APN 007-171-008 IMPROVEMENT PLANS FOR INTERIM HOUSING SHELTER SOLUTIONS PROJECT 900 HOPPER STREET PETALUMA CALIFORNIA

CONSULTANTS

CIVIL ENGINEER LAND SURVEYOR LANDSCAPE ARCHITECT

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PVC

R.C.E.

SD

SDMH

SDR

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W, WTR

WM

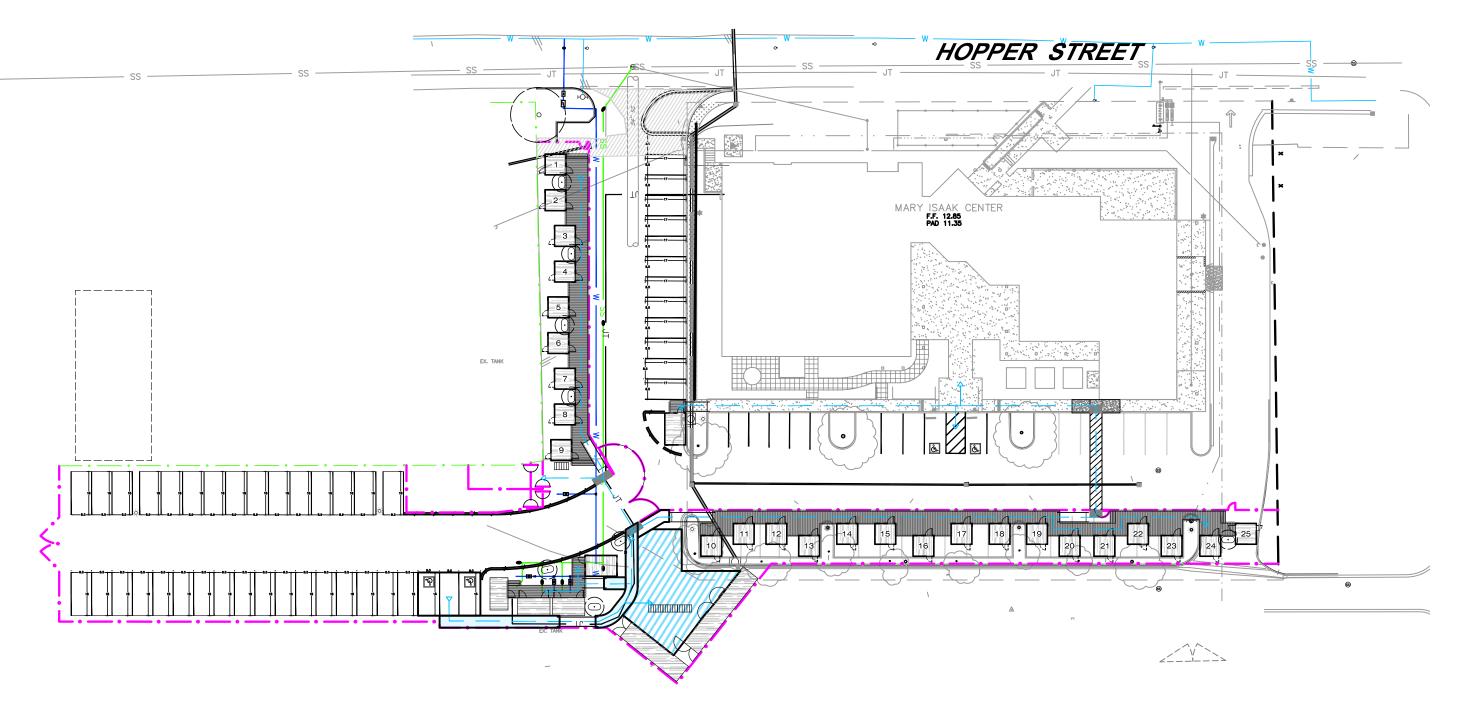
ABBREVIATIONS

AC APN BC CB CL, C/L COP	ASPHALT CONCRETE ASSESSOR'S PARCEL NUMBER BEGINNING OF CURVE CATCH BASIN CENTERLINE CITY OF PETALUMA
EG	EXITING GROUND
DI	DROP INLET
FC	FACE OF CURVE
FG	FINISH GRADE
FH	FIRE HYDRANT
GV	GATE VALVE
HP	HIGH POINT
INV, IG	INVERT GRADE
JT	JOINT TRENCH
LF	LINEAL FOOT

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ARCH	ITECTURAL LAYOUTS
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	ARCHITECTURAL DETAILS
ELECT	RICAL LAYOUTS
<u>ELECT</u> E001	RICAL LAYOUTS ELECTRICAL LEGEND AND ABBREVIATIONS
<u>ELECT</u> E001 E002	RICAL LAYOUTS ELECTRICAL LEGEND AND ABBREVIATIONS ELECTRICAL SHEET SPECIFICATION
<u>ELECT</u> E001 E002 E101	RICAL LAYOUTS ELECTRICAL LEGEND AND ABBREVIATIONS ELECTRICAL SHEET SPECIFICATION SITE ELECTRICAL PLAN
<u>ELECT</u> E001 E002 E101 E102	RICAL LAYOUTSELECTRICAL LEGEND AND ABBREVIATIONSELECTRICAL SHEET SPECIFICATIONSITE ELECTRICAL PLANPHOTOMETRIC CALCULATIONSELECTRICAL PLAN UNITS 1–9, RESTROOM
ELECT E001 E002 E101 E102 E111	RICAL LAYOUTSELECTRICAL LEGEND AND ABBREVIATIONSELECTRICAL SHEET SPECIFICATIONSITE ELECTRICAL PLANPHOTOMETRIC CALCULATIONSELECTRICAL PLAN UNITS 1–9, RESTROOM
ELECT E001 E002 E101 E102 E111 E112	TRICAL LAYOUTSELECTRICAL LEGEND AND ABBREVIATIONSELECTRICAL SHEET SPECIFICATIONSITE ELECTRICAL PLANPHOTOMETRIC CALCULATIONSELECTRICAL PLAN UNITS 1–9, RESTROOMELECTRICAL PLAN UNITS 10–25ELECTRICAL DETAILS
ELECT E001 E002 E101 E102 E111 E112 E501	TRICAL LAYOUTSELECTRICAL LEGEND AND ABBREVIATIONSELECTRICAL SHEET SPECIFICATIONSITE ELECTRICAL PLANPHOTOMETRIC CALCULATIONSELECTRICAL PLAN UNITS 1–9, RESTROOMELECTRICAL PLAN UNITS 10–25ELECTRICAL DETAILS

POLYVINYL CHLORIDE PIPE REGISTERED CIVIL ENGINEER SQUARE FEET STORM DRAIN STORM DRAIN MANHOLE STANDARD DIMENSION RATIO STANDARD DIMENSION RATIO SANITARY SEWER SANITARY SEWER CLEAN OUT SANITARY SEWER MANHOLE TOP OF CURB WATER WATER METER WATER METER WATER VALVE

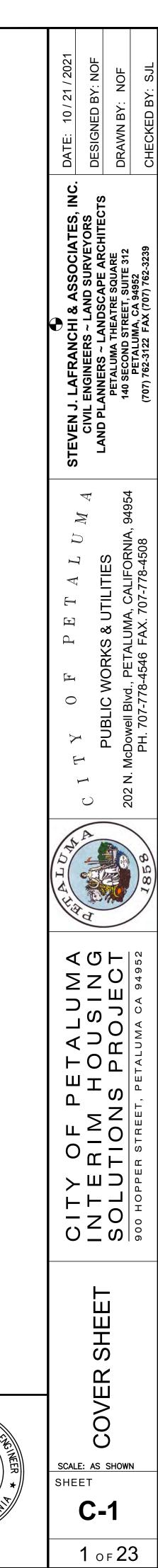


SCALE: 1" = 40'

OWNER / APPLICANT

CITY OF PETALUMA PUBLIC WORKS AND UTILITIES PROJECT MANAGER, JOSH MINSHALL, SENIOR CIVIL ENGINEER 202 N. McDOWELL BLVD, PETALUMA, CA 94954 707.776.3785 VOICE jminshall@cityofpetaluma.org

LE	GEND		PE
EXISTING	PROPOSED		
		(E) CHAINLINK FENCE – PRIVACY SLATS TO BE ADDED NEW CHAINLINK FENCE WITH PRIVACY SLATS PROPERTY LINE/RW EASEMENT LINE CONCRETE	
		CURB & GUTTER	
		EDGE OF PAVEMENT ASPHALT CONCRETE	
		ASPHALT / CONCRETE TO BE REMOVED	
		PATIO	
		ADA WALKWAY	
<i>SS</i>	<i>SS</i>	SANITARY SEWER/CLEANOUT	
S		SANITARY SEWER MANHOLE	I ́⊢⊦
FO	⊢●	GATE VALVE	
FOH		FIRE HYDRANT	
W	W	WATER LINE	
		WATER METER	
		DROP INLET/STORM DRAIN	
	JT	JOINT TRENCH	
	-	SURFACE FLOW	
		6" ASPHALT DIKE	
		PROJECT NO. 212262	
		No. 49302	SCALE: A SHEET



STANDARD NOTES

- ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION SHALL CONFORM TO THE CITY OF PETALUMA STANDARD DETAILS AND SPECIFICATIONS THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS IS BASED ON
- THE BEST INFORMATION AVAILABLE. THE CITY OF PETALUMA AND THE ENGINEER ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION SHOWN, OR FOR THE INADVERTENT OMISSION OF ANY SUCH INFORMATION.
- THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY COMPANIES AND OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF THIS PROJECT.
- 4. THE CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATION OF ANY TRENCH OVER 5 FT. IN DEPTH.
- WATER MAIN SHALL BE DUCTILE IRON, C151, CLASS 50 MINIMUM OR PVC C900, CLASS 200 MINIMUM
- SEWER MAIN SHALL BE PVC SDR-35. SEWER SERVICE LATERAL SHALL BE SAME MATERIAL AS SEWER MAIN.
- ALL EXCESS TRENCH SPOILS SHALL BE REMOVED FROM THE SITE.
- PRIOR TO INSTALLATION OF SANITARY SEWER, STORM DRAIN AND WATER, THE CONTRACTOR SHALL UNCOVER AND VERIFY THE LOCATION, SIZE AND DEPTH OF WHERE THESE LINES CONNECT TO THE EXISTING SYSTEMS AND AT ALL CROSSINGS.
- 10. ANY DISCREPANCY DISCOVERED IN THESE PLANS OR ANY FIELD CONDITIONS DISCOVERED THAT MAY INHIBIT THE PROPER COMPLETION OF THE WORK PER THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY UPON DISCOVERY.
- 11. CONSTRUCTION CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE 19 CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONSTRUCTION CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD FNGINFFR. OWNER, AND CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN 20. CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER, OWNER, AND CITY.
- 12. LINEAL DIMENSIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE, BASED ON RECORD INFORMATION. CONTRACTOR SHALL INSTALL THE PIPES AS SHOWN, ASSUMING RESPONSIBILITY FOR DETERMINING THE ACTUAL MATERIAL QUANTITIES NEEDED TO COMPLETE THE WORK.
- 13. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO ANY EXCAVATION SO THAT THEIR LINES CAN BE MARKED.
- 14. THE ENGINEER AND CITY ACCEPT NO LIABILITY FOR THE EXISTENCE OR NONEXISTENCE OF UTILITIES. CONTRACTOR AND OTHERS USING THIS DRAWING MUST CONFIRM THE LOCATION OF UNDERGROUND LINES OR STRUCTURES WITH THE UTILITY COMPANIES PRIOR TO COMMENCING CONSTRUCTION. CONTACT USA 800-227-2600 FOR MARKING OF UTILITY LINES.
- 15. CONTRACTOR SHALL PROVIDE TEMPORARY SAFETY BARRICADES AND OTHER PRECAUTIONS FOR PUBLIC SAFETY DURING CONSTRUCTION AS REQUIRED BY THE CITY OF PETALUMA.
- 16. THE CITY INSPECTOR SHALL BE GIVEN 48 HOURS ADVANCE NOTICE OF ANY CONSTRUCTION. 17. ALL TRENCHES OR HOLE OPENINGS SHALL BE PROTECTED AGAINST CAVE-IN EITHER BY SUITABLE SHORING, CAGES OR PROPER SLOPING.
- 18. ALL WORK AND EQUIPMENT SHALL COMPLY WITH THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY REQUIREMENTS.
- 19. VARIANCES FROM CITY OF PETALUMA STANDARDS OR FROM THESE PLANS REQUIRE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- 20. ALL NEW STREET CONSTRUCTION, SEWER, WATER AND STORM DRAIN CONSTRUCTION AND OTHER PUBLIC IMPROVEMENTS SHALL BE ACCURATELY LOCATED BY THE CONTRACTOR AND SHOWN UPON THE CONSTRUCTION PLANS. ONE SET OF "AS-BUILT" CONSTRUCTION PLANS SHALL BE RETURNED TO THE DEPARTMENT OF PUBLIC WORKS PRIOR TO ACCEPTANCE OF THE PUBLIC IMPROVEMENTS.
- 21. IF A STREET HAS BEEN CUT TO INSTALL UTILITIES OR TO MATCH EXISTING PAVEMENT, THE STREET SHALL BE SLURRY SEALED IN ACCORD WITH STANDARD SPECIFICATIONS OF THE STATE OF CALIF. SECTION 37-2. THE EXTENT OF AREA TO BE SEALED SHALL BE DETERMINED BY THE CITY INSPECTOR.
- 22. AN ENCROACHMENT PERMIT SHALL BE REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT OF WAY.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF EXISTING CONDITIONS INCLUDING, BUT NOT LIMITED TO SURFACING, LANDSCAPING AND UTILITIES, DUE TO THE CONSTRUCTION OF TRENCHES. RESTORATION SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF A COMPLETION NOTICE UNLESS OTHERWISE SPECIFICALLY APPROVED IN ADVANCE BY THE CITY OF PETALUMA

GENERAL NOTES

- THE PROJECT ENGINEER SHALL HAVE A 48 HOUR NOTICE FOR ANY REQUIRED INSPECTIONS. UNAUTHORIZED CHANGES AND USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- THE CONTRACTOR SHALL BE CHARGED FOR THE COST OF ALL LABORATORY AND FIELD TESTS WHERE TEST RESULTS DO NOT MEET SPECIFICATIONS.
- ROUTES OF INGRESS TO AND EGRESS FROM PROJECT SITE FOR ALL HEAVY CONSTRUCTION VEHICLES SHALL BE FROM CASA GRANDE ROAD AND SHALL BE APPROVED BY THE CITY OF PFTALUMA.
- THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE BEST AVAILABLE INFORMATION. HOWEVER, THE CITY OF PETALUMA, SONOMA COUNTY WATER AGENCY AND THE DESIGN ENGINEER ASSUME NO RESPONSIBILITY FOR THE INADVERTENT OMISSION OF ANY SUCH INFORMATION.
- CONTRACTOR SHALL REPLACE AND REPAIR, AT HIS OWN EXPENSE, DAMAGED, REMOVED OR OTHERWISE DISTURBED EXISTING IMPROVEMENTS.
- ALL UNUSABLE EXCESS SOIL MATERIAL, STUMPS AND BOULDERS SHALL BE REMOVED AND DISPOSED OFF THE PROJECT SITE.
- GRADING MUST BE CERTIFIED WHEN COMPLETED BY A CIVIL ENGINEER TO INDICATE COMPLIANCE WITH APPROVED PLANS AND WILL BE REQUIRED PRIOR TO OCCUPANCY.
- BENCHMARK: TOP OF 2" BRASS DISC & PUNCH IN MONUMENT WELL IN CENTER OF SONOMA MOUNTAIN PARKWAY ROUNDABOUT, ELEVATION = 42.57 NAVD 1988.
- 10. THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN, ARE THE SOLE PROPERTY OF STEVEN J. LAFRANCHI and ASSOCIATES. UNAUTHORIZED USE, COPYING, DISCLOSURE OR PUBLICATION BY ANY METHOD IS PROHIBITED WITHOUT THE WRITTEN APPROVAL OF STEVEN J. LAFRANCHI and ASSOCIATES. STEVEN J. LAFRANCHI and ASSOCIATES TAKES NO RESPONSIBILITY FOR ANY UNAUTHORIZED DUPLICATION OF INFORMATION THAT MAY APPEAR ON ANOTHER PLAN OR MAP.
- 11. FIVE HOURS MAXIMUM SHUTDOWN TIME OF EXISTING MAINS WHILE MAKING CONNECTIONS. TWENTY-FOUR (24) HOUR NOTICE OF SHUTDOWN TO BE GIVEN BY SUBDIVIDER TO ALL WATER CUSTOMERS. EXISTING VALVES TO BE OPERATED BY CITY WATER DEPARTMENT PERSONNEL ONLY.
- 12. WATER SERVICES SHALL BE PLACED OVER THE TOP OF THE UNDERGROUND JOINT TRENCH UTILITIES. WATER SERVICES SHALL NOT BE WITHIN CURB CUTS FOR DRIVEWAYS.

SURVEY NOTES

- TOPOGRAPHIC INFORMATION SHOWN HERE IS BASED UPON A FIELD SURVEY PERFORMED BY STEVEN J. LAFRANCHI & ASSOCIATES, INC. ON SEPTEMBER 30, 2021.
- VERTICAL DATUM: NGVD29, BASED ON AERIAL MAPPING PREPARED BY TOWILL, INC. AND IS BASED ON THE CONTROL NETWORK PREPARED BY DAVID L. CRAMER, P.L.S. A LOCAL JOB BENCHMARK HAS BEEN ESTABLISHED ON SITE, BEING A MAG NAIL & WASHER, STAMPED "SJLA CONTROL" AT EDGE OF EXISTING ASPHALT PARALLEL TO SMART RAIL TRACKS, ELEVATION=9.28', NGVD29 DATUM.
- HORIZONTAL DATUM: RECORD OF SURVEY, FILED IN BOOK 600 OF MAPS, AT PAGE 32, SONOMA COUNTY RECORDS.
- NO TITLE REPORT WAS REVIEWED IN CONJUNCTION WITH THIS MAPPING. IT IS RECOMMENDED THAT 4. A TITLE REPORT BE RECEIVED FROM THE OWNER TO VERIFY THE EXISTENCE OF ANY ADDITIONAL EASEMENTS OF RECORD OR LOT LINE ADJUSTMENTS THAT MAY HAVE ALTERED THE INFORMATION SHOWN HEREON PRIOR TO ANY DESIGN AND/OR CONSTRUCTION.
- THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF STEVEN J. LAFRANCHI AND ASSOCIATES, INC. UNAUTHORIZED USE, COPYING, DISCLOSURE OR PUBLICATION BY ANY METHOD IS PROHIBITED WITHOUT THE WRITTEN APPROVAL OF STEVEN J. LAFRANCHI AND ASSOCIATES, INC. STEVEN J. LAFRANCHI AND ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR ANY UNAUTHORIZED DUPLICATION OF INFORMATION THAT MAY APPEAR ON ANOTHER PLAN OR MAP

GENERAL NOTES (CON'T):

- 13. ALL WATER MAINS, WATER SERVICES AND SEWER LATERALS REQUIRING RELOCATION SHALL BE ACCURATELY LOCATED BY THE SUBDIVIDER'S CONTRACTOR AND SHOWN UPON THE CONSTRUCTION PLANS. ONE SET OF "DRAWING OF RECORD" PLANS SO MARKED AND CERTIFIED AS TO ACCURACY AND COMPLETENESS BY THE SUBDIVIDER'S CONTRACTOR SHALL BE RETURNED TO THE CITY ENGINEER BY THE SUBDIVIDER.
- 14. WHERE UTILITIES CROSS UNDER CURBS, THE SUBDIVIDER'S CONCRETE CONTRACTOR SHALL STAMP THE LETTER 'S' ON THE FACE OF CURB DIRECTLY ABOVE THE SEWER LATERAL, 'W' ON THE FACE OF CURB DIRECTLY ABOVE THE WATER SERVICES AND 'B' ON THE FACE OF CURB ABOVE A BLOWOFF OR AIR RELIEF VALVE. LETTERS SHALL BE NEAT, CLEAR AND 4" HIGH.
- 15. GRADE BREAKS ON CURBS AND SIDEWALKS TO BE ROUNDED OFF IN FORM WORK AND FINISHED SURFACING.
- 16. INSTALL SIGNING AND STRIPING TO CONFORM TO THE CURRENT EDITION OF THE CALTRANS TRAFFIC MANUAL.
- CONSTRUCTION OPERATIONS BY THE ERECTION OF BARRIERS AT THE DRIP LINE OF SAID TREES. (SEE ARBORIST REPORTS)
- 18. IT IS THE OWNERS RESPONSIBILITY TO MAKE THESE PLANS AVAILABLE TO ANY DESIGN CONSULTANTS WHO MAY PREPARE ANY ADDITIONAL PLANS (BUILDING, FOUNDATION, ETC.) OR REPORTS WITHIN THE LIMITS OF THIS DESIGN. STEVEN J. LAFRANCHI & ASSOCIATES TAKES NO RESPONSIBILITY FOR CONFLICTS THAT MAY ARISE DUE TO PLANS NOT BEING PROVIDED TO SAID CONSULTANTS. IT IS THE OWNERS AND ALL DESIGN CONSULTANTS RESPONSIBILITY TO CONTACT STEVEN J. LAFRANCHI & ASSOCIATES IF ANY ADDITIONAL PLAN OR REPORT IS PREPARED IN CONJUNCTION WITH THIS PROJECT.
- ALL CONTRACTORS SHALL BE PROVIDED A COMPLETE SET OF PLANS THAT INCLUDES ALL DRAWINGS AND REPORTS PREPARED BY ALL CONSULTANTS FOR THIS PROJECT FOR THE PURPOSE OF BIDDING AND CONSTRUCTION.
- STEVEN J. LAFRANCHI & ASSOCIATES, INC. DOES NOT SPECIFY NOR RECOMMEND THE USE OR INSTALLATION OF ANY MATERIAL OR EQUIPMENT WHICH IS MADE FROM, OR WHICH CONTAINS ASBESTOS FOR USE IN THE CONSTRUCTION OF THESE IMPROVEMENTS. ANY PARTY INSTALLING OR USING SUCH MATERIALS OR EQUIPMENT SHALL BE SOLELY RESPONSIBLE FOR ALL INJURIES, DAMAGES, OR LIABILITIES OF ANY KIND, CAUSED BY THE USE OF SUCH MATERIALS OR FQUIPMENT. THE PROVISIONS OF THIS NOTE SHALL APPLY UNLESS THEY ARE EXPRESSLY WAIVED IN WRITING BY STEVEN J. LAFRANCHI & ASSOCIATES, INC. CONTRACTOR SHALL COMPLY FULLY WITH THE REQUIREMENTS OF ASSEMBLY BILL (2040) DAVIS, ASBESTOS.
- 21. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT STEVEN J. LAFRANCHI & ASSOCIATES, INC. AT (707)762-3122 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 23. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. HE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE ENGINEER.
- 24. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING. BRACING AND SHEETING. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH. AND/OR STRUCTURE IS FIVE FEET OR MORE IN DEPTH. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING AND BRACING OR EQUIVALENT METHOD, FOR THE PROTECTION OF LIFE, OR LIMB, WHICH SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA, THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY 25 ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION. THE PROJECT ENGINEER SHALL HAVE TWENTY-FOUR (24) HOUR NOTICE FOR ANY REQUIRED INSPECTIONS. THE CONTRACTOR SHALL CONFIRM THE APPROVAL OF THE HAUL ROUTE FOR ALL MATERIALS TO AND FROM THE PROJECT WITH THE CITY ENGINEER PRIOR TO ISSUANCE OF AN ENCROACHMENT PERMIT
- 26. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY.
- 27. ANY EXTRA CONSTRUCTION STAKING NECESSITATED SOLELY BY THE CONTRACTOR'S NEGLIGENCE WILL BE CHARGED TO THE CONTRACTOR ON A TIME AND EXPENSES BASIS AND PAID FOR BY THE CONTRACTOR.
- 28. ALL RETURN RADII AND CURB DATA ARE TO FACE OF CURB.
- 29. ALL QUANTITIES AND PAY ITEMS ARE AND WILL BE BASED ON HORIZONTAL MEASUREMENTS.
- 30. LENGTHS OF SANITARY SEWERS AND STORM DRAINS ARE HORIZONTAL DISTANCES FROM THE CENTER TO CENTER OF STRUCTURES. ROUNDED OFF TO THE NEAREST FOOT.
- 31. THE CONSTRUCTION OF ALL GRAVITY UNDERGROUND LINES (SANITARY SEWERS AND STORM DRAINS) SHALL BEGIN AT THE MOST DOWNSTREAM END, UNLESS OTHERWISE SPECIFICALLY APPROVED BY STEVEN J. LAFRANCHI & ASSOCIATES, INC.

