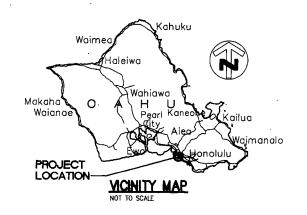
HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

REMEDIATION/CAPPING AND INTERIM PARKING AT KAKA'AKO MAKAI



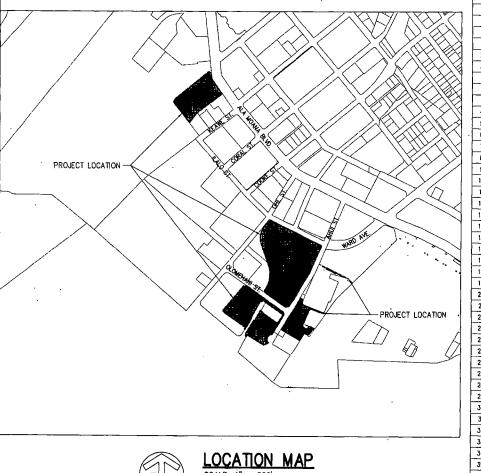
HONOLULU, OAHU, HAWAII

TMK: 2-1-015: 053 2-1-058: 041, 082 - 086, 091, 095 2-1-060: 001, 002, 004 - 006 PREPARED BY:

THE LIMTIACO CONSULTING GROUP
650 IWILEI ROAD, SUITE 208

LOCATION MAP

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	25 0	C-22	SIGNAGE AND STRIPING PLAN - PIANO PARKING LOT "B"			
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2	9 (C-26	SITE PLAN - LOT 6			
3	10 (C-27	SITE PLAN - LOT 8			
] [3	51 (C-28	CIVIL DETAILS - 1			
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APPROVALS:



CONSTRUCTION NOTES:

- 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 & COUNTY OF HONOLULU AND
- 2. THE CONTRACTOR SHALL PROVIDE ACCESS TO AND FROM PUBLIC STREETS AT ALL
- 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 TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
- 4. 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN 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 NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
- ALL EXISTING UTILITIES TO REMAIN IN USE. WHETHER OR NOT SHOWN ON THE PLANS. SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION UNLESS SPECIFIED ON THE PLANS TO BE ABANDONED. ANY DAMAGES TO EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR
- WHEN TRENCH EXCAVATION IS CLOSE TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING, SHORING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE—INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDER-PINNING TO FULLY PROTECT THEM FROM DAMAGE.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS AND EXISTING STRUCTURES DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN
- 10. 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 AND THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES-HISTORIC PRESERVATION DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768-8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
- 11. FOR PROJECTS ABUTTING STATE HIGHWAYS' RIGHTS-OF-WAY, THE OWNER OR HIS 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
- 12. EXISTING TOPOGRAPHIC DATA WAS TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENTITLED "TOPOGRAPHIC SURVEY FOR INTERIM PARKING AND REMEDIATION AT KAKAAKO", DATED MAY 21, 2009. THE CONTRACTOR SHALL VERIFY FIELD DATA FOR ACCURACY, ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. THE LIMITACO CONSULTING GROUP SHALL NOT BE HELD LIABLE FOR ANY ERRORS OR OMISSIONS ORIGINATING FROM THE PROVIDED TOPOGRAPHIC DATA
- 13. CONTRACTOR SHALL SATISFY ALL REQUIREMENTS OF THE UTILITY NOTIFICATION CENTER (1-877-668-4001) PRIOR TO TRENCHING ACTIVITIES.
- 14. CONTRACTOR SHALL HYDROMULCH ALL DISTURBED DIRT OR GRASS AREAS.
- 15. FOR BENCH MARKS, SEE SHEET C-01

GRADING NOTES:

- ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15 AND 16, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL, OF THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED, AND SOILS REPORT ENTITLED "SOILS INVESTIGATION TEMPORARY PARKING LOTS 7.5 AND 3.3 ACRE PARCELS", PREPARED BY HIRATA AND ASSOCIATES, INC., DATED JUNE 19, 2008.
- NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION 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.
- THE CONTRACTOR, AT HIS 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 CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 60.1, "AIR POLLUTION CONTROL".
- 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

GRADING NOTES (CONT.):

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
- 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
- 7. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE CONTINUOUSLY KEYED AND BENCHED.
- THE CITY 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. THE DEPARTMENT OF PLANNING AND PERMITTING, SITE DEVELOPMENT DIVISION, CIVIL ENGINEERING BRANCH, PERMITTING AND INSPECTION SECTION SHALL BE NOTIFIED OF ANY SUBSEQUENT CHANGES IN THE LOCATION OF BORROW/DISPOSAL SITES (PHONE NUMBER: 768-8084).
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE DIRECTOR, DEPARTMENT OF PLANNING AND PERMITTING, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS CONTAINED IN THE HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 46, "COMMUNITY NOISE CONTROL".
- 10. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AND IF APPLICABLE, THE NPDES PERMIT FOR THE PROJECT, BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
- 12. 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
- 13. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- TEMPORARY EROSION CONTROL PROCEDURES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO APPLICATION FOR GRADING PERMIT.
- 15. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS. CONTACT THE SOLID AND HAZARDOUS WASTE BRANCH OF THE STATE DEPARTMENT OF HEALTH FOR MORE INFORMATION (PHONE NUMBER: 586-4226).
- FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK. FOR CITY PROJECTS, THE CONTRACTOR SHALL COORDINATE INSPECTIONAL SERVICES WITH THE RESPONSIBLE CITY AGENCY.
- 17. 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). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, D.P.P. (768-8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
- 18. 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. ALSO, FOR NON-CITY AND OTHER NON-GOVERNMENTAL AGENCY PROJECTS, THE CONTRACTOR SHALL PROVIDE A WRITTEN COPY OF THE NGPC TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, D.P.P., AT LEAST SEVEN (7) CALENDAR DAYS BEFORE THE START OF THE CONSTRUCTION, 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.
- 19. 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.
- 20. 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 SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
- 21. FOR BENCH MARK, SEE SHEET C-01

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES:

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

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES (CONT.):

- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND REMOVAL OF ALL SILT AND DEBRIS GENERATED BY HIS WORK AND DEPOSITED AND ACCUMULATED WITHIN DOWNSTREAM WATERWAYS, DITCHES AND DRAIN PIPES AND PUBLIC AND PRIVATE ROADWAYS. THE CONTRACTOR AGREES TO REIMBURSE THE CITY AND COUNTY OF HONOLULU FOR ALL COSTS EXPENDED IN PERFORMANCE OF ABOVE WORK IF REQUIRED FOR PUBLIC HEALTH AND SAFETY OR MADE NECESSARY BY NON-PERFORMANCE BY THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL NOT PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY OR STATE 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
- 5. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 46 PUBLIC HEALTH REGULATIONS, DEPARTMENT OF HEALTH, STATE OF HAWAII. "COMMUNITY NOISE CONTROL," IN WHICH MAXIMUM PERMISSIBLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION WORK REQUIRES A PERMIT FROM THE DIRECTOR OF HEALTH, THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 46 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR THE CONSTRUCTION ACTIVITIES. APPLICATION AND INFORMATION ON VARIANCES ARE AVAILABLE FROM THE ENVIRONMENTAL PROTECTION AND HEALTH SERVICES DIVISION 1250 PUNCHBOWL ST., HONOLULU, HI 96813 OR BY TELEPHONE (586-4576).

HECO NOTES:

- THE LOCATION OF HECO'S OVERHEAD AND UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE FROM EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY AND ARE NOT GUARANTEED AS SHOWN, THE CONTRACTOR SHALL VERIFY IN THE THE LOCATIONS OF THE FACILITIES AND SHALL EXERCISE PROPER CARE IN EXCAVATING AND WORKING THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES AND UTILITY CROSSINGS ARE SHOWN, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS AND CROSSINGS TO VERIFY THE DEPTHS PRIOR TO EXCAVATION. FOR THE NEW LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO HECO'S FACILITIES WHETHER SHOWN OR NOT SHOWN ON THE
- THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAWS AND REGULATIONS, INCLUDING WITHOUT LIMITATION, THOSE RELATED TO WORKING ON OR NEAR EXPOSED OR ENERGIZED FLECTRICAL
- THE CONTRACTOR SHALL OBTAIN AN EXCAVATION CLEARANCE FROM HECO'S THE PLANNING AND DESIGN SECTION OF THE CUSTOMER INSTALLATIONS DEPARTMENT (543-5654) LOCATED AT 820 WARD AVENUE, 4TH FLOOR, A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO STARTING CONSTRUCTION.
- 4. EXISTING HECO OVERHEAD AND UNDERGROUND LINES ARE ENERGIZED AND WILL REMAIN ENERGIZED DURING CONSTRUCTION UNLESS PRIOR SPECIAL ARRANGEMENTS HAVE BEEN MADE WITH HECO. ONLY HECO PERSONNEL ARE TO HANDLE THESE ENERGIZED LINES AND ERECT TEMPORARY GUARDS TO PROTECT THESE LINES FROM DAMAGE. THE CONTRACTOR SHALL WORK CAUTIOUSLY AT ALL TIMES TO AVOID ACCIDENTS AND DAMAGE TO EXISTING HECO FACILITIES, WHICH CAN RESULT IN ELECTROCUTION
- STATE LAW (OSHA 1910.269(k)(2B)) REQUIRES THAT A WORKER AND THE LONGEST OBJECT HE OR SHE MAY CONTACT CANNOT COME CLOSER THAN A MINIMUM RADIAL CLEARANCE OF 10 FEET WHEN WORKING CLOSE TO OR UNDER ANY OVERHEAD LINES RATED 50kV AND BELOW. FOR EACH ADDITIONAL 10kV ABOVE 50kV, AN ADDITIONAL 4 INCHES SHALL BE ADDED TO THE 10-FOOT CLEARANCE REQUIREMENT. THE PRECEDING INFORMATION ON LINE CLEARANCE REQUIREMENTS IS PROVIDED AS A CONVENIENCE AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE INFORMED OF AND COMPLY WITH ANY REVISIONS OR AMENDMENTS TO THE LAW.

SHOULD THE CONTRACTOR ANTICIPATE THAT HIS WORK WILL RESULT IN THE NEED TO ENCROACH WITHIN THE MINIMUM REQUIRED CLEARANCE AT ANY TIME, THE CONTRACTOR SHALL NOTIFY HECO AT LEAST FOUR (4) WEEKS PRIOR TO THE PLANNED ENCROACHMENT SO THAT, IF FEASIBLE, THE NECESSARY PROTECTIONS (E.G. RELOCATE OR DE-ENERGIZE HECO LINES) CAN BE INVESTIGATED. HECO MAY ALSO BE ABLE TO BLANKET ITS DISTRIBUTION (12KV AND BELOW) LINES TO PROVIDE A VISUAL AID IN PREVENTING ACCIDENTAL CONTACT. HECO'S COST OF SAFEGUARDING OR IDENTIFYING ITS LINES WILL BE CHARGED TO THE CONTRACTOR.

CONTACT HECO'S CUSTOMER INSTALLATIONS DEPARTMENT AT 543-7846 FOR ASSISTANCE IN IDENTIFYING AND SAFEGUARDING OVERHEAD POWER LINES.

A MINIMUM CLEARANCE OF 10 FEFT MUST BE MAINTAINED WHEN EXCAVATING AROUND UTILITY POLES AND/OR THEIR ANCHOR SYSTEM TO PREVENT WEAKENING OR POLE SUPPORT FAILURE. SHOULD WORK REQUIRE EXCAVATING WITHIN 10 FEET OF A POLE AND/OR ITS ANCHOR SYSTEM, THE CONTRACTOR SHALL PROTECT, SUPPORT, SECURE, AND TAKE ALL OTHER PRECAUTIONS TO PREVENT DAMAGE TO OR LEANING OF THESE POLES. THE CONTRACTOR IS RESPONSIBLE FOR ALL POLE BRACING DESIGNS AND STRUCTURAL CALCULATIONS, AS WELL AS ASSOCIATED COSTS TO BRACE, REPAIR, OR STRAIGHTEN POLES. ALL MEANS OF STRUCTURAL SUPPORT FOR THE POLE AND OR ANCHOR SYSTEM PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO HECO'S CUSTOMER INSTALLATIONS DEPARTMENT (543-7846) FÖR REVIEW A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO IMPLEMENTATION. THE COST OF HECO'S REVIEW/ASSISTANCE IN PROVIDING PROPER SUPPORT AND PROTECTION OF ITS POLES WILL BE CHARGED TO THE CONTRACTOR

HECO NOTES (CONT.):

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF UNDERGROUND LINES. HECO'S EXISTING ELECTRICAL CABLES ARE ENERGIZED AND WILL REMAIN ENERGIZED DURING CONSTRUCTION. ONLY HECO PERSONNEL ARE TO BREAK INTO EXISTING HECO FACILITIES, HANDLE THESE CABLES AND ERECT TEMPORARY GUARDS TO PROTECT THESE CABLES FROM DAMAGE. THE COST OF HECO'S ASSISTANCE IN PROVIDING PROPER SUPPORT AND PROTECTION OF ITS UNDERGROUND LINES WILL BE CHARGED TO THE CONTRACTOR, FOR ASSISTANCE/COORDINATION IN PROVIDING PROPER SUPPORT AND PROTECTION OF THESE LINES, THE CONTRACTOR SHALL CALL HECO'S CUSTOMER INSTALLATIONS DEPARTMENT AT 543-7846 A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE.

SPECIAL PRECAUTIONS ARE REQUIRED WHEN EXCAVATING NEAR HECO'S 138KV UNDERGROUND LINES (SEE HECO INSTRUCTIONS TO CONSULTANTS/CONTRACTORS ON "EXCAVATION NEAR HECO'S UNDERGROUND 138KV LINES" FOR DETAIL REQUIREMENTS)

FOR VERIFICATION OF UNDERGROUND LINES, THE CONTRACTOR SHALL CALL THE HAWAII ONE CALL CENTER AT 866-423-7287 A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE

- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF HECO'S UNDERGROUND FUEL OIL PIPELINES. SPECIAL PRECAUTIONS ARE REQUIRED WHEN EXCAVATING NEAR HECO'S UNDERGROUND FUEL OIL PIPELINES (SEE HECO'S SPECIFIC FUEL PIPELINE "GUIDELINES" TO CONSULTANTS/CONTRACTORS ON "EXCAVATION NEAR HECO'S UNDERGROUND FUEL PIPELINES" FOR DETAILED REQUIREMENTS.)
- WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH HECO'S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR:
- A. ARRANGING FOR HECO STANDBY PERSONNEL TO OBSERVE WORK AT CONTRACTOR'S COST.
- B. SHEETING, BRACING, OR OTHERWISE SUPPORTING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE AND TO PREVENT POSSIBLE SLIDES, CAVE-INS, AND SETTLEMENTS
- C. PROPERLY SUPPORTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, UNDER-PINNINGS, OR OTHER NECESSARY METHODS TO FULLY PROTECT IT FROM DAMAGE.
- D. BACKFILLING WITH PROPER BACKFILL MATERIAL INCLUDING SPECIAL THERMAL BACKFILL WHERE EXISTING (REFER TO ENGINEERING DEPARTMENT FOR THERMAL BACKFILL SPECIFICATIONS).
- 10. ANY WORK REQUIRED TO RELOCATE OR MODIFY HECO FACILITIES SHALL BE DONE BY HECO, OR BY THE CONTRACTOR UNDER HECO'S SUPERVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION AND SHALL PROVIDE NECESSARY SUPPORT FOR HECO'S WORK, WHICH MAY INCLUDE, BUT NOT BE LIMITED TO, STAKING OF POLE/ANCHOR LOCATIONS, IDENTIFYING RIGHT OF WAY AND PROPERTY LINES, EXCAVATION AND BACKFILL, PERMITS AND TRAFFIC CONTROL, BARRICADING, AND RESTORATION OF PAVEMENT, SIDEWALKS, AND OTHER

ALL COSTS ASSOCIATED WITH ANY RELOCATION OR MODIFICATION (EITHER TEMPORARY OR PERMANENT) FOR THE CONVENIENCE OF THE CONTRACTOR, OR TO ENABLE THE CONTRACTOR TO PERFORM WORK IN A SAFE AND EXPEDITIOUS MANNER IN FULFILLING HIS CONTRACT OBLIGATIONS SHALL BE BORNE BY THE

11. ANY REDESIGN OR RELOCATION OF HECO'S FACILITIES NOT SHOWN ON THE PLANS MAY BE CAUSE FOR LENGTHY DELAYS. THE CONTRACTOR ACKNOWLEDGES THAT HECO IS NOT RESPONSIBLE FOR ANY DELAY OR DAMAGE THAT MAY ARISE AS A RESULT OF ANY CONFLICTS DISCOVERED OR IDENTIFIED WITH RESPECT TO THE LOCATION OR CONSTRUCTION OF HECO'S ELECTRICAL FACILITIES IN THE FIELD, REGARDLESS OF WHETHER THE CONTRACTOR HAS MET THE REQUESTED MINIMUM ADVANCE NOTICES. IN ORDER TO MINIMIZE ANY DELAY OR IMPACT ARISING FROM SUCH CONFLICTS, HECO SHOULD BE NOTIFIED IMMEDIATELY UPON DISCOVERY OR IDENTIFICATION OF SUCH CONFLICT.

SON H. PROFESSIONA ENGINEER NO. 9360-C RAMAII USP 4/30/12

_				
REV	DATE	DESCRIPTION	BY	APPR
	To To	HE LIMTIACO CONSULIVIL ENGINEERING AND ENVIRONME	TING GROUP	

650 WILEI ROAD, SUITE 208 • HONDLULU, HAWAII 96817 PHONE: (808) 596-7790 • FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

GENERAL NOTES	
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CHECKED BY: JL DRAWN BY: KK DES BY: KK SCALE: DATE: JULY 2010

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY FILE POCKET FOLDER NO. _SHEET__2__QF__56_

PERMIT SET DRAWING G-01

HECO NOTES (CONT.):

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL HECO SURFACE AND SUBSURFACE UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO HECO'S FACILITIES AS A RESULT OF HIS OPERATIONS. THE CONTRACTOR SHALL IMMEDIATELY REPORT SUCH DAMAGES OR ANY HAZARDOUS CONDITIONS RELATED TO HECO'S LINES TO HECO'S TROUBLE DISPATCHER AT 548-7961. REPAIR WORK SHALL BE DONE BY HECO OR BY THE CONTRACTOR UNDER HECO'S SUPERVISION. COSTS FOR DAMAGES TO HECO'S FACILITIES SHALL BE BORNE BY THE CONTRACTOR.

IN CASE OF DAMAGE OR SUSPECTED DAMAGE TO HECO'S FUEL PIPELINE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY HECO'S HONOLULU POWER PLANT SHIFT SUPERVISOR AT 533-2102 (A 24-HOUR NUMBER) SO HECO PERSONNEL CAN SECURE THE DAMAGED SECTION AND REPORT ANY OIL SPILLS TO THE PROPER AUTHORITIES, IN CASE OF DAMAGE OR SUSPECTED DAMAGE TO THE WAIAU OR KAHE FUEL PIPELINES, THE CONTRACTOR SHALL ALSO NOTIFY CHEVRON AT 682-2227. ALL COS ASSOCIATED WITH THE DAMAGE, REPAIR, AND OIL SPILL CLEANUP SHALL BE BORNE BY

13. THE CONTRACTOR MAY REQUEST HECO TO PROVIDE AN INSPECTOR TO STAND-BY DURING CONSTRUCTION NEAR HECO'S FACILITIES. THE COST OF SUCH INSPECTION WILL BE CHARGED TO THE CONTRACTOR.

THE CONTRACTOR SHALL CALL THE HECO'S CUSTOMER INSTALLATIONS DEPARTMENT AT 543-7846 A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE TO ARRANGE FOR

- 14. THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS HECO FROM AND AGAINST ALL LOSSES, DAMAGES, CLAIMS, AND ACTIONS, INCLUDING BUT NOT LIMITED TO REASONABLE ATTORNEY'S FEES AND COSTS BASED UPON OR ARISING OUT OF DAMAGE TO PROPERTY OR INJURIES TO PERSONS, OR OTHER TORTIOUS ACTS CAUSED OR CONTRIBUTED TO BY CONTRACTOR OR ANYONE ACTING UNDER ITS DIRECTION OR CONTROL OR ON ITS BEHALF; PROVIDED CONTRACTOR'S INDEMNITY SHALL NOT BE APPLICABLE TO ANY LIABILITY BASED UPON THE SOLE NEGLIGENCE OF HECO.
- 15. THE FOLLOWING CLEARANCES SHALL BE MAINTAINED BETWEEN HECO'S DUCTLINE AND ALL ADJACENT STRUCTURES (CHARTED AND UNCHARTED) IN THE TRENCH:

MINIMUM SEI	PARATION CLEARAN HORIZ	ICES TO EXISTING IONTAL (PARALLEL)		CTLINES
UTILITY BEING INSTALLED	EXISTING DIRECT BURKED CABLE	EXISTING DIRECT BURIED IN CONDUIT (NO CONCRETE ENCASEMENT)	EXISTING 3" CONCRETE ENCASEMENT	APPLICABLE NOTES:
HECO DB CONDUITS	12"	3*	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"	12"	6*	
TELEPHONE/CATV DB DUCTS	12"	12"	6"	
TELEPHONE/CATV 3" ENCASEMENT	0*	0-	0"	E
TRAFFIC SIGNAL	12"	12"	12"	
WATER DB	36"	36"	36*	A, D
WATER SERVICE LATERALS	12"	12*	12"	
WATER (CONCRETE JACKETED)	36"	36"	36*	A, D
GAS DB	12"	12"	12"	A
GAS (CONCRETE JACKETED)	12"	12"	12"	A
SEWER DB	36"	36"	36	A, B
SEWER (CONCRETE JACKETED)	36"	36"	36"	А. В
DRAIN	12*	12*	12"	Α
FUEL PIPELINES	48"	48"	48"	С

- WHERE SPACE IS AVAILABLE, PARALLEL CLEARANCE TO OTHER UTILITIES, OR FOREIGN STRUCTURES OTHER THAN COMMUNICATION OR TRAFFIC SIGNAL SHALL BE
- IF 36" CLEARANCE CANNOT BE MET:
 - -IF CLEARANCE IS LESS THAN 12", JACKET SEWER LINE WITH REINFORCED CONCRETE (PER HECO'S STD. 30-1030) FOR A DISTANCE OF 5' PLUS PIPE DIAMETER
 - -IF CLEARANCE IS BETWEEN 12" AND 36", JACKET SEWER LINE WITH PLAIN CONCRETE.
- ELECTRICAL CONDUIT CROSSINGS OF FUEL LINES SHOULD BE KEPT A MINIMUM OF 48" CLEAR BELOW FUEL LINE FOR THE FULL EASEMENT WIDTH. IF THE 48" CLEARANCE CANNOT BE MET BUT THERE IS A MINIMUM OF 24", THE FUEL LINE MUST BE ENCASED WITH 6" OF CONCRETE.
- 5 FEET CLEAR TO WATER MAINS 16" AND LARGER.
- FOR SITUATIONS WITH O" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED
- CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES.

HECO NOTES (CONT.):

UTILITY BEING INSTALLED	EXISTING DIRECT BURIED CABLE	EXISTING DIRECT BURIED IN GONDUIT (NO CONCRETE ENCASEMENT)	EXISTING 3" CONCRETE ENCASEMENT	APPUCABLE NOTES:
HECO DB CONDUITS	6*	3"	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"		6"	
TELEPHONE/CATV DB DUCTS	12"	12"	5"	
TELEPHONE/CATV 3" ENCASEMENT	0-	0*	0"	Ε
TRAFFIC SIGNAL	12"	12"	8"	
WATER DB	6"	6"	6"	В
WATER SERVICE LATERALS	6"	6"	6"	
WATER (CONCRETE JACKETED)	6"	6*	6*	8
GAS DB	12"	12*	12*	
GAS (CONCRETE JACKETED)	12*	12"	12"	T
SEWER D8	24"	24"	24"	A
SEWER (CONCRETE JACKETED)	24"	24"	24"	A
DRAIN	12*	12"	12*	
FUEL PIPELINES	48"	48"	48"	С

MINIMUM SEPARATION CLEARANCES TO EXISTING UNDERGROUND DUCTLINES

- A. IF CLEARANCE CANNOT BE MET:
 - -IF CLEARANCE IS LESS THAN 12", JACKET SEWER LINE WITH REINFORCED CONCRETE (PER HECO'S STD. 30-1030) FOR A DISTANCE OF 5' PLUS PIPE
 - -IF CLEARANCE IS BETWEEN 12" AND 24", JACKET SEWER LINE WITH PLAIN CONCRETE.
- 12" VERTICAL CLEARANCE FOR PIPE DIAMETERS GREATER THAN 16" ELECTRICAL CONDUIT CROSSINGS OF FUEL LINES SHOULD BE KEPT A MINIMUM OF 48" CLEAR BELOW FUEL LINE FOR THE FULL EASEMENT WIDTH. IF THE 48" CLEARANCE CANNOT BE MET BUT THERE IS A MINIMUM OF 24", THE FUEL LINE MUST BE ENCASED WITH 6" OF CONCRETE.
- 5 FEET CLEAR TO WATER MAINS 16" AND LARGER.
- FOR SITUATIONS WITH O" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED
- CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES.

THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER & HECO OF ANY HEAT SOURCES (POWER CABLE DUCT BANK, STREAMLINE, ETC.) ENCOUNTERED THAT ARE NOT PROPERLY IDENTIFIED ON THE DRAWING.

<u>SEWER_NOTES:</u>

- ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS, SEPT. 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPT. 1984, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990 AS AMENDED, AND THE DESIGN STANDARDS OF THE DEPARTMENT OF WASTEWATER MANAGEMENT VOL. 1, JULY 1993.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGEMENT BRANCH, WASTEWATER DIVISION, DDC, AT 768-8788 OR 768-8770 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF SEWER WORK. THE CONTRACTOR SHALL PAY FOR ALL INSPECTION COSTS.
- 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 AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
- 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.):

CONFINED SPACE

FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS AND REPRESENTATIVES, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:

·

- 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:
 - FULL BODY HARNESSES FOR UP TO TWO PERSONNEL. LIFELINE AND ASSOCIATE CLIPS.

 - INGRESS/EGRESS AND FULL PROTECTION EQUIPMENT.
 - TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
 - CELLULAR TELEPHONÉ TO CALL FOR EMERGENCY ASSISTANCE
 - CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20 FEET AWAY).
 - PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
- CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY
- III. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).
- ALL SAFETY EQUIPMENT SHALL COMPLY WITH THE STANDARDS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND ALL APPLICABLE FEDERAL, STATE, AND CITY LAWS AND REGULATIONS RELATING TO SAFETY.
- THE CONTRACTOR SHALL PROVIDE MECHANICAL PLUG OR ALTERNATE ACCEPTABLE MEANS TO PREVENT AND MINIMIZE ANY DEBRIS AS RESULT OF LOWERING OR ADJUSTMENT FROM ENTERING THE SANITARY SEWER SYSTEM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TONING OF BURIED FRAMES AND COVERS PRIOR TO COLD MILLING OF ROADWAY.
- CONTRACTOR SHALL SCHEDULE WORK TO MINIMIZE THE TIME WHERE ACCESS TO THE FACILITY IS LIMITED, I.E. LOWERING, PAVING AND ADJUSTMENT TO FINAL GRADE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND/OR COST OF CLEANING THE FACILITY DUE TO DEBRIS ENTERING THE SYSTEM.
- CONTRACTOR SHALL PROVIDE ADDITIONAL PLANS TO CIVIL CONSTRUCTION MANAGEMENT BRANCH FOR INSPECTION IF UTILITIES ARE SHOWN.
- THE COST OF THE ABOVE SEWER NOTES 7 THROUGH 11 SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE PRICES BID FOR THE ADJUSTMENT OF EXISTING UTILITIES TO NEW GRADES.

SYMBOLS

	O HAIDOLO	
EXISTING	PROPOSED	
S ₃₆		SEWER LINE W/ SIZE
		SEWER MANHOLE
	← ~	DIRECTION OF RUN OFF
	-ф- в1	BORING LOCATION AND I.D.
——D ₁₈ —		DRAIN LINE W/ SIZE
		FIRE HYDRANT
—— 0/н —		OVERHEAD ELECTRICAL LINE
—— нтсо —		TELEPHONE LINE
		WATER LINE W/ SIZE
		PROPERTY LINE AND/OR RIGHT-OF-WAY
		EASEMENT BOUNDARY

SHEET NUMBERING NOMENCLATURE

ALL SHEETS WILL BE NUMBERED REGINNING WITH A LETTER FLOLLOWED BY DASH "-" AND TWO NUMBERS AS FOLLOWS:

T - TITLE - GENERAL. C - CIVIL E - ELECTRICAL

-SHEFT NUMBER

DETAIL/SECTION TITLE

SECTIONS DESIGNATED BY A LETTER AND DETAILS DESIGNATED

. - LANDSCAPE & IRRIGATION



SHEET NUMBER WHERE DETAIL/SECTION IS SHOWN



REV DATE DESCRIPTION

650 WILE ROAD, SUITE 208 • HONOLULU, HAWAII 96B17 PHONE: (808) 596-7780 • FAX: (808) 596-7361 HAWAII COMMUNITY DEVELOPMENT AUTHORITY

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

DRAWN BY: KK	DES BY: KK		CHECKED	BY: JL
SCALE:		DATE: J	ULY 2010	

O.F 56

SHEET

MANHOLE MIN MINIMUM MIXED LIQUOR ML MON. MONUMENT NORTH OVERFLOW

ABBREVIATIONS

ASPHALT CONCRETE

AIR RELEASE VALVE

BACK FLOW PREVENTER

BACKWASH/BOTTOM WALL

CONCRETE MASONRY UNIT

CONCRETE RUBBLE MASONRY

EFFLUENT FLUSHING WATER

AIR CONDITIONING

APPROXIMATE

BOTTOM CURB

AVENUE

BYPASS

ROTTON

CENTERLINE

CHAIN-LINK

CLEAN OUT

COMMUNICATION

DIAMETER OR DRAIN

DIGESTED SLUDGE

ELECTRIC MANHOLE

EDGE OF PAVEMENT

ELECTRIC POLE

FROTH CONTROL

FINISH GRADE

FIRE HYDRANT

FILTRATE

FIRE LINE

GROUND

HEIGHT

HOSE BIB

INVERT INJECTOR WATER LATERAL

FORCE MAIN

GATE VALVE

HEATED SLUDGE

INNER DIAMETER

LINEAR FOOT

GAS/GAS SLUDGE

GUY POLE/GUARD POST/GATE POST

HAWAIIAN ELECTRIC COMPANY

HAWAIIAN TELEPHONE COMPANY

IRRIGATION CONTROL VALVE

DILUTING WATER

CHLORINE

COLUMN

CONCRETE

DRAIN INLET

DRAWING

DRIVEWAY

ELECTRIC

ELEVATION

DETAIL

CATCH BASIN

AVE

REP

BOT

COMM

CRM

DET.

DW

DWG.

DWY.

EMH

ΈP

EOP

H.B.

HS

ICV I.D.

INV.

HTCo

EXIST

E/ELEC.

ELEV./EL.

C/CONC.

