

ARCHITECT		CIVIL		STRUCTURAL		ARCHITECTURAL ABBREVIATIONS		GENERAL NOTES		APPLICABLE CODES		CBC 2019	
HMC ARCHITECTS 3546 CONCOURS STREET ONTARIO, CALIFORNIA 91764 PHONE (909) 989-9979 FAX (909) 483-1400		SNIPES-DYE ASSOCIATES 8348 CENTER DRIVE, SUITE G LA MESA, CA 91942 PHONE (619) 697-9234 FAX (619) 460-2033		SAIFUL BOUQUET STRUCTURAL ENGINEERS 2020 CAMINO DEL RIO NORTH, SUITE 305 SAN DIEGO, CA 92108 PHONE (619) 630-9199		<div><div><div>Ø DIAMETER OR ROUND PLUS MINUS</div><div># POUND OR NUMBER</div><div>% PERCENT</div><div>° AT DEGREE</div><div>CL CENTER LINE</div><div>MO ANGLE</div><div>PL PROPERTY LINE</div><div>AB ANCHOR BOLT</div><div>ABS ABSOLUTE</div><div>AC ASPHALTIC CONCRETE</div><div>ACC ACCESSIBLE WORK STATION</div><div>ACOUS ACOUSTICAL</div><div>ADJ ADJACENT</div><div>AFI ABOVE FINISH FLOOR</div><div>ALUM ALUMINUM</div><div>ANSI AMERICAN NATIONAL STANDARDS INSTITUTE</div><div>ARCH ARCHITECTURAL</div><div>BOARD BOARD</div><div>BLOG BUILDING</div><div>BLK BLOCK</div><div>BULK BLOCKING</div></div><div><div>BTWN BETWEEN</div><div>C CHANNEL</div><div>CER CERAMIC</div><div>CFR CUBIC FEET</div><div>CFI CONTRACTOR FURNISHED</div><div>CFCI CONTRACTOR INSTALLED</div><div>CFOR CONTRACTOR FURNISHED, OWNER INSTALLED</div><div>CJ CONTROL JOINT</div><div>CLF CHAINLINK FENCE</div><div>CLG CEILING</div><div>CLR CLEAR</div><div>CMU CONCRETE MASONRY UNIT</div><div>CONC CONCRETE</div><div>CONT CONTINUOUS</div><div>CORR CORROD</div><div>CR CLASSROOM</div><div>CTSK COUNTER SINK</div><div>CTC CENTER TO CENTER</div><div>P PENNY</div><div>DBL DOUBLE</div><div>DEL DELETE</div><div>DET DETAIL</div><div>DF DRINKING FOUNTAIN</div><div>DN DOWN</div><div>DL DOOR LOWER</div><div>DN DOWN</div><div>DP DISABLED PERSON ACCESSIBLE</div><div>DS DOWNSPUT</div><div>DWG DRAWING</div><div>EA EACH</div><div>EJ EXPANSION JOINT</div><div>ELEV ELEVATION</div><div>ELEC ELECTRICAL</div><div>EMT ELECTRICAL METAL TUBING</div><div>ENCL ENCLOSURE</div><div>ENGR ENGINEER</div><div>EOS EDGE OF SLAB</div><div>EQ EQUAL</div><div>EQT EQUIPMENT</div><div>EW EACH WAY</div><div>EXP EXPANSION</div><div>EXT EXTERIOR</div><div>FA FIRE ALARM</div><div>FD FLOOR DRAIN</div><div>FDC FIRE DEPARTMENT CONNECTION</div><div>FON FOUNDATION</div><div>FE FIRE EXTINGUISHER</div><div>FEC FIRE EXTINGUISHER WICABINET</div><div>FF FINISH FLOOR</div><div>FG FINISH GRADE</div><div>FH FIRE HYDRANT</div><div>PHC FIRE HOSE W/ CABINET</div><div>FHWS FLAT HEAD WOOD SCREW</div><div>FL FLOOR</div><div>FO FACE OF</div><div>FOC FACE OF CONCRETE</div><div>FOF FACE OF FINISH</div><div>FOM FACE OF MASONRY</div><div>FOS FACE OF STUD</div><div>FS FINISH SURFACE</div><div>FT FOOT OF FEET</div><div>FTG FOOTING</div><div>GA GAUGE</div><div>GALV GALVANIZED</div><div>GS GYPSUM BOARD</div><div>GPRC GLASS FIBER REINFORCED CONCRETE</div><div>GYP GYPSUM</div><div>HORSE HORSE BIB</div><div>HOME HARDWARE</div><div>HU HOLLOW METAL</div><div>HOR HORIZONTAL</div><div>HOR HOUR</div><div>HVAC HEATING VENTILATION AIR</div><div>ID INSIDE DIAMETER</div><div>IN INCH OR INCHES</div><div>INT INTERIOR</div><div>INV INVERT</div><div>JBOX JUNCTION BOX</div><div>JAN JANITOR CLOSET</div><div>LAV LAVATORY</div><div>LB(S) POUND(S)</div></div><div><div>MAX MAXIMUM</div><div>MB MACHINE BOLT</div><div>MD MEDIUM DENSITY FIBERBOARD</div><div>MFR MANUFACTURER</div><div>MNH MANHOLE</div><div>MIN MINIMUM</div><div>MISC MISCELLANEOUS</div><div>MO MASONRY OPENING</div><div>MTL METAL</div><div>NI NEW</div><div>NO NO</div><div>NO IN CONTRACT</div><div>NR NOT RATED</div><div>NTS NOT TO SCALE</div><div>NTS NOT TO SCALE</div><div>O OVER</div><div>OA OVERALL</div><div>OC ON CENTER</div><div>OD OUTSIDE DIAMETER</div><div>OF OWNER FURNISHED</div><div>OFI CONTRACTOR-INSTALLED</div><div>OFOR OWNER FURNISHED, OWNER INSTALLED</div><div>OH OWNER-INSTALLED</div><div>OTO OUT TO OUT</div><div>PA PUBLIC ADDRESS</div><div>PE PAD ELEVATION</div><div>PERP PERPENDICULAR</div><div>PH PANIC HARDWARE</div><div>PL PLATE</div><div>PLAM PLASTIC LAMINATE</div><div>PLUMB PLUMBING</div><div>PLYWD PLYWOOD</div><div>PM PARTITION MOUNTED</div><div>PCC POINT OF CONNECTION</div><div>PAR PAIR</div><div>PREP PREPARE</div><div>PSF POUNDS PER SQUARE FOOT</div><div>PSI POUNDS PER SQUARE INCH</div><div>PVC POLYVINYL CHLORIDE</div><div>R RISER, RADIUS</div><div>RD ROAD DRAIN</div><div>REG REGRESSED</div><div>REF REFERENCE</div><div>REQ REQUIRED</div><div>RM ROOM</div><div>RWL RAIN WATER LEADER</div><div>RO ROUGH OPENING</div><div>SCHED SCHEDULE</div><div>SECT SECTION</div><div>SF SQUARE FEET</div><div>SHT SHEET</div><div>SM SIMILAR</div><div>SM SURFACE MOUNTED</div><div>SMS SHEET METAL SCREW</div><div>SOV SHUT OFF VALVE</div><div>SPEC SPECIFICATION</div><div>SST STAINLESS STEEL</div><div>STD STANDARD</div><div>STL STEEL</div><div>STRUCT STRUCTURAL</div><div>TAB TOP AND BOTTOM</div><div>TEMP TEMPORARY</div><div>TO TOP OF</div><div>TOC TOP OF CURB</div><div>TOU TOP OF DRAIN</div><div>TOR TOP OF PARAPET</div><div>TOPL TOP OF PLATE</div><div>TOR TOP OF RIDGE</div><div>TOS TOP OF SLAB</div><div>TOW TOP OF WALL</div><div>TST TOP OF STEEL</div><div>TV TELEVISION</div><div>TY TYPICAL</div><div>UNO UNLESS NOTED OTHERWISE</div><div>VCT VINYL COMPOSITION TILE</div><div>VERT VERTICAL</div><div>W WIDE FLANGE</div><div>W WITH</div><div>W/O WITHOUT</div><div>WOOD WOOD</div><div>WH WATER HEATER</div><div>WI WOODWORK INSTITUTE</div><div>WIN WINDOW</div><div>WP WATERPROOF</div><div>WS WOOD SCREW</div><div>WT WEIGHT</div><div>WNF WELDED WIRE FABRIC</div><div>x BY</div><div>YD YARD</div></div></div> <div><div><div>S0.01 GENERAL NOTES</div><div>S0.02 GENERAL NOTES</div><div>S0.03 ABBREVIATIONS</div><div>S0.10 TYPICAL CONCRETE DETAILS</div><div>S0.11 TYPICAL DETAILS</div><div>S2.01 WELDING EXHAUST PLANS AND ELEVATION</div><div>S3.01 ELEVATIONS AND DETAILS</div></div><div>TOTAL: 7</div></div>		<div><div>C1.01 NOTE SHEET</div><div>C3.00 GRADING PLAN</div></div> <div>TOTAL: 2</div>		<div><div>G0.11 PROJECT DATA SHEET & INDEX</div><div>G1.11 CAMPUS SITE PLAN</div><div>A1.11 DEMO ENLARGED SITE PLAN</div><div>A1.12 REMODEL ENLARGED SITE PLAN</div><div>A3.11 REFLECTED CEILING PLAN</div><div>A3.11 DUCT/EQUIPMENT SECTIONS</div><div>A10.01 DETAILS</div></div> <div>TOTAL: 7</div>			
MECHANICAL P2S Inc 9665 CHESAPEAKE DRIVE, SUITE 230, SAN DIEGO, CA 92123 PHONE (619) 618-2347		ELECTRICAL JOHNSON CONSULTING ENGINEERS, Inc 12875 BROOKPRINTER PLACE, SUITE 300, POWAY, CA 92064 PHONE (858) 679-4030											
<div><div>M0.01 GENERAL NOTES, LEGEND, ABBREVIATIONS & INDEX</div><div>M0.02 SCHEDULES</div><div>M1.11 SITE RENOVATION PLAN</div><div>M6.01 DETAILS</div><div>M01.11 SITE DEMOLITION PLAN</div></div> <div>TOTAL: 5</div>		<div><div>E0.0 ELECTRICAL LEGEND AND NOTES</div><div>E1.0 FLOOR PLAN - POWER</div></div> <div>TOTAL: 2</div>											
		GRAND TOTAL: 23											

SCOPE OF WORK		PROJECT DATA	
WORK INCLUDED IN THE CONTRACT: THE DEMOLITION OF AN EXISTING DUST & FUME COLLECTOR UNIT AND THE INSTALLATION OF A NEW DUST & FUME COLLECTOR AT BUILDING T1, DEPARTMENT OF CABINET FURNITURE TECHNOLOGY, PUBLIC WORKS MANAGEMENT, WATER & WASTE WATER PROGRAMS, & WELDING TECHNOLOGY.		PROJECT ADDRESS: PALOMAR COLLEGE: NEW STORAGE BUILDINGS 1140 W. MISSION RD., SAN MARCOS, CA 92069	

LEGEND	

VICINITY MAP	

	NORTH ARROW SHADED AREA INDICATES PLAN NORTH
	SECTION CALLOUT LOCATION ON SHEET SHEET WHERE SECTION IS DRAWN
	DETAIL CALLOUT INDICATES A SIMILAR CONDITION LOCATION ON SHEET SHEET WHERE SECTION IS DRAWN
	CONTROL OR DATUM POINT NAME OF ELEVATION (IF APPLICABLE) ELEVATION ABOVE FINISHED FLOOR
	GRID BUBBLE GRID NUMBER

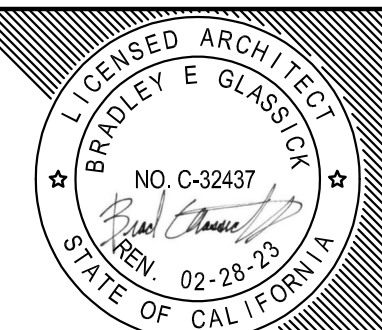
PROJECT DATA SHEET & INDEX		1
----------------------------	--	---



HMC Architects

5015037000

3546 Concoors Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date
-----	--------	------	-----	--------	------

Keynotes:

Legend:

Agency
Approval

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
CAMPUS SITE PLAN

DSA APPROVED SET

Date: 06/24/2021

Sheet: _____

Sheet:

CAMPUS SITE PLAN

G1.11

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF ALL EXISTING AND PROPOSED IMPROVEMENTS TO BE MET BY WORK TO BE DONE PRIOR TO CONSTRUCTION. IN THE EVENT THAT THE ALIGNMENT IS IN CONFLICT WITH THE WORK TO BE DONE, CONTRACTOR SHALL STOP WORK IMMEDIATELY AND NOTIFY THE CONSTRUCTION MANAGER OF THE CONFLICT.
2. THE LOCATION OF EXISTING UNDERGROUND FACILITIES ARE INDICATED ON THE PLANS AS A RESULT OF A SEARCH OF THE AVAILABLE RECORDS. LOCATIONS HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR IS DIRECTED TO REQUEST UTILITY MARK OUT AND TO EXCAVATE AND VERIFY LOCATIONS PRIOR TO EXCAVATIONS. ENGINEER OF WORK DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF ANY UTILITY LOCATIONS INDICATED ON THE PLANS.
3. ENGINEER OF WORK IS NOT RESPONSIBLE FOR JOB SAFETY.
4. CONTRACTOR SHALL SUBMIT A WORK PLAN TO CAMPUS FOR REVIEW & APPROVAL. WORK PLAN SHALL INCLUDE, BUT NOT LIMITED TO, WORK HOURS, LIMIT OF WORK, ADA PATH OF TRAVEL, FENCE LOCATIONS, SIGNAGE.
5. CONTRACTOR SHALL MAINTAIN SAFE AND THROUGH PASSAGE ACCESS TO ALL BUILDINGS & ADA PATH OF TRAVEL AT ALL TIMES. CAMPUS SHALL BE NOTIFIED 14 DAYS PRIOR TO ANY ACCESS CLOSURE DUE TO CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL PROVIDE CONSTRUCTION SURVEY STAKING AS A PART OF CONTRACT.
7. STOCKPILING OF MATERIALS OUTSIDE OF LIMIT OF WORK SHALL NOT BE ALLOWED.
8. THE 2019 EDITION OF THE CALIFORNIA BUILDING CODE (CBC) ADOPTS THE 2018 INTERNATIONAL BUILDING CODE (IBC).

GRADING NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (CURRENT EDITION), THESE PLANS AND THE PROJECT SPECIFICATIONS.
2. THE MINIMUM GRADIENT FOR GRADED SWALES SHALL BE 1%.
3. THE MINIMUM GRADIENT OF FINISHED GRADE AWAY FROM STRUCTURES SHALL BE 1:51, UNLESS OTHERWISE NOTED ON PLANS.
4. FINISH GRADE SHALL BE DETERMINED AS THE ELEVATION OF ANY LANDSCAPE MATERIAL PLACED ON GRADE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERCUT GRADE TO ALLOW FOR PLACEMENT OF LANDSCAPE MATERIALS.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HANDLE ANY EXPORT OF EXCESS MATERIAL FOR THE SITE. RESPONSIBILITY SHALL INCLUDE ALL PERMITS AND APPROVALS BY THE APPROPRIATE AGENCIES. THE OWNER AND ENGINEER OF WORK WILL NOT ASSUME ANY RESPONSIBILITY FOR THE REMOVAL, TRANSPORTATION OR PLACEMENT OF EXCESS MATERIAL.
6. FINISH GRADE SHALL BE INSPECTED BY THE ENGINEER OF WORK AND VERIFIED THAT THE ACTUAL GRADING IS REPRESENTATIVE OF THE PROPOSED GRADING AND THAT THE MINIMUM SLOPE GRADIENTS EXIST.
7. THE MAXIMUM SLOPE GRADIENT SHALL BE 2:1 (HORIZONTAL TO VERTICAL).
8. CONCRETE CURBS AND GUTTERS SHALL BE INSTALLED IN ACCORDANCE WITH THE REFERENCED DETAIL AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) (CURRENT EDITION).
9. SAW CUTTING OF EXISTING IMPROVEMENTS SHALL PROVIDE A CLEAN VERTICAL EDGE VOID OF CHIPPING AND SHALL BE MADE AT THE NEAREST JOINT.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY REMOVAL OF ALL SPOIL MATERIALS CREATED BY THE DEMOLITION OF EXISTING IMPROVEMENTS.
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF EXISTING IMPROVEMENTS. CONTRACTOR SHALL, IN ADVANCE OF CONSTRUCTING IMPROVEMENTS, NOTIFY THE ENGINEER OF WORK OF ANY CONFLICTS BETWEEN THE PROPOSED DESIGN AND EXISTING IMPROVEMENTS. THE ENGINEER OF WORK SHALL REVIEW THE CONFLICTS AND MAKE RECOMMENDATIONS FOR RESOLUTION IN A TIMELY MANNER.
12. SIDEWALK FINISHES AND JOINT DETAILS SHALL MATCH EXISTING ADJACENT FINISHES FLUSH.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE COUNTY OF SAN DIEGO 'LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS' MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND/OR WATER POLLUTION CONTROL PLAN (WPCL) FOR CONSTRUCTION LEVEL BMP'S AND POST CONSTRUCTION POST CONSTRUCTION TREATMENT CONTROL PERMANENT BMP'S, THE WATER QUALITY TECHNICAL REPORT (WQTR) IF APPLICABLE.
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SLUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SLUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER/DEVELOPER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

Underground Service Alert

Call: TOLL FREE
1-800
422-4133

TWO WORKING DAYS BEFORE YOU DIG

EROSION AND SEDIMENT CONTROL NOTES (CONT.)

16. CONTRACTOR SHALL PROTECT SPOIL AND MATERIAL STORAGE PILES FROM MOVEMENT OF SILT VIA WATER AND WIND EROSION.
17. UPON COMPLETION OF GRADING, CONTRACTOR SHALL STABILIZE AREA WITH LANDSCAPING OR HYDROSEED AND RELOCATE SILT FENCE TO THE PERIMETER OF THE WORK AREA.
18. CONTRACTOR TO INSTALL STABILIZED CONSTRUCTION ENTRANCE/EXIT AT POINT OF ACCESS TO CONSTRUCTION SITE TO REDUCE THE TRACKING OF MUD AND DIRT.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MEASURES & IMPLEMENTATION AS A PART OF EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION REPAIR.

MINIMUM POST-CONSTRUCTION MAINTENANCE PLAN

AT THE COMPLETION OF THE WORK SHOWN, THE FOLLOWING PLAN SHALL BE FOLLOWED TO ENSURE WATER QUALITY CONTROL IS MAINTAINED FOR THE LIFE OF THE PROJECT:

1. STABILIZATION: ALL PLANTED SLOPES AND OTHER VEGETATED AREAS SHALL BE INSPECTED PRIOR TO OCTOBER 1 OF EACH YEAR AND AFTER MAJOR RAINFALL EVENTS (MORE THAN 1/4 INCH) AND REPAIRED AND REPLANTED AS NEEDED UNTIL A NOTICE OF TERMINATION (NOT) IS FILED.
2. STRUCTURAL PRACTICES: DESILTING BASINS, DIVERSION DITCHES, DOWNDRAINS, INLETS, OUTLET PROTECTION MEASURES, AND OTHER PERMANENT WATER QUALITY AND SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED PRIOR TO OCTOBER 1ST OF EACH YEAR AND AFTER MAJOR RAINFALL EVENTS (MORE THAN 1/4 INCH). REPAIRS AND REPLACEMENTS SHALL BE MADE AS NEEDED AND RECORDED IN THE MAINTENANCE LOG IN PERPETUITY.
3. OPERATION AND MAINTENANCE, FUNDING: POST-CONSTRUCTION MANAGEMENT MEASURES ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL THE TRANSFER OF RESPECTIVE SITES TO HOME BUILDERS, INDIVIDUAL OWNERS, HOMEOWNERS ASSOCIATIONS, SCHOOL DISTRICTS, OR LOCAL AGENCIES AND/OR GOVERNMENTS. AT THAT TIME, THE NEW OWNERS SHALL ASSUME RESPONSIBILITY FOR THEIR RESPECTIVE PORTIONS OF THE DEVELOPMENT.

PERMANENT POST-CONSTRUCTION BMP NOTES

1. OPERATION AND MAINTENANCE SHALL BE SECURED BY AN EXECUTED AND RECORDED STORM WATER MANAGEMENT AND DISCHARGE CONTROL MAINTENANCE AGREEMENT (SWMDCMA), OR ANOTHER MECHANISM APPROVED BY THE CITY ENGINEER THAT ASSURES ALL PERMANENT BMP'S WILL BE MAINTAINED IN PERPETUITY, PER THE LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS.
2. PERMANENT POST CONSTRUCTION BMP DEVICES SHOWN ON PLAN SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY ENGINEER OR RESIDENT ENGINEER AND THE ENGINEER OF WORK.

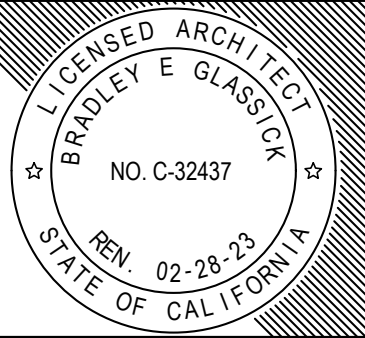
AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
NOTE SHEET

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:



ENGINEER OF WORK
Snipes-Dye associates
civil engineers and land surveyors
8348 CENTER DRIVE, STE. G, LA MESA, CA 91942
TELEPHONE: (619) 597-9234 FAX: (619) 460-2033
Matthew P. Krutz 1-12-21
MATTHEW P. KRUTZ R.C.E. 79546
EXPIRES 09-30-22



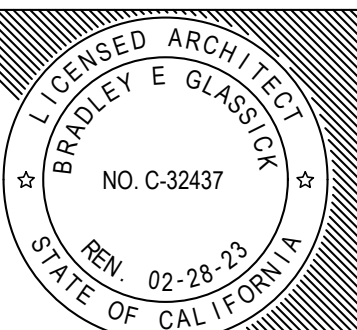
AGENCY
APPROVAL:



HMC Architects

5015037000

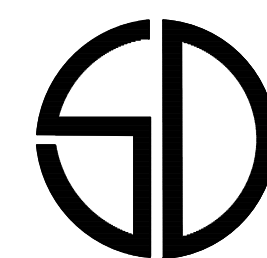
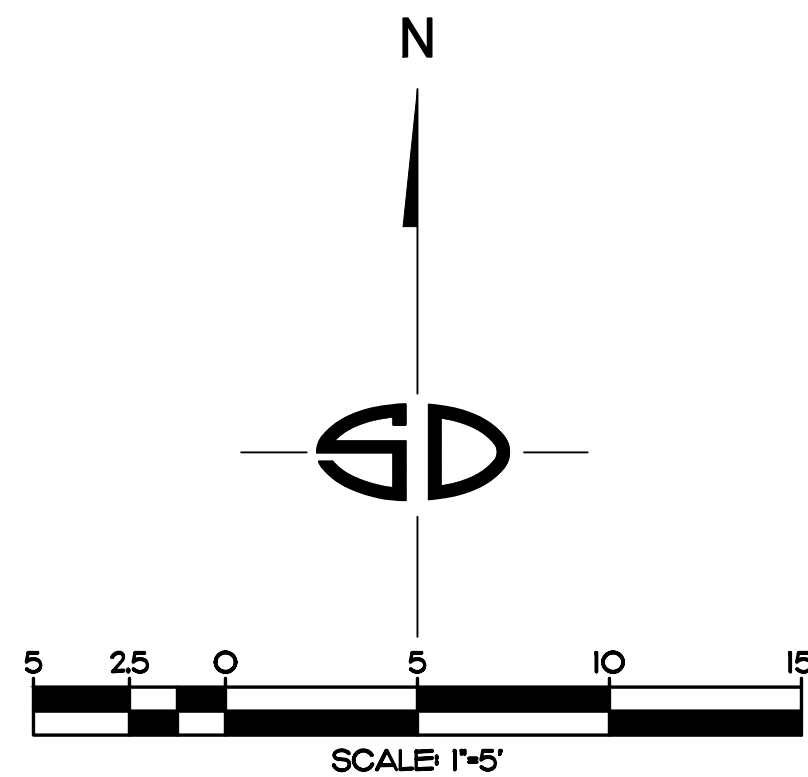
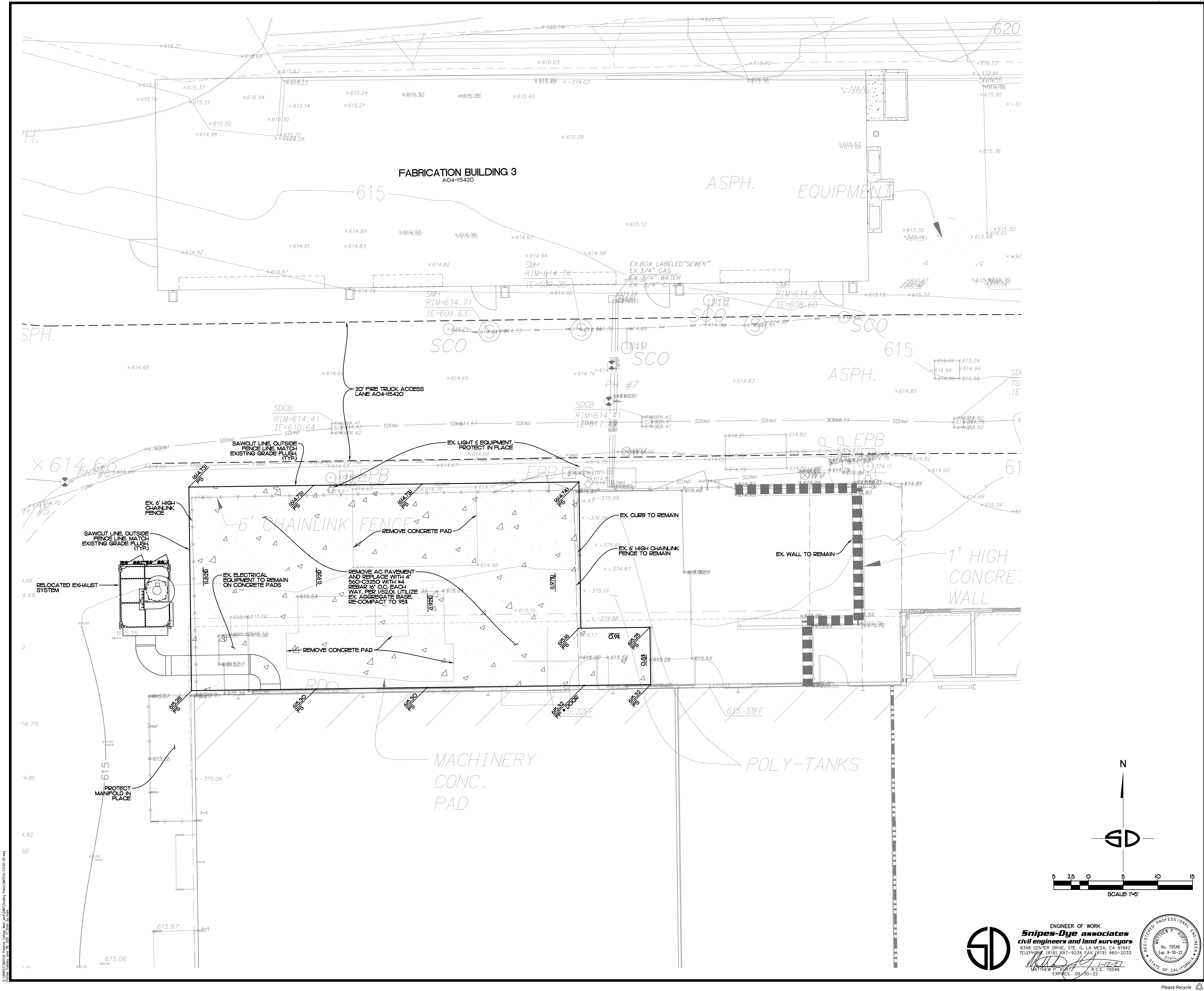
3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:



ENGINEER OF WORK
Snipes-Dye associates
civil engineers and land surveyors
8348 CENTER DRIVE, STE. G, LA MESA, CA 91942
TELEPHONE: (619) 597-9234 FAX: (619) 460-2033
MATTHEW P. KUTZ
REGISTERED PROFESSIONAL ENGINEER
No. 79546
Exp. 9-30-22
EXPIRES 09-30-22



Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
GRADING PLAN

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:

C3.00

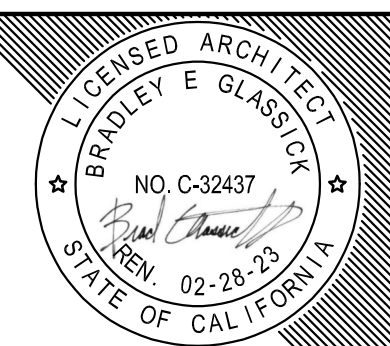
AGENCY
APPROVAL:



