

HHFDC BID NO. 22-009-K85-S

VILLAGES OF KAPOLEI DEDICATION

KAIAU AVENUE ROADWAY REHABILITATION PROJECT- PHASE I

HONOULIULI, EWA, OAHU, HAWAII
 TMK: 9-1-016, 091, 119

HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
 STATE OF HAWAII

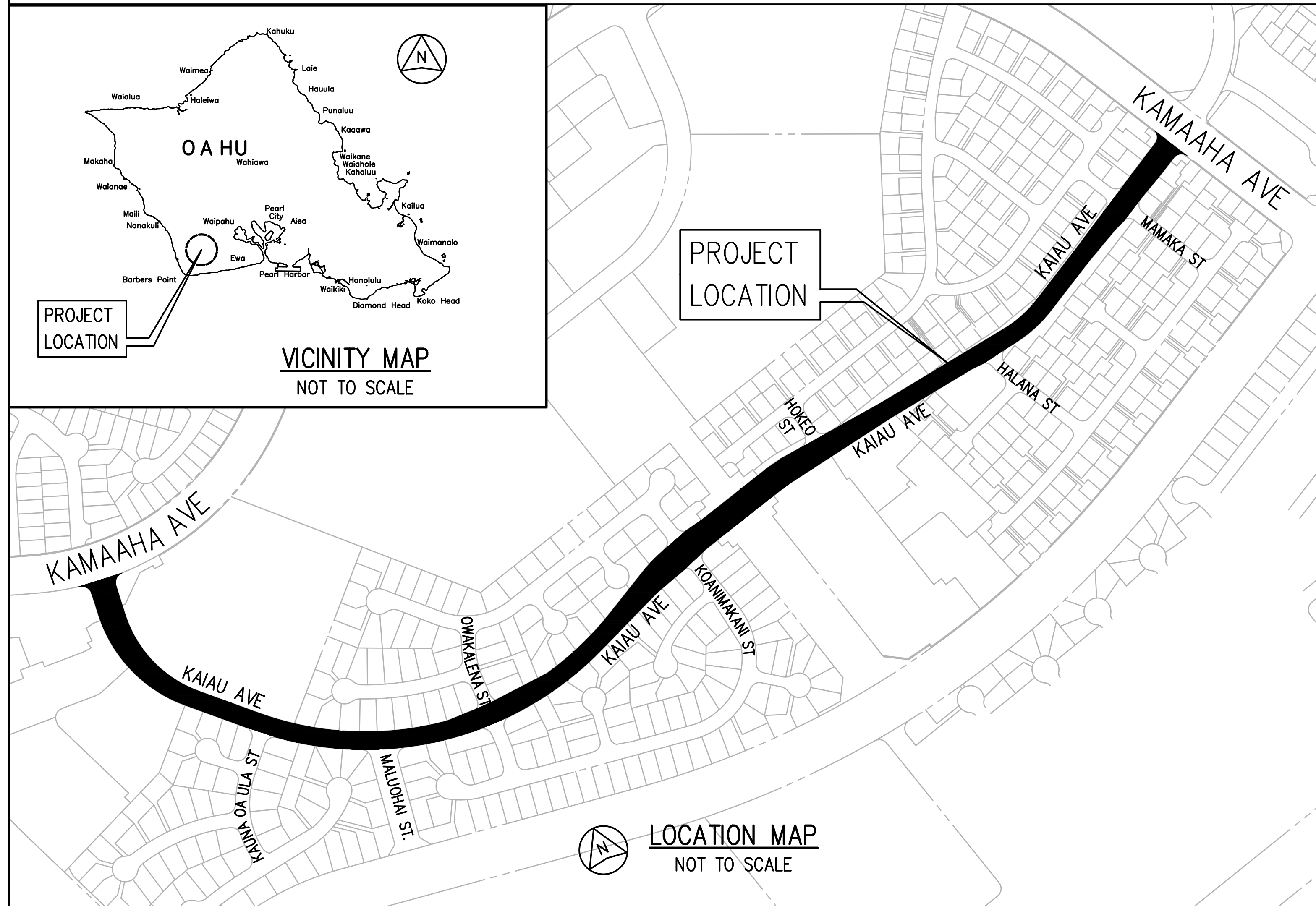
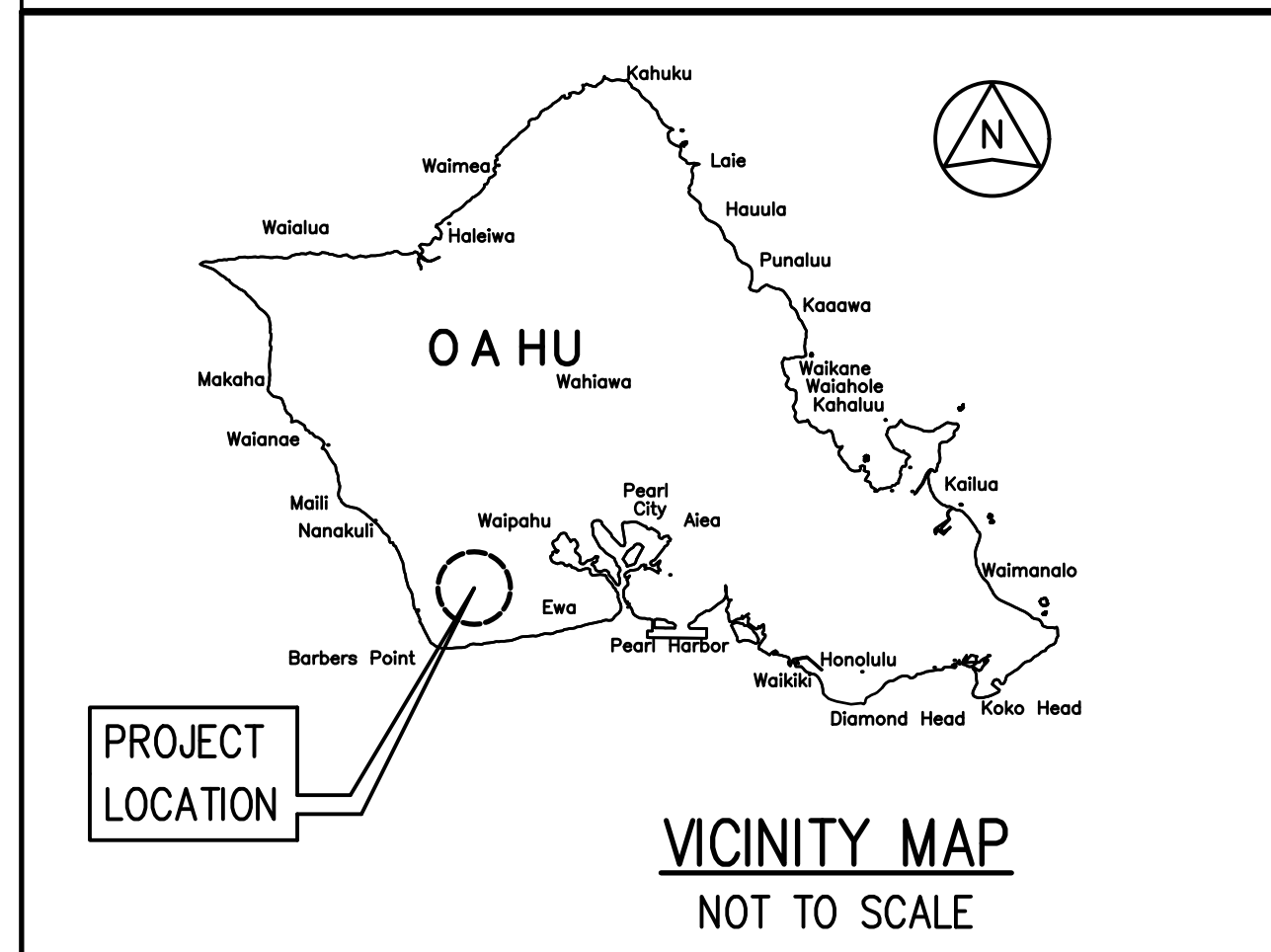


1001 BISHOP ST
 AMERICAN SAVINGS BANK TOWER, STE 2400
 HONOLULU, HAWAII 96813

LOCATION MAP

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APPROVED



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GENERAL CONSTRUCTION NOTES:

1. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUIAI, MAUI, AND HAWAII.
2. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST FROM RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH APPLICABLE PROVISIONS HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS," AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE(S) FOR THE FOLLOWING:

1. STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES THAT DISTURB ONE (1) ACRE OR MORE, AND
2. DISCHARGES OF HYDROTASTING EFFLUENT, DEWATERING EFFLUENT, AND WELL DRILLING EFFLUENT TO STATE WATERS.

IN ACCORDANCE WITH STATE LAW, ALL DISCHARGES RELATED TO THE PROJECT CONSTRUCTION OR OPERATIONS ARE REQUIRED TO COMPLY WITH STATE WATER QUALITY STANDARDS (HAWAII ADMINISTRATIVE RULES, CHAPTER 11-54). BEST MANAGEMENT PRACTICES SHALL BE USED TO MINIMIZE OR PREVENT THE DISCHARGE OF SEDIMENT, DEBRIS, AND OTHER POLLUTANTS TO STATE WATERS. PERMIT COVERAGE IS AVAILABLE FROM THE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH AT [HTTP://HEALTH.HAWAII.GOV/CWB](http://health.hawaii.gov/cwb). THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING OTHER FEDERAL, STATE OR LOCAL AUTHORIZATIONS AS REQUIRED BY LAW.

5. CONFINED SPACE
FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:
 - I. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. FULL BODY HARNESSSES FOR UP TO TWO PERSONNEL,
 - B. LIFELINE AND ASSOCIATED CLIPS,
 - C. INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT,
 - D. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT,
 - E. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION),
 - F. CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE,
 - G. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE OF AT LEAST 20- FEET AWAY),
 - H. PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 - II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 - III. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).
 - IV. ALL SAFETY EQUIPMENT SHALL COMPLY WITH THE STANDARDS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND ALL APPLICABLE FEDERAL, STATE, AND CITY LAWS AND REGULATIONS RELATING TO SAFETY.
6. PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015).
7. FOR PROJECTS ABUTTING STATE HIGHWAYS' RIGHTS-OF-WAY, THE OWNER OR AUTHORIZED REPRESENTATIVE SHALL NOTIFY THE STATE DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, OAHU DISTRICT, DRAINAGE DISCHARGE UNIT AT 831-6793 FOR AN ASSESSMENT OF STATE HIGHWAYS PERMIT REQUIREMENTS.
8. ANY EXISTING PAVEMENT AND PAVEMENT MARKINGS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESTORED TO ITS ORIGINAL, OR BETTER, CONDITION. SUCH RESTORATION SHALL BE TO THE SATISFACTION OF THE OFFICER-IN-CHARGE AT CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATION OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING. THE CONTRACTOR SHALL COORDINATE ALL WORK.

GENERAL CONSTRUCTION NOTES (Cont'd):

10. THE CONTRACTOR SHALL RESTORE TO ITS ORIGINAL CONDITION ALL IMPROVEMENTS DAMAGED AS A RESULT OF CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL, DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCLUDED IN COST OF THE VARIOUS CONTRACT ITEMS.
11. THE EXISTING IMPROVEMENTS WITHIN THE RIGHT-OF-WAY THAT ARE NOT TO BE REMOVED SHALL BE PRESERVED AND PROTECTED. ANY AND ALL DAMAGES RESULTING FROM THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE REPLACED AND REPAIRED TO ORIGINAL CONDITION, TO THE SATISFACTION OF THE OWNER AND PAID FOR BY THE CONTRACTOR.
12. UNLESS RELOCATION IS CALLED FOR ON THE PLANS, EXISTING UTILITIES SHALL REMAIN IN SERVICE AND IN PLACE. IF RELOCATION OF EXISTING UTILITIES IS REQUIRED FOR THE CONTRACTOR'S CONVENIENCE, INTERRUPTION OF SERVICE SHALL BE KEPT TO A MINIMUM AND SHALL BE DONE AT THE CONTRACTOR'S EXPENSE AND ONLY WITH THE APPROVAL OF THE OFFICER-IN-CHARGE.
13. THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND SERVICES TO PROPERLY PERFORM AND FULLY COMPLETE ALL WORK SHOWN ON CONTRACT, DRAWINGS AND SPECIFICATIONS.
14. ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS SHALL BE CHECKED AND VERIFIED PRIOR TO THE START OF CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OFFICER-IN-CHARGE FOR CLARIFICATION.
15. ALL CONSTRUCTION WORK SHALL IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE CONSTRUCTION SITE WILL BE REDUCED TO THE MAXIMUM EXTENT PRACTICABLE AND WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF WATER QUALITY STANDARDS.
16. FOR ALL PROJECTS, WHICH WILL DISTURB ONE (1) ACRE OR MORE OF LAND, THE CONTRACTOR SHALL NOT START CONSTRUCTION UNTIL A NOTICE OF GENERAL PERMIT COVERAGE (NGPC) IS RECEIVED FROM THE DEPARTMENT OF HEALTH, STATE OF HAWAII, AND HAS SATISFIED ANY OTHER APPLICABLE REQUIREMENTS OF THE NPDES PERMIT PROGRAM. FOR CITY OR OTHER GOVERNMENTAL PROJECTS, THE CONTRACTOR SHOULD PROVIDE A WRITTEN COPY OF THE NGPC TO THE APPROPRIATE CITY DEPARTMENT OR GOVERNMENTAL AGENCY PER THEIR REQUIREMENTS.

SEWER NOTES:

1. ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S "STANDARD SPECIFICATIONS," SEPT. 1986, THE DEPARTMENT OF ENVIRONMENTAL SERVICES "WASTEWATER SYSTEM DESIGN STANDARDS," JULY 2017, AND "WASTEWATER SYSTEM STANDARD DETAILS," JULY 2017, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990 AS AMENDED.
2. IN THE EVENT THAT ANY CHANGE IN ALIGNMENT OR GRADE FOR THE PROPOSED SEWERS ARE REQUIRED DUE TO UNFORESEEN CONFLICT WITH OTHER UTILITIES, THE ENGINEER IN CHARGE OR THE MAKER OF THE PLANS SHALL BE RESPONSIBLE FOR THE REQUIRED CHANGES WHICH ARE TO BE PRESENTED TO THE DEPARTMENT OF PLANNING AND PERMITTING (DPP) FOR APPROVAL.
3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGEMENT BRANCH, WASTEWATER ENGINEERING AND CONSTRUCTION DIVISION, ENV, AT 768-8785, 768-8769, OR 768-8755 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS TO THE WASTEWATER BRANCH, DPP SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF SEWER WORK. THE CONTRACTOR SHALL PAY FOR ALL INSPECTION COSTS.
4. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES, INCLUDING AND AFFECTING SEWER LINES, IN THE PRESENCE OF THE WASTEWATER INSPECTOR AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.
5. SEWER LATERALS SHALL BE CLEAR OF AND NOT CONFLICTING WITH ANY OTHER UTILITY. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES SHALL BE STRICTLY OBSERVED AND FOLLOWED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
7. THE CONSULTING ENGINEER SHALL SUBMIT TO THE WASTEWATER BRANCH, DPP "AS-BUILT" TRACINGS AND ELECTRONIC FILES OF THE CONSTRUCTION PLANS AS ACTUALLY CONSTRUCTED, SHOWING ALL CHANGES FROM THE ORIGINAL PLANS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SEWAGE SPILLS CAUSED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE STATE DEPARTMENT OF HEALTH AND UTILIZE APPROPRIATE SAMPLING AND ANALYZING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC NOTIFICATIONS AND PRESS RELEASES.

SEWER NOTES (Cont'd):

9. CONFINED SPACE
FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT-REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:
 1. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
 - a. FULL BODY HARNESSSES FOR UP TO TWO PERSONNEL.
 - b. LIFELINE AND ASSOCIATED CLIPS.
 - c. INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - d. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
 - e. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
 - f. CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
 - g. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20- FEET AWAY).
 - h. PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 2. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 3. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).

10. FOR SEWER MANHOLE ADJUSTMENTS UPWARD LESS THAN 3", SEE STD. DETAIL S-28. FOR SMH ADJUSTMENTS UPWARD GREATER THAN 3" OR FOR ANY ADJUSTMENTS DOWNWARD, RECONSTRUCT SMH TOP FROM BELOW THE CONE SECTION.

11. IF THE CONTRACTOR ENCOUNTERS FLOW MONITORING DEVICES, SUCH AS SPECIAL SEWER MANHOLE COVERS EMBEDDED WITH SOLAR PANELS, CONTACT COLLECTION SYSTEMS MAINTENANCE (CSM), ENV AT 768-7272 TO COORDINATE TEMPORARY REMOVAL.

12. THE CONTRACTOR SHALL MAINTAIN VISIBILITY AND MAINTENANCE ACCESS TO LIVE SEWER MANHOLE LOCATIONS AT ALL TIMES, INCLUDING DURING NON-WORK HOURS AND PAVING OPERATIONS.

13. THE CONTRACTOR SHALL USE A MANHOLE DEBRIS CATCHING DEVICE WHEN PERFORMING MANHOLE HEIGHT ADJUSTMENT WORK AND REMOVE ANY CONSTRUCTION DEBRIS THAT HAS FALLEN INTO THE MANHOLE. DISPOSAL OF CONSTRUCTION DEBRIS IN THE SEWER SYSTEM IS STRICTLY PROHIBITED.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES:

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR, AT ITS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE CITY AND COUNTY OF HONOLULU SHALL REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.

MECHANICAL/ELECTRICAL DIVISION NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE JOINT POLE COMMITTEE TWO (2) WEEKS IN ADVANCE OF ANY RELOCATION OF UTILITY POLE(S) THAT MAY BE NECESSARY.
2. THE CONTRACTOR SHALL NOTIFY THE MECHANICAL/ELECTRICAL DIVISION, DDC, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE STREET LIGHTING SYSTEM (PHONE: 768-8431).
3. THE STREET LIGHTING SYSTEM SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION REQUIRED SHALL BE APPROVED BY THE MECHANICAL/ELECTRICAL DIVISION, DDC, AND PAID FOR BY THE CONTRACTOR.
4. THE LOCATIONS OF THE EXISTING UNDERGROUND STREET LIGHT FACILITIES SHOWN ON THE PLANS ARE FROM EXISTING PLANS AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY TO THE EXISTING STREET LIGHT FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING STREET LIGHT FACILITIES. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF HONOLULU.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE CITY'S EXISTING COMMUNICATIONS FIBER OPTIC CABLE SYSTEM. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF HONOLULU.

WATER NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES IN THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S "WATER SYSTEM STANDARDS", DATED 2002, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 2021, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.

WATER NOTES (Cont'd):

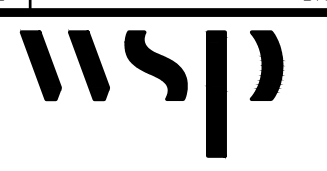
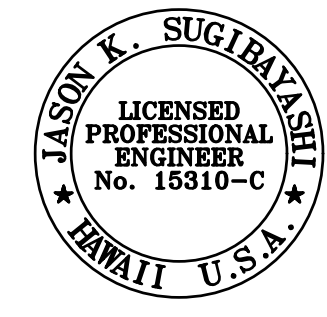
2. ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED ON THE ADEQUACY OF THE WATER SUPPLY AND/OR IF WORK IS TO BE DONE ON/OR NEAR THE WATER SYSTEM.
3. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THEIR ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL DAMAGES TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOT ASSUME THAT WHERE NO UTILITIES ARE SHOWN, THAT NONE EXIST.
4. THE CONTRACTOR SHALL VERIFY ALL EXISTING SERVICE LATERAL LOCATIONS WHETHER SHOWN OR NOT SHOWN ON PLANS PRIOR TO COMMENCING WITH ANY OF THE WORK AND SHALL NOT ASSUME THAT WHERE NO SERVICES ARE SHOWN NONE EXIST.
5. THE CONTRACTOR SHALL ADJUST ALL MANHOLE FRAMES/VALVE BOXES/METER BOXES WITHIN THE RECONSTRUCTED AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR "REFERENCING" THESE MANHOLES/VALVE BOXES/METER BOXES TO FACILITATE THE ADJUSTMENT.
6. PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATERLINES AND APPURTENANCES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINES, TEES, AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING CONSTRUCTION METHOD.
8. TWO-WAY BLUE REFLECTIVE HYDRANT MARKERS TYPE DB SHALL BE INSTALLED AT ALL FIRE HYDRANT LOCATIONS.
9. THE CONTRACTOR SHALL NOTIFY THE BWS CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION IN WRITING ONE (1) WEEK PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
10. RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO (2) YEARS.
11. MAINTAIN 3'-0" MINIMUM COVER FOR ALL EXISTING WATERLINES FROM NEW FINISH GRADE.
12. ANY ADJUSTMENTS TO THE EXISTING WATER SYSTEM REQUIRED DURING CONSTRUCTION, TO MEET THE MINIMUM COVER AND THE REQUIREMENTS OF THE BOARD OF WATER SUPPLY STANDARDS, WHETHER SHOWN ON PLANS OR NOT, SHALL BE DONE BY THE CONTRACTOR AT NO COST TO THE BOARD OF WATER SUPPLY.

ADJUSTMENT TO EXISTING UTILITIES NOTE:

1. ADJUST ALL UTILITY VALVE BOX FRAMES & COVERS, WATER METER BOXES, MANHOLE FRAMES AND COVERS, STREET MONUMENT COVERS, ETC., TO NEW FINISH GRADE. COORDINATE WITH PRIVATE COMPANIES AND CITY AGENCIES FOR WORK ON EACH RESPECTIVE UTILITY.

HONOLULU FIRE DEPARTMENT (HFD) NOTE:

1. THE CONTRACTOR SHALL NOTIFY THE HONOLULU FIRE DEPARTMENT (HFD), BATTALION CHIEF ALAN CARVALHO (723-7182), 636 SOUTH STREET, HONOLULU, HAWAII, 96813 OR a.carvalho@honolulu.gov TWO WEEKS PRIOR TO CONSTRUCTION, INFORMING THEM OF LOCATION, SCOPE OF WORK, AND PROPOSED CLOSURE OF ANY STREET OR TRAFFIC LANES.

DESIGN: MN					
DRAWN: MN					
CHECKED: JS	REVISION	DATE	BRIEF	BY	APPROVED
DATE: SEPTEMBER 2022	 WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368				
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII					
KAIUA AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULULU, EWA, OAHU, HAWAII CONSTRUCTION NOTES - 1					
				APPROVED: _____ DWG NO. CN-1	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.					

GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES

ALL PROJECTS MUST IMPLEMENT AND MAINTAIN GOOD HOUSEKEEPING PRACTICES TO ELIMINATE AND MINIMIZE POLLUTANT DISCHARGES TO THE MAXIMUM EXTENT PRACTICABLE. MANDATORY GOOD HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO:

- STREET SWEEPING AND VACUUMING. ALL POLLUTANTS DISCHARGED FROM A CONSTRUCTION SITE TO OFF-SITE AREAS MUST BE SWEEPED OR VACUUMED EACH DAY BEFORE LEAVING THE JOB SITE.
- MATERIALS DELIVERY, STORAGE AND USE MANAGEMENT. PREVENT, REDUCE, OR ELIMINATE THE DISCHARGE OF POLLUTANTS FROM MATERIAL DELIVERY, STORAGE, AND USE TO THE STORM WATER SYSTEM OR WATERCOURSES BY MINIMIZING THE STORAGE OF HAZARDOUS MATERIALS ONSITE, STORING MATERIALS IN A DESIGNATED AREA, INSTALLING SECONDARY CONTAINMENT. CONSTRUCTION MATERIALS, WASTE, TOXIC AND HAZARD SUBSTANCES, STOCKPILES AND OTHER SOURCES OF POLLUTION SHALL NOT BE STORED IN BUFFER AREAS, NEAR AREAS OF CONCENTRATED FLOW, OR AREAS ABUTTING THE MS4, RECEIVING WATERS, OR DRAINAGE IMPROVEMENTS THAT DISCHARGE OFF-SITE. PRIMARY AND SECONDARY CONTAINMENT CONTROLS AND COVERS SHALL BE IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE.
- SPILL PREVENTION AND CONTROL. PROJECTS SHALL CREATE AND IMPLEMENT SPILL PREVENTION AND RESPONSE PLANS TO ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO THE MS4 AND RECEIVING WATERS FROM LEAKS AND SPILLS BY REDUCING THE CHANCE FOR SPILLS, ABSORBING, CONTAINING, AND CLEANING UP SPILLS AND PROPERLY DISPOSING OF SPILL MATERIALS. AT A MINIMUM, ALL PROJECTS SHALL CLEAN UP ALL LEAKS AND SPILLS IMMEDIATELY.
- HAZARDOUS MATERIALS. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM HAZARDOUS WASTE THROUGH PROPER MATERIAL USE AND WASTE DISPOSAL. IN THE EVENT THAT HAZARDOUS MATERIALS ARE DISCHARGED TO THE MS4, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY HHFDC, HONOLULU FIRE DEPARTMENT, AND HONOLULU POLICE DEPARTMENT OF THE DISCHARGE BY TELEPHONE. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASONS FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO HHFDC NO LESS THAN 3 DAYS AFTER NOTIFICATION BY PHONE.
- NON-HAZARDOUS MATERIALS. IN THE EVENT THAT NON-HAZARDOUS MATERIALS ARE DISCHARGED TO THE MS4, THE CONTRACTOR SHALL NOTIFY HHFDC BY TELEPHONE NO LATER THAN THE NEXT BUSINESS DAY. A WRITTEN REPORT DESCRIBING THE POLLUTANTS THAT WERE DISCHARGED, THE REASON FOR THE DISCHARGE, AND THE MEASURES THAT HAVE BEEN TAKEN OR WILL BE TAKEN TO PREVENT A REOCCURRENCE OF THE DISCHARGE SHALL BE SUBMITTED TO THE DIRECTOR NO LESS THAN 3 DAYS AFTER NOTIFICATION BY PHONE.
- VEHICLE AND EQUIPMENT CLEANING. ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT CLEANING OPERATIONS BY USING OFF-SITE FACILITIES WHEN FEASIBLE, WASHING IN DESIGNATED, CONTAINED AREAS ONLY, AND ELIMINATING DISCHARGES TO THE STORM DRAIN SYSTEM BY EVAPORATING AND/OR TREATING WASH WATER AS APPROPRIATE, OR INFILTRATING WASH WATER FOR EXTERIOR CLEANING ACTIVITIES THAT USE WATER ONLY.
- VEHICLE AND EQUIPMENT FUELING. PREVENT FUEL SPILLS AND LEAKS BY USING OFF-SITE FACILITIES, FUELING ONLY IN DESIGNATED AREAS, ENCLOSING OR COVERING STORED FUEL, AND IMPLEMENTING SPILL CONTROLS SUCH AS SECONDARY CONTAINMENT AND ACTIVE MEASURES USING SPILL RESPONSE KITS.
- VEHICLE AND EQUIPMENT MAINTENANCE. ELIMINATE AND MINIMIZE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM VEHICLE AND EQUIPMENT MAINTENANCE OPERATIONS BY USING OFF-SITE FACILITIES WHEN FEASIBLE, PERFORMING WORK IN DESIGNATED AREAS ONLY, USING SPILL PADS UNDER VEHICLES AND EQUIPMENT, CHECKING FOR LEAKS AND SPILLS, AND CONTAINING AND CLEANING UP SPILLS IMMEDIATELY.
- SOLID WASTE MANAGEMENT. PREVENT OR REDUCE DISCHARGE OF POLLUTANTS TO THE LAND, GROUNDWATER, AND IN STORM WATER FROM SOLID WASTE OR CONSTRUCTION AND DEMOLITION WASTE BY PROVIDING DESIGNATED WASTE COLLECTION AREAS, COLLECT SITE TRASH DAILY, AND ENSURING THAT CONSTRUCTION WASTE IS COLLECTED, REMOVED, AND DISPOSED OF ONLY AT AUTHORIZED DISPOSAL AREAS.
- SANITARY/SEPTIC WASTE MANAGEMENT. TEMPORARY AND PORTABLE SANITARY AND SEPTIC WASTE SYSTEMS SHALL BE MOUNTED OR STAKED IN, WELL-MAINTAINED, AND SCHEDULED FOR REGULAR WASTE DISPOSAL AND SERVICING. SOURCES OF SANITARY AND/OR SEPTIC WASTE SHALL NOT BE STORED NEAR THE MS4 OR RECEIVING WATERS.
- STOCKPILE MANAGEMENT. STOCKPILES SHALL NOT BE LOCATED IN DRAINAGE WAYS, WITHIN 50 FEET FROM AREAS OF CONCENTRATED FLOWS, AND ARE NOT ALLOWED IN THE CITY RIGHT-OF-WAY. SEDIMENT BARRIERS OR SILT FENCES SHALL BE USED AROUND THE BASE OF ALL STOCKPILES. STOCKPILES SHALL NOT EXCEED 15 FEET IN HEIGHT. STOCKPILES GREATER THAN 15 FEET IN HEIGHT SHALL REQUIRE 8 FOOT WIDE BENCHING IN ACCORDANCE WITH ROH CHAPTER 14, ARTICLE 15. STOCKPILES MUST BE COVERED WITH PLASTIC SHEETING OR A COMPARABLE MATERIAL IF THEY WILL NOT BE ACTIVELY USED WITHIN 7 DAYS.
- LIQUID WASTE MANAGEMENT. LIQUID WASTE SHALL BE CONTAINED IN A CONTROLLED AREA SUCH AS A HOLDING PIT, SEDIMENT BASIN, ROLL-OFF BIN, OR PORTABLE TANK OF SUFFICIENT VOLUME AND TO CONTAIN THE LIQUID WASTES GENERATED. CONTAINMENT AREAS OR DEVICES MUST BE IMPERMEABLE AND LEAK FREE AND SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS.
- CONTAMINATED SOIL MANAGEMENT. AT MINIMUM CONTAIN CONTAMINATED MATERIAL SOIL BY SURROUNDING WITH IMPERMEABLE LINED BERMS OR COVER EXPOSED CONTAMINATED MATERIAL WITH PLASTIC SHEETING. CONTAMINATED SOIL SHOULD BE DISPOSED OF PROPERLY IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES (CONT.)

- CONCRETE WASTE MANAGEMENT. PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MILLIMETER POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. CONTAINMENT AREAS OR DEVICES SHOULD NOT BE LOCATED WHERE ACCIDENTAL RELEASE OF THE CONTAINED LIQUID CAN DISCHARGE TO WATER BODIES, CHANNELS, OR STORM DRAINS. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75 PERCENT FULL. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF AS SOLID WASTE.
- DUST CONTROL SHALL BE APPLIED TO REDUCE DUST EMISSIONS. THE CONTRACTOR, AT THEIR OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS IN HAWAII ADMINISTRATIVE RULES: TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".

EROSION CONTROL PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES NOTES

- THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF HONOLULU'S "RULES RELATING TO WATER QUALITY".
- MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY CONSTRUCTION IS INITIATED.
- REGULARLY INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROLS TO ENSURE CONTINUED PERFORMANCE.
- PERMANENT STABILIZATION
ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED USING VEGETATIVE COVERING, PAVEMENT, OR EQUIVALENT, PRIOR TO REMOVING EROSION AND SEDIMENT MEASURES. TRAPPED SEDIMENT AND AREAS OF DISTURBED SOIL WHICH RESULT FROM THE REMOVAL OF THE TEMPORARY MEASURES SHALL BE IMMEDIATELY AND PERMANENTLY STABILIZED.
- INLET PROTECTION
 - ALL STORM DRAIN INLETS ONSITE AND THOSE OFFSITE WHICH MAY RECEIVE RUNOFF FROM THE SITE SHALL USE AN INLET PROTECTION DEVICE UNLESS THEY ARE DIRECTED TO A SEDIMENT BASIN.
 - SEDIMENT LEVELS MAY NOT EXCEED ONE THIRD OF THE HEIGHT OF A SEDIMENT BARRIER OR INLET PROTECTION DEVICE AT ANY POINT ALONG THE LENGTH OF THE SEDIMENT BARRIER OR THE INLET PROTECTION DEVICE.
 - SEDIMENT BARRIERS AND INLET PROTECTION DEVICES MUST BE UNCLOGGED AND CLEANED WHEN PERFORMANCE IS COMPROMISED.
 - TORN, WEATHERED, OR SAGGING SEDIMENT BARRIERS OR INLET PROTECTION DEVICES MUST BE REPAIRED OR REPLACED IMMEDIATELY.
- TRACKING CONTROL
 - MINIMIZE SEDIMENT TRACK-OUT ONTO THE OFF-SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS FROM VEHICLES EXITING THE CONSTRUCTION SITE BY RESTRICTING VEHICLE TRAFFIC TO PROPERLY DESIGNATED AREAS AND USING ADDITIONAL CONTROLS TO REMOVE SEDIMENT FROM VEHICLE TIRES PRIOR TO EXITING THE SITE.
 - VEHICULAR PARKING AND MOVEMENTS ON PROJECT SITES MUST BE CONFINED TO PAVED SURFACES OR PREDEFINED PARKING AREAS AND VEHICLE PATHS, WHICH SHALL BE MARKED WITH FLAGS OR BOUNDARY FENCING.
 - ALL POLLUTANTS AND MATERIALS THAT ARE DROPPED, WASHED, TRACKED, SPILLED OR OTHERWISE DISCHARGED FROM A PROJECT SITE TO OFF-SITE STREETS, OTHER PAVED AREAS, SIDEWALKS OR THE MS4 MUST BE CLEANED USING DRY METHODS SUCH AS SWEEPING OR VACUUMING.
 - WASHING POLLUTANTS AND MATERIALS THAT ARE DISCHARGED FROM THE PROJECT SITE TO THE MS4 INTO DRAIN INLETS OR CATCH BASINS IS PROHIBITED UNLESS THE MATERIAL IS SEDIMENT AND THE INLETS ARE DIRECTED TO A SEDIMENT BASIN OR SEDIMENT TRAP.
- BEST MANAGEMENT PRACTICES (BMPS) SHALL NOT BE REMOVED UNTIL FINAL STABILIZATION IS COMPLETE FOR EACH PHASE.
- PROVIDE SEDIMENT FENCES OR BARRIERS AROUND THE PERIMETER OF STAGING AREAS IF THERE IS A POTENTIAL FOR RUNOFF TO FLOW OFF THE PROJECT SITE, AND AROUND THE BASE OF ALL MATERIAL STOCKPILES. THESE MAY INCLUDE GRAVEL BAGS, SAND BAGS, FIBER ROLLS, SILT FENCES, OR COMPOST SOCKS THAT INTERCEPT RUNOFF.
- CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES AT ALL TIMES DURING CONSTRUCTION WITH THE USE OF "SEDIMENT CONTROL FILTERS" AT CATCH BASINS/DRAIN INLETS.
- REFER TO CITY AND COUNTY OF HONOLULU STORM WATER BEST MANAGEMENT PRACTICES MANUAL - CONSTRUCTION, FOR MORE INFORMATION ON BMPS.

EROSION CONTROL PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES NOTES (CONT.)

- FLUSHING INTO CATCH BASINS/DRAIN INLETS IS PROHIBITED.
- FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING LOCAL WEATHER REPORTS FOR FORECASTED AND/OR ANTICIPATED SEVERE STORM EVENTS. THE CONTRACTOR SHALL PREPARE THE CONSTRUCTION WORK SITE AS NECESSARY TO PREVENT FLOODING ON THE ROADWAY, OR DAMAGE TO THE PROJECT OR SURROUNDING PROPERTIES.
- ALL MOBILIZED EQUIPMENT SHALL BE REMOVED POST CONSTRUCTION.

EROSION & SEDIMENT CONTROL PLAN SCHEDULE AND RAIN RESPONSE PLAN

PROJECT SEQUENCE:

- INSTALL INLET PROTECTION AT EXISTING CATCH BASINS/DRAIN INLETS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AS PER THE EROSION CONTROL PREVENTION, SEDIMENT CONTROL AND GOOD HOUSEKEEPING BMP NOTES.
- INSTALL PERIMETER CONTROLS AROUND STAGING AREAS AND MATERIAL STOCKPILES AS NEEDED.
- PROCEED WITH CONSTRUCTION WITH LEAST POSSIBLE DISTURBANCE OF VEGETATIVE AREAS AND TEMPORARY STRUCTURES.
- REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER FULL ESTABLISHMENT OF PERMANENT VEGETATIVE COVER OR PERMANENT PAVEMENT STRUCTURE HAS BEEN INSTALLED.
- PRACTICE GOOD HOUSEKEEPING MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
- INSPECTIONS WILL BE PERFORMED WEEKLY.

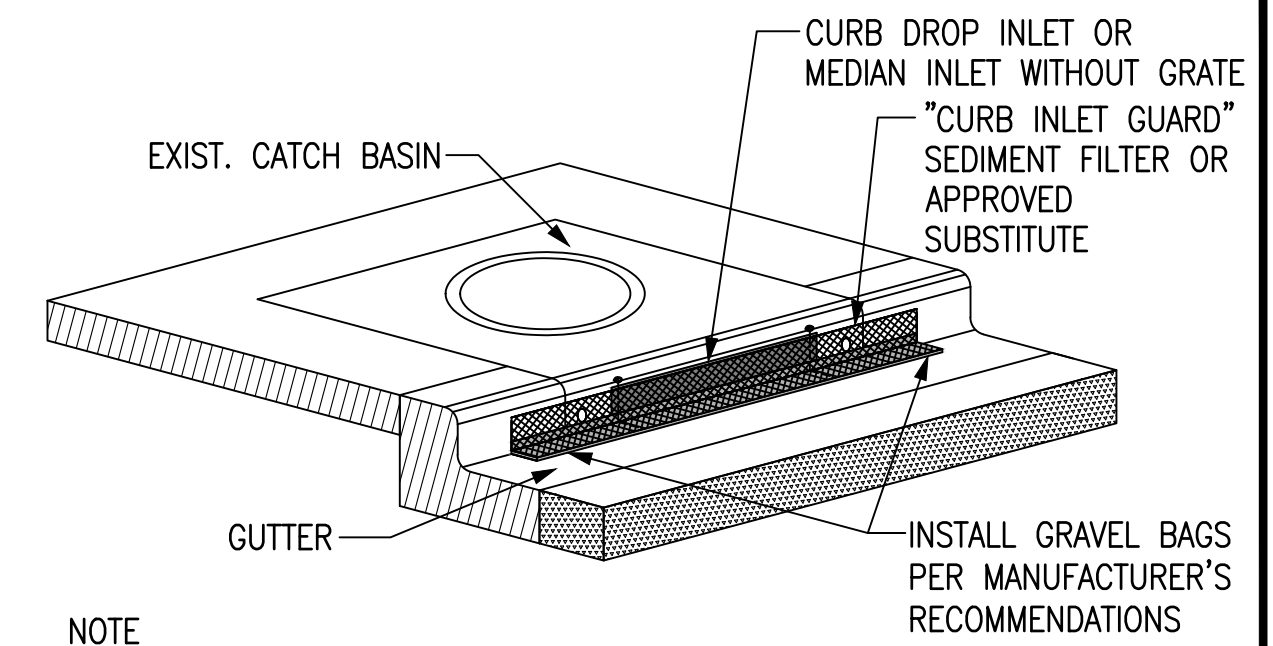
RAIN RESPONSE PLAN:

THE FOLLOWING WILL BE PERFORMED WHEN HEAVY RAINS, TROPICAL STORM OR HURRICANE IS IMMINENT OR IS FORECASTED IN THE NEXT 48 HOURS:

- TEMPORARY SUSPENSION OF ACTIVE TRENCHING OR COLD PLANING ACTIVITIES.
- INSPECT ALL INLET PROTECTION DEVICES AND MAINTAIN AS NEEDED. IF A SEVERE STORM IS EXPECTED, REMOVE INLET PROTECTION DEVICES TO PREVENT FLOODING ON SURROUNDING STREETS.
- COVER OR RELOCATE MATERIAL STOCKPILES AND LIQUID MATERIAL CONTAINERS TO AVOID CONTACT WITH RAINWATER.
- PLACE SPILL PANS OR OIL-ONLY SPILL PADS UNDER CONSTRUCTION VEHICLES TO PREVENT RUNOFF FROM CONTACTING ANY SPILLED PETROLEUM PRODUCTS. PROPERLY DISPOSE OF ANY ACCUMULATED OILY WATER AFTER THE RAIN EVENT.
- RE-INSPECT AFTER THE APPROACHING HEAVY RAINS, TROPICAL STORM OR HURRICANE AND REPLACE OR MAINTAIN BMPS AS NEEDED.

DEWATERING OPERATIONS BEST MANAGEMENT PRACTICES NOTE

- DEWATERING OPERATIONS ARE NOT PART OF THE PROJECT SCOPE; BEST MANAGEMENT PRACTICES FOR DEWATERING OPERATIONS ARE NOT REQUIRED, AS NO GROUNDWATER IS ANTICIPATED.



NOTE

"CURB INLET GUARD" IS MANUFACTURED BY ERTEC ENVIRONMENTAL SYSTEMS.

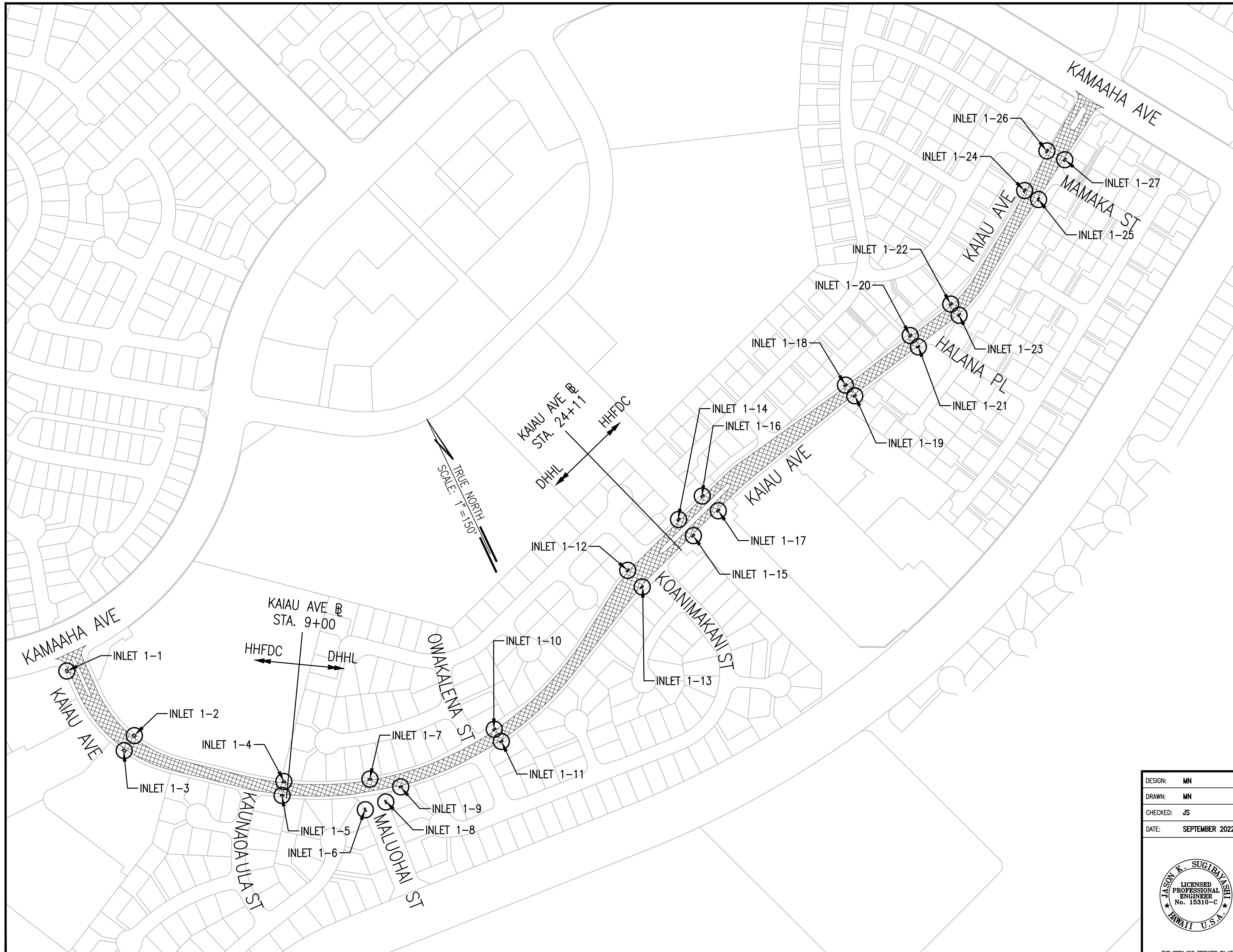
CATCH BASIN SEDIMENT CONTROL FILTER DETAIL

NOT TO SCALE

NOTES:

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- SEDIMENT LEVELS MAY NOT EXCEED ONE THIRD OF THE HEIGHT OF A SEDIMENT OR AN INLET PROTECTION DEVICE AT ANY POINT ALONG THE LENGTH OF THE SEDIMENT BARRIER OR THE INLET PROTECTION DEVICE.
- SEDIMENT BARRIERS AND INLET PROTECTION DEVICES MUST BE UNCLOGGED AND CLEANED WHEN PERFORMANCE IS COMPROMISED.
- TORN, WEATHERED OR SAGGING SEDIMENT BARRIERS OR INLET PROTECTION DEVICES MUST BE REPAIRED OR REPLACED IMMEDIATELY.

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DRAWN: MN					
CHECKED: JS	REVISION	DATE	BRIEF	BY	APPROVED
DATE: SEPTEMBER 2022	WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368				
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULIULI, EWA, OAHU, HAWAII EROSION & SEDIMENT CONTROL PLAN NOTES AND DETAILS				
	APPROVED:				DWG NO. ES-1



LEGEND:

☉ CATCH BASIN/DRAIN INLET FILTER

▨ DISTURBED AREA

NOTES:

1. SEE DWG. NO. ES-1 FOR ESCP NOTES AND DETAILS.
2. INLET NUMBERING ON THIS SHEET FOR NPDES PERMIT PURPOSES ONLY

EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=200'

GRAPHIC SCALE



SCALE: 1"=150'

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 DRAWN: MN
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 DATE: SEPTEMBER 2022



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 SIGNATURE: [Signature] 4/30/2024 EXPIRATION DATE OF THE LICENSE

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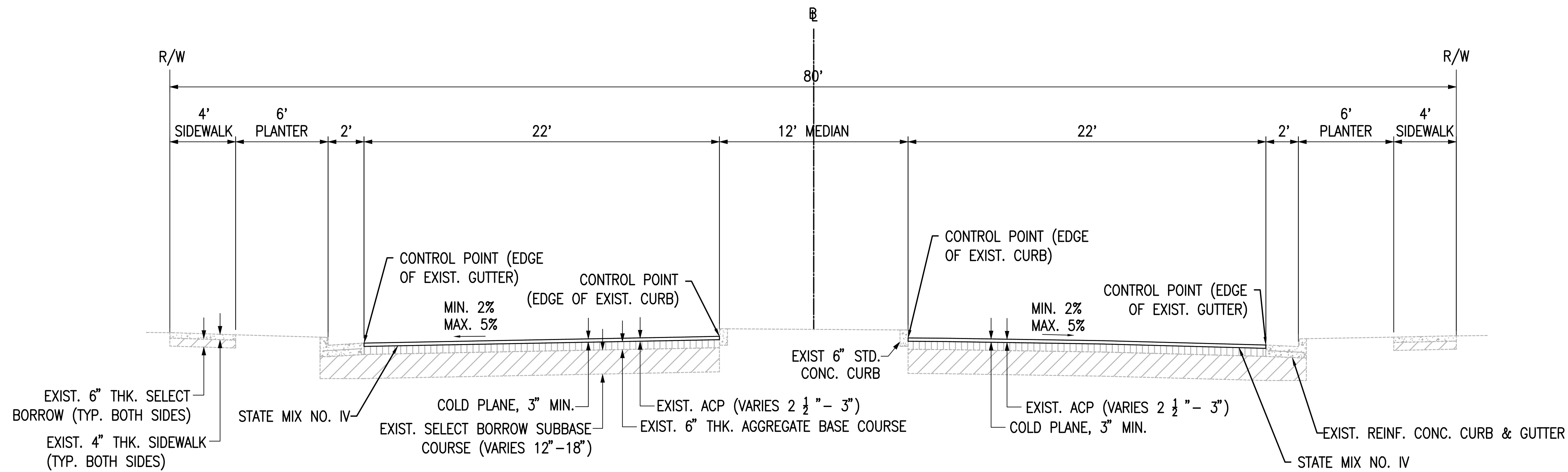
wsp
 WSP USA Inc.
 1001 Bishop Street, Suite 2400
 Honolulu, HI 96813
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 FAX: +1.808.528.2368

VILLAGES OF KAPOLEI DEDICATION
 HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
 STATE OF HAWAII

KAIU AVENUE ROADWAY
 REHABILITATION PROJECT - PHASE I
 HONOLULU, EWA, OAHU, HAWAII
 EROSION & SEDIMENT
 CONTROL PLAN

APPROVED:	DWG NO. ES-2
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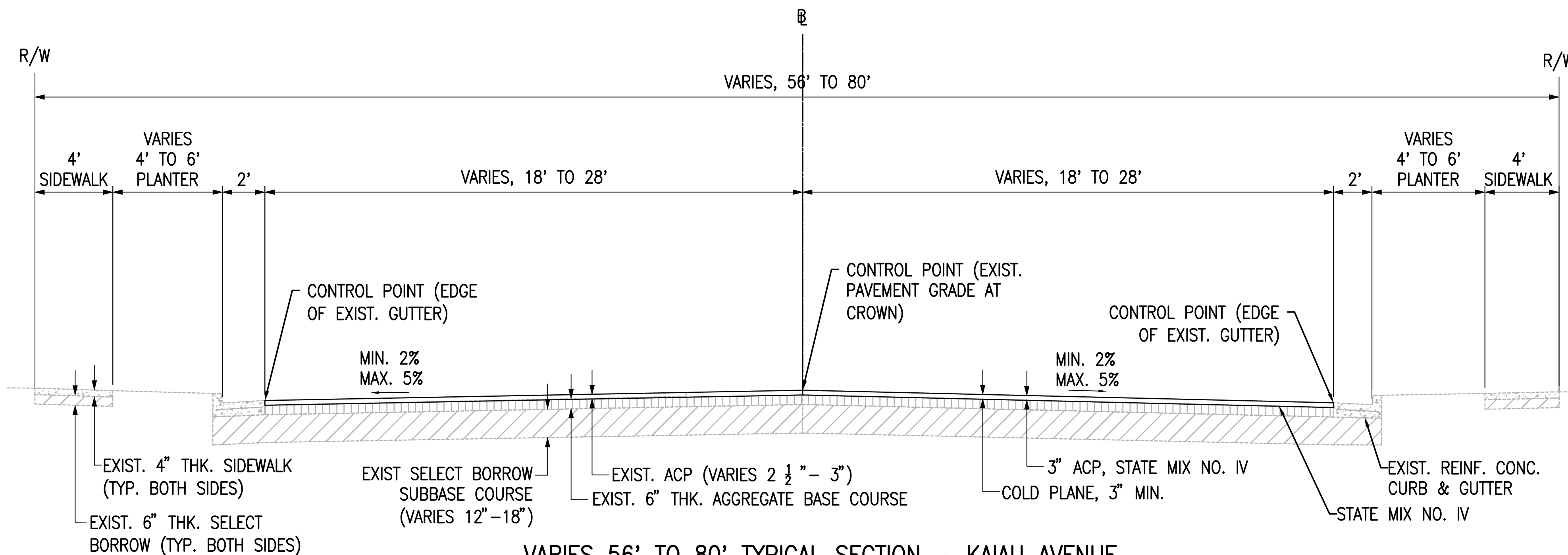
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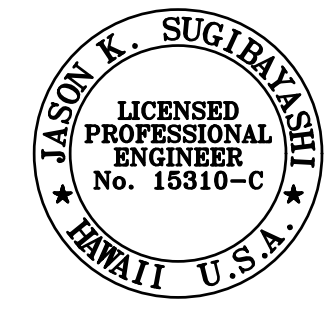
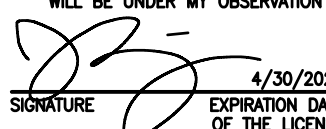
80' TYPICAL SECTION – KAIU AVENUE
KAIU AVENUE @ STA. 0+50 TO STA. 1+88
 NOT TO SCALE

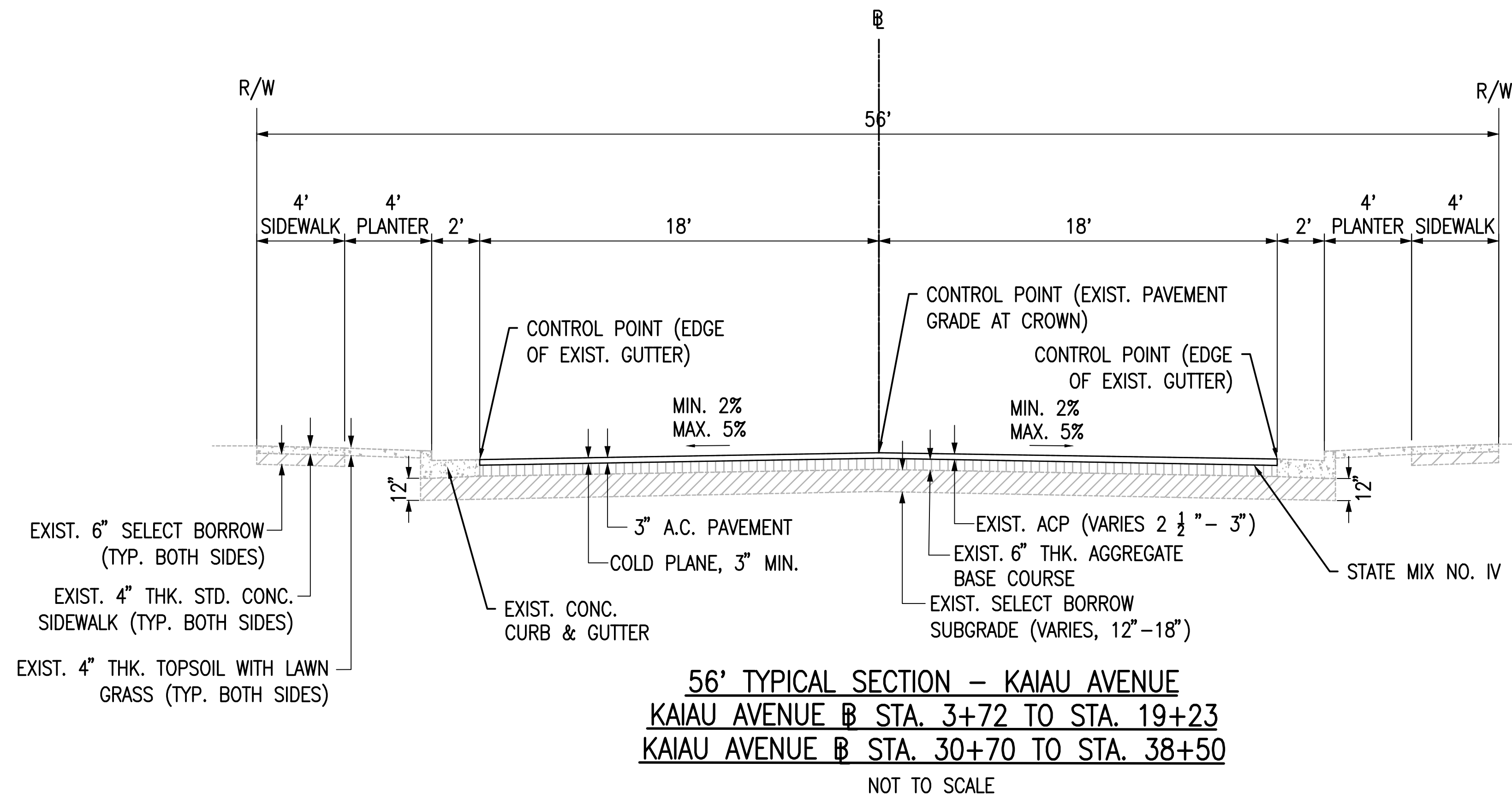
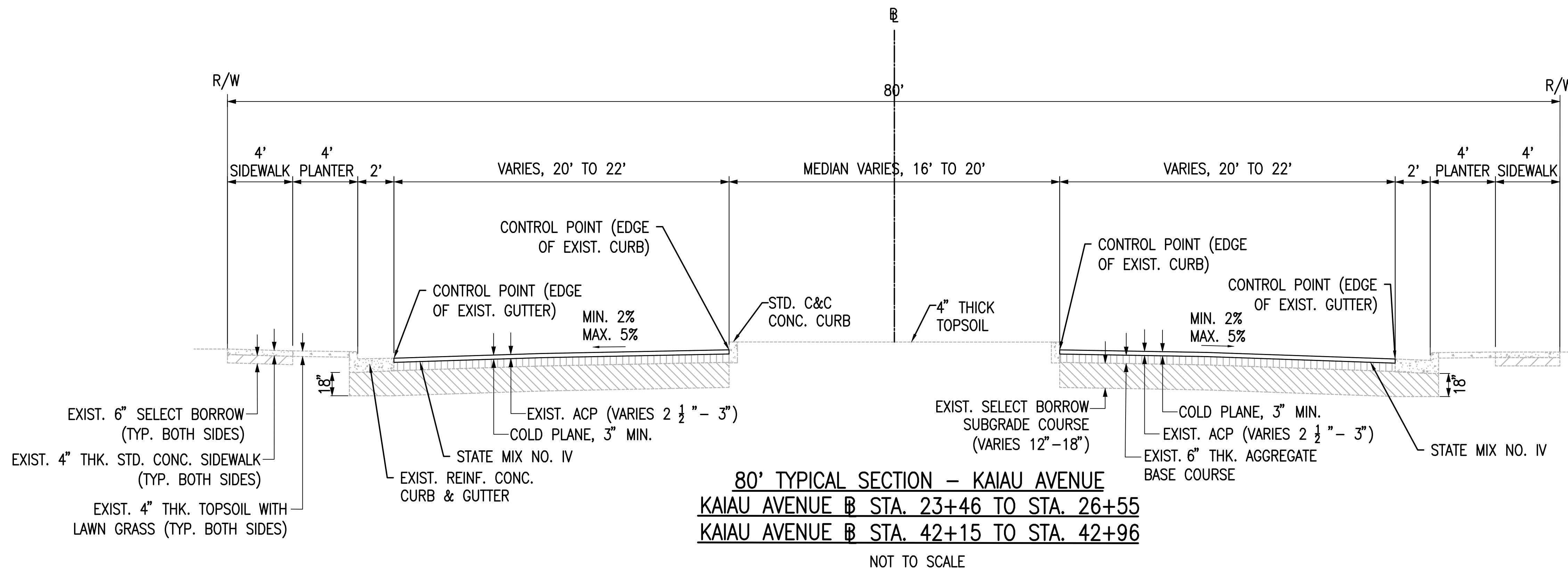
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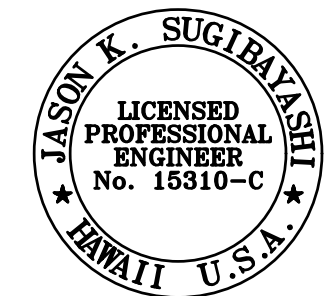

1. AFTER EXCAVATION/COLD PLANING FOR NEW PAVEMENT SECTION, PROOF-ROLLING ANY EXPOSED AGGREGATE BASE/SUBBASE AND SUBGRADE SURFACES. PROOF-FOLLING WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE CONTRACT PRICES FOR THE VARIOUS PAY ITEMS.



VARIES 56' TO 80' TYPICAL SECTION – KAIU AVENUE
KAIU AVENUE @ STA. 0+00 TO STA. 0+50 **KAIU AVENUE @ STA. 26+55 TO STA. 30+70**
KAIU AVENUE @ STA. 1+88 TO STA. 3+72 **KAIU AVENUE @ STA. 38+50 TO STA. 42+15**
KAIU AVENUE @ STA. 19+23 TO STA. 23+46 **KAIU AVENUE @ STA. 42+96 TO STA. 43+26**
 NOT TO SCALE

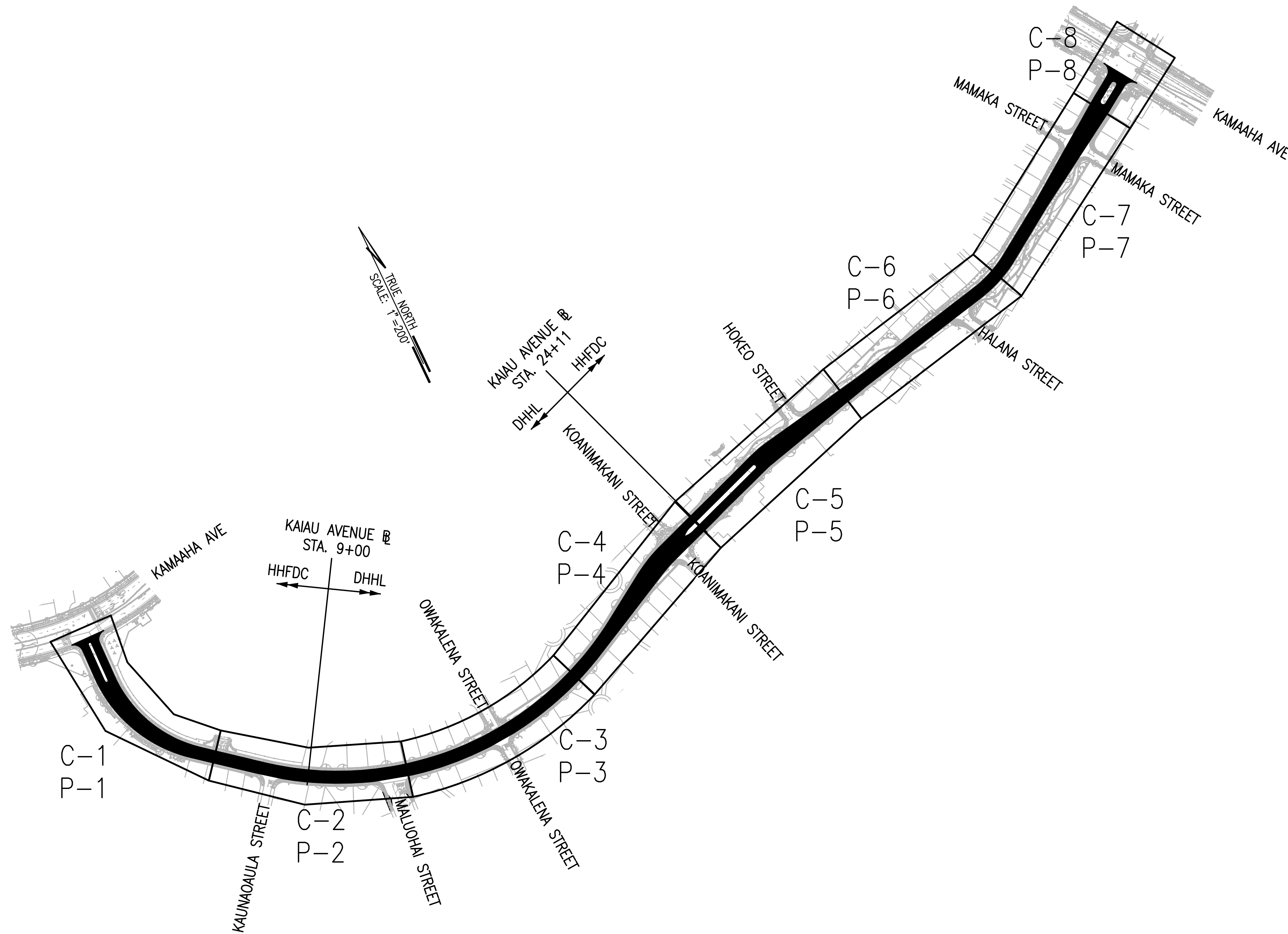
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CHECKED: JS					
DATE: SEPTEMBER 2022					
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	KAIU AVENUE ROADWAY REHABILITATION PROJECT – PHASE I HONOLULUI, EWA, OAHU, HAWAII TYPICAL SECTION – 1 KAIU AVENUE				
 SIGNATURE 4/30/2024 EXPIRATION DATE OF THE LICENSE	APPROVED:	DWG NO. G-1			



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	KAI AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULIULI, EWA, OAHU, HAWAII TYPICAL SECTION - 2 KAI AU AVENUE				
APPROVED:	DWG NO. G-2				

LIST OF ABBREVIATIONS:

AC/A.C.	ASPHALT CONCRETE	MAX	MAXIMUM
ACB	ASPHALT CONCRETE	MEP	MAXIMUM EXTENT
	BASECOURSE		PRACTICABLE
ACP	ASPHALT CONCRETE	MH	MANHOLE
	PAVEMENT	MIN	MINIMUM
AGG	AGGREGATE	MISC	MISCELLANEOUS
ANSI	AMERICAN NATIONAL	MON	MONUMENT
	STANDARDS INSTITUTE	MS4	MUNICIPAL SEPARATE
APPROX	APPROXIMATELY		STORM SEWER SYSTEM
ASTM	AMERICAN SOCIETY FOR	MSL	MEAN SEA LEVEL
	TESTING AND MATERIALS		
AVE	AVENUE	NO.	NUMBER
		NTS	NOT TO SCALE
Ⓡ	BASELINE		
BM	BENCHMARK	OC/O.C.	ON CENTER
		O/S	OFFSET
C	CHORD	OMC	OPTIMUM MOISTURE
CL	CENTERLINE		CONTENT
CB	CATCH BASIN	PAV'T	PAVEMENT
CLR	CLEAR	PCC	PORTLAND CEMENT
CONC	CONCRETE		CONCRETE
CONN	CONNECTION	PCCP	PORTLAND CEMENT
Cont'd	CONTINUED		CONCRETE PAVEMENT
CONT	CONTINUOUS	PL	PLACE
COORD	COORDINATES	Ⓡ	PROPERTY LINE
CLR	CLEAR	PSI	POUND PER SQUARE INCH
CP/C.P.	CURBLINE PROLONGATION	PT	POINT OF TANGENT
D/DIA/⌀	DIAMETER		
D/W	DRIVEWAY	R	RADIUS
DEMO	DEMOLISH	REINF	REINFORCED
DET	DETAIL	RD	ROAD
DI	DRAIN INLET	RPM	RAISED PAVEMENT MARKER
DIAG	DIAGONAL	RT	RIGHT
DMH	DRAIN MANHOLE	R/W	RIGHT-OF-WAY
DR	DRIVE		
DRG	DRAWING	S	SLOPE
		S/W	SIDEWALK
EA	EACH	SDMH	STORM DRAIN MANHOLE
ELEV	ELEVATION	SF	SQUARE FEET
EP	EDGE OF PAVEMENT	SHT	SHEET
EQ.	EQUAL	SL	STREET LIGHT
ESCP	EROSION & SEDIMENT	SLB	SLB
	CONTROL PLAN	SMH	SEWER MANHOLE
EXIST	EXISTING	ST	STREET
		STA	STATION
FT	FEET	STD	STANDARD
FH	FIRE HYDRANT		
		T	TANGENT
GALV.	GALVANIZED	TRANS	TRANSITION
GDI	GRATED DROP INLET	TSPB	TRAFFIC SIGNAL PULLBOX
		TYP	TYPICAL
HWY	HIGHWAY	VERT	VERTICAL
IMSA	INTERNATIONAL MUNICIPAL		
	SIGNAL ASSOCIATION	W/	WITH
INT	INTERSECTION	WMH	WATER MANHOLE
INV	INVERT	WM	WATER METER
IV	IRRIGATION VALVE	WV	WATER VALVE
L	LENGTH OF CURVE		
LC	LENGTH OF CHORD		
LF	LINEAR FEET		
LP	LOOP		
LT	LEFT		



APPROVED:

CHIEF, CIVIL ENGINEERING BRANCH, DPP DATE

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	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII GENERAL SITE LAYOUT PLAN & LIST OF ABBREVIATIONS</p>				
APPROVED:					DWG NO. G-3

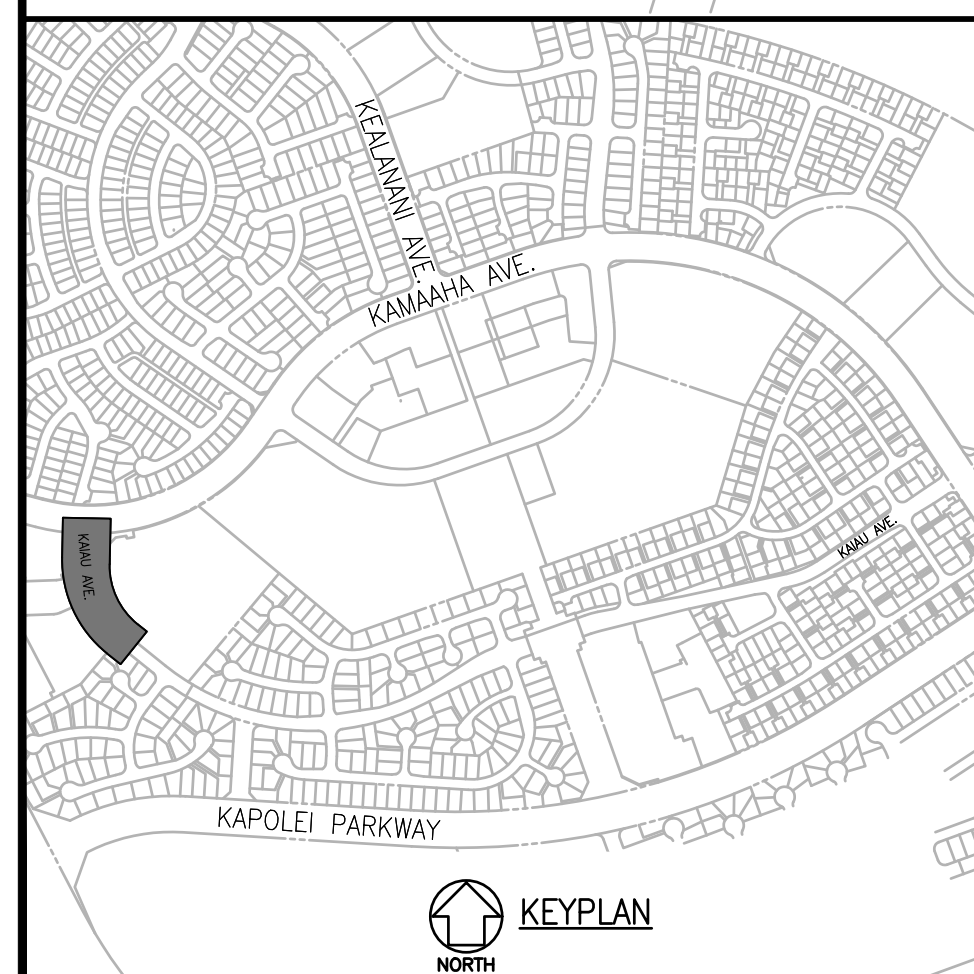
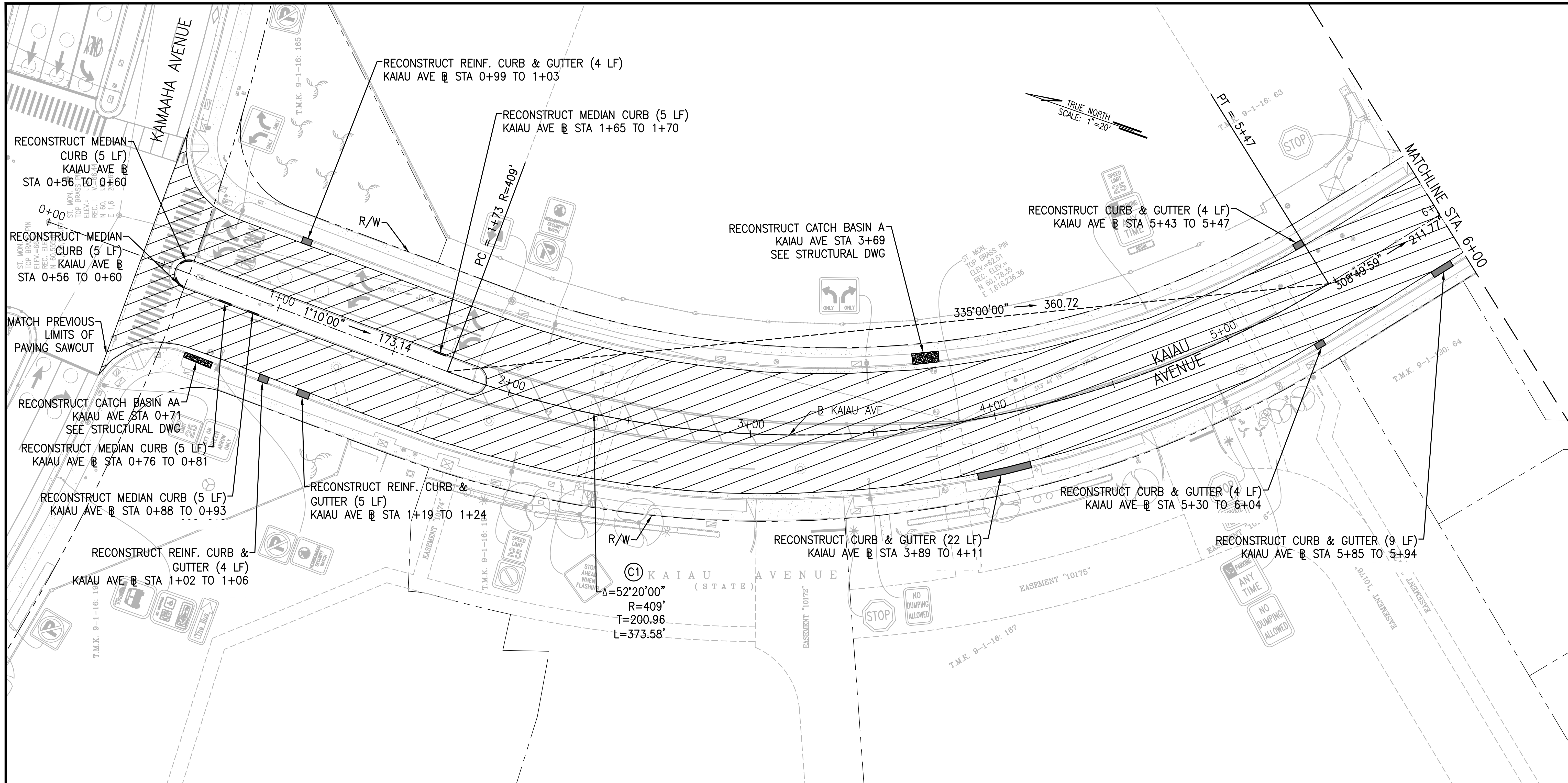
GENERAL SITE LAYOUT PLAN




SCALE: 1"=200'

GRAPHIC SCALE

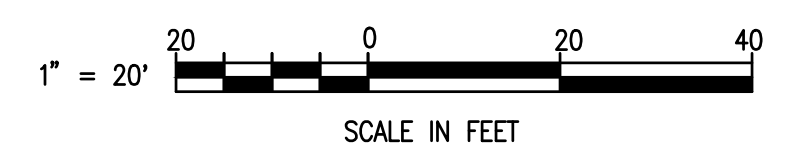




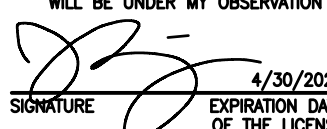

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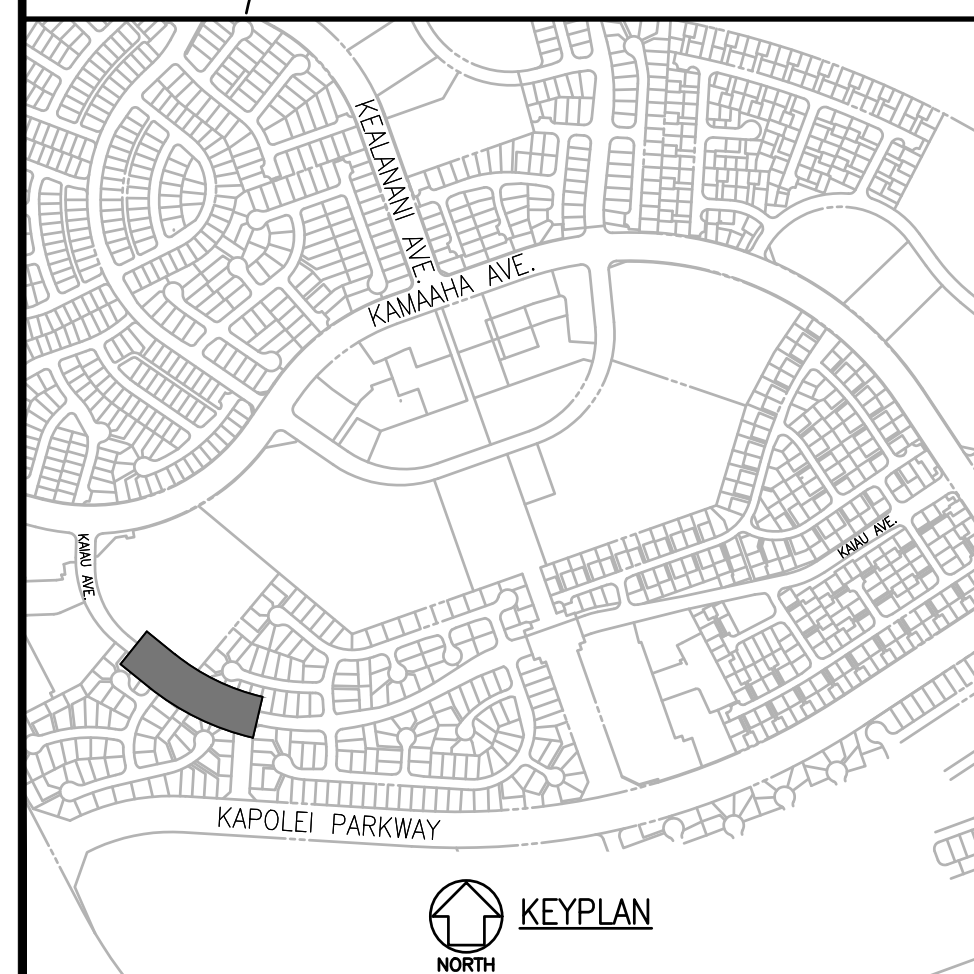
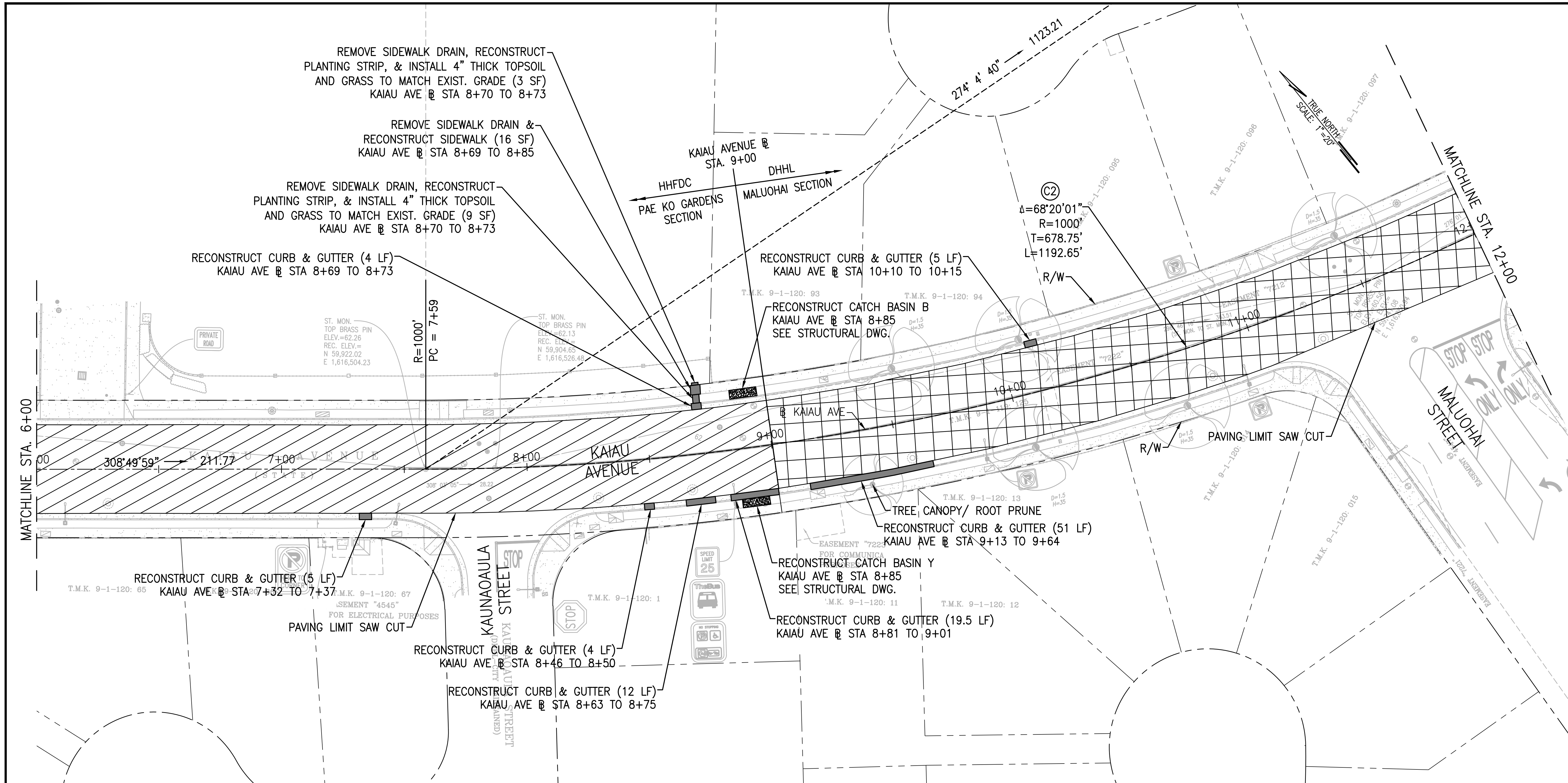


- LEGEND:**
-  REPAVING AREA
KAI AU AVENUE - PAE KO GARDENS SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 -  CONCRETE CURB/CURB & GUTTER
RECONSTRUCTION
 -  CATCH BASIN RECONSTRUCTION

- NOTES:**
1. PAVEMENT LIMITS AND LOCATION OF RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.
 2. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO EXISTING DRAIN STRUCTURE.
 3. LIMITS AND LOCATION OF CURB AND/OR GUTTER RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.



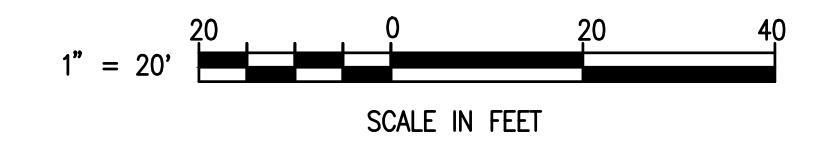
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APPROVED:  4/30/2024 <small>EXPIRATION DATE OF THE LICENSE</small>		VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII		
APPROVED: 		KAI AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 1		
		DWG NO. C-1		



LEGEND:

	REPAVING AREA KAIU AVENUE - PAE KO GARDEN SECTION COLD PLANE 3" AND RESURFACE WITH 3" STATE MIX NO. IV
	REPAVING AREA KAIU AVENUE - MALUOHAH SECTION COLD PLANE 3" AND RESURFACE WITH 3" STATE MIX NO. IV
	CONCRETE CURB/CURB & GUTTER RECONSTRUCTION
	CATCH BASIN RECONSTRUCTION

- NOTES:**
- PAVEMENT LIMITS AND LOCATION OF RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.
 - CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO EXISTING DRAIN STRUCTURE.
 - LIMITS AND LOCATION OF CURB AND/OR GUTTER RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.