O/H OVERHEAD ELECTRIC LINE

P/PAV'T. PAVEMENT PRIMARY SLUDGE POUND PER SQUARE INCH POLYVINYL CHLORIDE

POTABLE WATER PW PIPE CAPACITY DESIGN PEAK FLOW RAS RETURN ACTIVATED SLUDGE

LIGHT/LAMP POLE

MAXIMUM

RCP RS REINFORCED CONCRETE PIPE RETURN SLUDGE SEWER/SLOPE/SPREAD/SUPERNATANT

STORM DRAIN

SDMI SEF S.L. SMH STORM DRAIN MANHOLE SECONDARY EFFLUENT SEWERLINE/STREET LIGHT

SEWER MANHOLE SSC STA. STD. SECONDARY SCUM NOTATE STANDARD

SV S/W TBS TC SEWER VALVE SIDEWALK TANK BOTTOM SLUDGE TOP CURB

T/TEL TELEPHONE TMK TAX MAP KEY TMH TELEPHONE MANHOLE

TP TRC TOP ROLLED CURB

TS TV TOP STEM/THICKENED SLUDGE TOP VALVE

TOP WALL TYP TYPICAL UTILITY POLE

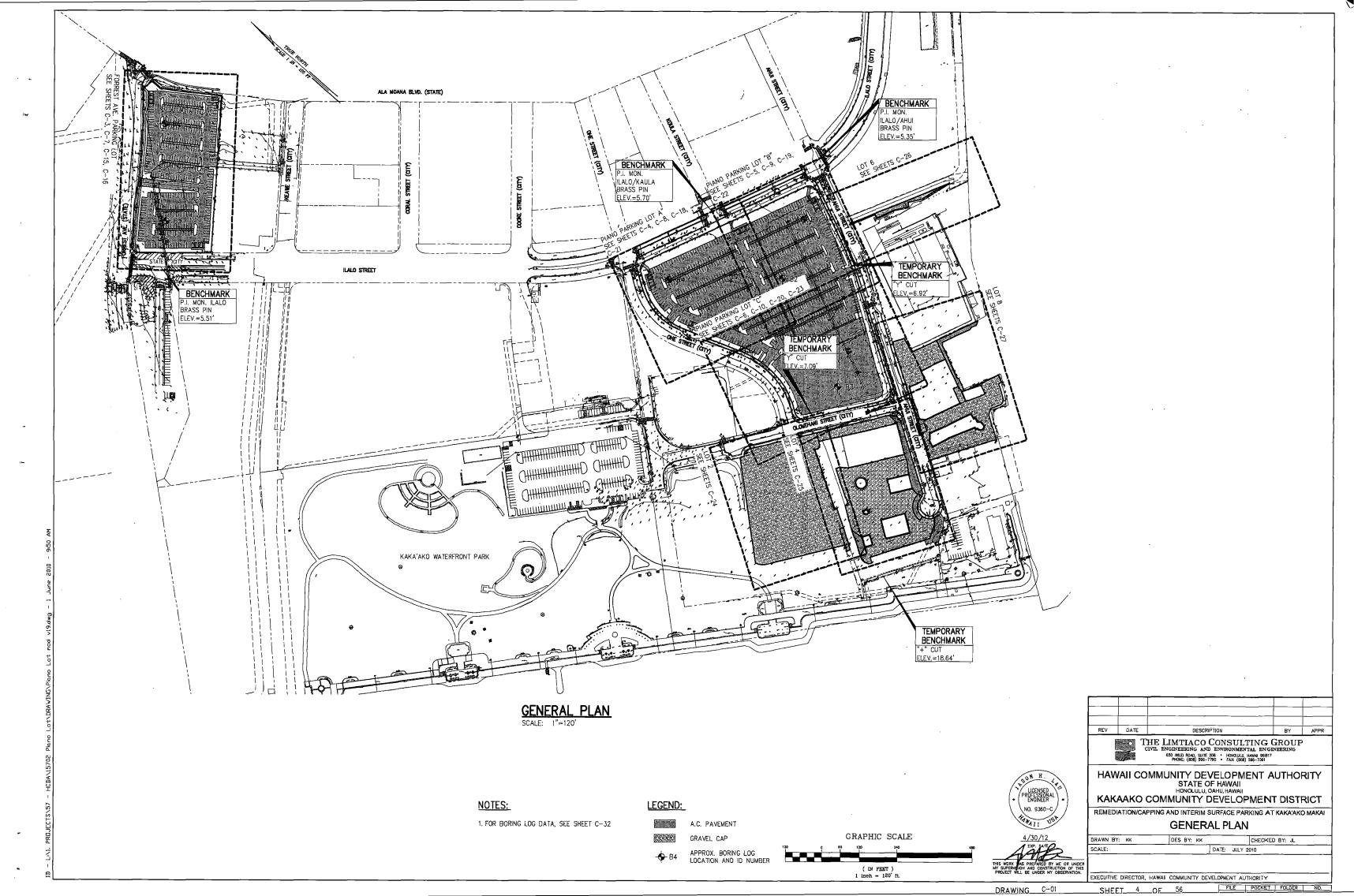
U.P./S.L. . UTILITY POLE W/ STREET LIGHT WAS WASTE ACTIVATED SLUDGE

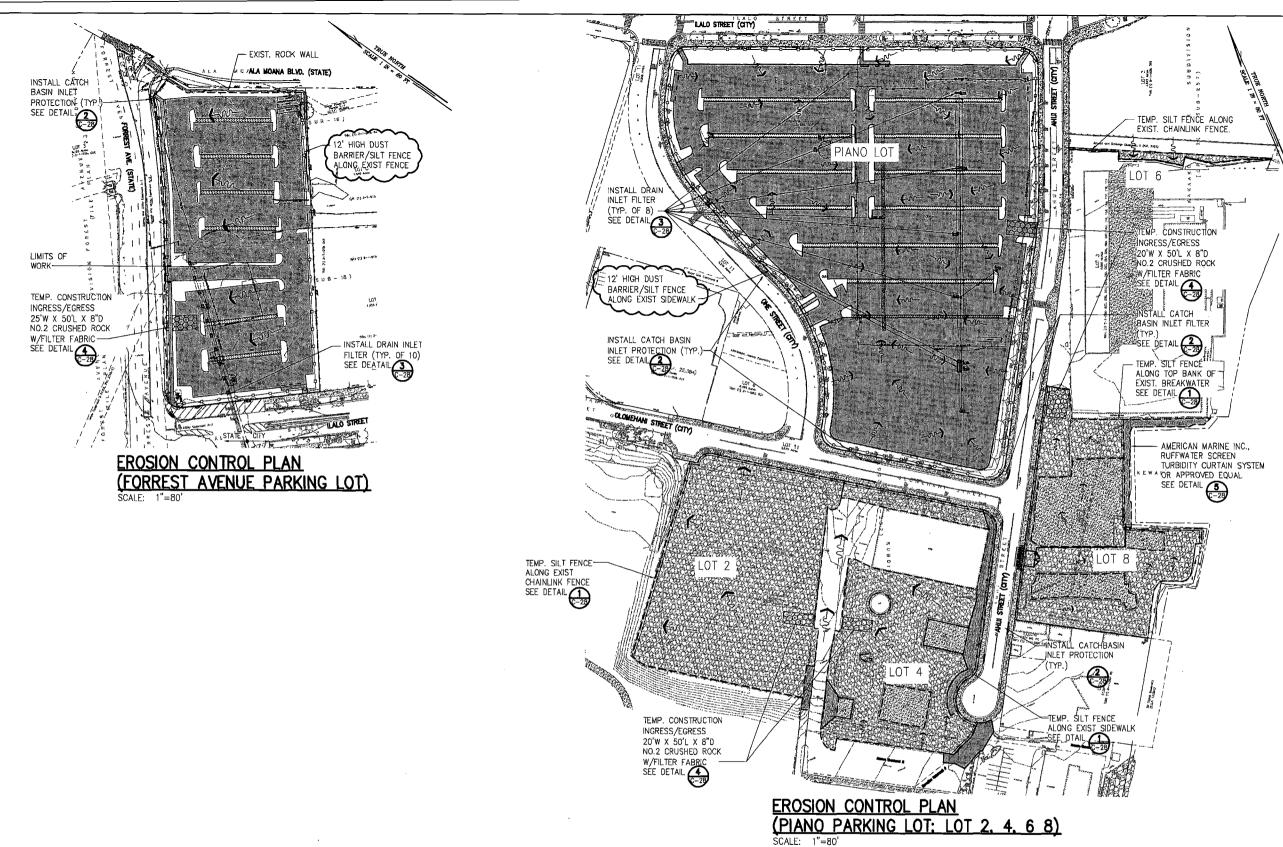
WATERLINE WATER METER WATER MANHOLE

WASTE SLUDGE WATER VALVE BOX

THE LIMITACO CONSULTING GROUP

STATE OF HAWAII KAKAAKO COMMUNITY DEVELOPMENT DISTRICT GENERAL NOTES ARBREVIATIONS AND SYMBOLS





EROSION CONTROL/BEST MANAGEMENT PRACTICES

- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREAS AND SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE DONE IN CONFORMANCE WITH AIR POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES: CHAPTER 11-60, "AIR POLLUTION CONTROL"
- MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY DEMOLITION, EXCAVATION, GRADING, OR TRENCHING WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- CONTRACTOR SHALL OBSERVE AND COMPLY WITH THE STATE DEPARTMENT OF HEALTH REGULATIONS REGARDING STORM WATER DISCHARGE.
- ALL EROSION CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, FOR EXAMPLE, WEEKLY IN DRY PERIODS AND WITHIN TWENTY-FOUR HOURS AFTER ANY RAINFALL OF 0.5 INCHES OR GREATER WITHIN A 24-HOUR PERIOD. DURING PROLONGED RAINFALL, DALLY CHECKING IS NECESSARY. DURING AN EVENT OF ABOVE NORMAL RAINFALL, THE CONTRACTOR SHALL REMOVE THE SEDIMENT AND DRAIN INLET FILTER AND REPLACE AFTER THE EVENT HAS PASSED. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL CHECKS AND REPAIRS AND A COPY SHALL BE AVAILABLE IN THE FIELD OFFICE.
- CATCH BASIN/INLET PROTECTION SHALL BE IMPLEMENTED AT ALL STORM DRAIN INLETS AND CATCH BASINS AS INDICATED TO PREVENT ANY SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. CATCH BASIN AND INLET PROTECTION DEVICES SHALL BE REMOVED DURING PERIODS OF ABOVE NORMAL RAINFALL AND REPLACED AFTER THE EVENT HAS PASSED. FOR CATCH BASIN AND DRAIN INLET PROTECTION DETAILS SEE SHEET C-28
- 6. CONTRACTOR SHALL INSTALL SILT FENCING AS SHOWN ON PLANS.
- THE STABILIZED CONSTRUCTION ACCESS PAD SHALL BE INSTALLED AT INGRESS AND EGRESS ENTRANCES TO THE CONSTRUCTION SITE PREVENT ANY MUD. DIRT, ROCK OR SEDIMENT FROM BEING TRACKED ONTO CITY OR STATE THE CONTRACTOR SHALL WASH DOWN ALL VEHICLE TIRES PRIOR TO LEAVING THE SITE.
- GOOD HOUSEKEEPING SHALL BE UTILIZED TO ENSURE PROTECTION OF ROADWAYS FROM MUD, DIRT, AND DEBRIS.
- THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES FOR THEIR CONSTRUCTION, STAGING, AND STORAGE AREAS AND SHALL INSPECT AND MONITOR HIS CONSTRUCTION, STAGING, AND STORAGE AREAS TO ENSURE THAT NO NON-STORM WATER DISCHARGES ARE EMITTED. IF SUCH SOURCES ARE IDENTIFIED THE CONTRACTOR SHALL PROVIDE IMMEDIATE MITIGATIVE
- 10. NO SEDIMENT LADEN RUNOFF SHALL LEAVE THE SITE.
- 11. WATER TRUCKS SHALL BE UTILIZED TO MINIMIZE THE AMOUNT OF AIRBORNE
- 12. THE FINAL LIFT OF EACH DAYS WORK SHALL BE COMPACTED TO PREVENT
- 13. CONTRACTOR SHALL ENSURE THE PROPER WORKING ORDER AND CONDUCT REGULAR MAINTENANCE OF ALL CONSTRUCTION EQUIPMENT. ALL CONSTRUCTION EQUIPMENT SHALL BE SERVICED OFFSITE AND NO OIL OR FUEL SHALL BE STORED ON THE SITE.
- 14. THE CONTRACTOR SHALL DISPOSE OF VEGETATION AND EQUIPMENT AND HYDRAULIC OILS OFF-SITE.
- 15. AT THE END OF THE GRADING OPERATION, EXISTING CATCH BASINS SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE CATCH BASINS SHALL BE REMOVED. FLUSHING INTO THE CATCH BASINS IS PROHIBITED.
- 16. GRASS SHALL BE ESTABLISHED ON DISTURBED AREAS WHICH ARE AT FINAL GRADE OR WILL NOT BE WORKED FOR LONGER THAN 14 DAYS. ALTERNATIVES TO GRASS INCLUDE 2" MINIMUM STRAW MULCH COVER, EROSION BLANKETS WITH ANCHORS, 6-MIL PLASTIC SHEETS, CHEMICAL SOIL STABILIZER, SEDIMENT TRAPS OR PONDS, OR INTERCEPTOR DIKES/SWALES. PERMANENT GRASSING OR PAVING SHALL BE APPLIED UPON COMPLETION OF GRADING WORK. THE CONTRACTOR SHALL ALSO ESTABLISH COVER OR LANDSCAPE PRIOR TO REMOVING EROSION CONTROL MEASURES.

LEGEND:

LIMITS OF WORK/GRADING

PROPERTY LINE

TEMP CONST

INGRESS/EGRESS TEMP. SILT FENCE

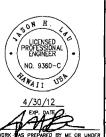
FLOATING SILT BARRIER TEMP. DUST BARRIER/SILT

TURBIDITY BARRIER

DIRECTION OF RUNOFF FLOW ---

NOTES:

1. THE PROJECT INCLUDES THE INCIDENTAL REMOVAL/ON-SITE RELOCATION OF POTENTIAL CONTAMINATED SOILS AND CAPPING THE SITE SOILS WITH CLEAN IMPORTED MATERIAL, LANDSCAPING AND/OR PAVEMENT. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT'S TECHNICAL SPECIFICATIONS FOR ANY CONSTRUCTION ACTIVITIES THAT INVOLVE THE DISTURBANCE OF EXISTING SITE SOILS AND/OR THAT MAY EXPOSE WORKERS OR THE PUBLIC TO POTENTIALLY CONTAMINATED SOIL.THE CONTRACTOR ALSO SHALL REVIEW THE JUNE 2009 ENVIRONMENTAL HAZARD EVALUATION, KAKAAKO MAKAI DISTRICT AND THE JUNE 2009 ENVIRONMENTAL HAZARD MANAGEMENT PLAN, KAKAAKO MAKAI DISTRICT PREPARED BY THE LIMITACO CONSULTING GROUP AND ENVIROSERVICES & TRAINING CENTER, LLC. AS WELL AS HISTORIC REPORTS REFERENCED THEREIN. SUSPECT CONTAMINANTS ASSOCIATED WITH LONG-TERM EXPOSURE HAZARDS AT THE VARIOUS SITES WITHIN THE PROJECT AREA INCLUDE, BUT ARE NOT LIMITED TO, PETROLEUMS, POLYNUCLEAR AROMATIC HYDROCARBONS, AND HEAVY METALS.





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HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

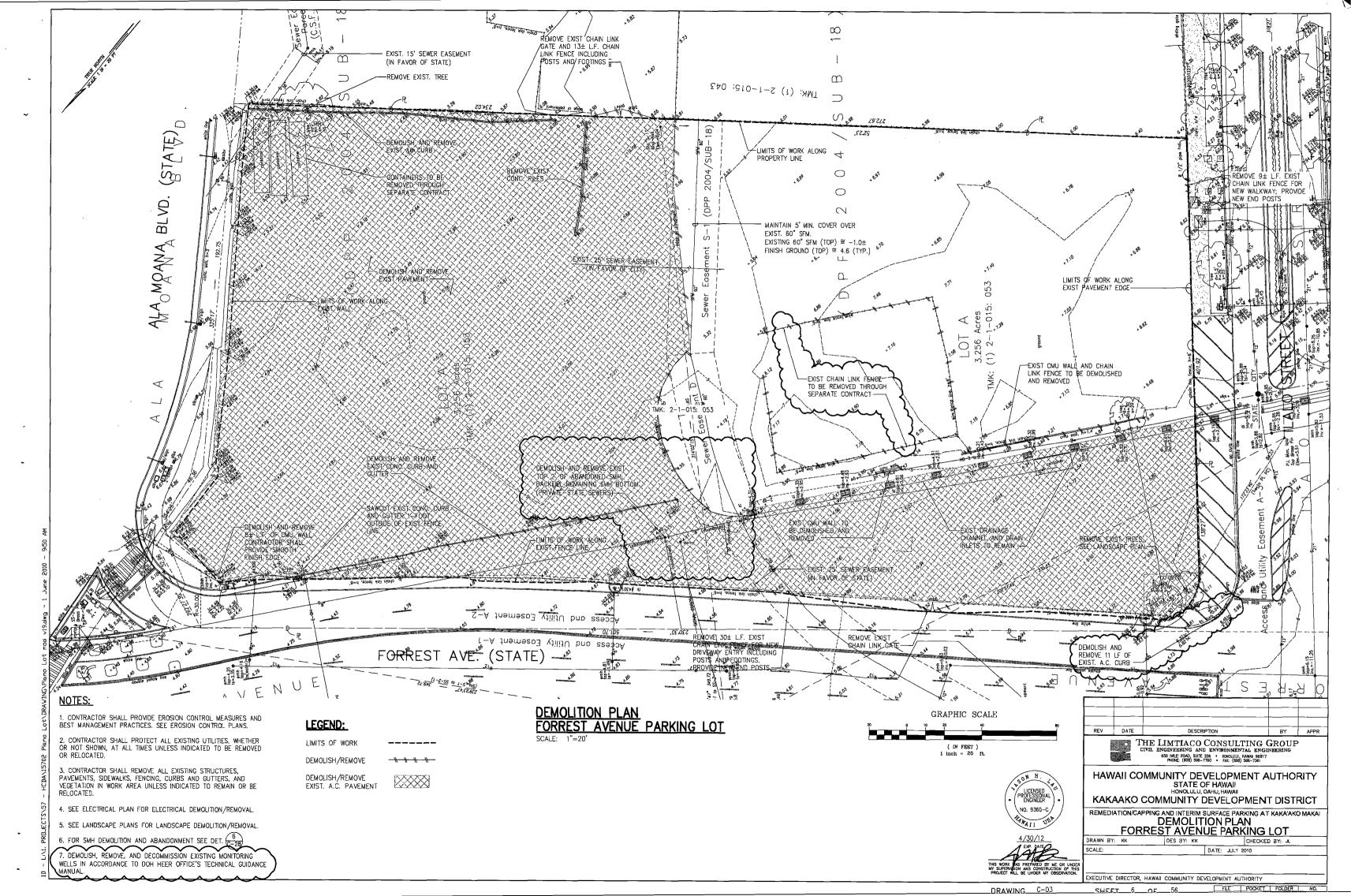
FROSION CONTROL PLAN

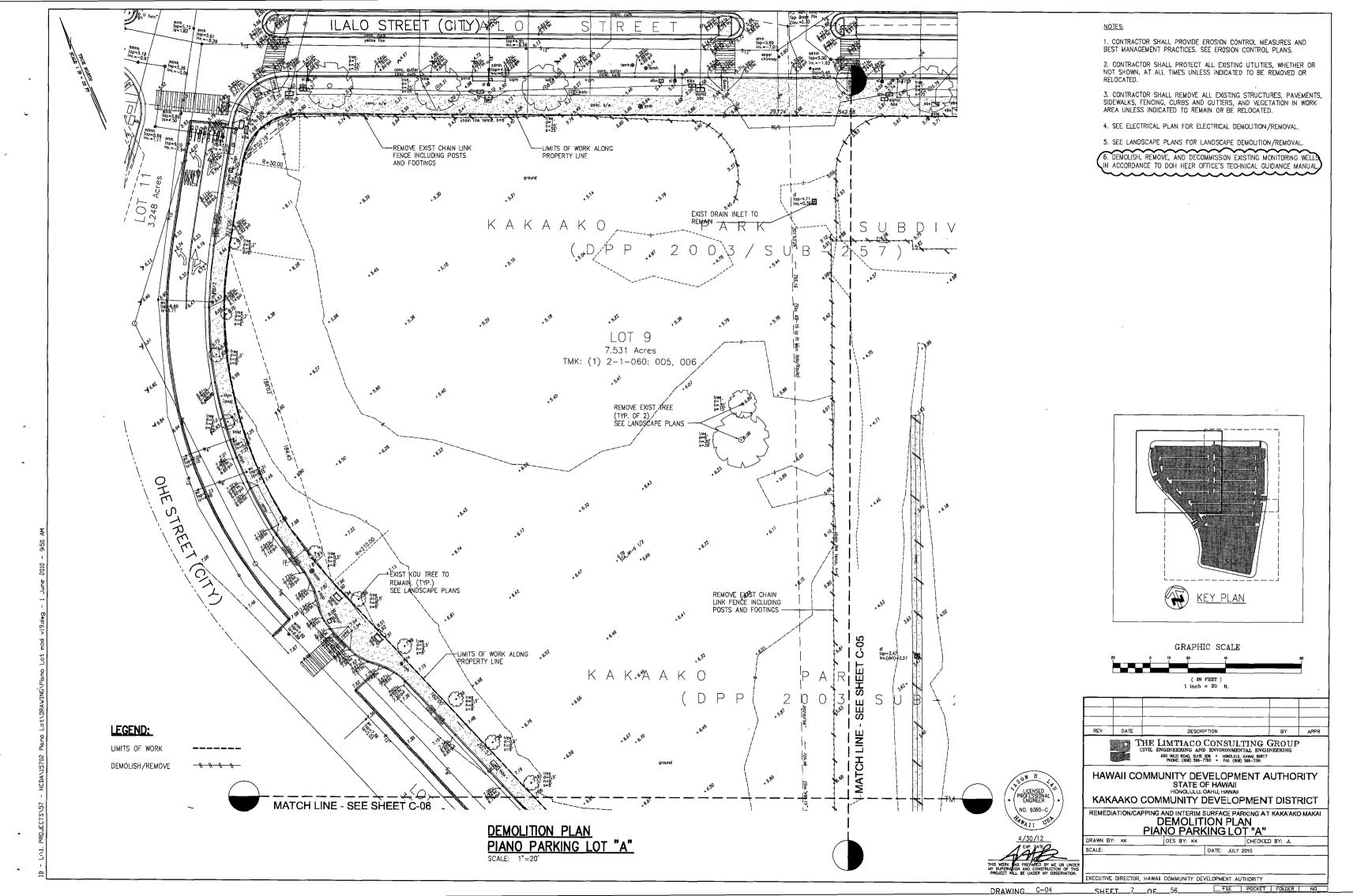
DRAWN BY: KK	DES BY: KK	CHECKED BY: JL
SCALE:	DATE:	JULY 2010
JUNES,	DATE:	JULY 2010

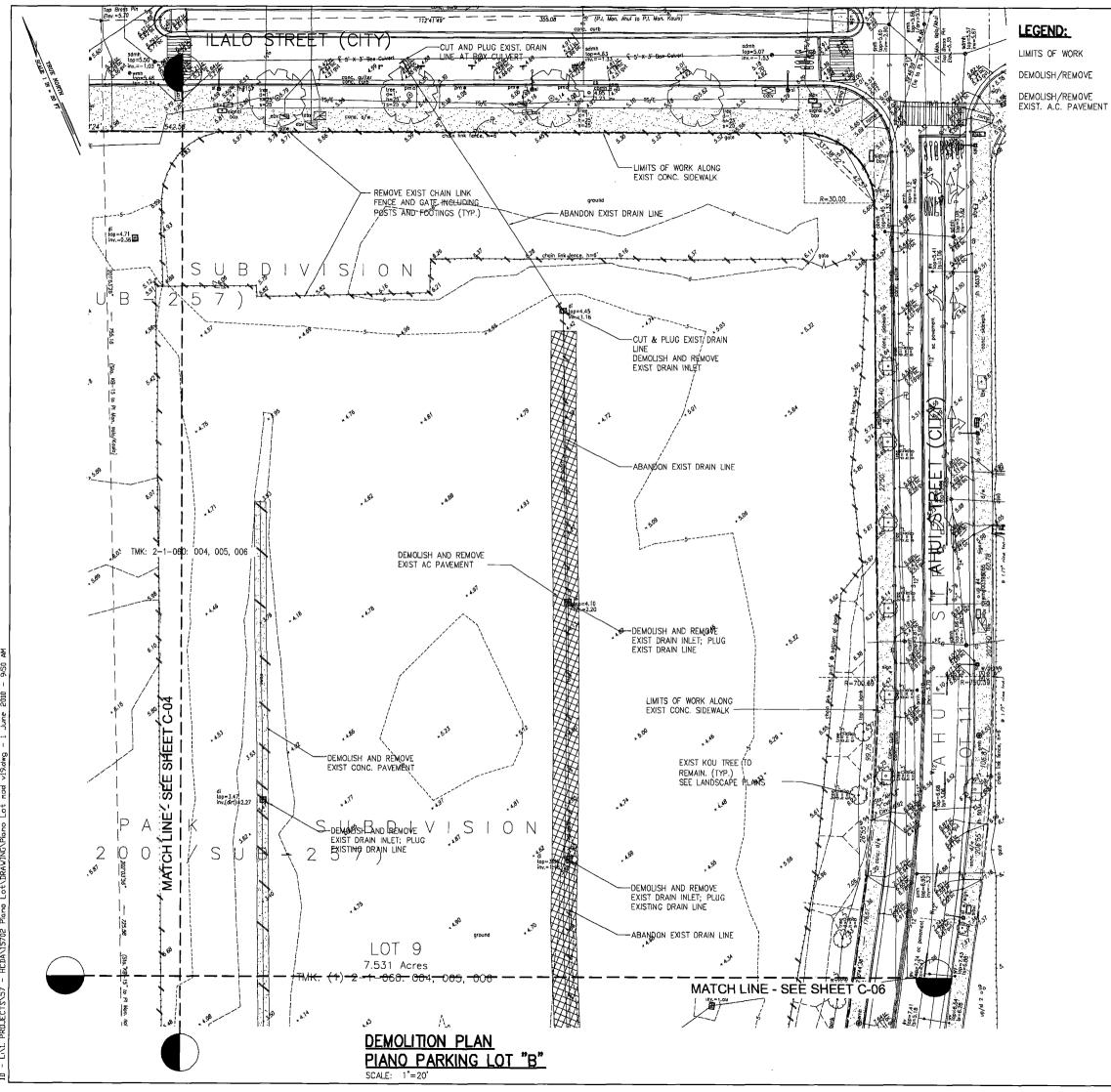
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DRAWING C-02

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

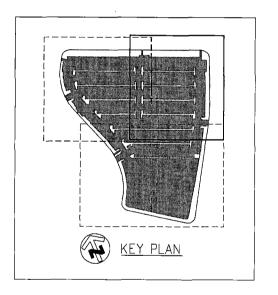


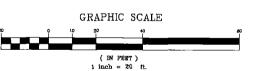




NOTES:

- 1. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES. SEE EROSION CONTROL PLANS.
- 2. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN, AT ALL TIMES UNLESS INDICATED TO BE REMOVED OR RELOCATED.
- 3. CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, PAVEMENTS, SIDEWALKS, FENCING, CURBS AND CUTTERS, AND VEGETATION IN WORK AREA UNLESS INDICATED TO REMAIN OR BE
- 4. SEE ELECTRICAL PLAN FOR ELECTRICAL DEMOLITION/REMOVAL.
- 5. SEE LANDSCAPE PLANS FOR LANDSCAPE DEMOLITION/REMOVAL
- 6. DEMOLISH, REMOVE, AND DECOMMISSION EXISTING MONITORING WELLS IN ACCORDANCE TO DOH HEER OFFICE'S TECHNICAL









THE LIMTIACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING
650 IMLE BOOD, SUITE 205 MINICIPUL HAWN 95817
PRINCE (808) 556-7706 - Fix (608) 556-7761

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

DEMOLITION PLAN PIANO PARKING LOT "B"

DRAWN BY: KK DES BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010

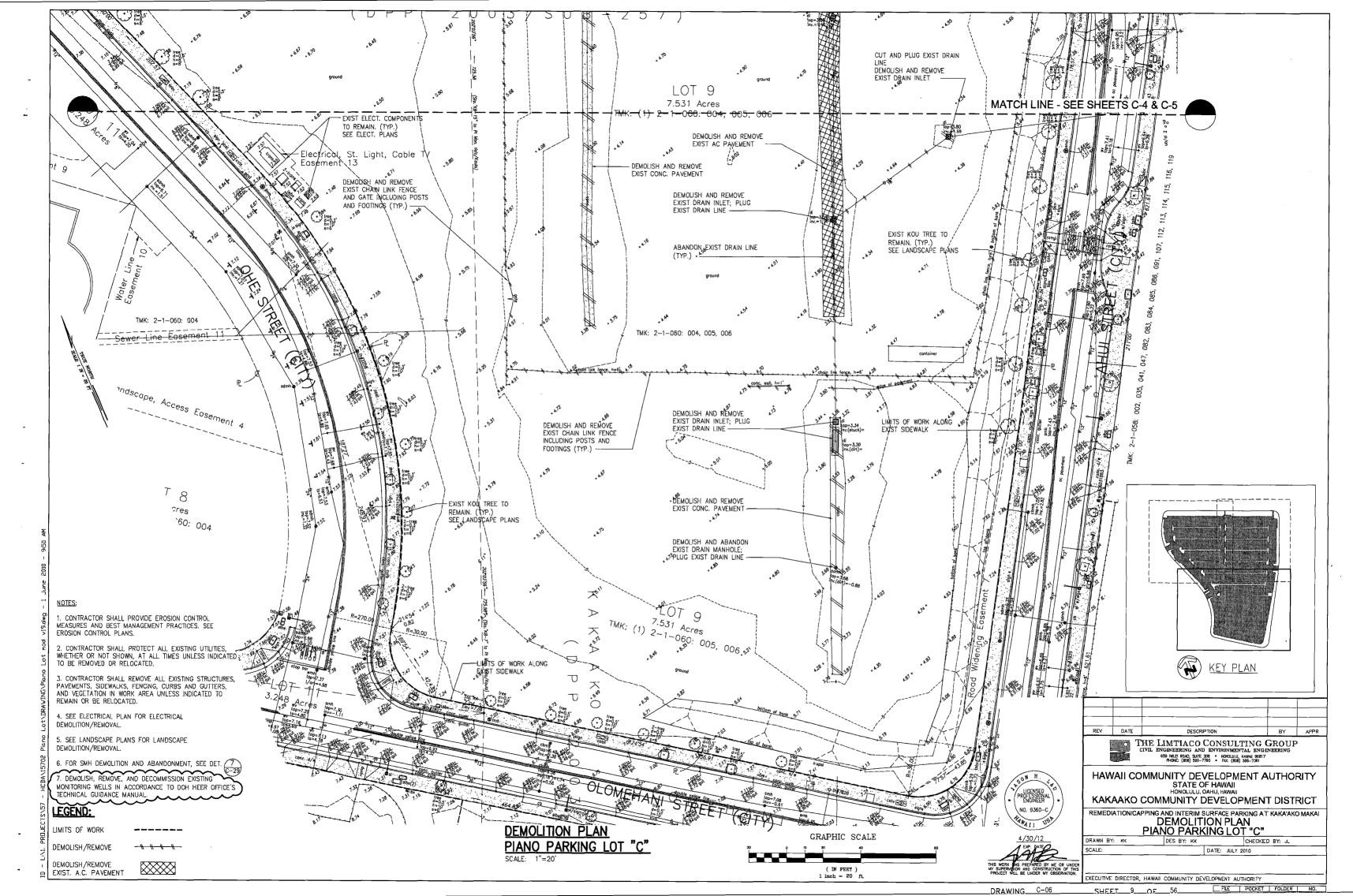
DRAWING C-05

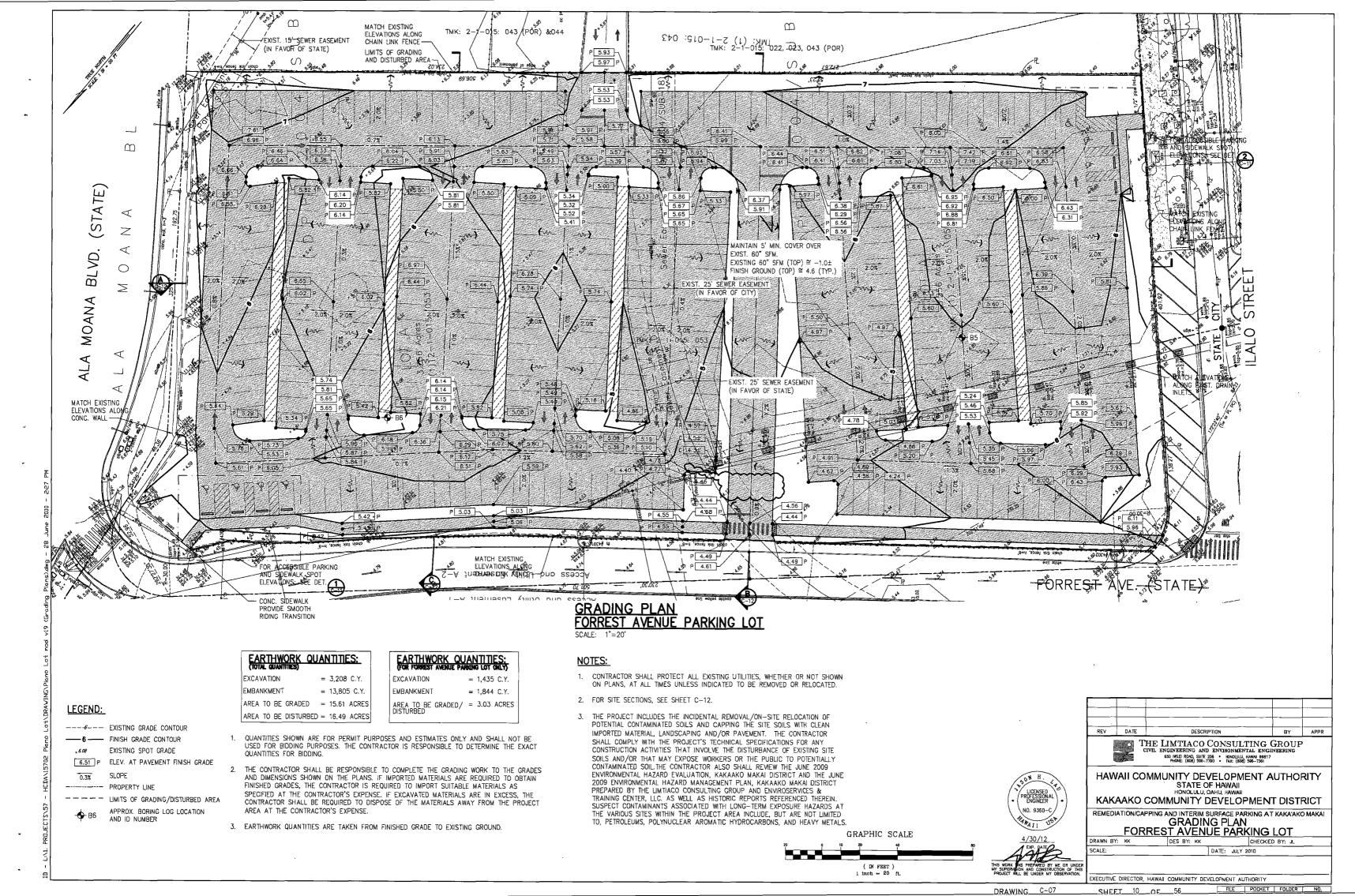
LICENSED PROFESSIONAL ENGINEER

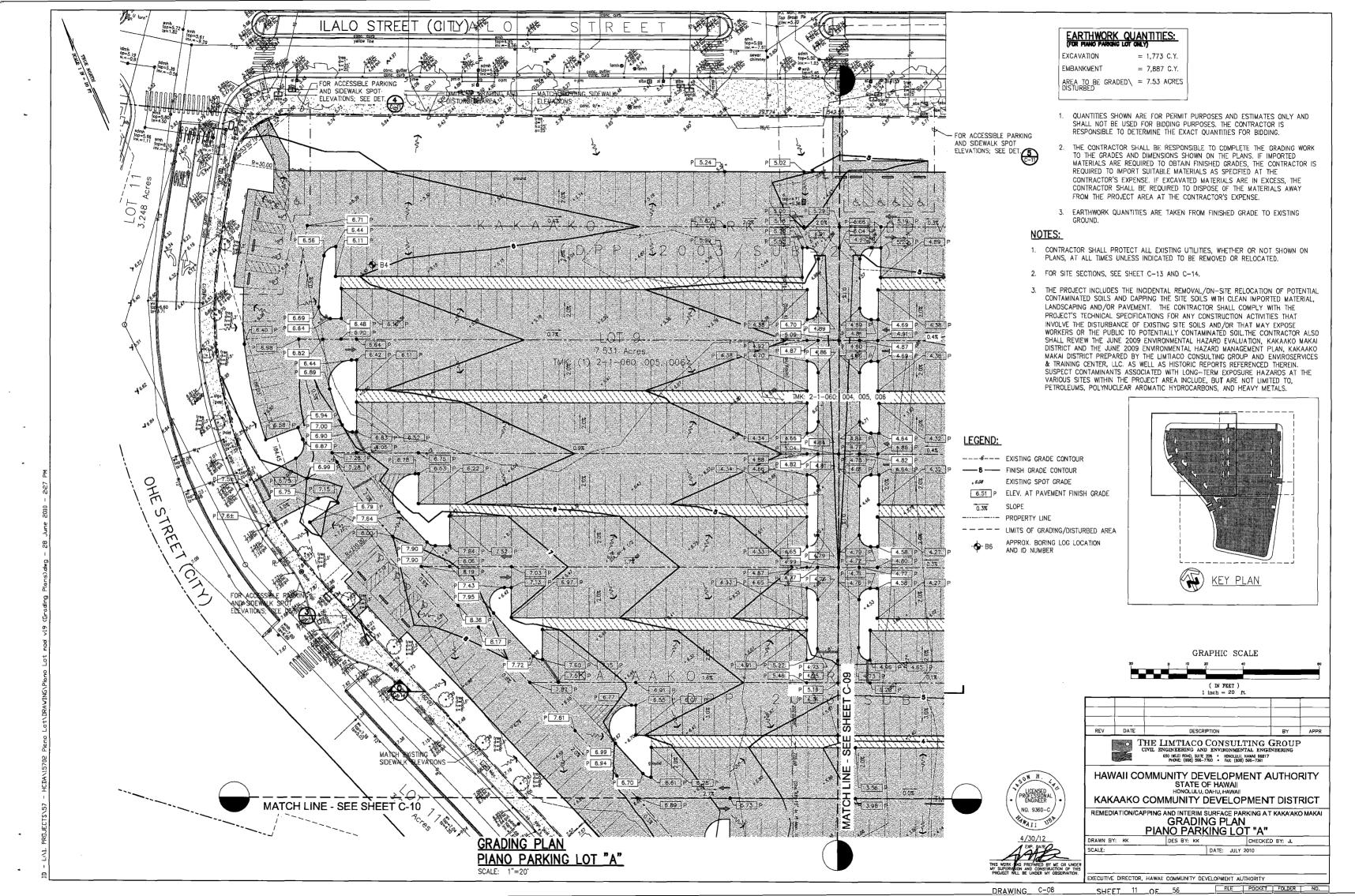
4/30/12

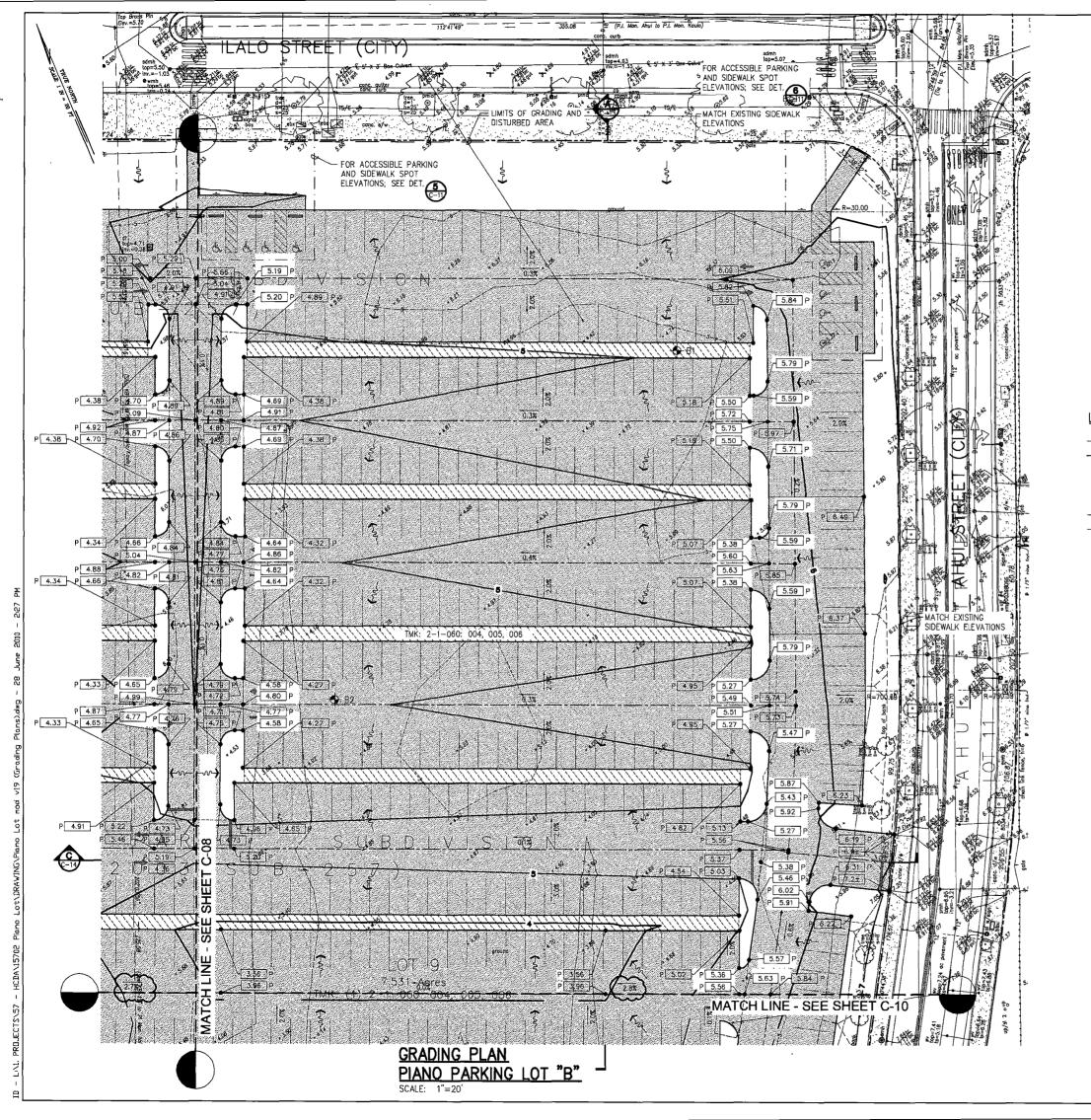
EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY <u> SHEET 8 OF 56</u>

FILE POCKET FOLDER NO.









