LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

GENERAL NOTES

1. THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.

2. LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID INTERCEPTING EXISTING PIPING OR CONDUITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.

3. THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF WLC ARCHITECTS, INC., AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF WLC ARCHITECTS, INC.

4. THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, WLC ARCHITECTS, INC. IS NOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS WLC ARCHITECTS, INC. RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

5. EACH BIDDER SHALL POSSESS AT THE TIME OF BID A CLASS B OR THE APPROPRIATE CLASS C CONTRACTOR'S LICENSE PURSUANT TO PUBLIC CONTRACT CODE SECTION 3300 AND BUSINESS AND PROFESSIONS CODE SECTION 7028.15. THE SUCCESSFUL BIDDER MUST MAINTAIN THE LICENSE THROUGHOUT THE DURATION OF THIS CONTRACT.

6. FIRE SAFETY DURING CONSTRUCTION

   A. GENERAL: FIRE SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9, CHAPTER 5 AND CHAPTER 33.

   B. ACCESS ROADS: FIRE DEPARTMENT ACCESS ROADS SHALL BE ESTABLISHED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33, SECTION 3310.

   C. WATER SUPPLY: WATER MAINS AND HYDRANTS SHALL BE OPERATIONAL IN ACCORDANCE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33, SECTION 3312.

   D. BUILDING ACCESS: ACCESS TO BUILDINGS FOR THE PURPOSE OF FIREFIGHTING SHALL BE PROVIDED. CONSTRUCTION MATERIAL SHALL NOT BLOCK ACCESS TO BUILDINGS, HYDRANTS, OR FIRE APPLIANCES.

   E. ALTERATIONS OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.

   F. DEMOLITION OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.

   G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS IN ACCORDANCE WITH CHAPTER 33, SECTION 3304.5. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.

7. PENETRATIONS TO FIRE RATED MATERIALS OR ASSEMBLIES SHALL BE RESTORED TO EQUAL RATING. FIRE STOP SYSTEMS AS LISTED BY UNDERWRITERS LABORATORIES SHALL BE INSTALLED PER FIRE RESISTANCE DIRECTORY. FIRE STOP SYSTEMS SHALL BE AS SPECIFIED.

8. NONRESIDENTIAL ENERGY STANDARDS COMPLIANCE STATEMENT (TITLE 24, PART 6):

   THE DESIGN INDICATED HEREIN COMPLIES WITH THE REQUIREMENTS OF THE ENERGY CONSERVATION STANDARDS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THE PROPOSED BUILDING(S) WILL BE IN COMPLIANCE WITH THE ENERGY CONSERVATION STANDARDS PROVIDED IT (THEY) IS (ARE) BUILT ACCORDING TO THESE DRAWINGS AND SPECIFICATIONS AND PROVIDED ANY FUTURE IMPROVEMENTS ARE COMPLETED ACCORDING TO THE REQUIREMENTS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED TO INCLUDE ALL SIGNIFICANT ENERGY CONSERVATION FEATURES REQUIRED FOR COMPLIANCE WITH THE STANDARDS. BUILDING AREAS THAT ARE UNCONDITIONED AND/OR NOT SUBJECT TO THE STANDARDS ARE INDICATED ON THE PLANS.

   ENVELOPE MANDATORY MEASURES:

   A. INSTALLED INSULATING MATERIALS SHALL HAVE BEEN CERTIFIED BY THE MANUFACTURER TO COMPLY WITH THE CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL.

   B. ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF TITLE 24, PART 2, CALIFORNIA CODE OF REGULATIONS, SECTIONS 720 AND 2603.

   C. ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL AND OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED, OR OTHERWISE SEALED.

   D. SITE CONSTRUCTED DOORS, WINDOWS, AND SKYLIGHTS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHERSTRIPPED (EXCEPT FOR UNFRAMED GLASS DOORS AND FIRE DOORS).

   E. MANUFACTURED DOORS AND WINDOWS INSTALLED SHALL HAVE AIR INFILTRATION RATES CERTIFIED BY THE MANUFACTURER IN ACCORDANCE WITH TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS, SECTION 110.6.

   F. MANUFACTURED FENESTRATION PRODUCTS IN THE ENVELOPE OF THE BUILDING, INCLUDING, BUT NOT LIMITED TO, WINDOWS, SLIDING GLASS DOORS, FRENCH DOORS, SKYLIGHTS, CURTAIN WALLS, AND GARDEN WINDOWS MUST BE LABELED FOR U-VALUE & SHGC IN ACCORDANCE WITH THE (NFRC) NATIONAL FENESTRATION RATING COUNCIL'S INTERIM U-VALUE & SHGC RATING PROCEDURE.

9. DEFERRED APPROVAL ITEMS:

   INSTALLATION OF DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL DETAILED PLANS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF DESIGN AND SIGNED BY A CALIFORNIA REGISTERED ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

   DEFFERED APPROVAL ITEMS SHALL BE SUBMITTED FOR REVIEW NO LATER THAN 60 DAYS AFTER THE NOTICE TO PROCEED.

   DEFERRED APPROVAL ITEMS FOR THIS PROJECT ARE THE FOLLOWING ITEMS:

   A. [N/A]

10. PROOF LOAD TESTS FOR EXPANSION TYPE ANCHOR BOLTS:

    A. ANCHOR DIAMETER REFERS TO THE THREAD SIZE FOR THE WEDGE CATEGORY ANCHOR.

    B. APPLY PROOF TEST LOADS TO WEDGE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH AND APPLY LOAD.

    C. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY THE FIXTURE(S).

    D. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.

    E. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:

       1. HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR WEDGE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE. DROP-IN ANCHORS ARE ONLY TO BE TESTED WITH THIS METHOD.

       2. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS FOR WEDGE TYPE ANCHORS: ONE-HALF (1/2) TURN OF THE NUT.

    F. TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS.

    G. ALL EXPANSION TYPE ANCHOR BOLTS USED FOR STRUCTURAL APPLICATIONS SHALL BE TESTED. ALL ANCHOR BOLTS OF THE EXPANSION TYPE USED FOR NON-STRUCTURAL APPLICATIONS (LOADED IN EITHER PULLOUT OR SHEAR) SHALL HAVE 50 PERCENT OF THE BOLTS (ALTERNATE BOLTS IN ANY GROUP ARRANGEMENT ALLOWED BY THE TYPE OF SUBSTRATE AND DIAMETER OF BOLT LISTED BELOW UNDER TEST VALUES TABLE) PROOF TESTED IN TENSION TO TWICE THE ALLOWABLE TENSION LOAD. IF THERE ARE ANY FAILURES, THE IMMEDIATELY ADJACENT BOLTS MUST THEN ALSO BE TESTED. [TESTING SHALL BE PERFORMED IN ACCORDANCE WITH TITLE 24, PART 2, SECTION 1910A.5]

    H. ALL BOLTS MUST HAVE ICC/ES APPROVAL.

    I. ALL ANCHOR BOLTS OF THE EXPANSION TYPE INSTALLED IN CONCRETE SHALL BE ONE OF THE FOLLOWING:

       1. HILTI, INC. - KWIK BOLT TZ:
          STAINLESS STEEL WEDGE ANCHOR - ICC-ES ESR-1917

       2. SIMPSON - STRONG BOLT 2:
          STAINLESS STEEL WEDGE ANCHOR - ICC-ES ESR-3037

REQUIRED INSTALLATION TORQUE
NORMAL WEIGHT OR LIGHWEIGHT CONCRETE

	DIA (IN)	TORQUE (FT-LBS)	EMBEDMENT (IN)
KWIK BOLT TZ ESR-1917	3/8"	25	2"
	1/2"	40	2" ; 3 1/4"
	5/8"	60	3 1/8" ; 4"
	3/4"	110	3 3/4" ; 4 3/4"
STRONG BOLT 2 ESR-3037	1/4"	4	1 1/2"
	3/8"	30	1 1/2" ; 2 1/2"
	1/2"	65	2 1/4" ; 3 3/8"
	5/8"	80	2 3/4" ; 4 1/2"
	3/4"	150	3 3/8" ; 5"

    J. ALL ANCHOR BOLTS OF THE EXPANSION TYPE INSTALLED IN GROUT-FILLED MASONRY SHALL BE ONE OF THE FOLLOWING:

       1. HILTI, INC. - KWIK BOLT 3:
          MASONRY ANCHORS - ICC-ES ESR-1385

       2. SIMPSON - STRONG BOLT 2:
          MASONRY ANCHORS - IAPMO UES ER-240

REQUIRED INSTALLATION TORQUE
NORMAL WEIGHT OR LIGHWEIGHT CONCRETE

	DIA (IN)	TORQUE (FT-LBS)	EMBEDMENT (IN)
KWIK BOLT 3 ESR-1385	1/4"	4	1 1/2"
	3/8"	15	2"
	1/2"	25	2" ; 3 1/4"
	5/8"	65	3 1/8" ; 4"
	3/4"	120	3 3/4" ; 5"
STRONG BOLT 2 ER-240	1/4"	4	1 3/4"
	3/8"	20	2 5/8"
	1/2"	35	3 1/2"
	5/8"	55	4 3/8"
	3/4"	100	5 1/4"

11. POWDER-DRIVEN CONCRETE FASTENERS:

    A. GENERAL: USE OF POWDER-DRIVEN CONCRETE FASTENERS FOR TENSION LOADS IS LIMITED TO SUPPORT OF MINOR LOADS LIKE ACOUSTICAL CEILINGS, DUCT WORK, CONDUIT.

    B. ALLOWABLE LOADS: IN GENERAL, LOADS SHOULD BE LIMITED TO LESS THAN 90 POUNDS PER ASCE 7, SECTION 13.4.5.

    C. TESTING: THE OPERATOR, TOOL, AND FASTENER SHALL BE PREQUALIFIED BY THE PROJECT INSPECTOR. HE SHALL OBSERVE THE TESTING OF THE FIRST 10 FASTENER INSTALLATIONS. A TEST "PULL-OUT" LOAD OF NOT LESS THAN TWICE THE DESIGN LOAD, OR 200 POUNDS, WHICHEVER IS GREATER SHALL BE APPLIED TO THE PIN IN SUCH A MANNER AS NOT TO RESIST THE SPALLING TENDENCY OF THE CONCRETE AROUND THE PIN. THEREAFTER, RANDOM TESTS UNDER THE PROJECT INSPECTOR'S SUPERVISION SHALL BE MADE OF APPROXIMATELY 1 IN 10 PINS, EXCEPT THAT WHEN THE DESIGN LOAD EXCEEDS 100 POUNDS, ONE HALF OF THE PINS SHALL BE TESTED. SHOULD FAILURE OCCUR ON ANY PIN TESTED, ALL INSTALLATIONS MUST BE TESTED AND UNFAIR PINS REPLACED.

    D. ALL POWDER-DRIVEN CONCRETE FASTENERS SHALL BE ONE OF THE FOLLOWING:

       1. HILTI, INC.
          X-CP 72 PINS - WOOD PLATE - ICC/ES NO. 2379
          X-U PINS - STEEL TRACK - ICC/ES NO. 2269

       2. ITW RAMSET/REDHEAD
          DRIVE PIN - WOOD PLATE - ICC/ES NO. 2690
          DRIVE PIN - STEEL TRACK - ICC/ES NO. 1799

       3. SIMPSON STRONG-TIE CO., INC.
          PDPWL-300MG-WOODPLATE-ICC/ES NO. 2138
          PDPA-125-STEEL TRACK-ICC/ES NO. 2138

12. SPECIFICATIONS FOR AUTOMATIC END WELDED STUDS

    A. MATERIAL: AUTOMATIC END WELDED STUDS SHALL BE NELSON GRANULAR FLUX-FILLED SHEAR CONNECTOR OR ANCHOR STUDS (OR APPROVED EQUAL). STUDS SHALL BE MANUFACTURED OF C-1010 THROUGH C-1020 COLD DRAWN STEEL WHICH CONFORMS TO ASTM A29. ICC/ES ESR-2856

    B. INSTALLATION: THE STUDS SHALL BE AUTOMATICALLY END WELDED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IN SUCH A MANNER AS TO PROVIDE COMPLETE FUSION BETWEEN THE END OF THE STUD AND THE PLATE. THERE SHOULD BE NO POROSITY OR EVIDENCE OF LACK OF FUSION BETWEEN THE WELDED END OF THE STUD AND THE PLATE. THE STUD SHALL DECREASE IN LENGTH DURING WELDING APPROXIMATELY 1/8" FOR 5/8" AND UNDER, AND 3/16" FOR OVER 5/8" DIAMETER. WELDING SHALL BE DONE ONLY BY QUALIFIED WELDERS APPROVED BY THE WELDING INSPECTOR.

    C. INSPECTION AND TESTS: INSPECTION, IN ACCORDANCE WITH TITLE 24, PART 2, SECTION 2213A.2. ALL THE SHOP AND FIELD WELDING OPERATIONS FOR THE AUTOMATIC END WELDED STUDS SHALL BE MADE BY A QUALIFIED WELDING INSPECTOR (APPROVED BY THE DIVISION OF THE STATE ARCHITECT). THE TYPE AND CAPACITY OF THE WELDING EQUIPMENT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE CHECKED AND APPROVED BY A WELDING INSPECTOR.

    D. AT THE BEGINNING OF EACH DAY'S WORK, A MINIMUM OF TWO TEST STUD WELDS SHALL BE MADE WITH THE EQUIPMENT TO BE USED TO METAL WHICH IS THE SAME AS THE ACTUAL WORK PIECE. THE TEST STUDS SHALL BE SUBJECTED TO A 90° BEND TEST BY STRIKING THEM WITH A HEAVY HAMMER. AFTER THE ABOVE TEST, THE WELD SECTION SHALL NOT EXHIBIT ANY TEARING OUT OR CRACKING.

13. INSPECTOR OF RECORD REQUIREMENTS

    A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTOR'S DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8.

    B. INSPECTOR SHALL BE CERTIFIED AS A CLASS [1] INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPECTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.

14. ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

15. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY TITLE 24, CCR, PART 1, SECTION 4-338.

16. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

17. DRINKING WATER SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS.

18. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ADDITION, ALTERATION OR RECONSTRUCTION IS IN COMPLIANCE WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY COMNDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT IDENTIFIED BY THE CONTRACT DOCUMENTS WHERIN THE FINAL WORK WOULD NOT COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ARCHITECT OF THE CONDITION IN WRITING. NECESSARY INFORMATION REQUIRED TO CORRECT THE CONDITIONS ENCOUNTERED WILL BE ISSUED BY THE ARCHITECT. A CHANGE ORDER MAY BE ISSUED TO ADJUST THE CONTRACT SUM OR TIME COMMENSURATE WITH THE AMOUNT OF ADDITIONAL WORK REQUIRED, IF ANY. THE CHANGE ORDER SHALL BE APPROVED BY THE DIVISION OF THE STATE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK REQUIRED BY THE CHANGE ORDER.

19. ALL SLOPE AND CROSS SLOPE OF ACCESSIBLE ROUTE PAVING INDICATED ON THESE DRAWINGS WAS DESIGNED IN COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE THE ACCESSIBILITY STANDARDS OF THE CALIFORNIA BUILDING CODE, (CBC) TITLE 24, PART 2, CHAPTER 11B OF THE CALIFORNIA CODE OF REGULATIONS (CCR). STRICT EXECUTION OF THE SLOPE AND CROSS SLOPE OF ACCESSIBLE ROUTE PAVING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SHOULD A CONDITION PRESENT ITSELF THAT WOULD RESULT IN AN INSTALLATION OTHER THAN WHAT IS INDICATED IN THESE DRAWINGS, WLC ARCHITECTS, INC. SHALL BE NOTIFIED IN WRITING AND A COMPLIANT RESOLUTION WILL BE FORMULATED.

PROJECT TEAM

OWNER
PERALTA COMMUNITY SCHOOL DISTRICT
333 EAST 8TH STREET
OAKLAND, CA 94606
PHONE: (510) 466-7200
FAX: -

MECHANICAL ENGINEER
FRANK M BOOTH, INC.
251 MICHELLE COURT
SOUTH SAN FRANCISCO, CA 94080
PHONE: (650) 589-1844
FAX: -

CONSTRUCTION MANAGER
SWINERTON MANAGEMENT & CONSULTING
260 TOWNSEND STREET
SAN FRANCISCO, CA 94107
PHONE: (415) 421-2980
FAX: -

ELECTRICAL ENGINEER
SILVERMAN & LIGHT, INC.
1201 PARK AVENUE, SUITE 100
EMERYVILLE, CA 94608
PHONE: (510) 655-1200
FAX: -

GENERAL CONTRACTOR
GILBANE BUILDING COMPANY
2033 GATEWAY PLACE, SUITE 450
SAN JOSE, CA 95110
PHONE: (408) 660-4400
FAX: (408) 660-4402

PLUMBING ENGINEER
FRANK M. BOOTH, INC.
251 MICHELLE COURT
SOUTH SAN FRANCISCO, CA 94080
PHONE: (650) 589-1844
FAX: -

ARCHITECT
WLC ARCHITECTS, INC.
2600 TENTH STREET, SUITE 700
BERKELEY, CA 94710
PHONE: (510) 450-1999
FAX: (510) 319-6091

SOILS ENGINEER
FURGO USA LAND, INC.
1777 BOTELHO DRIVE, SUITE 262
WALNUT CREEK, CA 94564
PHONE: (925) 945-7100
FAX: -

CIVIL ENGINEER
SANDIS CIVIL ENGINEERS
636 9TH STREET
OAKLAND, CA 94607
PHONE: (510) 873-8866
FAX: (510) 873-8868

TOPOGRAPHY SURVEY
COMPANY NAME
123 STREET NAME COURT
ANYTOWN, CA 90000
PHONE: (909) 000-0000
FAX: (909) 000-0000

STRUCTURAL ENGINEER
MIYAMOTO INTERNATIONAL
535 MISSION STREET, SUITE 1730
SAN FRANCISCO, CA 94105
PHONE: (415) 230-7097
FAX: -

DOOR HARDWARE
MICHELLE BOND
AHC OPENING CONSULTANT
-
PHONE: (925) 462-4777
FAX: (925) 463-7704

DIVISION OF THE STATE ARCHITECT
DSA OAKLAND REGIONAL OFFICE
1515 CLAY STREET
OAKLAND, CA 94612
PHONE: (510) 622-3101
FAX: (510) 622-3109

THE SCOPE OF THE WORK AS STATED BELOW IS FOR DSA PLAN REVIEW PURPOSES ONLY AND DOES NOT CONSTITUTE A DETAILED AND FULL EXPLANATION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

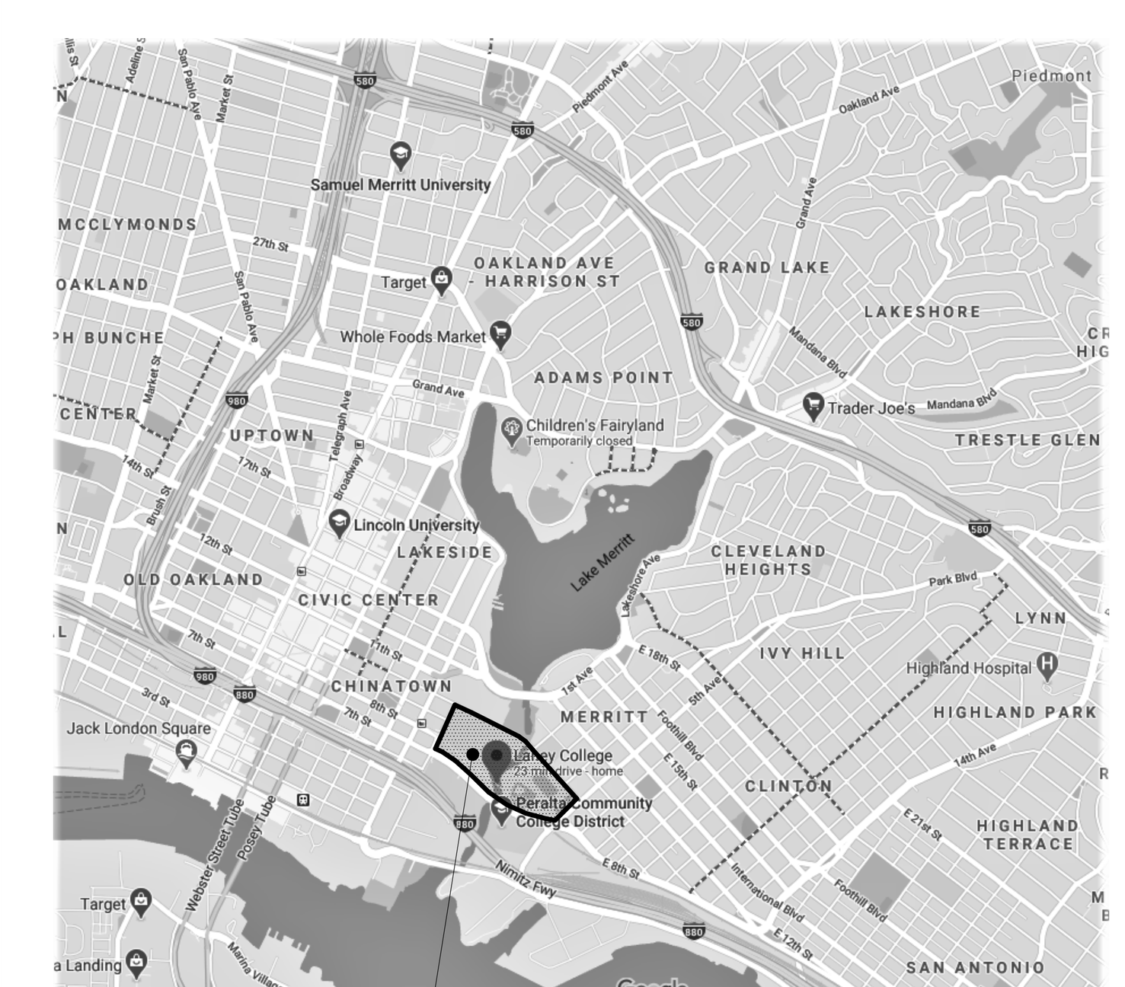
THE PROJECT INCLUDES ALL SCOPE DEFINED BY THE BRIDGING DOCUMENTS INCLUDING BUT NOT LIMITED TO:

THE REPLACEMENT OF THE EXISTING CHILLERS, BOILERS, AND COOLING TOWERS, REPAIR OR REPLACEMENT OF ASSOCIATED PUMPS, PIPING, VALVES, AND BUILDING AUTOMATION SYSTEM. THE REPLACEMENT CHILLERS AND BOILERS WILL BE LOCATED IN THE EXISTING CENTRAL PLANT (BUILDING E) AND THE REPLACEMENT COOLING TOWERS WILL MOVE TO AN ENCLOSURE (UTILITY BUILDING 'AA'), SOUTH OF BUILDING F, CONSTRUCTED AS PART OF THIS PROJECT. ALSO TO BE CONSTRUCTED AS PART OF THIS PROJECT IS THE PIPING CONNECTING BUILDING E TO THE REPLACEMENT COOLING TOWERS LOCATED IN BUILDING AA.

THE PROJECT SCOPE INCLUDES:

1. MODIFICATION TO BUILDING E'S CHILLER AND BOILER SPACES TO ACCOMMODATE THE REPLACEMENT EQUIPMENT, DEMOLITION OF EXISTING COOLING TOWER UTILITY STRUCTURE, CONSTRUCTION OF A UTILITY STRUCTURE (UTILITY BUILDING 'AA'), AND PROVISIONS FOR THE UTILITY BUILDING AND THE FUTURE LEARNING RESOURCE CENTER (LRC).
2. PATCHING AND REPAIRING EXISTING CONDITIONS WHERE AFFECTED BY ANY AND ALL DEMOLITION WORK.
3. NEW CENTRAL UTILITY PLANT AND ASSOCIATED SITE UTILITIES AND PAVEMENT REPAIR. NEW UTILITY STUB-OUTS FOR THE FUTURE LEARNING RESOURCE CENTER, AS WELL AS UTILITY RELOCATION.

SCOPE OF WORK | -



FEMA FLOOD MAP
PANEL DESIGNATION:
06001C0067H
ZONE: X

TRUE NORTH

VICINITY MAP | NOT SCALED

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
NO	DATE	BY	DESCRIPTION
	REVISIONS		

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE: As indicated
PROJECT NUMBER: 2015800

GENERAL NOTES & PROJECT DIRECTORY

DRAWING NUMBER: A0.1

4/14/2021 3:20:35 PM
C:\Users\evasquez\Documents\2015800_3-CD_PCCD Laney College Central Utility Plant_evasquez.rvt

DRAWING INDEX

DWG REF NO	DESCRIPTION
	INDEX STRUCTURAL
S0.01	GENERAL NOTES
S0.02	GENERAL NOTES
S1.01	TYPICAL CONCRETE DETAILS
S1.02	TYPICAL CONCRETE DETAILS
S1.03	TYPICAL CONCRETE DETAILS
S1.04	TYPICAL CMU DETAILS
S1.05	DETAILS
S2.00	NEW UTILITY BUILDING - PLANS
	INDEX MECHANICAL
M0.01	MECHANICAL LEGENDS & NOTES
M0.02	HVAC BASIS OF DESIGN
M0.03	HVAC EQUIPMENT SCHEDULE
M0.04	HVAC EQUIPMENT SCHEDULES
M2.01	MECHANICAL DEMOLITION PLAN
M2.02	MECHANICAL SITE PLAN
M2.03	BUILDING E - MECHANICAL DUCT PLAN
M2.04	BUILDING E - MECHANICAL PIPE PLAN
M2.05	BUILDING AA UG MECH PIPING PLAN
M2.06	BUILDING AA MECHANICAL PIPING PLAN
M4.01	CHILLED WATER PLANT PIPING SCHEMATIC
M4.02	HOT WATER PLANT PIPING SCHEMATIC
M5.01	HVAC DETAILS
M5.02	HVAC DETAILS
M5.03	HVAC DETAILS
M5.04	HEATING HOT WATER SYSTEM SKID DETAIL
M5.05	HHW TERTIARY PUMP SKID DETAIL
M5.06	CHILLED WATER SKID DETAIL
P1.04	BUILDING AA PLUMBING PLAN
	INDEX PLUMBING
P0.01	PLUMBING LEGENDS AND NOTES
P0.02	PLUMBING EQUIPMENT SCHEDULES
P1.01	PLUMBING SITE PLAN
P1.02	BUILDING E PLUMBING FLOOR PLAN
P1.03	BUILDING AA UG PLUMBING PLAN
	INDEX ELECTRICAL
E0.01	ELECTRICAL LEGEND AND ABBREVIATIONS
E0.61	PANEL SCHEDULES
E1.01	ELECTRICAL SITE PLAN
E2.01	LIGHTING PLAN - LEVEL 1 - BLDG A
E3.01	POWER PLAN - LEVEL 1 - BLDG A
E3.10	DEMOLITION POWER PLAN - LEVEL 1 - BLDG E
E3.11	POWER PLAN - LEVEL 1 - BLDG E
E5.10	ELECTRICAL NEW ONE-LINE, FEEDER SCHEDULE
E5.11	ELECTRICAL EXISTING ONE-LINE

DWG REF NO	DESCRIPTION
	INDEX TITLE
A0.1	GENERAL NOTES & PROJECT DIRECTORY
A0.2	DRAWING INDEX
A0.3	DRAFTING SYMBOLS AND MATERIALS
A0.4	ARCHITECTURAL DRAWING ABBREVIATIONS
A0.5	SITE CODE ANALYSIS & ACCESSIBILITY
A0.6	FIRE ACCESS PLAN
A0.7	BUILDING CODE ANALYSIS
	INDEX CIVIL
C1.0	COVER SHEET
C1.1	TOPOGRAPHIC SURVEY (BY OTHERS - FOR REFERENCE ONLY)
C1.2	TOPOGRAPHIC SURVEY (BY OTHERS - FOR REFERENCE ONLY)
C2.0	DEMOLITION PLAN WEST
C2.1	DEMOLITION PLAN EAST
C3.0	SITE UTILITY PLAN WEST
C3.1	SITE UTILITY PLAN EAST
C4.0	UTILITY CROSS-SECTION DETAILS
C5.0	CIVIL CONSTRUCTION DETAILS
C5.1	CIVIL CONSTRUCTION DETAILS
	INDEX ARCHITECTURAL
A1.0	ENLARGED DEMO SITE PLAN - WEST
A1.1	ENLARGED DEMO SITE PLAN - EAST
A1.2	ENLARGED SITE PLAN - WEST
A1.3	ENLARGED SITE PLAN - EAST
A1.4	ENLARGED EXISTING SITE PARKING
AA2.1	BLDG AA - FIRST FLOOR PLAN
AA4.1	BLDG AA - ROOF PLAN
AA5.1	BLDG AA - EXTERIOR ELEVATIONS
AA5.2	BLDG AA - BUILDING SECTIONS
AE2.1	BLDG E - FIRST FLOOR DEMO PLAN
AE2.2	BLDG E - FIRST FLOOR PLAN
	INDEX ARCHITECTURAL DETAILS
2.1	SITE DETAILS
7.1	THERMAL AND MOISTURE PROTECTION
8.1	DOOR AND FRAME SCHEDULE, DOOR DETAILS
9.1	ROOM FINISH SCHEDULE AND WALL DETAILS
10.1	SPECIALTY DETAILS
10.2	SPECIALTY DETAILS
	TOTAL NUMBER OF SHEETS
	77

DRAWING INDEX CODE

DRAWING DISCIPLINE PREFIX INDEX

A. ARCHITECTURAL
C. CIVIL
D. INTERIOR DESIGN / FURNITURE
E. ELECTRICAL
F. FIRE PROTECTION / SPRINKLER SYSTEM
G. GRAPHICS
H. HAZARDOUS MATERIALS
K. DIETARY / FOOD SERVICE
L. LANDSCAPING
M. MECHANICAL
P. PLUMBING
S. STRUCTURAL
T. TELECOMMUNICATIONS

DRAWING GROUP PREFIX INDEX

0. GENERAL INFORMATION
1. SITE PLANS
2. FLOOR PLANS
3. REFLECTED CEILING PLANS
4. ROOF PLANS
5. EXTERIOR ELEVATIONS / SECTIONS
6. ENLARGED FLOOR PLANS
7. INTERIOR ELEVATIONS
8. CIRCULATION / STAIRS / ELEVATORS
9. 3D REPRESENTATIONS

DRAWING NUMBER CODE

AH2.2

- DRAWING NUMBER
- GROUP PREFIX INDEX
- BUILDING IDENTITY
- DISCIPLINE PREFIX INDEX

DISCIPLINE OR DRAWING GROUPS NOT INDICATED IN DRAWING INDEX ARE NOT APPLICABLE OR ARE INCLUDED IN THE 16 DIVISIONAL GROUPING OF THE DETAIL DRAWINGS. BUILDING IDENTITY DESIGNATIONS MAY OR MAY NOT BE UTILIZED. REFER TO KEY PLANS AND DRAWING INDEX FOR APPLICATION OF BUILDING DESIGNATIONS. THE DISCIPLINE AND DRAWING GROUPS ARE INTEGRAL WITH THE DETAIL DRAWINGS AND ARE NOT COMPLETE IN THEMSELVES. IN CASE OF DISCREPANCY BETWEEN THE INDEX AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.

ARCHITECTURAL DETAIL DRAWING PREFIX INDEX

DIVISION 1 - GENERAL REQUIREMENTS
DIVISION 2 - SITE WORK
DIVISION 3 - CONCRETE
DIVISION 4 - MASONRY
DIVISION 5 - METALS
DIVISION 6 - WOOD AND PLASTICS
DIVISION 7 - THERMAL AND MOISTURE PROTECTION
DIVISION 8 - DOORS AND WINDOWS
DIVISION 9 - FINISHES
DIVISION 10 - SPECIALTIES
DIVISION 11 - EQUIPMENT
DIVISION 12 - FURNISHINGS
DIVISION 13 - SPECIAL CONSTRUCTION
DIVISION 14 - CONVEYING SYSTEMS
DIVISION 15 - MECHANICAL - NOT USED
DIVISION 16 - ELECTRICAL - NOT USED

DETAIL DRAWING CODE

8.4

- DRAWING NUMBER
- DIVISION PREFIX INDEX

THE DIVISION PREFIX NUMBERS ARE THOSE IDENTIFIED BY THE 16 DIVISION GROUPING SYSTEM OF MASTER FORMAT AS PUBLISHED BY THE CONSTRUCTION SPECIFICATION INSTITUTE (CSI) AND SHALL NOT BE SOLEY REPRESENTATIVE OF REQUIREMENTS FOR ANY ONE DIVISION. THOSE DIVISIONS NOTED AS BEING NOT USED OR OMITTED ARE NOT APPLICABLE OR ARE INCLUDED UNDER DISCIPLINE DRAWINGS. IN CASE OF DISCREPANCY BETWEEN THE INDEX AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.

ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE C-25998 04-31-23 STATE OF CALIFORNIA
DRAFT NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE:
PROJECT NUMBER: 2015800

DRAWING INDEX

DRAWING NUMBER: **A0.2**

DRAFTING SYMBOLS LEGEND

NEW / REQUIRED POINT ELEVATION (PLAN)

EXISTING POINT ELEVATION (PLAN)

SURFACE DRAINAGE
ARROW INDICATES DIRECTION OF FLOW

SITE REFERENCE GRID
WORK POINT COORDINATES

PROJECT NORTH

COLUMN REFERENCE GRIDS
B,2.3 = COLUMN DESIGNATION

BUILDING ELEVATIONS
AA5.1 = SHEET DESIGNATION
1 = DETAIL DESIGNATION ON SHEET
ARROW INDICATES DIRECTION OF VIEW

INTERIOR ELEVATIONS
AA5.1 = SHEET DESIGNATION
1, 2, 3, 4 = DETAIL DESIGNATION ON SHEET
ARROW INDICATES DIRECTION OF VIEW

BUILDING SECTION
1 = SECTION DESIGNATION
A5.2 = REFERENCE DRAWING NUMBER
ARROW INDICATES DIRECTION OF VIEW

WALL SECTION
1 = SECTION DESIGNATION
A5.3 = REFERENCE DRAWING NUMBER
ARROW INDICATES DIRECTION OF VIEW

DETAIL
1 = DETAIL DESIGNATION
8.3 = REFERENCE DRAWING NUMBER

AREA IDENTITY/ CODE ANALYSIS
LOBBY = ROOM NAME
E1 = OCCUPANCY GROUP
6 = SPACE USE - REF SPACE USE SCHEDULE
20 = OCCUPANT LOAD FACTOR (CBC TABLE 1004.5)
900 = FLOOR AREA - SQUARE FEET
45 = OCCUPANT LOAD (CBC TABLE 1004.5)
* = OCCUPANT LOAD SIGN REQUIRED WHEN NOTED - (CBC SEC 1004.9) REF SIGNAGE SCHEDULE
76 = ACCUMULATIVE OCCUPANT LOAD OF SPACE WHEN APPLICABLE

AREA IDENTITY/ PLAN
LOBBY = ROOM NAME
A230 = AREA IDENTITY
A - BUILDING OR AREA DESIGNATION
2 - FLOOR NUMBER
30 - ROOM NUMBER

REVISION
1 = REVISION NUMBER

EQUIPMENT IDENTIFICATION
123 = EQUIPMENT NUMBER

GLAZED OPENING OR WINDOW TYPE
ALPHABETICAL DESIGNATION = GLAZED OPENING
NUMERICAL DESIGNATION = WINDOW TYPE

DOOR IDENTIFICATION
A = BUILDING DESIGNATION
2 = FLOOR NUMBER
50 = DOOR NUMBER

REFERENCE NOTE IDENTIFICATION
06 = DIVISIONAL PREFIX
54 = NOTE NUMBER

WALL IDENTIFICATION
C = WALL TYPE DESIGNATION - REF SCHEDULE
4 = NOMINAL STUD OR MASONRY SIZE
2 = FIRE RATING IN HOURS
B = ADDITIONAL REMARKS - REF SCHEDULE
* = OPTIONAL CHARACTER

TOILET ACCESSORY IDENTIFICATION
3 = ACCESSORY NUMBER - REF SCHEDULE
A = ACCESSIBLE WHEN NOTED

CABINET DESIGNATION
100 = WI CABINET NUMBER
M = MODIFIED AS NOTED
L = LOCK WHEN NOTED

LEVEL LINE, CONTROL POINT
FFE 0'-0" = ELEVATION

STAIR DIRECTION SYMBOL
NUMBER AND SIZE OF TREADS AND RISERS IN INCHES

MATCH LINE AND AREA DESIGNATOR
SHADED PORTION IS THE SIDE CONSIDERED

BAR SCALE
SCALE : 1/8" = 1'-0"

CENTER LINES, FLOOR LINES AND LEVEL LINES

SECTION LINES

PROPERTY LINES, BOUNDRY LINES AND MATCH LINES

HIDDEN CONSTRUCTION FEATURE

BREAKS OF BUILDING COMPONENTS

MATERIALS INDICATION LEGEND

PLAN / SECTION

EARTH

POROUS FILL (STONE, GRAVEL, ETC.)

ROCK

ASPHALT PAVING

CAST-IN-PLACE CONCRETE (OR CONCRETE FILL)

PRECAST CONCRETE (GLASS FIBER REINFORCED CONCRETE)

CEMENTITIOUS DECKS & TOPPINGS (GYPSUM, INSULATING CONCRETE)

BRICK (COMMON OR FACE, LARGE SCALE)

GLAZED BRICK

FIRE BRICK

CONCRETE MASONRY UNITS (CMU, LARGE SCALE CONCRETE BLOCK)

GLAZED CONCRETE MASONRY UNITS

GLASS UNIT MASONRY

GROUT

CUT STONE (MARBLE, GRANITE, LIMESTONE)

CAST STONE

SLATE, SOAPSTONE, FLAGGING

STRUCTURAL CLAY TILE

GLAZED STRUCTURAL CLAY TILE

ALUMINUM (LARGE SCALE)

STEEL (LARGE SCALE)

ORNAMENTAL METAL (BRASS, BRONZE)

METAL (SMALL SCALE, STRUCTURAL OR SHEET)

PARTICLE BOARD

PLYWOOD (LARGE SCALE)

WOOD FINISHED

WOOD ROUGH/CONTINUOUS (2 X 10 - SIZE NOTED)

WOOD ROUGH/BLOCKING (2 X 10 - SIZE NOTED)

INSULATION (LOOSE OR BATT)

INSULATION (RIGID)

GLASS (LARGE SCALE)

ACOUSTICAL TILE

CERAMIC TILE

GYPSUM BOARD

SAND, CEMENT, ETC.

METAL LATH AND PLASTER

RESILIENT FLOORING

CARPET

TERRAZZO

ELEVATION

CONCRETE, PLASTER, GYPSUM BOARD

MARBLE, FIELD STONE

MASONRY (BRICK OR CMU)

GLAZING (CLEAR, TEMPERED, ETC.)

GLAZING (WIRE, LABELED)

SHEET METAL

CERAMIC TILE

WALL MATL.'S LEGEND

PLAN

EXISTING WALL TO BE REMOVED

EXISTING WALL TO REMAIN

STUD WALL - REF SCHEDULE FOR STUD TYPE, SIZE AND SPACING

BRICK MASONRY WALL - REF SCHEDULE FOR SIZE

CONCRETE MASONRY WALL (CMU) - REF SCHEDULE FOR TYPE AND SIZE

COMPOSITE MASONRY WALL - REF SCHEDULE FOR MASONRY TYPES AND SIZES

COMPOSITE VENEER WALL - REF SCHEDULE FOR MASONRY AND STUD TYPE, SIZE AND SPACING

SHAFT WALL - REF SCHEDULE FOR STUD TYPE, SIZE AND SPACING

SOUND RATED WALL - REF SCHEDULE FOR WALL MATERIALS

CONCRETE WALL - REF SCHEDULE FOR SIZE

ONE HOUR FIRE RATED WALL - REF PLAN AND SCHEDULE FOR WALL MATERIALS AND UBC/UL/GA LISTING

TWO HOUR FIRE RATED WALL - REF PLAN AND SCHEDULE FOR WALL MATERIALS AND UBC/UL/GA LISTING

GENERAL NOTES:

1. REFER TO FINISH SCHEDULE FOR WALL FINISHES
2. REFER TO WALL TYPE SCHEDULE FOR WALL DETAILS AND MATERIALS OF CONSTRUCTION
3. ALL WALL DEFINITIONS MAY NOT BE USED, REFER TO FLOOR PLAN(S) FOR APPLICABLE WALL DEFINITIONS USED

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE: 1 : 1
PROJECT NUMBER: 2015800

DRAFTING SYMBOLS AND MATERIALS

DRAWING NUMBER: A0.3

ABBREVIATIONS A-D

A/C	- AIR CONDITIONING
A/E	- ARCHITECT / ENGINEER
AB	- ANCHOR BOLT
ABAN	- ABANDON
ABC	- AGGREGATE BASE COURSE
ABV	- ABOVE
AC	- ASPHALTIC CONCRETE
ACC	- ACCESS(IBLE)
ACST	- ACOUSTICAL
ACT	- ACOUSTICAL CEILING TILE
AD	- AREA DRAIN
ADDM	- ADDENDUM
ADH	- ADHESIVE
ADJ	- ADJUSTABLE
ADJC	- ADJACENT
AFF	- ABOVE FINISHED FLOOR
AFG	- ABOVE FINISHED GRADE
AGGR	- AGGREGATE
AHU	- AIR HANDLING UNIT
AL	- ALUMINUM
ALT	- ALTERNATE
ANC	- ANCHOR, ANCHORAGE
APLD	- APPLIED
APPRX	- APPROXIMATE
ARCH	- ARCHITECT(URAL)
ASC	- ABOVE SUSPENDED CEILING
ASPH	- ASPHALT
ASSY	- ASSEMBLY
ASYM	- ASYMMETRICAL
AWG	- AMERICAN WIRE GAUGE
BC	- BACK OF CURB
BD	- BOARD
BITUM	- BITUMINOUS
BLDG	- BUILDING
BLK	- BLOCK
BLKG	- BLOCKING
BLW CLG	- BELOW CEILING
BLW FFLR	- BELOW FINISH FLOOR
BLW	- BELOW
BM	- BENCH MARK
BN	- BOUNDARY NAILING
BOT	- BOTTOM
BRCG	- BRACING
BRDG	- BRIDGING
BRG	- BEARING
BRK	- BRICK
BRKT	- BRACKET
BRS	- BRASS
BRZ	- BRONZE
BS	- BOTH SIDES
BSMT	- BASEMENT
BTWN	- BETWEEN
BUR	- BUILT-UP ROOFING
BW	- BOTH WAYS
C&G	- CURB AND GUTTER
CAB	- CABINET
CAD	- CADMIUM
CB	- CATCH BASIN
CBB	- CEMENTITIOUS BACKER BOARD
CEM	- CEMENT
CER	- CERAMIC
CFCI	- CONTRACTOR FURNISH CONTRACTOR INSTALLED
CFLG	- COUNTERFLASHING
CFOI	- CONTRACTOR FURNISH OWNER INSTALLED
CG	- CORNER GUARD
CHBD	- CHALKBOARD
CHFR	- CHAMFER
CI	- CAST IRON
CIR	- CIRCLE
CIRC	- CIRCULAR, CIRCUMFERENCE
CJ	- CONSTRUCTION JOINT
CL	- CHAIN LINK
CLG	- CEILING
CLJ	- CONTROL JOINT
CLL	- CONTRACT LIMIT LINE
CLOS	- CLOSURE
CLR	- CLEAR(ANCE)
CLRM	- CLASSROOM
CMPST	- COMPOSITION
CMU	- CONCRETE MASONRY UNIT
CNCL	- CONCEALED
CNR	- CORNER
CNTR	- COUNTER
COL	- COLUMN
COM	- COMMON
COMB	- COMBINATION
COMPT	- COMPARTMENT
CONC	- CONCRETE
CONF	- CONFERENCE
CONN	- CONNECTION
CONSTR	- CONSTRUCTION
CONT	- CONTINUOUS (ATION)
CONTR	- CONTRACT(OR)
COORD	- COORDINATE
CORR	- CORRIDOR
CPR	- COPPER
CPRS	- COMPRESS(ED), (ION), (IBLE)
CPT	- CARPET(ED)
CRS	- COLD ROLLED STEEL
CS	- COST STONE
CSG	- CASING
CSK	- COUNTERSUNK
CSMT	- CASEMENT
CSWK	- CASEWORK
CT	- CERAMIC TILE
CTB	- CERAMIC TILE BASE
CTF	- CERAMIC TILE FLOOR
CTG	- COATING
CTR	- CENTER
CUFT	- CUBIC FOOT
CUIN	- CUBIC INCH
CUST	- CUSTODIAN
CUYD	- CUBIC YARD
D	- DRAIN
DA	- DOUBLE ACTING
DBL	- DOUBLE
DEMO	- DEMOLISH, DEMOLITION
DEP	- DEPRESSED
DEPT	- DEPARTMENT
DET	- DETAIL
DF	- DRINKING FOUNTAIN
DH	- DOUBLE HUNG
DIA	- DIAMETER
DIAG	- DIAGONAL
DIFF	- DIFFUSER
DIM	- DIMENSION
DISP	- DISPENSER
DIV	- DIVISION
DMPF	- DAMPPROOFING
DMT	- DEMOUNTABLE
DN	- DOWN
DR	- DOOR
DRB	- DRAINBOARD
DRLV	- DOOR LOUVER
DS	- DOWNSPOUT
DSP	- DRY STANDPIPE
DT	- DRAIN TILE
DVTL	- DOVETAIL
DW	- DISHWASHER
DWG	- DRAWING
DWL	- DOWEL
DWR	- DRAWER

ABBREVIATIONS E-K

E	- EAST
EA	- EACH
EAR	- EXHAUST AIR REGISTER
EB	- EXPANSION BOLT
EE	- EACH END
EF	- EACH FACE
EFS	- EXTERIOR FINISH SYSTEM
EHD	- ELECTRIC HAND DRYER
EIFS	- EXTERIOR INSULATION AND FINISH SYSTEM
EJ	- EXPANSION JOINT
EL	- ELEVATION
ELAST	- ELASTOMERIC
ELEC	- ELECTRIC(AL)
ELEV	- ELEVATOR
EM	- EXPANDED METAL
EMER	- EMERGENCY
EN	- EDGE NAILING
ENCL	- ENCLOSE (URE)
ENGR	- ENGINEER
ENTR	- ENTRANCE
EP	- ELECTRICAL PANELBOARD
EQ	- EQUAL
EQUIP	- EQUIPMENT
ESC	- ESCUTCHEON
ESCL	- ESCALATOR
ESMT	- EASEMENT
EW	- EACH WAY
EWC	- ELECTRIC WATER COOLER
EWH	- ELECTRIC WATER HEATER
EWS	- EYE WASH STATION
EXC	- EXCAVATE
EXG	- EXISTING
EXH	- EXHAUST
EXP	- EXPOSED
EXPN	- EXPANSION
EXS	- EXTRA STRONG
EXT	- EXTERIOR
F/F	- FACE TO FACE
FA	- FIRE ALARM
FAB	- FABRIC
FBD	- FIBERBOARD
FBRK	- FIRE BRICK
FCBRK	- FACE BRICK
FD	- FLOOR DRAIN
FDTN	- FOUNDATION
FE	- FIRE EXTINGUISHER
FEC	- FIRE EXTINGUISHER CABINET
FFA	- FROM FLOOR ABOVE
FFB	- FROM FLOOR BELOW
FFEL	- FINISHED FLOOR ELEVATION
FFL	- FINISHED FLOOR LINE
FGL	- FIBERGLASS
FHC	- FIRE HOSE CABINET
FHMS	- FLATHEAD MACHINE SCREW
FHWS	- FLATHEAD WOOD SCREW
FIN	- FINISH(ED)
FJT	- FLUSH JOINT
FLASH	- FLASH(ING)
FLDG	- FOLDING
FLG	- FLOORING
FLR	- FLOOR
FLUOR	- FLUORESCENT
FN	- FIELD NAILING
FOC	- FACE OF CONCRETE
FOF	- FACE OF FINISH
FOG	- FACE OF GRID
FOM	- FACE OF MASONRY
FOS	- FACE OF STUDS
FPL	- FIREPLACE
FPRF	- FIREPROOF(ING)
FR	- FRAME(D), (ING)
FRG	- FIBER REINFORCED GYPSUM
FRGL	- FIRE RESISTIVE GLAZING
FRP	- FIBERGLASS REINFORCED PLASTIC
FRTD	- FIRE RATED
FRTW	- FIRE RETARDANT TREATED WOOD
FRZ	- FREEZER
FS	- FAR SIDE
FSTN	- FASTEN, FASTENER
FT	- FOOT OR FEET
FTG	- FOOTING
FURG	- FURRED (ING)
FUT	- FUTURE
FWC	- FABRIC WALL COVERING
GA	- GAGE
GAL	- GALLON
GALV	- GALVANIZED
GB	- GRAB BAR
GFRC	- GLASS FIBER REINFORCED CONCRETE
GI	- GALVANIZED IRON
GL	- GLASS
GLU LAM	- GLUE LAMINATED
GLZ	- GLAZING
CLZCMU	- GLAZED CONCRETE MASONRY UNITS
GND	- GROUND
GPC	- GYPSUM PLASTER CEILING
GR LN	- GRADE LINE
GR BM	- GRADE BEAM
GR	- GRADE (ING)
GRBD	- GARBAGE DISPOSER
GSB	- GYPSUM SHEATHING BOARD
GSS	- GALVANIZED STEEL SHEET
GST	- GALVANIZED STRUCTURAL TILE
GT	- GROUT
GVL	- GRAVEL
GYP	- GYPSUM
HB	- HOSE BIB
HC	- HOLLOW CORE
HD	- HEAVY DUTY
HD JT	- HEAD JOINT
HDAS	- HEADED ANCHOR STUD
HDR	- HEADER
HDW	- HARDWARE
HDWD	- HARDWOOD
HEX	- HEXAGONAL
HGR	- HANGER
HLDN	- HOLD DOWN
HM	- HOLLOW METAL
HMD	- HOLLOW METAL DOOR
HMDF	- HOLLOW METAL DOOR AND FRAME
HMF	- HOLLOW METAL FRAME
HNDRL	- HANDRAIL
HORIZ	- HORIZONTAL
HPT	- HIGH POINT
HR	- HOUR
HT	- HEIGHT
HTG	- HEATING
HVAC	- HEATING/VENTILATING/ AIR CONDITIONING
HWH	- HOT WATER HEATER
ID	- INSIDE DIAMETER
INCL	- INCLUDE(D), (ING)
INSTL	- INSTALL
INSUL	- INSULATE(D), (ION)
INT	- INTERIOR
INV	- INVERT
IPS	- IRON PIPE SIZE
JAN	- JANITOR
JST	- JOIST
JT	- JOINT
KIT	- KITCHEN
KO	- KNOCKOUT
KPL	- KICKPLATE

ABBREVIATIONS L-P

LAB	- LABORATORY
LAD	- LADDER
LAM	- LAMINATE(D)
LAV	- LAVATORY
LBL	- LABEL
LBR	- LUMBER
LB	- POUND
LCT	- LINOLEUM COMPOSITE TILE
LDR	- LEADER
LG	- LENGTH
LH	- LEFT HAND
LHR	- LEFT HAND REVERSE
LKNT	- LOCKNUT
LKR	- LOCKER
LLH	- LONG LEG HORIZONTAL
LLV	- LONG LEG VERTICAL
LMST	- LIMESTONE
LNDSCP	- LANDSCAPE(D)
LNTL	- LINTEL
LP	- LIGHTPROOF
LPT	- LOW POINT
LT	- LIGHT
LTWT	- LIGHT WEIGHT
LVL	- LEVEL(ER)
LVR	- LOUVER
LW	- LIGHTWEIGHT CONCRETE
LWIC	- LIGHTWEIGHT INSULATING CONCRETE
MAINT	- MAINTAIN(ANCE)
MAS	- MASONRY
MATL	- MATERIAL
MAX	- MAXIMUM
MB	- MACHINE BOLT
MBR	- MEMBER
MC	- MEDICINE CABINET
MCB	- METAL CORNER BEAD
MDO	- MEDIUM DENSITY OVERLAID
MECH	- MECHANICAL
MED	- MEDIUM
MEMB	- MEMBRANE
MEZZ	- MEZZANINE
MFD	- METAL FLOOR DECKING
MFR	- MANUFACTURE(R)
MH	- MANHOLE
MIN	- MINIMUM
MIRR	- MIRROR
MISC	- MISCELLANEOUS
ML	- METAL LATH
MLDG	- MOLDING
MLWK	- MILLWORK
MO	- MASONRY OPENING
MOD	- MODULE (AR)
MR	- MOISTURE RESISTANT
MRB	- MARBLE
MRD	- METAL ROOF DECKING
MS	- MACHINE SCREW
MTD	- MOUNTED
MTL	- METAL
MTR	- MORTAR
MULL	- MULLION
MVBL	- MOVEABLE
MWP	- MEMBRANE WATER PROOFING
N	- NORTH
NA	- NOT APPLICABLE
NAT	- NATURAL
NCOMBL	- NONCOMBUSTIBLE
NE	- NOT EXCEEDING
NF	- NEAR FACE
NIC	- NOT IN CONTRACT
NLB	- NON LOAD BEARING
NM	- NON METALLIC
NO	- NUMBER
NOM	- NOMINAL
NR	- NOISE REDUCTION
NRC	- NOISE REDUCTION COEFFICENT
NRCA	- NATIONAL ROOFING CONTRACTORS ASSOCIATION
NS	- NEAR SIDE
NTS	- NOT TO SCALE
O/O	- OUT TO OUT
OA	- OVERALL
OBS	- OBSCURE
OC	- ON CENTER(S)
OD	- OUTSIDE DIAMETER
OFCI	- OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED OWNER INSTALLED
OFS	- OUTSIDE FACE OF STUD
OHMS	- OVALHEAD MACHINE SCREW
OHWS	- OVALHEAD WOOD SCREW
OPH	- OPPOSITE HAND
OPNG	- OPENING
OPP	- OPPOSITE
OPQ	- OPAQUE
OPR	- OPERABLE
ORD	- OVERFLOW ROOF DRAIN
OVFL	- OVERFLOW
OVHD	- OVERHEAD
PAR	- PARALLEL
PAT	- PATTERN
PB	- PANIC BAR
PBD	- PARTICLE BOARD
PC	- PORTLAND CEMENT
PCC	- PRECAST CONCRETE
PCP	- PORTLAND CEMENT PLASTER
PED	- PEDESTAL
PERF	- PERFORATE(D)
PERIM	- PERIMETER
PERP	- PERPENDICULAR
PGBD	- PEGBOARD
PH	- PHASE
PHS	- PHILLIPS HEAD SCREW
PI	- POINT OF INTERSECTION
PIV	- POST INDICATOR VALVE
PL	- PROPERTY LINE
PLAM	- PLASTIC LAMINATE
PLAS	- PLASTER
PLBG	- PLUMBING
PLYWD	- PLYWOOD
PNEU	- PNEUMATIC
PNL	- PANEL
PNT	- PAINT(ED)
POL	- POLISHED
POLY	- POLYETHYLENE
PORC	- PORCELAIN
PORT	- PORTABLE
PR	- PAIR
PRCST	- PRECAST
PREFAB	- PREFABRICATE(D)
PREFIN	- PREFINISHED
PREFMD	- PREFORMED
PRKG	- PARKING
PRML	- PREMOLDED
PROJ	- PROJECT
PROP	- PROPERTY
PSONC	- PRESTRESSED CONCRETE
PT	- POINT
PTCONC	- POST TENSIONED CONCRETE
PTD	- PAPER TOWEL DISPENSER
PTN	- PARTITION
PTR	- PAPER TOWEL RECEPTOR
PVC	- POLYVINYL CHLORIDE
PVG	- PAVE(D), (ING)
PVMT	- PAVEMENT

ABBREVIATIONS Q-S

QT	- QUARRY TILE
QTB	- QUARRY TILE BASE
QTF	- QUARRY TILE FLOOR
QTR	- QUARTER
QTY	- QUANTITY
R	- RISER
RA	- RETURN AIR
RAB	- RABBET
RAD	- RADIUS
RB	- RESILIENT BASE
RBR	- RUBBER
RCP	- REINFORCED CONCRETE PIPE
RCVR	- RECEIVER
RD	- ROOF DRAIN
RDGINS	- RIGID INSULATION
RDWY	- ROADWAY
REBAR	- REINFORCING STEEL BARS
REC	- RECESSED
RECT	- RECTANGULAR
REF	- REFERENCE
REFL	- REFLECT(ED), (IVE), (OR)
REFR	- REFRIGERATOR
REG	- REGISTER
REINF	- REINFORCE(D), (ING), (MENT)
REM	- REMOVABLE
REP	- REPAIR
REPL	- REPLACE
REQD	- REQUIRED
RESIL	- RESILIENT
RET	- RETURN
REV	- REVISION(S), REVISED
RF	- RESILIENT FLOORING
RFG	- ROOFING
RFH	- ROOF HATCH
RH	- RIGHT HAND
RHMS	- ROUND HEAD MACHINE SCREW
RHR	- RIGHT HAND REVERSE
RHWS	- ROUND HEAD WOOD SCREW
RL	- ROOF LEADER
RLG	- RAILING
RM	- ROOM
RND	- ROUND
RO	- ROUGH OPENING
ROW	- RIGHT OF WAY
RS	- ROUGH SAWN
RTF	- RUBBER TILE FLOORING
RTU	- ROOF TOP UNIT
RV	- ROOF VENT
RVL	- REVEAL
RVS	- REVERSE (SIDE)
RVT	- RIVET(ED)
RWD	- REDWOOD
RWL	- RAIN WATER LEADER
S	- SOUTH
S2S	- SURFACED TWO SIDES
S4S	- SURFACED FOUR SIDES
SA	- SUPPLY AIR
SALV	- SALVAGE
SAT	- SUSPENDED ACOUSTICAL TILE
SB	- SPLASH BLOCK
SBSTR	- SUBSTRATE
SC	- SOLID CORE
SCD	- SEAT COVER DISPENSER
SCHED	- SCHEDULE
SCP	- SCUPPER
SCRN	- SCREEN
SD	- STORM DRAIN
SDBL	- SANDBLAST
SECT	- SECTION
SGL	- SINGLE
SHR	- SHOWER
SHT	- SHEET(ING)
SHTHG	- SHEATHING
SHV	- SHELVES (ING)
SIM	- SIMILAR
SKLT	- SKYLIGHT
SLD	- SEALED
SLDG	- SLIDE (ING)
SLDR	- SOLDER
SLNT	- SEALANT
SLV	- SLEEVE
SMACNA	- SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SMLS	- SEAMLESS
SND	- SANITARY NAPKIN DISPENSER
SNDINS	- SOUND INSULATION
SNDU	- SANITARY NAPKIN DISPOSAL UNIT
SNT	- SEALANT
SPC	- SUSPENEDED PLASTER CEILING
SPD	- SOAP DISPENSER
SPEC	- SPECIFICATION(S) (ED)
SPRT	- SUPPORT
SQ	- SQUARE
SSK	- SERVICE SINK
SST	- STAINLESS STEEL
STA	- STATION
STAG	- STAGGERED
STC	- SOUND TRANSMISSION CLASS
STD	- STANDARD
STG	- SEATING
STIF	- STIFFENER
STIR	- STIRRUP
STL	- STEEL
STOR	- STORAGE
STG	- STRAIGHT
ST	- STREET
STRCT	- STRUCTURAL
STU	- STRUCT
SUSP	- SUSPENDED
SV	- SHEET VINYL
SYMM	- SYMMETRICAL
SYNTH	- SYNTHETIC
SYS	- SYSTEM

ABBREVIATIONS T-Y

T	- TREAD
T & B	- TOP AND BOTTOM
T & G	- TONGUE AND GROOVE
TB	- THRU BOLT
TBE	- THREADED BOTH END
TBM	- TEMPORARY BENCH MARK
TD	- TOWEL DISPENSER
TDR	- TOWEL DISPENSER / RECEPTACLE
TEL	- TELEPHONE
TEMP	- TEMPORARY
TER	- TERRAZZO
TFA	- TO FLOOR ABOVE
TFB	- TO FLOOR BELOW
THD	-THREAD(ED)
THERM	- THERMAL
THK	- THICK(NESS)
THRES	- THRESHOLD
TKBD	- TACKBOARD
TMPD	- TEMPERED
TOB	- TOP OF BEAM
TOC	- TOP OF CURB
TOF	- TOP OF FOOTING
TOFF	- TOP OF FINISH FLOOR
TOJ	- TOP OF JOIST
TOL	- TOLERANCE
TOM	- TOP OF MASONRY
TOP	- TOP OF PARAPET
TOPV	- TOP OF PAVEMENT
TOS	- TOP OF STEEL
TOW	- TOP OF WALL
TPD	- TOILET PAPER DISPENSER
TPTN	- TOILET PARTITION
TS	- TUBE STEEL
TWLB	- TOWEL BAR
TV	- TELEVISION
TYP	- TYPICAL
UC	- UNDERCUT
UGND	- UNDERGROUND
UL	- UNDERWRITERS LABORATORY
UNFIN	- UNFINISHED
UON	- UNLESS OTHERWISE NOTED
UR	- URINAL
VAR	- VARIES
VB	- VINYL BASE
VCT	- VINYL COMPOSITION TILE
VERT	- VERTICAL
VEST	- VESTIBULE
VFAT	- VINYL FACED ACOUSTIC TILE
VIF	- VERIFY IN FIELD
VJ	- V-JOINT(ED)
VNR	- VENEER
VR	- VAPOR RETARDER
VTR	- VENT THROUGH ROOF
VWC	- VINYL WALL COVERING
W/	- WITH
W/W	- WALL TO WALL
W/O	- WITHOUT
W	- WEST
WBL	- WOOD BLOCKING
WC	- WATER CLOSET
WD	- WOOD
WDP	- WOOD PANELING
WDW	- WINDOW
WF	- WIDE FLANGE
WFS	- WOOD FURRING STRIP
WGL	- WIRED GLASS
WH	- WALL HUNG
WI	- WROUGHT IRON
WID	-WIDTH, WIDE
WLD	- WELD(ED)
WM	- WIRE MESH
WP	- WATERPROOF(ING)
WPT	- WORK POINT
WR	- WIRE ROPE
WS	- WOOD SCREW
WSCT	- WAINSCOT
WT	- WEIGHT
WWF	- WELDED WIRE FABRIC
XBRACE	- CROSS BRACE
XFMR	- TRANSFORMER
XSECT	- CROSS SECTION
YCO	- YARD CLEANOUT
YD	- YARD

SYMBOLS

&	- AND
∠	- ANGLE
@	- AT
CL	- CENTERLINE
⊏	- CHANNEL
Ø	- DIAMETER OR ROUND
(E)	- EXISTING
(N)	- NEW
d	- PENNY (NAILS)
⊥	- PERPENDICULAR
PL	- PLATE
#	- POUND OR NUMBER

REFERENCE NOTES

KEYNOTE	DESCRIPTION
01AA	(E) STOREFRONT TO BE REMOVED & PROTECTED DURING CONSTRUCTION FOR REMOVAL OF INTERIOR MECHANICAL EQUIPMENT. CONTRACTOR TO REINSTALL IN GOOD CONDITION
01BF	(E) BOLLARD TO BE DEMOLISHED & REPLACED, REF DTL 5/2.1
01BG	(E) BOLLARD TO REMAIN, TYP- PROTECT IN PLACE
01BH	(E) BOLLARD TO BE DEMOLISHED
01BL	(E) ROOF OVERHANG/BUILDING LINE ABOVE
01CJ	(E) SITE LIGHTING TO BE REMOVED: SALVAGE & STORE POLES, ELECTRICAL EQUIPMENT, AND FURNISHINGS. DEMOLISH (E) BASE & CAP UTILITY LINES. CONTRACTOR TO REINSTALL IN KIND
01CL	(E) SITE UTILITY BOX TO REMAIN, TYP. IF UNIT IS DISTURBED DURING CONSTRUCTION, CONTRACTOR TO REINSTALL BOX TO IT'S ORIGINAL LOCATION
01CM	(E) SANITARY SEWER CLEAN-OUT TO BE RELOCATED PER CIVIL DWGS
01CN	(E) SITE UTILITY BOX TO BE REMOVED & REINSTALLED IF IN GOOD CONDITION. REF CIVIL DWGS FOR NEW LOCATION
01CO	(E) DRAIN INLET TO REMAIN, TYP. IF UNIT IS DISTURBED DURING CONSTRUCTION, CONTRACTOR TO REINSTALL TO IT'S ORIGINAL LOCATION
01DA	(E) MONUMENT SIGN TO BE REMOVED, SALVAGED & STORED DURING CONSTRUCTION. CONTRACTOR TO REINSTALL IN KIND
01EA	(E) HOT WATER BOILERS TO BE DEMOLISHED
01EB	(E) PRIMARY HOT WATER PUMP TO BE DEMOLISHED
01EC	(E) SECONDARY CHILLED WATER PUMP TO BE DEMOLISHED
01ED	(E) SECONDARY HEATING HOT WATER PUMP TO BE DEMOLISHED
01EF	(E) CHILLER VFD TO BE DEMOLISHED
01EG	(E) CHILLER TO BE DEMOLISHED
01EH	(E) PRIMARY CHILLED WATER PUMP TO BE DEMOLISHED
01EJ	(E) STEAM SYSTEMS TO BE DEMOLISHED
01EK	(E) NON-OPERATIONAL COMPRESSORS TO BE DEMOLISHED
01EL	(E) TERTIARY HOT WATER PUMP TO BE DEMOLISHED
01JG	(E) CONCRETE WALL TO BE DEMOLISHED
01JH	(E) CONCRETE PAD TO BE DEMOLISHED
01JJ	(E) WOOD WALL, FENCE & FOUNDATIONS TO BE DEMOLISHED
01SD	(E) ADA WARNING SURFACE TRUNCATED DOMES TO BE DEMOLISHED AND REPLACED IN KIND
01XH	(E) MANHOLE TO REMAIN; PATCH & REPAIR AS REQD FOR NEW WORK- REF CIVIL DWGS
02DF	6" WIDE x 8'-0" LONG TRENCH DRAIN CENTERED @ BUILDING WALL OPENING, REF AA2.1 & AA5.1 FOR LOCATIONS. SEE CIVIL DWGS FOR CONTINUATION
07AB	OVERFLOW DRAIN OUTLET; REF DTL 8/7.1
07IB	METAL PARAPET CAP, PAINTED - REF DTL 5/7.1
07RB	PAINTED METAL DOWNSPOUT CONNECT TO STORM DRAIN, REF DTL XX/XX
08CB	SCHEDULED DOOR, REF DOOR SCHED SHEET 8.1
09AA	CMU EXPANSION JOINT, REF EXTERIOR ELEVATIONS AA5.1 & STRUCTURAL DWGS FOR ADDITIONAL INFO
09AB	CMU EXPANSION JOINT, REF STRCT DWGS DTL 9/S1.04
09RS	WALL OPENING FOR SURFACE RAIN DRAINAGE
10CD	FIXED METAL LOUVER, REF DTL 5/8.1
15LG	PREFABRICATED METAL ROLL UP DOOR, REF DTL 6/8.1 & 7/8.1
16AA	FUTURE LOCATION OF BLDG TRANSFORMER, NIC
16AB	FUTURE LOCATION OF BLDG GENERATOR, NIC
16AC	FUTURE LOCATION OF BLDG FUEL LEAN PANEL, NIC
16AD	FUTURE LOCATION OF MINI POWER CENTER, NIC
16AE	FUTURE LOCATION OF PORTABLE GENERATOR DOCKING STATION, NIC
16AF	FUTURE LOCATION OF MANUAL TRANSFER SWITCH, NIC
16FA	SURFACE-MOUNTED EXTERIOR LIGHT FIXTURE +9'-0" AFF, TYP. INSTALL PER PLAN- REF ELEC DWGS
16FB	SURFACE-MOUNTED EXTERIOR LIGHT FIGHTURE, REF EXTERIOR ELEVATIONS SHT AA5.1

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT · KEVIN MacQUARRIE · STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

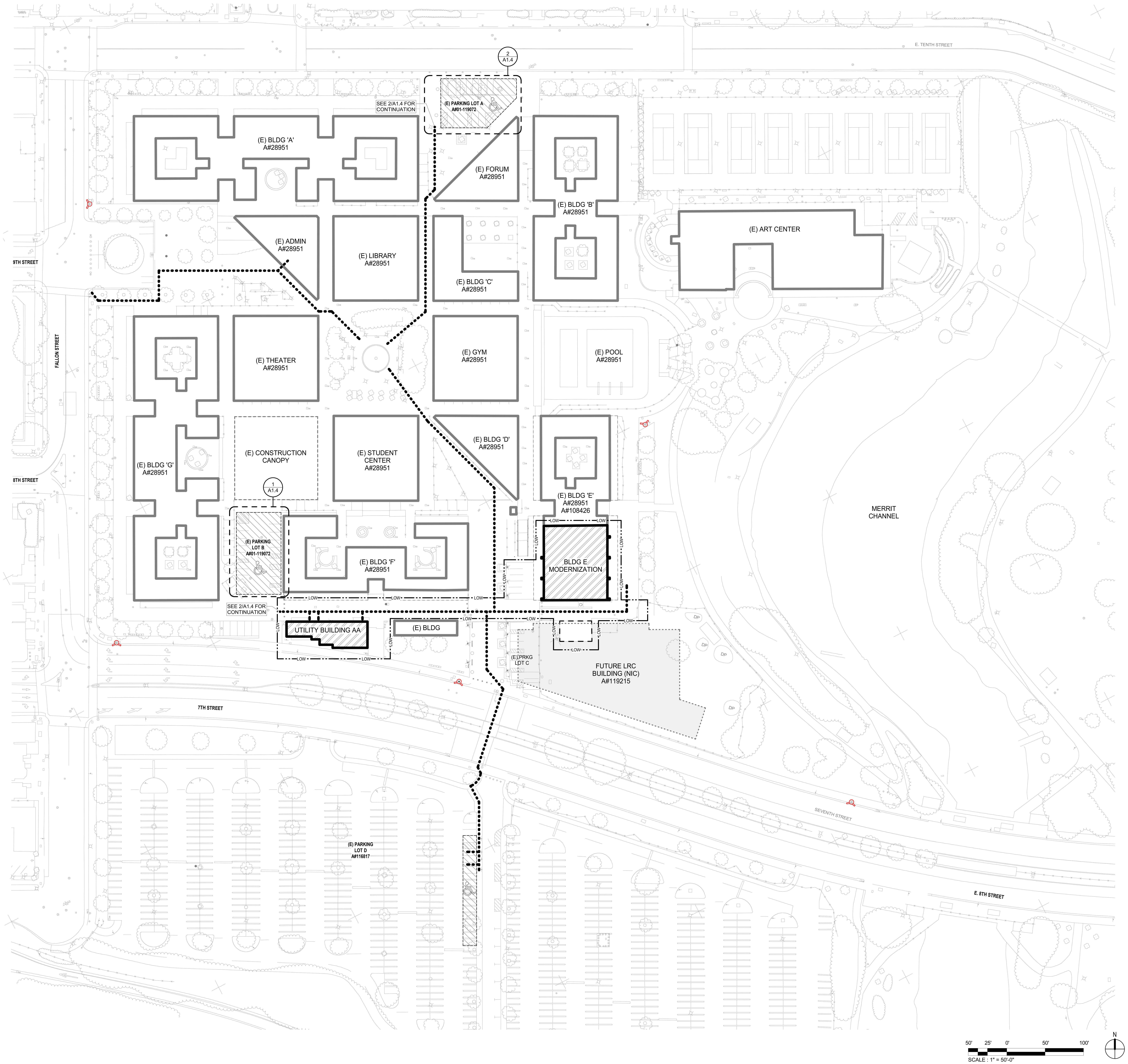
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: 1 : 1
PROJECT NUMBER: 2015800	

ARCHITECTURAL DRAWING ABBREVIATIONS

DRAWING NUMBER: A0.4



OVERALL SITE PLAN | 1" = 50'-0" | 1

GENERAL NOTES & SITE LEGEND

GENERAL NOTES:

1. REFER TO GENERAL NOTES ON SHEET A0.1 FOR GENERAL REQUIREMENTS.
2. REFER TO SHEET A0.7 FOR BUILDING CODE.
4. REFER TO CIVIL DRAWINGS FOR UTILITIES, GRADING, AND SIGNAGE INFORMATION.
5. GATES IN THE PATH OF TRAVEL MUST COMPLY WITH EXIT DOOR REQUIREMENTS OF CALIFORNIA BUILDING CODE (CBC) SECTION 1010. GATE WILL BE PROVIDED WITH PANIC HARDWARE AND A 10" HIGH KICK PLATE AT THE BOTTOM OF BOTH SIDES OF GATE OR SHALL BE PROVIDED WITH SIGN LOCATED ADJACENT TO THE GATE STATING, "GATE TO REMAIN LOCKED IN THE OPEN POSITION DURING BUSINESS / SCHOOL HOURS OR DURING ANY PUBLIC FUNCTIONS". TEXT OF SIGN SHALL BE 1" HIGH IN ALL CAPITAL LETTERS- REF 22/10.1

PROPERTY LINE

LOW — LIMIT OF WORK

EXISTING ROOF, OVERHANGS & COVERED WALKWAYS (FOR REFERENCE ONLY)

EXISTING CHAIN LINK FENCE

EXISTING FIRE HYDRANT; SEE A0.6 FOR MORE INFO

(E) BUILDINGS NIC

UTILITY BUILDING AA

PORTION OF (E) BLDG E 1ST FLOOR TO BE MODERNIZED

FUTURE BUILDING

ACCESSIBLE PATH OF TRAVEL

AP — (E) ACCESSIBLE PARKING

AS — DIRECTIONAL ACCESS SIGN (REF 7/2.1)

FL — FIRE LANE (REF 6/2.1)

FR — PROVIDE TACTILE SIGNAGE STATING "FIRE RISER INSIDE" (REF 10/10.1)

TA — UNAUTHORIZED PARKING SIGN (REF 4/A1.2)

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THE THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

PATH OF TRAVEL, TECHNICAL REQUIREMENTS FOR ACCESSIBLE ROUTE:

"ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:12 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP-RESISTANT. CROSS-SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL."

CAMPUS RECORDS

EXISTING DSA APPLICATION NUMBERS

PROJECT DATE	PROJECT	PROJECT DESCRIPTION	DSA APP NO.
BUILDING			
1968	CAMPUS CONSTRUCTION	INITIAL CAMPUS CONSTRUCTION	028951
1995	FIRE ALARM UPGRADE: PROJECT 152	CAMPUS-WIDE FIRE ALARM UPGRADE	063147
2007	BEGINNER'S INN CULINARY KITCHEN	KITCHEN UPGRADES IN BUILDING E	108426
2010	ADA RENOVATION PROJECTS AT LANEY COLLEGE	CAMPUS-WIDE ADA UPGRADES: RESTROOMS, LOCKER ROOMS, ETC.	111245
PARKING & SITE			
2010	ADA RENOVATION PROJECTS AT LANEY COLLEGE	LOTS: NEAR G-COMPLEX, NEAR FORUM	111245
2018	OVERFLOW PRKG LOT IMPROVEMENTS	LOTS: 4TH ST, 7TH ST	116817
2020	PAVEMENT REHABILITATION	PAVEMENT REHABILITATION THROUGHOUT, RESTRIPING AT N AND SW PARKING LOTS	119072

PARKING TABULATION

PARKING SPACES	STALL TYPE			TOTALS
	STANDARD	ACCESSIBLE		
		STANDARD	VAN	
LANEY COLLEGE NORTH PARKING LOT A ACCESSIBLE PARKING REQ'D (CBC TABLE 11B-208.2)	3	8	1	12
LANEY COLLEGE SOUTHWEST PARKING LOT B ACCESSIBLE PARKING REQ'D (CBC TABLE 11B-208.2)	8	11	2	21
LANEY COLLEGE SOUTHEAST PARKING LOT C ACCESSIBLE PARKING REQ'D (CBC TABLE 11B-208.2)	THE SOUTHEAST ADA PARKING LOT C WILL BE REMOVED IN PREPARATION FOR THE FUTURE LIBRARY EXPANSION PROJECT (A#119215). THESE SIX ADA STALLS WILL BE RELOCATED TO THE SOUTHWEST PARKING LOT B SHOWN ON THIS SHEET TO THE LEFT (A#01-119072).			
SCHOOL PARKING LOT D ACCESSIBLE PARKING REQ'D (CBC TABLE 11B-208.2)	898	9	3	910
TOTALS	909	28	6	943

NOTE: FOR LOCATION OF STANDARD AND VAN ACCESSIBLE PARKING STALLS, REFER TO SHEET A1.4

ARCHITECTS WLC

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | CHECKED: EM

DATE: 03/15/21 | SCALE: As indicated

PROJECT NUMBER: 2015800

SITE CODE ANALYSIS & ACCESSIBILITY

DRAWING NUMBER: A0.5

FIRE ACCESS PLAN | 1" = 50'-0" | 1

GENERAL NOTES & SITE LEGEND

NOTE:

1. REFER TO SHEET A0.5 FOR ADDITIONAL INFORMATION

- (1) SERVICE MAN / VEHICULAR GATE #
- (E) FIRE HYDRANT, REF CIVIL DWGS FOR MORE INFO
- PROPERTY LINE
- EXISTING ROOF, OVERHANGS & COVERED WALKWAYS (FOR REFERENCE ONLY)
- EXISTING CHAIN LINK FENCE
- FIRE LANE CURB, SEE DTL 10/2.1
- EXISTING FIRE HYDRANT(S)
- (E) BUILDINGS - NOT IN SCOPE
- SCOPE OF WORK, REF A0.5
- ACCESSIBLE RESTROOMS, REF A0.4
- 20' - 0" FIRE DEPARTMENT EMERGENCY ACCESS "FIRE LANE" 150' ACCESS SHALL BE PROVIDED TO ALL PORTIONS OF THE FACILITY AND ALL EXTERIOR WALLS OF THE FIRST STORY OF BUILDINGS AS MEASURED BY AN APPROVED ACCESS ROUTE AROUND THE EXTERIOR OF THE BUILDING. ALL EMERGENCY ACCESS ROADS SHALL HAVE A 13'-6" FEET VERTICAL CLEARANCE AND AN UNOBSTRUCTED MINIMUM WIDTH OF 20'-0". FIRE ACCESS ROADS AND FIRE LANE SHALL MEET NFD STANDARDS #204
- 400'-0" : MAX DISTANCE BETWEEN FIRE HYDRANTS (CFC TABLE C102.1)
- 150'-0" FIRE TRUCK COVERAGE TO BUILDINGS & FACILITIES (CFC SECTION 503.1.1)

LOCAL FIRE MARSHAL APPROVAL

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1-3 below is to be provided for all project types indicated above. Information associated with items 4-7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the local fire authority (LFA) is only required when an alternate design means is being requested.

Page 1 of the completed form must be imaged onto the fire access site plan. When an alternate design/means is proposed, completed pages 1 and 2 are to be imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy 09-01.

PROJECT INFORMATION

School District/Owner: Peralta Community College District
Project Name/School: Laney College Cental Utility Plant Upgrade
Project Address: 900 Fallon St., Oakland, CA 94607

FIRE & LIFE SAFETY INFORMATION

1.	Has a fire hydrant flow test been performed within the past 12 months? (If yes, provide a copy of the test data.)	Yes ☒		No ☐
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☒
3.	Is the project located within a designated fire hazard severity zone as established by Cal-Fire? (If yes, indicate fire hazard zone classification below)	Yes ☐		No ☒
	Refer to the following for fire hazard zone locations: www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) (If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)			WIFA ☐

CONDITION MEANS AND METHODS RESOLUTION — ALTERNATE ACCEPTED

		Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.			x	
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.			x	
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			x	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.			x	
6.	**Fire Hydrants:** Water flow and pressure are less than CDC minimum.			x	
6a.	**Acceptable Alternate:** The available flow and pressure is acceptable for providing fire suppression and protection of life and property.			x	
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CDC requirements.			x	
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.			x	

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requiremetns, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: ____________ Title: ____________

Signature: ____________ Date: ____________

LOCAL FIRE AUTHORITY (LFA) INFORMATION

LFA Agency Name:

LFA Review Official:

Title: Work Phone:

Work E-mail:

LFA Reviewer's Signature: ____________ Date: ____________

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT — KEVIN MacQUARRIE — STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

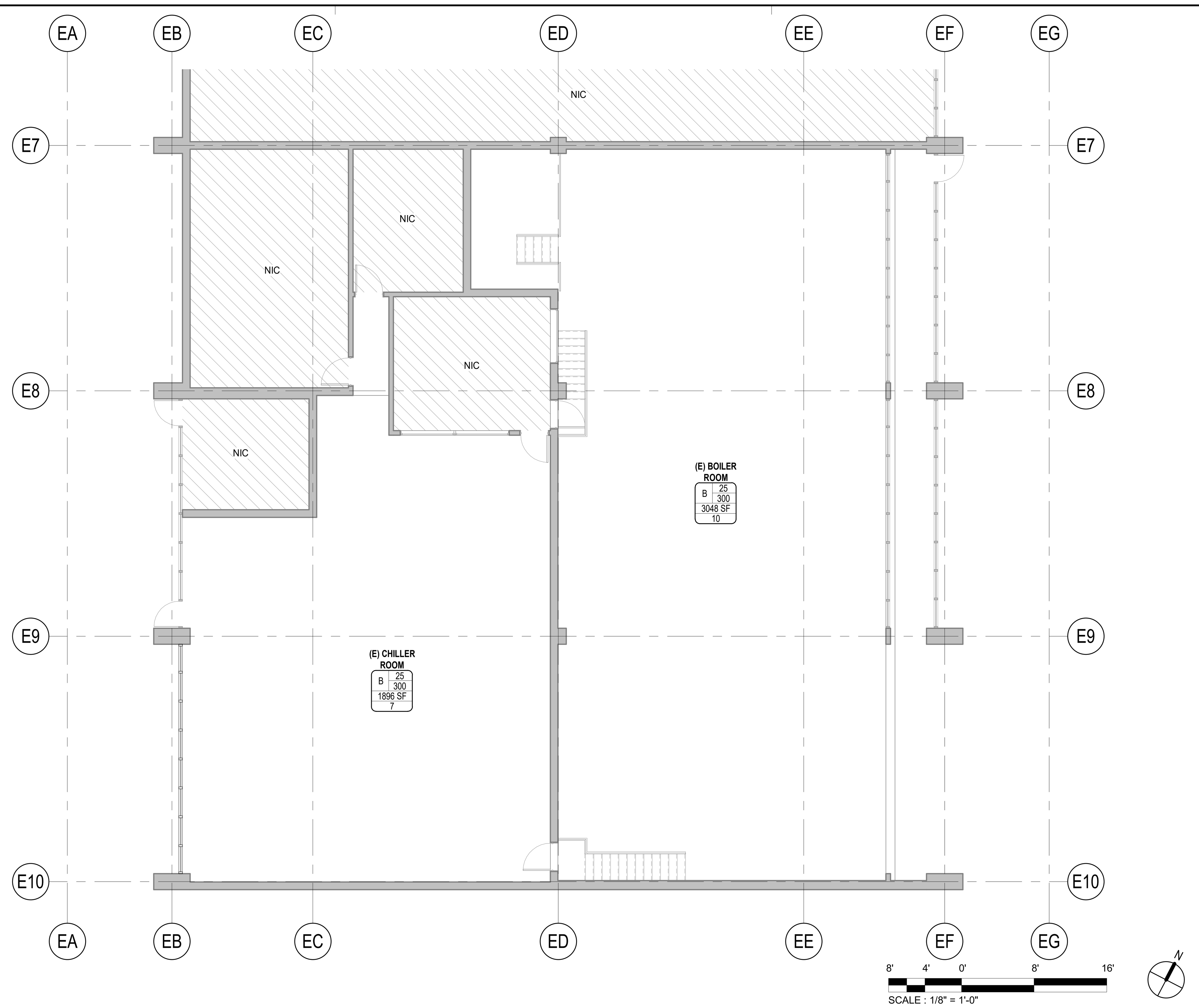
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author | CHECKED: Checker
DATE: 04/01/21 | SCALE: As indicated
PROJECT NUMBER: 2015800

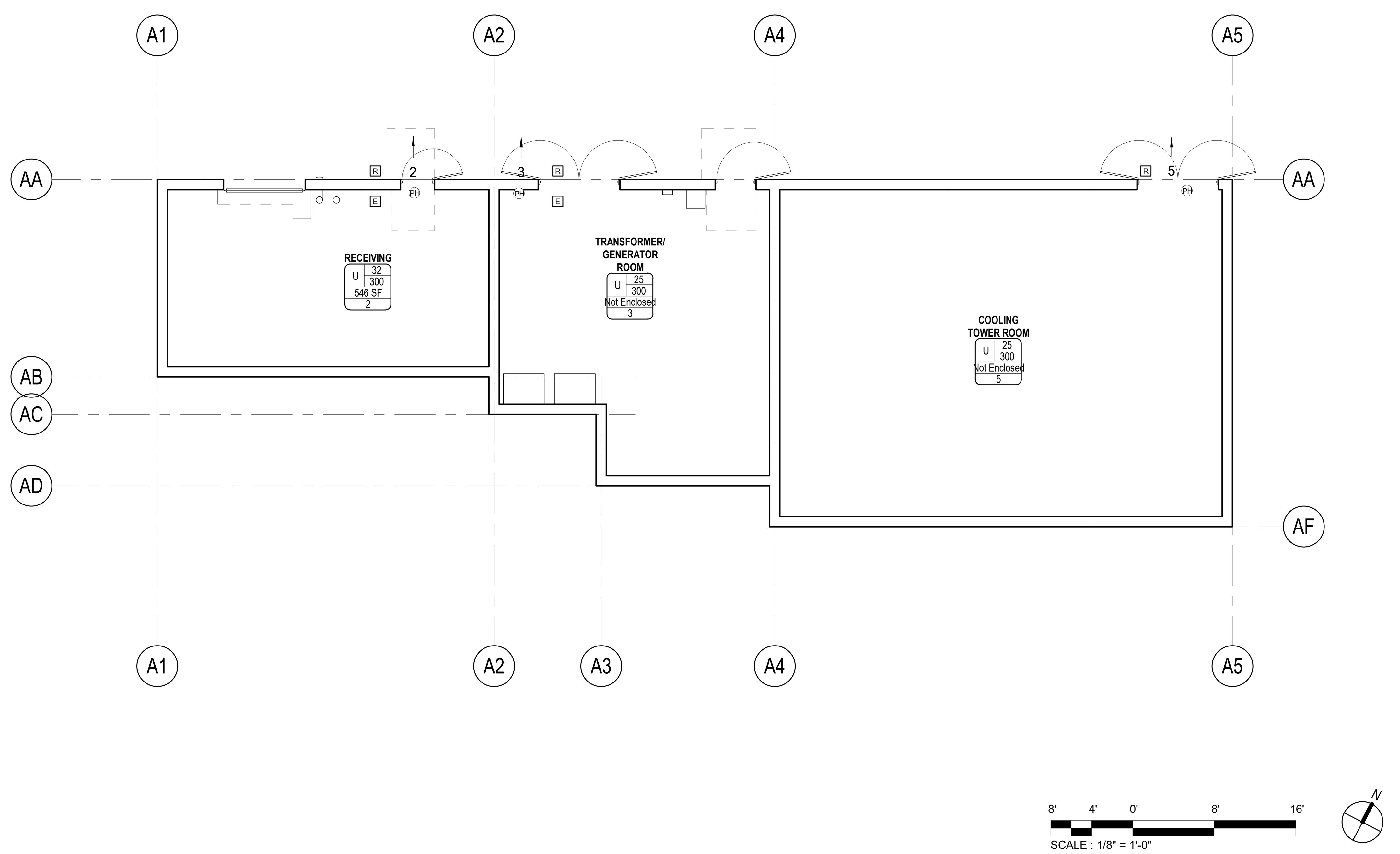
FIRE ACCESS PLAN

DRAWING NUMBER: A0.6



PORTION OF EXISTING BUILDING E CODE ANALYSIS | 1/8" = 1'-0" | 1

BUILDING CODE ANALYSIS	
1	BUILDING DESIGNATION: BUILDING AA
2	OCCUPANCY GROUP: U-OCCUPANCY
3	CONSTRUCTION TYPE: TYPE 1
4	BASIC ALLOWABLE FLOOR AREA: 35,500 SF
5	ACTUAL FLOOR AREA: 35,608 SF
6	ALLOWABLE AREA INCREASE: N/A
7	BASIC ALLOWABLE BUILDING HEIGHT/NO. OF STORIES: 6 STORIES
8	ACTUAL BUILDING HEIGHT/ NO. OF STORIES: 1 STORY
9	FIRE SPRINKLER: N/A
FIRE RESISTANCE RATING REQUIREMENTS (CBC TABLE 601)	
1	STRUCTURAL FRAME: [1 HOUR RATING - UL NO. D902]
2	EXTERIOR BEARING WALLS:
3	INTERIOR BEARING WALLS:
4	EXTERIOR NON-BEARING WALLS:
5	INTERIOR NON-BEARING WALLS:
6	FLOOR CONSTRUCTION:
7	ROOF CONSTRUCTION:
8	SHAFT CONSTRUCTION:
FIRE RESISTANCE RATING REQUIREMENTS OF EXTERIOR WALLS (CBC TABLE 602)	
1	FIRE SEPARATION DISTANCE X<5'-0": 1 HOUR RATING
2	FIRE SEPARATION DISTANCE 5'-0" ≤ X < 10'-0": 1 HOUR RATING
3	FIRE SEPARATION DISTANCE 10'-0" ≤ X < 30'-0": 1 HOUR RATING
4	FIRE SEPARATION DISTANCE X ≥ 30'-0": NO PROTECTION
INTERIOR WALL AND CEILING FINISH REQUIREMENTS (CBC TABLE 803.13)	
1	INTERIOR EXIT STAIRWAYS: CLASS
2	CORRIDORS: CLASS
3	ROOMS AND ENCLOSED SPACES: CLASS
ROOFING COVERING CLASS REQUIREMENTS (CBC TABLE 1505.1)	
1	ROOF COVERING: CLASS A
MINIMUM EGRESS WIDTH (CBC SECTION 1005)	
1	INTERIOR EXIT STAIRWAYS: # OCCUPANTS X [0.2] [0.3] = EGRESS WIDTH
2	DOORS: # OCCUPANTS X [0.15] [0.20] = EGRESS WIDTH
3	2 EXITS ARE PROVIDED WHERE OCCUPANT LOAD EXCEEDS 50



BUILDING AA CODE ANALYSIS | 1/8" = 1'-0" | 2

BUILDING CODE ANALYSIS	
1	BUILDING DESIGNATION: BUILDING AA
2	OCCUPANCY GROUP: U-OCCUPANCY
3	CONSTRUCTION TYPE: TYPE 1-B
4	BASIC ALLOWABLE FLOOR AREA: 35,500 SF
5	ACTUAL FLOOR AREA: 2,613 SF
6	ALLOWABLE AREA INCREASE: N/A
7	BASIC ALLOWABLE BUILDING HEIGHT/NO. OF STORIES: 6 STORIES
8	ACTUAL BUILDING HEIGHT/ NO. OF STORIES: 1 STORY
9	FIRE SPRINKLER: N/A
FIRE RESISTANCE RATING REQUIREMENTS (CBC TABLE 601)	
1	STRUCTURAL FRAME: [1 HOUR RATING - UL NO. D902]
2	EXTERIOR BEARING WALLS:
3	INTERIOR BEARING WALLS:
4	EXTERIOR NON-BEARING WALLS:
5	INTERIOR NON-BEARING WALLS:
6	FLOOR CONSTRUCTION:
7	ROOF CONSTRUCTION:
8	SHAFT CONSTRUCTION:
FIRE RESISTANCE RATING REQUIREMENTS OF EXTERIOR WALLS (CBC TABLE 602)	
1	FIRE SEPARATION DISTANCE X<5'-0": 1 HOUR RATING
2	FIRE SEPARATION DISTANCE 5'-0" ≤ X < 10'-0": 1 HOUR RATING
3	FIRE SEPARATION DISTANCE 10'-0" ≤ X < 30'-0": 1 HOUR RATING
4	FIRE SEPARATION DISTANCE X ≥ 30'-0": NO PROTECTION
INTERIOR WALL AND CEILING FINISH REQUIREMENTS (CBC TABLE 803.13)	
1	INTERIOR EXIT STAIRWAYS: CLASS
2	CORRIDORS: CLASS
3	ROOMS AND ENCLOSED SPACES: CLASS
ROOFING COVERING CLASS REQUIREMENTS (CBC TABLE 1505.1)	
1	ROOF COVERING: CLASS A
MINIMUM EGRESS WIDTH (CBC SECTION 1005)	
1	INTERIOR EXIT STAIRWAYS: # OCCUPANTS X [0.2] [0.3] = EGRESS WIDTH
2	DOORS: # OCCUPANTS X [0.15] [0.20] = EGRESS WIDTH
3	2 EXITS ARE PROVIDED WHERE OCCUPANT LOAD EXCEEDS 50

GOVERNING CODES

2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1

2019 CALIFORNIA BUILDING CODE (CBC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2 — (2018 INTERNATIONAL BUILDING CODE (IBC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3 — (2017 NATIONAL ELECTRIC CODE (NEC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4 — (2018 UNIFORM MECHANICAL CODE (UMC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5 — (2018 UNIFORM PLUMBING CODE (UPC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6

2019 CALIFORNIA HISTORICAL BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 8

2019 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9 — (2018 INTERNATIONAL FIRE CODE (IFC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 10 — (2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC) W/ CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11 — 1990 STATE FIRE MARSHAL REGULATIONS (AS AMENDED TO DATE) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19

2019 CALIFORNIA REFERENCED STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12 — 2010 AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS FOR ACCESSIBLE DESIGN (ADAS)

CALIFORNIA ELEVATOR SAFETY CODE, CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 8

APPLICABLE NFPA STANDARDS

- NFPA 13 - AUTOMATIC SPRINKLER SYSTEMS, 2016 EDITION
- NFPA 14 - STANDPIPE SYSTEMS, 2013 EDITION
- NFPA 17 - DRY CHEMICAL EXTINGUISHING SYSTEMS, 2013 EDITION
- NFPA 17A - WET CHEMICAL SYSTEMS, 2013 EDITION
- NFPA 20 - STATIONARY PUMPS, 2016 EDITION
- NFPA 24 - PRIVATE FIRE MAINS, 2016 EDITION
- NFPA 72 - NATIONAL FIRE ALARM CODE, 2016 EDITION
- NFPA 80 - FIRE DOORS AND OTHER OPENING PROTECTIVES, 2016 EDITION
- NFPA 92 - STANDARD FOR SMOKE CONTROL SYSTEMS, 2015 EDITION
- NFPA 253 - CRITICAL RADIANT FLUX OF FLOOR COVERINGS, 2015 EDITION
- NFPA 2001 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2015 EDITION
- ICC 300 - ICC STANDARDS FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS, 2012 EDITION
- UL 300 - FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL RESTAURANT COOKING AREAS, 2005 EDITION W/ REVISIONS THRU 2014
- UL 464 - AUDIBLE SIGNAL APPLIANCES, 2003 EDITION
- UL 521 - HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION W/ REVISIONS THRU JULY 30, 2005

NOTE: ALL NFPA STANDARDS AS LISTED ARE TO CONFORM TO THE EDITION AS LISTED WITH THE LATEST CALIFORNIA AMENDMENTS. REFERNECE THE 2019 CBC, TITLE 24, PART 2 - CHAPTER 35 FOR ADDITIONAL APPLICABLE NFPA, UL. STANDARDS AND ANY CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

GENERAL NOTES

GENERAL NOTES:

1. OCCUPANT LOAD FACTORS ARE ACCORDING TO CBC SECTION 1004, TABLE NO. 1004.1.1
2. REFER TO FUNCTION OF SPACE / SPACE USE SCHEDULE BELOW: ACCESSORY USE AREA EXCLUDED FROM OCCUPANT LOADING.
3. WHERE OCCUPANT LOAD SIGN IS REQUIRED THE ROOM SHALL BE POSTED WITH A SIGN NEAR THE MAIN EXIT FROM THE ROOM. REFER TO SIGNAGE SCHEDULE FOR DETAIL.
4. REFER TO SIGNAGE SHECDULE ON SHEET 10.1 FOR LOCATION OF ALL SIGNAGE NOT COVERED ON THIS SHEET. SIGNAGE SCHEDULE ON SHT 10.1 TAKES PRECEDENCE, U.O.N. ON THIS SHEET.
5. THE BUILDING IS FIRE SPRINKLERED THEREFORE THE EXIT ACCESS TRAVEL DISTANCE IS INCREASED TO 250 FEET FROM ANY LOCATION (PER TITLE 24 CBC TABLE 1017.2)
6. PER CBC SECTION 1007.1.1 EXCEPTION #2 FOR EXIT AND EXIT ACCESS DOORWAY CONFIGURATION: "WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 093.3.1.1 OR 903.3.1.2, THE SEPARATION DISTANCE SHALL BE NOT LESS THAN ONE-THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED."

CODE ANALYSIS LEGEND

AREA IDENTITY/ CODE ANALYSIS:

LOBBY | E-1 | 6 | 20 | 900 SF | 45 *

- LOBBY = ROOM NAME
- E-1 = OCCUPANCY GROUP
- 6 = SPACE USE - REF SPACE USE SCHEDULE
- 20 = OCCUPANT LOAD FACTOR (CBC TABLE 1004.5)
- 900 = FLOOR AREA - SQUARE FEET
- 45 = OCCUPANT LOAD (CBC TABLE 1004.5)
- * = OCCUPANT LOAD SIGN REQUIRED WHEN NOTED - SEC 1004.9 - REF SIGNAGE SCHEDULE
- 76 = ACCUMULATIVE OCCUPANT LOAD OF SPACE WHEN APPLICABLE

SYMBOL LEGEND:

- # — OCCUPANT LOAD SIGN LOCATION, **[NOT USED]**
- AL — ASSISTIVE LISTENING SIGN LOCATION, **[NOT USED]**
- DR — DIRECTION ACCESS ROUTE, **[NOT USED]**
- E — TACTILE EXIT SIGNAGE, REF 21/10.1
- ER — TACTITLE 'TO EXIT' SIGN, REF **[NOT USED]**
- FR — PROVIDE TACTILE SIGNAGE STATING " FIRE RISER INSIDE, **[NOT USED]**
- FS — PROVIDE MARKING AND IDENTIFICATION PER CBC 703.7 STATING, "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS", **[NOT USED]**
- R — TACTILE ROOM CONTROL SIGNAGE, REF 10/10.1
- SE — PROVIDE SIGNAGE PER CFC 605.3.1 STATING: "ELECTRICAL ROOM" **[NOT USED]**
- TE — TACTILE 'TO EXIT' SIGN, **[NOT USED]**
- LS — PROVIDE ONE INCH TALL LETTER SIGN OF CONTRASTING BACKGROUND COLOR AT THE DOOR HEADER TRANSOM STATING " THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS." **[NOT USED]**
- **1-HOUR FIRE RATED WALL**: ALL OPENINGS IN THE FIRE RATED WALL TO COMPLY WITH CBC 716 & TABLE 716.5 & TABLE 716.6.
- DIRECTION OF TRAVEL, TYP
- PATH OF EGGRESS
- 120 — PATH OF EGRESS: 120 = OCCUPANT LOAD
- PH — EXIT DOOR WITH PANIC HARDWARE
- EXIT SIGN CEILING/WALL MOUNTED PER CBC 1013. PROVIDE FLOOR-LEVEL EXIT SIGNS AS REQUIRED PER 1013.7. SEE DOOR SCHEDULE FOR PANIC HARDWARE AND RATED ASSEMBLIES. FOR ADDITIONAL INFORMATION NOT SHOWN, SEE DOOR SCHEDULE SHEET 8.1 & SIGNAGE SCHEDULE ON SHEET 10.1
- FE A — SEMI-RECESSED WALL MOUNTED FIRE EXTINGUISHER; REF DTL 15/9.5; A = ADA ACCESSIBLE

FUNCTION OF SPACE / SPACE USE

NOTE: REFER TO DSA IR A-26 FOR FURTHER CLARIFICATION OF OCCUPANT LOAD

TABLE 10-A MINIMUM EGRESS REQUIREMENTS

Use Description	Two Means of Egress	Occupant Load Factor
0 NO CLASSIFICATION APPLIES	0	0
1 ASSEMBLY AREA - CONCENTRATED USE	50	7
2 ASSEMBLY AREA - LESS CONCENTRATED USE	50	15
3 ASSEMBLY AREA - STANDING SPACE	50	5
4 ASSEMBLY AREA - FIXED SEATS	50	0
5 MULTIPURPOSE ROOM	50	7
6 LOBBY - ACCESSORY TO ASSEMBLY (NOTE 2)	50	0
7 LOBBY - ACCESSORY TO ASSEMBLY	50	7
8 WAITING AREA	50	5
9 CONFERENCE ROOM	50	15
10 DINING ROOM	50	15
11 EXHIBIT SPACE	50	15
12 GYMNASIUM - FLOOR AREA W/OUT BLEACHERS	50	15
13 GYMNASIUM - FLOOR AREA W/ BLEACHERS	50	7
14 GYMNASIUM - BLEACHERS	50	0
15 LOUNGE	50	15
16 STAGE / PLATFORM	50	15
17 CLASSROOM	50	20
18 COURTROOM - NO FIXED SEATS	50	40
19 EXERCISE ROOM	50	50
20 KITCHEN	30	200
21 LIBRARY - READING ROOM	50	50
22 LIBRARY - STACK AREA	30	100
23 LOCKER ROOM	30	50
24 NURSERIES FOR CHILDREN / DAY CARE	7	35
25 MECHANICAL EQUIPMENT ROOM	30	300
26 ELECTRICAL EQUIPMENT ROOM	30	100
27 GARAGE PARKING	30	200
28 OFFICE	30	150
29 SHOP / LABORATORY / VOCATIONAL ROOM	50	50
30 SWIMMING POOL - POOL AREA	50	50
31 SWIMMING POOL - DECK AREA	50	15
32 STORAGE	30	300
33 CUSTODIAL	30	100
34 TOILET / SHOWER ROOM (NOTE 2)	0	0
35 CORRIDOR / STAIRWAY (NOTE 2)	0	0
36 ALL OTHERS	50	100

ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE C-25998 01-31-23 STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

BUILDING CODE ANALYSIS

DRAWING NUMBER: **A0.7**

LANEY COLLEGE CENTRAL UTILITY PLANT

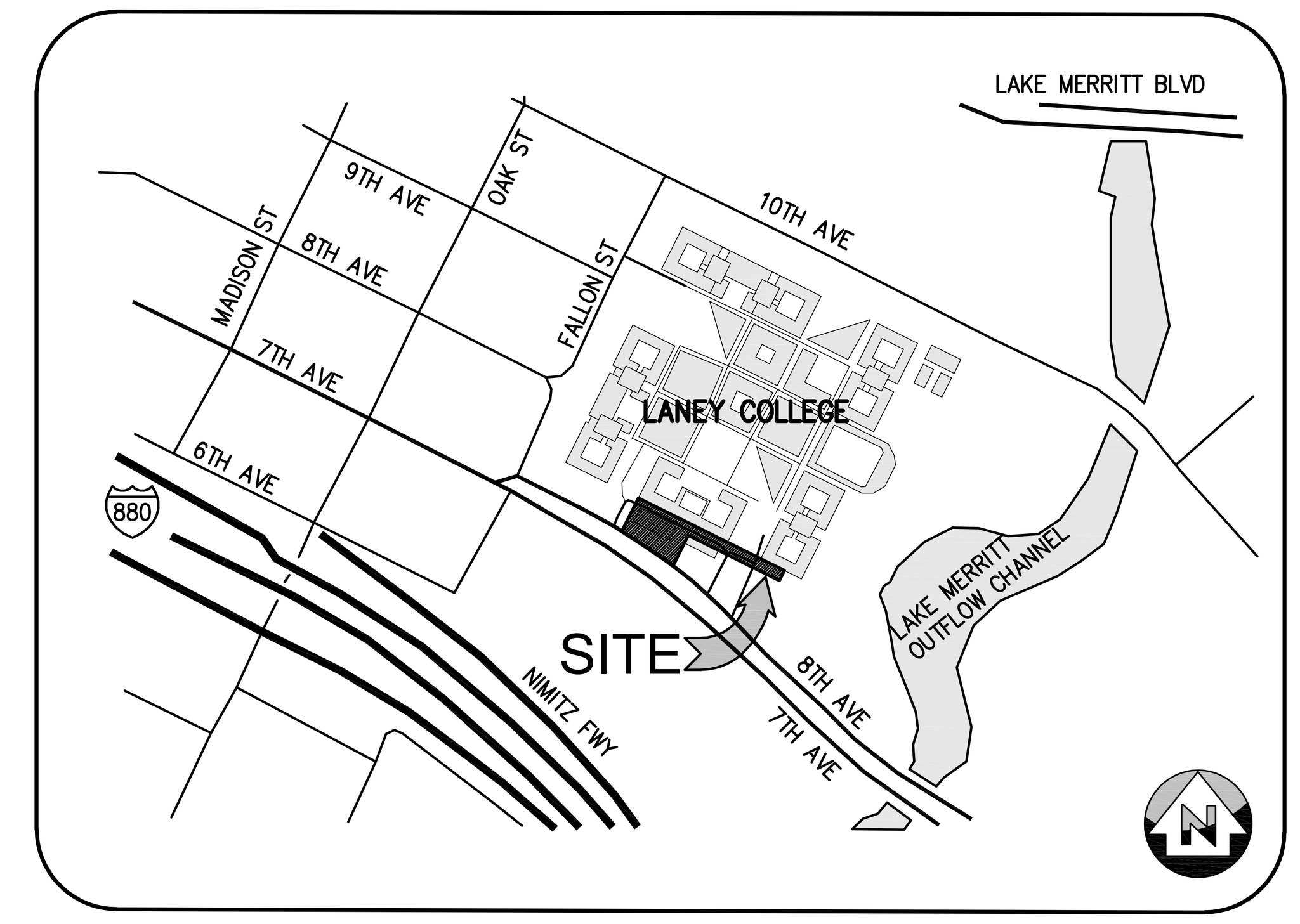
900 FALLON STREET OAKLAND, CA

LEGEND

	EXISTING	PROPOSED
SAWCUT AND CONFORM LINE		
RETAINING WALL		
A.C. PAVEMENT		
CONC. VALLEY GUTTER		
CONC. SIDEWALK OR PAD		
6" CURB & GUTTER		
EDGE OF A.C. PAVEMENT	EP	
6" VERTICAL CURB		
CENTER LINE		
SANITARY SEWER MAIN	8" SS	8" SS
STORM DRAIN MAIN	12" SD	15" SD
PERFORATED PIPE		6" SD
WATER MAIN	6" W	6" W
FIRE WATER MAIN	6" FW	4" FW
DOMESTIC WATER MAIN	6" DW	4" DW
CHILLED WATER MAIN	6" CHW	4" CHW
IRRIGATION LINE	2" IRR	4" IRR
HOT WATER SUPPLY & RETURN	HWS–HWR	HWS HWR
STEAM LINE	ST	ST
TRENCH DRAIN		
CONDENSATE RETURN	CR	CR
FLOW LINE		
CHAIN LINK FENCE	x x	x x
GAS MAIN	G	2" G
ELECTRIC AND SIGNAL DUCT BANK	E	E
OVERHEAD ELECTRIC LINE	OHE	OHE
UNDERGROUND ELECTRIC LINE	UGE	UGE
STREET LIGHT CONDUIT	SL	SL
CONTOUR ELEVATION LINE	85	90 89
SPOT ELEVATION	x 95.94 95.94 G	FG 95.94
DIRECTION OF SLOPE		2:1 1%
GAS METER	G	GM
GAS VALVE	GV	GV
WATER METER	W	WM
WATER VALVE	WV	WV
FIRE HYDRANT		
BACK FLOW PREVENTOR		
POST INDICATOR VALVE	PIV	PIV
FIRE DEPARTMENT CONNECTION		
WATER LINE TEE		
CAP AND PLUG END		
AIR RELEASE VALVE		ARV
SIGN		
ACCESSIBLE RAMP		
CONCRETE THRUST BLOCK		
REDUCER		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT	SSCO	SSCO
STORM DRAIN MANHOLE		
STORM DRAIN AREA DRAIN		
STORM DRAIN CATCH BASIN	CB	
STORM DRAIN CURB INLET		
STORM DRAIN CLEANOUT	SDCO	SDCO
ELECTROLIER		
JOINT POLE	JP	JP
OVERLAND RELEASE		
CONSTRUCTION DETAIL REFERENCE		1 / C5.0 DETAIL REFERENCE SHEET REFERENCE

ABBREVIATIONS

AB – AGGREGATE BASE
AC – ASPHALT CONCRETE
AD – AREA DRAIN
ADA – AMERICANS WITH DISABILITIES ACT
ASB – AGGREGATE SUBBASE
BC – BEGINNING OF CURVE
BFP – BACK FLOW PREVENTOR
BLDC – BUILDING CORNER
BLDG – BUILDING
BOD – BOTTOM OF DOCK
BOL – BOLLARD
BOS – BOTTOM OF STEP
BOW – FG @ BOTTOM OF WALL
BVC – BEGIN VERTICAL CURVE
BW – BACK OF WALK
C – CONCRETE OR CIVIL
C&G – CURB AND GUTTER
CB – CATCH BASIN
CI – COMBINATION INLET
CIP – CAST IRON PIPE
CL – CENTER LINE OR CLASS
CMP – CORRUGATED METAL PIPE
CO – CLEANOUT
COI – CURB OPENING INLET
CONC – CONCRETE
CONST – CONSTRUCTION OR CONSTRUCT
CY – CUBIC YARD
DCDA – DOUBLE CHECK DETECTOR ASSEMBLY
DI – DROP INLET
DIP – DUCTILE IRON PIPE
DOM – DOMESTIC
DW – DOMESTIC WATER
DWG – DRAWING
E – EAST
EC – END OF CURVE
EP – EDGE OF PAVEMENT
ER – END OF RETURN
EVC – END VERTICAL CURVE
ELEV – ELEVATION
EX., EXIST. – EXISTING
FC – FACE OF CURB
FDC – FIRE DEPARTMENT CONNECTION
FF – FINISHED FLOOR
FG – FINISHED GRADE
FH – FIRE HYDRANT
FL – FLOW LINE
FOUND – FOUNDATION
FS – FINISHED SURFACE
FT – FOOT
FW – FIRE WATER
G – GROUND ELEVATION
GB – GRADE BREAK
GV – GATE VALVE
HCR – ACCESSIBLE RAMP
HP – HIGH POINT
INV – INVERT ELEVATION
JP – JOINT POLE
JT – JOINT TRENCH
LIP – LIP OF GUTTER
LP – LOW POINT
LSA – LANDSCAPE ARCHITECT
MAX – MAXIMUM
MEP – MECHANICAL/ELECTRICAL/PLUMBING
MH – MANHOLE
MIN – MINIMUM
MPVC – MIDPOINT OF VERTICAL CURVE
MON – MONUMENT
N – NORTH
N.I.C. – NOT IN CONTRACT
NO – NUMBER
NTS – NOT TO SCALE
P – PAVEMENT ELEVATION
PCC – PORTLAND CEMENT CONCRETE / POINT OF CONTINUOUS CURVATURE
PIV – POST INDICATOR VALVE
PL – PROPERTY LINE
PMH – POWER MANHOLE
POC – POINT ON CURVE
PP – POWER POLE
PRC – POINT OF REVERSE CURVATURE
PVC – POLYVINYL CHLORIDE PIPE
R – RADIUS
RC – RELATIVE COMPACTION
RCP – REINFORCED CONCRETE PIPE
RPPA – REDUCED PRESSURE PRINCIPLE ASSEMBLY
R/W – RIGHT OF WAY
S – SLOPE OR SOUTH
S.A.D. – SEE ARCHITECTURAL DRAWINGS
SB – SEDIMENT BASIN
SD – STORM DRAIN
S.E.D. – SEE ELECTRICAL DRAWINGS
SF – SILT FENCE
SG – SUBGRADE
S.L.D. – SEE LANDSCAPE DRAWINGS
S.M.D. – SEE MECHANICAL DRAWINGS
SMH – SIGNAL MANHOLE
S.P.D. – SEE PLUMBING DRAWINGS
SS – SANITARY SEWER
STA – STATION
STD – STANDARD
S/W – SIDEWALK
TC – TOP OF CURB
TD – TRENCH DRAIN
TOD – TOP OF DOCK
TOE – TOE OF SLOPE
TOS – TOP OF STAIR
TOW – FG @ TOP OF WALL
TS – TOP OF SLAB
TYP – TYPICAL
UON – UNLESS OTHERWISE NOTED
U/G – UNDERGROUND
VC – VERTICAL CURVE
WM – WATER METER
WV – WATER VALVE
W – WEST
WWF – WELDED WIRE FABRIC
W/ – WITH



VICINITY MAP
N.T.S.

UTILITY/POTHOLE NOTE

THE TYPES, LOCATIONS, SIZES AND /OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND FACILITIES AND UTILITIES BY POTHOLING PRIOR TO COMMENCING CONSTRUCTION.

SURVEY UTILITY NOTE

THE TYPES, LOCATIONS, SIZES AND /OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC SURVEY ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THIS SURVEY.

SURVEY NOTE

THIS SURVEY WAS PREPARED BY CSW/STUBER–STROEH ENGINEERING GROUP, INC., DATED MARCH 6–8TH, 2019. ANY CHANGES OR IMPROVEMENTS MADE TO THE PROPERTY AFTER THIS DATE MAY NOT BE SHOWN ON THIS SURVEY.

HORIZONTAL DATUM IS CALIFORNIA STATE PLANE COORDINATES, NORTH AMERICAN DATUM OF 1983 (NAD83), ZONE 3, EPOCH 2010.0000 PER GPS OPUS SOLUTION.

VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER GPS OPUS SOLUTION.

ADA NOTES

1. ALL SITE WORK SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS AND WITH THE AMERICANS WITH DISABILITIES ACT.
2. CURB RAMPS SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).
3. PATH OF TRAVEL TO BUILDINGS SHALL NOT EXCEED A SLOPE OF 1:20 (5%) UNLESS RAILINGS ARE SHOWN ON ARCHITECTURAL PLANS, IN WHICH CASE THE SLOPE SHALL NOT EXCEED 1:12 (8.33%).
4. A 2% MAXIMUM SLOPE LANDING SHALL BE PROVIDED AT PRIMARY ENTRANCES TO BUILDINGS, THE LANDINGS SHALL HAVE A MINIMUM WIDTH OF 60" AND A MINIMUM DEPTH OF 60" WHEN THE DOOR OPENS INTO THE BUILDING, AND 42" PLUS THE WIDTH OF THE DOOR WHEN THE DOOR OPEN ONTO THE LANDING.
5. RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES OF 1:20 (5%) AND 1:12 (8.33%), AND SHALL HAVE A MINIMUM WIDTH OF 48" AND A MAXIMUM CROSS–SLOPE OF 2%. RAMPS EXCEEDING 2'–6" VERTICAL SHALL HAVE INTERMEDIATE (2% MAXIMUM SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60". BOTTOM LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72".
6. MAXIMUM CROSS SLOPE ON ANY SIDEWALK OR RAMP SHALL BE 2%. MAXIMUM. MAXIMUM SLOPE WITHIN PARKING STALLS DESIGNATED AS ACCESSIBLE PARKING SHALL BE 2% IN ANY DIRECTION.
7. ALL SIDEWALKS SHALL HAVE A 4' MINIMUM CLEAR WIDTH FOR ACCESSIBLE CONFORMANCE.

PROJECT DESCRIPTION

NEW CENTRAL UTILITY PLANT (CUP) AND ASSOCIATED SITE UTILITIES AND PAVEMENT REPAIR. NEW UTILITY STUB–OUTS FOR THE FUTURE LEARNING RESOURCE CENTER (LRC), AS WELL AS RELOCATING UTILITIES THAT FALL WITHIN THE LRC FOOTPRINT.

CONSTRUCTION NOTES

1. ALL OFF–SITE CONSTRUCTION MATERIAL AND METHODS SHALL COMPLY WITH THE LATEST EDITION OF THE CITY OF OAKLAND AND THE LATEST CALTRANS STANDARD PLANS & SPECIFICATIONS.
2. CONTRACTOR SHALL LEAVE AN EMERGENCY PHONE NUMBER WITH THE CITY OF OAKLAND POLICE AND FIRE DEPARTMENTS.
3. CONTRACTOR SHALL POST ON THE SITE, EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE, AND FIRE DEPARTMENTS.
4. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY UNLESS AN EXCAVATION PERMIT SPECIFIES OTHERWISE.
5. THE CONTRACTOR SHALL HIRE A STREET CLEANING CONTRACTOR TO CLEAN UP DIRT AND DEBRIS FROM CITY STREETS THAT ARE ATTRIBUTABLE TO THE DEVELOPMENT'S CONSTRUCTION ACTIVITIES.
6. ALL GRADING SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MAINTENANCE DISTRICT FOR AIRBORNE PARTICULATES (DUST).
7. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HEREON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER. THE GEOTECHNICAL ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS BEFORE BEGINNING ANY GRADING. UNOBSERVED AND UNAPPROVED GRADING WORK SHALL BE REMOVED AND REDONE AT THE CONTRACTORS EXPENSE.
8. ALL MATERIALS, REQUIRED FOR THE COMPLETE EXECUTION OF THE PROJECT, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY DURING THE CONSTRUCTION PERIOD.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ANY EXISTING IMPROVEMENTS OF UNDERGROUND FACILITIES DAMAGED DURING THE CONSTRUCTION PERIOD.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL ENCROACHMENT, EXCAVATION, CONCRETE, ELECTRICAL, PLUMBING, ETC. PERMITS NECESSARY PRIOR TO BEGINNING CONSTRUCTION FOR ANY WORK.
12. THE CONTRACTOR SHALL HAVE A SUPERINTENDENT OR REPRESENTATIVE ON SITE AT ALL TIMES DURING CONSTRUCTION.
13. STORAGE OF CONSTRUCTION MATERIAL AND EQUIPMENT ON CITY STREETS WILL NOT BE PERMITTED.
14. CONSTRUCTION EQUIPMENT SHALL BE PROPERLY MUFFLED. UNNECESSARY IDLING OF GRADING CONSTRUCTION EQUIPMENT IS PROHIBITED.
15. CONSTRUCTION EQUIPMENT, TOOLS, ETC. SHALL NOT BE CLEANED OR RINSED INTO A STREET, GUTTER OR STORM DRAIN.
16. A CONTAINED AND COVERED AREA ON–SITE SHALL BE USED FOR STORAGE OF CEMENT BAGS, PAINTS, FLAMMABLE, OILS, FERTILIZERS, PESTICIDES, OR ANY OTHER MATERIALS THAT HAVE POTENTIAL FOR BEING DISCHARGED TO THE STORM DRAIN SYSTEM BY WIND OR IN THE EVENT OF A MATERIAL SPILL.
17. ALL CONSTRUCTION DEBRIS SHALL BE GATHERED ON A REGULAR BASIS AND PLACED IN A DUMPSTER WHICH IS EMPTIED OR REMOVED WEEKLY. WHEN FEASIBLE, TARPS SHALL BE USED ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORMWATER POLLUTION.
18. ANY TEMPORARY ON–SITE CONSTRUCTION PILES SHALL BE SECURELY COVERED WITH A TARP OR OTHER DEVICE TO CONTAIN DEBRIS.
19. CONCRETE TRUCKS AND CONCRETE FINISHING OPERATIONS SHALL NOT DISCHARGE WASH WATER INTO THE STREET GUTTERS OR DRAINS.

DISCREPANCIES

IF THERE ARE ANY DISCREPANCIES BETWEEN DIMENSIONS IN DRAWINGS AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE ATTENTION OF THE ENGINEER FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

FEMA NOTES

PER FEMA COMMUNITY–PANEL NUMBER 06001C0067H, THE PROJECT SITE LIES IN ZONE X. ZONE X IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN.

GEOTECHNICAL NOTES

THE PROJECT SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT TITLED "GEOTECHINCAL INVESTIGATION FOR LANEY COLLEGE CENTRAL UTILITY PLANT", PERFORMED BY FUGRO USA LAND, INC., DATED JANUARY 8TH, 2021.

CORROSION PROTECTION NOTES

THE PROJECT SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CORROSION PROTECTION REPORT TITLED "SOIL CORROSIVITY EVALUATION & RECOMMENDATIONS FOR CORROSION CONTROL, LANEY COLLEGE CENTRAL UTILITY PLANT", PERFORMED BY JDH CORROSION CONSULTANTS, INC., DATED 3/19/2021.

EARTHWORK QUANTITIES

CUT **XXX** CY
FILL **XXX** CY
BALANCE **XXX** CY **IMPORT/EXPORT**
(IF ZERO, INDICATE 0)

THE EARTHWORK QUANTITIES SHOWN ARE PROVIDED FOR THE PURPOSE OF GRADING PERMIT APPROVAL ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CARRY OUT THE CUT/FILL, IMPORT/EXPORT AS NECESSARY TO MEET THE DESIGN GRADES AS SHOWN ON THE PLANS REGARDLESS OF THE ESTIMATED EARTHWORK QUANTITIES AS INDICATED. SIGNIFICANT REVISIONS TO THE QUANTITIES NEED REVIEW BY THE **CITY/COUNTY**. FILL SHORTAGE IS ANTICIPATED TO COME FROM ON–SITE SPOILS ACQUIRED FROM UTILITY TRENCHES AND FOOTING SPOILS.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

CIVIL SHEET INDEX

811 Know what's below. Call before you dig.

UNAUTHORIZED CHANGES AND USES
CAUTION: 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 THE PLANS.

ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com
Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE C-25938 04-31-23 STATE OF CALIFORNIA
DRAFT – NOT FOR CONSTRUCTION

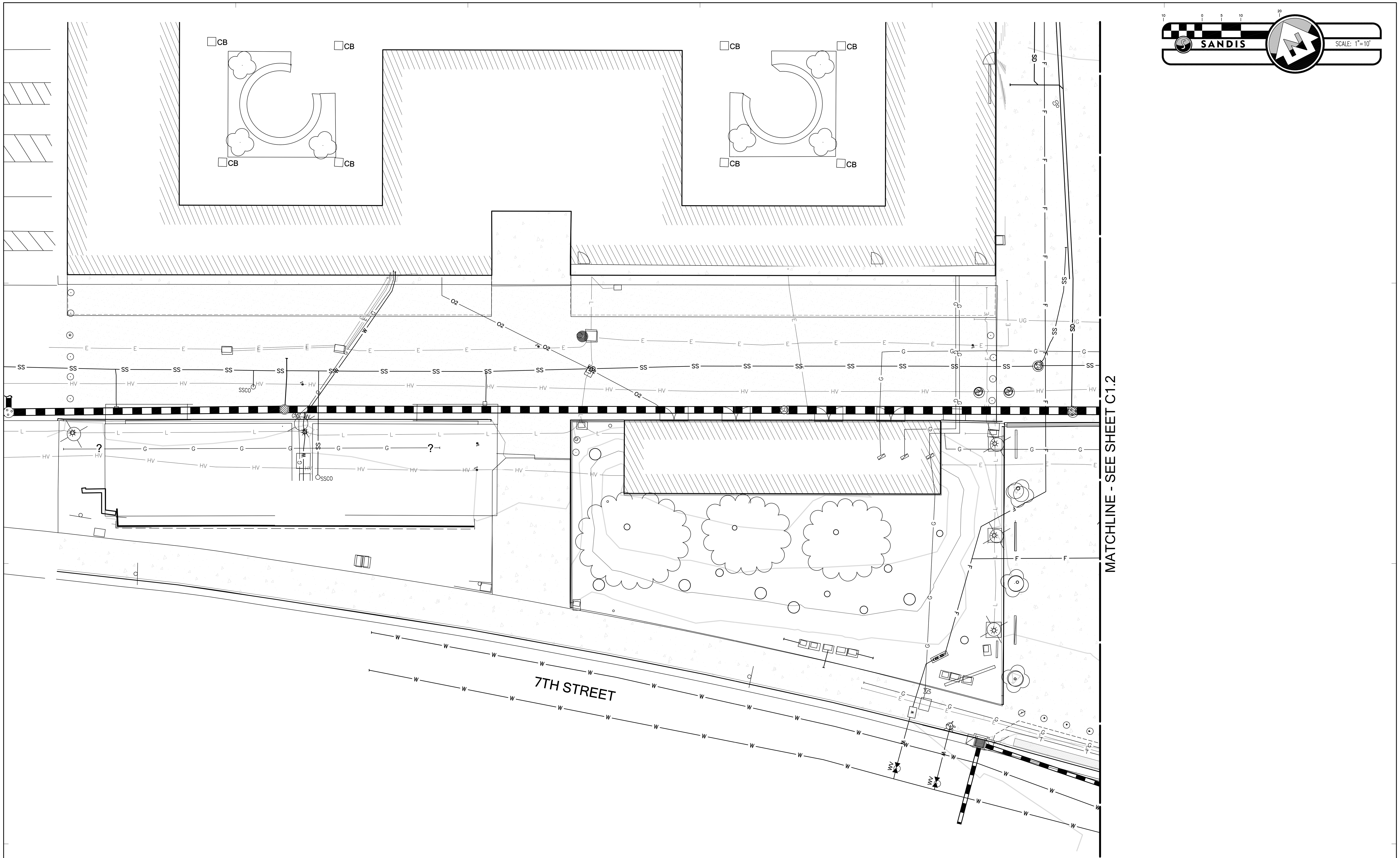
CONSULTANT
SANDIS BUILD ON.

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
			REVISIONS

DRAWN: SEC	CHECKED: SU
DATE: 03/15/21	SCALE: N.T.S.
PROJECT NUMBER: 2015800	

COVER SHEET

DRAWING NUMBER: C1.0



ARCHITECTS

WLC

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

SANDIS BUILD ON.

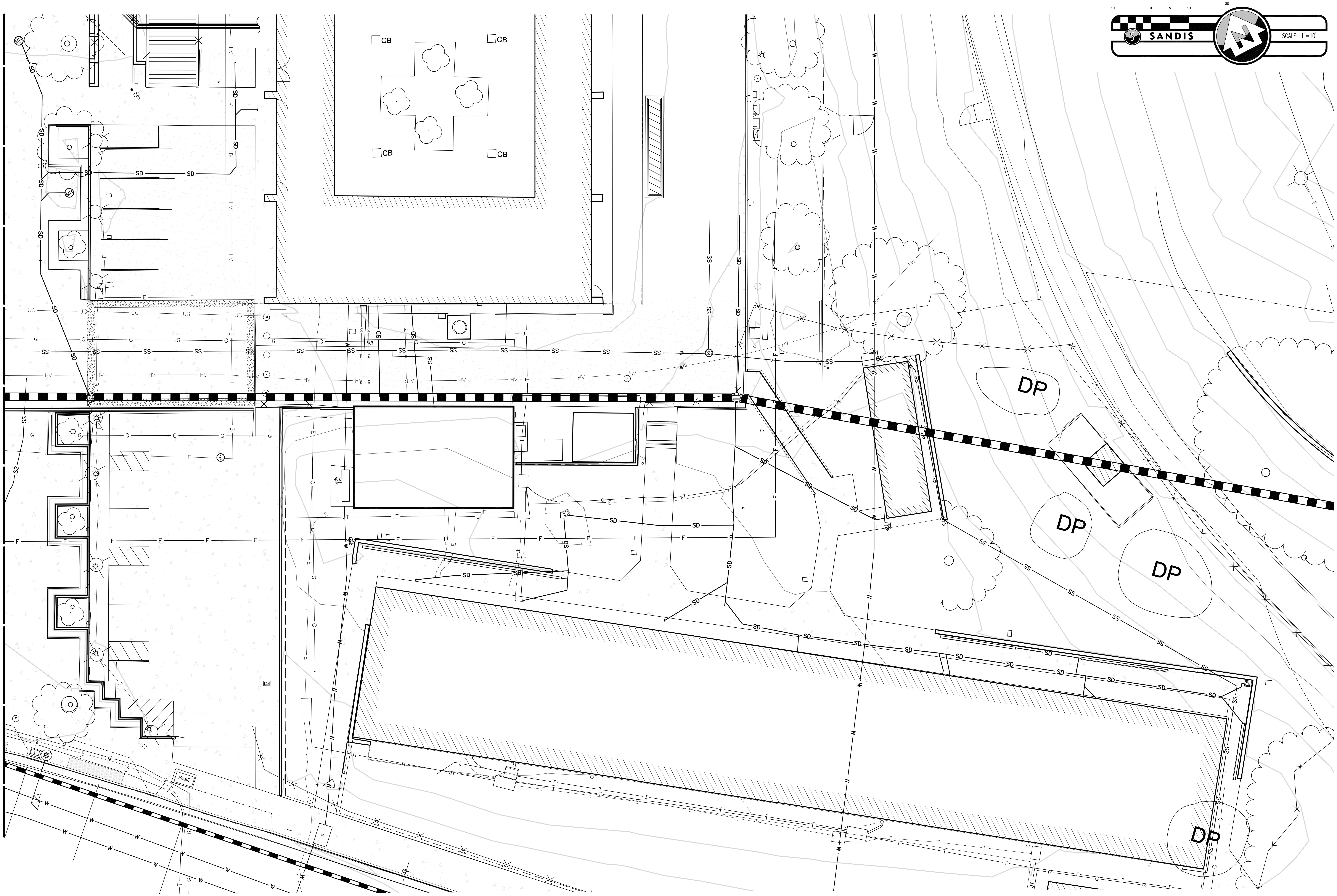
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: SAN	CHECKED: DIS
DATE: 03/15/21	SCALE: 1"=20'
PROJECT NUMBER: 2015800	

TOPOGRAPHIC SURVEY (BY OTHERS - FOR REFERENCE ONLY)

DRAWING NUMBER: **C1.1**



ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

SANDIS

BUILD ON.

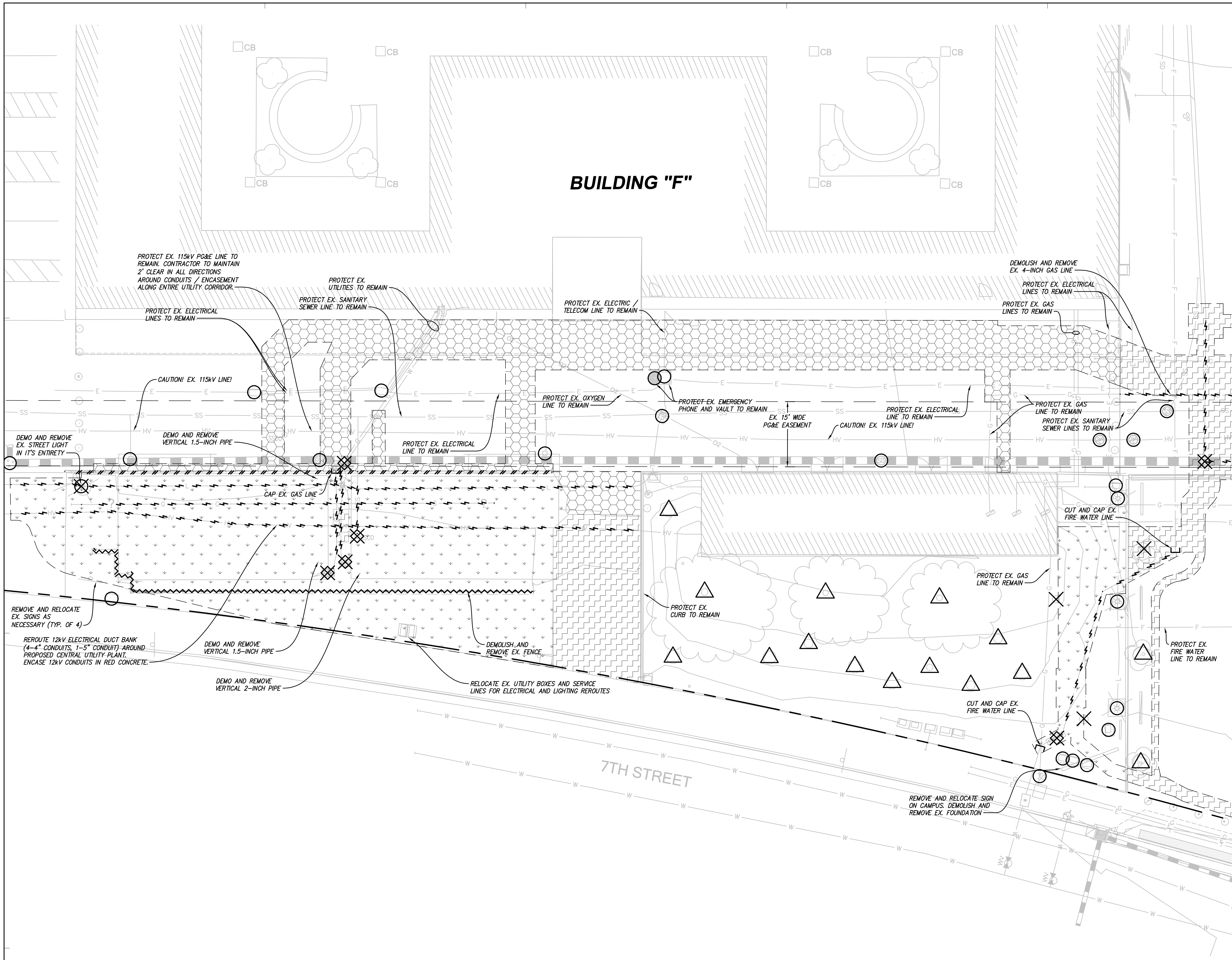
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

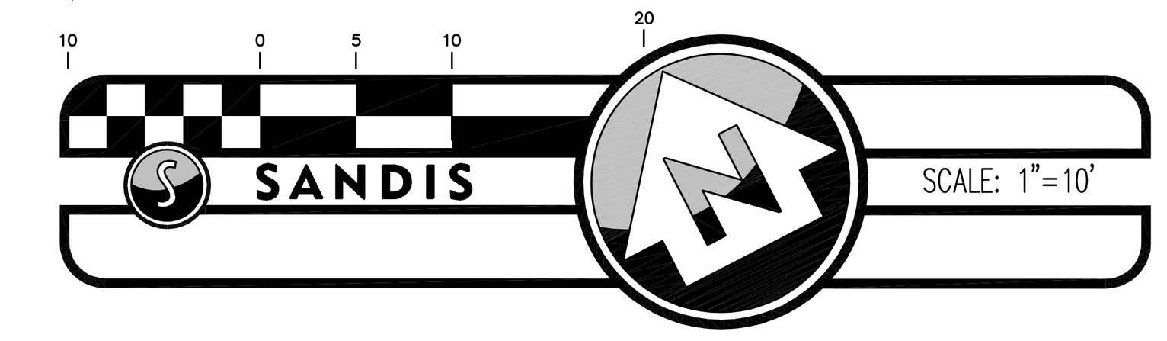
REVISIONS

DRAWN: SAN	CHECKED: DIS
DATE: 03/15/21	SCALE: N.T.S.
PROJECT NUMBER: 2015800	

TOPOGRAPHIC SURVEY (BY OTHERS - FOR REFERENCE ONLY)

DRAWING NUMBER: C1.2





LEGEND

- SAWCUT LINE. CONTRACTOR SHALL SAWCUT WITH A NEAT, CLEAN EDGE. SAWCUT CONCRETE AT NEAREST JOINT TO SAWCUT LINE SHOWN ON PLAN.
- DEMOLISH AND REMOVE EXISTING CURB AND GUTTER, INCLUDING ANY ASSOCIATED REBAR OR BASE ROCK. SAWCUT WITH NEAT, CLEAN EDGE.
- REMOVE EXISTING WALL OR FENCE INCLUDING ASSOCIATED FOOTINGS. RETURN FENCE TO OWNER.
- DEMOLISH AND REMOVE EX. UTILITY LINE. BACKFILL EMPTY TRENCH WITH APPROVED FILL PER GEOTECHNICAL REPORT.
- DEMOLISH AND REMOVE EX. UTILITY STRUCTURE
- CAP EXISTING UTILITY WHERE SHOWN PER UTILITY OWNERS SPECIFICATIONS AND REQUIREMENTS. IF PRESSURIZED UTILITY CONTRACTOR SHALL HAVE COMPETENT PROFESSIONAL DESIGN PIPE RESTRAINTS.
- DEMOLISH AND REMOVE EX. STREETLIGHT AND FOUNDATION
- PROTECT EXISTING UTILITY TO REMAIN
- REMOVE EXISTING TREE AND ROOT BALL. COORDINATE WITH LANDSCAPE ARCHITECT AND PROJECT ARBORIST PRIOR TO REMOVING ANY TREES.
- PROTECT EXISTING TREE TO REMAIN. SEE LANDSCAPE PLANS AND ARBORIST'S REPORT FOR TREE PROTECTION DETAILS.
- DEMOLISH AND REMOVE AC PAVING AND ANY ASSOCIATED BASE ROCK. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY GEOTECHNICAL ENGINEER.
- DEMOLISH AND REMOVE CONCRETE INCLUDING ANY ASSOCIATED BASE ROCK AND REBAR. STABILIZE THE EXISTING SUBGRADE, DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY THE GEOTECHNICAL ENGINEER.
- CLEAR AND GRUB EXISTING LANDSCAPE AREA SO NO ORGANICS ARE STILL PRESENT.
- DEMOLISH AND REMOVE EXISTING BUILDING, SEE ARCHITECTURAL PLANS FOR EXTENT OF BUILDING DEMOLITION. STABILIZE THE EXISTING SUBGRADE.

