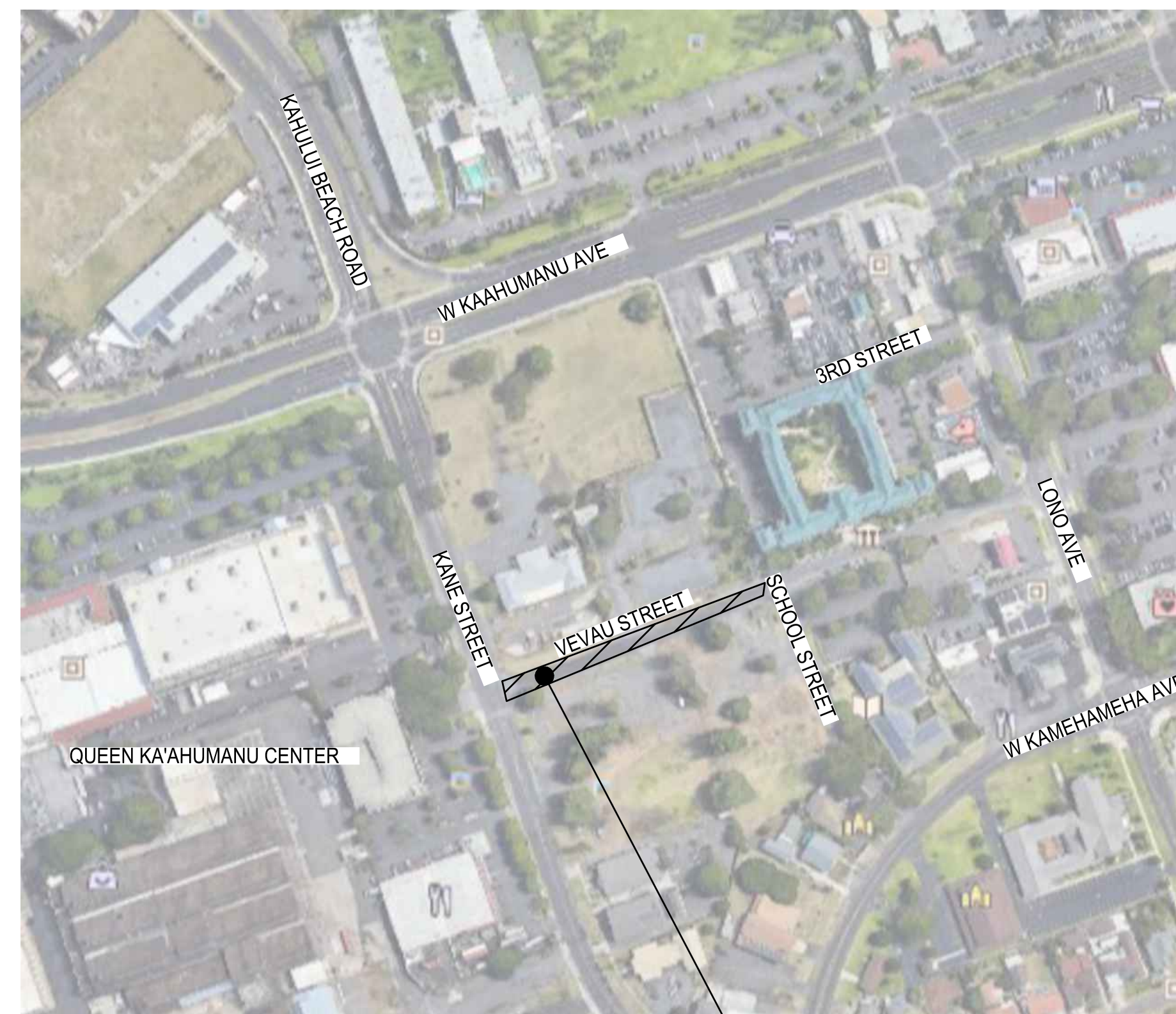


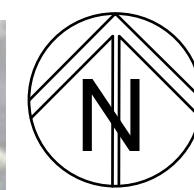
# VEVAU STREET IMPROVEMENTS

FOR COUNTY OF MAUI DEDICATION  
KANE STREET TO SCHOOL STREET  
KAHULUI, MAUI, HAWAII  
TAX MAP KEY: 3-7-005:003

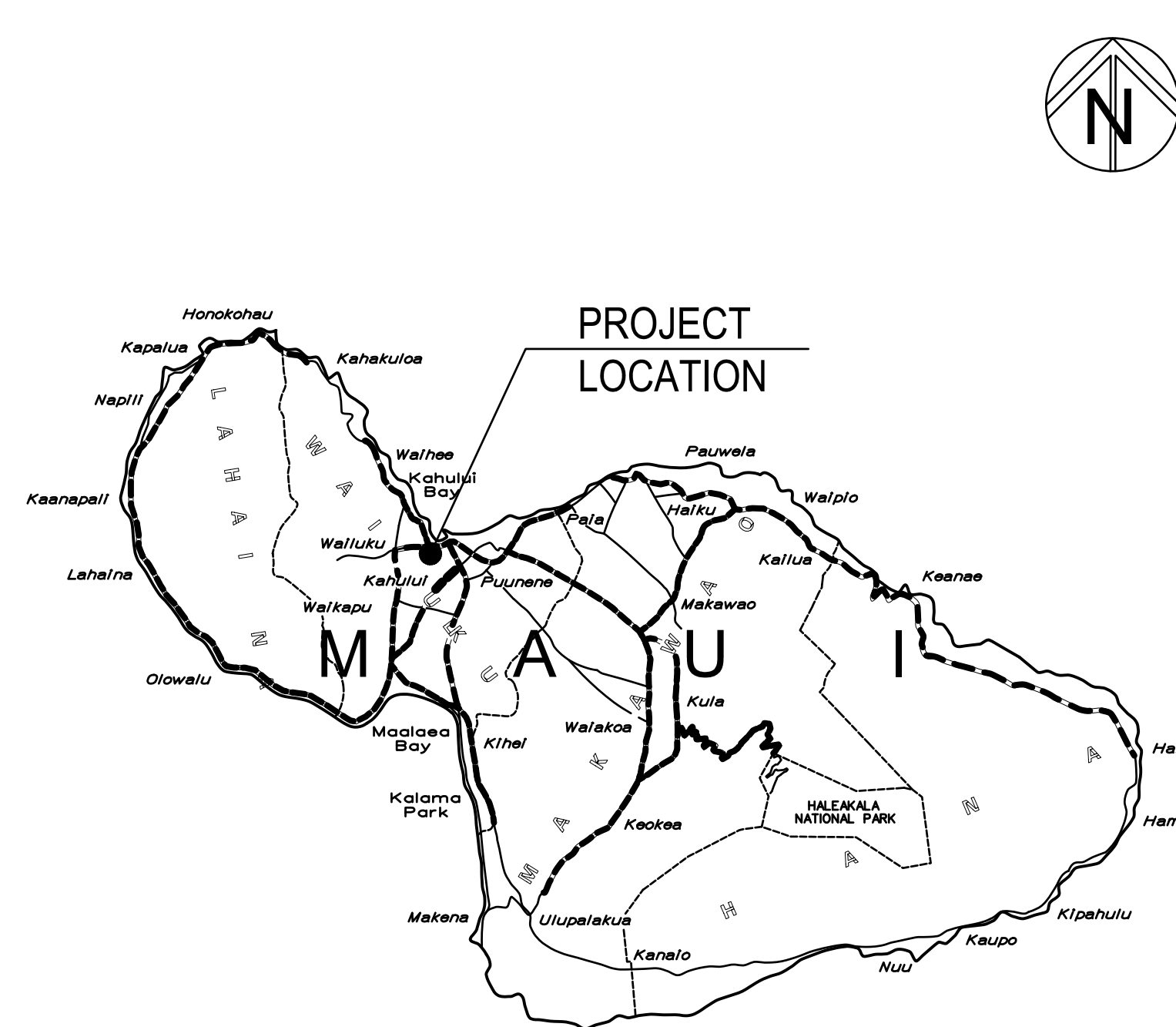
INDEX TO DRAWINGS		
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VICINITY MAP  
PROJECT LOCATION



NOTE:  
1. ALL WORK SHALL BE DONE PER THE APPROVED SHPD MONITORING PLAN



ISLAND OF MAUI  
PROJECT LOCATION

APPROVED BY:

\_\_\_\_\_  
DIRECTOR, DEPARTMENT OF WATER SUPPLY COUNTY OF MAUI DATE

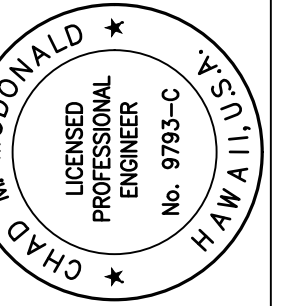
(APPROVAL IS LIMITED TO THE WATER SYSTEM IMPROVEMENTS WHICH WILL BE DEDICATED TO THE DEPARTMENT OF WATER SUPPLY)

\_\_\_\_\_  
DIRECTOR, DEPARTMENT OF PUBLIC WORKS COUNTY OF MAUI DATE

(APPROVAL LIMITED TO WORK IN COUNTY RIGHT-OF-WAY ONLY)

REVISIONS	BY

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF HAWAII. I HAVE OBSERVED THE CONSTRUCTION OF THIS PROJECT IN ACCORDANCE WITH THE REQUIREMENTS OF HAWAII ADMINISTRATIVE RULES, CHAPTER 16-112, SUBCHAPTER 1, DEFINITIONS OF THE HAWAII ADMINISTRATIVE RULES, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS. *Chad M. McDonald* EXPIRATION DATE: 04/30/2022



VEVAU STREET IMPROVEMENTS  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET



M & A HAWAII

ARCHITECTURE  
ENGINEERING  
PLANNING  
CONSTRUCTION MANAGEMENT  
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Sheet Title

TITLE SHEET AND INDEX TO DRAWINGS

Date AUGUST 2021

Scale AS NOTED

Drawn By AY

Job

Sheet

C001

Sheet 1 of 20

GENERAL NOTES

- 1. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" DATED 2005, THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1986 AND "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" DATED SEPTEMBER 1984 OF THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF MAUI, AS AMENDED.
- 2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND LICENSES REQUIRED. THE CONTRACTOR SHALL CONDUCT ALL TESTS AS REQUIRED BY THE ENGINEER AND BE RESPONSIBLE FOR ALL EXPENSES INCURRED IN CONDUCTING THESE TESTS.
- 3. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT, COUNTY OF MAUI, ENGINEERING DIVISION SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND INVERTS OF ALL EXISTING UTILITIES AND DRAINAGE SYSTEMS, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 5. THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCY OR CONFLICTS FOUND IN THE FIELD PRIOR TO OR DURING THE COURSE OF CONSTRUCTION AND SHALL NOT PROCEED WITH CONSTRUCTION UNTIL THE ENGINEER RESOLVES THE SAID DISCREPANCY OR CONFLICT.
- 6. FOR DETAILS NOT DELINEATED BY THESE PLANS, THE CONTRACTOR SHALL REFER TO THE "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION" MAUI, HAWAII AND KAUAI COUNTIES AND CITY AND COUNTY OF HONOLULU, OR THE "WATER SYSTEM STANDARDS", DATED 2002, WHICHEVER IS APPLICABLE.
- 7. UNLESS OTHERWISE NOTED, ALL EXISTING PAVEMENT, UTILITY LINES AND OTHER IMPROVEMENTS WITHIN THE COUNTY OR STATE RIGHT-OF-WAY THAT ARE DAMAGED OR UNDERMINED AS A RESULT OF THE CONTRACTOR'S OPERATION SHALL BE RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO MATCH OR BETTER THAN EXISTING CONDITIONS.
- 8. ALL VISIBLE UTILITY STRUCTURES HAVE BEEN LOCATED IN THE FIELD. HOWEVER, CONNECTIONS TO UNDERGROUND UTILITY LINES AS SHOWN ARE UNVERIFIED AND COMPILED FROM EXISTING DATA. UNDERGROUND UTILITIES SHOWN HEREIN ARE FOR INFORMATION ONLY, HAVING BEEN OBTAINED FROM THE BEST AVAILABLE SOURCES. NO GUARANTEE IS MADE ON THE ACCURACY OR COMPLETENESS OF SAID INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF ANY DAMAGED UTILITIES.
- 9. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL TONE OR PROBE THE PROJECT SITE TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AND PIPELINES WHETHER SHOWN OR NOT. IF UTILITIES OR PIPELINES ARE FOUND DURING PROBING AND ARE NOT SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 10. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND ENVIRONMENTAL QUALITY.
- 11. WHENEVER 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, DEPTHS AND ASSURE CONNECTIONS CAN BE MADE PRIOR TO EXCAVATION FOR THE NEW LINES, AT NO ADDITIONAL COST TO THE COUNTY.
- 12. IN THE EVENT THAT SUBSURFACE CULTURAL REMAINS SUCH AS ARTIFACTS, BURIALS, OR DEPOSITS OF SHELLS OR CHARCOAL ARE ENCOUNTERED DURING EXCAVATION WORK, THE CONTRACTOR SHALL STOP WORK IN THE AREA OF THE FIND AND CONTACT THE DEPARTMENT OF LAND AND NATURAL RESOURCES, HISTORIC PRESERVATION DIVISION (808-692-8015) IMMEDIATELY.
- 13. TOPOGRAPHIC SURVEY PERFORMED BY CONTROL POINT SURVEYING, INC., DATED MARCH 1, 2019.
- 14. THE CONTRACTOR MUST SUBMIT AN ENGINEERED GRADING REPORT (PER MAUI COUNTY CODE 20.08.250) AT THE COMPLETION OF THE PROJECT.

GRADING NOTES

- 1. ALL GRADING WORK SHALL CONFORM TO THE MAUI COUNTY CODE. SHOULD A GRADING PERMIT BE REQUIRED, NO WORK SHALL COMMENCE UNTIL THE DEPARTMENT OF PUBLIC WORKS APPROVES A GRADING PERMIT.
- 2. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEASURES TO PREVENT FLOODING AND EROSION PROBLEMS TO ADJACENT PROPERTIES.
- 3. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS RESULTING FROM HIS WORK. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE DPW SHALL BE PAYABLE BY THE CONTRACTOR.
- 4. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREAS FREE FROM DUST NUISANCES. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL RULES OF THE STATE DEPARTMENT OF HEALTH, HAR 11-60.1, FUGITIVE DUST.
- 5. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 55, WATER POLLUTION CONTROL AND CHAPTER 54, WATER QUALITY STANDARDS.
- 6. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, COMMUNITY NOISE CONTROL.
- 7. SHOULD ANY UNANTICIPATED ARCHAEOLOGICAL SITE(S) BE UNCOVERED BY THE GRADING ACTIVITY, ALL WORK SHALL CEASE IN THE IMMEDIATE AREA AND THE CONTRACTOR SHALL NOTIFY THE STATE HISTORIC PRESERVATION DIVISION AT 692-8015. NO WORK SHALL RESUME UNTIL THE CONTRACTOR OBTAINS CLEARANCE FROM THE HISTORIC PRESERVATION DIVISION.
- 8. THE CONTRACTOR SHALL SOD OR PLANT ALL SLOPES AND EXPOSED AREAS IMMEDIATELY AFTER THE GRADING WORK HAS BEEN COMPLETED.
- 9. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
- 10. THE CONTRACTOR SHALL INFORM THE DPW OF THE LOCATION OF THE DISPOSAL AND/OR BORROW SITE(S) REQUIRED FOR THIS PROJECT WHEN AN APPLICATION FOR A GRADING PERMIT IS MADE. THE DISPOSAL AND/OR BORROW SITES MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- 11. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS, AND HOLIDAYS ANYTIME WITHOUT PRIOR APPROVAL FROM DPW. GRADING WORK ON NORMAL WORKING DAYS SHALL BE BETWEEN THE HOURS OF 8:00 AM TO 4:30 PM.
- 12. FILLS SHALL BE COMPACTED TO 90 PERCENT (90%) OF MAXIMUM DENSITY PER ASTM D-1557 TEST, UNLESS SPECIFIED OTHERWISE.
- 13. THE CONTRACTOR SHALL REMOVE ALL VEGETATION BEFORE PLACING FILLS ON NATURAL GROUND SURFACE.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER HANDLING, STORAGE AND/OR DISPOSAL OF ALL WASTE GENERATED BY THIS CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A PLAN TO MAUI COUNTY DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT FOR COMPOSTING AND DISPOSAL OF CLEARED AND GRUBBED MATERIAL AND RECYCLING AND DISPOSAL OF CONSTRUCTION WASTE.
- 15. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH 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 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.
- 16. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO 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.
- 17. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
- 18. THE COUNTY SHALL BE INFORMED OF THE LOCATION OF THE BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- 19. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- 20. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
- 21. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- 22. TEMPORARY EROSION CONTROL PROCEDURES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO APPLICATION FOR GRADING PERMIT.
- 23. ALL GRADING AND 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.
- 24. NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECT TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

NOTES FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY

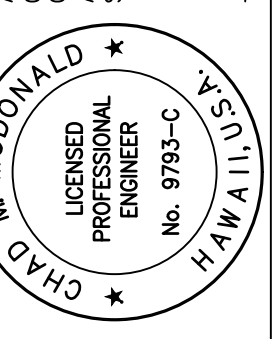
- 1. CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM WORK ON COUNTY HIGHWAYS FROM THE DEVELOPMENT SERVICES ADMINISTRATION TWO WEEKS PRIOR TO THE COMMENCEMENT OF WORK.
- 2. STANDARD DETAIL DRAWINGS AND STANDARD SPECIFICATIONS OF THE DEPARTMENT OF PUBLIC WORKS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION PLANS.
- 3. ALL CONSTRUCTION SHALL STRICTLY CONFORM TO THE LATEST VERSION OF THE HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE PUBLIC WORKS CONSTRUCTION, AND THE SEPTEMBER 1984 "STANDARD DETAILS" FOR PUBLIC WORKS CONSTRUCTION OF THE DEPARTMENT OF PUBLIC WORKS, AS AMENDED.
- 4. IF EXISTING UTILITIES, WHETHER OF NOT SHOWN ON PLANS, ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL AT HIS OWN EXPENSE BE REQUIRED TO REPAIR SUCH UTILITIES.
- 5. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC, ACCORDING TO THE LATEST VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE FOR STREETS AND HIGHWAYS", AND TO THE RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORKSITES AND/OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND THE U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".
- 6. THE DIRECTOR PUBLIC WORKS AND/OR THE DIRECTOR OF THE DEPARTMENT OF WATER SUPPLY HAS THE RIGHT TO STOP CONSTRUCTION SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION PLAN OR DETRIMENTAL TO THE PUBLIC'S INTEREST.
- 7. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE DEVELOPMENT SERVICES ADMINISTRATION FIVE (5) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 8. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND COUNTY GRADING ORDINANCE.
- 9. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION ORDERED BY THE DIRECTOR OF PUBLIC WORKS SHALL BE PAID BY THE CONTRACTOR.
- 10. CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE WORK SITE. THE CONTRACTOR SHALL INFORM THE DIRECTOR OF PUBLIC WORKS OF THE LOCATION OF THE DISPOSAL SITES. THE DISPOSAL SITE MUST FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.
- 11. THE CONTRACTOR SHALL SUBMIT A TIFF AND FIVE (5) COPIES OF THE "AS-BUILT" DRAWINGS PRIOR TO THE FINAL APPROVAL OF THE IMPROVEMENTS.
- 12. SHOULD HISTORIC SITES SUCH AS WALLS, PLATFORMS, PAVEMENTS, OR MOUNDS, OR REMAINS SUCH AS ARTIFACTS BURIALS, CONCENTRATION OF SHELL OR CHARCOAL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, WORK SHALL CEASE IMMEDIATELY IN THE IMMEDIATE VICINITY OF THE FIND AND THE FIND SHALL BE PROTECTED FROM FURTHER DAMAGE. THE CONTRACTOR AND/OR LANDOWNER SHALL IMMEDIATELY CONTACT THE STATE HISTORIC PRESERVATION DIVISION (692-8015), WHICH WILL ASSESS THE SIGNIFICANCE OF THE FIND AND RECOMMEND AN APPROPRIATE MITIGATION MEASURE, IF NECESSARY.
- 13. THE COUNTY OF MAUI IS NOT RESPONSIBLE FOR ANY PARK, ROADWAY, EASEMENT (INCLUDING BUT NOT LIMITED TO DRAINAGE, SEWER, ACCESS, RECLAIMED WATER, OR AVIGATION EASEMENT), OR ANY OTHER INTEREST IN REAL PROPERTY SHOWN ON THIS MAP OR SHOWN ON THESE PLANS, UNLESS THE MAUI COUNTY COUNCIL HAS ACCEPTED ITS DEDICATION BY A RESOLUTION APPROVED BY A MAJORITY OF COUNCIL MEMBERS AT A REGULAR OR SPECIAL MEETING OF THE MAUI COUNTY COUNCIL OR THE COUNTY OF MAUI HAS SIGNED ITS ACCEPTANCE VIA A CONVEYANCE DOCUMENT RECORDED IN THE BUREAU OF CONVEYANCES OF THE STATE OF HAWAII IN COMPLIANCE WITH MAUI COUNTY CODE SECTION 3.44.015.
- 14. STEEL PLATE WARNING SIGNS ARE REQUIRED FOR ALL STEEL PLATES IN THE RIGHT-OF-WAY.
- 15. WHEELCHAIR RAMP INSPECTION/CERTIFICATION FORMS SHALL BE REQUIRED FOR ALL NEWLY CONSTRUCTED RAMPS.
- 16. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE OF THERMOPLASTIC MATERIAL.
- 17. COMPACTION REQUIREMENTS
  - a. TESTING OF MATERIALS SHALL BE CONDUCTED BY AN APPROVED INDEPENDENT TESTING AGENCY IN ACCORDANCE WITH ASTM STANDARD METHODS OR AS SPECIFIED BY THE DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION, AS FOLLOWS:
    - i. EMBANKMENT/SELECT BORROW AND SUBGRADE MATERIALS: ONE (1) COMPACTION TEST PER 600 SQUARE YARDS PER LIFT;
    - ii. AGGREGATE SUBBASE COURSE: ONE (1) COMPACTION TEST PER 400 SQUARE YARDS; ONE (1) GRADATION AND SAND EQUIVALENT TEST PER LIFT PER PROJECT;
    - iii. AGGREGATE BASE COURSE: ONE (1) COMPACTION TEST PER 300 SQUARE YARDS; ONE (1) GRADATION AND SAND EQUIVALENT TEST PER LIFT PER PROJECT;
    - iv. ASPHALT CONCRETE PAVEMENT OR ASPHALT TREATED BASE COURSE; THREE (3) A.C. CORES FOR THICKNESS AND DENSITY TEST PER PROJECT;
    - v. TRENCH BACKFILL MATERIAL: ONE (1) TEST FOR EACH 300 LINEAL FEET OF TRENCH PER LIFT OF MATERIAL
  - b. CONTRACTOR SHALL SUBMIT ALL TESTING REPORTS INCLUDING RESULTS TO THE COUNTY'S INSPECTION AGENCY FOR REVIEW AND APPROVAL PRIOR TO COUNTY'S ACCEPTANCE OF WORK.
  - c. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE COUNTY OF ANY TESTING FAILURES AND CORRECT EACH FAILURE PRIOR TO PROCEEDING TO THE NEXT PHASE OF CONSTRUCTION.

ABBREVIATIONS:

AC	ASPHALTIC CONCRETE	M	METER
ADA	AMERICANS WITH DISABILITIES ACT	MAX	MAXIMUM
&	AND	MECH	MECHANICAL
APPROX	APPROXIMATE, APPROXIMATELY	MH	MANHOLE
ARCH	ARCHITECT	MISC	MISCELLANEOUS
@	AT	MIN	MINIMUM
B, BOT	BOTTOM	N	NORTH
BB	BOTTOM OF BANK	NTS	NOT TO SCALE
BLDG	BUILDING	NO	NUMBER
BW	BOTTOM OF WALL	OC	ON CENTER
BC	BOTTOM OF CURB	OD	OUTSIDE DIAMETER
		OFF	OFFSITE
		O/S	OFFSET
CO	CLEAN OUT	PCC	PORTLAND CEMENT CONCRETE
CONN	CONNECT, CONNECTION	PAVT	PAVEMENT
⊙	CENTERLINE	PI	POINT OF INTERSECTION
CONC	CONCRETE	P.I.V	POST INDICATOR VALVE
CONT	CONTINUE, CONTINUOUS	PL	PROPERTY LINE, PLACE
COTG	CLEAN OUT TO GRADE	PVC	POLYVINYL CHLORIDE
DET/DTL	DETAIL	PP	POWER POLE
DIA	DIAMETER	POC	POINT ON CURVE
DI	DRAIN INLET	PORT	PORTABLE BUILDING
DL	DRAIN LINE	R	RADIUS
DMH	DRAIN MANHOLE	REQ'D	REQUIRED
DPW	DEPARTMENT OF PUBLIC WORKS	REINF	REINFORCEMENT
DS	DOWNSPOUT	REV	REVISION/REVISED
DSP	DRY STAND PIPE	ROW	RIGHT OF WAY
DWG	DRAWING	S	SOUTH, SLOPE, SEWER
E	EAST	SHT	SHEET
EA	EACH	SL	SEWER LINE
ELEC	ELECTRIC	SMH	SEWER MANHOLE
EP	EDGE OF PAVEMENT	SPEC	SPECIFICATION
EA	EACH	ST	STREET
ELEV, EL	ELEVATION	STA	STATION
ELEC	ELECTRICAL	STD	STANDARD
EQ	EQUAL	T	TOP
EW	EACH WAY	TB	TOP OF BANK
EXIST, EX	EXISTING	TC	TOP OF CURB
E/DL	EXISTING DRAIN LINE	THK	THICK
E/ELEC	EXISTING ELECTRICAL LINE	TW	TOP OF WALL
E/GL	EXISTING GAS LINE	TP	TOP OF PAVEMENT
E/SL	EXISTING SEWER LINE	TYP	TYPICAL
E/WL	EXISTING WATER LINE	VB	VALVE BOX
FH	FIRE HYDRANT	VCP	VITRIFIED CLAY PIPE
FFE	FINISH FLOOR ELEVATION	VERT	VERTICAL
FG	FINISH GRADE	W	WATER
GALV	GALVANIZED	W/	WITH
GV	GATE VALVE	WL	WATER LINE
HORIZ	HORIZONTAL	WM	WATER METER
ID	INSIDE DIAMETER	WV	WATER VALVE
INV	INVERT	W	WEST
ISA	INTERNATIONAL SYMBOL OF ACCESSIBILITY		
LAT	LATERAL		
LF	LINEAR FOOT		

REVISIONS	BY

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF IT COMPLIES WITH ALL CITY, STATE AND FEDERAL REQUIREMENTS AND REGULATIONS AS DEFINED IN CHAPTER 16-11.3, SUBCHAPTER 1, DEFINITIONS, OF THE HAWAII ADMINISTRATIVE RULES. PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS )



EXPIRATION DATE: 04/30/2022

**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005: 003  
 KANE STREET TO SCHOOL STREET



M & A HAWAII

ARCHITECTURE  
 ENGINEERING  
 PLANNING  
 CONSTRUCTION MANAGEMENT  
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 SUITE 216  
 HONOLULU, HI 96814  
 PH. (808) 945-7882  
 FAX. (808) 946-2563

Sheet Title

**CONSTRUCTION NOTES 1**

Date AUGUST 2021

Scale AS NOTED

Drawn By AY

Job

Sheet

C002

Sheet 2 of 20

**TRAFFIC NOTES:**

1. A PERMIT SHALL BE OBTAINED FROM THE COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS-DEVELOPMENT SERVICES ADMINISTRATION (DSA) BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN.
2. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES. THE CONTRACTOR SHALL ALSO TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, SAFETY AND CONVENIENCE OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM TO THE "HAWAII ADMINISTRATIVE RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS", ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".
3. WORK ON ANY STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 AM TO 3:30 PM, MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DSA.
4. DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NONSKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
5. FOR LANE CLOSURES, THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS, AS NECESSARY, TO CONTROL THE FLOW OF TRAFFIC AND TO ENSURE PUBLIC SAFETY.
6. PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN FUNCTIONAL CONDITION OR OTHER FACILITIES SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AND INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
7. ALL SIGNS AND PAVEMENT MARKINGS DAMAGED BY THE CONSTRUCTION WORK SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.
8. UPON COMPLETION OF THE CONSTRUCTION WORK, THE CONTRACTOR SHALL RESTRIPE ALL PAVEMENT MARKINGS WITHIN THE CONSTRUCTION WORK AREA AND ADJACENT ROADWAY PAVEMENTS UP TO 100 FEET BEYOND THE CONSTRUCTION AREA. ALL SIGNS AND MARKINGS WITHIN THE CONSTRUCTION AREA AND ADJACENT AREAS THAT HAVE BEEN DAMAGED, REMOVED, OR ADVERSELY AFFECTED BY THE CONSTRUCTION WORK SHALL BE RESTORED TO ITS ORIGINAL CONDITION OR BETTER BY THE CONTRACTOR.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING STREET LIGHTING AND TRAFFIC SIGNAL FACILITIES AND DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR.
10. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHT-OF-WAY, EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE COUNTY OF MAUI DEPARTMENT OF PUBLIC WORKS.
11. THE CONTRACTOR SHALL INFORM THE DSA AT LEAST SIX (6) WORKING DAYS PRIOR TO ANY WORK ON PAVEMENT MARKING OPERATIONS AND/OR SIGN INSTALLATIONS TO SCHEDULE A REVIEW AND APPROVAL OF THE STRIPING AND/OR SIGNING PLANS.
12. ALL PAVEMENT STRIPING ON COUNTY ROADWAYS SHALL BE THERMOPLASTIC.
13. ALL TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS AMENDED, AND APPLICABLE SECTIONS OF PART V OF THE "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER, 1984, AND THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", 2005 EDITION, UNLESS OTHERWISE SPECIFIED ON THE PLANS, SPECIFICATIONS, OR THE STANDARD TRAFFIC NOTES.
14. THE APPROVED STRIPING PLAN SHALL BE LAID OUT USING TEMPORARY STRIPING TAPE OR OTHER APPROVED DEVICE. FIELD ADJUSTMENTS SHALL BE MADE AS DIRECTED BY THE ENGINEER BEFORE FINAL MARKINGS ARE APPLIED.
15. ALL PAVEMENT MARKINGS THAT BECOME INAPPLICABLE SHALL BE REMOVED BY THE CONTRACTOR AT HIS OWN EXPENSE. REMOVAL SHALL BE BY "SANDBLASTING" OR BY OTHER METHODS APPROVED BY THE ENGINEER BEFORE THE NEW PAVEMENT MARKINGS ARE APPLIED.
16. ALL RAISED PAVEMENT MARKERS SHALL MEET SPECIFICATION REQUIREMENTS FOR THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION.
17. ALL TRAFFIC SIGNS AND POSTS SHALL MEET THE REQUIREMENTS OF THE STATE OF HAWAII DEPARTMENT OF TRANSPORTATION AND COUNTY OF MAUI. SIGNS SHALL BE ON ALUMINUM SHEETING OF 0.080-INCH THICK MINIMUM. SIGN POSTS SHALL BE 2 INCH SQUARE TELESPAR TUBING NO. 20-F-12 OR EQUIVALENT WITH 2 1/4 INCH SQUARE TELESPAR ANCHOR POST BASE.
18. ALL TRAFFIC SIGNS SHALL BE RETROREFLECTIVE WITH DIAMOND-GRADE HIGH INTENSITY REFLECTIVE SHEETING.
19. THE 2 1/4 INCH SQUARE ANCHOR POST FOR SIGNS SHALL BE DRIVEN INTO THE GROUND, A/C PAVEMENT, OR CONCRETE SIDEWALK IN ACCORDANCE WITH THE PLANS. ALL DAMAGES TO THE SURROUNDING AREA SHALL BE REPAIRED TO ITS ORIGINAL CONDITION OR BETTER. BEFORE DRIVING INTO CONCRETE, A NEAT HOLE OF APPROXIMATELY 3 INCH DIAMETER SHALL BE DRILLED THROUGH THE CONCRETE PRIOR TO THE INSTALLATION OF THE ANCHOR POST. IF DRIVING INTO THE CONCRETE OR A/C PAVEMENT IS NOT POSSIBLE WITHOUT DAMAGE TO THE SURROUNDING CONCRETE OR A/C PAVEMENT, A 12"x12" SQUARE SHALL BE SAW-CUT AND REMOVED PRIOR TO THE INSTALLATION OF THE ANCHOR POST AND THEN PATCHED WITH HOT MIX TO MATCH THE EXISTING A/C PAVEMENT, AND CONCRETE TO MATCH EXISTING CONCRETE PAVEMENT.