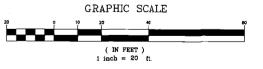
- 1. FOR EARTHWORK QUANTITIES SEE SHEET C-08.
- 2. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON PLANS, AT ALL TIMES UNLESS INDICATED TO BE REMOVED OR
- 3. FOR SITE SECTIONS, SEE SHEET C-13 AND C-14.
- 4. THE PROJECT INCLUDES THE INCIDENTAL REMOVAL/ON—SITE RELOCATION OF POTENTIAL CONTAMINATED SOILS AND CAPPING THE SITE SOILS WITH CLEAN IMPORTED MATERIAL, LANDSCAPING AND/OR PAVEMENT. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT'S TECHNICAL SPECIFICATIONS FOR ANY CONSTRUCTION ACTIVITIES THAT INVOLVE THE DISTURBANCE OF EXISTING SITE SOILS AND/OR THAT MAY EXPOSE WORKERS OR THE PUBLIC TO POTENTIALLY CONTAMINATED SOIL THE CONTRACTOR ALSO SHALL REVIEW THE JUNE 2009 ENVIRONMENTAL HAZARD EVALUATION, KAKAAKO MAKAI DISTRICT AND THE JUNE 2009 ENVIRONMENTAL HAZARD MANAGEMENT PLAN, KAKAAKO MAKAI DISTRICT PREPARED BY THE LIMITACO CONSULTING GROUP AND ENVIROSERVICES & TRAINING CENTER, LLC. AS WELL AS HISTORIC REPORTS REFERENCED THEREIN. SUSPECT CONTAMINANTS ASSOCIATED WITH LONG-TERM EXPOSURE HAZARDS AT THE VARIOUS SITES WITHIN THE PROJECT AREA INCLUDE, BUT ARE NOT LIMITED TO, PETROLEUMS, POLYNUCLEAR AROMATIC HYDROCARBONS, AND HEAVY METALS.

LEGEND:

---- EXISTING GRADE CONTOUR - FINISH GRADE CONTOUR EXISTING SPOT GRADE 6.51 P ELEV. AT PAVEMENT FINISH GRADE 0.3% SLOPE -- PROPERTY LINE

---- LIMITS OF GRADING/DISTURBED AREA APPROX. BORING LOG LOCATION







650 IWLEI ROAD, SUITE 208 • HONOLULU, HAWAII 96817 PHONE: (808) 596-7790 • FAX: (808) 595-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

GRADING PLAN PIANO PARKING LOT "B" DRAWN BY: KK DES BY: KK CHECKED BY: JL SCALE:

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

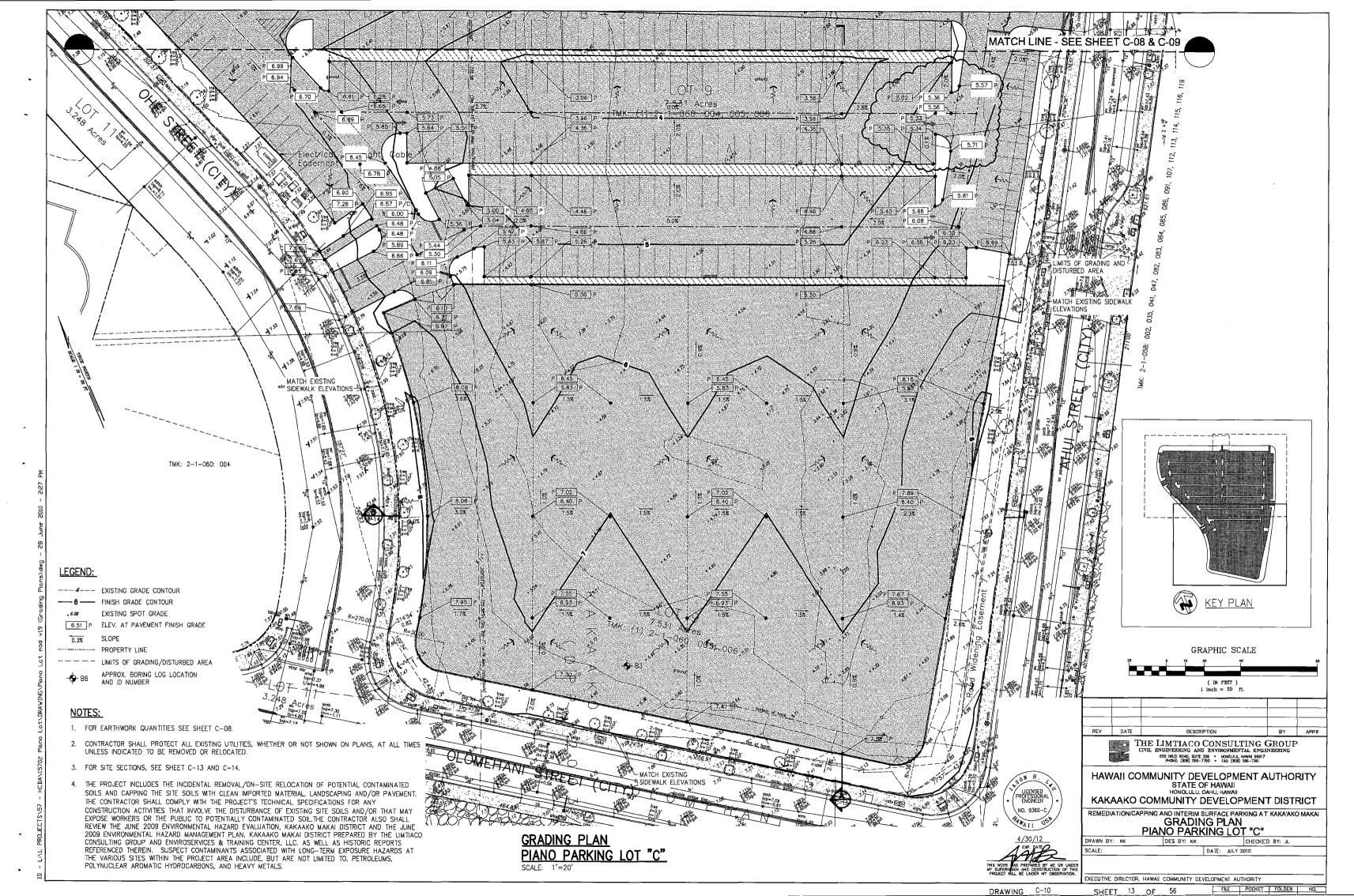
DRAWING_

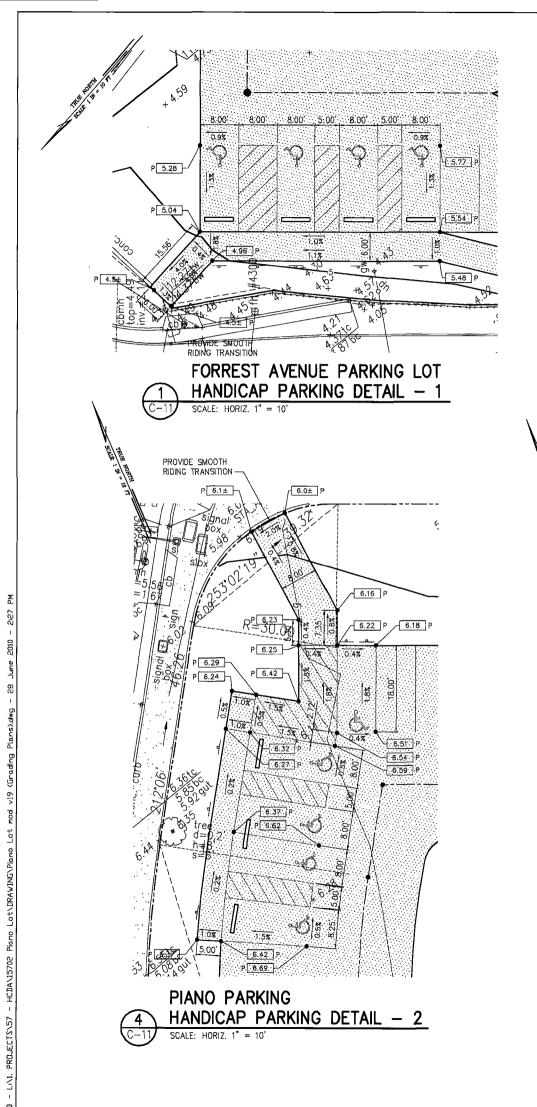
SHEET 12 OF

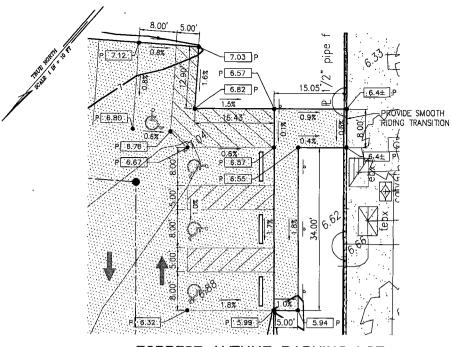
NO. 9360-C

4/30/12

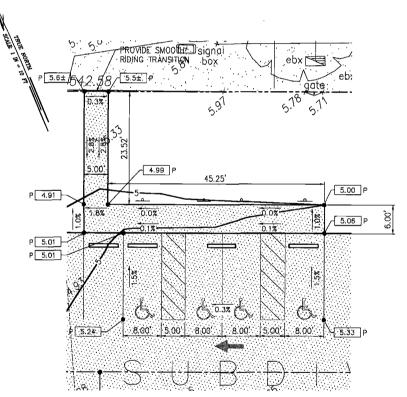
FILE POCKET FOLDER NO.



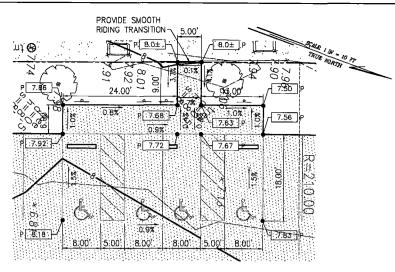




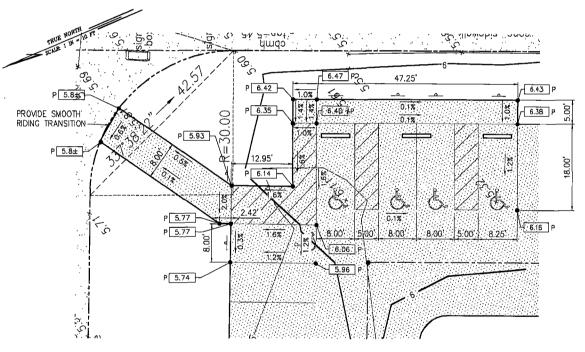
FORREST AVENUE PARKING LOT HANDICAP PARKING DETAIL - 2



PIANO LOT PARKING HANDICAP PARKING DETAIL - 3



PIANO LOT PARKING HANDICAP PARKING DETAIL - 1



PIANO LOT PARKING HANDICAP PARKING DETAIL - 4



THE LIMTIACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING
650 INLIE ROAD, SUITE 2008 * HONOLULU, HAWAI 96817
PROME: (600) 506-7700 * FAX: (600) 506-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

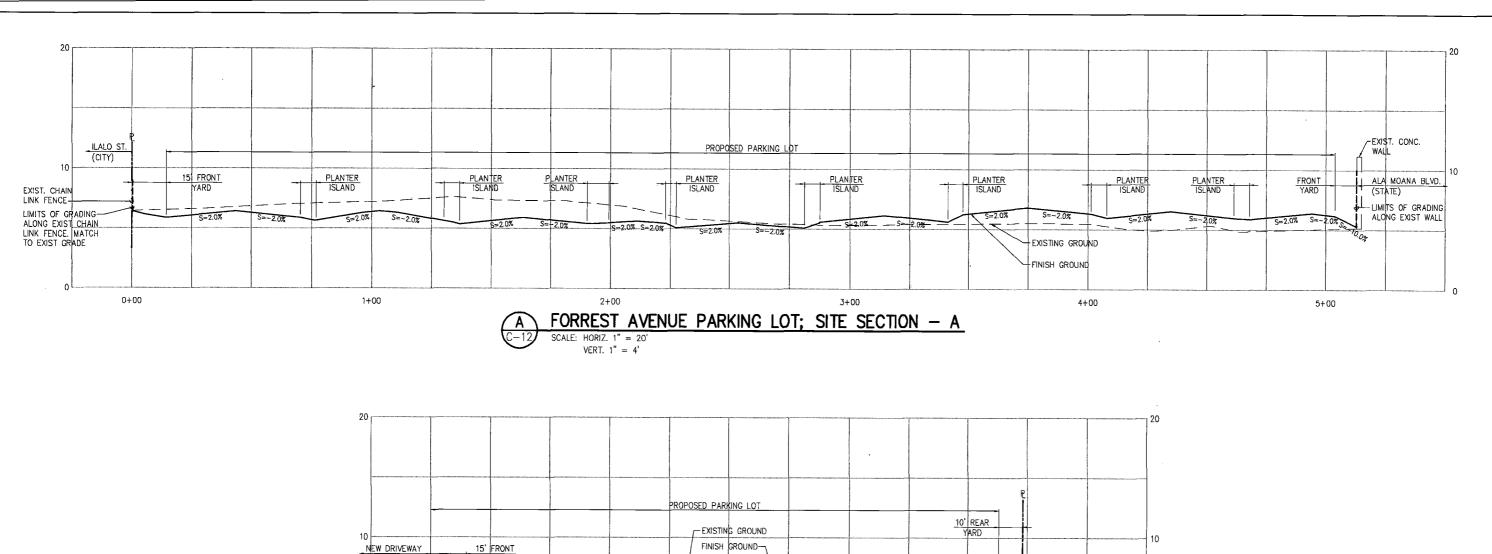
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

ACCESSIBLE PARKING SPOT ELEVATIONS

CHECKED BY: JL SCALE: 1" = 10" DATE: JULY 2010 EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DRAWING

SHEET 14 OF 56



PROPOSED PARKING LOT

15' FRONT
TYARD

EXIST. CHAIN
LINK FENCE
MATCH
TO EXIST GRADE.

FORREST AVENUE PARKING LOT; SITE SECTION — B

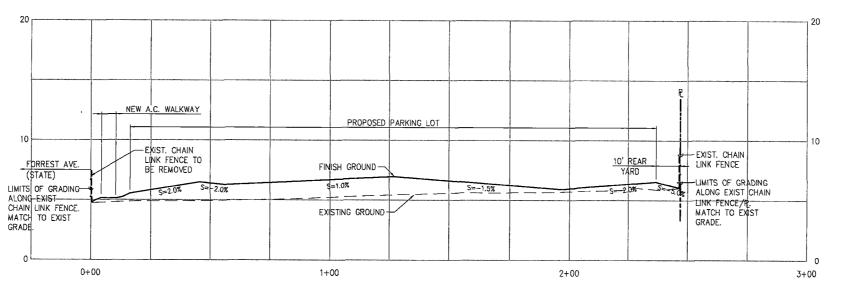
SCALE: HORIZ. 1" = 20'
VERT. 1" = 4'

(FORREST AVE. STATE)

0+00

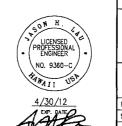
LIMITS OF GRADING-

ALONG EXIST
CHAIN LINK FENCE.
MATCH TO EXIST
GRADE.



FORREST AVENUE PARKING LOT; SITE SECTION — C

SCALE: HORIZ. 1" = 20'
VERT. 1" = 4'



REV DATE DESCRIPTION BY APPR

THE LIMITACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING

500 Mail ROAD, SITE 266 + HONQUIL HAWAY 88817

HAWAII COMMUNITY DEVELOPMENT AUTHORITY

STATE OF HAWAII
HONGLU, OAHU, HAWAII
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

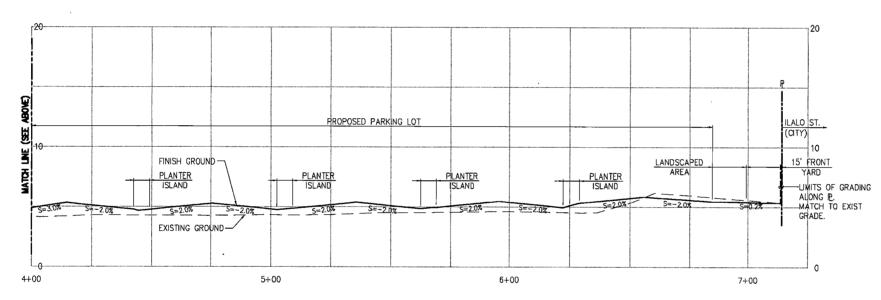
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

MEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE SECTIONS FORREST AVENUE PARKING LOT

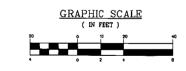
DRAWN BY: KK DES BY: KK CHECKED BY: JL

SCALE: DATE: JULY 2010

DRAWING C-12 SHEET 15 OF 56 FILE POCKET FOLDER NO.



PIANO PARKING LOT; SITE SECTION - A SCALE: HORIZ. 1" = 20' VERT. 1" = 4'



REV	DATE	DESCRIPTION	BY	APPR
	o T	HE LIMTIACO CONSULTING	GROUP	,

CIVIL ENGINEERING AND ENVIRONMENTAL ENGIN
650 INLE ROAD, SUITE 208 • HONOLUL, HAWAI 96817
PHONE: (808) 595-7790 • FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE SECTIONS PIANO PARKING LOT

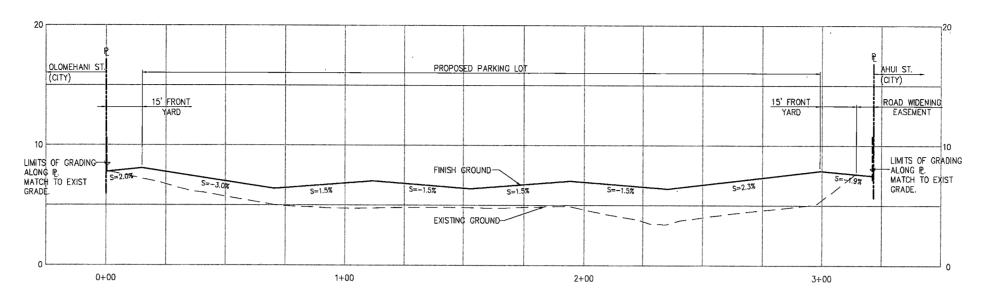
DRAWN BY: KK DES BY: KK CHECKED BY: JL

DATE: JULY 2010

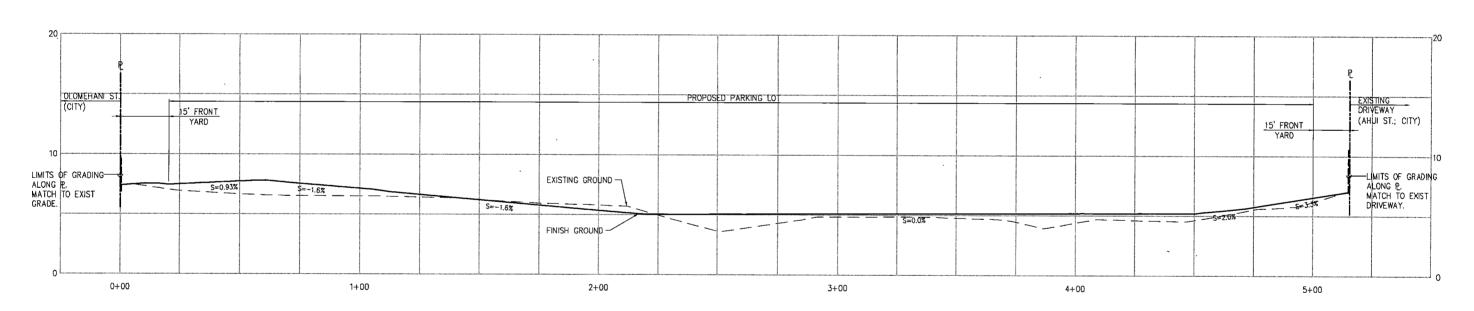
EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DRAWING _C-13_

FILE POCKET FOLDER NO. SHEET _16 OF _56_



PIANO PARKING LOT; SITE SECTION - B



PIANO PARKING LOT; SITE SECTION - C SCALE: HORIZ. 1" = 20' VERT. 1" = 4'







HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE SECTIONS
PIANO PARKING LOT