DESIGN: MN				
DRAWN: MN				
CHECKED: JS				
DATE: SEPTEMBER 2022				

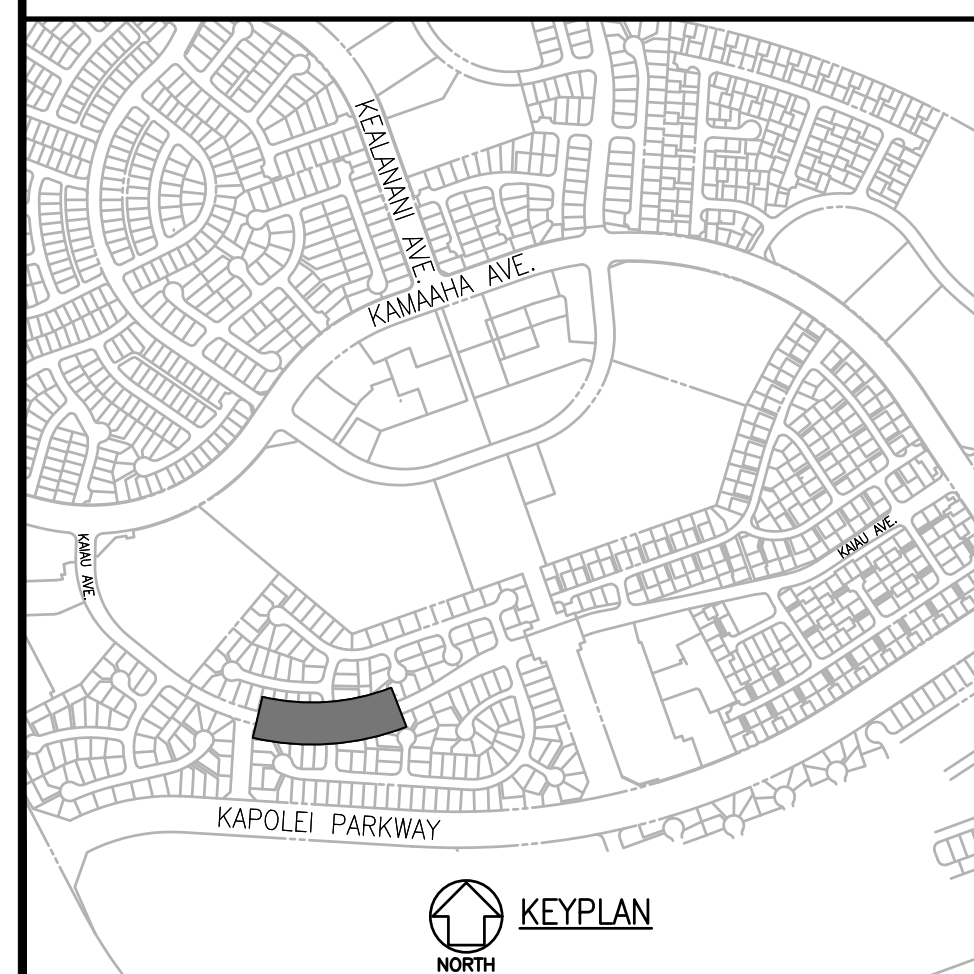
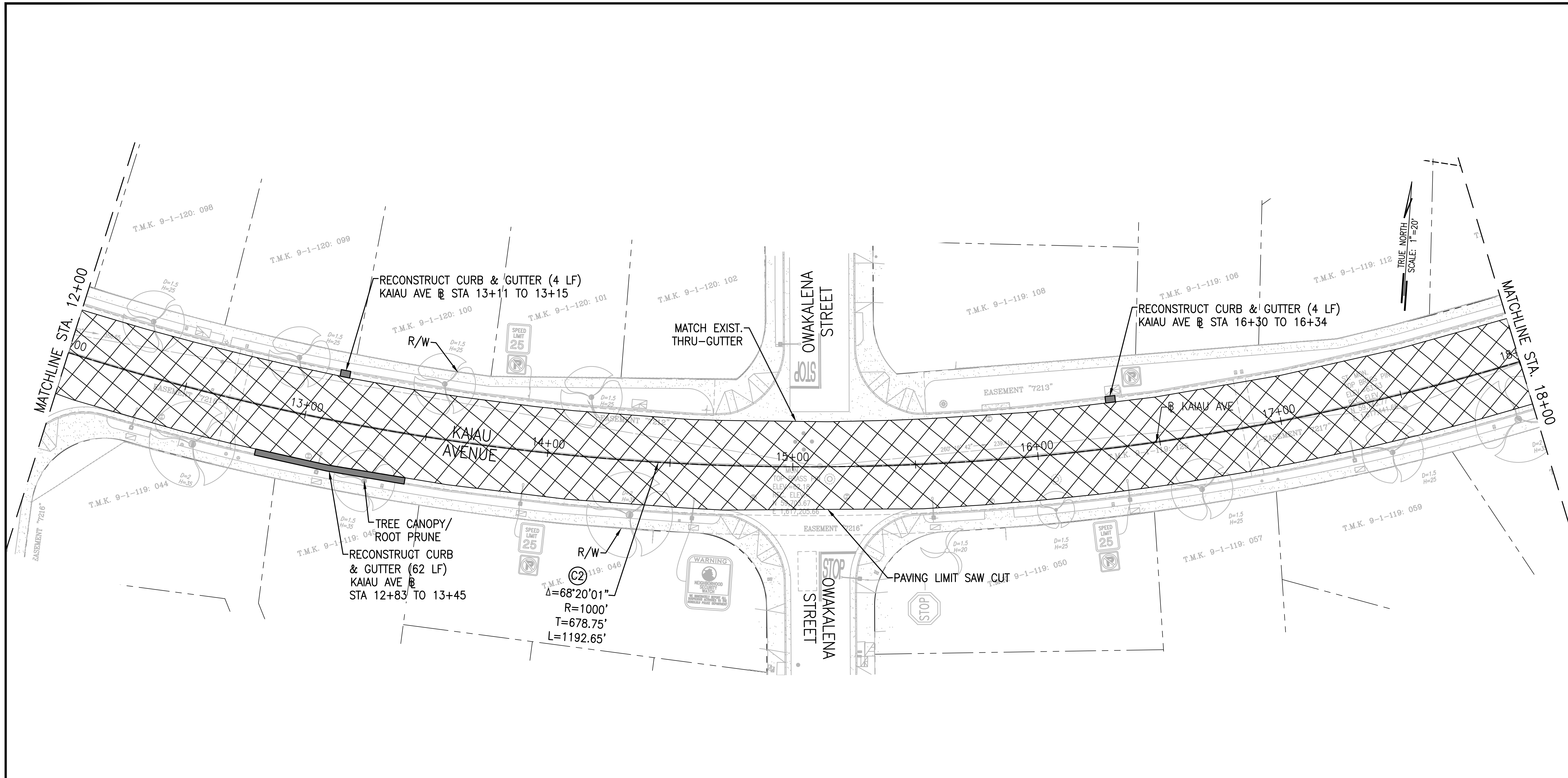
REVISION	DATE	BRIEF	BY	APPROVED
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 2				

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SIGNATURE: 4/30/2024
EXPIRATION DATE OF LICENSE

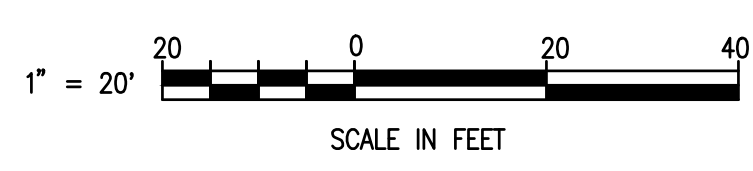
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DWG NO.
C-2

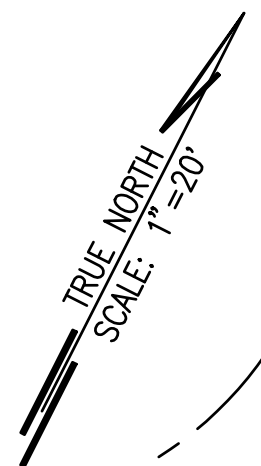
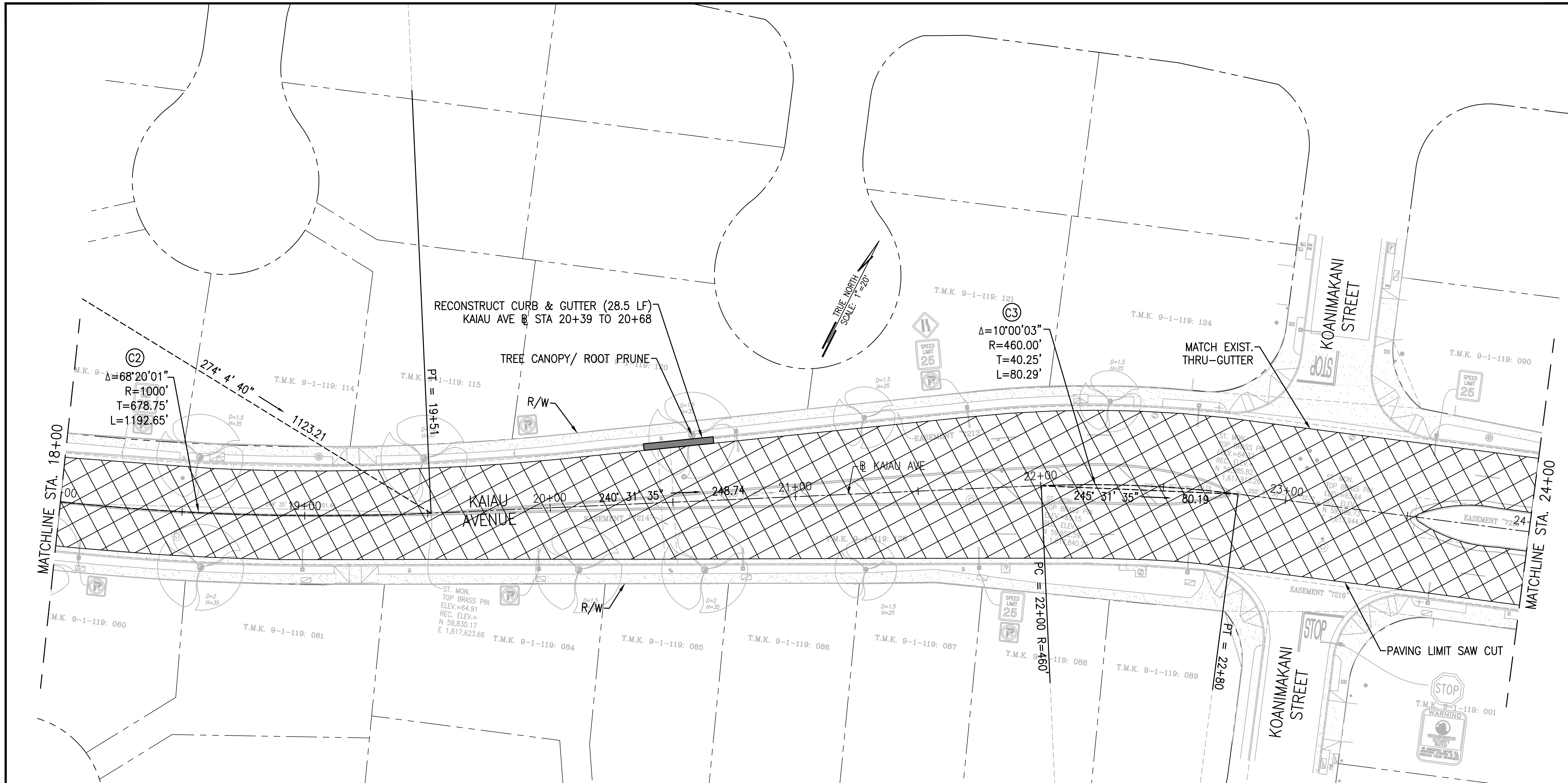


- LEGEND:**
- REPAVING AREA
KAIU AVENUE - MALUOHAI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 - CONCRETE CURB/CURB & GUTTER
RECONSTRUCTION
 - CATCH BASIN RECONSTRUCTION

- NOTES:**
1. PAVEMENT LIMITS AND LOCATION OF RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.
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 3. LIMITS AND LOCATION OF CURB AND/OR GUTTER RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.

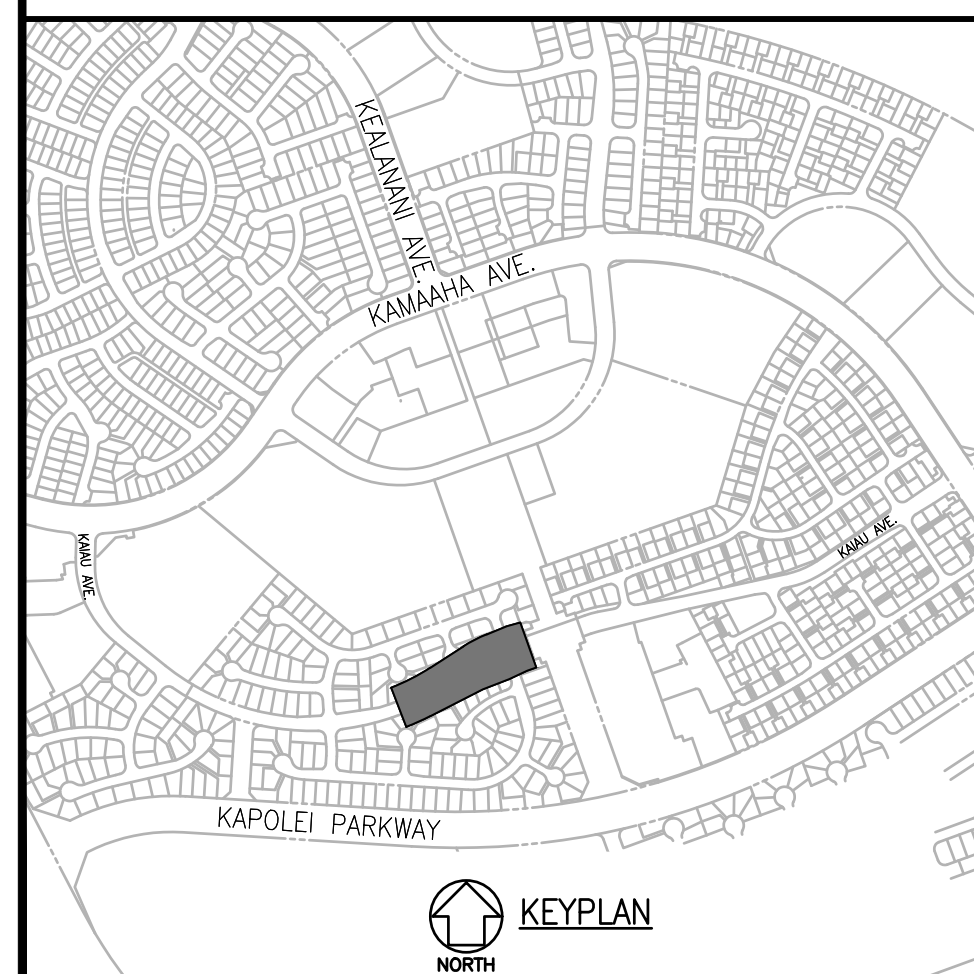


DESIGN: MN				
DRAWN: MN				
CHECKED: JS				
DATE: SEPTEMBER 2022				
		<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>		
<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 3</p>				
APPROVED:				DWG NO. C-3



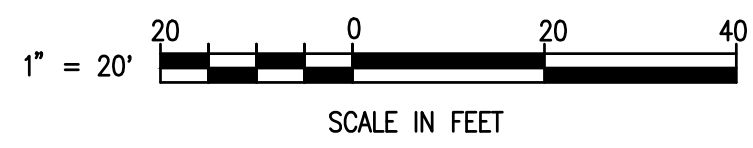
MATCHLINE STA. 18+00

MATCHLINE STA. 24+00

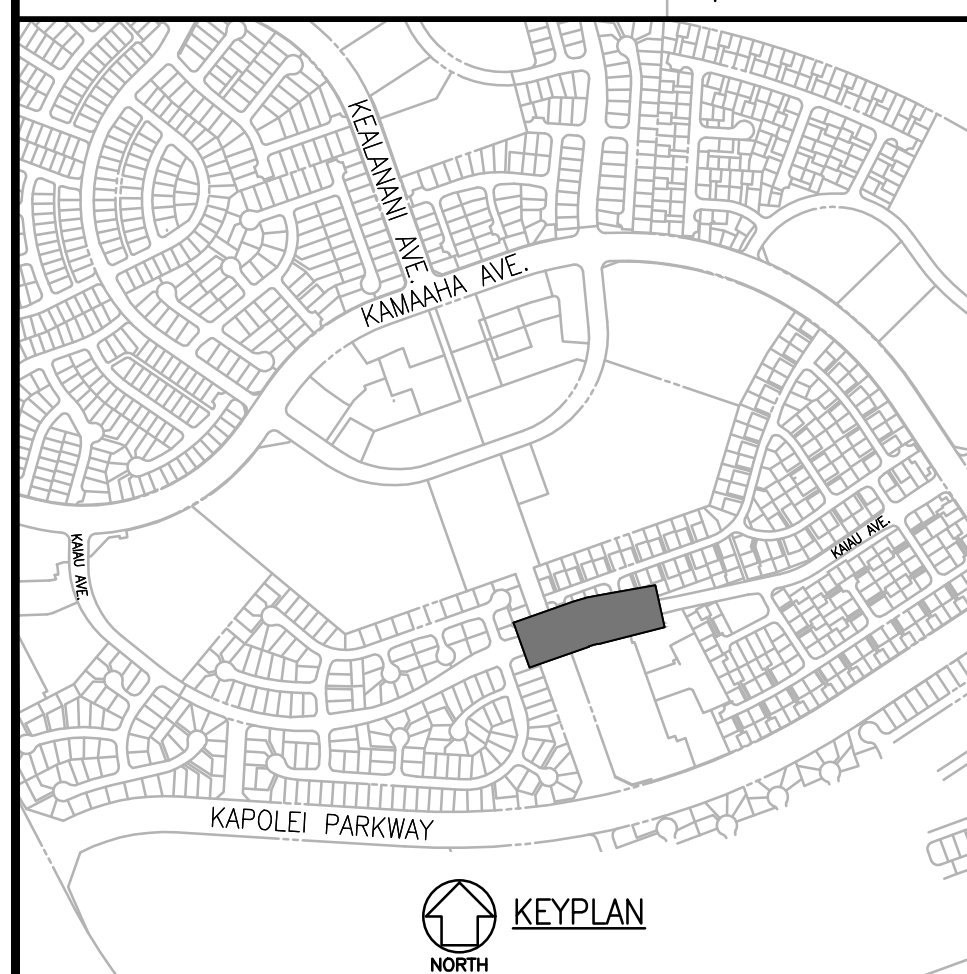
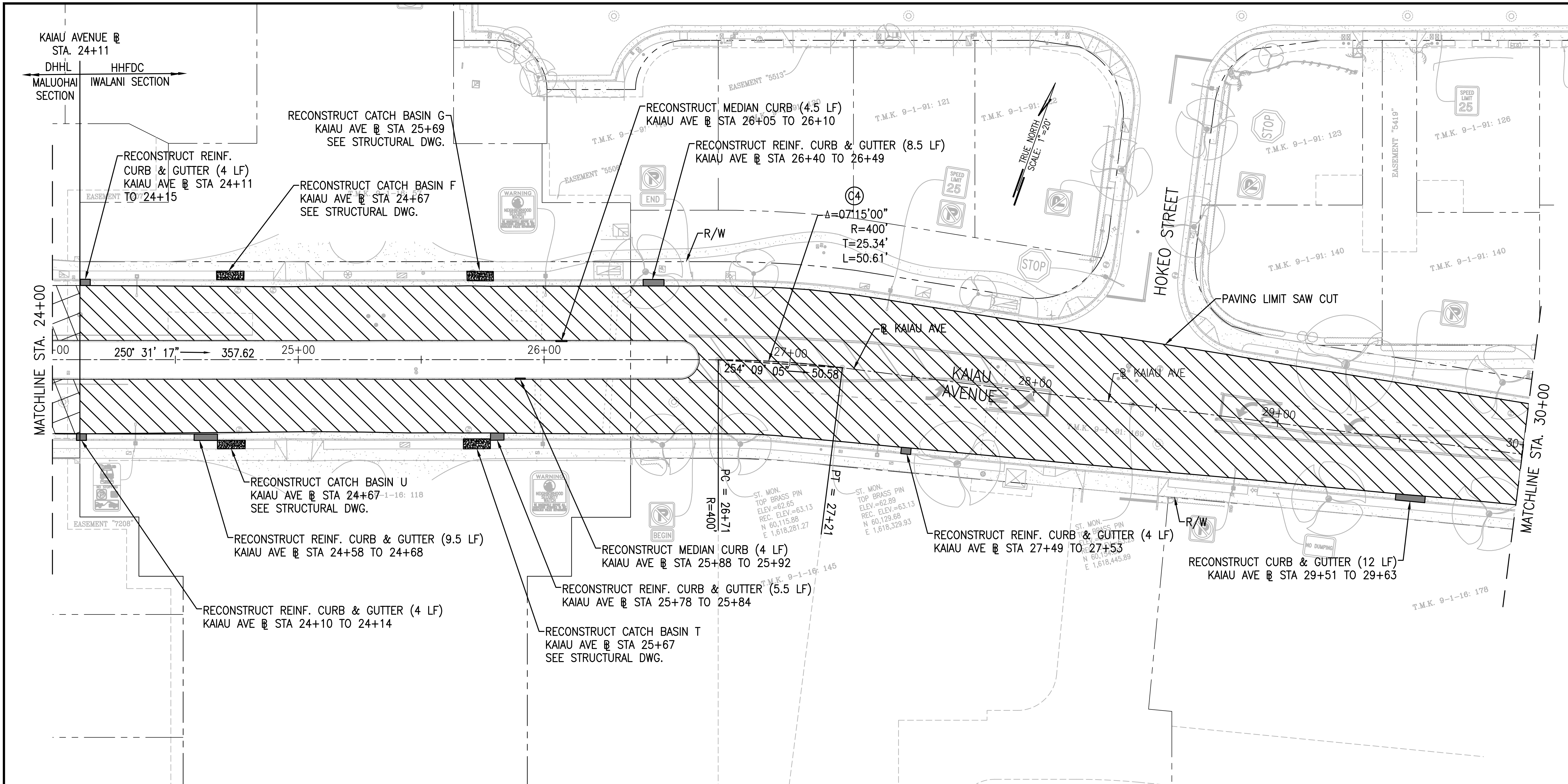


- LEGEND:**
- REPAVING AREA
KAIU AVENUE - MALUOHAH SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 - CONCRETE CURB/CURB & GUTTER
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 - CATCH BASIN RECONSTRUCTION

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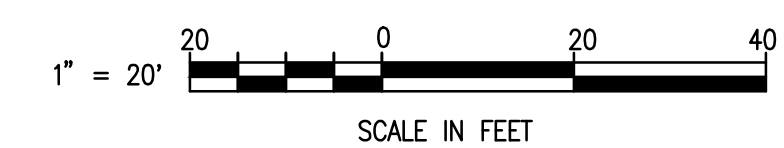


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CHECKED: JS				
DATE: SEPTEMBER 2022				
	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>			
	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>			
<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 4</p>				
APPROVED:	DATE: 4/30/2024			DWG NO. C-4

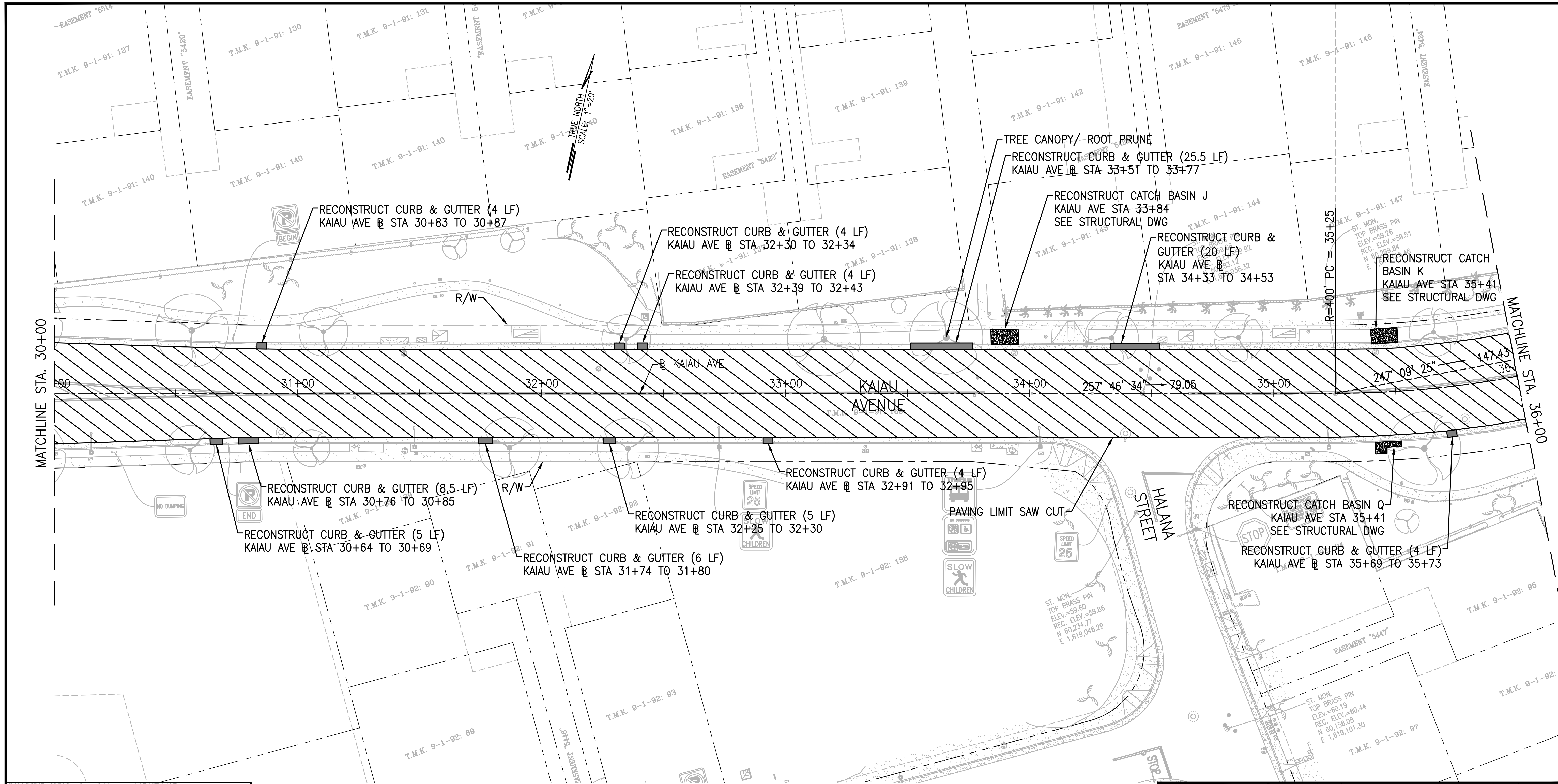


- LEGEND:**
- REPAVING AREA
KAIU AVENUE - IWALANI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 - REPAVING AREA
KAIU AVENUE - MALUOHAI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 - CONCRETE CURB/CURB & GUTTER
RECONSTRUCTION
 - CATCH BASIN RECONSTRUCTION

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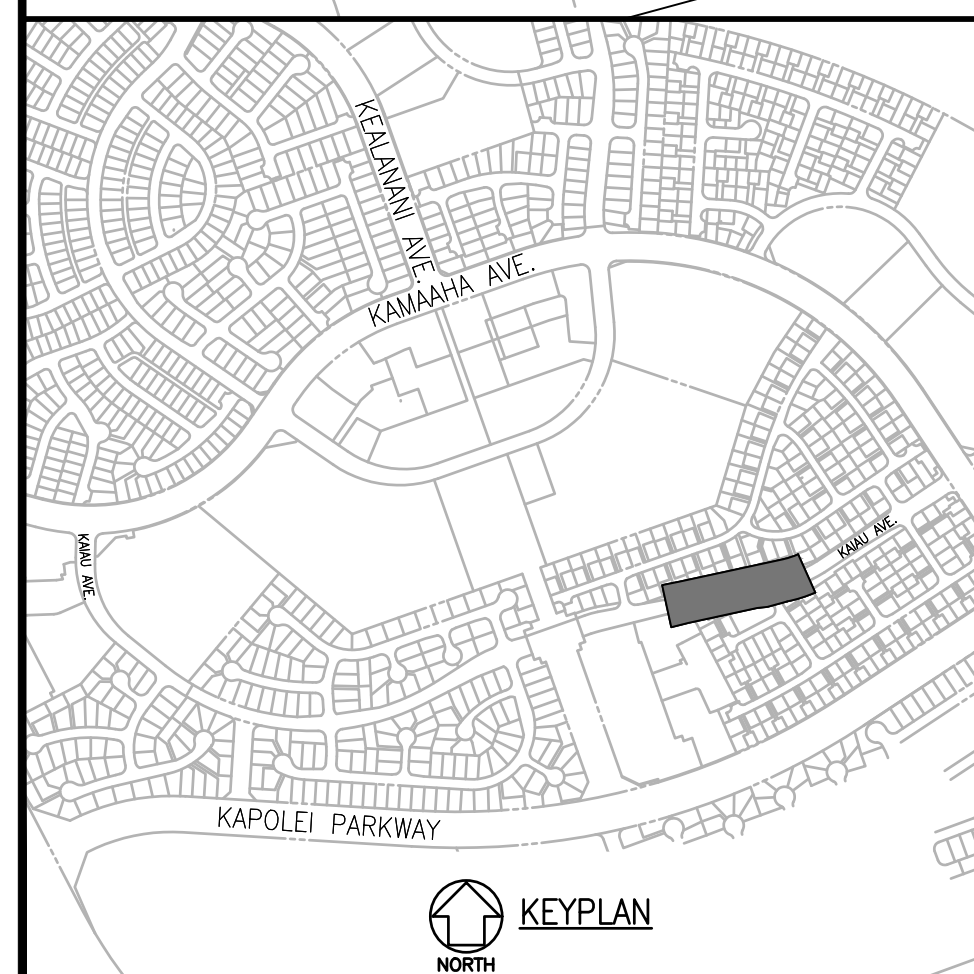
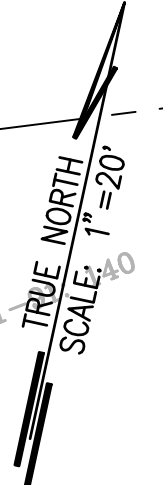


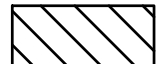

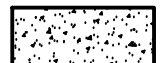
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	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>											
<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 5</p>				<p>APPROVED:</p>								
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p> <p>4/30/2024 EXPIRATION DATE OF THE LICENSE</p>				<p>DWG NO. C-5</p>								
<p>SHEET 13 OF 55 SHEETS</p>				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">FILE</td> <td style="width: 25%;">POCKET</td> <td style="width: 25%;">FOLDER</td> <td style="width: 25%;">NUMBER</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	FILE	POCKET	FOLDER	NUMBER				
FILE	POCKET	FOLDER	NUMBER									



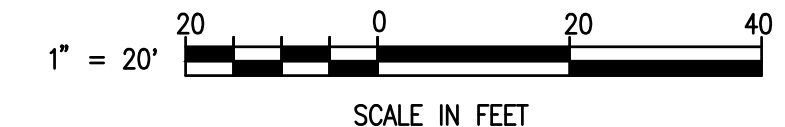
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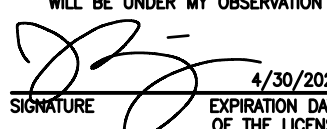
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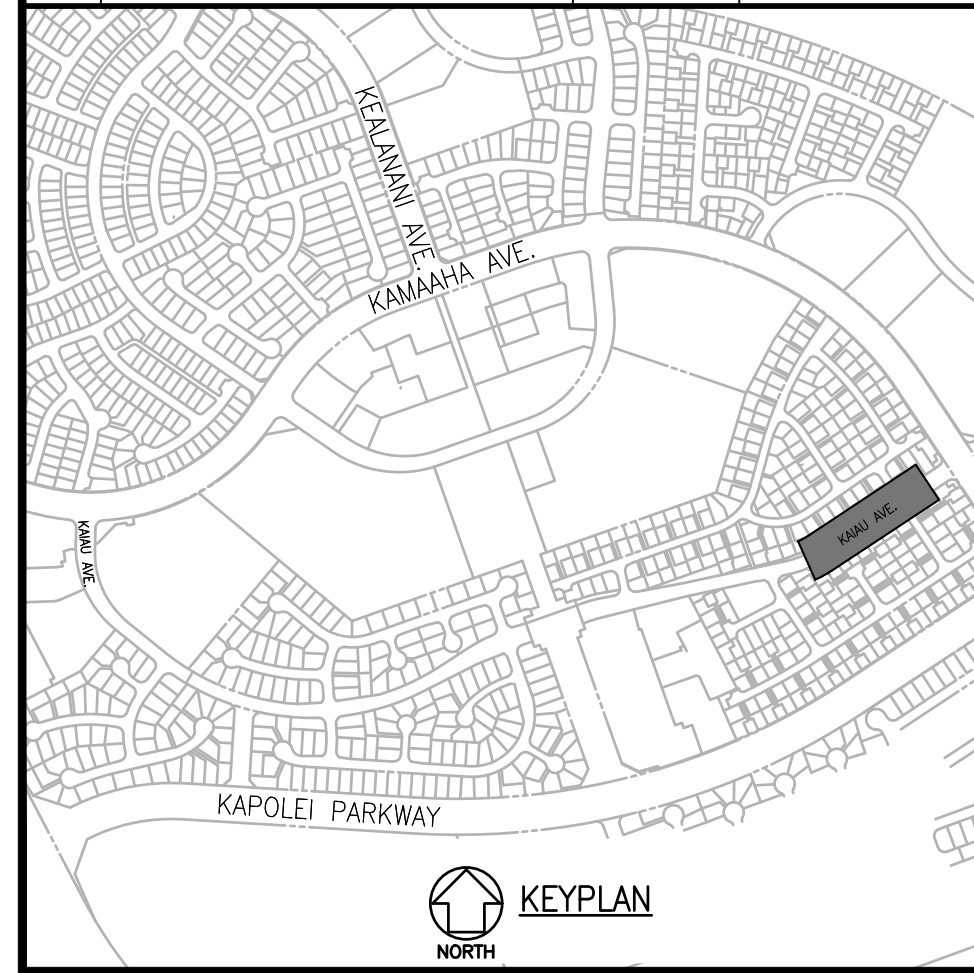
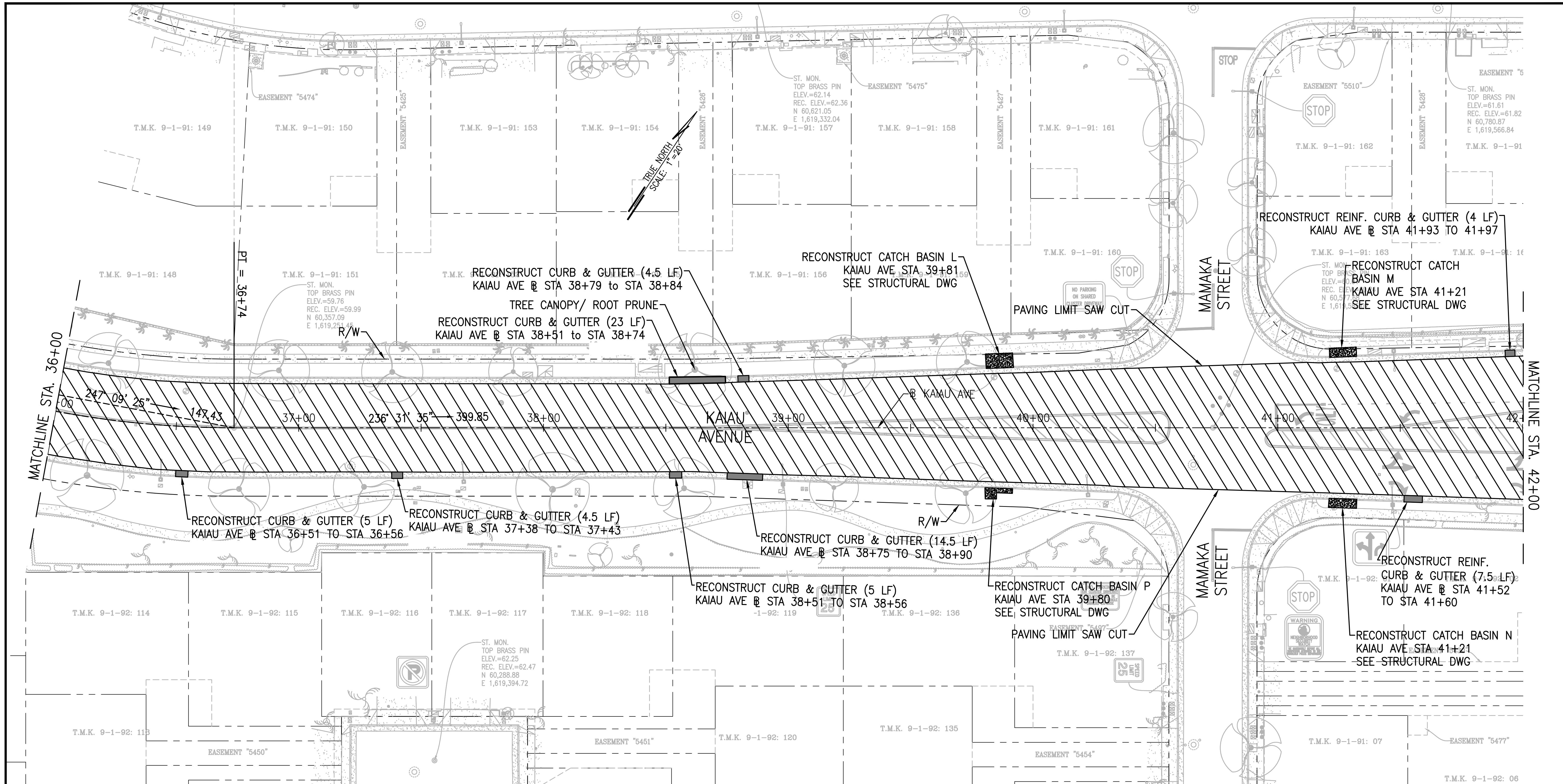





- LEGEND:**
-  REPAVING AREA
KAIU AVENUE - IVALANI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 -  CONCRETE CURB/CURB & GUTTER
RECONSTRUCTION
 -  CATCH BASIN RECONSTRUCTION

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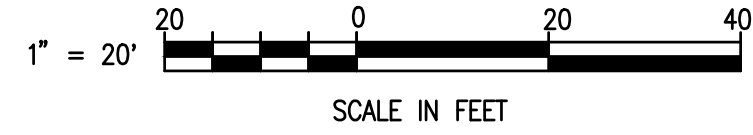


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DRAWN: MN	 WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368				
CHECKED: JS					
DATE: SEPTEMBER 2022					
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII					
KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 6					
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. SIGNATURE:  4/30/2024 EXPIRATION DATE OF THE LICENSE					DWG NO. C-6

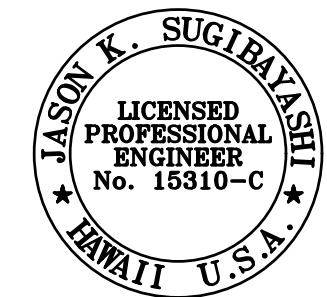


- LEGEND:**
-  REPAVING AREA
KAIU AVENUE - IWALANI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 -  CONCRETE CURB/CURB & GUTTER
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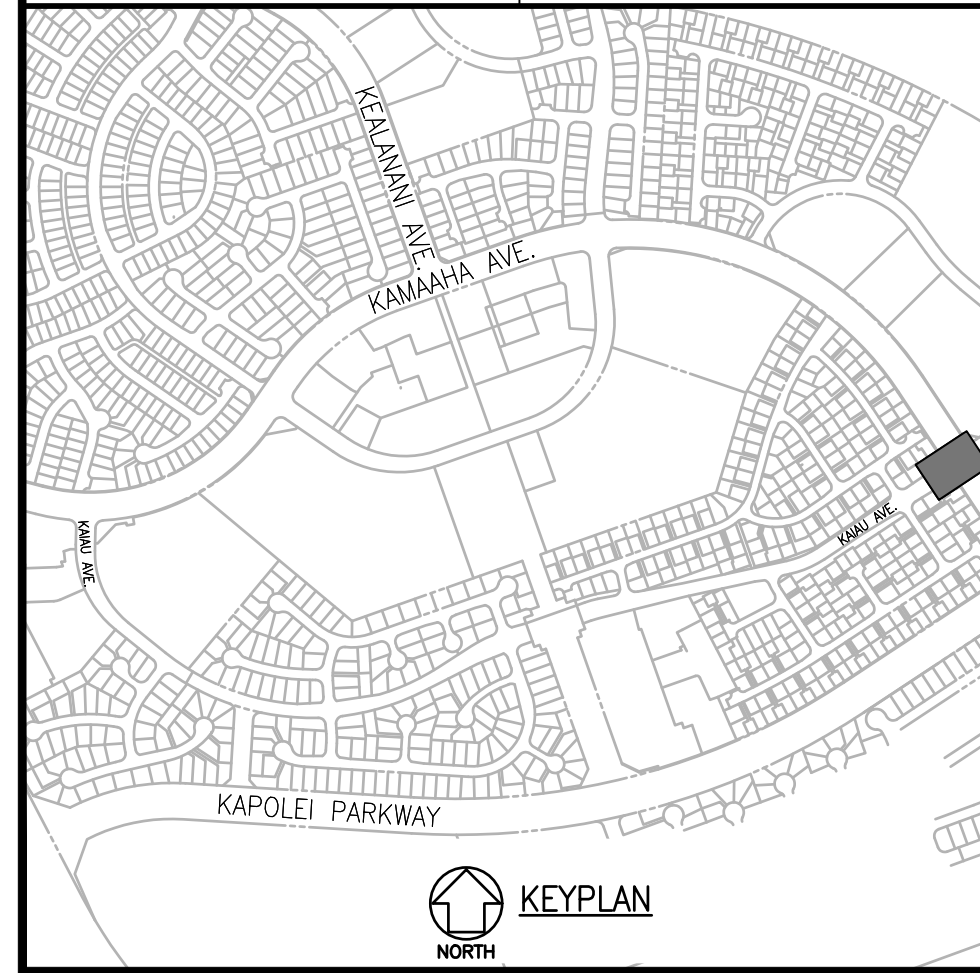
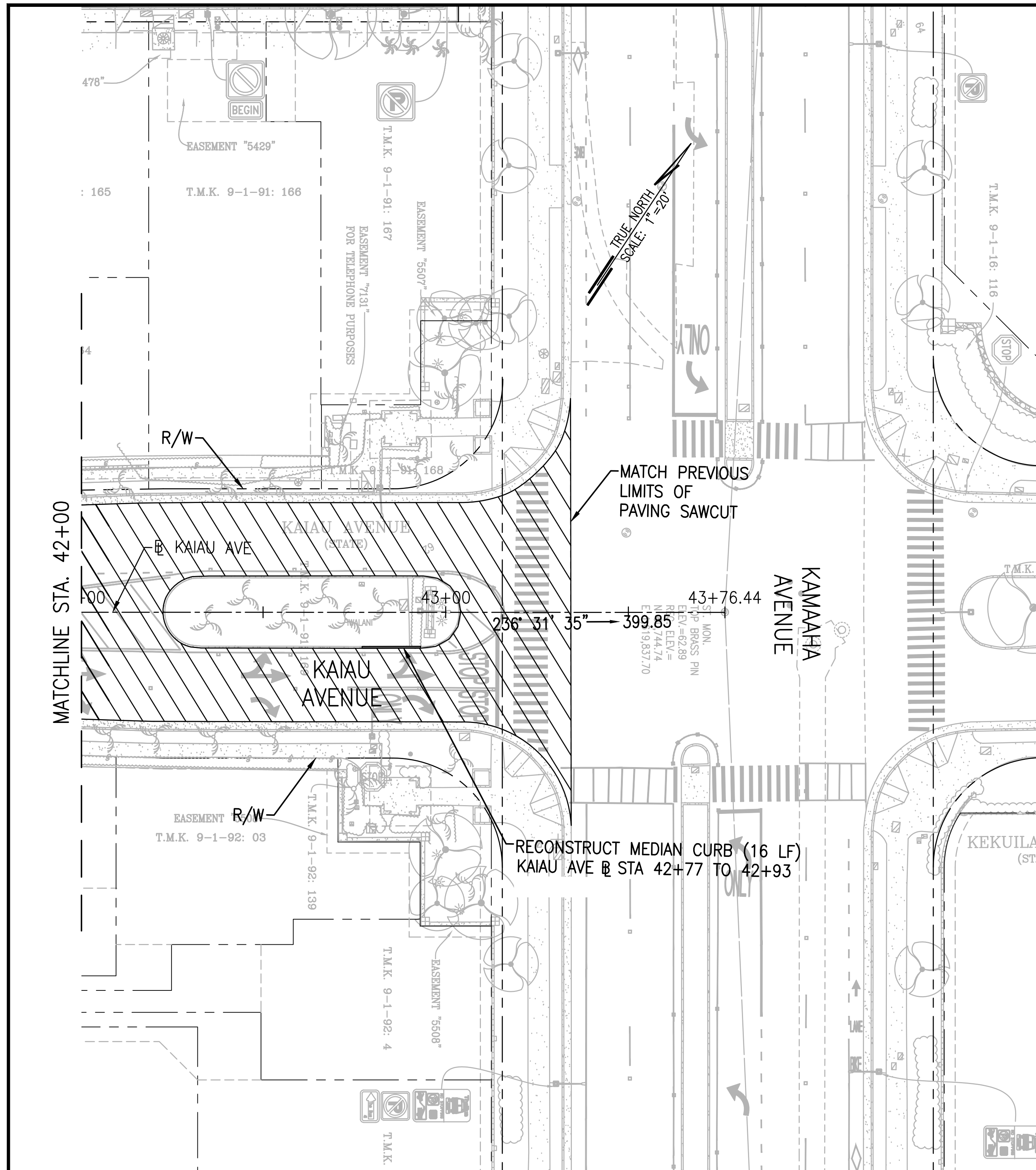
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 DATE: SEPTEMBER 2022



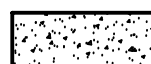


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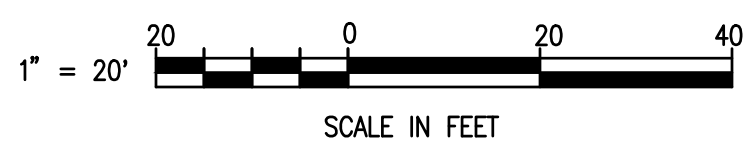
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 EXPIRATION DATE OF THE LICENSE

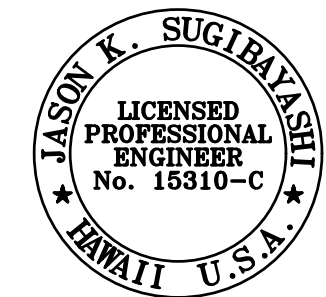
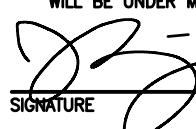

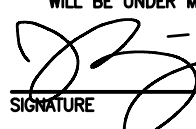
REVISION	DATE	BRIEF	BY	APPROVED
 WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368				
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 7				
APPROVED:				DWG NO. C-7

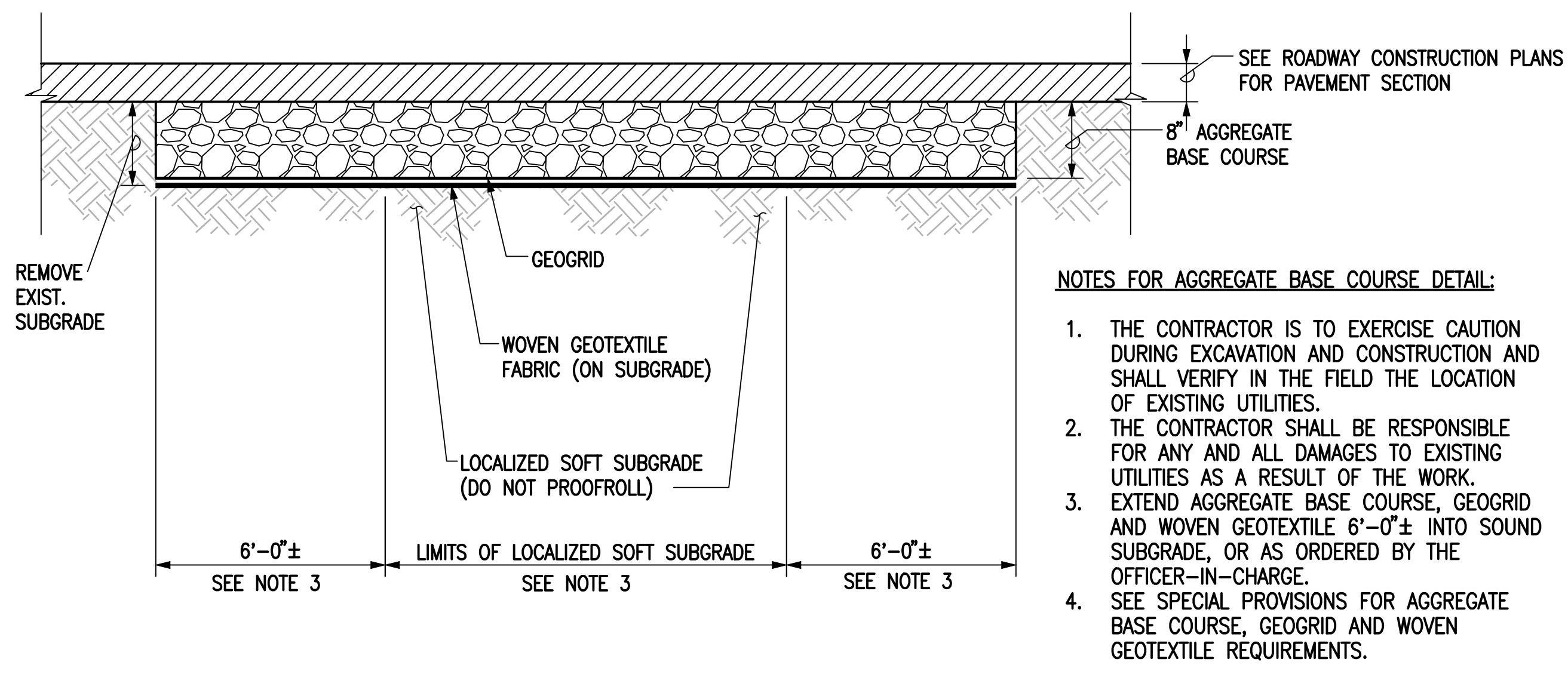


- LEGEND:**
-  REPAVING AREA
KAIU AVENUE - IWALANI SECTION
COLD PLANE 3" AND RESURFACE WITH 3"
STATE MIX NO. IV
 -  CONCRETE CURB/CURB & GUTTER
RECONSTRUCTION
 -  CATCH BASIN RECONSTRUCTION

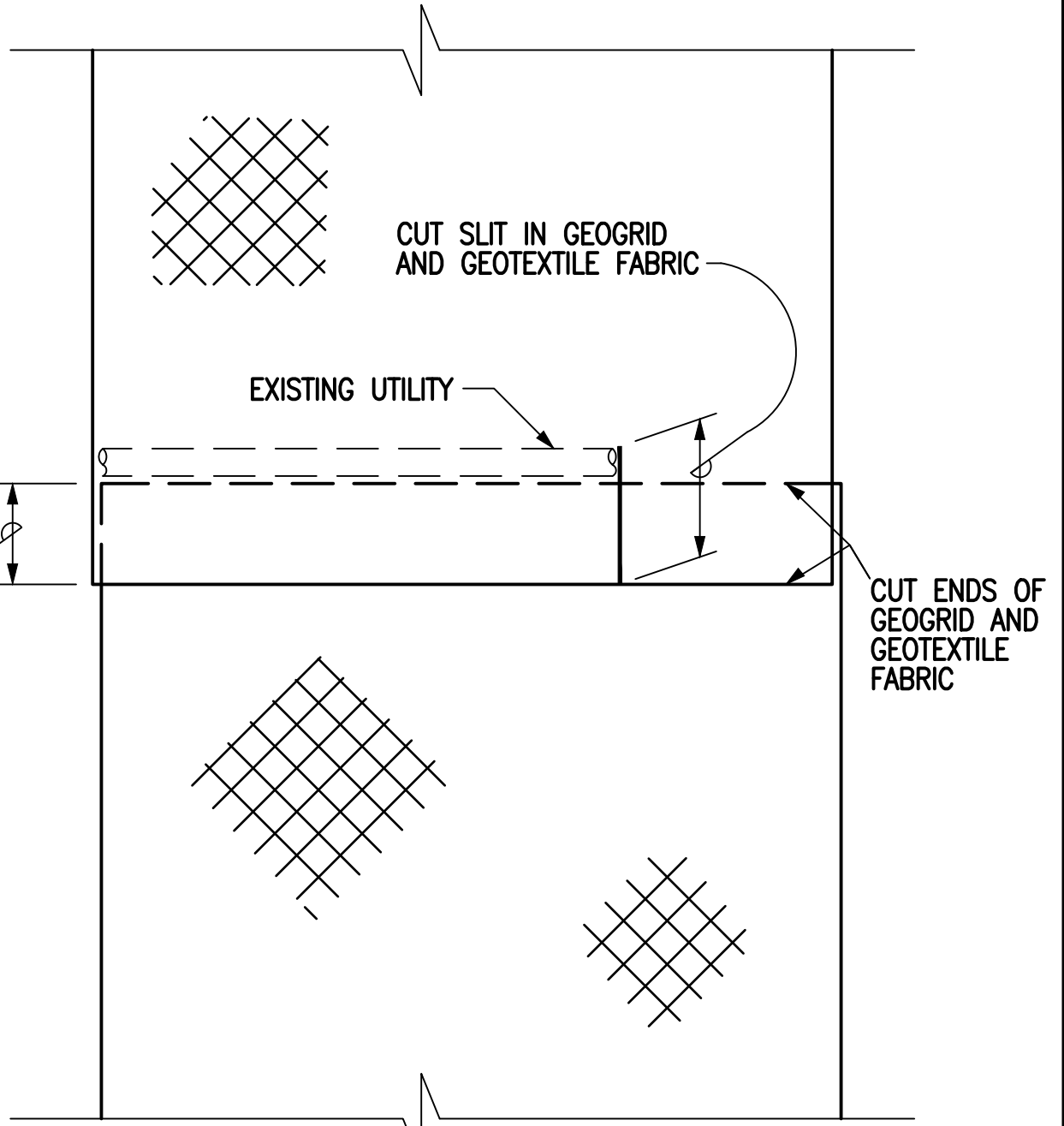
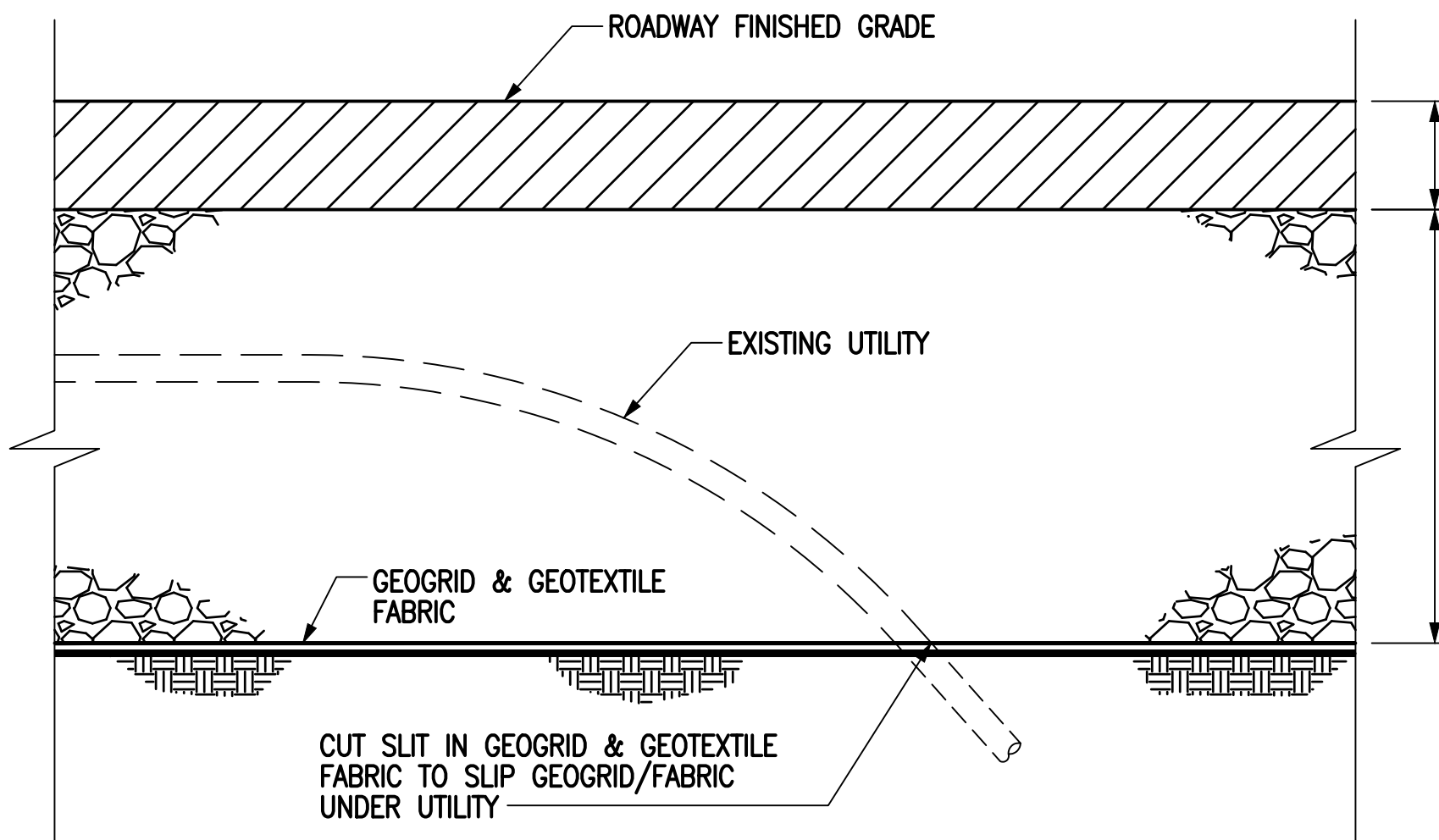
- NOTES:**
1. PAVEMENT LIMITS AND LOCATION OF RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.
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 3. LIMITS AND LOCATION OF CURB AND/OR GUTTER RECONSTRUCTION IN THE FIELD ARE TO BE DETERMINED BY THE OFFICER-IN-CHARGE.



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DRAWN: MN				
CHECKED: JS				
DATE: SEPTEMBER 2022				
 <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small> 	 <small>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</small>	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII		
	KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION PLAN - 8			
	APPROVED:			



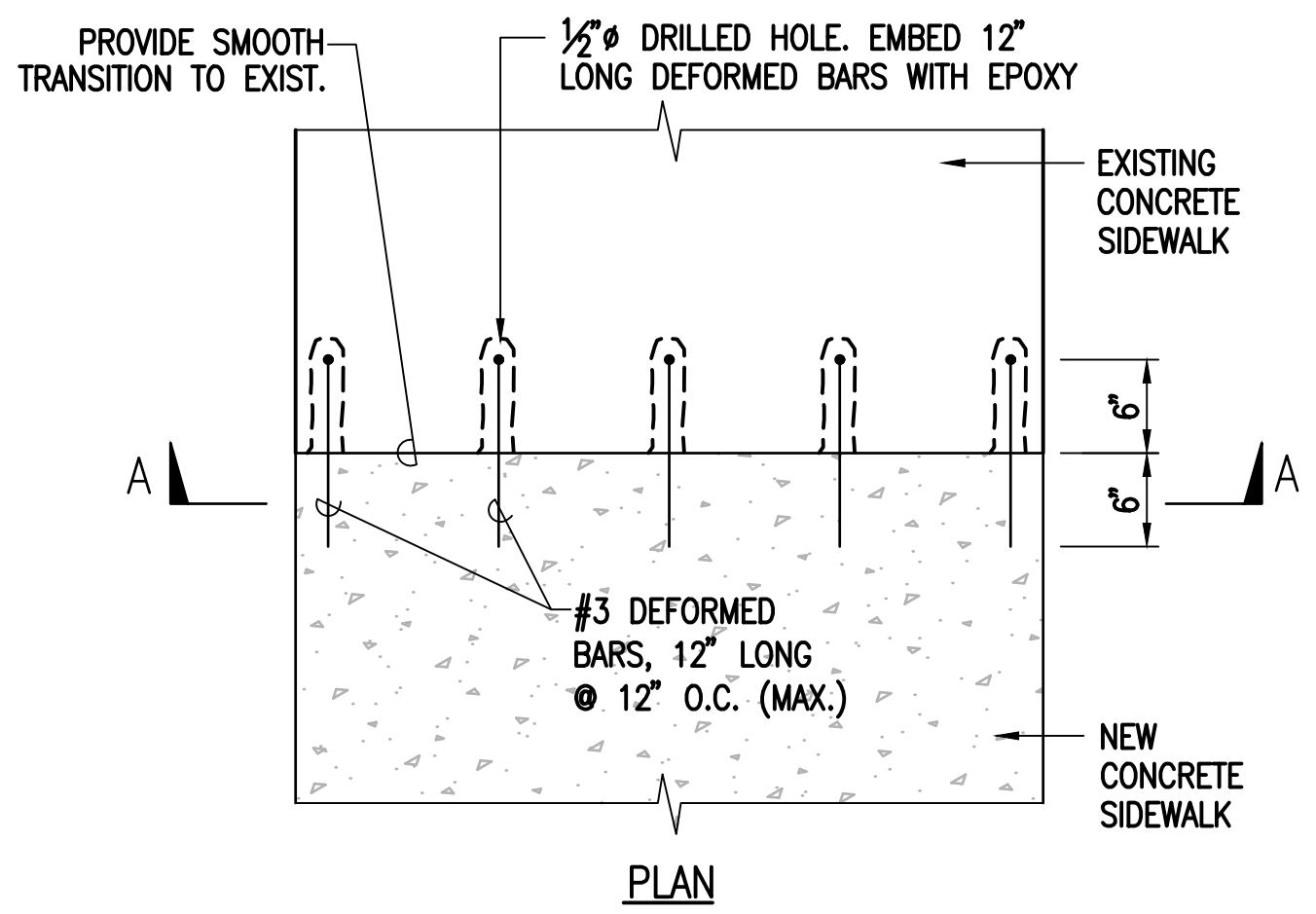
- NOTES FOR AGGREGATE BASE COURSE DETAIL:**
1. THE CONTRACTOR IS TO EXERCISE CAUTION DURING EXCAVATION AND CONSTRUCTION AND SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING UTILITIES.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UTILITIES AS A RESULT OF THE WORK.
 3. EXTEND AGGREGATE BASE COURSE, GEOGRID AND WOVEN GEOTEXTILE 6'-0"± INTO SOUND SUBGRADE, OR AS ORDERED BY THE OFFICER-IN-CHARGE.
 4. SEE SPECIAL PROVISIONS FOR AGGREGATE BASE COURSE, GEOGRID AND WOVEN GEOTEXTILE REQUIREMENTS.



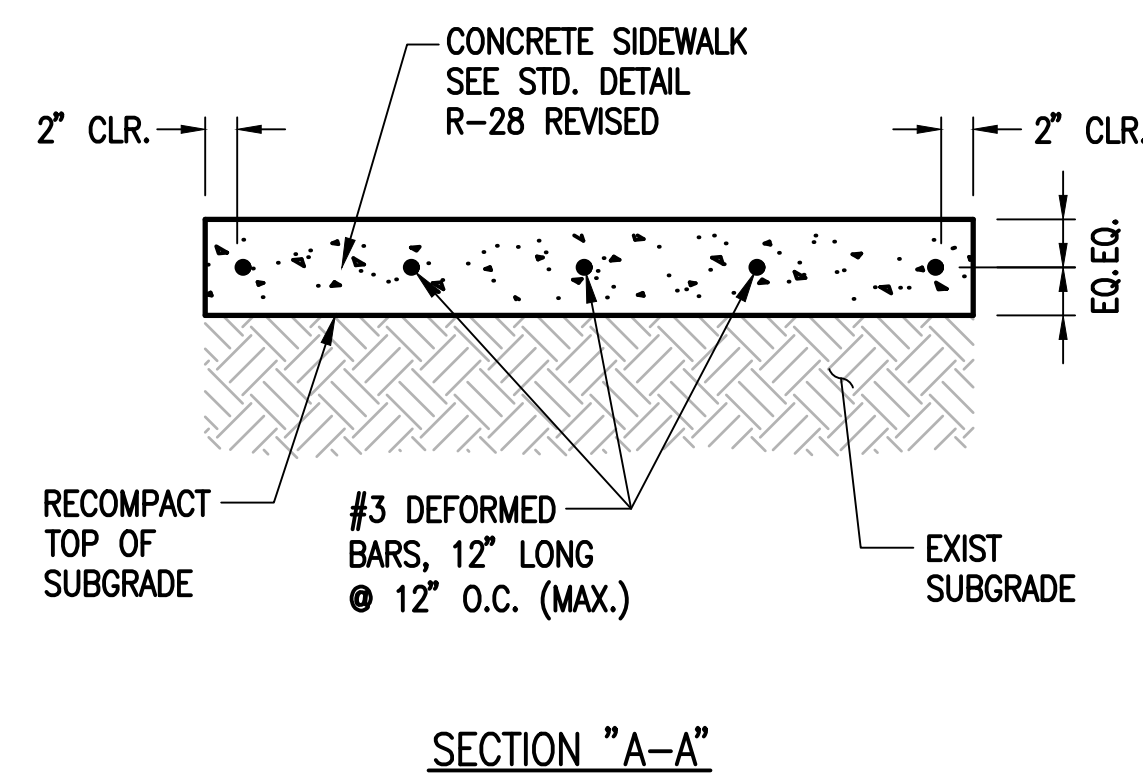
SOFT SUBGRADE REPLACEMENT WITH AGGREGATE BASE COURSE DETAIL
NOT TO SCALE

SECTION

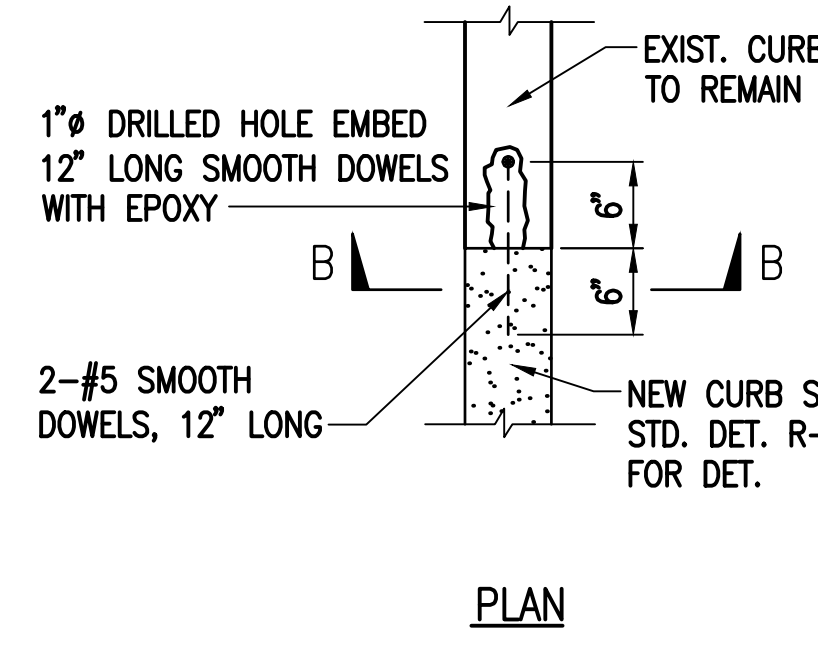
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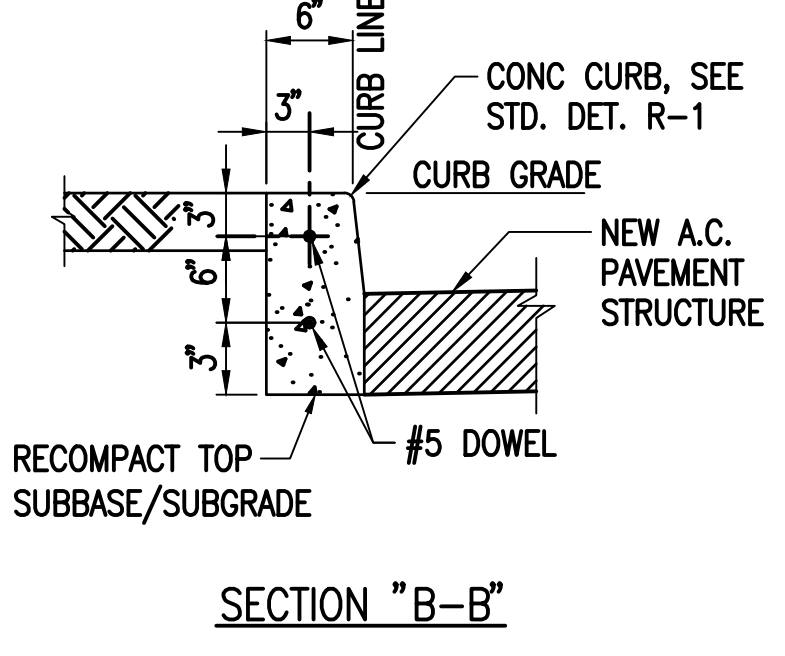
SIDEWALK CONNECTION DETAIL
NOT TO SCALE



SECTION "A-A"

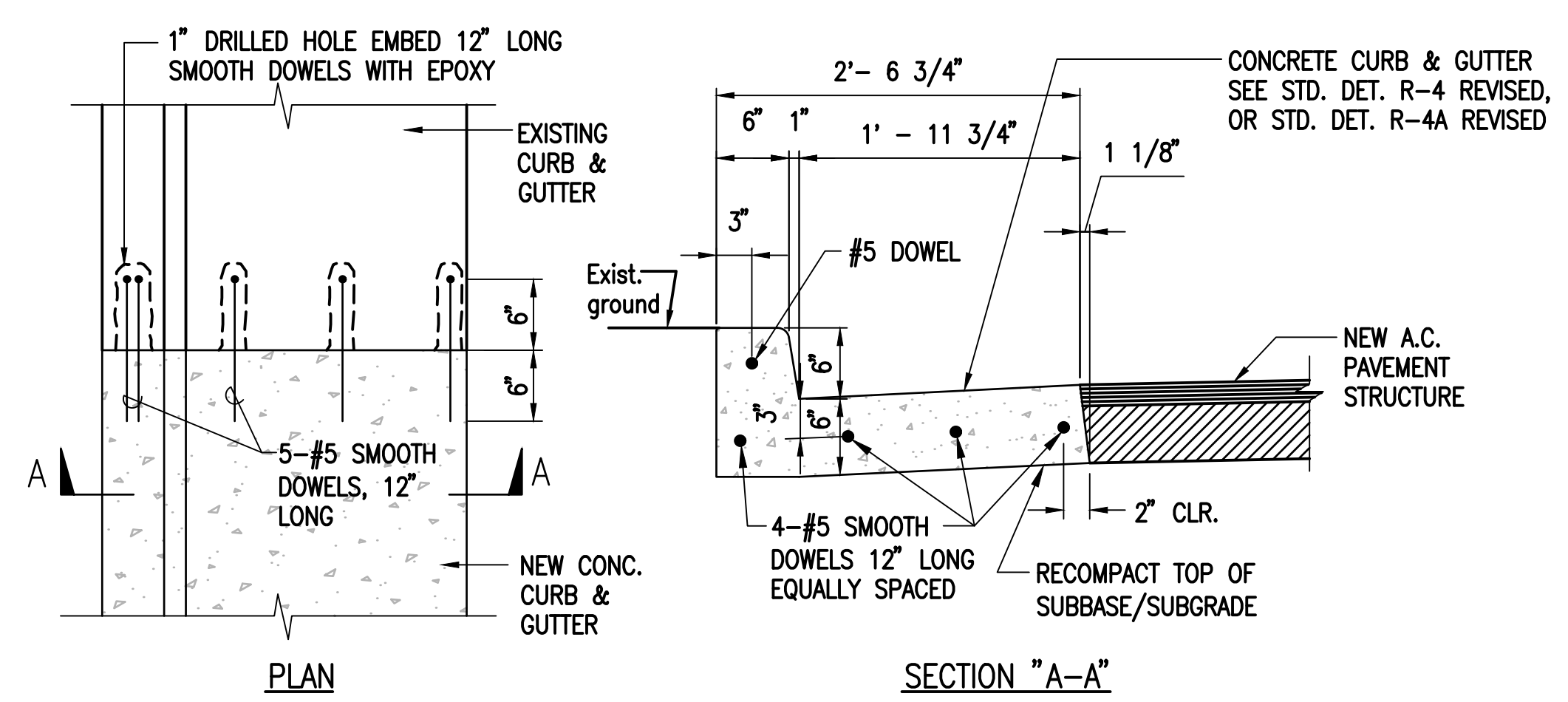


PLAN



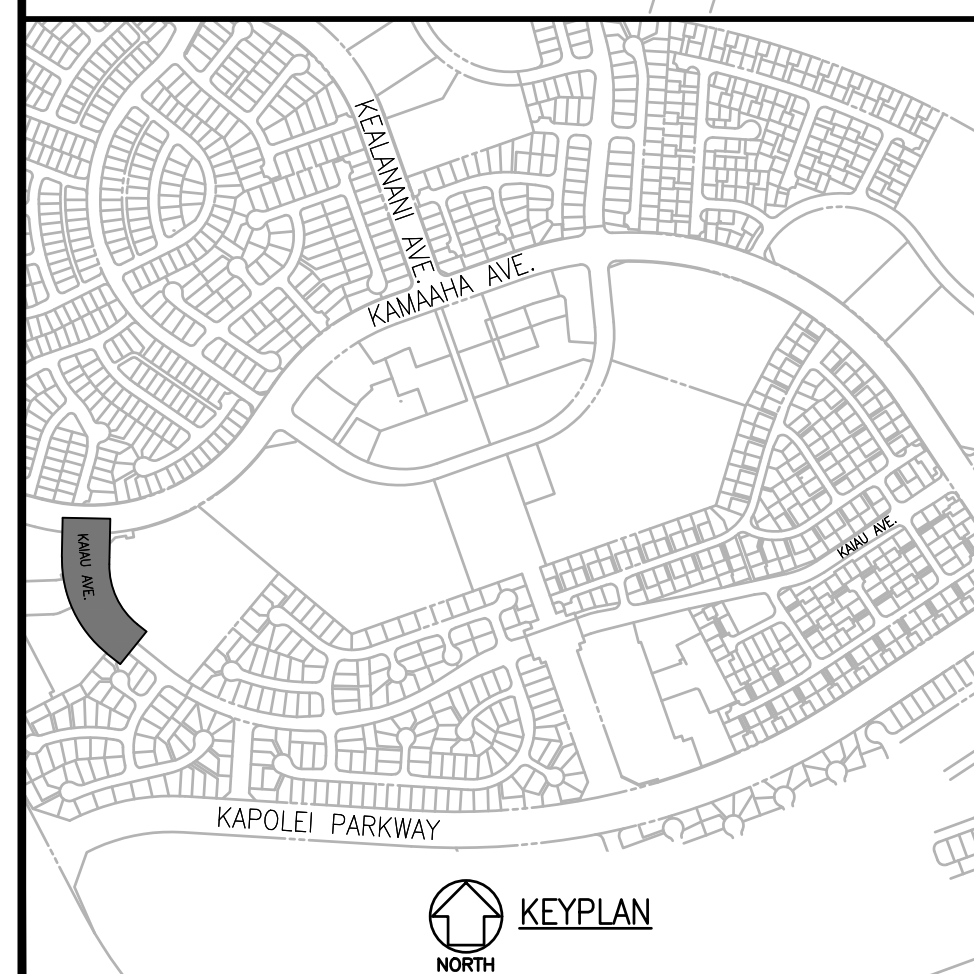
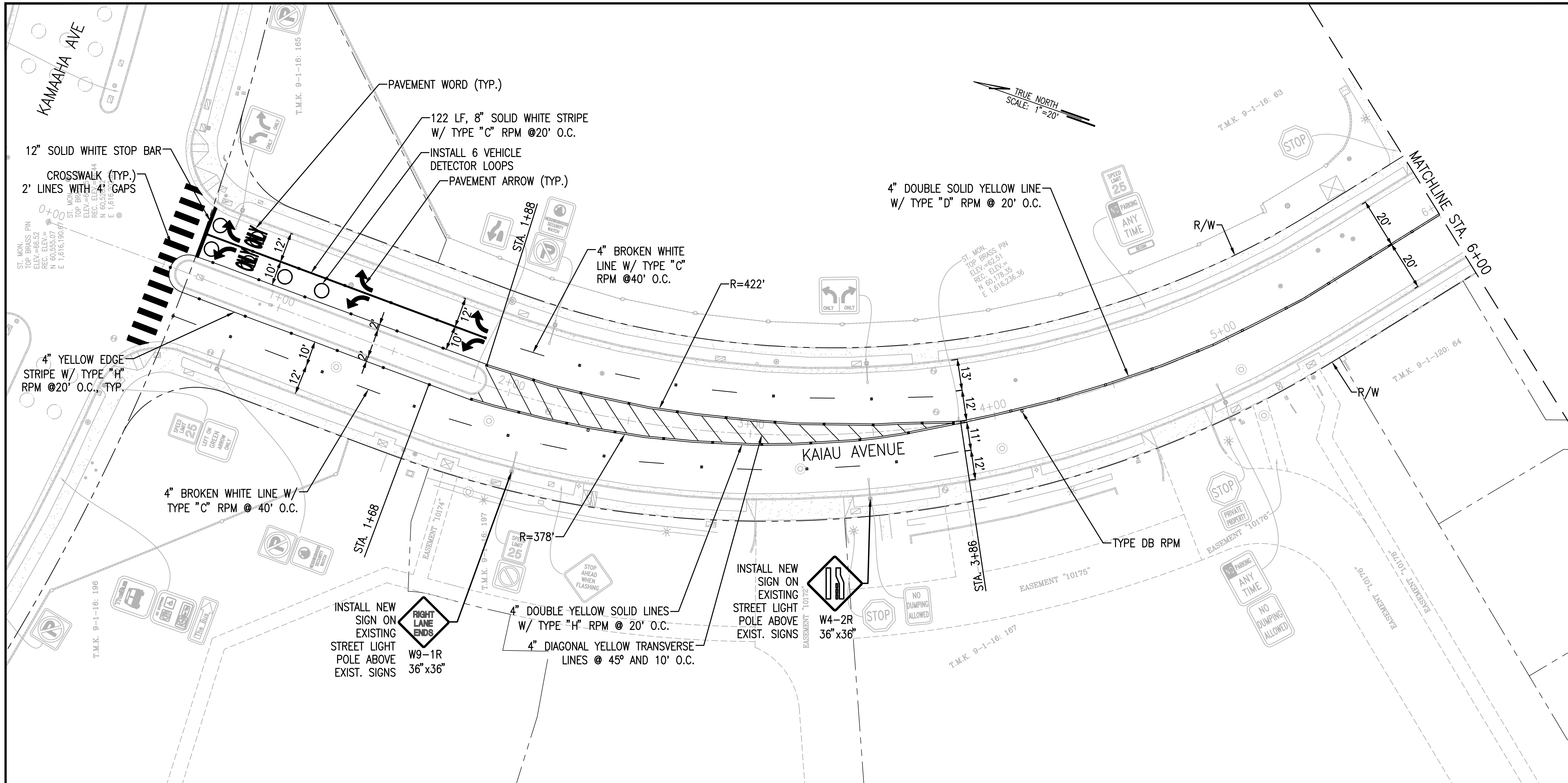
SECTION "B-B"

CONCRETE CURB CONNECTION DETAIL
NOT TO SCALE



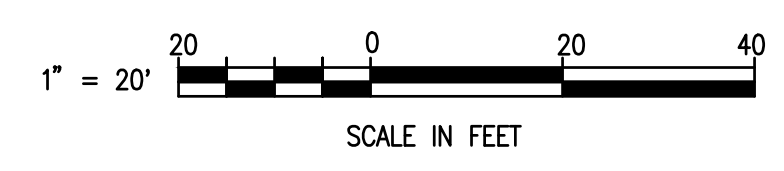
CONCRETE CURB & GUTTER CONNECTION DETAIL
NOT TO SCALE

DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
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	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULIULI, EWA, OAHU, HAWAII ROADWAY CONSTRUCTION DETAILS-1 MISCELLANEOUS DETAILS</p>				
	APPROVED:				DWG NO. C-9

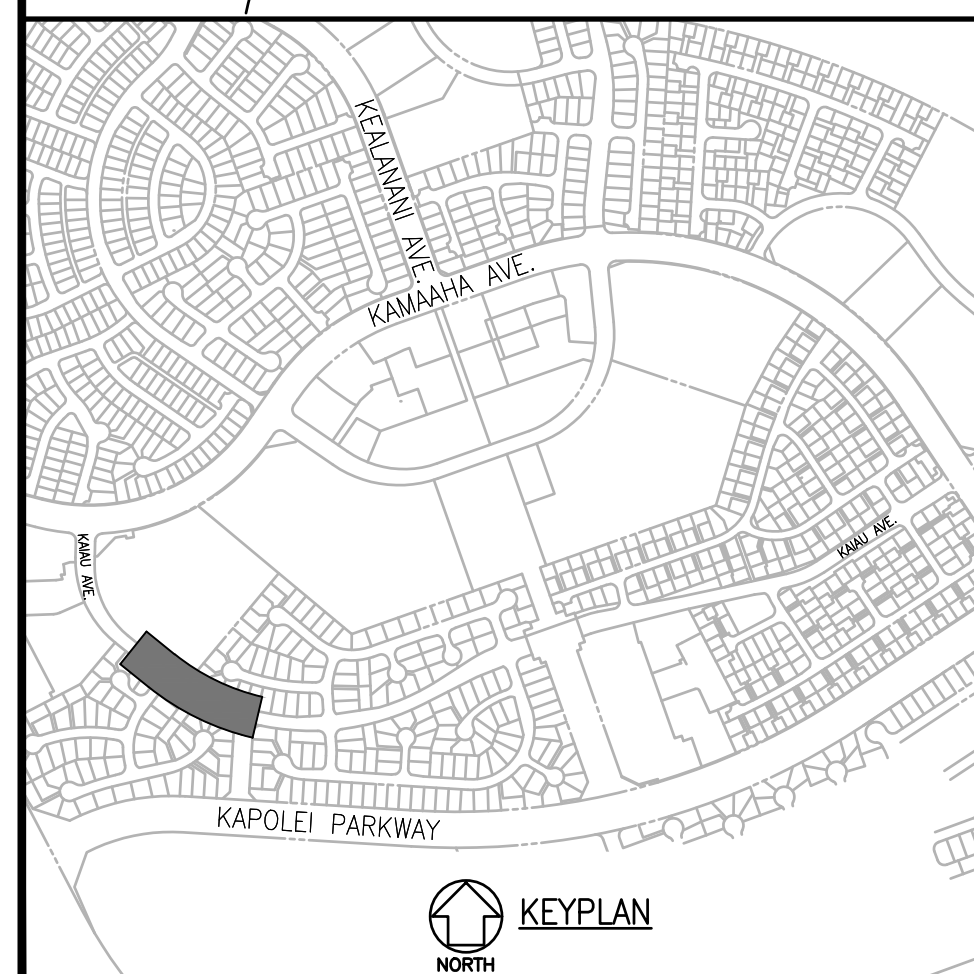
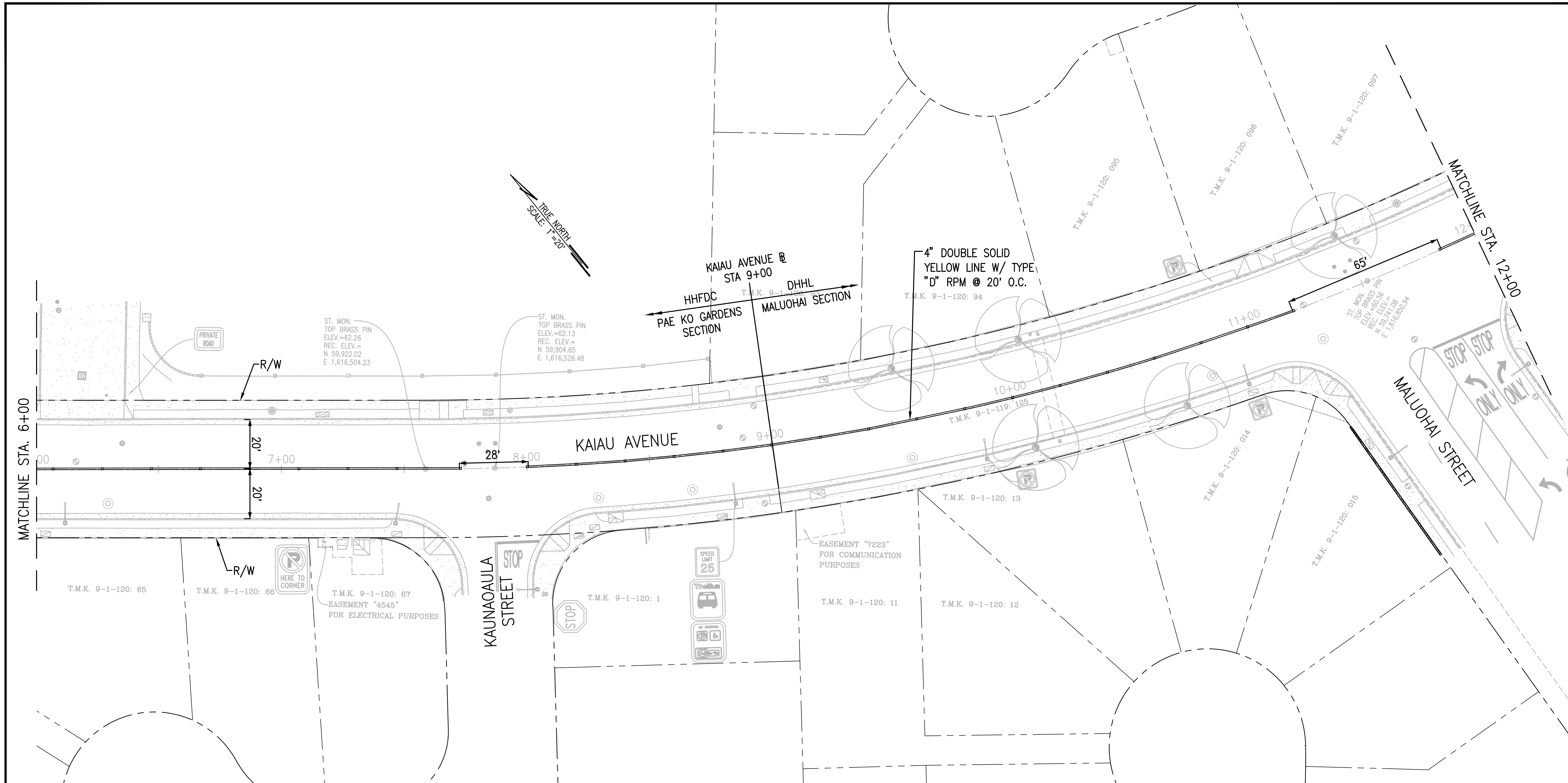


NOTES:

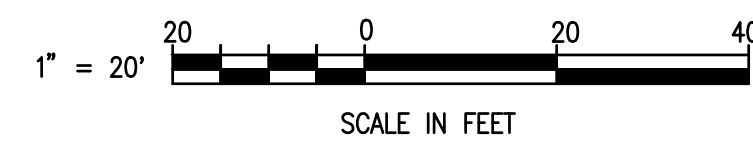
1. INSTALL TYPE "DB" RPM FIRE HYDRANT MARKER AT ALL FIRE HYDRANT LOCATIONS.
2. STOP BARS ARE 10' MIN. FROM FACE OF CURB (OR EDGE OF PAVEMENT WHERE THERE ARE NO CURBS), UNLESS OTHERWISE SHOWN ON PLANS.
3. ROAD WIDTH DIMENSIONS SHOWN ON PLANS ARE FROM EDGE OF TRAVELWAY (ETW) UNLESS OTHERWISE NOTED. ROAD WIDTHS MAY VARY ALONG SOME ROADS; CONTRACTOR SHALL VERIFY IN FIELD. LANE WIDTHS SHOWN ARE FROM ETW TO CENTER OF STRIPE, OR CENTER OF STRIPE TO CENTER OF STRIPE, UNLESS OTHERWISE NOTED.