**BMP NOTES:**

**TEMPORARY EROSION CONTROL MEASURES:**

1. PRIOR TO CLEARING LAND FOR GRADING, TEMPORARY EROSION CONTROL MEASURES, SUCH AS STABILIZED ACCESS AND SILT FENCES SHALL BE INSTALLED.
2. TEMPORARY STABILIZED ENTRY/EXIT ACCESS SHALL BE ESTABLISHED PRIOR TO CLEARING OPERATIONS AND SHALL BE CONSTRUCTED ACCORDINGLY DOT'S HWY CRITERIA. ACCESS SHALL BE 30' WIDE, 50' LONG AND 12" DEEP, MINIMUM.
3. OPENING AND CLEARING OF LAND FOR GRADING SHALL BE PERFORMED INCREMENTALLY TO MINIMIZE EROSION POTENTIAL.
4. AREAS NOT WITHIN THE LIMITS OF CLEARING AND GRUBBING SHALL REMAIN VEGETATED DURING GRADING OPERATIONS.
5. SILT WHICH HAS ACCUMULATED ON SILT FENCE SHALL BE REMOVED AND DISPOSED OF ON A BI-WEEKLY BASIS.
6. WHEN CLEARED OR GRUBBED AREAS ARE NOT TO BE GRADED OR DISTURBED FOR 30 DAYS OR MORE, SEED, PLANT OR HYDROSEED TEMPORARY VEGETATION, UNLESS REMAINING NATURAL VEGETATION PROVIDES ADEQUATE PROTECTION.
7. THE CONTRACTOR'S EQUIPMENT STORAGE AREAS SHALL BE PROTECTED THROUGH THE USE OF EARTH BERMS AND/OR ABSORPTION MATERIALS TO PREVENT POLLUTANTS FROM DISCHARGING INTO STATE WATERS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN STORAGE AREAS.

**PERMANENT EROSION CONTROL MEASURES:**

1. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED.
2. 2:1 SLOPES SHALL BE TREATED WITH GEOFABRIC OR TREATED WITH SOIL CONDITIONER TO AID IN THE ESTABLISHMENT OF TURF/ PLANTING.

**GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:**

1. MATERIALS POLLUTION PREVENTION PLAN
  - A. APPLICABLE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION. OTHER MATERIALS AND SUBSTANCES NOT LISTED BELOW SHALL BE ADDED TO THE INVENTORY: CONCRETE, DETERGENTS, PAINTS (ENAMEL AND LATEX), METAL STUDS, AND TAR.
  - B. MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.
  - C. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE.
  - D. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
  - E. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
  - F. WHENEVER POSSIBLE, A PRODUCT SHALL BE USED UP COMPLETELY BEFORE DISPOSING OF THE CONTAINER.
  - G. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
  - H. THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
2. ONSITE AND OFFSITE PRODUCT SPECIFIC PLAN
  - A. THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED.
    - I. ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
    - II. FERTILIZERS: FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE SHALL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
    - III. PAINTS: ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STATE DRAINAGE SYSTEM BUT SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
    - IV. CONCRETE TRUCKS: CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DRUM WASH WATER ONLY AT A DESIGNATED SITE. WATER SHALL NOT BE DISCHARGED IN THE STATE DRAINAGE SYSTEM OR WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL CONTACT DRINKING WATER BRANCH, DEPARTMENT OF HEALTH AT 586-4258 TO RECEIVE PERMISSION TO DESIGNATE A DISPOSAL SITE. THE CONTRACTOR SHALL CLEAN DISPOSAL SITE AS REQUIRED OR AS REQUESTED BY THE OWNER'S REPRESENTATIVE.
  - B. VEHICLE TRACKING.
    - I. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS.
    - II. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE SHALL BE CLEANED DAILY OR AS REQUIRED TO REMOVE ANT EXCESS MUD, COLD PLANED MATERIALS, DIRT, OR ROCK TRAKCED FROM THE SITE.
    - III. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPAULIN.

**TEMPORARY EROSION CONTROL NOTES:**

1. ALL GRADING AND DRAINAGE IMPROVEMENTS SHALL COMPLY WITH TITLE MC-15, CHAPTER 4, "RULES FOR THE DESIGN OF STORM DRAINAGE FACILITIES IN THE COUNTY OF MAUI" OF THE DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT, COUNTY OF MAUI.
2. EROSION CONTROL BMPS SHALL CONFORM TO THE HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISIONS CONSTRUCTION BEST MANAGEMENT PRACTICES FIELD MANUAL DATED JANUARY 2008.
3. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF LAND TO BE EXPOSED AT ANY TIME.
4. ALL GRADED AREAS SHALL BE GRASSED IMMEDIATELY AFTER FINAL GRADES ARE ESTABLISHED. GRASS PLANTING SHALL BE IN ACCORDANCE WITH SECTION 51 OF THE "STANDARDS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER 1986.
5. GRADED AREAS THAT ARE NOT AT FINAL GRADE AND ARE EXPECTED TO BE EXPOSED FOR MORE THAN 21 DAYS SHALL BE STABILIZED (GRASSED OR GRAVELED) BY NO LATER THAN 14 DAYS AFTER DISTURBANCE IN ORDER TO PREVENT EROSION AND SILT RUNOFF.
6. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN PLACE AND ESTABLISHED.
7. PROVIDE STABILIZED ACCESS AT CONSTRUCTION ENTRY AND EXIT LOCATION SHOWN. #2 CRUSHED ROCK SHALL BE USED.

**SEQUENCE FOR SEDIMENT CONTROL:**

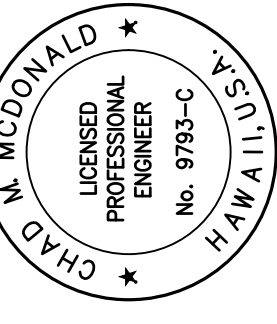
1. INSTALL DUST FENCE, FILTER SOCK, DRAIN INLET PROTECTION, AND TEMPORARY STABILIZED ENTRY/EXIT ACCESS.
2. COMMENCE GRADING OPERATIONS.
3. GROUND COVER, SUCH AS GRASSING, MULCHING OR NETTING TO BE INSTALLED IMMEDIATELY AFTER FINAL GRADES ARE ESTABLISHED.
4. AS CONSTRUCTION PROGRESSES, THE CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES AS REQUIRED. AT NO TIME SHALL TEMPORARY EROSION CONTROLS BE REMOVED WITHOUT RELOCATED TEMPORARY EROSION CONTROLS OR PERMANENT EROSION CONTROLS BEING IN PLACE.
5. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND AREA RESTORED AT THE COMPLETION OF THE PROJECT.
6. AT THE END OF GRADING OPERATIONS, EXISTING CATCH BASINS, INLETS AND DRAINAGE DITCHES SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND SHALL BE REMOVED. FLUSHING INTO THE DRAINAGE WAYS IS PROHIBITED.

REVISIONS	BY

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER AS DEFINED IN CHAPTER 16-113, SUBCHAPTER 1, DEFINITIONS, OF THE HAWAII ADMINISTRATIVE RULES. PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS )

*Chad M. McDonald*

EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**

VEVAU STREET IMPROVEMENTS

TAX MAP KEY: (2) 3-7-005-003

KANE STREET TO SCHOOL STREET



**M & A HAWAII**

ARCHITECTURE  
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Sheet Title

**CONSTRUCTION NOTES 2**

Date AUGUST 2021

Scale AS NOTED

Drawn By AY

Job

Sheet

C003

Sheet 3 of 20

PLAN NOTES FOR WATER SYSTEMS

1. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER SUPPLY (DWS), IN WRITING, ONE (1) WEEK PRIOR TO COMMENCEMENT OF WORK.
2. IF CONSTRUCTION OF WATER SYSTEM IMPROVEMENTS WILL AFFECT DWS CONSUMERS, CONTRACTOR SHALL NOTIFY CONSUMERS BY RADIO/NEWSPAPER TWO (2) DAYS BEFORE AND ON DAY OF CONNECTION. CONTRACTOR SHALL ALSO NOTIFY CONSUMERS HOUSE-TO-HOUSE ONE (1) DAY BEFORE CONNECTION WORK.
3. ALL MATERIALS USED AND METHODS OF CONSTRUCTION OF WATER SYSTEM FACILITIES SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF DWS WATER SYSTEM STANDARDS. CONTRACTOR SHALL OBTAIN THE LATEST REVISIONS OF THE DWS STANDARDS BEFORE COMMENCING CONSTRUCTION.
4. ALL WATER SYSTEM WORK SHALL BE PERFORMED BY CONTRACTORS POSSESSING VALID STATE OF HAWAII CONTRACTOR'S LICENSES, REGARDLESS OF THE VALUE OF THE WORK.
5. CONTRACTOR SHALL FOLLOW ALL LOCAL, STATE, FEDERAL LAWS, RULES AND REGULATIONS REGARDING THE HANDLING, REMOVAL AND DISPOSAL OF ASBESTOS PIPE.
6. CONTRACTOR SHALL PROTECT EXISTING WATERLINE DURING COURSE OF CONSTRUCTION AND SUPPORT EXPOSED WATERLINE TO PREVENT ANY MOVEMENT.
7. THE EXACT DEPTH AND LOCATION OF EXISTING WATERLINES, SERVICE LATERALS AND OTHER UTILITIES ARE NOT KNOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE SAME PRIOR TO TRENCHING FOR THE NEW WATERLINE. THE COST OF LOWERING, RELOCATING OR ADJUSTING EXISTING WATERLINES, SERVICE LATERALS AND APPURTENANCES, WHETHER SHOWN OR NOT SHOWN ON CONSTRUCTION PLANS AT THE CONTRACTOR'S EXPENSE.
8. PAVEMENT RESURFACING/RESTORATION:
  - A. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING DWS VALVES AND MANHOLES, WHEN AFFECTED BY THE WORK, PRIOR TO START OF CONSTRUCTION.
  - B. ALL WATER VALVE AND WATER MANHOLE CONCRETE COLLARS WITHIN THE PROJECT LIMITS SHALL BE DEMOLISHED AND RECONSTRUCTED PER DWS STANDARD DETAIL V12 AND V23, RESPECTIVELY, AT THE CONTRACTOR'S EXPENSE.
  - C. THE VALVE BOX RISER AND COVER OF ALL WATER VALVES WITHIN THE PROJECT LIMITS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  - D. CONTRACTOR SHALL ADJUST DWS SLIDING VALVE BOX ASSEMBLY AND MANHOLE FRAME AND COVER TO FINISHED GRADE.
  - E. PRIOR TO PAVEMENT RESURFACING/RESTORATION WORK, THE CONTRACTOR SHALL SCHEDULE INSPECTION WITH DWS.
9. ANY SLIDING VALVE BOX ASSEMBLY, MANHOLE COVER, OR CONCRETE COLLAR, WHETHER DISCOVERED DAMAGED OR NOT SPECIFIED ON THE PLANS TO BE ADJUSTED OR REPLACED, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR SHALL ADJUST TO FINISHED GRADES, ALL UTILITIES (I.E., WATER, SEWER, DRAIN, ETC.) AFFECTED BY THE WORK WHETHER SHOWN OR NOT SHOWN ON THE CONSTRUCTION PLANS AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL RESTORE ALL ROAD IMPROVEMENTS DISTURBED OR DAMAGED DURING CONSTRUCTION IN ACCORDANCE WITH THE 2005 "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS AMENDED, TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC WORKS AT THE CONTRACTOR'S EXPENSE. ROAD IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO, PAVEMENT, PAVEMENT MARKERS, SHOULDER DRESSING, STRIPING, AND SPEED HUMPS.
12. CONCRETE FOR REACTION BLOCKS AND ANCHOR BLOCKS SHALL BE DWS CLASS 2500.
13. THE MAXIMUM DISTANCE BETWEEN VALVE NUT AND TOP OF MANHOLE COVER SHALL BE THREE (3) FEET.
14. CONTRACTOR SHALL SUBMIT A MATERIALS LIST TO DWS FOR APPROVAL PRIOR TO CONSTRUCTION.
15. CONNECTION TO DWS SYSTEM:
  - A. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL NECESSARY FITTINGS AND OTHER MATERIALS AND EQUIPMENT REQUIRED FOR THE HOOK-UP. CONTRACTOR SHALL VERIFY THE EXACT LOCATION, DEPTH, TYPE, AND CONDITION OF THE EXISTING LINE BEFORE ORDERING MATERIALS FOR THE HOOK-UP. CONTRACTOR SHALL, HOWEVER, CHECK WITH DWS BEFORE EXCAVATING FOR VERIFICATION PURPOSES.
  - B. WHENEVER FEASIBLE, MECHANICAL JOINT FITTINGS SHALL BE USED FOR BURIED APPLICATIONS, AND FLANGED JOINT FITTINGS SHALL BE USED FOR EXPOSED APPLICATIONS.
  - C. DWS PERSONNEL MAY BE REQUIRED TO BE PRESENT OR ASSIST WITH CONNECTIONS TO THE EXISTING WATER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED BY DWS FOR SAID WORK.
  - D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL, EQUIPMENT AND LABOR FOR TRENCH EXCAVATION, BACKFILLING, CLEANING AND CHLORINATION, PAVING, AND OTHER WORK NECESSARY TO COMPLETE THE HOOK-UP, AS DIRECTED BY AND TO THE SATISFACTION OF DWS.

PLAN NOTES FOR WATER SYSTEMS (CONT.)

16. MINIMUM COVER OVER WATER MAIN, 6" DIAMETER OR LARGER, SHALL BE 3'-0". MINIMUM COVER FOR 4" DIAMETER SHALL BE 2'-6". MINIMUM COVER FOR DIAMETERS LESS THAN 4" SHALL BE 1'-6".
17. CONTRACTOR SHALL ENSURE INSTALLATION OF WATERLINES, SERVICE LATERALS AND APPURTENANCES HAVE PROPER CLEARANCES FROM EXISTING TREES, WALLS, FENCES, ETC. IN ACCORDANCE WITH CURRENT DWS WATER SYSTEM STANDARDS.
18. CONTRACTOR SHALL VERIFY AND MAINTAIN 18" MINIMUM CLEARANCE WITH WATERLINE OR SERVICE LATERAL CROSSING OVER EXISTING SEWERLINE OR SERVICE LATERAL. INSTALL REINFORCED CONCRETE JACKET AROUND SEWERLINE WHERE SEWER IS ABOVE WATER LINE OR LESS THAN 18" BELOW WATERLINE. THE LENGTH OF JACKET REQUIRED SHALL BE SPECIFIED IN TABLE 100-5 OF THE DWS STANDARDS. PROVIDE 6" MINIMUM CLEARANCE FROM OUTSIDE JACKET TO WATERLINE OR SERVICE LATERAL. STANDARD CONCRETE JACKET DETAILS FOR SEWERLINE AS SPECIFIED BY THE DEPARTMENT OF PUBLIC WORKS STANDARDS SHALL BE FOLLOWED.
19. CONTRACTOR SHALL HAVE LICENSED SURVEYOR STAKE OUT WATERLINE BASELINE STATIONING, RIGHT-OF-WAY LIMITS, PROPERTY LINES, AND EASEMENT LINES TO ENSURE PROPER LOCATION OF WATER SYSTEM IMPROVEMENTS.
20. BOLTS FOR EXPOSED FLANGED DUCTILE IRON PIPE JOINTS SHALL BE EITHER SILICON BRONZE BOLTS AND NUTS OR 316 STAINLESS STEEL BOLTS WITH THE HEAVY DUTY STAINLESS STEEL NUTS (ONLY) FURNISHED WITH TRIPAC 2000 BLUE COATING SYSTEM. ANTI-SEIZE SHALL NOT BE USED. T-BOLTS FOR DUCTILE IRON MECHANICAL JOINT (MJ) PIPE AND FITTING CONNECTIONS IN UNDERGROUND SITUATIONS SHALL BE ONE OF THE FOLLOWING SYSTEMS:
  - A. 316 STAINLESS STEEL T-BOLTS WITH THE HEAVY DUTY STAINLESS STEEL NUTS (ONLY) FURNISHED WITH TRIPAC 2000 BLUE COATING SYSTEM. ANTI-SEIZE SHALL NOT BE USED.
  - B. COR-TEN T-BOLTS AND NUTS WITH HIGH GRADE ZINC SACRIFICIAL ANODES, EQUIVALENT TO "DURATRON" SACRIFICIAL "SAC-NUT" MODULES, INSTALLED ON THE NUTS FOR ALL STANDARD COR-TEN T-BOLTS.
  - C. COR-TEN T-BOLTS AND NUTS BOTH FACTORY COATED WITH TRIPAC 2000 BLUE COATING SYSTEM BY "TRIPAC FASTENERS".

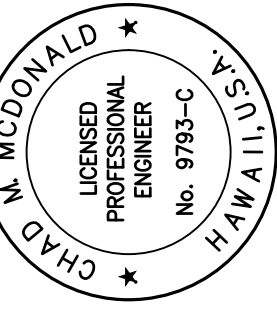
ALL HOT FORGED STAINLESS STEEL BOLTS ARE REQUIRED TO BE PASSIVATED PER ASTM A380. MANUFACTURE CERTIFICATES ARE REQUIRED FOR PROOF WITH EACH SHIPMENT
21. CONTRACTOR SHALL FURNISH AND INSTALL DUCTILE IRON NIPPLES FOR COMPLETE INSTALLATION OF THE WATERLINE, WHETHER SHOWN OR NOT SHOWN ON THE CONSTRUCTION PLANS, AT THE CONTRACTOR'S EXPENSE.
22. CONTRACTOR SHALL FURNISH TEMPORARY CLEANOUTS WHEN NECESSARY TO TEST, FLUSH, AND CHLORINATE THE WATERLINE AT THE CONTRACTOR'S EXPENSE.
23. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL PORTIONS OF ABANDONED WATERLINES THAT ARE EXPOSED OR WITHIN 12-INCHES BELOW THE GROUND SURFACE AT THE CONTRACTOR'S EXPENSE.
24. ALL BURIED METALS, INCLUDING COPPER PIPES, SHALL BE WRAPPED WITH POLY-WRAP. FOR ALL BURIED INSTALLATIONS OF DUCTILE IRON PIPE AND FITTINGS, POLY-WRAP IS REQUIRED EXCEPT WITHIN CONCRETE JACKETS.
25. LUBRICATE HYDRANT NOZZLE THREADS WITH NON-TOXIC GREASE.
26. CONTRACTOR SHALL PAINT AND NUMBER FIRE HYDRANT(S). NUMBERING TO BE FURNISHED BY DWS.
27. WATER MAINS AND APPURTENANCES SHALL BE SUBJECT TO HYDROSTATIC TESTING IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C600, UNDER THE "HYDROSTATIC TESTING" SECTION, TO A PRESSURE OF AT LEAST 1.5 TIMES THE WORKING PRESSURE. UNLESS OTHERWISE STATED IN THE CONSTRUCTION DOCUMENTS OR LIMITED BY THE PRESSURE RATING OF EQUIPMENT, THE PRESSURE TEST AND LEAKAGE TEST SHALL BE PERFORMED AT 225 POUNDS PER SQUARE INCH PRESSURE.
28. DEVELOPER SHALL SUBMIT A COST LIST ALONG WITH AN AFFIDAVIT FOR THE WATER SYSTEM PRIOR TO ACCEPTANCE.
29. CONTRACTOR SHALL SUBMIT ONE (1) SET OF RECORD DRAWINGS VIA A CONSULTANT PRIOR TO ACCEPTANCE OF THE WATER SYSTEM. AN ELECTRONIC IMAGE FILE IN PDF FORMAT AT FULL SIZE (24"x36") SHALL BE PROVIDED TO THE DWS FOR ALL PROJECTS.

PLAN NOTES FOR CHLORINATION OF WATER SYSTEM PIPELINES

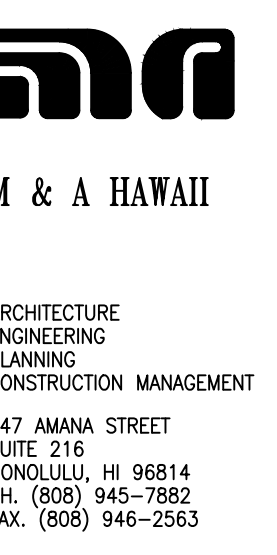
1. WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651. ALL PROCEDURES AND MATERIALS (LIQUID CHLORINE OR CALCIUM HYPOCHLORITE) USED FOR THE CHLORINATION OF THE PROJECT SHALL CONFORM TO AWWA REQUIREMENTS.
2. PRIOR TO CHLORINATION, THE PROJECT PIPELINES SHALL BE THOROUGHLY CLEANED. CLEANING OF LINES 8" AND LARGER SHALL BE BY PIGGING USING FOAM PIGS. SMALLER LINES CAN BE FLUSHED IN ACCORDANCE WITH AWWA REQUIREMENTS IF ADEQUATE WATER SUPPLY IS PROVIDED, OTHERWISE BY PIGGING. THE CONTRACTOR SHALL SUBMIT HIS PLAN FOR PIPELINE CLEANING, INCLUDING FITTING REQUIREMENTS FOR PIGGING, FOR APPROVAL PRIOR TO PROCEEDING.
3. THE INTERIOR SURFACES OF THE PROJECT SHALL BE EXPOSED TO THE CHLORINATING SOLUTION FOR A MINIMUM OF 24 HOURS AND THE CHLORINE RESIDUAL SHALL NOT BE LESS THAN 10 PPM AFTER SUCH TIME.
4. SHOULD CALCIUM HYPOCHLORITE BE USED, NO SOLID AND/OR UNDISSOLVED PORTION OF THE COMPOUND SHALL BE INTRODUCED INTO ANY SECTION OF THE PROJECT TO BE CHLORINATED.
5. AT THE END OF THE 24-HOUR DISINFECTION PERIOD, REPRESENTATIVE SAMPLES SHALL BE TAKEN AND ANALYZED TO ASSURE A CHLORINE RESIDUAL OF AT LEAST 10 PPM. MEASUREMENTS FOR CHLORINE RESIDUAL TESTS SHALL BE BY A TRAINED, QUALIFIED TESTER APPROVED BY THE DIRECTOR.
6. SHOULD THE RESULTS INDICATE ADEQUATE CHLORINATION, THE PROJECT SHALL BE THOROUGHLY FLUSHED AND FILLED WITH POTABLE WATER FROM THE EXISTING POTABLE WATER SYSTEM AND AGAIN TESTED FOR CHLORINE RESIDUAL. THE FLUSHING SHALL BE CONSIDERED ADEQUATE IF THE TEST RESULTS INDICATE THAT THE WATER IN THE PROJECT HAS A COMPARABLE CHLORINE RESIDUAL AS THE WATER IN THE EXISTING SYSTEM.
7. FOLLOWING THE ACCEPTABLE FLUSHING OF THE HIGH CONCENTRATION CHLORINE SOLUTION, TWO CONSECUTIVE SETS OF ACCEPTABLE SAMPLES SHALL BE TAKEN AT LEAST 24 HOURS APART FROM REPRESENTATIVE POINTS IN THE PROJECT AND SUBJECTED TO MICROBIOLOGICAL TESTS PERFORMED BY A CERTIFIED LABORATORY APPROVED BY THE DEPARTMENT OF HEALTH. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED AND TESTED FROM EVERY 1,200 FEET OF THE NEW WATER MAIN, PLUS ONE SET FROM THE END OF THE LINE AND AT LEAST ONE SET FROM EACH BRANCH. POSITIVE RESULTS WILL NOT BE ACCEPTABLE AND THE ENTIRE CHLORINATION PROCESS WILL BE REPEATED.
8. ANALYSIS FOR RESIDUAL CHLORINE SHALL BE MADE IN ACCORDANCE WITH "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", AMERICAN PUBLIC HEALTH ASSOCIATION, CURRENT EDITION.
9. MICROBIOLOGICAL TESTS SHALL BE MADE IN ACCORDANCE WITH "STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER", AMERICAN PUBLIC HEALTH ASSOCIATION, CURRENT EDITION.
10. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ALL OF THE FOREGOING.

REVISIONS	BY

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF HAWAII. MY EXPIRATION DATE IS 04/30/2022.  
**Chad M. McDonald**  
 LICENSED PROFESSIONAL ENGINEER  
 No. 9793-C  
 HAWAII



**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005: 003  
 KANE STREET TO SCHOOL STREET



Sheet Title

**CONSTRUCTION NOTES 3**

Date AUGUST 2021

Scale AS NOTED

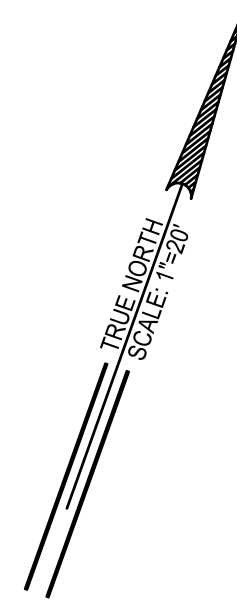
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Job

Sheet

**C004**

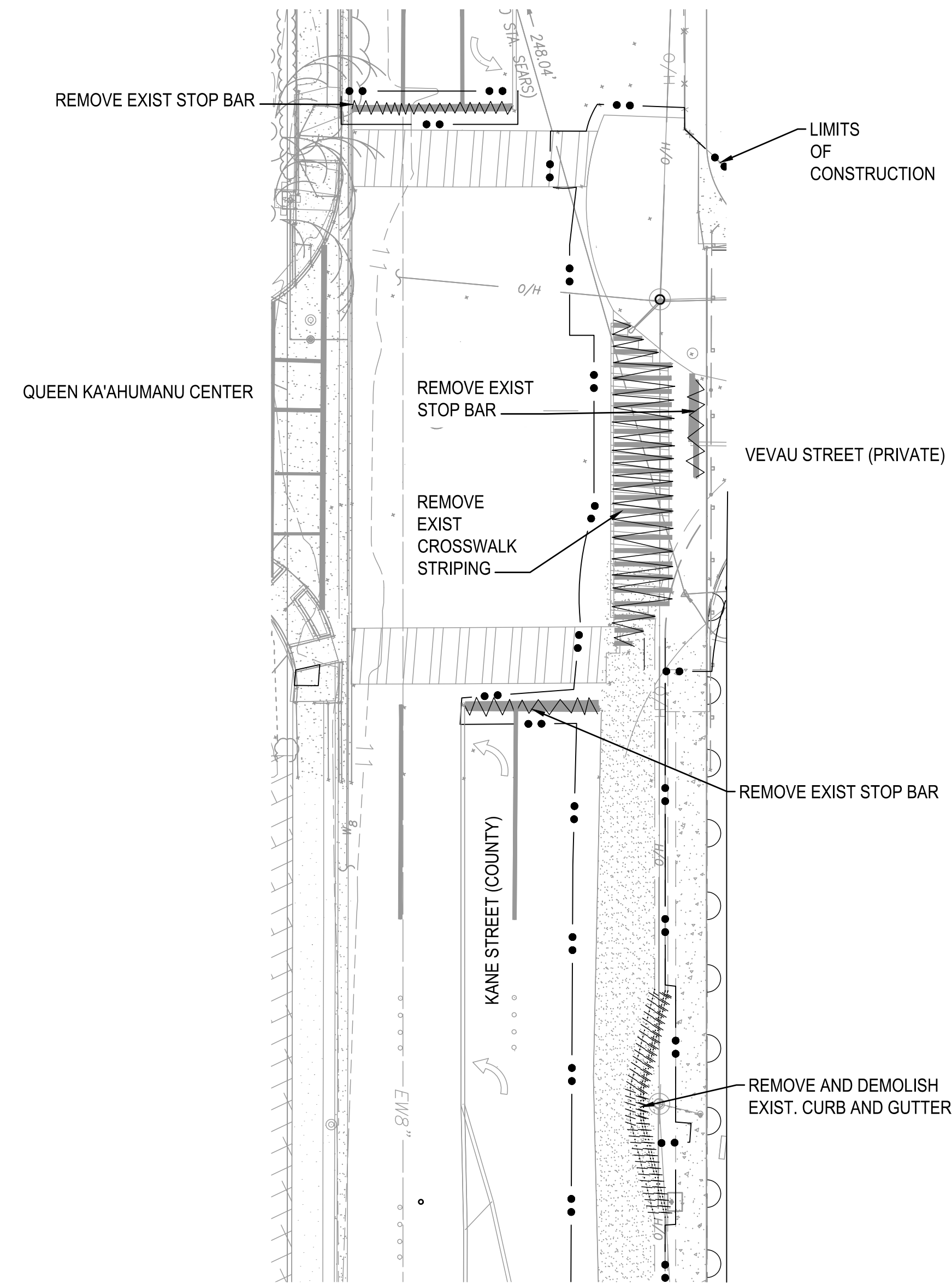
Sheet 4 of 20



**LEGEND**

--- PROPERTY LINE

---●●--- LIMITS OF CONSTRUCTION

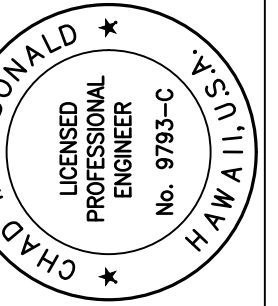


**VEVAU STREET DEMOLITION PLAN**  
SCALE: 1"=20'

REVISIONS	BY

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*Chad M. McDonald*  
EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005-003  
KANE STREET TO SCHOOL STREET