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

SANDIS BUILD ON.

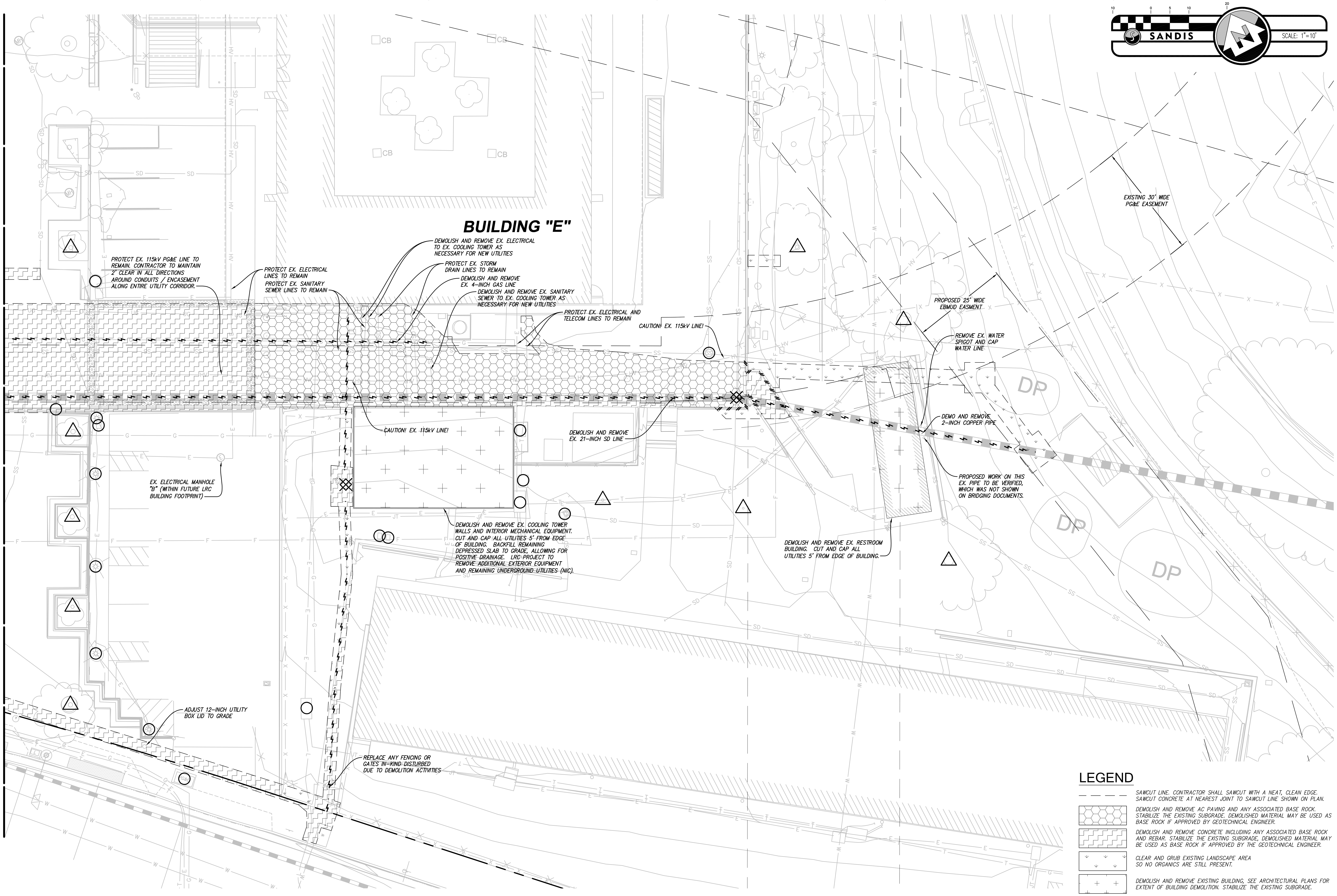
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
NO	DATE	BY	DESCRIPTION

REVISIONS

DRAWN: SEC	CHECKED: SU
DATE: 03/15/21	SCALE: 1"=10'
PROJECT NUMBER: 2015800	

DEMOLITION PLAN WEST

DRAWING NUMBER: **C2.0**



LEGEND

(dashed line)	SAWCUT LINE. CONTRACTOR SHALL SAWCUT WITH A NEAT, CLEAN EDGE. SAWCUT CONCRETE AT NEAREST JOINT TO SAWCUT LINE SHOWN ON PLAN.
(hexagon hatch)	DEMOLISH AND REMOVE AC PAVING AND ANY ASSOCIATED BASE ROCK. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY GEOTECHNICAL ENGINEER.
(brick hatch)	DEMOLISH AND REMOVE CONCRETE INCLUDING ANY ASSOCIATED BASE ROCK AND REBAR. STABILIZE THE EXISTING SUBGRADE. DEMOLISHED MATERIAL MAY BE USED AS BASE ROCK IF APPROVED BY THE GEOTECHNICAL ENGINEER.
(grass hatch)	CLEAR AND GRUB EXISTING LANDSCAPE AREA SO NO ORGANICS ARE STILL PRESENT.
(cross hatch)	DEMOLISH AND REMOVE EXISTING BUILDING, SEE ARCHITECTURAL PLANS FOR EXTENT OF BUILDING DEMOLITION. STABILIZE THE EXISTING SUBGRADE.
(slashed line)	DEMOLISH AND REMOVE EXISTING CURB AND GUTTER, INCLUDING ANY ASSOCIATED REBAR OR BASE ROCK. SAWCUT WITH NEAT, CLEAN EDGE.
(wavy line)	REMOVE EXISTING WALL OR FENCE INCLUDING ASSOCIATED FOOTINGS. RETURN FENCE TO OWNER.
(lightning line)	DEMOLISH AND REMOVE EX. UTILITY LINE. BACKFILL EMPTY TRENCH WITH APPROVED FILL PER GEOTECHNICAL REPORT.
(crossed box)	DEMOLISH AND REMOVE EX. UTILITY STRUCTURE
(cap symbol)	CAP EXISTING UTILITY WHERE SHOWN PER UTILITY OWNERS SPECIFICATIONS AND REQUIREMENTS. IF PRESSURIZED UTILITY CONTRACTOR SHALL HAVE COMPETENT PROFESSIONAL DESIGN PIPE RESTRAINTS.
(crossed circle)	DEMOLISH AND REMOVE EX. STREETLIGHT AND FOUNDATION
○	PROTECT EXISTING UTILITY TO REMAIN
X	REMOVE EXISTING TREE AND ROOT BALL. COORDINATE WITH LANDSCAPE ARCHITECT AND PROJECT ARBORIST PRIOR TO REMOVING ANY TREES.
△	PROTECT EXISTING TREE TO REMAIN. SEE LANDSCAPE PLANS AND ARBORIST'S REPORT FOR TREE PROTECTION DETAILS.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SANDIS
BUILD ON.

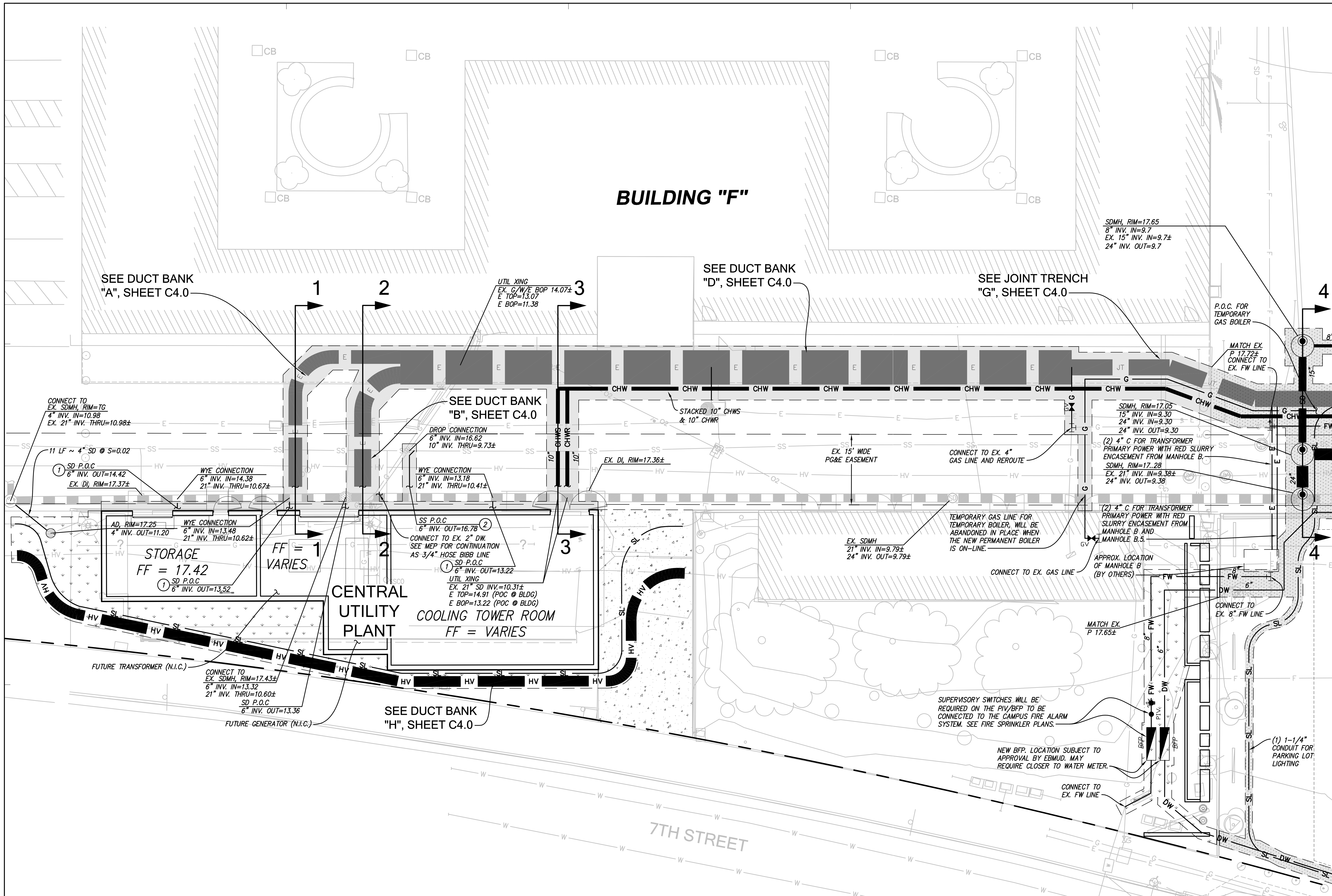
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

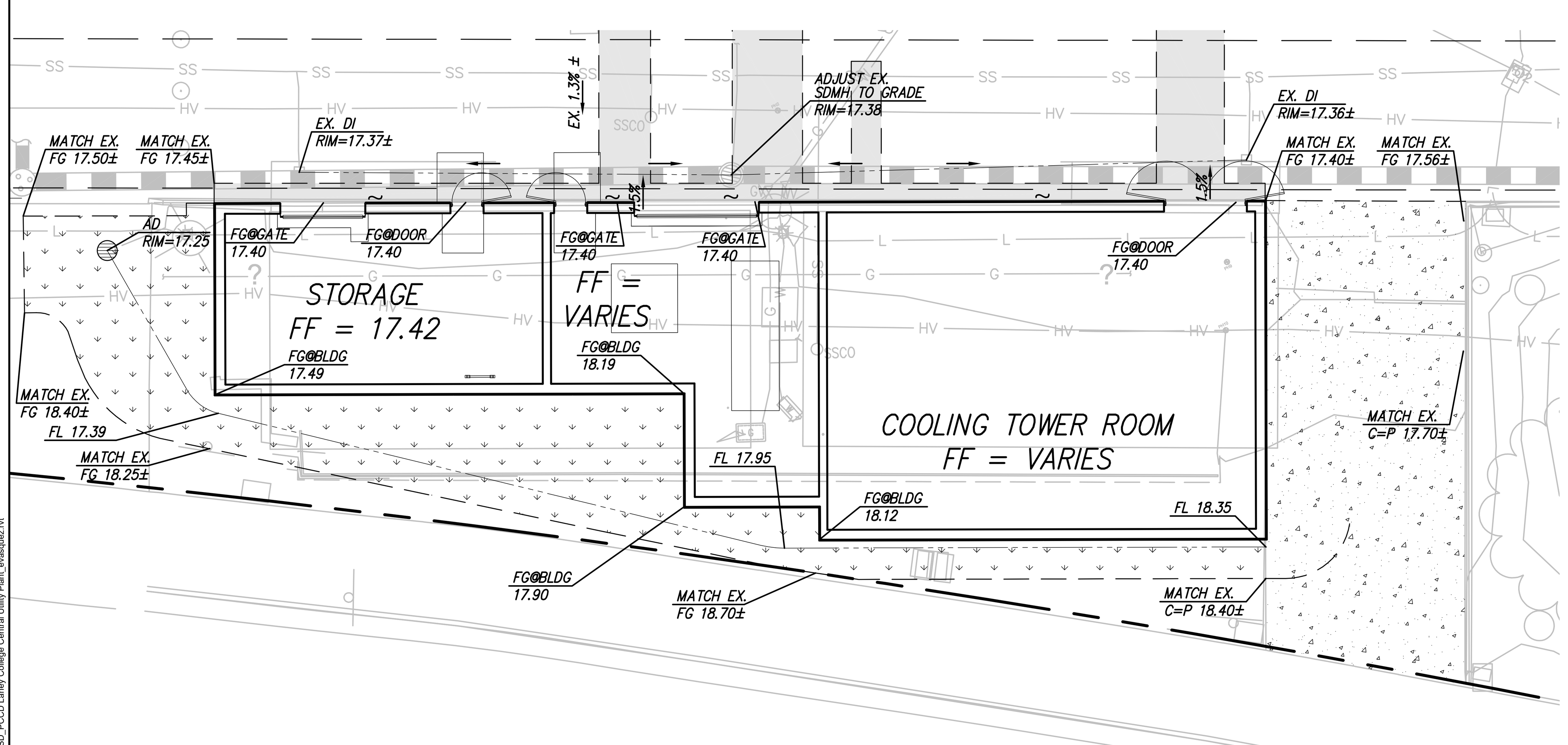
DRAWN: SEC	CHECKED: SU
DATE: 03/15/21	SCALE: 1"=10'
PROJECT NUMBER: 2015800	

DEMOLITION PLAN EAST

DRAWING NUMBER: C2.1



UTILITY PLAN



GRADING PLAN

SANDIS SCALE: 1"=10'

LEGEND

- PROPERTY LINE
- SAWCUT LINE
- AC PAVEMENT SEE DETAIL 1, SHEET C5.0
- TEMPORARY AC PAVEMENT SEE DETAIL 2, SHEET C5.0
- CONCRETE SIDEWALK
- PLANTING

STORM DRAIN NOTES

1. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITH A MINIMUM OF TWO (2) FEET OF COVER IN NON-TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 GREEN PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH BELLS AND SPIGOT CONNECTIONS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS, 45° ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
2. PRIVATE STORM DRAIN LINE 6-INCH THROUGH 12-INCH WITH LESS THAN THREE (3) FEET OF COVER IN VEHICULAR TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) C900, RATED FOR 150 PSI CLASS PIPE. PROVIDE AND INSTALL "STORM DRAIN" MARKER TAPE FOR THE ENTIRE LENGTH OF PIPE TRENCH. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, OBTUSE ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
3. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
4. ALL TRENCHES SHALL BE BACK FILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
5. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO THE TRENCHING OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
6. DRAINS SHOWN ON CIVIL PLANS ARE NOT INTENDED TO BE THE FINAL NUMBER AND LOCATION OF ALL DRAINS. PLACEMENT AND NUMBER OF LANDSCAPING DRAINS ARE HIGHLY DEPENDENT ON GROUND COVER TYPE AND PLANT MATERIAL. CONTRACTOR SHALL ADD ADDITIONAL AREA DRAINS AS NEEDED AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
7. INSTALL SEPARATE SUB-DRAIN SYSTEM BEHIND RETAINING WALLS PER GEOTECHNICAL REPORT AND CONNECT TO STORM DRAIN SYSTEM AS SHOWN ON PLANS.
8. ALL DOWN SPOUTS SHALL DISCHARGE DIRECTLY ON TO ADJACENT PERVIOUS SURFACES OR SPLASH BLOCKS UNLESS OTHERWISE NOTED ON PLANS. SEE ARCHITECTURE PLANS FOR EXACT LOCATION OF THE DOWN SPOUTS.

SANITARY SEWER NOTES

1. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT STANDARDS.
2. PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH BELL AND SPIGOT CONNECTIONS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS OR 45°. ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
3. ALL LATERALS SHALL HAVE A TWO WAY CLEANOUT AT FACE OF BUILDING AND AS SHOWN ON PLANS.
4. IF (E) SEWER LATERAL IS TO BE USED, CONTRACTOR SHALL VIDEO INSPECT, PERFORM PRESSURE TEST ON (E) SEWER LATERAL, AND SHALL PERFORM ANY NEEDED REPAIRS.

WATER SYSTEM NOTES

1. MAINTAIN WATER MAIN LINES 10' AWAY FROM SANITARY SEWER MAIN LINES. LATERALS SHALL BE SEPARATED PER PLAN DIMENSIONS.
2. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER LINES.
3. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE WATER DISTRICT STANDARDS.
4. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER.
5. THRUST RESTRAINTS SHALL BE DESIGNED AND INSTALLED AT ALL TEES, CROSSES, BENDS (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS.

GENERAL NOTES

1. FLEXIBLE PIPE CONNECTIONS SHALL BE USED AT EXISTING, PROPOSED AND FUTURE BUILDING UTILITY POINTS-OF-CONNECTION.
2. CORROSION PROTECTION AND/OR CATHODIC PROTECTION OF BURIED METALLIC PIPING, FITTINGS AND APPURTENANCES IS REQUIRED. SEE CIVIL SPECIFICATIONS.
3. A "ZERO NET LOAD" FOR SITE IMPROVEMENTS IS REQUIRED. SEE CIVIL SPECIFICATIONS.

SHEET NOTES

(1) STORM DRAIN POINT OF CONNECTION AT BUILDING. SEE ARCHITECTURAL PLANS FOR CONTINUATION. S=0.020 MIN.

(2) UTILITY POINT OF CONNECTION AT BUILDING. SEE PLUMBING PLANS FOR CONTINUATION.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT: SANDIS

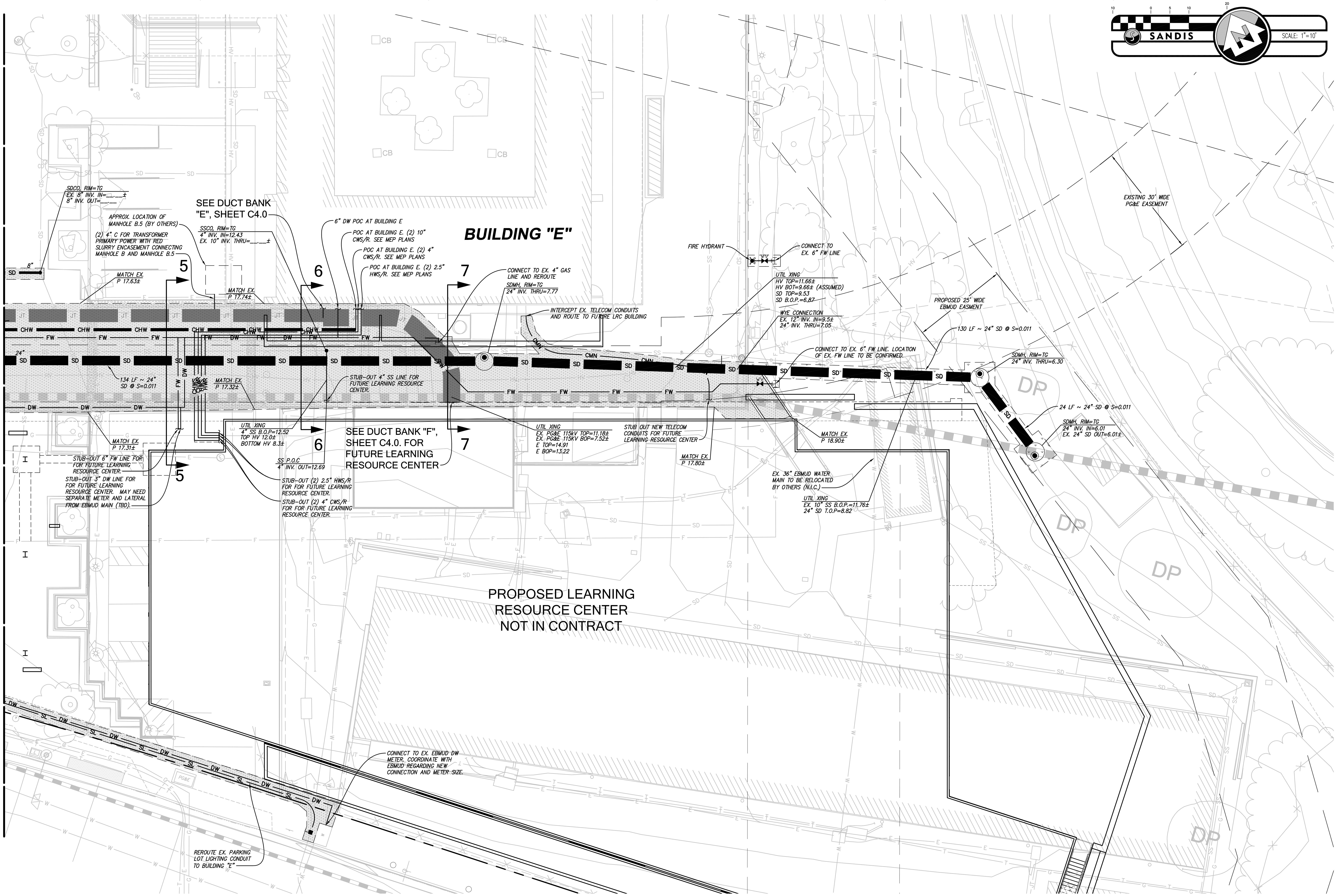
03-15-2021			100% DD SET
04-14-2021			50% CD SET
NO	DATE	BY	DESCRIPTION
	REVISIONS		

DRAWN: SEC | CHECKED: SU
DATE: 03/15/21 | SCALE: 1"=10'
PROJECT NUMBER: 2015800

SITE UTILITY PLAN WEST

DRAWING NUMBER: C3.0

File: X:\P\620111 - Laney College CUP\4_ENGINEERING\2_PLAN SETS\3_SHEET SET\ONSITE\C3.0.dwg Date:Apr 12, 2021



LEGEND

- PROPERTY LINE
- SAWCUT LINE
- AC PAVEMENT SEE DETAIL 1, SHEET C5.0
- TEMPORARY AC PAVEMENT SEE DETAIL 2, SHEET C5.0
- CONCRETE SIDEWALK
- PLANTING

STORM DRAIN NOTES

1. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITH A MINIMUM OF TWO (2) FEET OF COVER IN NON-TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 GREEN PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH BELLS AND SPIGOT CONNECTIONS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS, 45° ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
2. PRIVATE STORM DRAIN LINE 6-INCH THROUGH 12-INCH WITH LESS THAN THREE (3) FEET OF COVER IN VEHICULAR TRAFFIC AREAS SHALL BE POLYVINYL CHLORIDE (PVC) C900, RATED FOR 150 PSI CLASS PIPE. PROVIDE AND INSTALL "STORM DRAIN" MARKER TAPE FOR THE ENTIRE LENGTH OF PIPE TRENCH. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, OBTUSE ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
3. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
4. ALL TRENCHES SHALL BE BACK FILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
5. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO THE TRENCHING OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
6. DRAINS SHOWN ON CIVIL PLANS ARE NOT INTENDED TO BE THE FINAL NUMBER AND LOCATION OF ALL DRAINS. PLACEMENT AND NUMBER OF LANDSCAPING DRAINS ARE HIGHLY DEPENDENT ON GROUND COVER TYPE AND PLANT MATERIAL. CONTRACTOR SHALL ADD ADDITIONAL AREA DRAINS AS NEEDED AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
7. INSTALL SEPARATE SUB-DRAIN SYSTEM BEHIND RETAINING WALLS PER GEOTECHNICAL REPORT AND CONNECT TO STORM DRAIN SYSTEM AS SHOWN ON PLANS.
8. ALL DOWN SPOUTS SHALL DISCHARGE DIRECTLY ON TO ADJACENT PERVIOUS SURFACES OR SPLASH BLOCKS UNLESS OTHERWISE NOTED ON PLANS. SEE ARCHITECTURE PLANS FOR EXACT LOCATION OF THE DOWN SPOUTS.

SANITARY SEWER NOTES

1. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT STANDARDS.
2. PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH BELL AND SPIGOT CONNECTIONS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS OR 45°. ELBOWS, 90° ELBOWS AND TEE'S ARE PROHIBITED.
3. ALL LATERALS SHALL HAVE A TWO WAY CLEANOUT AT FACE OF BUILDING AND AS SHOWN ON PLANS.
4. IF (E) SEWER LATERAL IS TO BE USED, CONTRACTOR SHALL VIDEO INSPECT, PERFORM PRESSURE TEST ON (E) SEWER LATERAL, AND SHALL PERFORM ANY NEEDED REPAIRS.

WATER SYSTEM NOTES

1. MAINTAIN WATER MAIN LINES 10' AWAY FROM SANITARY SEWER MAIN LINES. LATERALS SHALL BE SEPARATED PER PLAN DIMENSIONS.
2. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER LINES.
3. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE WATER DISTRICT STANDARDS.
4. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER.
5. THRUST RESTRAINTS SHALL BE DESIGNED AND INSTALLED AT ALL TEES, CROSSES, BENDS (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS.

GENERAL NOTES

1. FLEXIBLE PIPE CONNECTIONS SHALL BE USED AT EXISTING, PROPOSED AND FUTURE BUILDING UTILITY POINTS-OF-CONNECTION.
2. CORROSION PROTECTION AND/OR CATHODIC PROTECTION OF BURIED METALLIC PIPING, FITTINGS AND APPURTENANCES IS REQUIRED. SEE CIVIL SPECIFICATIONS.
3. A "ZERO NET LOAD" FOR SITE IMPROVEMENTS IS REQUIRED. SEE CIVIL SPECIFICATIONS.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT: SANDIS BUILD ON.

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

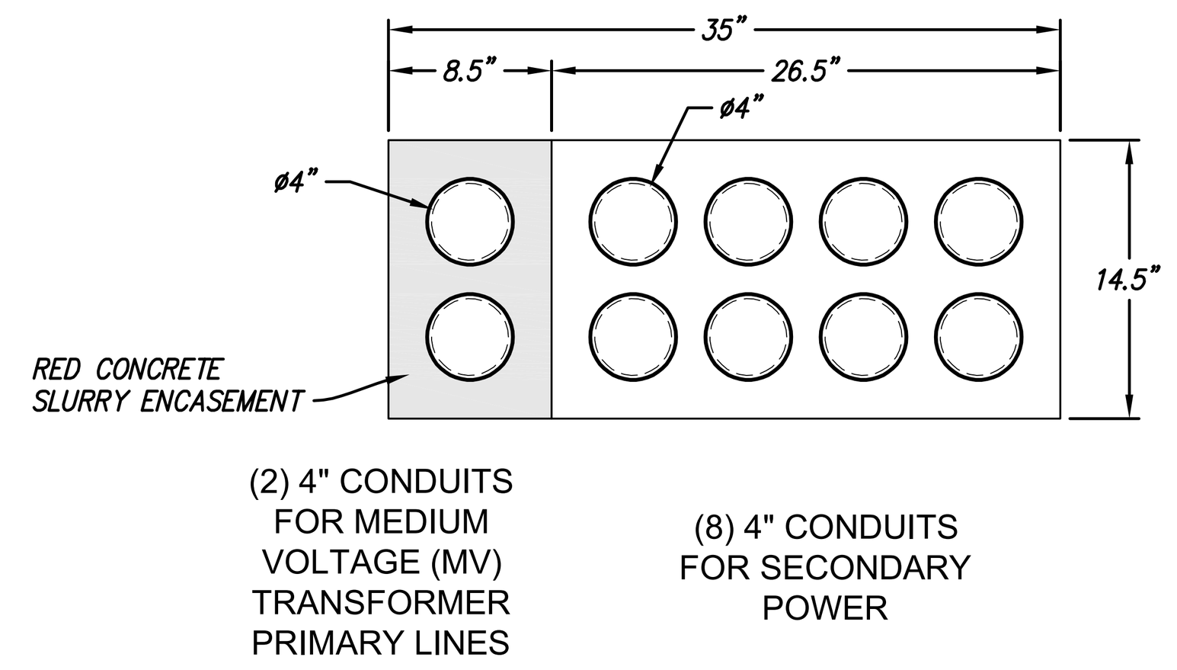
REVISIONS

DRAWN: SEC	CHECKED: SU
DATE: 03/15/21	SCALE: 1"=10'
PROJECT NUMBER: 2015800	

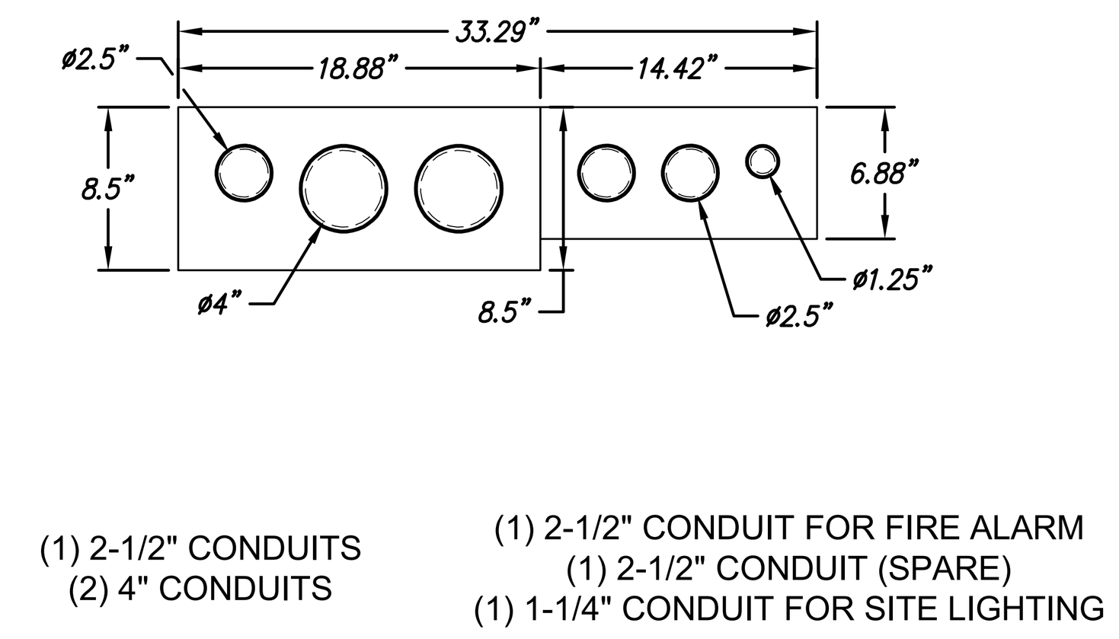
SITE UTILITY PLAN EAST

DRAWING NUMBER: C3.1

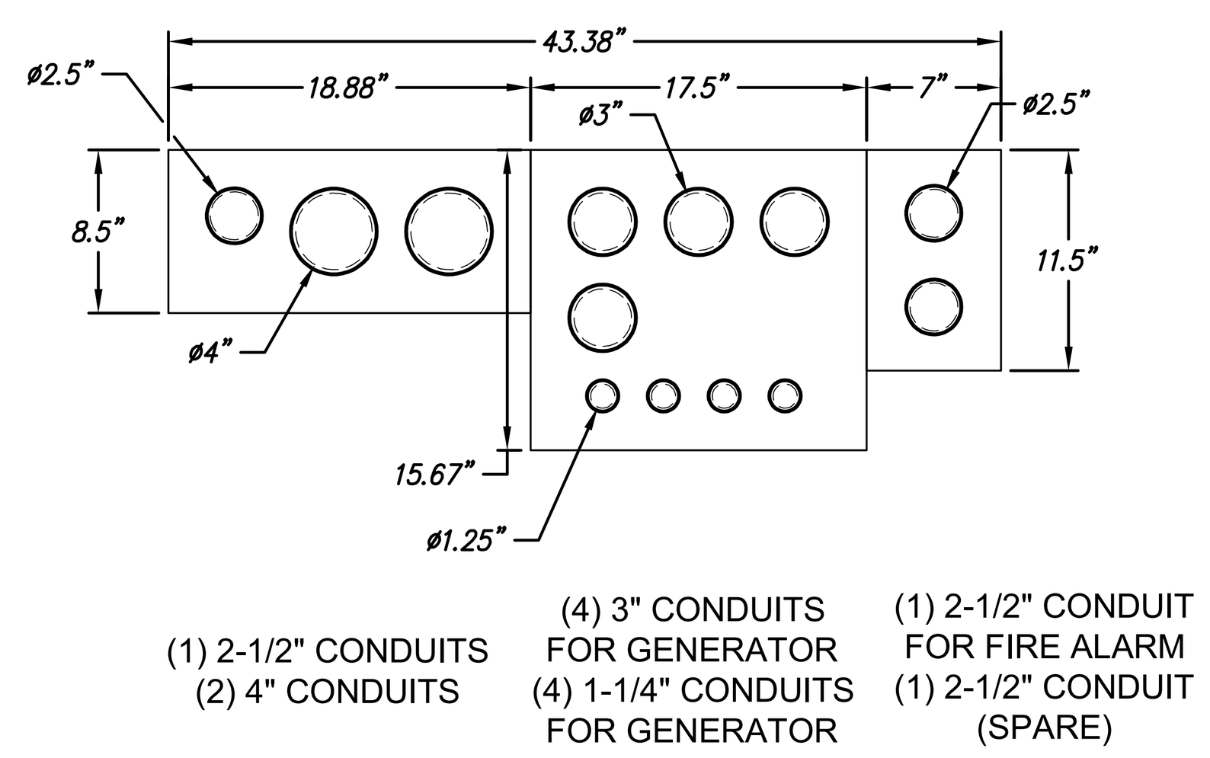
File: X:\P\620111 ~ Laney College CUP\4_ENGINEERING\2_PLAN SETS\3_SHEET SET\ONSITE\C3.0.dwg Date:Apr 12, 2021



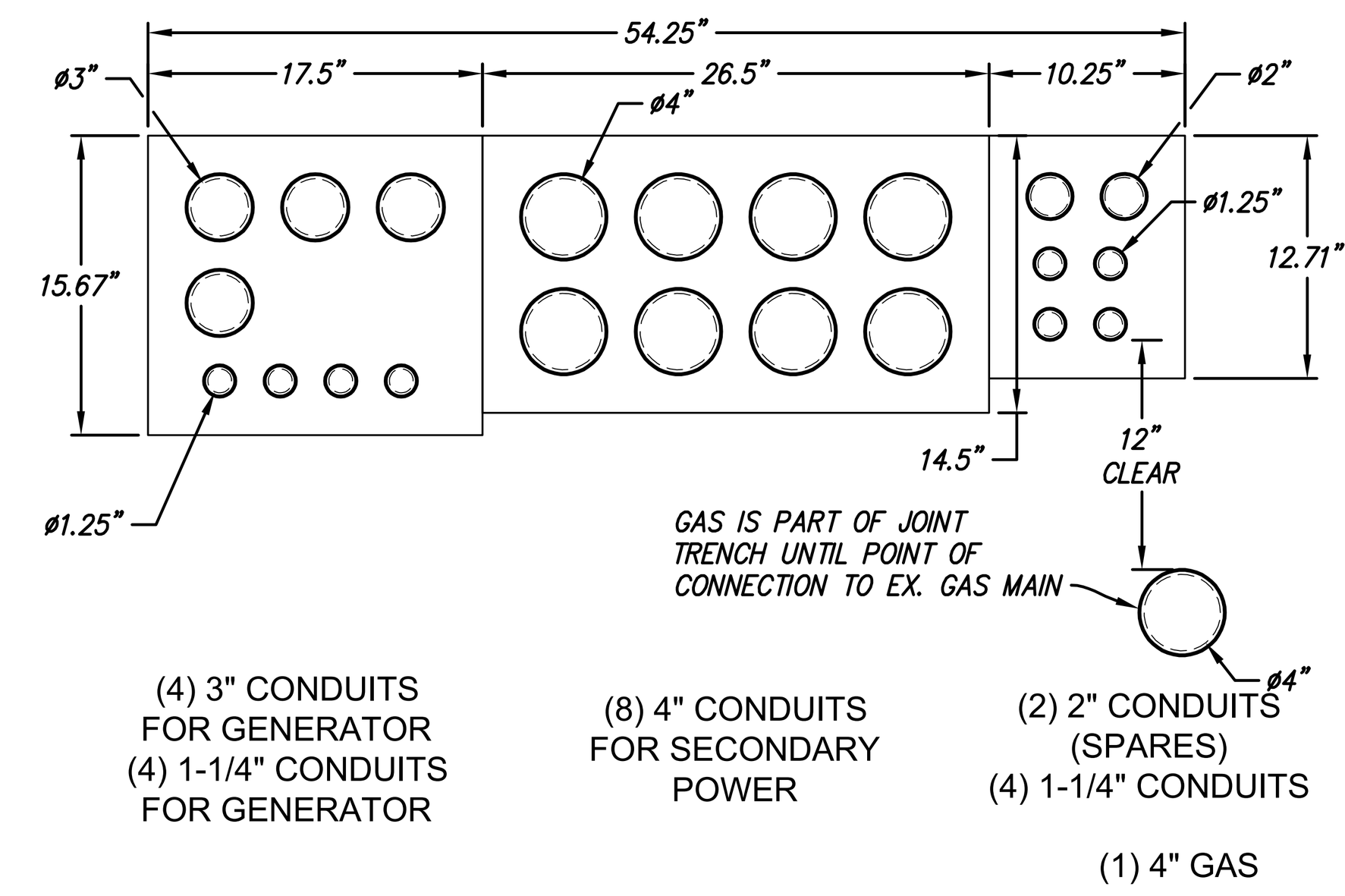
ELECTRICAL DUCT BANK "A"



ELECTRICAL DUCT BANK "E"



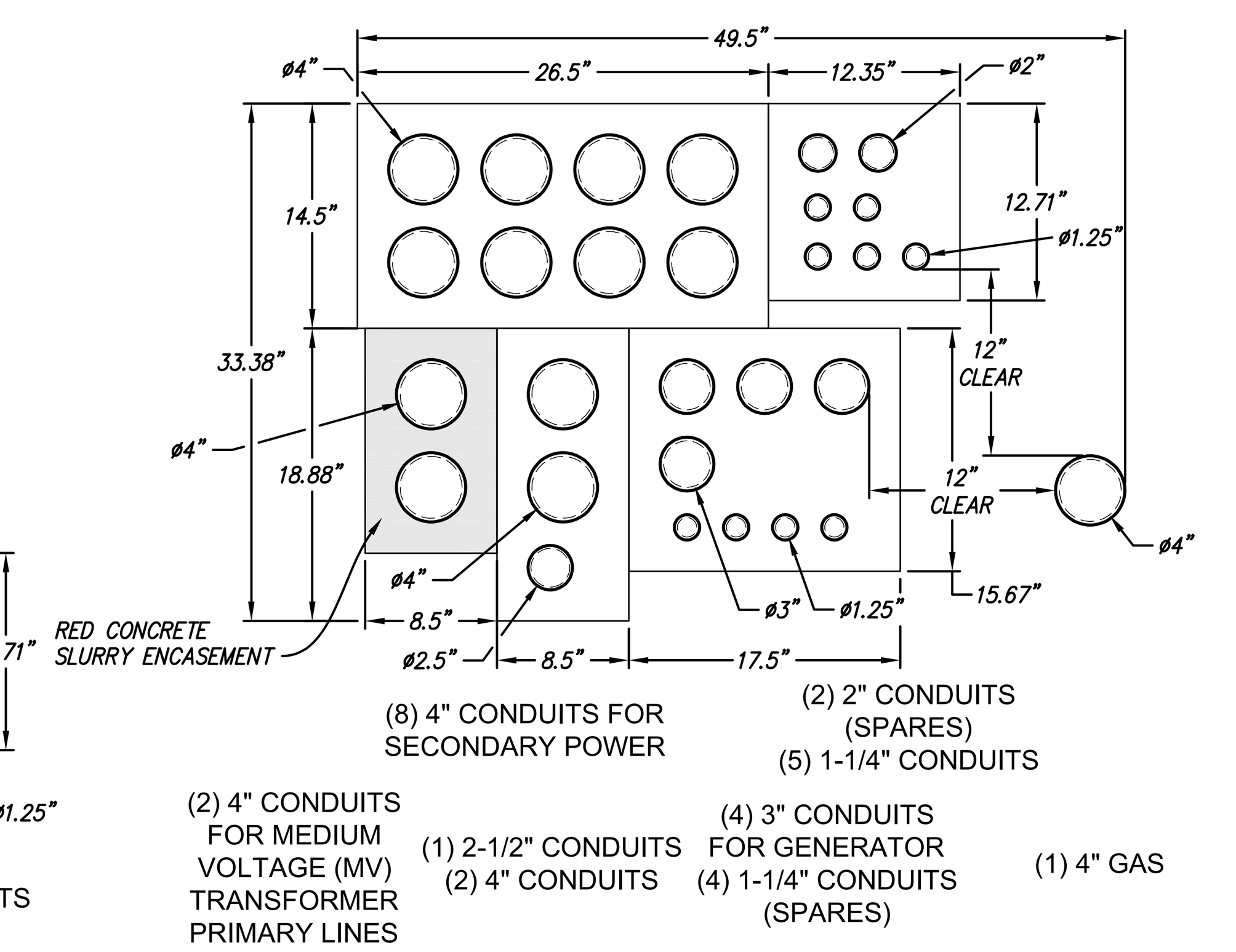
ELECTRICAL DUCT BANK "B"



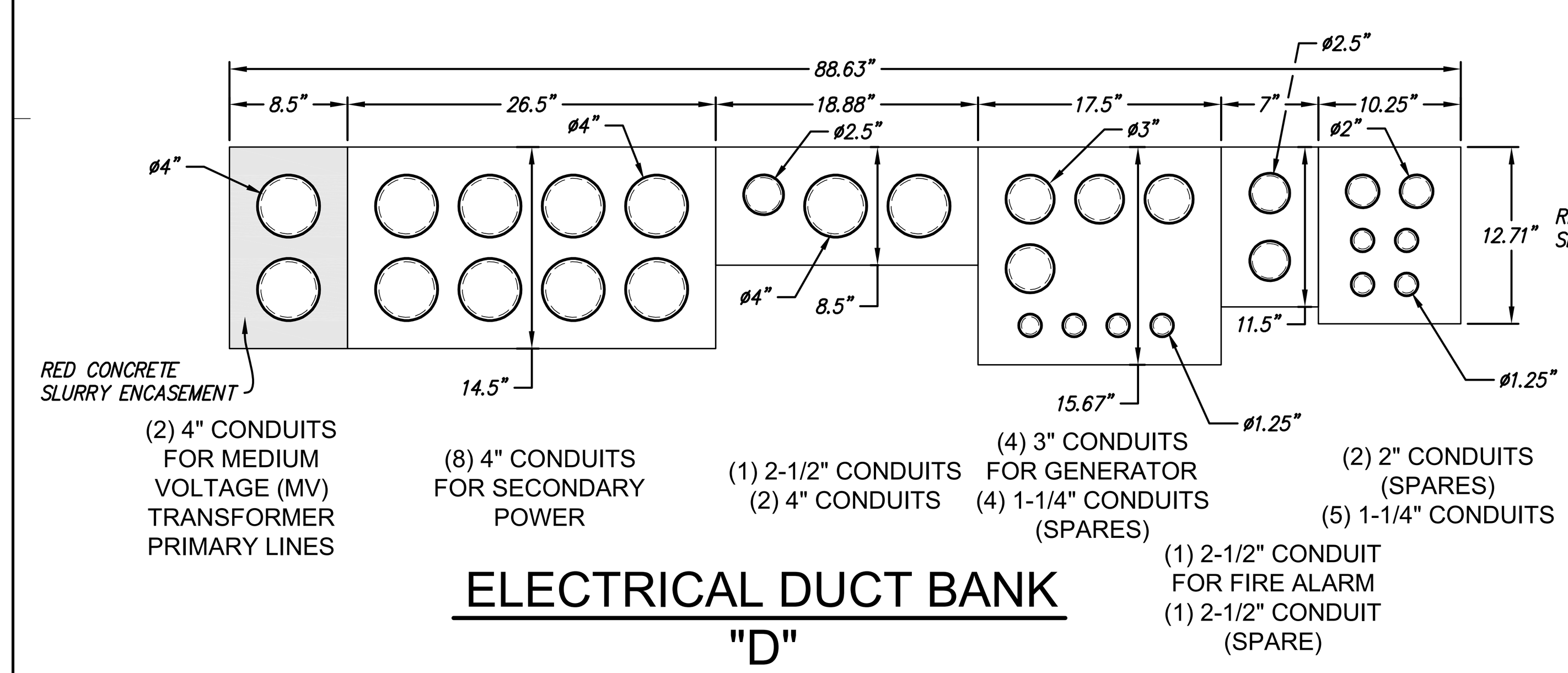
ELECTRICAL DUCT BANK "F"

NOT USED

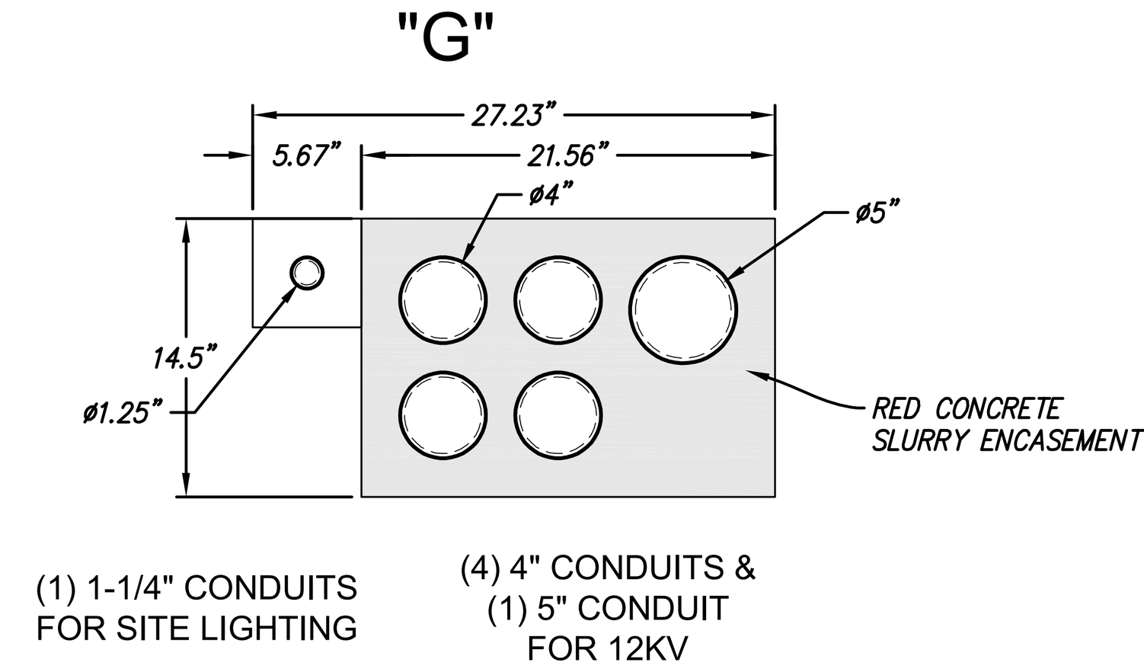
ELECTRICAL DUCT BANK "C"



ELECTRICAL DUCT BANK "G"



ELECTRICAL DUCT BANK "D"



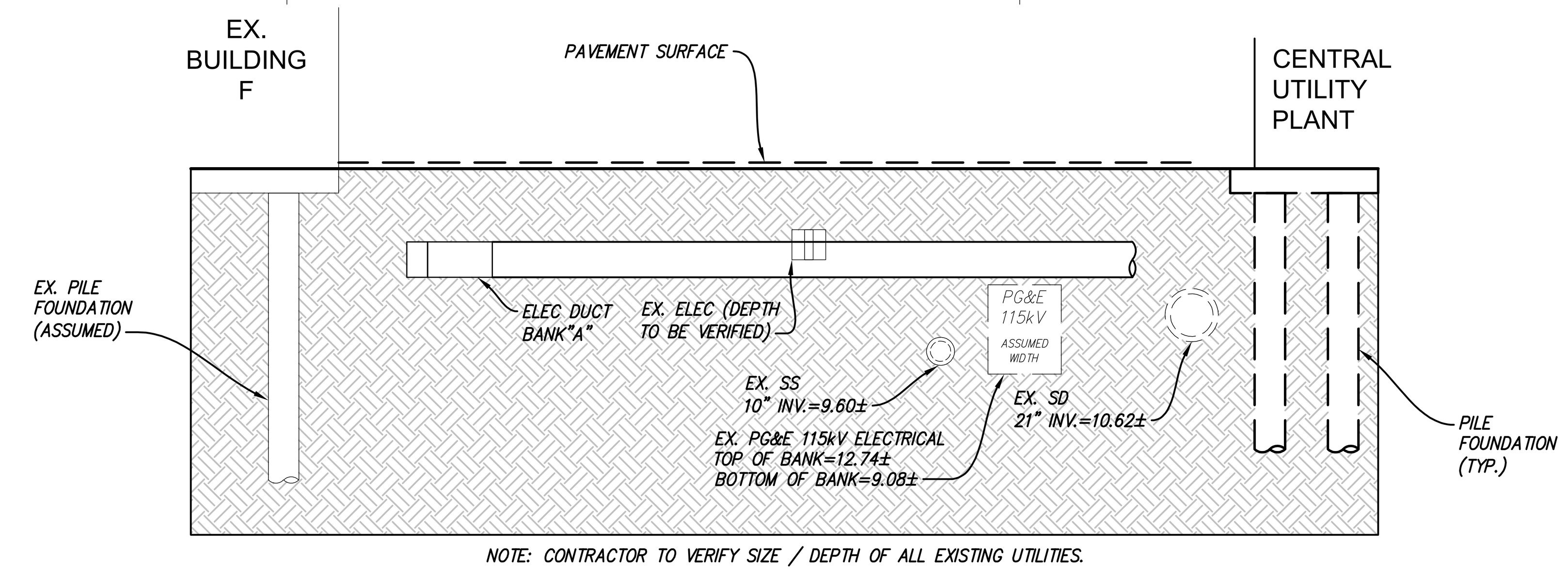
ELECTRICAL DUCT BANK "H"

DUCT BANK NOTES

5" CONDUIT	-	5.563" OUTSIDE DIAMETER
4" CONDUIT	-	4.5" OUTSIDE DIAMETER
3" CONDUIT	-	3.5" OUTSIDE DIAMETER
2 1/2" CONDUIT	-	2.875" OUTSIDE DIAMETER
2" CONDUIT	-	2.375" OUTSIDE DIAMETER
1 1/4" CONDUIT	-	1.66" OUTSIDE DIAMETER

MIN. SPACING BETWEEN CONDUITS: 1.5"
MIN. SPACING FROM EDGE OF CONDUIT TO EDGE OF ENCASEMENT: 2"

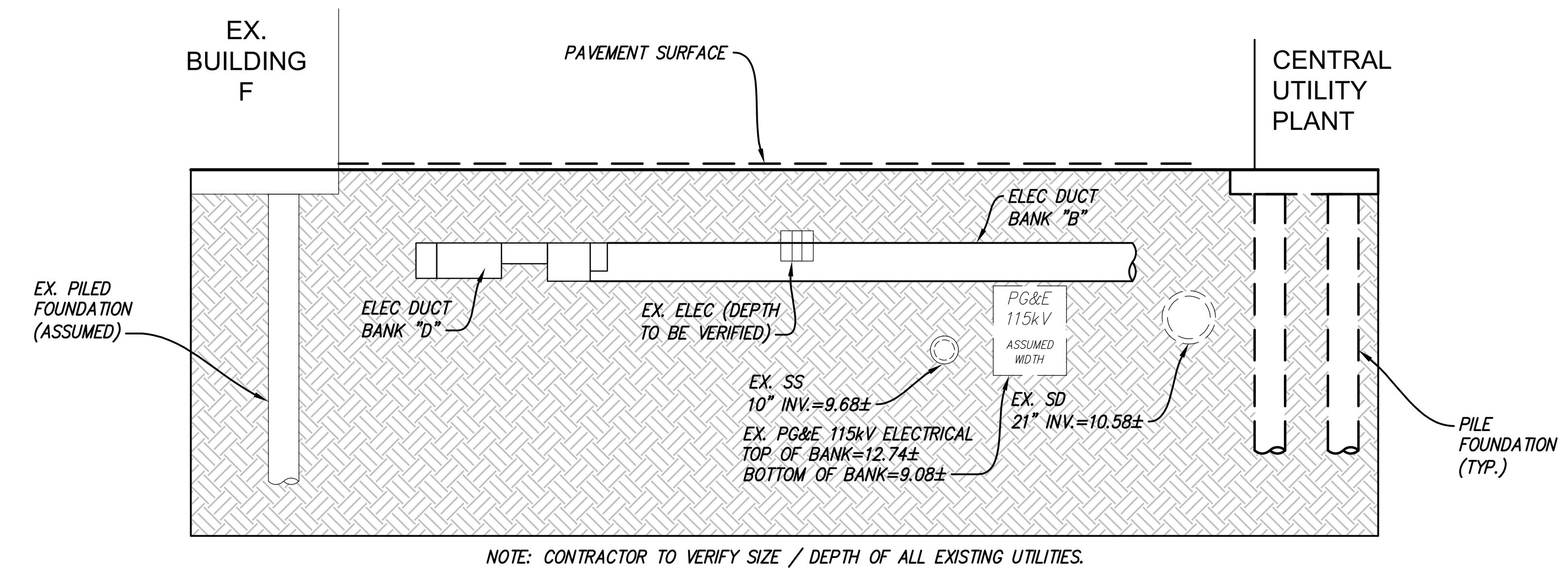
MIN. DEPTH OF COVER: 24"
MIN. DEPTH OF COVER (HIGH VOLTAGE): 30"



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 1-1

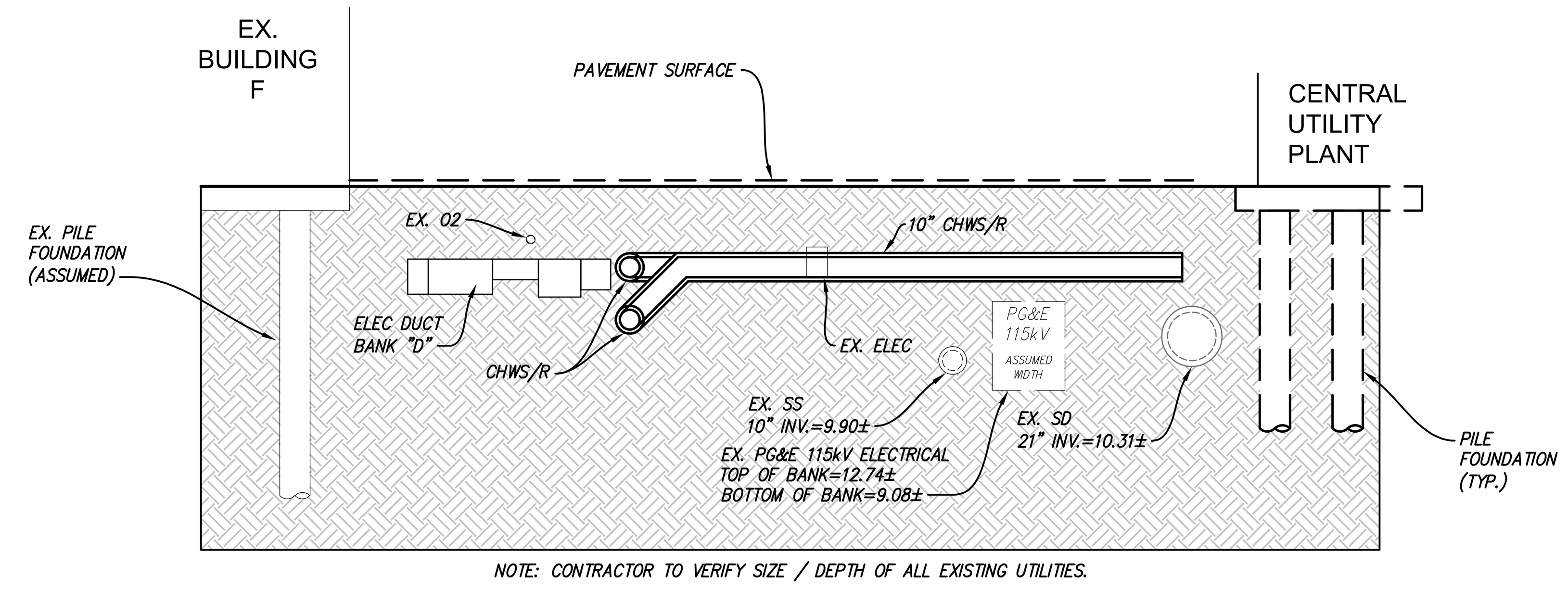
SCALE: 1" = 5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 2-2

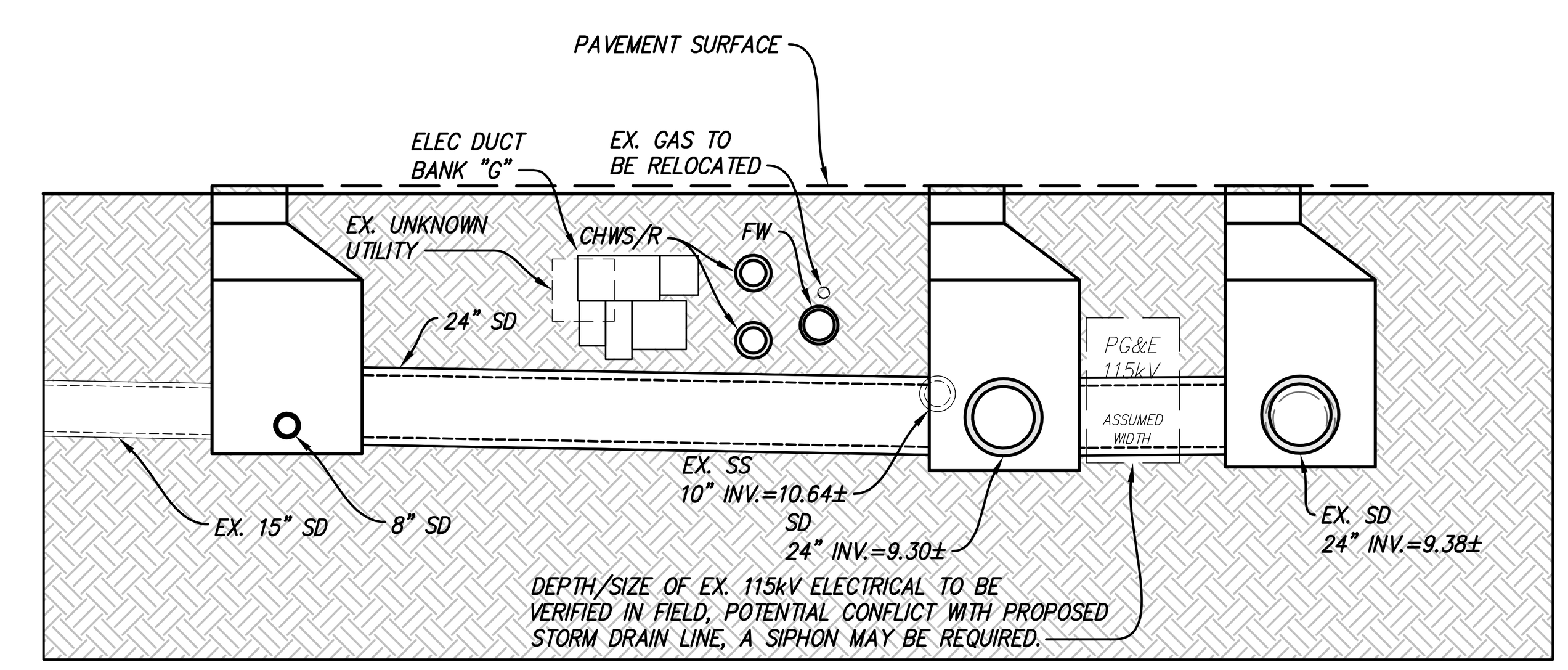
SCALE: 1" = 5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 3-3

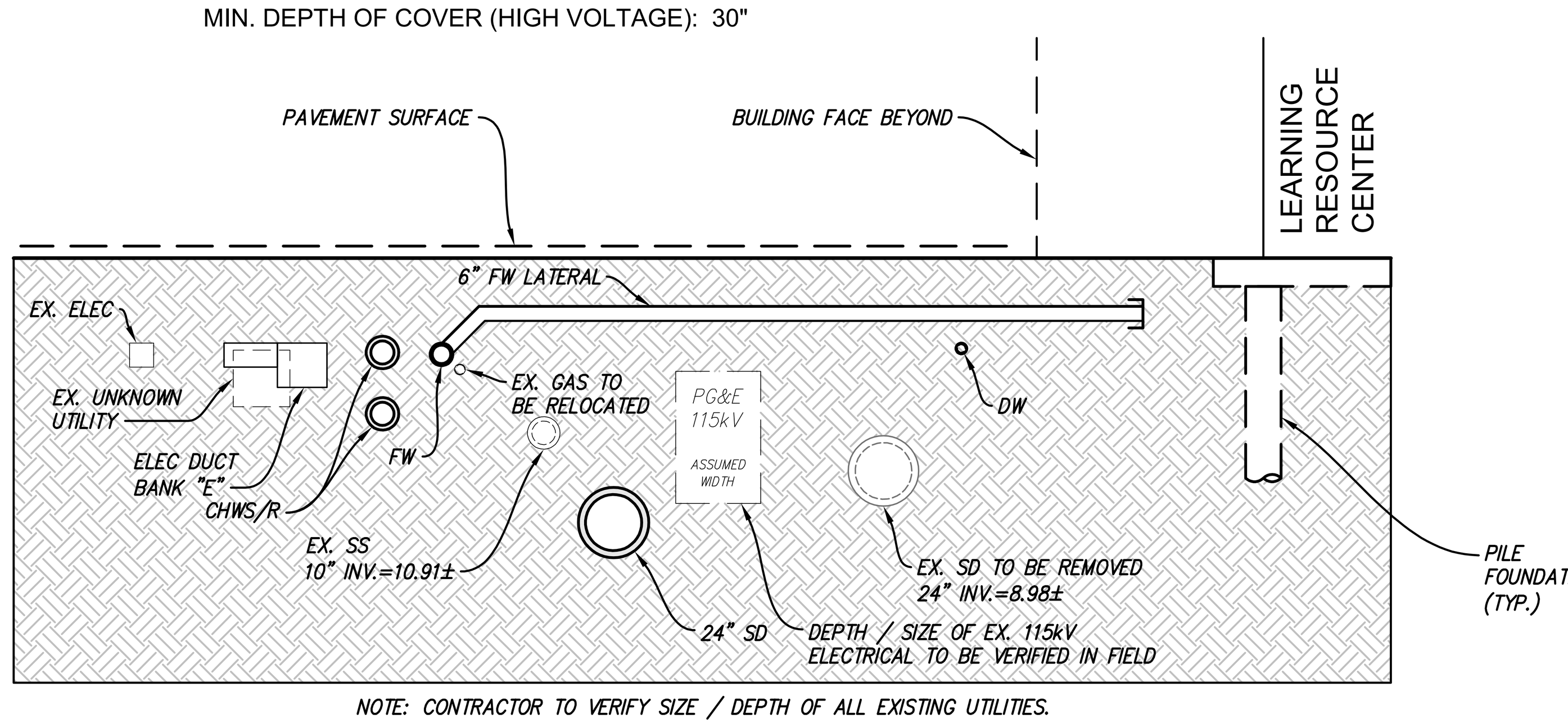
SCALE: 1"=5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 4-4

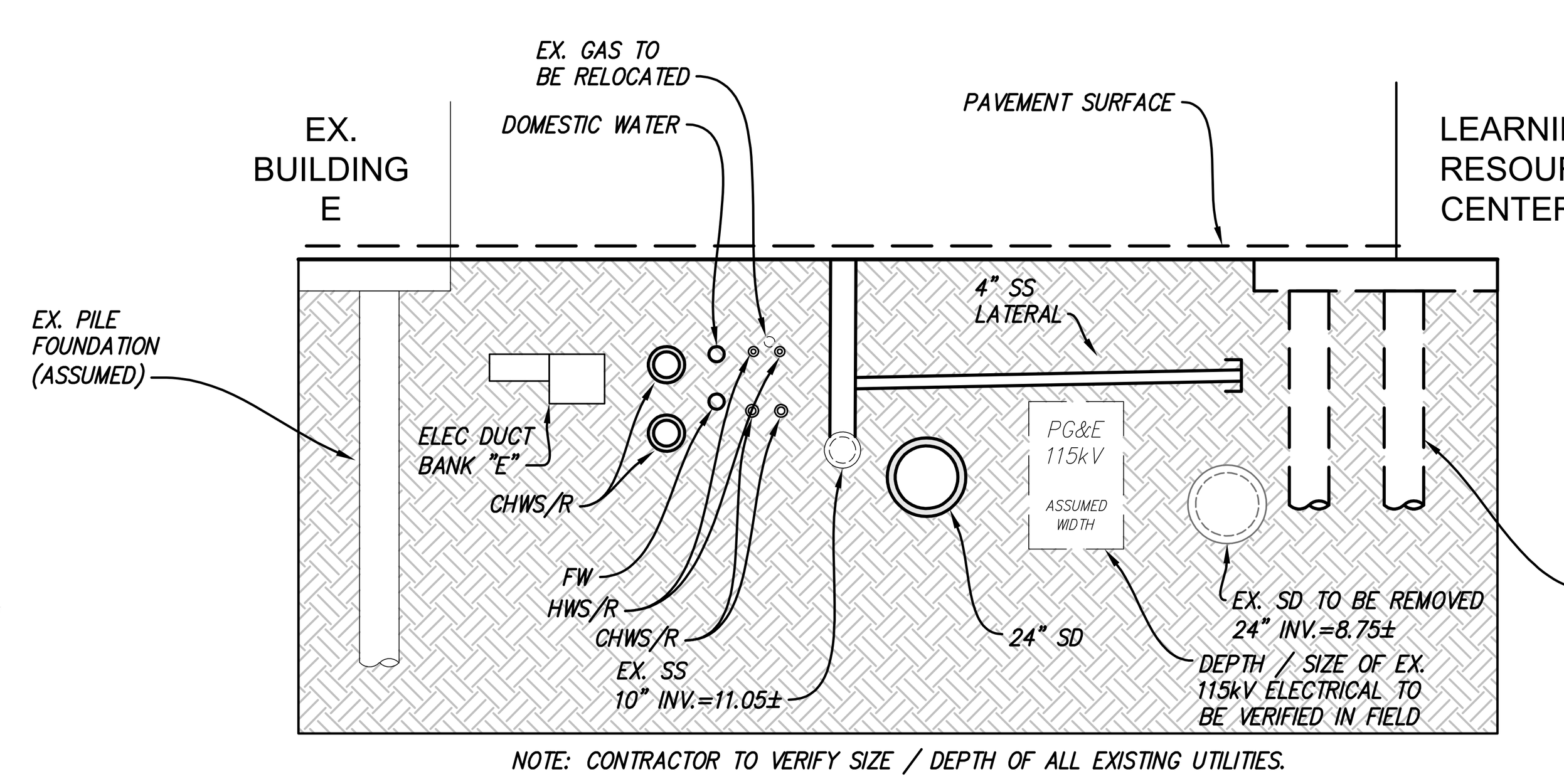
SCALE 1"=5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 5-5

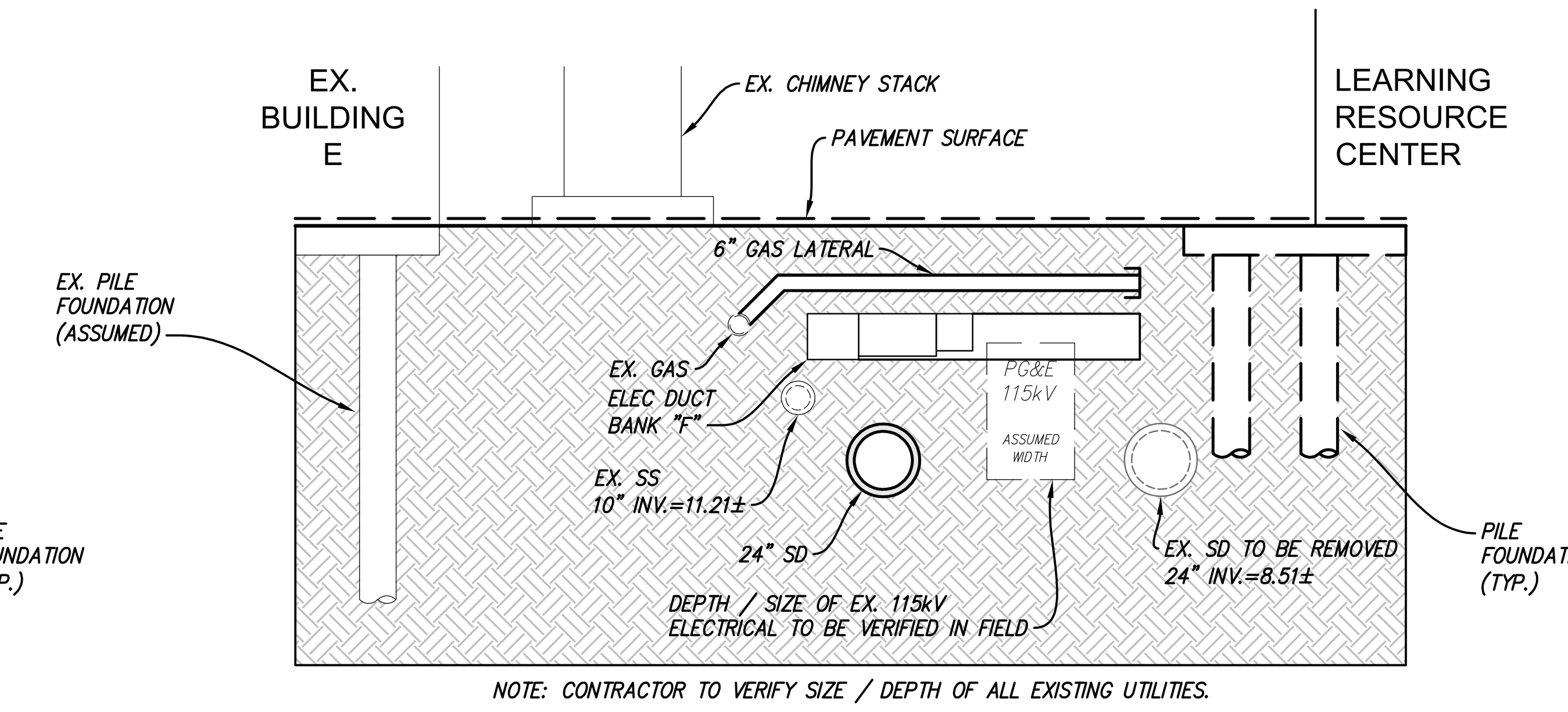
SCALE: 1"=5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 6-6

SCALE: 1"=5'



NOTE: CONTRACTOR TO VERIFY SIZE / DEPTH OF ALL EXISTING UTILITIES.

SECTION 7-7

SCALE: 1"=5'

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SANDIS
BUILD ON.

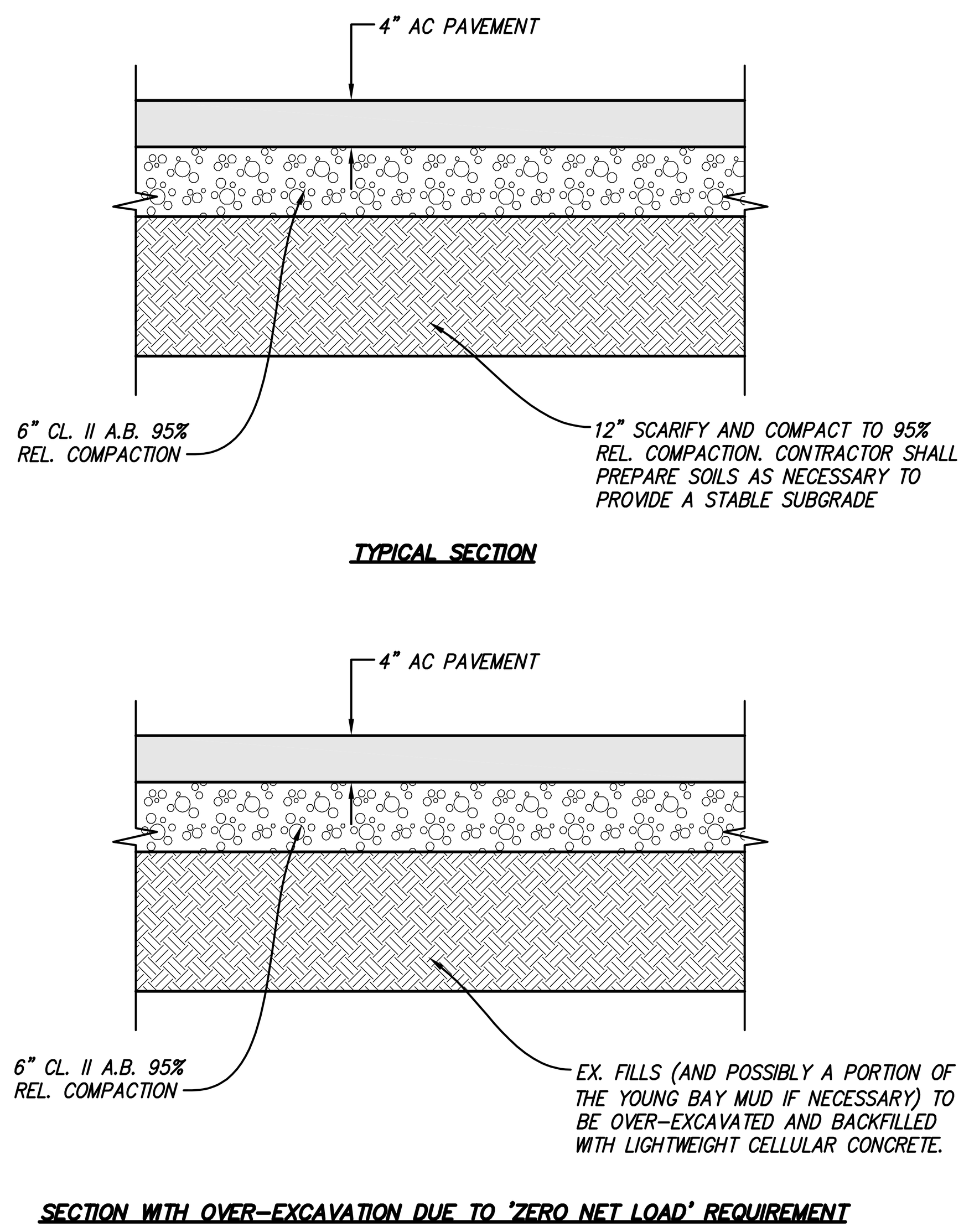
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

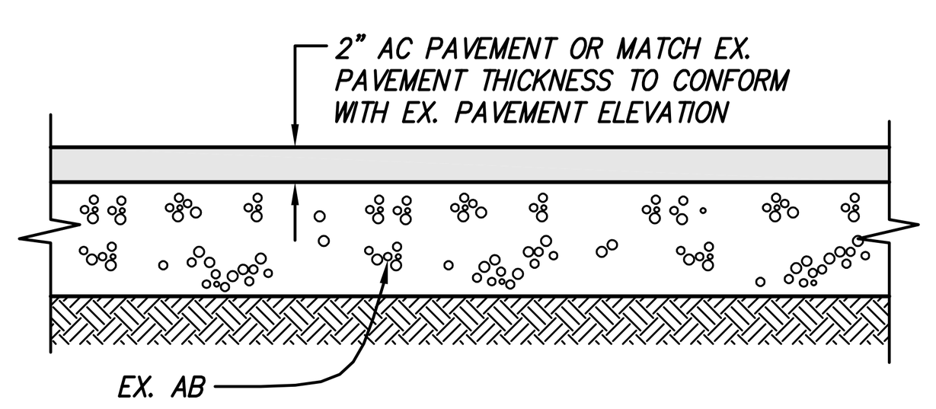
DRAWN: SEC	CHECKED: SU
DATE: 03/15/21	SCALE: N.T.S.
PROJECT NUMBER: 2015800	

UTILITY CROSS SECTIONS - DETAILS

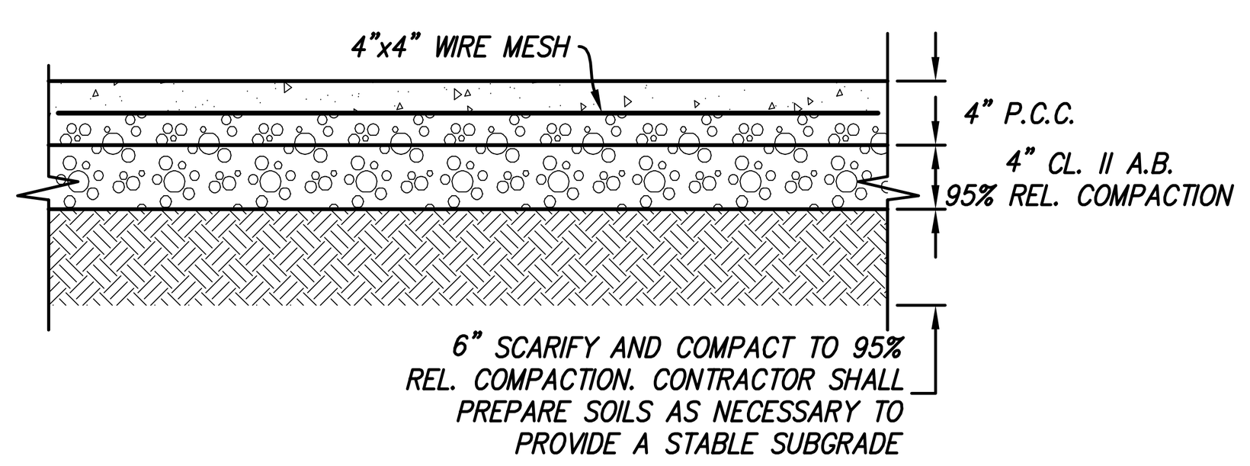
DRAWING NUMBER: C4.0



ASPHALT PAVEMENT SECTION (1)
N.T.S.

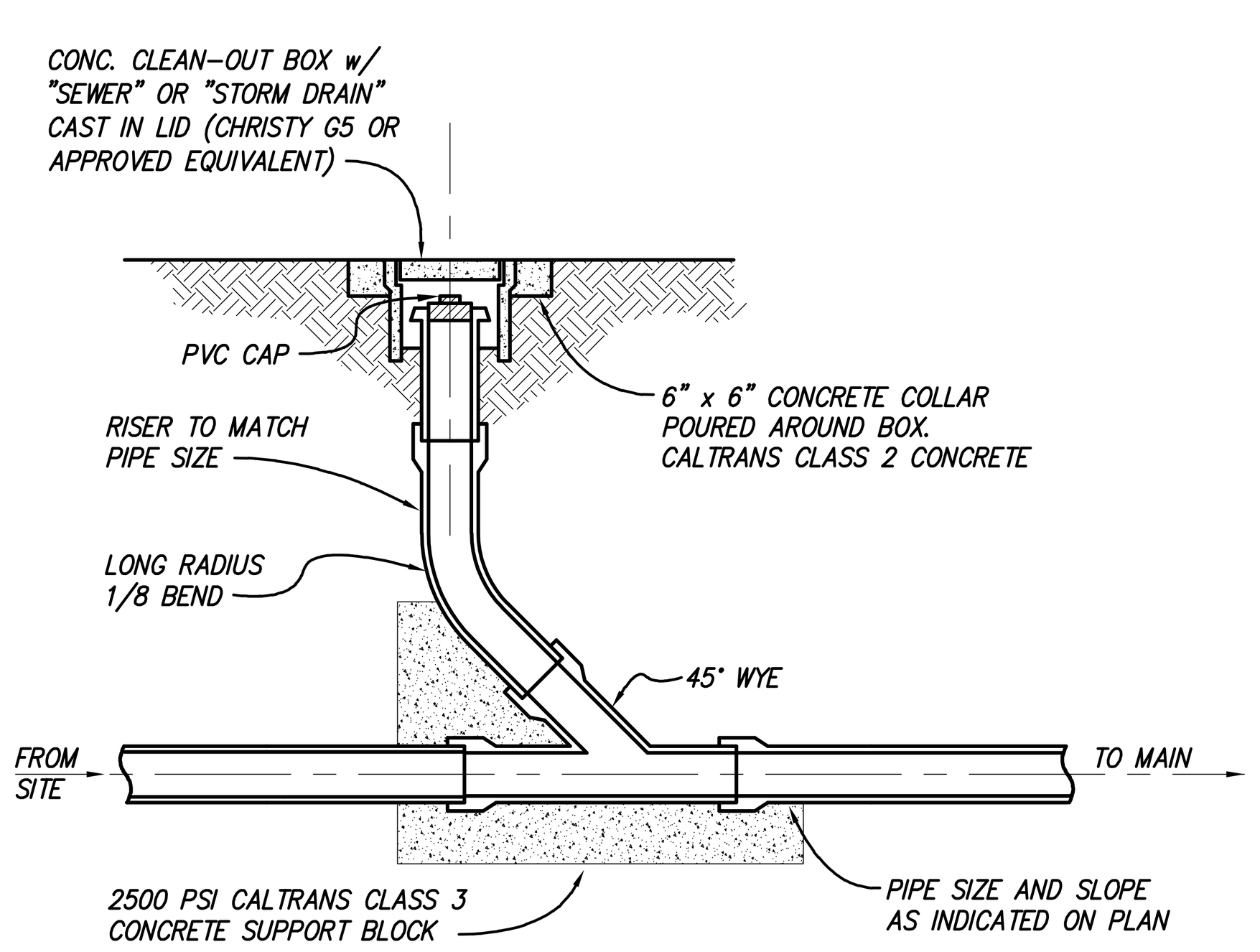


TEMPORARY ASPHALT PAVEMENT SECTION (2)
N.T.S.

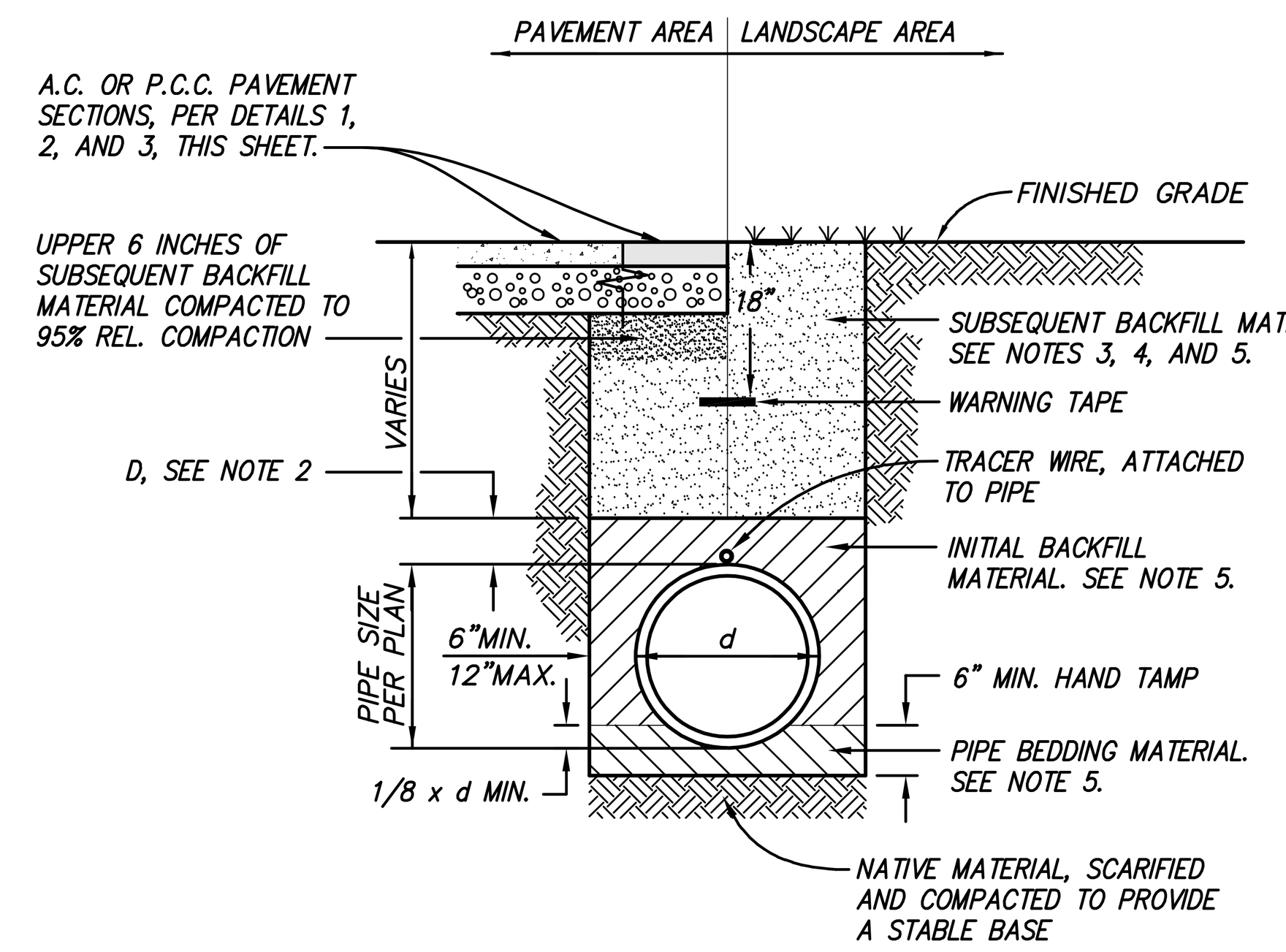


NOTES:
SEE DETAIL 1, SHEET C5.1 FOR JOINT DETAIL.

PEDESTRIAN CONCRETE (3)
1"=1'



CLEANOUT WITH LATERAL STUB (4)
N.T.S.

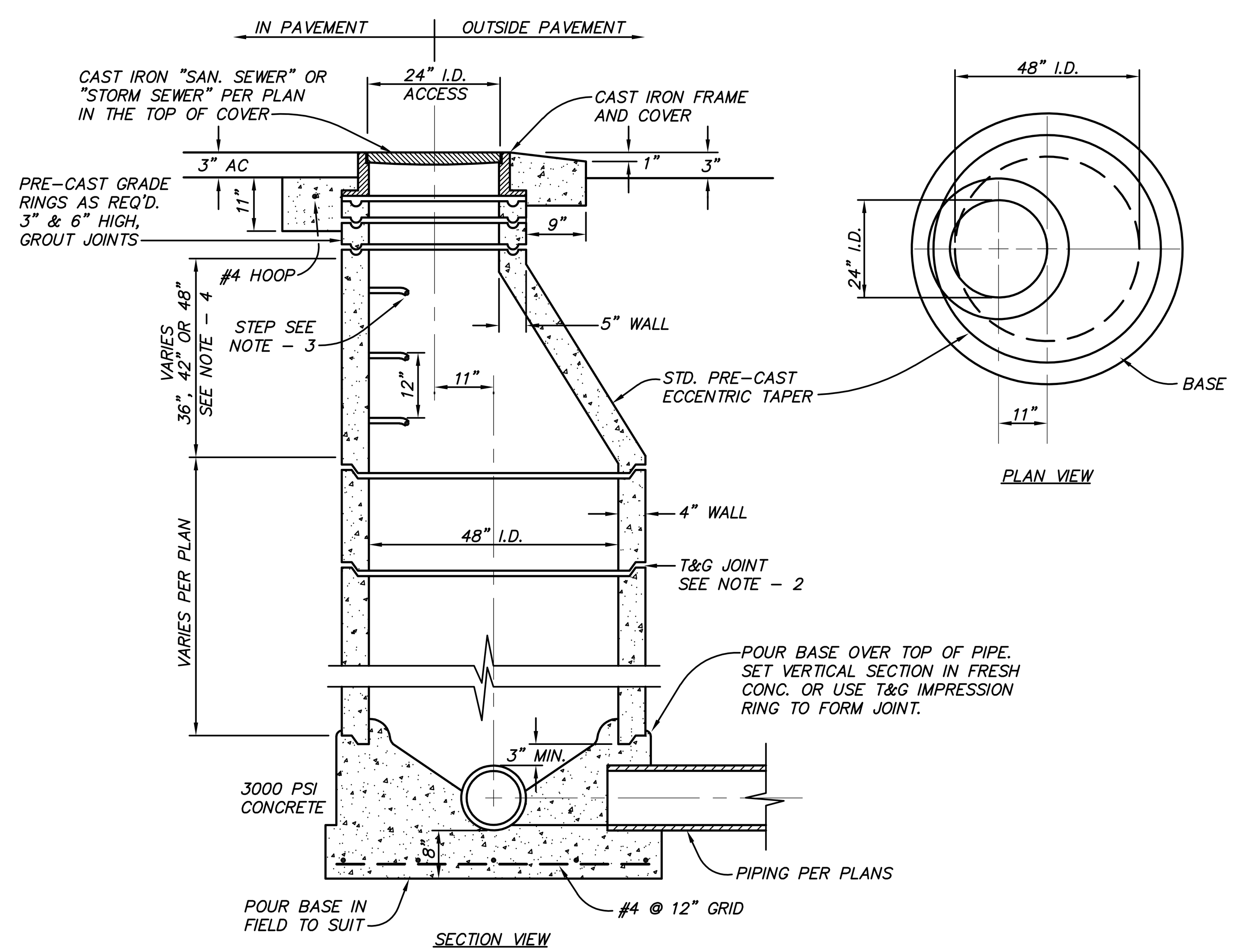


NOTE:
1. PLACE CUT OFF PLUG OF IMPERMEABLE MATERIAL WHERE ALL TRENCHES ENTER A PAVEMENT AREA.
2. D=6" MIN. FOR PIPE SIZES ≤ 12 INCHES
D=12" MIN. FOR PIPE SIZES > 12 INCHES
3. IF YOUNG BAY MUD IS FOUND, TRENCH TO BE OVER-EXCAVATED 18 INCHES, COVERED WITH STABILIZATION FABRIC AND BACKFILLED WITH CLASS II AB.
4. AT TRENCH FOR DEEPLY BURIED PIPELINES (ACTUAL DEPTH TO BE VERIFIED BY GEOTECHNICAL ENGINEER), EXISTING FILLS SHALL BE OVER-EXCAVATED (AND POSSIBLY A PORTION OF THE YOUNG BAY MUD IF NECESSARY) AND BACKFILLED WITH LIGHTWEIGHT CELLULAR CONCRETE.
5. COMPACT BACKFILL AND BEDDING MATERIALS TO THE FOLLOWING PERCENT RELATIVE COMPACTION:

COMPACTION REQUIREMENTS

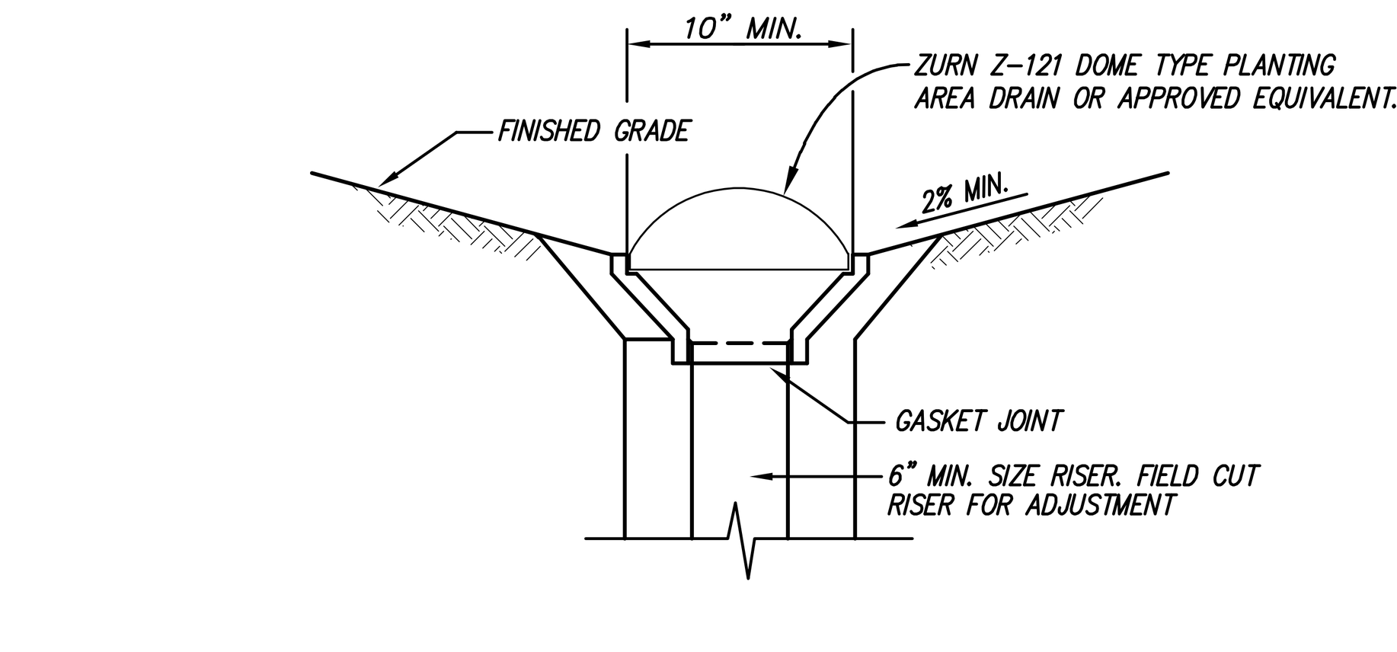
	TRENCH SAND	TRENCH GRAVEL	APPROVED NATIVE	IMPORTED FILL	CLASS II AGGREGATE BASE
SUBSEQUENT BACKFILL MATERIAL (UNDER PAVEMENT)	N/A	N/A	90%	90%	95%
SUBSEQUENT BACKFILL MATERIAL (IN LANDSCAPE)	N/A	N/A	90%	90%	95%
INITIAL BACKFILL MATERIAL	90%	90%	N/A	N/A	N/A
BEDDING MATERIAL	90%	90%	N/A	N/A	N/A

TRENCH DETAIL (5)
N.T.S.

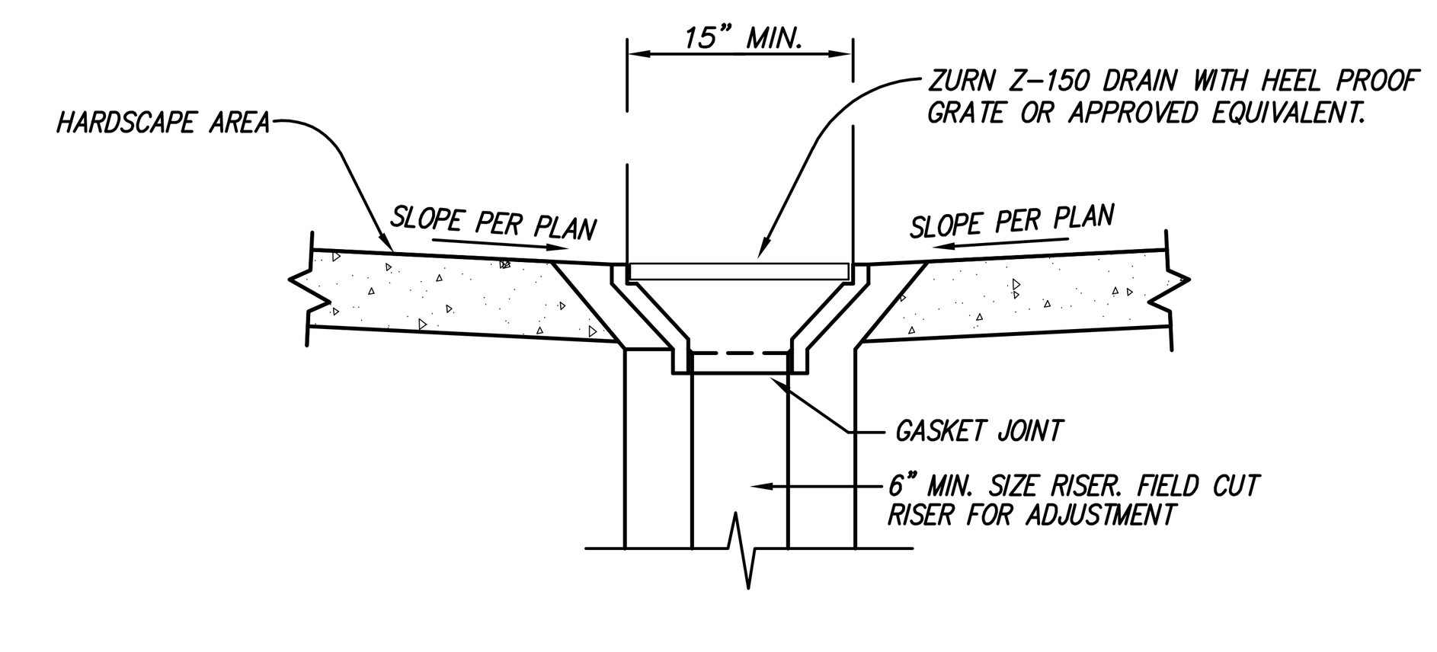


NOTES:
1. PRE-CAST MANHOLE MATERIAL SHALL BE MANUFACTURED TO ASTM SPECIFICATION C478.
2. GROUT JOINTS WITH 1:3 MORTAR MIX OR USE RAM-NEK JOINT COMPOUND.
3. USE POLY COATED STEPS, 3/4" DIA. GALV. STEEL STEPS ARE SPACED 12" O.C. VERTICALLY AND 6" FROM JOINTS. SEE LOCAL CODE FOR USE OF STEPS.
4. A 36" TAPER MAY BE COMBINED WITH A 12" VERTICAL TO FORM A 48" TAPER SECTION.
5. ALL CONCRETE JOINTS SHALL BE LEANED, WETTED, AND MORTARED PRIOR TO SETTING THE NEXT SECTION THE JOINTS SHALL BE PACKED, TROWELLED AND BRUSHED WHILE THE MORTAR IS PLASTIC.
6. MANHOLE SHALL BE SET TO GRADE SUBSEQUENT TO PLACING AC OR RCC.
7. XYPEX CONCENTRATE/CRYSTALLINE COATING ON INTERIOR CONCRETE SURFACES.
8. STEPS NOT REQUIRED IN MANHOLES 3.5 FEET OR LESS IN DEPTH.

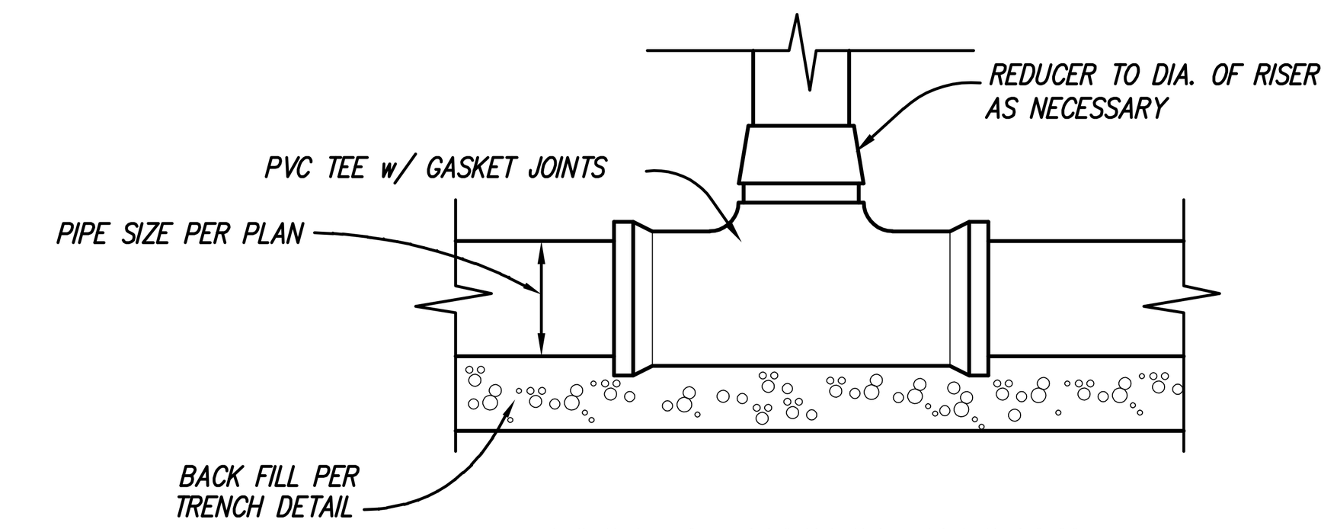
TYPICAL MANHOLE DETAIL (6)
N.T.S.



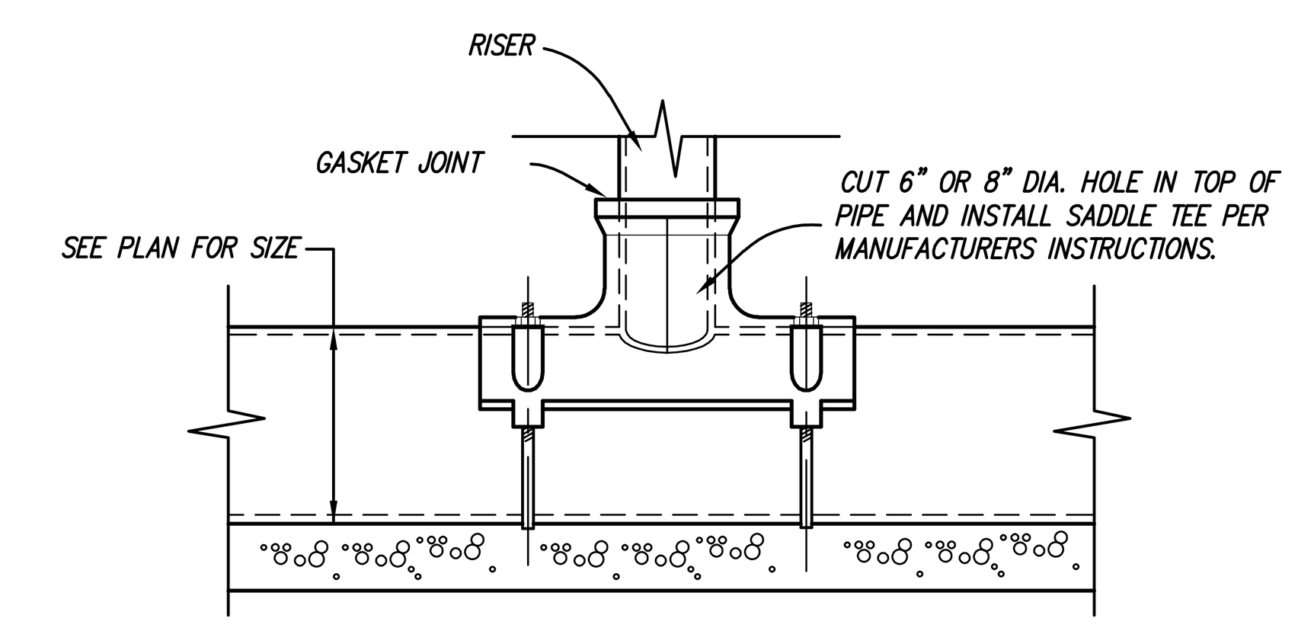
LANDSCAPE
GRATE & RISER DETAIL



HARDSCAPE
GRATE & RISER DETAIL

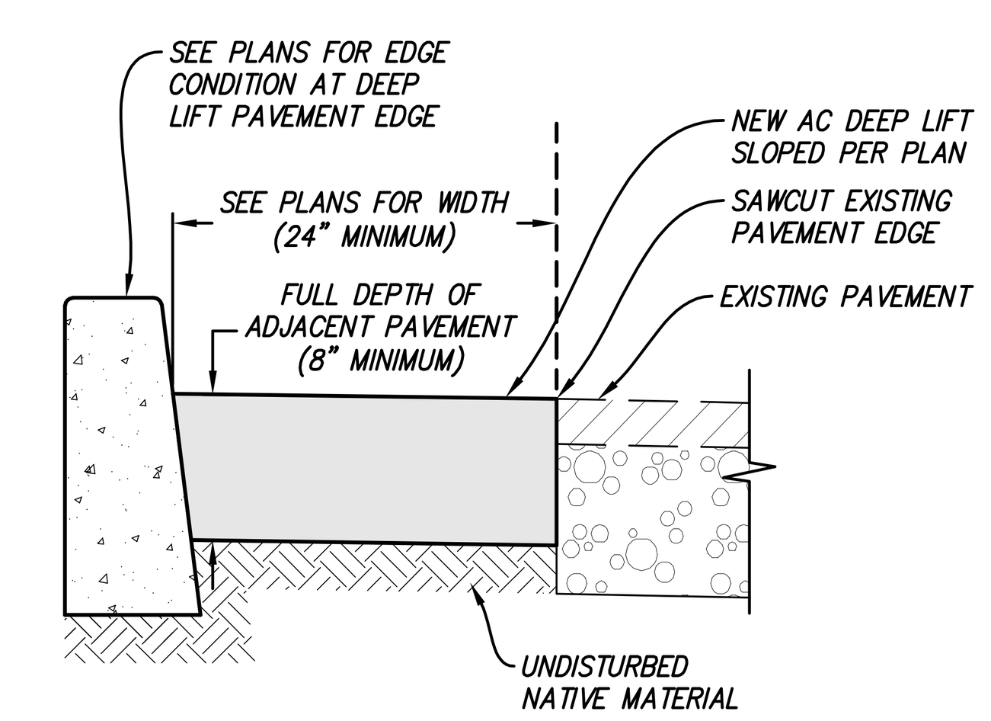


TEE & RISER DETAIL



SADDLE & RISER DETAIL

AREA DRAIN (7)
N.T.S.



ASPHALT DEEP LIFT (8)
1"=1'

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SANDIS BUILD ON.

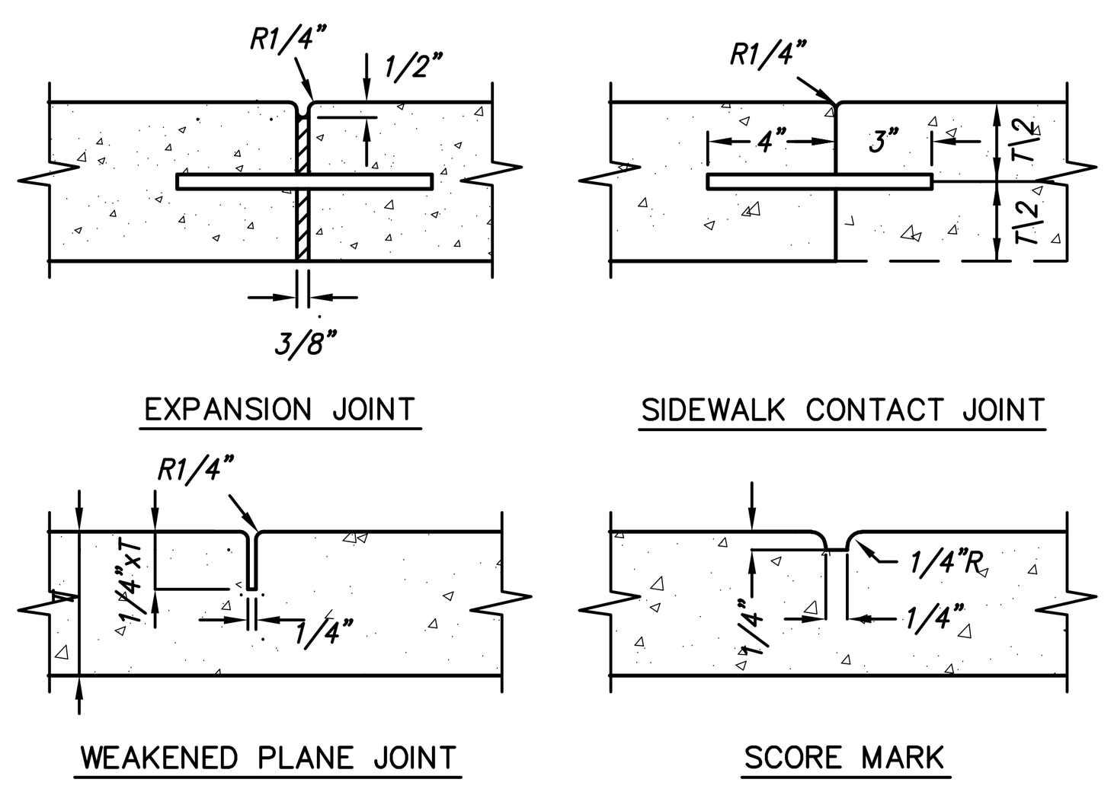
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: SAN	CHECKED: DIS
DATE: 03/15/21	SCALE: N.T.S.
PROJECT NUMBER: 2015800	

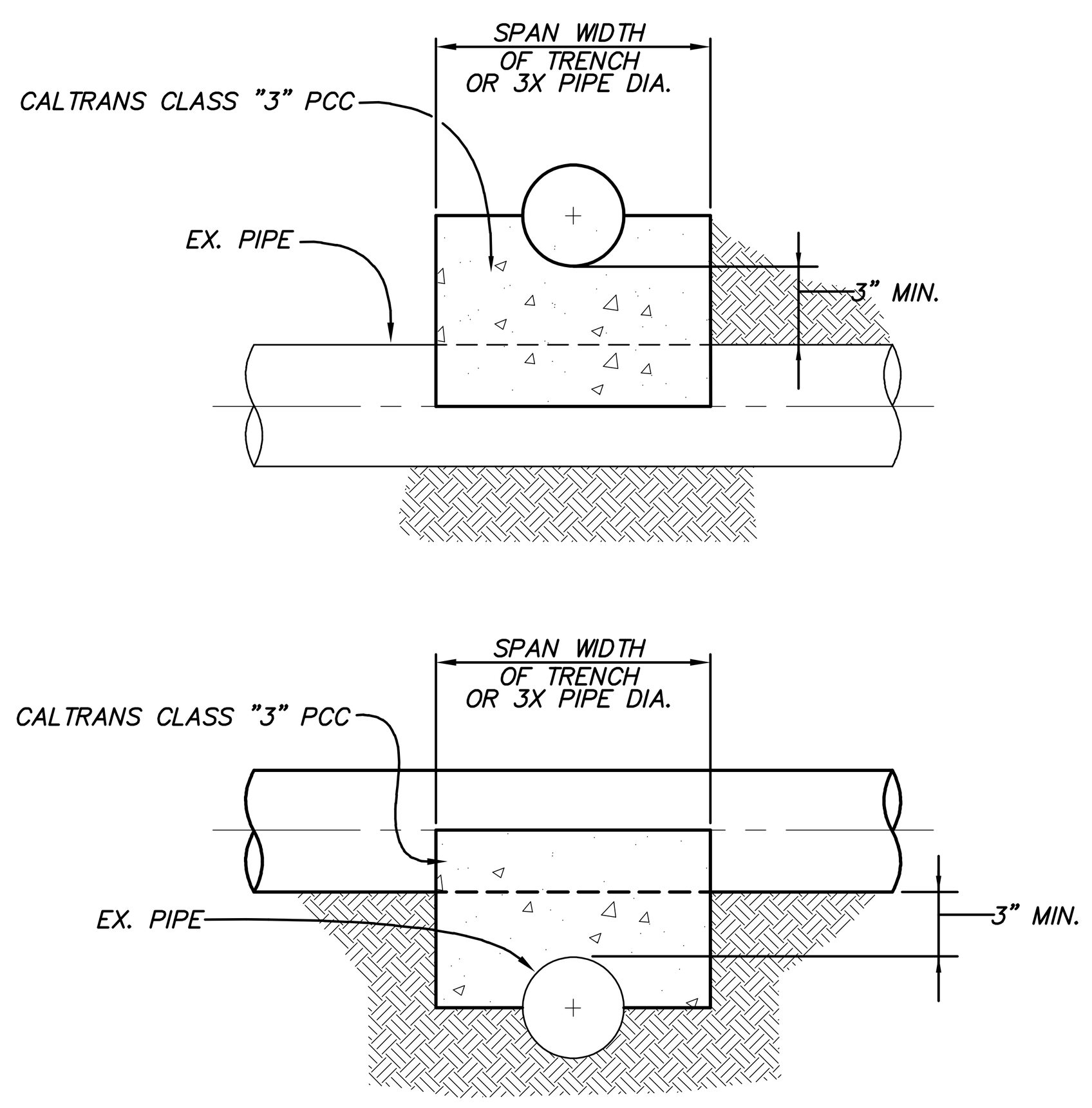
CIVIL CONSTRUCTION DETAILS

DRAWING NUMBER: C5.0



NOTES:
1. ALTERNATE BETWEEN EXPANSION AND WEAKENED PLANE JOINTS AT 5' O.C., TYPICAL ALONG SIDEWALKS.

TYPICAL CONCRETE DETAILS (1)
1"=3"



PIPE SADDLE DETAIL (2)
N.T.S.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

SANDIS BUILD ON.

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

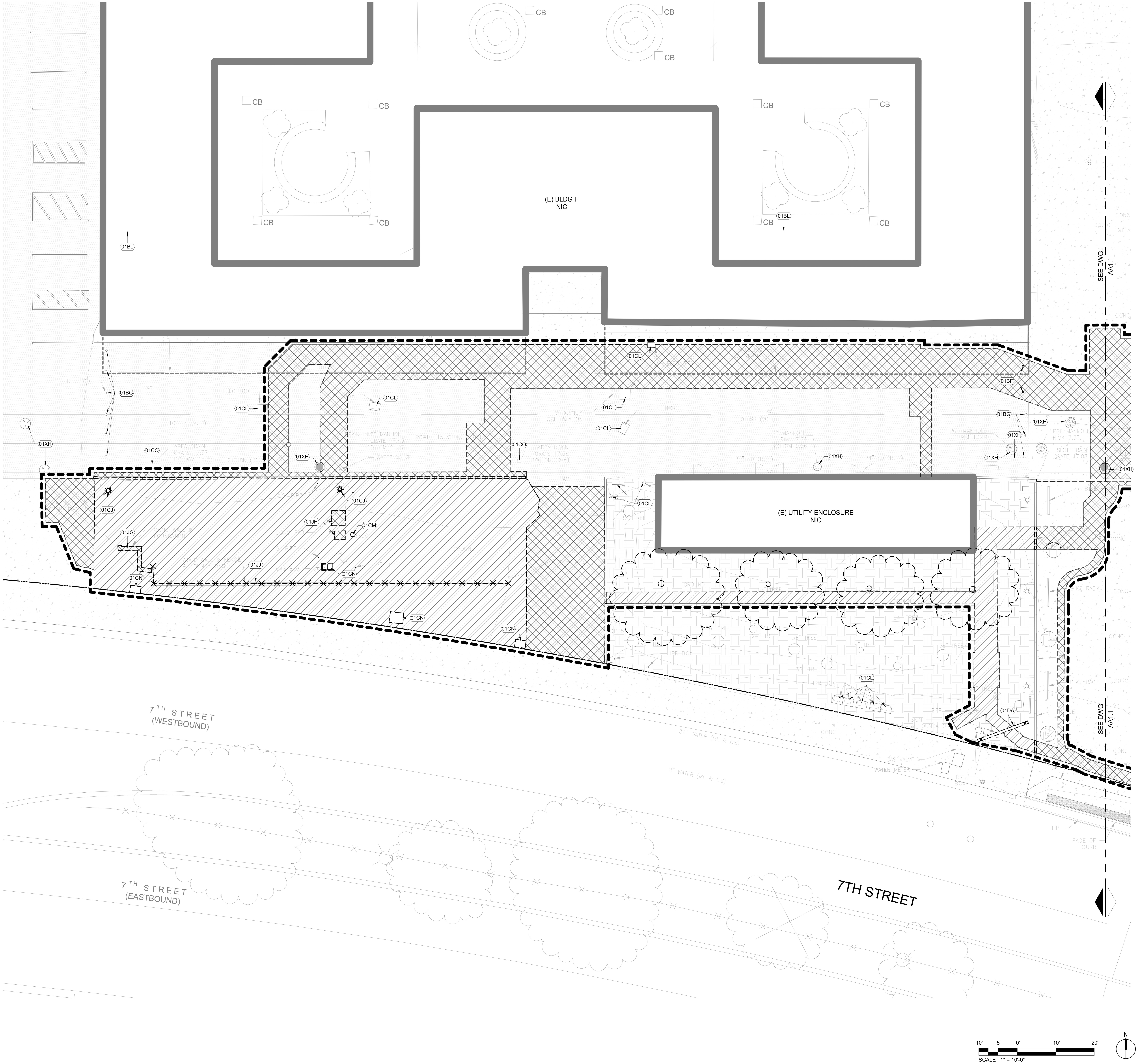
REVISIONS

DRAWN: SAN | CHECKED: DIS
DATE: 03/15/21 | SCALE: N.T.S.
PROJECT NUMBER: 2015800

CIVIL CONSTRUCTION DETAILS

DRAWING NUMBER: C5.1

File: X:\P\620111 – Laney College CUP\4_ENGINEERING\2_PLAN SETS\3_SHEET SET\ONSITE\C5.0.dwg Date:Apr 12, 2021



ENLARGED DEMO SITE PLAN | 1" = 10'-0" | 1

GENERAL NOTES

GENERAL DEMO NOTES:

1. CONTRACTOR TO DEMOLISH & REMOVE EXISTING SOILS, PLANTS MATERIAL, ASPHALT CONC PAVING, CONC FLATWORK, DEMOLITION DEBRIS, ETC SHOWN TO BE REMOVED IN THE DESIGNATED 'SCOPE OF DEMO' AS REQUIRED FOR NEW CONSTRUCTION. ALL DEMO AND CONSTRUCTION SPOILS TO BE REMOVED OFF SITE AT CONTRACTOR'S EXPENSE.
2. CONTRACTOR RESPONSIBLE TO PATCH, REPAIR, OR RELOCATE ANY EXISTING PIPING, CONDUITS OR IRRIGATION LINES OR HEADS DISTURBED DURING DEMOLITION OR CONSTRUCTION PROCESS WHICH ARE NOT SCHEDULED FOR DEMOLITION IN SCOPE OF WORK.
3. CONTRACTOR RESPONSIBLE TO PATCH OR REPAIR ANY EXISTING SURFACES DAMAGED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION.
4. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING TREES, PLANTS AND GROUND COVER NOT SCHEDULED FOR REMOVAL DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING UTILITY SERVICES TO SCHOOL SITE TO INSURE NO DISRUPTION IN SERVICE DURING NORMAL SCHOOL HOURS.
6. CONTRACTOR RESPONSIBLE TO PROVIDE MIN OF 6' HIGH CHAIN LINK FENCE BARRIER AROUND ENTIRE BOUNDARY OF DEMOLITION AND CONSTRUCTION OPERATIONS FOR DURATION OF PROJECT.
7. CONTRACTOR RESPONSIBLE TO PROVIDE TEMPORARY CONSTRUCTION SIGN. LOCATION TO BE DETERMINED BY THE DISTRICT- REF 1/2.1
8. EXCEPTIONS TO NOTES ABOVE ARE GOVERNED BY REFERENCE NOTES DENOTED ON SITE PLAN.
9. REFER TO CIVIL AND LANDSCAPE DWGS FOR ADDITIONAL DEMOLITION INFO.

LEGEND

- AREA OF DEMOLITION, SEE GENERAL DEMO NOTES, REF CIVIL DWGS FOR ADDITIONAL DEMO SCOPE. NOTE SOME ITEMS WITHIN THE AREA TO REMAIN/TO BE SALVAGED PER PLAN
- (E) BUILDING
- (E) CONCRETE WALKWAY TO REMAIN, PROTECT IN PLACE
- (E) ASPHALT PAVING TO REMAIN, PROTECT IN PLACE
- (E) SOFTSCAPE TO REMAIN, PROTECT IN PLACE
- (E) HARDSCAPE TO BE: DEMOLISHED, PATCHED, &/OR REPAIRED, REF CIVIL DWGS FOR EXTENT OF WORK
- (E) SOFTSCAPE TO BE DEMOLISHED OR REPLACED. REF TO CIVIL DWGS FOR EXTENT OF WORK
- DEMO LINES: SEE GENERAL NOTES FOR MORE INFO
- DEMOLISH (E) FENCE. SEE PLAN FOR EXTENT OF DEMOLITION
- (E) FENCE TO REMAIN. CONTRACTOR TO VIF WHERE PORTIONS OF DEMOLISHED FENCING TO OCCUR

REFERENCE NOTES

KEYNOTE	DESCRIPTION
01BF	(E) BOLLARD TO BE DEMOLISHED & REPLACED, REF DTL 5/2.1
01BG	(E) BOLLARD TO REMAIN, TYP- PROTECT IN PLACE
01BL	(E) ROOF OVERHANG/BUILDING LINE ABOVE
01CJ	(E) SITE LIGHTING TO BE REMOVED: SALVAGE & STORE POLES, ELECTRICAL EQUIPMENT, AND FURNISHINGS. DEMOLISH (E) BASE & CAP UTILITY LINES. CONTRACTOR TO REINSTALL IN KIND
01CL	(E) SITE UTILITY BOX TO REMAIN, TYP. IF UNIT IS DISTURBED DURING CONSTRUCTION, CONTRACTOR TO REINSTALL BOX TO IT'S ORIGINAL LOCATION
01CM	(E) SANITARY SEWER CLEAN-OUT TO BE RELOCATED PER CIVIL DWGS
01CN	(E) SITE UTILITY BOX TO BE REMOVED & REINSTALLED IF IN GOOD CONDITION. REF CIVIL DWGS FOR NEW LOCATION
01CO	(E) DRAIN INLET TO REMAIN, TYP. IF UNIT IS DISTURBED DURING CONSTRUCTION, CONTRACTOR TO REINSTALL TO IT'S ORIGINAL LOCATION
01DA	(E) MONUMENT SIGN TO BE REMOVED, SALVAGED & STORED DURING CONSTRUCTION. CONTRACTOR TO REINSTALL IN KIND
01JG	(E) CONCRETE WALL TO BE DEMOLISHED
01JH	(E) CONCRETE PAD TO BE DEMOLISHED
01JJ	(E) WOOD WALL, FENCE & FOUNDATIONS TO BE DEMOLISHED
01XH	(E) MANHOLE TO REMAIN; PATCH & REPAIR AS REQD FOR NEW WORK- REF CIVIL DWGS

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com
Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

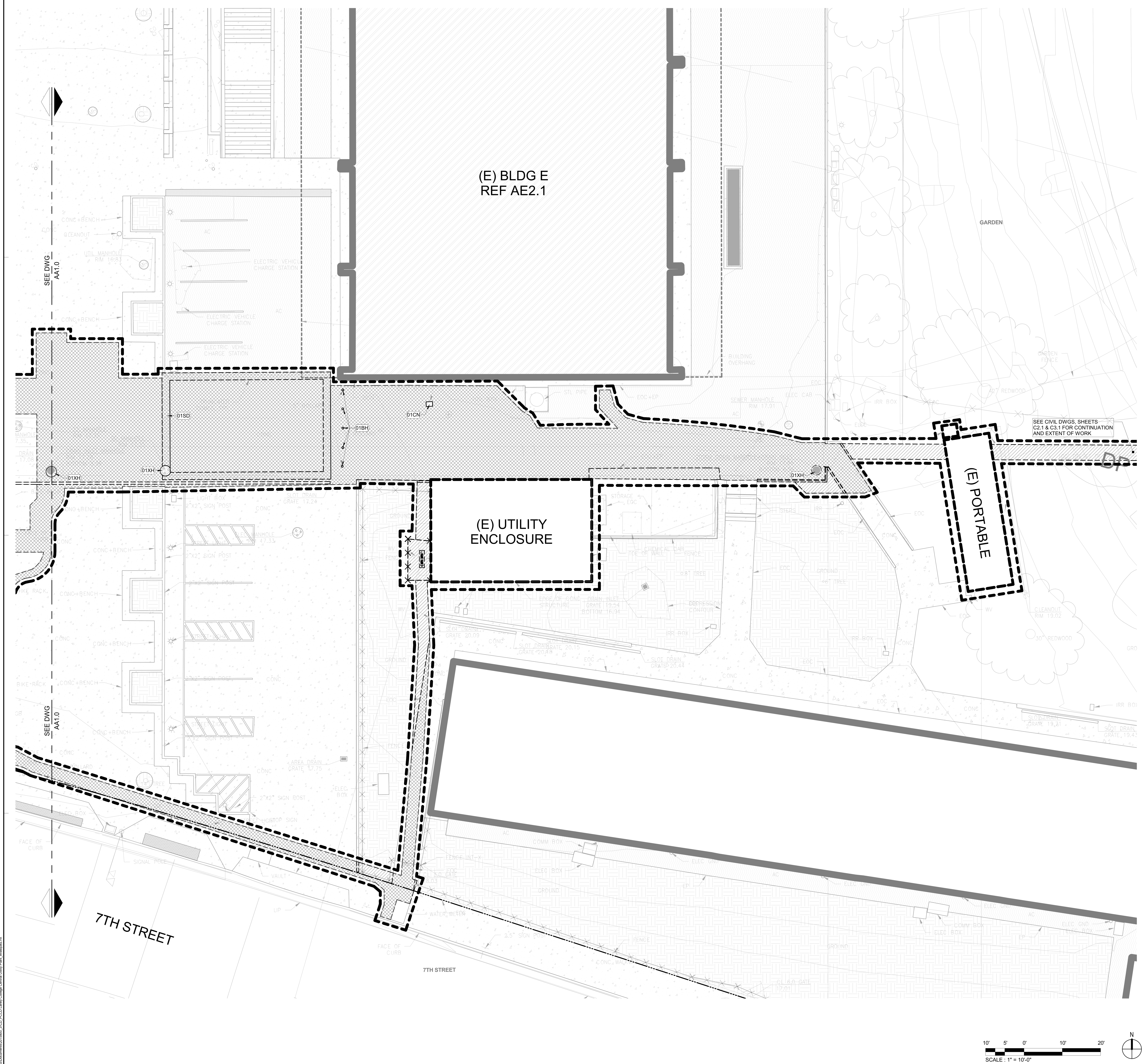
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

ENLARGED DEMO SITE PLAN - WEST

DRAWING NUMBER: A1.0



GENERAL NOTES

GENERAL DEMO NOTES:

1. CONTRACTOR TO DEMOLISH & REMOVE EXISTING SOILS, PLANTS MATERIAL, ASPHALT CONC PAVING, CONC FLATWORK, DEMOLITION DEBRIS, ETC SHOWN TO BE REMOVED IN THE DESIGNATED 'SCOPE OF DEMO' AS REQUIRED FOR NEW CONSTRUCTION. ALL DEMO AND CONSTRUCTION SPOILS TO BE REMOVED OFF SITE AT CONTRACTOR'S EXPENSE.
2. CONTRACTOR RESPONSIBLE TO PATCH, REPAIR, OR RELOCATE ANY EXISTING PIPING, CONDUITS OR IRRIGATION LINES OR HEADS DISTURBED DURING DEMOLITION OR CONSTRUCTION PROCESS WHICH ARE NOT SCHEDULED FOR DEMOLITION IN SCOPE OF WORK.
3. CONTRACTOR RESPONSIBLE TO PATCH OR REPAIR ANY EXISTING SURFACES DAMAGED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION.
4. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING TREES, PLANTS AND GROUND COVER NOT SCHEDULED FOR REMOVAL DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING UTILITY SERVICES TO SCHOOL SITE TO INSURE NO DISRUPTION IN SERVICE DURING NORMAL SCHOOL HOURS.
6. CONTRACTOR RESPONSIBLE TO PROVIDE MIN OF 6' HIGH CHAIN LINK FENCE BARRIER AROUND ENTIRE BOUNDARY OF DEMOLITION AND CONSTRUCTION OPERATIONS FOR DURATION OF PROJECT.
7. CONTRACTOR RESPONSIBLE TO PROVIDE TEMPORARY CONSTRUCTION SIGN. LOCATION TO BE DETERMINED BY THE DISTRICT- REF 1/2.1
8. EXCEPTIONS TO NOTES ABOVE ARE GOVERNED BY REFERENCE NOTES DENOTED ON SITE PLAN.
9. REFER TO CIVIL AND LANDSCAPE DWGS FOR ADDITIONAL DEMOLITION INFO.