GRADING

17. TREES TO REMAIN SHALL BE PROTECTED FROM DAMAGE INCIDENT TO SITE PREPARATION AND

- THE CONTRACTOR SHALL ENLIST THE SERVICES OF A REGISTERED GEOTECHNICAL ENGINEER TO PROVIDE INTERMITTENT SITE OBSERVATIONS AND TESTING BY A QUALIFIED TECHNICIAN AND, UPON SATISFACTORY COMPLETION OF THE GRADING, A WRITTEN REPORT SUMMARIZING THE RESULTS OF THESE OBSERVATIONS AND TESTS ALONG WITH "PROFESSIONAL OPINIONS" AS TO THE ADEQUACY OF THE WORK PERFORMED BY THE CONTRACTOR.
- 2. CUT SLOPES SHALL BE EQUAL TO OR LESS THAN 2:1 WITH A GEOTECHNICAL ENGINEER'S WRITTEN PERMISSION, WEATHERED ROCK CUTS MAY BE STEEPENED. FILL SLOPES SHALL BE EQUAL TO OR LESS THAN 2:1.
- ALL EXCESS SOIL MATERIAL, STUMPS AND BOULDERS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ANY ENVIRONMENTAL REGULATIONS AND PERMIT RESOURCE MANAGEMENT DEPARTMENT GRADING ORDINANCE AS THEY MAY APPLY.
- 4. IF CONSTRUCTION IS PERFORMED EARLIER THAN MAY 1 OR LATER THAN OCTOBER 1 IN ANY GIVEN YEAR, AN APPROVED SILTATION CONTROL PLAN, DESIGNED BY A CIVIL ENGINEER OR APPROVED. COMPETENT INDIVIDUAL IS REQUIRED.
- PERFORM GRADING IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX CHAPTER 33 OF THE CALIFORNIA BUILDING CODE AND APPLICABLE SONOMA COUNTY REGULATIONS.
- EXISTING DRAINAGE COURSES RECEIVING WATERS FROM THIS SITE AND LOCATED THROUGHOUT THIS SITE SHALL REMAIN OPEN AND CLEAR OF DEBRIS TO PROPERLY CONVEY STORM WATER. IN ANY EVENT, THE OWNER AND/OR CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
- RETAINING WALLS ARE NOT APPROVED UNDER THIS GRADING PERMIT. RETAINING WALLS REQUIRE A SEPARATE BUILDING PERMIT, UNLESS EXEMPT.
- 8. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER UPON DISCOVERING SIGNIFICANT DISCREPANCIES, ERRORS OR OMISSIONS IN THE PLANS. PRIOR TO PROCEEDING. THE OWNER SHALL HAVE THE PLANS REVISED TO CLARIFY IDENTIFIED DISCREPANCIES, ERRORS OR OMISSIONS. THE REVISED PLANS SHALL BE SUBJECT TO REVIEW BY THE CHIEF BUILDING OFFICIAL.
- 9. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN A 100 FOOT RADIUS OF THE FIND. THE NORTHWEST INFORMATION CENTER SHALL NOTIFIED AT (707) 664-0880. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE COUNTY PER THE ARCHEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER AT (707) 565 - 5070.
- 10. SHOULD GRADING OPERATIONS ENCOUNTER HAZARDOUS MATERIALS, OR WHAT APPEAR TO BE HAZARDOUS MATERIALS, STOP WORK IN THE AFFECTED AREA IMMEDIATELY AND CONTACT 911 OR THE APPROPRIATE AGENCY FOR FURTHER INSTRUCTION.
- 11. THE GRADING PERMIT AND AN APPROVED COPY OF THE GRADING PLANS SHALL BE MAINTAINED ON THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- 12. DRAINAGE FACILITIES AND GRADING SHALL BE INSPECTED BEFORE RECEIVING FINAL APPROVAL. THE CONTRACTOR SHALL CONSULT THE REQUIRED INSPECTIONS NOTES FOR COORDINATION OF INSPECTION REQUESTS.
- 13. TESTING FOR RELATIVE DENSITIES SHALL BE IN ACCORDANCE WITH CALTRANS TEST METHOD NO. 216 PART II OR ASTM 1557. THE USE OF SAND CONE METHODS - SUCH AS ASTM 1556 OR CALTRANS 216, PART I - SHALL NOT BE ALLOWED.
- 14. PLACEMENT OF MAILBOXES MUST BE COORDINATED WITH AND APPROVED BY THE LOCAL BRANCH OF THE UNITED STATES POST OFFICE.
- 15. GRADING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL INVESTIGATION PREPARED BY PJC AND ASSOCIATES, INC., JOB No. 9158.01 DATED SEPTEMBER 27, 2019. THE GEOTECHNICAL RECOMMENDATIONS CONTAINED IN THE REPORT, LETTER AND MEMO ARE BY REFERENCE INCORPORATED IN THESE PLANS.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY STEVEN J. LAFRANCHI & ASSOCIATES, INC. IN WRITING IMMEDIATELY OF ANY DIFFERENCES IN TOPOGRAPHY FROM THAT SHOWN ON THIS PLAN WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR EFFECT THE EARTHWORK QUANTITY.
- 17. EARTHWORK QUANTITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE FURNISHED FOR THE CONTRACTOR'S INFORMATION ONLY. THEY HAVE BEEN CALCULATED FROM EXISTING GROUND BASED ON THE TOPOGRAPHY REFERENCED ABOVE TO FINISHED GRADE. THE ACTUAL AMOUNT OF EARTH MOVED WILL VARY DEPENDING ON COMPACTION. CONSOLIDATION, STRIPPING AND THE CONTRACTOR'S METHOD OF OPERATION.
- THE CONTRACTOR SHALL CONFIRM THE EARTHWORK QUANTITIES TO HIS SATISFACTION PRIOR TO THE START OF CONSTRUCTION AND SHALL ARRANGE FOR DISPOSAL OF EXCESS MATERIAL OR ACQUISITION OF IMPORT MATERIAL AS REQUIRED TO COMPLETE THE GRADING AS SHOWN ON THESE PLANS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXPORT OR IMPORT REQUIRED.
- 19. THE CONTRACTOR SHALL GRADE EACH PAD TO WITHIN 0.1 FOOT OF THE PAD GRADE ELEVATIONS SHOWN ON THESE PLANS.
- 20. A REGISTERED PROFESSIONAL GEOTECHNICAL ENGINEER SHALL BE AVAILABLE FOR SUPPLEMENTAL SITE OBSERVATIONS AND CONSULTATION WITH THE CONTRACTOR AND / OR OTHER ENGINEERS AS REQUIRED OR REQUESTED IN ORDER TO RESPOND TO GEOTECHNICAL RELATED CONCERNS OR CHANGED CONDITIONS AS THEY ARISE.
- NOTE: ALL SITE AND PAD GRADING SHALL BE CERTIFIED BY THE PROJECT ENGINEER AND THE PROJECT GEOTECHNICAL ENGINEER. SAID CERTIFICATION SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
- 21. COMPREHENSIVE TRAFFIC CONTROL MEASURES SHALL BE IMPLEMENTED, INCLUDING SCHEDULING OF MAJOR TRUCK TRIPS, AND DELIVERIES SHALL AVOID PEAK TRAVEL HOURS AND PROPER LANE CLOSURE PROCEDURES SUCH AS FLAGGER STATIONS, SIGNAGE, CONES, AND OTHER WARNING DEVICES SHALL BE PRACTICED.
- 22. MASS GRADING ACTIVITIES SHALL BE LIMITED TO THE HOURS BETWEEN 8:00 A.M. AND 5:00 14. FIRE HYDRANTS TO BE INSTALLED AT LOCATIONS SHOWN ON PL P.M. MONDAY THRU FRIDAY, UNLESS PRIOR WRITTEN APPROVAL IS GRANTED BY THE CITY ENGINEER. GENERALLY, NO GRADING SHALL BE ALLOWED TO OCCUR BETWEEN OCTOBER 15 AND APRIL 1 OF ANY YEAR WITHOUT PRIOR APPROVAL OF THE CITY ENGINEER. GRADING WORK CAN OCCUR THROUGHOUT THE YEAR IF WEATHER CONDITIONS PERMIT AND APPROPRIATE EROSION CONTROL/STORM WATER QUALITY MEASURES ARE IN PLACE, SUBJECT TO APPROVAL BY THE CITY ENGINEER.
- 23. ALL INTERNAL COMBUSTION ENGINES ON GRADING OR CONSTRUCTION EQUIPMENT USED AT THE PROJECT SHALL BE EQUIPPED WITH A MUFFLER EQUAL TO OR BETTER THAN THAT SUPPLIED BY THE VEHICLE MANUFACTURER. ALL EQUIPMENT SHALL BE MAINTAINED IN GOOD MECHANICAL CONDITION SO AS TO MINIMIZE NOISE AND AIR POLLUTION FROM FAULTY ENGINE, DRIVE TRAIN, AND OTHER COMPONENTS. NO MUFFLER OR EXHAUST SYSTEM SHALL BE EQUIPPED WITH CUTOUT, BYPASS, OR SIMILAR DEVICE INTENDED TO THWART QUIETING.
- 24. TRASH, CONSTRUCTION DEBRIS, OR CONSTRUCTION MATERIALS SHALL NOT BE ALLOWED OFF-SITE, IN CREEK AREAS, OR NEAR SIGNIFICANT VEGETATION DURING ANY PHASE OF DEVELOPMENT OF THE PROJECT. PROPERTY OWNER SHALL CLEAN UP TRASH OR CONSTRUCTION DEBRIS PRIOR TO ACCEPTANCE OF IMPROVEMENTS BY THE CITY.
- 25. DUST CONTROL BEST MANAGEMENT PRACTICES, AS APPROVED BY THE CITY ENGINEER SHALL BE FOLLOWED AT ALL TIMES DURING GRADING AND CONSTRUCTION OPERATIONS. SUCH MEASURES MAY INCLUDE WATERING OF EXPOSED SURFACES TWICE A DAY, AND MORE FREQUENT WATERING WHEN WIND SPEEDS EXCEED 15 MPH; COVERING OF STOCKPILED EARTH; COVERING OF TRUCKS HAULING DIRT IF WINDY CONDITIONS PREVAIL. FAILURE TO KEEP DUST UNDER CONTROL MAY RESULT IN THE STOPPAGE OF ALL WORK UNTIL A MODIFIED PLAN ACCEPTABLE TO THE CITY ENGINEER IS APPROVED AND IMPLEMENTED.
- 26. PRIOR TO GRADING CONSTRUCTED AFTER OCTOBER 1 AND BEFORE MAY 1, STORM DRAINS, OUTLET STRUCTURES, CHECK DAMS AND DITCHES SHALL BE CONSTRUCTED.
- 27. SPRINKLE ALL CONSTRUCTION AREAS WITH WATER (RECYCLED WHEN POSSIBLE) AT LEAST TWICE A DAY, DURING EXCAVATION AND OTHER GROUND-PREPARING OPERATIONS, TO REDUCE FUGITIVE DUST EMISSIONS.
- 28. APPROPRIATE EROSION CONTROL DEVICES SHALL BE UTILIZED TO RETAIN SEDIMENT WITHIN THE PROJECT AREAS DURING THE CONSTRUCTION SEASON.
- 29. THE CONTRACTOR SHALL COMPLY WITH "BEST MANAGEMENT PRACTICES" AS DEFINED IN CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES HANDBOOKS "CONSTRUCTION ACTIVITY" AND ALL REQUIREMENTS OF THE STATE OF CALIFORNIA "GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT".
- 30. SUBGRADE FOR BUILDING PADS SHOULD BE COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION.
- 31. SUBGRADE AND CLASS 2 AGGREGATE BASE FOR DRIVEWAYS SHOULD BE COMPACTED TO 95% RELARIVE COMPACTION PER ASTM D1557

PROJECT NOTES:

- CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING 1. ENGINEER, THE DEVELOPER OR DEVELOPER'S REPRESENTATIVE BEFORE START OF CONSTRUCTION. CONTRACTOR SHALL CONT INSPECTION AT (707)778-4301 TO ARRANGE THE MEETING.
- THE DEVELOPER'S ENGINEER WILL PROVIDE THE CONSTRUCTION AND LOCATION OF WHICH SHALL BE DETERMINED BEFORE THI ALL STAKING REQUESTS SHOULD BE DIRECTED TO THE ENGINI WORKING DAYS PRIOR TO ACTUAL NEED. ANY ADDITIONAL ST ONLY BE DONE AS DIRECTED AND AUTHORIZED BY THE DEVEL AGENT. THE CITY ENGINEER HAS THE AUTHORITY TO REQUIRE AUTHORIZED AGENT TO PLACE ADDITIONAL STAKES OR RESTAKE NECESSARY FOR PROPER CONSTRUCTION OR TO AVOID CONFLI
- THE CONTRACTOR SHALL NOT DESTROY ANY PERMANENT SURV CONSENT OF THE CITY ENGINEER. ANY PERMANENT MONUME SHALL BE REPLACED BY A REGISTERED CIVIL ENGINEER OR L THE STATE OF CALIFORNIA AT THE CONTRACTOR'S EXPENSE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING S LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANS GUTTERS, SIDEWALKS, GRADING ETC., AND AVOIDING ANY ABRU IN GRADES OR CROSS SLOPES, LOW SPOTS, OR HAZARDOUS
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SHALL NOTIFY THE APPROPRIATE INDIVIDUAL OR AGENCY PRIOR TO THE TIME THAT THE CONTRACTOR WISHES THE INSP
- THESE PLANS AND SPECIFICATIONS, INCLUDING GRADES AND S SUBJECT TO MODIFICATION DURING CONSTRUCTION SHOULD C WFRE NOT APPARENT DURING DESIGN. ANY SUCH MODIFICATION THE CITY OF PETALUMA CITY ENGINEER.
- 7. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIE WRITTEN AUTHORIZATION FROM THE LOCAL AGENCY ENGINEER ASSOCIATES, INC. ANY DEVIATIONS OR CHANGES IN THESE F APPROVAL OF THE CIVIL ENGINEER SHALL ABSOLVE THE CIVIL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
- 8. A REGISTERED GEOTECHNICAL ENGINEER FIRM SHALL PROVIDE TECHNICIAN, WORKING UNDER THE DIRECTION OF A GEOTECHI SITE INTERMITTENTLY AS REQUIRED TO OBSERVE AND TEST TH UNDERGROUND UTILITY TRENCH BACKFILLING / COMPACTION T IS PERFORMED IN ACCORDANCE WITH THE INTENT OF THE GE RECOMMENDATIONS. THE RESULTS OF THESE OBSERVATIONS PRESENTED IN A WRITTEN REPORT UPON SATISFACTORY COMPI
- 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATI CITY INSPECTOR AND THE CIVIL ENGINEER UPON DISCOVERY C CONFLICTS.
- 10. ANY EXISTING WELLS ENCOUNTERED SHALL BE ABANDONED AN CONTRACTOR PER COUNTY OF SONOMA AND STATE REQUIREME
- 11. ALL DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CAL

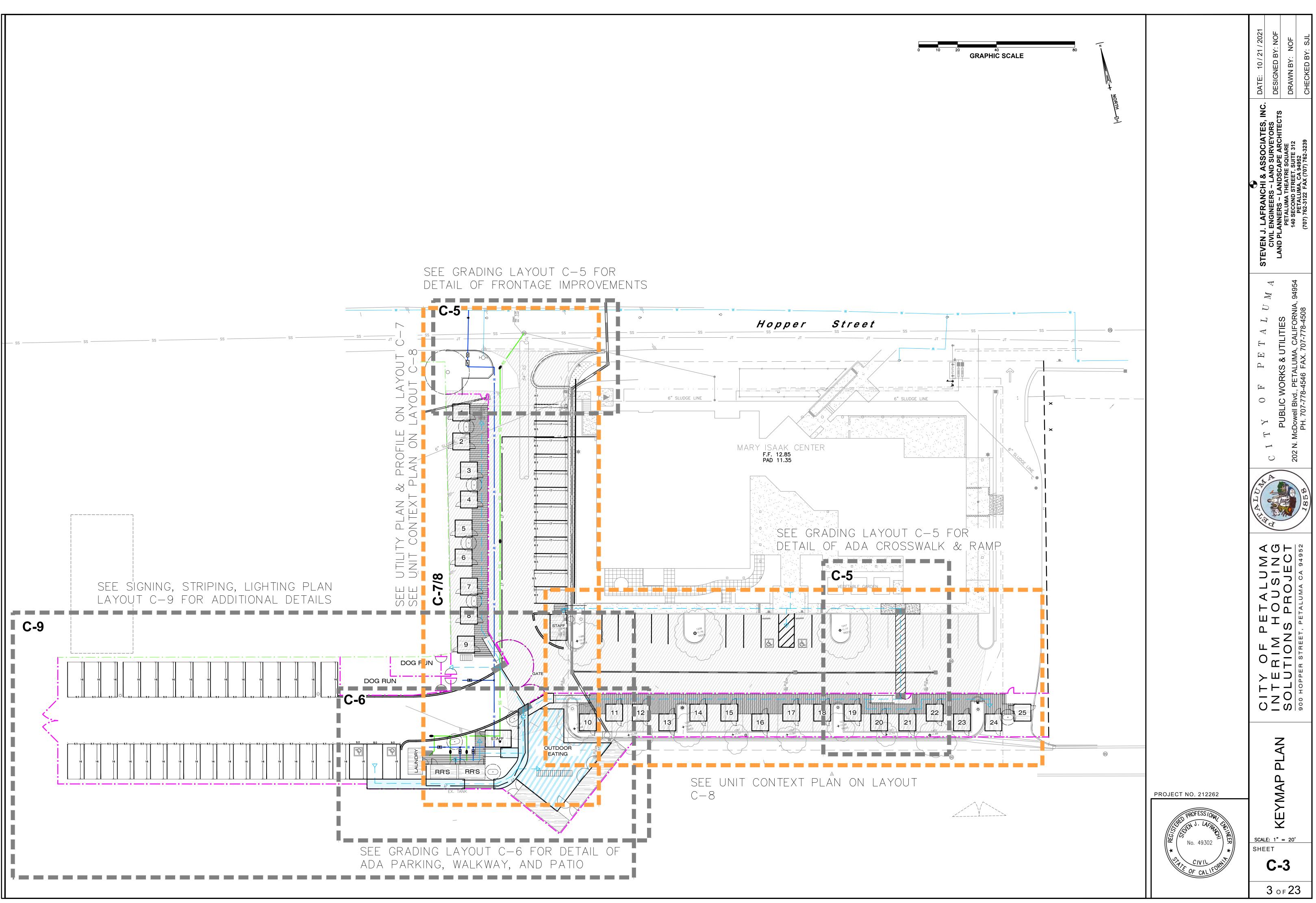
WATER SYSTEM

- BEDDING AND BACKFILL SHALL COMPLY WITH THE CITY OF PETAL SPECIFICATIONS AND STD. 219.
- EXCAVATIONS MUST BE KEPT DEWATERED AT ALL TIMES SO AS CONTAMINATED WATER TO ENTER WATER MAINS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETE DIAMETER. AND TYPE OF EXISTING PIPE SO THAT THE NEW PIPE ALIGNED WITH AND FITTED TO THE EXISTING PIPE.
- MISALIGNMENTS SHALL BE CORRECTED BY THE REALIGNMENT OF PIPES TO BE CONNECTED. CONTRACTOR SHALL PROVIDE ALL F MATERIALS NEEDED TO CONNECT THE NEW PIPE TO THE EXISTIN
- 5. DEFLECTION OF PIPE AT JOINTS SHALL COMPLY WITH MANUFACT BENDS MAY NOT BE USED EXCEPT WHEN PROVIDED FOR ON TH PERMITTED BY THE CITY ENGINEER.
- THRUST BLOCKS SHALL BE PROVIDED AT TEES AND BENDS 22-GREATER. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PE
- 8 WATER SERVICE AND METER SHALL BE INSTALLED PER CITY ST ONSITE SHALL BE SCHEDULE 40 PVC. ALL NEW WATER SERVICE WITH 1 INCH METERS.
- TIE-INS BY THE CONTRACTOR MUST BE COORDINATED WITH THE I FAST 48 HOURS IN ADVANCE OF WORK. EXCAVATIONS BY TH TIE-INS MUST BE APPROVED BY THE CITY ENGINEER OR AUTHO THE DAY BEFORE WORK IS COMMENCE AT EACH TIE-IN.
- 10. ALL FITTINGS, VALVES AND MATERIALS TO ACCOMPLISH ALL TIE-JOB, AND EXISTING LINES EXPOSED AND CHECKED FOR PROPER PRIOR TO ANY SHUTDOWN.
- 11. THE INSIDE OF ALL PIPE AND FITTINGS MUST BE DISINFECTED DISINFECTING AGENT PER CITY OF PETALUMA SPECIFICATIONS.
- 12. TIE-IN TO THE EXISTING CITY WATER SYSTEM SHALL BE MADE (OF AND WITH THE APPROVAL OF THE CITY ENGINEER. THE OPE THE EXISTING CITY SYSTEM BY OTHER THAN CITY PERSONNEL W NO TIE-INS TO EXISTING MAINS WILL BE PERMITTED UNTIL CERT (DISINFECTION) PER CITY STANDARDS IS ACCOMPLISHED.
- WATER METERS SHALL NOT BE LOCATED IN DRIVEWAYS. DRIVEW STAKED BEFORE SERVICE LATERALS ARE INSTALLED. WITH CITY STD. 857.01. A BREAK-AWAY AVK'S SHALL BE INST
- HDRANTS. THE BLUE MARKER INDICATING EXISTENCE OF FIRE HY INSTALLED PER CITY STANDARDS. 15. ALL FIRE HYDRANT INSTALLATIONS WILL BE SUBJECT TO INSPECT THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE. INSPEC
- MARSHALL WILL ONLY BE MADE AT THE DISCRETION OF THE AG SUCH TIME AS ALL WORK ON THE WATER SUPPLY SYSTEM HAS 16. WHENEVER WATER MAINS CROSS STORM OR SANITARY SEWER LI
- PIPE AS SPECIFIED HEREIN, SHALL BE USED AS FOLLOWS: WHEN THE WATER LINE CROSSES UNDER A SANITARY SEWER LI CLEARANCE.
- B. WHEN THE WATER LINE CROSSES UNDER A STORM DRAIN WITH OF CLEARANCE.
- WHEN THE WATER LINE CROSSES OVER A STORM OR SANITARY THAN ONE FOOT OF CLEARANCE. CONSTRUCTION SHALL BE BASI CURRENT STANDARDS AT THE TIME OF CONSTRUCTION.

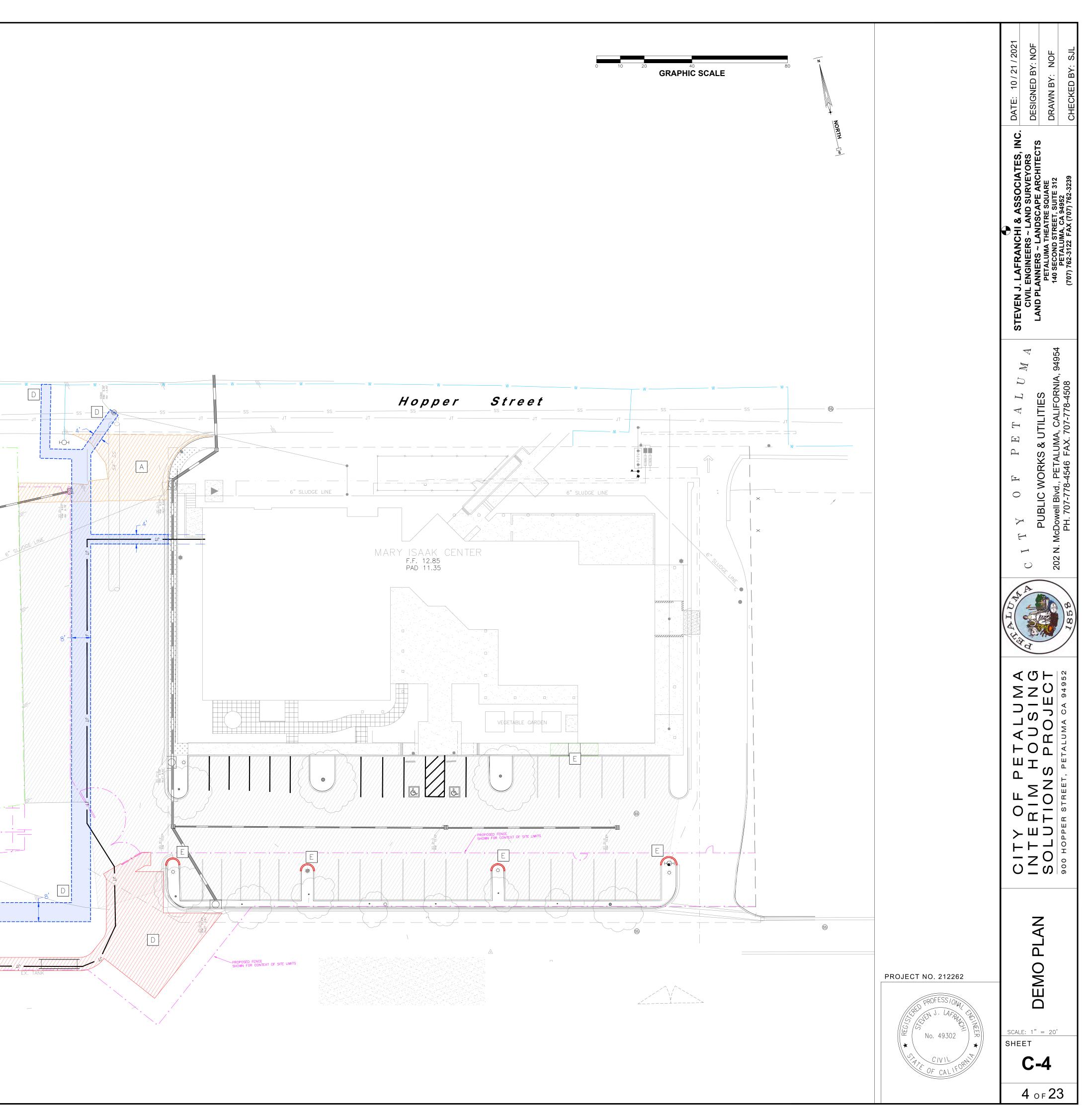
SEWER NOTES

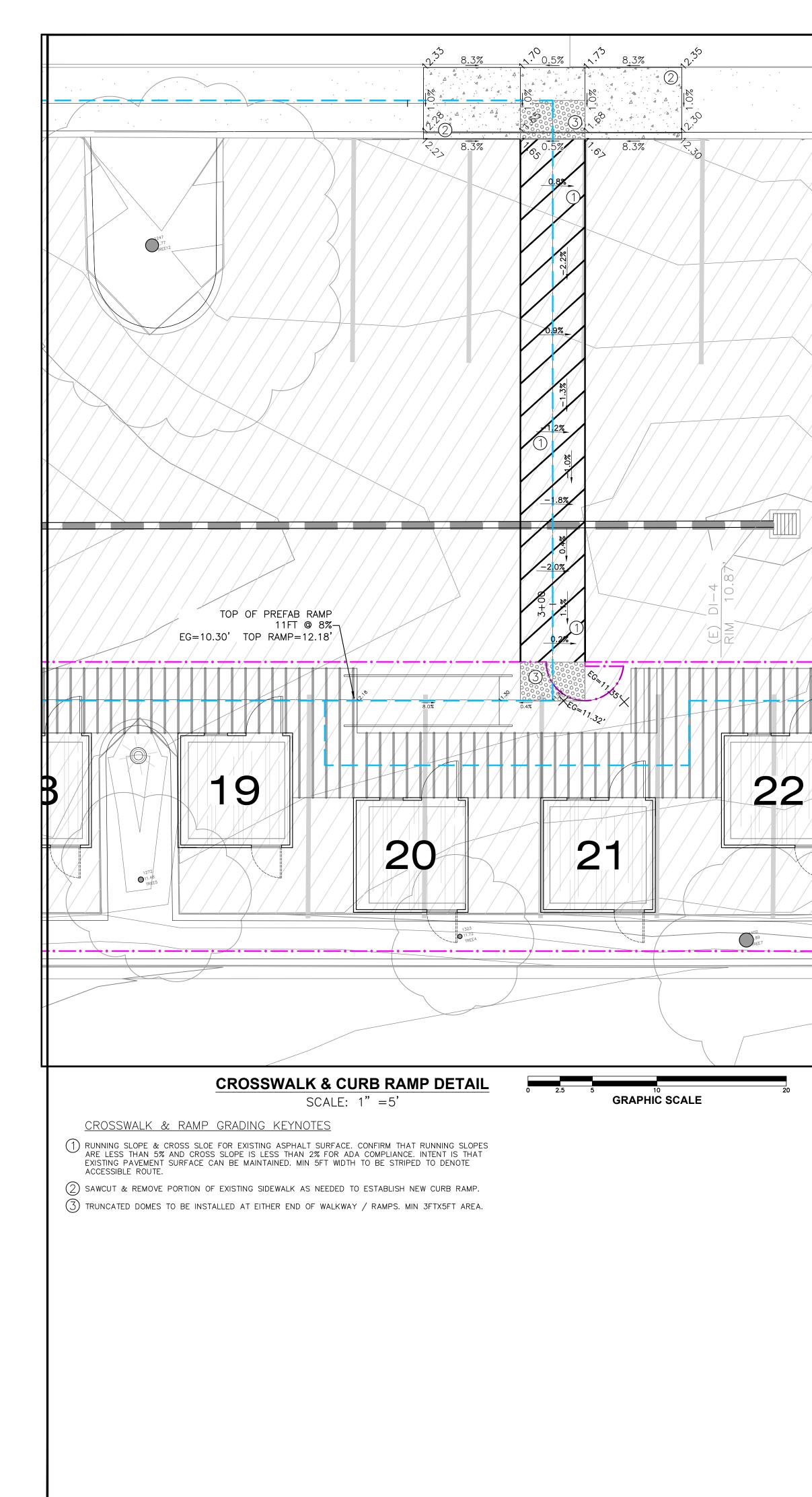
- 1. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE PETALUMA CONSTRUCTION STANDARDS AND SPECIFICATIONS, INC. DRAWINGS (LATEST REVISION).
- THE PROJECT DESIGN ENGINEER SHALL VERIFY THE INVERT OF WHEN IT IS EXPOSED AND ADJUST THE GRADE OF THE NEW S ACCORDINGLY.
- NO BUILDING SHALL BE CONNECTED TO THE MAINLINE SEWER 3. SEWER HAS BEEN INSPECTED AND ACCEPTED BY THE CITY OF
- ALL SANITARY SEWER CONSTRUCTION SHALL BE INSPECTED BY 4. THE CITY OF PETALUMA BUILDING DEPARTMENT. 48 HOUR ADV REQUIRED FOR ALL INSPECTIONS.
- 5. INSPECTION WILL OCCUR WHEN EXCAVATION OF SEWER INSTALL NO BEDDING, PIPE OR BACKFILL OR OTHER MATERIAL SHALL EXCAVATION UNTIL THE EXCAVATION HAS BEEN INSPECTED AND INSPECTOR. 48 HOUR ADVANCE NOTICE IS REQUIRED FOR ALL
- SEWER LATERALS SHALL HAVE A MIN. OF 3.0 FEET OF COVER 6. AND SHALL NOT HAVE LESS THAN 2% MIN SLOPE, IT SHALL UNDERGROUND JOINT TRENCH UTILITIES AND KEPT CLEAR OF
- 7. ALL EXISTING SEPTIC TANKS AND LEACHFIELDS SHALL BE ABA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.
- CONSTRUCTION SHALL BE BASED ON THE MOST CURRENT STAL OF CONSTRUCTION.

