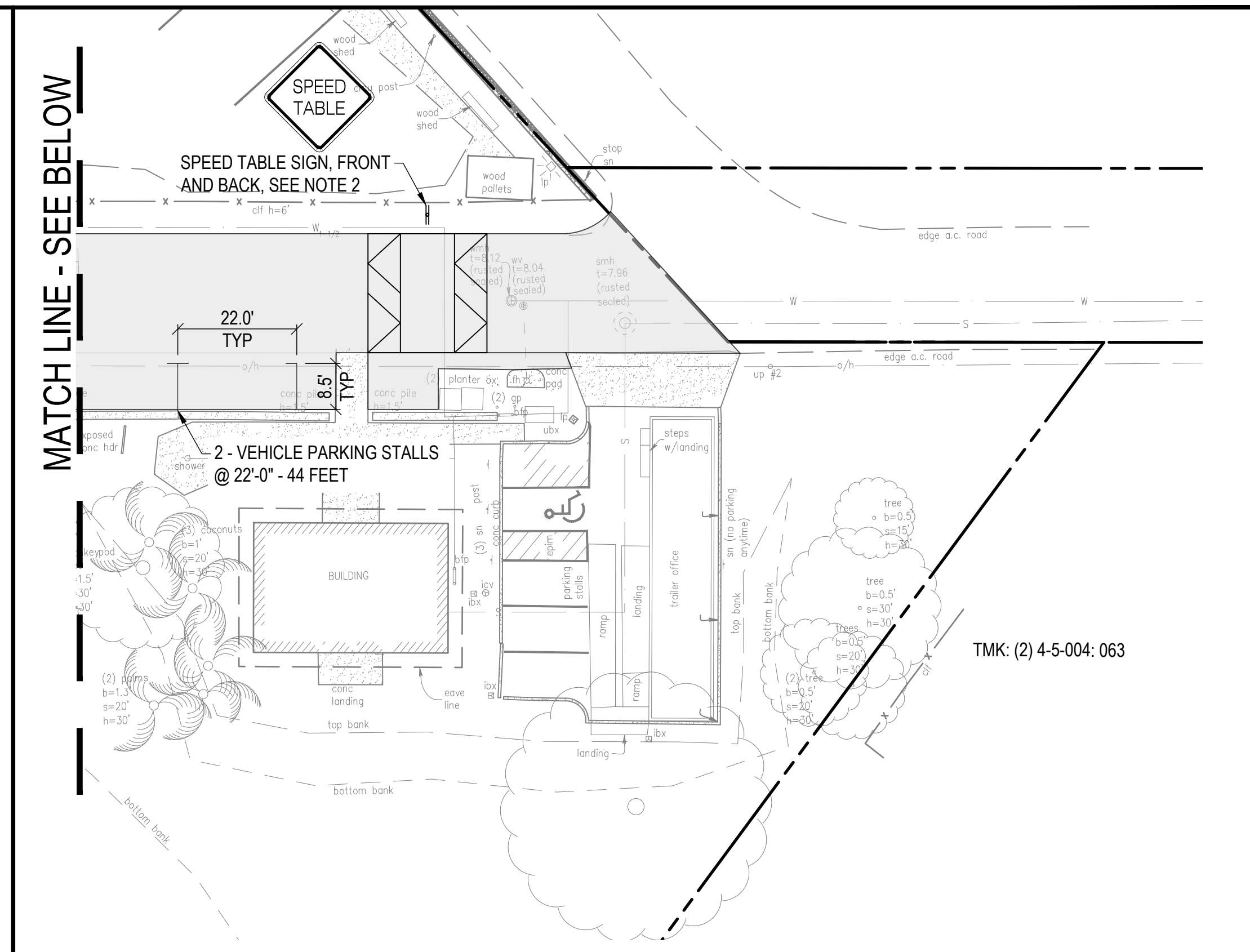
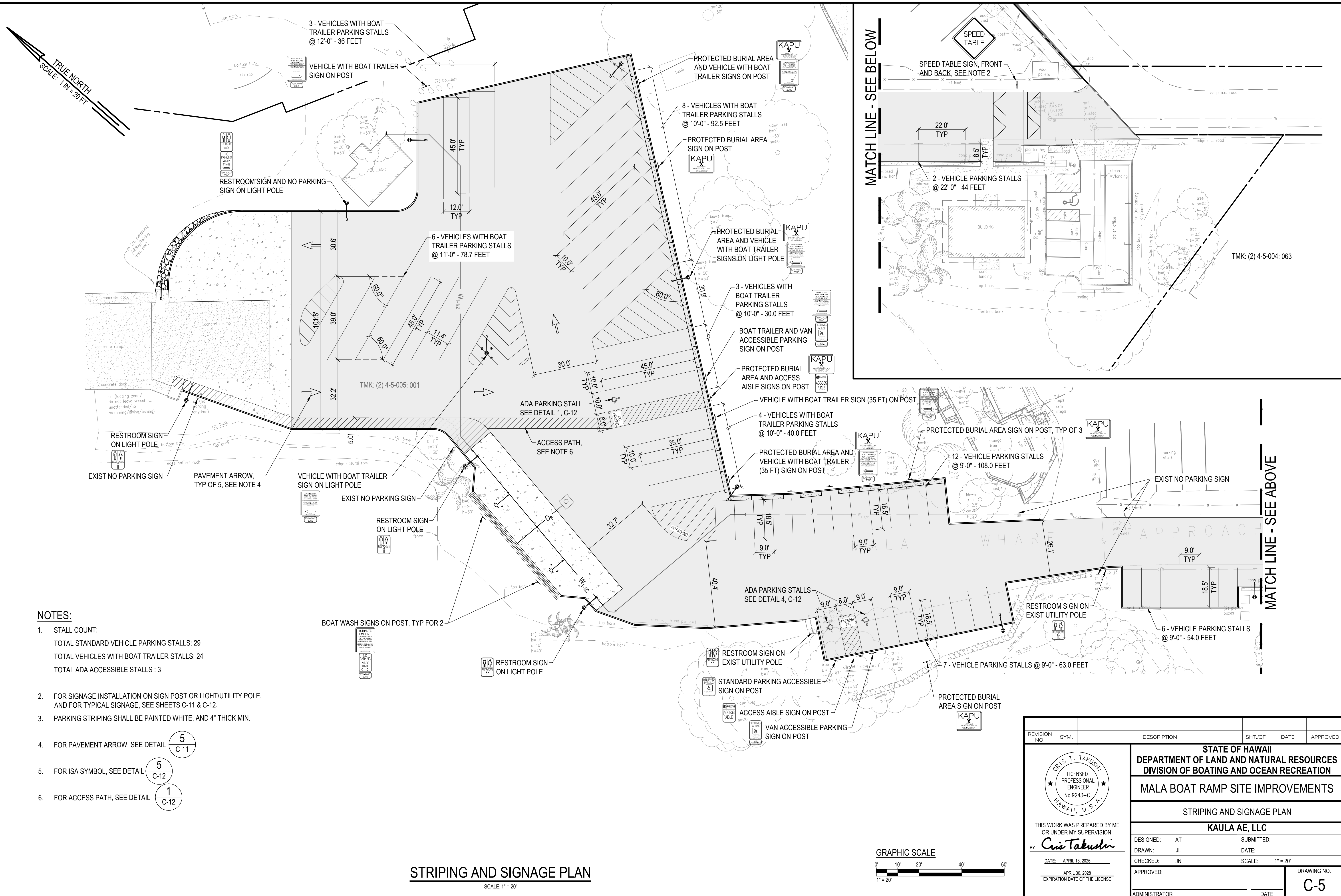
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b> <b>GRADING PLAN</b> <b>KAULA AE, LLC</b>					
DESIGNED: AT DRAWN: JL CHECKED: JN APPROVED: _____ ADMINISTRATOR			SUBMITTED: _____ DATE: _____ SCALE: 1" = 20' DRAWING NO. <b>C-4</b>		



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 BY: *Cris Takushi*  
 DATE: APRIL 13, 2026  
 APRIL 30, 2028  
 EXPIRATION DATE OF THE LICENSE

CAD DWG NO.: B48CM75A - C-4 GRADING PLAN.dwg 4/10/26 16:03

CAD DWG NO.: B48CM75A - C-5 STRIPING AND SIGNAGE PLAN.dwg 4/10/26 16:03

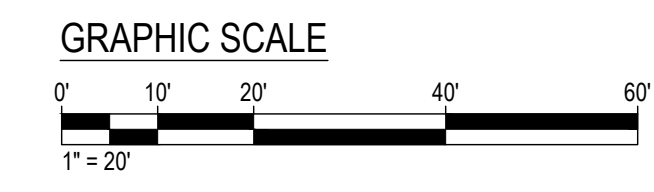


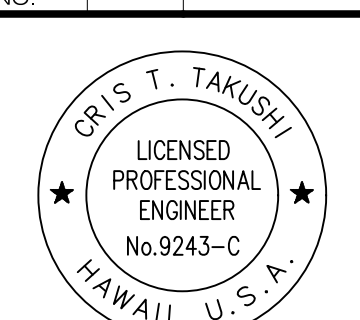
**NOTES:**

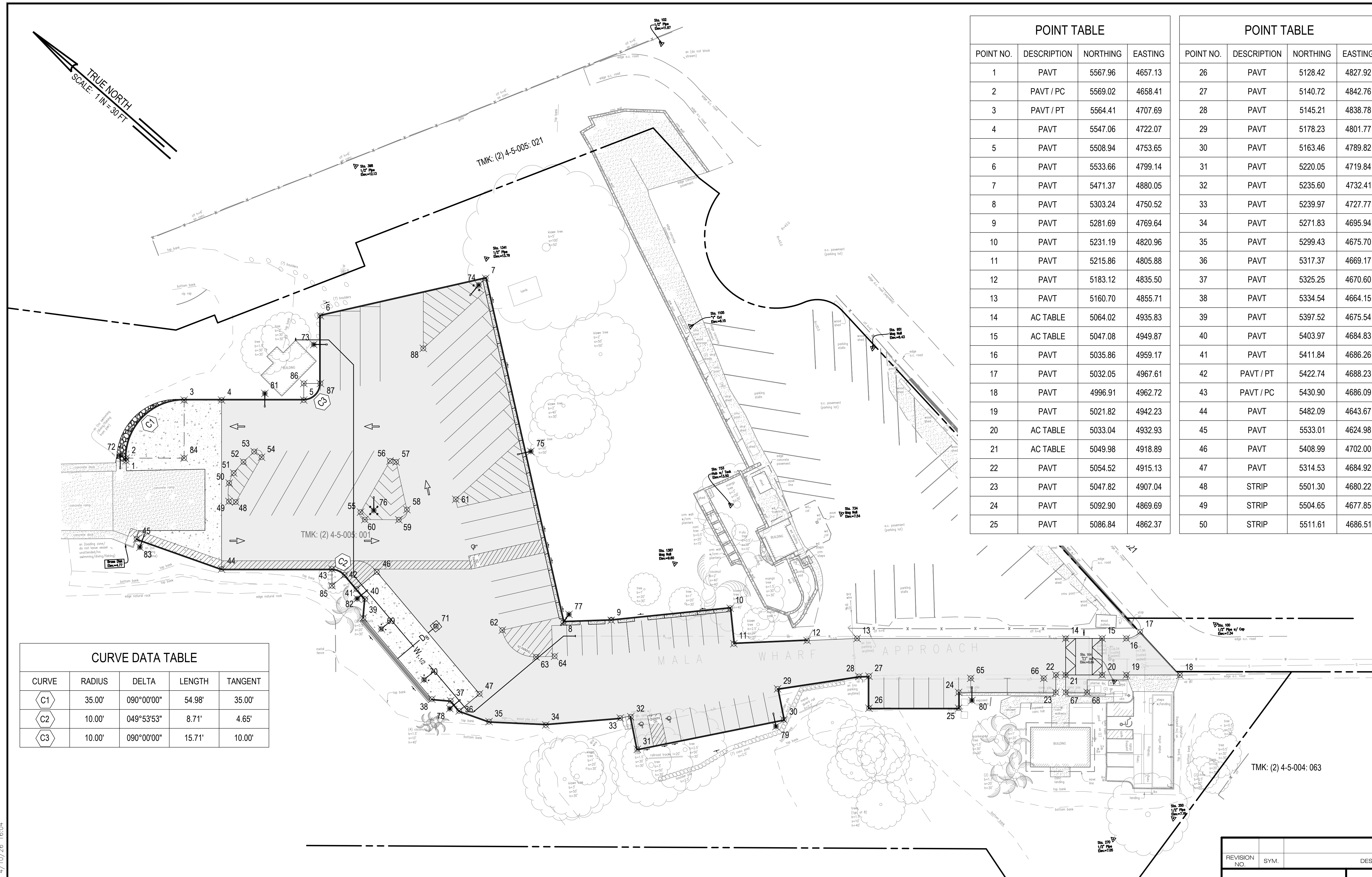
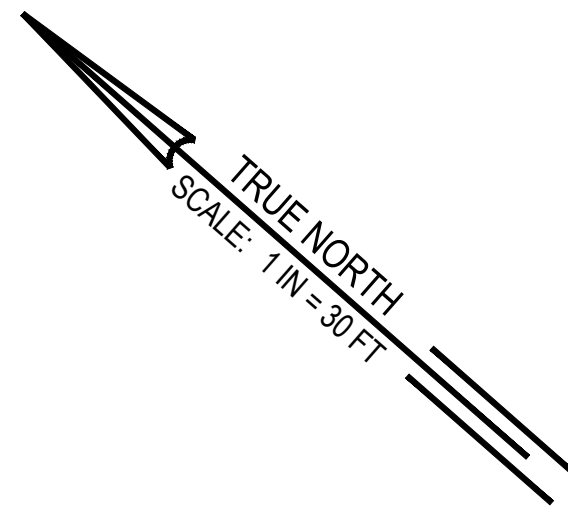
- STALL COUNT:  
 TOTAL STANDARD VEHICLE PARKING STALLS: 29  
 TOTAL VEHICLES WITH BOAT TRAILER STALLS: 24  
 TOTAL ADA ACCESSIBLE STALLS : 3
- FOR SIGNAGE INSTALLATION ON SIGN POST OR LIGHT/UTILITY POLE, AND FOR TYPICAL SIGNAGE, SEE SHEETS C-11 & C-12.
- PARKING STRIPING SHALL BE PAINTED WHITE, AND 4" THICK MIN.
- FOR PAVEMENT ARROW, SEE DETAIL 5 C-11
- FOR ISA SYMBOL, SEE DETAIL 5 C-12
- FOR ACCESS PATH, SEE DETAIL 1 C-12

**STRIPING AND SIGNAGE PLAN**

SCALE: 1" = 20'



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>CRIS T. TAKUSHI LICENSED PROFESSIONAL ENGINEER No. 9243-C HAWAII, U.S.A.</p> </div> <div style="text-align: center;"> <p><b>STATE OF HAWAII</b>                      DEPARTMENT OF LAND AND NATURAL RESOURCES                      DIVISION OF BOATING AND OCEAN RECREATION</p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p>STRIPING AND SIGNAGE PLAN</p> <p>KAULA AE, LLC</p> </div> </div>					
DESIGNED: AT		SUBMITTED:			
DRAWN: JL		DATE:			
CHECKED: JN		SCALE: 1" = 20'			
APPROVED:		DATE:		DRAWING NO.	
ADMINISTRATOR		DATE:		<b>C-5</b>	



POINT TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
1	PAVT	5567.96	4657.13
2	PAVT / PC	5569.02	4658.41
3	PAVT / PT	5564.41	4707.69
4	PAVT	5547.06	4722.07
5	PAVT	5508.94	4753.65
6	PAVT	5533.66	4799.14
7	PAVT	5471.37	4880.05
8	PAVT	5303.24	4750.52
9	PAVT	5281.69	4769.64
10	PAVT	5231.19	4820.96
11	PAVT	5215.86	4805.88
12	PAVT	5183.12	4835.50
13	PAVT	5160.70	4855.71
14	AC TABLE	5064.02	4935.83
15	AC TABLE	5047.08	4949.87
16	PAVT	5035.86	4959.17
17	PAVT	5032.05	4967.61
18	PAVT	4996.91	4962.72
19	PAVT	5021.82	4942.23
20	AC TABLE	5033.04	4932.93
21	AC TABLE	5049.98	4918.89
22	PAVT	5054.52	4915.13
23	PAVT	5047.82	4907.04
24	PAVT	5092.90	4869.69
25	PAVT	5086.84	4862.37

POINT TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
26	PAVT	5128.42	4827.92
27	PAVT	5140.72	4842.76
28	PAVT	5145.21	4838.78
29	PAVT	5178.23	4801.77
30	PAVT	5163.46	4789.82
31	PAVT	5220.05	4719.84
32	PAVT	5235.60	4732.41
33	PAVT	5239.97	4727.77
34	PAVT	5271.83	4695.94
35	PAVT	5299.43	4675.70
36	PAVT	5317.37	4669.17
37	PAVT	5325.25	4670.60
38	PAVT	5334.54	4664.15
39	PAVT	5397.52	4675.54
40	PAVT	5403.97	4684.83
41	PAVT	5411.84	4686.26
42	PAVT / PT	5422.74	4688.23
43	PAVT / PC	5430.90	4686.09
44	PAVT	5482.09	4643.67
45	PAVT	5533.01	4624.98
46	PAVT	5408.99	4702.00
47	PAVT	5314.53	4684.92
48	STRIP	5501.30	4680.22
49	STRIP	5504.65	4677.85
50	STRIP	5511.61	4686.51

POINT TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
51	STRIP	5513.38	4692.89
52	STRIP	5513.09	4701.81
53	STRIP	5512.12	4710.68
54	STRIP	5506.52	4710.93
55	STRIP	5439.55	4723.50
56	STRIP	5445.50	4758.52
57	STRIP	5442.31	4760.44
58	STRIP	5418.99	4742.48
59	STRIP	5418.87	4734.65
60	STRIP	5434.69	4721.69
61	STRIP	5400.34	4765.99
62	STRIP	5328.43	4723.22
63	STRIP	5302.52	4723.76
64	STRIP	5294.13	4731.21
65	STRIP	5092.72	4880.87
66	STRIP	5058.84	4908.95
67	PAVT	5043.28	4910.80
68	PAVT	5033.27	4919.10
69	HB	5385.00	4677.34
70	HB	5345.64	4670.22
71	SDMH	5360.66	4699.53
72	LP	5572.89	4657.59
73	LP	5525.67	4783.24
74	LP	5472.05	4874.26
75	LP	5383.90	4817.08
76	LP	5434.02	4729.35
77	LP	5303.57	4756.16
78	LP	5322.63	4666.65
79	LP	5164.50	4783.69
80	LP	5083.63	4871.05
81	LP	5529.55	4741.77
82	LP	5407.80	4682.05
83	LP	5528.35	4622.43
84	RP	5542.07	4680.74
85	RP	5424.52	4678.39
86	RP	5515.32	4761.35
87	PAVT	5507.62	4767.73
88	STRIP	5473.36	4823.55

CURVE DATA TABLE				
CURVE	RADIUS	DELTA	LENGTH	TANGENT
C1	35.00'	090°00'00"	54.98'	35.00'
C2	10.00'	049°53'53"	8.71'	4.65'
C3	10.00'	090°00'00"	15.71'	10.00'

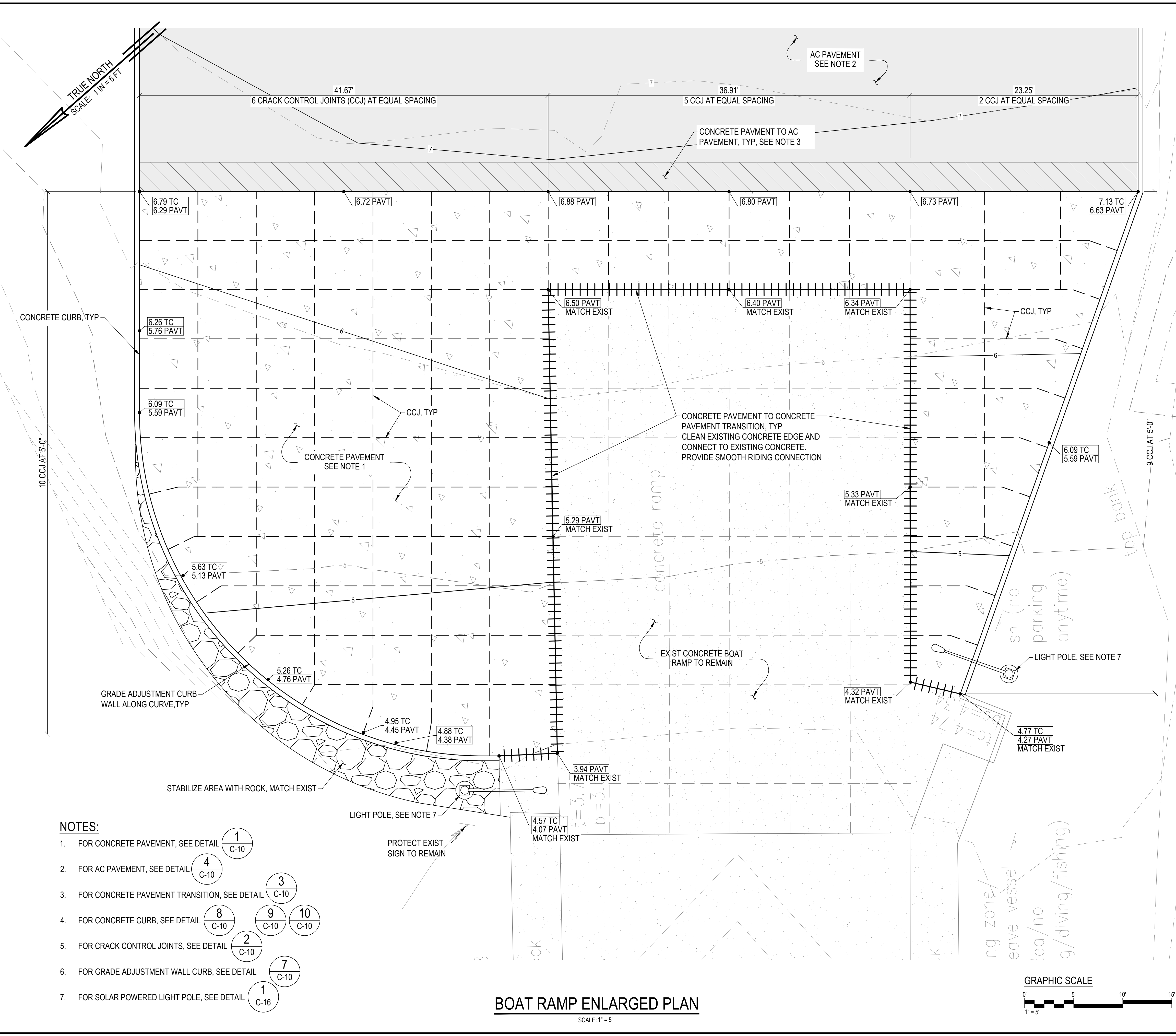


**SITE LAYOUT PLAN**  
SCALE: 1" = 30'

REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b> <b>SITE LAYOUT PLAN</b> <b>KAULA AE, LLC</b>					
DESIGNED: AT	SUBMITTED:				
DRAWN: JL	DATE:				
CHECKED: JN	SCALE: 1" = 30'				
APPROVED:	DATE:		DRAWING NO.		
ADMINISTRATOR			<b>C-6</b>		

CAD DWG NO.: B48CM75A - C-6 SITE LAYOUT.dwg 4/10/26 16:04

CAD DWG NO.: B48CM75A - C-7 BOAT RAMP ENLARGED PLAN.dwg 4/10/26 16:04



**LEGEND**

- ||||| CONCRETE TO CONCRETE TRANSITION
- ▨ CONCRETE TO AC TRANSITION
- - - - CRACK CONTROL JOINT (CCJ)
- ▭ AC PAVEMENT
- ▭ CONCRETE PAVEMENT
- ▭ ROCK
- ▭ EXISTING CONCRETE PAVEMENT

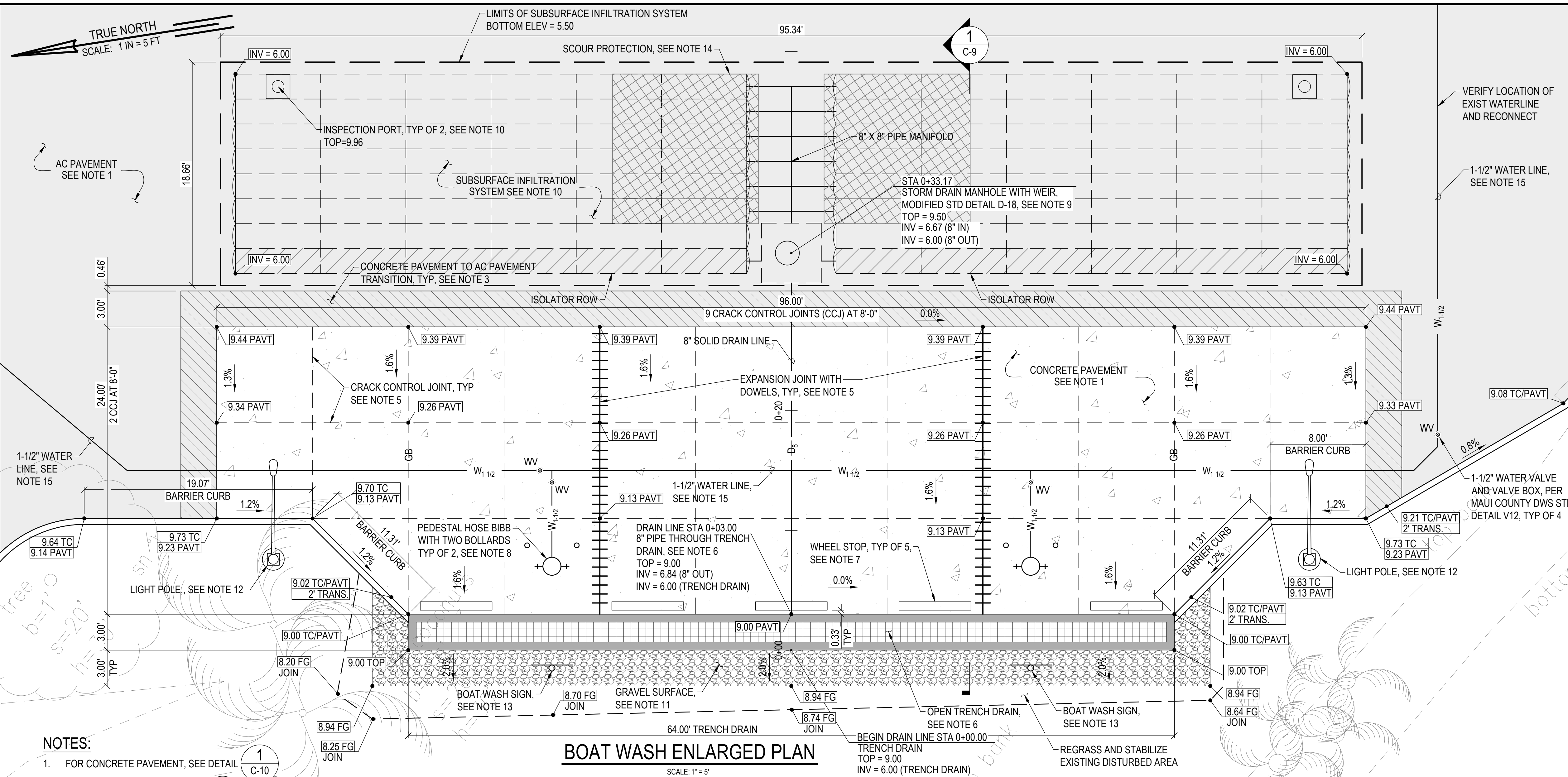
**1** TYPICAL JOINT LAYOUT AT CURVE/ANGLE  
SCALE: NTS

- NOTES:**
1. FOR CONCRETE PAVEMENT, SEE DETAIL **1** C-10
  2. FOR AC PAVEMENT, SEE DETAIL **4** C-10
  3. FOR CONCRETE PAVEMENT TRANSITION, SEE DETAIL **3** C-10
  4. FOR CONCRETE CURB, SEE DETAIL **8** C-10
  5. FOR CRACK CONTROL JOINTS, SEE DETAIL **2** C-10
  6. FOR GRADE ADJUSTMENT WALL CURB, SEE DETAIL **7** C-10
  7. FOR SOLAR POWERED LIGHT POLE, SEE DETAIL **1** C-16

**BOAT RAMP ENLARGED PLAN**  
SCALE: 1" = 5'



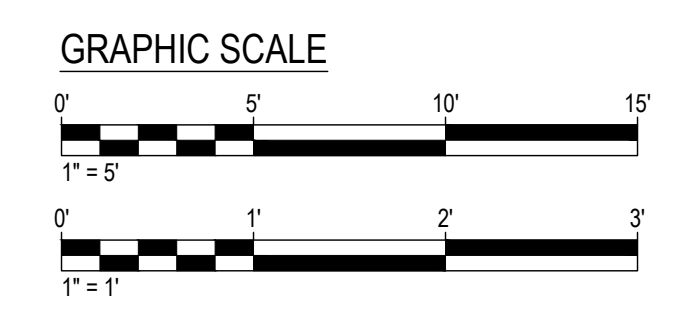
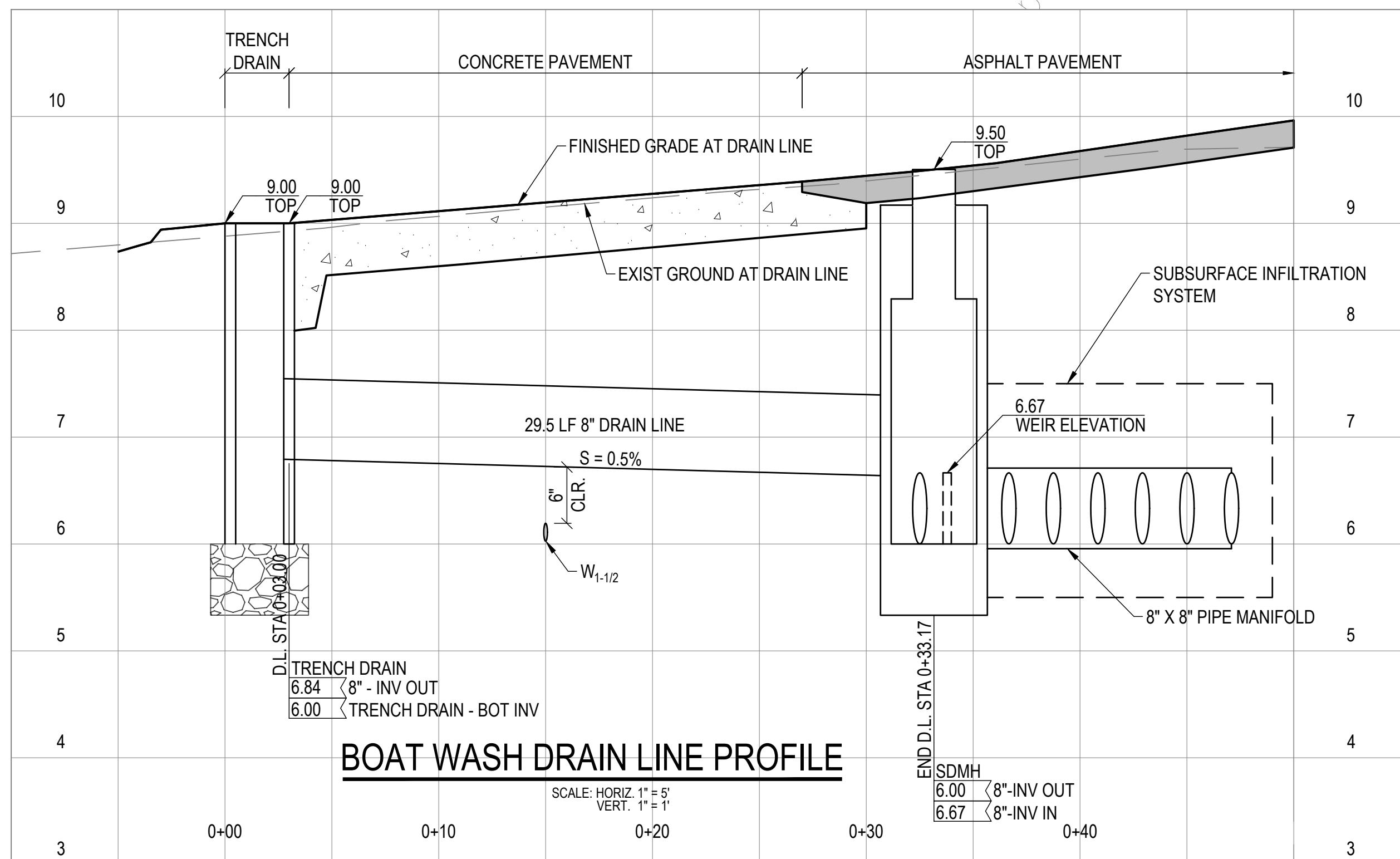
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<p><b>STATE OF HAWAII</b>  <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>  <b>DIVISION OF BOATING AND OCEAN RECREATION</b></p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p><b>BOAT RAMP ENLARGED PLAN</b></p> <p><b>KAULA AE, LLC</b></p>					
<p>DESIGNED: AT</p> <p>DRAWN: JL</p> <p>CHECKED: JN</p> <p>APPROVED: _____</p> <p>ADMINISTRATOR _____</p>			<p>SUBMITTED: _____</p> <p>DATE: _____</p> <p>SCALE: 1" = 5'</p> <p>DATE: _____</p> <p>DATE: _____</p>		
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.</p> <p>BY: <i>Cris Takushi</i></p> <p>DATE: APRIL 13, 2026</p> <p>APRIL 30, 2028</p> <p>EXPIRATION DATE OF THE LICENSE</p>					<p>DRAWING NO.</p> <p><b>C-7</b></p>



DESIGN DATA	
<b>ASSUMPTIONS</b>	
TOTAL DAILY USAGE (GAL):	9,600
TOTAL DAILY USAGE (CF):	1,284
INFILTRATION RATE (IN/HR)	0.5
INFILTRATION RATE (FT/DAY)	1.0
MIN REQUIRED STORAGE CAPACITY (CF):	1,284
MIN REQUIRED INFILTRATION SURFACE AREA (SF):	1,284
<b>STORAGE CAPACITY</b>	
TRENCH DRAIN VOLUME (CF):	315
SUBSURFACE CHAMBER VOLUME (CF):	1,856
TOTAL STORAGE PROVIDED (CF):	2,171
<b>INFILTRATION SURFACE AREA</b>	
TRENCH DRAIN AREA (SF):	105
SUBSURFACE CHAMBER AREA (SF):	1,780
TOTAL SURFACE AREA (SF):	1,885
<b>INFILTRATED VOLUME PER DAY</b>	
SYSTEM CAPACITY (CF/DAY)	1,885

LEGEND	
	EXPANSION JOINT WITH DOWELS
	CONCRETE TO AC TRANSITION
	CRACK CONTROL JOINT (CCJ)
	AC PAVEMENT
	CONCRETE PAVEMENT
	GRAVEL SURFACE
	INFILTRATION CHAMBER W/ CAP
	ISOLATOR ROW
	SCOUR PROTECTION
	BED LIMITS

- NOTES:**
- FOR CONCRETE PAVEMENT, SEE DETAIL C-10
  - FOR AC PAVEMENT, SEE DETAIL C-10
  - FOR CONCRETE TO AC PAVEMENT TRANSITION, SEE DETAIL C-10
  - FOR CURBS AND TRANSITIONS, SEE DETAIL C-10 C-10 C-10
  - FOR CONCRETE PAVEMENT JOINTS, SEE DETAIL C-10
  - FOR OPEN TRENCH DRAIN PLAN AND SECTION, SEE DETAIL C-13
  - FOR CONCRETE WHEEL STOP, SEE DETAIL C-11
  - FOR HOSE BIBB AND BOLLARDS, SEE DETAIL C-15 C-15
  - FOR STORM DRAIN MANHOLE, SEE DETAIL C-13
  - FOR SUBSURFACE INFILTRATION SYSTEM, SEE DETAIL C-14
  - FOR GRAVEL SURFACE, SEE DETAIL C-10
  - FOR SOLAR POWERED LIGHT POLE, SEE DETAIL C-16
  - FOR SIGN POST INSTALLATION AND TYPICAL SIGNAGE, SEE SHEETS C-11 & C-12.
  - PLACE MINIMUM 12.50' OF ADSPLUS625 WOVEN GEOTEXTILE OR APPROVED EQUAL OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS PER MANUFACTURER'S RECOMMENDATIONS.
  - FOR TYPICAL WATER LINE TRENCH, SEE DETAIL C-15



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED

CRIS T. TAKUSHI  
LICENSED PROFESSIONAL ENGINEER  
No. 9243-C  
HAWAII, U.S.A.