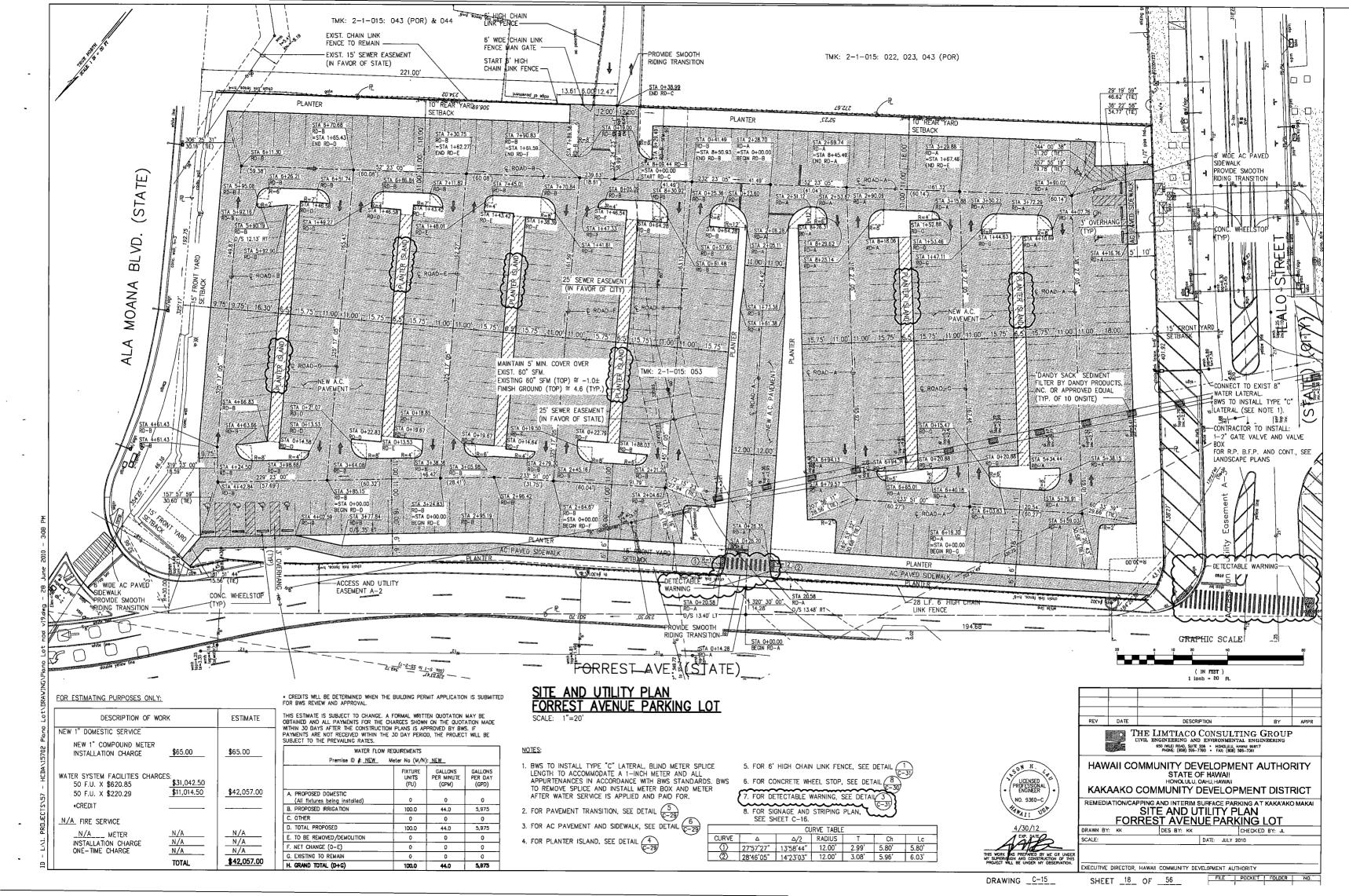
DRAWN BY: KK DES BY: KK CHECKED BY: JL

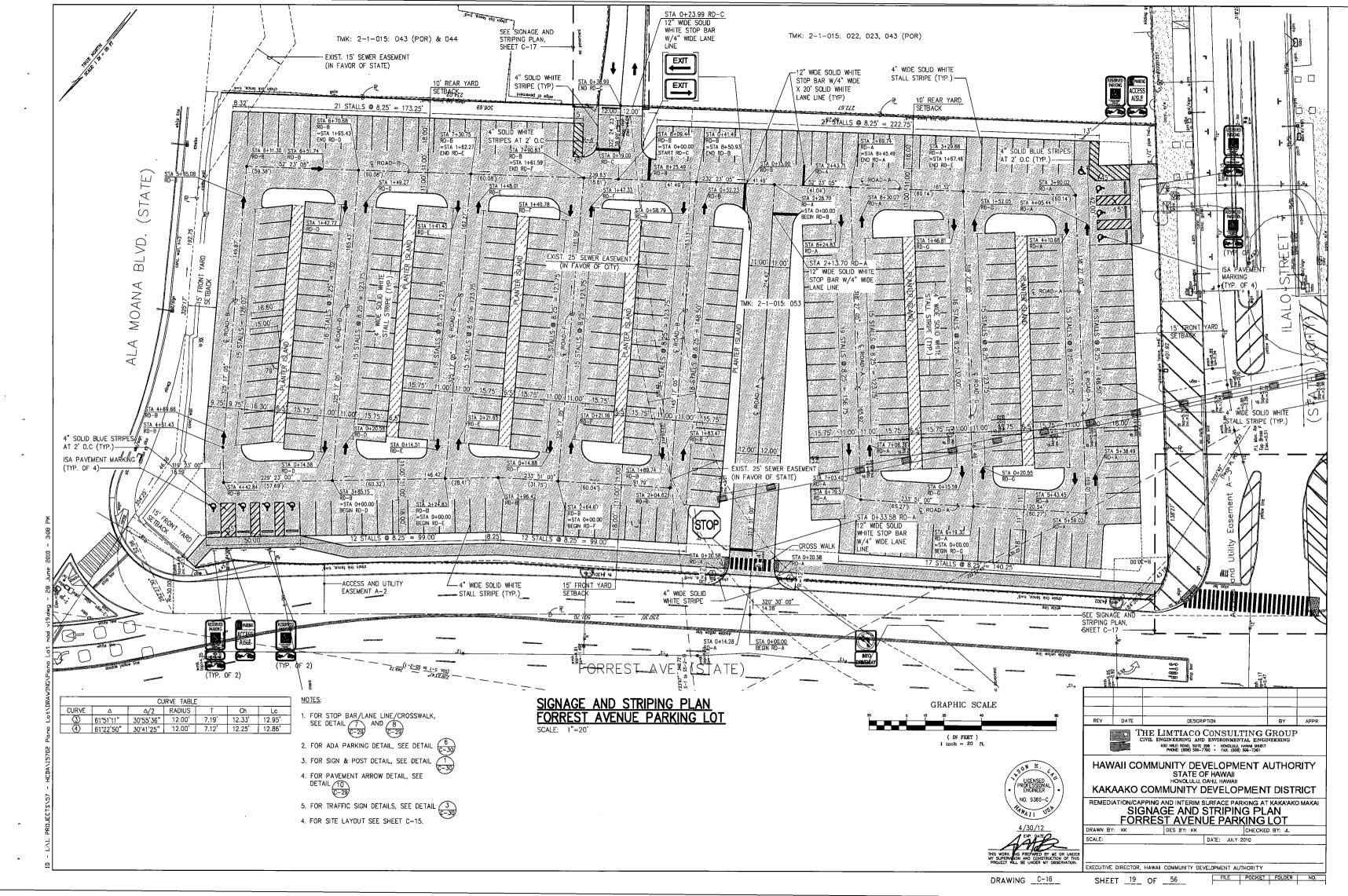
SCALE: DATE: JULY 2010

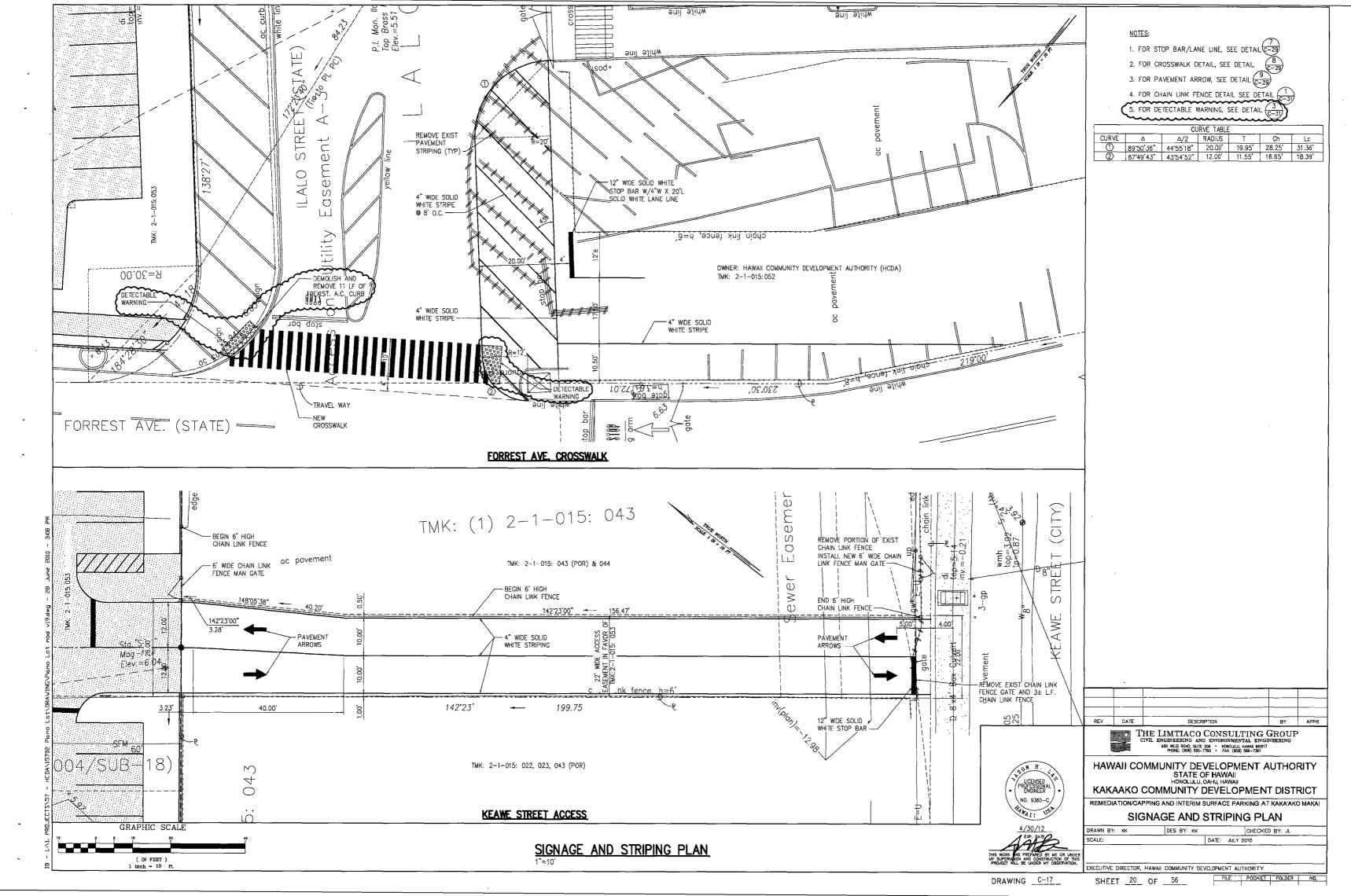
DRAWN BY: KK

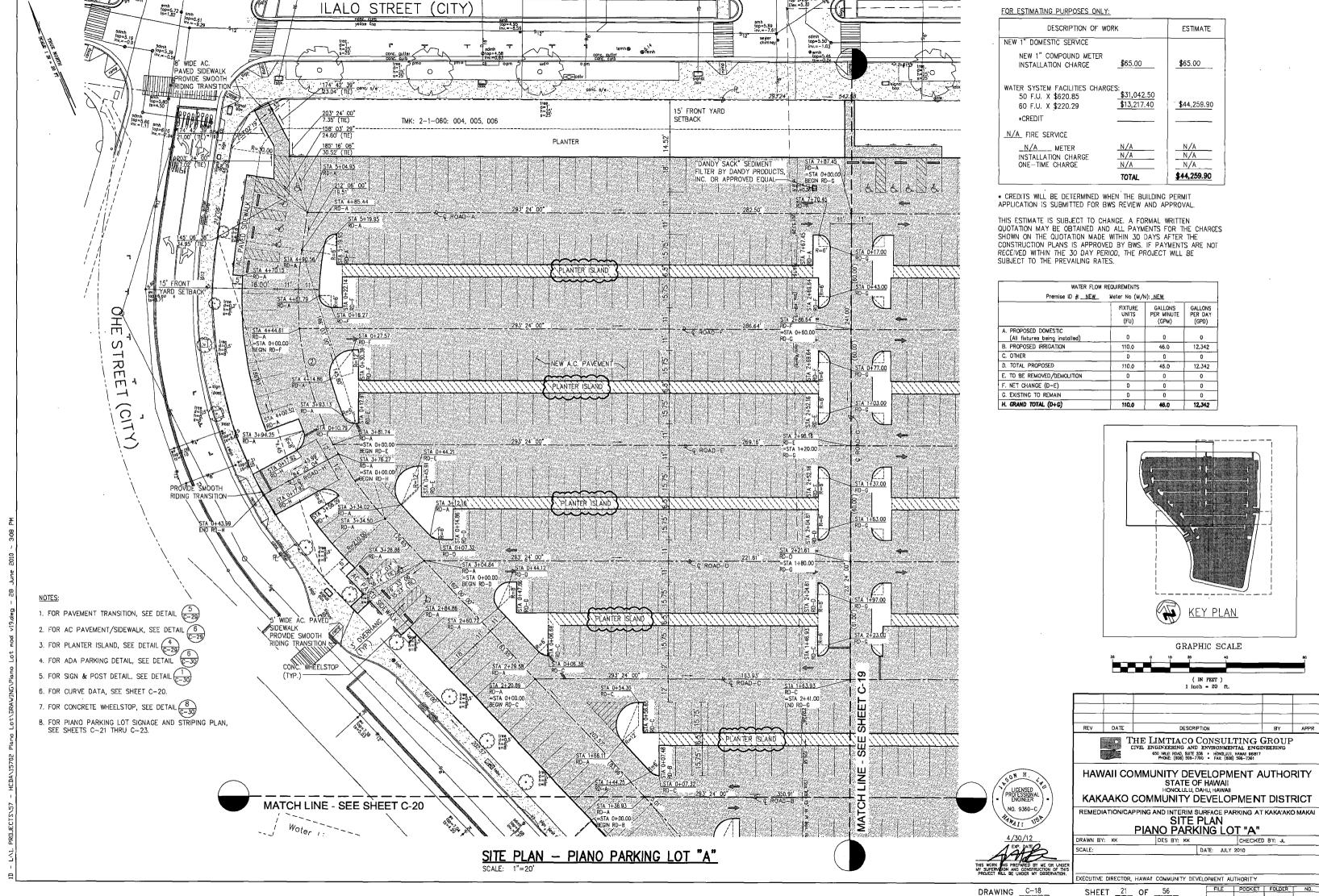
DRAWING _C-14_

SHEET _17_ OF __56__

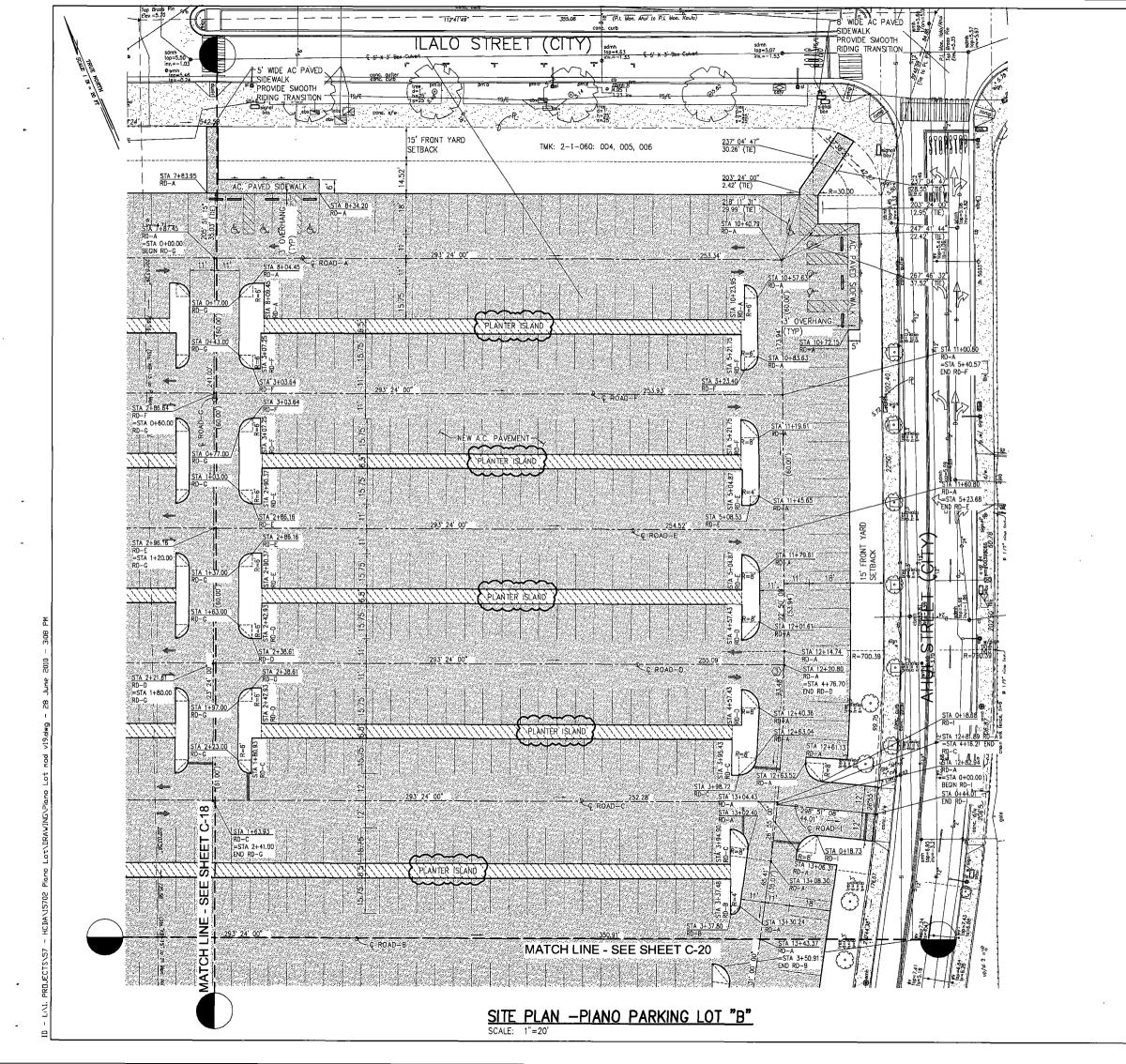




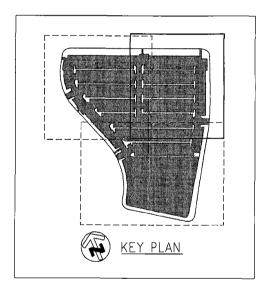


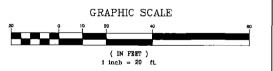


SHEET _21 OF _ 56



- 1. FOR PAVEMENT TRANSITION, SEE DETAIL (5)
- 2. FOR AC PAVEMENT/SIDEWALK, SEE DETAIL 6 C-29
- 3. FOR PLANTER ISLAND, SEE DETAIL 4
 C-29
 6
 6
 C-39
- 5. FOR SIGN & POST DETAIL, SEE DETAIL (-39)
- 6. FOR CURVE DATA, SEE SHEET C-20.
- 7. FOR CONCRETE WHEELSTOP, SEE DETAIL $\begin{pmatrix} 8 \\ C-30 \end{pmatrix}$
- 8. FOR PIANO PARKING LOT SIGNAGE AND STRIPING PLAN, SEE SHEETS C-21 THRU C-23.





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REV	DATE	DESCRIPTION	BY	APPR
	οТ	HE LIMTIACO CONSULTIN	G GROUF	>

650 IWLEI ROAD, SUITE 206 • HONOLULU, HAWAII 96817 PHONE: (808) 596-7790 • FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY
STATE OF HAWAII
HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE PLAN
PIANO PARKING LOT "B"

DRAWN BY: KK DES BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

FILE POCKET FOLDER NO.

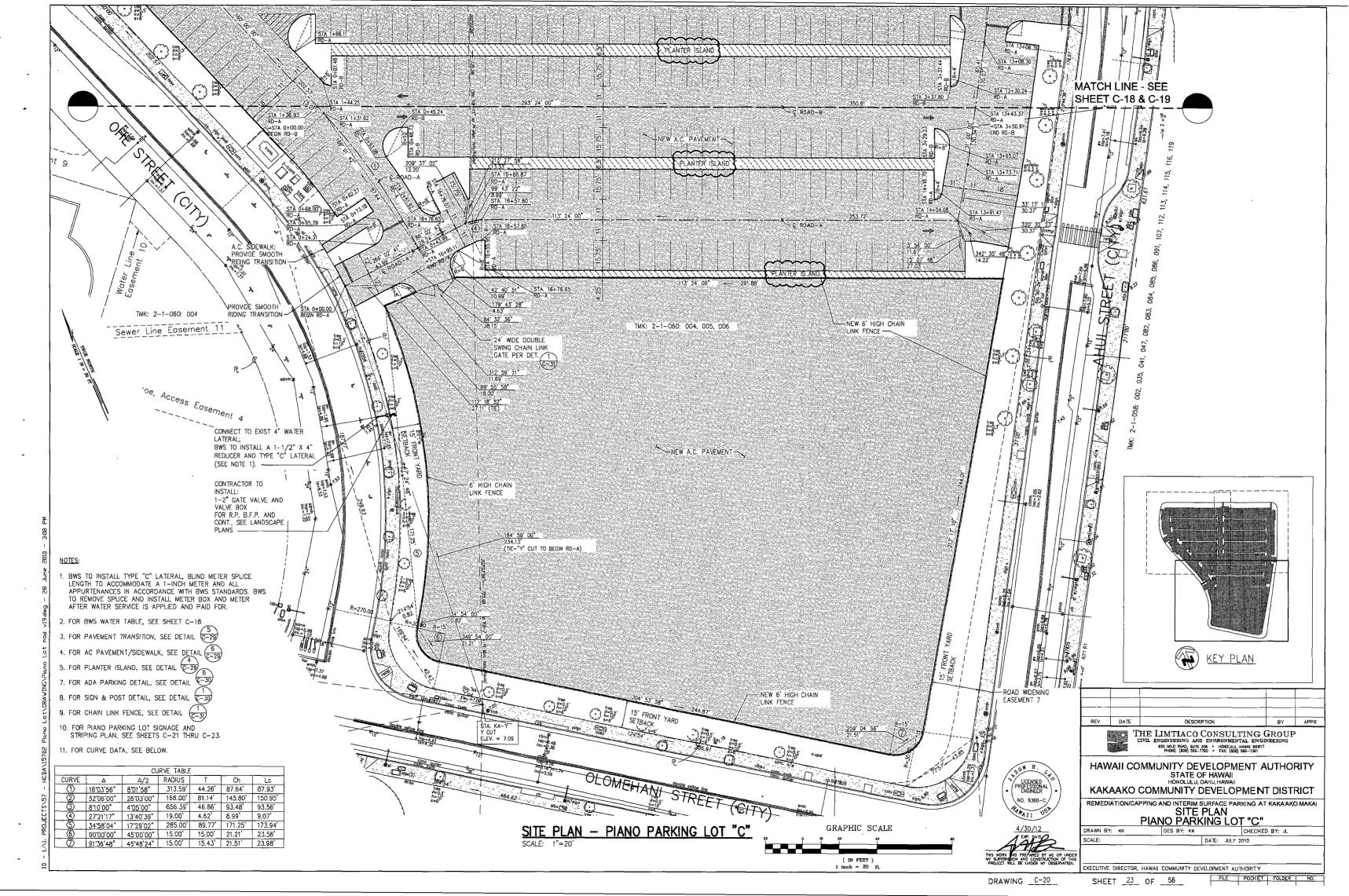
DRAWING _C-19

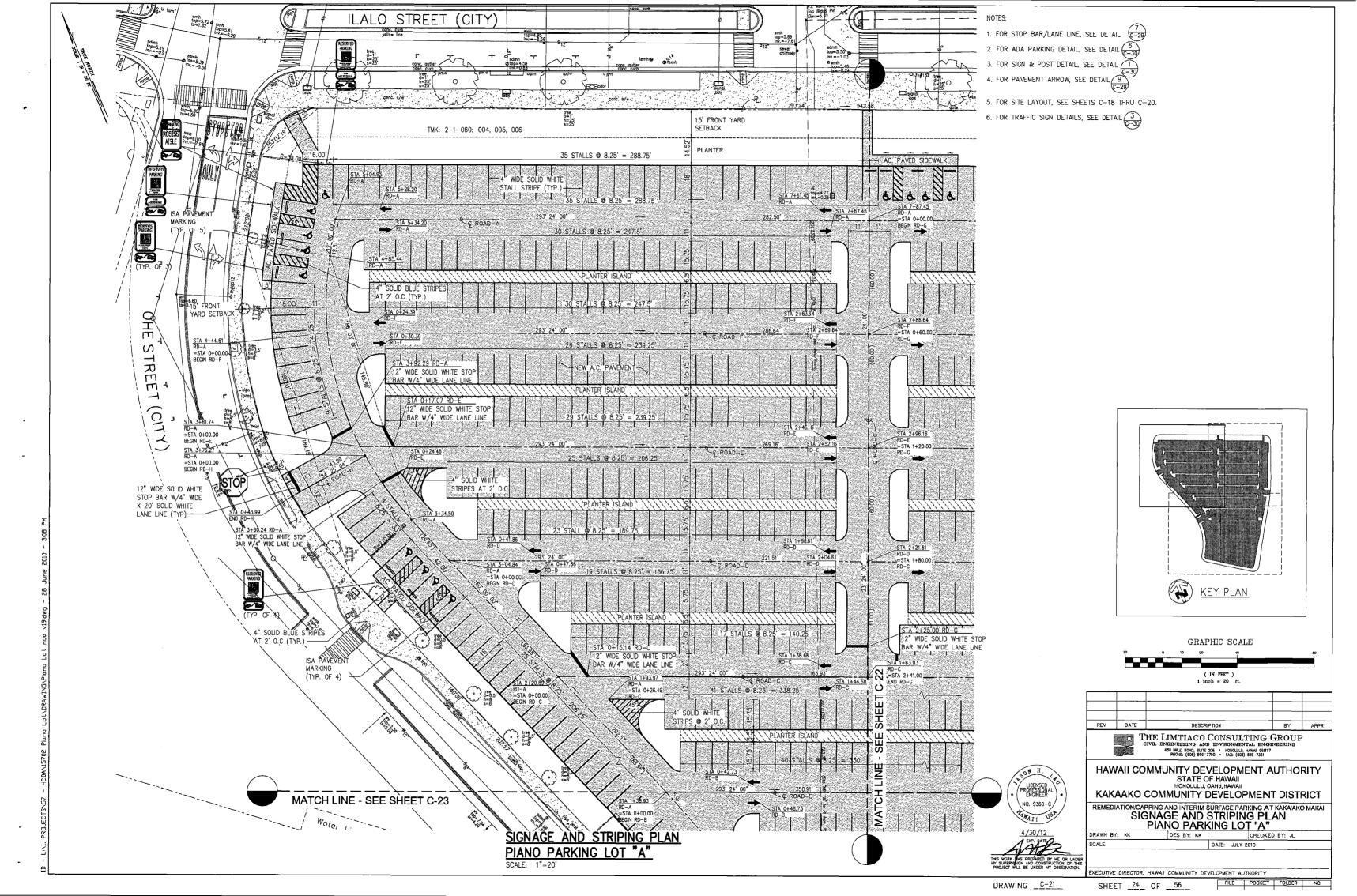
LICENSED PROFESSIONAL ENGINEER

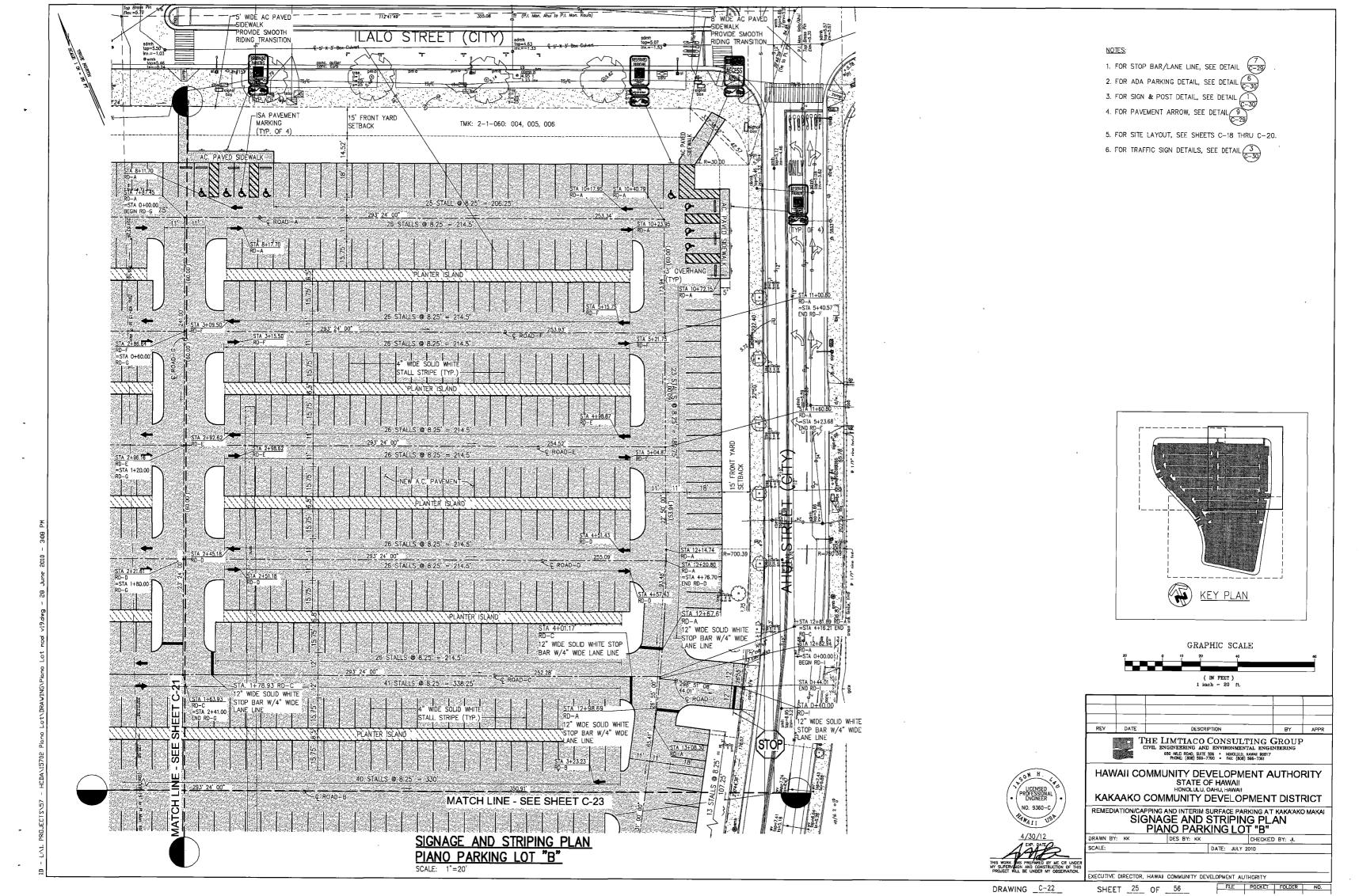
NO. 9360-C

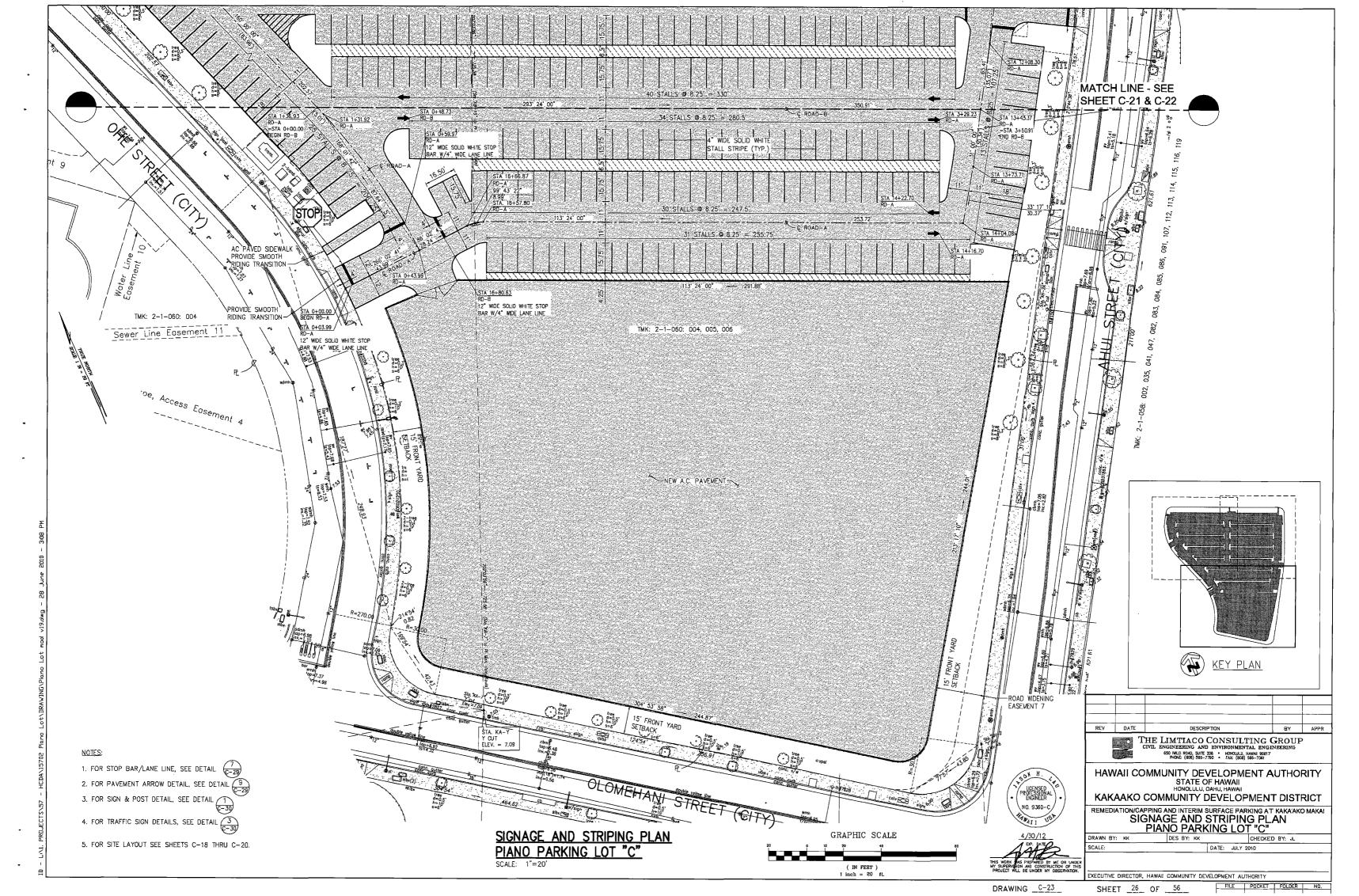
4/30/12

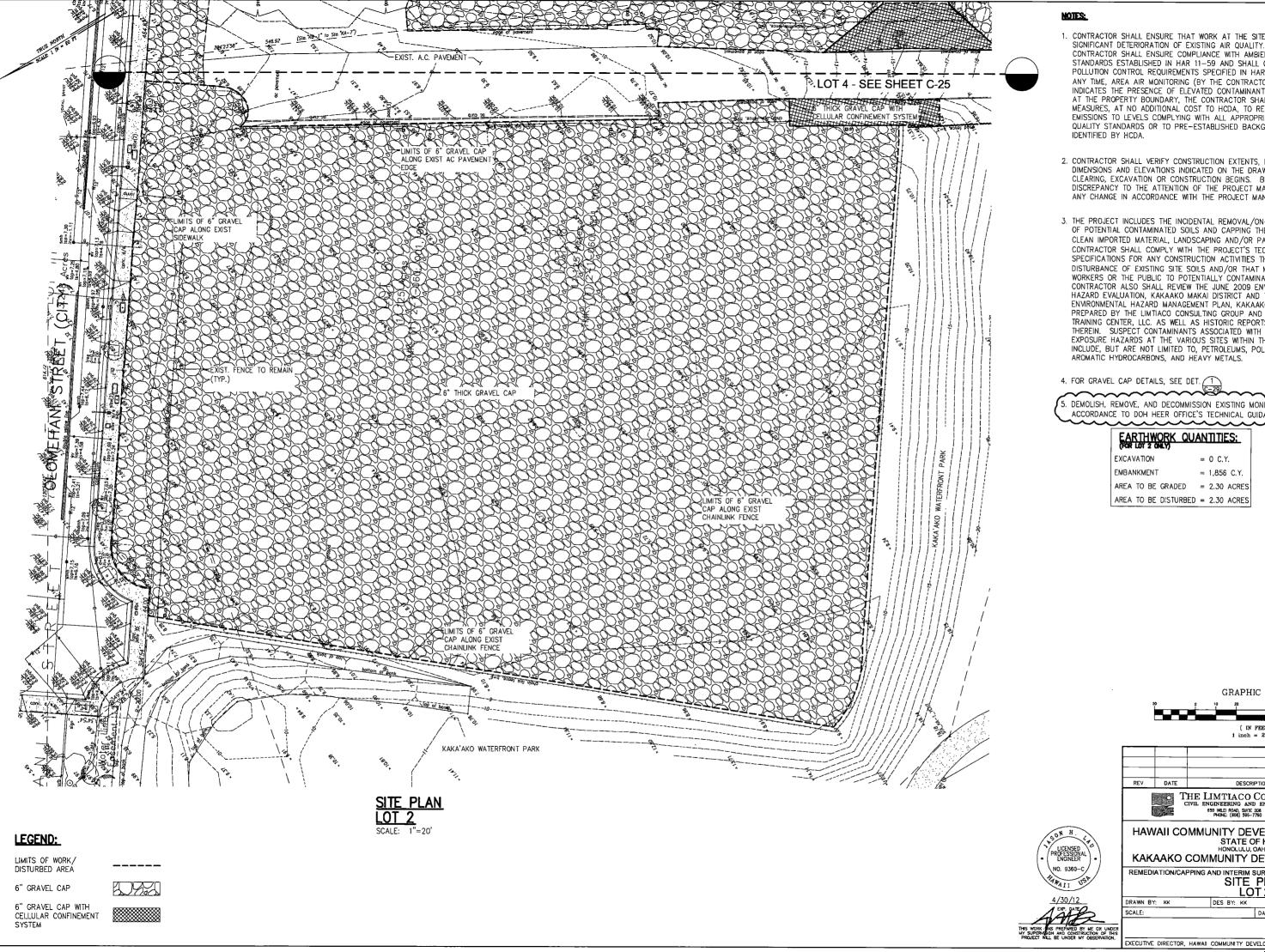
SHEET _22_ OF __58_











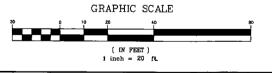
- 1. CONTRACTOR SHALL ENSURE THAT WORK AT THE SITE DOES NOT CAUSE SIGNIFICANT DETERIORATION OF EXISTING AIR QUALITY, SPECIFICALLY, THE CONTRACTOR SHALL ENSURE COMPLIANCE WITH AMBIENT AIR QUALITY STANDARDS ESTABLISHED IN HAR 11-59 AND SHALL COMPLY WITH AIR POLLUTION CONTROL REQUIREMENTS SPECIFIED IN HAR 11-60.1. IF, AT ANY TIME, AREA AIR MONITORING (BY THE CONTRACTOR OR HCDA)
 INDICATES THE PRESENCE OF ELEVATED CONTAMINANT CONCENTRATIONS
 AT THE PROPERTY BOUNDARY, THE CONTRACTOR SHALL TAKE ADDITIONAL MEASURES, AT NO ADDITIONAL COST TO HCDA, TO REMEDY THE EMISSIONS TO LEVELS COMPLYING WITH ALL APPROPRIATE AMBIENT AIR QUALITY STANDARDS OR TO PRE-ESTABLISHED BACKGROUND LEVELS
- 2. CONTRACTOR SHALL VERIFY CONSTRUCTION EXTENTS, LINES, GRADES, DIMENSIONS AND ELEVATIONS INDICATED ON THE DRAWINGS BEFORE ANY CLEARING, EXCAVATION OF CONSTRUCTION BEGINS. BRING ANY DISCREPANCY TO THE ATTENTION OF THE PROJECT MANAGER, AND MAKE ANY CHANGE IN ACCORDANCE WITH THE PROJECT MANAGER INSTRUCTION.
- 3. THE PROJECT INCLUDES THE INCIDENTAL REMOVAL/ON—SITE RELOCATION OF POTENTIAL CONTAMINATED SOILS AND CAPPING THE SITE SOILS WITH CLEAN IMPORTED MATERIAL, LANDSCAPING AND/OR PAVEMENT. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT'S TECHNICAL SPECIFICATIONS FOR ANY CONSTRUCTION ACTIVITIES THAT INVOLVE THE DISTURBANCE OF EXISTING SITE SOILS AND/OR THAT MAY EXPOSE WORKERS OR THE PUBLIC TO POTENTIALLY CONTAMINATED SOIL.THE CONTRACTOR ALSO SHALL REVIEW THE JUNE 2009 ENVIRONMENTAL HAZARD EVALUATION, KAKAAKO MAKAI DISTRICT AND THE JUNE 2009 ENVIRONMENTAL HAZARD MANAGEMENT PLAN, KAKAAKO MAKAI DISTRICT PREPARED BY THE LIMTIACO CONSULTING GROUP AND ENVIROSERVICES & TRAINING CENTER, LLC. AS WELL AS HISTORIC REPORTS REFERENCED THEREIN. SUSPECT CONTAMINANTS ASSOCIATED WITH LONG-TERM
 EXPOSURE HAZARDS AT THE VARIOUS SITES WITHIN THE PROJECT AREA
 INCLUDE, BUT ARE NOT LIMITED TO, PETROLEUMS, POLYNUCLEAR AROMATIC HYDROCARBONS, AND HEAVY METALS.

4. FOR GRAVEL CAP DETAILS, SEE DET. 1

5. DEMOLISH, REMOVE, AND DECOMMISSION EXISTING MONITORING WELLS IN ACCORDANCE TO DOH HEER OFFICE'S TECHNICAL GUIDANCE MANUAL.

