DEPARTMENT OF VETERANS AFFAIRS

Project Number 600-22-703

EHRM TRAINING AND ADMIN SPACE SUPPORT

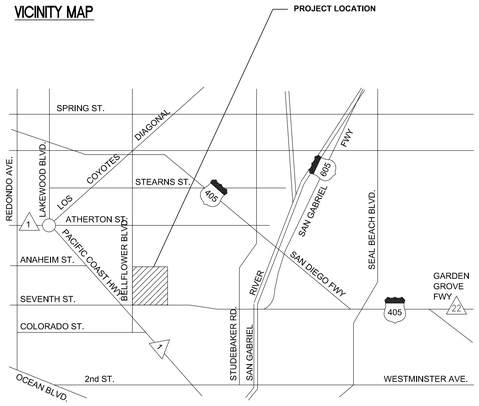
TIBOR RUBIN MEDICAL CENTER

5901 EAST 7TH STREET, LONG BEACH, CA 90822

ARCHITECTURAL SYMBOLS

- ELEVATION INDICATOR
- CENTER LINE INDICATOR
- CONTRACT LIMIT LINE
- DEMOLITION LINE
- EXISTING TO REMAIN LINE
- FEATURES ABOVE LINE INDICATOR
- HIDDEN FEATURES LINE
- NEW LINE
- PROPERTY LINE
- SMOKE BARRIER LINE
- BREAK, ROUND (USER DEFINES SIZE)
- BREAK, STRAIGHT (SEE SECTION INDICATORS, BUILDING, WITH BREAK STANDARDS)
- DETAIL INDICATOR (D2 / A–512)
- DETAIL INDICATOR (D2 / A–512)
- DIMENSION LINE
- ELEVATION INDICATOR, EXTERIOR (A4 / A–201) (A4 / A–201)
- ELEVATION INDICATOR, INTERIOR, MULTIPLE VIEW (A2 / A–202)
- ELEVATION INDICATOR, INTERIOR, SINGLE VIEW (A2 / A–202)
- BUILDING SECTION INDICATOR (A4 / A–201)
- DOOR INDICATOR (B301.1)
- WINDOW INDICATOR (263)
- DETAIL INDICATOR (DETAIL NUMBER 1, SHEET WHERE REF. A3.1, SHEET WHERE DRAWN A4.3)
- FURNITURE, FIXTURE, & EQUIPMENT INDICATOR (22)
- INTERIOR FINISH (234)
- ROOM NAME AND NUMBER (CORRIDOR C2)
- COLUMN GRID
- KEYNOTE
- WALL OR PARTITION TYPE (AA)
- FIRE EXTINGUISHER CABINET (FEC)
- CORNER GUARD (CG)
- NORTH ARROW
- V V ITEM – VA SUPPLIED & INSTALLED
- VC ITEM – VA SUPPLIED & CONTRACTOR INSTALLED
- CC ITEM – CONTRACTOR SUPPLIED & INSTALLED

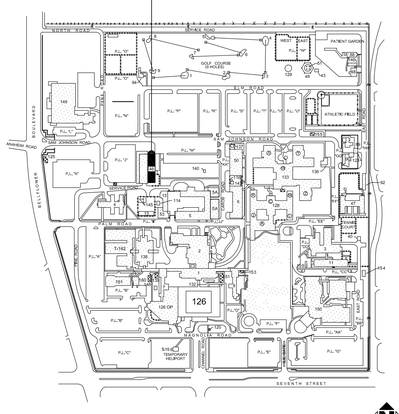
VICINITY MAP



NTS

KEY MAP

PROJECT AREA
FIRST FLOOR, BLD. #46



NTS

APPLICABLE CODES AND STANDARDS

VA HAS ADOPTED THE LATEST EDITION OF THE FOLLOWING CODES AND STANDARDS AS A MINIMUM FOR ALL PROJECTS PERFORMED IN THE MODERNIZATION, ALTERATION, ADDITION, AND/OR IMPROVEMENT OR ITS REAL PROPERTY AND THE CONSTRUCTION OF NEW STRUCTURES. VA DESIGN MANUALS AND MASTER SPECIFICATIONS SPECIFY OTHER CODES AND STANDARDS THAT VA FOLLOWS ON ITS PROJECTS:

VA DIRECTIVES, DESIGN MANUALS, MASTER SPECIFICATIONS, VA NATIONAL CAD STANDARD APPLICATION GUIDE, AND OTHER GUIDANCE ON THE TECHNICAL INFORMATION LIBRARY (TIL) (HTTP://WWW.CFM.VA.GOV/TIL/)

ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE THE FOLLOWING STANDARDS, AS ADOPTED BY THE GOVERNING AUTHORITIES:

2021 INTERNATIONAL BUILDING CODE (IBC).
2021 INTERNATIONAL MECHANICAL CODE.
2021 INTERNATIONAL PLUMBING CODE.
2021 INTERNATIONAL ENERGY CONSERVATION CODE.
2021 INTERNATIONAL EXISTING BUILDING CODE.
2021 NFPA 101 LIFE SAFETY CODE.
2019 NFPA 13.
2020 NFPA 70
2021 VA DESIGN MANUAL FOR FIRE PROTECTION.
OTHER NFPA NATIONAL FIRE CODES (EXCLUDING NFPA 5000 AND NFPA 900).
OCCUPATIONAL, SAFETY AND HEALTH ADMINISTRATION STANDARDS (OSHA).
VA SEISMIC DESIGN REQUIREMENTS, H–18–8.
NATIONAL ELECTRIC CODE (NEC).
INTERNATIONAL PLUMBING CODE (IPC).
SAFETY CODE FOR ELEVATORS AND ESCALATORS, AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) A 17.1.
ASME BOILER AND PRESSURE VESSEL CODE.
ASME CODE FOR PRESSURE PIPING.
ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARDS (ABAAS) INCLUDING VA SUPPLEMENT, BARRIER FREE DESIGN GUIDE (PG–18–13).
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMMENTARY (ACI 318).
MANUAL OF STEEL CONSTRUCTION, LOAD AND RESISTANCE FACTOR DESIGN SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
ENERGY POLICY ACT OF 2005 (EPACT)
DOE INTERIM FINAL RULE: ENERGY CONSERVATION STANDARDS FOR NEW FEDERAL, COMMERCIAL AND MULTI–FAMILY HIGH–RISE RESIDENTIAL BUILDINGS AND NEW LOW–RISE RESIDENTIAL BUILDINGS, 10 CFR PARTS 433, 434 AND 435.
FEDERAL LEADERSHIP IN HIGH PERFORMANCE AND SUSTAINABLE BUILDINGS: MEMORANDUM OF UNDERSTANDING (MOU).
EXECUTIVE ORDER 13423: STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORT MANAGEMENT.
THE PROVISIONS FOR CONSTRUCTION AND SAFETY SIGNS, STATED IN THE GENERAL REQUIREMENTS SECTION 01010 OF THE VA MASTER CONSTRUCTION SPECIFICATION.
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY – ASHRAE STANDARD 62.1–2004.
SAFETY STANDARD FOR REFRIGERATION SYSTEMS – ASHRAE STANDARD 15–2007.
2019 NFPA 72
2018 NFPA 10
TMS 402/602–22 BUILDING REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES

BUILDING DATA

BUILDING TYPE:	(E) V–B
OCCUPANCY:	B – BUSINESS S – STORAGE
SPRINKLERED:	(E) AUTOMATIC SPRINKLER SYSTEM THROUGHOUT
NUMBER OF STORIES:	(E) 1
PROJECT LOCATION IN BUILDING:	FIRST FLOOR – BUILDING #46
PROJECT SQUARE FOOTAGE:	INTERIOR 2,300 S.F. EXTERIOR 1,800 S.F.
OCCUPANCY LOAD:	B – BUSINESS S – STORAGE
PARKING REQUIREMENTS:	(E) ON–SITE PARKING STALL (NO CHANGE)

PROJECT SCOPE OF WORK

THIS PROJECT RENOVATES 2,300 SF OF BUILDING 46 TO PROVIDE ELECTRONIC HEALTH RECORD MODERNIZATION (EHRM) TRAINING AND ADMINISTRATIVE SUPPORT SPACES. APPROXIMATELY 1,800 S.F. OF EXTERIOR COURTYARD AND LANDSCAPING WILL BE RENOVATED.

SHEET INDEX

GENERAL INFO — 5 SHEETS

G1.101 TITLE SHEET
G1.102 GENERAL NOTES
G1.103 ABBREVIATIONS
G1.104 ACCESSIBILITY DETAILS
G1.105 ACCESSIBILITY DETAILS

LANDSCAPE — 11 SHEETS

L1.100 HARDSCAPE FINISHES PLAN
L1.200 HARDSCAPE FINISHES LEGEND
L1.300 HARDSCAPE DETAILS
L2.100 IRRIGATION PLAN
L2.200 IRRIGATION LEGEND AND NOTES
L2.300 IRRIGATION DETAILS
L2.400 IRRIGATION DETAILS
L2.500 IRRIGATION DETAILS
L3.100 PLANTING PLAN
L3.200 PLANTING LEGEND AND NOTES
L3.300 PLANTING DETAILS

ARCHITECTURAL — 9 SHEETS

A0.100 LIFE SAFETY AND EGRESS PLAN
A1.100 DEMO SITE PLAN
A2.100 DEMO FLOOR PLAN
A2.200 DEMO CEILING PLAN
A3.100 REMODEL FLOOR PLAN
A3.200 REMODEL CEILING PLAN
A3.300 BUILDING SECTIONS AND ELEVATIONS
A3.400 INTERIOR ELEVATIONS
A4.100 DETAILS

FIRE PROTECTION — 4 SHEETS

FA001 FIRE ALARM PLAN – GENERAL NOTES
FA101 FIRE ALARM PLAN
FS001 FIRE SPRINKLER PLAN – GENERAL NOTES
FS101 FIRE SPRINKLER PLAN

STRUCTURAL — 7 SHEET

S0.100 GENERAL NOTES
S0.101 GENERAL NOTES
S1.100 PARTIAL FOUNDATION PLAN
S1.101 PARTIAL ROOF FRAMING PLAN
S2.100 FOUNDATION DETAILS
S2.101 FRAMING DETAILS
S2.102 FRAMING DETAILS

MECHANICAL — 6 SHEETS

M1.100 MECHANICAL LEGENDS AND NOTES
M1.200 MECHANICAL SCHEDULES AND AIR BALANCE TABLE
M2.100 MECHANICAL DEMO FLOOR PLAN
M3.100 MECHANICAL NEW WORK FLOOR PLAN
M4.100 MECHANICAL ROOF PLAN
M5.100 MECHANICAL DETAILS

PLUMBING — 1 SHEET

P2.100 PLUMBING DEMO FLOOR PLAN

ELECTRICAL — 13 SHEETS

E0.101 ELECTRICAL SYMBOLS LIST, GENERAL NOTES AND SHEET INDEX
EL1.00 ELECTRICAL SITE LIGHTING PLAN

EL2.101 LIGHTING DEMOLITION PLAN
EL2.102 LIGHTING RENOVATION PLAN
EL2.103 LIGHTING PHOTOMETRIC OVERALL PLAN
EL2.104 LIGHTING PHOTOMETRIC EGRESS PLAN

EP2.201 POWER AND SIGNAL DEMOLITION PLAN
EP2.202 POWER AND SIGNAL RENOVATION PLAN

ESL2.601 PARTIAL SINGLE LINE DIAGRAM AND LOAD CALCULATIONS

ES2.701 ELECTRICAL SCHEDULES
ES2.702 PANEL SCHEDULES

EK2.801 ELECTRICAL DETAILS
EK2.802 LIGHTING CONTROL DETAILS

VENDOR (FOR REFERENCE ONLY) — 5 SHEETS

VD1.100 OPERABLE PANEL OP–05
VD1.200 OPERABLE PANEL OP–06
VD1.300 OPERABLE PANEL OP–07
VD1.400 OPERABLE PANEL OP–08
VD1.500 VENDOR TYP. DETAILS

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Revisions:	Date
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CONSULTANTS:

LICENSED ARCHITECT — C–21579 — 4/30/24, 2023 RENEWAL DATE — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: TITLE SHEET

Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	JJ	DH

Project Number: 600–22–703

Building Number: BLDG. #46

Drawing Number: GI.101

Dwg. Page 1 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08–6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\VHPD\VA LONG BEACH\VALB22101 – EHRM Trng Admin Space Support\4. CD\2. DWG CD\A. Arch–CD\Plot\GI.101 TITLE SHEET.dwg 1–11–23 11:06:12 AM Darrinuska

GENERAL

1. CONTRACTOR SHALL SUBMIT REQUEST FOR INFORMATION (RFI'S) REGARDING ANY KNOWN DISCREPANCIES WITH THE CONTRACT DOCUMENTS OR UNFORESEEN SITE CONDITIONS TO THE VA AND THE ARCHITECT FOR CLARIFICATION PRIOR TO NOTICE TO PROCEED.
2. DIMENSIONS SHALL NOT BE SCALED FROM THE PLANS, SECTIONS, ELEVATIONS OR DETAILS. ALL DRAWINGS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATING PURPOSES.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK.
4. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE VA COR, OTHER VA PROJECT STAKEHOLDERS, THE ARCHITECT, AND THE CONTRACTOR WITH ALL OF HIS MAJOR SUBCONTRACTORS SHALL BE HELD IMMEDIATELY AFTER SIGNING OF THE OWNER-CONTRACTOR AGREEMENT AND PRIOR TO THE START OF ANY WORK
5. UNLESS OTHERWISE NOTED, DIMENSIONS ARE TO COLUMN CENTERLINE, FACE OF FINISH PARTITION, FACE OF MASONRY WALLS AND FACE OF EXISTING WALLS.
6. ALL CUTTING AND PATCHING SHALL BE DONE BY THE GENERAL CONTRACTOR AS OUTLINED IN THE GENERAL CONDITIONS OF THE SPECIFICATIONS. PATCHES IN FINISH SURFACES SHALL MATCH THE ADJACENT SURFACES IN MATERIAL, FINISH AND QUALITY.
7. NEW WORK EXTENDING EXISTING CONDITIONS SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.
8. ALL SOUND RATED WALLS OR PARTITIONS SHALL EXTEND TO THE UNDERSIDE OF THE STRUCTURE OR DECK ABOVE UNLESS OTHERWISE NOTED. THESE PARTITIONS SHALL BE ENTIRELY SEALED OFF WITH CLOSURE GASKETS AND/OR ACOUSTICAL SEALANT AT BOTTOM, TOP, SIDES AND ANY OTHER ABUTMENT WHERE A SOUND LEAK WOULD OTHERWISE OCCUR. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC., IN SUCH PARTITIONS SHALL BE PACKED AND SEALED ALONG THE PERIMETER OF THE PENETRATION.
9. IN THE CASE OF NON-RATED PARTITIONS, CARRY METAL STUDS TO THE STRUCTURE ABOVE, AND HOLD THE GYPSUM BOARD TO 6" MINIMUM ABOVE THE FINISHED CEILING.
10. PROVIDED 45 STC RATING BETWEEN OFFICES
    PROVIDED 55 STC RATING BETWEEN OFFICES AND PUBLIC SPACE
    PROVIDED 65 STC RATING BETWEEN OFFICES AND SERVICE AREA
    PROVIDED 45 STC RATING BETWEEN OFFICES AND ACCESS CORRIDOR
11. DUE TO MANUFACTURER'S VARIATION WITH SIZE OF EQUIPMENT, CASEWORK, PLUMBING FIXTURES, ETC; ALL DIMENSIONS REFERRED TO THE SPACE WHERE SUCH ITEMS ARE BUILT-IN SHALL BE VERIFIED WITH THE ITEM SUPPLIED.

CLEAN ATTIRE:

1. GENERAL CONTRACTOR AND THE SUBCONTRACTOR(S) THAT AS A SERVICE PROVIDER TO THE VETERANS AND VETERAN AFFAIRS HEALTHCARE ARE TO WEAR APPROPRIATE ATTIRE, I.E. CLEAN CLOTHING IN THE COMMON AREA EXCLUDING THE WORK AREA.

PROJECT SCHEDULE AND PHASING OF THE WORK

1. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY VA COR AN INTERIM PROJECT SCHEDULE OF HIS OPERATIONS WITH INTERIM PHASING PLANS PRIOR TO NOTICE TO PROCEED. REFER TO SPECIFICATION SECTION 013216.15
2. DURING THE CONSTRUCTION PHASE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A SCHEDULE OF HIS OPERATIONS AND PHASING PLAN PRIOR TO STARTING ANY NEW PHASE.
3. THE CONTRACTOR SHALL DEVELOP A SCHEDULE OF CONSTRUCTION WHICH INCLUDES THE NECESSARY ACTIONS TO MAINTAIN THE OPERATION OF THE ADJACENT FUNCTION (INCLUDING ONE FLOOR ABOVE AND BELOW) DURING THE CONSTRUCTION PROCESS
4. THE VA RESIDENT ENGINEER AND THE DESIGN/BUILDER WILL REVIEW THE DESIGN/BUILDER'S SCHEDULE TO VERIFY MOST EFFICIENT TIMING OF THE CONTRACT WORK TO AVOID CONFLICTS WITH THE CURRENT OPERATIONS
5. INTENT OF THE PHASING PLANS IS TO PERMIT THE CONTINUAL OPERATION OF NORMAL ACTIVITIES AT THE VA HEALTHCARE CENTER DURING PROGRESS OF WORK AT NO TIME SHALL ANY WORK INTERFERE WITH THE VA'S NORMAL OPERATION WITHOUT PRIOR ACCEPTANCE PRIOR TO START OF THE WORK.

TEMPORARY PARTITIONS

1. PROVIDE TEMPORARY INTERIOR DUST PROOF PARTITION WALLS WHERE NECESSARY TO PREVENT INFILTRATION OF DUST INTO OCCUPIED AREAS FLOOR TO DECK, WITH SECURED OPENINGS.
2. ENSURE THAT TEMPORARY CONSTRUCTION PARTITIONS ARE SMOKE TIGHT AND CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
3. ALL DUST, NOISE AND ODORS SHALL BE KEPT TO A MINIMUM.
4. PROVIDE 1/2' GYPSUM BOARD TEMPORARY WALL SEPARATING PUBLIC FROM PROJECT AREA(S) FOR DUST AND INFECTION CONTROL. BARRIER TO BE AIR TIGHT FLOOR TO DECK WITH SECURED OPENINGS.
5. CONTRACTOR TO REPAIR ALL IMPACTED SURFACES AFTER REMOVAL OF TEMPORARY PARTITIONS.
6. TEMPORARY PARTITIONS SHALL BE IN COMPLIANCE WITH NFPA 241. CONSTRUCTION AREA TO BE SEPARATED BY 1 HOUR PARTITION THAT EXTENDS TO THE BOTTOM OF THE DECK ABOVE.

INTERIM LIFE SAFETY MEASURES

INTERIM LIFE SAFETY MEASURES (ILSM) ARE REQUIRED TO BE TAKEN TO TEMPORARILY COMPENSATE FOR THE HAZARDS POSED BY CONSTRUCTION ACTIVITIES, AND ARE REQUIRED BY JOINT COMMISSION ON ACCREDIDATION OF HOSPITALS (JCAHO). IMPLEMENTATION OF ILSM IS REQUIRED IN OR ADJACENT TO ALL CONSTRUCTION AREAS. ILSM APPLY TO ALL PERSONNEL, INCLUDING CONSTRUCTION WORKERS. FOR THE CONTRACTOR, ILSM CONSISTS OF THE FOLLOWING ACTIONS:

1. ENSURING EXITS PROVIDE FREE AND UNOBSTRUCTED EGRESS. PERSONNEL RECEIVE TRAINING IF ALTERNATIVE EXITS MUST BE DESIGNATED. BUILDING/AREAS UNDER CONSTRUCTION MUST MAINTAIN ESCAPE FACILITIES FOR CONSTRUCTION WORKERS AT ALL TIMES. MEANS OF EGRESS IN CONSTRUCTION AREAS ARE INSPECTED DAILY.
2. ENSURING FREE AND UNOBSTRUCTED ACCESS TO EMERGENCY DEPARTMENTS/SERVICES AND FOR EMERGENCY FORCES.
3. ENSURING FIRE ALARM, DETECTION & SUPPRESSION SYSTEMS ARE NOT IMPAIRED. A TEMPORARY BUT EQUIVALENT SYSTEM SHALL BE PROVIDED WHEN ANY FIRE SYSTEM IS IMPAIRED. TEMPORARY SYSTEMS MUST BE INSPECTED AND TESTED MONTHLY.
4. PROVIDE TEMPORARY CONSTRUCTION BARRICADES TO SEPARATE THE AREA OF WORK FROM ONGOING BUILDING OPERATIONS. A TEMPORARY BARRIER SHALL MEET THE SAME FIRE RATING CRITERIA AS THE PERMANENT RATED PARTITION. WHERE A TEMPORARY BARRICADE ENCROACHES ON A CORRIDOR OR EXITWAY, MAINTAIN A SIX FOOT MIN. CLR. WIDTH. CONTRACTOR SHALL SUBMIT LAYOUT TO COR FOR APPROVAL.
5. ENSURING TEMPORARY CONSTRUCTION PARTITIONS ARE SMOKE TIGHT AND BUILT OF NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE MATERIALS THAT WILL NOT CONTRIBUTE TO THE DEVELOPMENT OR SPREAD OF FIRE.
6. PROVIDING ADDITIONAL FIRE-FIGHTING EQUIPMENT AND USE TRAINING PERSONNEL.
7. SMOKING SHALL BE PROHIBITED AT ALL TIMES, IN OR ADJACENT TO ALL CONSTRUCTION AREAS. NO SMOKING PERMITTED ON VA PROPERTY.
8. DEVELOPING AND ENFORCING STORAGE, HOUSEKEEPING, AND DEBRIS-REMOVAL PRACTICES THAT REDUCE THE FLAMMABLE AND COMBUSTIBLE FIRE LOAD OF THE BUILDING TO THE LOWEST LEVEL NECESSARY FOR DAILY OPERATIONS.
9. CONDUCTING A MINIMUM OF TWO FIRE DRILLS PER SHIFT PER QUARTER IN AREAS WHERE EXISTING DEFICIENCIES AND/OR CONSTRUCTION ACTIVITIES REDUCE THE LEVEL OF FIRE SAFETY REQUIRED BY THE LIFE SAFETY CODE.
10. INCREASING HAZARD SURVEILLANCE OF BUILDINGS, GROUNDS, AND EQUIPMENT WITH SPECIAL ATTENTION TO EXCAVATIONS, CONSTRUCTION AREAS, CONSTRUCTION STORAGE, AND FIELD OFFICES.
11. TRAINING PERSONNEL IN ALTERNATE FIRE SAFETY PROCEDURES WHEN STRUCTURAL OR COMPARTMENTATION FEATURES OF FIRE SAFETY ARE COMPROMISED.
12. CONDUCTING ORGANIZATION-WIDE SAFETY EDUCATION PROGRAMS TO ENSURE AWARENESS OF ANY LIFE SAFETY CODE DEFICIENCIES, CONSTRUCTION HAZARDS AND THESE ILSM.
13. PROVIDE TEMPORARY DIRECTIONAL SIGNAGE APPROVED BY VA.
14. MAINTAIN SPRINKLER COVERAGE AND ACCESS TO PULL STATIONS AT ALL RELOCATION OF PULL STATION & FIRE EXTINGUISHERS MAY BE REQUIRED.
15. ACCESS TO VALVES AND PANELS TO BE MAINTAINED THROUGHOUT THE PROJECT.

CONTRACTOR NOTES

1. THE CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR UTILITY SHUTDOWNS TO THE OWNER'S REPRESENTATIVE AT LEAST 21 DAYS PRIOR TO THE EVENT. WORK REQUIRING SHUTDOWNS MAY BE REQUIRED TO BE PERFORMED OUTSIDE NORMAL WORK HOURS.
2. IF WORK ADJOINS AREAS THAT WILL BE OCCUPIED DURING CONSTRUCTION, THE CONTRACTOR AND SUBCONTRACTORS SHALL COOPERATE WITH THE OWNER TO MAINTAIN CONTINUOUS OPERATION. IF CONFLICTS OCCUR, THE INTERESTS OF THE VA SHALL GOVERN.
3. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE THE IMPACT OF CONSTRUCTION IN AFFECTED AREAS.
4. DUST SCREENS OF EITHER PLASTIC CURTAINS FOR ICRA CLASS I & II OR RATED GYPSUM BOARD PARTITIONS FOR ICRA CLASS III AND IV SHALL BE MAINTAINED ADJACENT TO & SEPARATING AREAS OF CONSTRUCTION FROM ADJOINING OCCUPIED AREAS TO MAINTAIN COMPLIANCE WITH NFPA 241. SCREENS SHALL EXTEND A DISTANCE TO ALLOW WORK WITHOUT DISRUPTING THE ADEQUATE FUNCTIONING OF THE FACILITY CIRCULATION. SCREENS SHALL BE RELOCATED AS NECESSARY FOR EACH PHASE OF THE PROJECT. CONTRACTOR SHALL COORDINATE WITH THE VA FOR THE SCREEN LOCATIONS.
5. ALL REQUIRED EXITS FROM OCCUPIED PORTIONS OF THE BUILDING MUST BE MAINTAINED AT ALL TIMES.
6. THE CONTRACTOR SHALL ESTABLISH PROCEDURES TO MINIMIZE CIRCULATION OF CONSTRUCTION PERSONNEL AND MATERIALS THROUGH OCCUPIED PORTIONS OF THE BUILDING.
7. THE CONTRACTOR SHALL IMMEDIATELY CLEAN DUST AND DIRT FROM CORRIDOR AREAS NOT PROTECTED BY DUST SCREENS.
8. STORAGE OF ALL MATERIALS, EQUIPMENT & SUPPLIES SHALL BE LIMITED TO SCHEDULED AREAS OF WORK IN PROGRESS, OR DESIGNATED EXTERIOR LOCATIONS APPROVED BY & ARRANGED W/ THE VA.
9. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORT FOR ALL FIXTURES, EQUIPMENT, CASEWORK, FURNISHINGS AND ALL OTHER ITEMS AS REQUIRED, INCLUDING BUT NOT LIMITED TO: TOWEL BARS, GRAB BARS, WINDOW TREATMENT, TELEPHONE BACKBOARDS, WATER HEATERS, AND CABINETRY.
10. THE GENERAL CONTRACTOR SHALL NOT MAKE ANY SUBSTITUTION OF MATERIALS OR EQUIPMENT WITHOUT THE WRITTEN CONSENT OF THE VA AND THE ARCHITECT.
11. COMPLETED CONSTRUCTION SHALL BE CLEANED, LABELS REMOVED, & ALL OTHER TOUCH-UP COMPLETED TO THE SATISFACTION OF THE VA PRIOR TO FINAL ACCEPTANCE.
12. WHERE PAVING, WALKS AND/OR LANDSCAPED AREAS ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPAIRED OR REPLACED TO MATCH EXISTING CONDITIONS AT CONTRACTORS EXPENSE.
13. THE GENERAL CONTRACTOR SHALL NOTIFY THE AOR AND COR IMMEDIATELY OF ANY SPECIFIED MATERIALS OR EQUIPMENT WHICH ARE EITHER UNAVAILABLE OR WILL CAUSE A DELAY IN THE CONSTRUCTION COMPLETION SCHEDULE.
14. ALL GYPSUM BOARD SURFACES, WALLS AND CEILINGS SHALL BE TAPED AND FEATHERED SMOOTH TO RECEIVE WALL FINISH. ALL WALLS AND CEILINGS SHALL RECEIVE A MINIMUM OF ONE COAT SEALER AND PAINT TO COVER.
15. WATER RESISTANT TYPE "GREEN" BOARD SHALL BE USED IN ALL RESTROOMS, SHOWERS, AND EXTERIOR AREAS.

OWNER FURNISHED, CONTRACTOR INSTALLED (OF/CI) EQUIPMENT

1. ALL EQUIPMENT INDICATED AS OWNER FURNISHED / CONTRACTOR INSTALLED - SHALL BE PLACED, CONNECTED TO NECESSARY UTILITIES, ANCHORED AS REQUIRED AND ADJUSTED PER THE CONSTRUCTION DOCUMENTS AND MANUFACTURERS RECOMMENDATIONS.
2. EQUIPMENT OF WEIGHT AND SIZE THAT REQUIRES RIGGING FOR PROPER INSTALLATION SHALL BE PROVIDED BY CONTRACTOR AT NO ADDITIONAL COST TO VA.
3. CONTRACTOR SHALL COORDINATE WITH VA FOR DELIVERY AND INSTALLATION OF EQUIPMENT TAKING SPECIAL NOTICE TO OVERSIZED EQUIPMENT THAT MAY REQUIRE ADDITIONAL CONSTRUCTION SEQUENCING. APPROPRIATE PRECAUTIONS SHALL BE TAKEN BY CONTRACTOR TO PROTECT FINISHES.
4. CONTRACTOR TO LOCATE ALL VA RETAINED MATERIAL (TO REMAIN IN PLACE OR TO BE TURNED OVER TO VA) AND COORDINATE WITH VA RESIDENT ENGINEER.
5. ALL MATERIALS NOT IDENTIFIED AS VA RETAINED (TO REMAIN OR TO BE TURNED OVER TO VA) ARE TO BE REMOVED FROM THE PREMISES BY THE CONTRACTOR.