HMC Architects

5015037000

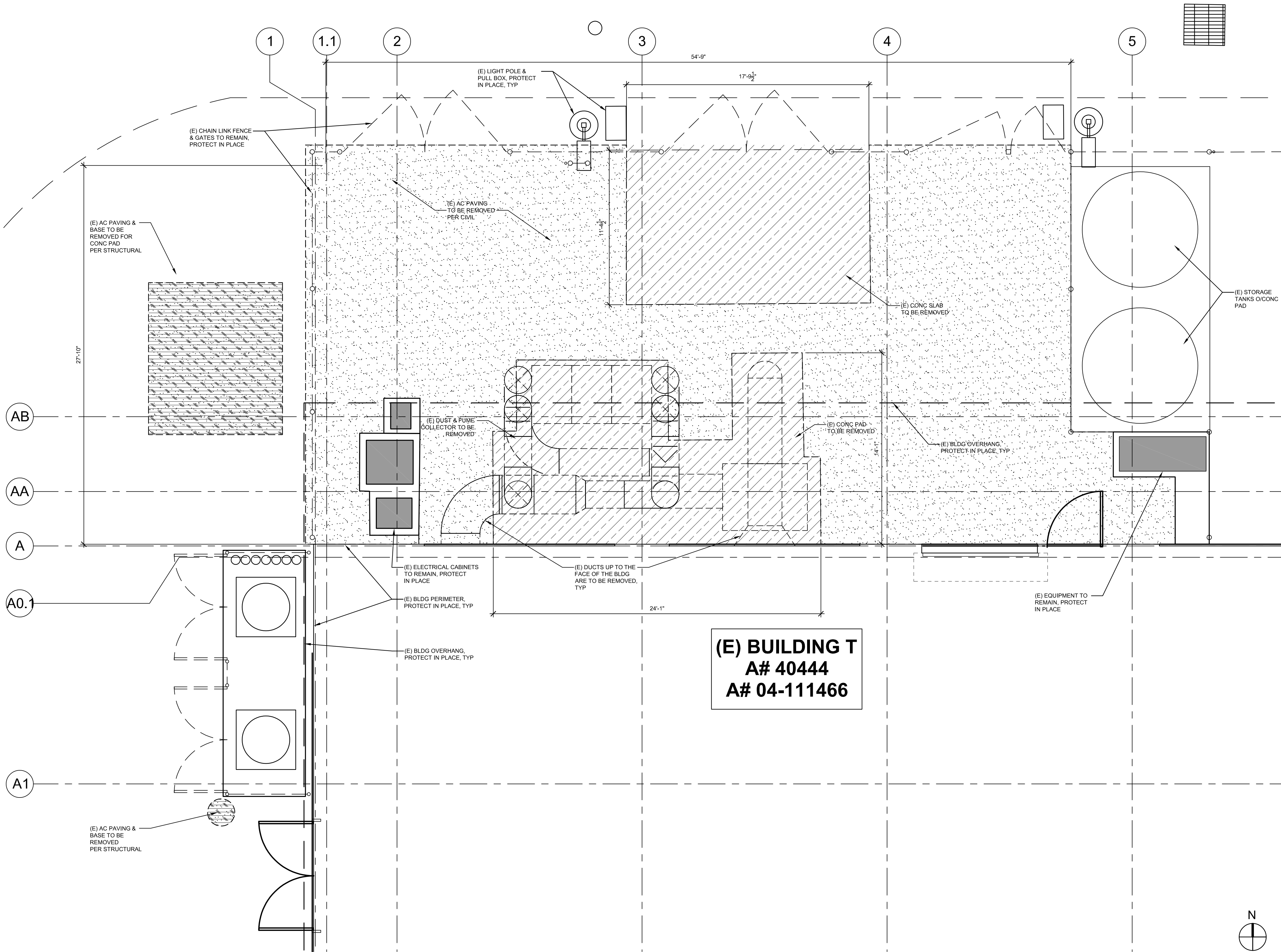
3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:



(E) BUILDING T
A# 40444
A# 04-111466

DEMO ENLARGED SITE PLAN

1

1/4" = 1'-0"

Please Recycle

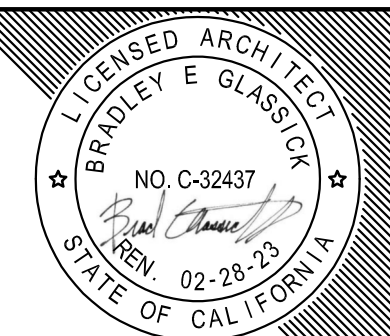
AGENCY
APPROVAL:



HMC Architects

5015037000

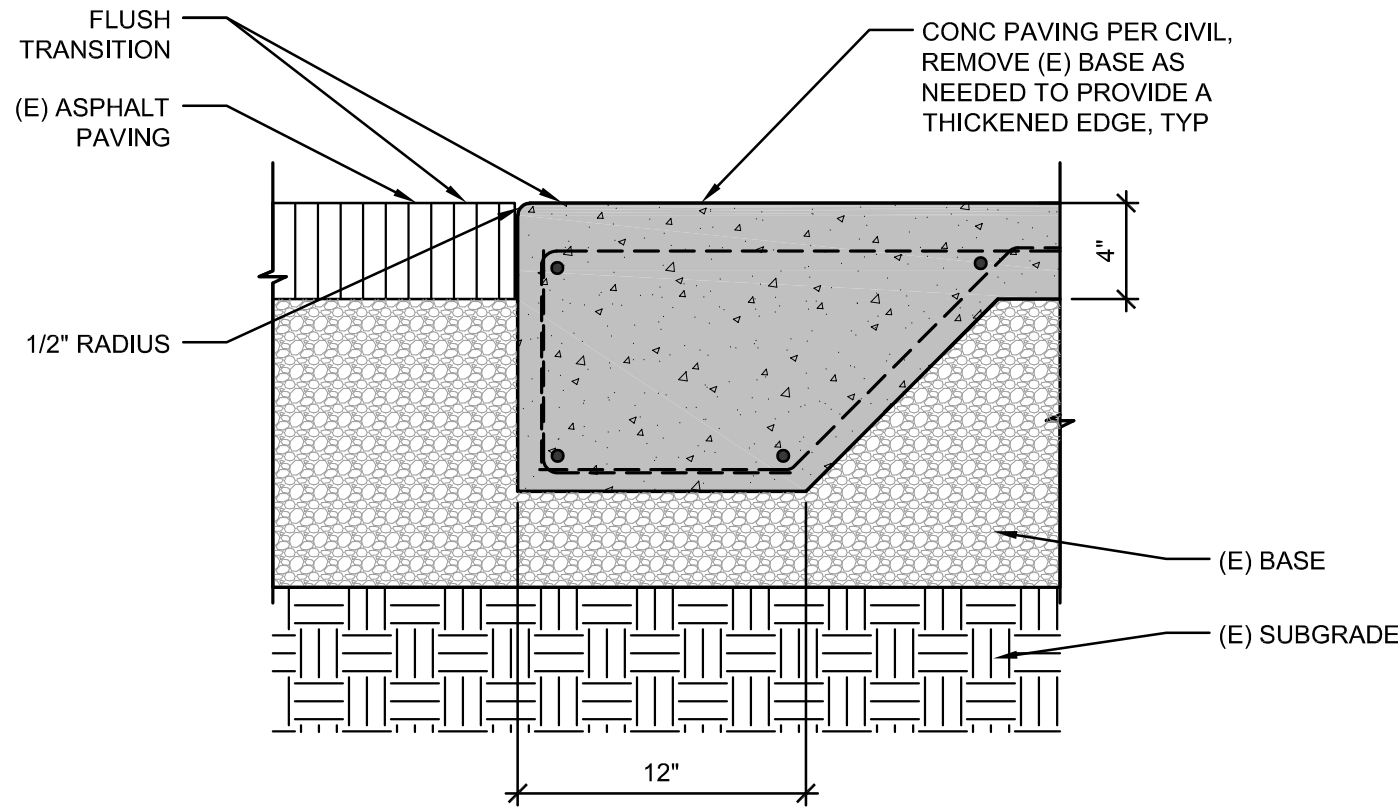
3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

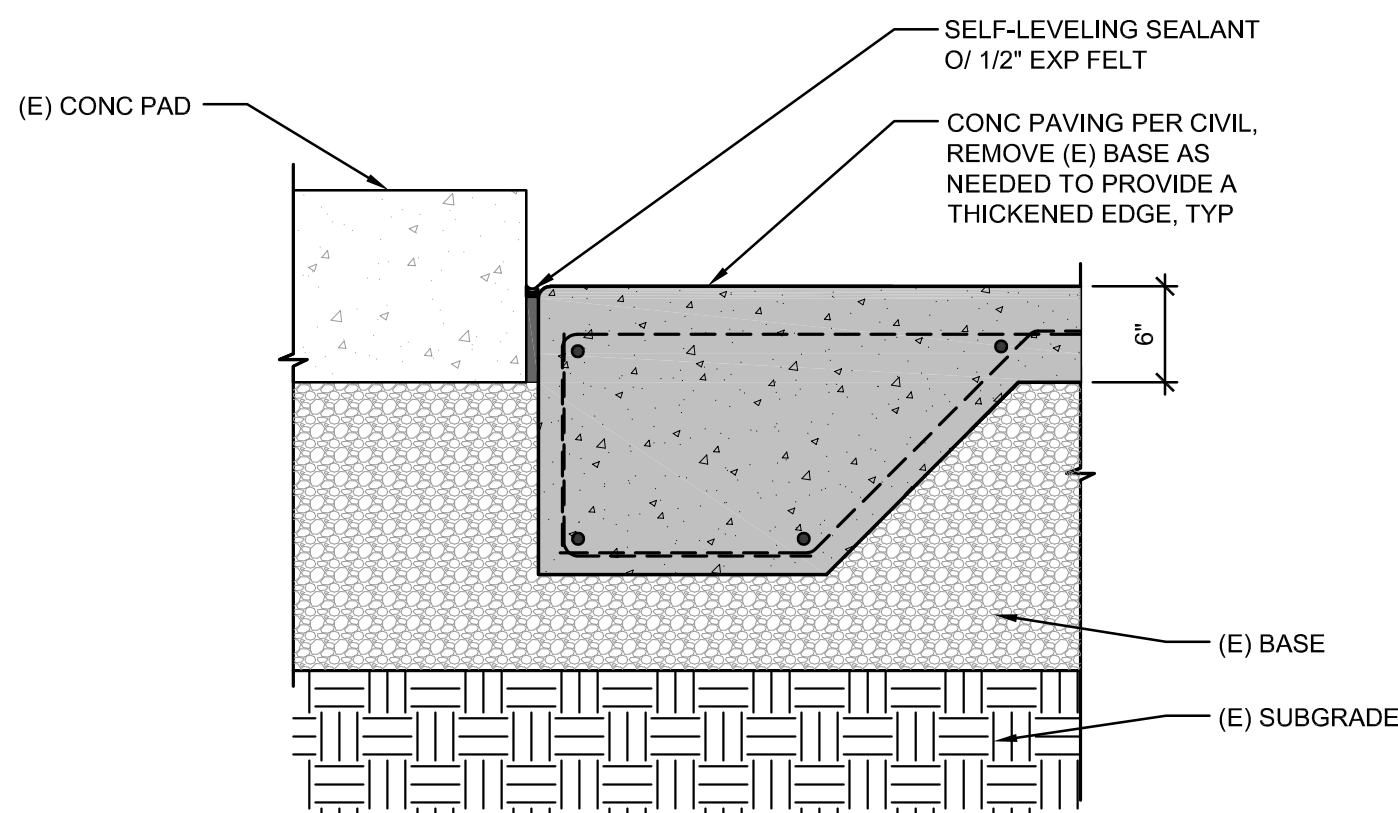
No.	Issued	Date	No.	Issued	Date

Keynotes:



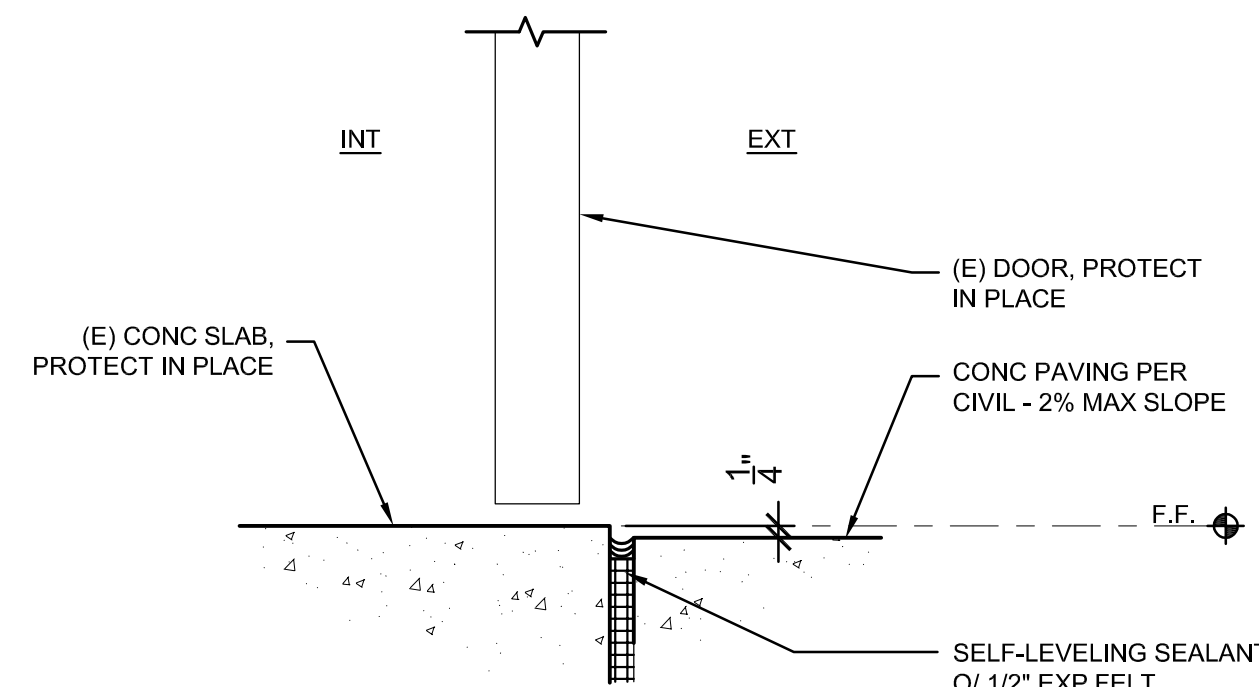
NEW CONC SLAB THICKENED EDGE TO (E) ASPHALT PAVING, TYP

12
1-1/2" = 1'-0"



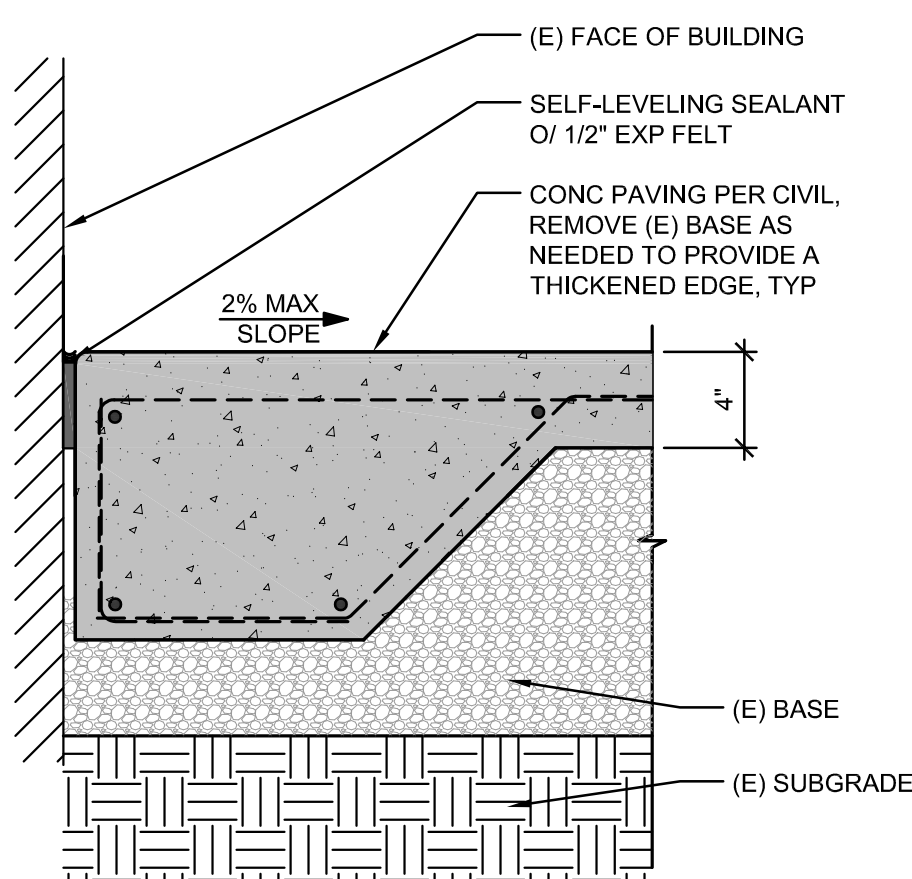
NEW CONC SLAB TO (E) CONC PAD

11
1-1/2" = 1'-0"



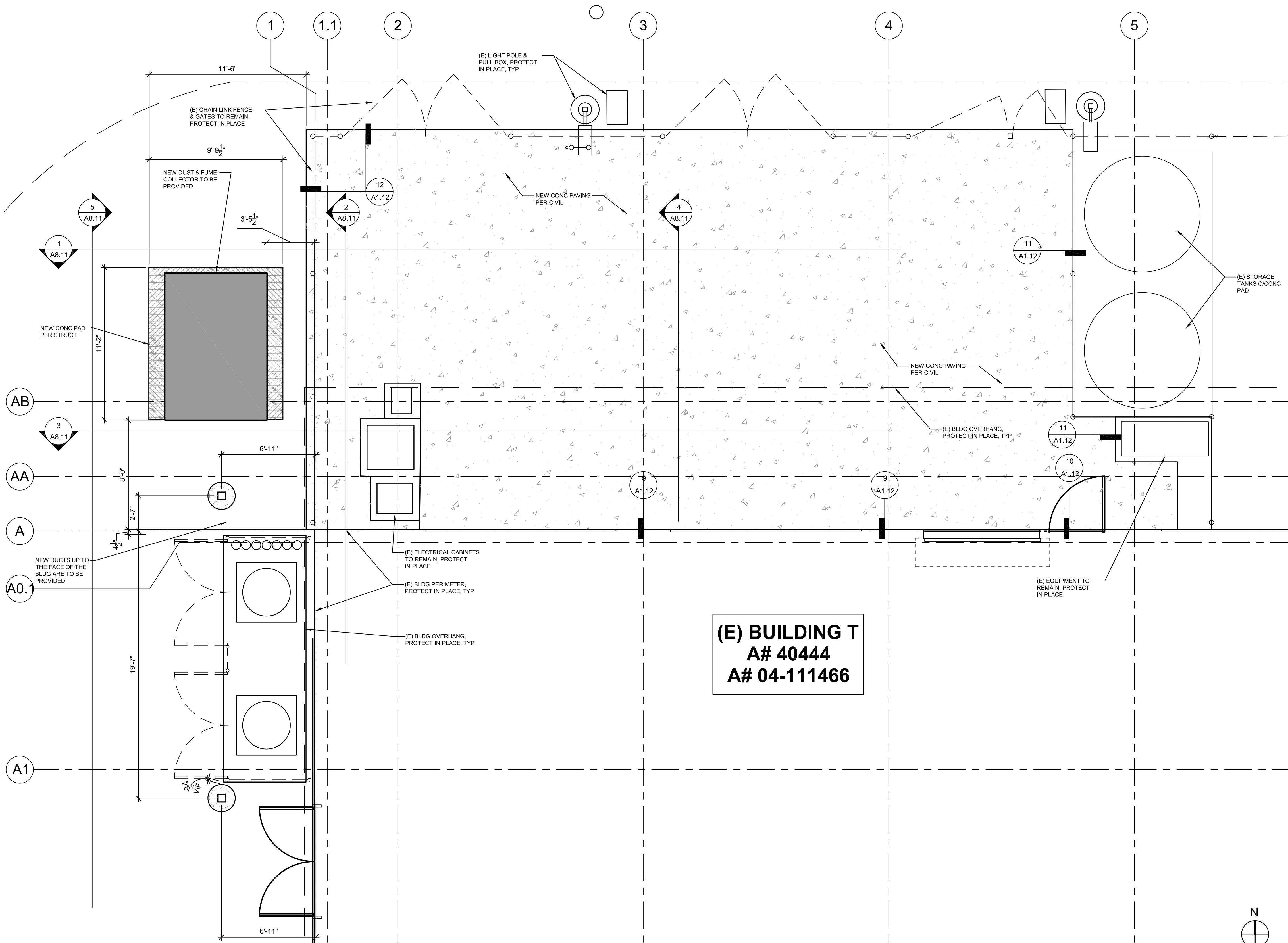
NEW CONC PAVING AT (E) EXTERIOR DOOR SILL

10
3" = 1'-0"

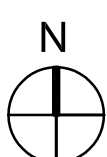


NEW CONC PAVING AT (E) BUILDING

9
1-1/2" = 1'-0"



(E) BUILDING T
A# 40444
A# 04-111466



REMODEL ENLARGED SITE PLAN

1
1/4" = 1'-0"

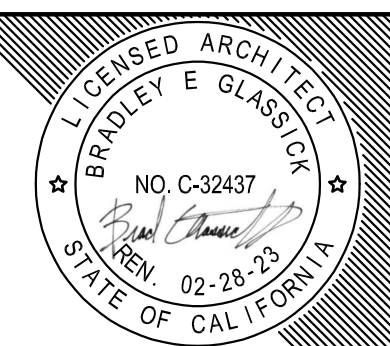
AGENCY
APPROVAL:



HMC Architects

5015037000

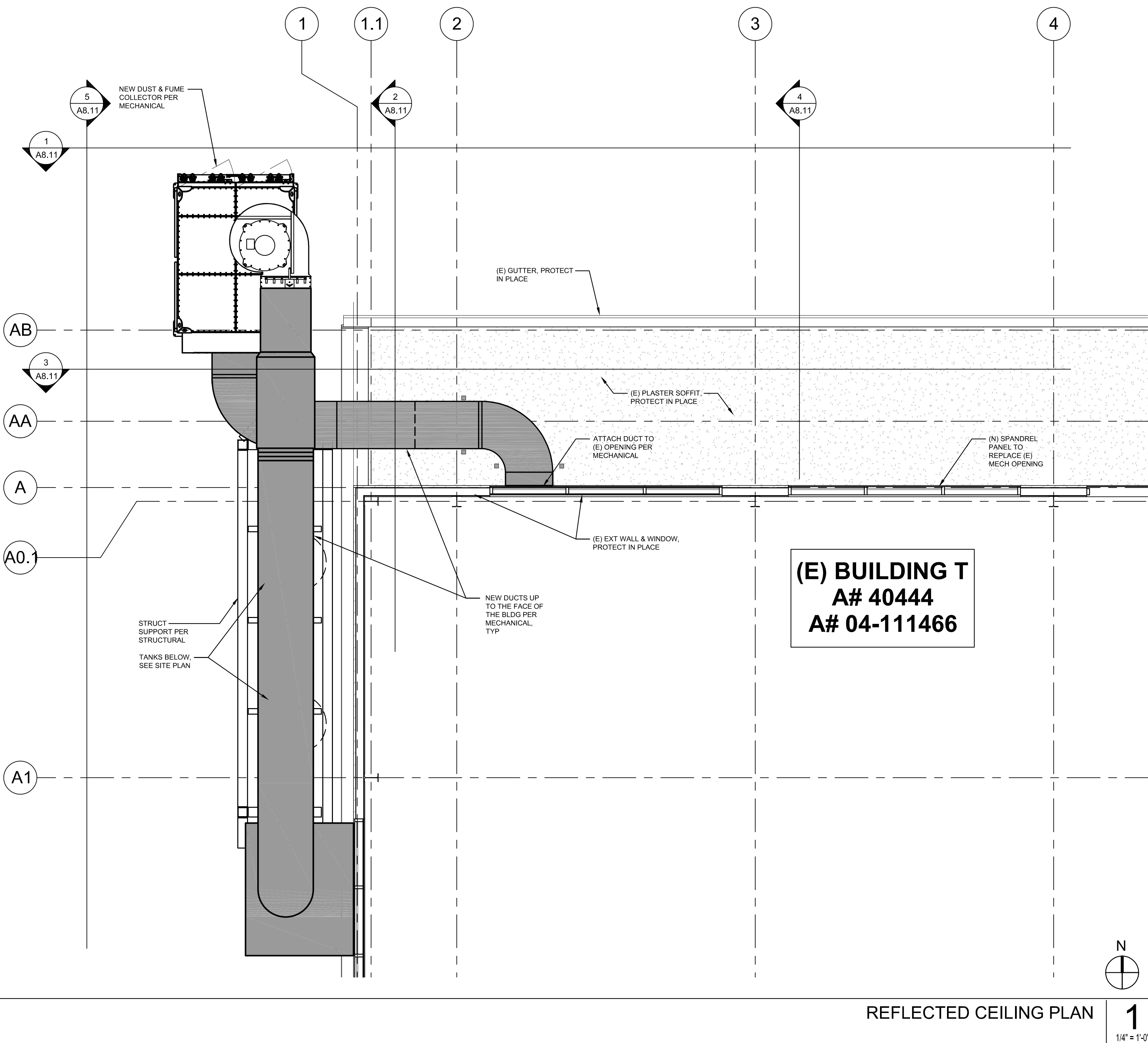
3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:



(E) BUILDING T
A# 40444
A# 04-111466



REFLECTED CEILING PLAN

1

1/4" = 1'-0"

Please Recycle

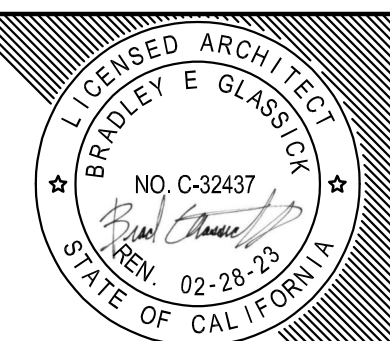
AGENCY
APPROVAL:



HMC Architects

5015037000

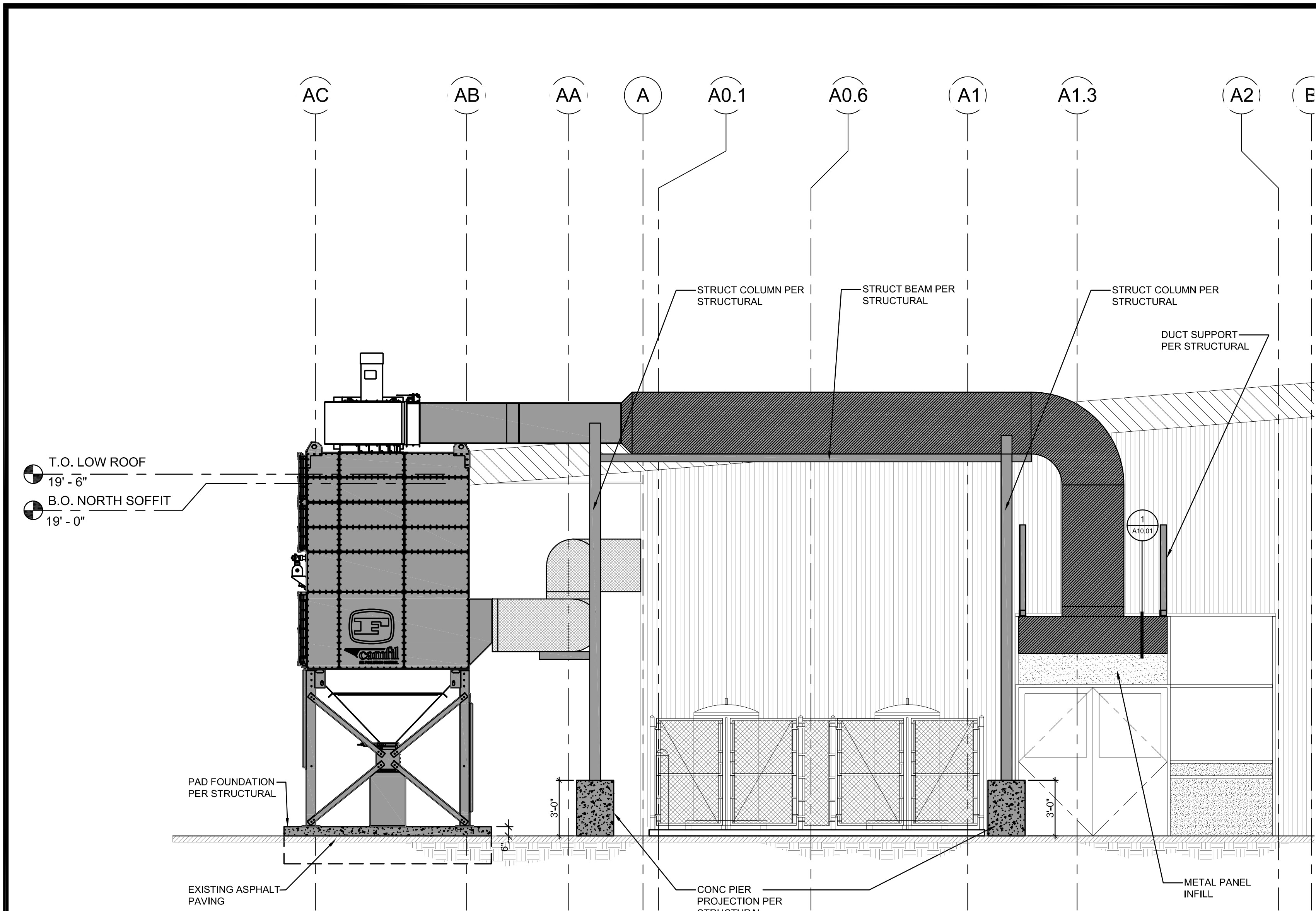
3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



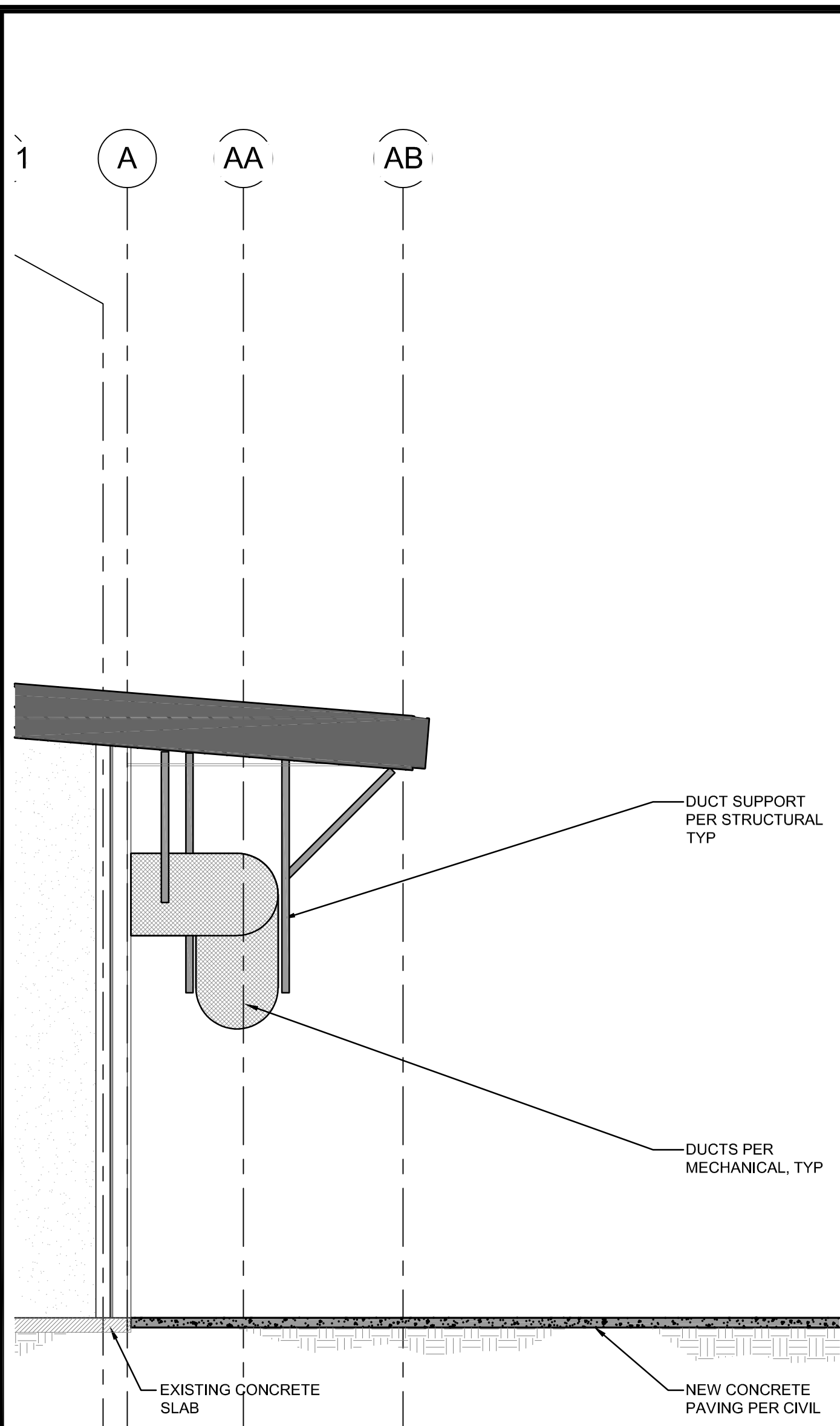
ISSUE:

No.	Issued	Date	No.	Issued	Date

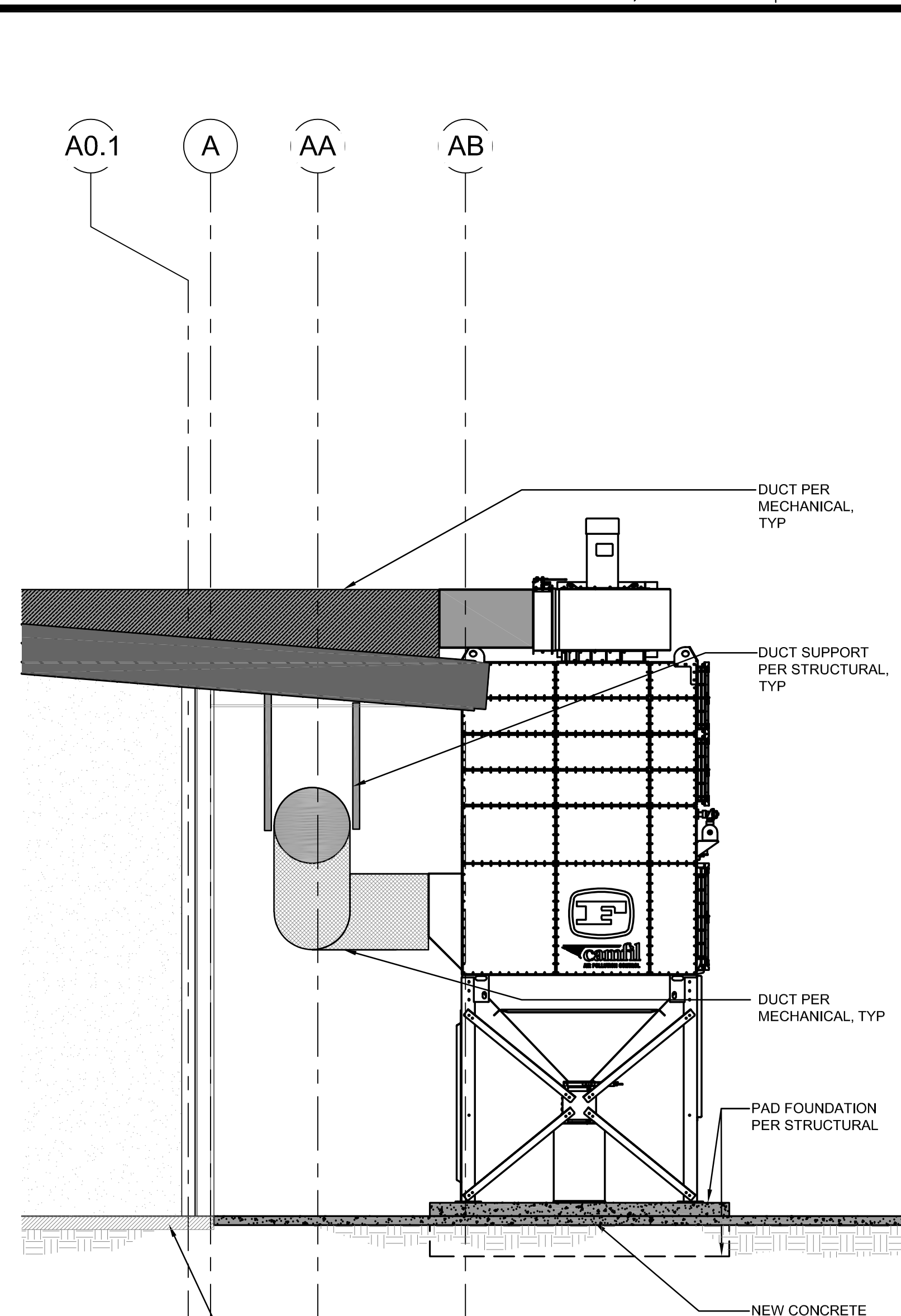
Keynotes:



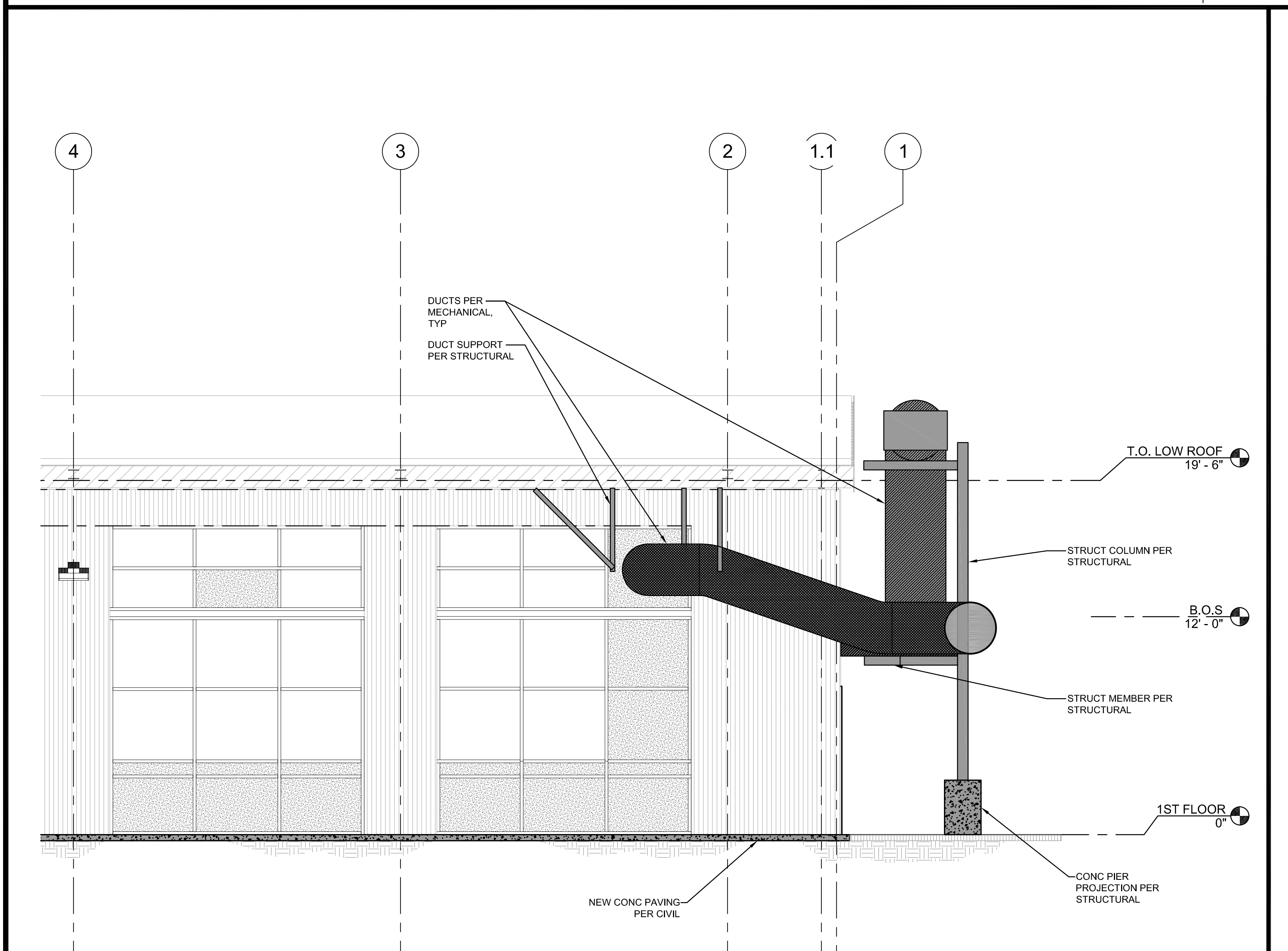
EQUIPMENT SECTION **5**
1/4" = 1'-0"



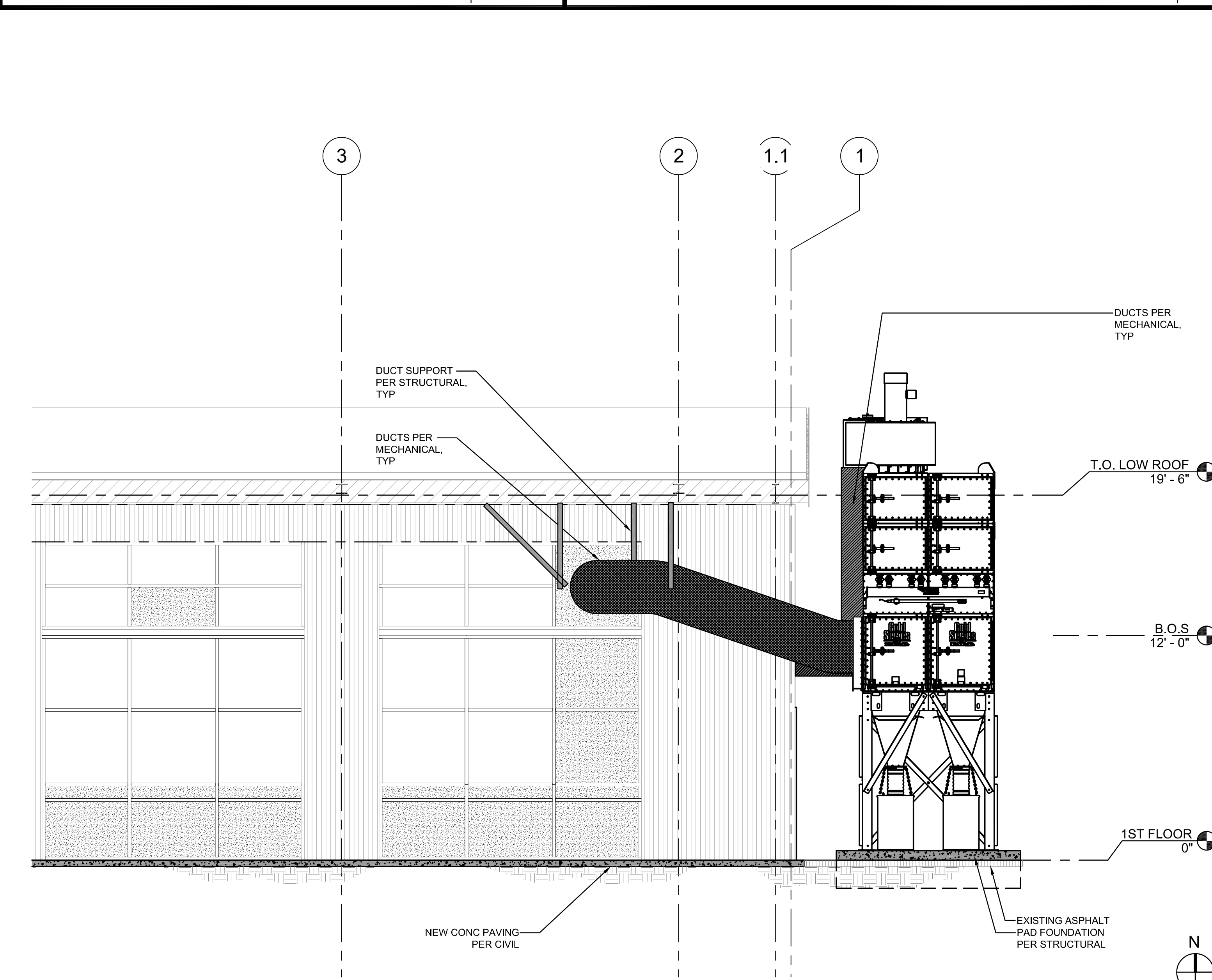
EQUIPMENT SECTION **4**
1/4" = 1'-0"



EQUIPMENT SECTION **2**
1/4" = 1'-0"



EQUIPMENT SECTION **3**
1/4" = 1'-0"



EQUIPMENT SECTION **1**
1/4" = 1'-0"

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
DUCT/EQUIPMENT SECTIONS

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:



PALOMAR COLLEGE®
Learning for Success

O.	Issued	Date	No.	Issued	Date

Agency Approval:

Sheet:

A10.01

STRUCTURAL STEEL (CONTINUED)

14. WELD MATERIALS USED IN SFRS WELDED CONNECTIONS SHALL CONFORM TO THE FOLLOWING TOUGHNESS REQUIREMENTS:
- A. WELDED CONNECTIONS SHALL BE MADE WITH A FILLER METAL THAT CAN PRODUCE WELDS THAT HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LB AT 0°F AS DETERMINED BY THE APPROPRIATE AWS CLASSIFICATION TEST METHOD.
 - B. WELDED CONNECTIONS DESIGNATED AS "DEMAND CRITICAL", SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 40 FT-LB AT 70°F BASED ON WPS HEAT INPUT ENVELOPE TESTING PRESCRIBED IN ANNEX A OF AWS D1.8/D1.8M.
15. WELD MATERIALS USED WITH HEAVY SECTIONS SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LB AT 70°F. HEAVY SECTIONS MAY BE ROLLED OR BUILT-UP AND ARE DEFINED AS FOLLOWS:
- A. SHAPES INCLUDED IN ASTM A6/A6M WITH FLANGES THICKER THAN 1-1/2 INCHES (38 MM)
 - B. WELDED BUILT-UP MEMBERS WITH PLATES THICKER THAN 2 INCHES (50 MM)
 - C. COLUMN BASE PLATES THICKER THAN 2 INCHES
16. INTERMIX OF FILLER METAL: WHEN FCAW-S FILLER METALS ARE USED IN COMBINATION WITH FILLER METALS FOR OTHER PROCESSES, INCLUDING FCAW-G, SUPPLEMENTAL CVN NOTCH TOUGHNESS TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ONE OF MORE OF THE FOLLOWING:
- A. TESTS AS DESCRIBED IN ANNEX B OF AWS D1.8/D1.8M.
 - B. PQR TESTS THAT CONTAIN INTERMIX WELD METAL, WHEREIN CVN TEST SPECIMENS HAVE BEEN TAKEN FROM THE INTERMIX ZONE.
17. ALL STEEL THAT IS ARCHITECTURALLY EXPOSED SHALL BE AESS CLASSIFICATION AS INDICATED ON ARCHITECTURAL DRAWINGS - AESS-1 UNO. ALL EXPOSED WELDMENTS ARE TO BE SSPC SP6 WITH CORROSION RESISTANCE UNO.

INSPECTOR OF RECORD (IOR)

1. IOR'S SHOULD HAVE CLASS 1 CERTIFICATION AND BE APPROVED BY DSA AS REQUIRED BY INTERPRETATION OF REGULATIONS (IR) A-7.

EXISTING CONDITION DOCUMENTATION

1. ALL EXISTING CONDITION INFORMATION INDICATED ON DRAWINGS IS BASED ON RENOVATION STRUCTURAL CONSTRUCTION DRAWINGS (DSA APPL. # 04-111466) DATED 11/9/2011 AS PREPARED BY KPFF CONSULTING ENGINEERS.
2. EXISTING FRAMING AND DIMENSIONS ARE FOR REFERENCE ONLY. CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS IN AREAS OF WORK AND NOTIFY AEOR AND SEOR IF CONDITIONS DIFFER THAN THAT SHOWN ON DRAWINGS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" ANSI/AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", AND AISI/AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", AS AMENDED BY CALIFORNIA BUILDING CODE (CBC) SECTIONS 2203A, 2204A AND 2205A.
2. SEISMIC FORCE RESISTING SYSTEM (SFRS) IS THAT PART OF THE STRUCTURAL SYSTEM THAT HAS BEEN CONSIDERED IN THE DESIGN TO PROVIDE THE REQUIRED RESISTANCE TO THE SEISMIC FORCES PRESCRIBED IN ASCE/SEI 7.
3. STRUCTURAL STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS, UNLESS NOTED OTHERWISE ON DRAWINGS:
- | | |
|---|---|
| RECTANGULAR HOLLOW STRUCTURAL SECTIONS..... | ASTM A500/A500M, GRADE C (F _y =50 KSI) |
| PLATES..... | ASTM A572/A572M, GRADE 50 |
| ANCHOR BOLTS..... | ASTM F1554, GRADE 36 (UNO) |
| ANCHOR BOLTS USED IN SFRS..... | ASTM F1554, GRADE 55, WELDABLE, UNO |
| THREADED ROUND STOCK..... | ASTM A36/A36M |
- FURNISH READILY IDENTIFIABLE STRUCTURAL STEEL IN COMPLIANCE WITH CBC SECTION 2202A.1.
4. SUBMIT SHOP DRAWINGS TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND, UPON REQUEST, TO GOVERNING CODE AUTHORITY. INDICATE AN ERECTION SEQUENCE OF WELDING TO MINIMIZE LOCKED-UP STRESSES OR DISTORTION FOR MOMENT-RESISTING STEEL FRAMES.
5. ALL STEEL NOT ENCASED IN CONCRETE, MASONRY, OR FIREPROOFING SHALL BE SHOP PRIMED AND PAINTED, EXCEPT FOR TOP FLANGE OF BEAMS SUPPORTING METAL DECK. ANY ABRASIONS OR UNPAINTED AREAS SHALL BE TOUCHED UP AFTER ERECTION.
6. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.
7. WELDING SHALL CONFORM TO LATEST EDITION OF AWS D1.1/D1.1M, AS AMENDED IN CBC SECTION 2204A.1.
- A. WELDING PROCESS SHALL BE ELECTRIC ARC USING E70XX ELECTRODES. SUBMERGED ARC PROCESS (SAW) WITH AUTOMATIC WELDING MAY BE USED AS AN ALTERNATIVE.
 - B. WELDERS SHALL BE CERTIFIED TO CONFORM WITH AWS STANDARDS AND APPROVED BY DSA.
 - C. SHOP WELDING, INCLUDING ULTRASONIC TESTING OF FULL PENETRATION GROOVE WELDS, SHALL BE PERFORMED ON THE PREMISES OF AN APPROVED FABRICATOR.
 - D. MINIMUM FILLET WELD SIZE SHALL CONFORM TO AISC SPECIFICATION TABLE J2.4. WELD LENGTHS NOTED ON DRAWINGS ARE THE NET EFFECTIVE LENGTHS REQUIRED.
 - E. FIELD WELD SYMBOLS NOTED ON THE DRAWINGS SHOW ENGINEERING INTENT, BUT NO ATTEMPT HAS BEEN MADE TO CLASSIFY ALL WELDS. AT FABRICATOR'S OPTION, ANY WELD INDICATED AS A FIELD WELD MAY BE SHOP WELDED AND ANY WELD INDICATED AS A SHOP WELD MAY BE FIELD WELDED.
8. WELDS SHALL BE PREQUALIFIED PER AWS D1.1. NON-PREQUALIFIED WELDED JOINTS SHALL BE QUALIFIED BY TEST PER AWS D1.1.
9. SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS) FOR ALL WELDS USED ON PROJECT PRIOR TO FABRICATION. FOR WELDS NOT PREQUALIFIED, THE SUPPORTING PROCEDURE QUALIFICATION RECORD (PQR) SHALL ALSO BE SUBMITTED WITH THE WPS. WPS SHALL BE IN ACCORDANCE TO AWS D1.1, SECTION 4.6 AND SHALL INCLUDE THE FOLLOWING INFORMATION FOR EACH WELD TYPE AND POSITION:
- A. SKETCH OF JOINT DESCRIBING GEOMETRY AND APPLICABLE DIMENSIONS, WELD TYPE AND SIZE, SEQUENCE OF WELD DEPOSITION, AND MAXIMUM LAYER THICKNESS AND BEAD WIDTHS. LAYER THICKNESS SHALL NOT EXCEED 1/4 INCH, AND BEAD WIDTH SHALL NOT EXCEED 5/8 INCH.
 - B. BASE METAL TYPES AND THICKNESS.
 - C. APPLICABLE WELD PROCESS (SMAW OR FCAW).
 - D. FILLER METAL PER AWS STANDARD AND ELECTRODE SPECIFICATION AND CLASSIFICATION, AS WELL AS DETAILS OF SHIELDING MATERIAL.
 - E. ELECTRICAL CHARACTERISTICS FOR WELD PROCESS USED SUCH AS TYPE OF CURRENT AND ACCEPTABLE RANGE OF CURRENT MEASURED IN AMPERAGE, VOLTAGE RANGE, AND ELECTRODE DIAMETER. FOR WELD FEED PROCESS, INDICATE MANUFACTURER RECOMMENDED WIRE SPEED, CONTACT DISTANCE, MELT OFF RATE AND DEPOSITION RATE.
 - F. A COPY OF ELECTRODE MANUFACTURER'S TECHNICAL INFORMATION AND CERTIFICATE OF CONFORMANCE.
10. TESTING LABORATORY WILL VERIFY COMPLIANCE WITH ACCEPTED WPS AND WILL PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) IF DEVIATIONS ARE FOUND.
11. ELECTRODE DIAMETER SHALL NOT EXCEED PREQUALIFIED LIMITS SHOWN IN AWS D1.1 TABLE 3.7, AS APPLICABLE. FOR FCAW PROCESS, MAXIMUM ELECTRODE SIZE SHALL NOT EXCEED 1/8 INCH.
12. DIFFUSIBLE HYDROGEN LEVEL FOR ELECTRODES AND ELECTRODE-FLUX COMBINATION SHALL MEET THE REQUIREMENTS TABLE 6.3 OF AWS D1.8/D1.8M.
13. DETAILS, MATERIALS, WORKMANSHIP, AND TESTING AND INSPECTION REQUIREMENTS OF WELDED JOINTS COMPRISING THE SFRS SHALL CONFORM TO THE FOLLOWING APPLICABLE STANDARDS:

- A. AWS D1.1/D1.1M "STRUCTURAL WELDING CODE - STEEL"
- B. AWS D1.8/D1.1M "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT"
- C. ANSI/AISC 341, "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS", CHAPTER J (QUALITY CONTROL AND QUALITY ASSURANCE).
- D. ANSI/AISC 358 "PREQUALIFIED CONNECTIONS FOR SPECIAL AND INTERMEDIATE STEEL MOMENT FRAMES FOR SEISMIC APPLICATIONS."

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE STANDARDS OF THE AMERICAN CONCRETE INSTITUTE, ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", WITH MODIFICATIONS AS NOTED IN THE CONTRACT DOCUMENTS.
- A. CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT ALL CONCRETE 3,000 PSI NOMINAL WEIGHT UNO.
2. UNLESS NOTED OTHERWISE HEREIN, CONCRETE IS ASSIGNED TO EXPOSURE CLASSES F0, S0, W0, AND C0, AS DEFINED IN TABLE 19.3.1.1 OF ACI 318-14.
- A. CONCRETE IN CONTACT WITH SITE SOIL SHALL BE ASSIGNED TO EXPOSURE CLASS S0.
3. PORTLAND CEMENT FOR CONCRETE IN EXPOSURE CLASS S1 SHALL CONFORM TO ASTM C150, TYPE II (OR OTHER TYPES OF PORTLAND CEMENT WITH C3A CONTENT LESS THAN 8 PERCENT).
4. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33. NORMAL WEIGHT CONCRETE SHALL HAVE A MINIMUM DRY UNIT WEIGHT OF 145 PCF.
5. MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2 INCHES FOR FOUNDATIONS AND 1 INCH ELSEWHERE, BUT NO LARGER THAN 1/5 THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS, (B) 1/3 THE DEPTH OF SLABS, OR (C) 3/4 THE MINIMUM CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, BUNDLES OF BARS, INDIVIDUAL TENDONS, BUNDLED TENDONS, OR DUCTS. SMALLER AGGREGATE SIZES MAY BE ALLOWED WITH THE APPROVAL OF THE ARCHITECT (STRUCTURAL ENGINEER).
6. MAXIMUM SLUMP SHALL BE 5 INCHES TYPICALLY AND 4 INCHES IN FLATWORK, UNLESS A HIGH-RATE WATER REDUCING ADMIXTURE (SUPERPLASTICIZER) IS USED IN THE CONCRETE MIX PROPORTIONS.
7. CONCRETE SHRINKAGE SHALL BE LIMITED TO 0.05 PERCENT AT 35 DAYS AS DETERMINED BY ASTM C157. TEST SPECIMENS SHALL BE MOIST CURED IN LIME SATURATED WATER FOR 28 DAYS AND AIR STORED FOR 7 DAYS.
8. WATER CEMENT RATIO SHALL NOT EXCEED 0.50.
9. CONCRETE MIX PROPORTIONING SHALL BE SIGNED AND SEALED BY A PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA AND SHALL BE SUBMITTED TO THE ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND APPROVAL.
- A. STRENGTH: CONCRETE MIX PROPORTIONING SHALL BE BASED ON FIELD EXPERIENCE AND/OR TRIAL MIXTURES AS STIPULATED IN ACI 301, ARTICLE 4.2.3. SUBMIT CONCRETE MIX PROPORTIONING DATA, INCLUDING HISTORICAL STRENGTH RECORDS AND/OR RESULTS OF TRIAL MIXTURES, FOR EACH TYPE AND COMPRESSIVE STRENGTH OF CONCRETE.
10. CONCRETE MIXING SHALL CONFORM TO ASTM C94.
11. PRIOR TO PLACING CONCRETE, REINFORCING BARS (INCLUDING WELDED WIRE REINFORCEMENT), EMBEDDED PLATES, ANCHOR BOLTS, AND OTHER CONCRETE EMBEDMENTS SHALL BE WELL SECURED IN POSITION.
12. CONCRETE PLACEMENT SHALL CONFORM TO ACI 304 AND CONTRACT DOCUMENTS, INTENTIONALLY ROUGHEN ALL PREVIOUSLY HARDENED CONCRETE SURFACES TO A FULL AMPLITUDE OF 1/4-INCH AGAINST WHICH FRESH CONCRETE IS PLACE.
13. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY ARCHITECT (STRUCTURAL ENGINEER).
14. GROUT SHALL BE NON-SHRINK, NON-METALLIC, SHALL NOT CONTAIN CHLORIDES, AND SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 6,000 PSI.
15. LEAN CONCRETE SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE, USE ONLY WHERE SPECIFICALLY INDICATED.