EARTHWORK QUANTITIES:

EXCAVATION = 1,856 C.Y.AREA TO BE GRADED = 2.30 ACRES AREA TO BE DISTURBED = 2.30 ACRES



REV DATE THE LIMTIACO CONSULTING GROUP

650 IWILEI ROAD, SUITE 208 • HONOLULU, HAWAII 96817 PHONE: (808) 596-7790 • FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

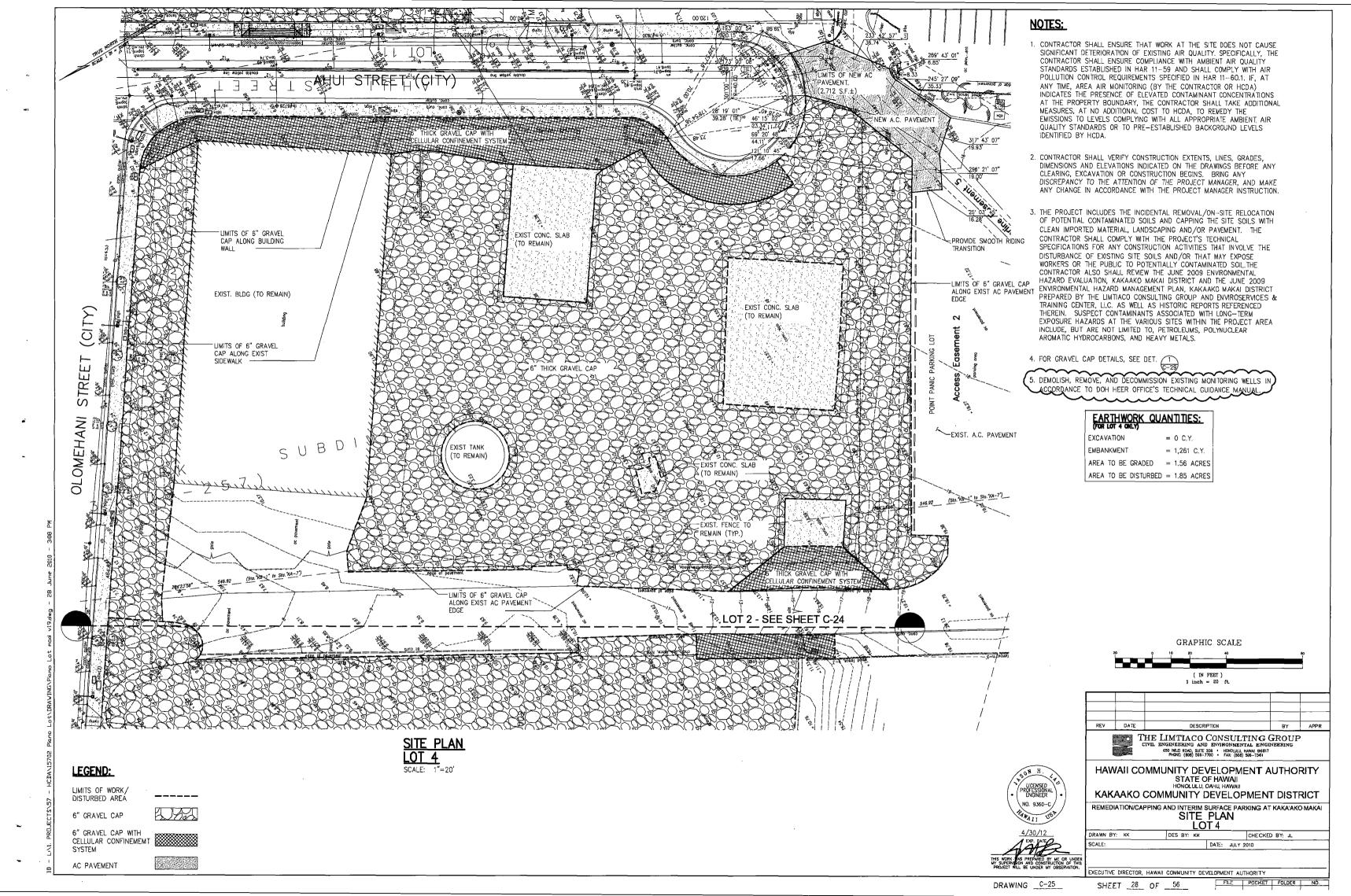
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE PLAN LOT 2

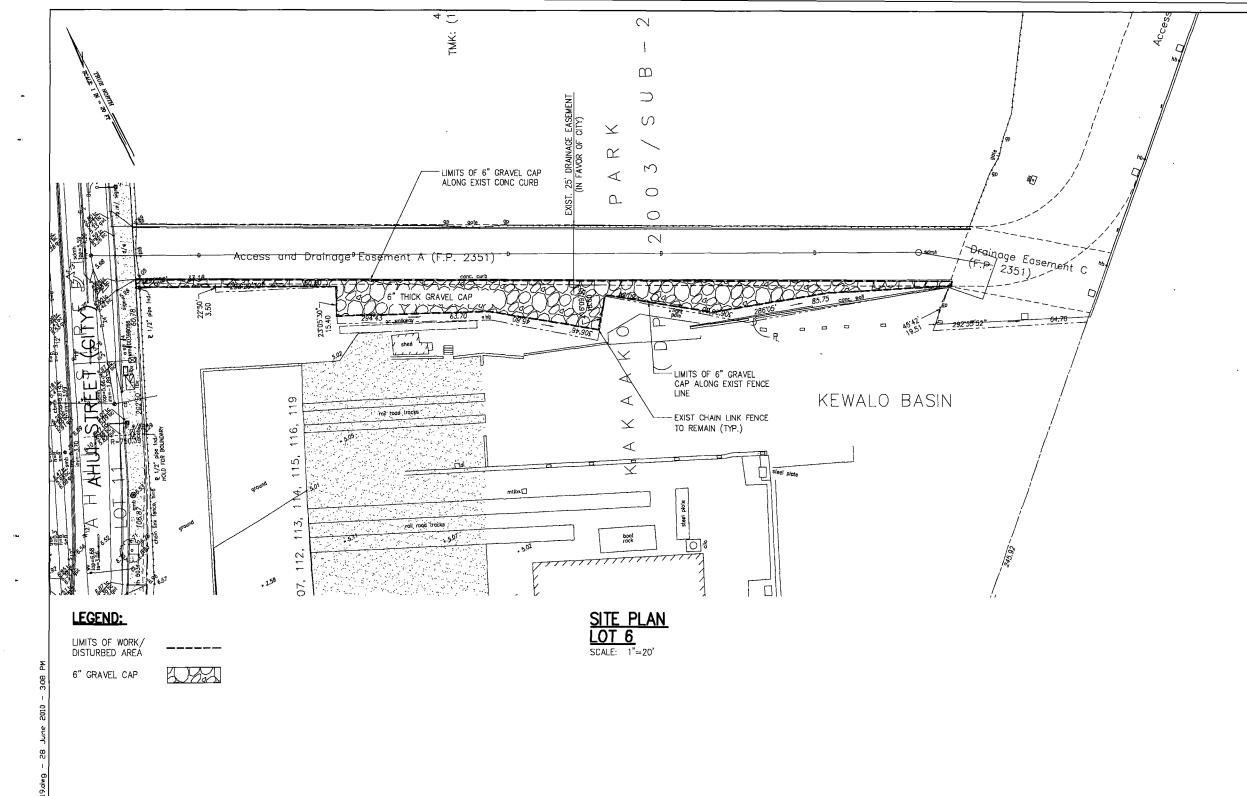
RAWN BY: KK DES BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010

XECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DRAWING _C-24

FILE POCKET FOLDER NO. SHEET _27_ OF __56_





- 1. CONTRACTOR SHALL ENSURE THAT WORK AT THE SITE DOES NOT CAUSE SIGNIFICANT DETERIORATION OF EXISTING AIR QUALITY. SPECIFICALLY, THE CONTRACTOR SHALL ENSURE COMPLIANCE WITH AMBIENT AIR QUALITY STANDARDS ESTABLISHED IN HAR 11-59 AND SHALL COMPLY WITH AIR POLLUTION CONTROL REQUIREMENTS SPECIFIED IN HAR 11-60.1. IF, AT ANY TIME, AREA AIR MONITORING (BY THE CONTRACTOR OR HCDA) INDICATES THE PRESENCE OF ELEVATED CONTAMINANT CONCENTRATIONS AT THE PROPERTY BOUNDARY, THE CONTRACTOR SHALL TAKE ADDITIONAL MEASURES, AT NO ADDITIONAL COST TO HCDA, TO REMEDY THE EMISSIONS TO LEVELS COMPLYING WITH ALL APPROPRIATE AMBIENT AIR QUALITY STANDARDS OR TO PRE-ESTABLISHED BACKGROUND LEVELS IDENTIFIED BY HCDA.
- 2. CONTRACTOR SHALL VERIFY CONSTRUCTION EXTENTS, LINES, GRADES, DIMENSIONS AND ELEVATIONS INDICATED ON THE DRAWINGS BEFORE ANY CLEARING, EXCAVATION OR CONSTRUCTION BEGINS. BRING ANY DISCREPANCY TO THE ATTENTION OF THE PROJECT MANAGER, AND MAKE ANY CHANGE IN ACCORDANCE WITH THE PROJECT MANAGER INSTRUCTION.
- 3. THE PROJECT INCLUDES THE INCIDENTAL REMOVAL/ON-SITE RELOCATION OF POTENTIAL CONTAMINATED SOILS AND CAPPING THE SITE SOILS WITH CLEAN IMPORTED MATERIAL, LANDSCAPING AND/OR PAVEMENT. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT'S TECHNICAL SPECIFICATIONS FOR ANY CONSTRUCTION ACTIVITIES THAT INVOLVE THE DISTURBANCE OF EXISTING SITE SOILS AND/OR THAT MAY EXPOSE WORKERS OR THE PUBLIC TO POTENTIALLY CONTAMINATED SOIL THE CONTRACTOR ALSO SHALL REVIEW THE JUNE 2009 ENVIRONMENTAL HAZARD EVALUATION, KAKAAKO MAKAI DISTRICT AND THE JUNE 2009 ENVIRONMENTAL HAZARD MANAGEMENT PLAN, KAKAAKO MAKAI DISTRICT PREPARED BY THE LIMITACO CONSULTING GROUP AND ENVIROSERVICES & TRAINING CENTER, LLC. AS WELL AS HISTORIC REPORTS REFERENCED THEREIN. SUSPECT CONTAMINANTS ASSOCIATED WITH LONG-TERM EXPOSURE HAZARDS AT THE VARIOUS SITES WITHIN THE PROJECT AREA INCLUDE, BUT ARE NOT LIMITED TO, PETROLEUMS, POLYNUCLEAR AROMATIC HYDROCARBONS, AND HEAVY METALS.

4. FOR GRAVEL CAP DETAILS, SEE DET.



= 0 C.Y.

EARTHWORK QUANTITIES: (FOR LOT 8 ONLY)

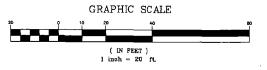
EXCAVATION

≈ 56 C.Y.

EMBANKMENT

AREA TO BE GRADED = 0.07 ACRES

AREA TO BE DISTURBED = 0.07 ACRES



THE LIMTIACO CONSULTING GROUP

650 (WILE: ROAD, SUITE 208 + HONOLULU, HAWAI 96:817 PHONE: (808) 596-7790 + FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

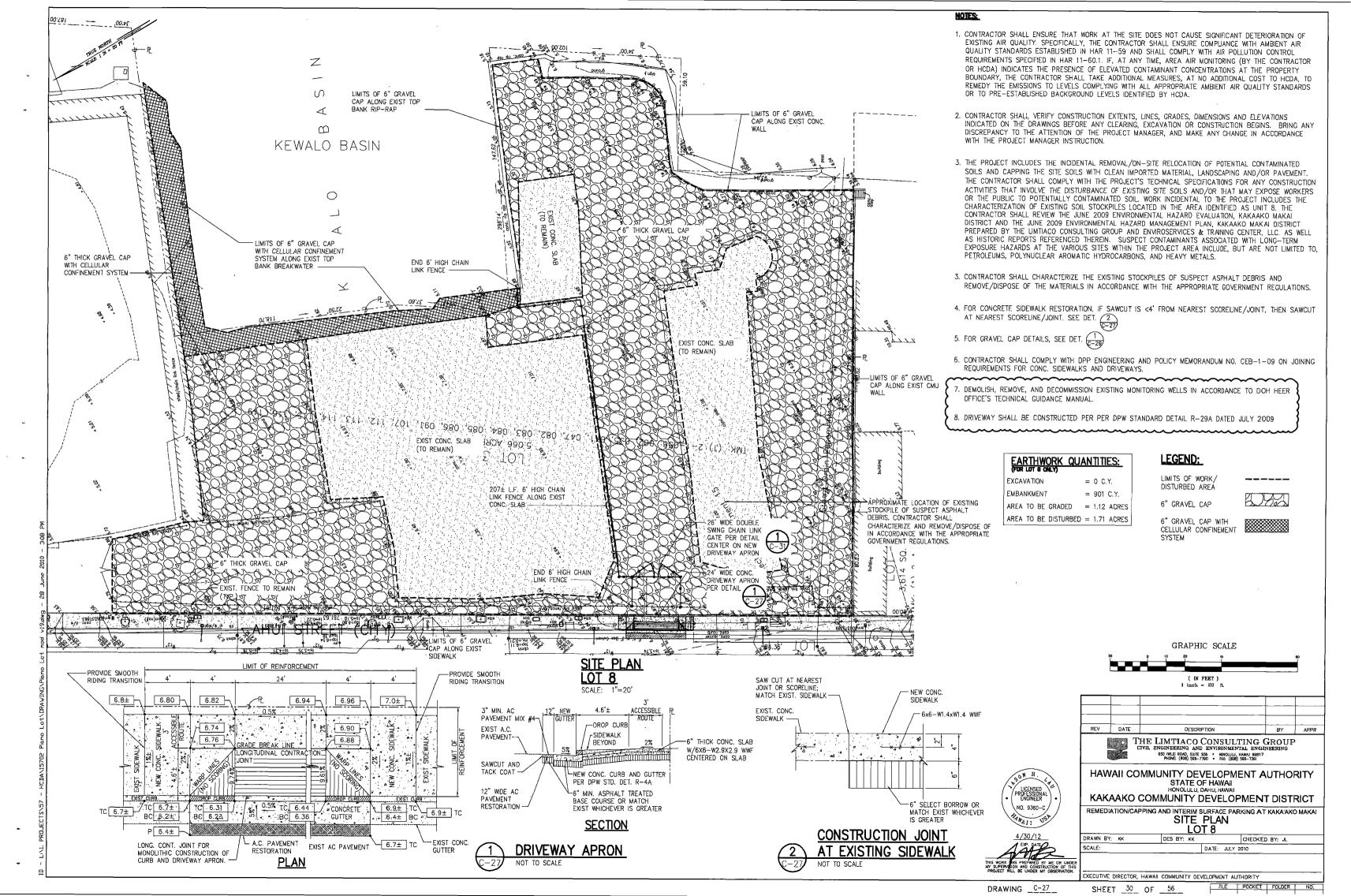
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI SITE PLAN

LOT 6 DRAWN BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010

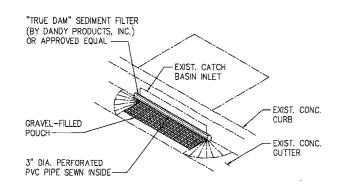
DRAWING __C-26_

NO. 9360-0

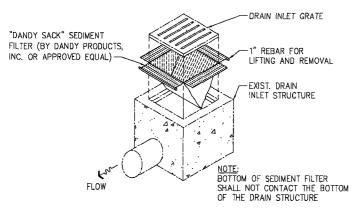
SHEET _29_ OF _ 56



TYPICAL SILT FENCE DETAIL



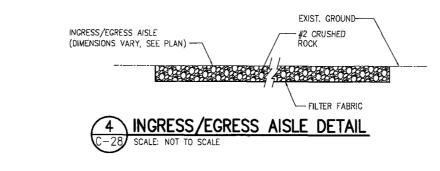
CATCH BASIN PROTECTION DETAIL SCALE: NOT TO SCALE

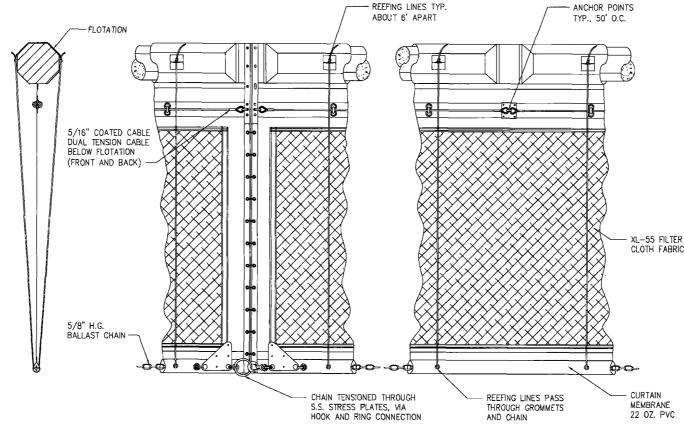


DRAIN INLET/CATCH BASIN/INLET STRUCTURE PROTECTION NOTES:

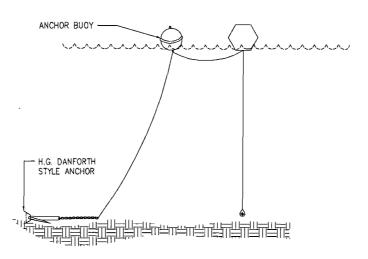
- 1. CONTRACTOR SHALL INSTALL SEDIMENT FILTER DEVICES AT DRAIN INLETS, CATCH BASINS. AND INLET STRUCTURES INDICATED TO PREVENT SOIL OR DEBRIS IN ANY FORM FROM ENTERING THE DRAINAGE SYSTEM. COST FOR INSTALLATION OF FILTERS SHALL BE INCIDENTAL TO EXCAVATION WORK.
- 2. ALL CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY. 3. CATCH BASIN, DRAIN INLET, AND INLET STRUCTURE PROTECTION DEVICES SHALL BE REMOVED DURING PERIODS OF ABOVE NORMAL RAINFALL THEN REPLACED AFTER THE EVENT HAS
- 4. AT THE END OF THE PROJECT, EXISTING CATCH BASINS, DRAIN INLETS, AND INLET STRUCTURES ADJACENT TO THE PROJECT SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE CATCH BASINS SHALL BE REMOVED. FLUSHING INTO





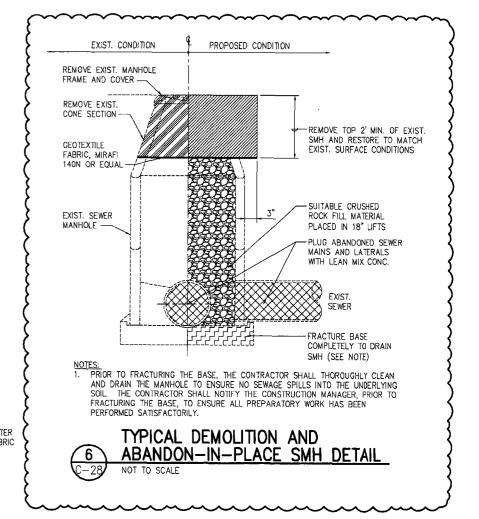


TURBIDITY SCREEN



ANCHOR SYSTEM

TURBIDITY SCREEN AND ANCHOR DETAIL





650 PMLEI ROAD, SUITE 208 • HONOLULU, HAWAII 96817 PHONE: (808) 596-7790 • FAX: (808) 596-7361

LICENSED PROFESSIONA ENGINEER NO. 9360-C

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

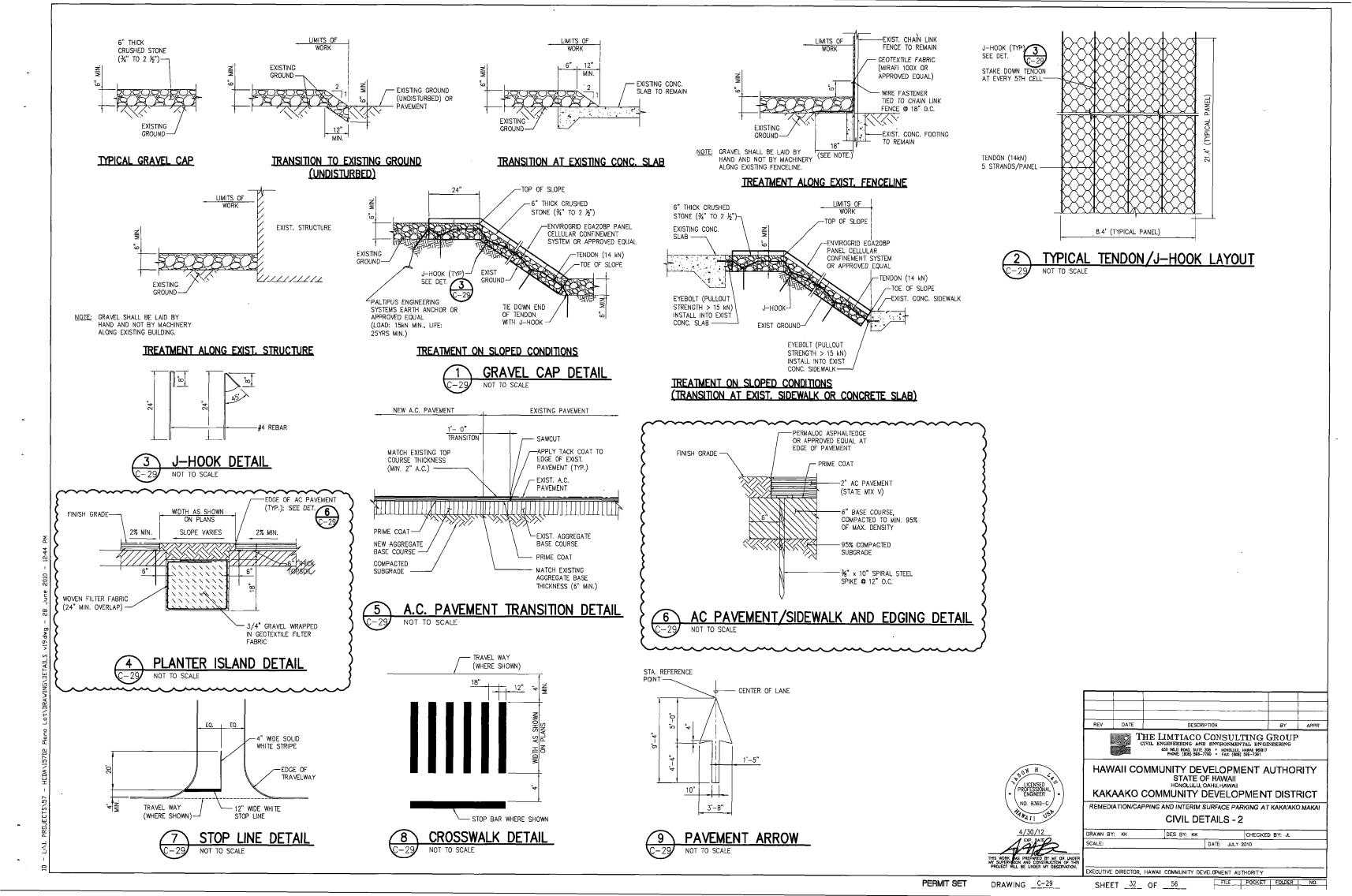
CIVIL DETAILS - 1

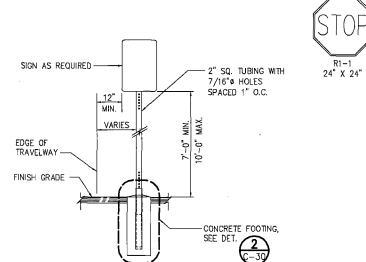
DRAWN BY: KK DES BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010 XECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

PERMIT SET

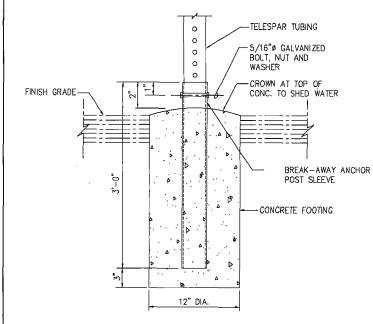
FILE POCKET FOLDER NO. SHEET _31_ OF _ 56

DRAWING _C-28









NOTE: SQUARE TUBE POSTS SHALL BE TELESCOPING PERFORATED.













R7-201A



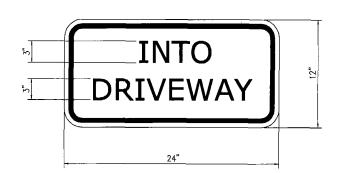


SIGNAGE NOTES:
1. SIGNS SHALL BE ALUM T6061 SHEET COVERED WITH

ENGINEERING GRADE REFLECTIVE SHEETING.

2. ALL SIGNS SHALL BE INSTALLED ON POSTS PER JRADE ...
JHALL BE INS ..
AND DET.
2
C-30

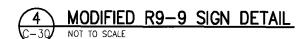




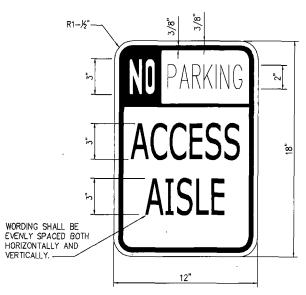
MODIFIED R10-18 SIGNAGE NOTES:

1. SIGN LETTERING SHALL BE UPPER CASE LETTERS (SERIES 2000 STANDARD ALPHABETS). BORDER AND LETTER COLOR SHALL BE BLACK

AGAINST A WHITE BACKGROUND. REFER TO MUTCD 2004 "STANDARD HIGHWAY SIGNS"



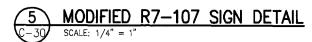
FOR ADDITIONAL DIMENSIONS OF THE R9-9 SIGN.



MODIFIED R7-107 SIGNAGE NOTES:

1. SIGN LETTERING SHALL BE UPPER CASE LETTERS ("HIGHWAY O" STYLE).

- BORDER AND LETTER COLOR SHALL BE RED AGAINST A WHITE BACKGROUND
- 3. REFER TO MUTCO 2004 "STANDARD HIGHWAY SIGNS" FOR ADDITIONAL DIMENSIONS OF THE



VAN ACCESSIBLE STALL-6' LONG CONC. WHEELSTOP -HANDICAP SIGN MOUNTED ON POST (TYP.); SEE DET. AND DET. -ACCESS AISLÉS-WHERE SHOWN EQ. -4" WIDE SOLID BLUE PAVEMENT STRIPES (TYP.) 4" WIDE SOLID BLUE PAVEMENT STRIPES (TYP.)

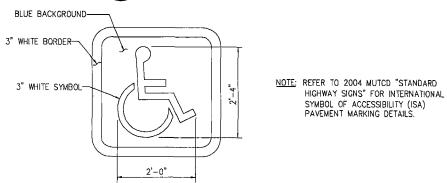
(SEE NOTE 1.)

ISA PAVEMENT MARKING; SEE DET.

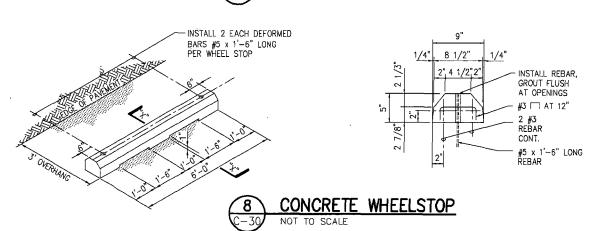
ACCESS AISLES ADJACENT TO VAN ACCESSIBLE STALLS SHALL BE A MINIMUM WIDTH OF 8'-0" OTHERWISE, THE MINIMUM WIDTH OF THE ACCESS AISLE SHALL BE

- FOR PARKING LOCATED ALONG CURVED PAVEMENT EDGES, THE WIDTHS SHOWN SHALL BE THE MINIMUM ALLOWED WITHIN EACH STALL AND ACCESS AISLE.
- HANDICAP PARKING STALLS SHALL HAVE SLOPES NOT TO EXCEED 2% IN ANY





ISA PAVEMENT MARKING







650 IWILEI ROAD, SUITE 208 • HONOLULU, HAWAII 96817 PHONE: (808) 596-7780 • FAX: (808) 596-7361 HAWAII COMMUNITY DEVELOPMENT AUTHORITY

STATE OF HAWAII KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

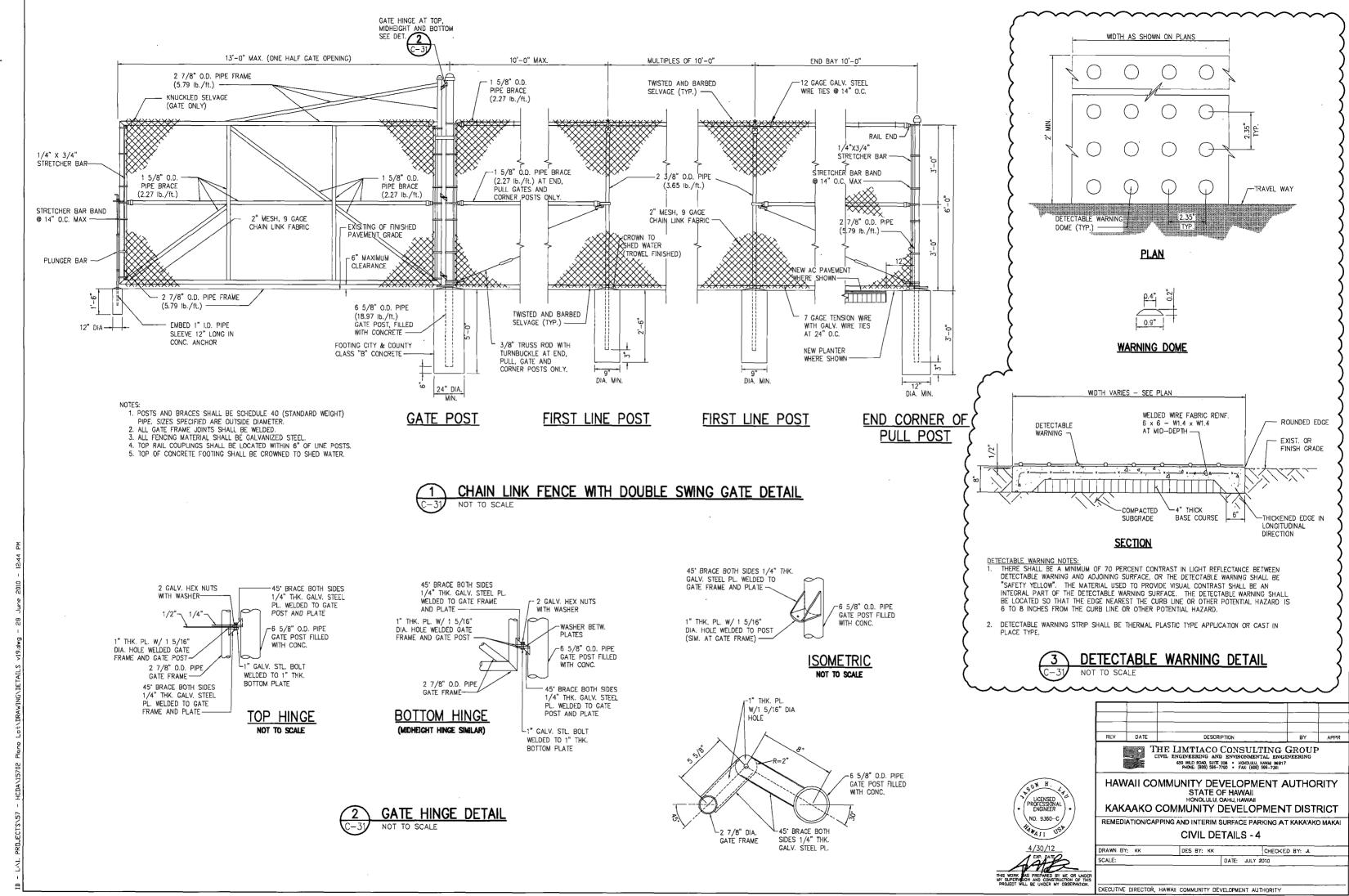
CIVIL DETAILS - 3 DRAWN BY: KK CHECKED BY: JL SCALE: DATE: JULY 2010 XECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

PERMIT SET

DRAWING _C-30_

SHEET 33 OF 56

FILE POCKET FOLDER NO.



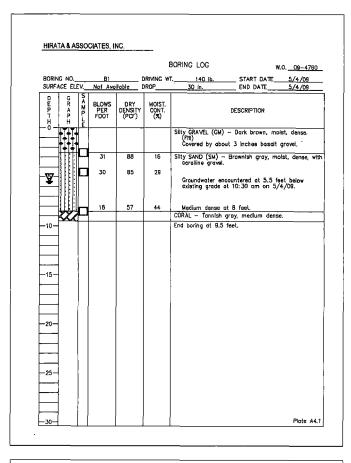
PERMIT SET

DRAWING __C-31__

DISSENVATION.

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

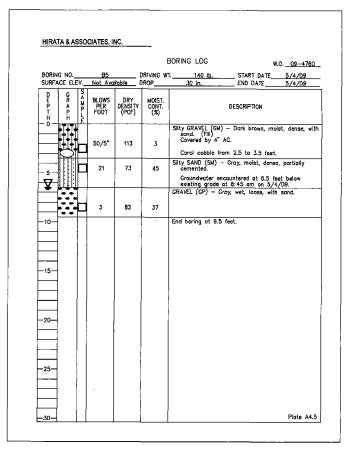
1 SHEET 34 OF 56 FILE POCKET FOLDER NO.



			8	IORING LOG	,	W.O. <u>09-4760</u>
BORING NO	B2			. 140 lb.		
SURFACE ELEV.	Not Avo	<u>iilable</u> (DROP	30 in.	_ END DATE	5/4/09
GRAPH GRAPH THO	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)	D	ESCRIPTION	
				Silty GRAVEL (GM) ~	Dark brown, m	oist, dense.
	-		-	(Fill) Covered by about	3 inches basatt	gravel.
	23	73	42	Silty SAND (SM) - To		-
∇				gravel, partially ce	mented.	
_ 5 _ C	24	84	33	Groundwater encou existing grade at 1	intered at 4 fer	et below
_ <u></u>	-		-	Gray color and wel		/4/09.
::::::				SAND (SP) - Gray, m coralline gravel, pa		dense, with
:::::]]	coralline gravel, pa	irtially cemente	d.
::::[12	87	30			
-10-				End boring at 9.5 fee	at .	
				End borning at 3.5 rec		
-						
-15-						
	l	1 1	1 1			
-20-						
—						
						
)				
-25-						
						Plote A4.

		. [BORING LOG	w	.o. <u>09-4760</u>
BORING NO SURFACE ELEV	B3 Not Available	DRIVING W	T, 140 lb, 30 in.	START DATE END DATE	5/4/09
0 8 4 P H	BLOWS DRY PER DENSI FOOT (PCF	Y CONT.		DESCRIPTION	
	19 92	14	Silty SAND (SM) — gravel. (FIII) Covered by abo	Dark brown, moist ut 3 inches basalt	, dense, with gravel.
	90 92	25	Trash fill at 3	feet.	
- 5	10/No Penetro	ntion	Cobble at 4.8 f		
-10					
25			Neither groundwate	r nor seepage wate	er encountered

				E	BORING LOG	w	.0. <u>09-476</u>
	G NO CE ELEV.		ilable	DRIVING WI	<u>140 lb.</u> 30 in.	START DATE END DATE	5/4/09 5/4/09
D E P T H	GR APH	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST. CONT. (%)		DESCRIPTION	
-0-	\ [26/7*	90	18	SAND (SP) — Tanni gravel. (Fill) Covered by abou	ish brown, móisit, o	dense, with
		28	79	31	Clayey SiLT (ML) - Boulder from 1 t Silty SAND (SM) -	Brown, moist, me to 2.5 feet	dium stiff. (I
- 5 -		14	85	25	cemented. Medium dense fr		, por trony
-10-							
-20- -25-					Neither groundwater	nor seepage wate	ir encountere



							BORING LOG		W.O. <u>09-4760</u>
BORIN SURF	G N	0 ELE	'V.	B6 Nat Avo	iiohle	DRIVING W	T140 lb; 30 in.	START DATE	5/4/09
D E P T H	F		いくざひしに	BLOWS PER FOOT	DRY DENSITY (PCF)	MOIST.		DESCRIPTION	47,735
			Ц	41	95	- 18	Silty SAND (SM) - grovel. (Fill) Covered by 2.5	Dark brown, moi AC over 5" Base	st, dense, with Course.
_				24	57	34	cemented.	Tan, moist, dens	
Ϋ́				44	94	14	existing grade	ot 9:15 am an 5/	4/09.
•	-	•	Н				GRAVEL (GP) - G End boring at 6.5	ray, wet, dense, w	ith sand.
-15-				į					
25—									

- 1. THE LOGS OF BORINGS INDICATE THE SUBSURFACE AND GROUNDWATER CONDITIONS ENCOUNTERED ONLY AT THE LOCATIONS WHERE THE BORINGS WERE DRILLED AND AT THE TIMES DESIGNATED ON THE LOGS, AND MAY NOT REPRESENT CONDITIONS AT OTHER LOCATIONS OR AT OTHER TIMES. SUBSURFACE AND GROUNDWATER CONDITIONS MAY CHANGE WITH THE PASSAGE OF TIME, IMPROVEMENTS CONSTRUCTED AT THE PROPERTY, AND CHANGES IN SURFACE DRAINAGE AND IRRIGATION PATTERNS.
- 2. THE BORING LOGS ARE FURNISHED FOR THE CONVENIENCE OF THE BIDDER. NO ASSURANCE IS GIVEN THAT THE SUBSURFACE OR GROUNDWATER CONDITIONS SHOWN ON THE BORING LOGS ARE REPRESENTATIVE OF THE CONDITIONS TO BE ENCOUNTERED DURING CONSTRUCTION. THE BIDDER IS SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS WHICH HE MAY MAKE OR DERIVE FROM HIS EXAMINATION OF THE SUBSURFACE INFORMATION AND DATA FURNISHED HEREIN.
- 3. THE BLOW COUNTS FOR THE 3.3-INCH (84 MM) DIAMETER SPLIT BARREL SAMPLER REPRESENT ACTUAL BLOW COUNT AND HAVE NOT BEEN CORRECTED TO EQUIVALENT SPT-N VALUES.
- 4. FOR BORING LOCATIONS SEE SHEET C-01.