**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**DIVISION OF BOATING AND OCEAN RECREATION**

**MALA BOAT RAMP SITE IMPROVEMENTS**

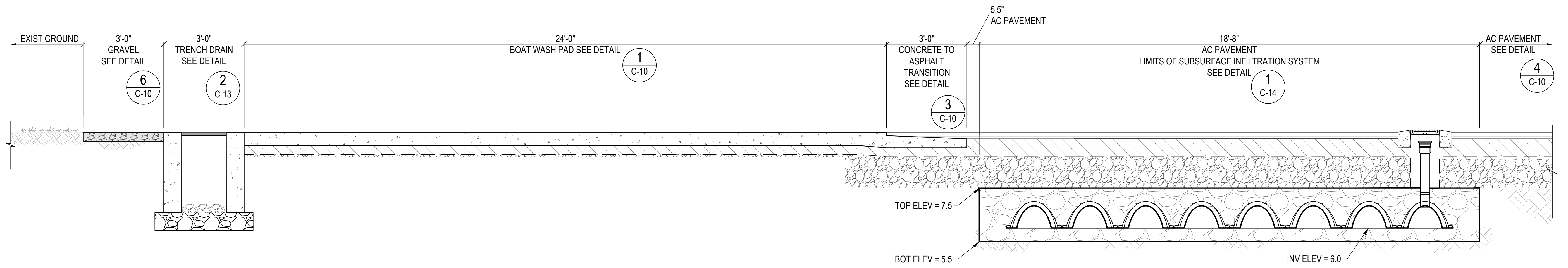
**BOAT WASH ENLARGED PLAN AND PIPING PROFILE**

**KAULA AE, LLC**

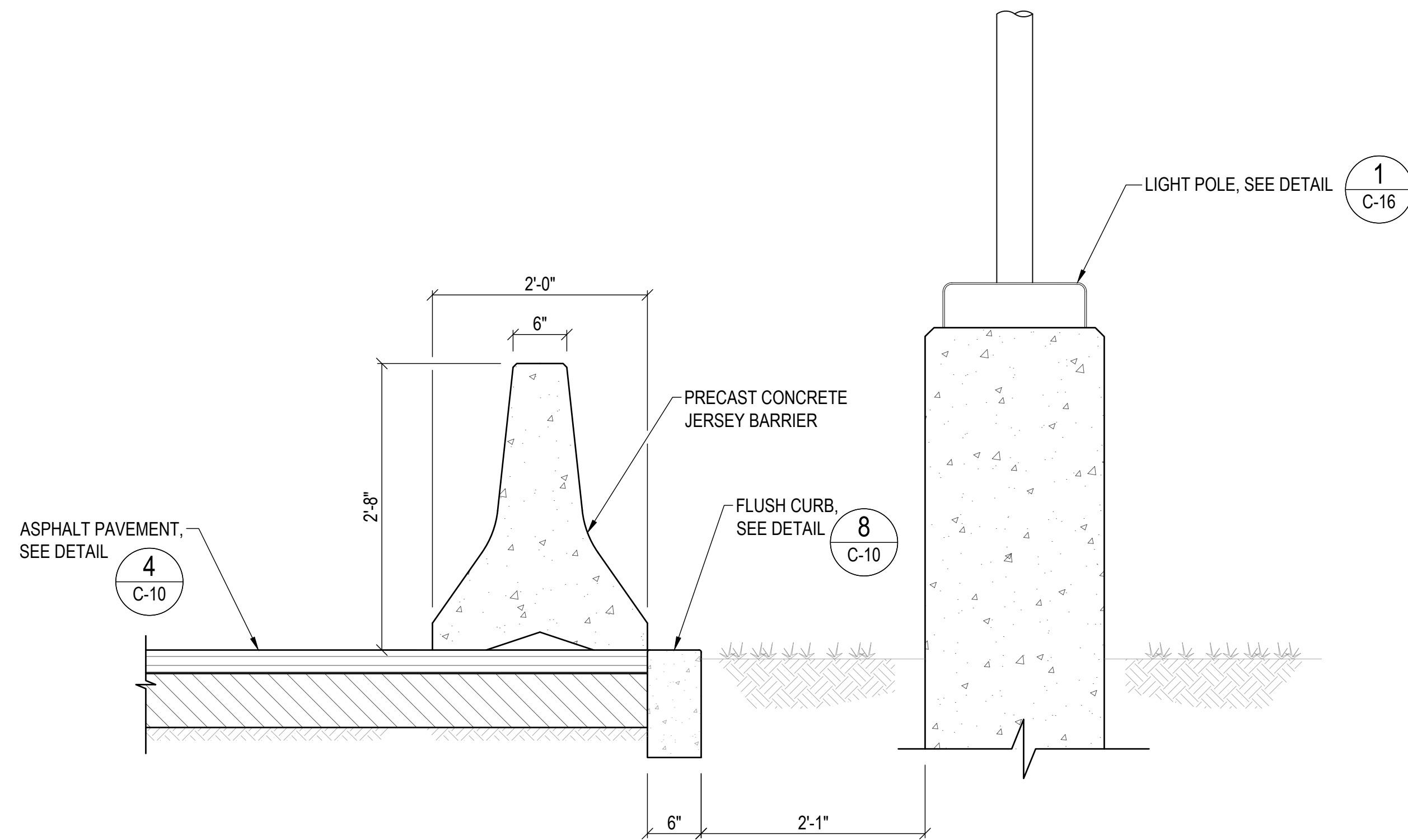
DESIGNED: AT	SUBMITTED:
DRAWN: JL	DATE:
CHECKED: JN	SCALE: 1" = 5', 1" = 1'
APPROVED:	DATE:
ADMINISTRATOR	DATE:

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
BY: *Cris Takushi*  
DATE: APRIL 13, 2028  
APRIL 30, 2028  
EXPIRATION DATE OF THE LICENSE

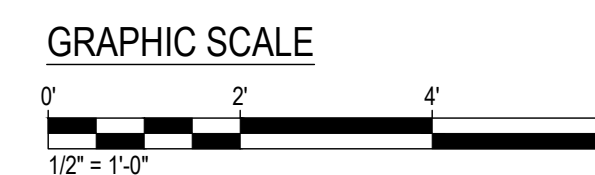
CAD DWG. NO.: B48CM75A - C-8 BOAT WASH ENLARGEMENT.dwg 4/10/26 16:04



**1** BOAT WASH CONCRETE PAD CROSS SECTION  
 C-9 SCALE: 1/2" = 1'-0"

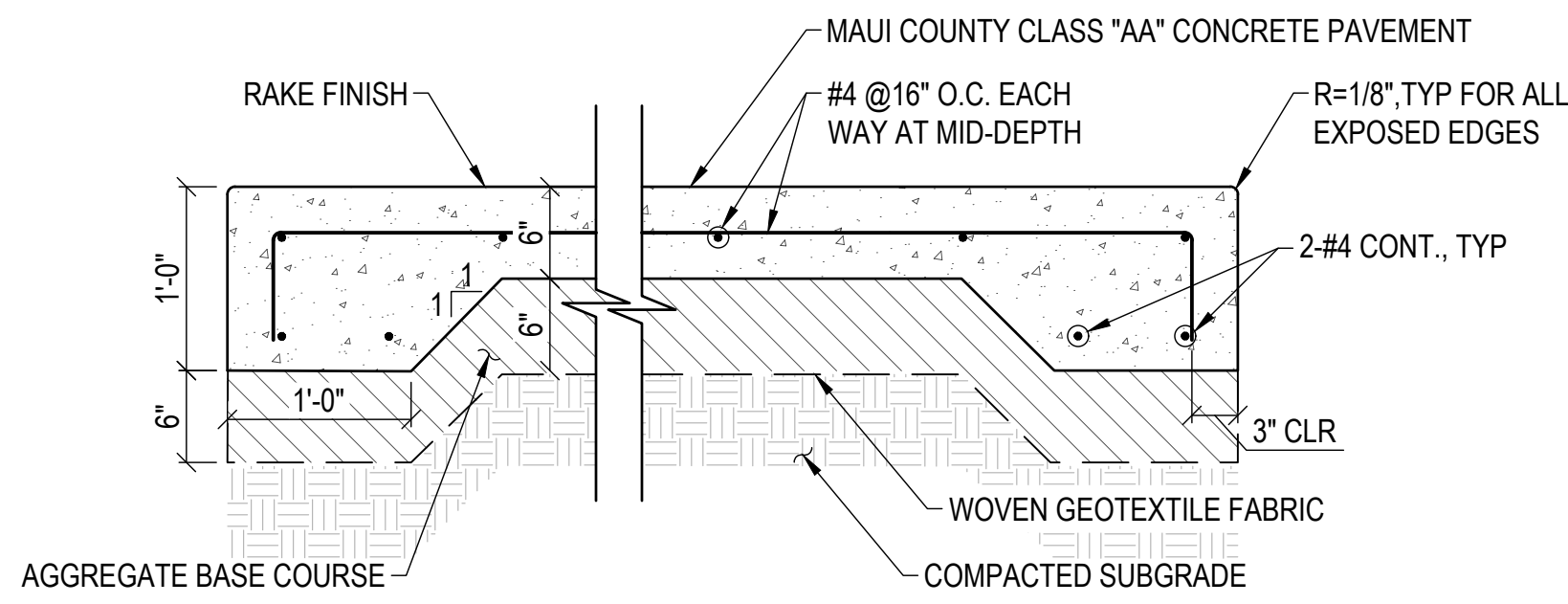


**2** TYPICAL SECTION AT CONCRETE JERSEY BARRIER  
 C-9 SCALE: NTS

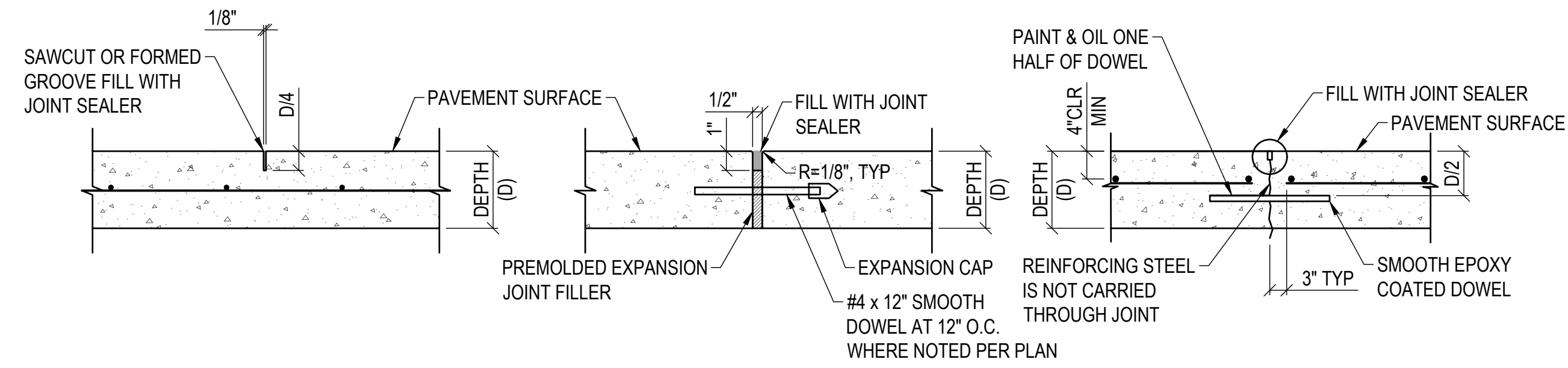


REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b>  <b>CROSS SECTION</b> <b>KAULA AE, LLC</b>					
DESIGNED: AT DRAWN: JL CHECKED: JN APPROVED: _____ ADMINISTRATOR			SUBMITTED: _____ DATE: _____ SCALE: AS SHOWN DATE: _____ DATE		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. BY: <i>Cris Takushi</i> DATE: APRIL 13, 2026 APRIL 30, 2028 EXPIRATION DATE OF THE LICENSE					<b>DRAWING NO.</b> <b>C-9</b>

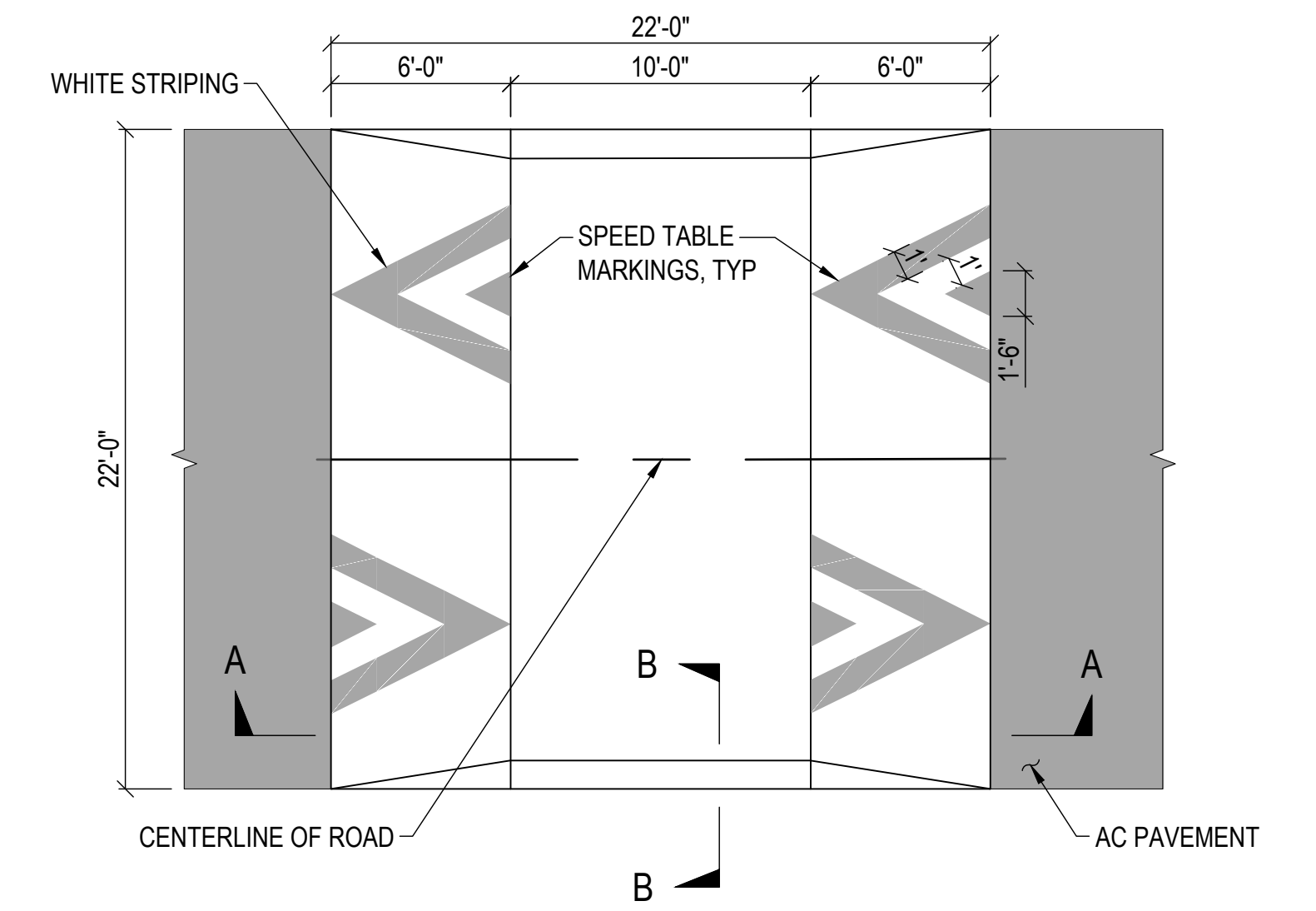
CAD DWG NO.: B48CM75A - C-XX DETAILS.dwg 4/10/26 16:04



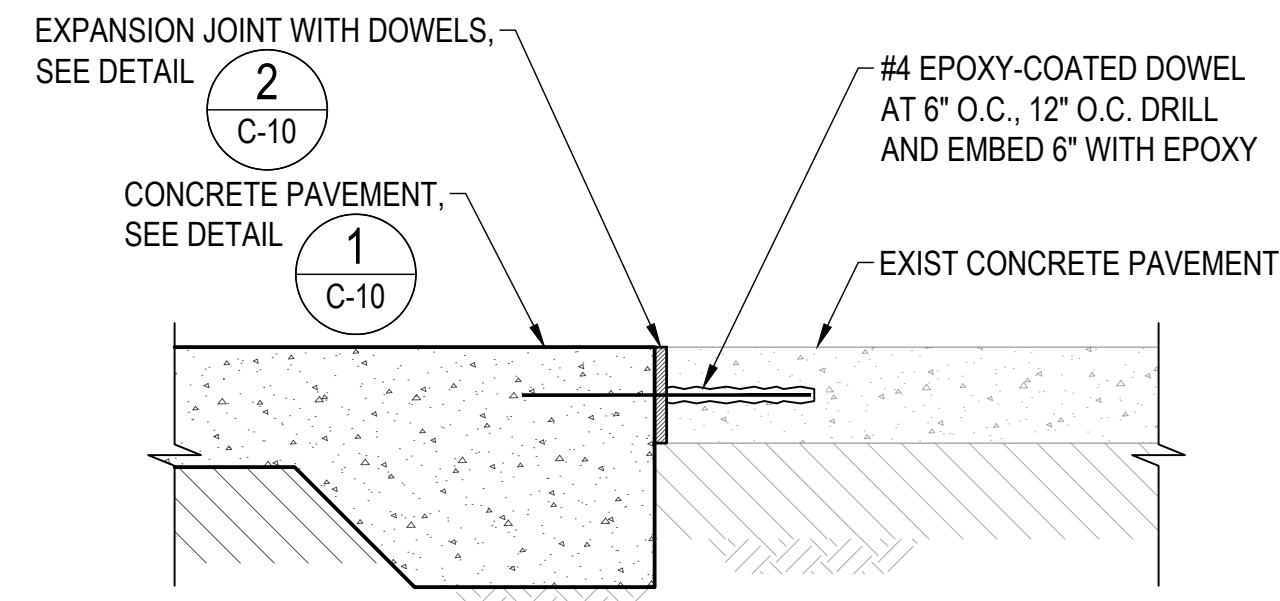
**1** TYPICAL CONCRETE PAVEMENT SECTION  
SCALE: NTS



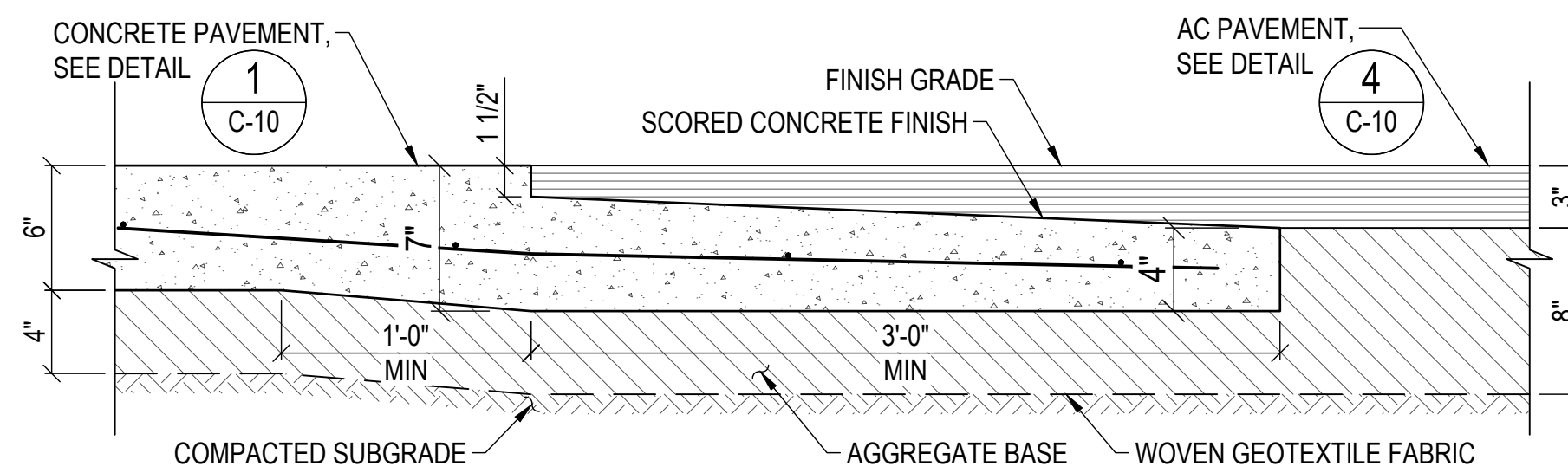
**2** CONCRETE PAVEMENT TYPICAL JOINT DETAILS  
SCALE: NTS



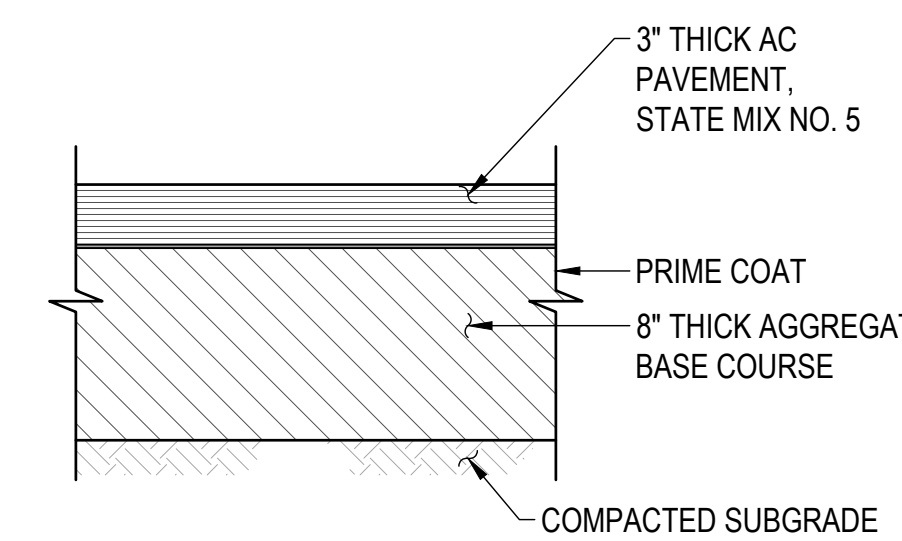
SPEED TABLE LAYOUT



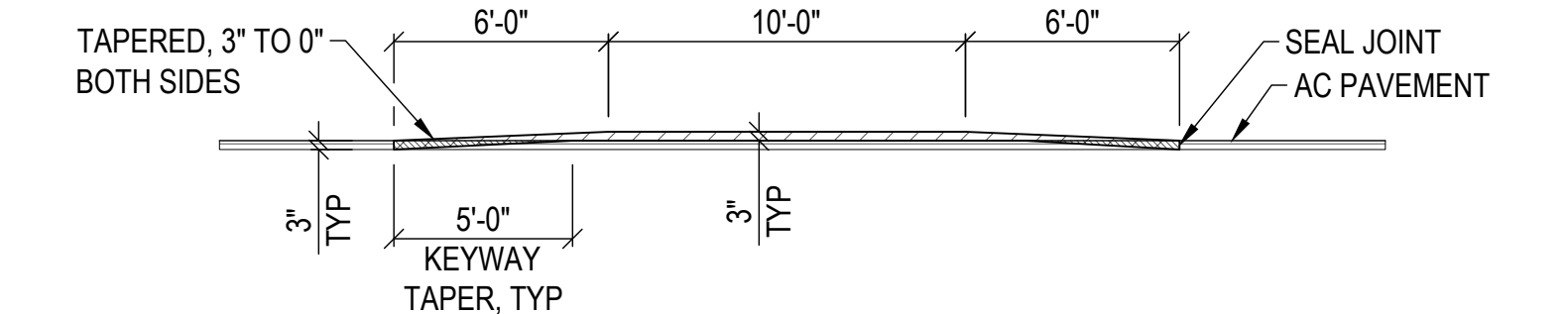
**3** TRANSITION TO PAVEMENT DETAILS  
SCALE: NTS



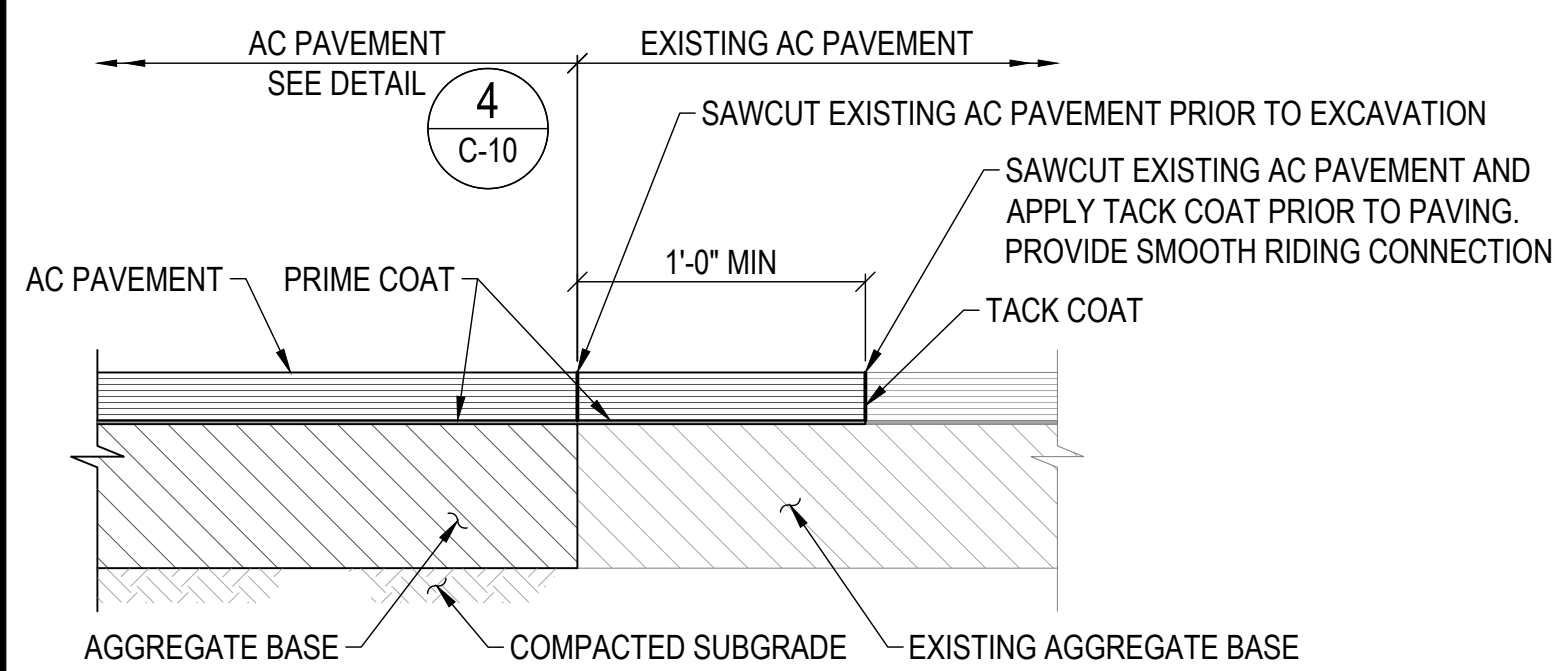
AT AC PAVEMENT



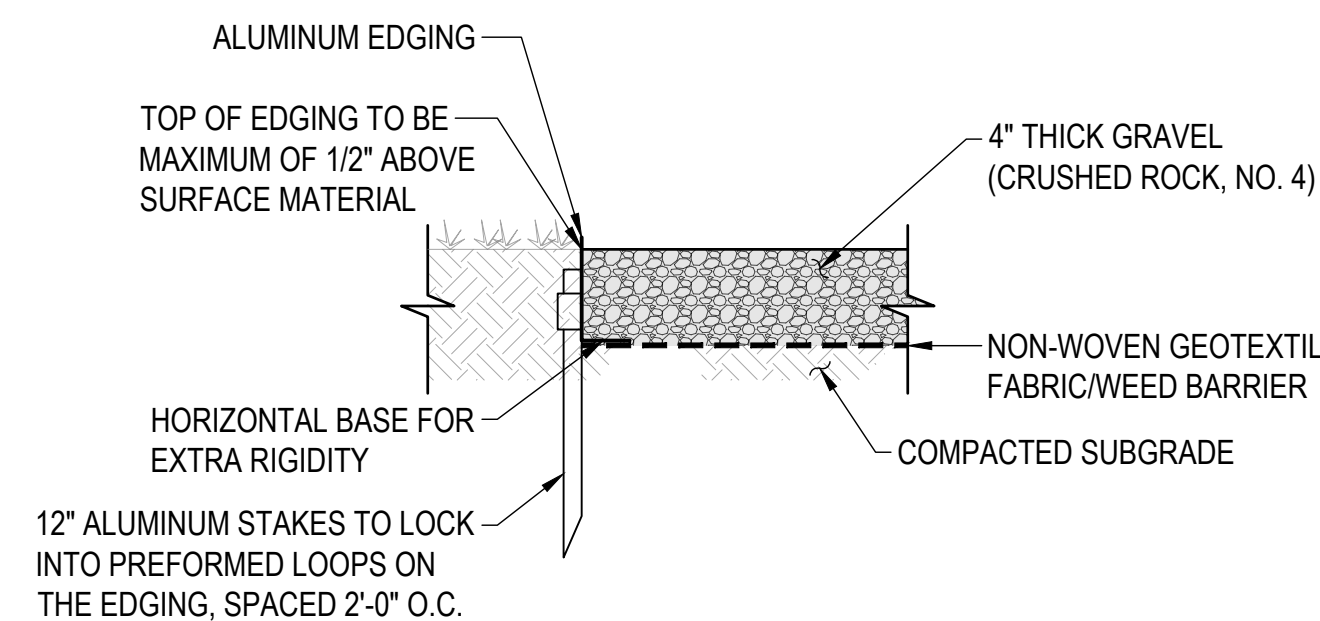
**4** AC PAVEMENT SECTION  
SCALE: NTS



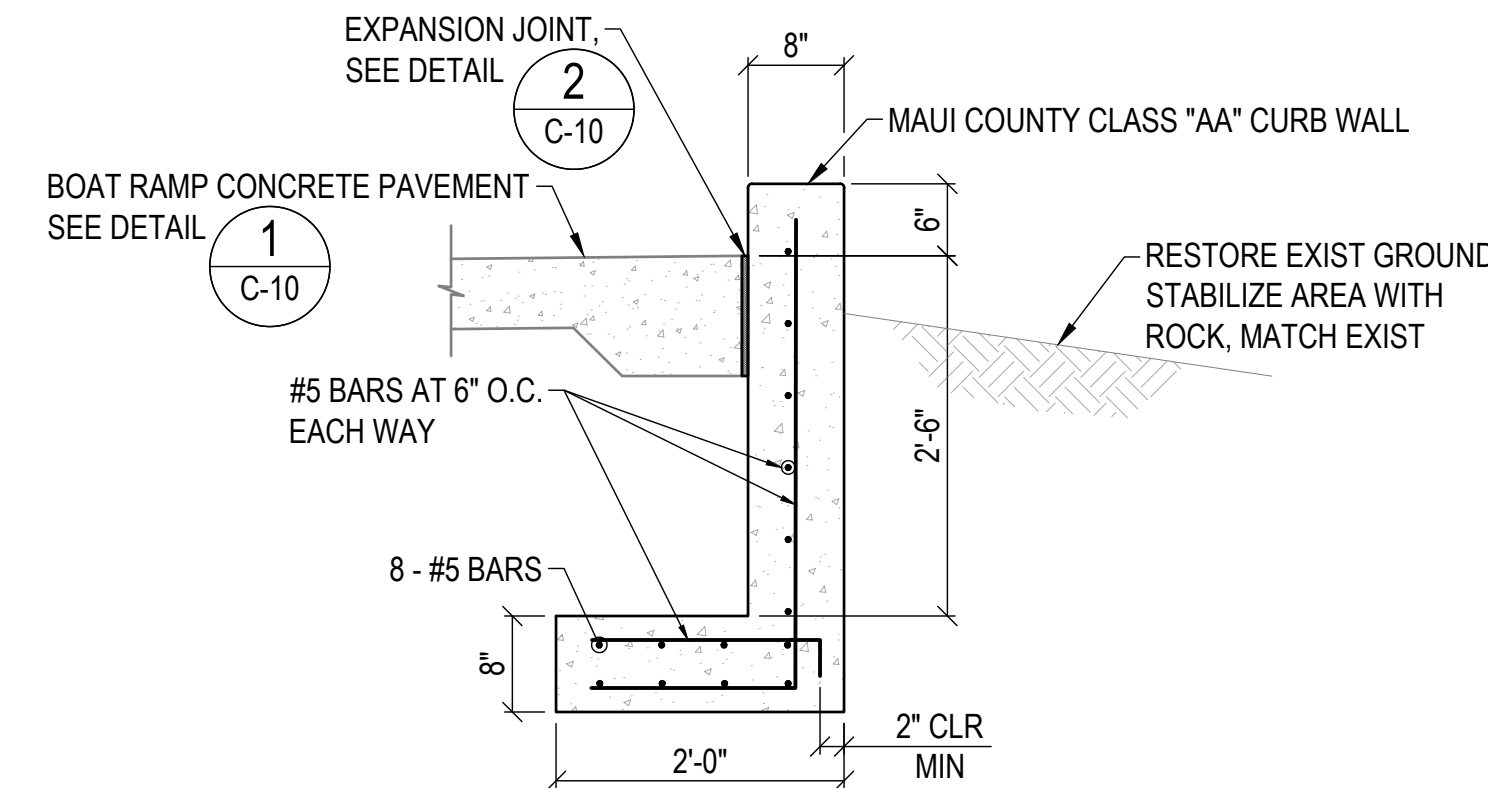
SECTION A-A



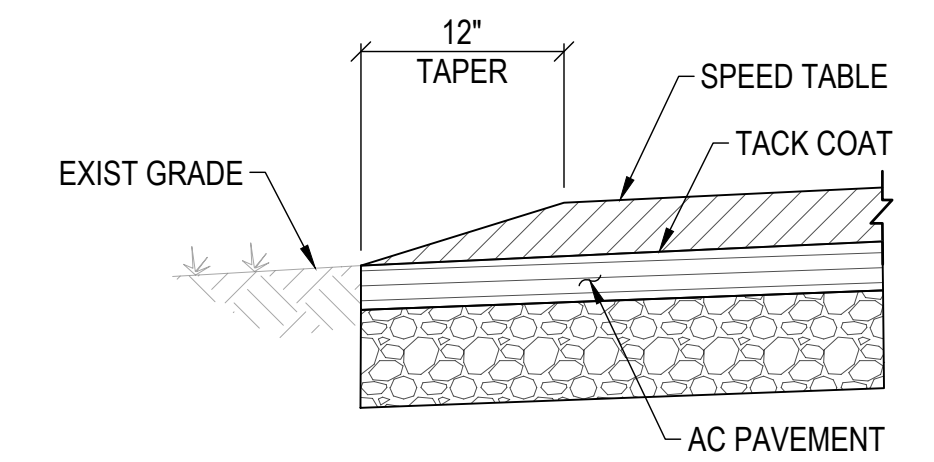
**5** AC PAVEMENT TRANSITION DETAIL  
SCALE: NTS



**6** GRAVEL SECTION  
SCALE: NTS

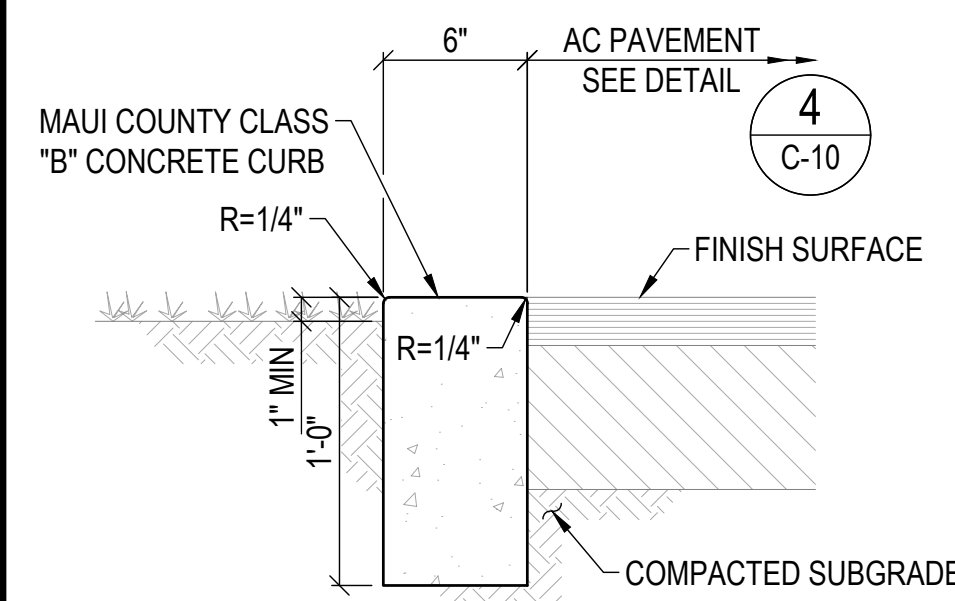


**7** GRADE ADJUSTMENT CURB WALL  
SCALE: NTS

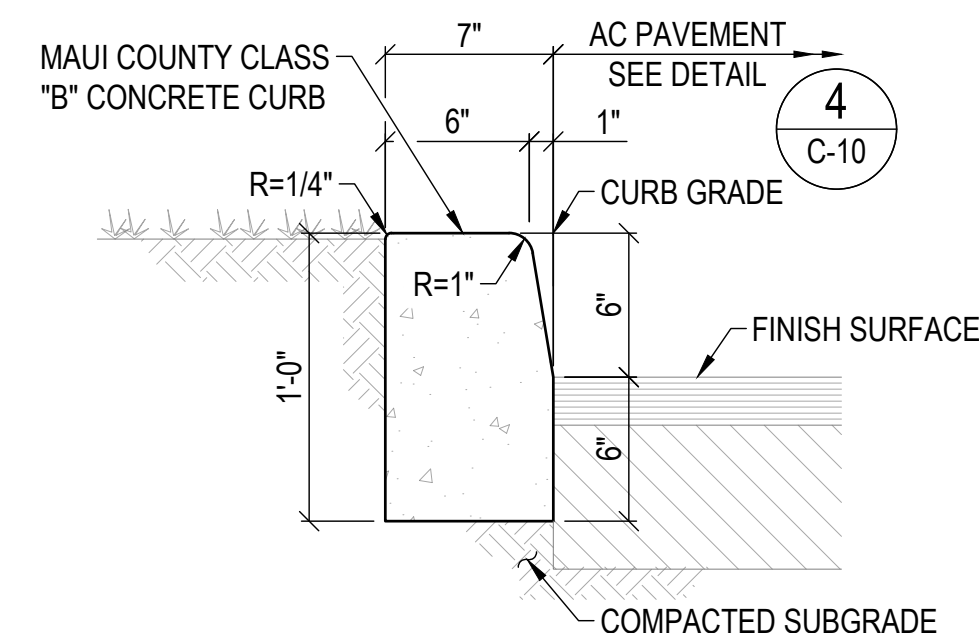


NOTES:  
1. TAPER GRIND AS SHOWN.  
2. APPLY AN ASPHALT TACK COAT TO COMPLETELY COVER BASE PAVING IMMEDIATELY PRIOR TO PAVING.