**M & A HAWAII**

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Sheet Title

**DEMOLITION PLAN**

Date AUGUST 2021

Scale AS NOTED

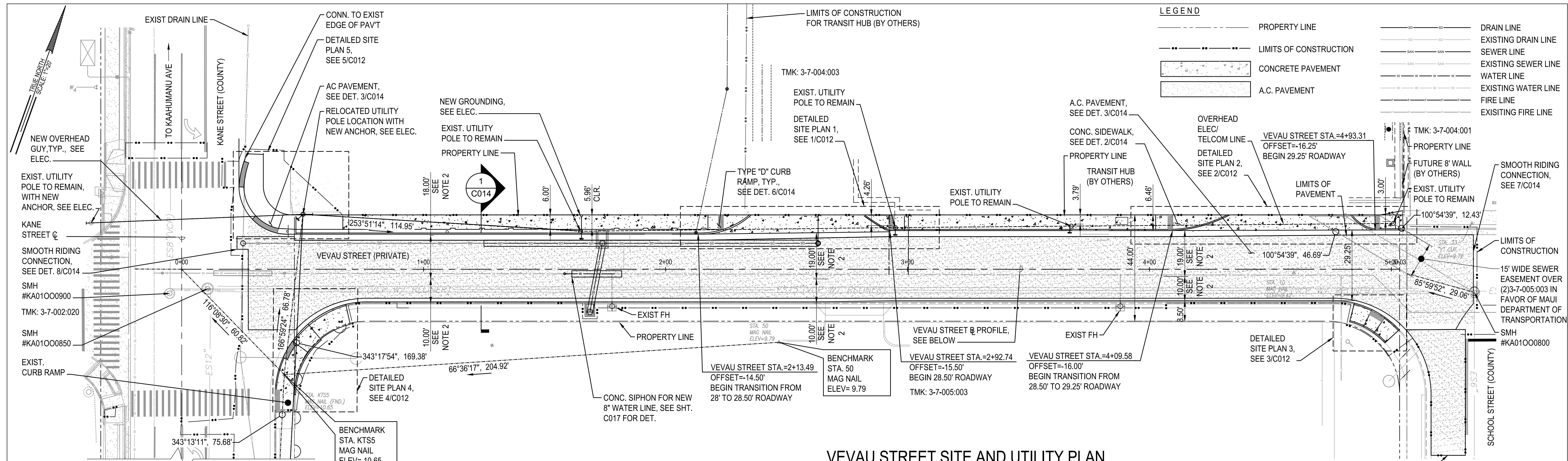
Drawn By AY

Job

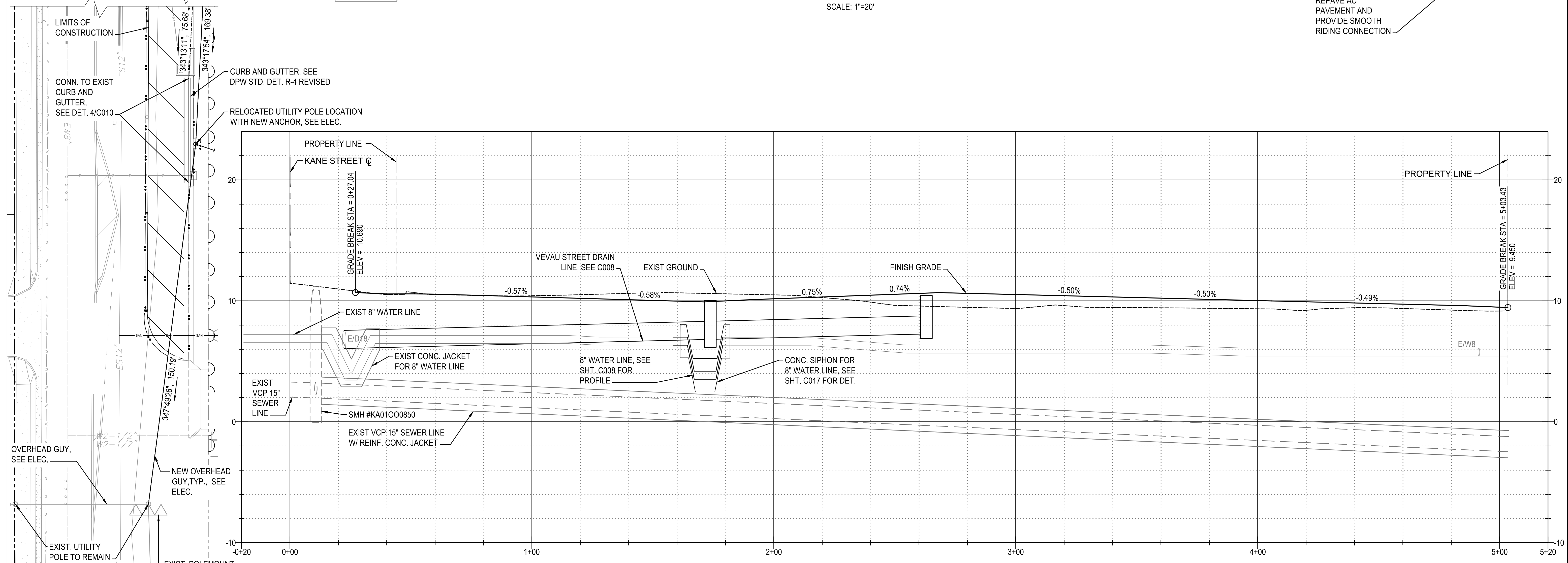
Sheet

**C005**

Sheet 5 of 20



**VEVAU STREET SITE AND UTILITY PLAN**  
SCALE: 1"=20'



**VEVAU STREET BASE LINE PROFILE**  
SCALE: HORIZ: 1" = 20'  
VERT: 1" = 4'

- NOTE:
1. ALL WORK SHALL BE DONE PER THE APPROVED SHPD MONITORING PLAN
  2. DIMENSION FROM CURB TO DOUBLE SOLID YELLOW LINE

**LEGEND**

---	PROPERTY LINE	---	DRAIN LINE
---	LIMITS OF CONSTRUCTION	---	EXISTING DRAIN LINE
---	CONCRETE PAVEMENT	---	SEWER LINE
---	A.C. PAVEMENT	---	EXISTING SEWER LINE
---		---	WATER LINE
---		---	EXISTING WATER LINE
---		---	FIRE LINE
---		---	EXISTING FIRE LINE

REVISIONS	BY

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CHAD MCDONALD  
LICENSED PROFESSIONAL ENGINEER  
No. 9793-C  
HAWAII

EXPIRATION DATE: 04/30/2022

**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET

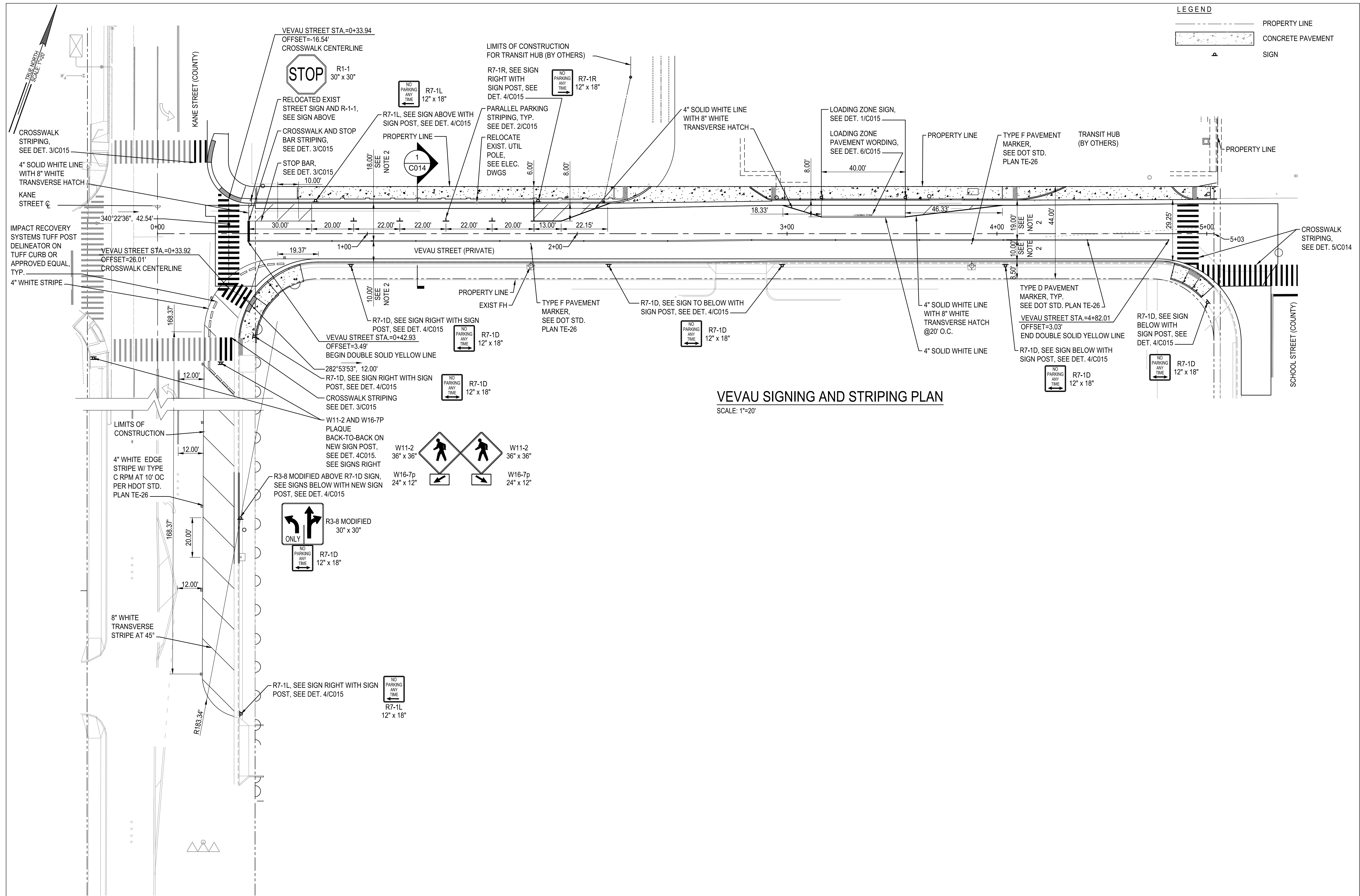
**M & A HAWAII**  
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Sheet Title

**OVERALL SITE AND UTILITY PLAN**

Date: AUGUST 2021  
Scale: AS NOTED  
Drawn By: AY  
Job:  
Sheet:  
C006  
Sheet 6 of 20



**VEVAU SIGNING AND STRIPING PLAN**  
SCALE: 1"=20'

- NOTE:
1. ALL WORK SHALL BE DONE PER THE APPROVED SHPD MONITORING PLAN
  2. DIMENSION FROM CURB TO DOUBLE SOLID YELLOW LINE

**LEGEND**

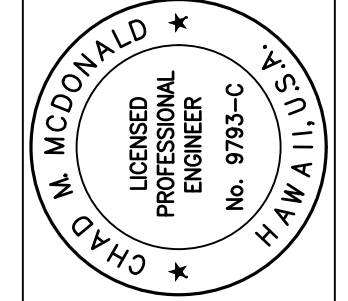
	PROPERTY LINE
	CONCRETE PAVEMENT
	SIGN

REVISIONS	BY

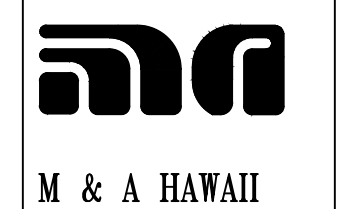
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN OBSERVATION OF CONSTRUCTION AS DEFINED IN CHAPTER 16-113, SUBCHAPTER 1, DEFINITIONS, OF THE HAWAII ADMINISTRATIVE RULES. PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS, AND LANDSCAPE ARCHITECTS

*Cher M. McDonald*

EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET



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Sheet Title

**SIGNING AND STRIPING PLAN**

Date AUGUST 2021

Scale AS NOTED

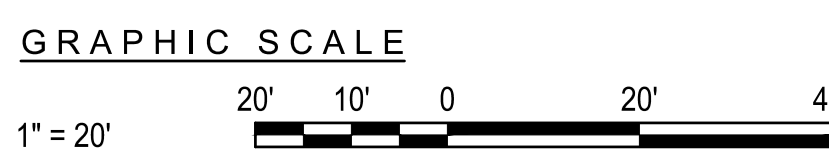
Drawn By AY

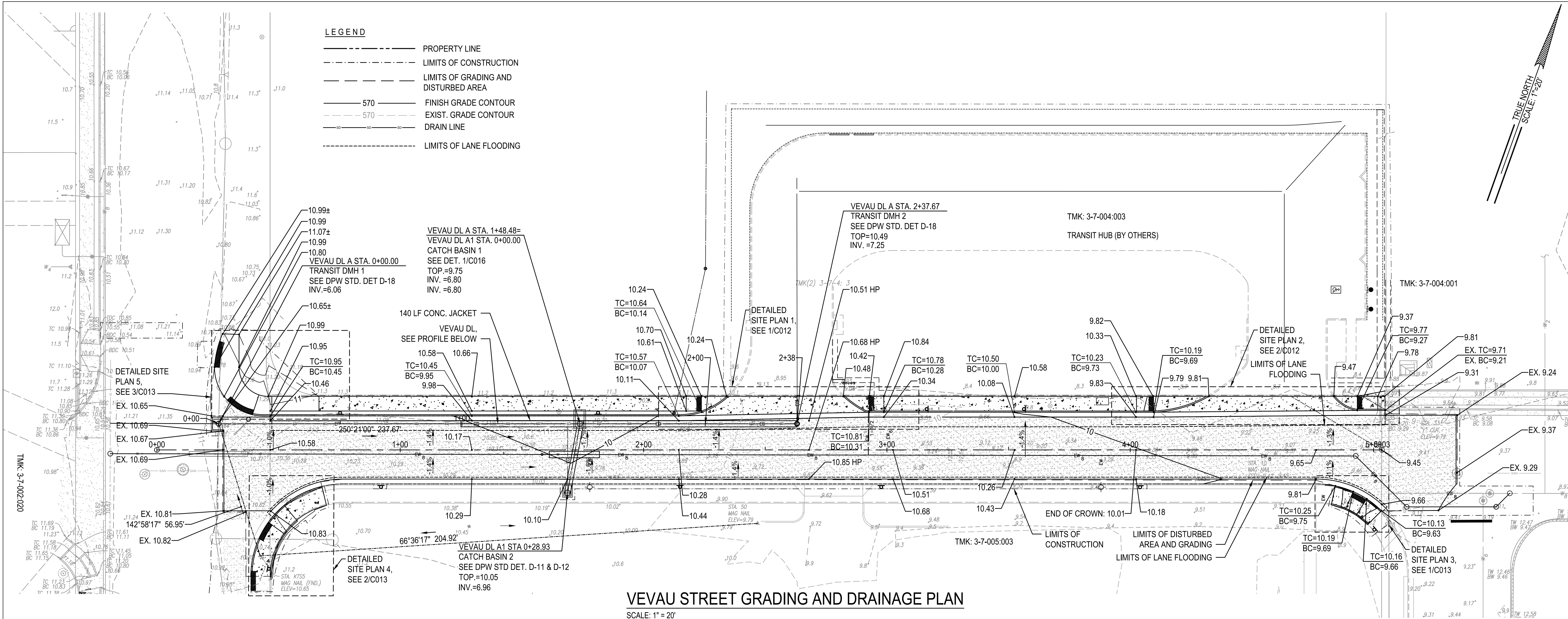
Job

Sheet

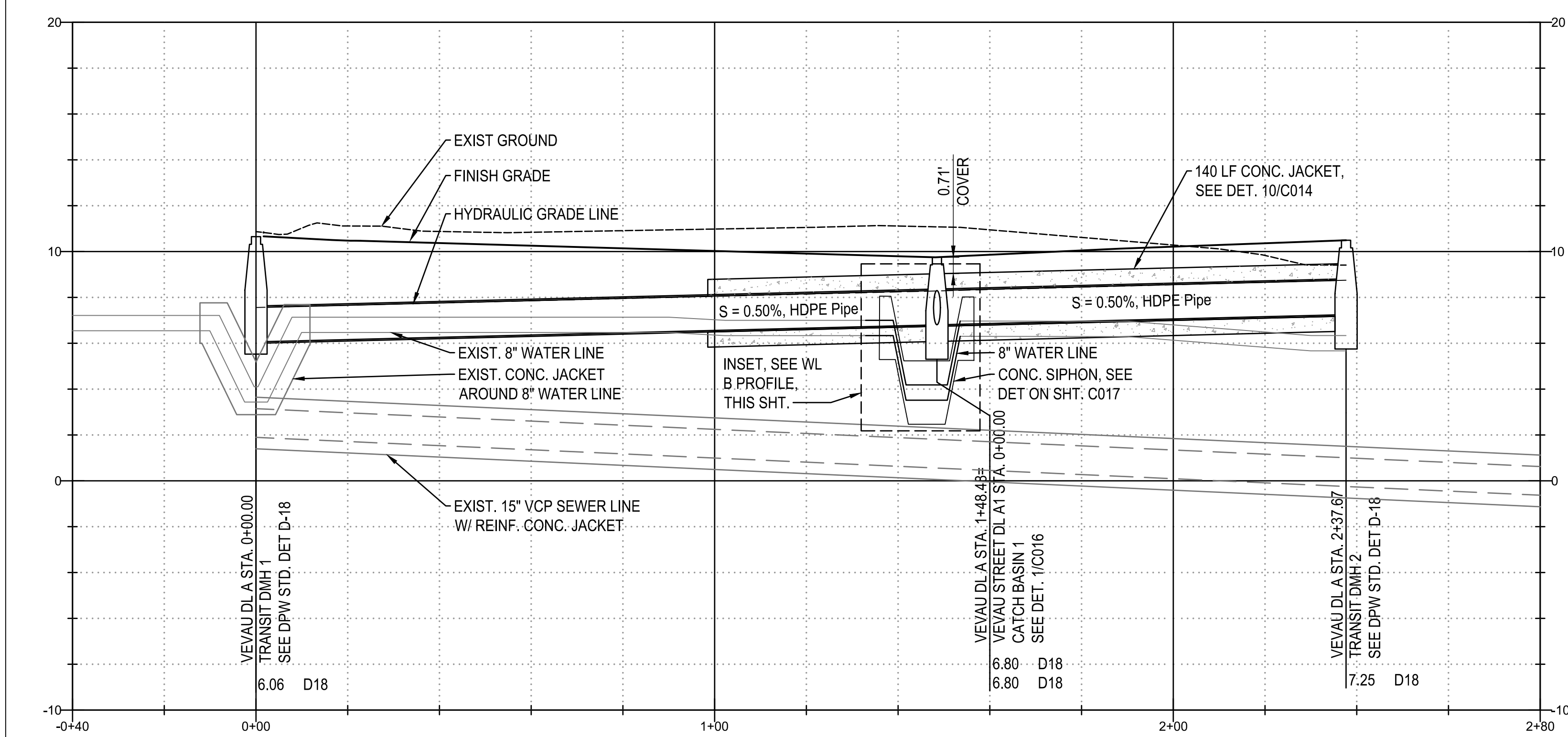
C007

Sheet 7 of 20

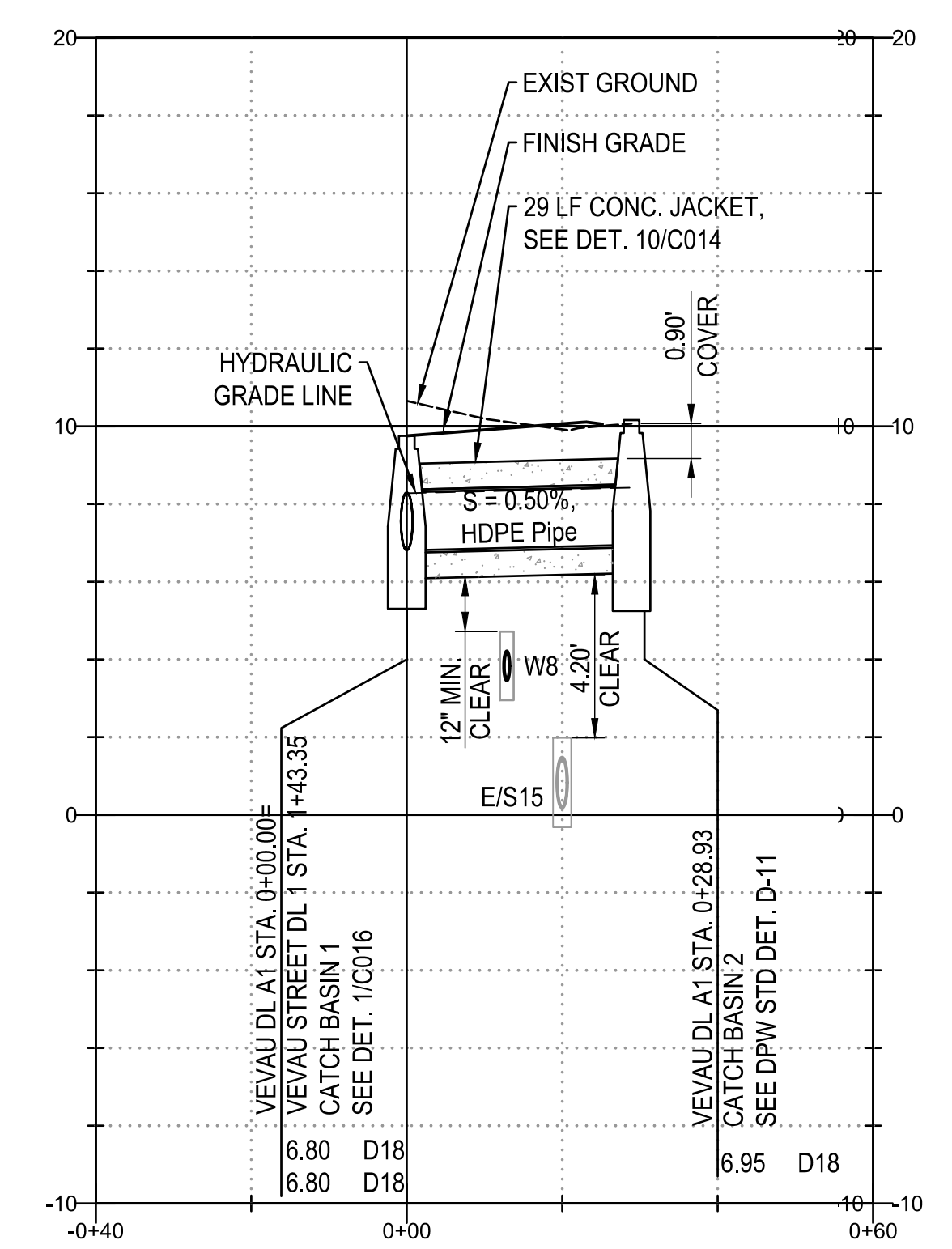




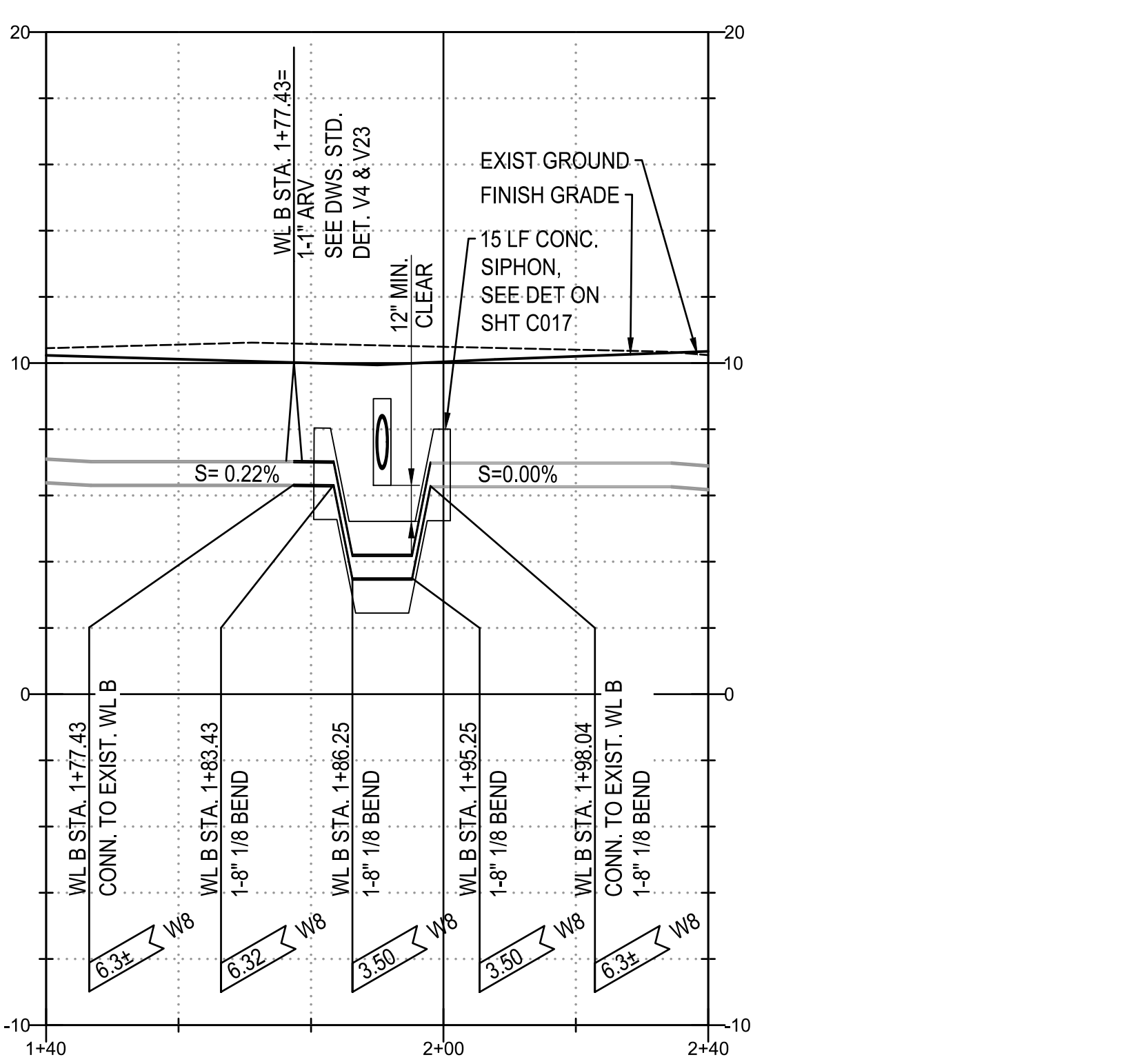
**VEVAU STREET GRADING AND DRAINAGE PLAN**  
SCALE: 1" = 20'



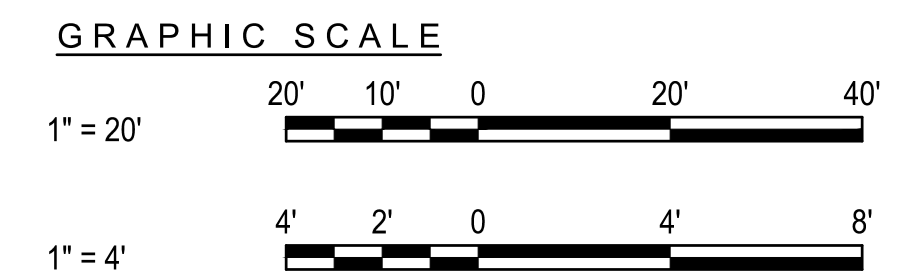
**TRANSIT DRAIN LINE A PROFILE**  
SCALE: HORIZ: 1" = 20'  
VERT: 1" = 4'



**TRANSIT DRAIN LINE A1 PROFILE**  
SCALE: HORIZ: 1" = 20'  
VERT: 1" = 4'



**WL B PROFILE**  
SCALE: HORIZ: 1" = 20'  
VERT: 1" = 4'



- LEGEND**
- PROPERTY LINE
  - - - - - LIMITS OF CONSTRUCTION
  - - - - - LIMITS OF GRADING AND DISTURBED AREA
  - 570 FINISH GRADE CONTOUR
  - - - - - 570 EXIST. GRADE CONTOUR
  - DRAIN LINE
  - - - - - LIMITS OF LANE FLOODING

REVISIONS	BY

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**CHAD M. McDONALD**  
LICENSED PROFESSIONAL ENGINEER  
No. 9793-C  
HAWAII, U.S.A.

EXPIRATION DATE: 04/30/2022

**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET

**M & A HAWAII**

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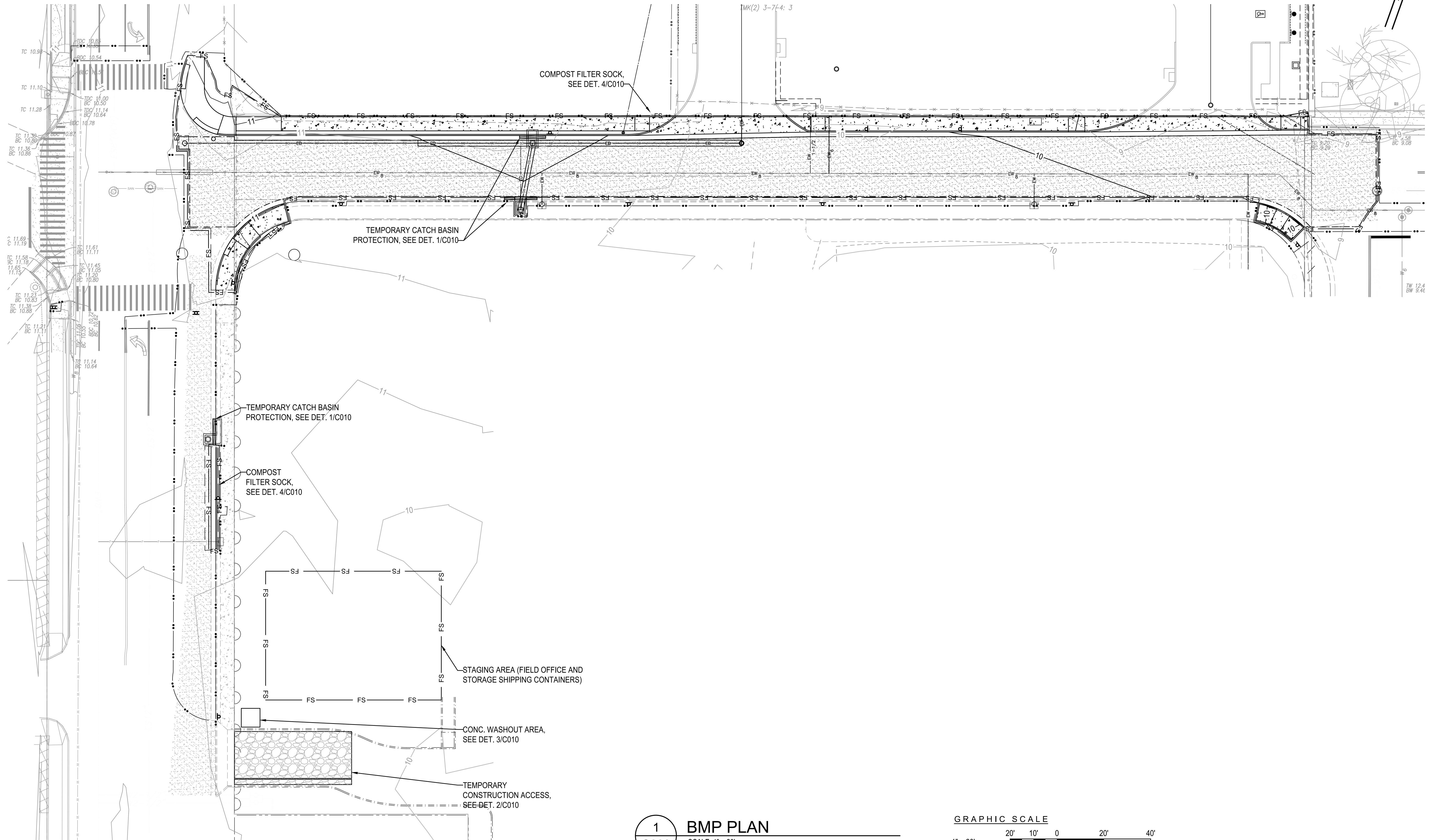
**OVERALL GRADING AND DRAINAGE PLAN**

Date: AUGUST 2021  
Scale: AS NOTED  
Drawn By: AY  
Job:  
Sheet:  
**C008**  
Sheet 8 of 20

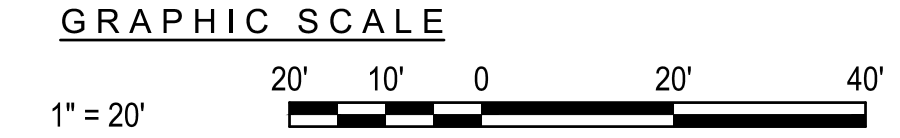


**LEGEND**

	PROPERTY LINE
	LIMITS OF CONSTRUCTION
	COMPOST FILTER SOCK, SEE DET. 4/C010
	FINISH GRADE CONTOUR
	EXIST. GRADE CONTOUR
	DRAIN LINE
	STABILIZED CONSTRUCTION ACCESS, SEE DET. 2/C010



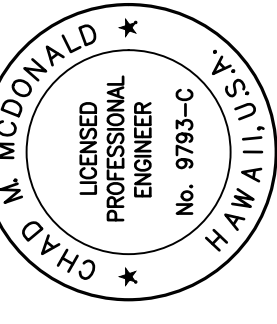
**1**  
C009 **BMP PLAN**  
SCALE: 1" = 20'



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*Chad M. McDonald*  
EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET

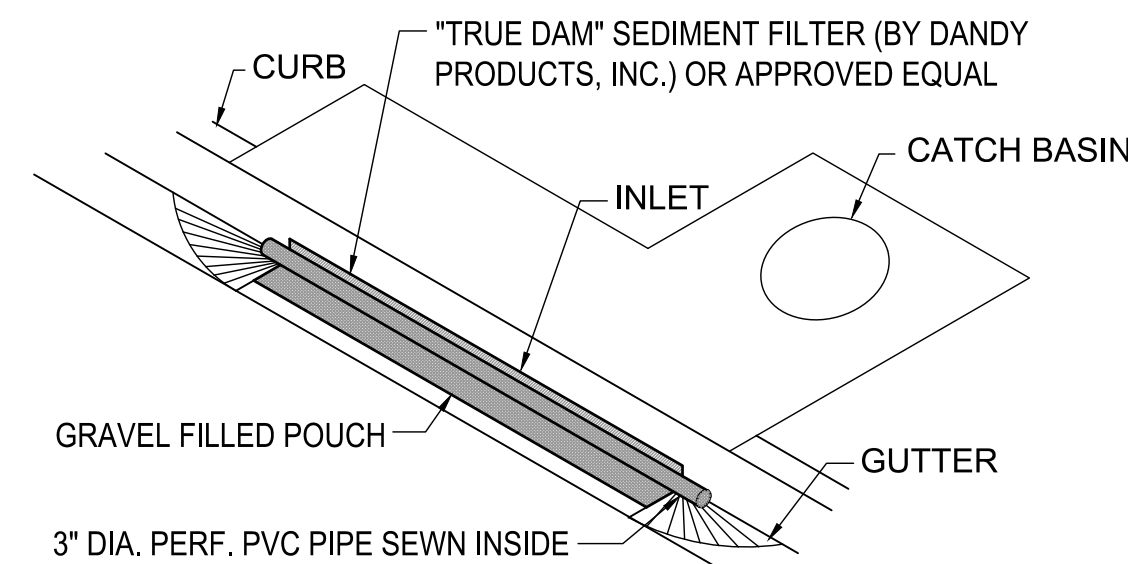


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Sheet Title

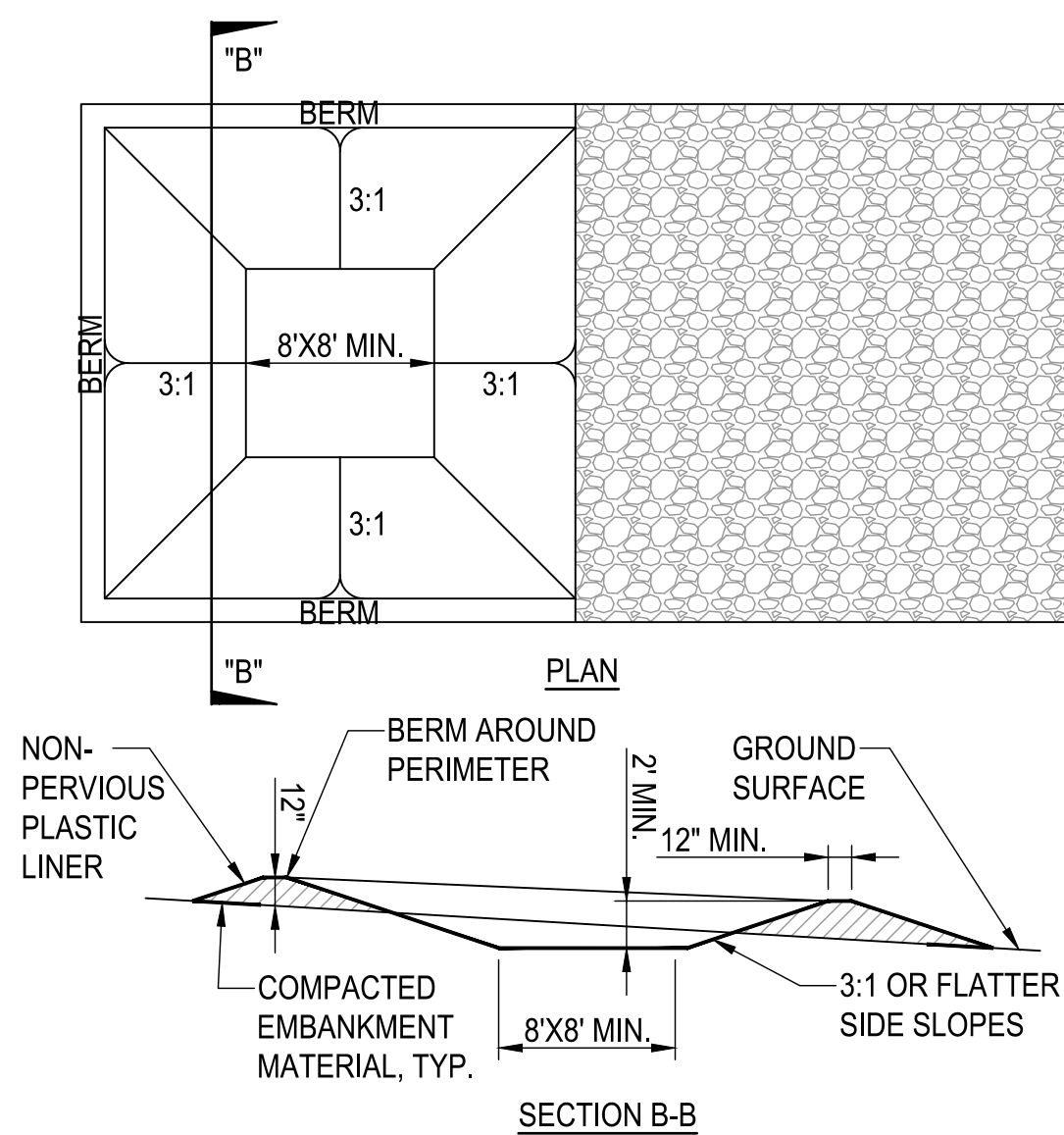
**BMP PLAN**

Date: AUGUST 2021  
Scale: AS NOTED  
Drawn By: AY  
Job:  
Sheet:  
**C009**  
Sheet 9 of 20



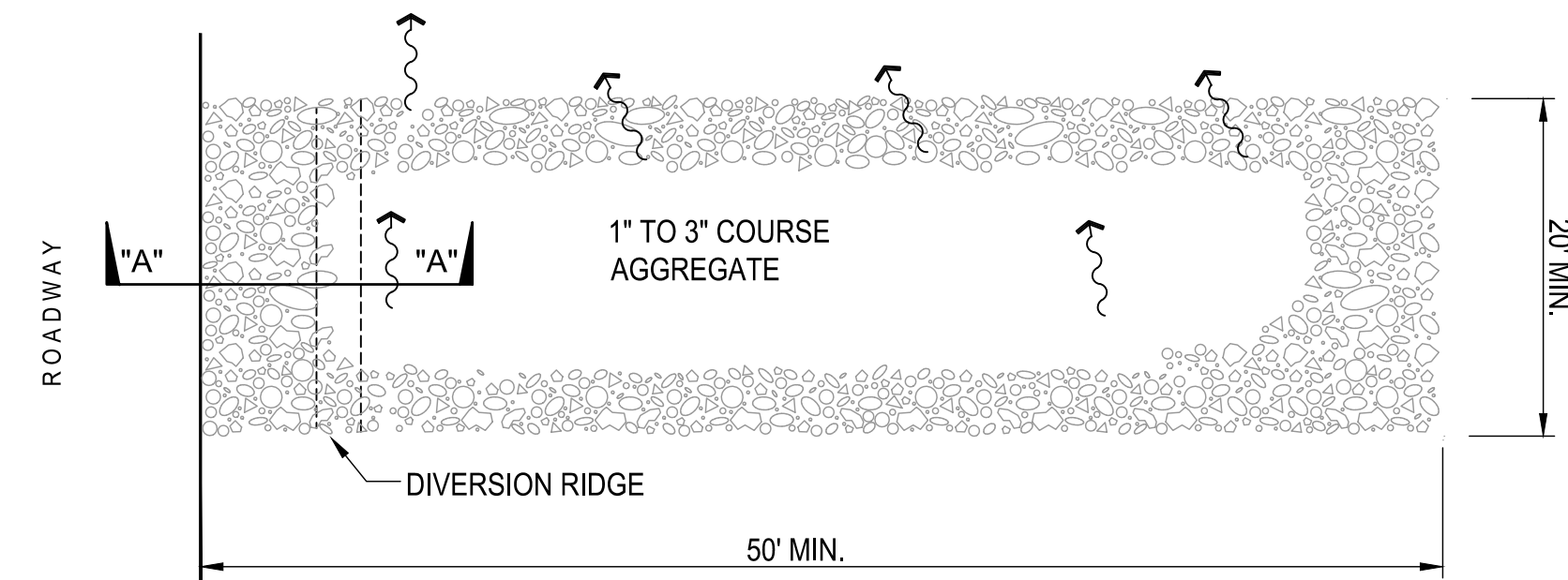
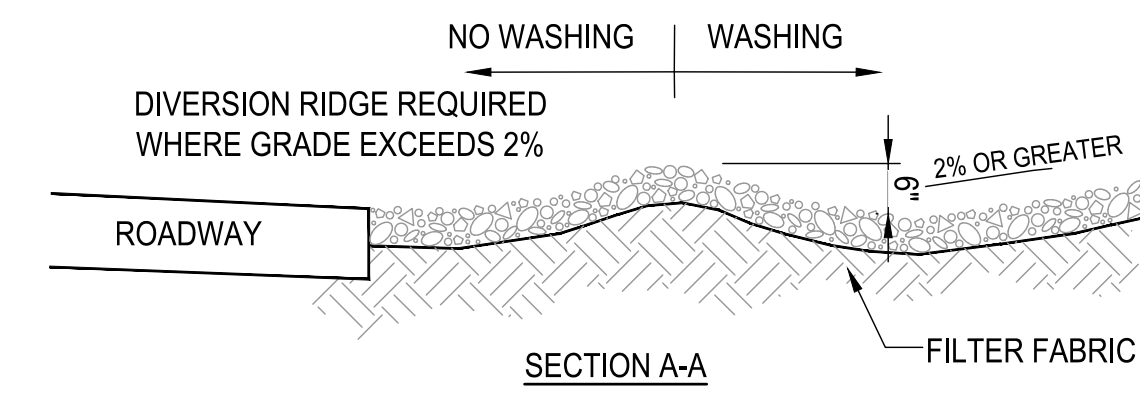
- NOTES:**
1. THE CONTRACTOR SHALL REMOVE TEMPORARY CATCH BASIN PROTECTION DURING EVENTS OF ABOVE NORMAL RAINFALL AND REPLACE ONCE THE EVENT PASSES.
  2. CONTRACTOR SHALL PROVIDE A SUBMITTAL FOR SEDIMENT FILTER.

**1 TEMPORARY CATCH BASIN PROTECTION**  
SCALE: 3/4" = 1'-0"



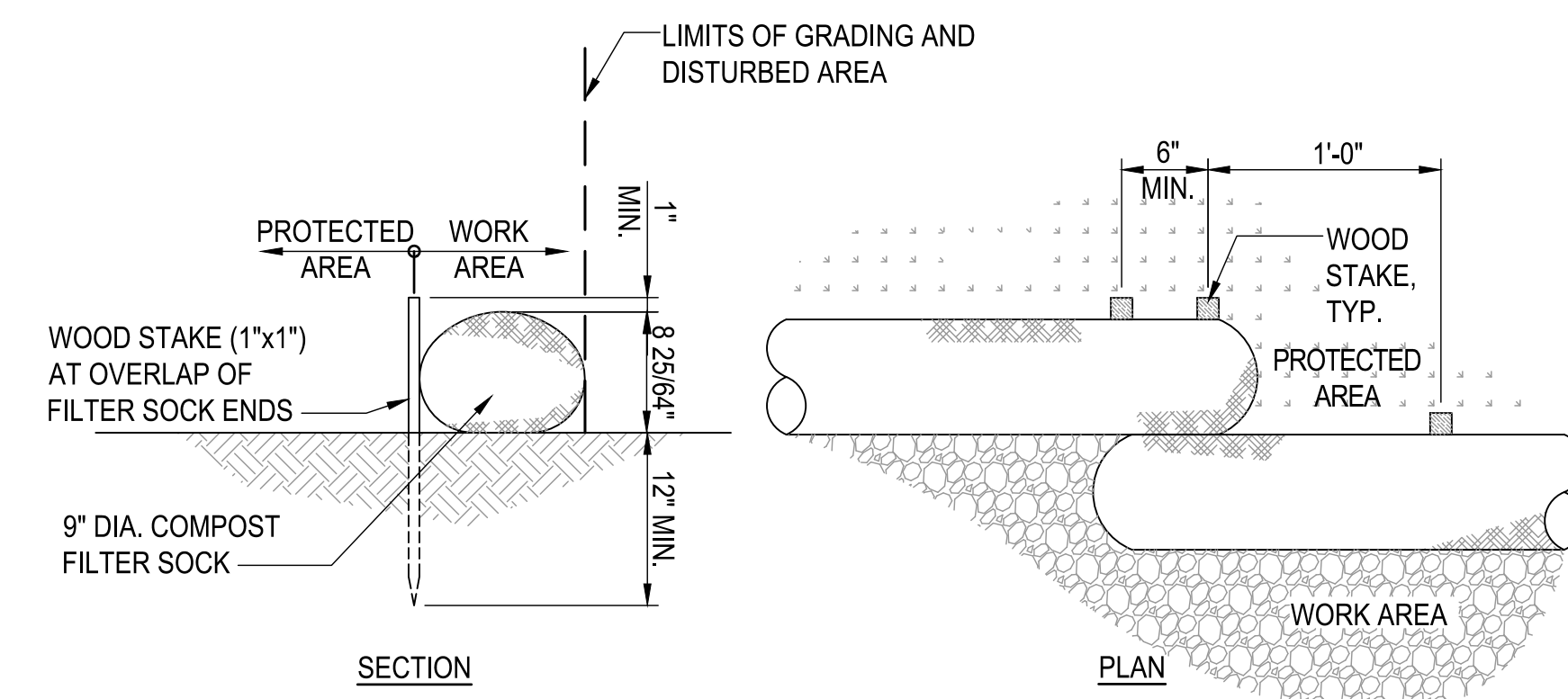
- NOTES:**
1. CONTRACTOR TO LOCATE CONC. WASHOUT AREA ON SITE.
  2. THE CONC. WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONC. PLACEMENT ON SITE.
  3. CRUSHED ROCK ACCESS IS REQUIRED AT THE ACCESS POINT.
  4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONC. WASHOUT AREA TO OPERATORS OF CONC. TRUCKS AND PUMP RIGS.
  5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.
  6. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONC. ALTERNATIVELY THE USE OF A CONCRETE WASTE BIN WITH HAUL OUT SERVICE MAY BE USED.
  7. AT THE END OF CONSTRUCTION, ALL CONC. SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
  8. WHEN THE CONC. WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE COUNTY.
  9. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

**3 CONC. WASHOUT AREA**  
NOT TO SCALE



- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS AND PREVENT WASH WATER FROM FLOWING OFF-SITE. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
  3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

**2 TEMPORARY CONSTRUCTION ACCESS**  
NOT TO SCALE

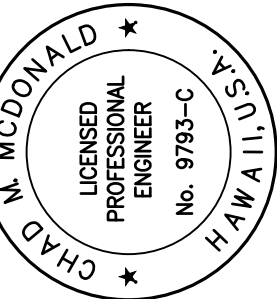


- NOTES:**
1. COMPOST SHALL NOT CONTAIN BIOSOLIDS & SHOULD BE CONSISTENT WITH EPA GUIDELINES
  2. WOOD STAKES ONLY REQUIRED AT CONNECTION BETWEEN FILTER SOCKS AS SHOWN ON DETAIL PLAN

**4 COMPOST FILTER SOCK**  
NOT TO SCALE

REVISIONS	BY

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*Cher M. McDonald*  
 EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
 VEVAVU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005: 003  
 KANE STREET TO SCHOOL STREET



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Sheet Title

**BMP DETAILS**

Date AUGUST 2021

Scale AS NOTED

Drawn By AY

Job

Sheet

C010

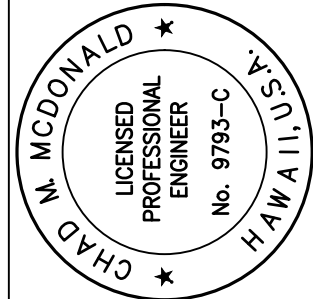
Sheet 10 of 20

LEGEND	
	PROPERTY LINE
	VEHICULAR ACCESS
	NO VEHICULAR ACCESS
	LIMITS OF CONSTRUCTION
	CONCRETE PAVEMENT
	WORK AREA
	TRAFFIC CONE
	SIGN
	DIRECTION OF TRAFFIC
	POLICE OFFICER
	TYPE III BARRICADE
	NO PARKING ZONE

REVISIONS	BY

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*Chad M. McDonald*  
 CHAD M. McDONALD  
 LICENSED PROFESSIONAL ENGINEER  
 No. 9793-C  
 HAWAII, U.S.A.  
 EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005: 003  
 KANE STREET TO SCHOOL STREET



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Sheet Title

**TRAFFIC CONTROL PLAN 1**

Date AUGUST 2021

Scale AS NOTED

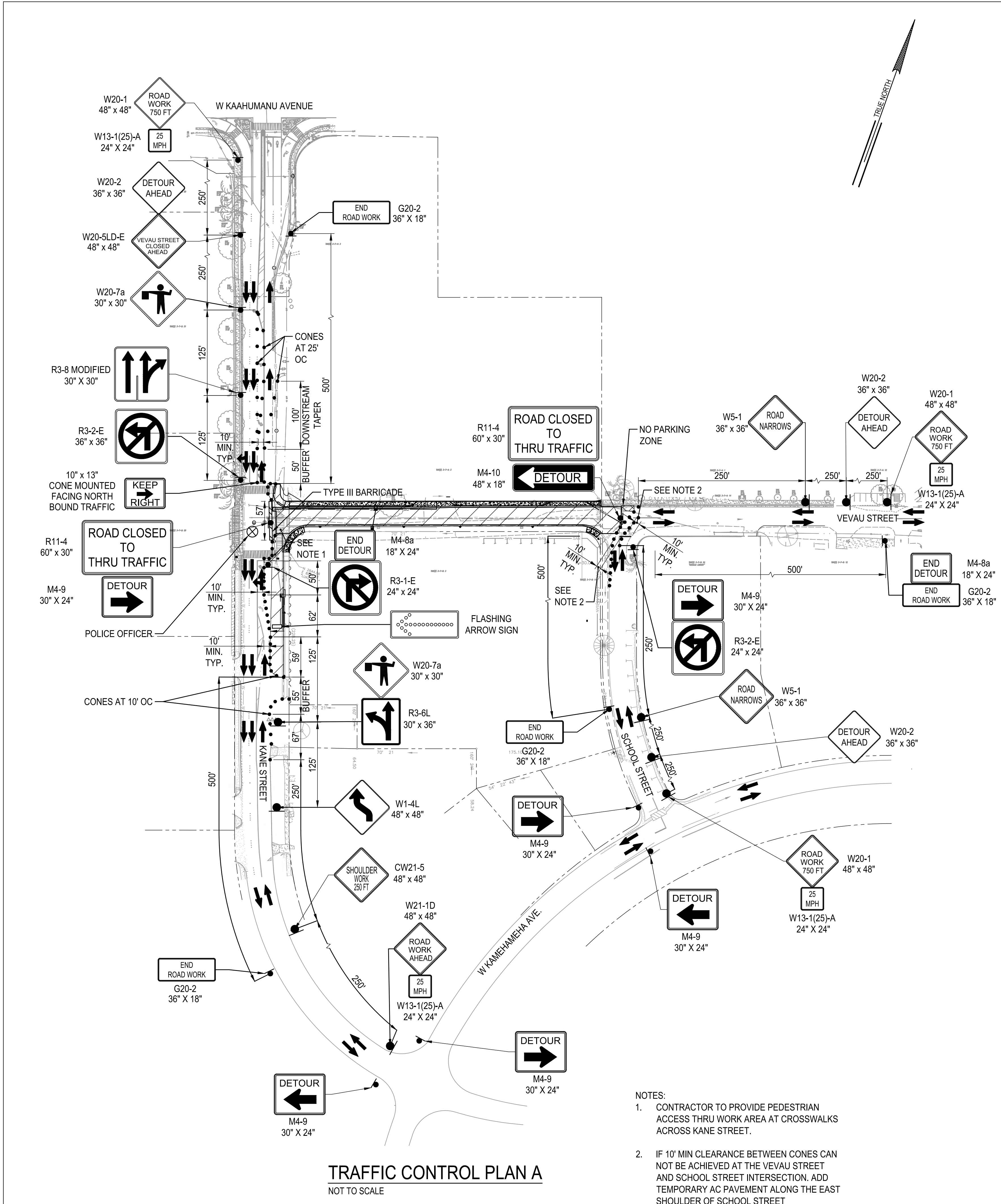
Drawn By AY

Job

Sheet

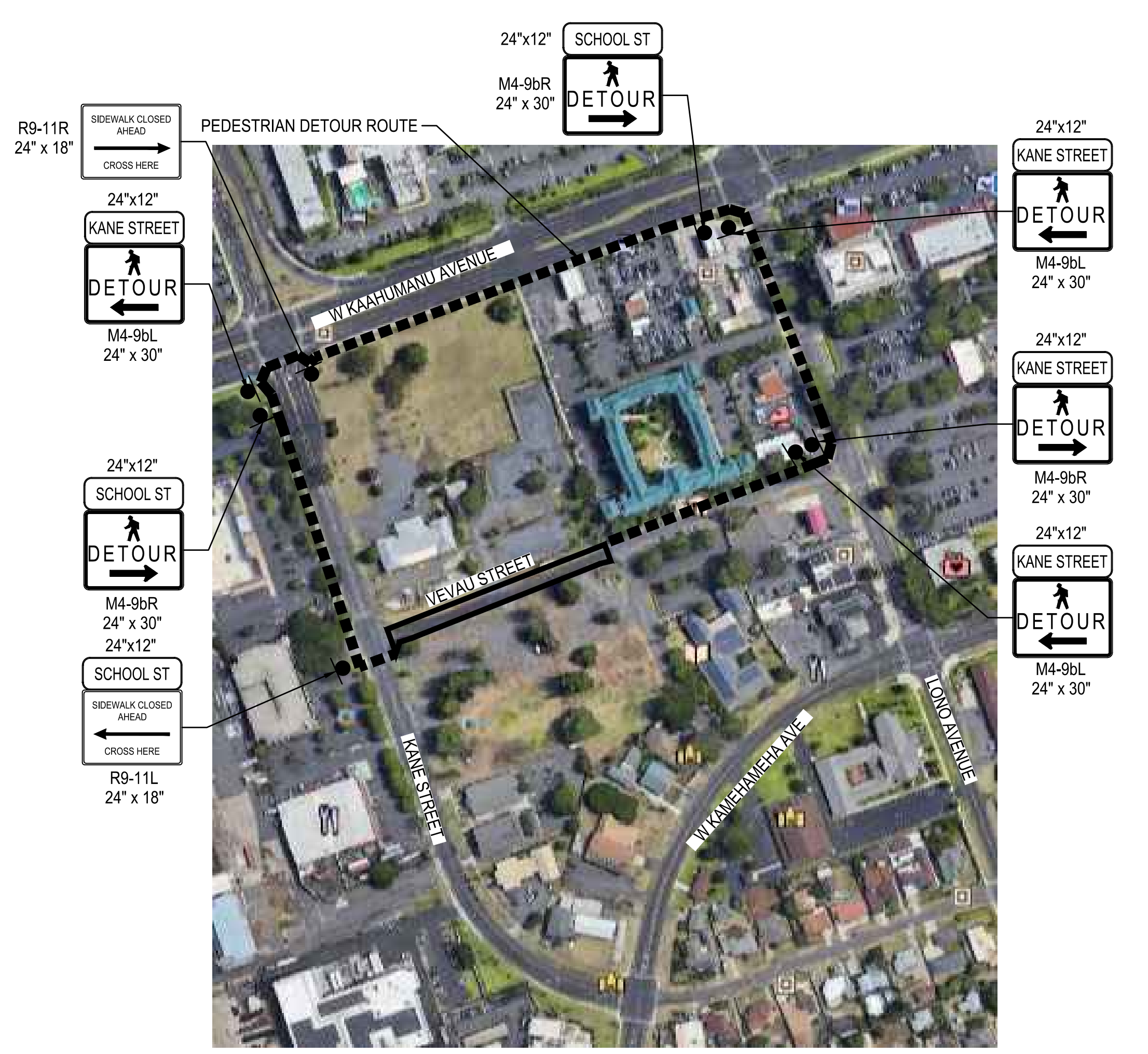
C011

Sheet 11 of 20

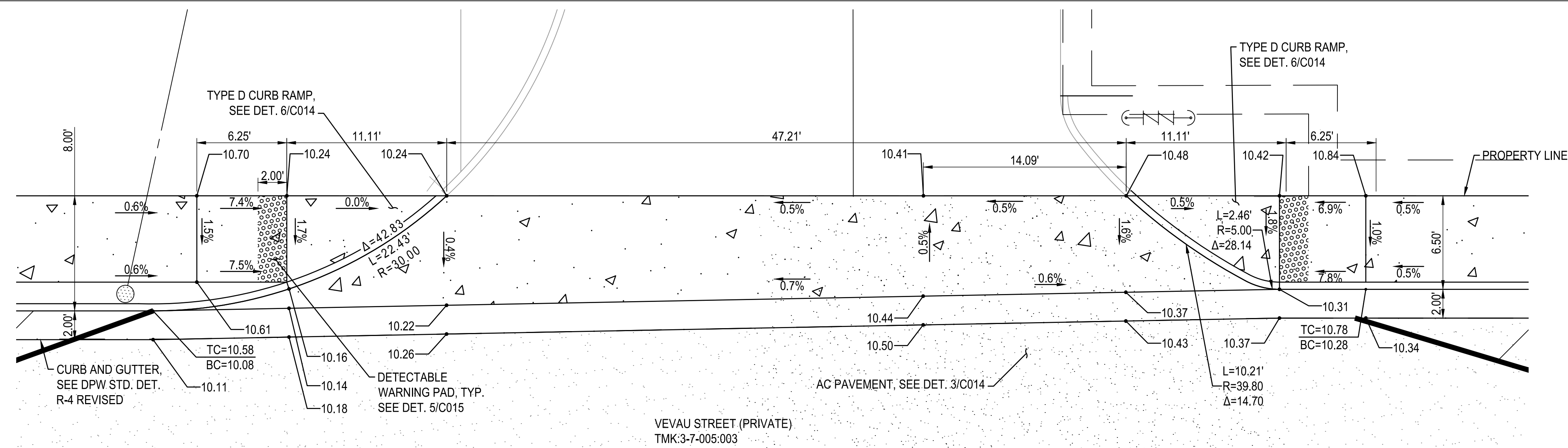


**TRAFFIC CONTROL PLAN A**  
 NOT TO SCALE

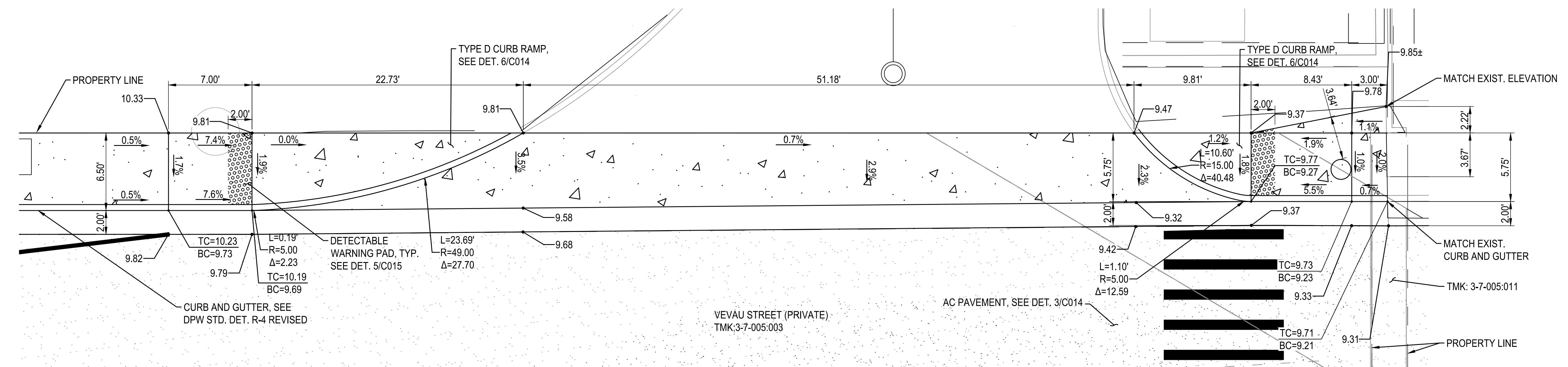
- NOTES:
- CONTRACTOR TO PROVIDE PEDESTRIAN ACCESS THRU WORK AREA AT CROSSWALKS ACROSS KANE STREET.
  - IF 10' MIN CLEARANCE BETWEEN CONES CAN NOT BE ACHIEVED AT THE VEVAU STREET AND SCHOOL STREET INTERSECTION, ADD TEMPORARY AC PAVEMENT ALONG THE EAST SHOULDER OF SCHOOL STREET



**PEDESTRIAN DETOUR ROUTE**  
 NOT TO SCALE



**1**  
C012  
**DETAILED SITE PLAN 1**  
SCALE: 1"=5'



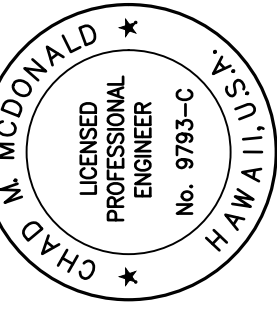
**2**  
C012  
**DETAILED SITE PLAN 2**  
SCALE: 1"=5'



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*Chad M. McDonald*  
EXPIRATION DATE: 04/30/2022



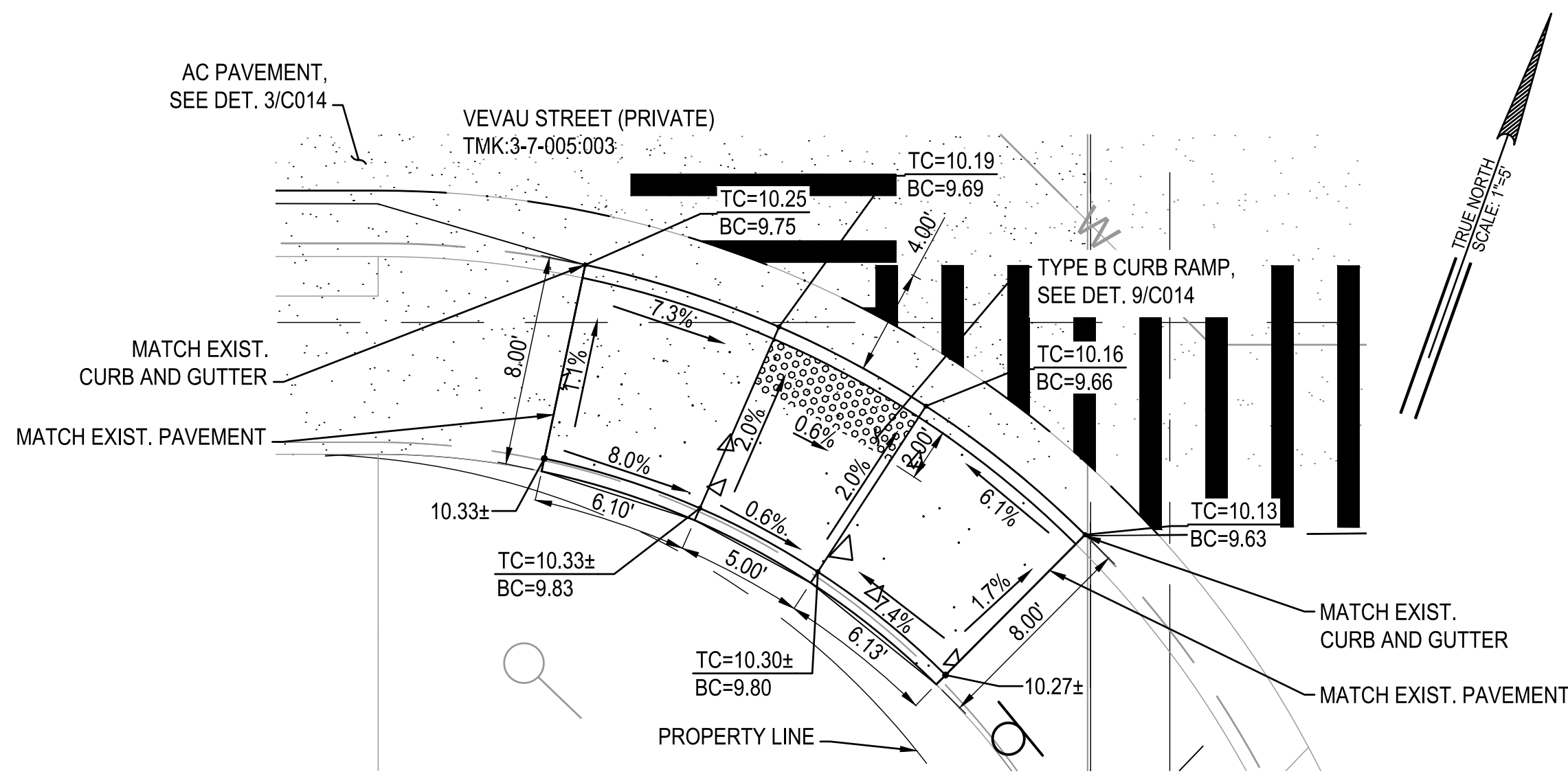
**VEVAU STREET IMPROVEMENTS**  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005:003  
KANE STREET TO SCHOOL STREET