DEMOLITION

1. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND IDENTIFY ALL BEARING STRUCTURAL ELEMENTS, MECHANICAL, PLUMBING, ELECTRICAL COMMUNICATIONS, AND ALL OTHER EXISTING SYSTEMS (AND MAKE NECESSARY PROVISIONS TO MAINTAIN THE INTEGRITY OF SAID SYSTEMS) PRIOR TO COMMENCEMENT OF DEMOLITION.
2. THE CONTRACTOR SHALL REFER TO DRAWINGS FOR EXTENT OF AND INFORMATION PARTICULAR TO THE REMOVAL OF EXISTING SYSTEMS.
3. PROVIDE TEMPORARY WEATHER PROTECTION AND SECURITY DEVICES DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR TO INTERIOR AREAS OF EXISTING BUILDING.
4. ALL SALVAGEABLE ITEMS SHALL BE THE PROPERTY OF THE VA AND SHALL BE REUSED OR STORE AS DESIGNATED BY THE VA.
5. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS TO PROTECT FINISHED PARTS OF THE MATERIALS AND EQUIPMENT AGAINST DAMAGE FROM ANY CAUSE DURING THE PROGRESS OF THE WORK AND UNTIL ACCEPTANCE BY THE OWNER.
6. CONTRACTOR SHALL PROTECT ALL FURNITURE, BOOKS, PLANTS, EQUIPMENT, MATERIALS, STORED ITEMS, ETC. IN THE INTERIOR SPACES AND REPAIR/REPLACE AS A RESULT OF THE DEMOLITION AND NEW CONSTRUCTION TO MATCH EXISTING CONDITIONS
7. REMOVE EXISTING INTERIOR WALLS OR CEILINGS WHERE INDICATED AND CUT GYPSUM BOARD BACK TO STRAIGHT LINES. RESTORE ALL DAMAGED GYPSUM BOARD WALLS.
8. IF JACK-HAMMERING CORE DRILLING OR CONCRETE SAWING IS TO BE UTILIZED, IT SHALL BE KEPT TO A MINIMUM AND SHALL BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE VA RESIDENT ENGINEER AND AT SUCH TIMES AS DESIGNATED. SEE NOTE NO. 12.
9. WHERE EXISTING CONSTRUCTION IS CUT OR OTHERWISE DISTURBED TO PERMIT INSTALLATION OF NEW WORK, REPAIR AND PATCH TO MATCH EXISTING CONSTRUCTION. USE METHODS AND MATERIALS WHICH ARE SIMILAR IN APPEARANCE AND EQUAL IN QUALITY TO THOSE AREAS BEING REPAIRED.
10. ALL ABANDONED PLUMBING LINES, ELECTRICAL CONDUIT OR BOXES, A/C DUCTS OR DIFFUSERS, TELEPHONE CABLES, ETC. WILL BE REMOVED BACK TO CLOSEST FEEDER POINT.
11. DEMOLITION SHALL BE EXECUTED IN CONFORMANCE WITH ALL INDUSTRY STANDARDS AND AS SET FORTH BY THE VA TIL.
12. DO NOT COMPROMISE ANY STRUCTURES OR STRUCTURAL ELEMENTS DURING DEMOLITION.
13. ALL UNFIXED FF&E SHALL BE REMOVED BY THE VA. ATTACHED FF&E SHALL BE REMOVED BY THE CONTRACTOR TO LOCATION DETERMINED BY THE VA.

NEW CONSTRUCTION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, AND FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTOR OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS WITH THE CONTRACT DOCUMENTS BEFORE COMMENCING ACTIVITIES. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS.
3. DIMENSIONS SHALL NOT BE SCALED FROM THE PLANS, SECTIONS, ELEVATIONS OR DETAILS. ALL DRAWINGS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATING PURPOSES.
4. AT ANY TIME; SHOULD ANY CONDITIONS ARISE WHEREIN THE INTENT OF THE DRAWINGS IS IN DOUBT OR WHERE THERE IS A DISCREPANCY BETWEEN THE DRAWINGS AND FIELD CONDITIONS; THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR WRITTEN CLARIFICATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF OPENINGS FOR ALL TRADES AND SHALL COORDINATE ALL CONSTRUCTION AS INDICATED BY THE CONTRACT DOCUMENTS, INCLUDING SHOP DRAWINGS REVISED BY THE ARCHITECT.
6. THE V.A. IS NOT RESPONSIBLE FOR ANY LOSS OR DAMAGE TO CONTRACTOR'S EQUIPMENT, TOOLS, ETC.
7. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS TO PROTECT FINISHED PARTS OF THE MATERIALS AND EQUIPMENT AGAINST DAMAGE FROM ANY CAUSE DURING THE PROGRESS OF THE WORK AND UNTIL ACCEPTANCE BY THE OWNER.
8. CONTRACTOR SHALL MAINTAIN A CLEAN WORK PLACE. DUST PALLIATION AND PREVENTION OF DUST CONTAMINATION OF NON-WORK SPACES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR ON AN ON GOING, DAILY BASIS.
9. ALL DIMENSIONS ARE TO FACE OF STUD OF NEW CONSTRUCTION AND FACE OF FINISH OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED.
10. SPECIAL TOOLS, IF ANY PART OF EQUIPMENT FURNISHED UNDER THIS CONTRACT REQUIRES A SPECIAL TOOL FOR ASSEMBLY, ADJUSTMENT, SETTING OF MAINTENANCE THEREOF, SHALL BE FURNISHED WITH EQUIPMENT AS A STANDARD ACCESSORY.
11. CONTRACTOR TO PATCH AND REPAIR ALL WALLS, FLOORS, AND CEILINGS DAMAGED DURING CONSTRUCTION TO MATCH EXISTING, ADJACENT FINISH.
12. THE CONTRACTOR SHALL PROTECT ALL FINISHED WORK AND SURFACES FROM DAMAGE DURING THE COURSE OF WORK AND SHALL REPAIR/REPLACE AS A RESULT OF THE DEMOLITION AND NEW CONSTRUCTION TO MATCH EXISTING CONDITIONS.

FINISH NOTES

1. REFER TO VA TECHNICAL INFORMATION LIBRARY (TIL) FOR VA REQUIREMENTS ON THE INTERIOR FINISHES. ADHERE TO NFPA 101 FOR INTERIOR REQUIREMENTS AS REQUIRED BY THE VAPDM
2. IN AREAS REQUIRING NEW WORK AND PATCHING, EXISTING FINISHES ARE TO BE VERIFIED BY THE CONTRACTOR AND ALL NEW FINISHES SHALL MATCH THE EXISTING FINISHES, UNLESS OTHERWISE NOTED. MATERIALS TO ADHERE TO NFPA 101 STANDARDS.
3. FOR EXISTING CEILING PATCHING, WHERE CEILING IS CUT OUT OR PORTIONS REMOVED FOR REMOVAL OF EXISTING WALL, DISTURBED PORTION SHALL BE PATCHED TO MATCH THE EXISTING CEILING FINISH BY THE RESPONSIBLE TRADE AS DEFINED BY THE GENERAL REQUIREMENTS OF THE SPECIFICATIONS.
4. WHERE WALL SURFACES ARE PATCHED TO MATCH THE EXISTING, THE NEW FINISH (PAINT, CEILING TILE, FLOORING, ETC.) SHALL BE APPLIED IN A MANNER THAT THERE WILL BE NO VISUAL DISTINCTIONS BETWEEN SURFACES AFTER COMPLETION OF WORK.

AS-BUILTS

THE CONTRACTOR SHALL PROVIDE WITH CD / DVD ELECTRONIC COPY OF AS-BUILT PER SECTION: 010000 1.13.

SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION

1. THE CONTRACTING OFFICER'S INTERPRETATION OF THE DRAWINGS AND SPECIFICATIONS WILL BE FINAL, SUBJECT TO THE DISPUTES CLAUSE.
2. LARGE SCALE DRAWINGS SUPERSEDE SMALL SCALE DRAWINGS.
3. DIMENSIONS GOVERN IN ALL CASES. SCALING OF DRAWINGS MAY BE DONE ONLY FOR GENERAL LOCATION AND GENERAL SIZE OF ITEMS.
4. DIMENSIONS SHOWN OF EXISTING WORK AND ALL DIMENSIONS REQUIRED FOR WORK THAT IS TO CONNECT WITH EXISTING WORK SHALL BE VERIFIED BY THE CONTRACTOR BY ACTUAL MEASUREMENT OF THE EXISTING WORK. ANY WORK AT VARIANCE WITH THAT SPECIFIED OR SHOWN IN THE DRAWINGS SHALL NOT BE PERFORMED BY THE CONTRACTOR UNTIL APPROVED IN WRITING BY THE CONTRACTING OFFICER.

SUBCONTRACTS AND WORK COORDINATION

1. NOTHING CONTAINED IN THIS CONTRACT SHALL BE CONSTRUED AS CREATING ANY CONTRACTUAL RELATIONSHIP BETWEEN ANY SUBCONTRACTOR AND THE GOVERNMENT. DIVISIONS OR SECTIONS OF SPECIFICATIONS ARE NOT INTENDED TO CONTROL THE CONTRACTOR IN DIVIDING WORK AMONG SUBCONTRACTORS, OR TO LIMIT WORK PERFORMED BY ANY TRADE
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE GOVERNMENT FOR ACTS AND OMISSIONS OF HIS/HER OWN EMPLOYEES, AND SUBCONTRACTORS AND THEIR EMPLOYEES.
3. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COORDINATION OF THE WORK OF THE TRADES, SUBCONTRACTORS, AND MATERIAL SUPPLIERS.
4. THE CONTRACTOR SHALL, IN ADVANCE OF THE WORK, PREPARE COORDINATION DRAWINGS SHOWING THE LOCATION OF OPENINGS THROUGH SLABS, THE PIPE SLEEVES AND HANGER INSERTS, AS WELL AS THE LOCATION AND ELEVATION OF UTILITY LINES, INCLUDING, BUT NOT LIMITED TO, CONVEYOR SYSTEMS, PNEUMATIC TUBES, DUCTS, AND CONDUITS AND PIPES 2 INCHES AND LARGER IN DIAMETER. THESE DRAWINGS, INCLUDING PLANS, ELEVATIONS, AND SECTIONS AS APPROPRIATE, SHALL CLEARLY SHOW THE MANNER IN WHICH THE UTILITIES FIT INTO THE AVAILABLE SPACE AND RELATE TO EACH OTHER AND TO EXISTING BUILDING ELEMENTS. THE DRAWINGS SHALL BE OF APPROPRIATE SCALE TO SATISFY THE PREVIOUSLY STATED PURPOSES, BUT NOT SMALLER THAN 3/8-INCH SCALE. DRAWINGS MAY BE COMPOSITE (WITH DISTINCTIVE COLORS FOR THE VARIOUS TRADES) OR MAY BE SEPARATE BUT FULLY COORDINATED DRAWINGS (SUCH AS SEPIAS OR PHOTOGRAPHIC PAPER REPRODUCIBLE) OF THE SAME SCALE. SEPARATE DRAWINGS SHALL DEPICT IDENTICAL BUILDING AREAS OR SECTIONS AND SHALL BE CAPABLE OF BEING OVERLAID IN ANY COMBINATION. THE SUBMITTED DRAWINGS FOR A GIVEN AREA OF THE PROJECT SHALL SHOW THE WORK OF ALL TRADES THAT WILL BE INVOLVED IN THAT PARTICULAR AREA.
5. SIX COMPLETE COMPOSITE DRAWINGS OR SIX COMPLETE SETS OF SEPARATE REPRODUCIBLE DRAWINGS SHALL BE RECEIVED BY THE GOVERNMENT NOT LESS THAN 20 DAYS PRIOR TO THE SCHEDULED START OF THE WORK IN THE AREA ILLUSTRATED BY THE DRAWINGS, FOR THE PURPOSE OF SHOWING THE CONTRACTOR'S PLANNED METHODS OF INSTALLATION. THE OBJECTIVES OF SUCH DRAWINGS ARE TO PROMOTE CAREFULLY PLANNED WORK SEQUENCE AND PROPER TRADE COORDINATION, IN ORDER TO ASSURE THE EXPEDITIOUS SOLUTIONS OF PROBLEMS AND THE INSTALLATION OF LINES AND EQUIPMENT AS CONTEMPLATED BY THE CONTRACT DOCUMENTS WHILE AVOIDING OR MINIMIZING ADDITIONAL COSTS TO THE CONTRACTOR AND TO THE GOVERNMENT IN THE EVENT THE CONTRACTOR, IN COORDINATING THE VARIOUS INSTALLATIONS AND IN PLANNING THE METHOD OF INSTALLATION, FINDS A CONFLICT IN LOCATION OR ELEVATION OF ANY OF THE UTILITIES WITH THEMSELVES, WITH STRUCTURAL ITEMS OR WITH OTHER CONSTRUCTION ITEMS, HE/SHE SHALL BRING THIS CONFLICT TO THE ATTENTION OF THE CONTRACTING OFFICER REPRESENTATIVE AND ARCHITECT IMMEDIATELY. IN DOING SO, THE CONTRACTOR SHALL EXPLAIN THE PROPOSED METHOD OF SOLVING THE PROBLEM OR SHALL REQUEST INSTRUCTIONS AS TO HOW TO PROCEED IF ADJUSTMENTS BEYOND THOSE OF USUAL TRADES COORDINATION ARE NECESSARY.
6. UTILITIES INSTALLATION WORK WILL NOT PROCEED IN ANY AREA PRIOR TO THE SUBMISSION AND COMPLETION OF THE GOVERNMENT AND ARCHITECT REVIEW OF THE COORDINATED DRAWINGS FOR THAT AREA, NOR IN ANY AREA IN WHICH CONFLICTS ARE DISCLOSED BY THE COORDINATION DRAWINGS, UNTIL THE CONFLICTS HAVE BEEN CORRECTED TO THE SATISFACTION OF THE CONTRACTING OFFICER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT THE REQUIRED DRAWINGS IN A TIMELY MANNER CONSISTENT WITH THE REQUIREMENTS TO COMPLETE THE WORK COVERED BY THIS CONTRACT WITHIN THE PRESCRIBED CONTRACT TIME. (C) THE GOVERNMENT OR ITS REPRESENTATIVES WILL NOT UNDERTAKE TO SETTLE ANY DIFFERENCES BETWEEN THE CONTRACTOR AND SUBCONTRACTORS OR BETWEEN SUBCONTRACTORS.
7. THE GOVERNMENT RESERVES THE RIGHT TO REFUSE TO PERMIT EMPLOYMENT ON THE WORK OR REQUIRE DISMISSAL FROM THE WORK OF ANY SUBCONTRACTOR WHO, BY REASON OF PREVIOUS UNSATISFACTORY WORK ON DEPARTMENT OF VETERANS AFFAIRS PROJECTS OR FOR ANY OTHER REASON, IS CONSIDERED BY THE CONTRACTING OFFICER TO BE INCOMPETENT OR OTHERWISE OBJECTIONABLE.

FIRE AND LIFE SAFETY NOTES:

THE FOLLOWING FIRE AND LIFE SAFETY NOTES ARE HEREBY INCORPORATED INTO THE WORK AND SHALL BE IMPLEMENTED.

1. ALL INTERIOR FINISHES SHALL CONFORM TO THE REQUIREMENTS VAFPDM AND NFPA 101
2. ALL INSULATION MATERIALS INSTALLED WALLS SHALL HAVE A FLAME –SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH NFPA 101.
3. ALL RATED DOOR SHALL BE POSITIVE LATCHING.
4. ALL FIRE RATED DOOR ASSEMBLIES SHALL BE PROVIDED WITH APPROVED GASKETING MATERIAL INSTALLED TO PROVIDE A SEAL WHERE THE DOOR MEETS THE STOP ON BOTH SIDES AND ACROSS THE TOP.
5. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE FOR ALL RATED OPENING ASSEMBLIES.
6. PENETRATIONS THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF ASTM–E 814 AND NFPA 101 AND IN COMPLIANCE WITH THE PROJECT MANUAL.
7. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATIONS, INCLUDING CONDUITS AND PIPING, THROUGH FIRE RATED WALL, FLOOR AND CEILING ASSEMBLIES SHALL BE TIGHTLY AND SOLIDLY SEALED WITH FIRESTOPPING COMPLYING WITH NFPA 101 AND THE PROJECT MANUAL WHERE ITEM PENETRATIONS AN AREA SEPARATION WALL, THE SECTION PASSING THROUGH THE WALL SURFACE AND THE FIXTURE CONNECTIONS THERETO SHALL BE ONLY OF METAL.
8. PROVIDE AND APPROPRIATE NUMBER OF PORTABLE FIRE EXTINGUISHERS WITH A RATING NOT LESS THAN 4A-60BC FOR PROTECTION DURING CONSTRUCTION.
9. DO NOT BLOCK EXITS AT ANY TIME.
10. PROVIDE COMBINATION FIRE/SMOKE DAMPERS AT ALL DUCT PENETRATIONS OF FIRE RATED WALLS, FLOORS, SHAFTS AND CEILINGS. COMBINATION
11. FIRE/SMOKE DAMPERS SHALL BE USED AT DUCT PENETRATIONS OF RATED CORRIDOR WALLS.
12. FIRE DAMPER DETAILS SHOWN FOR REFERENCE ONLY. FIRE DAMPERS SHALL BE APPROVED AND LISTED BY _____. INSTALL STRICTLY PER MANUFACTURER'S PRINTED INSTRUCTIONS AND LISTINGS APPROVAL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITIES.
13. DUCT INSULATION APPLIED TO THE EXTERIOR SURFACE OF DUCTS LOCATED IN BUILDINGS SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND SMOKE-DEVELOPED RATING OF NOT MORE THAN 50 WHEN TESTED AS A COMPOSITE; INSTALLATION IN