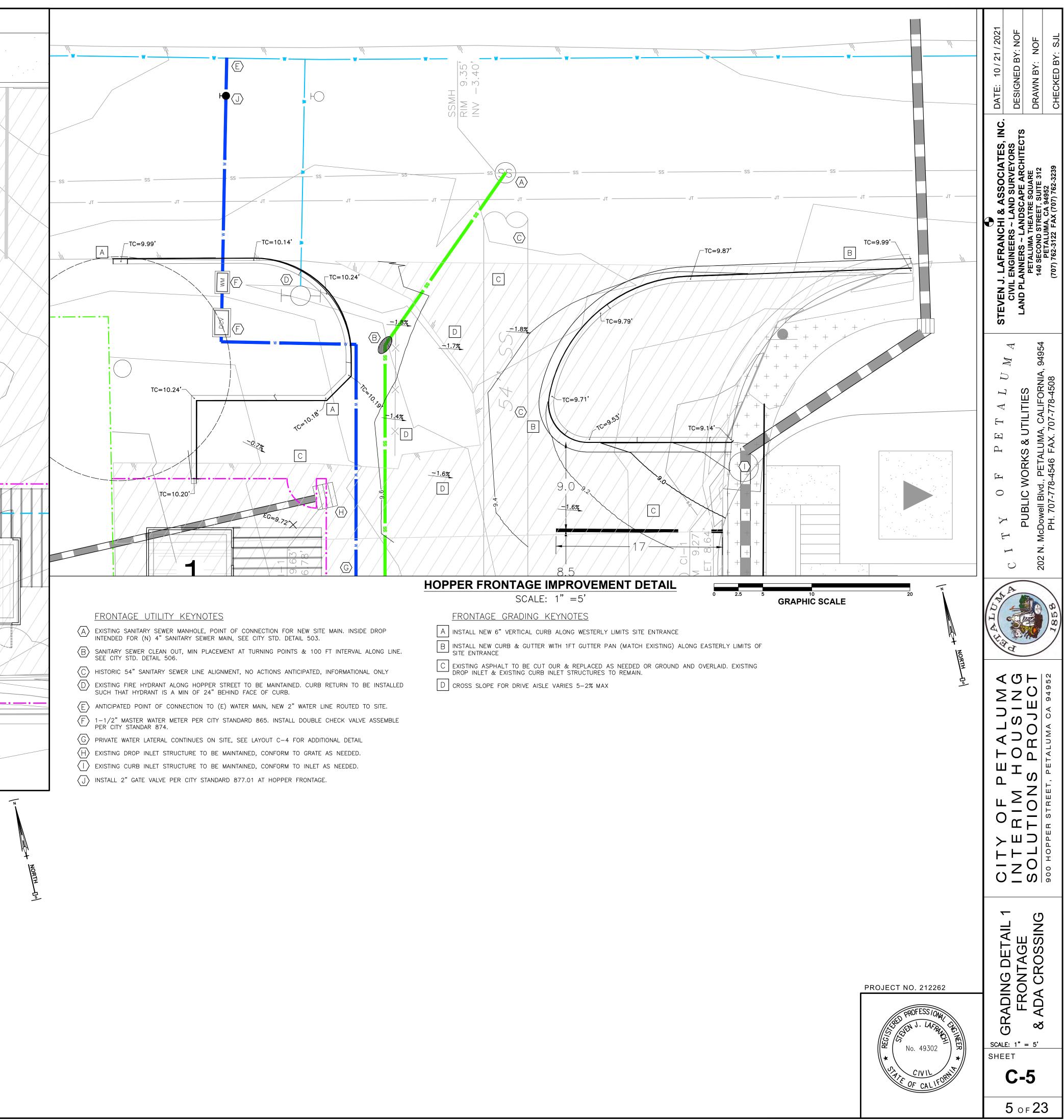
ASPHALT PAVING S WITH THE PETALUMA CITY (F AND CIVIL ENGINEER NTACT PUBLIC WORKS ASPHALT PAVING 1. THE MATERIAL AND METHODS USED SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF PETALUMA SPECIFICATIONS OR THE CURRENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS, EXCEPT THAT COMPACTION REQUIREMENTS FOR THE SOIL SUBGRADE AND AGGREGATE BASE ROCK SHALL BE BASED ON ASTM D-1557. AGGREGATE USED FOR THE BASE COURSE SHALL COMPLY WITH THE MINIMUM	10 / 21 / 2021 ED BY: NOF BY: NOF ED BY: SJL
 ON STAKES. THE NUMBER HE CONSTRUCTION BEGINS. NEER A MINIMUM OF TWO (2) STAKING OR RESTAKING WILL ELOPER OR HIS AUTHORIZED RE THE DEVELOPER OR HIS KKES AS HE DEEMS FLICTS. REQUIREMENTS SPECIFIED IN CALTRANS STANDARD SPECIFICATIONS, SECTION 26, FOR CLASS II AGGREGATE BASE. PAVEMENTS SHALL BE CONSTRUCTED DURING THE DRY SEASON TO AVOID THE SATURATION OF THE SUBGRADE AND BASE MATERIALS WHICH OFTEN OCCURS DURING THE WET WINTER MONTHS. IF PAVEMENTS ARE CONSTRUCTED DURING THE WINTER AND EARLY SPRING, A COST INCREASE RELATIVE TO DRIER WEATHER CONSTRUCTION SHOULD BE ANTICIPATED. UNSTABLE AREAS SHALL BE OVER EXCAVATED TO REMOVE SOFT SOILS. 	INC. DATE: 10/. DESIGNED E DRAWN BY: CHECKED B
RVEY POINTS WITHOUT THE ENTS OR POINTS DESTROYED LAND SURVEYOR LICENSED IN THE EXCAVATIONS WILL PROBABLY REQUIRE GEOTEXTILE FABRIC AND BACKFILLING WITH IMPORTED CRUSHED ROCK. THE GEOTECHNICAL ENGINEER SHALL BE CONSULTED FOR RECOMMENDATIONS AT THE TIME OF CONSTRUCTION.	- ia
3. ASPHALT CONCRETE SHALL BE TYPE A, 1/2–INCH MAXIMUM, MEDIUM STREETS, SURROUNDING INSITION IN PAVING, CURBS, RUPT OR APPARENT CHANGES S CONDITIONS. 3. ASPHALT CONCRETE SHALL BE TYPE A, 1/2–INCH MAXIMUM, MEDIUM GRADATION AND SHALL CONFORM TO SECTION 39 OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. ASPHALT BINDER TO BE MIXED WITH THE AGGREGATE SHALL BE PAVING ASPHALT AR-4000.	
AG REQUIRED INSPECTIONS Y TWO (2) WORKING DAYS SPECTION TO BE MADE. 5. THE ASPHALT CONCRETE SHALL HAVE A RELATIVE COMPACTION OF AT LEAST	► LAND ~ LAND ~ LAND NDSC/ IEATRE (IREET, S AX (707
STREET DRAINAGE ARE 95%. CONDITIONS APPEAR THAT TION SHALL BE APPROVED BY 6. A SOILS OR GEOTECHNICAL ENGINEER SHALL TEST, AND APPROVE THE CONSTRUCTION OF ROADS, AND, IF REQUIRED, PARKING AREAS. THE	J. LAFRANCHI & ASSO L ENGINEERS ~ LAND SUR LANNERS ~ LANDSCAPE A PETALUMA THEATRE SQUAF 140 SECOND STREET, SUITE PETALUMA, CA 94952 (707) 762-3122 FAX (707) 762-3
FIELD CHANGES MADE WITHOUT R OR STEVEN J. LAFRANCHI & PLANS WITHOUT OFFICIAL IL ENGINEER OF ANY AND ALL WHICH CONTAINS AN ANALYSIS OF THE SOLS ENCOUNTERED AND	
 DE A QUALIFIED FIELD HINICAL ENGINEER, TO BE ON THE SITE GRADING WORK AND TO CHECK THAT THE WORK COMPILATION OF COMPACTION TESTS PERFORMED. THE CLASS II AGGREGATE BASE SHALL HAVE A RELATIVE COMPACTION OF AT LEAST 95%, SHALL BE FREE OF LOOSE OR EXTRANEOUS MATERIAL, AND BE A TIGHT NON-YIELDING SURFACE WITH NO VISIBLE DISPLACEMENT. AGGREGATE BASE MATERIALS SHALL BE PLACED IN ACCORDANCE WITH SECTION 26-1.04 OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALLEORNIA LATEST EDITION 	A LAN 954
OF ANY FIELD OR PLAN	U M VIA, 94 38
AND SEALED BY THE MENTS. CAL GREEN REQUIREMENTS.	T A L U UTILITIES A, CALIFORNIA, 707-778-4508
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DF EITHER OR BOTH FITTINGS AND PIPE FING PIPE.	T Y PUBLI McDowell E PH. 707
CTURER'S SPECIFICATIONS. THESE PLANS OR	N. MCD I
2–1/2 DEGREES OR PER CITY STD. PLAN 854.	C C
TD. 863. WATER SERVICE CES SHALL BE 1.5 INCHES	NA A
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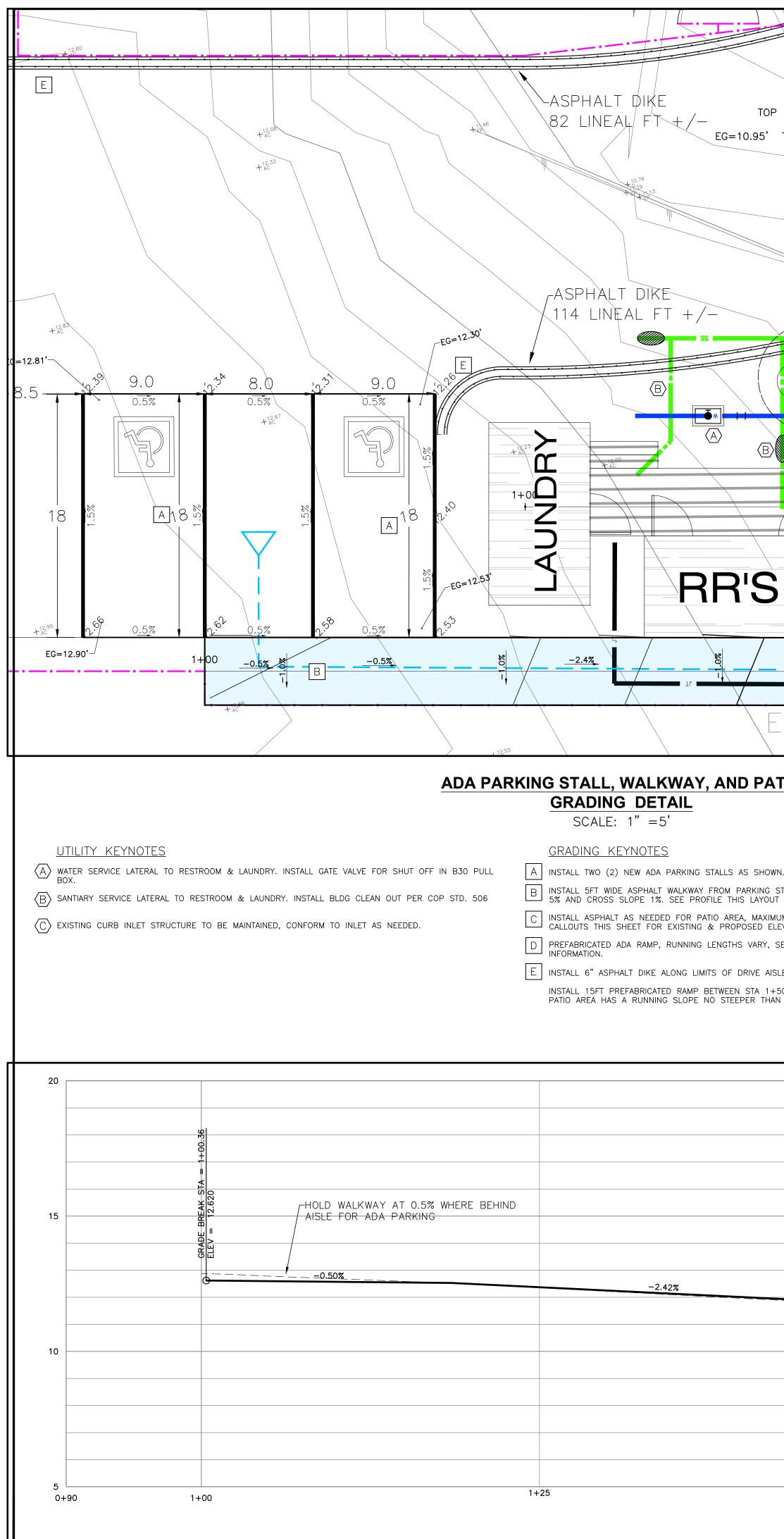


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(/////////////////////////////////////	DEMOLITION KEYNOTES	
	A EXISTING ASPHALT PAVING AT SITE ENTRANCE TO BE REMOVED AS SHOW. [1,150 SQ. FT + / -]	
	B APPROXIMATE LIMITS OF ASPHALT DEMOLITION & REMOVAL AS NEEDED FOR NEW PARKING, WALKWAY,	
//////////////////////////////////////	AND PATIO AREA. SEE OTHER LAYOUTS THIS SET FOR ADDITIONAL DETAIL. CONTRACTOR TO ADJUST	6"
	LIMITS OF AC REMOVAL AS NEEDED TO PREPARE FOR INSTALLATION. [2,500 SQ. FT $+/-$]	J
	C PORTION OF EXISTING SIDEWALK / CURB & GUTTER TO BE REMOVED AS NEEDED FOR INSTALLATION OF ADA COMPLIANT CURB RAMP. SEE OTHER LAYOUTS THIS SET FOR DETAILS OF PROPOSED FLAT WORK.	
	[96 SQ. FT +/-]	
	D APPROXIMATE LIMITS OF ASPHALT REMOVAL AS NEEDED FOR WATER LINE & SEWER LINE INSTALLATION.	
'' '	TRENCH WIDTH VARIES 4-8FT. RESTORE ASPHALT PAVEMENT CONSISTENT WITH (E) PAVEMENT SECTION. 4"AC/8" AB CL-II ASSUMED, TO BE VERIFIED IN FIELD.	
	4 AC/6 AB CL-II ASSOMED, TO BE VERIFIED IN FIELD. [2,200 SQ. FT +/-]	
\bigcirc	E SAWCUT & REMOVE CURB FROM PLANTING MEDIANS ALONG SOUTHERLY SIDE OF DRIVE AISLE AS	
u u	SHOWN. INTENT FOR CURB TO BE CUR AT START OF CURVES.	
	[40 LINEAL FT +/-]	EX. TANK
	EXISTING FENCING TO ADD PRIVACY SU	ATS AS NEEDED
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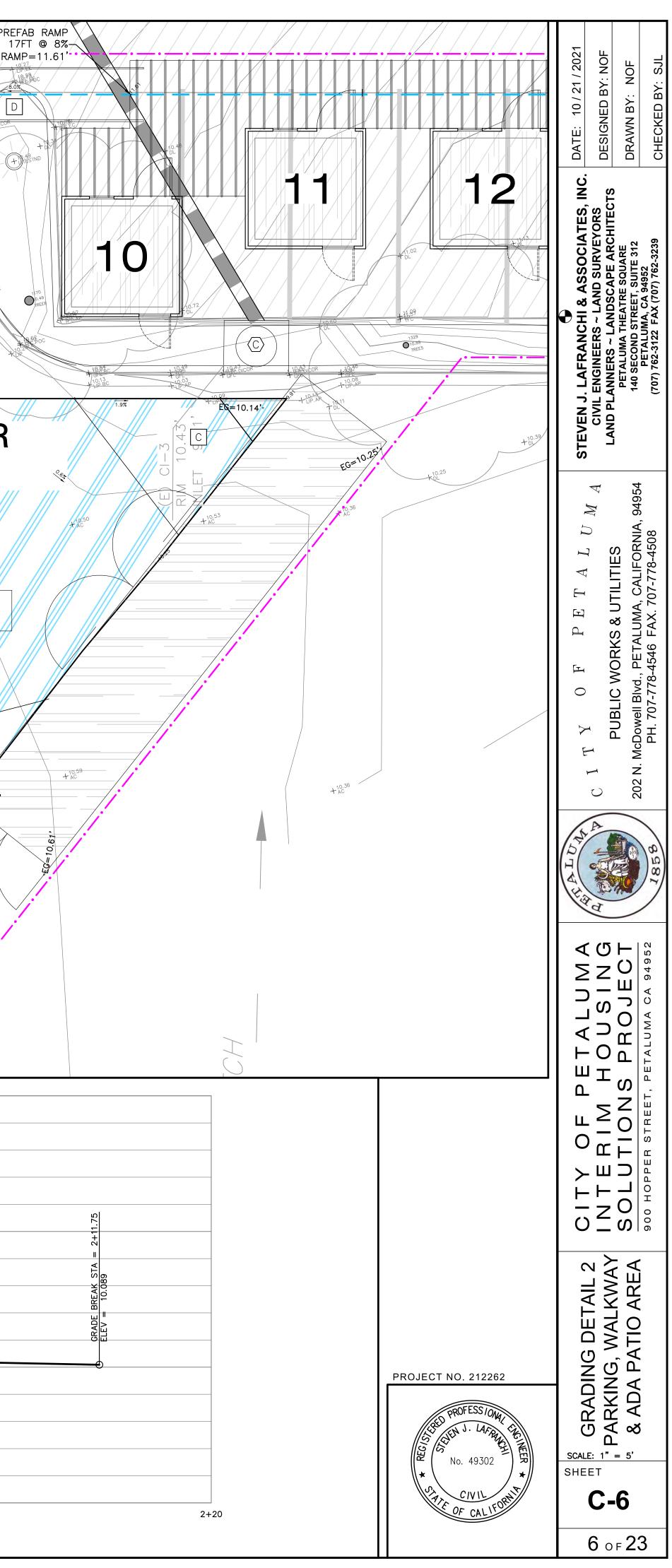


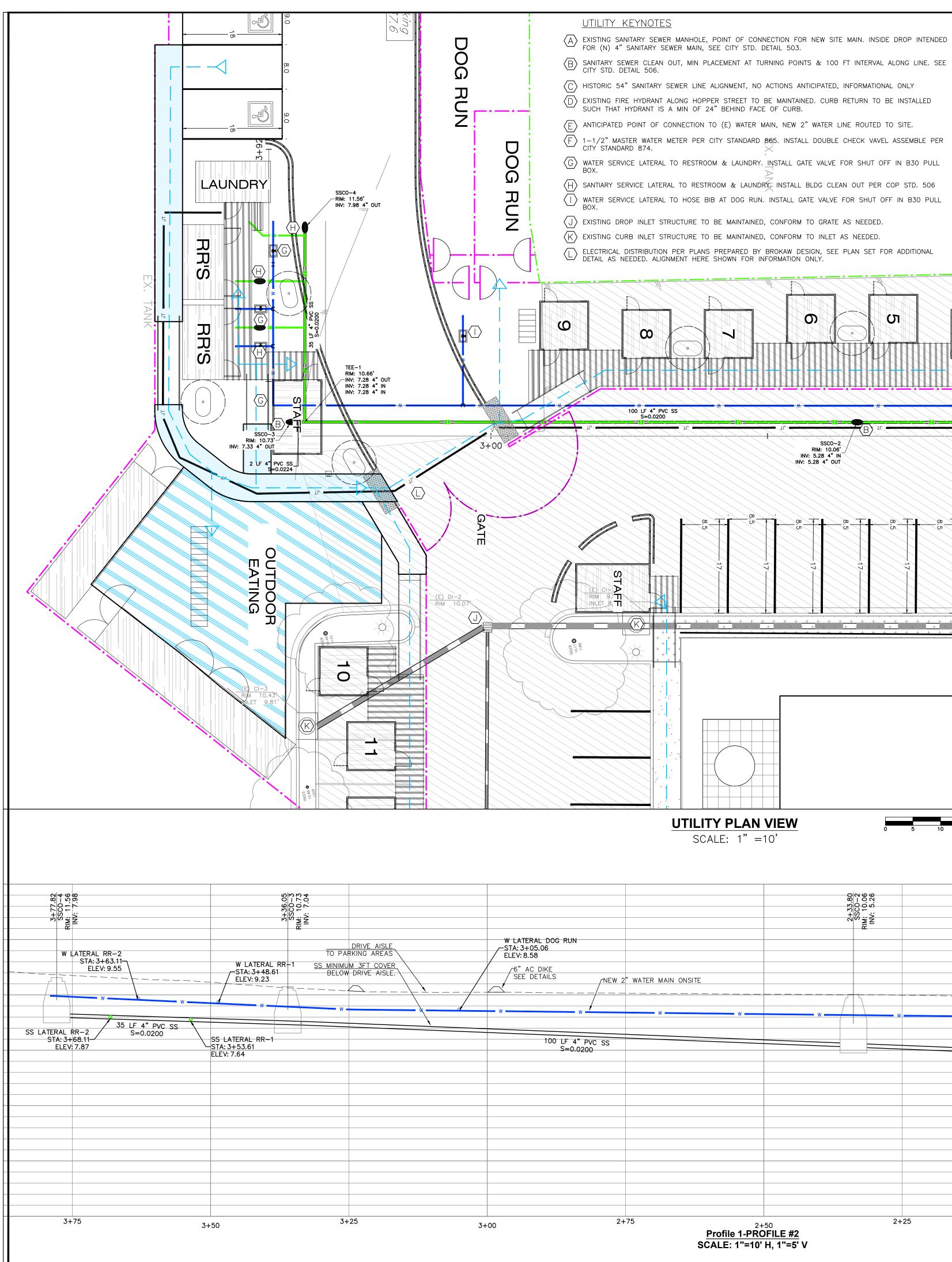






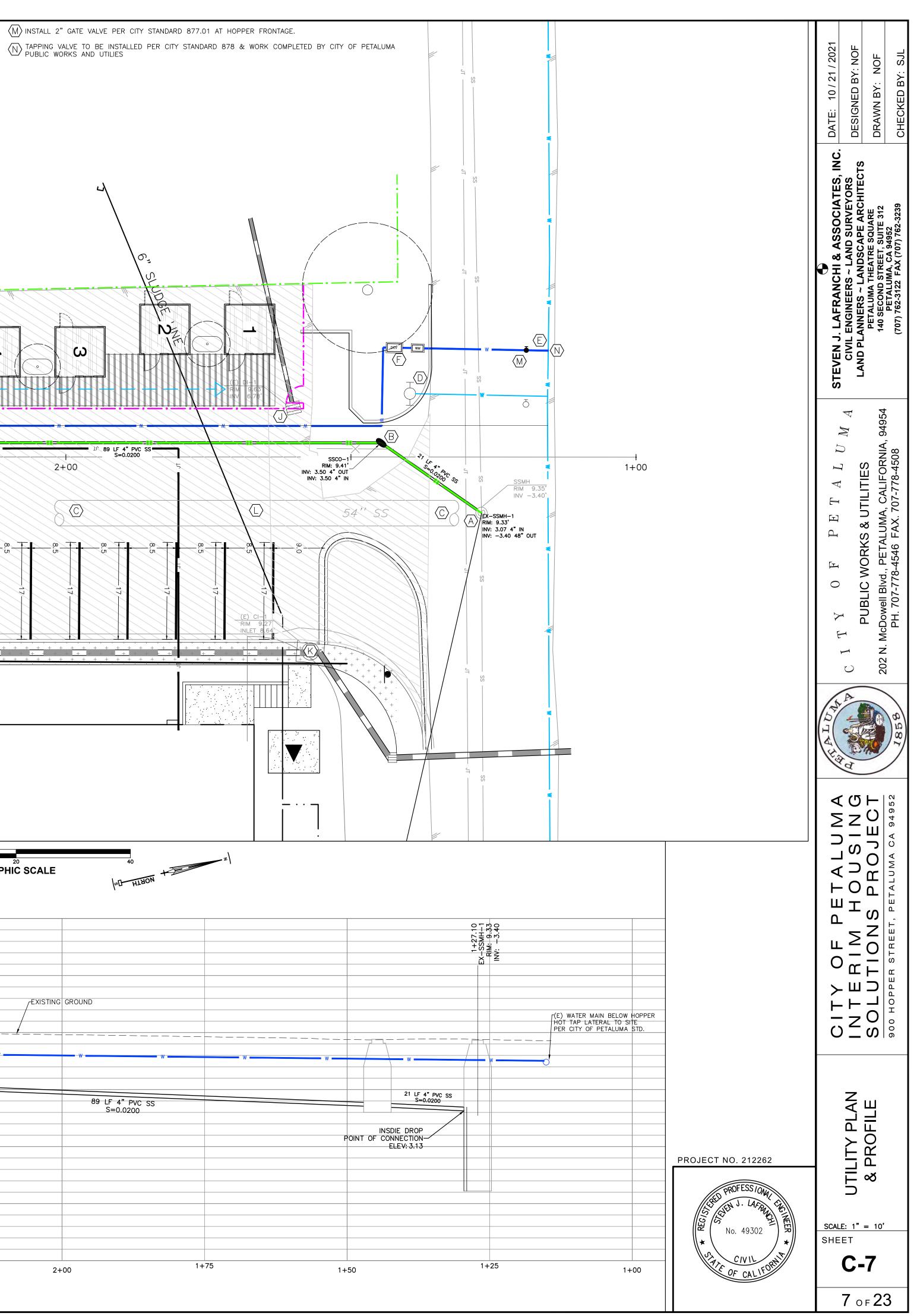
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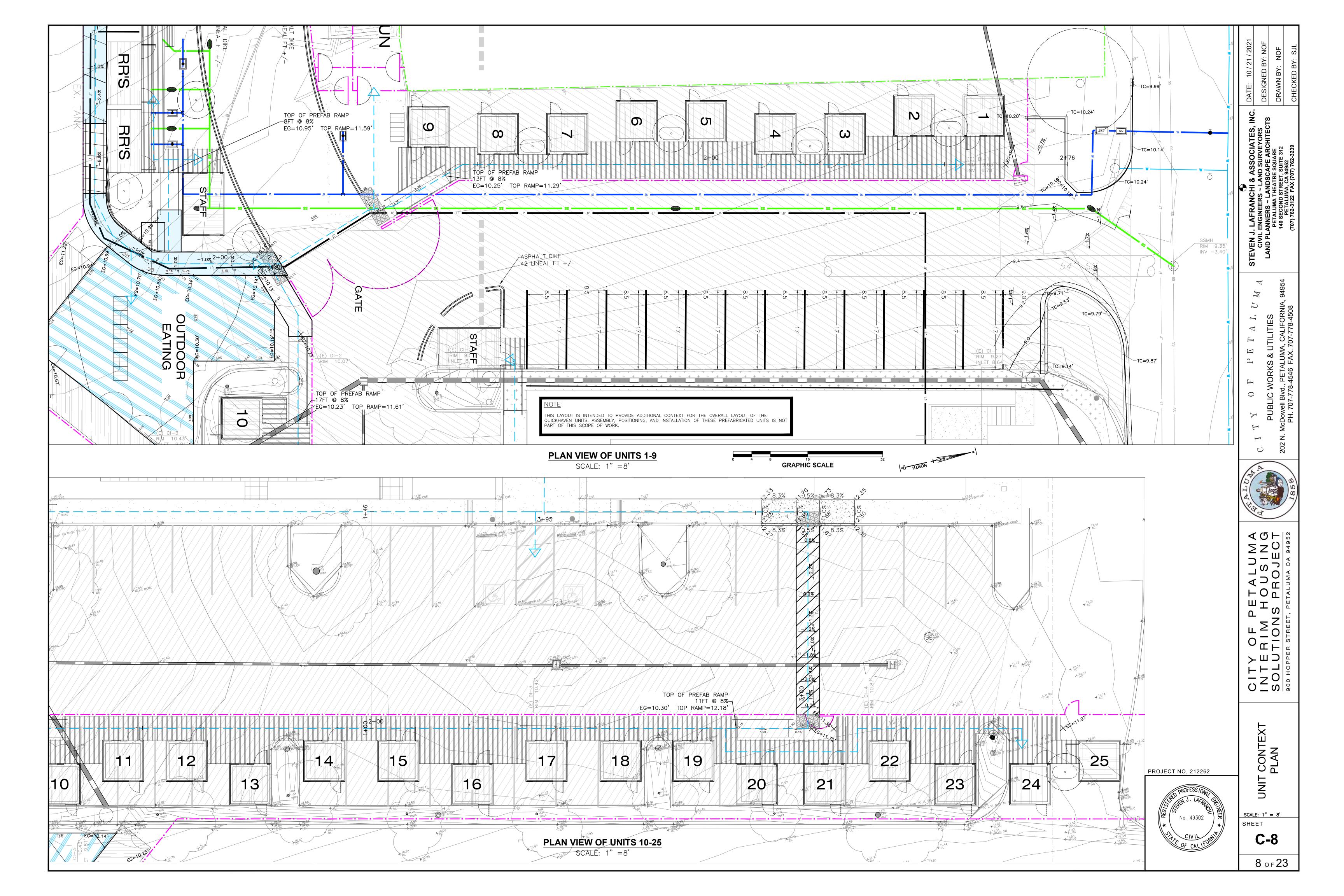