	MAJOR DIV	ISIONS	LETTER SYMBOL	CRAPHIC SYMBOL	GROUP NAMES
SIEVE	GRAVELS	CLEAN GRAVELS LESS THAN	GW		WELL-GRADED GRAVEL, WELL-GRADED GRAVEL WITH SAND
8	MORE THAN 50% OF	5% FINES	GP		POORLY GRADED GRAVEL WITH SAND
SOILS	FRACTION RETAINED ON	GRAVELS WITH	GM		SILTY GRAVEL, SILTY GRAVEL WITH SAND
COARSE-GRAINED ON SOX RETAINED ON	NO. 4 SIEVE	12% FINES	GC		CLAYEY GRAVEL, CLAYEY GRAVEL WITH SAND
SE-GRAINI RETAINED	SANDS	CLEAN SAND LESS THAN	SW		WELL-GRADED SAND, WELL-GRADED SAND WITH GRAVEL
COARSI	50% OR MORE OF COARSE	5% FINES	SP		POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
MORE TH	FRACTION PASSES NO. 4 SIEVE	SANDS WITH MORE THAN	SM		SILTY SAND, SILTY SAND WITH GRAVEL
ž	Sieve	12% FINES	sc		CLAYEY SAND, CLAYEY SAND WITH GRAVEL
SIEVE		_	ML		SILT, SILT WITH SAND OR GRAVEL, SANDY OR GRAVELLY SILT
튑	SILTS AN	D CLAYS ESS THAN 50	CL		LEAN CLAY, LEAN CLAY WITH SAND O GRAVEL, SANDY OR GRAVELLY LEAN O
			ÖL		ORGANIC SILT OR CLAY, DRGANIC SILT OR CLAY WITH SAND OR GRAVEL, SAY OR GRAVELLY ORGANIC SILT OR CLAY
INE-GRAINED	SILTS AN	D CLAYS	МН		ELASTIC SILT, ELASTIC SILT WITH SAND OR GRAVEL, SANDY OR GRAVELLY ELASTIC SILT
50 X OR	UQUID LIMIT	50 OR MORE	СН		FAT CLAY, FAT CLAY WITH SAND OR GRAVEL, SANDY OR GRAVELLY FAT CLAY
			ОН		ORGANIC SILT OR CLAY, ORGANIC SILT OR CLAY WITH SAND OR GRAVEL, SAN OR GRAVELLY ORGANIC SILT OR CLAY
н	IGHLY ORGANI	C SOILS	PT		PEAT
ER TO	BOLS ARE USE ASTM D2487 P-GM, GP-GC	FOR BORDERI	LINE CL	ASSIFIC	CLASSIFICATIONS. ATTONS GW-GM, AND SP-SC, UNIFIED SOIL

GRADATION CHART PARTICLE SIZE

LOWER LIMIT UPPER LIMIT

MILLIMETERS SIEVE SIZE ** MILLIMETERS SIEVE SIZE ** 0.075 #200 ** 0.425 0.425 #40 ** 2.00 2.00 #10 ** 4.75 4.75 19.0 #4 ** 3/4" * 19.0 75.0 FINE COARSE COBBLES 75.0 3" • 300 BOULDERS 300 12" * PLASTICITY CHART ML OR OL 20 30 40 30 80 90
Liquid Limit (LL)
FOR CLASSIFICATION OF FINE-GRANED SOILS
AND FINE-GRANED FRACTION OF
COARSE-GRANED SOILS NOTE: WHEN SHOWN ON THE BORING LOGS, THE FOLLOWING TERMS ARE USED TO DESCRIBE THE CONSISTENCY OF COHESINE SOILS AND THE RELATIVE COMPACTNESS OF COHESIONLESS SOLS. COHESIONLESS SOILS VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD UNIFIED SOIL CLASSIFICATION SYSTEM (SHEET 2 OF 2)



		<u> </u>		
REV	DATE	DESCRIPTION	BY	APPR
	T	HE LIMTIACO CONSULTING O	GROUP)

650 IMILEI ROAD, SUITE 208 • HONOLULU, HAWAII 96817 PHONE: (808) 595-7790 • FAX: (808) 595-7361 HAWAII COMMUNITY DEVELOPMENT AUTHORITY

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

BORING LOGS

DRAWN BY: KK CHECKED BY: JL SCALE: EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

SHEET _35_ OF _56_

FILE POCKET FOLDER NO.

PERMIT SET

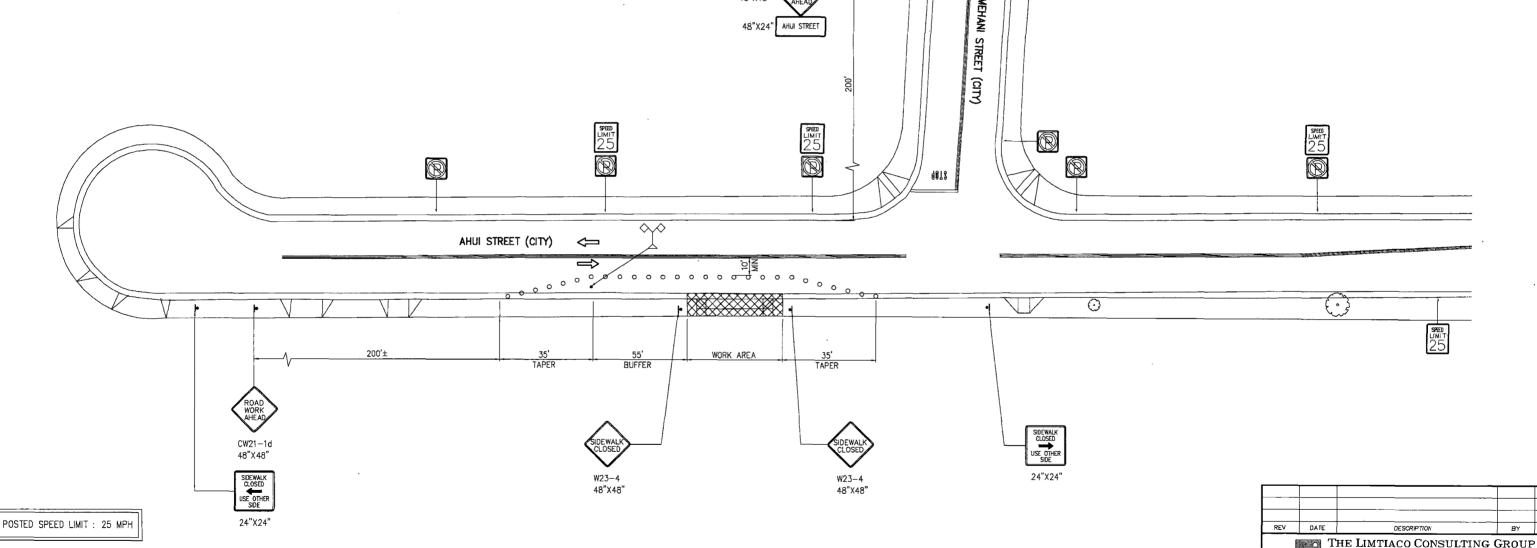
DRAWING __C-32

- 1. THE PERMITTEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVEWAYS, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.
- 2. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
- 3. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA IS PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA
- 4. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR
- 5. FLAGGERS AND/OR POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- 6. WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITTEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTROL PLANS.
- 7. ALL TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.
- 8. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE OR NOT IN USE.
- 9. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (I.E., WHEN SIGNS HAVE MESSAGES ON BOTH FACES).

- 10. LANE CLOSURE SHALL BE LIMITED ONLY TO THE EXTENT OF ACCOMPLISHING EACH DAY'S WORK. AS SOON AS EACH DAY'S WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION. EXISTING FADED OR OBLITERATED PAVEMENT MARKINGS
 THAT ARE NECESSARY FOR SAFE TRAFFIC FLOW IN THE CONSTRUCTION AREA SHALL BE REPLACED WITH TEMPORARY OR PERMANENT MARKINGS BEFORE OPENING THE ROADWAY TO PUBLIC TRAFFIC EACH DAY.
- 11. PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS SHALL BE REPLACED UPON COMPLETION OF EACH PHASE OF WORK.
- CONES AND DELINEATORS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 20 FEET APART. A MINIMUM OF SIX CHANNELIZING DEVICES SHALL BE USED FOR EACH TAPER LENGTH.
- 13. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY. FURTHER, THE PERMITEE SHALL CONTROL TRAFFIC GOING IN AND OUT OF
- BUFFER AND TAPER AREAS ON APPROACH TO ANY WORK AREA SHALL BE KEPT CLEAR OF VEHICLES AND EQUIPMENT.
- A HIGH LEVEL WARNING DEVICE (FLAG TREE) SHALL BE INSTALLED ON APPROACH TO ALL WORK AREAS.
- 16. "NO PARKING" SIGNS SHALL BE POSTED WITHIN ANY WORK AREA AND FOR HE BUFFER AND TAPER AREAS APPROACHING THE WORK AREA.
- 17. TRAFFIC CONTROL PLANS ARE APPROVED FOR WORK ON ANY CITY STREET AREA ONLY BETWEEN THE HOURS OF 8:30 AM AND 3:30 PM AND FOR 24—HOUR SIDEWALK CLOSURE WHEN REQUIRED.

TRAFFIC NOTES FOR WORK ON CITY AND COUNTY STREETS:

- A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN. CONSTRUCTION TRAFFIC CONTROL PLANS APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES AND FOR THE DEPARTMENT OF PLANNING AND PERMITTING MUST BE PROVIDED WHEN APPLYING FOR THE
- THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE "HAWAII ADMINISTRATION RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREET AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION'S "PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES — STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS."
- WORK ON ANY CITY STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 A.M. TO 3:30 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF
- DURING WORKING HOURS. THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
- AS REQUIRED BY THE DEPARTMENT OF TRANSPORTATION SERVICES, THE CONTRACTOR SHALL PROVIDE AN OFF-DUTY POLICE OFFICER TO CONTROL THE FLOW OF TRAFFIC.
- DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
- WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION IN ACCORDANCE WITH ADAAG 4.1.1(4) AND 4.3 OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
- NO EQUIPMENT SHALL BE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PLANNING AND PERMITTING, AT 768-8084 ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS, AND PAVEMENT MARKINGS.
- 10. CONTRACTOR SHALL REFERENCE TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION SERVICES AND THE DEPARTMENT OF PLANNING AND PERMITTING, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS AND TRAFFIC MARKINGS DISTURBED BY HIS /HER ACTIVITIES
- 11. THE <u>HAWAII COMMUNITY DEVELOPEMENT AUTHORITY (HCDA)</u> SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCH AND HAWAII ADMINISTRATIVE RULES AS SPECIFIED IN TRAFFIC NOTE #2.



W21-10

LEGEND:

FLAG TREF

SIGN

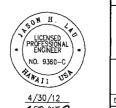
28"H CONE WITH REFLECTIVE COLLAR (DOUBLE UP TO INCREASE STABILITY)

WORK AREA DIRECTION OF TRAFFIC \Rightarrow

CONE, DELINEATOR, AND BARRICADE SPACING: 10' O.C. FOR WORK AREAS 20' O.C. FOR TAPERS AND BUFFERS

TRAFFIC CONTROL PLAN

NOT TO SCALE



HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

650 IWILEI ROAD, SUITE 208 HONOLULU, HAWAI 96817 PHONE: (808) 596-7790 FAX: (808) 595-7361

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI TRAFFIC CONTROL PLAN

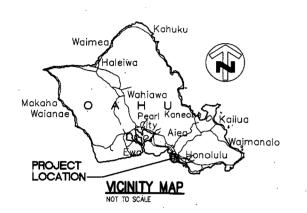
DRAWN BY: KK	DES BY: KK	CHECKED BY: JL
SCALE:		DATE: JULY 2010

DRAWING _ C-33

SHEET 36 OF 56

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

REMEDIATION/CAPPING AND INTERIM PARKING AT KAKA'AKO MAKAI



HONOLULU, OAHU, HAWAII

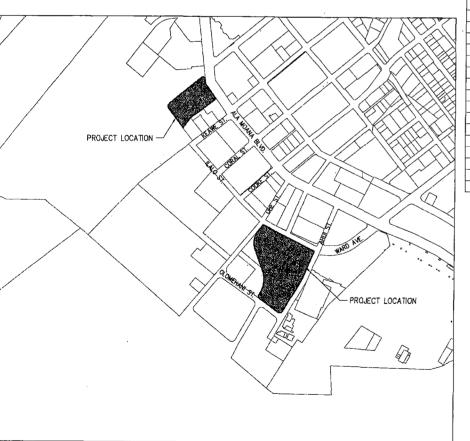
TMK: 2-1-015: 053 AND 2-1-060: 004 - 006 PREPARED BY:

THE LIMITACO CONSULTING GROUP
650 IWILEI ROAD, SUITE 208

ELECTRICAL PERMIT SET

LOCATION MAP

INDEX OF DRAWINGS



SHET!	DING. NO.	DESCRIPTION
		TITLE
1	T-01	TITLE SHEET
		ELECTRICAL
2	E-01	ELECTRICAL SYMBOL LIST AND GENERAL NOTES
3	E-02	ELECTRICAL SITE DEMOLITION PLAN - FORREST AVENUE PARKING LOT
4	E-03	ELECTRICAL SITE PLAN - FORREST AVENUE PIANO PARKING LOT
5	E-04	ELECTRICAL SITE PLAN - PIANO PARKING LOT "A"
6	E-05	ELECTRICAL SITE PLAN PIANO PARKING LOT "B"
7	E-06	ELECTRICAL SITE PLAN - PIANO PARKING LOT "C"
8	E-07	EQUIPMENT DETAILS AND ONE-LINE DIAGRAM - FORREST AVENUE PARKING LOT
9	E-08	EQUIPMENT DETAILS AND ONE-LINE DIAGRAM - PIANO PARKING LOT
10	E-09	POLE LIGHT DETAILS
11	E-10	GUYING DETAIL

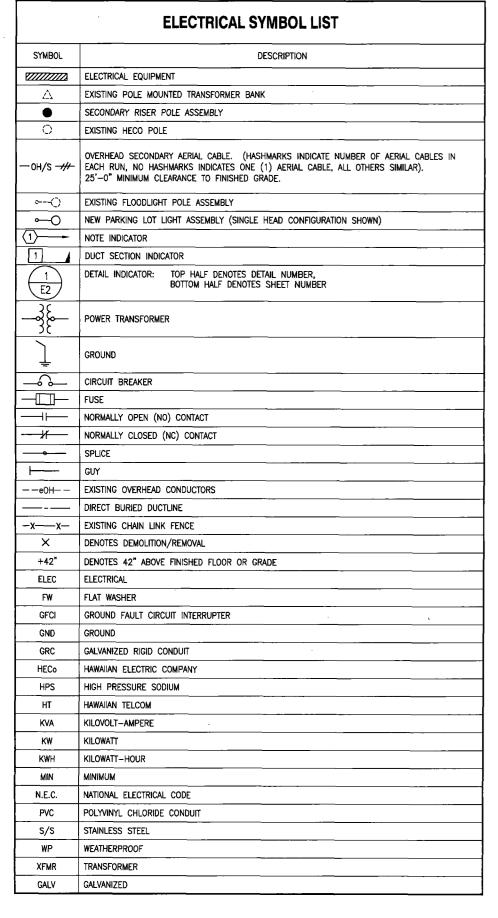
SCALE: 1" = 500'
TMK: 2-1-015: 053
2-1-060: 004 - 006

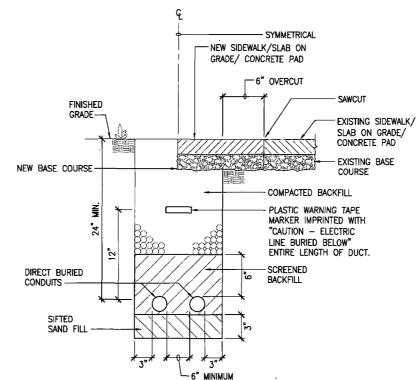
APPROVALS:

Curthous pyllus

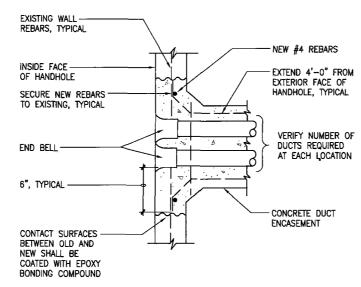
Executive Director, Hawaii comunity development authority

4-27-10 DATE

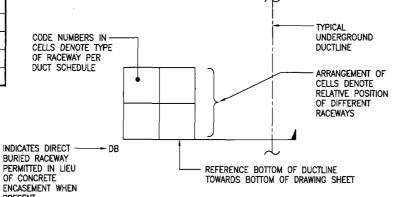




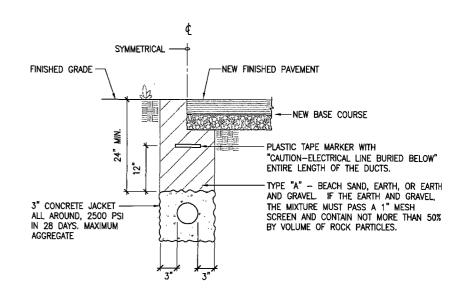
TYPICAL DIRECT BURIED DUCT SECTION NOT TO SCALE E-01



HANDHOLE PENETRATION DETAIL E-01 / NOT TO SCALE



DUCT SECTION FLAG CODE NOT TO SCALE E-01

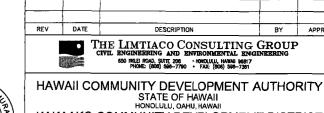


TYPICAL CONCRETE ENCASED DUCT SECTION E-01 NOT TO SCALE

GENERAL NOTES:

- ALL WORK SHOWN ON ELECTRICAL DRAWINGS IS NEW UNLESS OTHERWISE NOTED. ALL MATERIAL IS CONTRACTOR FURNISHED, CONTRACTOR INSTALLED UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO COMMENCEMENT OF NEW WORK.
- TONE ALL DUCTLINE ROUTES AND LIGHT POLE LOCATIONS PRIOR TO EXCAVATION. PROTECT EXISTING UNDERGROUND UTILITIES FROM DAMAGE DURING EXCAVATION. REPAIR ALL DAMAGE AT NO ADDITIONAL COST TO
- THE WORK SCHEDULE SHALL BE COORDINATED WITH THE STATE PRIOR TO
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH THE 5. OTHER TRADES TO AVOID CONFLICTS WITH OTHER ELEMENTS OF THE
- ALL CONDUCTORS SHALL BE COPPER UNLESS OTHERWISE NOTED. PROVIDE U.L. LISTED COPPER TO ALUMINUM CONNECTORS WHERE REQUIRED.
- OVERHEAD SECONDARY AERIAL CABLE SHALL BE SERIES 8000 ALUMINUM, TYPE NSD. XHHW, 600V
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL WORK WITH THE RESPECTIVE UTILITY COMPANY (HECO AND HT)

DUCT SCHEDULE								
(ALL DU	CTS SHALL BE CONCRETE ENCASED UNLESS OTHERWISE NOTED							
TYPE	DESCRIPTION							
1	2" SCHEDULE 40 PVC, HECO SERVICE, CONCRETE ENCASED, WITH PULLSTRING							
2	1" SCHEDULE 80 PVC, LIGHTING, DIRECT BURIED, SEE ONE-LINE DIAGRAM FOR CONDUCTORS							
3	1" SCHEDULE BO PVC, POWER, DIRECT BURIED, WITH PULLSTRING							
4	1" SCHEDULE 80 PVC, POWER, DIRECT BURIED, SEE PANEL SCHEDULE FOR CONDUCTORS							



KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

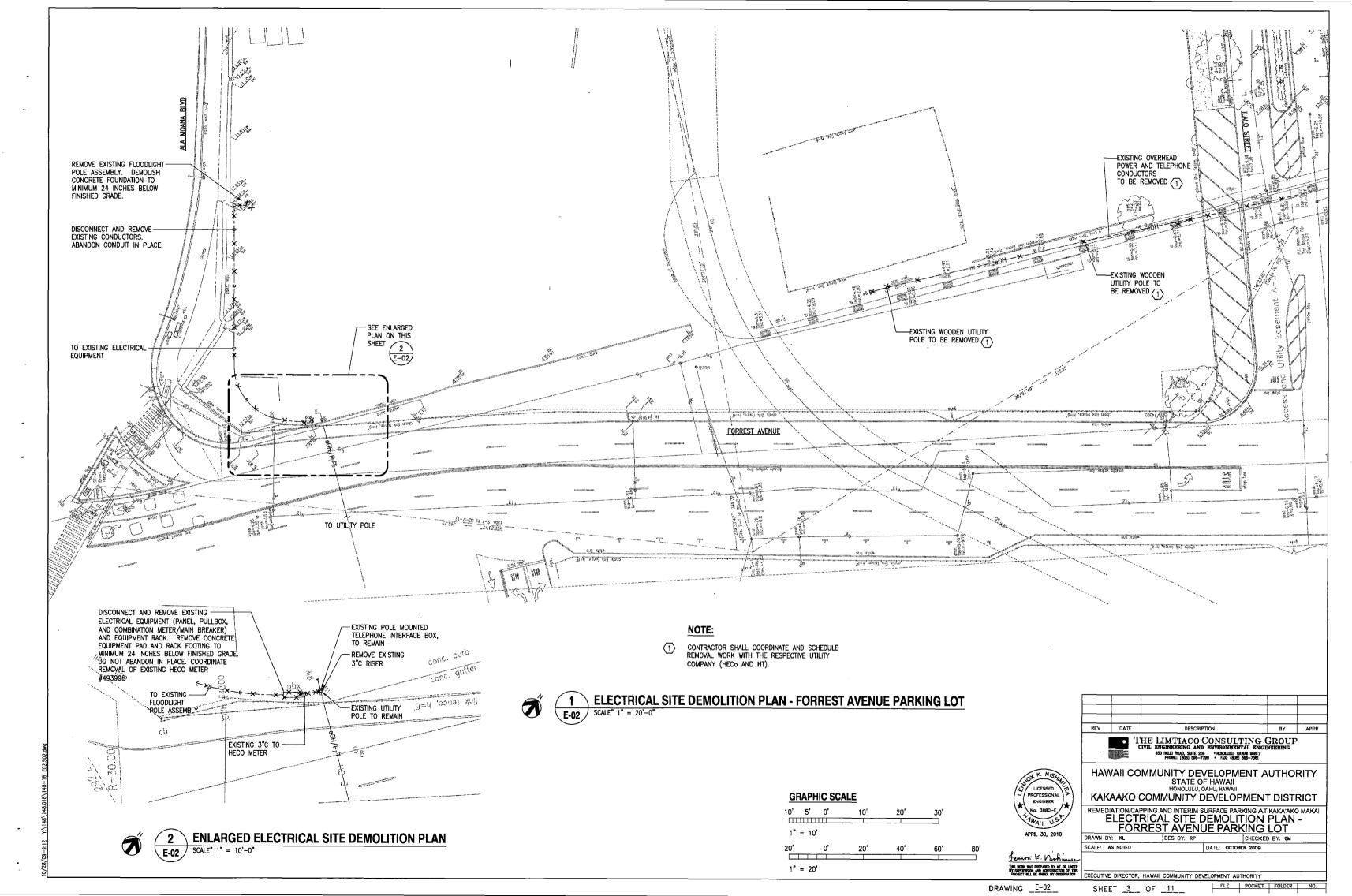
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI ELECTRICAL SYMBOL LIST AND **GENERAL NOTES**

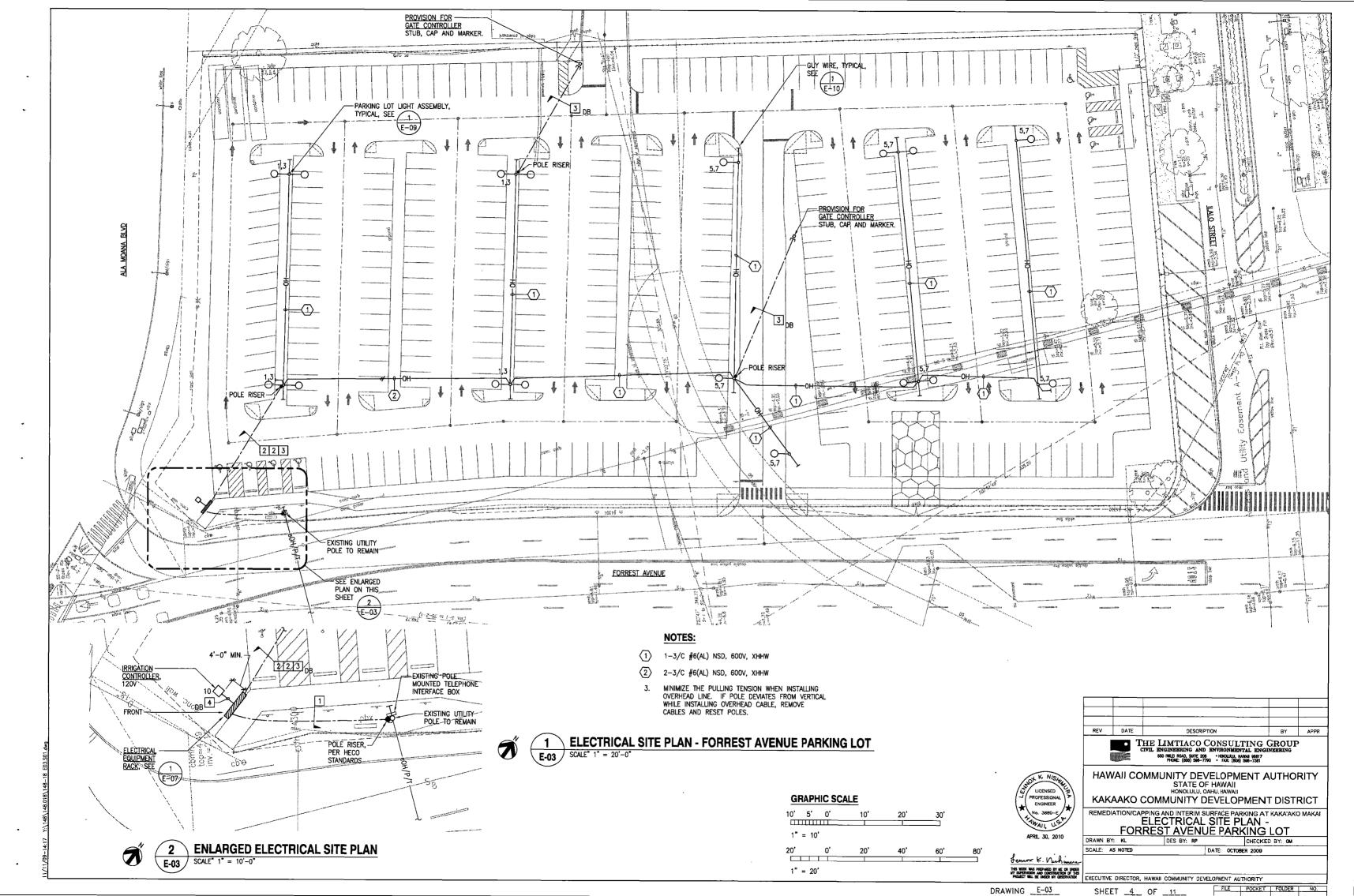
DRAWN BY: KL DES BY: RP CHECKED BY: GM SCALE: AS NOTED DATE: OCTOBER 2009 Fernox K Nushin EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

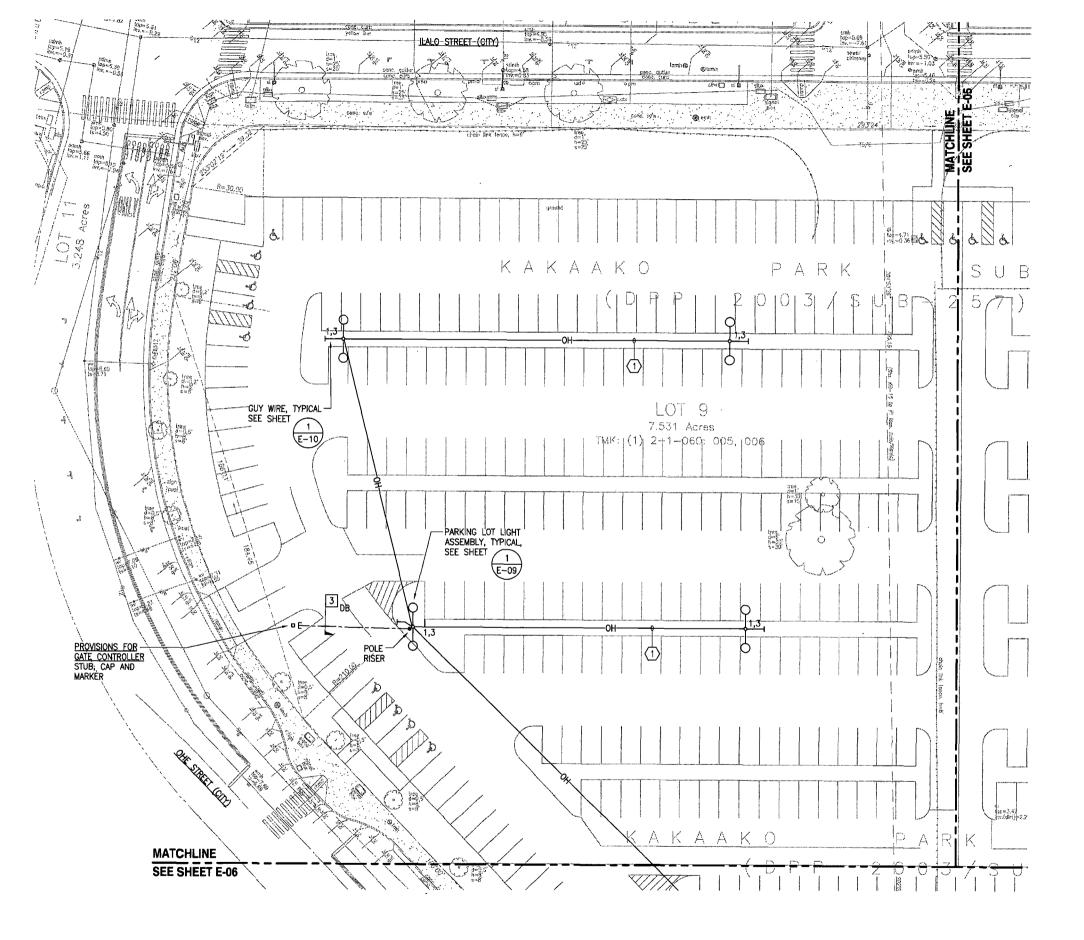
DRAWING _E-01

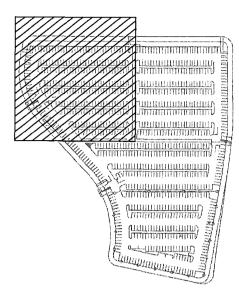
FILE | POCKET | FOLDER | NO.

SHEET _2_ OF _11_









KEY PLAN NO SCALE

NOTES:

- 1-3/C #6(AL) NSD, 600V, XHHW
- MINIMIZE THE PULLING TENSION WHEN INSTALLING OVERHEAD LINE. IF POLE DEVIATES FROM VERTICAL WHILE INSTALLING OVERHEAD CABLE, REMOVE CONDUCTORS AND RESET POLE.





HAWAII COMMUNITY DEVELOPMENT AUTHORITY
STATE OF HAWAII
HONOLULU, OAHU, HAWAII
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI ELECTRICAL SITE PLAN - PIANO PARKING LOT "A"

PIANO PARKING LOT "A"

DRAWN BY: KL DES BY: RP CHECKED BY: GM

SCALE: AS NOTED DATE: OCTOBER 2009

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

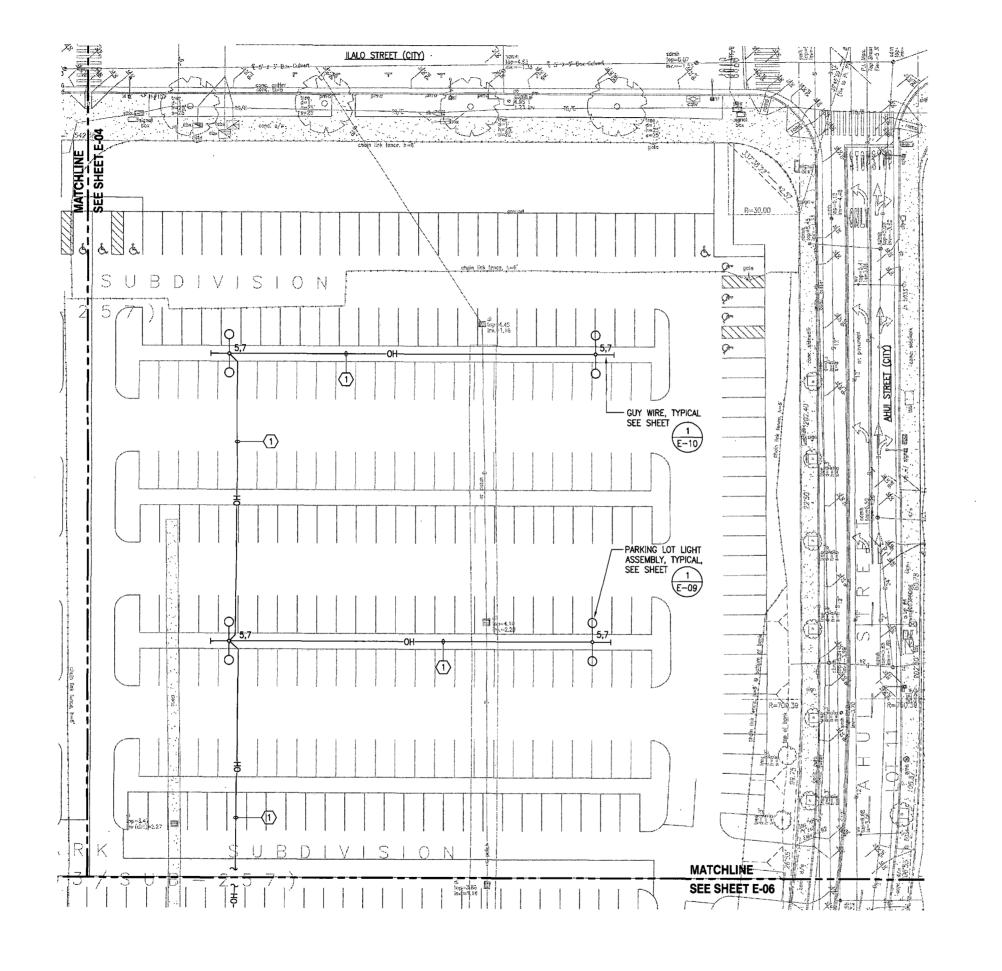
20' 0' 20' 40' 60' 80' 1" = 20'

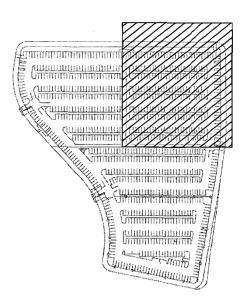


THIS MORE WAS PREPARED BY ME OR UNDER MY SUPERFICIAL AND CONSTRUCTION OF THIS PROJECT MILL BE UNDER MY DISSERVATION

DRAWING E-04 S

SHEET _5_ OF _11__





KEY PLAN NO SCALE

NOTES:

- 1-3/C #6(AL) NSD, 600V, XHHW
- MINIMIZE THE PULLING TENSION WHEN INSTALLING OVERHEAD LINE. IF POLE DEVIATES FROM VERTICAL WHILE INSTALLING OVERHEAD CABLE, RESET THE POLE.