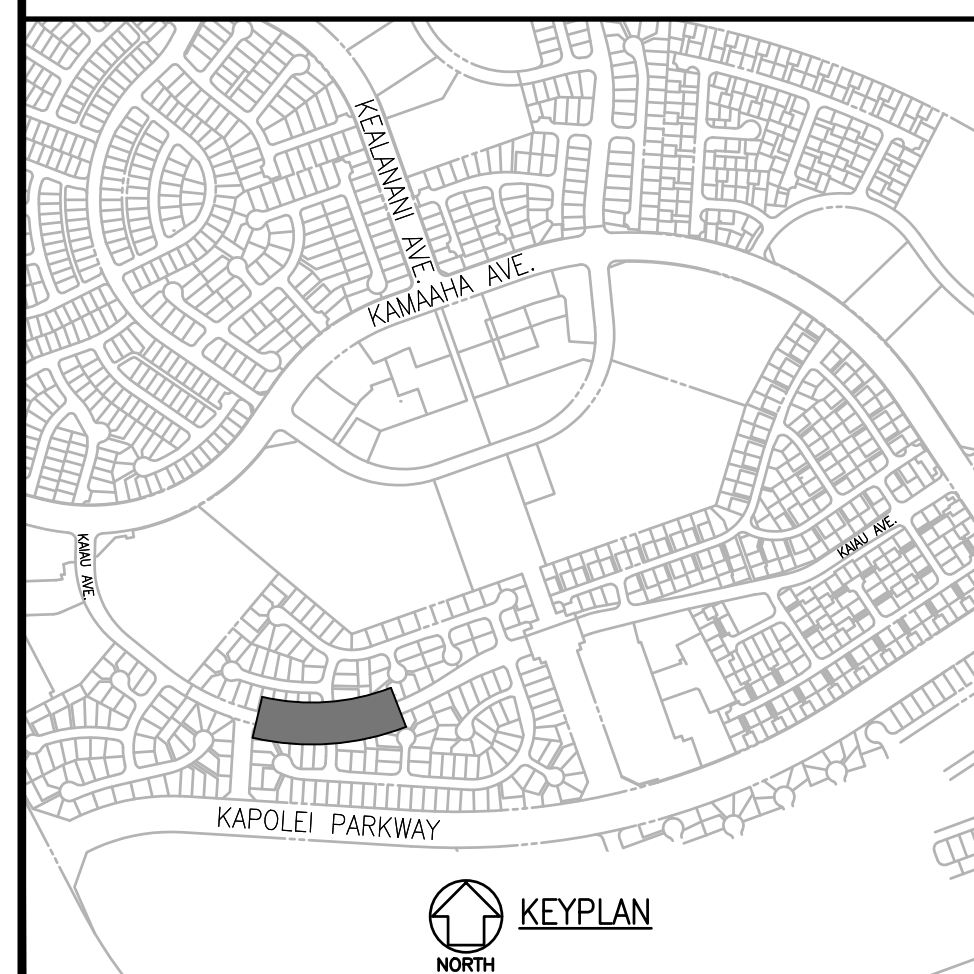
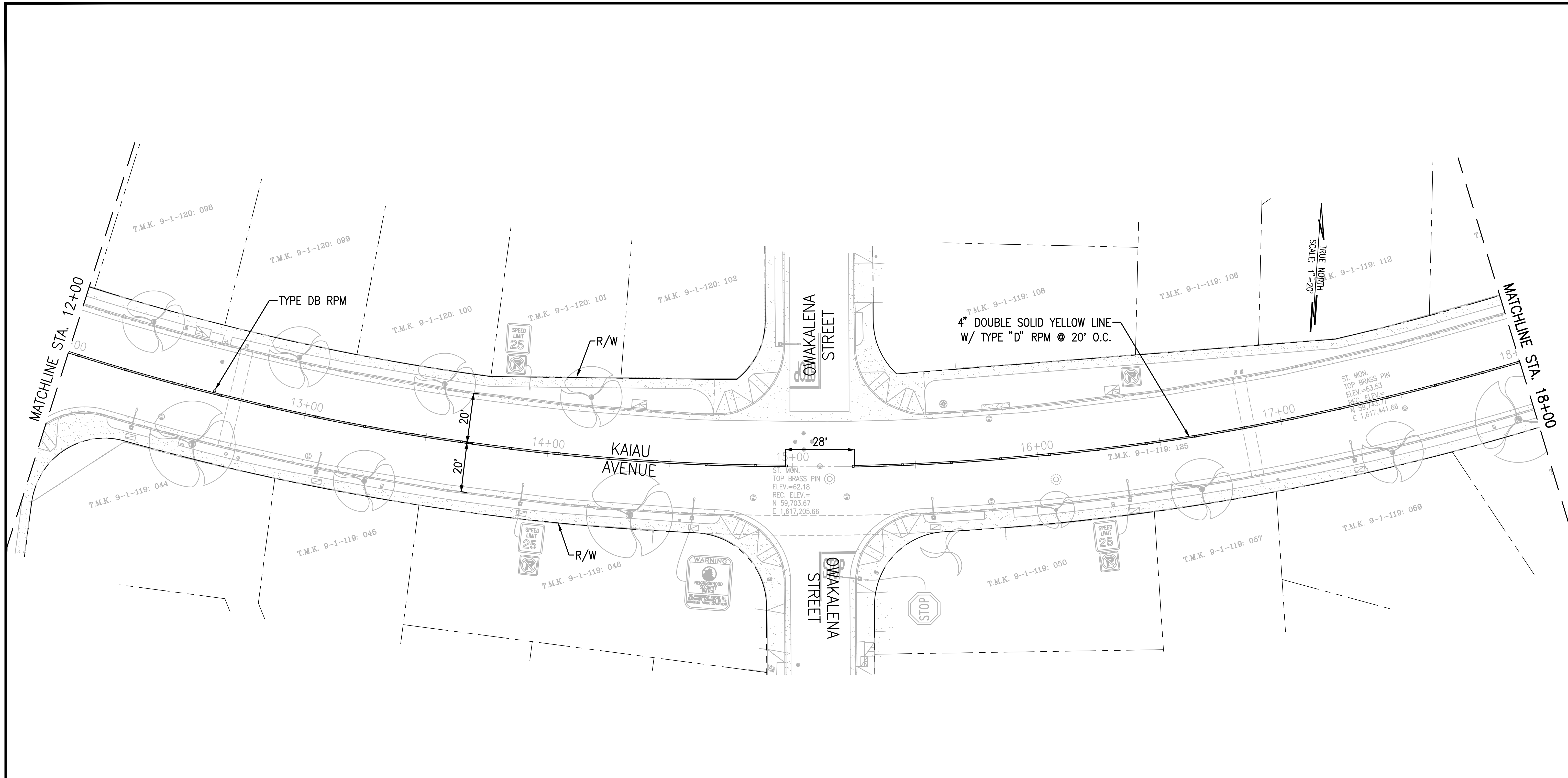
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	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULULI, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING PLAN - 1</p>				
	APPROVED:				DWG NO. P-1



- NOTES:**
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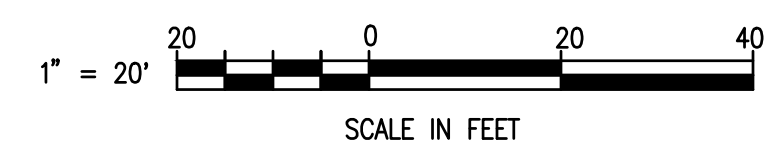


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APPROVED:					DWG NO. P-2

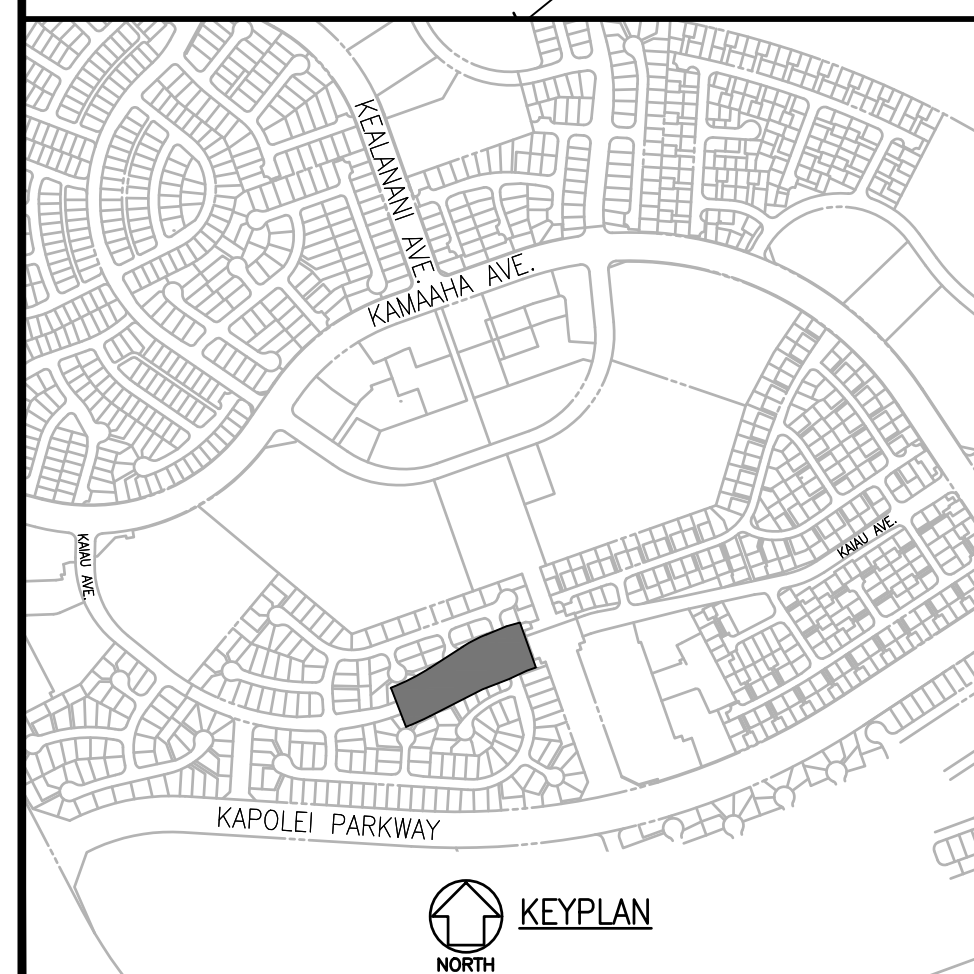
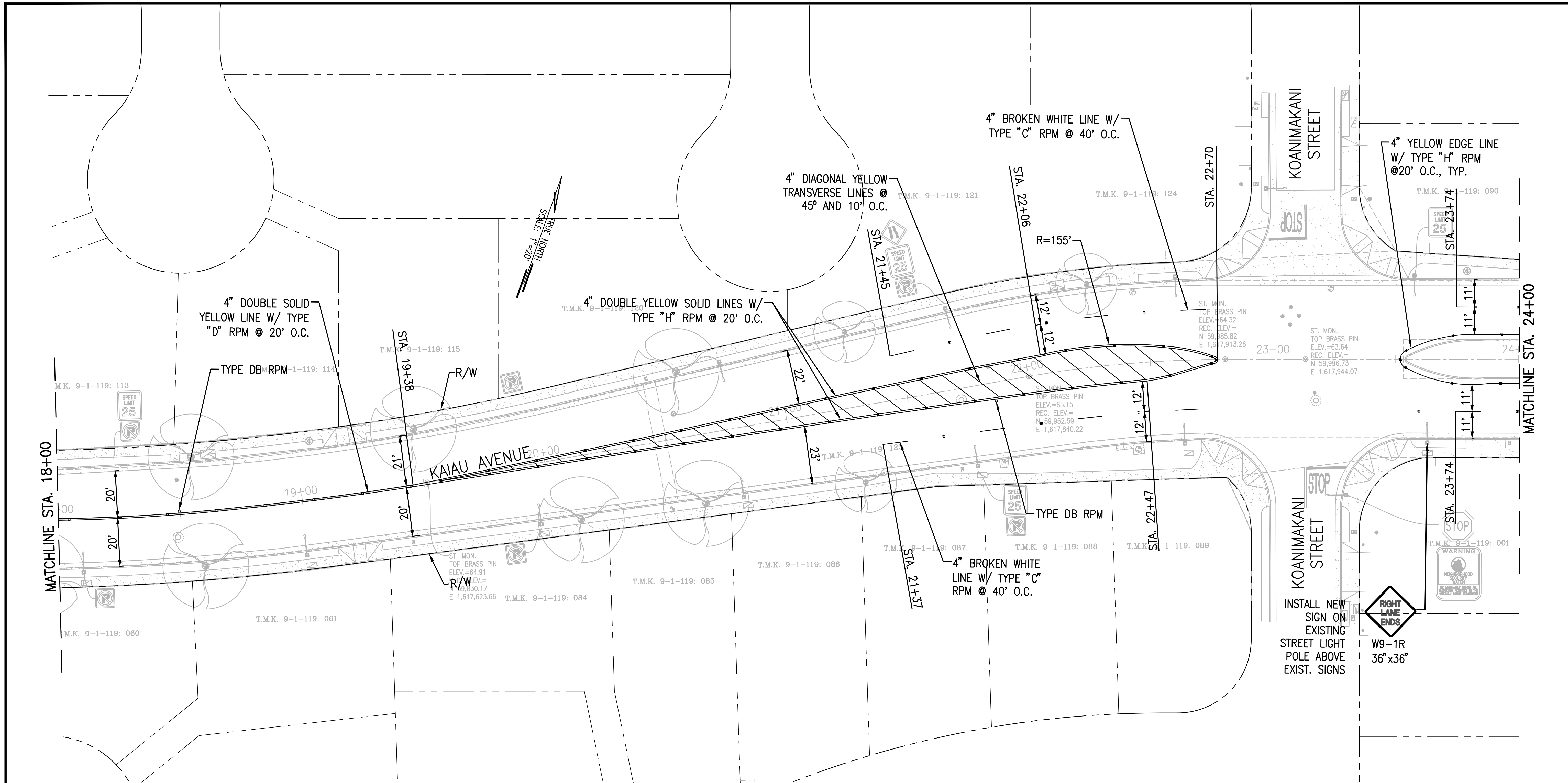


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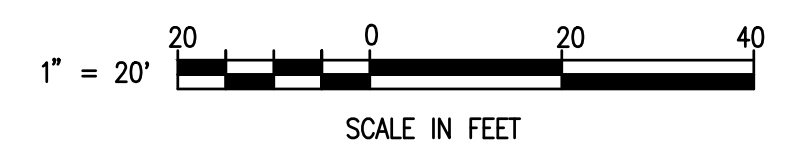
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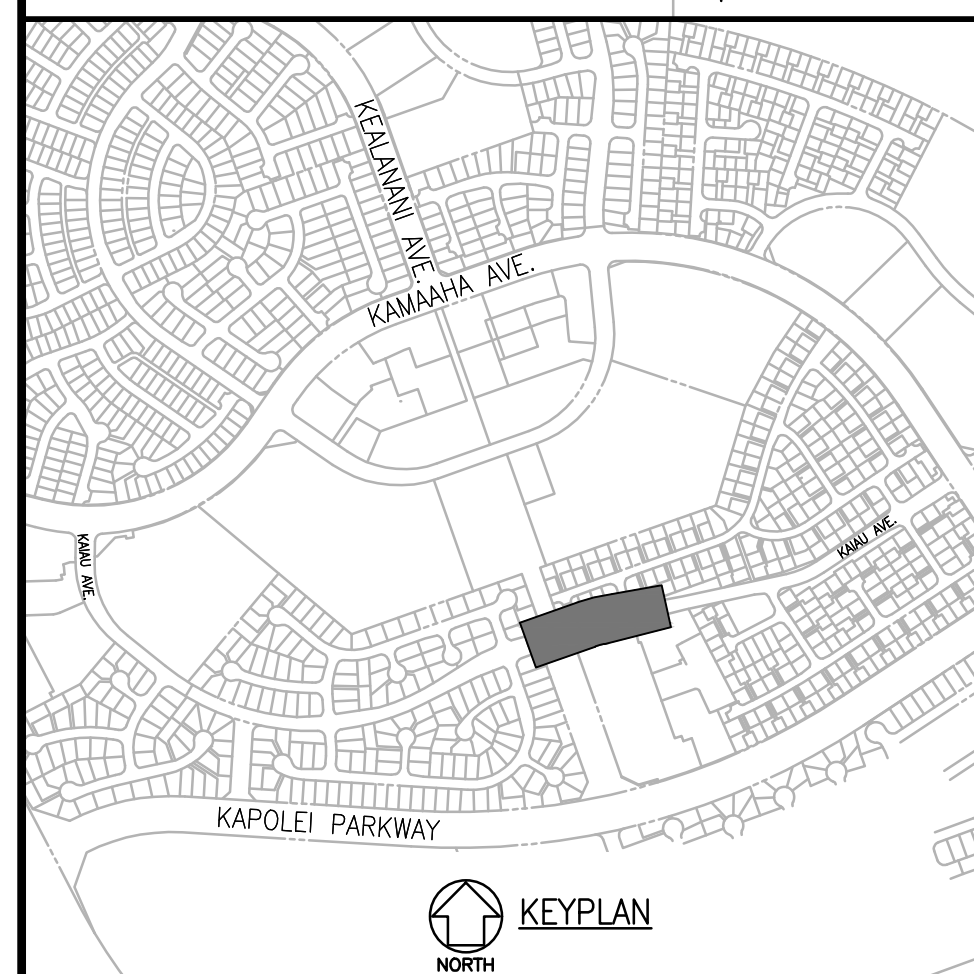
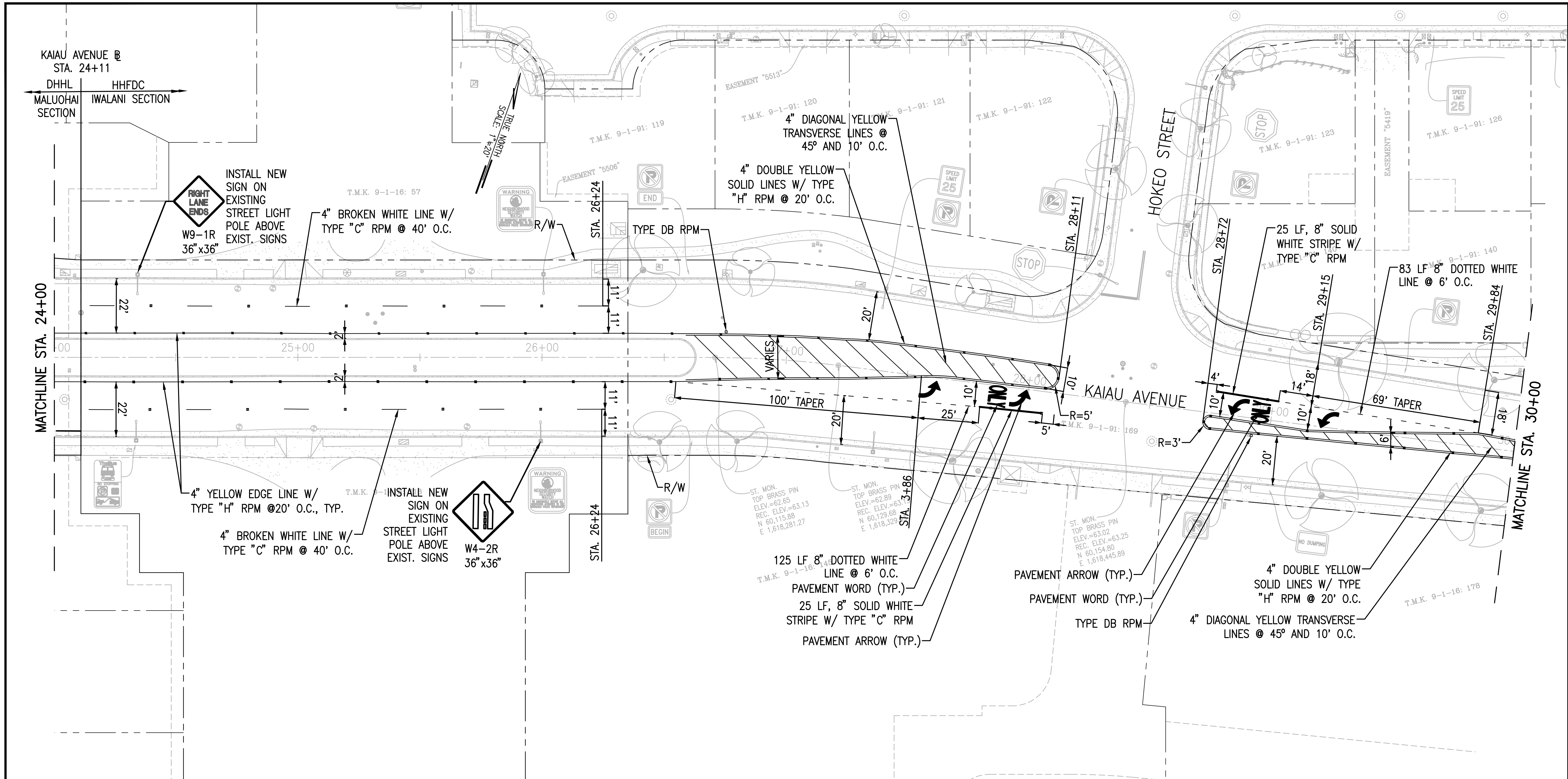
DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN	WSP WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368				
CHECKED: JS					
DATE: SEPTEMBER 2022	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING PLAN - 3				
	APPROVED: 4/30/2024 <small>SIGNATURE EXPIRATION DATE OF THE LICENSE</small>				DWG NO. P-3



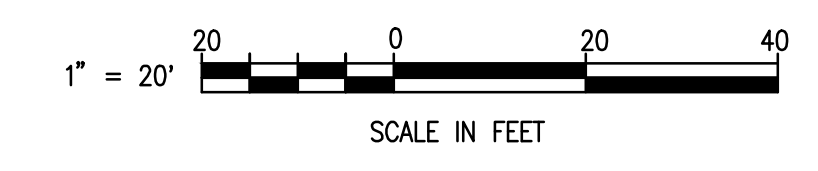
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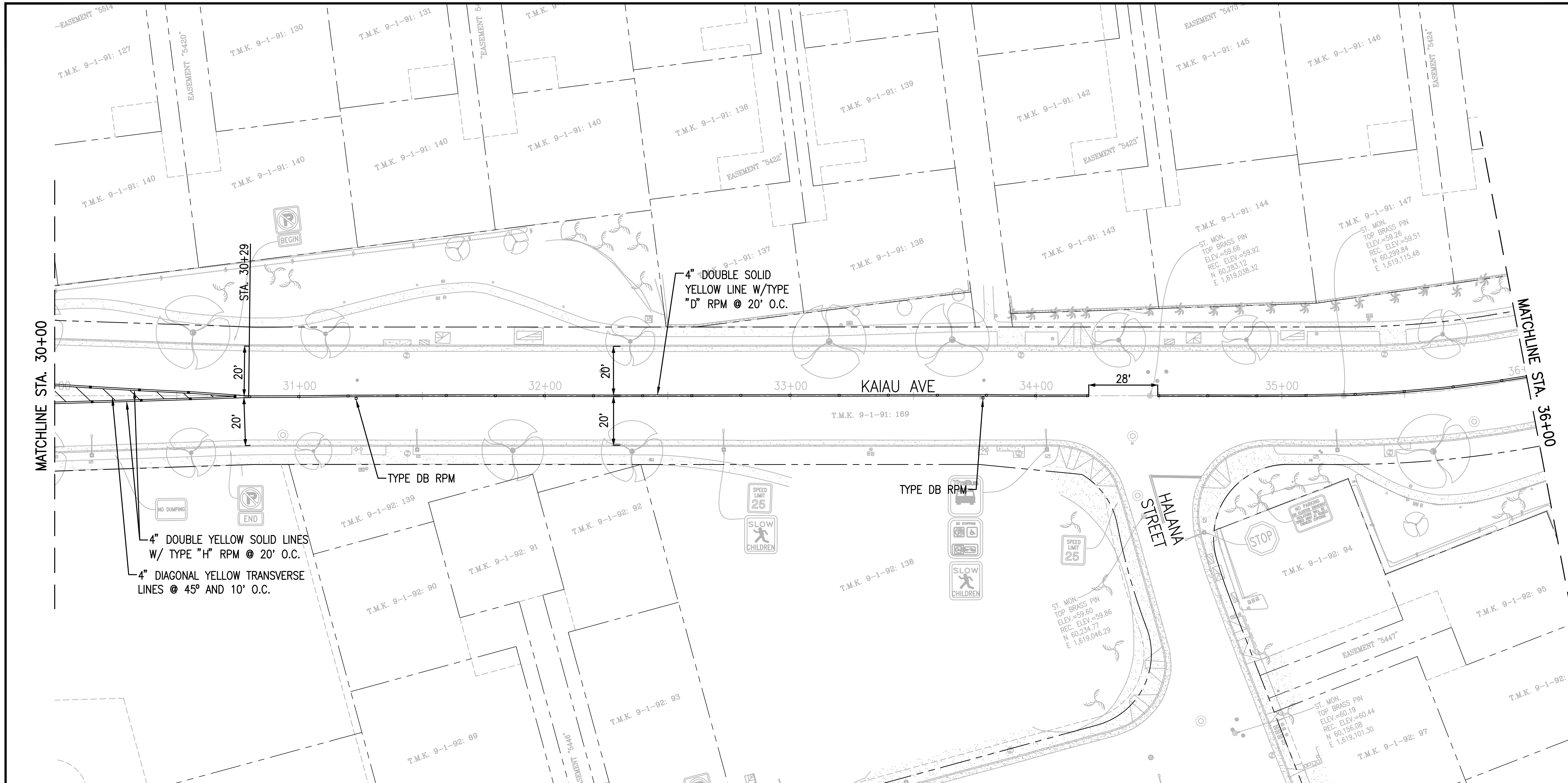
DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p> <p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING PLAN - 4</p>				
CHECKED: JS					
DATE: SEPTEMBER 2022					
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DWG NO. P-4					NUMBER



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DRAWN: MN	<p style="text-align: center; font-size: small;">WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p> <p style="text-align: center;">VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p style="text-align: center;">KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULUI, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING PLAN - 5</p>				
CHECKED: JS					
DATE: SEPTEMBER 2022					
<p style="font-size: x-small;">THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p> <p style="font-size: x-small;">SIGNATURE: <i>[Signature]</i> 4/30/2024 EXPIRATION DATE OF THE LICENSE</p>					<p>APPROVED:</p> <p>DWG NO. P-5</p>



4" DOUBLE YELLOW SOLID LINES
W/ TYPE "H" RPM @ 20' O.C.
4" DIAGONAL YELLOW TRANSVERSE
LINES @ 45° AND 10' O.C.

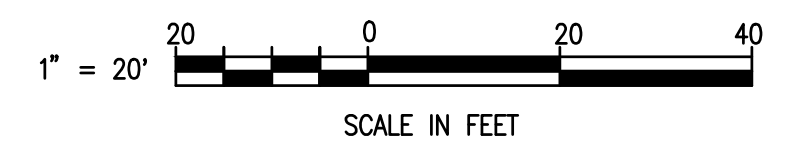
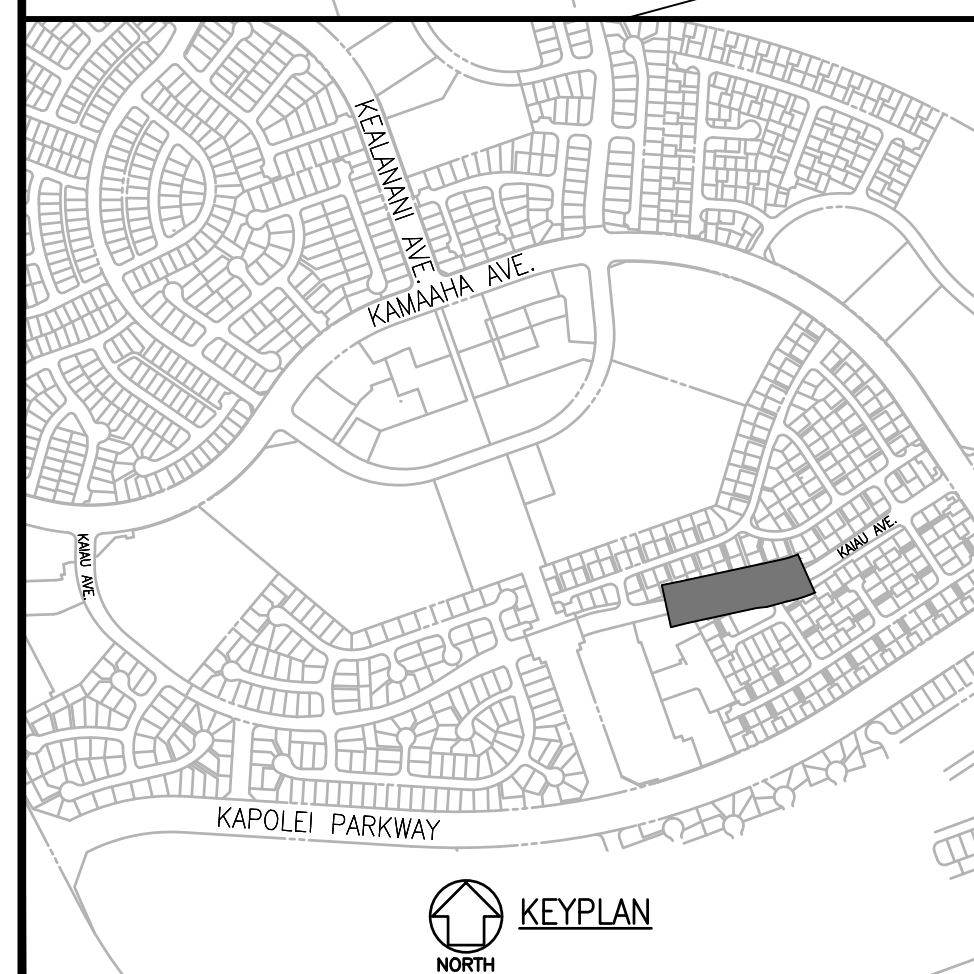
4" DOUBLE SOLID
YELLOW LINE W/TYPE
"D" RPM @ 20' O.C.


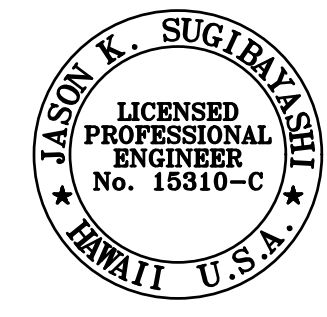
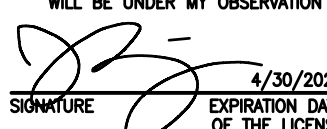
TYPE DB RPM

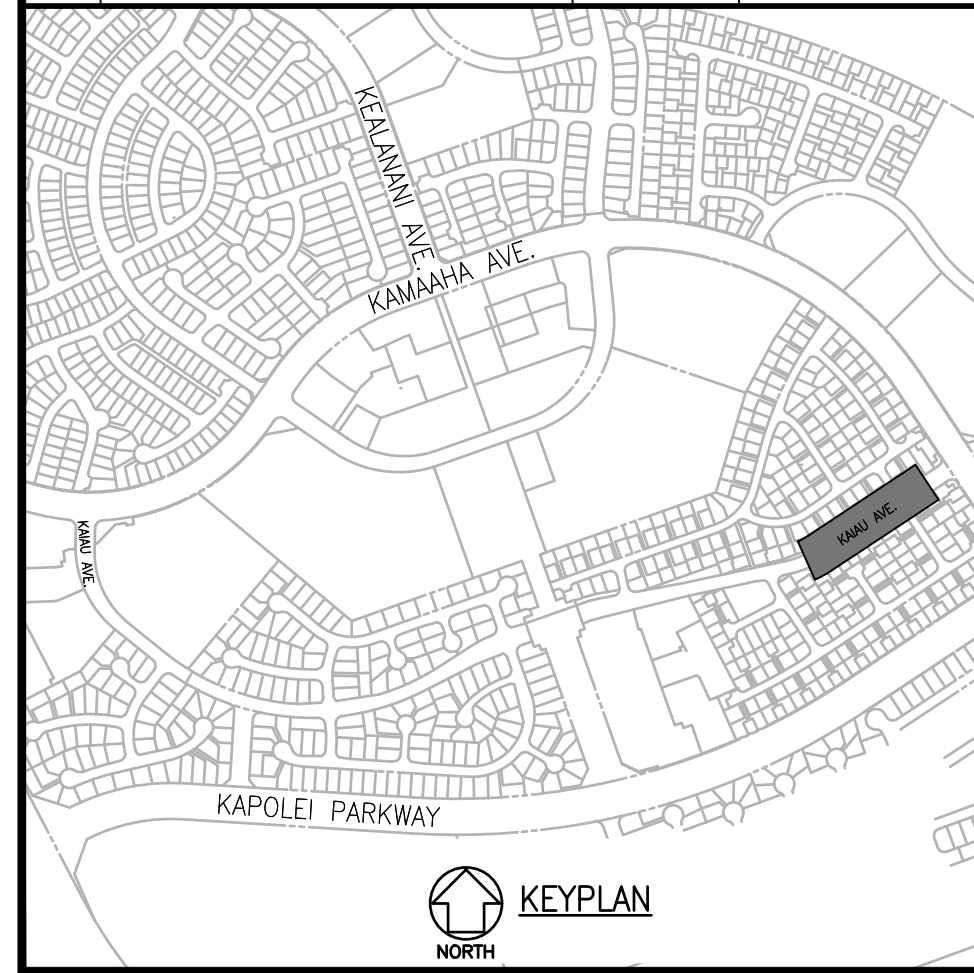
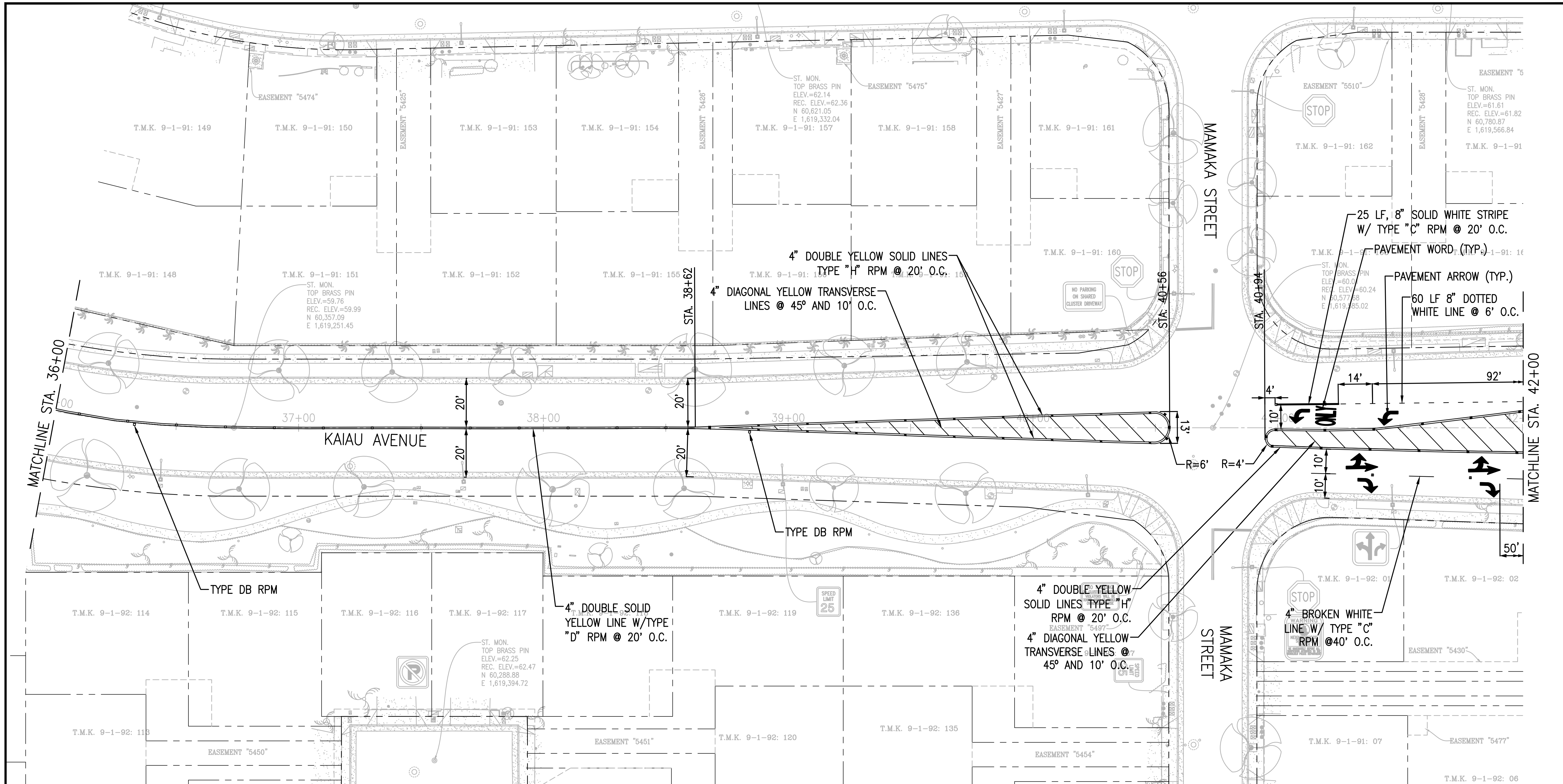
TYPE DB RPM

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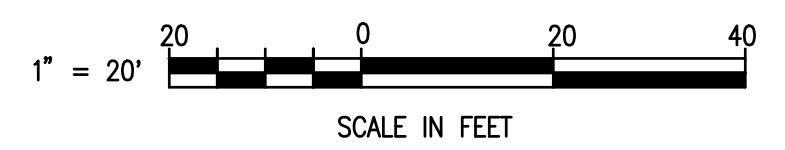


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CHECKED: JS					
DATE: SEPTEMBER 2022					
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DWG NO. P-6					

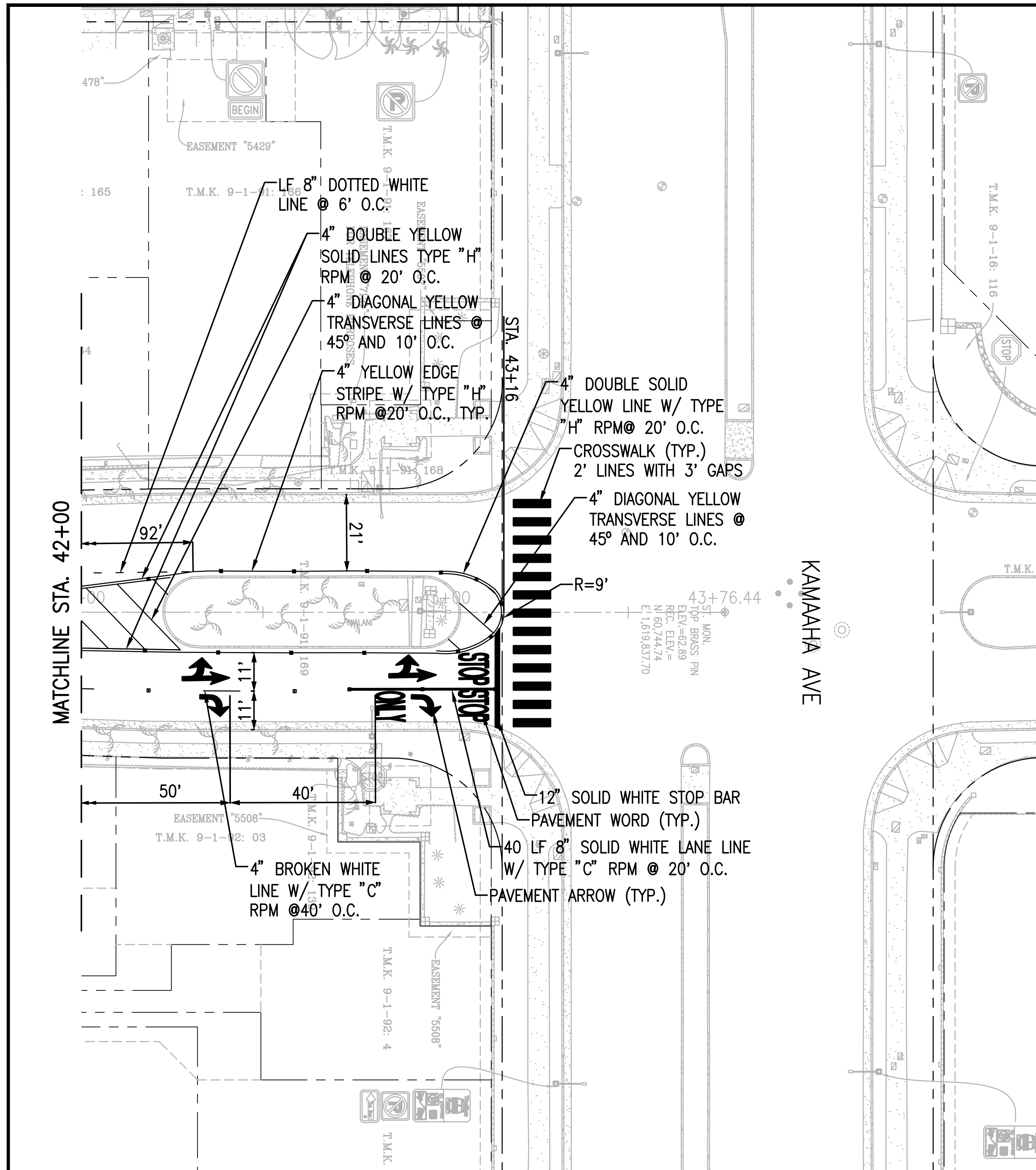


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CHECKED: JS					
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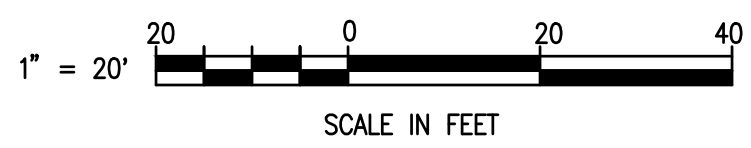


ST. MON.
TOP BRASS PIN
ELEV. = 62.89
REC. ELEV. =
N 50.744.74
E 1.619.837.70

KAMAHA AVE

NOTES:

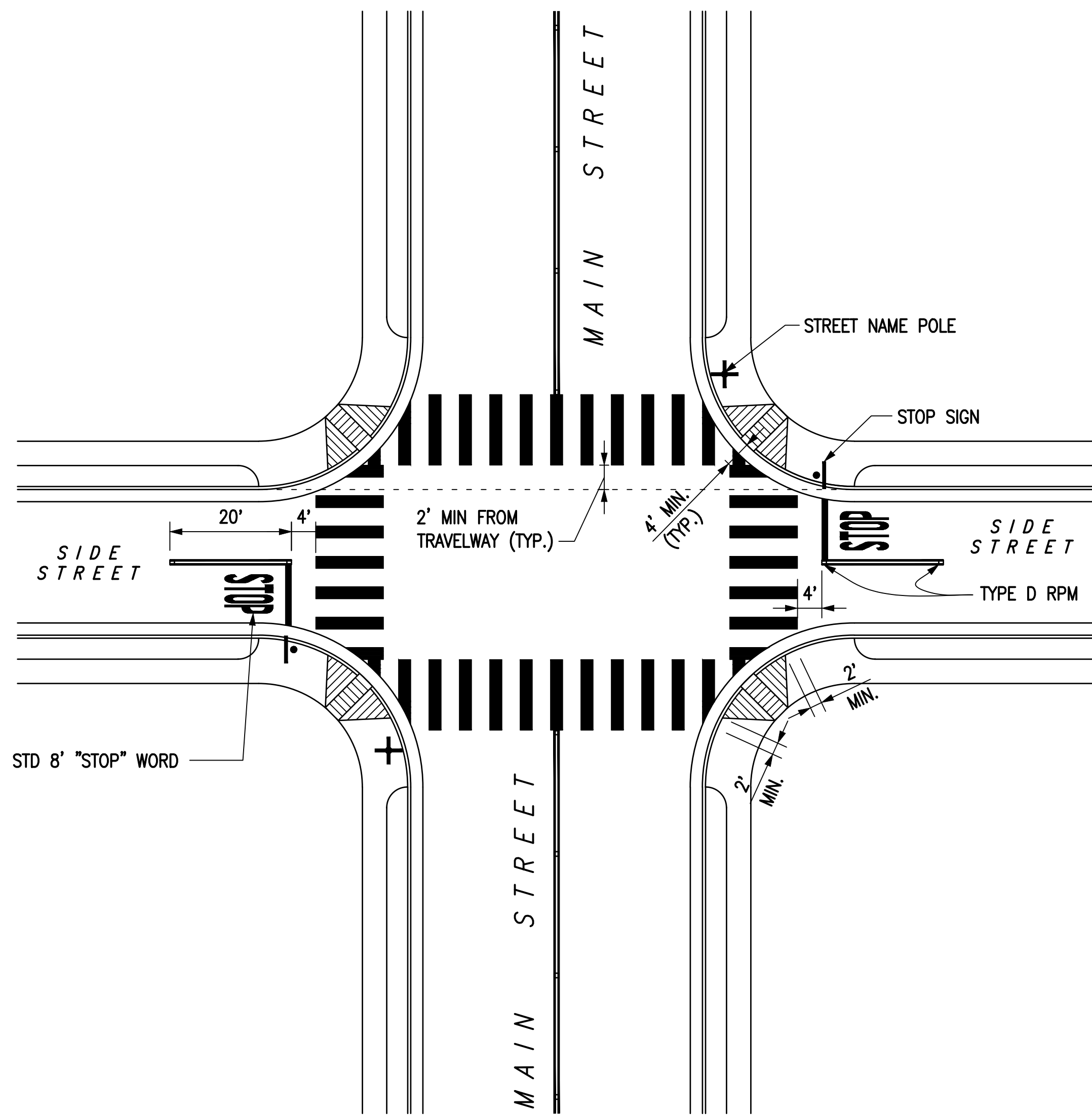
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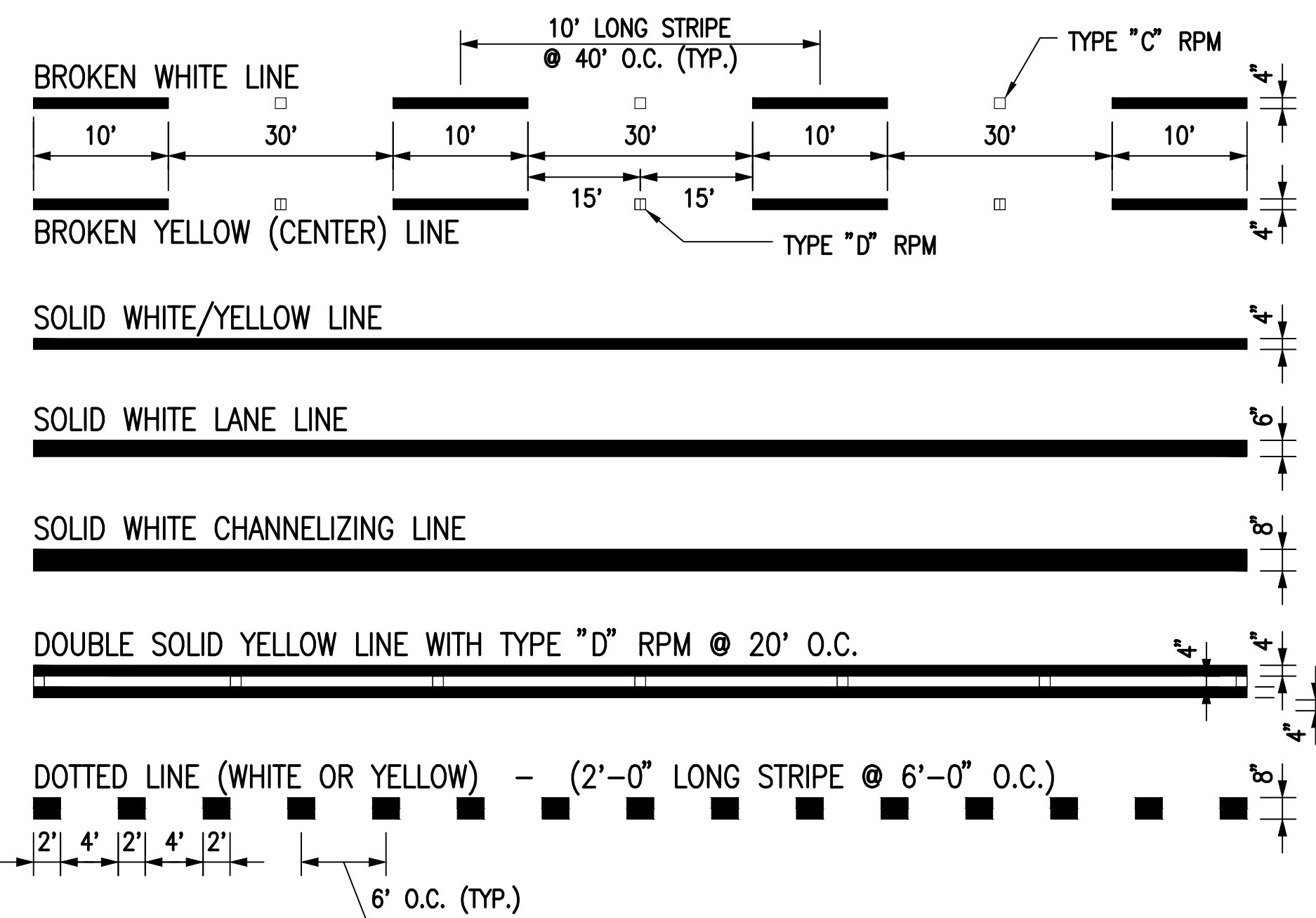
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	APPROVED:				DWG NO. P-8

SIGNS AND MARKING NOTES:

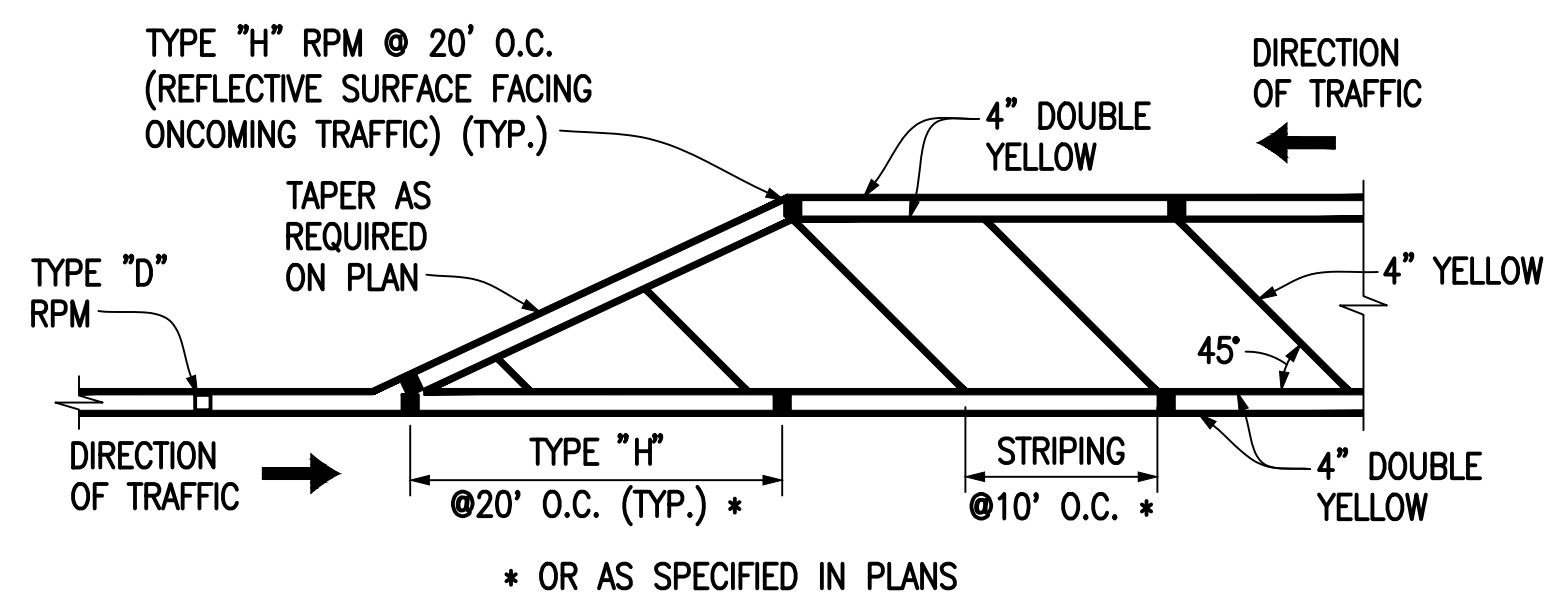
- ALL TRAFFIC SIGN AND PAVEMENT MARKING INSTALLATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," 2009 EDITION, AS AMENDED, THE LATEST SPECIFICATIONS FROM THE TRAFFIC REVIEW BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AND AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL SUBMIT MATERIAL BROCHURES FOR ALL SIGNS AND PAINT MATERIALS FOR APPROVAL PRIOR TO START OF INSTALLATION.
- THE SIGNING AND/OR STRIPING CONTRACTOR SHALL KEEP ONE (1) SET OF APPROVED PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION WORK.
- CONTRACTOR SHALL PAINT TEMPORARY GUIDELINES AND OUTLINE OF ARROWS, LEGENDS, AND CROSSWALKS WITH A TWO INCH (2") WIDE BRUSHED LINE ON THE DAY THE ROADWAY IS OPENED TO TRAFFIC. THESE MARKINGS MUST BE APPROVED BY THE INSPECTOR PRIOR TO OPENING THE ROADWAY TO TRAFFIC.
- CONTRACTOR SHALL MEET WITH THE INSPECTOR DURING THE FINAL INSPECTION.
- WITHIN TEN (10) DAYS FOLLOWING NOTIFICATION OF AWARD OF CONTRACT, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, A LIST OF ANY SIGNING AND PAVEMENT MARKING MATERIAL WHICH THE CONTRACTOR PROPOSES TO INSTALL. THE LIST SHALL BE COMPLETE AS TO THE NAME OF MANUFACTURER, CATALOG NUMBER, AND SHALL BE SUPPLEMENTED WITH MATERIAL BROCHURES.
- UPON FINAL INSPECTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A LETTER OF CERTIFICATION FOR ALL TRAFFIC SIGNING AND PAVEMENT MARKING MATERIALS INSTALLED.
- SIGNS SHALL BE ATTACHED TO BRACKETS WITH 5/8" ZINC PLATED STEEL BOLTS, NUTS AND WASHERS. SIGNS 48" WIDE OR LARGER THAN 10 SQ. FT. IN AREA SHALL BE MOUNTED ON TWO 2" GALV. PIPE POST. THE SIGN SHALL BE INSTALLED WITH AT LEAST (1) ONE FOOT CLEARANCE FROM THE SIGN EDGE TO THE CURB FACE.
- ALL TRAFFIC SIGNS SHALL BE REFLECTORIZED.
- RAISED PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND PERMITTING STANDARDS.
- LOCATION OF "STOP" SIGN:
 - INSTALL "STOP" SIGN AT CURB TANGENT POINT.
 - INSTALL "STOP" SIGN ON METAL STREET LIGHT STANDARD IF A STANDARD IS LOCATED WITH IN 10 FEET OF CURB RETURN.
 - INSTALL "STOP" SIGN IN FRONT OF UTILITY POLE IF A POLE IS LOCATED WITHIN 10 FEET OF CURB RETURN.
- PAVEMENT WORD AND SYMBOL MARKINGS SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND PERMITTING STANDARDS.
- THE CONTRACTOR SHALL USE THERMOPLASTIC MATERIAL, APPROVED BY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, FOR ALL CROSSWALKS, STOP BARS, PAVEMENT ARROWS, CENTER LINES, LANE LINES, ARC LINES, CHANNELIZED TRAFFIC ISLANDS, AND LEGENDS.



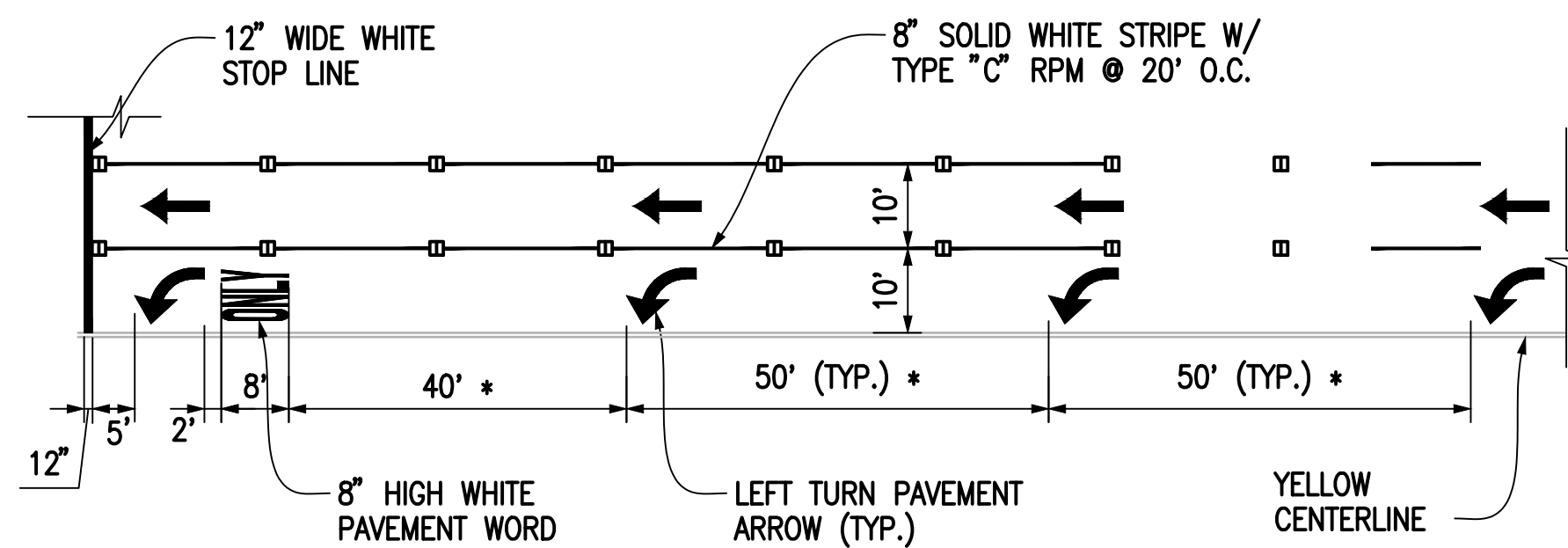
TYPICAL INTERSECTION SIGNING AND PAVEMENT MARKINGS WITH CROSSWALKS
NOT TO SCALE



TYPICAL PAVEMENT MARKINGS - TYPES OF LONGITUDINAL LINES
NOT TO SCALE

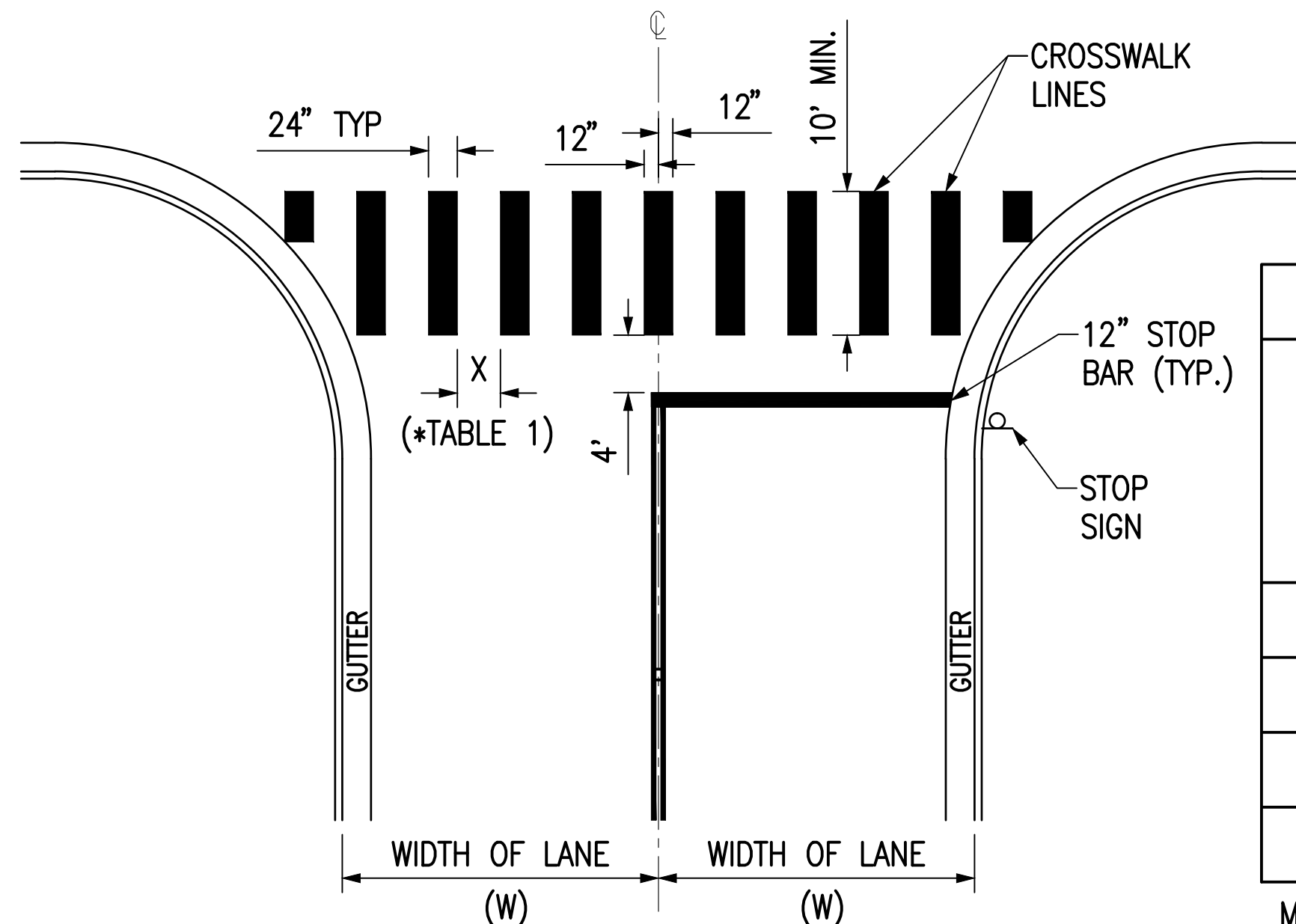


TRANSVERSE MEDIAN STRIPING DETAIL
NOT TO SCALE



TYPICAL TURN LANE STRIPING
NOT TO SCALE

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	APPROVED:				
	DWG NO. P-9				

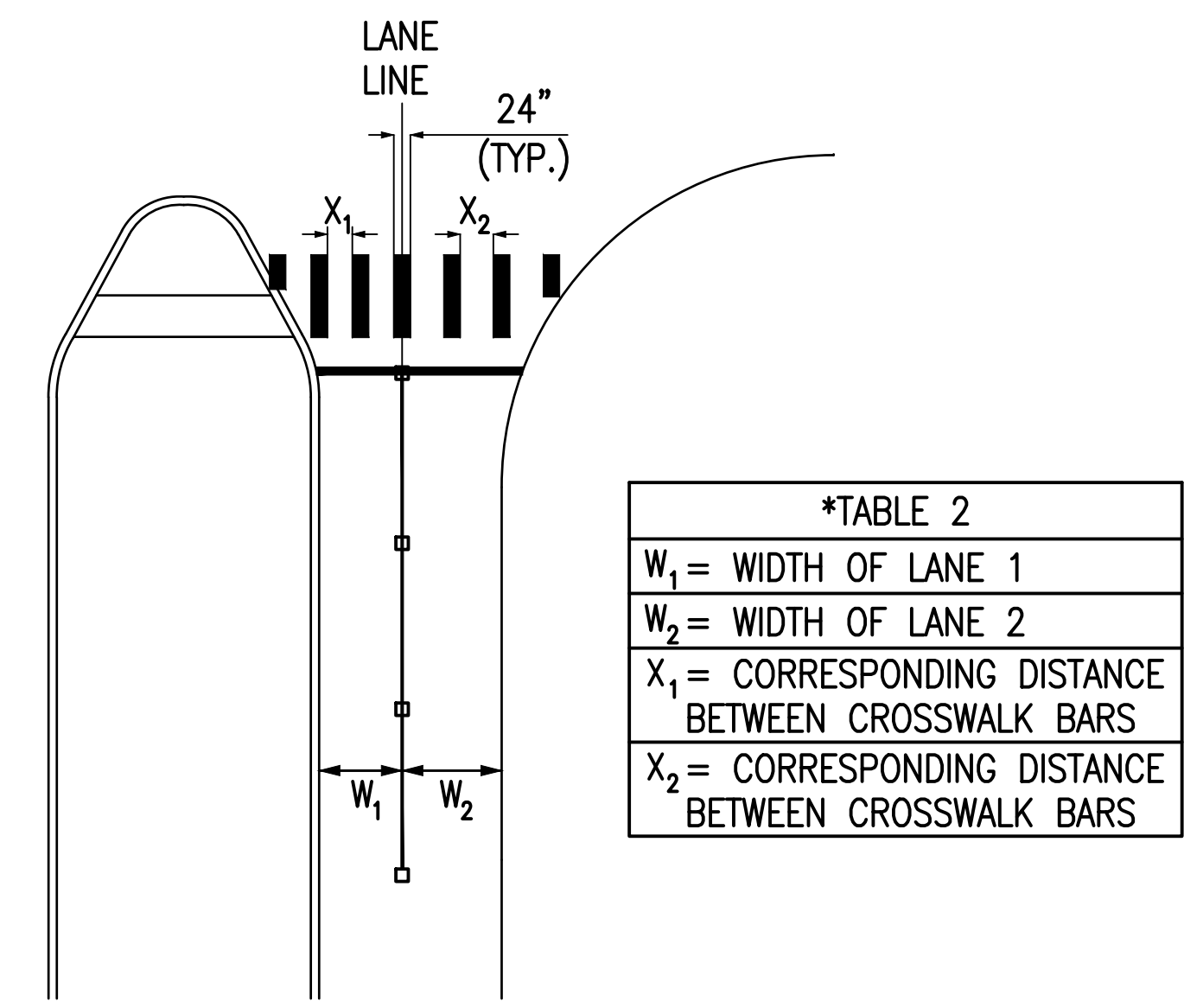


CONTROLLED INTERSECTION CROSSWALK DETAIL

***TABLE 1**

LANE WIDTH (W)	X (DISTANCE BETWEEN CROSSWALK BARS)
<12'	3'
12'-14'	4'
15'-17'	5'
>17'	3'

MAX X = 5'

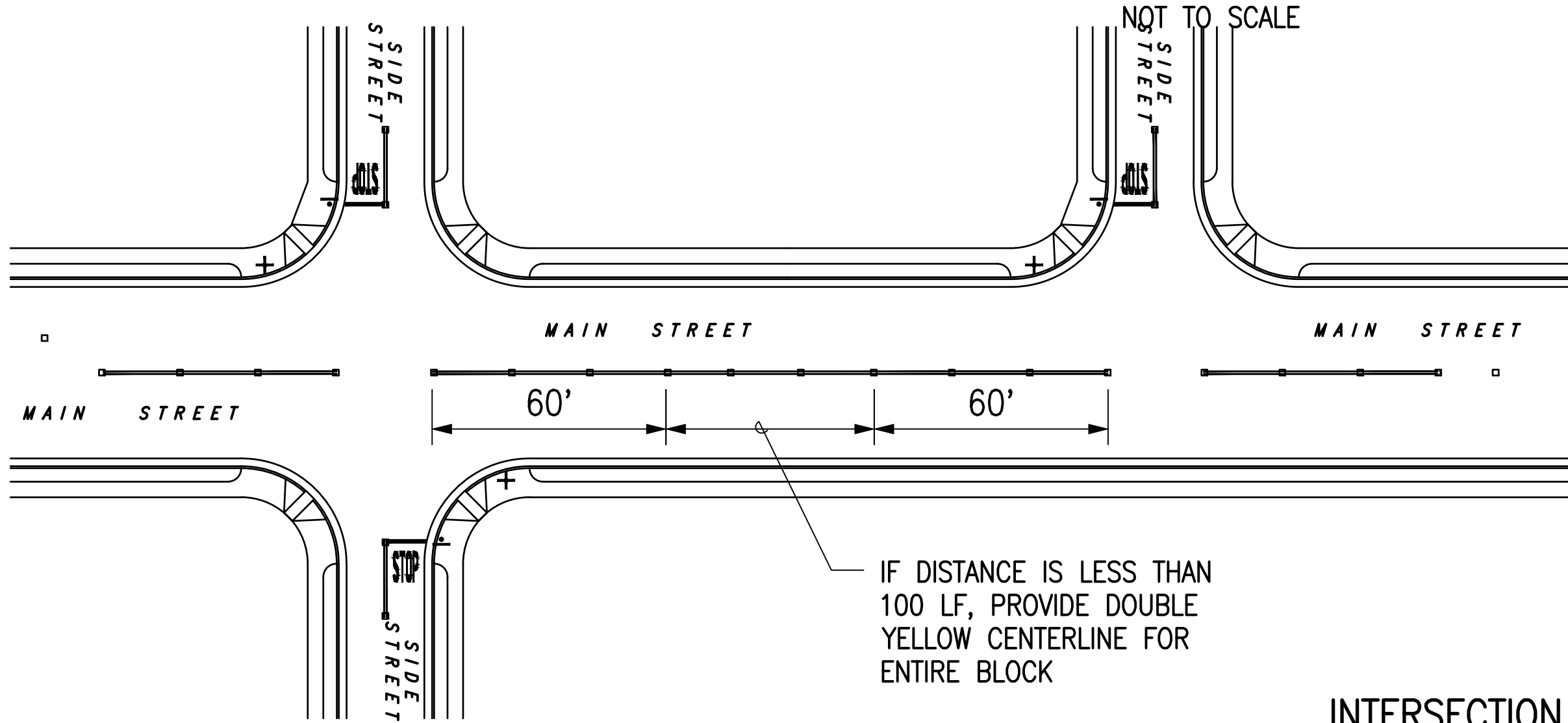


TYPICAL MEDIAN MULTILANE

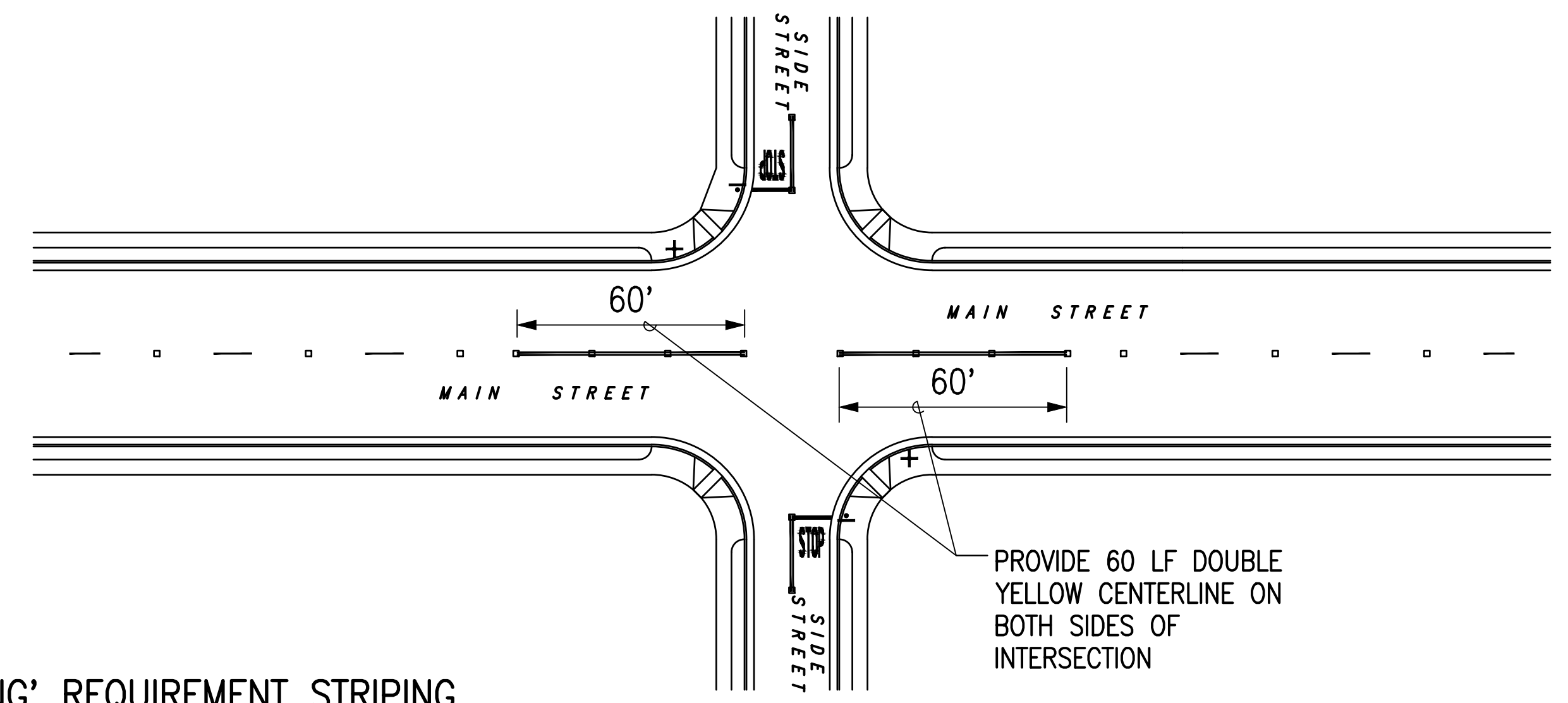
***TABLE 2**

W_1 = WIDTH OF LANE 1
W_2 = WIDTH OF LANE 2
X_1 = CORRESPONDING DISTANCE BETWEEN CROSSWALK BARS
X_2 = CORRESPONDING DISTANCE BETWEEN CROSSWALK BARS

CROSSWALK STRIPING DETAILS



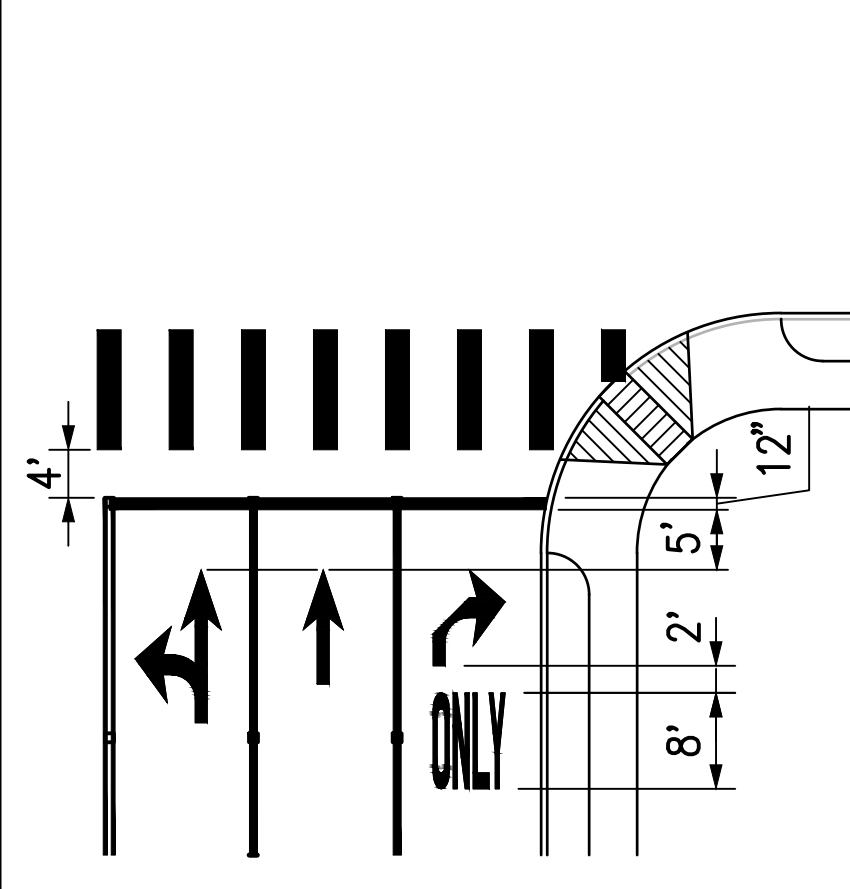
IF DISTANCE IS LESS THAN 100 LF, PROVIDE DOUBLE YELLOW CENTERLINE FOR ENTIRE BLOCK