ARCHITECTURAL ABBREVIATIONS

A LABEL	CLASS A DOOR	COM	COMMON
A/C	AIR CONDITION	COMB	COMBINATION, COMBINED
A/C UNIT	AIR CONDITIONING UNIT	COMM	COMMUNICATION
A/E	ARCHITECT/ENGINEER	COMP	COMPONENT
AAMA	AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION		
AB	ANCHOR BOLT	CONC	CONCRETE
ABC	AGGREGATE BASE COURSE	CONC FLR	CONCRETE FLOOR
AC	ASBESTOS CEMENT OR ASPHALTIC CONCRETE	COND	CONDENSER OR CONDITION
ACI	AMERICAN CONCRETE INSTITUTE	CONF	CONFERENCE
ACS DR	ACCESS DOOR	CONN	CONNECT
ACS FLR	ACCESS FLOOR	CONSTR	CONSTRUCTION
ACS PNL	ACCESS PANEL	CONT	CONTINUE
ACST	ACOUSTIC	CONTR	CONTRACTOR
ACT	ACOUSTICAL CEILING TILE	COORD	COORDINATE
AD	AREA DRAIN	CORR	CORRIDOR
ADA	AMERICANS WITH DISABILITIES ACT	CPM	CRITICAL PATH METHOD
ADC	AUTOMATIC DOOR CLOSER	CPRS	COMPRESSIBLE
ADDL	ADDITIONAL	CPT	CARPET
ADDN	ADDITION	CRS	COLD ROLLED STEEL
ADH	ADHESIVE	CRSI	CONCRETE REINFORCING STEEL INSTITUTE
ADJ	ADJACENT, ADJOINING, OR ADJUSTABLE	CSB	CONCRETE SPLASH BLOCK
ADMIN	ADMINISTRATION	CSG	CASING
ADB	AUTOMATIC DOOR BOTTOM	CSI	CONSTRUCTION SPECIFICATIONS INSTITUTE
AFC	ABOVE FINISHED COUNTER	CSK	COUNTER SUNK
AFF	ABOVE FINISHED FLOOR	CSMT	CASEMENT
AFG	ABOVE FINISHED GRADE	CSWK	CASEWORK
AFS	ABOVE FINISHED SLAB	CT	CERAMIC TILE
AGA	AMERICAN GAS ASSOCIATION	CTB	CERAMIC TILE BASE
AGC	ASSOCIATED GENERAL CONTRACTORS	CTF	CERAMIC TILE FLOOR
AGGR	AGGREGATE	CTG	COATING
AHJ	AUTHORITY HAVING JURISDICTION	CTR	CENTER CONTOUR
AHR	ANCHOR	CTRL	CONTROL
AHU	AIR HANDLING UNIT	CTV	CABLE TELEVISION
AIA	AMERICAN INSTITUTE OF ARCHITECTS	CU	COPPER C
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	CU FT	CUBIC FEET
ALT	ALTERNATE	CU IN	CUBIC INCH
ALT NO	ALTERNATE NUMBER	CU YD	CUBIC YARD
ALUM	ALUMINUM	CURT	CURTAIN
AMP	AMPERE	CYL	CYLINDER
AMT	AMOUNT	CYL L	CYLINDER LOCK
ANOD	ANODIZE		
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	D	DEPTH OR PENNY (NAIL)
ANT	ANTENNA	D LABEL	CLASS D DOOR
APA	AMERICAN PLYWOOD ASSOCIATION	DAT	DATUM
APPD	APPROVED	DB	DECIBEL
APPROX	APPROXIMATE	DBL	DOUBLE
APT	APARTMENT	DBL GLZ	DOUBLE GLAZE
AR	AS REQUIRED	DC	DIRECT CURRENT
ARCH	ARCHITECT	DEG	DEGREE
ASB	ASBESTOS	DEL	DELETE
ASI	ARCHITECT'S SUPPLEMENTAL INSTRUCTION	DEMO	DEMOLITION
ASKLR	AUTOMATIC SPRINKLER	DEPT	DEPARTMENT
ASPH	ASPHALT	DET	DETAIL
ASSN	ASSOCIATION	DF	DRINKING FOUNTAIN
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	DIA	DIAMETER
ATCH	ATTACHMENT	DIAG	DIAGONAL DIAGRAM
ATM	AUTOMATIC TELLER MACHINE	DIAG	DIAGRAM DIAGONAL
ATS	AUTOMATIC TRANSFER SWITCH	DIFF	DIFFERENCE OR DIFFUSER
AUTO	AUTOMATIC	DIM	DIMENSION
AUX	AUXILIARY	DIR	DIRECTION
AV	AUDIO VISUAL	DISP	DISPENSER
AVE	AVENUE	DIST	DISTANCE
AVG	AVERAGE	DIV	DIVIDE OR DIVISION
AW	ACID WASTE	DL	DEAD LOAD
AWI	ARCHITECTURAL WOODWORKING INSTITUTE	DOC	DOCUMENT
AWPA	AMERICAN WOOD PRESERVERS' ASSOCIATION	DOUG FIR	DOUGLAS FIR
AWS	AMERICAN WELDING SOCIETY	DOZ	DOZEN
AWT	ACOUSTICAL WALL TREATMENT	DR	DOOR, DRAIN, DRESSING ROOM, OR DRIVE
		DR CL	DOOR CLOSER
B LABEL	CLASS B DOOR	DR FR	DOOR FRAME
B PL	BASE PLATE	DR OPNG	DOOR OPENING
BALC	BALCONY	DS	DOWNSPOUT
BAT	BATTEN	DSGN	DESIGN
BB	BULLETIN BOARD	DW	DISHWASHER
BD	BOARD	DWG	DRAWING
BD FT	BOARD FEET (FOOT)	DWTR	DUMBWAITER
BEV	BEVEL		
BHMA	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION	E	EAST
BI FLD DR	BIFOLDING DOORS	E LABEL	CLASS E DOOR
BITUM	BITUMINOUS	EA	EACH
BKG	BACKING	EFF	EFFICIENCY
BLD	BUILD	EFS	EXTERIOR FINISH SYSTEM
BLDG	BUILDING	EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
BLKT	BLANKET	EJ	EXPANSION JOINT
BLVD	BOULEVARD	EQL SP	EQUALLY SPACED
BM	BEAM OR BENCHMARK	EQUIP	EQUIPMENT
BOT	BOTTOM	EQUIV	EQUIVALENT
BR	BEDROOM	ERD	EXISTING ROOF DRAIN
BRCG	BRACING	ESC	ESCAPE OR ESCUTCHEON
BRDG	BRIDGING	ESCAL	ESCALATOR
BRDG JST	BRIDGING JOIST	ESMT	EASEMENT
BRG	BEARING	ESP	ESPECIALLY
BRG PL	BEARING PLATE	ESTR	ESTIMATE
BRKT	BRACKET	ETC	AND SO FORTH OR ET CETERA
BRZ	BRONZE	ID	IDENTIFICATION, INSIDE DIAMETER, OR INTERIOR DESIGN
BSMT	BASEMENT	ID NO	IDENTIFICATION NUMBER
BTWN	BETWEEN	EWC	ELECTRIC WATER COOLER
BU	BUSHEL	EWS	EYE WASH STATION
BUR	BUILT-UP ROOFING	EXH	EXHAUST
		EXIST	EXISTING
C	CELSIUS CHANNEL	EXP	EXPANSION OR EXPOSED
C	CHANNEL CELSIUS	EXP BT	EXPANSION BOLT
C CONC	CAST CONCRETE	EXST GR	EXISTING GRADE
C LABEL	CLASS C DOOR	EXT	EXTERIOR, EXTERNAL, OR EXTINGUISHER
C TO C	CENTER TO CENTER	EXT GR	EXTERIOR GRADE
CAB	CABINET		
CAC	CEILING ATTENUATION CLASS	F	FAHRENHEIT OR FEMALE
CB	CATCH BASIN OR CORNER BEAD	FA	FIRE ALARM
CBB	CEMENTITIOUS (BACKER) BOARD	FAB	FABRIC
CC	CUBIC CENTIMETER	FAC	FACTOR
CCTV	CLOSED CIRCUIT TELEVISION	FACIL	FACILITY
CCW	COUNTERCLOCKWISE	FAS	FASCIA
CD	CONSTRUCTION DOCUMENTS OR CONTRACT DOCUMENTS	FAS BD	FASCIA BOARD
CEM	CEMENT	FCO	FLOOR CLEANOUT
CEM PLAS	CEMENT PLASTER	FCTY	FACTORY
CER	CERAMIC	FD	FLOOR DRAIN
CF	CONTRACTOR FURNISHED	FDC	FIRE DEPARTMENT CONNECTION
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	FDTN	FOUNDATION
CF/OI	CONTRACTOR FURNISHED/OWNER INSTALLED	FE	FIRE EXTINGUISHER
CFLG	COUNTERFLASHING	FEC	FIRE EXTINGUISHER CABINET
CFM	CUBIC FEET PER MINUTE	FF	FINISH FACE
CFMF	COLD-FORMED METAL FRAMING	FF EL	FINISH FLOOR ELEVATION
CFS	CUBIC FEET PER SECOND	FF&E	FURNITURE, FIXTURE, AND EQUIPMENT
CG	CENTER OF GRAVITY OR CORNER GUARD	FH	FLAT HEAD OR FLAT HEAD SCREWS
CGSFU	CERAMIC GLAZED STRUCTURAL FACING UNITS	FHC	FIRE HOSE CABINET
CH BD	CHALKBOARD	FHMS	FLAT HEAD MACHINE SCREW
CHEM	CHEMICAL	FHP	FULL HEIGHT PARTITION
CHFR	CHAMFER	FHWS	FLAT HEAD WOOD SCREW
CHK	CHECK	FIG	FIGURE
CI	CAST IRON	FIL	FILLET
CIP	CAST-IN-PLACE	FIN	FINISH
CIR	CIRCLE	FIN FLR	FINISH FLOOR
CIRC	CIRCULAR	FIN GR	FINISH GRADE
CJ	CONSTRUCTION JOINT OR CONTROL JOINT	FIN WD	FINISH WOOD
CL	CENTER LINE	FIXT	FIXTURE
CLDG	CLADDING	FL	FLOORLINE
CLG	CEILING	FLASH	FLASHING
CLG HT	CEILING HEIGHT	FLDG	FOLDING
CLR	CLEAR	FLEX	FLEXIBLE
cm^2	SQUARE CENTIMETER	FLG	FLOORING
cm^3	CUBIC CENTIMETER	FLR	FLOOR
CM	CONSTRUCTION MANAGEMENT		
CMU	CONCRETE MASONRY UNIT	FLR FIN	FLOOR FINISH
CNR	CORNER	FLR SK	FLOOR SINK
CNTR	COUNTER	FLUOR	FLUORESCENT
CO	CARBON MONOXIDE, CERTIFICATE OF OCCUPANCY, CLEANOUT, OR COMPANY	FLUOR FIX	FLUORESCENT FIXTURE
CO_2	CARBON DIOXIDE	FM	FACTORY MUTUAL
COL	COLUMN	FM-G	FACTORY MUTUAL GLOBAL
		FO	FINISHED OPENING
		FOC	FACE OF CONCRETE OR FACE OF CURB
		FOF	FACE OF FINISH
		FOM	FACE OF MASONRY
		FOS	FACE OF SLAB OR FACE OF STUD
		FOUNT	FOUNTAIN
		FOW	FACE OF WALL
		FP	FIRE PROTECTION OR FIREPROOF
		FPM	FEET PER MINUTE
		FPS	FEET PER SECOND
		FR	FIRE RATING, FIRE RESISTANT, OR FRAME
		FR SNK	FLUSHING RIM SINK
		FREQ	FREQUENCY
		FRMG	FRAMING
		FRP	FIBER REINFORCED POLYESTER OR FIBERGLASS REINFORCED PLASTIC
		FRZ	FREEZER
		FS	FEDERAL SPECIFICATION
		FSTNR	FASTENER
		FT	FEET OR FOOT
		FTG	FOOTING
		FURG	FURRING
		FURN	FURNISH OR FURNITURE
		FUT	FUTURE
		FWC	FABRIC WALLCOVERING
		GA	GAGE OR GYPSUM ASSOCIATION
		GAL	GALLON
		GALV	GALVANIC OR GALVANIZED
		GALV STL	GALVANIZED STEEL
		GB	GRAB BAR
		GC	GENERAL CONTRACTOR
		GD	GUARD
		GDR	GUARD RAIL
		GEN	GENERAL OR GENERATOR
		GFRC	GLASS-FIBER-REINFORCED CONCRETE
		GFRG	GLASS-FIBER-REINFORCED GYPSUM
		GFRP	GLASS-FIBER-REINFORCED PLASTIC
		GI	GALVANIZED IRON
		GL	GLASS
		GL BLK	GLASS BLOCK
		GLU LAM	GLUED LAMINATED WOOD
		GR FL	GROUND FLOOR
		GRAN	GRANITE
		GRTG	GRATING
		GSB	GYPSUM SHEATHING BOARD
		GSM	GALVANIZED SHEET METAL
		GSU	GLAZED STRUCTURAL UNIT
		GT	GROUT
		GUAR	GUARANTEE
		GUT	GUTTER
		GYP	GYPSUM
		GYP BD	GYPSUM BOARD
		GYP PLAS	GYPSUM PLASTER
		H	HIGH
		H PLAM	HIGH PRESSURE PLASTIC LAMINATE
		HAZ MAT	HAZARDOUS MATERIALS
		HB	HOSE BIBB
		HC	HOLLOW CORE
		HCWD	HOLLOW CORE WOOD DOOR
		HDBD	HARDBOARD
		HDNR	HARDENER
		HDO	HIGH DENSITY OVERLAY
		HDR	HEADER
		HDW	HARDWARE
		HDWD	HARDWOOD
		HEPA	HIGH EFFICIENCY PARTICULATE AIR (FILTER)
		HEX	HEXAGON
		HF	HIGH FREQUENCY
		HGR	HANGER
		HM	HECTOMETER
		HM	HOLLOW METAL
		HMD	HOLLOW METAL DOOR
		HMDF	HOLLOW METAL DOOR AND FRAME
		HMF	HOLLOW METAL FRAME
		HNDRL	HANDRAIL
		HO	HOLD OPEN
		HORIZ	HORIZONTAL
		HOSP	HOSPITAL
		HP	HIGH PRESSURE OR HORSEPOWER
		HQ	HEADQUARTERS
		HS	HEAT-STRENGTHENED (GLASS) OR HIGH STRENGTH
		HSE	HOUSE
		HSKPG	HOUSEKEEPING
		HST	HOIST
		HT	HEIGHT
		HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
		HVY	HEAVY
		HW	HOT WATER
		HYD	HYDRANT
		HYDR	HYDRAULIC
		I	INTERSTATE (HIGHWAY) OR MOMENT OF INERTIA
		IAQ	INDOOR AIR QUALITY
		IBC	INTERNATIONAL BUILDING CODE
		ID	IDENTIFICATION, INSIDE DIAMETER, OR INTERIOR DESIGN
		ID NO	IDENTIFICATION NUMBER
		ILLUM	ILLUMINATION
		INCL	INCLUDED
		IND	INDEPENDENT OR INDUSTRIAL
		INFO	INFORMATION
		INSUL	INSULATION
		INT	INTERIOR
		INTERCOM	INTERCOMMUNICATION
		INTL	INTERNATIONAL
		IRMA	INVERTED ROOF MEMBRANE ASSEMBLY
		IWH	INSTANTANEOUS WATER HEATER
		JAN	JANITOR
		J-BOX	JUNCTION BOX
		KD	KILN DRIED OR KNOCKED DOWN
		KIT	KITCHEN
		KO	KNOCKOUT
		KPL	KICKPLATE
		L	ANGLE
		LAB	LABORATORY
		LAD	LADDER
		LAM	LAMINATE
		LAM GL	LAMINATED GLASS
		LAU	LAUNDRY
		LAV	LAVATORY
		LBR	LUMBER
		LBS	POUND
		LD BRG	LOAD-BEARING
		LDR	LEADER
		LED	LIGHT EMITTING DIODE
		LF	LINEAR FEET (FOOT)
		LH	LEFT HAND
		LHR	LEFT HAND REVERSE
		LHR	LEFT HAND REVERSE LATENT HEAT RATIO
		LIB	LIBRARY
		LIN	LINEAR
		LINO	LINOLEUM
		LIQ	LIQUID
		LKR	LOCKER
		LKR RM	LOCKER ROOM
		LKWASH	LOCKWASHER
		LL	LEAD LINED
		LLH	LONG LEG HORIZONTAL
		LLV	LONG LEG VERTICAL
		LMST	LIMESTONE
		LNDSCP	LANDSCAPE
		LR	LIVING ROOM
		LRG	LARGE
		LRV	LOUVERED ROOF VENT
		LS	LUMP SUM
		LT	LIGHT
		LT GA	LIGHT GAGE
		LT WT	LIGHTWEIGHT
		LTG	LIGHTING
		LTNG	LIGHTNING
		LVD	LOUVERED
		LVR	LOUVER
		LWC	LIGHTWEIGHT CONCRETE
		LWIC	LIGHTWEIGHT INSULATING CONCRETE
		LYR	LAYER
		MACH	MACHINE
		MACH RM	MACHINE ROOM
		MAINT	MAINTENANCE
		MAN	MANUAL
		MATL	MATERIAL
		MATV	MASTER ANTENNA TELEVISION SYSTEM
		MAX	MAXIMUM
		MB	MACHINE BOLT
		MCB	METAL CORNER BEAD
		MD	DECK
		ME	MECHANICAL ENGINEER
		MEAS	MEASURE
		MECH	MECHANICAL
		MECH RM	MECHANICAL ROOM
		MED	MEDICAL MEDIUM
		MED	MEDIUM MEDICAL
		MEK	METHYL ETHYL KETONE
		MEL	MELAMINE
		MEMB	MEMBRANE
		MEMO	MEMORANDUM
		MEZZ	MEZZANINE
		MF	MILL FINISH
		MFD	MANUFACTURED
		MFG	MANUFACTURING
		MFR	MANUFACTURER
		MFR REC	MANUFACTURER'S RECOMMENDATION
		MGT	MANAGEMENT
		MH	MANHOLE
		MIC	MICROPHONE
		MID	MIDDLE
		MIL STD	MILITARY STANDARD
		MIN	MINIMUM MINUTE
		MIN	MINUTE MINIMUM
		MIRR	MIRROR
		MISC	MISCELLANEOUS
		MIT	MITER
		MKR	MARKER
		ML	METAL LATH
		MLDG	MOLDING (MOULDING)
		MLWK	MILLWORK
		mm	MILLIMETER
		MO	MASONRY OPENING OR MOTOR OPERATED
		MOD	MODEL, MODIFY OR MODULE
		MOD BIT	MODIFIED BITUMEN
		MON	MONITOR
		MOPR	MOP RACK
		MR	MOISTURE RESISTANT
		MS	MACHINE SCREW OR MOP SINK
		MTD	MOUNTED
		MTG	MOUNTING
		MTL	METAL
		MULL	MULLION
		MW	MICROWAVE
		MWP	MEMBRANE WATERPROOFING
		N	NORTH
		NA	NOT APPLICABLE
		NAAMM	NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS
		NAT	NATURAL
		NATL	NATIONAL
		NC	NOISE CRITERIA
		NCOMBL	NONCOMBUSTIBLE
		NEC	NATIONAL ELECTRICAL CODE
		NEG	NEGATIVE
		NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
		NEUT	NEUTRAL
		NFC	NATIONAL FIRE CODE
		NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
		NIC	NOT IN CONTRACT
		NO	NUMBER
		NOM	NOMINAL
		NR	NOISE REDUCTION
		NRC	NOISE REDUCTION COEFFICIENT
		NRCA	NATIONAL ROOFING CONTRACTORS ASSOCIATION
		NRP	NONREMOVABLE
		NS	NARROW STILE
		NUM	NUMERAL
		O/O	OUT TO OUT
		O	OXYGEN
		OA	OUTSIDE AIR OR OVERALL
		OC	ON CENTER
		OCC	OCCUPY
		OCT	OCTAGON
		OD	OUTSIDE DIAMETER OUTSIDE DIMENSION
		OD	OUTSIDE DIMENSION OUTSIDE DIAMETER
		OFD	OVERFLOW DRAIN
		OFF	OFFICE
		OFOI	OWNER FURNISHED/OWNER INSTALLED
		OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
		OFVI	OWNER FURNISHED/VENDOR INSTALLED
		OH	OVERHANG
		OH DR	OVERHEAD (COILING) DOOR
		OPH	OPPOSITE HAND
		OPNG	OPENING
		OPP	OPPOSITE
		OPR	OPERABLE
		OPT	OPTIONAL
		OR	OPERATING ROOM OR OUTSIDE RADIUS
		ORD	ORDNANCE OR OVERFLOW ROOF DRAIN
		ORG	ORGANIC
		ORIG	ORIGINAL
		ORN	ORNAMENTAL
		OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINSTRATION
		OUT	OUTLET
		OZ	OUNCE
		PAR	PARALLEL OR PARAPET
		PARA	PARAGRAPH
		PART	PARTIAL
		PAT	PATTERN
		PB	PUSHBUTTON
		PBD	PARTICLEBOARD
		PC	PIECE, POLYCARBONATE OR PORTLAND CEMENT
		PCA	PORTLAND CEMENT ASSOCIATION
		PCC	PRECAST CONCRETE
		PCCP	CONCRETE PAVEMENT
		PCD	PAPER CUP DISPENSER
		PCF	POUNDS PER CUBIC FOOT
		PCP	PORTLAND CEMENT PLASTER
		PED	PEDESTAL
		PEN	PENETRATE
		PEND	PENDMANT
		PERF	PERFORATED
		PERIM	PERIMETER
		PERP	PERPENDICULAR
		PGBD	PEGBOARD
		PHAR	PHARMACY
		PHOTO	PHOTOGRAPH
		PHS	PHILLIPS HEAD SCREW
		PKG	PACKAGE
		PL	PROPERTY LINE
		PL GL	PLATE GLASS
		PLAM	PLASTIC LAMINATE
		PLAS	PLASTER OR PLASTIC
		PLBG	PLUMBING
		PLYWD	PLYWOOD
		PMTL	PAINTED METAL
		PNEU	PNEUMATIC
		PNL	PANEL
		PO	POST OFFICE PURCHASE ORDER
		PO	PURCHASE ORDER POST OFFICE
		POLY	POLYETHYLENE (PLASTIC)
		PR	PAIR
		PRCST	PRECAST
		PREFAB	PREFABRICATE
		PREFIN	PREFINISH
		PRELIM	PRELIMINARY
		PREP	PREPARATION
		PRESS	PRESSURE
		PREV	PREVIOUS
		PRKG	PARKING
		PRMLD	PREMOLDED
		PROJ	PROJECT
		PROP	PROPERTY
		PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
		PT	PAINT, PNEUMATIC TUBE, OR PRESSURE TREATED
		PTD	PAPER TOWEL DISPENSER
		PTN	PARTITION
		PVC	POLYVINYL CHLORIDE (PLASTIC)
		PVG	PAVING
		PWR	POWER
		QA	QUALITY ASSURANCE
		QC	QUALITY CONTROL
		QRY	QUARRY
		QT	QUARRY TILE
		QTB	QUARRY TILE BASE
		QTF	QUARRY TILE FLOOR
		QTR	QUARTER
		QTY	QUANTITY
		QUAD	QUADRANT
		QUAL	QUALITY
		R	RADIUS OR RISER
		RA	RETURN AIR
		RAD	RADIATOR
		RB	RESILIENT BASE OR RUBBER BASE
		RB HK	ROBE HOOK
		RBM	REINFORCED BRICK MASONRY
		RBR	RUBBER
		RC	REMOTE CONTROL
		RCP	REFLECTED CEILING PLAN
		RCVR	RECEIVER
		RD	ROAD OR ROOF DRAIN
		REC	RECESSED
		RECD	RECEIVED
		RECPT	RECEPTACLE
		RECT	RECTANGLE
		REF	REFERENCE OR REFRIGERATOR
		REFR	REFRACTORY REFRIGERATION
		REFR	REFRIGERATION REFRACTORY
		REG	REGISTER
		REINF	REINFORCE
		REP	REPAIR
		REPL	REPLACE
		REQ	REQUIRE
		REQD	REQUIRED
		RESIL	RESILIENT
		RET	RETURN
		REV	REVISION
		RF	RADIO FREQUENCY
		RFG	ROOFING
		RFI	REQUEST FOR INFORMATION
		RFP	REQUEST FOR PROPOSAL
		RH	RIGHT HAND
		RHMS	ROUND HEAD MACHINE SCREW
		RHR	RIGHT HAND REVERSE
		RHWS	ROUND HEAD WOOD SCREW
		RL	ROOF LEADER
		RLG	RAILING
		RM	ROOM
		RND	ROUND
		RO	ROUGH OPENING
		ROW	RIGHT OF WAY
		RPM	REVOLUTIONS PER MINUTE
		RS	ROUGH SAWN
		SA	SUPPLY AIR
		SALV	SALVAGE
		SAMP	SAMPLE
		SAN	SANITARY
		SAT	SUSPENDED ACOUSTICAL TILE
		SATC	SUSPENDED ACOUSTICAL TILE CEILING
		SB	SPLASH BLOCK
		SBS	STYRENE BUTADIEN STYRENE
		SBSTR	SUBSTRATE
		SC	SHADING COEFFICIENT OR SOLID CORE
		SCH	SCHOOL
		SCHED	SCHEDULE
		SCHEM	SCHEMATIC
		SCP	SCUPPER
		SCRN	SCREEN
		SCT	STRUCTURAL CLAY TILE
		SCWD	SOLID CORE WOOD DOOR
		SD	SHOP DRAWINGS, SMOKE DETECTOR, OR SOAP DISPENSER;
		SDG	SIDING
		SECT	SECTION
		SEG	SEGMENT
		SEL	SELECT
		SEP	SEPARATE
		SF	SQUARE FOOT (FEET)
		SFTWD	SOFTWOOD
		SGD	SLIDING GLASS DOOR
		SGL	SINGLE
		SHR	SHOWER
		SHR HD	SHOWER HEAD
		SHRD	SHOWER DRAIN
		SHT	SHEET
		SHT MTL FLASH	SHEET METAL (FLASHING)
		SHTHG	SHEATHING
		SHV	SHELVING
		SIM	SIMILAR
		SJ	SCORED JOINT
		SJI	STEEL JOIST INSTITUTE
		SK	SKETCH
		SKLT	SKYLIGHT
		SLD WDW	HORIZONTAL SLIDING WINDOW
		SLDG	SLIDING
		SLNT	SEALANT
		SM	SHEET METAL
		SMK	SMOKE
		SND	SANITARY NAPKIN DISPENSER
		SND INS	SOUND INSULATION
		SNDU	SANITARY NAPKIN DISPOSAL UNIT
		SPEC	SPECIFICATION
		SPKLR	SPRINKLER
		SPKR	SPEAKER
		SPLY	SUPPLY
		SQ	SQUARE
		SQ IN	SQUARE INCH
		SQ YD	SQUARE YARD
		SS	SANITARY SEWER OR SERVICE SINK
		SST	STAINLESS STEEL
		ST	STAIRS OR STREET
		STC	SOUND TRANSMISSION CLASS
		STD	STANDARD
		STIF	STIFFENER
		STL JST	STEEL JOIST
		STL LNTL	STEEL LINTEL
		STL PL	STEEL PLATE
		STL RF DK	STEEL ROOF DECK
		STL TB	STEEL TUBE
		STL TR	STEEL TRUSS
		STNLS	STAINLESS
		STOR	STORAGE
		STR	STRINGERS
		STRUCT	STRUCTURAL
		STRUCT STL	STRUCTURAL STEEL
		SUB	SUBSTITUTE
		SURF	SURFACE
		SUSP	SUSPEND
		SUSP CLG	SUSPENDED CEILING
		SV	SHEET VINYL
		SW	SWITCH
		SWDR	SWING DOOR
		SYM	SYMBOL
		SYNTH	SYNTHETIC
		SYS	SYSTEM
		T	TREAD
		T&G	TONGUE AND GROOVE
		T&M	TIME AND MATERIALS
		TB	THROUGH BOLT OR TOWEL BAR
		TCA	TILE COUNCIL OF AMERICA
		TCP	TELEPHONE CONTROL PANEL TEMPERATURE CONTROL PANEL; TRAFFIC CONTROL PLAN
		TD	TOWEL DISPENSER
		TECH	TECHNICAL
		TEL	TELEPHONE
		TEMP	TEMPERATURE OR TEMPORARY
		TER	TERRAZZO
		THD	THREAD
		THERM	THERMAL
		THK	THICKNESS
		THRES	THRESHOLD
		THRU	THROUGH
		THRUOUT	THROUGHOUT
		TK BD	TACKBOARD
		TMPD	TEMPERED
		TMPD GL	TEMPERED GLASS
		TN	TRUE NORTH
		TO	TOP OF ———
		TO FDN	TOP OF FOUNDATION
		TOB	TOP OF BEAM
		TOM	TOP OF MASONRY
		TOP	TOP OF PARAPET
		TOS	TOP OF STEEL
		TOW	TOP OF WALL
		TPD	TOILET PAPER DISPENSER
		TPH	TOILET PAPER HOLDER
		TR	TOWEL RACK
		TRANS	TRANSOM
		TRANS WD FIN	TRANSPARENT WOOD FINISH
		TRTD	TREATED
		TS	TENSILE STRENGTH OR TUBE STEEL
		TSTAT	THERMOSTAT
		TV	TELEVISION
		TYP	TYPICAL
		U	HEAT TRANSFER COEFFICIENT
		UC	UNDERCUT
		UCD	UNDERCUT DOOR
		UGND	UNDERGROUND
		UL	UNDERWRITERS LABORATORIES
		ULT	ULTIMATE
		UNFIN	UNFINISH
		UON	UNLESS OTHERWISE NOTED
		UPS	UNINTERRUPTIBLE POWER SUPPLY
		UR	URINAL
		UTIL	UTILITY
		UV	ULTRAVIOLET
		V	VOLT
		VAC	VACUUM
		VAR	VARIES
		VCT	VINYL COMPOSITION TILE VITRIFIED CLAY TILE
		VEH	VEHICLE
		VENT	VENTILATION
		VERT	VERTICAL
		VEST	VESTIBULE
		VFAT	VINYL FACED ACOUSTICAL TILE
		VIC	VICINITY
		VID	VIDEO
		VIF	VERIFY IN FIELD
		VNR	VENEER
		VOC	VOLATILE ORGANIC COMPOUND
		VOL	VOLUME
		VOLT	VOLTAGE
		VP	VENEER PLASTER
		VR	VAPOR RETARDER
		VTR	VENT THROUGH ROOF
		VWC	VINYL WALL COVERING
		VWF	VINYL WALL FABRIC
		V/C	VA FURNISHED / CONTRACTOR INSTALLED
		V/V	VA FURNISHED / VA INSTALLED
		V/C	CONTRACTOR FURNISHED / CONTRACTOR INSTALLED
		W	WIDE OR WEST
		W/	WITH
		W/O	WITHOUT
		WARR	WARRANTY
		WBL	WOOD BLOCKING
		WC	WALL COVERING OR WATER CLOSET
		WC WL HNG	WATER CLOSET, WALL HUNG
		WCHR	WATER CHILLER
		WCL WL MTD	WATER COOLER, WALL HUNG
		WD	WOOD
		WDW	WINDOW
		WF	WIDE FLANGE
		WFAB	WALL FABRIC
		WFR	WOOD FRAME
		WFS	WOOD FURRING STRIPS
		WH	WATER HEATER
		WHSE	WAREHOUSE
		WLD	WELDED
		WM	WIRE MESH
		WP	WATERPROOFING
		WPD	WATER PRESSURE DROP
		WPM	WATERPROOF MEMBRANE
		WR	WEATHER RESISTANT
		WS	WEATHERSTRIP
		WSCT	WAINSCOT
		WT	WEIGHT
		WWF	WELDED WIRE FABRIC
		X BRACE	CROSS BRACE
		XPS	EXTRUDED POLYSTYRENE BOARD (INSULATION)
		YD	YARD
		YR	YEAR

Revisions:	Date
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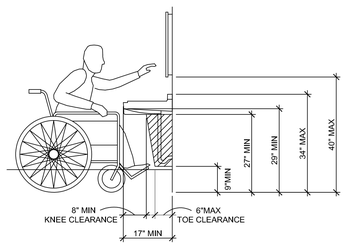
Drawing Title: ABBREVIATIONS

Approved: Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPP

CLEAR FLOOR SPACE: A CLEAR FLOOR SPACE COMPLYING WITH 306, POSITIONED FOR A FORWARD APPROACH, AND KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.
HEIGHT: LAVATORIES AND SINKS SHALL BE INSTALLED WITH THE FRONT OF THE HIGHER OF THE RIM OR COUNTER SURFACE 34 INCHES (865 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
FAUCETS. CONTROLS FOR FAUCETS SHALL COMPLY WITH 606.4. HAND-OPERATED METERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM.
EXPOSED PIPES AND SURFACES. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.



306.3 KNEE CLEARANCE.

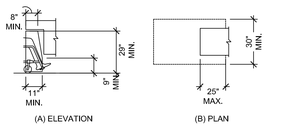
306.3.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED KNEE CLEARANCE AND SHALL COMPLY WITH 306.3.

EXCEPTION: LAVATORIES REQUIRED TO BE ACCESSIBLE BY SECTION 213.3.4, SPACE BETWEEN 9 INCHES AND 29" ABOVE FINISH FLOOR OR GROUND SHALL BE CONSIDERED KNEE CLEARANCE.

306.3.2 MAXIMUM DEPTH. KNEE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND.

306.3.3 MINIMUM REQUIRED DEPTH. WHERE KNEE CLEARANCE IS REQUIRED UNDER AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE KNEE CLEARANCE SHALL BE 11 INCHES (280 MM) DEEP MINIMUM AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND, AND 8 INCHES (205 MM) DEEP MINIMUM AT 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND.

306.3.4 CLEARANCE REDUCTION. BETWEEN 9 INCHES (230 MM) AND 27 INCHES (685 MM) ABOVE THE FINISH FLOOR OR GROUND, THE KNEE CLEARANCE SHALL BE PERMITTED TO REDUCE AT A RATE OF 1 INCH (25 MM) IN DEPTH FOR EACH 6 INCHES (150 MM) IN HEIGHT. 306.3.5 WIDTH. KNEE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.



(A) ELEVATION (B) PLAN

FIGURE 306.3 KNEE CLEARANCE

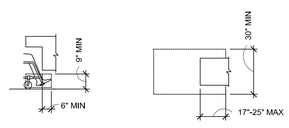
306.2 TOE CLEARANCE.

306.2.1 GENERAL. SPACE UNDER AN ELEMENT BETWEEN THE FINISH FLOOR OR GROUND AND 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED TOE CLEARANCE AND SHALL COMPLY WITH 306.2.

306.2.2 MAXIMUM DEPTH. TOE CLEARANCE SHALL EXTEND 25 INCHES (635 MM) MAXIMUM UNDER AN ELEMENT.

306.2.3 MINIMUM REQUIRED DEPTH. WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE TOE CLEARANCE SHALL EXTEND 17 INCHES (430 MM) MINIMUM UNDER THE ELEMENT.

306.2.4 ADDITIONAL CLEARANCE. SPACE EXTENDING GREATER THAN 6 INCHES (150 MM) BEYOND THE AVAILABLE KNEE CLEARANCE AT 9 INCHES (230 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT BE CONSIDERED TOE CLEARANCE. 306.2.5 WIDTH. TOE CLEARANCE SHALL BE 30 INCHES (760 MM) WIDE MINIMUM.



(A) ELEVATION (B) PLAN

FIGURE 306.2 TOE CLEARANCE

E1 TOE AND KNEE CLEARANCE
N.T.S.

703.3.2 POSITION. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH (9.5 MM) MINIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

703.4.1 HEIGHT ABOVE FINISH FLOOR OR GROUND. TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES (1220 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES (1525 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.

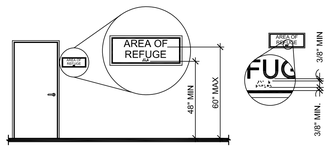


FIGURE 703.4.1 HEIGHT OF TACTILE CHARACTERS ABOVE FINISH FLOOR OR GROUND

703.4.2 LOCATION. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (455 MM) MINIMUM BY 18 INCHES (455 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

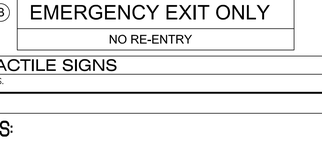


FIGURE 703.4.2 LOCATION OF TACTILE SIGNS AT DOORS

PROVIDE TACTILE EXIT SIGNS AT THE FOLLOWING LOCATIONS:

LOCATIONS	TACTILE IDENTIFICATION
GRADE LEVEL EXTERIOR EXIT DOORS	"EXIT"
EXIT DOORS LEADING DIRECTLY TO A GRADE LEVEL EXTERIOR EXIT BY STAIRWAY OR RAMP	A"EXIT STAIR DOWN" (WHERE OCCURS) B"EXIT RAMP DOWN" (WHERE OCCURS) C"EXIT STAIR UP" (WHERE OCCURS) D"EXIT RAMP UP" (WHERE OCCURS)
EXIT DOORS LEADING DIRECTLY TO A GRADE LEVEL EXTERIOR EXIT OR ENCLOSURE BY PASSAGEWAY	"EXIT ROUTE"
EXIT ACCESS DOORS FROM AN INTERIOR SPACE OR ROOM TO A CORRIDOR OR HALLWAY REQUIRED TO HAVE VISUAL EXIT SIGN	"EXIT ROUTE"
EXIT DOOR THROUGH A HORIZONTAL EXIT	"TO EXIT"

NOTE: RAISED CHARACTER AND BRAILLE EXIT SIGN - CONFORM TO 2018 IBC

NOTE:
WAY–FINDING, ROOM AND DEPARTMENT SIGNAGE BY OWNER AND OWNERS SIGNAGE VENDOR.

D2 TACTILE SIGNS
N.T.S.

E2 TACTILE SIGNS
N.T.S.

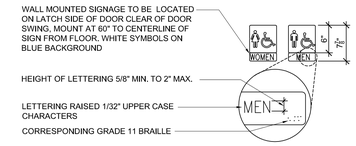
ACCESSIBILITY TOILET ROOM SIGNAGE NOTES:

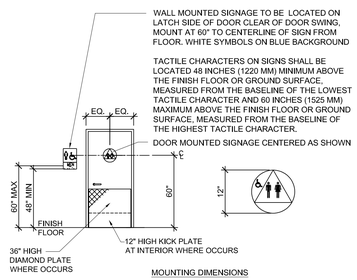
DOOR SIGN - SHALL BE CENTERED ON DOOR AND MOUNTED (WITH ADHESIVE ONLY & CAULK EDGES WITH CLEAR SILICON) 60" ABOVE THE FLOOR AT THE CENTER OF THE SIGN.

ROOM SIGN - RAISED AND BRAILLED CHARACTERS AND PICTORIAL SYMBOL SIGNS (PICTOGRAMS). LETTERS AND NUMERALS SHALL BE RAISED 1/32 " UPPER CASE, SANS-SERIF OR SIMPLE SERIF TYPE AND SHALL BE ACCOMPANIED BY GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE AT LEAST 5/8 " HIGH, BUT NO HIGHER THAN 2".

FINISH CONTRAST - THE CHARACTERS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL, MATTE, OR OTHER NON-GLARE FINISH. BACKGROUND COLOR OF SIGNS SHALL CONTRAST WITH DOOR OR WALL COLOR.

CHARACTERS AND SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR.

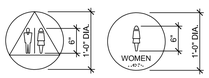




MOUNTING DIMENSIONS

1/4" THICK ACRYLIC PLASTIC- IMAGE AND LETTERS SHALL BE ENGRAVED (MIN. 1/32" DIST.) INTO PLAQUE SURFACE.

SYMBOLS AND LETTERS SHALL BE DIFFERENT FROM THE DOOR IN COLOR AND CONTRAST.



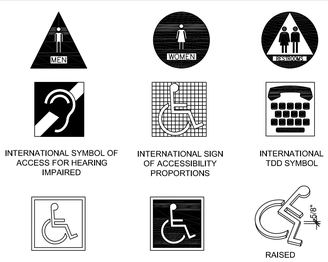
SUBSURFACE IMAGES SHALL BE CENTERED ON PLAQUE.

NOTE:
EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 ".

TYPICAL RESTROOM DOOR SIGNS

NOTE:
WAY–FINDING, ROOM AND DEPARTMENT SIGNAGE BY OWNER AND OWNERS SIGNAGE VENDOR.

D3 RESTROOM SIGNAGE
N.T.S.



E3 ACCESSIBILITY SIGNAGE
N.T.S.

307 PROTRUDING OBJECTS 307.2 PROTRUSION LIMITS. OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES (685 MM) AND NOT MORE THAN 80 INCHES (2030 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES (100 MM) MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH.

EXCEPTION: HANDRAILS SHALL BE PERMITTED TO PROTRUDE 4 1/2 INCHES (115 MM) MAXIMUM.

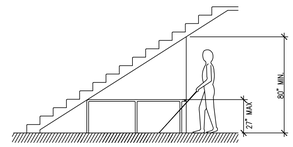
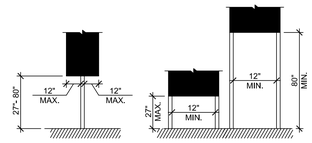


FIG. (E)

307.3 POST-MOUNTED OBJECTS. FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS SHALL OVERHANG CIRCULATION PATHS 12 INCHES (305 MM) MAXIMUM WHEN LOCATED 27 INCHES (685 MM) MINIMUM AND 80 INCHES (2030 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND, WHERE A SIGN OR OTHER OBSTRUCTION IS MOUNTED BETWEEN POSTS OR PYLONS AND THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES (305 MM). THE LOWEST EDGE OF SUCH SIGN OR OBSTRUCTION SHALL BE 27 INCHES (685 MM) MAXIMUM OR 80 INCHES (2030 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.



307.4 VERTICAL CLEARANCE. VERTICAL CLEARANCE SHALL BE 80 INCHES (2030 MM) HIGH MINIMUM. GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE THE VERTICAL CLEARANCE IS LESS THAN 80 INCHES (2030 MM) HIGH. THE LEADING EDGE OF SUCH GUARDRAIL OR BARRIER SHALL BE LOCATED 27 INCHES (685 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES (1980 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

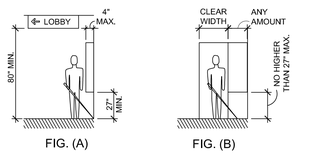


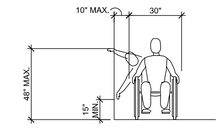
FIG. (A) FIG. (B)

FIG. (C) FIG. (D)

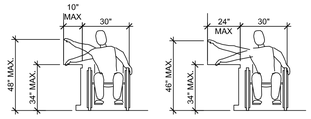
PROTRUDING OBJECTS

308.3 SIDE REACH.

308.3.1 UNOBSTRUCTED: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW SIDE REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

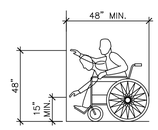


308.3.2 OBSTRUCTED HIGH REACH: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (865 MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610 MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (255 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES (255 MM), THE HIGH SIDE REACH SHALL BE 46 INCHES (1170 MM) MAXIMUM FOR A REACH DEPTH OF 24 INCHES (610 MM) MAXIMUM.

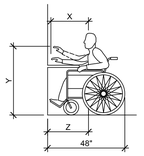


308.2 FORWARD REACH.

308.2.1 UNOBSTRUCTED: WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES (380 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.



308.2.2 OBSTRUCTED HIGH REACH:WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48 INCHES (1220 MM) MAXIMUM WHERE THE REACH DEPTH IS 20 INCHES (510 MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 20 INCHES (510 MM), THE HIGH FORWARD REACH SHALL BE 44 INCHES (1120 MM) MAXIMUM AND THE REACH DEPTH SHALL BE 25 INCHES (635 MM) MAXIMUM.



NOTES:
1. X SHALL BE < 25 INCHES; Z SHALL BE > X.
2. WHEN X < 20 INCHES, THEN Y SHALL BE 48 INCHES MAXIMUM.
3. WHEN X IS 20 TO 25 INCHES, THEN Y SHALL BE 44 INCHES MAXIMUM

REACH RANGES

TACTILE EXIT SIGN NOTES:

1. CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL HAVE A NON GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT ON DARK BACKGROUND OR DARK ON LIGHT BACKGROUND.
2. CHARACTERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO OF BETWEEN 1:5 AND 1:10.
3. CONTRACTED BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS DOTS SHALL BE 1/10 INCH (2.54 MM) ON CENTER IN EACH CELL WITH 2/10 INCH (5.08 MM) SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40 INCH (0.635) ABOVE THE BACKGROUND. BRAILLE DOTS SHALL BE DOMED OR ROUNDED.
4. WHERE PERMANENT IDENTIFICATION SIGNS ARE PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. WHERE PERMANENT IDENTIFICATIONS SIGNAGE IS PROVIDED FOR ROOMS AND SPACES THEY SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE ENTERS THE ROOM OR SPACE. SIGNS THAT IDENTIFY EXITS SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ON EXITS THE ROOM OR SPACE.
5. MOUNTING HEIGHT SHALL BE 60 INCHES (1524 MM) ABOVE THE FINISH FLOOR TO THE CENTER LINE OF THE SIGN. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3 INCHES (76 MM) OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.

TYPICAL EXIT SIGNAGE

D4 WALKWAY / RAMP
N.T.S.

E4 EXIT SIGNAGE
N.T.S.