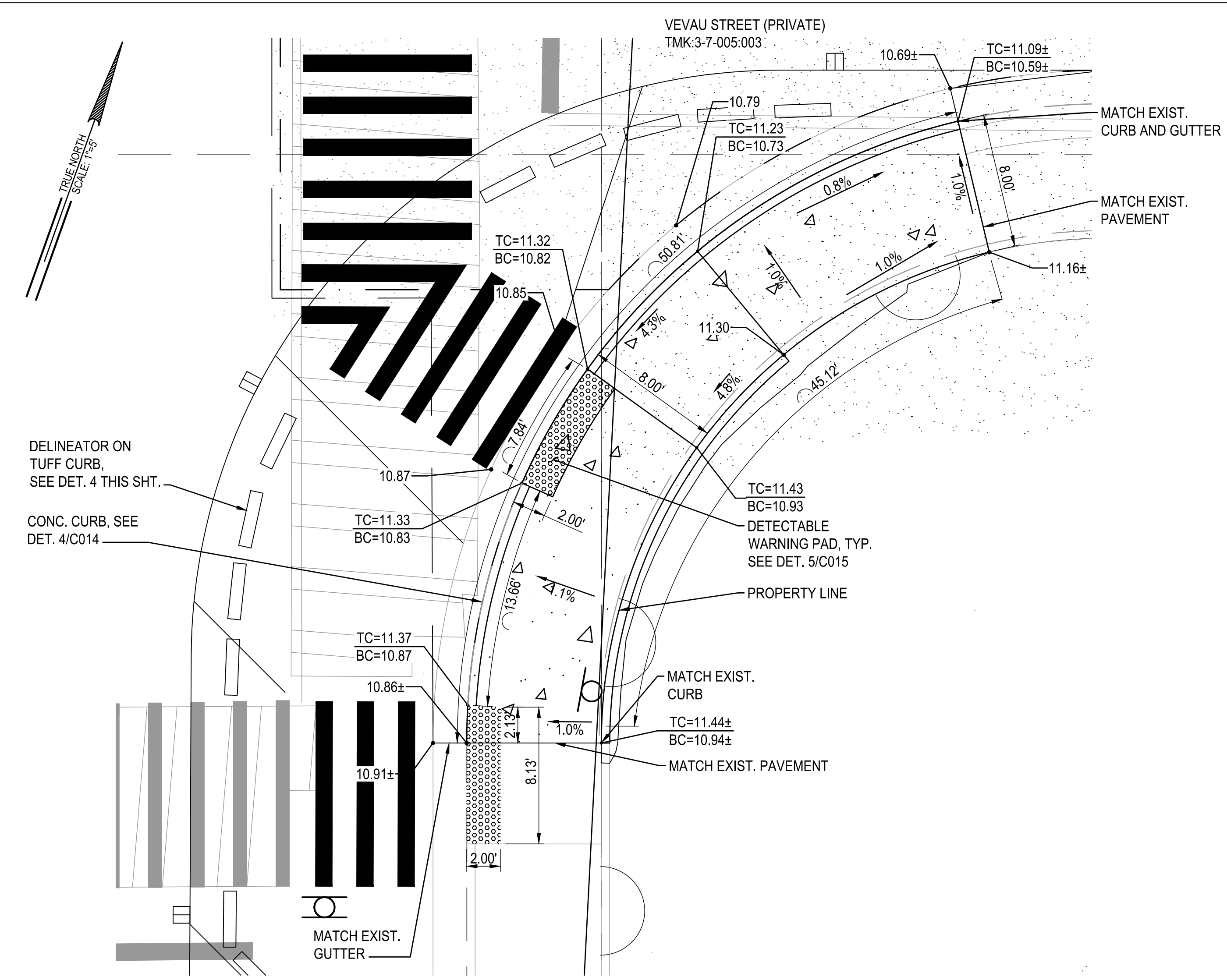
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Sheet Title  
**DETAILED SITE PLAN 1**

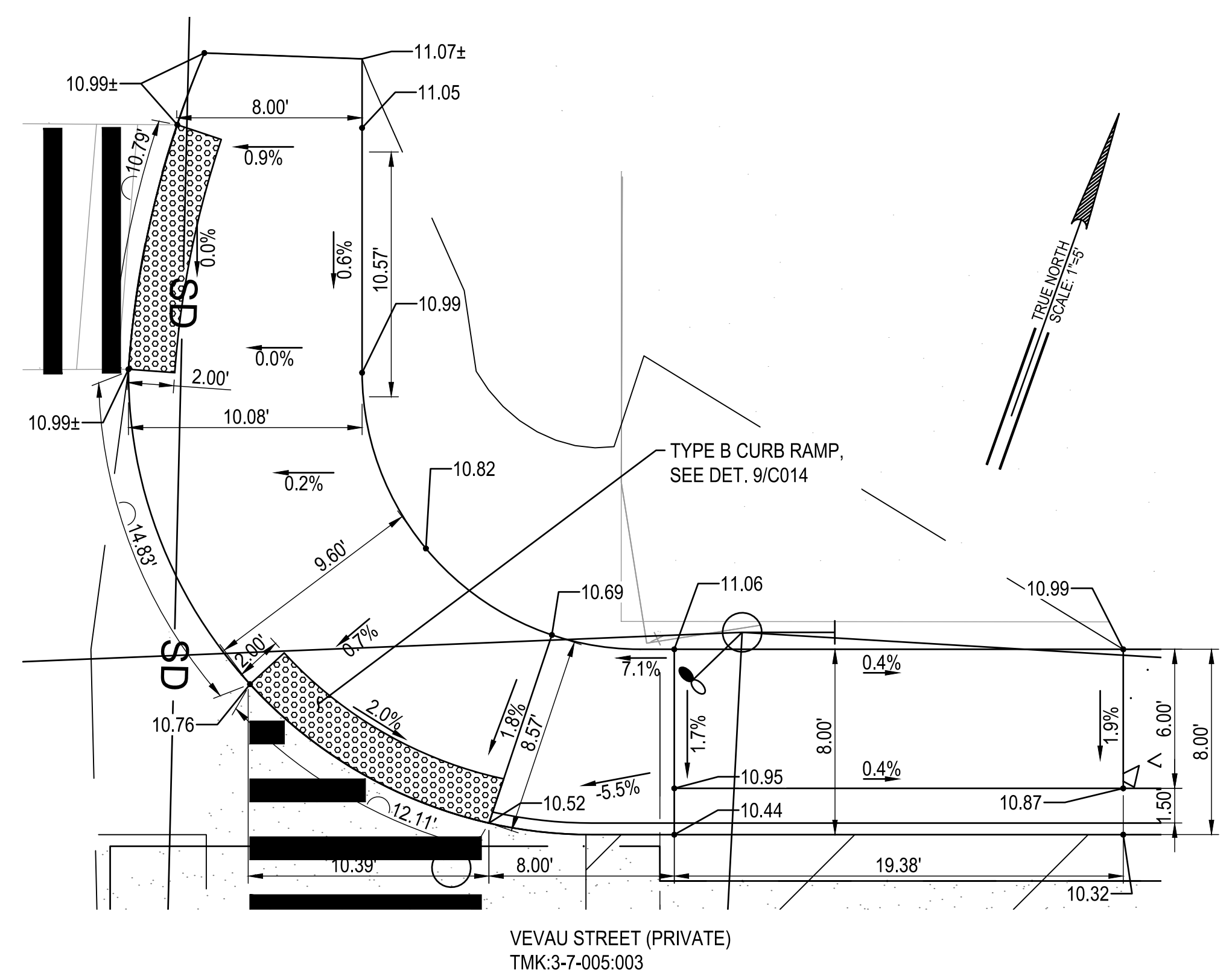
Date: AUGUST 2021  
Scale: AS NOTED  
Drawn By: AY  
Job:  
Sheet:  
C012  
Sheet 12 of 20



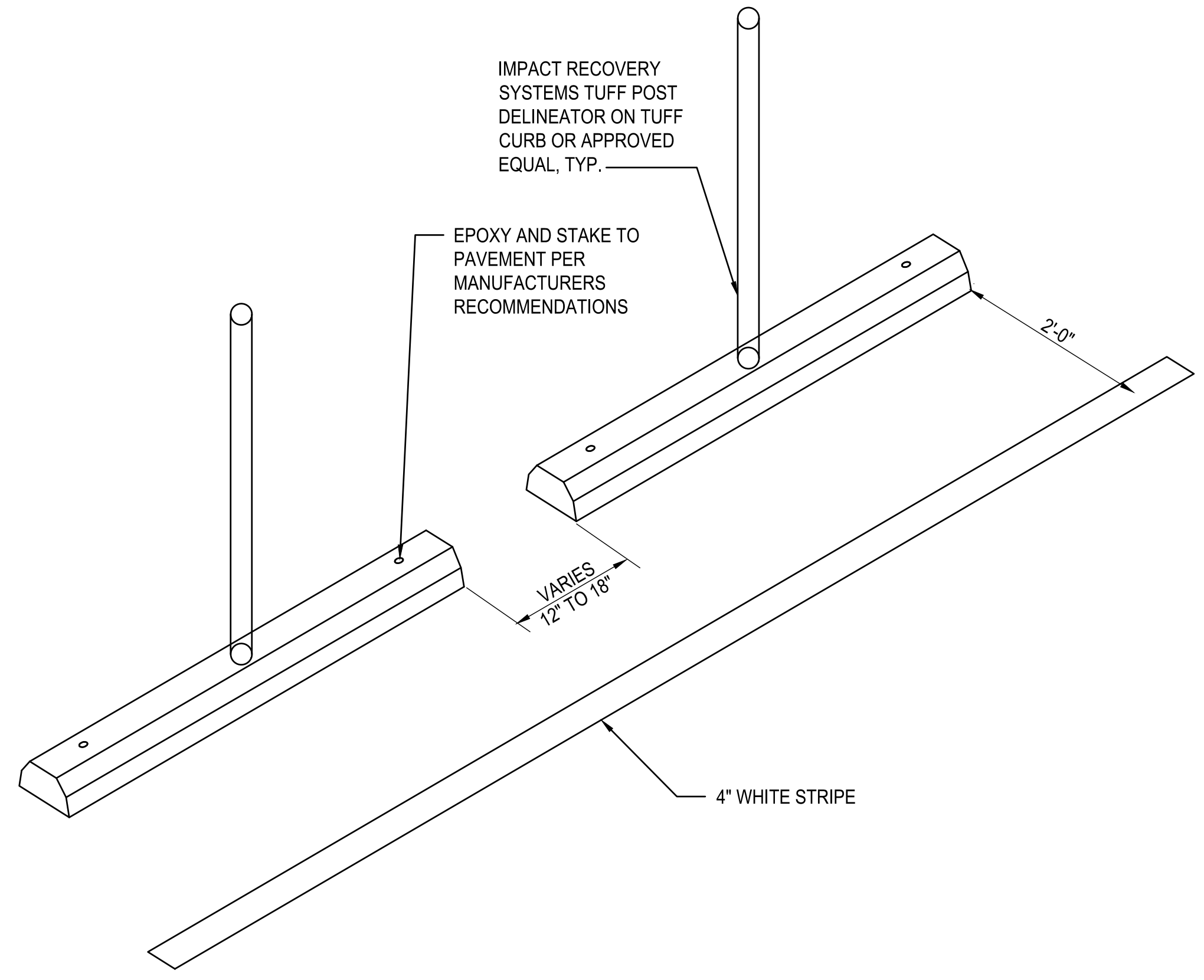
**1 DETAILED SITE PLAN 3**  
C013 SCALE: 1"=5'



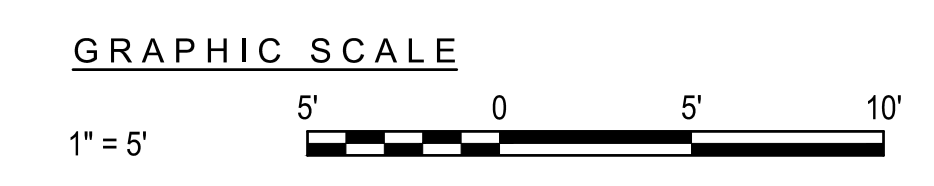
**2 DETAILED SITE PLAN 4**  
C013 SCALE: 1"=5'



**3 DETAILED SITE PLAN 5**  
C013 SCALE: 1"=5'



**4 TUFF CURB SPACING**  
C013 NOT TO SCALE

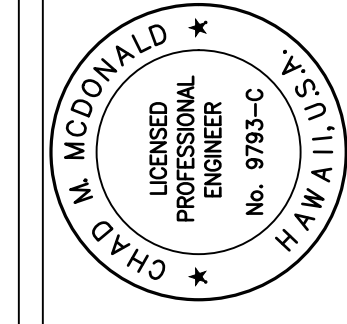


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*Cher M. McDonald*

EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**

VEVAU STREET IMPROVEMENTS

TAX MAP KEY: (2) 3-7-005:003

KANE STREET TO SCHOOL STREET

**M & A HAWAII**

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Sheet Title

**DETAILED SITE PLAN 2**

Date: AUGUST 2021

Scale: AS NOTED

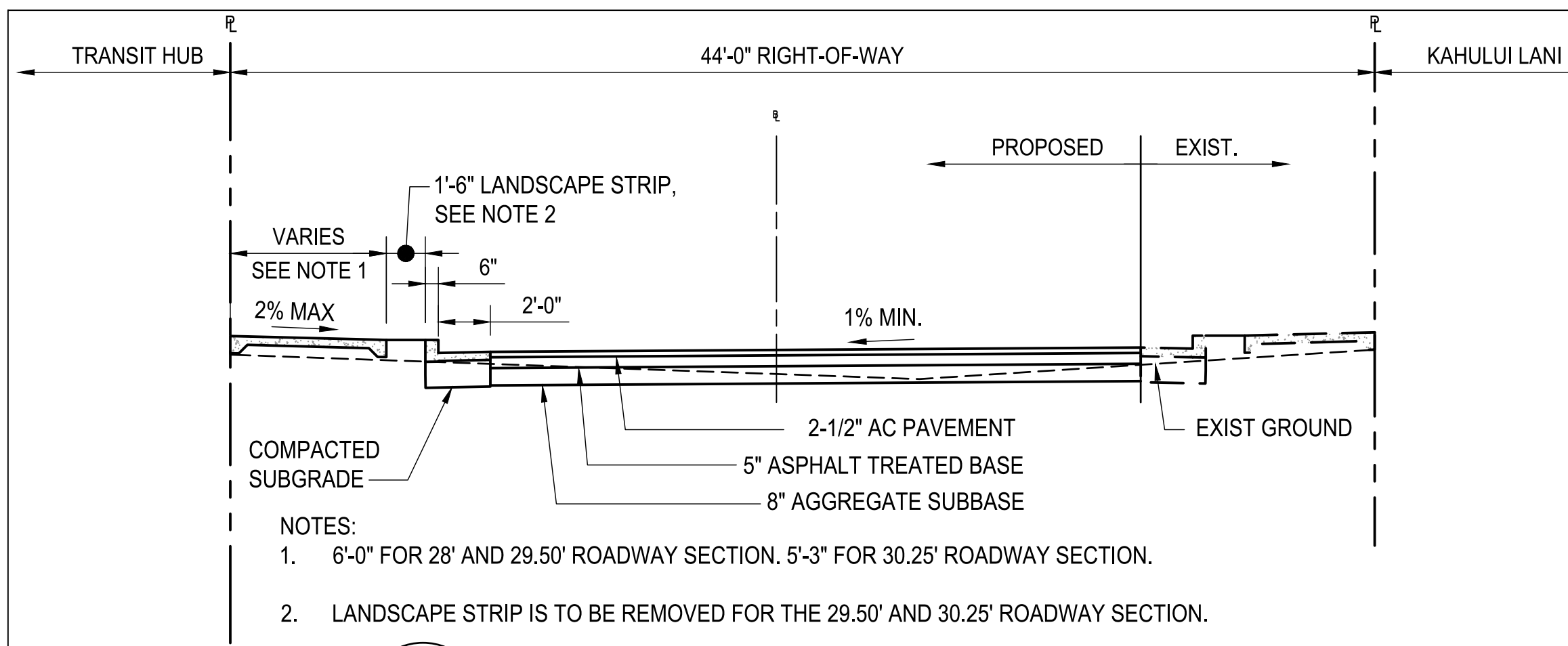
Drawn By: AY

Job

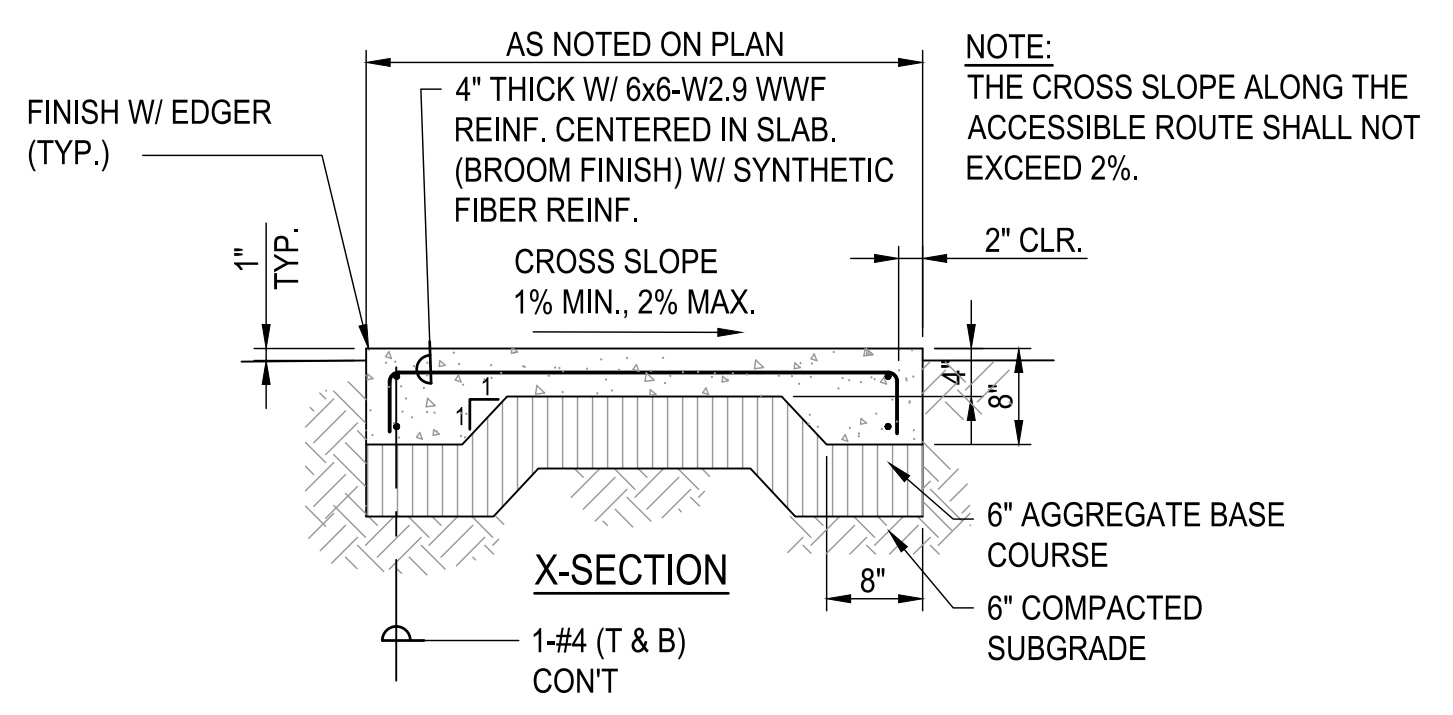
Sheet

C013

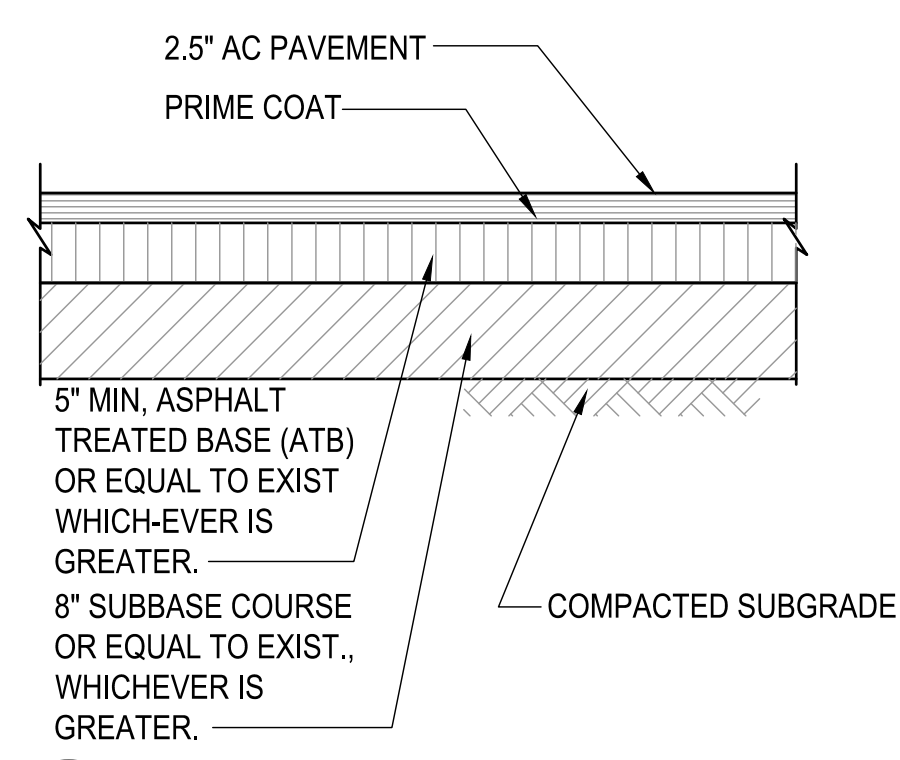
Sheet 13 of 20



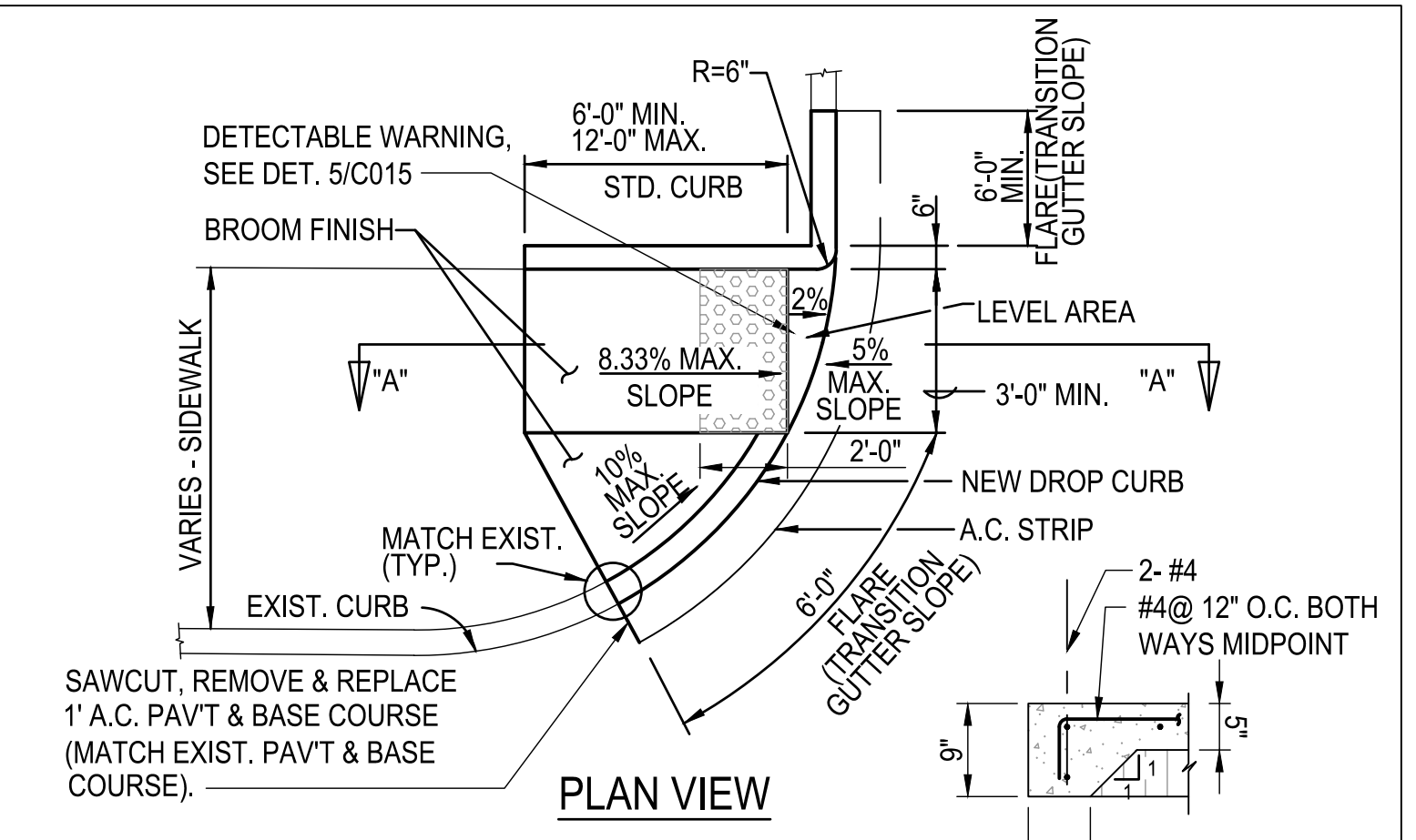
**1 VEVAU STREET TYPICAL SECTION**  
 C014 SCALE: 1"=5'-0"



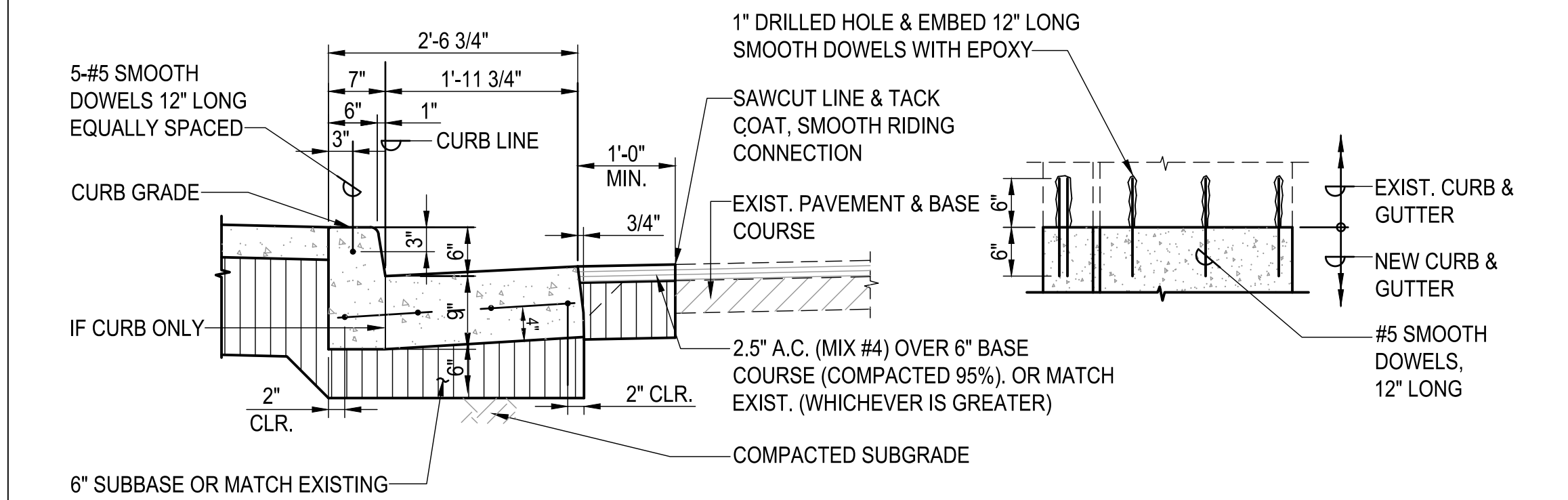
**2 CONC. SIDEWALK DETAIL**  
 C014 SCALE: 3/4"=1'-0"