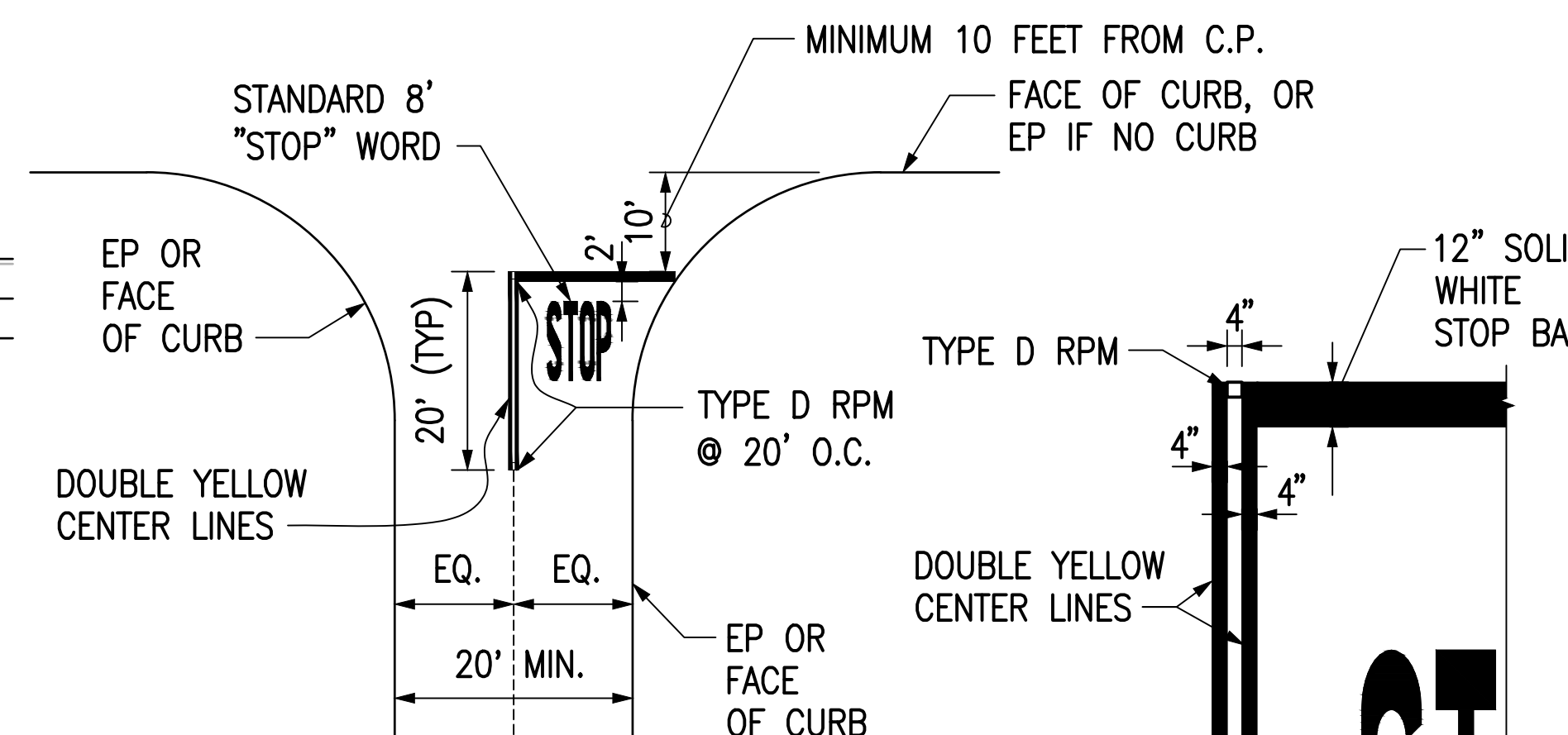
PROVIDE 60 LF DOUBLE YELLOW CENTERLINE ON BOTH SIDES OF INTERSECTION

INTERSECTION 'NO PASSING' REQUIREMENT STRIPING

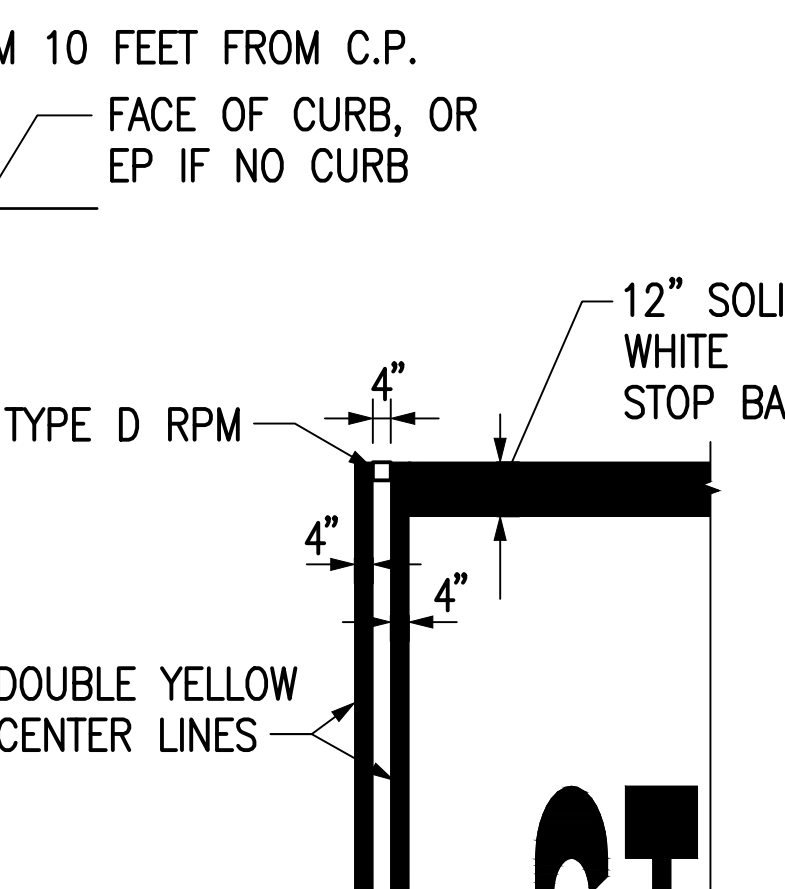
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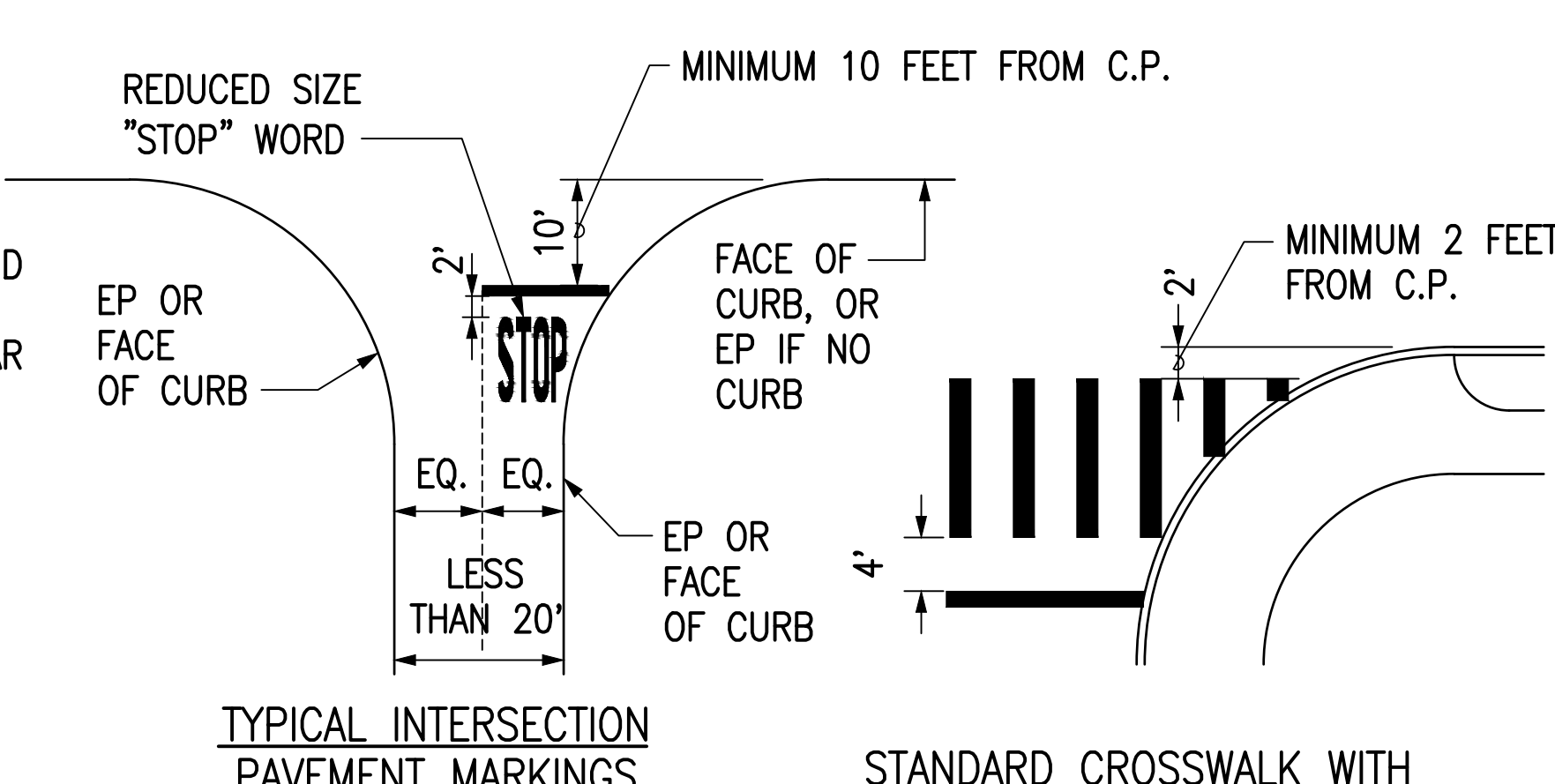
TYPICAL LANE ARROW MARKINGS



TYPICAL INTERSECTION PAVEMENT MARKINGS (MIN 20' WIDTH)



CENTERLINE & STOP BAR



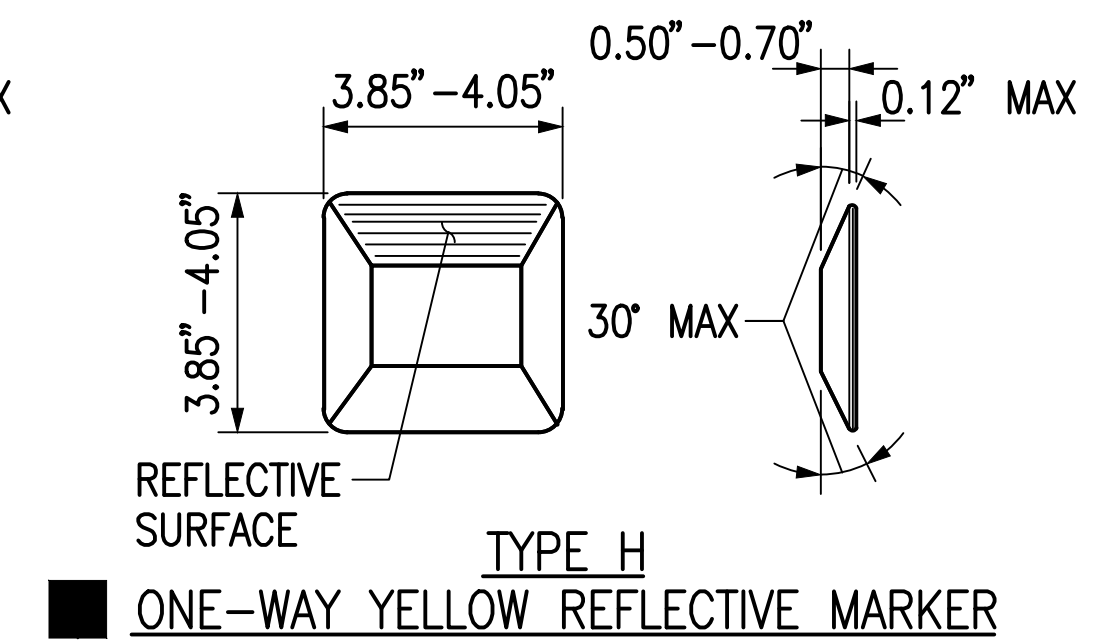
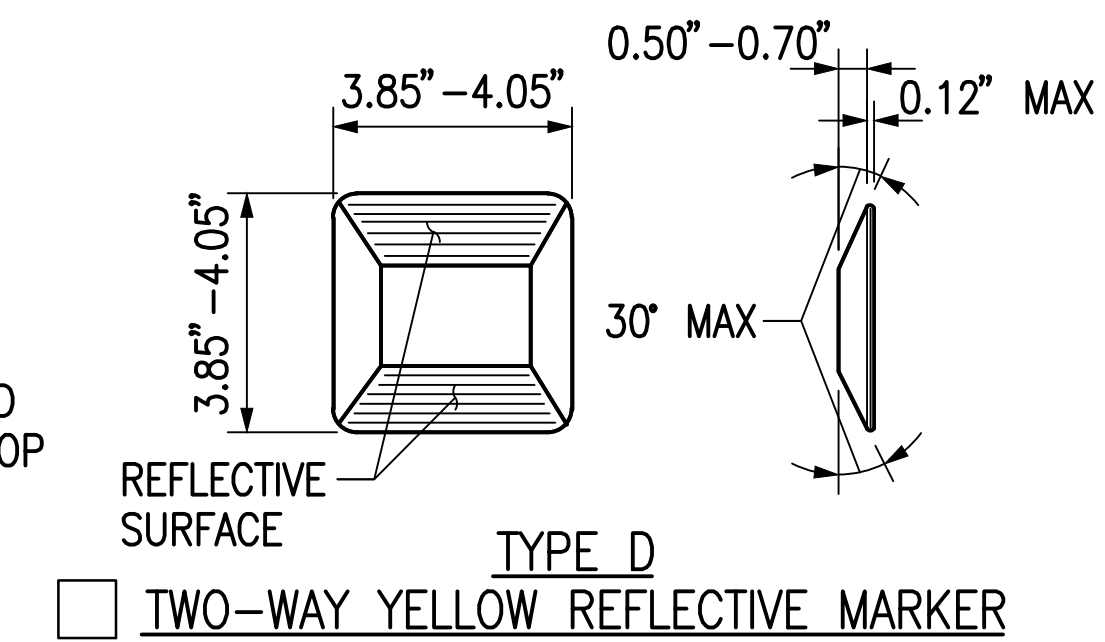
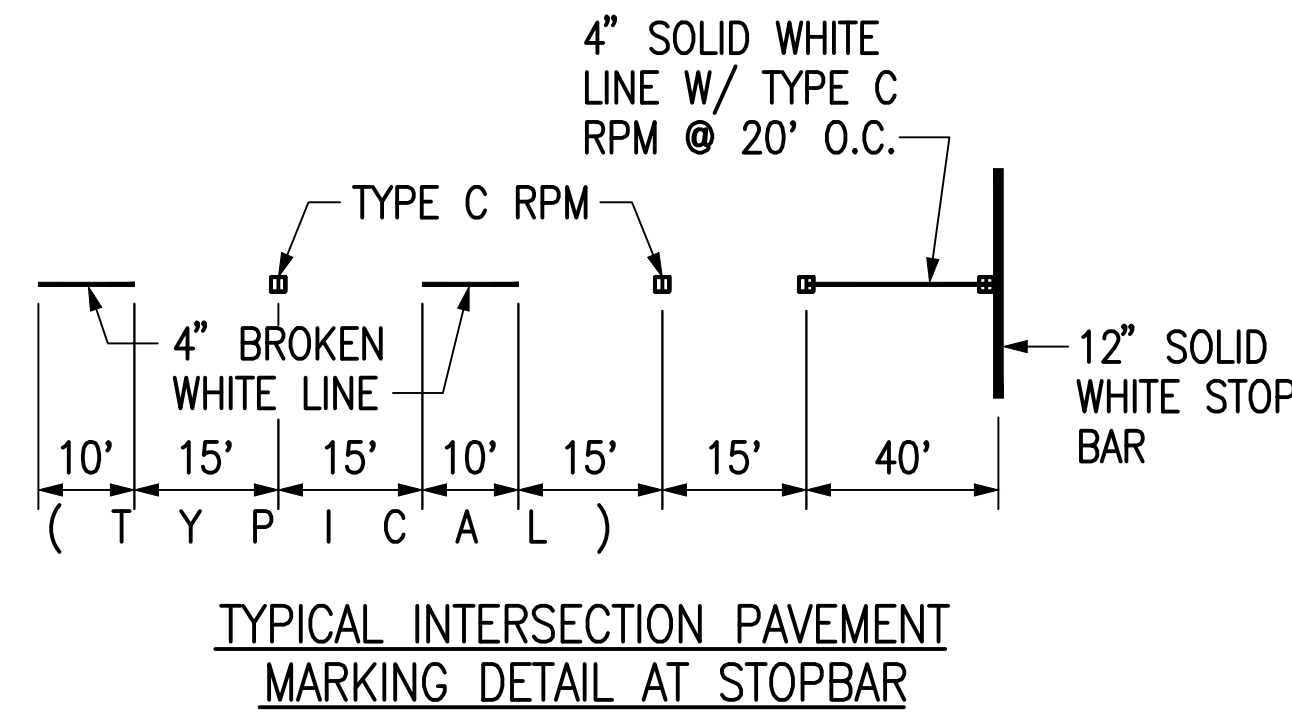
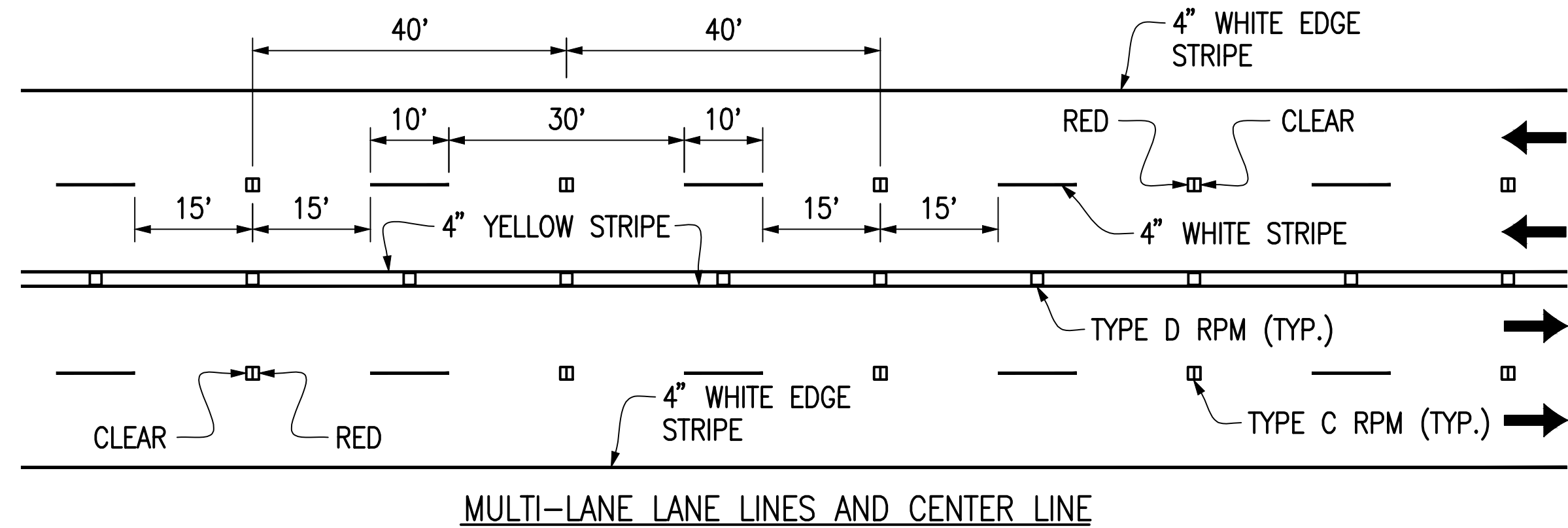
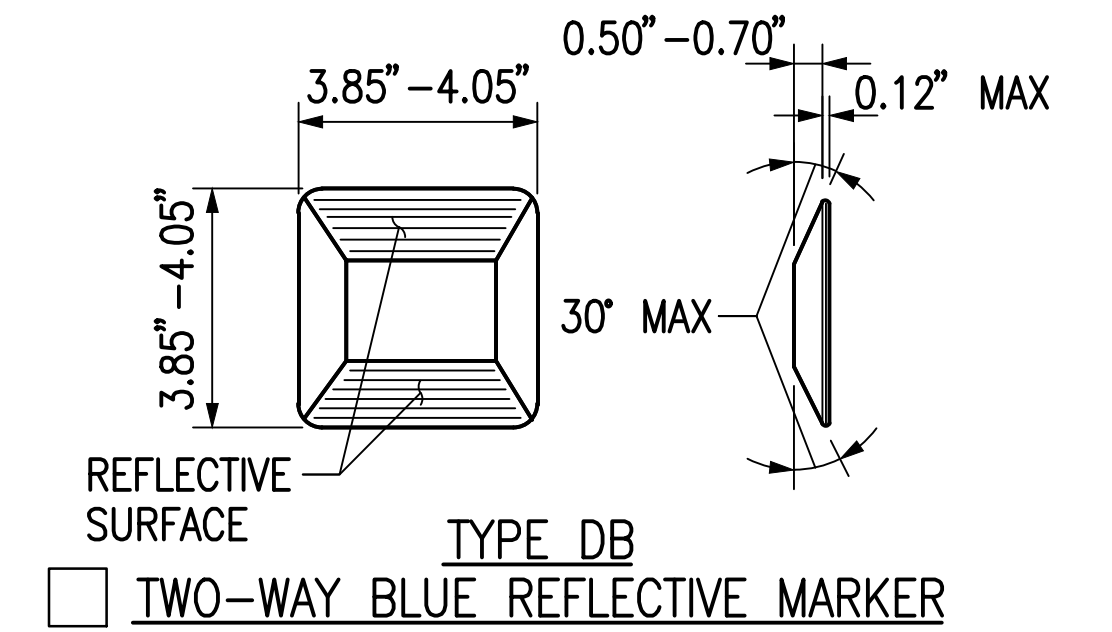
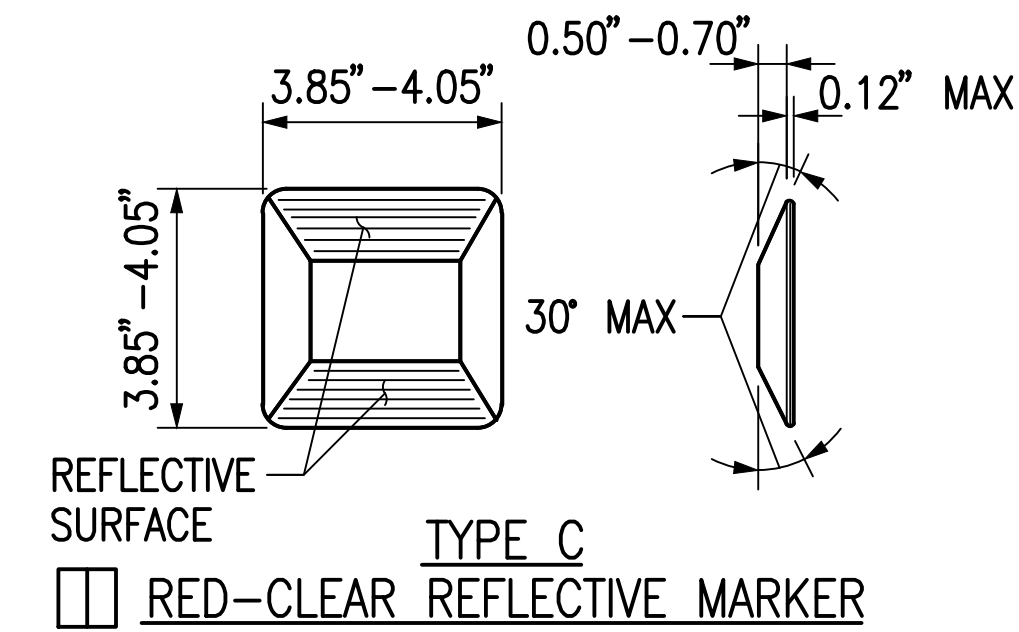
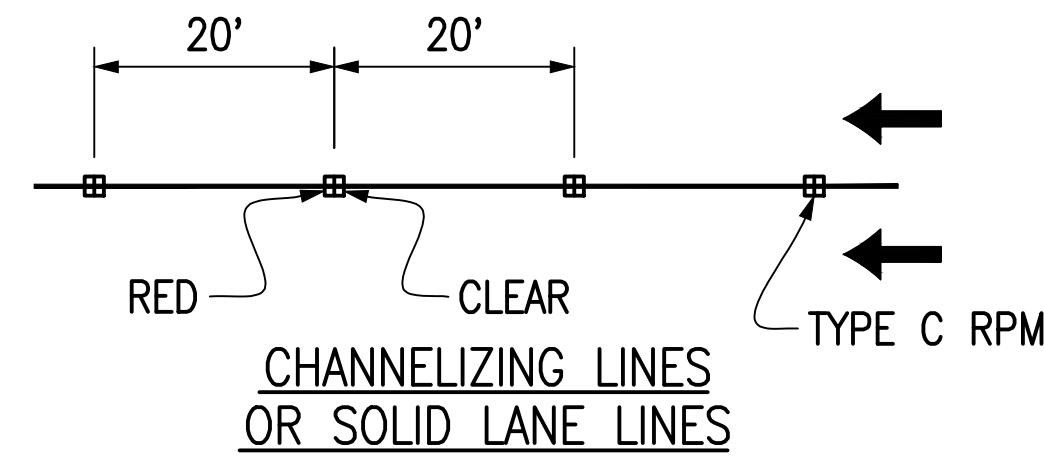
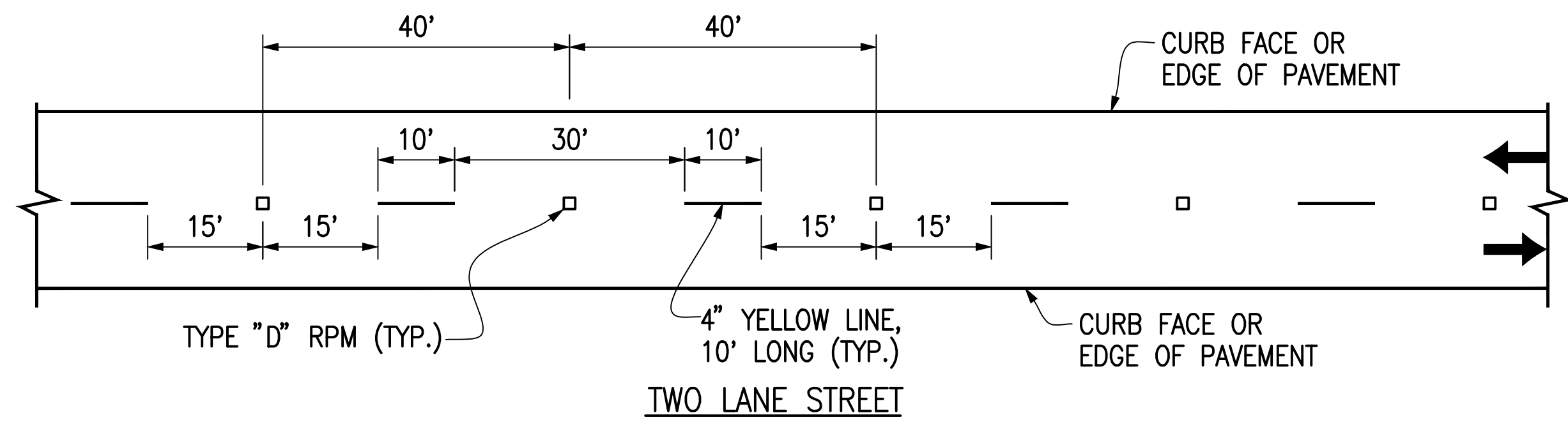
TYPICAL INTERSECTION PAVEMENT MARKINGS (LESS THAN 20' WIDTH)

STANDARD CROSSWALK WITH STOP BAR AT LOCATION WITH NO CURB RAMP

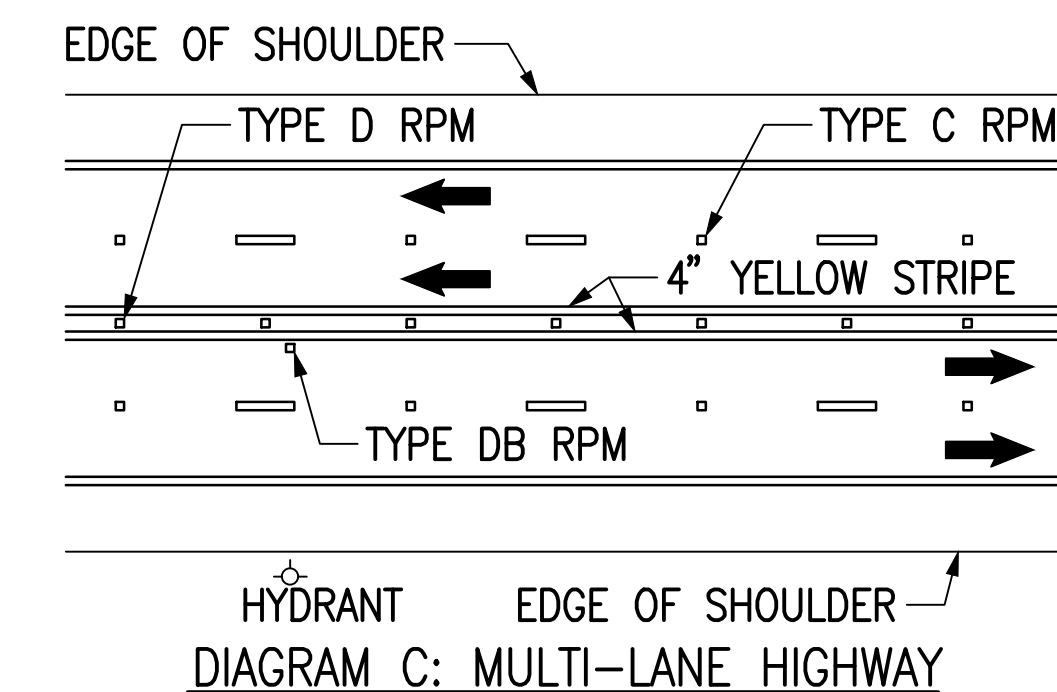
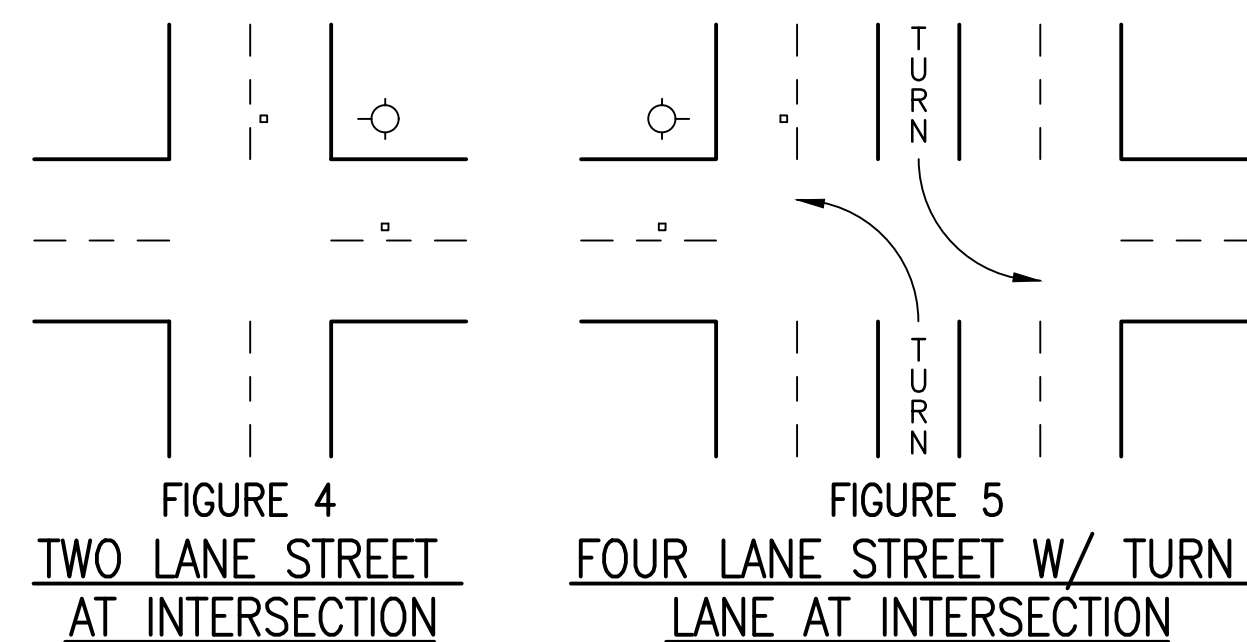
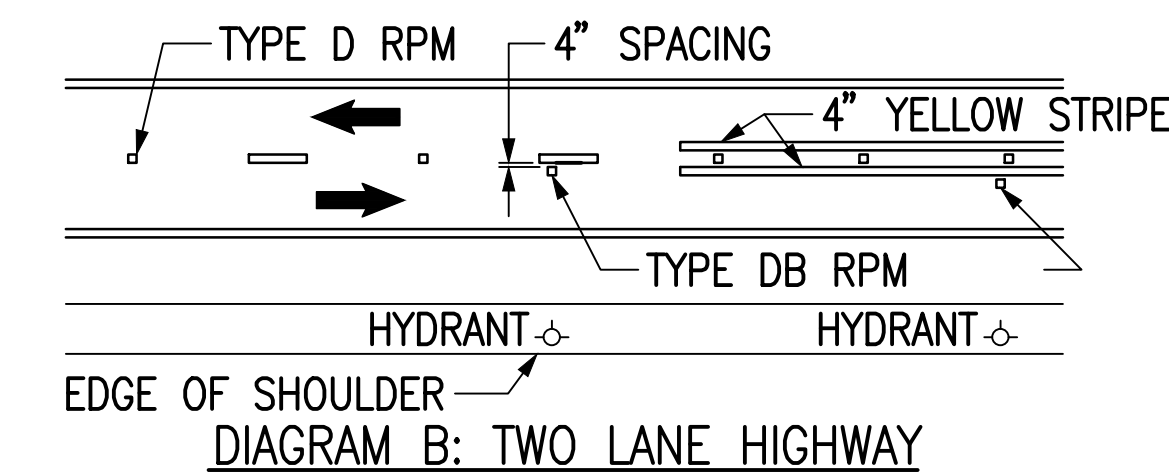
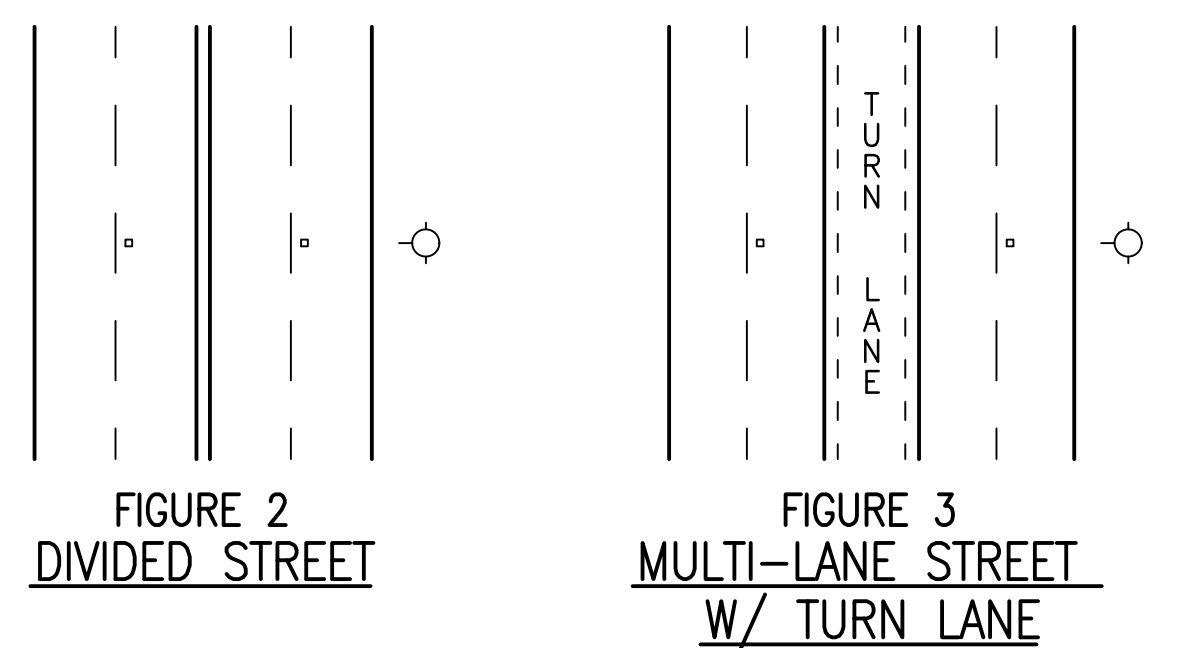
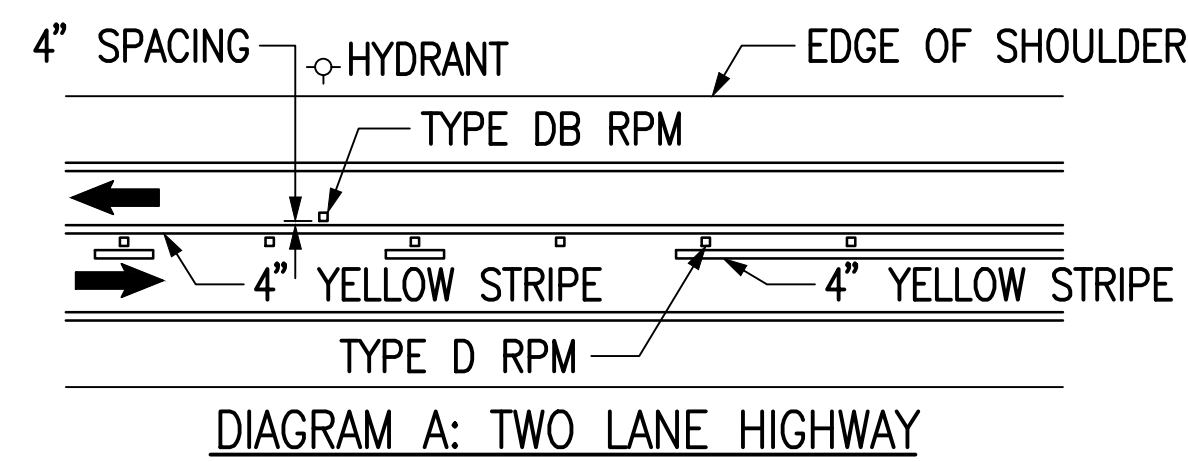
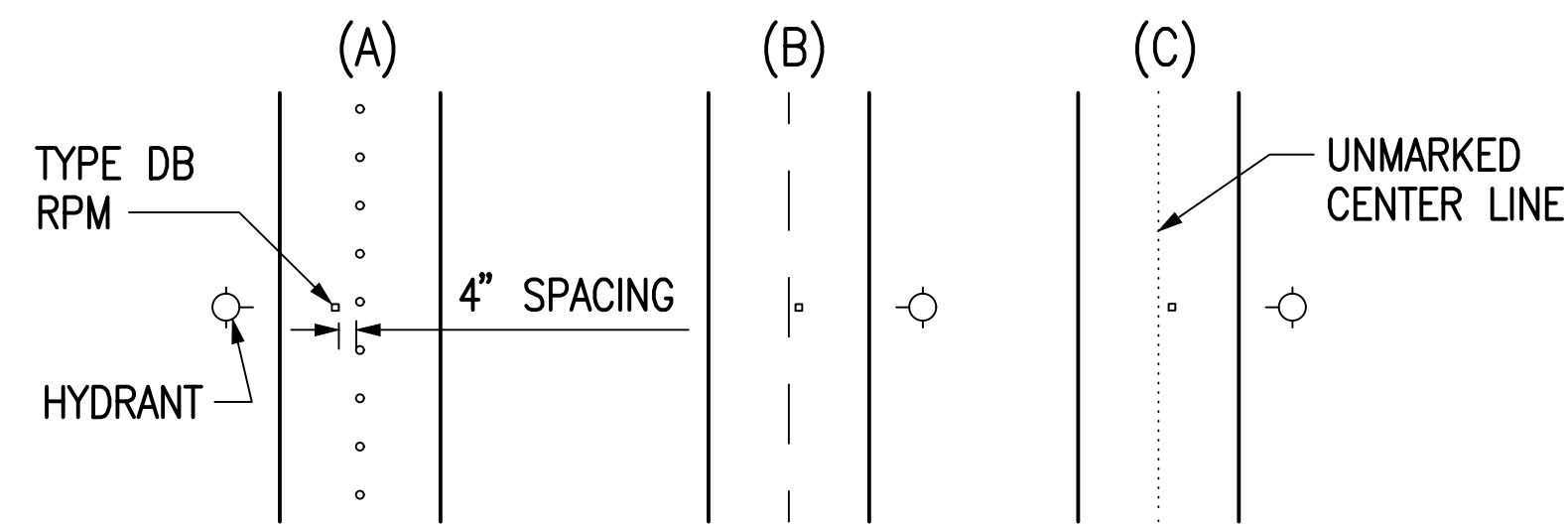
TYPICAL STOP BAR DETAILS

NOT TO SCALE

DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>				
CHECKED: JS					
DATE: SEPTEMBER 2022					
<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING NOTES AND DETAILS - 2</p>					
<p>APPROVED: _____</p> <p>4/30/2024 SIGNATURE EXPIRATION DATE OF THE LICENSE</p>					<p>DWG NO. P-10</p>



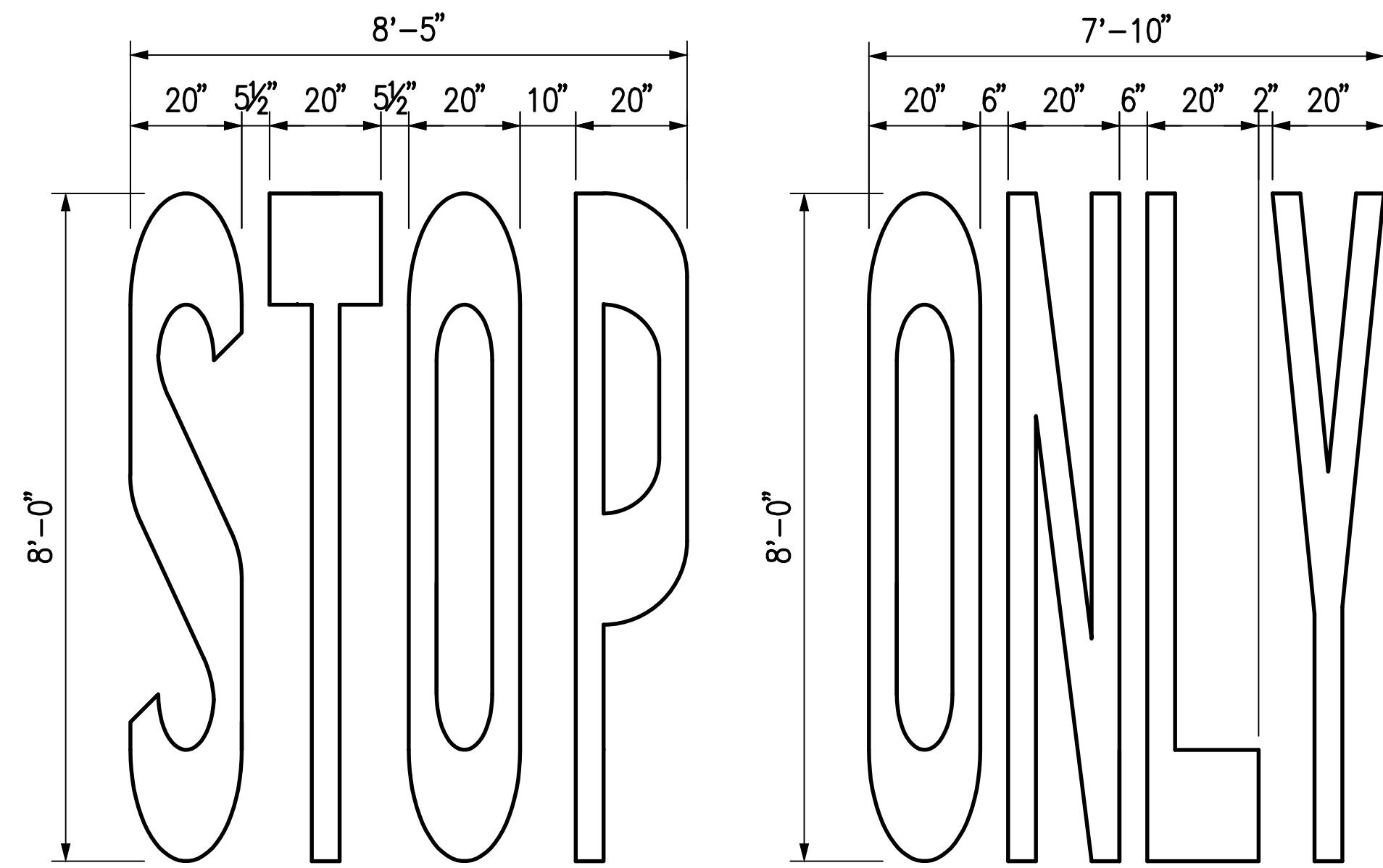
TYPICAL INSTALLATION DETAILS OF RAISED PAVEMENT MARKERS
NOT TO SCALE



HYDRANT MARKER LOCATION FOR STREETS
NOT TO SCALE

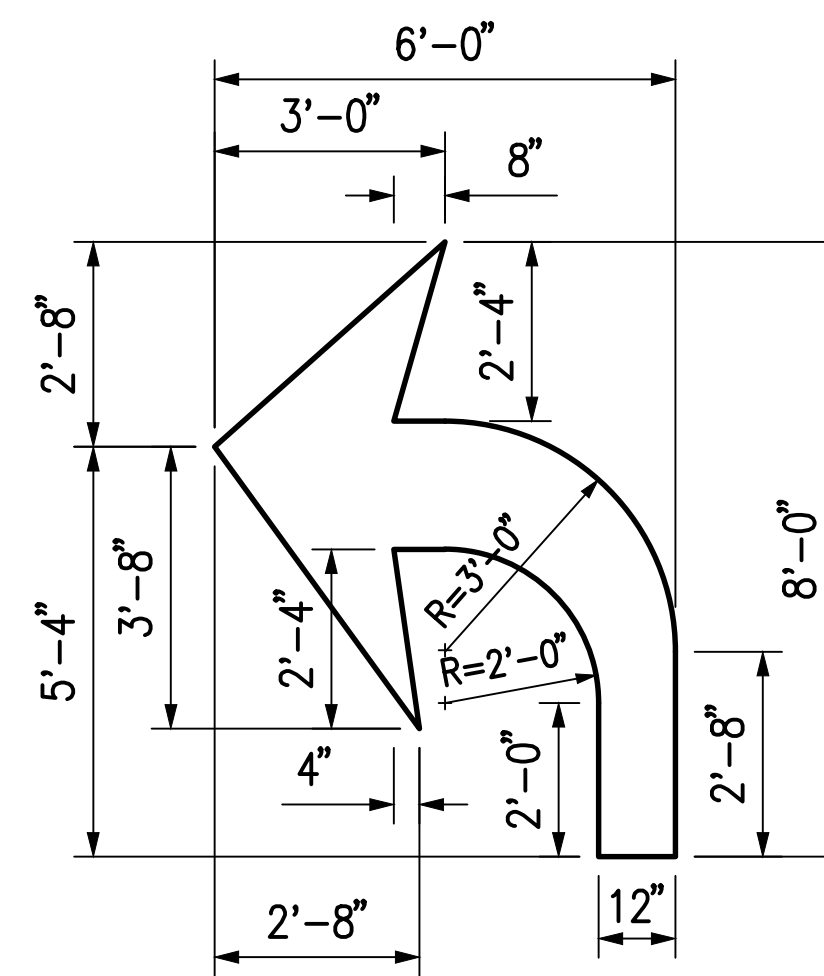
HYDRANT MARKER LOCATION FOR HIGHWAYS
NOT TO SCALE

DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN					
CHECKED: JS					
DATE: SEPTEMBER 2022					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p>SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 4/30/2024</p>	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>				
	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOLULU, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING NOTES AND DETAILS - 3</p>				
	APPROVED:				DWG NO. P-11

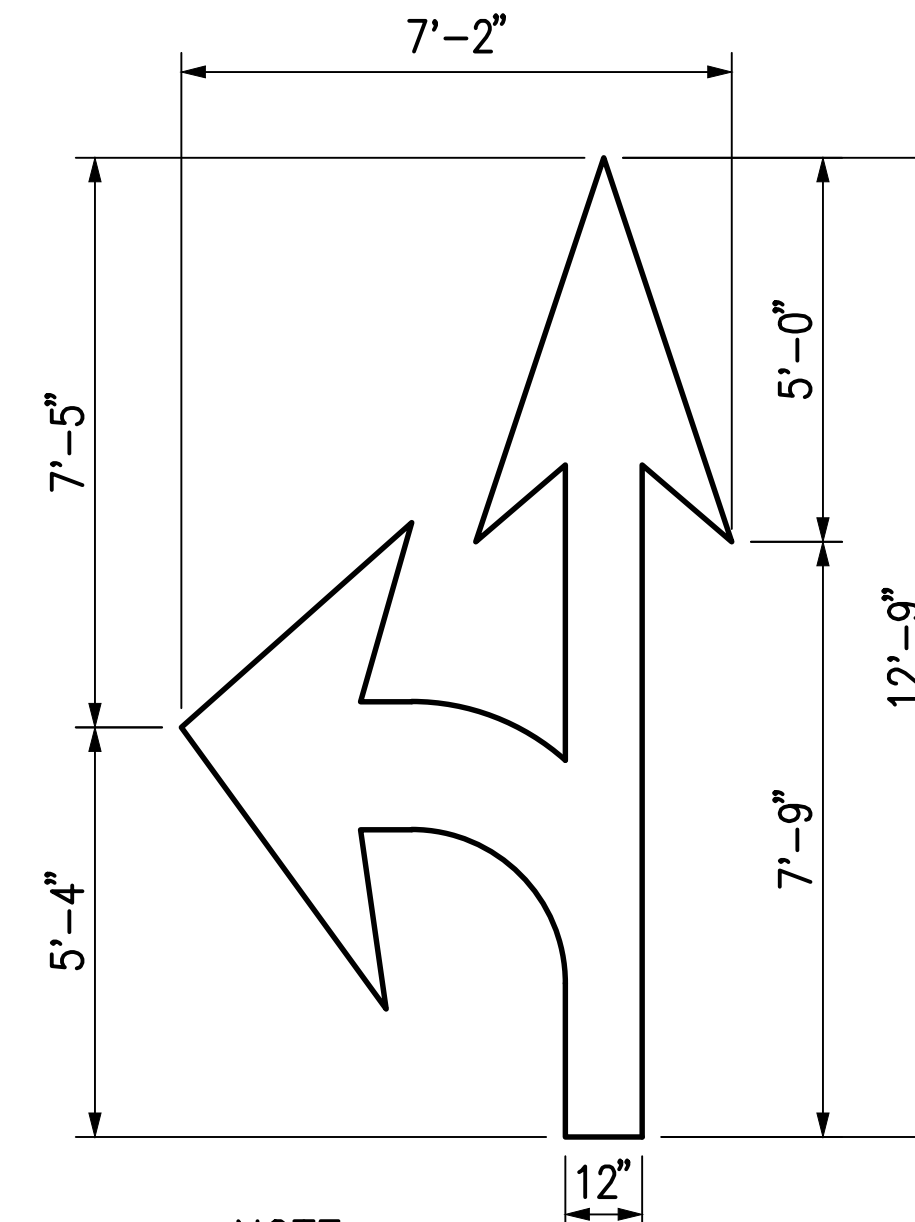


NOTE: PAVEMENT ALPHABETS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL HIGHWAY ADMINISTRATION PUBLICATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE CITY & COUNTY OF HONOLULU PUBLICATION, "TRAFFIC STANDARDS MANUAL, DEPARTMENT OF TRANSPORTATION SERVICES" AND ITS AMENDMENTS.

STANDARD 8'-0" PAVEMENT WORDS
NOT TO SCALE



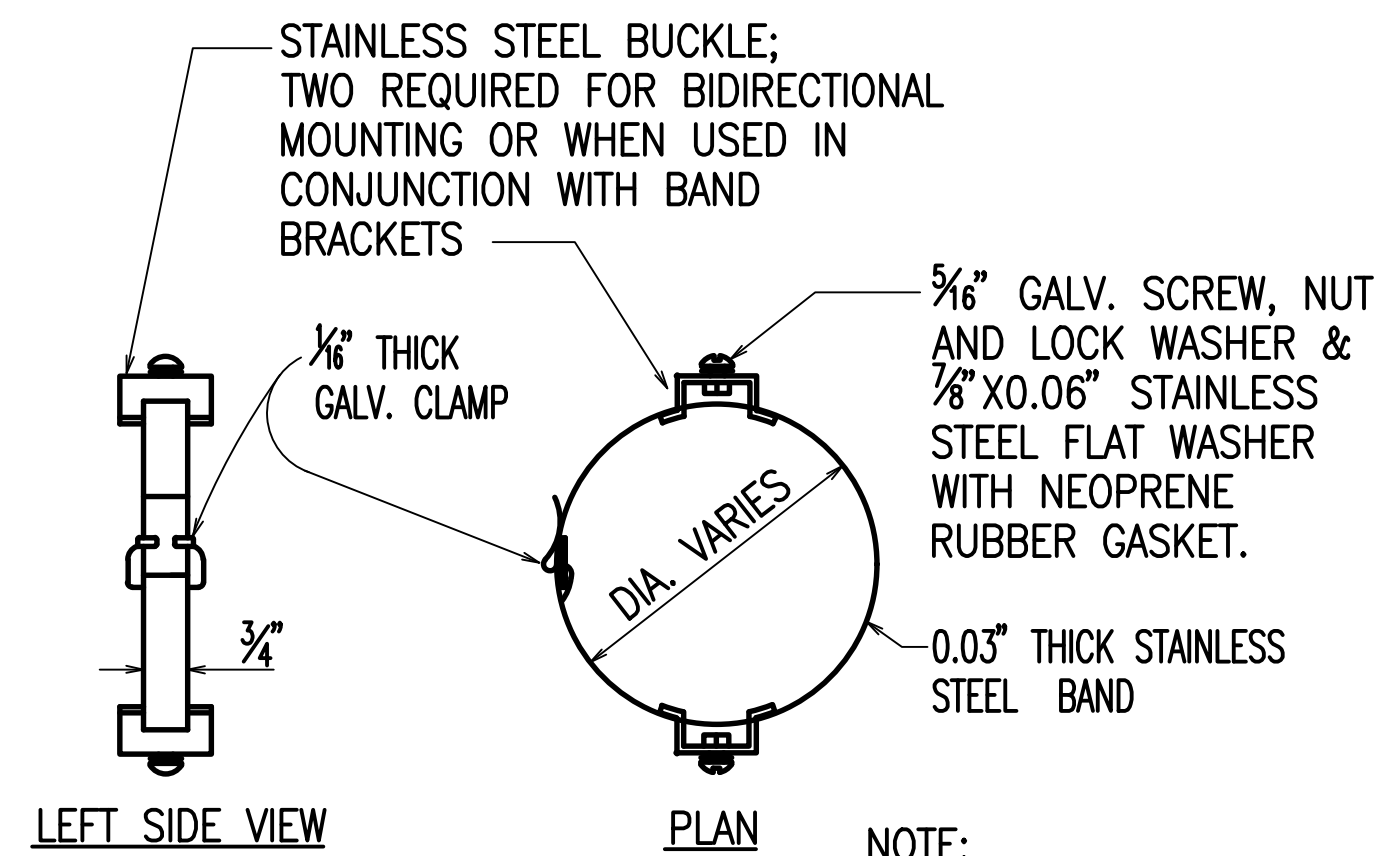
TURN ARROW



NOTE:
SEE STRAIGHT AND TURN ARROWS
FOR DETAILED DIMENSIONS.

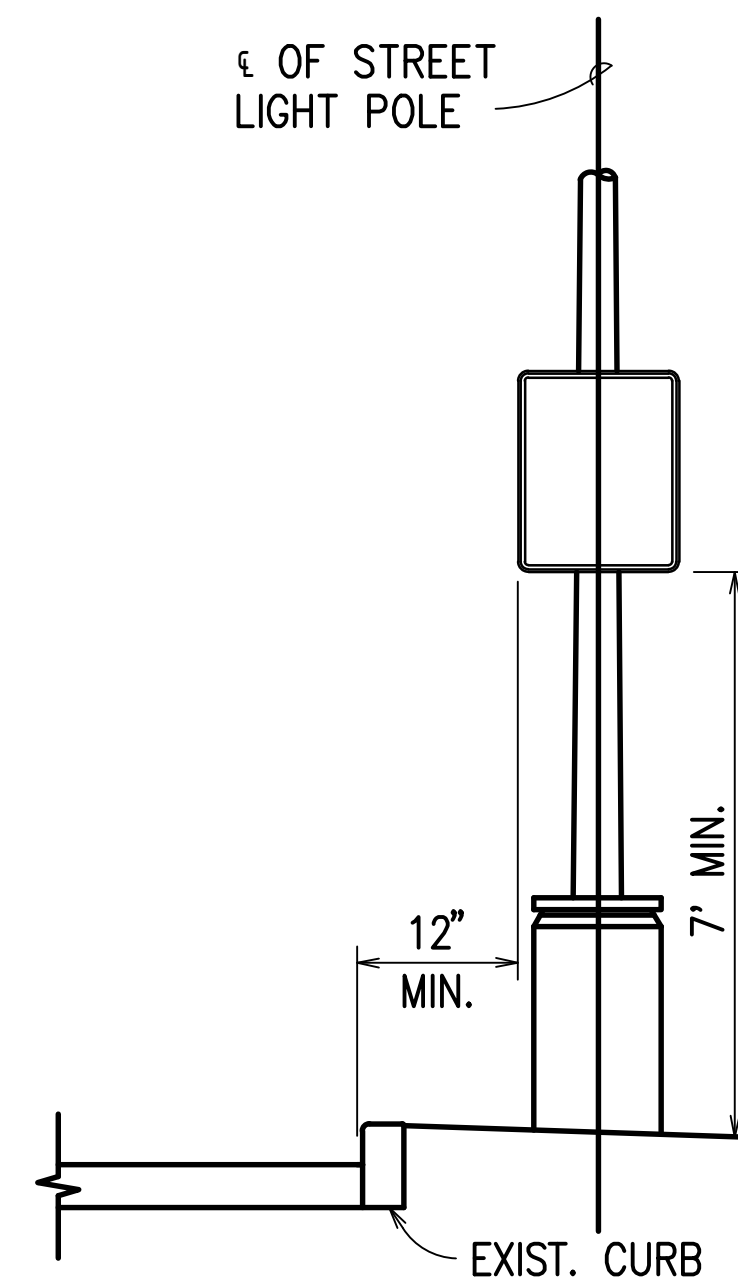
COMBINED ARROWS

TYPICAL PAVEMENT ARROWS
NOT TO SCALE



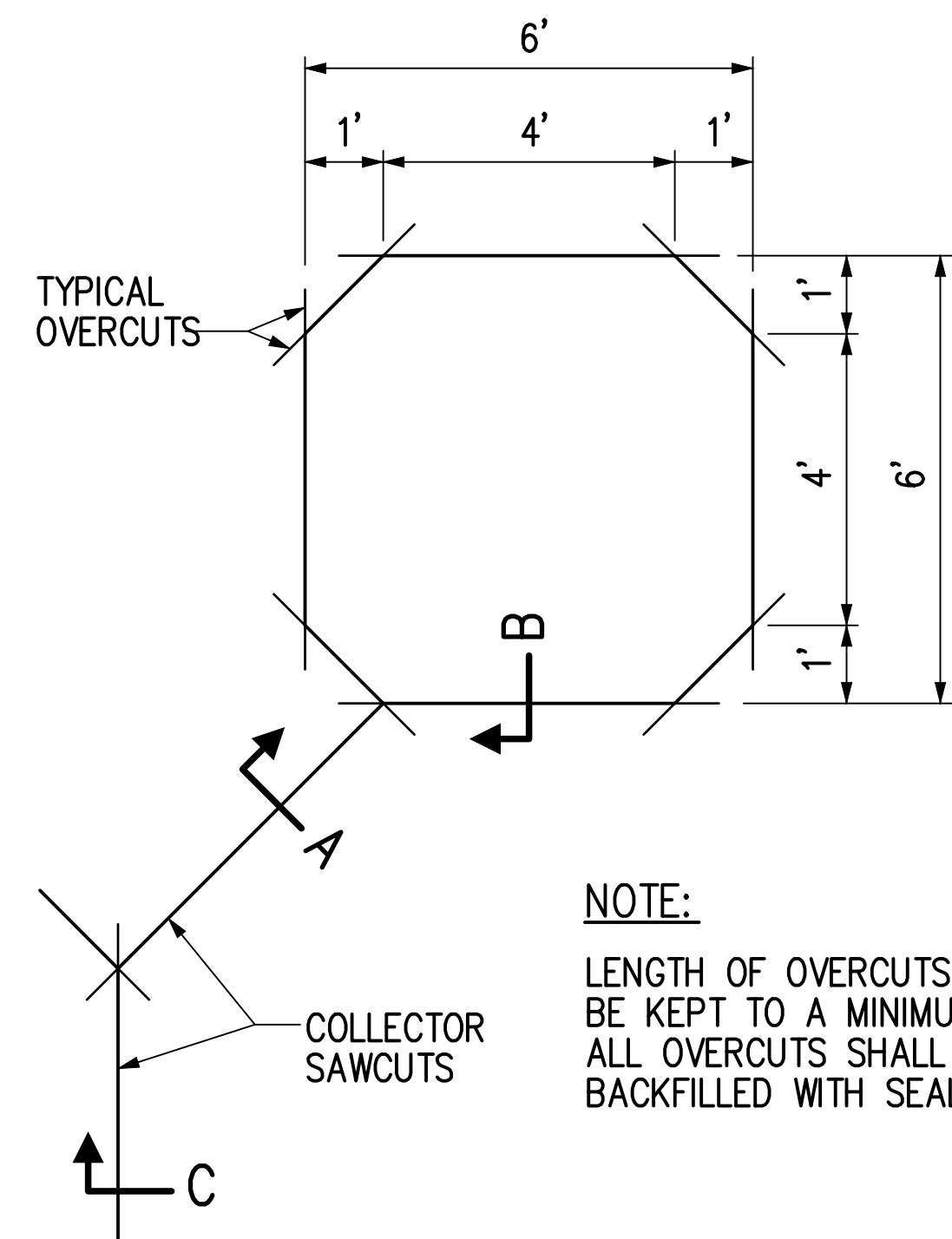
**NEW SIGN ON EXISTING STREET LIGHT
POLE MOUNTING DETAIL**
NOT TO SCALE

NOTE:
MOUNT SIGNS AT 7' MIN.
HEIGHT TO BOTTOM OF SIGN.



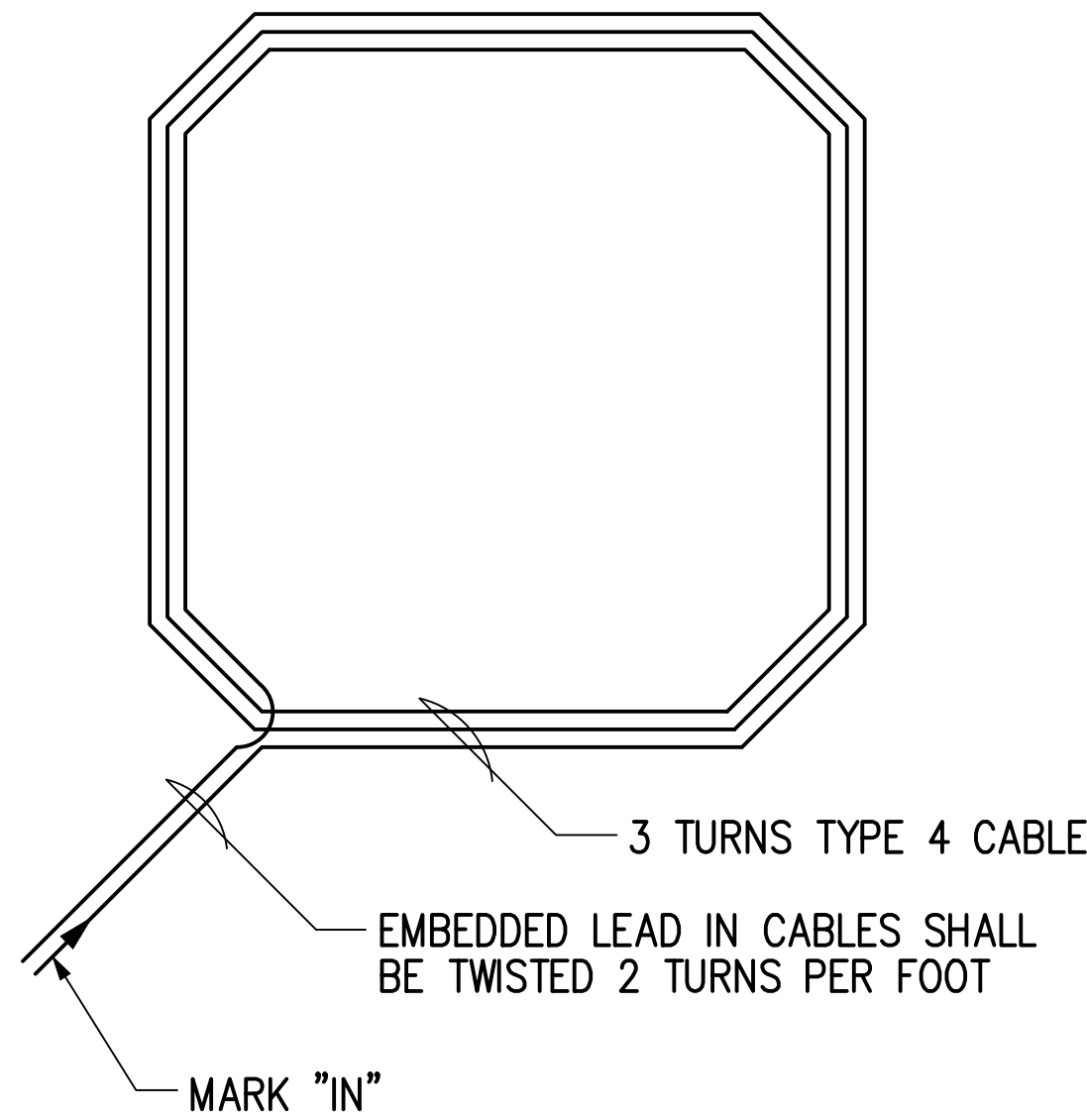
HEIGHT AND LATERAL LOCATION OF SIGN
NOT TO SCALE

DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN					
CHECKED: JS					
DATE: SEPTEMBER 2022					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p>SIGNATURE: <i>[Signature]</i> 4/30/2024 EXPIRATION DATE OF LICENSE</p>	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>				
	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIAU AVENUE ROADWAY REHABILITATION PROJECT - PHASE I HONOULIULI, EWA, OAHU, HAWAII SIGNING & PAVEMENT MARKING DETAILS - 4</p>				
	APPROVED:				DWG NO. P-12

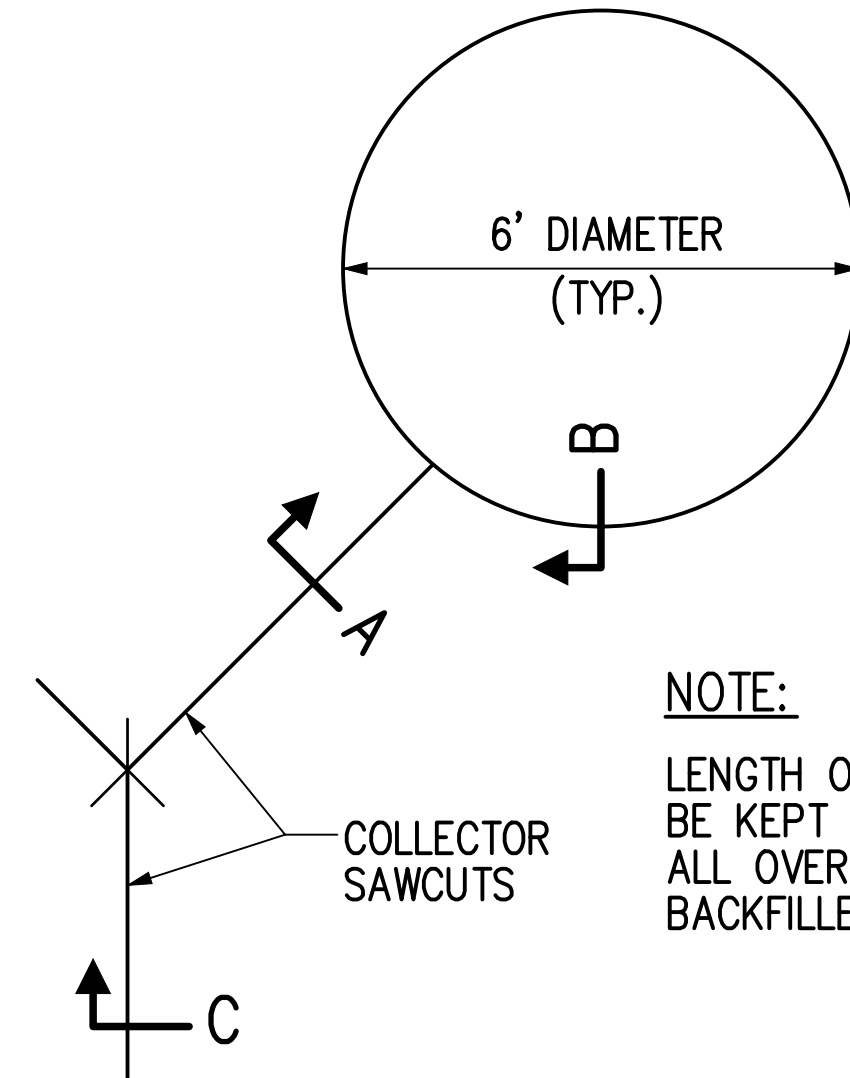


NOTE:
LENGTH OF OVERCUTS SHALL BE KEPT TO A MINIMUM. ALL OVERCUTS SHALL BE BACKFILLED WITH SEALANT.

TYPICAL DETECTOR LOOP SAWCUT DETAIL (SQUARE ALTERNATIVE)
NOT TO SCALE

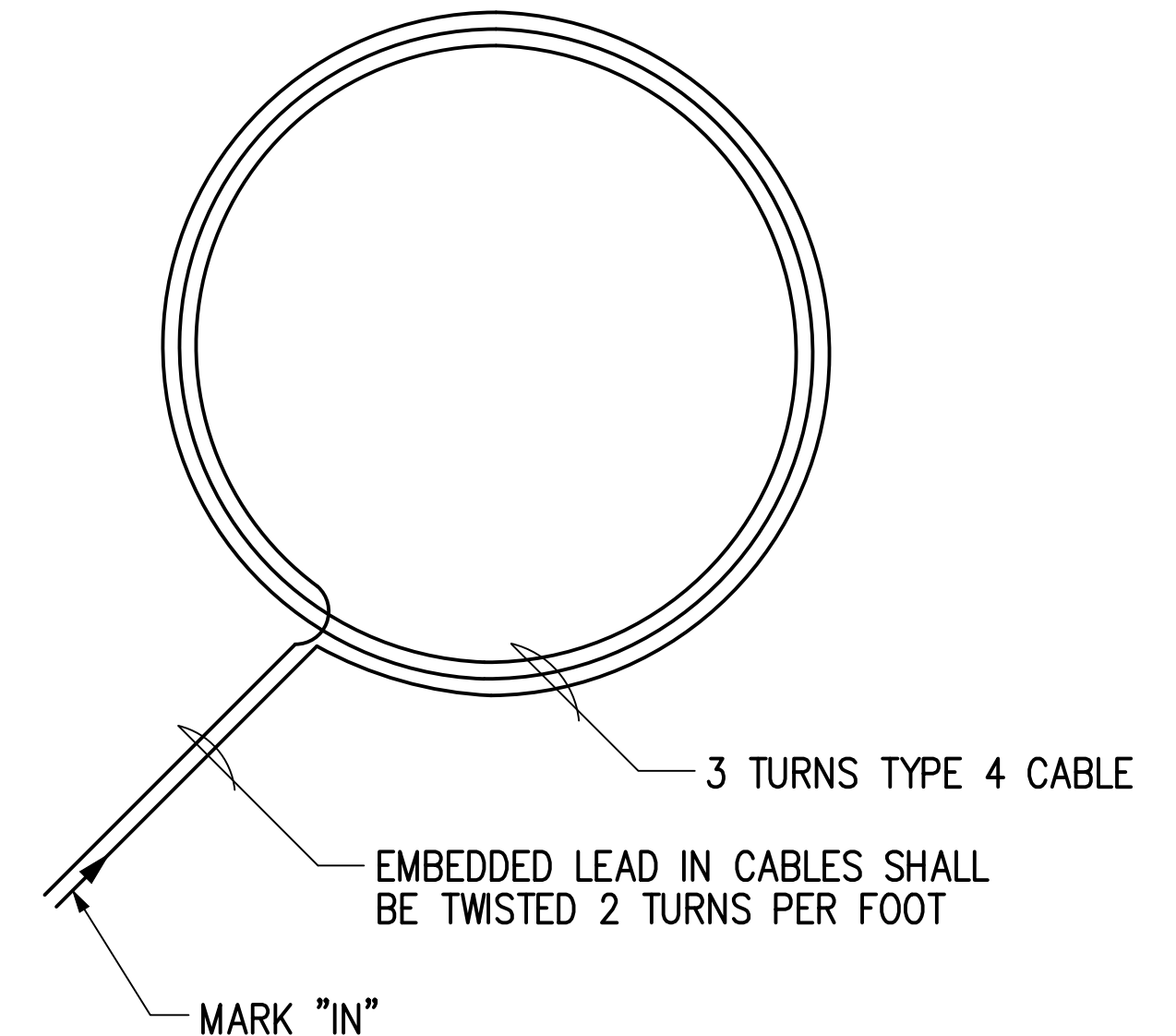


TYPICAL DETECTOR LOOP WIRING DIAGRAM (SQUARE ALTERNATIVE)
NOT TO SCALE

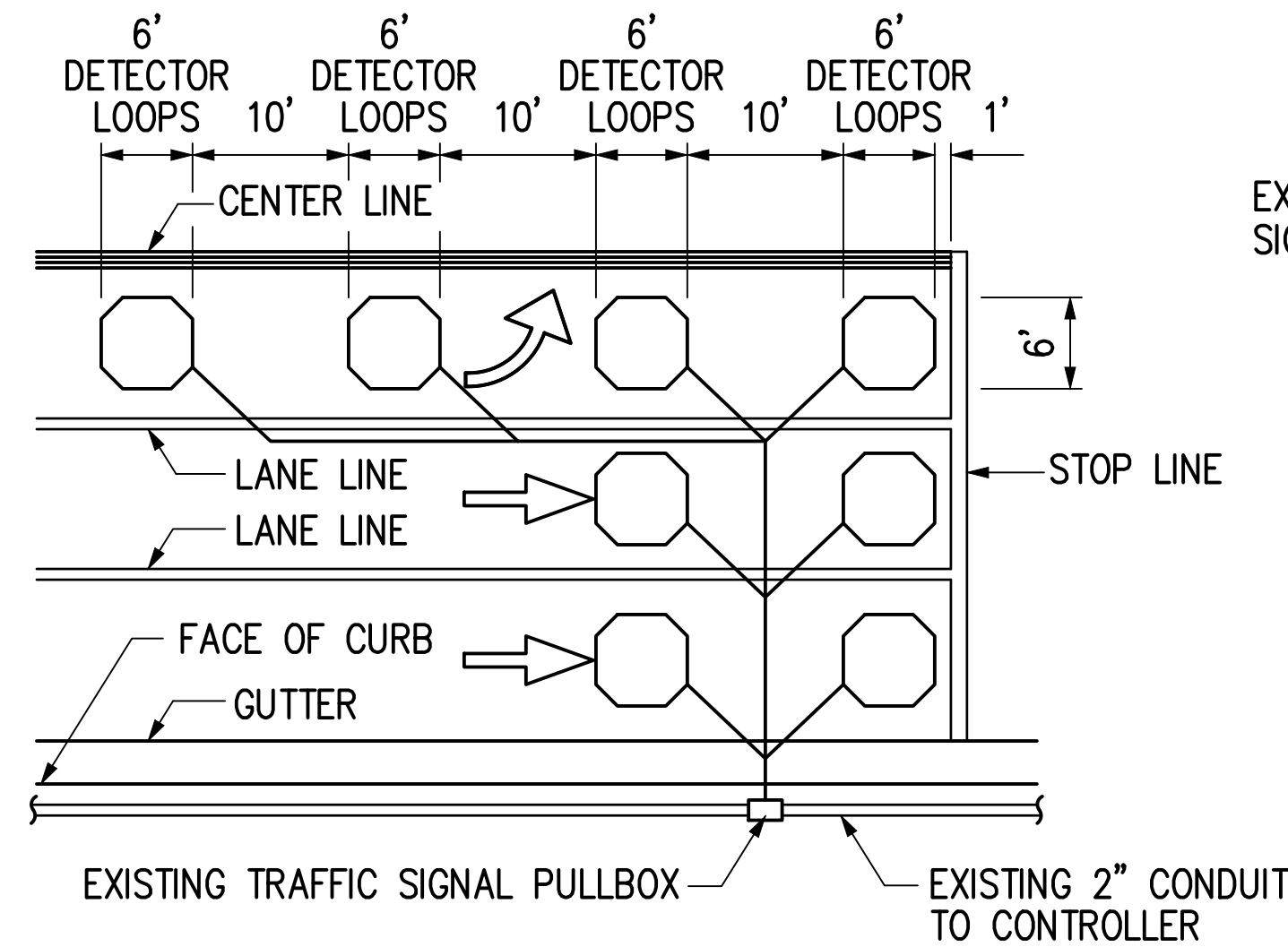


NOTE:
LENGTH OF OVERCUTS SHALL BE KEPT TO A MINIMUM. ALL OVERCUTS SHALL BE BACKFILLED WITH SEALANT.

TYPICAL DETECTOR LOOP SAWCUT DETAIL (CIRCULAR ALTERNATIVE)
NOT TO SCALE

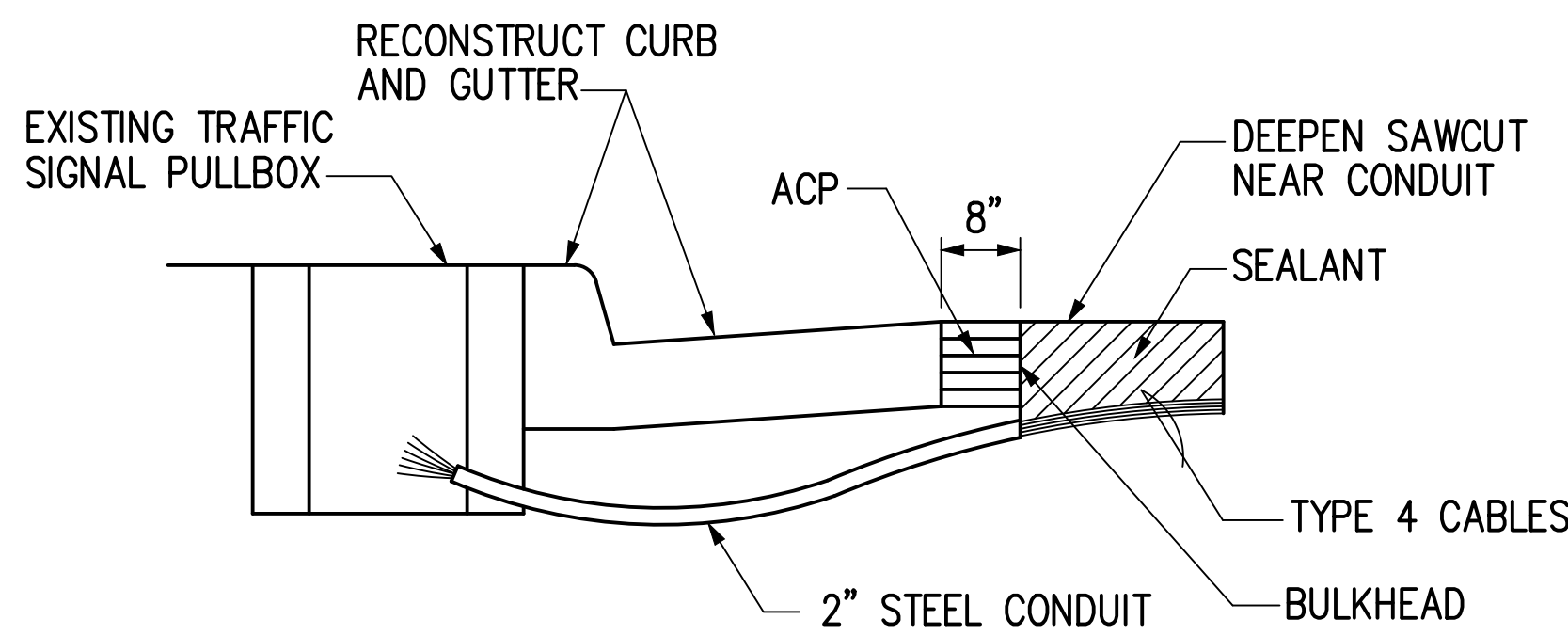


TYPICAL DETECTOR LOOP WIRING DIAGRAM (CIRCULAR ALTERNATIVE)
NOT TO SCALE



- NOTES:**
- CENTER DETECTOR LOOPS IN LANES.
 - COLLECTOR CABLES SHALL BE TWISTED 2 TURNS PER FOOT.
 - NUMBER OF LOOPS AND LOCATIONS VARY. SEE PROJECT PLANS.
 - NUMBER AND LOCATIONS OF COLLECTOR SAWCUTS MAY BE VARIED IN THE FIELD.
 - LOOPS MAY BE PROVIDED AS SQUARE OR CIRCULAR.

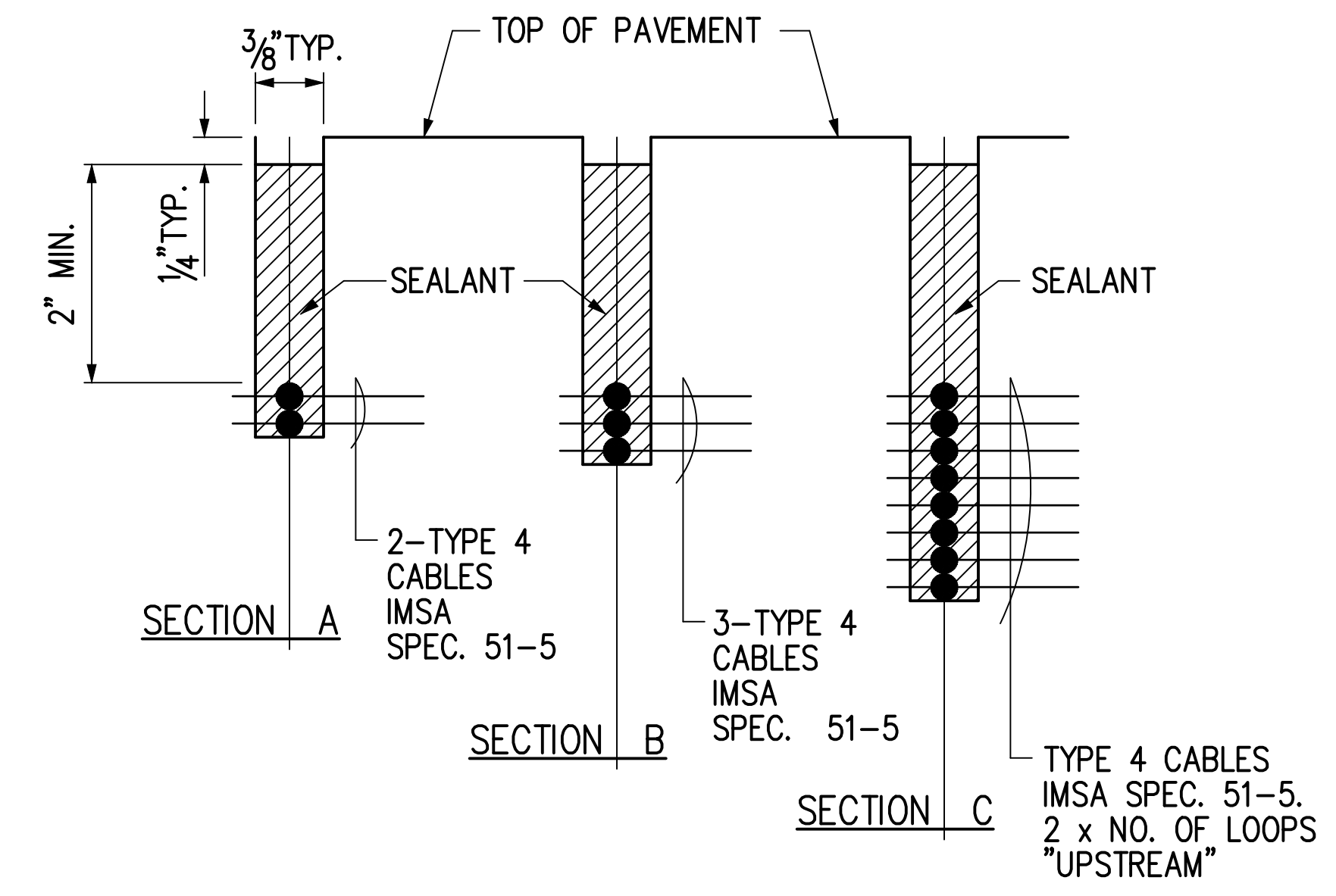
TYPICAL DETECTOR LOOP LAYOUT
NOT TO SCALE



NOTES ON CONSTRUCTION AT END OF SAWCUT:

- SEAL ROADWAY END OF CONDUIT AFTER INSTALLATION OF CONDUCTORS.
- INSTALL BULKHEAD ACROSS CONDUIT TRENCH.
- PLACE SEALANT IN SAWCUT.
- BACKFILL OVER CONDUIT WITH NEW ACP.
- RECONSTRUCT CURB AND GUTTER AS REQUIRED.

DETAIL OF DETECTOR LOOP INSTALLATION AT EDGE OF PAVEMENT
NOT TO SCALE



TYPICAL SECTIONS THROUGH DETECTOR LOOP
NOT TO SCALE

NOTE:
DETECTOR LOOPS MAY BE PROVIDED AS SQUARE OR CIRCULAR.

DESIGN: MN	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: MN					
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DATE: SEPTEMBER 2022					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p>4/30/2024 EXPIRATION DATE OF LICENSE</p>	<p>WSP USA Inc. 1001 Bishop Street, Suite 2400 Honolulu, HI 96813 TEL: +1.808.531.7094 FAX: +1.808.528.2368</p>				
	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIUA AVENUE ROADWAY REHABILITATION PROJECT - PHASE HONOLULU, EWA, OAHU, HAWAII VEHICLE DETECTOR LOOP DETAILS</p>				
	APPROVED:				DWG NO. P-13

STRUCTURAL GENERAL NOTES

1. GENERAL SPECIFICATIONS:

A. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF THE CITY AND COUNTY OF HONOLULU, DATED SEPTEMBER 1986, WITH ACCOMPANYING SPECIAL PROVISIONS.