THE SECTIONS QUOTED WITHIN THESE ACCESSIBILITY DETAILS IS BASED ON THE VA BARRIER FREE DESIGN STANDARD, SUPPLEMENT TO THE ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARDS (ABAAS)

E5 DETECTABLE WARNINGS
N.T.S.

DOORS SHALL PROVIDE A CLEAR WIDTH OF 32" MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURE BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES (404.2.3)

HARDWARE: OPERABLE FROM INSIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT. OPERABLE BY SINGLE EFFORT LEVER-TYPE DEVICE (NOT REQUIRING GRASPING). MOUNTED 34" TO 44" ABOVE FINISH FLOOR. MAXIMUM 5 LBS. EFFORT TO OPERATE INTERIOR AND EXTERIOR DOOR (309.4)

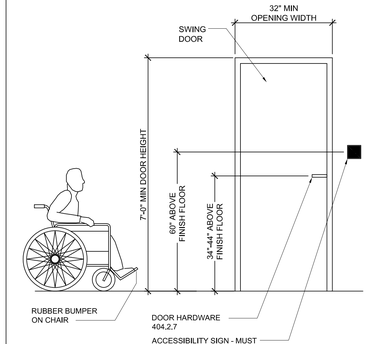
THRESHOLDS, IF ANY, SHALL BE 1/2" HIGH MAXIMUM. (404.2.5)

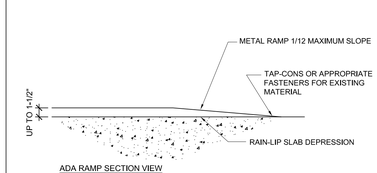
DOOR HARDWARE CAN BE OPERATED WITH A CLOSED FIST OR A LOOSE GRIP TO ACCOMMODATE GREAT RANGE OF USERS.

DOORS SURFACES WITHIN 10" FROM FINISH FLOOR OR GROUND VERTICALLY MEASURED SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATE SHALL BE CAPPED (404.2.10)

MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED THE FOLLOWING PER THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE, TITLE 24, 1008.1.3 AND 404.2.9.

A. INTERIOR DOORS - 5 POUNDS
B. EXTERIOR DOORS - 5 POUNDS
C. FIRE DOORS - 15 POUNDS



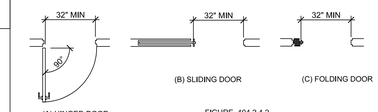


ADA RAMP SECTION VIEW

C6 SWING DOOR
N.T.S.

404.2.2. AT LEAST ONE OF THE ACTIVE LEAVES OF DOORWAYS WITH TWO LEAVES SHALL COMPLY WITH 404.2.3. CLEAR WIDTH AND 404.2.4. MANEUVERING CLEARANCES.

404.2.3. CLEAR WIDTH. DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES (813 MM) MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES (610 MM) DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES (914 MM) MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING WIDTH LOWER THAN 34 INCHES (864 MM) ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES (864 MM) AND 80 INCHES (2032 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT EXCEED 4 INCHES (102 MM).



(A) HINGED DOOR (B) SLIDING DOOR (C) FOLDING DOOR

FIGURE 404.2.4.2
CLEAR WIDTH OF DOORWAYS

E6 CLEAR WIDTH FOR DOORS
N.T.S.

Revisions	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

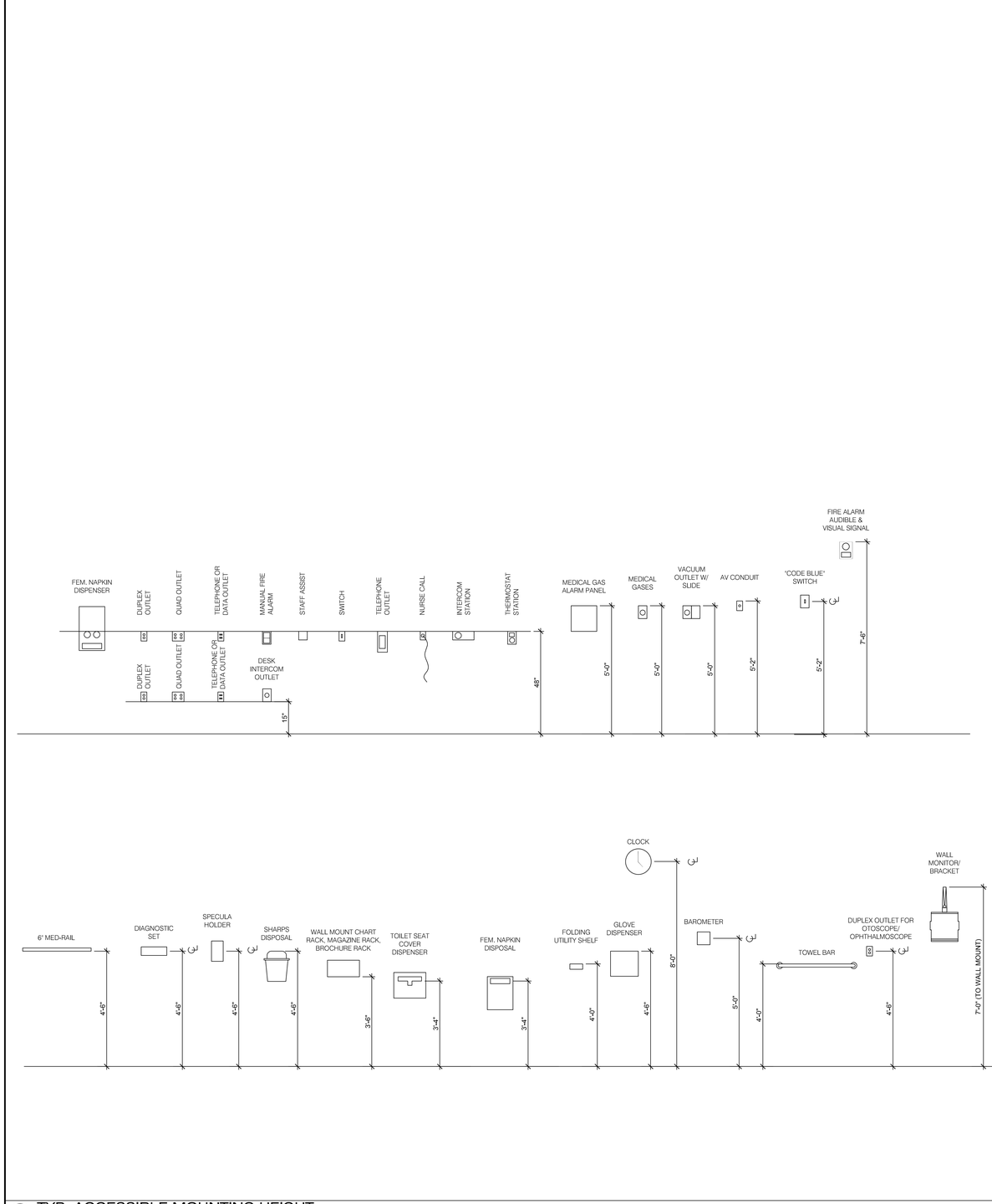
CONSTRUCTION DOCUMENTS

Drawing Title: ACCESSIBILITY DETAILS
Approved Project Director:
Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA LONG BEACH CA
Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH
Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: GI.104
Dwg. Page 4 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

Z:\Projects\WPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\2. DWG CD\A. Arch-CD\Plot\GI.104_GI.105 ACCESSIBILITY DETAILS.dwg 1-10-23 09:47:24 AM DorinHuska



E1 TYP. ACCESSIBLE MOUNTING HEIGHT
N.T.S.

304 TURNING SPACE
304.3.1 CIRCULAR SPACE:
THE TURNING SPACE SHALL BE A SPACE OF 60 INCHES (1525 MM) DIAMETER MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306, AND 304.3.2 T-SHAPED SPACE. THE TURNING SPACE SHALL BE A T-SHAPED SPACE WITHIN A 60 INCH (1525 MM) SQUARE MINIMUM WITH ARMS AND BASE 36 INCHES (915 MM) WIDE MINIMUM. EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 12 INCHES (305 MM) MINIMUM IN EACH DIRECTION AND THE BASE SHALL BE CLEAR OF OBSTRUCTIONS 24 INCHES (610 MM) MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306 ONLY AT THE END OF EITHER THE BASE OR ONE ARM.

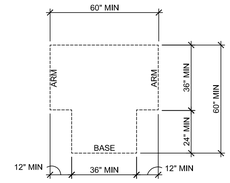


FIGURE 304.3.2 T-SHAPED TURNING SPACE

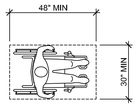


FIGURE 305.3 CLEAR FLOOR OR GROUND SPACE

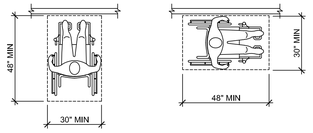


FIGURE 305.5 POSITION OF CLEAR FLOOR OR GROUND SPACE

305.7.1 FORWARD APPROACH, ALCOVES SHALL BE 36 INCHES (915 MM)WIDE MINIMUM WHERE THE DEPTH EXCEEDS 24 INCHES (610 MM).

305.7.1 FORWARD APPROACH, ALCOVES SHALL BE 36 INCHES (915 MM)WIDE MINIMUM WHERE THE DEPTH EXCEEDS 24 INCHES (610 MM).

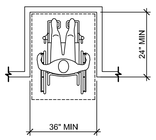


FIGURE 305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

305.7.2 PARALLEL APPROACH, ALCOVES SHALL BE 60 INCHES (1525 MM) WIDE MINIMUM WHERE THE DEPTH EXCEEDS 15 INCHES (380 MM).

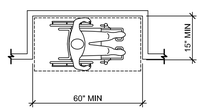


FIGURE 305.7.2 MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

E4 MANEUVERING CLEARANCES
N.T.S.

402.2 COMPONENTS.

ACCESSIBLE ROUTES SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING COMPONENTS: WALKING SURFACES WITH A RUNNING SLOPE NOT STEEPER THAN 1:20, DOORWAYS, RAMPS, CURB RAMPS EXCLUDING THE FLARED SIDES, ELEVATORS, AND PLATFORM LIFTS. ALL COMPONENTS OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF CHAPTER 4.

WALKING SURFACES MUST HAVE RUNNING SLOPES NOT STEEPER THAN 1:20, SEE 403.3.

OTHER COMPONENTS OF ACCESSIBLE ROUTES, SUCH AS RAMPS (405) AND CURB RAMPS (406), ARE PERMITTED TO BE MORE STEEPLY SLOPED.

403.1 GENERAL. WALKING SURFACES THAT ARE A PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH 403. 403.2 FLOOR OR GROUND SURFACE. FLOOR OR GROUND SURFACES SHALL COMPLY WITH 302. 403.3 SLOPE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48. 403.4 CHANGES IN LEVEL. CHANGES IN LEVEL SHALL COMPLY WITH 303. 403.5 CLEARANCES. WALKING SURFACES SHALL PROVIDE CLEARANCES COMPLYING WITH 403.5, EXCEPTION: WITHIN EMPLOYEE WORK AREAS, CLEARANCES ON COMMON USE CIRCULATION PATHS SHALL BE PERMITTED TO BE DECREASED BY WORK AREA EQUIPMENT PROVIDED THAT THE DECREASE IS ESSENTIAL TO THE FUNCTION OF THE WORK BEING PERFORMED. 403.5.1 CLEAR WIDTH. EXCEPT AS PROVIDED IN 403.5.2 AND 403.5.3, THE CLEAR WIDTH OF WALKING SURFACES SHALL BE 36 INCHES (915 MM) MINIMUM. EXCEPTION: THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32 INCHES (815 MM) MINIMUM FOR A LENGTH OF 24 INCHES (610 MM) MAXIMUM PROVIDED THAT REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48 INCHES (1220 MM) LONG MINIMUM AND 36 INCHES (915 MM) WIDE MINIMUM.

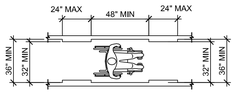


FIGURE 403.5.1
CLEAR WIDTH OF AN ACCESSIBLE ROUTE

403.5.2 CLEAR WIDTH AT TURN. WHERE THE ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND AN ELEMENT WHICH IS LESS THAN 48 INCHES (1220 MM) WIDE, CLEAR WIDTH SHALL BE 42 INCHES (1065 MM) MINIMUM APPROACHING THE TURN, 48 INCHES (1220 MM) MINIMUM AT THE TURN AND 42 INCHES (1065 MM) MINIMUM LEAVING THE TURN.

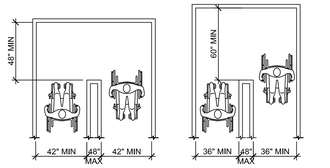


FIGURE 403.5.2
CLEAR WIDTH AT TURN

403.5.3 PASSING SPACES. AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60 INCHES (1525 MM) SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET (61 M) MAXIMUM.

E6 ACCESSIBLE ROUTES
N.T.S.

404.2.4. RECESSED DOORS AND GATES. MANEUVERING CLEARANCES FOR FORWARD APPROACH SHALL BE PROVIDED WHEN ANY OBSTRUCTION WITHIN 18 INCHES (455 MM) OF THE LATCH SIDE OF A DOORWAY PROJECTS MORE THAN 8 INCHES (205 MM) BEYOND THE FACE OF THE DOOR, MEASURED PERPENDICULAR TO THE FACE OF THE DOOR OR GATE.
404.2.4.1 SWINGING DOORS AND GATES SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.4.1.

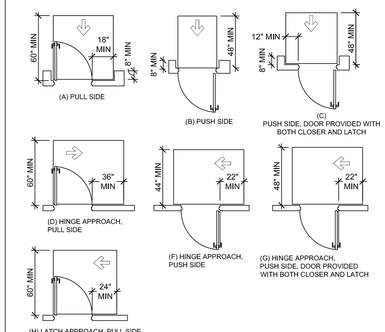
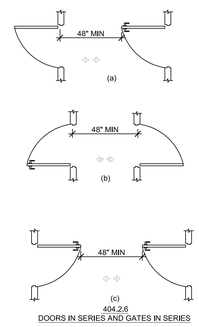


FIGURE 404.2.4.1
MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

TYPE OF USE		MIN. MANEUVERING CLEARANCE	
APPROACH DIRECTION	DOOR OR GATE SIDE	PERPENDICULAR TO DOORWAY	PARALLEL TO DOORWAY
FROM FRONT	PULL	60 INCHES	18 INCHES
FROM FRONT	PUSH	48 INCHES	0 INCHES
FROM HINGE SIDE	PULL	60 INCHES	36 INCHES
FROM HINGE SIDE	PUSH	44 INCHES	22 INCHES
FROM LATCH SIDE	PULL	60 INCHES	24 INCHES
FROM LATCH SIDE	PUSH	44 INCHES	24 INCHES

TABLE 404.2.4.1.
MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

404.2.6 DOORS IN SERIES AND GATES IN SERIES. THE DISTANCE BETWEEN TWO HINGED OR PIVOTED DOORS IN SERIES AND GATES IN SERIES SHALL BE 48 INCHES (1219 MM) MINIMUM PLUS THE WIDTH OF DOORS OR GATES SWINGING INTO THE SPACE.



404.2.6
DOORS IN SERIES AND GATES IN SERIES

THE SECTIONS QUOTED WITHIN THESE ACCESSIBILITY DETAILS IS BASED ON THE VA BARRIER FREE DESIGN STANDARD, SUPPLEMENT TO THE ARCHITECTURAL BARRIERS ACT ACCESSIBILITY STANDARDS (ABAAS)

E3 DOOR CLEARANCES
N.T.S.

CONSTRUCTION DOCUMENTS

Revisions:	Date
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CONSULTANTS:

LICENSED ARCHITECT RENEWAL 08/31/2024 C-21579 STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

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Drawing Title: ACCESSIBILITY DETAILS
Approved Project Director:

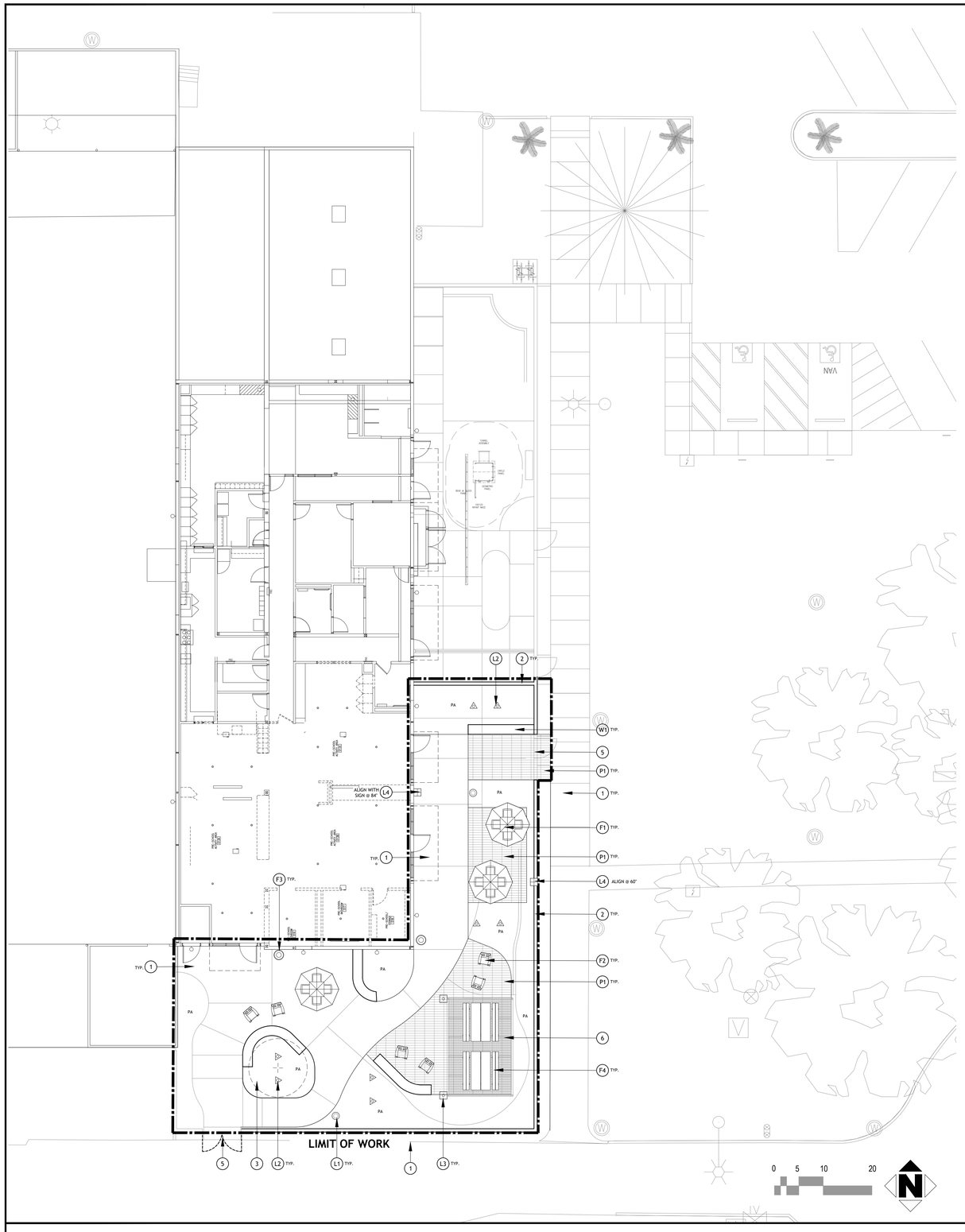
Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA LONG BEACH CA
Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: GI.105
Dwg. Page 5 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

Z:\Projects\NPD\VA LONG BEACH\VAL622101 - EHRM Trng Admin Space Support\v4. CD\v2. DWG CD\A. Arch-CD\Plot\GI.104_GI.105 ACCESSIBILITY DETAILS.dwg 1-10-23 09:48:19 AM DonnHuska
three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



MATERIALS & PRODUCTS SCHEDULE

SYMBOL		ITEM	DETAIL	DESCRIPTION
		PAVING		
	P1	LINEAR CONCRETE PAVERS ON SAND BASE	1 / L1.200	BELGARD MELVILLE PLANK SLIM PAVERS WITH POLYMERIC SAND AT JOINTS, FOUNDRY/GRAPHITE/LINEN COLOR. INSTALL IN SLIM LINEAR PATTERN
		WALLS/FENCES/GATES		
	W1	PRECAST CONCRETE SEATWALL	2 / L1.200	CUSTOM LITE CRETE BENCH. C-NATURAL, T--SANDSTONE, STANDARD SEALER 4200
		SITE LIGHTING		
	L1	PEDESTRIAN POLE LIGHT		LIGHT COLUMN PEDESTRIAN BY FORMS AND SURFACES
	L2	TREE ACCENT LIGHTING		TREE UPLIGHT, NP-6LED-BZ, BRONZE METALLIC BY FX LUMINAIRE
	L3	DOWNLIGHTING @ SHADE STRUCTURE		(2) AMERISTAR LED - AR-LED-TR-E65-MFL-A9-BLP-12-1 1-C-6-WM - WALL MOUNTED BY BK LIGHTING
	L4	ELECTRICAL STUB OUT WITH JBOX AND WP PLATE		REFER TO ELECTRICAL
		OTHER		
	1	EXISTING HARDSCAPE TO REMAIN		PROTECT IN PLACE
	2	EXISTING CMU BLOCK WALL TO REMAIN		PROTECT IN PLACE
	3	EXISTING TREE TO REMAIN		PROTECT IN PLACE
	4	EXISTING SECURITY FENCE		PROTECT IN PLACE
	5	EXISTING GATES		TO BE REMOVED. REFER TO ARCH
	6	CUSTOM STEEL SHADE STRUCTURE WITH ALUMAWOOD SLATS	1 / L1.300	
	PA	PLANTING AREA		REFER TO PLANTING PLANS
		SITE FURNISHINGS		
	F1	TABLES AND CHAIRS+UMBRELLA (4 TOP)		36" SQUARE TABLE BY VICTOR STANLEY. MODEL SPCT-42,BLACK, SURFACE MOUNT + W/ (2) VICTOR STANLEY, MODEL NRS-36 W/BACK & (2) (2) VICTOR STANLEY,MODEL NRS-36 BACKLESS BLACK COLOR, SURFACE MOUNT + FIBERBUILT LUCAYA 8' DIA. UMBRELLA W/UMBRELLA STAND
	F2	LOUNGE CHAIR		LOLL LOLLYGAGGER. GREEN COLOR
	F3	WASTE RECEPTACLES		BELSON - CBTR-FT, BLCK, BLACK COLOR, RIVER FINISH WITH HOOD
	F4	PICNIC TABLE WITH ADA COMPANION SEATING		ALFRESCO DINING TABLE + STOOLS FROM LOLL. 95IN. LENGTH, BLUE COLOR

NOTES:

1. REFER TO CIVIL UTILITY PLANS FOR EXISTING ITEMS NOT CALLED OUT ON THESES DRAWINGS. PROTECT IN PLACE ALL PAVING , UTILITIES AND STRUCTURES NOT IDENTIFIED FOR DEMOLITION.
2. REFER TO CIVIL GRADING PLANS FOR ALL GRADING AND PAVING ELEVATION INFORMATION
3. NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE OF ANY DISCREPANCIES WITH THE LAYOUT OF PROPOSED IMPROVEMENTS PRIOR TO INSTALLATION
4. ALL EXTERIOR CONCRETE FINISHES SHALL MEET OR EXCEED THE SLIP COEFFICIENT FOR EXTERIOR CONCRETE
5. NEW PAVING SHALL MATCH EXISTING GRADES AT ALL THRESHOLDS AND WALKWAYS

Revisions	Date
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-	-

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LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA
Signature 11/30/22
Renewal Date 10/14/22
Date

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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858.344.8900

Drawing Title: HARDSCAPE FINISHES PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L.1.100

Dwg. Page 6 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

one eighth inch = one foot | 2:\landLAB PROJECTS\VA EHRM Remodel Long Beach\AutoCAD\landLAB\Sheets\20s\L1.100 HARDSCAPE FINISHES PLAN.dwg 12-21-22 02:50:43 PM Jon Alarcon
three eighths inch = one foot | one quarter inch = one foot | one half inch = one foot | three quarters inch = one foot | one inch = one foot | one and one half inches = one foot | three inches = one foot

MATERIALS & PRODUCTS SCHEDULE

SYMBOL		ITEM	DETAIL	DESCRIPTION	MANUF/SUPPLIER	MODEL NO.	SPEC SECTION	REMARKS
		PAVING						
	P1	LINEAR CONCRETE PAVERS ON SAND BASE	1 / L1.200	BELGARD MELVILLE PLANK SLIM PAVERS WITH POLYMERIC SAND AT JOINTS. FOUNDRY/GRAPHITE/LINEN COLOR. INSTALL IN SLIM LINEAR PATTERN	WWW.BELGARD.COM			SUBMIT PRODUCTS FOR REVIEW PRIOR TO ORDERING
		WALLS/FENCES/GATES						
	W1	PRECAST CONCRETE SEATWALL	2 / L1.200	CUSTOM LITE CRETE BENCH. C-NATURAL, T-SANDSTONE, STANDARD SEALER 4200	WWW.QCP-CORP.COM. SCOTT ULRICH,. 760.500.8609			SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION
		SITE LIGHTING						
	L1	PEDESTRIAN POLE LIGHT		LIGHT COLUMN PEDESTRIAN BY FORMS AND SURFACES	WWW.FORMS-SURFACES.COM. KELLY MCKEOWN. 800.451.0410			REFER TO MANUFACTURERS FOR CONCRETE FOOTING RECOMMENDATIONS. REFER TO ELECTRICAL FOR CONNECTIONS AND INSTALLATION DETAILS
	L2	TREE ACCENT LIGHTING		TREE UPLIGHT, NP-6LED-BZ, BRONZE METALLIC BY FX LUMINAIRE	WWW.FXLUMINAIRE.COM			REFER TO ELECTRICAL FOR CONNECTIONS AND INSTALLATION DETAILS
	L3	DOWNLIGHTING @ SHADE STRUCTURE		(2) AMERISTAR LED - AR-LED-TR-E65-MFL-A9-BLP-12-1 1-C-6-WM - WALL MOUNTED BY BK LIGHTING	SURFACE MOUNT TO SHADE CANOPY POSTS			REFER TO ELECTRICAL FOR CONNECTIONS AND INSTALLATION DETAILS
	L4	ELECTRICAL STUB OUT WITH JBOX AND WP PLATE		REFER TO ELECTRICAL				REFER TO ELECTRICAL FOR CONNECTIONS AND INSTALLATION DETAILS
		OTHER						
	1	EXISTING HARDSCAPE TO REMAIN		PROTECT IN PLACE	PROTECT IN PLACE			
	2	EXISTING CMU BLOCK WALL TO REMAIN		PROTECT IN PLACE	PROTECT IN PLACE			
	3	EXISTING TREE TO REMAIN		PROTECT IN PLACE	PROTECT IN PLACE			
	4	EXISTING SECURITY FENCE		PROTECT IN PLACE	PROTECT IN PLACE			
	5	EXISTING GATES		TO BE REMOVED. REFER TO ARCH				
	6	CUSTOM STEEL SHADE STRUCTURE WITH ALUMAWOOD SLATS	1 / L1.300					SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION
	PA	PLANTING AREA		REFER TO PLANTING PLANS				
		SITE FURNISHINGS						
	F1	TABLES AND CHAIRS+UMBRELLA (4 TOP)		36" SQUARE TABLE BY VICTOR STANLEY. MODEL SPCT-42,BLACK, SURFACE MOUNT + W/ (2) VICTOR STANLEY, MODEL NRS-36 W/BACK & (2) (2) VICTOR STANLEY,MODEL NRS-36 BACKLESS BLACK COLOR, SURFACE MOUNT + FIBERBUILT LUCAYA 8' DIA. UMBRELLA W/UMBRELLA STAND	WWW.VICTORSTANLEY.COM / WWW.ANOVAFURNISHINGS.COM	INSTALL PER MANUFACTURER'S SPECIFICATIONS.		
	F2	LOUNGE CHAIR		LOLL LOLLYGAGGER. GREEN COLOR	WWW.LOLL.COM	INSTALL PER MANUFACTURER'S SPECIFICATIONS.		
	F3	WASTE RECEPTACLES		BELSON - CBTR-FT, BLCK, BLACK COLOR, RIVER FINISH WITH HOOD	WWW.BELSON.COM	INSTALL PER MANUFACTURER'S SPECIFICATIONS.		
	F4	PICNIC TABLE WITH ADA COMPANION SEATING		ALFRESCO DINING TABLE + STOOLS FROM LOLL. 95IN. LENGTH, BLUE COLOR				

NOTES:

1. REFER TO CIVIL UTILITY PLANS FOR EXISTING ITEMS NOT CALLED OUT ON THESES DRAWINGS. PROTECT IN PLACE ALL PAVING , UTILITIES AND STRUCTURES NOT IDENTIFIED FOR DEMOLITION.
2. REFER TO CIVIL GRADING PLANS FOR ALL GRADING AND PAVING ELEVATION INFORMATION
3. NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE OF ANY DISCREPANCIES WITH THE LAYOUT OF PROPOSED IMPROVEMENTS PRIOR TO INSTALLATION
4. ALL EXTERIOR CONCRETE FINISHES SHALL MEET OR EXCEED THE SLIP COEFFICIENT FOR EXTERIOR CONCRETE
5. NEW PAVING SHALL MATCH EXISTING GRADES AT ALL THRESHOLDS AND WALKWAYS

CONCRETE MOCK-UPS

CAST MOCK-UPS OF SECTIONS 48 BY 48 INCHES OF DECORATIVE CEMENT CONCRETE PAVEMENT TO DEMONSTRATE TYPICAL PATTERN, TEXTURE, SURFACE FINISH, COLOR, JOINTS, AND STANDARD OF WORKMANSHIP.

1. BUILD MOCK-UPS ON THE SITE AND OF THE SIZE INDICATED FOR ONSITE REVIEW.

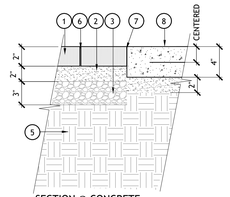
2. IF MULTIPLE COLORS AND FINISHES ARE SPECIFIED, ALL SAMPLES SHALL BE PREPARED FOR REVIEW AT THE SAME TIME.

3. IN PRESENCE OF OWNER'S REPRESENTATIVE, DAMAGE PART OF THE EXPOSED SURFACE OF DECORATIVE CEMENT CONCRETE PAVEMENT FOR EACH FINISH, COLOR, AND TEXTURE REQUIRED, AND DEMONSTRATE MATERIALS AND TECHNIQUES PROPOSED FOR REPAIR TO MATCH ADJACENT UNDAMAGED SURFACES.