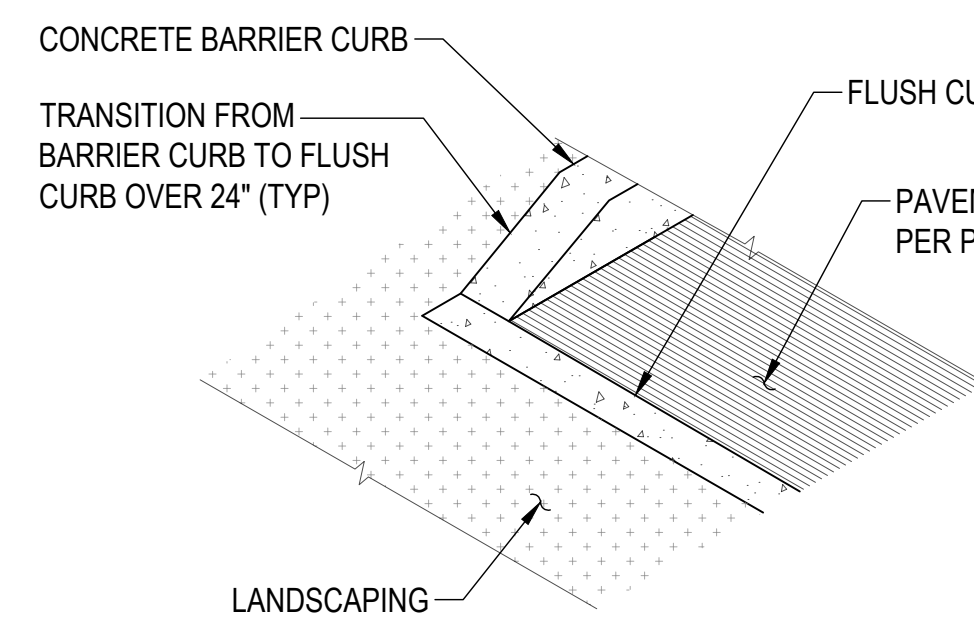
**11** SPEED TABLE DETAIL  
SCALE: NTS



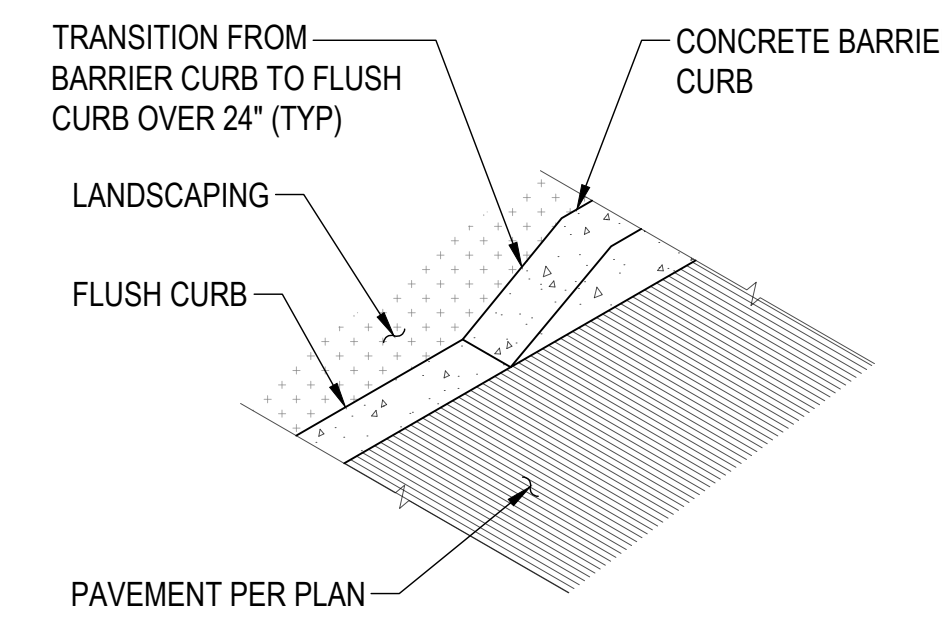
**8** CONCRETE FLUSH CURB  
SCALE: NTS



**9** CONCRETE BARRIER CURB  
SCALE: NTS



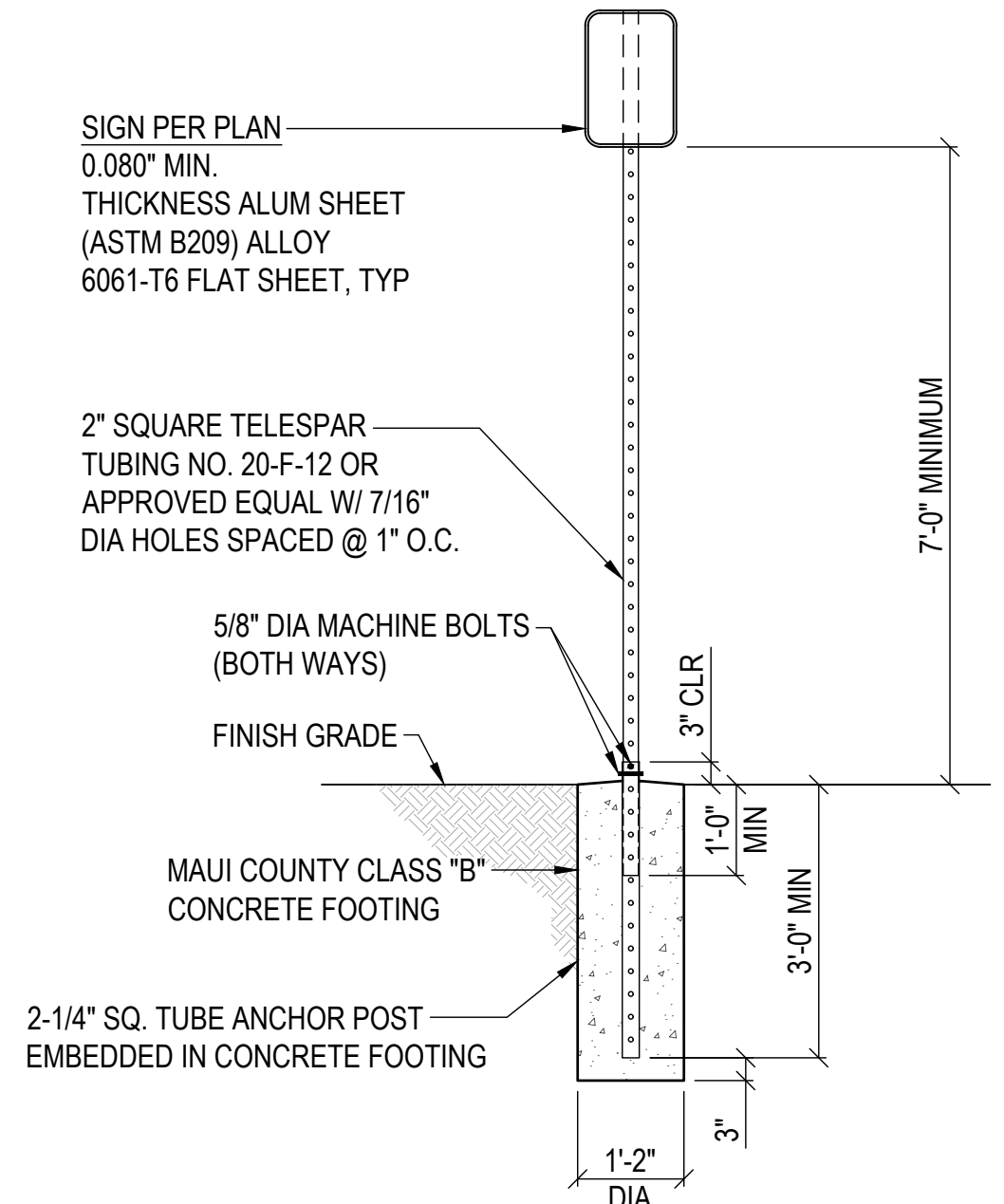
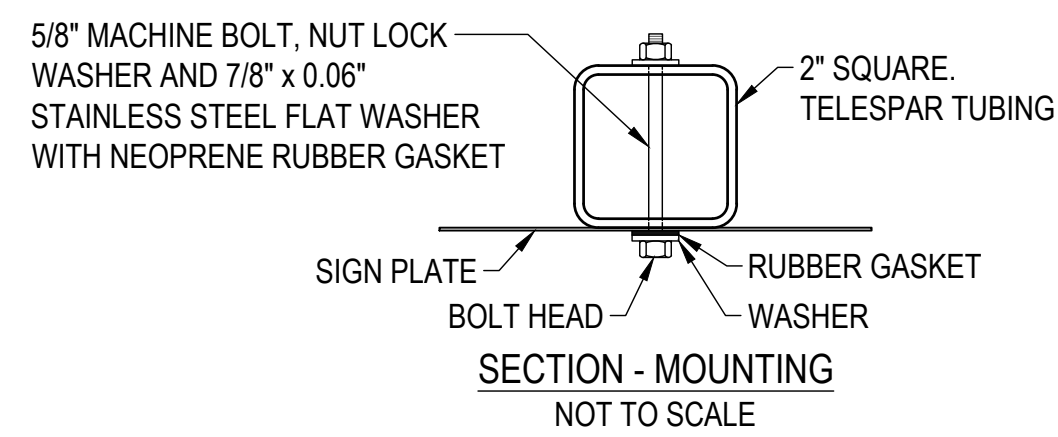
AT ANGLE POINT



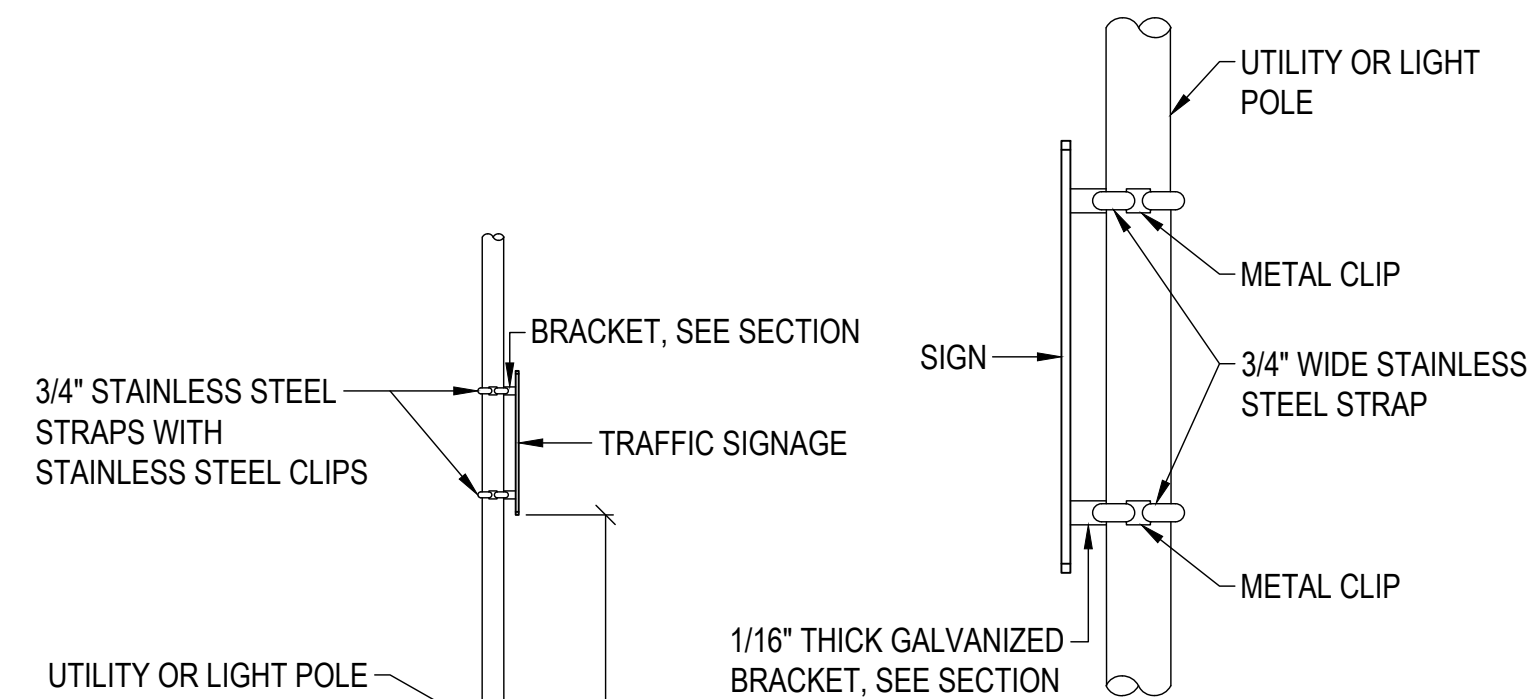
IN LINE

**10** CURB FACE TRANSITION DETAIL  
SCALE: NTS

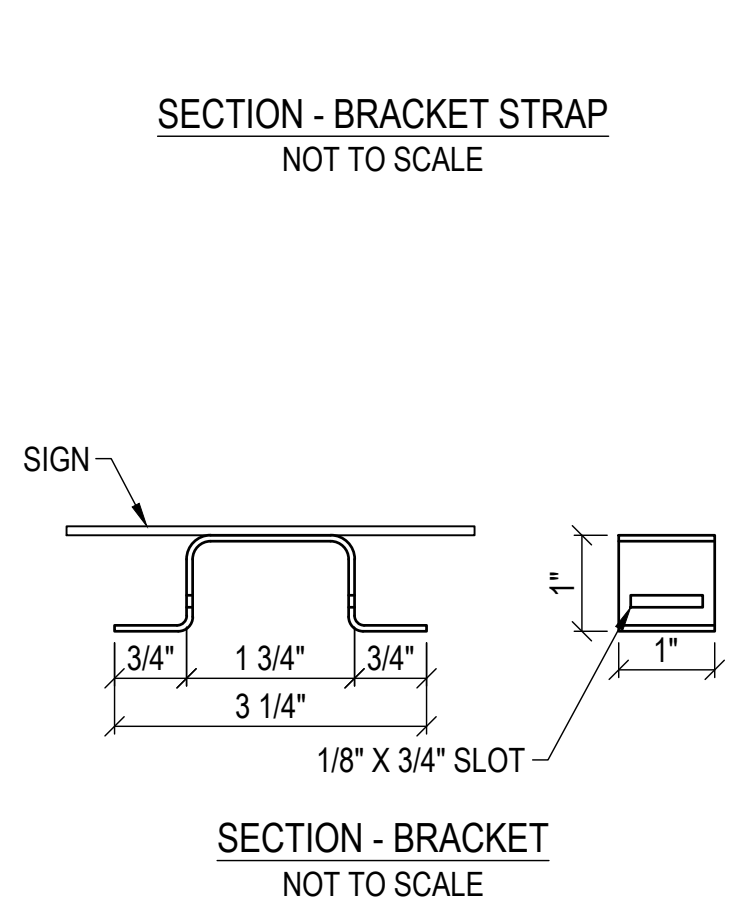
REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b> SITE DETAILS - 1 <b>KAULA AE, LLC</b>					
DESIGNED: AT DRAWN: JL CHECKED: JN APPROVED: _____ ADMINISTRATOR			SUBMITTED: _____ DATE: _____ SCALE: NONE DATE: _____ DATE: _____		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <b>Cris Takushi</b> DATE: APRIL 13, 2028 APRIL 30, 2028 EXPIRATION DATE OF THE LICENSE					DRAWING NO. <b>C-10</b>



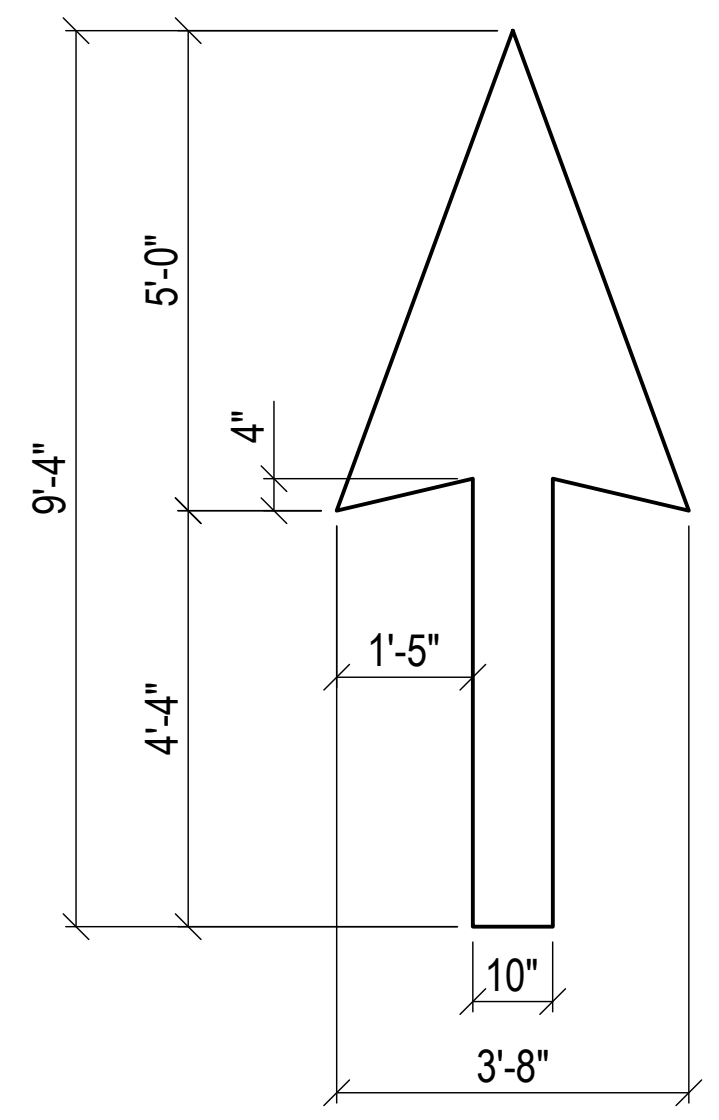
**1** TYPICAL SIGN POST DETAIL  
SCALE: NTS



**2** SIGN DETAIL ON LIGHT/UTILITY POLE  
SCALE: NTS

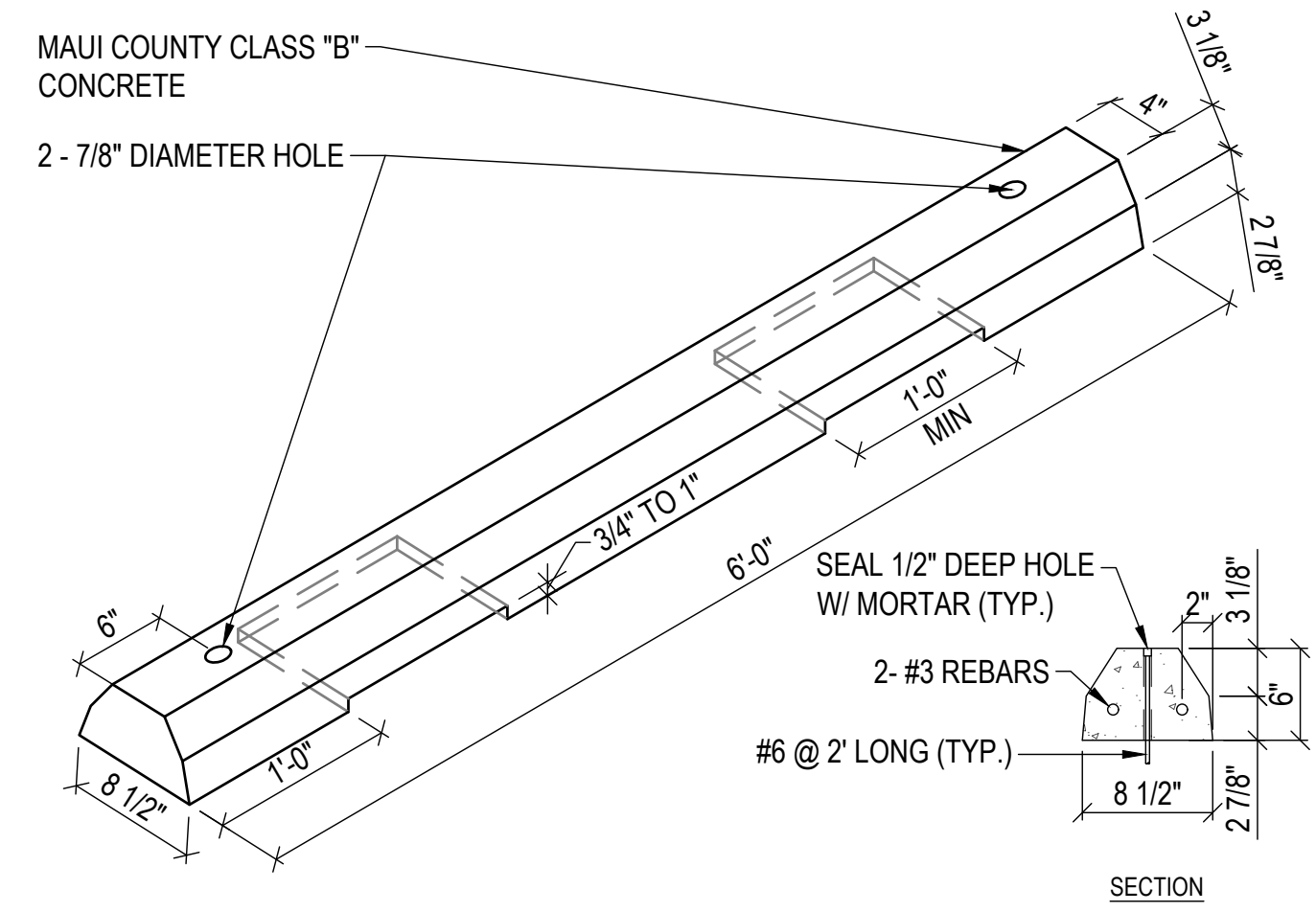


**2** SIGN DETAIL ON LIGHT/UTILITY POLE  
SCALE: NTS

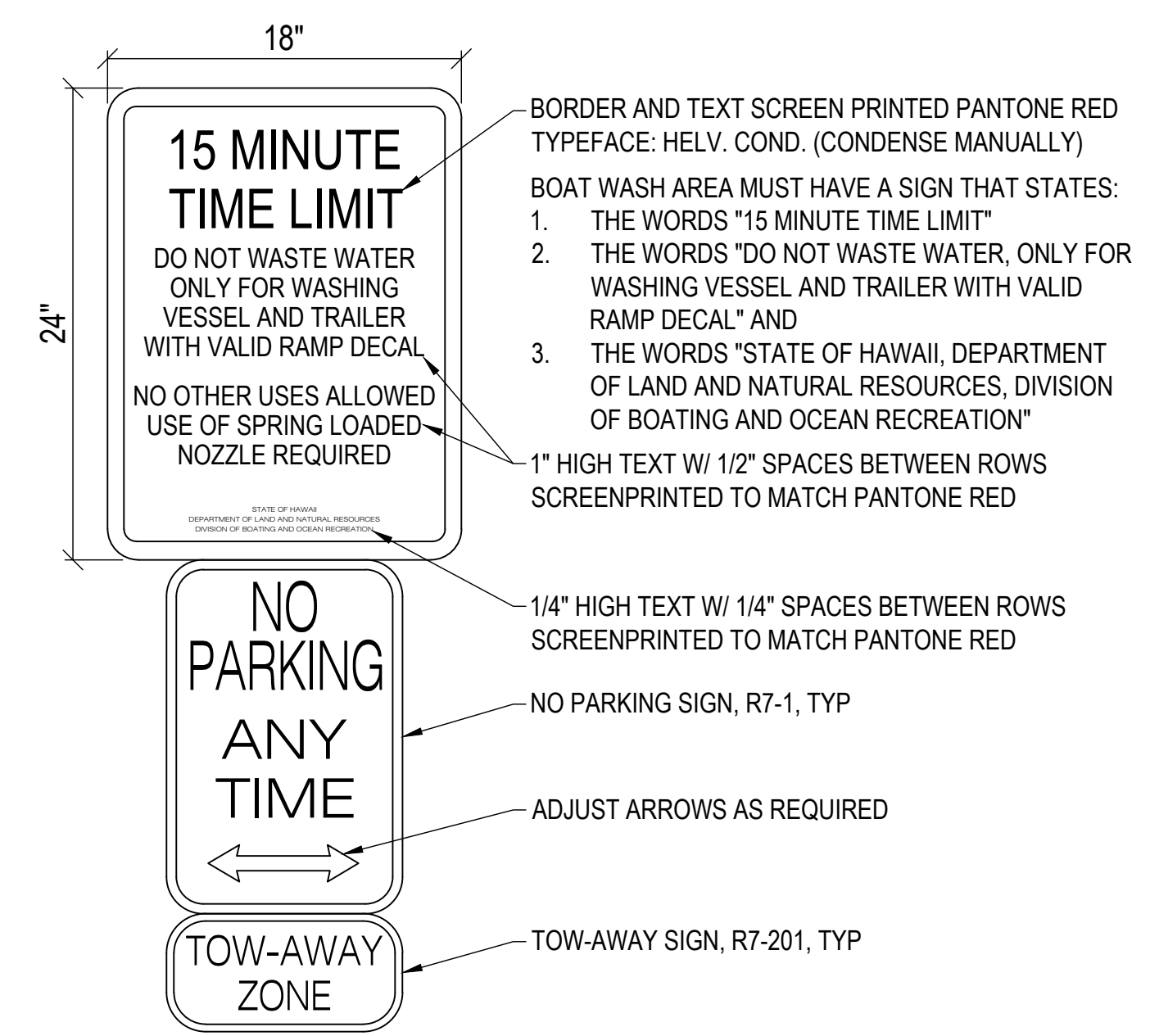


NOTE:  
1. PAINT ARROW SOLID WHITE.

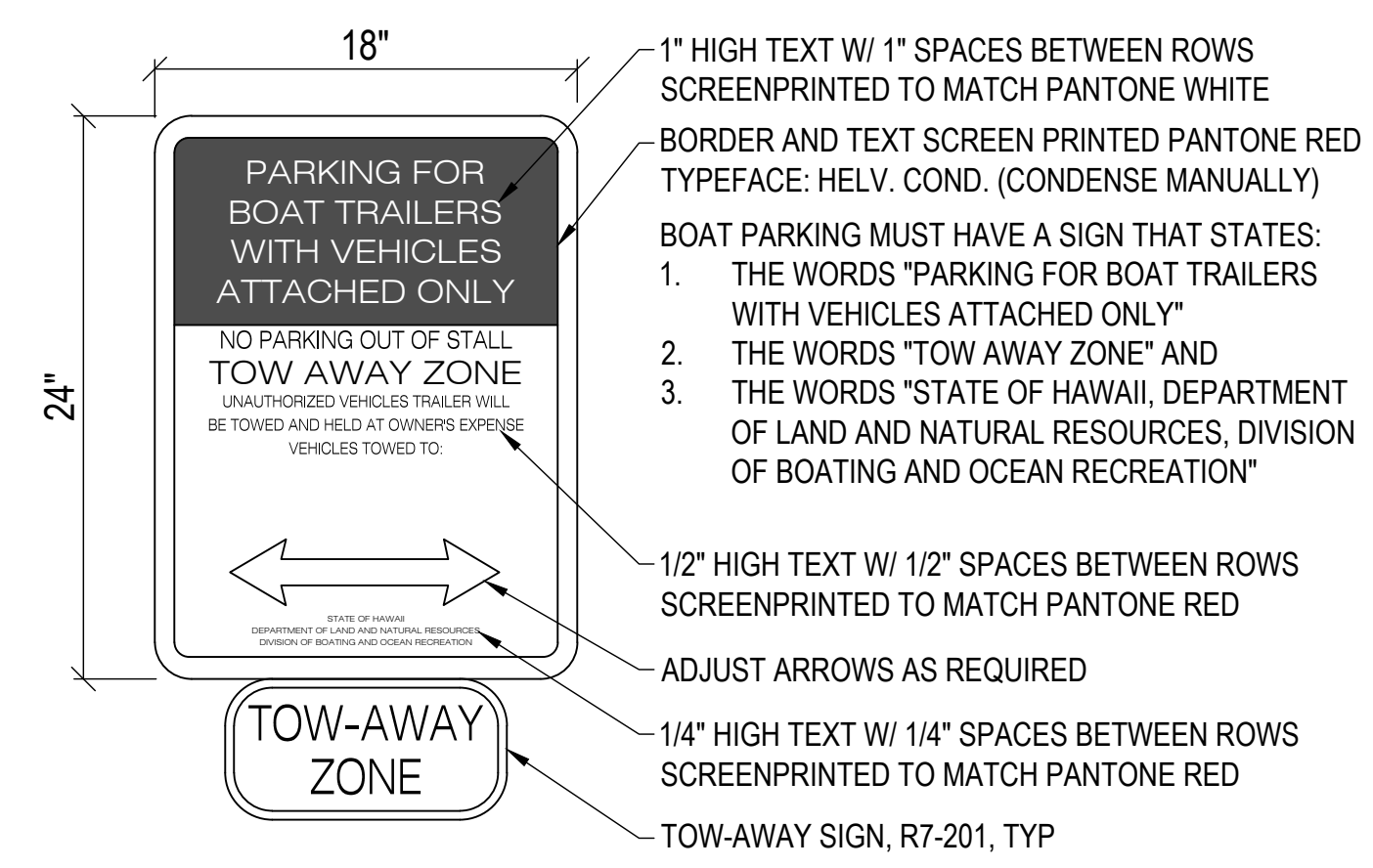
**5** TYPICAL PAVEMENT ARROW  
SCALE: NTS



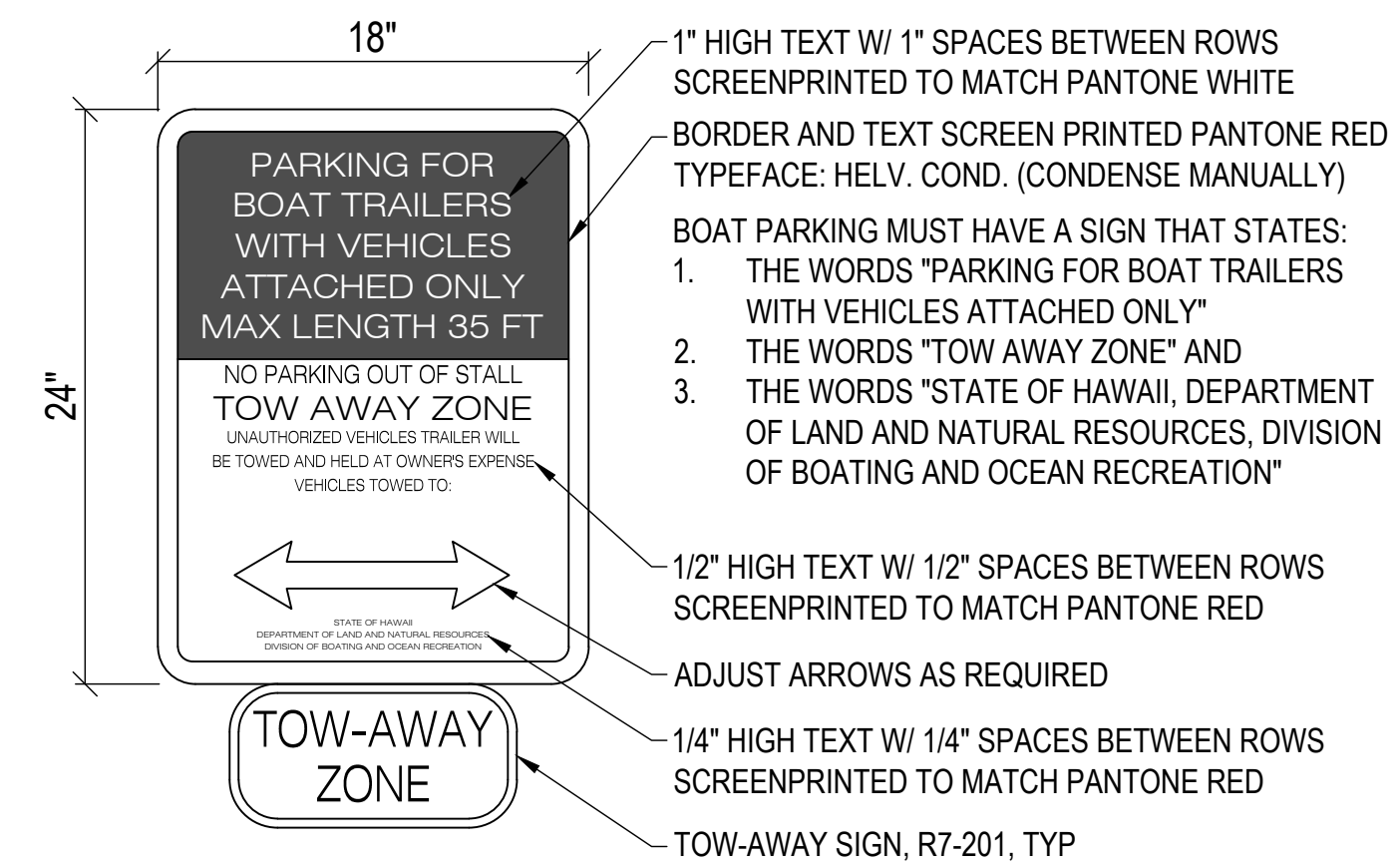
**6** CONCRETE WHEEL STOP DETAIL  
SCALE: NTS