2. DESIGN SPECIFICATIONS:

B. AASHTO 2014 LRFD BRIDGE DESIGN SPECIFICATIONS, (SEVENTH EDITION) AND ITS SUBSEQUENT INTERIM REVISIONS.

3. GENERAL:

A. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY. ANY REQUIREMENT OCCURRING IN ONE DOCUMENT IS AS BINDING AS THOUGH OCCURRING IN ALL. A STRICTER REQUIREMENT PREVAILS OVER ANY LESS STRICT REQUIREMENT. THE STRICTER REQUIREMENT WILL BE THE REQUIREMENT THAT PROVIDES THE GREATER PRODUCT LIFE, DURABILITY, STRENGTH, AND FUNCTION.

B. EXISTING CONDITIONS ARE SHOWN ON THE DRAWINGS TO THE BEST OF THE DESIGNER'S KNOWLEDGE AND ARE INTENDED TO AID THE CONTRACTOR DURING CONSTRUCTION. EXISTING DIMENSIONS SHOWN MAY NOT BE EXACT AND ARE PROVIDED FOR INFORMATION ONLY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE PROMPTLY CALLED TO THE ATTENTION OF THE OFFICER-IN-CHARGE AND SHALL BE RESOLVED PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WORK.

4. CONCRETE:

A. ALL CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY COMPRESSIVE STRENGTHS, UNLESS SHOWN OTHERWISE:

ITEM	28-DAY STRENGTH (PSI)
1). CATCH BASIN TOP SLAB	4,000
2). ALL CONCRETE UNLESS OTHERWISE NOTED	4,000

B. ALL CONCRETE SHALL HAVE A MAXIMUM W/C RATIO OF 0.45.

C. A SHRINKAGE REDUCING ADMIXTURE (SRA), MASTERLIFE SRA 035 BY BASF OR ECLIPSE BY W.R. GRACE & CO. OR APPROVED SUBSTITUTE, SHALL BE ADDED TO THE CONCRETE MIX UNDER NOTE 4.A.1). THE MINIMUM DOSAGE REQUIREMENT SHALL BE ONE GALLON PER CUBIC YARD OF CONCRETE.

D. A MIGRATING CORROSION INHIBITOR AMINE CARBOXYLATE WATER-BASED ADMIXTURE, CORTEC MCI-2005 NS OR APPROVED SUBSTITUTE, SHALL BE ADDED TO THE CONCRETE MIX UNDER NOTE 4.A.1) AND 4.A.2). THE MINIMUM DOSAGE REQUIREMENT SHALL BE 1-1/2 PINTS PER CUBIC YARD OF CONCRETE.

E. CONCRETE FOR ITEM 4.A.1). SHALL CONTAIN A SYNTHETIC MACROFIBER, GRACE STRUX 90/40 OR FORTA FERRO 1-1/2" LONG OR APPROVED SUBSTITUTE, AT A DOSAGE OF 7.5 POUNDS PER CUBIC YARD OF CONCRETE.

F. THE USE OF ANY CALCIUM CHLORIDE IN ANY CONCRETE IS PROHIBITED.

G. ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER PLACEMENT BY THE USE OF A CURING COMPOUND, OR OTHER APPROVED METHODS. CURING COMPOUND SHALL BE SINAK LITHIUM CURE 1000 OR APPROVED SUBSTITUTE. FOLLOW MANUFACTURER'S RECOMMENDED COVERAGE RATE.

H. POLYMER MODIFIED REPAIR MORTAR SHALL BE A FACTORY BLENDED CEMENTITIOUS PATCHING MATERIAL (CONTAINING NO GYPSUM) COMBINED WITH A POLYMER TYPE ADMIXTURE, WATER, AND A PENETRATING CORROSION INHIBITOR. IT SHALL CONFORM TO THE FOLLOWING MINIMUM MATERIAL PROPERTIES.

- 1) 7-DAY COMPRESSIVE STRENGTH - 4,000 PSI
- 2) 28-DAY COMPRESSIVE STRENGTH - 5,000 PSI
- 3) 28-DAY SPLITTING TENSILE STRENGTH - 750 PSI
- 4) 28-DAY FLEXURAL STRENGTH - 2,000 PSI

I. CONCRETE BONDING AGENT SHALL BE A TWO-COMPONENT, 100% SOLIDS, MOISTURE-TOLERANT STRUCTURAL EPOXY ADHESIVE. 14-DAY BOND STRENGTH SHALL BE A MINIMUM OF 2,000 PSI IN ACCORDANCE WITH ASTM C882.

5. REINFORCING STEEL:

A. STRENGTHS - UNLESS OTHERWISE NOTED ON PLAN, ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60, DEFORMED BARS. EPOXY COATED BAR SHALL BE ASTM A775 DEFORMED GRADE 60 BAR.

B. UNLESS OTHERWISE SHOWN, THE MINIMUM COVERING MEASURED FROM THE SURFACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING BARS SHALL BE:

- 1) CONCRETE POURED AGAINST EARTH 3"
- 2) ALL OTHERS 2"

C. BAR BENDS, HOOKS, OFFSETS, AND LAP-SPLICES SHALL BE IN ACCORDANCE WITH THE CRSI RECOMMENDATIONS AND AS DETAILED IN THE DRAWINGS.

D. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

E. MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS SHALL BE 1-1/2 TIMES THE MAXIMUM SIZE OF THE COARSE AGGREGATE OR 1-1/2 INCH, WHICHEVER IS GREATER.

F. ALL DIMENSIONS RELATING TO REINFORCING BARS ARE TO CENTERS OF BARS UNLESS OTHERWISE NOTED.

G. REINFORCING BARS SHALL BE SECURELY TIED AT ALL INTERSECTIONS AND LAP SPLICES EXCEPT WHERE THE SPACING OF INTERSECTIONS IS LESS THAN ONE FOOT IN EACH DIRECTION, IN WHICH CASE ALTERNATE INTERSECTIONS SHALL BE TIED.

6. GLASS FIBER REINFORCED POLYMER BAR

A. GLASS FIBER REINFORCED POLYMER (GFRP) BAR SHALL HAVE A MINIMUM TENSILE STRENGTH OF 110 KSI FOR #4 BAR OR SMALLER.

B. THE MODULUS OF ELASTICITY OF THE GFRP BAR SHALL BE A MINIMUM OF 6,700,000 PSI.

C. MINIMUM CONCRETE COVER FOR GFRP BARS SHALL BE 1 INCH UNLESS OTHERWISE NOTED.

D. ALL GFRP BARS SHALL BE SECURELY TIED IN PLACE.

E. THE GFRP BARS MAY BE CUT IN THE FIELD WITH A MASONRY OR DIAMOND BLADE.

F. ALL WORK FOR GFRP BARS INCLUDING MATERIALS AND BENDS SHALL FOLLOW MANUFACTURERS RECOMMENDATIONS.

7. CONSTRUCTION NOTES:

A. EXCEPT AS OTHERWISE NOTED, ALL VERTICAL DIMENSIONS ARE MEASURED PLUMB.

B. CONSTRUCTION JOINTS MAY BE RELOCATED OR ADDITIONAL ONES ADDED SUBJECT TO THE APPROVAL OF THE OFFICER-IN-CHARGE. ALL CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED TO 1/4" AMPLITUDE.

C. UNLESS OTHERWISE NOTED, ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4 INCH X 3/4 INCH.

D. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES, UTILITIES, AND EXISTING AND NEW STRUCTURES FROM DAMAGE DUE TO CONSTRUCTION.

E. EPOXY FOR POST-INSTALLED ANCHORS SHALL BE HILTI-RE 500 V3 OR APPROVED SUBSTITUTE. MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED.


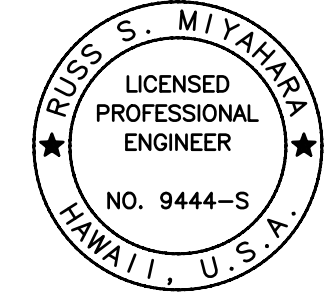
F. DRILLED HOLES IN EXISTING CONCRETE FOR REINFORCING STEEL AND GFRP DOWELS SHALL NOT BE LEFT UNFILLED FOR MORE THAN 8 HOURS. EPOXY IN DRILLED HOLES SHALL BE ABLE TO DEVELOP THE FULL STRENGTH OF THE DOWELS PRIOR TO POURING CONCRETE AROUND REINFORCING STEEL DOWELS.

G. LOCATION OF DRILLED HOLES SHOWN IN PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL LOCATE ALL REINFORCING STEEL AND ADJUST THE LOCATION OF HOLES TO CLEAR ALL REINFORCING BARS. FINAL HOLE LOCATIONS ARE SUBJECT TO THE APPROVAL OF THE OFFICER-IN-CHARGE.

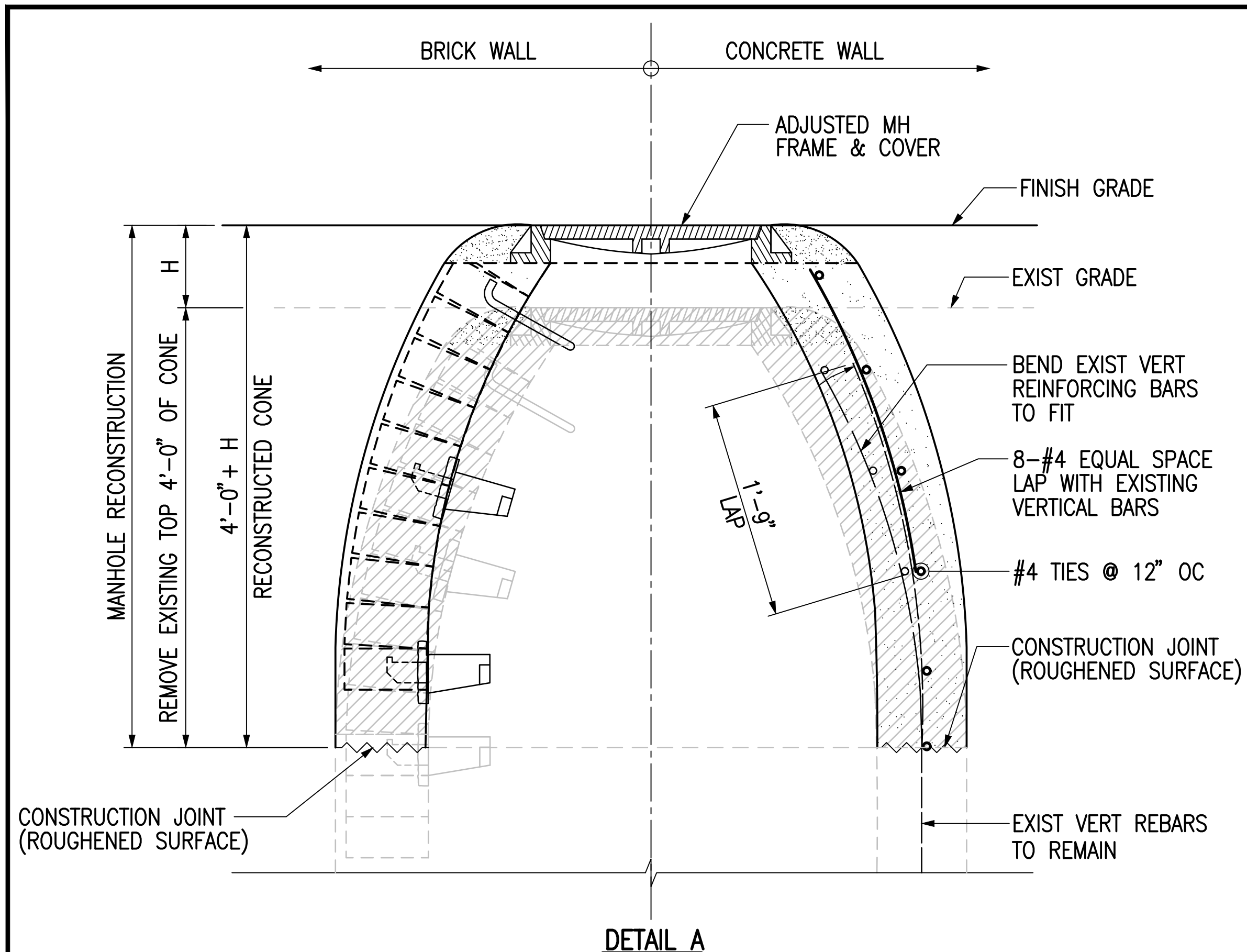
H. ANY DEFECTIVE CONCRETE THAT THE CONTRACTOR DISCOVERS THROUGHOUT THE CONSTRUCTION PROCESS THAT IS NOT COVERED IN THE CONTRACT QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE OFFICER-IN-CHARGE. IF APPROVED, LOCATION SHALL BE REPAIRED.

I. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

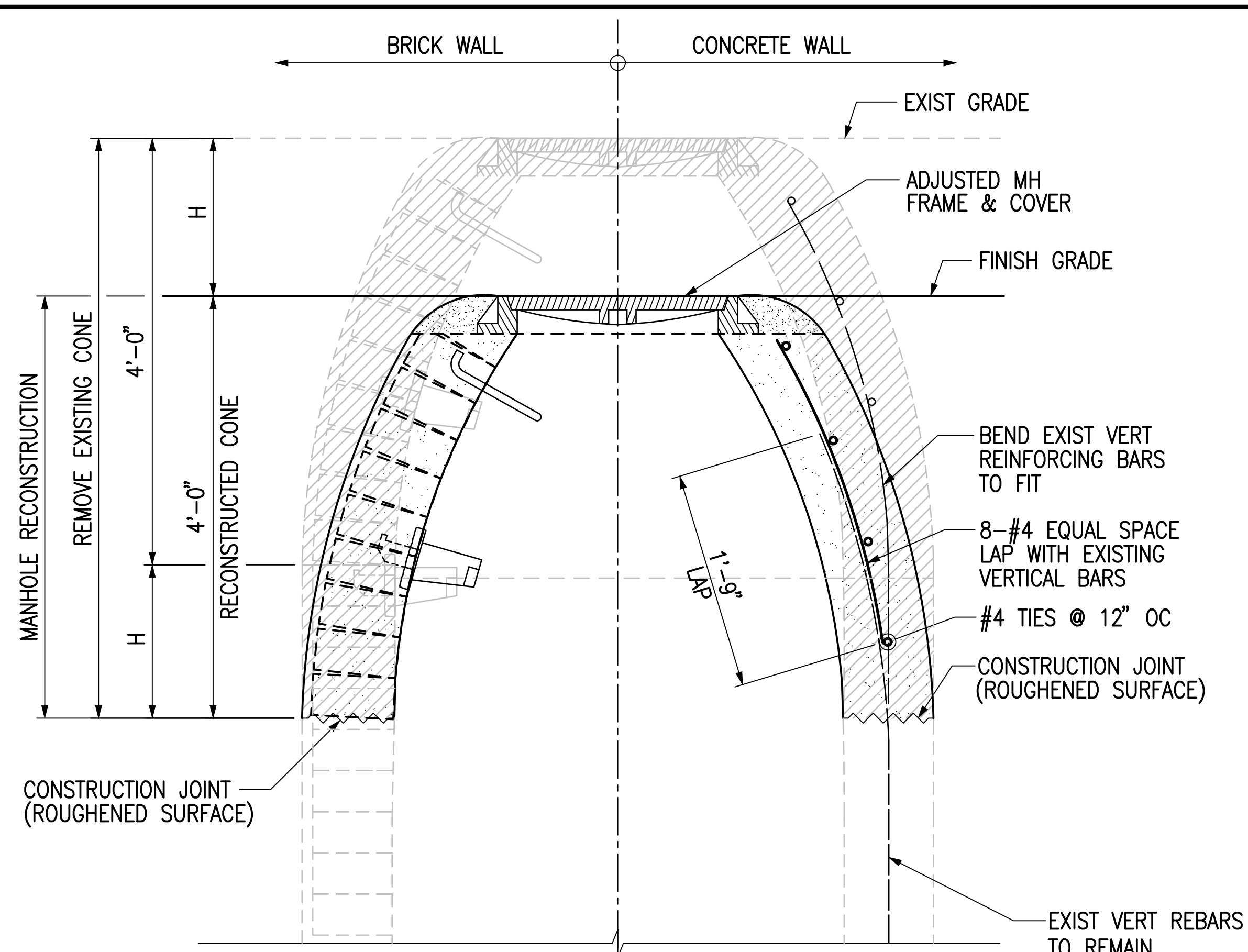
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DESIGN: RM					
DRAWN: KSF					
CHECKED: RM	REVISION	DATE	BRIEF	BY	APPROVED
DATE: SEPTEMBER 2022	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us				
 <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p> <p><i>Russ S. Miyahara</i> SIGNATURE 9/15/2024 EXPIRATION DATE OF THE LICENSE</p>	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII				
	STRUCTURAL GENERAL NOTES				
	APPROVED:				DWG NO. S0.1

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S002 DET-MH-01.DWG PLOT TIME: 09-14-22, 4:52 PM



DETAIL A



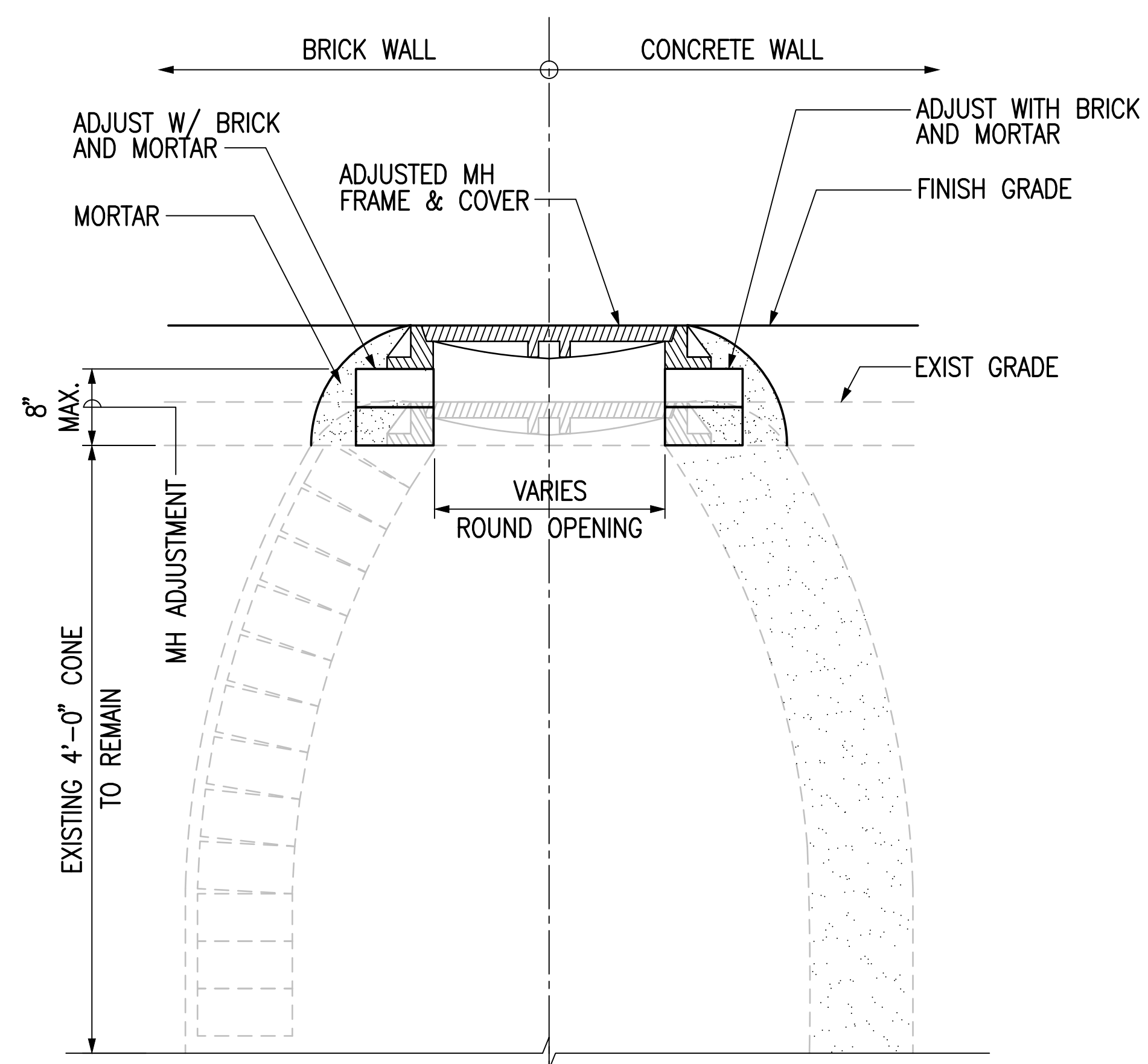
DETAIL B

RECONSTRUCTION OF EXISTING MANHOLE COVER – CONICAL

NOT TO SCALE
(SEE NOTE 1)

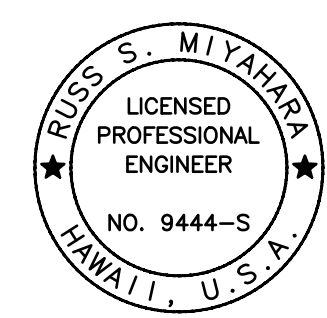

NOTES:

1. FOR ADJUSTING EXIST. CONICAL MANHOLE COVER
 - A. WHEN MH ADJUSTMENT HEIGHT EXCEEDS 8", RECONSTRUCT AS SHOWN IN DETAIL A OR DETAIL B.
 - B. FOR CONCRETE WALL, EXPOSE AND RETAIN THE REINFORCING BARS.
2. SEE TYPICAL DETAILS AND STANDARD SPECS OF RESPECTIVE MANHOLE OWNERS/AGENCIES FOR ADDITIONAL REQUIREMENTS.
3. DETAILS SHOWN ARE FOR STANDARD MANHOLES. NOTIFY THE OFFICER-IN-CHARGE IF SPECIAL MANHOLES ARE ENCOUNTERED.
4. NO RUNGS FOR SEWER MANHOLES.
5. FOR SEWER MANHOLES, SEE NOTES ON WASTEWATER STANDARD DETAILS S-9 AND S-10.

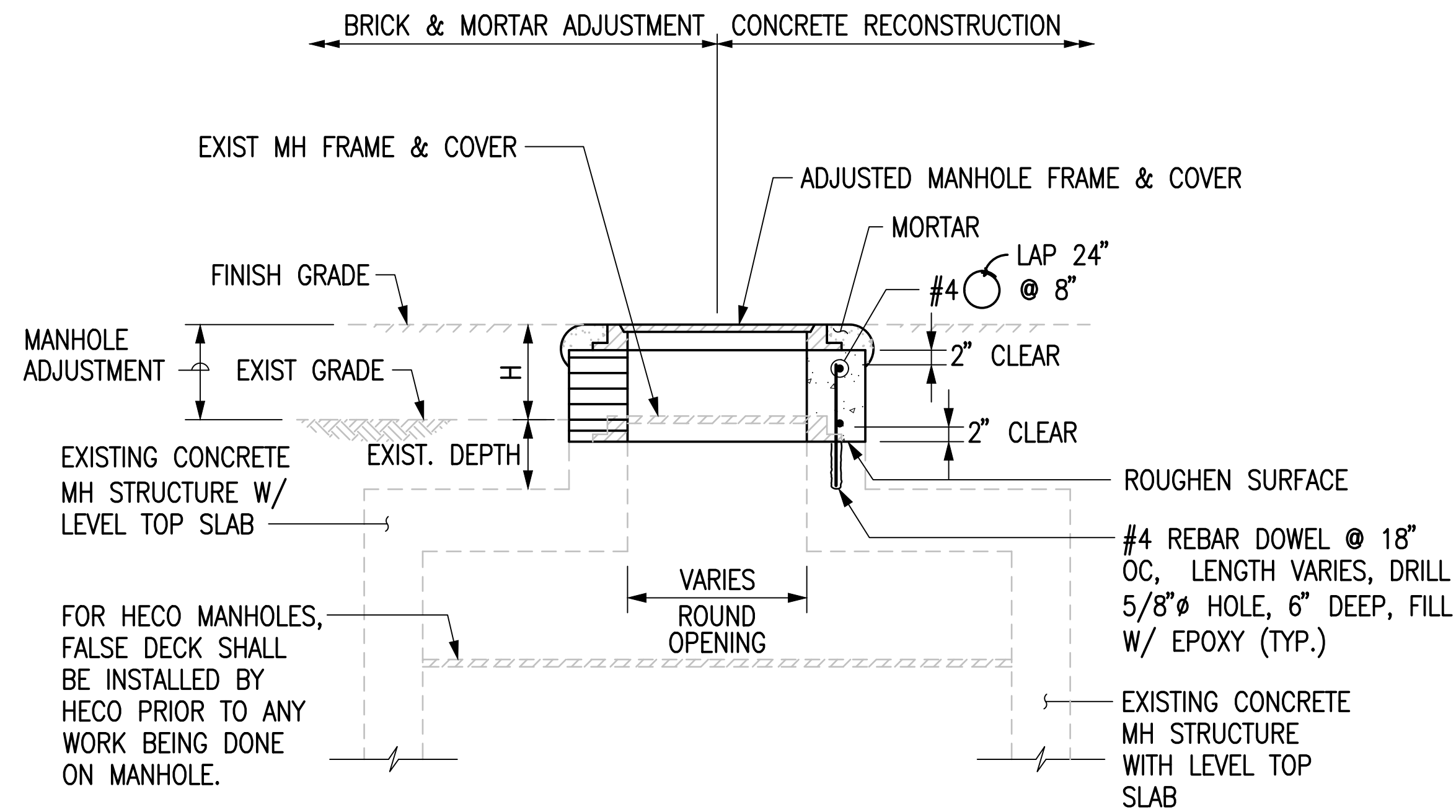


DETAIL C

ADJUSTMENT OF EXISTING MANHOLE COVER – CONICAL
NOT TO SCALE

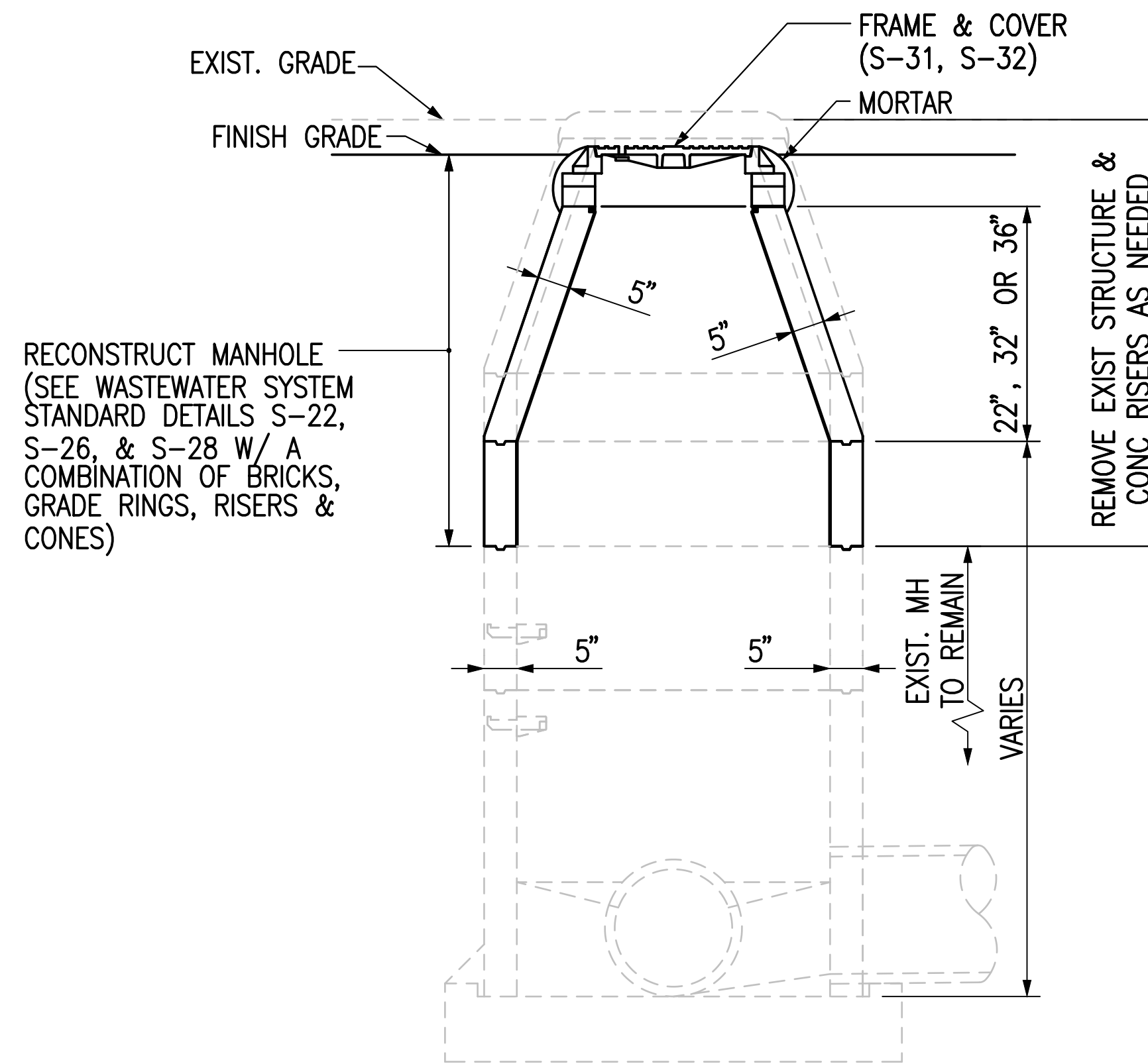
DESIGN: RM				
DRAWN: KSF				
CHECKED: RM	REVISION	DATE	BRIEF	BY APPROVED
DATE: SEPTEMBER 2022				
 <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small> <small>9/15/2024</small> <small>EXPIRATION DATE OF THE LICENSE</small>	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us			
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII			
	KAIKU AVENUE ROADWAY REHABILITATION PROJECT – PHASE 1 HONOLULU, EWA, OAHU, HAWAII			
MANHOLE ADJUSTMENT DETAILS – 1				DWG NO. S0.2

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S003 DET-MH-02.DWG PLOT TIME: 09-14-22, 4:52 PM



ADJUSTMENT/RECONSTRUCTION OF EXIST MANHOLE COVER – LEVEL TOP SLAB

NOT TO SCALE
(SEE NOTE 1)



LOWERING OF EXISTING PLAIN PRE-CAST CONCRETE SEWER MANHOLE DETAIL

SCALE: NOT TO SCALE

NOTES FOR PRE-CAST CONCRETE SEWER MANHOLE:

1. DETAILS REFERENCE CITY & COUNTY OF HONOLULU WASTEWATER SYSTEM STANDARD DETAILS, DATED JULY 2017.
2. SEE NOTES ON WASTEWATER SYSTEM STANDARD DETAILS S-9 & S-10.
3. MAY REUSE EXISTING PRECAST SEGMENTS IF SALVAGEABLE AND IN GOOD CONDITION.

NOTES:

1. FOR ADJUSTING EXIST. MANHOLE COVER WITH LEVEL TOP SLAB
 - A. CONTRACTOR SHALL PROBE TO DETERMINE EXISTING DEPTH TO TOP SLAB.
 - B. FOR $0'' < (H + \text{EXIST DEPTH}) < 18''$, ADJUST WITH BRICK AND MORTAR, IF $(H + \text{EXIST DEPTH}) > 18''$, ADJUST WITH CONCRETE.
 - C. IF EXIST MH IS ALREADY ADJUSTED WITH BRICK AND MORTAR AND $(H + \text{EXIST DEPTH}) > 18''$, REMOVE EXIST BRICKS AND ADJUST WITH CONCRETE.
2. SEE TYPICAL DETAILS AND STANDARD SPECS OF RESPECTIVE MANHOLE OWNERS/AGENCIES FOR ADDITIONAL REQUIREMENTS.
3. DETAILS SHOWN ARE FOR STANDARD MANHOLES. NOTIFY THE OFFICER-IN-CHARGE IF SPECIAL MANHOLES ARE ENCOUNTERED.
4. NO RUNGS FOR SEWER MANHOLES.

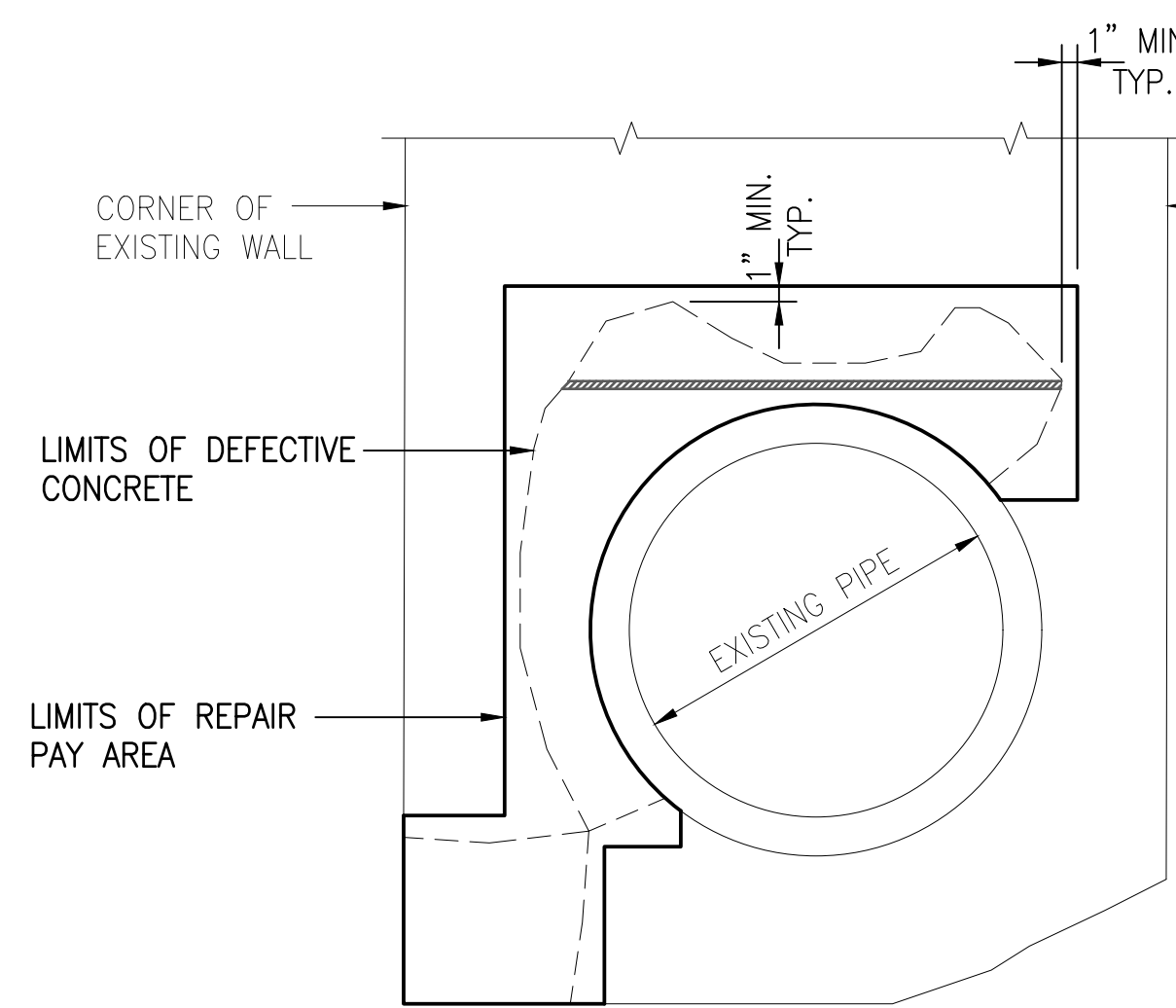
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DRAWN: KSF					
CHECKED: RM	REVISION	DATE	BRIEF	BY	APPROVED
DATE: SEPTEMBER 2022					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</p> <p><i>R. Miyahara</i> SIGNATURE 4/30/2024 EXPIRATION DATE OF LICENSE</p>	<p>615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 kafinc@kafinc.us</p> <p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p>KAIKU AVENUE ROADWAY REHABILITATION PROJECT – PHASE 1 HONOLULU, EWA, OAHU, HAWAII</p> <p>MANHOLE ADJUSTMENT DETAILS – 2</p>				
	APPROVED:				
	DWG NO.				
	S0.3				

PREPARATION OF SUBSTRATE AND REINFORCING STEEL FOR SPALL REPAIRS:

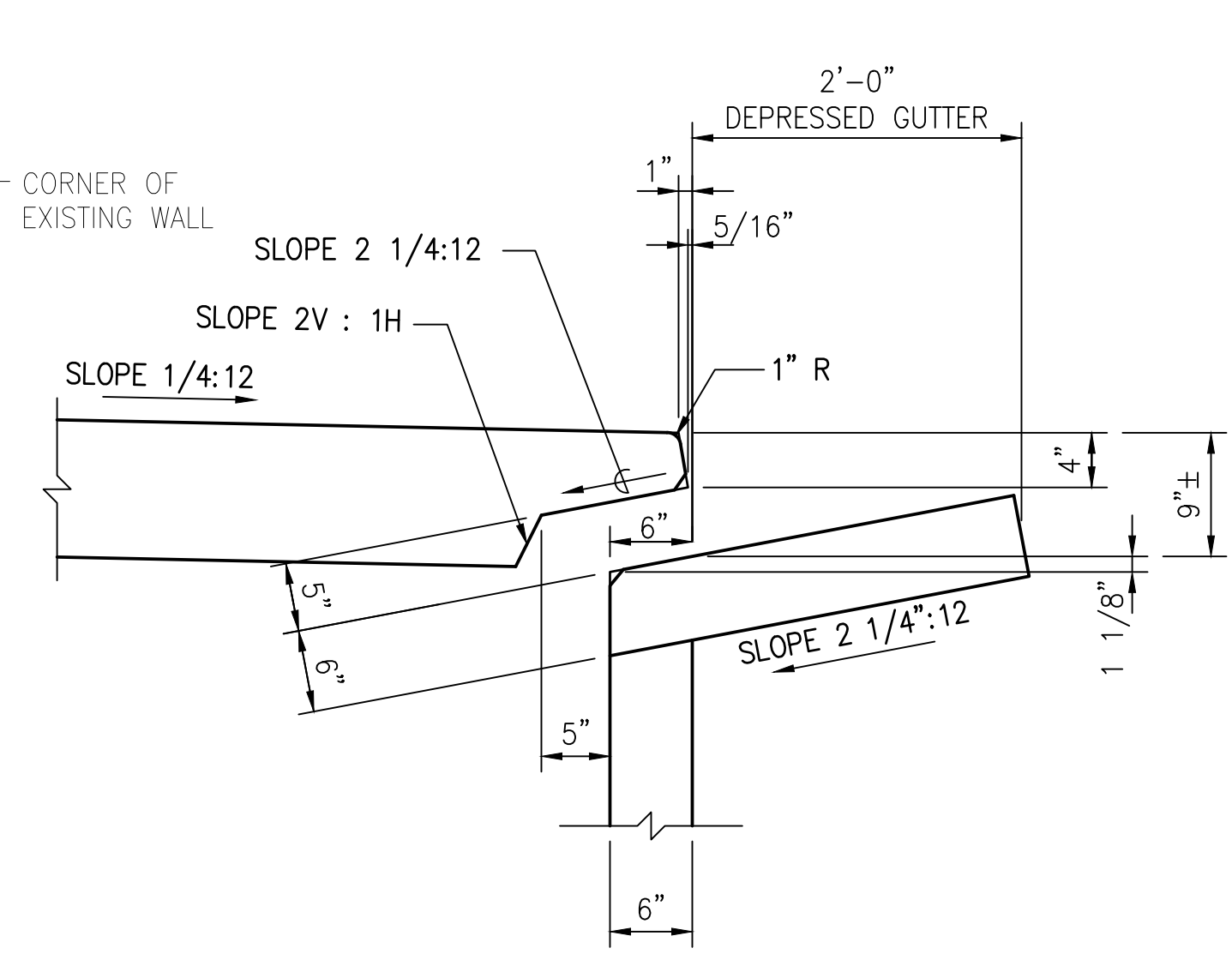
- "SPALLS", "DELAMINATIONS" AND "HONEYCOMBING" AS NOTED ON THE DRAWINGS SHALL ALL BE REFERRED TO AS "DEFECTIVE" CONCRETE, AND SHALL RECEIVE THE SAME REPAIR PROCEDURE DEPENDING ON LOCATION.
- THE CONTRACTOR SHALL INSPECT ENTIRE AREA FOR CONCRETE DEFECTS. THE CONTRACTOR SHALL SOUND ALL CONCRETE IN GENERAL REPAIR AREAS TO IDENTIFY ANY ADDITIONAL REPAIR AREAS NOT EXPLICITLY SHOWN ON THE PLANS.
- THE DEFECTIVE CONCRETE SHALL BE COMPLETELY REMOVED TO SOUND SUBSTRATE AND BEYOND THE EXTENT OF THE EXISTING REINFORCING. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGING THE UNDERLYING SOUND CONCRETE.
- THE DEFECTIVE CONCRETE SHALL BE SQUARED BY SAW-CUTTING AND CHIPPING THE CONCRETE AT THE PERIMETER BEYOND THE REMOVAL AREA A MINIMUM OF 1/4 INCH TO ATTAIN A 3/4 INCH MINIMUM DEPTH AND TO PREVENT FEATHER EDGE CONDITIONS. EXERCISE GREAT CARE TO AVOID CUTTING OR DAMAGING ANY EXISTING EMBEDDED STEEL REINFORCING. ANGLES BETWEEN ADJACENT SAW-CUTS AROUND THE PERIMETER SHALL NOT BE LESS THAN 90 DEGREES AND THE SHAPE OF EACH PATCH SHALL NOT BE IRREGULAR.
- FOR ANY EMBEDDED REINFORCEMENT WITHIN THE REPAIR AREA, ADDITIONAL CONCRETE SHALL BE REMOVED TO ATTAIN THE MINIMUM CLEAR SPACE MEASURED RADIALLY AROUND THE BARS.
- EXISTING CONCRETE SURFACES WITHIN THE REPAIR AREAS SHALL BE ROUGHENED TO ENSURE PROPER ADHESION WITH REPAIR MATERIAL.
- ALL EXPOSED CONCRETE SURFACES AND REINFORCING BARS IN THE REPAIR AREA SHALL BE NEEDLE GUNNED TO REMOVE ALL SCALE, LOOSE RUST, DEBRIS AND DETERIORATED CONCRETE. ANY AREAS NOT PATCHED MORE THAN 48 HOURS AFTER NEEDLE GUNNING SHALL BE RECLEANED.
- ANY REINFORCEMENT IN REPAIR AREA WHICH HAS LOST MORE THAN 25 PERCENT OF ITS CROSS-SECTIONAL AREA SHALL BE CALLED TO THE ATTENTION OF THE OFFICER-IN-CHARGE.
- THE PATCH AREA SHALL BE CLEANED OF ALL DUST AND DEBRIS JUST PRIOR TO PATCHING WITH HIGH PRESSURE, OIL-FREE COMPRESSED AIR AT A MINIMUM OF 100 PSI.

APPLICATION OF SPALL REPAIR MATERIALS:

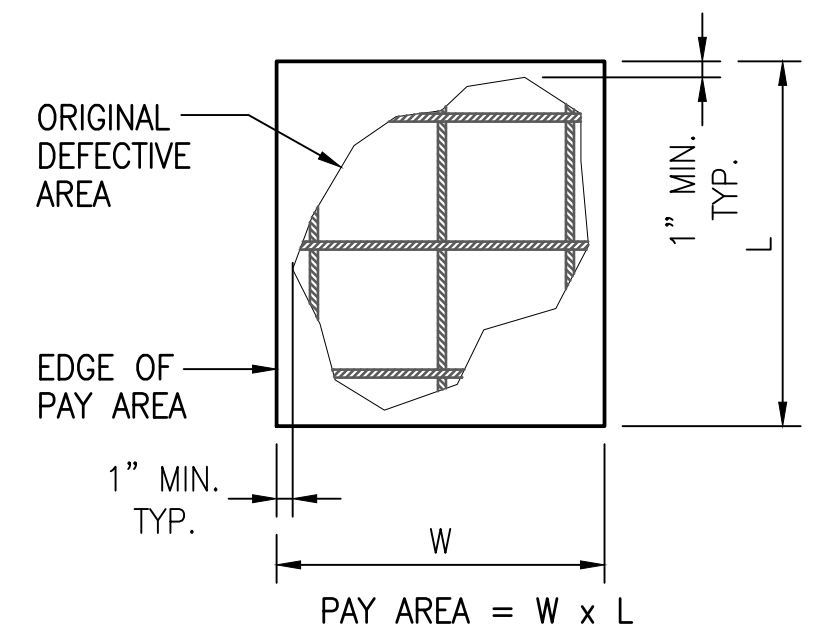
- PRIOR TO PLACEMENT OF REPAIR MATERIAL, BONDING AGENT AND ANTI-CORROSION COATING, ALL CONCRETE REPAIR SURFACES SHALL BE WASHED WITH CLEAN WATER AND THE EXPOSED CONCRETE SURFACE SHALL BE SATURATED WITH NO WATER ACCUMULATION ON THE SURFACE.
- ALL EXPOSED STEEL SHALL BE LIBERALLY COATED WITH TWO 20 MIL COATS OF BONDING AGENT AND ANTI-CORROSION COATING. THE COATING SHALL BE COMPLETE WITH NO SKIPS, PIN HOLES OR HOLIDAYS AROUND THE ENTIRE SURFACE OF THE EXPOSED STEEL. THE FIRST COAT SHALL BE ALLOWED TO DRY 3 HOURS PRIOR TO APPLICATION OF THE SECOND COAT. THE SECOND COAT SHALL ALSO BE ALLOWED TO DRY A MINIMUM OF 30 MINUTES PRIOR TO THE PLACEMENT OF THE REPAIR MATERIAL. CARE SHALL BE TAKEN TO AVOID APPLYING THE COATING MATERIAL TO THE CONCRETE SUBSTRATE. REPAIR MATERIAL SHALL BE PLACED WITHIN THE OPEN TIME OF COATING APPLICATION. SEE MANUFACTURER'S RECOMMENDATIONS FOR ADDITIONAL REQUIREMENTS.
- THE CONTRACTOR SHALL NOT SECURE FORMS BY RAMSETTING. ALL HOLES AND SPALLS CAUSED BY TEMPORARY ATTACHMENTS SHALL BE PATCHED. ALL INSERTS SHALL BE REMOVED.
- REPAIR MATERIAL SHALL BE USED FOR ALL VERTICAL AND OVERHEAD REPAIRS. THE MATERIAL SHALL BE APPLIED IN THICKNESSES PER MANUFACTURER'S RECOMMENDATIONS.
- REPAIR MATERIAL APPLIED TO THICKNESSES EXCEEDING MAXIMUMS FOR NEAT MATERIAL SHALL BE EXTENDED WITH AGGREGATE AS RECOMMENDED BY MANUFACTURER.
- SNAP TIES AND INSERTS SHALL BE PLASTIC OR STAINLESS STEEL.
- ALL CONCRETE REPAIRS SHALL BE MADE SMOOTH AND LEVEL WITH THE EXISTING CONCRETE SURFACE AND SHALL NOT HAVE LESS THAN 1 INCH OF CONCRETE COVER, UNLESS OTHERWISE NOTED.
- THE REPAIR MATERIAL SHALL BE VIBRATED, RODDED, OR TAMPED DURING PLACEMENT TO CONSOLIDATE THE POUR AND FILL ALL CORNERS OF THE PATCH OR FORM WITH NO VOIDS.
- THERE SHALL BE NO COLD JOINTS IN THE FIELD OF THE REPAIR.
- THE REPAIRED SURFACE FINISH SHALL MATCH THE ORIGINAL SURFACE FINISH.
- VOID SPACES BEYOND THE EDGE OF THE FORM SHALL BE DRY PACKED IN LIFTS WITH PATCHING COMPOUND.
- APPLY A CURING COMPOUND AS RECOMMENDED BY THE MANUFACTURER. REMOVE CURING FROM ANY SURFACE WHERE BONDING IS NEEDED AFTER CURING IS COMPLETE.



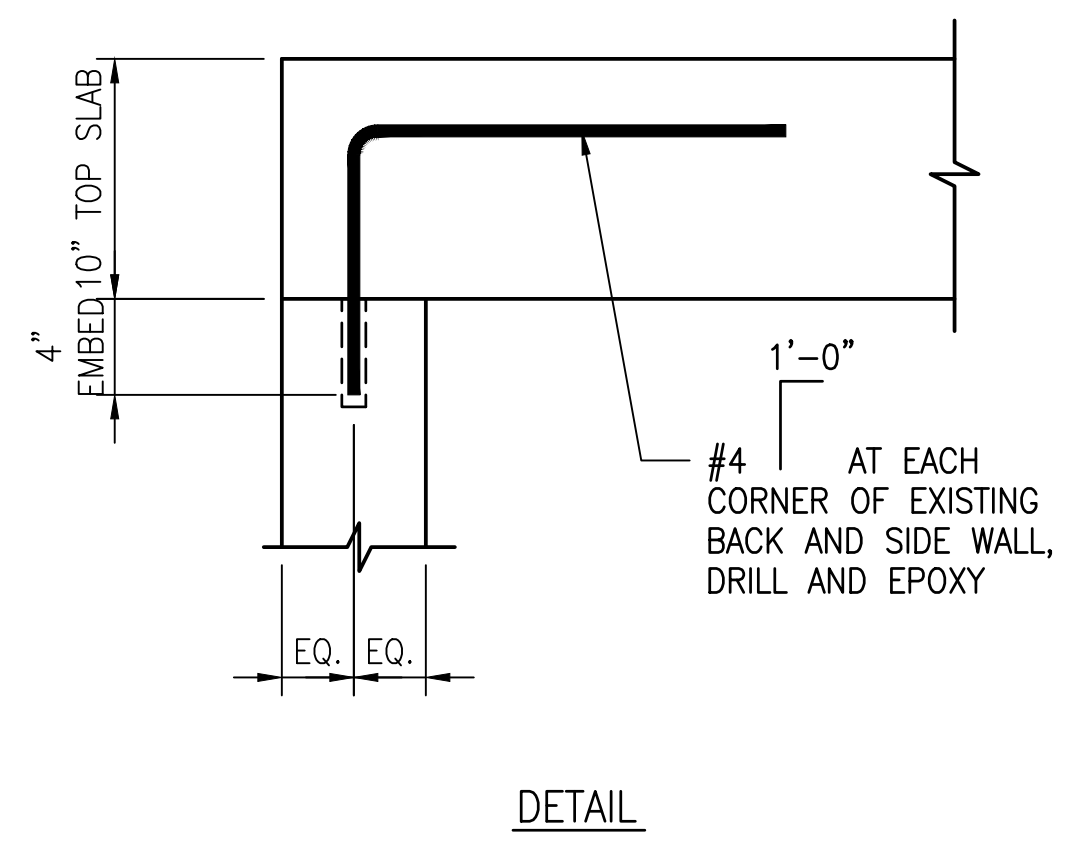
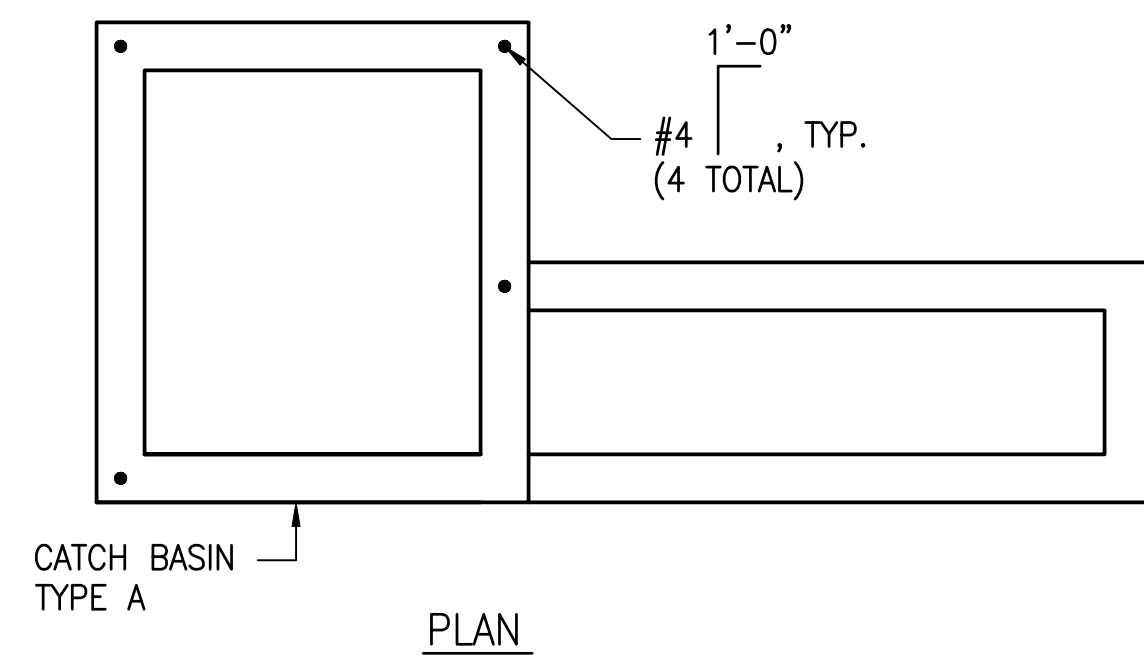
A SPALL REPAIR - PIPE OPENING ELEVATION
S0.4 SCALE: 1" = 1'-0"



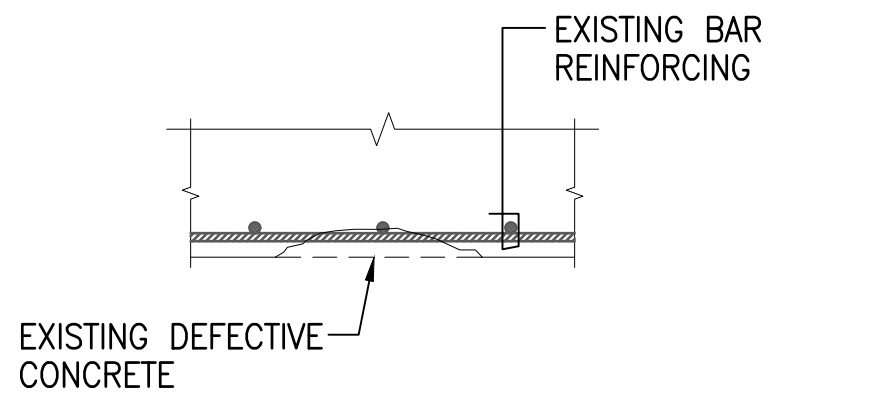
3 DETAIL
S0.4 SCALE: 1" = 1'-0"



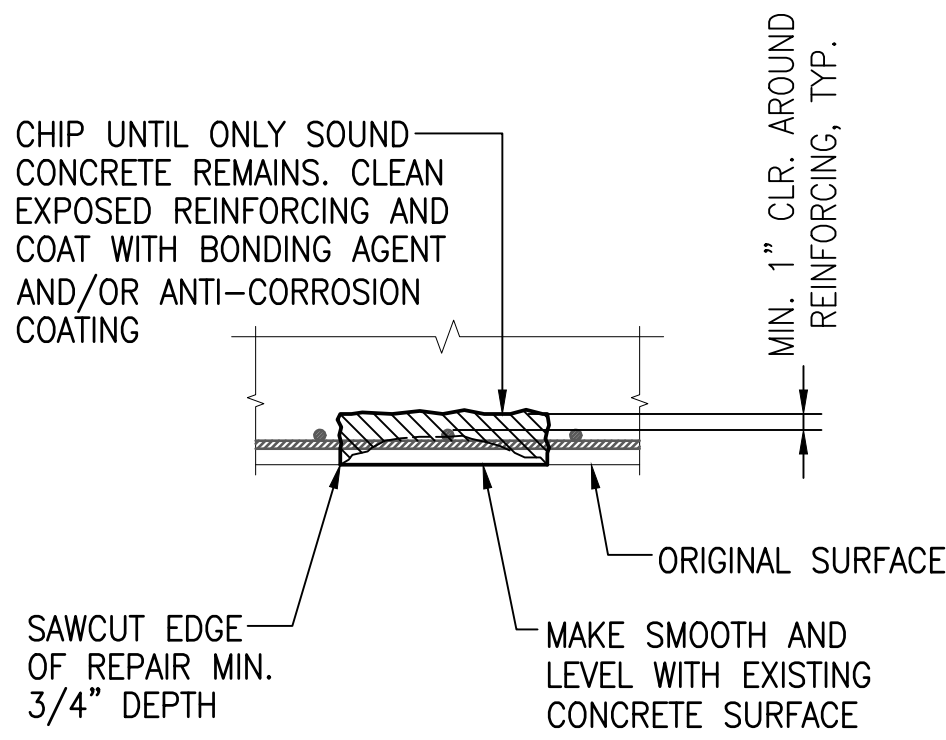
B SPALL REPAIR - WALL ELEVATION
S0.4 SCALE: 1" = 1'-0"




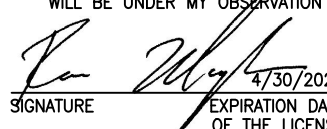
4 ADDED REINFORCING AT CORNERS OF CATCH BASIN WALLS
S0.4 NOT TO SCALE



1 DEFECT DETAIL SECTION
S0.4 SCALE: 1" = 1'-0"

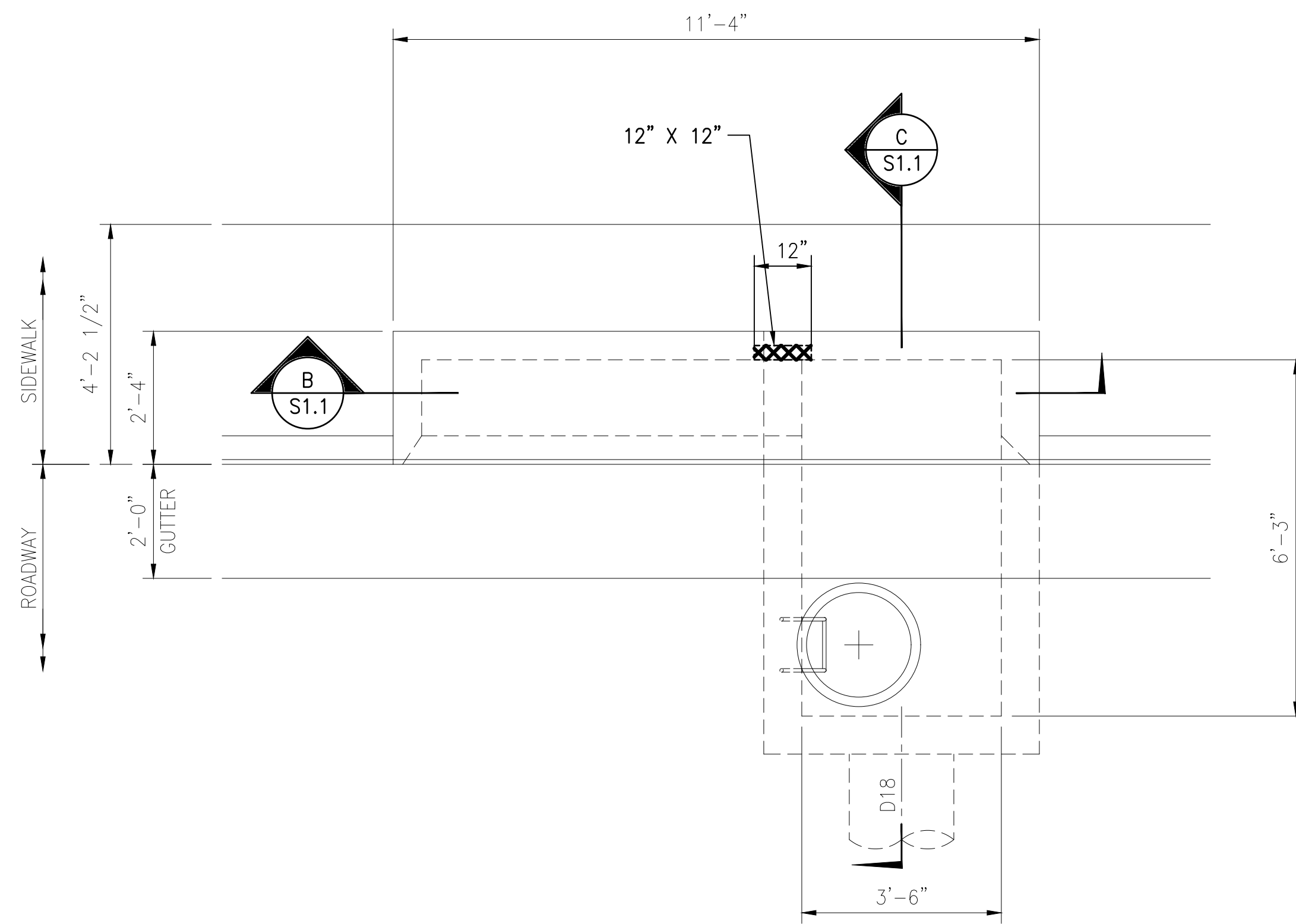


2 REPAIR DETAIL SECTION
S0.4 SCALE: 1" = 1'-0"

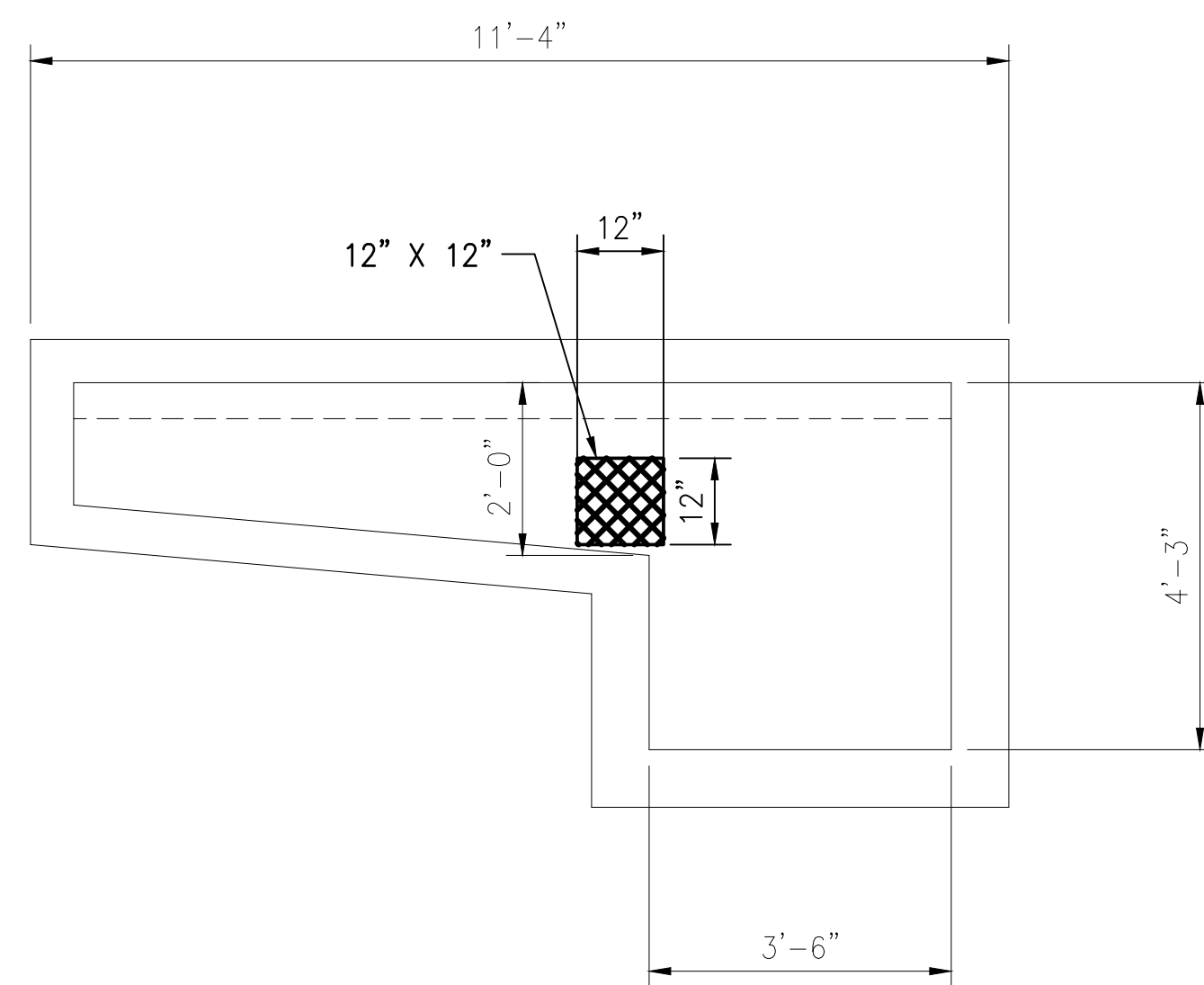
DESIGN: RM					
DRAWN: KSF					
CHECKED: RM	REVISION	DATE	BRIEF	BY	APPROVED
DATE: SEPTEMBER 2022	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us				
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII					
KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII					
SPALL REPAIR NOTES AND SECTIONS					
APPROVED:					DWG NO.
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. EXPIRATION DATE OF THE LICENSE: 4/30/2024					S0.4

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S004-TYPDLS.DWG PLOT TIME: 09-14-22, 4:53 PM

DRAWING NAME: Z:\00_ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22_FINAL\KCB-S0101_A_REPAIR.DWG PLOT TIME: 09-14-22, 4:53 PM



A PLAN
S1.1 SCALE: 1/2" = 1'-0"



B SECTION
S1.1 SCALE: 1/2" = 1'-0"

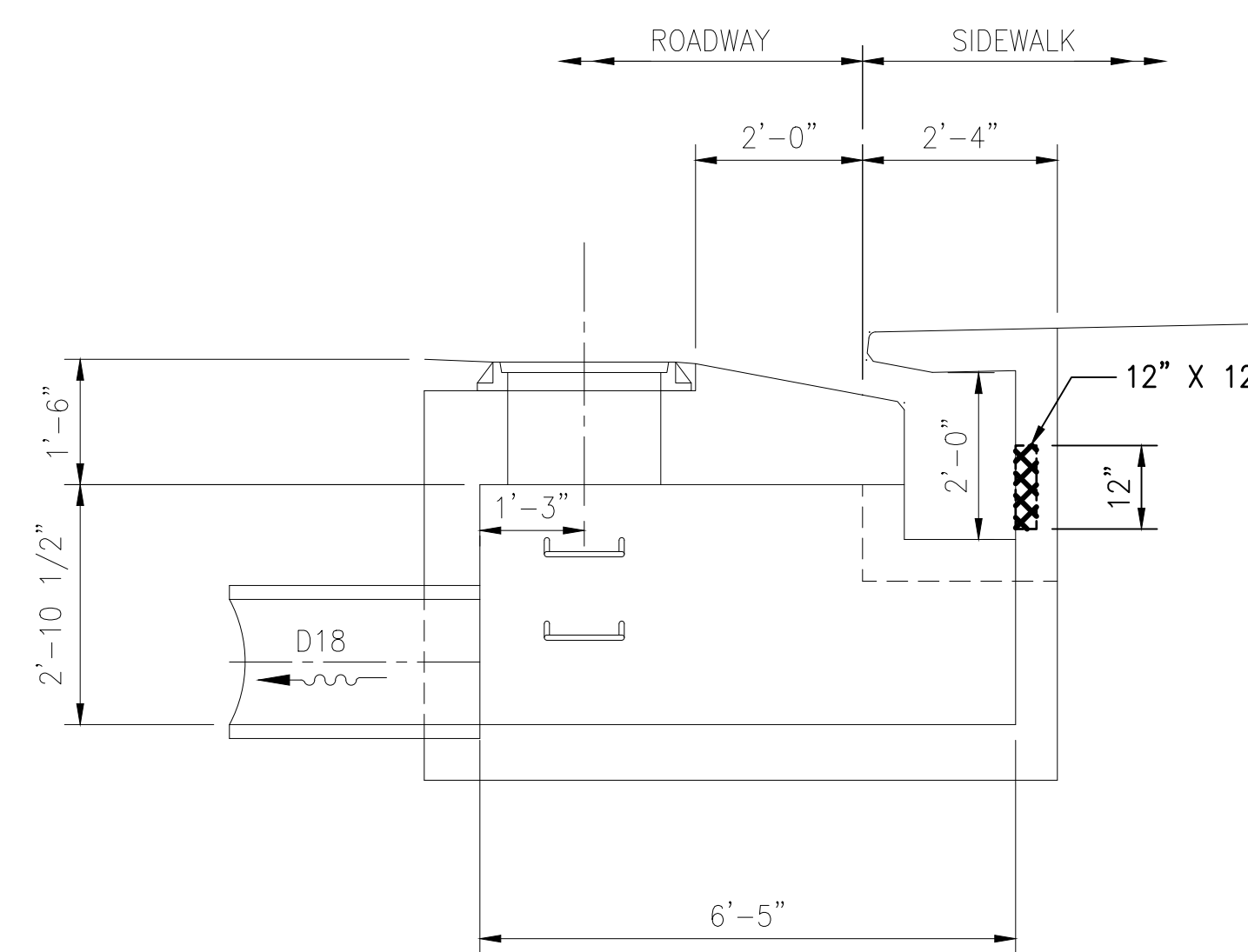
CATCH BASIN - CB "A"

LEGEND:

EXTENT OF DEFECTIVE CONCRETE REPAIR

NOTES:

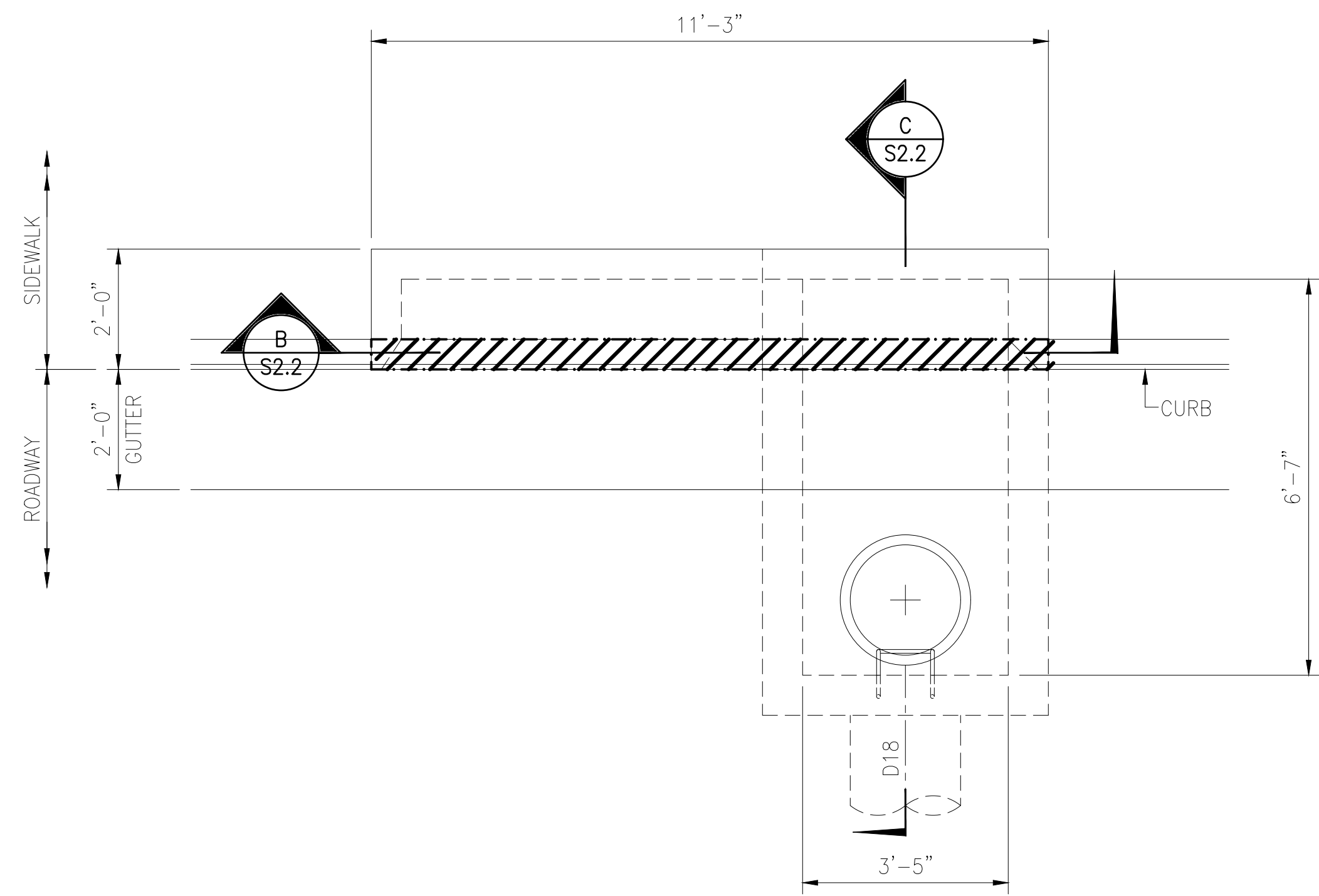
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.