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE TO AMERICAN CONCRETE INSTITUTE ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE".
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615/A615M, GRADE 60, UNLESS NOTED OTHERWISE. BARS TO BE WELDED SHALL CONFORM TO LOW ALLOY ASTM A706/A706M, GRADE 60.
3. DEFORMED LONGITUDINAL REINFORCEMENT RESISTING EARTHQUAKE-INDUCED MOMENT, AXIAL FORCE, OR BOTH, IN SPECIAL MOMENT FRAMES, SPECIAL STRUCTURE WALLS, AND ALL COMPONENTS OF SPECIAL STRUCTURAL WALLS INCLUDING COUPLING BEAMS AND WALL PIERS SHALL COMPLY WITH ASTM A706/A706M, GRADE 60. ASTM A615/A615M GRADES 40 AND 60 REINFORCEMENT SHALL BE PERMITTED IN THESE MEMBERS IF:
- A. THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI.
 - B. FOR ASTM A615/A615M GRADE 40 REINFORCEMENT, THE RATIO OF THE ACTUAL TENSILE STRENGTH TO THE ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.
 - C. FOR ASTM A615/A615M GRADE 60 REINFORCEMENT, THE MINIMUM ELONGATION IN 8 INCHES SHALL BE AS FOLLOWS:
 - 1. NO. 3 THROUGH NO. 6 = 14 PERCENT
 - 2. NO. 7 THROUGH NO. 11 = 12 PERCENT
 - 3. NO. 14 AND NO. 18 = 10 PERCENT
4. HEADED STEEL REINFORCING BAR ANCHORS SHALL BE LENTON TERMINATOR BY ERICO INTERNATIONAL CORPORATION (APMO USES EVALUATION REPORT NO. 0188) OR APPROVED EQUAL. HEADED STEEL REINFORCING BAR ANCHORS MAY BE USED IN LIEU OF STANDARD HOOKS ONLY WHERE SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER.
5. MECHANICAL COUPLERS FOR SPLICING REINFORCING BARS SHALL BE LENTON STANDARD COUPLERS OR LENTON FORM SAVER COUPLERS, SA OR FS SERIES, BY ERICO INTERNATIONAL CORPORATION (APMO USES EVALUATION REPORT NO. 0129) OR APPROVED EQUAL. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICING REINFORCING BARS ONLY WHERE SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER.
6. PREPARE REINFORCING STEEL SHOP DRAWINGS IN ACCORDANCE TO ACI 315, PART B. SHOP DRAWINGS MAY BE PREPARED MANUALLY OR BY COMPUTER. PLACING DRAWINGS SHALL BE PREPARED TO THE SAME STANDARD AS CONTRACT DRAWINGS. SHOW REINFORCING PLACEMENT, SPLICE LOCATIONS, REINFORCING LENGTHS, DETAILS, ELEVATIONS, BEND DETAILS, ETC. SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW PRIOR TO FABRICATION. PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO DEVELOPING REINFORCING STEEL SHOP DRAWINGS IF INSUFFICIENT CLEAR DISTANCES BETWEEN REINFORCING STEEL OR OTHER CONGESTION IS ENCOUNTERED. DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLEARLY IDENTIFIED ON THE SHOP DRAWINGS. IF SUBMITTAL IS PARTIAL, CLEARLY INDICATE ITEMS EXCLUDED FROM SUBMITTAL. SHOP DRAWINGS WILL BE REJECTED IF NOT PREPARED TO THE STANDARDS STATED ABOVE.
7. REINFORCING STEEL SHALL BE SPLICED AS SHOWN ON THE DRAWINGS. IF NOT SHOWN, LOCATE SPLICES IN AREAS OF MINIMUM STRESS. LAP (SPLICE) LENGTHS ARE AS INDICATED ON THE DRAWINGS.
8. MINIMUM CLEARANCES BETWEEN PARALLEL REINFORCING STEEL INCLUDING SPLICED BARS SHALL BE ONE INCH, ONE BAR DIAMETER, OR 4/3 TIMES THE MAXIMUM SIZE AGGREGATE, WHICHEVER IS GREATER. PROVIDE 1 1/2 INCHES OR 1 1/2 BAR DIAMETERS, WHICHEVER IS GREATER, AT COLUMNS ONLY. FOR BUNDLED BARS, MINIMUM CLEAR DISTANCES BETWEEN UNITS OF BUNDLED BARS SHALL BE SAME AS SINGLE BARS EXCEPT BAR DIAMETER IS DERIVED FROM EQUIVALENT TOTAL AREA OF BUNDLE.
9. PROVIDE THE FOLLOWING CONCRETE COVERAGE FOR REINFORCING STEEL PLACED IN CAST-IN-PLACE CONCRETE:
- | | |
|--|--------------------|
| A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH | 3" |
| a. CONCRETE EXPOSED TO EARTH OR WEATHER: | |
| NO. 6 THROUGH NO. 18 BARS | 2" |
| NO. 5 BARS, W31 OR D31 WIRE, AND SMALLER | 1-1/2" |
| b. CONCRETE NOT EXPOSED WEATHER OR IN CONTACT WITH GROUND: | |
| SLAB, WALLS, JOISTS: | |
| NO. 14 AND NO. 18 BARS | 1-1/2" |
| NO. 11 BARS AND SMALLER (*) | 1" |
| BEAMS AND COLUMNS | |
| PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS | 1-1/2" |
| B. SLAB-ON-GRADE | MID-HEIGHT OF SLAB |
| (*) CONCRETE COVERAGE ADEQUATE FOR FIRE-RESISTIVE PERIOD OF 2 HOURS. | |
10. USE PLASTIC OR PLASTIC COATED SPACERS AND CHAIRS IF RESTING ON EXPOSED CONCRETE SURFACES.
11. WELDING OF REINFORCING STEEL SHALL BE MADE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH AMERICAN WELD SOCIETY AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL".
- A. EXCEPT FOR REINFORCING STEEL CONFORMING TO ASTM A706/A706M, DETERMINE CARBON EQUIVALENT OF ALL REINFORCING STEEL TO BE WELDED. SUBMIT WPS FOR ALL REINFORCING STEEL TO BE WELDED TO ARCHITECT (STRUCTURAL ENGINEER) FOR REVIEW AND TO DSA FOR APPROVAL PRIOR TO EXECUTION. WPS SHALL INCLUDE:
 - 1. SKETCH OF JOINT DESCRIBING GEOMETRY AND APPLICABLE DIMENSIONS, WELD TYPE AND SIZE, SEQUENCE OF WELD DEPOSITION, AND MAXIMUM LAYER THICKNESS AND BEAD WIDTHS.
 - 2. APPLICABLE WELD PROCESS.
 - 3. FILLER METAL PER AWS STANDARD AND ELECTRODE SPECIFICATION AND CLASSIFICATION, AS WELL AS DETAILS OF SHIELDING MATERIAL.
 - 4. ELECTRICAL CHARACTERISTICS FOR WELD PROCESS USED SUCH AS TYPE OF CURRENT AND ACCEPTABLE RANGE OF CURRENT MEASURED IN AMPERAGE, VOLTAGE RANGE, AND ELECTRODE DIAMETER. FOR WELD FEED PROCESS, INDICATE MANUFACTURER RECOMMENDED WIRE SPEED, MELT OFF RATE AND DEPOSITION RATE.
 - 5. PREHEAT TEMPERATURES.
 - 6. PROCEDURE QUALIFICATION RECORDS (PQR) FOR ALL WPS'S QUALIFIED BY TESTING.
 - B. WELDERS SHALL BE AWS CERTIFIED TO CONFORM WITH AWS STANDARDS AND APPROVED BY THE DSA.
12. REINFORCING STEEL BENDS SHALL BE MADE COLD WITH BEND DIAMETERS AS PER DETAIL 3 / 50.11. RE-BENDING OF PREVIOUSLY BENT REINFORCING IS NOT PERMITTED.
13. ALL REINFORCING STEEL, INCLUDING WELDED WIRE REINFORCING, SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, CONCRETE BLOCKS, CHAIRS, BOLSTERS, ETC. SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL REINFORCING. HOOKING AND WALKING-IN IS NOT PERMITTED.
14. ALL REINFORCING STEEL SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN FINAL INSPECTION IS CONDUCTED.

GENERAL

1. ALL WORK SHALL CONFORM TO THE STANDARDS OF THE 2019 CALIFORNIA BUILDING CODE, AS AMENDED BY THE DIVISION OF THE STATE ARCHITECT - STRUCTURAL SAFETY, AND THOSE CODES AND STANDARDS LISTED IN THE CONTRACT DOCUMENTS.
2. CODES, STANDARDS, AND SPECIFICATIONS, INCLUDING ADDENDA AND SUPPLEMENTS, REFERENCED IN THE CONTRACT DOCUMENTS SHALL BE THE LATEST APPROVED ISSUE, UNLESS SPECIFICALLY NOTED.
3. NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. IF CONFLICT OCCURS BETWEEN THE CONTRACT DRAWINGS, IMMEDIATELY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) FOR RESOLUTION. DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS.
4. DESIGN LIVE LOADS: ROOF 20 PSF
5. RISK CATEGORY = II
6. CODE LEVEL WIND DESIGN DATA:
- a. DESIGN WIND SPEED, V_{ULT} (ULTIMATE) = 96 MPH (3S GUST SPEED)
 - b. EXPOSURE CATEGORY = C
 - c. ENCLOSURE CLASSIFICATION = ENCLOSED BUILDING
 - d. INTERNAL PRESSURE COEFFICIENT, GC_{pi} = ± 0.18
7. CODE LEVEL EARTHQUAKE DESIGN DATA:
- a. SITE COORDINATES = 33.152436 °N, -117.178763 °W
 - b. MAPPED SPECTRAL RESPONSE ACCELERATION, S_s = 0.901g
 - c. MAPPED SPECTRAL RESPONSE ACCELERATION, S₁ = 0.332g
 - d. SITE CLASS = D
 - e. DESIGN SPECTRAL RESPONSE COEFFICIENT, S_{DS} = 0.72g
 - f. DESIGN SPECTRAL RESPONSE COEFFICIENT, S₀₁ = N/A
 - g. IMPORTANCE FACTOR, I_e = 1.0
 - h. SEISMIC DESIGN CATEGORY = D
 - i. BASIC SEISMIC-FORCE RESISTING SYSTEM = MECHANICAL COMPONENT
 - j. COMPONENT RESPONSE MODIFICATION FACTOR, R₀ = 6.0
 - k. ANALYTICAL PROCEDURE = ASCE 7-16, CH 13
 - l. COMPONENT AMPLIFICATION FACTOR, ap = 2.5
8. GOVERNING CODE AUTHORITY: DIVISION OF STATE ARCHITECTS (DSA) - STRUCTURAL SAFETY.
9. CONTRACT DOCUMENTS INDICATE INFORMATION SUFFICIENT TO CONVEY DESIGN INTENT. REVIEW CONTRACT DOCUMENTS AND VERIFY FIELD AND EXISTING CONDITIONS. PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER), PRIOR TO PROCEEDING WITH WORK, IF FURTHER CLARIFICATION OF DESIGN INTENT IS NEEDED.
10. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ARCHITECT (STRUCTURAL ENGINEER) OF ANY DISCREPANCIES.
11. PERFORM STRUCTURAL RELATED WORK AND DEVELOP SHOP DRAWINGS CONSIDERING CONTRACT DOCUMENTS IN THEIR ENTIRETY. CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED AS DETAILED FOR SIMILAR WORK.
12. CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL NECESSARY MEASURES TO PROTECT THE STRUCTURE DURING CONSTRUCTION. COMPLY WITH THE STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH REGULATIONS. CONSTRUCTION MATERIALS, IF PLACED ON FRAMED FLOORS AND ROOFS, SHALL BE SPREAD OUT SUCH THAT THE DESIGN LIVE LOAD PER SQUARE FOOT IS NOT EXCEEDED. PROVIDE ADEQUATE SHORING IF OVERLOAD IS ANTICIPATED OR WHERE STRUCTURAL ELEMENTS HAVE NOT ATTAINED FULL DESIGN STRENGTH. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT CONSTITUTE ACCEPTANCE OF CONSTRUCTION MEANS AND METHODS.
13. SUBMIT SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION. CONTRACTOR SHALL REVIEW FOR COMPLETENESS AND COMPLIANCE WITH CONTRACT DOCUMENTS PRIOR TO SUBMISSION TO ARCHITECT (STRUCTURAL ENGINEER). ARCHITECT'S (STRUCTURAL ENGINEER'S) REVIEW IS FOR GENERAL CONFORMANCE WITH DESIGN INTENT AND DOES NOT CONSTITUTE AN AUTHORIZATION TO DEVIATE FROM TERMS AND CONDITIONS OF CONTRACT. WHEN INDICATED, THE SUBMITTAL SHALL BE SIGNED AND SEALED BY A PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA. MAINTAIN AT SITE A COPY OF REVIEWED AND ACCEPTED SUBMITTALS.
14. MODIFICATIONS AND SUBSTITUTIONS MUST BE ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER). NO MODIFICATION OR SUBSTITUTION WILL BE ACCEPTED VIA SHOP DRAWING REVIEW. MANUFACTURED MATERIALS SHALL BE APPROVED BY THE DSA PRIOR TO THEIR USE. ADHERE TO ALL CONDITIONS OF THOSE APPROVALS.
15. "TYPICAL DETAILS" ARE APPLICABLE THROUGHOUT CONSTRUCTION DOCUMENTS AND MAY NOT BE SPECIFICALLY REFERENCED THEREIN. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THESE TYPICAL DETAILS AND UNDERSTANDING EXTENT OF THEIR APPLICATION PRIOR TO PERFORMING WORK.
16. UNLESS SPECIFICALLY SHOWN ON THE PLANS NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER.
17. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 11, TITLE 24, CCR.
18. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

FOUNDATIONS

1. FOUNDATION DESIGN VALUES (2019 CBC TABLE 1806A.2):
- | | |
|-------------------------------|------------|
| BEARING CAPACITY..... | 1,500 PSF* |
| LATERAL BEARING PRESSURE..... | 100 PSF |
| LATERAL RESISTANCE..... | 130 PSF |
- *INCREASE BY ONE-THIRD FOR SHORT TERM LOADING ALLOWED PER CBC.
2. BOTTOM OF FOOTINGS SHALL BE A MINIMUM OF 18 INCHES BELOW LOWEST ADJACENT FLOOR OR GRADE AND 18 INCHES INTO RECOMMENDED BEARING MATERIAL (NATIVE EARTH MATERIALS). FOOTING DIMENSIONS SHALL NOT BE LESS THAN 24 INCHES FOR ISOLATED SPREAD FOOTINGS AND 12 INCHES FOR CONTINUOUS SPREAD FOOTINGS.
3. FOUNDATIONS MAY BE CAST DIRECTLY AGAINST EXCAVATIONS PROVIDED EXCAVATION IS CAPABLE OF MAINTAINING A VERTICAL CUT WITHOUT SLOUGHING.
4. CONCRETE SHALL NOT BE PLACED ON FROZEN GRADE. IF FOOTING IS SUBJECT TO FREEZING TEMPERATURES AFTER FOUNDATION CONSTRUCTION, THEN FOOTING SHALL BE ADEQUATELY PROTECTED FROM FREEZING.
5. CONTRACTOR TO PROVIDE FOR DEWATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER OR SEEPAGE. DEWATERING SHALL EFFECTIVELY ELIMINATE ANY HYDROSTATIC PRESSURE ON SHORING. ENSURE THAT CONTAMINATED WATER IS NOT DISPOSED OF IN PUBLIC SEWER OR STORM DRAIN SYSTEM AND ENSURE THAT DIRTY WATER IS NOT DISPOSED OF INTO PUBLIC RIGHT-OF-WAY.
6. UNLESS ADEQUATELY BRACED AND SHORED, RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL WALLS HAVE ATTAINED FULL DESIGN STRENGTH. FOR PIT WALLS AND BUILDING WALLS BELOW GRADE, BRACING AND SHORING SHALL REMAIN IN PLACE UNTIL ATTACHED FLOORS ARE PLACED, CURED FOR AT LEAST 7 DAYS, AND HAVE ATTAINED FULL DESIGN STRENGTH. BACKFILL PLACED IMMEDIATELY BEHIND RETAINING WALLS SHALL BE COMPACTED WITH HAND OPERATED EQUIPMENT.
7. SIDEWALKS OR PAVING IMMEDIATELY ADJACENT TO BUILDING PERIMETER SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING. LANDSCAPE IRRIGATION IS NOT PERMITTED WITHIN FIVE FEET OF BUILDING PERIMETER FOOTINGS EXCEPT WHEN ENCLOSED IN PROTECTED PLANTERS THAT DIRECT DRAINAGE AWAY FROM STRUCTURE AND FOUNDATIONS. DISCHARGE FROM DOWNSPOUTS, ROOF DRAINS AND SCUPPERS IS NOT PERMITTED ONTO UNPROTECTED SOILS WITHIN FIVE FEET OF BUILDING PERIMETER.

Agency Approval:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:

Consultant:



Agency Approval:

File No.: 37-C1

Facility:

PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:

WELDING YARD IMPROVEMENTS

Sheet Title:

GENERAL NOTES

DSA APPROVED SET

Date: 06/24/2021

Client Project No: 5015037000

Sheet:

STATEMENT OF SPECIAL INSPECTIONS (CONTINUED)

7. APPROVED AGENCY SHALL PERFORM SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE IN ACCORDANCE WITH CBC SECTION 1707A FOR THE FOLLOWING WORK:
- A. STRUCTURAL STEEL: REFER TO AISC 341 APPENDIX Q AND THE FOLLOWING NONDESTRUCTIVE TESTING (NDT) OF WELDS:
- 1) PROCEDURES
- a) ULTRASONIC TESTING (UT) SHALL BE PERFORMED ACCORDING TO THE PROCEDURES PRESCRIBED IN ANSIAISC 341-16 APPENDIX J, SECTION J6.
- b) MAGNETIC PARTICLE TESTING (MT) SHALL BE PERFORMED ACCORDING TO THE PROCEDURES PRESCRIBED IN ANSIAISC 341-16 APPENDIX J, SECTION J6.
- 2) REQUIRED NDT
- a) K-AREA NDT: WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES, OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, THE WEB SHALL BE TESTED FOR CRACKS USING MT. THE MT INSPECTION AREA SHALL INCLUDE THE K-AREA BASE METAL WITHIN 3 INCHES OF THE WELD.
- b) CJP GROOVE WELD NDT: UT SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16 INCH OR GREATER. UT IN MATERIAL LESS THAN 5/16 INCH THICK IS NOT REQUIRED. MT SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS.
- c) BASE METAL NOT FOR LAMELLAR TEARING AND LAMINATIONS: AFTER JOINT COMPLETION, BASE METAL THICKER THAN 1-1/2 INCHES LOADED IN TENSION IN THE THROUGH THICKNESS DIRECTION IN TEE AND CORNER JOINTS, WHERE THE CONNECTED MATERIAL IS GREATER THAN 3/4 INCH AND CONTAINS CJP GROOVE WELDS, SHALL BE UT FOR DISCONTINUITIES BEHIND AND ADJACENT TO THE FUSION LINE OF SUCH WELDS. ANY BASE METAL DISCONTINUITIES FOUND WITHIN T4 OF THE STEEL SURFACE SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1 TABLE 6.2, WHERE T IS THE THICKNESS OF THE PART SUBJECTED TO THE THROUGH-THICKNESS STRAIN.
8. APPROVED AGENCY SHALL PERFORM TESTING AND QUALIFICATION FOR SEISMIC RESISTANCE IN ACCORDANCE WITH CBC SECTION 1705A.12 FOR THE FOLLOWING WORK.
- 1) ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND WHERE THE REQUIREMENTS OF ASCE 7 SECTION 13.2.1, ITEM 2 ARE MET BY SUBMITTAL OF MANUFACTURER'S CERTIFICATION IN ACCORDANCE WITH ITEM 3, SHALL COMPLY WITH CBC SECTION 1705A.12.5 & 1705A.12.6.
9. DEFINITIONS
- A. CONTINUOUS – THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
- B. PERIODIC – THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF WORK.

NOTE: REFER TO DSA-103 FORM FOR ALL STRUCTURAL TESTING & SPECIAL INSPECTION REQUIREMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATION, AND DSA-103 FORM, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

POST INSTALLED ANCHORS

1. ALL POST INSTALLED ANCHORS SHALL COMPLY WITH REQUIREMENTS OF THE CORRESPONDING ICC-ESR REPORTS.
2. POST-INSTALLED ANCHORS OF EQUAL QUALITY AND WITH CURRENT ICC-ES REPORT MAY BE SUBSTITUTED IF APPROVED BY THE ARCHITECT (STRUCTURAL ENGINEER).
3. EXPANSION ANCHORS:
- A. HILTI KWIK BOLT T22 EXPANSION ANCHORS IN ACCORDANCE WITH ICC-ES REPORT NO. 4266 INTO CONCRETE.
4. INSTALLATION: PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND REFERENCED ICC EVALUATION REPORT.
- A. DRILLING HOLES IN EXISTING CONCRETE: USE ONLY NON-REBAR CUTTING DRILL BITS TO DRILL HOLES. LOCATE EXISTING REBAR BY NON-DESTRUCTIVE MEANS PRIOR TO DRILLING HOLES. DO NOT CUT OR DAMAGE EXISTING REBAR. PROVIDE MINIMUM 1" CLEARANCE BETWEEN REINFORCING AND ANCHOR.
- B. DELETERIOUS MATERIALS: KEEP ANCHORS FREE OF DUST, GREASE, AND OTHER MATERIALS WHICH WILL IMPAIR BOND WITH CONCRETE.
- C. ALL ANCHORS SHALL MEET THE MINIMUM EMBEDMENT AND SPACING, EDGE DISTANCE AND SIDE THICKNESS CRITERIA ESTABLISHED BY THE RELEVANT ICC-ES REPORT. UNLESS NOTED OTHERWISE IN REPORT, ANCHOR EDGE DISTANCE SHALL BE A MINIMUM OF 10 BOLT DIAMETERS FROM ANY FREE EDGE OF THE SLAB AND SHALL BE SPACED A MINIMUM 12 BOLT DIAMETERS CENTER TO CENTER.
- D. DO NOT DRILL HOLES WITHIN 4 INCHES OF EXISTING ELECTRICAL OUTLETS THAT ARE EMBEDDED IN SUBSTRATE.
5. BRING TO THE ATTENTION OF THE ARCHITECT (STRUCTURAL ENGINEER) ANY POST-INSTALLED ANCHOR LOCATION THAT CANNOT COMPLY WITH THE PARAMETERS STATED HEREIN AND INDICATED ON THE DRAWINGS.
6. TESTING AND INSTALLATION OF POST-INSTALLED ANCHORS SHALL COMPLY WITH THE FOLLOWING:

EXPANSION ANCHOR BOLTS

1. ALL FIELD INSTALLED CONCRETE EXPANSION ANCHORS SHALL BE APPROVED FOR THE TYPE AND INSTALLATION, FOR ITS APPLICATION, AND MATERIALS. ALL BOLTS SHALL HAVE AN APPROVED ICC EVALUATION REPORT.
2. ALL EXPANSION TYPE ANCHORS SHALL BE TENSION TESTED AS REQUIRED BY CBC 1910A.5 WHERE ANCHORS ARE USED FOR NON-STRUCTURAL APPLICATIONS SUCH AS EQUIPMENT ANCHORAGE, 50% OF ALL ANCHORS AND EACH BOLT GROUP SHALL BE TENSION TESTED.
3. ALL ANCHORS SHALL BE TESTED PER CORRESPONDING ICC-ESR REPORTS AND AS FOLLOWS:
- A. ANCHOR DIAMETER REFERS TO THE THREAD SIZE FOR A WEDGE AND TO THE ANCHOR OUTSIDE DIAMETER FOR THE SLEEVE CATEGORY.
- B. APPLY PROOF TEST LOADS TO WEDGE AND SLEEVE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE THE NUT AND INSTALL A THREADED COUPLER NUT TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH AND APPLY LOAD.
- C. FOR SLEEVE/SHELL INTERNALLY THREADED CATEGORIES, VERIFY THAT THE ANCHOR IS NOT PREVENTED FROM WITHDRAWING BY A BASE PLATE OR OTHER FIXTURES. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE FIXTURE(S) PRIOR TO TESTING.
- D. 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).
- E. TEST EQUIPMENT SHALL BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
- F. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS: HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE.
- TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT ONE-QUARTER (1/4) TURN OF THE NUT FOR THE 3/8 IN. SLEEVE ANCHOR ONLY.
- G. TORQUE TEST SHALL BE PERFORMED WITH THE INSTALLATION TORQUE SPECIFIED IN THE FOLLOWING TABLE FOR EXPANSION ANCHORS INSTALLED IN CONCRETE:

HILTI KB-T22 TORQUE TEST VALUES IN CONCRETE PER ICC REPORT #ESR-4266					
DIAMETER	1/4"	3/8"	1/2"	5/8"	3/4"
TORQUE (CARBON STEEL)	4 FT-LB	30 FT-LB	50 FT-LB	40 FT-LB	110 FT-LB
TORQUE (STAINLESS STEEL)	6 FT-LB	30 FT-LB	40 FT-LB	60 FT-LB	125 FT-LB

THE ANCHOR MANUFACTURER RECOMMENDED INSTALLATION TORQUE AS PUBLISHED IN THE CURRENT ICC-ES REPORT SHALL TAKE PRECEDENCE OVER TABULATED VALUES ABOVE.

STRUCTURAL OBSERVATION

1. STRUCTURAL OBSERVATION IS REQUIRED FOR THE STRUCTURAL SYSTEM IN ACCORDANCE WITH SECTION 1704A.6 OF THE CALIFORNIA BUILDING CODE (CBC). STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION AT THE CONSTRUCTION SITE OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES, AND THE COMPLETE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY THE DIVISION OF STATE ARCHITECT SPECIAL INSPECTOR OR THE DEPUTY INSPECTOR.
2. THE OWNER SHALL EMPLOY A STATE OF CALIFORNIA REGISTERED CIVIL OR STRUCTURAL ENGINEER OR LICENSED ARCHITECT TO PERFORM THE STRUCTURAL OBSERVATION. THE GOVERNING CODE AUTHORITY RECOMMENDS THE USE OF THE ENGINEER OR ARCHITECT, OR HIS/HER DESIGNEE RESPONSIBLE FOR THE STRUCTURAL DESIGN WHO ARE INDEPENDENT OF THE CONTRACTOR.
3. THE PROJECT INSPECTOR SHALL COORDINATE AND CALL FOR A MEETING BETWEEN THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTORS. THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY MAJOR STRUCTURAL ELEMENTS AND CONNECTIONS THAT AFFECT VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS. A RECORD OF THE MEETING SHALL BE INCLUDED IN THE FIRST OBSERVATION REPORT SUBMITTED TO THE PROJECT INSPECTOR.
4. THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED. AT A MINIMUM, THE LISTED SIGNIFICANT CONSTRUCTION STAGES ON THE "STRUCTURAL OBSERVATION/SIGNIFICANT CONSTRUCTION STAGES TABLE"(HERE IN BELOW) REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER.
5. THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT FOR EACH SIGNIFICANT STAGE OF CONSTRUCTION OBSERVED. THE ORIGINAL OF THE STRUCTURAL OBSERVATION REPORT SHALL BE SENT TO THE PROJECT INSPECTOR'S OFFICE AND SHALL BE SIGNED AND SEALED (WET STAMP) BY THE RESPONSIBLE STRUCTURAL OBSERVER. ONE COPY OF THE OBSERVATION REPORT SHALL BE ATTACHED TO THE APPROVED PLANS. THE COPY ATTACHED TO PLANS SHALL BE SIGNED AND SEALED (WET STAMP) BY THE RESPONSIBLE STRUCTURAL OBSERVER OR THEIR DESIGNEE. COPIES OF REPORT SHALL ALSO BE GIVEN TO THE OWNER, CONTRACTOR, AND DEPUTY INSPECTOR. ANY DEFICIENCIES NOTED ON THE OBSERVATION REPORT WILL BECOME THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OR ARCHITECT OF RECORD TO VERIFY ITS COMPLETION BY THE STRUCTURAL OBSERVER.
6. A FINAL OBSERVATION REPORT MUST BE SUBMITTED WHICH SHOWS THAT ALL OBSERVED DEFICIENCIES WERE RESOLVED AND STRUCTURAL SYSTEM GENERALLY CONFORMS WITH THE APPROVED PLANS AND SPECIFICATIONS. THE DIVISION OF THE STATE ARCHITECT WILL NOT ACCEPT THE STRUCTURAL WORK WITHOUT THIS FINAL OBSERVATION REPORT AND THE CORRECTION OF SPECIFIC DEFICIENCIES NOTED DURING NORMAL BUILDING INSPECTION.
7. THE STRUCTURAL OBSERVER SHALL PROVIDE THE ORIGINAL STAMPED AND SIGNED STRUCTURAL OBSERVATION REPORT TO THE DEPUTY INSPECTOR.
8. WHEN THERE IS A NEED TO REPLACE THE STRUCTURAL OBSERVER OF RECORD, THE OWNER SHALL:
- A. NOTIFY THE DEPUTY INSPECTOR IN WRITING BEFORE THE NEXT INSPECTION
- B. CALL AN ADDITIONAL PRECONSTRUCTION MEETING, AND
- C. FURNISH THE REPLACEMENT STRUCTURAL OBSERVER WITH A COPY OF ALL PREVIOUS OBSERVATION REPORTS.
- D. THE NEW STRUCTURAL OBSERVER MUST BE DESIGNATED BY THE STRUCTURAL OR ARCHITECT OF RECORD.

THE REPLACEMENT STRUCTURAL OBSERVER SHALL APPROVE THE CORRECTION OF THE ORIGINAL OBSERVED DEFICIENCIES UNLESS OTHERWISE APPROVED BY THE OWNER. THE POLICY OF THE OWNER IS TO CORRECT ANY PROPERLY NOTED DEFICIENCIES WITHOUT CONSIDERATION OF THEIR SOURCE.

9. THE ENGINEER OR ARCHITECT OF RECORD WILL DEVELOP ALL CHANGES RELATING TO THE STRUCTURAL SYSTEMS, THE OWNER SHALL REVIEW AND APPROVE ALL CHANGES TO THE APPROVED PLANS AND SPECIFICATIONS.
10. SIGNIFICANT CONSTRUCTION STAGES ARE THE STAGES OF CONSTRUCTION IDENTIFIED BY THE ENGINEER OBSERVER AS SIGNIFICANT AND REQUIRE SITE STRUCTURAL OBSERVATION.

STRUCTURAL OBSERVATION/SIGNIFICANT CONSTRUCTION STAGES TABLE

CONST STAGE	CONST TYPE	ELEMENTS/CONNECTIONS TO BE OBSERVED
FRAMING	FRAMES	STEEL ERECTED
FOUNDATIONS	FOUNDATIONS	REINFORCING PLACEMENT PRIOR TO FIRST POUR
COMPLETION	OVERALL STRUCTURE	ALL OBSERVED DEFICIENCIES RESOLVED GENERAL CONFORMANCE TO APPROVED DOCUMENTS

STATEMENT OF SPECIAL INSPECTIONS

1. AN APPROVED AGENCY, RETAINED BY THE OWNER AND SATISFACTORY TO ARCHITECT (STRUCTURAL ENGINEER) SHALL PERFORM REQUIRED TESTS AND SPECIAL INSPECTIONS OF THIS CONTRACT AND APPLICABLE CODE. AN APPROVED AGENCY IS AN ESTABLISHED AND RECOGNIZED AGENCY REGULARLY ENGAGED IN CONDUCTING TESTS AND/OR FURNISHING INSPECTION SERVICES, WHEN SUCH AN AGENCY IS APPROVED.
2. APPROVED AGENCY SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH INSPECTION REPORTS TO GOVERNING CODE AUTHORITY AND THE ARCHITECT (STRUCTURAL ENGINEER). REPORTS SHALL INDICATE WHETHER THE WORK INSPECTED WAS DONE IN CONFORMANCE OR NONCONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. NONCONFORMITIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF NOT CORRECTED, THE NONCONFORMITIES SHALL BE BROUGHT TO THE ATTENTION OF THE GOVERNING CODE AUTHORITY AND THE ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF NONCONFORMITIES SHALL BE SUBMITTED UPON COMPLETION OF WORK.
3. WHERE FABRICATION OF STRUCTURAL MEMBERS AND ASSEMBLIES IS PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF FABRICATED ITEMS ARE REQUIRED IN ACCORDANCE WITH CBC SECTION 1704A.2.5. SPECIAL INSPECTIONS ARE NOT REQUIRED WHERE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE DSATO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.
4. CONTRACTOR SHALL SUBMIT MATERIAL CERTIFICATION OR LABORATORY TEST REPORTS CERTIFYING MATERIALS ARE OF IDENTIFIABLE TESTED STOCK, COMPLYING WITH PROJECT SPECIFICATIONS, TO THE DISTRICT, APPROVED AGENCY, ARCHITECT (STRUCTURAL ENGINEER) AND, UPON REQUEST, OWNER. IF LABORATORY TEST REPORTS CANNOT BE MADE AVAILABLE, APPROVED AGENCY WILL PERFORM TESTS AS DIRECTED BY ARCHITECT (STRUCTURAL ENGINEER). CONTRACTOR SHALL PAY FOR COSTS RELATED TO TESTS AND INSPECTIONS OF UNIDENTIFIABLE MATERIALS. MATERIALS FURNISHED WITHOUT LABORATORY TEST REPORTS, MATERIALS FOUND DEFICIENT AFTER INITIAL TESTS AND INSPECTIONS, AND/OR MATERIALS REPLACING DEFICIENT MATERIALS.
5. APPROVED AGENCY SHALL SUBMIT MATERIAL TEST REPORTS INDICATING WHETHER TESTED MATERIALS ARE IN COMPLIANCE OR NONCOMPLIANCE WITH CONTRACT DOCUMENTS TO OWNER, CONTRACTOR, ARCHITECT (STRUCTURAL ENGINEER).
6. APPROVED AGENCY SHALL PERFORM SPECIAL INSPECTIONS IN ACCORDANCE WITH CBC SECTION 1705A AND WITH THIS SHEET FOR THE FOLLOWING WORK. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL TEST AND INSPECTION REQUIREMENTS.
- A. CONCRETE CONSTRUCTION: SEE TABLE 1705A.3 AND CBC SECTION 1705A.3.
- B. STEEL CONSTRUCTION: SEE TABLE 1705A.2.1 AND CBC SECTION 1705A.2.