**3 A.C. PAVEMENT DETAIL**  
 C014 SCALE: 3/4"=1'-0"

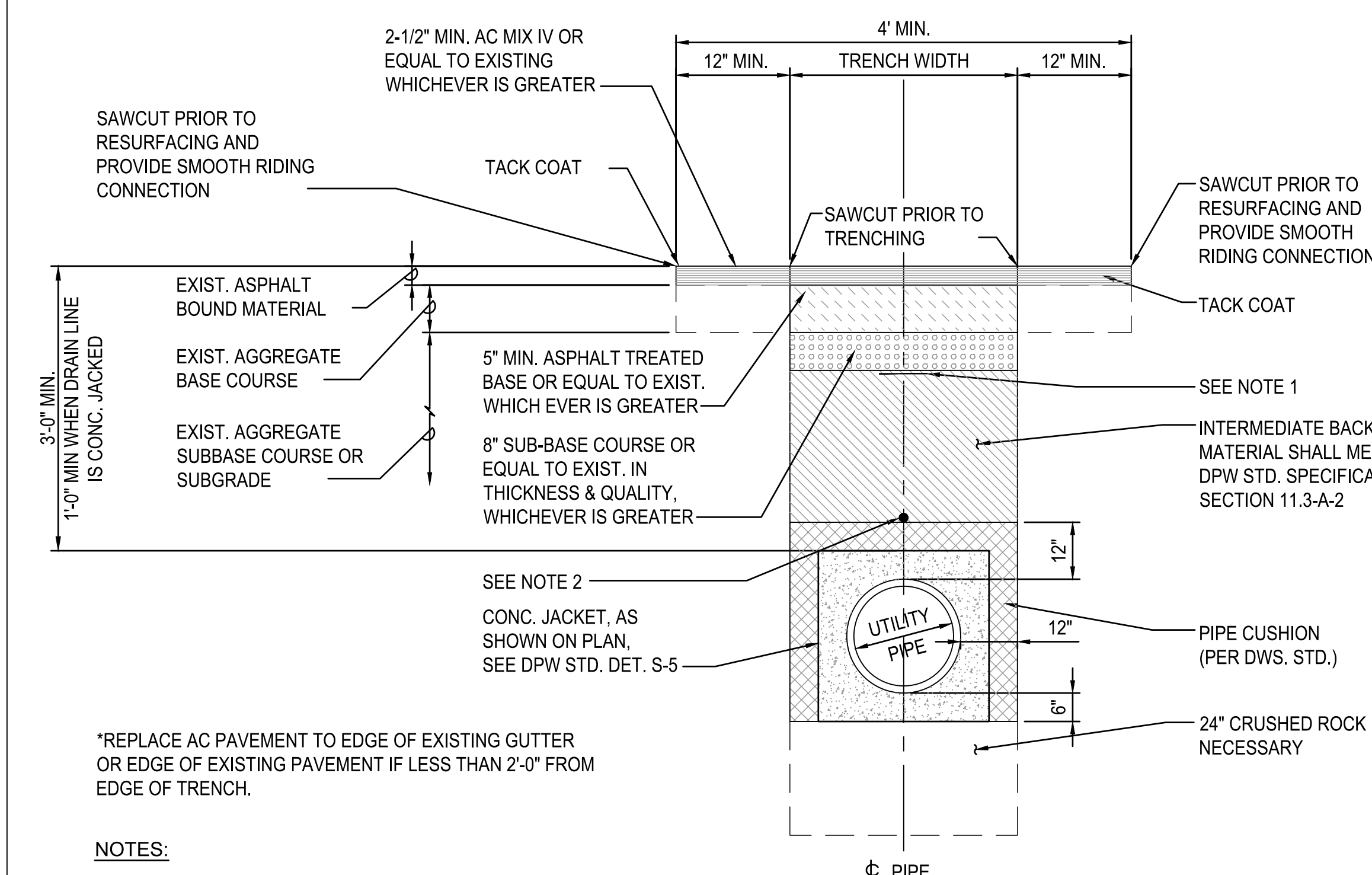


**6 TYPE "D" CURB RAMP DETAIL**  
 C014 SCALE: 1/4"=1'-0"

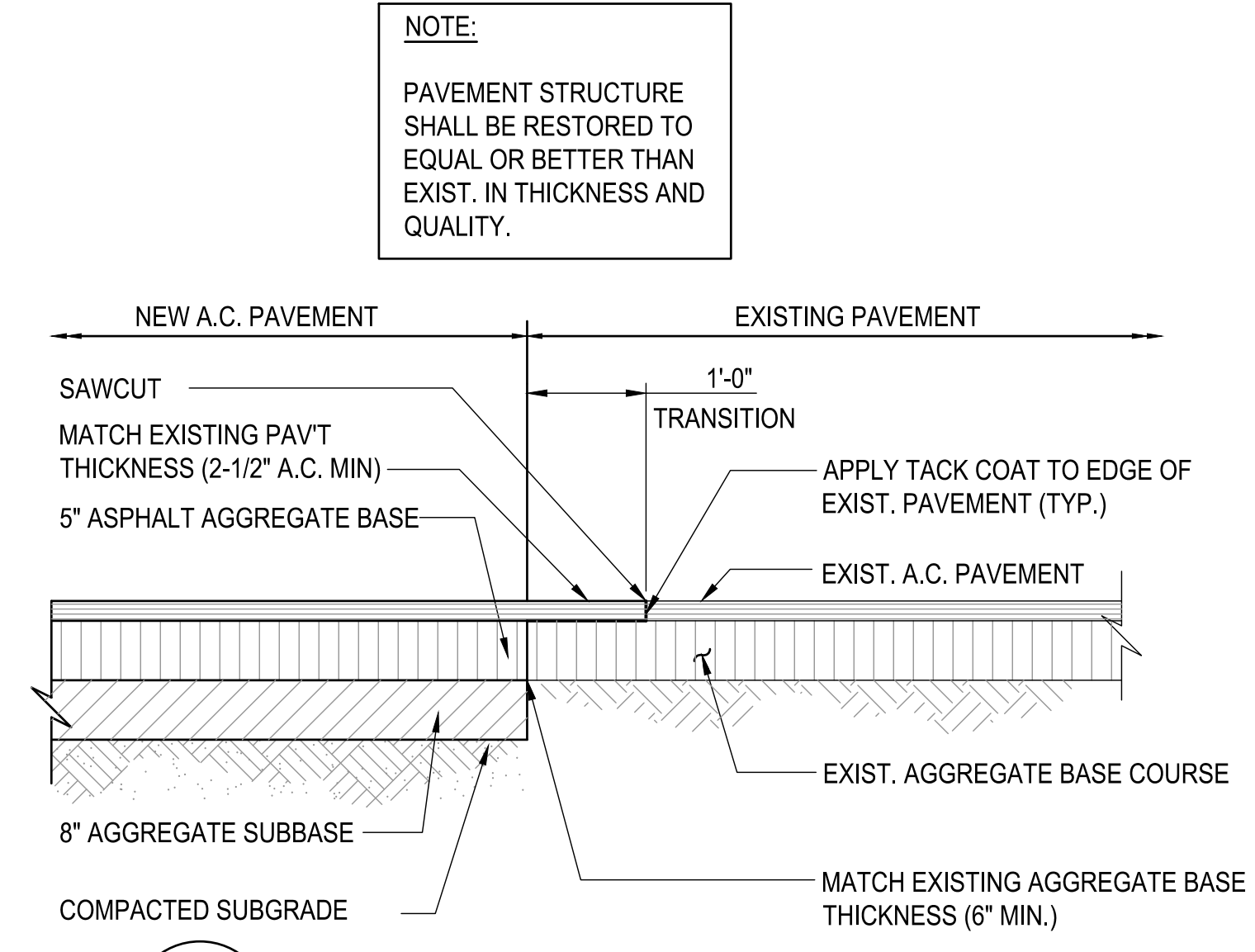


**NEW CONC. CURB SECTION**  
 PLAN

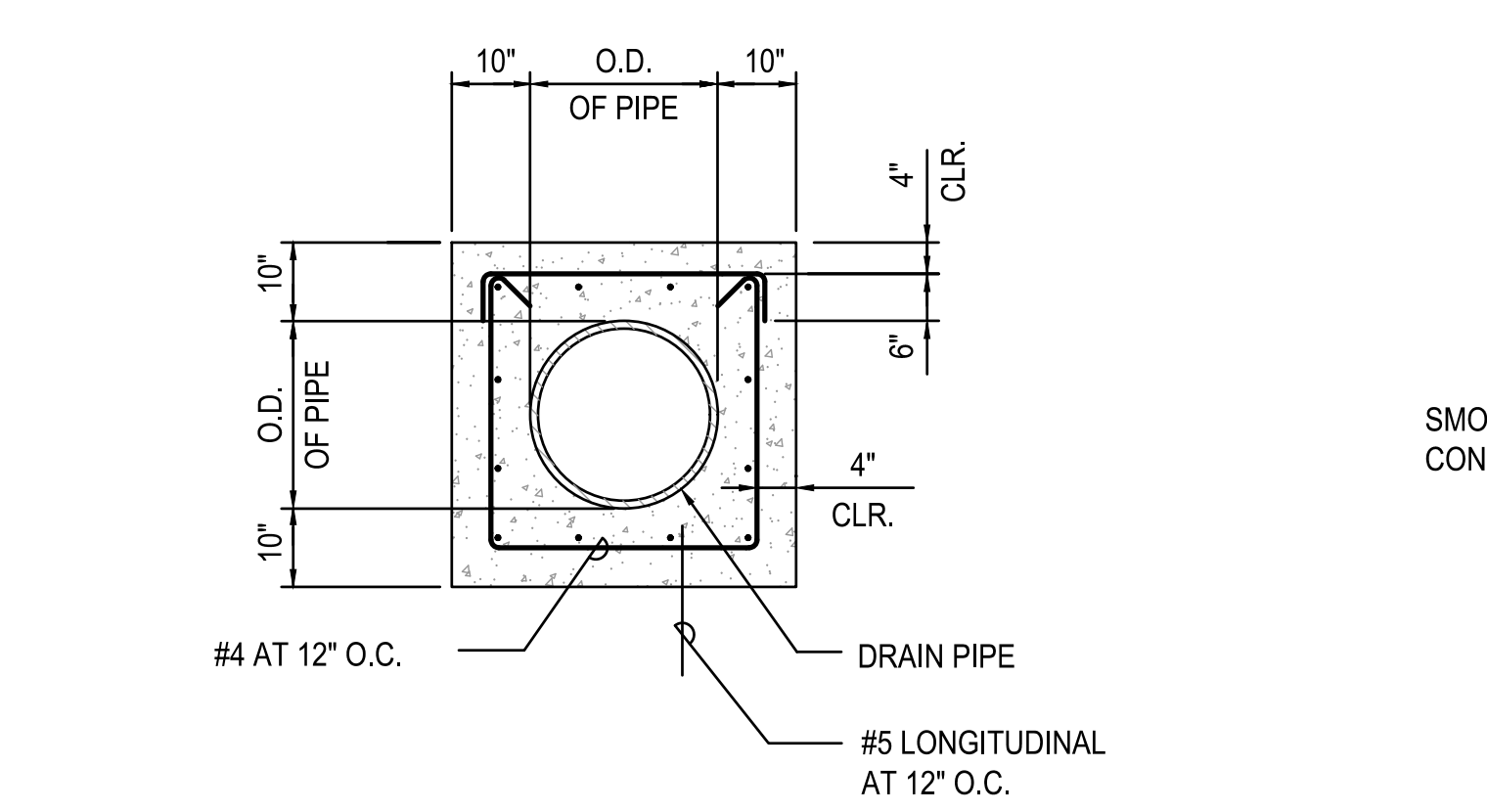
**4 CONC. CURB & GUTTER CONNECTION DETAIL**  
 C014 SCALE: 3/4"=1'-0"



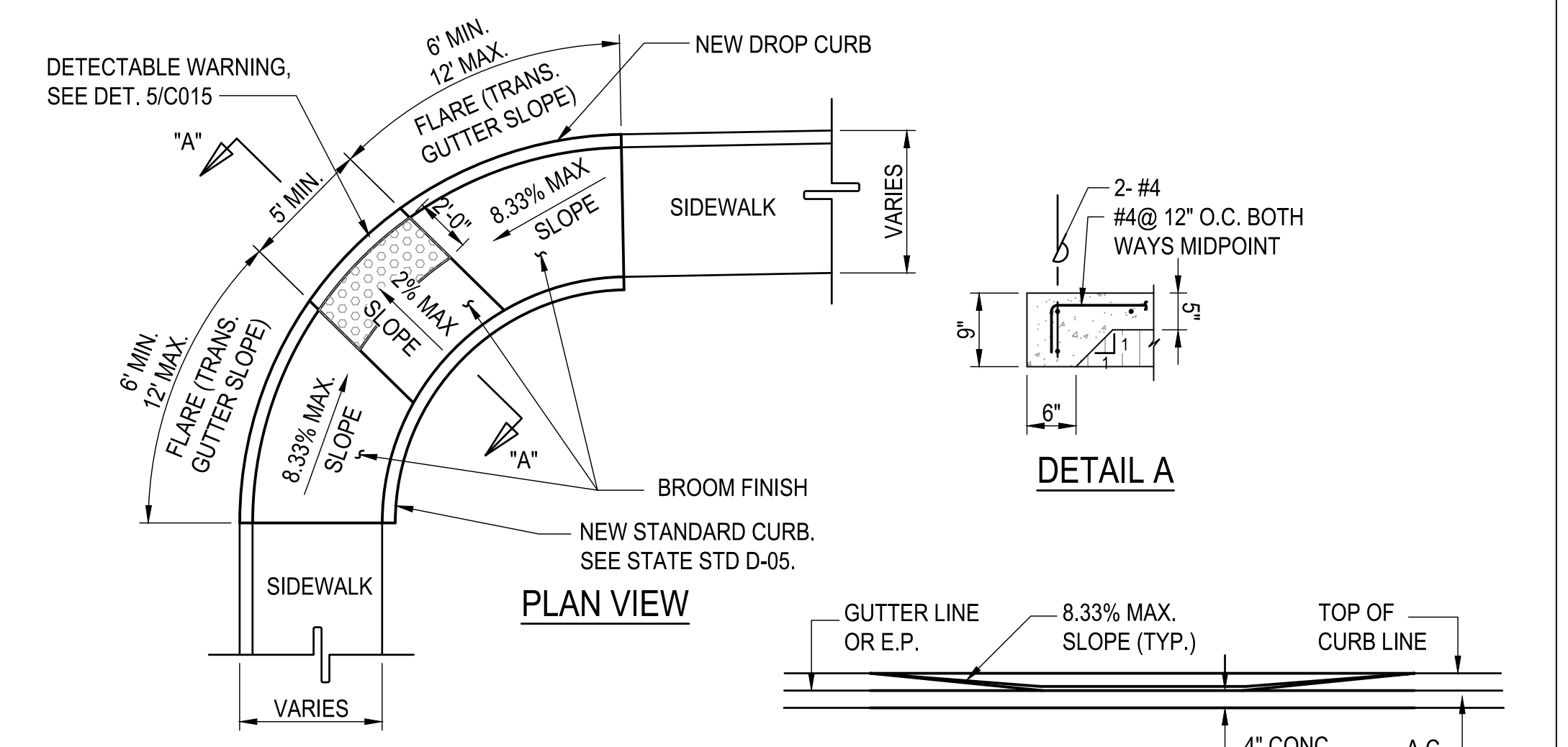
**7 TYPICAL TRENCH DETAIL (COUNTY R/W)**  
 C014 NOT TO SCALE



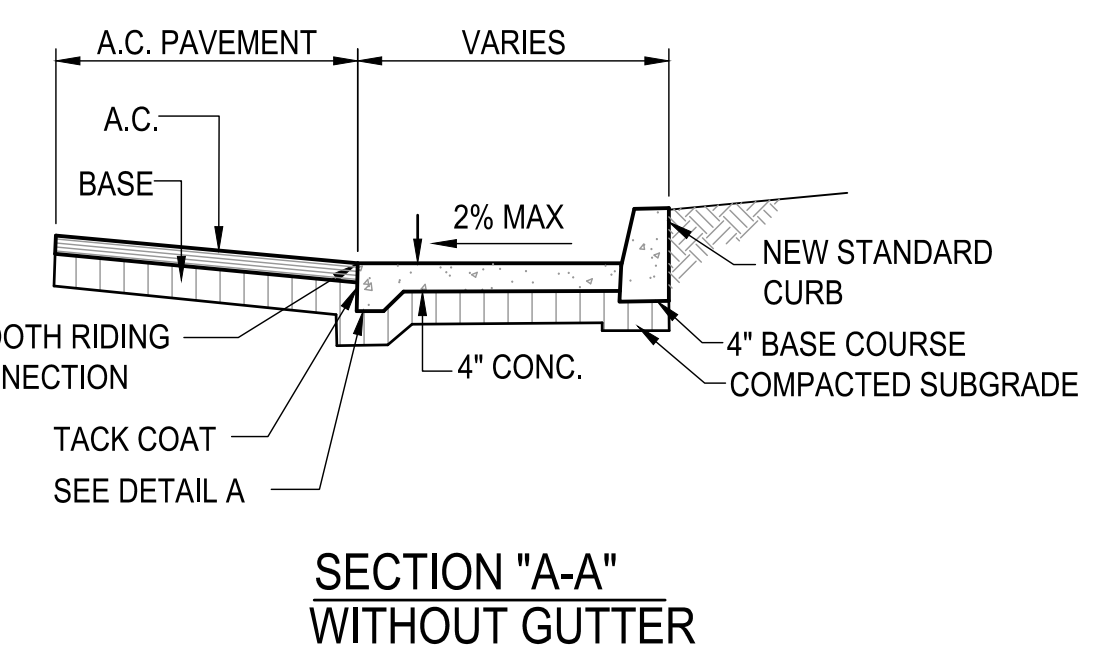
**8 SMOOTH RIDING CONNECTION DETAIL**  
 C014 SCALE: 3/4"=1'-0"



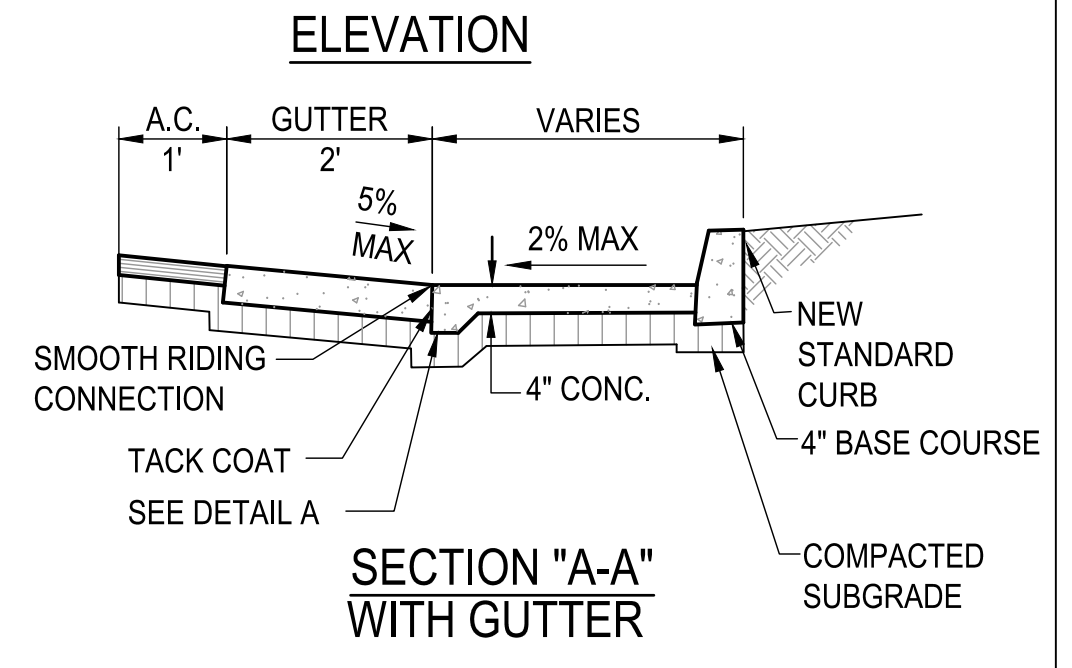
**10 REINF. CONC. JACKET FOR DRAIN PIPE**  
 C014 SCALE: 1/2"=1'-0"



**9 MODIFIED TYPE "B" CURB RAMP DETAIL**  
 C014 SCALE: 1/4"=1'-0"



**SECTION "A-A" WITHOUT GUTTER**



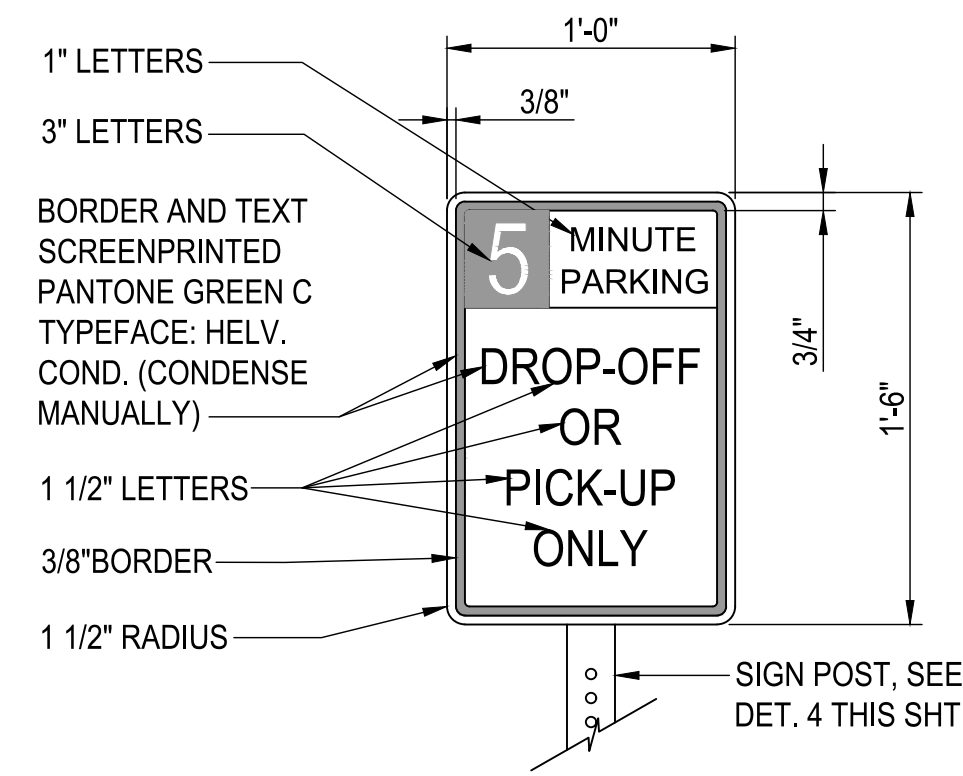
**SECTION "A-A" WITH GUTTER**

REVISIONS	BY

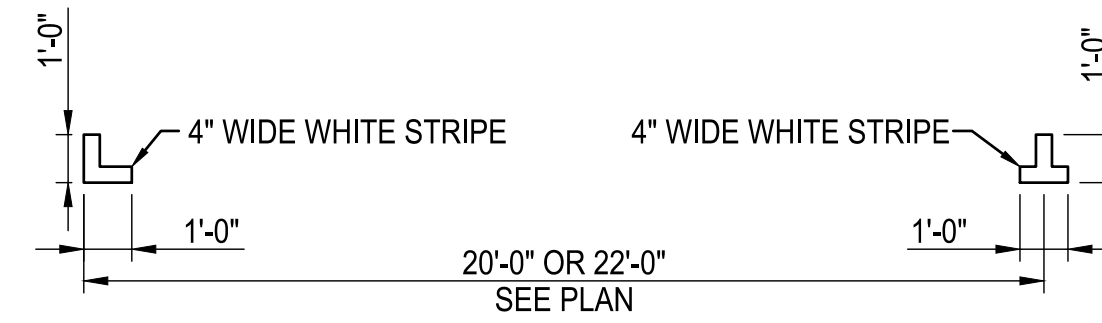
**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005: 003  
 KANE STREET TO SCHOOL STREET

**M & A HAWAII**  
 ARCHITECTURE  
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 PLANNING  
 CONSTRUCTION MANAGEMENT  
 747 AWANA STREET  
 SUITE 216  
 HONOLULU, HI 96814  
 PH. (808) 945-7882  
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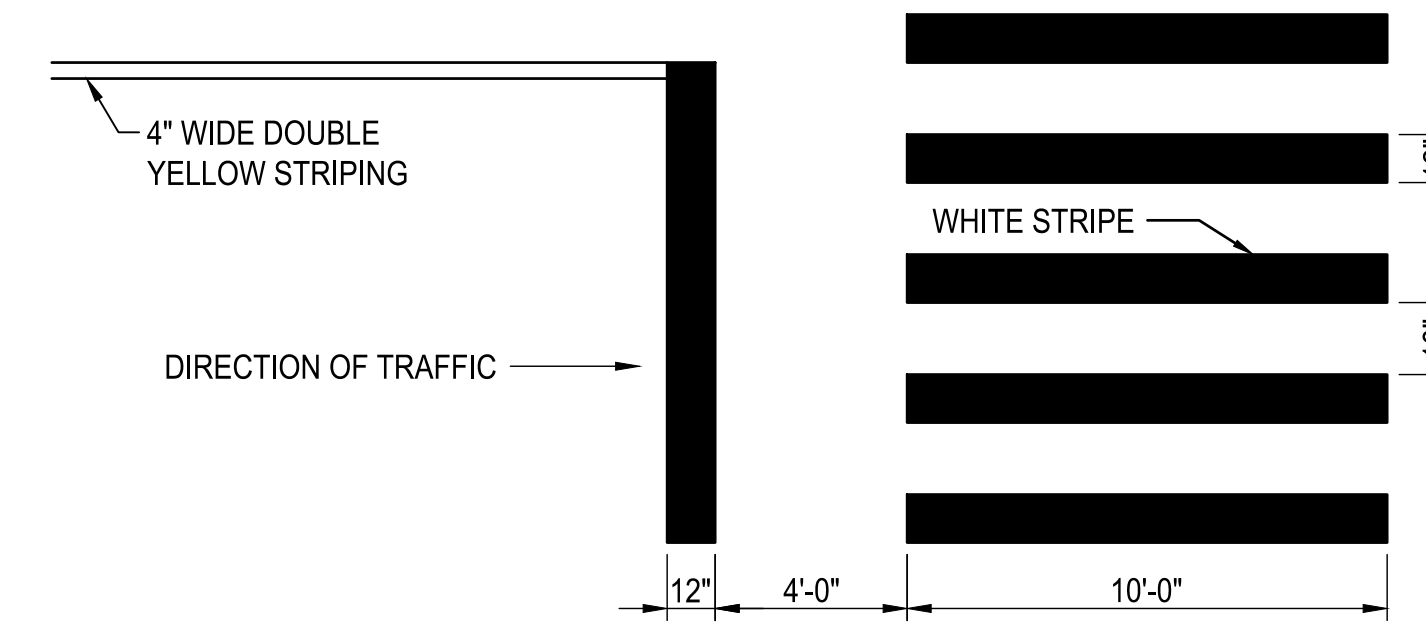
Sheet Title  
**MISCELLANEOUS DETAILS**  
 Date: AUGUST 2021  
 Scale: AS NOTED  
 Drawn By: AY  
 Job:  
 Sheet:  
**C014**  
 Sheet 14 of 20



**1 DROP-OFF ZONE SIGN DETAIL**  
 C015 SCALE: 1-1/2"=1'-0"

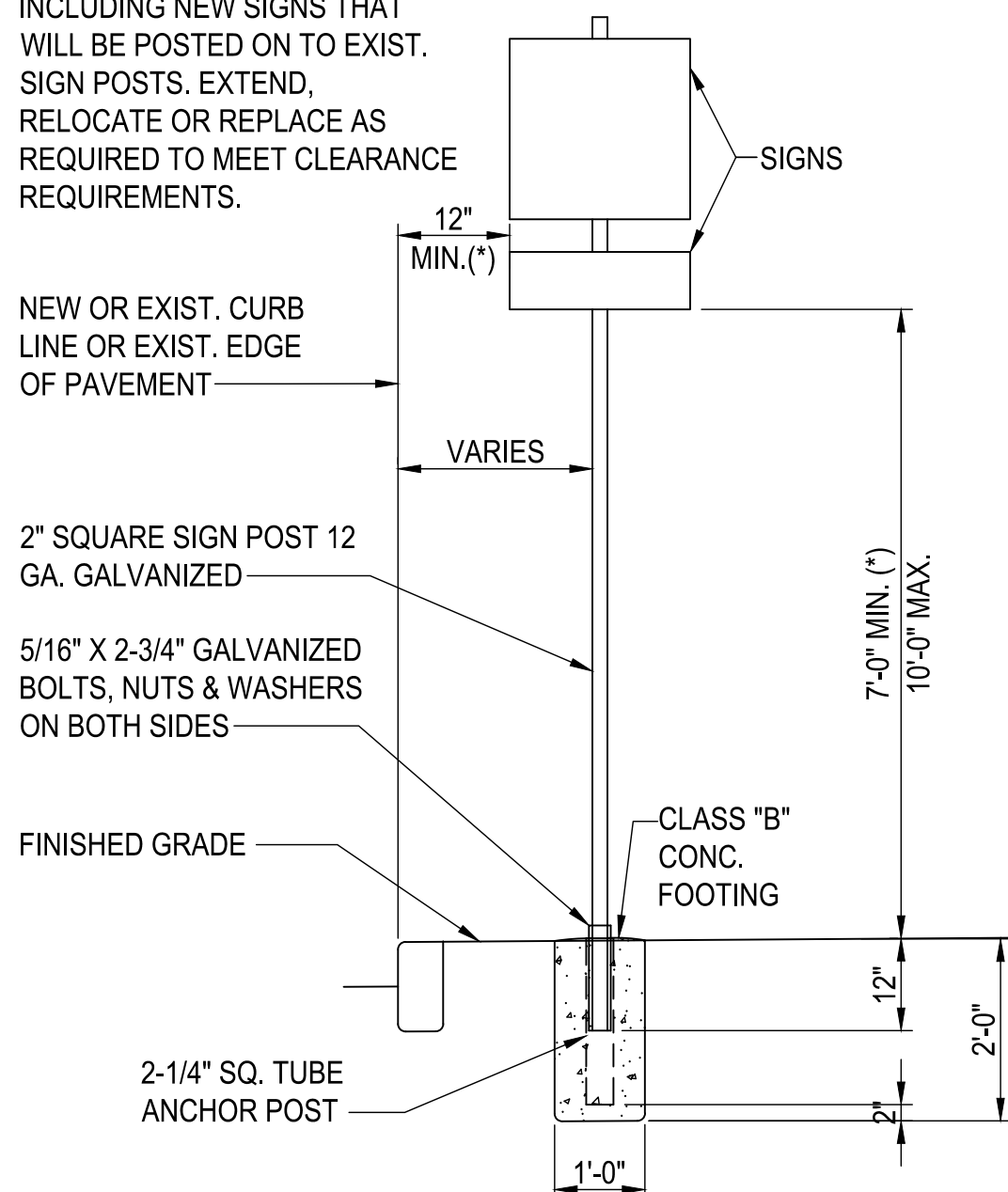


**2 PARALLEL PARKING STRIPING DETAIL**  
 C015 SCALE: 1/4"=1'-0"



**3 CROSSWALK STRIPING DETAIL**  
 C015 SCALE: 1/4"=1'-0"

(\*) ALL SIGN(S) INSTALLATIONS MUST MEET LATERAL AND HEIGHT CLEARANCES INCLUDING NEW SIGNS THAT WILL BE POSTED ON TO EXIST. SIGN POSTS. EXTEND, RELOCATE OR REPLACE AS REQUIRED TO MEET CLEARANCE REQUIREMENTS.

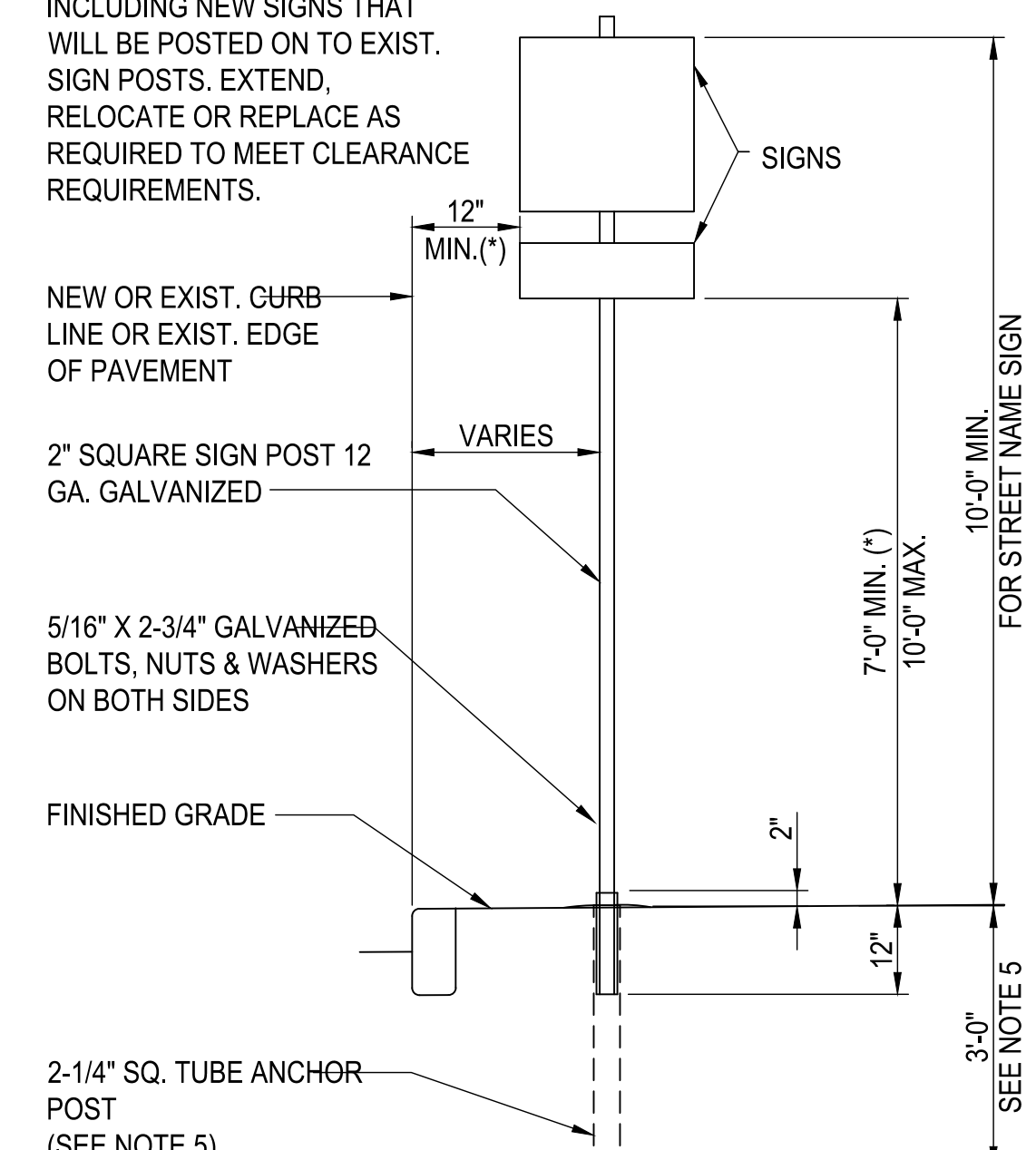


- ANCHOR POST NOTES:**
- KEEP INSIDE OF 2-1/4" ANCHOR POST FREE FROM IMPEDIMENTS THAT MAY PREVENT PROPER SEATING OF 2" SIGN POST.
  - SQUARE TUBING SIGN POST SHALL BE TELESCOPING TYPE WITH 7/16" DIA. HOLES AT 1" O.C. ON FOUR SIDES.
  - OCTAGON SIGN POST SHALL BE TELESCOPING TYPE WITH 7/16" DIA. HOLES AT 1" O.C. ON TWO SIDES.
  - USE 5/16" X 2-3/4" BOLTS TO SECURE THE OCTAGONAL AND SQUARE TUBING POST ONTO THE 2-1/4" SQUARE TUBE ANCHOR POST.