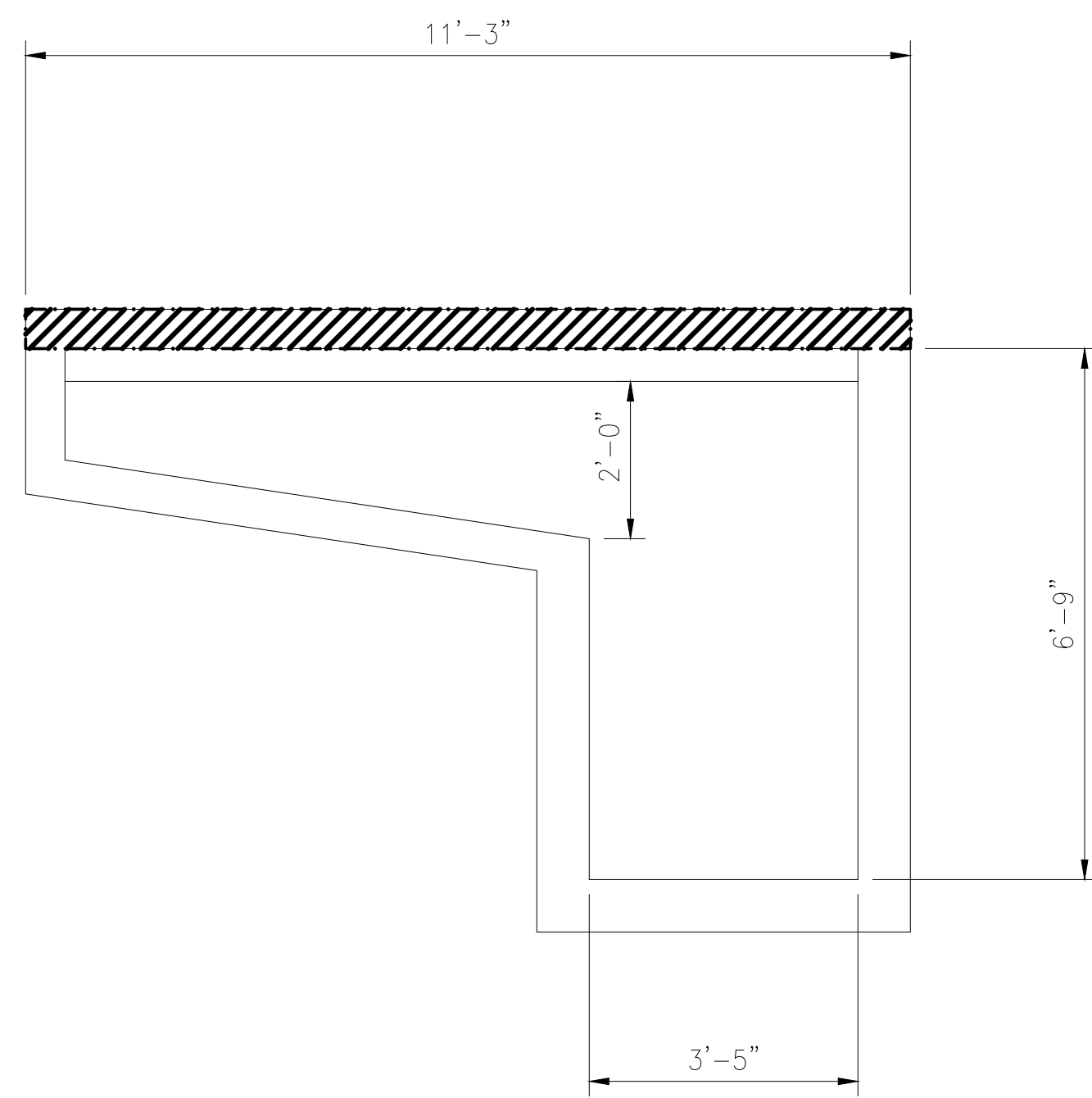
C SECTION
S1.1 SCALE: 1/2" = 1'-0"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p><i>Russ S. Miyahara</i> SIGNATURE 4/25/2024 EXPIRATION DATE OF THE LICENSE</p>	<p>615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us</p>				
	<p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p>				
	<p>KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOULIULI, EWA, OAHU, HAWAII</p>				
	<p>CATCH BASIN CB "A" PLAN AND SECTIONS</p>				
	APPROVED:				DWG NO. S1.1

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S0201 B REPLACE.DWG PLOT TIME: 09-14-22, 4:54 PM



A DEMO PLAN
S2.2 SCALE: 1/2" = 1'-0"



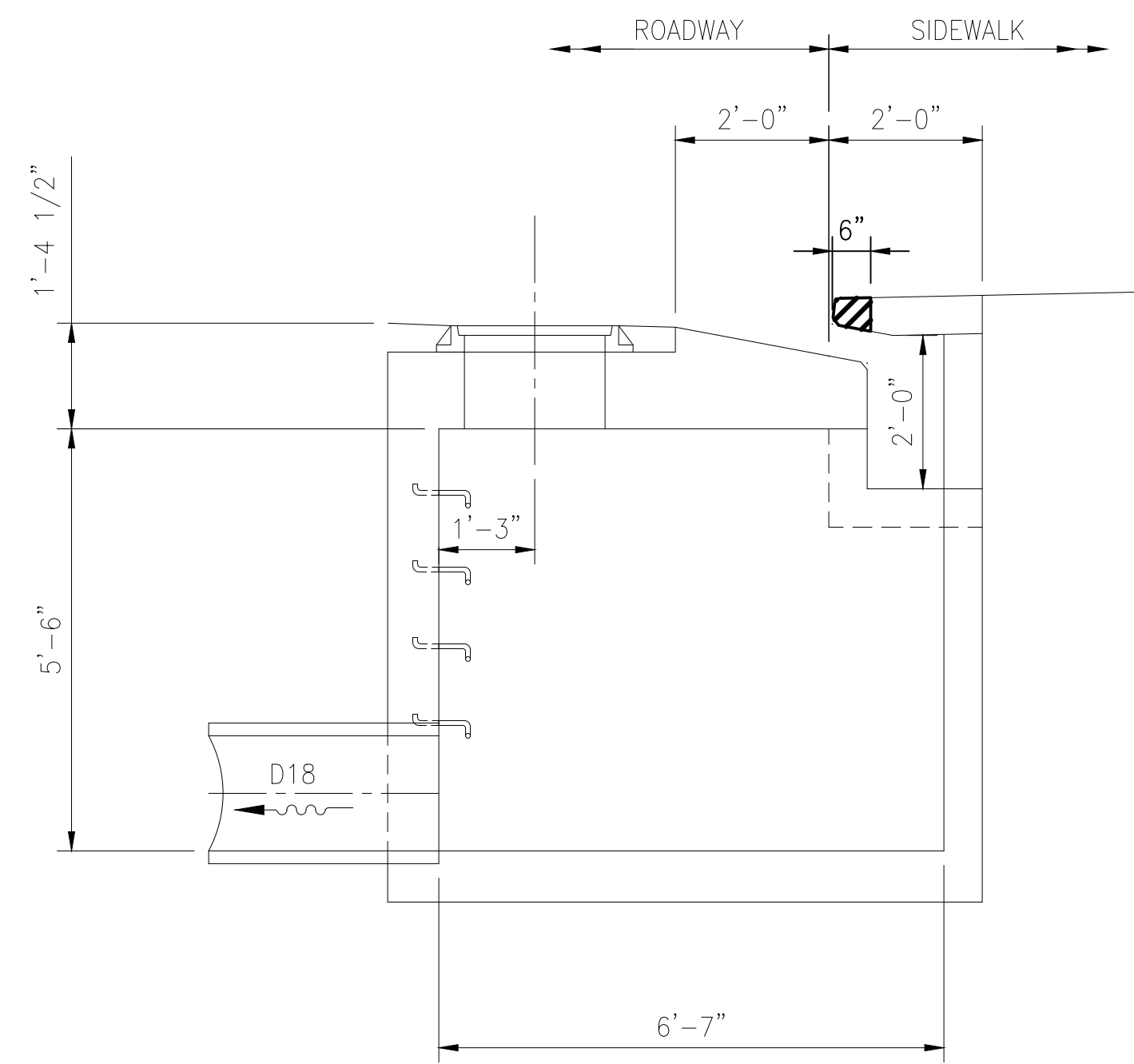
B DEMO SECTION
S2.2 SCALE: 1/2" = 1'-0"

LEGEND:

EXTENT OF CURB DEMOLITION

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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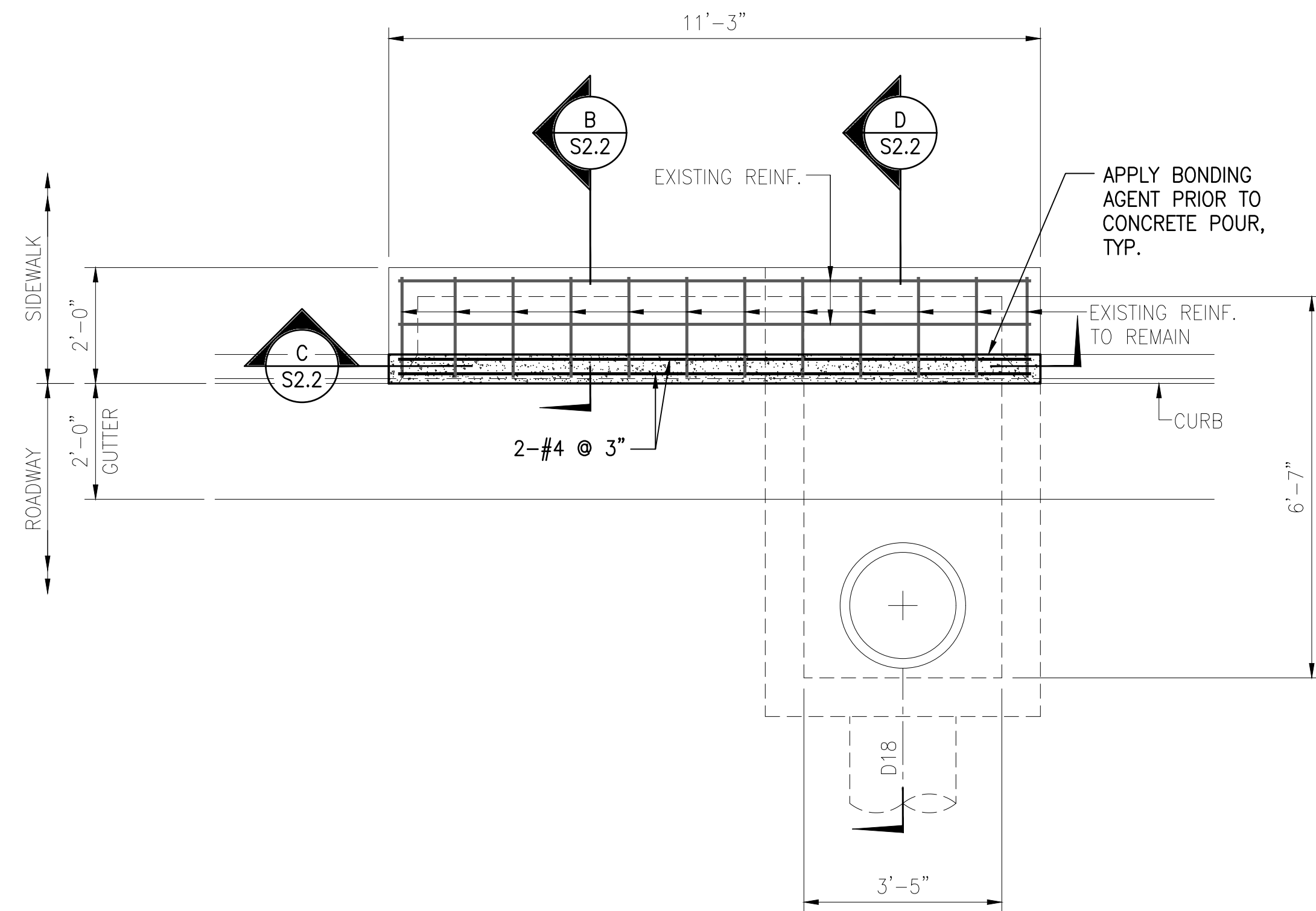


C DEMO SECTION
S2.2 SCALE: 1/2" = 1'-0"

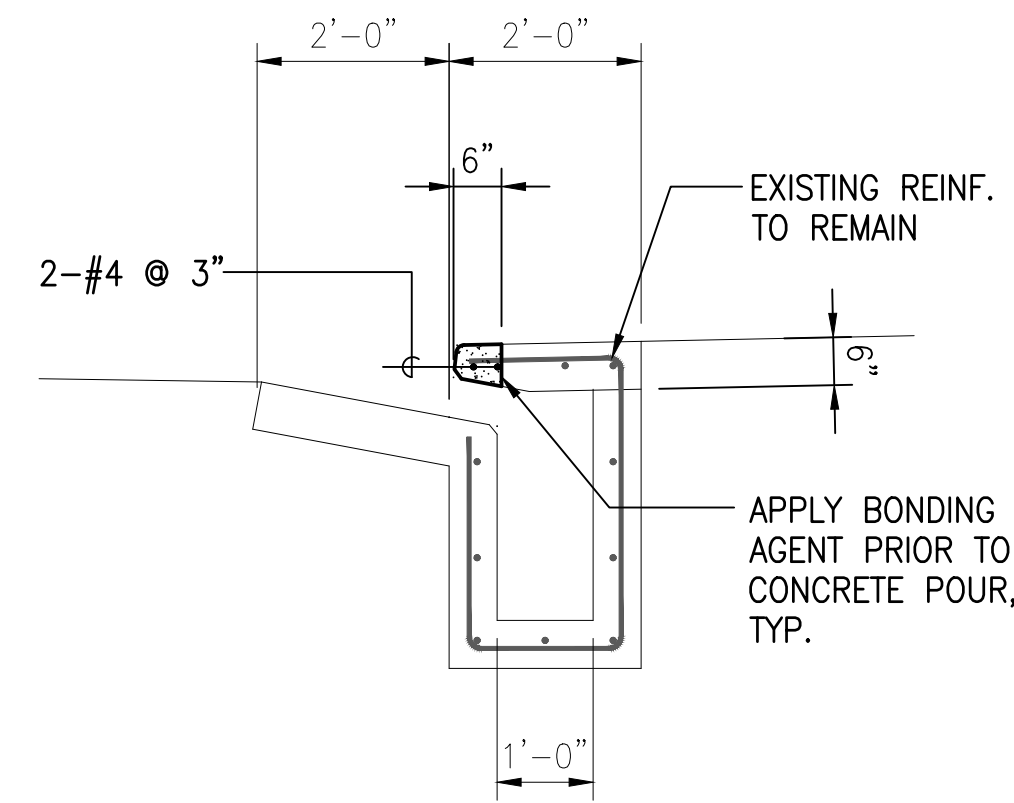
CATCH BASIN - CB "B"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED	
DRAWN: KSF						
CHECKED: RM						
DATE: SEPTEMBER 2022						
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p><i>Russ S. Miyahara</i> SIGNATURE 9/15/2024 EXPIRATION DATE OF THE LICENSE</p>	<p>615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us</p> <p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p>KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII</p> <p>CATCH BASIN CB "B" DEMOLITION PLAN AND SECTIONS</p>					
	APPROVED:					DWG NO.
						S2.1

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S0201 B REPLACE.DWG PLOT TIME: 09-14-22, 4:54 PM



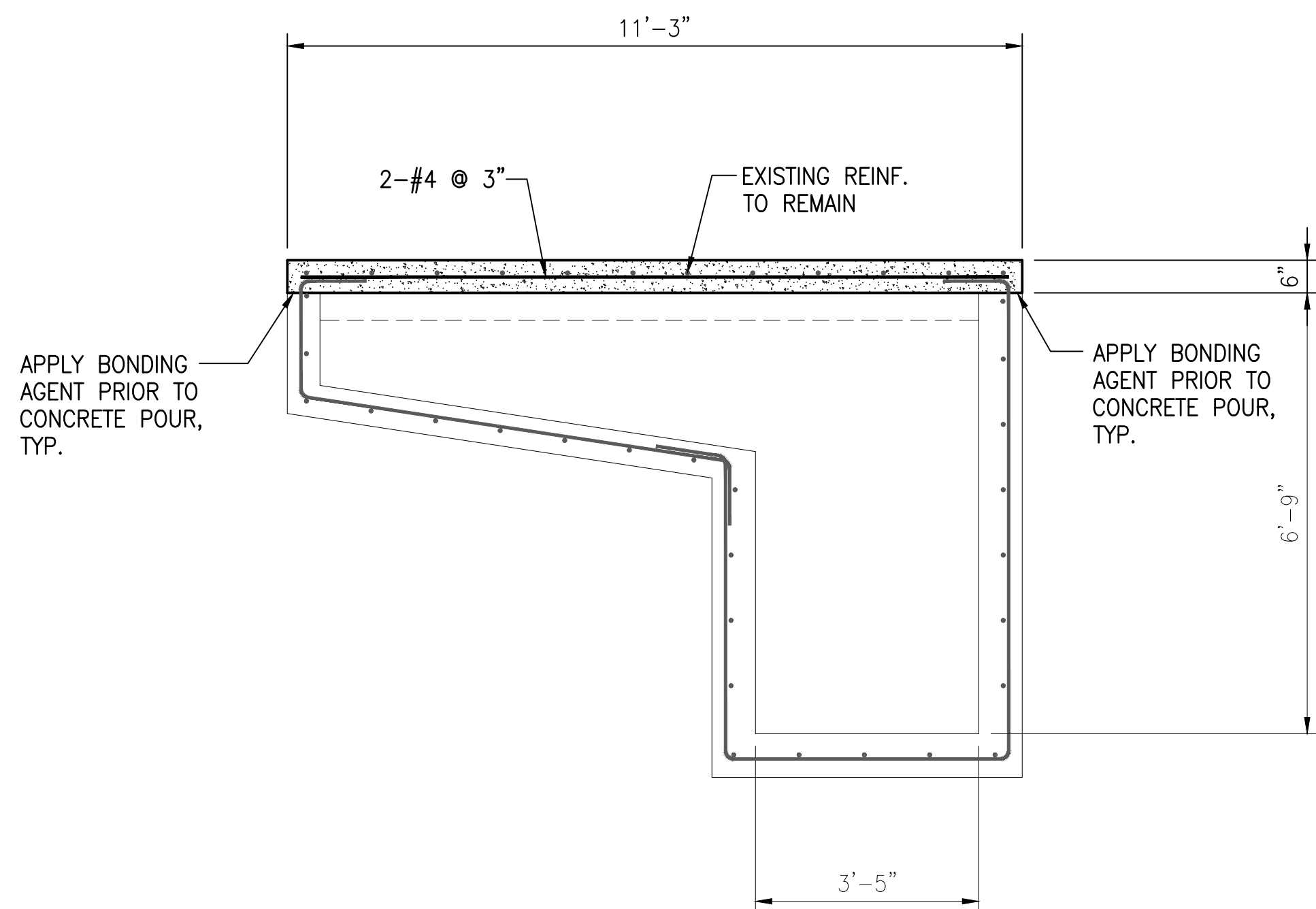
A PLAN
S2.2 SCALE: 1/2" = 1'-0"



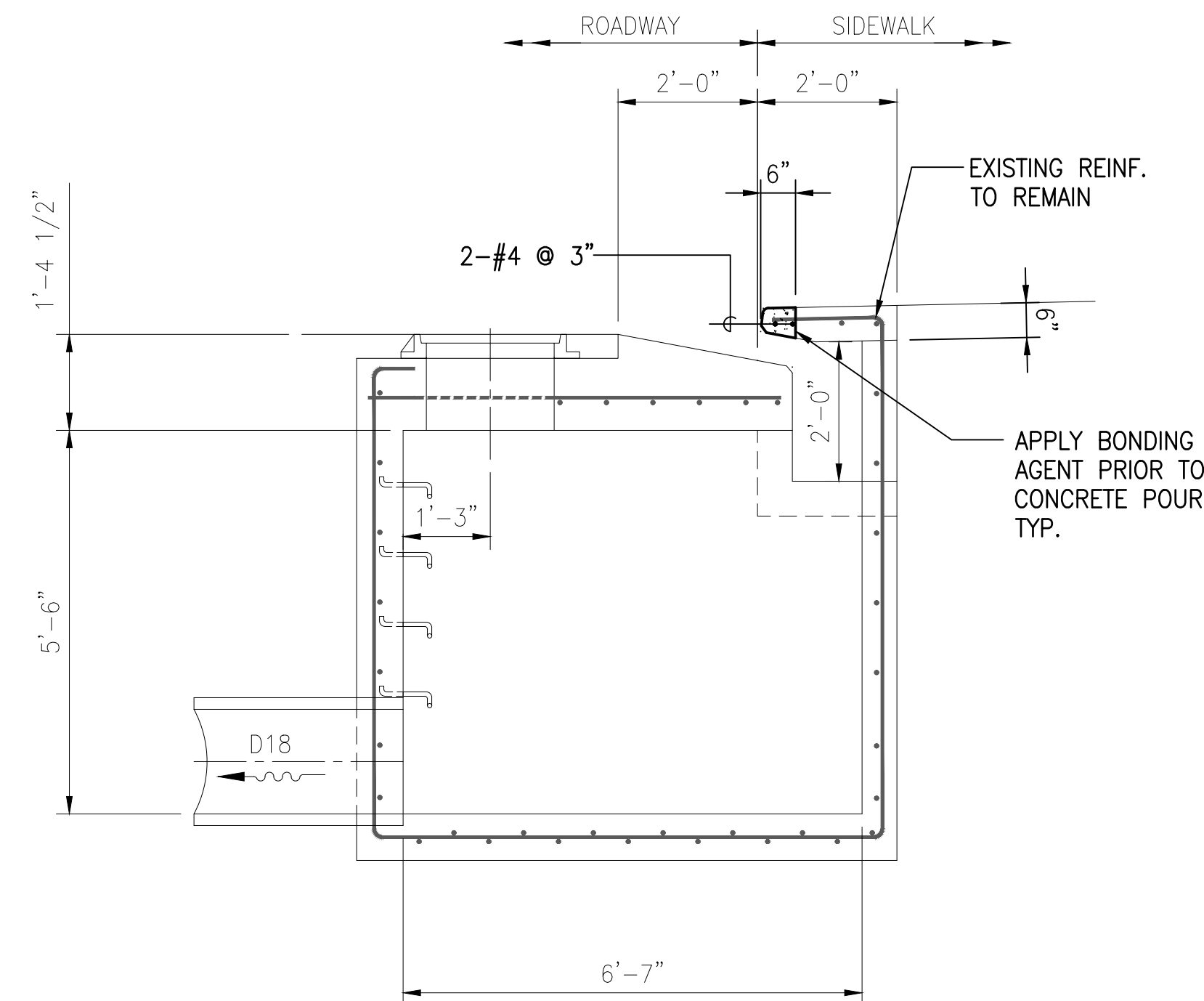
B SECTION
S2.2 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF CONCRETE REPAIR

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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C SECTION
S2.2 SCALE: 1/2" = 1'-0"



D SECTION
S2.2 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "B"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

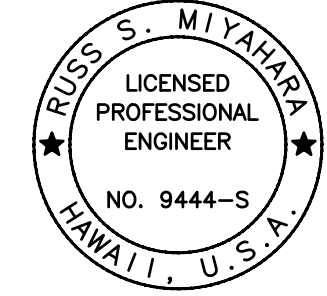


615 PIKOI STREET, SUITE 300
HONOLULU, HAWAII 96814
kafinc@kafinc.us

VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "B"
PLAN AND SECTIONS



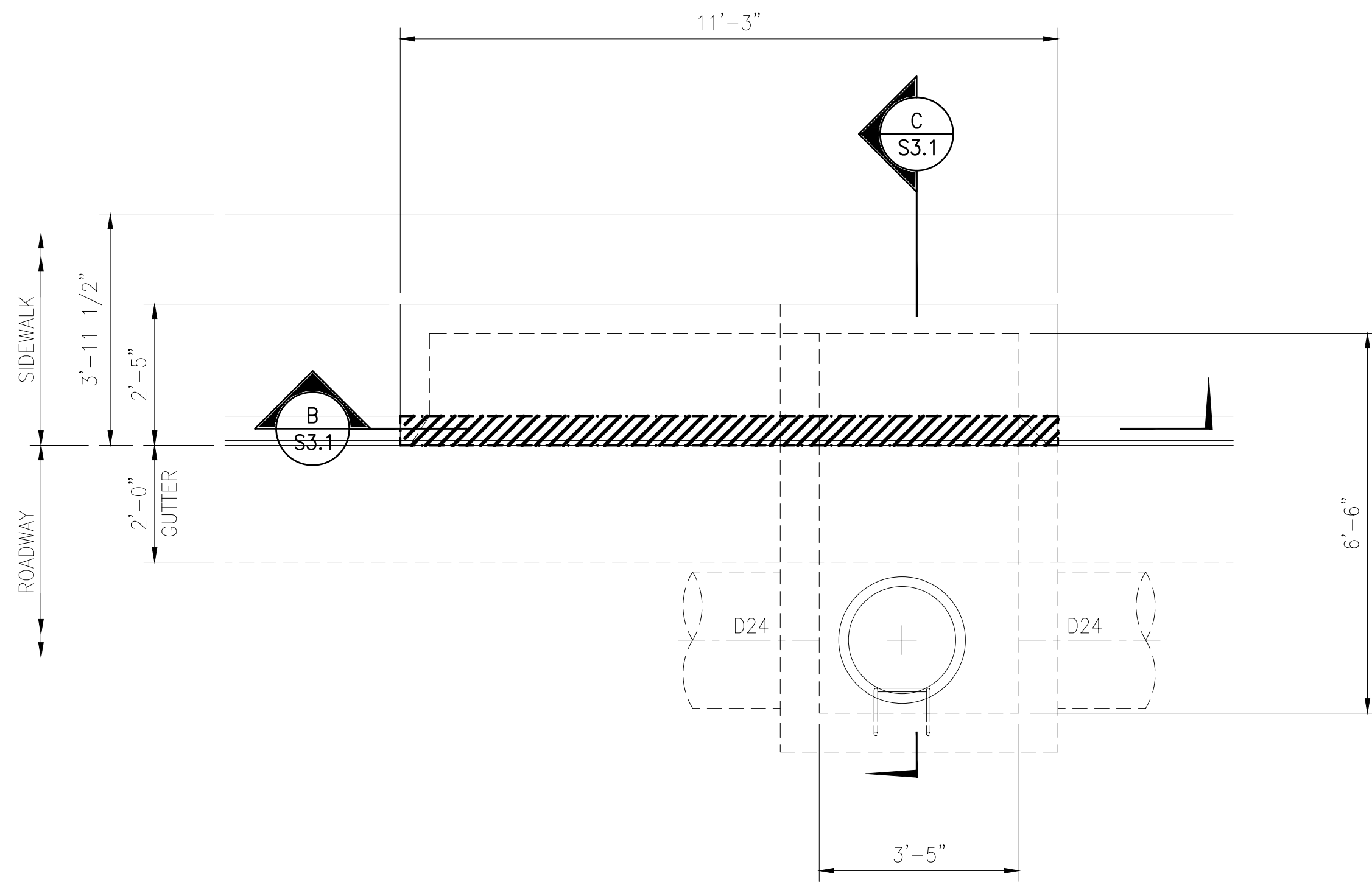
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Russ S. Miyahara
SIGNATURE
7/25/2024
EXPIRATION DATE OF THE LICENSE

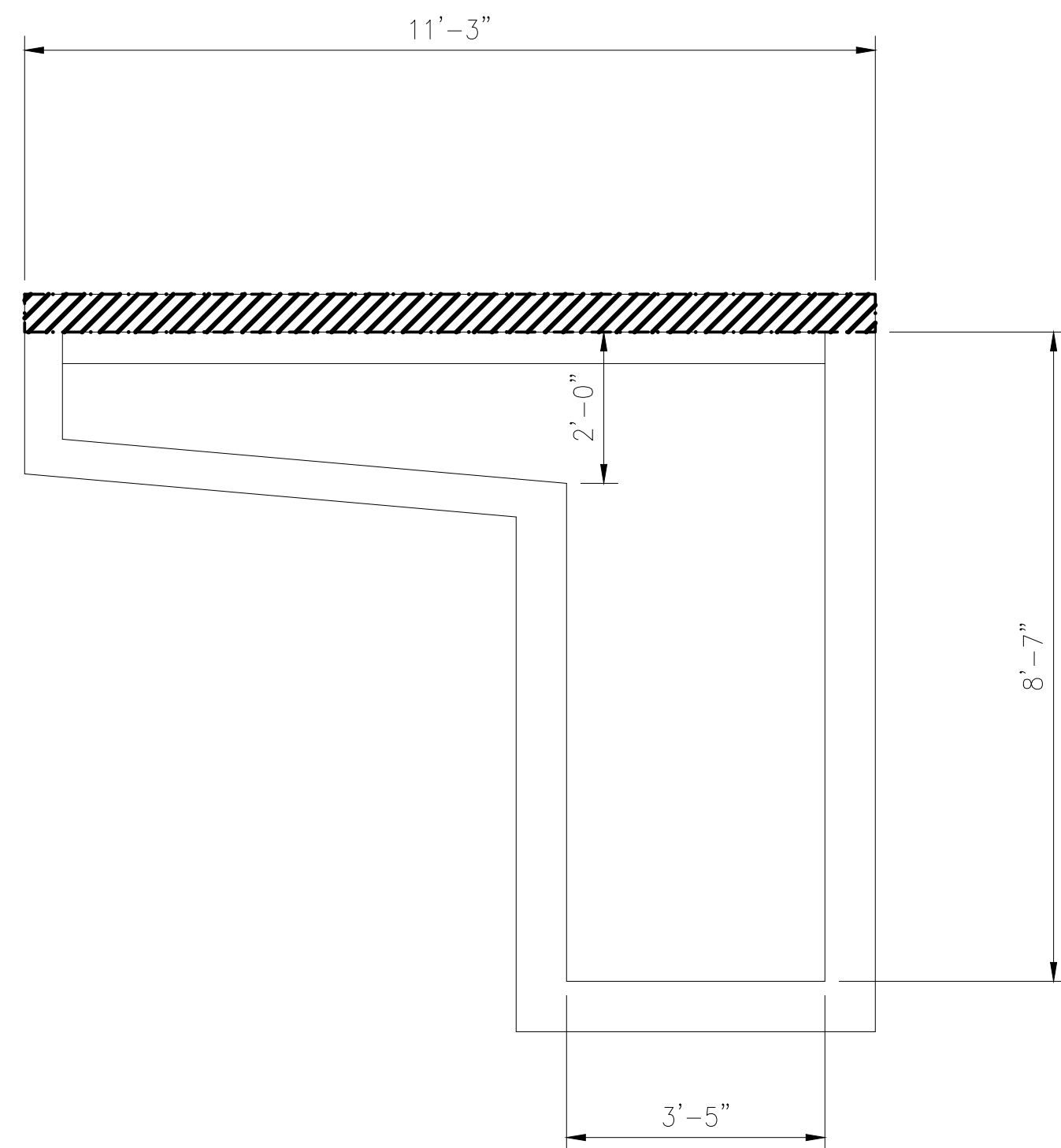
APPROVED:

DWG NO.
S2.2

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S0301 F. RR.DWG PLOT TIME: 09-14-22, 4:51 PM



A DEMO PLAN
S3.1 SCALE: 1/2" = 1'-0"



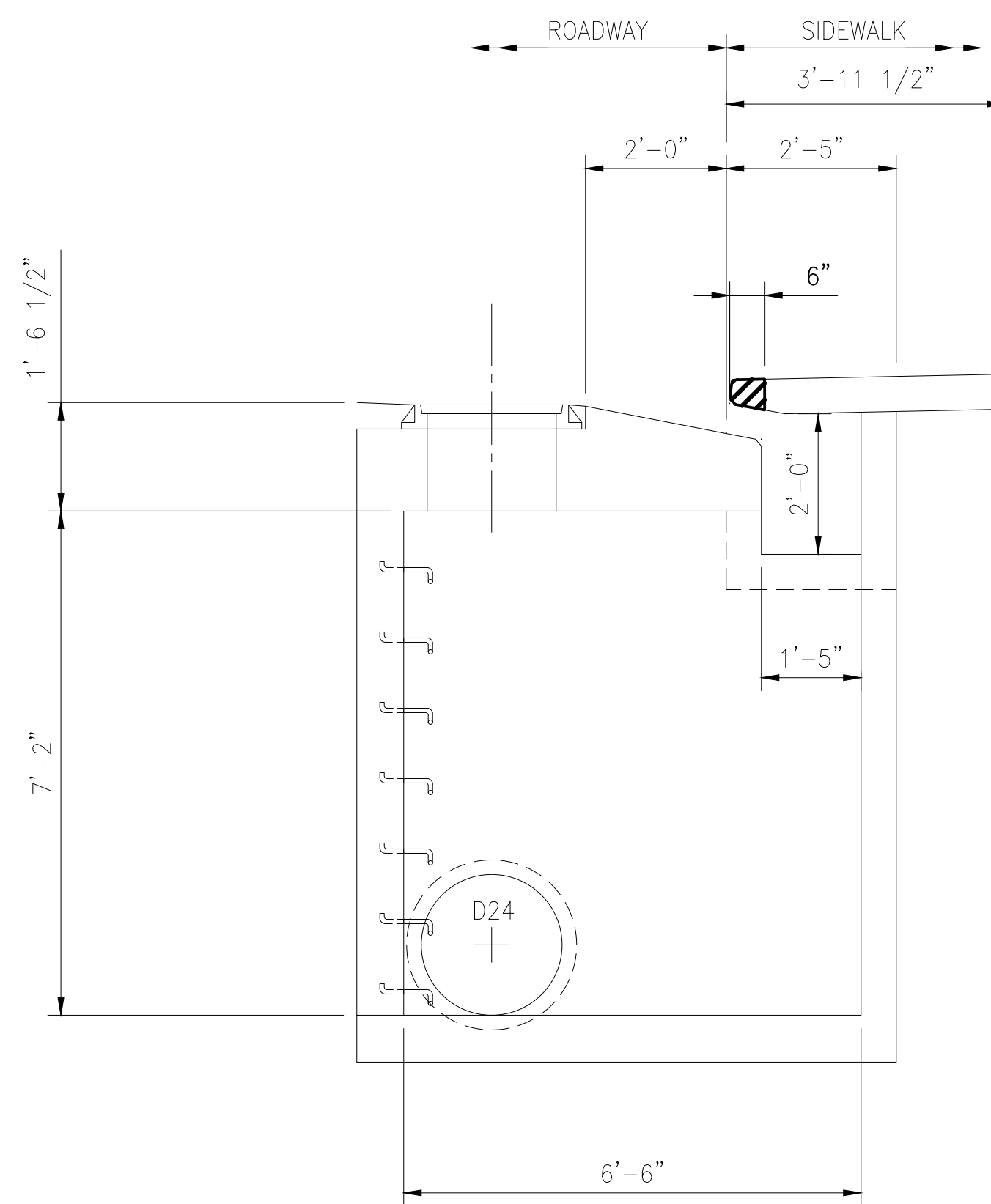
B DEMO SECTION
S3.1 SCALE: 1/2" = 1'-0"

LEGEND:

EXTENT OF CURB DEMOLITION

NOTES:

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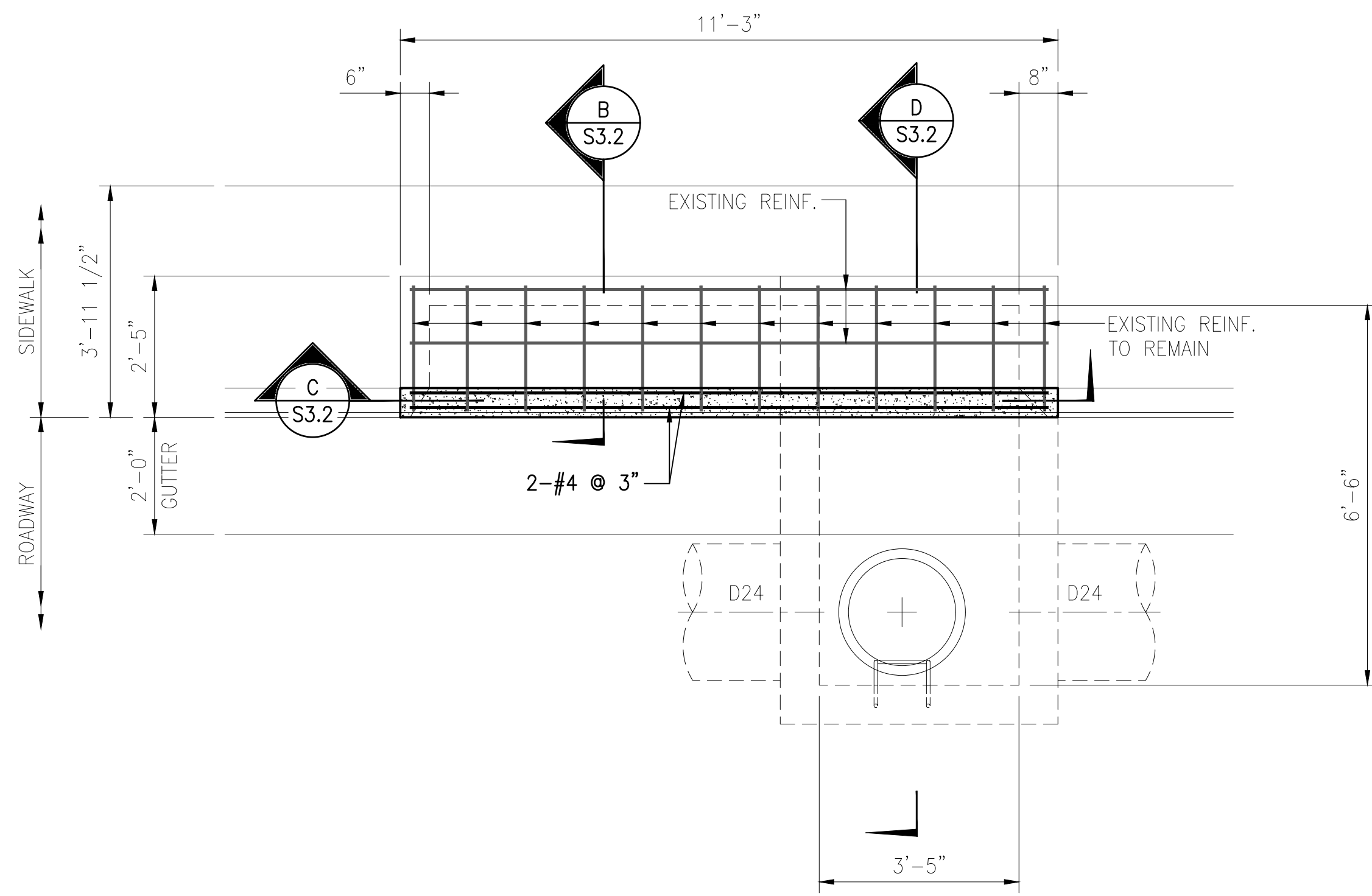


C DEMO SECTION
S3.1 SCALE: 1/2" = 1'-0"

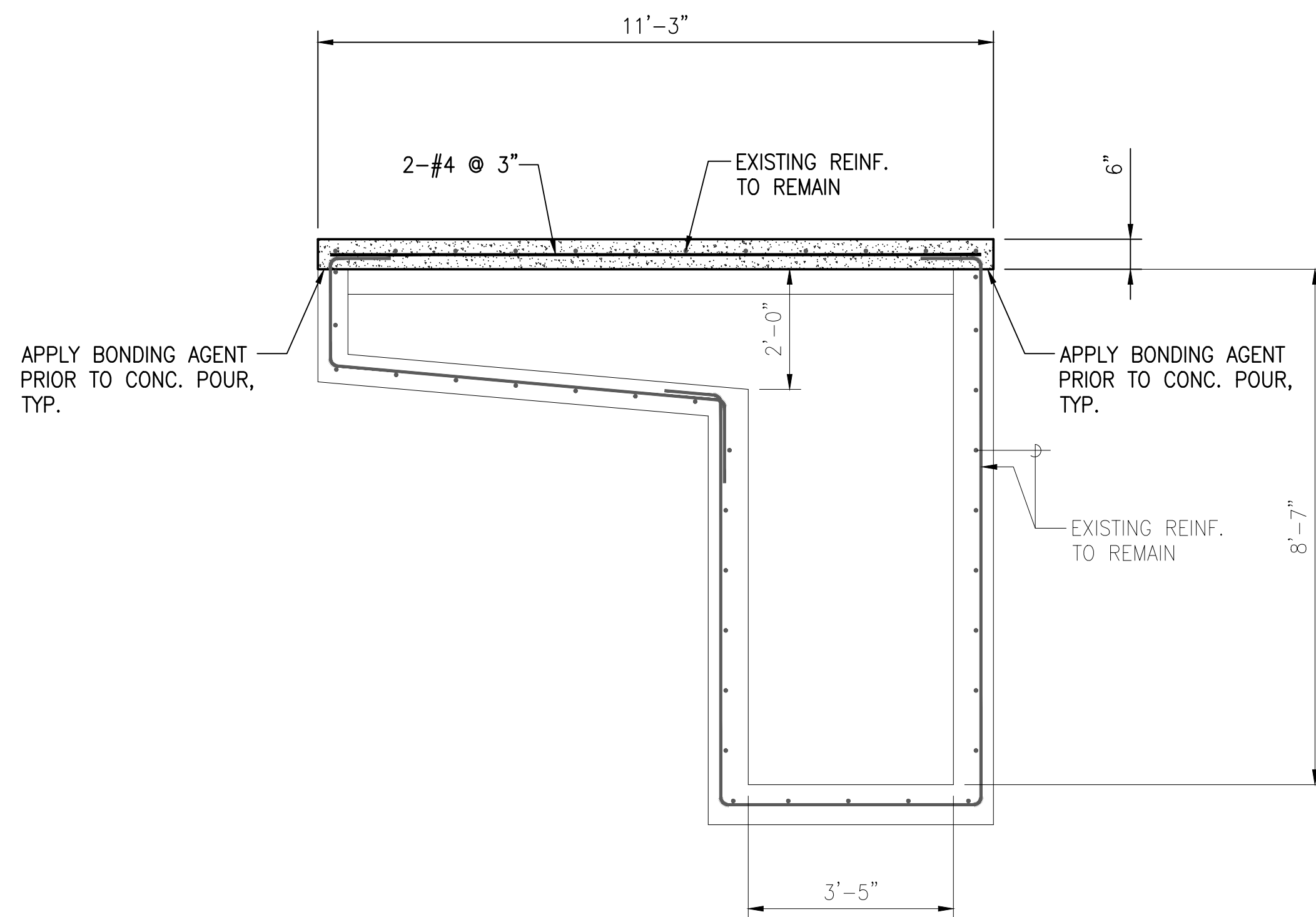
CATCH BASIN - CB "F"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED	
DRAWN: KSF						
CHECKED: RM						
DATE: SEPTEMBER 2022						
<p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</p> <p><i>Russ S. Miyahara</i> SIGNATURE 1/30/2024 EXPIRATION DATE OF THE LICENSE</p>	<p>615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 kafinc@kafinc.us</p> <p>VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII</p> <p>KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOULIULI, EWA, OAHU, HAWAII</p> <p>CATCH BASIN CB "F" DEMOLITION PLAN AND SECTIONS</p>					
	APPROVED:					DWG NO.
						S3.1

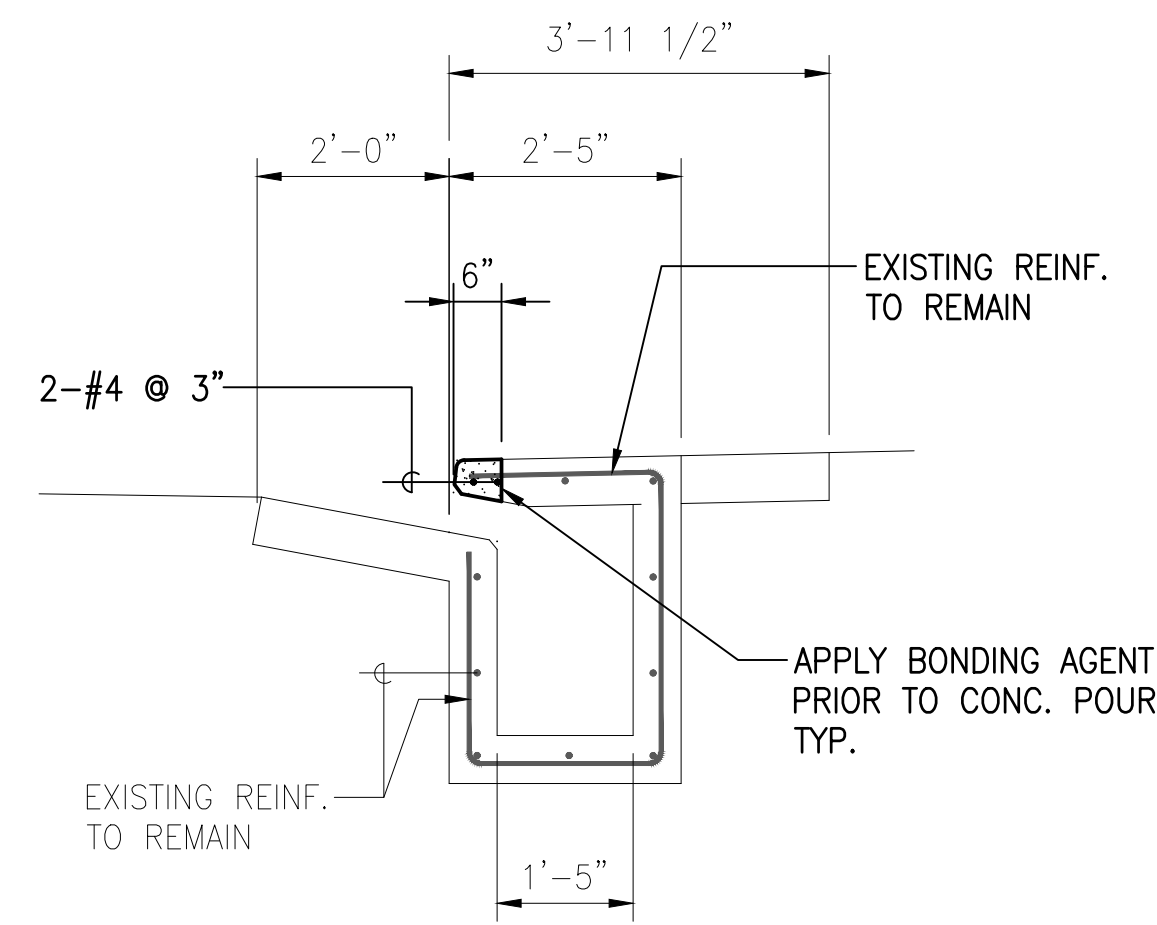
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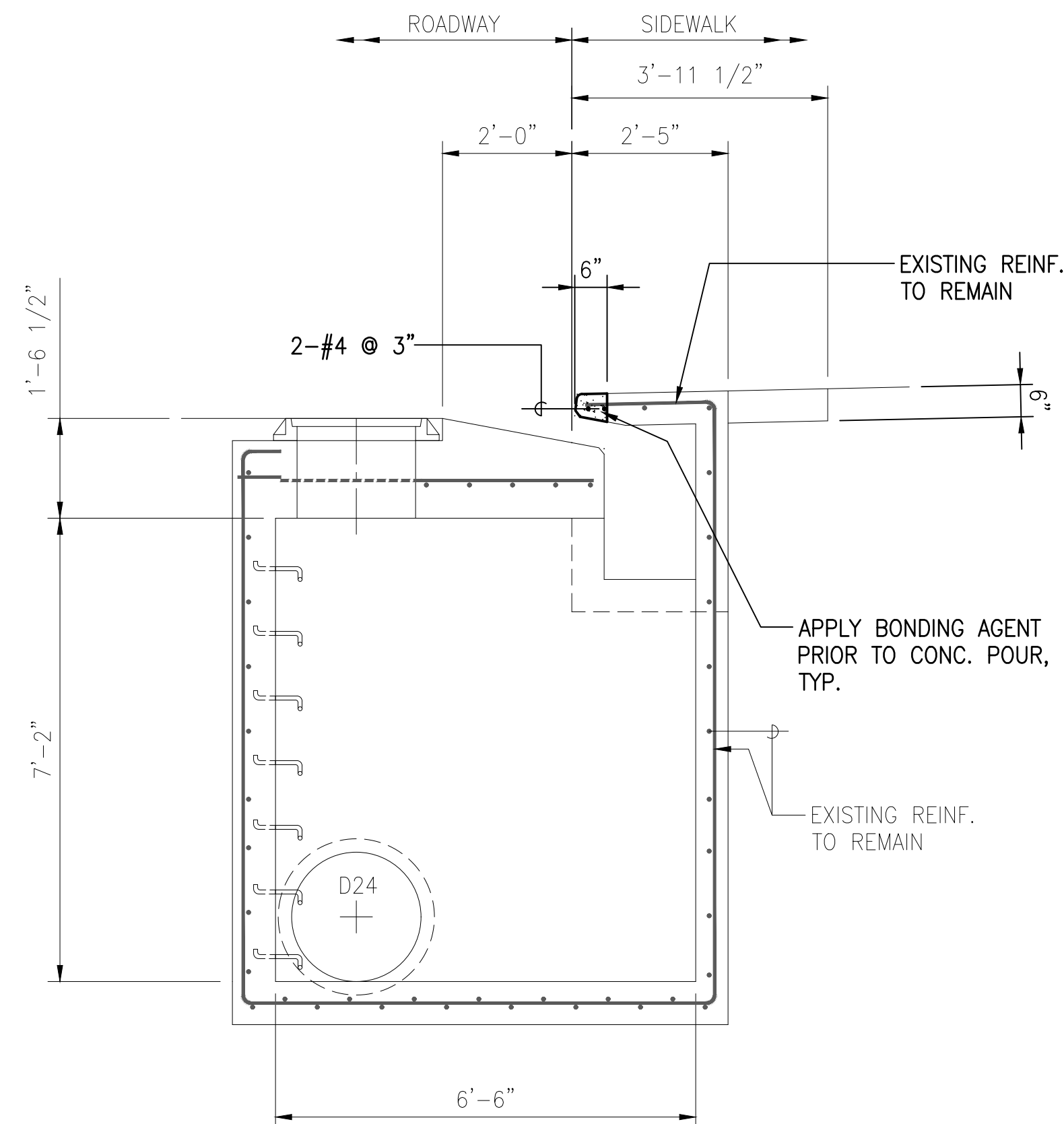
A PLAN
S3.2 SCALE: 1/2" = 1'-0"



C SECTION
S3.2 SCALE: 1/2" = 1'-0"



B SECTION
S3.2 SCALE: 1/2" = 1'-0"



D SECTION
S3.2 SCALE: 1/2" = 1'-0"

LEGEND:

EXTENT OF CONCRETE REPAIR

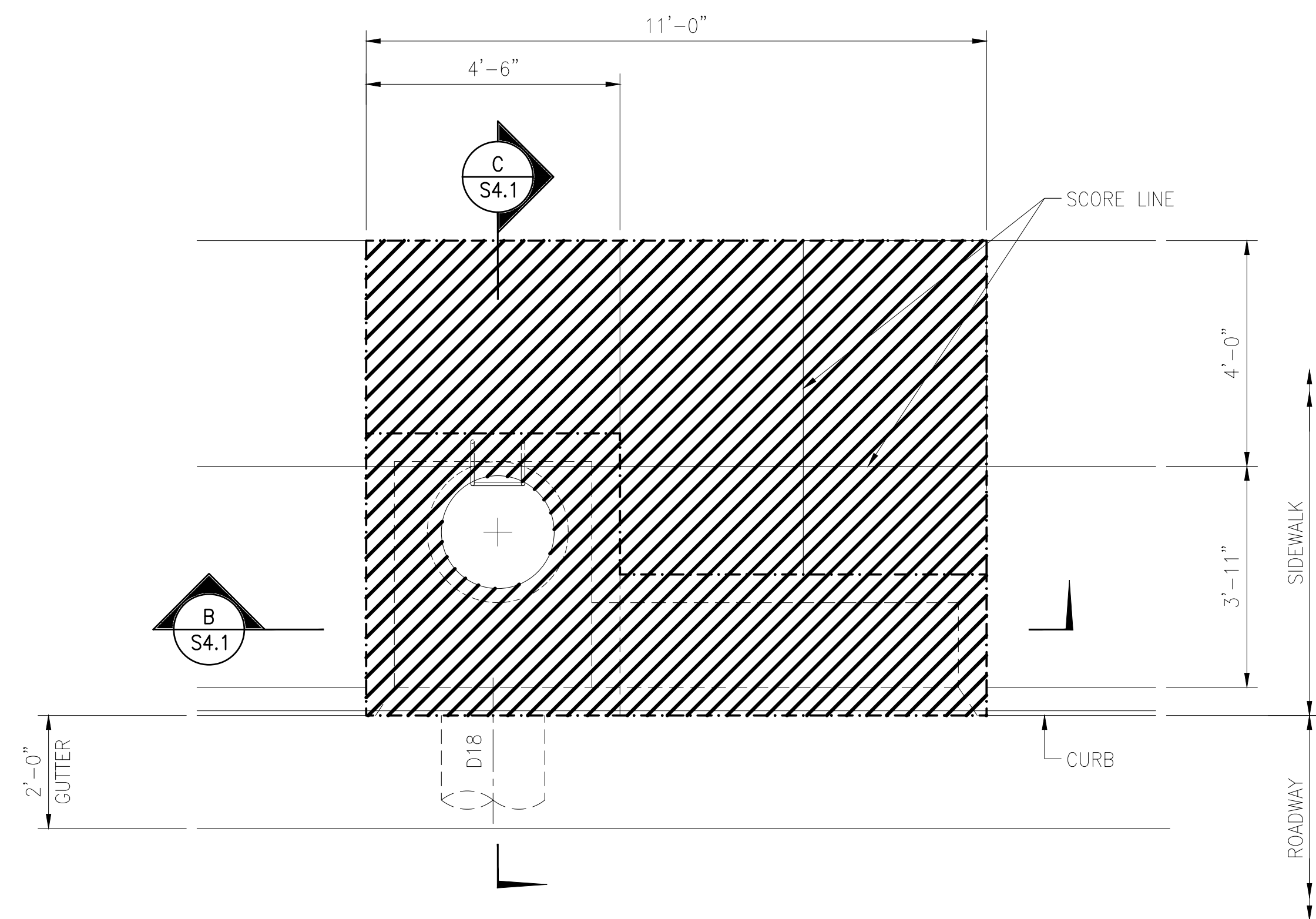
NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "F"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
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DATE: SEPTEMBER 2022					
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	<p style="text-align: center;">SHEET 39 OF 55 SHEETS</p>				
	FILE	POCKET	FOLDER	NUMBER	

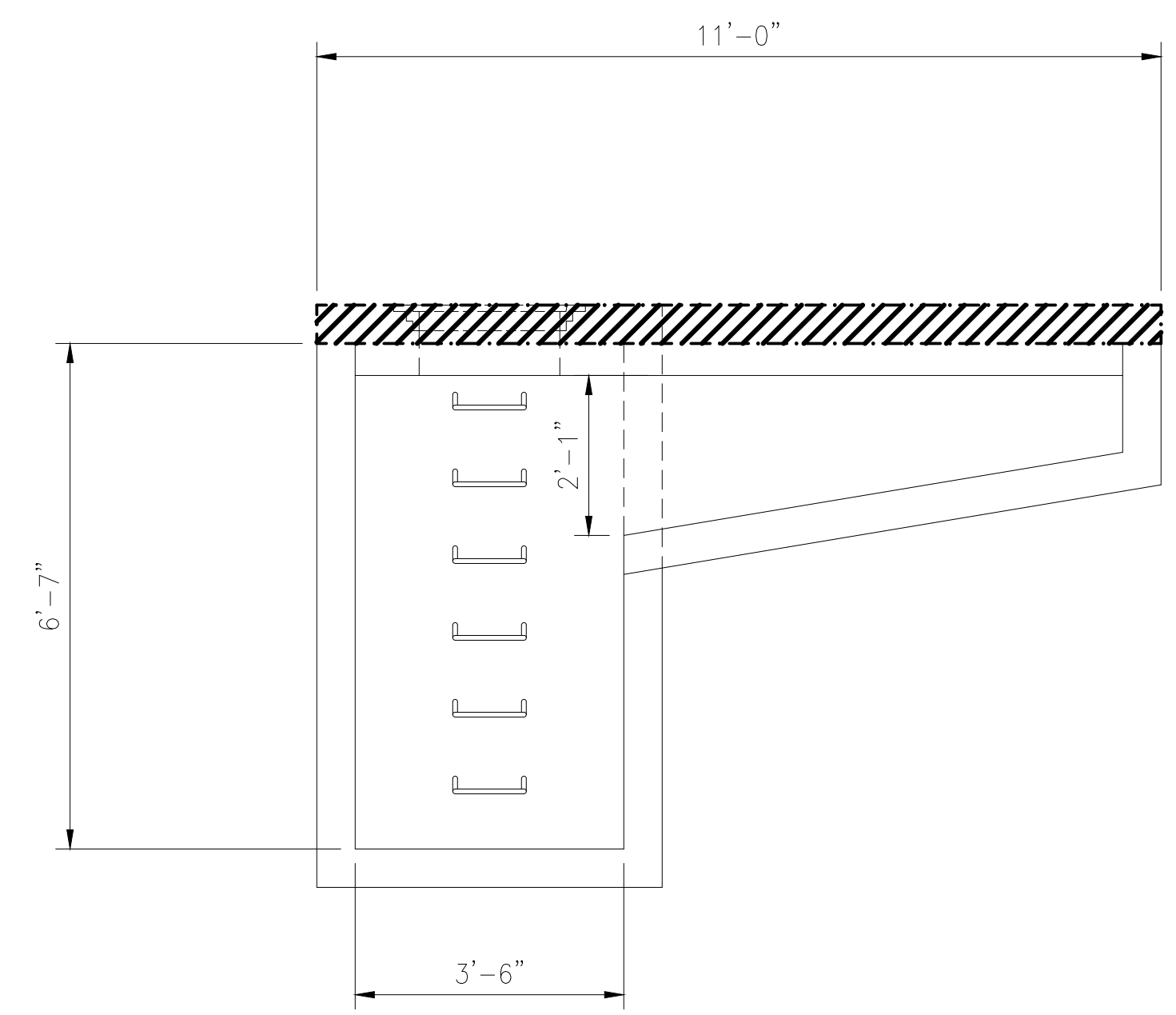
DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S0401 G.PRDWG PLOT TIME: 09-14-22, 4:56 PM



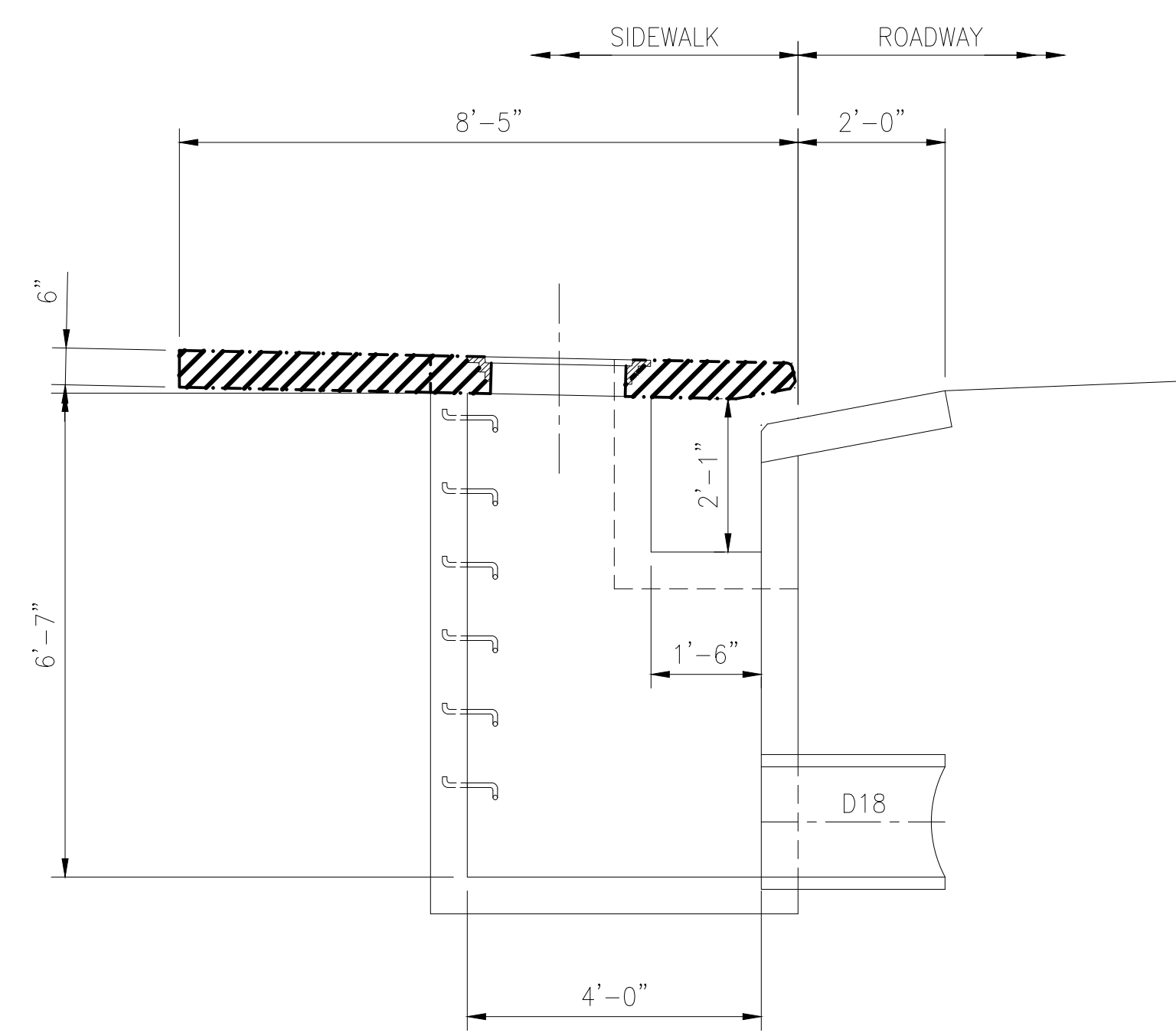
A PLAN
S4.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF SLAB DEMOLITION

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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B SECTION
S4.1 SCALE: 1/2" = 1'-0"



C SECTION
S4.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "G"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Russ S. Miyahara
SIGNATURE
4/30/2024
EXPIRATION DATE OF LICENSE

615 PIKOI STREET, SUITE 300
HONOLULU, HAWAII 96814
ksfinc@ksfinc.us

VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

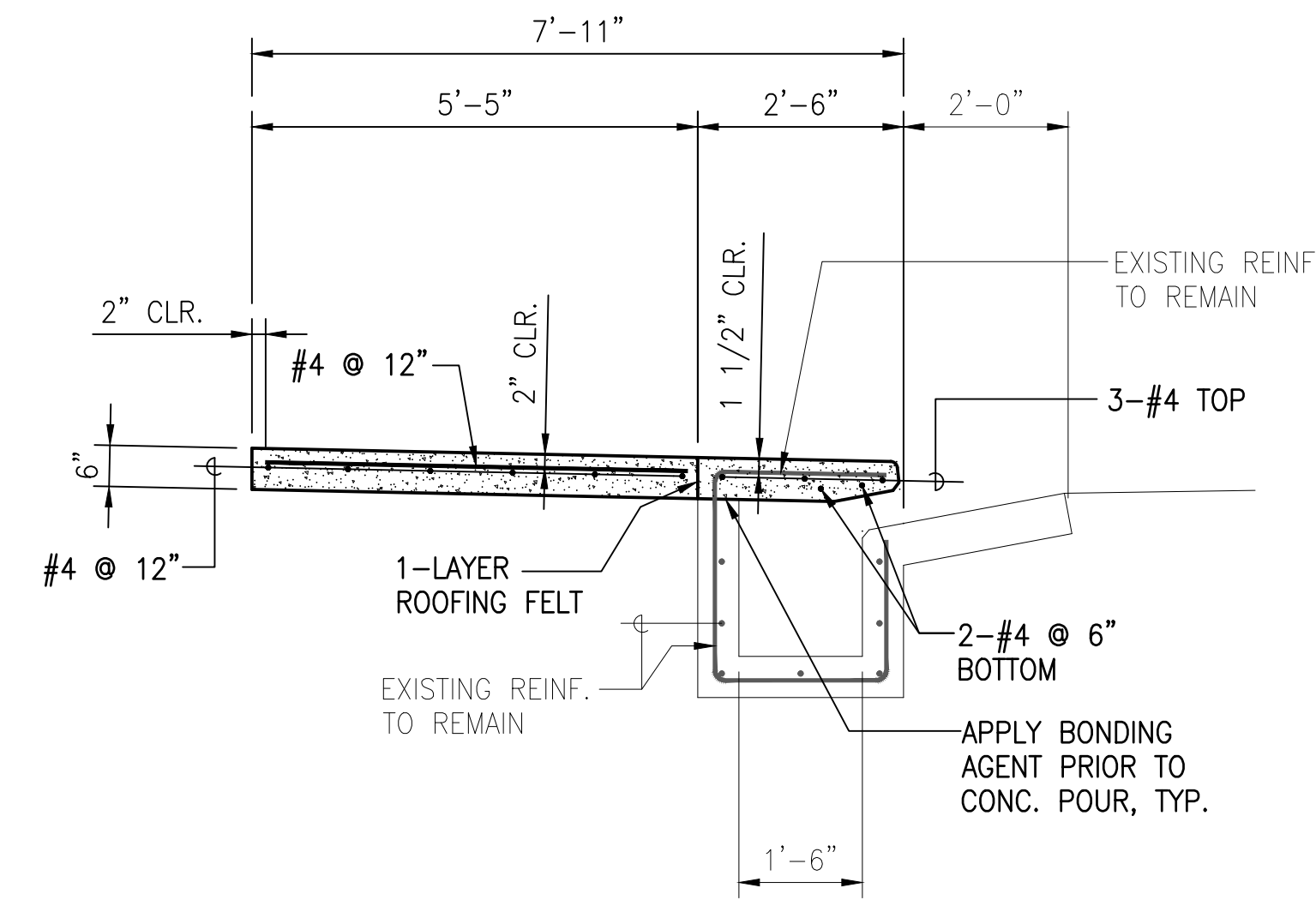
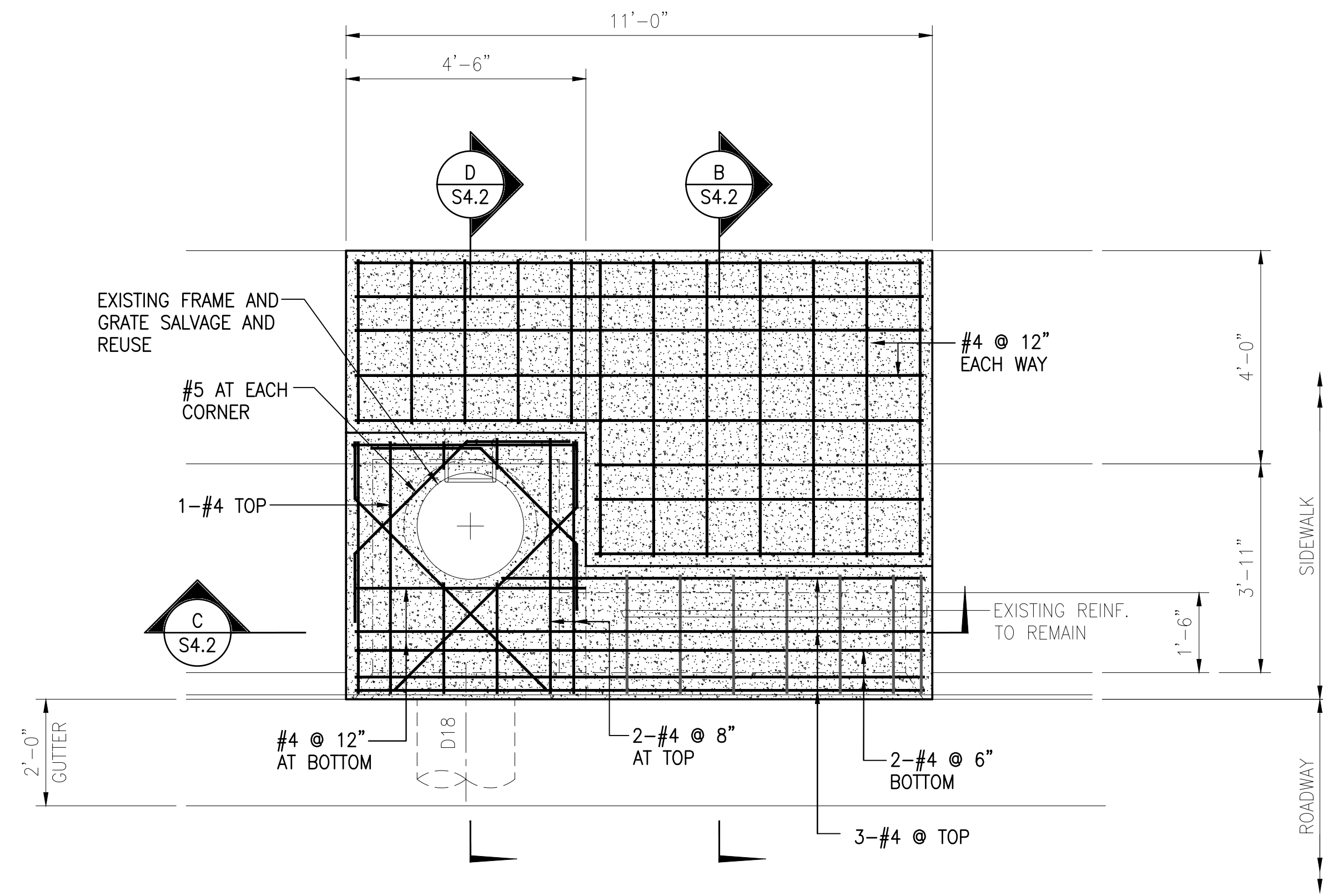
KAI'AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "G"
DEMOLITION PLAN AND SECTIONS

APPROVED:

DWG NO.
S4.1

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S0401 G.PRDWG PLOT TIME: 09-14-22, 4:56 PM

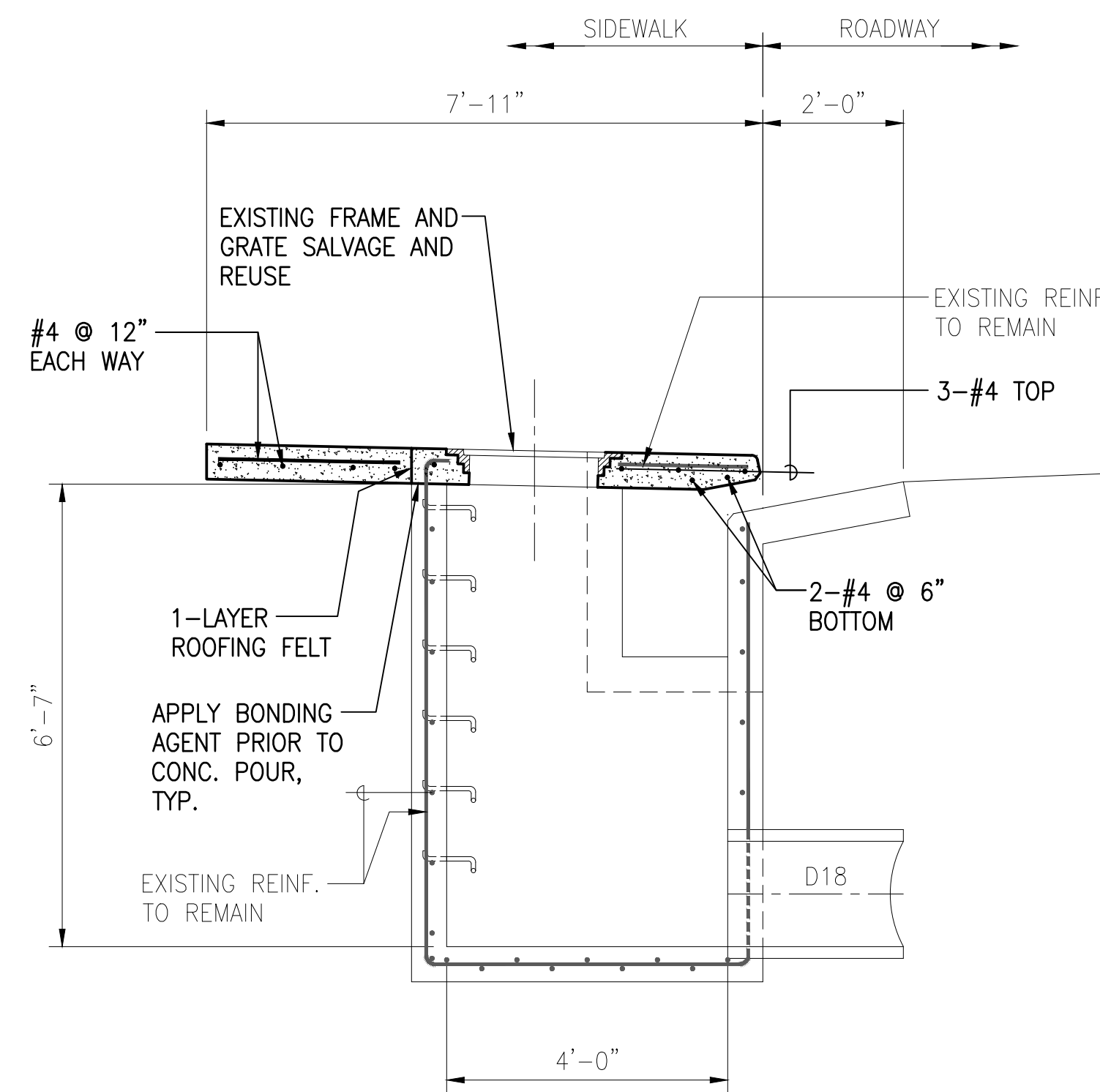
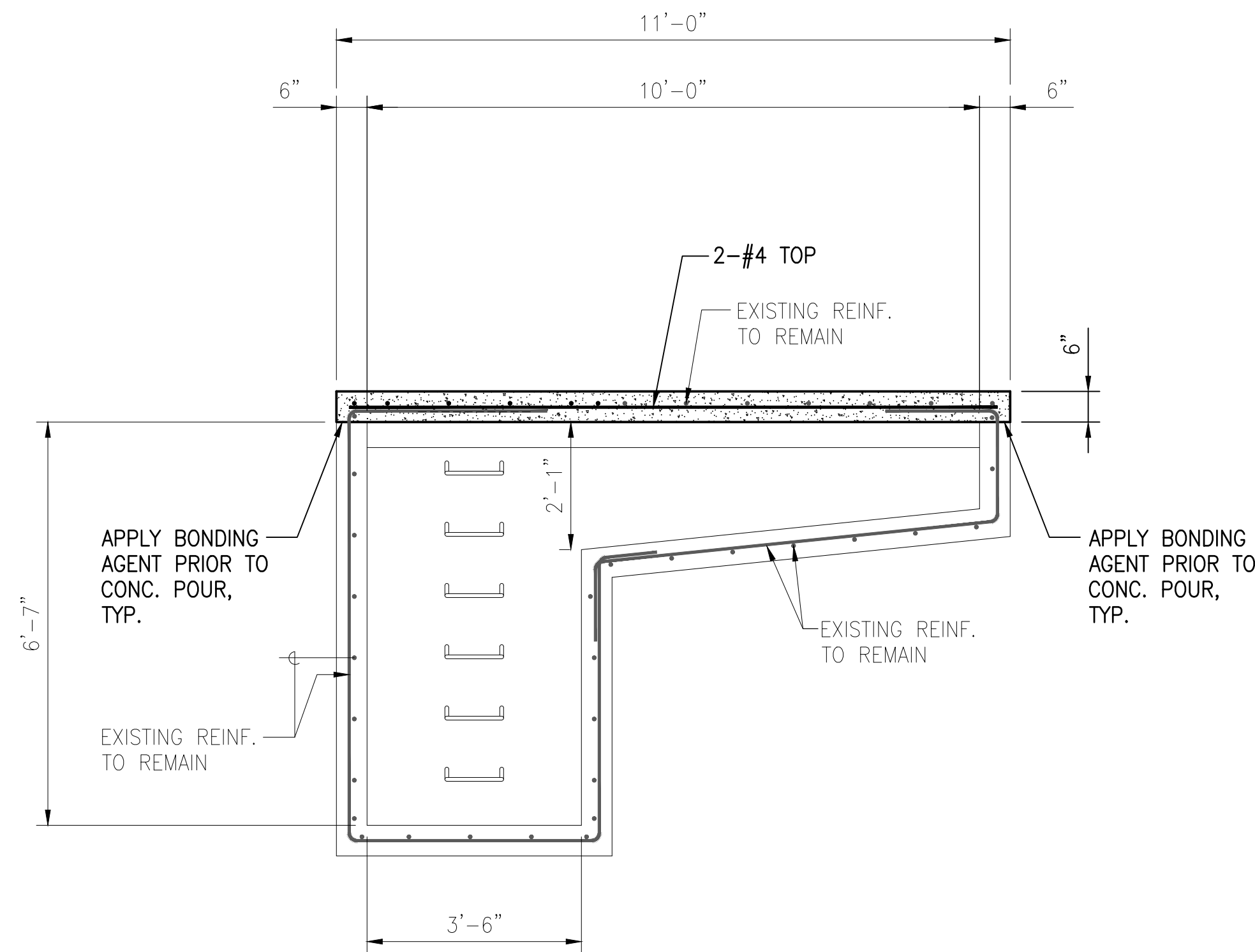


LEGEND:

EXTENT OF CONCRETE REPAIR

NOTES:

- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

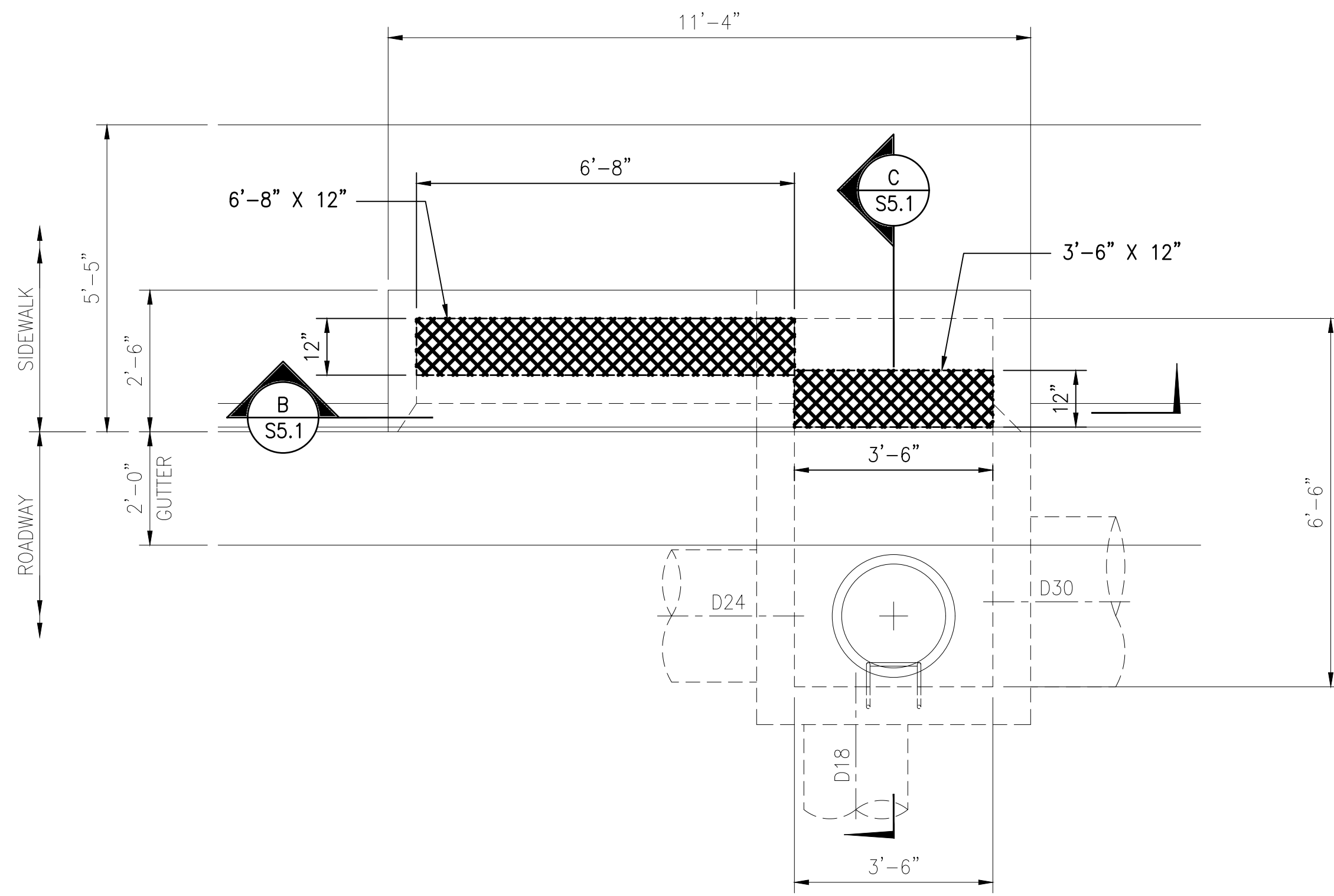


CATCH BASIN - CB "G"

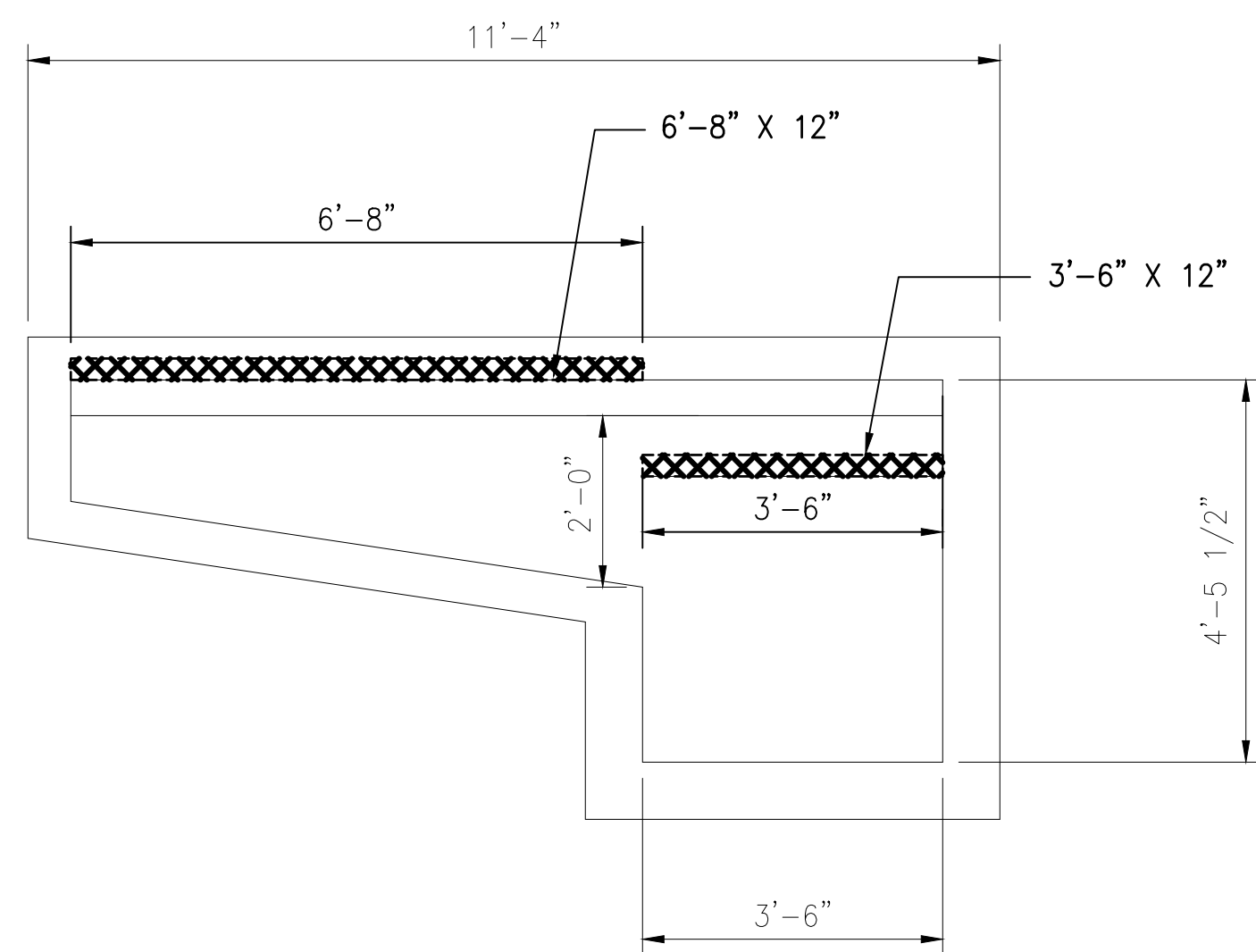
DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. SIGNATURE: <i>Russ S. Miyahara</i> EXPIRATION DATE OF THE LICENSE: 4/30/2024	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us				
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII CATCH BASIN CB "G" PLAN AND SECTIONS				
	APPROVED:				DWG. NO. S4.2

FILE	POCKET	FOLDER	NUMBER
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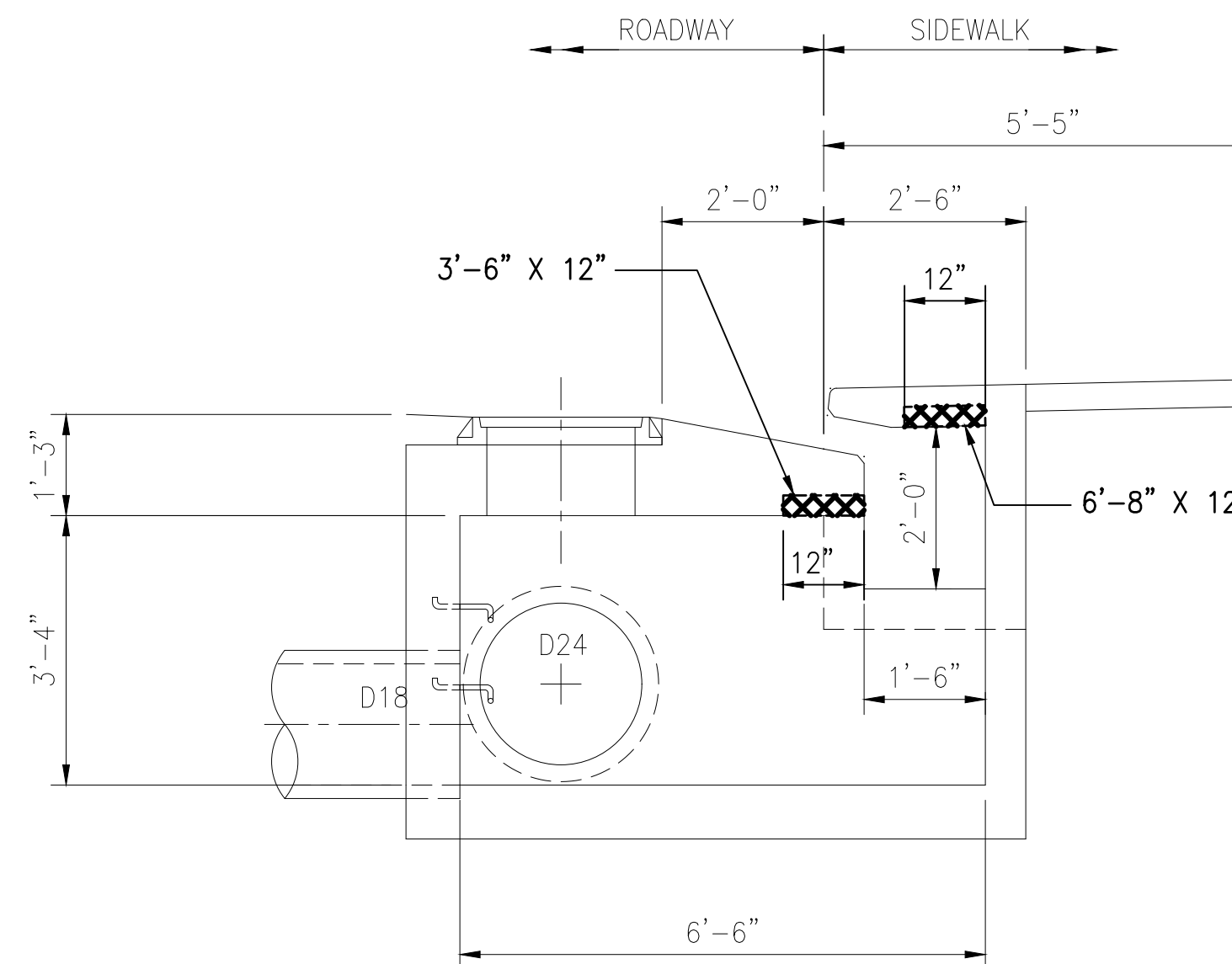
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A PLAN
S5.1 SCALE: 1/2" = 1'-0"



B SECTION
S5.1 SCALE: 1/2" = 1'-0"



C SECTION
S5.1 SCALE: 1/2" = 1'-0"

LEGEND:

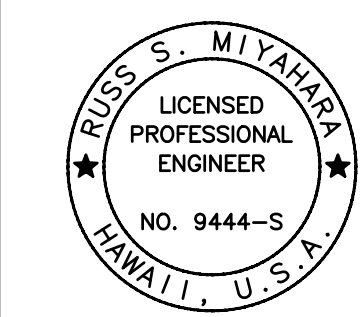
EXTENT OF DEFECTIVE CONCRETE REPAIR

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "J"

DESIGN: RM					
DRAWN: KSF	REVISION	DATE	BRIEF	BY	APPROVED
CHECKED: RM	615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us				
DATE: SEPTEMBER 2022					
VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII					
KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII					
CATCH BASIN CB "J" PLAN AND SECTIONS					
APPROVED:					DWG NO. S5.1

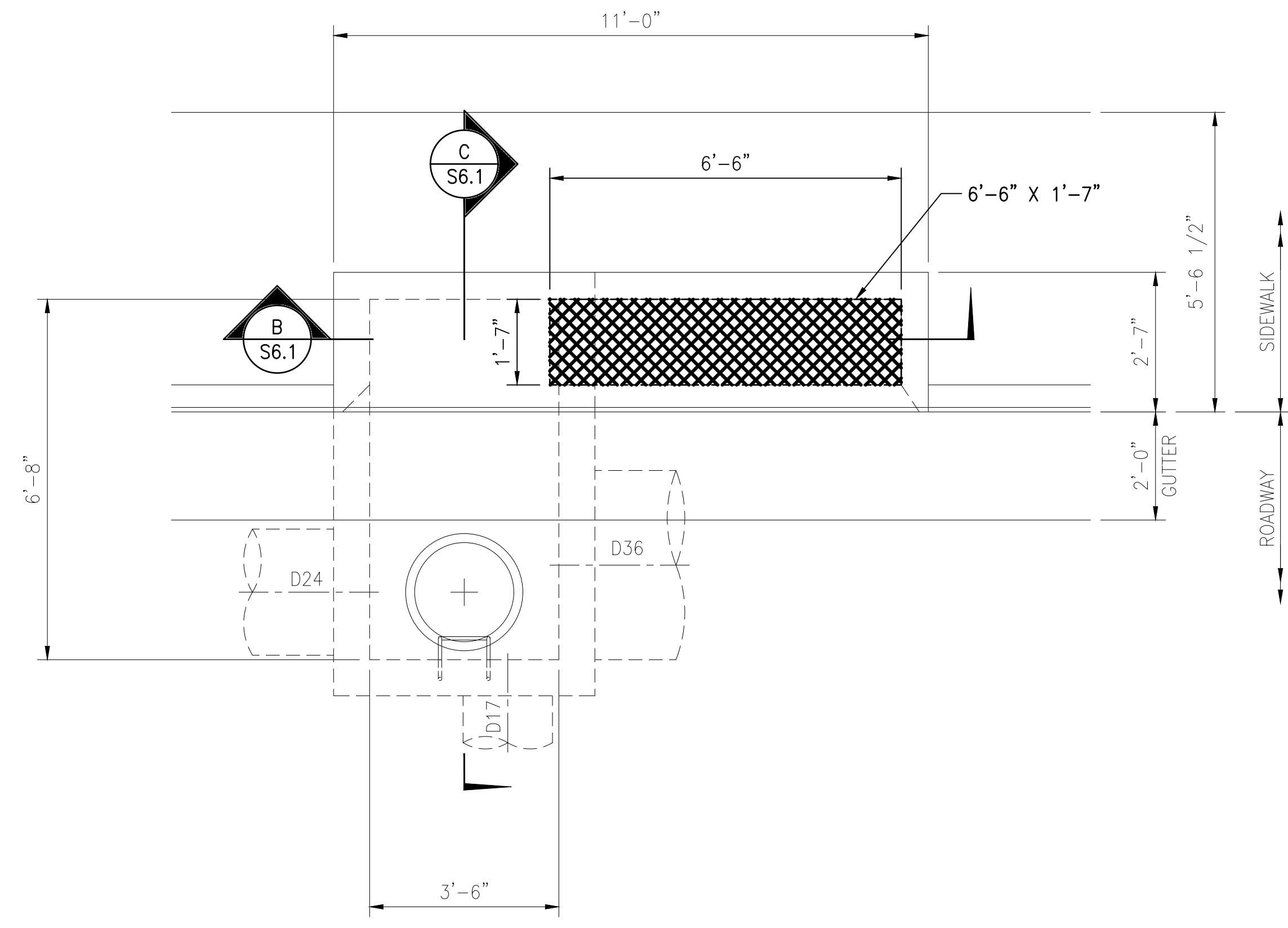


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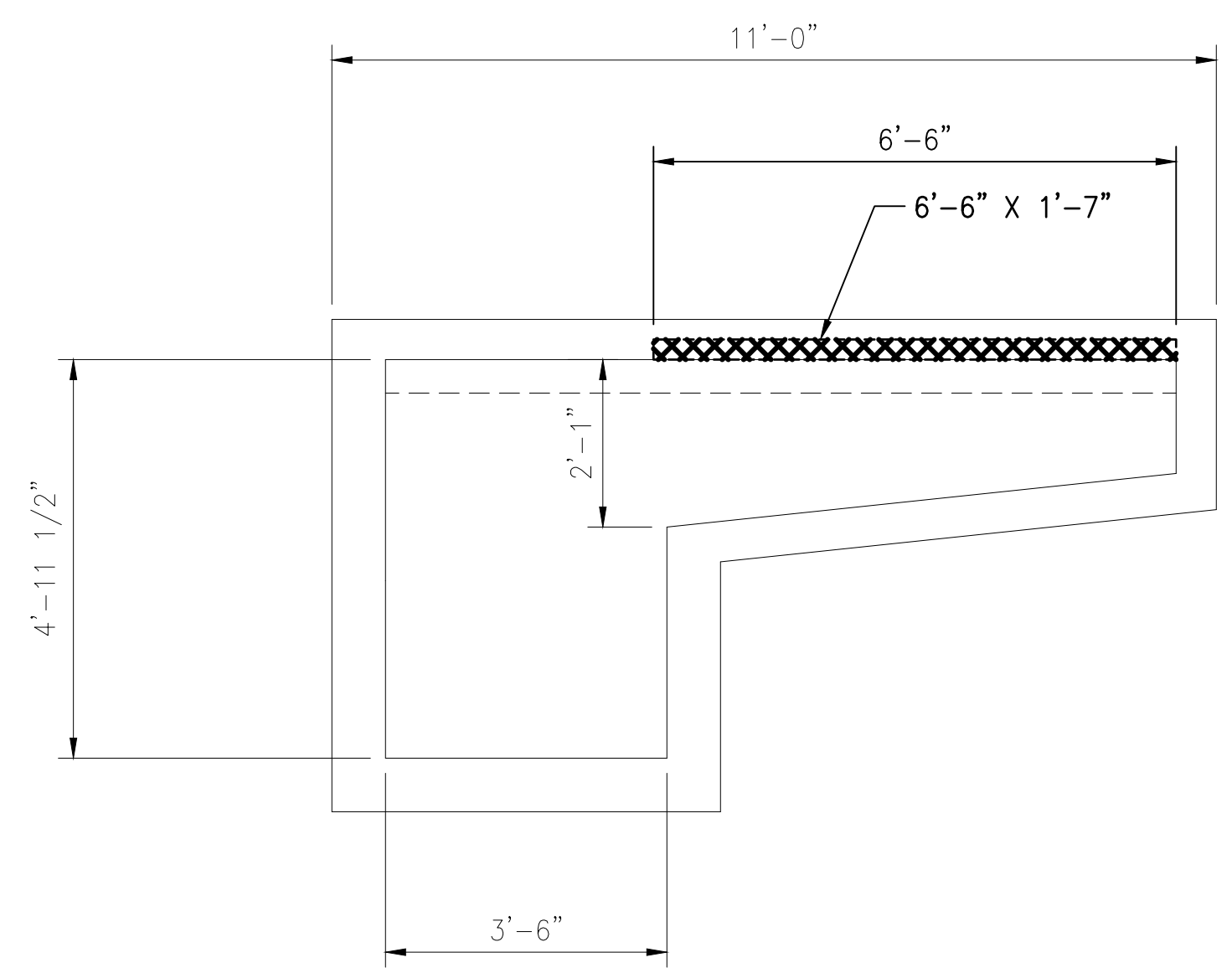
Russ S. Miyahara
SIGNATURE