4. THE MOCK-UPS SHALL BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK. MOCK-UPS THAT DO NOT MATCH THE REFERENCE PANELS AND DO NOT DEMONSTRATE ALL SPECIFIED JOINTS AND JOINT MATERIALS, CAULKING, AND SCORING TREATMENTS WILL BE REJECTED. REMOVE AND RECONSTRUCT THE MOCK-UPS UNTIL APPROVED. THE CONTRACTOR SHALL BE BACK-CHARGED FOR THE COSTS OF THE OWNER'S REPRESENTATIVE TO REVIEW MORE THAN TWO (2) MOCK-UP ATTEMPTS. APPROVED MOCK-UPS SHALL SERVE AS STANDARD OF ACCEPTANCE FOR PAVING WORK AND REMAIN AVAILABLE FOR THE DURATION OF THE PROJECT.

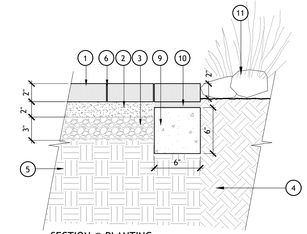
5. CONCRETE PAVING MOCK UP ARE TO INCLUDE THE FOLLOWING PER TYPE CONCRETE TYPE AS CALLED OUT ON HARDSCAPE LEGEND:

A. CONCRETE / AGGREGATE COLOR
B. SURFACE RETARDER PRODUCT APPLIED AS PRESELECTED BY LANDSCAPE ARCHITECT.
C. SAW CUT CONTROL JOINTS
D. EXPANSION JOINT MATERIAL
E.EXPANSION JOINT SEALANT WITH COLORS AS PRESELECTED BY LANDSCAPE ARCHITECT.
F. RADIUS EDGES AS CALLED OUT ON DRAWINGS.
G. REFER TO APPENDIX A FOR MORE INFORMATION ON QUALITIES ON WHICH THE CONCRETE MOCK-UPS WILL BE REVIEWED.



SECTION @ CONCRETE PAVING

1. PRECAST CONCRETE PAVER, REFER TO LEGEND FOR TYPE
2. BEDDING SAND
3. CLASS II SUBBASE COMPACTED PER PROJECT GEOTECHNICAL
4. AMENDED PLANTING SOIL PER PLANTING PLAN
5. COMPACTED SUBBASE BELOW PAVING @90% COMPACTION
6. FILL-IN ALL GAPS BETWEEN PAVERS WITH POLYMERIC SAND USING A VIBRATING PLATE
7. EXPANSION JOINT



SECTION @ PLANTING AREA

8. ADJACENT C.I.P. CONCRETE, REFER TO PLAN FOR TYPE
9. C.I.P CONCRETE DEEP POUR EDGE/ PAVER RESTRAINT
10. THIN SET MORTAR BED PER MANUFACTURER'S RECOMMENDATION REFER TO SPECS
11. PLANTING AREA REFER TO PLANTING PLAN

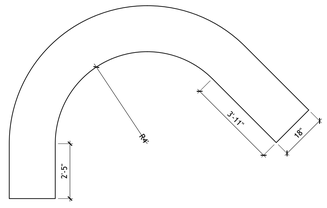
NOTE:

1. REFER TO CIVIL FOR PEDESTRIAN AND VEHICULAR THICKNESS AND SUBBASE REQUIREMENTS.

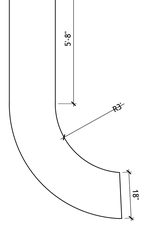
1 PRECAST CONCRETE PAVERS ON SAND BASE

SCALE: 1 1/2"=1'

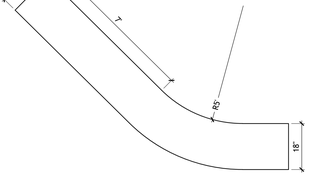
1. LITE CRETE WALL, REFER TO LEGEND FOR FINISH
2. ADJACENT PAVING, REFER TO HARDSCAPE PLAN FOR TYPE
3. 1/8" RADIUS AT ALL EDGES
4. REINFORCING PER MANUFACTURER
5. (2) 1/2" CAST-IN THREADED INSERT AS INSTALLED BY MANUFACTURER.
6. 2" CORE DRILLED HOLE FOR BENCH INSERT WITH NONSHRINK GROUT.
7. COMPACTED SUBGRADE @ 95% BELOW SEAT WALL
8. AMENDED NATIVE SOIL @ PLANTING AREA
9. PLANTING AREA (CONDITION VARIES REFER TO PLAN)
11. 3/8" PREFORMED EXPANSION FILLER+SEALANT
12. CLASS II GRAVEL SETTING BED COMPACTED @ 95%



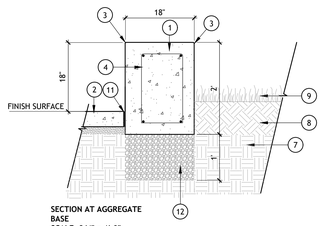
WALL TYPE 1 PLAN
NOT TO SCALE



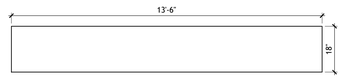
WALL TYPE 2 PLAN
NOT TO SCALE



WALL TYPE 3 PLAN
NOT TO SCALE



SECTION AT AGGREGATE BASE
SCALE: 3/4" = 1'-0"



WALL TYPE 4 PLAN
NOT TO SCALE

2 PRECAST CONCRETE SEAT WALL

SCALE: 3/4"=1'

Revisions	Date
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CONSULTANTS:

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LICENSED LANDSCAPE ARCHITECT — NICHOLAS HOLLAND — No. 6064 — Signature 11/30/23 — Renewal Date 12/14/22 — Date — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: HARDSCAPE FINISHES LEGEND

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L1.200

Dwg. Page 7 of 61

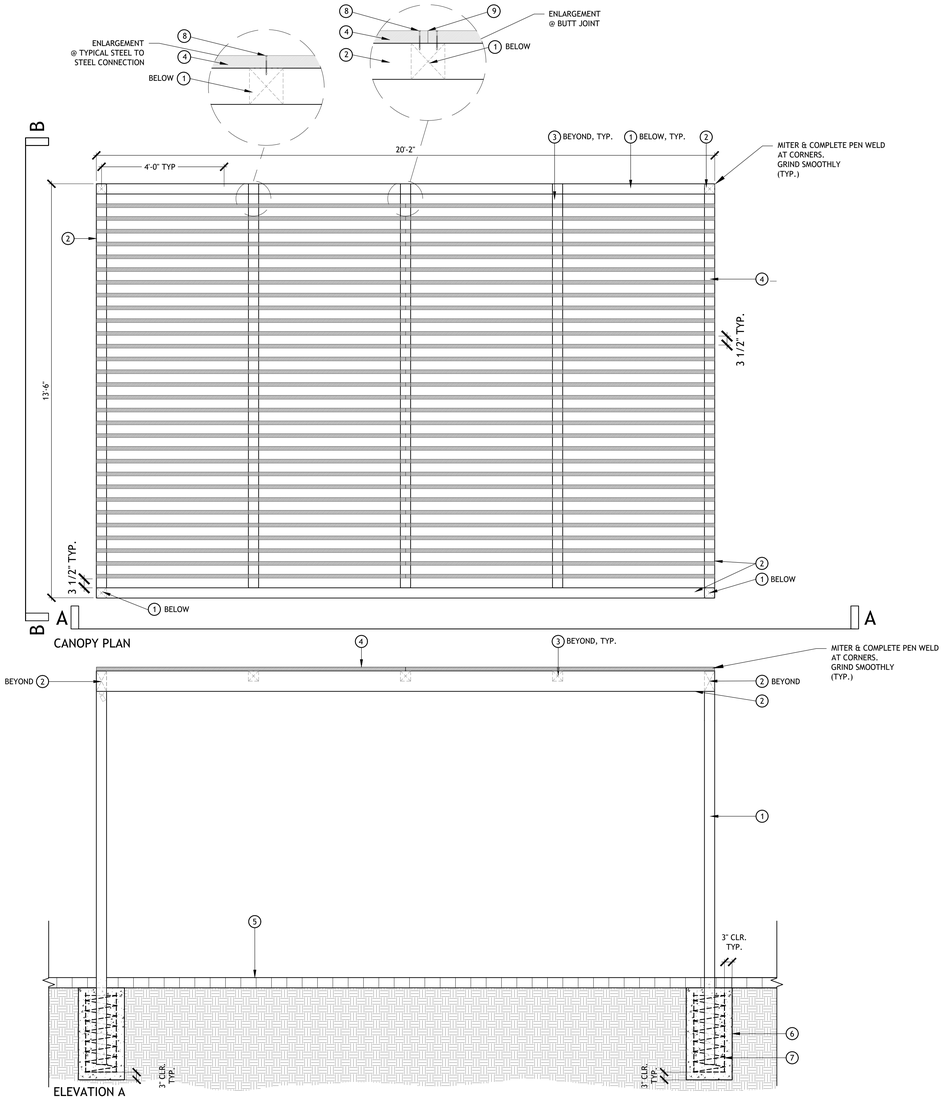
CONSTRUCTION DOCUMENTS

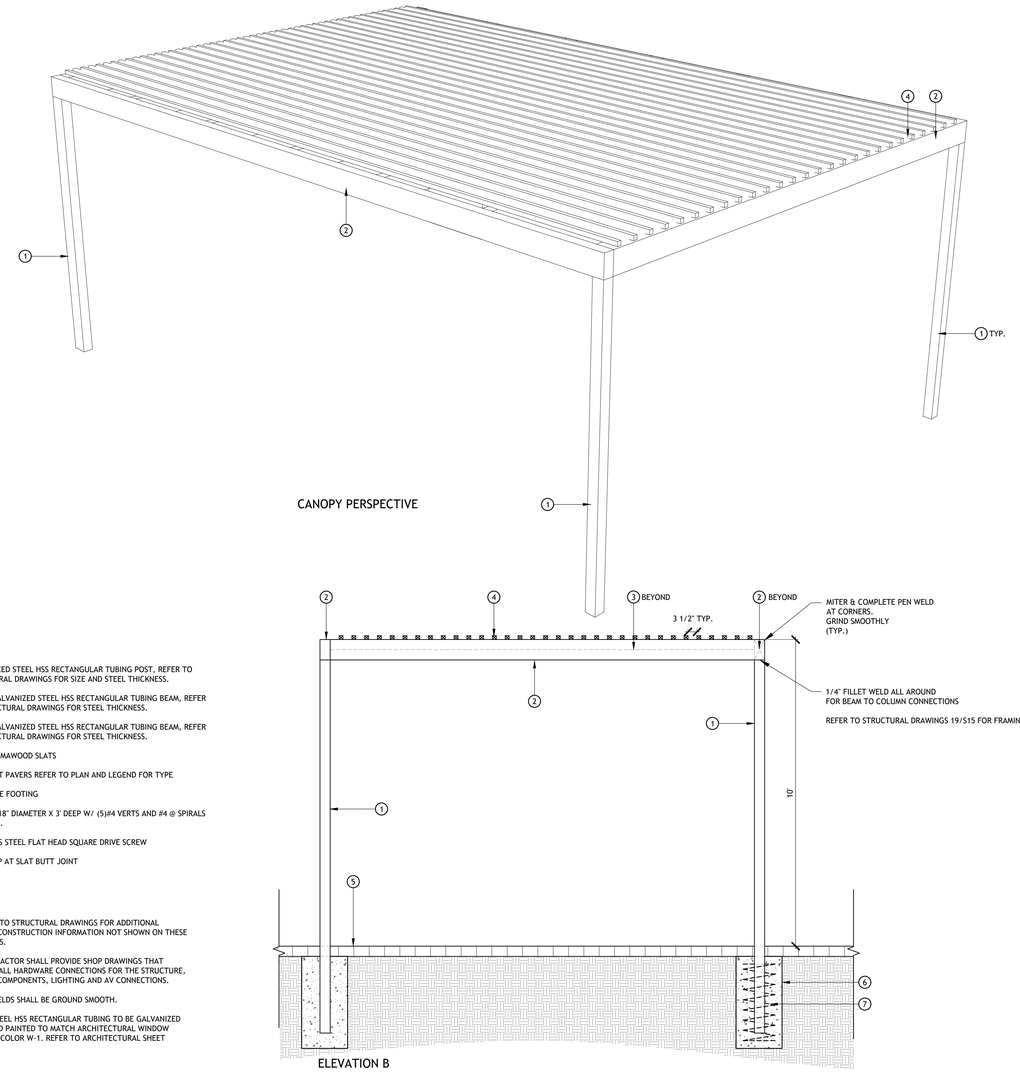
Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot | 6" | one and one half inches = one foot | 1" 0" 6" | one inch = one foot | 2" 0" 6" | three quarters inch = one foot | 2" 0" 6" | one half inch = one foot | 4" 0" | three eighths inch = one foot | 4" 0" | one quarter inch = one foot | 8" 4" 0" | one eighth inch = one foot | 16" 8" 4" 0" | 2:\landLAB PROJECTS\VA EHRM Remodel Long Beach\AutoCAD\landLAB\Sheets\CDs\L1.200 HARDSCAPE FINISHES LEGEND.dwg 12-21-22 02:50:46 PM Jon Alarcon





1. GALVANIZED STEEL HSS RECTANGULAR TUBING POST, REFER TO STRUCTURAL DRAWINGS FOR SIZE AND STEEL THICKNESS.
2. 4" X 8" GALVANIZED STEEL HSS RECTANGULAR TUBING BEAM, REFER TO STRUCTURAL DRAWINGS FOR STEEL THICKNESS.
3. 4" X 4" GALVANIZED STEEL HSS RECTANGULAR TUBING BEAM, REFER TO STRUCTURAL DRAWINGS FOR STEEL THICKNESS.
4. 2"X2" ALUMAWOOD SLATS
5. ADJACENT PAVERS REFER TO PLAN AND LEGEND FOR TYPE
6. CONCRETE FOOTING
7. TYPICAL 18" DIAMETER X 3' DEEP W/ (5)#4 VERTS AND #4 @ SPIRALS AT 4" O.C.
8. STAINLESS STEEL FLAT HEAD SQUARE DRIVE SCREW
9. 3/32" GAP AT SLAT BUTT JOINT

NOTES:

1. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL CANOPY CONSTRUCTION INFORMATION NOT SHOWN ON THESE DRAWINGS.

2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS THAT INCLUDE ALL HARDWARE CONNECTIONS FOR THE STRUCTURE, CANOPY COMPONENTS, LIGHTING AND AV CONNECTIONS.

3. ALL WELDS SHALL BE GROUND SMOOTH.

4. ALL STEEL HSS RECTANGULAR TUBING TO BE GALVANIZED AND FIELD PAINTED TO MATCH ARCHITECTURAL WINDOW MULLION COLOR W-1. REFER TO ARCHITECTURAL SHEET A03.91.

1 STEEL SHADE CANOPY

SCALE: 1/2"=1'

Revisions	Date
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LICENSED LANDSCAPE ARCHITECT — NANCY E. HARLEY — Signature 11/20/23 — Renewal Date 10/24/22 — Date — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: HARDSCAPE DETAILS

Approved: Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L1.300

Dwg. Page 8 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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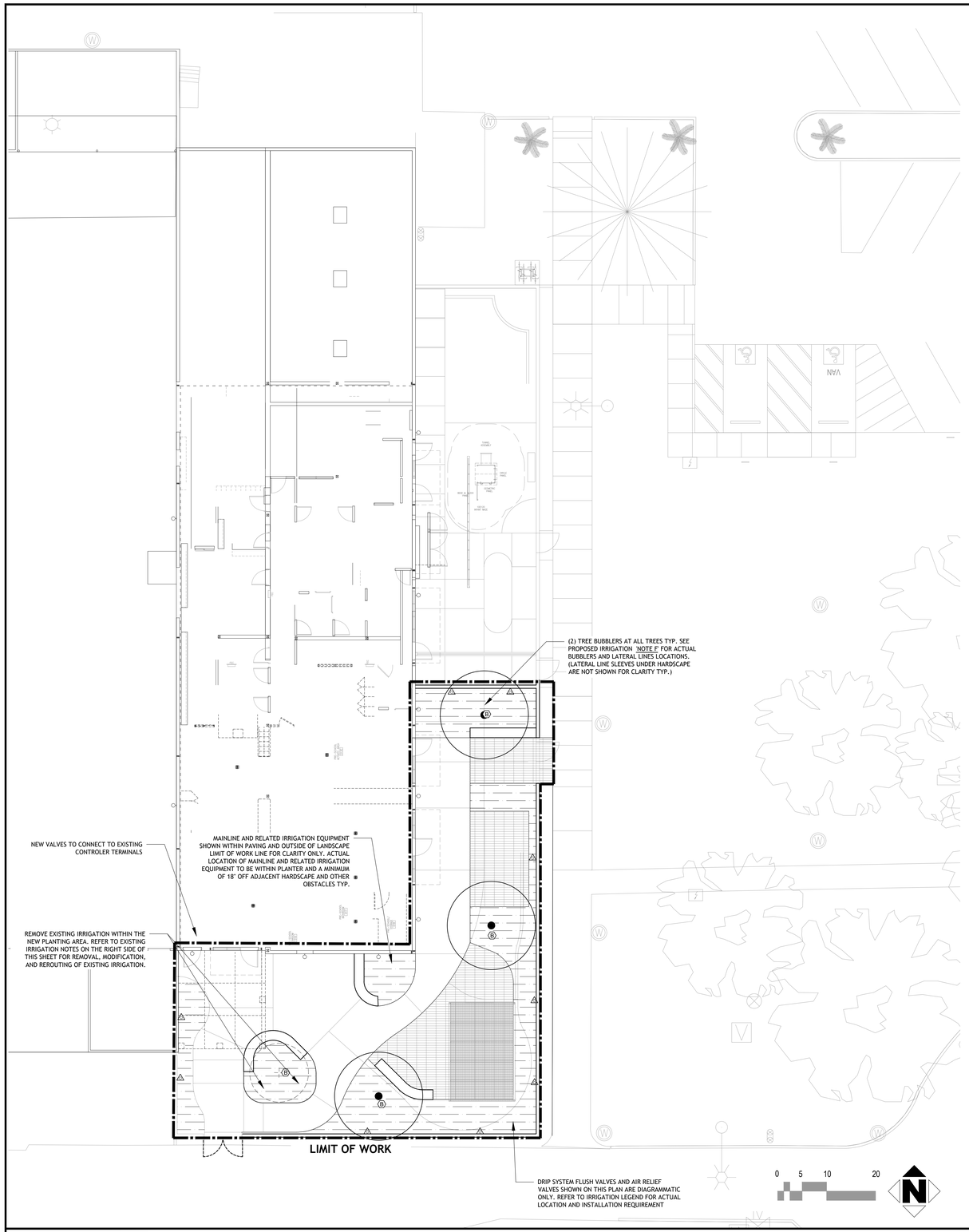

EXISTING IRRIGATION NOTES

NOTE 1:
CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL EXISTING IRRIGATION EQUIPMENT AFFECTED BY THE NEW CONSTRUCTION IMPROVEMENTS, IF NECESSARY. CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE REMOVED AND DISPOSED OF IN FIELD PRIOR TO BIDDING WORK AND PRIOR TO COMMENCING WORK.

NOTE 2:
CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO BIDDING WORK AND AGAIN PRIOR TO COMMENCING WORK. VERIFICATION SHALL BE DOCUMENTED AND DELIVERED TO OWNER'S REPRESENTATIVE.

NOTE 3:
CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ALL SCH. 40 PVC SLEEVING UNDER PAVING, WALLS AND CURBS AT NO LESS THAN 24" BELOW GRADE AND NO LESS THAN 2X DIAMETER OF IRRIGATION PIPE IN AREAS WHERE PIPE CROSSING WILL OCCUR. WHEN PIPE SIZE IS NOT AVAILABLE USE 6" SLEEVING MATERIAL. CONFIRM CROSSINGS WITH OWNER'S REPRESENTATIVE PRIOR TO PAVING AND HARDSCAPE CONSTRUCTION.

NOTE 4:
CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING BACKFLOW DEVICE AND TESTING FOR PROPER OPERATION. SHOULD BACKFLOW DEVICE BE INOPERABLE OR NOT IN PLACE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF SAID BACKFLOW DEVICE. CONFIRM ANY DISCREPANCIES WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO BIDDING WORK AND PRIOR TO COMMENCING WORK.

PROPOSED IRRIGATION NOTES

NOTE A:
POINT OF CONNECTION "A" SHALL BE AN EXISTING 2" REDUCED PRESSURE BACKFLOW PREVENTER (SEE PLAN FOR APPROXIMATE LOCATION). VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STATIC WATER PRESSURE	75 PSI
DESIGN WATER PRESSURE	N/A
MAXIMUM SYSTEM DEMAND	N/A
RESIDUAL WATER PRESSURE	N/A

NOTE B:
POINT OF CONNECTION "B" SHALL BE AN EXISTING 4" IRRIGATION MAINLINE (SEE PLAN FOR APPROXIMATE LOCATION. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STATIC WATER PRESSURE	75 PSI
DESIGN WATER PRESSURE	49.5 PSI
MAXIMUM SYSTEM DEMAND	14.7 GPM
RESIDUAL WATER PRESSURE	34.8 PSI

NOTE C:
NEW CONTROLLER SHALL BE ET2000e-48-EN-R/SSE-R-RB, 48 STATION IRRIGATION CONTROLLER WITH ETHERNET CONNECTION WITHIN A STAINLESS STEEL ENCLOSURE AS PART OF ASSEMBLY. FINAL LOCATION OF CONTROLLER AND ELECTRICAL POC SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK

NOTE D:
MAINLINE AND RELATED IRRIGATION EQUIPMENT SHOWN OFFSET FROM PLANTING FOR CLARITY ONLY. ACTUAL LOCATION OF MAINLINE AND RELATED IRRIGATION EQUIPMENT TO BE WITHIN PLANTER AND A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE E:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE F:
BUBBLERS AND LATERAL LINES ARE SHOWN OFFSET FROM PLANTING FOR CLARITY ONLY, ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE G:
CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING WITHIN THE DRIPLINE OF EXISTING TREES. NO MECHANICAL TRENCHING WITHIN THE DRIPLINE OF THE EXISTING TREE WILL BE ALLOWED. VERIFY ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE. REFER TO EXISTING IRRIGATION NOTES BELOW FOR ADDITIONAL INFORMATION.

LATERAL PIPE SIZE CHART	
PIPE SIZE	GALLONAGE
3/4"	0-5
1"	5-10
11/4"	11-22
11/2"	23-28
2"	29-50
21/2"	51-70

Revisions	Date
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LICENSED LANDSCAPE ARCHITECT — NICHOLAS A. HARLEY — Signature 11/30/23 — Renewal Date 10/31/25 — Date — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: IRRIGATION PLAN

Approved Project Director:

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Project Number: 600-22-703

Building Number: BLDG. #46

Location: VA LONG BEACH CA

Drawing Number: L2.100

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

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Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

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three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

IRRIGATION NOTES

1 ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR CONDITIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.

2 THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.

3 THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.

4 THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.

5 THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.

6 DO NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE UNIVERSITY.

7 INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.

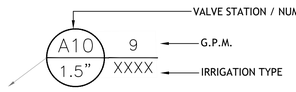
8 ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

9 CONTRACTOR SHALL ROUTE **TWO** ADDITIONAL 'CONTROL' WIRES AND **ONE** ADDITIONAL 'COMMON' WIRE ALONG ENTIRE MAINLINE ROUTE AND ALONG EACH AND EVERY LEG OF MAINLINE ROUTE. ROUTE WIRES INTO EACH AND EVERY RCV VALVE BOX. WHERE VALVE BOXES ARE GROUPED INTO A MANIFOLD, ROUTE WIRES INTO FIRST VALVE BOX ON MANIFOLD ONLY. SPARE 'CONTROL' WIRES SHALL BE OF A DIFFERENT COLOR THAN THOSE USED ON THE PROJECT. 'COMMON' WIRE SHALL BE OF A DIFFERENT COLOR THAN THAT USED ON THE PROJECT, OR WHITE WITH A STRIPE.

10 ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE TWICE THE DIAMETER OF THE PIPE CARRIED. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.

11 ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.

IRRIGATION VALVE IDENTIFICATION



SRH SERIES 1-1/2" RECLAIMED SUB-METER FOR MONITORING OF PARKING LOT IRRIGATION USAGE. MARK METER BOX LID "M"

IRRIGATION MATERIAL LEGEND

SYMBOL	MANUFACT.	MODEL NO. / DESCRIPTION	DETAIL
M	NEPTUNE	T-10 1 1/2" DEDICATED IRRIGATION SUB-METER. MARK METER BOX LID "M"	
EB	EXISTING	EXISTING 2" BACKFLOW W/ WYE STRAINER SHALL BE TESTED, CERTIFIED AND REUSED FOR NEW IRRIGATION. NEW 4" THICK CONCRETE PAD AND LOCKING STAINLESS STEEL ENCLOSURE, V.I.T. STRONG BOX MODEL #SBBC-45SS, SHALL BE INSTALLED FOR THE EXISTING BACKFLOW ASSEMBLY. IF THE EXISTING BACKFLOW FAILS CERTIFICATION AND REQUIRES REPLACEMENT, THE NEW BACKFLOW ASSEMBLY SHALL BE WILKINS 975XL, 2" R/P BACKFLOW PREVENTION DEVICE WITH 2" SXL WYE STRAINER. INSTALL WITH BRASS NIPPLES, UNIONS, AND FITTINGS, SIZED PER DEVICE. BACKFLOW SHALL BE INSTALLED WITH LOCKING STAINLESS STEEL ENCLOSURE, V.I.T. STRONG BOX MODEL #SBBC-45SS	L2.03 / 1
B	WILKINS	NEW BACKFLOW ASSEMBLY SHALL BE WILKINS 975XL, 1 1/2" R/P BACKFLOW PREVENTION DEVICE WITH 1 1/2" SXL WYE STRAINER. INSTALL WITH BRASS NIPPLES, UNIONS, AND FITTINGS, SIZED PER DEVICE. BACKFLOW SHALL BE INSTALLED WITH LOCKING STAINLESS STEEL ENCLOSURE, V.I.T. STRONG BOX MODEL #SBBC-45SS	L2.03 / 1
V	RAIN BIRD	200-PESB 2" SCRUBBER REMOTE CONTROL VALVE	L2.03 / 4
F	CALSENSE	FM-1B 1" FLOW SENSOR, INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND WIRE TO CONTROLLER	L2.03 / 4
	RAIN BIRD	XXX-PESB SCRUBBER REMOTE CONTROL VALVE (SIZE PER PLAN)	L2.03 / 4
	RAIN BIRD	1" DRIP ZONE ASSEMBLY; MODEL XCZ-PRB-100-COM WITH PRB-QKCHK-200M PRESSURE REGULATING BASKET FILTER AND INCLUDED 1" BALL VALVE. INSTALL BALL VALVE ON UPSTREAM SIDE OF VALVE FOR ISOLATION.	L2.03 / 5
	RAIN BIRD	MODEL 44-LRC. INSTALL ON RCV MANIFOLD. SUPPLY 2 QC KEYS WITH HOSE BIB ATTACHED. CONTRACTOR SHALL TURN OVER KEYS TO OWNER'S CONTRACT REPRESENTATIVE AT COMPLETION OF MAINTENANCE PERIOD	L2.03 / 7
	WILKINS	MANIFOLD ISOLATION FULL PORT BRONZE BALL VALVE, MODEL 850XL-5B, WITH STAINLESS STEEL BALL AND HANDLE. INSTALLED WITH HANDLE ON SIDE. SIZE PER MAINLINE. INSTALL WITHIN STD. PLASTIC RECTANGULAR VALVE BOX, MARK LID "BV"	L2.03 / 5
NO SYMBOL	WILKINS	RCV/QCV MANIFOLD ISOLATION FULL PORT BRONZE BALL VALVE, MODEL 850XL-5B, WITH STAINLESS STEEL BALL AND HANDLE. INSTALLED WITH HANDLE ON SIDE. TO MATCH MANIFOLD SIZE. ALL RCV'S AND QCV'S SHALL BE CONNECTED BY MANIFOLD TO MAINLINE. MANIFOLD SIZE SHALL BE SAME AS LARGEST LATERAL PIPE OUT OF MANIFOLD. INSTALL ON ALL RCV MANIFOLDS. INSTALL WITHIN STD.PLASTIC RECTANGULAR VALVE BOX, MARK LID "BV"	L2.03 / 5