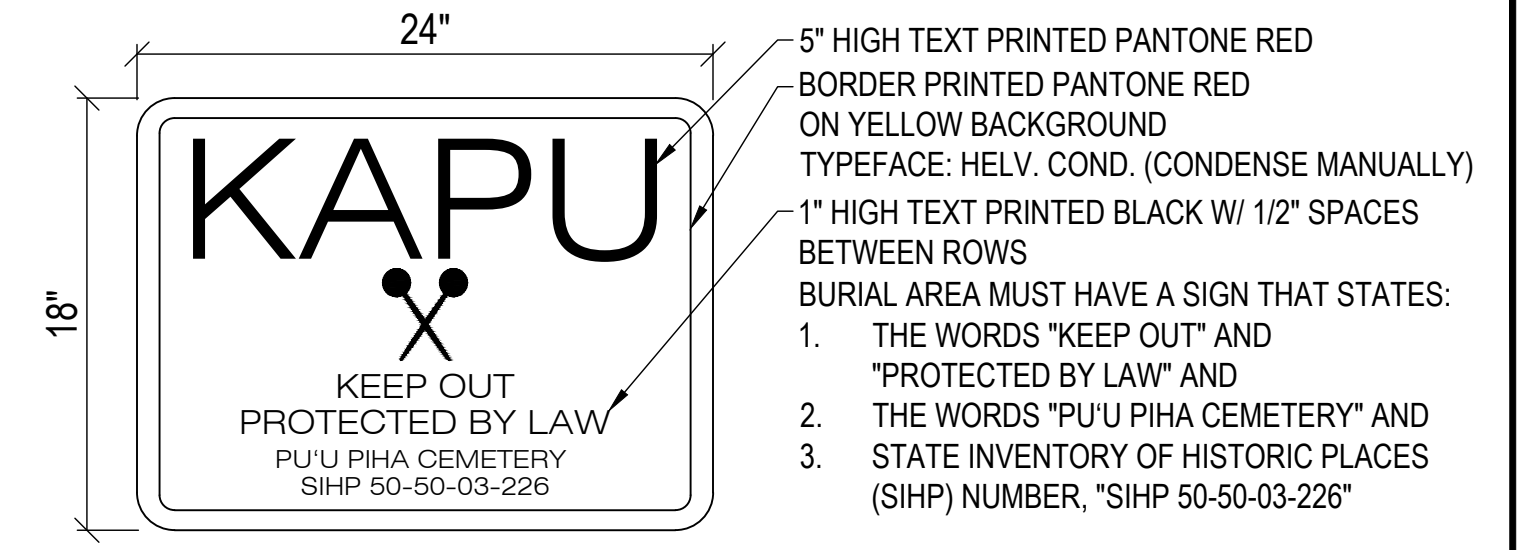
**3** TYPICAL BOAT WASH SIGN  
SCALE: NTS



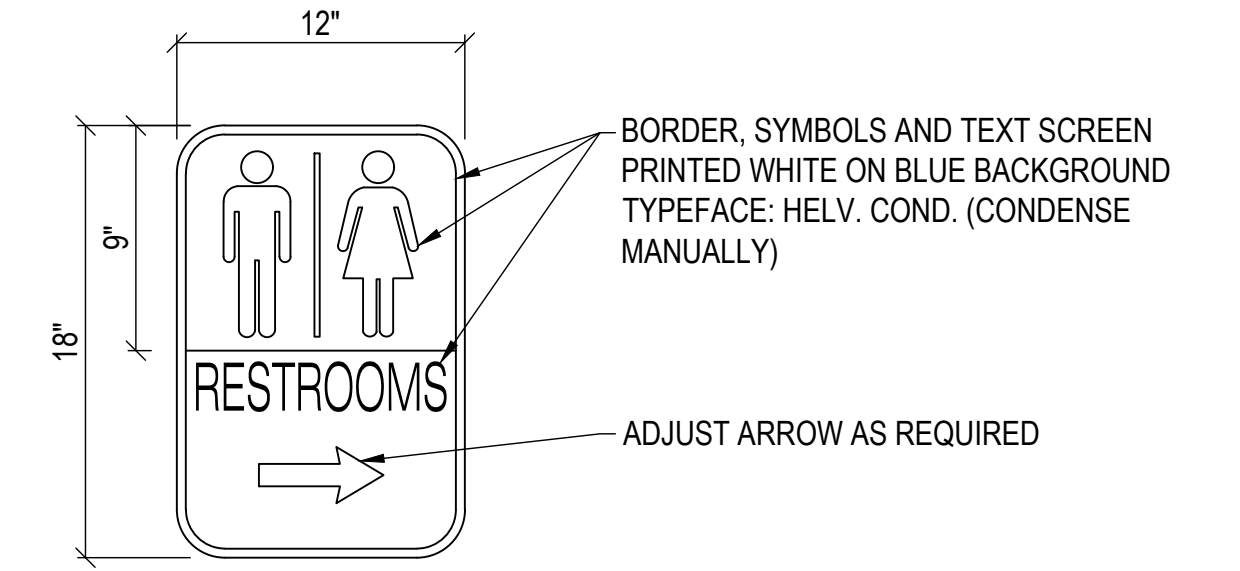
**7** TYPICAL BOAT PARKING SIGN  
SCALE: NTS



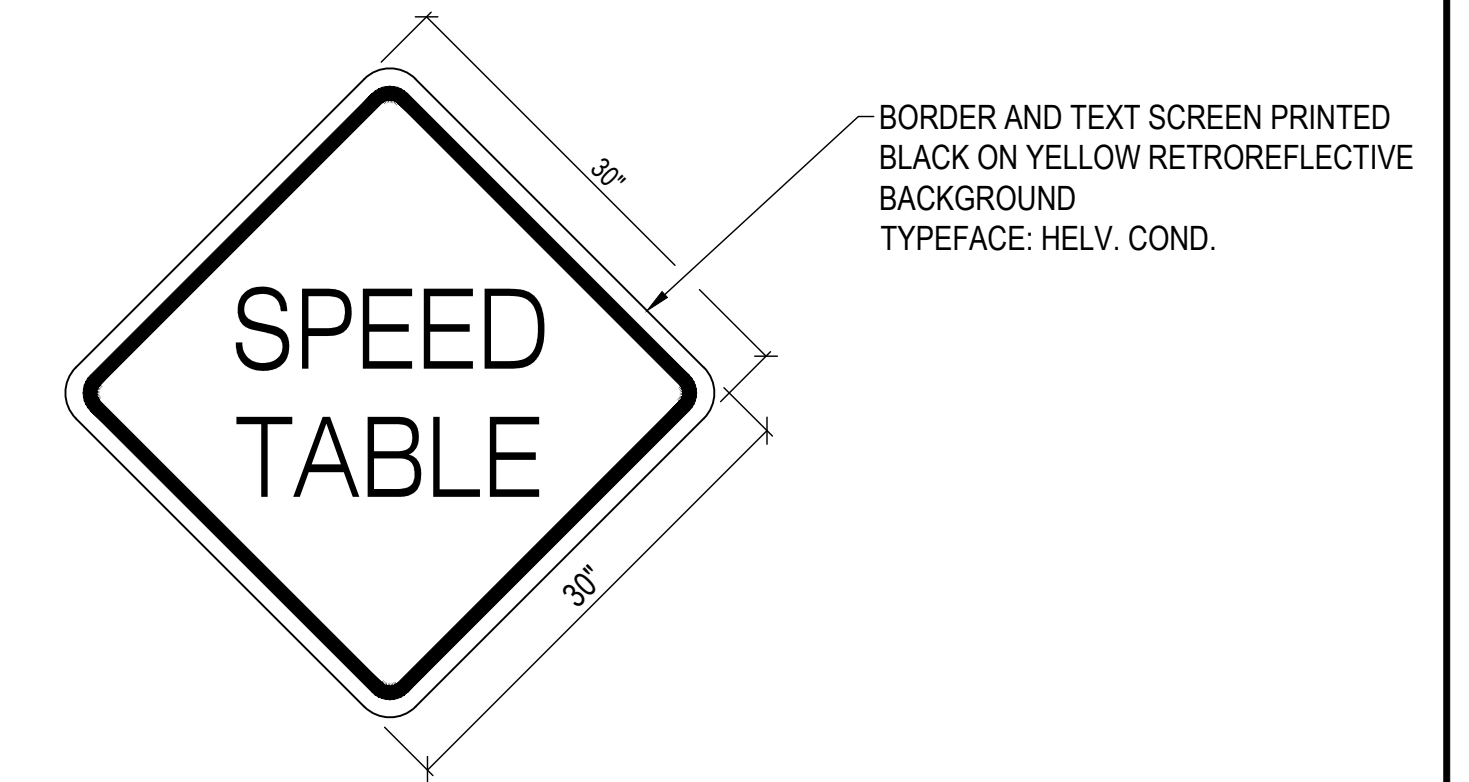
**9** BOAT PARKING SIGN (35 FEET)  
SCALE: NTS



**4** PROTECTED BURIAL AREA SIGN  
SCALE: NTS



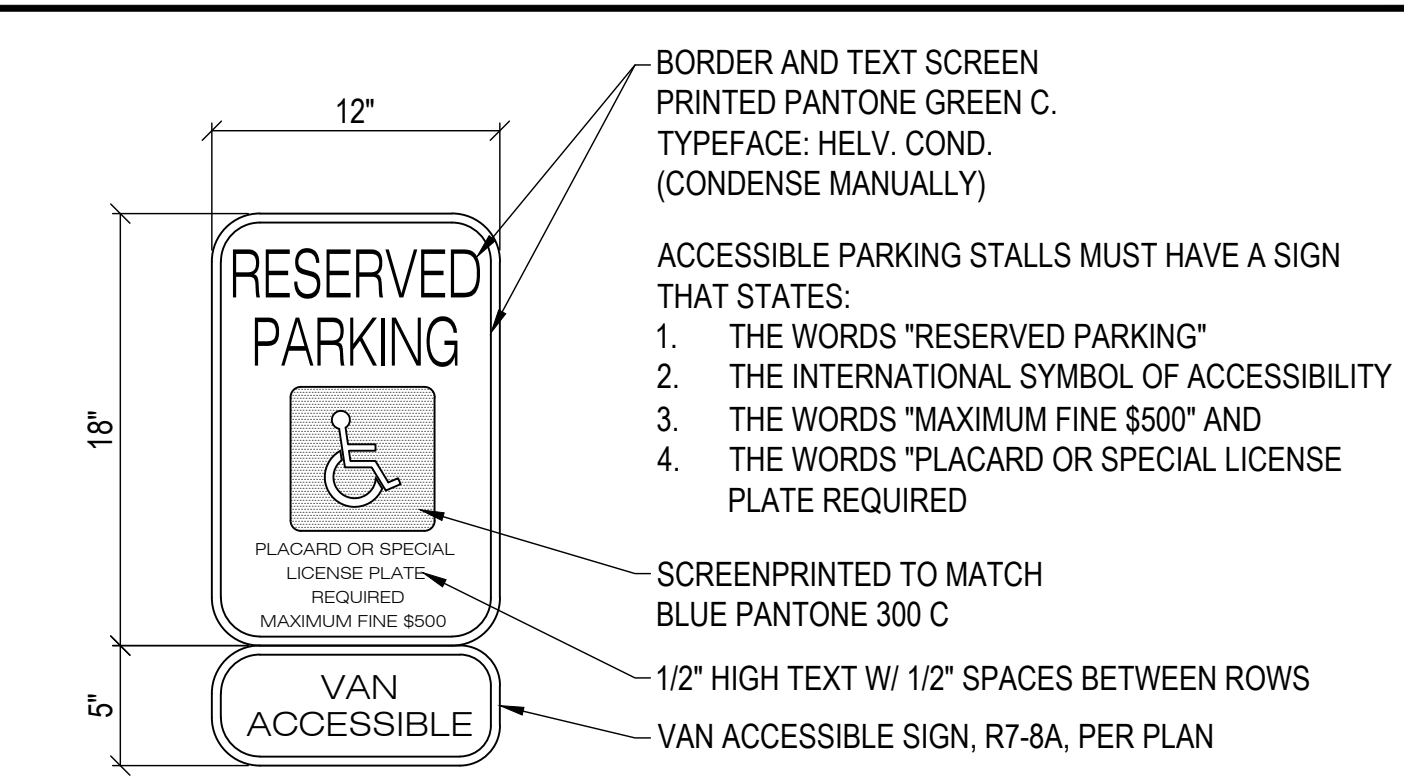
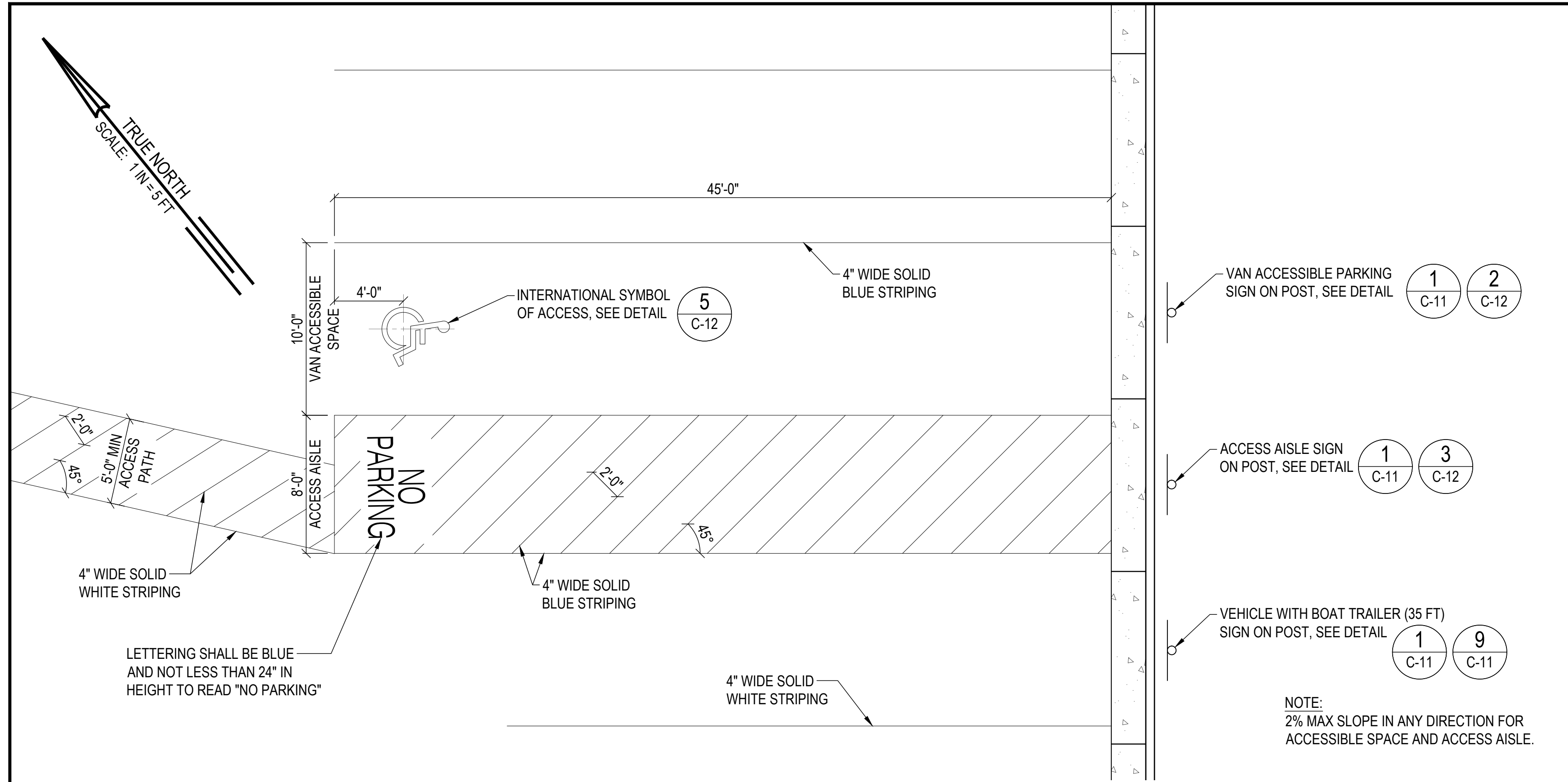
**8** TYPICAL RESTROOM SIGN  
SCALE: NTS



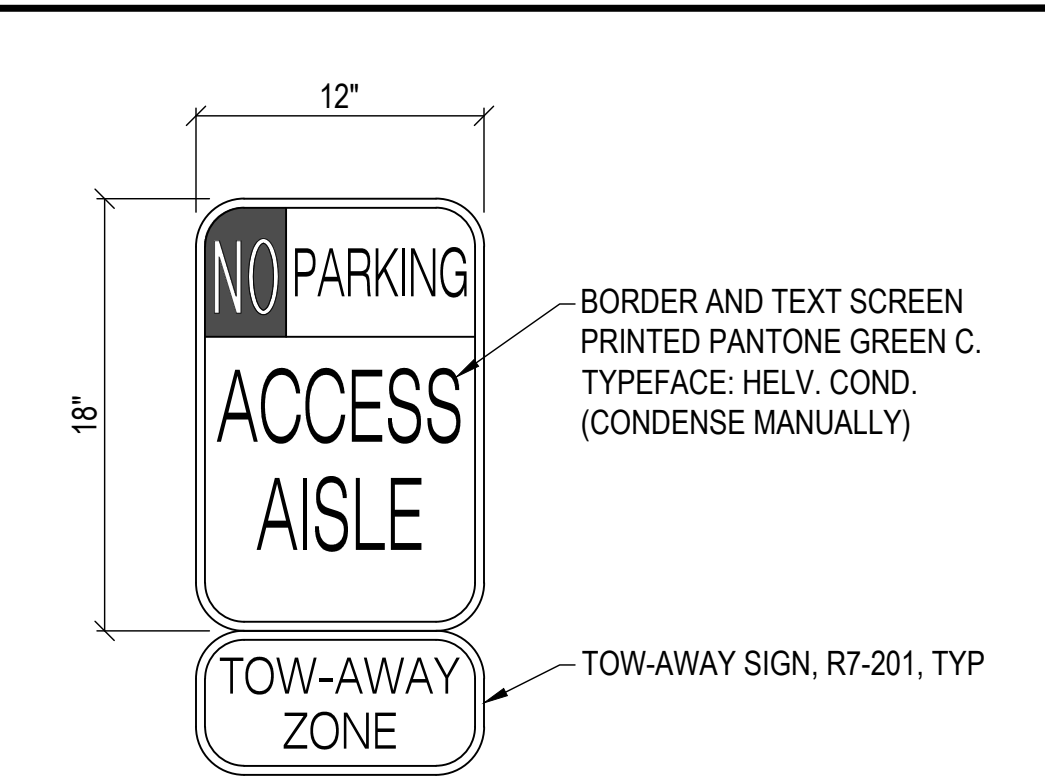
**10** TYPICAL SPEED TABLE SIGN  
SCALE: NTS

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b>					
<b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
SITE DETAILS - 2					
<b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	NONE		
APPROVED:			DRAWING NO.		
ADMINISTRATOR		DATE	<b>C-11</b>		

CAD DWG. NO.: B48CM75A - C-XX DETAILS.dwg 4/10/26 16:05

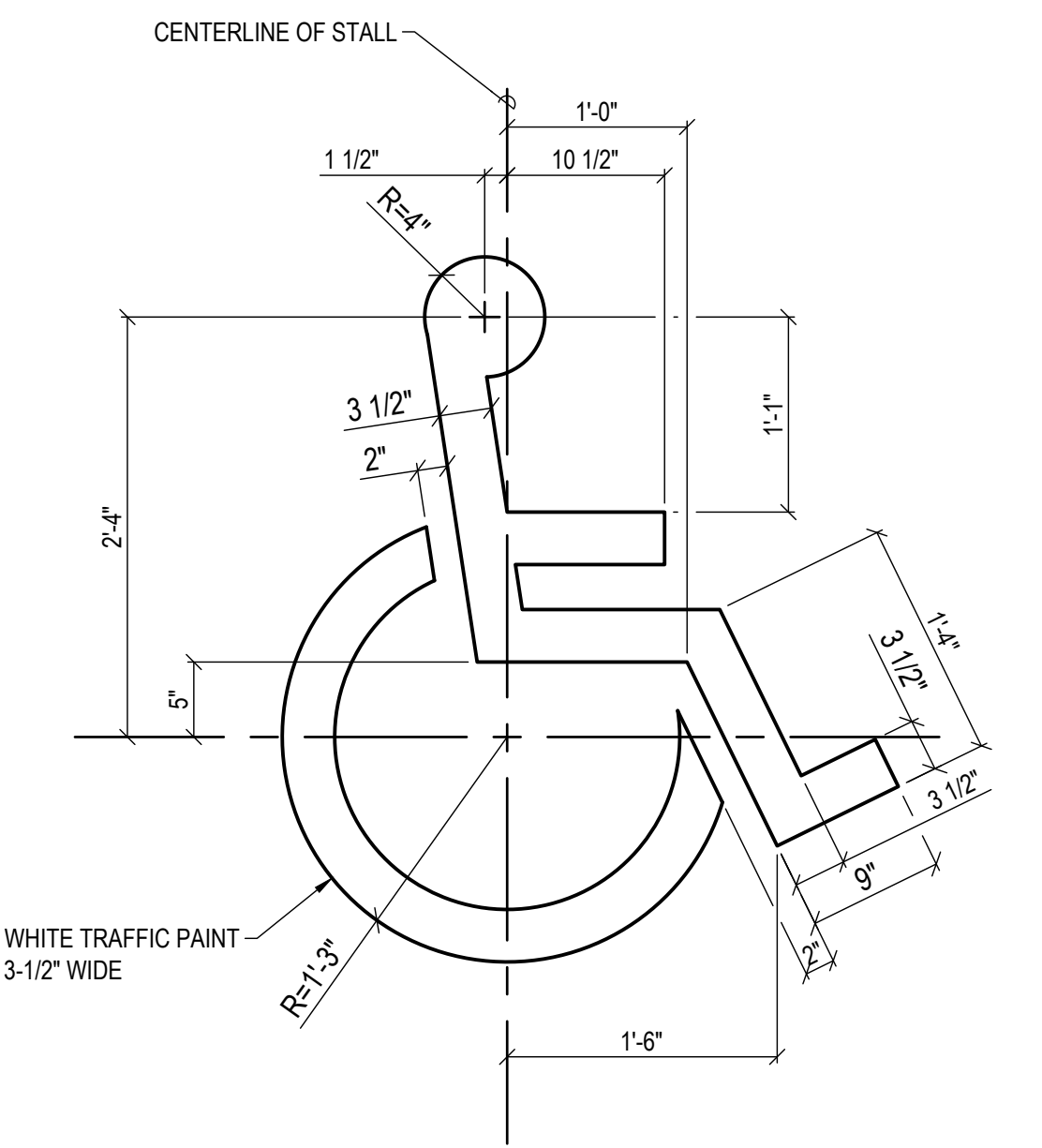


**2 TYPICAL ACCESSIBLE STALL SIGN**  
SCALE: NTS

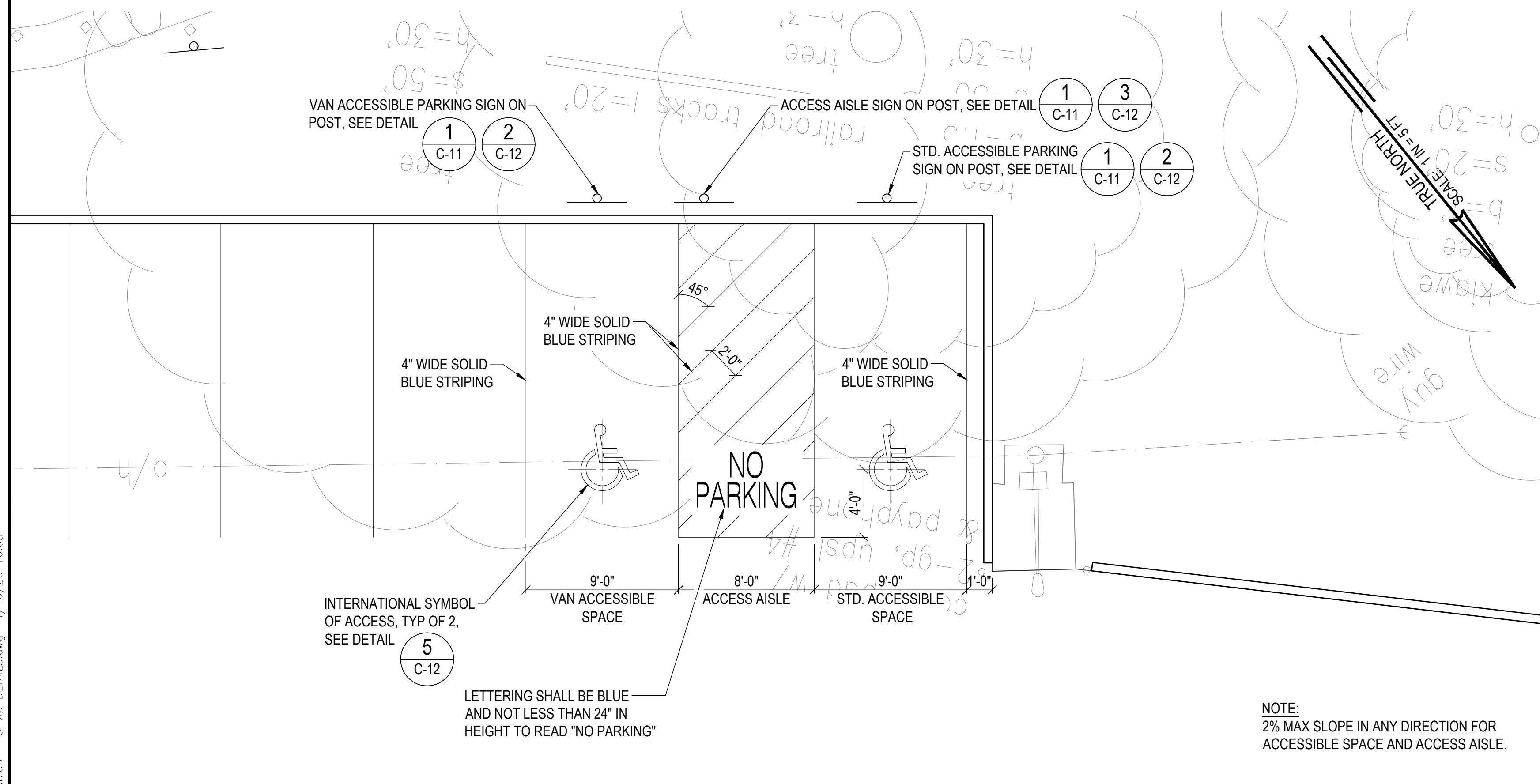


**3 TYPICAL ACCESS AISLE SIGN**  
SCALE: NTS

**1 BOAT TRAILER ACCESSIBLE PARKING DETAIL**  
SCALE: 1" = 5'



**5 ISA SYMBOL DETAIL**  
SCALE: NTS

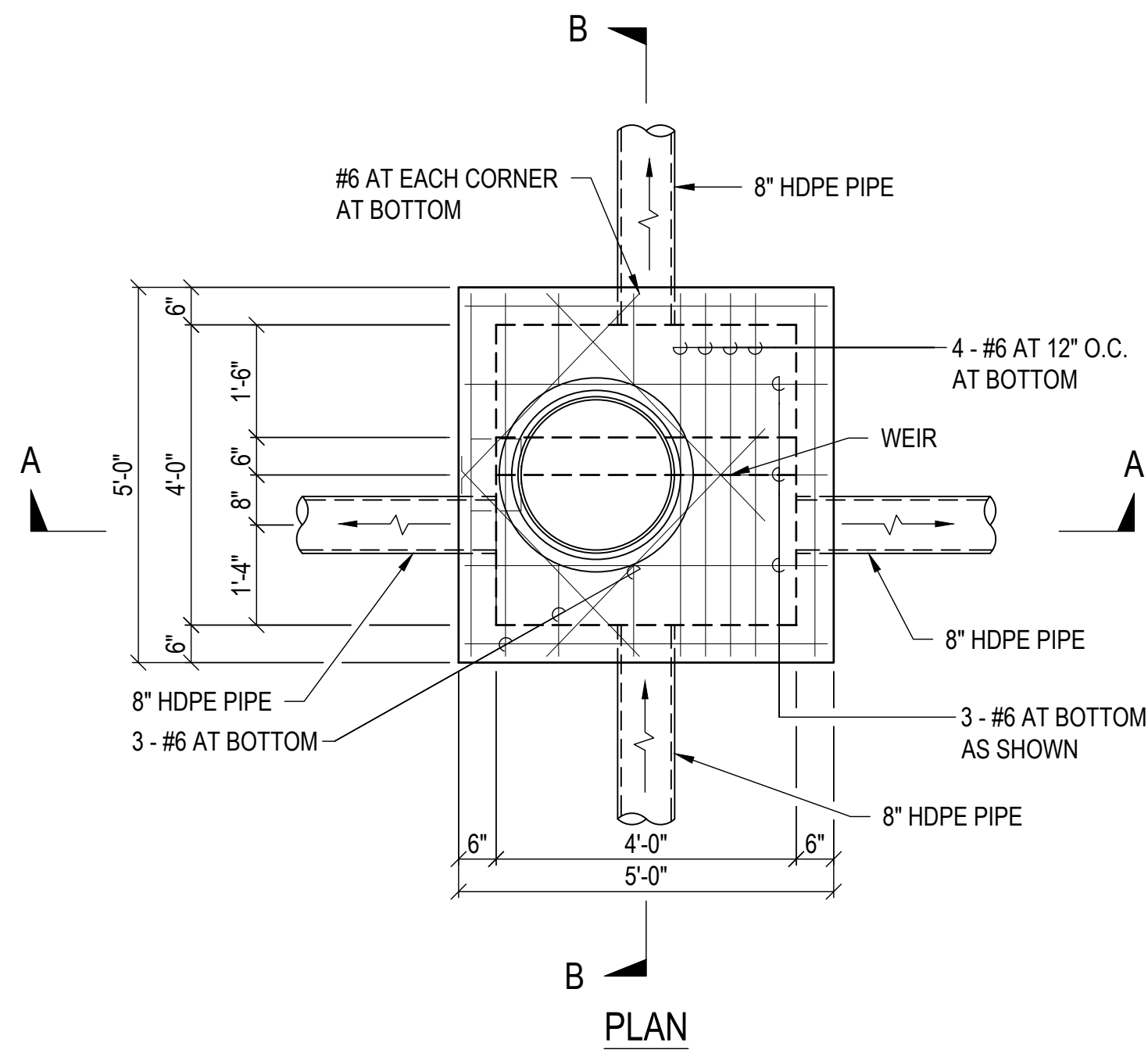


**4 STANDARD ACCESSIBLE PARKING DETAIL**  
SCALE: 1" = 5'

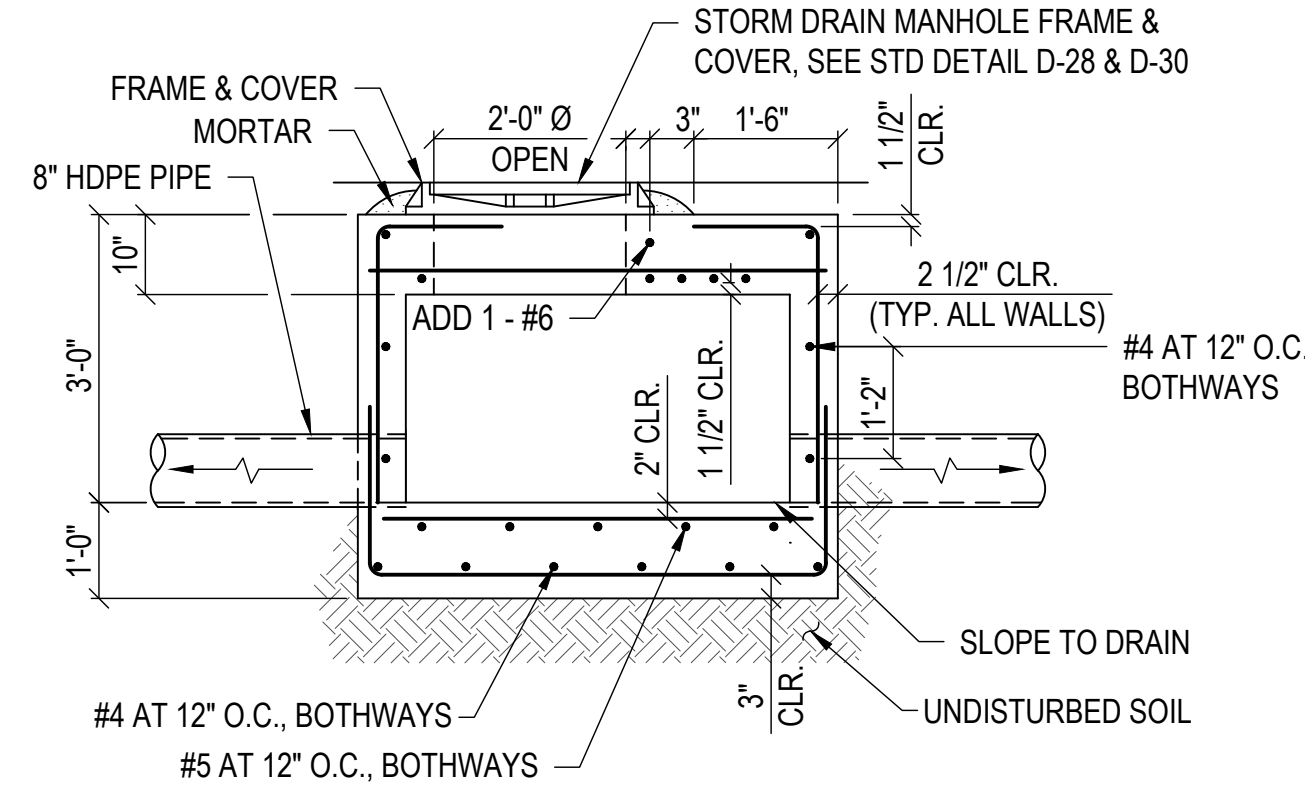


REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b>					
<b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
<b>SITE DETAILS - 3</b>					
<b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	AS SHOWN		
APPROVED:					DRAWING NO.
				<b>C-12</b>	
ADMINISTRATOR		DATE			

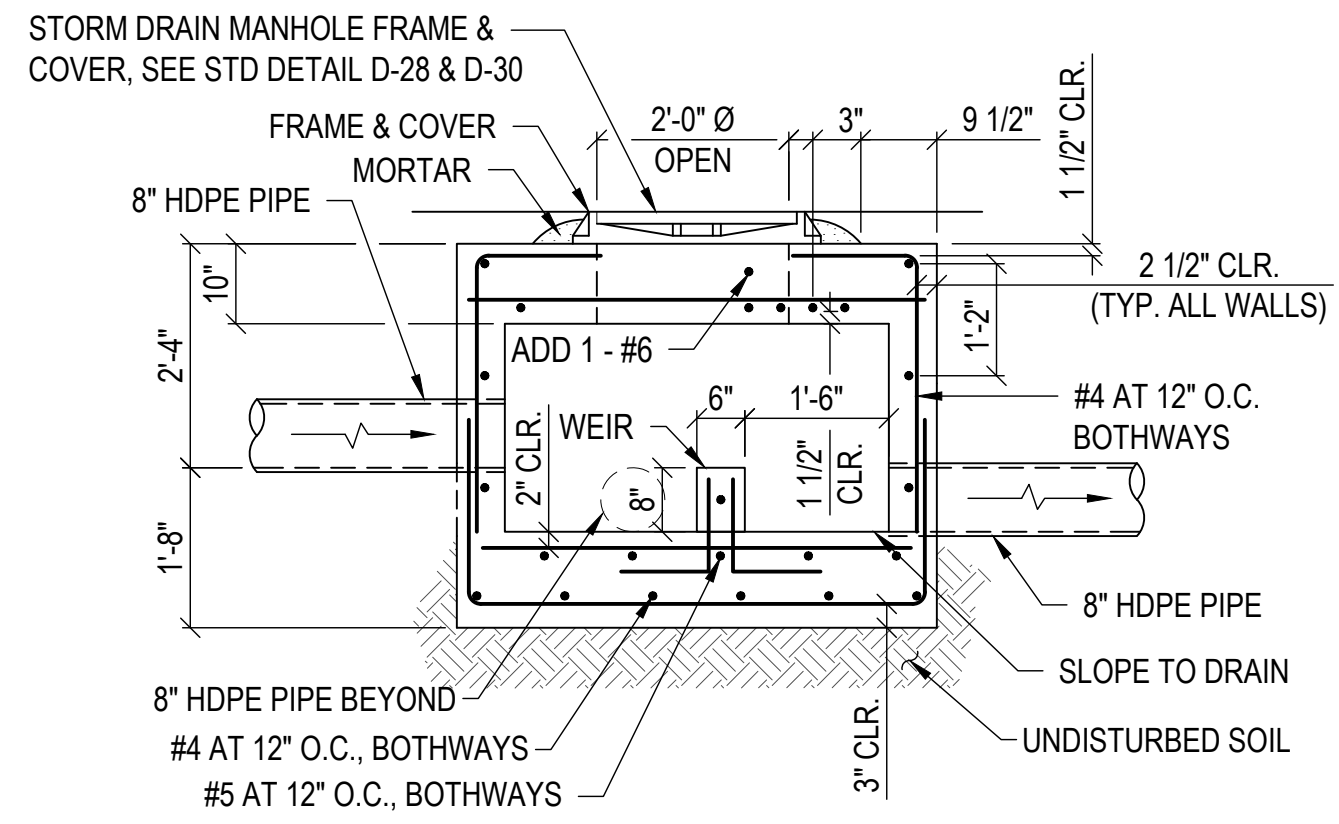
CAD DWG. NO.: B48CM75A - C-XX DETAILS.dwg 4/10/26 16:05