LEGEND

- AREA OF DEMOLITION, SEE GENERAL DEMO NOTES, REF CIVIL DWGS FOR ADDITIONAL DEMO SCOPE. NOTE SOME ITEMS WITHIN THE AREA TO REMAIN/TO BE SALVAGED PER PLAN
- (E) BUILDING
- (E) CONCRETE WALKWAY TO REMAIN, PROTECT IN PLACE
- (E) ASPHALT PAVING TO REMAIN, PROTECT IN PLACE
- (E) SOFTSCAPE TO REMAIN, PROTECT IN PLACE
- (E) HARDSCAPE TO BE: DEMOLISHED, PATCHED, &/OR REPAIRED, REF CIVIL DWGS FOR EXTENT OF WORK
- (E) SOFTSCAPE TO BE DEMOLISHED OR REPLACED. REF TO CIVIL DWGS FOR EXTENT OF WORK
- DEMO LINES: SEE GENERAL NOTES FOR MORE INFO
- DEMOLISH (E) FENCE. SEE PLAN FOR EXTENT OF DEMOLITION
- (E) FENCE TO REMAIN. CONTRACTOR TO VIF WHERE PORTIONS OF DEMOLISHED FENCING TO OCCUR

REFERENCE NOTES

KEYNOTE	DESCRIPTION
01BH	(E) BOLLARD TO BE DEMOLISHED
01CN	(E) SITE UTILITY BOX TO BE REMOVED & REINSTALLED IF IN GOOD CONDITION. REF CIVIL DWGS FOR NEW LOCATION
01SD	(E) ADA WARNING SURFACE TRUNCATED DOMES TO BE DEMOLISHED AND REPLACED IN KIND
01XH	(E) MANHOLE TO REMAIN; PATCH & REPAIR AS REQD FOR NEW WORK- REF CIVIL DWGS

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE C-25998 04-31-23 STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

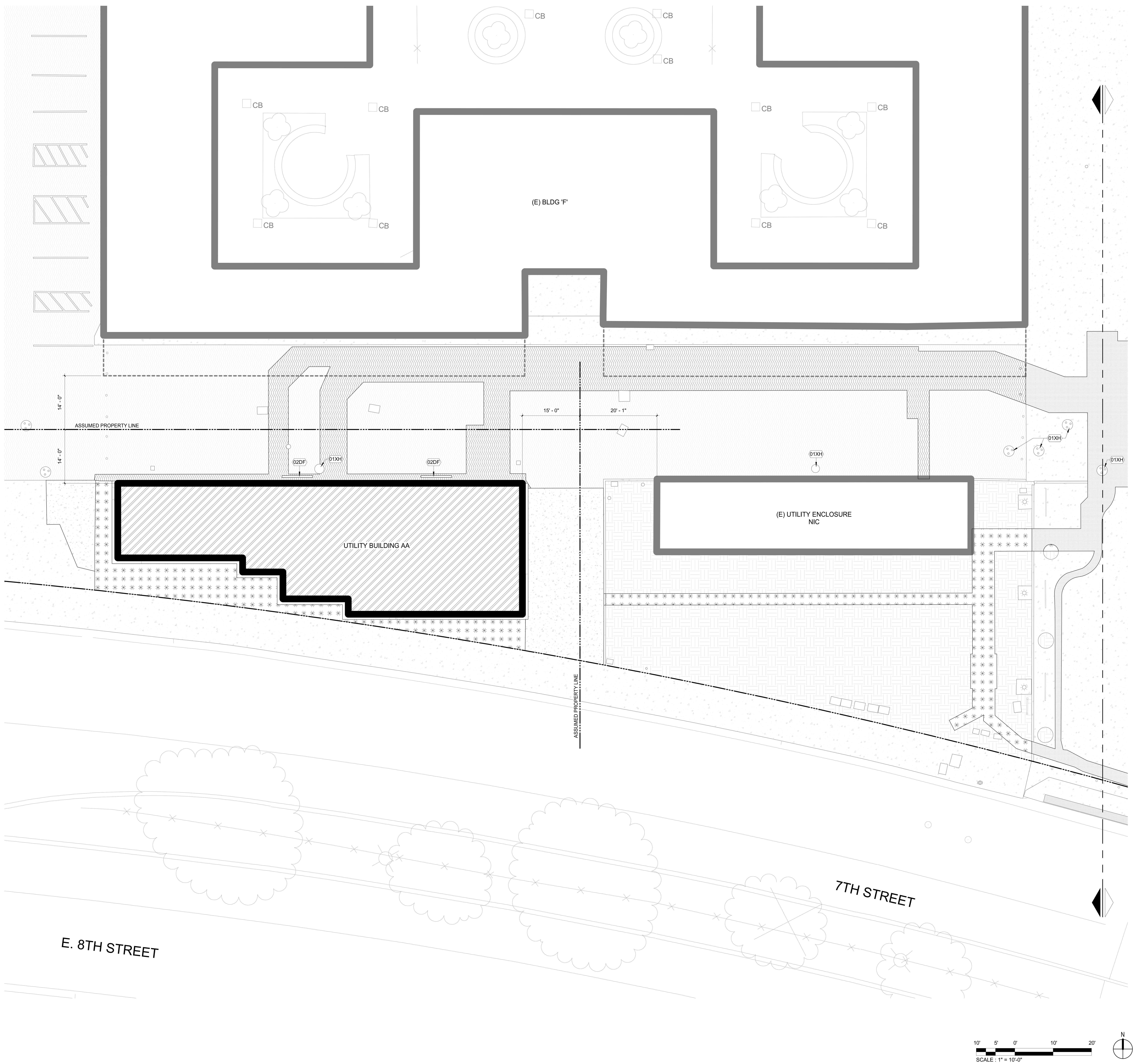
REVISIONS

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE: As indicated
PROJECT NUMBER: 2015800

ENLARGED DEMO SITE PLAN - EAST

DRAWING NUMBER: A1.1

ENLARGED DEMO SITE PLAN - EAST | 1" = 10'-0" | 1



ENLARGED SITE PLAN - WEST | 1" = 10'-0" | 1

GENERAL NOTES

GENERAL NOTES:

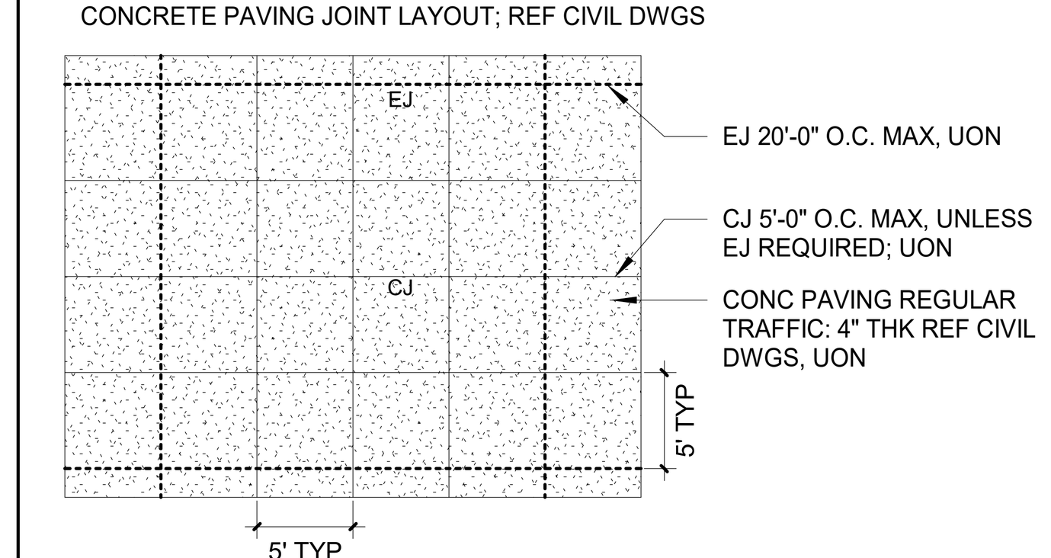
1. CONTRACTOR TO DEMOLISH & REMOVE EXISTING SOILS, PLANTS MATERIAL, ASPHALT CONC PAVING, CONC FLATWORK, DEMOLISH DEBRIS, ETC TO BE REMOVED IN THE SCOPE OF WORK AS REQUIRED FOR NEW CONSTRUCTION. ALL DEMO AND CONSTRUCTION SPOILS TO BE REMOVED OFF SITE AT CONTRACTOR'S EXPENSE, UNLESS OTHERWISE NOTED.
2. CONTRACTOR RESPONSIBLE TO PATCH, REPAIR, OR RELOCATE ANY EXISTING PIPING, CONDUITS OR IRRIGATION LINES OR HEADS DISTURBED DURING DEMOLITION OR CONSTRUCTION PROCESS WHICH ARE NOT SCHEDULED FOR DEMOLITION IN SCOPE OF WORK.
3. CONTRACTOR RESPONSIBLE TO PATCH OR REPAIR ANY EXISTING SURFACE DAMAGED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION.
4. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING TREES, PLANTS AND GROUND COVER NOT SCHEDULED FOR REMOVAL DURING DEMOLITION AND CONSTRUCTION TO THEIR ORIGINAL CONDITION.
5. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING UTILITY SERVICES TO SCHOOL SITE TO INSURE NO DISRUPTION IN SERVICE DURING NORMAL SCHOOL HOURS.
6. CONTRACTOR RESPONSIBLE TO PROVIDE MIN OF 6' HIGH CHAIN LINK FENCE BARRIER AROUND ENTIRE BOUNDARY OF DEMOLITION AND CONSTRUCTION OPERATIONS FOR DURATION OF PROJECT.
7. CONTRACTOR RESPONSIBLE TO PROVIDE TEMPORARY CONSTRUCTION SIGN. LOCATION TO BE DETERMINED BY THE OWNER.
8. CONTRACTOR TO COORDINATE WITH CONSULTANT DWGS.

LEGEND

- (E) BUILDINGS; REF A0.5 FOR ADDITIONAL INFO
- (E) CONCRETE: PATCH & REPAIR WHERE REQUIRED. REF CIVIL DWGS FOR MORE INFO
- (E) SOFTSCAPE: PATCH & REPAIR WHERE REQD. SEE CIVIL DWGS FOR MORE INFO
- (E) ASPHALT CONCRETE (AC) PAVING: PATCH & REPAIR WHERE REQD. SEE CIVIL DWGS FOR MORE INFO
- CONCRETE PER CIVIL DWGS; MATCH ADJACENT AS REQUIRED PER PLAN
- SOFTSCAPE PER CIVIL DWGS; MATCH ADJACENT AS REQUIRED PER PLAN
- ASPHALT CONCRETE (AC) PAVING; REF CIVIL DWGS FOR MORE INFO. PROVIDE SMOOTH TRANSITION TO (E) AC PAVING
- TEMPORARY AC PAVING TO MATCH (E) GRADES. PAVING WILL BE REPLACED AS PART OF FUTURE LRC PROJECT (A#119215). REF CIVIL DWGS
- SINGLE STORY UTILITY ENCLOSURE; REF SHEET AA2.1

STANDARD CONCRETE PAVING JOINT LAYOUT:

NOTE: JOINT LAYOUT ONLY TO BE USED WHERE CIVIL DWGS DO NOT DIMENSION CONCRETE PAVING JOINT LAYOUT; REF CIVIL DWGS



- ASSUMED PROPERTY LINE
- CHAIN LINK FENCE: REF PLAN IF (E) OR NEW
- EXISTING ROOF OVERHANGS OR COVERED WALKWAYS (FOR REFERENCE ONLY)

REFERENCE NOTES

KEYNOTE	DESCRIPTION
01XH	(E) MANHOLE TO REMAIN; PATCH & REPAIR AS REQD FOR NEW WORK- REF CIVIL DWGS
02DF	6" WIDE x 8'-0" LONG TRENCH DRAIN CENTERED @ BUILDING WALL OPENING, REF AA2.1 & AA5.1 FOR LOCATIONS. SEE CIVIL DWGS FOR CONTINUATION

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT — KEVIN MacQUARRIE — STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

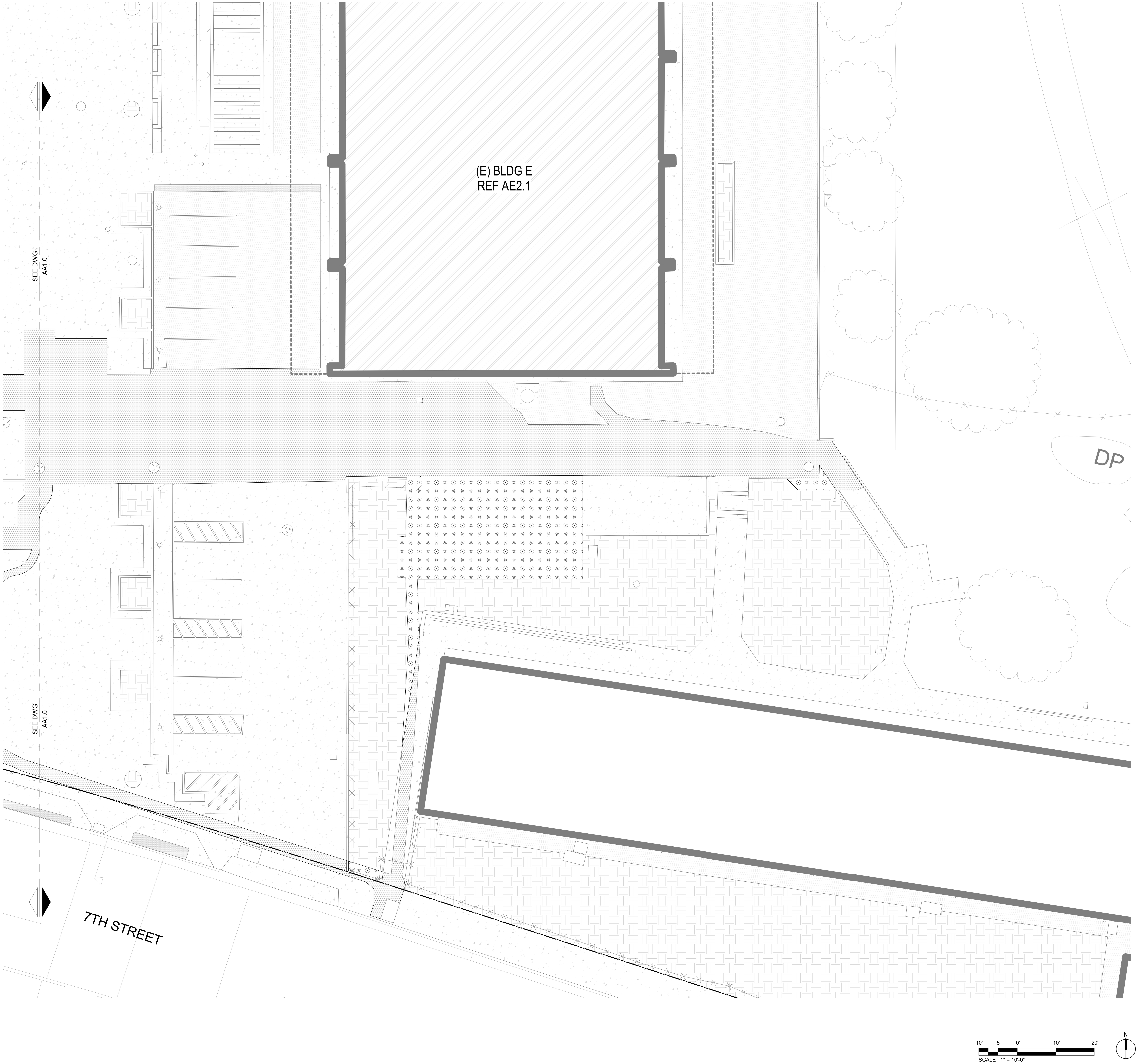
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

ENLARGED SITE PLAN - WEST

DRAWING NUMBER: A1.2



ENLARGED SITE PLAN - EAST | 1" = 10'-0" | 1

GENERAL NOTES

GENERAL NOTES:

1. CONTRACTOR TO DEMOLISH & REMOVE EXISTING SOILS, PLANTS MATERIAL, ASPHALT CONC PAVING, CONC FLATWORK, DEMOLISH DEBRIS, ETC TO BE REMOVED IN THE SCOPE OF WORK AS REQUIRED FOR NEW CONSTRUCTION. ALL DEMO AND CONSTRUCTION SPOILS TO BE REMOVED OFF SITE AT CONTRACTOR'S EXPENSE, UNLESS OTHERWISE NOTED.
2. CONTRACTOR RESPONSIBLE TO PATCH, REPAIR, OR RELOCATE ANY EXISTING PIPING, CONDUITS OR IRRIGATION LINES OR HEADS DISTURBED DURING DEMOLITION OR CONSTRUCTION PROCESS WHICH ARE NOT SCHEDULED FOR DEMOLITION IN SCOPE OF WORK.
3. CONTRACTOR RESPONSIBLE TO PATCH OR REPAIR ANY EXISTING SURFACE DAMAGED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION.
4. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING TREES, PLANTS AND GROUND COVER NOT SCHEDULED FOR REMOVAL DURING DEMOLITION AND CONSTRUCTION TO THEIR ORIGINAL CONDITION.
5. CONTRACTOR RESPONSIBLE TO PROTECT EXISTING UTILITY SERVICES TO SCHOOL SITE TO INSURE NO DISRUPTION IN SERVICE DURING NORMAL SCHOOL HOURS.
6. CONTRACTOR RESPONSIBLE TO PROVIDE MIN OF 6' HIGH CHAIN LINK FENCE BARRIER AROUND ENTIRE BOUNDARY OF DEMOLITION AND CONSTRUCTION OPERATIONS FOR DURATION OF PROJECT.
7. CONTRACTOR RESPONSIBLE TO PROVIDE TEMPORARY CONSTRUCTION SIGN. LOCATION TO BE DETERMINED BY THE OWNER.
8. CONTRACTOR TO COORDINATE WITH CONSULTANT DWGS.

LEGEND

(E) BUILDINGS; REF A0.5 FOR ADDITIONAL INFO

(E) CONCRETE: PATCH & REPAIR WHERE REQUIRED. REF CIVIL DWGS FOR MORE INFO

(E) SOFTSCAPE: PATCH & REPAIR WHERE REQD. SEE CIVIL DWGS FOR MORE INFO

(E) ASPHALT CONCRETE (AC) PAVING: PATCH & REPAIR WHERE REQD. SEE CIVIL DWGS FOR MORE INFO

CONCRETE PER CIVIL DWGS; MATCH ADJACENT AS REQUIRED PER PLAN

SOFTSCAPE PER CIVIL DWGS; MATCH ADJACENT AS REQUIRED PER PLAN

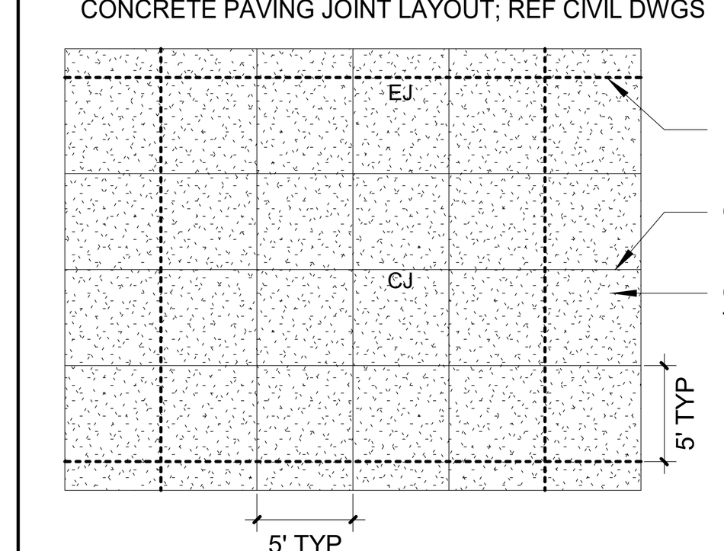
ASPHALT CONCRETE (AC) PAVING; REF CIVIL DWGS FOR MORE INFO. PROVIDE SMOOTH TRANSITION TO (E) AC PAVING

TEMPORARY AC PAVING TO MATCH (E) GRADES. PAVING WILL BE REPLACED AS PART OF FUTURE LRC PROJECT (A#119215). REF CIVIL DWGS

SINGLE STORY UTILITY ENCLOSURE; REF SHEET AA2.1

STANDARD CONCRETE PAVING JOINT LAYOUT:

NOTE: JOINT LAYOUT ONLY TO BE USED WHERE CIVIL DWGS DO NOT DIMENSION CONCRETE PAVING JOINT LAYOUT; REF CIVIL DWGS



EJ 20'-0" O.C. MAX, UON

CJ 5'-0" O.C. MAX, UNLESS EJ REQUIRED; UON

CONC PAVING REGULAR TRAFFIC: 4" THK REF CIVIL DWGS, UON

ASSUMED PROPERTY LINE

CHAIN LINK FENCE: REF PLAN IF (E) OR NEW

EXISTING ROOF OVERHANGS OR COVERED WALKWAYS (FOR REFERENCE ONLY)

REFERENCE NOTES

KEYNOTE	DESCRIPTION

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

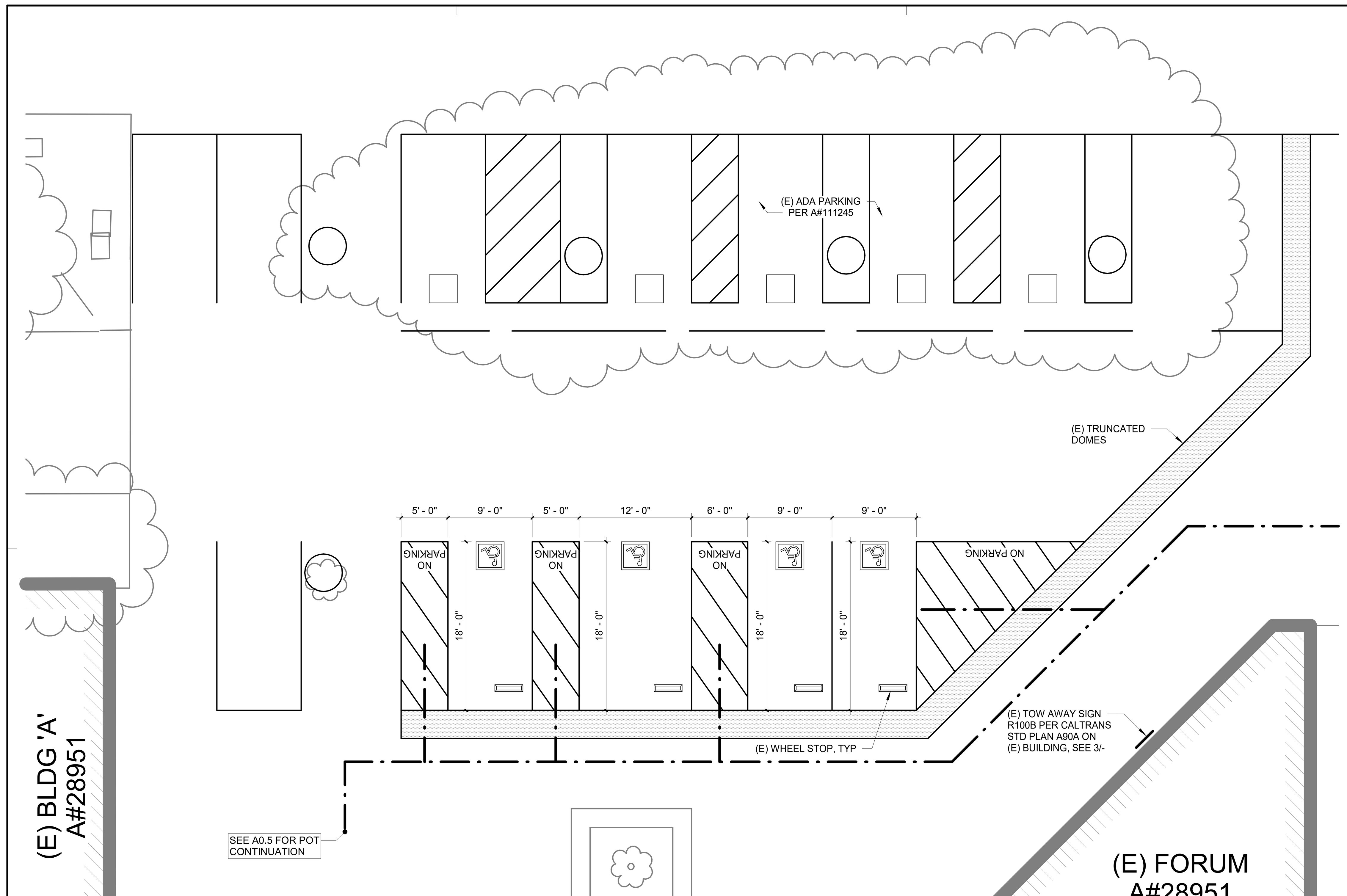
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | **CHECKED:** EM
DATE: 03/15/21 | **SCALE:** As indicated
PROJECT NUMBER: 2015800

ENLARGED SITE PLAN - EAST

DRAWING NUMBER: A1.3



PARKING SUMMARY:

SOUTHWEST PARKING LOT B	Regular	ADA-Std	ADA-Van	Total
EXISTING	3	8	1	12

MIN ADA STALLS REQUIRED FOR 1-25 STALLS IS 1 (STANDARD +VAN).

SCALE : 1/8" = 1'-0"

EXISTING PARKING LOT A (A#01-119072) | 1/8" = 1'-0" | 2

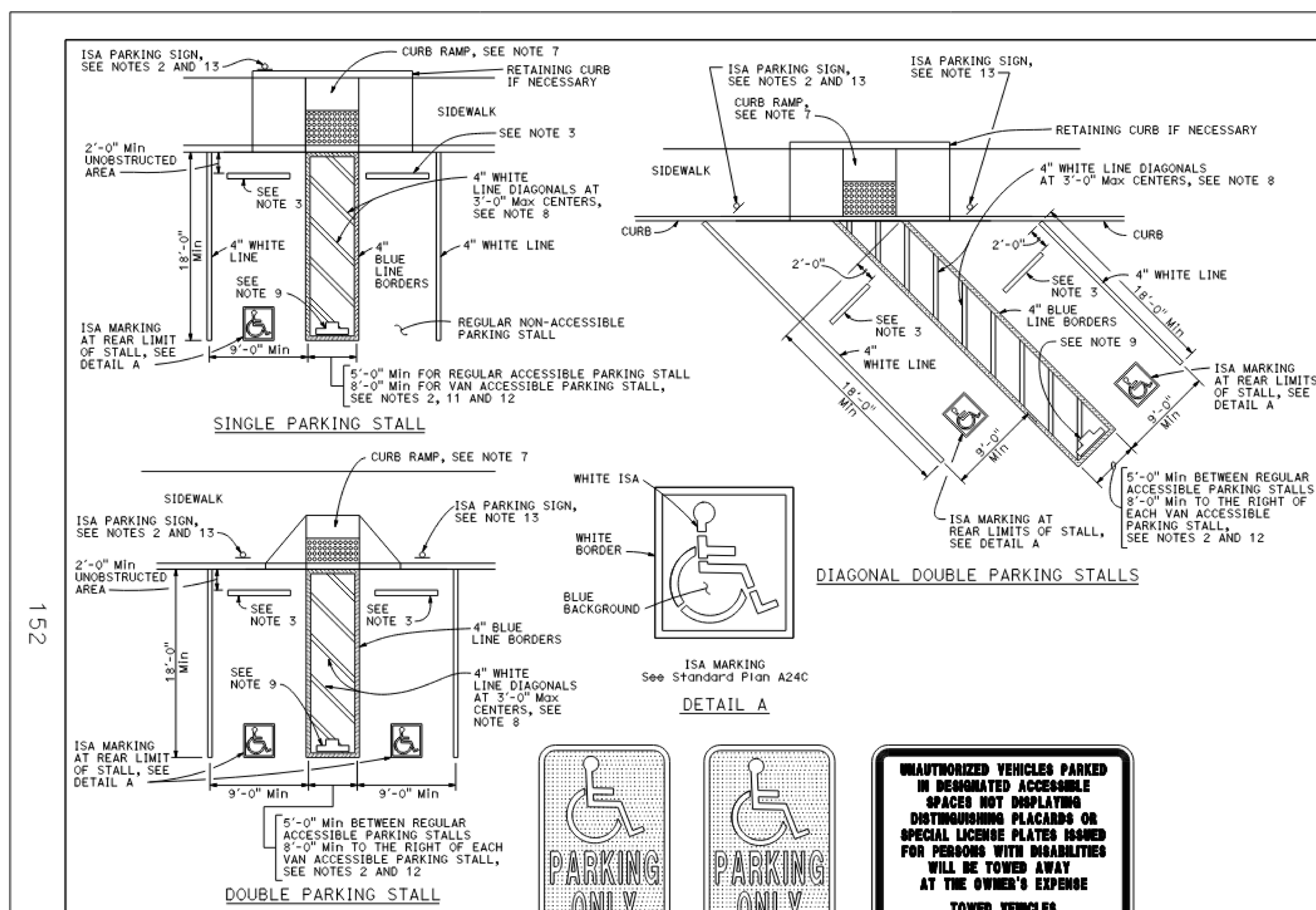


TABLE A

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2 PERCENT OF TOTAL
1001 AND OVER	20 PLUS 1 FOR EACH 100 OR FRACTION THEREOF OVER 1000

REGISTERED CIVIL ENGINEER

May 31, 2018

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility.
2. One in every six accessible off-street parking stalls, but not less than one, shall be served by an accessible aisle of 8'-0" minimum width and shall be signed van accessible. The R7-8b sign shall be mounted below the R99B (CA) plaque or the R99C (CA) sign.
3. In each parking stall, a curb or parking bumper shall be provided if required to prevent encroachment of vehicles over the required width of walkways. Parking stalls shall be so located that persons with disabilities are not compelled to wheel or walk behind parked vehicles other than their own. For more parking bumper requirements, see the Standard Specifications.
4. Parking spaces and access aisles shall be level with surface slopes not exceeding 1.5% in all directions.
5. Table A shall be used to determine the required number of accessible parking stalls in each parking lot or garage.
6. Where Plaque R99B (CA), Sign R99C (CA) or Sign R7-8b are installed, the bottom of the sign or plaque panel shall be a minimum of 7'-0" above the surrounding surface.
7. Curb ramps shall conform to the details shown on Standard Plan A88A.
8. Blue paint, instead of white may be used for marking accessibility aisles in areas where snow may cause white markings to not be visible.
9. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high and located so that it is visible to traffic enforcement officials. See Standard Plan A90B for details of the "NO PARKING" pavement marking.
10. A R100B (CA) sign shall be posted in a conspicuous place at each entrance to off-street parking facilities or immediately adjacent to and visible from each stall. The sign shall include the address where the towed vehicle may be reclaimed and the telephone number of the local traffic law enforcement agency.
11. Where a single (non-van) accessible parking space is provided, the loading and unloading access aisle shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
12. Where a van accessible parking space is provided, the loading and unloading access aisle shall be 8'-0" wide minimum, and shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
13. Accessible Parking Only Sign shall be Sign R99C (CA) or Sign R99 (CA) with Plaque R99B (CA).

LEGEND

ISA = International Symbol of Accessibility

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ACCESSIBLE PARKING OFF-STREET

NO SCALE

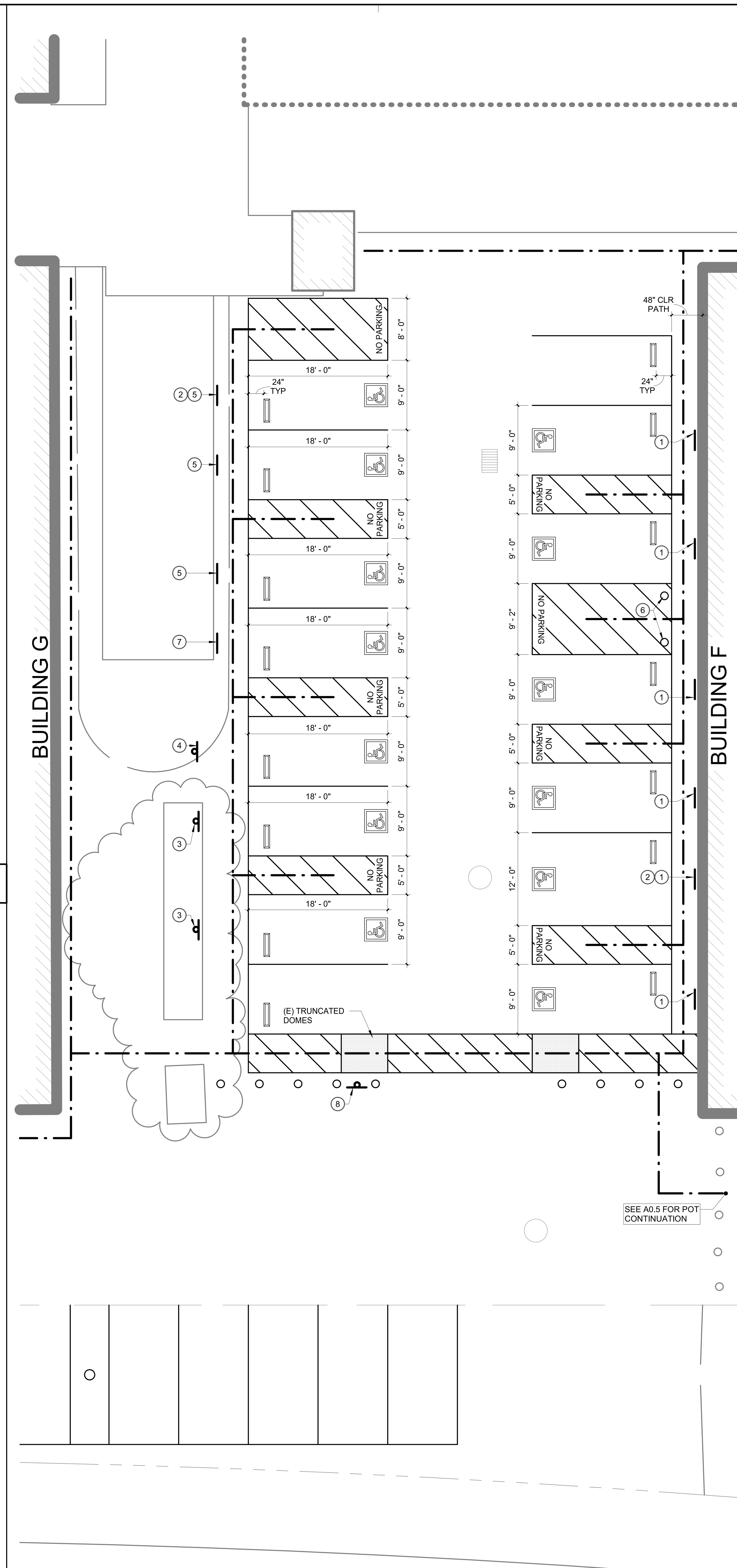
A90A

2018 STANDARD PLAN A90A

152

NOTE:
THE DOCUMENT ABOVE WAS USED AS A TEMPLATE FOR SIGNAGE AND PARKING REQUIREMENTS AT THE TIME OF THE PROJECT SUBMISSION. THIS DOCUMENT IS FOR REFERENCE ONLY.

CALTRANS STD PLAN A90A | NTS | 3



PARKING SUMMARY:

SOUTHWEST PARKING LOT B	Regular	ADA-Std	ADA-Van	Total
EXISTING	8	11	2	21

MIN ADA STALLS REQUIRED FOR 1-25 STALLS IS 1 (STANDARD +VAN).

SCALE : 1/8" = 1'-0"

EXISTING PARKING LOT B (A#01-119072) | 1/8" = 1'-0" | 1

GENERAL NOTES & LEGEND

GENERAL NOTES:

1. DRAWINGS ON THIS SHEET ARE FOR REFERENCE ONLY ILLUSTRATING EXISTING CONDITIONS, UNLESS OTHERWISE NOTED.
2. ALL STRIPING OF EXISTING PARKING SPACES ARE 4" WHITE LINE, EXCEPT AT ADA PARKING SPACE LANDING AREAS ARE 4" BLUE LINE.
3. EXISTING 4" WHITE LINE DIAGONALS AT 3'-0" O.C. AT NO PARKING AREAS.
4. MAXIMUM NUMBER OF PARKING SPACES (INCLUDING ADA) WERE RESTRIPED AS A SLURRY SEAL PROJECT PER DSA A#119072.

(1) (E) SIGN R99C PER CALTRANS STD PLAN A90A ON EXISTING BUILDING. SEE 3/-

(2) (E) SIGN R7-8b PER CALTRANS STD PLAN A90A ON EXISTING BUILDING. SEE 3/-

(3) (E) ACCESSIBLE PARKING SIGN AND POST R99C PER CALTRANS STD PLAN A90A IN PLATER AREA, SEE 3/-

(4) (E) ACCESSIBLE PARKING SIGN AND POST R99C PER CALTRANS STD PLAN A90A IN CONCRETE AREA, SEE 3/-

(5) (E) ACCESSIBLE PARKING SIGN R99C PER CALTRANS STD PLAN A90A BOLTED TO WALL OF THE EXISTING STAIRCASE, SEE 3/-

(6) (E) BOLLARD IN "NO PARKING" ASPHALT AREA

(7) (E) ACCESSIBLE PARKING SIGN AND POST R99C PER CALTRANS STD PLAN PLACED ON (E) STAIRCASE RAILING, SEE 3/-

(8) (E) SIGN R100B PER CALTRANS STD PLAN A90A, SEE 3/-

— · — · — ACCESSIBLE PATH OF TRAVEL

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

03-15-2021	100% DD SET
04-14-2021	50% CD SET

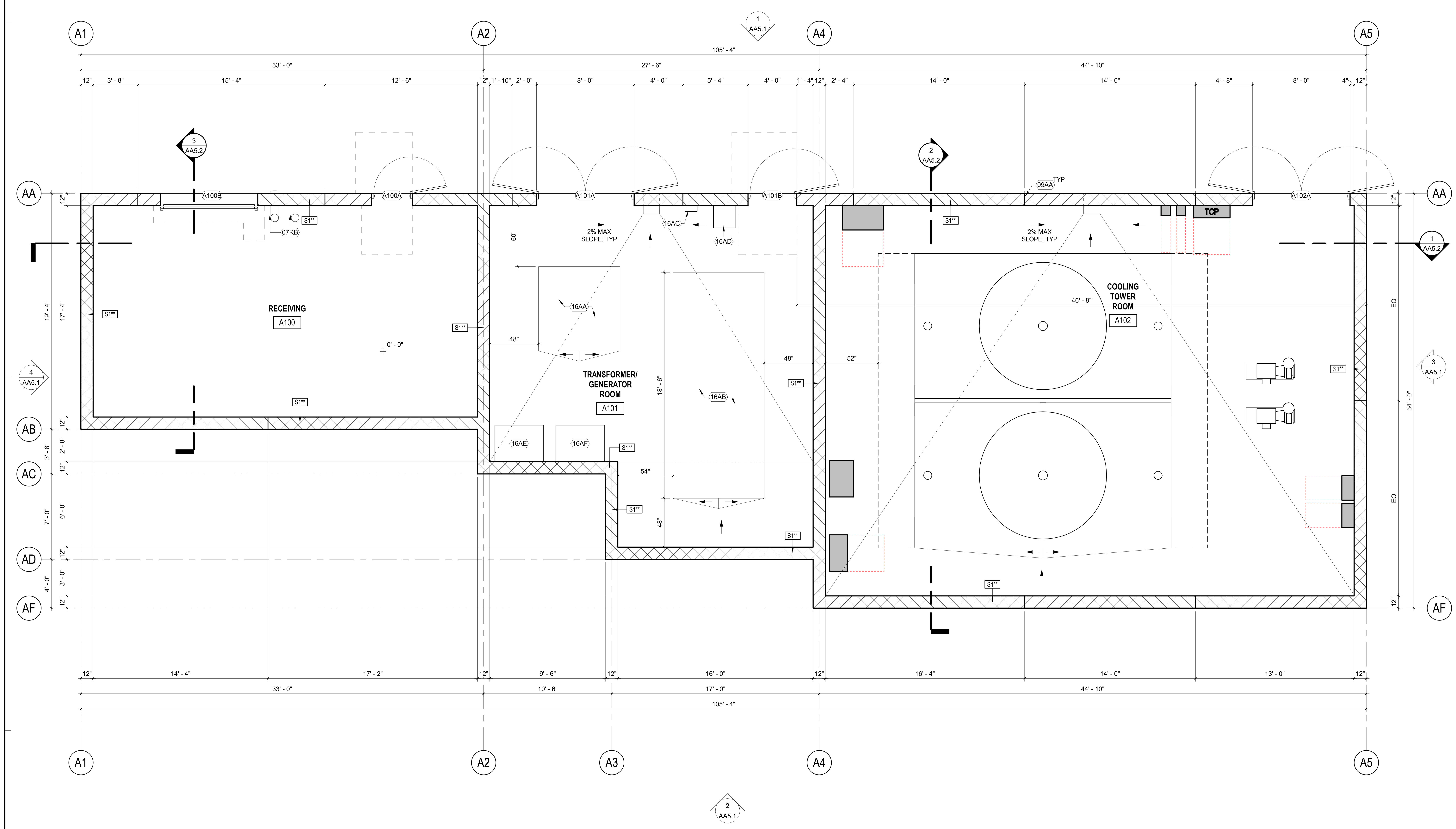
NO	DATE	BY	DESCRIPTION

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 03/25/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

ENLARGED EXISTING SITE PARKING

DRAWING NUMBER: **A1.4**



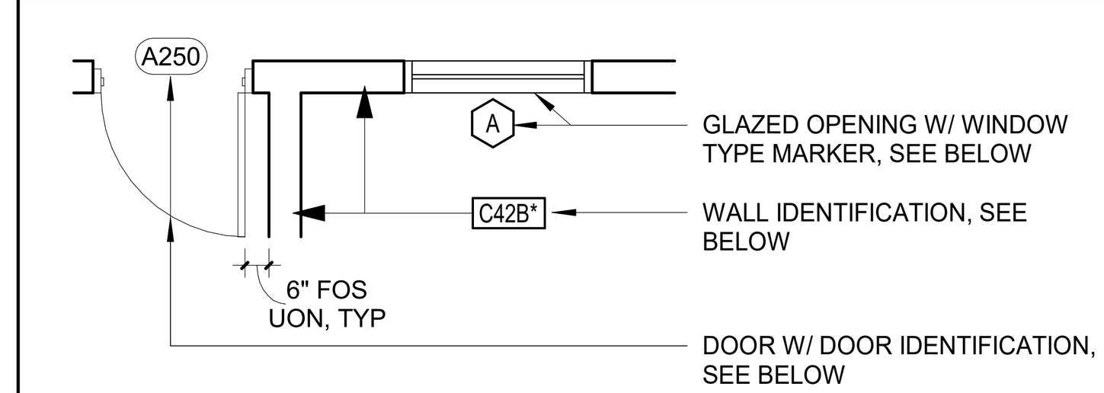
FIRST FLOOR PLAN 1/4" = 1'-0" 1

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

GENERAL NOTES

1. REFER TO FINISH PLANS FOR INTERIOR ELEVATION REFERENCES AND CASEWORK INFORMATION.
2. DIMENSIONS SHOWN ARE TAKEN FROM FACE OF CMU, UON. WHERE NOTE SAYS "TYP", IT MEANS THE DIMENSION IS "TYPICAL". CMU SIZES ARE SHOWN NOMINALLY.
3. REFER TO STRUCTURAL DRAWINGS FOR CMU SCHEDULE AND LOCATION OF DEPRESSED SLABS.
4. WHERE DOOR IS NOT LOCATED IN DIMENSION OR DETAIL FROM AN INTERVENING ROOM, DOOR JAMB WILL BE 6" FROM FACE OF STUD; EXCEPTIONS:
   - INTERIOR CLASSROOM DOORS: 4'-6" FROM CENTERLINE OF ADJ WALL TO CENTER OF DOOR OPENING, UON
   - EXTERIOR CLASSROOM DOORS: AS SHOWN ON PLAN
   - ALL OTHER DOORS NOT SPECIFIED ARE DIMENSIONED PER PLAN OR ENLARGED PLAN ON A6 SERIES.
5. FOR LOCATION OF EXIT LIGHTS, REFER TO CODE ANALYSIS & ELECTRICAL DWGS.
6. FOR SIGNAGE SCHEDULES, REFER TO SHEET 10.1
7. FOR DOOR SCHEDULE, REFER TO SHEET 8.1
8. FOR WALL TYPES REF TO SHT 9.1, COORDINATE WALL TYPE WITH FLR PLANS.
9. ROOMS AND BLDG COMPONENTS ARE DESIGNATED "AIRTIGHT" FOR THE PURPOSES OF SOUND ISOLATION AND NOISE CONTROL. THE REQUIREMENTS FOR SUCH AIRTIGHT CONSTRUCTION ARE DETAILS ON SHEET 9.5, ALL NECESSARY PRODUCTS AND DETAILING SHALL BE PROVIDED TO ACHIEVE AIRTIGHT/LEAKPROOF CONSTRUCTION.
10. PROVIDE SEALANT PER SPECIFICATION SECTION 07 92 00 AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS.
11. FIRE EXTINGUISHER CABINET TO BE LOCATED PER SHEET A0.7 - BUILDING CODE ANALYSIS. FIRE EXTINGUISHERS SHALL BE LOCATED AT A MAXIMUM OF 75'-0".
12. REF FLOOR PLANS FOR ENLARGED PLANS & SECTION CUT LOCATIONS.
13. FIRE WALLS, OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS (REF 3/10.1). SUCH IDENTIFICATION SHALL:
   - BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR CEILING OR ATTIC SPACES;
   - BE LOCATED WITHIN 15 FEET OF THE END OF EACH, ALL, AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL PARTITION;
   - INCLUDED LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH MIN 3/8 INCH STROKE IN A CONTRASTING COLOR, INCORPORATING THE SUGGESTED WORDING: "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER WORDING.

REFERENCE NOTES



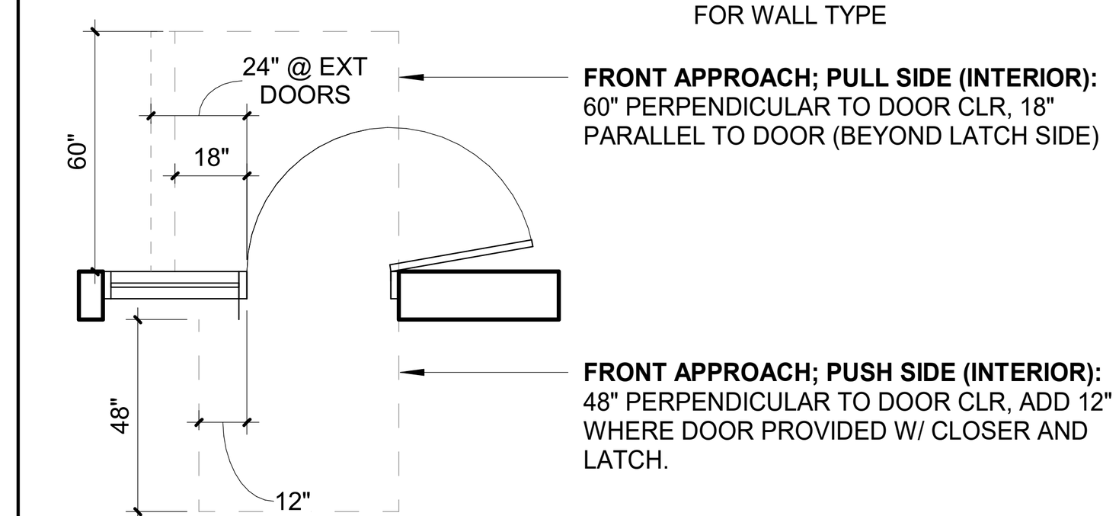
(A) **GLAZED OPENING OR WINDOW TYPE:**
ALPHABETICAL DESIGNATION = GLAZED OPENING
NUMERICAL DESIGNATION = WINDOW TYPE

(A250) **DOOR IDENTIFICATION:**
A = BUILDING IDENTIFICATION
2 = FLOOR NUMBER
50 = DOOR NUMBER

[C42B*] **WALL IDENTIFICATION:**
C = WALL TYPE DESIGNATION - REF DTL SCHEDULES SHT 9.5
4 = NOMINAL STUD OR MASONRY SIZE
2 = FIRE RATING IN HOURS
B = ADDITIONAL REMARKS - REF DTL SCHEDULES SHT 9.5
* = OPTIONAL CHARACTER

CMU WALL, SEE SHEET 9 SERIES FOR WALL TYPE

1-HR WALL, SEE SHEET 9 SERIES FOR WALL TYPE



FRONT APPROACH; PULL SIDE (INTERIOR): 60" PERPENDICULAR TO DOOR CLR, 18" PARALLEL TO DOOR (BEYOND LATCH SIDE)

FRONT APPROACH; PUSH SIDE (INTERIOR): 48" PERPENDICULAR TO DOOR CLR, ADD 12" WHERE DOOR PROVIDED W/ CLOSER AND LATCH.

REFERENCE NOTES

KEYNOTE	DESCRIPTION
07RB	PAINTED METAL DOWNSPOUT CONNECT TO STORM DRAIN, REF DTL XX/XX
09AA	CMU EXPANSION JOINT, REF EXTERIOR ELEVATIONS AA5.1 & STRUCTURAL DWGS FOR ADDITIONAL INFO
16AA	FUTURE LOCATION OF BLDG TRANSFORMER, NIC
16AB	FUTURE LOCATION OF BLDG GENERATOR, NIC
16AC	FUTURE LOCATION OF BLDG FUEL LEAN PANEL, NIC
16AD	FUTURE LOCATION OF MINI POWER CENTER, NIC
16AE	FUTURE LOCATION OF PORTABLE GENERATOR DOCKING STATION, NIC
16AF	FUTURE LOCATION OF MANUAL TRANSFER SWITCH, NIC

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

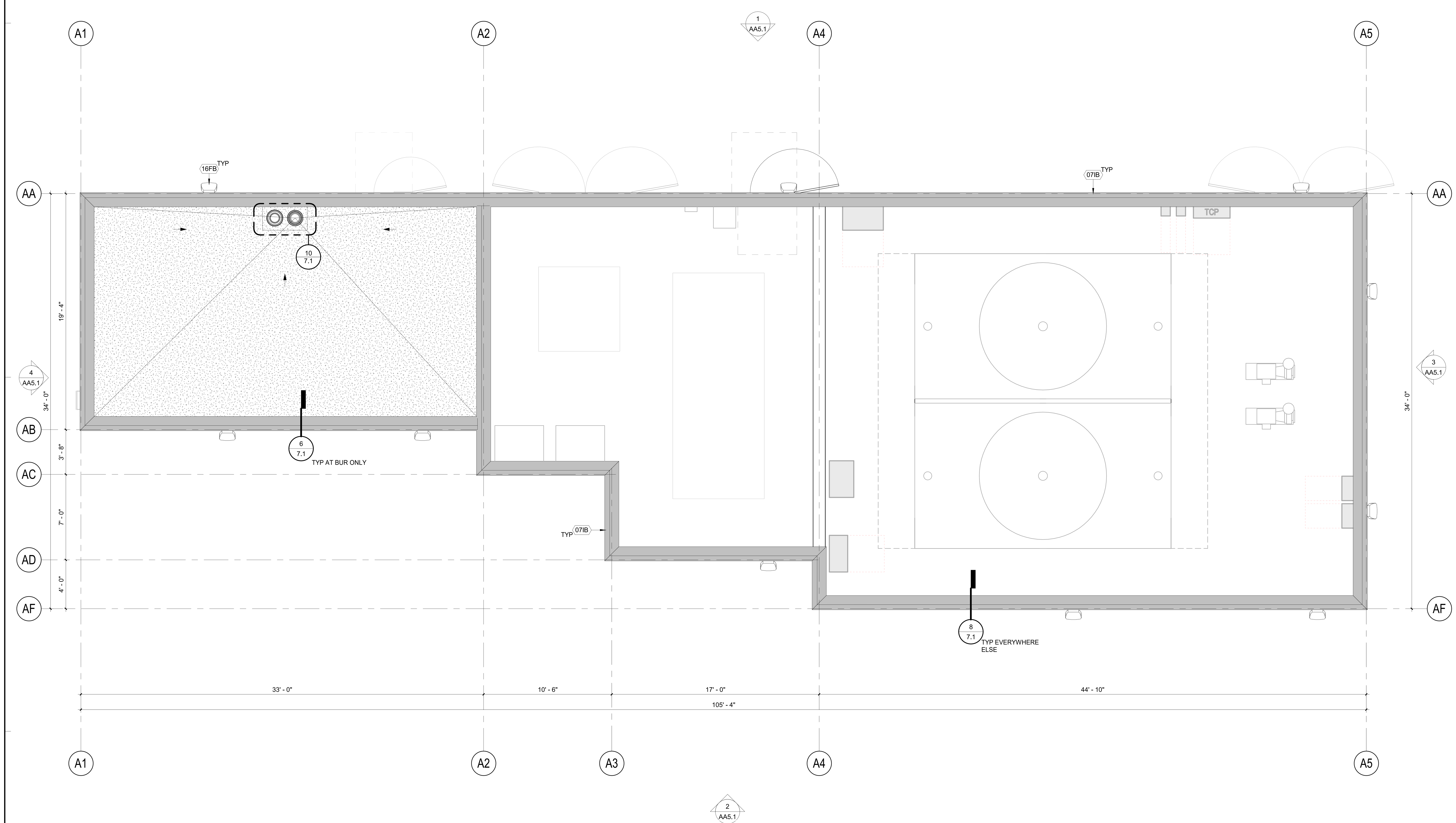
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

BLDG AA - FIRST FLOOR PLAN

DRAWING NUMBER: AA2.1



ROOF PLAN | 1/4" = 1'-0" | 1

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

GENERAL NOTES

1. PROVIDE A POSITIVE SLOPE TO DRAIN AT 1% MINIMUM, TYP. ROOF SLOPE AT 1/2" PER FOOT, UON
2. FOR ADDITIONAL INFORMATION NOT SHOWN, REF:
   - MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT LOCATIONS. COORDINATE WITH STRUCTURAL FOR MECHANICAL SUPPORTS.
   - REFER TO SHEET 7.1 & 7.2 FOR THERMAL AND MOISTURE PROTECTION DETAILS.
3. SEE PLUMBING DRAWINGS FOR ROOF DRAINS AND ROOF VENTS.
4. REF TO STRCT DWGS FOR LOCATIONS OF STRUCTURAL DECK & FASTENING.
5. USE STAINLESS STEEL FOR: FLASHING, TRIMS, GUTTERS, & METAL ACCESSORIES, GRADE AS SPECIFIED IN THE PROJECT MANUAL, THICKNESS AS REQD PER "STANDARD PRACTICES FOR STAINLESS STEEL" BY SSINA. PAINTED OR FACTORY FACTORY FINISH AS SELECTED BY OWNER & ARCHITECT.
6. ALL ROOF ELEVATIONS NOTED ARE FROM +0' - 0" REF FINISH FLOOR ELEVATION.
7. LOCATE ANY ROOF UNIT / EQUIPMENT 8" MINIMUM CLEAR FROM PARAPET WALL, TYP UON.
8. EDGE OF ROOF DRAINS PER ROOF PLAN, TYP UON. CENTER DRAINS AS SHOWN. REF PLBG DWGS FOR CONTINUATION.
9. ASPHALT BUILT-UP ROOF, UL CLASS 'A' CLASSIFICATION PER CBC TABLE 15A AND SECTION 1504, REF 1/7.1
10. REF DTL 2/7.1 FOR ROOF PIPE PENETRATION DETAILS. SEE MECH AND PLBG DWGS FOR LOCATION AND COORDINATION. REF DTL 3/7.1 FOR PIPE SUPPORT BLOCK AS REQUIRED.

LEGEND

ROOF HATCH, TYP; REF 16/7.1

CRICKET WHERE SHOWN TYP, REF 9/7.1

SLOPE DOWN MARKER, SEE ROOF PLAN

ROOF DRAIN, REF DTL 10/7.1; REF CIVIL DWGS FOR STORM WATER CONNECTION. ADDITIONAL INFO REF PLUMBING DWGS

OVERFLOW DRAIN, REF DTL 8/7.1

32" x 32" x 5/16" TRAFFIC PADS. INSTALL PER ROOF PLAN. MAINTAIN MIN 6" SPACE BETWEEN PADS UON, TYP. REF SPEC SECTION 07 51 00.

ASPHALT BUILT-UP ROOFING CLASS 'A', SEE SHEET GENERAL NOTES

REFERENCE NOTES

KEYNOTE	DESCRIPTION
07IB	METAL PARAPET CAP, PAINTED - REF DTL 5/7.1
16FB	SURFACE-MOUNTED EXTERIOR LIGHT FIGHTURE, REF EXTERIOR ELEVATIONS SHT AA5.1

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

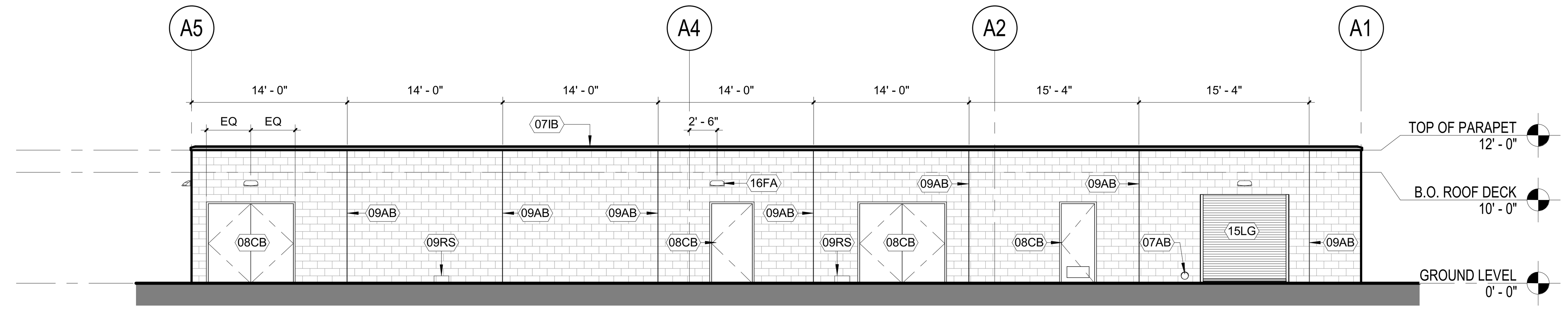
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

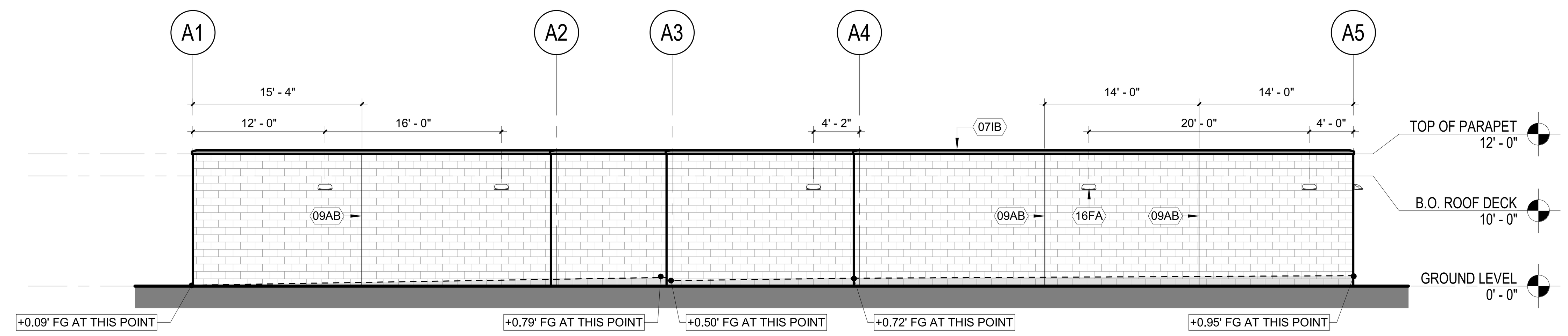
DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: 1/4" = 1'-0"
PROJECT NUMBER: 2015800	

BLDG AA - ROOF PLAN

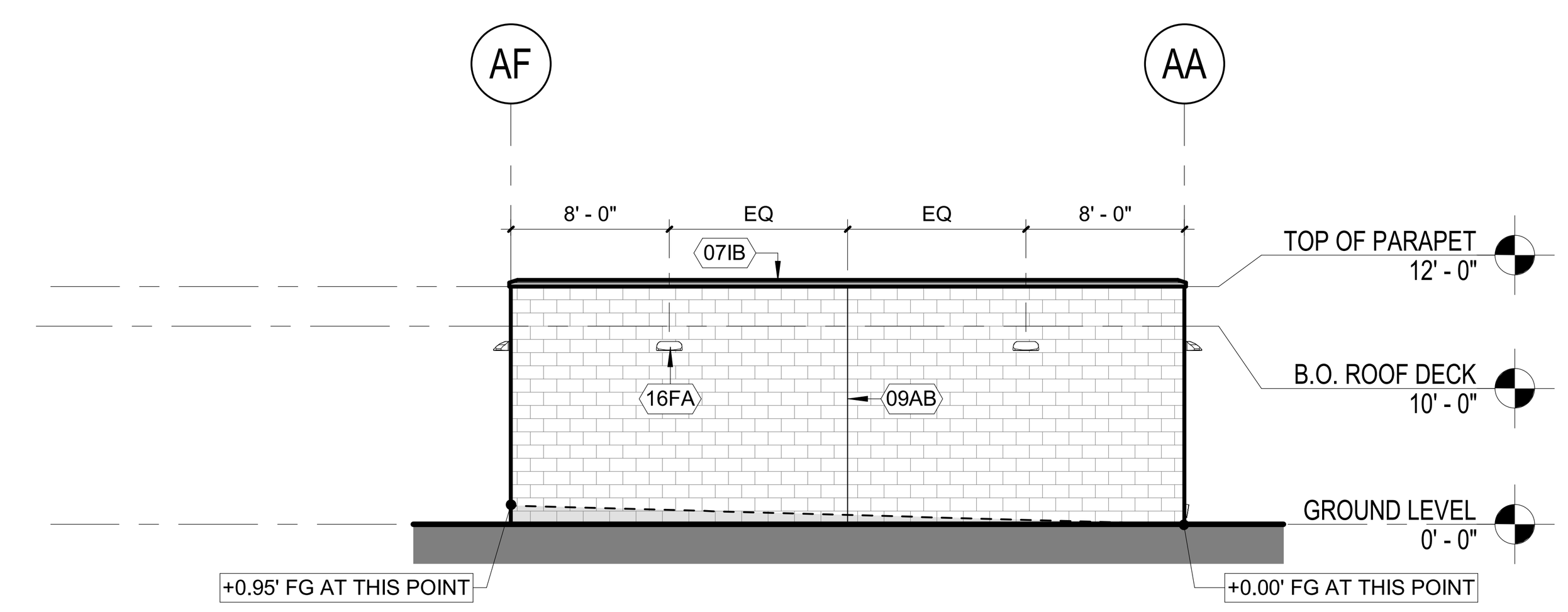
DRAWING NUMBER: **AA4.1**



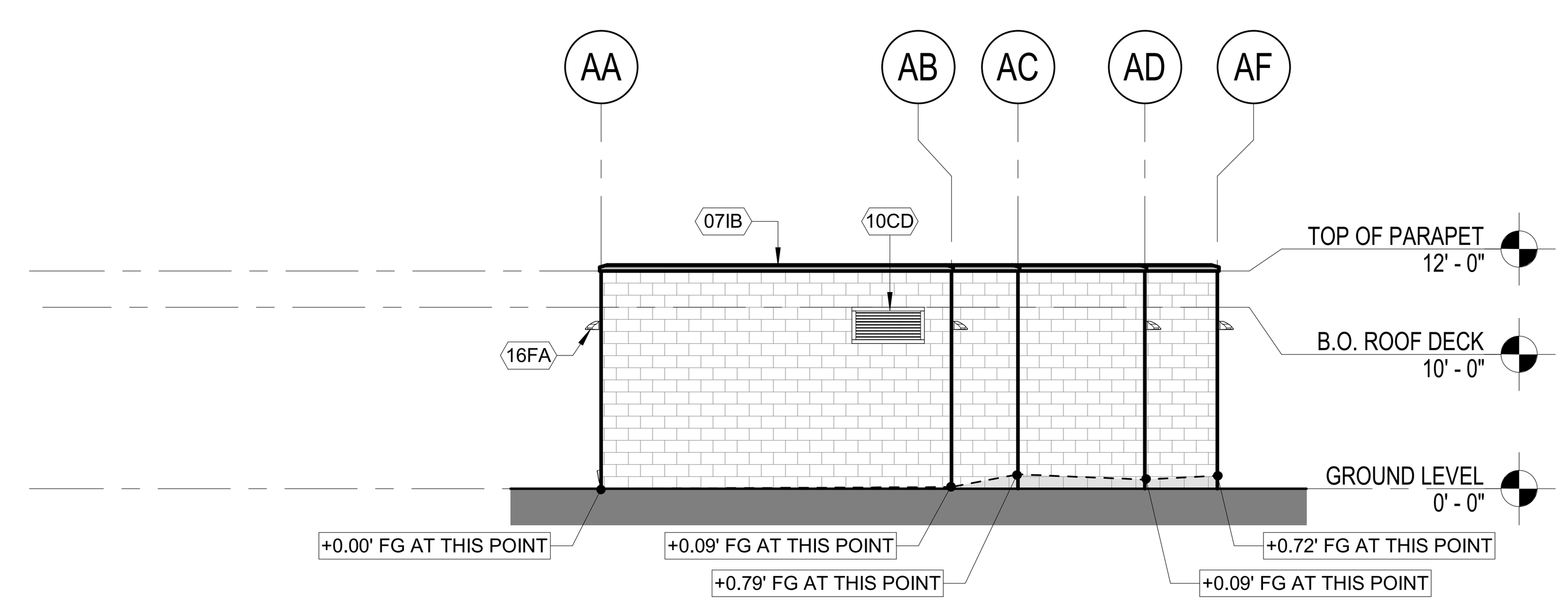
PROJECT NORTH EXTERIOR ELEVATION | 1/8" = 1'-0" | 1



PROJECT SOUTH EXTERIOR ELEVATION | 1/8" = 1'-0" | 2



PROJECT EAST EXTERIOR ELEVATION | 1/8" = 1'-0" | 3



PROJECT WEST EXTERIOR ELEVATION | 1/8" = 1'-0" | 4

GENERAL NOTES

1. PARAPET COPING: REF 2/7.1 FOR ADDITIONAL INFO. SEE ROOF PLANS FOR LOCATION OF ALL COPING.
2. ACCESSIBLE OPERABLE WINDOWS: 1 PER ROOM WHERE OPERABLE WINDOWS PROVIDED. SEE FLOOR PLANS FOR LOCATION OF OPERABLE WINDOWS.
3. USE STAINLESS STEEL FOR: FLASHING, TRIMS, GUTTERS, & METAL ACCESSORIES, GRADE AS SPECIFIED IN THE PROJECT MANUAL, THICKNESS AS REQD PER "STANDARD PRACTICES FOR STAINLESS STEEL" BY SSINA.
4. WALL FINISHES ARE TO BE PRE-FINISHED (FACTORY FINISH), TYPICAL UNLESS OTHERWISE NOTED.
5. WALL SWEEPS / REVEALS ARE DIMENSIONED PER ELEVATION PLAN. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL SWEEPS/REVEALS PRIOR TO APPLICATION.
6. CMU WALL EXPANSION JOINTS TO BE 18'-0" O.C. MAX, SEE STRCT DWGS DTL 9/S1.04 FOR ADDITIONAL INFO.

LEGEND

SPLIT FACE CMU BLOCK, COLOR & PATTERN PER ARCHITECT APPROVED. FOR WALL SIZING, REF WALL DETAIL SS 2/9.1

REFERENCE NOTES

KEYNOTE	DESCRIPTION
07AB	OVERFLOW DRAIN OUTLET; REF DTL 8/7.1
07IB	METAL PARAPET CAP, PAINTED - REF DTL 5/7.1
08CB	SCHEDULED DOOR, REF DOOR SCHED SHEET 8.1
09AB	CMU EXPANSION JOINT, REF STRCT DWGS DTL 9/S1.04
09RS	WALL OPENING FOR SURFACE RAIN DRAINAGE
10CD	FIXED METAL LOUVER, REF DTL 5/8.1
15LG	PREFABRICATED METAL ROLL UP DOOR, REF DTL 6/8.1 & 7/8.1
16FA	SURFACE-MOUNTED EXTERIOR LIGHT FIXTURE +9'-0" AFF, TYP. INSTALL PER PLAN- REF ELEC DWGS

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

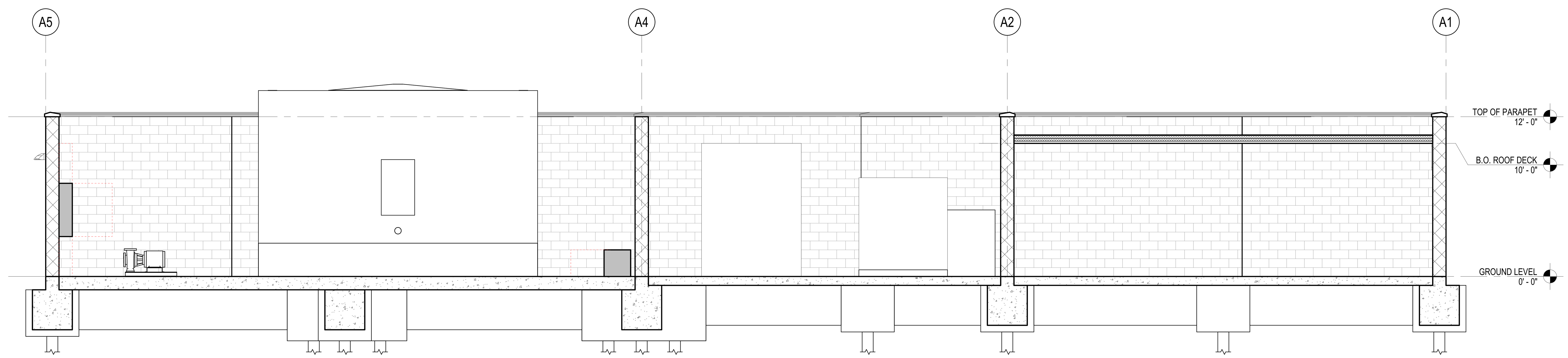
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

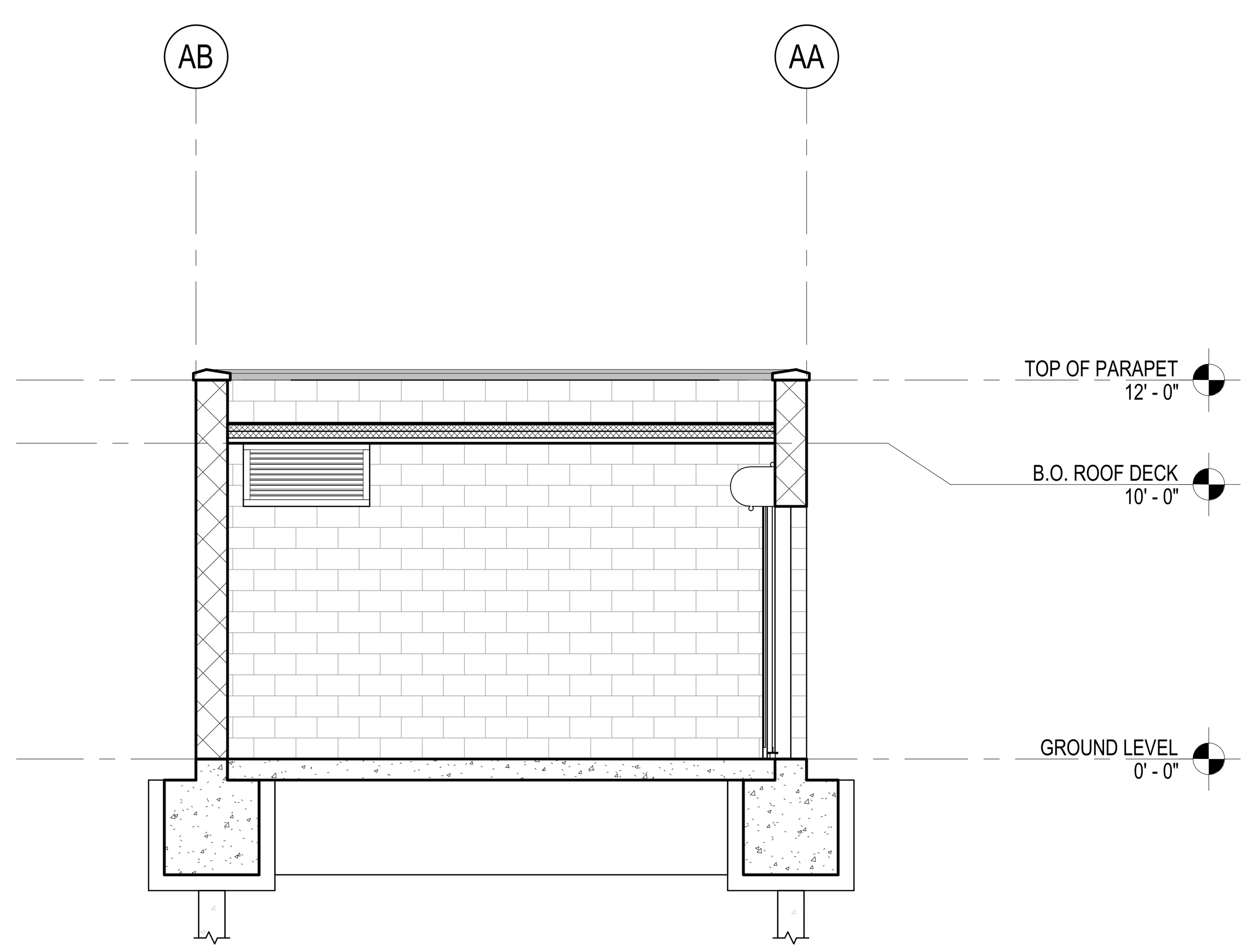
DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

BLDG AA - EXTERIOR ELEVATIONS

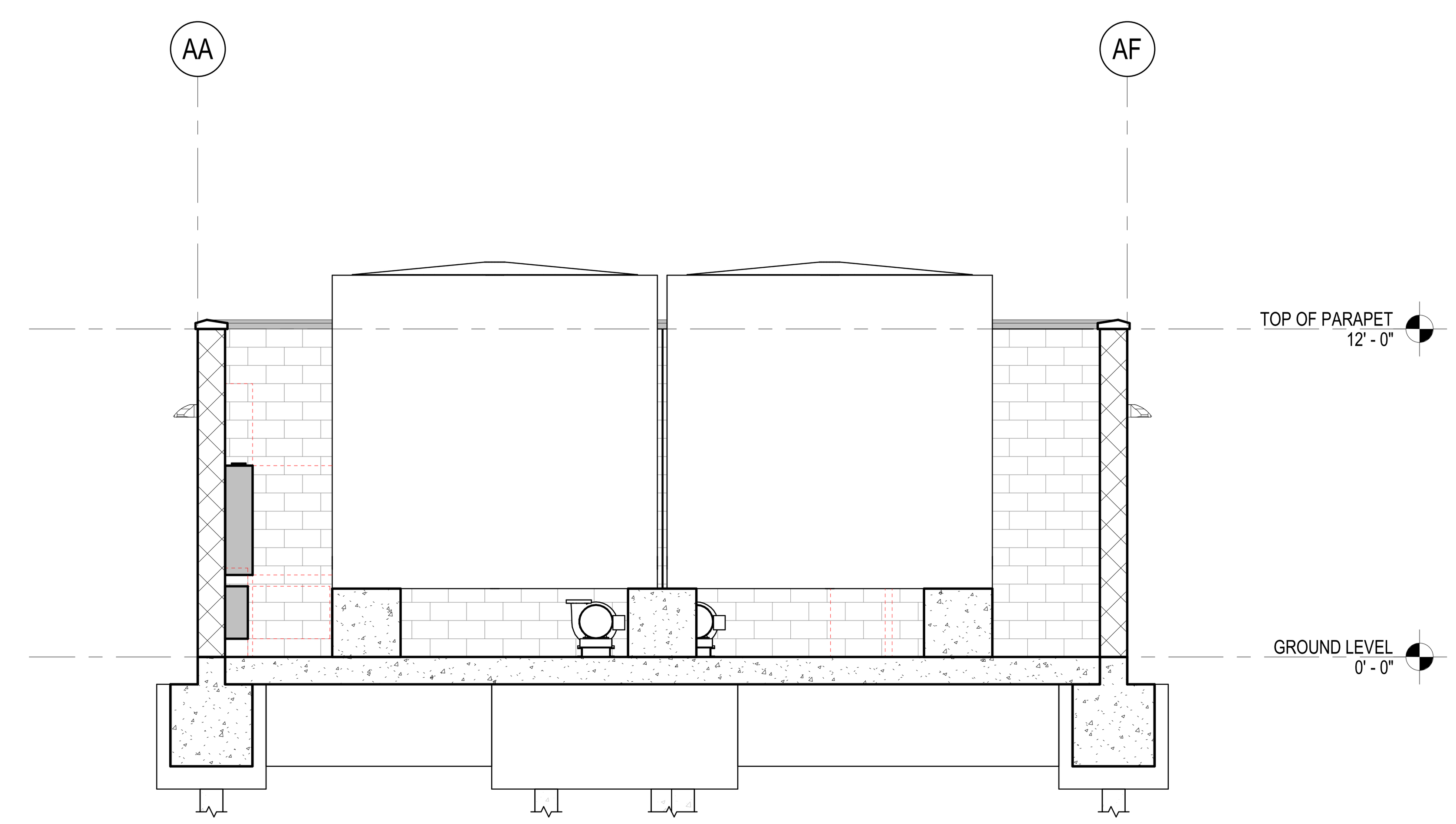
DRAWING NUMBER: **AA5.1**



BUILDING AA - SECTION 1 | 1/4" = 1'-0" | 1



BUILDING AA - SECTION 3 | 1/4" = 1'-0" | 3



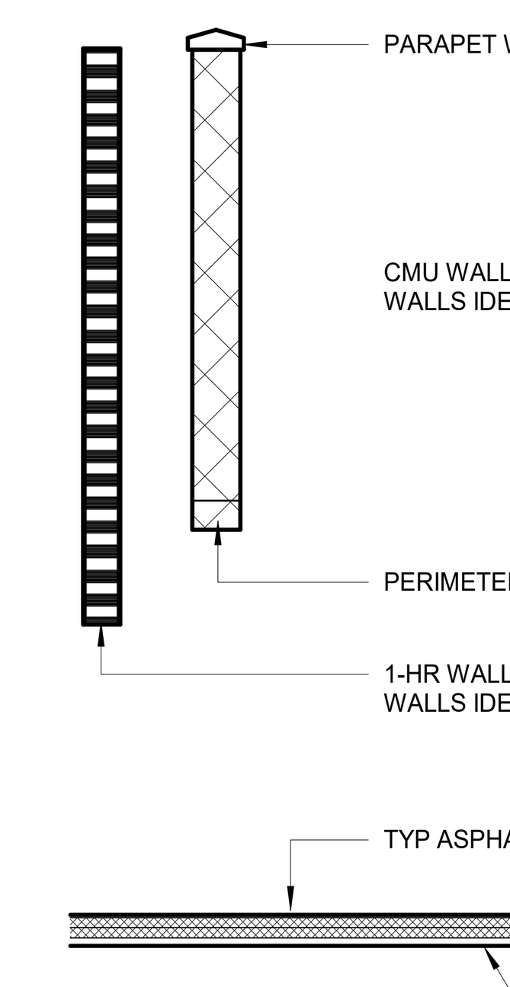
BUILDING AA - SECTION 2 | 1/4" = 1'-0" | 2

GENERAL NOTES

GENERAL NOTES:

1. NOTE NOT ALL ITEMS DIMENSIONED OR SHOWN FOR CLARITY. REF OTHER ARCHITECTURAL SHEETS FOR FULL EXTENT OF SCOPE
2. CONTRACTOR TO COORDINATE ALL DISCIPLINS WITHIN CEILING PLENUM SPACE PRIOR TO INSTALLATION.
3. STRUCTURAL SLAB & FOUNDATION DIMENSIONS PER STRCT DWGS.

LEGEND



REFERENCE NOTES

KEYNOTE	DESCRIPTION

ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

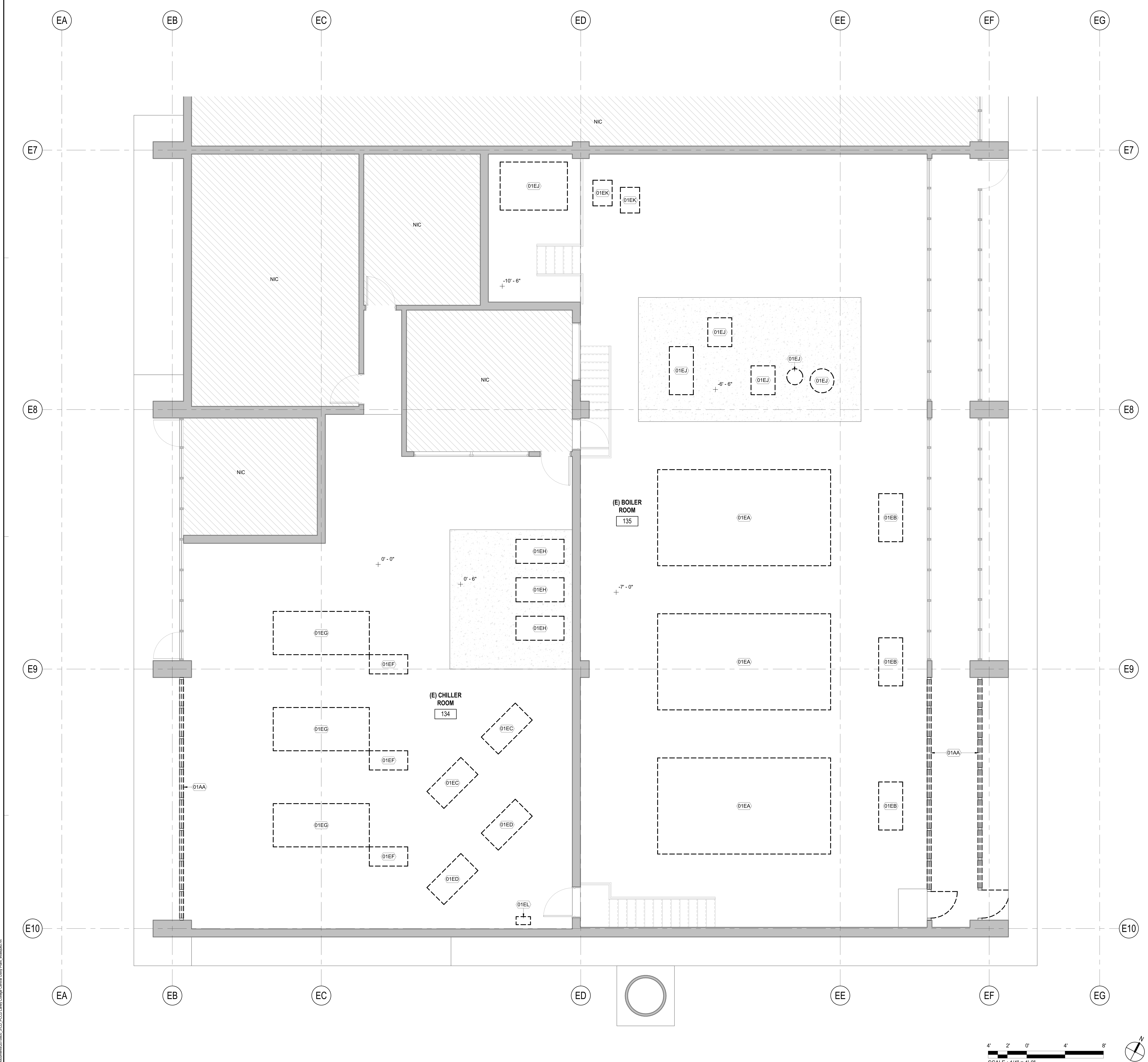
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: 1/4" = 1'-0"
PROJECT NUMBER: 2015800	

BLDG AA - BUILDING SECTIONS

DRAWING NUMBER: AA5.2



DEMO - FIRST FLOOR PLAN | 1/4" = 1'-0" | 1

GENERAL NOTES

LEGEND

REFERENCE NOTES

KEYNOTE	DESCRIPTION
01AA	(E) STOREFRONT TO BE REMOVED & PROTECTED DURING CONSTRUCTION FOR REMOVAL OF INTERIOR MECHANICAL EQUIPMENT. CONTRACTOR TO REINSTALL IN GOOD CONDITION
01EA	(E) HOT WATER BOILERS TO BE DEMOLISHED
01EB	(E) PRIMARY HOT WATER PUMP TO BE DEMOLISHED
01EC	(E) SECONDARY CHILLED WATER PUMP TO BE DEMOLISHED
01ED	(E) SECONDARY HEATING HOT WATER PUMP TO BE DEMOLISHED
01EF	(E) CHILLER VFD TO BE DEMOLISHED
01EG	(E) CHILLER TO BE DEMOLISHED
01EH	(E) PRIMARY CHILLED WATER PUMP TO BE DEMOLISHED
01EJ	(E) STEAM SYSTEMS TO BE DEMOLISHED
01EK	(E) NON-OPERATIONAL COMPRESSORS TO BE DEMOLISHED
01EL	(E) TERTIARY HOT WATER PUMP TO BE DEMOLISHED

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

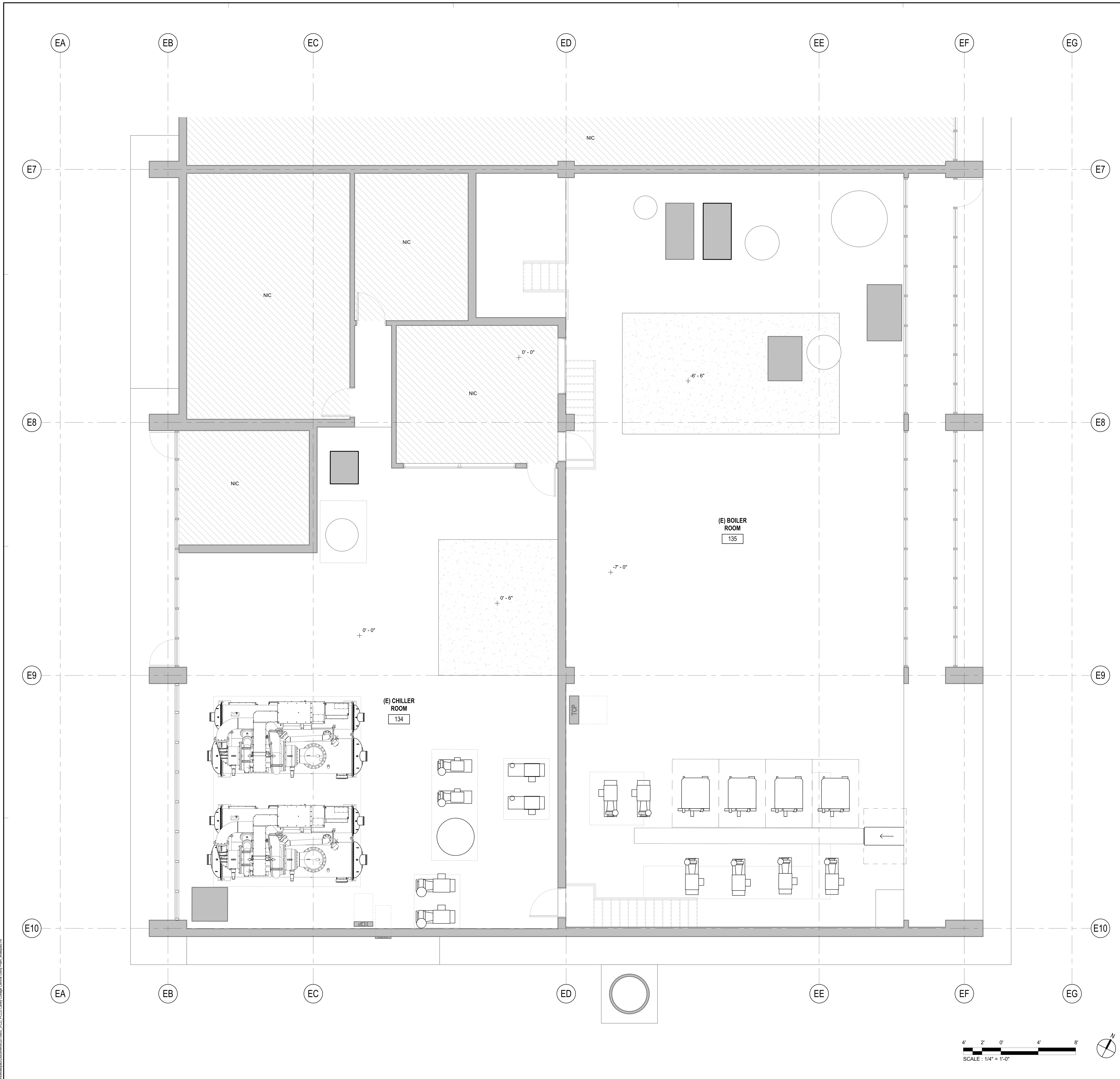
DRAWN: EV | CHECKED: EM

DATE: 03/15/21 | SCALE: 1/4" = 1'-0"

PROJECT NUMBER: 2015800

BLDG E - FIRST FLOOR DEMO PLAN

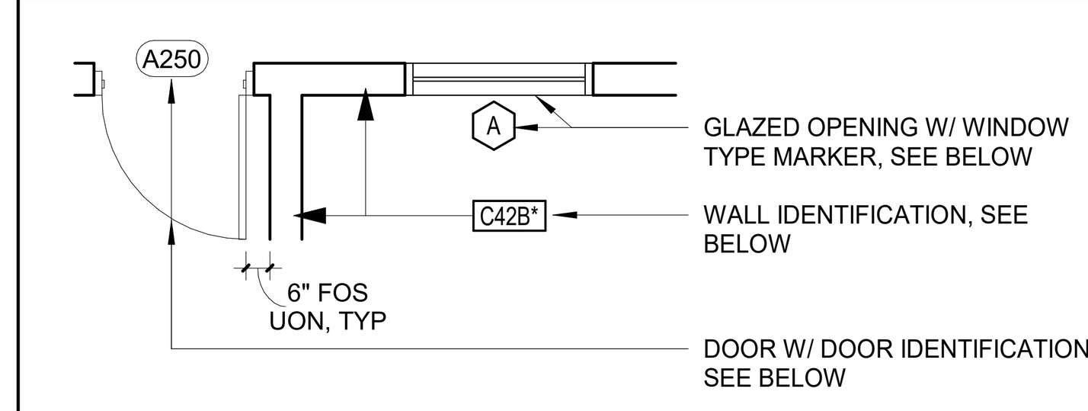
DRAWING NUMBER: AE2.1



GENERAL NOTES

1. REFER TO FINISH PLANS FOR INTERIOR ELEVATION REFERENCES AND CASEWORK INFORMATION.
2. DIMENSIONS SHOWN ARE TAKEN FROM FACE OF CMU, UON. WHERE NOTE SAYS "TYP", IT MEANS THE DIMENSION IS "TYPICAL". CMU SIZES ARE SHOWN NOMINALLY.
3. REFER TO STRUCTURAL DRAWINGS FOR CMU SCHEDULE AND LOCATION OF DEPRESSED SLABS.
4. WHERE DOOR IS NOT LOCATED IN DIMENSION OR DETAIL FROM AN INTERVENING ROOM, DOOR JAMB WILL BE 6" FROM FACE OF STUD; EXCEPTIONS:
   - INTERIOR CLASSROOM DOORS: 4'-6" FROM CENTERLINE OF ADJ WALL TO CENTER OF DOOR OPENING, UON
   - EXTERIOR CLASSROOM DOORS: AS SHOWN ON PLAN
   - ALL OTHER DOORS NOT SPECIFIED ARE DIMENSIONED PER PLAN OR ENLARGED PLAN ON A6 SERIES.
5. FOR LOCATION OF EXIT LIGHTS, REFER TO CODE ANALYSIS & ELECTRICAL DWGS.
6. FOR SIGNAGE SCHEDULES, REFER TO SHEET 10.1
7. FOR DOOR SCHEDULE, REFER TO SHEET 8.1
8. FOR WALL TYPES REF TO SHT 9.1, COORDINATE WALL TYPE WITH FLR PLANS.
9. ROOMS AND BLDG COMPONENTS ARE DESIGNATED "AIRTIGHT" FOR THE PURPOSES OF SOUND ISOLATION AND NOISE CONTROL. THE REQUIREMENTS FOR SUCH AIRTIGHT CONSTRUCTION ARE DETAILS ON SHEET 9.5, ALL NECESSARY PRODUCTS AND DETAILING SHALL BE PROVIDED TO ACHIEVE AIRTIGHT/LEAKPROOF CONSTRUCTION.
10. PROVIDE SEALANT PER SPECIFICATION SECTION 07 92 00 AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS.
11. FIRE EXTINGUISHER CABINET TO BE LOCATED PER SHEET A0.7 - BUILDING CODE ANALYSIS. FIRE EXTINGUISHERS SHALL BE LOCATED AT A MAXIMUM OF 75'-0".
12. REF FLOOR PLANS FOR ENLARGED PLANS & SECTION CUT LOCATIONS.
13. FIRE WALLS, OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS (REF 3/10.1). SUCH IDENTIFICATION SHALL:
   - BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR CEILING OR ATTIC SPACES;
   - BE LOCATED WITHIN 15 FEET OF THE END OF EACH, ALL, AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL PARTITION;
   - INCLUDED LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH MIN 3/8 INCH STROKE IN A CONTRASTING COLOR, INCORPORATING THE SUGGESTED WORDING: "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER WORDING.

REFERENCE NOTES



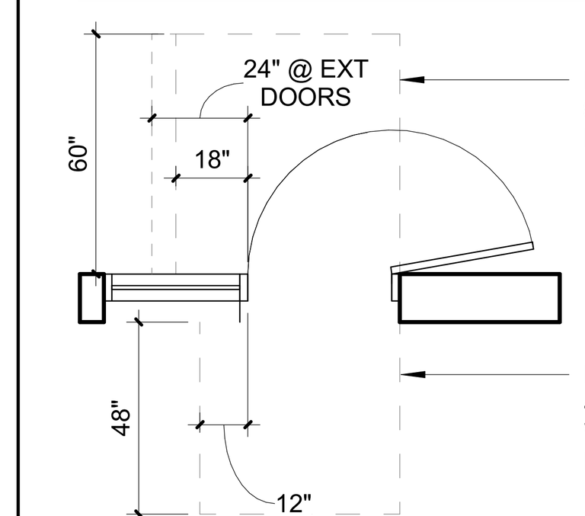
GLAZED OPENING OR WINDOW TYPE:
ALPHABETICAL DESIGNATION = GLAZED OPENING
NUMERICAL DESIGNATION = WINDOW TYPE

DOOR IDENTIFICATION:
A = BUILDING IDENTIFICATION
2 = FLOOR NUMBER
50 = DOOR NUMBER

WALL IDENTIFICATION:
C = WALL TYPE DESIGNATION - REF DTL SCHEDULES SHT 9.5
4 = NOMINAL STUD OR MASONRY SIZE
2 = FIRE RATING IN HOURS
B = ADDITIONAL REMARKS - REF DTL SCHEDULES SHT 9.5
* = OPTIONAL CHARACTER

CMU WALL, SEE SHEET 9 SERIES FOR WALL TYPE

1-HR WALL, SEE SHEET 9 SERIES FOR WALL TYPE



FRONT APPROACH; PULL SIDE (INTERIOR): 60" PERPENDICULAR TO DOOR CLR, 18" PARALLEL TO DOOR (BEYOND LATCH SIDE)

FRONT APPROACH; PUSH SIDE (INTERIOR): 48" PERPENDICULAR TO DOOR CLR, ADD 12" WHERE DOOR PROVIDED W/ CLOSER AND LATCH.

REFERENCE NOTES

KEYNOTE	DESCRIPTION

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com
Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

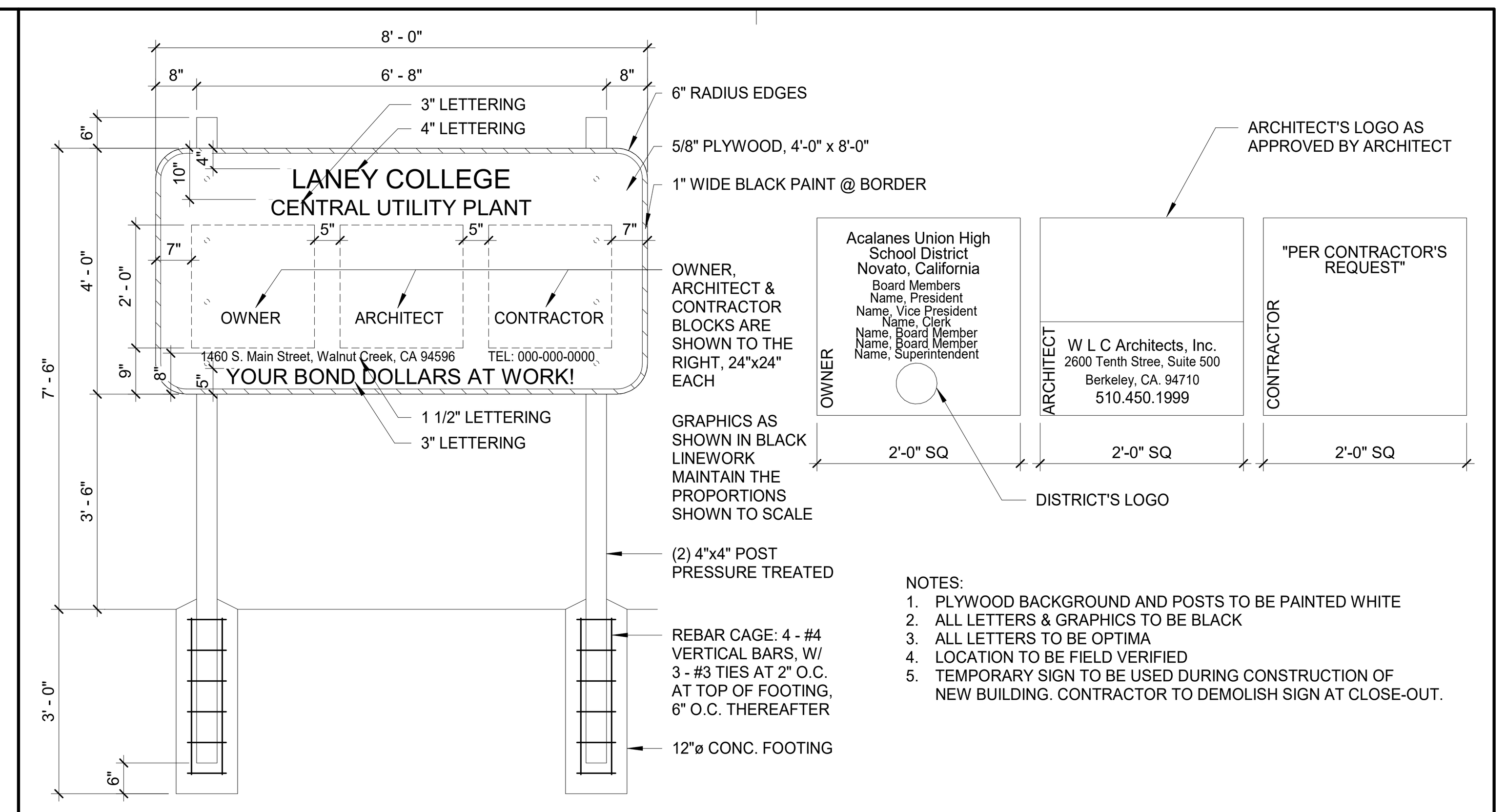
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE: As indicated
PROJECT NUMBER: 2015800

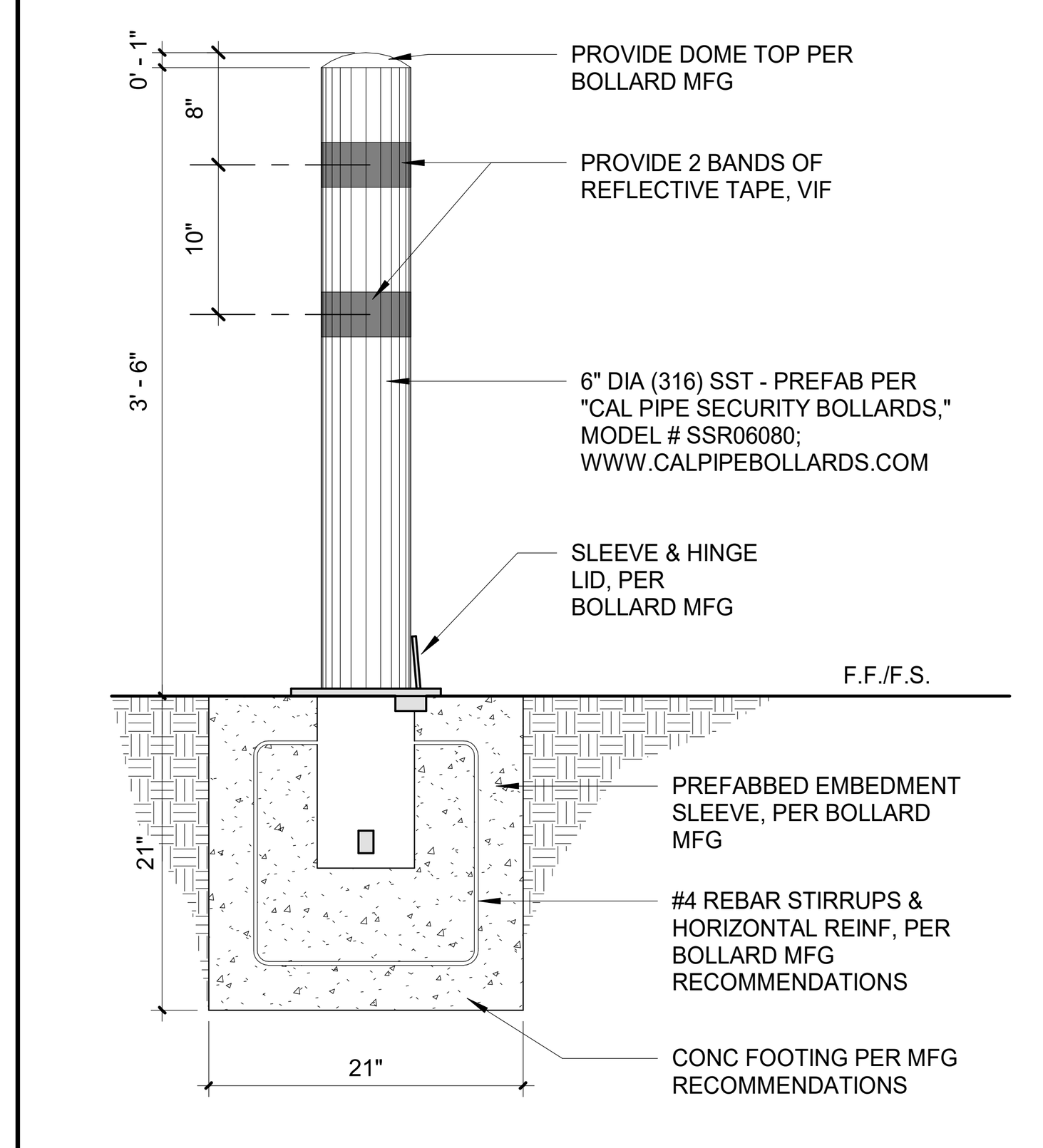
BLDG E - FIRST FLOOR PLAN

DRAWING NUMBER: AE2.2

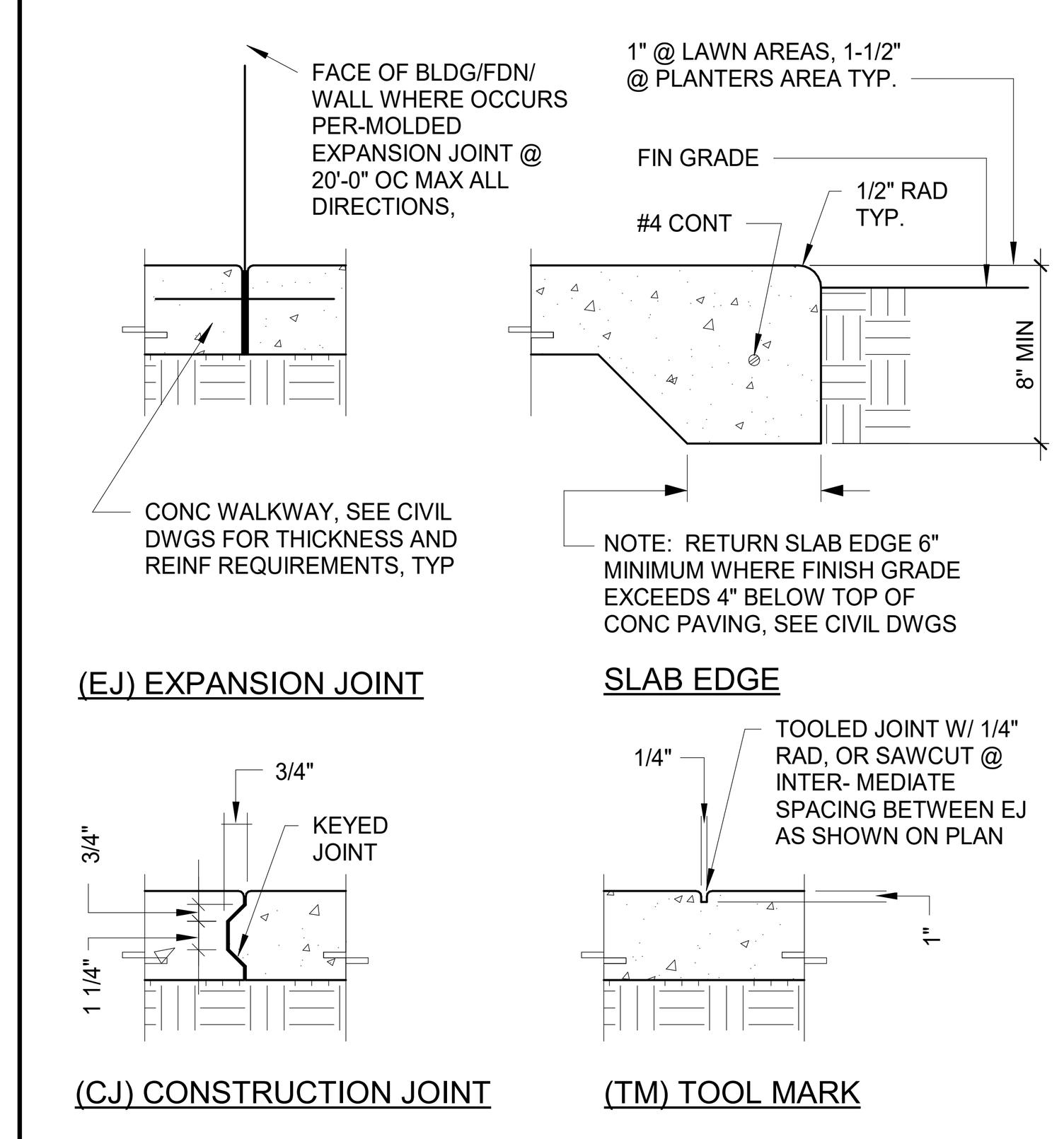


NOTES:
1. PLYWOOD BACKGROUND AND POSTS TO BE PAINTED WHITE
2. ALL LETTERS & GRAPHICS TO BE BLACK
3. ALL LETTERS TO BE OPTIMA
4. LOCATION TO BE FIELD VERIFIED
5. TEMPORARY SIGN TO BE USED DURING CONSTRUCTION OF NEW BUILDING. CONTRACTOR TO DEMOLISH SIGN AT CLOSE-OUT.

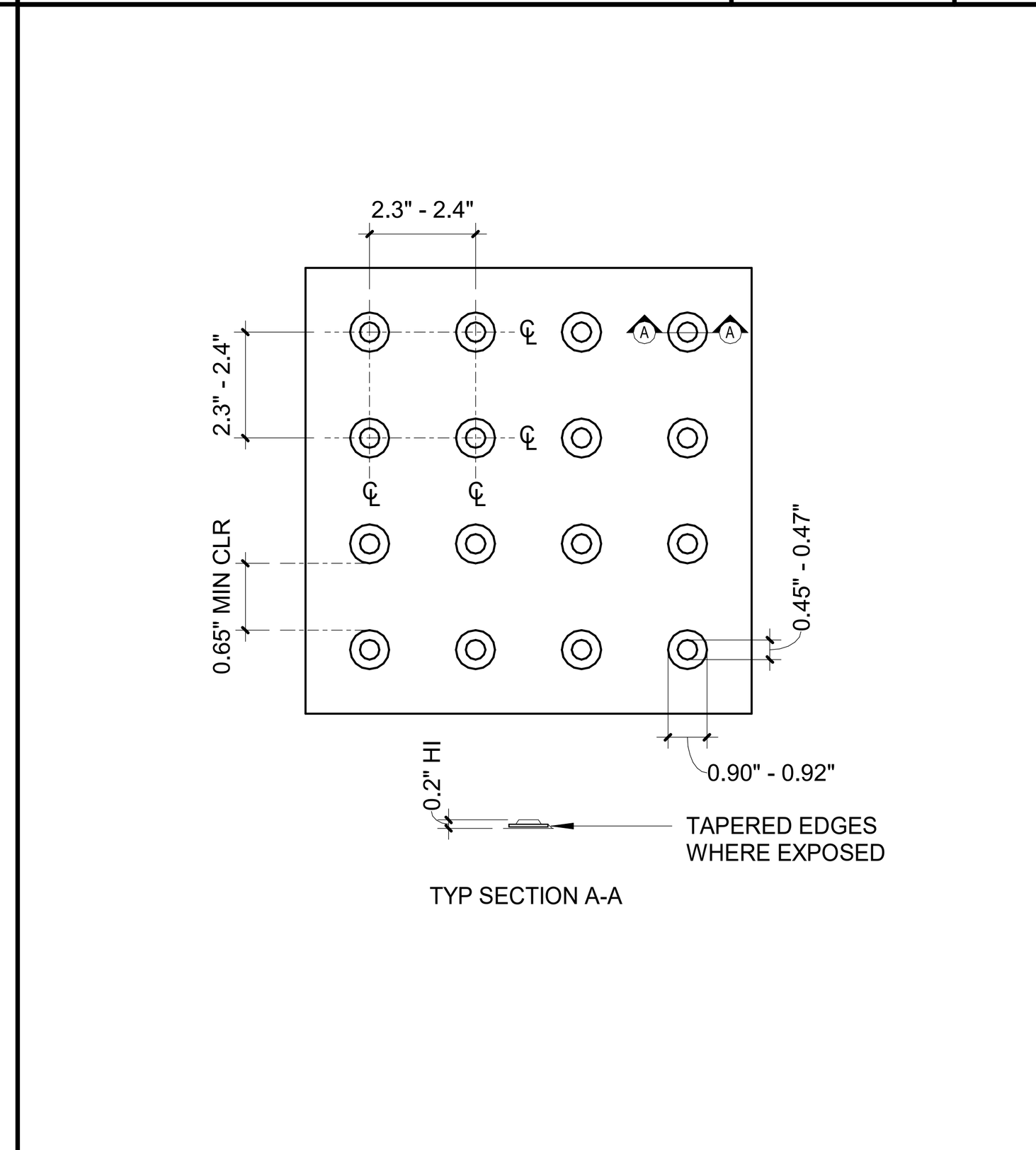
TEMPORARY CONSTRUCTION SIGN | 1/2" = 1'-0" | 1



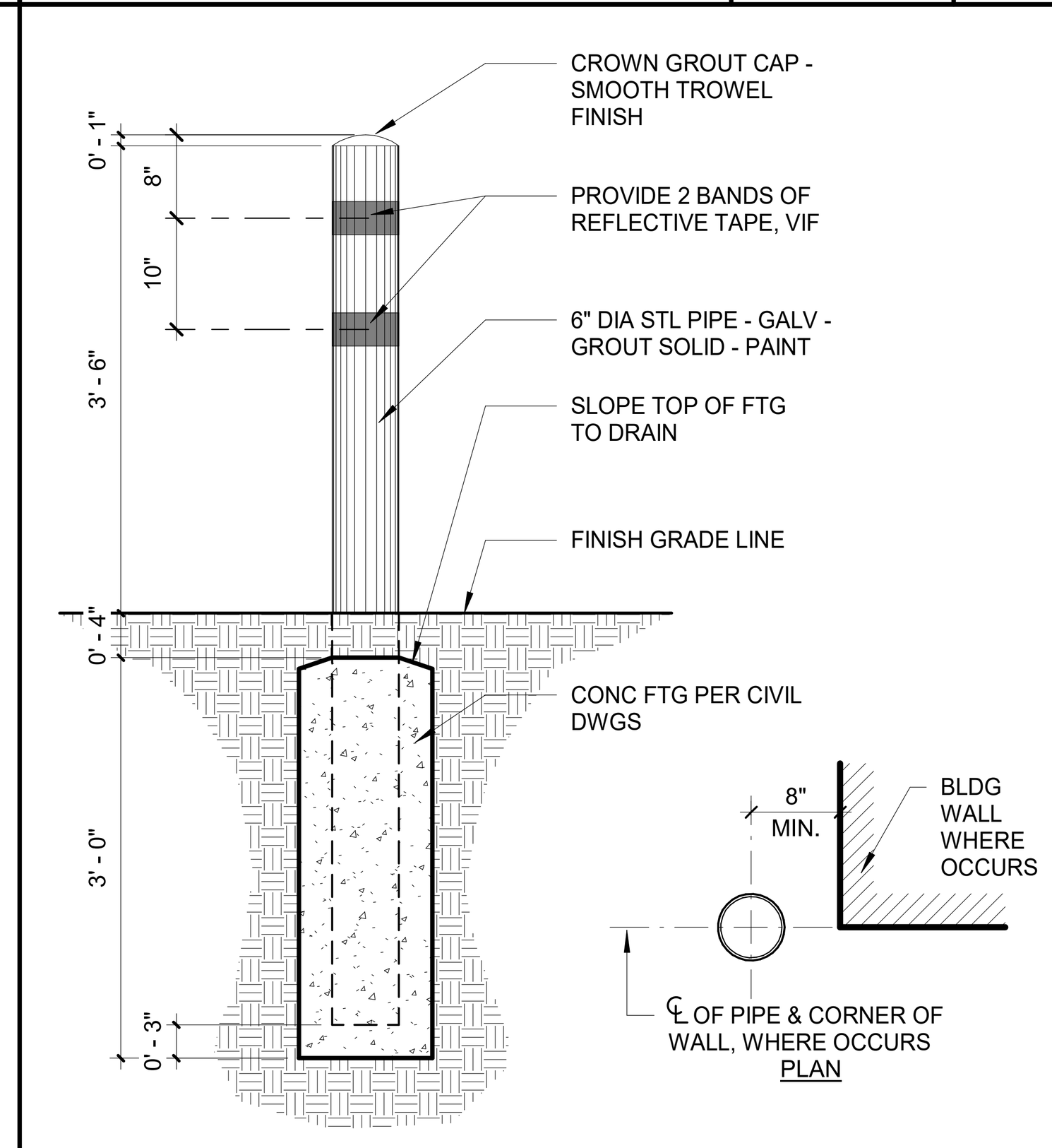
REMOVABLE BOLLARD | 1" = 1'-0" | 6



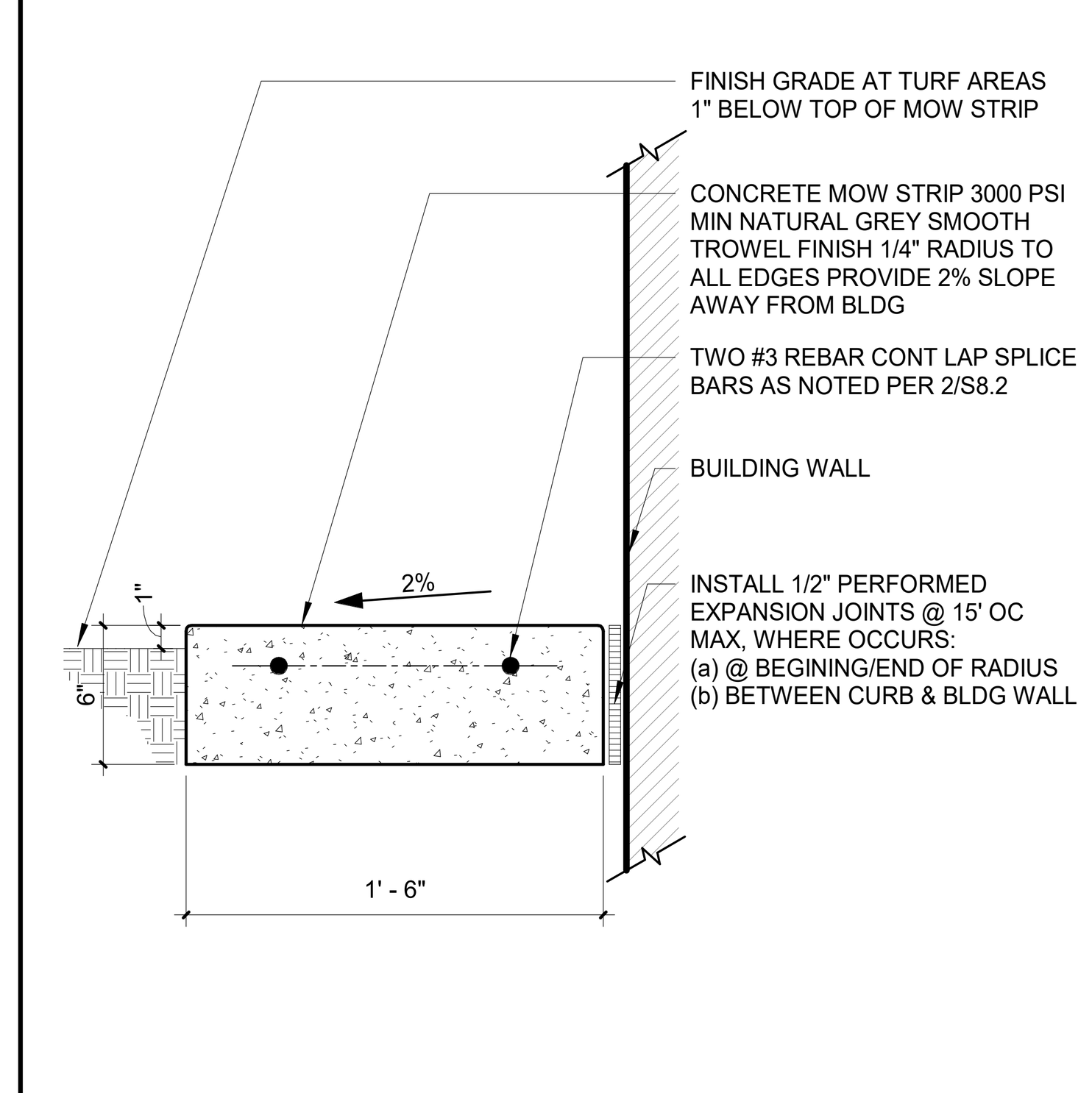
TYP CONCRETE SLAB | 3/4" = 1'-0" | 2



TRUNCATED DOME WARNING SURFACE | 3" = 1'-0" | 5



PIPE BOLLARD | 3/4" = 1'-0" | 3



CONCRETE MOW STRIP | 1 1/2" = 1'-0" | 4

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

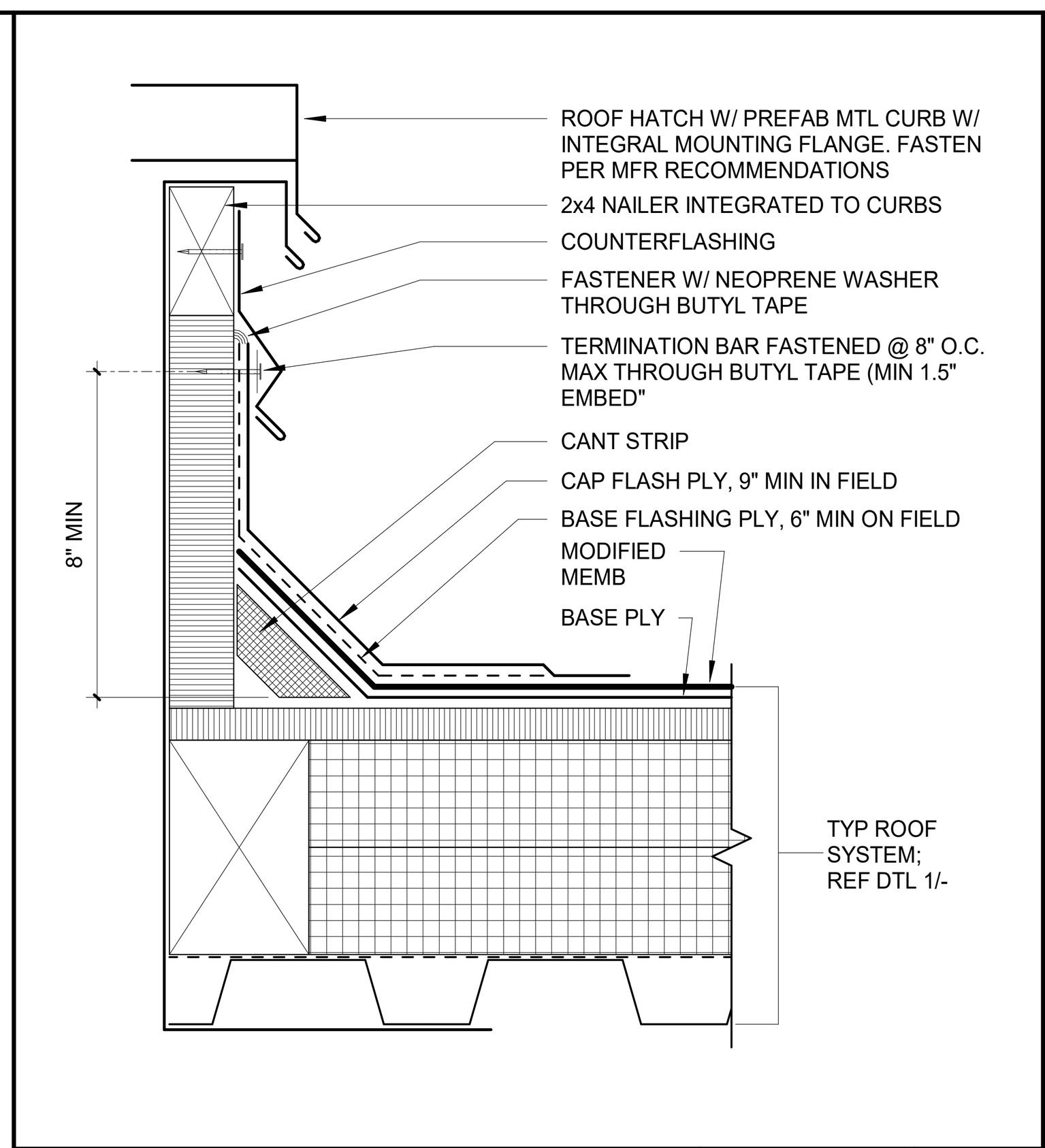
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

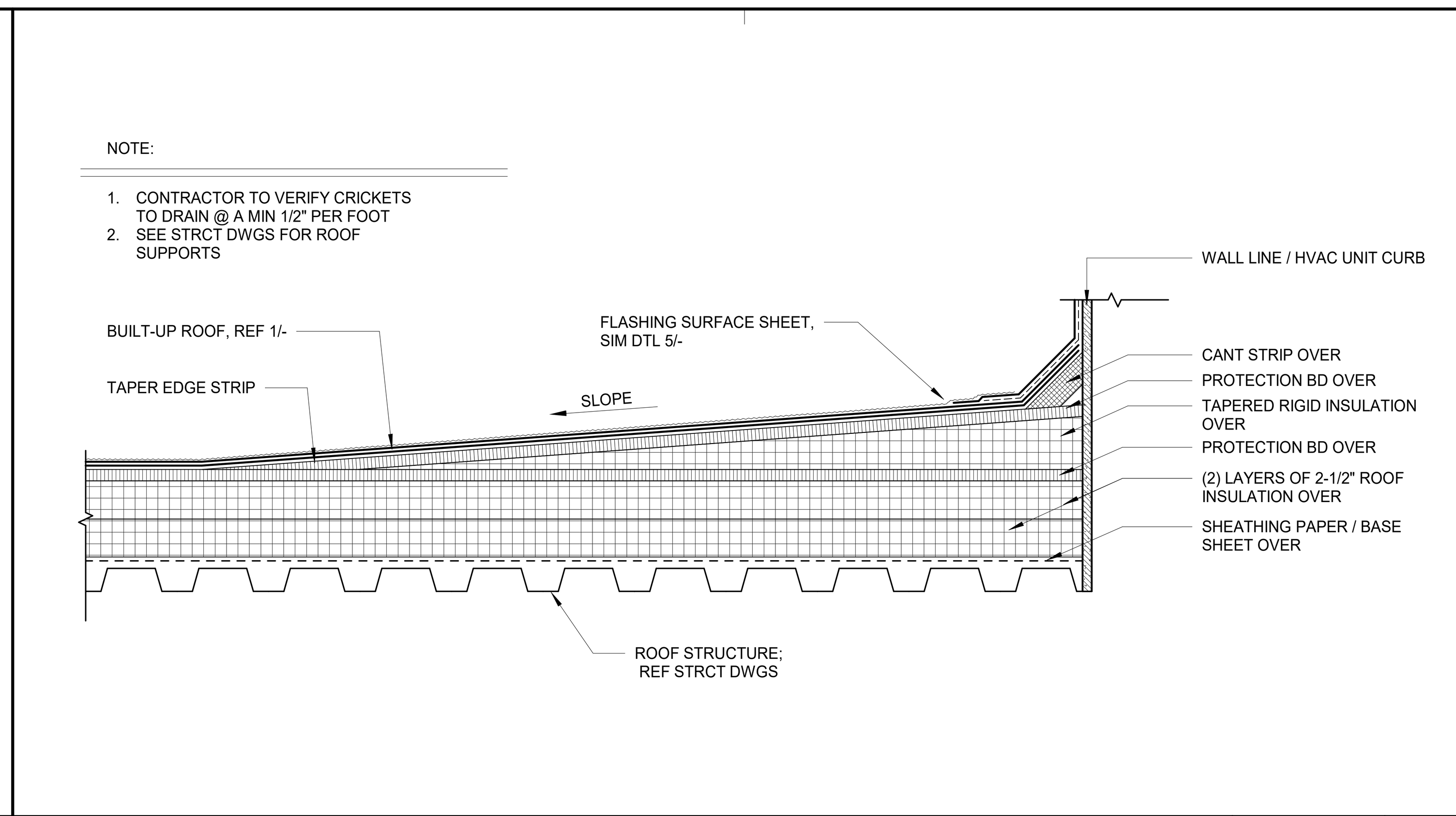
DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

SITE DETAILS

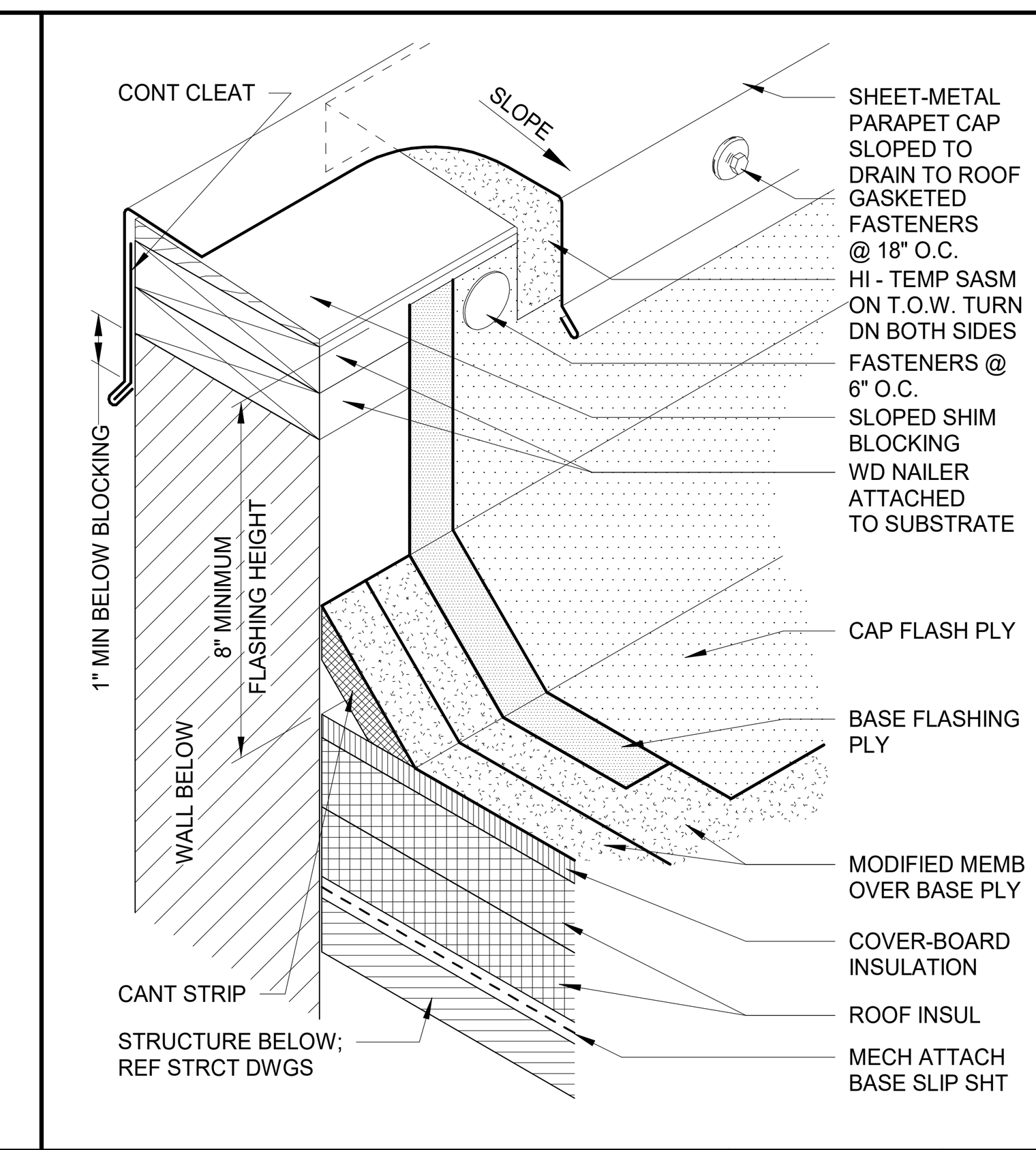
DRAWING NUMBER: **2.1**



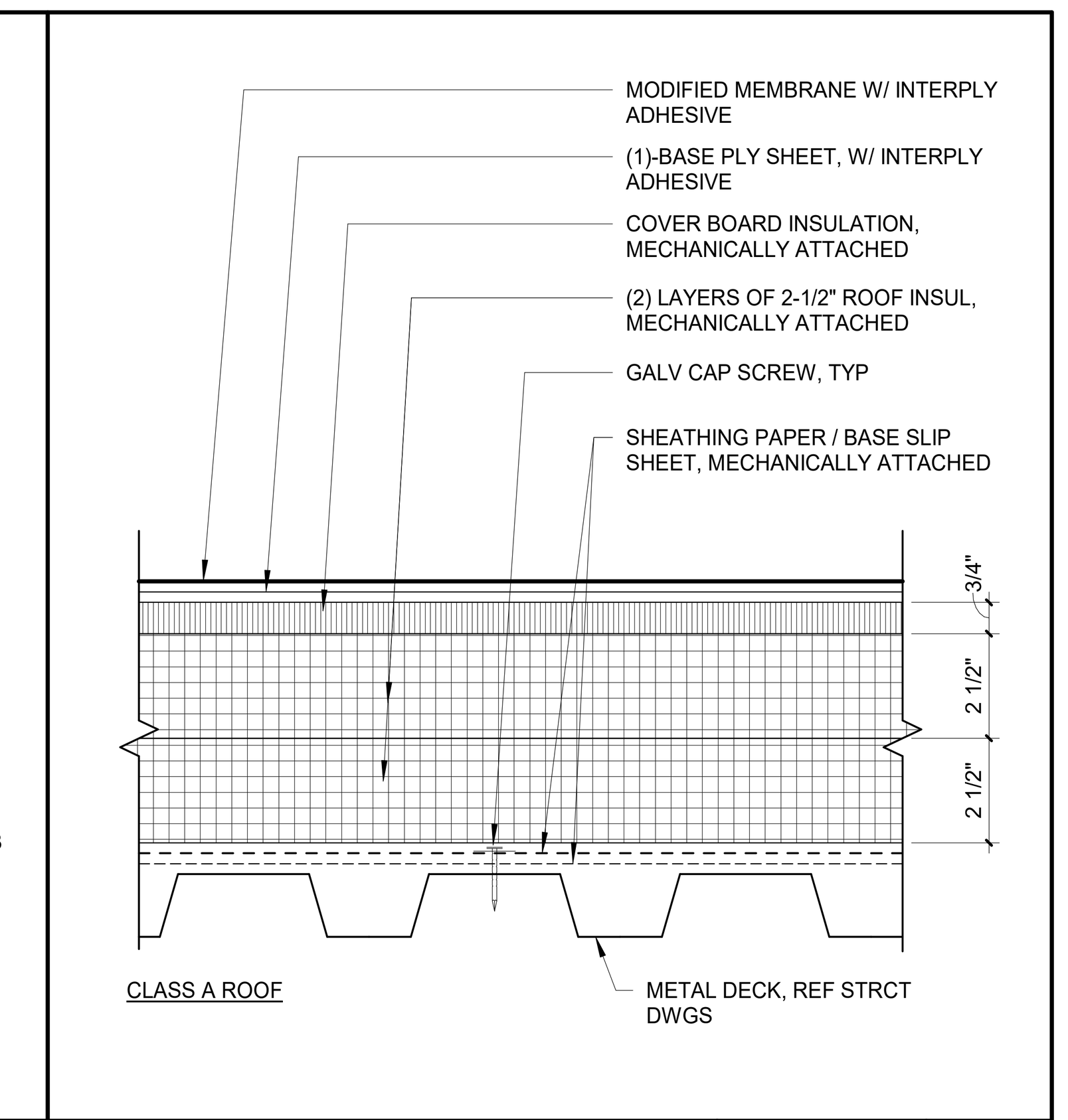
ROOF HATCH SECTION | 3" = 1'-0" | 17



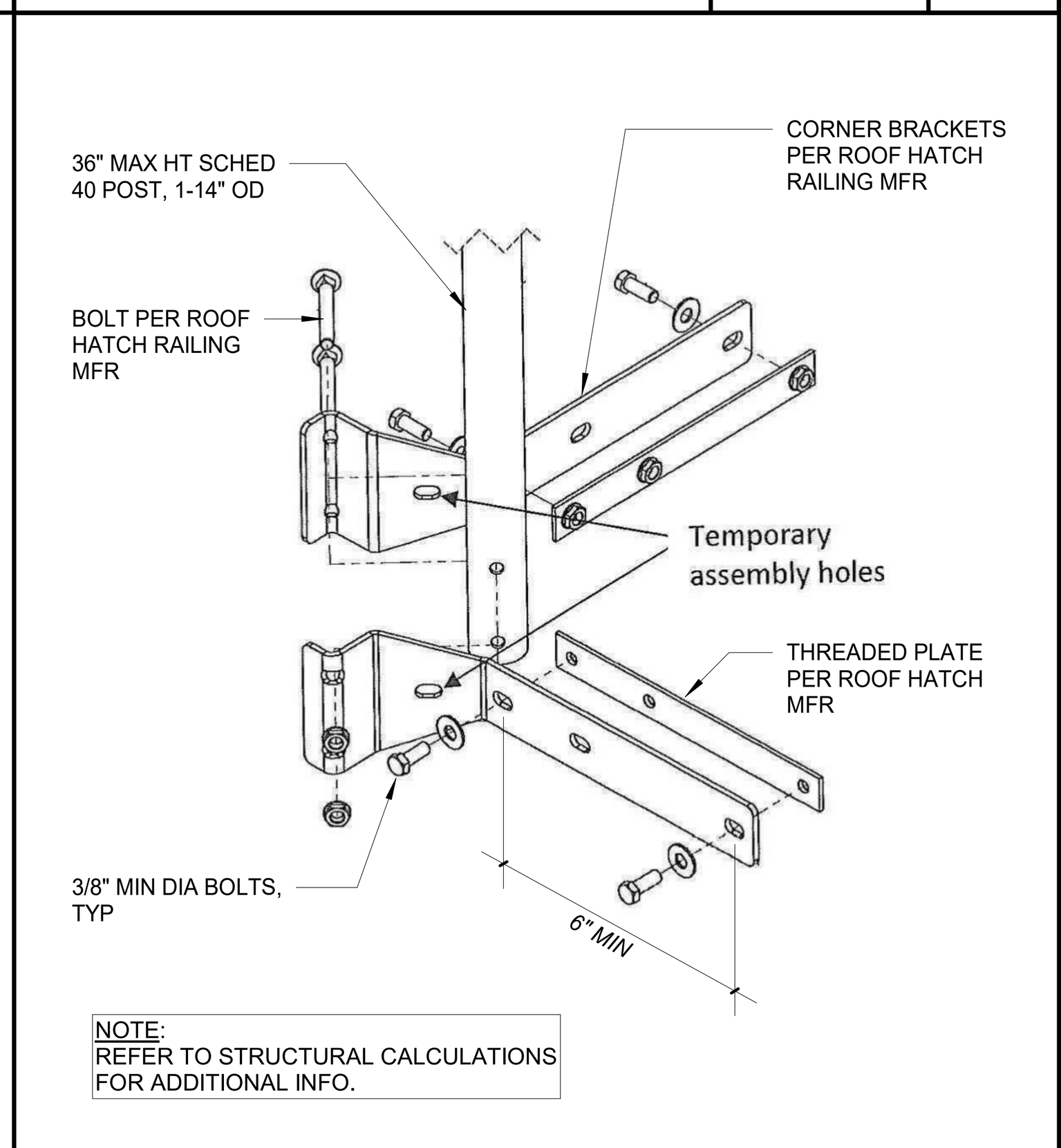
ROOF CRICKET | 1 1/2" = 1'-0" | 9



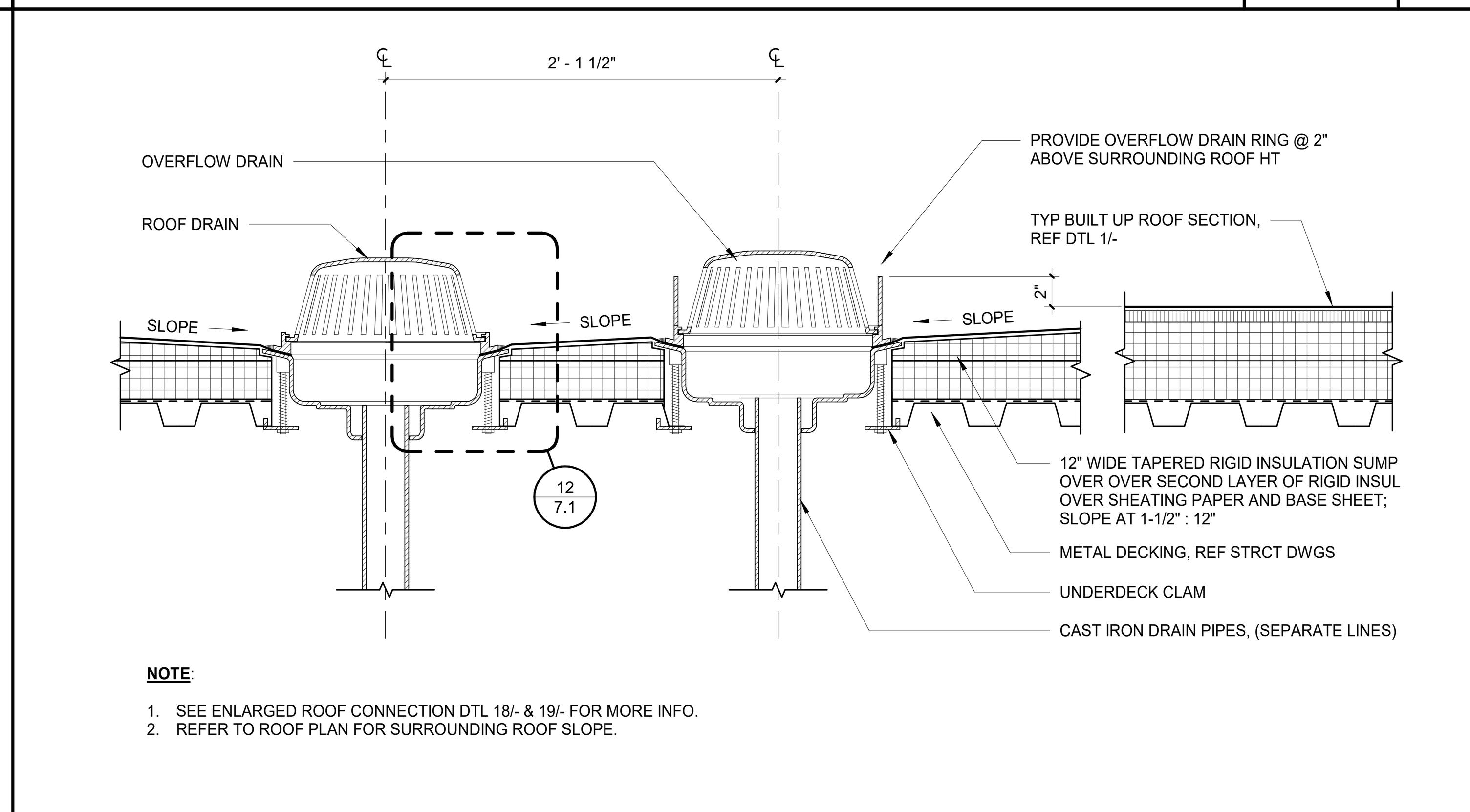
PARAPET WALL ISOMETRIC | 12" = 1'-0" | 5