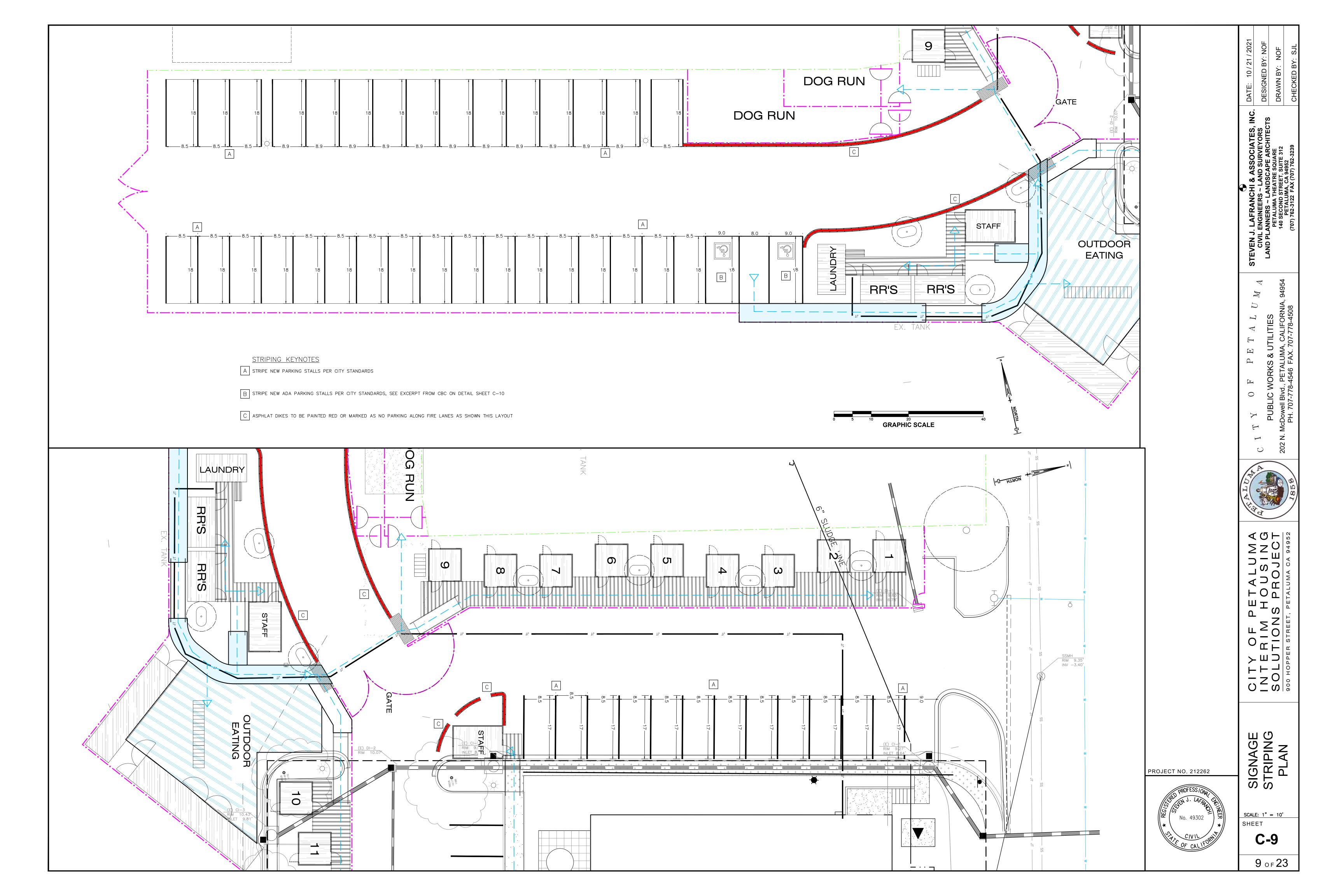


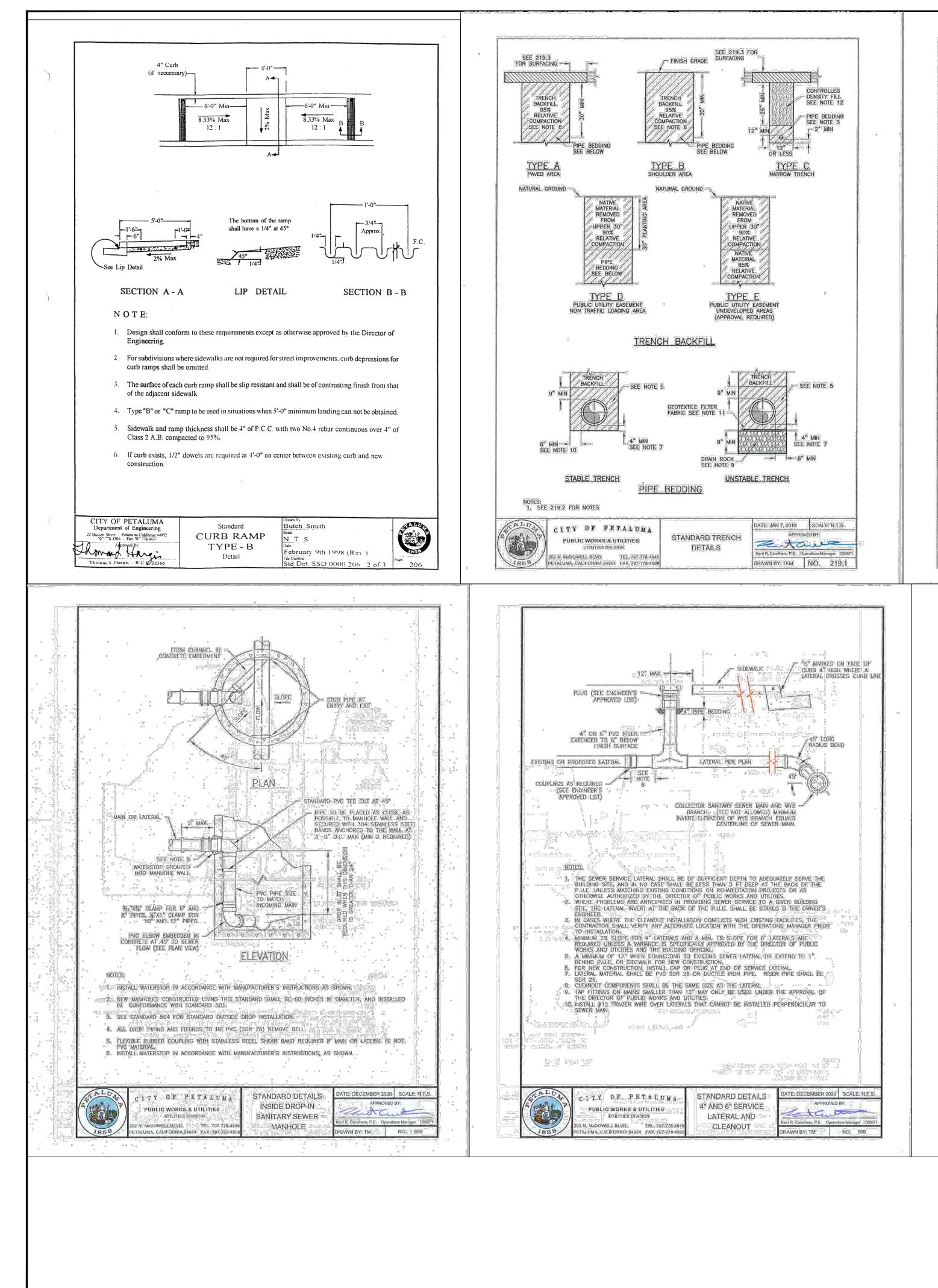
R WATER METER PER CITY STANDARD 86 874.	Ś						
LICE LATERAL TO RESTROOM & LAUNDRY	INSTALL BLDG CLEAN OUT	PER COP STD. 5	506				
P INLET STRUCTURE TO BE MAINTAINED,	CONFORM TO GRATE AS NEE	DED.					
STRIBUTION PER PLANS PREPARED BY BI DED. ALIGNMENT HERE SHOWN FOR INFO	ROKAW DESIGN, SEE PLAN S		JAL		o.		
		5				(E) DI-1 (E) DI-1 RIM 9.63 INV 6.78	
00 LF 4" PVC SS S=0.0200					89 LF 4" PVC SS S=0.0200		SSC0-1 RIM: 9.41'
	SSCO-2 RIM: 10.06' INV: 5.28 4" IN INV: 5.28 4" OUT			2+00			RIM: 9.41' INV: 3.50 4" OUT INV: 3.50 4" IN
							5
						8	
			+ + + + + + + + +	+ + + + + +	+ + + + + + + + +		
							
UTILITY PLAN V SCALE: 1" =10	/IEW D'	0 5	¹⁰ GRAPHIC SC	CALE	40 AD HIBON	Z	
	2+33.80 \$\$\$\$\$\$\$\$ \$	÷ 2.26					
		Ź					
WATER MAIN ONSITE			/ ^f	XISTING GROUND			
w w	w	w					w
				89	LF 4" PVC SS S=0.0200		
					S=0.0200		P
⁵ <u>Profile 1-PROF</u> SCALE: 1"=10' H	⊡ ILE #2 I, 1"=5' V	2+25		2+00		1+75	1+5

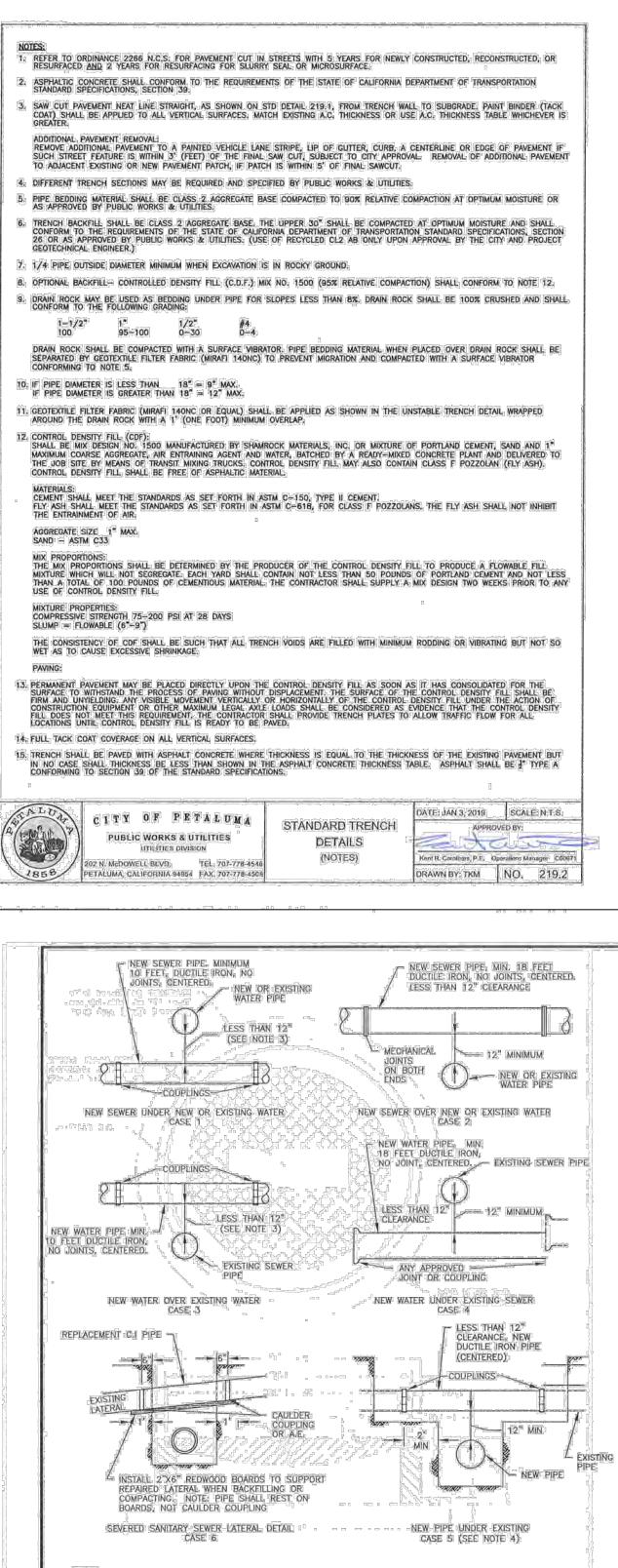
 $\langle M \rangle$ install 2" gate value per city standard 877.01 at hopper frontage.

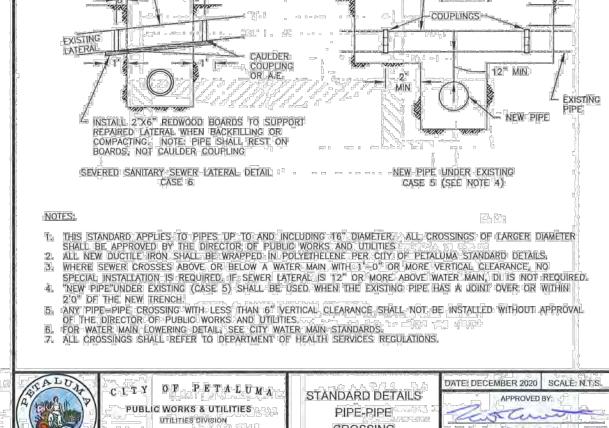












2 N. McDOWELL BLVD. TEL. 707-778-41

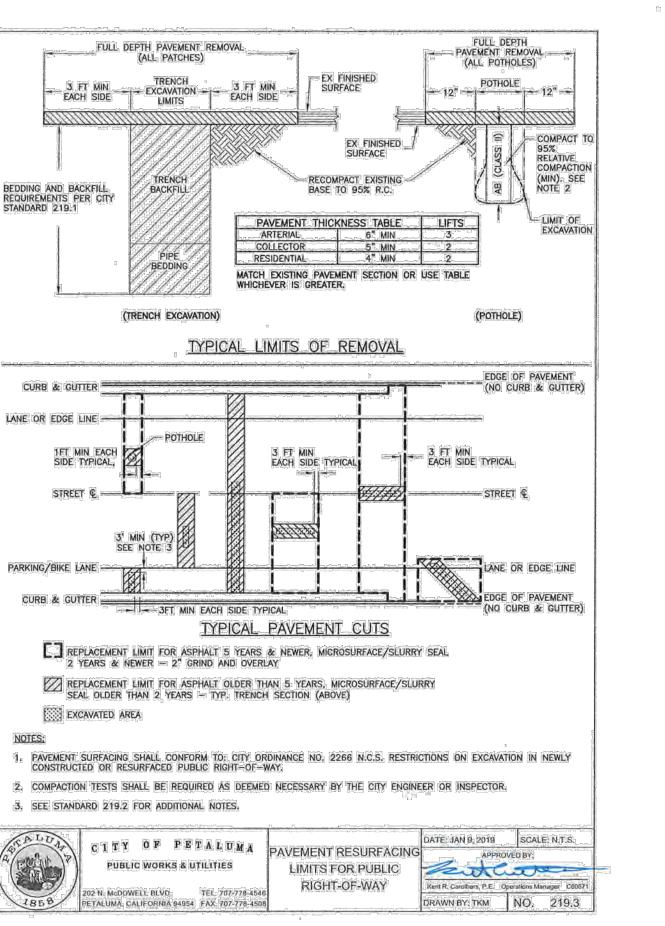
ALUMA, CALIEORNIA 94954 FAX, 707-778-

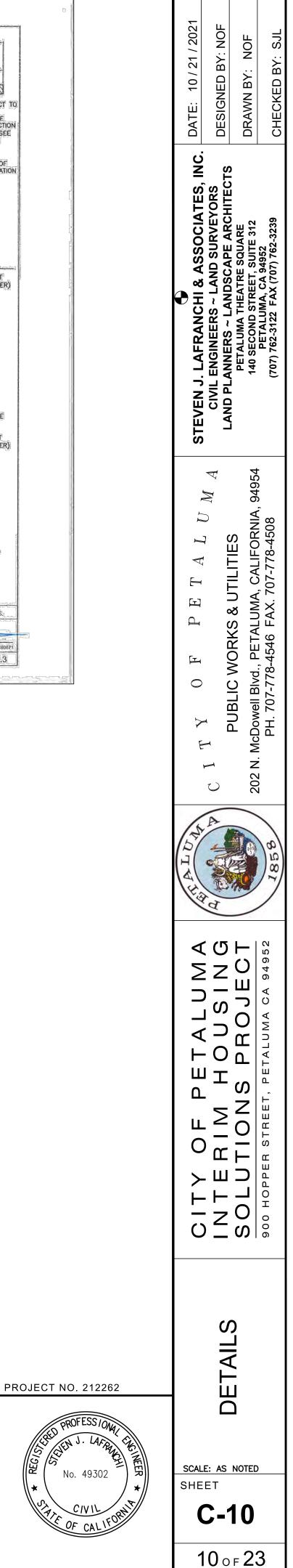
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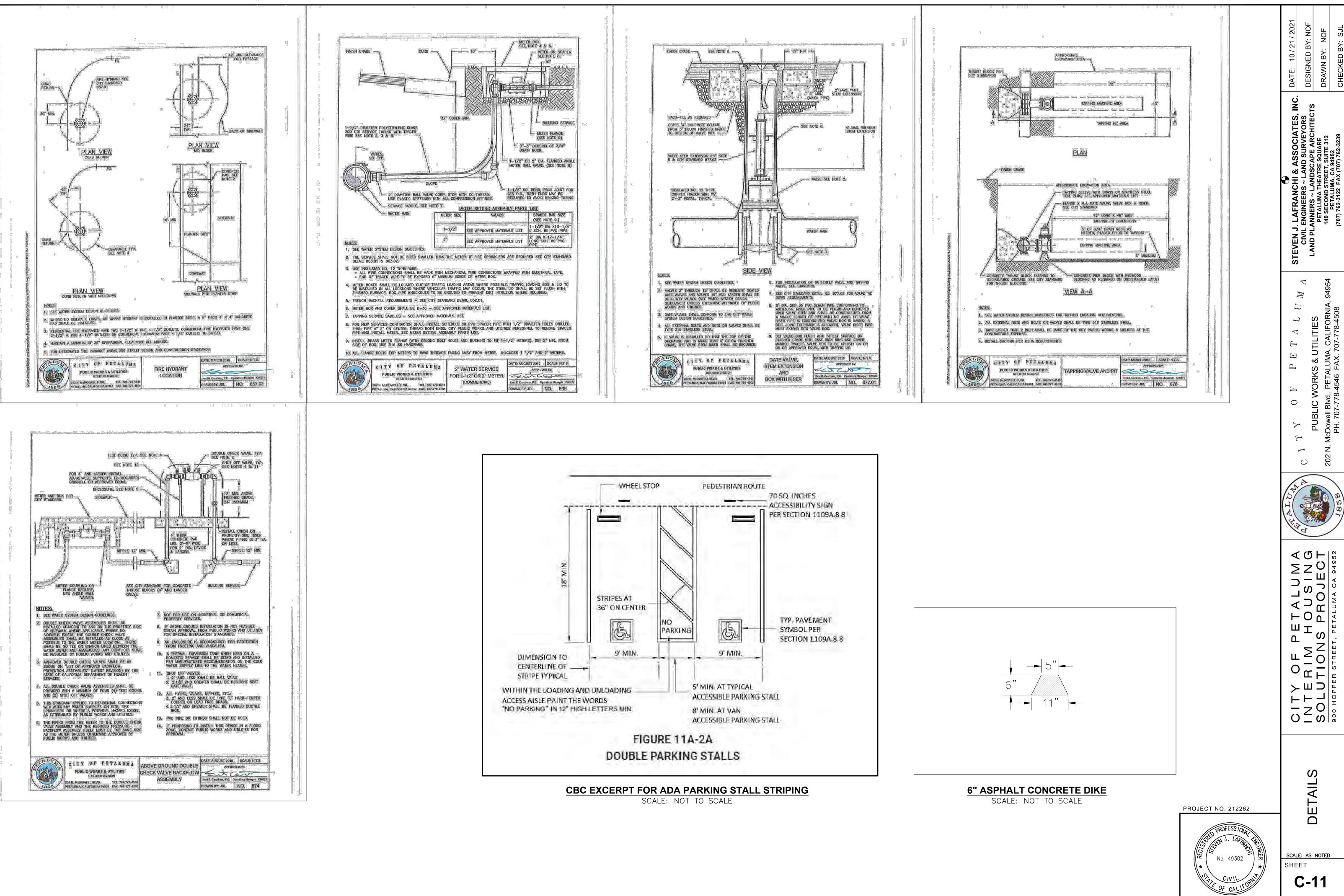
CROSSING

Carothers, P.E. Operations Manager

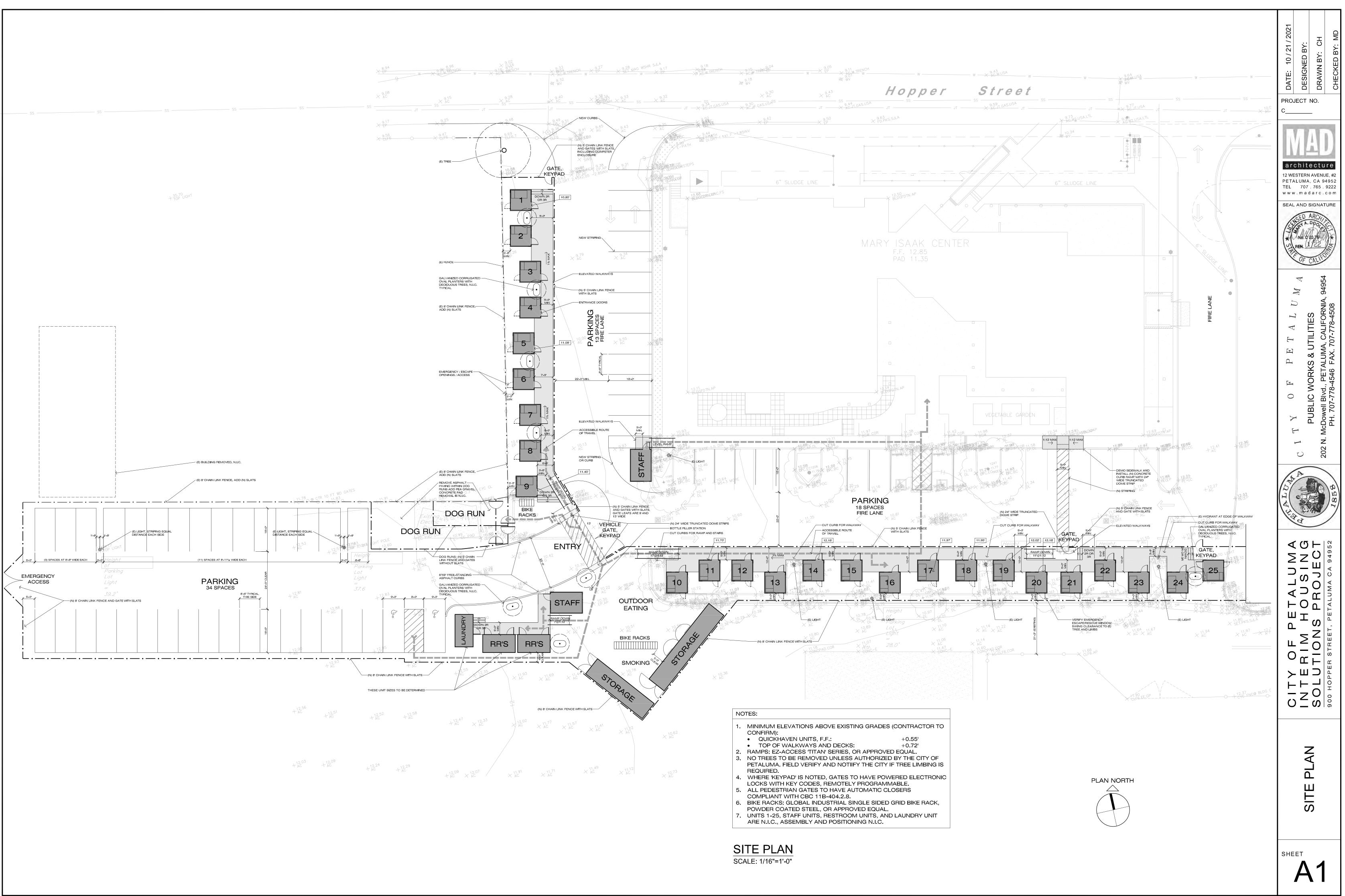
AWN BY: TM NO: 512

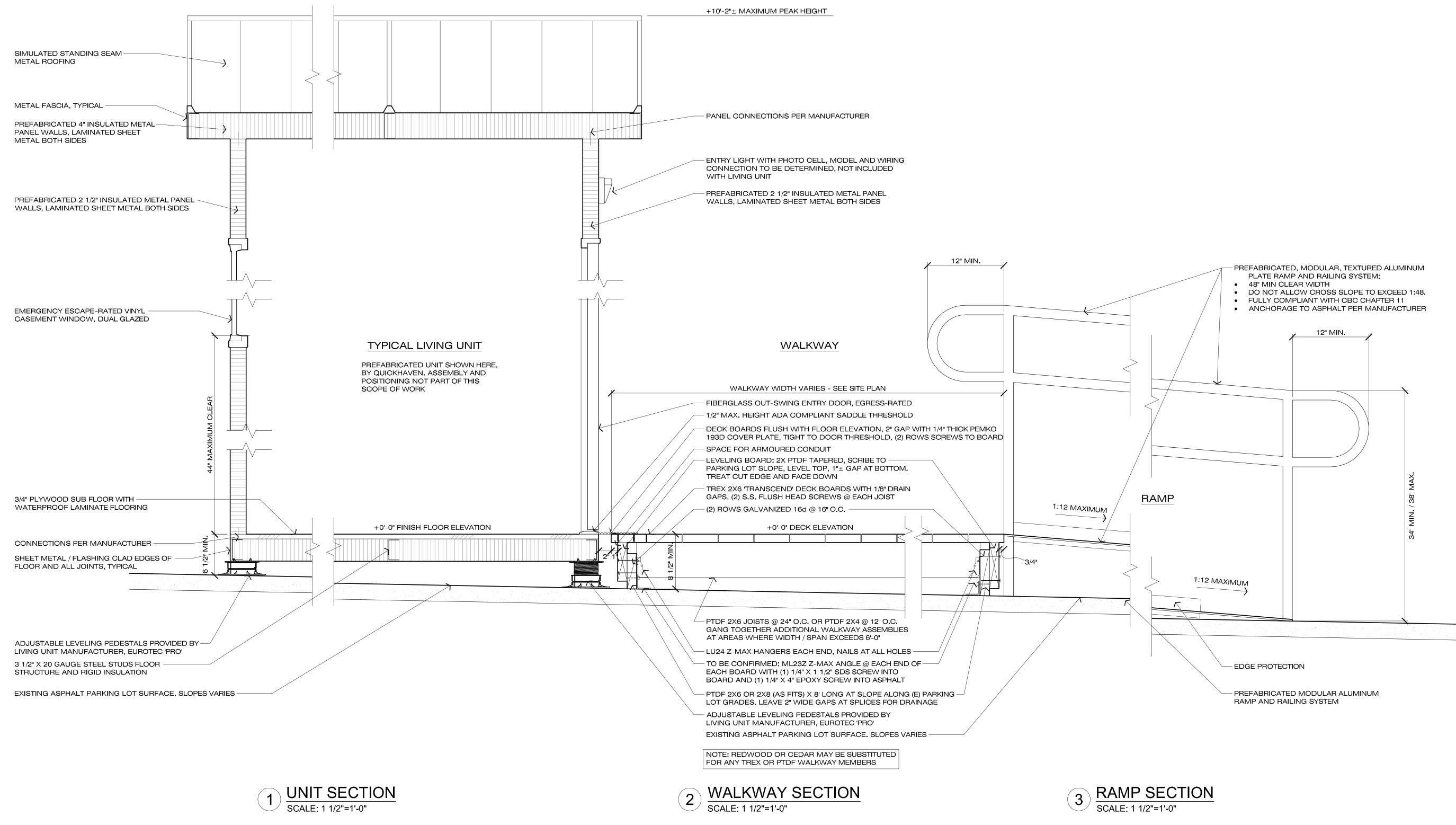




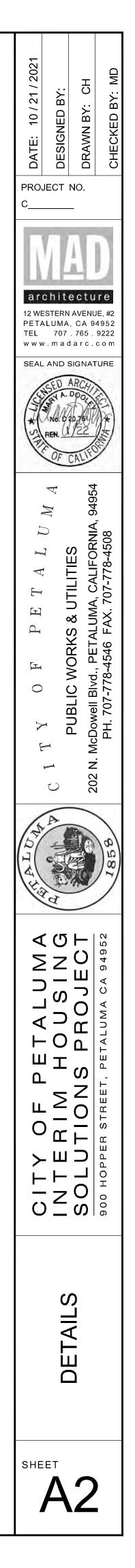


o **F 23**









ELECTRICAL DEVICES

- J JUNCTION BOX - WALL MOUNTED +18" A.F.F. U.O.N.
- J JUNCTION BOX - FLOOR MOUNTED
- $\langle \rangle$ JUNCTION BOX - CEILING MOUNTED
- Φ POWER OUTLET , DUPLEX - WALL MOUNTED +18" A.F.F. U.O.N.
- POWER OUTLET, DEDICATED DUPLEX - WALL MOUNTED +18" A.F.F. U.O.N.
- POWER OUTLET, SWITCHED DUPLEX - +18" A.F.F. U.O.N.
- ⊕ POWER OUTLET, FOURPLEX - WALL MOUNTED +18" A.F.F. U.O.N.
- POWER OUTLET, DEDICATED FOURPLEX - WALL MOUNTED +18" A.F.F. U.O.N.
- Φ POWER OUTLET, SIMPLEX - WALL MOUNTED +18" A.F.F. U.O.N.
- \square POWER OUTLET, DUPLEX - FLOOR MOUNTED, FLUSH LID U.O.N.
- POWER OUTLET, DEDICATED DUPLEX - FLOOR MOUNTED, FLUSH LID U.O.N.
- \oplus POWER OUTLET, FOURPLEX - FLOOR MOUNTED, FLUSH LID U.O.N.
- POWER OUTLET, DEDICATED FOURPLEX FLOOR MOUNTED, FLUSH LID U.O.N.
- POWER OUTLET, DUPLEX - CEILING MOUNTED
- POWER OUTLET, DEDICATED DUPLEX CEILING MOUNTED
- POWER OUTLET, FOURPLEX CEILING MOUNTED
- POWER OUTLET, DEDICATED FOURPLEX CEILING MOUNTED

NOTE: ALL 15- AND 20-AMPERE, 125- AND 250-VOLT NONLOCKING-TYPE RECEPTACLES IN PRESCHOOLS AND ELEMENTARY EDUCATION FACILITIES SHALL BE TAMPER-RESISTANT TYPE.