PLAN



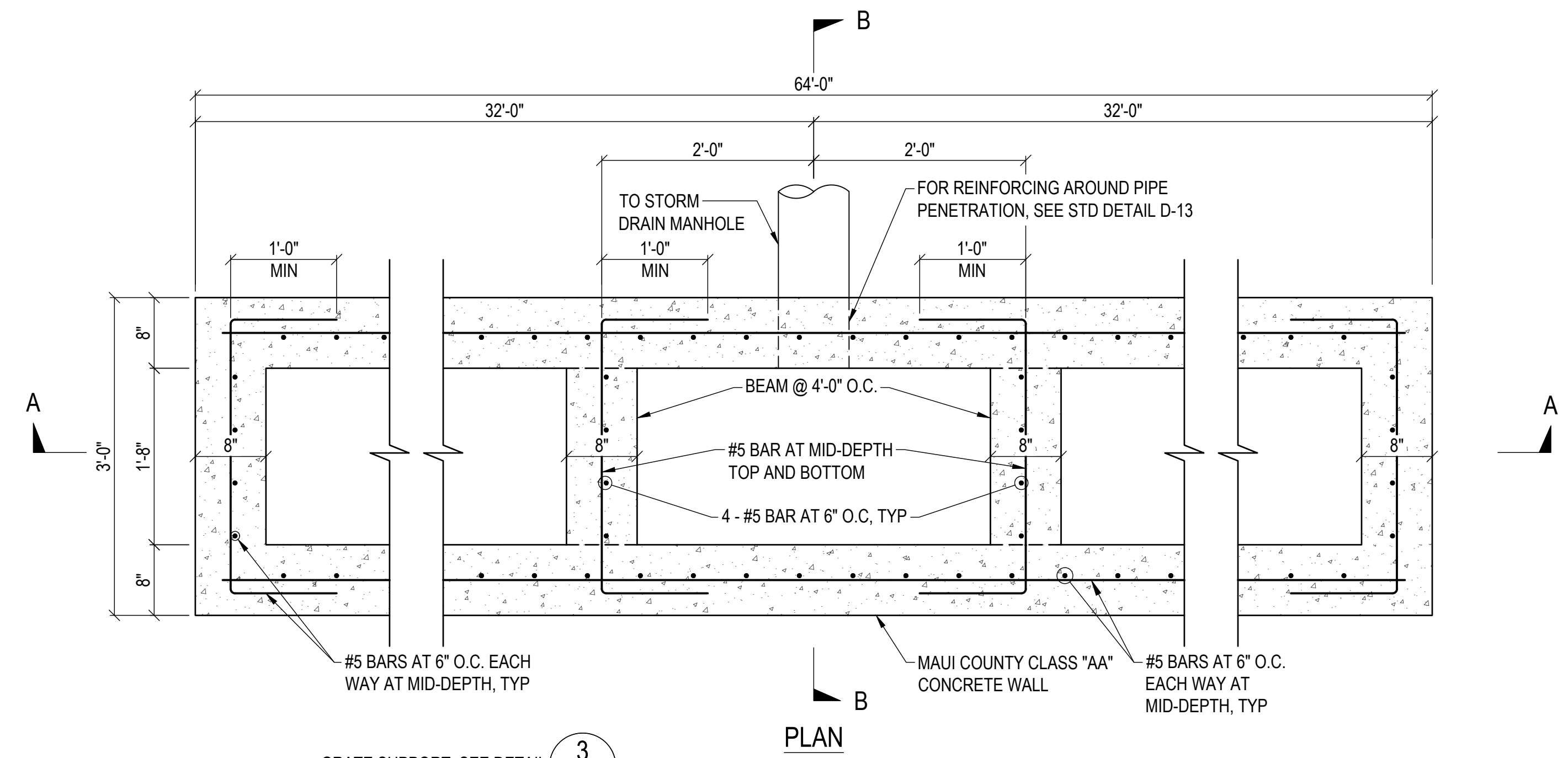
SECTION A-A



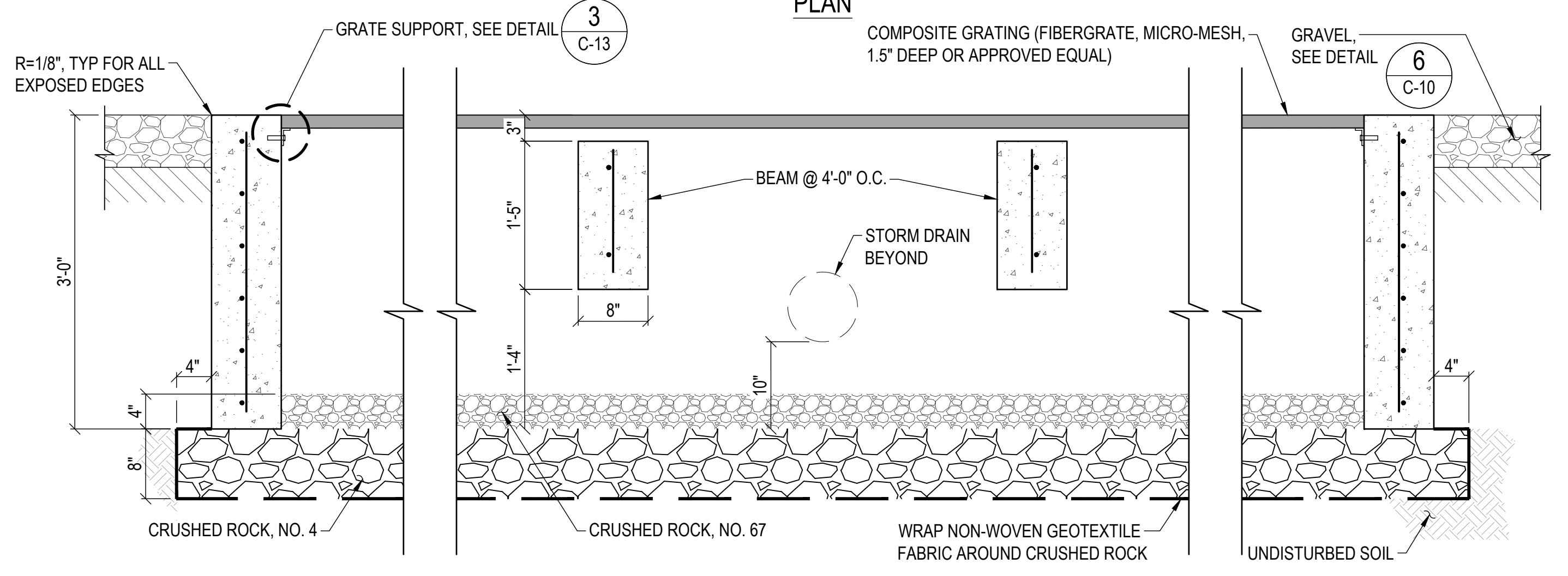
SECTION B-B

- NOTES:
1. CONCRETE STORM DRAIN MANHOLE IS MODIFIED FROM DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL D-18.
  2. CONCRETE SHALL BE MAUI COUNTY CLASS "AA".
  3. FOR REINFORCING, SEE DPW STANDARD DETAIL D-18 AND D-13.

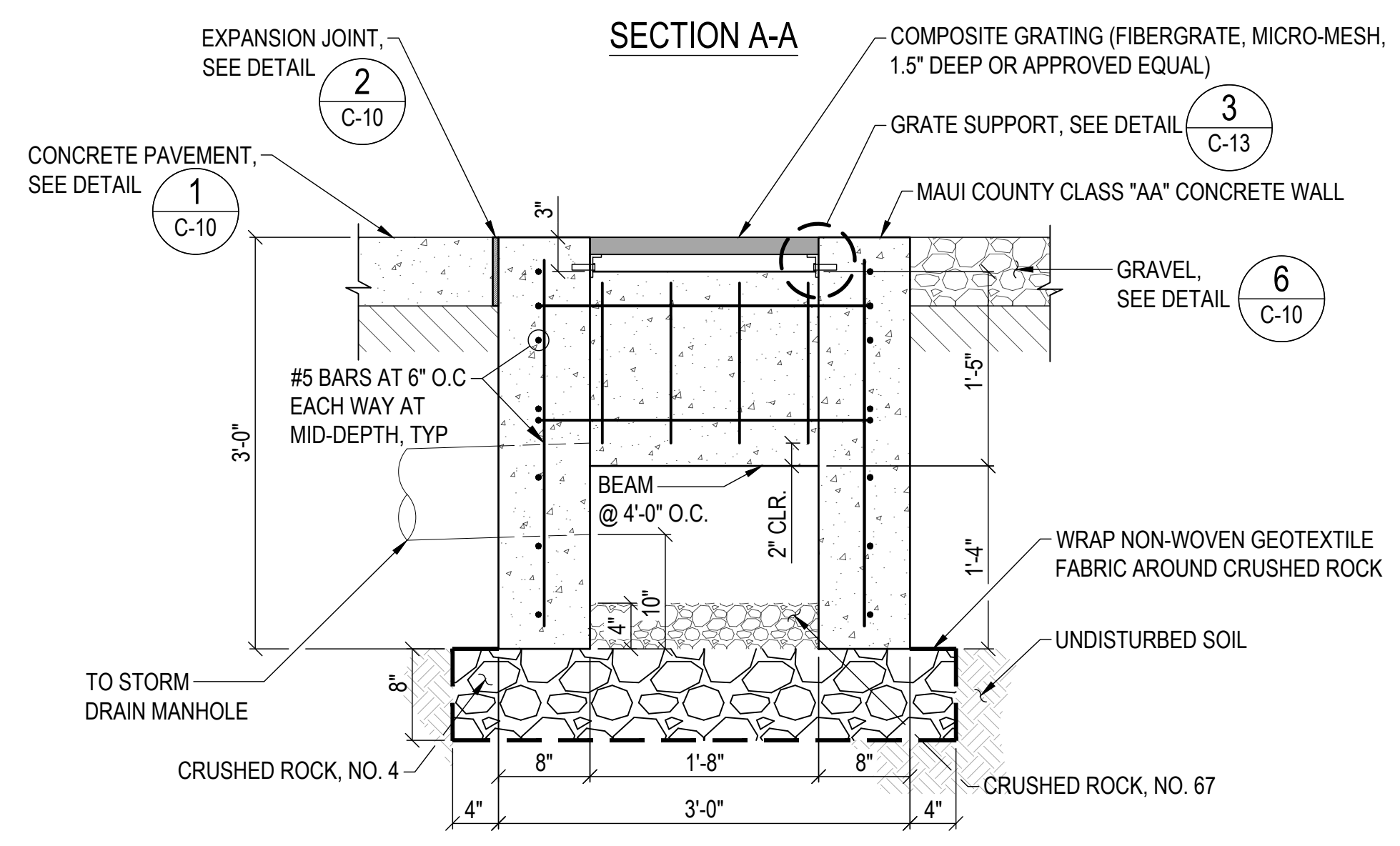
**1** CONCRETE STORM DRAIN MANHOLE WITH WEIR  
SCALE: 1/2" = 1'-0"



PLAN

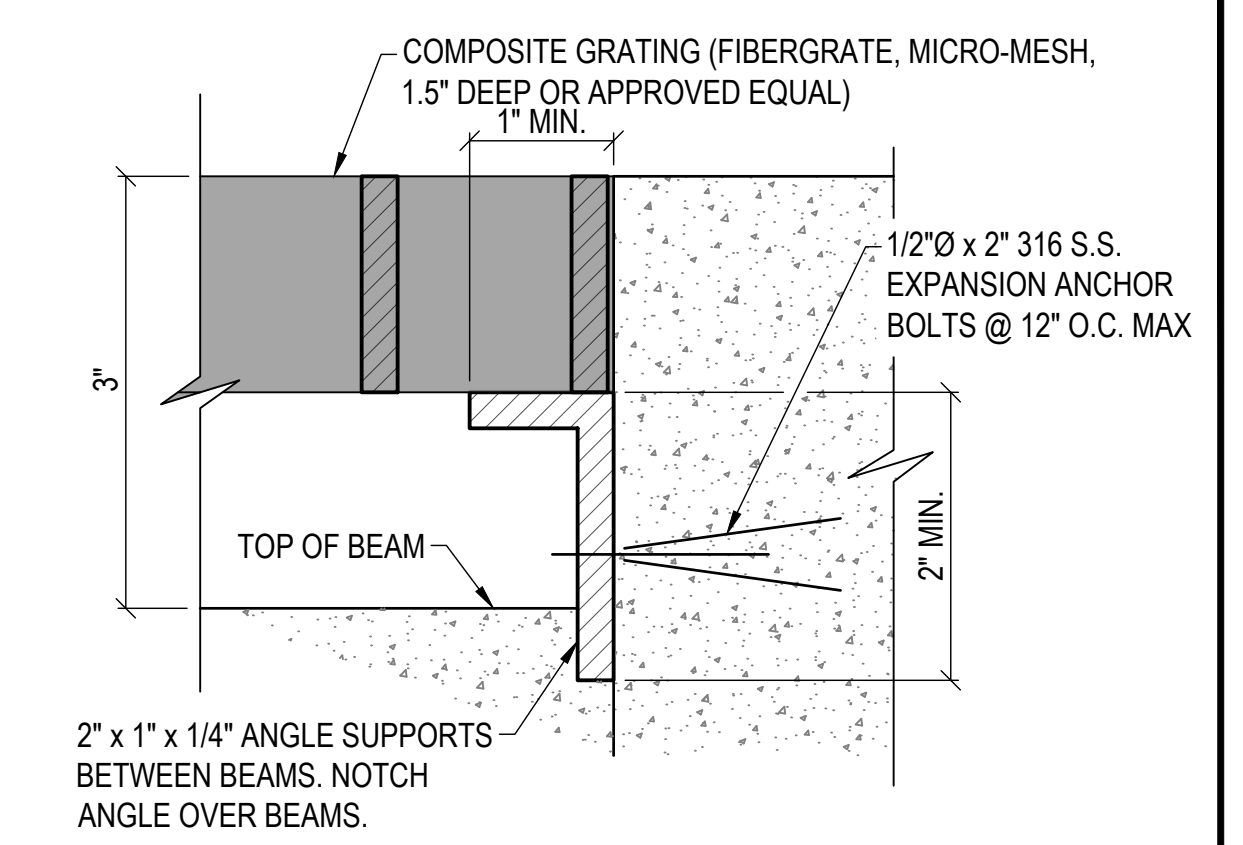


SECTION A-A

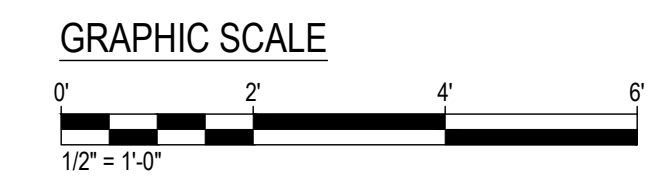


SECTION B-B

**2** TRENCH DRAIN DETAIL  
SCALE: NTS

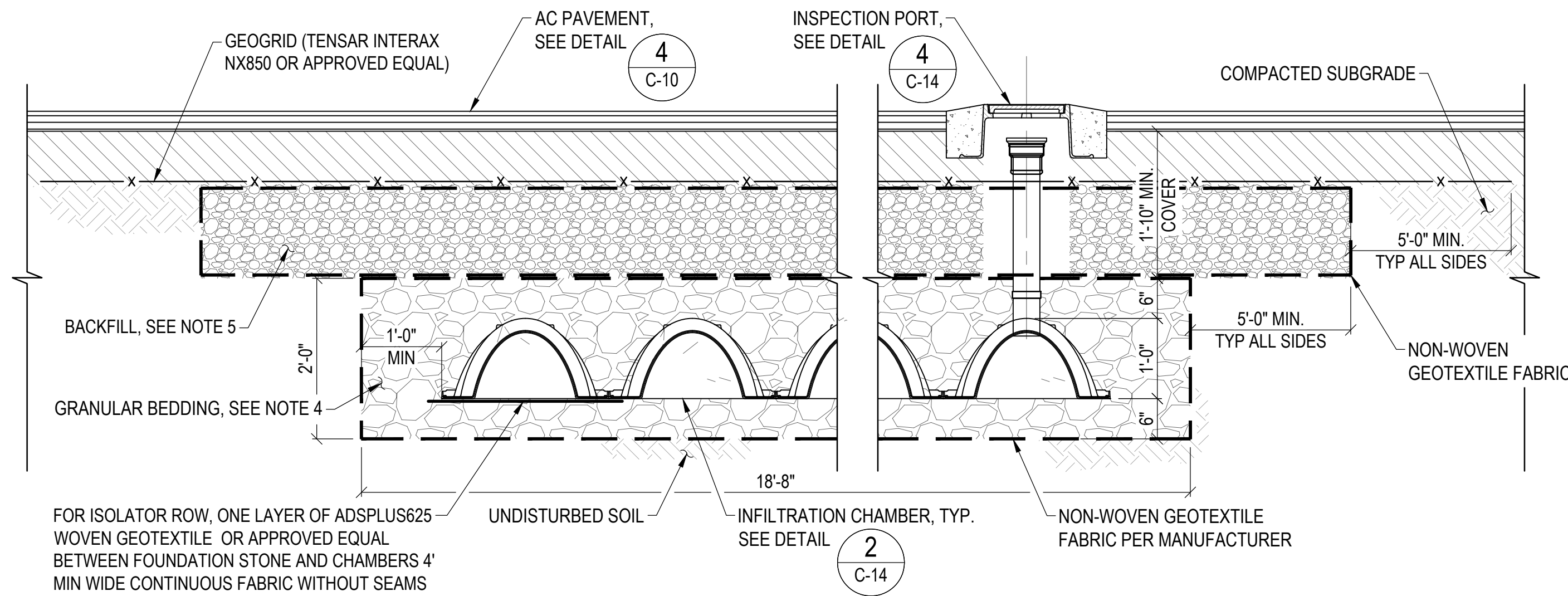


**3** GRATE SUPPORT  
SCALE: NTS



REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<p><b>STATE OF HAWAII</b>  <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b>  <b>DIVISION OF BOATING AND OCEAN RECREATION</b></p> <p><b>MALA BOAT RAMP SITE IMPROVEMENTS</b></p> <p><b>DRAINAGE DETAILS - 1</b></p> <p><b>KAULA AE, LLC</b></p>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	AS SHOWN		
APPROVED:			DRAWING NO.		<b>C-13</b>
ADMINISTRATOR	DATE				

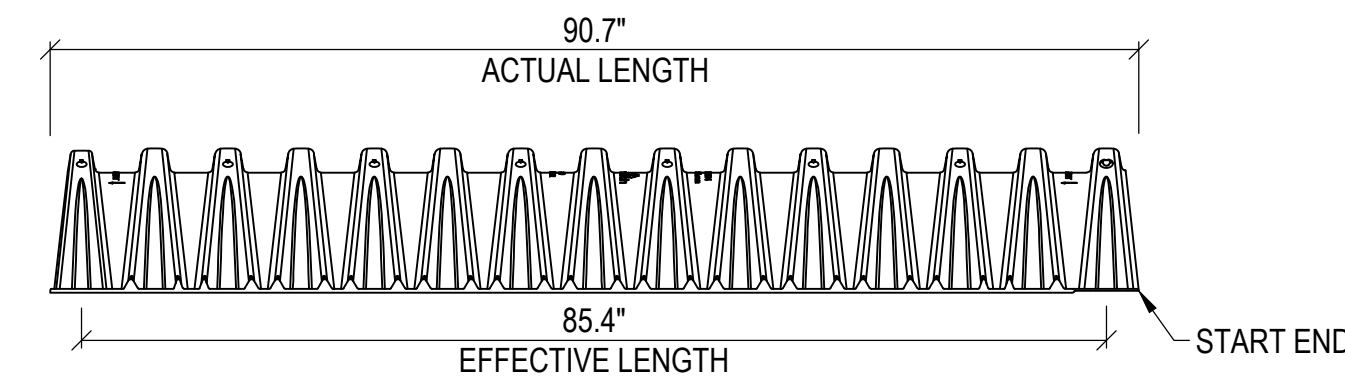
CAD DWG. NO.: B48CM75A - C-XX DETAILS.dwg 4/10/26 16:05



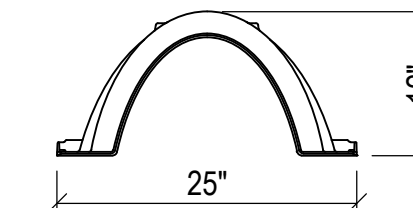
FOR ISOLATOR ROW, ONE LAYER OF ADSPLUS625 WOVEN GEOTEXTILE OR APPROVED EQUAL BETWEEN FOUNDATION STONE AND CHAMBERS 4' MIN WIDE CONTINUOUS FABRIC WITHOUT SEAMS

**NOTES:**

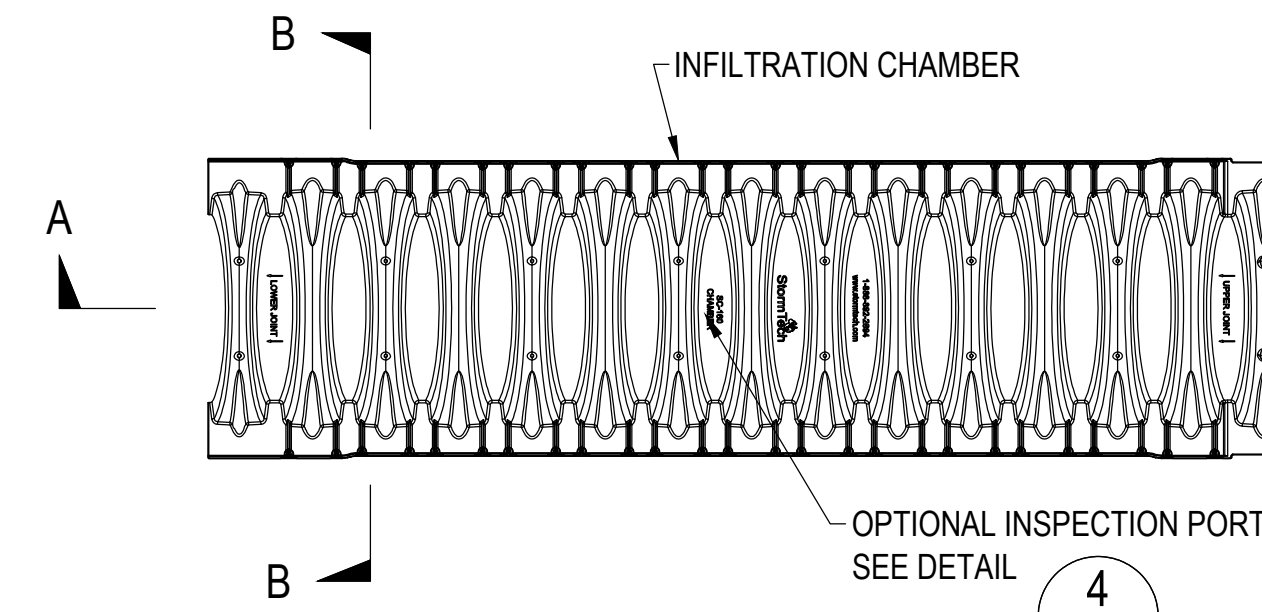
1. INSTALL SYSTEM PER MANUFACTURER'S RECOMMENDATIONS.
2. THE BOTTOM OF THE BED AND INFILTRATION CHAMBER SHALL BE LEVEL.
3. CHAMBERS TO BE INSTALLED EDGE-TO-EDGE AND 12" FROM THE SIDEWALL EXCAVATION.
4. GRANULAR BEDDING SHALL BE WASHED DRAIN ROCK (CLEAN, CRUSHED, AND ANGULAR ROCK, NO. 4).
5. BACKFILL TO BOTTOM OF AGGREGATE BASE COURSE WITH CLEAN CRUSHED ROCK, NO.67.
6. CONTRACTOR SHALL NOTIFY THE ENGINEER OF UNUSUAL CONDITIONS FOUND DURING EXCAVATION THAT COULD IMPACT THE PERFORMANCE OF THE SYSTEM SUCH AS UNDERGROUND HOLES, WATER, UTILITIES, ETC.



SECTION A - A

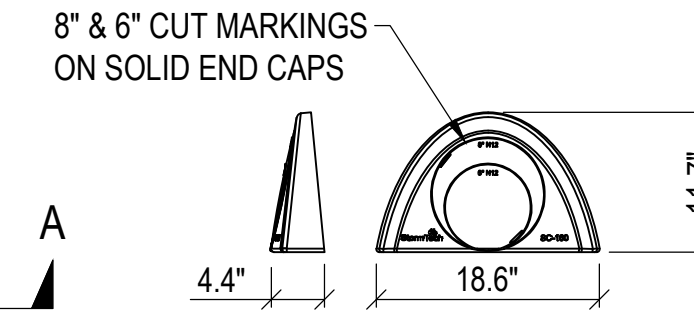


SECTION B - B



PLAN

4 C-14



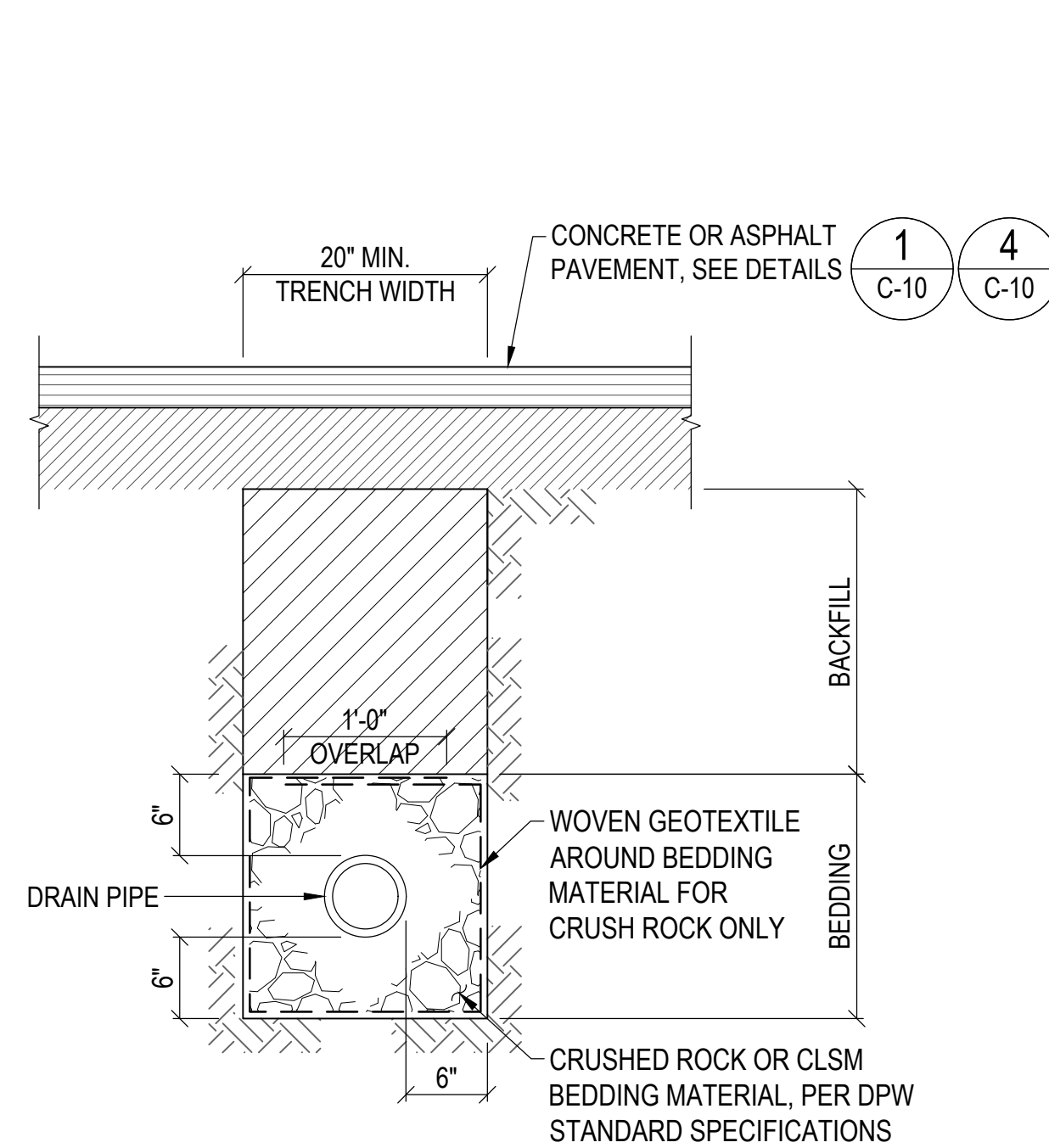
END CAP

**NOTES:**

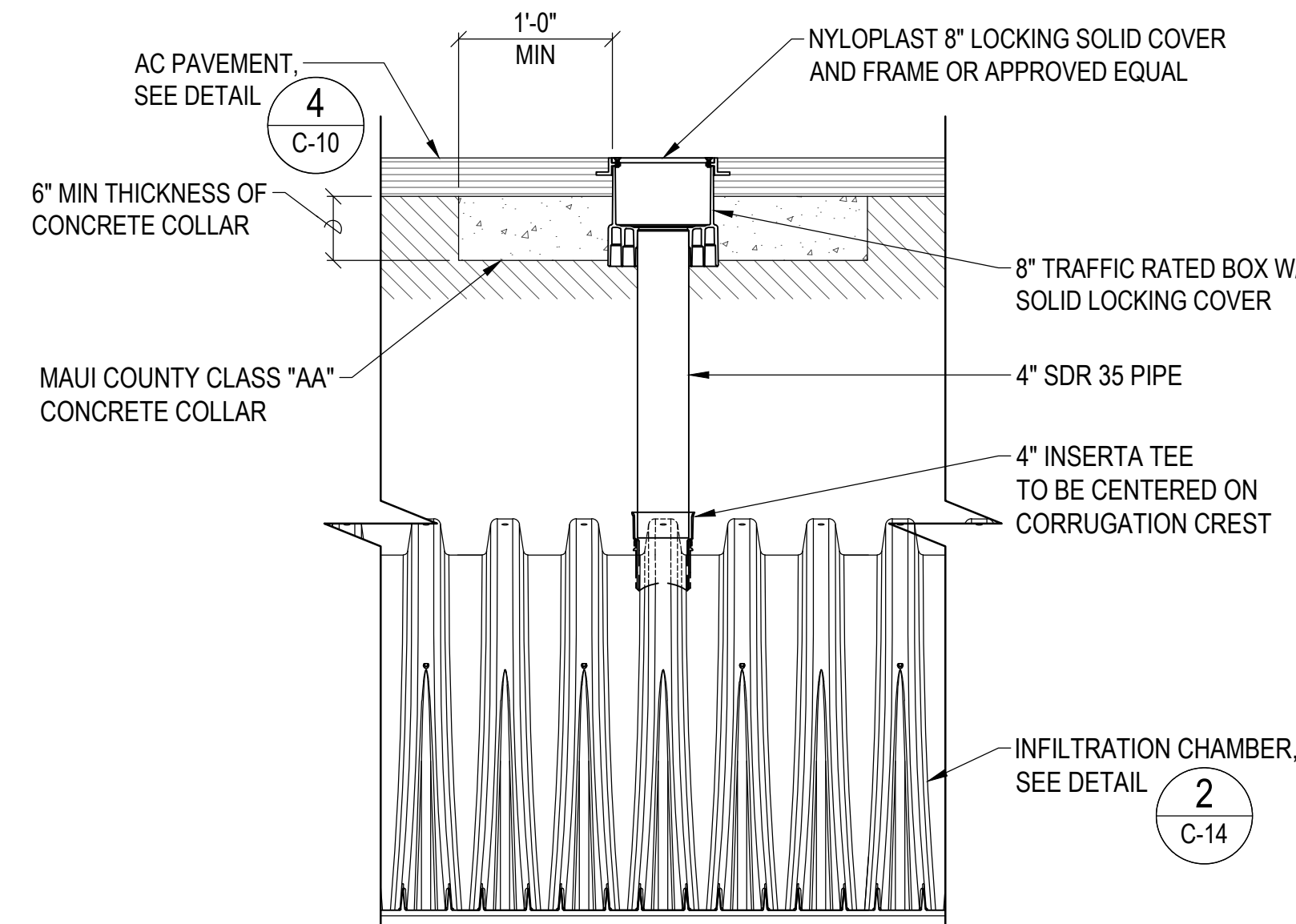
1. CHAMBER SHALL BE ADS SC-160LP CHAMBERS OR APPROVED EQUAL.
2. EXCAVATION, SITE PREPARATION AND INSTALLATION PER MANUFACTURER RECOMMENDATIONS.
3. MIN. STORAGE CAPACITY: 51.2 GALLONS / 6.85 FT<sup>3</sup>

**1** SUBSURFACE INFILTRATION SYSTEM DETAIL  
SCALE: NTS

**2** INFILTRATION CHAMBER DETAIL  
SCALE: NTS



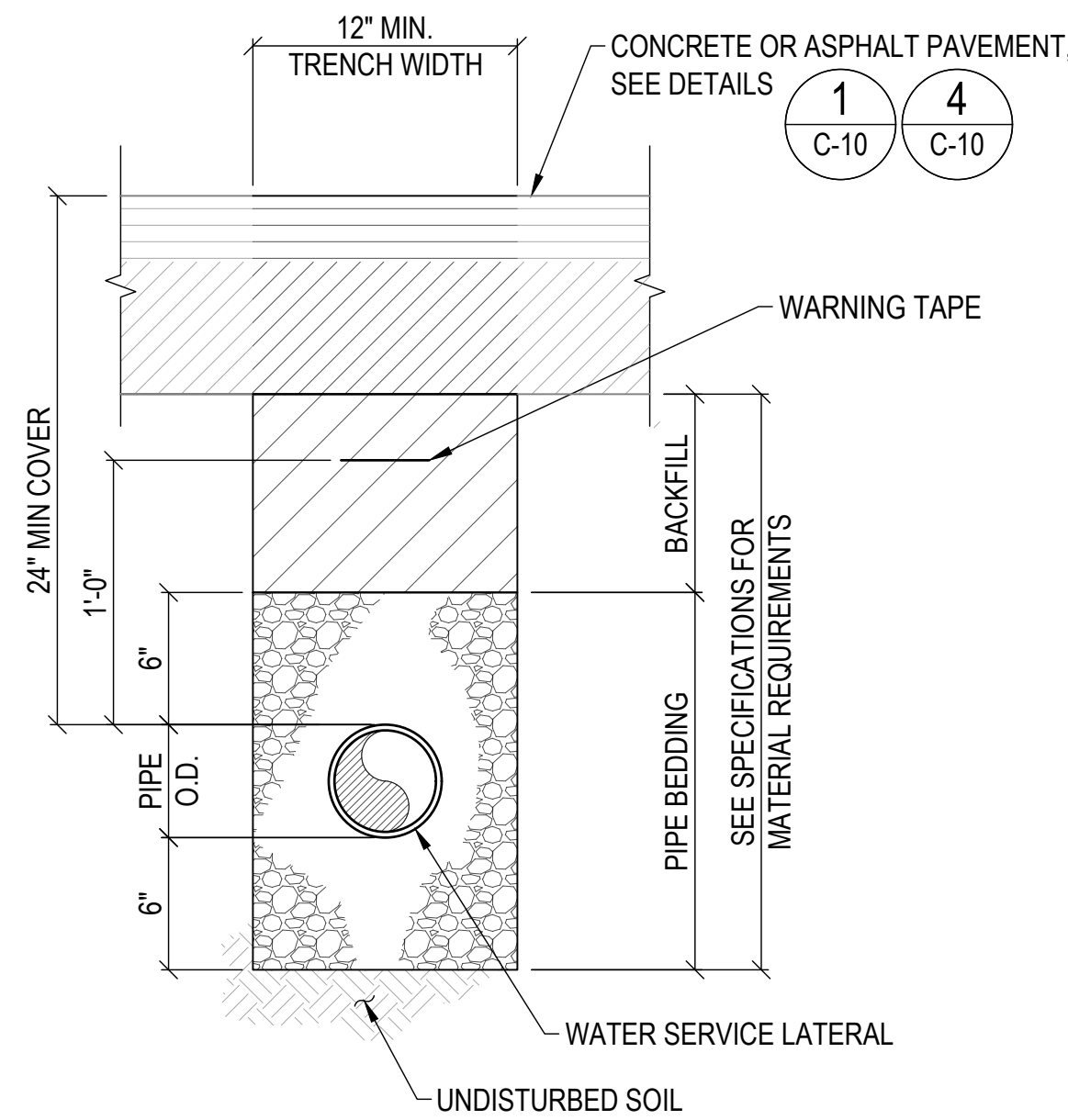
**3** DRAINAGE TRENCH DETAIL  
SCALE: NTS