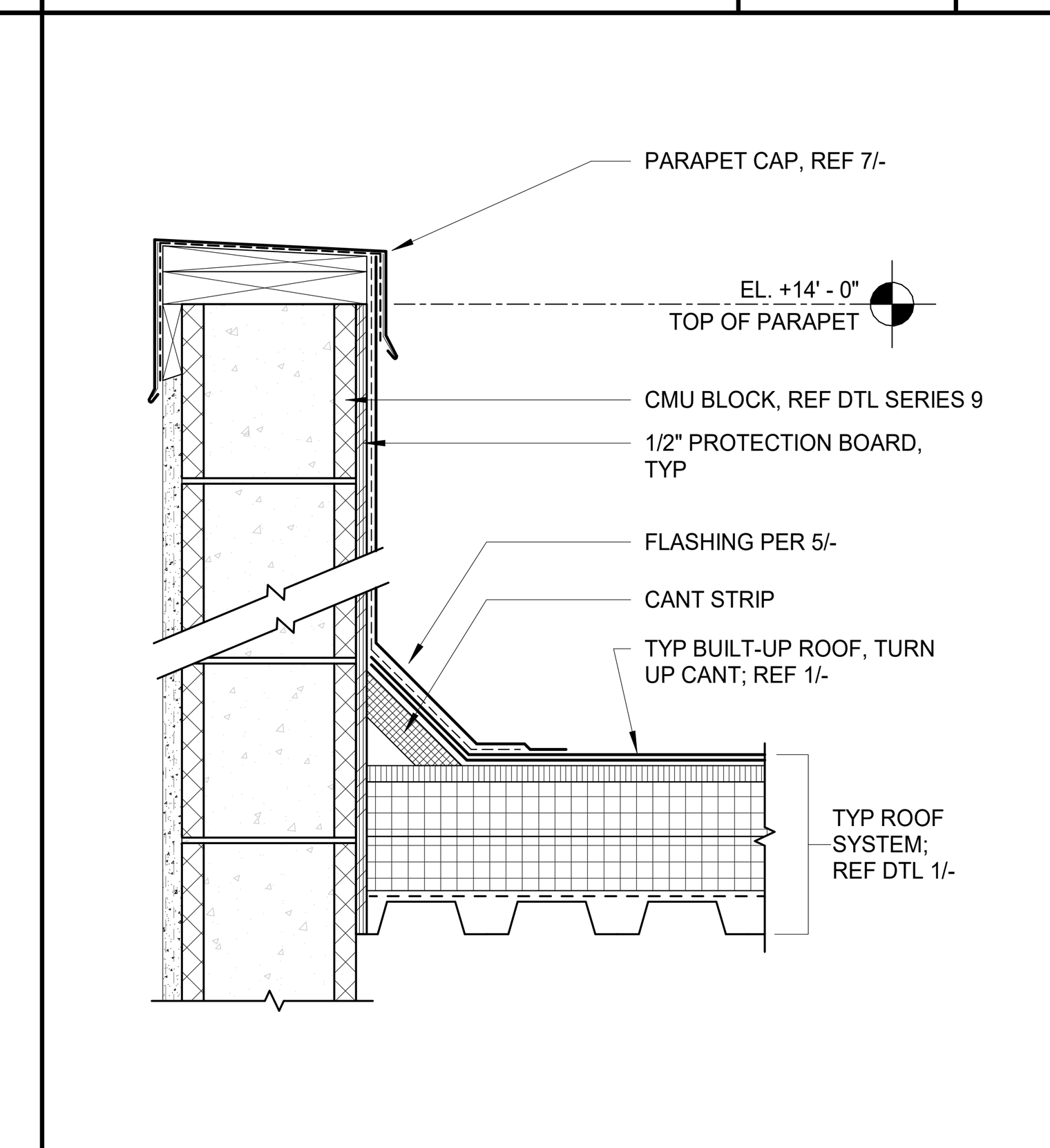
TYP BUILT-UP ROOF SECTION | 3" = 1'-0" | 1



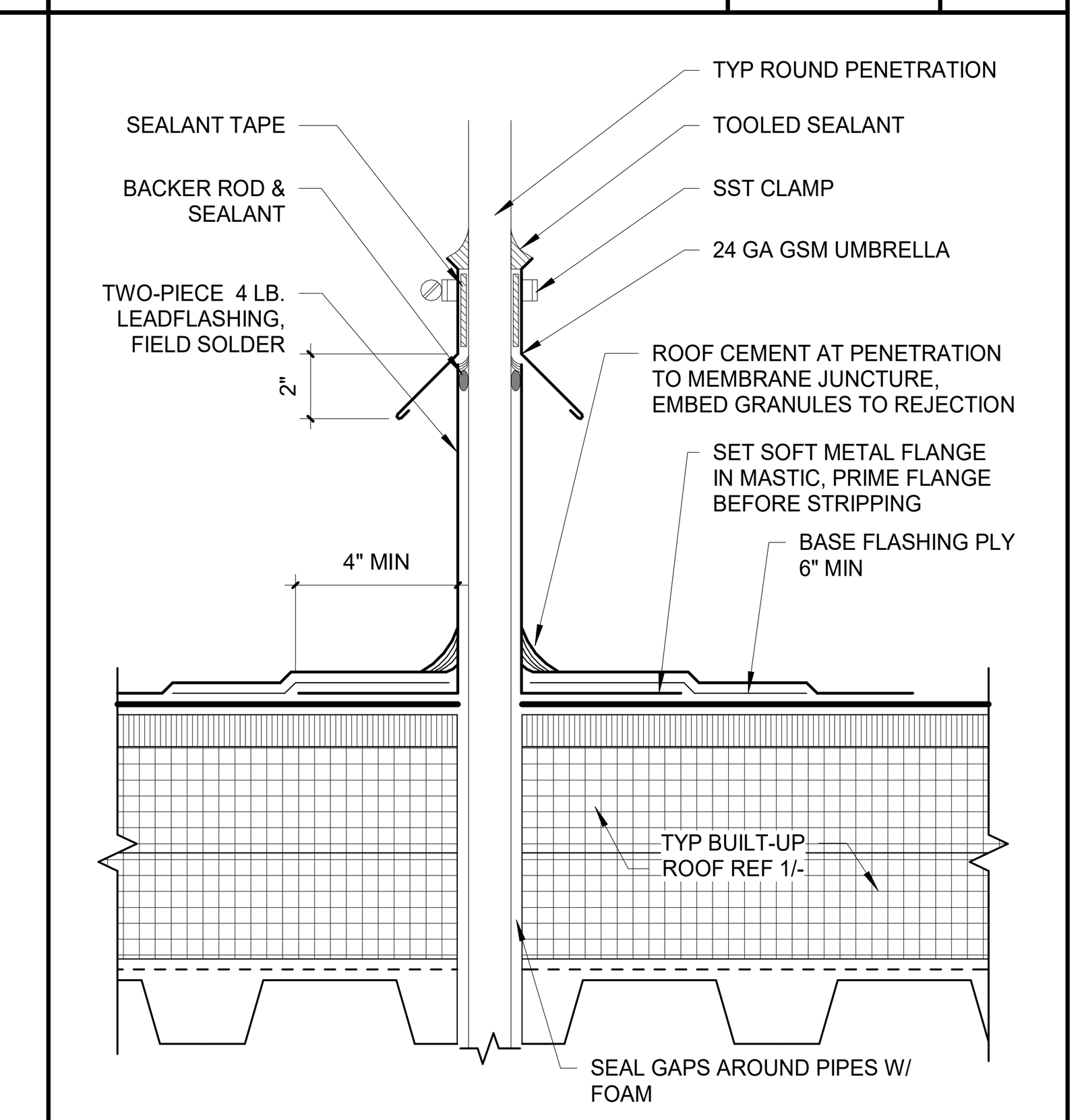
ROOF HATCH RAILING | 1 1/2" = 1'-0" | 18



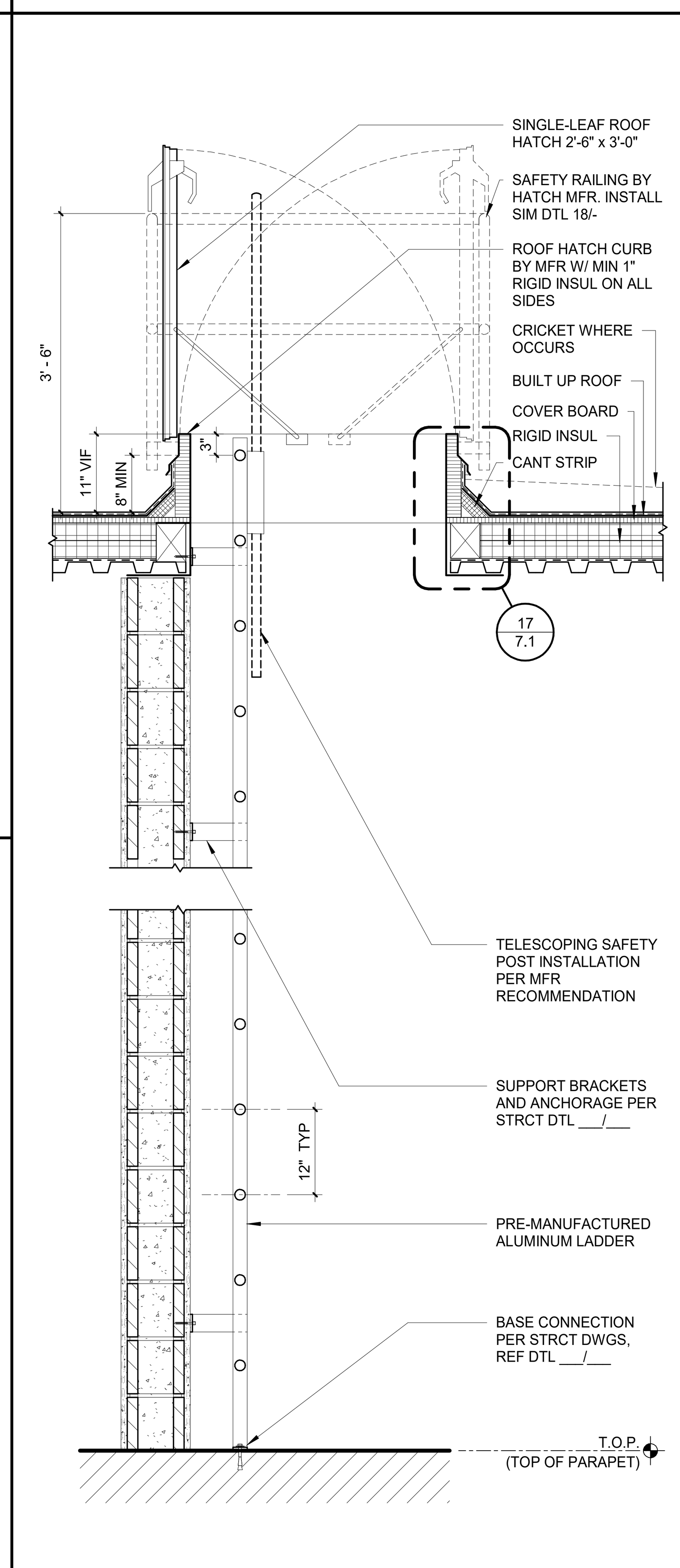
ROOF OVERFLOW/DRAIN CONNECTION | 1 1/2" = 1'-0" | 10



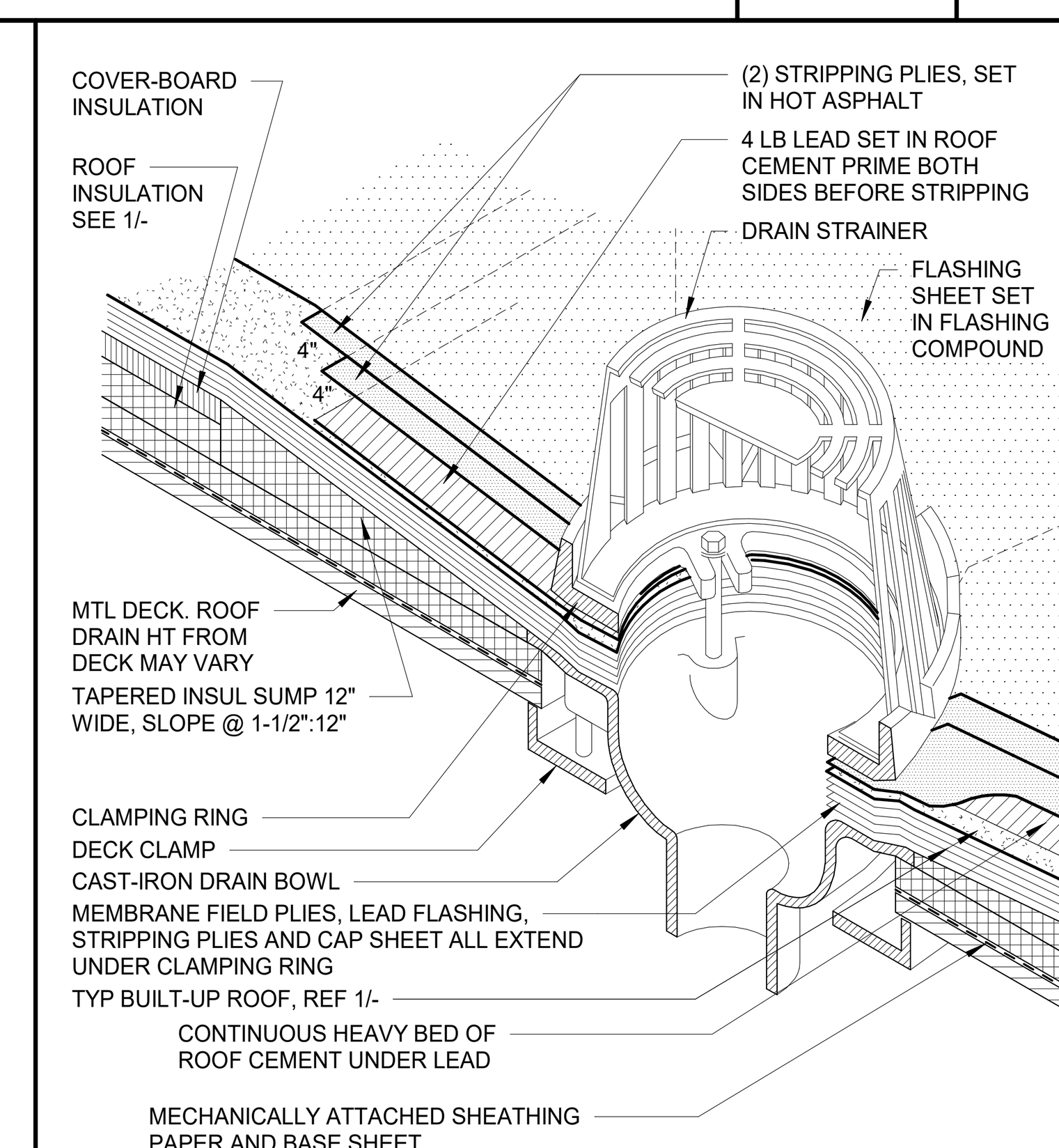
PARAPET SECTION | 1 1/2" = 1'-0" | 6



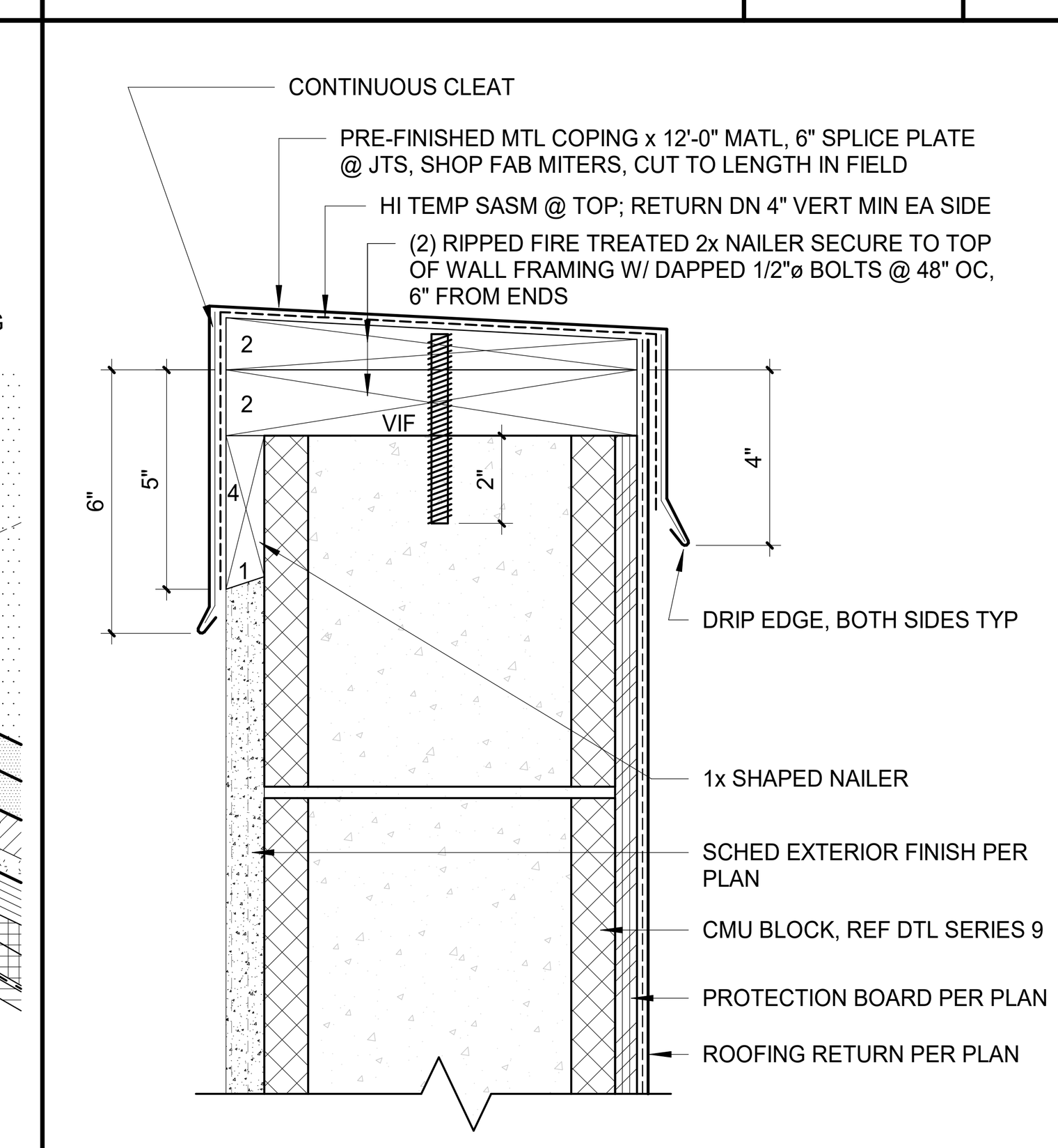
ROUND PENETRATION | 3" = 1'-0" | 2



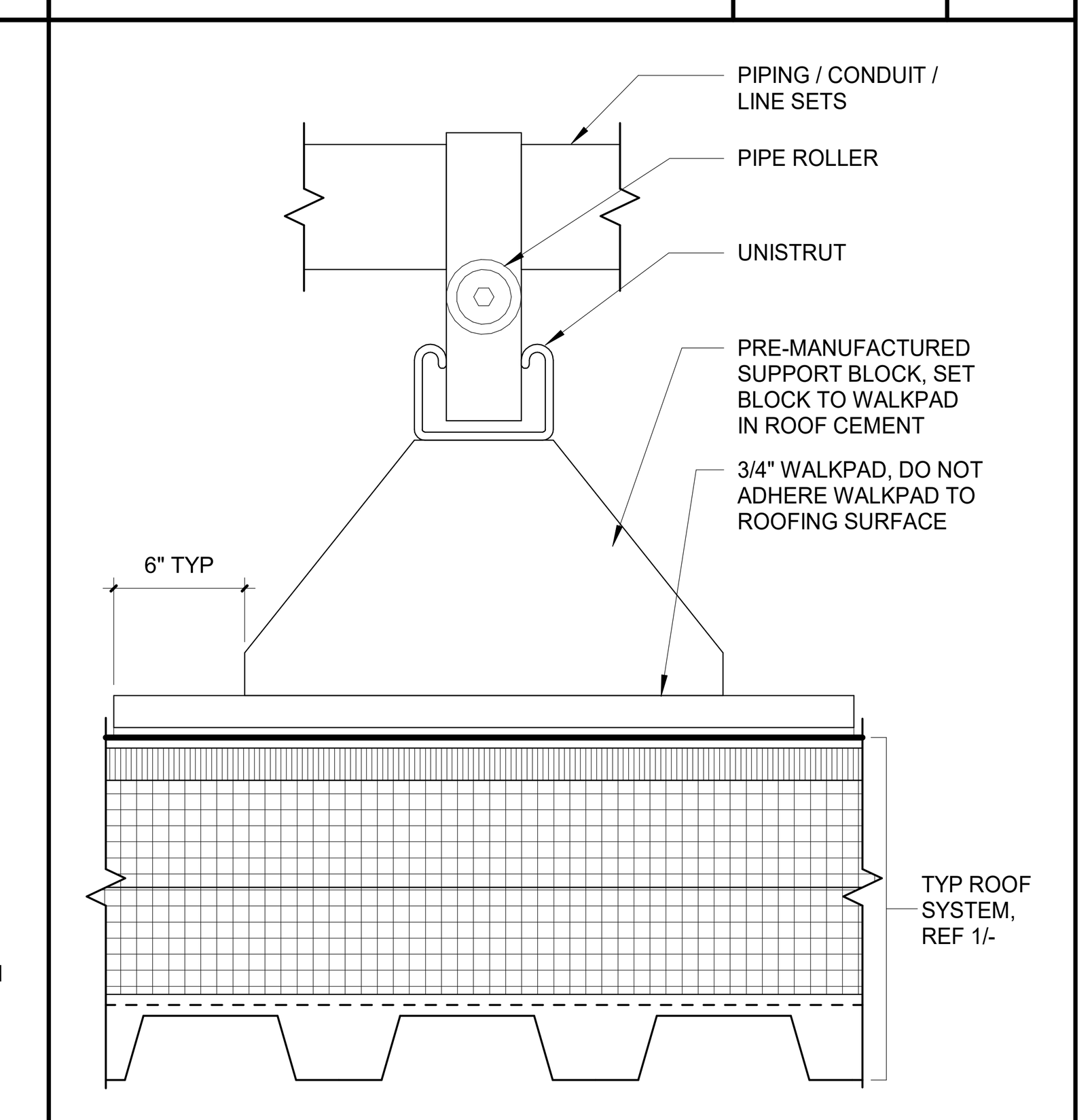
ROOF HATCH LADDER | 3/4" = 1'-0" | 16



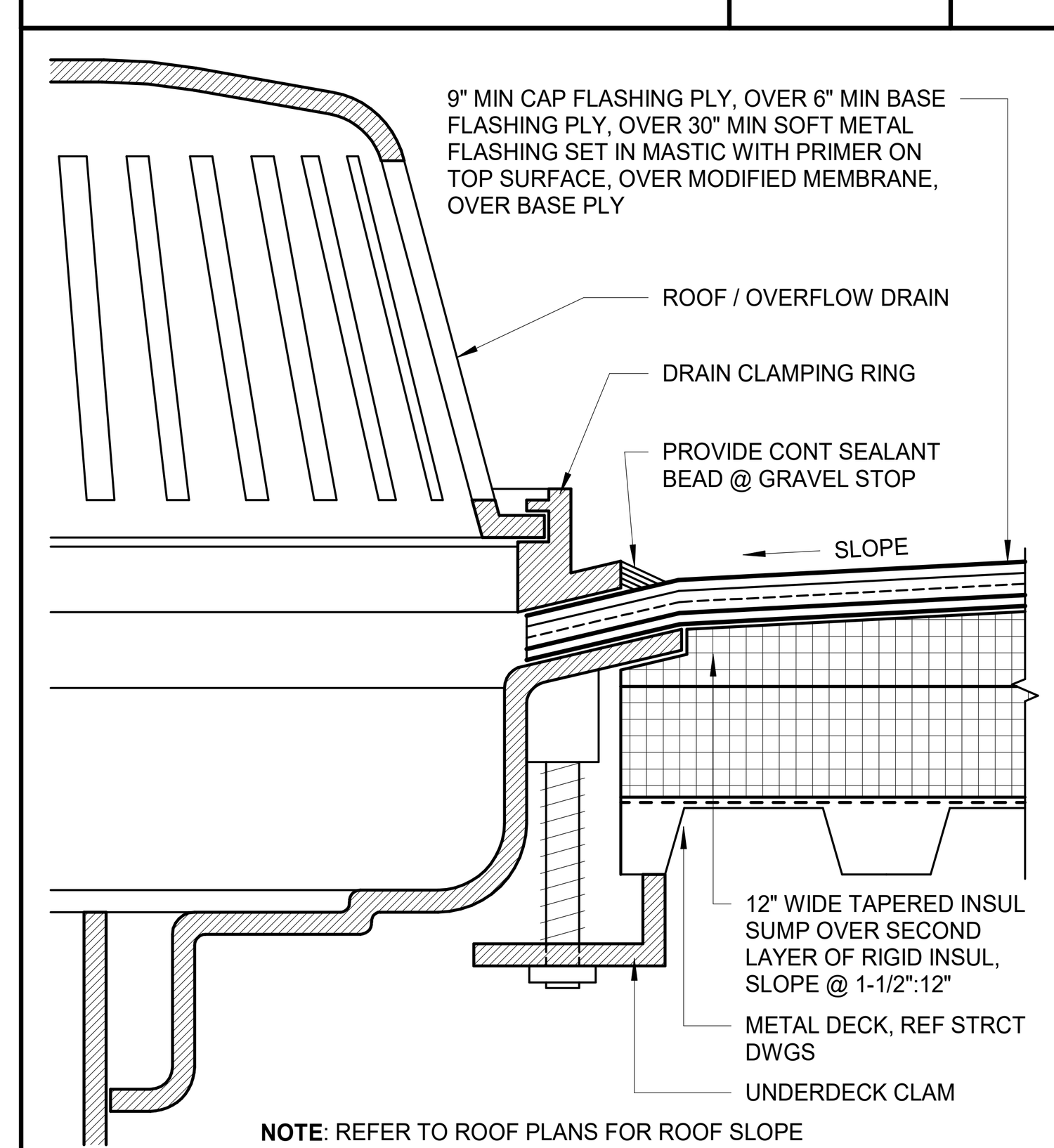
ROOF DRAIN ISOMETRIC | 12" = 1'-0" | 11



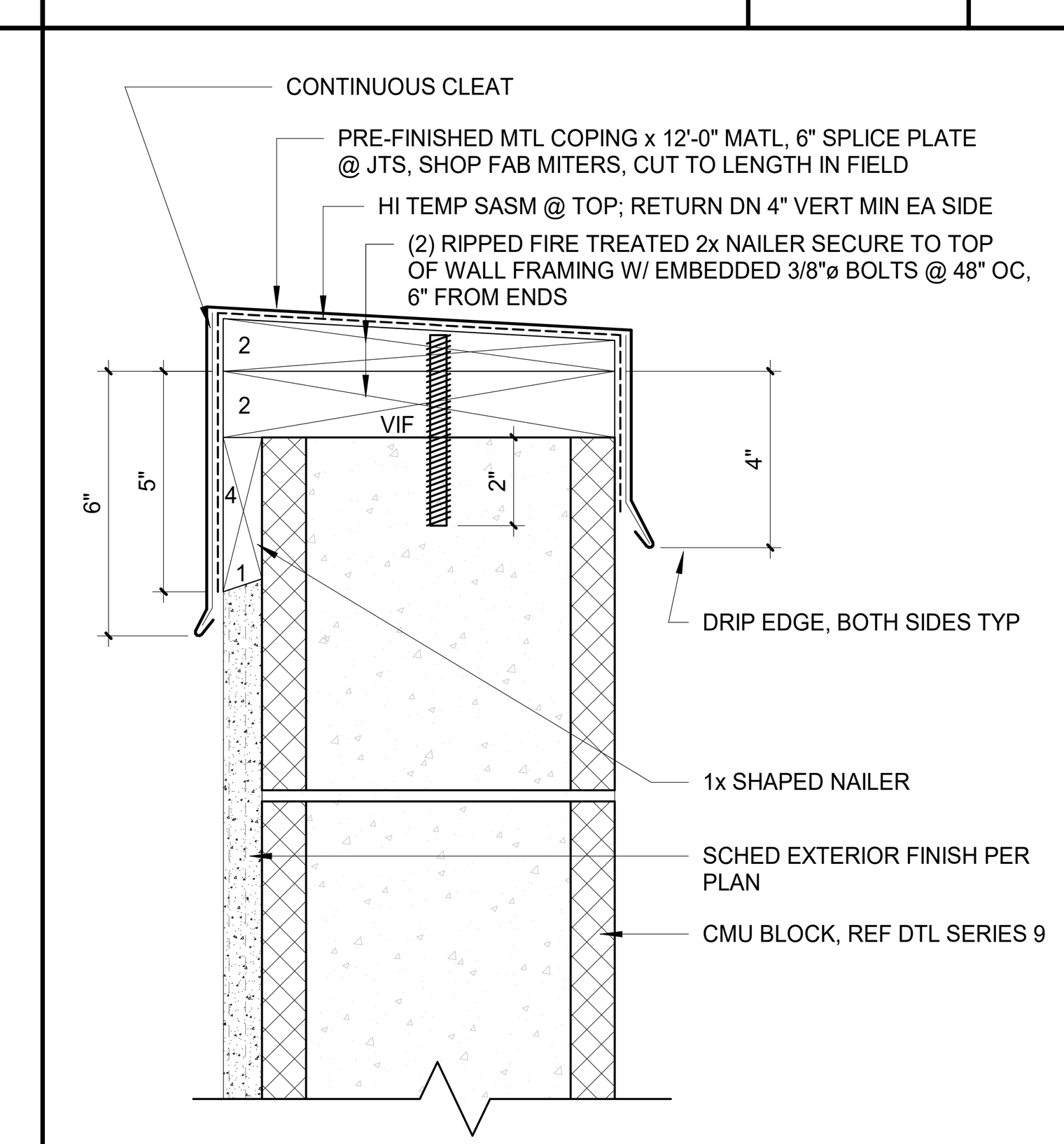
PARAPET CAP SECTION 1 | 3" = 1'-0" | 7



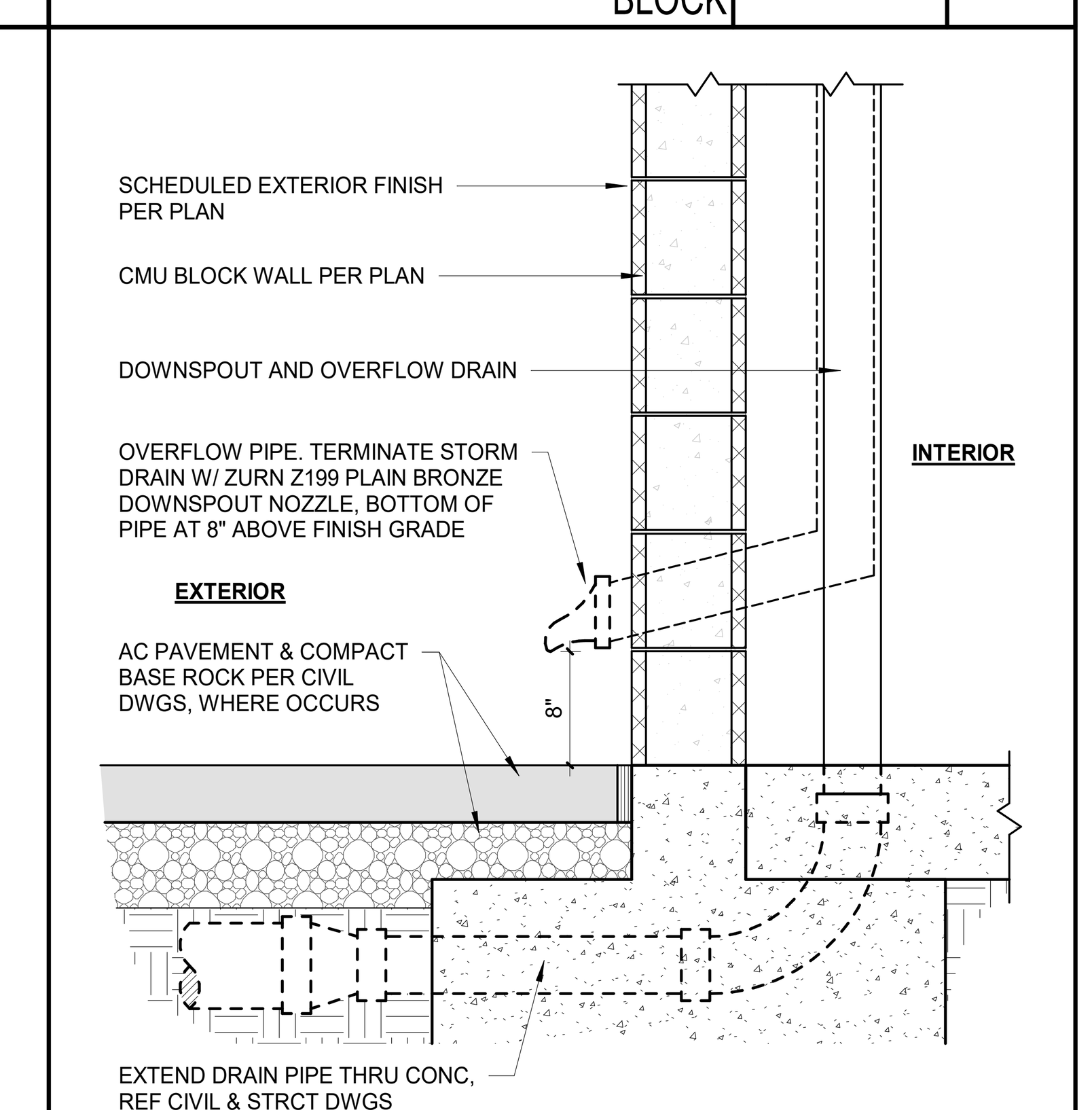
EXPOSED PIPE/CONDUIT SUPPORT BLOCK | 3" = 1'-0" | 3



ENLARGED RD CONNECTION | 3" = 1'-0" | 12



PARAPET CAP SECTION 2 | 3" = 1'-0" | 8



DOWNSPOUT & OVERFLOW | 1" = 1'-0" | 4

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

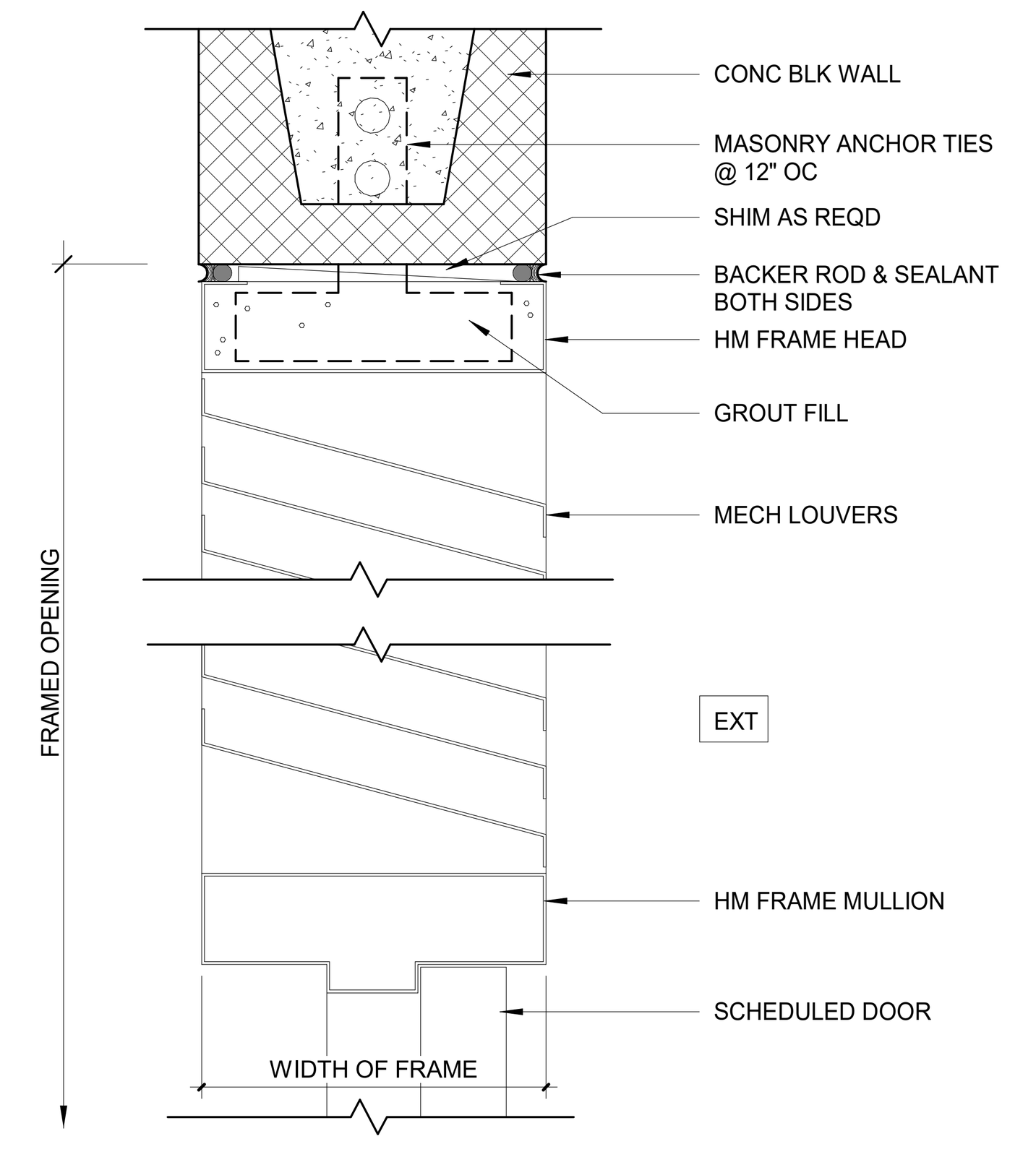
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

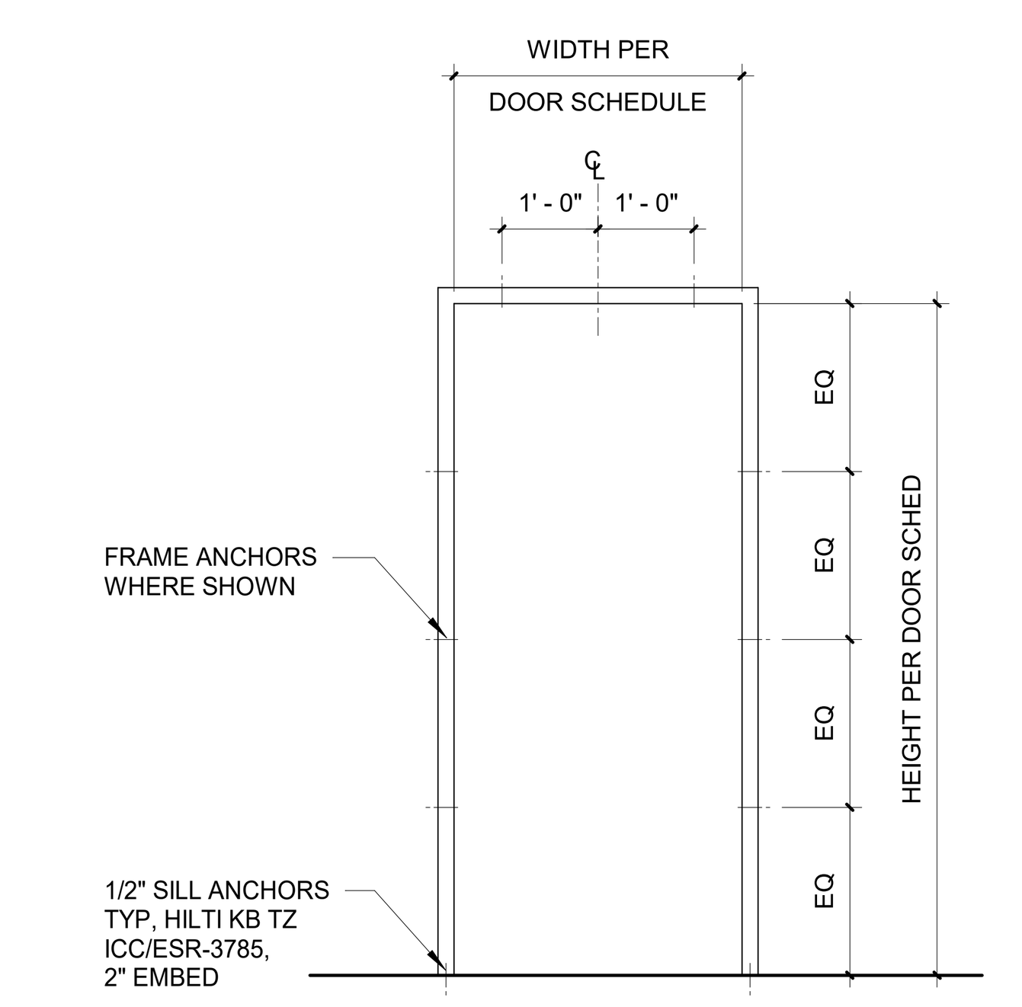
DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

THERMAL AND MOISTURE PROTECTION

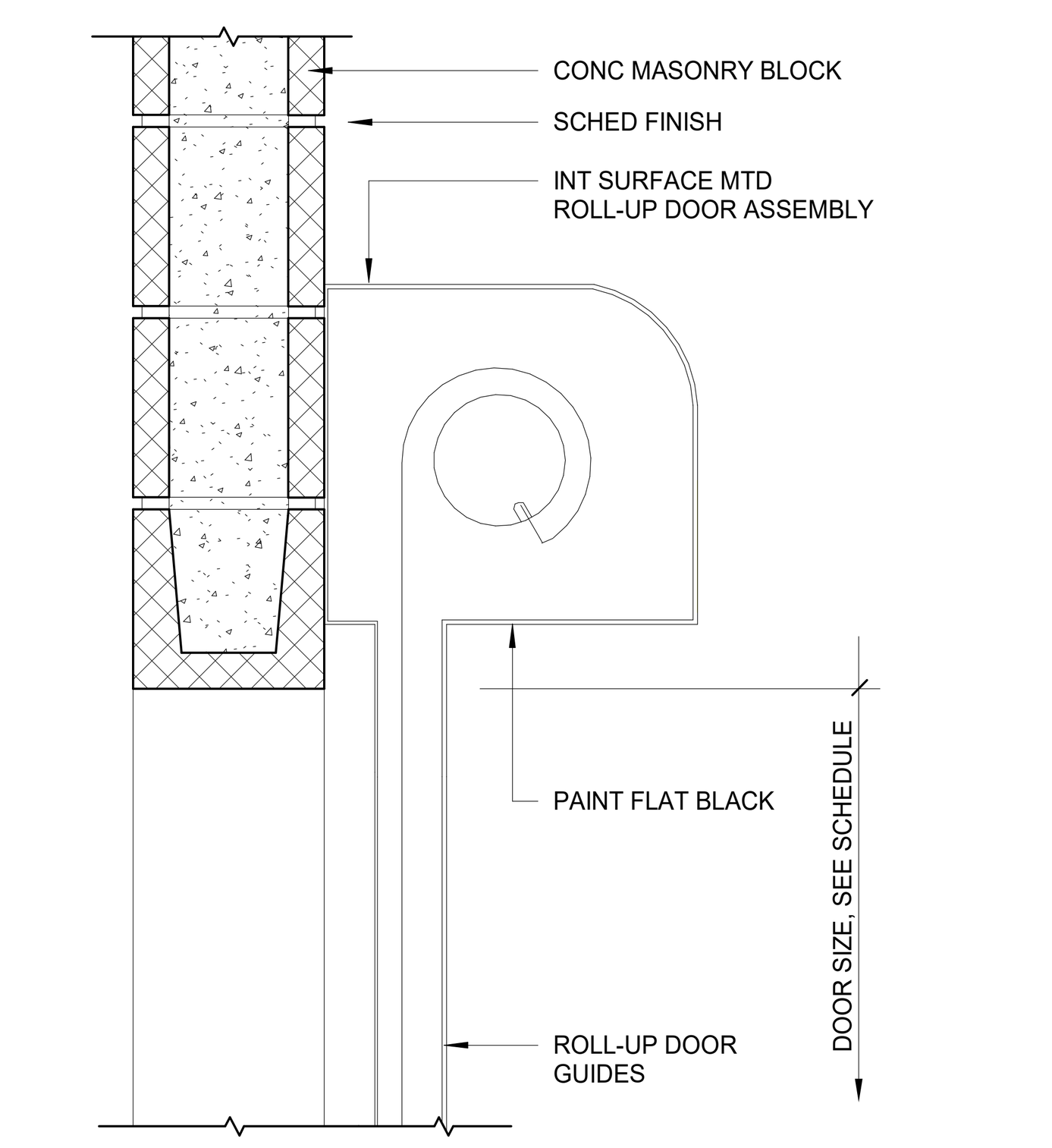
DRAWING NUMBER: 7.1



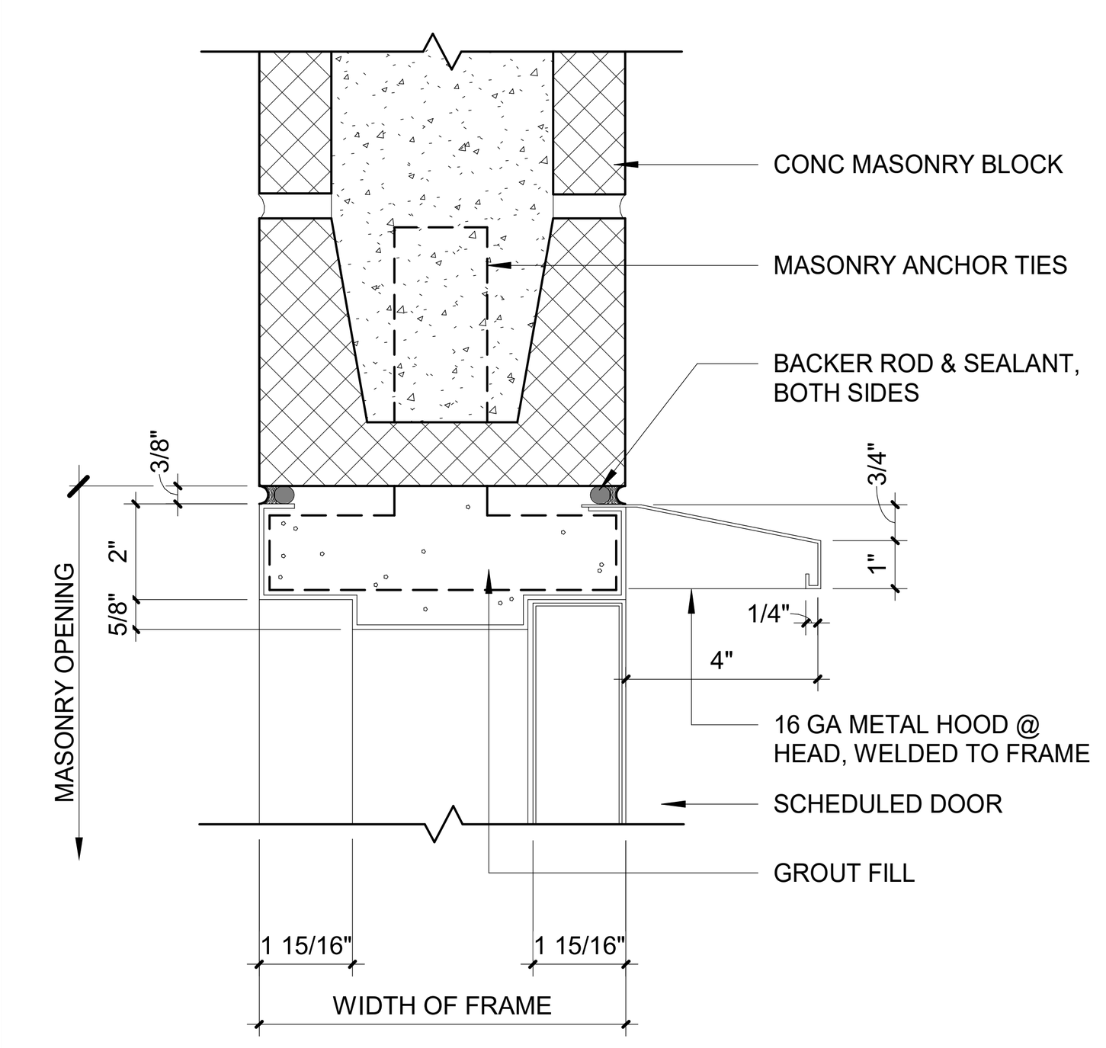
EXTERIOR DOOR HEAD | 3" = 1'-0" | 5



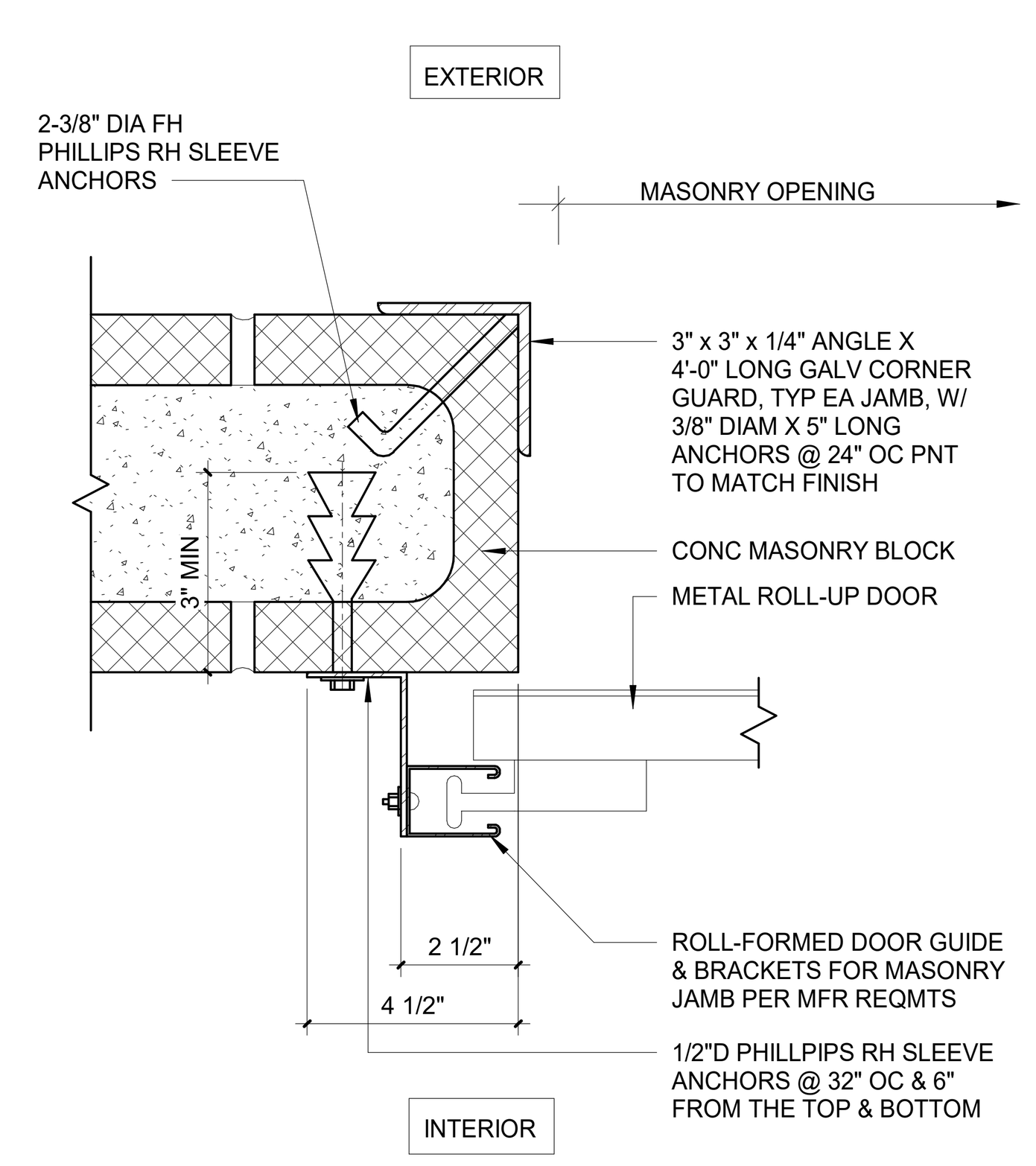
TYP DOOR ANCHORAGE | 1/2" = 1'-0" | 1



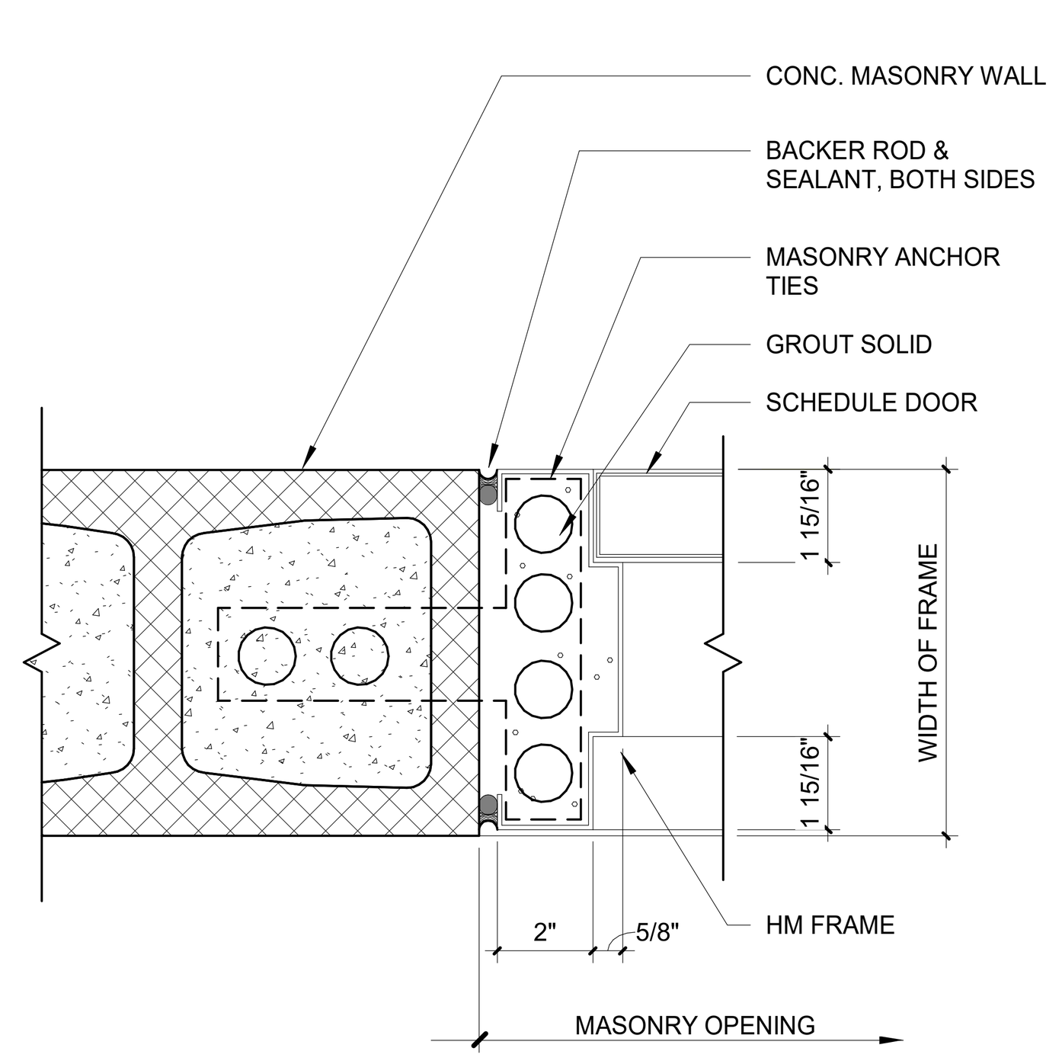
ROLL-UP DOOR HEAD | 1 1/2" = 1'-0" | 6



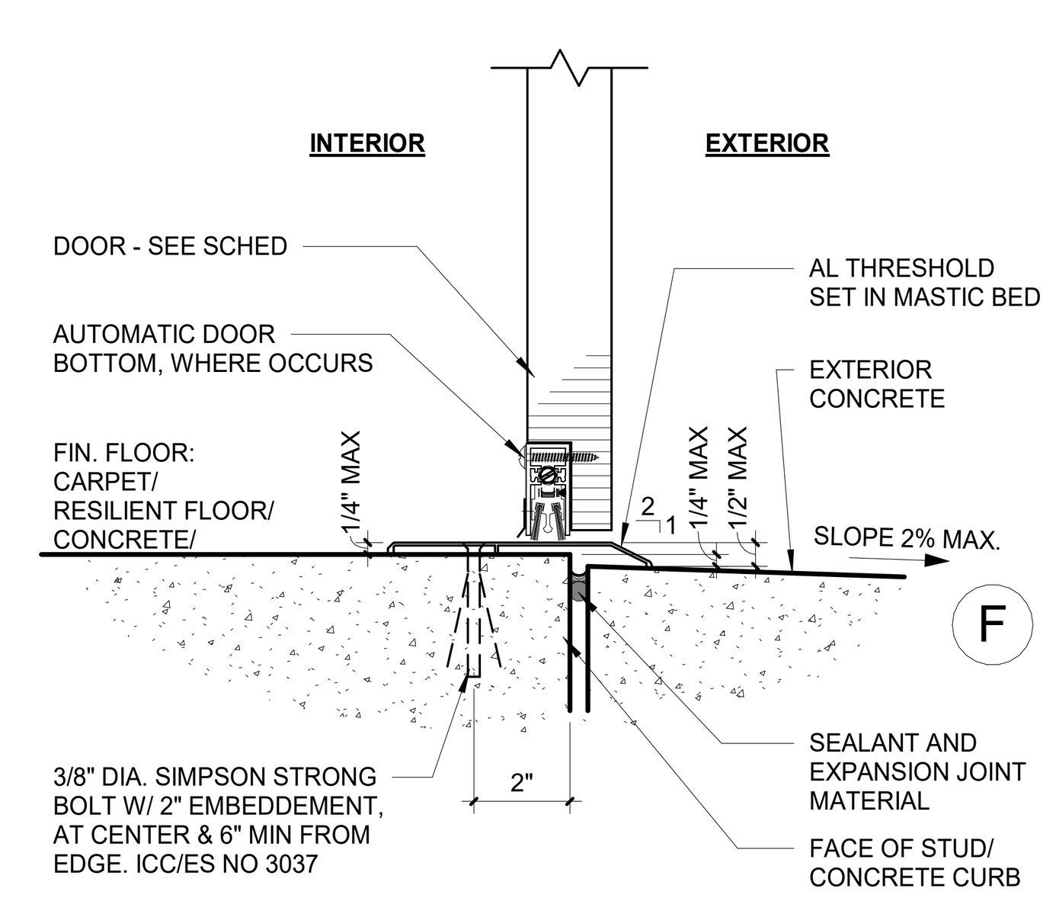
EXTERIOR DOOR HEAD | 3" = 1'-0" | 2



ROLL-UP DOOR JAMB | 3" = 1'-0" | 7



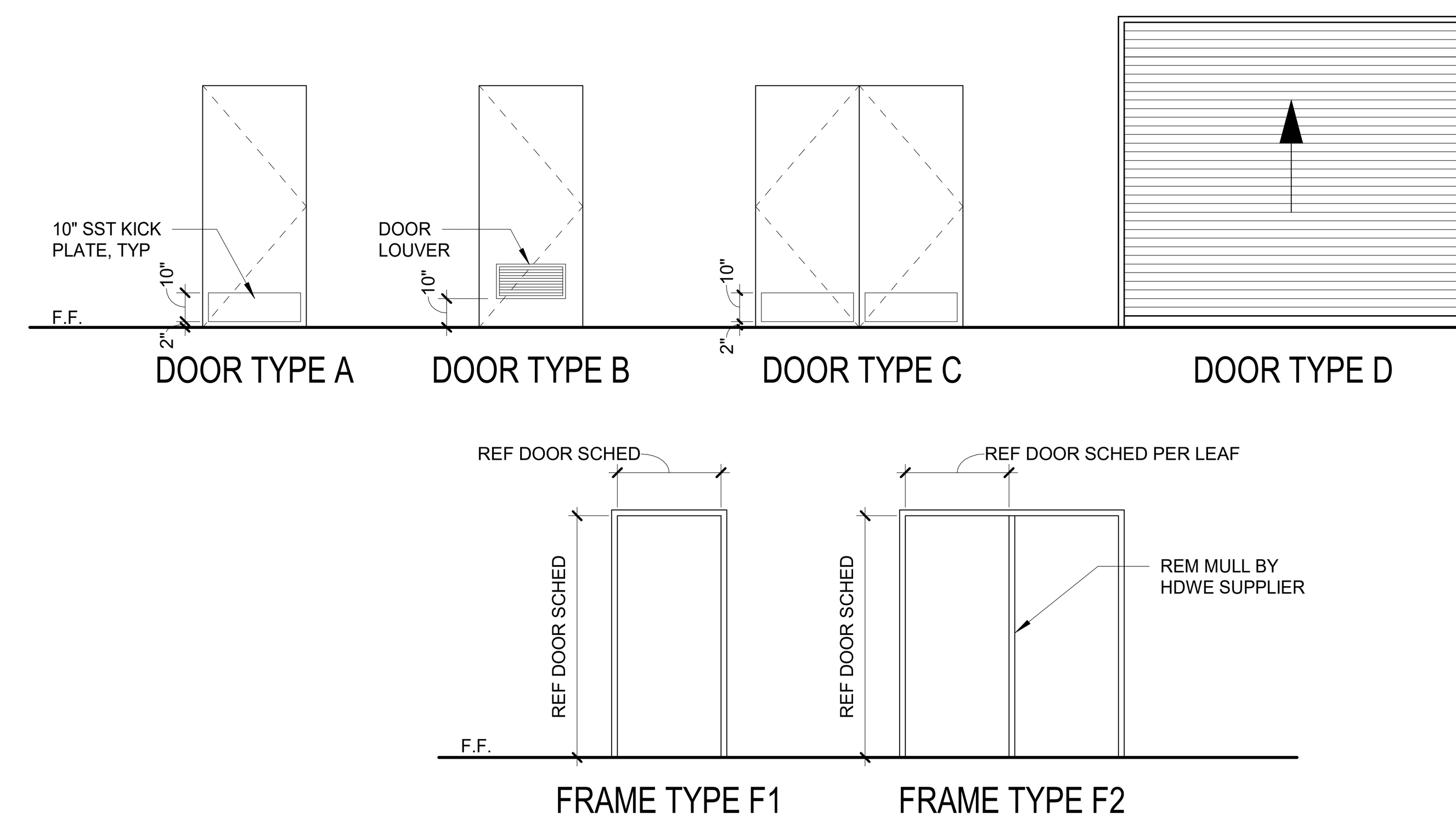
TYP DOOR JAMB | 3" = 1'-0" | 3



THRESHOLD DETAIL | 3" = 1'-0" | 4

DOOR MARK	DOOR									FRAME							HDWE GROUP	FIRE RATING		REMARKS
	NOMINAL SIZE			MATERIAL	TYPE	GLASS	DETAIL	LOUVER		MATERIAL	TYPE	GLASS	DETAILS					LABEL	HOUR	
	WIDTH PER LEAF	HT	THK					W	HT				JAMB	HEAD	SILL	OTHER				
A100A	3' - 0"	7' - 2"	1 3/4"	HM	A	-		2'-0"	1'-0"	HM	F1	-	3/-	5/-	4/-					
A100B	9' - 1 1/2"	9' - 5 11/32"		MTL	D	-		-	-	MTL		-	7/-	6/-						
A101A	3' - 10"	7' - 2"	1 3/4"	HM	A	-		-	-	HM	F1	-	3/-	2/-	4/-					
A101B	3' - 8"	7' - 2"	1 3/4"	HM	C			-	-	HM	F1	-	3/-	2/-	4/-					
A102A	3' - 10"	7' - 2"	1 3/4"	HM	A	-		-	-	HM	F2	-	3/-	2/-	4/-					

SCHEDULE DOOR



DOOR AND FRAME TYPES

DOOR AND FRAME COLUMN REFERENCE GUIDE

1. DOOR MARK: SPECIFIC NUMBER ASSIGNED TO INDIVIDUAL DOOR.
2. NOMINAL DOOR SIZE: DESIGNATES NOMINAL WIDTH AND HEIGHT OF DOOR IN FEET AND INCHES. DOOR WIDTH IS GIVEN PER LEAF. REFER TO FLOOR PLAN FOR PAIRS OF DOORS. THICKNESS OF DOOR IS GIVEN IN INCHES.
3. DOOR MATERIAL: INDICATES MATERIAL FROM WHICH DOOR IS CONSTRUCTED I.E., HM-HOLLOW METAL, WD-WOOD, AL-ALUMINUM, TG - TEMPERED GLASS, LAM - LAMINATED GLASS, ETC.
4. DOOR TYPE: ALPHANUMERICAL DESIGNATION OF DOOR TYPE AS SHOWN IN ELEVATION. DESIGNATIONS ARE DERIVED FROM THOSE IDENTIFIED BY THE STEEL DOOR INSTITUTE PUBLICATION SDI-106 I.E., F-FLUSH DOOR, HG-HALF GLASS DOOR, FG-FULL GLASS DOOR, NV- NARROW VISION LITE DOOR, ETC. REFER TO DOOR TYPE.
5. DOOR GLASS: DESIGNATES TYPE OF GLASS TO BE USED IN DOOR, I.E., G1-G6; REF GLASS ABBREVIATIONS.
6. DOOR DETAIL: REFERENCE NUMBER FOR DOOR CONSTRUCTION DETAIL SUCH AS DUTCH DOOR, SHELF, TRANSOM PANEL, ETC.
7. DOOR LOUVER: INDICATES WIDTH AND HEIGHT OF LOUVER REQUIRED IN DOOR. LOUVER SIZE IS GIVEN IN FEET AND INCHES.
8. FRAME MATERIAL: INDICATES MATERIAL FROM WHICH FRAME IS CONSTRUCTED, I.E., HM-HOLLOW METAL, WD-WOOD, AL-ALUMINUM, SST - STAINLESS STEEL, ETC.
9. FRAME TYPE: NUMERICAL DESIGNATION OF FRAME TYPE AS SHOWN IN FRAME TYPE ELEVATION.
10. FRAME GLASS: DESIGNATES TYPE OF GLASS TO BE USED IN FRAME, I.E., G1-G6; REF GLASS ABBREVIATIONS.
11. FRAME DETAILS: REFERENCE NUMBERS FOR FRAME SECTIONS AS CONDITIONS EXIST AT THE WALLS OR JAMBS OF DOORS WITH ANY UNUSUAL DETAILS REFERENCED UNDER SEPARATE HEADING "OTHER".
12. HARDWARE GROUP: NUMERICAL DESIGNATION OF HARDWARE GROUPING TO BE APPLIED TO DOOR. REFER TO SPECIFICATIONS FOR DESCRIPTION OF HARDWARE CONTAINED WITHIN GROUPING.
13. DOOR AND FRAME FIRE RATING: DESIGNATES ALPHABETICAL FIRE RESISTANCE RATING CLASSIFICATION LABEL REQUIRED FOR DOOR AND FRAME WITH TIME PERIOD REQUIRED IN HOURS.
14. REMARKS: DESIGNATES OR REFERENCES SPECIAL, UNUSUAL OR ABSTRACT CONDITIONS WHICH EXIST AND ARE NOT COVERED IN SCHEDULE ITEMS 1 THRU 14. REFER TO REMARKS REFERENCE SCHEDULE FOR NUMERICAL DESIGNATION.

GENERAL NOTES, ABBREVIATIONS, REMARKS REFERENCE SCHEDULE, & SIGNAGE NOTES

GENERAL NOTES:

1. ALL EXIT DOORS SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE BY USED OF PANIC HARDWARE PER HARDWARE SCHEDULE.
2. REFER TO FLOOR PLANS FOR PAIRS OF DOORS AND DIRECTION OF SWING.
3. ALL RATED DOORS ARE TO BE POSITIVE LATCHING AND SELF-CLOSING.
4. FIRE-RATED DOOR FRAMES SHALL BE INSTALLED STRICTLY PER MANUFACTURER'S PRINTED INSTRUCTIONS. MANUFACTURER'S PRINTED INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITIES.
5. VERIFY SPECIFIC THRESHOLD CONDITION WITH FINISH SCHED.
6. COILING THERMAL DOOR/HAND CHAIN OPERATED WINDLOCKS.
7. REFER TO DOOR AND FRAME TYPES ABOVE FOR TYP DOOR FRAME.
8. VERIFY ALL STUD OPENINGS PRIOR TO FABRICATION OF FRAMES.
9. DOOR FRAME TO BE ANCHORED TO STUD OPENING, REF 1/8.2
10. KICK PLATES TO BE INSTALLED ON PUSH SIDE OF DOORS. SEE HARDWARE SPECS.
11. WEATHERSTRIP ALL EXTERIOR DOORS.
12. FOR HARDWARE GROUPING , SEE SPEC 08 71 00.
13. ALL SIGNAGE SHALL COMPLY WITH TITLE 24 AND CBC 11B-7.3.
14. THE MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN A DOOR SHALL BE NO MORE THAN 5 LBS FOR INTERIOR AND EXTERIOR DOORS (15 LBS FOR FIRE DOORS).
15. ALL WD OR HM DOORS & FRAMES TO BE PAINTED PER SPEC SECTION 09 90 00.
16. AL DOORS TO HAVE ARCHITECT / OWNER'S APPROVED PRE-FABRICATED MFR FINISH. REF TO MFR STANDARD COLOR CHARTS.
17. PER CBC, SECTION 1010.1.11, ALL CLASSROOMS SHALL BE LOCKABLE FROM INSIDE. REF SPEC SECTION 08 71 00 FOR HARDWARE TYPE.
18. DOOR HARDWARE SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHINC OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS. MAXIMUM (11B-309.4).

MATERIAL ABBREVIATIONS:

AG - ACOUSTICAL DOOR GASKET
AL - ALUMINUM
HM - HOLLOW METAL
MT - METAL
P - PAINTED
PF - PREFINISHED
SST - STAINLESS STEEL
WD - SOLD CORE WOOD DOOR

GLASS ABBREVIATIONS:

G1 - TEMPERED GLASS, CLEAR
G2 - TEMPERED GLASS, TINTED
G3 - FIRE RESISTIVE GLAZING
G4 - FIRE RESISTIVE SAFETY GLAZING
G5 - SEALED INSULATED GLASS UNIT
G6 - LAMINATED GLASS, TINTED
G7 - TEMPERED GLASS, TRANSLUCENT

REMARKS NOTES LEGEND:

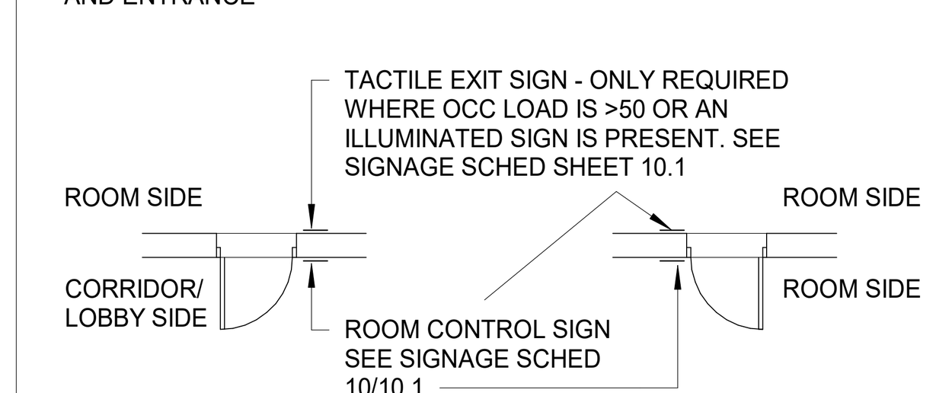
1. PROVIDE MANUALLY OPERATED MECHANICAL DOOR/WINDOW SHADES W/ (2) LAYERS OF SHADECLOTH AS SPECIFIED IN THE PROJECT MANUAL OVER TRANSOMS AND SIDELITES.
2. ELECTRICALLY OPERATED SECTIONAL OVERHEAD DOORS, REF 17/8.1 AND 18/8.1
3. PROVIDE OPAQUE ETCHED / FROSTED GLAZING FINISH AS APPROVED BY ARCHITECT
4. MANUALLY OPERATED FOLDING PANEL / GLASS PARTITION DOORS, REF 8/8.1
5. PROVIDE SIGNAGE AS NOTED ON A0.10 AND/OR 10.1
6. FOR MEN'S/BOY'S RR SIGNAGE: PROVIDE ACCESSIBLE RR IDENTIFICATION DOOR AND WALL SIGNAGE, REF 7/10.1 & 8/10.1
7. FOR WOMEN'S/GIRL'S RR SIGNAGE: PROVIDE ACCESSIBLE RR IDENTIFICATION DOOR AND WALL SIGNAGE, REF 3/10.1 & 4/10.1
8. PROVIDE ROOM IDENTIFICATION SIGNAGE, REF 10/10.1
9. THE BLDG ENTRANCES AND EXITS SHALL BE IDENTIFIED WITH ONE STANDARD SIGN OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AS DESCRIBED IN THE CALIFORNIA STATE BUILDING CODE, REF 17/10.2; VERIFY EXACT LOCATION WITH ARCHITECT
10. PROVIDE TACTILE EXIT SIGNS AT ALL EXTERIOR DOORS TO GRADE PER CBC 1011.4, REF 21/10.1
11. 11a - SOUND SENSITIVE DOOR JAMB. PROVIDE BATT INSULATION;
    11b - THERMAL BATT INSULATION AT DOOR JAMBS
    11c - NO FILL IN DOOR JAMB
12. DOOR TO HAVE PANIC HARWARE PER HARDWARE SCHEDULE.

SIGNAGE NOTES:

REFER TO THE FOLLOWING DETAILS FOR LOCATION OF ALL INTERIOR IDENTIFYING DEVICES (SIGNAGE):
- SIGNAGE SCHEDULE SHEET 10.1
- SIGNAGE MOUNTING DETAIL 16/10.1
- ROOM CAPACITY SIGN 20/10.1

PROVIDE AND INSTALL ROOM CONTROL SIGNAGE, TACTILE EXIT SIGNAGE AND PICTORIAL SYMBOL SIGNAGE AS INDICATED ON SIGNAGE SCHEDULE SHEET 10.1

PROVIDE AND INSTALL ENTRANCE AND RESTROOM SIGNAGE AS AS INDICATED ON SIGNAGE SCHEDULE SHEET 10.1 FOR EACH RESTROOM AND ENTRANCE



ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

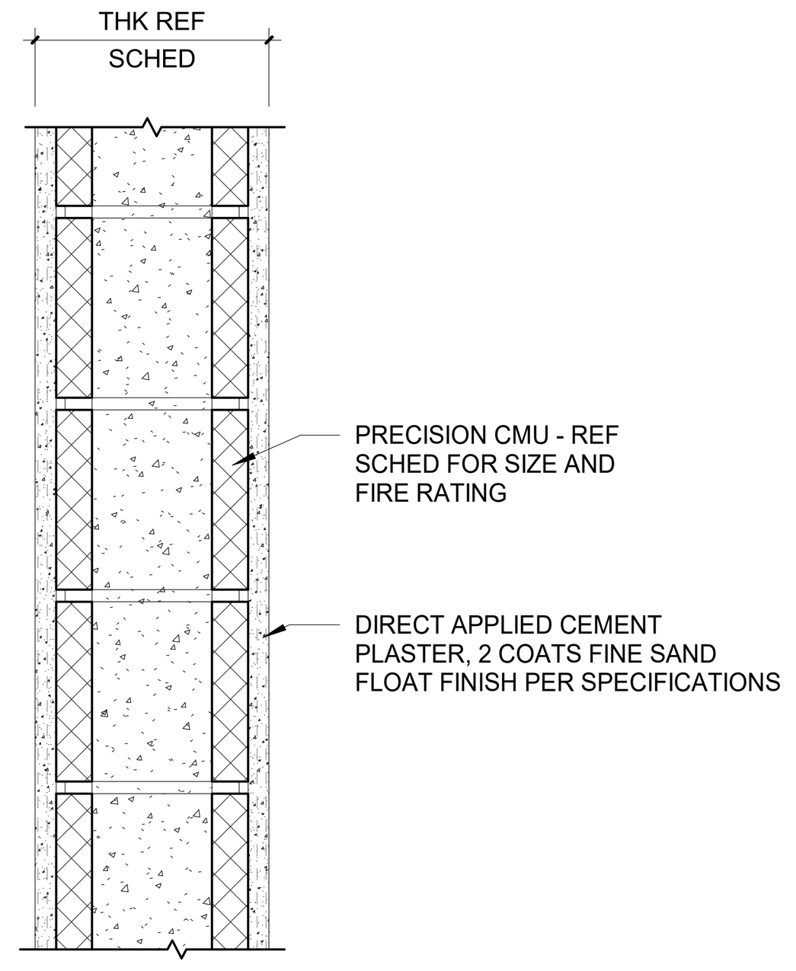
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

DOOR AND FRAME SCHEDULE, DOOR DETAILS

DRAWING NUMBER: 8.1



CMU SIZE	WALL THK	FIRE RATING (CBC / UL / GA LISTING)			REMARKS
		0 HR	1 HR	2 HR	
4	5 3/8	FF4**	-----	-----	FF4**
6	7 3/8	FF6**	FF61* (UL U906)	FF62* (UL U906)	FF6**
8	9 3/8	FF8**	FF81* (UL U906)	FF82* (UL U906)	FF8**
10	11 3/8	FF0**	FF01* (UL U906)	FF02* (UL U906)	FF0**
12	13 3/8	FF1**	FF11* (UL U906)	FF12* (UL U906)	FF1**

PLAN INDICATION

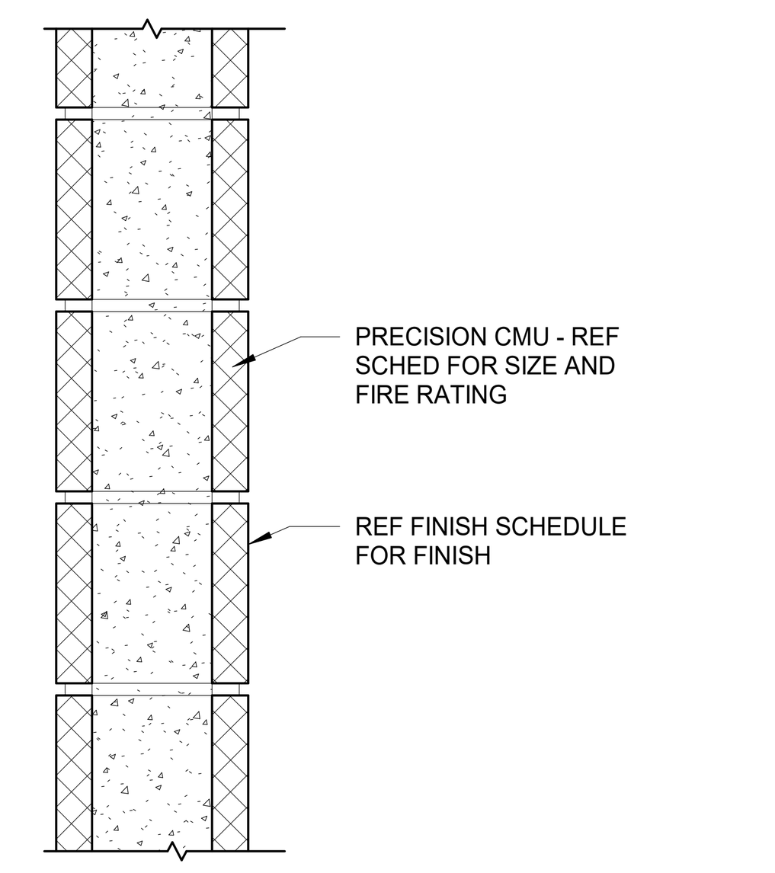
NON RATED

FIRE RATED

NOTE
1. REF FIN SCHED FOR FIN
2. GROUT CMU SOLID
3. REF ___/___ FOR HEAD DTL
4. REF ___/___ FOR BASE DTL

REMARKS SCHEDULE

WALL TYPE FF | 1 1/2" = 1'-0" | 1



CMU SIZE	WALL THK	FIRE RATING (CBC / UL / GA LISTING)			REMARKS
		0 HR	1 HR	2 HR	
4	3 5/8	S4**	S41* (UBC 6-1.3)	-----	S4**
6	5 5/8	S6**	S61* (UBC 6-1.3)	S62* (UBC 6-1.3)	S6**
8	7 5/8	S8**	S81* (UBC 6-1.3)	S82* (UBC 6-1.3)	S8**
10	9 5/8	S0**	S01* (UBC 6-1.3)	S02* (UBC 6-1.3)	S0**
12	11 5/8	S1**	S11* (UBC 6-1.3)	S12* (UBC 6-1.3)	S1**

PLAN INDICATION

NON RATED

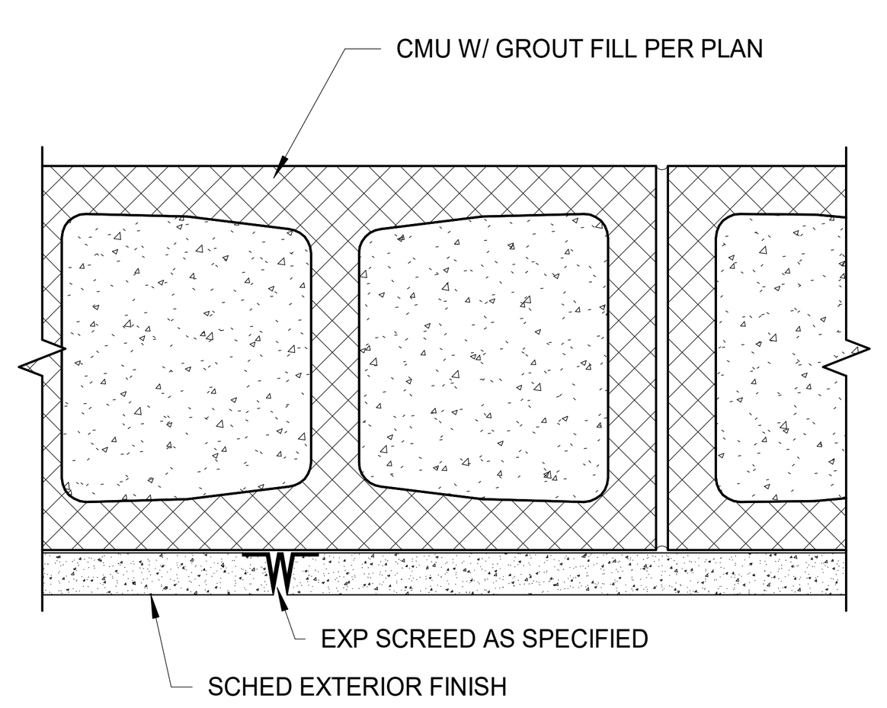
FIRE RATED

NOTE
1. REF FIN SCHED FOR FIN
2. GROUT CMU SOLID
3. REF ___/___ FOR HEAD DTL
4. REF ___/___ FOR BASE DTL

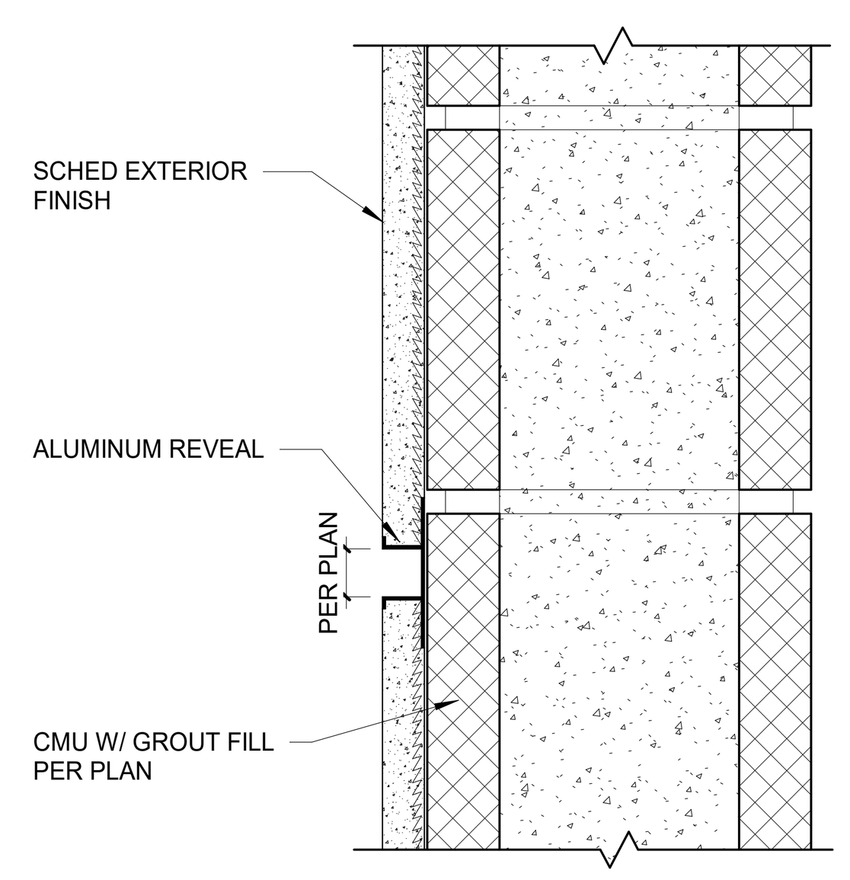
REMARKS SCHEDULE
A. SINGLE SCORE
B. 2 SCORE
C. 3 SCORE

WALL TYPE S | 1 1/2" = 1'-0" | 2

NOTE:
- INSTALL PER ASTM STANDARDS & SPECIFICATION DIVISION NUMBER 09 XX XX. SPACE MAX 18'-0" AND 144 SQ FT. REF EXTERIOR ELEVATIONS FOR LOCATIONS.



A. TYP CONTROL JOINTS



B. HORIZONTAL REVEAL

WALL REVEAL/CONTROL JOINT DETAIL | 3" = 1'-0" | 3

SCHEDULE ROOM FINISH

ROOM		FLOOR MTL	BASE MTL	WALL MATERIAL				CEILING		WAINSCOT		FINISHES			REMARKS
NUMBER	NAME			1	2	3	4	MTL	HT	MTL	HT	FLOOR	WALLS	CEILING	
A100	RECEIVING	CONC		CMU	CMU	CMU	CMU			-	-				
A101	TRANSFORMER/ GENERATOR ROOM	CONC		CMU	CMU	CMU	CMU	-		-	-			-	
A102	COOLING TOWER ROOM	CONC		CMU	CMU	CMU	CMU	-		-	-			-	

REMARKS REFERENCE SCHEDULE

1. REF A7.1 FOR ACCENT WALL PAINT LOCATIONS
2. PROVIDE FRP OVER MOP SINK ONLY, REF 2/9.5
3. PROVIDE FRP OVER EYEWASH & SHOWER, ALL AROUND. PROVIDE ADDITIONAL FRP PANEL OVER ADJACENT CASEWORK TO PROTECT WOOD FINISH, REF SIM 2/9.5
4. WALLS TO RECEIVE TACKABLE WALL BOARD, MARKERBOARD, MARKER WALL &/OR OFCI FLAT SCREEN TV'S PER INTERIORS PLAN A7.1 & INTERIOR ELEVATIONS A7.2, A7.3, A7.4
5. RESTROOM FLOOR / WALL TILE PATTERN: REF 7/9.5 & 8/9.5 FOR PATTERN TYPES. FINAL DESIGN TO BE APPROVED BY ARCHITECT DURING SUBMITTAL PHASE.

ROOM FINISH SCHED COLUMN REFERENCE GUIDE

1. ROOM NUMBER: SPECIFIC NUMBER ASSIGNED TO INDIVIDUAL ROOM.
2. ROOM NAME: DESIGNATES SPECIFIC USAGE OF SPACE.
3. FLOOR MATERIAL: DESIGNATES BASE FLOOR MATERIAL, I.E., CONC - CONCRETE, WD - WOOD ,ST - STEEL, ETC.
4. BASE MATERIAL: DESIGNATES FINAL BASE FINISH. SEE MATERIALS LEGEND. CONTINUE BASE FINISH BELOW KNEE SPACES AND OPEN COUNTERTOPS.
5. WALL MATERIALS : DESIGNATES MATERIAL FROM WHICH WALLS ARE CONSTRUCTED AND FINISH OF WALLS. SEE MATERIALS LEGEND. COLUMNS "N, E, S, W" DESIGNATE NORTH, EAST, SOUTH, WEST WALL TO BUILDING REFERENCE NORTH.
6. WAINSCOT MATERIAL AND HEIGHT: DESIGNATES ANY FINAL WAINSCOTING MATERIAL AND HEIGHT OF WAINSCOT MATERIAL FROM FINISHED FLOOR LINE EXPRESSED IN FEET AND INCHES. SEE MATERIALS LEGEND.
7. FLOOR FINISH: DESIGNATES FINAL FLOOR FINISH. SEE MATERIALS LEGEND. CONTINUE FLOOR FINISH BELOW KNEE SPACES AND OPEN COUNTERTOPS.
8. WALL FINISH: DESIGNATES FINAL WALL FINISH, SUCH AS PAINT, WALL COVERINGS, SPECIALTIES, ETC. SEE MATERIAL LEGEND. COORDINATE WALL FINISH WITH REMARKS COLUMN.
9. REMARKS: DESIGNATES OR REFERENCES SPECIAL, UNUSUAL OR ABSTRACT CONDITIONS WHICH EXISTS AND ARE NOT COVERED IN SCHEDULE ITEMS 1 THRU 8. REFER TO REMARKS REFERENCE SCHEDULE FOR ALPHANUMERICAL DESIGNATION.

GENERAL NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC, CFC, AND TITLE 19 CCR.
2. A-ESPT: ACCENT WALL SHOULD BE PAINTED FLOOR TO CEILING. SEE A7.1 FOR LOCATIONS.
3. REFER STRCT DWGS AND ARCHITECTURAL FLOOR PLANS FOR LOCATION OF ALL PLYWD SHEATHING.
4. FOR LOCATION AND TYPES OF ALL WALL COVERINGS: TACKABLE WALL BOARD, MARKER BOARD, MARKER WALLS REF INTERIOR PLANS SHT A7.1 & INTERIOR ELEVATIONS SHEET 7 SERIES
5. 11B-302.1: GENERAL. FLOOR AND GROUND SURFACES SHALL BE STABLE, FIRM, AND SLIP RESISTANT AND SHALL COMPLY WITH SECTION 11B-302.

MATERIAL LEGEND

SYMBOLS	BASE FINISH	SYMBOLS	FLOOR FINISHES	SYMBOLS	WAINSCOT / WALL
CPT	CARPET	CPT	CARPET	PCL	PORCELAIN TILE
PCL	PORCELAIN TILE	PCL	PORCELAIN TILE	GB	GYPSUM BOARD - PAINTED
RB	RUBBER	RF	RUBBER FLOOR	FRL	FIBER REINFORCED LAMINATE
VB	VENTED RUBBER	RES	RESILIENT FLOOR	FRP	FIBER REINFORCED PLASTIC
WD	HARDWOOD	SEALED	SEALED CONCRETE	WC	WALL COVERING, REF NOTE #4
SST	STAINLESS STEEL	WD	WOOD ATHLETIC FLOOR OR STAGE WOOD FLOOR	WDWC	WOOD VENEER WALL COVERING
				WP	WALL PADDING
		PVR	PEDESTRIAN PAVERS	A-ESPT	ACCENT EGGSHELL PAINT
				ESPT	EGGSHELL PAINT
				FPT	FLAT PAINT
				SGPT	SEMI-GLOSS PAINT

NOTE: REFER TO SPECIFICATIONS FOR FLAME AND SMOKE REQUIREMENTS OF ALL INTERIOR FINISH MATERIALS, IF REQUIRED

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

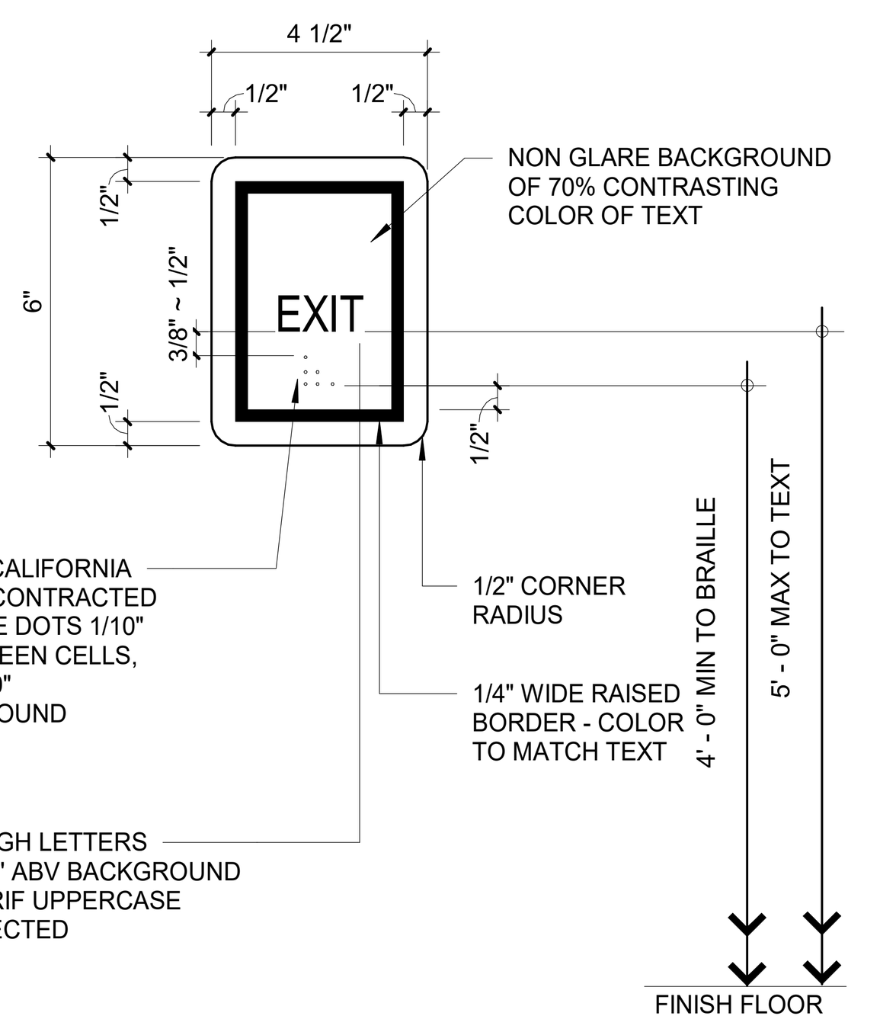
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

ROOM FINISH SCHEDULE AND WALL DETAILS

DRAWING NUMBER: **9.1**

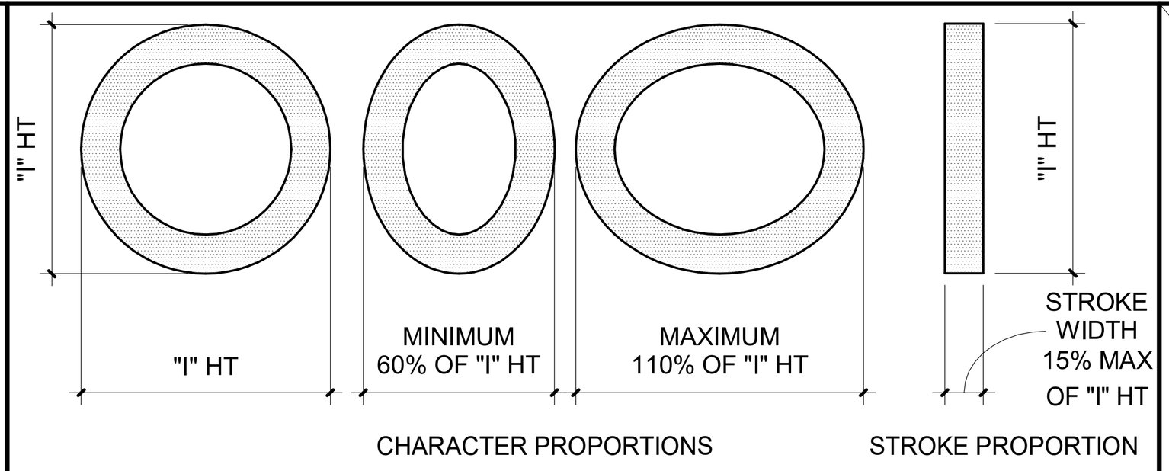


BRAILLE FONT: CALIFORNIA ROUNDED TOP CONTRACTED GRADE 2 BRALLE DOTS 1/10" O.C., 2/10" BETWEEN CELLS, RAISED MIN. 1/40" ABOVE BACKGROUND

TEXT: EXIT, 1" HIGH LETTERS RAISED MIN 1/32" ABV BACKGROUND FONT: SANS SERIF UPPERCASE COLOR: AS SELECTED

NOTE: PROVIDE MECHANICALMOUNTING W/ VANDAL RESISTANT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS

TACTILE EXIT SIGN | 3" = 1'-0" | 21



WIDTH TO HEIGHT PROPORTION TEMPLATE

TACTILE TEXT TEMPLATE PER (CBC) CALIFORNIA BUILDING CODE (CCR)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, SECTION 11B-703

GENERAL NOTES:
1. FINISH AND CONTRAST: CHARACTERS AND THEIR FINISH SHALL BE NON GLARE. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKRGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND. REF CBC 11B-703.5.1.

2. PROPORTIONS: CHARACTERS SHALL HAVE A FONT WHERE THE WIDTH OF THE UPPER CASE LETTER "0" IS 60% MINIMUM AND 110% MAXIMUM OF THE UPPER CASE LETTER "I". STROKE THICKNESS SHALL BE 15% MAXIMUM OF THE THICKNESS OF THE UPEPRCASE "I" AS INDICATED ABOVE. REF CBC SECTION 11B-703.2.4. AND 11B-703.2.6.

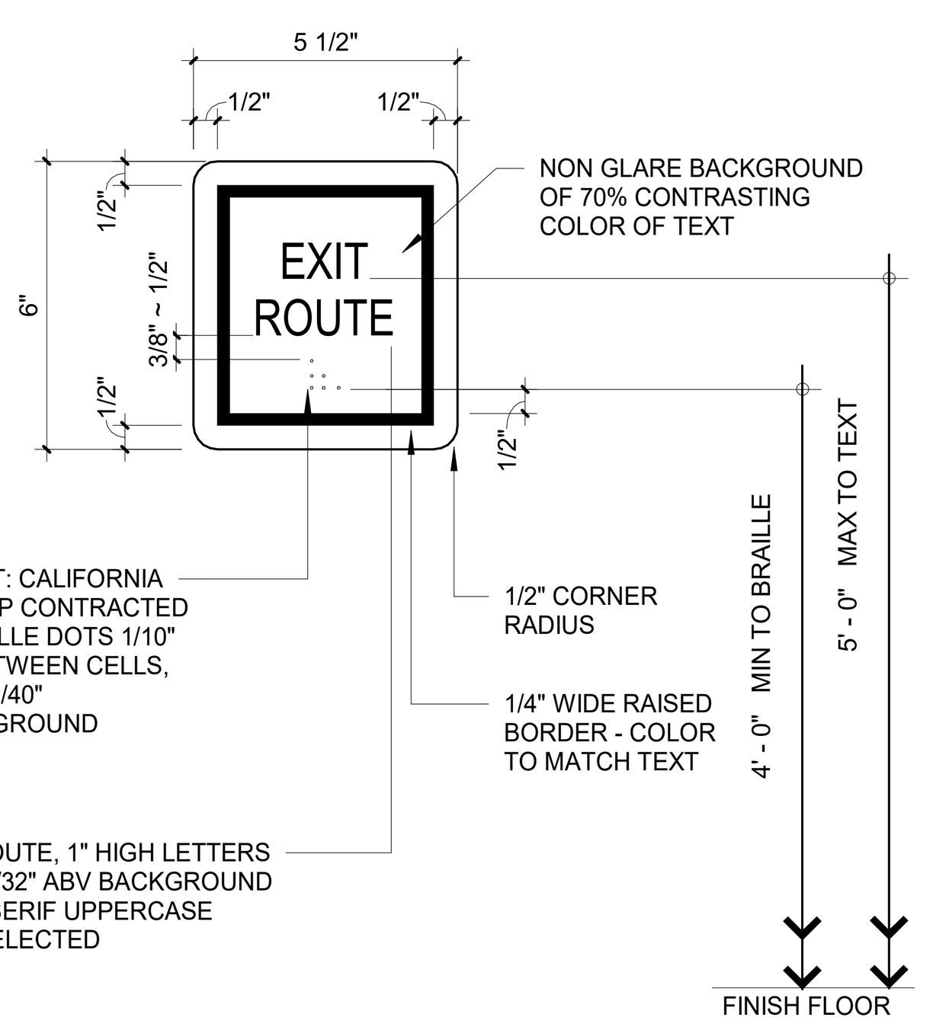
3. TACTILE FONT: SHALL BE UPPER CASE SAN SERIF & BE RAISED A MINIMUM OF 1/32". FONT SHALL BE DUPLICATED IN BRAILLE. REF CBC 11B-703.2.3.

4. HEIGHT: FONT SHALL BE 5/8" MINIMUM AND 2" MAXIMUM BASED UPON HEIGHT OF THE UPPERCASE "I". REF CBC 11B-703.2.5 AND TABLE 11B-703.5.5.

5. CHARACTER SPACING: MIN OF 1/8" AND MAX OF 4 TIMES CHARACTER STROKE WIDTH MEASURED BETWEEN CLOSEST POINTS OF ADJACENT LETTERS AND SHALL BE SEPERATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" MINIMUM. REF CBC SECTION 11B-703.2.7.

6. LINE SPACING: MIN OF 135% AND MAX OF 170% OF THE UPPERCASE "I" HEIGHT MEASURED BASELINE TO BASELINE OF CHARACTERS. TEXT SHALL BE HORIZONTAL FORMAT. REF CBC 11B-703.2.8.

SIGNAGE TEMPLATE | 1 : 1 | 17



BRAILLE FONT: CALIFORNIA ROUNDED TOP CONTRACTED GRADE 2 BRALLE DOTS 1/10" O.C., 2/10" BETWEEN CELLS, RAISED MIN. 1/40" ABOVE BACKGROUND

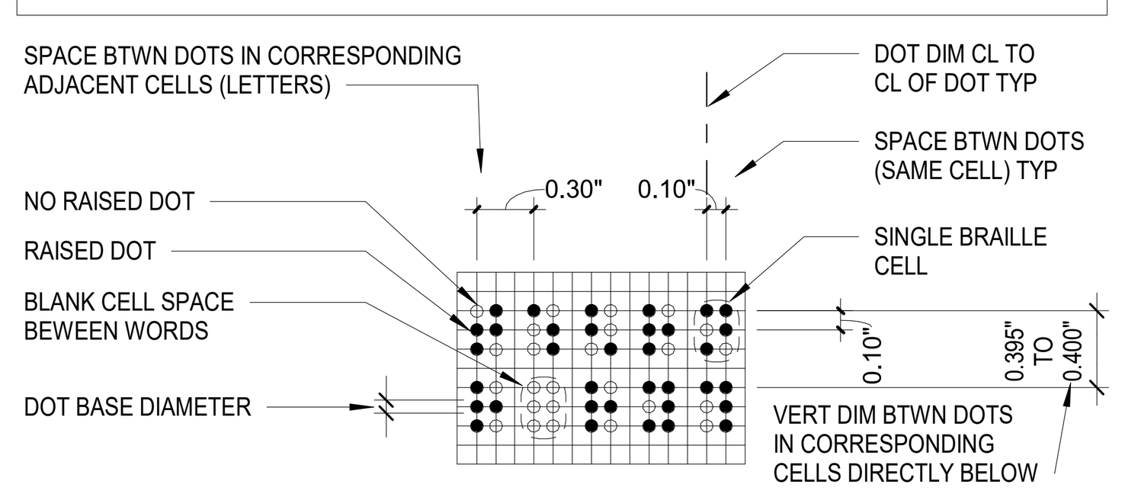
TEXT: EXIT ROUTE, 1" HIGH LETTERS RAISED MIN 1/32" ABV BACKGROUND FONT: SANS SERIF UPPERCASE COLOR: AS SELECTED

NOTE: PROVIDE MECHANICALMOUNTING W/ VANDAL RESISTANT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS

TACTILE EXIT SIGN | 3" = 1'-0" | 22

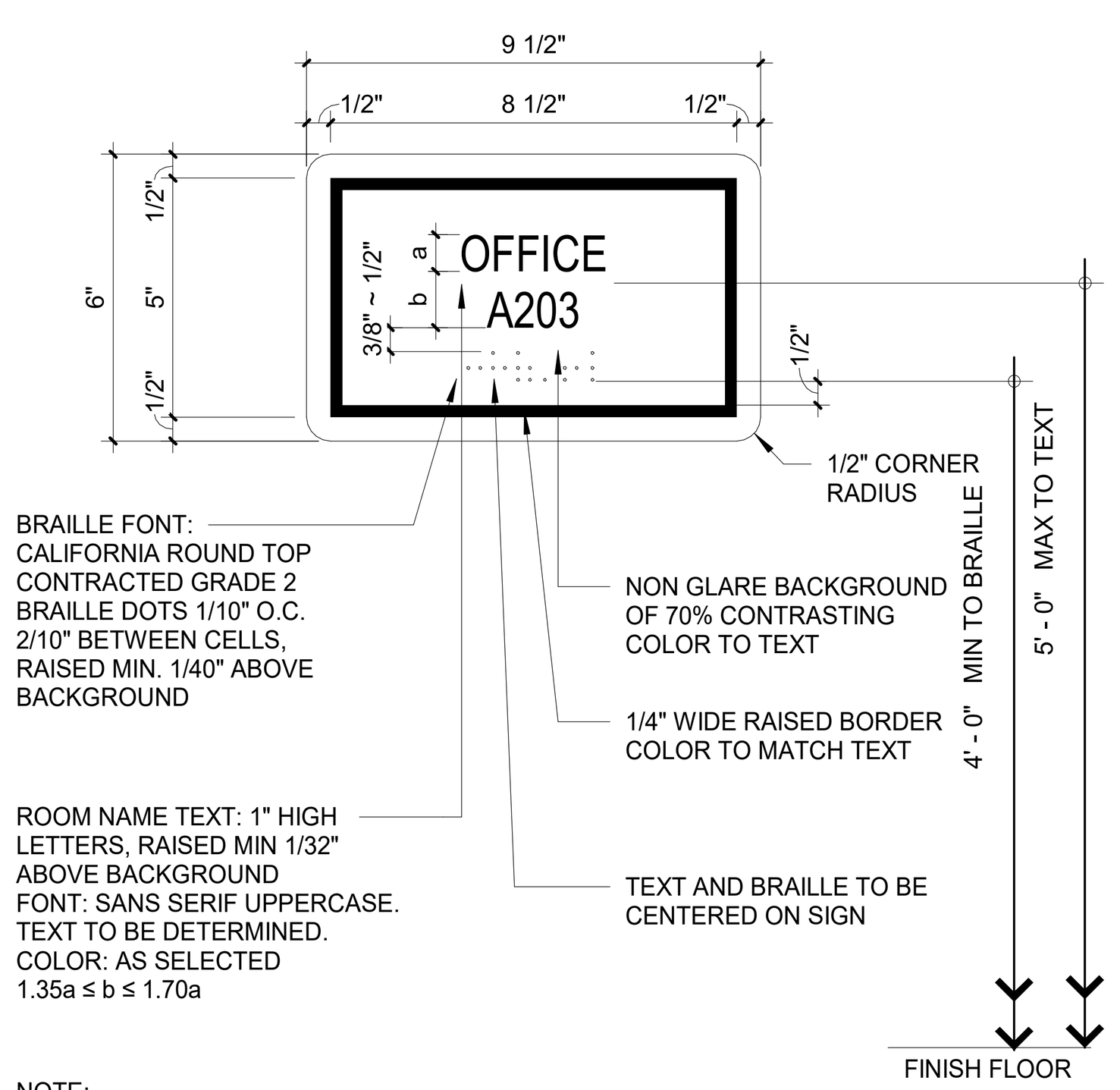
REF CBC TABLE 11B-703.3.1 BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM AND MAXIMUM IN INCHES
BASE DOT DIAMETER	0.059 TO 0.063
DISTANCE BETWEEN 2 DOTS IN THE SAME CELL *	0.100
DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS *	0.300
DOT HEIGHT	0.025 TO 0.037
DISTANCE BETWEEN CORRESPONDING DOTS FROM 1 CELL DIRECTLY BELOW *	0.395 TO .400
* MEASUREMENT IS CENTER TO CENTER OF DOT	



GENERAL NOTE:
1. CALIFORNIA CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHERE EVER BRAILLE IS REQUIRED.
INDIVIDUAL BRAILLE DOTS SHALL EACH BE DISTINCT AND SEPARATE. EACH DOT SHALL BE ROUNDED OR DOMED IN LIEU OF SQUARE SIDED AND FLAT TOPPED. DOT SHALL BE 0.059" TO 0.063" DIA. X 0.025" TO 0.037" HIGH. REF CBC 11B-703.3, 11B-703.3.1 & 11B-703.4.

BRAILLE TEMPLATE | 12" = 1'-0" | 18



BRAILLE FONT: CALIFORNIA ROUND TOP CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C. 2/10" BETWEEN CELLS, RAISED MIN. 1/40" ABOVE BACKGROUND

ROOM NAME TEXT: 1" HIGH LETTERS, RAISED MIN 1/32" ABOVE BACKGROUND FONT: SANS SERIF UPPERCASE. TEXT TO BE DETERMINED. COLOR: AS SELECTED 1.35a ≤ b ≤ 1.70a

NOTE:
PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS.

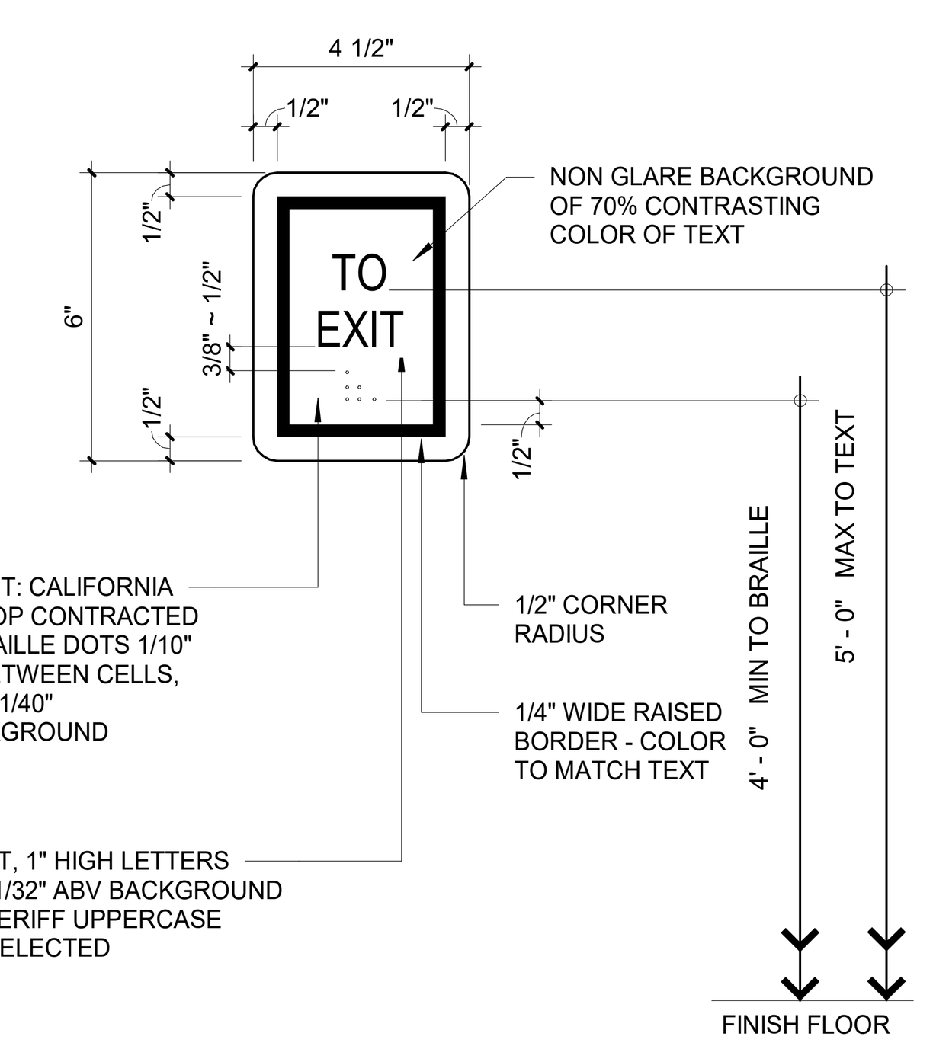
ROOM CONTROL SIGNAGE | 3" = 1'-0" | 10

SIGNAGE SCHEDULE

ITEM DESCRIPTION	DETAIL	LOCATION	REMARKS
FEMALE RESTROOM DOOR SYMBOL	3/10.1	ALL FEMALE RESTROOM DOORS	1
MALE RESTROOM DOOR SYMBOL	7/10.1	ALL MALE RESTROOM DOORS	1
RESTROOM DOOR SYMBOL	11/10.1	ALL SINGLE USE RESTROOM DOORS	1
MALE RESTROOM WALL SIGN	8/10.1	ALL MALE RESTROOMS	1, 2
FEMALE RESTROOM WALL SIGN	4/10.1	ALL FEMALE RESTROOMS	1, 2
RESTROOM WALL SIGN	12/10.1	ALL SINGLE USE RESTROOMS	1, 2
ACCESSIBLE ENTRY SIGN	17/10.1	ALL MAIN EXTERIOR BUILDING ENTRIES	1
TACTILE EXIT SIGN (EXTERIOR EXIT)	21/10.1	EXTERIOR EXIT DOORS	1, 2, 3
TACTILE EXIT SIGN (CORRIDOR OR HALLWAY)	22/10.1	CORRIDOR AND HALLWAY EXIT DOORS	1, 2, 3
TACTILE EXIT SIGN (HORIZONTAL EXIT)	23/10.1	AT HORIZONTAL EXIT DOORS	1, 2
TACTILE EXIT SIGN (RAMP OR STAIRWAY)	24/10.1	ALL EXIT RAMPS AND STAIRS	1, 2
ROOM CONTROL SIGNAGE	10/10.1	ALL INTERIOR & EXTERIOR ROOMS	1, 2
ASSISTIVE LISTENING SIGN	13/10.1	ALL CONFERENCE & ASSEMBLY SPACES	-
WHEELCHAIR LIFT SIGN	9/10.1	ADJACENT TO ALL WHEELCHAIR LIFTS	-
ELEVATOR EXIT SIGN	14/10.1	ALL ABOVE GRADE ELEVATOR LANDINGS	4
NO SMOKING SIGN	23/10.2	ALL MAIN EXTERIOR BUILDING ENTRIES	-
GATE ACCESS SIGN	9/10.2	ALL EXTERIOR EXIT GATES	-
DIRECTIONAL ACCESS SIGN	10/10.2	REFER TO SITE PLAN FOR LOCATIONS	-
ACCESSIBLE PARKING SIGN	13/10.2	ALL ACCESSIBLE AUTO PARKING STALLS	-
ACCESSIBLE VAN PARKING SIGN	14/10.2	ALL ACCESSIBLE VAN PARKING STALLS	-
LOADING ZONE SIGN	15/10.2	ALL BUS DROP OFF & LOADING AREAS	-
ACCESSIBLE PARKING LOT SIGN	16/10.2	ALL ACCESSIBLE PARKING LOT ENTRIES	-
ACCESSIBLE SYMBOL	11/10.2	ALL ACCESSIBLE PARKING STALLS	-
ROOM CAPACITY SIGN	20/10.1	REFER TO DETAIL FOR ROOM LOCATIONS	-
STAIRWAY SIGNAGE	15/10.1	ALL FLOOR LEVELS OF STAIRWAYS	2
FIRE WALL BARRIER IDENTIFICATION SIGN	18/10.2	ALL FIRE AND SMOKE BARRIER WALLS	-
RESCUE ASSISTANCE SIGN	19/10.2	ALL ELEVATOR LANDINGS ABOVE GRADE	4
SAFE DISPERSAL AREA SIGN	21/10.2	ALL EXTERIOR SAFE DISPERSAL AREAS	5
STORAGE ROOM SIGN	22/10.2	ALL ELEVATOR MACHINE ROOMS	-

REMARKS

1. REF DET 16/- FOR MOUNTING
2. REF DET 17/- AND 18/- FOR SIGNAGE AND BRAILLE TEMPLATE
3. REF CODE ANALYSIS FOR DOOR LOCATIONS
4. REF DET 20/10.2 FOR LOCATION AT ELEVATOR LANDING
5. REF SITE PLAN FOR LOCATION OF SAFE DISPERSAL AREAS AND SIGN LOCATIONS

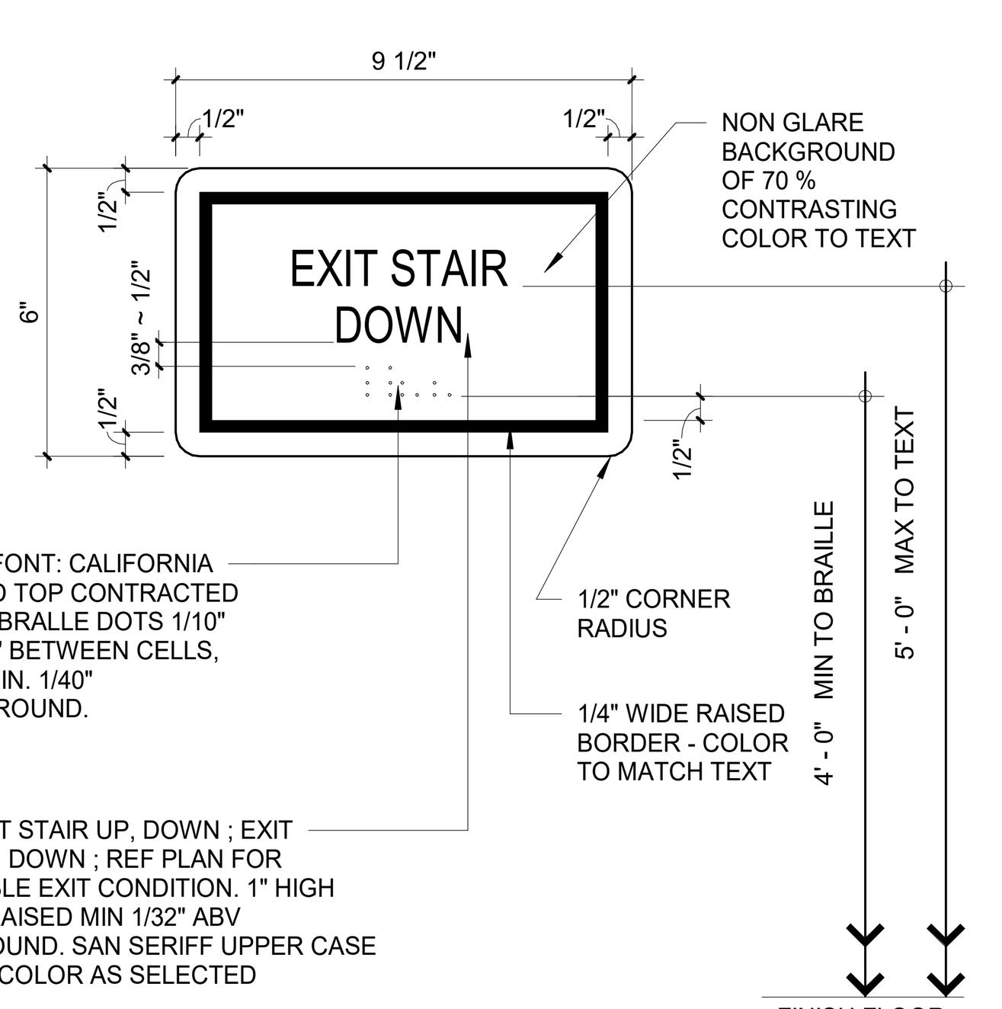


BRAILLE FONT: CALIFORNIA ROUNDED TOP CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C., 2/10" BETWEEN CELLS, RAISED MIN. 1/40" ABOVE BACKGROUND

TEXT: TO EXIT, 1" HIGH LETTERS RAISED MIN 1/32" ABV BACKGROUND FONT: SAN SERIFF UPPERCASE COLOR: AS SELECTED

NOTE: PROVIDE MECHANICALMOUNTING W/ VANDAL RESISTANT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS

TACTILE EXIT SIGN | 3" = 1'-0" | 23



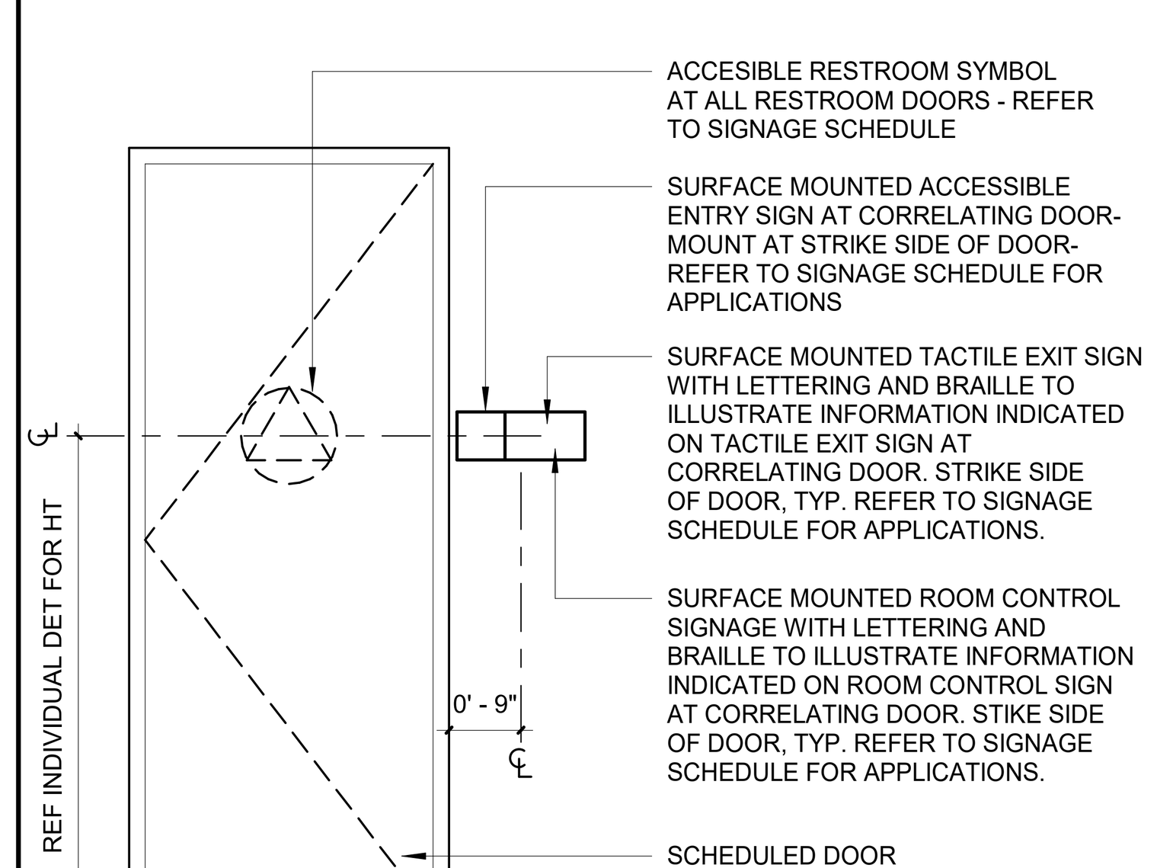
BRAILLE FONT: CALIFORNIA ROUNDED TOP CONTRACTED GRADE 2 BRAILLE DOTS 1/10" O.C., 2/10" BETWEEN CELLS, RAISED MIN. 1/40" ABOVE GROUND.

TEXT: EXIT STAIR UP, DOWN : EXIT RAMP UP, DOWN : REF PLAN FOR APPLICABLE EXIT CONDITION. 1" HIGH LETTER RAISED MIN 1/32" ABV BACKGROUND. SAN SERIFF UPPER CASE FONT OF COLOR AS SELECTED

NOTE: PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTNAT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS

TACTILE EXIT SIGN | 3" = 1'-0" | 24

NOTE: AT ALL DOUBLE DOORS LOCATE SIGNAGE ADJACENT TO JAMB OF INACTIVE LEAF OF DOOR PAIR. PROVIDE 90 DEGREE INHIBITOR TYPE CLOSER ON INACTIVE DOOR.



SIGNAGE MOUNTING DETAIL | 1/2" = 1'-0" | 16

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

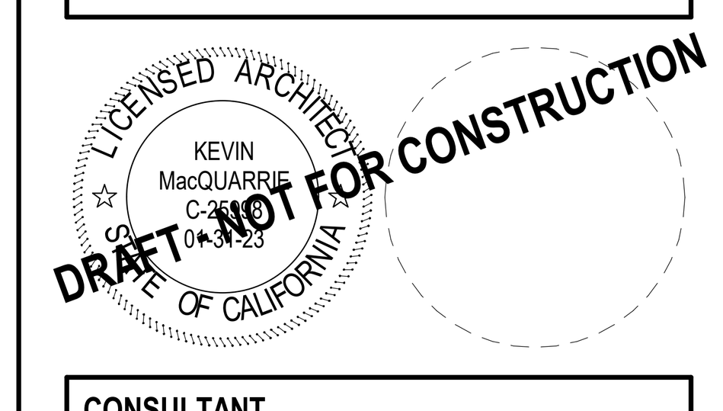
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607



CONSULTANT

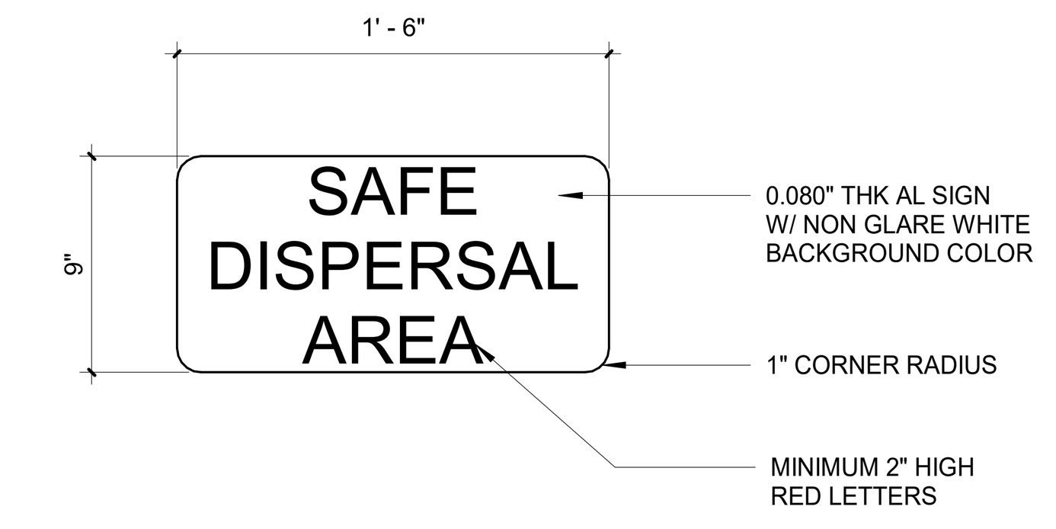
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV	CHECKED: EM
DATE: 03/15/21	SCALE: As indicated
PROJECT NUMBER: 2015800	

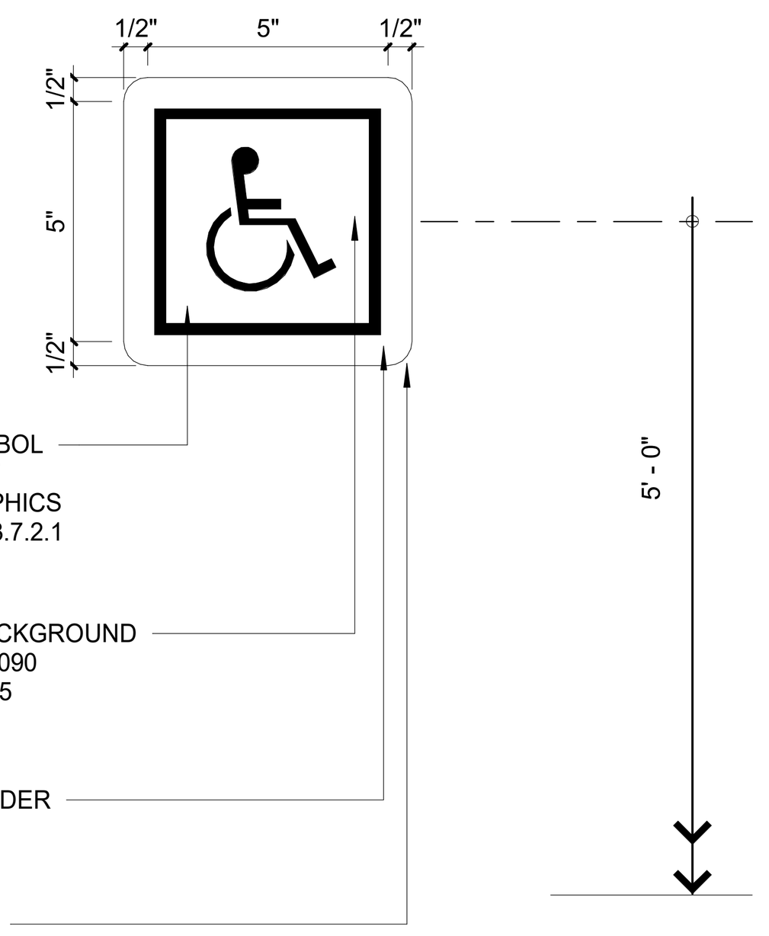
SPECIALTY DETAILS

DRAWING NUMBER: **10.1**



NOTE:
REF DET 13/10.2 FOR POLE MTD SIGN, DET 17/10.2 FOR WALL MTD SIGN, DET 17/10.2 FOR FENCE FABRIC MOUNTED SIGN. REFER TO SIGNAGE SCHEDULE & SITE PLAN FOR LOCATIONS.