**INSTALLATION OF NEW OR RELOCATED SIGN POST WITH CONCRETE FOOTING**

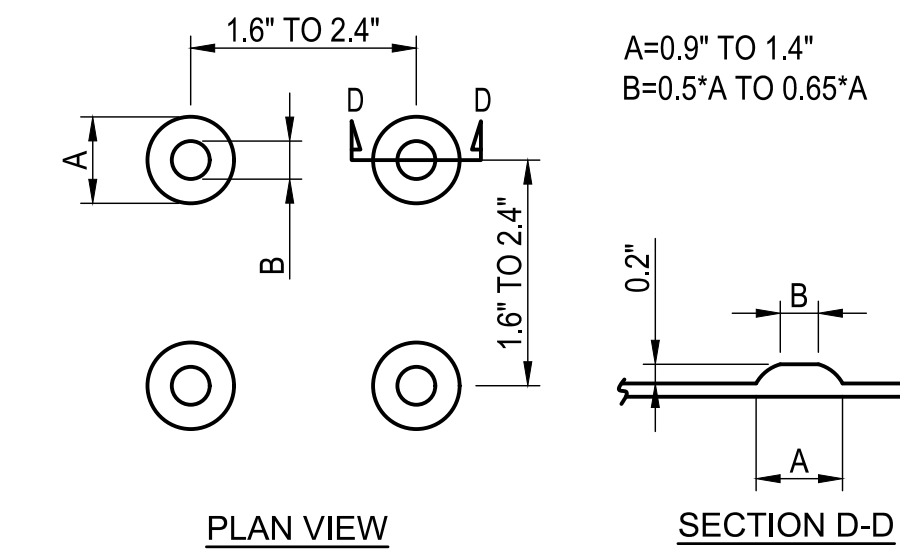
**4 INSTALLATION OF NEW OR RELOCATED SIGN POST**  
 C015 SCALE: 1/2"=1'-0"

(\*) ALL SIGN(S) INSTALLATIONS MUST MEET LATERAL AND HEIGHT CLEARANCES INCLUDING NEW SIGNS THAT WILL BE POSTED ON TO EXIST. SIGN POSTS. EXTEND, RELOCATE OR REPLACE AS REQUIRED TO MEET CLEARANCE REQUIREMENTS.



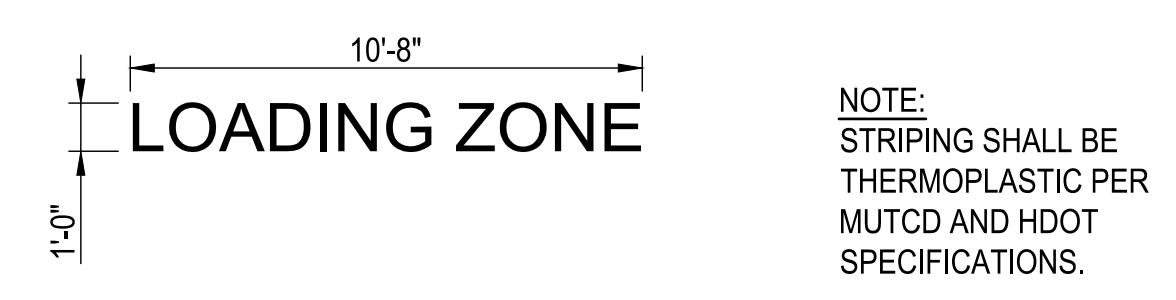
- ANCHOR POST NOTES:**
- KEEP INSIDE OF 2-1/4" ANCHOR POST FREE FROM IMPEDIMENTS THAT MAY PREVENT PROPER SEATING OF 2" SIGN POST.
  - SQUARE TUBING SIGN POST SHALL BE TELESCOPING TYPE WITH 7/16" DIA. HOLES AT 1" O.C. ON FOUR SIDES.
  - OCTAGON SIGN POST SHALL BE TELESCOPING TYPE WITH 7/16" DIA. HOLES AT 1" O.C. ON TWO SIDES.
  - USE 5/16" X 2-3/4" BOLTS TO SECURE THE OCTAGONAL AND SQUARE TUBING POST ONTO THE 2-1/4" SQUARE TUBE ANCHOR POST.
  - MINIMUM BURY DEPTH FOR THE 2-1/4" ANCHOR POST SHALL BE AS FOLLOWS:  
 4'-0" MIN. AT POOR SOIL CONDITIONS  
 2'-6" MIN. AT ROCKY CONDITIONS

**INSTALLATION OF NEW OR RELOCATED SIGN POST W/ ANCHOR POST, WITHOUT CONCRETE FOOTING**



- NOTES**
- TRUNCATED DOMES SHALL COMPLY WITH ADAAG SECTION 705.
  - DETECTABLE WARNING MAT SHALL BE 24" IN THE DIRECTION OF TRAVEL & EXTEND THE FULL WIDTH OF THE CURB RAMP.
  - TRUNCATED DOMES SHALL HAVE A BASE-TO-BASE SPACING ON 0.65 IN MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES ON A SQUARE GRID PER ADAAG SECTION 705.1.2.
  - TRUNCATED DOMES SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.
  - DOMES SHALL BE ALIGNED IN ROWS, NOT SKEWED DIAGONALLY.
  - THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTIVE BETWEEN THE DETECTABLE WARNING & ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "SAFETY YELLOW".

**5 DETECTABLE WARNINGS**  
 C015 SCALE: 1"=1'-0"

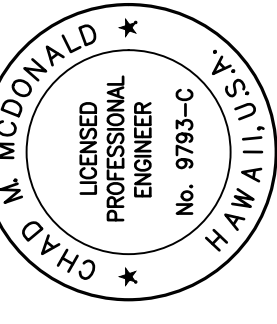


**6 PAVEMENT WORD STRIPING DETAIL**  
 C015 SCALE: 1/4"=1'-0"

REVISIONS	BY

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*Chad M. McDonald*  
 EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005-003  
 KANE STREET TO SCHOOL STREET



ARCHITECTURE  
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Sheet Title

**SIGNAGE AND STRIPING DETAILS**

Date AUGUST 2021

Scale AS NOTED

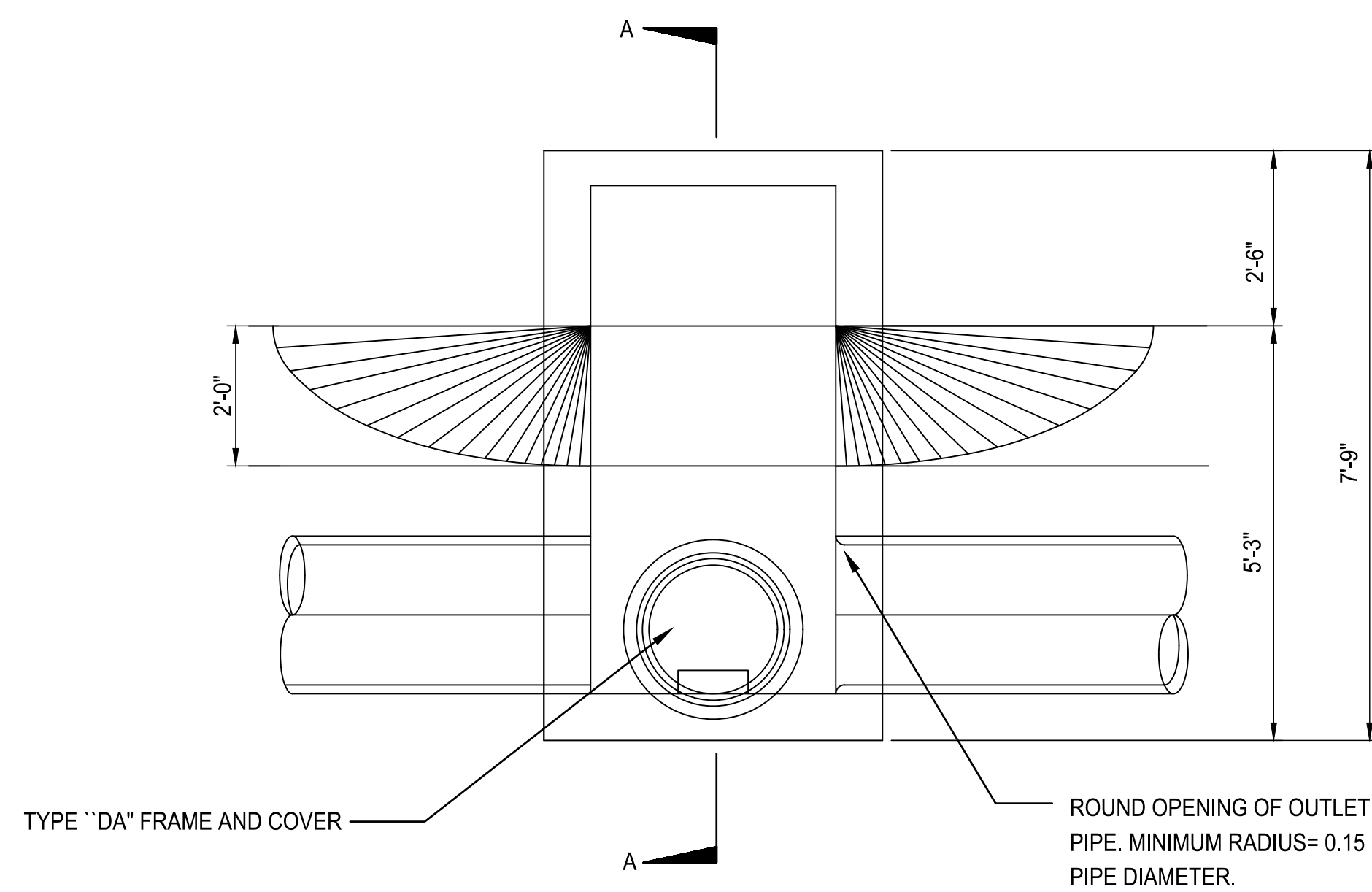
Drawn By AY

Job

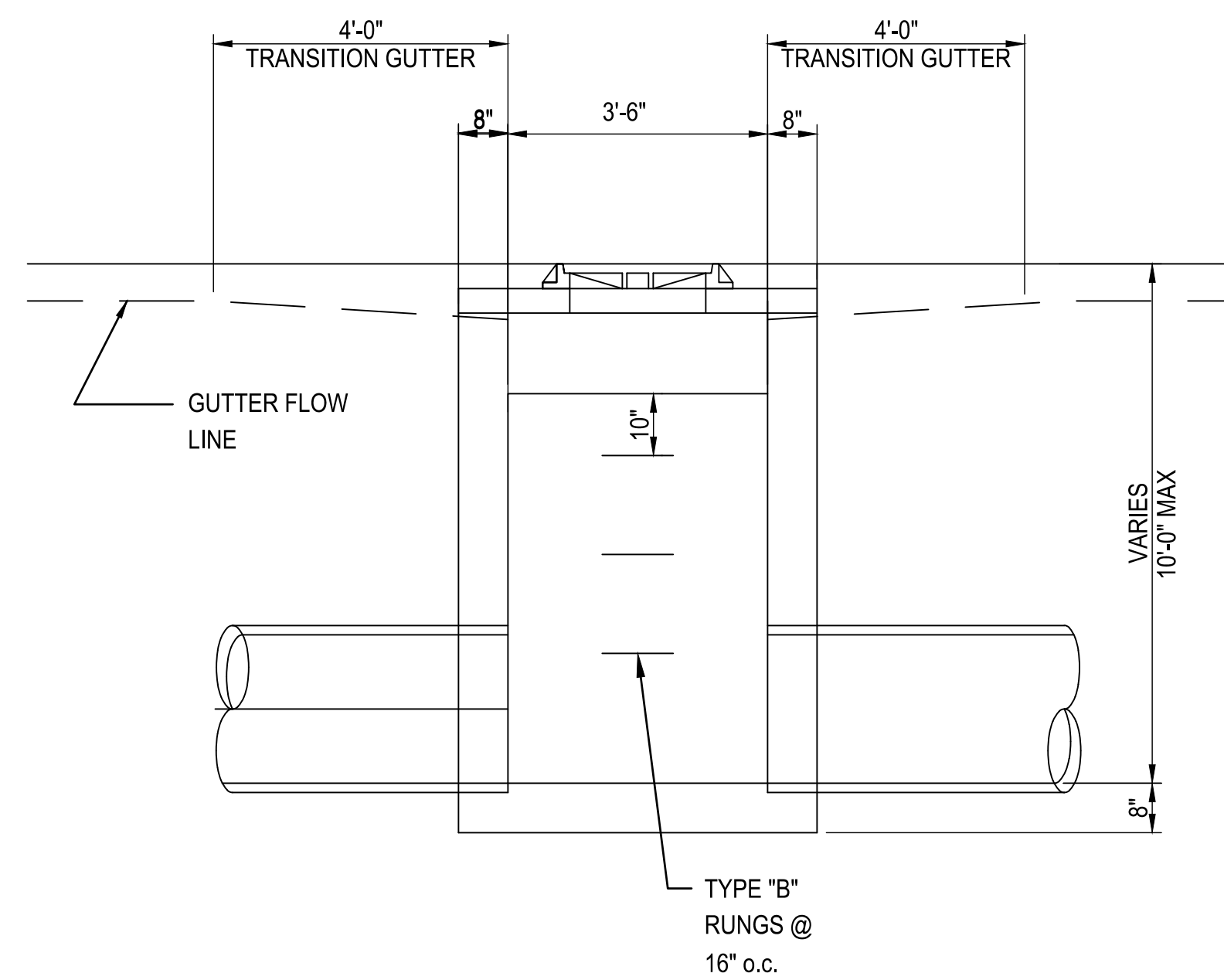
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C015

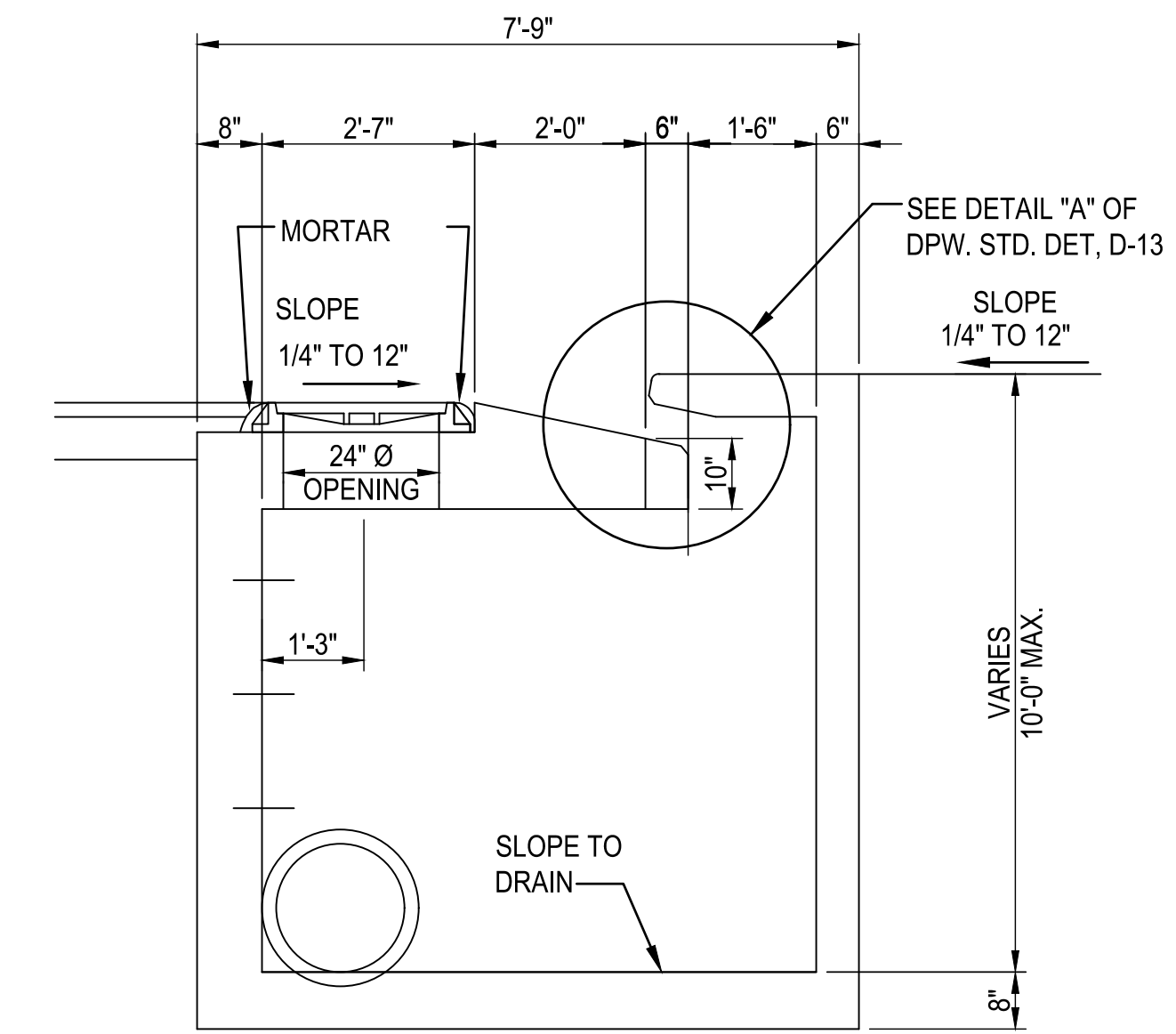
Sheet 15 of 20



PLAN



ELEVATION

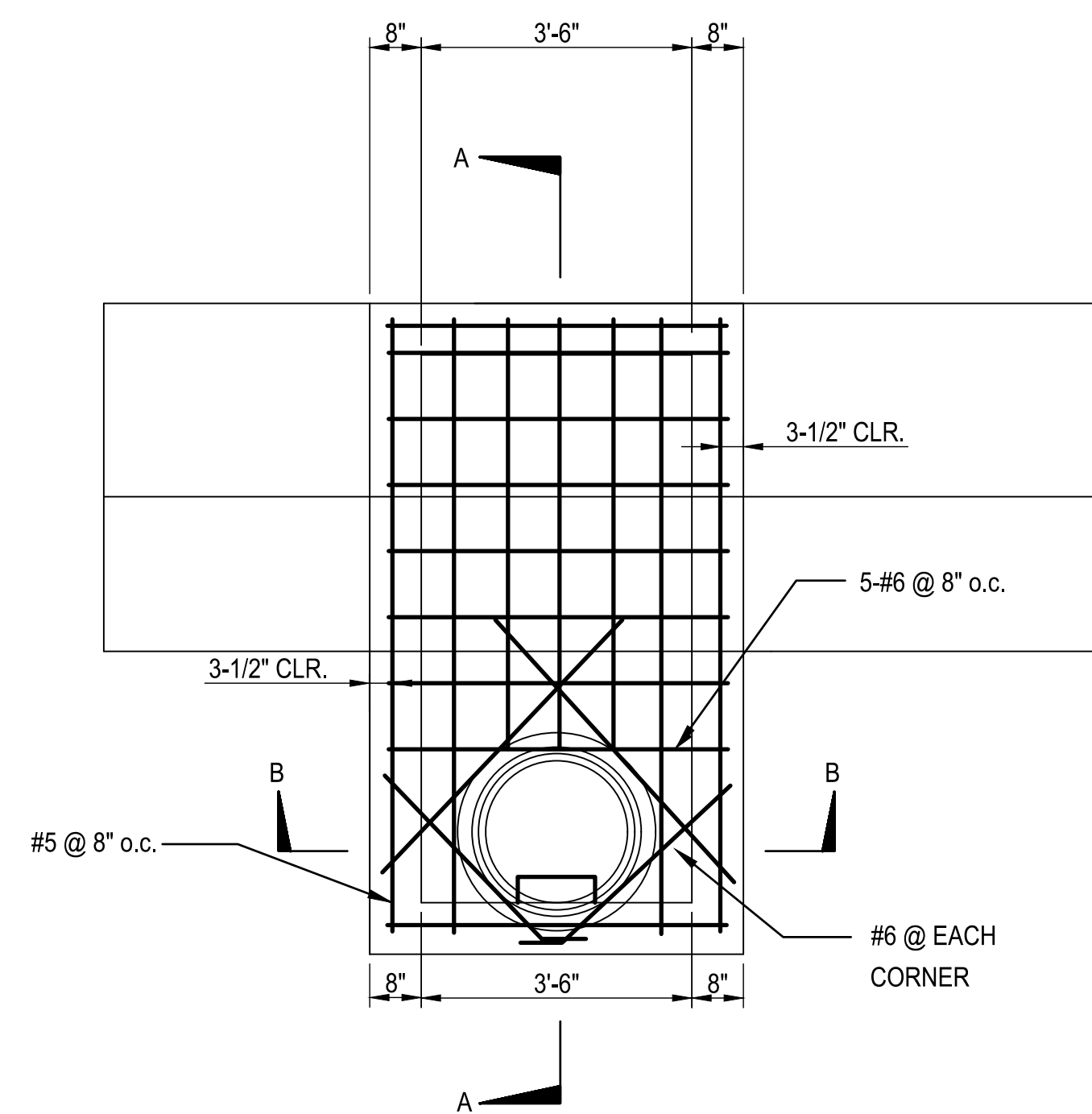


SECTION "A-A"

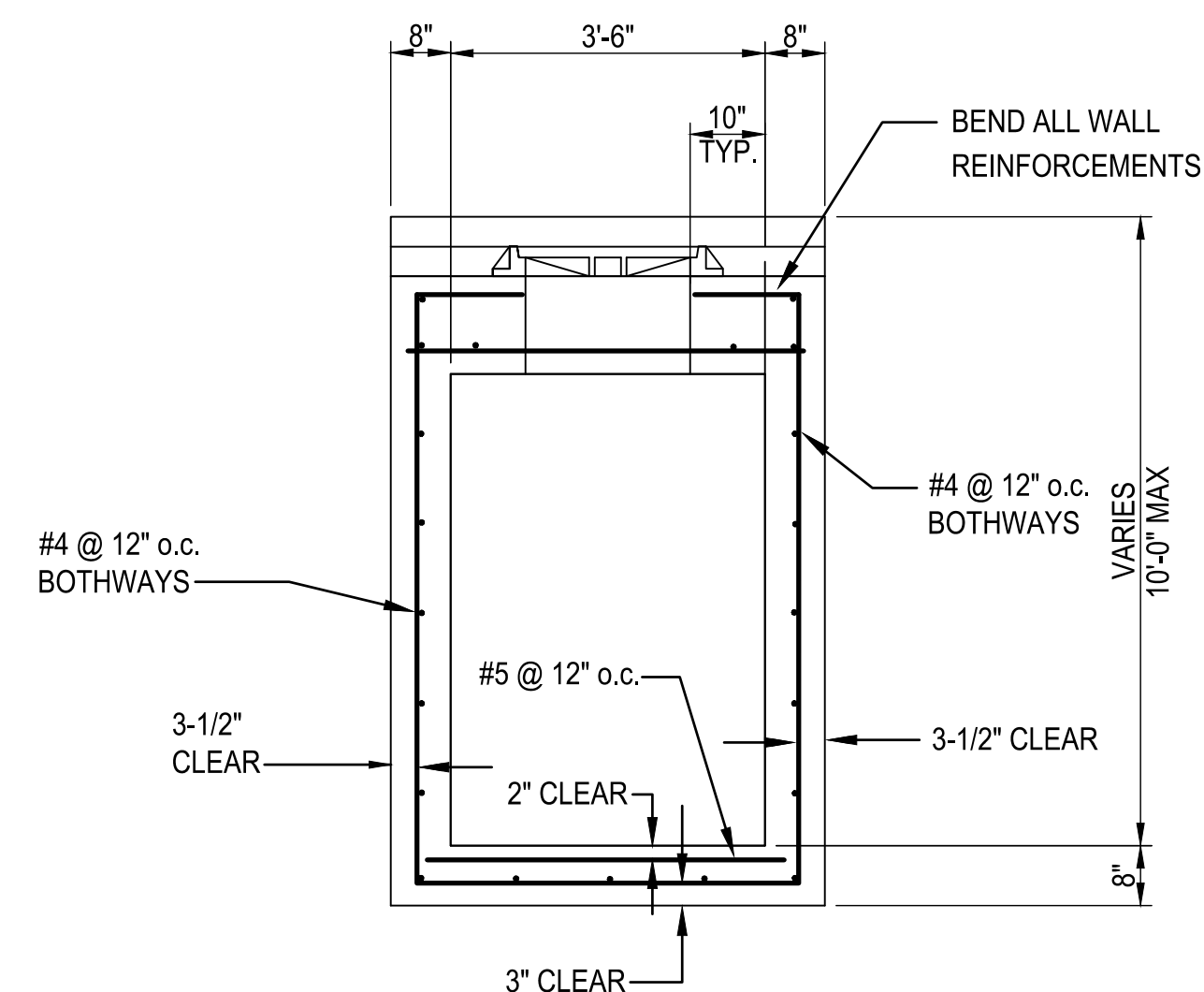
NOTES:

1. PROVIDE 2 CU. FT. OF CRUSHED ROCK, ASTM SIZE #9 ROCK SAND, AT WEEP HOLE.
2. C.B. WING SHALL BE INSTALLED TO FAVOR UPSTREAM OF GUTTER FLOW
3. RUNGS SHALL NOT BE INSTALLED OVER A PIPE CONNECTION AND THE LOWEST RUNG SHALL BE NOT MORE THAN 2'-0" ABOVE THE INVERT.
4. SEE DET. 2 ON THIS SHEET FOR REINFORCEMENT DETAILS.
5. FOR ALL OTHER REQUIREMENTS SEE DPW STD DETAIL D-6, TYPE B CATCH BASIN WITHOUT THE WING.

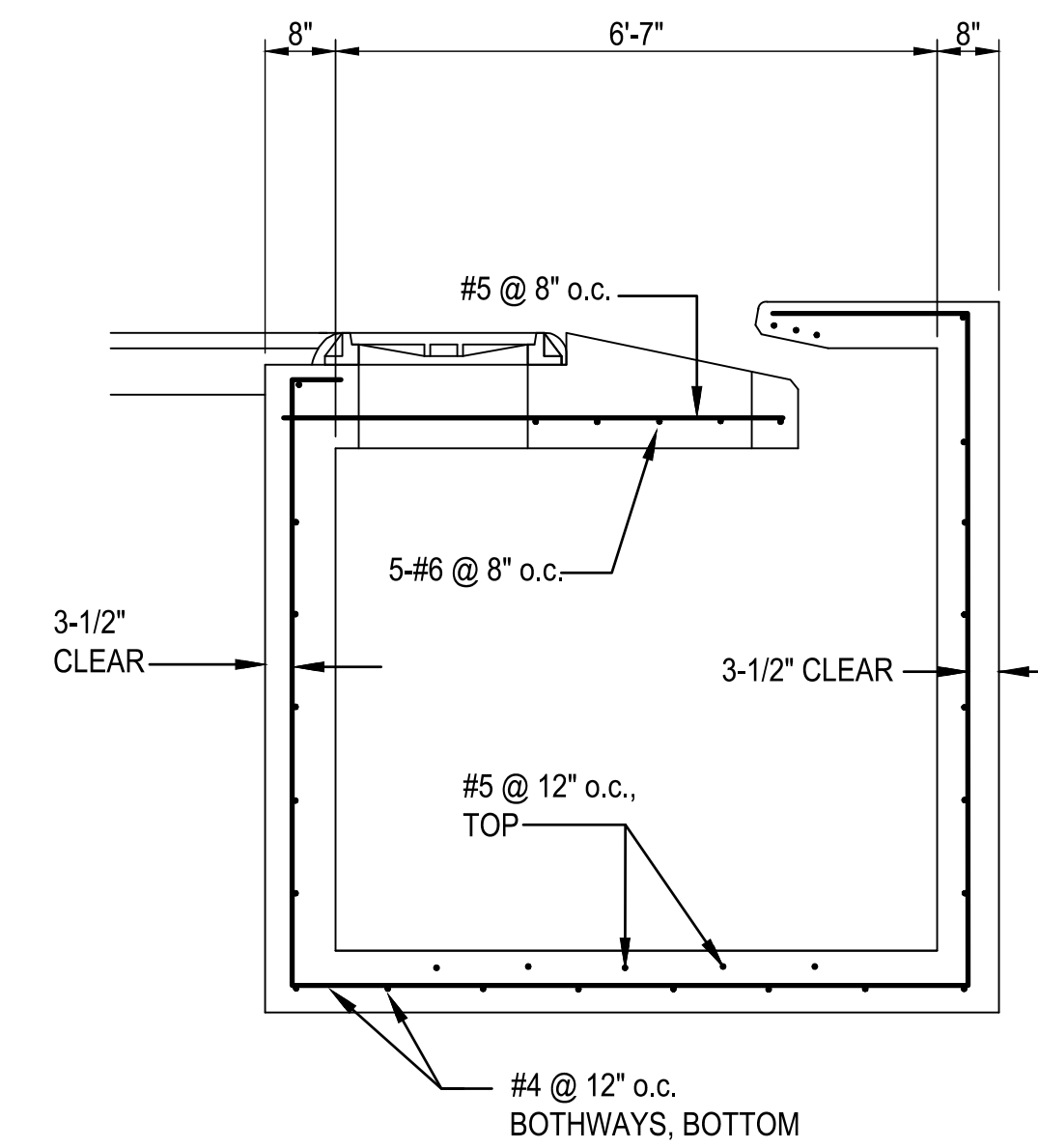
1 TYPE "B" CATCH BASIN  
SCALE: 1/2"=1'-0"



PLAN



SECTION B-B



SECTION A-A

2 TYPE "B" CATCH BASIN REINFORCEMENT DETAILS  
SCALE: 1/2"=1'-0"

REVISIONS	BY

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CHAD MCDONALD  
LICENSED PROFESSIONAL ENGINEER  
No. 9793-C  
HAWAII, U.S.A.