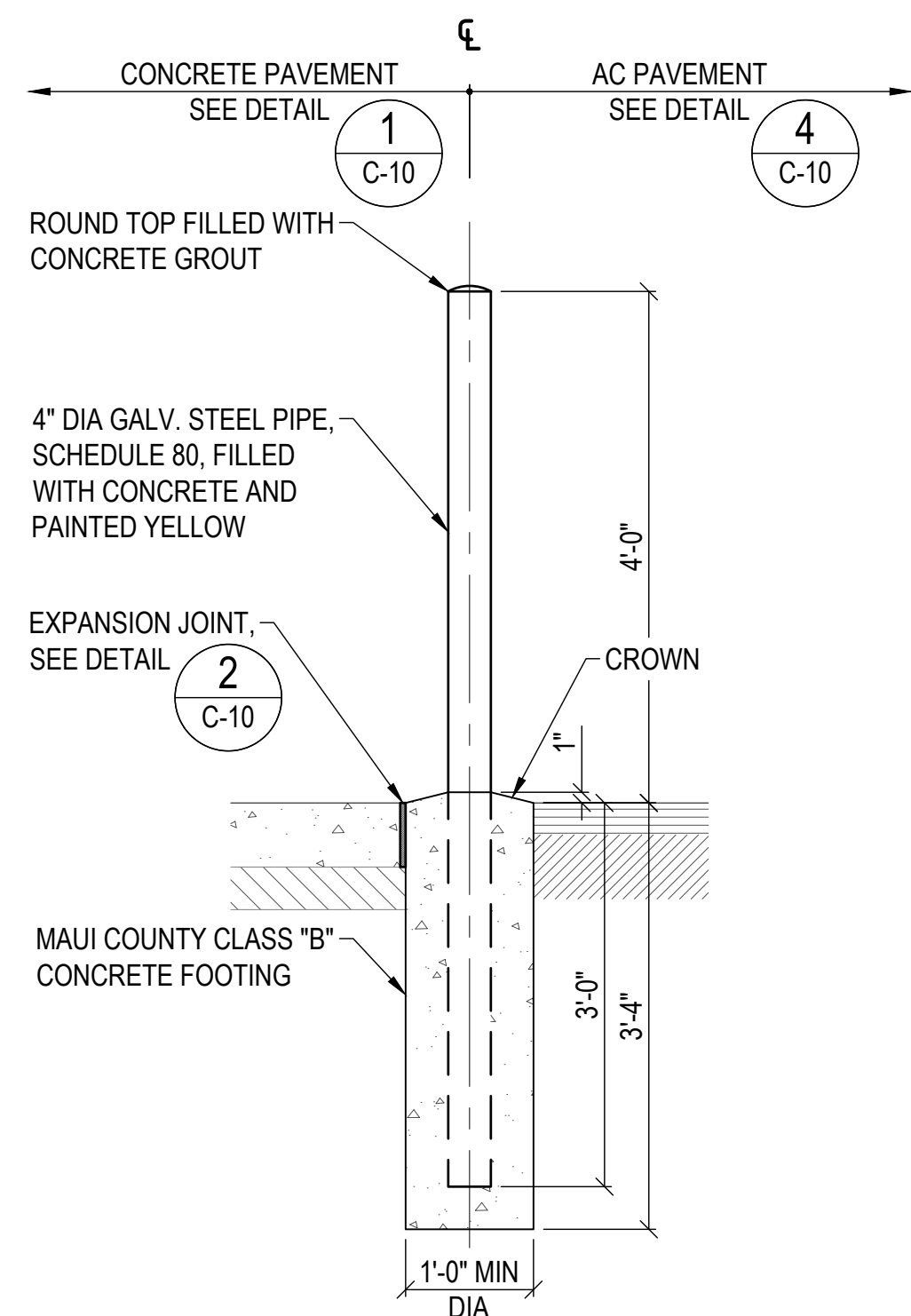
NOTE:  
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST

**4** INSPECTION PORT DETAIL  
SCALE: NTS

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b>  <b>DRAINAGE DETAILS - 2</b> <b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	NONE		
APPROVED:					DRAWING NO.
					<b>C-14</b>
ADMINISTRATOR					DATE

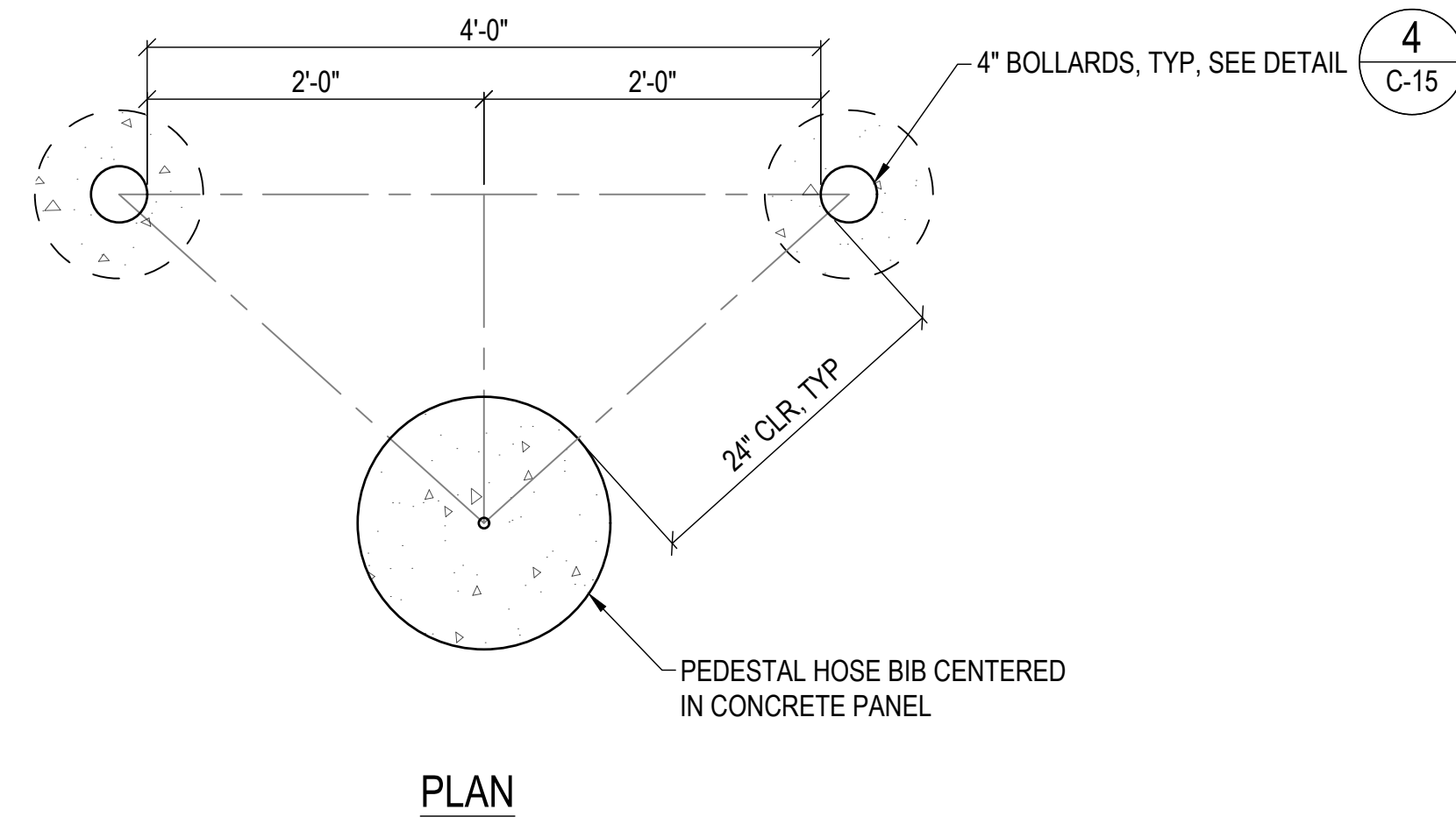


**1 WATER SERVICE LATERAL TRENCH FOR 4" AND SMALLER**  
SCALE: NTS

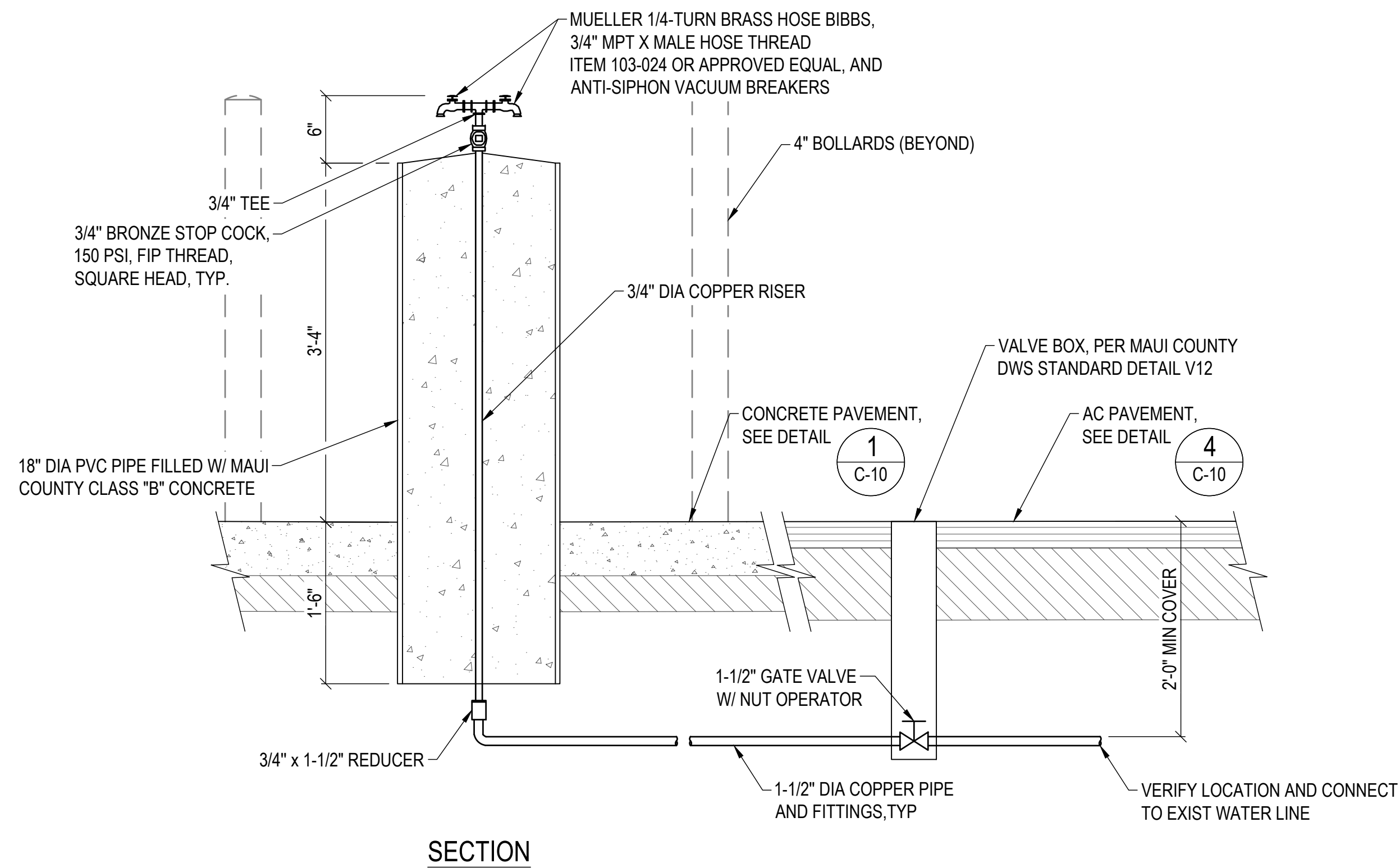


NOTES:  
1. CLEAR DISTANCE BETWEEN BOLLARDS MUST BE 4'-0" MAX.

**4 4-INCH CONCRETE BOLLARD DETAIL**  
SCALE: NTS

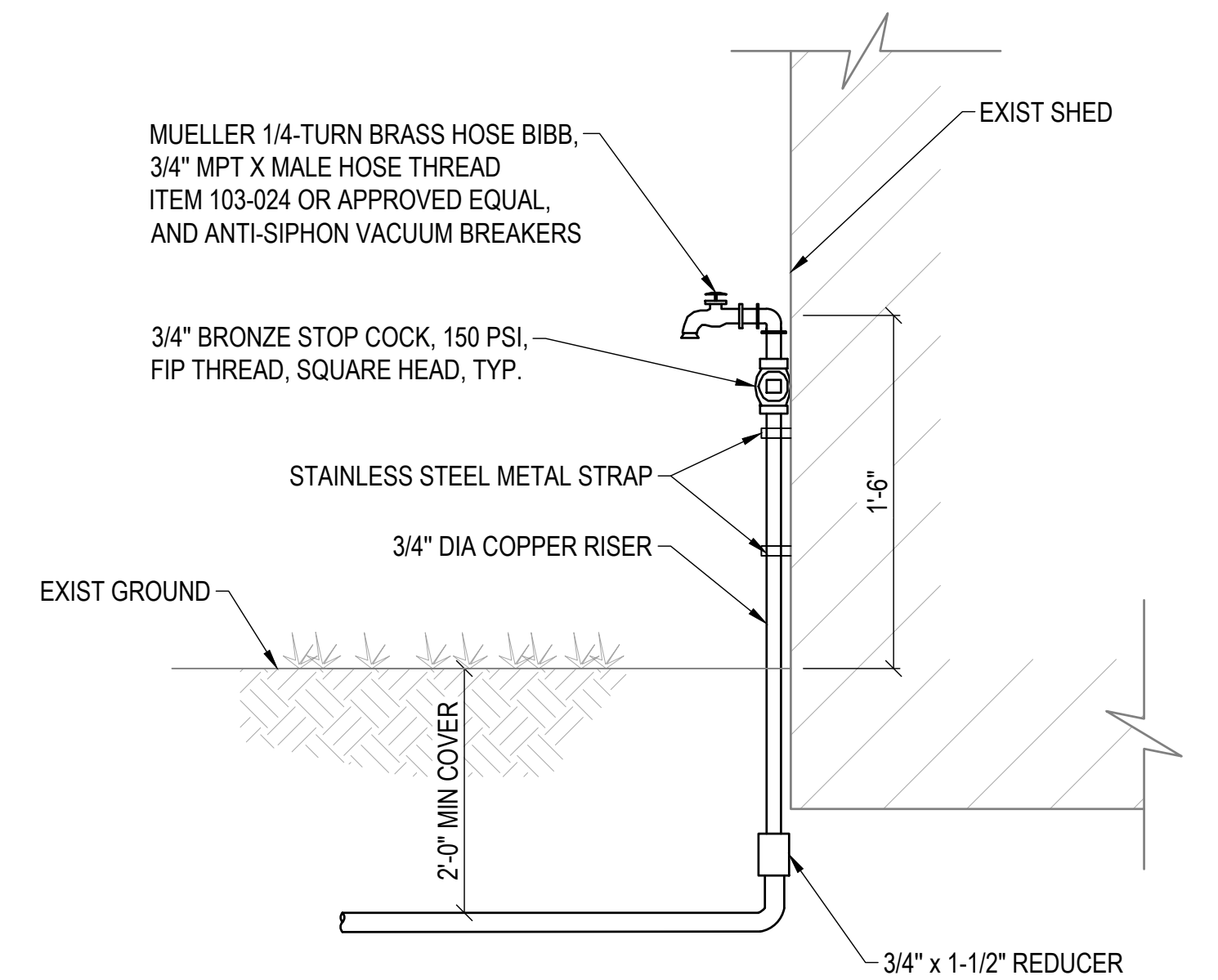


**PLAN**



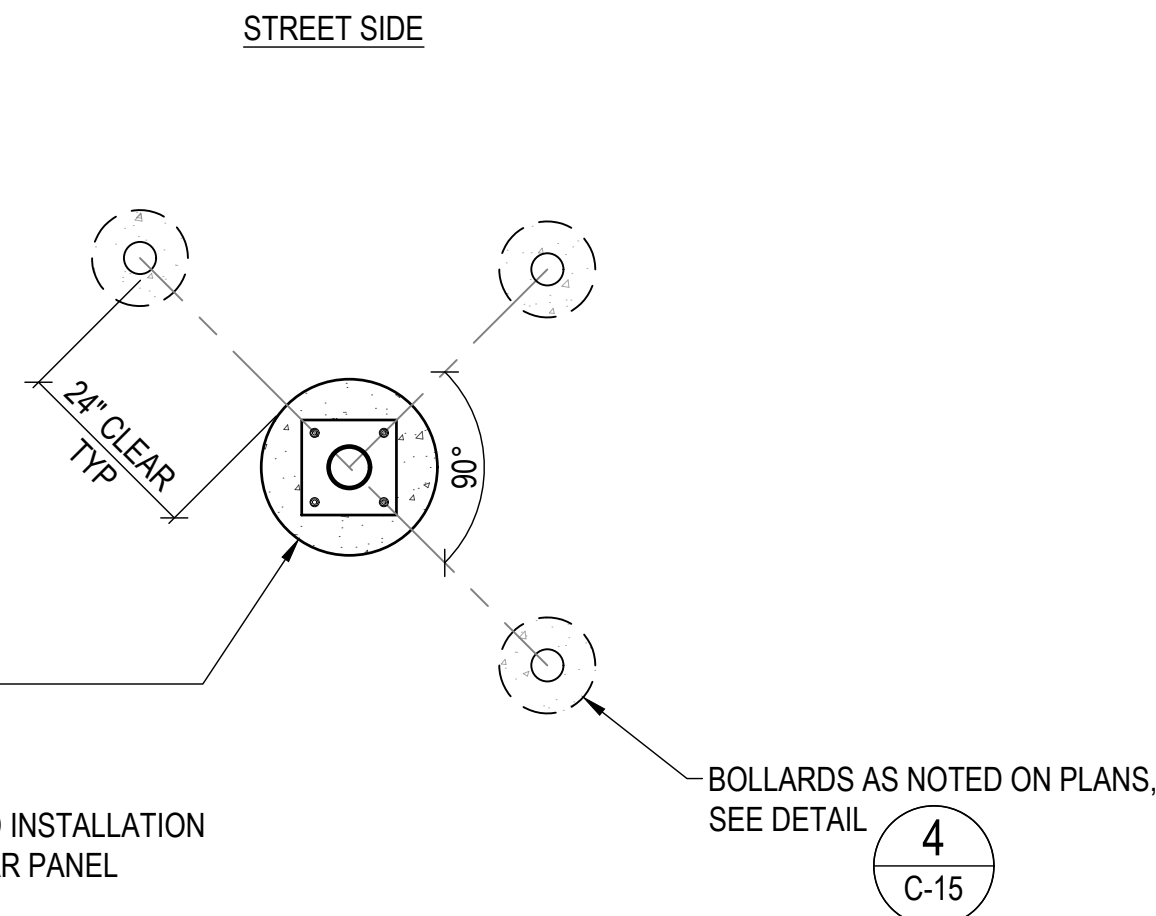
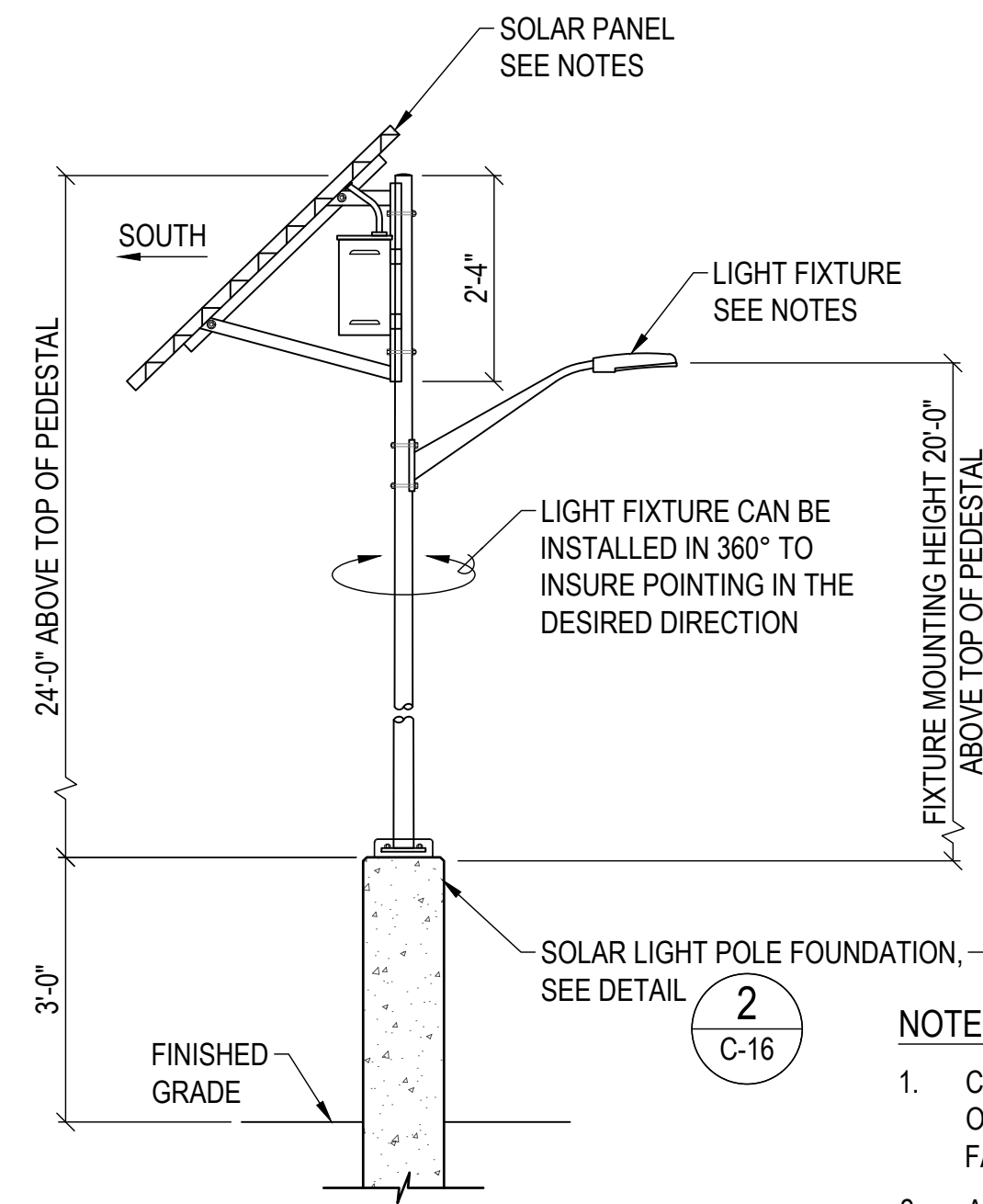
**SECTION**

**2 PEDESTAL HOSE BIBB DETAIL**  
SCALE: NTS



**3 HOSE BIBB DETAIL**  
SCALE: NTS

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
<b>WATER DETAILS</b> <b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	NONE		
APPROVED:			DRAWING NO.		C-15
ADMINISTRATOR			DATE		



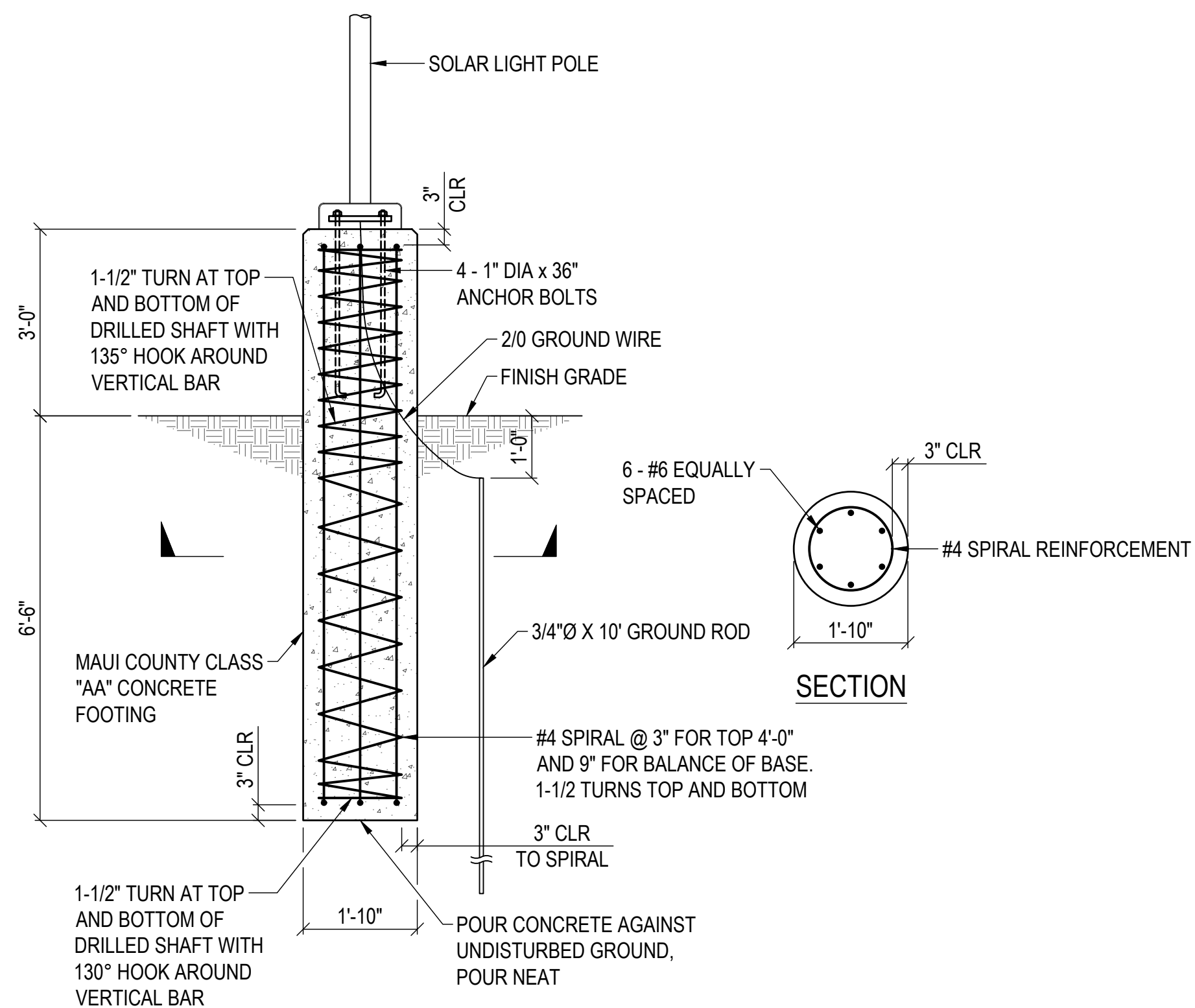
**NOTES:**

1. COORDINATE CONSTRUCTION AND INSTALLATION OF FOUNDATION TO ENSURE SOLAR PANEL FACES SOUTH.
2. ALL POLE WIRING IS ROUTED INSIDE THE POLE.
3. LIGHT AS SHOWN IS A PRODUCT OF SEPSCO. LIGHTS SHALL BE UL LISTED AS A COMPLETE SYSTEM AND HAVE VANDAL PROTECTION.
4. SHIELD THE BATTERIES FROM EXPOSURE TO DIRECT SUNLIGHT.

SECTION

PLAN

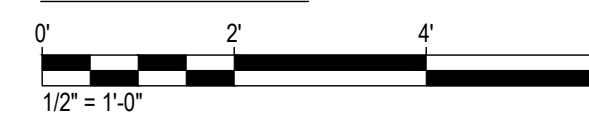
**1 SOLAR POWERED LIGHT POLE DETAIL**  
SCALE: NTS



SECTION

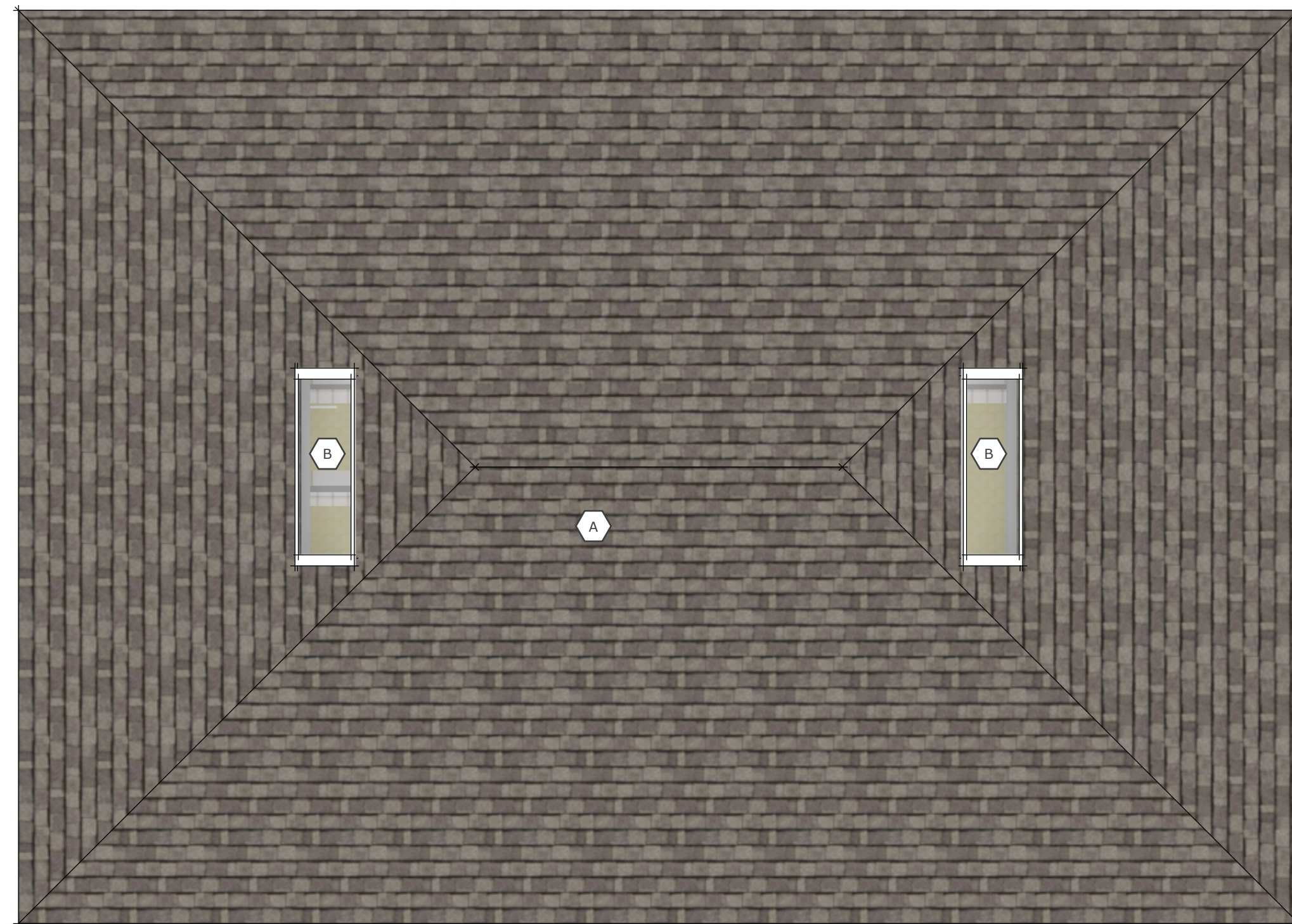
**2 SOLAR LIGHT POLE FOUNDATION**  
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE

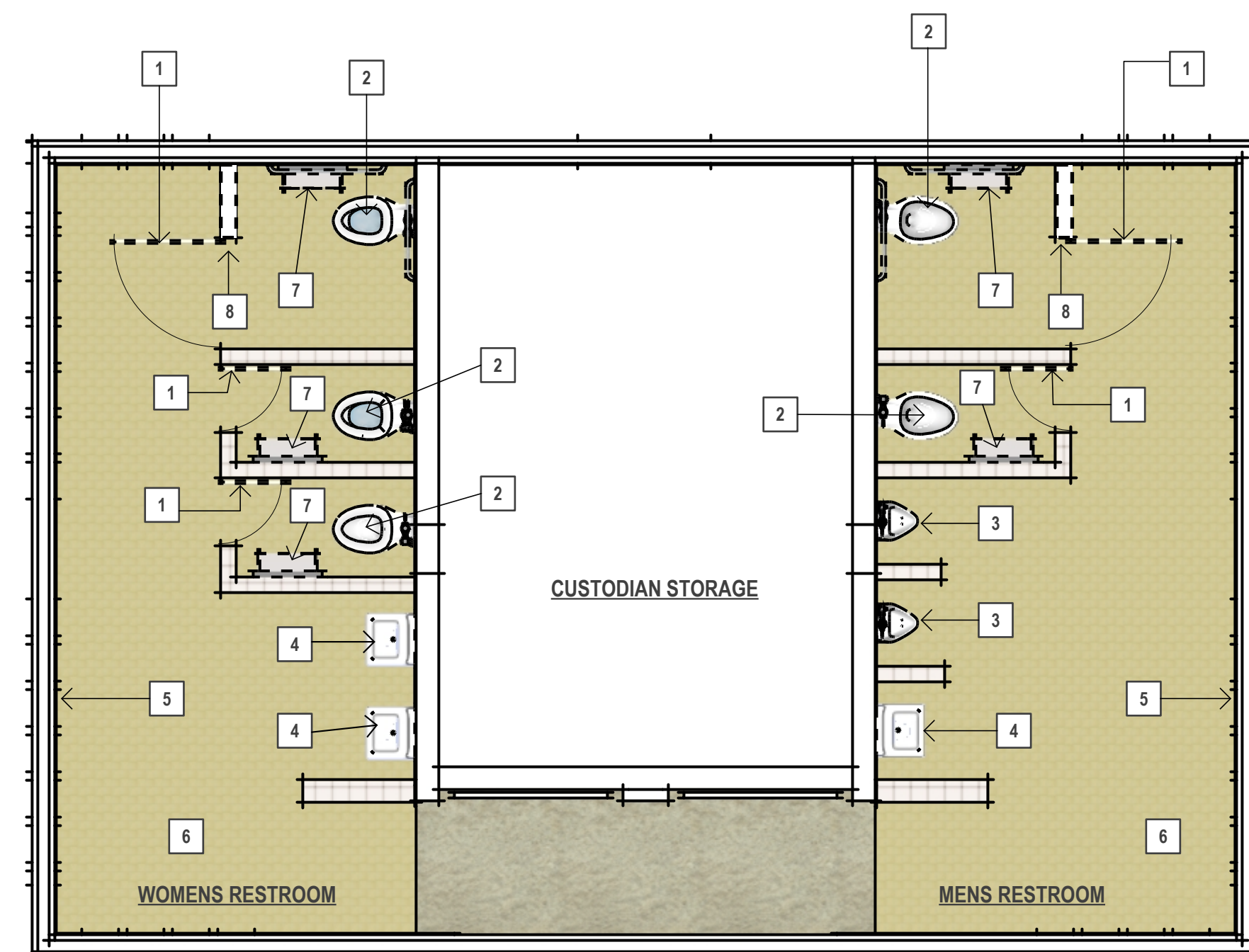
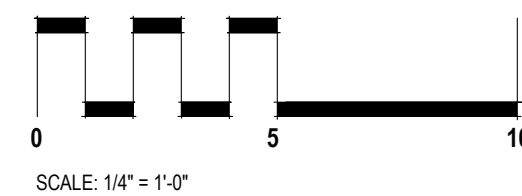