CONTROLS

\$	SWITCH, SINGLE CONTROL - WALL MOUNTED +42" A.F.F. U.O.N.
\$ ³	SWITCH, 3-WAY CONTROL - WALL MOUNTED +42" A.F.F. U.O.N.
$\4	SWITCH, 4 WAY CONTROL - WALL MOUNTED +42" A.F.F. U.O.N.
\$ ^M	SWITCH, MOTOR RATED - NOTED MOUNTING
\$ ^D	SWITCH, DIMMER CONTROL - WALL MOUNTED +42" A.F.F U.O.N.
\$ ^{VD}	SWITCH, DIMMER WITH VACANCY CONTROL - WALL MOUNTED +42" A.F.F U.O.N.
\$ ^{V1}	SWITCH, VACANCY CONTROL - SINGLE POLE - WALL MTD +42" A.F.F U.O.N.
\$ ^{V2}	SWITCH, VACANCY CONTROL - DUAL POLE - WALL MOUNTED +42" A.F.F U.O.N. (FAN CONTROL SHALL BE PROVIDED WITH TIME DELAY)
	LV SWITCH, UP TO FOUR ZONES, EACH WITH ON/OFF AND DIMMER CONTROL - WALL MOUNTED +42" A.F.F U.O.N. LV SCENE SWITCH - WALL MOUNTED +42" A.F.F U.O.N.
Sx	(NUMBER OF SCENE BUTTONS AS INDICATED)
М	LV MASTER CONTROL - WALL MOUNTED +42" A.F.F U.O.N.
	LV VACANCY SENSOR CONTROL - CEILING MOUNTED
	LV DAYLIGHTING SENSOR CONTROL - DUAL ZONE - CEILING MOUNTED
PLC	PLUG LOAD CONTROLLER - MOUNT IN ACCESSIBLE LOCATION
RCx	ROOM LIGHTING CONTROLLER - MOUNT IN ACCESSIBLE LOCATION (NUMBER OF ZONES AS INDICATED)
¢¢	SWITCH, PHOTO CELL
TC	ASTRONOMICAL TIME CLOCK
	LOW VOLTAGE
	CEILING SPEAKER
Ø-	WALL MOUNTED SPEAKER: +96" A.F.F. U.O.N., 3/4" CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE CEILING
WP 🕐-	WP EXTERIOR SPEAKER: +96" A.F.F. U.O.N., 3/4" CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE CEILING
	SPEAKER/ CLOCK: +96" A.F.F. U.O.N., 1" CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE CEILING
Y	DATA OUTLET - WALL MOUNTED +18" A.F.F.
Ŧ	DATA OUTLET - NOTED MOUNTED
₩P WAP	DATA OUTLET FOR EXTERIOR WIRELESS ACCESS POINT, +10'-0" A.F.F.
Ţ	VOICE/DATA OUTLET - WALL MOUNTED +18" A.F.F.
Ŧ	VOICE/DATA OUTLET - NOTED MOUNTING
∇	VOICE OUTLET - WALL MOUNTED +18" A.F.F.
¥	VOICE OUTLET - +48" A.F.F. TO CENTER WITH PHONE MOUNT KEYSTONE WALL PLATE, SINGLE GANG, 1-PORT STAINLESS STEEL
	DATA OUTLET - FLOOR MOUNTED
\bigtriangledown	VOICE OUTLET - FLOOR MOUNTED
	VOICE/DATA OUTLET - FLOOR MOUNTED
$\langle \mathbf{v} \rangle$	DATA OUTLET - CEILING MOUNTED
WAP	DATA OUTLET - CEILING MOUNTED FOR WIRELESS ACCESS POINT.
Ŷ	TV OUTLET, WALL MOUNTED +18" A.F.F., U.O.N., 3/4" CONDUIT STUBBED INTO ACCESSIBLE SPACE ABOVE CEILING
AV1	4-GANG IN-WALL A/V CONNECTION ENCLOSURE (HUBBELL #NSAV124M) WITH (1) RECEPTACLE POWER KIT MOUNTED AT +60" AT FLAT PANEL LOCATION. PROVIDE 1" CONDUIT TO ACCESSIBLE CEILING SPACE
	SECURITY
MS	SECURITY MOTION SENSOR: +84" AFF TO TOP OF SINGLE GANG BOX, 3/4" CONDUIT STUBBED TO ACCESSIBLE SPACE ABOVE CEILING
К	INTRUSION ALARM KEYPAD: +44" TO TOP OF SINGLE GANG BOX, 3/4" CONDUIT STUBBED TO ACCESSIBLE SPACE ABOVE CEILING
∇ C	SINGLE GANG BOX FOR SECURITY CAMERA: 3/4" CONDUIT TO ACCESSIBLE SPACE ABOVE CEILING, MOUNT HIGH ON WALL, VERIFY BOX LOCATIONS AND HEIGHTS WITH DISTRICT PRIOR TO ROUGH-IN
DC	SECURITY DOOR CONTACT: 1/2" CONDUIT FROM DOOR FRAME STUBBED TO ACCESSIBLE SPACE ABOVE CEILING

APPLICABLE CODES & STANDARDS REFERENCES

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PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2020*	
2019 California Administrative Code (CAC), Part 1, Title 24 CCR*	
2019 California Building Code (CBC), Part 2, Title 24 CCR	
(2018 International Building Code, Vol. 1 & 2, and 2019 California amendment	ts)
2019 California Electrical Code (CEC), Part 3, Title 24 CCR	
(2017 National Electrical Code and 2019 California Amendments)	
2019 California Mechanical Code (CMC), Part 4, Title 24 CCR	
(2018 IAPMO Uniform Mechanical Code and 2019 California amendments)	
2019 California Plumbing Code (CPC), Part 5, Title 24 CCR	
(2018 IAPMO Uniform Plumbing Code and 2019 California amendments)	
2019 California Energy Code (CEC), Part 6, Title 24 CCR	
2019 California Fire Code (CFC), Part 9, Title 24 CCR	
(2018 International Fire Code and 2019 California Amendments)	
2019 California Existing Building Code (CEBC), Part 10, Title 24 CCR	
(2018 International Existing Building Code and 2019 California Amendments)	
2019 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR	
2019 California Referenced Standards Code, Part 12, Title 24 CCR	
Title 19 CCR, Public Safety, State Fire Marshal Regulations	
2016 ASME A17.1/CSA B44-13 Safety Code for Elevators and Escalators (per 2019 (
Note: Cal/OSHA Elevator Unit enforces CCR Title 8 and uses the 2004 ASME A17.1	by adoption
PARTIAL LIST OF APPLICABLE STANDARDS	
NFPA 13 - Standard for the Installation of Sprinkler Systems (CA amended)	
NFPA 14 - Standard for the Installation of Standpipe and Hose Systems (CA amended	
NFPA 17 - Standard for Dry Chemical Extinguishing Systems	
NFPA 17A - Standard for Wet Chemical Extinguishing Systems	
NFPA 20 - Standard for the Installation of Stationary Pumps for Fire Protection	
NFPA 22 - Standard for Water Tanks for Private Fire Protection	2013 Edition
NFPA 24 - Standard for the Installation of Private Fire Service Mains and	
Their Appurtenances (CA amended)	
NFPA 72 - National Fire Alarm and Signaling Code (CA amended)	
NFPA 80 - Standard for Fire Doors and Other Opening Protectives	
NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems (CA amended)	2015 Edition
UL 300 - Standard for Fire Testing of Fire Extinguishing Systems for	
Protection of Commercial Cooking Equipment	2005 (R2010)
UL 464 - Audible Signaling Devices for Fire Alarm and Signaling Systems,	
Including Accessories	
UL 521 - Standard for Heat Detectors for Fire Protective Signaling Systems	
UL 1971 - Standard for Signaling Devices for the Hearing Impaired	2002 (R2010)
ICC 300 - Standard for Bleachers, Folding and Telescopic Seating, and Grand	Istands2017 Edition
For a complete list of applicable NFPA standards refer to 2019 CBC (SFM) Chapter 33	5 and California Fire
Code Chapter 80.	
See California Building Code Chapter 35 for State of California amendments to the NF	PA Standards.
*All parts of the 2019 California Building Code become effective January 1, 2020 exce	pt the effective date for
the use of the 2019 Building Energy Efficiency Standards (Title 24, Part 1, Chapter 10) is January 8, 2019 and
the effective date for the use of the California Administrative Code (Title 24, Part 1, Ch	napter 4) is January 8,
2019.	
2010.	

CIRCUITING

CIRCUIT - CONCEALED

SINCEN CONCERCED
CIRCUIT - EXPOSED
CIRCUIT - UNDER FLOOR, GROUND OR SLAB
CIRCUIT - HOME RUN
CIRCUIT - STUB OUT
CIRCUIT - STUB DOWN

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CIRCUIT - STUB UP CIRCUIT - COMPLETE CONNECTION

EQUIPMENT

DISCONNECT, NON-FUSED
DISCONNECT, WITH FUSE
STARTER, NON-FUSED
STARTER, WITH FUSE
DIVISION 15 FAN
STARTER, WITH CIRCUIT BREAKER
PANELBOARD FLUSH
PANELBOARD SURFACE
ENCLOSURE FLUSH
ENCLOSURE SURFACE
DISTRIBUTION BOARD
METER SECTION
MOTOR
МТТВ
SITE PULL BOX / VAULT

TRANSFORMER

LIGHT FIXTURES

• •	LIGHT FIXTURE, 1 x 4 - PENDANT MOUNTED
o o	LIGHT FIXTURE, 1 x 8 - PENDANT MOUNTED
	LIGHT FIXTURE, 1 x 4 - RECESSED MOUNTED
O	LIGHT FIXTURE, 1 x 8 - RECESSED MOUNTED
O	LIGHT FIXTURE, 1 x 4 - SURFACE MOUNTED
0	LIGHT FIXTURE, 1 x 8 - SURFACE MOUNTED
R	LIGHT FIXTURE, 2 x 2 - RECESSED MOUNTED
	LIGHT FIXTURE, 2 x 4 - RECESSED MOUNTED
0	LIGHT FIXTURE, 2 x 2 - SURFACE MOUNTED
0	LIGHT FIXTURE, 2 x 4 - SURFACE MOUNTED
ноон	LIGHT FIXTURE, 4' STRIP - SURFACE MOUNTED
н————————————————————————————————————	LIGHT FIXTURE, 8' STRIP - SURFACE MOUNTED
	LIGHT FIXTURE, EXIT WITH EGRESS - WALL/CEILING MOUNTED
9_9	LIGHT FIXTURE, EGRESS - WALL MOUNTED
•	LIGHT FIXTURE, EXIT DOUBLE FACE - CEILING MOUNTED
•	LIGHT FIXTURE, EXIT DOUBLE FACE - WALL MOUNTED
\bigotimes	LIGHT FIXTURE, EXIT SINGLE FACE - CEILING MOUNTED
\bigtriangledown	LIGHT FIXTURE, EXIT SINGLE FACE - WALL MOUNTED
\oplus	LIGHT FIXTURE - PENDANT MOUNTED
Ø	LIGHT FIXTURE - RECESSED MOUNTED
۲	LIGHT FIXTURE, WALL WASH - RECESSED MOUNTED
-¢-	LIGHT FIXTURE - SURFACE MOUNTED
- - - - - - - - - - - - - -	LIGHT FIXTURE - WALL MOUNTED
Φ	LIGHT FIXTURE - POLE MOUNTED
•	LIGHT FIXTURE, NO ARM - POLE MOUNTED OR BOLLARD

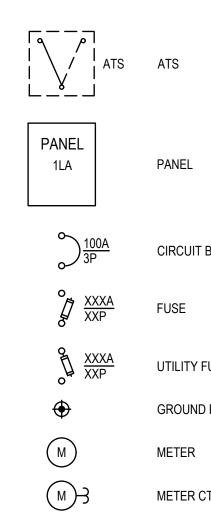
ADA REQUIREMENTS

3

A. ALL HEIGHTS CALLED OUT ON PLANS ARE TO CENTERLINE OF DEVICE, U.O.N. B. FOLLOW ALL ADA REQUIREMENTS FOR DEVICE MOUNTING:

• MAX UNOBSTRUCTED FORWARD REACH 48-INCHES TO TOP OF DEVICE. • MIN UNOBSTRUCTED FORWARD REACH 15-INCHES TO BOTTOM OF DEVICE. • MAX OBSTRUCTED FORWARD REACH 44-INCHES TO TOP OF DEVICE. • MAX OBSTRUCTED SIDE REACH 46-INCHES TO TOP OF DEVICE.

DIAGRAMS



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PANEL
CIRCUIT BREAKER
FUSE
UTILITY FUSE
GROUND ROD
METER
METER CT
TRANSFORMER

MISCELLANEOUS

XX DEMO KEYED NOTE TAG ELECTRICAL EQUIPMENT TAG $\langle \mathbf{x} \rangle$ KEYED NOTE TAG $\langle 1 \rangle$ / X X / MECHANICAL EQUIPMENT TAG X **REVISION DELTA** $\langle 1 \rangle$ EQUIPMENT MANUFACTURER'S IDENTIFICATION NUMBER DETAIL REFERENCE X EPLEP NORTH DETAIL REFERENCE

PLAN NORTH ARROW

ABBREVIATIONS

А	AMPERES	HVAC	HEATING, VENTILATION &
AC	ALTERNATING CURRENT		AIR-COND.
A.F.F.	ABOVE FINISHED FLOOR	IG	ISOLATED GROUND
AFG	ABOVE FINISHED GRADE	IMC	INTERMEDIATE METAL CONDU
AHJ	AUTHORITY HAVING JURISDICTION	JB	JUNCTION BOX
AHU	AIR HANDLING UNIT	KV	KILO VOLT
AL	ALUMINUM	KVA	KILO VOLT-AMP
ANN	ANNUNCIATOR	KW	KILO WATT
APPROX	APPROXIMATE	LV	LOW VOLTAGE
ARF	ABOVE RAISED FLOOR	MAX	MAXIMUM
ANG		MC	METAL-CLAD
	AMERICAN WIRE GAUGE		
BAT	BATTERY	MCC	MOTOR CONTROL CENTER
BFG	BELOW FINISH GRADE	MFR, MFGR	
	CENTERLINE	MIC	MICROPHONE
C, CND	CONDUIT	MIN	MINIMUM
CB	CIRCUIT BREAKER	MDP	MAIN DISTRIBUTION BOARD
CKT	CIRCUIT	MSB	MAIN SWITCHBOARD
CO	CONDUIT ONLY	MTD	MOUNTED
COMM	COMMUNICATIONS	(N)	NEW
CONST	CONSTRUCTION	N, NEUT	NEUTRAL
CONT	CONTINUED	N/A	NOT APPLICABLE
CP	CONTROL PANEL	NC	NORMALLY CLOSED
CPT	CONTROL POWER TRANSFORMER	NIC	NOT IN CONTRACT
СТ	CURRENT TRANSFORMER	NO	NORMALLY OPEN
CU	COPPER	NTS	NOT TO SCALE
DC	DIRECT CURRENT	OC	ON CENTER
DWG	DRAWING	PNL	PANEL
(E)	EXISTING	PVC	POLYVINYL CHLORIDE
EA	EACH	PB	PULL BOX, ELECTRICAL
EF	EXHAUST FAN	REQD	REQUIRED
EMT	ELECTRICAL METALLIC CONDUIT	RGS, RSG	
ENT	ELECTRICAL METALLIC CONDOT	RTU	REMOTE TERMINAL UNIT
	CONDUIT	SP	SPACE, SPARE
		SS	
EP	EXPLOSION PROOF		STAINLESS STEEL
EQ	EQUAL	SW	SWITCH
EVACS	EMERGENCY VOICE &	SWBD	SWITCHBOARD
<i>(</i>)	COMMUNICATIONS SYSTEM	SWGR	SWITCHGEAR
(F)	FUTURE	TP	TAMPER PROOF
FA	FIRE ALARM	TYP	TYPICAL
FACP	FIRE ALARM CONTROL PANEL	UF	UNDER FLOOR
FC	FAN COIL	UG	UNDER GROUND
G, GND	GROUND	U.O.N.	UNLESS OTHERWISE NOTED
GFCI	GROUND FAULT CIRCUIT	V	VOLT
	INTERRUPTER	VA	VOLT-AMP
GFI	GROUND FAULT INTERRUPTER	W/0	WITHOUT
HV	HIGH VOLTAGE	WP	WEATHER PROOF
		XFMR	TRANSFORMER

ELECTRICAL	SHEET	INDE>

- E-001 ELECTRICAL LEGEND AND ABBREVIATIONS E-002 ELECTRICAL SHEET SPECIFICATIONS E-003 PHOTOMETRIC SITE PLAN - SITE E-101 ELECTRICAL SITE PLAN ELECTRICAL PLANS - UNITS 1-9, RESTROOMS E-111 ELECTRICAL PLANS - UNITS 10-25 E-112 **DETAILS - ELECTRICAL** E-501
- E-502 DETAILS - ELECTRICAL
- E-601 DIAGRAMS - ELECTRICAL
- E-701 SCHEDULES

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ELECTRICAL

1.01- RELATED DOCUMENTS A. The General Conditions, Supplementary Conditions and Division 1 apply to the electrical work.

1.02 - WORK INCLUDES

- A. Work included in this section: All materials, labor, equipment, services, and incidentals necessary to install the Electrical Work as shown on the drawings and as specified hereinafter, including, but not limited to the following:
- 1. Distribution system, including main switchboard, panelboards, and feeders.
- 2. Branch circuit wiring, wiring devices and connections to all equipment requiring electrical service.
- 3. Lighting fixtures with hangers, anchors and supports. Lighting Controls.
- Electrical equipment grounding system. 5. Telecommunication boxes, outlets, raceways and cabletrays.
- 6. Mechanical equipment power and control connections as stated in the mechanical and electrical specifications and as shown on the mechanical and electrical drawings.
- 7. Fire alarm system shall be Design Build by a Fire Alarm contractor.
- 8. Security and access control. 9. Raceways, outlet boxes and power connections for security and access control system. Coordinate
- all requirements with Owner.
- 10. Sleeves, inserts and blocking in cast concrete as required for work in this section. 11. All required incidental work, such as excavating and backfilling, roof flashing, and testing.
- 12. Any other electrical work as might reasonably be implied as required, even though not specifically mentioned herein or shown on the drawings.

1.03 - INCORPORATED DOCUMENTS

- A. Requirements of the general conditions, supplementary conditions, and division 1. sections apply to all 2.01 GENERAL work in this section. unless modified herein. B. Published specifications, standard tests or recommended methods of trade, industry or government
- organizations apply to work of this section where cited by abbreviations noted below, unless modified
- 1. NATIONAL ELECTRICAL CODE, LATEST EDITION, (NEC).
- 2. NEMA STANDARDS
- 3. UNDERWRITERS' LABORATORIES, INC. (UL).
- 4. LOCAL UTILITY COMPANY REGULATIONS. 5. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

1.04 - CONDITIONS AT SITE:

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A. Visit to site is required of all bidders prior to submission of bid. All will be held to have familiarized themselves with all discernible conditions and no extra payment will be allowed for work required because of these conditions, whether specifically mentioned or not.

1.05 - QUALITY ASSURANCE

- A. Conformance: 1. All work shall conform to the applicable requirements of Article 1.03 above.
- 2. The Contractor shall notify the Architect, prior to submission of bid, about any part of the design which fails to comply with abovementioned requirements.
- 3. If after contract is awarded, minor changes and additions are required by aforementioned authorities, even though such work is not shown on drawings or covered in specifications, they shall be included at Contractor's expense.

B. Coordination:

- 1. The Contractor shall become familiar with the conditions at the job site, and with the drawings and specifications and plan the installation of the electrical work to conform with the existing conditions and that shown and specified so as to provide the best possible assembly of the combined work of all trades.
- 2. The Contractor shall work out in advance all "tight" conditions, involving all trades and if found necessary, supplementary drawings shall be prepared by this Contractor, for the Architect's approval, before work proceeds in these areas. No additional costs will be considered for work which must be relocated due to conflicts with the work of other trades.

1.06 - SUBMITTALS

- A. Product Data: 1. Comply with the General Provisions of the Contract.
- 2. Within 15 days after award of the Contract, submit:
 - a. Complete material list of all items proposed to be furnished and installed under this Section, including but not limited to the following items: Circuit breakers, lighting fixtures, conduit, devices, enclosures, etc.
 - b. Manufacturers' specifications and other data required to demonstrate compliance with the specified requirements.
 - c. Manufacturers' recommended installation procedures which, when approved by the Architect, shall become the basis for inspecting and accepting or rejecting actual installation procedures used on the work.
- 3. Shop Drawings: Furnish shop drawings and/or equipment cuts for the following:
 - a. Light Fixtures
 - b. Switchboard
 - c. Panelboards
 - d. Motor Starters, Control Equipment, and Control Relays e. Disconnect Switches
 - f. Fire Alarm System
 - g. Lamps
 - Ballasts
 - i. Lighting Control System
 - Security and access Control
 - . Switches, receptacles and faceplates.
- 4. Test Reports:
 - a. Factory Tests where indicated for specific equipment.
 - b. Field Tests: Performance tests as specified for specific equipment. c. When series rated circuit breakers are used, provide a letter from the manufacturer of the equipment confirming that U.L. series rating exists for all protective devices. State the available fault current from the Utility Company and indicate that the overcurrent devices exceed the available fault current at the respective point of protection.

1.07- MATERIALS

A. Materials of the same type or classification, used for the same purpose, shall be the product of the same manufacturer.

1.08 - ACCEPTABLE MANUFACTURERS

- A. Materials shall be of make mentioned elsewhere in this specification. All materials shall be the best of their several kinds, perfectly new and approved by the Underwriters' Laboratories. B. Where material, equipment, apparatus or other products are specified by manufacturer, brand name,
- type or catalog number, such designation is to establish standards of desired quality, style and utility and shall be the basis of the bid. Materials so specified shall be furnished under the contract unless changed by written approval of the Owner's Representative. Where two or more designations are listed, choice shall be optional with this Contractor, but this Contractor must submit his choice for final approval.

1.09 - DELIVERY, STORAGE AND HANDLING

- A. Protection: Use all means necessary to protect the materials of this Section before, during, and after installation and to protect the work and materials of all trades.
- B. Delivery and Storage: Deliver all materials to the job site in their original containers with all labels intact and legible at time of use. Store in strict accordance with approved manufacturers'
- recommendations. C. Replacements: In the event of damage, immediately make all repairs and replacements necessary to
- the approval of the Architect and at no additional cost to the Owner. D. This Contractor shall personally, or through an authorized representative, check all materials upon receipt at jobsite for conformance with approved shop drawings and/or plans and specifications.
- 1.10 SCHEDULING/SEQUENCING
- A. Place orders for all equipment in time to prevent any delay in construction schedule or completion of project. If any materials or equipment are not ordered in time, additional charges made by equipment manufacturers to complete their equipment in time to meet the construction schedule, together with any special handling charges, shall be borne by this Contractor.
- 1.11 REQUIREMENTS

- A. The contract drawings indicate the extent and general arrangements of the conduit wiring systems, etc. If any departures from the contract drawings are deemed necessary by the Contracto such departures and the reasons therefore shall be submitted as soon as practicable, and days after award of the electrical contract.
- B. UNLESS MATERIAL LIST AND DATA IS RECEIVED AS A COMPLETE AND ALL INCLU SUBMITTAL WITHIN THE STIPULATED TIME ALL ITEMS SHALL BE PROVIDED AS S WITH NO DEVIATIONS PERMITTED.
- C. Any and all additional costs incurred by the substitution of electrical material or equipmer installation thereof, whether architectural, structural, plumbing, mechanical or electrical, by the Contractor under this section.
- 1.12 IDENTIFICATION
- A. Switchboards, feeder circuit breakers in switchboards, panels, disconnect switches, moto motor disconnect switches, cabinets, and other apparatus used for the operation of, or co circuits, appliances or equipment, shall be properly identified by means of engraved lamin descriptive nameplates mounted on apparatus using stainless steel screws. Nameplates white letters with black background and be submitted to the Architect for approval. Card form are not acceptable.
- B. Each branch circuit of panelboards to have a permanently fixed number with directory, mo celluloid on inside of cabinet door, showing circuit numbers, room number feed and typew description of equipment supplied by breakers.
- C. Each Panelboard, Switchboard and Motor Control Center shall be provided with an Arc-F label per NEC requirements.

PART 2 - PRODUCTS:

- A. Materials shall be new, packed in original containers, installed and turned over to the Ow defects
- B. Materials shall bear Underwriters' Laboratory label. C. Furnish equipment and materials for any one system by same manufacturer.

2.02 - MATERIALS A. Conduit

- 1. Conduit shall be delivered to the site of construction in the original bundles. Each lengt the label of the National Board of Fire Underwriters. All conduit subjected to rough usa
- the job, before installation, shall be removed from the premises upon notice. Raceway and boxes located as indicated on drawings and at other locations required for
- taps, wire pulling, equipment connections, and compliance with regulatory requirements and boxes are shown in approximate locations unless dimensioned. Provide raceway to wiring system.
- 3. Rigid Steel: Hot dipped galvanized, used exposed and in concrete slab, with completel 4. "Schedule 40" PVC shall be provided with code size minimum bare No. 12 ground wire
- "Schedule 80" elbows and stub-ups. 5. All rigid steel conduit, couplings and elbows in soil or under membrane to be 1/2 tape w
- Scotch #50 tape and threaded ends coated with red lead prior to installation of coupling 6. Use flexible conduit for all motor connections; Flexible metal type provide with code siz No. 12) bare ground wire in all flexible conduit.
- 7. Conduit Bends Long Radius.
- 8. Provide conduit seals at all concrete slab penetrations.
- 9. Contractor shall xray all existing concrete slab before core drilling.
- 10. All indoor conduit shall be installed concealed in walls or above ceiling unless noted oth 11. Installation:
 - a. Outdoor Locations:

- Above Grade: Provide rigid steel conduit. Provide cast metal outlet, pull, boxe
- In Soil: Provide Sched 40 or 80 PVC with Sched 80 PVC elbows (in marin
- moisture environments) or Rigid Steel elbows wrapped. In Concrete: Provide hot dipped galvanized rigid steel or Sched 40 PVC
- Flexible Connection: WP Flexible metal conduit.
- Watertight and corrosion resistant fittings, couplings, boxes, etc. Indoor Locations:
- Exposed Dry Locations: Provide galvanized rigid steel conduit or Intermed conduit. Provide cast boxes. Electric Metallic Tubing may be provided in areas
- Concealed Dry Locations: Provide electrical metallic tubing for sizes less t 2-inches. Provide galvanized rigid steel or intermediate steel conduit in siz or larger. Provide cast or sheet metal boxes.
- Electric non-metallic tubing may be used from data/voice outlet to at
- plenum ceiling only, otherwise it is unacceptable. • Flexible Conduit/MC cable may be used for the following application allowed by the latest NEC publications:
- ••• Between light fixtures / light switches (not for homerun) ••• Between general 20A receptacles within walls (not for homeru Cable must be the same size as the IMC or EMT conduit to which i connected. Both the flexible metal conduit and it's fittings are to be grounding. A green grounding conductor shall be installed. All conn
- be of a NEMA approved type. Electric non-metallic tubing may be used from data/voice outlet to above r

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ELECTRICAL SPECIFICATIONS 26 00 00