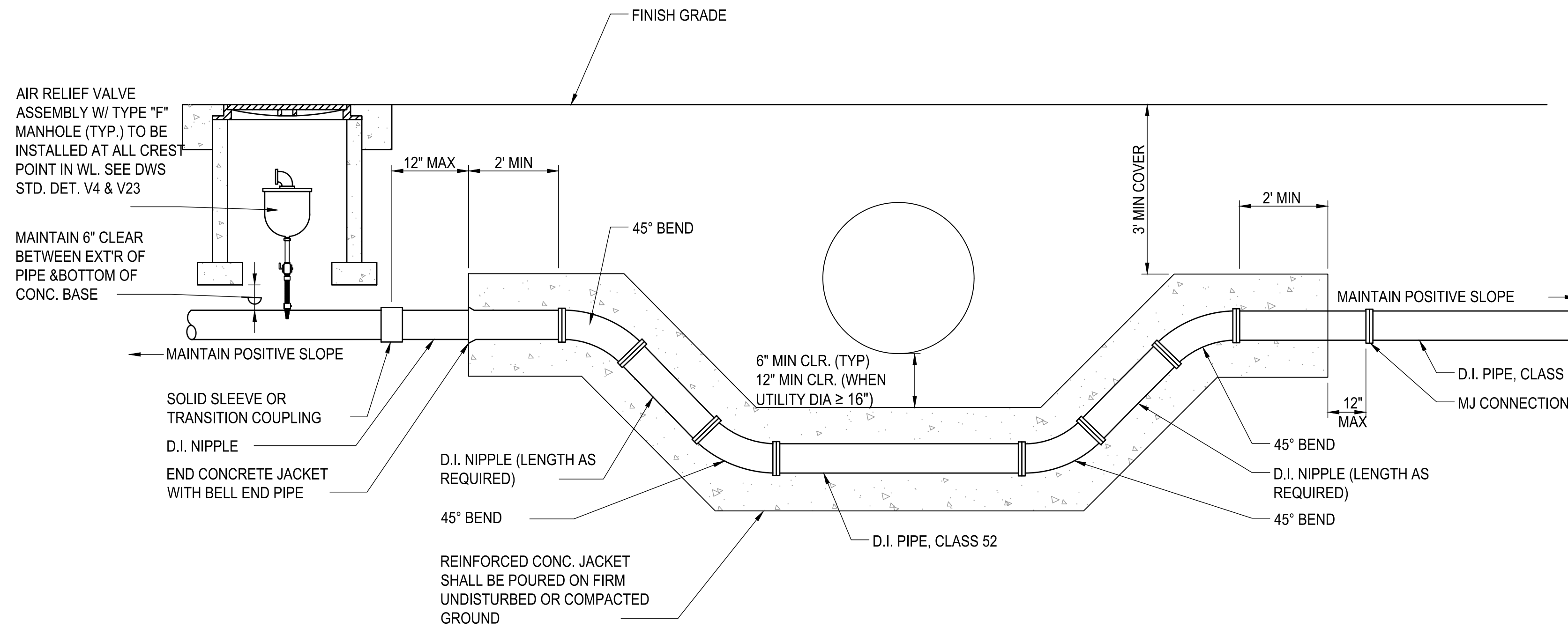
CHAD MCDONALD  
EXPIRATION DATE: 04/30/2022

VEVAU STREET IMPROVEMENTS  
VEVAU STREET IMPROVEMENTS  
TAX MAP KEY: (2) 3-7-005-003  
KANE STREET TO SCHOOL STREET

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Sheet Title  
TYPE B CATCH BASIN  
Date AUGUST 2021  
Scale AS NOTED  
Drawn By AY  
Job  
Sheet  
C016  
Sheet 16 of 20





**DETAIL - WATERLINE OFFSET AT DRAINLINE CROSSING**  
SCALE: 1/2" = 1 FT.

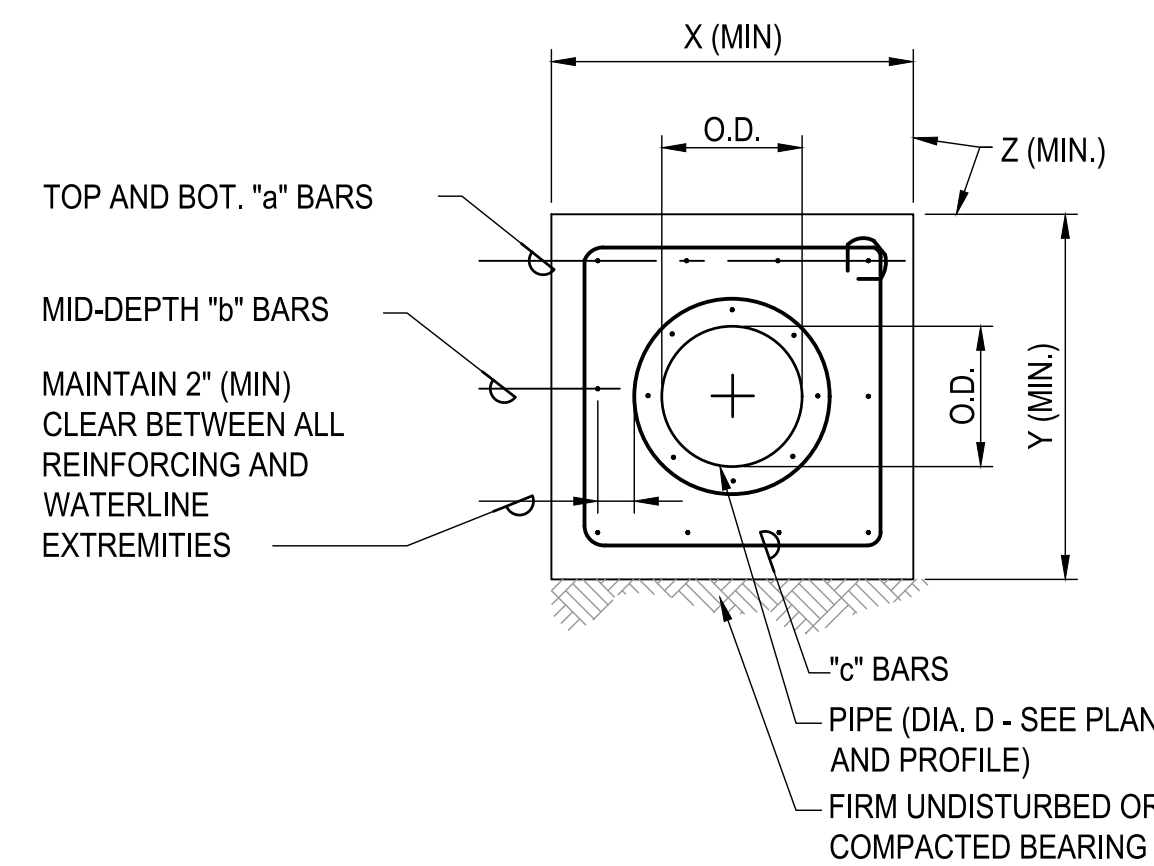
**NOTES:**

1. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND TYPE OF THE EXIST. WATERLINE PRIOR TO COMMENCEMENT OF ANY WATERLINE OFFSET WORK. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY SHOULD ANY DISCREPANCIES BE DISCOVERED, PRIOR TO COMMENCEMENT WITH ANY WORK, OTHERWISE ALL CORRECTIVE WORK SHALL BE MADE BY THE CONTRACTOR AT HIS EXPENSE.
2. SHOULD A.C. PIPE BE DISCOVERED, THE CONTRACTOR SHALL REMOVE ONE SECTION OF A.C. PIPE AT EACH CONNECTION AND REPLACE THE SAME WITH EQUIVALENT DIAMETER DUCTILE IRON PIPE, CLASS 52.
3. ALL JOINTS AND FITTINGS SHALL BE MECHANICAL JOINT.
4. INVERT ELEVATIONS OF THE TOP BENDS SHALL BE THE SAME.
5. INVERT ELEVATIONS OF THE BOT. BENDS SHALL BE THE SAME.

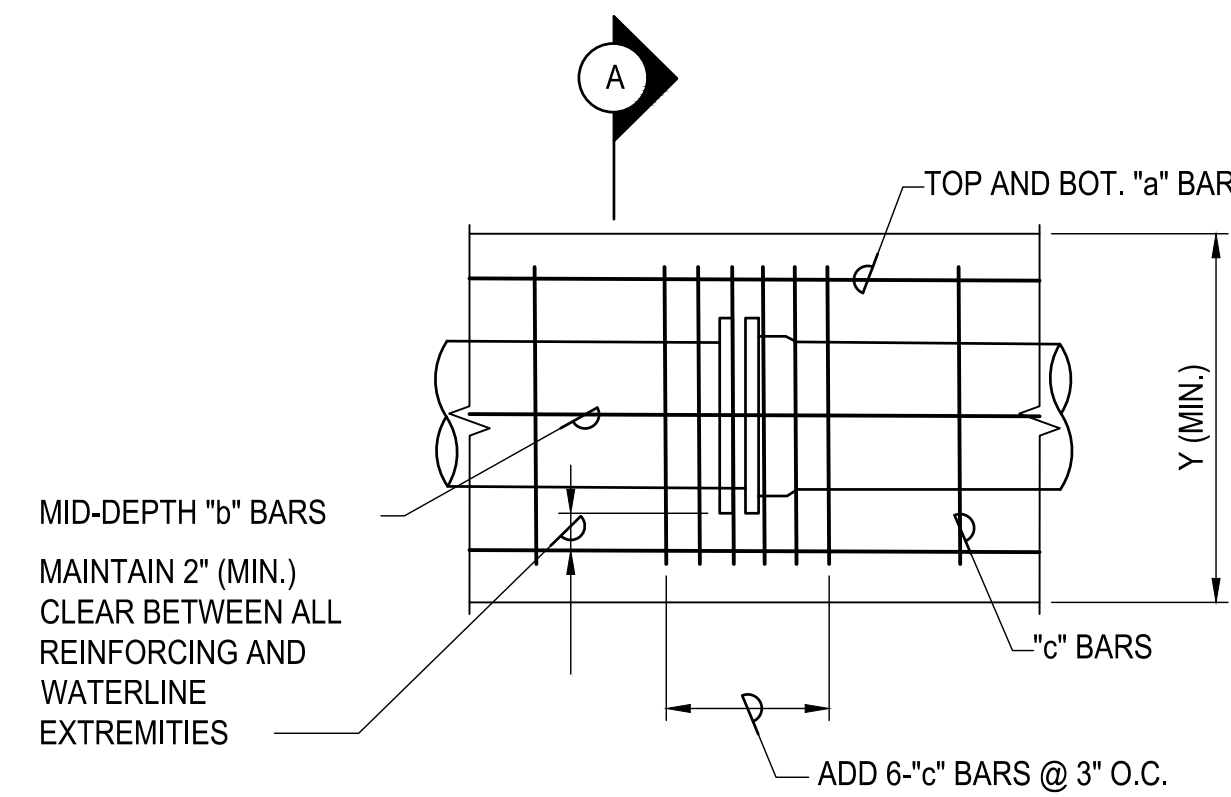
REINFORCING BAR & DIMENSION SCHEDULE							
DIAMETER	H (MAX)	X	Y	Z	TOP & BOT "a" BARS	"b" BARS	"c" BARS
12"	4'-0"	2'-8"	2'-8"	10"	4-#6 T&B	2-#6	#5 @ 12" O.C.
12"	5'-0"	2'-8"	2'-8"	10"	2-#6 T&B, 2-#7 T&B	2-#7	#5 @ 12" O.C.
12"	6'-0"	3'-0"	3'-0"	1'-0"	2-#6 T&B, 2-#7 T&B	2-#7	#5 @ 12" O.C.
12"	7'-0"	3'-0"	3'-0"	1'-0"	4-#7 T&B	2-#7	#5 @ 12" O.C.
12"	8'-0"	3'-0"	3'-0"	1'-0"	5-#7 T&B	2-#7	#5 @ 12" O.C.

**NOTES:**

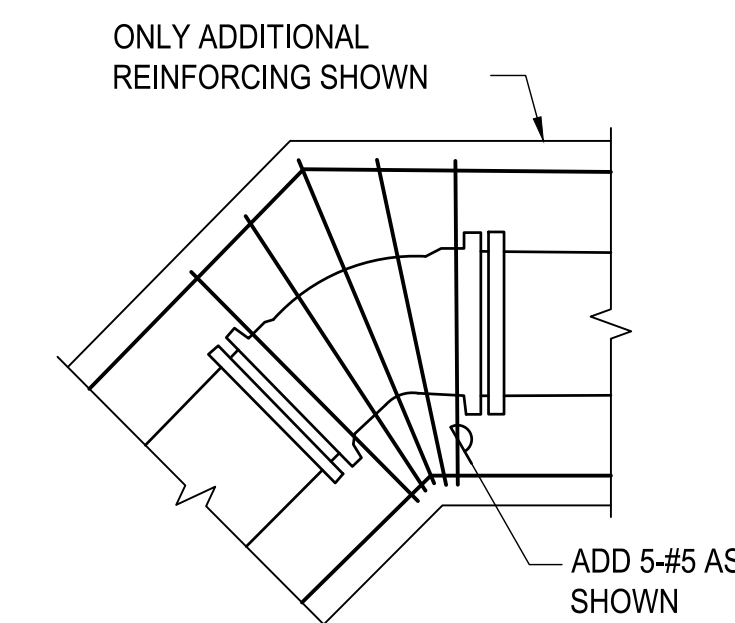
1. CONCRETE:  $f'_c = 3500$  P.S.I. (MIN.)
2. STEEL REINFORCEMENT:  $f_y = 60$  K.S.I. (ASTM A615 GRADE 60)
3. HYDRAULIC DESIGN PRESSURE: 250 P.S.I. (150 P.S.I. PLUS 100 P.S.I. SURGE)
4. CONTRACTOR SHALL SUBMIT CERTIFICATION OF COMPLIANCE WITH ABOVE CRITERIA FOR CONCRETE AND STEEL REINFORCEMENT WITHIN TWO (2) WORKING DAYS AFTER FABRICATION OF STRUCTURE.
5. FOR PRE-CAST APPLICATIONS, CONTRACTOR SHALL SUBMIT STRUCTURALLY-STAMPED SHOP DRAWINGS DETAILING LIFTING CONFIGURATION AND INTEGRAL LIFTING HARDWARE AT LEAST TEN (10) WORKING DAYS PRIOR TO FABRICATION OF STRUCTURE.
6. FOR CAST-IN-PLACE APPLICATIONS, WHERE HYDRAULIC PRESSURE IS EXPECTED PRIOR TO AT LEAST FOURTEEN (14) DAYS AFTER PLACEMENT OF CONCRETE, CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINTS OR RESTRAINED JOINTS (MEGALUG OR APPROVED EQUAL), AS REQUESTED, AND SHALL SUBMIT STRUCTURALLY-STAMPED SHOP DRAWINGS DETAILING SAME AT LEAST TEN (10) WORKING DAYS PRIOR TO FABRICATION OF STRUCTURE.
7. CONCRETE JACKETING OF A.C. OR P.V.C. PIPE SHALL NOT BE ALLOWED.
8. ALL INTERIOR JOINTS AND FITTINGS SHALL BE "MJ".



**SECTION A**  
NOT TO SCALE



**DETAIL - CONC. JACKET AT INTERIOR JOINTS**  
NOT TO SCALE



**DETAIL - ADDITIONAL REINFORCEMENT AT BENDS**  
NOT TO SCALE

REVISIONS	BY

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 EXPIRATION DATE: 04/30/2022



**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005-003  
 KANE STREET TO SCHOOL STREET



**M & A HAWAII**  
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Sheet Title

**CONCRETE SIPHON DETAIL**

Date AUGUST 2021

Scale AS NOTED

Drawn By AY

Job

Sheet

C017

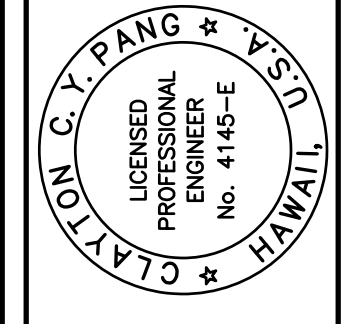
Sheet 17 of 20

REVISIONS	BY
1	2-8-22 CP

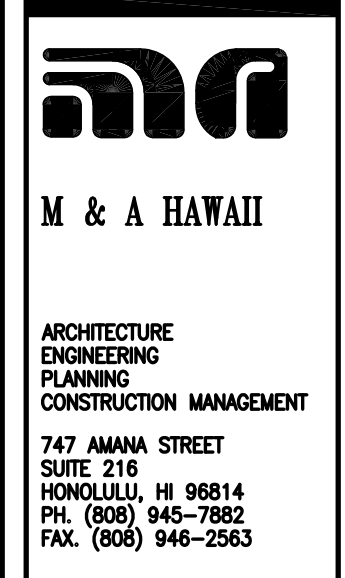
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. (OBSERVATION OF CONSTRUCTION AS DEFINED IN CHAPTER 10 OF THE HAWAIIAN CONSTRUCTION CODE.) I AM A LICENSED PROFESSIONAL ENGINEER, SURVEYOR, AND LANDSCAPE ARCHITECT.

*Chaf*

EXPIRATION DATE: 04/30/22



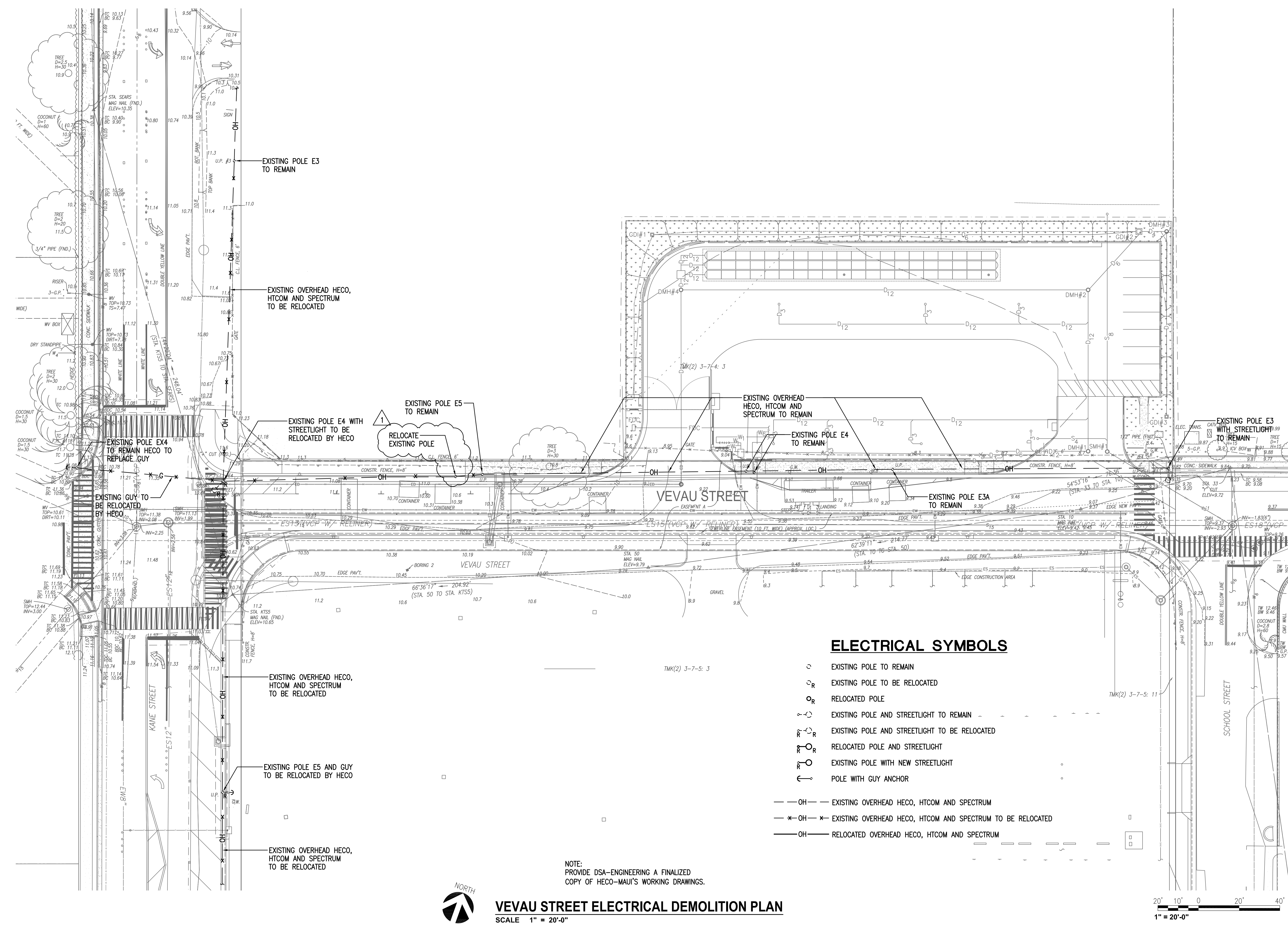
**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005 : 003  
 KANE STREET TO SCHOOL STREET



Sheet Title  
**VEVAU STREET ELECTRICAL DEMOLITION PLAN**

Date	DEC. 2020
Scale	AS NOTED
Drawn By	EB
Job	16177
Sheet	

**E001**



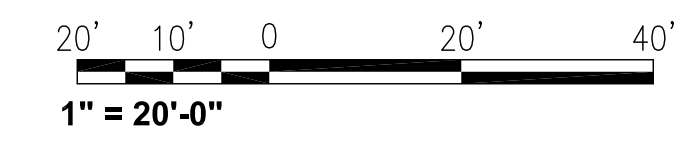
**ELECTRICAL SYMBOLS**

- EXISTING POLE TO REMAIN
- <sub>R</sub> EXISTING POLE TO BE RELOCATED
- <sub>R</sub> RELOCATED POLE
- <sub>R</sub> WITH STREETLIGHT EXISTING POLE AND STREETLIGHT TO REMAIN
- <sub>R</sub> WITH STREETLIGHT EXISTING POLE AND STREETLIGHT TO BE RELOCATED
- <sub>R</sub> WITH STREETLIGHT RELOCATED POLE AND STREETLIGHT
- <sub>R</sub> WITH STREETLIGHT EXISTING POLE WITH NEW STREETLIGHT
- ← POLE WITH GUY ANCHOR
- OH — EXISTING OVERHEAD HECO, HTCOM AND SPECTRUM
- \* OH \* — EXISTING OVERHEAD HECO, HTCOM AND SPECTRUM TO BE RELOCATED
- OH — RELOCATED OVERHEAD HECO, HTCOM AND SPECTRUM

NOTE:  
 PROVIDE DSA-ENGINEERING A FINALIZED COPY OF HECO-MAUI'S WORKING DRAWINGS.



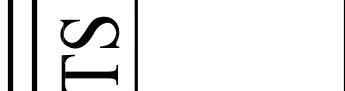
**VEVAU STREET ELECTRICAL DEMOLITION PLAN**  
 SCALE 1" = 20'-0"



REVISIONS	BY
1	2-8-22 CP

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DATE: 04/29/22



**VEVAU STREET IMPROVEMENTS**  
 VEVAU STREET IMPROVEMENTS  
 TAX MAP KEY: (2) 3-7-005 : 003  
 KANE STREET TO SCHOOL STREET

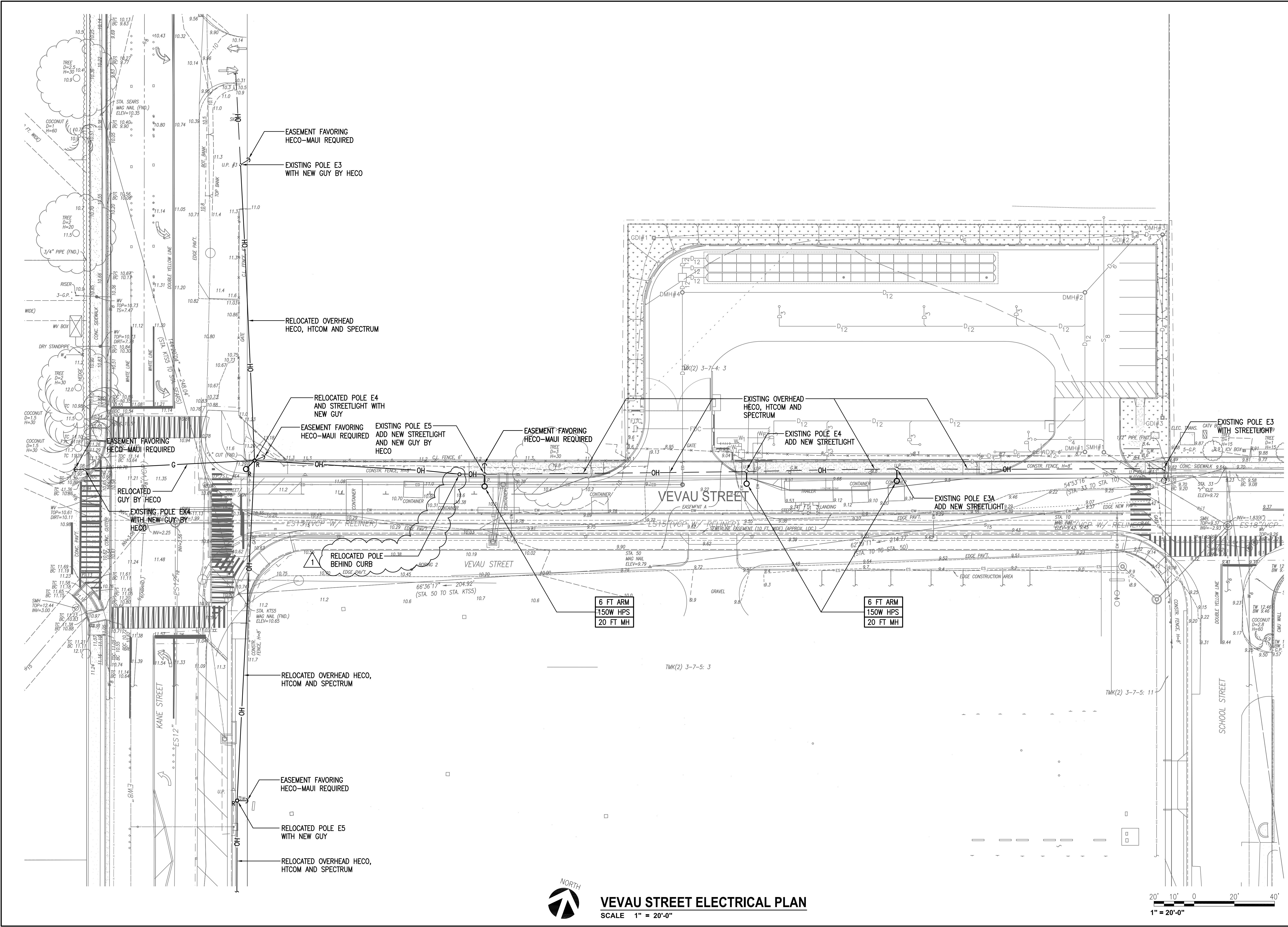


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 FAC. (808) 945-2563

Sheet Title  
**VEVAU STREET ELECTRICAL PLAN**

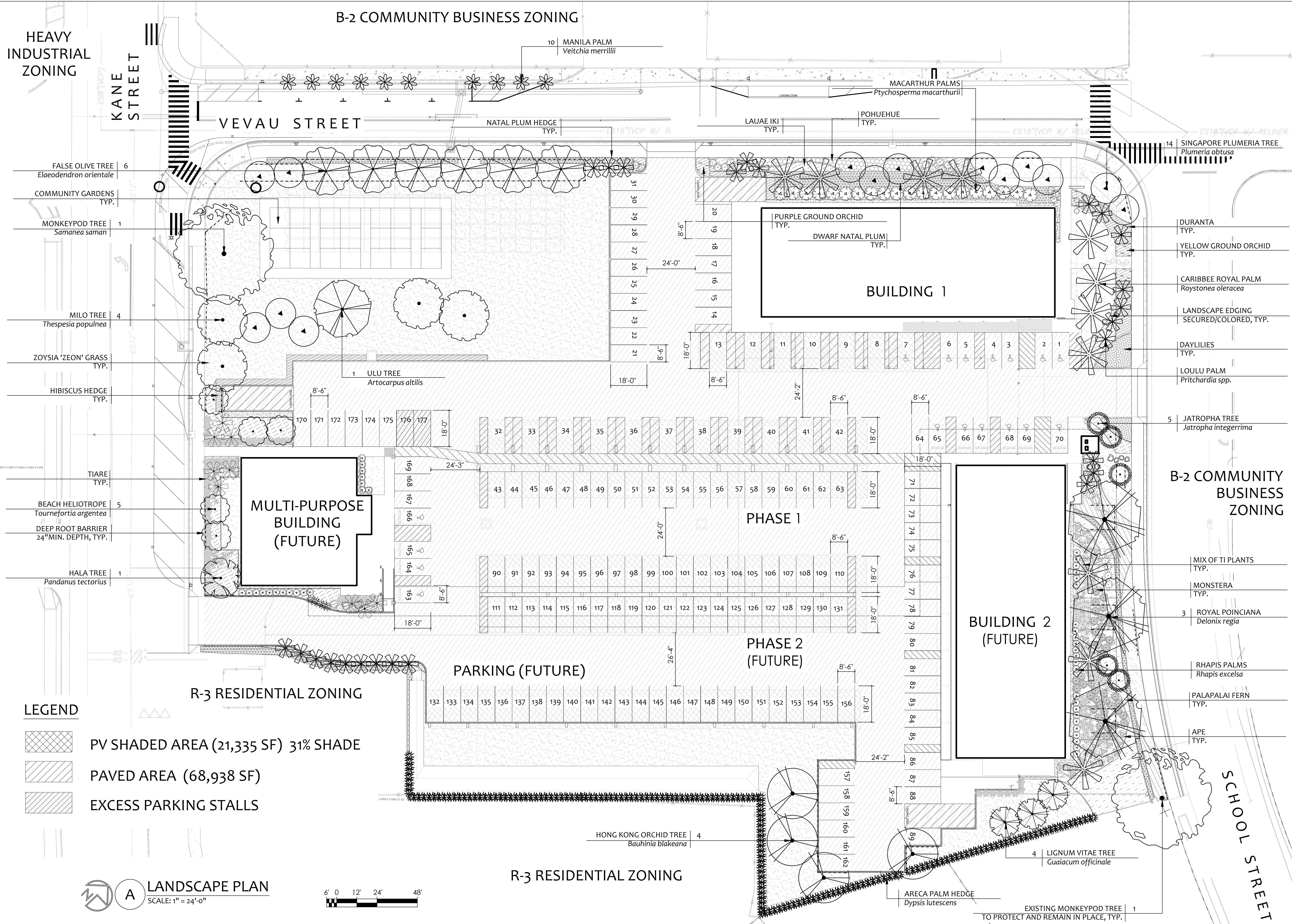
Date DEC. 2020  
 Scale AS NOTED  
 Drawn By EB  
 Job 16177  
 Sheet

E002  
 Sheet of



**VEVAU STREET ELECTRICAL PLAN**  
 SCALE 1" = 20'-0"





HEAVY INDUSTRIAL ZONING

B-2 COMMUNITY BUSINESS ZONING

KANE STREET

VEVAU STREET

SCHOOL STREET

- 6 FALSE OLIVE TREE  
*Elaeodendron orientale*
- TYP. COMMUNITY GARDENS
- 1 MONKEYPOD TREE  
*Samanea saman*
- 4 MILO TREE  
*Thespesia populnea*
- TYP. ZOYSIA 'ZEON' GRASS
- TYP. HIBISCUS HEDGE
- 5 TIARE  
TYP.
- 5 BEACH HELIOTROPE  
*Tournefortia argentea*
- 24" MIN. DEPTH, TYP. DEEP ROOT BARRIER
- 1 HALA TREE  
*Pandanus tectorius*

- 10 MANILA PALM  
*Veitchia merrillii*
- MACARTHUR PALMS  
*Ptychosperma macarthurii*
- 14 SINGAPORE PLUMERIA TREE  
*Plumeria obtusa*
- DURANTA TYP.
- YELLOW GROUND ORCHID TYP.
- CARIBBEE ROYAL PALM  
*Roystonea oleracea*
- LANDSCAPE EDGING SECURED/COLORED, TYP.
- DAYLILIES TYP.
- LOULU PALM  
*Pritchardia spp.*
- 5 JATROPHA TREE  
*Jatropha integerrima*

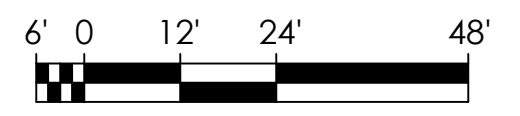
LEGEND

- PV SHADED AREA (21,335 SF) 31% SHADE
- PAVED AREA (68,938 SF)
- EXCESS PARKING STALLS

R-3 RESIDENTIAL ZONING

R-3 RESIDENTIAL ZONING

**A** LANDSCAPE PLAN  
SCALE: 1" = 24'-0"



REVISIONS	BY

THIS WORK WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF HAWAII. I AM NOT PROVIDING ANY DESIGN OR CONSTRUCTION SERVICES OUTSIDE THE STATE OF HAWAII. I AM NOT PROVIDING ANY DESIGN OR CONSTRUCTION SERVICES OUTSIDE THE STATE OF HAWAII.

**VEVAU STREET IMPROVEMENTS**  
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TAX MAP KEY: (2) 3-7-005: 003  
KANE STREET TO SCHOOL STREET

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Sheet Title  
**LANDSCAPE PLAN**

Date: DECEMBER 2020  
Scale: AS NOTED  
Drawn By: AY  
Job:  
Sheet:  
**L-01**  
Sheet 14 of 14