SAFE DISPERSAL SIGN | 1 1/2" = 1'-0" | 21



INTERNATIONAL SYMBOL OF ACCESSIBILITY W/ WHITE SYMBOL GRAPHICS REF CBC SEC 11B-703.7.2.1

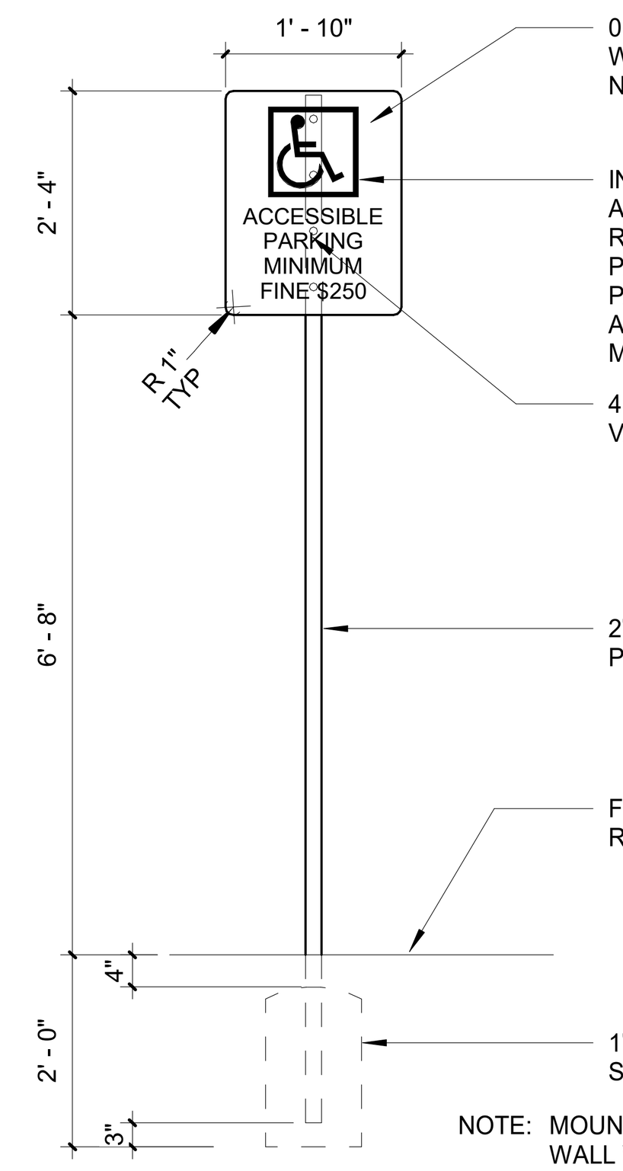
NON GLARE BLUE BACKGROUND COLOR - BLUE NO. 15090 PER SAE AMS-STD-595

1/4" WIDE WHITE BORDER

1/2" CORNER RADIUS

NOTE: PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING. REFER TO SIGNAGE SCHED FOR LOCATIONS

ACCESSIBLE ENTRY SIGN | 3" = 1'-0" | 17



0.080" THK AL SIGN PAINTED W/ BLUE REFLECTORIZED PAINT NO. 15090 PER SAE AMS-STD-595

INTERNATIONAL SYMBOL OF ACCESSIBILITY AND GRAPHICS REF CBC SEC 11B-703.7.2.1 PAINTED W/ WHITE REFLECTORIZED PAINT 2" HIGH LETTERS - GRAPHICS AS FOLLOWS: "ACCESSIBLE PARKING - MINIMUM FINE $250"

4 - #10 x 3/4" SELF TAPPING VANDAL PROOF SCREWS

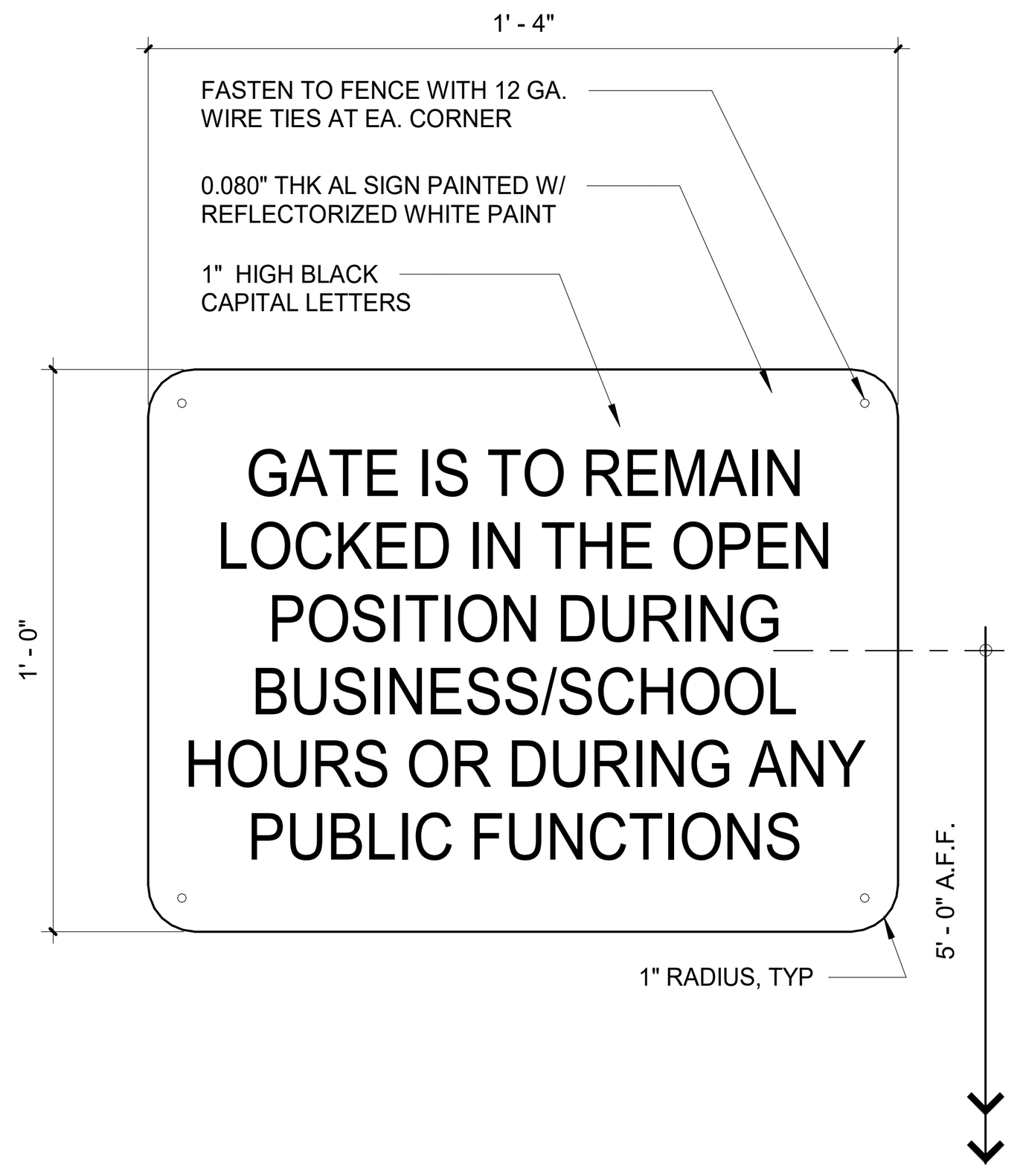
2" DIA STD WT STL PIPE POST - GLAV

FIN GRADE OR PAVING, REFER TO SITE PLAN

1' - 0" DIA CONC FTG - SLOPE TOP TO DRAIN

NOTE: MOUNT SIGN ON ADJACENT MASONRY WALL W/ 1/4" DIA. EXPANSION BOLTS IN LOCATION AS INDICATED ON PLAN.

PARKING SIGN | 1/2" = 1'-0" | 13



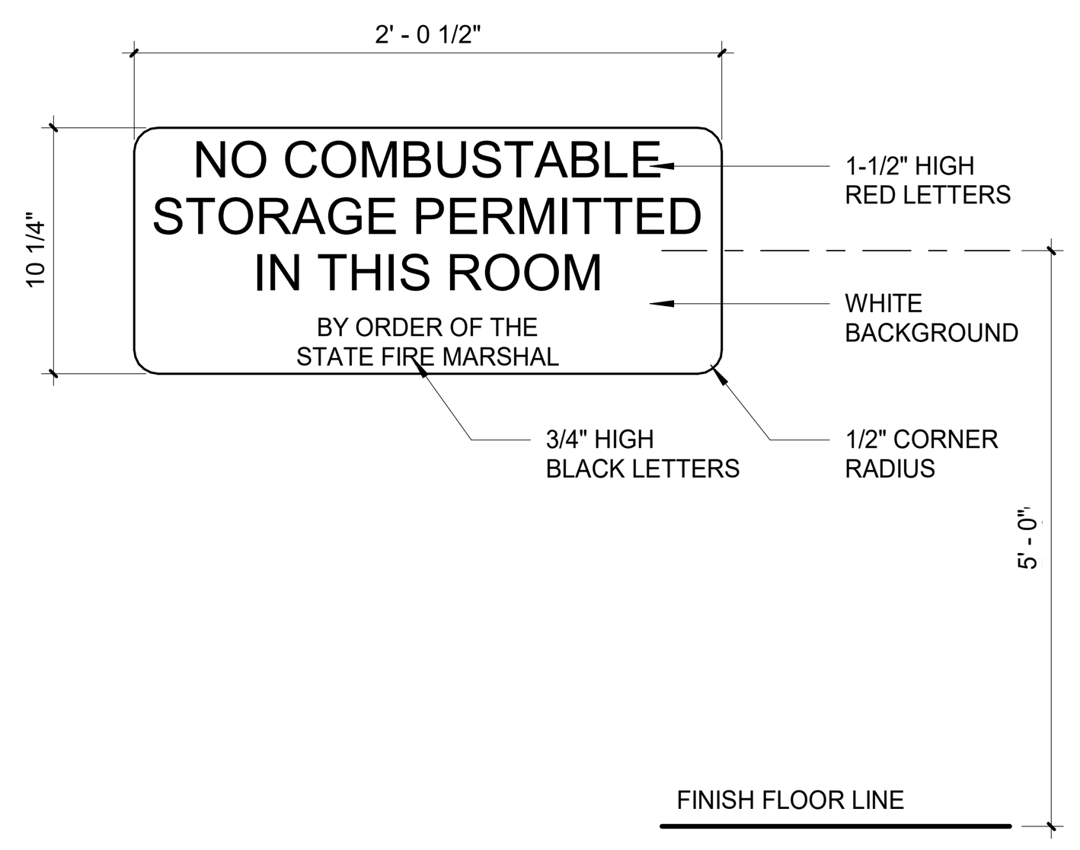
FASTEN TO FENCE WITH 12 GA. WIRE TIES AT EA. CORNER

0.080" THK AL SIGN PAINTED W/ REFLECTORIZED WHITE PAINT

1" HIGH BLACK CAPITAL LETTERS

1" RADIUS, TYP

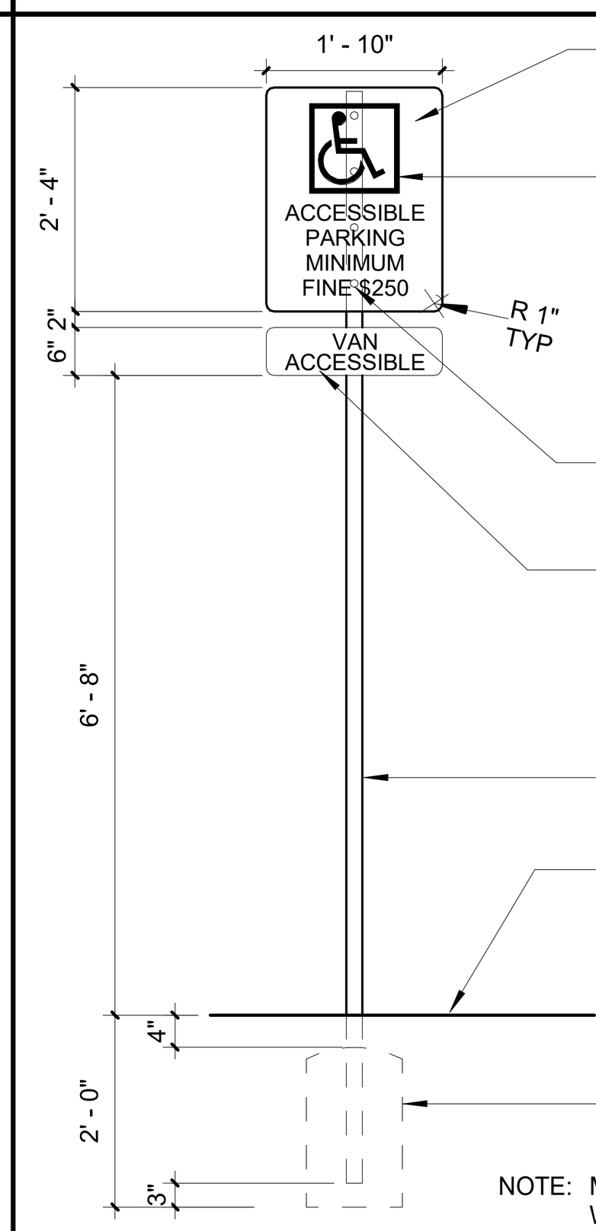
GATE ACCESS SIGNAGE | 3" = 1'-0" | 9



NOTE:

1. SIGN TO BE ACRYLIC PLASTIC W/ HELVETICA MEDIUM LETTERS
2. REFER TO SIGNAGE SCHED FOR LOCATIONS
3. ATTACH SIGN USING FLATHEAD VANDAL RESISTANT COUNTERSUNK SCREWS AND ADHESIVE

STORAGE SIGN | 1 1/2" = 1'-0" | 22



0.080" THK AL SIGN PAINTED W/ BLUE REFLECTORIZED PAINT NO. 15090 PER SAE AMS-STD-595

INTERNATIONAL SYMBOL OF ACCESSIBILITY AND GRAPHICS REF CBC SEC 11B-703.7.2.1 PAINTED W/ WHITE REFLECTORIZED PAINT 2" HIGH LETTERS - GRAPHICS AS FOLLOWS: "ACCESSIBLE PARKING - MINIMUM FINE $250"

4 - #10 x 3/4" SELF TAPPING VANDAL PROOF SCREWS

ADDITIONAL SIGN PAINTED W/ WHITE REFLECTORIZED PAINT 2" HIGH LETTERS - GRAPHICS AS FOLLOWS: "VAN ACCESSIBLE"

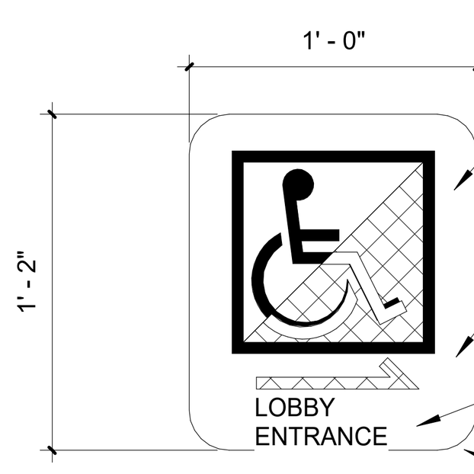
2" DIA STD WT STL PIPE POST - GALV

FIN GRADE OR PAVING, REFER TO SITE PLAN

1' - 0" DIA CONC FTG - SLOPE TOP TO DRAIN

NOTE: MOUNT SIGN ON ADJACENT MASONRY WALL W/ 1/4" DIA. EXPANSION BOLTS IN LOCATION AS INDICATED ON PLAN.

PARKING SIGN | 1/2" = 1'-0" | 14



INTERNATIONAL SYMBOL OF ACCESSIBILITY W/ WHITE SYMBOL & GRAPHICS REF CBC SEC 11B-703.7.2.1

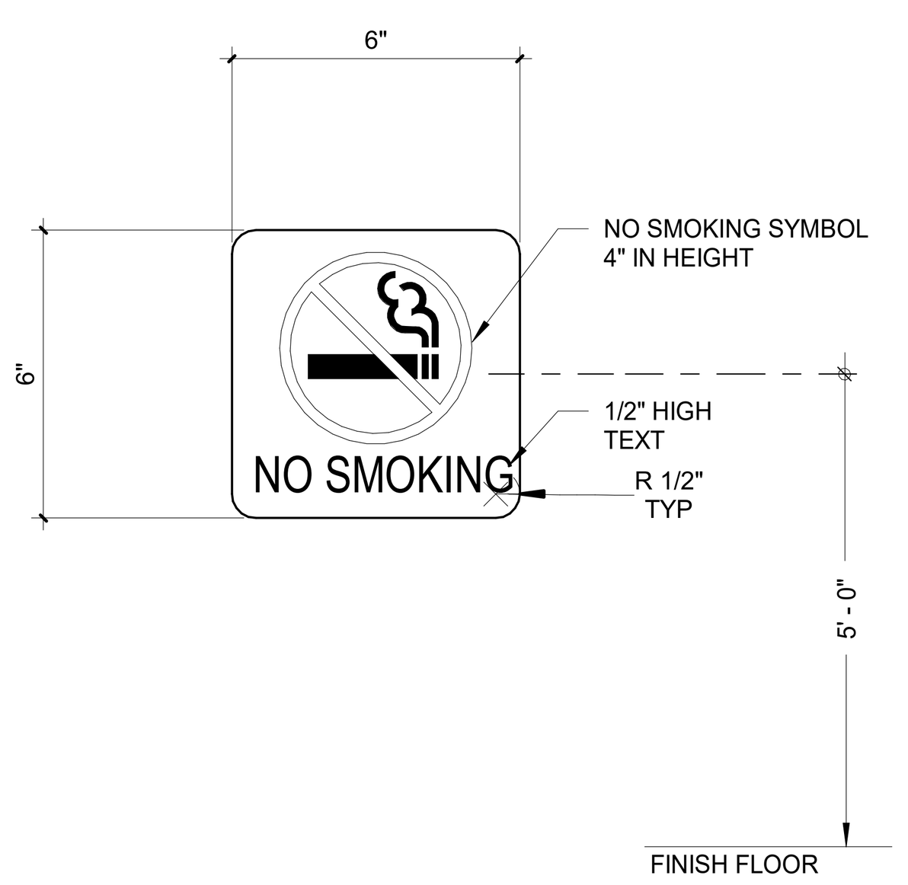
0.080" THK AL SIGN W/ NON GLARE FEDERAL BLUE BACKGROUND COLOR NO. 15090 PER SAE AMS-STD-595

TEXT TO BE VERIFIED PRIOR TO FABRICATION MINIMUM 3" IN HEIGHT

1" CORNER RADIUS

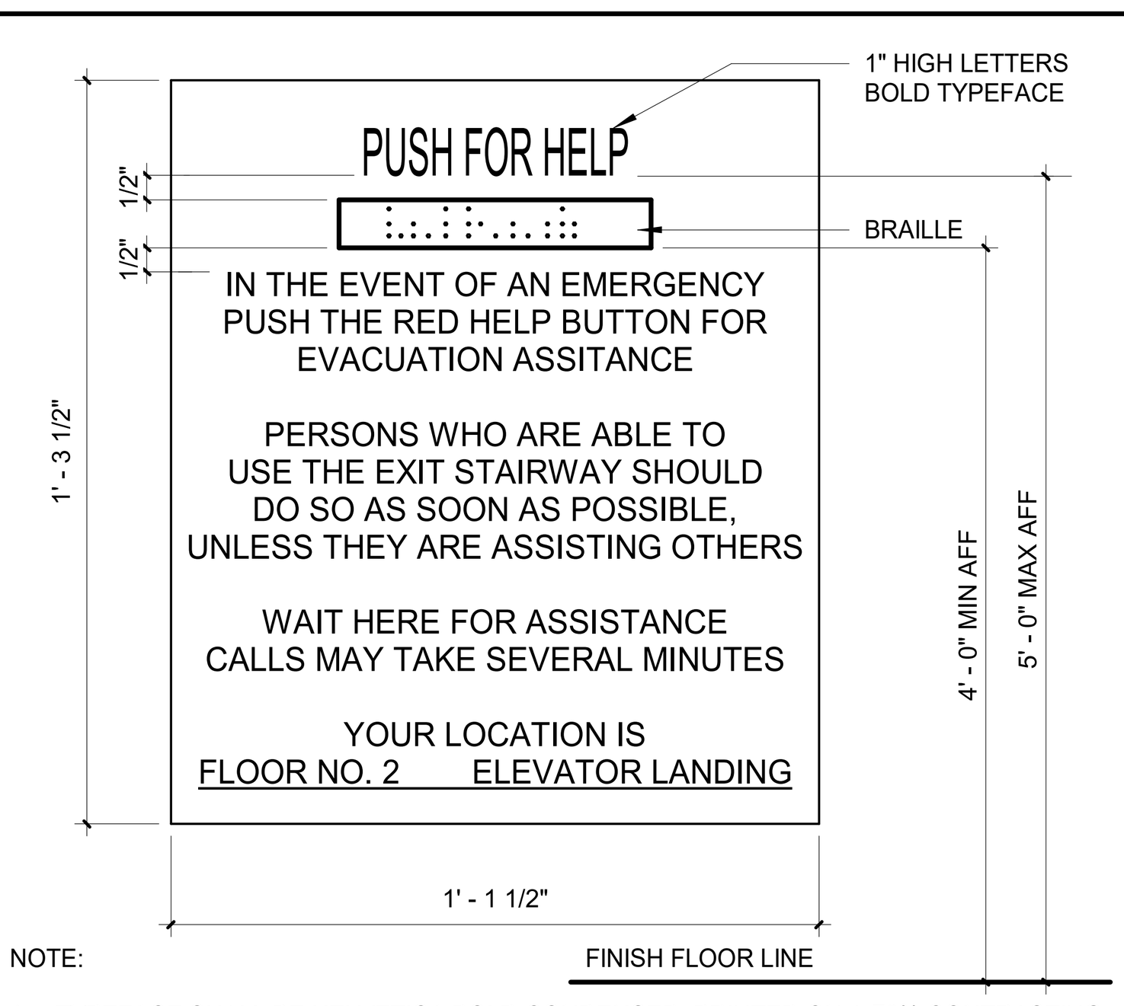
NOTE:
REF DET 13/10.2 FOR POLE MTD SIGN, DET 17/10.2 FOR WALL MTD SIGN. REFER TO SIGNAGE SCHEDULE & SITE PLAN FOR LOCATIONS.

DIRECTIONAL ACCESS SIGN | 1 1/2" = 1'-0" | 10



NOTE:
PROVIDE MECHANICALMOUNTING W/ VANDAL RESISTANT FASTNERS. PROVIDE ADHESIVE MOUNTING SYSTEM WHEN ATTACHED TO GLAZING.
REFER TO SIGNAGE SCHED FOR LOCATIONS

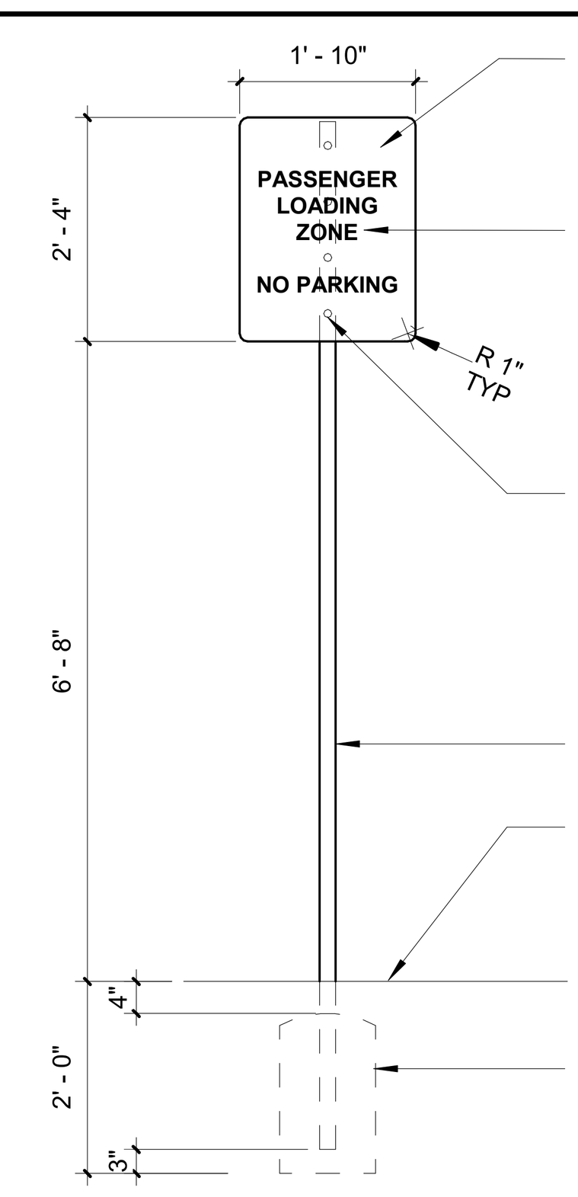
NO SMOKING SYMBOL | 3" = 1'-0" | 23



NOTE:

1. TYPEFACE SHALL BE HELVETICA BOLD CONDENSED, PRINTED ON A 70% CONTRASTING BACKGROUND IN LETTERS NOT LESS THAN 5/8" HIGH.
2. EXCEPT AT THE MAIN ENTRANCE LEVEL OF ELEVATORS, A RESCUE ASSISTANT SIGN SHALL BE POSTED ADJACENT TO EACH ELEVATOR CALL STATION AT EACH LANDING.
3. BRAILLE FONT: CALIFORNIA ROUND TOP CONTRACTED 2 BRAILLE DOTS. 1/10" OC 2/10" BETWEEN CELLS. RAISED MIN 1/40" ABOVE BACKGROUND.

RESCUE SIGN | 3" = 1'-0" | 19



0.080" THK AL SIGN PAINTED W/ BLUE REFLECTORIZED PAINT FED NO. 15090 PER SAE AMS-STD-595

PAINTED W/ WHITE REFLECTORIZED PAINT 2" HIGH LETTERS - GRAPHICS AS FOLLOWS: "PASSENGER LOADING ZONE - NO PARKING"

4 - #10 x 3/4" SELF TAPPING VANDAL PROOF SCREWS

2" DIA STD WT STL PIPE POST -- GALV

FIN GRADE OR PAVING, REFER TO SITE PLAN

1' - 0" DIA CONC FTG -- SLOPE TOP TO DRAIN

DROP-OFF SIGN | 1/2" = 1'-0" | 15

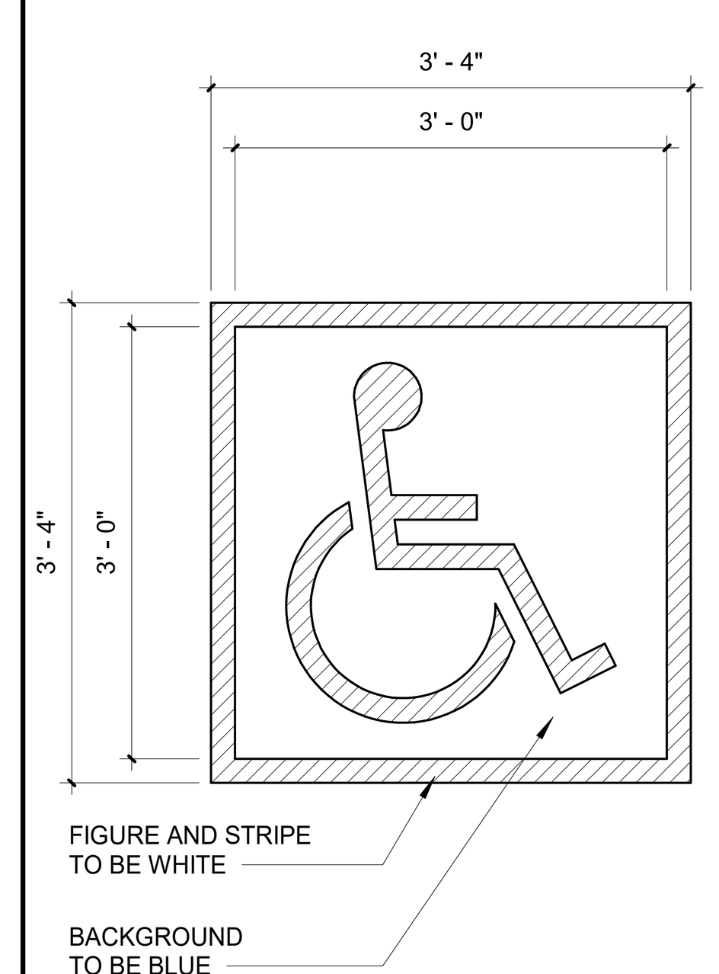


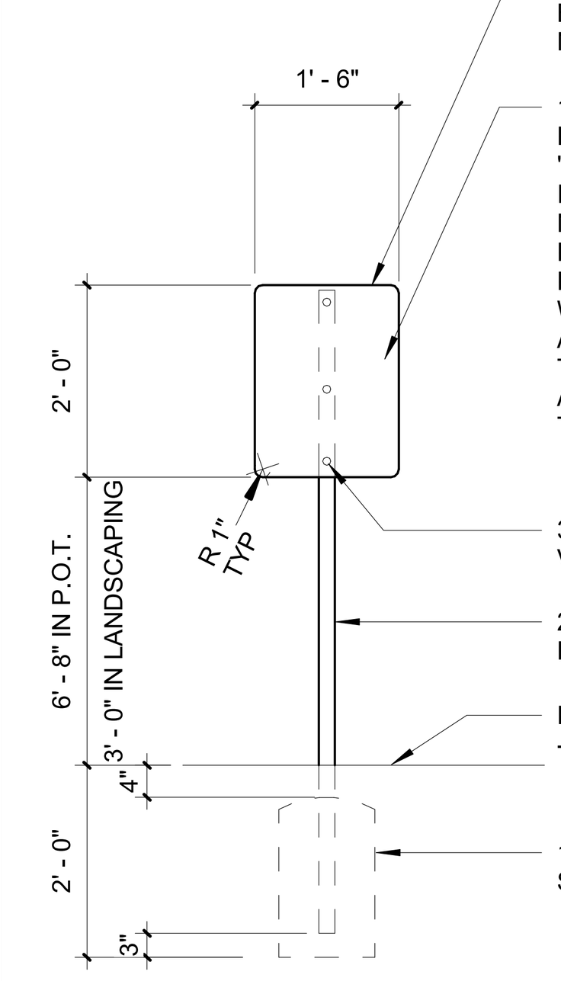
FIGURE AND STRIPE TO BE WHITE

BACKGROUND TO BE BLUE

NOTES:

1) ALL STROKES TO BE 2" WIDE W/ WHITE PAINT
2) PROVIDE 2 (TWO) COATS OF PAINT
3) BACKGROUND COLOR TO BE BLUE NO. 15090 PER SAE AMS-STD-595
4) LOCATE SYMBOL AT CENTER OF ACC PARKING STALL WHERE SHOWN ON SITE PLAN
5) INTERNATIONAL SYMBOL OF ACCESSIBILITY - REF TO CBC SEC 11B-703.7.2.1

ACCESS SIGN | 3/4" = 1'-0" | 11



0.080" THK AL SIGN PAINTED W/ BLUE REFLECTORIZED PAINT NO. 15090 PER SAE AMS-STD-595

1" HIGH WHITE REFLECTORIZED PAINTED GRAPHICS AS FOLLOWS: "UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR SPECIAL LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES WILL BE TOWED AWAY AT OWNER'S EXPENSE. TOWED VEHICLES MAY BE RECLAIMED AT _ _ _ _ * _ _ _ _ OR BY TELEPHONING _ _ _ * _ _ _ _"

3-1/8" DIA. x 3/4" SELF TAPPING VANDAL PROOF SCREWS

2" DIA STD WT STL PIPE POST - GALV

FIN GRADE OR PAVING - REF SITE PLAN

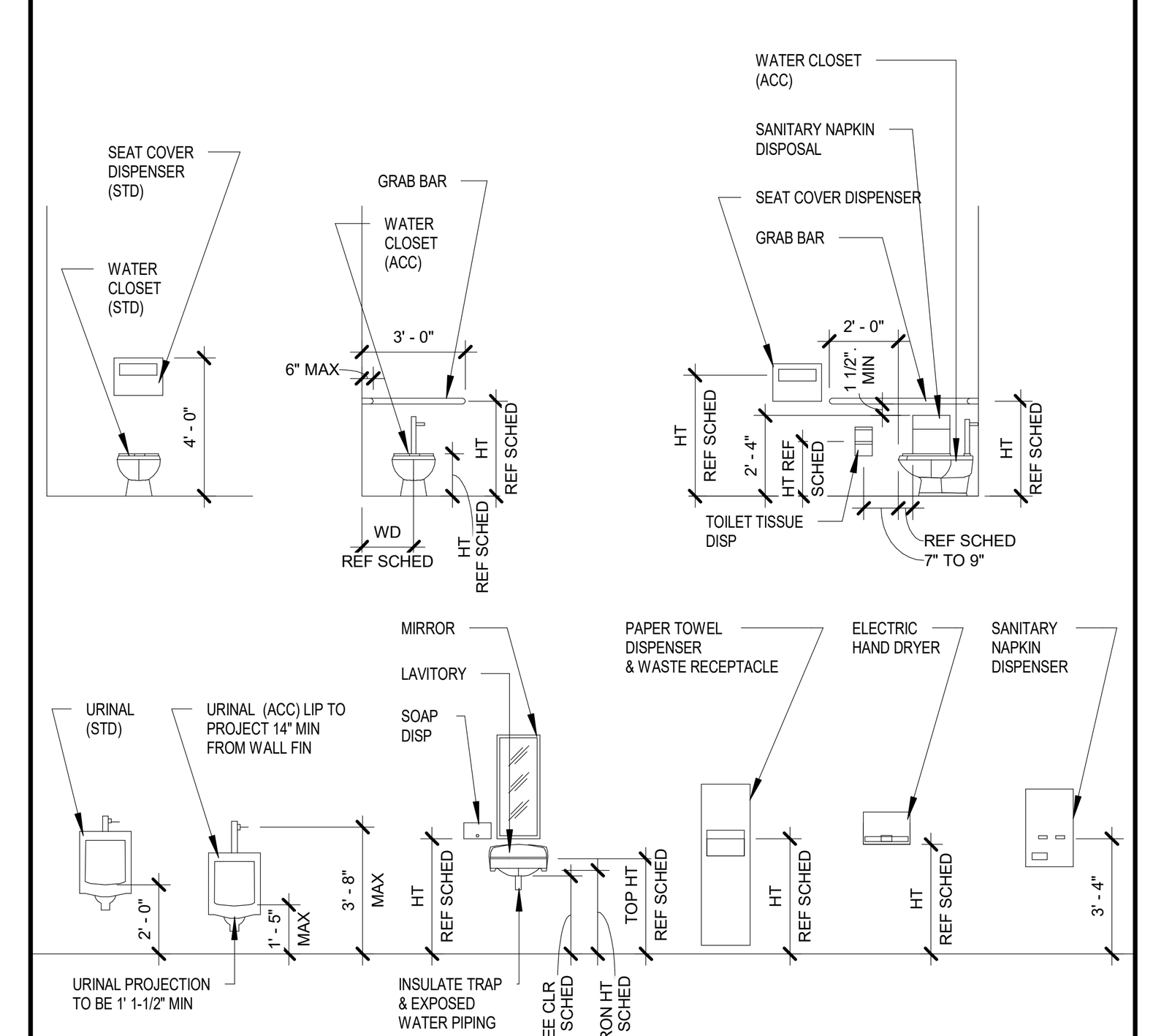
1'-0" DIA CONC FTG - SLOPE TOP TO DRAIN

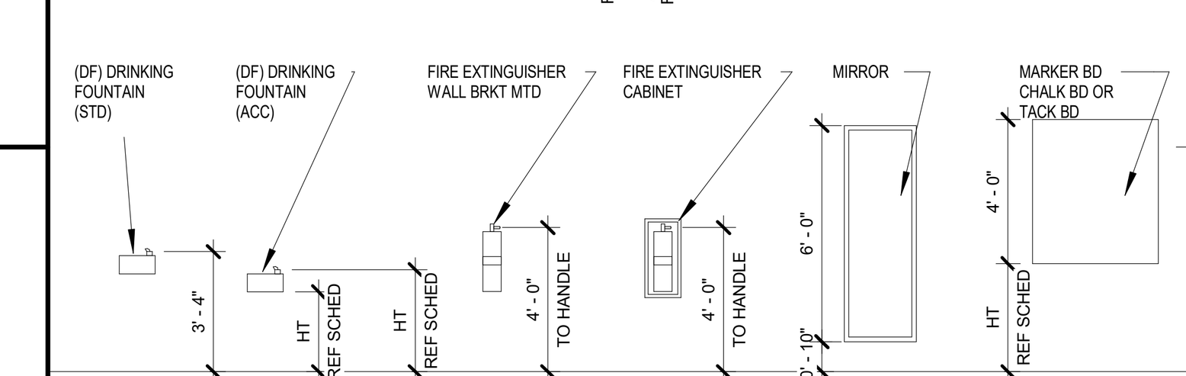
NOTE: VERIFY ALL INFORMATION PRIOR TO FABRICATION

* BLANK INFORMATION TO BE GIVEN BY OWNER AND MADE AS A PERMANENT PART OF THE SIGN.

PARKING SIGN | 1/2" = 1'-0" | 16

MOUNTING HEIGHT SCHEDULE





FIXTURE	SUGGESTED DIMENSION A	SUGGESTED DIMENSION E	SUGGESTED DIMENSION K
TOILET CENTER LINE FROM WALL	1' - 5" ~ 1' - 6"	1'-3" ~ 1' - 6"	1' - 0" ~ 1' - 3"
TOILET SEAT HEIGHT (TOP OF SEAT)	1' - 5" ~ 1' - 7"	1' - 3" ~ 1' - 5"	1' - 0" ~ 1' - 3"
GRAB BAR HEIGHT (TOP OF BAR)	2' - 9" ~ 3' - 0"	1' - 8" ~ 2' - 1"	1' - 6" ~ 1' - 8"
TOILET PAPER DISPENSER HT TO OUTLET	1' - 7" MIN	1' - 2" ~ 1' - 5"	1' -2" ~ 1' - 5"
NAPKIN DISPOSAL IN BACK OF TOILET	6" MAX	6" MAX	N / A
DISPENSER OR MIRROR HEIGHT	3' - 4" MAX	3' - 4" MAX	3' - 0" MAX
LAVATORY/SINK TOP HEIGHT	2' - 10" MAX	2' - 7" MAX	2' - 6" MAX
LAVATORY APRON CLEARANCE	2' - 5" MIN	N / A	N / A
LAVATORY/SINK KNEE CLEARANCE	2' - 3" MIN	2' - 0" MIN	2' - 0" MIN
DF BUBBLER HEIGHT	3' - 0" MAX	2' - 6" MAX	2' - 6" MAX
DF BUBBLER FROM FRONT EDGE	5" MAX	3-1/2" MAX	3-1/2" MAX
DF CONTROL FROM FRONT EDGE	6" MAX	6" MAX	6" MAX
DF KNEE CLEARANCE	2' - 3" MIN	PARALLEL APPROACH	PARALLEL APPROACH
RAMP/STAIR HANDRAIL HEIGHT	2' - 10" ~ 3' - 2"	2' - 4" MAX	2' - 4" MAX
MARKER BOARD HEIGHT	3' - 0"	2' - 6"	2' - 0"

LEGEND

A = ADULT DIMENSIONS (AGE 12 AND OVER)
E = ELEMENTARY DIMENSIONS (AGE 6 TO 11)
K = KINDERGARTEN AND PRE-SCHOOL DIMENSIONS (AGE 3 TO 5)

NOTE

1. ALL FIXTURES AND ACCESSORIES ARE ACCESSIBLE UNLESS OTHERWISE NOTED OR DIMENSIONED.
2. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
3. SEE ENLARGED TOILET PLANS FOR TOILET ACCESSORY LOCATIONS.
4. ALL ACCESSORIES ARE TO BE ACCESSIBLE WITH A MAXIMUM REACH HEIGHT OF 3'-4" FROM FLOOR TO TOP OF FUNCTIONAL POINT UNLESS OTHERWISE NOTED OR DIMENSIONED. MIRROR HEIGHT IS TO BOTTOM OF REFLECTIVE SURFACE.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT UPGRADE

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

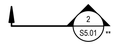
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: EV | CHECKED: EM
DATE: 03/15/21 | SCALE: As indicated
PROJECT NUMBER: 2015800

SPECIALTY DETAILS

DRAWING NUMBER: 10.2



ABBREVIATIONS AND LEGEND

010000-0002

AB	ANCHOR BOLT
ABV	ABOVE
ADDL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BN	BOUNDARY NAILING
B.O.	BOTTOM OF
BOTT	BOTTOM
BRB	BUCKLING-RESTRAINED BRACE
BRG	BEARING
BS	BOTH SIDES
BTWN	BETWEEN
C	CAMBER
CG	CENTER OF GRAVITY
CIP	CAST IN PLACE
CJ	CONTROL/CONSTRUCTION JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CSK	COUNTERSINK, COUNTERSUNK
CTR(D)	CENTER(ED)
D_B, DB	BAR DIAMETER OR BOLT DIAMETER
DBL	DOUBLE
DEMO	DEMOLITION
DET	DETAIL
DIA , Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIR	DIRECTION
DO	DITTO
DWG	DRAWING
(E)	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EMBED	EMBEDMENT
ELEC	ELECTRICAL
ELEV	ELEVATION OR ELEVATOR
EN	EDGE NAILING
E.O.	EDGE OF
EOR	ENGINEER OF RECORD
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE OR EDGE SCREW
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FN	FIELD NAILING
FND	FOUNDATION
F.O.	FACE OF
FS	FAR SIDE OR FIELD SCREW
FRMG	FRAMING
FRP	FIBER REINFORCED POLYMER
FT	FOOT OR FEET
FTG	FOOTING
Fy	YIELD STRESS
G	GIRDER
GA	GAGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GLB	GLUED-LAMINATED BEAM
HAB	HEADED ANCHOR BOLT
HD	HOLDOWN
HDR	HEADER
HGR	HANGER
HK	HOOK
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HIGH-STRENGTH
HSB	HIGH-STRENGTH BOLT
HSS	HOLLOW STRUCTURAL SECTION
HT	HEIGHT
ID	INSIDE DIAMETER

I.F.	INSIDE FACE
IN	INCH
INT	INTERIOR
IOR	INSPECTOR OF RECORD
JST	JOIST
JT	JOINT
KLF	KIPS PER LINEAR FOOT
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE
LD	DEVELOPMENT LENGTH
LDH	HOOK DEVELOPEMNT LENGTH
LFRS	LATERAL FORCE RESISTING SYSTEM
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LS	LAP SPLICE
LWC	LIGHTWEIGHT CONCRETE
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MTL	METAL
(N)	NEW
NA	NEUTRAL AXIS
NS	NEAR SIDE OR NON-SHRINK
NTS	NOT TO SCALE
NWC	NORMALWEIGHT CONCRETE
OC	ON CENTER
OD	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OH	OPPOSITE HAND
OPNG	OPENING
PDF	POWDER/POWER DRIVEN FASTENER
PJ	PANEL JOINT
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLC(S)	PLACE(S)
PLF	POUNDS PER LINEAR FOOT
PLYWD	PLYWOOD
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED OR POST TENSION
QTY	QUANTITY
RAD, R	RADIUS
REF	REFERENCE
REINF	REINFORCING
REQD	REQUIRED
(S)	"SIMPSON" STRONG TIE CO. OR "USP" W/ EQUIVALENT THIRD PARTY EVALUATION VALUES
SB	SILL BOLT
SC	SAW CUT OR SLIP-CRITICAL
SCHED	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SHTG	SHEATHING
SIM	SIMILAR
SMS	SHEET METAL SCREW
SN	SILL NAIL
SOG	SLAB ON GRADE
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STGRD	STAGGERED
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURAL
T&B	TOP & BOTTOM
T&G	TONGUE AND GROOVE
THK	THICK
THRD	THREADED
T.O.	TOP OF
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WF, W	WIDE FLANGE
WLD	WELDED
WO	WHERE OCCURS
WP	WORK POINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

⊕ REFERENCE ELEVATION OR WORK POINT

LFRS (LFRS) INDICATES THAT A DETAIL OR PORTION OF FRAMING IS A PART OF THE LATERAL FORCE RESISTING SYSTEM AND IS SUBJECT TO ADDITIONAL REQUIREMENTS OUTLINED IN THE GENERAL NOTES AND SPECIFICATIONS

TYPICAL HATCH PATTERNS USED (UNLESS NOTED OTHERWISE):

⬚	CONCRETE	▨	STEEL	▥	SOIL/EARTH
▨	MASONRY	⬚	GROUT/SAND	▨	PLYWOOD/SHEATHING

EXISTING ELEMENTS ARE SHOWN AS HALFTONE, NEW ELEMENTS ARE SHOWN AS FULL TONE UNO; EXAMPLE:

INDICATES A NEW ELEMENT

INDICATES AN EXISTING ELEMENT

SAWN LUMBER:

CONTINUOUS

BLOCKING

END OF MEMBER

REFERENCE OF SECTIONS, DETAILS & SYMBOLS

010000-0004

DETAIL REFERENCE SHOWN THUS *:

BUILDING SECTION INDICATION SHOWN THUS:

ELEVATION INDICATION SHOWN THUS:

DETAIL NOTED IS SHOWN ON SHEET S5.01, DETAIL 2

CUT IS SHOWN ON SHEET S5.01, DETAIL 2

ELEVATION IS SHOWN ON SHEET S5.01, DETAIL 2

* (ADDITIONAL INDICATORS MAY BE USED TO SHOW LOCATION OF DETAIL CUTS)

** (SHEET NUMBER MAY BE REPLACED BY A HYPHEN (-) WHEN THE REFERENCED DETAIL APPEARS ON THE SAME SHEET AS THE CALL-OUT)

DETAIL TITLE SHOWN THUS:

INDICATES THE TITLE, SCALE, AND DETAIL NUMBER ON SHEET

EXISTING CONDITIONS

020000-0000

1. SEE "AS BUILT" DRAWINGS FOR EXISTING BUILDING ITEMS NOT SHOWN OR NOTED.
2. FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO SHOP DRAWING PRODUCTION AND FABRICATION OF STRUCTURAL ELEMENTS.
3. WHERE EXISTING CONDITIONS VARY FROM THOSE SHOWN ON THESE DRAWINGS, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED PRIOR TO CONTINUED CONSTRUCTION RELATED TO SUBJECT CONDITIONS.
4. SHORE ALL EXISTING CONSTRUCTION AS REQUIRED, INCLUDING WHERE WELDING TO EXISTING STEEL FRAMING. SHORING DESIGN IS BY OTHERS.
5. ALL EXISTING CONCRETE SURFACES TO BE IN CONTACT WITH NEW CONCRETE SHALL BE CLEANED AND ROUGHENED TO 1/4" MINIMUM AMPLITUDE. USE THIRD PARTY EVALUATION APPROVED BONDING AGENT ON EXISTING CONCRETE PRIOR TO PLACING NEW CONCRETE.
6. VERIFY LOCATION OF EXISTING REBAR BEFORE FABRICATION USING NON-DESTRUCTIVE TESTING.
7. THE GENERAL CONTRACTOR SHALL COORDINATE THE WEIGHT AND SPECIFIC LOCATION OF ALL EQUIPMENT WITH THE STRUCTURAL FRAMING. IF THE EQUIPMENT DEVIATES IN WEIGHT OR LOCATION FROM THOSE INDICATED IN THE DRAWINGS, THE STRUCTURAL ENGINEER'S APPROVAL MUST BE OBTAINED PRIOR TO INSTALLATION OF THE UNITS.

STRUCTURAL SUBMITTALS

010000-0008

1. REVIEW OF SHOP DRAWINGS AND SUBMITTALS BY THE EOR IS FOR GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS.
2. SHOP DRAWINGS SHALL BE SUBMITTED TO THE EOR (ALLOW FOR A REVIEW DURATION OF 10 BUSINESS DAYS), AND SHALL CONSIST OF ELECTRONIC FILES.
3. REPRODUCTION OF STRUCTURAL PLANS AND DETAILS FOR SHOP DRAWINGS IS PROHIBITED. SUBCONTRACTOR/FABRICATOR IS TO PROVIDE INDEPENDENTLY CREATED DRAWINGS BASED ON THE STRUCTURAL PLANS AND DETAILS. SHOP DRAWINGS THAT ARE REPRODUCTIONS OF STRUCTURAL DRAWINGS WILL NOT BE REVIEWED.
4. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.
5. THE FOLLOWING LIST SUMMARIZES REQUIRED STRUCTURAL SUBMITTALS FOR THIS PROJECT. REFER TO THE SPECIFICATIONS FOR A COMPLETE LIST AND ADDITIONAL REQUIREMENTS.

GENERAL
- QUALIFICATION DATA FOR APPROVED INSTALLERS AND FABRICATORS
- CERTIFICATES OF CONFORMANCE FOR PREFABRICATED MEMBERS
- SEISMIC JOINT AND EXPANSION JOINT COVER PRODUCT DATA

CONCRETE REINFORCEMENT
- MANUFACTURER'S PRODUCT DATA, SPECIFICATIONS AND INSTALLATION PROCEDURES FOR PROPRIETARY MATERIALS AND REINFORCEMENT
- STEEL PRODUCER'S CERTIFICATES OF MILL ANALYSIS, TENSILE AND BEND TESTS
- SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT

CAST-IN-PLACE CONCRETE
- DESIGN MIX FOR EACH CONCRETE MIX
- MATERIAL TEST REPORTS
- MATERIAL CERTIFICATES FOR CEMENT, AGGREGATES AND ADMIXTURES
- SHOP DRAWINGS FOR PROPOSED LOCATIONS OF ADDITIONAL CONSTRUCTION OR CONTROL JOINTS NOT SHOWN ON THE STRUCTURAL PLANS
- MINUTES FROM PREINSTALLATION CONFERENCE

STRUCTURAL STEEL
- MANUFACTURER'S MILL CERTIFICATES
- MILL TEST REPORTS
- SHOP DRAWINGS FOR FABRICATION AND ASSEMBLY OF MEMBERS
- ERECTION PLAN SEQUENCE AND PROCEDURES
- WELDING PROCEDURE SPECIFICATIONS (WPS)
- CERTIFICATES FOR ALL WELDERS VERIFYING CURRENT AWS QUALIFICATIONS
- TEST REPORTS FOR SHOP AND FIELD WELDED AND BOLTED CONNECTIONS

STEEL DECK
- SHOP DRAWINGS INDICATING TYPE, LAYOUT, DETAILS, AND OPENINGS LARGER THAN 1'-0"

PRODUCT REPORTS

010000-0006

1. FOR ALL ITEMS IN THE CONSTRUCTION DOCUMENTS NOT NOTED WITH A SPECIFIC PRODUCT NAME OR MANUFACTURER, THE CONTRACTOR SHALL PROVIDE A PRODUCT SPECIFIED IN THE TABLE BELOW.
2. THE FOLLOWING PRODUCTS SHALL BE INSTALLED PER THE REQUIREMENTS OF THE REFERENCED PRODUCT REPORTS, UNO.
3. A PRODUCT MAY BE SUBSTITUTED FOR AN EQUIVALENT PRODUCT PER THE SCHEDULE BELOW IF APPROVED BY THE EOR AND THE BUILDING OFFICIAL.
4. PRODUCTS SPECIFIED BY TYPE ONLY MAY USE ANY PRODUCT FROM THE SCHEDULE BELOW.

TYPE	PRODUCT	ICC#	IAPMO#	LARR#
EXPANSION ANCHOR TO CONCRETE	HILTI KWIK BOLT TZ	ESR-1917	-	25701
	MKT SZ	ESR-3173	-	-
	SIMPSON STRONG-BOLT 2	ESR-3037	-	25891
	DEWALT POWER STUD+ SD1	ESR-2818	-	25787
	DEWALT POWER STUD+ SD2/SD4/SD6	ESR-2502	-	25831
ADHESIVE ANCHOR TO CONCRETE	HILTI HIT-HY 200	ESR-3187	-	25964
	HILTI HIT-RE 500 V3	ESR-3814	-	26028
	HILTI HIT-RE 100	ESR-3829	-	26027
	HILTI HIT-HY-100	ESR-3572	-	-
	SIMPSON SET-3G	ESR-4057	-	-
	SIMPSON SET-XP	ESR-2508	-	-
	SIMPSON AT-XP	-	0263	-
	DEWALT PE1000+	ESR-2583	-	25849
	DEWALT AC200+	ESR-4027	-	-
	DEWALT PURE 110+	ESR-3298	-	26035
SCREW ANCHOR TO CONCRETE	HILTI KWIK HUS-EZ	ESR-3027	-	25897
	SIMPSON TITEN HD	ESR-2713	-	-
	SIMPSON SS TITEN SCREW	-	0493	26125
	DEWALT SCREWBOLT+	ESR-3889	-	-
DROP-IN ANCHOR TO CONCRETE	DEWALT SNAKE+	ESR-2272	-	25810
UNDERCUT ANCHORS TO CONCRETE	HILTI HDA	ESR-1546	-	25939
	DEWALT ATOMIC+	ESR-3067	-	-
	DEWALT MINI-UNDERCUT+	ESR-3912	-	-
CAST-IN INTERNALLY THREADED	HILTI HCI-HD/HCI-WF	ESR-3713	-	26024
	SIMPSON BLUE BANGER HANGER	ESR-3707	-	26030
	DEWALT BANG-IT / WOOD KNOCKER	ESR-3657	-	-
CONCRETE SCREW	SIMPSON SS TITEN 2	-	0449	-
	ITW BUILDEX TAPCON	ESR-2202	-	-
	DEWALT TAPPER+	ESR-3068	-	-
SHOTPIN (POWER DRIVEN FASTENER) ***	HILTI LOW-VELOCITY	ESR-2269	-	25675
	ITW / RAMSET POWER-DRIVEN	ESR-1799	-	22668
	SIMPSON POWER-ACTUATED	ESR-2138	-	25469
	DEWALT TRACK-IT C5	ESR-3275	-	25920
	DEWALT POWER-DRIVEN	ESR-2024	-	25304
CONCRETE REINFORCING HEADED END *	HRC 555 HEADED BARS	ESR-2935	0177	25815
	LENTON TERMINATOR D14	-	0188	25893
	BAR SPLICE BUTTON HEAD	-	0331	25996
	DEXTRA BARTEC	ESR-2166	-	25884
CONCRETE REINFORCING MECHANICAL SPLICES	HRC 500 COUPLERS	ESR-2764	-	25347
	LENTON THREADED COUPLERS	-	0129	24507
	BAR SPLICE ZAP SCREWLOK TYPE 2	ESR-3517	-	25366
	BAR SPLICE BPI-GRIP XL	ESR-2299	-	25011
	DEXTRA BARTEC	ESR-1705	-	25615
	DAYTON SUPERIOR BAR-LOCK	ESR-2495	-	25342
FORM MOUNTED REINF COUPLER	DEXTRA BARTEC	ESR-1705	-	25615
	LENTON THREADED FORM SAVERS	-	0129	24507
EXPANSION ANCHOR TO GROUTED MASONRY	HILTI KWIK BOLT 3	ESR-1385	25577M	-
	HILTI KWIK BOLT TZ	ESR-3785	26057	-
	SIMPSON STRONG-BOLT 2	-	0240	25936
	DEWALT POWER STUD+ SD1	ESR-2966	-	25864
ADHESIVE ANCHOR TO GROUTED MASONRY	HILTI HIT-HY 270	ESR-4143	-	-
	HILTI HIT-HY-200	ESR-3963	26077	-
	SIMPSON SET	-	-	25279
	SIMSPON SET-XP	-	0265	25965
	SIMPSON AT-XP	-	0281	25966
	DEWALT AC100+ GOLD	ESR-3200	-	26049
SCREW ANCHOR TO GROUTED MASONRY	HILTI KWIK HUS-EZ	ESR-3056	-	25979
	SIMPSON TITEN HD	ESR-1056	-	25560
	DEWALT SCREWBOLT+	ESR-4042	-	-
MASONRY SCREW	DEWALT TAPPER+	ESR-3196	-	-
ADHESIVE ANCHOR TO BRICK	HILTI HIT-HY 270	ESR-4144	-	-
	SIMPSON SET	ESR-1772	-	25279
WELDED STUDS	NELSON STUDS	ESR-2856	-	02725
	STUD WELDING ASSOCIATES SHEAR CONNECTOR STUDS	ESR-1094	-	-
	TRU-WELD HEADED STUD ANCHORS	ESR-2577	-	24330
WELDED BAR ANCHORS	NELSON DEFORMED BAR ANCHORS	ESR-2907	-	25860
	TRU-WELD DEFORMED BAR ANCHORS	ESR-2823	-	25887
METAL DECK	VERCO DECK	-	0217	23789
	ASC STEEL ROOF DECK	ESR-1414	-	23783
	ASC STEEL FLOOR DECK	ESR-2408	-	23783
	EPIC METALS EPICORE	ESR-2047	-	25487
	CONSOLIDATED SYSTEMS ROOF DECK	ESR-2657	-	25758
	CONSOLIDATED SYSTEMS FLOOR DECK	ESR-2839	-	-
CONCRETE SLAB STUD RAILS	DECON STUD RAILS	ESR-2494	-	25395
	PEIKKO DSA/SSA SHEAR RAILS	ESR-3904	-	-
	TRU-WELD SHEAR RESISTOR STUDS	ESR-2822	-	25941
	PJ'S PUNCHING SHEAR RESISTORS	ESR-3821	-	26070
	NELSON PUNCHING SHEAR RESISTORS	ESR-1170	-	25499
	JSW STUD RAILS	ESR-3264	-	25930
SHEET METAL SCREW **	HILTI KWIK-PRO	ESR-2196	-	25678
	HILTI KWIK-FLEX	ESR-3332	-	25095
	SIMPSON X METAL SCREWS	ESR-3006	0326	25917
	PRIMESOURCE DARTS	ESR-1408	-	25904
	ITW BUILDEX TEKS	ESR-1976	-	25915
	ELCO DRIL-FLEX	ESR-3332		25095
BLIND FASTENERS TO STEEL	LNA BOXBOLT TYPE C	ESR-3217	-	-
	HOLLO-BOLT 3 PART / 5 PART	ESR-3330	-	26037
WOOD FRAMING CLIPS	SIMPSON STRONG-TIE CLIPS	ESR-2523	-	-
	USP STRUCTURAL CONNECTORS	ESR-2685	-	-
WOOD SCREWS	SIMPSON STRONG DRIVE SCREWS (SDS)	ESR-2236	-	25711
	SIMPSON SD TIMBER SCREWS (SDWS/SDWH)	-	0192	25906
	FASTENMASTER TIMBERLOK / HEADLOK / LEDGERLOK	ESR-1078	-	-

FOOTNOTES:

* ANY CONCRETE REINFORCING HEADED END COMPLYING WITH ASTM A970 MAY BE USED.

** ANY SHEET METAL SCREW COMPLYING WITH ASTM C1513, SELF-DRILLING AND TAPPING TYPE, WITH HEAD TYPE APPROPRIATE TO THE APPLICATION, MAY BE USED.

*** AT TREATED LUMBER, PROVIDE GALVANIZED SIMPSON POWDER-ACTUATED OR POWERS POWER-DRIVEN SHOTPINS IN ACCORDANCE WITH PRODUCT REPORTS.

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

010000-0003-DSA

1. THE OWNER SHALL EMPLOY ONE OR MORE DSA APPROVED SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF DSA, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
2. SEE DSA FORM DSA 103 FOR ALL REQUIRED STRUCTURAL TESTS AND SPECIAL INSPECTIONS.
3. ALL INSPECTIONS SHALL BE PERFORMED BY INDEPENDENT SPECIAL INSPECTORS. JOB SITE VISITS BY THE STRUCTURAL ENGINEER OR DSA DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR INSPECTIONS BY A SPECIAL INSPECTOR.
4. ALL INSPECTION REPORTS SHALL BE SUBMITTED TO DSA AND SEOR, AOR, CONTRACTOR AND SCHOOL DISTRICT. THE FINAL REPORT BY THE SPECIAL INSPECTOR(S) MUST CERTIFY THAT THE ENTIRE STRUCTURAL SYSTEM COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS.
5. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT THESE INSPECTIONS ARE PERFORMED.
6. WORK REQUIRING SPECIAL INSPECTION SHALL BE OBSERVED BY THE SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS PERFORMED AND AT THE COMPLETION OF WORK. CONTINUOUS INSPECTION CONSISTS OF FULL-TIME INSPECTION, PERIODIC INSPECTION CONSISTS OF PART-TIME OR INTERMITTENT INSPECTION.

GENERAL

010000-0000

1. REFER TO THE TYPICAL DETAIL SHEETS FOR TYPICAL DETAILS OF CONSTRUCTION. TYPICAL DETAILS APPLY TO ALL CONSTRUCTION UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE. WHERE CONDITIONS REQUIRE MODIFICATIONS OF A TYPICAL DETAIL, THE CONTRACTOR SHALL SUBMIT MODIFIED DETAIL FOR APPROVAL BY THE ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION. DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONSTRUCTION.
2. CONTRACTOR SHALL CONSIDER THE PROJECT SPECIFICATIONS AS PART OF THE CONTRACT DOCUMENTS. WHERE INFORMATION IS CONFLICTING, SPECIFIC DETAILS SHALL GOVERN OVER TYPICAL DETAILS WHICH SHALL GOVERN OVER GENERAL NOTES WHICH SHALL GOVERN OVER SPECIFICATIONS.
3. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL DIMENSIONS. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE OMITTED OR NOT CLEAR, CONTACT THE ARCHITECT OF RECORD OR SEOR. ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR. DIMENSIONS ARE TO THE FACE OF STUDS, AND TO THE CENTERLINE OF COLUMNS UNO.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE EOR OF ANY CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND OTHER DRAWINGS, OR EXISTING CONDITIONS NOT SHOWN OR DIFFERENT FROM THOSE SHOWN ON DRAWINGS, PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL NOT ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE SCOPE THAT IS IN CONFLICT UNTIL THE CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.
5. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN THEY DO NOT INDICATE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE CONSTRUCTION AND ALL ADJACENT PROPERTIES DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR EOR SHALL NOT INCLUDE OBSERVATION OF THE ABOVE ITEMS.
6. SUBSTITUTION REQUESTS FOR MATERIALS AND PRODUCTS SPECIFIED ON THE STRUCTURAL DRAWINGS MAY BE CONSIDERED WITH MATERIALS AND PRODUCTS HAVING EQUIVALENT OR GREATER CAPACITY AND PERFORMANCE. CURRENT EVALUATION REPORTS AND PRODUCT INFORMATION SHALL BE PROVIDED TO THE SEOR DEMONSTRATING THE REQUIRED CAPACITY AND PERFORMANCE OF THE MATERIAL TO BE SUBSTITUTED. WRITTEN APPROVAL FROM THE EOR SHALL BE OBTAINED PRIOR TO THE SUBSTITUTION OF ANY MATERIAL OR PRODUCT SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE ARCHITECT, SEOR, AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
8. ALL WORK IS NEW (N) UNLESS INDICATED AS EXISTING (E).
9. CONSTRUCTION MATERIALS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT LOADS DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION.
10. SHOP DRAWINGS SHALL BE SUBMITTED TO THE SEOR FOR REVIEW PRIOR TO FABRICATION. REFER TO THE PROJECT SPECIFICATIONS FOR SHOP DRAWING REQUIREMENTS AND SUBMITTALS. REVIEW OF SHOP DRAWINGS AND SUBMITTALS BY THE SEOR IS FOR GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. THE CONTRACTOR WILL REMAIN RESPONSIBLE FOR ALL ERRORS OF DETAILING AND FABRICATION, AND FOR CORRECT FITTING OF ALL STRUCTURAL MEMBERS, INCLUDING COORDINATION WITH OTHER TRADES. SHOP DRAWINGS AND SUBMITTALS DO NOT CONSTITUTE CHANGE ORDERS. ANY PROPOSED CHANGES TO THE STRUCTURAL DOCUMENTS MUST BE SUBMITTED IN WRITING AS A REQUEST FOR SUBSTITUTION TO THE ARCHITECT AND EOR FOR APPROVAL.
11. CORE DRILLS SHALL NOT CUT ANY REINFORCING. THE CONTRACTOR IS TO COORDINATE WORK OF ALL TRADES TO ENSURE COMPLIANCE. ALL CORE DRILLS ARE TO BE PRESENTED TO THE INSPECTOR OF RECORD (IOR) FOR VERIFICATION. THE IOR IS TO DOCUMENT CORES EXAMINED INDICATING AN ABSENCE OF REINFORCING.
12. STRUCTURAL JOINT DIMENSIONS SHOWN ON PLANS (EXPANSION, SEISMIC, SEPARATION, ETC) (WHERE OCCURS) INDICATE THE MINIMUM CLEAR DISTANCE REQUIRED. SEE PLANS, DETAILS, AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

STRUCTURAL DESIGN CRITERIA

010000-0001

1. CODES:

ALL NEW WORK SHALL BE IN CONFORMANCE WITH THE CALIFORNIA BUILDING CODE (CBC) 2019 EDITION (TITLE 24, PART 2), INCLUDING ALL AMENDMENTS. ALL STANDARDS USED SHALL BE THE LATEST VERSION APPROVED BY THE CODE ENFORCEMENT AGENCY ON THE DATE OF THE PERMIT ISSUANCE UNLESS SPECIFICALLY NOTED OTHERWISE. THE PURPOSE OF THIS CODE IS TO, IN PART, ESTABLISH THE MINIMUM REQUIREMENTS TO SAFEGUARD THE PUBLIC HEALTH, SAFETY AND GENERAL WELFARE THROUGH STRUCTURAL STRENGTH AND STABILITY. STRUCTURES DESIGNED IN ACCORDANCE WITH THE CODE ARE LIKELY TO HAVE A LOW PROBABILITY OF COLLAPSE BUT MAY SUFFER SERIOUS STRUCTURAL AND NON-STRUCTURAL DAMAGE IF SUBJECTED TO THE DESIGN EARTHQUAKE.

2. GRAVITY	
LIVE LOADS (REDUCIBLE, UNO)	
ROOF, UNIFORM	20 PSF
FLOOR(S)	
UNIFORM	100 PSF
3. RISK CATEGORY	II
4. SEISMIC	
IMPORTANCE FACTOR I_e	1.0
SITE CLASS	F
SEISMIC DESIGN CATEGORY	E
S_S	TBD
S_1	TBD
S_{DS}	1.23g
S_{D1}	1.62g
LATERAL FORCE RESISTING SYSTEM	SPECIAL CONCRETE SHEAR WALL
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE
RESPONSE MODIFICATION COEFFICIENT, R	TBD
BASE SHEAR COEFFICIENT, C_s	TBD
MAX STORY DRIFT RATIO	0.010 x STORY HEIGHT
(DSA/OSHPD) HORIZONTAL STRUCTURAL IRREGULARITIES	TBD
(DSA/OSHPD) VERTICAL STRUCTURAL IRREGULARITIES	NONE
(DSA/OSHPD) LOCATION OF SEISMIC BASE	GROUND LEVEL
5. WIND	
EXPOSURE CATEGORY	C
BASIC WIND SPEED (3 SECOND GUST)	Vult = 90 MPH Vasd = 70 MPH
INTERNAL PRESSURE COEFFICIENT, GCpi	+/-0.18

STRUCTURAL OBSERVATIONS

010000-0007

1. VISUAL OBSERVATIONS WILL BE PERFORMED AT THE DISCRETION OF THE OWNER, ARCHITECT, EOR, AND AS REQUIRED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE BUILDING CODE. VISUAL OBSERVATIONS SHALL NOT BE CONSIDERED AS A SUBSTITUTE FOR THE SPECIAL INSPECTION REQUIREMENTS.
2. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE SEOR AS TO WHEN EACH MAJOR PHASE OF CONSTRUCTION IS READY FOR OBSERVATION A MINIMUM OF FIVE BUSINESS DAYS IN ADVANCE.
3. THE FOLLOWING MAJOR PHASES OF CONSTRUCTION REQUIRE A SITE VISIT AND STRUCTURAL OBSERVATION REPORT FROM THE SEOR:
   a. FOUNDATION REBAR AND ANCHORS - PRIOR TO FIRST POUR OF CONCRETE
   b. STRUCTURAL FRAMING - AFTER ERECTION AND PRIOR TO CLOSING IN
   c. COMPLETION OF THE STRUCTURAL SYSTEM
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT NAILING, REINFORCEMENT, WELDS, CONNECTIONS, ETC. ARE VISIBLE FOR OBSERVATION WHEN THE SEOR IS ONSITE AND FOR ANY SCHEDULING DELAYS DUE TO NONCOMPLIANT ITEMS FOUND DURING THE OBSERVATION.
5. AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVERS' KNOWLEDGE, HAVE NOT BEEN RESOLVED.

STRUCTURAL SHEET INDEX

000115-0000

SHEET NUMBER	SHEET NAME
S0.01	GENERAL NOTES
S0.02	GENERAL NOTES
S1.01	TYPICAL CONCRETE DETAILS
S1.02	TYPICAL CONCRETE DETAILS
S1.03	TYPICAL CONCRETE DETAILS
S1.04	TYPICAL CMU DETAILS
S1.05	DETAILS
S2.00	FOUNDATION & ROOF FRAMING PLANS

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

miyamoto.

3150 Almaden Expressway, Suite 150
San Jose, CA 95118
MI Job NO: MI2013213

T: (408) 513-1939
miyamotointernational.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE
CHECKED: SF
DATE: 03/15/2021
SCALE: AS NOTED
PROJECT NUMBER: 2015800

GENERAL NOTES

DRAWING NUMBER: S0.01

CURTAIN WALLS & PRECAST CONCRETE ELEMENTS

034500-0000

1. THE ITEM(S) INCLUDED IN THIS SECTION ARE DESIGN-BUILD AND/OR BIDDER-DESIGNED.
2. CONTRACT DOCUMENTS INDICATE INFORMATION SUFFICIENT TO CONVEY DESIGN INTENT. AT SOME LOCATIONS THERE MAY BE INDICATIONS OF SUPPORTS AND FASTENINGS. AT OTHER LOCATIONS THERE MAY NOT BE SUCH INDICATIONS. IN BOTH INSTANCES IT IS NOT INTENDED BY ARCHITECT OR EOR TO SUPPLY CONTRACTOR WITH STRUCTURAL DESIGN CRITERIA, BUT RATHER TO SHOW WHERE SUPPORTS AND FASTENINGS APPEAR IN A GENERAL LOCATION ONLY. IF AREAS SO LOCATED ARE INADEQUATE, AND IF ADDITIONAL SUPPORTS, FASTENINGS, BRACES, AND OTHER STRUCTURAL ELEMENTS AND FEATURES ARE REQUIRED FOR THE WORK, CONTRACTOR TO PROVIDE THEM AT NO ADDITIONAL COST TO OWNER AND ADVISE ARCHITECT AND EOR OF THE NEED THEREOF.
3. AT CONNECTIONS TO STRUCTURE, PROVIDE STABILIZING ELEMENTS SUCH AS BRACES, STIFFENER PLATES, ETC., SO AS NOT TO IMPOSE ECCENTRIC LOADING, TWISTING, OR WARPING TO STRUCTURAL MEMBERS, PROVIDE MATERIAL AND INSTALL STABILIZING ELEMENTS AT NO ADDITIONAL COST TO OWNER.
4. DESIGN MEMBERS AND CONNECTIONS (INCLUDING THOSE TO STRUCTURAL FRAMING) AND PROVIDE FOR LATERAL RESTRAINT COMPLYING WITH APPLICABLE GOVERNING CODE AND CONTRACT DOCUMENTS.
5. PROVIDE ADEQUATE EXPANSION, CONTRACTION AND SEISMIC SEPARATION BETWEEN SUPPORTING STRUCTURE AND CURTAIN WALLS, WINDOW WALLS, OR STOREFRONTS.
6. SUBMIT SHOP DRAWINGS AND STRUCTURAL CALCULATIONS SIGNED BY AND BEARING THE SEAL OF A REGISTERED CIVIL ENGINEER TO ARCHITECT (EOR) FOR REVIEW AND GOVERNING CODE AUTHORITY FOR APPROVAL.
7. SLAB EDGES ARE NOT DESIGNED TO STRUCTURALLY SUPPORT CURTAIN WALL CONNECTIONS. ANY CONNECTION TO SLAB EDGE SHALL BE ENGINEERED AND DETAILED BY CURTAIN WALL CONTRACTOR (SEE NOTES 2 AND 3).

FIRE SPRINKLER ANCHORAGE

230000-0000

1. THE ITEM(S) INCLUDED IN THIS SECTION ARE DESIGN-BUILD AND/OR BIDDER-DESIGNED.
2. FIRE SPRINKLER CONTRACTOR SHALL PROVIDE CALCULATIONS, DETAILS AND PLANS OF ALL FIRE SPRINKLER ANCHORAGE. VERTICAL LOADS ARE PER BUILDING CODE AND LATERAL LOADS ARE PER NFPA 13.
3. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE HANGER AND BRACING ANCHORAGE LOCATIONS WITH THE STRUCTURAL DRAWINGS AND ROOF AND FLOOR FRAMING SYSTEMS BY OTHERS.
4. SUBMIT PLANS DETAILS AND CALCULATIONS STAMPED AND SIGNED BY A LICENSED FIRE PROTECTION CONTRACTOR FOR REVIEW PRIOR TO FABRICATION.

CONCRETE MASONRY

042200-0000

1. CONCRETE MASONRY UNITS (CMU) SHALL DEVELOP THE FOLLOWING MINIMUM 28 DAY PRISM COMPRESSIVE STRENGTHS:

LOCATION	f'm	CONCRETE MASONRY UNITS	GROUT
ALL CMU, UNO	3000 PSI	3000 PSI	3000 PSI

2. CONCRETE BLOCK SHALL CONFORM TO ASTM C90 NORMALWEIGHT. USE OF LIGHTWEIGHT BLOCK REQUIRES PRIOR WRITTEN APPROVAL BY THE EOR.
3. MORTAR SHALL BE TYPE S MORTAR.
4. VERTICAL REINFORCING SHALL BE FULL HEIGHT OF WALL AND SHALL BE BRACED AT 6'-8" MAXIMUM TO PREVENT MOVEMENT WHILE GROUTING.
5. HORIZONTAL REINFORCING SHALL BE IN BOND BEAM UNITS AND TIED SECURELY TO VERTICAL REINFORCING.
6. DOWELS, ANCHORS, AND OTHER EMBEDDED ITEMS SHALL BE TIED SECURELY IN PLACE TO PREVENT MOVEMENT WHILE GROUTING. WET SETTING OR STABBING IS NOT ALLOWED.
7. LAYOUT OF MASONRY BLOCK UNITS SHALL BE PER ARCHITECTURAL DRAWINGS. BLOCK MODULES / MORTAR JOINTS SHOWN ON THESE DRAWINGS ARE FOR PRESENTATION PURPOSES ONLY, AND NOT INTENDED TO SUPERCEDE ARCHITECTURAL DESIGN REQUIREMENTS. BLOCK SHALL BE PLACED IN RUNNING BOND AND SHALL BE 8x8x16 NOMINAL UNITS, UNO. WHERE BLOCK IS REQUIRED TO BE PLACED IN STACK BOND (SEE ARCH), OPEN-ENDED UNITS (I.E., "SPEED BLOCK") SHALL BE USED.
8. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SAFETY OF LIFT HEIGHT FOR OPEN-ENDED OR FIELD MODIFIED BLOCKS.
9. PROVIDE VERTICAL CONTROL JOINTS IN CMU WALLS AS SHOWN ON PLAN. UNLESS NOTED OTHERWISE, VERTICAL CONTROL JOINTS SHALL OCCUR AT:
    a. 25'-0"OC MAXIMUM ALONG LENGTH OF WALL
    b. A SPACING NOT EXCEEDING 1.5 TIMES THE WALL HEIGHT
    c. CHANGES IN WALL HEIGHT
    d. CHANGES IN WALL THICKNESS
    e. FLOOR AND ROOF JOINTS
    f. 24" PAST ONE SIDE OF OPENINGS LESS THAN 6'-0" WIDE
    g. 24" PAST BOTH SIDES OF OPENINGS GREATER THAN OR EQUAL TO 6'-0" WIDE
    h. CORNERS AND INTERSECTIONS, WITHIN A DISTANCE EQUAL TO HALF THE CONTROL JOINT SPACING
10. FILL ALL CELLS WITH GROUT. MAXIMUM GROUT LIFTS SHALL NOT EXCEED 8'-0" AND CLEANOUTS AT THE BOTTOM OF ALL CELLS SHALL BE USED UNLESS THE LIFT IS 4'-0" OR LESS. GROUT FOR EACH POUR SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A BLOCK COURSE EXCEPT AT THE FINAL COURSE. ALL GROUT SHALL BE THOROUGHY CONSOLIDATED BY VIBRATING IMMEDIATELY AFTER PLACING. SHAKING OR RODDING REBAR IS NOT ALLOWED. HORIZONTAL REINFORCING SHALL BE FULLY EMBEDDED IN GROUT IN AN UNINTERRUPTED POUR.
11. (DSA) FILL ALL CELLS WITH GROUT. LIFTS SHALL BE 4'-0" MAX UNLESS HIGH-LIFT GROUTING IS USED. GROUT FOR EACH POUR SHALL BE STOPPED 1 1/2" BELOW TOP OF BLOCK EXCEPT AT THE FINAL COURSE. ALL GROUT SHALL BE THOROUGHLY CONSOLIDATED BY VIBRATING IMMEDIATELY AFTER PLACING. HORIZONTAL REINFORCING SHALL BE FULLY EMBEDDED IN GROUT IN AN UNINTERRUPTED POUR. DSA APPROVAL IS REQUIRED FOR HIGH-LIFT GROUTING. ALL HIGH-LIFT GROUTING SHALL CONFORM TO DSA IR 21-2 AND CBC 2019 SECTION 2104A.1.3.1.1.1.2

WELDING

051200-0006

1. WELDING PROCEDURES, ELECTRODES AND WELDER QUALIFICATIONS SHALL CONFORM TO AWS AND AISC REQUIREMENTS.
2. ALL WELDERS SHALL HAVE EVIDENCE OF PASSING THE AWS STANDARD QUALIFICATION TESTS, AND SHALL BE CERTIFIED FOR THE WORK THEY ARE PERFORMING.
3. PROJECT WELDING SHALL BE PERFORMED ONLY IN ACCORDANCE WITH WELDING PROCEDURE SPECIFICATIONS (WPS) SUBMITTED BY THE CONTRACTOR AND REVIEWED BY THE EOR AND PROJECT WELDING INSPECTOR. THE WPS SHALL BE IN ACCORDANCE WITH THE APPLICABLE AWS.
4. WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED PER AWS D1.1 USING E70XX ELECTRODES UNLESS OTHERWISE NOTED.
5. ALL FULL PENETRATION WELDS SHALL BE ULTRA-SONIC TESTED PER AWS D1.1 AND D1.8 REQUIREMENTS AS APPLICABLE.
6. ALL GROOVE OR BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS, UNO. ALL EXPOSED BUTT WELDS SHALL BE GROUND SMOOTH.
7. ALL EXPOSED WELDS ON ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL COMPLY WITH AISC CODE OF STANDARD PRACTICE, SECTION 10.
8. FIELD WELDS HAVE BEEN INDICATED WHERE THEY ARE EXPECTED TO OCCUR. THE CONTRACTOR SHALL DETERMINE THE ACTUAL FIELD WELDING NECESSARY TO COMPLETE THE PROJECT AND INCLUDE ALL ASSOCIATED COSTS WITHIN THE BASE BID.

METAL DECK

053000-0000

1. SEE TYPICAL DETAILS FOR REINFORCING OF DECK AROUND OPENINGS. CONTRACTOR SHALL COORDINATE SIZE AND LOCATIONS OF OPENINGS WITH THE VARIOUS TRADES. NO LOADS SHALL BE HUNG FROM DECK WITHOUT APPROVAL OF EOR.
2. FLOOR AND ROOF DECK IS DESIGNED FOR UNSHORED CONSTRUCTION, UNO. MAINTAIN 3 SPAN CONDITION WHEREVER POSSIBLE (2 SPAN MIN) EXCEPT AT STAIR LANDING AND WHERE NOTED OTHERWISE ON PLANS.
3. PROVIDE 2" MINIMUM BEARING AT ALL SUPPORTS. END LAPS OF METAL DECK SHALL BE A MINIMUM OF 2" AND SHALL OCCUR ONLY OVER SUPPORTS. DECK SHALL BE LAID OUT SO THAT A LOW FLUTE FALLS ON EACH PARALLEL SUPPORT.
4. SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL SHOW TYPE OF DECK, LAYOUT OF DECK, THE SIZE AND LOCATION OF ANY OPENINGS OF WIDTH GREATER THAN 1'-0", AND ATTACHMENT METHOD.
5. ALTERNATES TO TYPE OF DECK AND FASTENING MAY BE USED WITH THE APPROVAL OF THE EOR. DECK PROPERTIES SHALL BE EQUAL TO OR GREATER THAN THOSE SHOWN ON THE PLANS. ANY DECK OR METHOD OF FASTENING SHALL HAVE AN EVALUATION REPORT APPROVING THE DECK FOR THE APPLICATION.
6. METAL DECK WITH CONCRETE FILL SHALL HAVE POSITIVE VENTING. DO NOT EMBED PIPES, SLEEVES, CONDUIT, ETC IN CONCRETE TOPPING, UNO.
7. WELDING OF METAL DECK SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) D1.3.

LEAN CONCRETE FILL

033100-0006

1. LEAN CONCRETE SHALL ONLY BE USED WHERE SPECIFIED IN THE DRAWINGS.
2. MIXING AND PLACING OPERATIONS SHALL CONFORM TO ACI 229R.
3. 28-DAY COMPRESSIVE STRENGTH:

WHERE SUPPORTING FOOTINGS	300 PSI
OTHER	100 PSI

4. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D4832.

SHORING AND EXCAVATIONS

010000-0009

1. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, APPROVALS, PERMITS, INSTALLATION AND MONITORING OF ALL TEMPORARY SHORING AND BRACING AS REQUIRED TO SUPPORT EXISTING FRAMING WHERE SUPPORT ELEMENTS (BEAMS, COLUMNS, AND BEARING WALLS) ARE TO BE REMOVED, EXCAVATIONS, AND WHERE INDICATED IN THE DESIGN DOCUMENTS.
2. DESIGN LOADS FOR SHORING AND BRACING OF FRAMING SHALL BE INDEPENDENTLY DETERMINED, BUT NOT LESS THAN THE DEAD LOADS AS STATED IN STRUCTURAL DESIGN CRITERIA WHERE NOTED.
3. TEMPORARY SOIL CUTS SHALL NOT EXCEED SLOPES RECOMMENDED IN THE GEOTECHNICAL REPORT, NOR THOSE SHOWN ON THE SHORING DRAWINGS FOR CONSTRUCTION OF FOUNDATIONS.
4. EXCAVATIONS AND FOUNDATION-RELATED SHORING SHALL BE PERFORMED UNDER THE CONTINUOUS INSPECTION AND APPROVAL OF THE GEOTECHNICAL ENGINEER. THE DESIGN OF SUCH SHALL BE BASED UPON RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE FAMILIAR WITH ALL DATA THEREIN AND SHALL KEEP A COPY OF THE REPORT AT THE JOB SITE AT ALL TIMES.
5. THE STRUCTURAL ENGINEER RESPONSIBLE FOR THE SHORING DESIGN (HEREAFTER CALLED THE SHORING ENGINEER) SHALL MAKE PERIODIC VISITS TO THE JOB SITE FOR THE PURPOSE OF OBSERVING THE INSTALLATION OF THE SHORING SYSTEM. OBSERVATIONS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE FOLLOWING:
    a. PRIOR TO THE START OF INSTALLATION, MEET WITH THE GEOTECHNICAL ENGINEER AND SHORING CONTRACTOR TO REVIEW ALL ASPECTS OF THE DESIGN AND INSTALLATION OF THE SHORING.
    b. REVIEW OF CONDITIONS AT COMPLETION OF EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE SHORING ENGINEER AT LEAST 48 HOURS PRIOR TO EACH OF THE ABOVE REQUIRED OBSERVATIONS.
6. WHERE MONITORING OF SHORING IS INDICATED IN THE DESIGN DOCUMENTS, CONTROL POINTS SHALL BE ESTABLISHED BY A LICENSED SURVEYOR TO MONITOR ANY HORIZONTAL AND VERTICAL MOVEMENTS OF THE SHORING. INITIAL READINGS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL, AND WEEKLY DATA SHALL BE SUBMITTED AS WORK PROGRESSES AND THROUGHOUT THE CONSTRUCTION PERIOD. ADDITIONAL READINGS SHALL BE OBTAINED WHEN REQUESTED BY THE BUILDING OFFICIAL, SHORING ENGINEER OR GEOTECHNICAL ENGINEER. IF HORIZONTAL OR VERTICAL MOVEMENT EXCEEDS THE ALLOWED AMOUNT, THE GEOTECHNICAL ENGINEER, SHORING ENGINEER AND EOR SHALL EVALUATE SUCH MOVEMENT AND RECOMMEND CORRECTIVE MEASURES, IF NECESSARY, BEFORE WORK IS CONTINUED.

DESIGN-BUILD FOUNDATION/ANCHORAGE SYSTEM

033100-0003

1. THE ITEM(S) INCLUDED IN THIS SECTION ARE DESIGN-BUILD AND/OR BIDDER-DESIGNED.
2. THE FOUNDATION CONTRACTOR SHALL PROVIDE CALCULATIONS, PLANS, AND DETAILS OF COMPLETE FOUNDATION/ANCHORAGE SYSTEM IN CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND THE BUILDING CODE FOR THE DESIGN LOADS GIVEN.
3. SUBMIT PLANS AND CALCULATIONS STAMPED AND SIGNED BY A CIVIL ENGINEER LICENSED IN THE STATE OF CALIFORNIA FOR REVIEW PRIOR TO FABRICATION.

CONCRETE PILES

033100-0002

1. USE 1/2"ø ASTM A416-68 GRADE 270 "LOWLAX" STRANDS; A = 0.153" SQ IN.
2. INITIAL TENSION: TBD #/STRAND. EFFECTIVE PRESTRESS: TBD PSI.
3. CONCRETE STRENGTH:
    F'c = 4000 PSI @ TRANSFER
    F'c = 7000 PSI @ 28 DAYS
4. FACTORED DESIGN LOAD: TBD
5. PROVIDE ADDITIONAL MILD REINFORCING AS REQUIRED TO PROVIDE REQUIRED CAPACITY. DUCTILE TIES CONFORMING TO THE BUILDING CODE TO BE DESIGNED BY PILE MANUFACTURER.
6. UNLESS PRESTRESSED STRANDS ARE DEVELOPED INTO PILE CAPS, USE ONLY THE MILD STEEL TO DEVELOP THE MAXIMUM MOMENT.
7. PLACEMENT OF PILES SHALL CONFORM TO THE PROJECT GEOTECHNICAL REPORT AND SHALL BE UNDER THE CONTINUOUS OBSERVATION BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. FINAL PILE DEPTHS TO BE DETERMINED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
8. GROUT SHALL BE MASTERFLOW #928 OR EQUAL.
9. WIRE SHALL CONFORM TO ASTM A82.
10. SEE SPECIFICATIONS FOR INDICATOR PILE AND TEST PILE REQUIREMENTS.
11. PRECAST PILE MANUFACTURER SHALL BE "KIE-CON" OR EQUIVALENT.
12. PILE MANUFACTURER TO PROVIDE PILE CUTOFF DETAIL, STAMPED AND SIGNED BY A CALIFORNIA LICENSED ENGINEER, FOR REVIEW AS REQUIRED.

POST-INSTALLED ANCHOR TESTING

030500-0000-DSA/OSHPD

1. ALL POST-INSTALLED ANCHORS ARE TO BE TENSION TESTED WITH THE EXCEPTION THAT TORQUE TESTING IS ALLOWED IF THE ANCHORS ARE SPECIFICALLY DESIGNED AS TORQUE CONTROLLED.
2. TEST QUANTITY OF POST-INSTALLED ANCHORS AS NOTED BELOW:

APPLICATION	QUANTITY
NON-STRUCTURAL (EQUIPMENT ANCHORAGE, ETC.)	50%
STRUCTURAL	100%

3. APPLY PROOF TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH AND APPLY LOAD.
4. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE INSPECTOR.
5. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING OR RESTRICTED FROM A CONCRETE SHEAR CONE TYPE FAILURE MECHANISM.
6. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
7. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
    a. HYDRAULIC RAM METHOD: ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST, E.G. AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT.
    b. TORQUE WRENCH METHOD: ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE MANUFACTURER RECOMMENDED TORQUE WITHIN 1/2 TURN OF THE NUT.
        EXCEPTIONS:
        i. WEDGE OR SLEEVE TYPE: ONE-QUARTER TURN OF THE NUT FROM 3/8" SLEEVE ANCHOR ONLY.
        ii. THREADED TYPE: ONE-QUARTER TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
8. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE NOT PREVIOUSLY TESTED UNTIL TWENTY CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY. IF THE ANCHORS ARE USED FOR THE SUPPORT AND BRACING OF NON-STRUCTURAL COMPONENTS (PIPE, DUCT OR CONDUIT), THE TWENTY SHALL BE ONLY THOSE ANCHORS INSTALLED BY THE SAME TRADE.
9. RE-USE OF SCREW ANCHORS OR HOLES IS NOT PERMITTED.
10. AN ACI-CRSI CERTIFIED ADHESIVE ANCHOR INSTALLER IS REQUIRED FOR THE INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL AND OVERHEAD CONDITIONS.
11. TEST LOADS:

ANCHOR		LOAD (LBS)	TORQUE (FT-LBS)
TYPE	SIZE (IN)		

STRUCTURAL STEEL

051200-0000

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), AS CONTAINED IN THE "AISC MANUAL OF STEEL CONSTRUCTION". ALL WORK SHALL BE IN CONFORMANCE WITH THE TESTING, INSPECTION, QUALIFICATION, AND QUALITY ASSURANCE PROVISIONS AS REQUIRED BY THE BUILDING CODE AND ANY APPLICABLE STANDARDS. THESE STANDARDS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"; AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", AWS D1.1 "STRUCTURAL WELDING CODE - STEEL", AWS D1.8 "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT", AND RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS". CONFORMANCE TO SUPPLEMENTS TO THESE STANDARDS, IF PUBLISHED ON OR BEFORE THE DATE OF PERMIT ISSUANCE, IS ALSO REQUIRED. ALTHOUGH THESE CONTRACT DOCUMENTS INCLUDE GENERAL REFERENCES TO CODES AND STANDARDS, AND REFERENCES TO OR INCLUSIONS OF SPECIFIED PROVISIONS, OMISSIONS OF ANY APPLICABLE CODE, STANDARD, OR PROVISION DOES NOT RELIEVE THE GENERAL CONTRACTOR FROM COMPLIANCE TO THE APPLICABLE REQUIREMENTS. COORDINATION OF QUALITY CONTROL AND QUALITY ASSURANCE IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
2. ALL STRUCTURAL STEEL SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND SHALL BE LEFT IN PLACE UNTIL OTHER MEANS IS PROVIDED TO ADEQUATELY BRACE THE STRUCTURE.
3. STRUCTURAL STEEL MATERIALS/GRADES, UNO:

SHAPE	MATERIAL / GRADE
WIDE FLANGE & TEES	ASTM A992
PLATES, ANGLES, CHANNELS, THREADED RODS (UNO)	ASTM A36
HIGH-STRENGTH PLATE	ASTM A572, GRADE 50
SQUARE OR RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS)	ASTM A500, GRADE C (Fy = 50 KSI) OR ASTM A1085
ROUND HOLLOW STRUCTURAL SECTIONS (HSS)	ASTM A500, GRADE C (Fy = 46 KSI) OR ASTM A1085
PIPES	ASTM A53 TYPE E OR S, GRADE B (Fy = 35 KSI)
MACHINE BOLTS (MB)	ASTM A307
WELDED HEADED STUDS	ASTM A108
THREADED RODS FOR ANCHOR BOLTS	ASTM F1554, GRADE 55

    a. EXCEPT AS OTHERWISE NOTED, ALL BOLTS SHALL BE HIGH-STRENGTH BOLTS.
    b. WHERE WELDING TO GRADE 55 THREADED ANCHOR RODS IS REQUIRED, USE ASTM F1554 GRADE 55 WITH SUPPLEMENT S1.
4. ALL CONNECTIONS NOT SHOWN SHALL CONFORM TO THE "AISC MANUAL OF STEEL CONSTRUCTION" AND SHALL BE SUBMITTED ON SHOP DRAWINGS FOR REVIEW BY EOR PRIOR TO FABRICATION.
5. ALL WELDED HEADED STUDS, THREADED STUDS, AND DEFORMED BARS SHALL BE NELSON, OR EQUIVALENT, AND WELDED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS BY CERTIFIED WELDERS SO AS TO FULLY DEVELOP THE TENSILE CAPACITY OF THE CONNECTOR.
6. BOLTS WITH UPSET THREADS ARE NOT ALLOWED. USE THE APPROPRIATE NUT AND WASHER TYPE FOR THE SPECIFIED BOLT.
7. ALL STEEL FABRICATION SHALL BE PERFORMED BY A LICENSED FABRICATOR.
8. BEAMS NOT SPECIFIED WITH CAMBER SHALL HAVE MILL CAMBER PLACED IN UPWARD POSITION.
9. ALL STRUCTURAL STEEL AND MISCELLANEOUS STEEL PERMANENTLY EXPOSED TO THE ELEMENTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION UNLESS A WEATHERPROOF COATING IS SPECIFIED BY THE ARCHITECT, UNO. STAINLESS AND WEATHERING STEELS, WHERE SPECIFIED, ARE EXEMPT FROM THIS REQUIREMENT. GALVANIZED SURFACES SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE REPAIRED AS NECESSARY. ALL ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL COMPLY WITH AISC CODE OF STANDARD PRACTICE, SECTION 10.
10. SEE ARCHITECTURAL DRAWINGS FOR NAILER HOLES, WELDED STUDS OR OTHER ITEMS NOT SHOWN IN THESE DRAWINGS.
11. WHERE STEEL IS EMBEDDED IN CONCRETE OR MASONRY, PROVIDE HOLES AS REQUIRED FOR PASSAGE OF CONTINUOUS REINFORCING BARS WHERE INDICATED ON DRAWINGS.
12. DO NOT CUT HOLES IN STRUCTURAL STEEL WITHOUT APPROVAL OF THE EOR.
13. PLACE NON-SHRINK OR DRYPACK GROUT UNDER ALL BASEPLATES AND ALLOW TO CURE UNTIL SPECIFIED STRENGTH IS REACHED BEFORE APPLYING LOADS.

HIGH-STRENGTH BOLTS

051200-0005

1. JOINT ASSEMBLIES USING HIGH-STRENGTH BOLTS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "AISC (RCSC) SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS".
2. ALL HIGH-STRENGTH BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325 OR A490, OR GRADE F1852, TYPE 1, W/ THREADS INCLUDED (N).
3. NUTS SHALL CONFORM TO ASTM A563 AND WASHERS SHALL CONFORM TO ASTM F436.
4. PAINT IS PROHIBITED ON CONTACT SURFACES UNLESS NOTED OTHERWISE. CONTACT SURFACES OF BOLTED PARTS SHALL BE DESCALED AND FREE OF DIRT, OIL, BURRS, PITS, AND OTHER DEFECTS WHICH PREVENT SOLID SEATING OF PARTS.
5. ALL HIGH-STRENGTH BOLTS SHALL BE TIGHTENED TO THE AISC SNUG TIGHT CONDITION UNLESS SPECIFIED AS SLIP-CRITICAL.
6. BOLTS IN "X" CONNECTIONS SHALL HAVE THE THREADS EXCLUDED FROM THE SHEAR PLANE. BOLTS IN "N" CONNECTIONS MAY HAVE THE THREADS INCLUDED IN THE SHEAR PLANE. CONNECTION TYPES ARE INDICATED AFTER THE BOLT GRADE (A325X FOR EXAMPLE). HIGH-STRENGTH BOLTS ARE "N" BEARING CONNECTIONS, UNLESS NOTED OTHERWISE.
7. SLIP-CRITICAL BOLTS SHALL HAVE CLASS "A" FAYING SURFACES. SLIP-CRITICAL JOINT ASSEMBLIES SHALL BE FULLY PRE-TENSIONED BY TURN-OF-NUT TIGHTENING, TENSION CONTROL CALIBRATED WRENCH TIGHTENING, TWIST-OFF BOLTS CONFORMING TO ASTM F3125 GRADE F1852, OR BY DIRECT TENSION INDICATOR TIGHTENING CONFORMING TO ASTM F959.

STRUCTURAL CONCRETE

033100-0000

1. CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH ACI 318 AND ACI 301 AND PROJECT SPECIFICATIONS.
2. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES, HOPPERS AND VERTICAL CHUTES OR TRUNKS SHALL BE USED. CHUTES OR TRUNKS SHALL BE OF VARIABLE LENGTHS SO THAT FREE UNCONFINED FALL OF CONCRETE DOES NOT EXCEED SIX FEET. A SUFFICIENT NUMBER OF CHUTES OR TRUNKS SHALL BE USED TO ENSURE THE CONCRETE IS KEPT LEVEL AT ALL TIMES.
3. CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED BY REMOVING THE ENTIRE SURFACE TO EXPOSE CLEAN AGGREGATE SOLIDLY EMBEDDED IN THE MORTAR MATRIX. LOCATIONS OF CONSTRUCTION JOINTS NOT SHOWN ON THESE PLANS SHALL BE SUBMITTED FOR APPROVAL TO THE EOR PRIOR TO PLACING ANY CONCRETE.
4. STRUCTURAL CONCRETE SHALL MEET THE FOLLOWING DESIGN CRITERIA:

LOCATION	MIN 28-DAY COMP STRENGTH	CONC TYPE	MAX AGGREGATE SIZE	MAX W/C RATIO
FOUNDATION	3000 PSI	NWC	1 1/2"	0.55
INTERIOR SLAB ON GRADE NOT EXPOSED TO WEATHER OR RECEIVING FLOORING FINISH	4000 PSI	NWC	1"	0.50
FILL OVER METAL DECK	3000 PSI	LWC	1"	0.50
ALL OTHER STRUCTURAL CONCRETE NOT NOTED ABOVE	3000 PSI	NWC	1"	0.50

    a. MAXIMUM AIR DRY UNIT WEIGHT OF LIGHTWEIGHT CONCRETE SHALL NOT EXCEED 115 PCF, UNLESS APPROVED BY EOR.
    b. WHEN THE USE OF PLASTICIZER (ASTM C1017, TYPE I OR II) OR WATER REDUCER (ASTM C494, TYPE F OR G) IS USED, MAXIMUM SLUMP SHALL BE 4" PRIOR TO ADMIXTURE AND 8" INCLUDING ADMIXTURE AT THE POINT OF DELIVERY. IN THE ABSENCE OF PLASTICIZER AND WATER REDUCER, SLUMP AT THE POINT OF DELIVERY SHALL NOT EXCEED 4".
    c. W/C RATIO INDICATES WATER TO CEMENTITIOUS MATERIALS RATIO.
    d. FOR INTERIOR SLABS ON GRADE AND ALL OTHER SLABS RECEIVING ADHERED FLOORING FINISHES (I.E., GLUED, ETC.), THE MAXIMUM W/C RATIO SHALL NOT EXCEED 0.46. CURING COMPOUNDS USED ON CONCRETE THAT IS TO RECEIVE FINISHES SHALL BE COMPATIBLE WITH TILE AND ADHESIVES OR GROUTS IN ACCORDANCE WITH MANUFACTURER'S DATA AND BE APPROVED BEFORE USE.
    e. SLABS ON GRADE, TOPPING SLABS, AND ELEVATED CONCRETE FLOORS SHALL HAVE A MAXIMUM SHRINKAGE RATE OF 0.04% AT 28 DAYS PER ASTM C157 (CURING TEST SPECIMENS TO BE CONSISTENT WITH FIELD CONDITIONS), OR USING EMBEDDED VIBRATING WIRE STRAIN GAUGES. RESULTS OF TESTING SHALL BE SUBMITTED TO ENGINEER.
    f. SEE ACI 318 FOR ADDITIONAL REQUIREMENTS REGARDING MAXIMUM AGGREGATE SIZE. AGGREGATE GRADATION OF 3/8" MAXIMUM (PEA GRAVEL) SHALL NOT BE USED WHERE FINISHED CONCRETE SURFACE IS EXPOSED TO VIEW.
5. CONCRETE MIX DESIGN AND TESTING SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE AND SPECIFICATIONS. ALL CONCRETE MIXES SHALL BE DESIGNED PER ACI 318 BY A RECOGNIZED TESTING LAB STAMPED AND SIGNED BY A LICENSED CALIFORNIA CIVIL ENGINEER AND SUBMITTED TO THE EOR FOR REVIEW PRIOR TO CONCRETE PLACEMENT. STRUCTURAL CONCRETE MIXES SHALL CONSIST OF 5 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE MINIMUM UNO.
6. AGGREGATES IN NORMALWEIGHT CONCRETE SHALL CONFORM TO ASTM C33 (HARDROCK). AGGREGATES IN LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C330.
7. COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND THE EOR.
8. PORTLAND CEMENT SHALL BE TYPE II AND SHALL CONFORM TO ASTM C150, LOW ALKALI. MILL TESTS WITH CERTIFICATES OF COMPLIANCE SHALL BE SUBMITTED.
9. FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618 CLASS F MAY BE USED AS A PARTIAL SUBSTITUTION FOR PORTLAND CEMENT UP TO A MAXIMUM OF 25% TOTAL CEMENTITIOUS MATERIALS BY WEIGHT IF THE MIX DESIGN IS PROPORTIONED BY FIELD EXPERIENCE OR TRIAL MIXTURES.
10. CONCRETE MIXING OPERATIONS, ETC. SHALL CONFORM TO ASTM C94.
11. LEAN CONCRETE, WHERE SPECIFICALLY INDICATED, SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
12. DRYPACK OR NONSHRINK GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI, AND CONSIST OF MASTERFLOW 713, EUCON NS GROUT, SIKA GROUT 212, OR APPROVED EQUAL. FOR THICK GROUT LAYERS FOLLOW MANUFACTURER'S GUIDELINES TO ATTAIN THE REQUIRED STRENGTH, WHICH MAY INCLUDE THE ADDITION OF PEA GRAVEL. FOR BASE PLATES LARGER THAN 6 SQUARE FEET, USE HI-FLOW GROUT OR MASTERFLOW 928.
13. DO NOT USE ANY CONCRETE OR GROUT CONTAINING CHLORIDES.
14. WATER USED IN MIX SHALL BE CLEAN AND POTABLE.
15. PRIOR TO ERECTING ANY ELEMENTS THAT LOAD THE FOUNDATION, CONCRETE MUST REACH AN UNCONFINED COMPRESSIVE STRENGTH OF 2000 PSI MINIMUM AS DETERMINED BY TESTING OR PREVIOUSLY DOCUMENTED DATA FOR THE MIX DESIGN USED UNDER SIMILAR CONDITIONS, AND MUST CURE FOR A MINIMUM OF 3 DAYS.
16. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY EOR.
17. SEE ARCHITECTURAL DRAWINGS FOR WALL OPENINGS, WALL OFFSETS, CHAMFERS, KERFS, DRIPS AND FOR EXTENT OF DEPRESSIONS, RAMPS, ETC.
18. PROVIDE SLEEVES FOR ALL PIPES THROUGH CONCRETE WALLS AND FOOTINGS SHOWN ON THESE DRAWINGS. CORING IS NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE EOR.
19. EXPOSED CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH 3/4" CHAMFER OR 1/2" RADIUS TOOLED EDGE, UNO.
20. BEAM LONGITUDINAL BARS SHALL BE ON INSIDE FACE OF COLUMN VERTICAL BARS.

POST-INSTALLED ANCHORS AND DOWELS

030500-0000

UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE FOLLOWING APPLIES TO ALL POST-INSTALLED ANCHORS INTO HARDENED CONCRETE OR MASONRY, WHICH INCLUDES TYPES SUCH AS EXPANSION, WEDGE, SLEEVE, ADHESIVE/EPOXY, SHOT-PIN, SCREW AND UNDERCUT.

1. INSTALL PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) EXCEPT AS OTHERWISE STATED IN THE SPECIFIED PRODUCT REPORTS. USE INSTALLATION PROCEDURES FOR CRACKED CONCRETE CONDITIONS. DO NOT USE CORE DRILL BITS FOR ANCHOR HOLES WITHOUT PRIOR EOR APPROVAL. COPIES OF INSTALLATION INSTRUCTIONS SHALL BE MAINTAINED ON SITE.
2. CLEAN OUT ANCHOR HOLES AND SET ANCHORS PER THE PRODUCT'S THIRD PARTY EVALUATION REPORT FOR THE APPROPRIATE CONDITIONS. INSTALL UNDER SUPERVISION OF THE SPECIAL INSPECTOR WHERE REQUIRED.
3. PROVIDE CARBON STEEL ANCHORS AT DRY INTERIOR LOCATIONS AND STAINLESS STEEL TYPE 304 OR 316 AT EXTERIOR LOCATIONS AND DAMP INTERIOR LOCATIONS.
4. REINFORCING BARS TO RECEIVE CONCRETE COVER MAY BE UNCOATED.
5. ANCHORS SHALL BE CLEAN AND FREE OF DEBONDING SUBSTANCES.
6. EMBEDMENT REFERS TO THE FINAL INSTALLED EFFECTIVE DEPTH "Hef" AS DEFINED IN THE PRODUCT REPORT. REQUIRED ANCHOR HOLE DEPTH FOR INSTALLATION MAY BE DEEPER.
7. EXISTING REINFORCING SHALL BE AVOIDED WHERE DRILLING FOR POST-INSTALLED ANCHORS OR CONCRETE DOWELS.
8. MAINTAIN A MINIMUM OF 2 INCHES FROM EXISTING CONDUIT AND POST-TENSIONING (WHERE OCCURS) PRIOR TO DRILLING, CORING OR SHOOTING PINS INTO EXISTING CONCRETE OR MASONRY. USE NONDESTRUCTIVE TESTING TO LOCATE SUCH ITEMS.
9. WHERE THE FULL ANCHOR EMBEDMENT DEPTH, SPACING OR EDGE DISTANCE CANNOT BE ACHIEVED, NOTIFY THE EOR AND IOR.
10. FILL ABANDONED HOLES WITH NON-SHRINK GROUT OR EPOXY. CLEAR DISTANCE BETWEEN NEW HOLES AND ABANDONED HOLES SHALL BE 2" OR TWO ANCHOR DIAMETERS, WHICHEVER IS GREATER, UNLESS OTHERWISE SPECIFIED BY EOR. ANCHORS PENETRATING THROUGH WATERPROOFING OR VAPOR MEMBRANES SHALL BE SEALED OR FLASHED.
11. INSTALL IN DRY CONCRETE OR MASONRY HAVING A MINIMUM AGE OF 21 DAYS.
12. RE-USE OF SCREW ANCHORS AND SCREW ANCHOR HOLES IS NOT PERMITTED.
13. AN ACI-CRSI CERTIFIED ADHESIVE ANCHOR INSTALLER IS REQUIRED FOR THE INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL AND OVERHEAD CONDITIONS.

FOUNDATIONS AND SLABS ON GRADE

033100-0001

1. GEOTECHNICAL REPORT INFORMATION AND DESIGN CRITERIA:

GEOTECHNICAL REPORT	
AUTHOR	TBD
REPORT NUMBER	TBD
DATE	TBD
GEOTECHNICAL DESIGN CRITERIA	
MINIMUM WIDTH OF FOOTINGS	TBD
MINIMUM EMBEDMENT OF FOOTINGS	TBD
ALLOWABLE SOIL PRESSURE, DEAD LOAD + LIVE LOAD	TBD PSF
ALLOWABLE SOIL PRESSURE, DEAD LOAD + LIVE LOAD + LATERAL LOAD	TBD PSF
ALLOWABLE LATERAL SOIL BEARING PRESSURE PER FOOT OF DEPTH	TBD PSF
DESIGN COEFFICIENT OF FRICTION FOR SLIDING	TBD

2. ALL GRADING, FOUNDATION, AND DRAINAGE PLANS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER UPON SUBMITTAL. A CERTIFIED LETTER BY THE GEOTECHNICAL ENGINEER IS REQUESTED STATING THAT THE RECOMMENDATIONS CONTAINED WITHIN THE SOILS REPORT HAVE BEEN INCORPORATED INTO THE PROJECT PLANS AND SPECIFICATIONS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS AND CONDITIONS INDICATED IN THE GEOTECHNICAL REPORT. THE GEOTECHNICAL ENGINEER SHALL OBSERVE ALL FOOTING EXCAVATIONS PRIOR TO PLACING CONCRETE.
4. SUBSURFACE SOIL PREPARATION:
    a. ALL EXISTING UNDOCUMENTED FILL SHALL BE REMOVED AND RECOMPACTED. ALL TOPSOILS SHALL BE REMOVED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.
    b. GEOTECHNICAL ENGINEER SHALL BE RETAINED DURING THE OVEREXCAVATION PROCESS. THE ACTUAL DEPTH OF REMOVAL WILL BE DETERMINED DURING GRADING OPERATIONS.
    c. OFFSITE FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
5. PRIOR TO THE CONTRACTOR REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL ADVISE THE BUILDING OFFICIAL IN WRITING THAT:
    a. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT.
    b. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
    c. THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.
6. FOOTINGS ARE CENTERED UNDER WALLS AND COLUMNS, UNO.
7. ALL TRENCHES SHALL COMPLY WITH APPLICABLE OSHA REQUIREMENTS. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER. FLOODING IS NOT PERMITTED.
8. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED BUT NOT BEHIND RETAINING WALLS BEFORE CONCRETE OR MASONRY ATTAINS ITS FULL DESIGN STRENGTH.
9. THE DESIGN OF ALL RETAINING WALLS AND SUBTERRANEAN BUILDING WALLS INDICATED ON THESE DRAWINGS IS BASED ON DRAINED SOILS.
10. CONSTRUCTION JOINTS (CJ) AND SAWCUT (SC) JOINTS IN SLABS SHALL OCCUR WHERE SPECIFIED IN CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL SUBMIT SLAB JOINT LAYOUT TO EOR FOR REVIEW PRIOR TO PLACING CONCRETE. CJ'S SHALL HAVE FORMED POUR STOPS. CONSTRUCTION JOINTS IN WALLS AND FOOTINGS NEED NOT OCCUR AT THE SAME LOCATION, UNO.
11. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF SLAB SLOPES, DEPRESSIONS, CURBS, DRAINS, NON-STRUCTURAL PARTITIONS AND OTHER EMBEDDED ITEMS NOT SHOWN IN THE STRUCTURAL DRAWINGS.
12. CONTRACTOR SHALL PROTECT ALL UTILITY LINES, ETC. ENCOUNTERED DURING EXCAVATION AND BACKFILLING. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.
13. THE SLAB ON GRADE IS NOT DESIGNED TO SUPPORT TRAFFIC FROM CRANES OR OTHER HEAVY CONSTRUCTION VEHICLES. CONTRACTOR SHALL REPAIR OR REPLACE DAMAGED CONCRETE SLABS.

REINFORCING STEEL

032000-0000

1. REINFORCING GRADES FOR CONCRETE AND MASONRY:

ALL BARS UNLESS NOTED OTHERWISE	ASTM A615 OR A706, GRADE 60
TIES AND STIRRUPS	ASTM A615 OR A706, GRADE 60
WELDED WIRE FABRIC	ASTM A1064
ALL BARS TO BE WELDED	ASTM A706, GRADE 60

2. ALL BARS SHALL BE DEFORMED.
3. MAINTAIN CONCRETE COVER FROM FACE OF CONCRETE TO EDGE OF ALL REINFORCEMENT AS FOLLOWS (UNO). THE INTENT IS FOR REINFORCEMENT TO BE PLACED SO THAT IT IS AS CLOSE TO CONCRETE SURFACES AS POSSIBLE, WITHIN SPECIFIED TOLERANCES, WHILE MAINTAINING THIS MINIMUM PROTECTION. PROVIDE THE LARGEST COVER REQUIRED FOR ALL APPLICABLE CONDITIONS. WHERE #3 STIRRUPS OR TIES ARE USED, ENSURE THAT THE COVER FOR LONGITUDINAL BARS IS ADEQUATE.

CONDITION	COVER
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
FORMED AND EXPOSED TO EARTH OR WEATHER	
#6 BARS AND LARGER	2"
#5 BARS AND SMALLER	1 1/2"
UNEXPOSED RAISED SLABS AND WALL FACES (#11 BARS AND SMALLER)	3/4"
UNEXPOSED COLUMNS AND BEAMS	1 1/2"
STRUCTURAL SLABS ON GRADE	
FROM BOTTOM OF SLAB	2"
FROM TOP OF SLAB	1 1/2"
OTHER CONCRETE NOT EXPOSED TO EARTH OR WEATHER (#11 BARS AND SMALLER)	3/4"

4. "CLEAR" OR "CLR" INDICATES DISTANCE BETWEEN SURFACES AND DOES NOT INDICATE MINIMUM UNLESS SPECIFICALLY NOTED AS SUCH. CLEAR DISTANCES ARE SUBJECT TO TOLERANCES PER CRSI.
5. REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE". EACH REINFORCING BAR SHALL BE WIRED TO A CROSS BAR AT A MAXIMUM SPACING OF 24"OC. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING IN POSITIONS SHOWN ON THE PLANS. DO NOT USE WOOD OR BRICK TO SUPPORT REINFORCING.
6. SPLICES IN CONTINUOUS REINFORCEMENT IN WALLS, FOOTINGS, ETC. SHALL HAVE A CLASS "B" LAP (1'-6" MIN) AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN 5'-0" APART. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES. BARS MAY BE WIRED TOGETHER AT SPLICES OR LAPS EXCEPT FOR TOP REINFORCING OF BEAMS AND SLABS OR WHERE SPECIFICALLY DETAILED TO BE SEPARATED. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.
7. ALL DOWELS, ANCHOR BOLTS AND OTHER HARDWARE TO BE SET IN CONCRETE SHALL BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. NO WET SETTING, STABBING, RODDING OR OTHER MOVEMENT OF EMBEDDED ITEMS SHALL BE PERFORMED DURING PLACEMENT OF CONCRETE.
8. BEND REINFORCING BARS COLD.
9. REINFORCEMENT SHALL BE FREE FROM MUD, OIL, DIRT, LOOSE RUST, MORTAR, PAINT, GREASE AND OTHER NON-METALLIC AGENTS THAT REDUCE BOND CAPACITY. BONDED RUST OR MILL SCALE IS ACCEPTABLE PROVIDED THE MINIMUM CROSS-SECTIONAL AREA (INCULDING HEIGHT OF DEFORMATIONS) AND WEIGHT ARE MAINTAINED.
10. DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE MAIN REINFORCING UNO.
11. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE DURING INSPECTION.
12. CHAIRS OR SPACERS FOR REINFORCING SHALL BE PLASTIC WHEN RESTING ON EXPOSED SURFACES.
13. WHERE LONGITUDINAL REINFORCING BARS ARE PLACED IN 2 OR MORE LAYERS, BARS IN THE UPPER LAYERS SHALL BE PLACED DIRECTLY ABOVE BARS IN THE BOTTOM LAYER.
14. ALL BENDS WITHIN STIRRUPS, HOOPS, AND CROSS-TIES SHALL ENGAGE A LONGITUDINAL BAR. PROVIDE #4 SPACER BAR WHERE A LONGITUDINAL BAR IS NOT SPECIFICALLY DETAILED.
15. WELDING OF REINFORCING BARS SHALL BE PERFORMED PER AMERICAN WELDING SOCIETY (AWS) D1.4 USING E90XX ELECTRODES FOR A615 REINFORCING AND E80XX ELECTRODES FOR A706 REINFORCING.
16. (SPECIAL SYSTEMS) THE FOLLOWING REINFORCEMENT SHALL COMPLY WITH ASTM A706:
    a. VERTICAL REINFORCEMENT AT INTERSECTIONS AND ENDS OF CONCRETE WALLS ENCLOSED IN TIES OR STIRRUPS.
    b. LONGITUDINAL MOMENT FRAME REINFORCEMENT.

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

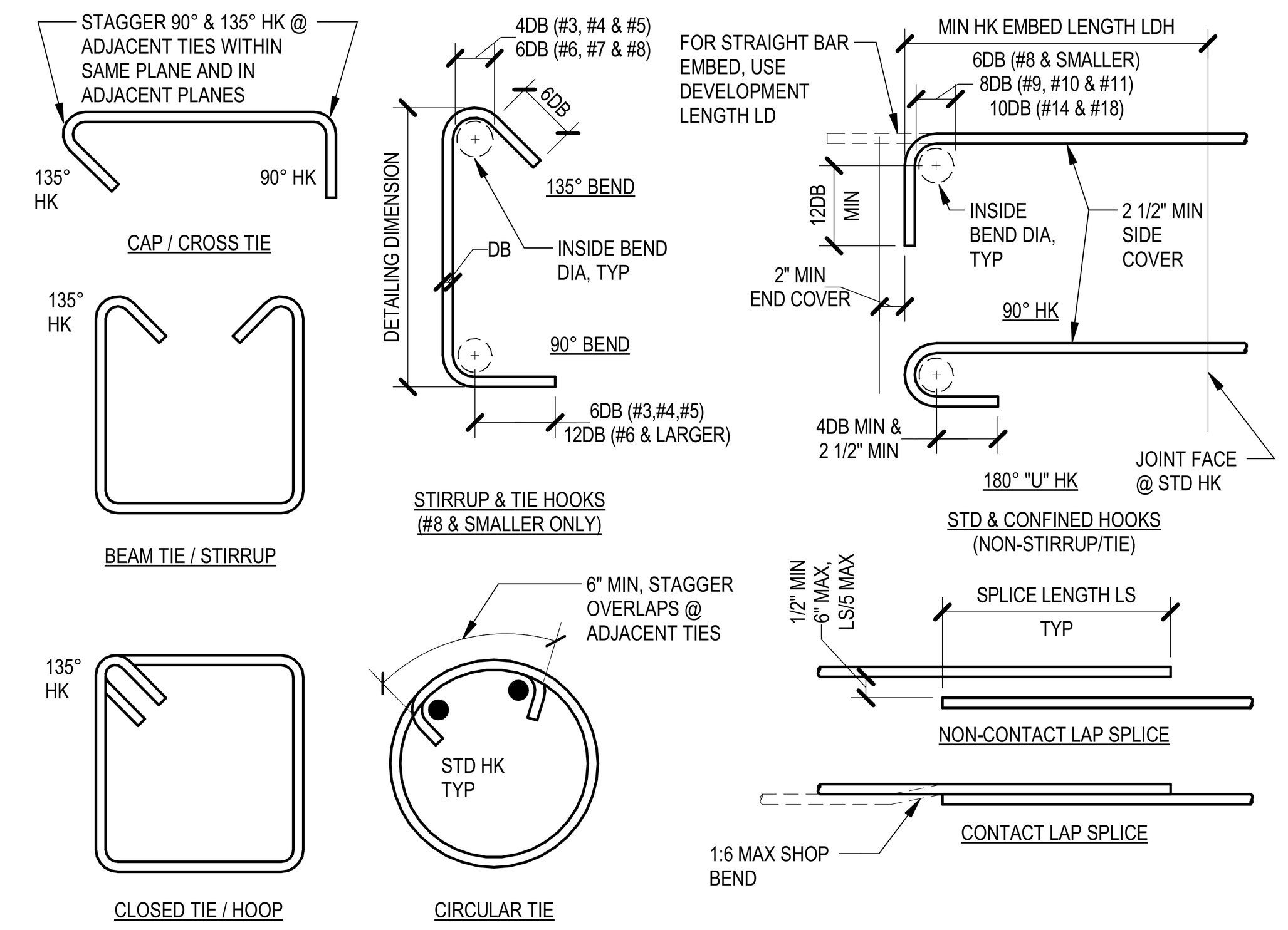
CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
MI Job NO: MI2013213
T: (408) 513-1939
miyamotointernational.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
#	REVISIONS		

DRAWN: AE
CHECKED: SF
DATE: 03/15/2021
SCALE: AS NOTED
PROJECT NUMBER: 2015800

GENERAL NOTES

DRAWING NUMBER: S0.02

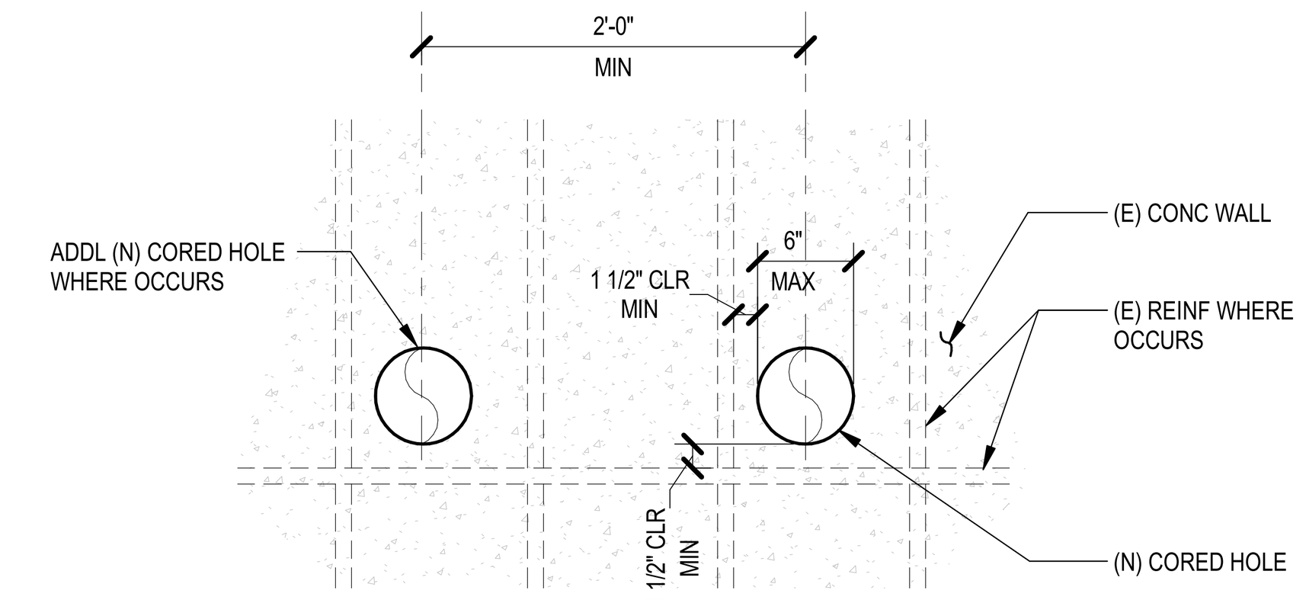


HOOKS, LAPS & DEVELOPMENT LENGTHS						
	BAR SIZE	STD HOOK DEVELOPMENT LENGTH 'LDH' (IN)	CLASS B LAP SPLICE 'LS' (IN)		DEVELOPMENT LENGTH 'LD' (IN)	
			BOTT	TOP	BOTT	TOP
3000 PSI NWC	#3	6	22	28	17	22
	#4	8	29	37	22	29
	#5	10	36	47	28	36
	#6	12	43	56	33	43
	#7	14	63	81	48	63
	#8	16	72	93	55	72
	#9	18	81	105	62	81
	#10	20	91	118	70	91
	#11	22	101	131	78	101
4000 PSI NWC	#3	6	19	24	15	19
	#4	7	25	32	19	25
	#5	9	31	40	24	31
	#6	10	37	48	29	37
	#7	12	54	70	42	54
	#8	14	62	80	48	62
	#9	15	70	91	54	70
	#10	17	79	102	61	79
	#11	19	87	113	67	87
5000 PSI NWC	#3	6	17	22	13	17
	#4	6	22	29	17	22
	#5	8	28	36	22	28
	#6	9	33	43	26	33
	#7	11	49	63	37	49
	#8	12	55	72	43	55
	#9	14	63	81	48	63
	#10	15	70	91	54	70
	#11	17	78	101	60	78

NOTES:
1. SEE BUILDING CODE AND ACI FOR ALL REQUIREMENTS NOT NOTED.
2. FOR LIGHTWEIGHT CONCRETE, MULTIPLY LDH, LS AND LD VALUES BY 1.33.
3. "TOP" BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW BARS. ALL OTHER BARS ARE "BOTT" BARS.
4. WHERE REQUIRED LS CANNOT BE OBTAINED WITH STRAIGHT BARS, EXTEND REINFORCING AS FAR AS POSSIBLE (LDH MINIMUM) AND PROVIDE STANDARD HOOK, WHERE LDH CANNOT BE OBTAINED, CONTACT THE EOR.
5. VALUES ARE FOR GRADE 60 (FY=60 KSI) REINFORCEMENT.
6. SPLICE LENGTHS ARE FOR CLEAR SPACING NOT LESS THAN 2DB AND CONCRETE COVER NOT LESS THAN DB.
7. FOR EPOXY-COATED AND/OR BUNDLED REINFORCEMENT, CONTACT THE EOR.
8. WHERE BARS OF DIFFERENT SIZES ARE LAP SPLICED IN TENSION, SPLICE LENGTH SHALL BE THE LARGER OF LD OF THE LARGER BAR AND LS OF THE SMALLER BAR.

5 CONCRETE REINFORCEMENT DETAILS & DEVELOPMENT LENGTHS

NTS 032000-0100

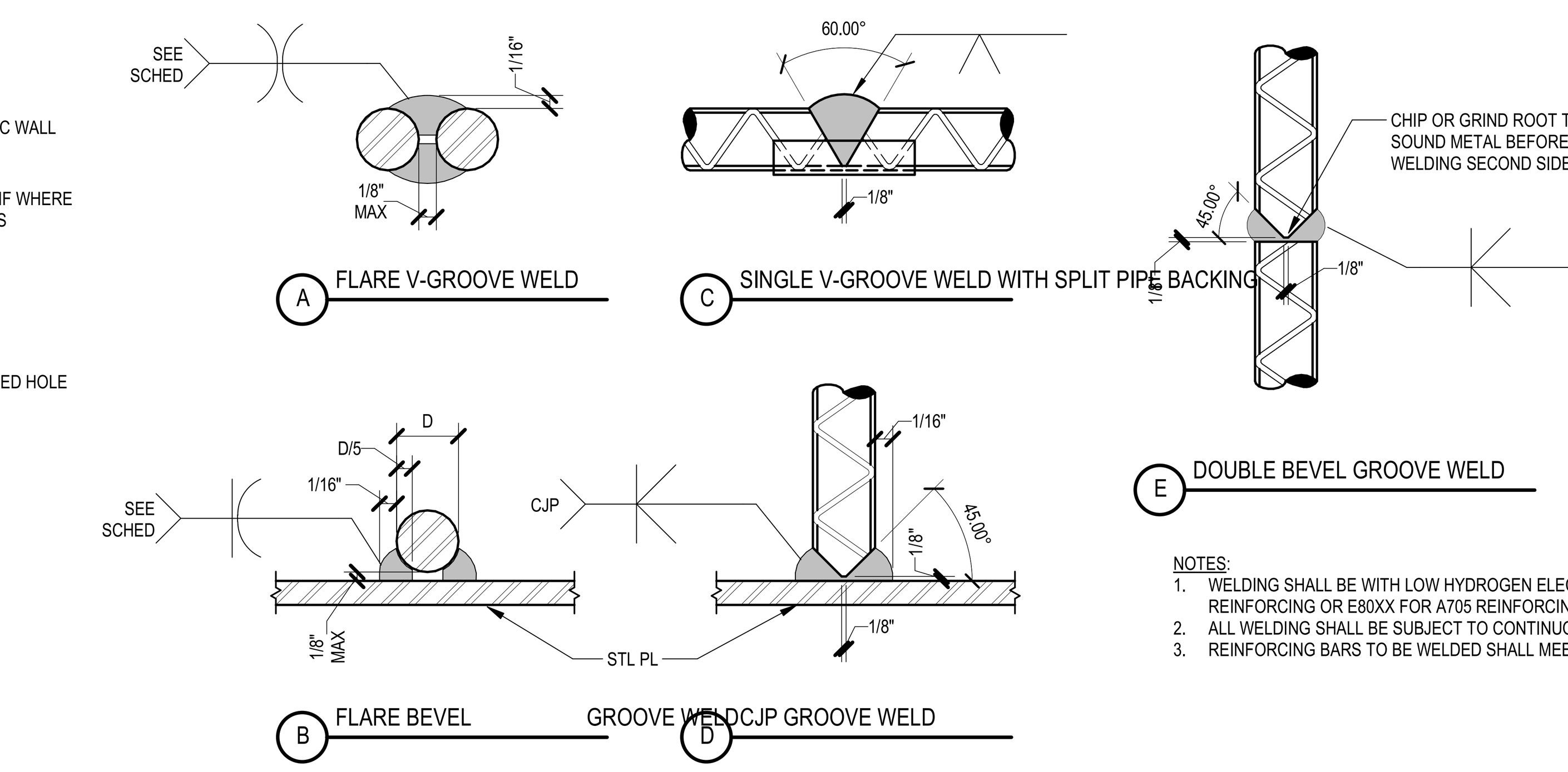


ELEVATION

NOTES:
1. ALL CORED HOLE LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE EOR PRIOR TO CORING.
2. PROVIDE NONDESTRUCTIVE TESTING TO DETERMINE THE LOCATION OF (E) REINFORCING BARS PRIOR TO THE CORING OF (N) HOLES. LOCATE THE (N) CORED HOLES IN SUCH A MANNER TO AVOID CONTACT WITH (E) REINFORCING.

10 NEW CORED HOLES IN CONCRETE

NTS 030000-0101

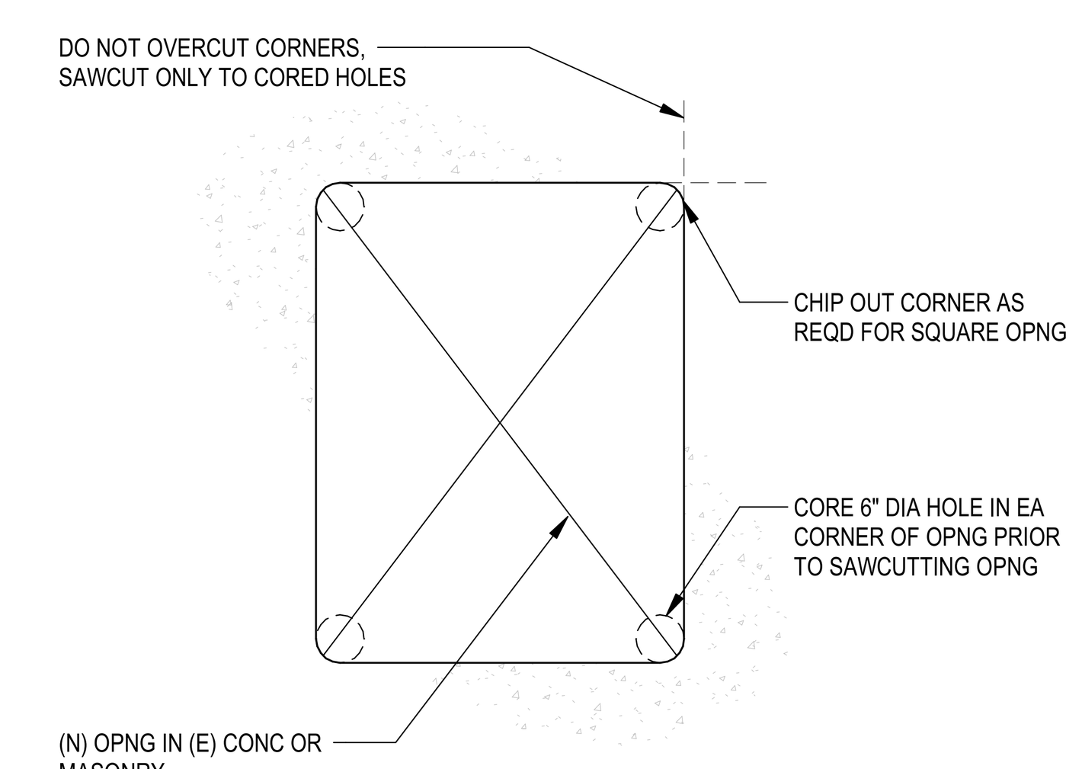


WELD SCHEDULE	
BAR SIZE	MIN WELD LENGTH
#3	3"
#4	3"
#5	3"
#6	4"
#7	5"
#8	5"
#9	6"
#10	6"

NOTES:
1. WELDING SHALL BE WITH LOW HYDROGEN ELECTRODES E90XX FOR A615 REINFORCING OR E80XX FOR A705 REINFORCING AND SHALL CONFORM TO AWS-D1.4.
2. ALL WELDING SHALL BE SUBJECT TO CONTINUOUS INSPECTION.
3. REINFORCING BARS TO BE WELDED SHALL MEET THE REQUIREMENT OF ASTM A706.