B. C. 12 - I A. B. C. ART : A.	The contract drawings indicate the extent and general arrangements of the conduit wiring systems, etc. If any departures from the contract drawings are deemed necessary by the Contractor, details of such departures and the reasons therefore shall be submitted as soon as practicable, and within 10 days after award of the electrical contract. UNLESS MATERIAL LIST AND DATA IS RECEIVED AS A COMPLETE AND ALL INCLUSIVE SUBMITTAL WITHIN THE STIPULATED TIME ALL ITEMS SHALL BE PROVIDED AS SPECIFIED-WITH NO DEVIATIONS PERMITTED. Any and all additional costs incurred by the substitution of electrical material or equipment, or installation thereof, whether architectural, structural, plumbing, mechanical or electrical, shall be borne by the Contractor under this section. DENTIFICATION Switchboards, feeder circuit breakers in switchboards, panels, disconnect switches, motor starters and motor disconnect switches, cabinets, and other apparatus used for the operation of, or control of circuits, appliances or equipment, shall be properly identified by means of engraved laminated plastic descriptive nameplates mounted on apparatus using stainless steel screws. Nameplates shall have white letters with black background and be submitted to the Architect for approval. Cardholders in any form are not acceptable. Each branch circuit of panelboards to have a permanently fixed number with directory, mounted under celluloid on inside of cabinet door, showing circuit numbers, room number feed and typewritten description of equipment supplied by breakers. Each Panelboard, Switchboard and Motor Control Center shall be provided with an Arc-Flash warning label per NEC requirements. 2 - PRODUCTS: SENERAL Materials shall be new, packed in original containers, installed and turned over to the Owner free of defects. Materials shall be ar Underwriters' Laboratory label.	1. 2 3 4 F. 1. 2 3 4 3 4 5 5 6 6 7 8 H. 1. 2	 Telecommunication Wiring/ Receptacles: Category 6 UTP cable: Unshielded, 4 twisted-pair, 24 AWG copper, Category 6 Indoor Fiber Optic backbone cable: 12 strand, 62.5/125 m, multi-mode, riser type, NEC rated OFNR/FT4, color coded, ripcord, 900 m buffer coating Telephone single port: Leviton 40644-00W or equal. For Indoor TV outlets: single gang with cable TV jack. Route in cable tray or on J-hooks (max 8ft on center where above accessible ceiling) or conduit (where non accessible). Receptacles: Leviton Decora style or equal, 125 volts, specification grade, conventional style, white color, unless otherwise noted: 15A 3PG 125 volt duplex TP - Leviton T5325-W or equal 15A 3PG 125 volt duplex TP with USB - Leviton T5832-W 20A 3PG 125 volt duplex TP vith USB - Leviton T5832-W 15A 3PG 125 volt duplex AFCI TP - Leviton AFTR1-W or equal 20A 3PG 125 volt duplex AFCI TP - Leviton AFTR2-W or equal 20A 3PG 125 volt duplex AFCI TP - Leviton AFTR2-W or equal 20A 3PG 125 volt duplex AFCI TP - Leviton AFTR2-W or equal 20A 3PG 125 volt duplex AFCI TP - Leviton AFTR2-W or equal 20A 3PG 125 volt duplex FG ITP - Leviton AFTR2-W or equal 20A 3PG 125 volt duplex FF op-up floor box - Leviton PFTR1 (verify color) 15A 3PG 125 volt duplex TP Pop-up floor box - Leviton PFTR2 (verify color) 20A 3PG 125 volt duplex TP Pop-up floor box - Leviton PFTR2 (verify color) 20A 3PG 125 volt duplex TP inth USB Pop-up floor box - Leviton PFUS1 (verify color) 20A 3PG 125 volt duplex TP with USB Pop-up floor box - Leviton PFUS2 (verify color) 20A 3PG 125 volt duplex TP Pop-up floor box - Leviton PFTR2 (verify color) 20A 3PG 125 volt duplex TP inth USB Pop-up floor box - Leviton PFUS1 (verify color) 20A 3PG 125 volt duplex TP inth USB Pop-up floor box - Leviton PFUS1 (verify color) 20A 3PG 125 volt duplex TP inth USB Pop-up floor box	3. Ba
C.	Furnish equipment and materials for any one system by same manufacturer.	I.	Motor Disconnect Switches and Safety Switches: Heavy Duty Type, cover interlocked with operating handle so that cover cannot be opened with switch in closed position and switch cannot be closed with	
A. 1 2 3	 MATERIALS Conduit Conduit shall be delivered to the site of construction in the original bundles. Each length shall bear the label of the National Board of Fire Underwriters. All conduit subjected to rough usage while on the job, before installation, shall be removed from the premises upon notice. Raceway and boxes located as indicated on drawings and at other locations required for splices, taps, wire pulling, equipment connections, and compliance with regulatory requirements. Raceway and boxes are shown in approximate locations unless dimensioned. Provide raceway to complete wiring system. Rigid Steel: Hot dipped galvanized, used exposed and in concrete slab, with completely watertight fittings. "Schedule 40" PVC shall be provided with code size minimum bare No. 12 ground wire with 	K. L. 1	 cover in open position, 240 or 480 volt rating, as required or as noted on drawings, in Nema 1 enclosure indoors, 3R enclosure outdoors, or as otherwise noted. All motor circuit fuses shall be dual element type. Lugs and Connectors: Thomas and Betts "lock-tite", for No. 4 and larger wire; "Scotchlock" with insulator for No. 6 and smaller wire. Splice Insulation: "Scotch" electrical tape with vinyl plastic backing or rubber tape with protective friction tape for interior work. Grounding: Install ground wires in rigid conduit. Provide physical protection for grounding electrode and bonding conductors in accordance with nec 250-64. Grounding conductors shall be in conduit and installed in accordance with NEC 250-64(e). All grounding electrode conductor connections "thermite" or "cad_weld" welded. 	5. Fi
5	"Schedule 80" elbows and stub-ups. All rigid steel conduit, couplings and elbows in soil or under membrane to be 1/2 tape wrapped with	3	bonding of grounding electrode system. All connections shall be visible, readily accessible for	PART 3 - E
6	 Scotch #50 tape and threaded ends coated with red lead prior to installation of couplings. Use flexible conduit for all motor connections; Flexible metal type provide with code size (minimum No. 12) bare ground wire in all flexible conduit. 	4	testing purposes. Terminate grounding conduits at equipment with ground bushing, with ground wire connected through bushing.	3.01 - INSP A. Exa
	 Conduit Bends - Long Radius. Provide conduit seals at all concrete slab penetrations. 	5	 Provide No. 12 stranded (green) THHN conductor from outlet box to ground screw of every receptacle except isolated ground receptacles. 	CON CON
g	 Contractor shall xray all existing concrete slab before core drilling. All indoor conduit shall be installed concealed in walls or above ceiling unless noted otherwise 	6 7	Ground all isolated sections of metallic raceways.	3.02 - PREF
1	1. Installation: a. Outdoor Locations:		continuously throughout branch circuit for all circuits, bonded to panel ground bus, and to all electrical devices and equipment enclosures.	A. Dra 1. Tł
	 Above Grade: Provide rigid steel conduit. Provide cast metal outlet, pull, and junction boxes. In Soil: Provide Sched 40 or 80 PVC with Sched 80 PVC elbows (in marine/high 	8	. After installation, test system, using the three-point fall of potential method <u>only</u> . Record results and submit to Architect for approval. If resistance to ground exceeds three (3) ohms, install additional ground rods, bonded and interconnected to grounding electrode system. Provide additional	ar w 2. Di
	 In Concrete: Provide bot dipped galvanized rigid steel or Sched 40 PVC Conduit. 	М.	grounding until resistance is less than three (3) ohms. Panelboards:	
	 Flexible Connection: WP Flexible metal conduit. Watertight and corrosion resistant fittings, couplings, boxes, etc. 	1. 2	Surface or flush mounted, with branch circuits as shown on drawings. Enclosures: code gauge galvanized sheet steel with welded full flange end pieces, stretcher_	th pc
	 b. Indoor Locations: • Exposed Dry Locations: Provide galvanized rigid steel conduit or Intermediate metal 	3	leveled steel trim, backpan and door. Bussing of copper with silver_plated contact surfaces.	m cc
	conduit. Provide cast boxes. Electric Metallic Tubing may be provided in unfinished areas.		. Trims on surface_mounted cabinets secured with nickel_plated screws with cup washers, <u>bottom of</u> <u>all trims</u> to have lugs for resting on cabinet flange.	lf in
	 Concealed Dry Locations: Provide electrical metallic tubing for sizes less than 2-inches. Provide galvanized rigid steel or intermediate steel conduit in sizes 2-inches or larger. Provide cast or sheet metal boxes. 	5	Panels shall be 20 inches minimum in width, provided with approved gutter space, barriers and adjustable supports. Doors mounted with concealed hinges provided with combination spring latch and lock. Doors and trims and surface mounted cabinets primed and finished with one coat baked	3. Di th th
	 Electric non-metallic tubing may be used from data/voice outlet to above non plenum ceiling only, otherwise it is unacceptable. 	6	on gray enamel. Breakers on same phase to be aligned horizontally. Each panel provided with 5_handle locks.	by
	 Flexible Conduit/MC cable may be used for the following applications only if allowed by the latest NEC publications: 	7	Each branch circuit of panelboards to have a permanently fixed number with one word directory, mounted under celluloid on inside of cabinet door, showing circuit numbers and typewritten	sv 4. C
	 Between light fixtures / light switches (not for homerun) Between general 20A receptacles within walls (not for homerun) 		description of outlets controlled by breakers. Color code mains and each breaker terminal, same as conductor insulation.	pr 5. Al
	Cable must be the same size as the IMC or EMT conduit to which it is connected. Both the flexible metal conduit and it's fittings are to be listed for arounding. A group grounding conductor shall be installed. All connections are to	Ν.	Each panel shall be equipped with a copper ground bus. Circuit Breakers:	6. Al Di 7. M
	grounding. A green grounding conductor shall be installed. All connections are to be of a NEMA approved type. • Electric non-metallic tubing may be used from data/voice outlet to above non plenum		 General: Circuit breakers shall be molded case rated for 480 or 240 volts, multiple or single pole and amperage rating as shown on the drawings, bolt on, manually operated with "de-ion" arc chutes. Distribution circuit breakers shall be rated for the amps interrupting capacity noted on the drawings 	7. M CC CC
	ceiling only, otherwise it is unacceptable. • Locations subject to Corrosive Atmosphere: Provide PVC coated, galvanized rigid	3	or U.L. series rated with the main circuit breaker. Branch circuit breakers shall be rated for the full interrupting amps capacity with main circuit	O' as
	 steel or intermediate steel conduit. Provide PVC coated cast or sheet metal boxes. Hazardous Locations (Per NEC Article 500): Galvanized rigid steel conduit. Cast iron boxes with threaded hubs for conduit entry. Conduit seals. 	4	 breaker/panel rating. Where mechanical equipment is U.L. listed for overcurrent protection with fuses or HACR type circuit breakers, provide fuses where a fused switch is shown. Where the overcurrent protection is a circuit 	3.03 - FIELI A. Ally
	Conduit Fittings: Fittings for rigid steel and flexible type conduit shall be of a type as required, malleable iron or steel,	5	breakers, provide HACR, (HACR means Heating, Air-Conditioning and Refrigeration) type. Provide type "SWD" circuit breakers were the circuit breaker is going to be used as a switching	A. Air Arc B. This
	galvanized or sherardized. Outlet Boxes and Junction Boxes:	6	device in a panelboard. Provide GFCI rated circuit breakers in all locations within 6-feet of water.	sup thro
1	. Galvanized one piece steel knockout type, unless otherwise noted, sizes as required for conditions at each outlet or as noted, not smaller than 2 inches wide by 4 inches high, ganged where multiple	0. 1		3.04 - INST
2	switch locations are indicated. 2. Outlet boxes located on exterior to be flush type (unless notes otherwise) with Weatherproof extra		horsepower rating, Westinghouse A-200 series or equal. Provide with overload sensor in each phase, hand-off-auto switch, red "run" pilot light, in Indoor NEMA 1,Outdoor NEMA 4X, or NEMA 3R	A. Cut Ger B. Pro
	 duty In-Use cover with lockable covers for receptacles. All connectors from conduit to junction or outlet boxes shall have integral insulated throats. Flush Service Floor Boxes: Multi-gang, cast iron, watertight, with corrosion resistant finish, exterior 	2	enclosure as shown. Coil shall be rated 120 VAC. Starters shall be across-the-line non-reversing unless otherwise noted. . Contacts: Across-the-line magnetic starters shall be equipped with double break silver alloy	B. Pro con
4	Is rush service roor boxes, multi-gang, cast iron, waterlight, with condition resistant initian, extending levelling screws, removable partitions, adjustable before and after concrete pour, with gasketed cover, meeting U.L 514. Coordinate with Owner's Representative and provide brass or black carpet	2		3.05 - ADJL A. Mai
5	plate (per owners preference) where required. Dutlet boxes for telephone and cable TV outlets shall be 4" square minimum with single gang plaster	3	Coils: Coils shall be of molded construction. All coils shall be replaceable from the front without removing the starter from the panel.	sec
D.	rings. Power Wire and Cable:		. Overload Relays and Thermal Units: Overload relays shall be the melting Motor Connections:	B. All unn
	 Copper 90% conductivity. Solid copper for conductors smaller than No. 8 AWG. Stranded copper for conductors No. 8 AWG and larger. No conductors smaller than No. 12 AWG, except as noted. Insulation type: #12 to #1 AWG: THWN for wet locations and THHN for doulocations. #10 through 		 Install motor circuits complete for all motors by other trades as shown on drawings. Furnish and install all disconnect switches, outlet boxes, starters, timeswitches etc., where noted. All motor and temperature control low voltage wiring shall be installed and connected by Division 15. 	C. Exc insp lave
	 Insulation type: #12 to #1 AWG: THWN for wet locations and THHN for dry locations. #1/0 through #4/0 AWG: XHHW (55 Mils). 250MCM and larger: XHHW (65 Mils). Conductors No. 8 and larger and as otherwise noted on drawings shall be stranded. 		 All motor and temperature control low voltage wiring shall be installed and connected by Division 15 Section of specifications, unless otherwise indicated on electrical and mechanical drawings. Motor / Equipment Switches: Rated 20 amp, 277 volt, quiet type, white color, specification grade; 	laye sur
	 Conductors No. 6 and larger and as otherwise noted on drawings shall be stranded. Connections to devices from "through_feed" branch circuit conductors to be made with pigtails, with no interruption of the branch circuit conductors. 	ي. 1		3.06 - SCHE A. Coo
	b. Neutral conductor identified by white outer covering braid, with different tracers of "EZ" numbering tags used where more than one neutral conductor is contained in a single unit.		. Wall mounted Occupancy Sensors- Dual Technology Lighting Controls: Provide full room controls to provide the control requirements shown. Manufacturer	unn
	Neatly arrange and "marlin" wired in panels and other equipment with "T and B Ty-rap" or approved equal plastic type strapping.		fixtures etc shall be specifically designed and approved by the manufacturer to function together.	3.07 - TEST A. Gro
	 Label each wire of each electrical system in each pull box, junction box, outlet box, terminal cabinet, and panelboard in which it appears with "EZ" numbering tags. All wire and cable shall bear the Underwriters' Label, brought to the job in unbroken packages; wire 		Manufacturer's include Wattstopper, Leviton, Lutron or equal. Provide detailed wiring diagrams, device layout locations, and devices controlled for approval. As listed in fixture schedule, and on drawings as indicated by type letter, completely lamped	1. Al re m
C	color coded as follows: Voltage Phasing A Phase B Phase C Phase Neutral		with new lamps, properly operating at time of acceptance of electrical work. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a	oł 2. G
	120\240 1p3w Black Red - White 120\208 3p 4w Black Red Blue White		qualified testing agency, and marked for intended location and application. a) Standards:	B. Ligh 1. Th
	2083wBlackRedBlue-277\4803p 4wBrownOrangeYellowWhite		ENERGY STAR certified.California Title 24 compliant.	er C. Pov
	480 3w Brown Orange Yellow -	٨	 UL Listing: Listed for damp location. Recessed luminaires shall comply with NEMA LE 4. 	1. Te m in
		1.	Lamps:	IU
	0		0	

a.	Unless otherwise noted, lamps described on the Drawings and in these Specifications,
	ANSI nomenclature; lamps shall be manufactured by Osram/Sylvania, North American
	Philips, or approved equal.
h	All incondescent lamps and tungston balagon lamps shall be 125, 130 yelt rated exten

- b. All incandescent lamps and tungsten halogen lamps shall be 125 -130 volt rated exte life or 2,000 hour life whenever such designs are available. c. T8 fluorescent lamps shall be 3500K-4100K color temperature, energy saving type sul
- d. Compact fluorescent lamps shall be 3500K-4100K color temperature, twin-tube and de twin tube (as required for each fixture), as manufactured by North American Philips, approved equal.
- e. LED lamps shall be 3500K-4100K color temperature. All LED shall be 0-10V dimming unless specifically stated otherwise. If contractor finds a fixture is not available with 0dimming and the contractor shall alert the GC prior to Bid. f. CRI of minimum 80. CCT
- g. Rated lamp life of 35,000 hours to L70.
- Lamps dimmable from 100 percent to 1 percent of maximum light output
- Ballasts: Fluorescent Lamp Ballasts: Solid State full light output Class P, ETL certified to CBM standards, high power factor one, two, three, or four lamp types; minimum starting temperature 50 degrees F. unless otherwise noted. Ballasts containing "PCB" are no permitted. The allowable total harmonic distortion shall be equal to or less than 10%. Maximum crest factor 1.4. Power factor .97 or greater. Advance, Magnetek, Lutron or
- b. Sound Ratings: "A", or the lowest rating available, for the number and types of lamps ballasted. Replace noisy ballasts at no cost to the Owner.
- c. All ballasts shall be high power factor energy efficient type. d. Ballasts in refrigerated spaces or outdoors shall be zero (0) degree F. temperature rai e. All ballasts shall be operated without excessive or unusual noise. Noisy or otherwise defective ballasts shall be replaced.
- f. Contractor shall burn in lamps per manufacturer's instructions.
- a. Translucent Plastic Components: Translucent plastic shall be made of smooth, white percent virgin acrylic material.
- b. Plastic Lenses: Lenses shall be uncolored 100 percent virgin acrylic plastic. Finish on Metal Parts:
- a. Steel Reflectors: Unless otherwise specified, the reflector surface finish shall be of synthetic white enamel or polyester powder coating. b. Aluminum Reflectors: Reflecting surfaces shall be provided with either a specular or
- finish as indicated. c. Non_Reflecting Surfaces: Unless otherwise specified, the finish on all non_reflecting
- exterior surfaces shall be aluminum oxide or aluminum; white, gray or aluminum paint steel; nickel or chromium plating on copper alloy. Fastening devices shall be nickel, chromium, cadmium or zinc plated.

- EXECUTION

ISPECTION

Examine the areas and conditions under which the work of this Section will be installed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.

REPARATION

- The general arrangement and location of wiring and equipment is shown on the electrical draw and shall be installed in accordance therewith, except for minor changes required by conflict w work of other trades.
- Drawings indicate the circuit and panel which supplies each device or fixture. Provide and inst conduit and conductors to make all connections from panel to nearest device and from first device additional devices on same circuit. Conduit size and fill shall satisfy NEC requirements. Two three different phases supplied by a 3_phase panel may share a single neutral only if circuit positions are adjacent in the panel and the breakers will have to be provided with a handle tie multi-pole breaker per NEC requirements. Do not exceed 4 #12 or 3 #10 conductors in a 1/2" conduit, 7 #12 or 5 #10 in a 3/4" conduit, or 11 #12 or 9 #10 in a 1" conduit, unless otherwise n If more than three current carrying conductors are installed in one conduit, conductor size shall increased as required per Note 8 to Table 310_16 of the NEC.
- Drawings indicate the location of all light switches. Where fixtures in a room are controlled by than one switch, the same lower case letter is drawn adjacent a switch and each fixture control that switch. Where no lower case letter is adjacent to a switch, all fixtures in the room are cont by that switch. Provide and install conduit and wire from fixture to switch and between fixtures required to accomplish switching shown. Do not route branch circuit wiring for light fixtures three switch boxes.
- Control wiring is generally not shown on the plans. Contractor shall refer to control diagrams and
- provide and install all wiring and raceways required to make all interconnections. All branch circuit wiring No. 12 or larger as noted, all control wiring No. 14 or larger.
- All dimensions, together with locations of doors, partitions, etc. are to be taken from the Archite Drawings, verified at site by this Contractor.
- Maintain "as-constructed" Record Drawings at all times, showing the exact location of conceale conduits and feeders installed under this contract, and actual numbering of each circuit. Upon completion of work and before acceptance can be considered, this Contractor must forward to t Owner's Representative corrected Record Drawings in Autocad format indicating the electrical as installed.
- IELD QUALITY CONTROL All workmanship shall be first class and carried out in a manner satisfactory to and approved by Architect.
- This Contractor shall personally, or through an authorized and competent representative, constant supervise the work and so far as possible keep the same foreman and workmen on the job hroughout.

ISTALLATION/APPLICATION/ERECTION

- Cutting, repairing and structural reinforcing for the installation of this work shall be done by the General Contractor in conformance with the Architect's requirements.
- Provide and place in form work all conduit, inserts and sleeves in time to prevent any delay in the concrete work.

DJUSTING AND CLEANING

- Main switchboard, panelboards and all other electrical equipment not "finish painted" under other sections shall be touched up where finished surface is marred or damaged. Panelboards in finish areas shall be painted to match wall.
- All equipment, lighting fixtures, etc., shall be left in clean condition, with all shipping and otherwise unnecessary labels removed therefrom.
- Excavate and trench as necessary for the electrical installation, and when the work has been inst inspected and approved, backfill all excavations with imported sandy soil in maximum 8" (eight in layers, moisten and machine tamp to 95% compaction, and restore the ground and/or paving or f surfaces to their original condition. Comply with requirements of Division 2.
- CHEDULES Coordination: Coordinate installation of electrical items with the schedule for other work to preve unnecessary delays in the total Work.

ESTING

- Grounding System:
- All ground connections shall be checked and the entire system shall be checked for continuity. resistance of the ground system shall be measured using a 3 point fall_of_potential method. T maximum ground resistance shall be three ohms. If the measured ground resistance exceeds ohms, additional ground rods shall be installed until a value of three ohms or less is obtained.
- Ground tests shall meet the requirements of the National Electric Code.
- _ighting Systems:
- The interior and exterior lighting systems shall be checked for proper local controls and operation entire installation, including the operation of the low voltage lighting control system. Power Distribution System:
- Tests: Test main switchboard, distribution boards, and panelboards for grounds and shorts with mains disconnected from feeders, branch circuits connected and circuit breakers closed, all fixt in place and permanently connected and grounding jumper to neutral lifted and with all wall sw

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s, are In		closed. 2. Test each	individual cire	cuit at ea	ach pane	lboard wi	ith equip	ment cor	nected f	or proper	operatio	on.			
ended		3. Check veri		lor codin	g, taggin										
uitable.		 Verify that Demonstration 								satisfact	orily and	as			
louble	ĺ	called for. D. Fire Alarm S						and devi	ices func	tion as s	pecified a	and to		A	
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trolled as		1.2. MAX ((6) #10 AWG (6) #8 AWG I	FOR 30	A CIRCI	JITS.									
ough and	2.	FOR BRANCH		O NOT E	EXCEED	NEC CO		FILL RE	QUIREM	ENTS,					OF PE RIM H TIONS
			(9) #12 AWG											╞	
ectural		2.3. MAX ((6) #10 AWG (4) #8 AWG ⁻	thhn Pi	ER 3/4" E	EMT CON	NDUIT.								≻쁜5
led		2.5. MAX ((3) #6 AWG ⁻ (2) #4 AWG ⁻	THHN PI	ER 3/4"E	MT CON	IDUIT.								
the work		2.6. MAX ((3) #4 AWG ⁻ (2) #2 AWG ⁻ (3) #2 AWG ⁻	thhn Pi	ER 1" EN	IT CONE	DUIT.								SOL SOL
	3.	FOR 20A CIRC	. ,												
the		3.1. UP TO	D 75FT - #12 TO 150FT - ;	AWG											
antly			TO 250FT -											D	
	4.	ADHERE TO V	OLTAGE DR												
				2%	VOLTA		3% \	VOLTAG							
е		CIRCUIT V	. ,		2.4	′)	DI	ROP (V) 3.6		TC	0TAL LO	SS (V)			SHEET NAME:
		20			4.2			6.2			10.4				
ir bod		24			4.8 5.5			7.2 8.3			12.0 13.9				
hed se		48			9.6			14.4			24.0			L	SHEET
se stalled,	ſ	VOLTAGE D	ROP FOR C	OMMON		RWIRE	GAUGE	S AND (IT LOADS	8				SPECIFICA
nch) floor					1	FEEDER									
		WIRE 14	AMPS 12	120 39	208 67	240 78	277 90	480 156	120 58	208 101	240 117	277 135	480 233		ISSUE DATE: Project Iss
ent		12 10	16 24	46 48	80 83	93 96	107 111	185 192	69 72	120 125	139 144	160 166	278 288		PREPARATION AND R DRAWN BY: -
		8	32	57	99	115	132	229	86	149	172	199	344		DESIGNER: - PROJ MGR: -
The		6 4	40 52	73 89	127 154	146 178	169 206	293 356	110 134	190 232	220 267	253 309	439 535	E	PEER REVIEW: -
he three		2	72 96	103 123	178 212	206 245	237 283	412 490	154 184	267 319	309 368	356 424	617 735		SHEET NUMBER:
		0	96 108	123 137	212 238	245 274	283 317	490 549	184 206	319 357	368 412	424 475	823		
ion of		0000 250	144	163	283	327	377	654	245	425	490	566	980		E00
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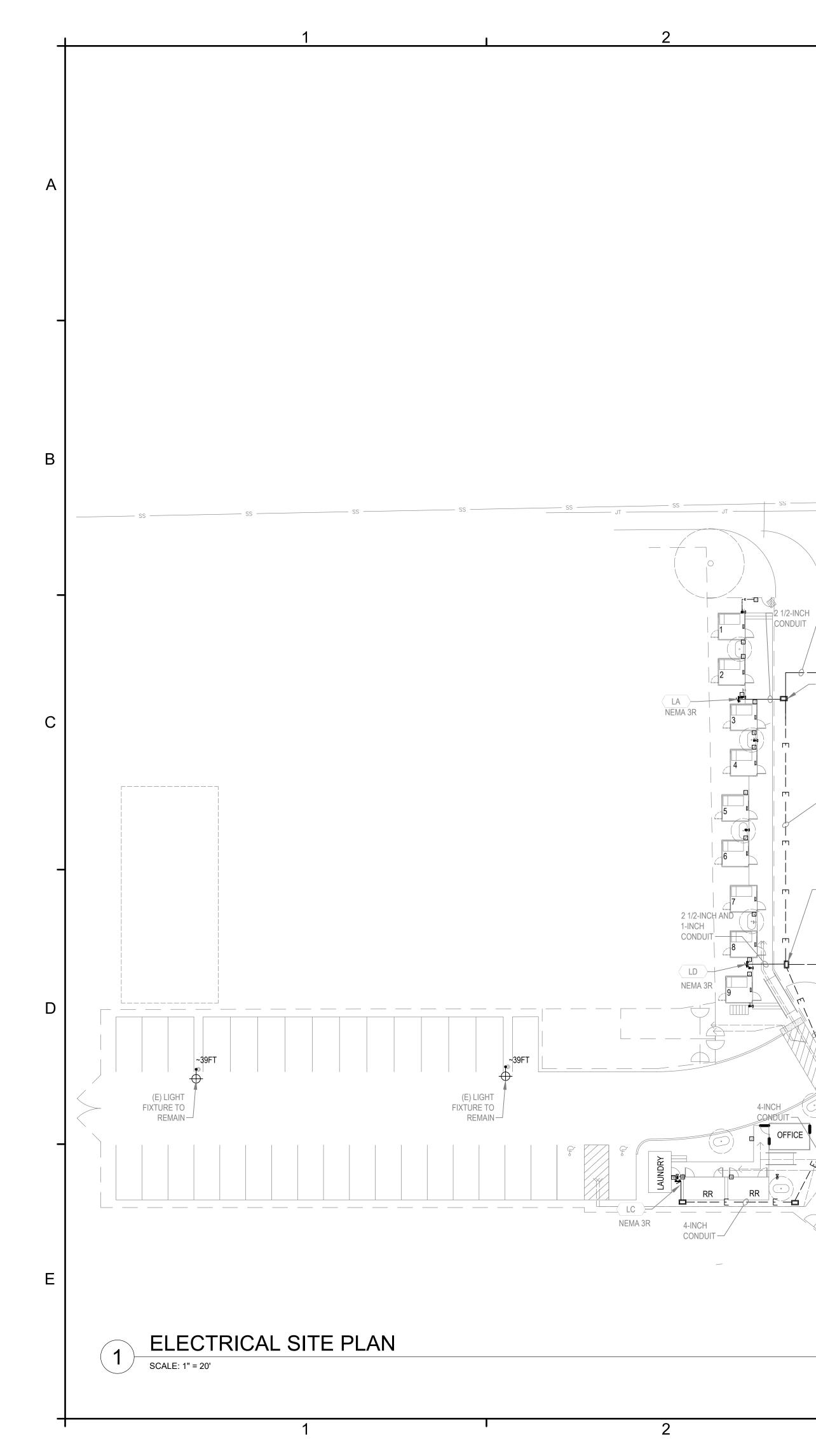
SCHEDULE

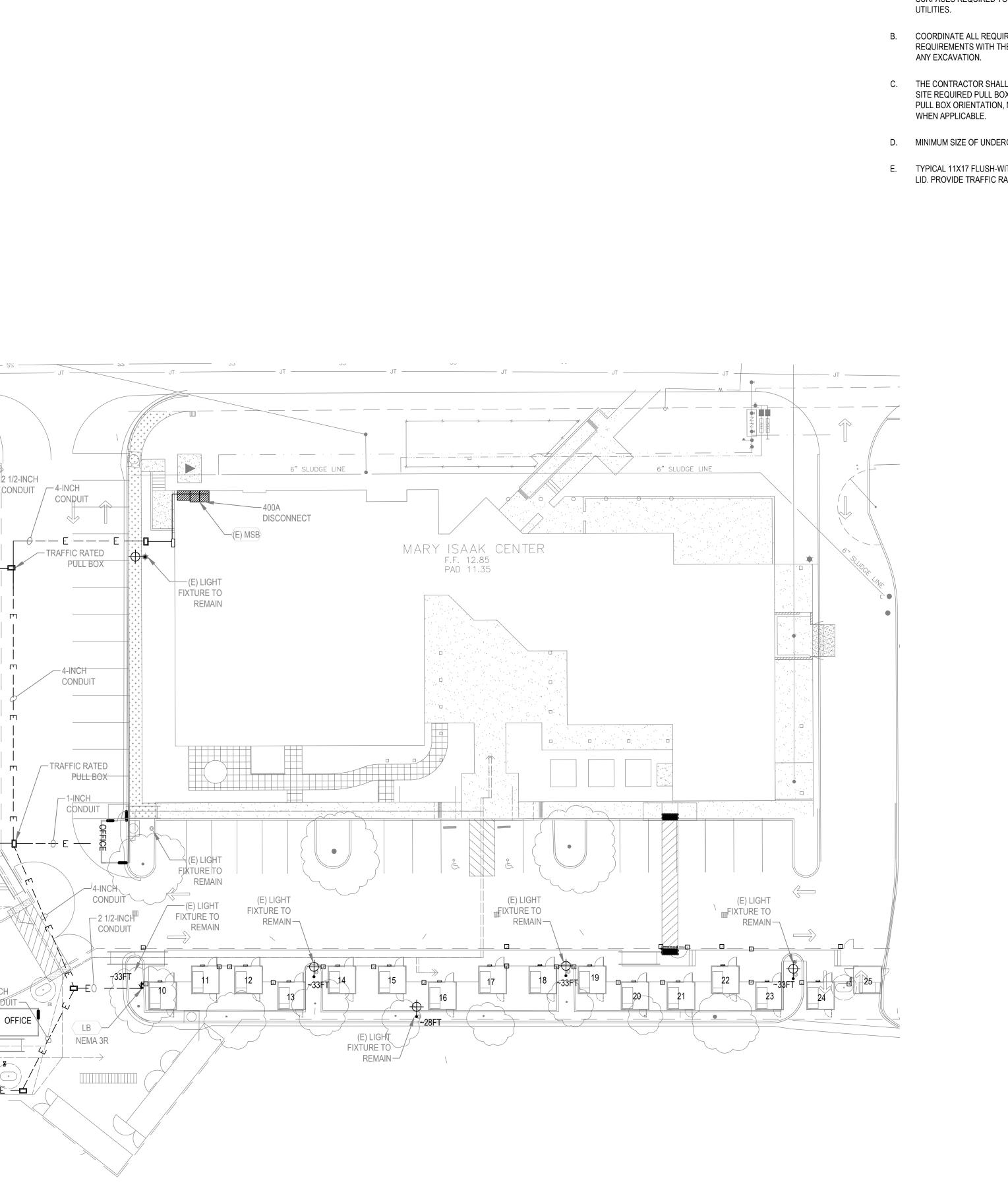
DATE

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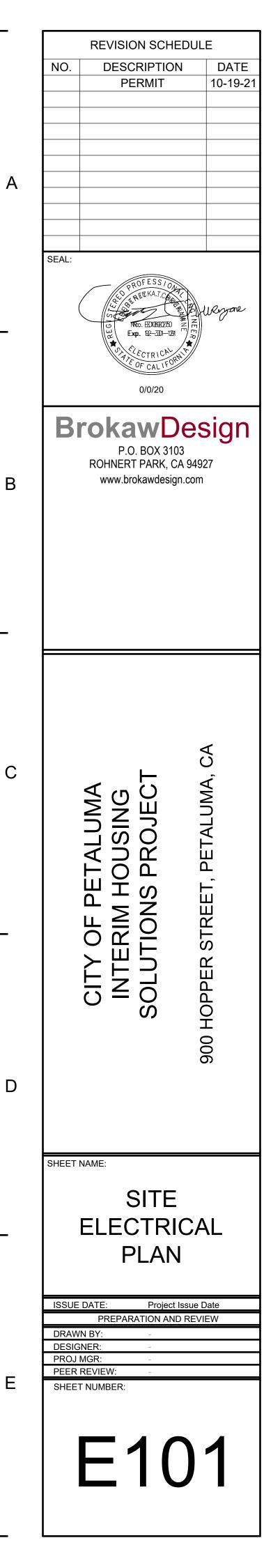


SCALE : 1" = 20'3 4

KEYED NOTES - SITE 🛛 🗴 1. X

SHEET NOTES - SITE ELECTRICAL

- A. LOCATION OF INDICATED (E) U/G UTILITIES IS DIAGRAMMATIC. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES AND LOCATE NEW EQUIPMENT TO SUIT THE PROJECT CONDITIONS.
- PROVIDE ALL NECESSARY SAW CUTTING AND REPAIR TO (E) FINISHED Β. SURFACES REQUIRED TO PROVIDE ELECTRICAL AND TELEPHONE
- COORDINATE ALL REQUIRED WORK AND LOCATIONS OF SERVICE REQUIREMENTS WITH THE UTILITY COMPANIES PRIOR TO BEGINNING
- C. THE CONTRACTOR SHALL PROVIDE SCALE SHOP DRAWINGS FOR ALL SITE REQUIRED PULL BOX LOCATIONS. SHOP DRAWING SHALL INDICATE PULL BOX ORIENTATION, NOMENCLATURE, SIZE AND TRAFFIC RATING
- MINIMUM SIZE OF UNDERGROUND CONDUIT SHALL BE 1".
- E. TYPICAL 11X17 FLUSH-WITH-GRADE CONCRETE PULLBOX WITH BOLT-ON LID. PROVIDE TRAFFIC RATED WHERE IN VEHICULAR AREAS.