MECHANICAL, ELECTRICAL AND PLUMBING (MEP) SYSTEMS

1. THE ANCHORAGE DETAILS FOR MEP EQUIPMENT PROVIDED IN THE DRAWINGS HAVE BEEN REVIEWED AND APPROVED BY DSA. CONTRACTOR SHALL SUBMIT THE EQUIPMENT ANCHORAGE INFORMATION LISTED BELOW TO JUSTIFY THE USE OF THE ANCHORAGE DETAILS IN THESE DRAWINGS, FOR REVIEW AND ACCEPTANCY BY THE DESIGN TEAM.
- A. SHOW THAT THE ACTUAL OPERATING WEIGHT OF EQUIPMENT IS EQUAL TO OR LESS THAN THE EQUIPMENT WEIGHT SHOWN ON THE DRAWINGS.
- B. SHOW THAT THE ACTUAL HEIGHT OF THE EQUIPMENT AND/OR HEIGHT TO CENTER OF GRAVITY ARE NOT GREATER THAN 10 PERCENT OF THE DIMENSIONS SHOWN ON THE DRAWINGS.
- C. SHOW THAT THE ACTUAL PLAN DIMENSIONS OF EQUIPMENT (WIDTH AND LENGTH) ARE NOT LESS THAN THE DIMENSIONS SHOWN ON THE DRAWINGS.
- D. SHOW THAT THE ACTUAL EQUIPMENT ANCHOR DETAILS CLEARLY MATCH THE ANCHORAGE DETAILS SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL PROVIDE THE EQUIPMENT ANCHORAGE DESIGN FOR EACH PIECE OF EQUIPMENT WHERE THE ANCHORAGE DETAILS ON THE DRAWINGS DO NOT ADHERE TO NOTE 1, OR ARE BEING SUBSTITUTED. FOR EQUIPMENT THAT THE CONTRACTOR MUST PROVIDE THE ANCHORAGE DESIGN, THE CONTRACTOR SHALL SUBMIT THE ITEMS LISTED BELOW, FOR REVIEW AND ACCEPTANCY BY THE DESIGN TEAM, SEOR AND DSA.
- A. EQUIPMENT ANCHORAGE DETAILS THAT CLEARLY SHOW THE METHOD OF ATTACHMENT AND BRACING TO THE STRUCTURE. THESE DETAILS SHALL BE COORDINATED WITH THE ACTUAL STRUCTURAL SYSTEM ON THIS PROJECT. ICC-EC REPORT NUMBERS SHALL BE PROVIDED IN THE DETAILS FOR ALL ANCHORAGE. IF PRE-APPROVED OSHPD SYSTEM IS USED THEN PRE-APPROVED NUMBER SHALL BE SHOWN. DETAILS SHALL BE STAMPED AND SIGNED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF CALIFORNIA.
- B. EQUIPMENT ANCHORAGE CALCULATIONS DESIGNING ALL OF THE COMPONENTS OF THE ANCHORAGE SYSTEM. THE CALCULATIONS SHALL CLEARLY SHOW THE MAGNITUDE AND LOCATION OF THE FORCES IMPOSED ON THE STRUCTURE. CALCULATIONS SHALL BE STAMPED AND SIGNED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF CALIFORNIA.
3. SUSPENDED UTILITIES SUPPORT AND BRACING NOTES:
CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT OF THE SUPPORT AND BRACING SYSTEMS FOR SUSPENDED PIPING, DUCTWORK, CONDUIT AND CABLE TRAYS.
SUSPENDED PIPING, DUCTWORK, CONDUIT AND CABLE TRAYS SHALL BE SUPPORTED AND BRACED IN ACCORDANCE WITH PRE-APPROVED OSHPD STANDARDS NOTED ON MEP DRAWINGS

COPIES OF THE OPM MANUALS SHALL BE ON THE JOB SITE PRIOR TO STARTING HANGING AND BRACING OF THE SUSPENDED PIPING, DUCTWORK, CONDUIT AND CABLE TRAYS. ONE COPY OF THE MANUAL SHALL BE MADE AVAILABLE TO THE INSPECTOR OF RECORD (IOR) AT ALL TIMES.

HANGING LOADS AND BRACING SHALL NOT IMPOSE ANY LATERAL OR TORSIONAL FORCES ON THE STEEL BEAM BOTTOM FLANGES. HANGERS SHALL BE CONCENTRIC TO STEEL BEAMS. CONCRETE SLABS, CONCRETE BEAMS OR BOTTOM FLUTE OF CONCRETE SLABS ON METAL DECK. LATERAL BRACES SHALL BE CONNECTED TO THE TOP FLANGE OF STEEL BEAMS WHICH ARE CONNECTED TO METAL DECK OR TO CONCRETE SLABS ON METAL DECK. HANGERS AND LATERAL BRACES SHALL NOT BE CONNECTED TO BARE METAL DECK. POST-INSTALLED ANCHORS SHALL NOT BE USED IN POST-TENSIONED SLABS AND BEAMS.

CONTRACTOR SHALL SUBMIT THE ITEMS LISTED BELOW PERTAINING TO THE SUPPORT AND BRACING OF SUSPENDED PIPING, DUCTWORK, CONDUIT AND CABLE TRAYS THAT WILL BE REVIEWED AND ACCEPTED BY THE ARCHITECT (STRUCTURAL ENGINEER):

A. SUPPORT AND BRACING DETAILS TO BE USED ON THE PROJECT. DETAILS SHALL CLEARLY SHOW HOW SYSTEMS ARE CONNECTED TO THE STRUCTURE AND ARE COORDINATED WITH THE ACTUAL STRUCTURAL SYSTEMS ON THE PROJECT.

B. FLOOR PLAN LAYOUTS SHOWING CONNECTION LOCATIONS TO STRUCTURE AND THE DESIGN FORCES IMPOSED ON THE STRUCTURE AT THESE LOCATIONS.

C. WHERE PRE-APPROVED OSHPD SYSTEMS DO NOT COVER A SPECIFIC CONDITION, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SUPPORT DETAILS AND CALCULATIONS - TO BE SUBMITTED AS CCD FOR DSA APPROVAL.

D. ALL SUPPORT DETAILS AND CALCULATIONS SHALL BE STAMPED AND SIGNED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF CALIFORNIA.

4. CONTRACTOR TO VERIFY DIMENSIONS OF UNIT AND ANCHOR POINTS, HOLES, PLATES ETC. PRIOR TO INSTALLATION OF BACKING PLATES, DRILLING HOLES IN SLAB, ETC.
5. REFER TO MEP COMPONENT ANCHORAGE NOTES ON SHEET E0.0.

Agency Approval:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

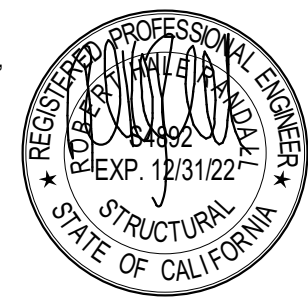
No.	Issued	Date	No.	Issued	Date

Keynotes:

Consultant:

sb
saiful-bouquet
structural engineers

2020 Camino Del Rio North,
Suite 305,
San Diego, CA 92121
Telephone 619.630.9199
www.saifulbouquet.com
SB Job No:20634



Agency Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
GENERAL NOTES

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:

S0.02

ABBREVIATIONS		
---------------	--	--

#	POUNDS, NUMBER
&	AND
@	AT
°	DEGREE
±	PLUS OR MINUS
≤	LESS THAN OR EQUAL TO
≥	GREATER THAN OR EQUAL TO

<	LESS THAN
---	-----------

A		
A	AA	ADHESIVE ANCHOR
A	AB	ANCHOR BOLT(S)
A	ABV	ABOVE
A	ADDL	ADDITIONAL
A	ADDN	ADDITION
A	ADJ	ADJACENT, ADJUSTABLE
A	AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
A	ALT	ALTERNATE
A	ANCH	ANCHOR
A	APPROX	APPROXIMATE
A	AR	ALL AROUND
A	ARCH	ARCHITECTURAL

B		
B	BAL	BALANCE
B	BC	BOTTOM CHORD
B	BE	BOUNDARY ELEMENT
B	BEL	BELOW
B	BLDG	BUILDING
B	BLKG	BLOCKING
B	BLL	BOTTOM LOWER LAYER
B	BM	BEAM
B	BN	BOUNDARY NAILING
B	BOTTOM OF	
B	BOBP	BOTTOM OF BASE PLATE
B	BOS	BOTTOM OF STEEL
B	BOT	BOTTOM
B	BP	BASE PLATE
B	BPL	BEARING PLATE
B	BRB	BUCKLING-RESTRAINED BRACE
B	BRBF	BUCKLING-RESTRAINED BRACED FRAME
B	BRCG	BRACING
B	BRDG	BRIDGING
B	BRG	BEARING
B	BS	BOTH SIDES
B	BSMT	BASEMENT
B	BTWN	BETWEEN
B	BU	BUILT-UP
B	BUL	BOTTOM UPPER LAYER
B	BYD	BEYOND

C		
C	C	CAMBER
C	CA	COLUMN ABOVE
C	CANT	CANTILEVER
C	CB	COLUMN BELOW
C	CC	CENTER TO CENTER
C	CF	CUBIC FEET
C	CHKD	CHECKERED
C	CIP	CAST-IN-PLACE
C	CJ	CONSTRUCTION JOINT
C	CJP	COMPLETE JOINT PENETRATION
C	CL	CENTERLINE
C	CLG	CEILING
C	CLR	CLEAR
C	CLSM	CONTROL LOW STRENGTH MATERIAL
C	CMU	CONCRETE MASONRY UNIT
C	COL	COLUMN
C	CONC	CONCRETE
C	CONN	CONNECTION
C	CONST	CONSTRUCTION
C	CONT	CONTINUOUS, CONTINUITY
C	CONTR	CONTRACTOR
C	COORD	COORDINATE, COORDINATES
C	CTR	CENTER
C	CTRL JT	CONTROL JOINT
C	CVN	CHARPY V-NOTCH
C	CY	CUBIC YARD
C	CYL	CYLINDER

D		
D	DBA	DEFORMED BAR ANCHOR
D	DBL	DOUBLE
D	DBLR	DOUBLER
D	DEG	DEGREE
D	DEGF	DEGREE FAHRENHEIT
D	DEPR	DEPRESS, DEPRESSED, DEPRESSION
D	DET	DETAIL
D	DF-L	DOUGLAS FIR - LARCH
D	DIA	DIAMETER
D	DIAG	DIAGONAL
D	DIAPH	DIAPHRAGM
D	DIM	DIMENSION
D	DL	DEAD LOAD
D	DN	DOWN
D	DO	DITTO
D	DWG	DRAWING
D	DWL	DOWEL

E		
E	(E)	EXISTING
E	EA	EACH
E	EB	EXPANSION (ANCHOR) BOLT
E	EBF	ECCENTRICALLY BRACED FRAME
E	EF	EACH FACE
E	EFF	EFFECTIVE

E		
E	EJ	EXPANSION JOINT
E	EL	ELEVATION
E	ELEC	ELECTRICAL
E	ELEV	ELEVATOR
E	EMBD	EMBEDMENT, EMBED
E	EN	EDGE NAILING
E	ENGR	ENGINEER
E	EOR	ENGINEER OF RECORD
E	EOS	EDGE OF SLAB
E	EPL	EMBEDDED PLATE
E	EQ	EQUAL
E	EQUIP	EQUIPMENT
E	ES	EACH SIDE
E	ESC	ESCALATOR
E	EW	EACH WAY
E	EWTB	EACH WAY TOP AND BOTTOM
E	EXC	EXCAVATE
E	EXP	EXPANSION
E	EXT	EXTERIOR

F		
F	F	FAHRENHEIT
F	FAB	FABRICATE, FABRICATION
F	FCAW	FLUX CORED ARC WELDING
F	FDN	FOUNDATION
F	FF	FAR FACE
F	FIN	FINISH
F	FJ	FLOOR JOIST
F	FLG	FLANGE
F	FLR	FLOOR
F	FN	FIELD NAILING
F	FO	FACE OF
F	FOC	FACE OF CONCRETE
F	FOF	FACE OF FINISH
F	FOGB	FACE OF GYPSUM BOARD
F	FOS	FACE OF STUD
F	FOW	FACE OF WALL
F	FP	FIREPROOF, FIREPROOFING
F	FRMG	FRAMING
F	FS	FAR SIDE
F	FT	FOOT, FEET, FLUSH TOP
F	FTG	FOOTING
F	FUT	FUTURE

G		
G	GA	GAGE, GAUGE
G	GALV	GALVANIZED
G	GEN	GENERAL
G	GFRC	GLASS FIBER REINFORCED CONCRETE
G	GLB	GLUE-LAMINATED BEAM
G	GMAW	GAS METAL ARC WELDING
G	GOL	GAGE OF ANGLE
G	GR	GRADE
G	GRTG	GRATING
G	GT	GROUND

H		
H	HAZ	HEATED AFFECTED ZONE
H	HCA	HEADED CONCRETE ANCHOR
H	HDB	HEADED DEFORMED BAR
H	HDG	HOT DIPPED GALVANIZED
H	HDR	HEADER
H	HGR	HANGER
H	HI, (H)	HIGH
H	HORIZ, (H)	HORIZONTAL
H	HP	HIGH POINT
H	HR	HANDRAIL
H	HS	HIGH STRENGTH
H	HSB	HIGH STRENGTH BOLT
H	HT	HEIGHT

I		
I	IF	INSIDE FACE
I	ICC-ES	INTERNATIONAL CODE COUNCIL EVALUATION SERVICE
I	ID	INSIDE DIAMETER
I	IE	INVERT ELEVATION
I	IMF	INTERMEDIATE MOMENT FRAME
I	IN	INCH
I	INFO	INFORMATION
I	INSP	INSPECTION, INSPECTOR
I	INSU	INSULATING
I	INT	INTERIOR
I	INTER	INTERMEDIATE
I	IRMSW	INTERMEDIATE REINFORCED MASONRY SHEAR WALL

J		
J	JST	JOIST
J	JT	JOINT

K		
K	K	KIP (KILOPOUND)(1000 POUNDS)
K	KSF	KIP PER SQUARE FOOT
K	KSI	KIP PER SQUARE INCH

L		
L	LAM	LAMINATED
L	LB	LAG BOLT, POUND
L	LG	LONG
L	LL	LIVE LOAD
L	LLBB	LONG LEG BACK TO BACK
L	LLH	LONG LEG HORIZONTAL
L	LLV	LONG LEG VERTICAL
L	LNDG	LANDING
L	LNTL	LINTEL
L	LO, (L)	LOW
L	LONGIT	LONGITUDINAL
L	LP	LOW POINT
L	LSH	LONG SLOTTED HOLE

L		
L	LTWT	LIGHTWEIGHT
L	LVL	LAMINATED VENEER LUMBER
L	LWC	LIGHTWEIGHT CONCRETE

M		
M	MAX	MAXIMUM
M	MB	MACHINE BOLT
M	MC	MOMENT CONNECTION
M	MECH	MECHANICAL
M	MEMB	MEMBER, MEMBRANE
M	MEZZ	MEZZANINE
M	MFR	MANUFACTURE(R)
M	MIN	MINIMUM
M	MISC	MISCELLANEOUS
M	MOV	MOVABLE
M	MR	MILD REINFORCED, MILD REINFORCING
M	MT	MAGNETIC PARTICLE TESTING
M	MTL	METAL
M	MWFRS	MAIN WIND-FORCE RESISTING SYSTEM

N		
N	(N)	NEW
N	NDT	NON-DESTRUCTIVE TESTING
N	NF	NEAR FACE
N	NIC	NOT IN CONTRACT
N	NIP	NOT IN PERMIT
N	NO	NUMBER, NORTH
N	NOM	NOMINAL
N	NS	NEAR SIDE
N	NTS	NOT TO SCALE
N	NWC	NORMAL WEIGHT CONCRETE

O		
O	O.F	OUTSIDE FACE
O	O/	OVER
O	OC	ON CENTER
O	OCBF	ORDINARY CONCENTRICALLY BRACED FRAME
O	OD	OUTSIDE DIAMETER
O	OH	OPPOSITE HAND
O	OMF	ORDINARY MOMENT FRAME
O	OPNG	OPENING
O	OPP HD	OPPOSITE HAND
O	ORCSW	ORDINARY REINFORCED CONCRETE SHEAR WALL
O	ORMSW	ORDINARY REINFORCED MASONRY SHEAR WALL
O	OSB	ORIENTED STRAND BOARD
O	OVS	OVERSIZED
O	OZ	OUNCE

P		
P	P/C	PRECAST
P	PAF	POWDER ACTUATED FASTENER
P	PAR	PARALLEL
P	PC	PIECE, PILECAP
P	PCF	POUNDS PER CUBIC FOOT
P	PERP	PERPENDICULAR
P	PJ	POUR JOINT
P	PJP	PARTIAL JOINT PENETRATION
P	PL	PLATE
P	PLATF	PLATFORM
P	PLCS	PLACES
P	PLF	POUNDS PER LINEAR FOOT
P	PLMB	PLUMBING
P	PLWD	PLYWOOD
P	POT	POINT OF TANGENCY
P	POR	PROCEDURE QUALIFICATION RECORD
P	PREFAB	PREFABRICATED
P	PRKG	PARKING
P	PROJ	PROJECTION
P	PS	PRESTRESS(ED)
P	PSF	POUNDS PER SQUARE FOOT
P	PSI	POUNDS PER SQUARE INCH
P	PSL	PARALLEL STRAND LUMBER
P	PT	POST-TENSION(ED), LIQUID PENETRANT TESTING
P	PTDF	PRESSURE TREATED DOUGLAS FIR
P	PWJ	PLYWOOD WEB JOIST

R		
R	PAF	POWER ACTUATED FASTENER
R	R	RADIUS, RISER
R	RAD	RADIANS
R	RBS	REDUCED BEAM SECTION
R	REF	REFERENCE
R	REINF	REINFORCING
R	REMV	REMOVABLE, REMOVE
R	REQD	REQUIRED
R	RET	RETURN
R	RF	ROOF
R	RJ	ROOF JOIST
R	ROTN	ROTATION
R	RT	RADIOGRAPHIC TESTING
R	RTNG	RETAINING

S		
S	>	GREATER THAN
S	SA	SCREW ANCHOR
S	SAD	SEE ARCHITECTURAL DRAWING(S)
S	SAW	SUBMERGED ARC WELDING
S	SCBF	SPECIAL CONCENTRICALLY BRACED FRAME
S	SCHED	SCHEDULE
S	SCL	STRUCTURAL COMPOSITE LUMBER
S	SECT	SECTION
S	SEOR	STRUCTURAL ENGINEER OF RECORD
S	SEP	SEPARATION
S	SF	SQUARE FEET
S	SHT	SHEET
S	SHTHG	SHEATHING
S	SIM	SIMILAR

S		
S	SL	SLOPE
S	SLBB	SHORT LEG BACK TO BACK
S	SLRS	SEISMIC LOAD RESISTING SYSTEM
S	SLV	SLEEVE
S	SMAW	SHIELDED METAL ARC WELDING
S	SMF	SPECIAL MOMENT FRAME
S	SMS	SHEET METAL SCREW
S	SO	SOUTH
S	SOF	SOFFIT
S	SOG	SLAB-ON-GRADE
S	SOMD	SLAB ON METAL DECK
S	SP	SURFACE PREPARATION
S	SPEC	SPECIFICATIONS, SPECIAL
S	SPSW	SPECIAL PLATE SHEAR WALL
S	SQ	SQUARE
S	SRCSW	SPECIAL REINFORCED CONCRETE SHEAR WALL
S	SRMSW	SPECIAL REINFORCED MASONRY SHEAR WALL
S	SS	STAINLESS STEEL
S	SSH	SHORT SLOTTED HOLE
S	SSPC	STEEL STRUCTURES PAINTING COUNCIL
S	STA	STATION
S	STAG	STAGGER
S	STD	STANDARD
S	STIF	STIFFENER
S	STIR	STIRRUP
S	STL	STEEL
S	STMF	SPECIAL TRUSS MOMENT FRAME
S	STRUCT	STRUCTURAL
S	SW	STUD WELDING
S	SWBC	SHEAR WALL BOUNDARY COLUMN
S	SYMM	SYMMETRY

T		
T	T	TREAD, TOP
T	T&B	TOP AND BOTTOM
T	T.O	TOP OF
T	T/	TOP OF
T	TAR	TYPICAL ALL AROUND
T	TC	TOP CHORD
T	TEMP	TEMPORARY, TEMPERATURE
T	THD	THREAD
T	THK	THICK, THICKNESS
T	THRU	THROUGH
T	TLL	TOP LOWER LAYER
T	TOBS	TOP OF BUILT-UP SLAB
T	TOC	TOP OF CONCRETE
T	TOD	TOP OF STEEL DECK
T	TOF	TOP OF FOOTING
T	TOG	TOP OF GRATING
T	TOPC	TOP OF PILE CAP
T	TOS	TOP OF STEEL
T	TOW	TOP OF WALL
T	TUL	TOP UPPER LAYER
T	TYP	TYPICAL

U		
U	UNO	UNLESS NOTED OTHERWISE
U	UT	ULTRASONIC TESTING

V		
V	VERT, (V)	VERTICAL
V	VIF	VERIFY IN FIELD

W		
W	W/	WITH
W	W/O	WITHOUT
W	WD	WOOD
W	WF	WIDE FLANGE
W	WL	WORK LINE
W	WP	WORK POINT
W	WPS	WELD PROCEDURE SPECIFICATIONS
W	WSP	WOOD STRUCTURAL PANEL
W	WT	WEIGHT
W	WWR	WELDED WIRE REINFORCEMENT

SHEET NUMBER	SHEET NAME
S0.XX SERIES - GENERAL	
S0.01	GENERAL NOTES
S0.02	GENERAL NOTES
S0.03	ABBREVIATIONS
S0XX - TYPICAL DETAILS	
S0.10	TYPICAL CONCRETE DETAILS
S0.11	TYPICAL DETAILS
S2.XX SERIES - PLANS	
S2.01	WELDING EXHAUST PLANS
S3.XX SERIES - CONCRETE FOUNDATION SCHEDULES	
S3.01	SECTIONS AND DETAILS
GRAND TOTAL: 7	

Agency Approval:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:

Consultant:



Agency Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

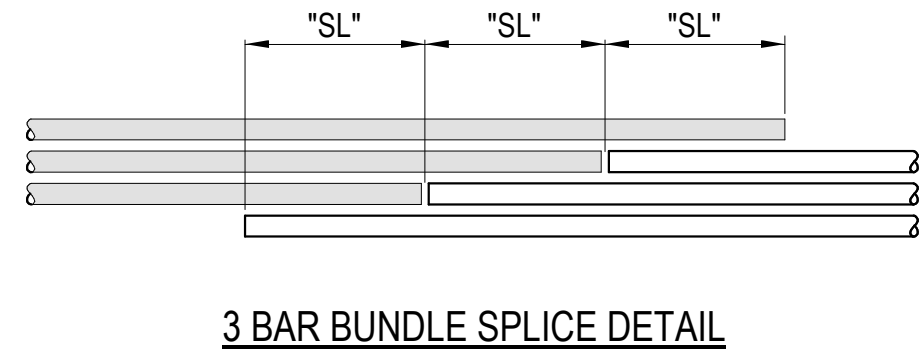
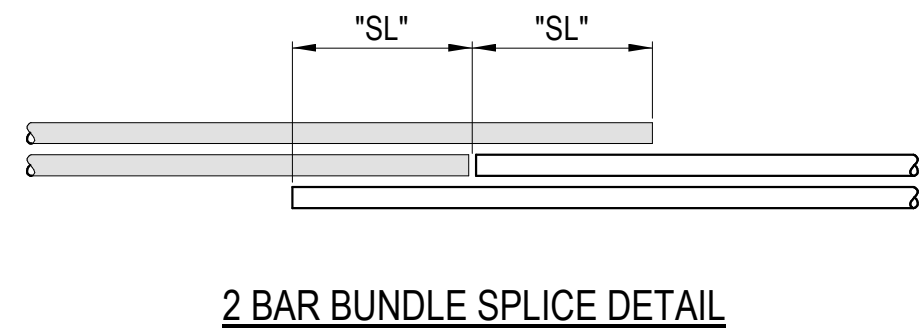
Sheet Title:
ABBREVIATIONS

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

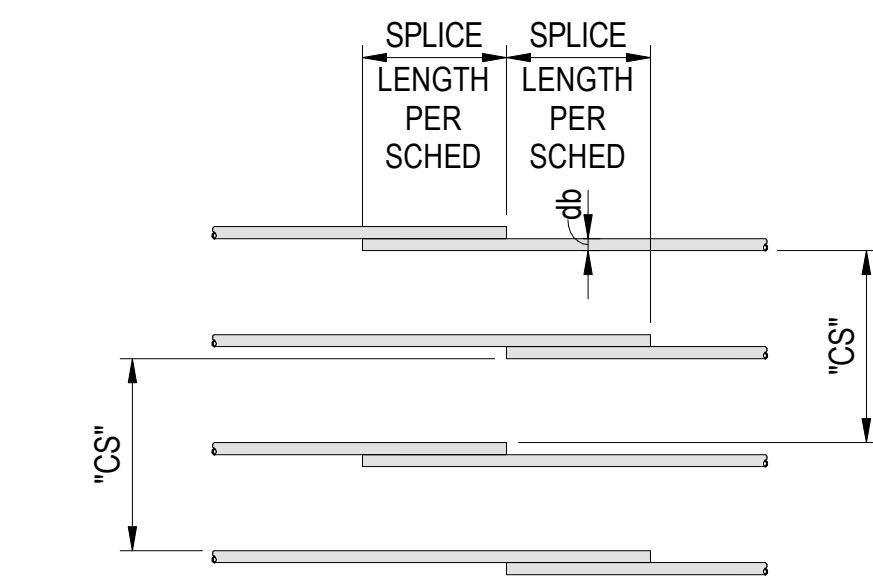
Sheet:

S0.03

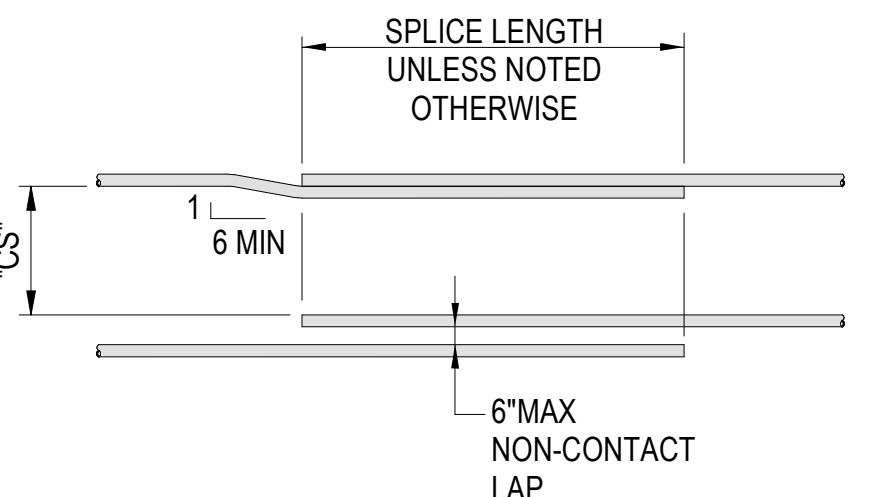


- NOTES:**
1. BARS SHALL BE BUNDLED WITH NO MORE THAN 2 BARS IN SAME PLANE
 2. "SL" INDICATES SPLICE LENGTH AT BUNDLED BARS. SEE REINFORCING SPLICE NOTE 5.

TYPICAL BUNDLED LAP SPLICES

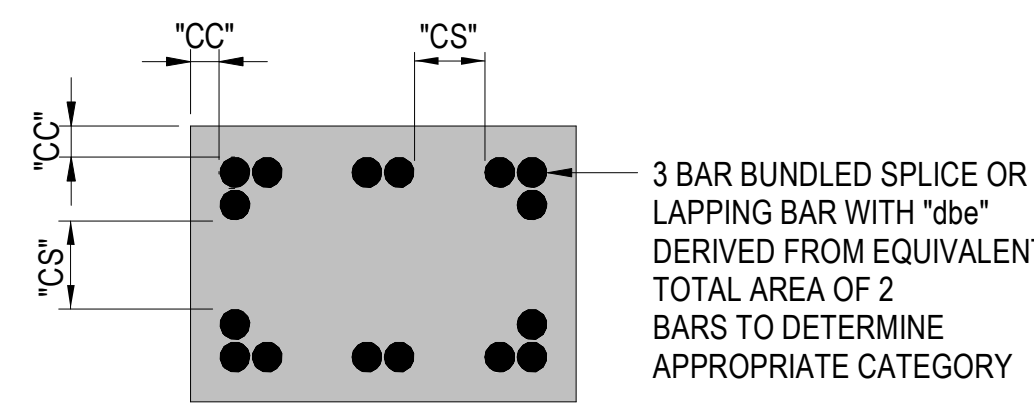


TYPICAL STAGGERED LAP SPLICING DETAIL



TYPICAL LAP SPLICE DETAIL

Note: Splice detail used where occurs on plan and not all conditions are applied on project



TYPICAL BAR CONCRETE COVER & CLEAR SPACING DIAGRAM

REINFORCING SPLICE NOTES:

1. SPLICE DETAIL APPLICABLE WHERE OCCURS ON PLAN. NOTE THAT THIS IS A TYPICAL DETAIL AND NOT ALL CONDITIONS MAY APPLY TO PROJECT.
2. SCHEDULED SPLICE LENGTHS ARE IN ACCORDANCE WITH ACI 318-14 AND APPLY TO REBAR $F_y=60$ KSI. LENGTHS ARE FROM CHAPTER 25 (NON-SEISMIC ELEMENTS) AND CHAPTER 18 (SEISMIC ELEMENTS).
3.