SYMBOL Q H T F	MANUFACT.	MODEL NO. / DESCRIPTION	GPM	PSI	RADIUS	DETAIL
① ② ③ ④	HUNTER	PROS-06-PRS30-CV-R 6" POP-UP HEAD WITH MP1000-90,210,360 ADJUSTABLE NOZZLES	.21, .42, .63, .84	30	12 FT	L2.05 / 2
⑤ ⑥	HUNTER	PROS-04-PRS40-CV-R 4" POP-UP HEAD WITH MP800SR-90 ADJUSTABLE NOZZLES	.23, .42	40	10 FT	L2.05 / 2
⑦ ⑧	HUNTER	PROS-04-PRS30-CV-R 4" POP-UP HEAD WITH MP800SR-90 ADJUSTABLE NOZZLES	.16, .32	30	8 FT	L2.05 / 2
⑨ ⑩	HUNTER	PROS-04-PRS30-CV-R 4" POP-UP HEAD WITH MP800SR-90 ADJUSTABLE NOZZLES	.13, .26	30	6-7 FT	L2.05 / 2
◔ ◓	HUNTER	PROS-04-PRS30-CV-R 4" POP-UP HEAD WITH PRO-SPRAY FIXED ARC NOZZLES 5Q/5H	.12, .23	30	5 FT	L2.05 / 2
	HUNTER	6 PORT EMITTER MANIFOLD -MPE-20 W/ 1/4" DISTRIBUTION TUBING. INSTALL HE-20-B EMITTERS AT THE END OF EACH TUBING W/ EMITTER STAKES. REFER TO ROOF IRRIGATION PLAN FOR TUBING LAYOUT. UNUSED PORTS SHOULD BE CLOSED USING VINYL EMITTER CAPS.	2.0 GPH PER EMMITER	30		L2.06 / 3
▼	HUNTER	PROS-04-PRS30-CV-R 4" POP-UP HEAD WITH W/MSBN-25Q BUBBLER	0.25 GPM	30		L2.05 / 2
B	HUNTER	PROS-06-CV POP-UP BUBBLER HEAD W/MSBN-25Q BUBBLER, EACH SYMBOL REPRESENTS TWO BUBBLERS PER TREE. PLACE BUBBLERS AT EDGE OF ROOTBALL ON OPPOSITE SIDES OF TREE TYPICAL.	0.25 GPM (0.5 PER TREE)	30		L2.03 / 8
	RAIN BIRD	XFS-06-18 SUBSURFACE DRIP TUBING AT 18" O.C. SPACING. DRIP TUBING SHALL BE INSTALLED 4" BELOW FINISHED SOIL GRADE (NOT COUNTING MULCH) AND IN PARALLEL ROWS A MAXIMUM OF 18" ON CENTER. THE PERIMETER ROW OF DRIP TUBING SHALL BE INSTALLED A MAXIMUM OF 4" FROM THE EDGE OF ANY HARDSCAPE OR TURF EDGE. ALL SUBSEQUENT INTERIOR ROWS SHALL BE ADJUSTED TO PROVIDE AN EVEN SPACING ACROSS THE PLANTER WITHOUT EXCEEDING 18" MAXIMUM SPACING. INSTALL 9" PVC COATED GALVANIZED TUBING STAKES A MAXIMUM OF FIVE (4) FEET ON CENTER ALONG THE LENGTH OF THE TUBING. TUBING STAKES SHALL BE MODEL #GDTS140900 AS MANUFACTURED BY GPH IRRIGATION PRODUCTS (866) 582-9684. THE HATCH PATTERN SYMBOLS ON THE PLANS REPRESENT THE APPROXIMATE DIRECTION AND SPACING OF THE DRIP TUBING ROWS, SEE ACTUAL SPACING REQUIREMENTS ABOVE AND IN DETAILS.		40		L2.04 / 3,4
	RAIN BIRD	CONNECTION FITTINGS BETWEEN PVC LATERAL LINES AND DRIPLINE TUBING FOR CENTER FEED SYSTEMS: RAIN BIRD XFD-TFA-075, MDCFEL, OR XFF-TMA-0F0 WITH 1/2" TT COUPLER. CONNECTION FITTINGS BETWEEN PVC SUPPLY OR EXHAUST HEADER PIPE AND DRIPLINE TUBING: RAIN BIRD XFF-MA-075 / XFF-MA-050 BARB MALE ADAPTER		40		L2.04 / 3
NO SYMBOL	RAIN BIRD	ALL CONNECTIONS BETWEEN 1/2" DRIPLINE TUBING SHALL BE MADE USING RAIN BIRD XFF INSERT FITTINGS AND XF INSERT CROSS FITTING		40		L2.04 / 3
F	RAINBIRD	FLUSH VALVE ASSEMBLY: PROVIDE GRAY 1/2" PVC THREADED BALL VALVE, MODEL 2621-005G, WITH CHAMPION IRRIGATION PRODUCTS (ARROWHEAD BRASS) BRASS HOSE-TO-PIPE THREAD INSERT ADAPTER, MODEL #10F, FOR FLUSHING PVC EXHAUST MANIFOLD PIPE WITH STANDARD GARDEN HOSE. INSTALL FLUSH VALVE INSIDE 10" ROUND SPECIFICATION GRADE VALVE BOX, ONE AT THE END OF EACH AND EVERY DRIPLINE ZONE IN EACH DIRECTION. INSTALL ONE FLUSH VALVE WITHIN EACH PLANTER OR PER A MAXIMUM OF 1000' OF TUBING MEASURED PER EITHER SIDE OF PVC SUPPLY CENTER FEED MANIFOLD(S) FOR EACH ZONE. MULTIPLE FLUSH VALVES MAY BE REQUIRED WITHIN DRIPLINE ZONE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLUSH VALVES REQUIRED. INSTALL FINAL LOCATION 18" FROM PAVING FOR EASE OF MAINTENANCE.				L2.04 / 2
A	RAIN BIRD	AIR/VACUUM RELIEF VALVE ASSEMBLY: MODEL ARV050, INSTALLED WITH A RAIN BIRD EASY FIT TEE, MDCFTEE AND 1/2" MDCF50FPT ADAPTER (NIPPLE MAY BE REQUIRED) OR XFF-TMA-075 WITH 3/4"x1/2" PVC THREADED BUSHING, 1/2" PVC NIPPLE, AND 1/2" PVC TT COUPLER. INSTALL LENGTH OF NIPPLE AS REQUIRED SO TOP OF VALVE IS ABOVE SURROUNDING GRADE. INSTALL ARV WITHIN 7" ROUND VALVE BOX AT EVERY HIGH POINT OF EACH AND EVERY PLANTER, INSTALL MINIMUM OF ONE ARV PER 500-600 FEET OF DRIPLINE OR 700-900 SQUARE FEET OF AREA WITHIN ZONE. AT EACH ARV LOCATION, USING XF SERIES BLANK TUBING, CONNECT THE BLANK TUBING TO EACH DRIPLINE LATERAL PERPENDICULAR TO ALL DRIPLINE LATERALS WITHIN INFLUENCE OF THE ARV. INSTALL THE ARV AT THE HIGHEST POINT. MULTIPLE ARV'S SHALL BE REQUIRED WITHIN UNDULATING AREAS, AT EACH HIGH POINT. FOR ZONES WITH MULTIPLE INTERCONNECTING PLANTERS VIA PVC PIPE, ARV'S SHALL BE REQUIRED WITHIN EACH PLANTER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ARV'S REQUIRED, AS PLANS MAY NOT SHOW ALL ARV'S REQUIRED FOR A PARTICULAR AREA. REVIEW LANDSCAPE AND GRADING PLANS PRIOR TO BIDDING AND STARTING WORK TO VERIFY TOTAL QUANTITY REQUIRED, INSTALL UNITS AND VALVE BOX AT ALL HIGH POINTS OF PLANTER AREA.				L2.04 / 1
C	CALSENSE	ET2000e-48-EN-R/SSE-R-RB, 48 STATION IRRIGATION CONTROLLER WITH ETHERNET CONNECTION WITHIN A STAINLESS STEEL ENCLOSURE AS PART OF ASSEMBLY. CONTROLLER WILL REQUIRE RJ45 ETHERNET CONNECTION TO LOCAL NETWORK. CONTROLLER TO HAVE RADIO REMOTE CAPABILITIES. PRIOR TO ORDERING CONTROLLER, CONTRACTOR SHALL CONTACT CALSENSE REP MARK HUNSINGER @ 760-580-1827.				L2.03 / 3
C1	CALSENSE	ET2000e-8-EN-R, 8 STATION IRRIGATION CONTROLLER WITH ETHERNET CONNECTION WITHIN A STAINLESS STEEL ENCLOSURE AS PART OF ASSEMBLY. CONTROLLER WILL REQUIRE RJ45 ETHERNET CONNECTION TO LOCAL NETWORK. CONTROLLER TO HAVE RADIO REMOTE CAPABILITIES. INSTALL CONTROLLER CABINET WITHIN PRIOR TO ORDERING CONTROLLER, CONTRACTOR SHALL CONTACT CALSENSE REP MARK HUNSINGER @ 760-580-1827.				L2.03 / 3
E	N/A	120 VOLT ELECTRICAL POWER, PROVIDED BY ELECTRICIAN, VERIFY ALL LOCATION IN FIELD.				
R	CALSENSE	RB-1 SERIES TIPPING RAIN BUCKET, INSTALL IN A LOCATION THAT RECEIVES FULL SUN EXPOSURE AND WIRE TO CONTROLLER.				
	AS APPROVED	PVC PIPE 2" CL. 315 SOLVENT WELD AS MAINLINES 18" BELOW GRADE				L2.03 / 3
	AS APPROVED	PVC PIPE, SCH 40, 3/4" - 1-1/2", AS LATERAL LINES 12" BELOW GRADE. SEE PLAN FOR SIZES				L2.03 / 3
	AS APPROVED	PIPE AND WIRE SLEEVES, ASTM D3034 PVC GRAVITY SEWER PIPE, MINIMUM TWICE THE DIAMETER OF PIPE CARRIED AND FOR WIRE CARRIED. PLACE BELOW ALL PAVING, HARDSCAPE, ETC, AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE.				L2.03 / 3 L2.03 / 3
NO SYMBOL	SPEARS	PVC SCH 80 FITTINGS MUST BE USED FOR ALL SOLVENT WELD MAINLINE FITTINGS, 2 INCH AND LARGER. WHEN A FITTING HAS A THREADED FEMALE OR MALE COMPONENT THE FITTING SHALL ALWAYS BE PVC SCH 80. ALL THREADED PLASTIC NIPPLES SHALL BE PVC SCH 80 TYPE.				N/A
NO SYMBOL	CARSON	SPECIFICATION GRADE IRRIGATION VALVE BOXES FOR IRRIGATION EQUIPMENT: MODELS 809, 910, 1419, 1324, 1730. INSTALL TAN LIDS ON ALL BOXES.				L2.03 / 2,4,5,7,9 L2.04 / 1,2
NO SYMBOL	3M	DBY-6 DIRECT BURIAL WATER-PROOF WIRE CONNECTORS FOR USE ON ALL WIRE CONNECTIONS (U.L. APPROVED)				L2.03 / 6
NO SYMBOL	CHRISTY'S	ALL REMOTE CONTROL VALVES SHALL BE OUTFITTED WITH AN ID TAG INDICATING THE CONTROLLER AND VALVE NUMBER.				L2.03 / 4,5

Revisions	Date
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LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA
Signature
11/30/23
Renewal Date
10/14/25
Date

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: IRRIGATION LEGEND AND NOTES

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L2.200

Dwg. Page 10 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

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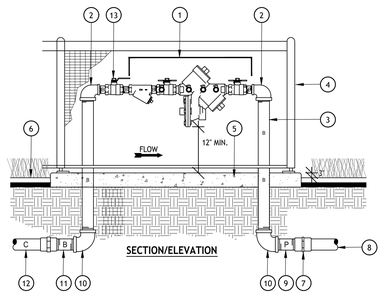
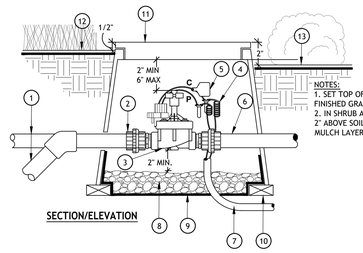


1. REDUCED PRESSURE PRINCIPLE BACKFLOW DEVICE WITH BRONZE WYE STRAINER (UPSTREAM OF BACKFLOW DEVICE) SEE LEGEND FOR BRAND, MODEL AND SIZE. SIZE BRASS NIPPLES SAME AS BACKFLOW DEVICE
2. BRASS THD. 90 DEG. REDUCING ELBOW 2 REQ.
3. BRASS NIPPLES, LENGTH AS REQ, 1 X NOMINAL SIZE LARGER THAN SPECIFIED BACKFLOW PREVENTION DEVICE. ASSEMBLY SHALL BE SIZED EQUAL TO THE BACKFLOW DEVICE SIZE, TYPICAL
4. STAILNESS STEEL BACKFLOW ASSEMBLY ENCLOSURE PER CITY OF SAN DIEGO STANDARDS
5. 4" THICK CONCRETE SLAB
6. FINISHED GRADE
7. SCH 80 PVC FEMALE ADAPTER
8. PVC MAINLINE TO RCVs
9. SCH 80 NIPPLE 6" MIN. LENGTH
10. BRASS THD. 90 DEG. ELL (SIZE PER NIPPLES), 2 REQ.
11. COPPER FEMALE ADAPTER
12. TYPE K COPPER PIPE FROM METER
13. INSTALL FULL PORT BRONZE BALL VALVE (WILKINS 850XL-SB, SIZE TO MAINLINE) UPSTREAM OF WYE STRAINER FOR MAINTENANCE

NOTES:
CONCRETE SLAB SHALL BE MINIMUM 4" THICK, 18" WIDE AND EXTEND AT LEAST 8" PAST THE BACKFLOW ASSEMBLY PIPING. IF BACKFLOW ENCLOSURE IS SPECIFIED, THE CONCRETE SLAB SHALL BE THE SIZE REQUIRED BY THE MANUFACTURER.

1 REDUCED PRESSURE BACKFLOW DEVICE

SCALE: N.T.S.

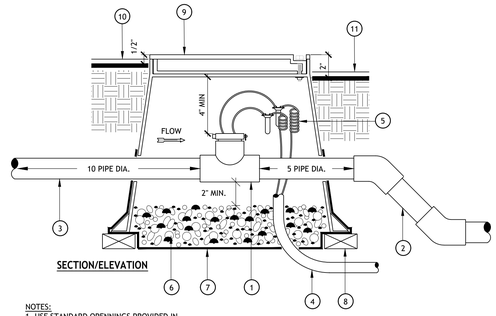


NOTES:
1. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
2. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.

1. PVC MAINLINE FROM BACKFLOW DEVICE OR BASKET STRAINER. USE SCH80 PVC 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH AS REQUIRED
2. LASCO #896 PVC UNION SLIP X MIPT, SIZE PER RCV 2 REQUIRED FOR ASSEMBLY
3. MASTER REMOTE CONTROL VALVE, SEE LEGEND FOR TYPE
4. 24" WIRE LOOPS AND 3M DBY-6 WATERPROOF WIRE CONNECTORS
5. RCV ID TAG
6. PVC MAINLINE TO FLOW SENSOR, PIPE PER PKANS AND SPECIFICATIONS
7. CONTROL WIRES TO CONTROLLER, IN CONDUIT IF INDICATED IN LEGEND
8. 3/4" CRUSHED GRAVEL, MIN. 4" DEPTH
9. LANDSCAPE FABRIC TO COVER BOTTOM AND ALL SITES OF VALVE BOX
10. BRICK SUPPORTS, 4 REQUIRED
11. PLASTIC RECTANGULAR VALVE BOX WITH T-COVER AND CAPTIVE STAINLESS STEEL BOLT AND LOC-KIT. INSTALL BOX AT RIGHT ANGLE TO ADJACENT HARDSCAPE EDGE. HEAT BRAND "MV" INTO LID.
12. FINISH GRADE IN TURF AREAS
13. FINISH GRADE IN SHRUB AREAS

2 MASTER VALVE

SCALE: N.T.S.

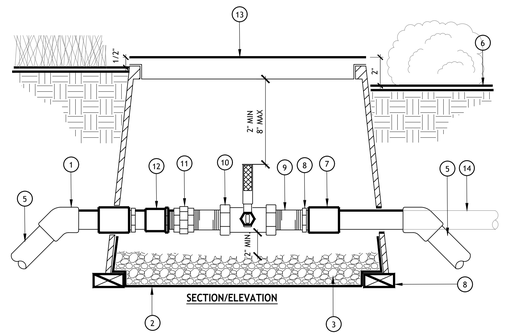


NOTES:
1. USE STANDARD OPENNINGS PROVIDED IN VALVE BOX FOR PIPE, DO NOT CUT BOX
2. USE SCH 80 PVC 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH AS REQUIRED

1. FLOW SENSOR, SEE LEGEND FOR BRAND, MODEL, AND SIZE
2. PVC MAINLINES TO RCVS. PIPE PER PLANS AND SPECS
3. PVC MAINLINE FROM MASTER CONTROL VALVE, NO FITTINGS WITHIN 10 PIPE DIA. UPSTREAM AND 5 PIPE DIA. DOWNSTREAM OF SENSOR
4. CONTROL WIRES TO CONTROLLER, IN CONDUIT IF INDICATED IN LEGEND
5. 24" WIRE LOOPS AND 3M DBY-6 WATERPROOF WIRE CONNECTORS
6. 3/4" CRUSHED GRAVEL, 4" MINIMUM DEPTH
7. LANDSCAPE FABRIC TO COVER BOTTOM AND ALL SIDE OF VALVE BOX
8. BRICK SUPPORTS, 4 REQUIRED
9. PLASTIC RECATANGULAR VALVE BOX WITH T-COVER AND CAPTIVE STAINLESS STEEL BOLT AND LOC-KIT. INSTALL BOX AT RIGHT ANGLE TO ADJACENT HARDSCAPE EDGE. HEAT BRAND "FS" ONTO LID.
10. FINISH GRADE IN TURF AREAS
11. FINISH GRADE IN SHRUB AREAS

3 FLOW SENSOR

SCALE: N.T.S.

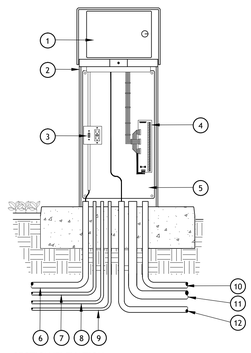


NOTES:
1. 45 DEGREE ELLS TO TRANSITION TO MAINLINE DEPTH.
2. INSTALL VALVE CENTERED IN BOX.
3. REDUCING BUSHINGS ONLY REQUIRED WHEN VALVE IS SIZED SMALLER THAN MAINLINE.
4. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
5. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.

1. PVC SCH 80 45 DEGREE ELL
2. LANDSCAPE FABRIC
3. 3/4" CRUSHED GRAVEL, MIN. 5"-6" DEPTH
4. SOLID BRICK, NOMINAL SIZE (MIN. 4 REQ.)
5. IRRIGATION MAINLINE
6. FINISH GRADE
7. PVC SCH 80 COUPLER, SS, MAINLINE SIZE
8. PVC SCH 80 REDUCING BUSHING, SF, MAINLINE SIZE x VALVE SIZE
9. PVC SCH 80 NIPPLE, 3" LENGTH (2 REQ.)
10. BALL VALVE, REFER TO LEGEND FOR TYPE. INSTALL SHUTOFF HANDLE PERPENDICULAR TO BOX LID
11. PVC SCH 80 TT UNION, SIZE PER VALVE
12. PVC SCH 80 MALE ADAPTER
13. RECTANGULAR SPECIFICATION GRADE VALVE BOX WITH BOLT DOWN 'T' COVER. HEAT BRAND "BV" ON LID
14. RCV / QCV MANIFOLD

4 BRASS BALL VALVE

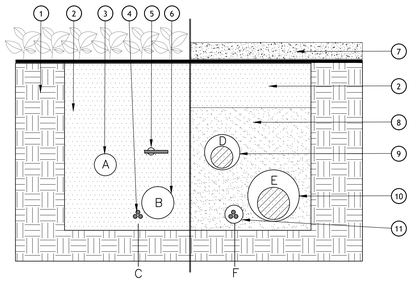
SCALE: N.T.S.



1. CONTROLLER, REFER TO LEGEND
2. STAINLESS STEEL CONTROLLER ENCLOSURE NEMA 3R RAINPROOF RATED
3. POWER SWITCH AND RECEPTACLE
4. TERMINAL STRIP FOR REMOTE CONTROL VALVE WIRE CONNECTION
5. STAINLESS STEEL, U.L. LISTED, PREDRILLED, REMOVABLE BACKBOARD. REMOVABLE FRONT PANEL NOT SHOWN
6. 1 1/4" PVC CONDUIT/SWEEP FOR ELECTRIC SERVICE
7. 1" PVC CONDUIT/SWEEP FOR ET GAGE WIRE (IF REQ.)
8. 1 1/4" PVC CONDUIT/SWEEP FOR TELEPHONE LINE (IF REQ.)
9. 1" PVC CONDUIT/SWEEP FOR FLOW SENSOR/MV WIRE (IF REQ.)
10. 1 1/4" PVC CONDUIT/SWEEP FOR COMMUNICATION CABLE TO OTHER CONTROLLERS (IF REQ.)
11. 3" PVC CONDUIT/SWEEP FOR CONTROL WIRES TO VALVES
12. 1 1/4" PVC CONDUIT/SWEEP FOR GROUND WIRE
13. POURED IN PLACE CONCRETE PAD PER MANUFACTURER'S INSTALLATION RECOMMENDATIONS
14. FINISH GRADE
15. COMPACTED SITE SOIL

5 CONTROLLER ENCLOSURE

SCALE: N.T.S.



DEPTH	A	B	C	D	E	F
6" & LARGER	–	36"	36"	36"	36"	36"
3" & 4"	18"	24"	24"	30"	36"	36"
21/2" & SMALLER	12"	24"	24"	24"	30"	30"
WIRING	–	–	BESIDE MAIN	–	–	BESIDE MAIN

NOTES:
1. LINES MUST HAVE MIN. CLEARANCE OF 6" FROM EACH OTHER & 12" FROM OTHER TRADES
2. RUN WIRING BESIDE MAINLINE AT LOCATION SHOWN, TAPE & BUNDLE @ 10' O.C.
3. TIE A 24" LOOP IN ALL WIRING AT CHANGES IN DIRECTION
4. ALL SLEEVES MUST BE 2X THE DIAMETER OF THE PIPE WITHIN
5. ALL SLEEVE ENDS MUST BE SEALED WITH FOAM SEALANT INSIDE PIPE TO MINIMIZE DEBRIS INTRUSION
6. ALL SLEEVES MUST EXTEND 12" MIN. DISTANCE PAST EDGE OF ROADWAY, CURB, OR SIDEWALK
7. CONTRACTOR MUST ADJUST MAINLINE AROUND ALL STREET LIGHT LOCATIONS, LIGHT BOLLARDS, TREE ROOT BALLS, (MIN. 5' CLEARANCE), AND OTHER OBSTACLES

1. UNDISTURBED SOIL
2. COMPACTED BACKFILL
3. LATERAL LINE
4. CONTROL WIRING
5. MAINLINE TRACER TAPE OR AWG #6 BARE COPPER TRACER WIRE, REFER TO LEGEND FOR SPECIFICATION
6. PVC MAINLINE, SEE LEGEND FOR SPECIFICATION
7. HARDSCAPE / PAVING
8. SAND BACKFILL
9. LATERAL SLEEVE
10. MAINLINE SLEEVE
11. WIRE SLEEVE

6 PIPE / WIRE / SLEEVE INSTALLATION

SCALE: N.T.S.

Revisions	Date
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Renewal Date
12/14/22
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Drawing Title: IRRIGATION DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L2.300

Dwg. Page 11 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot 6" 0
one and one half inches = one foot 1" 6" 0
one inch = one foot 6" 0
three quarters inch = one foot 2" 6" 0
one half inch = one foot 4" 0
three eighths inch = one foot 4" 0
one quarter inch = one foot 8" 4" 0
one eighth inch = one foot 16" 8" 4" 0
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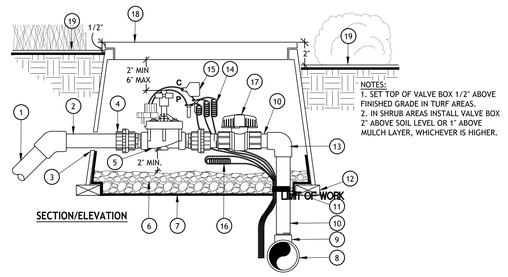
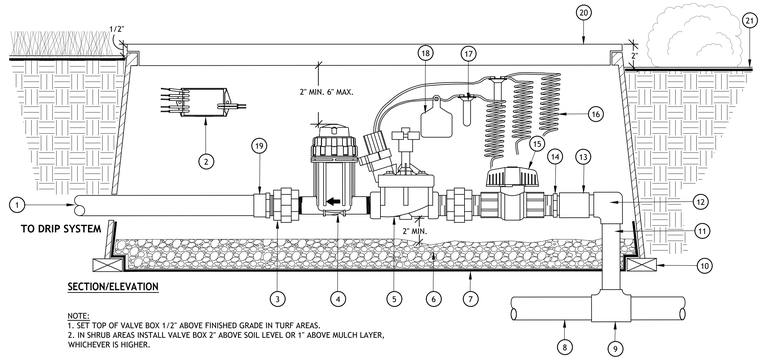


NOTES:
1. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
2. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.

1. PVC LATERAL LINE PIPE, 45 DEGREE TO LATERAL LINE DEPTH
2. PVC PIPE, SIZE PER PLANS, TYPE PER LEGEND
3. USE STANDARD BOX OPENINGS FOR PIPE, DO NOT CUT BOX
4. LASCO #896 PVC UNION SLIP X MIPT, SIZE PER RCV, 2 REQUIRED FOR ASSEMBLY
5. REMOTE CONTROL VALVE, SEE LEGEND FOR TYPE
6. 3/4" CRUSHED GRAVEL, MIN. 4" DEPTH
7. LANDSCAPE FABRIC TO COVER BOTTOM AND ALL SITES OF VALVE BOX
8. PVC MAINLINE LINE PIPE, SIZE PER PLANS, TYPE & DEPTH PER LEGEND
9. PVC SCH 80 MAINLINE TEE/ELL FITTING
10. PVC PIPE, MINIMUM PRESSURE RATING-315 PSI, SIZE PER IMMEDIATE DOWNSTREAM RCV LATERAL SIZE
11. TAPE WIRES TO PIPE
12. SOLID BRICK SUPPORTS, MIN. 4 REQUIRED
13. SCH. 80 PVC SLIP 90 DEGREE ELL
14. 24" WIRE LOOPS AND 3M DBY-6 WATERPROOF WIRE CONNECTORS
15. RCV ID TAG
16. SPARE CONTROL WIRE, LOOP 48" LENGTH INTO EACH RCV BOX
17. SCH 80 FULL PORT SINGLE VALVE ISOLATION BALL VALVE, OMIT WHEN MANIFOLD ISOLATION VALVE IS USED
18. PLASTIC RECTANGULAR (JUMBO BOX IF ISOLATION VALVE IS ADDED) VALVE BOX WITH T-COVER AND CAPTIVE STAINLESS STEEL BOLT AND LOC-KIT. INSTALL BOX AT RIGHT ANGLE TO ADJACENT HARDSCAPE ENGE. HEAT BRAND "RCV" AND CONTROL STATION # ONTO LID.
19. FINISH GRADE AT PLANTING AREA

1 RCV ASSEMBLY FOR TREE BUBBLERS

SCALE: N.T.S.



NOTE:
1. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
2. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.

1. LATERAL LINE PIPE
2. TWO-WIRE DECODER UNIT AS REQUIRED. REFER TO LEGEND
3. PVC SCH 80 UNION, SIZE PER RCV/FILTER, 2 REQUIRED FOR 1" ASSEMBLY; 3 REQUIRED FOR 1-1/2" ASSEMBLY
4. PRB-QKCHK-100 BASKET FILTER WITH BUILT-IN 40 PSI REGULATOR, ONE OR TWO UNITS IN PARALLEL
5. REMOTE CONTROL VALVE
6. 3/4" CRUSHED GRAVEL, MIN. 5" DEPTH
7. LANDSCAPE FABRIC
8. MAINLINE / MANIFOLD PIPE, DEPTH PER SPECS.
9. MAINLINE PVC SCH 80 FITTING
10. NOMINAL SIZE SOLID BRICK (MIN. 6 REQ.)
11. PIPE SIZE PER IMMEDIATE DOWNSTREAM LATERAL SIZE
12. EL, SIZE PER #11
13. SS COUPLER, SIZE PER IMMEDIATE RCV LATERAL
14. SCH 40 BUSHING, SxT
15. PVC BALL VALVE, RCV SIZE
16. CONTROL WIRES PROVIDE 24" COIL OF WIRE AT VALVE
17. CONTROL WIRE SPLICE CONNECTION
18. RCV ID TAG
19. MALE ADAPTER, SIZE PER DRIP ZONE LATERAL
20. JUMBO RECTANGULAR SPECIFICATION GRADE VALVE BOX. HEAT BRAND "RCV" AND ZONE # ON LID
21. FINISH GRADE

2 DRIP SYSTEMS RCV ASSEMBLY

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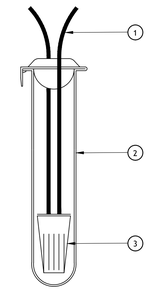
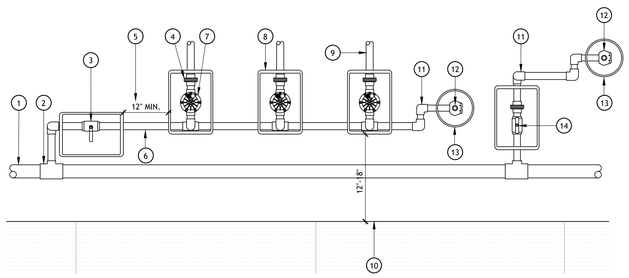


1. LOW VOLTAGE WIRES
2. POLY TUBE PRE-FILLED WITH WATERPROOF GEL
3. WIRE CONNECTOR. WIRES SHALL BE PRE-STRIPPED OF 1/2" OF THE INSULATION PRIOR TO INSERTION INTO THE CONNECTOR. TWIST CONNECTOR ONTO WIRES TO SEAT FIRMLY.

3 WIRE CONNECTIONS

SCALE: N.T.S.



1. IRRIGATION MAINLINE
2. MAINLINE TEE FITTING, MAINLINE X MANIFOLD SIZE
3. MANIFOLD ISOLATION VALVE. REFER TO LEGEND FOR TYPE. MANIFOLD SIZE
4. PVC SCH 80 UNION. ONE OR TWO REQUIRED. SEE RCV INSTALLATION DETAILS
5. ALL VALVE BOXES TO HAVE A MINIMUM 12" SEPARATION BETWEEN BOXES
6. IRRIGATION MANIFOLD "SUB-MAINLINE" PIPE. SIZE PER LARGEST LATERAL PIPE
7. REMOTE CONTROL VALVE
8. RECTANGULAR SPECIFICATION GRADE VALVE BOX. REFER TO LEGEND FOR TYPE
9. LATERAL LINE TO SPRINKLERS
10. SIDEWALK/HARDSCAPE EDGE. INSTALL BOXES 12"-18" FROM EDGE
11. QUICK COUPLER SWING JOINT
12. QUICK COUPLER VALVE
13. 10" ROUND SPECIFICATION GRADE VALVE BOX. REFER TO LEGEND FOR TYPE.
14. QCV MANIFOLD ISOLATION BALL VALVE. REFER TO LEGEND FOR TYPE

4 RCV MANIFOLD LAYOUT

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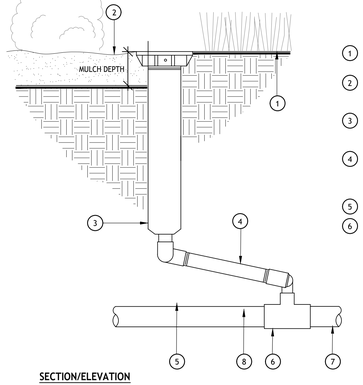

1. INSTALL SPRINKLER HEAD FLUSH WITH FINISHED GRADE IN TURF AREAS
2. INSTALL SPRINKLER HEAD FLUSH WITH TOP OF MULCH IN SHRUB AND GROUNDCOVER AREA
3. POP-UP SPRINKLER HEAD WITH SPRAY OR BUBBLER NOZZLE. SEE LEGEND FOR SPECIFICATION
4. PRE-ASSEMBLED QUADRUPLE SWING JOINT, RAINBIRD SA-6505OQ (OR APPROVED EQUAL). LAY LENGTH TO BE 6" MINIMUM, SIZE AS PER SPRINKLER OUTLET
5. PVC SCH 40 SxSxT TEE OR ELL
6. PVC LATERAL PIPE

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. INSTALL SPRINKLER HEADS 6" FROM PAVING EDGE IN GROUND COVER AREAS.
3. INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN TURF AREAS.
4. INSTALL SPRINKLER HEADS 12" FROM ALL BUILDINGS AND WALLS.
5. INSTALL SPRINKLER HEADS PLUMB.
6. ADJUST SPRAYS OR NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS. DO NOT SCALE DRAWINGS.