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	+0.0	0.0	⁺ 0.0	⁺ 0.0	\ ⁺ 0.1	+0.1	\ ⁺ 0.1	+0.1	⁺ 0.0	+0.0	⁺ 0.0	+0.0
	+0.0	 ↓ 0.0	⁺ 0.0	⁺ 0.1	0.2	⁺ 0.3	+0.2	⁺ 0.1	⁺ 0.1	+0.0	+0.0	+ 0.0
	+0.0	+0.0	⁺ 0.1	+0.2	+0.8	⁺ 0.8	+0.6	⁺ 0.2	⁺ 0.1	+0.0	+0.0	+0.0
A	+0.0	0.0		+0.4	⁺ 2.8	⁺ 2.6	+1.5	⁺ 0.5	⁺ 0.1	⁺ 0.1	+0.0	+0.0
	+0.0	+ 0.1	⁺ 0.2	⁺ 0.8	⁺ 7.4	+ 5.6	2.8	⁺ 0.7	⁺ 0.2	⁺ 0.1	⁺ 0.0	+0.0
	⁺ 0.0	[†] 0.0	+0.0	+0.0	7.6	⁺ 5.7	+2.8	+0.7	⁺ 0.2	⁺ 0.1	⁺ 0.0	+0.0
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	+0.0	+0 ₁ 0	+0.1	0.5	+4.6	5.7	+4.1	⁺ 1.1	⁺ 0.3	⁺ 0.1	⁺ 0.0	+0.0
	⁺ 0.0	+0.0	+0.1	0.5	+4.7	/ ⁺ 5.8	+4.2	⁺ 1.1	⁺ 0.3	⁺ 0.1	⁺ 0.0	+0.0
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	+0.0	+0.0	⁺ 0.0	⁺ 0.0	+0.0	⁺ 0.4	+0.4	⁺ 0.3	⁺ 0.1	⁺ 0.1	⁺ 0.0	+0.0
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		+0.0	+ 0.1	+0.3	+2.2	+7.4	+ 5.6	7.0	+0.4	⁺ 0.1	⁺ 0.0	+0.0
_	+0.0	+0.0	+0.1	+0.2	+1.3	⁺ 3.5	⁺ 3.3	+1.2	+0.3		⁺ 0.0	+0.0
E	+0.0	0.0	+0.0	0.1		⁺ 1.1	+1.2	0.6	+0.2	+0.1	+0.0	+0.0
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	1 PHOTOMETRIC PLANS - SCALE: 1/8" = 1'-0"	NE	:VV	SH	ΕL	IG	HIS	5				
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		LIGHTING FIXTURE SCHEDULE									
TAG	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMP	FIXTURE INPUT WATTS	BUG	MOUNTIN				
SA1	EXTERIOR WOOD POLE MOUNTED WITH INTEGRAL PHOTOCELL	LITHONIA	WDGE1 LED P1 27K 90CRI VF	LED	10	0-0-0	WOOD PO				



/			
Туре			

Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WDGE LE	ED Family C	verview							
Luminaire	Standard EM, 0°C	Colc EM, -20°C	Concert			Lumens	s (4000K)		
Luminaire	Standard Elw, U.C.	COIC ENI, -20 C	Sensor	P1	P2	P3	P4	P5	P6
WDGE1 LED	4W			1,200	2,000				
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000		
WDGE4 LED			Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Series	Package	Color Temperature	CRI	Distribution		Voltage	Mounting
WDGE1 LED)	P1 P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K1 5000K	80CRÌ (90CRI)	VE (Visual comfort forward t VW Visual comfort wide	hrow	MVOLT 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ^s Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when (there is no junction box available.
PE Photo DS Dual DMG 0-10	ccell, Button Type switching (comes wi / dimming wires pull m conduit entry for b	o, Certified in CA Title 20 MAED th 2 drivers and 2 light engines ed outside fixture (for use with boack box (PBBW). Total of 4 eni	; see page 3 for de 1 an external conti	tails)	Finish DDBXD DBLXD DNAXD DWHXD DSSXD	Dark bronze Black Natural aluminu White Sandstone	DWHGXD Textured white DSSTXD Textured sandstone
/DGEAWS DDBXD /DGE1PBBW DDBXD L)				NOTES 1 50K not available in 90CRI. 4 PE not available with DS. 2 347V not available with E4WH, DS or PE. 5 Not qualified for DLC. No available with E4WH. 3 E4WH not available with PE or DS. available with E4WH not available with

			⁺ 0.0	⁺ 0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0	+0.0 °	+0.0		
⁺ 0.0 ⁺ 0.0	⁺ 0.1	⁺ 0.1	⁺ 0.1	⁺ 0.0	⁺ 0.0	+0.0	⁺ 0.0	+0.1	+ 0.1	0.1	+0.1	+0.0	,, , ,	0.0	⁺ 0.0
⁺ 0.0 ⁺ 0.0															
+0.0+0.0	+ 0.0	0.6	0.5	[†] 0.3	° 0.2) ⁺ 0.2	⁺ 0.3	+ 0.4	⁺ 0.6) - - 0.6		+0.2	⁺ Ø.1	+0.1	⁺ 0.0
		⁺ 2.7	⁺ 1.8	+0.8	0.4	+0.3	⁺ 0.6	+ 1.4 =	2.5	2.5	1.5	0.6	/ 0.2	+0.1	⁺ 0.0
	0.0	6.3	⁺ 3.6	1.3	0.5	+0.4	0.8	+ 2.5 =	+ 5.5	⁺ 5.8	+2.8	+0.9/	⁺ 0.3	0.1	⁺ 0.0
+0.0 M .0															
	+0.0	+1.0	⁺ 0.0	⁺ 0.0	+0.0	+0.0	⁺ 0.0	°.0	+0.0	° ⁺ 1.0)+0.5	+/0.2	+0.1	+0.0	+0.0
+0.0 4 .0 +0.0 +0.0	⁺ 0.0	+ 0.2	+ 0.0	KR 0.0	+ 0.0	+0.0	+ 0.0	R + 0.0	+ 0.0	+0.2	+0.1	/+ / Ø.1	+0.0	⁺ 0.0	+ 0.0
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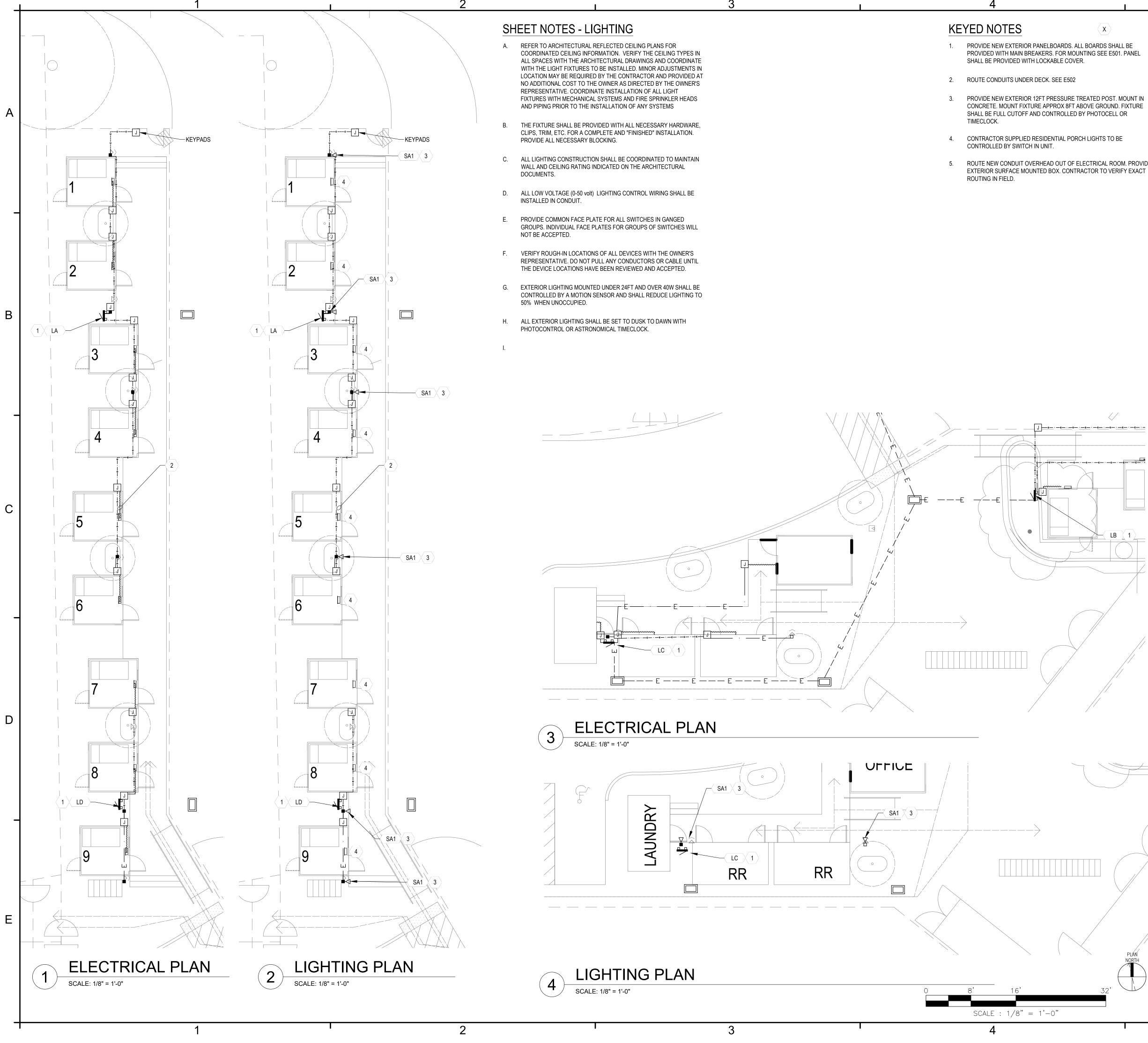
40' 20'

PLAN

SCALE : 1" = 20'

Å	NO.	DES	SION SC SCRIPTI PERMIT		E DATE 10-19-21
	SEAL:	rok F ROHNE	PROFESS/ BEREKA.T.C. D.C. BOX 33 RT. PAREKA.T. BEREKA.T.C. D.C. BOX 33 RT. PAREKA.T.		•
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	SHEE	N BY: NER: MGR: REVIEW: T NUMBER	ARATION A - - - :		
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NTING	NOTES	
POST		
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- ROUTE NEW CONDUIT OVERHEAD OUT OF ELECTRICAL ROOM. PROVIDE EXTERIOR SURFACE MOUNTED BOX. CONTRACTOR TO VERIFY EXACT

SHEET NOTES - ELECTRICAL

- A. ALL EXTERIOR MOUNTED DEVICES SHALL BE PROVIDED WITH WP OR NEMA 3R RATING.
- B. PROVIDE HUB TYPE FITTINGS ON EXTERIOR CONDUITS.
- C. ALL EMPTY BOXES SHALL BE PROVIDED WITH BLANK COVER PLATES.
- VERIFY COLOR OF ALL DEVICES AND COVER PLATES WITH THE OWNER'S D. REPRESENTATIVE PRIOR TO ORDERING.
- E. <u>ALL EXTERIOR COVER PLATES SHALL BE STAINLESS STEEL.</u>
- RECEPTACLES PROVIDED AT COUNTER TOPS SHALL BE LOCATED AT +6" ABOVE BACK SPLASH. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE DUPLEX MECHANICAL EQUIPMENT MAINTENANCE RECEPTACLE G WITHIN 25-FEET OF ALL EQUIPMENT TO BE SERVICED. LOCATE ON THE SAME LEVEL AS EQUIPMENT, INCLUDING ALL ATTICS, BASEMENTS AND CRAWL SPACES. IF LOCATED OUTDOOR OR BELOW GRADE GFCI PROTECTION IS REQUIRED.
- ALL ELECTRICAL CONSTRUCTION SHALL BE COORDINATED TO MAINTAIN н WALL AND CEILING RATING INDICATED ON THE ARCHITECTURAL DOCUMENTS.
- PROVIDE TAMPER-RESISTANT RECEPTACLES ON ALL 15-20A 125-250V NON LOCKING TYPE RECEPTACLES IN THE FOLLOWING LOCATIONS PER ARTICLE 406.12 DWELLING UNITS, GUEST ROOMS OF HOTELS AND MOTELS, CHILD CARE FACILITIES, PRESCHOOLS AND ELEMENTARY EDUCATION FACILITIES, BUSINESS OFFICES, CORRIDORS, WAITING ROOMS AND THE LIKE IN CLINICS, MEDICAL AND DENTAL OFFICES AND OUTPATIENT FACILITIES, SUBSET OF ASSEMBLY OCCUPANCIES INCLUDING GYMNASIUMS, SKATING RINKS AND AUDITORIUMS AND DORMITORIES.

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BrokawDesign P.O. BOX 3103 ROHNERT PARK, CA 94927 www.brokawdesign.com JSIN 20J ETAL ш Ш STRI \bigcirc 900 HOPPER SOLI SOLI C SHEET NAME: ELECTRICAL PLAN

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REVISION SCHEDULE

NO. EE01089202750

Exp. 192-3301-1291

0/0/20

DATE

10-19-21

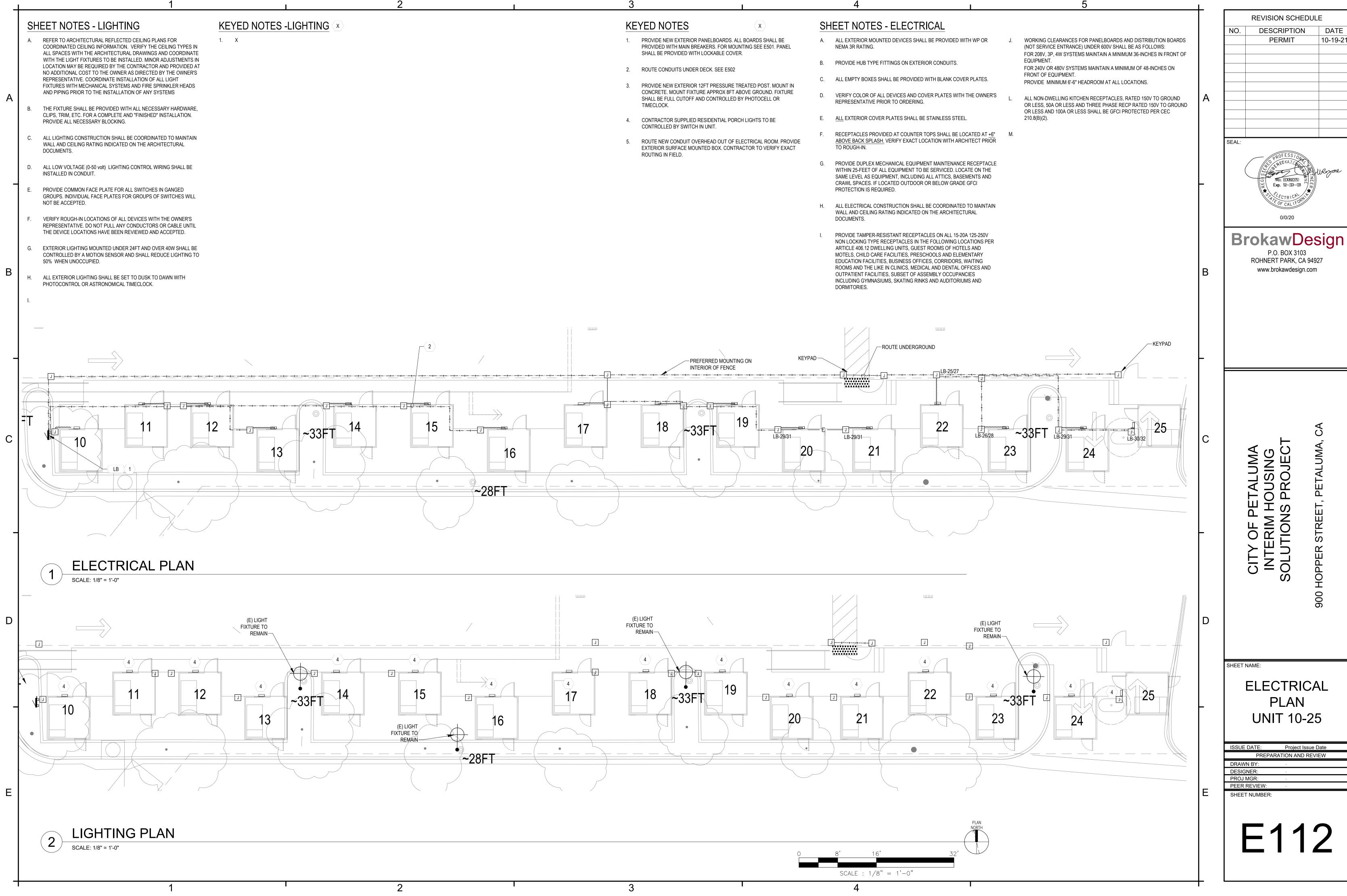
DESCRIPTION

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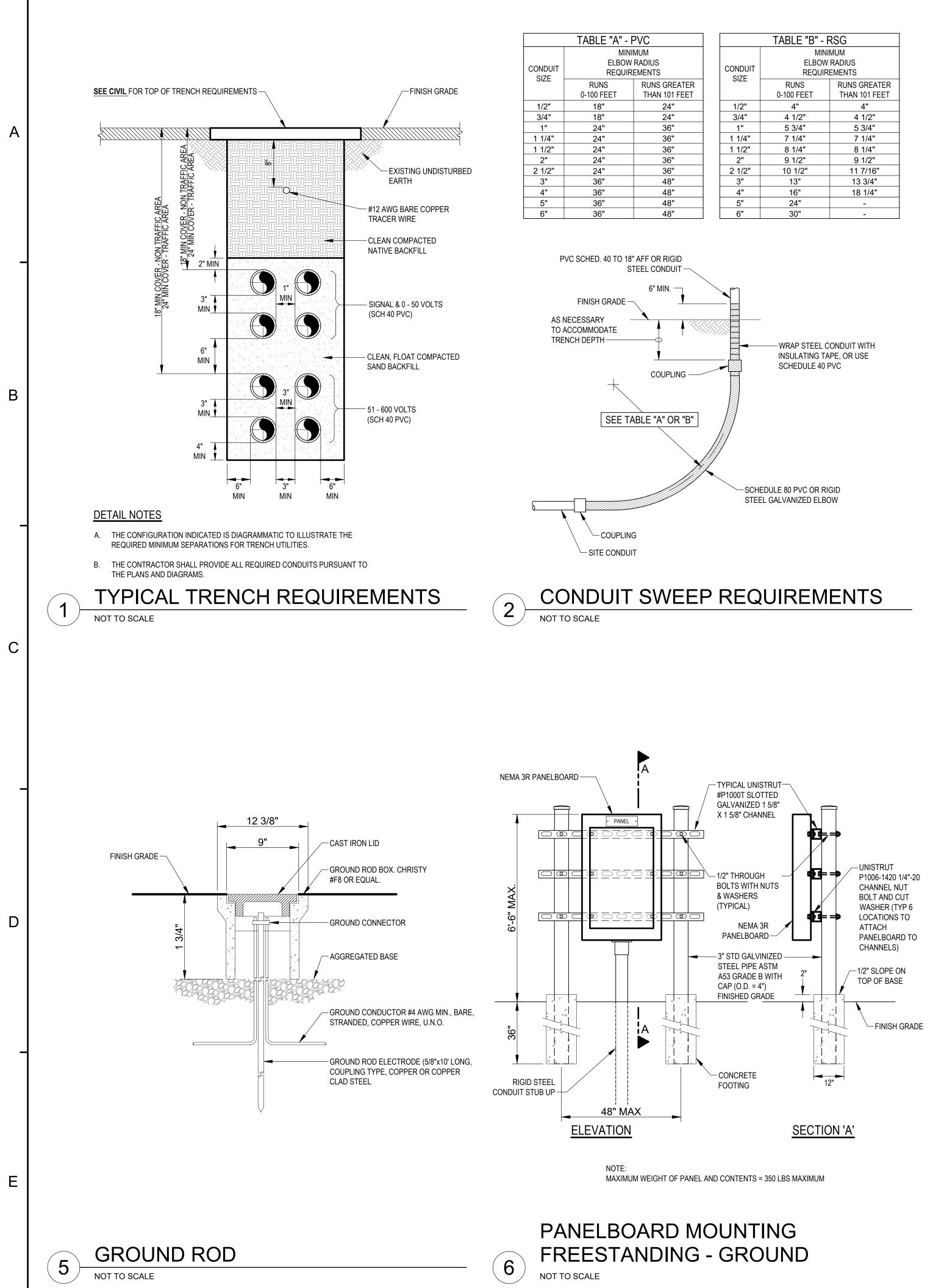
UNITS 1-9, RESTROOMS SSUE DATE: Project Issue Date PREPARATION AND REVIEW DRAWN BY: DESIGNER: PROJ MGR: PEER REVIEW: SHEET NUMBER: F11



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KE	EYED NOTES	$\langle \mathbf{x} \rangle$	SHE	ET NOTES - ELECTRICAL
1.	PROVIDE NEW EXTERIOR PANELBOARDS. ALL PROVIDED WITH MAIN BREAKERS. FOR MOUN SHALL BE PROVIDED WITH LOCKABLE COVER	TING SEE E501. PANEL		ALL EXTERIOR MOUNTED DEVICES SHALL BE PROVIDED V NEMA 3R RATING.
2.	ROUTE CONDUITS UNDER DECK. SEE E502		B. F	PROVIDE HUB TYPE FITTINGS ON EXTERIOR CONDUITS.
3.	PROVIDE NEW EXTERIOR 12FT PRESSURE TR	EATED POST. MOUNT IN	C. /	ALL EMPTY BOXES SHALL BE PROVIDED WITH BLANK COV
	CONCRETE. MOUNT FIXTURE APPROX 8FT AB SHALL BE FULL CUTOFF AND CONTROLLED B TIMECLOCK.			VERIFY COLOR OF ALL DEVICES AND COVER PLATES WITH REPRESENTATIVE PRIOR TO ORDERING.
4.	CONTRACTOR SUPPLIED RESIDENTIAL PORC CONTROLLED BY SWITCH IN UNIT.	H LIGHTS TO BE	E. <u>/</u>	ALL EXTERIOR COVER PLATES SHALL BE STAINLESS STEE
5.	ROUTE NEW CONDUIT OVERHEAD OUT OF EL EXTERIOR SURFACE MOUNTED BOX. CONTRA ROUTING IN FIELD.		1	RECEPTACLES PROVIDED AT COUNTER TOPS SHALL BE L ABOVE BACK SPLASH. VERIFY EXACT LOCATION WITH ARG TO ROUGH-IN.
				PROVIDE DUPLEX MECHANICAL EQUIPMENT MAINTENANC WITHIN 25-FEET OF ALL EQUIPMENT TO BE SERVICED. LOO SAME LEVEL AS EQUIPMENT, INCLUDING ALL ATTICS, BAS CRAWL SPACES. IF LOCATED OUTDOOR OR BELOW GRAD PROTECTION IS REQUIRED.
			١	ALL ELECTRICAL CONSTRUCTION SHALL BE COORDINATE WALL AND CEILING RATING INDICATED ON THE ARCHITEC DOCUMENTS.
			1	PROVIDE TAMPER-RESISTANT RECEPTACLES ON ALL 15-2 NON LOCKING TYPE RECEPTACLES IN THE FOLLOWING LO ARTICLE 406.12 DWELLING UNITS, GUEST ROOMS OF HOT MOTELS, CHILD CARE FACILITIES, PRESCHOOLS AND ELEI