CATEGORY	DESCRIPTION
1	$2db \leq CC$ AND $4db \leq CS$
2	$[db \leq CC < 2db \text{ \& } 2db \leq CS]$ OR $[db \leq CC \text{ \& } 2db \leq CS < 4db]$
3	$1/2db \leq CC < db$ OR $db \leq CS < 2db$

CC INDICATES CONCRETE COVER, CS INDICATES BAR CLEAR SPACING.
4. IF $CC < 1/2db$ OR $CS < db$ CONTACT SEOR FOR REQUIRED SPLICE LENGTH.
5. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE POURED BELOW BARS.
6. FOR BUNDLED BARS, AN EFFECTIVE BAR DIAMETER (dbe) SHALL BE USED FOR DETERMINING COVER AND SPACING LIMITATIONS:
 - a. FOR 2 BAR BUNDLE $dbe = 1.414db$
 - b. FOR 3 BAR BUNDLE $dbe = 1.732db$
 - c. FOR 4 BAR BUNDLE $dbe = 2.000db$
7. WHERE BARS OF DIFFERENT SIZES ARE LAP SPICED, LAP SPLICE LENGTH SHALL BE THE LARGER OF L_d (STRAIGHT BAR DEVELOPMENT) FOR LARGER BAR AND LAP SPLICE LENGTH OF SMALLER BAR.
8. SPLICES LENGTHS MAY BE REDUCED 23% IF SPECIFICALLY NOTED ON STRUCT DRAWINGS AS CLASS "A" SPLICE.
9. APPLY THE FOLLOWING MULTIPLIERS TO SCHEDULED SPLICE LENGTHS FOR EACH INSTANCE BELOW WHICH APPLIES:
 - a. FOR REBAR YIELD STRENGTHS OTHER THAN 60 KSI, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY RATIO OF ACTUAL YIELD STRENGTH / 60,000.
 - b. SPLICE LENGTH OF LONGITUDINAL BARS IN THE "SPECIAL SPLICE ZONE" AS INDICATED ON SHEAR WALL ELEVATIONS SHALL BE MULTIPLIED BY 1.25 THAT INDICATED IN THE SCHEDULE.
 - c. FOR 3-BAR BUNDLES, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY 1.20. FOR 4-BAR BUNDLES, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY 1.33. ENTIRE BUNDLE SHALL NOT BE LAP SPICED.
 - d. FOR LIGHTWEIGHT CONCRETE, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY 1.33.
 - e. FOR EPOXY COATED BARS WITH $CC < 3db$ OR $CS < 6db$, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY 1.50. FOR OTHER EPOXY COATED BARS, MULTIPLY SPLICE LENGTHS IN SCHEDULE BY 1.20.
 - f. FOR CONCRETE STRENGTH IN BETWEEN STRENGTHS INDICATED IN THE SCHEDULE. USE DEVELOPMENT LENGTH FOR THE LOWER CONCRETE STRENGTH.

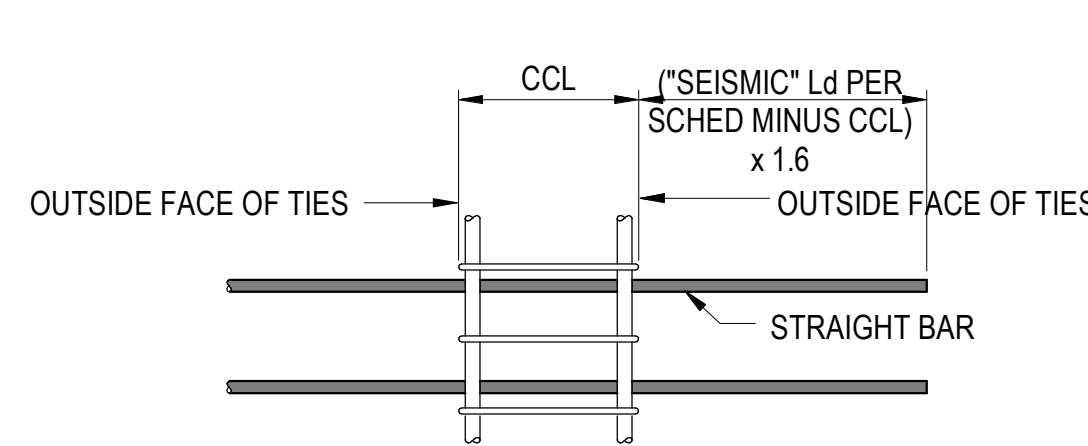
SPLICE LENGTH SCHEDULE IN INCHES (APPLICABLE TO REBAR W/ 60 KSI YIELD STRENGTH)																			
NORMAL WEIGHT CONCRETE (f _c PSI)		3000 PSI						4000 PSI						5000 PSI					
CATEGORY		1		2		3		1		2		3		1		2		3	
BAR SIZE	BAR DIAMETER (db)	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS
#4	0.500	23	18	38	29	56	43	20	15	33	25	49	37	18	14	29	23	44	34
#5	0.625	28	22	47	36	70	54	25	19	41	31	61	47	22	17	36	28	54	42
#6	0.750	34	26	56	43	84	65	29	23	49	37	73	56	26	20	44	34	65	50
#7	0.875	49	38	81	63	122	94	43	33	71	54	106	81	38	29	63	49	95	73
#8	1.000	56	43	93	72	139	107	49	37	81	62	121	93	44	34	72	56	108	83
#9	1.128	63	49	105	81	157	121	55	42	91	70	136	105	49	38	81	63	122	94
#10	1.270	71	55	118	91	177	136	62	47	102	79	153	118	55	43	92	71	137	106
#11	1.410	79	61	131	101	196	151	68	53	114	87	170	131	61	47	102	78	152	117

SPLICE LENGTH SCHEDULE IN INCHES (APPLICABLE TO REBAR W/ 60 KSI YIELD STRENGTH)																			
NORMAL WEIGHT CONCRETE (f'c PSI)		6000 PSI						7000 PSI						8000 PSI					
CATEGORY		1		2		3		1		2		3		1		2		3	
BAR SIZE	BAR DIAMETER (db)	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS
#4	0.500	16	13	27	21	40	31	15	12	25	19	37	28	14	12	23	18	35	27
#5	0.625	20	16	33	26	50	38	19	14	31	24	46	35	18	14	29	22	42	33
#6	0.750	24	19	40	31	59	46	22	17	37	28	55	42	21	16	35	27	52	40
#7	0.875	35	27	58	45	86	67	32	25	54	41	80	62	30	23	50	39	75	58
#8	1.000	40	31	66	51	99	76	37	28	61	47	91	70	35	27	57	44	86	66
#9	1.128	45	35	74	57	111	86	42	32	69	53	103	79	39	30	64	50	96	74
#10	1.270	50	39	84	64	125	96	47	36	77	60	116	89	44	34	72	56	108	84
#11	1.410	56	43	93	71	139	107	52	40	86	66	129	99	48	37	80	62	120	93

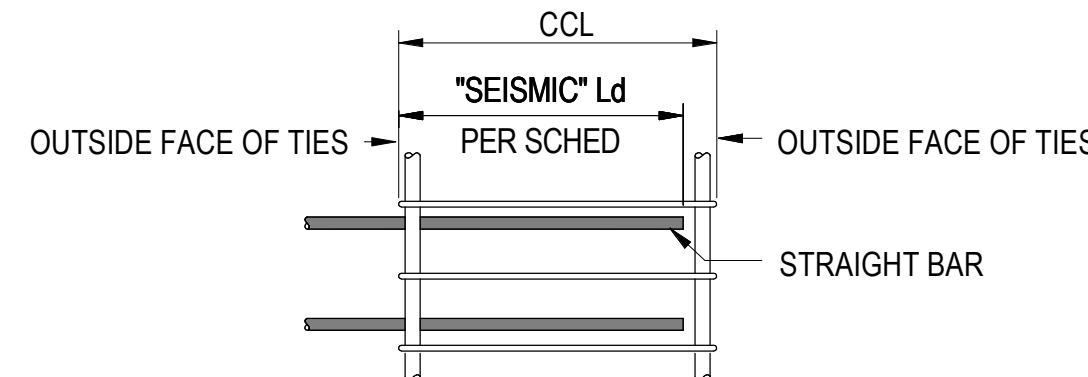
TYPICAL REINFORCING SPLICE LENGTH SCHEDULE

9

NTS



CONDITION WHERE "SEISMIC" L_d IS GREATER THAN CONFINED CORE LENGTH CCL



CONDITION WHERE "SEISMIC" L_d FITS WITHIN CONFINED CORE

NOTE:
"CCL" INDICATES CONFINED CORE LENGTH OF SPECIAL MOMENT FRAME COLUMNS.

STRAIGHT "SEISMIC" DEVELOPMENT L_d AT CONFINED CORES OF SPECIAL MOMENT FRAME COLUMNS

STRAIGHT DEVELOPMENT LENGTH SCHEDULE (L_d) IN INCHES (APPLICABLE TO REBAR W/ 60 KSI YIELD STRENGTH)																			
NORMAL WEIGHT CONCRETE (fc PSI)		3000 PSI						4000 PSI						5000 PSI					
CATEGORY		1		2		3		SEISMIC (SEE NOTE 6)		1		2		3		SEISMIC (SEE NOTE 6)		1	
BAR SIZE	BAR DIAMETER (db)	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS
#4	0.500	18	14	29	22	43	33	28	22	15	12	25	19	37	29	24	19	14	12
#5	0.625	22	17	36	28	54	42	35	27	19	15	31	24	47	36	30	23	17	13
#6	0.750	26	20	43	33	65	50	42	32	23	18	37	28	56	43	36	28	20	16
#7	0.875	38	29	63	48	94	72	48	37	33	25	54	42	81	63	42	32	29	23
#8	1.000	43	33	72	55	107	83	55	43	37	29	62	48	93	72	48	37	34	26
#9	1.128	49	38	81	62	121	93	62	48	42	33	70	54	105	81	54	42	38	29
#10	1.270	55	42	91	70	136	105	70	54	47	37	79	61	118	91	61	47	43	33
#11	1.410	61	47	101	78	151	116	78	60	53	41	87	67	131	101	67	52	47	36
#14	1.693	73	56	121	93	181	140	-	-	63	49	105	81	157	121	-	-	57	44
#18	2.257	97	75	161	124	242	186	-	-	84	65	140	108	209	161	-	-	75	58

STRAIGHT DEVELOPMENT LENGTH SCHEDULE (L_d) IN INCHES (APPLICABLE TO REBAR W/ 60 KSI YIELD STRENGTH)																			
NORMAL WEIGHT CONCRETE (fc PSI)		6000 PSI						7000 PSI						8000 PSI					
CATEGORY		1		2		3		SEISMIC (SEE NOTE 6)		1		2		3		SEISMIC (SEE NOTE 6)		1	
BAR SIZE	BAR DIAMETER (db)	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS	TOP	OTHERS
#4	0.500	13	12	21	16	31	24	20	15	12	12	19	15	28	22	20	15	12	12
#5	0.625	16	12	26	20	38	30	25	19	14	12	24	18	36	27	23	18	14	12
#6	0.750	19	14	31	24	46	35	30	23	17	13	28	22	42	33	27	21	16	13
#7	0.875	27	21	45	34	67	51	34	27	25	19	41	32	62	48	32	25	23	18
#8	1.000	31	24	51	39	76	59	39	30	28	22	47	36	70	54	36	28	27	21
#9	1.128	35	27	57	44	86	66	44	34	32	25	53	41	79	61	41	32	30	23
#10	1.270	39	30	64	50	96	74	50	38	36	28	60	46	89	69	46	36	34	26
#11	1.410	43	33	71	55	107	82	55	43	40	31	66	51	99	76	51	39	37	29
#14	1.693	52	40	86	66	128	99	-	-	48	37	79	61	119	92	-	-	45	35
#18	2.257	69	53	114	88	171	132	-	-	64	49	106	81	158	122	-	-	60	46

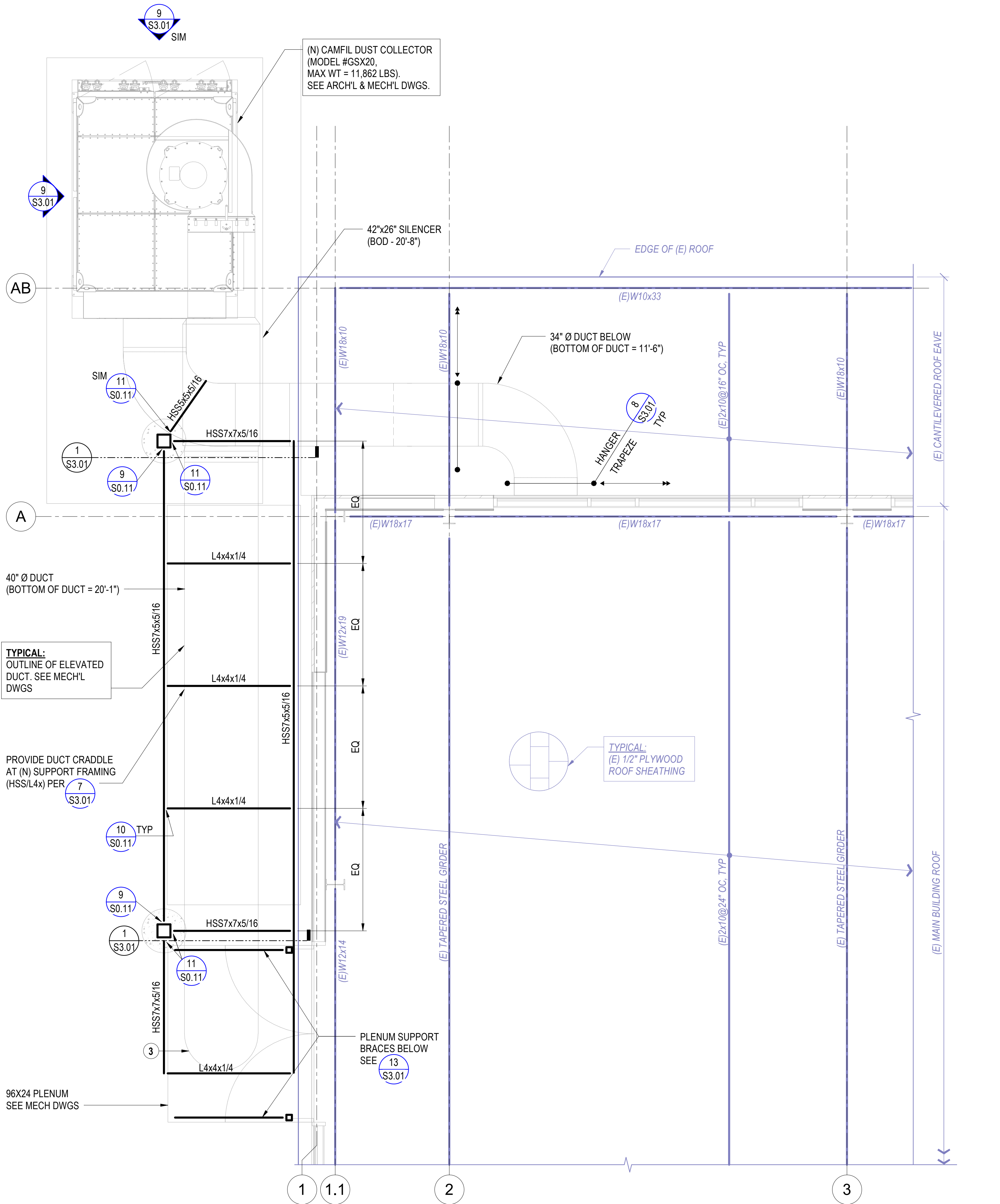
HOOKED DEVELOPMENT LENGTH SCHEDULE (L _{dh}) IN INCHES (APPLICABLE TO REBAR W/ 60 KSI YIELD STRENGTH)													
NORMAL WEIGHT CONCRETE (f _c PSI)		3000 PSI		4000 PSI		5000 PSI		6000 PSI		7000 PSI		8000 PSI	
BAR SIZE	BAR DIAMETER (db)	STANDARD	SEISMIC (SEE NOTE 7)	STANDARD	SEISMIC (SEE NOTE 7)	STANDARD	SEISMIC (SEE NOTE 7)	STANDARD	SEISMIC (SEE NOTE 7)	STANDARD	SEISMIC (SEE NOTE 7)	STANDARD	SEISMIC (SEE NOTE 7)
#4	0.500	8	9	7	8	6	6	6	6	6	6	6	6
#5	0.625	10	11	9	10	8	9	7	8	7	7	6	7
#6	0.750	12	13	10	11	9	10	9	9	8	9	8	8
#7	0.875	14	15	12	13	11	12	10	11	9	10	9	10
#8	1.000	16	17	14	15	12	14	11	12	11	12	10	11
#9	1.128	18	20	15	17	14	15	13	14	12	13	11	12
#10	1.270	20	22	17	19	15	17	14	16	13	15	12	14
#11	1.410	22	24	19	21	17	19	16	17	15	16	14	15
#14	1.693	38	-	33	-	29	-	27	-	25	-	23	-
#18	2.257	50	-	43	-	39	-	35	-	33	-	31	-

KEY NOTES

- HSS BEAM TOS TO BE AT BOD PER PLAN.
- BEAM-TO-COLUMN CONNECTION PER [9](#) [S0.11](#).
- CONNECT VERTICAL DUCT TO STEEL ANGLE - SEE MECH DWGS.

ROOF FRAMING PLAN NOTES

- FOR GENERAL NOTES SEE S0.0X SERIES AND TYPICAL DETAILS SEE S0.1X SHEETS.
- VERIFY ALL DIMENSIONS PRIOR TO START OF WORK. SEE ARCHITECTURAL DRAWINGS FOR REMAINDER OF DIMENSIONS NOT SHOWN ON THIS PLAN.
- EXISTING CONSTRUCTION INDICATED [9](#) [S0.11](#) BASED ON "AS-BUILT" ORIGINAL STRUCTURAL CONSTRUCTION DRAWINGS. SEE "EXISTING CONDITION DOCUMENTATION" GENERAL NOTE #1 ON [S0.01](#). AS BUILT CONSTRUCTION MAY DIFFER AND IS TO BE FIELD VERIFIED BY CONTRACTOR.
- EXISTING FRAMING AND DIMENSIONS AS NOTED ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY EXISTING FRAMING CONDITIONS PRIOR TO PERFORM WORK AND NOTIFY SEOR OF DEVIATIONS.
- TOP OF STEEL ELEVATION (TOS) IS EQUAL TO BOTTOM OF DUCT ELEVATION (BOD).
- PROVIDE END CAP PLAT AT ALL OPEN ENDED HSS MEMBERS PER [9](#) [S0.11](#).
- INDICATES KEY NOTE.
- MAXIMUM UNSUPPORTED DUCT SPAN [9](#) [S0.11](#) 0'-0".
- INDICATES DIRECTION OF UNISTRUT BRACING PER [8](#) [S3.01](#).
- T.O. STEEL AND B.O. DUCT ELEVATIONS TO BE VERIFIED WITH ARCH'L & MECH'L DWG'S.



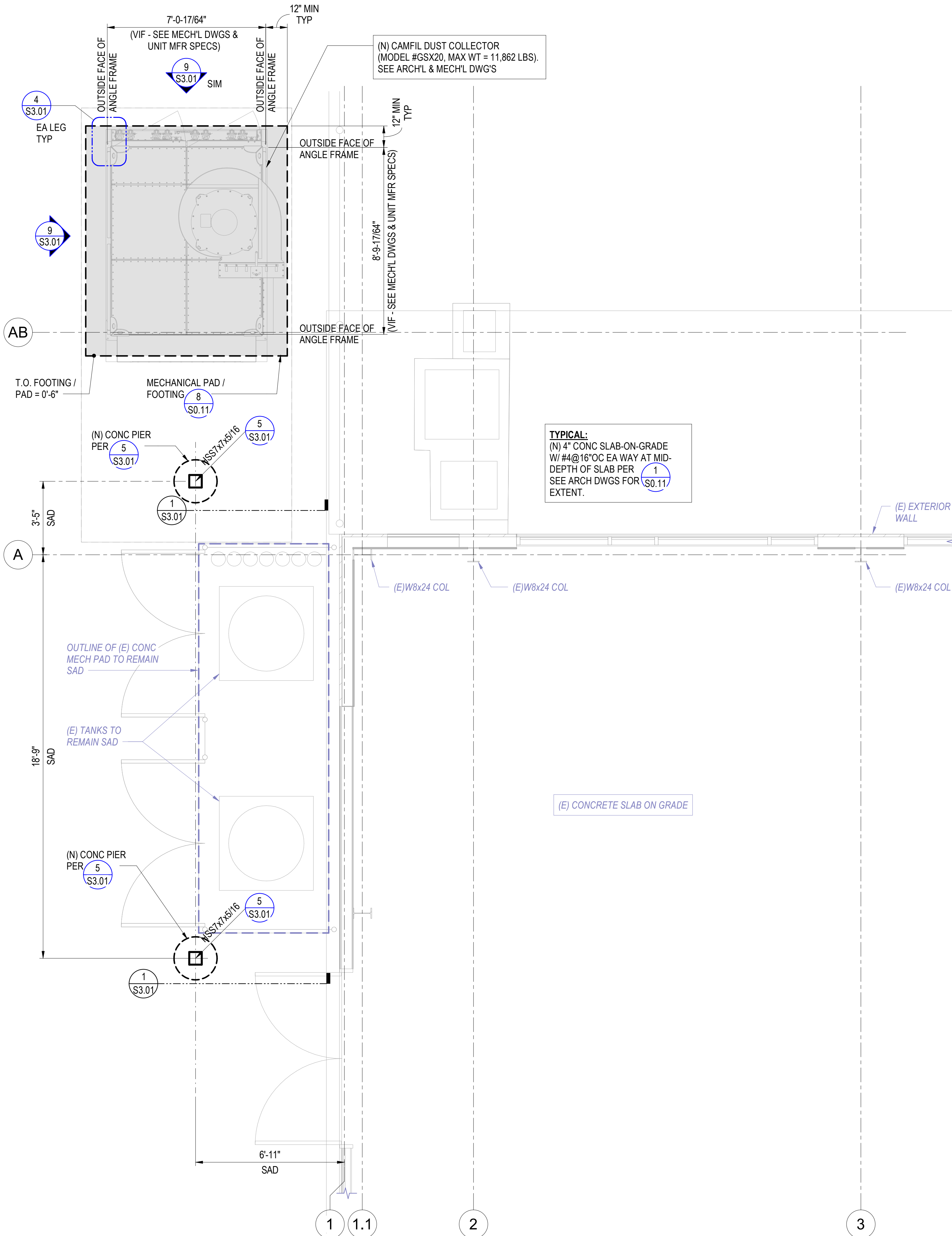
PARTIAL ROOF FRAMING PLAN

2

3/8" = 1'-0"

FOUNDATION PLAN NOTES

- FOR GENERAL NOTES SEE S0.0X SERIES AND TYPICAL DETAILS SEE S0.1X SHEETS.
- VERIFY ALL DIMENSIONS PRIOR TO START OF WORK. SEE ARCHITECTURAL DRAWINGS FOR REMAINDER OF DIMENSIONS NOT SHOWN ON THIS PLAN.
- CONTRACTOR TO DETERMINE ACTUAL FRAME DIMENSIONS BASED ON DUCT & EQUIPMENT LAYOUT. REFER TO ARCH'L & MECH'L DWG'S FOR BALANCE OF INFORMATION.
- T.O. FOOTING ELEVATIONS TO BE VERIFIED WITH ARCH'L DWG'S.



PARTIAL FOUNDATION PLAN

1

3/8" = 1'-0"

Agency Approval:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

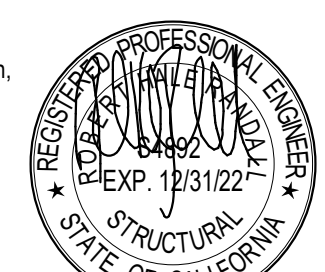
No.	Issued	Date	No.	Issued	Date

Keynotes:

Consultant:

Sb
saiful-bouquet
structural engineers

2020 Camino Del Rio North,
Suite 200,
San Diego, CA 92121
Telephone 619.630.9199
www.saifulbouquet.com
SB Job No:20634



Agency Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
WELDING EXHAUST PLANS

DSA APPROVED SET

Date: 06/24/2021

Client Project No: 5015037000

Sheet:

S2.01

Agency Approval:



3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



Keynotes:



DUST COLLECTOR BASE PL / ANCHORAGE
DETAIL


$$1'' = 1'-0''$$

$$1'' = 1'-0''$$
ELEVATION AT HSS COLUMN

5
3/4" = 1'-0"



NTS



13
3/4" = 1'-0"



9
1/2" = 1'-0"

GENERAL LEGEND

SYMBOL	DESCRIPTION
	NOTE CALLOUT
	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
	MECHANICAL EQUIPMENT CALLOUT. SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS
	SECTION CALLOUT
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	NEW LINework
	EXISTING LINework
	DEMOLITION LINework
	DIRECTION OF FLOW
	DIFFUSER LABEL - NECK SIZE AND DIFFUSER TYPE - CUBIC FEET PER MINUTE

DUCTWORK LEGEND

SYMBOL	DESCRIPTION
	SHEET METAL DUCT
	HIDDEN SHEET METAL DUCT
	INTERNALLY INSULATED SHEET METAL DUCT CLEAR INSIDE DIMENSION SHOWN, LINER THICKNESS IN PARENTHESIS
	STANDARD BRANCH FOR SUPPLY AND RETURN
	ROUND ELBOW DOWN
	ROUND ELBOW UP
	RECTANGULAR TO ROUND TRANSITION
	FLEXIBLE DUCT
	FLEX CONNECTION
	BACK DRAFT DAMPER
	FIRE DAMPER
	COMBINATION FIRE AND SMOKE DAMPER
	MOTORIZED DAMPER
	BALANCING DAMPER
	SUPPLY DIFFUSER. 2-WAY/3-WAY/4-WAY
	GRILLE: RETURN/EXHAUST
	SUPPLY AIR DUCT SECTION
	RETURN AIR DUCT SECTION
	EXHAUST AIR DUCT SECTION

PIPING LEGEND

SYMBOL	DESCRIPTION
	NEW PIPING (SIZE-SERVICE)
	EXISTING PIPING (SIZE-SERVICE)
	ELBOW FACING AWAY FROM VIEWER
	ELBOW FACING TOWARD VIEWER
	TEE FACING AWAY FROM VIEWER
	TEE FACING TOWARD VIEWER
	BALL VALVE

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT	HP	HORSEPOWER
AFF	ABOVE FINISHED FLOOR	HT	HEIGHT
AHU	AIR HANDLING UNIT	HZ	HERTZ
AL	ALUMINUM	ID	INSIDE DIAMETER
AP	ACCESS PANEL	IN	INCHES
APD	AIRSIDE PRESSURE DROP	KW	KILOWATTS
BD	BLOWDOWN	LAT	LEAVING AIR TEMPERATURE
BDD	BACK DRAFT DAMPER	LBS	POUNDS
BFC	BELOW FINISHED CEILING	LF	LINEAR FEET
BFP	BACK FLOW PREVENTER	LWT	LEAVING WATER TEMPERATURE
BHP	BRAKE HORSEPOWER	MAX	MAXIMUM
BLDG	BUILDING	MBH	THOUSAND BTU PER HOUR
BDB	BOTTOM OF BEAM	MC	MECHANICAL CONTRACTOR
BOP	BOTTOM OF PIPE	MCA	MINIMUM CIRCUIT AMPS
BTU	BRITISH THERMAL UNIT	MH	MANHOLE
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CHWR	CHILLED WATER RETURN	MOC	MAXIMUM OVERLOAD CIRCUIT PROTECTION
CHWS	CHILLED WATER SUPPLY	NFA	NET FREE AREA
CI	CAST IRON	NIC	NOT IN CONTRACT
CL	CENTER LINE	NPSHR	NET POSITIVE SUCTION HEAD REQUIRED
CP	CONDENSATE PUMP	OAT	OUTSIDE AIR TEMPERATURE
CT	COOLING TOWER	OBD	OPPOSED BLADE DAMPER
CJ	CONDENSING UNIT	OC	ON CENTER
CJ	CONDENSING UNIT	OD	OUTSIDE DIAMETER
CJ	CONDENSING UNIT	OA	OUTSIDE AIR
CJ	CONDENSING UNIT	PD	PRESSURE DROP
CJ	CONDENSING UNIT	PERF	PERFORATED
CJ	CONDENSING UNIT	PH	PHASE
CJ	CONDENSING UNIT	POD	POINT OF DISCONNECT
CJ	CONDENSING UNIT	PR	PRESSURE RELIEF
CJ	CONDENSING UNIT	PRV	PRESSURE REDUCING VALVE
CJ	CONDENSING UNIT	PSD	POUNDS PER SQUARE INCH DIFFERENTIAL
CJ	CONDENSING UNIT	PSIG	POUNDS PER SQUARE INCH GAUGE
CJ	CONDENSING UNIT	PVC	POLYVINYL CHLORIDE
CJ	CONDENSING UNIT	RA	RETURN AIR
CJ	CONDENSING UNIT	RF	RETURN FAN
CJ	CONDENSING UNIT	RLA	RATED LOAD AMPS
CJ	CONDENSING UNIT	RPM	REVOLUTIONS PER MINUTE
CJ	CONDENSING UNIT	SA	SUPPLY AIR
CJ	CONDENSING UNIT	SF	SUPPLY FAN
CJ	CONDENSING UNIT	SPEC	SPECIFICATION
CJ	CONDENSING UNIT	SS	STAINLESS STEEL
CJ	CONDENSING UNIT	STD	STANDARD
CJ	CONDENSING UNIT	TAD	TRANSFER AIR DUCT
CJ	CONDENSING UNIT	TDH	TOTAL DYNAMIC HEAD
CJ	CONDENSING UNIT	TEFC	TOTALLY ENCLOSED FAN COOLED
CJ	CONDENSING UNIT	TSP	TOTAL STATIC PRESSURE
CJ	CONDENSING UNIT	TYP	TYPICAL
CJ	CONDENSING UNIT	UC	UNDERCUT
CJ	CONDENSING UNIT	TYP	TYPICAL
CJ	CONDENSING UNIT	V	VOLTS
CJ	CONDENSING UNIT	VAV	VARIABLE AIR VOLUME
CJ	CONDENSING UNIT	VD	VOLUME DAMPER
CJ	CONDENSING UNIT	VFD	VARIABLE FREQUENCY DRIVE
CJ	CONDENSING UNIT	VTR	VENT THRU ROOF
CJ	CONDENSING UNIT	W	WITH
CJ	CONDENSING UNIT	W/O	WITHOUT
CJ	CONDENSING UNIT	WB	WET BULB
CJ	CONDENSING UNIT	WC	WATER COLUMN
CJ	CONDENSING UNIT	WG	WATER GAUGE
CJ	CONDENSING UNIT	WPD	WATER PRESSURE DROP
CJ	CONDENSING UNIT	WT	WEIGHT

IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

SHEET INDEX

SHEET	DESCRIPTION
M0.01	GENERAL NOTES, LEGEND, ABBREVIATIONS, AND SHEET INDEX
M0.02	SCHEDULES
M1.11	SITE RENOVATION PLAN
M6.01	DETAILS
MD1.11	SITE DEMOLITION PLAN

GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE 2019 EDITIONS OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE, OR LOCAL CODES AS ADOPTED AND ENFORCED BY THE LOCAL JURISDICTION. IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN. YET NOTHING ON THE DESIGN DOCUMENTS SHALL BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).
- SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.
- WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DRAWINGS AND SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL PREVAIL.
- CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.
- NO PIPING, EQUIPMENT, ETC. SHALL BE REMOVED, DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE OWNER TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK ARE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE OWNER INDICATING WHICH AREAS WILL BE AFFECTED, WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF TIME.
- THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS. THIS CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF HVAC SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNERS REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS AND CONFIGURATIONS AND SUBMITTED TO ENGINEER FOR REVIEW.
- THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK.
- EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- THIS CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM A DESIGNATED STRUCTURAL ENGINEER AND THE OWNER.
- ALL PIPE ELBOWS SHALL BE LONG RADIUS UNLESS OTHERWISE SPECIFICALLY NOTED ON THE DRAWINGS.
- INSTALL MANUAL VOLUME DAMPERS WITHIN DUCT BRANCHES TO BALANCE AIRFLOW CFM. ON INSULATED DUCTS, MOUNT DAMPER REGULATOR ON 2" STAND-OFF BRACKET TO CLEAR INSULATION.
- ALL MATERIAL EXPOSED WITHIN RA PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT GREATER THAN 25 AND SMOKE DEVELOPED INDEX NOT GREATER THAN 50. COMPLY WITH CMC-602.2
- COORDINATE ACCESS TO EQUIPMENT WITH WORK OF OTHER TRADES. PROVIDE DUCT ACCESS DOORS AND CEILING ACCESS DOORS TO ALLOW ACCESS FOR FILTER CHANGEOUT, CONTROLS ACCESS AND ACCESS TO SERVICE/REMOVE COMPONENTS INCLUDING, BUT NOT LIMITED TO, FANS, PULLEYS, SHEAVES, BELTS, ETC.
- UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR AUTHORIZATION IN WRITING BY THE SEOR AND DSA.