5 POP-UP SPRAY / TREE BUBBLER

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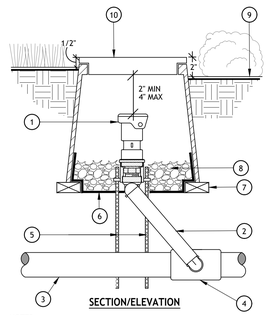

NOTES:
1. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
2. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.
3. USE AN APPROVED, NON-HARDENING TEFLON ASSEMBLY PASTE ON ALL THREADED FITTINGS.

1. QUICK COUPLING VALVE. SEE LEGEND FOR SPECIFICATION
2. LASCO SNAP-LOK PVC SWING JOINT W/ MALE BRASS STABILIZER ELBOW AND SNAP-LOCK COLLAR
   3/4" QCV USE MODEL G13T-310
   1" QCV USE MODEL G13S-310
3. IRRIGATION MANIFOLD "SUB-MAINLINE"
4. SCH 80 PVC SXSXT TEE OR SXT ELL FITTING, MAINLINE X QCV INLET SIZE
5. #4 REBAR 24" MIN. LENGTH, TWO REQUIRED
6. LANDSCAPE FABRIC
7. BRICK SUPPORTS, 3 REQUIRED
8. 3/4" CRUSHED GRAVEL, 4" MINIMUM DEPTH
9. FINISH GRADE
10. 10" ROUND SPECIFICATION GRADE VALVE BOX WITH "T" COVER. HEAT BRAND "QCV" ONTO LID.

6 QUICK COUPLER ASSEMBLY

SCALE: N.T.S.

Revisions	Date
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LA JOLA, CA 92037
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Drawing Title: IRRIGATION DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L2.400

Dwg. Page 12 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot | one and one half inches = one foot | one inch = one foot | three quarters inch = one foot | one half inch = one foot | three eighths inch = one foot | one quarter inch = one foot | one eighth inch = one foot
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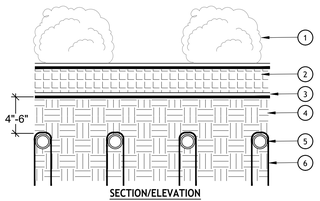

1 SHRUBS/GROUND COVER
2 MULCH LAYER*, REFER TO LANDSCAPE SPECIFICATIONS FOR TYPE
3 FINISH GRADE
4 NATIVE OR AMENDED SOIL*, REFER TO LANDSCAPE SPECIFICATIONS
5 DRIP TUBING INSTALLATION: 4"-6" BELOW FINISH GRADE
6 GALVANIZED WIRE STAKE, SPACE AT 4 FEET O.C. ALONG ALL TUBING

SECTION/ELEVATION

RECOMMENDED INSTALLATION NOTES:
1. TO INSURE EVEN PARALLEL AND LEVEL TUBING ROWS IT IS RECOMMENDED THAT THE SOIL LEVEL IN THE PLANTER AREAS BE BROUGHT TO 4"-6" BELOW FINISHED GRADE, LEVELED, AND PROPERLY COMPACTED AS PER THE LANDSCAPED DRAWINGS PRIOR TO THE INSTALLATION OF THE TUBING. SOIL COVER OVER TUBING SHALL BE 4"-6"
2. INSTALL TUBING AS INDICATED ON THESE DRAWINGS AND SECURE TO GRADE USING GALVANIZED WIRE HOOP STAKES AT 4 O.C. SPACING.

* NOTE: DEPTH PER LANDSCAPE SPECIFICATIONS

1 DRIPLINE INSTALLATION

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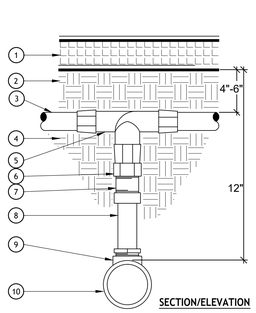
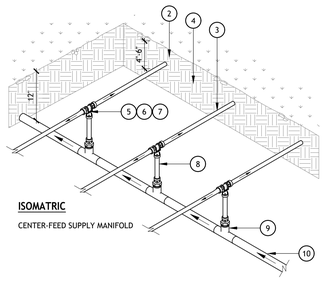


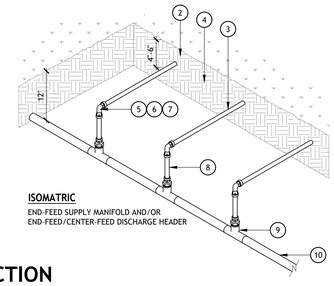
SECTION/ELEVATION

1 MULCH, REFER TO LANDSCAPE SPECIFICATIONS FOR TYPE
2 SOIL COVER
3 DRIP TUBING TYPICAL BOTH SIDES
4 AMENDED SOIL / SUB FINISHED GRADE
5 RAIN BIRD "EASY FIT" MDCFTEE OR MDCFEL FITTING
6 RAIN BIRD "EASY FIT" MDCF50FPT 1/2" ADAPTER
7 1/2" SCH 80 PVC T.O.E. NIPPLE LENGTH AS REQUIRED
8 GPH IRRIGATION PRODUCTS FLEXIBLE NIPPLE, #GFN050600, 1/2" MIPT X FIPT X 6" LENGTH
9 SCH 40 PVC TEE SxSxT, LINE SIZE BY 1/2"
10 DRIP TUBING SUPPLY OR DISCHARGE HEADER, PVC LATERAL LINE PIPE, 1" MINIMUM SIZE, OTHERWISE SIZE PER DRAWINGS



ISOMATRIC

CENTER-FEED SUPPLY MANIFOLD

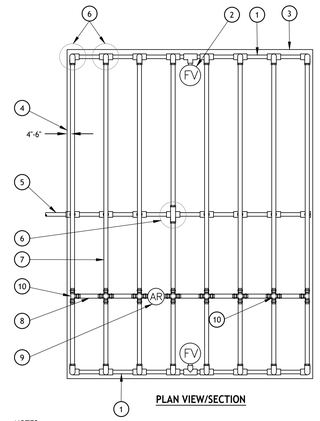


ISOMATRIC

END-FEED SUPPLY MANIFOLD AND/OR
END-FEED/CENTER-FEED DISCHARGE HEADER

2 PVC / DRIPLINE CONNECTION

SCALE: N.T.S.



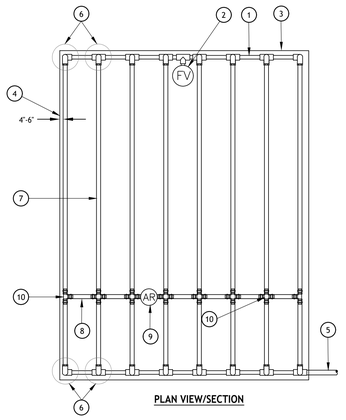
PLAN VIEW/SECTION

1 PVC EXHAUST HEADER
2 FLUSH VALVE (TYPICAL) WITHIN 7" ROUND BOX
3 PERIMETER OF AREA
4 PERIMETER DRIPLINE PIPE TO BE INSTALLED, 4"-6" FROM PERIMETER OF AREA
5 LATERAL PIPE SUPPLY HEADER WITHIN A 12" TRENCH, PER PIPE DETAIL
6 CONNECTION FROM PVC SUPPLY/DISCHARGE HEADER TO DRIPLINE SEE PVC/DRIPLINE CONNECTION DETAILS: 5 / L2.04
7 SUB-SURFACE DRIPLINE TUBING: SEE LEGEND FOR SPECIFICATION
8 POLYETHYLENE BLANK TUBING: RAIN BIRD XFD SERIES BLANK TUBING
9 AIR RELIEF VALVE: RAIN BIRD, MODEL ARV050, WITHIN 7" ROUND VALVE BOX. CONNECT TO ALL LINES USING XF SERIES BLANK TUBING
10 RAIN BIRD 17MM XFD-CROSS/XFF-TEE

NOTES:
A. DISTANCE BETWEEN LATERAL ROWS TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. MAXIMUM SPACING SHALL BE 16" APART FOR FLAT AREAS. FOR ADDITIONAL INFORMATION SEE RAIN BIRD DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACING.
B. AIR RELEASE / VACUUM VALVE WHERE SHOWN AS DIAGRAMMATIC ONLY. PLACE AT HIGHEST POINT IN AREA FOR PROPER VACUUM RELEASE ACTION.
C. MAXIMUM TUBING LENGTH OF RUN IN EITHER DIRECTION SHALL NOT EXCEED 100' FROM LATERAL PIPE SUPPLY MANIFOLD.

3 DRIPLINE - CENTER FEED LAYOUT

SCALE: N.T.S.



1 PVC EXHAUST HEADER
2 FLUSH VALVE (TYPICAL) WITHIN 7" ROUND BOX
3 PERIMETER OF AREA
4 PERIMETER DRIPLINE PIPE TO BE INSTALLED, 4"-6" FROM PERIMETER OF AREA
5 LATERAL PIPE SUPPLY HEADER WITHIN A 12" TRENCH, PER PIPE DETAIL
6 CONNECTION FROM PVC SUPPLY/DISCHARGE HEADER TO DRIPLINE SEE PVC/DRIPLINE CONNECTION DETAILS: 5 / L2.04
7 SUB-SURFACE DRIPLINE TUBING: SEE LEGEND FOR SPECIFICATION
8 POLYETHYLENE BLANK TUBING: RAIN BIRD XFD SERIES BLANK TUBING
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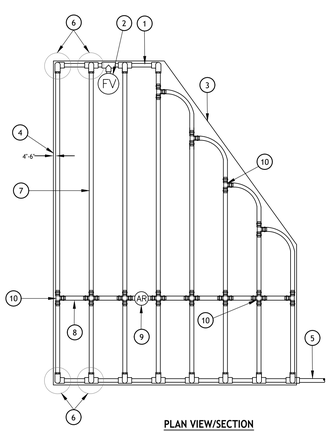
10 RAIN BIRD 17MM XFD-CROSS/XFF-TEE

NOTES:
A. DISTANCE BETWEEN LATERAL ROWS TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. MAXIMUM SPACING SHALL BE 16" APART FOR FLAT AREAS. FOR ADDITIONAL INFORMATION SEE RAIN BIRD DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACING.
B. AIR RELEASE / VACUUM VALVE WHERE SHOWN AS DIAGRAMMATIC ONLY. PLACE AT HIGHEST POINT IN AREA FOR PROPER VACUUM RELEASE ACTION.
C. MAXIMUM TUBING LENGTH OF RUN SHALL NOT EXCEED 150' FROM LATERAL PIPE SUPPLY MANIFOLD.

4 DRIPLINE - END FEED LAYOUT

SCALE: N.T.S.



1 PVC EXHAUST HEADER
2 FLUSH VALVE (TYPICAL) WITHIN 7" ROUND BOX
3 PERIMETER OF AREA
4 PERIMETER DRIPLINE PIPE TO BE INSTALLED, 4"-6" FROM PERIMETER OF AREA
5 LATERAL PIPE SUPPLY HEADER WITHIN A 12" TRENCH, PER PIPE DETAIL
6 CONNECTION FROM PVC SUPPLY/DISCHARGE HEADER TO DRIPLINE SEE PVC/DRIPLINE CONNECTION DETAILS: 5 / L2.04
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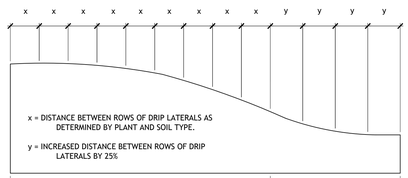
10 RAIN BIRD 17MM XFD-CROSS/XFF-TEE

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. MAXIMUM SPACING SHALL BE 18" APART FOR FLAT AREAS. FOR ADDITIONAL INFORMATION
2. SEE RAIN BIRD DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACING.
AIR RELEASE / VACUUM VALVE WHERE SHOWN IS DIAGRAMMATIC ONLY. PLACE AT ALL HIGHEST POINTS
3. IN AREA FOR PROPER VACUUM RELEASE ACTION.
MAXIMUM TUBING LENGTH OF RUN SHALL NOT EXCEED 150' FROM LATERAL PIPE SUPPLY MANIFOLD.

5 DRIPLINE - IRREGULAR FEED LAYOUT

SCALE: N.T.S.

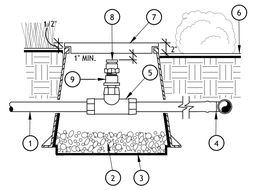


SECTION

NOTES:
A. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION.
B. SLOPES LESS THAN 3% DO NOT REQUIRE SPECIAL DESIGN CONSIDERATION.
C. SLOPE GREATER THAN 3% SHOULD INCREASE THE DRIPLINE SPACING BY 25% IN THE BOTTOM 1/3 OF THE ZONE.
D. DRIPLINES SHOULD RUN PERPENDICULAR (ACROSS) TO THE SLOPE WHEN POSSIBLE.

6 DRIPLINE - SLOPE LAYOUT

SCALE: N.T.S.



SECTION/ELEVATION

1 BLANK DRIP TUBING. CONNECTED PERPENDICULAR TO EACH DRIP TUBING LINE, USE RAIN BIRD INSERT FITTINGS (CROSS AND TEES), MODELS XFD-CROSS AND XFF-TEE FOR CONNECTIONS
2 3/4" CRUSHED GRAVEL, 1/2 CUBIC FT
3 LANDSCAPE FABRIC
4 BLANK TUBING CONNECTION TO INLINE DRIP TUBING AT EDGE OF ZONE (PARALLEL TO HARDSCAPE)
5 INLINE TUBING TEE FITTING: RAIN BIRD 'EASY FIT' COMPRESSION TEE, MODEL MDCFTEE
6 FINISH GRADE
7 7" ROUND SPECIFICATION GRADE VALVE BOX, REFER TO LEGEND FOR TYPE. HEAT BRAND "ARV" ONTO LID
8 AIR / VACUUM RELIEF VALVE, RAIN BIRD MODEL ARV050
9 RAIN BIRD 'EASY FIT' COMPRESSION ADAPTER, 1/2" IPS FEMALE THREAD, MODEL MDCF50FPT

NOTES:
1. SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE IN TURF AREAS.
2. IN SHRUB AREAS INSTALL VALVE BOX 2" ABOVE SOIL LEVEL OR 1" ABOVE MULCH LAYER, WHICHEVER IS HIGHER.

7 DRIP AIR RELIEF VALVE

SCALE: N.T.S.

Revisions:	Date
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LICENSED LANDSCAPE ARCHITECT — STATE OF CALIFORNIA — Signature 11/30/23 — Renewal Date 12/14/22 — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: IRRIGATION DETAILS

Approved Project Director:

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L2.400

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Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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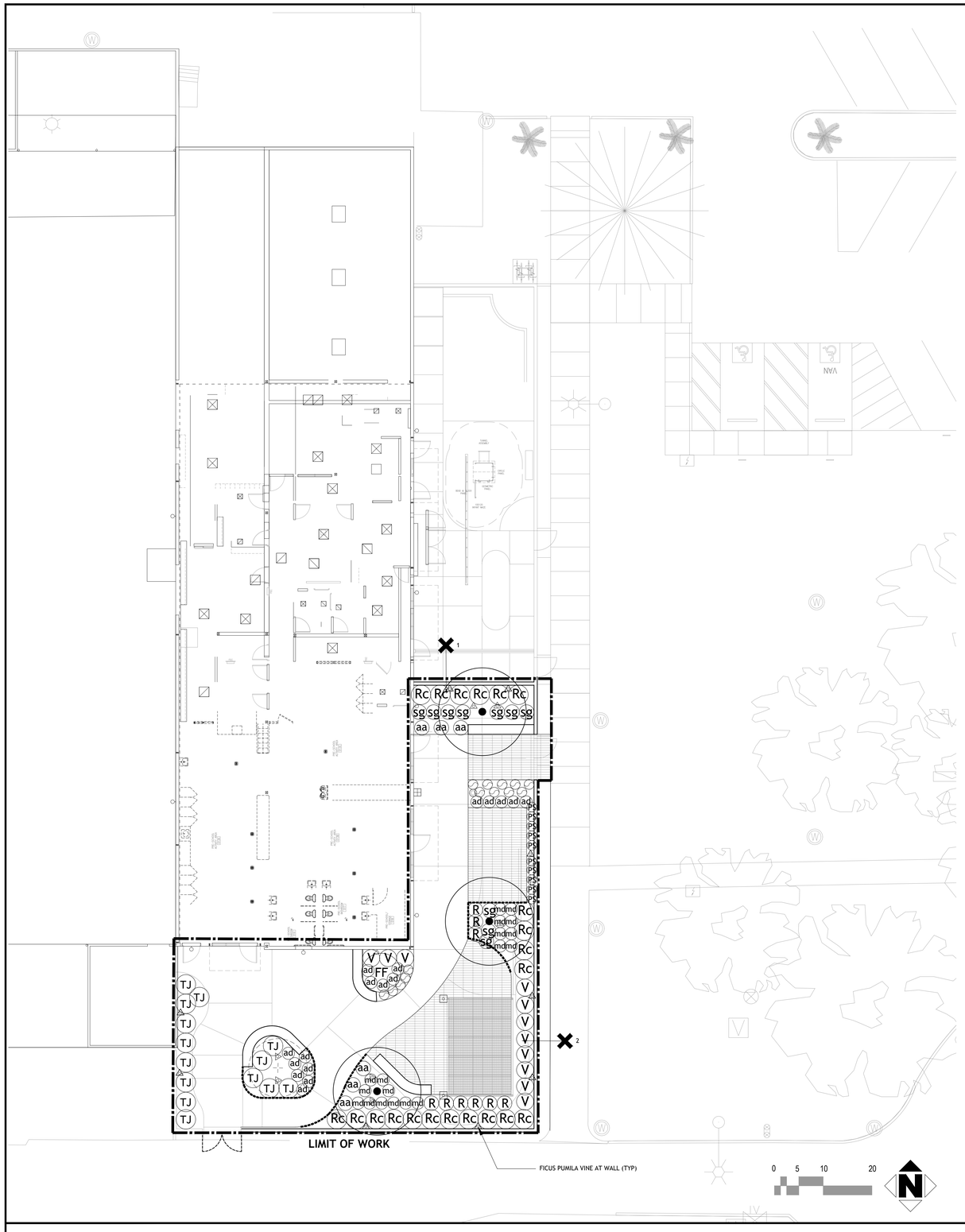

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	FORM	WATER	PAVING OFFSET	QUANTITY
	LANDSCAPE TREES						
	LAGERSTROEMIA 'MUSKOGEE'	MUSKOGEE CRAPE MYRTLE	36" BOX	STANDARD	MEDIUM	SEE PLANS	3
	EXISTING TREE TO REMAIN	PROTECT IN PLACE					
	SHRUBS/SUCCULENTS/GRASSES		**SIZE**	**SPACING**	**WATER- LIGHT**	**MATURE SIZE**	**QUANTITY**
aa	AGAVE ATENNUATA RAY OF LIGHT	VARIEGATED FOX TAIL AGAVE	5 GALLON	3' O.C.	VERY LOW	2'T/3'W	6
al	ALOE BARBADENSIS	ALOE VERA	5 GALLON	2' O.C.	LOW	2'T/2'W	14
ad	ASPARAGUS DENSIFLORUS	FOXTAIL FERN	1 GALLON	1 GALLON	LOW	2'T/30"W	17
FF	FURCREA FOETIDA VARIEGATA	FALSE AGAVE	5 GALLON	8' O.C.	LOW	8'	1
md	MUHLENBERGIA DUBIA	PINE MUHLY GRASS	5 GALLON	3' O.C.	LOW	30"T/30"W	18
PS	PENNISETUM SPATHIOLATUM 'FAIRY TAILS'	EVERGREEN FOUNTAIN GRASS	1 GALLON	1 GALLON	LOW	2'T/2'W	10
Rc	RHAMNUS CALIFORNICA 'MOUNT ST BRUNO'	COFFEEBERRY	5 GALLON	2' O.C.	VERY LOW	6'-8'	21
R	ROSEMARINUS OFFICINALIS PROSTATUS	CREEPING ROSEMARY	1 GALLON	3'-0"	LOW	4'	9
sg	SALVIA GREGGII 'FURMAN'S RED'	FURMAN'S RED AUTUMN SAGE	1 GALLON	3'-0"	LOW	2'-0"	10
TJ	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GALLON	4' O.C.	LOW	4'-0"	14
V	VERBENA RIGIDA	BLUE RIGID VERBENA	5 GALLON	4'-6" O.C.	LOW	2'T/4'W	11
	VINES						
	FICUS PUMILA	CREEPING FIG	5 GALLON	5'-0"	MEDIUM	8'	
	OTHER						
	'BIOBARRIER' ROOTBARRIER	TYPAR BIOBARRIER		20' LENGTH AT ALL TREES LOCATED WITHIN 5' OF HARDSCAPE			
	PERCOLATION PIT/SOILS TEST	REFER TO SPECS					

MULCH LEGEND

SYMBOL	MULCH	COLOR & SIZE	
(NOT SHOWN) AT ALL PLANTING AREAS	ORGANIC MULCH TYPE 1	GORILLA HAIR	PER SPECS

NOTES

1. ALL NEW PLANTING AREAS TO RECEIVE A MIN. 3" MULCH DEPTH
2. REMOVE ANY CONCRETE, ASPHALT AND ASSOCIATED BASE COURSE FROM ALL PLANTING AREAS. ALL NEW PLANTING AREAS TO BE RIPPED AND RECOMPACTED PER SPECIFICATIONS.
3. ALL PLANTING SHALL BE IMPLEMENTED WITHIN 60 DAYS OF COMPLETION OF THE CONSTRUCTION.
4. ALL PLANTING SHALL BE MAINTAINED IN GOOD GROWING CONDITION.
5. RODENTICIDES CONTAINING ANY ANTICOAGULANT COMPOUNDS SHALL NOT BE USED.
6. SEE PLANS FOR SPECIFIC PLANT LOCATIONS; SPACING IS TYPICAL UNLESS OTHERWISE NOTED BY DIMENSIONS ON PLANS

Revisions	Date
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LICENSED LANDSCAPE ARCHITECT — NANCY H. HARVEY — Signature 11/30/22 — Renewal Date 10/14/24 — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: PLANTING PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | **Checked:** NH | **Drawn:** JA

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L3.100

Dwg. Page 14 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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one eighth inch = one foot | one quarter inch = one foot | three eighths inch = one foot | one half inch = one foot | three quarters inch = one foot | one inch = one foot | one and one half inches = one foot | three inches = one foot

PLANT LEGEND

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Rc	RHAMNUS CALIFORNICA 'MOUNT ST BRUNO'	COFFEEBERRY	5 GALLON	2' O.C.	VERY LOW	6'-8'	21
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	'BIOBARRIER' ROOTBARRIER	TYPAR BIOBARRIER		20' LENGTH AT ALL TREES LOCATED WITHIN 5' OF HARDSCAPE			
✖	PERCOLATION PIT/SOILS TEST	REFER TO SPECS					

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SYMBOL	MULCH	COLOR & SIZE	
(NOT SHOWN) AT ALL PLANTING AREAS	ORGANIC MULCH TYPE 1	GORILLA HAIR	PER SPECS

NOTES

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4. ALL PLANTING SHALL BE MAINTAINED IN GOOD GROWING CONDITION.
5. RODENTICIDES CONTAINING ANY ANTICOAGULANT COMPOUNDS SHALL NOT BE USED.
6. SEE PLANS FOR SPECIFIC PLANT LOCATIONS; SPACING IS TYPICAL UNLESS OTHERWISE NOTED BY DIMENSIONS ON PLANS

PLANTING NOTES

GENERAL REQUIREMENTS

1 IF THE MOISTURE CONTENT OF THE SOIL SHOULD REACH SUCH A LEVEL THAT WORKING IT WOULD DESTROY SOIL STRUCTURE, SPREADING AND GRADING OPERATIONS SHALL BE SUSPENDED UNTIL, IN THE OPINION OF THE UNIVERSITY'S REPRESENTATIVE, THE MOISTURE CONTENT IS INCREASED OR REDUCED TO ACCEPTABLE LEVELS AND THE DESIRED RESULTS ARE LIKELY TO BE OBTAINED.

2 ACTUAL PLANTING SHALL BE PERFORMED DURING THOSE PERIODS WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE IN ACCORDANCE WITH LOCALLY ACCEPTED HORTICULTURAL PRACTICE AS APPROVED BY THE UNIVERSITY'S REPRESENTATIVE. CONTRACTOR SHALL ONLY INSTALL AS MANY PLANTS PER DAY AS CAN BE PLANTED AND WATERED ON THAT SAME DAY.

3 ALL SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CAREFULLY CHECK AND VERIFY ALL DIMENSIONS AND SHALL IMMEDIATELY INFORM THE UNIVERSITY'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS.

4 PLANT MATERIAL QUANTITIES SHOWN ARE FOR CONVENIENCE ONLY. VERIFY COUNT AND PROVIDE NUMBER TO FULFILL INTENT OF DRAWINGS PRIOR TO ORDERING FROM NURSERIES.

5 PROTECTION OF EXISTING TREES, SHRUBS, AND GROUNDCOVER:

A THE UNIVERSITY'S REPRESENTATIVE SHALL IDENTIFY EXISTING TREES AND SHRUBS OF WHICH ARE TO BE PRESERVED WITHIN THE PROJECT LIMITS, PRIOR TO THE START WORK, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH PLANT MATERIAL TO BE PRESERVED, RELOCATED, AND REMOVED.

B ALL PLANTING TO REMAIN SHALL BE PROTECTED AT ALL TIMES FROM DAMAGE BY MEN AND EQUIPMENT. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT TO EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND ROOTS. EXCAVATION IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR SHALL BE DONE BY HAND. TUNNELING UNDER ROOTS 2" AND LARGER SHALL BE DONE AND ONLY DONE AFTER RECEIPT OF WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PAINT CUT ROOTS WITHIN 24 HOURS; WHERE THIS IS NOT POSSIBLE, KEEP THE SIDE OF EXCAVATION ADJACENT TO TREE SHADED WITH MOIST BURLAP OR CANVAS. ALL MINOR DAMAGE BY CONTRACTOR TO EXISTING TREES AND SHRUBS SHALL BE REPAIRED AT HIS EXPENSE BY A LICENSED TREE SURGEON OR OTHER APPROVED PERSONNEL.

C DAMAGE TO A TREE OR SHRUB, WHICH RESULTS IN DEATH OR PERMANENT DISFIGURATION, SHALL RESULT IN THE CONTRACTORS COMPLETE REMOVAL OF SAID TREE OR SHRUB, INCLUDING ROOTS, FROM THE SITE. THE CONTRACTOR SHALL REPLACE THE TREE OR SHRUB AS ESTABLISHED BY THE UNIVERSITY'S REPRESENTATIVE WITH ONE OF EQUAL VALUE AT HIS OWN EXPENSE, OR SHALL REIMBURSE TO THE OWNER THE COST OF SAID REPLACEMENT. THE UNIVERSITY'S REPRESENTATIVE SHALL BE THE SOLE JUDGE OF THE CONDITION OF ANY TREE OR SHRUB.

D ALL PLANTS TO REMAIN ON-SITE WILL BE IRRIGATED AS NECESSARY DURING THE ENTIRE CONSTRUCTION CONTRACT.

DEEP WATER LEACHING

1 FILL IN ALL DEPRESSIONS, VOIDS, EROSION SCARS, OR SETTLED TRENCHES GENERATED BY THE DEEP LEACHING WITH CONDITIONED SOIL, LEAVING A FINAL GRADE SMOOTH AND EVEN (IF LEACHING IS REQUIRED).

FINAL GRADES

1 MINOR MODIFICATIONS TO GRADE MAY BE REQUIRED TO ESTABLISH THE FINAL GRADES.

2 CLEAN ALL PLANTING AREAS TO A DEPTH OF TWELVE (12) INCHES, REMOVING ALL WEEDS, DEBRIS, ROCKS, OR OTHER DELETERIOUS MATTER 1" DIAMETER OR LARGER FROM THE SITE.

3 ALL UNDULATIONS AND IRREGULARITIES IN THE PLANTING SURFACES SHALL RESULTING FROM TILLAGE, ROTOTILLING, AND ALL OTHER OPERATIONS BE LEVELED AND FLOATED OUT BEFORE PLANTING.

4 THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT AND AVOID DAMAGE TO SPRINKLER HEADS, IRRIGATION LINES, AND OTHER UNDERGROUND UTILITIES DURING GRADING AND CONDITIONING OPERATIONS.

5 CONTRACTOR SHALL COORDINATE ALL DRAINAGE WORK WITH ALL OTHER TRADES ESTABLISHED SITE DRAINAGE SHALL BE MAINTAINED BY CONTRACTOR DURING ALL PHASES OF LANDSCAPE CONSTRUCTION.

6 FINAL FINISH GRADES SHALL INSURE POSITIVE DRAINAGE OF THE SITE WITH ALL SURFACE DRAINAGE AWAY FROM BUILDINGS, WALLS AND TOWARD DRAINS AND CATCH BASINS.

7 FINAL GRADES SHALL BE APPROVED IN WRITING BY THE UNIVERSITYS REPRESENTATIVE BEFORE PLANTING OPERATIONS WILL BE ALLOWED TO BEGIN.

PERCOLATION TESTING AND DRAINAGE

1 A MINIMUM OF FIVE (5) SOILS PERCOLATION TESTS SHALL BE PERFORMED BY FILLING TREE PLANTING PITS (SEE PLANS FOR APPROPRIATE SIZE OF TREE PIT) WITH WATER, WAITING 12 HOURS AND THEN COMPLETELY REFILLING. IF ALL THE WATER IS NOT ABSORBED WITHIN 12 HOURS OF THE SECOND FILLING IT HAS FAILED THE TEST. UPON FAILURE, CONTACT UNIVERSITYS REPRESENTATIVE FOR WITH REMEDIAL MEASURES PER SPECIFICATIONS.

2 BID PRICE SHALL BE BASED ON STANDARD TREE PLANTING PIT DETAILS SHOWN ON THE PLANS.

WEED CONTROL

1 PRIOR TO PLANTING, ERADICATE WEEDS WITHIN THE LIMITS OF WORK IN THE FOLLOWING ORDER:

A IRRIGATE TWICE EACH DAY FOR APPROXIMATELY 5 TO 10 MINUTES EACH WATERING TIME (AS APPROPRIATE TO SITE CONDITIONS) FOR A PERIOD OF 30 CALENDAR DAYS.

B APPLY POST EMERGENT HERBICIDE (SUCH AS "ROUND-UP PRO") PER CALIFORNIA LICENSED PEST CONTROL ADVISOR AND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. TAKE CARE TO PROTECT EXISTING PLANT MATERIAL WHICH IS TO REMAIN AS SHOWN ON THE PLANS.

C WAIT THE REQUIRED PERIOD FOR THE HERBICIDE TO TAKE EFFECT (APPROXIMATELY 7-14 DAYS).

D PHYSICALLY REMOVE WEEDS DEAD OR ALIVE WITHIN THE PROJECT LIMITS.