7/30/2024
EXPIRATION DATE OF THE LICENSE

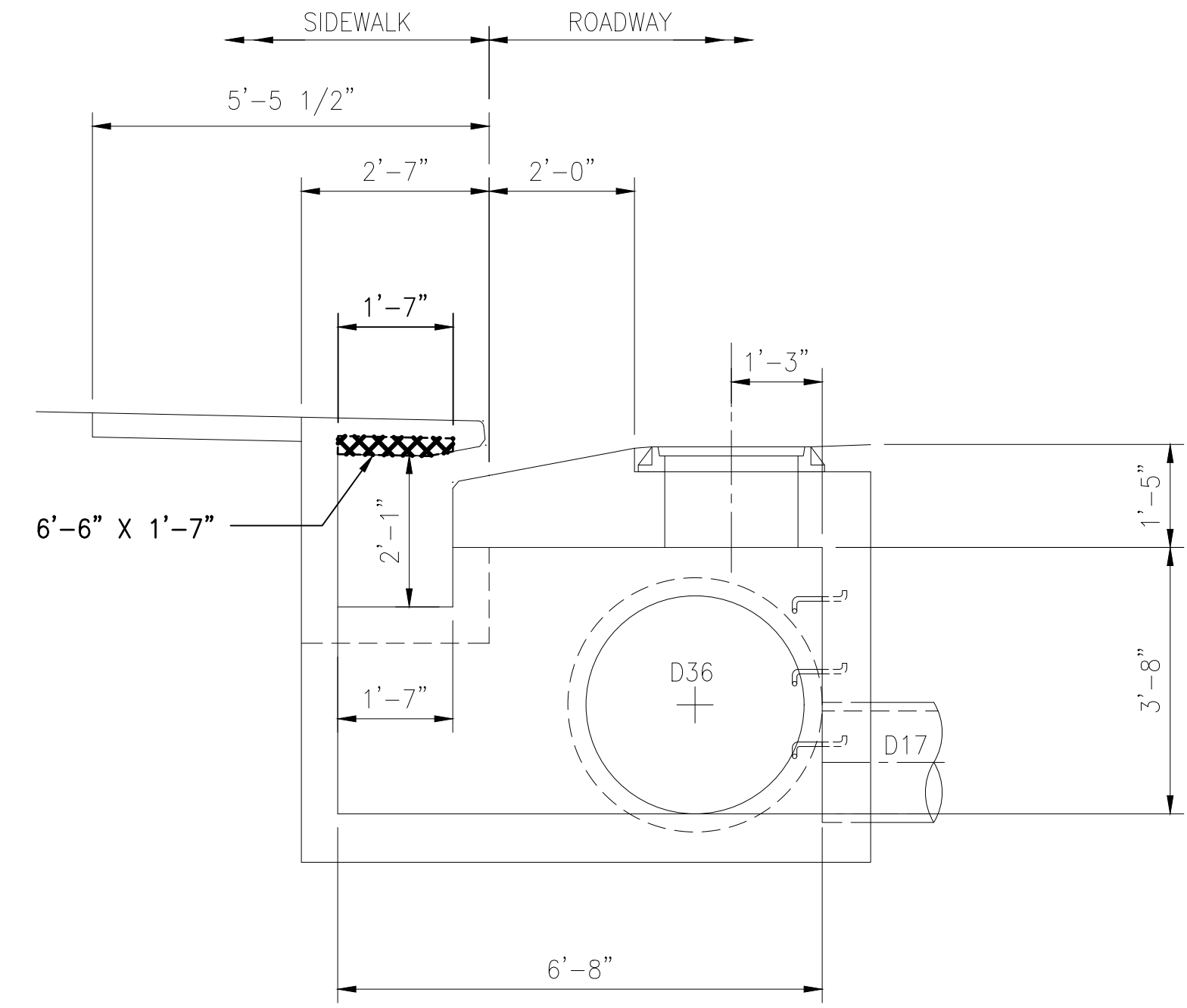
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A PLAN
S6.1 SCALE: 1/2" = 1'-0"



B SECTION
S6.1 SCALE: 1/2" = 1'-0"




C SECTION
S6.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF DEFECTIVE CONCRETE REPAIR

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "K"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

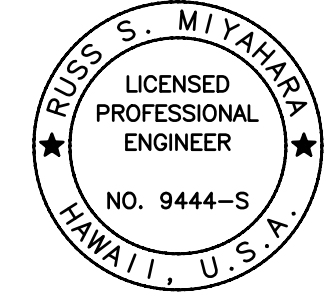


615 PIKOI STREET, SUITE 300
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kafinc@kafinc.us

VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAI'IAU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "K"
PLAN AND SECTIONS



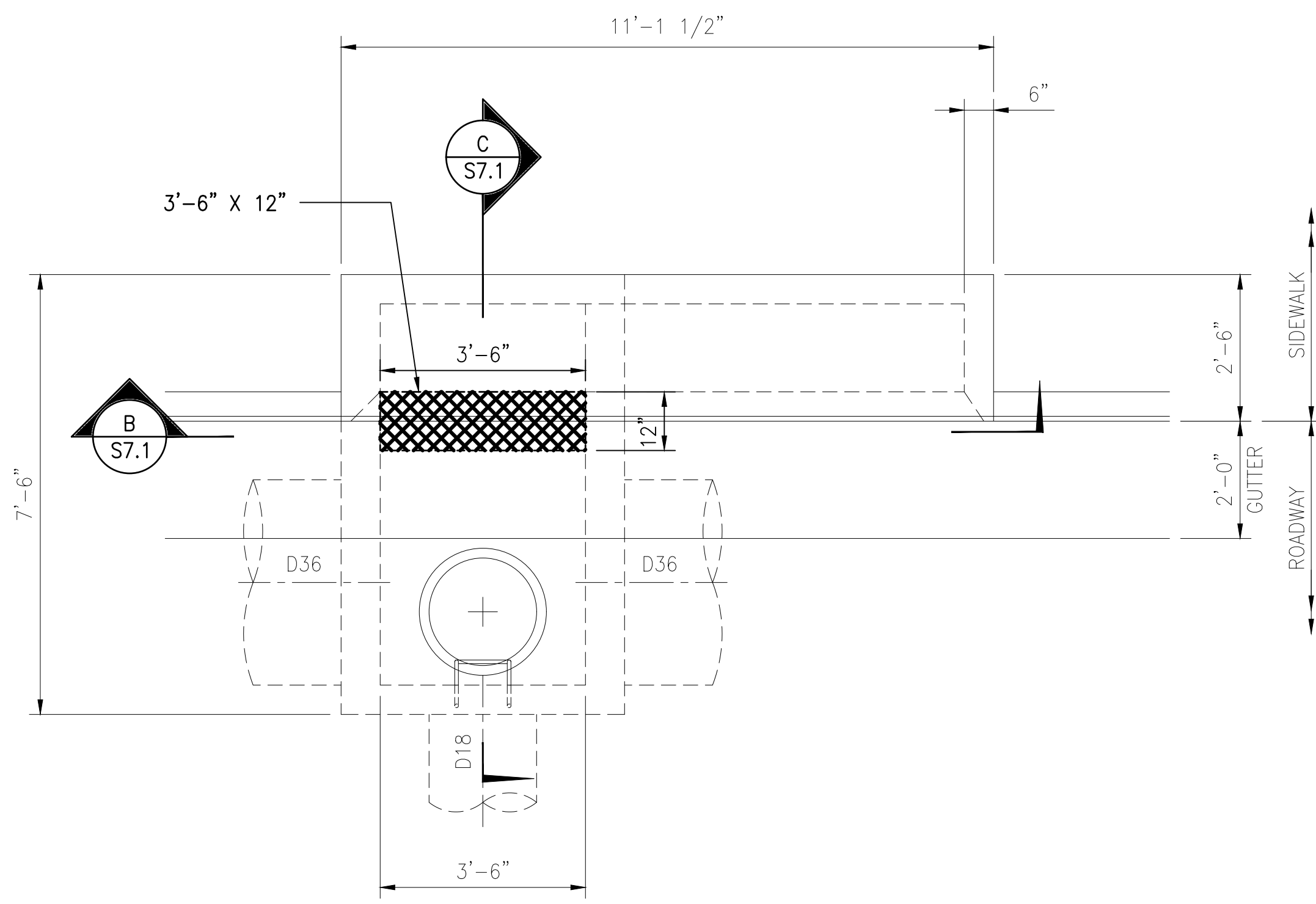
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Russ S. Miyahara
SIGNATURE 9/15/2024
EXPIRATION DATE OF THE LICENSE

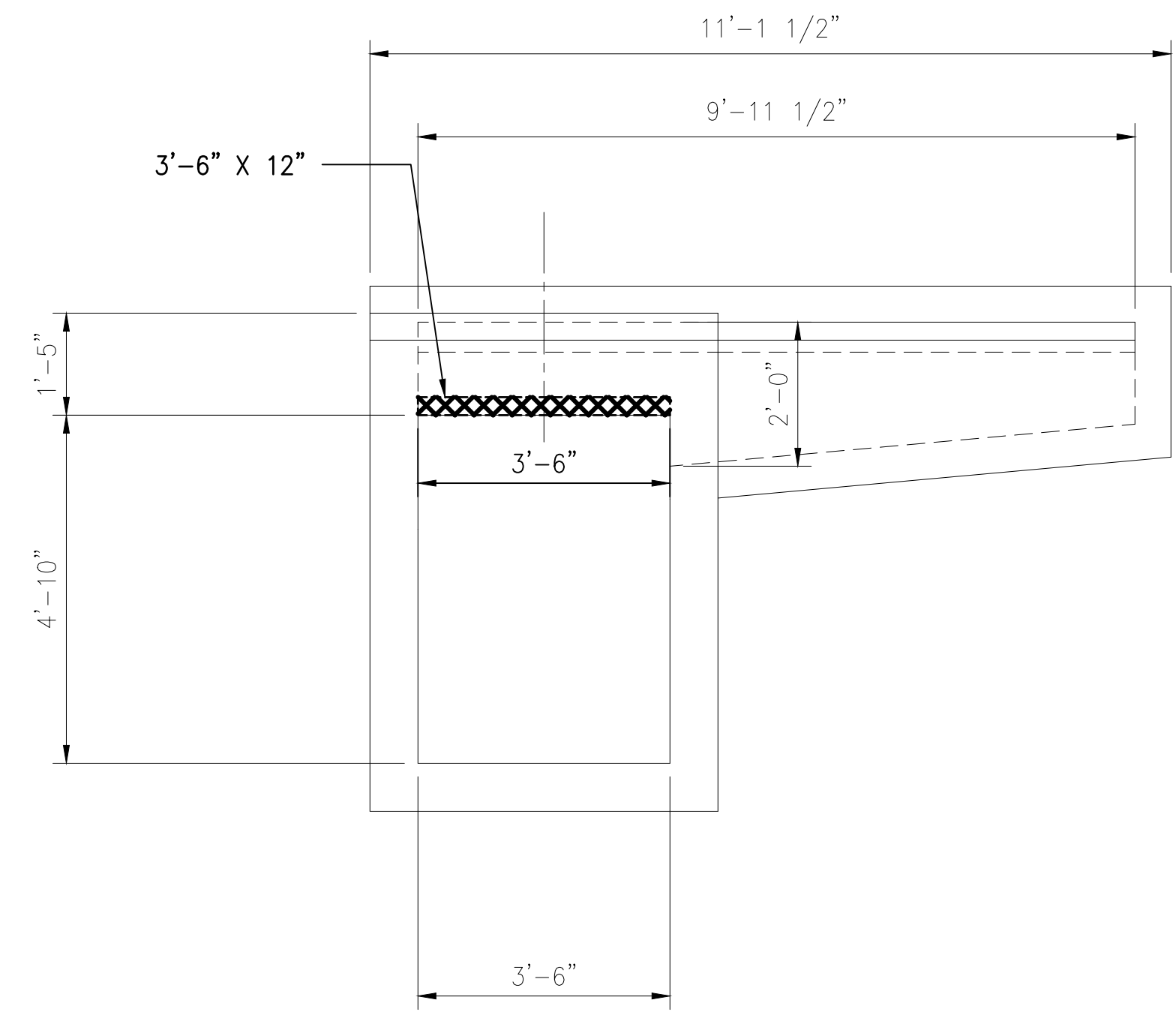
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DWG NO. **S6.1**

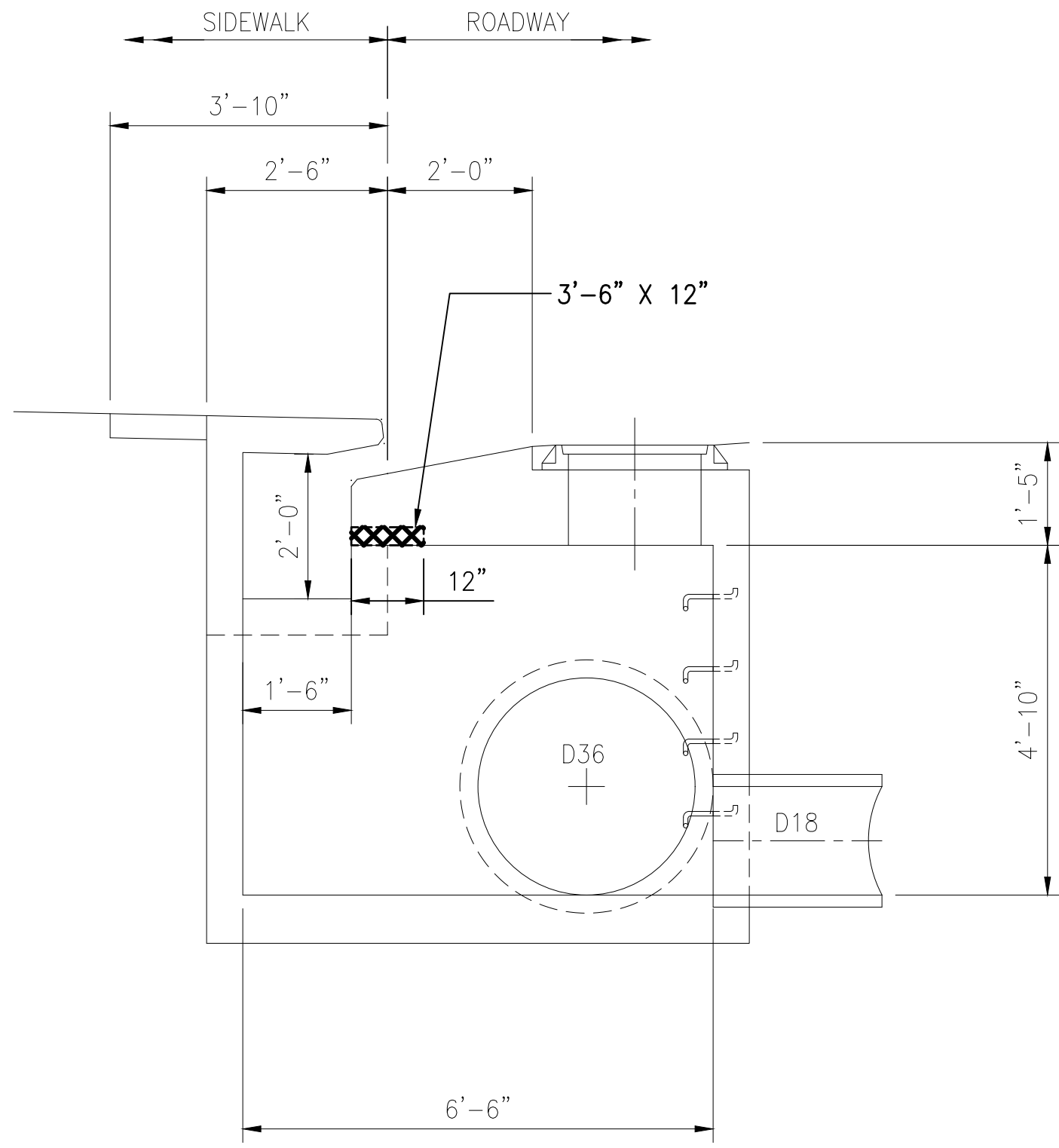
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A PLAN
S7.1 SCALE: 1/2" = 1'-0"



B SECTION
S7.1 SCALE: 1/2" = 1'-0"



C SECTION
S7.1 SCALE: 1/2" = 1'-0"

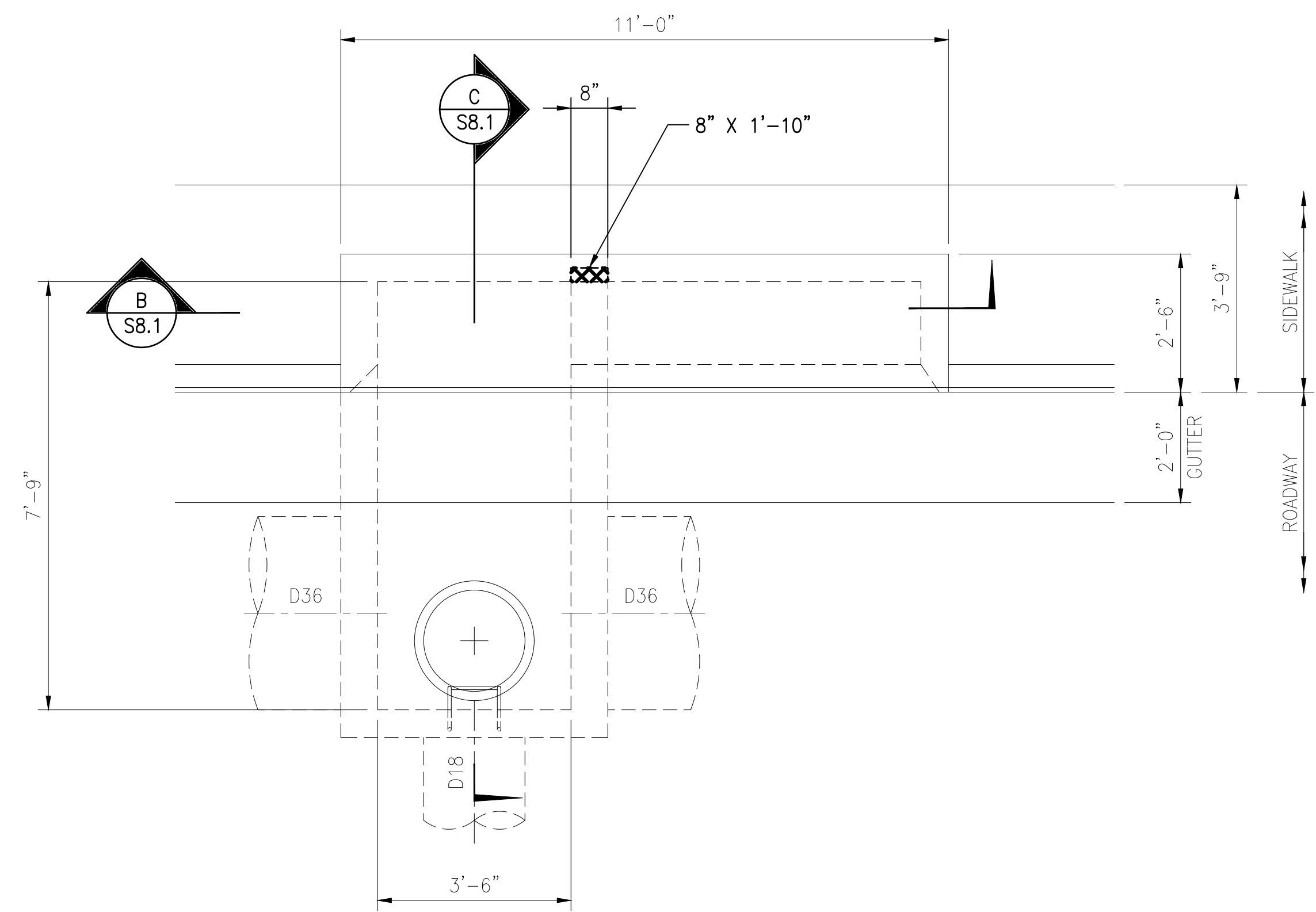
LEGEND:
 EXTENT OF DEFECTIVE CONCRETE REPAIR

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "L"

DESIGN: RM							
DRAWN: KSF	REVISION	DATE	BRIEF	BY	APPROVED		
CHECKED: RM							
DATE: SEPTEMBER 2022							
 <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION</small> <small>4/30/2024 EXPIRATION DATE OF THE LICENSE</small>	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us						
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII						
	KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII						
CATCH BASIN CB "L" PLAN AND SECTIONS						APPROVED:	DWG NO. S7.1

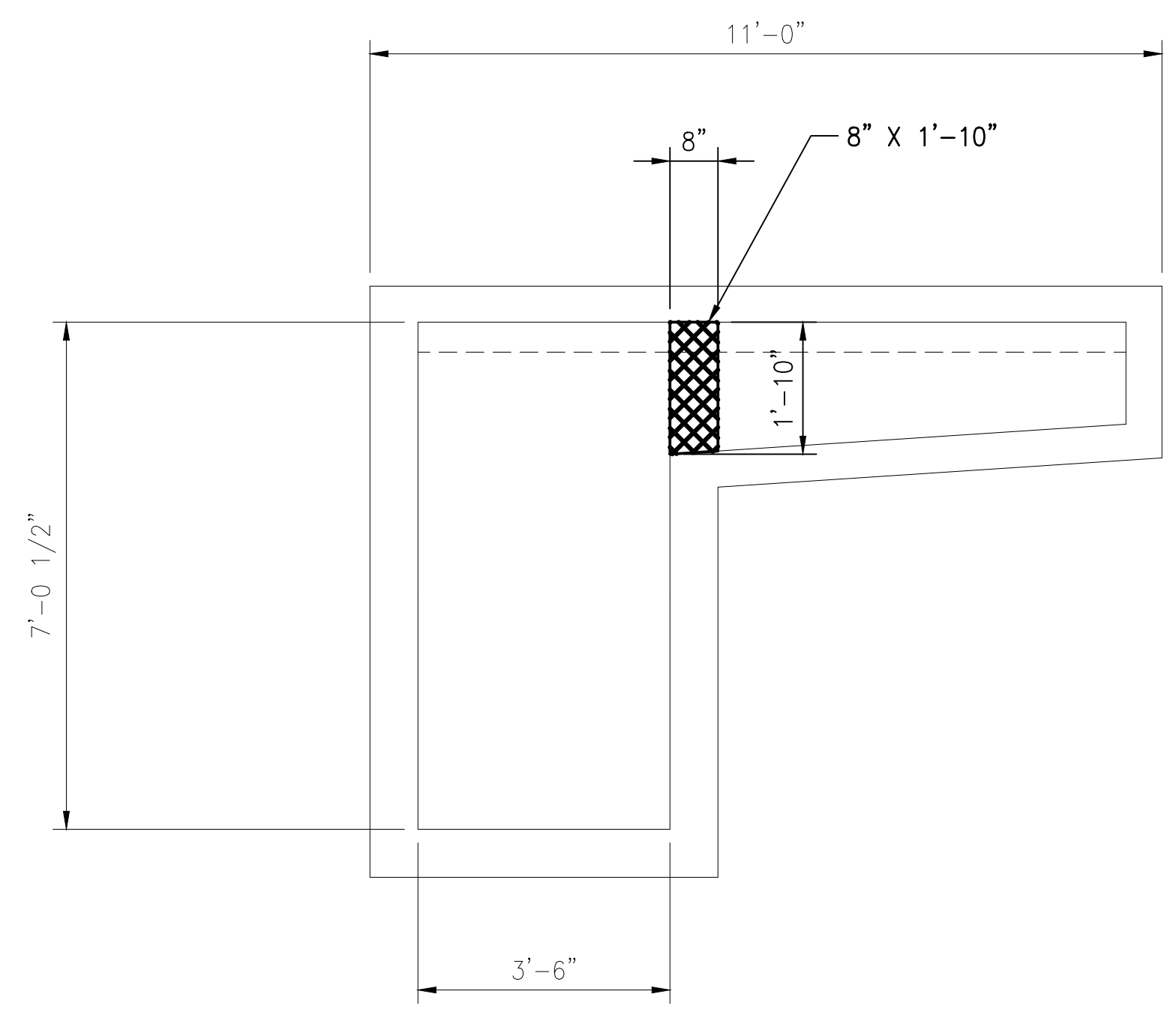
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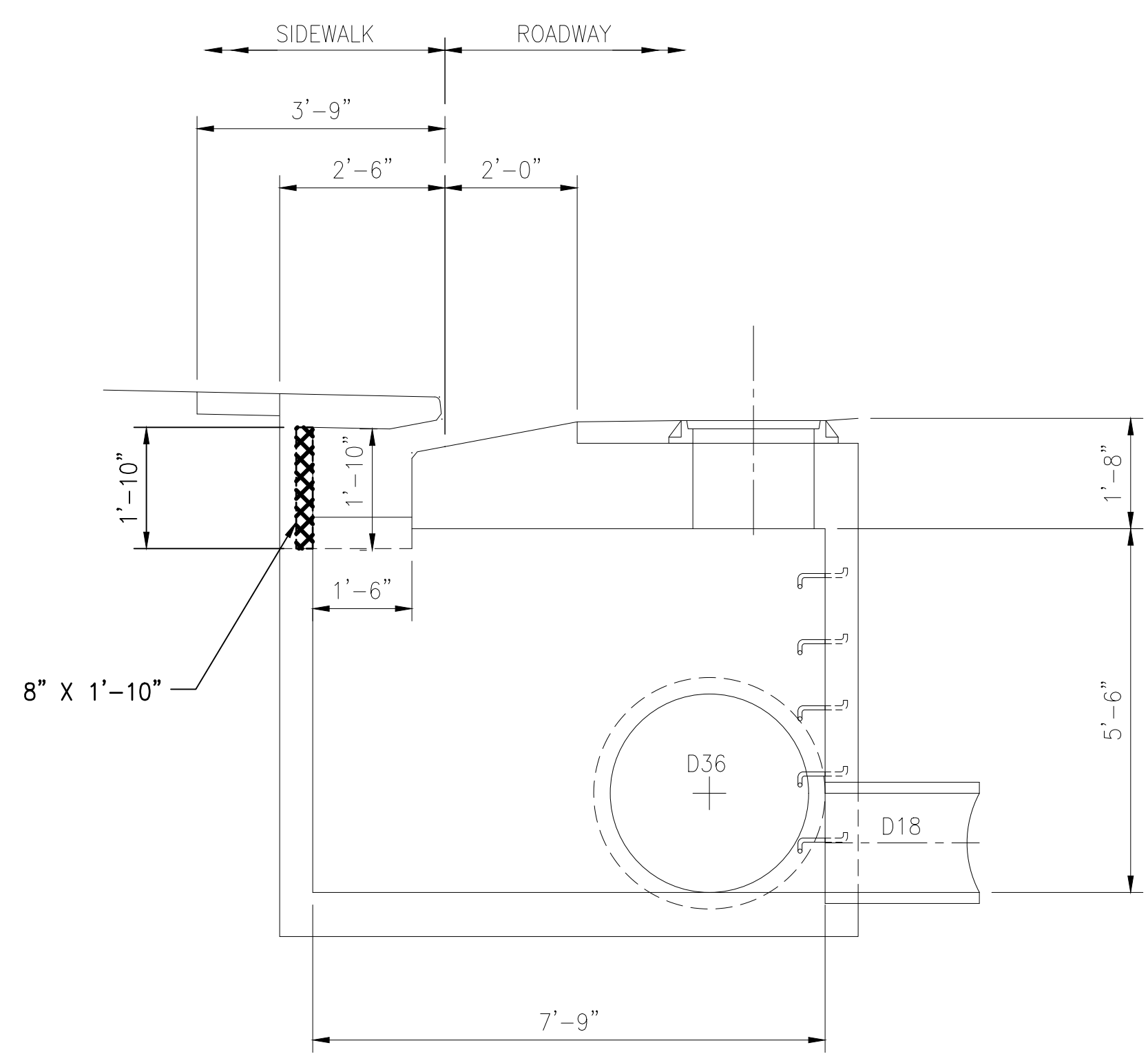
A PLAN
S8.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF DEFECTIVE CONCRETE REPAIR

- NOTES:**
1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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B SECTION
S8.1 SCALE: 1/2" = 1'-0"



C SECTION
S8.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "M"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

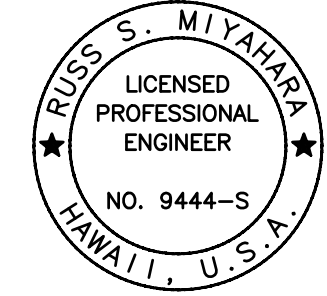


615 PIKOI STREET, SUITE 300
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ksfinc@ksfinc.us

VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAIKAI AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "M"
PLAN AND SECTIONS



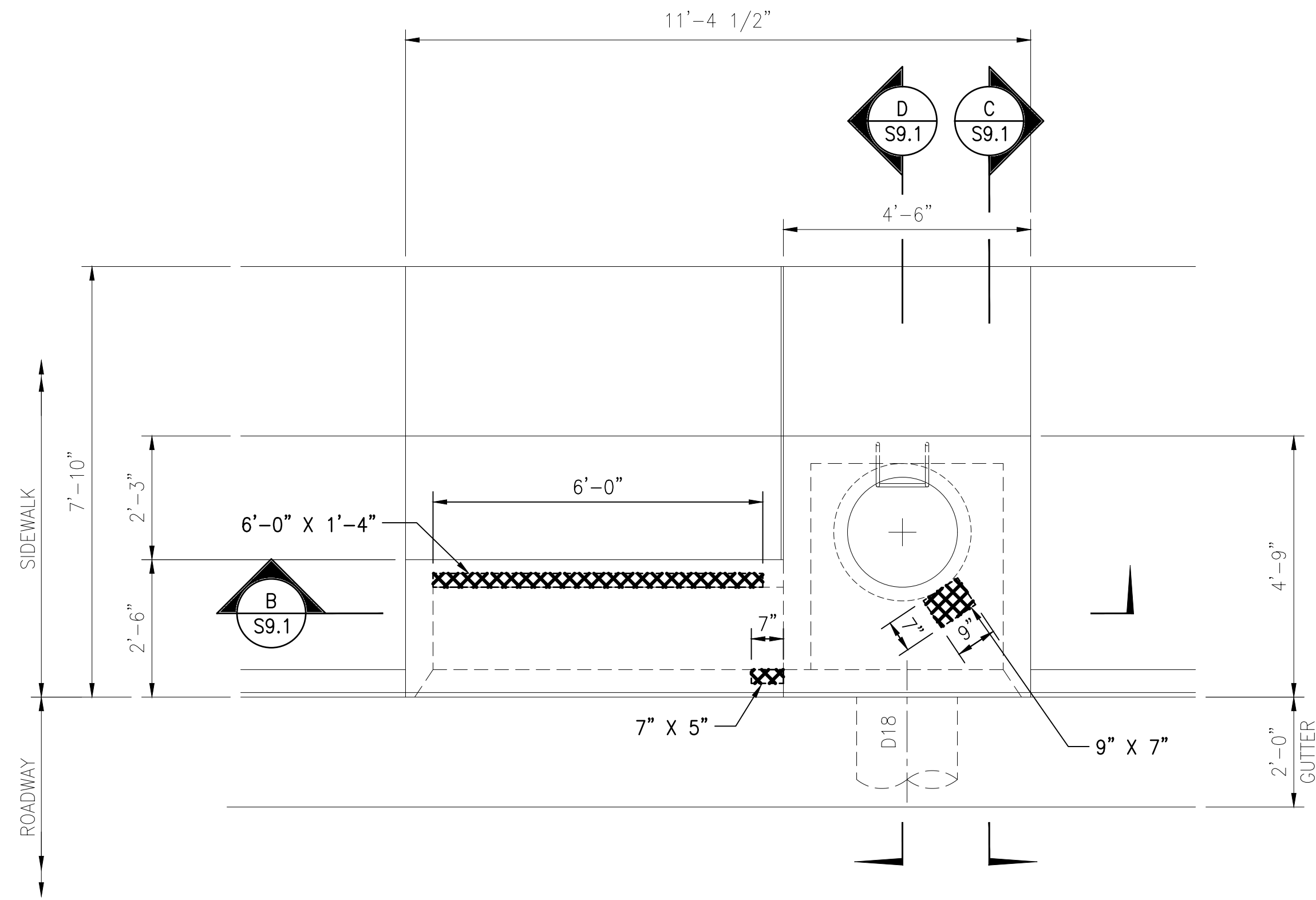
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Russ S. Miyahara
SIGNATURE
9/15/2024
EXPIRATION DATE OF THE LICENSE

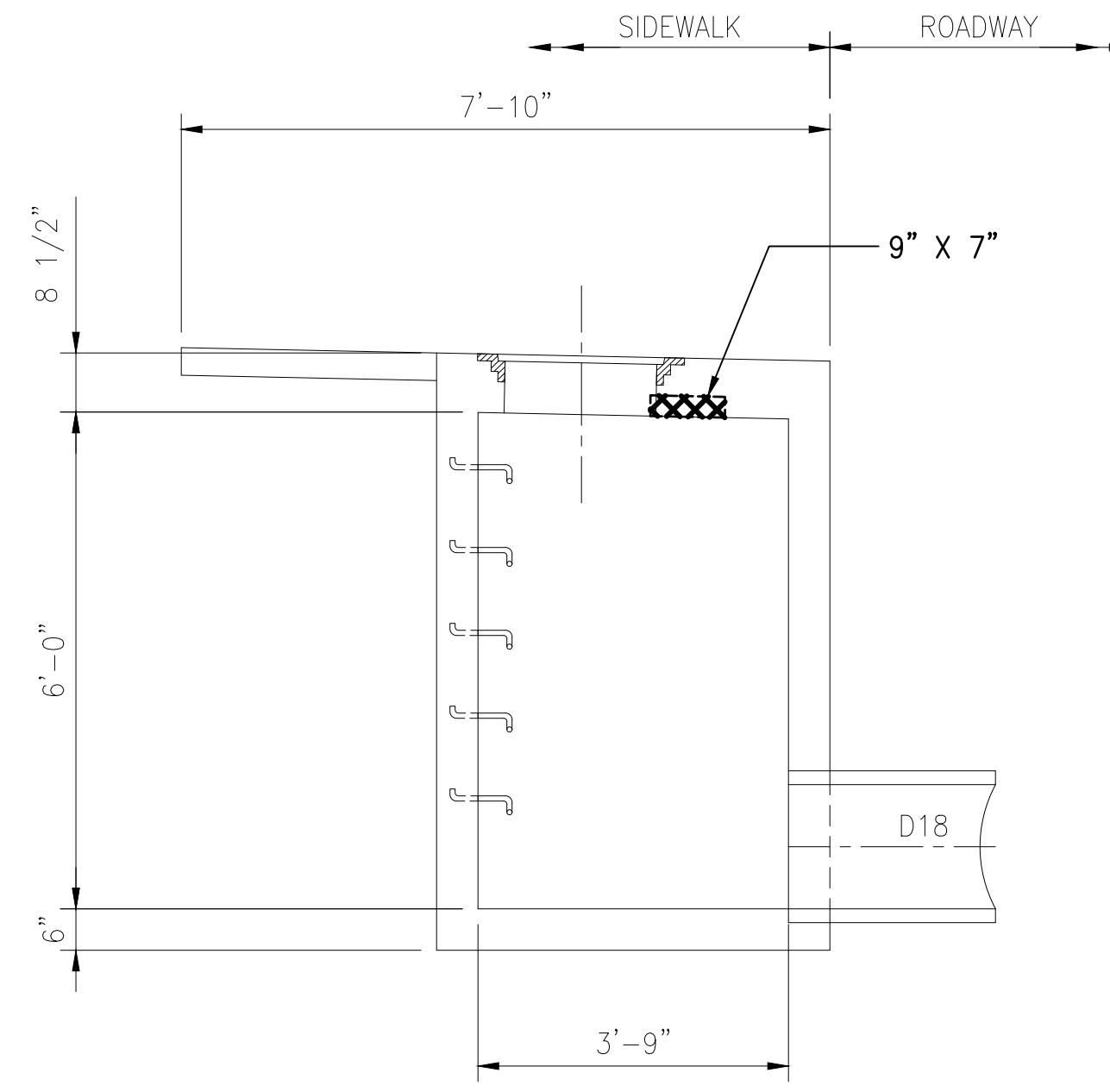
APPROVED:

DWG NO.
S8.1

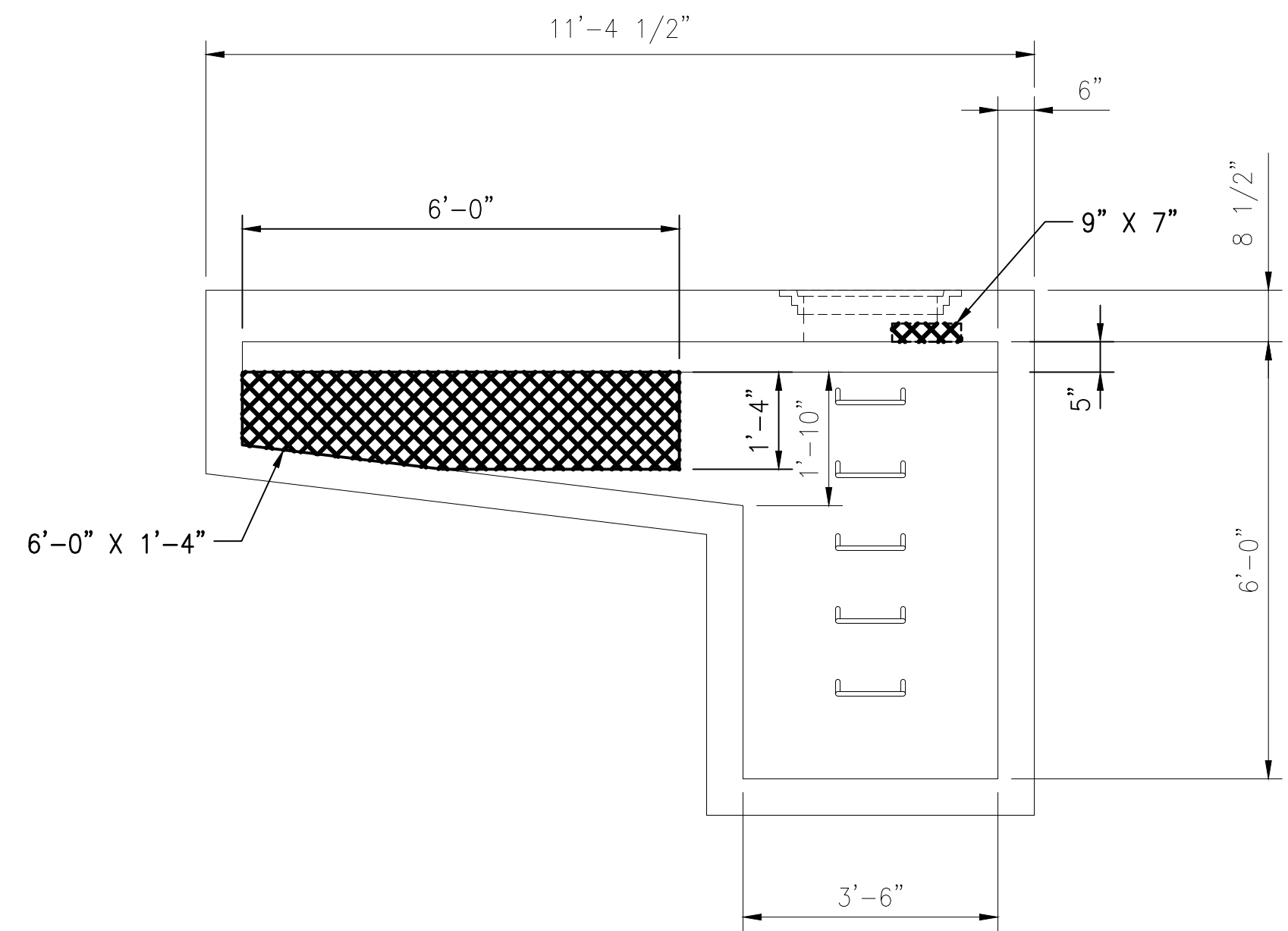
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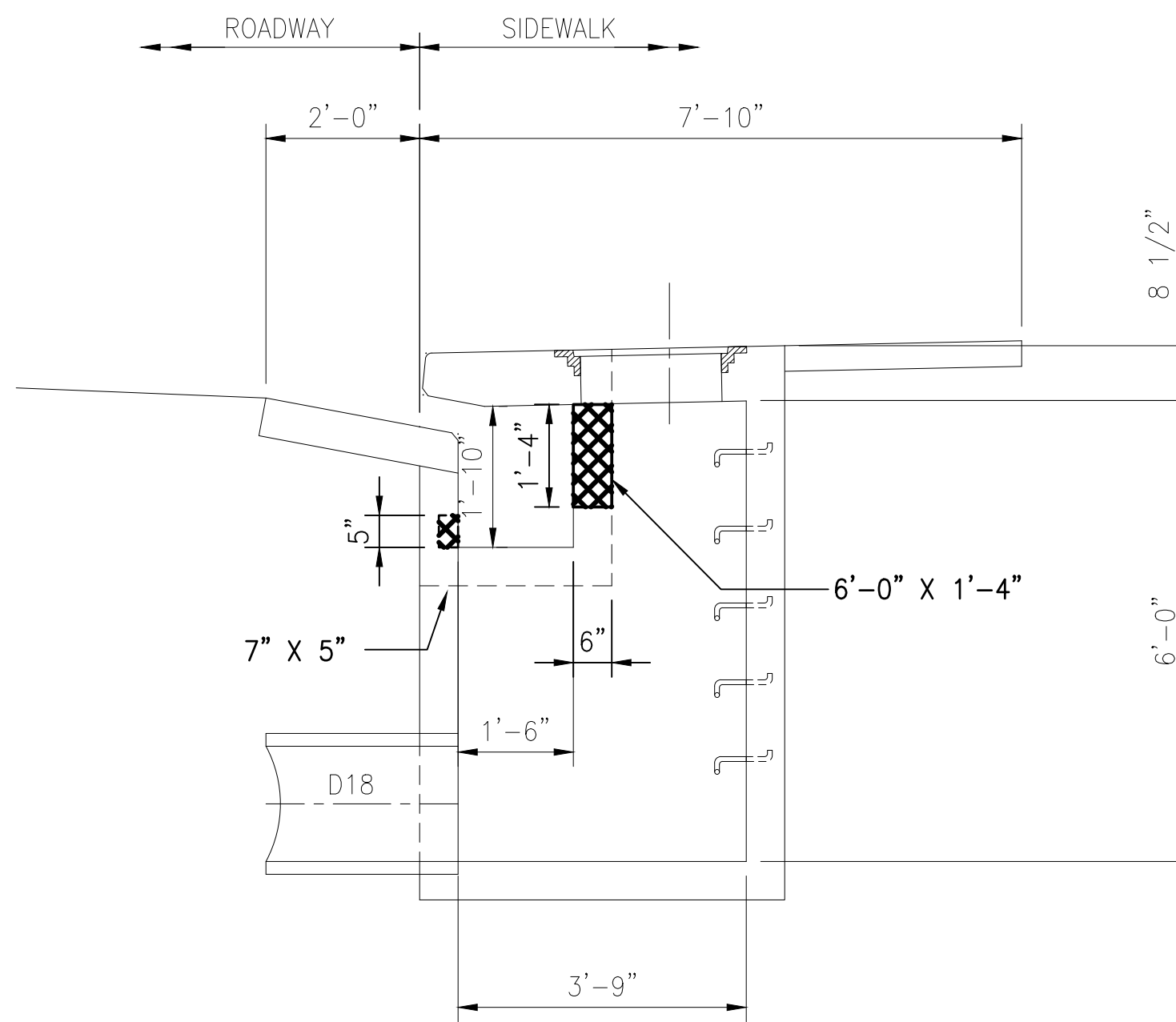
A PLAN
S9.1 SCALE: 1/2" = 1'-0"



C SECTION
S9.1 SCALE: 1/2" = 1'-0"



B SECTION
S9.1 SCALE: 1/2" = 1'-0"



D SECTION
S9.1 SCALE: 1/2" = 1'-0"

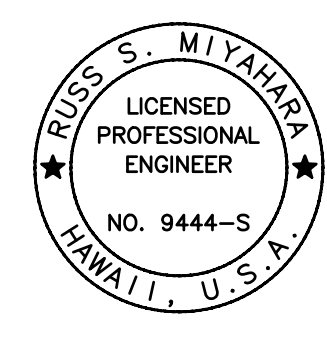
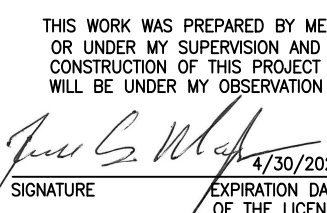

LEGEND:

EXTENT OF DEFECTIVE CONCRETE REPAIR

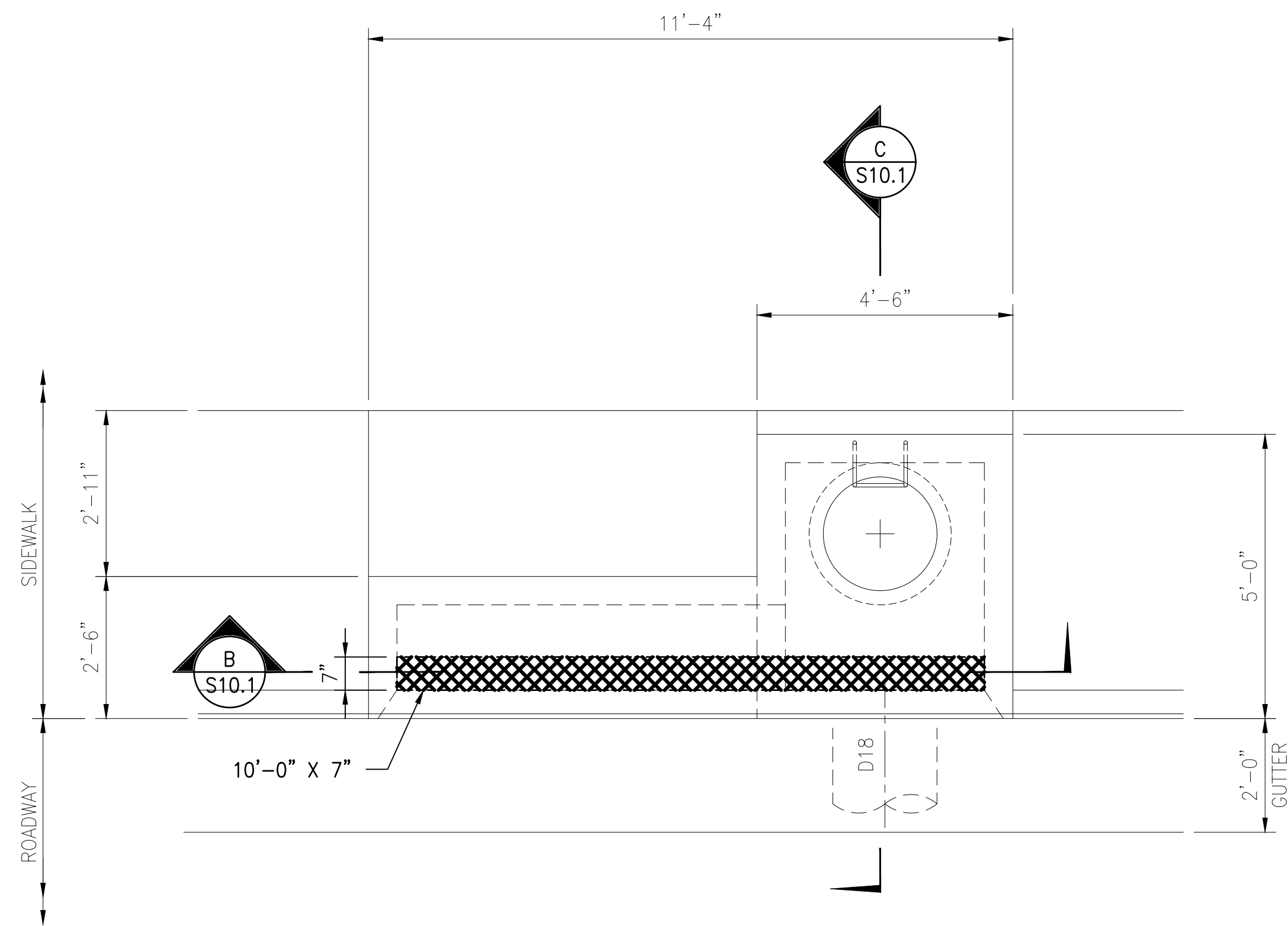
NOTES:

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CATCH BASIN - CB "N"

DESIGN: RM							
DRAWN: KSF	REVISION	DATE	BRIEF	BY	APPROVED		
CHECKED: RM							
DATE: SEPTEMBER 2022							
 <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small>  <small>SIGNATURE</small> <small>4/30/2024</small> <small>EXPIRATION DATE OF THE LICENSE</small>	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us						
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII						
	KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII CATCH BASIN CB "N" PLAN AND SECTIONS						
	APPROVED:					DWG NO.	
						S9.1	

DRAWING NAME: Z:\00_ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22_FINAL\KCB-S1001_P_REPAIR.DWG PLOT TIME: 09-14-22, 4:58 PM



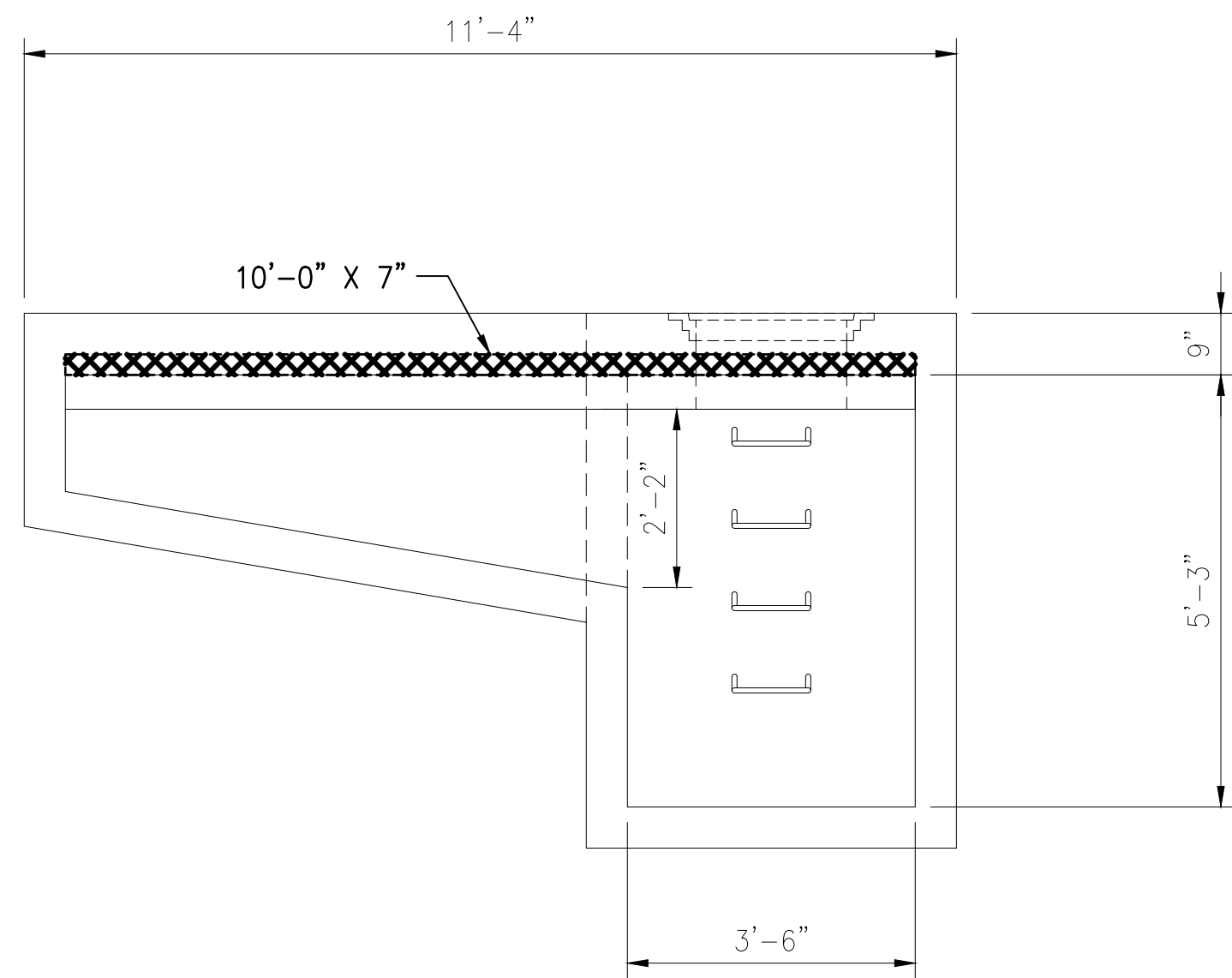
A PLAN
S10.1 SCALE: 1/2" = 1'-0"

LEGEND:

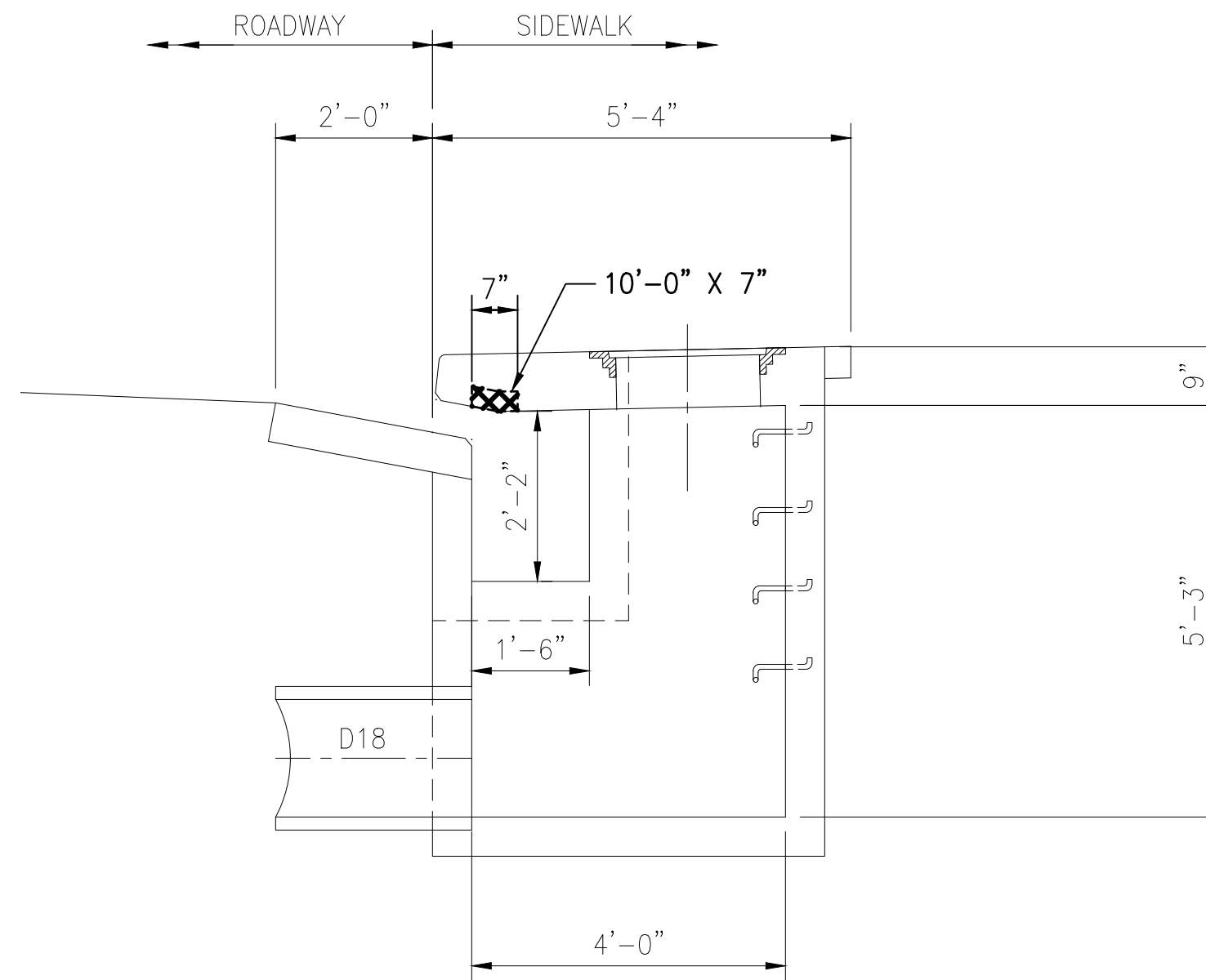
EXTENT OF DEFECTIVE CONCRETE REPAIR

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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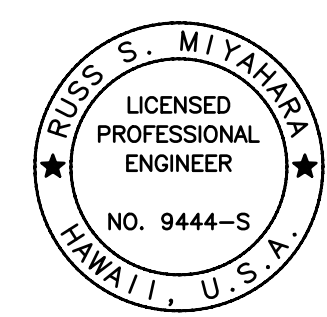
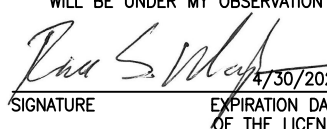



B SECTION
S10.1 SCALE: 1/2" = 1'-0"

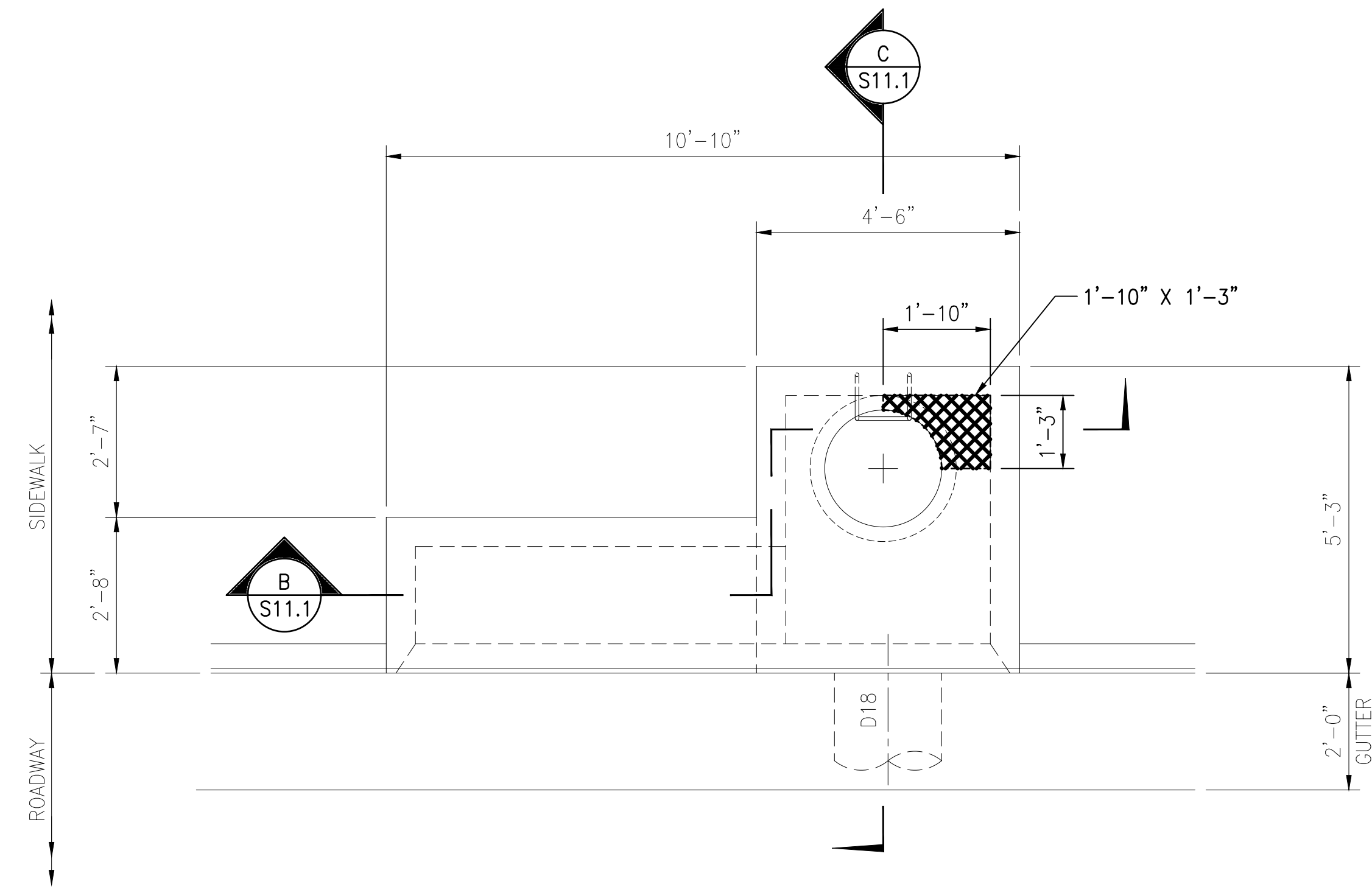


C SECTION
S10.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "P"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					
 <small>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.</small>  <small>SIGNATURE</small>	 615 PIKOI STREET, SUITE 300 HONOLULU, HAWAII 96814 ksfinc@ksfinc.us				
	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII				
	CATCH BASIN CB "P" PLAN AND SECTIONS				
	APPROVED:				DWG NO. S10.1

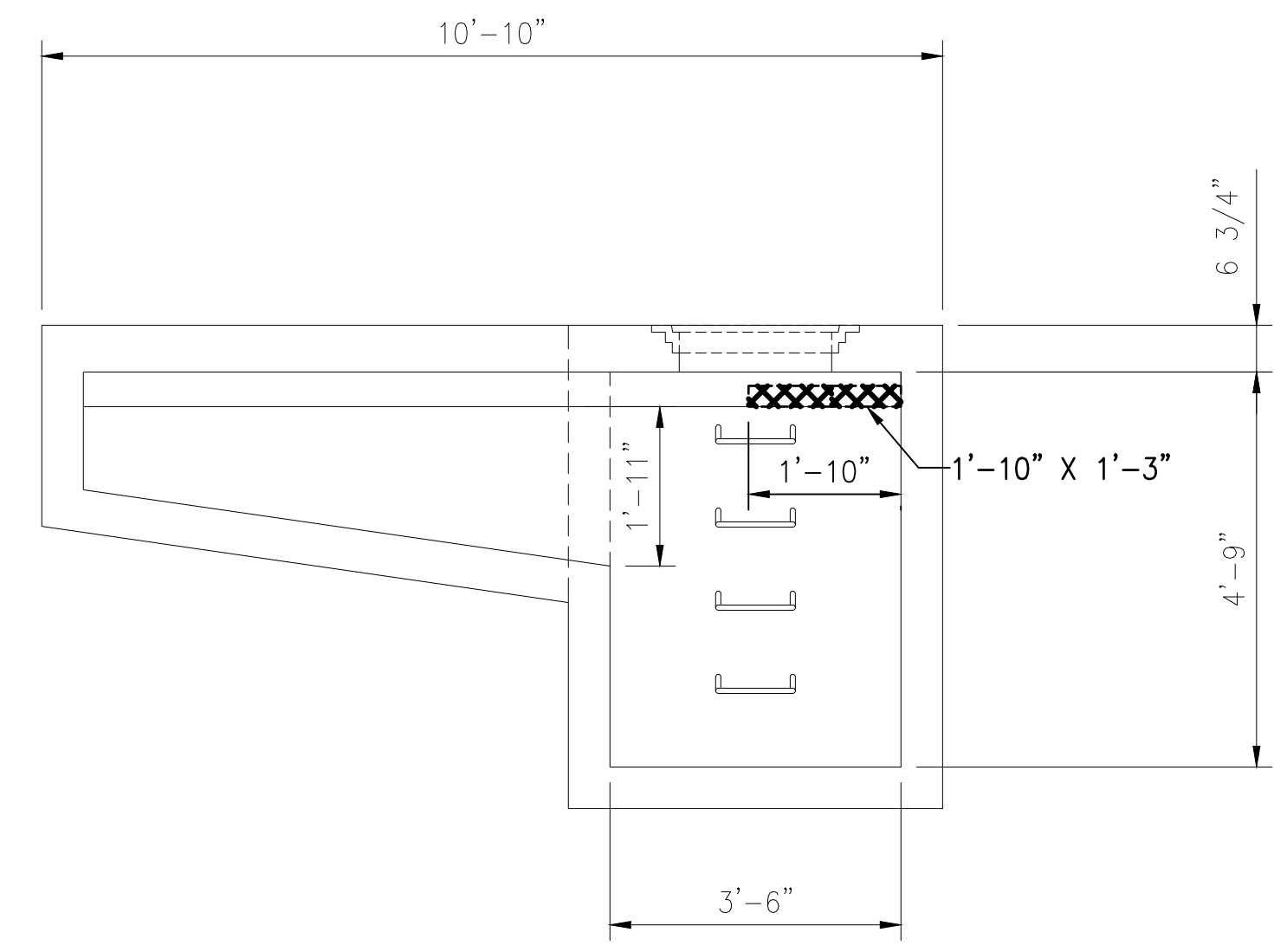
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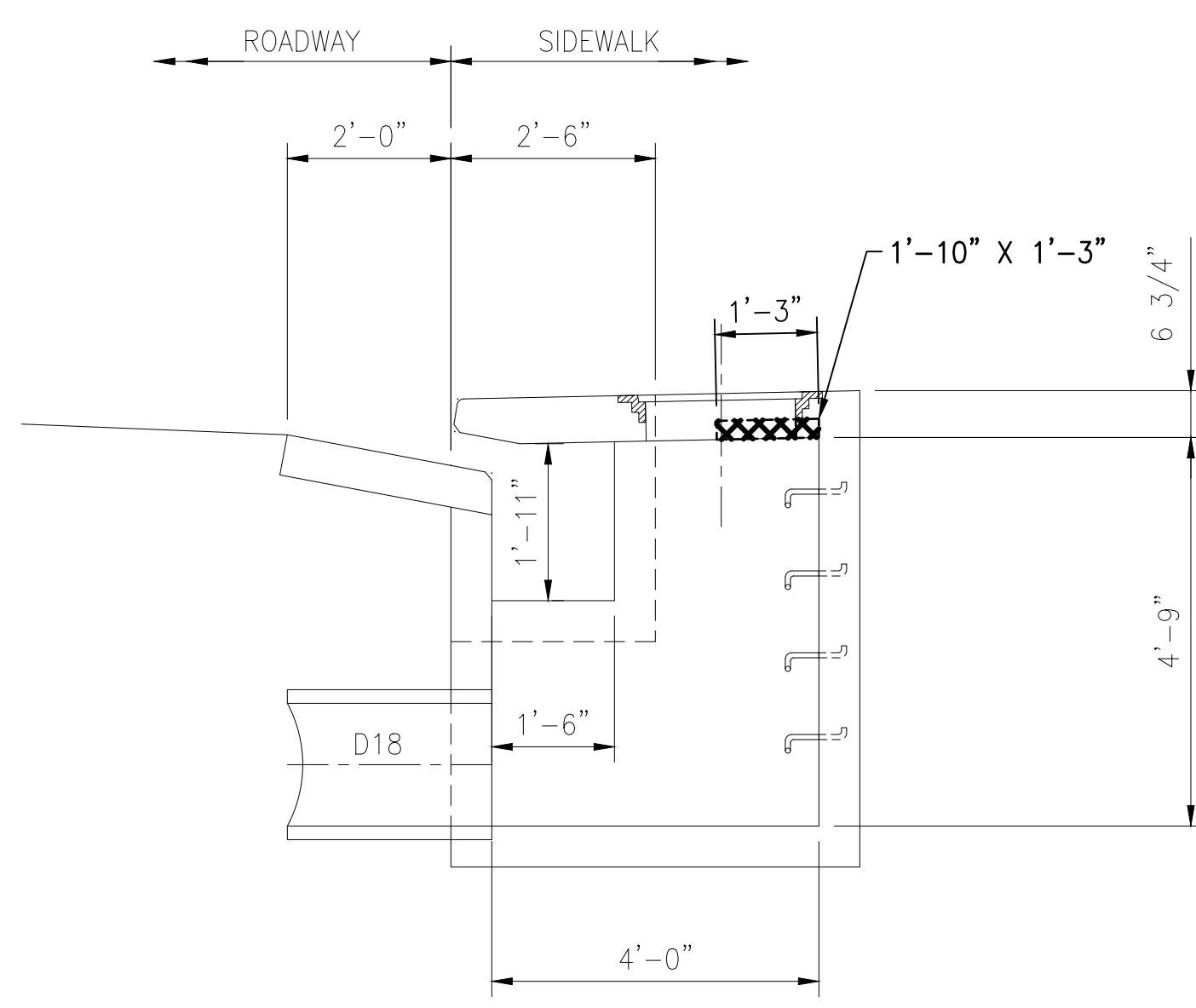
A PLAN
S11.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF DEFECTIVE CONCRETE REPAIR

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.




B SECTION
S11.1 SCALE: 1/2" = 1'-0"



C SECTION
S11.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "Q"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

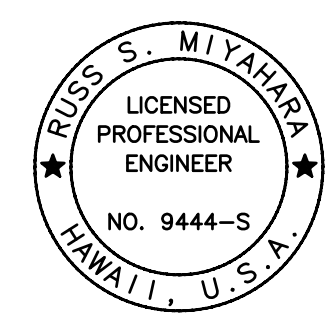


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STATE OF HAWAII

KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOULIULI, EWA, OAHU, HAWAII

CATCH BASIN CB "Q"
PLAN AND SECTIONS



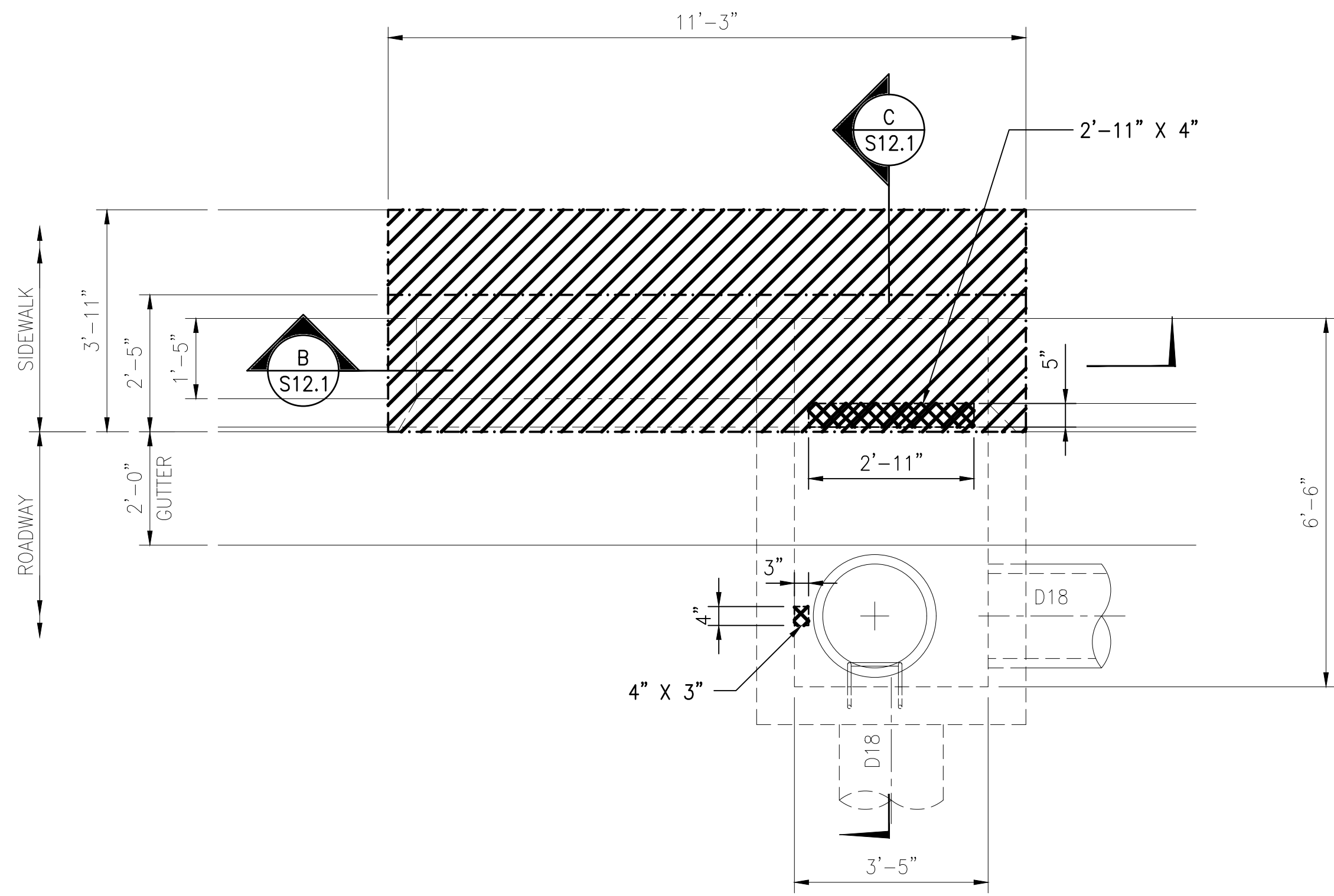
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Russ S. Miyahara
SIGNATURE
4/30/2024
EXPIRATION DATE OF LICENSE

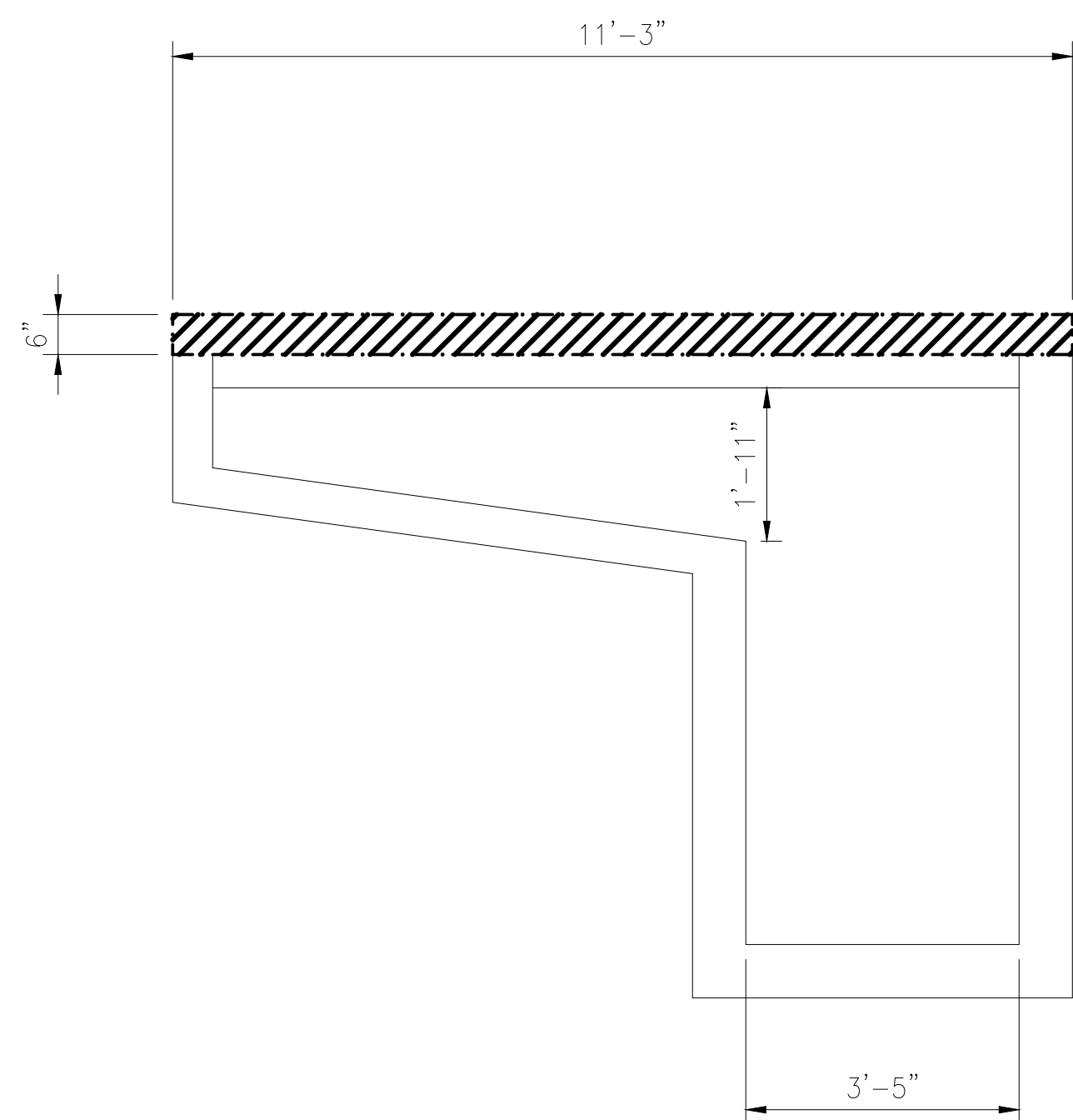
APPROVED:

DWG NO.
S11.1

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S1201.T REPLACE.DWG PLOT TIME: 09-14-22, 4:59 PM



A PLAN
S12.1 SCALE: 1/2" = 1'-0"



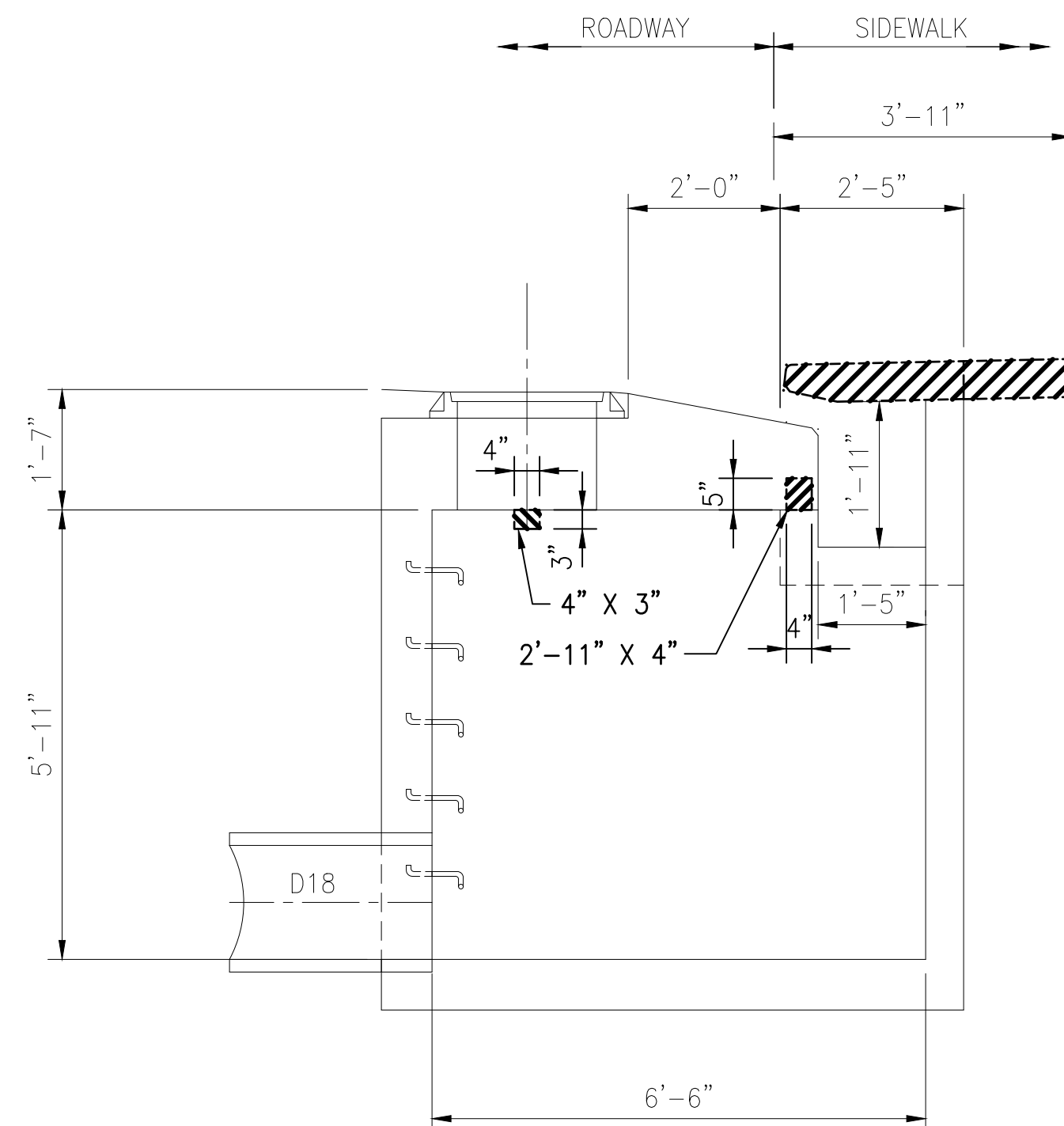
B SECTION
S12.1 SCALE: 1/2" = 1'-0"

LEGEND:

- EXTENT OF SLAB DEMOLITION
- EXTENT OF DEFECTIVE CONCRETE REPAIR

NOTES:


1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.