HAWAII COMMUNITY DEVELOPMENT AUTHORITY
STATE OF HAWAII
HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI ELECTRICAL SITE PLAN -PIANO PARKING LOT "B"

DRAWN BY: KL DES BY: RP CHECKED BY: CM SCALE: AS NOTED DATE: OCTOBER 2009 Fernox K. Nishimu.

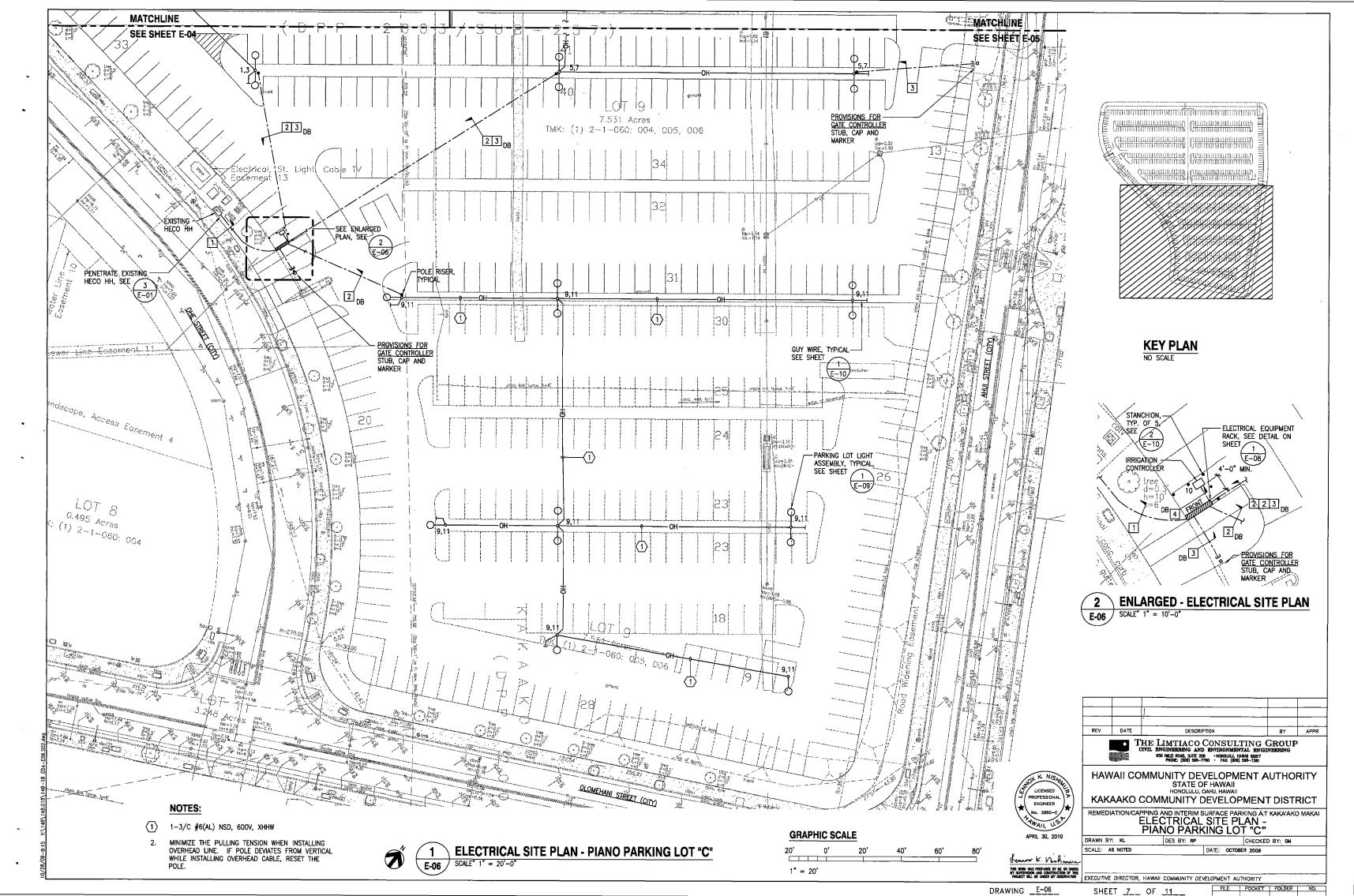
ELECTRICAL SITE PLAN - PIANO PARKING LOT "B" E-05 SCALE" 1" = 20'-0"

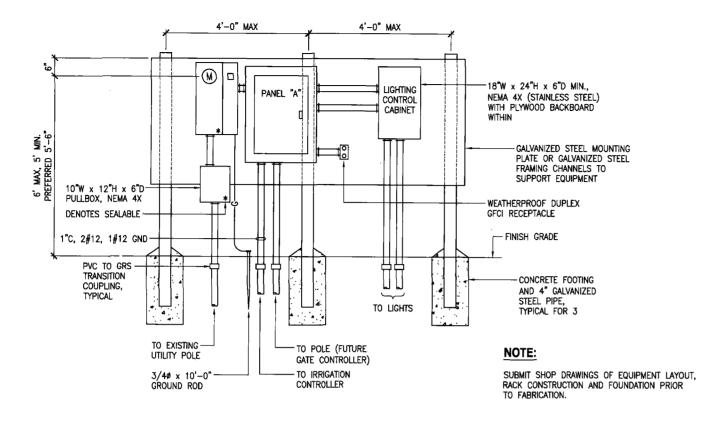
GRAPHIC SCALE 1" = 20'

DRAWING _E-05

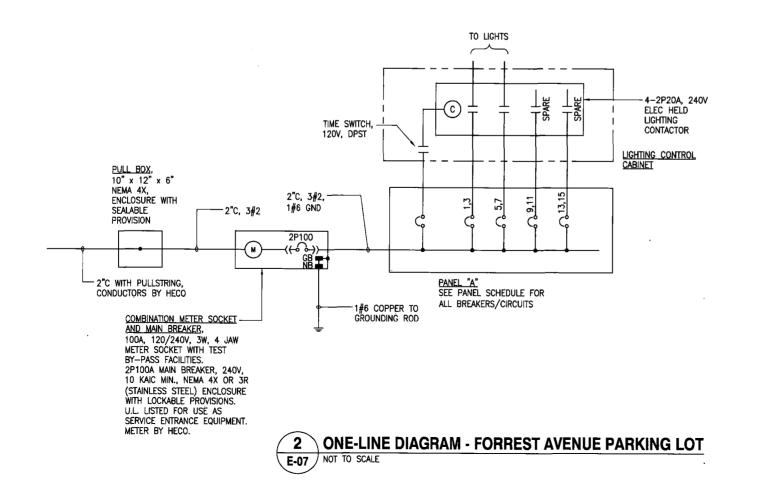
SHEET 6 OF 11

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY FILE POCKET FOLDER NO.





EQUIPMENT RACK DETAIL - FORREST AVENUE PARKING LOT E-07 NOT TO SCALE



SIZE (AWG)	P	ANEL "A"	1	00 A	MP M	AIN L	UGS C	NLY			MIN AIC: 10,000 AIC MOUNTING: SURFACE STEEL ENCLOSURE		SIZE (AWG)
뽍	CKT NO	USE	-	BKR AMP		NN LO NSE A		VA) SE B		BKR POLE		CKT NO	يب [
6	1	POLE LIGHT	2		0.8	1.0				2	SPARE	2	-
6	3			20			0.8	1.0	20	\geq		4	-
6	5	POLE LIGHT	2	\angle	0.8	0.2	L		20	1	TIME SWITCH	6	12
6	7_			20			0.8	0.2	20	1_	WP RECEPT	8	12
12	9	SPARE	2		1.0	1.0			20	1	IRRIGATION CONTROLLER	10	12
12	11			20			1.0	1.0	20	1	GATE CONTROLLER	12	Τ-
12	13	SPARE	2		1.0	1.0			20	1	SPARE	14	Τ-
12	15			20			1.0	1.0	20	1	SPARE	16	Ι-
12	17	110	1	20	-				-	1	PFB	18	-
12		PFB	1	20			-	_	_	1	PFB	20	-
12		PFB	1	20	-	_			_	1	PFB	22	Ι-
12	23	PFB	1	20				_	_	1	PFB	24	-
		CONNECTED LOAD/PH	ASE		6	.8	5.	.8		Ī	-		
		TOTAL CONNECTED LO	AD		13	.6	KVA						
		DEMAND FACTOR			0	.5			Ì				
		TOTAL DEMAND LOAD			6	.8	KVA =	= 28	3.3 A	MPS			





650 INUE ROAD, SUITE 208 • HONOLULU, HAWAI 96817 PHONE: (808) 598-7790 • FAX: (808) 598-7381

HAWAII COMMUNITY DEVELOPMENT AUTHORITY
STATE OF HAWAII
HONOLULU, OAHU, HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI EQUIPMENT DETAILS AND ONE-LINE DIAGRAM
- FORREST AVENUE PARKING LOT
DRAWN BY: KL DES BY: RP CHECKED BY: GM

SCALE: AS NOTED

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

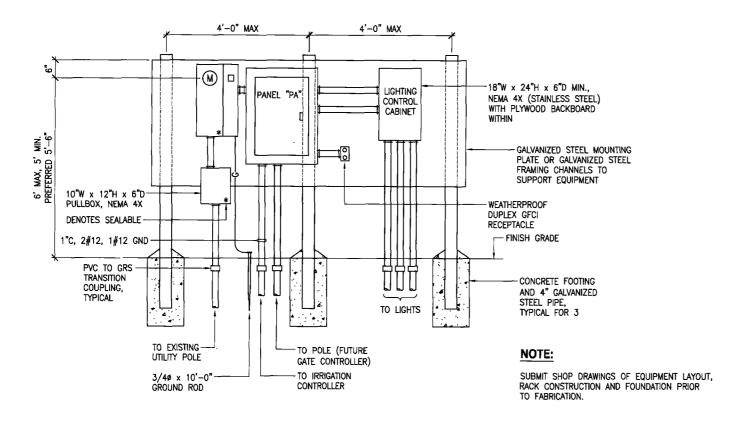
EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

SHEET <u>8</u> OF <u>11</u>

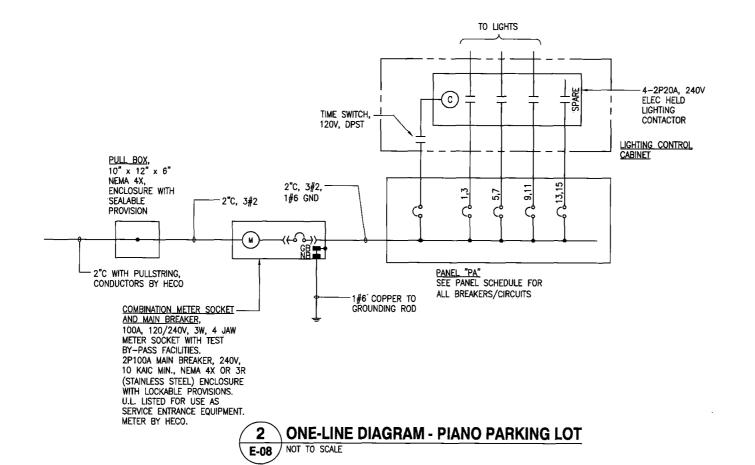
DRAWING _E-07_

FILE POCKET FOLDER NO.

DATE: OCTOBER 2009



EQUIPMENT RACK DETAIL - PIANO PARKING LOT E-08 NOT TO SCALE



SIZE (AWG)	P	ANEL "PA"	1	00 A	MP M	AIN L	1 PH UGS 0 NEMA	NLY			MIN AIC: 10,000 MOUNTING: SURF STEEL ENCLOSURE		SIZE (AWG)
ابیا	KT NO	USE		BKR AMP		IN LO	AD (K	VA) SE B	CKT AMP	_	l liet	CKT	يس 🛚
6		POLE LIGHT	2	$ \angle $	1.0	1.0				2	SPARE	2	Ţ-
	3			20			1.0	1.0	20			4	L-
		POLE LIGHT	2		1.2	0.2			20	_1	TIME SWITCH	6	12
6	7			20			1.2	0.2	20	1	WP RECEPT	8	12
2	9	POLE LIGHT	2		1.2	1.0			20	1	IRRIGATION CONTROLLE	R 10	12
2	11			20	L		1.2	1.0	20	1	GATE CONTROLLER	12	-
2	13	SPARE	2		1.0	1.0			20	1	GATE CONTROLLER	14	-
2	15			20			1.0	1.0	20	1	GATE CONTROLLER	16	Τ=
12		PFB	1	20	_	1.0			[]	1	PFB	18	-
12		PFB	1	20			-	1.0	[<u> </u>	1	PFB	20	-
		PFB	1	20	-					1	PFB	22	-
12 :	23	PFB	1	20				_	_]	1	PFB	24	-
CONNECTED LOAD/PHASE				8.6		8	8.6			· -			
		TOTAL CONNECTED LO	AD		17	.2	KVA		1				
		DEMAND FACTOR			0	.5							
		TOTAL DEMAND LOAD			8	.6	KVA =	= 35	.8 A	MPS			





THE LIMTIACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING
PHONE (800) 909-7701
FACE (800) 909-7701
FACE (800) 509-7701

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII
HONOLULU, OAHU, HAWAII
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI EQUIPMENT DETAILS AND ONE-LINE DIAGRAM
- PIANO PARKING LOT DRAWN BY: KL CHECKED BY: GM DES BY: RP

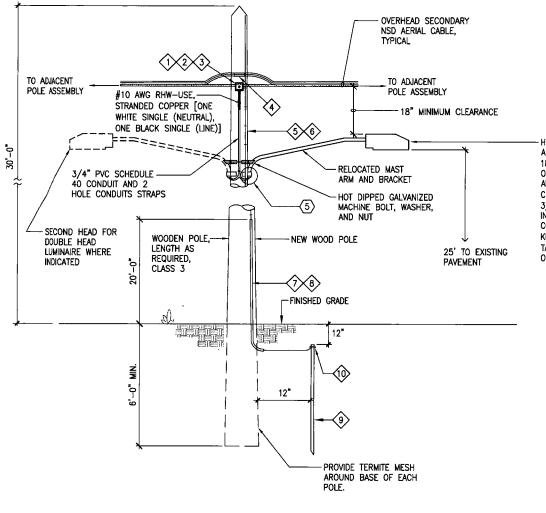
Fernox K. Nishin THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

SCALE: AS NOTED DATE: OCTOBER 2009 EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DRAWING _E-08_

SHEET _9 _ OF _11

FILE POCKET FOLDER NO.



TYPICAL ONE (1) PARKING LOT LIGHT ASSEMBLY SHOWN. DOUBLE PARKING LOT LIGHT ASSEMBLY SIMILAR.

STRAIGHT LINE MESSENGER SUPPORT SHOWN, PROVIDE

TWO (2) DEAD END CONNECTIONS PER OVERHEAD

GREATER THAN 10". PROVIDE ONE (1) DEAD END CONNECTION PER OVERHEAD SECONDARY AERIAL CABLE AT

SECONDARY AERIAL CABLE WHEN DEVIATION ANGLE IS

ONE (1) OVERHEAD SECONDARY AERIAL CABLE SHOWN. PROVIDE ADDITIONAL MESSENGER SUPPORTS (STRAIGHT LINE OR DEAD END) FOR EACH OVERHEAD SECONDARY AERIAL

PROVIDE NECESSARY MOUNTING HARDWARE (BOLTS, NUTS, WASHERS ETC.) TO PROPERLY SECURE LIGHTS TO MOUNTING BRACKET.

PROVIDE #11 RUBBER STOPPER (CYLINDRICAL 2-HOLES,

TOP-56MM, LENGTH-48MM, EACH HOLE-5MM) TO PREVENT NESTING BIRDS. CONTRACTOR TO PROVIDE & INSTALL. HAWAII CHEMICAL & SCIENTIFIC #13-8752-20 (PHONE:

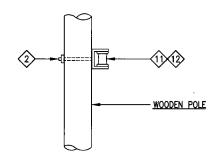
TYPICAL PARKING LOT LIGHT ASSEMBLY

NOTES:

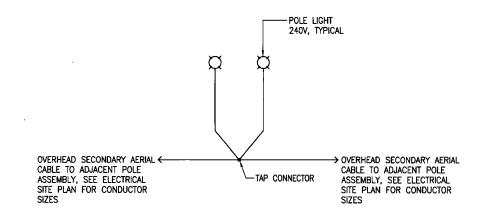
841-4265)

E-09 / NOT TO SCALE

HIGH PRESSURE SODIUM; MAST ARM MOUNTED ARCHITECTURAL AREA TYPE FIXTURE;
18"LONG x 12"WIDE x 6"DEEP NOMINAL;
ONE-PIECE DIE CAST LOW COPPER ALUMINUM ALLOY HOUSING AND LENS FRAME; CUTOFF/FULLY SHIELDED OPTICS. 3/16" THICK TEMPERED GLASS LENS; INTEGRAL HPF BALLAST; STEALTH GRAY POWDER COAT PAINT FINISH; 150WATT LAMP; 240VOLT. KIM #SAR3-150HP240-SG HSF, TALON # TLM-150HPS 240- 3F FG-AP-MA 1202, OR APPROVED EQUIVALENT



TYPICAL DEADEND CONNECTION E-09 NOT TO SCALE

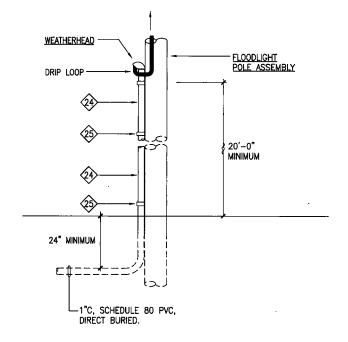


NOTES:

- WIRING DIAGRAM FOR TWO (2) POLE LIGHTS SHOWN, WIRING DIAGRAM FOR ONE (1) POLE LIGHT CONDITION SIMILAR.
- EXTEND 8'-0" LENGTH OF SO CORD AS REQUIRED TO ACCOMMODATE INSTALLATION OF POLE LIGHT LUMINAIRES.

TYPICAL POLE LIGHT WIRING DIAGRAM E-09 / NOT TO SCALE

TO OVERHEAD SECONDARY AERIAL CABLES, SEE ELECTRICAL SITE PLAN AND ONE LINE DIAGRAM FOR CONDUCTORS



NOTE:

1-1"C RISER FOR PARKING LOT LIGHTING SHOWN.





HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI POLE LIGHT DETAILS

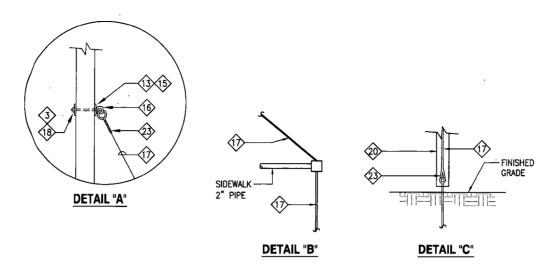
DRAWN BY: KL CHECKED BY: CM DES BY: RP SCALE: AS NOTED DATE: OCTOBER 2009 EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

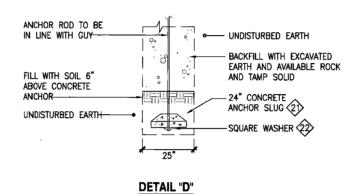
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SHEET _10 OF _11__

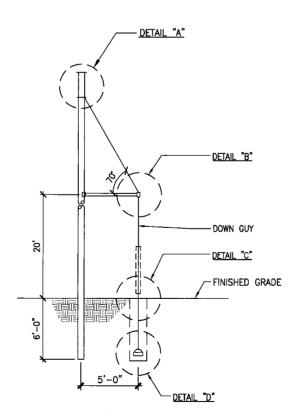
DRAWING _E-09

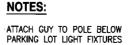
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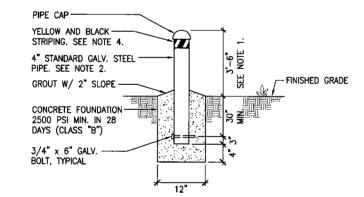












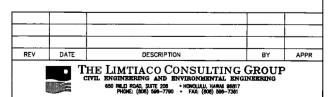
NOTES:

- 1. PROVIDE ALL STANCHIONS INSTALLED AT THE SAME HEIGHT.
- 2. FILL GALV. PIPE WITH CONCRETE.
- PAINT STANCHION YELLOW PER ANSI SPEC. 2535.1 TO COMPLY WITH OSHA STANDARDS PER COLOR CODING. GALV. PIPING SHALL BE ACID WASHED AND PRIMED BEFORE PAINTED YELLOW.
- PROVIDE 3" WIDE YELLOW AND BLACK PRESSURE SENSITIVE TACK ADHESIVE WARNING TAPE AROUND TOP OF STANCHION.



TYPICAL GUYING DETAILS (WHERE SHOWN)

	POLE MATERIAL SCHEDULE
ITEM	DESCRIPTION
$ \langle 1 \rangle$	STRAIGHT LINE MESSENGER SUPPORT
2	BOLT, 5/8" DIAMETER x LENGTH AS REQUIRED, GALVANIZED, MACHINE WITH NUT AND WASHER
3	WASHER, 2 1/2" SQUARE, CURVED, GALVANIZED
4	TAP CONNECTOR, COMPRESSION, UL. LISTED FOR COPPER TO ALUMINUM CONNECTION
5	CONDUCTOR, #4 SOFT DRAWN BARE COPPER (GROUND)
6	STAPLE, GALVANIZED
\bigcirc	MOLDING, WOOD, 1/2" INTERNAL DIAMETER, LENGTH AS REQUIRED
8	NAIL, GALVANIZED
9	GROUND ROD, COPPER CLAD STEEL, 3/4" DIAMETER x 10'-0" LONG
10>	GROUND CLAMP
11>	CLEVIS, GALVANIZED, FOR 3" DIAMETER SECONDARY INSULATOR
12>	INSULATOR, SECONDARY, 3" DIAMETER
13	WASHER, 2 1/4" SQUARE x 1/4" THICK, GALVANIZED, 5/8" HOLE
14>	STRAIN INSULATOR
15	LIFT PLATE, 3—HOLE, 3/4" DIAMETER BOLT
16>	ANGLE THIMBLE EYE BOLT, 3/4" DIAMETER x 1" LONG
17	WIRE, GUY, 1/2" DIAMETER, HIGH STRENGTH, GALVANIZED
18	NUT, 5/8" OR 3/4" SQUARE, GALVANIZED, SIZE TO SUIT
19>	ROD ANCHOR, 1" DIAMETER x 8'-0" LONG, SINGLE STRAND EYE
20>	GUY GUARD, PVC, 8'-0" LONG, 3/4" DIAMETER, YELLOW
21>	ANCHOR SLUG, CONCRETE, 24" DIAMETER
22>	WASHER, 4" SQUARE x 1/4" THICK, 3/4" HOLE
23	DEAD END STRAND GRIP, 1/2" DIAMETER, HIGH STRENGTH, GALVANIZED
24>	1" PVC CONDUIT, SCHEDULE 80, SUNLIGHT (UV) RESISTANT
_	





HAWAII COMMUNITY DEVELOPMENT AUTHORITY

STATE OF HAWAII
HONOLULU, OAHU, HAWAII
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

DES BY: RP

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI GUYING DETAIL

Fernox K. Nuchimu

SCALE: AS NOTED

DRAWN BY: KL

25 CONDUIT STRAP, 2-HOLE, SPACED EVERY 8'-0" MAXIMUM

EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

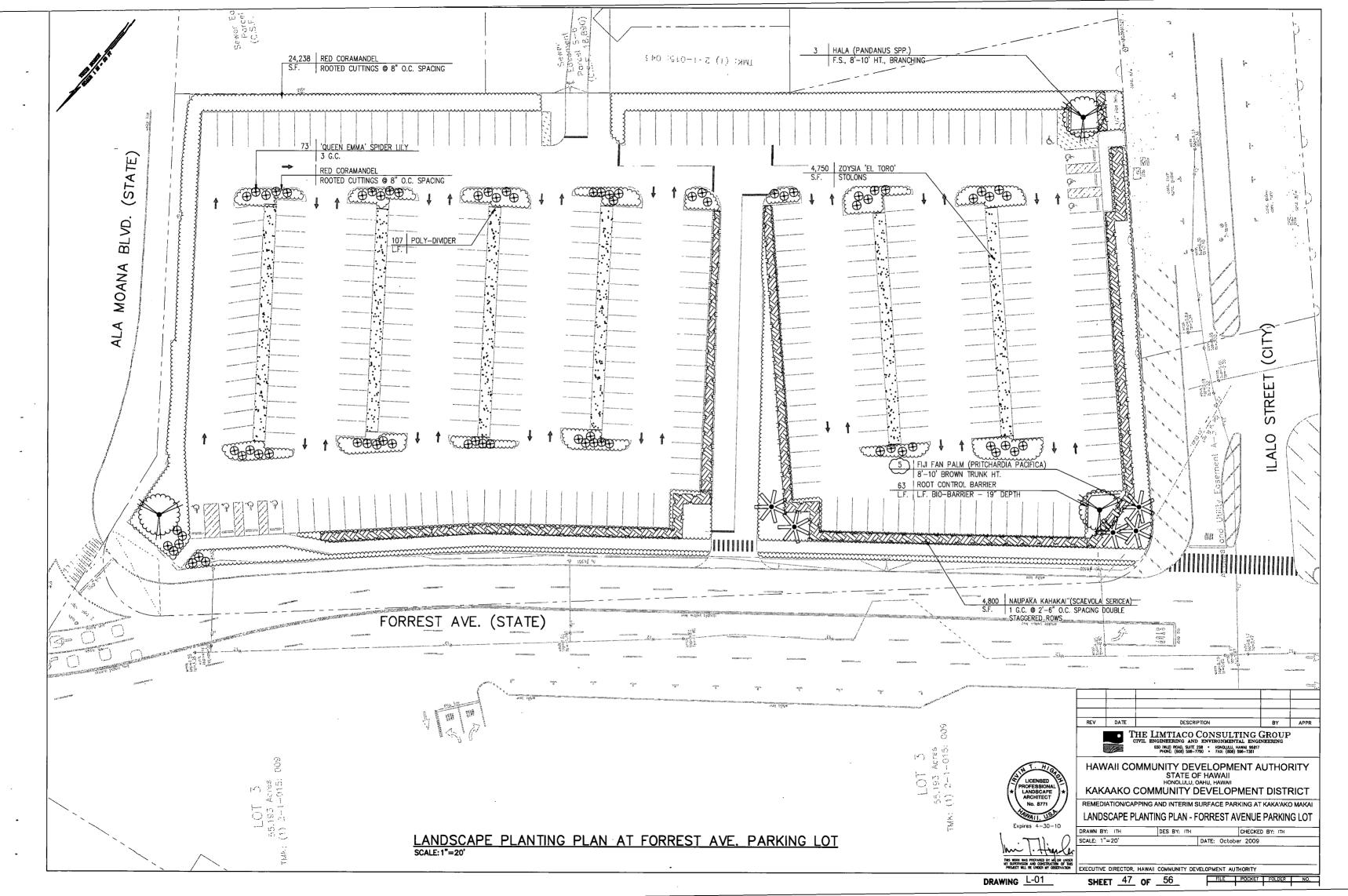
SHEET _11_ OF _11_

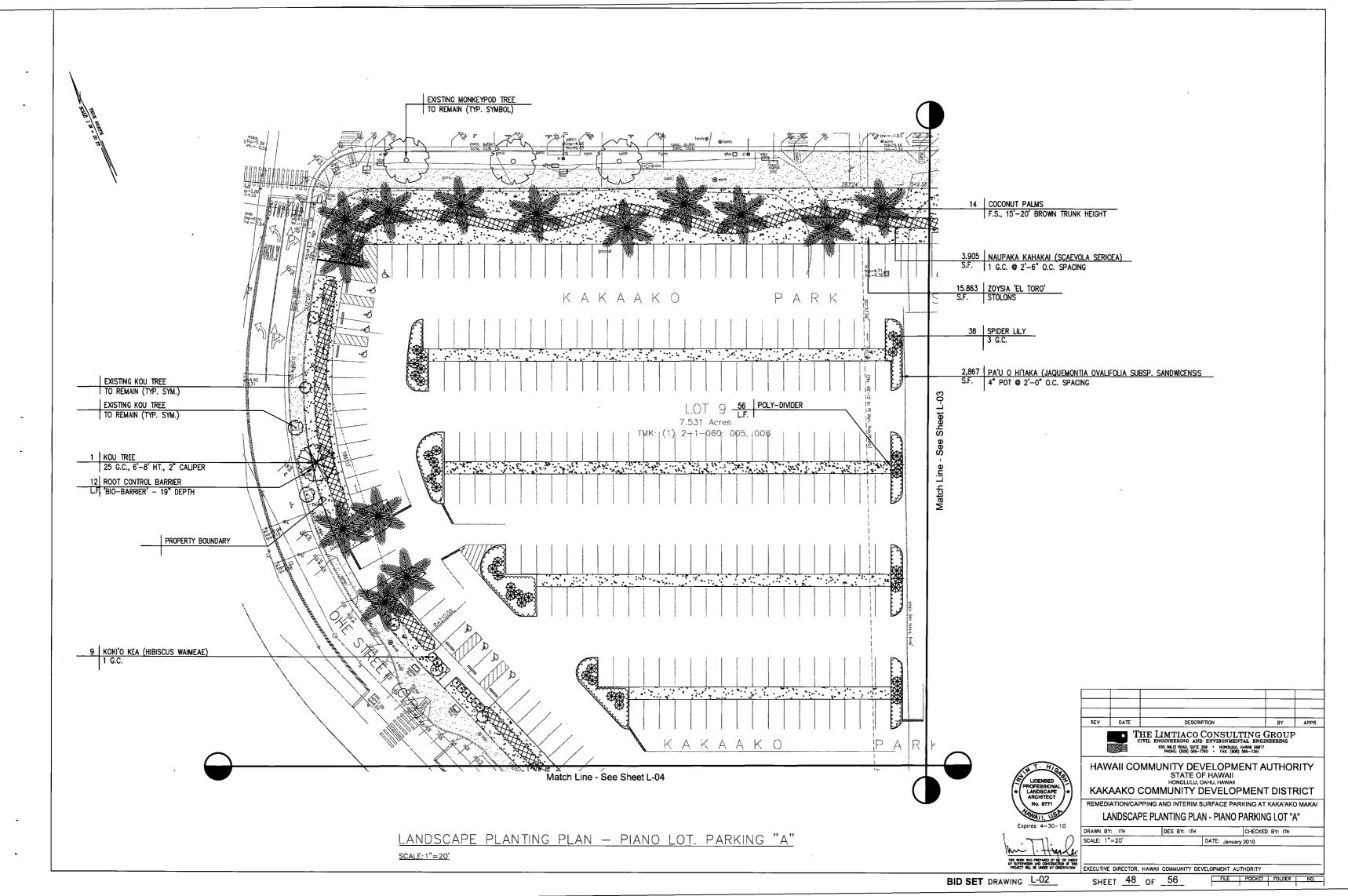
DRAWING _E-10

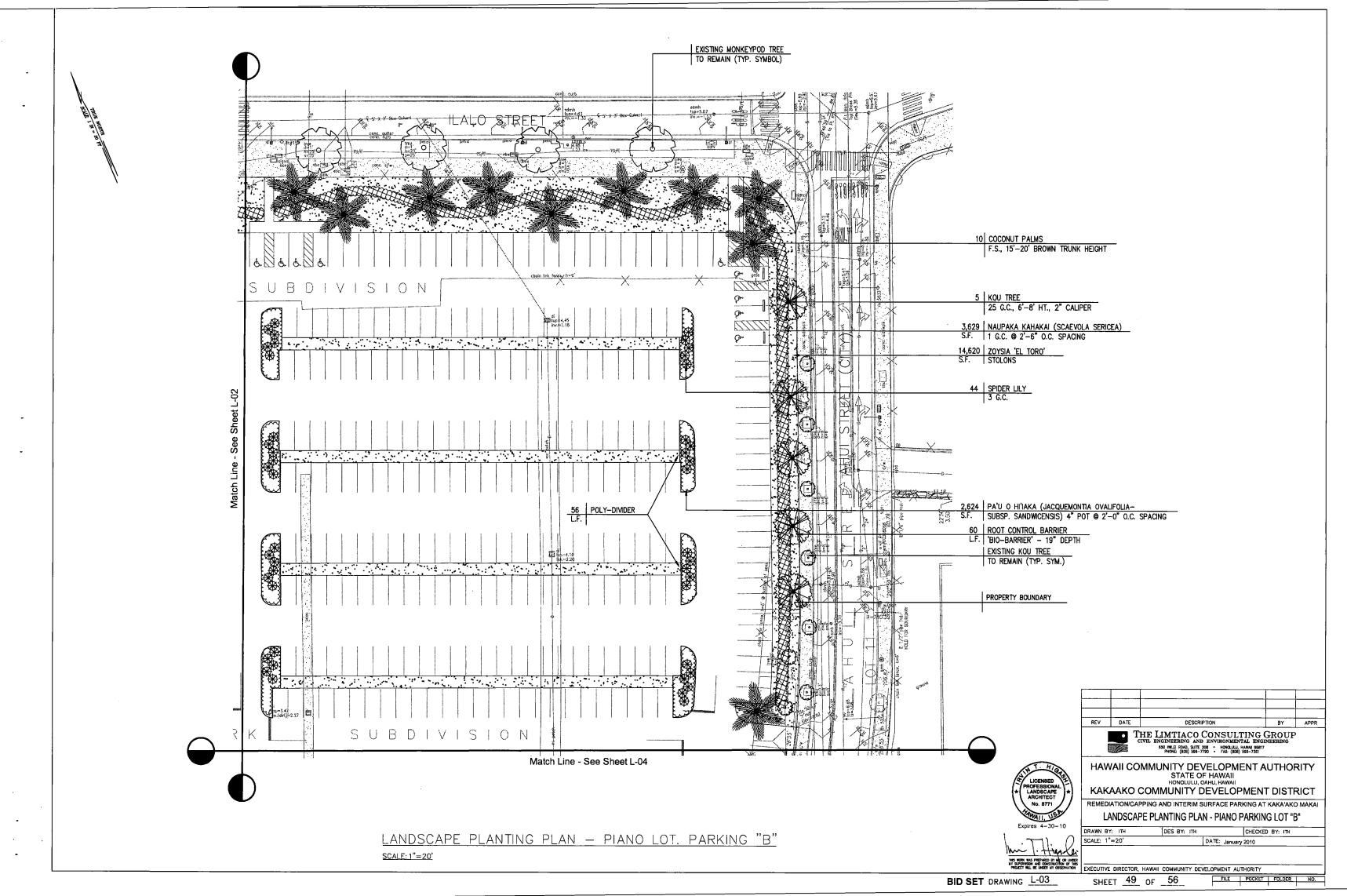
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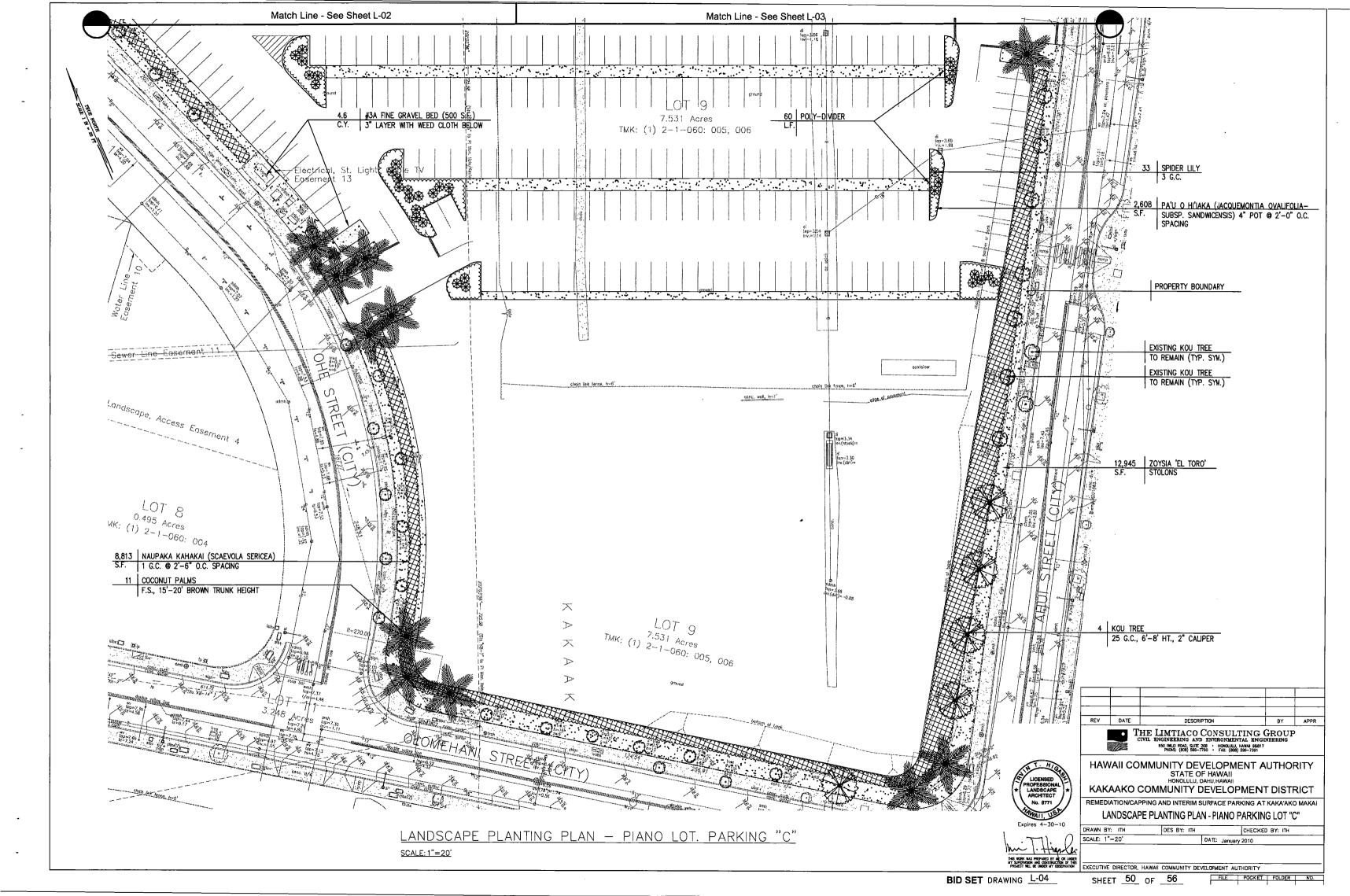
DATE: OCTOBER 2009