6 REINFORCING BAR WELDING

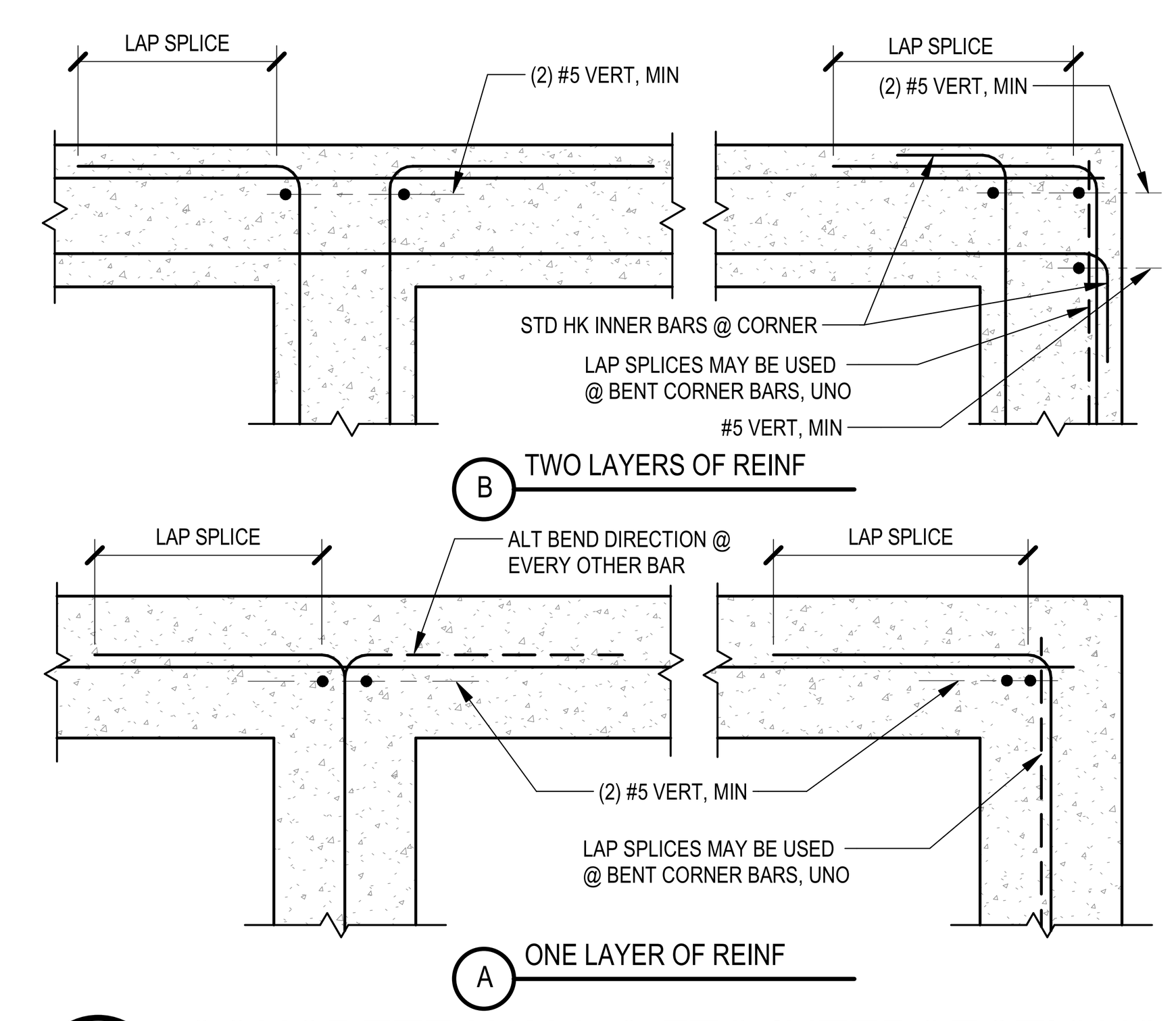
NTS 032000-0101



NOTES:
1. ALL OPENING LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE EOR PRIOR TO CORING.
2. PROVIDE NONDESTRUCTIVE TESTING TO DETERMINE THE LOCATION OF (E) REINFORCING BARS PRIOR TO THE CUTTING OF (N) HOLES. LOCATE THE (N) OPENING IN SUCH A MATTER TO AVOID CONTACT WITH (E) REINFORCING.

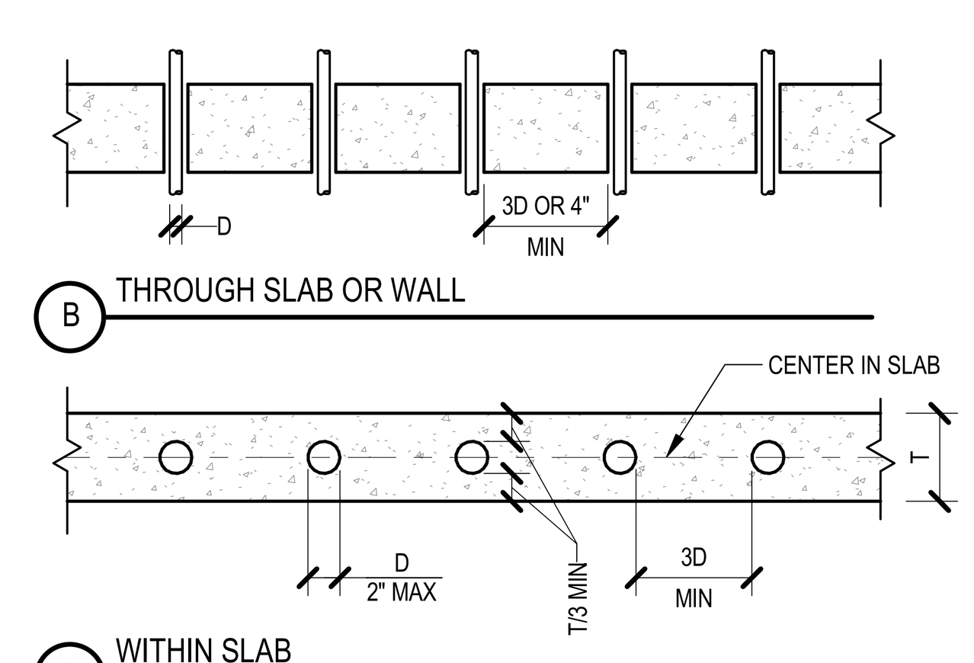
7 SAWCUT OPENING

NTS 030000-0100



3 CONCRETE WALL & FTG INTERSECTIONS

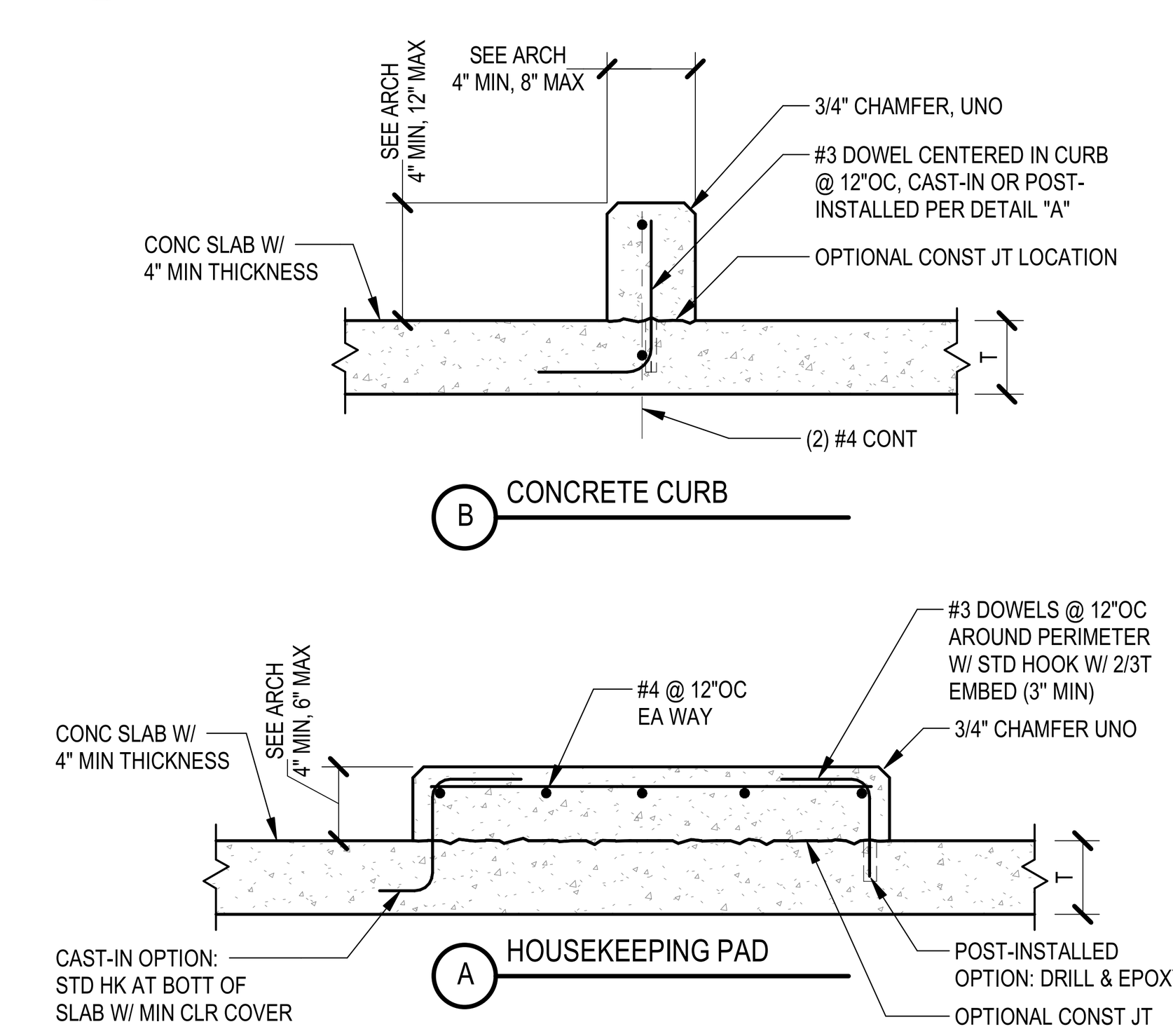
NTS 032000-0102



NOTES:
1. NO CONDUIT/PIPES SHALL BE ALLOWED IN SLABS UNLESS "T" IS A MINIMUM OF 5".
2. WHERE CLEAR DISTANCE CANNOT BE ACHIEVED, THIS AREA SHALL BE TREATED AS A SLAB OPENING.
3. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION.
4. CONDUIT SHALL BE 2'-0" MIN FROM PT TENDONS AND TENDON ANCHORAGE.
5. MAINTAIN A MINIMUM HORIZONTAL CLEARANCE FROM PARALLEL PT TENDONS OF 1'-0" AND A MINIMUM VERTICAL CLEARANCE OF 1" FROM PT TENDONS BEING CROSSED.
6. CONDUITS/PIPES SHALL BE ADEQUATELY SUPPORTED AND SECURED AGAINST DISPLACEMENT PRIOR TO CONCRETE PLACEMENT.
7. MAINTAIN ONE REBAR DIAMETER CLEAR BETWEEN CONDUIT/PIPES AND REBARS. DO NOT SET CONDUIT/PIPES DIRECTLY ON REBAR.
8. NO MORE THAN 5 PARALLEL CONDUITS MAY BE PLACED IN ANY 5'-0" WIDE STRIP OF CONCRETE.
9. DO NOT CUT/RELOCATE REBAR TO INSTALL CONDUIT OR PIPING.

8 PIPES/CONDUITS IN/THRU SLAB & WALL

NTS 033100_00-0100



4 CONCRETE PAD & CURB

NTS 033053_01-0100

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
T: (408) 513-1939
miyamotointernational.com

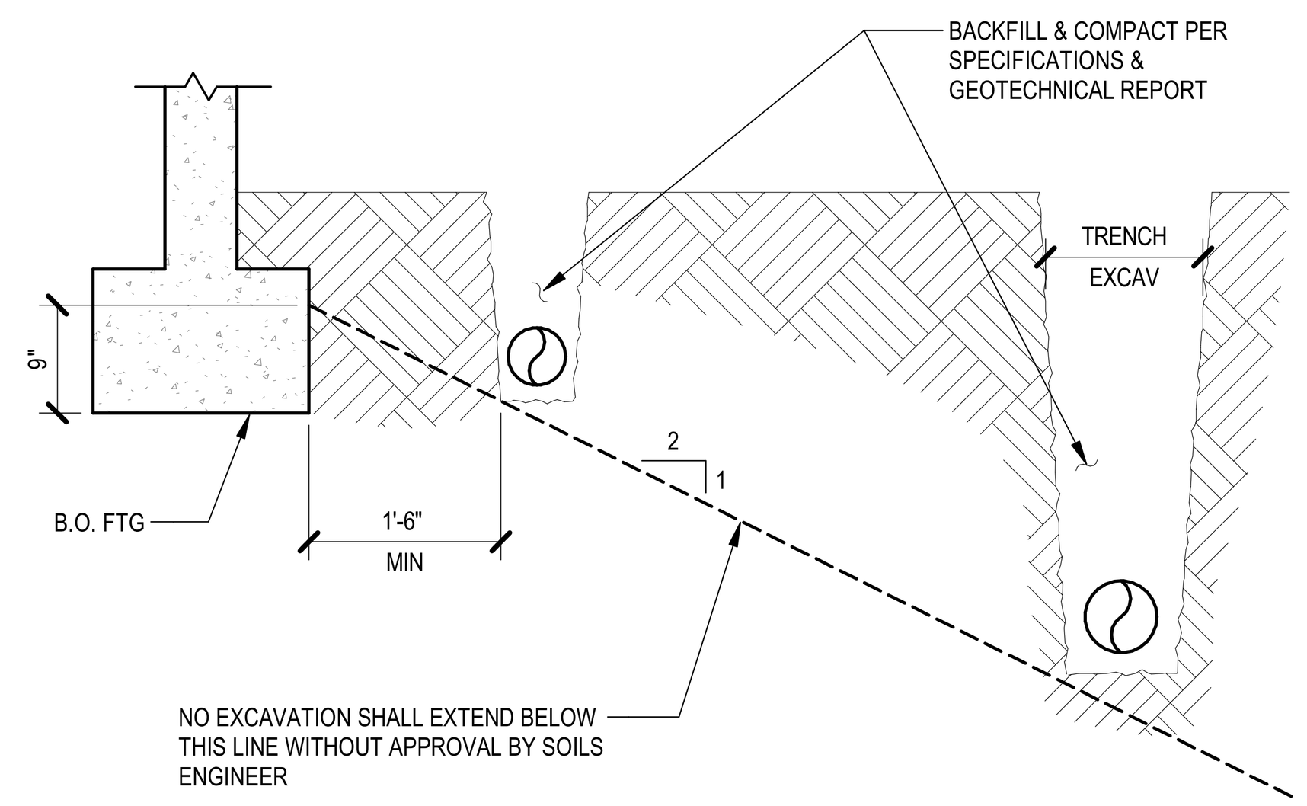
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE CHECKED: SF
DATE: 03/15/2021 SCALE: AS NOTED
PROJECT NUMBER: 2015800

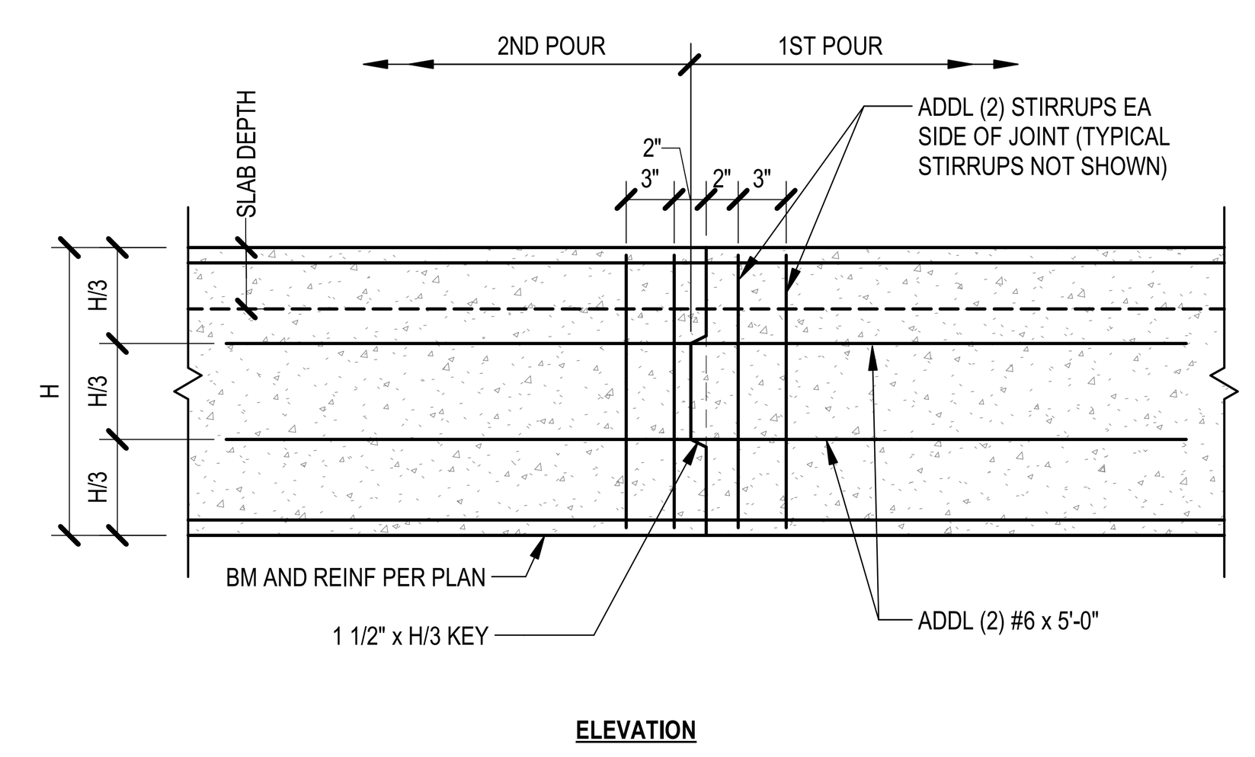
TYPICAL CONCRETE DETAILS

DRAWING NUMBER: S1.01

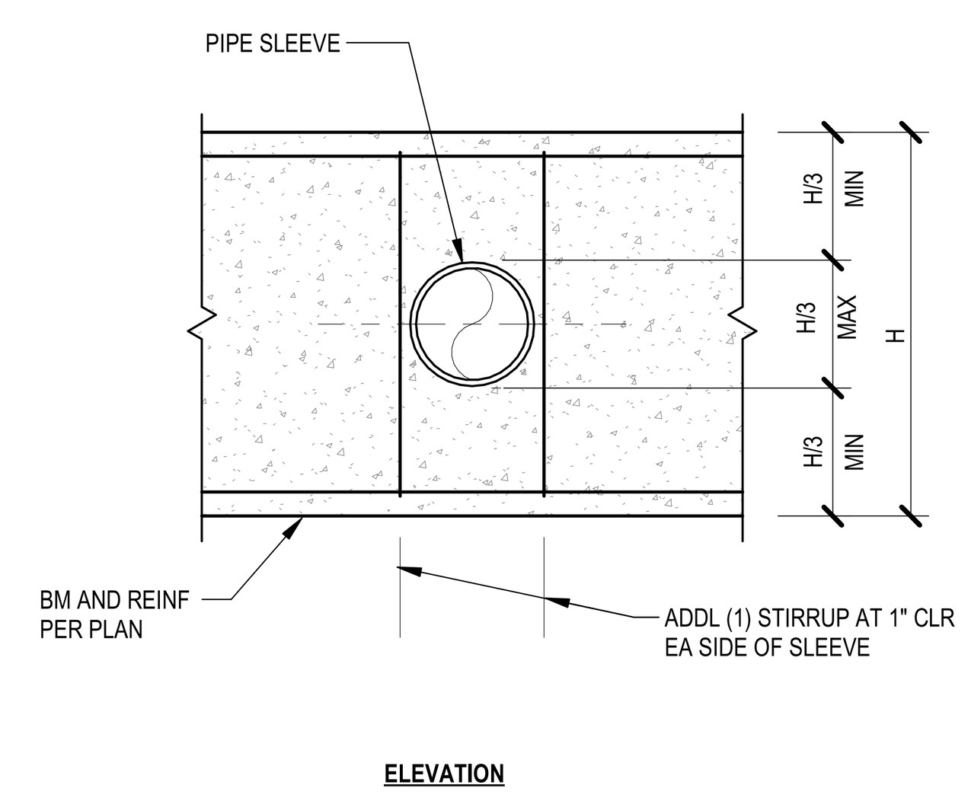


NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING OR OTHERWISE MAINTAINING THE SIDES OF THE EXCAVATION FROM CAVE-INS UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS AND GEOTECHNICAL REPORT.

17 EXCAVATION PARALLEL TO FOOTINGS
NTS 033100_00-0102 (DSA)

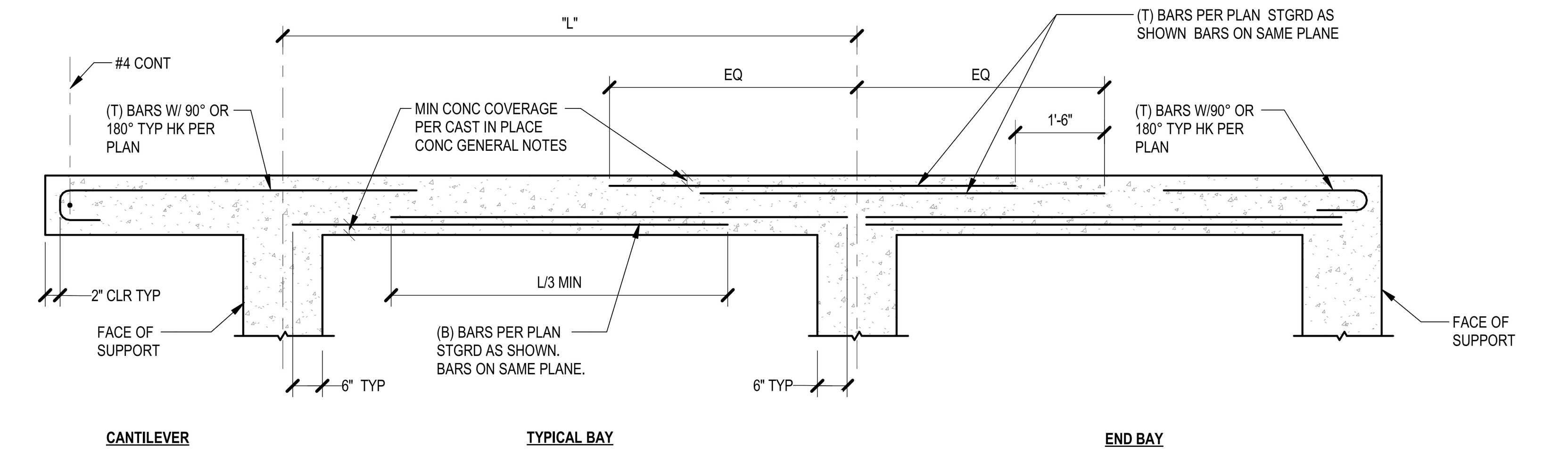


13 BEAM CONSTRUCTION JOINT
NTS 033100_05-0101

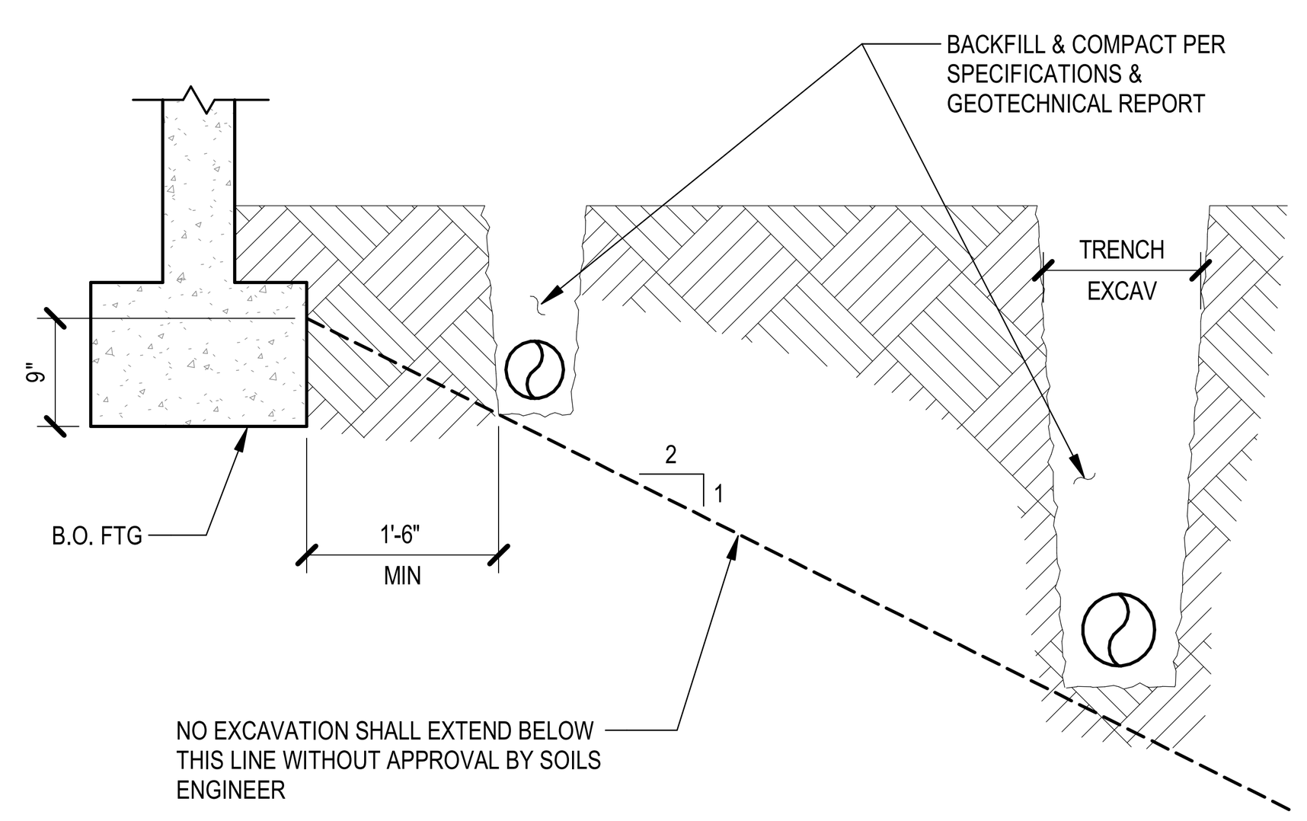


NOTE:
PENETRATIONS ARE PERMITTED ONLY WITH THE REVIEW AND APPROVAL OF THE EOR.

9 PENETRATION THROUGH CONC BEAM
NTS 033100_05-0102

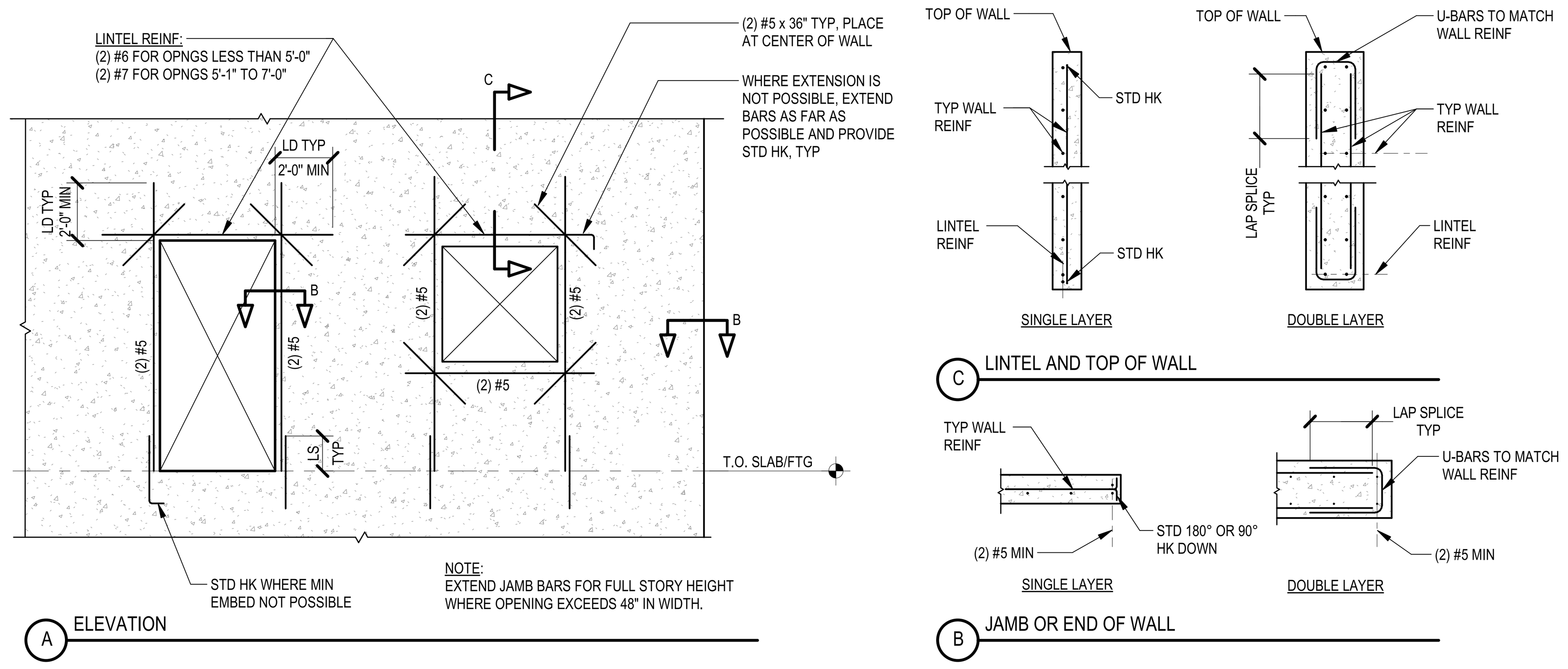


5 CONCRETE SLAB REINFORCEMENT
NTS 033100_04-0100



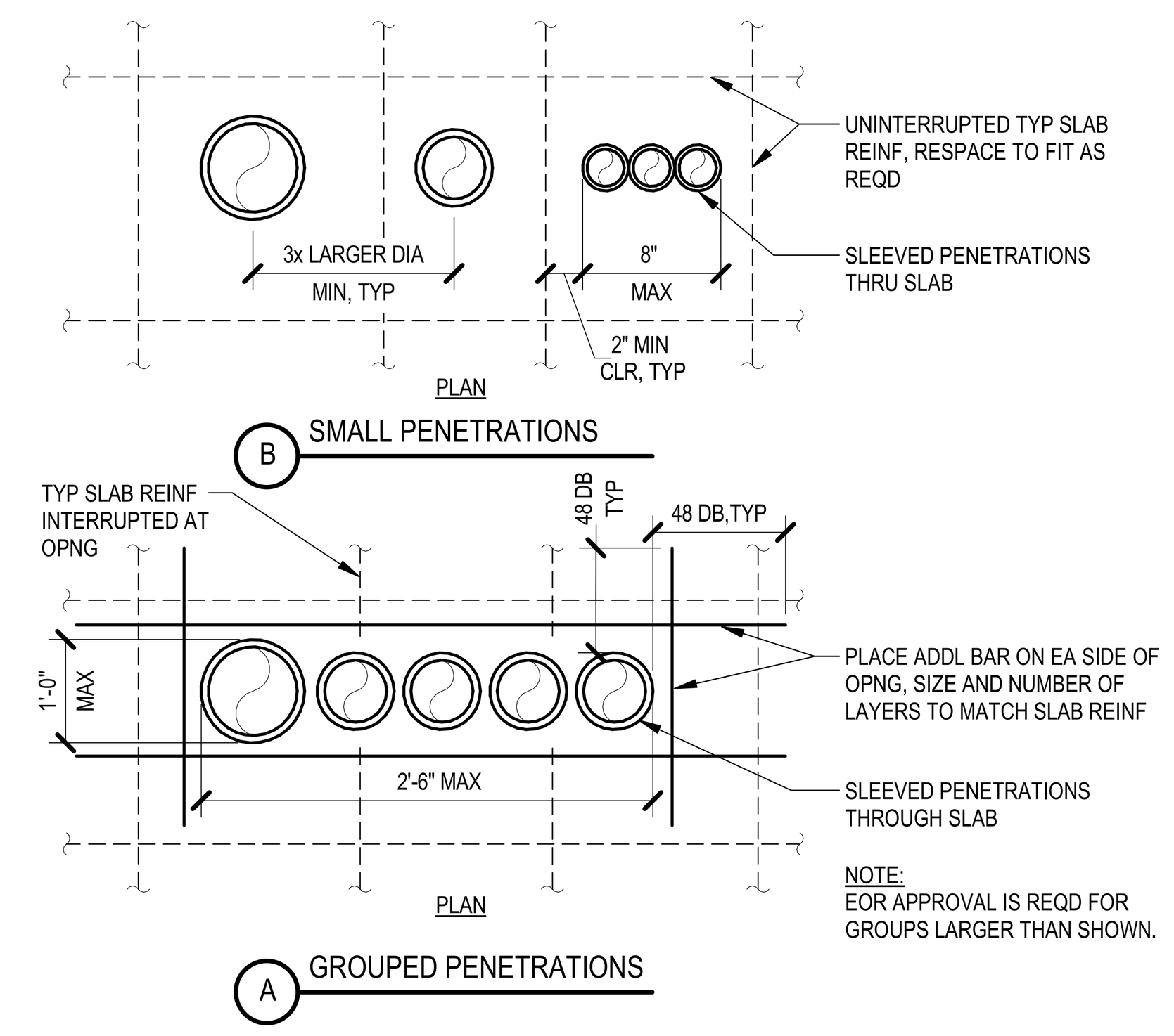
NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING OR OTHERWISE MAINTAINING THE SIDES OF THE EXCAVATION FROM CAVE-INS UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS AND GEOTECHNICAL REPORT.

18 EXCAVATION PARALLEL TO FOOTINGS
NTS 033100_00-0102 (DSA)



NOTE:
EXTEND JAMB BARS FOR FULL STORY HEIGHT WHERE OPENING EXCEEDS 48" IN WIDTH.

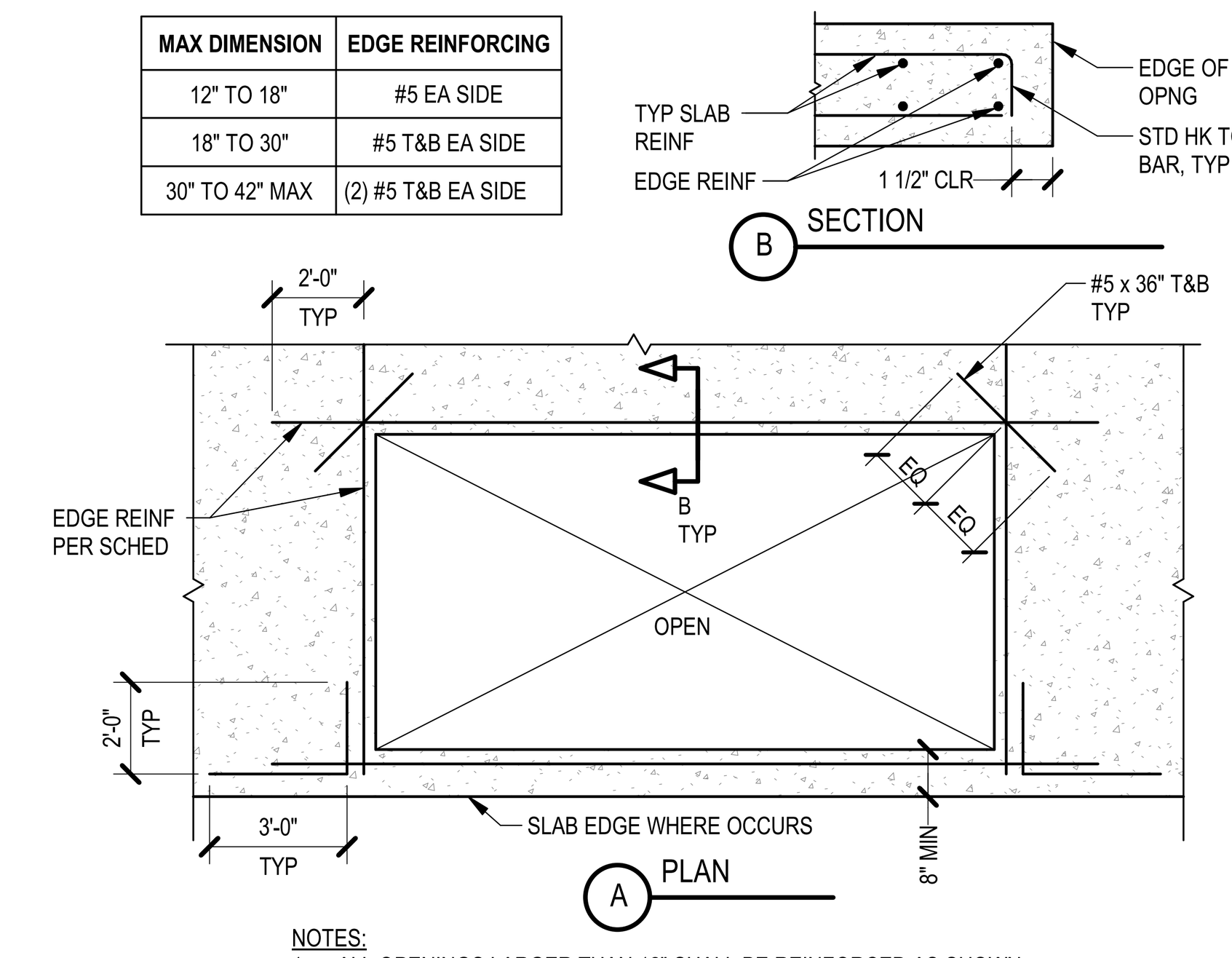
14 MINIMUM REINFORCING AT CONCRETE WALL OPENINGS
NTS 033100_06-0100



NOTE:
EOR APPROVAL IS REQD FOR GROUPS LARGER THAN SHOWN.

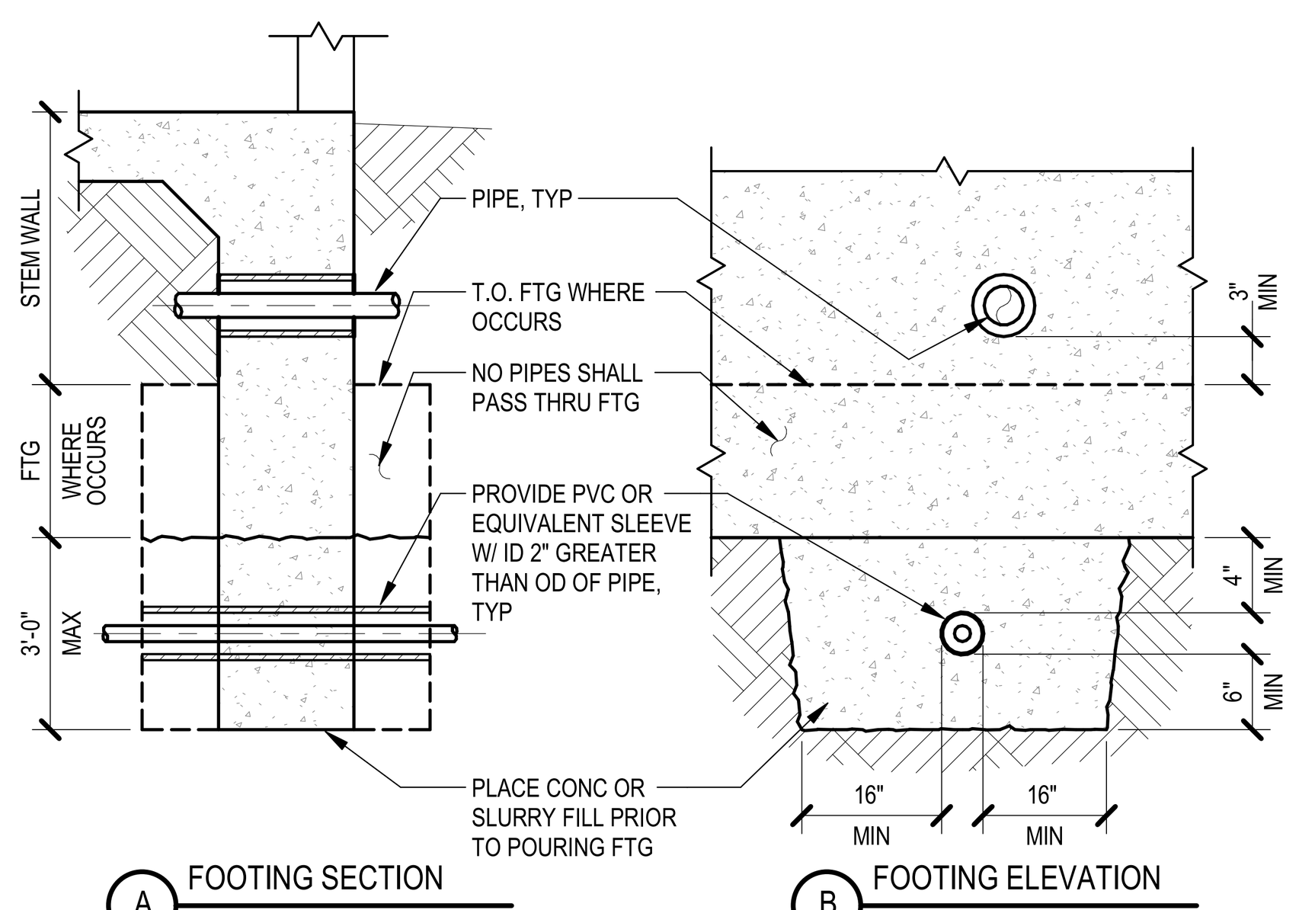
6 PENETRATION THROUGH CONC SLAB
NTS 033100_00-0104

MAX DIMENSION	EDGE REINFORCING
12" TO 18"	#5 EA SIDE
18" TO 30"	#5 T&B EA SIDE
30" TO 42" MAX	(2) #5 T&B EA SIDE



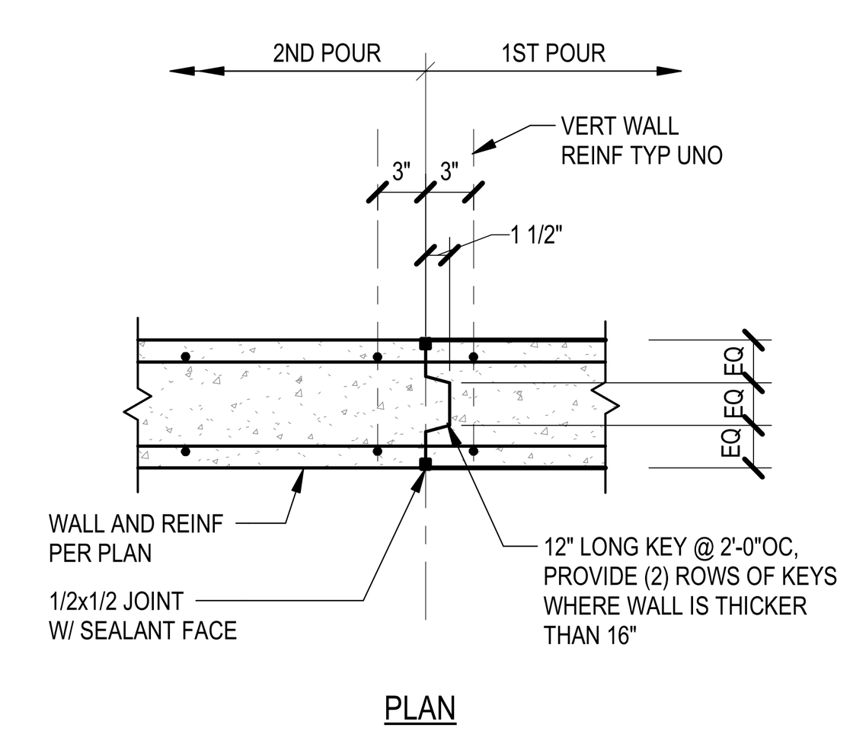
NOTES:
1. ALL OPENINGS LARGER THAN 12" SHALL BE REINFORCED AS SHOWN.
2. THESE BARS ARE IN ADDITION TO REBAR SHOWN ON PLANS.
3. WHERE FULL EXTENSION IS NOT POSSIBLE, EXTEND BARS AS FAR AS POSSIBLE AND USE A STD HOOK.

2 TRIM BARS AT SLAB OPENING
NTS 033100_04-0101



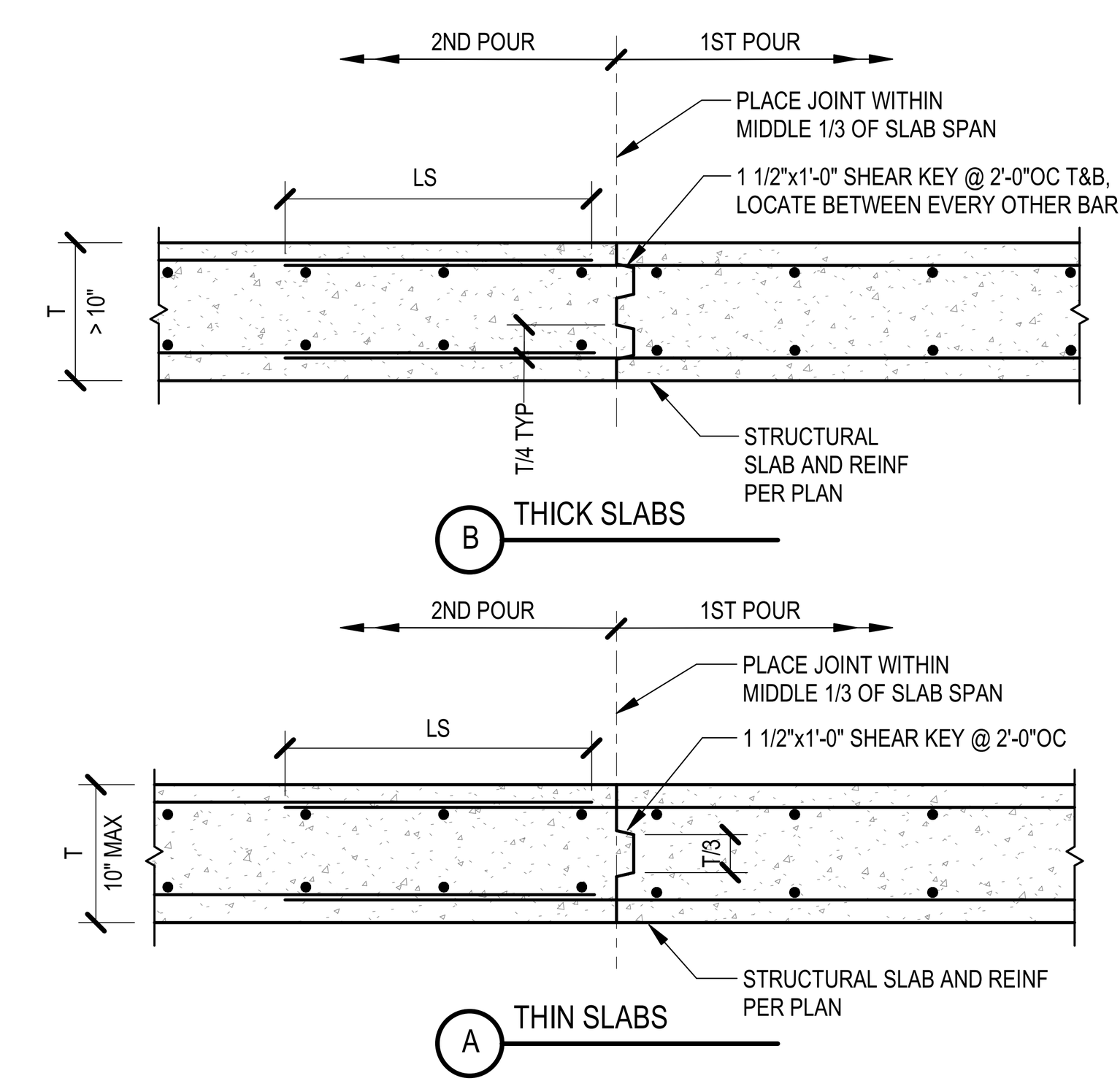
NOTES:
1. PIPES GREATER THAN 8" IN DIAMETER, AND BUNDLES OR BANKS NOT SPECIFICALLY SHOWN ON THE STRUCTURAL PLANS ARE NOT ALLOWED TO BE PLACED WITHOUT OBTAINING EOR APPROVAL.
2. CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
3. IF REQUIREMENTS AS SHOWN CANNOT BE MET, STEP FOOTING PER TYPICAL "STEPPED FOOTING" DETAIL.

15 PIPE THROUGH/BELOW FOOTING
NTS 033100_00-0101 (DSA)

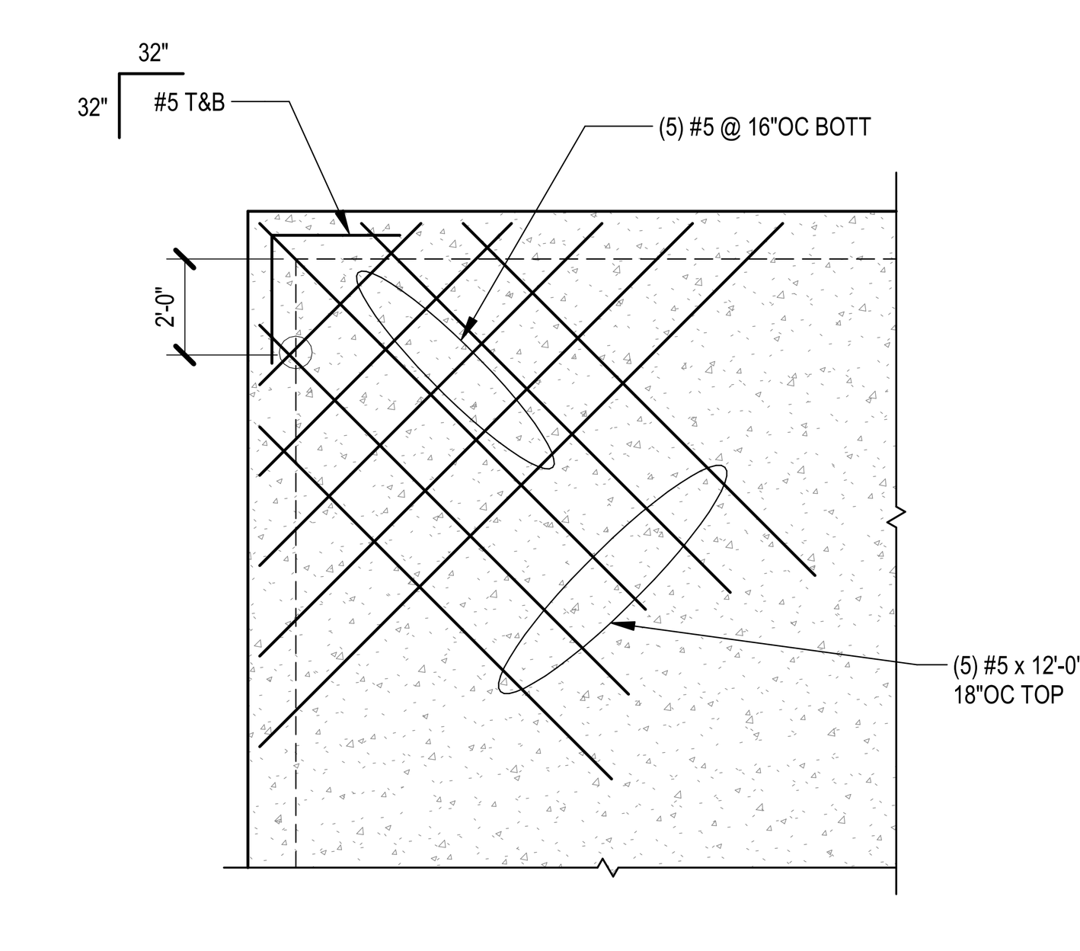


NOTES:
1. PROVIDE CONSTRUCTION JOINTS AT 60'-0" MAX.
2. LOCATION AND DETAIL OF JOINTS SHALL BE APPROVED BY ARCHITECT PRIOR TO CONSTRUCTING FORMS OR PLACING OF CONCRETE.

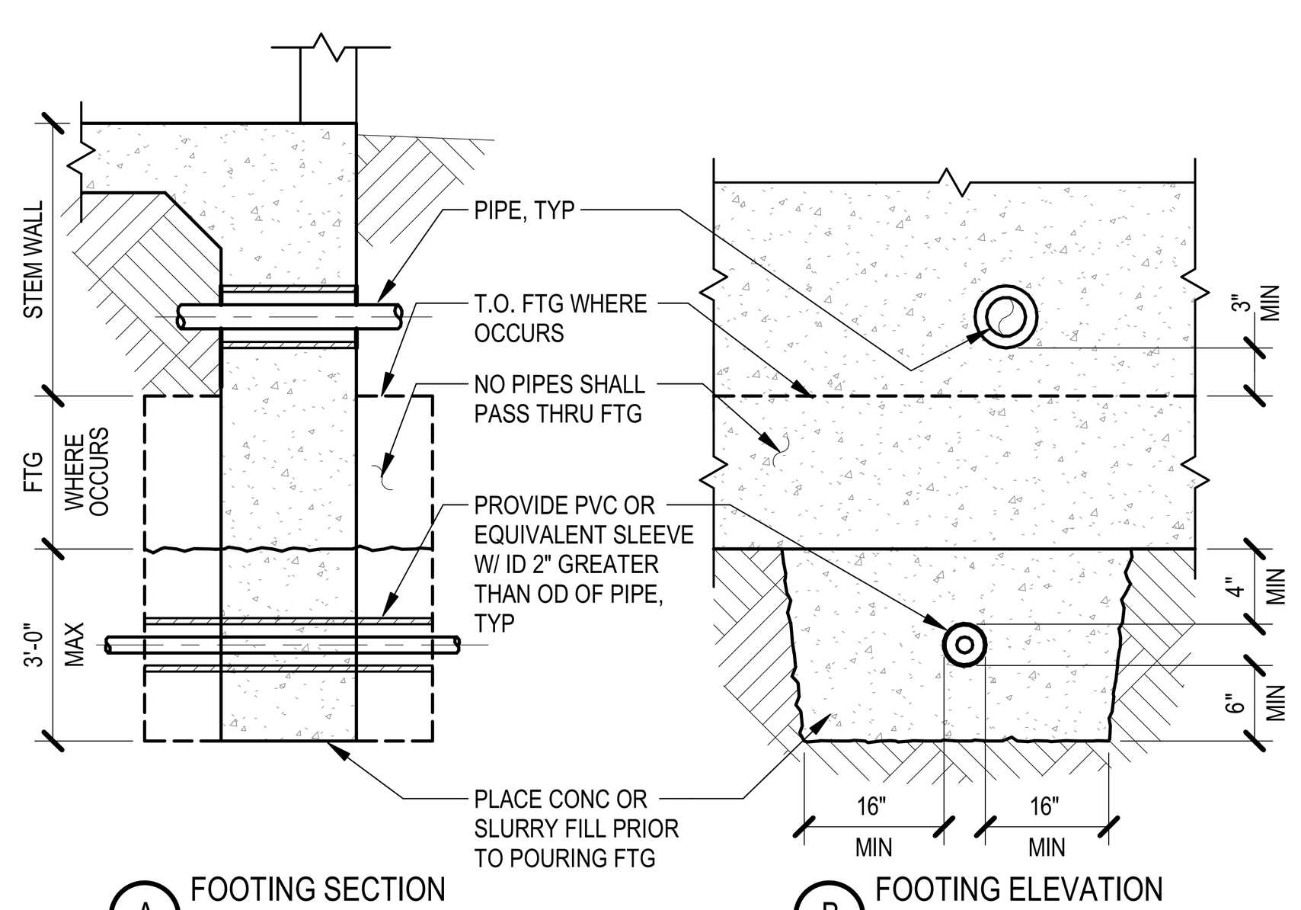
11 VERTICAL WALL CONSTRUCTION JOINT
NTS 033100_06-0103



7 SLAB CONSTRUCTION JOINT
NTS 033100_03-0104

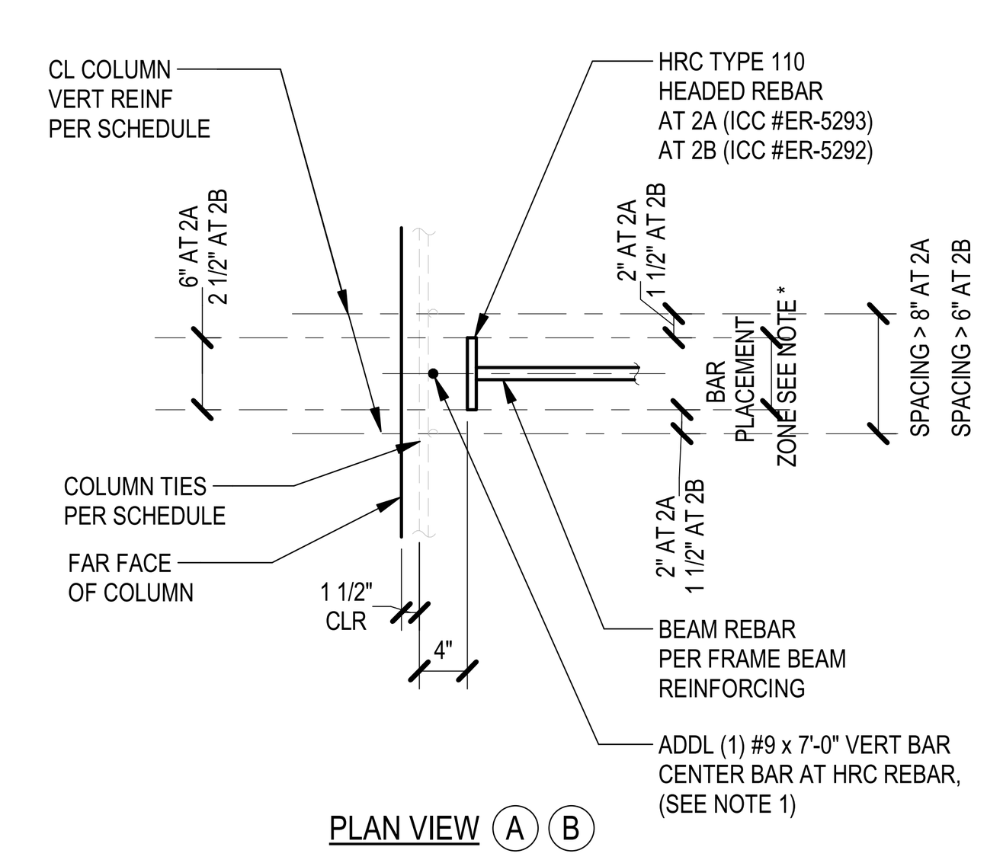


3 TRIM BARS AT SUPPORTED SLAB EDGES
NTS 033100_04-0102



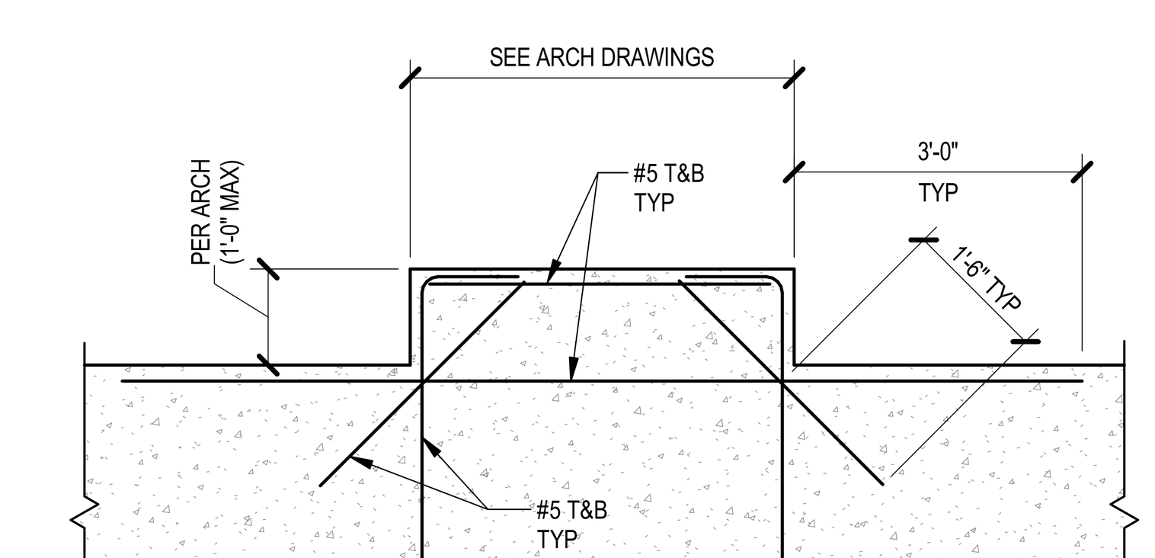
NOTES:
1. PIPES GREATER THAN 8" IN DIAMETER, AND BUNDLES OR BANKS NOT SPECIFICALLY SHOWN ON THE STRUCTURAL PLANS ARE NOT ALLOWED TO BE PLACED WITHOUT OBTAINING EOR APPROVAL.
2. CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
3. IF REQUIREMENTS AS SHOWN CANNOT BE MET, STEP FOOTING PER TYPICAL "STEPPED FOOTING" DETAIL.

16 PIPE THROUGH/BELOW FOOTING
NTS 033100_00-0101 (DSA)

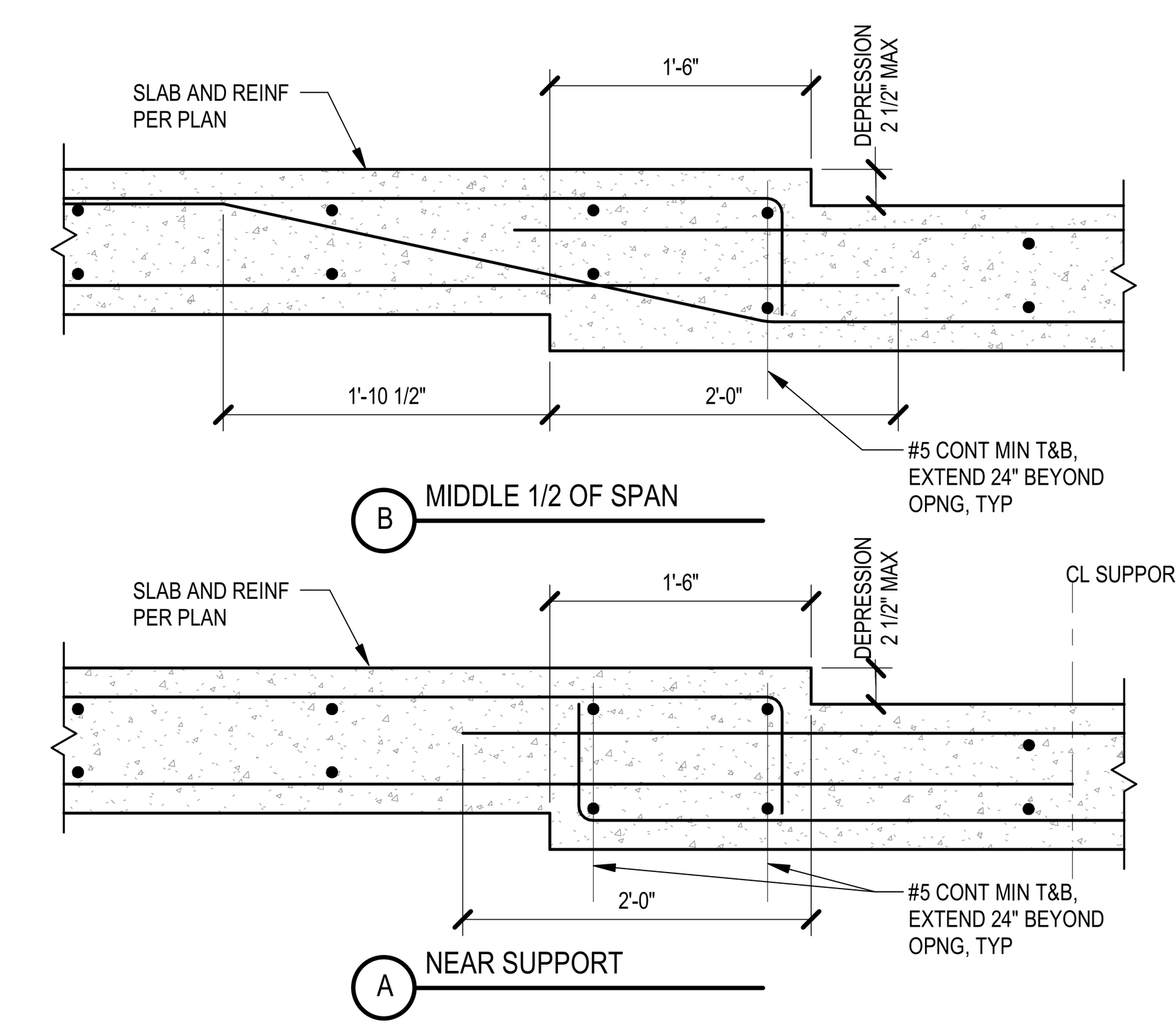


NOTE:
WHERE BEAM BAR IS OUTSIDE OF BAR PLACEMENT ZONE, THERE IS NO NEED TO ADD (1) #9 x 7'-0" AS SHOWN.

12 ALTERNATIVE TO 90° HOOK REBAR
3/4" = 1'-0"



8 TRIM BARS AT CANTILEVERED SLAB
NTS 033100-04-0108



4 SLAB REINF AT DEPRESSION
NTS 033100_04-0104

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150 San Jose, CA 95118
T: (408) 513-1939
miyamotointernational.com

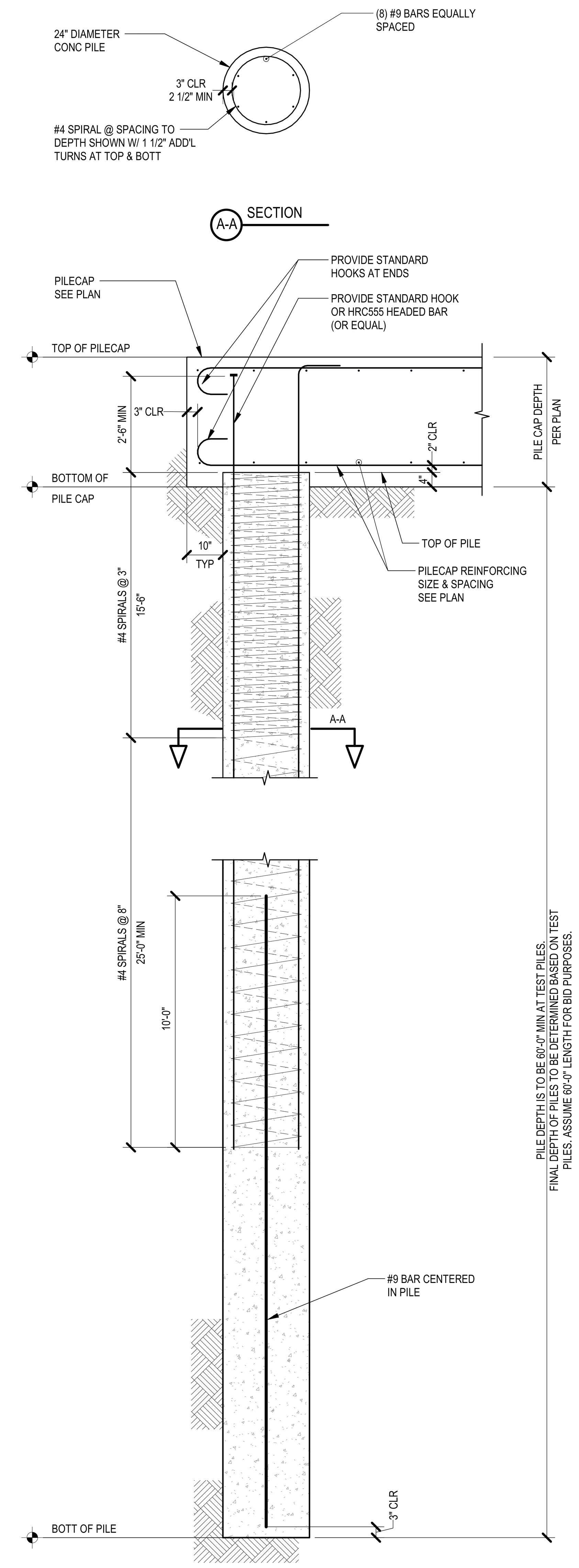
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE CHECKED: SF
DATE: 03/15/2021 SCALE: AS NOTED
PROJECT NUMBER: 2015800

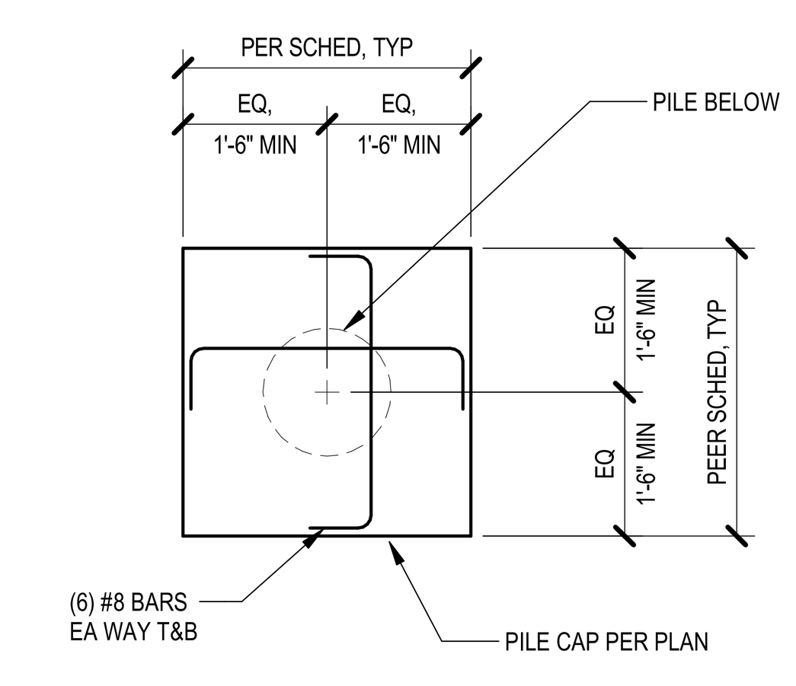
TYPICAL CONCRETE DETAILS

DRAWING NUMBER: S1.02

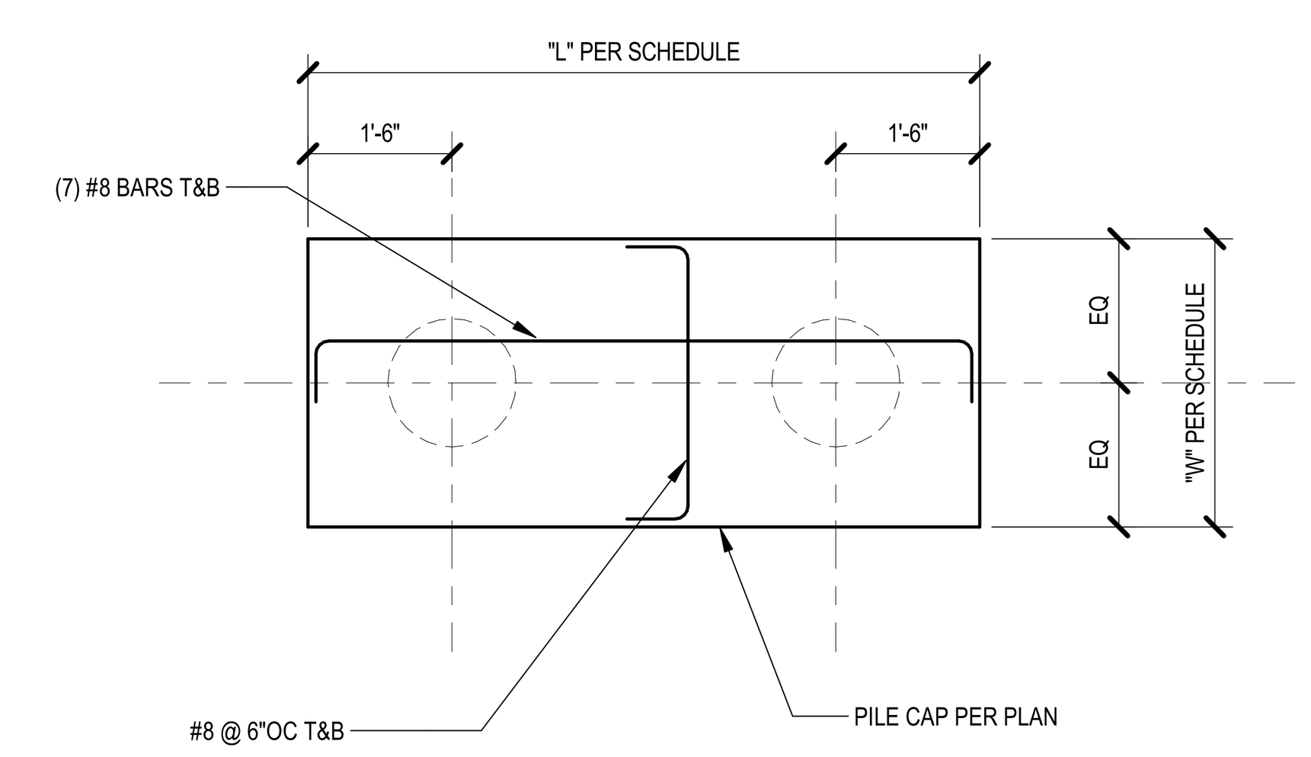


7 TYPICAL CAST-IN-PLACE CONC PILE DETAIL

1/2" = 1'-0"



1-PILE CAP (PC1)



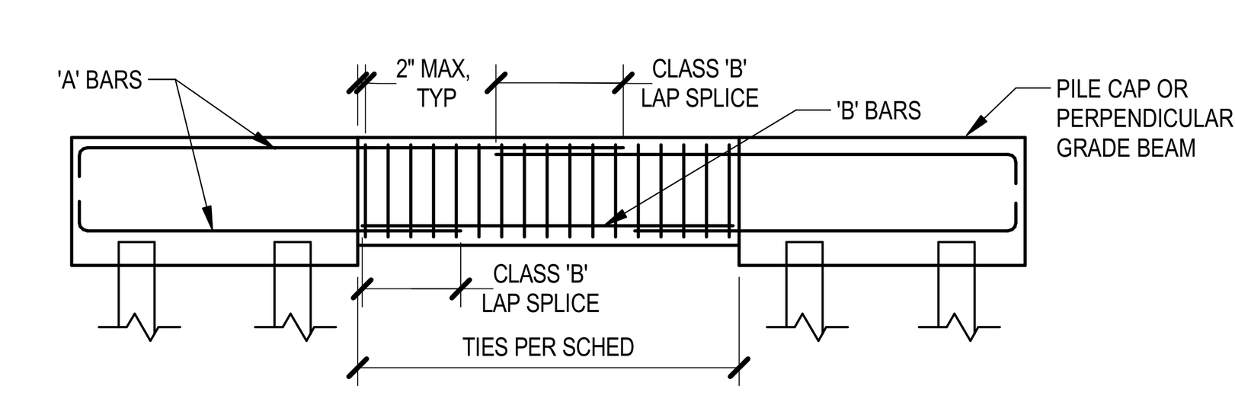
2-PILE CAP (PC2)

NOTE:
SEE DETAILS ON S401 AND S402 FOR SLAB TO PILE CAP DOWELS.

3 PIER CAP DETAIL

NTS

TIE BEAM / GRADE BEAM SCHEDULE						
MARK	SIZE		REINFORCEMENT			REMARKS
			HORIZONTAL		TIES/STIRRUPS	
	WIDTH	DEPTH	'A' BARS	'B' BARS		
GB1	3'-0"	3'-0"	(8) #9 T&B	(8) #9 T&B	2 LEGS #5 CLOSED TIES @ 6" OC, TYP	-
GB2	3'-0"	3'-0"	(8) #9 T&B	(8) #9 T&B	4 LEGS #4 CLOSED TIES @ 6" OC, TYP	-
GB3	3'-0"	3'-0"	(6) #9 T&B	(6) #9 T&B	2 LEGS #4 CLOSED TIES @ 6" OC, TYP	-



8 TIE BEAM/GRADE BEAM SCHEDULE

NTS

EAST BUILDING GRID LOCATION	P, DL (SERVICE) KIPS	P, LL (SERVICE) KIPS	P, EQ OR W* (LRFD) KIPS	V, EQ (LRFD) KIPS
P-1-A	52	12	13	33
P-2-A	75	18	8	33
P-1.5-A	73	20	3	33
P-1-B	52	12	16	32
P-2-B	83	21	7	32
P-3-B	60	19	11	32
P-4-C	89	17	15	64
P-3-A	56	12	6	33
P-4-A	80	17	10	33
P-4-B	94	35	5	64
P-5-D	53	8	14	35
P-5-A	53	8	17	35
P-4.5-D	110	28	2	67
P-4.5-A	105	27	3	67
P-5-B	81	24	8	35
P-1.5-B	77	20	9	32
P-4.5-B	111	51	0	67
P-3-C	32	5	22	31

SCHEDULE NOTES:
1. LOADS NOTED ABOVE ARE APPLIED AT THE TOP OF EACH PILE AT THE PILE CAP GRID LOCATION NOTED.
2. ADD 5% CONTINGENCY TO THE ABOVE LOADS.
3. THE EARTHQUAKE AXIAL LOADS CAN ACT IN EITHER COMPRESSION OR TENSION AND INCLUDE SEISMIC SYSTEM OVERSTRENGTH.
4. * INDICATES WIND LOAD ACTING UPWARD ONLY. NO EARTHQUAKE LOADING ACTS SIMULTANEOUSLY AT LOCATIONS WITH WIND LOAD.
5. PILE ULTIMATE CAPACITIES SHOULD MEET A MINIMUM OF TWICE THE ALLOWABLE FACTORED DESIGN LOAD AFTER ADDING THE CONTINGENCY.
6. ** ELEVATOR PILE LOADS ARE TO BE CONFIRMED UPON REVIEW AND APPROVAL OF THE ELEVATOR DEFERRED APPROVAL.

4 PILE DESIGN LOAD SCHEDULE

NTS

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com
Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
MI Job NO: MI2013213
T: (408) 513-1939
miyamotointernational.com

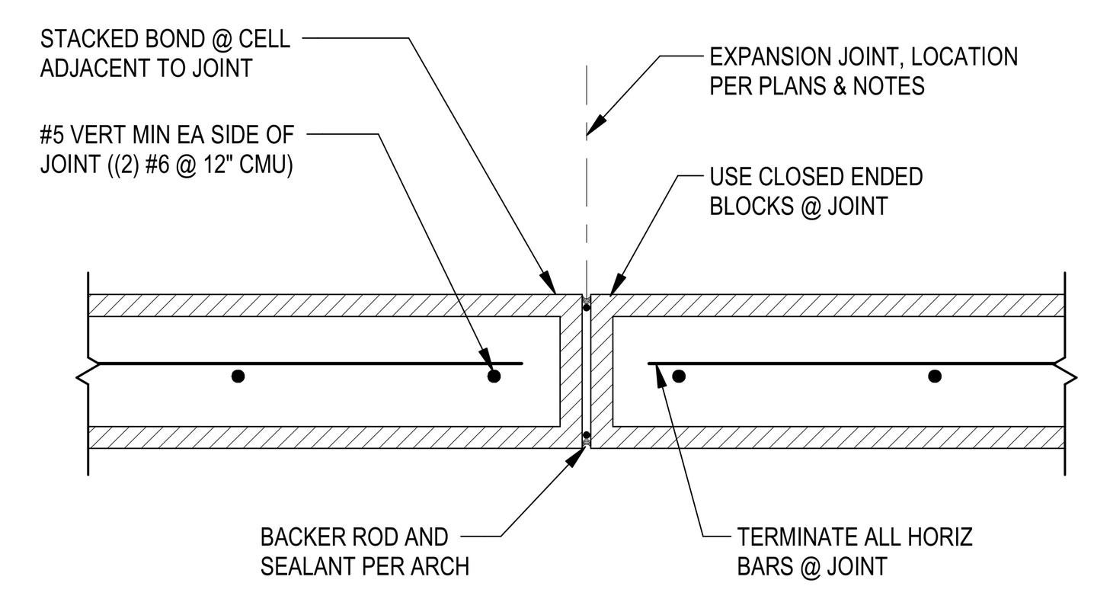
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE | CHECKED: SF
DATE: 03/15/2021 | SCALE: AS NOTED
PROJECT NUMBER: 2015800

TYPICAL CONCRETE DETAILS

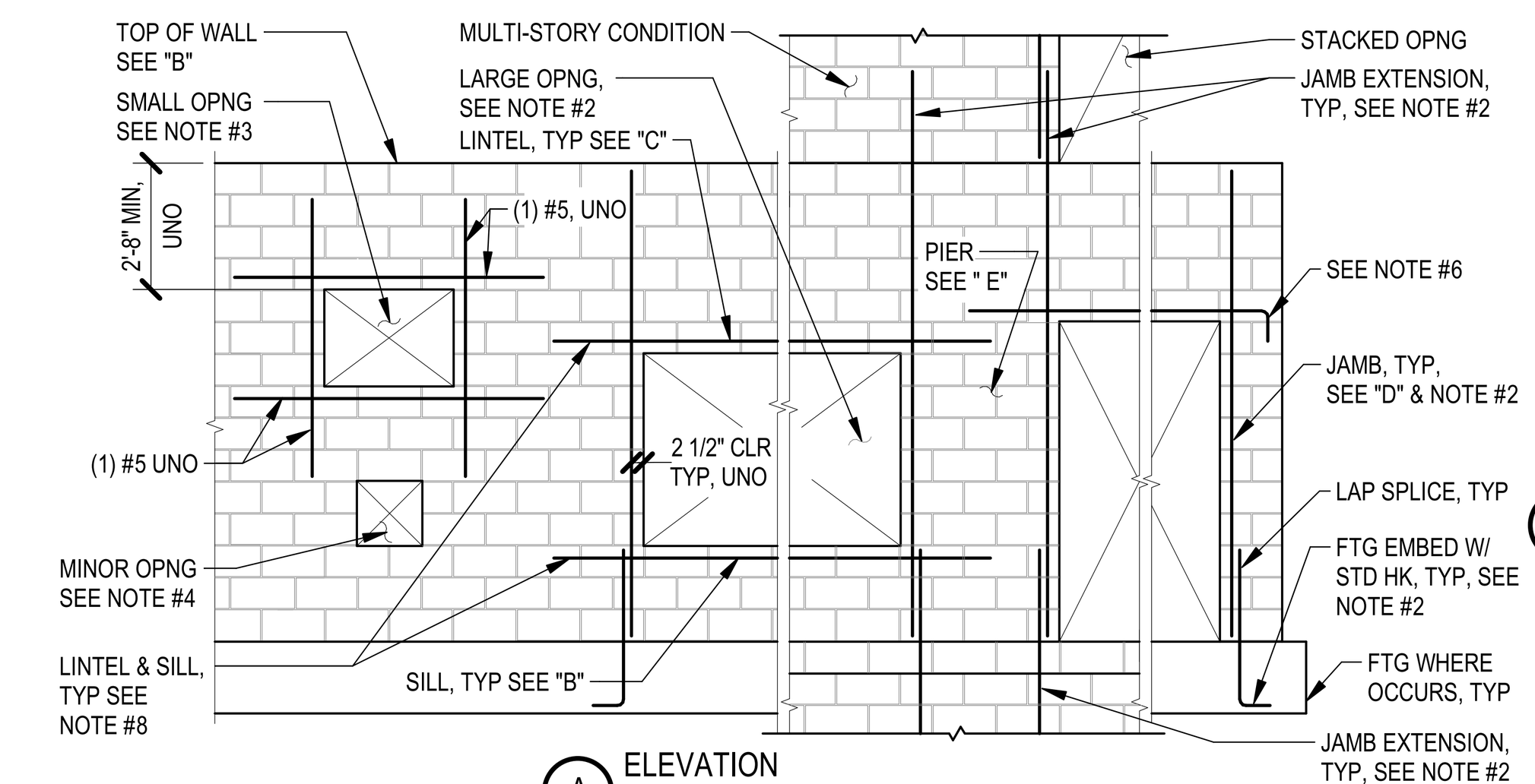
DRAWING NUMBER: S1.03

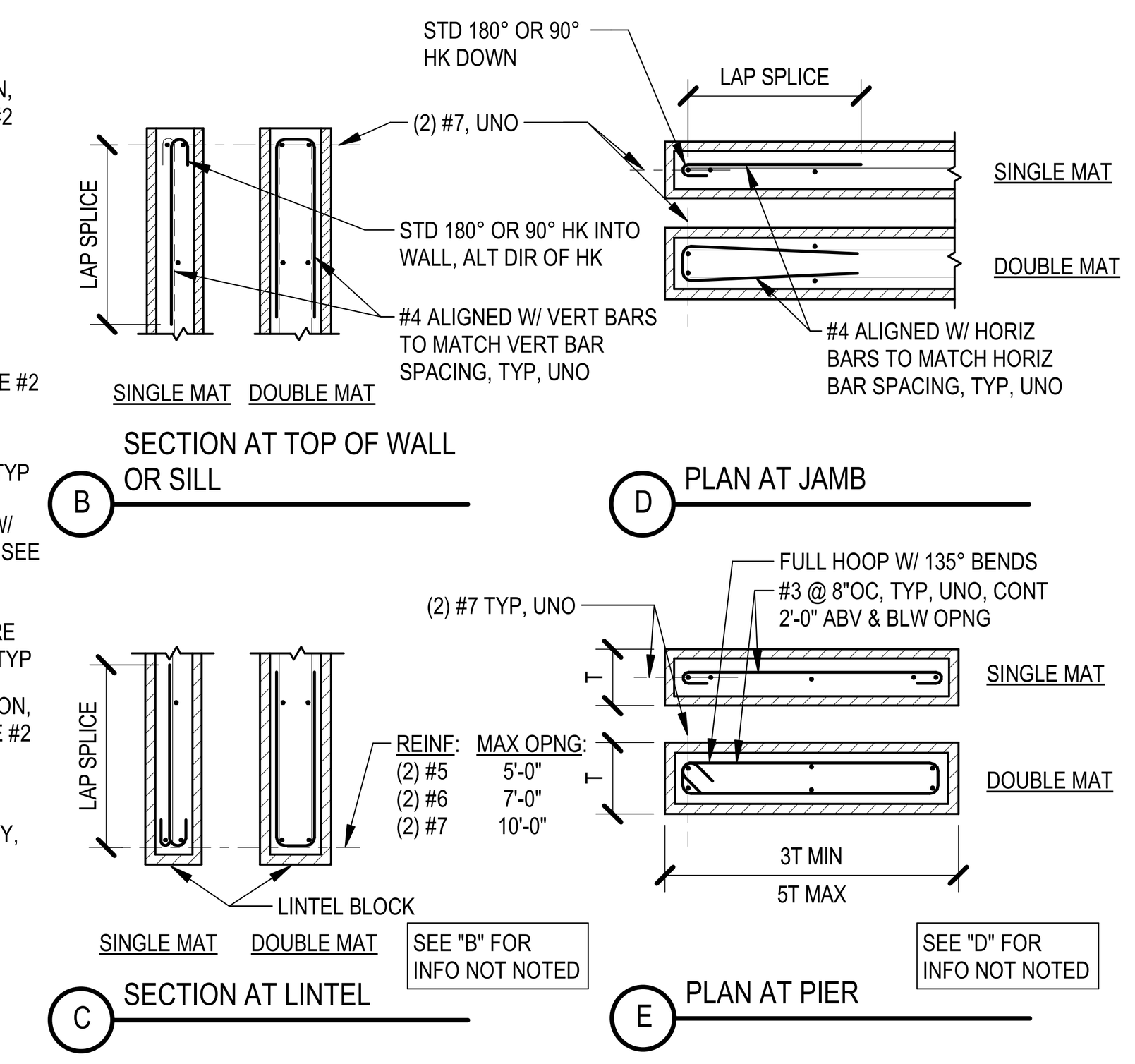


NOTE:
DO NOT SUBSTITUTE EXPANSION JOINTS FOR CONTROL JOINTS. USE ONLY WHERE SPECIFICALLY NOTED.

9 CMU WALL EXPANSION JOINT

NTS 042200-0104

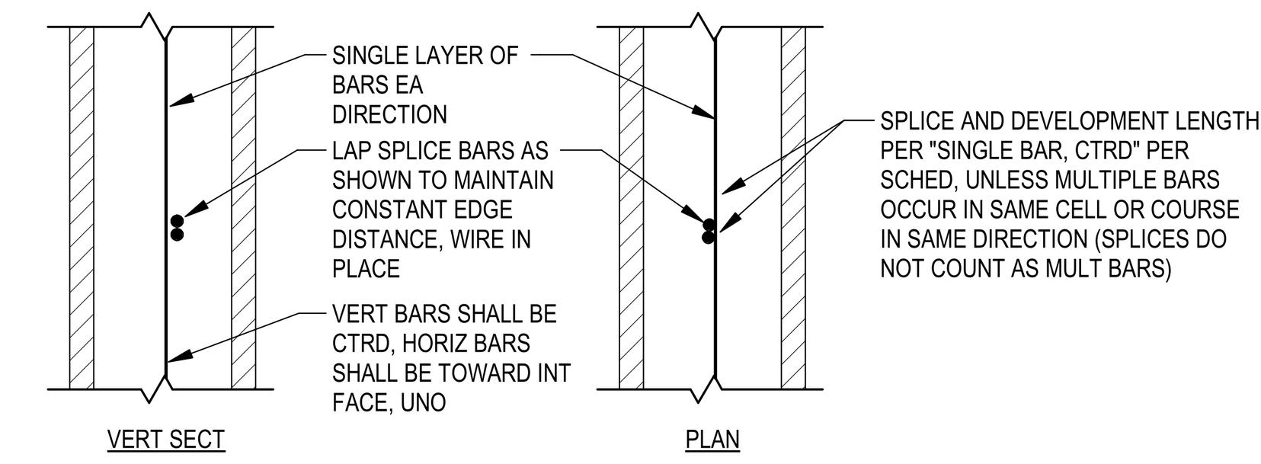




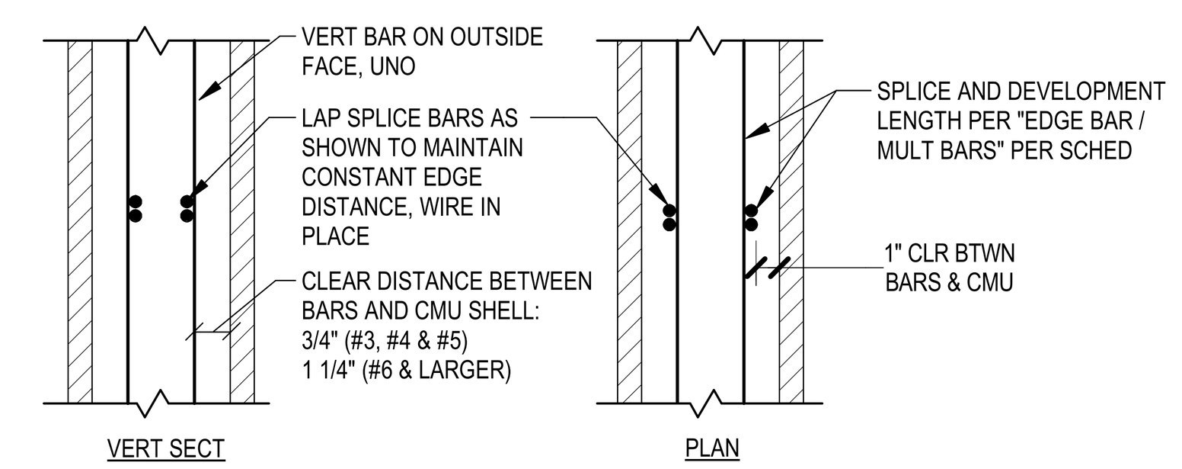
NOTES:
1. SEE PLANS FOR TYPICAL AND ADDITIONAL REINFORCEMENT.
2. FOR OPENINGS 36" OR LARGER IN WIDTH, USE FULL HEIGHT JAMB BARS. EXTEND TO TOP OF WALL AT UPPER OR SINGLE STORY, AND 48DB BELOW TOP OF FLOOR AND INTO FOOTING.
3. AT OPENINGS LESS THAN 36" IN WIDTH, EXTEND JAMB BARS 48DB PAST EDGE OF OPENING.
4. FOR MINOR OPENINGS THAT DO NOT INTERRUPT TYPICAL REINF, ARE NO LARGER THAN 24" SQ, AND ARE AT LEAST 24" FROM ADJACENT OPENINGS AND WALL ENDS, NO ADDITIONAL REINF IS REQUIRED UNO.
5. WHERE FULL EXTENSION IS NOT POSSIBLE, EXTEND BARS AS FAR AS POSSIBLE AND USE A STD HOOK.
6. EXTEND LINTEL AND SILL BARS 48DB MINIMUM PAST EDGE OF OPENING.
7. THE WEB AND SHELL MAY BE REMOVED TO FACILITATE INSTALLATION, IF REQUIRED, PROVIDED THAT GROUTING AND BLOCK INTEGRITY ARE NOT COMPROMISED.

5 REINFORCEMENT FOR CMU WALL OPENINGS

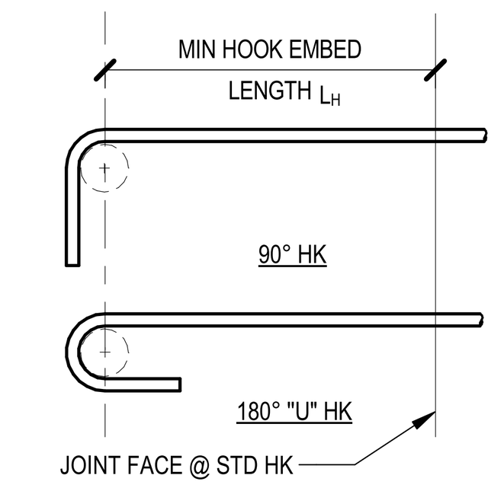
NTS 042200-0100



A REINFORCEMENT CENTERED IN CMU BLOCK



B REINFORCEMENT AT EDGE OF CMU BLOCK / MULTIPLE BARS



C STD HOOKS

			LAP SPLICE (IN) UNO	DEVELOPMENT LENGTH L_D (IN) UNO	
	BAR SIZE	STD HOOK L_H (IN)	$72D_B$ (IN)	EDGE BAR/ MULT BARS	SINGLE BAR, CTRD
ALL CMU	#3	11	27	16	15
	#4	14	36	25	20
	#5	17	45	39	25
	#6	30	54	54	39
	#7	39	63	63	50
	#8	59	72	72	72
	#9	66	81	81	81

NOTES:
1. VALUES ARE FOR GRADE 60 REINF DEVELOPED IN CMU (f'm = 2000 PSI).
2. VALUES MAY NOT BE USED FOR DEVELOPMENT INTO CONCRETE.

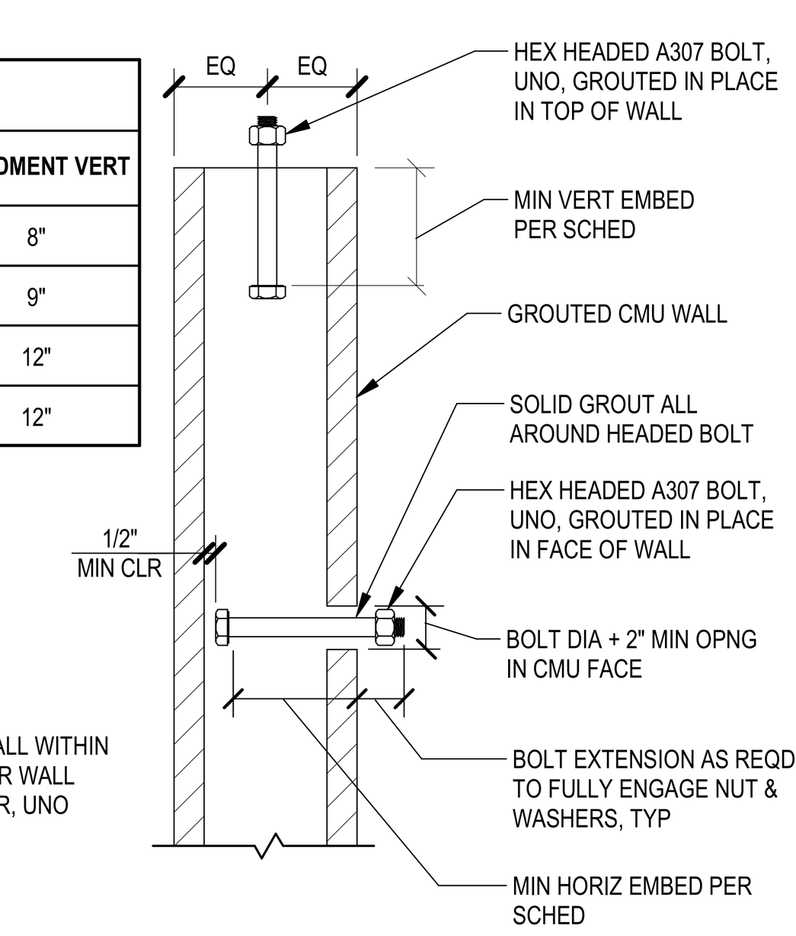
6 CMU REINFORCEMENT DETAILS & DEVELOPMENT LENGTHS

NTS 042200-0101

BOLT EMBED SCHEDULE		
BOLT SIZE	EMBEDMENT HORIZ	EMBEDMENT VERT
1/2" DIA	4"	8"
5/8" DIA	5"	9"
3/4" DIA	5"	12"
7/8" DIA*	7"	12"

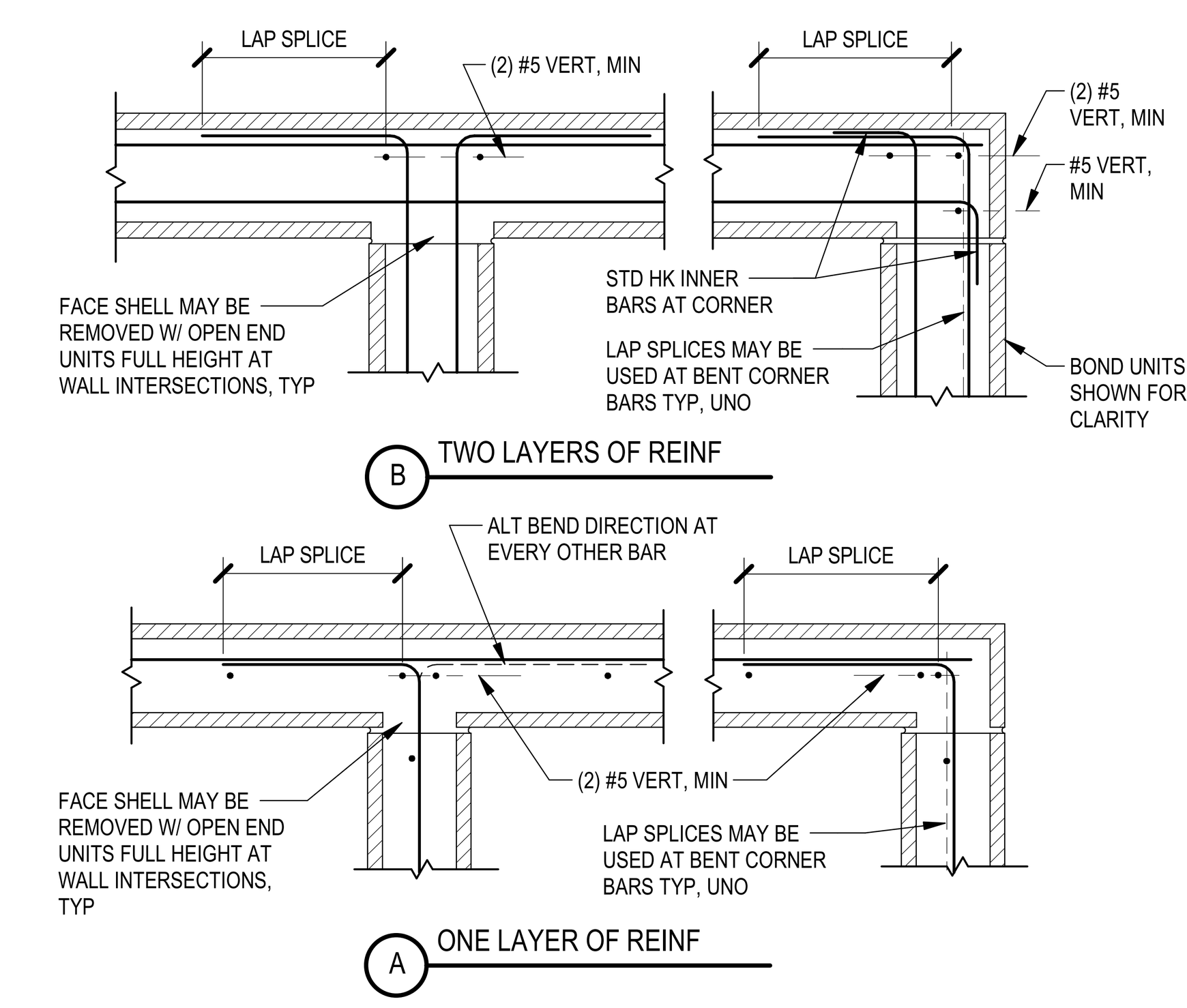
* NOT ALLOWED IN 8" CMU

NOTE:
DO NOT PLACE BOLTS IN FACE OF WALL WITHIN 12 BOLT DIAMETERS OF OPENINGS OR WALL ENDS WITHOUT APPROVAL FROM EOR, UNO



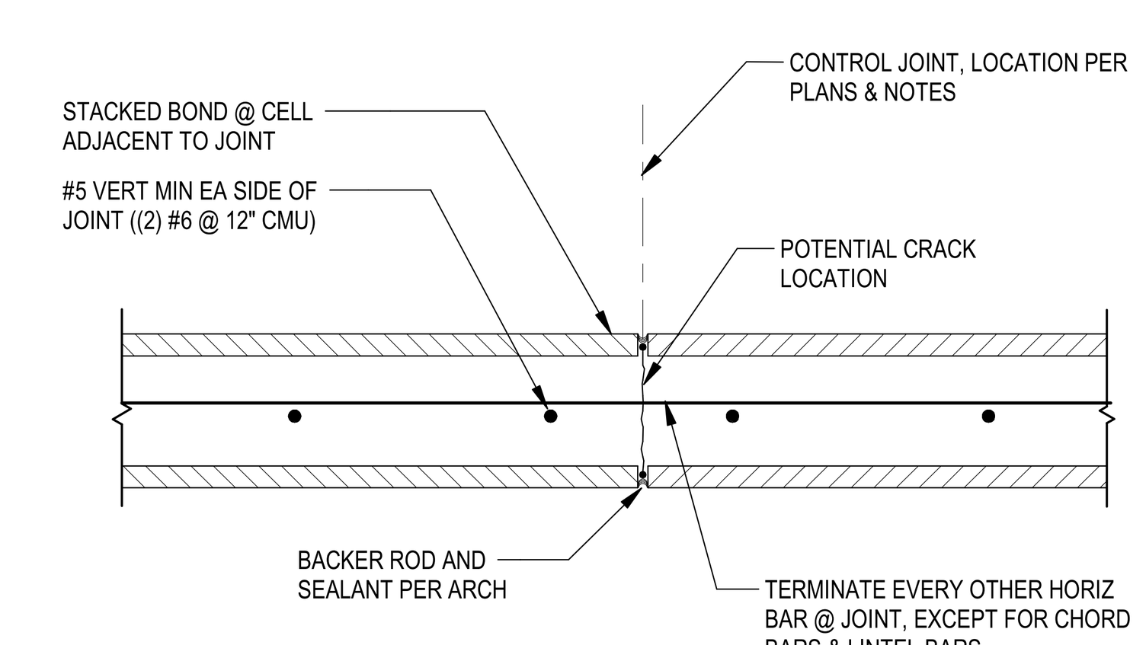
7 HEADED BOLT IN CMU WALL

NTS 042200-0105



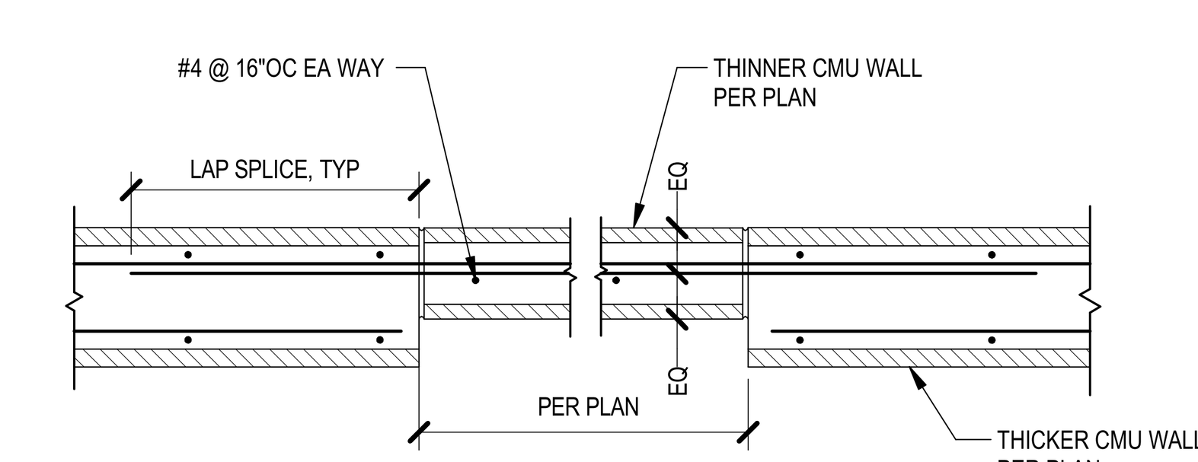
3 CMU WALL INTERSECTIONS

NTS 042200-0107



8 CMU WALL CONTROL JOINT

NTS 042200-0103



4 CMU WALL THICKNESS TRANSITION

NTS 042200-0102

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
MI Job NO: MI2013213
T: (408) 513-1939
miyamotointernational.com

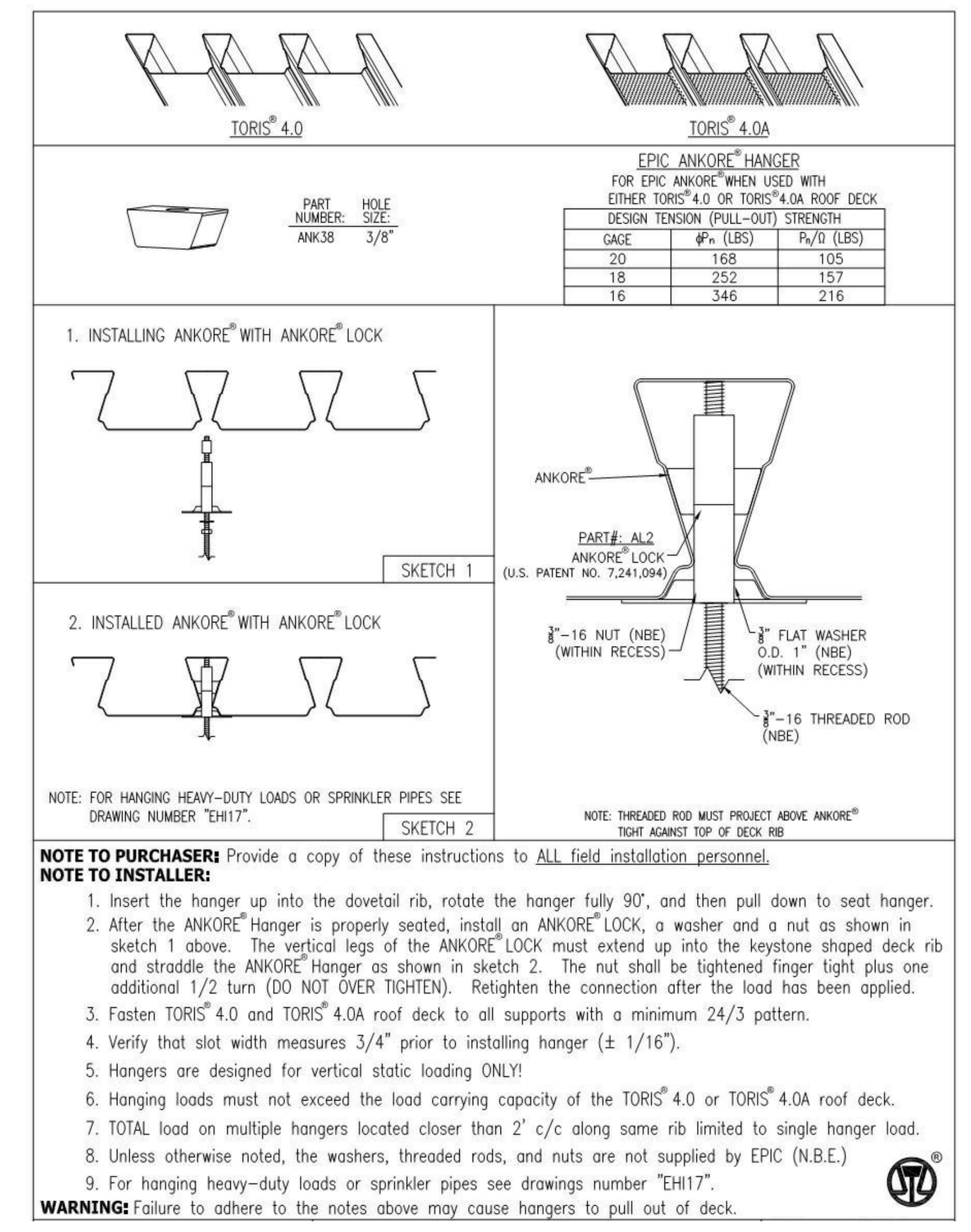
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE CHECKED: SF
DATE: 03/15/2021 SCALE: AS NOTED
PROJECT NUMBER: 2015800

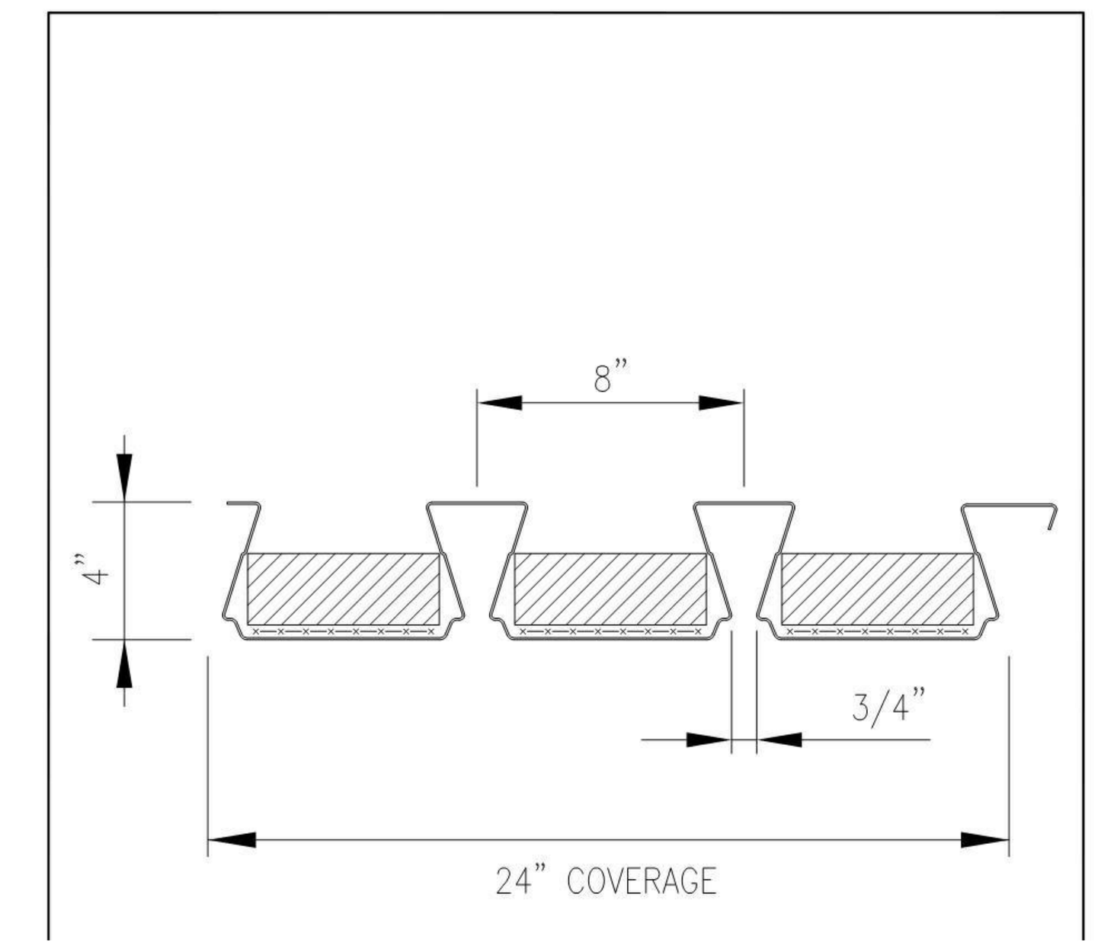
TYPICAL CMU DETAILS

DRAWING NUMBER: S1.04



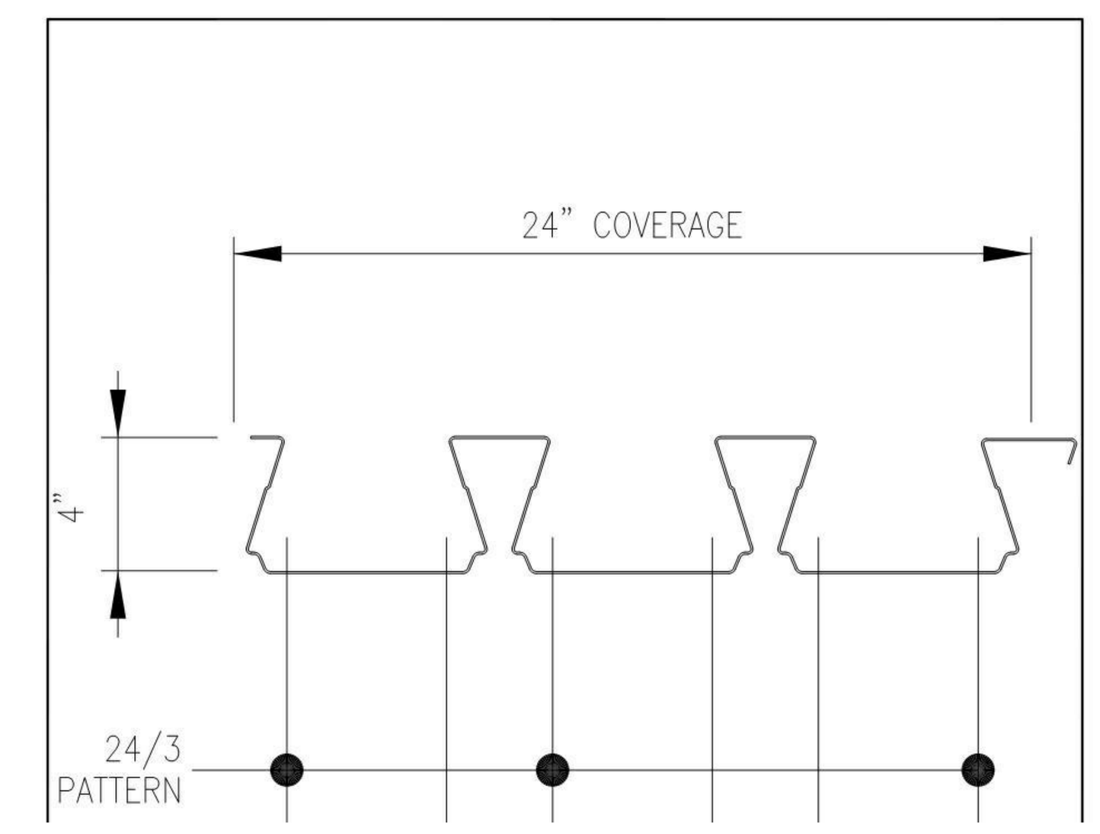
5 TORIS 4.0 & TORIS 4.0A HANGER INSTALLATION RECOMMENDATION

NTS



1 PROFILE

NTS



2 SUPPORT FASTENER PATTERN

NTS

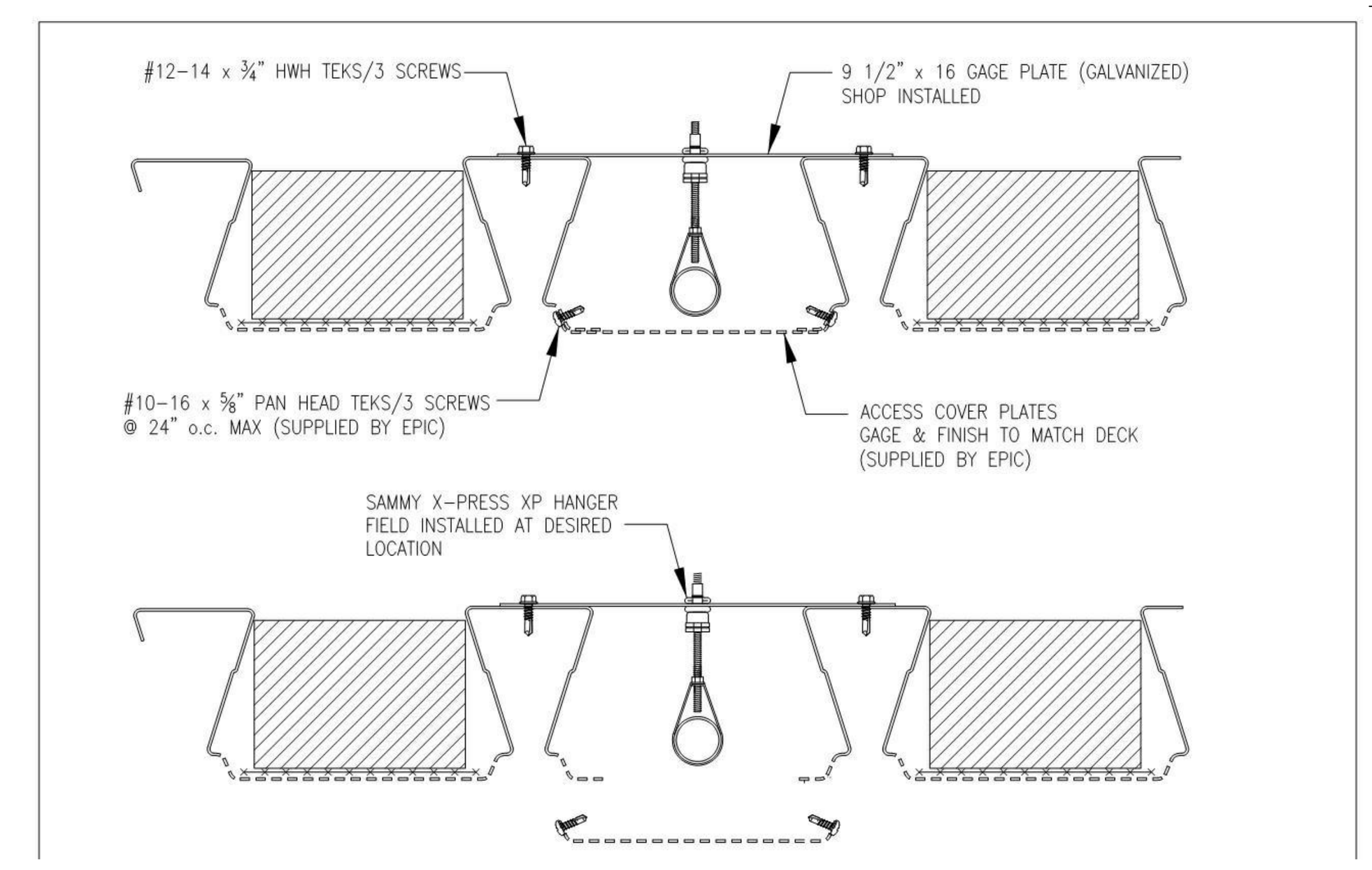
METAL DECK SCHEDULE[4]													
METAL DECK (PER PRODUCT SCHEDULE)								CONC OVER DECK [3,4]					
DECK TYPE	DEPTH (IN)	TYPE	GAGE	I (IN^4/FT)	S+ (IN^3/FT)	S- (IN^3/FT)	DESIGN STRENGTH (LBS/IN2)	TOTAL DEPTH	CONC TYPE	REINF[1,2]	END AND INTERMEDIATE SUPPORTS CONNECTION PATTERN [3]	END AND INTERMEDIATE SUPPORTS CONNECTION TYPE [2, 7]	SIDE SEAMS
D-1	4"	TORIS 4A	18	3.21	1.22	1.17	36,000	-	-	-	24/3	● 3/4"Ø ARC PUDDLE WELD	1.5" FILLET WELD @ 18" OC

NOTES:
1. WHEN TWO DECK PANELS ABUT, EACH PANEL SHALL BE ATTACHED AS SPECIFIED.
2. SEE REPORT PER "PRODUCT REPORTS" IN GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE "METAL DECK ATTACHMENTS" DETAIL FOR INFORMATION ON LOCATION OF CONNECTIONS.
4. CONNECTIONS FOR LONGITUDINAL SUPPORTS AND MEMBERS PARALLEL TO FLUTES @ 12"OC MAX AND SHALL MATCH "END AND INTERMEDIATE SUPPORT TYPE".
5. EFFECTIVE DIAMETER OF 3/4"Ø ARC SPOT WELDS SHALL BE 1/2"Ø.
6. SEE PLAN FOR ADDITIONAL CONNECTIONS WHERE OCCURS.
7. DECK GAGE INDICATED IN SCHEDULE IS FOR MULTI SPAN DECK CONDITION (MIN 2 DECK SPAN). USE 16GA FOR SINGLE SPAN DECK CONDITION.

LEGEND:
□ SHEET EDGE ATTACHMENT
● FLUTE ATTACHMENT
× SIDE SEAM CONNECTION
YY/Z ← ATTACHMENTS PER SHEET
SHEET WIDTH (INCHES)

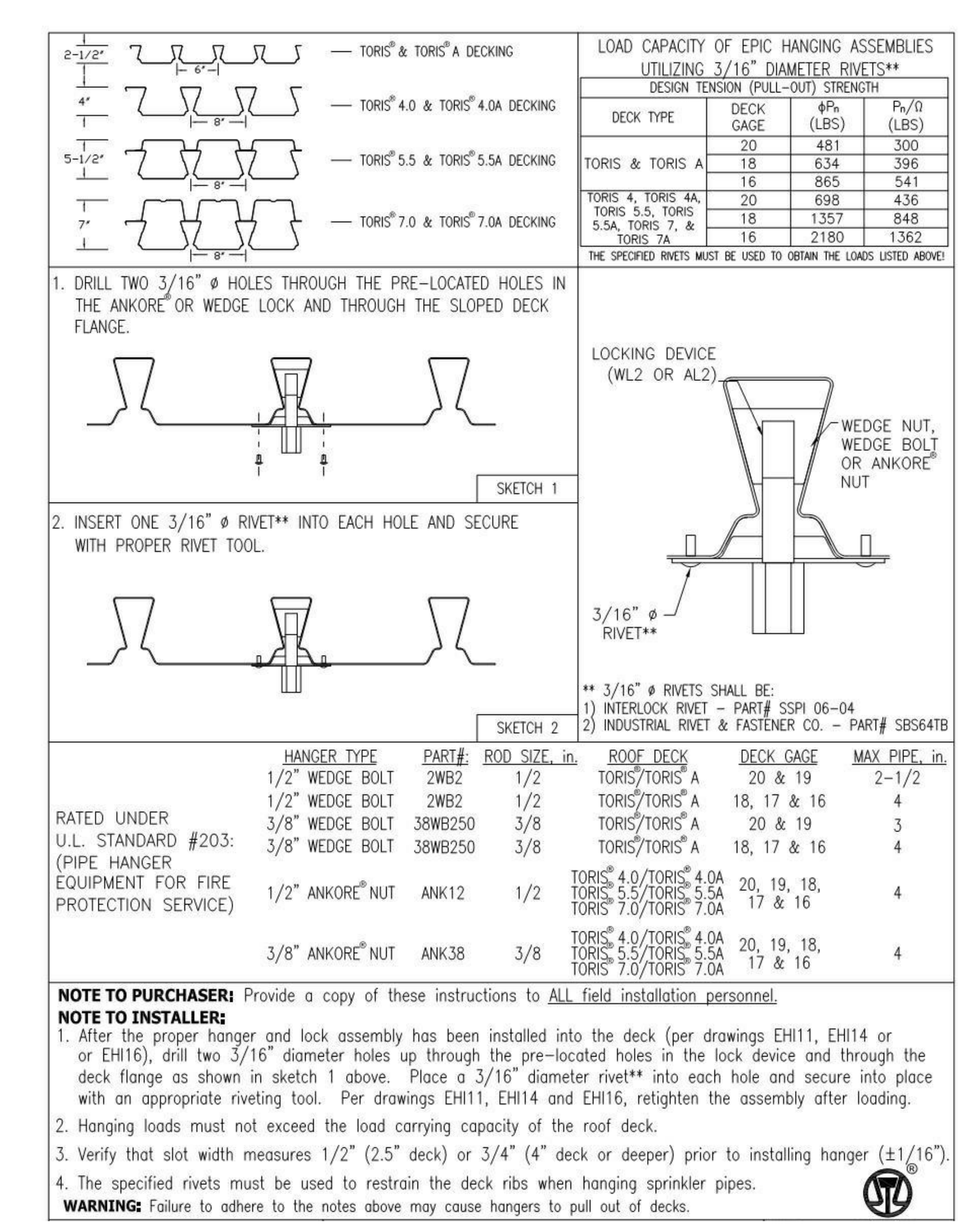
6 METAL DECK SCHEDULE

NTS



3 ACCESS COVER DETAIL

NTS



4 WEDGE & ANKORE LOCK WITH RIVETS INSTALLATION RECOMMENDATION

NTS

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
T: (408) 513-1999
miyamotointernational.com

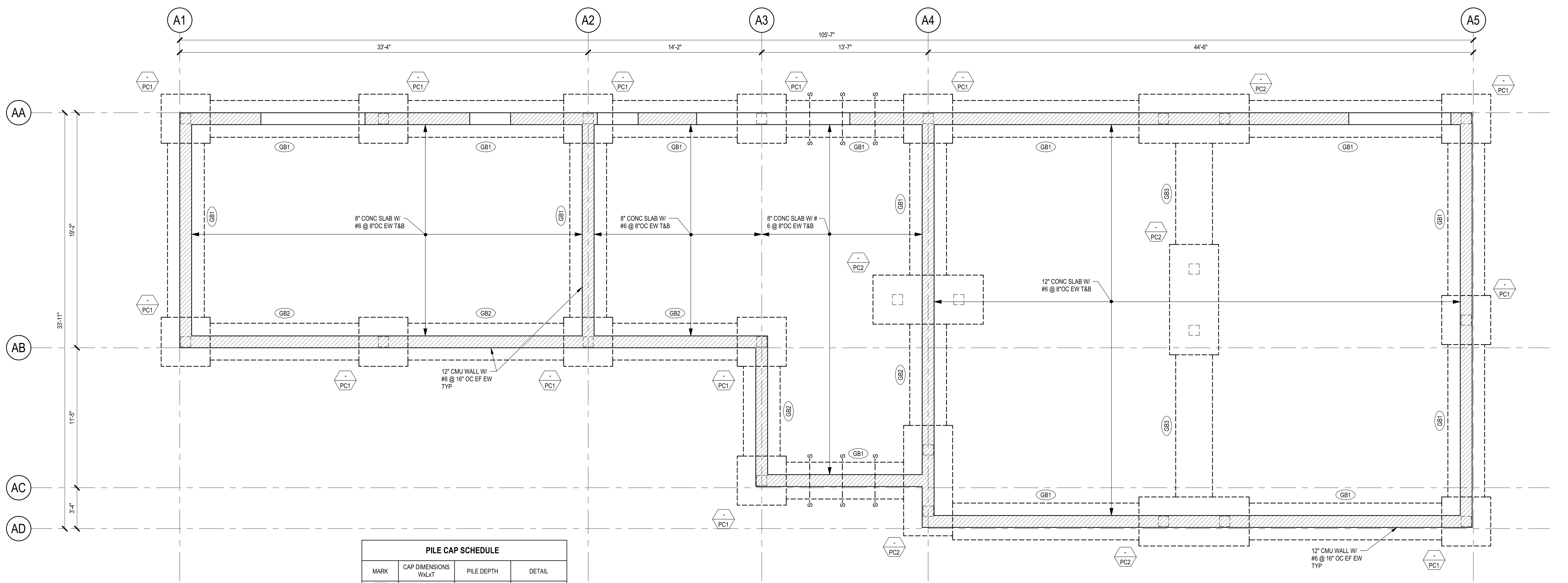
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE | CHECKED: SF
DATE: 03/15/2021 | SCALE: AS NOTED
PROJECT NUMBER: 2015800

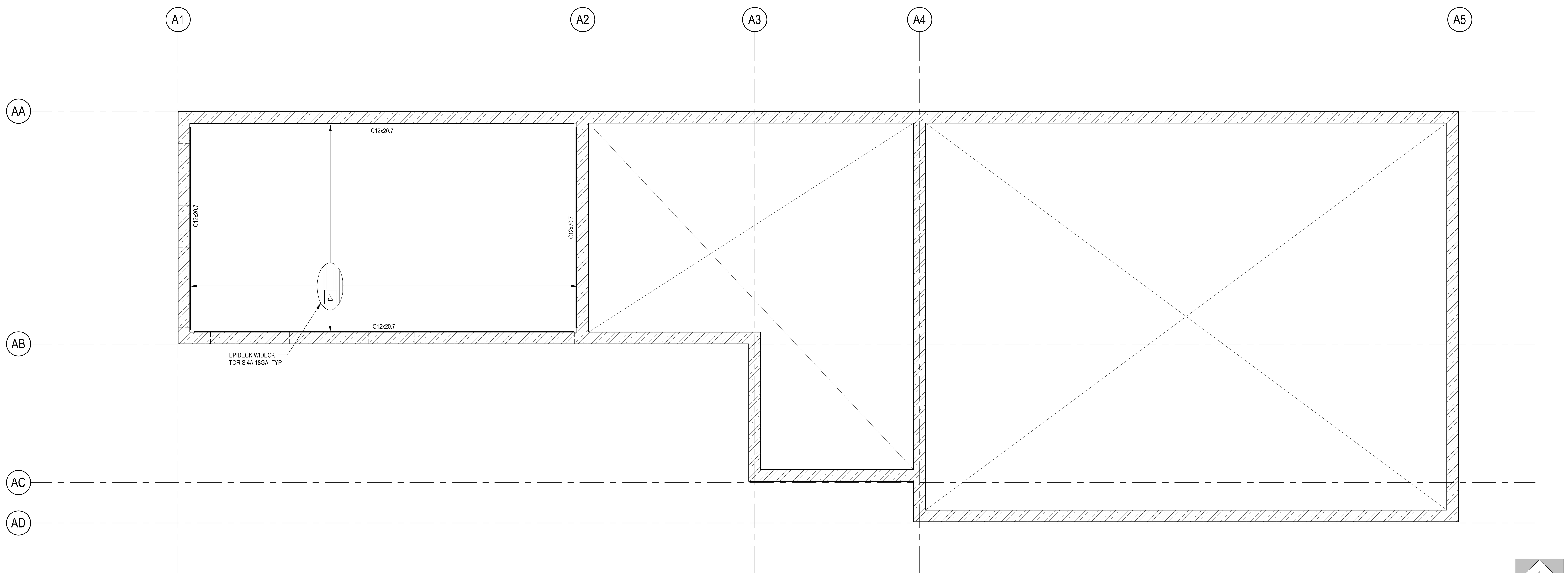
DETAILS

DRAWING NUMBER: S1.05



PILE CAP SCHEDULE			
MARK	CAP DIMENSIONS WxLxT	PILE DEPTH	DETAIL
PC1	4'-0"x4'-0"x3'-6"	60'-0" MIN	3/S1.03
PC2	4'-0"x9'-0"x3'-10"	60'-0" MIN	3/S1.03

1 NEW UTILITY BUILDING - FOUNDATION PLAN
1/4" = 1'-0"



2 NEW UTILITY BUILDING - ROOF FRAMING PLAN
1/4" = 1'-0"

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
miyamoto.
3150 Almaden Expressway, Suite 150
San Jose, CA 95118
T: (408) 513-1939
miyamotointernational.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: AE	CHECKED: SF
DATE: 03/15/2021	SCALE: AS NOTED
PROJECT NUMBER: 2015800	

FOUNDATION & ROOF FRAMING PLANS

DRAWING NUMBER: S2.00

PIPING MATERIAL MATRIX

ID	SYSTEM	SIZE	MATERIAL	JOINT TYPE	INSULATION
CHS CHR	CHILLED WATER	3/4" - 2"	STD WT BLK ERW THREADED AND COUPLED	150 MALLEABLE IRON, SCREWED	FIBERGLASS 1/2" THICK FOR 1-1/4" PIPE AND BELOW, 1" THICK FOR 1-1/2" AND ABOVE
CHS CHR	CHILLED WATER	2-1/2" - 14"	STD WT BLK ERW ENDS BEVELED FOR WELDING OR GROOVED ENDS FOR VICTAULIC COUPLINGS, ASTM A53, GRADE A	STD WT BUTTWELDING OR VICTAULIC COUPLINGS, ASTM A234 ANSI B16.9	FIBERGLASS 1" THICK
CHS CHR	CHILLED WATER (BELOW GRADE)	2-1/2" - 14"	-	-	-
CS CR	CONDENSER WATER	3/4" - 2"	STD WT BLK ERW THREADED AND COUPLED	150 MALLEABLE IRON, SCREWED	N/A
CS CR	CONDENSER WATER	2-1/2" - 14"	STD WT BLK ERW ENDS BEVELED FOR WELDING OR GROOVED ENDS FOR VICTAULIC COUPLINGS, ASTM A53, GRADE A	STD WT BUTTWELDING OR VICTAULIC COUPLINGS, ASTM A234 ANSI B16.9	N/A
CS CR	CONDENSER WATER (BELOW GRADE)	2-1/2" - 14"	-	-	-
HWS HWR	HEATING WATER	3/4" - 2"	STD WT BLK ERW THREADED AND COUPLED	150 MALLEABLE IRON, SCREWED	FIBERGLASS 1" THICK FOR 3/4" PIPE, 1-1/2" THICK FOR 1" PIPE AND ABOVE
HWS HWR	HEATING WATER	2-1/2" - 10"	STD WT BLK ERW ENDS BEVELED FOR WELDING OR GROOVED ENDS FOR VICTAULIC COUPLINGS, ASTM A53, GRADE A	STD WT BUTTWELDING OR VICTAULIC COUPLINGS, ASTM A234 ANSI B16.9	FIBERGLASS 1-1/2" THICK
HWS HWR	HEATING WATER (BELOW GRADE)	2-1/2" - 10"	-	-	-
COPPER OPTION					
CHS CHR	CHILLED WATER	3/4" - 2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22, LEADFREE SOLDER JOINTS-HARRIS, CANFIELD OR EQUAL, OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQUAL.	FIBERGLASS 1/2" THICK FOR 1-1/4" PIPE AND BELOW, 1" THICK FOR 1-1/2" AND ABOVE
CHS CHR	CHILLED WATER	2-1/2" - 4"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER JOINT TUBE FITTINGS, ANSI B16.22 FOR BRAZING	FIBERGLASS 1" THICK
HWS HWR	HEATING WATER	3/4" - 2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22, LEADFREE SOLDER JOINTS-HARRIS, CANFIELD OR EQUAL, OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQUAL.	FIBERGLASS 1" THICK FOR 3/4" PIPE, 1-1/2" THICK FOR 1" PIPE AND ABOVE
HWS HWR	HEATING WATER	2-1/2" - 4"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER JOINT TUBE FITTINGS, ANSI B16.22 FOR BRAZING	FIBERGLASS 1-1/2" THICK
RG RL	REFRIGERANT PIPING	1/8" - 1-3/8"	TO BE MANUFACTURED IN ACCORDANCE WITH ASTM B280 AND ANSI B9.1 REFRIGERATION STANDARDS	BRAZED WROUGHT COPPER CAPILLARY FITTINGS, ANSI B16.22 OR MSS SP-73. CAST COPPER NOT PERMITTED.	CLOSED CELL 1/2" THICK

NOTES:

1. EXTERIOR FIBERGLASS INSULATED PIPE SHALL HAVE EMBOSSED ALUMINUM INSULATION JACKET WITH PVC FITTINGS.
2. EXTERIOR CLOSED CELL INSULATED PIPE SHALL HAVE U.V. BARRIER PROTECTION.
3. INSULATION THICKNESS BASED ON CONDUCTIVITY RANGES PER 2016 CA ENERGY CODE.
4. PROVIDE PVC JACKET UP TO 10 FT AFF ON INTERIOR INSTALLATIONS THAT ARE EXPOSED.
5. RUN OUTS 1" DIAMETER OR LESS AND WITHIN 5 FEET OF COIL CONNECTIONS ON HWS/R PIPING, NOT TO REQUIRE INSULATION.