C SECTION
S12.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "1"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

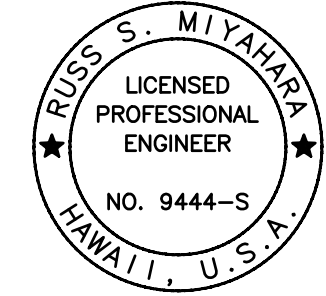


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ksfinc@ksfinc.us

VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAIKU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "1"
DEMOLITION PLAN AND SECTIONS



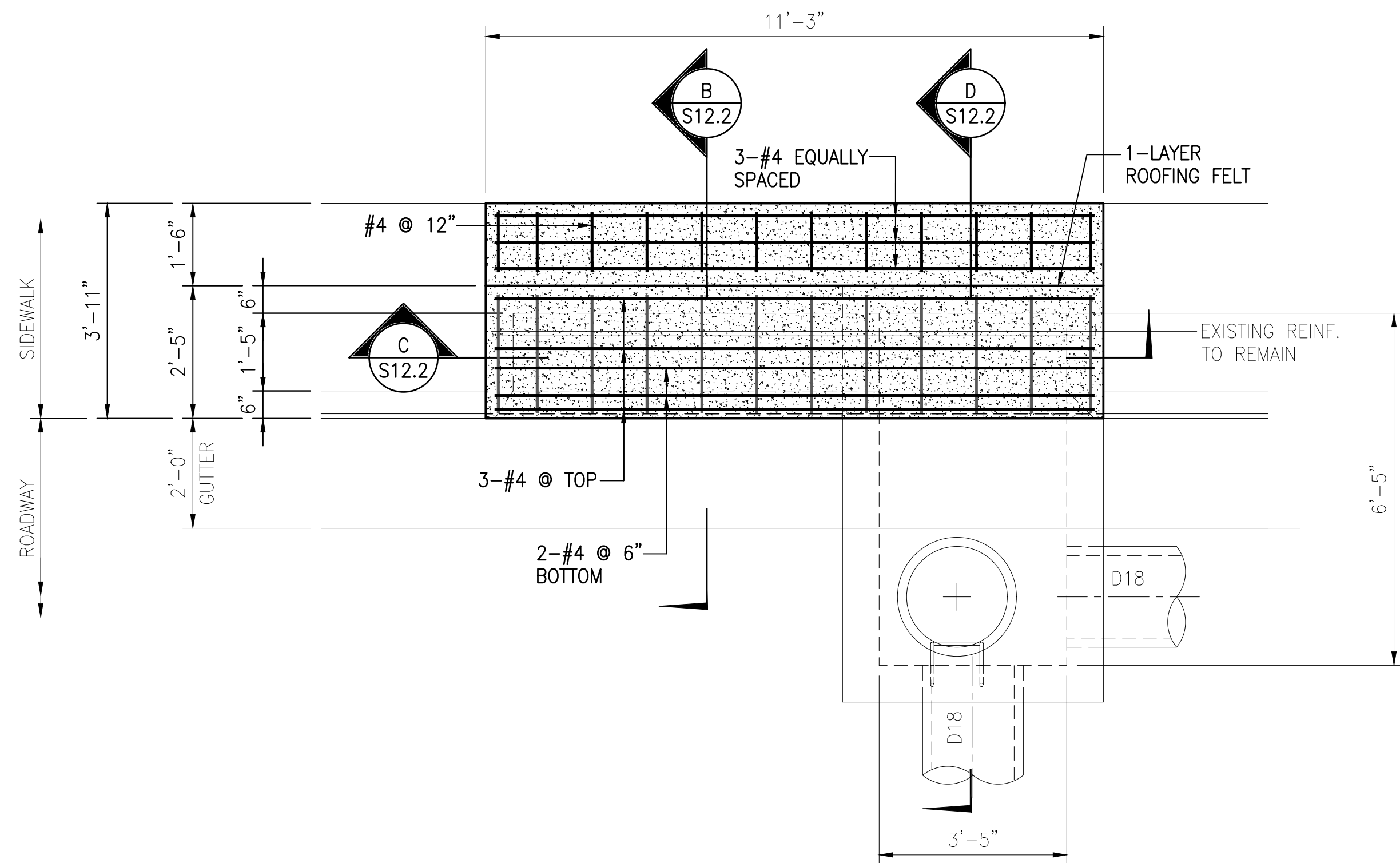
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Russ S. Miyahara
SIGNATURE
4/30/2024
EXPIRATION DATE OF THE LICENSE

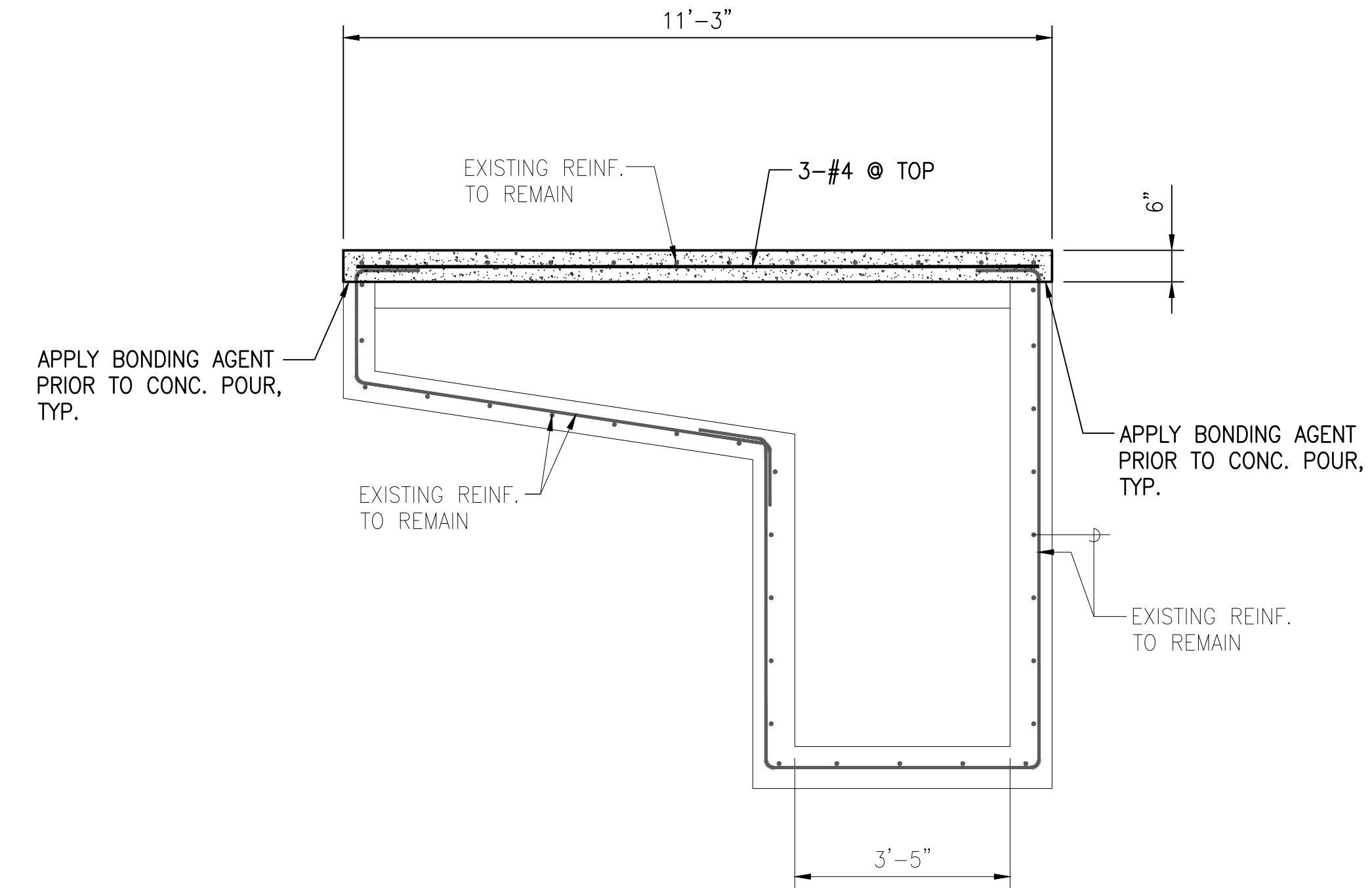
APPROVED:

DWG NO. **S12.1**

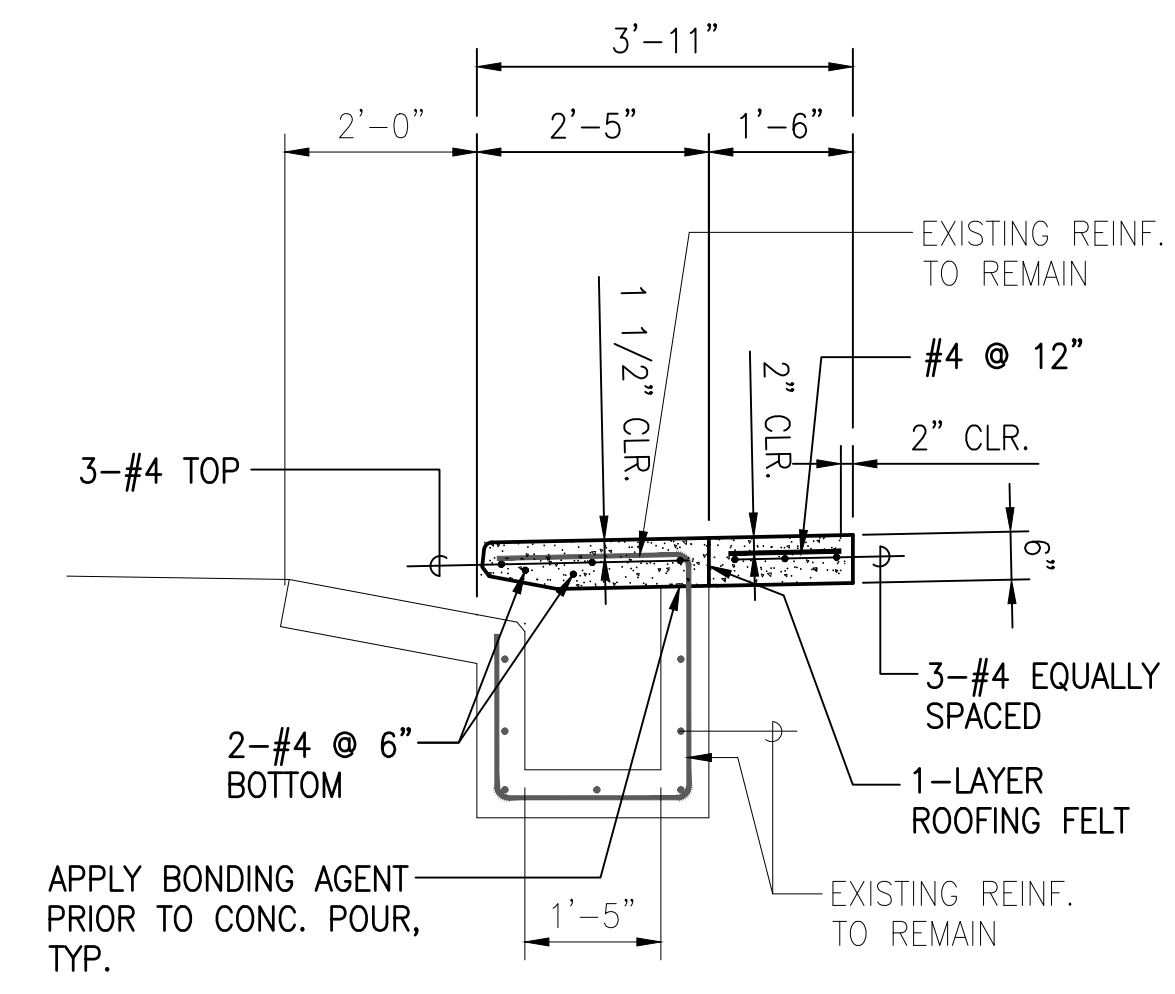
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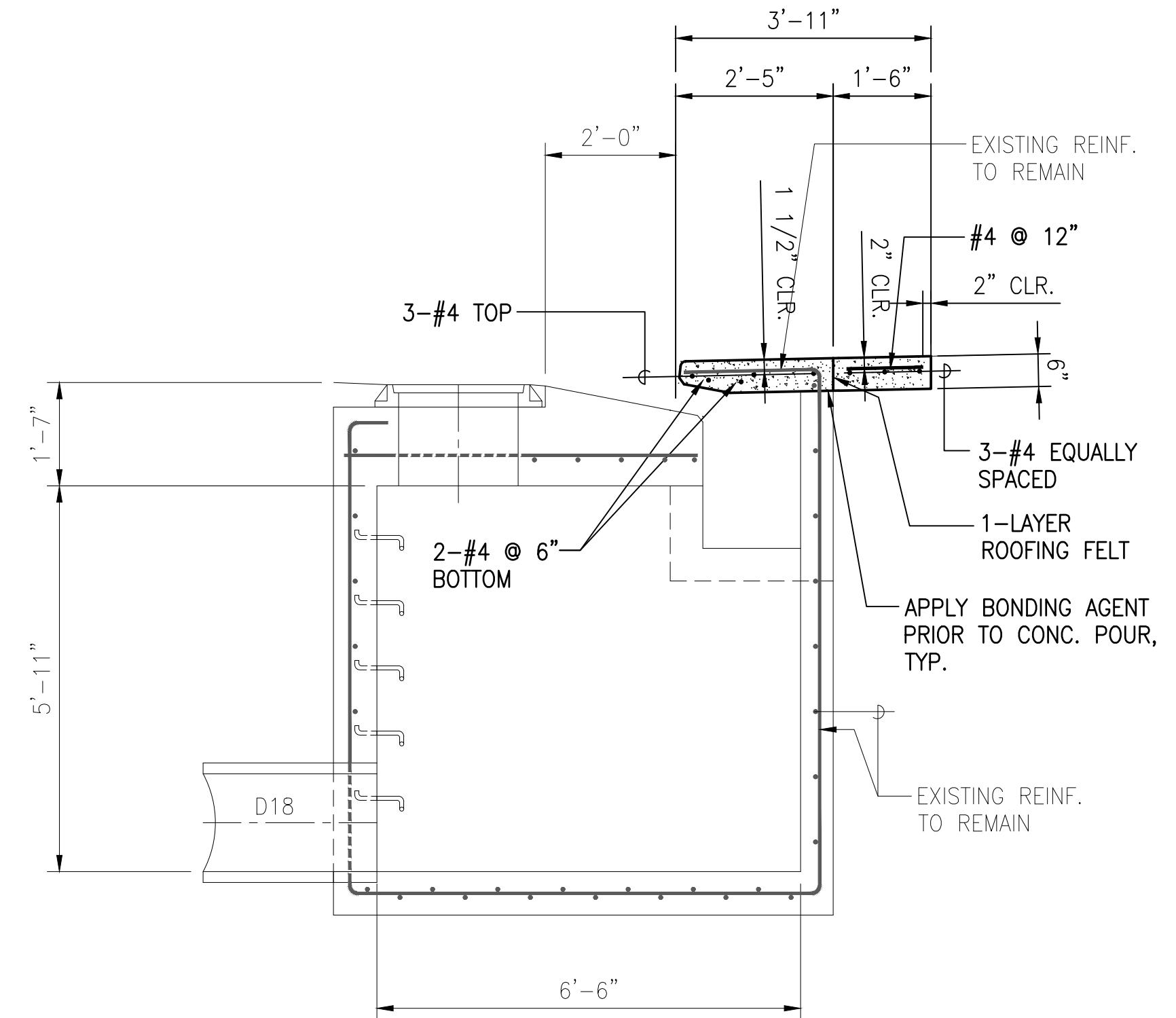
A PLAN
S12.2 SCALE: 1/2" = 1'-0"



C SECTION
S12.2 SCALE: 1/2" = 1'-0"



B SECTION
S12.2 SCALE: 1/2" = 1'-0"




D SECTION
S12.2 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF CONCRETE REPAIR

- NOTES:**
- SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
 - THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "T"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

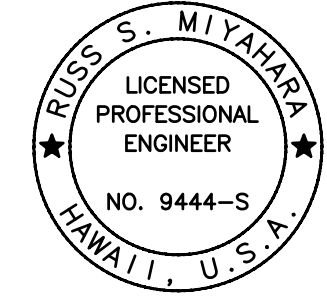


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STATE OF HAWAII

KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "T"
PLAN AND SECTIONS



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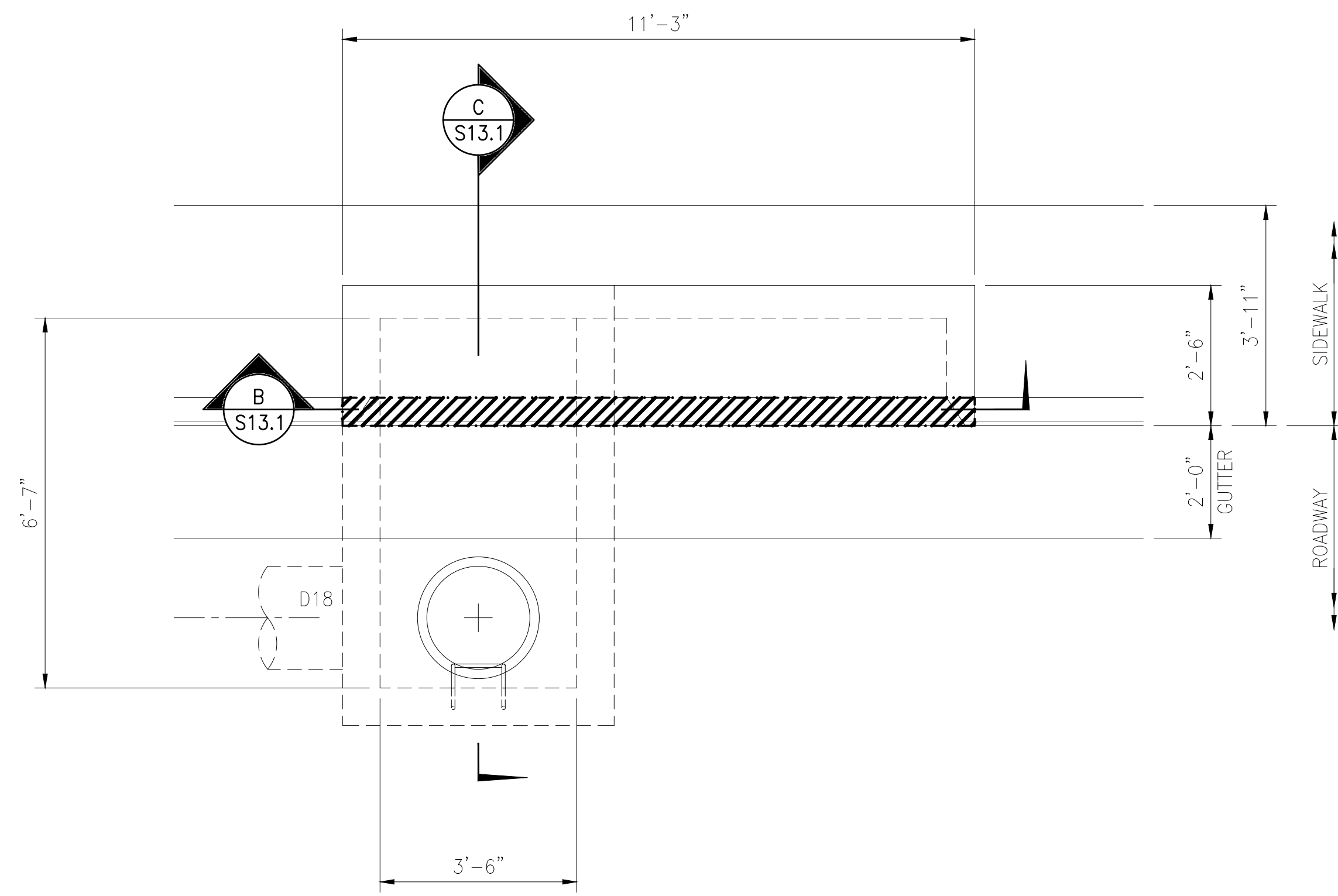
Russ S. Miyahara
SIGNATURE

4/30/2024
EXPIRATION DATE OF THE LICENSE

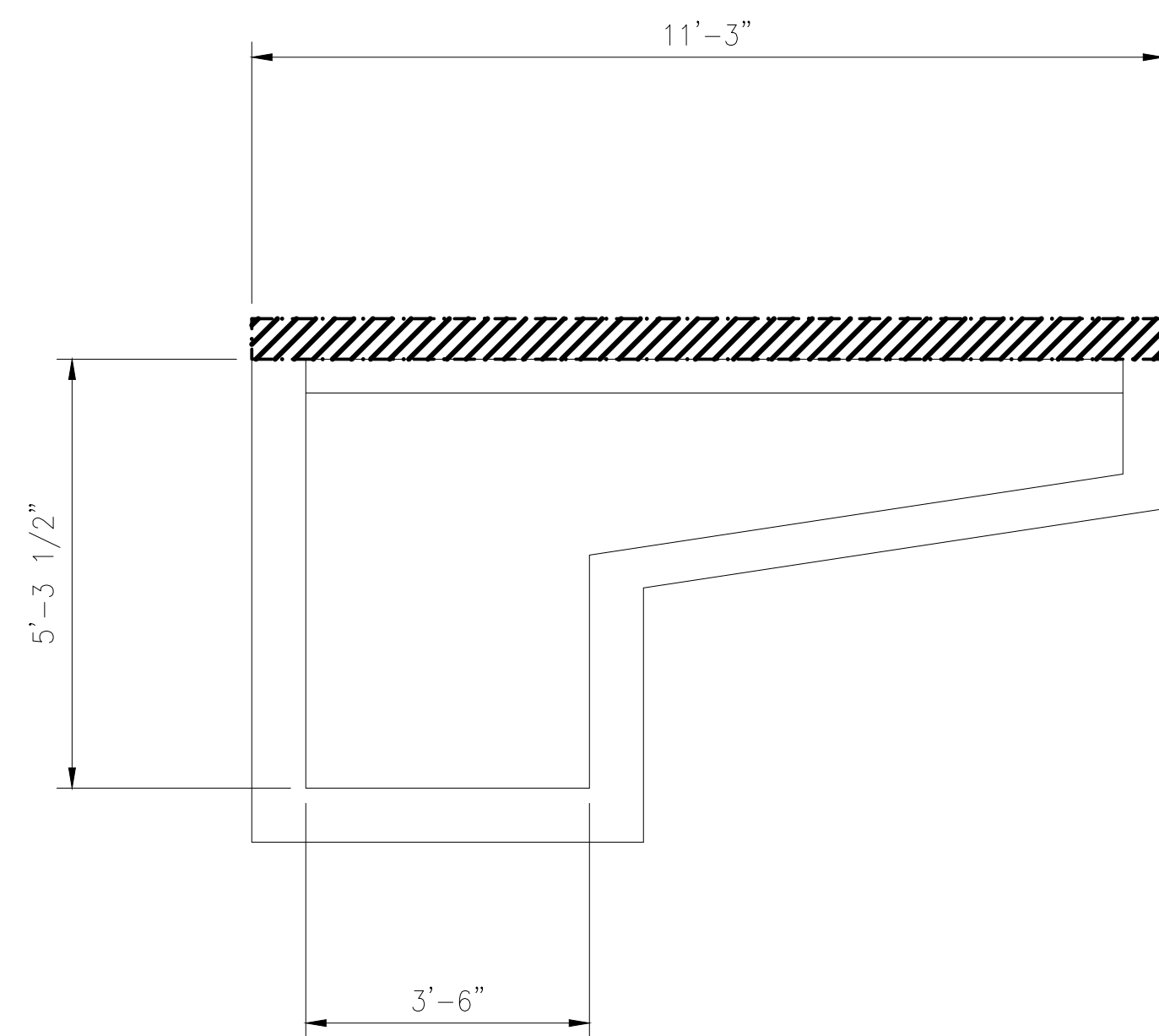
APPROVED:

DWG NO.
S12.2

DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S1301 U REPLACE.DWG PLOT TIME: 09-15-22, 12:47 PM



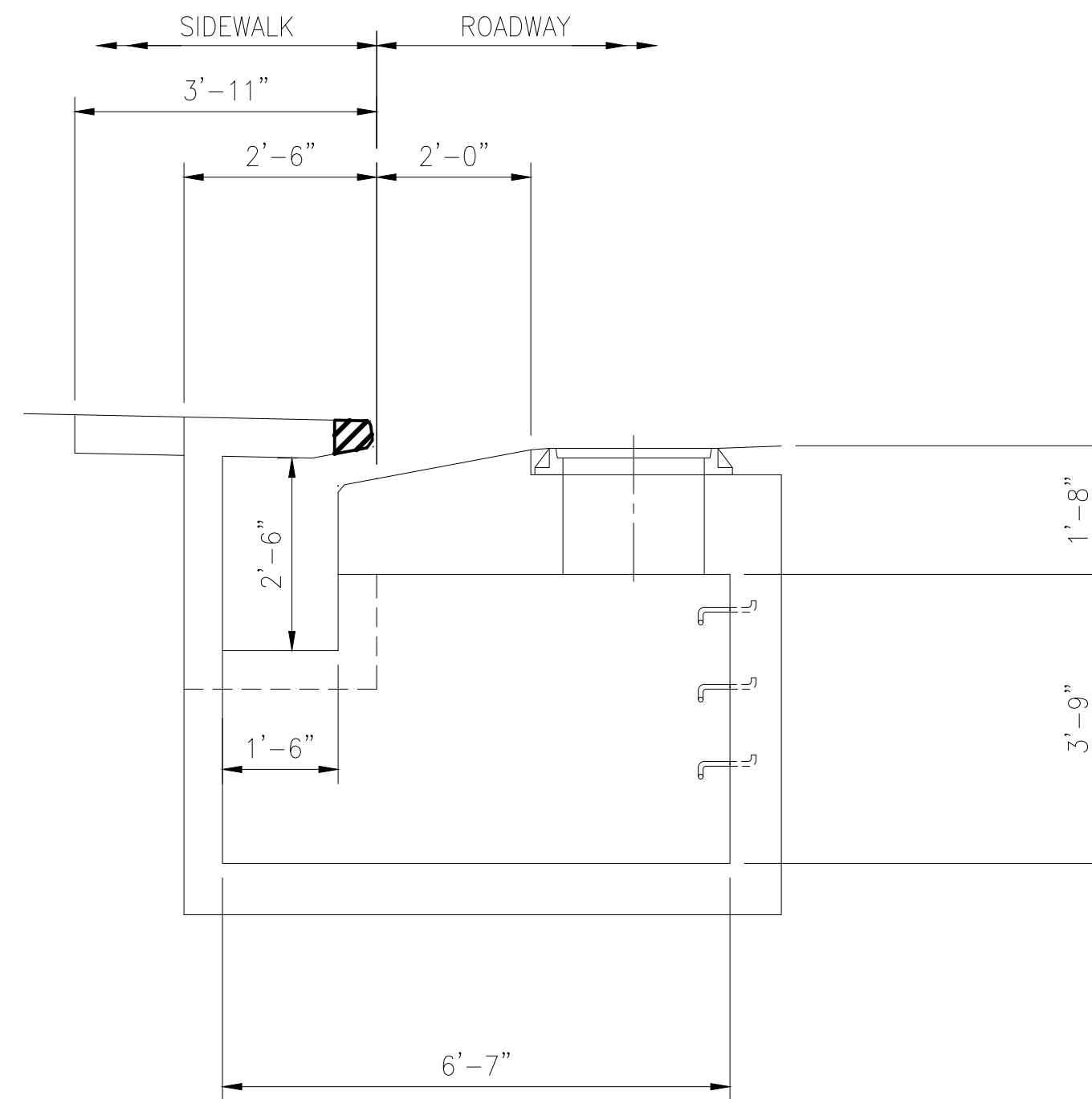
A PLAN
S13.1 SCALE: 1/2" = 1'-0"



B SECTION
S13.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF CURB DEMOLITION


- NOTES:**
1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
 2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.



C SECTION
S13.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "U"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

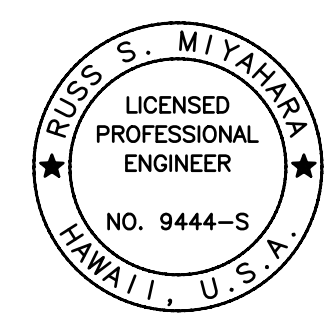


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VILLAGES OF KAPOLEI DEDICATION
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STATE OF HAWAII

KAI'AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "U"
DEMOLITION PLAN AND SECTIONS



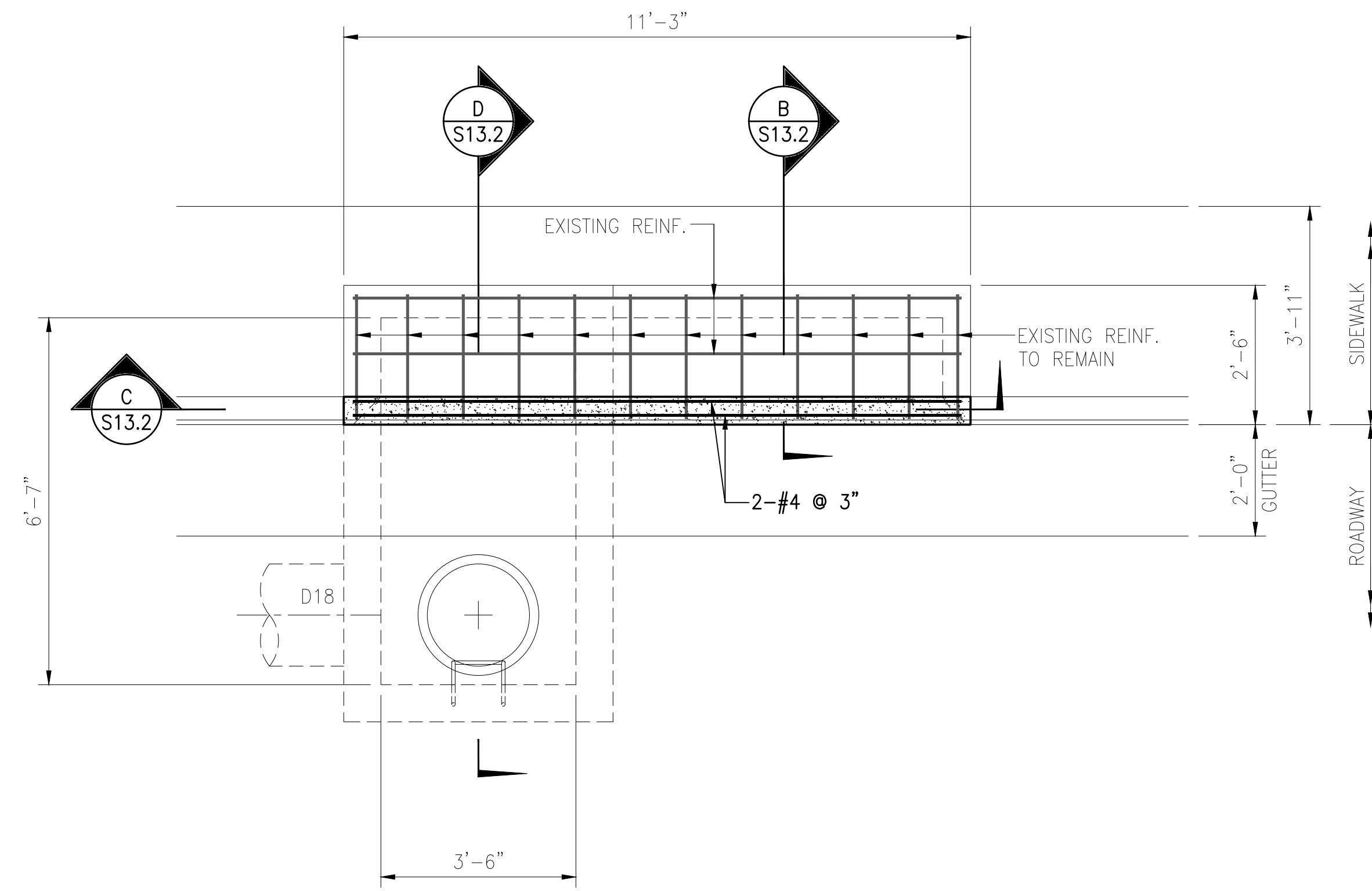
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Russ S. Miyahara
SIGNATURE
7/25/2024
EXPIRATION DATE OF THE LICENSE

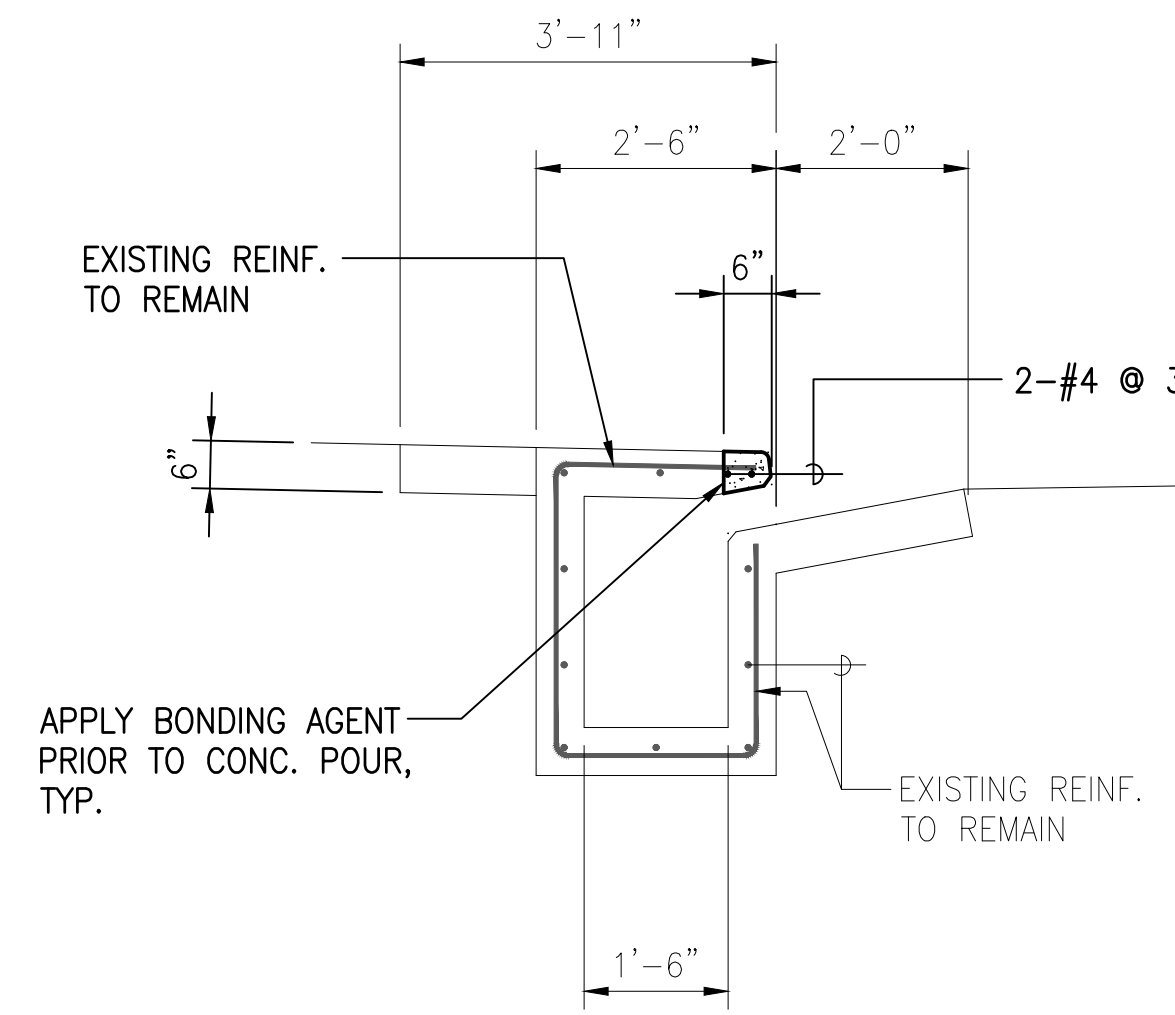
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DWG NO.
S13.1

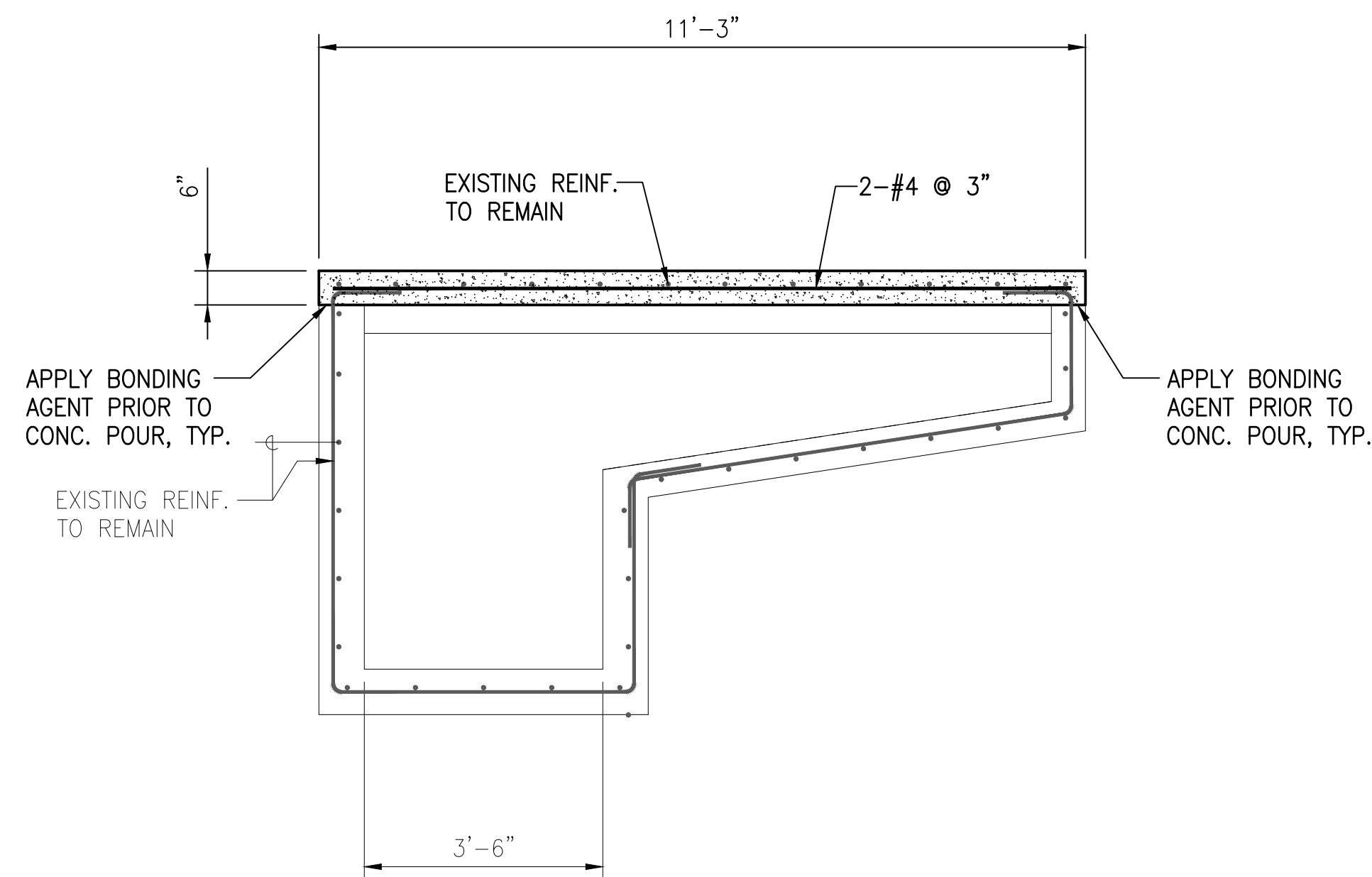
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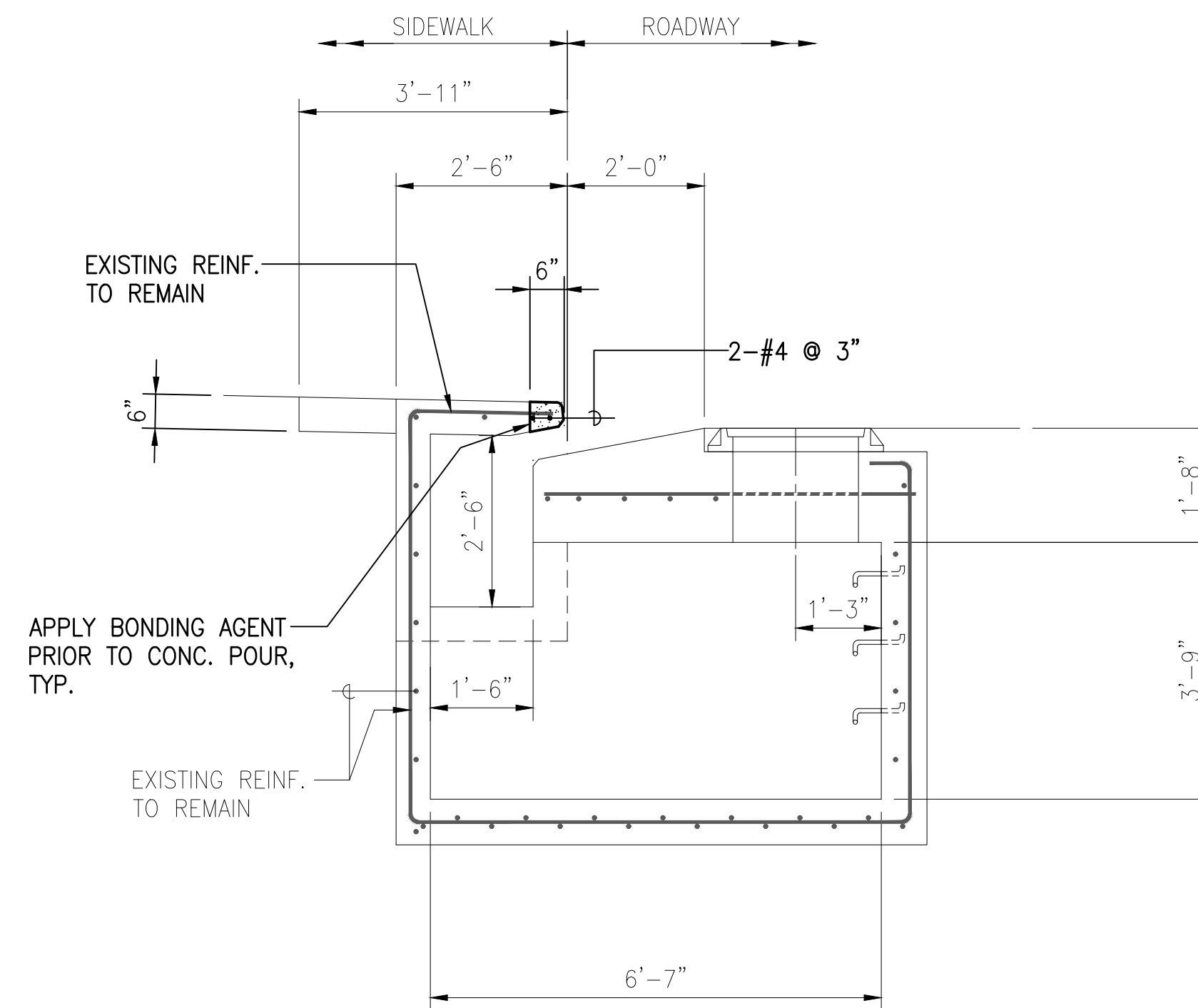
A PLAN
S13.2 SCALE: 1/2" = 1'-0"



B SECTION
S13.2 SCALE: 1/2" = 1'-0"



C SECTION
S13.2 SCALE: 1/2" = 1'-0"



D SECTION
S13.2 SCALE: 1/2" = 1'-0"

LEGEND:


EXTENT OF CONCRETE REPAIR

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.

CATCH BASIN - CB "U"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

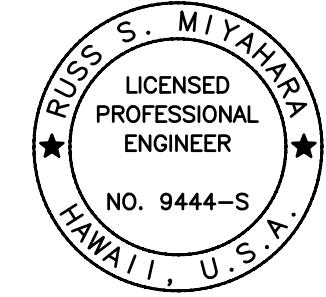


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VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAI'AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "U"
PLAN AND SECTIONS



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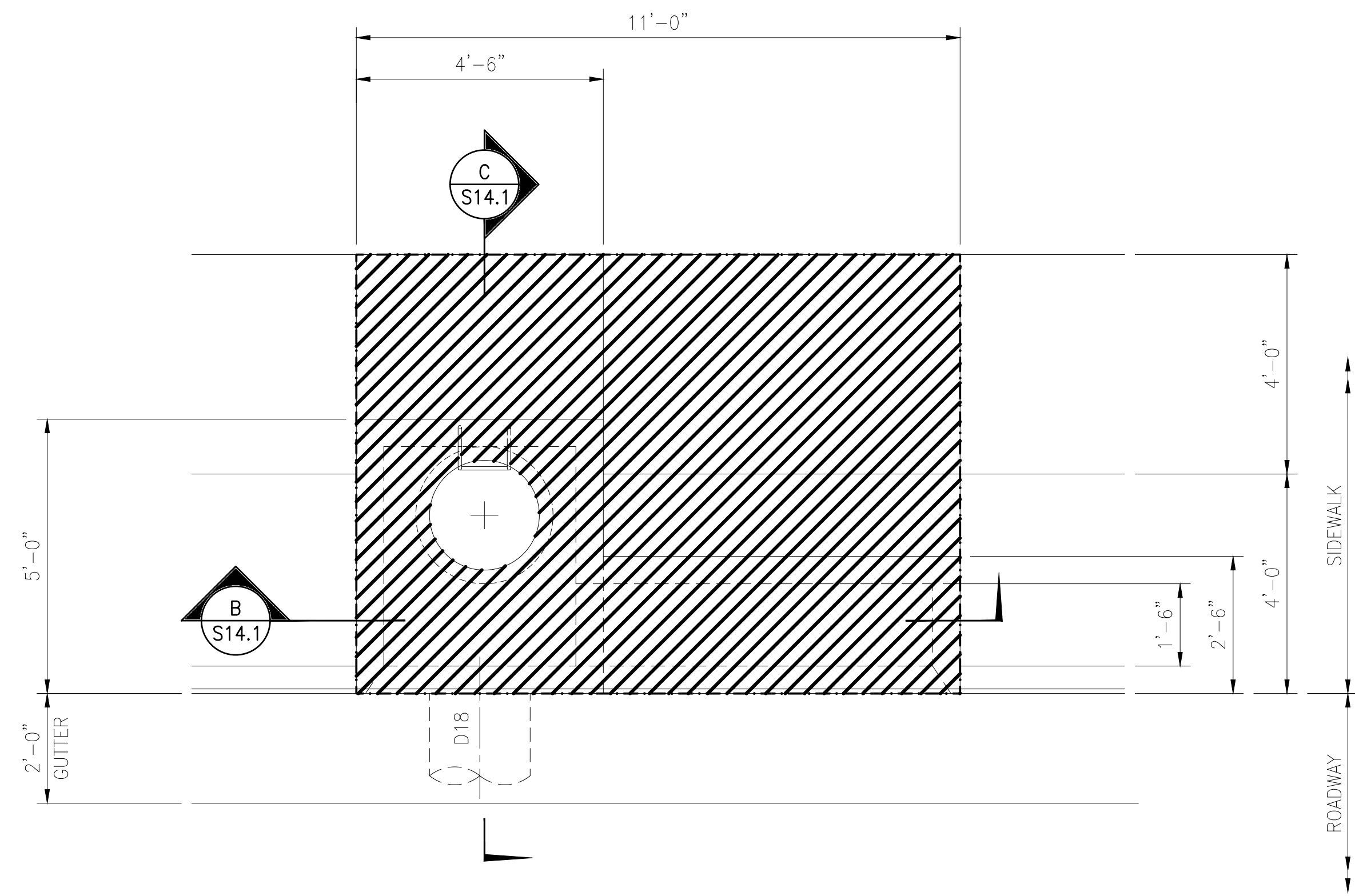
Russ S. Miyahara
SIGNATURE
7/25/2024
EXPIRATION DATE OF THE LICENSE

APPROVED:

DWG NO.
S13.2

FILE	POCKET	FOLDER	NUMBER
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DRAWING NAME: Z:\00 ONGOING\22-025-VILLAGES OF KAPOLEI\CBS-WSP\01 CAD\09-15-22 FINAL\KCB-S1401 Y REPLACE.DWG PLOT TIME: 09-14-22, 5:00 PM



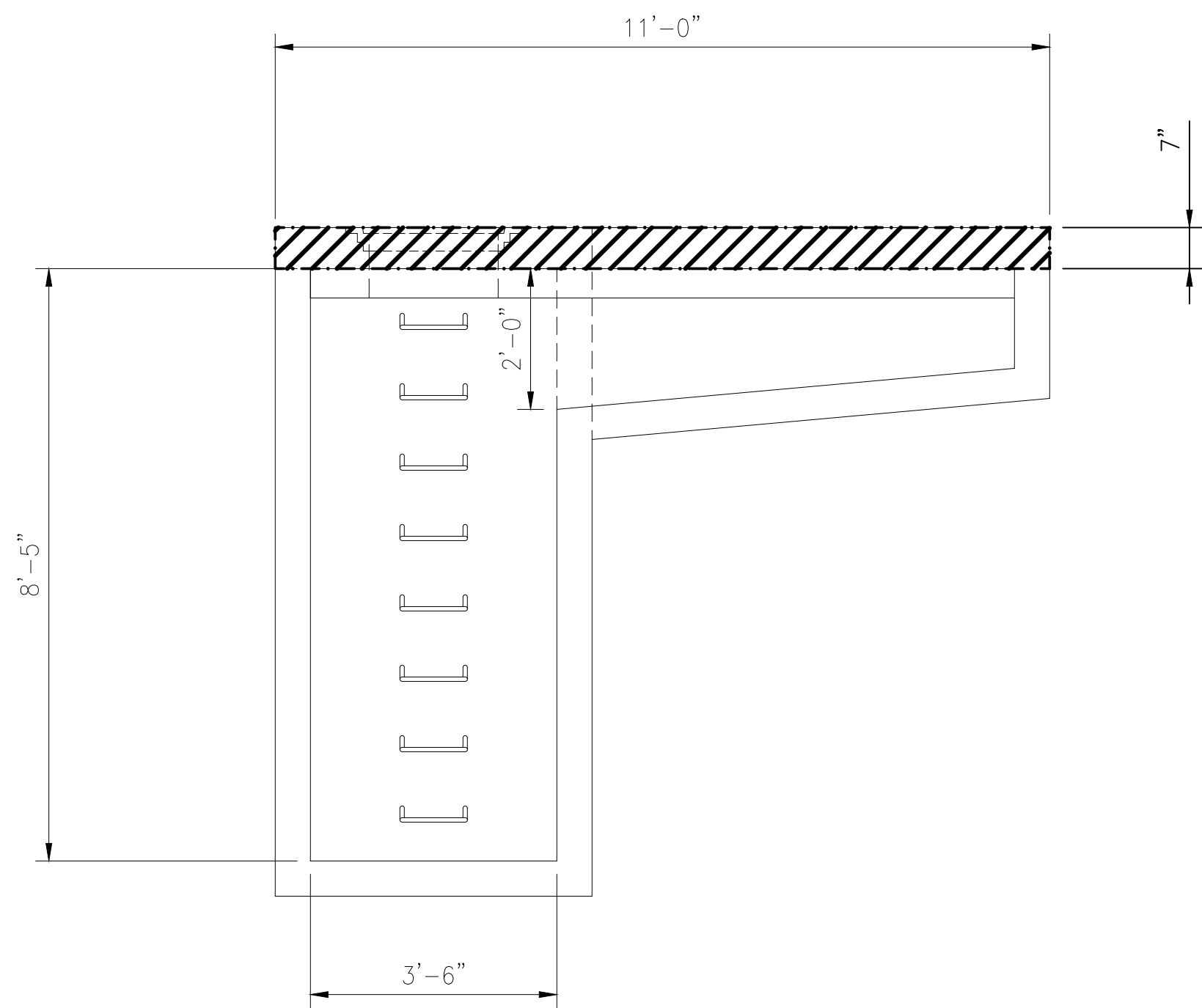
A PLAN
S14.1 SCALE: 1/2" = 1'-0"

LEGEND:

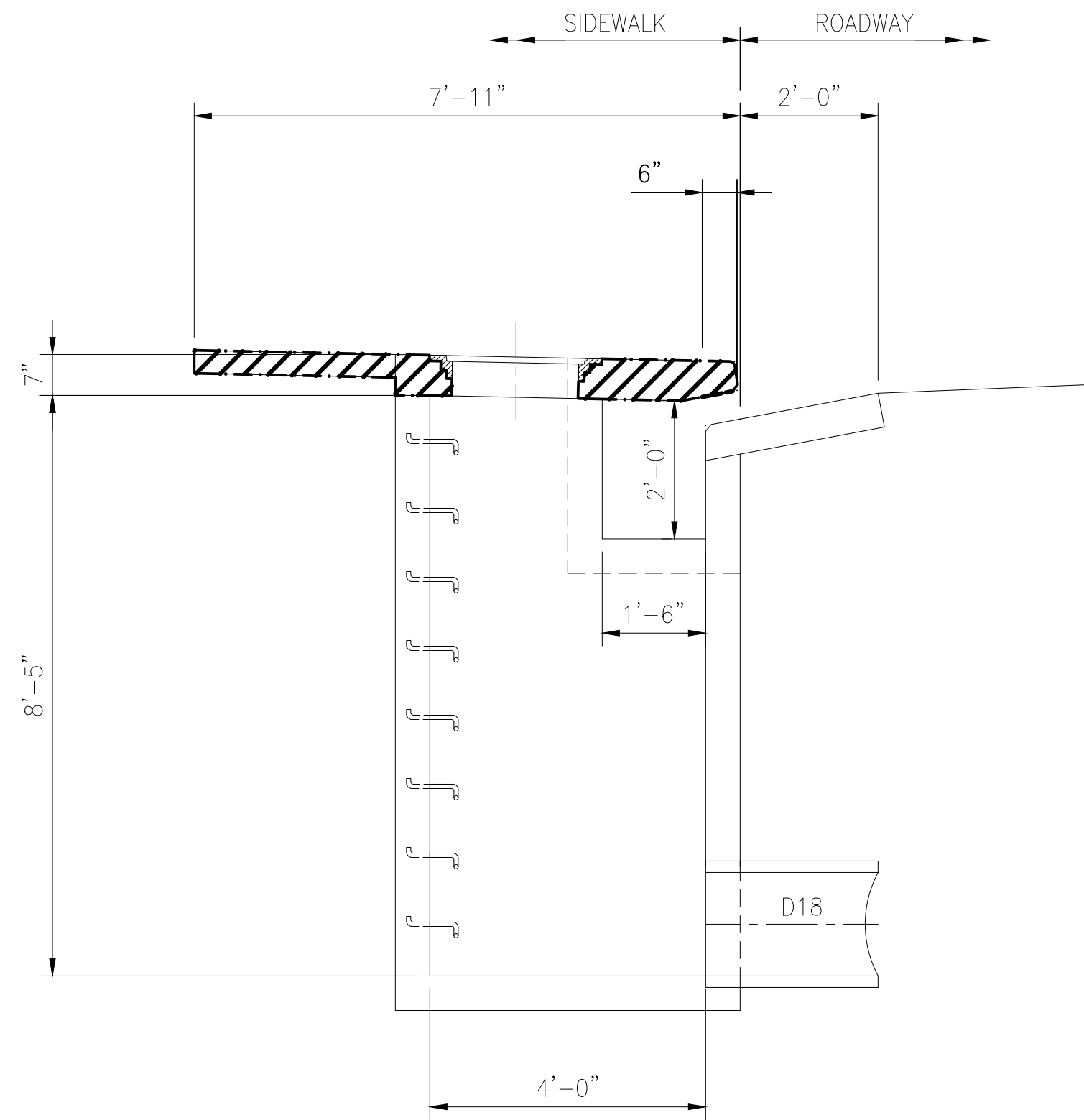
EXTENT OF SLAB DEMOLITION

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND NOT RELY ON THESE PLANS FOR EXISTING ROADS, ROADWAY GUTTERS, CURBS, SIDEWALKS, ETC. CONDITIONS MAY DIFFER FROM THOSE SHOWN.



B SECTION
S14.1 SCALE: 1/2" = 1'-0"

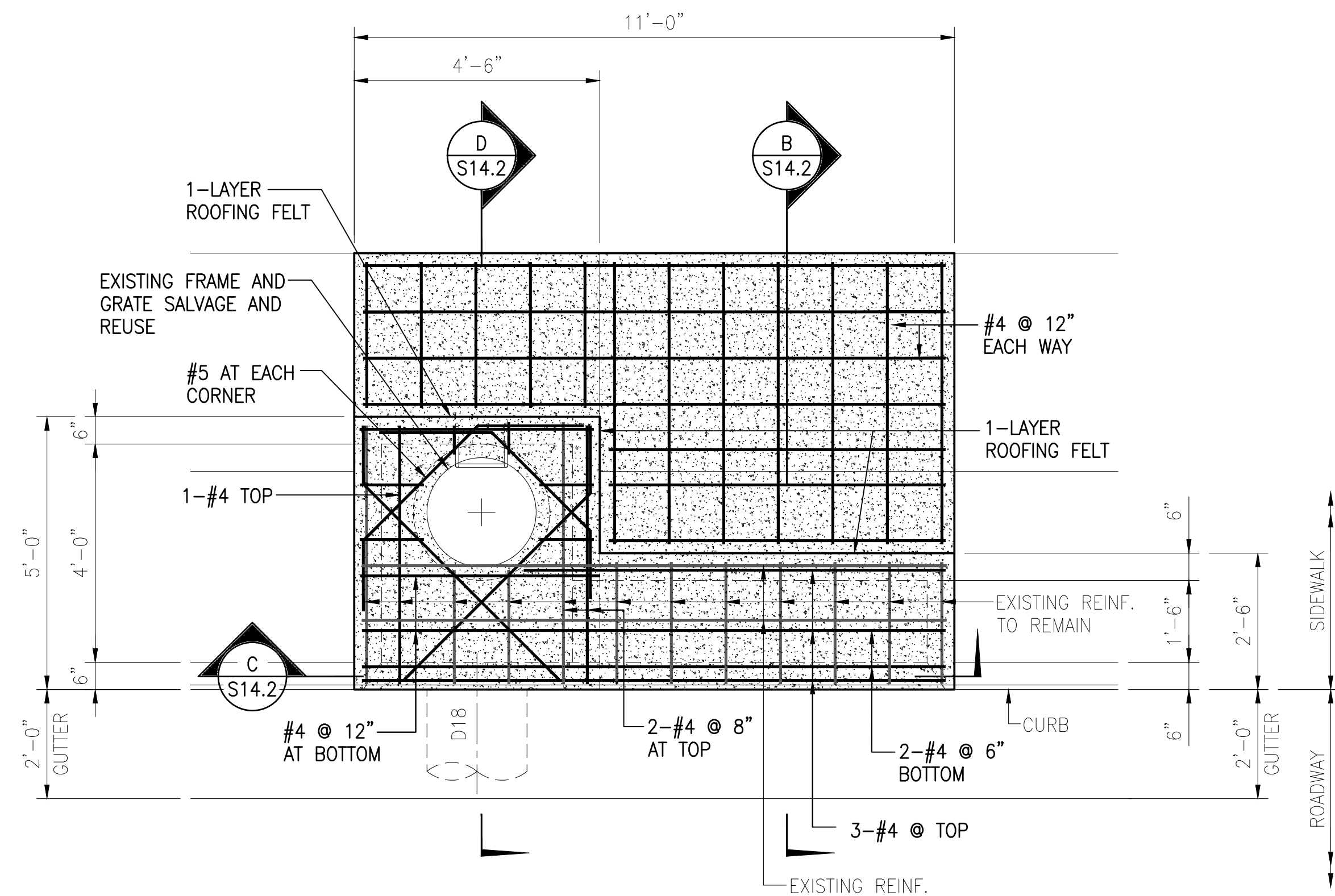


C SECTION
S14.1 SCALE: 1/2" = 1'-0"

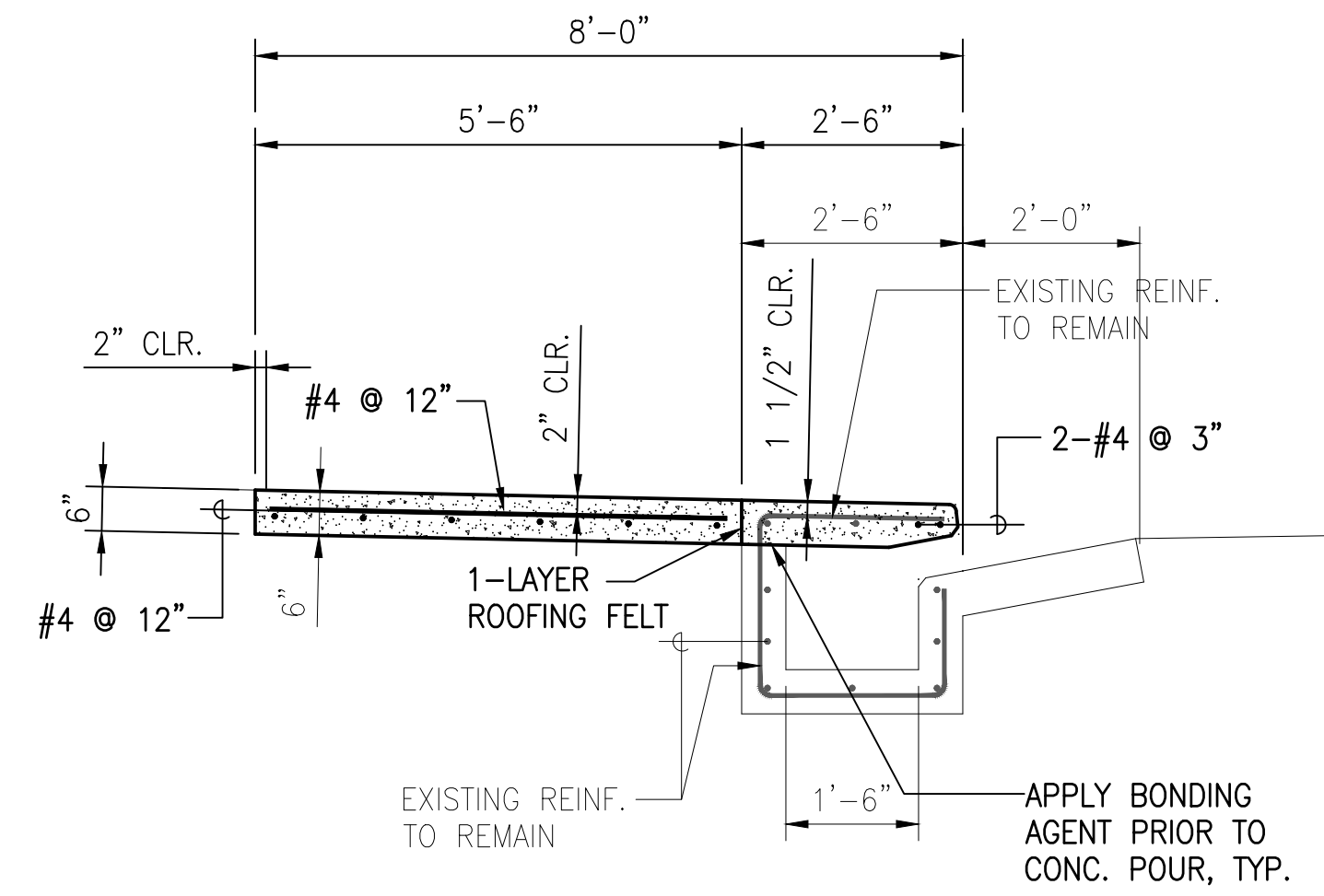
CATCH BASIN - CB "Y"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					
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	VILLAGES OF KAPOLEI DEDICATION HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION STATE OF HAWAII				
	KAIU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1 HONOLULU, EWA, OAHU, HAWAII CATCH BASIN CB "Y" DEMOLITION PLAN AND SECTIONS				
	APPROVED:				DWG NO. S14.1

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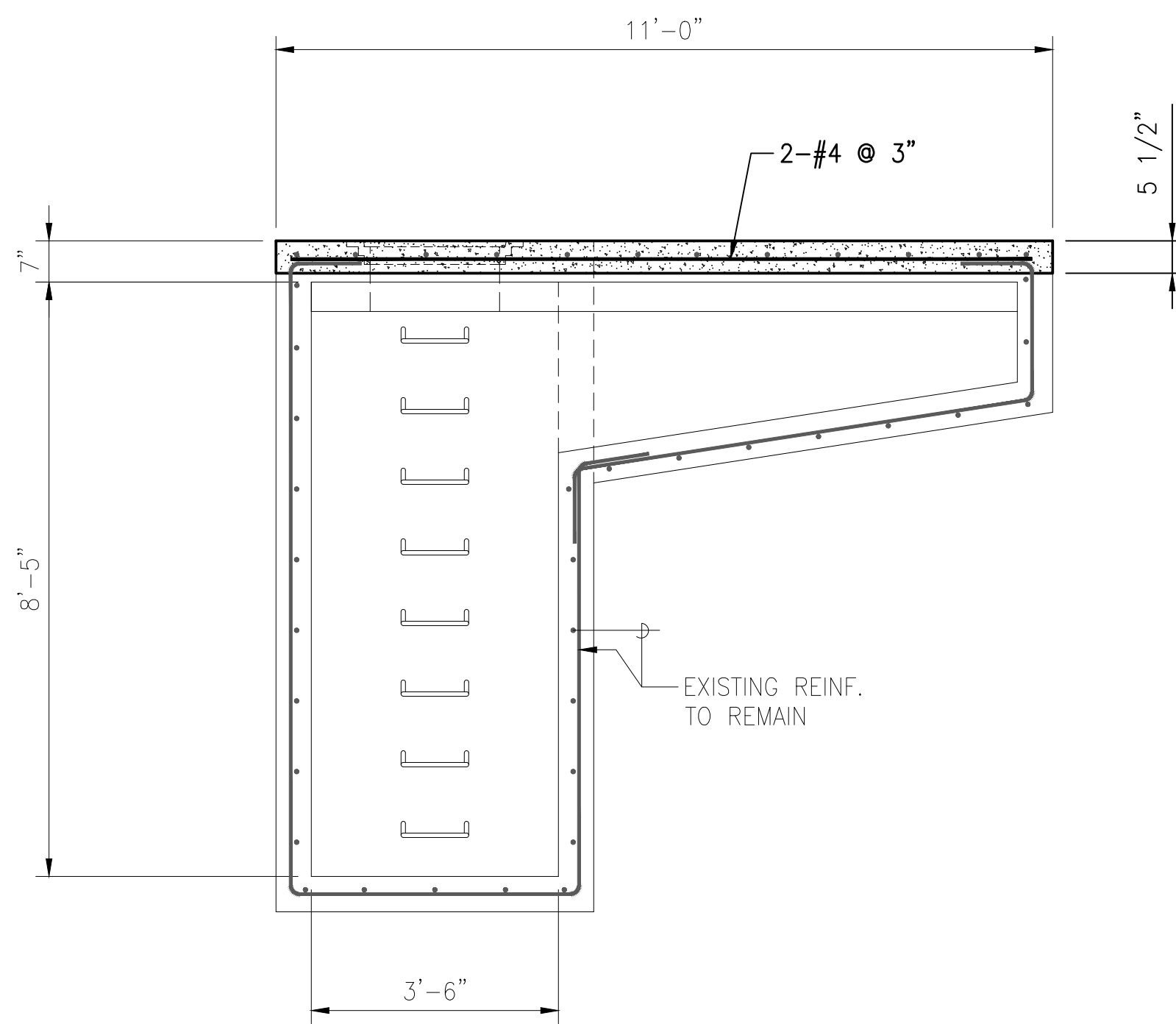
A PLAN
S14.2 SCALE: 1/2" = 1'-0"



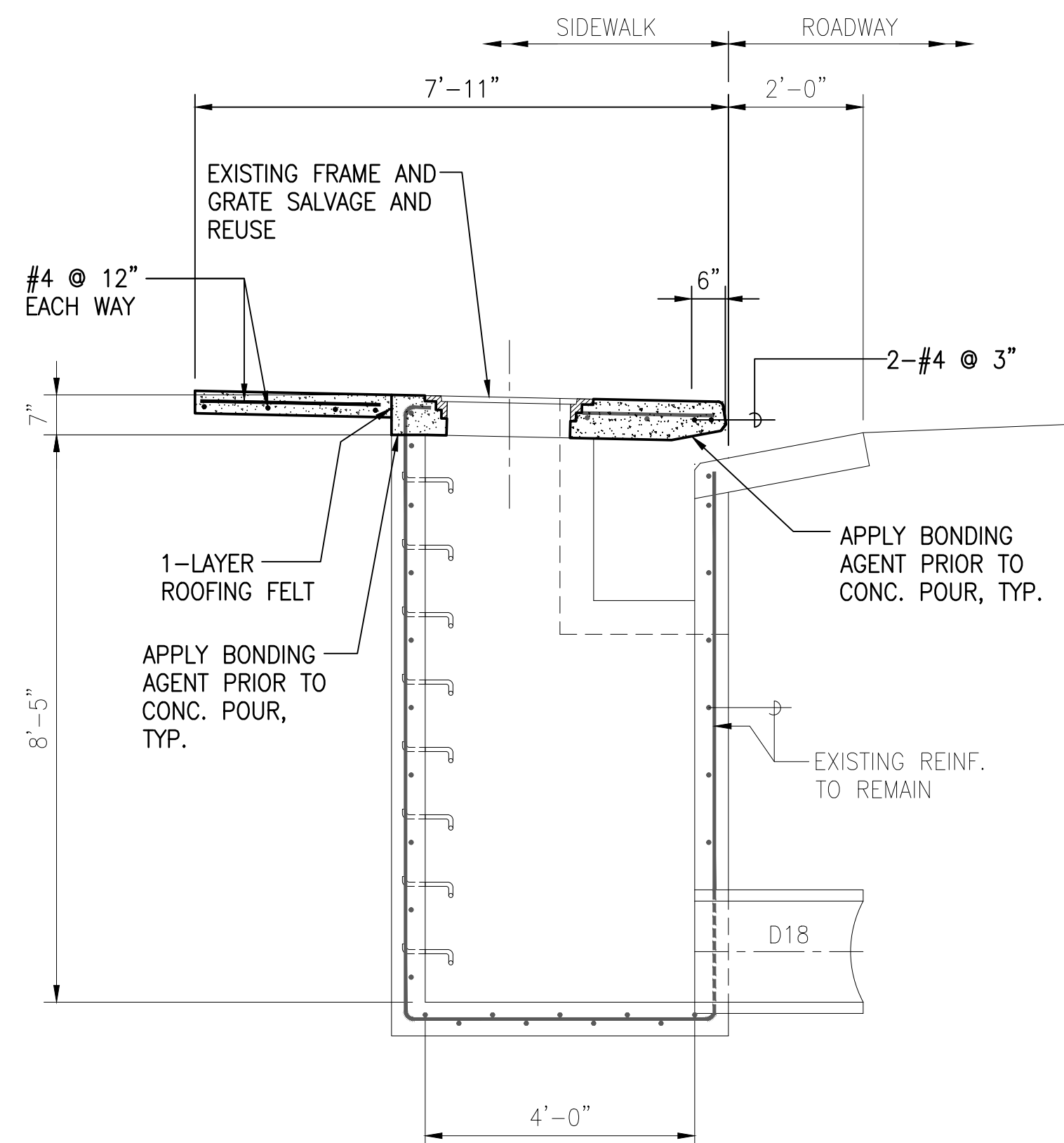
B SECTION
S14.2 SCALE: 1/2" = 1'-0"

NOTES:

1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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C SECTION
S14.2 SCALE: 1/2" = 1'-0"

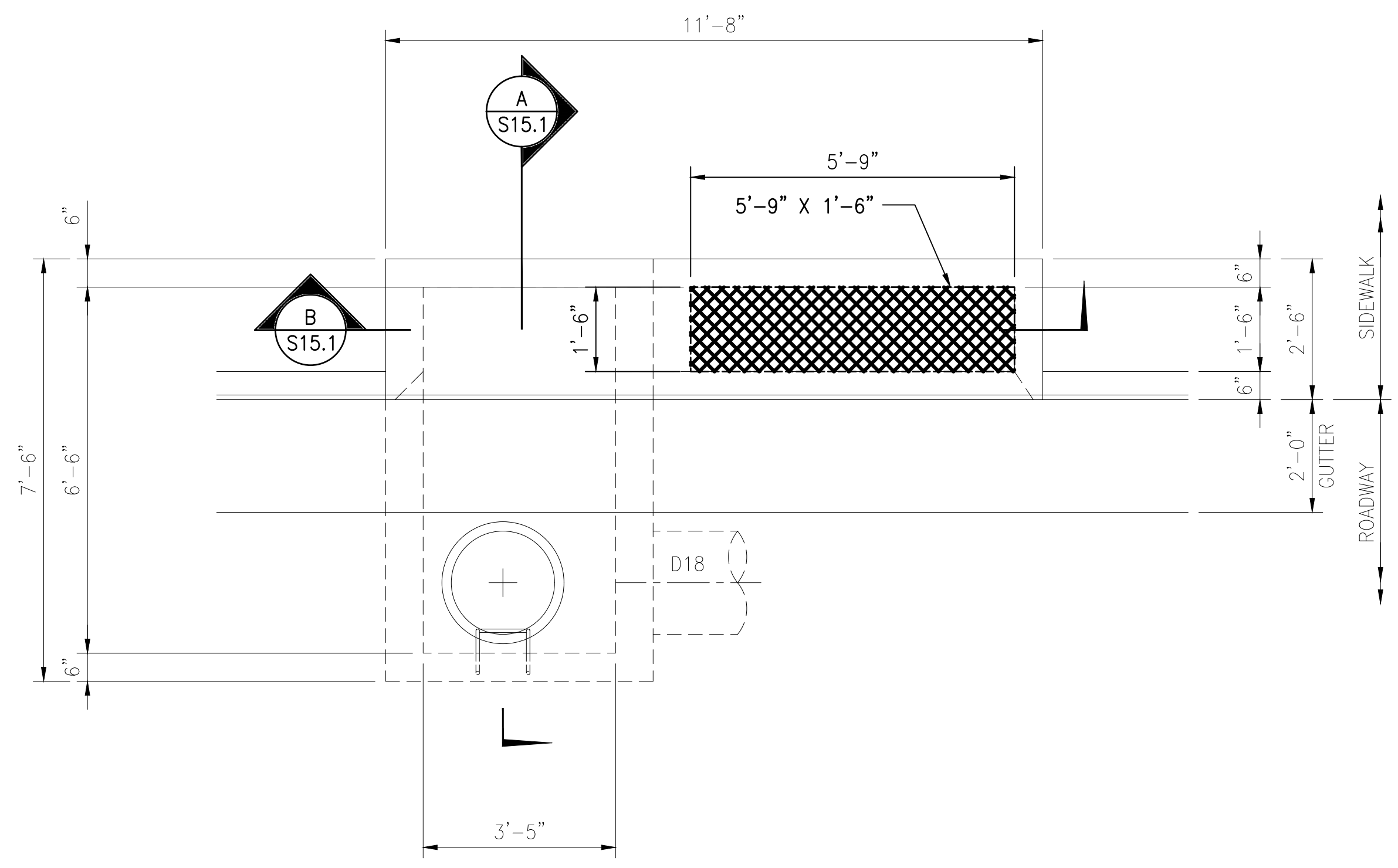


D SECTION
S14.2 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "Y"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED			
DRAWN: KSF								
CHECKED: RM								
DATE: SEPTEMBER 2022								
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	APPROVED:							
	DWG NO. S14.2							
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FILE	POCKET	FOLDER	NUMBER					

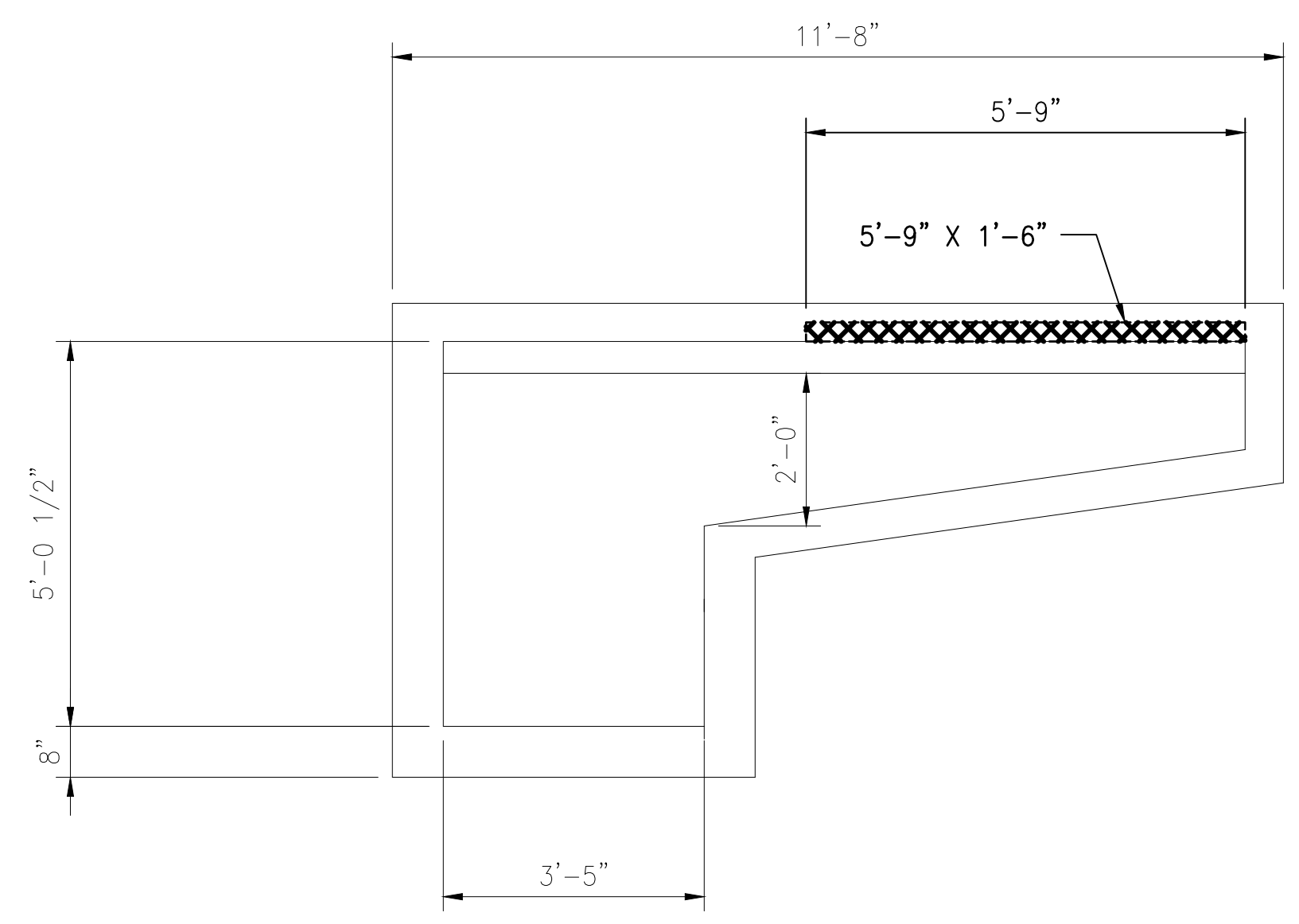
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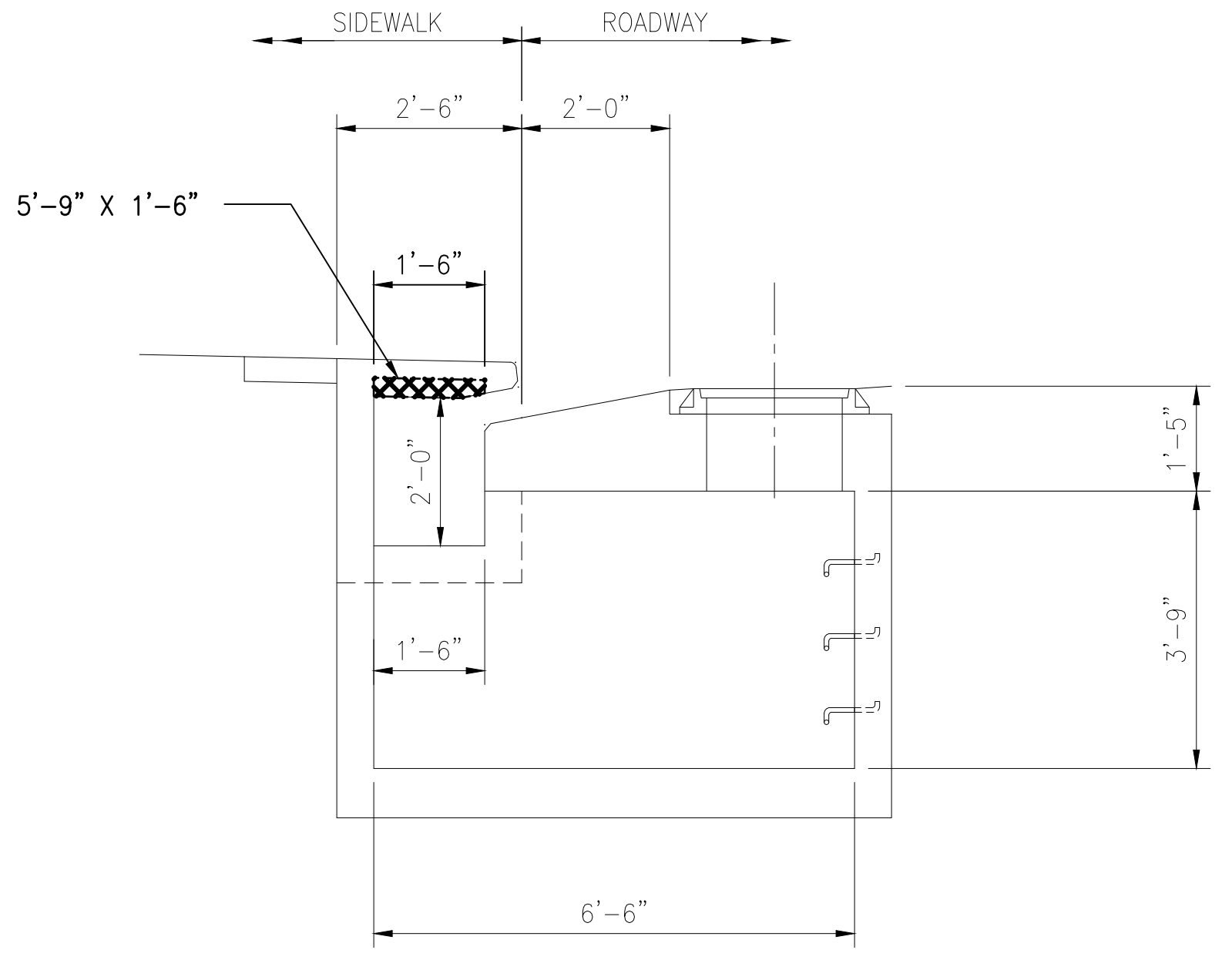
A PLAN
S15.1 SCALE: 1/2" = 1'-0"

LEGEND:
 EXTENT OF DEFECTIVE CONCRETE REPAIR

- NOTES:**
1. SALVAGE ALL EXISTING REINFORCING PROTRUDING OUT OF COLD JOINTS AT ALL CATCH BASINS, INCLUDING REINFORCING NOT SHOWN, UNLESS NOTED OTHERWISE.
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B SECTION
S15.1 SCALE: 1/2" = 1'-0"



C SECTION
S15.1 SCALE: 1/2" = 1'-0"

CATCH BASIN - CB "AA"

DESIGN: RM	REVISION	DATE	BRIEF	BY	APPROVED
DRAWN: KSF					
CHECKED: RM					
DATE: SEPTEMBER 2022					

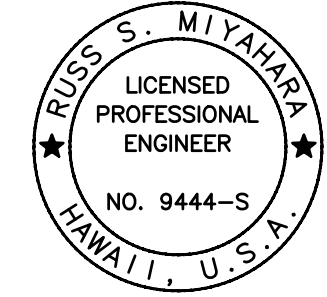


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VILLAGES OF KAPOLEI DEDICATION
HAWAII HOUSING FINANCE & DEVELOPMENT CORPORATION
STATE OF HAWAII

KAI'AU AVENUE ROADWAY REHABILITATION PROJECT - PHASE 1
HONOLULU, EWA, OAHU, HAWAII

CATCH BASIN CB "AA"
PLAN AND SECTIONS



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Russ S. Miyahara
SIGNATURE

9/15/2024
EXPIRATION DATE OF THE LICENSE

APPROVED:

DWG NO.
S15.1