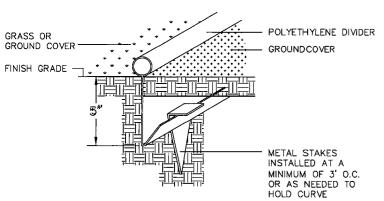
CHECKED BY: GM



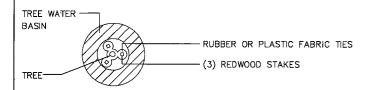








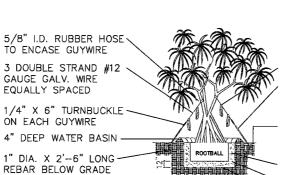
POLY-DIVIDER DETAIL (L-05) NO SCALE



NOTE: 1. RAKE OUT BERM AT END OF MAINTENANCE PERIOD. 2. WHEN REFILLING HOLE DO NOT LEAVE ANY AIRSPACE; WATER HEAVILY TO INSURE THAT SOIL SETTLES AROUND ROOTS 3. TRUNK MUST BE PROTECTED FROM ROPE SLING BURNS AND ABRASIONS DURING MOVING (3) 2" x 2" x 8'-0" TREATED LONG RWD. STAKE (DO NOT DRIVE THROUGH ROOTBALL) OF WIND RUBBER OR PLASTIC FABRIC TIES TOP OF ROOTBALL TO BE 4" BELOW FINISH GRADE GRADE -TREE WATER BASIN, 4" DEEP REMOVE EXCESS SOIL FROM PIT - SLOW RELEASE PLANTING TABLETS (SEE SPECS.) TWICE DIA. -LOOSEN ADDITIONAL 6" AT BOTTOM OF PIT; OF ROOTBALL ADD FERTILIZER MIXTURE

*UNLESS DESIGNATED OTHERWISE ON PLAN.

25 GAL TREE PLANTING DETAIL L-05 NO SCALE



TAMPED BACKFILL-

RAKE OUT BERM AT END OF MAINTENANCE PERIOD.

TRUNK MUST BE PROTECTED FROM ROPE SLING BURNS AND ABRASIONS DURING MOVING.

YELLOW FLAGS AT 3'-0" O.C.

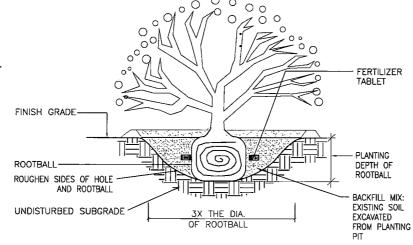
1/2" DIA. WHITE PVC PIPE OVER WIRE AS PROTECTION 60" MIN. (1 PER GUYWIRE)

FINISH GRADE PLANTING TABLETS SPACED EVENLY AROUND ROOTBALL AND 6" BELOW

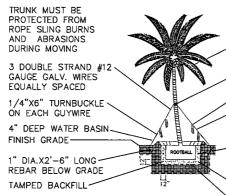
THE ROOT CROWN BACKFILL MIXTURE LOOSEN ADDITIONAL 12" AT

BOTTOM OF PIT ADD FERTILIZER





SHRUB PLANTING DETAIL NO SCALE



5/8" I.D. RUBBER HOSE TO ENCASE GUYWIRE YELLOW FLAGS AT 3'-0" O.C. 1/2" DIA. WHITE PVC PIPE OVER WIRE AS PROTECTION 60" MIN. LONG (1 PER GUYWIRE)

RAKE OUT BERM AT END OF MAINTENANCE PERIOD

AND SACKING

REMOVE LOWER FRONDS, NUTS,

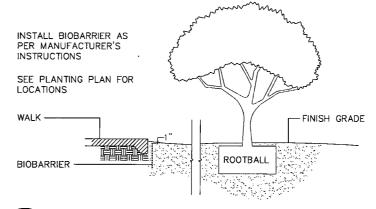
PLANTING TABLETS SPACED EVENLY AROUND THE ROOTBALL AND 6" BELOW THE ROOT CROWN MAUI DUNE SAND

LOOSEN ADDITIONAL 12" AT BOTTOM OF PIT

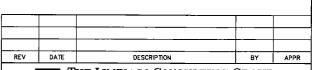


PLANT LIST		·	Sheet L-02			
Trees and Palms	Size and Conditions	Quantity	Quantity	Quantity	Quantity	Total
Hala	Field stock; 8' to 10' height, branching	3	0	0	0	تبر
Fiji Fan Palm	Field stock; 8' to 10' brown trunk height	(5)	0	. 0	0	(5
Coconut Palm	Field stock; 15' to 20' brown trunk height	0	14	10	11	35
True Kou Tree	25 g.c.; 6' — 8' height; 2" caliper	0	1	5_	4	10
Shrubs	Size and Conditions	Quantity	Quantity	Quantity	Quantity	Total
Queen Emma' Spider Lily_	3 g.c.	73	0	0	0	73
Spider Lily (Green)	3 g.c.	0	38	44	33	115
Koki'o Kea (Hibiscus waimeae)	1 g.c.	0	9	0	0	9
Ground Covers	Size and Conditions	Quantity	Quantity	Quantity	Quantity	Total
Naupaka kahakai (Scaevola sericea)	s.f.; 1 g.c. @ 2'-6" o.c. spacing	4,800	3,905	3,629	8,813	21,147
Pa'u o hi'iaka (Jacquemontia ovalifolia subsp. Sandwicensis)	4" pot; @ 2′−0" o.c. spacing	0	2,867	2,624	2,608	8,099
Red Coromandel	s.f.; rooted cuttings @ 8" o.c. spacing	24,238	0	0	0	24,238
Zoysia 'El Toro'	s.f.; stolons	4,750	15,863	14,620	12,945	48,178
Miscellaneous	Size and Conditions	Quantity	Quantity	Quantity	Quantity	Total
Root Control Barrier	I.f.; Bio—Barrier (19" depth)	63	12	60	0	/135
Poly-Divider	l.f.	107	56	56	60	279
Organic Cover Mulch	c.y.; 2" layer (Place under naupaka)	30	24	22	54	130
#3A Fine Gravel w/ Weed Cloth Below	c.y.; 3" layer	0	0	0	4.6	4.6
Irrigation System	s.f.	33,788	22,635	20,873	24,366	101,662
Maintenance Period	3 Month	3 month	3 month	3 month	3 month	3 month
Imported Screened Topsoil w/amendments	c.y., 4" layer	417	279	257	300	1,253

- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITY LINES PRIOR TO CONSTRUCTION OPERATIONS. ANY UTILITY LINES DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- 2. FOR FINAL GRADING SEE CIVIL DRAWINGS.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR TO VERIFY EXACT LOCATIONS OF ALL TREES AND SHRUBS WITH THE LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF PLANTING OPERATIONS.
- THE PLANT LIST QUANTITIES ARE APPROXIMATE AND SHOULD SERVE ONLY AS A GUIDELINE FOR THE CONTRACTOR. ALL WORK INDICATED ON THE DRAWINGS BY NOTES SHALL BE PROVIDED WHETHER OR NOT SPECIFICALLY MENTIONED IN THE PLANT LIST. PLANTS AND GROUND COVERS SHALL BE FURNISHED IN QUANTITIES AS REQUIRED TO COVER THE AREAS INDICATED ON THE PLANS AT THE SPACE NOTED. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES BEFORE BIDDING.
- 6. ALL TREES TO BE PLACED 6 FEET MINIMUM AWAY FROM ALL UTILITY LINES.
- ALL TREES AND PALMS TO BE LOCATED AWAY FROM DRAINAGE SWALES.
- 8. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON PROJECT SITE PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORK WITHIN THE AVAILABLE SPACE.







THE LIMITACO CONSULTING GROUP 650 IMILEI ROAD, SUITE 208 - HONOLULU, HAWAII 96817 PHONE: (808) 596-7790 - FAX: (808) 596-7361

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI

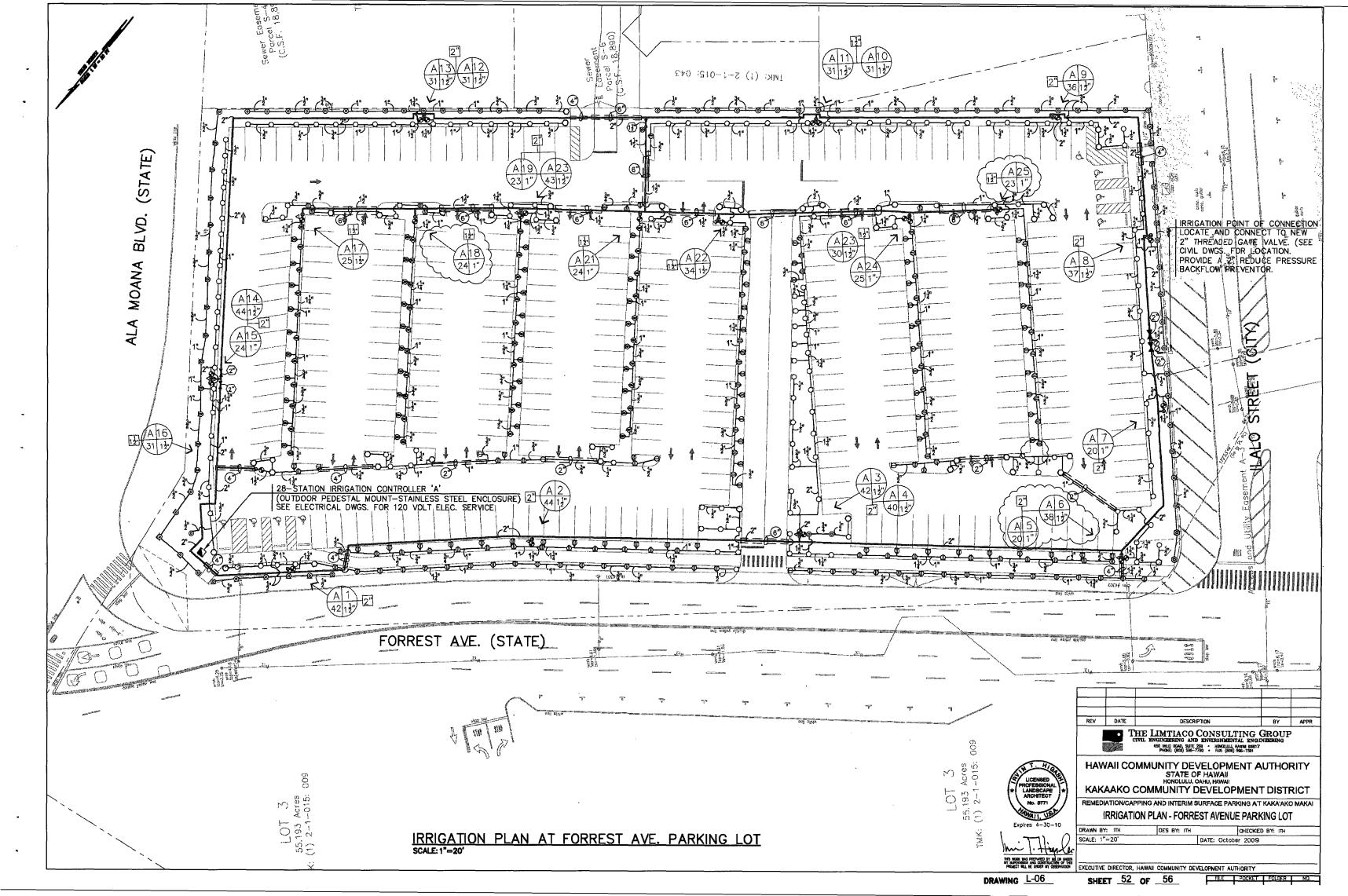
EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

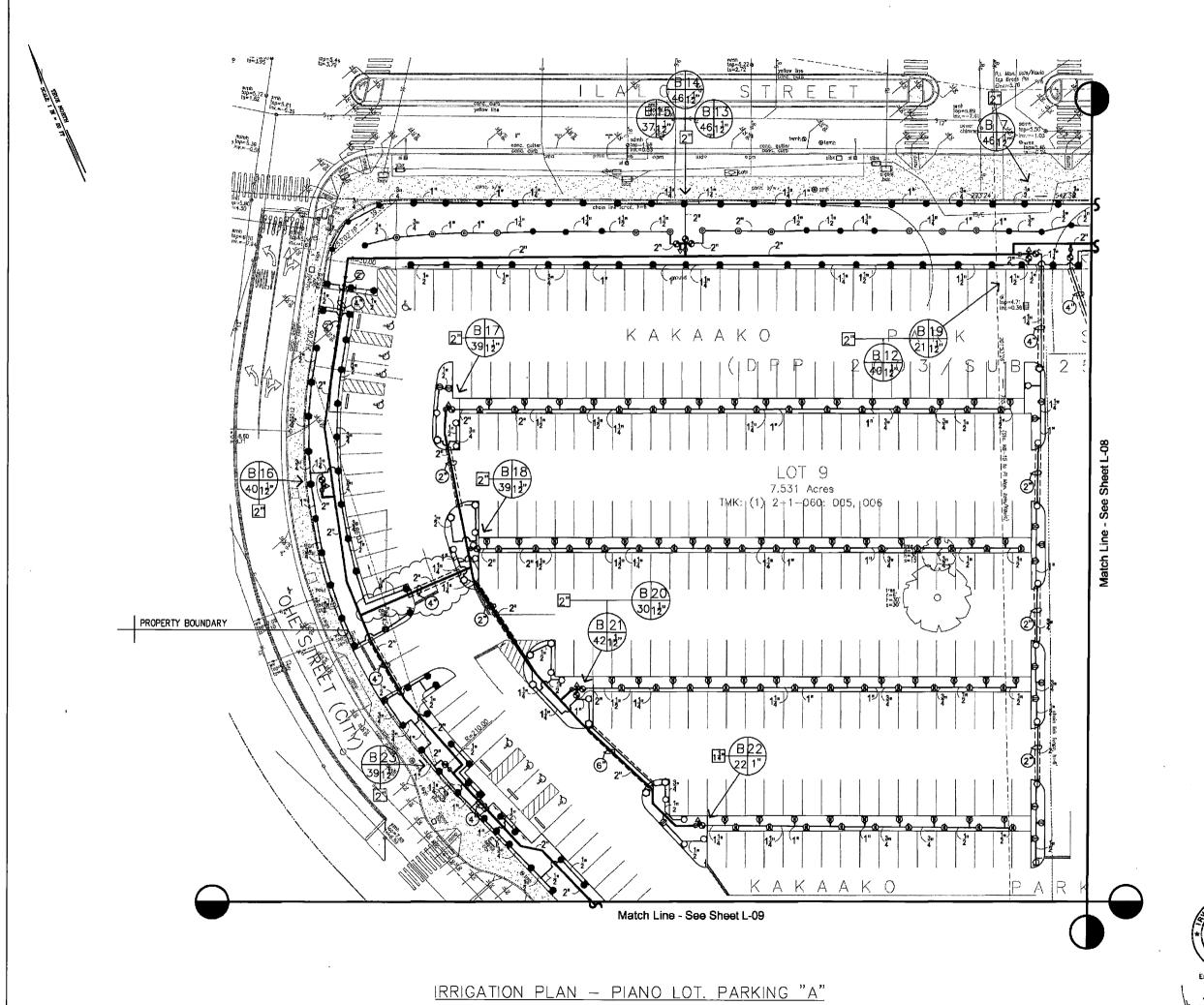
PLANT LIST, DETAILS & NOTES DRAWN BY: ITH CHECKED BY: ITH SCALE: DATE: October 2009

DRAWING L-05

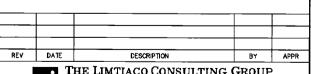
Expires 4-30-10

SHEET 50 OF 56





SCALE: 1"=20'



THE LIMITACO CONSULTING GROUP CIVIL ENGINEERING AND ENVIRONMENTAL ENGINEERING SOS NELLO ROOK, SUITE 200. INSPECTABLE, HARMS 200417 HARE (200) 556-7701 - FALE (200) 566-7801

HAWAII COMMUNITY DEVELOPMENT AUTHORITY
STATE OF HAWAII
HONOLULU, OAHU, HAWAII

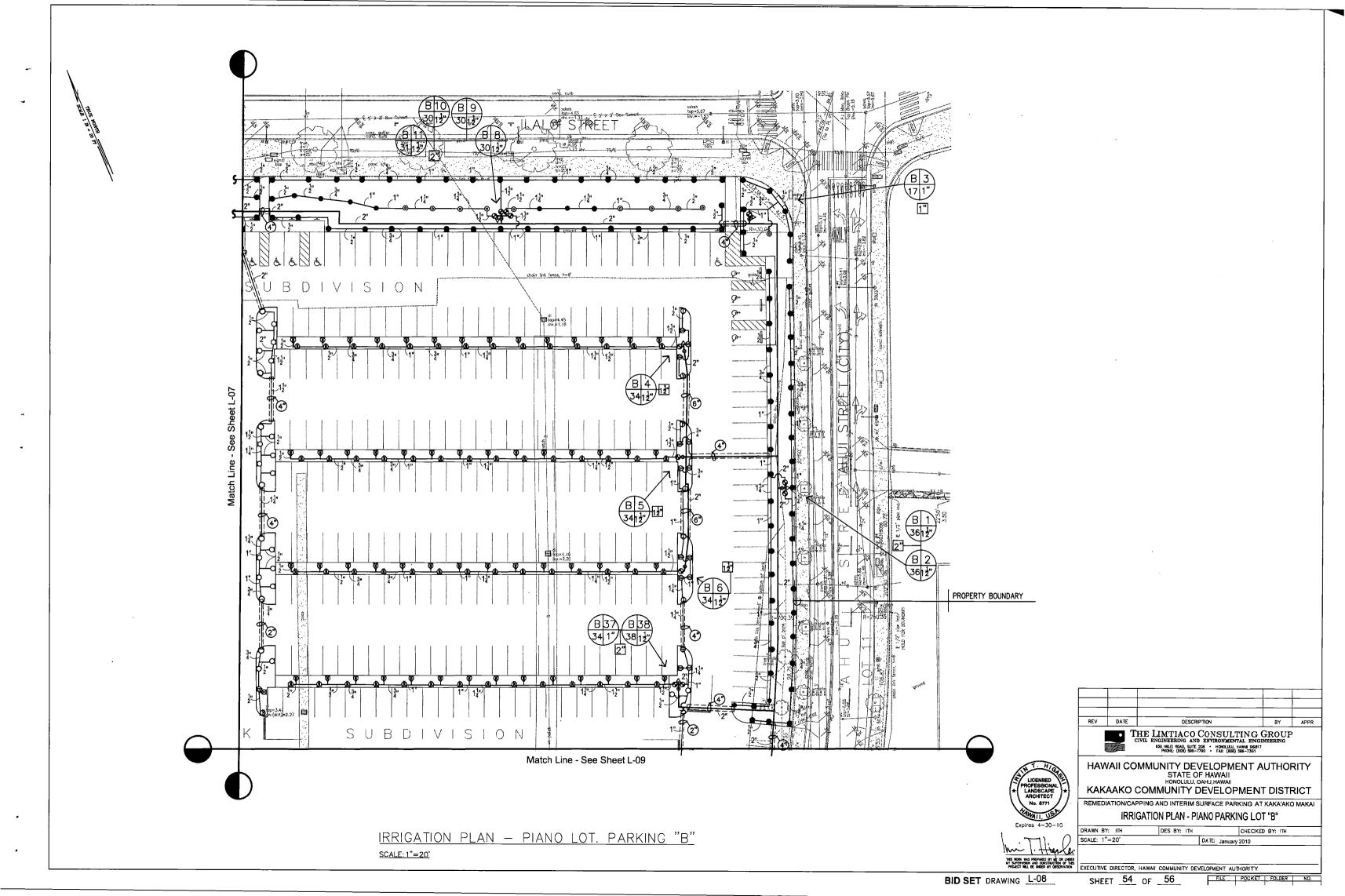
KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

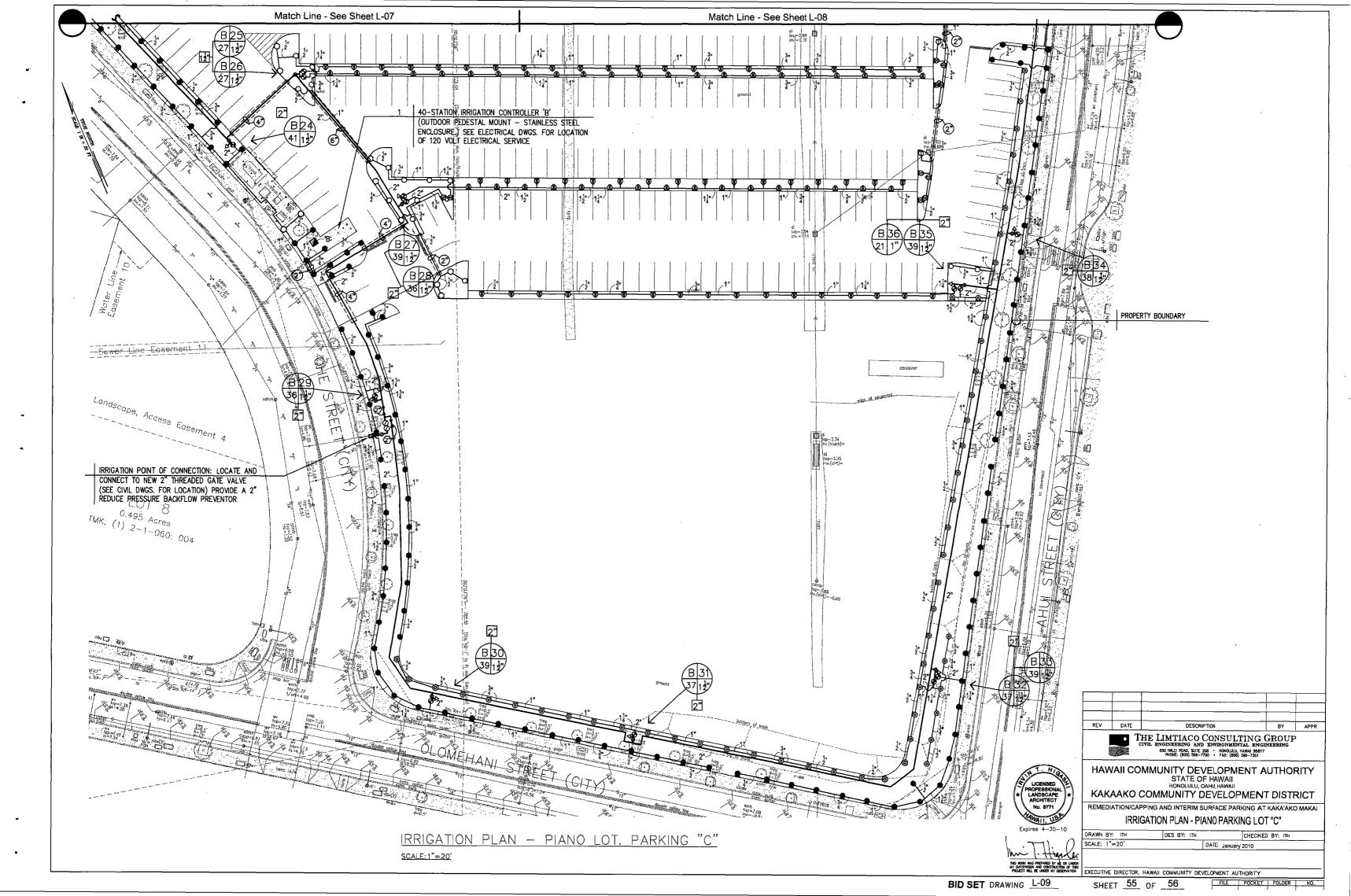
REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI IRRIGATION PLAN - PIANO PARKING LOT "A"

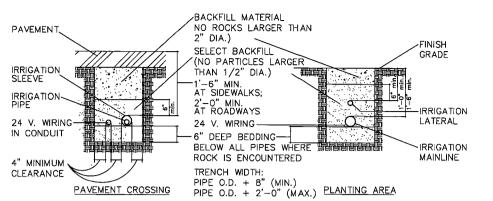
DRAWN BY: ITH CHECKED BY: ITH DATE: October 2009 EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

DRAWING L-07

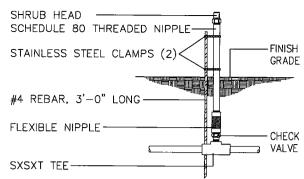
SHEET 53 OF 56 FILE POCKET FOLDER NO.







INSTALL PART CIRCLE AND STRIP PATTERN SHRUB HEADS 1'-0" FROM EDGE OF PLANTING AREA



TRENCH DETAIL L-10,

NO SCALE

SHRUB HEAD ON RISER DETAIL NO SCALE

SXSXT TEE INSTALL PART CIRCLE POLYETHYLENE PIPE WITH STRFFT FIL AND 2 12" POP-UP HEADS BARBED ELLS 6" FROM EDGE OF PLANTING AREA POP-UP HEAD STRIP HEADS 4" FROM EDGE - FINISH GRADE ô 1, - M

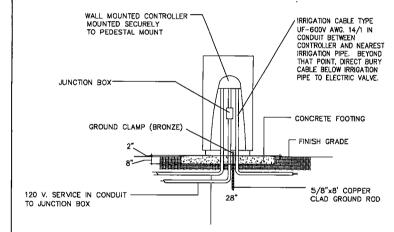
NOTIES:

1. INSTALL CONTROLLER PER MANUFACTURERS INSTRUCTIONS.

2. INSTALL WIRING AS PER LOCAL CODE.

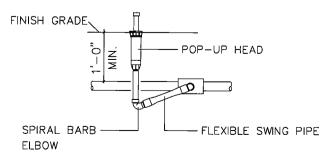
3. PEDESTAL SHALL BE ANCHORED TO CONCRETE BASE AS RECOMMENDED BY MANUFACTURER.

4. CONCRETE BASE SIZE SHALL BE AS RECOMMENDED BY MANUFACTURER.



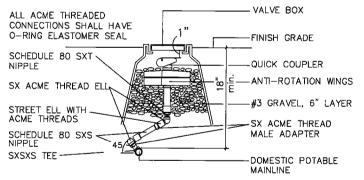
PEDESTAL MOUNT CONTROLLER DETAIL NO SCALE

INSTALL PART CIRCLE POP-UP HEADS 4" FROM EDGE OF LAWN: STRIP HEADS 2" FROM EDGE.

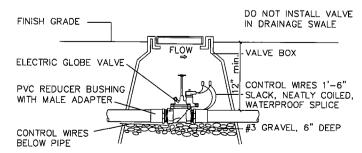


4" POP-UP LAWN HEAD DETAIL NO SCALE

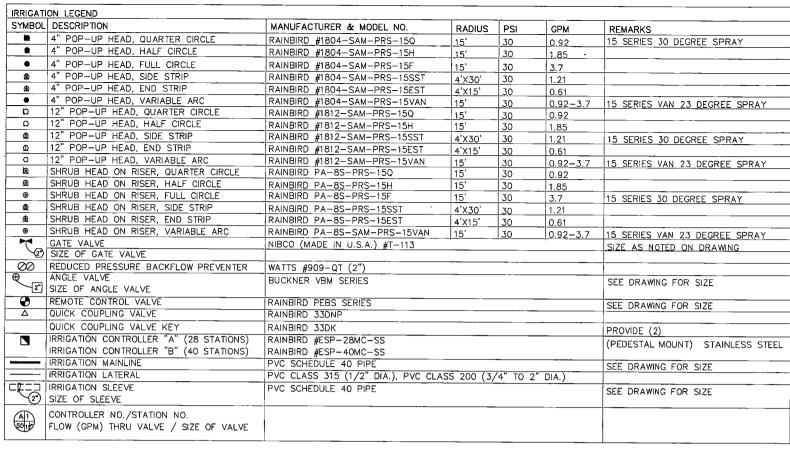


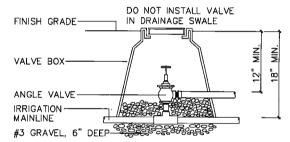


QUICK COUPLER VALVE DETAIL NO SCALE



REMOTE CONTROL VALVE DETAIL NO SCALE

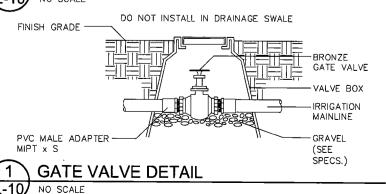




ANGLE VALVE DETAIL

NO SCALE 2" REDUCE PRESSURE-BACKFLOW VALVE ASSEMBLY 2" COPPER 2" COPPER MALE ADAPTER -MALE ADAPTER 2" COPPER ELL 2" COPPER ELL 2" TYPE K HARD COPPER PIPE, TAPE WRAF FĽOW FINISH GRADE 2" PVC PIPE WITH -12"x12"x12" CONC. THRUST MALE ADAPTER 2" COPPER ELL WITH REDUCER BUSHING ADAPTER

REDUCE PRESSURE BACKFLOW VALVE DETAIL L-10 NO SCALE



IRRIGATION NOTES:

- PERFORM A PRESSURE TEST AT THE IRRIGATION POINT OF CONNECTION TO VERIFY SUFFICIENT WORKING PRESSURE. NOTIFY THE LANDSCAPE ARCHITECT IF ANY DISCREPANCIES SHOULD OCCUR.
- 2. THE MINIMUM STATIC PRESSURE, AT THE IRRIGATION POINT OF CONNECTION, TO BE 75 PSI. THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT THE PRESSURE INDICATED ON THE IRRIGATION LEGEND FOR ALL HEAD TYPES. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE TO INSURE ALL REMOTE CONTROL VALVES AND SPRINKLER HEADS OPERATE AT THE SPECIFIED PRESSURE
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITY LINES PRIOR TO CONSTRUCTION OPERATIONS. ANY UTILITY LINES DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- 4. FOR FINAL GRADING SEE CIVIL DRAWINGS.
- 5. FOR BUILDING LAYOUT SEE ARCHITECTURAL DRAWINGS.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION OPERATIONS.
- THE IRRIGATION PLAN IS DIAGRAMMATICAL AND EXACT LOCATIONS OF HEADS FOR ADEQUATE COVERAGE IS THE CONTRACTOR'S RESPONSIBILITY.
- ALL IRRIGATION LINES, WHERE POSSIBLE, SHALL BE PLACED ADJACENT TO SIDEWALKS, CURBS, OR WALLS.
- PROVIDE 12" POP-UP BODY FOR HEADS LOCATED IN GROUND COVER AREAS ADJACENT TO CURBS, WALKWAYS AND ROAD EDGES.
- 10. ALL OTHER IRRIGATION HEADS TO BE SHRUB HEAD ON RISER UNLESS OTHERWISE NOTED ON PLAN.
- THE CONTRACTOR SHALL COORDINATE WITH THE SITEWORK CONTRACTOR FOR LAYING SLEEVES AND CONDUITS PRIOR TO LAYING ASPHALT CONCRETE AND CONCRETE PAVING.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORK WITHIN THE AVAILABLE SPACE.
- 13. MAXIMUM "OFF-PEAK" IRRIGATION DEMANDS:

FLOW: 43 GALLONS PER MINLITE DEMAND: GALLONS PER DAY



Expires 4-30-10

~ 1. Highter THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERNISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY DESERVATION

HAWAII COMMUNITY DEVELOPMENT AUTHORITY STATE OF HAWAII

KAKAAKO COMMUNITY DEVELOPMENT DISTRICT

REMEDIATION/CAPPING AND INTERIM SURFACE PARKING AT KAKA'AKO MAKAI IRRIGATION LEGEND, DETAILS & NOTES

DRAWN RY: ITH SCALE: DATE: January 2010 EXECUTIVE DIRECTOR, HAWAII COMMUNITY DEVELOPMENT AUTHORITY

BID SET DRAWING L-10

SHEET <u>56</u> OF <u>56</u>