DIFFUSERS, REGISTERS & GRILLES SCHEDULE

MARK	MODEL NO.	MOUNT	OBD	FINISH	REMARKS
S1	SMCD	24x24 LAY-IN	NO	WHITE	MODULAR CORE
S2	SMCD	SURFACE	NO	WHITE	MODULAR CORE, BEVELED FACE
S3	520L	SURFACE	NO	WHITE	FRONT BLADES PARALLEL TO LONG DIMENSION, DOUBLE DEFLECTION
R1	PDDR	24x24 LAY-IN	NO	WHITE	PERFORATED FACE
R2	10	SURFACE	NO	WHITE	PERFORATED FACE
R3	530L	SURFACE	NO	WHITE	HORIZONTAL FIXED BLADES, PARALLEL TO LONG DIMENSION, 45 DEG. DEF.
E1	PDDR	24x24 LAY-IN	NO	WHITE	PERFORATED FACE
E2	10	SURFACE	NO	WHITE	PERFORATED FACE
E3	530L	SURFACE	NO	WHITE	HORIZONTAL FIXED BLADES, PARALLEL TO LONG DIMENSION, 45 DEG. DEF.

SCHEDULE NOTES

1. MODEL NUMBERS ARE BASED ON PRICE; EQUAL MFR'S AND MODELS ARE ACCEPTABLE.
2. NECK SIZE AND DEFLECTION ARE SHOWN ON FLOOR PLAN. ALL ARE 4-WAY BLOW UON.

MECHANICAL MATERIAL MATRIX

SYSTEM	DUCT STATIC PRESSURE	MATERIAL	INSULATION
EXHAUST AIR DUCT	-2"	GALV.	N/A
RETURN AIR DUCT	-2"	GALV.	N/A
SUPPLY AIR DUCT (UPSTREAM OF VAV)	+3"	GALV.	N/A FOR CONDITIONED SPACE R-4.2 FOR UNCONDITIONED SPACE R-8 FOR EXTERIOR
SUPPLY AIR DUCT (DOWNSTREAM OF VAV)	+2"	GALV.	N/A FOR CONDITIONED SPACE R-4.2 FOR UNCONDITIONED SPACE R-8 FOR EXTERIOR
BOILER FLUE	+2"	T.B.D. (PENDING BOILER FINAL SELECTION)	N/A

MECHANICAL ABBREVIATIONS

SYMBOL	ABBREVIATION	DESCRIPTION
		TEE DOWN
	TA, TB	TO ABOVE, TO BELOW
	TCP	TEMPERATURE CONTROL PANEL
M	TCV	TEMPERATURE CONTROL VALVE (2-WAY)
M	TCV	TEMPERATURE CONTROL VALVE (3-WAY)
T		TEMPERATURE GAUGE (WATER)
T		TEMPERATURE SENSOR (WATER)
	TSP	TOTAL STATIC PRESSURE
		TRIPLE VIC FLEXIBLE CONNECTION
	TYP	TYPICAL
		UNION
	UCD	UNDER CUT DOOR
	UF / UG	UNDERFLOOR / UNDERGROUND
	UON / UNO	UNLESS OTHERWISE NOTED / UNLESS NOTED OTHERWISE
	V	VOLTAGE
	VAV	VARIABLE AIR VOLUME
	VFD / VSD	VARIABLE FREQUENCY DRIVE / VARIABLE SPEED DRIVE
	WB	WET BULB
	WMS	WIRE MESH SCREEN
	WPD	WATER PRESSURE DROP
	WT	WEIGHT
		Y STRAINER WITH HOSE END BLOW OFF

MECHANICAL LEGENDS

SYMBOL	DESCRIPTION
10x12 L / 10x12 L	ACOUSTICALLY LINED DUCT - DIMENSIONS ARE NET INSIDE
R(D) / R(D)	DUCT RISE (DROP) IN DIRECTION OF AIR FLOW
8x10 / 8x10	DUCT - WIDTH x DEPTH
	LATERAL WITH TRANSITION TO DUCT SIZES INDICATED
	RADIUS ELBOW SEE SPECS.
	SQUARE ELBOW WITH TURNING VANES
6"Ø 6x6 / 6"Ø 6x6	TRANSITION ROUND TO RECTANGULAR
	VERTICAL DUCT RISE OR DROP
	DUCT DROP OR RISE THRU ROOF OR FLOOR
	SUPPLY, RETURN, OUTSIDE OR EXHAUST AIR DUCT
T SP CO2	THERMOSTAT / STATIC PRESSURE / CO2 (HEIGHT TO BE NO MORE THAN 48 INCHES FROM THE TOP OF OUTLET BOX AND NO LESS THAN 15 INCHES FROM BOTTOM OF OUTLET BOX TO FF)
	MANUAL VOLUME DAMPER (MVD)
BDD	BACKDRAFT DAMPER
F	FIRE DAMPER
FSD	COMBINATION FIRE SMOKE DAMPER ASSEMBLY
	FLEXIBLE CONNECTION
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
	FLEXIBLE DUCT
	DIRECTIONAL FLOW ARROWS

NECK SIZE OF DIFFUSER — 8x8 S1 — INDICATES TYPE OF DIFFUSER

CFM PER DIFFUSER — 180, 9"Ø — INDICATES INLET SIZE

DIFFUSER/GRILLE TAG, TYP

#-# — FSD NUMBER — FLOOR LEVEL NUMBER

FIRE SMOKE DAMPER TAG, TYP

GENERAL NOTES (MECHANICAL)

1. ALL WORK SHALL COMPLY WITH 2019 CALIFORNIA BUILDING CODE, 2019 CALIFORNIA BUILDING ADMINISTRATIVE CODE, 2016 CALIFORNIA REFERENCE STANDARDS CODE, 2019 GREEN BUILDING STANDARD (CALgreen) WITH THE AMENDMENTS, 2016 CALIFORNIA ENERGY CODE, 2019 FIRE CODE WITH LOCAL AMENDMENTS AND APPLICABLE NFPA STANDARDS, 2016 CALIFORNIA MECHANICAL CODE, 2019 CALIFORNIA PLUMBING CODE, 2019 CALIFORNIA ELECTRICAL CODE, AMERICAN DISABILITIES ACT (ADA), LOCAL ORDINANCES AND INDUSTRY STANDARDS.
2. THE ANCHORAGE AND SUPPORTING STRUCTURAL ELEMENTS FOR AIR DUCTS SHALL BE DESIGNED TO WITHSTAND THE LATERAL FORCES AS REQUIRED BY 2019 CBC, TITLE 24, PART 2.
3. INSULATION, JACKETS, COVERINGS, AND LAP SEAL ADHESIVES FOR PIPING INSTALLATIONS SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT GREATER THAN 50 WHEN TESTED IN ACCORDANCE WITH NFPA 255, ASTM E84 OR UL 723.
4. INSULATION APPLIED TO THE SURFACE OF DUCTS, INCLUDING DUCT COVERINGS, LININGS, TAPES AND ADHESIVES SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT GREATER THAN 50 WHEN TESTED IN ACCORDANCE WITH NFPA 255, ASTM E84 OR UL 723.
5. MANUAL VOLUME DAMPERS SHALL BE INSTALLED AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE DIFFUSER OR GRILLE.
6. DUCT SHALL BE INSULATED PER 2016 TITLE 24 REQUIREMENTS.
7. THERMOSTAT LOCATIONS ARE SHOWN FOR APPROXIMATE PLACEMENT ONLY. DRAWINGS ARE NOT TO BE SCALED FOR EXACT LOCATION, COORDINATE FINAL LOCATION WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.

MECHANICAL ABBREVIATIONS

SYMBOL	ABBREVIATION	DESCRIPTION
	ABC	ABOVE CEILING
	AC	AIR CONDITIONING
	AD	ACCESS DOOR
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AHU	AIR HANDLER UNIT
	APD	AIR PRESSURE DROP
	BAS	BUILDING AUTOMATION SYSTEM
	BFF, BFG	BELOW FLOOR, BELOW GRADE
	BFV	BUTTERFLY VALVE
	BHP	BRAKE HORSE POWER
	BTUH	BRITISH THERMAL UNITS PER HOUR
	BV	BALL VALVE
	CA	COMPRESSED AIR
	CBV	CALIBRATED BALANCE VALVE (POSITIVE SHUTOFF)
	CC	CHILLED WATER COIL
	CD	CONDENSATE DRAIN
	CEF	CEILING EXHAUST FAN
	CFF	CAP FOR FUTURE
	CFM	CUBIC FEET OF AIR FLOW PER MINUTE
	CHV	CHECK VALVE
CHR	CHR	CHILLED WATER RETURN
CHS	CHS	CHILLED WATER SUPPLY
	CLG	CEILING
	CLR	CLEAR
	CONN	CONNECT OR CONNECTION
	CONT	CONTINUATION
CWR	CWR	CONDENSING WATER RETURN
CWS	CWS	CONDENSING WATER SUPPLY
	DB	DRY BULB
	DIA., Ø	DIAMETER
	DN	DOWN
DP	DP	DIFFERENTIAL PRESSURE TRANSMITTER
	DR	DRAIN, DRAIN RECEPTOR
	DTR	DUCT THROUGH ROOF
		DOUBLE BELLOWS FLEXIBLE CONNECTION
	(E), (F)	EXISTING, FUTURE
	EA, OA, RA, SA	EXHAUST AIR, OUTSIDE AIR, RETURN AIR, SUPPLY AIR
	EAD	EXHAUST AIR DAMPER
	EF	EXHAUST FAN
	EL	ELEVATION
	ENT	ENTERING
	ESP	EXTERNAL STATIC PRESSURE
	EWT	ENTERING WATER TEMPERATURE
	°F	DEGREES FAHRENHEIT
	FA, FB	FROM ABOVE, FROM BELOW
	FC	BRAIDED FLEXIBLE CONNECTION
	FF	FINISH FLOOR
	FLA	FULL LOAD AMPS
	FLR.	FLOOR
FM		FLOW METER
FS		FLOW SWITCH
	FPI	FINS PER INCH
	FPM	FEET PER MIN
	FT	FEET
		FLOAT AND THERMOSTATIC TRAP
FOS	FOS	FUEL OIL SUPPLY
FOR	FOR	FUEL OIL RETURN
FOV	FOV	FUEL OIL VENT
	GA	GAUGE
	GALV	GALVANIZED
HPS	HPS	HIGH PRESSURE STEAM
	HP	HORSEPOWER
HWR	HWR	HEATING HOT WATER RETURN
HWS	HWS	HEATING HOT WATER SUPPLY
		INVERTED BUCKET STEAM TRAP
	L	ACOUSTICALLY LINED
	LBS	POUNDS
LPS	LPS	LOW PRESSURE STEAM
	LRA	LOCKED ROTOR AMPS
	LWT	LEAVING WATER TEMPERATURE
	MAX, MIN	MAXIMUM, MINIMUM
	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
	MCA	MINIMUM CIRCUIT AMPS
	MFR	MANUFACTURER
	MOCP	MAXIMUM OVER CURRENT PROTECTION
	(N)	NEW
	NC, NO	NORMALLY CLOSED, NORMALLY OPEN
	OA, OAD	OUTSIDE AIR, OUTSIDE AIR DAMPER
	OC	ON CENTER
	OH	OVERHEAD
	OSA	OUTSIDE AIR
	PCR	PUMPED CONDENSATE RETURN
		PETE'S PLUG
	POC	POINT OF CONNECTION
P		PRESSURE GAUGE
		PRESSURE REGULATOR
	PRV	PRESSURE REDUCING VALVE
	PSI (G)	POUNDS PER SQUARE INCH (GAUGE)
	(R)	RISE
	RA, RAD	RETURN AIR, RETURN AIR DAMPER
	RBFP	REDUCE PRESSURE BACKFLOW PREVENTER
	RF	RETURN FAN
	RLA	RUNNING LOAD AMPS
		RISE UP (ELBOW) / RISER DOWN (ELBOW)
RL, RS	RL/RS	REFRIGERANT LIQUID/REFRIGERANT SUCTION
	RPM	REVOLUTIONS PER MINUTE
SD	SD	SMOKE DETECTOR
	SF	SQUARE FEET
	SF	SUPPLY FAN
	SM	SHEET METAL
	SP	STATIC PRESSURE (IN H2O)
	SPD	STATIC PRESSURE DROP
		STRAINER
	SS	STAINLESS STEEL

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: | CHECKED:
DATE: 04/14/2021 | SCALE:
PROJECT NUMBER: 2015800

MECHANICAL LEGENDS AND NOTES

DRAWING NUMBER: **M0.01**

MECHANICAL BASIS OF DESIGN

SPACE TYPE (AREA NAME)	WINTER INDOOR °F	SUMMER INDOOR INTER./EXT. °F	OCCUPANCY (SF/PERSON)	LIGHTING LOAD (W/SF)	ELECTRICAL LOAD (W/SF)	EXHAUST AIR MINIMUM (CFM/SF)	ACTIVE HUMIDITY CONTROL	COMMENTS
OFFICE	–	–/–	–	–	–	–	–	
CHILLER ROOM	–	–/–	–	–	–	–	–	
BOILER ROOM	–	–/–	–	–	–	–	–	

NOTES:

1. LOCATION: OAKLAND, CALIFORNIA; LATITUDE XX°N; LONGITUDE XX°W; ELEVATION XX FEET, CLIMATE ZONE ASHRAE 3C; CA 03
2. SUMMER DESIGN AMBIENT: XX°F DB, XX°F WB; WINTER DESIGN AMBIENT: XX°F DB
3. CENTRAL PLANT SIZING BASED UPON:
   APPENDIX B – PCCD LANEY CUP RFP DRAWINGS [PROVIDED WITH SEPTEMBER 14 2020 RFP PACKAGE]
   APPENDIX B – PCCD LANEY CUP RFP SPECS [PROVIDED WITH SEPTEMBER 14 2020 RFP PACKAGE]
   APPENDIX H – LC CENTRAL UTILITY PLANT STUDY TAYLOR 2020 0305 [PROVIDED WITH SEPTEMBER 14 2020 RFP PACKAGE]

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS®
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:
CHECKED:
DATE: 04/14/2021
SCALE:
PROJECT NUMBER: 2015800

HVAC BASIS OF DESIGN

DRAWING NUMBER: M0.02

WATER COOLED CHILLER SCHEDULE

TAG	MANUFACTURER MODEL NO. (OR EQUAL)	LOCATION	COMP TYPE	CAPACITY (TONS)	REFREGERANT TYPE	REFREGERANT WEIGHT	EVAPORATOR GPM	EVAPORATOR MIN GPM	EVAPORATOR EWT (°F)	EVAPORATOR LWT (°F)	EVAPORATOR WATER△P (FT HEAD)	EVAPORATOR FF -	EVAPORATOR PASS -	CONDENSER GPM	CONDENSER MIN GPM	CONDENSER EWT (°F)	CONDENSER LWT (°F)	CONDENSER WATER△P (FT HEAD)	CONDENSER FF -	CONDENSER PASS -	NPLV	AHRI COP -	AHRI IPLV -	ELECTRICAL VOLTS/PH	ELECTRICAL MCA	ELECTRICAL MOCP	ELECTRICAL KW/TN	OPER. WT. LBS.	REMARKS
CH 1	CARRIER 23XRV	CHILLER ROOM	SCREW	450	R-134A	750	900	340	56	44	11.5	0.0001	2	950	685	74	87	8.9	0.00025	2	0.32	-	-	460/3	615	600	0.46	25,000	①②③④
CH 2	CARRIER 23XRV	CHILLER ROOM	SCREW	450	R-134A	750	900	340	56	44	11.5	0.0001	2	950	685	74	87	8.9	0.00025	2	0.32	-	-	460/3	386	600	0.46	25,000	①②③④

SCHEDULE NOTES:

1. R-134A REFRIGERANT

REMARKS

1. PROVIDE UNIT MOUNTED INTEGRAL VFD.
2. DESIGNED FOR VARIABLE CHILLED WATER FLOW.
3. PROVIDE BACNET INTERFACE.
4. PROVIDE FACTORY CIRCUIT BREAKER.

CHEMICAL FEEDER SCHEDULE

TAG	MANUFACTURER MODEL NO. (OR EQUAL)	LOCATION	SYSTEM	CAPACITY (GAL)	OPER. WT. LBS.	REMARKS
CF H1	GRISWOLD DB-5-SB-CS-Z	BOILER ROOM	HEATING WATER	5	100	①
CF CH1	GRISWOLD DB-5-SB-CS-Z	CHILLER ROOM	CHILLED WATER	5	100	①

SCHEDULE NOTES

1. CARBON STEEL VESSEL WITH EXTERNAL POWDER COATING.
2. 3/4" NPT CONNECTIONS.
3. LOCATED ON PUMP SKID, SEE PLANS AND DETAILS FOR LOCATION AND TOTAL SKID WEIGHT.

REMARKS

1. PROVIDE FUNNEL ASSEMBLY AND VALVE PACKAGE KIT.

COOLING TOWERS

TAG	MANUFACTURER MODEL NO.	GPM	OAWB	EWT / LWT	WPD	ASHRAE GPM/HP	MIN GPM	MAX GPM	MUW GPM	FANS QTY	FANS HP	FANS VOLTS/PHASE	OPER. WT. LBS.	REMARKS
CT 1	BAC - XES3E	1,900	67	86 / 74	12	90 MIN.	-	-	15	2	20	460/3	65,000	①②③④⑤⑥⑦

SCHEDULE NOTES:

1. COOLING TOWER SHALL BE DESIGNED TO ALLOW FOR 33% TO 100% OF DESIGN CONDENSER WATER FLOW.

REMARKS

1. PROVIDE TEAO VARIABLE SPEED MOTOR WITH SHAFT GROUNDING.
2. PROVIDE GROOVED CONNECTIONS.
3. PROVIDE SIDE INLET AND BOTTOM OUTLET/EQUALIZER CONNECTION.
4. PROVIDE STAINLESS STEEL FOR HOT AND COLD WATER BASINS.
5. PROVIDE WITH (2) INDEPENDENT CELLS WITH SEPARATE BASIN AND OVERFLOW
6. PROVIDE WITH EXTERNAL PLATFORM WITH LADDER.
7. PROVIDE WITH INTERNAL PLATFORM.

VARIABLE FREQUENCY DRIVE SCHEDULE

TAG	MANUFACTURER MODEL NO. (OR EQUAL)	LOCATION	SERVICE	ENCLOSURE	VOLTS/ PHASE	HP	OPER. WT. LBS.	REMARKS
PCHP 1	-	-	PRIMARY CHILLED WATER PUMP	NEMA 1	460/3	75	150	①
PCHP 2	-	-	PRIMARY CHILLED WATER PUMP	NEMA 1	460/3	75	150	①
SHWP 1	-	-	SECONDARY HEATING WATER PUMP	NEMA 1	460/3	20	150	①
SHWP 2	-	-	SECONDARY HEATING WATER PUMP	NEMA 1	460/3	20	150	①
THWP 1	-	-	TERTIARY HEATING WATER PUMP	NEMA 1	460/3	5	150	①
THWP 2	-	-	TERTIARY HEATING WATER PUMP	NEMA 1	460/3	5	150	①
CWP 1	-	-	CONDENSER WATER PUMP	NEMA 3R	460/3	20	150	①
CWP 2	-	-	CONDENSER WATER PUMP	NEMA 3R	460/3	20	150	①
CT 1A	-	-	COOLING TOWER	NEMA 3R	460/3	20	150	①
CT 1B	-	-	COOLING TOWER	NEMA 3R	460/3	20	150	①

SCHEDULE NOTES

1. SCHEDULE REFLECTS VFDs THAT DO NOT COME INTEGRAL TO EQUIPMENT SCHEDULED ELSEWHERE.
2. VFDs ARE SIZED BASED ON TOTAL MOTOR AMPS.
3. PROVIDED BY DIVISION 23 AND INSTALLED BY DIVISION 26.
4. PROVIDE FACTORY DISCONNECT.
5. MOUNT PER X/MX.XX.

REMARKS

1. PROVIDE BACnet MS/TP INTERFACE.
2. STANDBY.

PUMP SCHEDULE

TAG	MANUFACTURER MODEL NO.	LOCATION	MOUNTING	MINIMUM SUCTION SIZE	FLOW (GPM)	TDH (FT)	MOTOR BHP/HP	MOTOR RPM	MOTOR VOLTS/ PHASE	OPER. WT. LBS.	REMARKS
PCHP 1	-	-	BASE	-	900	200	-/75	1800	460/3	1200	①②
PCHP 2	-	-	BASE	-	900	200	-/75	1800	460/3	1200	①②
PHWP 1	-	-	BASE	-	340	50	5.5/7.5	1800	460/3	250	②
PHWP 2	-	-	BASE	-	340	50	5.5/7.5	1800	460/3	250	②
PHWP 3	-	-	BASE	-	340	50	5.5/7.5	1800	460/3	250	②
PHWP 4	-	-	BASE	-	340	50	5.5/7.5	1800	460/3	250	②
SHWP 1	-	-	BASE	-	580	100	17.7/20	1800	460/3	350	①②
SHWP 2	-	-	BASE	-	580	100	17.7/20	1800	460/3	350	①②
THWP E1	-	-	BASE	-	130	60	3.3/5	1800	460/3	200	①②
THWP E2	-	-	BASE	-	130	60	3.3/5	1800	460/3	200	①②
CWP 1	-	-	BASE	-	950	55	15.1/20	1800	460/3	700	①②④
CWP 2	-	-	BASE	-	950	55	15.1/20	1800	460/3	700	①②④

SCHEDULE NOTES

1. -

REMARKS

1. PROVIDE VARIABLE SPEED MOTOR WITH SHAFT GROUNDING.
2. CLOSE COUPLED END SUCTION PUMP.
3. FLEX COUPLED END SUCTION PUMP.
4. PROVIDE TEFC MOTORS FOR OUTDOOR USE.

AIR SEPARATOR SCHEDULE

TAG	MFR MODEL NO.	LOCATION	SYSTEM	FLOW (GPM)	WATER ΔP (FT HEAD)	CONN SIZE (IN)	OPER. WEIGHT (LBS)	REMARKS
AS H1	TACO AC10	BOILER ROOM	HEATING WATER	1,160	1.5	10	1310	①②③
AS CH1	TACO AC10	CHILLER ROOM	CHILLED WATER	1,900	1.5	10	1310	①②③

SCHEDULE NOTES

1. ASME RATED FOR 125 PSIG.

REMARKS

1. PROVIDE WITH GROOVED CONNECTIONS.
2. PROVIDE WITHOUT STRAINER.
3. PROVIDE WITH SKIRT AND SUPPORT BRACKETS.

BOILER SCHEDULE

TAG	MFR MODEL NO. (OR EQUAL)	LOCATION	GAS INPUT (MBH)	GAS OUTPUT (MBH)	WATER GPM	WATER EWT (°F)	WATER LWT (°F)	WATER ΔP (FT HEAD)	VOLTS/ PHASE (FLA)	MCA	MAX % EFF	OPER WT (LBS)	REMARKS
B 1	CAMUS - DNFH-6014	BOILER ROOM	6000	5280	340	150	180	-	230/3	19	-	2600	①
B 2	CAMUS - DNFH-6014	BOILER ROOM	6000	5280	340	150	180	-	230/3	19	-	2600	①
B 3	CAMUS - DNFH-6014	BOILER ROOM	6000	5280	340	150	180	-	230/3	19	-	2600	①
B 4	CAMUS - DNFH-6014	BOILER ROOM	6000	5280	340	150	180	-	230/3	19	-	2600	①

SCHEDULE NOTES:

1.

REMARKS

1. PROVIDE WITH STAINLESS STEEL HEAT EXCHANGERS

EXPANSION TANK SCHEDULE

TAG	MFR MODEL NO.	LOCATION	SYSTEM	TANK VOLUME (GAL)	ACCEPT. VOLUME (GAL)	SIZE DIA	SIZE HEIGHT	OPER WT (LBS)	PRE CHARGE SETTING (PSIG)	REMARKS
ET H1	TACO CA1000-125	BOILER ROOM	HEATING WATER	264	264	36	79	875	8	①
ET CH1	TACO CA140-125	CHILLER ROOM	CHILLED WATER	23	23	20	29 1/8	135	9	①

SCHEDULE NOTES

1. APPROVALS: ASME SECTION VIII, DIVISION 1.
2. FULL ACCEPTANCE.
3. CARBON STEEL SHELL.
4. HEAVY DUTY BUTYL BLADDER.
5. MAX OPERATING PRESSURE: 125 PSI.
6. MAX OPERATING TEMPERATURE: 240°F.
7. NPT SYSTEM CONNECTIONS.
8. LOCATED ON PUMP SKID, PUMP SKID TOTAL WEIGHT IS XXX LBS.

REMARKS

1. -

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-35998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
#	REVISIONS		

DRAWN: | CHECKED:
DATE: 04/14/2021 | SCALE:
PROJECT NUMBER: 2015800

HVAC EQUIPMENT SCHEDULES

DRAWING NUMBER: M0.03

FAN COIL SCHEDULE

TAG	LEVEL	MANUFACTURER MODEL NO.	LOCATION	AREA SERVED	AIRFLOW			MIN. OA (CFM)	FAN		CHILLED WATER COIL									HEATING PEFORMANCE						REMARKS
					CFM	TSP/ESP (INCHES)	(BHP/HP)		FAN RPM	VOLTS/ PHASE	EDB (°F)	EWB (°F)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	WATER FLOW (GPM)	EWT (°F)	LWT (°F)	AIR △P Pa (In WC)	WATER △P (FT HEAD)	EDB (°F)	TOTAL CAPACITY (MBH)	WATER FLOW (GPM)	EWT (°F)	LWT (°F)	WEIGHT (LBS)	
FC 1	-	- -	-	ENGINEER'S OFFICE	500	0.5	0.5/0.75	XX	-	115/1	-	-	18	-	-	44	56	-	-	-	16	-	180	150	-	
SF-4E M-752	-	- -	-	BOILER ROOM	8000	7/8	-/3	-	675	460/3	-	-	-	-	-	-	-	-	-	-	320	-	180	150	-	①
SF-5E M-752	-	- -	-	BOILER ROOM	8000	7/8	-/3	-	675	460/3	-	-	-	-	-	-	-	-	-	-	320	-	180	150	-	①
FC 2	-	- -	-	CHILLER ROOM	6000	-	-	XX	-	-	-	-	200	-	-	44	56	-	-	-	240	-	180	150	-	

SCHEDULE NOTES:

1. -

REMARKS

① (E) FAN COIL TO REMAIN

TRANSFER FAN SCHEDULE

TAG	MANUFACTURER MODEL NO.	LOCATION/ AREA SERVED	QTY.	FAN				DRIVE	MOTOR			OPER. WT. LBS.	REMARKS
				CFM	ESP (in WG)	RPM	LWA		BHP/HP	RPM	VOLTS/ PHASE		
TF 1	GREENHECK SQ-120-VG	STORAGE ROOM	1	1050	0.35	1166	65	DIRECT	0.08/0.5	1725	115/1	75	①②

SCHEDULE NOTES:

1. -

REMARKS

① CONTROL VIA LINE VOLTAGE T-STAT.

② PROVIDE EC MOTOR WITH DIAL ON HOUSING.

EXHAUST FAN SCHEDULE

TAG	MANUFACTURER MODEL NO.	LOCATION/ AREA SERVED	QTY.	FAN				DRIVE	MOTOR			OPER. WT. LBS.	REMARKS
				CFM	ESP (in WG)	RPM	LWA		BHP/HP	RPM	VOLTS/ PHASE		
EF CP1	PENN SX125BC	CHILLER ROOM (ROOM 132)	1	3000	0.375	1407	-	BELT	0.82/1	-	460/3	-	①②

SCHEDULE NOTES:

1. -

REMARKS

① EXISTING FAN.

② TWO SPEED MOTOR.

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

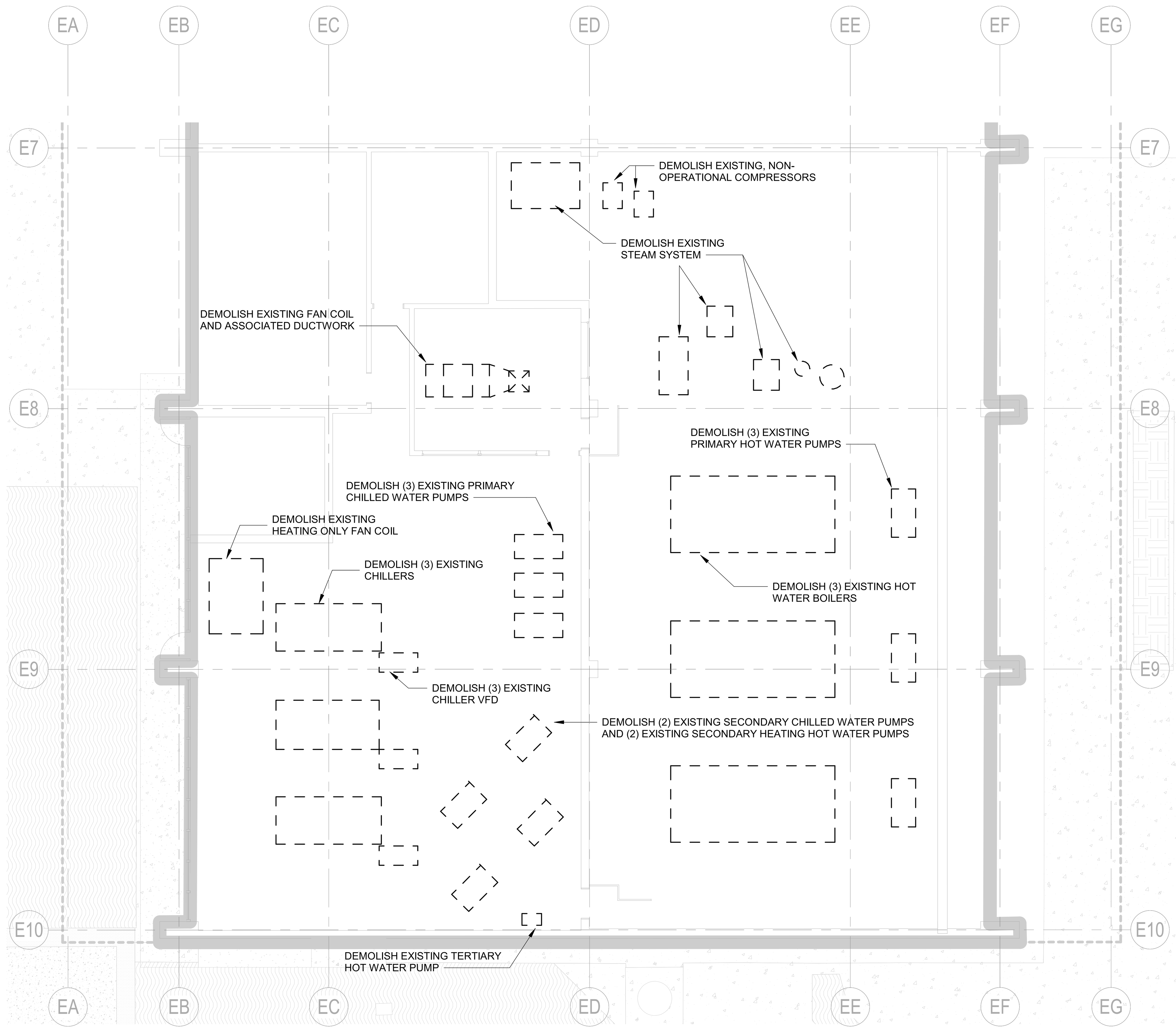
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

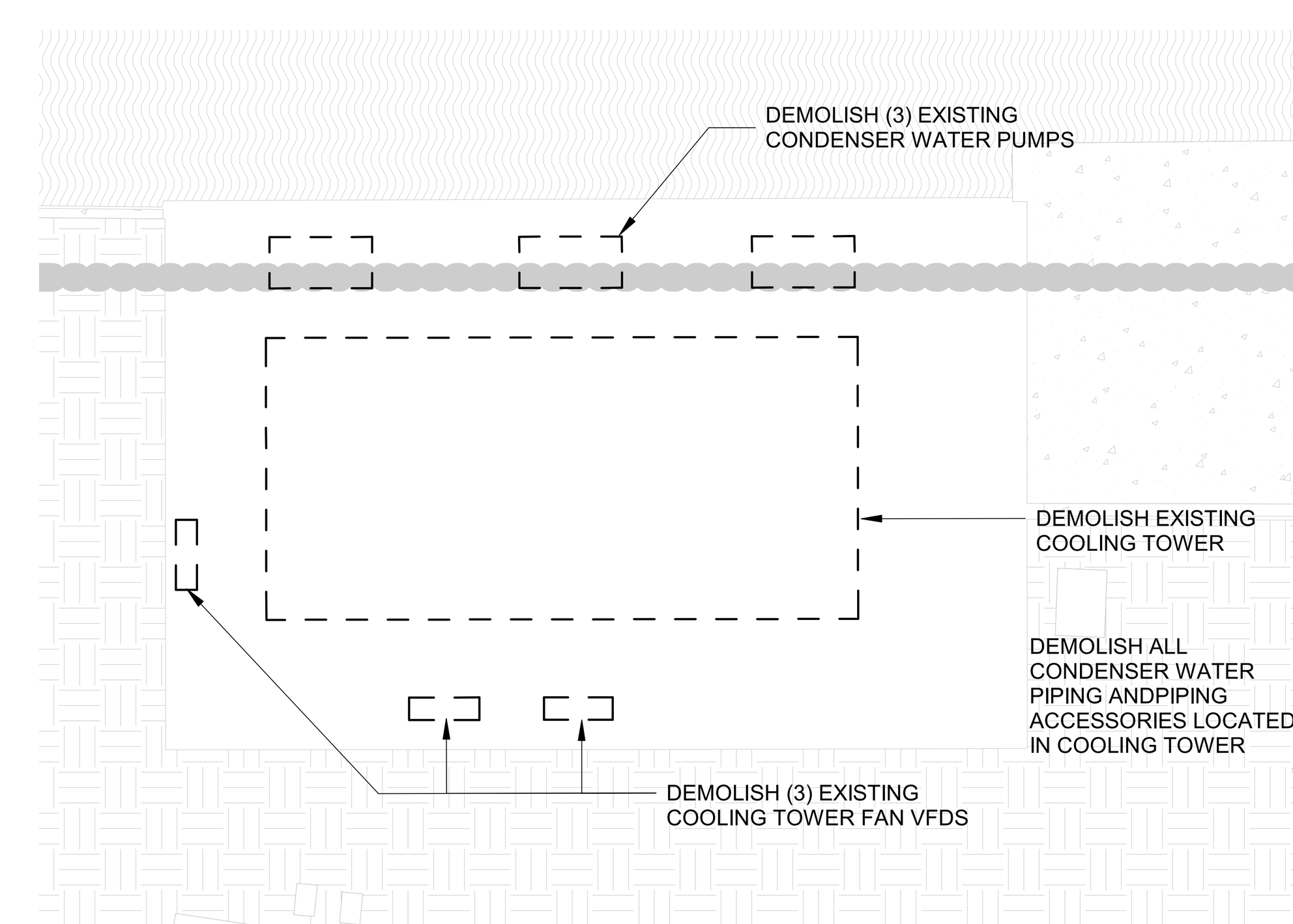
HVAC EQUIPMENT SCHEDULES

DRAWING NUMBER: **M0.04**



1 **BUILDING E MECHANICAL DEMOLITION PLAN**

SCALE: 1/8" = 1'-0"



2 **EXISTING COOLING TOWER ENCLOSURE DEMO PLAN**

SCALE: 1/8" = 1'-0"

ARCHITECTS WLC

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

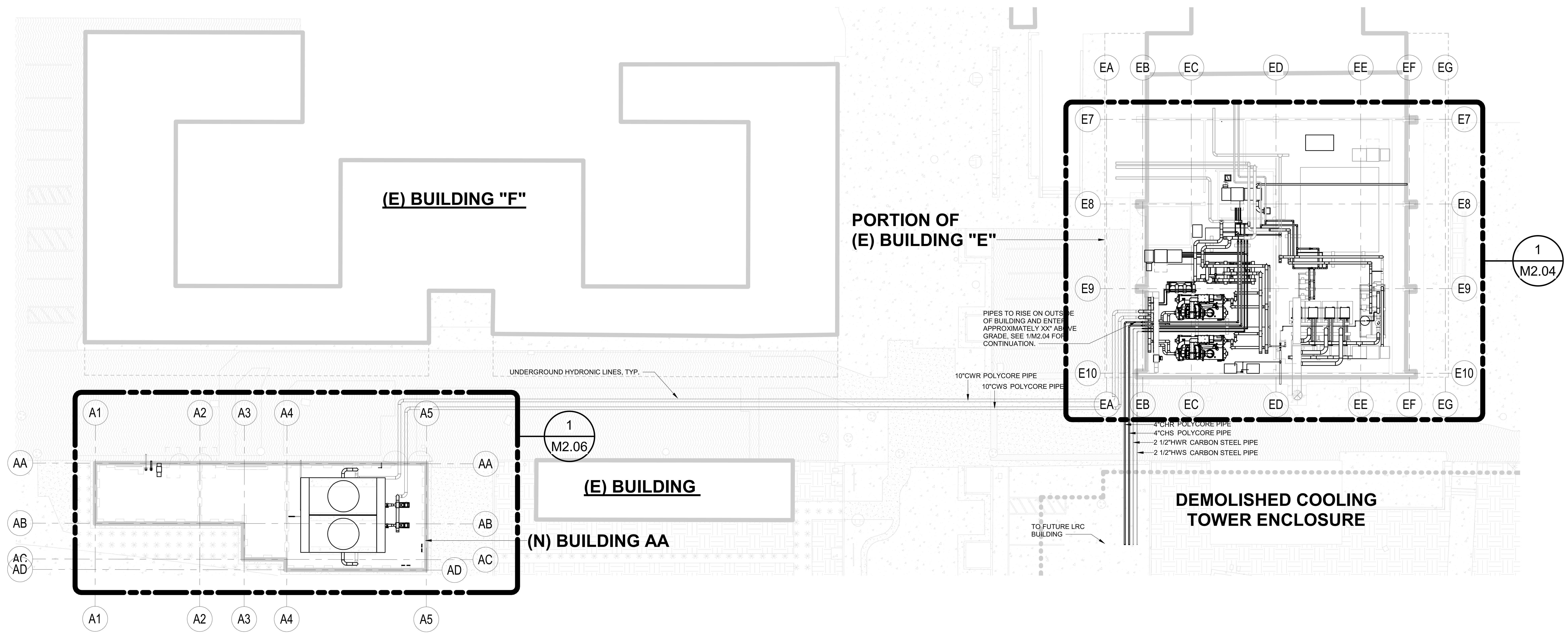
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/8" = 1'-0"
PROJECT NUMBER:	

MECHANICAL DEMOLITION PLANS

DRAWING NUMBER: **M2.01**



1 **MECHANICAL SITE PLAN**

SCALE: 1/16" = 1'-0"

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
NO	DATE	BY	DESCRIPTION
REVISIONS			

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/16" = 1'-0"
PROJECT NUMBER:	

MECHANICAL SITE PLAN

DRAWING NUMBER: **M2.02**

① BUILDING E MECHANICAL DUCT PLAN

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

REFRIGERATION MACHINERY ROOM

2019 CMC 1106.2.3 REFRIGERATION MACHINERY ROOM MECHANICAL VENTILATION

1106.2.5.1 EMERGENCY VENTILATION REQUIRED AIRFLOW:

Q = 100*G^(1/2)
G = 750 lbs. (REFRIGERANT MASS IN LARGEST SYSTEM)
Q = 2378 CFM (CALCULATED)
DESIGN AIRFLOW = 3000 CFM ((E) EF-CP-1)

1106.3 NORMAL OPERATION FOR MECHANICAL VENTILATION

1106.3 (1) VENTILATED AT MINIMUM OF 0.5 CFM/SQFT WHEN OCCUPIED

Q = 0.5 * AREA
AREA = 1562 SQFT
Q = 781 CFM
DESIGN AIRFLOW = 1000 CFM ((E) EF-CP-1)

2019 CMC 1106.8 MAXIMUM TEMPERATURE

LIMIT TEMPERATURE RISE WITHIN ROOM TO MAXIMUM 104°F

CALCULATED TOTAL HEAT LOAD = XXX MBH
DESIGN SENSIBLE COOLING CAPACITY = XXX MBH (XX-XX-XX)

COMBUSTION CALCULATIONS

2019 CMC 701.6.1 TWO PERMANENT OPENINGS METHOD

TOTAL INPUT RATING OF BOILERS: 24,000,000 BTU/H

24,000,000 / 4000 = 6,000 SQUARE INCHES OF FREE AREA EACH OPENING REQUIRED MINIMUM

XXXX SQUARE INCHES OF FREE AREA EACH OPENING PROVIDED

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS®
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

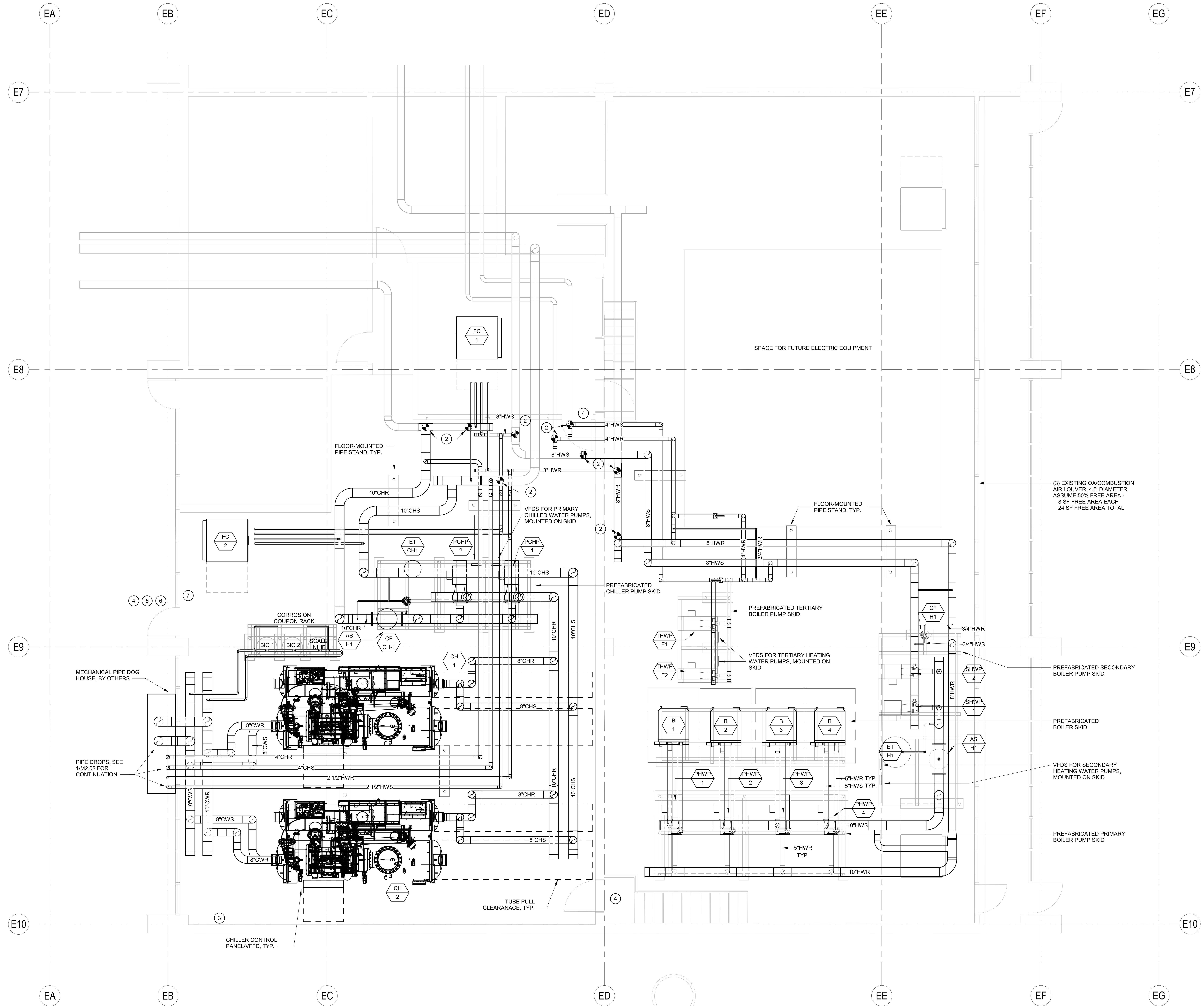
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING E MECHANICAL DUCT PLAN

DRAWING NUMBER: M2.03



1 **BUILDING E MECHANICAL PIPE PLAN**

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

GENERAL NOTES

1. NEW WORK SHOWN BOLD. EXISTING WORK SHOWN GREY.

SHEET NOTES

(1) BAS PANEL, 20 AMP 120 VOLT E-POWER DEDICATED CIRCUIT REQUIRED.

(2) POINT OF CONNECTION, TIE INTO EXISTING SYSTEM.

(3) PROVIDE REFRIGERANT VAPOR DETECTOR AT +/- 18" AFF.

(4) PROVIDE A VISUAL AND AUDIBLE REFRIGEANT VAPOR ALARM INSIDE CHILLER ROOM AND OUTSIDE EACH ENTRY, ALARMS SHALL BE ACTIVATED AT A SET POINT NOT MORE THAN THE CORRESPONDING OCCUPATIONAL EXPOSURE LIMIT, OEL, IN ACCORDANCE WITH CMC TABLE 1102.3, A SET POINT DETERMINED IN ACCORDANCE WITH THE OEL AS DEFINED IN CHAPTER 2 OF THE 2019 CMC SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION. ALARM SHALL ALSO ACTIVATE AT A SET POINT OF 25% OF THE LFL. THE MEANING OF EACH ALARM SHALL BE CLEARLY MARKED BY SIGNAGE NEAR THE ANNUNCIATOR. ALARMS SHALL REQUIRE MANUAL RESET WITH THE RESET LOCATED INSIDE THE REFRIGERANT MACHINERY ROOM.

(5) PROVIDE VENTILATION AND EMERGENCY ACTION CONTROL PANEL (VEACP) WITH CLEARLY IDENTIFIED SWITCHES OF THE KEY-OPERATED TYPE (OR WITHIN A LOCKED BREAK-GLASS COVER) THAT PROVIDES AUTO/ON/OFF CONTROL OF THE ASSOCIATED FAN: XX-XX-XX. "AUTO" POSITION SHALL COMMANND XX-XX-XX TO OPERATE IF REFRIGERANT GAS IS OF CONCENTRATIONS THAT WILL ACTIVATE REFRIGERANT VAPOR ALARMS (SEE SHEET NOTE 4), "ON" POSITION SHALL ENABLE THE FAN. "OFF" POSITION SHALL DISABLE THE FAN. XX-XX-XX MINIMUM AIRFLOW SHALL BE XXXX CFM. XX-XX-XX SHALL OPERATE CONTINUOUSLY. MINIMUM AIRFLOW DURING XX-XX-XX OPERATION SHALL BE XXXX CFM. AIRFLOW SHALL BE SET AT TIME OF BALANCE. TWO COLORED AND LABELED INDICATOR LAMPS CORRESPONDING TO THE FAN OPERATION SHALL BE PROVIDED FOR EACH SWITCH. ONE LAMP SHALL INDICATE FLOW AND THE OTHER SHALL INDICATE NO FLOW. 20 AMP, 120V DEDICATED CIRCUIT REQUIRED.

(6) PROVIDE A CLEARLY IDENTIFIED SWITCH OF THE KEY-OPERATED TYPE (OR WITHIN A LOCKED BREAK-GLASS COVER) WITH OFF-ONLY CONTROL OF REFRIGERANT COMPRESSOR, RERIGERANT PUMPS, AND NORMALLY CLOSED AUTOMATIC REFRIGERANT VALVES LOCATED IN THE CHILLER ROOM. THE SWITCH SHALL BE AUTOMATICALLY SHUTOFF BY REFRIGERANT VAPOR CONCENTRATIONS THAT WILL ACTIVATE REFRIGERANT VAPOR ALARMS (SEE NOTE 4).

(7) PROVIDE PERMANENT SIGN WITH THE FOLLOWING INFORMATION: NAME OF INSTALLING CONTRACTOR, NAME AND NUMBER DESIGNATION OF REFRIGERANT IN SYSTEM, POUNDS OF REFRIGERANT OF SYSTEM.

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

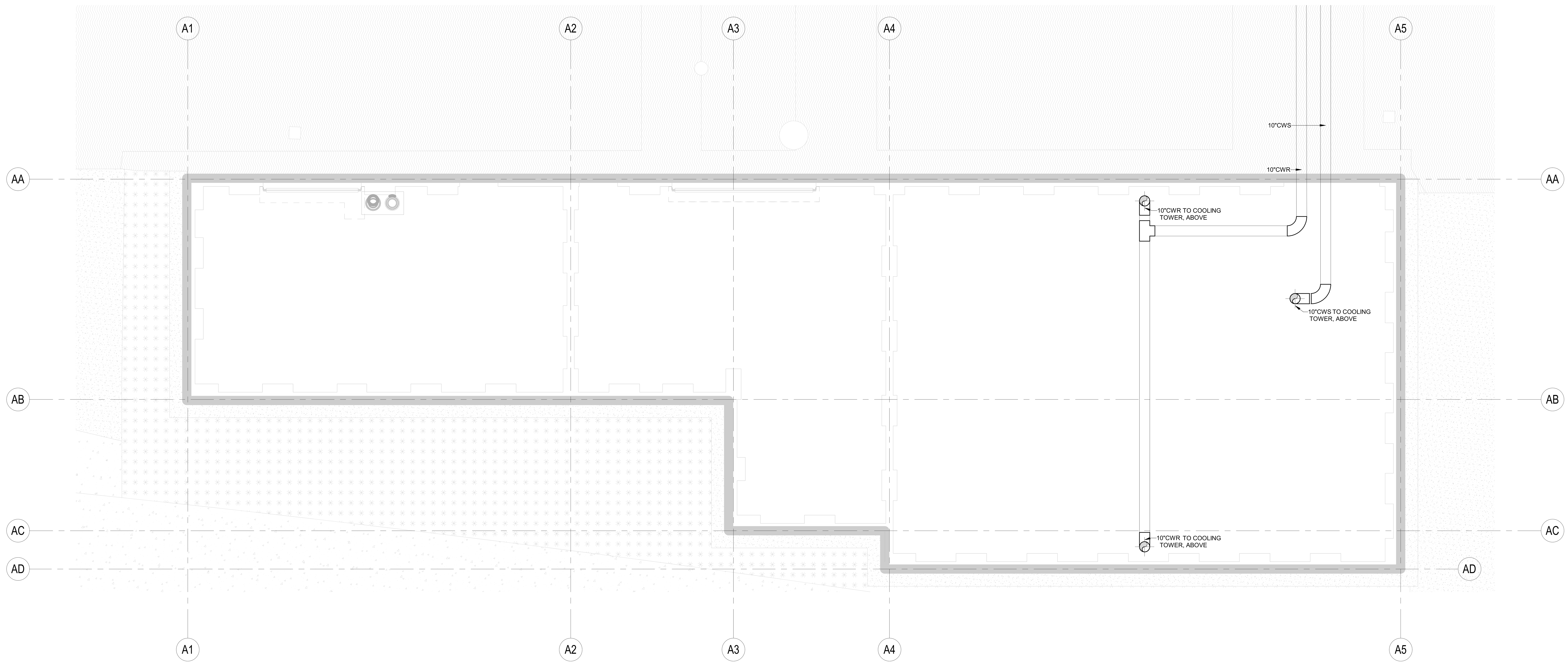
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: As indicated
PROJECT NUMBER:	

BUILDING E MECHANICAL PIPE PLAN

DRAWING NUMBER: **M2.04**



1 BUILDING AA UNDERGROUND MECHANICAL PIPING PLAN

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

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

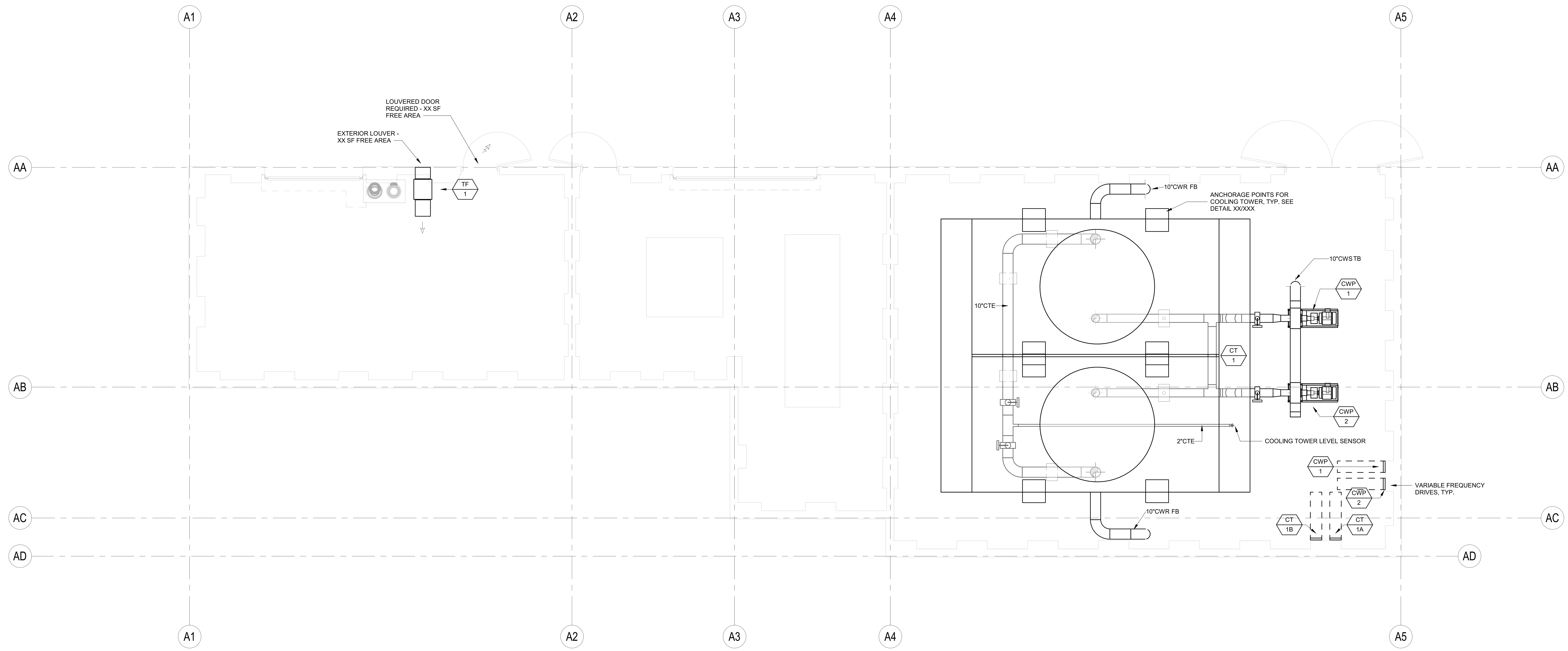
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING AA UG MECH PIPING PLAN

DRAWING NUMBER: M2.05



1 **BUILDING AA MECHANICAL PLAN**

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

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

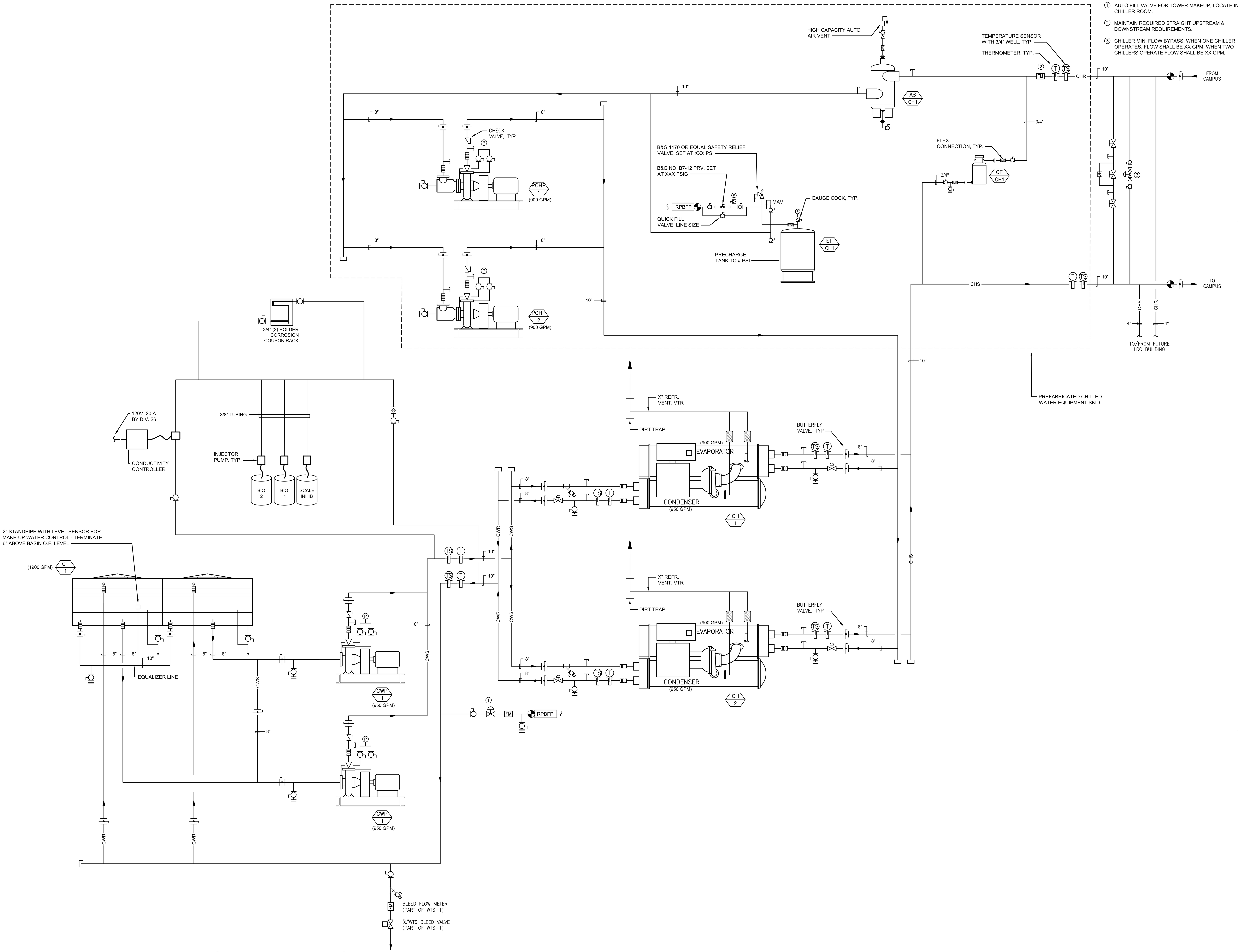
DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING AA MECHANICAL PIPING PLAN

DRAWING NUMBER: **M2.06**

SHEET NOTES

1. AUTO FILL VALVE FOR TOWER MAKEUP, LOCATE IN CHILLER ROOM.
2. MAINTAIN REQUIRED STRAIGHT UPSTREAM & DOWNSTREAM REQUIREMENTS.
3. CHILLER MIN. FLOW BYPASS, WHEN ONE CHILLER OPERATES, FLOW SHALL BE XX GPM. WHEN TWO CHILLERS OPERATE FLOW SHALL BE XX GPM.



1 **CHILLED WATER DIAGRAM**

NOT TO SCALE

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE
DRAFT NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

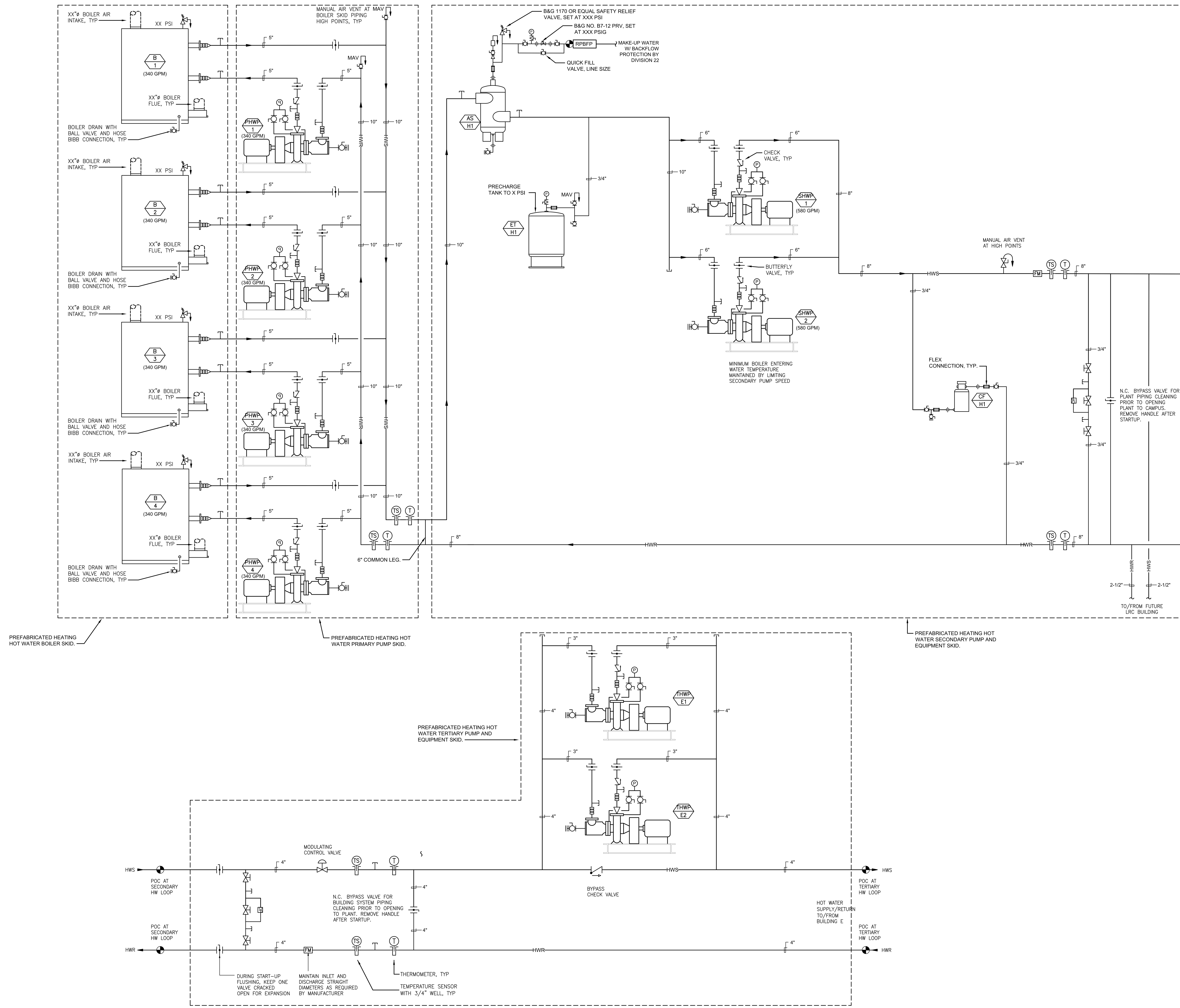
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

CHILLED WATER PLANT PIPING SCHEMATIC

DRAWING NUMBER: **M4.01**



1 **HEATING HOT WATER DIAGRAM**

NOT TO SCALE

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

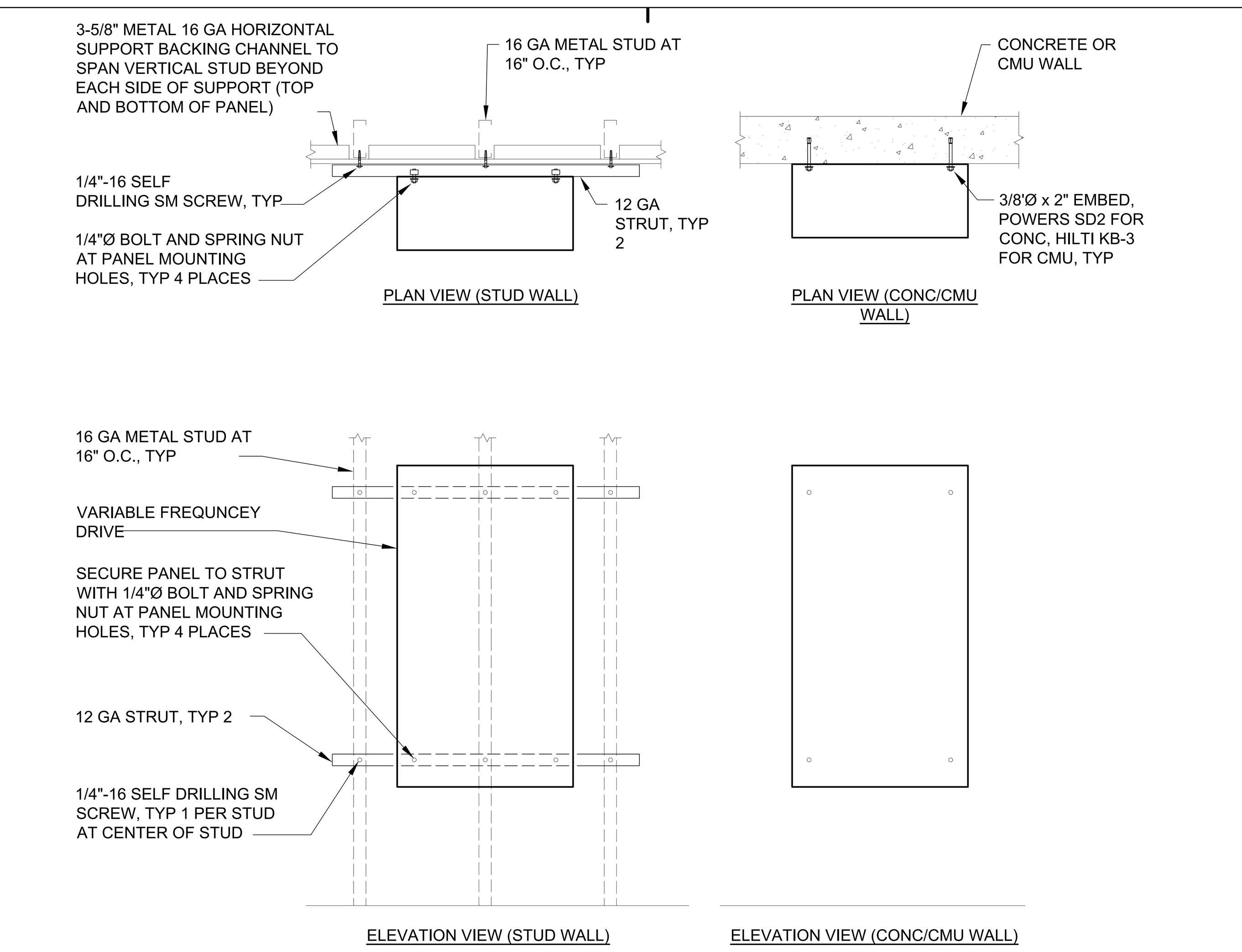
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

HOT WATER PLANT PIPING SCHEMATIC

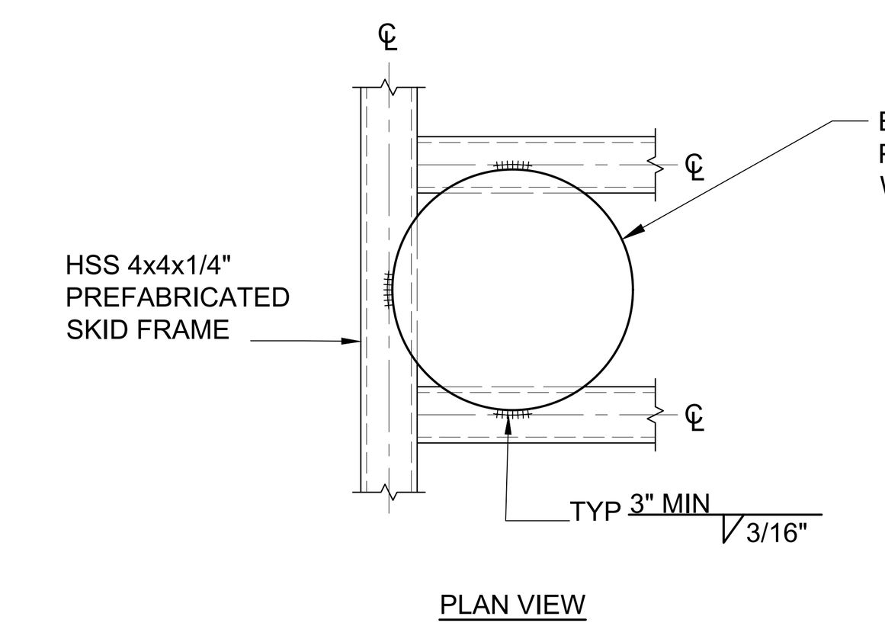
DRAWING NUMBER: **M4.02**



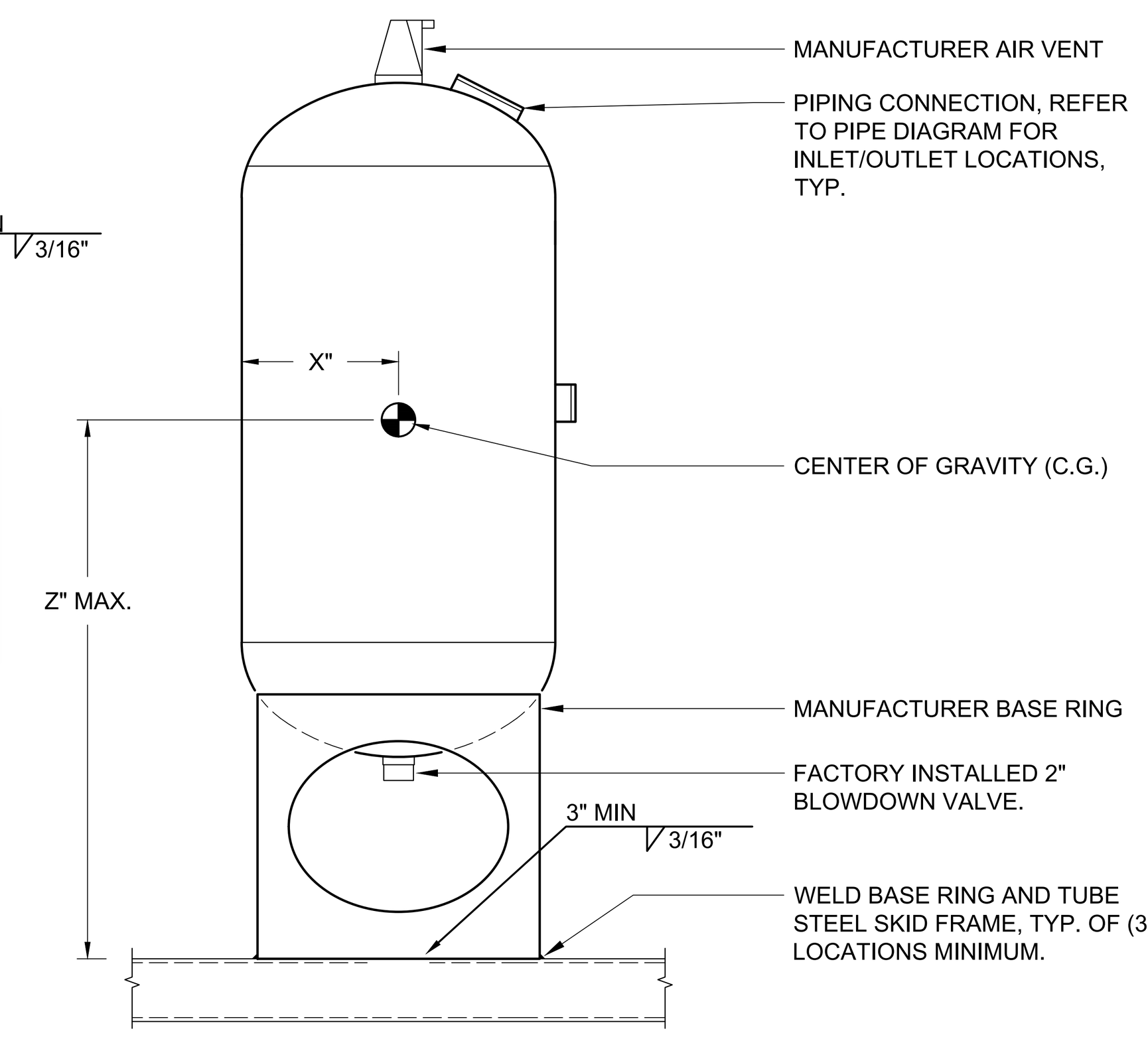
7 VARIABLE FREQUENCY DRIVE MOUNTING DETAIL

CONTROL PANELS SIMILAR

NOT TO SCALE



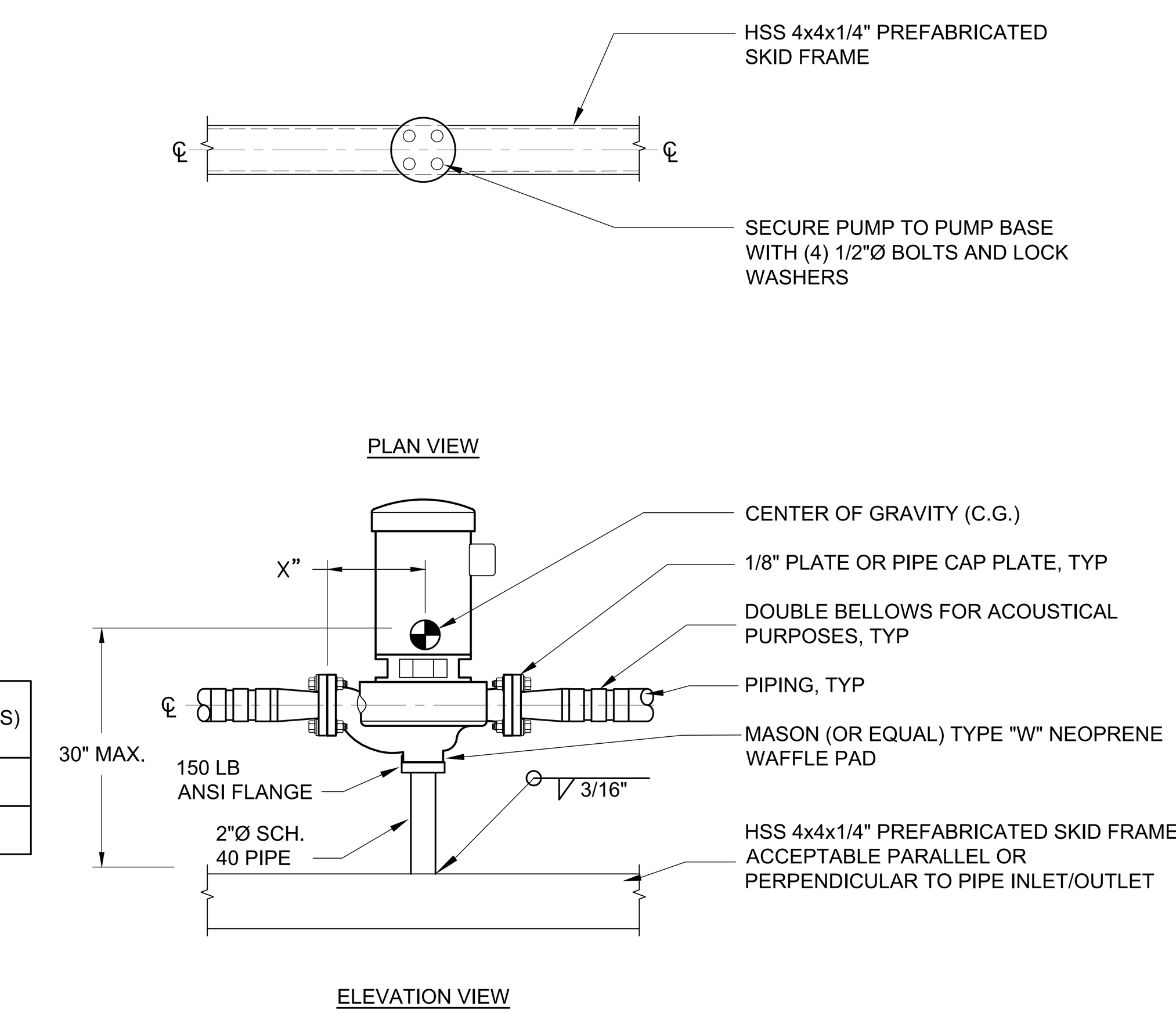
EQUIPMENT	WEIGHT (LBS)	DIMENSIONS	
		X"	Z"
ET-H1	850	XX	XX
ET-CH2	120	XX	XX



4 EXPANSION TANK MOUNTING DETAIL

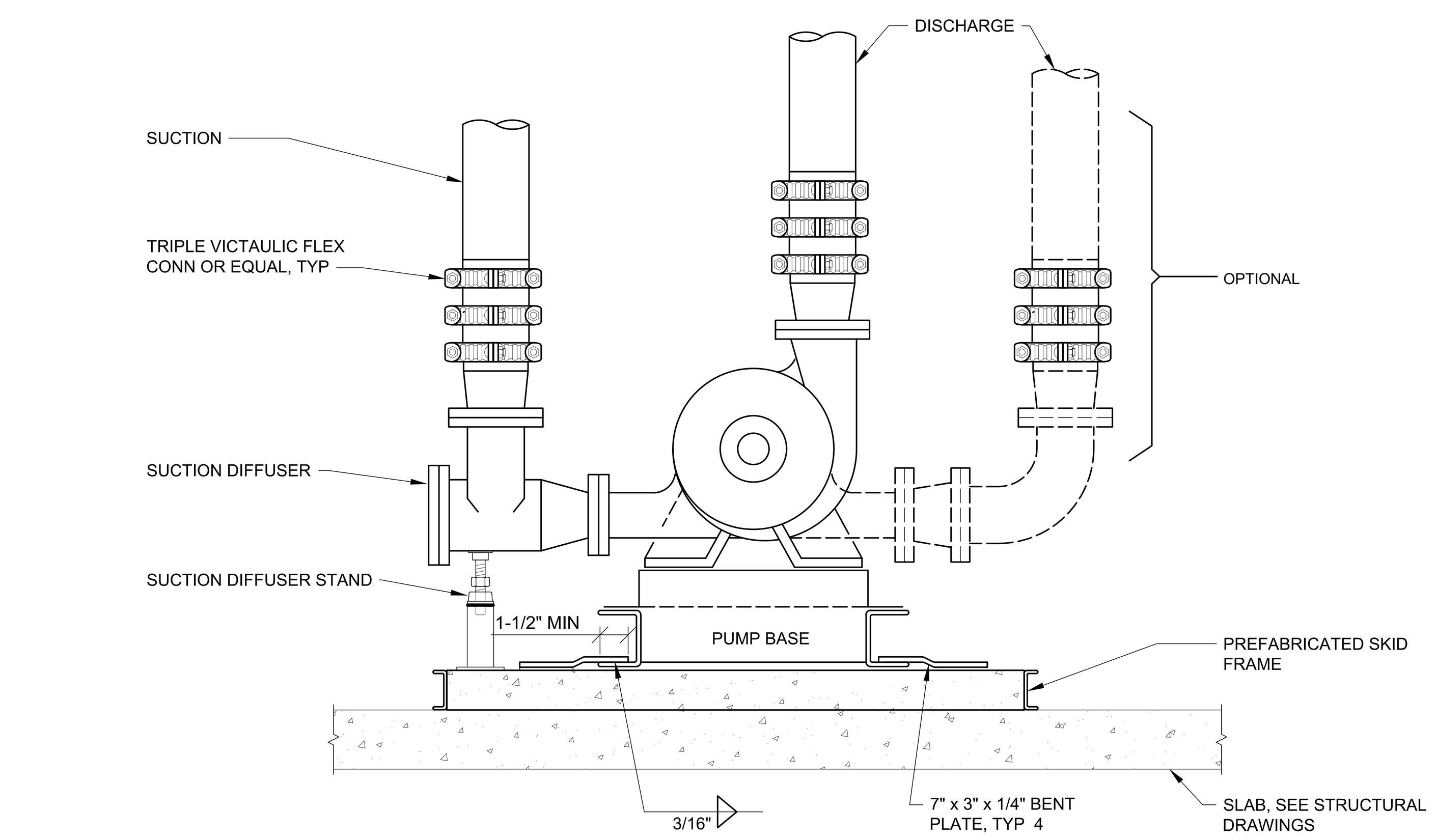
NOT TO SCALE

EQUIPMENT	WEIGHT (LBS)
XX	XX
XX	XX



1 INLINE PUMP MOUNTING DETAIL

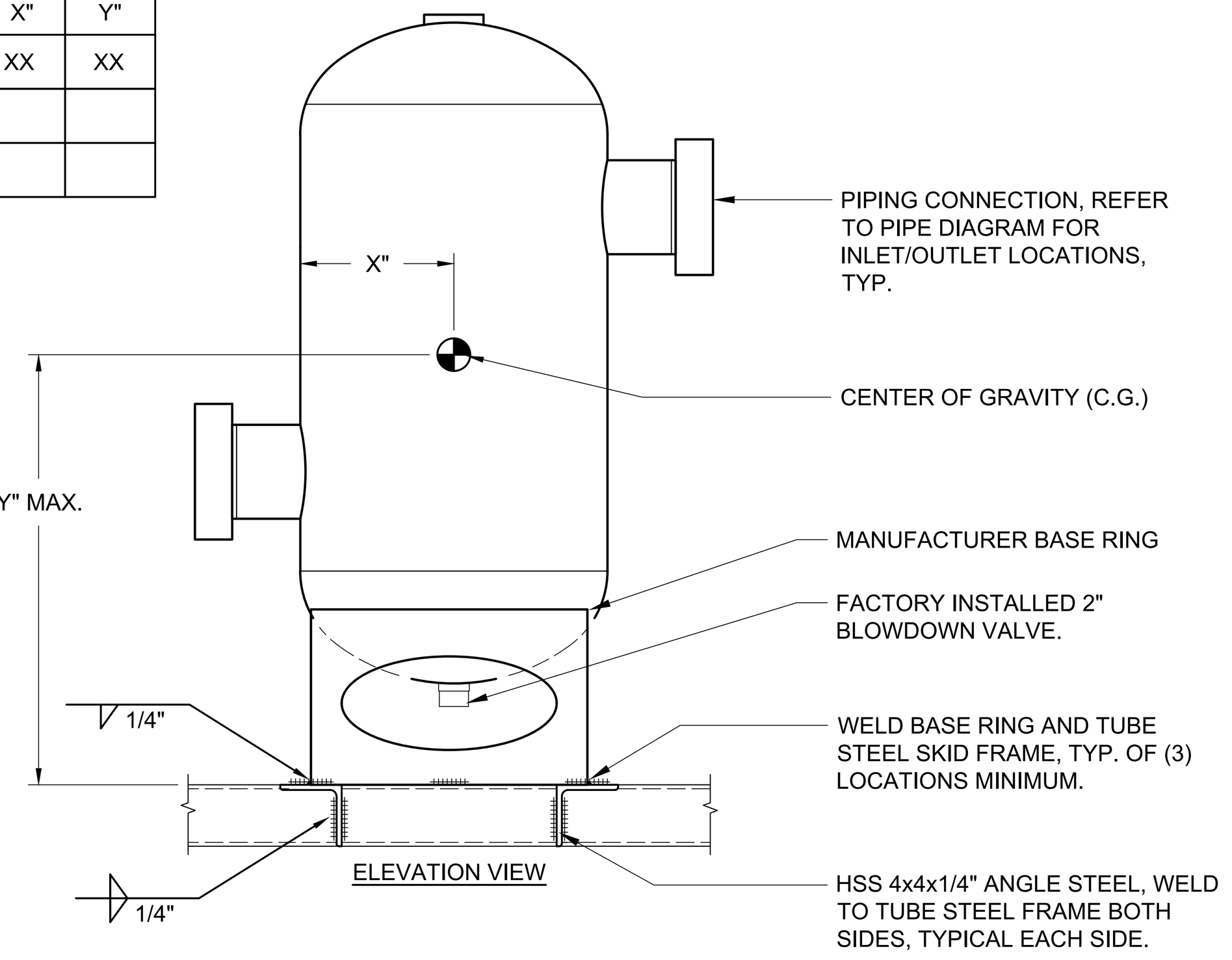
NOT TO SCALE



8 PUMP MOUNTING DETAIL

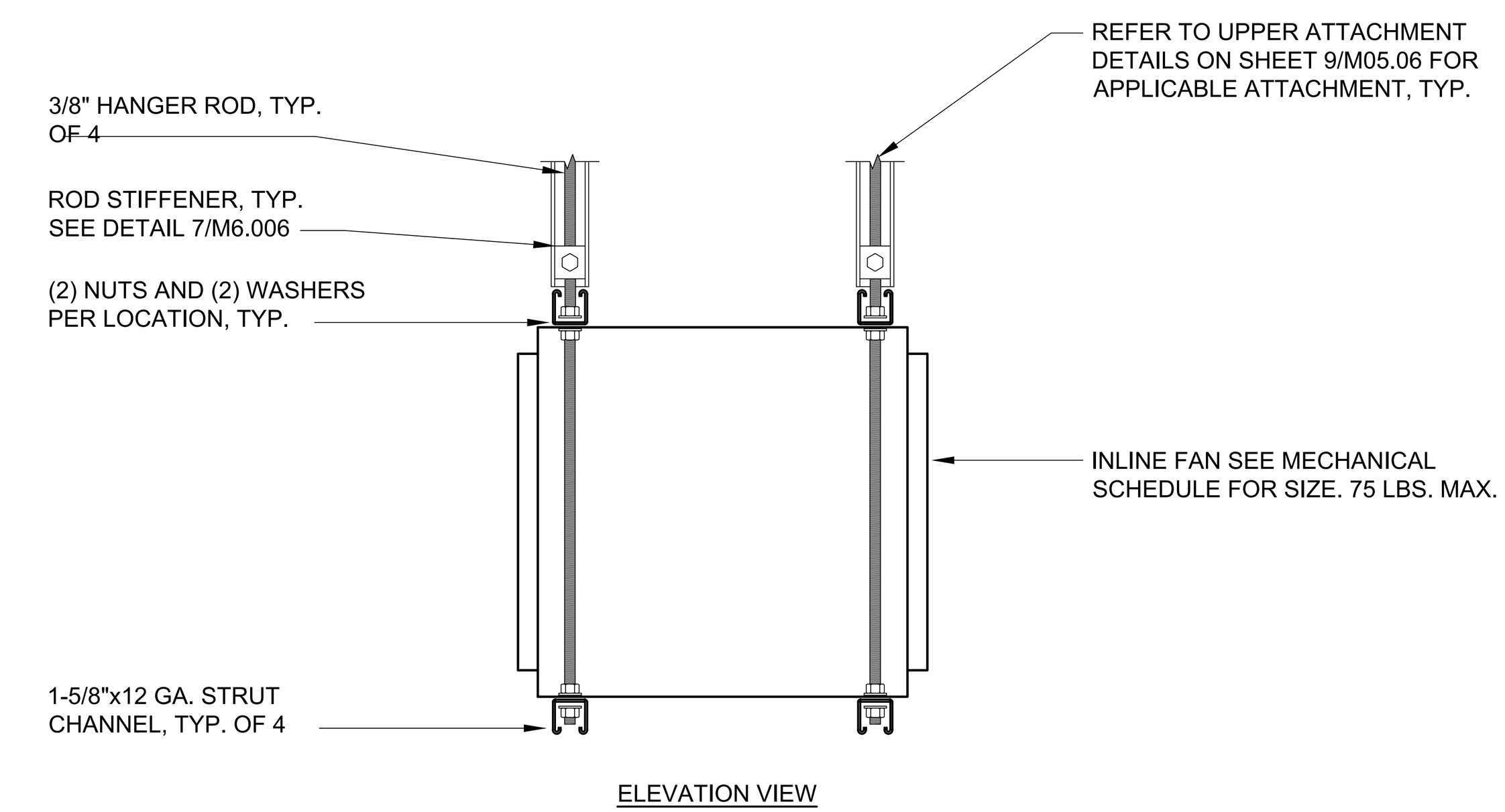
NOT TO SCALE

EQUIPMENT	WEIGHT (LBS)	DIMENSIONS	
		X"	Y"
AS-1	XX	XX	XX



5 AIR SEPARATOR MOUNTING DETAIL

NOT TO SCALE



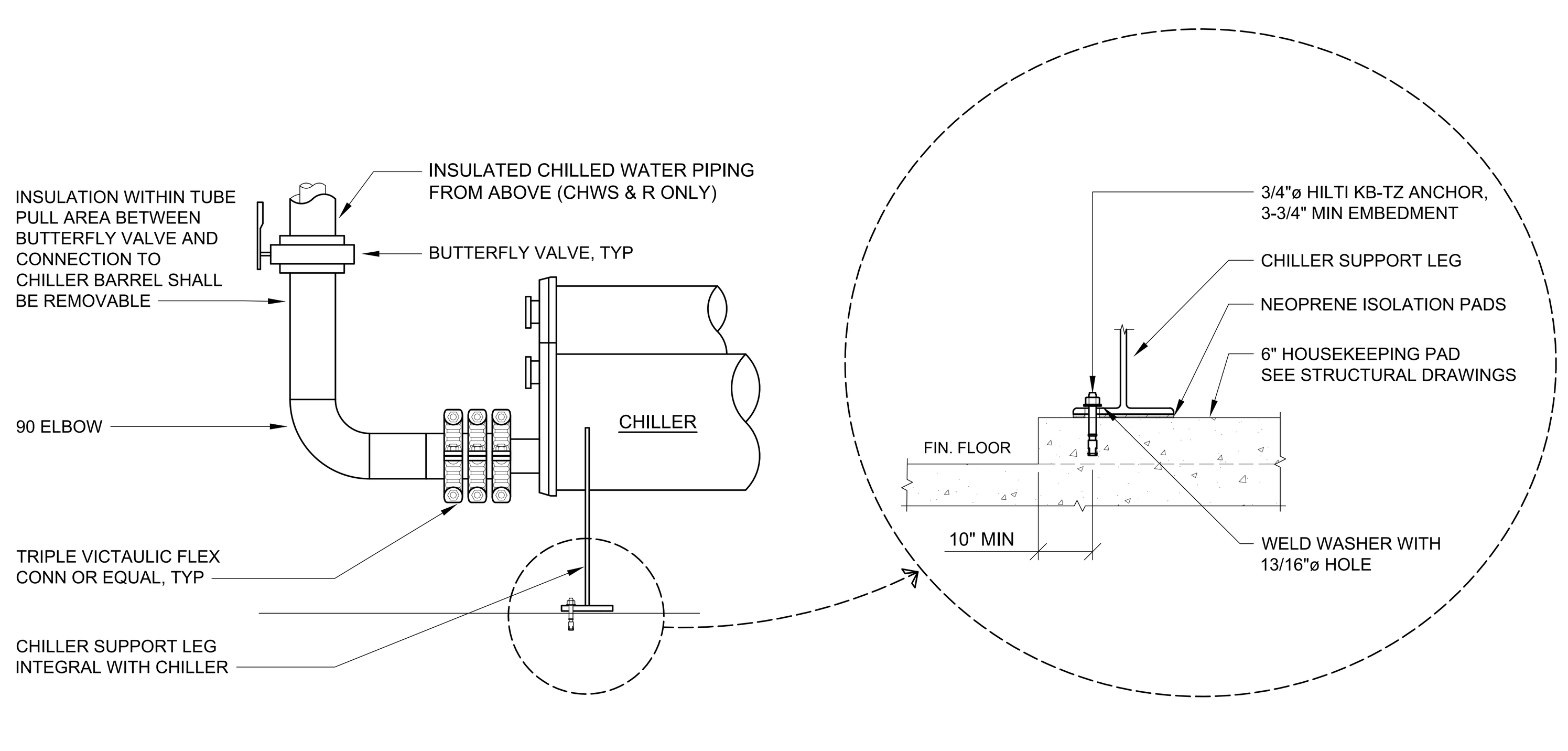
NOTE:

1. USE BENT PLATE AND (2) #10 SMS AT METAL FRAMING OR 3/8"Ø HILTI KH-EZ, 1-5/8" MIN. EMBEDMENT, 4" MIN. EDGE DISTANCE, 4" MIN. ANCHOR SPACING AT CONCRETE/CMU WALL.

2 TRANSFER FAN MOUNTING DETAIL

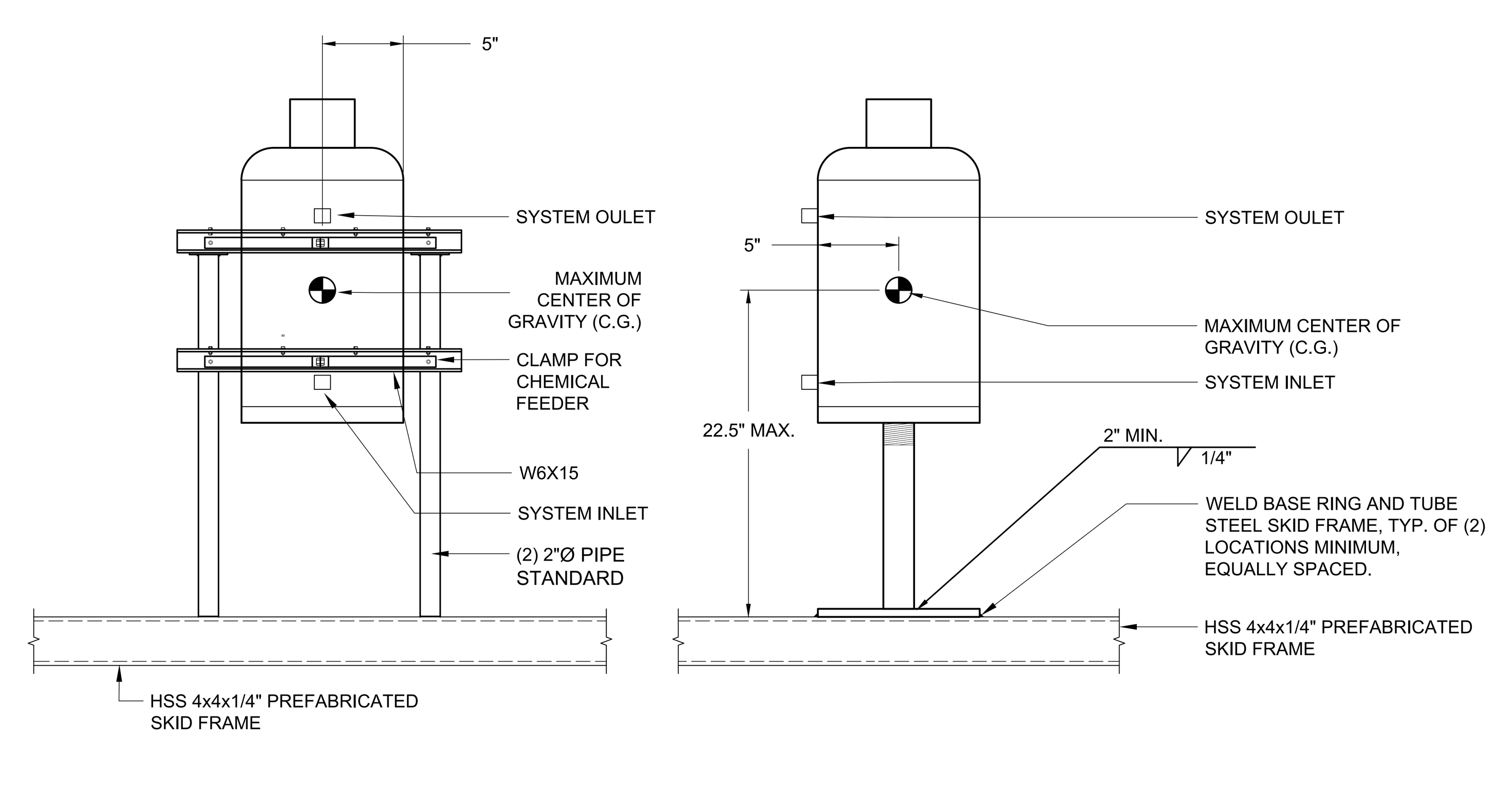
FANS WEIGHING LESS THAN OR EQUAL TO 75 LBS

NOT TO SCALE



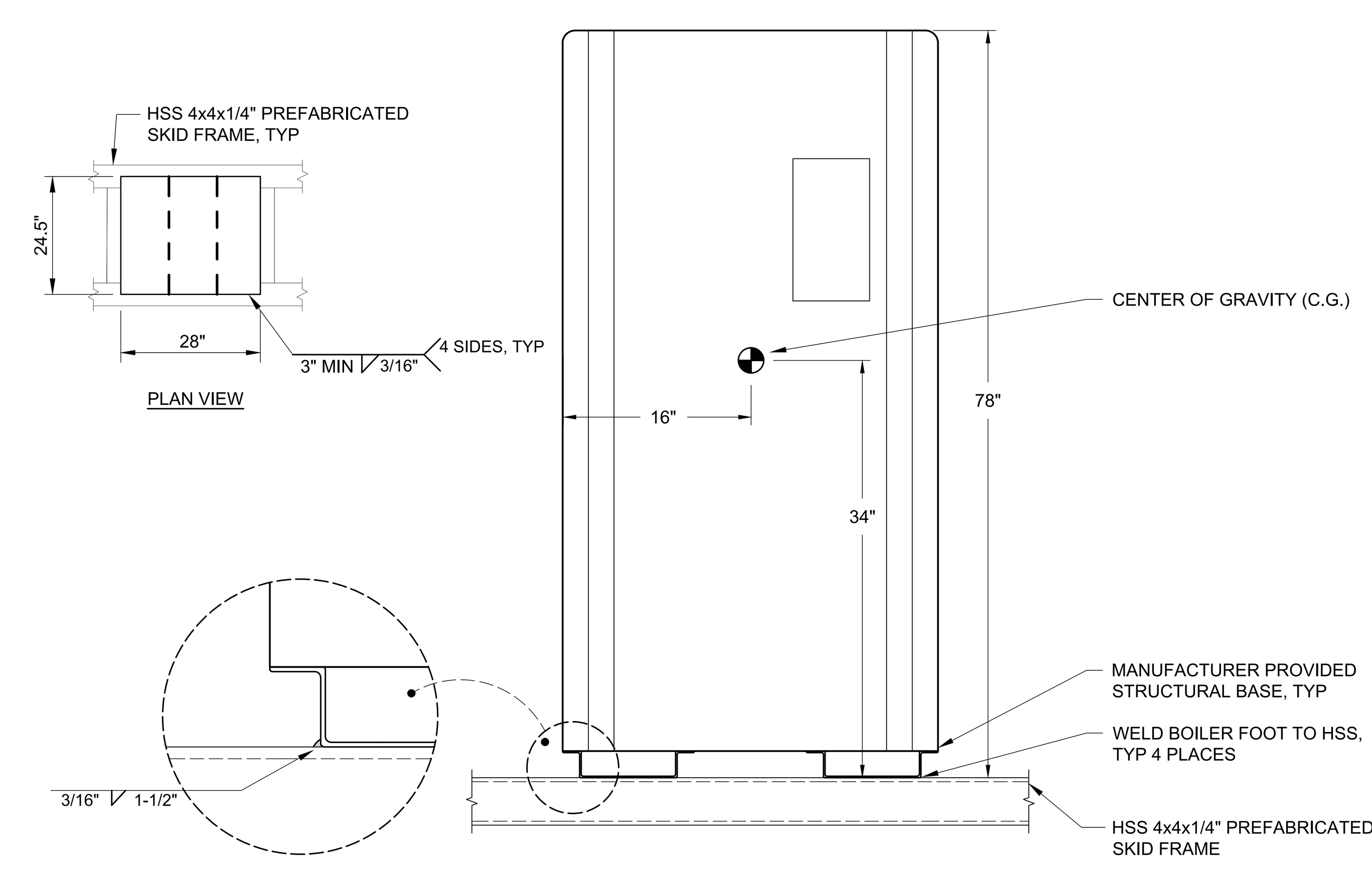
9 CHILLER MOUNTING DETAIL

NOT TO SCALE



6 CHEMICAL FEEDER MOUNTING DETAIL

NOT TO SCALE



3 BOILER MOUNTING DETAIL

B-1, B-2, B-3, B-4

NOT TO SCALE

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA

2600 TENTH STREET, SUITE 500

BERKELEY

CALIFORNIA 94710-2597

TEL: 510-450-1999

www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.

OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT.

SO. SAN FRANCISCO, CA 94080

TEL 650.81.8292

FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

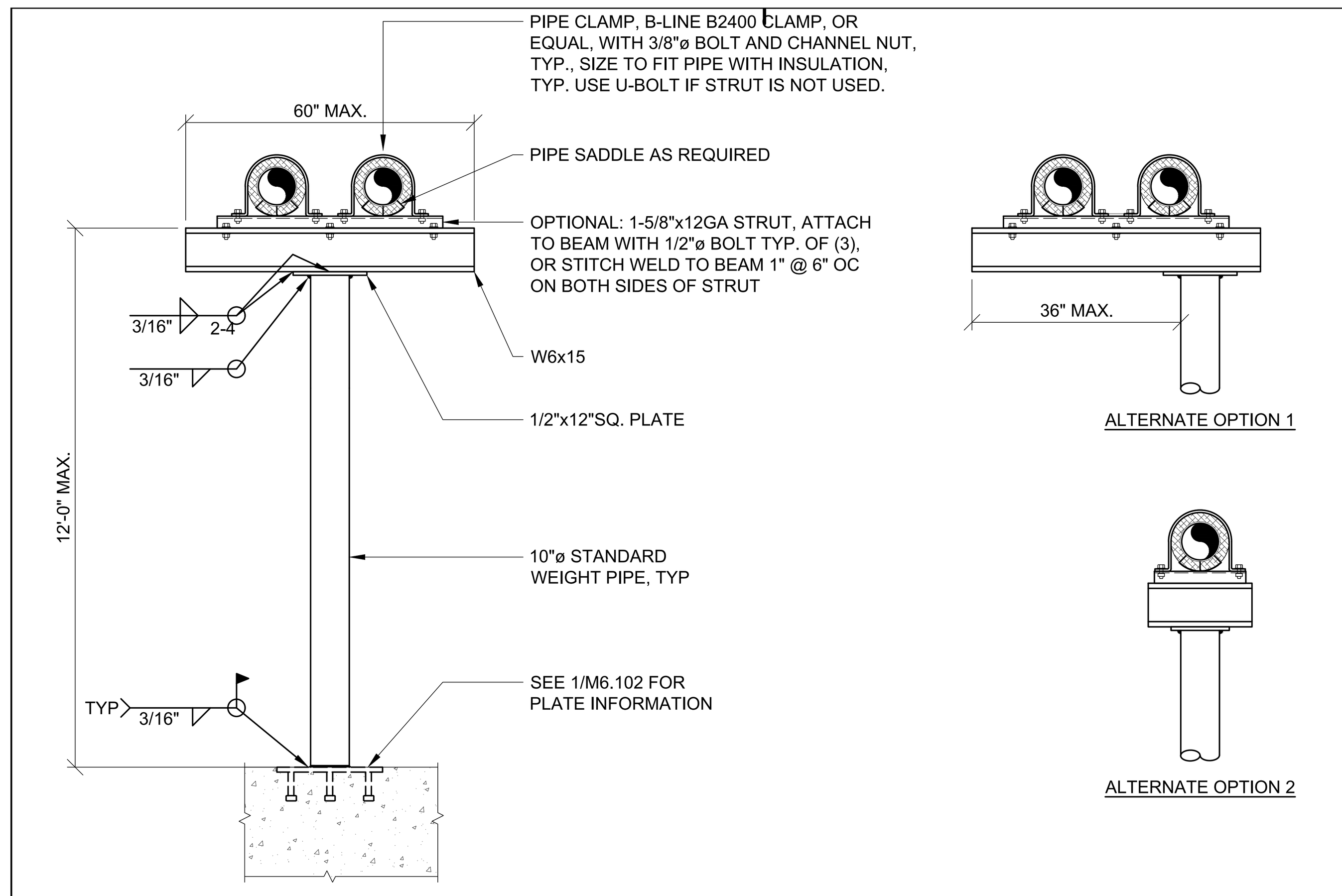
DRAWN: CHECKED:

DATE: 04/14/2021 SCALE:

PROJECT NUMBER: 2015800

HVAC DETAILS

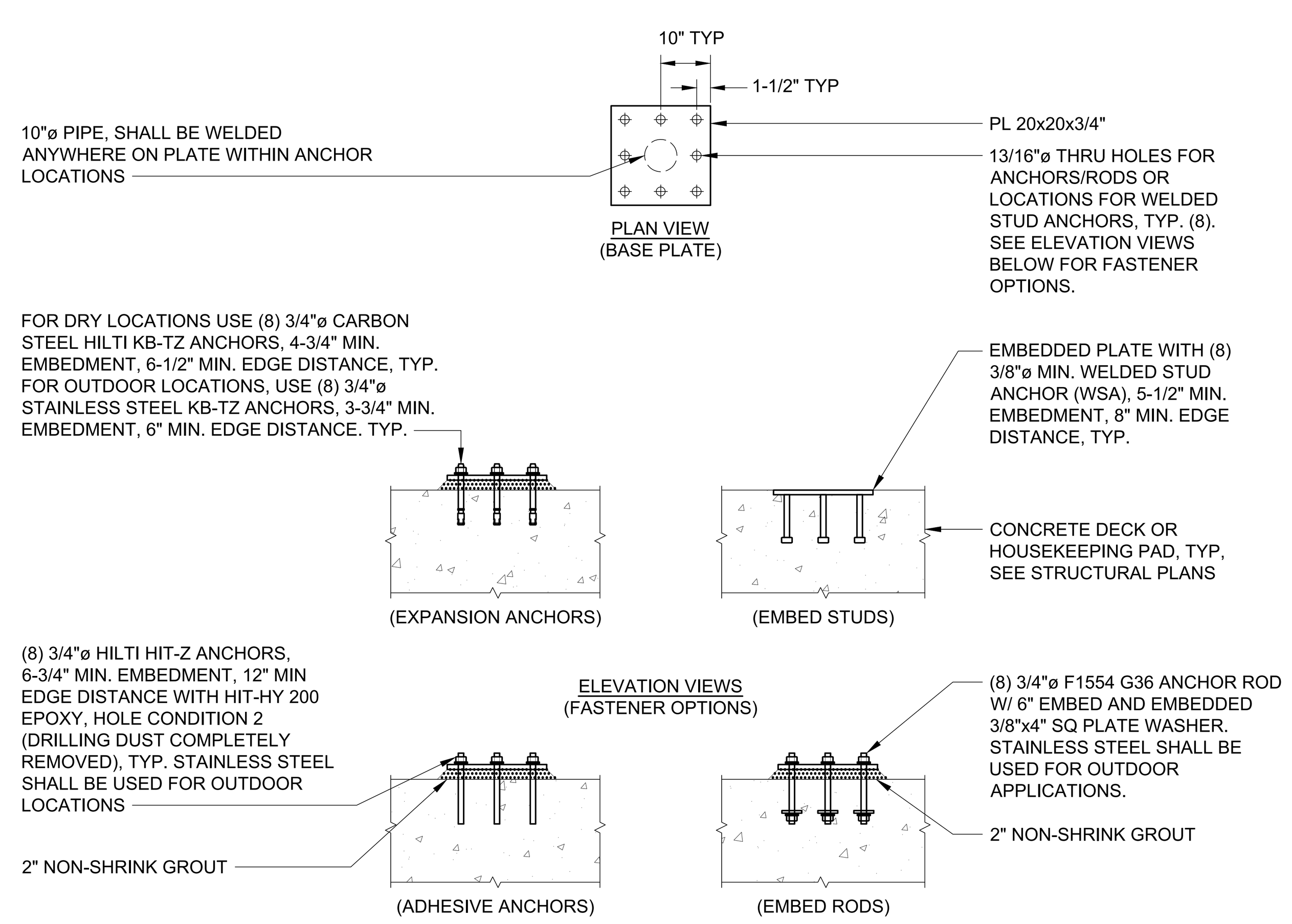
DRAWING NUMBER: M5.01



NOTES:
1. MAXIMUM SUPPORT DISTANCE 16 FT. ON CENTER.
2. MAXIMUM PIPE WEIGHT TOTAL 355 LBS./FT (1 - 16"ø PIPE AND 1 - 20"ø PIPE).
3. FOR CANTILEVER OPTION 1: MAXIMUM PIPE WEIGHT TOTAL 220 LBS/FT (2 - 12"ø PIPES).
4. FOR STAND ALONE PIPE OPTION 2: MAXIMUM PIPE WEIGHT TOTAL 210 LBS/FT (1 - 20"ø PIPE).
5. SEE MECHANICAL PLANS FOR PIPE SIZES.

1 CANTILEVER PIPE SUPPORT AT FLOOR DETAIL

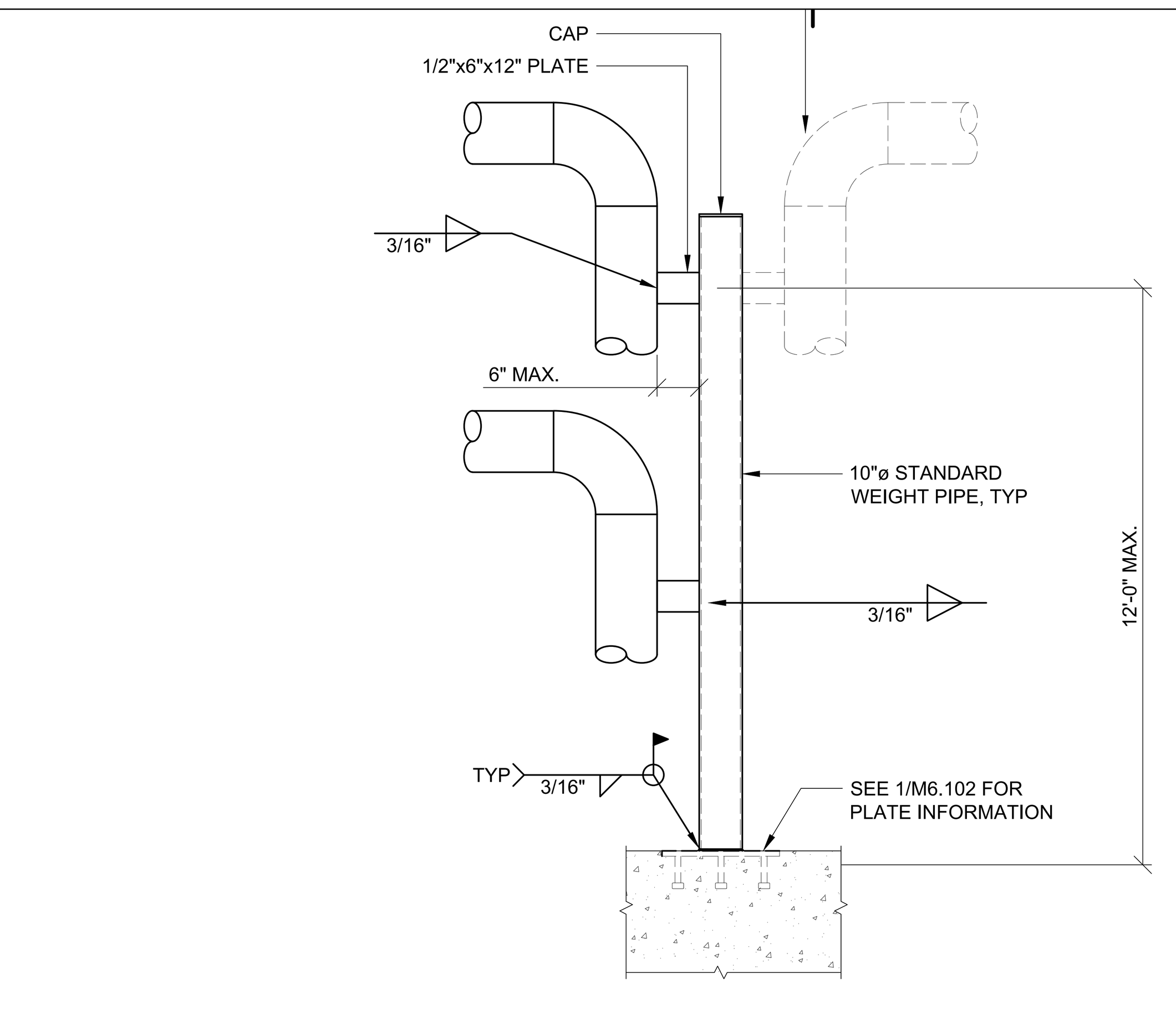
NOT TO SCALE



NOTES:
1. INFORMATION SHOWN LIGHT IS FOR REFERENCE ONLY.
2. SEE ICC-ES ESR-1917 (EXPANSION ANCHORS), ESR-3187 (ADHESIVE ANCHORS) FOR MORE INFORMATION.

1 PLATE DETAIL

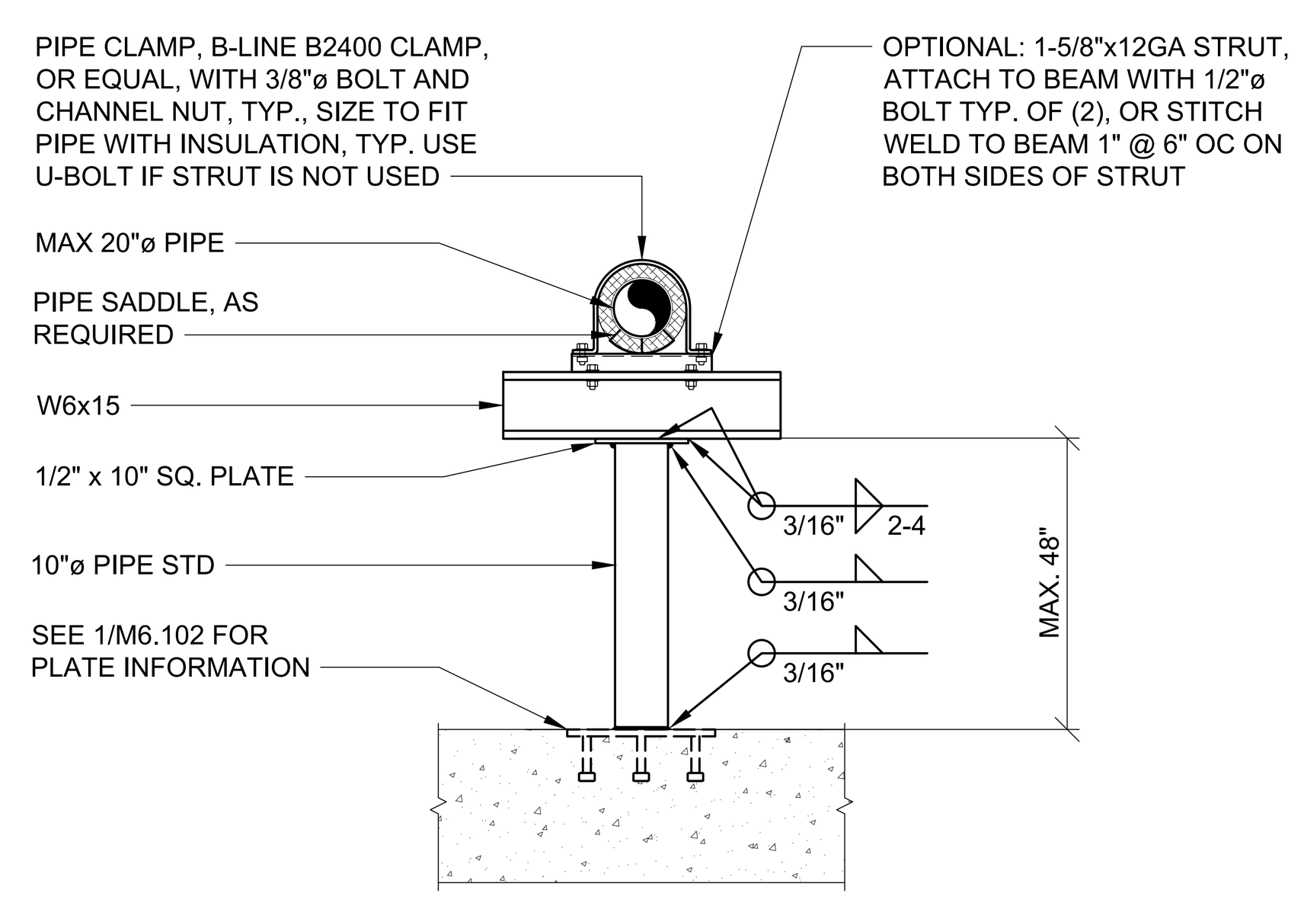
NOT TO SCALE



NOTES:
1. MAXIMUM PIPE WEIGHT TOTAL 220 LBS./FT. (2 - 12"ø PIPES)
2. SEE MECHANICAL PLANS FOR PIPE SIZES.

4 FLAG POLE PIPE SUPPORT AT FLOOR DETAIL

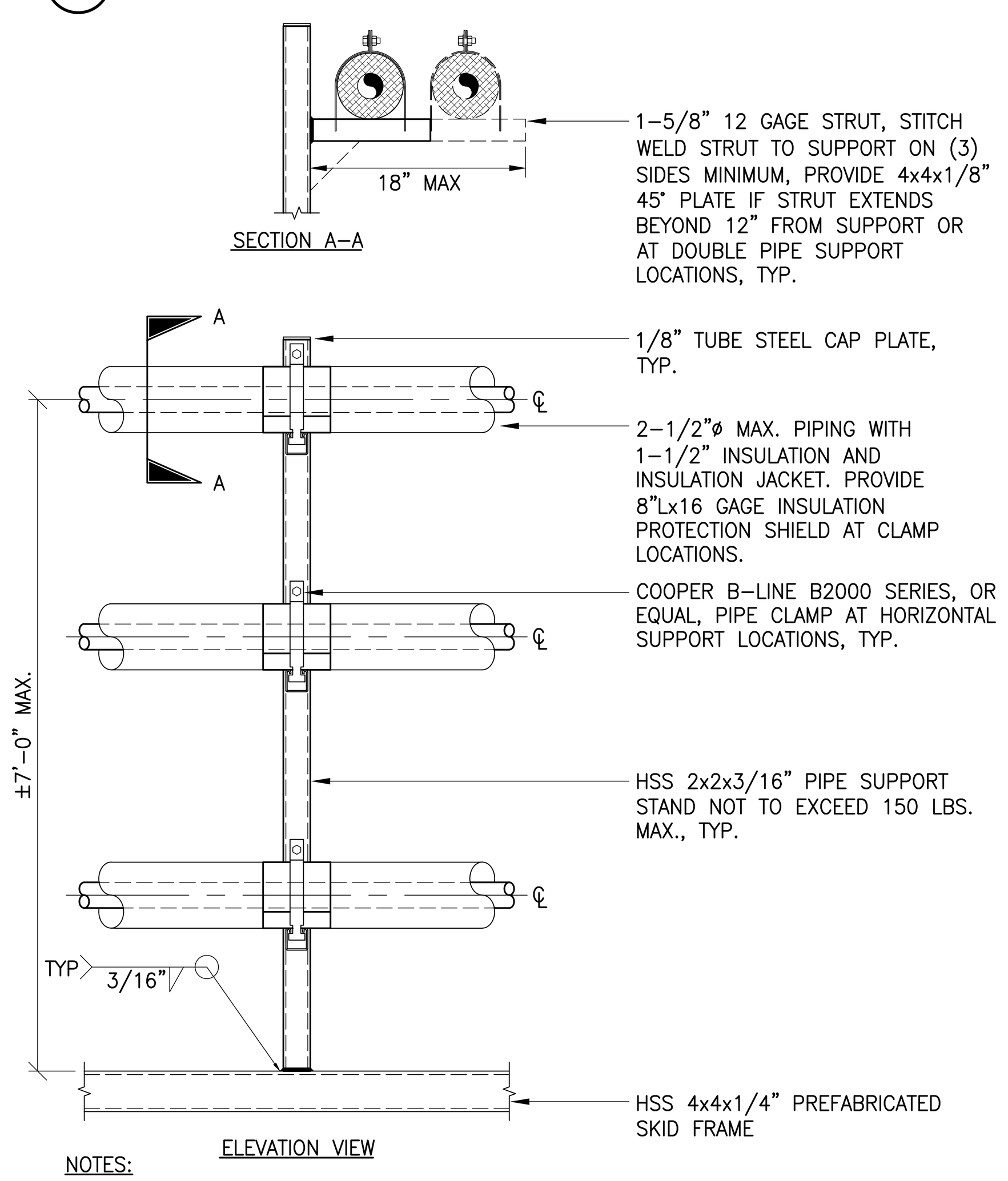
NOT TO SCALE



NOTES:
1. MAXIMUM SUPPORT DISTANCE 16 FT. ON CENTER.
2. MAXIMUM PIPE WEIGHT TOTAL 210 LBS./FT (1 - 20"ø PIPE).
3. GROUT AS NEEDED TO MAINTAIN PIPE LEVELED.
4. FOR OUTDOOR APPLICATION, USE STAINLESS STEEL BOLT AND CHANNEL NUT.
5. SEE MECHANICAL PLANS FOR PIPE SIZES.

2 PIPE SUPPORT AT FLOOR DETAIL

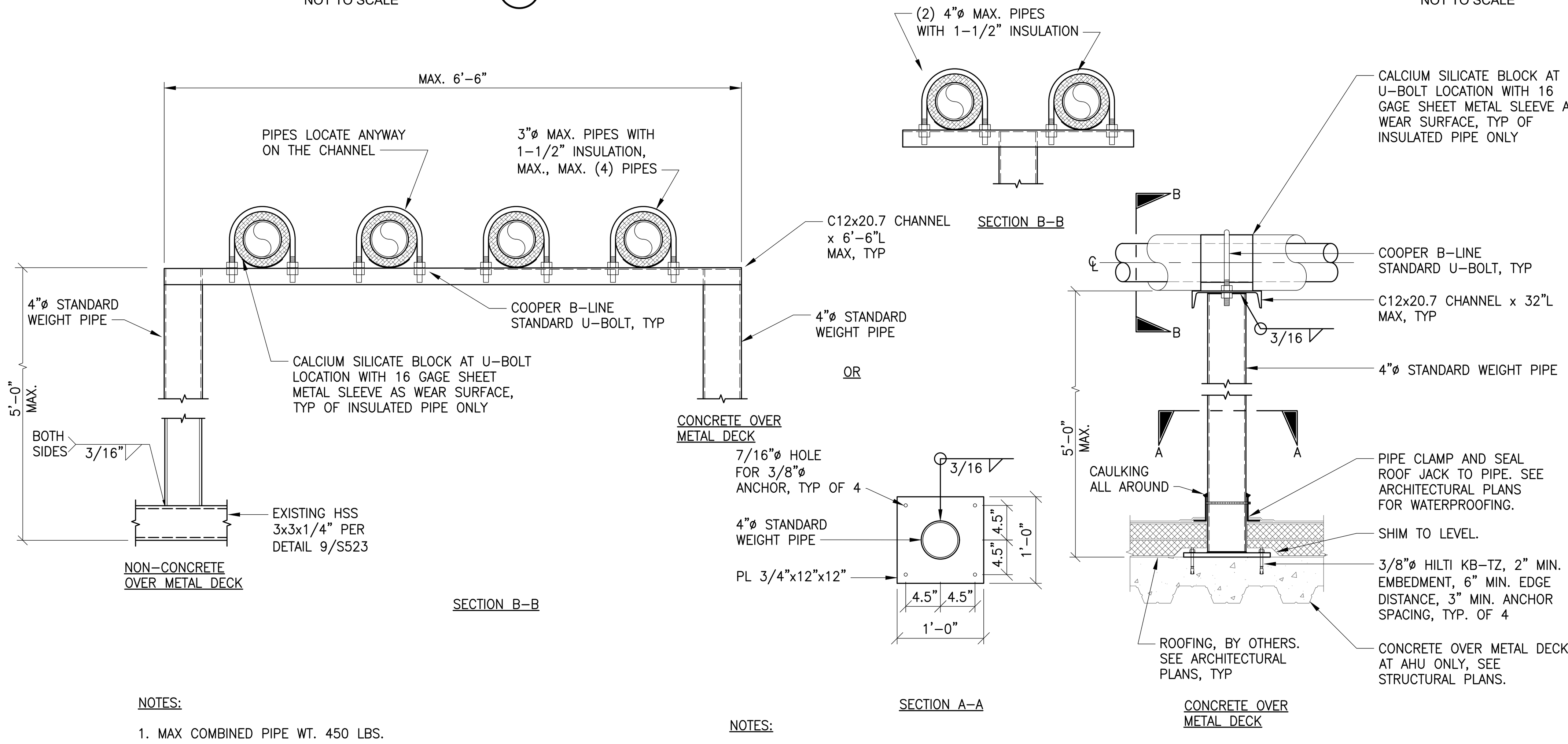
NOT TO SCALE



NOTES:
1. PROVIDE PIPE SUPPORT AT 8'–6" MAX.

5 PIPE SUPPORT DETAIL

NOT TO SCALE

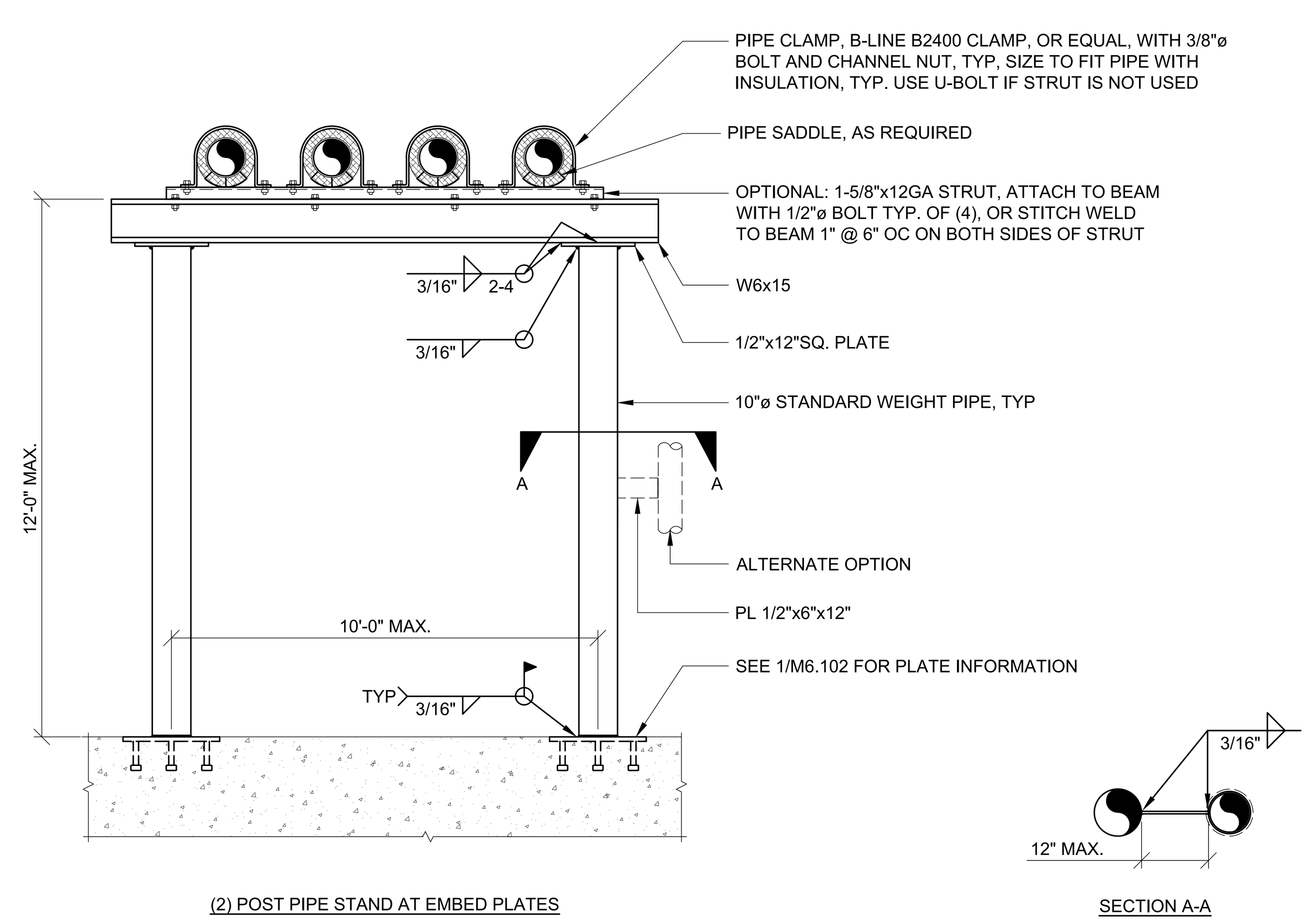


NOTES:
1. MAX COMBINED PIPE WT. 450 LBS.

NOTES:
1. ALL EXPOSED SUPPORT STEEL SHALL BE PRIMED AND PAINTED OR GALVANIZED.
2. MAXIMUM SUPPORT SPACING 10 FEET ON CENTER.
3. MAXIMUM PIPE WEIGHT FILLED WITH WATER NOT TO EXCEED 400 LBS.
4. ACCEPTABLE TO USE LEVELING NUTS ON ANCHORS TO LEVEL, IF USING LEVELING NUTS USE A MINIMUM OF 3/4" TO A MAXIMUM OF 1–1/2" OF NON–SHRINK GROUT UNDER SUPPORT PLATE.