DSA NOTES

- MEP COMPONENT ANCHORAGE NOTE:

ALL MECHANICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30.

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

- PIPING AND DUCTWORK DISTRIBUTION SYSTEM BRACING NOTE:

PIPING AND DUCTWORK DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP ☒ MD ☐ PP ☐ E ☐ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP ☐ MD ☐ PP ☐ E ☐ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #0043-13

- AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED TYPE. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES SHALL BE CLASS 2 OR BETTER (AS SHOWN IN THE STATE FIRE MARSHAL LISTING). AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT PER CMC 304.0.

AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:

P2S ENG

Long Beach | Los Angeles
San Diego | San Jose

p2sinc.com

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
**GENERAL NOTES, LEGEND, ABBREVIATIONS,
AND SHEET INDEX**

DSA APPROVED SET

Date: 06/24/2021

Client Project No: 5015037000

Sheet:

M0.01

INDUSTRIAL DUST COLLECTOR

MARK	MANUFACTURER MODEL	LOCATION	SERVICE	COMPRESSED AIR		DOMESTIC WATER		SUPPLY FAN			ELECTRICAL			OPERATING WEIGHT (LBS)	REMARKS
				PIPE SIZE	CFM	PIPE SIZE	GPM	CFM	ESP	HP	V	PH	HZ		
DC-1	CAMFIL GSX20	OUTSIDE/ ON-GRADE	WELDING SHOP	1	62.4	1	70	26,000	13.5	75	460	3	60	11,862	OWNER FURNISHED, CONTRACTOR INSTALLED

PIPING MATERIALS

	SERVICE	MATERIALS
1	DOMESTIC WATER PIPING ABOVE GRADE:	TYPE 'L' COPPER TUBING, HARD DRAWN CONFORMING TO ASTM B 88, WITH WROUGHT COPPER SOLDER SWEAT FITTINGS AND LEAD FREE-SOLDER JOINTS.
2	COMPRESSED AIR:	TYPE 'L' COPPER TUBING WITH WROUGHT COPPER SWEAT FITTINGS.
3	PIPE PROTECTION: PROVIDE NON-CONDUCTING DIELECTRIC CONNECTIONS JOINING DISSIMILAR METALS. LEAD FREE BRASS UNIONS WITH 6-INCH LEAD FREE BRASS NIPPLE.	
4	QUALITY ASSURANCE: THE PIPING SYSTEMS SHALL BE CONSTRUCTED FROM MATERIALS EXTRUDED AND MOLDED USING THE SAME COMPOUND MANUFACTURER.	
5	QUALITY ASSURANCE: BOTH THE PIPE AND FITTINGS SHALL BE MANUFACTURED IN NORTH AMERICA AND MEET OR EXCEED THE REQUIREMENTS SET FORTH BY THE AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) AND ANS/ANSI STANDARDS 14 AND 61.	

GRILLES, REGISTERS, DIFFUSERS

MARK	DESCRIPTION	SIZE	MATERIAL	BORDER	FRONT BLADES	DAMPER	REMARKS	
CD-1	TITUS 112RL	96"W x 36"H	STEEL	SIDEWALL	DOUBLE DEFLECTION	NO	1	2

- 1 (2) 48"W x 36"H FRAMES SHALL BE AN ACCEPTABLE ALTERNATIVE IN THE CASE THAT 96"W x 36"H IS NOT AVAILABLE.
- 2 COORDINATE FINISH WITH ARCHITECT.

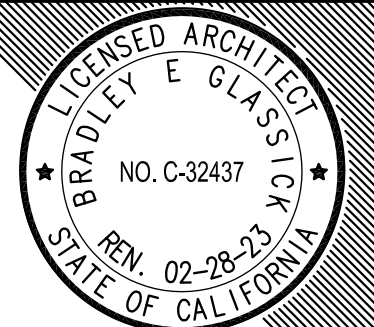
AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

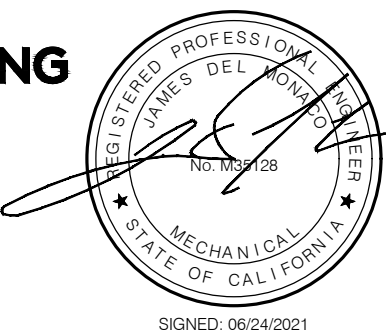
No.	Issued	Date	No.	Issued	Date

Keynotes:

P2S ENG

Long Beach | Los Angeles
San Diego | San Jose

p2sinc.com



Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

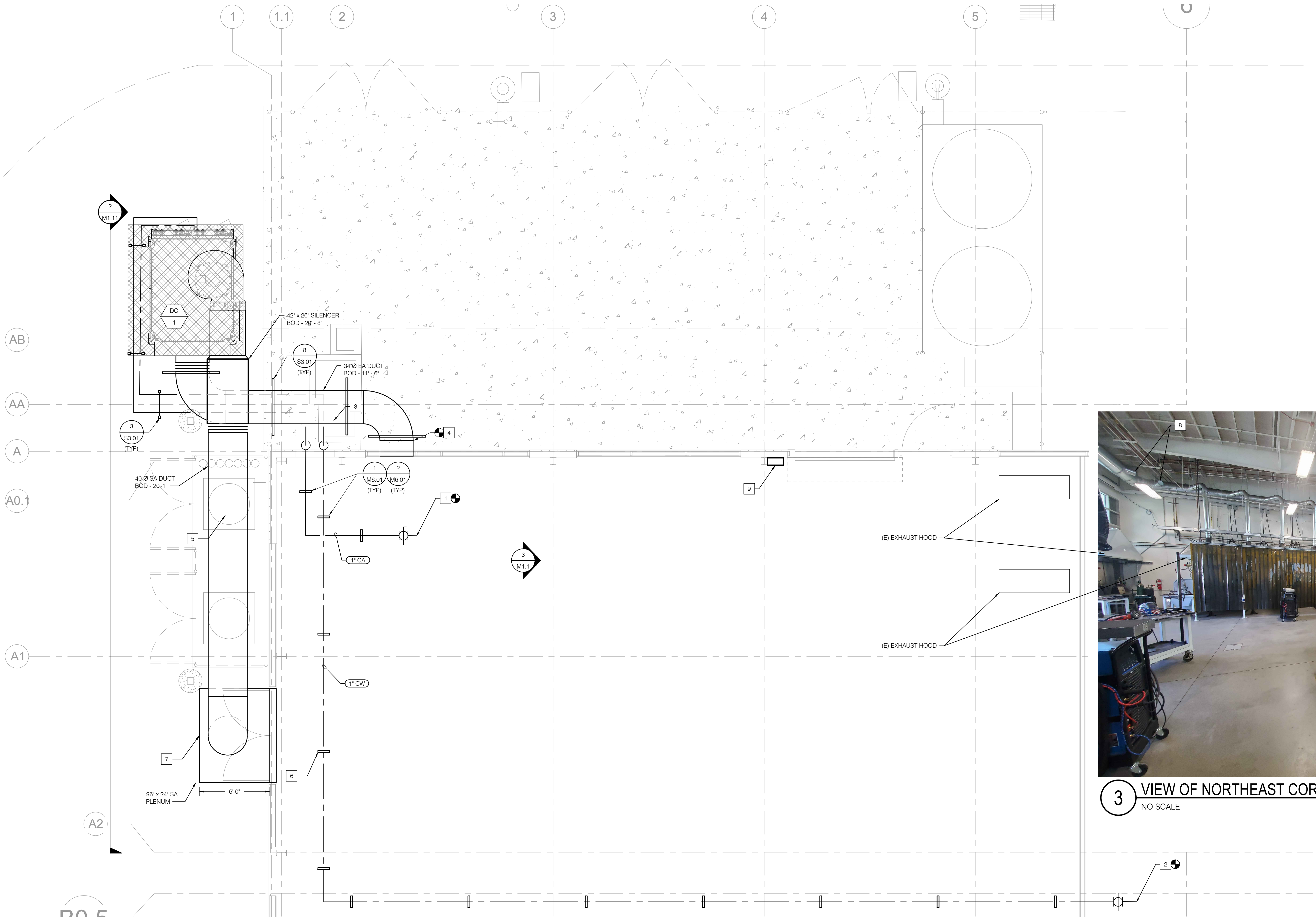
Sheet Title:
SCHEDULES

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:





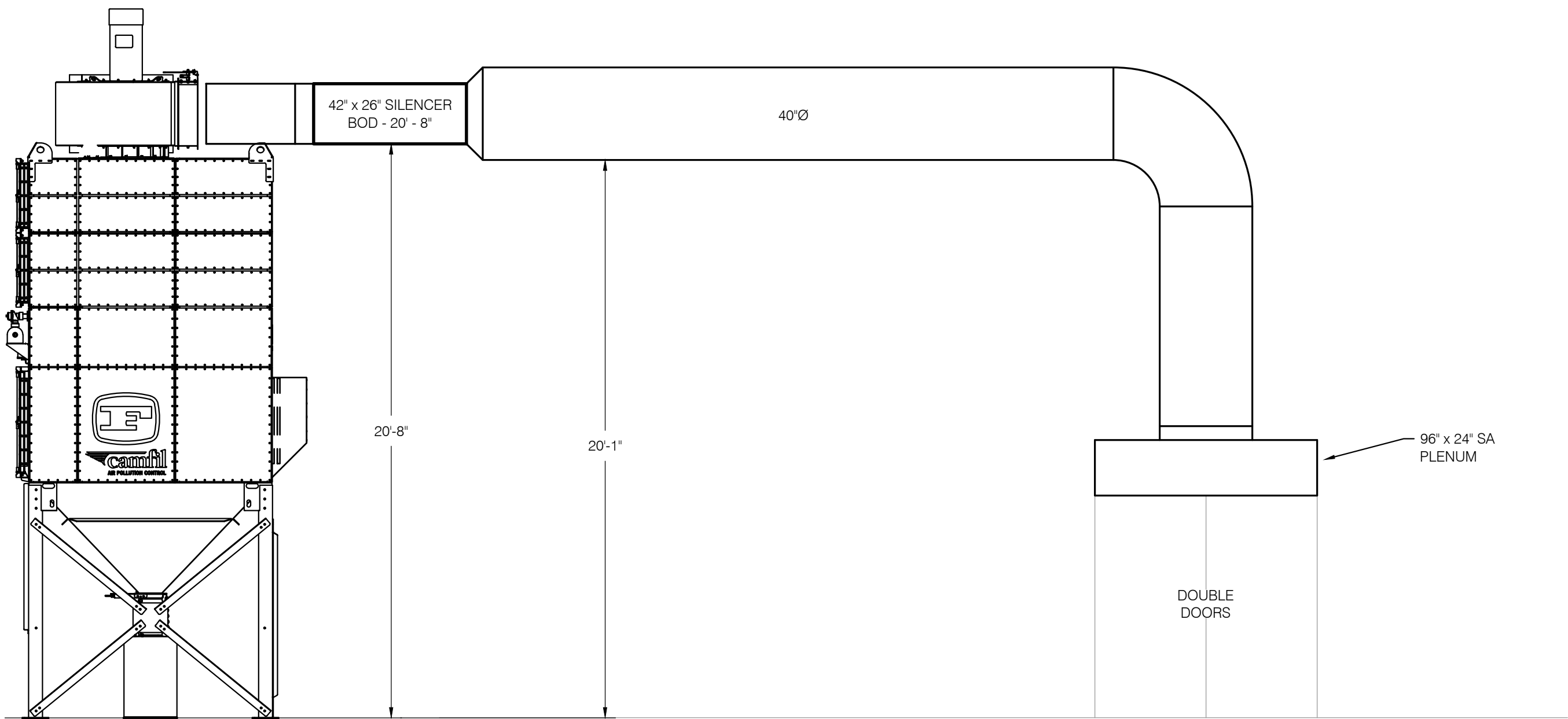
NOTES

- 1 POC FOR 1" CA TO (E) 1" CA.
- 2 POC FOR 1" CW TO (E) 1-1/4" CW.
- 3 PROVIDE BACKFLOW PREVENTER IN CW RISER.
- 4 CONNECT TO (E) DUCT DISTRIBUTION INSIDE BUILDING. POC OCCURS OUTSIDE OF THE BUILDING.
- 5 FOR SUPPLY AIR DUCT SUPPORT, SEE DETAIL 1 / S301.
- 6 MAXIMUM PIPE SUPPORT SPACING TO COMPLY WITH THE REQUIREMENTS OF OPM 0043-13 AS SHOWN ON DETAILS 1 AND 2 ON SHEET M6.01.
- 7 FOR DUCT CONNECTION DETAILING, SEE DETAILS ON SHEET A10.01.
- 8 REMOVE EA DUCT CAP FROM DUST COLLECTOR EA DUCT MAIN AND RECONNECT EA DUCT TO (E) EXHAUST HOOD. PROVIDE DUCT STRAP SUPPORT WHERE REQUIRED PER DETAIL 6/M6.01.
- 9 CONTROLLER/INTERLOCK FOR DC-1 BY MANUFACTURER

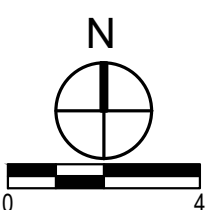


3 VIEW OF NORTHEAST CORNER OF WELDING SHOP
NO SCALE

1 SITE RENOVATION PLAN
1/4" = 1'-0"



2 SECTION
1/4" = 1'-0"



AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:



Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
SITE RENOVATION PLAN

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:

M1.11

AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:



p2sinc.com

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

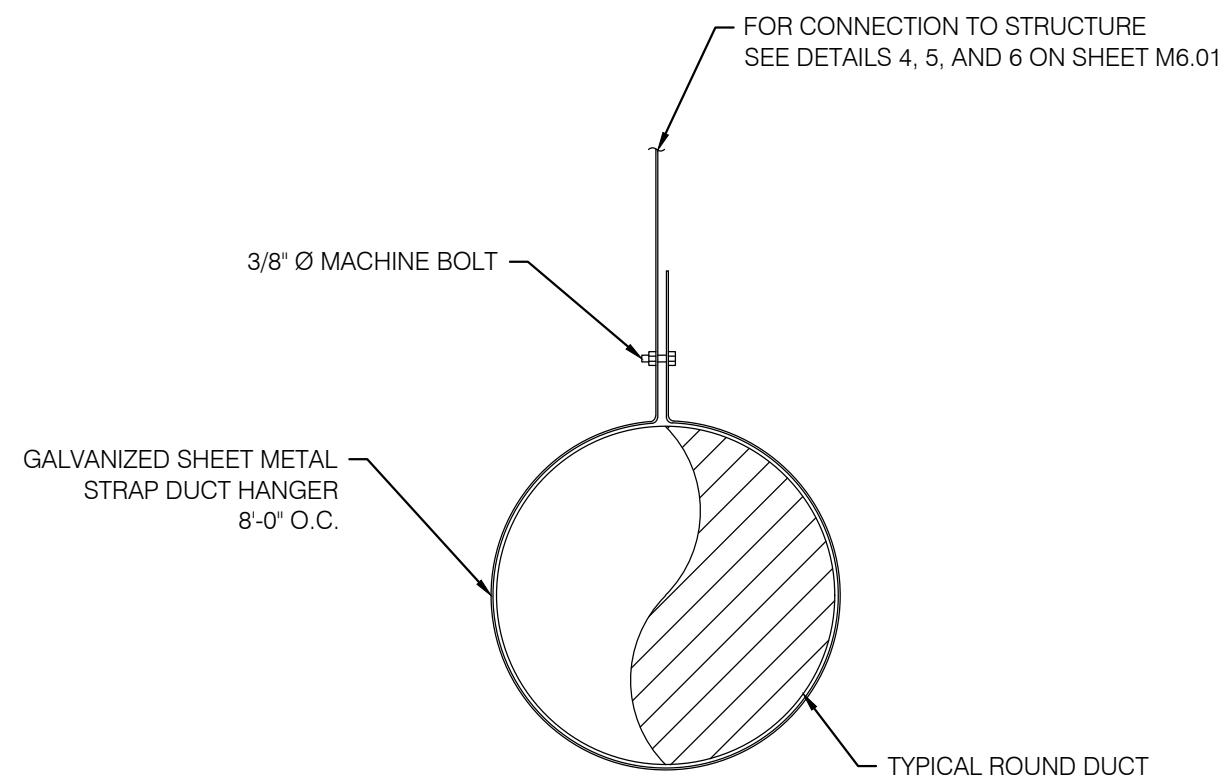
Sheet Title:
DETAILS

DSA APPROVED SET

Date: 06/24/2021 Client Project No: 5015037000

Sheet:

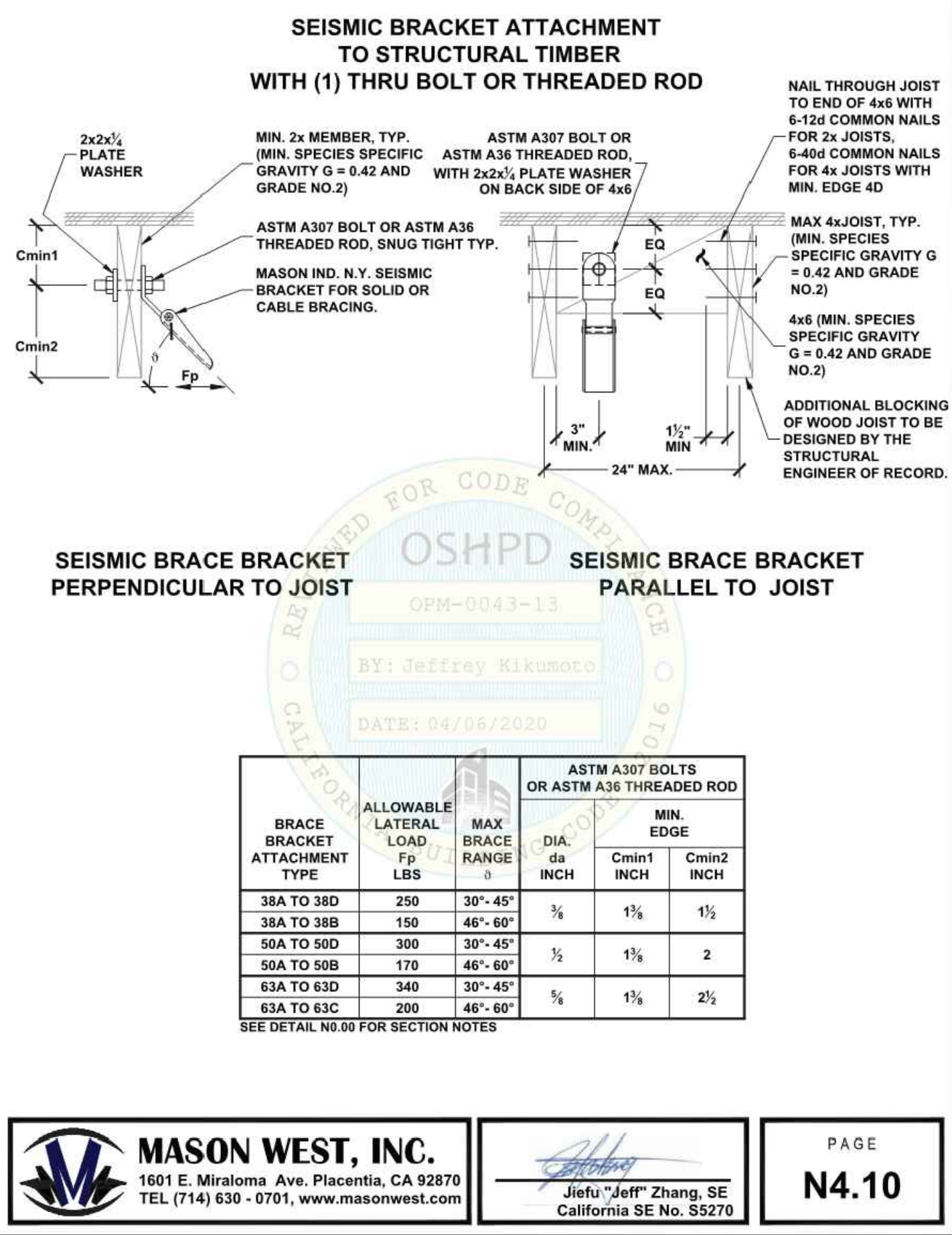
M6.01



ROUND DUCT		
DAMETER /INCHES	STRAP AT 12 FT. SPACING	MAX LOAD EACH HANGER LBS
UP TO 24"	1" X 22 GA.	260

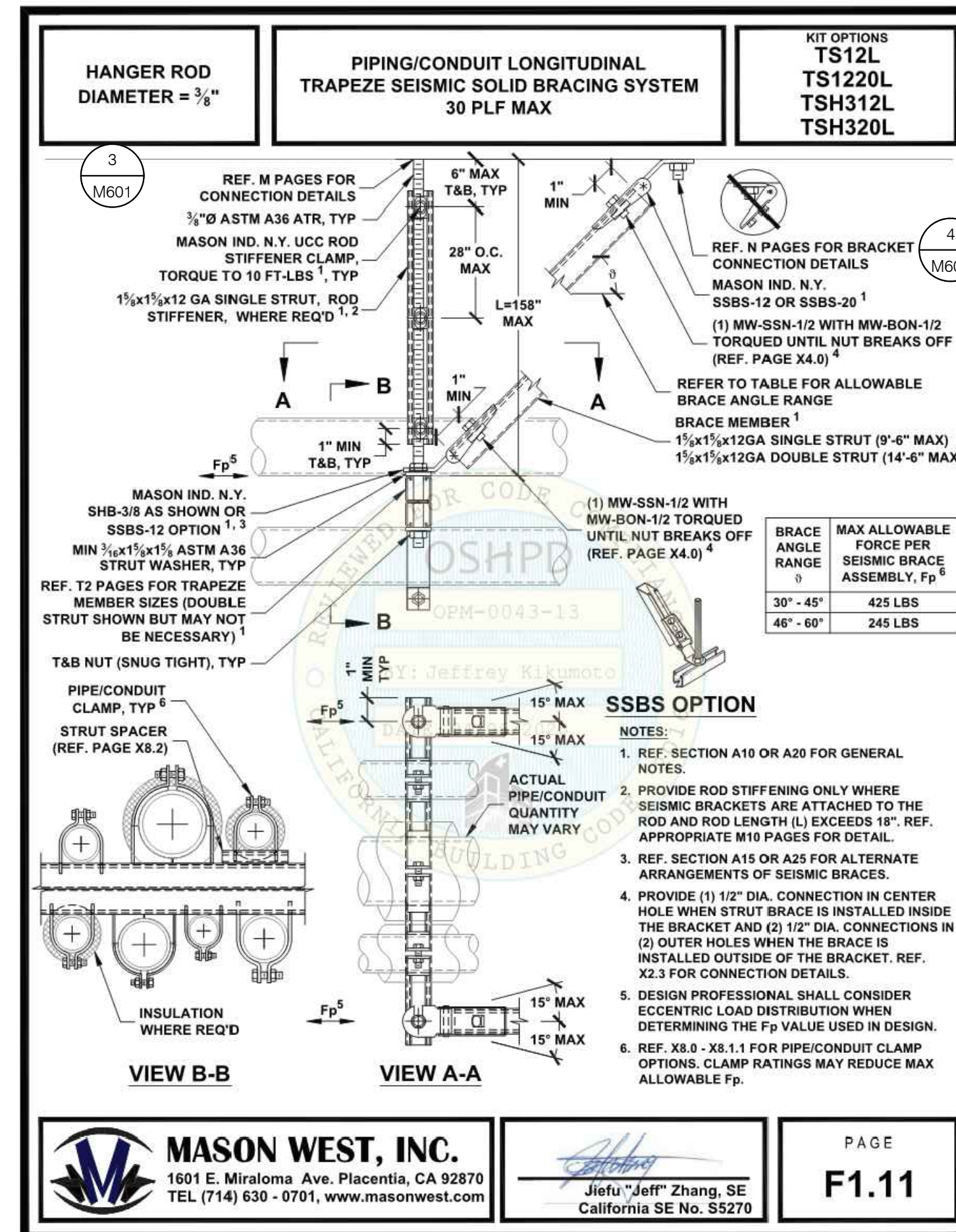
6 DUCT STRAP HANGER DETAIL

NO SCALE



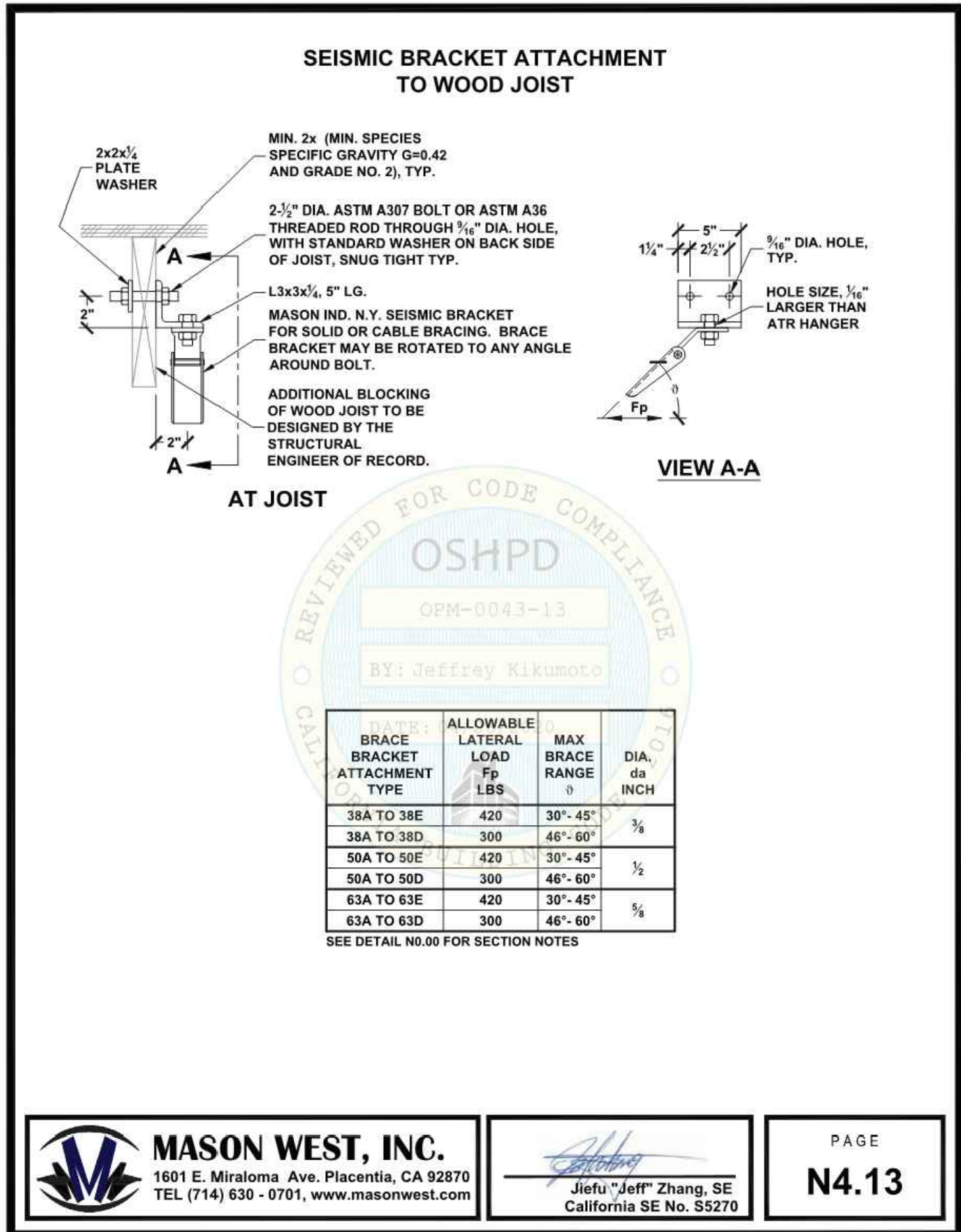
4 OPM 0043-13 DETAIL N4.10

NO SCALE



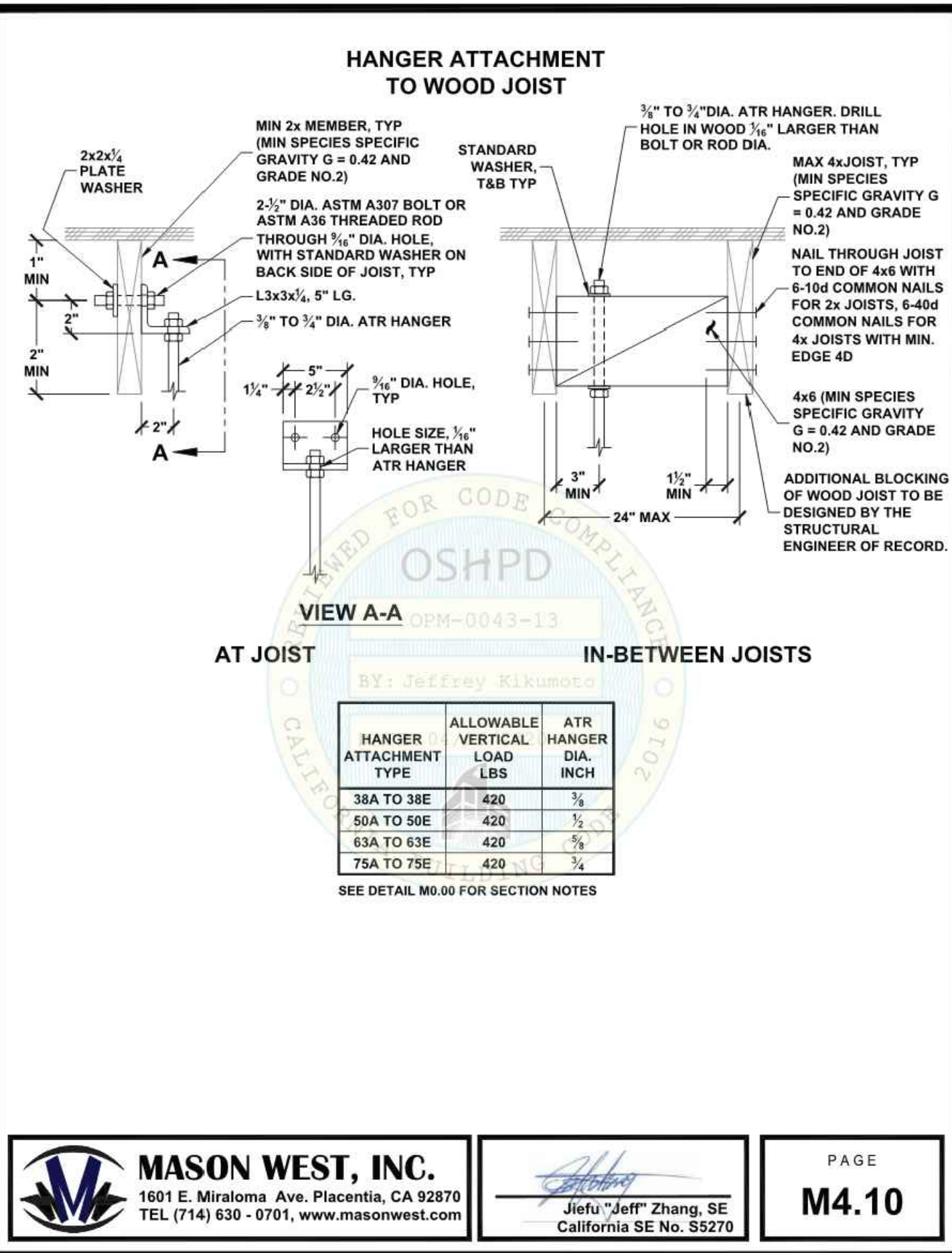
2 OPM 0043-13 DETAIL F1.11

NO SCALE



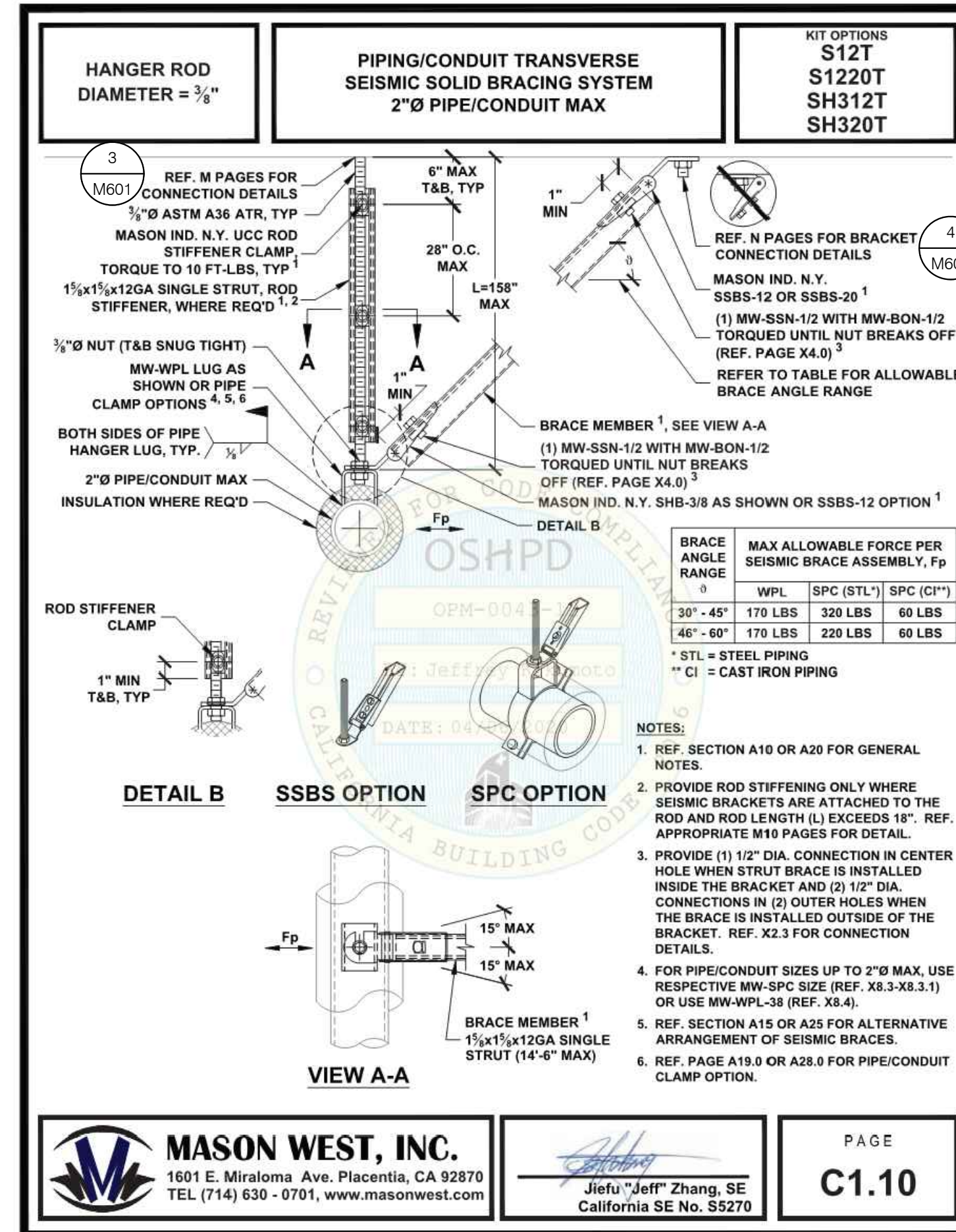
5 OPM 0043-13 DETAIL N4.13

NO SCALE



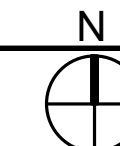
3 OPM 0043-13 DETAIL M4.10

NO SCALE



1 OPM 0043-13 DETAIL C1.10

NO SCALE



NOTES

- 1 (E)EXHAUST DUCT AND ACCESSORIES SHALL BE DEMOLISHED BACK TO THE DEMOLISHED (E)DUST COLLECTOR & DEMOLISHED (E)SUPPLY FAN.
- 2 EXISTING CA PIPE TO BE DEMOLISHED, CUT & CAPPED IN PLACE.
- 3 (E)SUPPLY DUCT AND ACCESSORIES SHALL BE DEMOLISHED BACK TO THE DEMOLISHED (E)DUST COLLECTOR & DEMOLISHED (E)SUPPLY FAN.

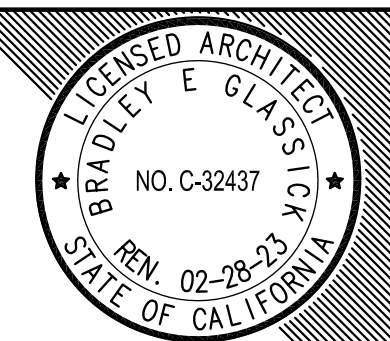
AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

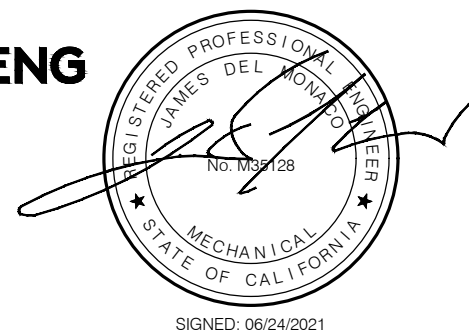
No.	Issued	Date	No.	Issued	Date

Keynotes:

P2S ENG

Long Beach | Los Angeles
San Diego | San Jose

p2sinc.com



Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
SITE DEMOLITION PLAN

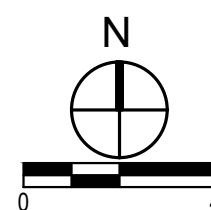
DSA APPROVED SET

Date: 06/24/2021

Client Project No: 5015037000

Sheet:

MD1.11

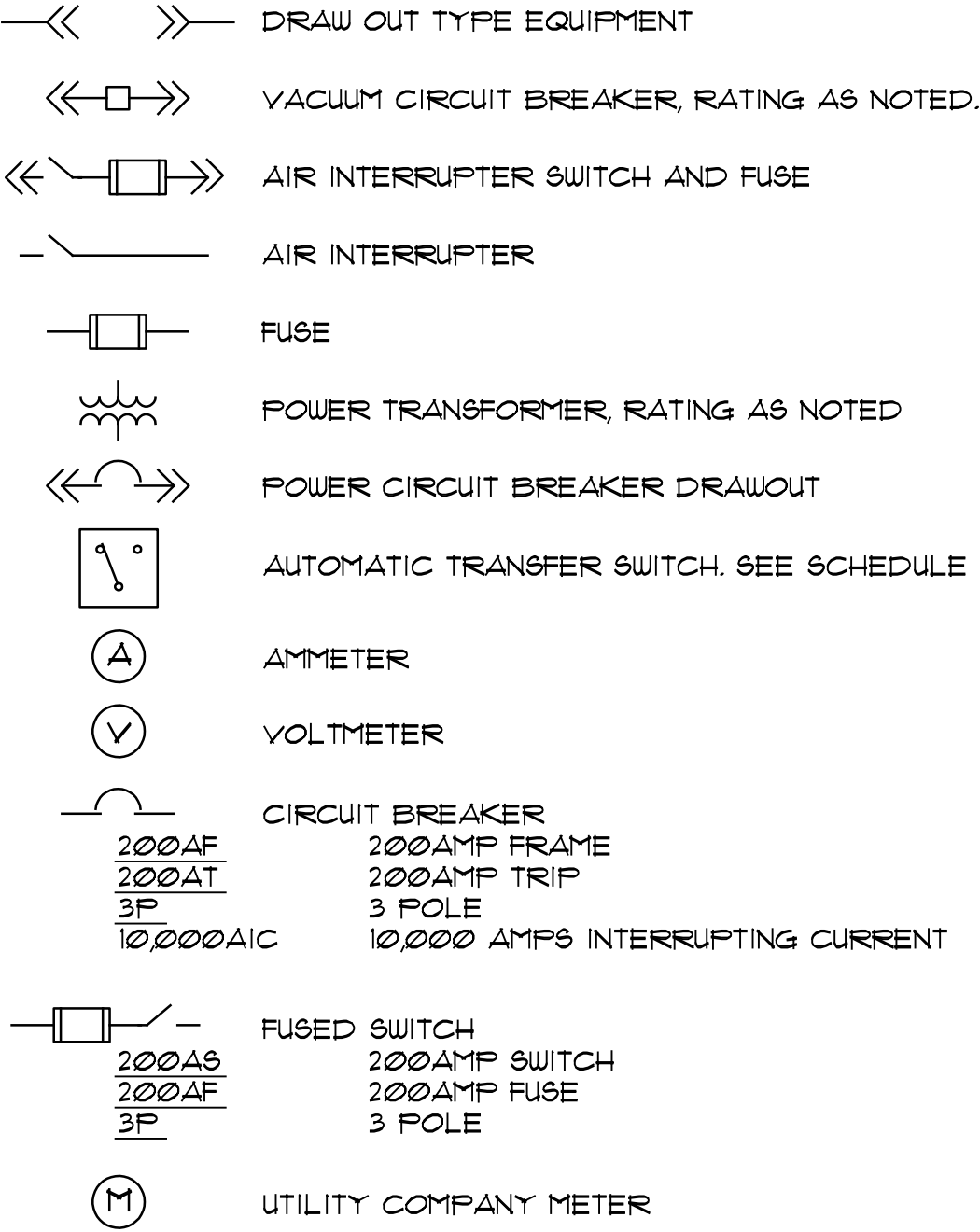


ABBREVIATIONS

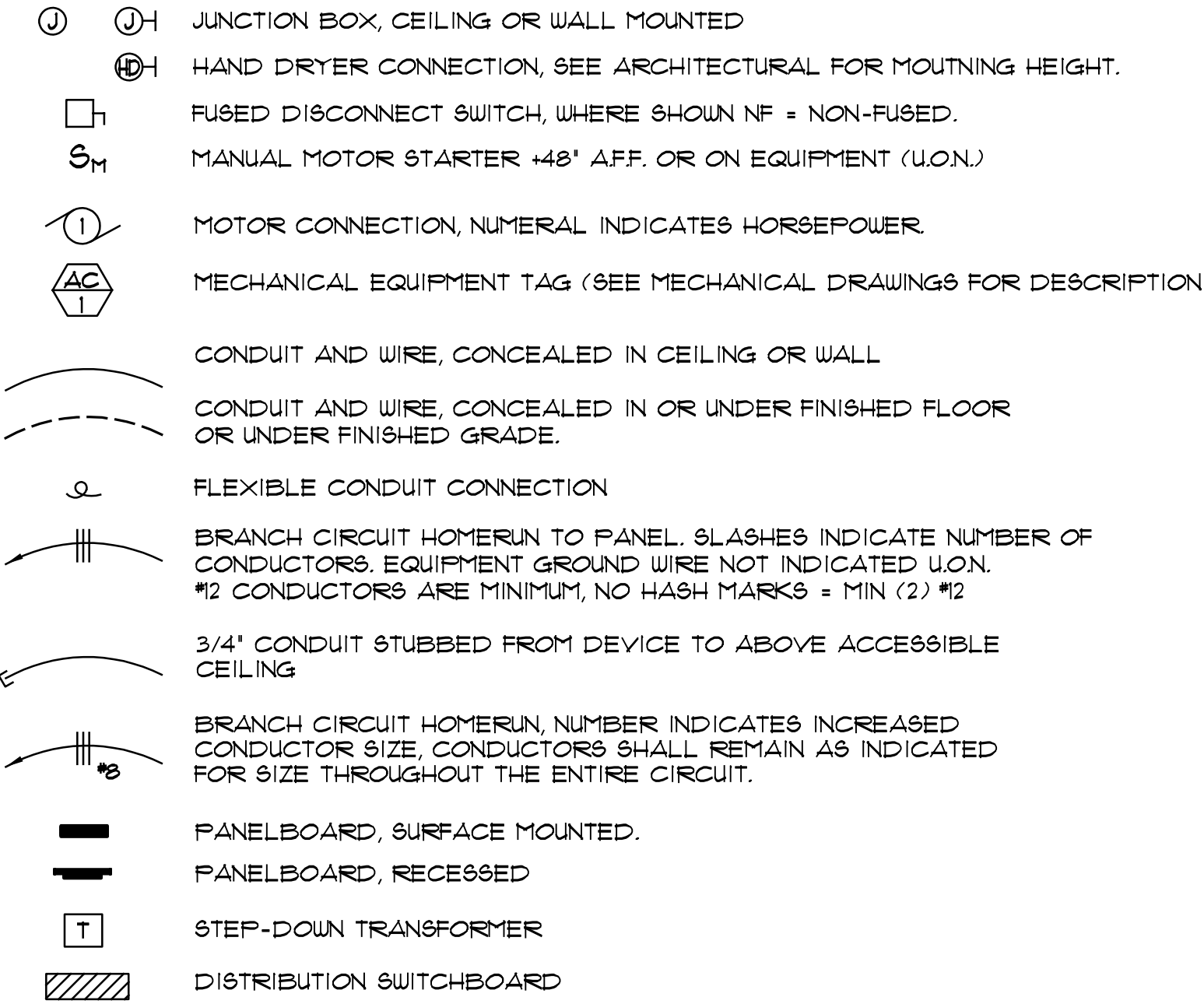
A	AMPERE (AMPS)
AC	ALTERNATING CURRENT
AF	AMPS-FRAME (RATING)
AIC	AMP INTERRUPTING CURRENT
AM	AMMETER
AS	AMP SWITCH (FUSED SWITCH RATING)
AT	AMPS-TRIP (RATING)
AWG	AMERICAN WIRE GAUGE
BC	BAKE COPPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CO	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CJ	COPPER
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DWG	DRAWING
EX	EXISTING
FLA	FULL LOAD AMPS
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GFI	GROUND FAULT INTERRUPTER
GRD/GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HQA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
KW	KILOWATT
LCL	LONG CONTINUOUS LOAD
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
MCC	MOTOR CONTROL CENTER
MCM (KCM)	THOUSAND CIRCULAR MILS
MECH	MECHANICAL
NC	NORMALLY CLOSED
NF	NON-FUSED
NO	NORMALLY OPEN/NUMBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
P	POLE
PH	PHASE
POC	POINT OF CONNECTION
FRS	PVC COATED RIGID STEEL (CONDUIT)
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE DUCT
SUBD	SUBBOARD
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT-AMPERES
VM	VOLTMETER
VL	VERIFY LOCATION
W	WIRE/WIATTS
WP	WEATHERPROOF (NEMA TYPE 3R)
WT	WATERTIGHT
XP	EXPLOSION PROOF (RATED FOR AREA HAZARD)

ELECTRICAL SYMBOL LEGEND

DISTRIBUTION EQUIPMENT



POWER CONTINUED



GENERAL PROJECT NOTES-

- UNLESS OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.
- UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO BE CENTERLINE OF THE DEVICE.
- "GENERAL NOTES" SHOWN ON AN INDIVIDUAL DRAWING APPLY TO ALL WORK SHOWN ON THAT SHEET. "KEY NOTES" ONLY APPLY TO SPECIFIC ITEMS WHERE ANNOTATED AT SPECIFIC LOCATIONS. SOME KEY NOTES MAY NOT APPLY TO ANY SPECIFIC ITEMS.
- UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR AUTHORIZATION IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD AND DSA.

MEP COMPONENT ANCHORAGE NOTE-

MEP COMPONENT ANCHORAGE NOTE
ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA- APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1611A.1.8 THROUGH 1611A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. PERMANENTLY ATTACHED SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

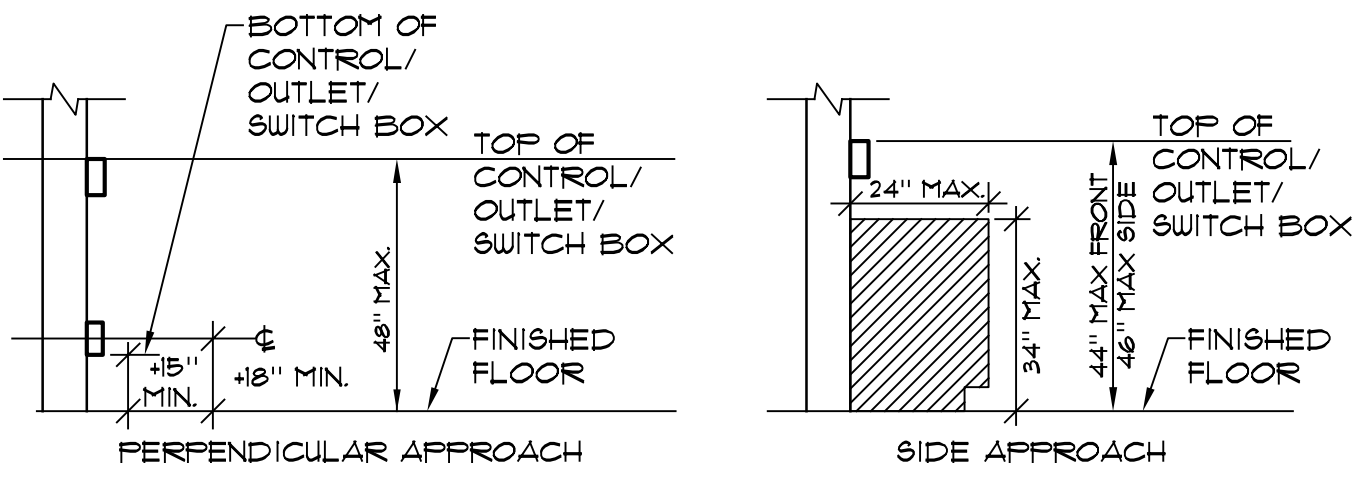
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1611A.1.24, 1611A.1.25 AND 1611A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2019 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP); MECHANICAL DUCTS (MD); PLUMBING PIPING (PP); ELECTRICAL DISTRIBUTION SYSTEMS (E):

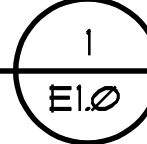
- ☐ ☐ ☐ ☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
- ☐ ☐ ☐ ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM) *



NOTE: MAINTAIN MINIMUM 36"x48" CLEAR FLOOR SPACE AT EACH APPROACH.

MOUNTING HEIGHT OVER OBSTRUCTION

NO SCALE



AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com

ISSUE:

No.	Issued	Date	No.	Issued	Date

Keynotes:

JOHNSON
CONSULTING ENGINEERS, INC.

Power | Lighting | Multimedia
Communications | Data Networking

12875 Brookprinter Place, Suite 300
Poway, CA 92084
P 858.679.4030 | F 858.513.0559
www.jce-inc.com

*20240 6/24/2021

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
ELECTRICAL LEGEND AND NOTES

DSA APPROVED SET

06/24/2021 Client Project No: 5015037000

Sheet:

E0.0

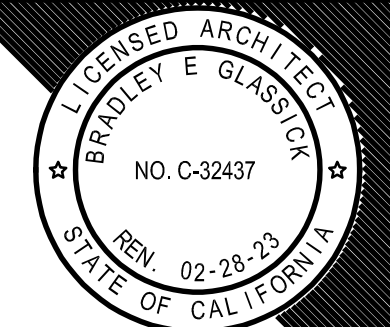
AGENCY
APPROVAL:



HMC Architects

5015037000

3546 Concourse Street / Ontario, CA 91764
T 909 989 9979 / www.hmcarchitects.com



ISSUE:

No.	Issued	Date	No.	Issued	Date

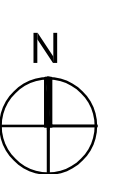
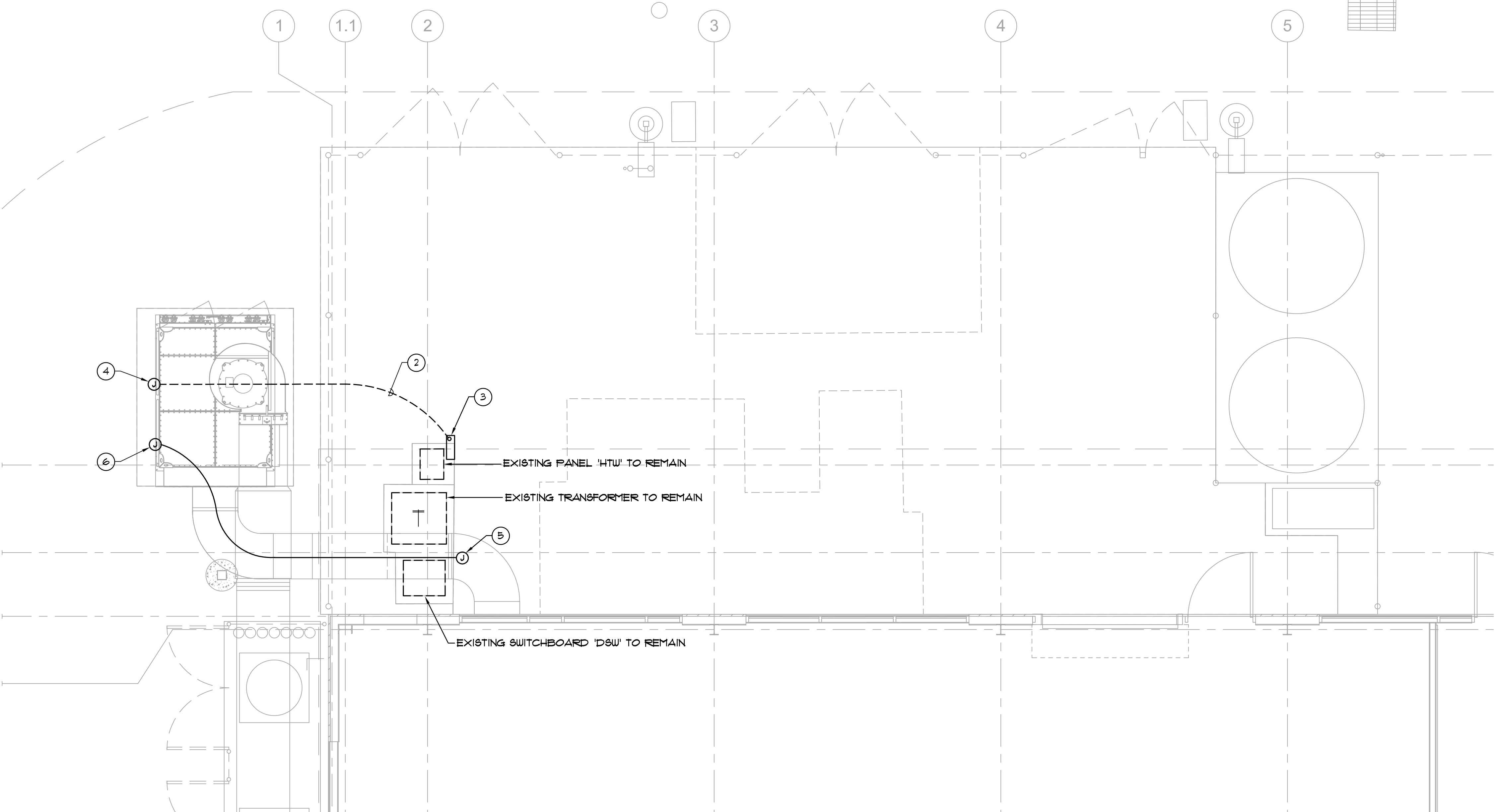
Keynotes:

KEY NOTES:

- EXISTING ELECTRICAL CONNECTION TO EXISTING DUST AND FUME COLLECTOR TO BE REMOVED. REMOVE EXISTING CONDUCTORS BACK TO EXISTING PANEL 'HTU', LABEL BREAKER AS SPARE AND REMOVE EXISTING CONDUIT FLUSH WITH EXISTING CONCRETE PAD.
- NEW UNDERGROUND 2" C, (4) #10, (1) #6 GND CIRCUIT #52123 PANEL 'HTU'. PROVIDE NEW 150 AMP / 3 POLE BREAKER IN EXISTING SPACE.
- PROVIDE NEMA 3R WIRING GUTTER MOUNTED ON EXISTING SUPPORT TO CONNECT NEW UNDERGROUND FEEDER AS REQUIRED.
- PROVIDE CONNECTION TO DUST AND FUME COLLECTOR FIELD. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
- EXTEND NEW 1" C, (3) #12, (1) #12 GND FROM SWITCHBOARD 'DSW' UP TO NEW DUCT SUPPORT STRUCTURE. ROUTE TO NEW COLLECTOR AS REQUIRED. PROVIDE (2) 20A / P BREAKERS IN EXISTING SPACES.
- FIELD VERIFY EXACT LOCATION OF SOLENOID AND CONTROL CONNECTION PRIOR TO ROUGH-IN.

DEMO ENLARGED SITE PLAN – ELECTRICAL

2
1/4" = 1'-0"



REMODEL ENLARGED SITE PLAN –
ELECTRICAL

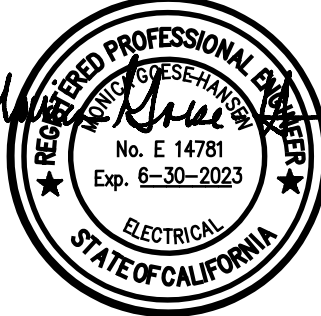
1
1/4" = 1'-0"

JOHNSON
CONSULTING ENGINEERS, INC.

Power | Lighting | Multimedia
Communications | Data Networking

12875 Brookprinter Place, Suite 300
Poway, CA 92084

P 858.679.4030 | F 858.513.0559
www.jce-inc.com



20240 6/24/2021

Agency
Approval:

File No.: 37-C1

Facility:
PALOMAR COLLEGE
PALOMAR COLLEGE
1140 W. MISSION ROAD, SAN MARCOS, CA 92069

Project:
WELDING YARD IMPROVEMENTS

Sheet Title:
FLOOR PLAN - POWER

DSA APPROVED SET

06/24/2021 Client Project No: 5015037000

Sheet:

E1.0