REVISION NO.	SYM.	DESCRIPTION	SHT. OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b>					
<b>MALA BOAT RAMP SITE IMPROVEMENTS</b>					
<b>SOLAR LIGHT DETAILS</b>					
<b>KAULA AE, LLC</b>					
DESIGNED:	AT	SUBMITTED:			
DRAWN:	JL	DATE:			
CHECKED:	JN	SCALE:	AS SHOWN		
APPROVED:			DRAWING NO.		
ADMINISTRATOR	DATE		<b>C-16</b>		

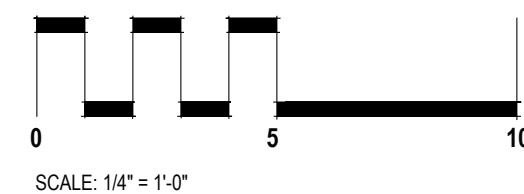
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 BY: *Cris Takushi*  
 DATE: APRIL 13, 2028  
 APRIL 30, 2028  
 EXPIRATION DATE OF THE LICENSE



**2 ROOF PLAN**  
A1 SCALE: 1/4" = 1'-0"



**1 DEMOLITION PLAN**  
A1 SCALE: 1/4" = 1'-0"



**GENERAL NOTES**

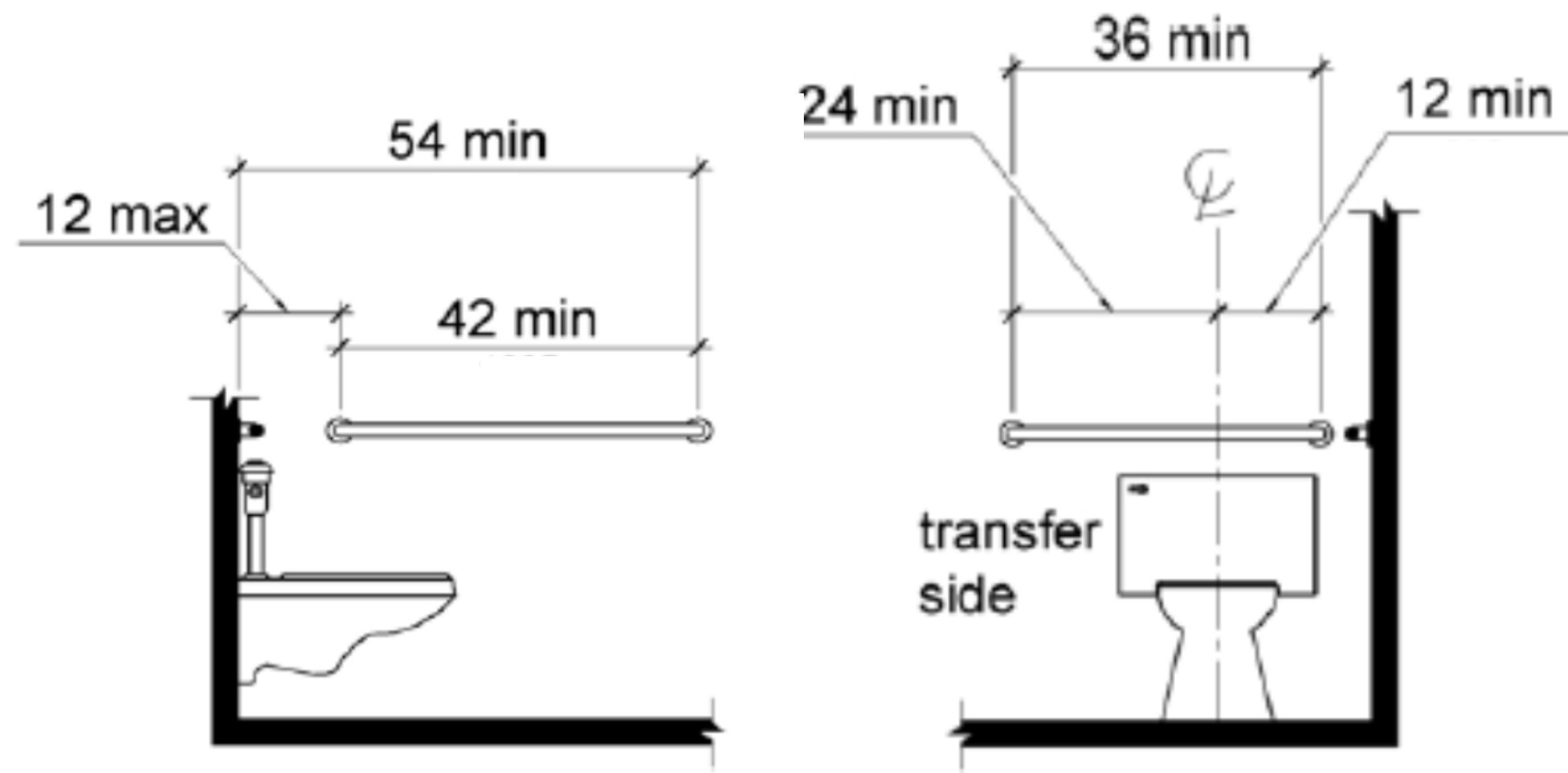
1. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT JOBSITE, EXISTING AND PROPOSED, BEFORE PROCEEDING WITH WORK. WHERE DETAILED INFORMATION IS LACKING OR ANY DISCREPANCY IS FOUND NOTIFY THE ARCHITECT.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND BUILDING BEFORE PROCEEDING WITH THE WORK AND NOTIFY THE ENGINEER PRIOR TO COMMENCEMENT OF WORK, OF ALL DISCREPANCIES AND/OR CONDITIONS THAT WILL AFFECT THE WORK.
3. DO NOT SCALE THE DRAWINGS. THE CONTRACTOR SHALL USE THE DIMENSIONS SHOWN ON THE DRAWINGS AND ACTUAL FIELD MEASUREMENTS. DIMENSIONS SHOWN ARE FROM FINISH FACE TO FINISH FACE, UNLESS OTHERWISE NOTED. DIMENSIONS OF EXISTING WALLS, COLUMNS, ETC. ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.
4. RE-INSTALL EXISTING MATERIALS, EQUIPMENT, ACCESSORIES, FURNISHINGS, ETC. WHICH ARE TEMPORARILY REMOVED WITH NEW CORROSION RESISTANT FASTENERS MATCHING EXISTING.
5. THE CONTRACTOR SHALL REVIEW AND ESTABLISH WITH THE ENGINEER, PRIOR TO COMMENCEMENT OF WORK THE FOLLOWING:
  - A. EXACT EXTENT OF STAGING AREA
  - B. EXACT LOCATION OF SITE ACCESS POINT
  - C. THE EXISTING CONDITION OF STAGING AREA AND SITE ACCESS POINT AS IT PERTAINS TO LANDSCAPING, IRRIGATION, UTILITIES, SITE FURNISHINGS, PAVING, ETC.
  - D. THE CONTRACTOR SHALL SURVEY AND PHOTOGRAPHICALLY DOCUMENT ANY AND ALL EXISTING BUILDING AND SITE DAMAGE, AND ADVISE THE ENGINEER OF THESE CONDITIONS PRIOR TO START OF WORK. THE CONTRACTOR SHALL ACCEPT THE BUILDING AND PRIOR TO THE START OF WORK SHALL BE CONSIDERED THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE.
6. TEMPORARY SUPPORTS SHALL BE USED TO AVOID ANY UNNECESSARY DAMAGE TO THE EXISTING STRUCTURE OR FINISHES DURING REMOVAL AND CONSTRUCTION WORK.
7. TEMPORARILY RELOCATE AND/OR DISCONNECT EXISTING FURNITURE, EQUIPMENT, MECHANICAL AND ELECTRICAL CONNECTIONS, ETC, AS REQUIRED, TO EXECUTE THE WORK. RETURN THESE ITEMS TO EXISTING LOCATION UPON COMPLETION OF THE WORK IN PROPER WORKING ORDER. THE CONTRACTOR SHALL CONSULT AND SERVE PROPER NOTICE TO THE ENGINEER REGARDING ANY TEMPORARY DISCONNECTION OF UTILITIES.
8. BUILDING PROTECTION
  - A. ENSURE THAT THERE ARE NO OPENINGS IN THE WALL/WINDOWS/DOORS OF THE BUILDINGS AT THE END OF EACH WORKING DAY WHERE UNLAWFUL ENTRY INTO THE BUILDINGS ARE POSSIBLE, DURING NON-WORKING HOURS.
  - B. PROTECT BUILDING INTERIOR AND ALL CONTENTS FROM THE RAIN AND WIND AT ALL TIMES. WHERE REMOVAL OF EXISTING CONSTRUCTION IS NECESSARY TO ACCOMPLISH WORK, HAVE MATERIALS AND WORKMEN READY TO PROVIDE ADEQUATE TEMPORARY COVERING OF EXPOSED AREAS. THE EXISTING CONSTRUCTION SHALL BE REMOVED ONLY TO THE EXTENT THAT INTERIOR AND CONTENTS OF THE BUILDING CAN BE PROTECTED AT THE END OF EACH WORK DAY.
9. TOUCH UP PAINT ALL SURFACES DAMAGED IN DEMOLITION OR IN INSTALLATION OF NEW WORK. MATCH EXISTING PAINT COLOR, TEXTURE AND FINISH.
10. CLEAN-UP: AT COMPLETION OF WORK, CLEAN ALL CERAMIC TILE WALL AND FLOOR SURFACES (NEW AND EXISTING). CLEAN ALL SURFACES SO THEY ARE FREE OF ALL FOREIGN MATTER, SOILING AND STAINS.
11. FINAL INSPECTION OF THIS FACILITY AFTER MODIFICATIONS MUST CONFORM WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINE (ADAAG). THE CONTRACTOR IS ADVISED TO BE FAMILIAR WITH THE ADA, ADAAG AND ITS REQUIREMENTS.

**LEGEND**

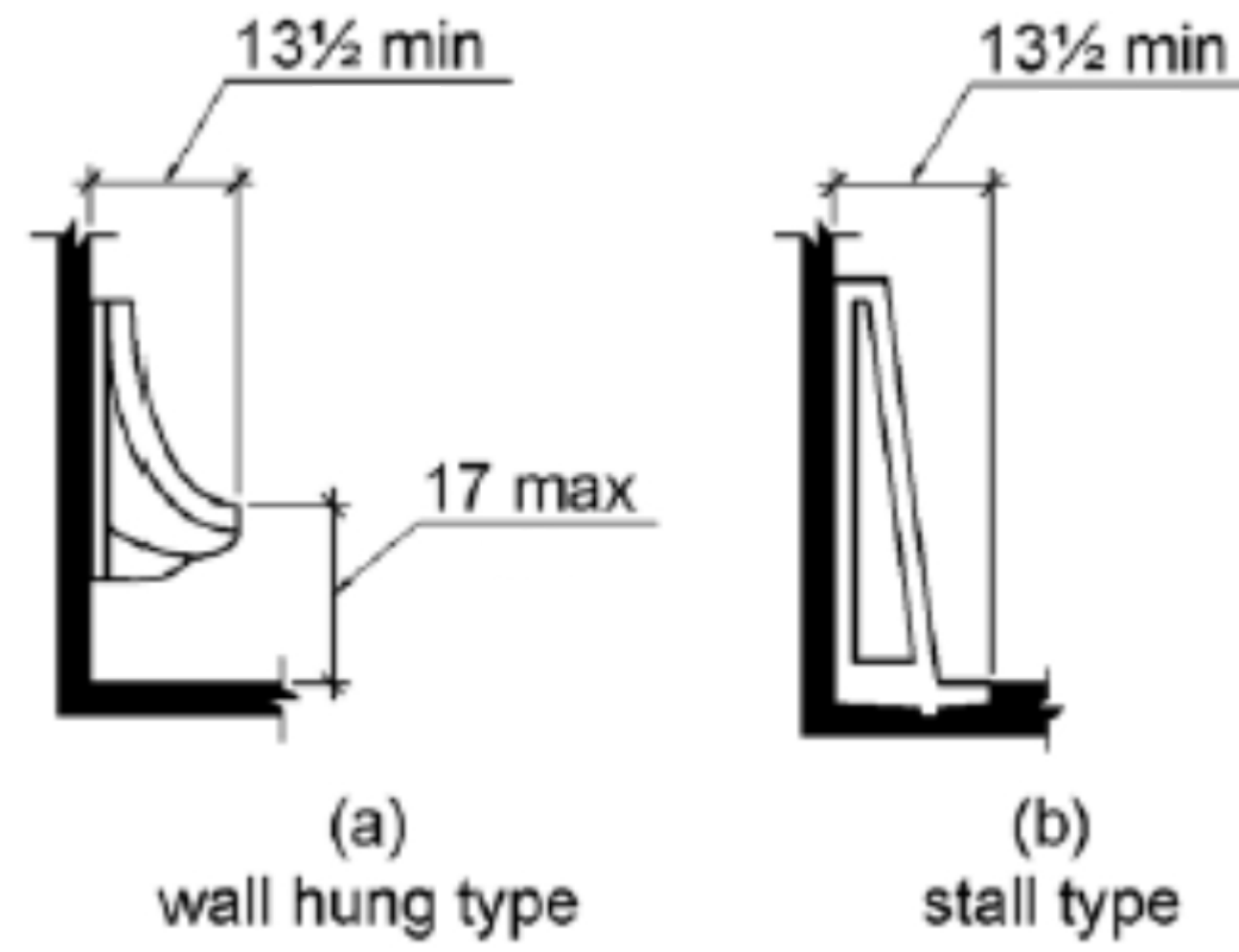
- A** REMOVE EXISTING ASPHALT SHINGLE ROOFING. REMOVE EXISTING BUILDING FELT PAPER. REMOVE EXISTING PLYWOOD SHEATHING. INSTALL NEW PLYWOOD SHEATHING. INSTALL NEW 30# FELT PAPER. INSTALL NEW ASPHALT SHINGLE ROOFING. INSTALL NEW EDGE FLASHING IF NECESSARY, OTHERWISE EXISTING EDGE FLASHING TO REMAIN. EXISTING ROOF SKYLIGHTS TO REMAIN.
- B** EXISTING SKYLIGHT TO REMAIN. ENSURE WATER TIGHT CONDITION AT CURB.
- 1** REMOVE EXISTING PARTITION DOORS AND MOUNTING HARDWARE.
- 2** REMOVE EXISTING WALL HUNG TOILET AND FLUSH VALVES.
- 3** REMOVE EXISTING URINAL.
- 4** REMOVE EXISTING SINK AND FAUCET.
- 5** REMOVE ALL EXISTING WALL TILE. GRIND AND PATCH EXISTING CMU SUBSTRATE TO MAKE SURFACE READY TO RECEIVE NEW LARGE FORMAT WALL TILES. AT LOCATION OF WALL HUNG TOILETS AND URINALS, INSURE LOCATION OF NEW BOLTS WILL BE STRUCTURALLY SOUND. IF REQUIRED PATCH AND REPAIR WALL SO THAT ANCHORING BOLTS ARE EMBEDDED IN SOLID STRUCTURE.
- 6** EXISTING FLOOR TILE TO BE CLEANED THOROUGHLY. SURFACE TO BE GRINDED AND SCARIFIED TO MAKE READY TO RECEIVE EPOXY RESIN FLOOR COVERING.
- 7** REMOVE EXISTING GRAB BARS AND TOILET PAPER DISPENSERS.
- 8** REMOVE EXISTING WALL PARTITION. PATCH FLOOR AND MAKE READY FOR NEW FLOOR FINISH. PATCH WALL AT DEMO LOCATION AND MAKE READY FOR NEW TILE.

REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b>  <b>DEMOLITION PLAN</b>  <b>KAULA AE, LLC</b>					
DESIGNED: <b>CLA</b> DRAWN: <b>CLA</b> CHECKED: <b>JNN</b>			SUBMITTED: DATE: SCALE: <b>AS SHOWN</b>		
APPROVED: _____ ADMINISTRATOR					DRAWING NO. <b>A-1</b>

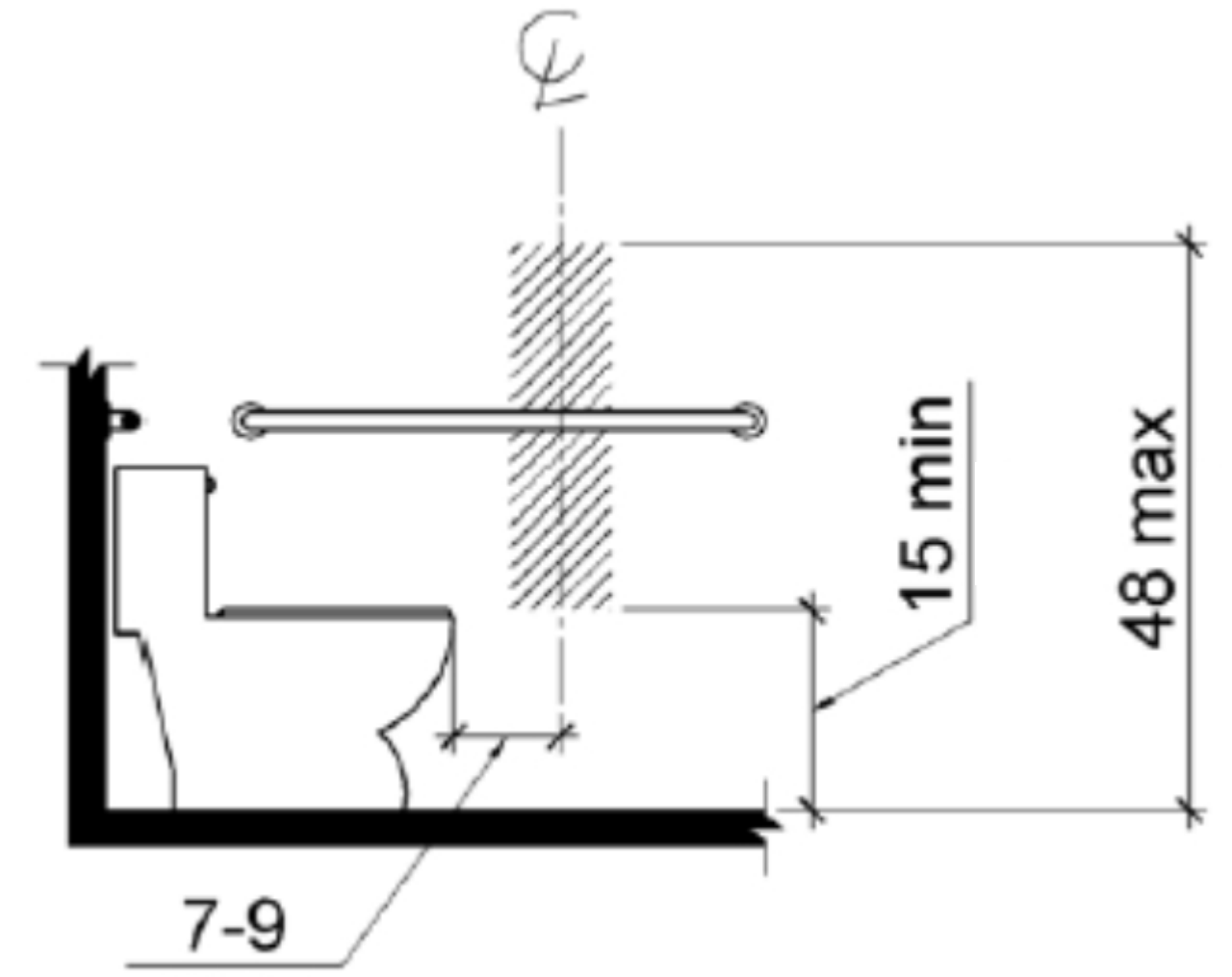
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 BY: \_\_\_\_\_  
 DATE: **APRIL 13, 2028**  
 EXPIRATION DATE OF LICENSE



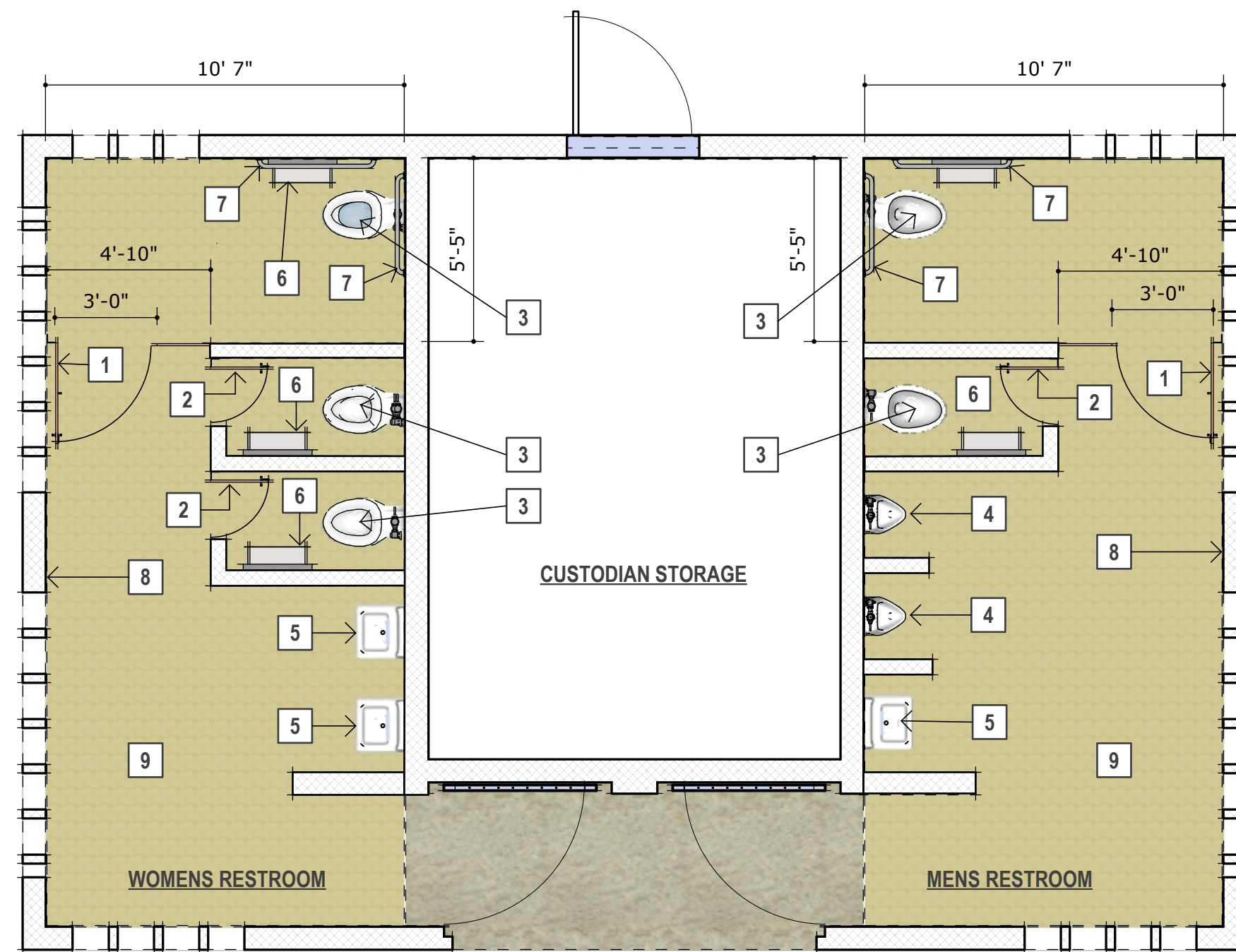
1 ADA GUIDELINE : GRAB BARS  
A5 SCALE: 1/4" = 1'-0"



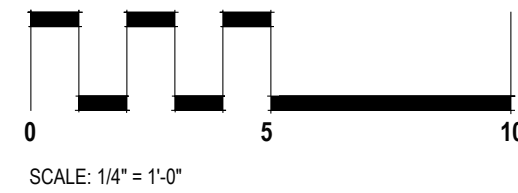
1 ADA GUIDELINE : URINALS  
A5 SCALE: 1/4" = 1'-0"



1 ADA GUIDELINE : TOILET PAPER DISPENSER  
A5 SCALE: 1/4" = 1'-0"

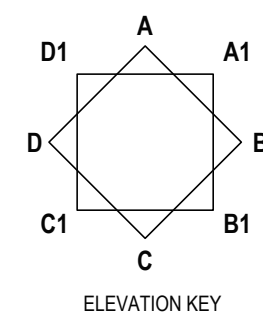


1 RENOVATED PLAN  
A2 SCALE: 1/4" = 1'-0"

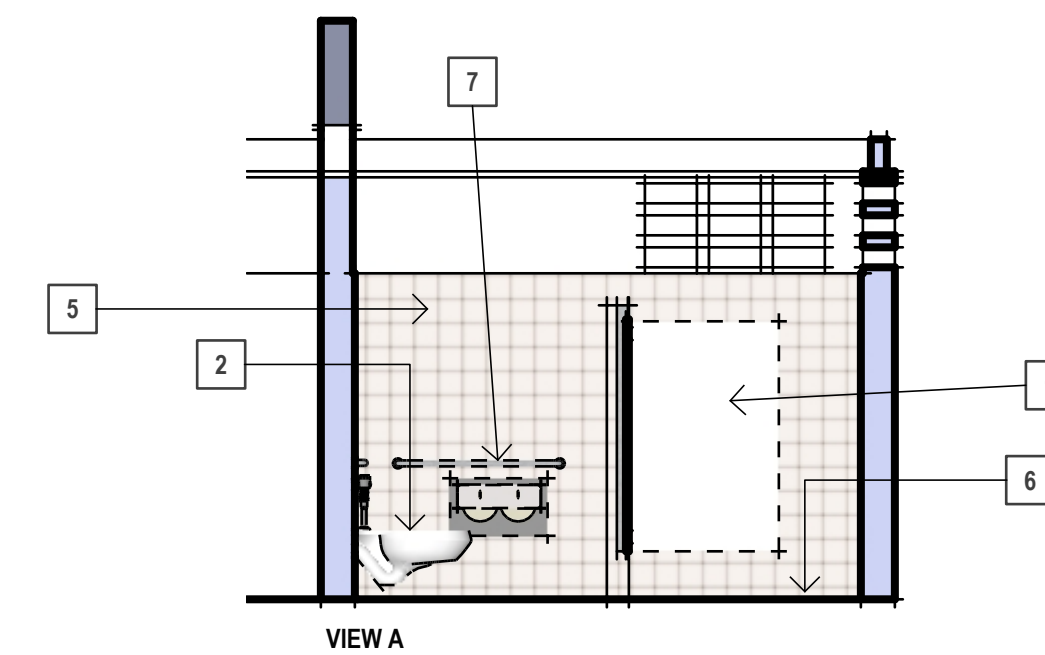
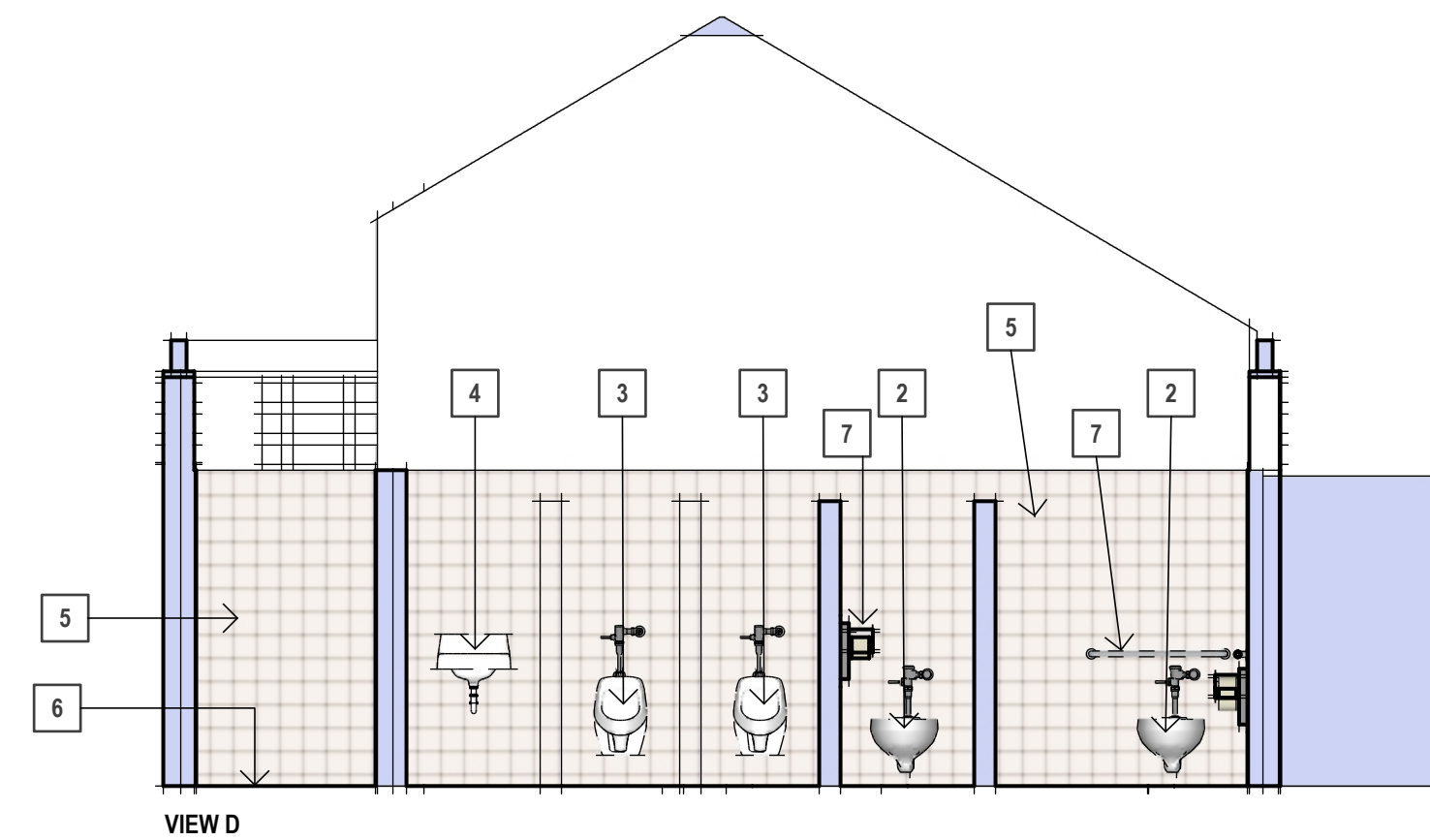
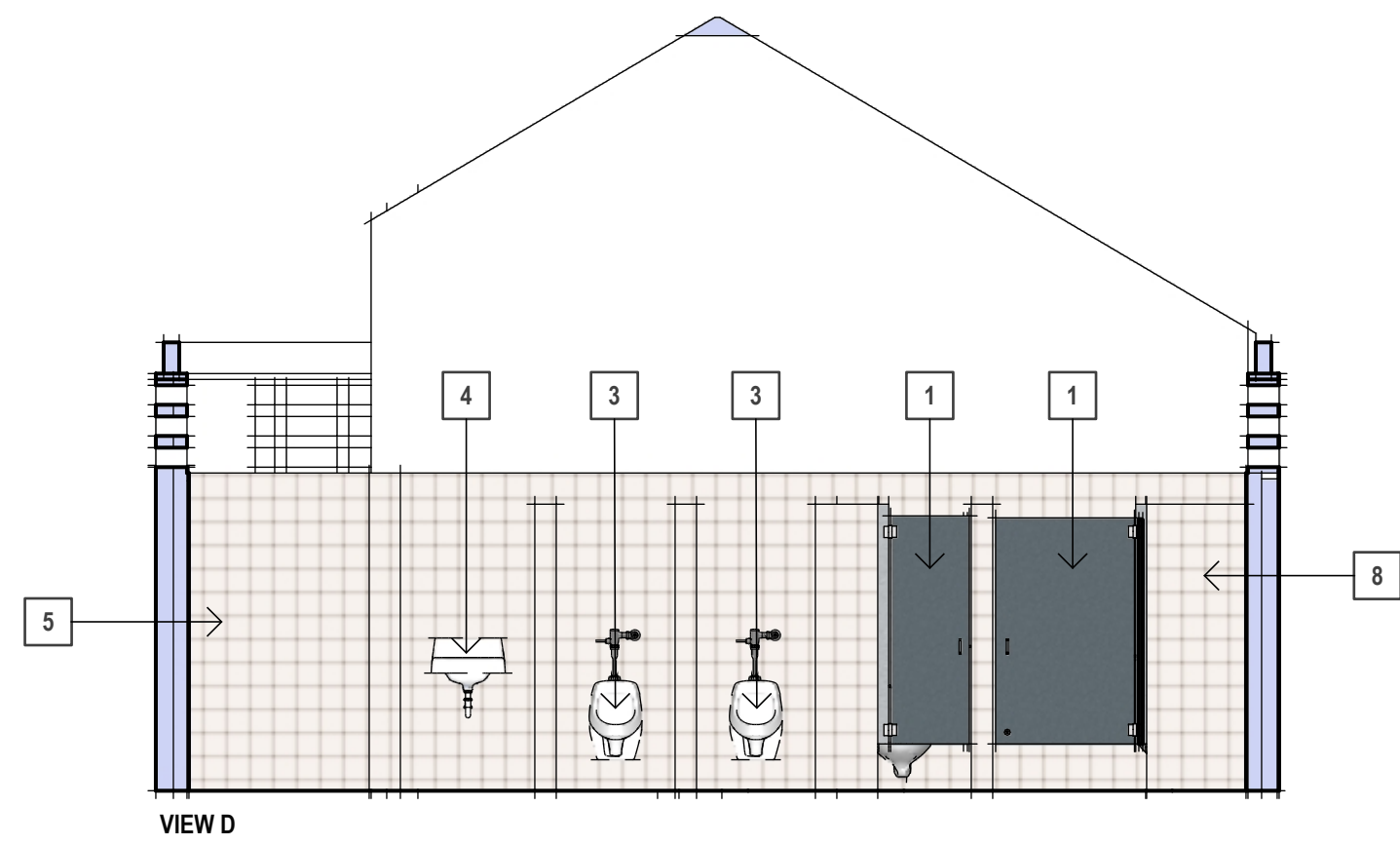


**LEGEND**

- 1 NEW TOILET PARTITION DOOR. PROVIDE 12" CLEAR TOE SPACE PER ADA REQUIREMENTS.
- 2 NEW TOILET PARTITION DOOR.
- 3 NEW WALL HUNG TOILET AND TOP MOUNT FLUSH VALVE.
- 4 NEW URINAL AND TOP MOUNT FLUSH VALVE.
- 5 NEW SINK WITH METERED FAUCET.
- 6 NEW DUAL TOILET PAPER DISPENSER.
- 7 NEW STAINLESS STEEL ADA GRAB BARS.
- 8 NEW PORCELIN LARGE FORMAT WALL TILE. (12"x24")
- 9 NEW EPOXY RESIN FLOOR COVERING OVER EXISTING FLOOR TILE.