2 PIPE ON ROOF DETAIL

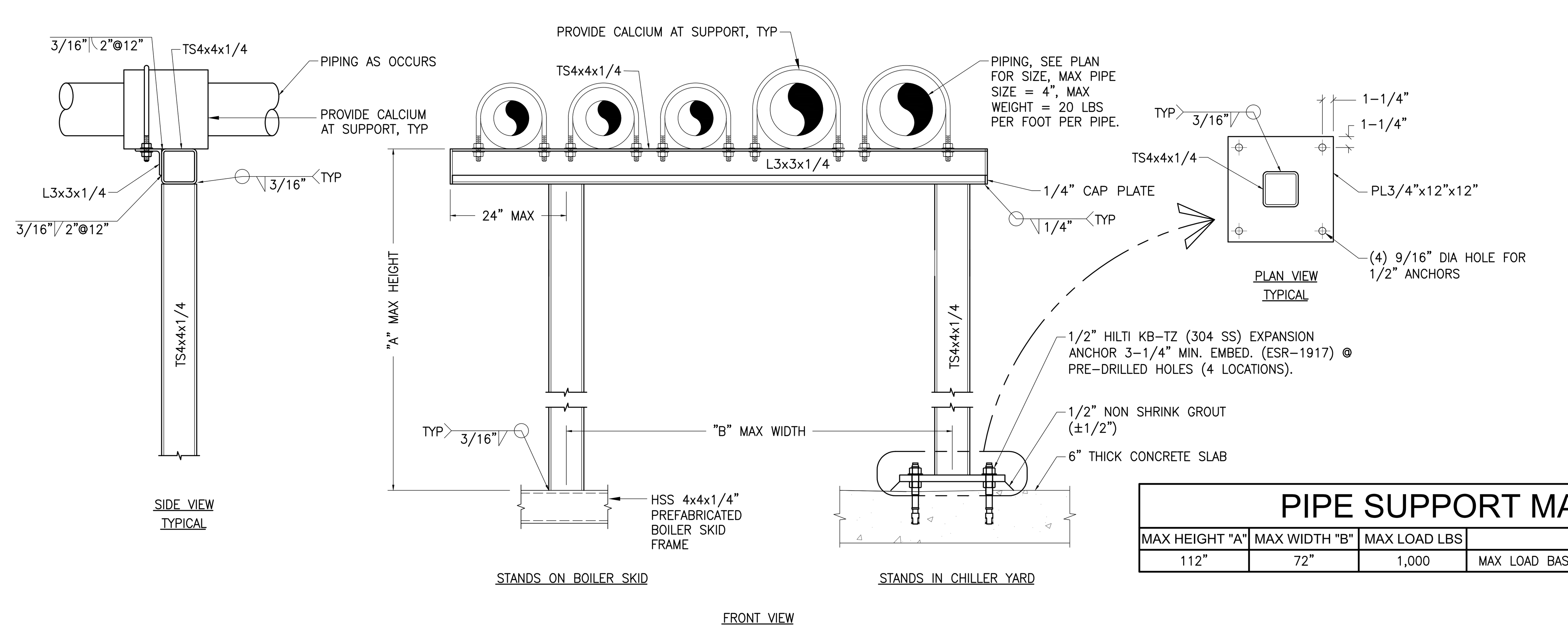
NOT TO SCALE



NOTES:
1. MAXIMUM SUPPORT DISTANCE 16 FT ON CENTER.
2. MAXIMUM PIPE WEIGHT TOTAL 720 LBS/FT (2 - 20"ø AND 2 - 16"ø PIPES).
3. SEE MECHANICAL PLANS FOR PIPE SIZES.

3 PIPE SUPPORT AT FLOOR DETAIL

NOT TO SCALE



PIPE SUPPORT MATRIX

MAX HEIGHT "A"	MAX WIDTH "B"	MAX LOAD LBS	REMARKS
112"	72"	1,000	MAX LOAD BASED ON 10'-0" O.C. MAX. SPACING.

3 PIPE SUPPORT DETAIL

NOT TO SCALE

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE
DRAFT NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

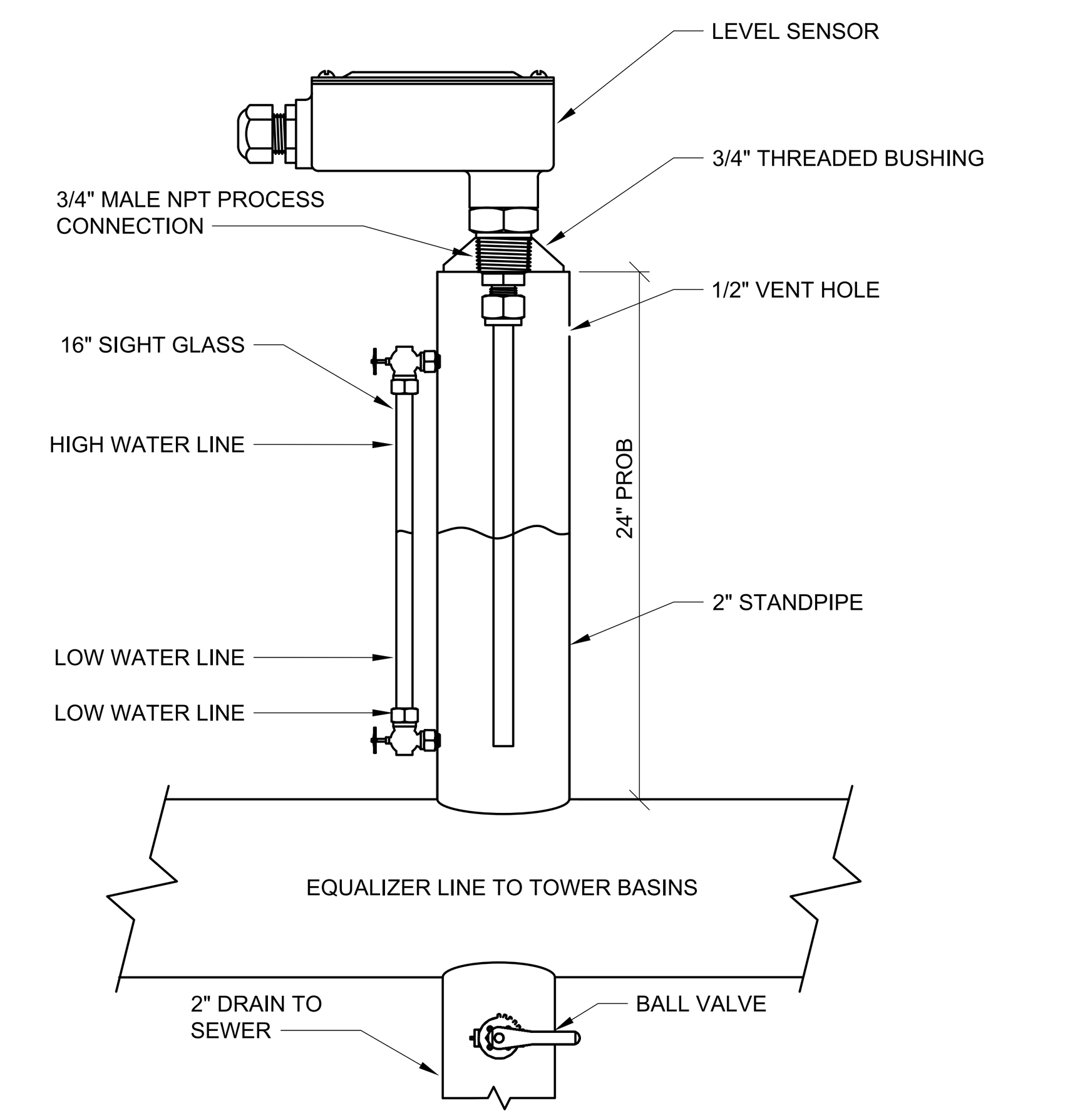
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

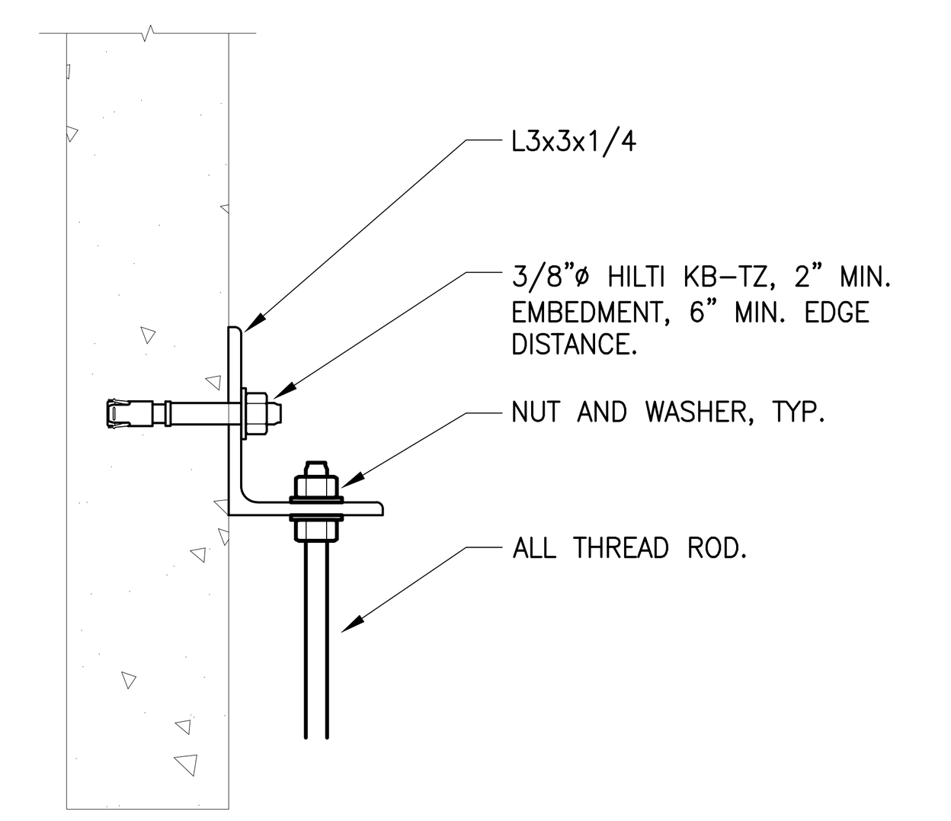
HVAC DETAILS

DRAWING NUMBER: M5.02



1 COOLING TOWER STANDPIPE WITH LEVEL SENSOR

NOT TO SCALE



ANCHORS IN CONCRETE BEAM

1 UPPER ATTACHMENT AT (E) BEAM

NOT TO SCALE

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN

DRAFT NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

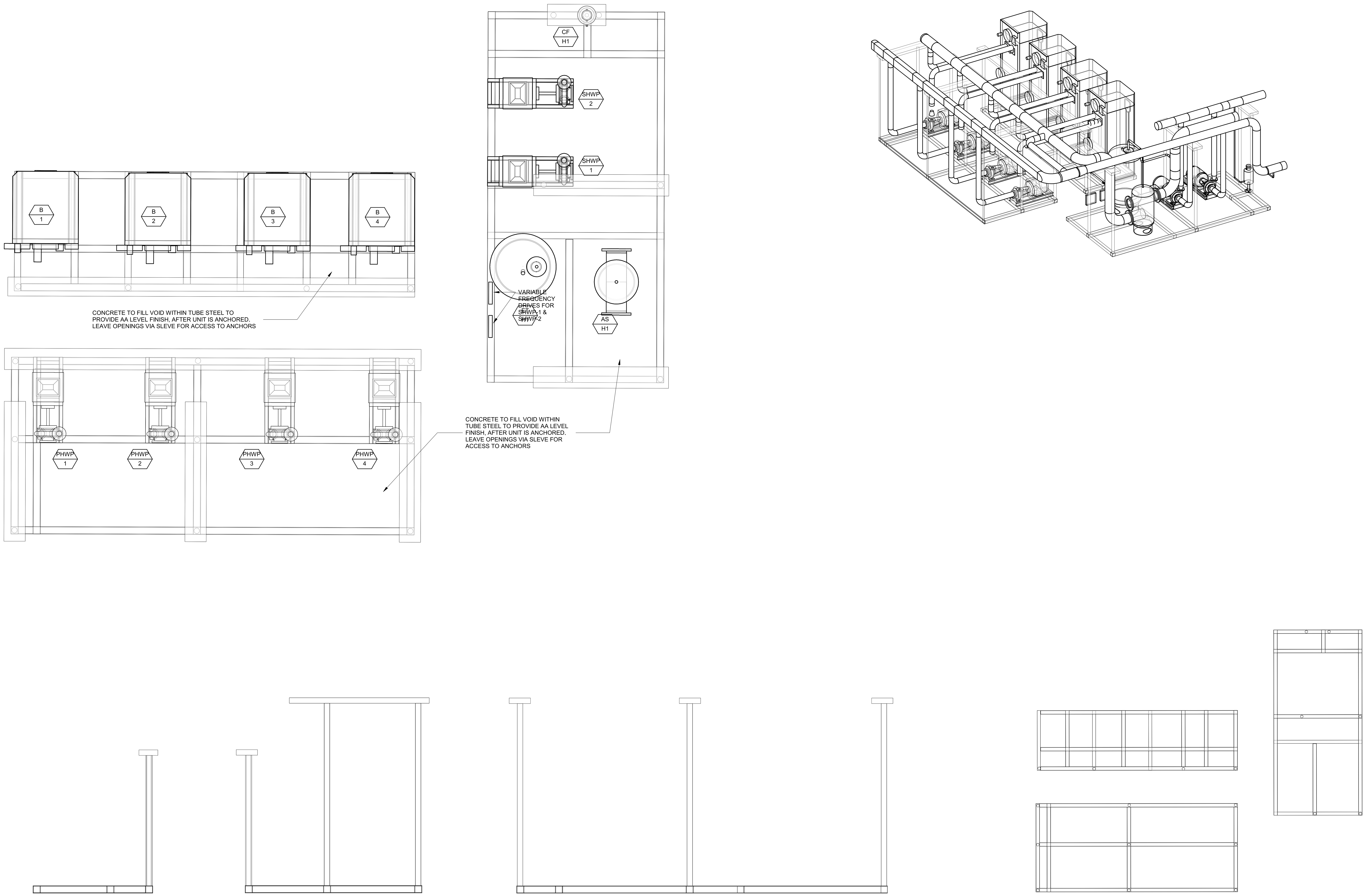
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

HVAC DETAILS

DRAWING NUMBER: **M5.03**



5 **HEATING HOT WATER SKID DETAIL**

SCALE: 1/2" = 1'-0"

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT
PERALTA COMMUNITY COLLEGE
900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

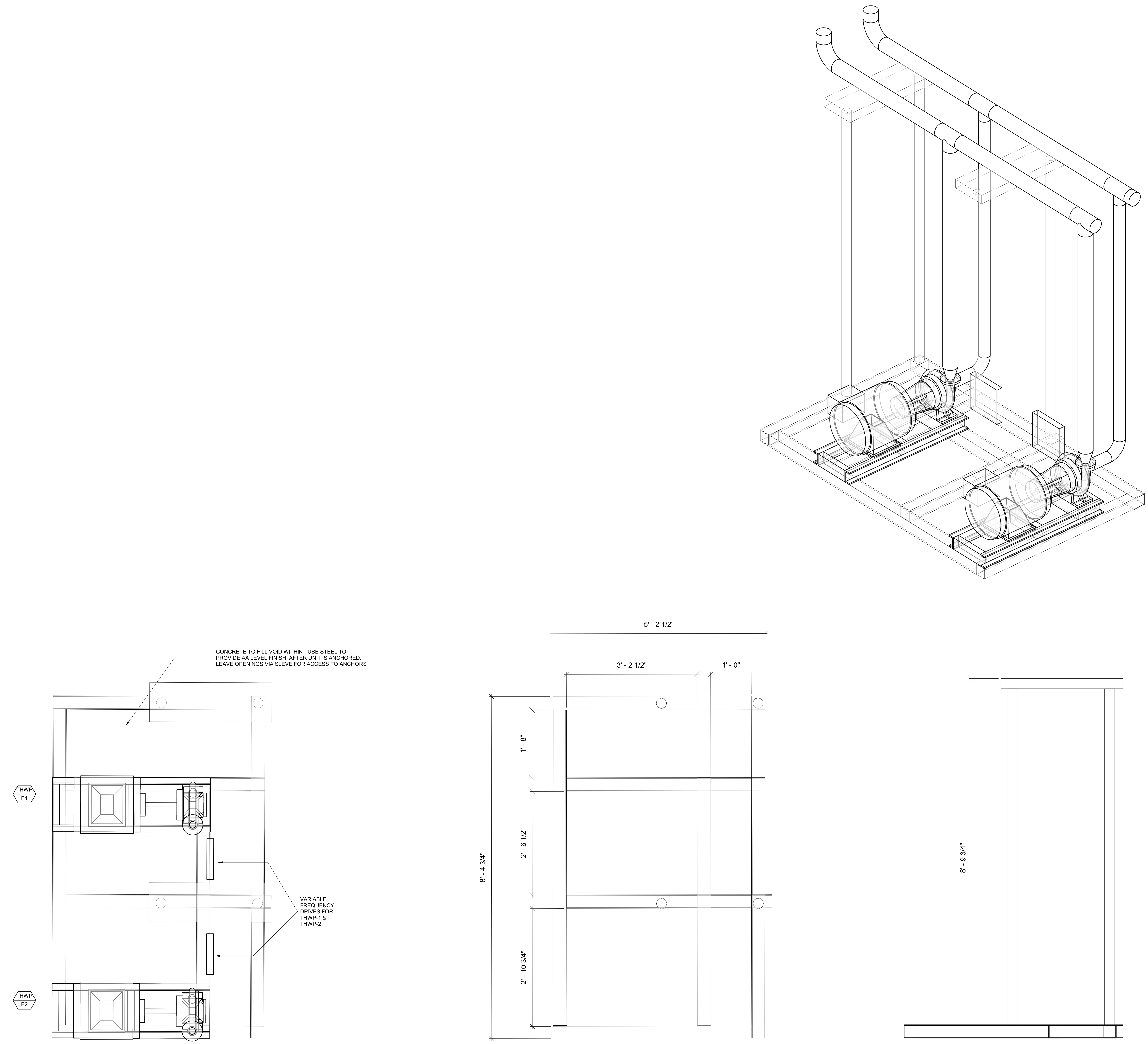
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/2" = 1'-0"
PROJECT NUMBER:	

HEATING HOT WATER SYSTEM SKID DETAIL

DRAWING NUMBER: **M5.04**



3 HHW TERTIARY PUMP SKID DETAIL

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

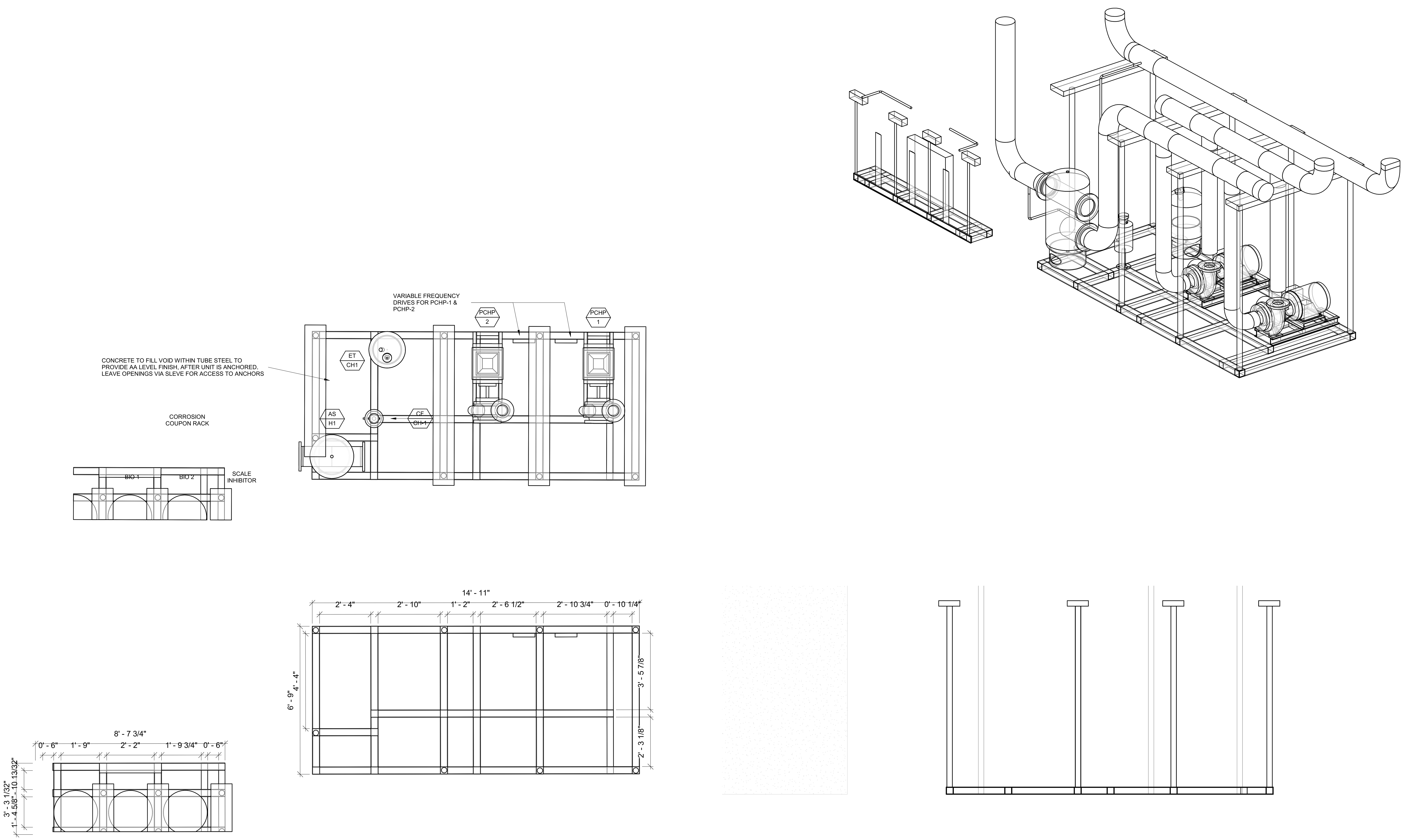
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1" = 1'-0"
PROJECT NUMBER:	

HHW TERTIARY PUMP SKID DETAIL

DRAWING NUMBER: M5.05



3 **CHILLED WATER SYSTEM SKID DETAIL**

ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS®
251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/2" = 1'-0"
PROJECT NUMBER:	

CHILLED WATER SKID DETAIL

DRAWING NUMBER: **M5.06**

PLUMBING MATERIAL MATRIX

TAG	SYSTEM	SIZE	MATERIAL	JOINT TYPE	INSULATION
CD	CONDENSATE DRAIN	3/4"- 1 1/4"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22 LEADFREE SOLDER JOINTS HARRIS, CANFIELD OR EQ., OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQ.	ASTM C547 1" THICK INSULATION MINERAL FIBER PREFORMED PIPE INSULATION
CD	CONDENSATE DRAIN	1 1/2"- 3"	COPPER DRAINAGE TUBE, HARD DRAWN ASTM B306, TYPE DWV	WROUGHT COPPER JOINT TUBE FITTINGS, ANSI B16.22 FOR BRAZING	ASTM C547 1" THICK INSULATION MINERAL FIBER PREFORMED PIPE INSULATION
DCW CW C	DOMESTIC COLD WATER (INDOORS)	1/2"-2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22 LEADFREE SOLDER JOINTS HARRIS, CANFIELD OR EQ., OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQ.	N/A
DCW CW C	DOMESTIC COLD WATER	2-1/2"-8"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER JOINT TUBE FITTINGS, ANSI B16.22 FOR BRAZING	N/A
DCW CW C	DOMESTIC COLD WATER (BELOW GRADE)	1/2"-8"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE K	WROUGHT COPPER JOINT TUBE FITTINGS, ANSI B16.22 FOR BRAZING	N/A
DCW CW C	DOMESTIC COLD WATER (OUTDOORS **)	1/2"-2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22 LEADFREE SOLDER JOINTS HARRIS, CANFIELD OR EQ., OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQ.	FIBERGLASS 1" THICK W/ METAL JACKET
DHW DHWR H	DOMESTIC HOT WATER SUPPLY AND RETURN (INDOORS *) (OUTDOORS **)	1/2"-2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22 LEADFREE SOLDER JOINTS HARRIS, CANFIELD OR EQ., OR WROUGHT COPPER VIEGA PROPRESS SYSTEM OR EQ.	FIBERGLASS 1" THICK FOR 1/2" AND 3/4" PIPE. 1-1/2" THICK FOR 1" TO 1-3/4" PIPE. 2" THICK FOR 2" AND LARGER PIPE
DHW DHWR H	DOMESTIC HOT WATER SUPPLY AND RETURN (INDOORS *) (OUTDOORS **)	2-1/2"-4"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B88, TYPE L	CAST-BRONZE, SOLDER-JOINT DRAINAGE FITTINGS. ANSI B-16.23 OR WROUGHT COPPER ANSI B16.29	FIBERGLASS 2" THICK
RWL/OFD	STORM DRAINAGE (BELOW GRADE)	2"-8"	PVC SCHEDULE 40 PIPE, PLAIN ENDS	INJECTION MOLDED PVC DWV FITTINGS CONFORMING TO ASTM D 2665	N/A
RWL/OFD	STORM DRAINAGE (ABOVE GRADE)	2"-12"	NO HUB CAST IRON PIPE CISPI 301	NO HUB CAST IRON FITTINGS CISPI 301	N/A
V	SANITARY VENT (BELOW GRADE)	2"-8"	PVC SCHEDULE 40 PIPE, PLAIN ENDS	INJECTION MOLDED PVC DWV FITTINGS CONFORMING TO ASTM D 2665	N/A
V	SANITARY VENT (ABOVE GRADE)	2"-8"	NO HUB CAST IRON PIPE CISPI 301	NO HUB CAST IRON FITTINGS CISPI 301	N/A
V (OPT.)	SANITARY VENT (ABOVE GRADE)	1-1/4"-3"	COPPER DRAINAGE TUBE, HARD TEMPER DRAWN ASTM B306, TYPE DWV	CAST-BRONZE, SOLDER-JOINT DRAINAGE FITTINGS. ANSI B-16.23 OR WROUGHT COPPER ANSI B16.29	N/A
W	SANITARY WASTE (BELOW GRADE)	2"-8"	PVC SCHEDULE 40 PIPE, PLAIN ENDS	INJECTION MOLDED PVC DWV FITTINGS CONFORMING TO ASTM D 2665	N/A
W	SANITARY WASTE (ABOVE GRADE)	2"-12"	NO HUB CAST IRON PIPE CISPI 301	NO HUB CAST IRON FITTINGS CISPI 301	N/A
W	SANITARY WASTE (INWALL ONLY COPPER OPTION)	1-1/4"-2"	SEAMLESS COPPER WATER TUBE, HARD DRAWN ASTM B306, TYPE DWV	DWV WROUGHT COPPER SOLDER JOINT TUBE FITTINGS, ANSI B16.22 LEADFREE SOLDER JOINTS SILVABRITE, CANFIELD OR EQ.	N/A

* - PROVIDE EXPOSED INSULATED PIPING INSIDE MECHANICAL ROOMS LESS THAN 8'-0" ABOVE FLOOR WITH PVC FIELD APPLIED JACKET
** - NO INSULATION NEEDED ON ROOF

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	MFR	MANUFACTURER
	MOCP	MAXIMUM OVER CURRENT PROTECTION
MPG	MPG	MEDIUM PRESSURE GAS (16-X PSI)
MV	MV	MEDICAL VACUUM
	MV, TMV	MIXING VALVE, THERMOSTATIC MIXING VALVE
	NC, NO	NORMALLY CLOSED, NORMALLY OPEN
N2	N2	NITROGEN GAS
NO2	NO2	NITROUS OXIDE
	OC	ON CENTER
	OH	OVERHEAD
	OF	OVERFLOW
OFD	OFD	OVERFLOW DRAIN
O2	O2	OXYGEN
	P&TRV	PRESSURE & TEMPERATURE RELIEF VALVE
	POC	POINT OF CONNECTION
	PRV	PRESSURE REDUCING VALVE
	PSI(G)	POUNDS PER SQUARE INCH (GAUGE)
	PW	PROCESS WATER
		PETE'S PLUG
		PIPING OR EQUIPMENT TO BE REMOVED
P		PRESSURE GAUGE
		PRESSURE REGULATOR
LPG		PROPANE
	(R), (D)	RISE, DROP
	RD, OFD	ROOF DRAIN, OVERFLOW DRAIN
	RED	REDUCER
	RLA	RUNNING LOAD AMPS
	RPM	REVOLUTIONS PER MINUTE
	RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
RO	RO	REVERSE OSMOSIS WATER
RWL	RWL	RAINWATER LEADER
		RISE UP/ RISER DOWN
SCD	SCD	SECONDARY DRAIN LINE
SD	SD	STORM DRAIN
	SM	SHEET METAL
	SP	STATIC PRESSURE
	SQFT	SQUARE FEET
	SS, W	SANITARY SEWER, WASTE PIPING
		STRAINER
	TA, TB	TO ABOVE, TO BELOW
	TCP	TEMPERATURE CONTROL PANEL
M	TCV	TEMPERATURE CONTROL VALVE (2-WAY)
M	TCV	TEMPERATURE CONTROL VALVE (3-WAY)
TP	TP	TRAP PRIMER
	TYP	TYPICAL
		TEE DOWN
T		TEMPERATURE GAUGE (WATER)
T		TEMPERATURE SENSOR (WATER)
		TRIPLE VIC FLEXIBLE CONNECTION
	(UG), (UF)	UNDERGROUND, UNDERFLOOR
	UON/ UNO	UNLESS OTHERWISE NOTED/ UNLESS NOTED OTHERWISE
		UNION
	V	VOLTAGE
	VAC	VACUUM
V	V, VR, VTR	SANITARY VENT, VENT RISER, VENT THRU ROOF
	VB	VALVE BOX
	VFD/ VSD	VARIABLE FREQUENCY DRIVE/ VARIABLE SPEED DRIVE
WAG	WAG	WASTE ANESTHETIC GAS
	WCO	WALL CLEANOUT
	WHA	WATER HAMMER ARRESTER
	WMS	WIRE MESS SCREEN
	WPD	WATER PRESSURE DROP
	WT.	WEIGHT
		Y STRAINER W/ HOSE END BLOW OFF

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	ABC	ABOVE CEILING
	AC	AIR CONDITIONING
	AD	ACCESS DOOR
	AFF, AFG	ABOVE FINISH FLOOR, ABOVE FINISH GRADE
	AHU	AIR HANDLER UNIT
	APD	AIR PRESSURE DROP
AV	AV	ACID VENT LINE
AW	AW	ACID SOIL OR ACID WASTE LINE
	BAS	BUILDING AUTOMATION SYSYTEM
	BFF	BELOW FININSHED FLOOR
	BFP	BACK FLOW PREVENTER
	BFV	BUTTERFLY VALVE
	BHP	BRAKE HORSE POWER
	BG	BELOW GRADE
	BTUH	BRITISH THERMAL UNITS PER HOUR
	BV	BALL VALVE
CA	CA	COMPRESSED AIR
	CBV	CALIBRATED BALANCE VALVE
	CC	CHILLED WATER COIL
CD	CD	CONDENSATE DRAIN
	CFF	CAP FOR FUTURE
	CHV	CHECK VALVE
	CLG	CEILING
	CLR	CLEAR
	CO	CLEANOUT
	CONN.	CONNECT OR CONNECTION
	CONT.	CONTINUATION
CO2	CO2	CARBON DIOXIDE GAS
CW	CW	COLD WATER
D	D	INDIRECT DRAIN
	DIS, DIR	DEIONIZED WATER SUPPLY, DEIONIZED WATER SUPPLY
	DN	DOWN
DP	DP	DIFFERENTIAL PRESSURE TRANSMITTER
	DR	DRAIN, DRAIN RECEPTOR
		DOUBLE BELLOWS FLEXIBLE CONNECTION
	(E), (N), (F)	EXISTING, NEW, FUTURE
	EL	ELEVATION
	ENT.	ENTERING
	F	DEGREES FAHRENHEIT
	(FA), (TA)	FROM ABOVE, TO ABOVE
	(FB), (TB)	FROM BELOW, TO BELOW
	FF	FINISH FLOOR
	FFE	FINISH FLOOR ELEVATION
	FLA	FULL LOAD AMPS
	FLR	FLOOR
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	FT.	FEET
	FU	FIXTURE UNIT
FM		FLOW METER
FS		FLOW SWITCH
G	G	NATURAL GAS (0-15 PSI)
	GA.	GAUGE
	GALV	GALVANIZED
	GCO, FCO	GRADE CLEANOUT, FLOOR CLEANOUT
	HB, WH	HOSE BIB, WALL HYDRANT
	HP	HORSEPOWER
	HW	DOMESTIC HOT WATER
	HW	HOT WATER LINE W/ HEAT TRACE
	HWR	HOT WATER RETURN
ICW	ICW	INDUSTRIAL COLD WATER
	IHW	INDUSTRIAL HOT WATER
	IE	INVERT ELEVATION
	LBS	POUNDS
	LRA	LOCKED ROTOR AMPS
	M, MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
	MAX, MIN	MAXIMUM, MINIMUM
	MCA	MINIMUM CIRCUIT AMPS

GENERAL NOTES (PLUMBING)

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 CALIFORNIA PLUMBING CODE.
2. PLUMBING INSTALLATION SHALL BE IN ACCORDANCE WITH IAPMO INSTALLATION STANDARDS.
3. COORDINATE PLUMBING SYSTEMS WITH WORK OF OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION.
4. COORDINATE LOCATIONS OF ALL ROOF OPENINGS WITH STRUCTURAL AND ARCHITECTURAL PLANS PRIOR TO ANY INSTALLATION.
5. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS RECOMMENDATIONS AND APPLICABLE CODES.
6. ALL CLEANOUTS SHALL BE ACCESSIBLE AND INSTALLED PER CPC SECTIONS 707.0 AND 719.0.
7. ALL HORIZONTAL DRAINAGE PIPE SHALL SLOPE AT $\frac{1}{4}$" PER FOOT UNLESS SPECIFICALLY NOTED OTHERWISE.
8. INSULATION, JACKETS, COVERINGS, AND LAP SEAL ADHESIVES FOR PIPING INSTALLATIONS IN PLENUMS SHALL HAVE A FLAME SPREAD INDEX OF NOT GREATER THAN 25 AND A SMOKE DEVELOPMENT INDEX OF NOT GREATER THAN 50 WHEN TESTED IN ACCORDANCE WITH NFPA 255 2005 EDITION, ASTM E84, OR UL 723.
9. DIELECTRIC UNIONS AND/OR NIPPLES SHALL BE USED AT ALL POINTS F CONNECTION WHERE THERE IS A DISSIMILARITY OF METALS.
10. PROVIDE FOAM WRAP AROUND UNDERGROUND PIPING PASSING OVER OR THROUGH COLUMN CAPS OR FOOTINGS AND WHERE PIPING WILL BE IN DIRECT CONTACT WITH CONCRETE.
11. REFER TO STRUCTURAL PLANS AND DETAILS FOR SPECIFIC REQUIREMENTS FOR PLUMBING TRENCHING AND PENETRATIONS ADJACENT TO, THROUGH, OR UNDER FOOTINGS.
12. REFER TO ARCHITECTURAL FLOOR PLANS AND INTERIOR ELEVATIONS FOR ADA FIXTURE INSTALLATION REQUIREMENTS AND CLEARANCES.
13. ALL PIPE, PIPE FITTINGS, TRAPS, FIXTURES, MATERIALS, AND DEVICES SHALL BE LISTED OR LABELED.
14. ALL WETTED SURFACES INSTALLED IN POTABLE WATER SYSTEMS SHALL BE ANSI NSF 61 AND IN COMPLIANCE WITH AB 1953.
15. ALL GASKETING IN PIPING SYSTEMS SHALL BE EPDM, OR NON-ASBESTOS GARLOCK.
16. ALL FLOOR SINKS AND INDIRECT WASTE RECEPTORS SHALL BE INSTALLED FLUSH WITH FINISH FLOOR UNLESS SPECIFICALLY NOTED.
17. REFER TO GEOTECHNICAL REPORT FOR SPECIFIC TRENCHING, BACKFILL, COMPACTION, AND PIPE PROTECTION FOR UNDERGROUND PLUMBING SYSTEMS.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT
PERALTA COMMUNITY COLLEGE DISTRICT
900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE
DRAFT NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: CHECKED:
DATE: 04/14/2021 SCALE:
PROJECT NUMBER: 2015800

PLUMBING LEGENDS AND NOTES

DRAWING NUMBER: P0.01

COMPRESSED AIR SYSTEM COMPRESSOR SCHEDULE

TAG	MANUFACTURER MODEL NO.	SERVICE	LOCATION	TYPE	DESIGN CAPACITY (CFM)	OPERATING PRESSURE (PSIG)	MOTOR HP	VOLT/PHASE	WEIGHT (LBS)	REMARKS
AC 1	SULLIVAN PALATEK --	COMPRESSED AIR	-	-	95	125	25	460/3	1,115	

SCHEDULE NOTES
1. -

REMARKS
(1) -

COMPRESSED AIR DRYER SCHEDULE

TAG	MANUFACTURER MODEL NO.	SERVICE	LOCATION	TYPE	DESIGN CAPACITY (SCFM)	OPERATING PRESSURE (PSIG)	ELECTRICAL (VOLTS/PHASE)	AMPS	WEIGHT (LBS)	REMARKS
AD 1	VAN AIR SYSTEMS RA-200	COMPRESSED AIR	-	-	200	100	120/1	15	500	

SCHEDULE NOTES
1. -

REMARKS
(1) -

ELECTRIC WATER HEATER SCHEDULE

TAG	MANUFACTURER MODEL NO.	SERVICE	LOCATION	TYPE	CAPACITY (KW)	FLOW (GPM)	ELECTRICAL (VOLTS/PHASE)	WEIGHT (LBS)	REMARKS
EHW 1	STEIBEL ELTRON CES	DOMESTIC HOT WATER	CHILLER ROOM	-	60	-	480/3	-	

SCHEDULE NOTES
1. -

REMARKS
(1) -

PLUMBING FIXTURES AND SPECIALTIES SCHEDULE

TAG	MANUFACTURER	MODEL	DESCRIPTION
TMV-1	GUARDIAN	G6040	ANSI Z358.1 COMPLIANT
EEWSH-1	GUARDIAN	G1991	ANSI Z358.1 COMPLIANT 20GPM FLOW CONTROL
BWV-1	ZURN	Z1090	BACKWATER VALVE
RPBF-1	ZURN	375-FSC	REDUCED PRESSURE BACKFLOW PREVENTER

SCHEDULE NOTES
1. -

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-35998
01-31-23
STATE OF CALIFORNIA

DRAFT NOT FOR CONSTRUCTION

CONSULTANT
FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS
251 MICHELLE CT.
SO. SAN FRANCISCO, CA 94080
TEL 650.81.8292
FMB JOB NO. 2021

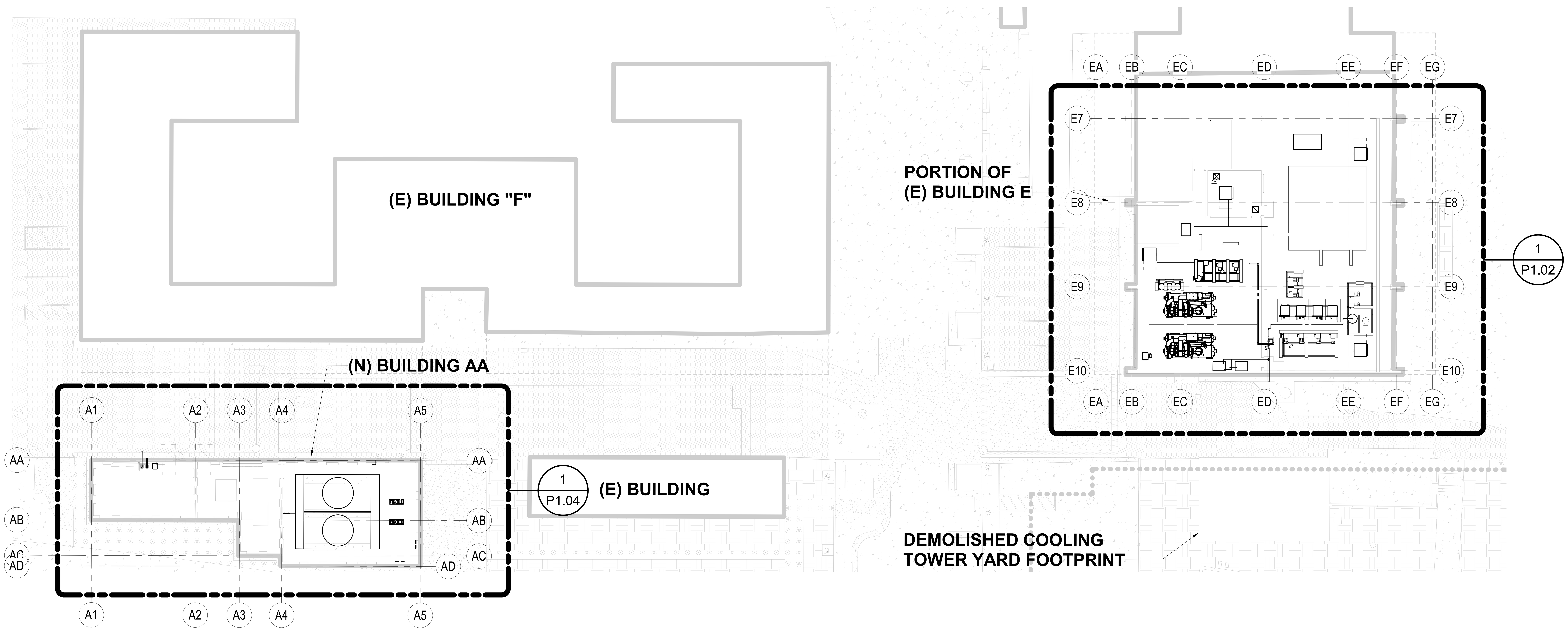
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN:	CHECKED:
DATE: 04/14/2021	SCALE:
PROJECT NUMBER: 2015800	

PLUMBING EQUIPMENT SCHEDULES

DRAWING NUMBER: P0.02



1 PLUMBING SITE PLAN

SCALE: 1/16" = 1'-0"

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT — KEVIN MacQUARRIE — STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

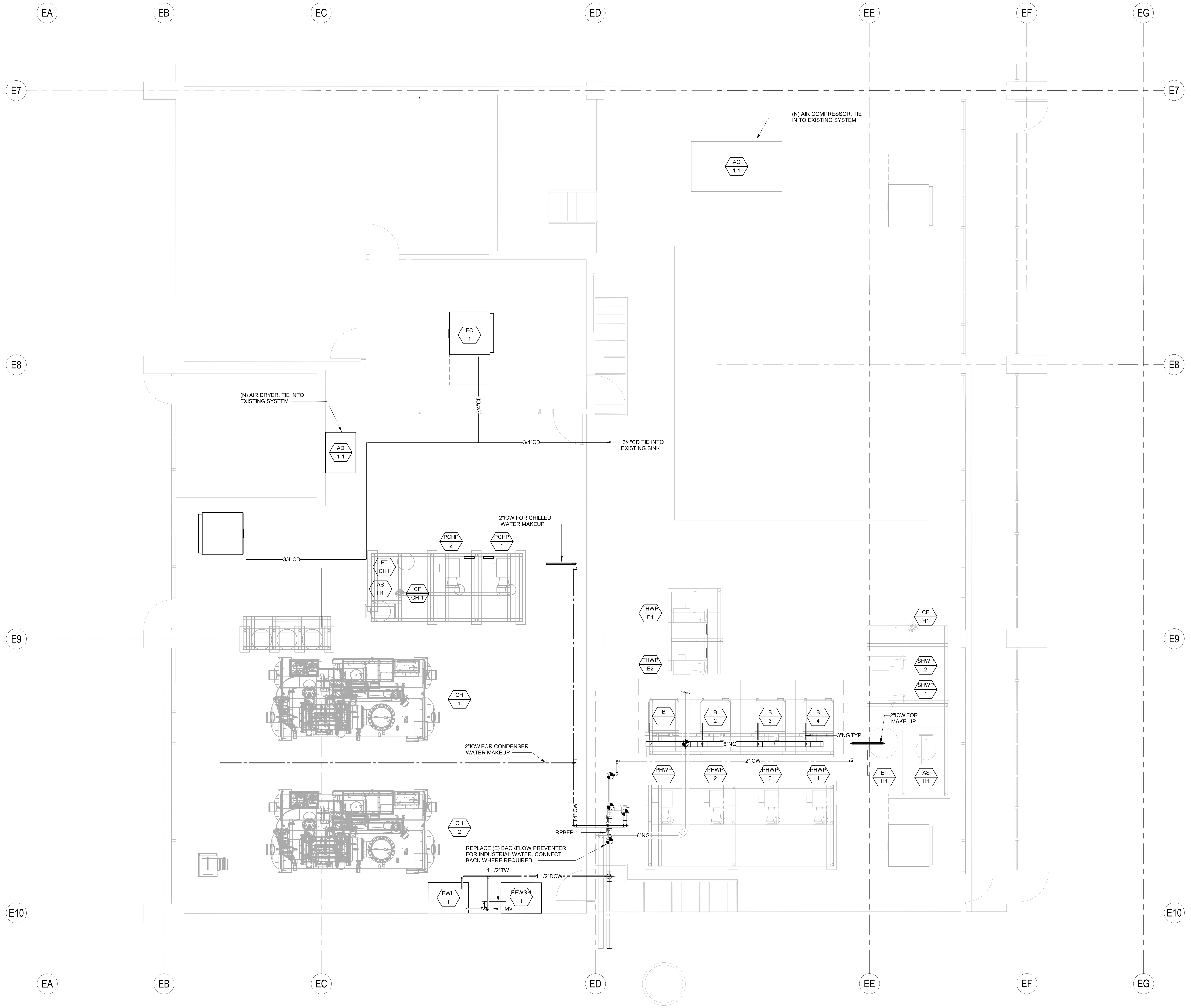
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/16" = 1'-0"
PROJECT NUMBER:	

PLUMBING SITE PLAN

DRAWING NUMBER: P1.01



1 BUILDING E PLUMBING FLOOR PLAN

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

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

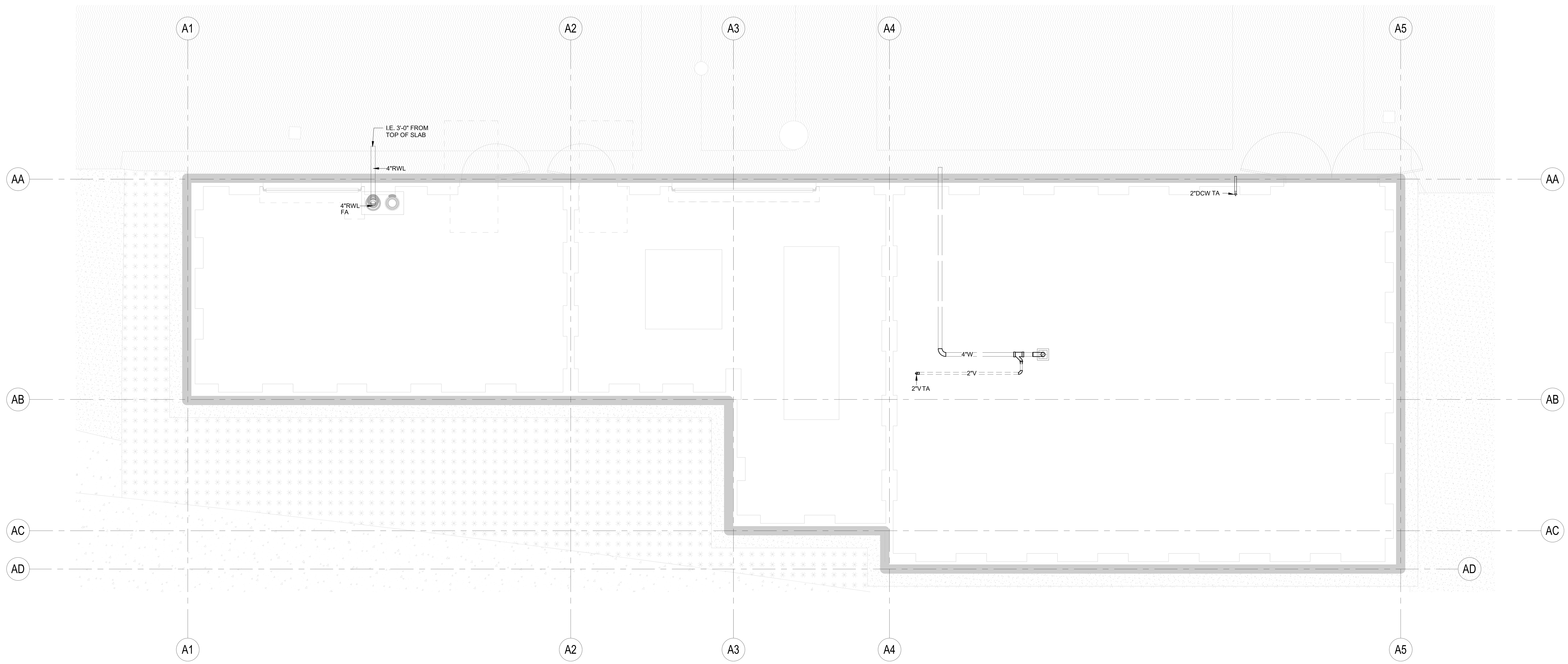
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING E PLUMBING FLOOR PLAN

DRAWING NUMBER: P1.02



1 BUILDING AA UNDERGROUND PLUMBING PLAN

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

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999

www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT
KEVIN MacQUARRIE
C-25998
01-31-23
STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.

OUR PERFORMANCE BUILDS RELATIONSHIPS®

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

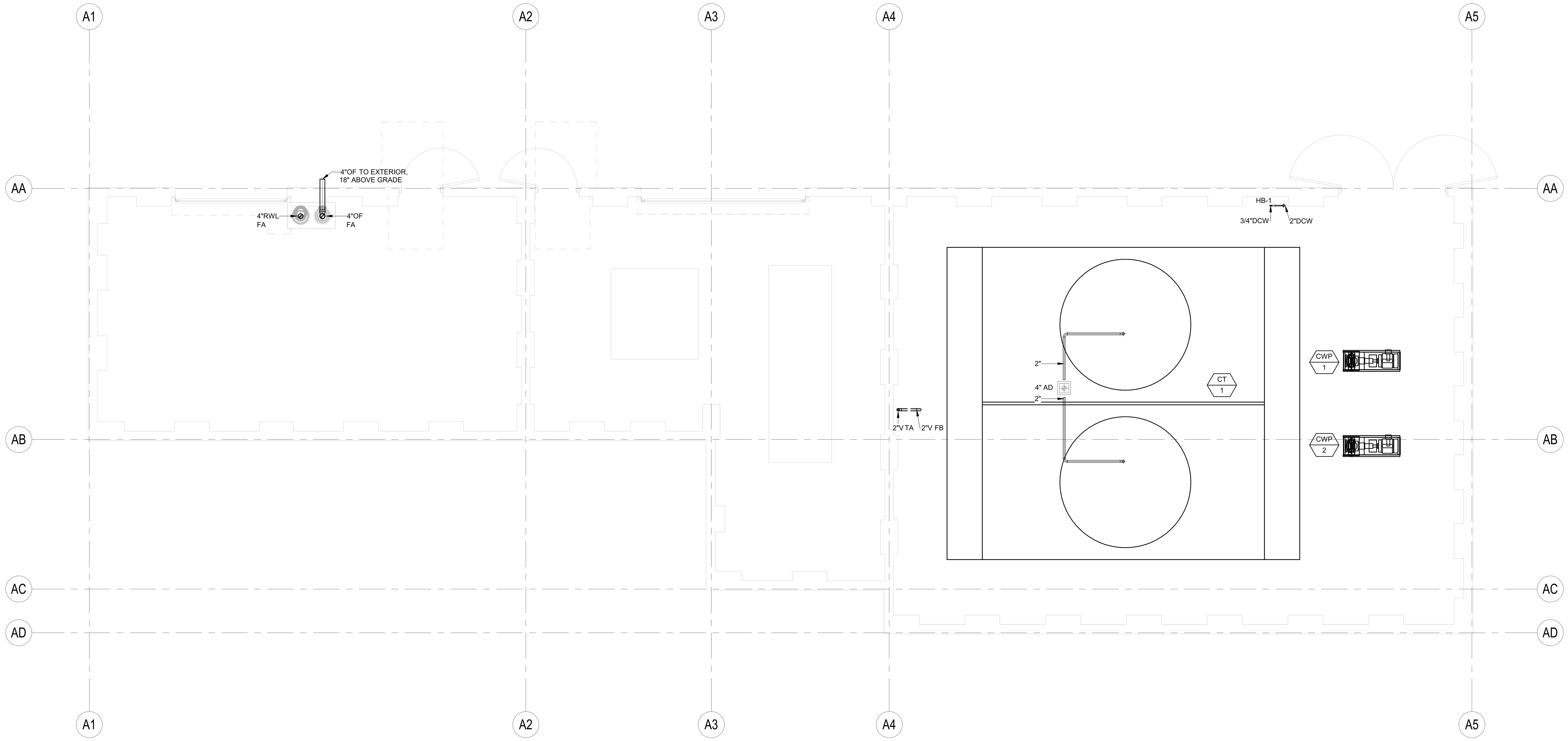
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING AA UG PLUMBING PLAN

DRAWING NUMBER: P1.03



1 BUILDING AA PLUMBING PLAN

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

WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE

900 FALLON ST, OAKLAND, CA 94607

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

FMB FRANK M. BOOTH, INC.
OUR PERFORMANCE BUILDS RELATIONSHIPS

251 MICHELLE CT
SO. SAN FRANCISCO, CA 94080
TEL 650.871.8292
FMB JOB NO. 2021

	03-15-2021		100% DD SET
	04-14-2021		50% CD SET
NO	DATE	BY	DESCRIPTION
	REVISIONS		

DRAWN: Author	CHECKED: Checker
DATE: 04/14/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER:	

BUILDING AA PLUMBING PLAN

DRAWING NUMBER: P1.04

CONTROLS

GENERAL

- SA — SUPPLY AIR
- OA — OUTSIDE AIR
- RA — RETURN AIR
- EA — EXHAUST AIR

EQUIPMENT

- 2-WAY VALVE
- 3-WAY VALVE
- SD — SMOKE DETECTOR
- FAN-PROP
- CENTRIFUGAL HOUSED FAN
- FAN-PLUG
- FAN ARRAY
- PUMP
- INLINE PUMP
- FURNACE
- FILTER
- AIR FLOW STATION
- C / C — COIL
- OPPOSED BLADE DAMPER
- PARALLEL BLADE DAMPER
- BAROMETRIC DAMPER
- VAV DAMPER
- ENABLE / RUN / SPEED / NETWORK / VFD — VARIABLE SPEED DRIVE
- ENABLE / STATUS / SETPOINT — CONTROLLER
- M/S / HOT / AUTO / AUX — MOTOR STARTER

CONTROLS

EQUIPMENT (CONT'D)

- CONTACT (BOXED)
- CONTACT (UNBOXED)
- R — RELAY (1 CONTACT)
- R — RELAY (2 CONTACTS)
- SWITCH
- ACCUVALVE
- HX — HEAT EXCHANGER
- R — LIGHT

SENSORS

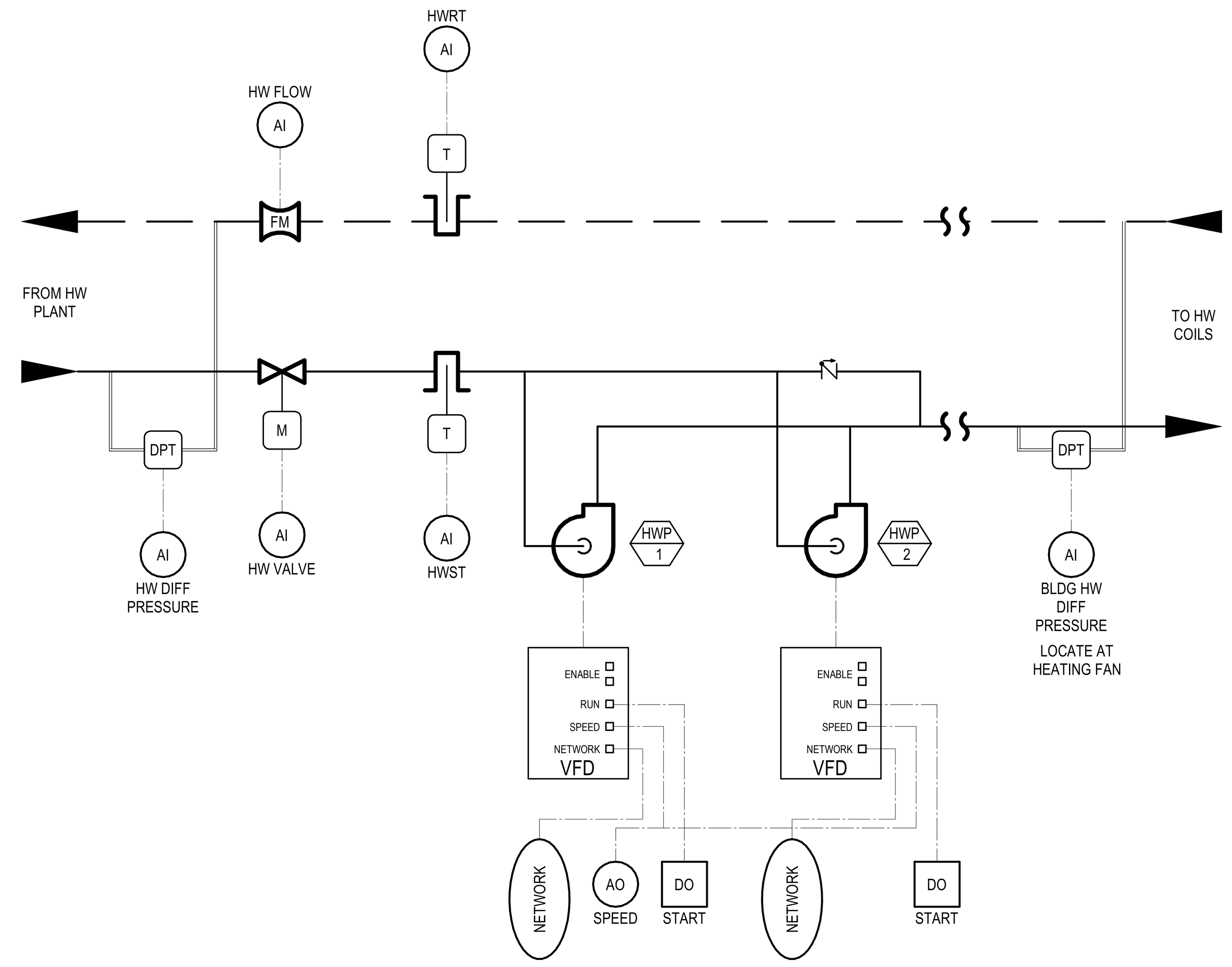
- STATIC PRESSURE TIP
- AFS FAN
- SENSOR WELL
- T — TEMPERATURE SENSOR & SENSOR WELL
- RH / T — HUMIDITY SENSOR (RH) OR TEMPERATURE SENSOR (T)
- T — AVERAGING TEMPERATURE SENSOR
- M — MODULATING ACTUATOR
- M2 — 2-POSITION ACTUATOR

DIGITAL POINT

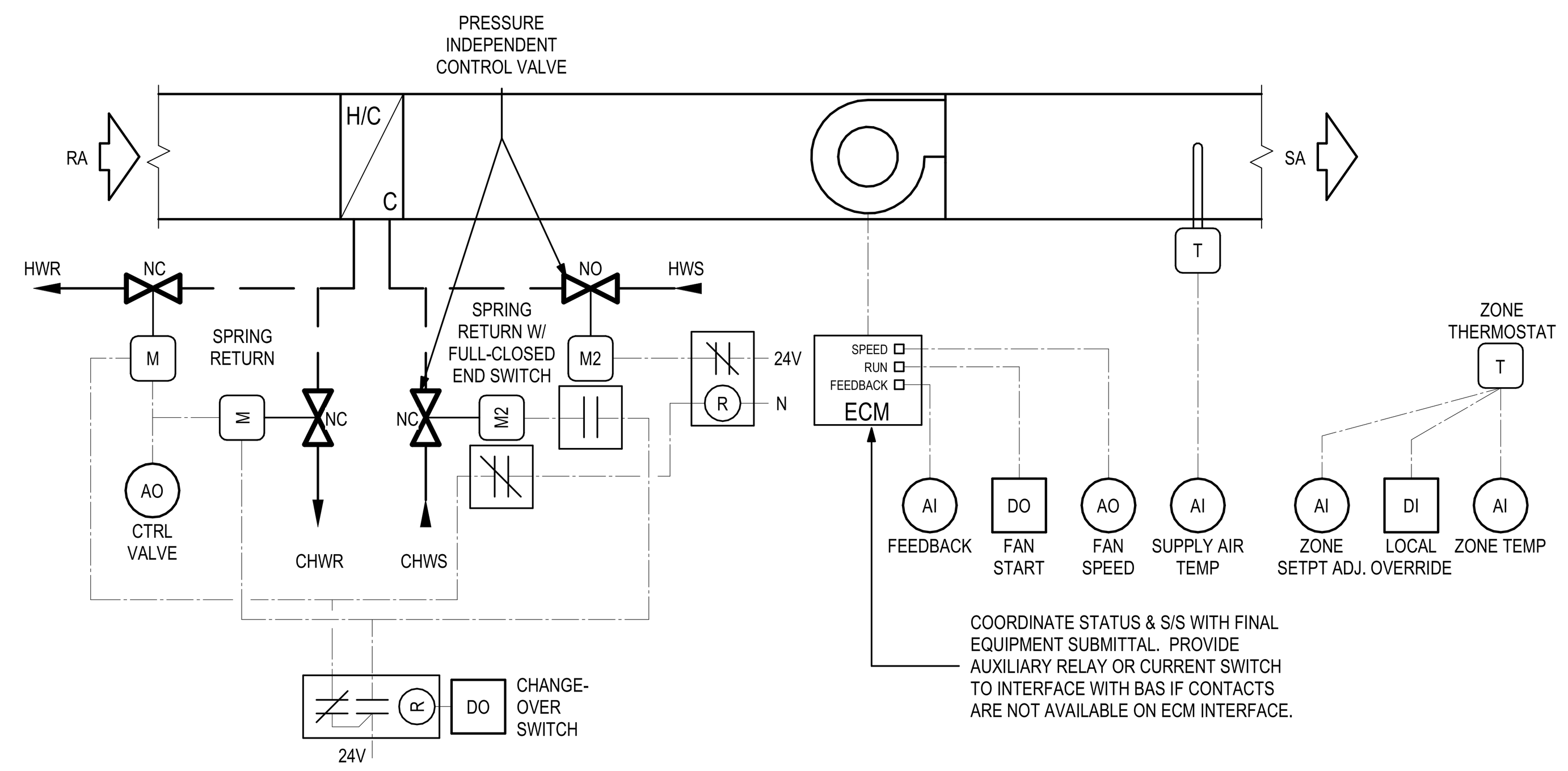
- DO — HARDWIRED DIGITAL OUTPUT (DO) OR DIGITAL INPUT (DI)

ANALOG POINT

- AO — HARDWIRED ANALOG OUTPUT (AO) OR ANALOG INPUT (AI)
- NETWORK — NETWORK CONNECTION BETWEEN CONTROLLER AND DEVICE
- FLOW CROSS
- FM — FLOW METER
- CS — CURRENT SWITCH



1 BUILDING E TERTIARY HOT WATER PUMPS



2 VARIABLE SPEED FAN COIL WITH ECM

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET
OAKLAND, CA 94807

LICENSED ARCHITECT — KEVIN MacQUARRIE — STATE OF CALIFORNIA

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

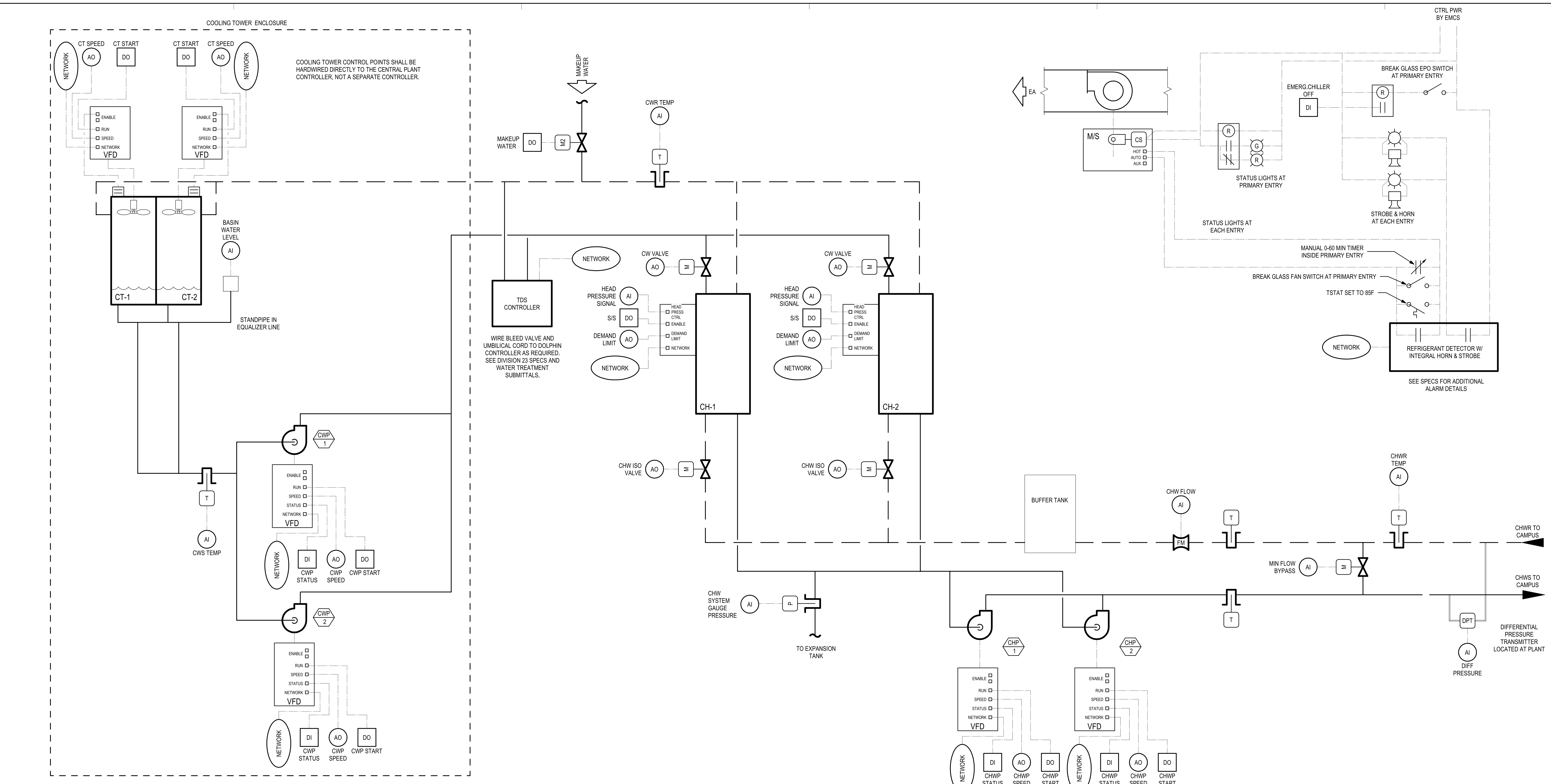
NO	DATE	BY	DESCRIPTION
	04-14-2021		50% CD SET

REVISIONS

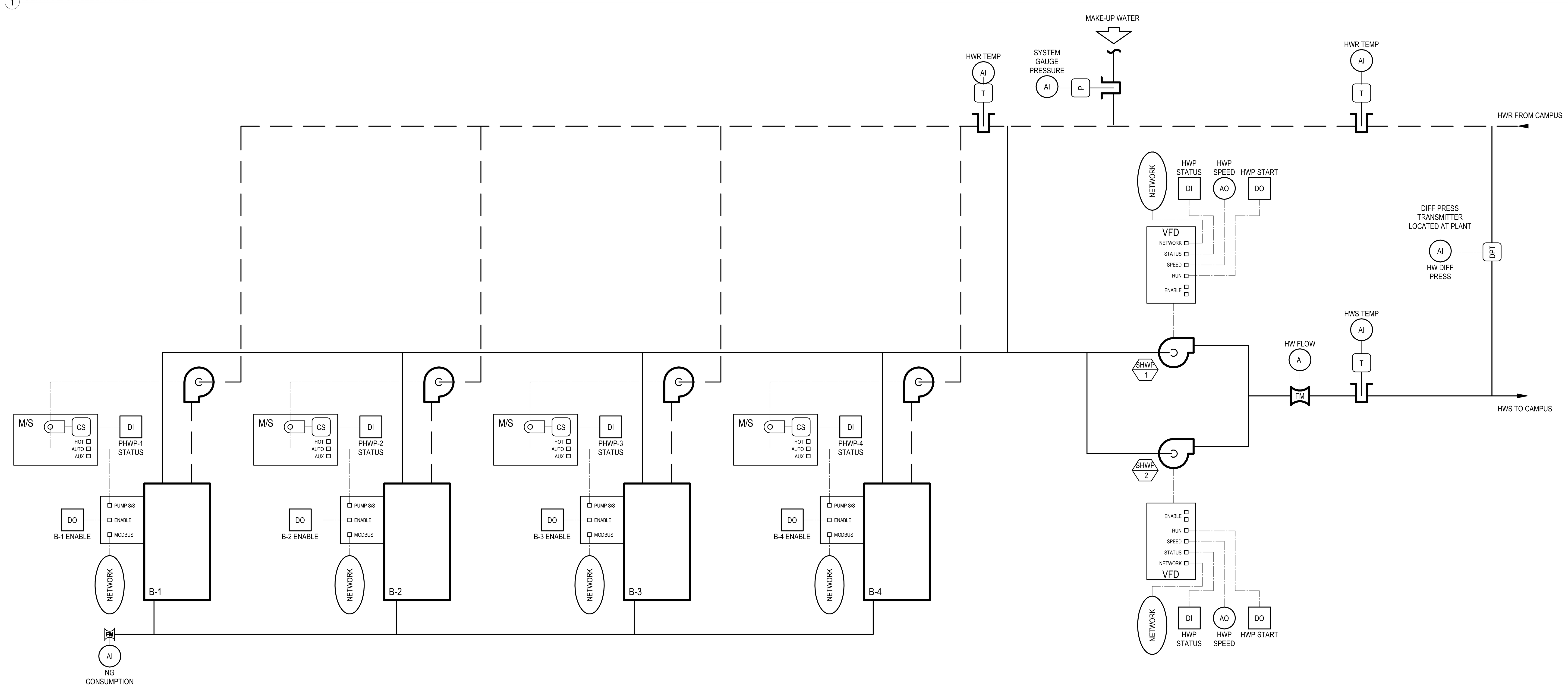
DRAWN: JFA | CHECKED: STT
DATE: 04/14/21 | SCALE: NO SCALE
PROJECT NUMBER: 21942.10

HVAC CONTROLS DRAWINGS

DRAWING NUMBER: BAS.01



1 CENTRAL CHILLED WATER PLANT



2 CENTRAL HEATING HOT WATER PLANT

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET
OAKLAND, CA 94807

LICENSED ARCHITECT KEVIN MacQUARRIE STATE OF CALIFORNIA
DRAFT - NOT FOR CONSTRUCTION

CONSULTANT

NO	DATE	BY	DESCRIPTION
	04-14-2021		50% CD SET

REVISIONS

DRAWN: JFA CHECKED: STT
DATE: 04/14/21 SCALE: NO SCALE
PROJECT NUMBER: 21942.10

HVAC CONTROLS DRAWINGS

DRAWING NUMBER: BAS.02

SYMBOLS LIST

ABBREVIATIONS

Ø	PHASE
A OR AMP	AMPERE
A/C	AIR CONDITIONER
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AIC	AMPS INTERRUPTING CAPACITY
ALT	ALTERNATE
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
C	CONDUIT
CB	CIRCUIT BREAKER
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CLG	CEILING
CONT	CONTINUOUS
CRT	CATHODE RAY TUBE
CT	CURRENT TRANSFORMER
DC	DIRECT CURRENT
DGP	DATA GATHERING PANEL
DIA	DIAMETER
DIAG	DIAGRAM
DISC	DISCONNECT
DIST	DISTRIBUTION
DMU	DIGITAL METERING UNIT
DN	DOWN
DPST	DOUBLE POLE SINGLE THROW
DSD	DUCT SMOKE DETECTOR
EC	EMPTY CONDUIT
EMT	ELECTRICAL METALLIC TUBING
EP	EMERGENCY POWER
EPO	EMERGENCY POWER OFF
EWC	ELECTRIC WATER COOLER
FIXT	FIXTURE
FLEX	FLEXIBLE
FLR	FLOOR
FVNR	FULL VOLTAGE, NON REVERSING
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GRC	GALVANIZED RIGID CONDUIT
GRD	GROUND
HG	HOSPITAL GRADE
HGT	HEIGHT
HP	HORSEPOWER
HTR	HEATER
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
ISO	ISOLATED
JB OR J-BOX	JUNCTION BOX
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LCP	LIGHTING CONTROL PANEL
LT	LIGHT
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MFR	MANUFACTURER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MT	MOUNT
MTD	MOUNTED
MTG	MOUNTING
N/A OR NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NF	NONFUSIBLE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NPA	NATIONAL PURCHASING AGREEMENT
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
P	POLE
PB	PULL BOX
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RECEPT	RECEPTACLE
REQ'D	REQUIRED
RM	ROOM
S/N	SOLID NEUTRAL
SAD	SEE ARCHITECTURAL DRAWINGS
SHT	SHEET
STD	STANDARD
SWBD	SWITCHBOARD
T	TRANSFORMER
TC	TIMECLOCK
TEL	TELEPHONE
TP	TAMPER PROOF
TS	TIME SWITCH
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP	TYPICAL
UF	UNDERFLOOR
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLTAMPERE
VFD	VARIABLE FREQUENCY DRIVE
W	WATT OR WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER

LIGHTING

- SURFACE OR PENDANT MOUNTED FIXTURE
- SURFACE MOUNTED LINEAR WALL/MIRROR FIXTURE
- SURFACE MOUNTED STRIP LIGHT FIXTURE
- FLUORESCENT STRIP LIGHT FIXTURE, SURFACE OR CHAIN MOUNTED
- SURFACE MOUNTED WALL FIXTURE
- EXIT FIXTURE, CEILING OR WALL MOUNTED, DIRECTIONAL ARROWS AS INDICATED
- SHADING OF ANY FIXTURE INDICATES EMERGENCY LIGHTING
- ARM MOUNT FIXTURE ON LIGHT POLE

LIGHTING CONTROL

DIGITAL LIGHTING CONTROL SYSTEM DEVICES

- LC — WALL MOUNTED CONTROL STATION
- LC — CONTROL STATION IN LOCATION OTHER THAN WALL. MOUNT AS DESCRIBED ON DRAWINGS.
- RC — ROOM CONTROLLER RELAY UNIT. MOUNT ABOVE CEILING OR IN LOCATIONS AS INDICATED ON DRAWINGS.
- DS — DAYLIGHT SENSOR. LOCATE PER DRAWINGS.
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PI — PARTITION INTERFACE. PROVIDE CONNECTION TO MOTORIZED PARTITION CONTROLLER PER MANUFACTURER'S INSTRUCTIONS.

CONVENTIONAL STAND-ALONE DEVICES

- OS — CEILING MOUNTED OCCUPANCY SENSOR, LINE OR LOW VOLTAGE. FOR LOW VOLTAGE APPLICATIONS, PROVIDE COMPLETE WITH CORRESPONDING SWITCHPACK. PROVIDE CONNECTION BETWEEN SENSOR AND SWITCHPACK USING LOW-VOLTAGE CABLING PER MANUFACTURER'S INSTRUCTIONS.
- PC — CEILING MOUNTED PHOTOCELL
- PC — WALL MOUNTED PHOTOCELL
- S_a — WALL MOUNTED SINGLE POLE TOGGLE SWITCH. SUBSCRIPT LETTER INDICATES SWITCHLEG CONTROLLED.
- S_3 — WALL MOUNTED THREE-WAY TOGGLE SWITCH
- S_D — WALL MOUNTED LINE-VOLTAGE DIMMER SWITCH
- S_{ms} — WALL MOUNTED OCCUPANCY SENSOR SWITCH
- S^D_{ms} — WALL MOUNTED SINGLE POLE OCCUPANCY SENSOR DIMMER SWITCH
- S_K — KEY-OPERATED TOGGLE SWITCH
- S_{WP} — SINGLE TOGGLE SWITCH IN WEATHERPROOF ENCLOSURE
- TC — WALL MOUNTED TIME CLOCK - TYPE AS NOTED ON PLANS

NOTES:

1. ALL WALL MOUNTED LIGHTING CONTROL DEVICES SHALL BE INSTALLED AT + 45" TO CENTER, UNLESS OTHERWISE NOTED.
2. FOR DIGITAL LIGHTING CONTROL SYSTEM, REFER TO SYSTEM CONTROL SCHEDULE FOR ADDITIONAL DETAILS AND PART NUMBERS.

POWER

- PANELBOARD, 277/480V, SURFACE MOUNTED
- PANELBOARD, 277/480V, FLUSH MOUNTED
- PANELBOARD, 120/208V, SURFACE MOUNTED
- PANELBOARD, 120/208V, FLUSH MOUNTED
- COMMUNICATIONS PANEL
- ELECTRIC MOTOR-CONNECTION.
- J — JUNCTION BOX, CEILING MOUNTED
- J — JUNCTION BOX, FLUSH FLOOR MOUNTED
- J — FLUSH WALL MOUNTED JUNCTION BOX
- DUPLEX CONVENIENCE OUTLET, +18" AFF UON, TV = TELEVISION +84" AFF
- DOUBLE DUPLEX CONVENIENCE OUTLET, +18" AFF UON
- DUPLEX GFCI OUTLET, +18" AFF UON
- DOUBLE DUPLEX GFCI OUTLET, +18" AFF UON
- SINGLE LINE THROUGH CENTER OF OUTLET INDICATES OUTLET(S) MOUNTED AT +45" AFF, OR 6" ABOVE COUNTERTOP. SAD FOR EXACT MOUNTING HEIGHT.
- CEILING MOUNTED DUPLEX CONVENIENCE OUTLET
- FLUSH FLOOR MOUNTED DUPLEX CONVENIENCE OUTLET
- FLUSH FLOOR MOUNTED DOUBLE DUPLEX CONVENIENCE OUTLET
- SPECIALTY OUTLET, 18" UON. TYPE AS NOTED ON PLANS
- HEAVY DUTY FUSIBLE SAFETY SWITCH 25/30/480/3 = AMP FUSE/AMP SWITCH/POLES/MAX VOLTS
- COMBINATION MOTOR STARTER/DISCONNECT, NEMA SIZE AS INDICATED
- VFD — COMBINATION VARIABLE FREQUENCY DRIVE CONTROLLER. PROVIDED UNDER DIVISION 23, INSTALLED & CONNECTED UNDER DIVISION 26.
- FSD — FIRE/SMOKE DAMPER. PROVIDED AND INSTALLED BY DIV. 23 AND CONNECTED BY DIV. 26.
- PACKAGE CONTROLLER OR STARTER FURNISHED & INSTALLED UNDER ANOTHER DIVISION BUT WIRED UNDER THIS DIVISION
- CT — CURRENT TRANSFORMERS
- CIRCUIT BREAKER; NA = NON AUTOMATIC; ST = SHUNT TRIP
- FUSED SWITCH
- T — TRANSFORMER
- CONNECTION TO GROUND
- M — METER
- GFR — GROUND FAULT RELAY
- ST — SHUNT TRIP
- PB — PULLBOX, SIZE AND TYPE AS SPECIFIED BY NUMBERED NOTE.

CONVENTIONS

- 1 — NUMBERED SHEET NOTE, APPLIES TO DRAWING CONTAINING NOTES ONLY
- AC 1 — MECHANICAL EQUIPMENT IDENTIFICATION TAG:
  - AC: AIR CONDITIONING UNIT
  - CU: CONDENSING UNIT
  - EF: EXHAUST FAN
  - HP: HEAT PUMP
  - HV: HEAT VENT UNIT
  - TEF: TOILET EXHAUST FAN
- ABCD — EQUIPMENT TAG
- ADDENDUM, BULLETIN, OR REVISION NUMBER
- 4003 — FEEDER TAG
- 1 — FOODSERVICE EQUIPMENT TAG
- E / E7.5 — DETAIL REFERENCE: DETAIL DESIGNATION; SHEET NUMBER
- F3 — FIXTURE IDENTIFICATION TAG: FIXTURE TYPE
- (1) 1-1/4 — DASH INDICATES FRACTION; PARENTHESIS INDICATES QUANTITY

RACEWAYS

- G — GROUND CONDUCTOR
- CONDUIT RUN CONCEALED IN SLAB, UNDERSLAB OR UNDERGROUND
- CONDUIT RUN CONCEALED IN WALL OR CEILING
- CONDUIT HOMERUN, CONTINUOUS RUN TO PANEL OR EQUIPMENT CABINET
- FLEXIBLE METALLIC CONDUIT CONNECTION
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- CROSS MARKS ON BRANCH CIRCUIT CONDUIT RUNS INDICATE THE QUANTITY OF CONDUCTORS AS FOLLOWS:
  - ISOLATED GROUND CONDUCTOR
  - NEUTRAL CONDUCTOR(S)
  - PHASE CONDUCTORS

1. NO CROSS MARKS INDICATES TWO #12 AWG CONDUCTORS, UON.
2. THREE TO SIX CROSS MARKS INDICATES THE QUANTITY OF #12 AWG CONDUCTORS, UON.
3. SEVEN OR MORE CROSS MARKS INDICATES THE QUANTITY OF #10 AWG CONDUCTORS, UON.
4. ALL 120V, 20A HOMERUNS LONGER THAN 100' AND ALL 277V, 20A HOMERUNS LONGER THAN 150' SHALL BE #10 MINIMUM
5. EXPOSED RACEWAYS IN MECHANICAL ROOMS AND ELECTRICAL ROOMS SHALL BE EMT OR RIGID

- WALL MOUNTED GROUND BUS. REFER TO DETAIL
- CABLE TRAY, LADDER, OR RUNWAY

GENERAL NOTES

1. REFER TO ARCHITECTURAL DRAWINGS (REFLECTED CEILING PLANS, INTERIOR ELEVATIONS, ETC.) FOR EXACT LOCATION OF ELECTRICAL EQUIPMENT, INCLUDING LIGHTING FIXTURES, SWITCHES, OUTLETS, SPEAKERS, SMOKE DETECTORS, ETC.
2. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION PER THE 2019 CALIFORNIA BUILDING CODE.
3. VERIFY CIRCUIT VOLTAGE OF SUPPLY CIRCUIT SHOWN ON PLANS FOR ALL LIGHT FIXTURES. PROVIDE FIXTURES/DRIVERS SUITABLE FOR SUPPLY CIRCUIT VOLTAGE.
4. CONTRACTOR SHALL LAY OUT CONDUIT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF UTILITIES AND OTHER TRADES.
5. INSTALL AND CONNECT A CODE SIZED INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR IN ALL BRANCH CIRCUIT AND FEEDER CONDUITS. THESE EQUIPMENT GROUND WIRES ARE NOT SHOWN ON THE PLANS; INCREASE CONDUIT SIZE WHERE REQUIRED.
6. INSTALL A POLYETHYLENE PULLING ROPE IN ALL EMPTY CONDUITS.
7. SUBSCRIPTS ON SWITCH SYMBOLS (Sa) DENOTE THE FIXTURE CONTROLLED.
8. REFER TO ONE-LINE POWER DIAGRAM FOR THE SIZE OF CONDUCTORS BETWEEN MAJOR POWER COMPONENTS OF THE ELECTRICAL SYSTEM.
9. VERIFY THE EXACT LOCATION OF ALL EQUIPMENT FURNISHED BY OTHERS PRIOR TO DETERMINING CONDUIT TERMINATION POINTS.
10. VERIFY CEILING TYPE FOR ALL FIXTURES. PROVIDE MOUNTING/TRIM HARDWARE SUITABLE FOR CEILING CONTAINING EACH FIXTURE.
11. PLANS SHOWING INTERIOR LIGHTING ARE INTENDED TO INDICATE APPROXIMATE LOCATIONS, TYPES, BRANCH CIRCUITS AND SWITCHING REQUIREMENTS FOR LIGHTING FIXTURES. EXACT LOCATION OF LIGHTING FIXTURES SHALL BE IN ACCORDANCE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS AND THE APPROVED REFLECTED CEILING PLAN SUBMITTAL.
12. ALL WIRING DEVICES SHALL BE PERMANENTLY LABELED WITH PANEL AND CIRCUIT NUMBER SUPPLYING THEM.
13. ALL EQUIPMENT TO BE INSTALLED OR PERMANENTLY CONNECTED (HARDWIRED) SHALL BE LISTED, LABELED OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).

SHEET LIST

ARCHITECTS WLC

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS
& LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: S&L	CHECKED: S&L
DATE: 03/15/2021	SCALE: NTS
PROJECT NUMBER: 2015800	

ELECTRICAL LEGEND AND ABBREVIATIONS

DRAWING NUMBER: E0.01

Distribution Board: (E) EP

VOLTAGE/PHASE/WIRE: 480/277, 3PH, 4W
BUS RATING:
MAIN:
FED FROM:
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING:
LOCATION:

CB OPT: ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

LOAD TYPE	CKT NO	A	B	C	CB OPT	LOAD SERVED	FEEDER TAG	# POLES	CB RATING
Motor	1	0.00	0.00	0.00		(N) EP2A		3	20 A
Motor	2	14.96	14.96	14.96		(N) EP2B		3	20 A
Motor	3	0.00	0.00	0.00		CH-1		3	20 A
Motor	4	0.00	0.00	0.00		CH-2		3	20 A
--	5	0.00			--	SPARE		1	20 A
--	6	0.00			--	SPARE		1	20 A
--	7	0.00			--	SPARE		1	20 A
--	8	0.00			--	SPARE		1	20 A
--	9	0.00			--	SPARE		1	20 A
Motor	10	0.00	0.00	0.00		AC-1		3	20 A
--	11	0.00			--	SPARE		1	20 A
--	12	0.00			--	SPARE		1	20 A
		14.96 kVA	14.96 kVA	14.96 kVA					

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE			PER CEC 220.44		
2	LIGHTING			125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED...	44.88 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	56.10 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY...	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	67 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

Branch Panel: (N) ER2CB

VOLTAGE/PHASE/WIRE: 120/208, 3PH, 4W
BUS RATING: 60 A
MAIN:
FED FROM: ER2CA
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING: SURFACE
LOCATION:

CB OPT : ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

DESCRIPTION	LOAD TYPE	AMP	P	CB OPT	CKT NO	A	B	C	A	B	C	CKT NO	CB OPT	P	AMP	LOAD TYPE	DESCRIPTION
RM 101, RM A102	1	20	1		1	0.90			0.96			2		1	20	2	LIGHTING
RM A100,RM A101	1	20	1		3		0.90			0.00		4	--	1	20	--	SPARE
TF-1	Motor	20	1		5			0.00			0.00	6	--	1	20	--	SPARE
SPARE	--	20	1	--	7	0.00			0.00			8	--	1	20	--	SPARE
SPARE	--	20	1	--	9		0.00			0.00		10	--	1	20	--	SPARE
SPARE	--	20	1	--	11			0.00			0.00	12	--	1	20	--	SPARE
SPARE	--	20	1	--	13	0.00			0.00			14	--	1	20	--	SPARE
SPARE	--	20	1	--	15		0.00			0.00		16	--	1	20	--	SPARE
SPARE	--	20	1	--	17			0.00			0.00	18	--	1	20	--	SPARE
SPARE	--	20	1	--	19	0.00			0.00			20	--	1	20	--	SPARE
SPARE	--	20	1	--	21		0.00			0.00		22	--	1	20	--	SPARE
SPARE	--	20	1	--	23			0.00			0.00	24	--	1	20	--	SPARE
SPARE	--	20	1	--	25	0.00			0.00			26	--	1	20	--	SPARE
SPARE	--	20	1	--	27		0.00			0.00		28	--	1	20	--	SPARE
SPARE	--	20	1	--	29			0.00			0.00	30	--	1	20	--	SPARE
SPARE	--	20	1	--	31	0.00			0.00			32	--	1	20	--	SPARE
SPARE	--	20	1	--	33		0.00			0.00		34	--	1	20	--	SPARE
SPARE	--	20	1	--	35			0.00			0.00	36	--	1	20	--	SPARE
SPARE	--	20	1	--	37	0.00			0.00			38	--	1	20	--	SPARE
SPARE	--	20	1	--	39		0.00			0.00		40	--	1	20	--	SPARE
SPARE	--	20	1	--	41			0.00			0.00	42	--	1	20	--	SPARE
					TOTAL LOAD:	1.86	0.90	0.00									

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE	1.80 kVA	1.80 kVA	PER CEC 220.44		
2	LIGHTING	0.96 kVA	1.20 kVA	125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED LOAD	2.76 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	3.00 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY %	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	8 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

MECHANICAL & PLUMBING EQUIPMENT

TAG	EQUIPMENT DESCRIPTION	VOLTS	HP	LOAD AMPS	CB AMPS
CH-1	CHILLER	480		386	600
CH-2	CHILLER	480		386	600
CT-1	COOLING TOWER	480	2X20		70
CWP-1	PUMP	480	20		40
CWP-2	PUMP	480	20		40
EWH-1	WATER HEATER	480		73	90
TF-1	TRANSFER FAN	120	1/2		20
FC-1	FAN COIL	120	3/4		20
AD-1	DRYER	120		15	20
AC-1	COMPRESSOR	480	25		50
THWP-E1	PUMP	480	5		15
THWP-E2	PUMP	480	5		15
PCHP-1	PUMP	480	10		20
PCHP-2	PUMP	480	10		20
SCHP-1	PUMP	480	50		90
SCHP-2	PUMP	480	50		90
B-1	BOILER	208		19	30
B-2	BOILER	208		19	30
B-3	BOILER	208		19	30
B-4	BOILER	208		19	30
PHWP-1	PUMP	480	7.5		15
PHWP-2	PUMP	480	7.5		15
PHWP-3	PUMP	480	7.5		15
PHWP-4	PUMP	480	7.5		15

Branch Panel: (E) EL

VOLTAGE/PHASE/WIRE:
BUS RATING: 225 A
MAIN:
FED FROM:
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING: SURFACE
LOCATION:

CB OPT : ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

DESCRIPTION	LOAD TYPE	AMP	P	CB OPT	CKT NO	A	B	C	A	B	C	CKT NO	CB OPT	P	AMP	LOAD TYPE	DESCRIPTION
					1							2					
					3							4					
					5							6					
					7							8					
					9							10					
					11							12					
					13							14					
					15							16					
					17							18					
					19							20					
					21							22					
					23							24					
					25							26					
					27							28					
					29							30					
					31							32					
					33							34					
					35							36					
					37							38					
					39							40					
					41							42					
					TOTAL LOAD:	0.00	0.00	0.00									

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE			PER CEC 220.44		
2	LIGHTING			125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED LOAD	0.00 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	0.00 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY %	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	0 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

Branch Panel: (N) EP2A

VOLTAGE/PHASE/WIRE: 480/277, 3PH, 4W
BUS RATING: 600 A
MAIN:
FED FROM: EP
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING: SURFACE
LOCATION:

CB OPT : ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

DESCRIPTION	LOAD TYPE	AMP	P	CB OPT	CKT NO	A	B	C	A	B	C	CKT NO	CB OPT	P	AMP	LOAD TYPE	DESCRIPTION
					1	0.00			0.00			2					
PCHP-1	Motor	20	3		3		0.00			0.00		4		3	20	Motor	EWH-1
					5			0.00			0.00	6					
					7	0.00			0.00			8					
PCHP-2	Motor	20	3		9		0.00			0.00		10		3	20	Motor	PHWP-1
					11			0.00			0.00	12					
					13	0.00			0.00			14					
SCHP-1	Motor	20	3		15		0.00			0.00		16		3	20	Motor	PHWP-2
					17			0.00			0.00	18					
					19	0.00			0.00			20					
SCHP-2	Motor	20	3		21		0.00			0.00		22		3	20	Motor	PHWP-3
					23			0.00			0.00	24					
					25	0.00			0.00			26					
SHWP-1	Motor	20	3		27		0.00			0.00		28		3	20	Motor	PHWP-4
					29			0.00			0.00	30					
					31	0.00			0.00			32					
SHWP-2	Motor	20	3		33		0.00			0.00		34		3	20	Motor	THWP-E1
					35			0.00			0.00	36					
SPARE	--	20	1	--	37	0.00			0.00			38					
SPARE	--	20	1	--	39		0.00			0.00		40		3	20	Motor	THWP-E2
SPARE	--	20	1	--	41			0.00			0.00	42					
					TOTAL LOAD:	0.00	0.00	0.00									

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE			PER CEC 220.44		
2	LIGHTING			125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED LOAD	0.00 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	0.00 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY %	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	0 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

Branch Panel: (E) ER2CA

VOLTAGE/PHASE/WIRE: 120/208, 3PH, 4W
BUS RATING: 125 A
MAIN:
FED FROM:
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING: SURFACE
LOCATION:

CB OPT : ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

DESCRIPTION	LOAD TYPE	AMP	P	CB OPT	CKT NO	A	B	C	A	B	C	CKT NO	CB OPT	P	AMP	LOAD TYPE	DESCRIPTION
SPARE	--	20	1	--	1	0.00			0.00			2	--	1	20	--	SPARE
SPARE	--	20	1	--	3		0.00			0.00		4	--	1	20	--	SPARE
SPARE	--	20	1	--	5			0.00			0.00	6	--	1	20	--	SPARE
FC-1	Motor	20	1		7	0.00			0.00			8	--	1	20	--	SPARE
AD-1-1	Motor	20	1		9		0.00			0.00		10	--	1	20	--	SPARE
SPARE	--	20	1	--	11			0.00			0.00	12	--	1	20	--	SPARE
SPARE	--	20	1	--	13	0.00			0.00			14	--	1	20	--	SPARE
SPARE	--	20	1	--	15		0.00			0.00		16	--	1	20	--	SPARE
SPARE	--	20	1	--	17			0.00			0.00	18	--	1	20	--	SPARE
					19	0.00			0.00			20	--	1	20	--	SPARE
B-1	Motor	20	3		21		0.00			0.00		22	--	1	20	--	SPARE
					23			0.00			0.00	24	--	1	20	--	SPARE
					25	0.00			0.00			26	--	1	20	--	SPARE
B-2	Motor	20	3		27		0.00			0.00		28	--	1	20	--	SPARE
					29			0.00			0.00	30	--	1	20	--	SPARE
					31	0.00			0.00			32	--	1	20	--	SPARE
B-3	Motor	20	3		33		0.00			0.00		34	--	1	20	--	SPARE
					35			0.00			0.00	36	--	1	20	--	SPARE
					37	0.00			1.86			38					
B-4	Motor	20	3		39		0.00			0.90		40		3	20	Motor; 2; 1	(N) ER2CB
					41			0.00			0.00	42					
					TOTAL LOAD:	1.86	0.90	0.00									

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE	1.80 kVA	1.80 kVA	PER CEC 220.44		
2	LIGHTING	0.96 kVA	1.20 kVA	125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED LOAD	2.76 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	3.00 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY %	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	8 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

Branch Panel: (N) EP2B

VOLTAGE/PHASE/WIRE: 480/277, 3PH, 4W
BUS RATING: 400 A
MAIN:
FED FROM: EP
PRELIMINARY AIC:
ENCLOSURE TYPE:
MOUNTING: SURFACE
LOCATION:

CB OPT : ST – SHUNT TRIP; AF – ARC FAULT CIRCUIT INTERRUPTER; GF – GROUND FAULT CIRCUIT INTERRUPTER; FR – 100% RATED; LK – LOCKABLE; RD – RED MARKING

DESCRIPTION	LOAD TYPE	AMP	P	CB OPT	CKT NO	A	B	C	A	B	C	CKT NO	CB OPT	P	AMP	LOAD TYPE	DESCRIPTION
					1	0.00			0.00			2					
CWP-2	Motor	30	3		3		0.00			0.00		4		3	30	Motor	CWP-1
					5			0.00			0.00	6					
					7	14.96			0.00			8	--	1	20	--	SPARE
CT-1	Motor	70	3		9		14.96			0.00		10	--	1	20	--	SPARE
					11			14.96			0.00	12	--	1	20	--	SPARE
SPARE	--	20	1	--	13	0.00			0.00			14	--	1	20	--	SPARE
SPARE	--	20	1	--	15		0.00			0.00		16	--	1	20	--	SPARE
SPARE	--	20	1	--	17			0.00			0.00	18	--	1	20	--	SPARE
SPARE	--	20	1	--	19	0.00			0.00			20	--	1	20	--	SPARE
SPARE	--	20	1	--	21		0.00			0.00		22	--	1	20	--	SPARE
SPARE	--	20	1	--	23			0.00			0.00	24	--	1	20	--	SPARE
SPARE	--	20	1	--	25	0.00			0.00			26	--	1	20	--	SPARE
SPARE	--	20	1	--	27		0.00			0.00		28	--	1	20	--	SPARE
SPARE	--	20	1	--	29			0.00			0.00	30	--	1	20	--	SPARE
SPARE	--	20	1	--	31	0.00			0.00			32	--	1	20	--	SPARE
SPARE	--	20	1	--	33		0.00			0.00		34	--	1	20	--	SPARE
SPARE	--	20	1	--	35			0.00			0.00	36	--	1	20	--	SPARE
SPARE	--	20	1	--	37	0.00			0.00			38	--	1	20	--	SPARE
SPARE	--	20	1	--	39		0.00			0.00		40	--	1	20	--	SPARE
SPARE	--	20	1	--	41			0.00			0.00	42	--	1	20	--	SPARE
					TOTAL LOAD:	14.96	14.96	14.96									

LOAD TYPE (NUMBER)	PANEL LOAD CALCULATION LOAD TYPE	CONNECTED LOAD	DEMAND LOAD	DEMAND FACTOR		
1	RECEPTACLE			PER CEC 220.44		
2	LIGHTING			125%	PANEL TOTALS	
3	EQUIPMENT			100%	TOTAL CONNECTED LOAD	44.88 kVA
4	MOTOR			PER CEC 220.50	TOTAL DEMAND LOAD	56.10 kVA
5	KITCHEN			PER CEC 220.56	SPARE LOAD CAPACITY %	
6	ELEVATOR			PER CEC 620.14	PANEL AMPS	67 A
7	HVAC			100%		
8	MISCELLANEOUS			100%		
9	X-RAY			PER CEC 517.73(2)		
10	MISC. CONTINUOUS			125%		
11	EV CHARGER			100%		

(E) PE	(N) ER2CB	M+P EQUIPMENT
	(E) EL	(N) EP2A
	(E) ER2CA	N) EP2B

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS
& LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

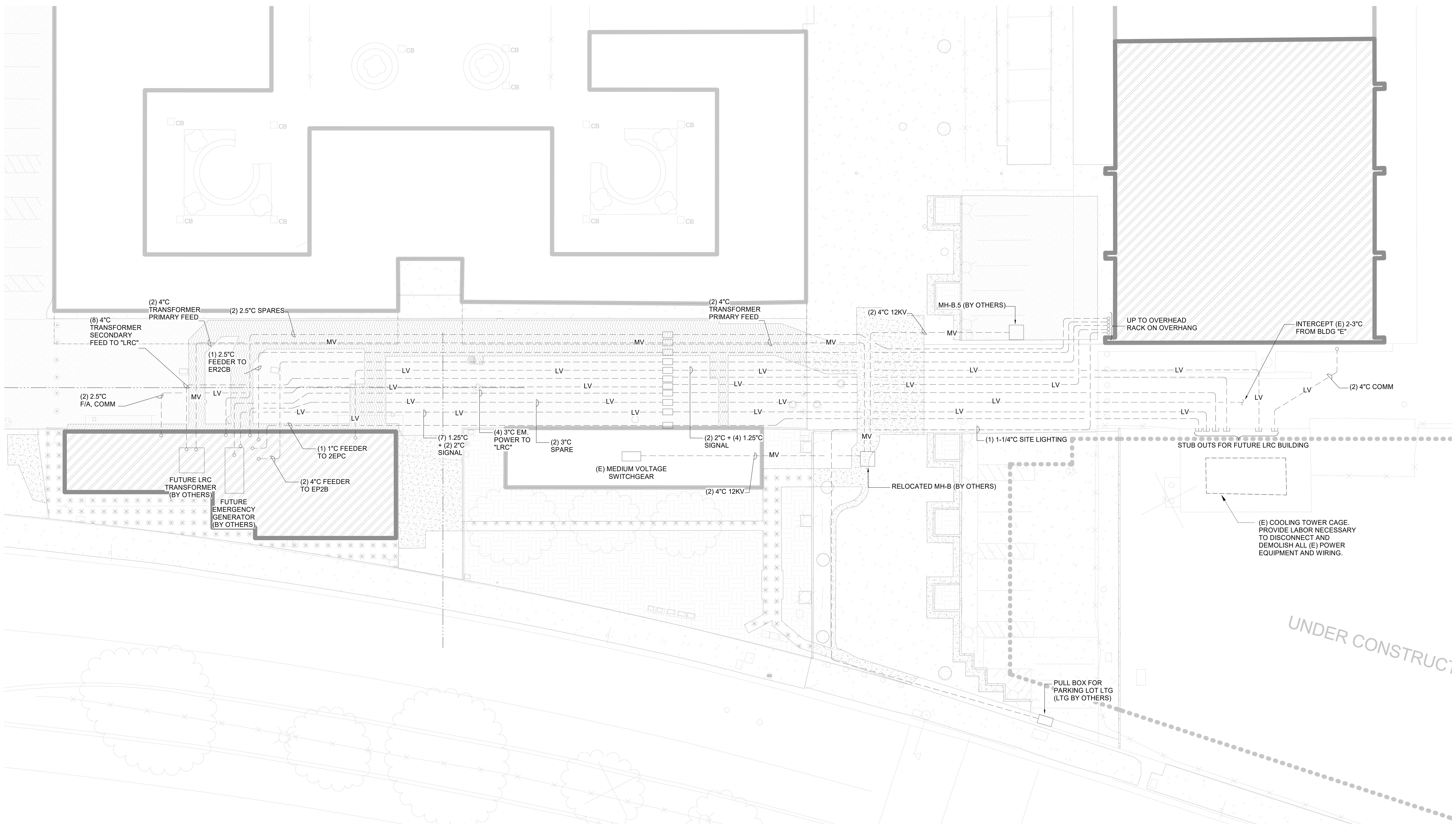
DRAWN: S&L | CHECKED: S&L
DATE: 03/15/2021 | SCALE: 1" = 1'-0"
PROJECT NUMBER: 2015800

PANEL SCHEDULES

DRAWING NUMBER: E0.61

GENERAL NOTES

NUMBERED NOTES



ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS
& LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

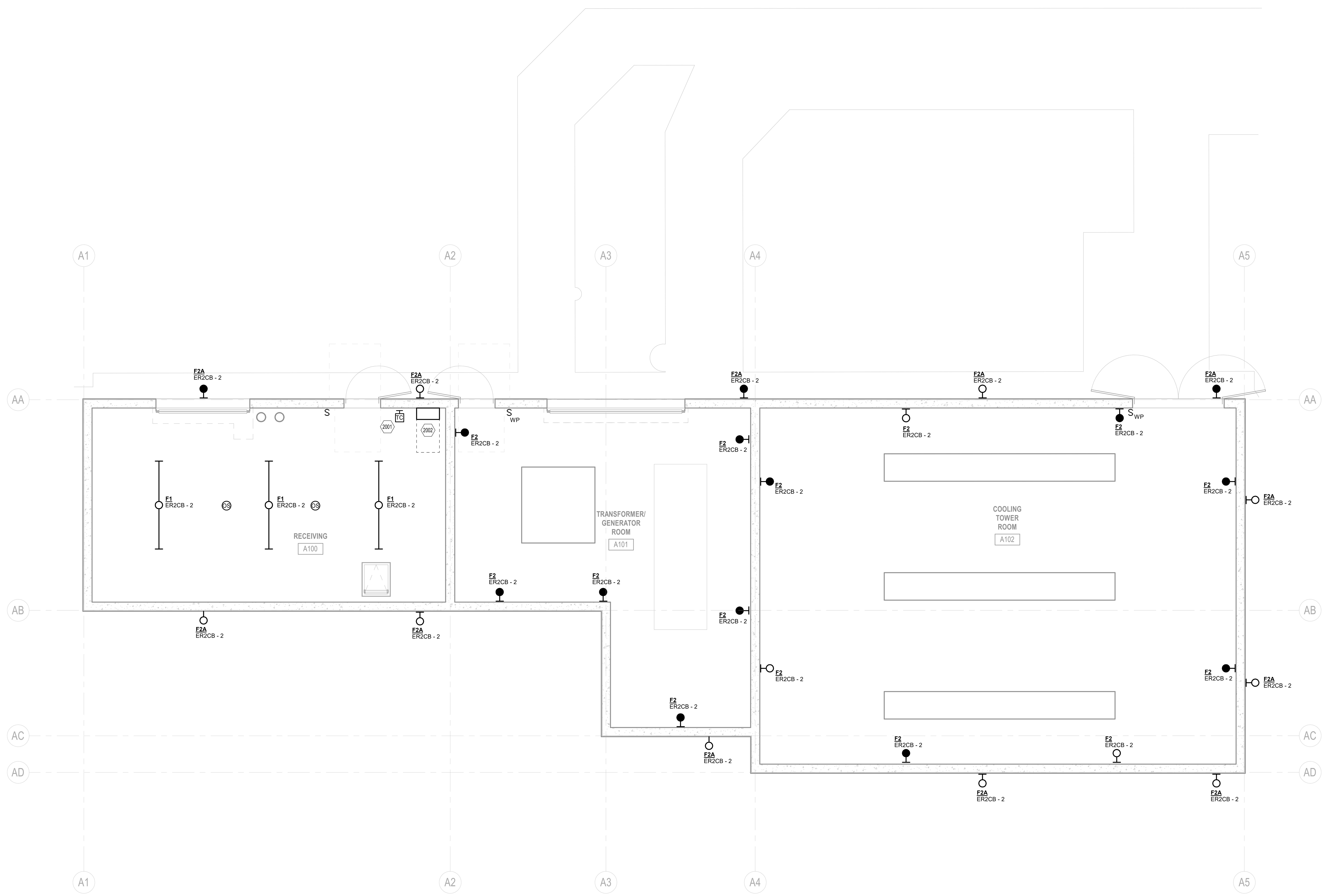
REVISIONS

DRAWN: S&L	CHECKED: S&L
DATE: 03/15/2021	SCALE: 1/16" = 1'-0"
PROJECT NUMBER: 2015800	

ELECTRICAL SITE PLAN

DRAWING NUMBER: E1.01

TYPE	DESCRIPTION	MANUFACTURER	MANUFACTURER NUMBER	LAMPING	WATTS	DRIVER	VOLTAGE	APPLICATION
F1	LED 8' STRIP. CONTRACTOR TO SWITCH FIXTURE TO 4,000K AND 6,000 LUMENS.	LITHONIA	CSS-L96-AL04-MVOLT-SWW3-80CRI-8C36 M12	4000K LED, 80 CRI, 6,495 LUMENS	55.3	0-10V DIMMABLE	120-277	BACK OF HOUSE
F2	9" TALL X 11.5" WIDE, LED OUTDOOR WALL PACK WITH TYPE 3 DISTRIBUTION.	LITHONIA	WDGE2-P5-40K-80CRI-VW-MVOLT-SRM-FINISH	4000K LED, 80 CRI, 6,151 LUMENS	48	STATIC	120-277	ELECTRICAL / COOLING TOWER
F2A	8" TALL X 9" WIDE, LED OUTDOOR WALL PACK WITH WIDE DISTRIBUTION.	LITHONIA	WDGE1-P1-40K-80CRI-VW-MVOLT-SRM-DMG-FINISH	4000K LED, 80 CRI, 1,229 LUMENS	10	STATIC	120-277	BUILDING PERIMETER



1 LIGHTING PLAN - LEVEL 1 - BLDG A
1/4" = 1'-0"

GENERAL NOTES

NUMBERED NOTES

2001 PROVIDE WITH ASTRONOMICAL TIMECLOCK SWITCH FOR EXTERIOR BUILDING MOUNTED LIGHTING CONTROL, PER T24 REQUIREMENTS.

2002 1000VA 120V LIGHTING INVERTER. ROUTE CIRCUIT FOR EMERGENCY LIGHTS THROUGH INVERTER.

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS & LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

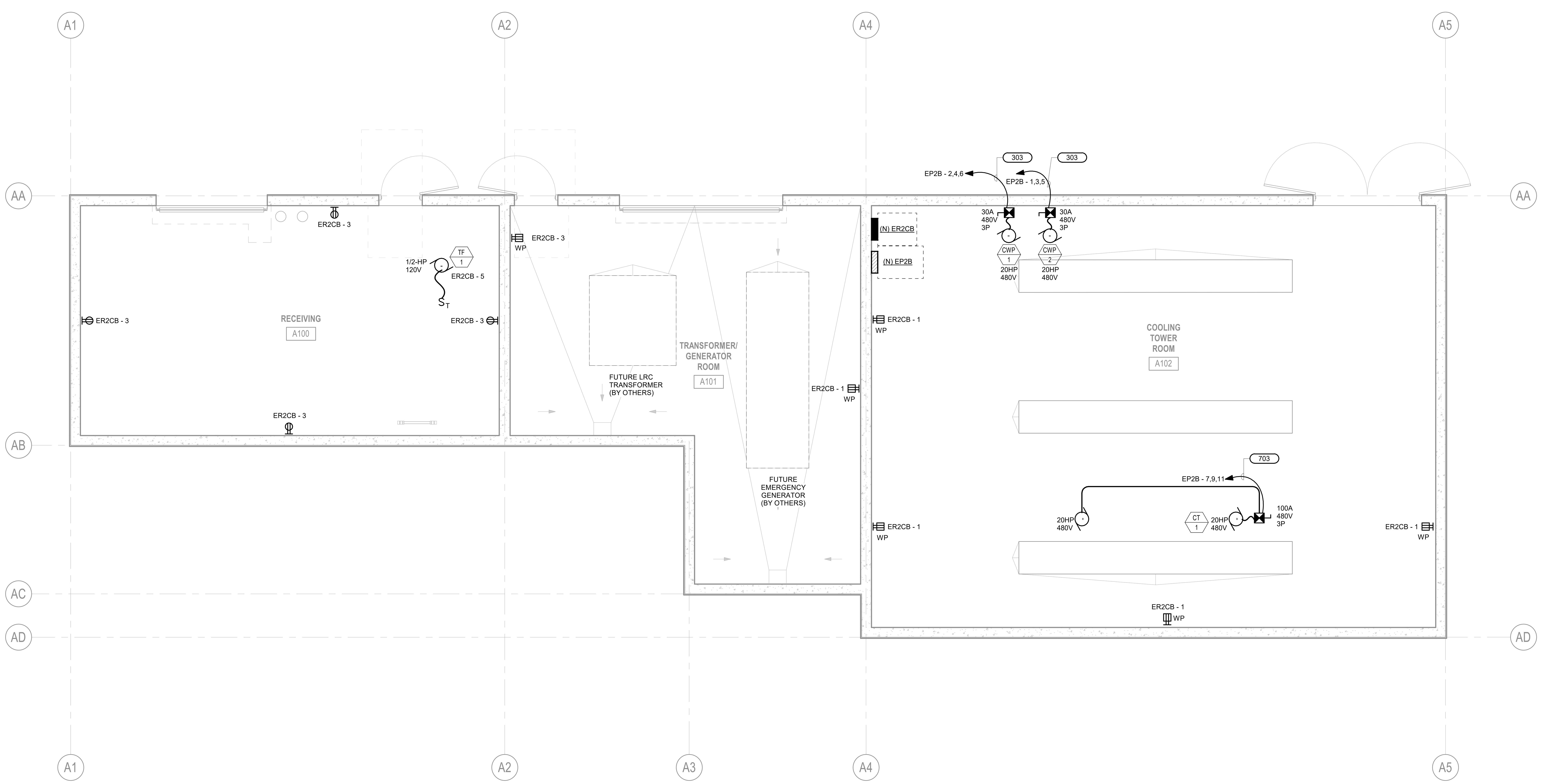
DRAWN: S&L | CHECKED: S&L
DATE: 03/15/2021 | SCALE: As indicated
PROJECT NUMBER: 2015800

LIGHTING PLAN - LEVEL 1 - BLDG A

DRAWING NUMBER: E2.01

GENERAL NOTES

NUMBERED NOTES



ARCHITECTS

WLC

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS
& LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

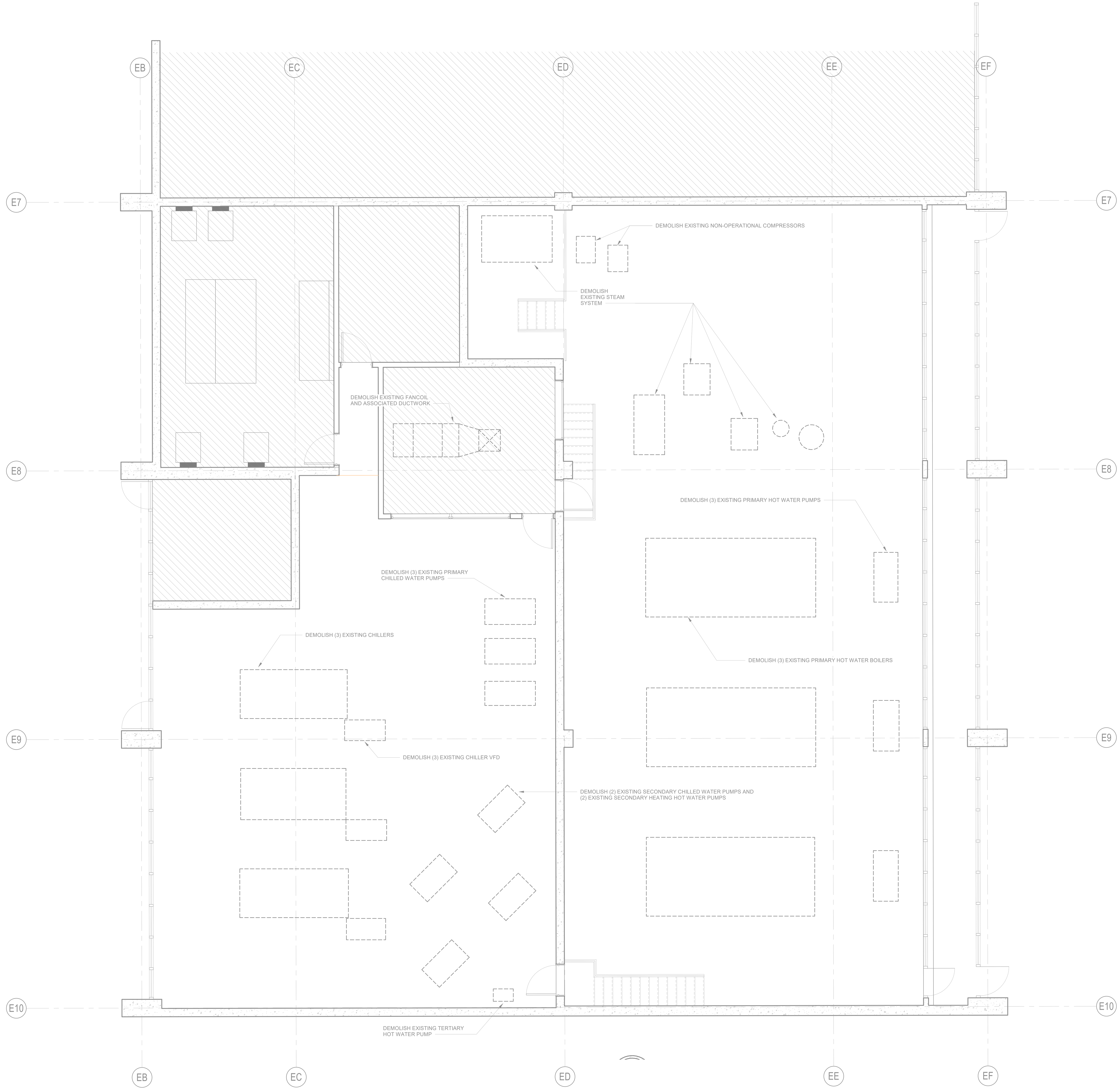
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: S&L	CHECKED: S&L
DATE: 03/15/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER: 2015800	

POWER PLAN - LEVEL 1 - BLDG A

DRAWING NUMBER: **E3.01**



GENERAL NOTES

1. PROVIDE LABOR TO DISCONNECT ALL EXISTING EQUPMENT TO BE DEMOLISHED. WHERE POSSIBLE, REUSE (E) FEEDERS TO SERVE (N) EQUIPMENT. SEE M2.02 FOR ADDITIONAL INFORMATION ON ITEMS REQUIRING DEMOLITION.

NUMBERED NOTES

WLC ARCHITECTS
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597

TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS
& LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

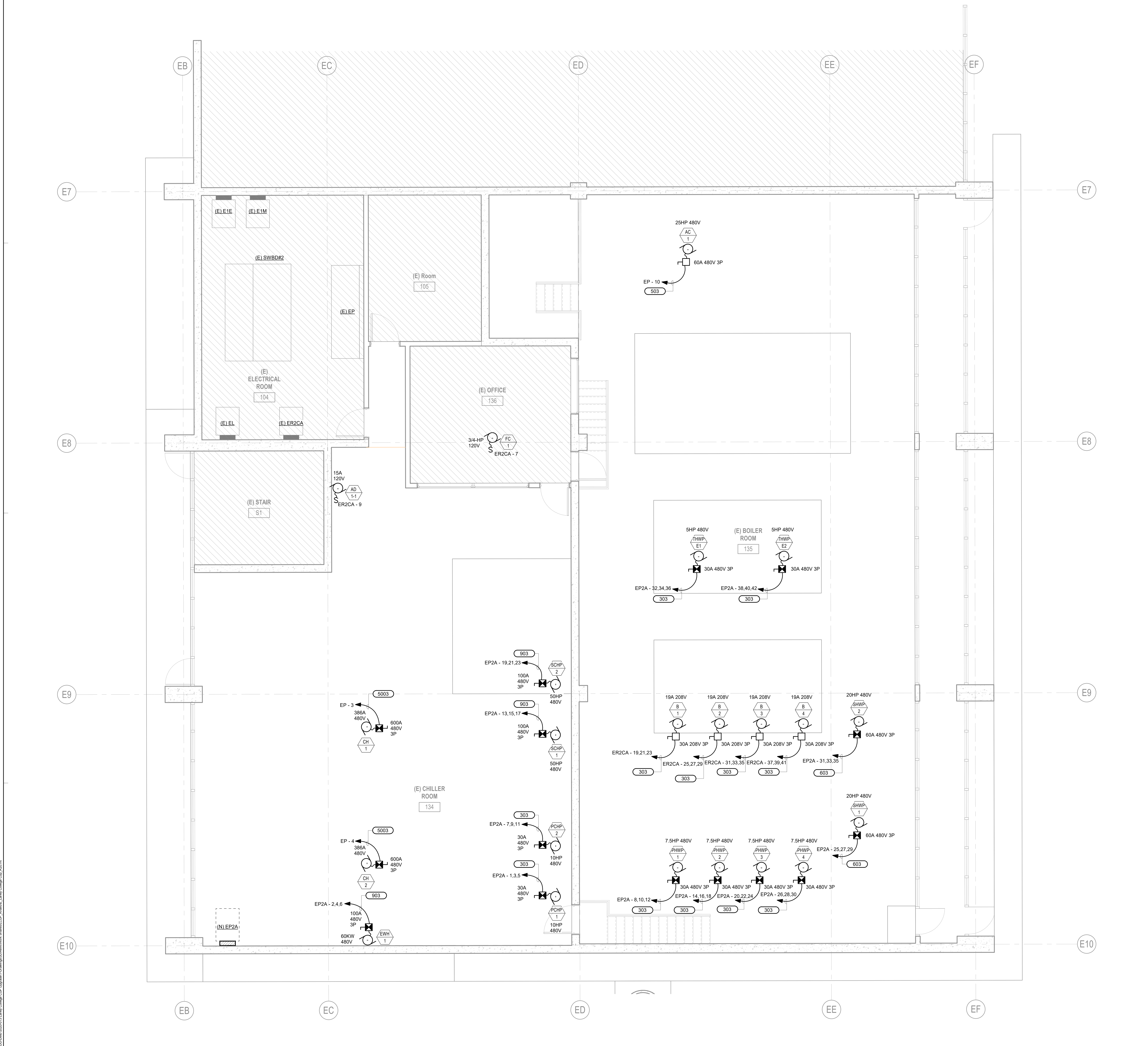
DRAWN: S&L	CHECKED: S&L
DATE: 03/15/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER: 2015800	

DEMOLITION POWER PLAN - LEVEL 1 - BLDG E

DRAWING NUMBER: E3.10

GENERAL NOTES

NUMBERED NOTES



WLC ARCHITECTS

CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS & LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

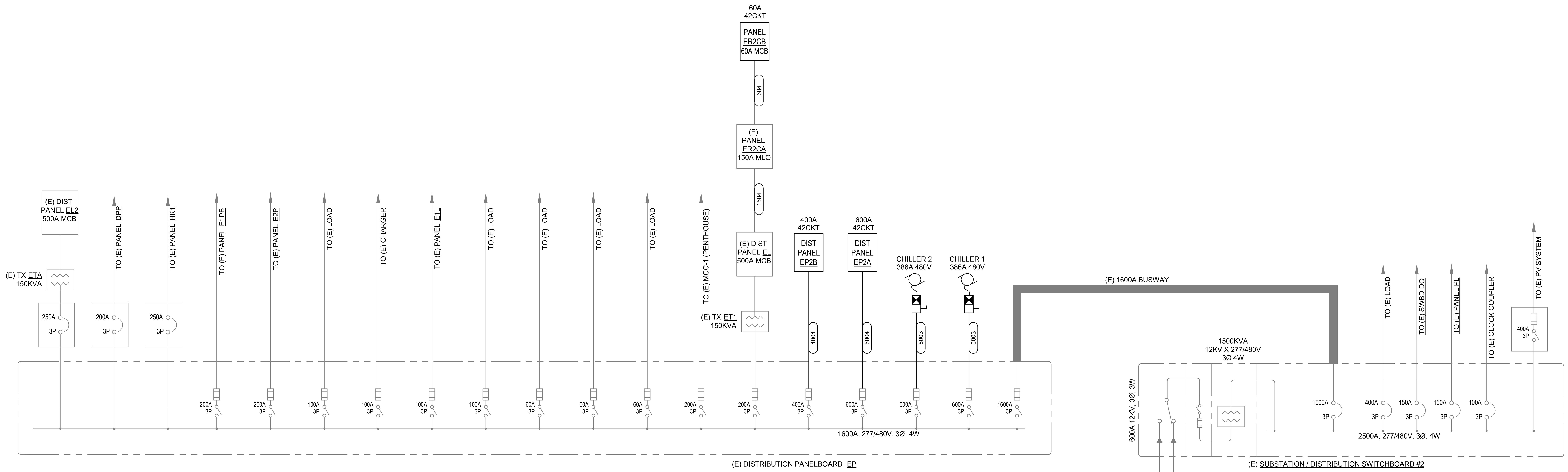
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: S&L	CHECKED: S&L
DATE: 03/15/2021	SCALE: 1/4" = 1'-0"
PROJECT NUMBER: 2015800	

POWER PLAN - LEVEL 1 - BLDG E

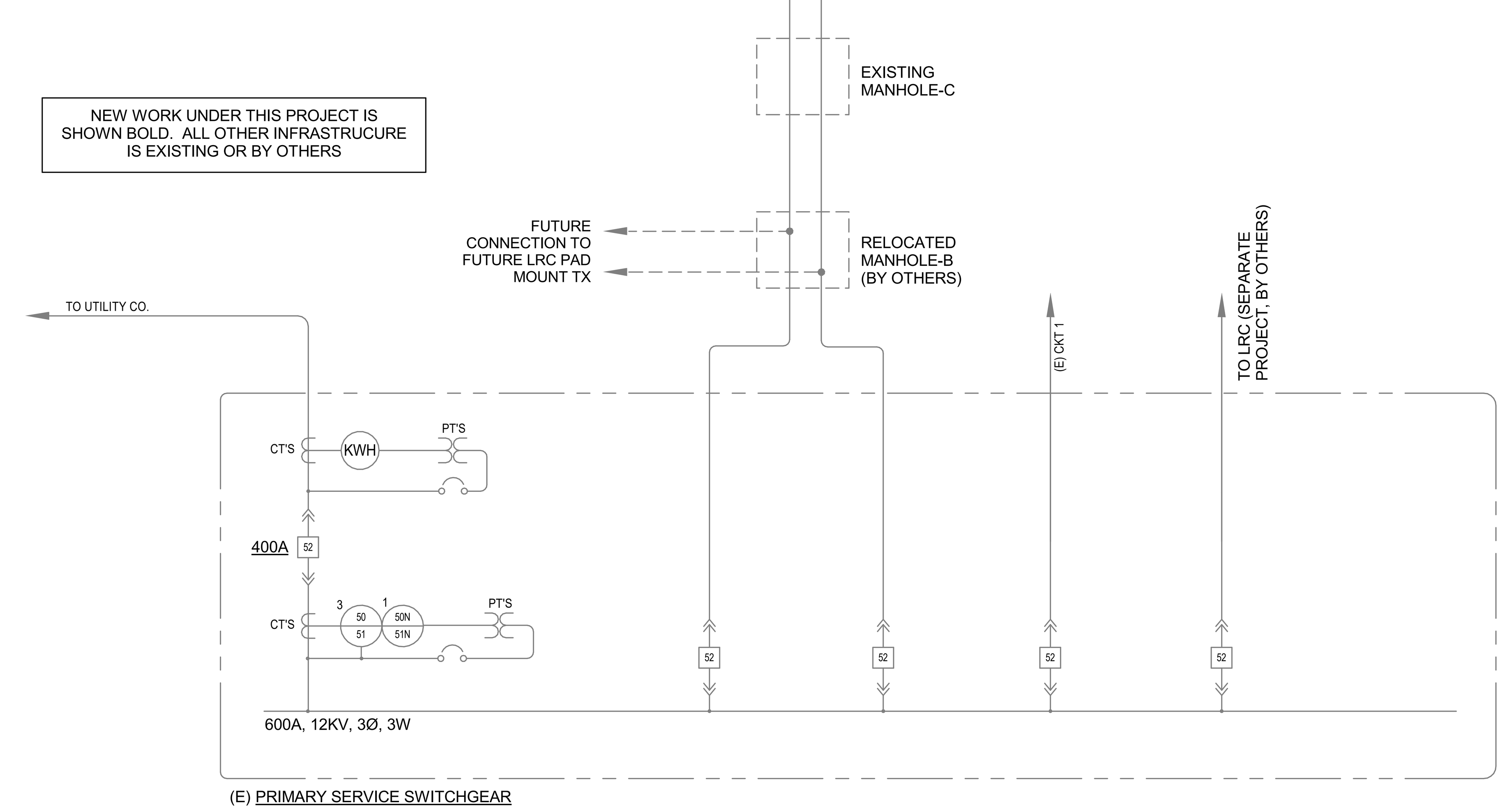
DRAWING NUMBER: E3.11



COPPER FEEDER SCHEDULE

FEEDER CODE	FEEDER DESCRIPTION	CONDUIT QTY-SIZE	NO of SETS	CONDUCTORS (AWG) PHASE	NEUTRAL	GROUND
303	30 AMP, 3PH, 3W	1-0.5"	1	3#10	-	1# 10
503	50 AMP, 3PH, 3W	1-0.75"	1	3#8	-	1# 10
603	60 AMP, 3PH, 3W	1-0.75"	1	3#6	-	1# 10
604	60 AMP, 3PH, 4W	1-1.00"	1	3#6	1# 6	1# 10
703	70 AMP, 3PH, 3W	1-1.00"	1	3#4	-	1#8
903	90 AMP, 3PH, 3W	1-1.25"	1	3#2	-	1#8
1504	150 AMP, 3PH, 4W	1-1.5"	1	3# 1/0	1# 1/0	1#6
4004	400 AMP, 3 PH, 4W	1-3.5"	1	3#500 KCMIL	1#500 KCMIL	1# 2
5003	500 AMP, 3 PH, 3W	2-2.00"	2	3#250 KCMIL	-	1# 2 PER SET
6004	600 AMP, 3 PH, 4W	2-3.00"	2	3#350 KCMIL	1#350 KCMIL	1# 1 PER SET

NEW WORK UNDER THIS PROJECT IS SHOWN BOLD. ALL OTHER INFRASTRUCURE IS EXISTING OR BY OTHERS



ARCHITECTS
WLC
CLIENT FOCUSED • PASSION DRIVEN
BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS & LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

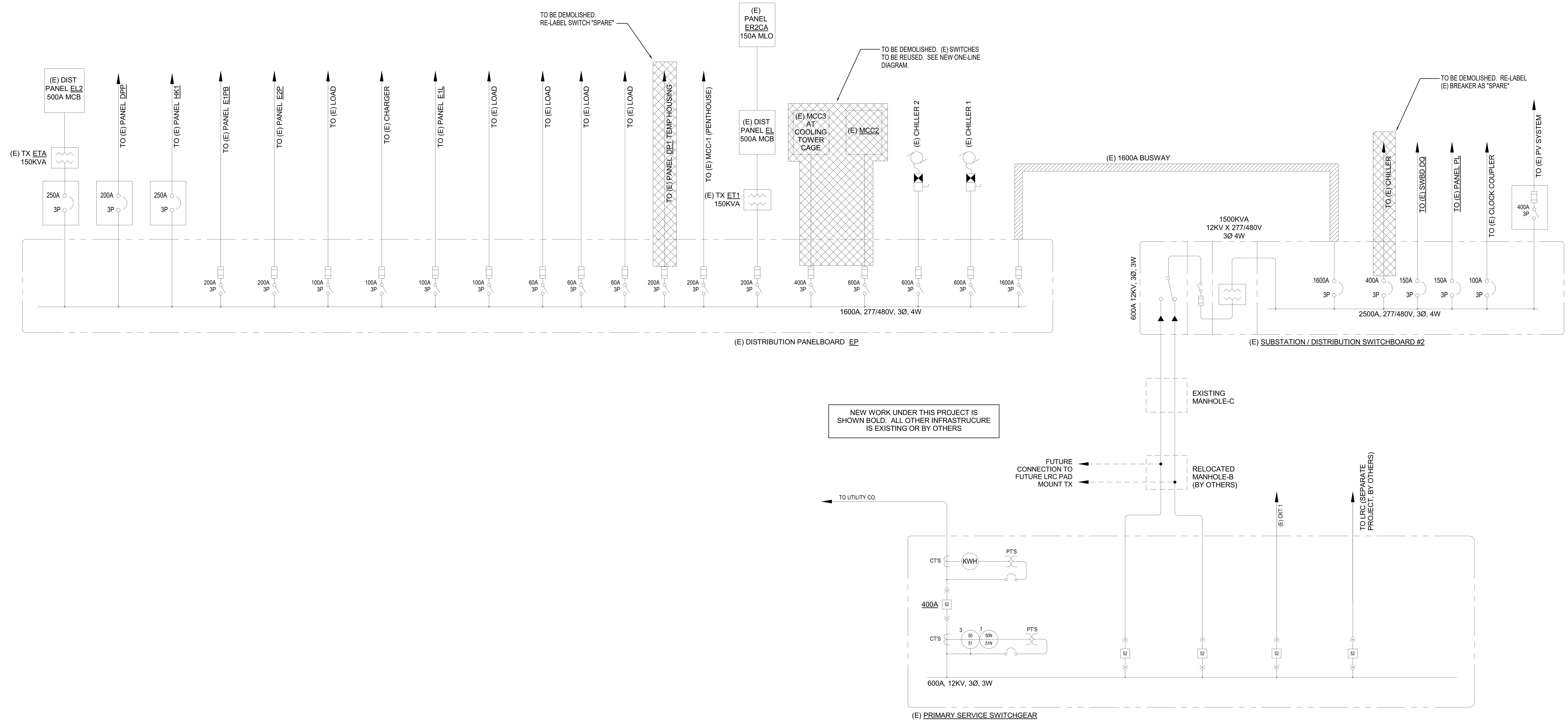
NO	DATE	BY	DESCRIPTION
	03-15-2021		100% DD SET
	04-14-2021		50% CD SET

REVISIONS

DRAWN: S&L CHECKED: S&L
DATE: 03/15/2021 SCALE: NTS
PROJECT NUMBER: 2015800

ELECTRICAL NEW ONE-LINE, FEEDER SCHEDULE

DRAWING NUMBER: E5.10



ARCHITECTS WLC
CLIENT FOCUSED • PASSION DRIVEN

BAY AREA
2600 TENTH STREET, SUITE 500
BERKELEY
CALIFORNIA 94710-2597
TEL: 510-450-1999
www.wlcarchitects.com

Gilbane

LANEY COLLEGE CENTRAL UTILITY PLANT

PERALTA COMMUNITY COLLEGE DISTRICT

900 FALLON STREET, OAKLAND, CA 94607

DRAFT - NOT FOR CONSTRUCTION

CONSULTANT
SILVERMAN & LIGHT
ELECTRICAL ENGINEERS & LIGHTING CONSULTANTS
1201 Park Avenue, Suite 100
Emeryville, CA 94608
Telephone (510) 655-1200
Facsimile (510) 655-1344
www.silvermanlight.com

NO	DATE	BY	DESCRIPTION
	04-14-2021		50% CD SET

REVISIONS

DRAWN: Author	CHECKED: Checker
DATE: 04/12/21	SCALE: NTS
PROJECT NUMBER: 2015800	

ELECTRICAL EXISTING ONE-LINE

DRAWING NUMBER: E5.11