A. SEE **<u>STRUCTURAL</u>** FOR ADDITIONAL INFORMATION.

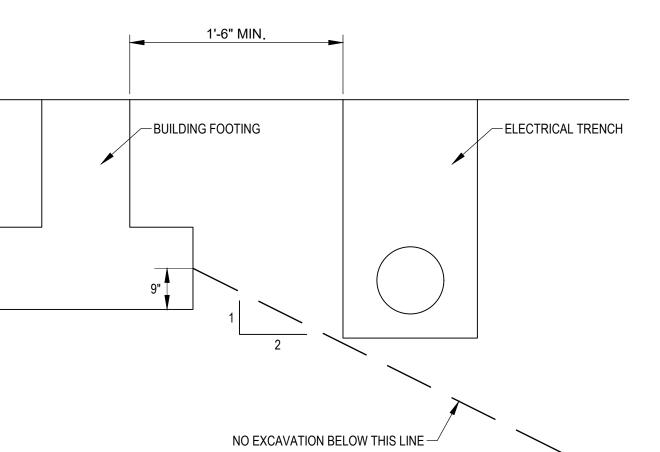
TRENCH LOCATION

DETAIL NOTES

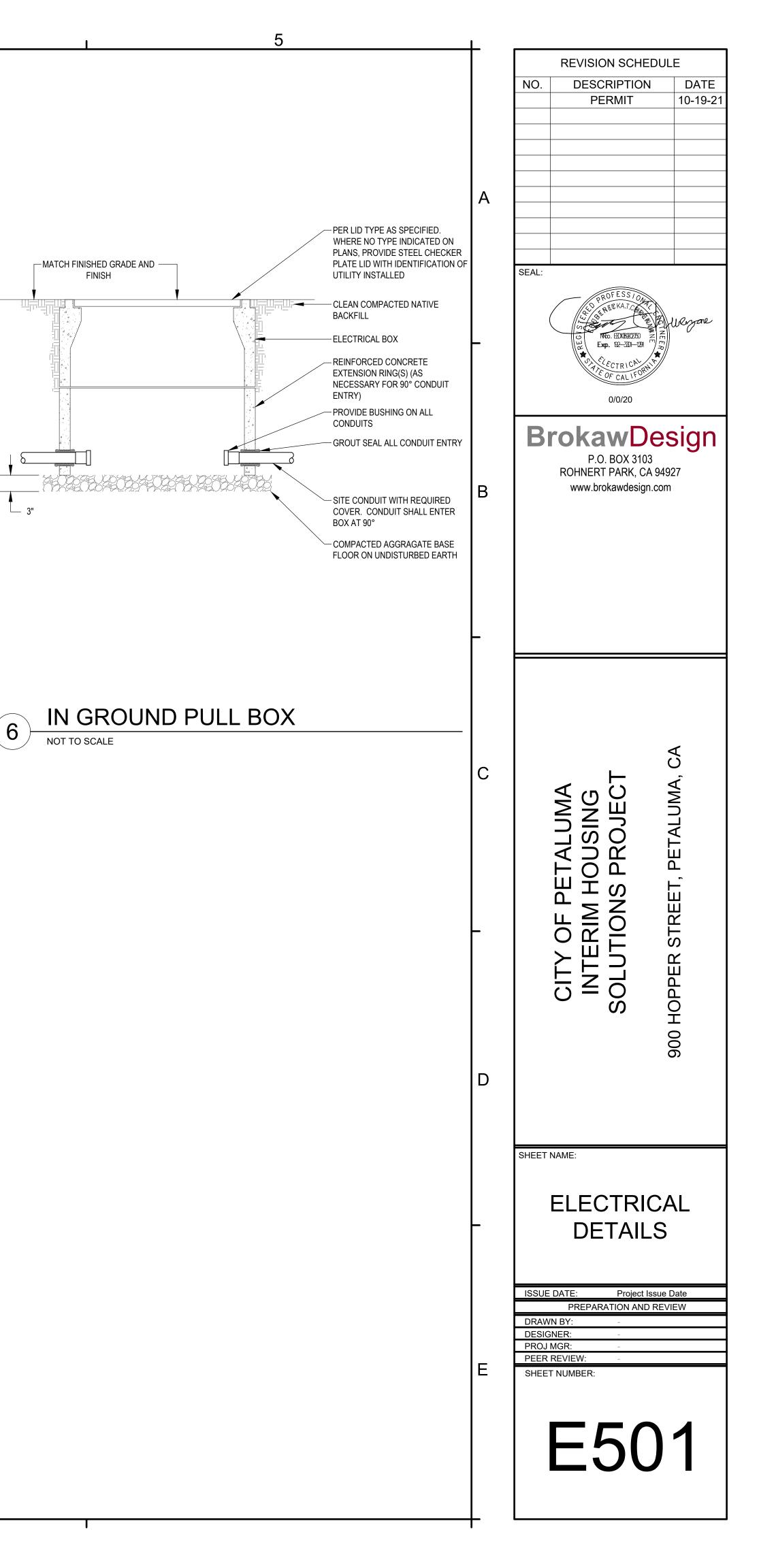
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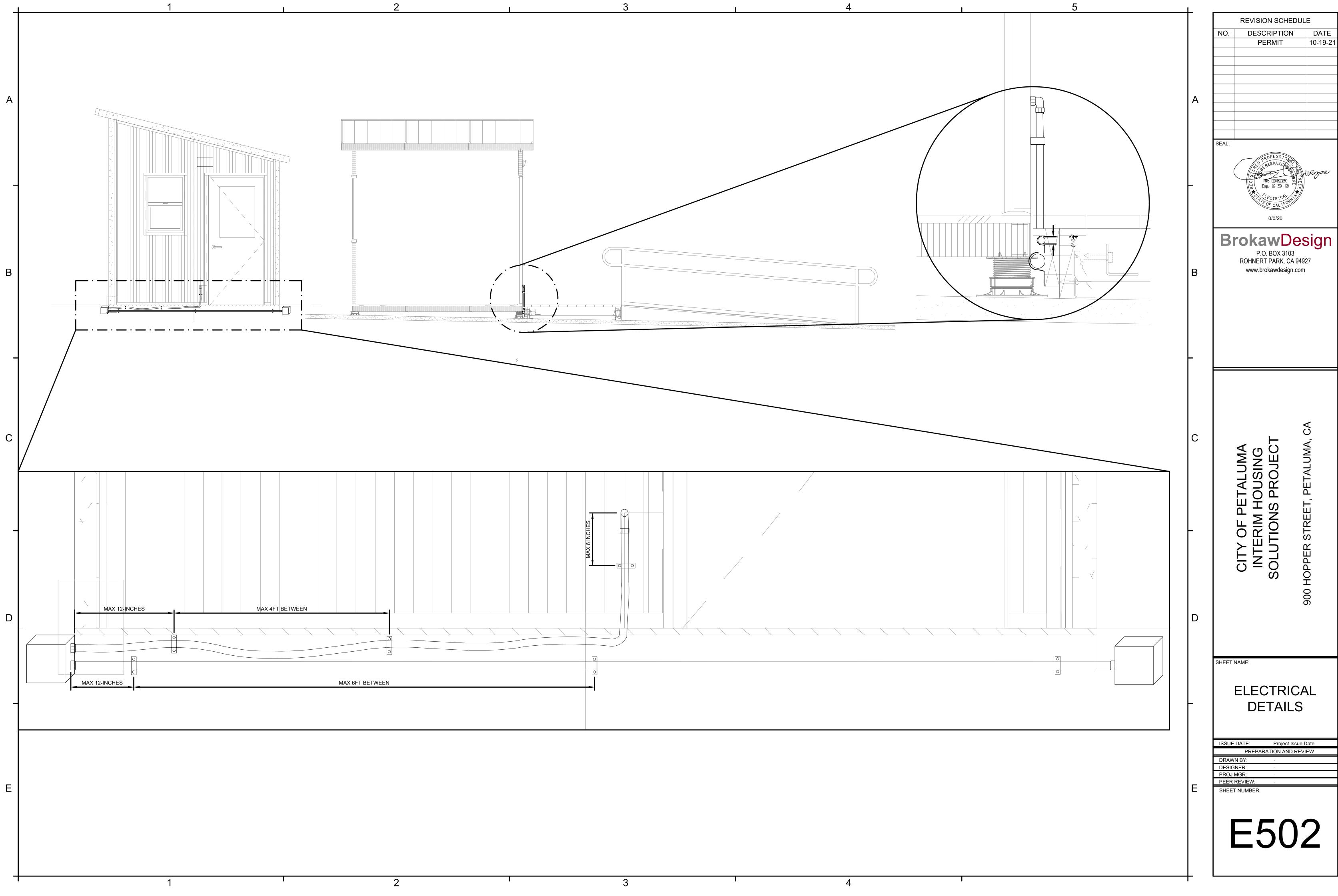
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		TABLE "B" - F	RSG
	CONDUIT	ELBOW	MUM RADIUS EMENTS
	JIZE	RUNS 0-100 FEET	RUNS GREATER THAN 101 FEET
	1/2"	4"	4"
	3/4"	4 1/2"	4 1/2"
	1"	5 3/4"	5 3/4"
	1 1/4"	7 1/4"	7 1/4"
	1 1/2"	8 1/4"	8 1/4"
	2"	9 1/2"	9 1/2"
	2 1/2"	10 1/2"	11 7/16"
	3"	13"	13 3/4"
	4"	16"	18 1/4"
	5"	24"	-
	6"	30"	_









				LOA	D SUMMAI	RY - BUILDING	TYPE		
			ľ				L	DAD (VA)	· · ·
UNI	T TYPE	SQFT	# OF UNITS IN BUILDING	LIGHTING / RECEPTACLE	AC	ELECTRIC RANGE	WATER HEATER	FIXED APPLIANCE	ELECTRIC DRYE
SLEEP	NG UNITS	800	25	90,000	37,500	-	-	25,000	-
REST	ROOMS	1000	2	6,000	3,000	-	9,000	-	-
LAU	JNDRY	1000	1	4,500	1,500	-	-	2,000	12,000
				-	-	-	-	-	-
STAFF	/ HOUSE		1	7,000					
	TOTAL		28	107,500	42,000	-	9,000	27,000	12,00
			T	NEC STAN	DARD DEN	IAND LOAD CA			
			-	LIGHTING/RECP	AC	RANGE		DAD (VA) APPLIANCE	DRYER
	TOTAL		-	107,500	42,000	RANGE -	9,000	27,000	12,00
			,	107,500		DEMAND (220.55)	DEMAND	DEMAND (220.53)	
	MULTIPLIER		FIRST 3 K	VA @100%		24%	75%	75%	100%
				3,000.00		-	6,750	20,250	12,00
			UP TO 120	K KVA @35%					
				36,575					
				IAINING KVA @25%					
				AINING KVA @25%					
	TOTAL		Demand	39,575	42,000	-	9,000	20,250	12,00
-			Demand	33,313	42,000	-	3,000	20,230	12,00
Standard Total Lo	oad Calculation	122,825	VA						
Using Option Loa (T220.84) added 8000K per require Applicable for Mu more units	in Range load	421,500	VA	x	0.33	=	139,095.00	VA	+ House Loads =
									TOTAL

SHEET NOTES

В

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A. ALL ELECTRICAL EQUIPMENT SUCH AS SWITCHBOARDS, PANELBOARDS, METER SOCKETS AND MOTOR CONTROL CENTERS SHALL BE PROVIDED WITH A PERMANENTLY AFFIXED ARC FLASH WARNING LABELS PER CEC 110.16 AND 110.21 REQUIREMENTS. LABEL SHALL AT MINIMUM STATE "WARNING: ARC FLASH AND SHOCK HAZARD APPROPRIATE PPE REQUIRED".

PHASE 3

- B. THE CONTRACTOR SHALL PERFORM ELECTRICAL DISTRIBUTION SYSTEM TESTING PRIOR TO ENERGIZING ANY FEEDERS.
- C. PROVIDE GROUND ROD AND CONCRETE WELL WITH STEEL LID LABELED "GROUND". RESISTANCE OF GROUND ROD SHALL NOT EXCEED 0-25 OHMS. IF A SINGLE ROD EXCEEDS 25 OHMS, PROVIDE ADDITIONAL GROUND ROD(S) SPACED A MINIMUM OF 6-FEET APART IN ACCORDANCE WITH NEC 250-56. SEE DSA PC #02-116162 DETAIL 2/E5.01.
- D. CONTRACTOR SHALL VERIFY AIC WITH UTILITY AND AIC OF NEW PANELBOARDS PRIOR TO ORDERING. ALL BREAKERS SHALL BE FULLY RATED TO MEET PANELBOARD RATING.

CIRCUIT NOTES

1. IF MORE THEN 3 CURRENT CARRYING CONDUCTORS ARE INSTALLED PER RACEWAY. CONTRACTOR SHALL DEMONSTRATE COMPLIANCE WITH NEC TABLE 310.15(B) (3) (a).

- 1.1. MAX (9) #12 AWG FOR 20A CIRCUITS.
- 1.2. MAX (20) #10 AWG FOR 20A CIRCUITS.
- 1.3. MAX (40) #8 AWG FOR 20A CIRCUITS.
- 2. FOR BRANCH CIRCUITS DO NOT EXCEED NEC CONDUIT FILL REQUIREMENTS,
- PROVIDE MAX: 2.1. MAX (29) #12 AWG THWN PER 1" IMC CONDUIT.
- 2.2. MAX (18) #10 AWG THWN PER 1" IMC CONDUIT.
- 2.3. MAX (6) #8 AWG THWN PER 3/4" IMC CONDUIT.
 2.4. MAX (10) #8 AWG THWN PER 1" IMC CONDUIT.
- 2.3. MAX (24) #8 AWG THWN PER 1 1/2" IMC CONDUIT.
- 2.3. MAX (39) #8 AWG THWN PER 2" IMC CONDUIT.
- 2.4. MAX (7) #6 AWG THWN PER 1"IMC CONDUIT.
- 3. FOR 20A 208V (3% VD) CIRCUITS PROVIDE MINIMUM:
 - 3.1. UP TO 78FT #12 AWG
 - 3.2. 78FT TO 130FT #10 AWG
 3.3. 130FT TO 200FT #8 AWG

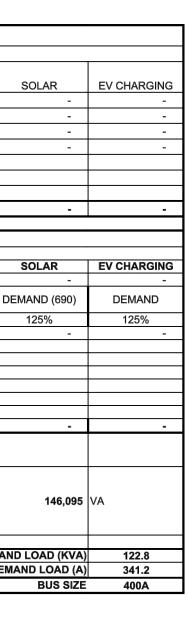
SINGLE LINE DIAGRAM - POWER

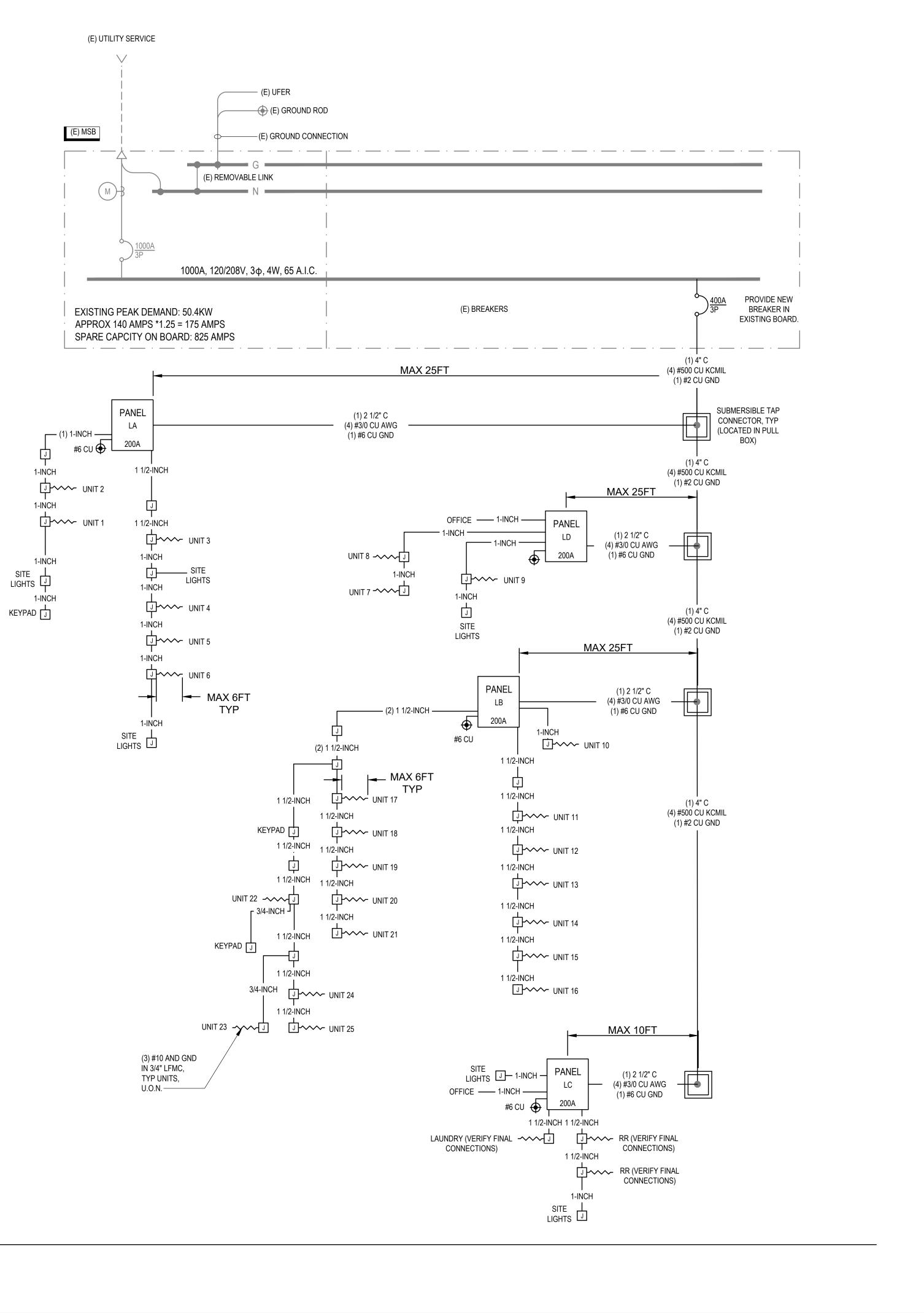
NOT TO SCALE

3

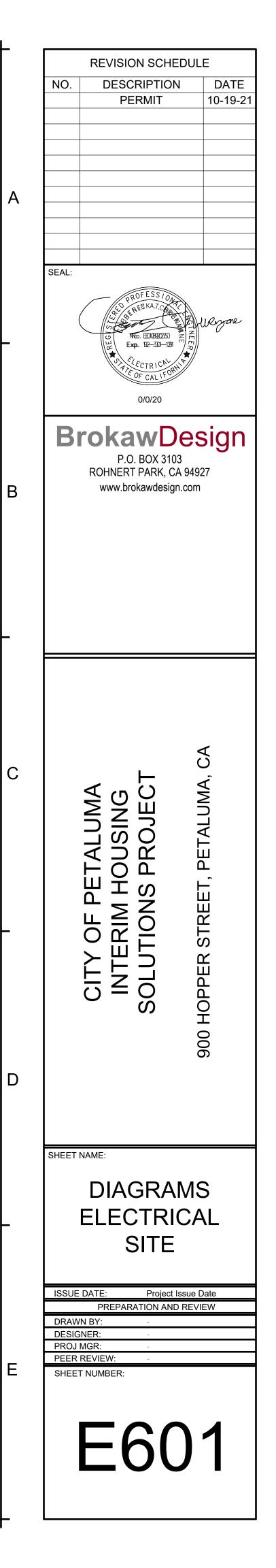








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В

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Ε

				:			PANE	L SCHED	ULE							
		PANEL	NAME:	LA	VOLTAGE:	208	NEM	A RATING:	3R		NOTES:					
				200 (A)	PHASE:	3	A	IC RATING:	1							
				225 (A)	WIRE:					LC		ELECTRICAL ROOM	_			
CKT NO	PHASE WIRE	NEUT WIRE	USE	DESCRIPTION	BKR SIZE	BKR OPTS	BKR KVA	PHASE:	BKR KVA	BKR OPTS	BKR SIZE	DESCRIPTION	USE	NEUT WIRE	PHASE WIRE	CKT NO
1	10	10	R	UNIT 1	20/2		2.00	A	2.00		20/2	UNIT 2	R	10	10	2
3	10	10	R		20/2		2.00	В	2.00		20/2	UNIT 2	R	1 10	10	4
5	10	10	R	UNIT 3	20/2		2.00	С	2.00		20/2	UNIT 4	R	10	10	6
7	10	10	R	0111-0	2012		2.00	A	2.00		2012	01114	R	10	10	8
9	10	10	R	UNIT 5	20/2		2.00	В	2.00		20/2	UNIT 6	R	10	10	10
11	10		R		0.000		2.00	С	2.00		10000	3000 5	R	(5.5)	10	12
13	10	10	R	UNIT 7	20/2		2.00	A	2.00		20/2	UNIT 8	R	10	10	14
15	10	20296	R		2009/00/2011		2.00	В	2.00			201231113 SC	R	u hasterne Tri	10	16
17	10	10	R	UNIT 9	20/2		2.00	С								18
19	10	10	R		00/4		2.00	A					-			20
21	10	10	L	SITE LIGHTING	20/1		0.50	B						-		22
23	10	10	R	KEYPADS	20/1		0.20	C								24
25					-			A					4	-		26
27 29					_			B	· · · · ·							28 30
_OADS:							LICE		LOAD TYP		BDEAKE	R OPTIONS:				30
PHASE A:			11.0	(1/2) / A)				<u>EGEND</u> H"	HVAC			ROUND FAULT CIRCUIT				
PHASE A: PHASE B:				(KVA) (KVA)				п L"	LIGHTING			EATING/AIR CONDITIO				
PHASE B: PHASE C:				(KVA) (KVA)				L //"	MOTOR			K-ON DEVICE	NING RA	IED		
TOTAL:				(CONNECTED KVA)				0"	OTHER			LOCK ATTACHMENT				
IUTAL.				(CONNECTED A)				0 R"	RECEPTAC		ST - SHU					
			101.3	(CONNECTED A)				P"	PANEL		HT - HAN					
								' C"	COOKING			ICATED CIRCUIT FOR F				
								E"	EV LOADS			ARM CIRCUIT", LOCK-O			,	
								∟ N"	WATER HE			AT FIRE ALARM EQUIP				
							,									
							CONN.	DEMAND	DEMAND]						
NEC DEMAI	-						KVA	FACTOR	KVA							
	MOTOR. LO							125%								
	MOTOR. LO		AINING)					100%								
	LIGHTING L						0.50	125%	0.63							
TYPE "R":	RECEPTAC	LES (FIRS	T 10KV/	A)			10.00	100%	10.00							
	RECEPTAC		R 10KVA	A)			26.20	50%	13.10							
	HVAC LOAD							100%		ļ						
	PANEL LOA							100%								
	COOKING L EV LOADS	UADS						65% 125%		{						
	WATER HE							125%		{						
			703	1				100%		{						
	OTHER I OA															
TYPE "O":	OTHER LO	ADS				DE	MAND KVA:		23.73							

				:			PANE	L SCHED	ULE			· · · · · ·				<u>.</u>
		PANEL	NAME:	LC	VOLTAGE:	208	NEM	A RATING:	3R		NOTES	:				
		MAINS F	RATING:	200 (A)	PHASE:	3	А	IC RATING:	22K							
				200 (A)	WIRE:					LC	CATION	:				
CKT NO	PHASE WIRE	NEUT WIRE	USE	DESCRIPTION	BKR SIZE	BKR OPTS	BKR KVA	PHASE:	BKR KVA	BKR OPTS	BKR SIZE	DESCRIPTION	USE	NEUT WIRE	PHASE WIRE	CKT NO
1	4		R				6.00	A	3.00	0110		na como como	R	1	8	2
3	4	4	R	LAUNDRY (VERIFY)	60/2	-	6.00	В	3.00		30/2	OFFICE	R	8	8	4
5	6		R				4.00	C				-		-		6
7	6	6	R	RESTROOM (VERIFY)	40/2	-	4.00	A				-	-	-		8
9	6	22	R		1000000		4.00	В				-				10
11	6	6	R	RESTROOM (VERIFY)	40/2		4.00	C								12
13	10	10		SITE LIGHTING	20/1		0.02	A				2		1		14
15		11.5						В								16
17								С								18
19								A								20
21								В								22
23								С						1		24
25								A								26
27								В								28
29								С								30
OADS:							USE L	EGEND	LOAD TYP	Ē	BREAK	R OPTIONS:				
PHASE A:			13.0	(KVA)			"	Н"	HVAC		GFCI - C	GROUND FAULT CIRCUIT	INTERR	JPTER		
PHASE B:				(KVA)			"	L"	LIGHTING		HACR -	HEATING/AIR CONDITIO	NING RAT	ΓED		
PHASE C:				(KVA)			"	//"	MOTOR		LO - LO	CK-ON DEVICE				
TOTAL:				(CONNECTED KVA)				0"	OTHER		PA - PA	DLOCK ATTACHMENT				
			94.5	(CONNECTED A)			"	R"	RECEPTAC	CLE	ST - SH	UNT TRIP				
								P"	PANEL		HT - HA	NDLE TIE				
								C"	COOKING			DICATED CIRCUIT FOR F			,	
								E"	EV LOADS			LARM CIRCUIT", LOCK-O		E. PERMAI	VENTLY ID	ENTIFY
							n	N"	WATER HE	EATER	CIRCUI	T AT FIRE ALARM EQUIP	MENT.			
						ł	CONN.	DEMAND	DEMAND]						
NEC DEMAN							KVA	FACTOR	KVA							
TYPE "M": N		ADS (LARC	GEST M	OTOR)				125%		1						
YPE "M": N	MOTOR. LO	ADS (REM	AINING)			1		100%		1						
YPE "L": L	IGHTING L	OADS					0.02	125%	0.03	1						
	RECEPTAC						10.00	100%	10.00]						
	RECEPTAC		R 10KVA	N)			24.00	50%	12.00							
	HVAC LOAD							100%								
	PANEL LOA							100%								
	COOKING L	OADS						65%								
TYPE "E": E								125%								
	WATER HE		ADS					100%	ļ							
YPE "0": (OTHER LOA	ADS						100%		-						
							MAND KVA:		22.03							
							AND AMPS:		61.2	1						

							PANE	L SCHED	ULE							
		PANEL	. NAME:	IB	VOLTAGE:	208		MA RATING:			NOTES					
				200 (A)	PHASE:			IC RATING:				•				
				200 (A)	WIRE:		-			LC	CATION					
CKT	PHASE	NEUT	USE	DESCRIPTION	BKR	BKR	BKR	PHASE:	BKR	BKR	BKR	DESCRIPTION	USE	NEUT	PHASE	CKT
NO	WIRE	WIRE			SIZE	OPTS	KVA		KVA	OPTS	SIZE			WIRE	WIRE	NC
1	8	8	R	UNIT 10	20/2		2.00	A	2.00		20/2	UNIT 11	R	8	8	2
3	8	1.7.1	R				2.00	В	2.00				R	19 7	8	4
5	8	8	R	UNIT 12	20/2		2.00	c	2.00		20/2	UNIT 13	R	8	8	6
9	8		R			2	2.00	AB	2.00 2.00				R		8	8
9 11	8	8	R	UNIT 14	20/2		2.00	C	2.00		20/2	UNIT 15	R	8	8	10 12
13	8		R				2.00	A	2.00				R	-	8	14
15	8	8	R	UNIT 16	20/2		2.00	В	2.00		20/2	UNIT 17	R	8	8	14
17	8	1227	R		2010		2.00	C	2.00				R		8	18
19	8	8	R	UNIT 18	20/2		2.00	A	2.00		20/2	UNIT 19	R	8	8	20
21	8	8	R	UNIT 20	20/2		2.00	В	2.00		20/2	UNIT 21	R	8	8	22
23	8	0	R		2012		2.00	С	2.00		2012		R	0	8	24
25	8	8	R	UNIT 22	20/2		2.00	A	2.00		20/2	UNIT 23	R	8	8	26
27	8		R				2.00	В	2.00			(7)))))(7)	R		8	28
29	8	8	R	UNIT 24	20/2	7	2.00	С	2.00		20/2	UNIT 25	R	8	8	30
31 33	8	8	R	SITE LIGHTING	20/1	8: 	2.00	AB	2.00				R	() ()	8	32 34
35	8	8	R	KEYPADS	20/1		0.50	C			-					34
37	0	0		INC IT ADO	20/1		0.20	A					-		-	38
39								В				-				40
41								C						<u>.</u>		42
LOADS:				•			USE L	EGEND	LOAD TYPE	Ē	BREAKE	R OPTIONS:				
PHASE A:			24.0	(KVA)				H"	HVAC		GFCI - C	GROUND FAULT CIRCUI	T INTERR	UPTER		
PHASE B:				i (KVA)				'L"	LIGHTING			HEATING/AIR CONDITIC	NING RA	TED		
PHASE C:				(KVA)				M"	MOTOR			CK-ON DEVICE				
TOTAL:				(CONNECTED KVA)				0"	OTHER RECEPTAC							
			179.7	(CONNECTED A)				R" P"	PANEL	LE		UNT TRIP NDLE TIE				
								г С"	COOKING							
								E"	EV LOADS			LARM CIRCUIT", LOCK-0				
									WATER HE			AT FIRE ALARM EQUIF				
							CONN.	DEMAND								
NEC DEMA							KVA	FACTOR	KVA							
	MOTOR. LO							125%								
	MOTOR. LO LIGHTING L		AINING)				0.50	100% 125%	0.63							
	RECEPTAC		T 10KV/	A)			10.00	125%	10.00							
	RECEPTAC						54.20	50%	27.10							
TYPE "H":	HVAC LOAD	DS `		· .				100%								
	PANEL LOA							100%								
	COOKING L	OADS						65%								
TYPE "E": I							ļ	125%								
	WATER HE		ADS	,				100%								
TTPE "U":	OTHER LOA	403					L MAND KVA	100%	37.73							
							AND AMPS		31.13	1						

							PANE	L SCHED	ULE			÷					
		PANEL	NAME:	LD	VOLTAGE:	208		A RATING:			NOTES:						
				200 (A)	PHASE:			IC RATING:	÷···								
		BUS F	RATING:	200 (A)	WIRE:					LOCATION: ELECTRICAL ROOM							
CKT	PHASE	NEUT	USE	DESCRIPTION	BKR	BKR	BKR	PHASE:	BKR	BKR	BKR	DESCRIPTION	USE	NEUT	PHASE	CKT	
NO	WIRE	WIRE			SIZE	OPTS	KVA		KVA	OPTS	SIZE			WIRE	WIRE	NO	
1	10	10	R	UNIT 7	20/2		2.00	A	2.00		20/2	UNIT 8	R	10	10	2	
3	10	10	R		20/2		2.00	В	2.00		20/2		R	10	10	4	
5	10	10	R	UNIT 9	20/2		2.00	С								6	
7	10	10	R	ONT 5	2012		2.00	A								8	
9	8	8	R	OFFICE	30/2		3.00	В								10	
11	8	U	R	OTTICE	00/2		3.00	C								12	
13								A								14	
15								В								16	
17								C								18	
19		165	2					A								20	
21	10	10	L	SITE LIGHTING	20/1		0.50	В								22	
23								С								24	
25			-					A								26	
27								В						<u></u>		28	
29								C		-	DDEAL					30	
LOADS:				40.4				EGEND	LOAD TYPE	_		R OPTIONS:					
PHASE A:				(KVA)				H" L"	HVAC			ROUND FAULT CIRCUIT					
PHASE B:				(KVA)				L //"	LIGHTING MOTOR			IEATING/AIR CONDITIO K-ON DEVICE	NING RA	IED			
PHASE C: TOTAL:				(KVA) (CONNECTED KVA)			-	// O"	OTHER			LOCK ATTACHMENT					
TOTAL:				(CONNECTED A)				5 R"	RECEPTAC		ST - SHU						
			51.4	(CONNECTED A)				P"	PANEL		HT - HAN						
								C"	COOKING			ICATED CIRCUIT FOR F					
								E"	EV LOADS			ARM CIRCUIT", LOCK-C					
								∟ //"	WATER HE	ATER		AT FIRE ALARM EQUIP					
				,				•									
							CONN.	DEMAND	DEMAND								
NEC DEMAN	ND LOAD						KVA	FACTOR	KVA								
TYPE "M": N		ADS (LARC	GEST MO	OTOR)				125%									
TYPE "M": N	MOTOR. LO	ADS (REM		A				100%									
TYPE "L": L							0.50	125%	0.63								
TYPE "R":							10.00	100%	10.00								
TYPE "R":			R 10KVA	A)			8.00	50%	4.00								
TYPE "H":								100%									
TYPE "P": I								100%									
TYPE "C":		OADS						65%									
TYPE "E": I			100					125%									
TYPE "W": TYPE "O":			405					100%									
TTPE "U": (100					MAND KVA:	100%	14.63								
							AND AMPS:		40.6								
									40.0							:	

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	NO.	DE	SION SC SCRIPT PERMIT	ION	E DATE 10-19-21
A					
	SEAL:		PROFESS	ION	
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•		REG	ТКО. ШОЮВЭС Ежр. 12-330 ССТВІС	-1291 "\`!!	
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