REVISION NO.	SYM.	DESCRIPTION	SHT./OF	DATE	APPROVED
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			THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. BY: DATE: APRIL 13, 2028 APRIL 30, 2028 EXPIRATION DATE OF LICENSE		
DESIGNED:	CLA	SUBMITTED:			
DRAWN:	CLA	DATE:			
CHECKED:	JNN	SCALE:	AS SHOWN		
APPROVED:			DRAWING NO.		<b>A-2</b>
ADMINISTRATOR			DATE		



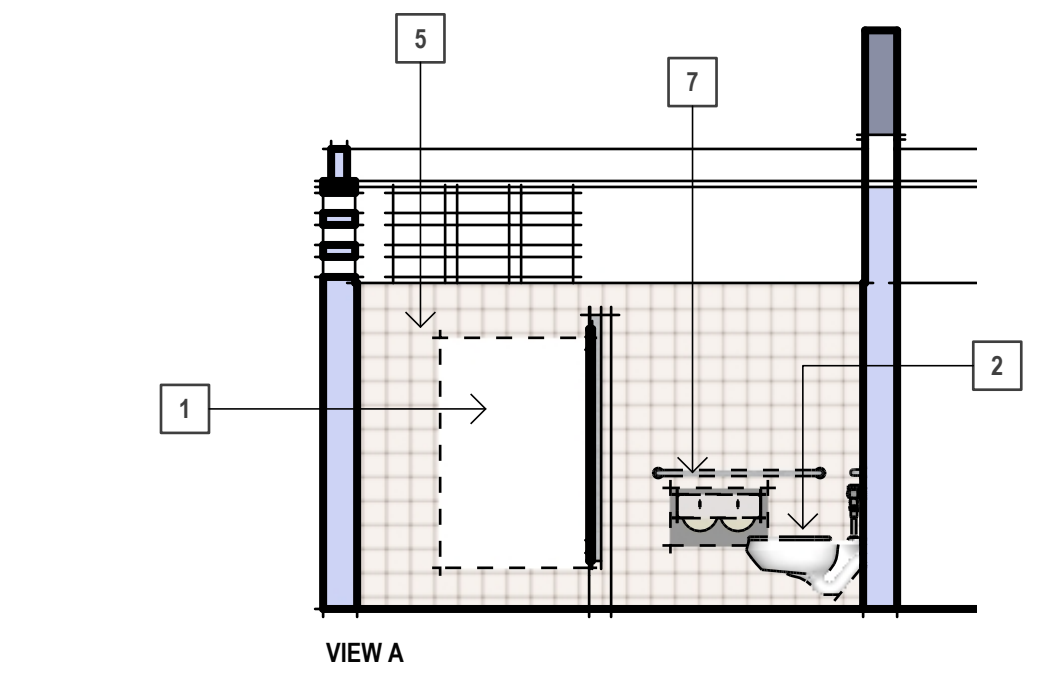
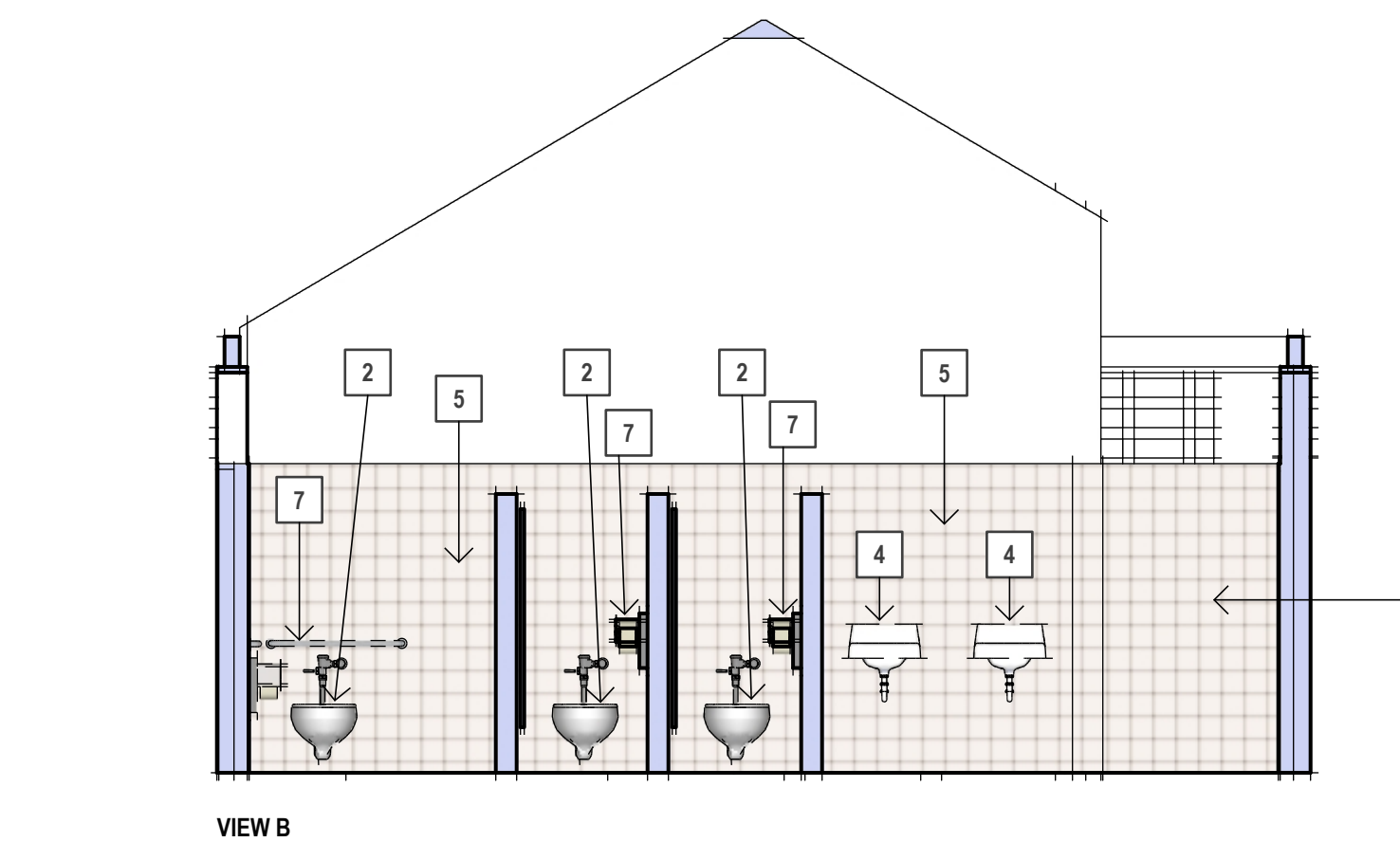
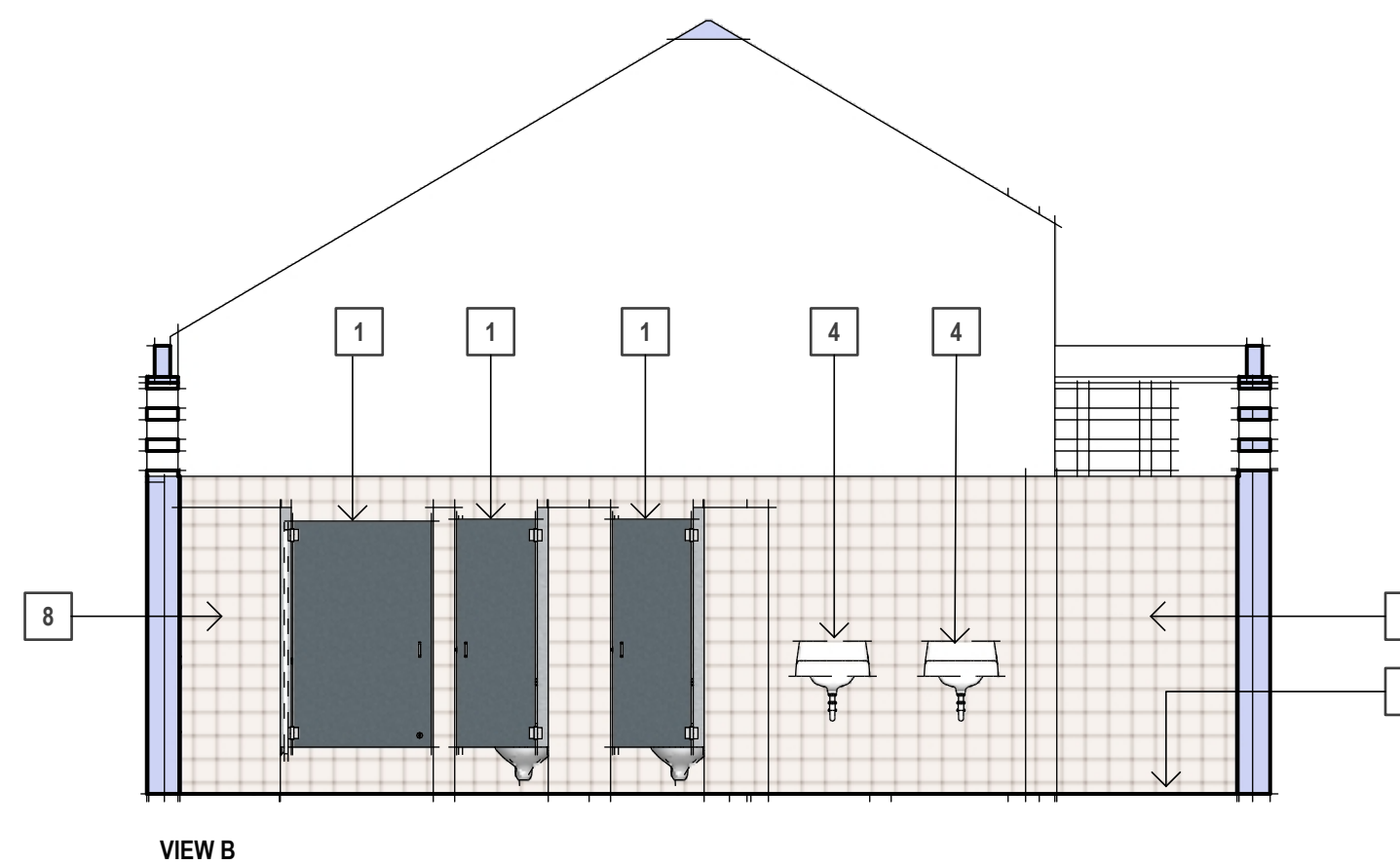
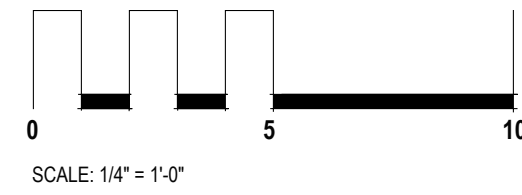
**LEGEND**

- 1 REMOVE EXISTING PARTITION DOORS AND MOUNTING HARDWARE. (36" x 58") & (24" x 58") VERIFY
- 2 REMOVE EXISTING WALL HUNG TOILET AND FLUSH VALVES.
- 3 REMOVE EXISTING URINAL.
- 4 REMOVE EXISTING SINK AND FAUCET.
- 5 REMOVE ALL EXISTING WALL TILE. GRIND AND PATCH EXISTING CMU SUBSTRATE TO MAKE SURFACE READY TO RECEIVE NEW LARGE FORMAT WALL TILES. AT LOCATION OF WALL HUNG TOILETS AND URINALS. INSURE LOCATION OF NEW BOLTS WILL BE STRUCTURALLY SOUND. IF REQUIRED PATCH AND REPAIR WALL SO THAT ANCHORING BOLTS ARE EMBEDDED IN SOLID STRUCTURE.
- 6 EXISTING FLOOR TILE TO BE CLEANED THOROUGHLY. SURFACE TO BE GRINDED AND SCARIFIED TO MAKE READY TO RECEIVE EPOXY RESIN FLOOR COVERING.
- 7 REMOVE EXISTING GRAB BARS AND TOILET PAPER DISPENSERS.
- 8 REMOVE EXISTING CMU & TILE PARTITION WALL. PATCH FLOOR AND WALL TO MAKE READY TO RECEIVE NEW WALL TILE AND NEW EPOXY FLOORING.

**EXISTING MENS RESTROOM ELEVS**

1  
A3

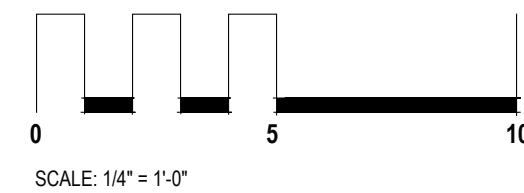
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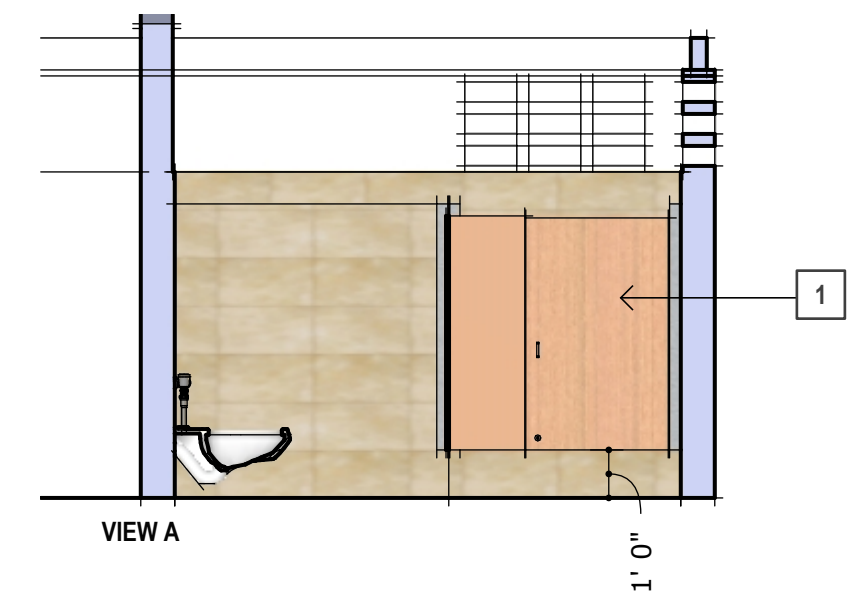
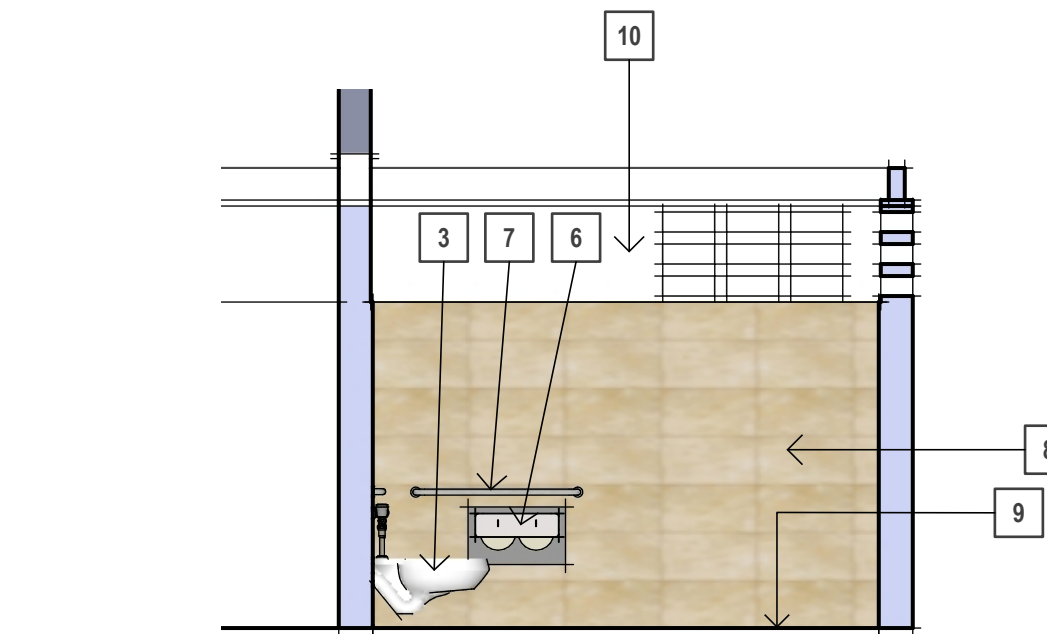
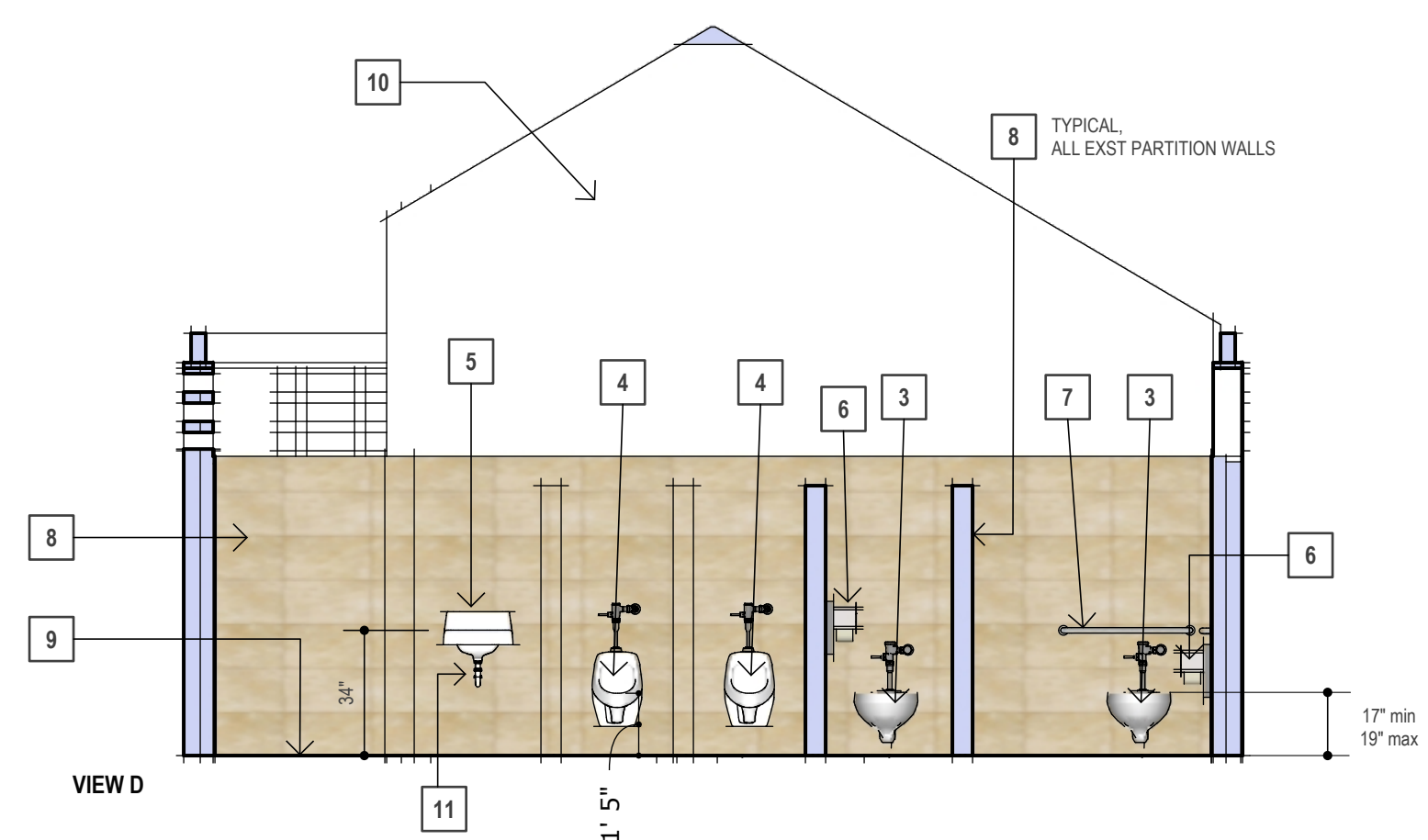
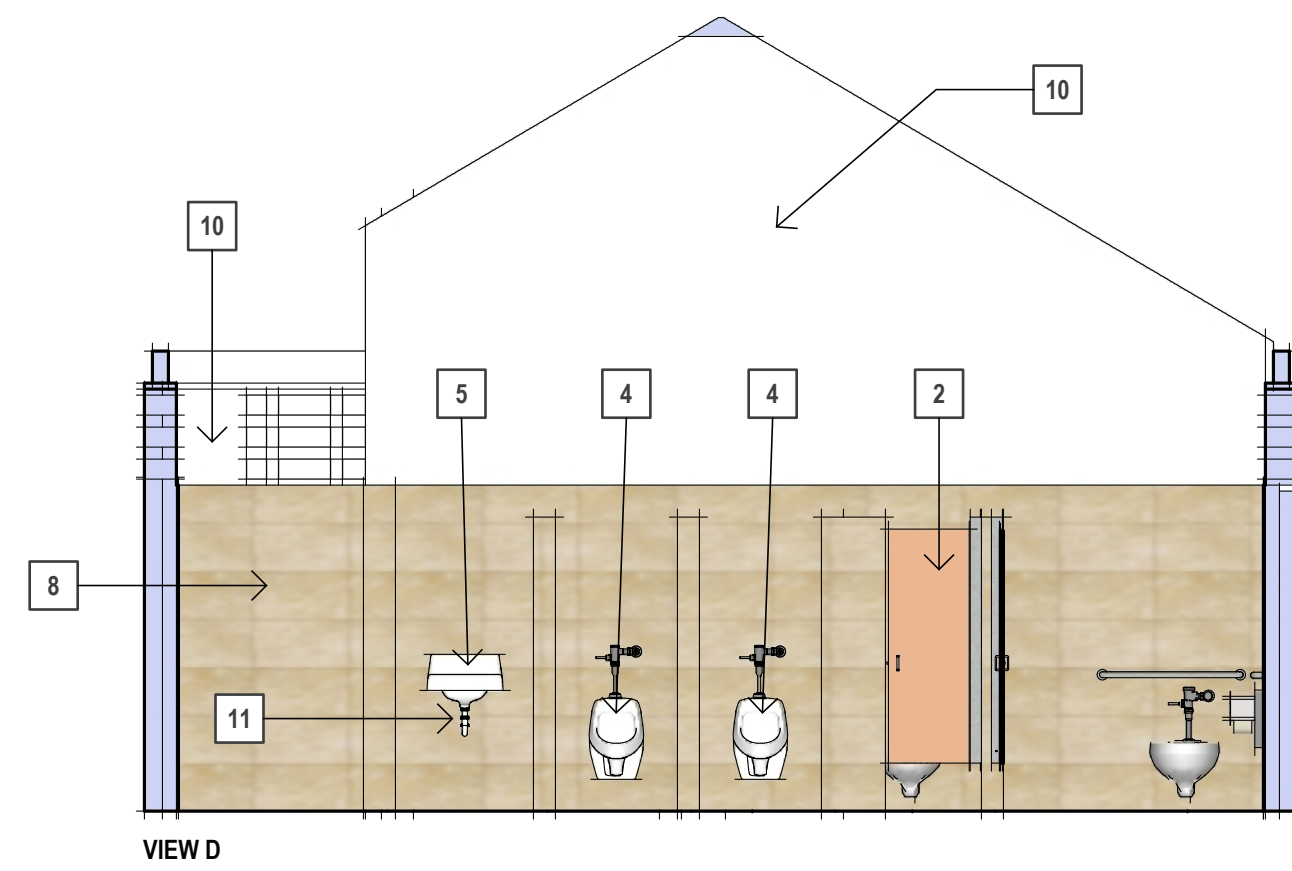
**EXISTING WOMENS RESTROOM ELEVS**

2  
A3

SCALE: 1/4" = 1'-0"

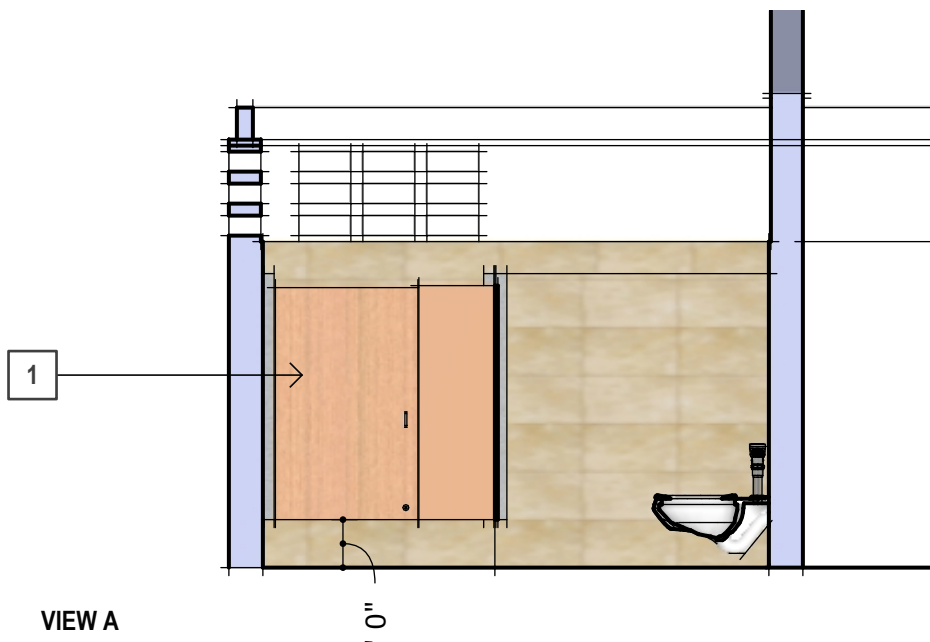
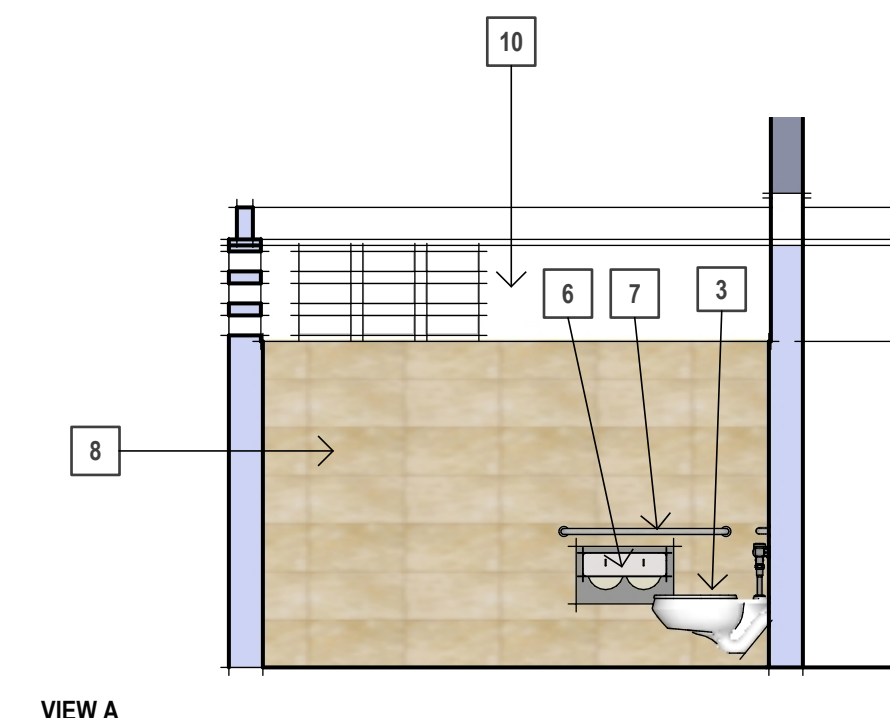
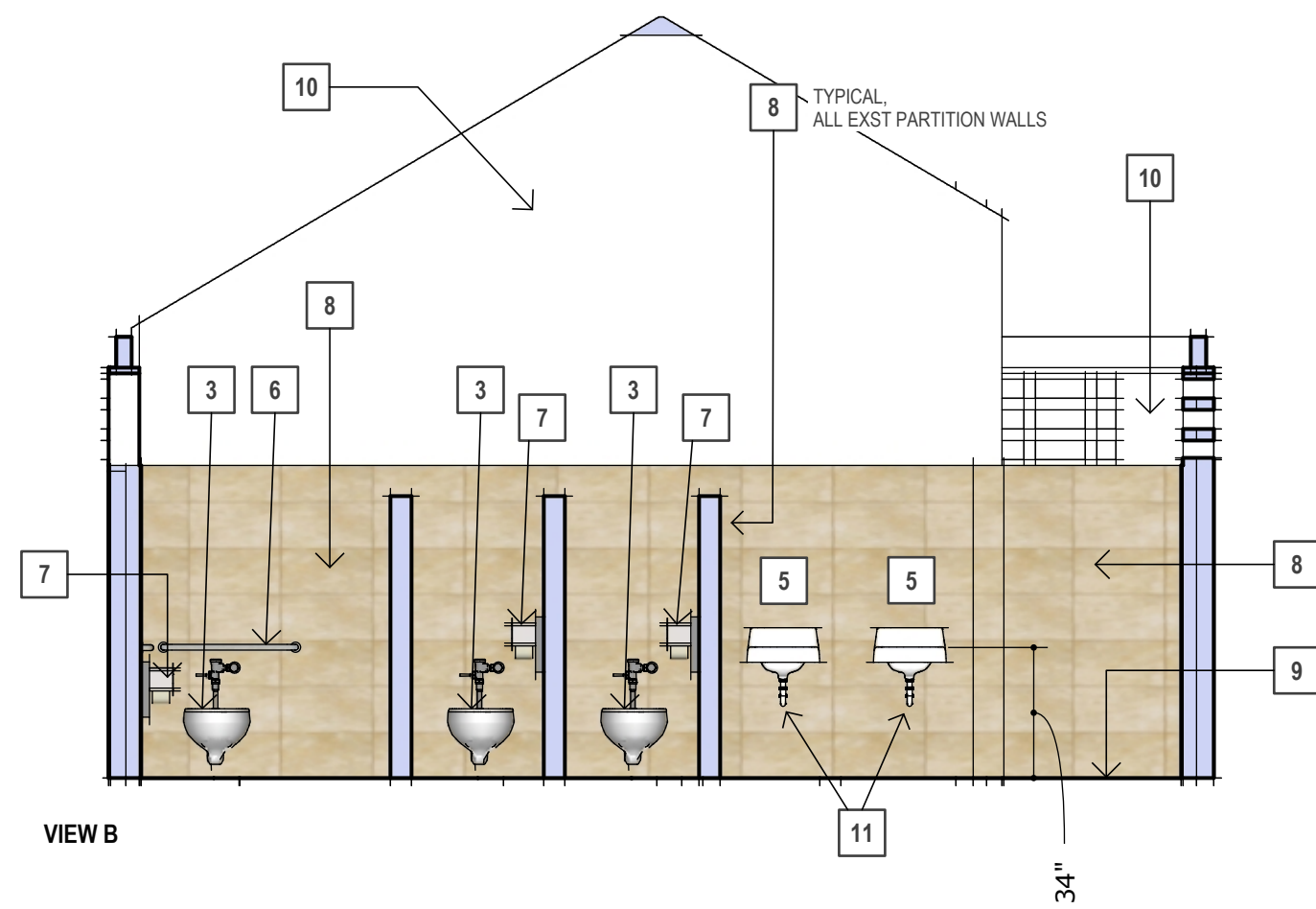
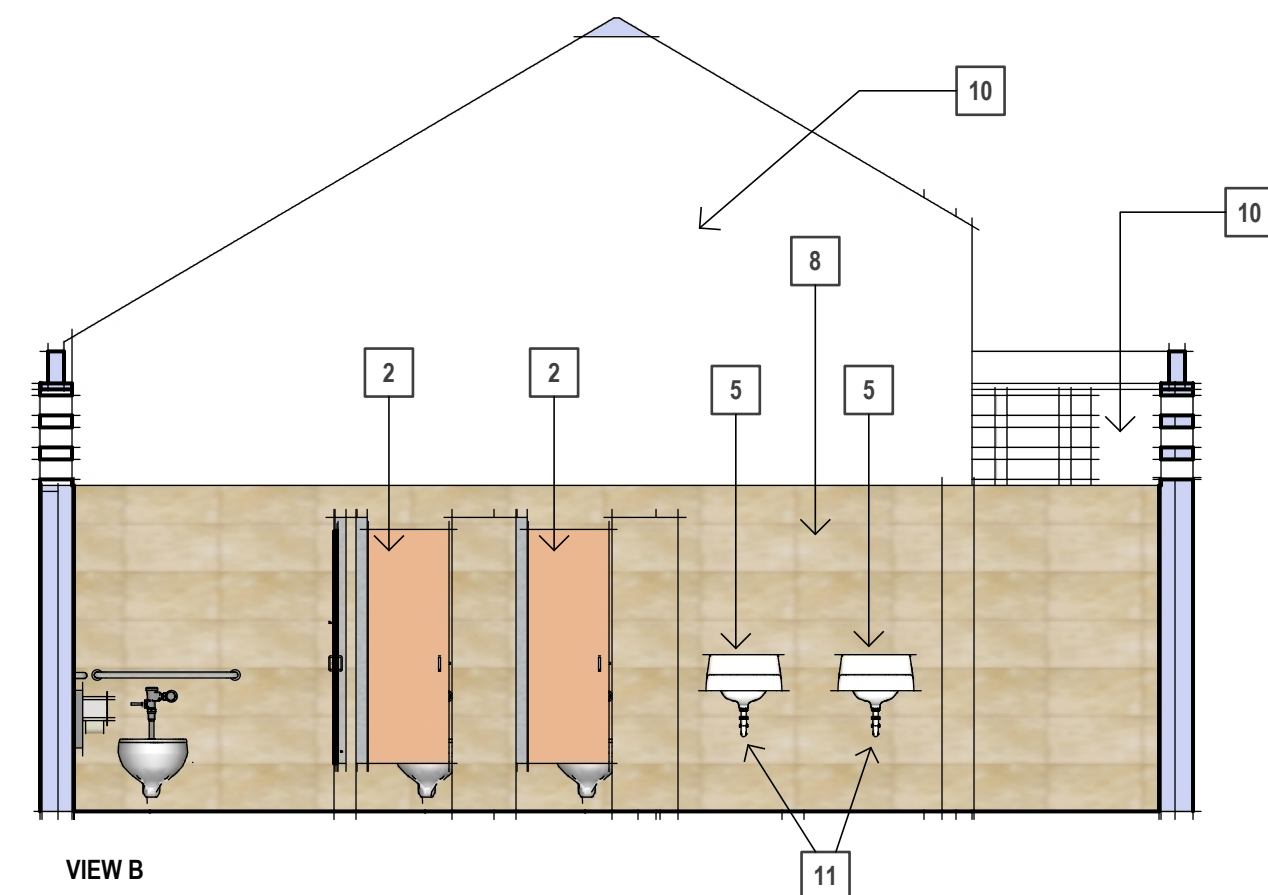
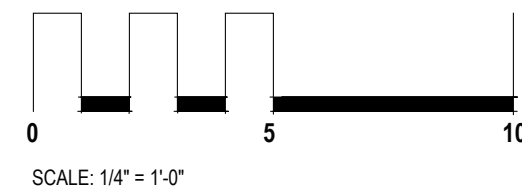


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<b>STATE OF HAWAII</b> <b>DEPARTMENT OF LAND AND NATURAL RESOURCES</b> <b>DIVISION OF BOATING AND OCEAN RECREATION</b> <b>MALA BOAT RAMP SITE IMPROVEMENTS</b> <b>EXISTING INTERIOR ELEVATIONS</b> <b>KAULA AE, LLC</b>					
			DESIGNED: CLA DRAWN: CLA CHECKED: JNN APPROVED: _____ ADMINISTRATOR		
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. BY: DATE: APRIL 13, 2028 EXPIRATION DATE OF LICENSE			SUBMITTED: _____ DATE: _____ SCALE: AS SHOWN DRAWING NO. <b>A-3</b>		

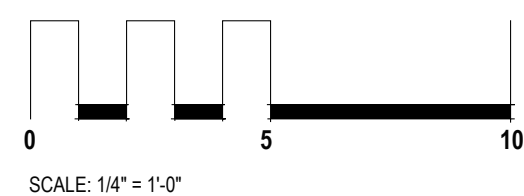


- LEGEND**
- 1 NEW TOILET PARTITION DOOR. (36" x 58"), REFER TO SPECIFICATIONS
  - 2 NEW TOILET PARTITION DOOR. (24" x 58"), REFER TO SPECIFICATIONS
  - 3 NEW WALL HUNG TOILET AND TOP MOUNT FLUSH VALVE.
  - 4 NEW URINAL AND TOP MOUNT FLUSH VALVE.
  - 5 NEW SINK WITH METERED FAUCET.
  - 6 NEW DUAL TOILET PAPER DISPENSER.
  - 7 NEW STAINLESS STEEL ADA GRAB BARS.
  - 8 NEW PORCELIN LARGE FORMAT WALL TILE. 12" x 24" AMERICAN OLEAN, SUNSET FALLS - BEIGE, RECTANGLE, MATT (SF16) EDGE & TRANSITION TILE TRIM ACCESSORIES BY SCHLUTER SYSTEMS.
  - 9 NEW EPOXY RESIN FLOOR COVERING OVER EXISTING FLOOR TILE. REFER TO SPECIFICATIONS
  - 10 NEW PAINT, SHERWIN WILLIAMS, SW 9500, INTERIOR, SEMI-GLOSS
  - 11 PROVIDE ADA COMPLIANT UNDER LAVATORY PROTECTOR FOR P-TRAP AND SUPPLY VALVES, SUCH AS "HANDY SHIELD MAXX" OR SIMILAR.

**1 RENOVATED MENS RESTROOM ELEVS**



**2 RENOVATED WOMENS RESTROOM ELEVS**



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			THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. BY: DATE: APRIL 13, 2026 EXPIRATION DATE OF LICENSE: APRIL 30, 2028		
DESIGNED:	CLA	SUBMITTED:			
DRAWN:	CLA	DATE:			
CHECKED:	JNN	SCALE:	AS SHOWN		
APPROVED:			DRAWING NO.		<b>A-4</b>
ADMINISTRATOR			DATE		