2 EXISTING NATIVE VEGETATION SHALL NOT BE IRRIGATED AND IRRIGATION RUN-OFF SHALL NOT SPREAD TO AREAS WITH EXISTING NATIVE PLANTS.

SOIL CONDITIONING AND FERTILIZING

1 GRUB / CLEAN AND ROTOTILL ALL PLANTING AREAS TO A DEPTH OF EIGHTEEN (18) INCHES, REMOVING ALL WEEDS, DEBRIS, ROCKS, OR OTHER DELETERIOUS MATTER 1' DIAMETER OR LARGER FROM THE SITE TO 12 INCH DEPTH(UNLESS SPECIFIED OTHERWISE). THEN BLEND IN CONDITIONERS CALLED FOR IN SPECIFICATIONS BASED ON SOILS REPORT.

2 PLANTER SOIL FOR RAISED PLANTER (S) SHALL BE AMENDED NATIVE TOPSOIL PER SPECIFICATIONS.

GENERAL PLANTING

1 PRUNING SHALL NOT BE DONE EXCEPT BY APPROVAL OF UNIVERSITY'S REPRESENTATIVE.

2 PLANT LOCATIONS SHALL BE CHECKED FOR POSSIBLE INTERFERENCE WITH EXISTING UNDERGROUND PIPING, PRIOR TO EXCAVATION OF HOLES. IF UNDERGROUND CONSTRUCTION OR UTILITY LINES ARE ENCOUNTERED IN THE EXCAVATION OF PLANTING AREAS, NOTIFY THE OWNER. EXPENSES FOR REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. MINIMUM TREE SEPARATION DISTANCES ARE AS FOLLOWS:

A TRAFFIC SIGNALS (STOP SIGNS) - 20 FEET
B UNDERGROUND UTILITY LINES - 5 FEET
C ABOVE GROUND UTILITY STRUCTURES -10 FEET
D DRIVEWAY (ENTRIES) -10 FEET
E INTERSECTIONS (INTERSECTING CURB LINES OF TWO STREETS) -25 FEET

3 ALL EXCAVATED HOLES SHALL HAVE VERTICAL SIDES WITH ROUGHENED SURFACES AND SHALL BE OF THE MINIMUM SIZES INDICATED ON DRAWINGS. HOLES SHALL BE, IN ALL CASES, LARGE ENOUGH TO PERMIT HANDLING AND PLANTING WITHOUT INJURY OR BREAKAGE OF ROOT BALLS OR ROOTS.

PLANT AVAILABILITY

1 THE ACT OF PROVIDING A BID FOR THIS PROJECT ESTABLISHES THE CONTRACTORS UNDERSTANDING THAT THE PLANTS SPECIFIED HEREIN MAY BE UNUSUAL AND MORE DIFFICULT TO LOCATE THAN THE INDUSTRY STANDARD AND THAT THE CONTRACTOR AGREES TO THE FOLLOWING:

A THE CONTRACTOR SHALL SEARCH FOR EACH PLANT SPECIFIED. LISTED BELOW ARE PLANT NURSERY SOURCES TO BE CONTACTED DURING CONTRACTORS SEARCH. IF ANY OF THE LISTED NURSERIES, OR ANY NURSERIES IN CALIFORNIA OR ARIZONIA HAVE THE SPECIFIED PLANTS IN THE CONTAINER SIZES SPECIFIED, THE CONTRACTOR SHALL BE OBLIGATED TO PURCHASE AND OBTAIN DELIVERY OF SAID PLANTS.

B WITHIN TWENTY-ONE (21) DAYS AFTER AWARD OF CONTRACT, CONTRACTOR SHALL SUBMIT A PLANT LIST WITH NURSERY SOURCES, PLANT QUANTITIES AND PLANT SIZES; PLANT LIST SHALL INDICATE ALL UNAVAILABLE PLANTS AND WHICH NURSERIES WERE CONTACTED DURING CONTRACTORS SEARCH. (LANDSCAPE ARCHITECT SHALL SUGGEST PLANT SUBSTITUTION BASED UPON INFORMATION IN CONTRACTOR SUBMITTAL.)

C UPON ACCEPTANCE OF CONTRACTOR PLANT SUBMITTAL BY LANDSCAPE ARCHITECT, CONTRACTOR SHALL SECURE PLANTS WITHIN FIVE (5) DAYS AND ARRANGE FOR DELIVERY FROM NURSERIES.

TREES, SHRUBS, AND VINES

1 EACH TREE AND SHRUB SHALL BE PLACED IN THE CENTER OF THE HOLE AND SHALL BE SET PLUMB AND HELD RIGIDLY IN POSITION UNTIL THE PLANTING BACKFILL HAS BEEN TAMPED DOWN AROUND EACH ROOTBALL.

2 ALL PLANTS SHALL BE SET AT SUCH A LEVEL THAT AFTER SETTLING THEY ARE 2" HIGHER THAN THE SURROUNDING FINISH GRADE AS DETAILED UNLESS OTHERWISE NOTED

3 ALL PLANTS SHALL BE THOROUGHLY WATERED INTO THE FULL DEPTH OF EACH PLANTING HOLE IMMEDIATELY AFTER PLANTING.

4 ROOT BARRIERS: ROOT CONTROL BARRIERS SHALL BE INSTALLED WHERE INDICATED ON PLANTING PLANS. INSTALL ROOT BARRIERS ADJACENT, AND PARALLEL TO, EDGE OF HARDSCAPE PER MANUFACTURERS INSTRUCTIONS. (LINEAR APPLICATION) AND NOT ENCIRCLING ROOTBALL. BARRIERS SHALL BE 20- FT. MIN. LENGTH; CENTER STRIP OF ROOT BARRIER ON THE TREE TRUNK.

MAINTENANCE PERIOD

1 LANDSCAPE AREAS SHALL BE KEPT FREE OF WEEDS, NOXIOUS GRASS, AND ALL OTHER UNDESIRED VEGETATIVE GROWTH AND DEBRIS.

2 PLANT MATERIALS SHALL BE KEPT IN A HEALTHY, OPTIMUM GROWING CONDITION AND IN A VISUALLY PLEASING APPEARANCE BY WATERING, PRUNING, MOWING, FERTILIZING, RESTAKING, PEST AND DISEASE CONTROLLING, SPRAYING, WEEDING, CLEAN-UP AND ANY MAINTENANCE OPERATION NECESSARY TO INSURE A HEALTHY, VIGOROUS STAND OF PLANTS AT THE TIME OF FINAL INSPECTION.

3 SEE SPECIFICATIONS FOR APPLICATION OF THE POST PLANTING FERTILIZER AT THE RATE SPECIFIED.

4 CONTRACTOR IS RESPONSIBLE FOR THE LANDSCAPE MAINTENANCE FOR ALL PLANTED AND/OR IRRIGATED AREAS SHOWN ON THE PLANS FOR THE INITIAL 90-DAY MAINTENANCE PERIOD.

Revisions	Date
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LICENSED LANDSCAPE ARCHITECT — JAMES A. HARLEY — Signature — 11/30/22 — Renewal Date 10/31/24 — STATE OF CALIFORNIA

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Drawing Title
PLANTING LEGEND AND NOTES

Approved Project Director

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location
VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	NH	JA

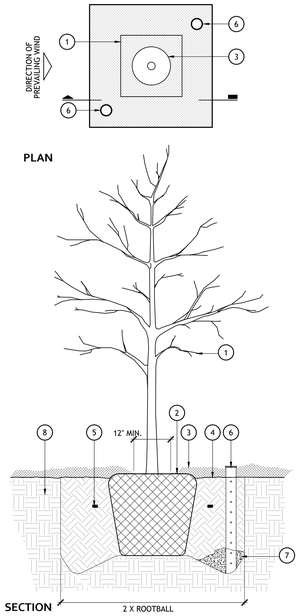
Project Number 600-22-703
Building Number BLDG. #46
Drawing Number L3.200
Dwg. Page 15 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

Z:\landLAB PROJECTS\VA EHRM Remodel Long Beach\AutoCAD\landLAB\Sheets\CDs\L3.200 PLANTING LEGEND.dwg 12-21-22 02:51:25 PM Jon Alarcon



PLAN

SECTION

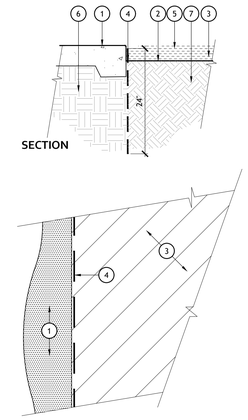
1. TREE AND ROOTBALL; SEE PLANS FOR BOX SIZE
2. SET ROOTBALL @ 2" ABOVE FINISH GRADE
3. MULCH 3" DEPTH MIN. SEE SPECIFICATIONS FOR TYPE. KEEP MULCH 12 MIN. FROM TREE TRUNK
4. FINISHED GRADE IN PLANTING AREA-REFER TO PLANS FOR ELEVATIONS
5. PLANT TABLETS PER SPECIFICATIONS 6" BELOW GRADE
6. AERATION TUBES SEE SPECIFICATIONS FOR TYPE, SIZE AND COVER- 2 PER TREE
7. 1/2 CU. FT. CRUSHED AGGREGATE
8. AMENDED NATIVE SOIL

NOTE:

1. REMOVE EXCESS SOIL FROM TOP OF TREE'S ROOTBALL, PRIOR TO PLANTING - TO ENSURE TREE IS PLANTED AT CORRECT DEPTH

1 TREE - LEVEL

SCALE: 1/2"=1'



1. CONCRETE PAVING REFER TO DETAIL
2. FINISH GRADE IN PLANTING AREA
3. PLANTING AREA WITH TREE
4. ROOTBARRIER BUTTING PAVING OR MOW EDGE
5. MULCH PER SPECIFICATIONS
6. COMPACTED SUBGRADE @ 95% BELOW PAVING
7. RIPPED & RECOMPACTED AMENDED NATIVE SOIL TO 18" DEPTH

NOTES:
1. REFER TO SPECIFICATIONS FOR ROOT BARRIER PRODUCT AND SIZE.

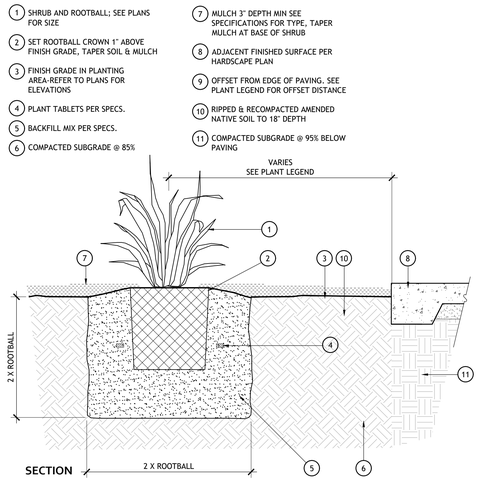
2. ROOT BARRIERS SHALL BE INSTALLED AT ALL TREES LOCATED WITHIN 5 FEET OF ALL HARDSCAPE.

3. SET TOP OF BARRIER 1/2" ABOVE FINISHED GRADE. 2 1/2" BELOW TOP OF MULCH

4. ROOT BARRIERS SHALL BE 20 FEET MINIMUM LENGTH. CENTER LENGTHS OF BARRIER ON THE TREE TRUNK UNLESS OTHERWISE SHOWN ON PLANS.

2 ROOTBARRIER

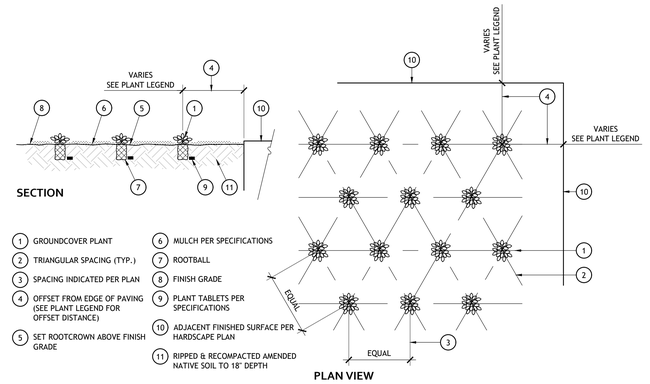
SCALE: 1"=1'



1. SHRUB AND ROOTBALL; SEE PLANS FOR SIZE
2. SET ROOTBALL CROWN 1" ABOVE FINISH GRADE, TAPER SOIL & MULCH
3. FINISH GRADE IN PLANTING AREA-REFER TO PLANS FOR ELEVATIONS
4. PLANT TABLETS PER SPECS.
5. BACKFILL MIX PER SPECS.
6. COMPACTED SUBGRADE @ 85%
7. MULCH 3" DEPTH MIN SEE SPECIFICATIONS FOR TYPE. TAPER MULCH AT BASE OF SHRUB
8. ADJACENT FINISHED SURFACE PER HARDSCAPE PLAN
9. OFFSET FROM EDGE OF PAVING. SEE PLANT LEGEND FOR OFFSET DISTANCE
10. RIPPED & RECOMPACTED AMENDED NATIVE SOIL TO 18" DEPTH
11. COMPACTED SUBGRADE @ 95% BELOW PAVING

3 SHRUB - LEVEL

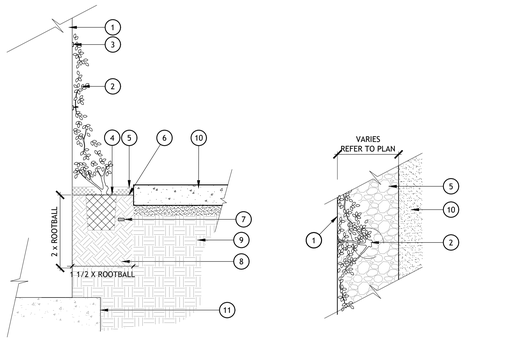
SCALE: 1"=1'



1. GROUNDCOVER PLANT
2. TRIANGULAR SPACING (TYP.)
3. SPACING INDICATED PER PLAN
4. OFFSET FROM EDGE OF PAVING (SEE PLANT LEGEND FOR OFFSET DISTANCE)
5. SET ROOTCROWN ABOVE FINISH GRADE
6. MULCH PER SPECIFICATIONS
7. ROOTBALL
8. FINISH GRADE
9. PLANT TABLETS PER SPECIFICATIONS
10. ADJACENT FINISHED SURFACE PER HARDSCAPE PLAN
11. RIPPED & RECOMPACTED AMENDED NATIVE SOIL TO 18" DEPTH

4 GROUNDCOVER

SCALE: 1"=1'



1. WALL, TYPE VARIES REFER TO PLAN
2. VINE PER PLAN
3. VINE TIES PER SPECIFICATIONS
4. SET ROOTCROWN 1" ABOVE FINISH GRADE
5. MULCH PER SPECIFICATIONS
6. FINISH GRADE AT PLANTING AREA
7. PLANT TABLETS PER SPECIFICATIONS
8. AMENDED NATIVE SOIL IN PLANTER PER SPECIFICATIONS
9. COMPACTED SUBGRADE PER PROJECT GEOTECHNICAL REPORT
10. ADJACENT HARDSCAPE MATERIALS OR PLANTING AREA (VARIES) REFER TO HARDSCAPE PLAN
11. WALL FOOTING VARIES REFER TO WALL ENGINEER'S DRAWINGS

5 VINE PLANTING

SCALE: 1"=1'

Revisions	Date
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Drawing Title: PLANTING DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: NH | Drawn: JA

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: L3.300

Dwg. Page 16 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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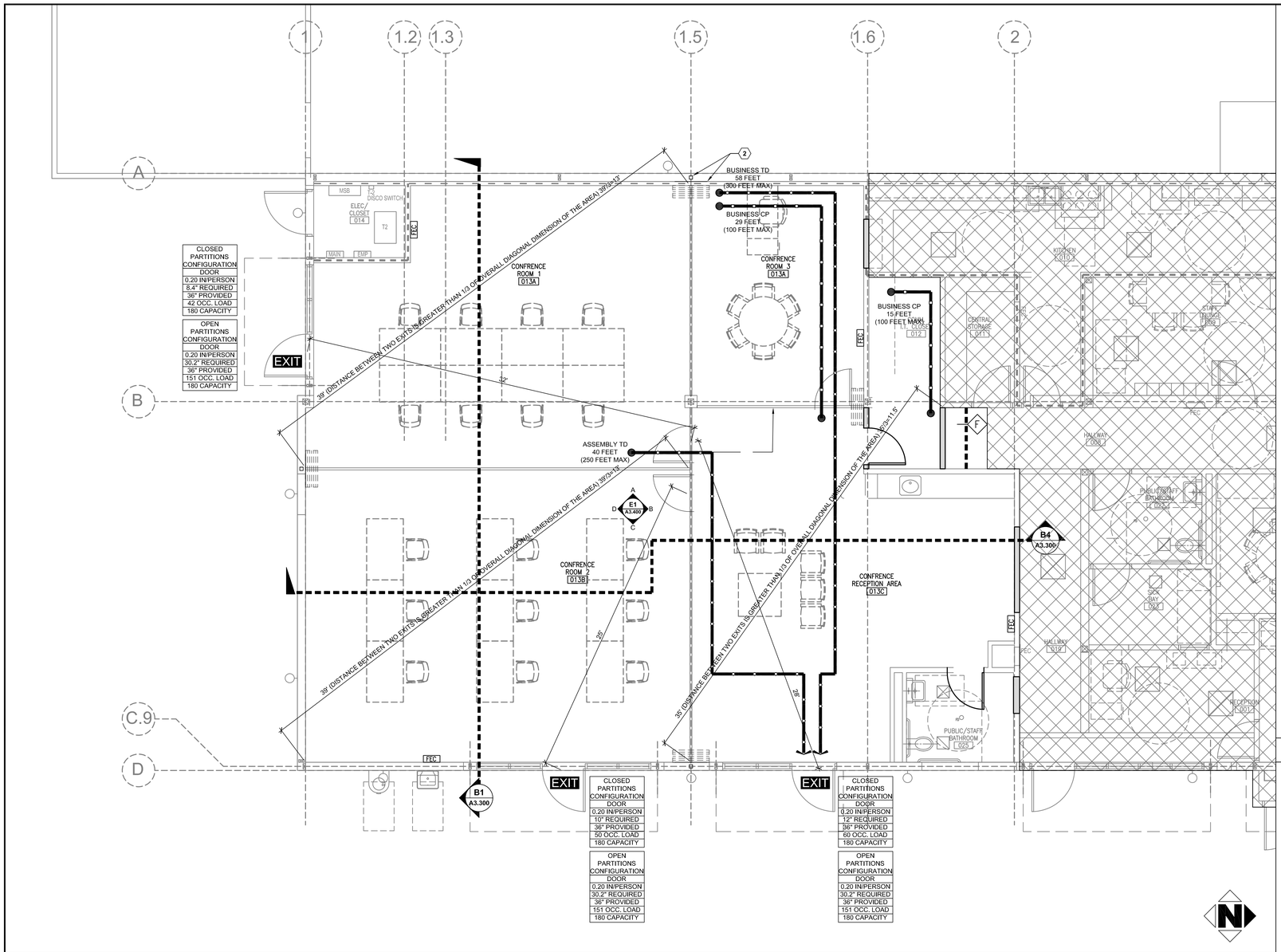

D1 REMODEL FLOOR PLAN
1/4"=1'-0"

LEGEND

(E) 1-HOUR FIRE PARTITION

(E) NON-RATED PARTITION

NEW WALL

CONSTRUCTION BARRIER - SEE DETAIL D2/A4.100. CONTRACTOR IS TO PROVIDE TEMPORARY DOORS AS NEEDED FOR EGRESS & OPERATION OF THE FACILITY

N.I.C.

EXIT ACCESS TRAVEL DISTANCE INDICATOR

COMMON PATH OF EGRESS TRAVEL DISTANCE INDICATOR

FEC

IN ACCORDANCE WITH NFPA 10 TABLES 6.2.1.1 & 6.3.1.1 PROVIDE CLASS A & B FIRE EXTINGUISHERS FOR USE IN THE EVENT OF A FIRE. DRY CHEMICAL ABC EXTINGUISHER RATING 2A:20B:C

PLUMBING FIXTURE CALCULATION AND NOTES

THE OCCUPANT LOAD CALCULATIONS WILL BE REQUIRED TO BE BASED ON THE WORST CASE SCENARIO. WORST CASE SCENARIO IS ALL FOLDING WALLS OPENED WITH AN OCCUPANT LOAD OF 15 FT PER PERSON IN ALL OF THE CONNECTED ROOMS. DUE TO THE FOLDING PARTITIONS, EACH AREA HAS THE POTENTIAL TO BE CONSIDERED GROUP-A

IBC 2021 (TABLE 2902.1) ASSEMBLEY AREA WITH OUT FIXED SEATING, UNCONCENTRATED OCCUPANT LOAD = 151					
	WATER CLOSETS		LAVATORIES		DRINKING FOUNTAIN
	MALE	FEMALE	MALE	FEMALE	
ASSEMBLY	1 per 125	1 per 65	1 per 200		1 per 500

EGRESS CALCULATION AND NOTES

THE OCCUPANT LOAD CALCULATIONS WILL BE REQUIRED TO BE BASED ON THE WORST CASE SCENARIO. WORST CASE SCENARIO IS ALL FOLDING WALLS OPENED WITH AN OCCUPANT LOAD OF 15 FT PER PERSON IN ALL OF THE CONNECTED ROOMS. DUE TO THE FOLDING PARTITIONS, EACH AREA HAS THE POTENTIAL TO BE CONSIDERED GROUP-A

OCCUPANCY GROUP	A
SQUARE FEET	2265
OCCUPANCY FACTOR	15
OCCUPANCY LOAD	151
WIDTH FACTOR	0.2
REQUIRED WIDTH	30.2
EXIT WIDTH	36
EXIT CAPACITY	180

Revisions:	Date
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CONSULTANTS:

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Drawing Title: LIFE SAFETY AND EGRESS PLAN

Approved Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A0.100

Dwg. Page 17 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

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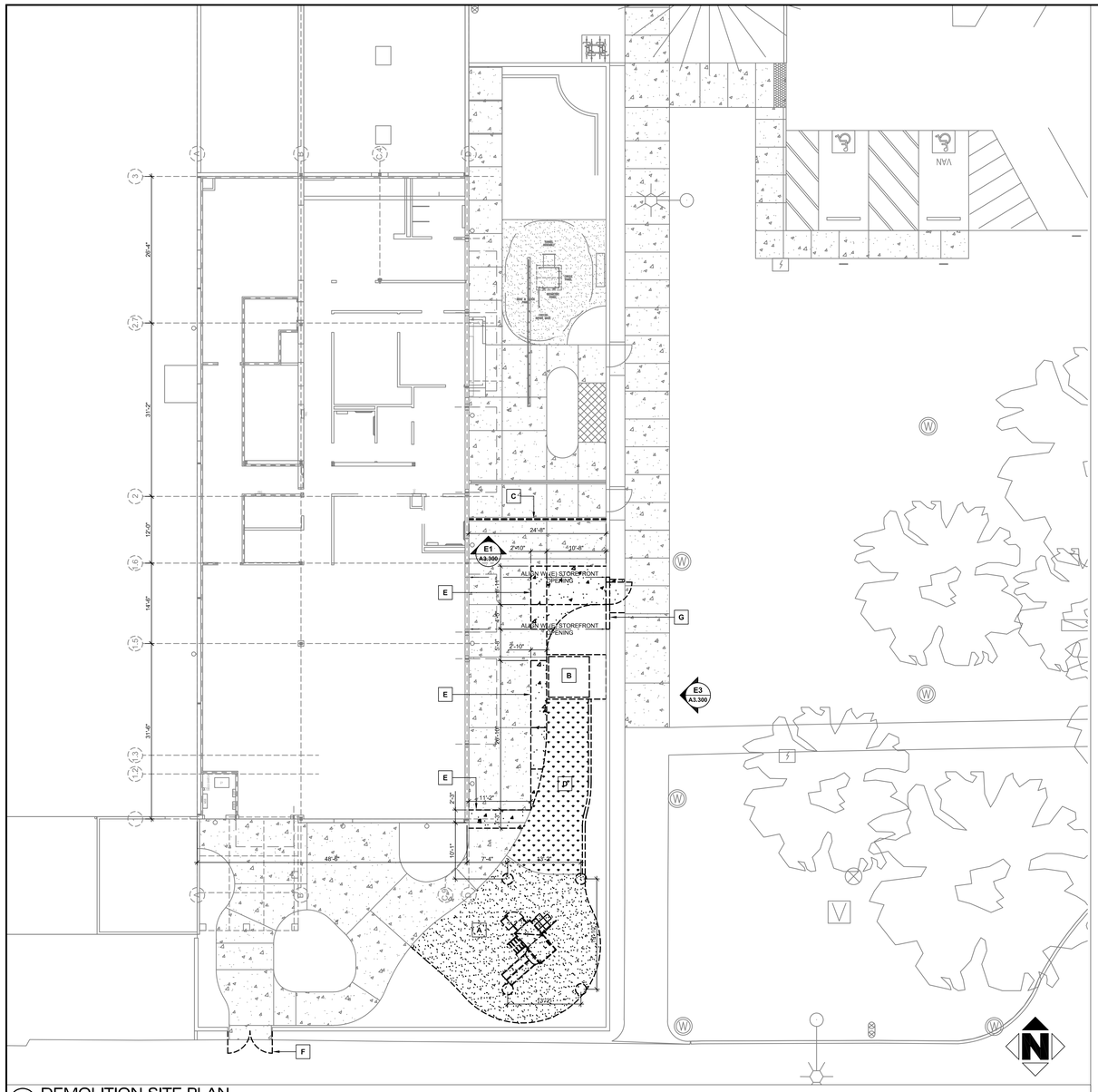


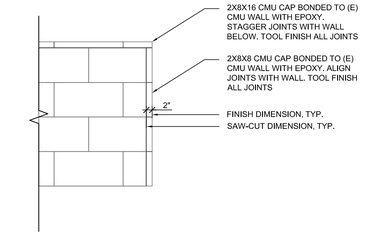
D1 DEMOLITION SITE PLAN
1"=10'-0"

TYPICAL NOTES:

1. DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS, FOLLOW PROCEDURES OUTLINED IN SPECIFICATIONS FOR REQUIREMENTS TO VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK.
2. PRIOR TO ANY DEMOLITION WORK CONTRACTOR MUST FIELD VERIFY ALL EXISTING MECHANICAL, PLUMBING AND ELECTRICAL WORK LOCATED IN THE SPACE WHICH AFFECTS THE SPACES. VA MUST BE NOTIFIED PRIOR TO SHUTDOWN OF ANY MECHANICAL, PLUMBING, FIRE ALARM AND ELECTRICAL SYSTEMS.
3. WALLS, PARTITIONS, DOORS, FRAMES, CASEWORK, TOILET FIXTURES AND OTHER ITEMS TO BE REMOVED ARE SHOWN DASHED. SERVICES WITHIN WALLS AND PARTITIONS SHALL ALSO BE REMOVED, EDGES OF WALLS SHOWN TO REMAIN SHALL BE SAW-CUT OR CLEARLY PREPARED TO ACCEPT NEW CONSTRUCTION. REPAIR AND PATCH EXISTING WALLS (INTERIOR AND EXTERIOR) SHOWN TO REMAIN WHERE INTERSECTING WALLS, DOORS, FRAMES, CASEWORK, ETC. ARE SHOWN TO BE REMOVED AND WHERE EXISTING CONSTRUCTION WILL NOW BE EXPOSED IN THE NEW CONSTRUCTION.
4. CONTRACTOR SHALL REFER TO DEMOLITION PLANS ON MECHANICAL, PLUMBING AND ELECTRICAL SHEETS FOR ADDITIONAL DEMOLITION NOTES
5. EXISTING CONSTRUCTION SHOWN TO REMAIN INCLUDING BUT NOT LIMITED TO WALLS, PARTITIONS, DOORS, FRAMES, ETC. SHALL BE PROTECTED DURING DEMOLITION, DAMAGE TO EXISTING CONSTRUCTION SHOWN TO REMAIN SHALL BE RESTORED TO MATCH PRE-DAMAGED CONDITION.
6. PROTECT FROM DAMAGE ALL EXISTING FINISH WORK TO REMAIN IN PLACE AND WHICH BECOMES EXPOSED DURING DEMOLITION OPERATIONS.
7. PROVIDE TEMPORARY WEATHER PROTECTION AND SECURITY DEVICES DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR TO INTERIOR AREAS OF EXISTING BUILDING.
8. CONTRACTOR SHALL VERIFY AND COORDINATE REMOVAL AND/OR RELOCATION OF FIRE ALARM, FIRE SPRINKLER, SECURITY DEVISE, NURSE CALL & CABLING WITH VA REPRESENTATIVE PRIOR TO ANY DEMOLITION.
9. ALL UNFIXED FF&E SHALL BE REMOVED BY THE VA. ATTACHED FF&E SHALL BE REMOVED BY THE CONTRACTOR TO LOCATION DETERMINED BY THE VA.
10. ANY THRU-PENETRATION THAT ARE TO BE ABANDONED SHALL BE REPAIRED TO COMPLY WITH REQUIREMENTS OF THE 2021 I.B.C., REFER TO SHEET A4.100, DETAILS A2 & E1.
11. CONTRACTOR SHALL COORDINATE THE SPECIFIC INFECTION CONTROL REQUIREMENTS WITH THE VA PRIOR TO SUBMITTING BID.
12. CONTRACTOR SHALL INCLUDE THE CLEANING OF ALL EXISTING WINDOWS AND FRAMES WITHIN THE BOUNDARY OF THE AREA OF WORK IN THEIR SUBMITTED BID.
13. EXISTING FIRE RATED AND SMOKE RATED; BARRIERS AND PARTITIONS SHALL REMAIN FREE OF DAMAGE AND SHALL REMAIN CONTINUOUS DURING CONSTRUCTION.
14. CONTRACTOR SHALL REFER TO SPECIFICATION SECTIONS 017919 AND 024100.

DEMOLITION KEYNOTES:

- A — REMOVE EXISTING PLAYGROUND EQUIPMENT AND RUBBER PLAYGROUND BASE
- B — REMOVE EXISTING SANDBOX
- C — REMOVE TOP METAL RAILING AND INSTALL NEW CMU PER DETAIL 7/S2.100, SEE - E1/A3.300 FOR ELEVATION.
- D — REMOVE EXISTING TURF
- E — SAW-CUT AND REMOVE (E) CONCRETE AS SHOWN. SEE L1.100 FOR NEW LAYOUT.
- F — REMOVE AND REPLACE UTILITY GATE - LIKE FOR LIKE.
- G — ENLARGE OPENING IN (E) CMU WALL PER DETAIL A6/–
- H — SHADE STRUCTURE FOOTING LOCATIONS. REFER TO 1/S1.100 & 1/S1.101. SEE SHEET L1.300 FOR ELEVATIONS



A6 CMU WALL CAP
3/4"=1'-0"

Revisions:	Date
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CONSTRUCTION DOCUMENTS

Drawing Title: DEMOLITION SITE PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A1.100

Dwg. Page 18 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

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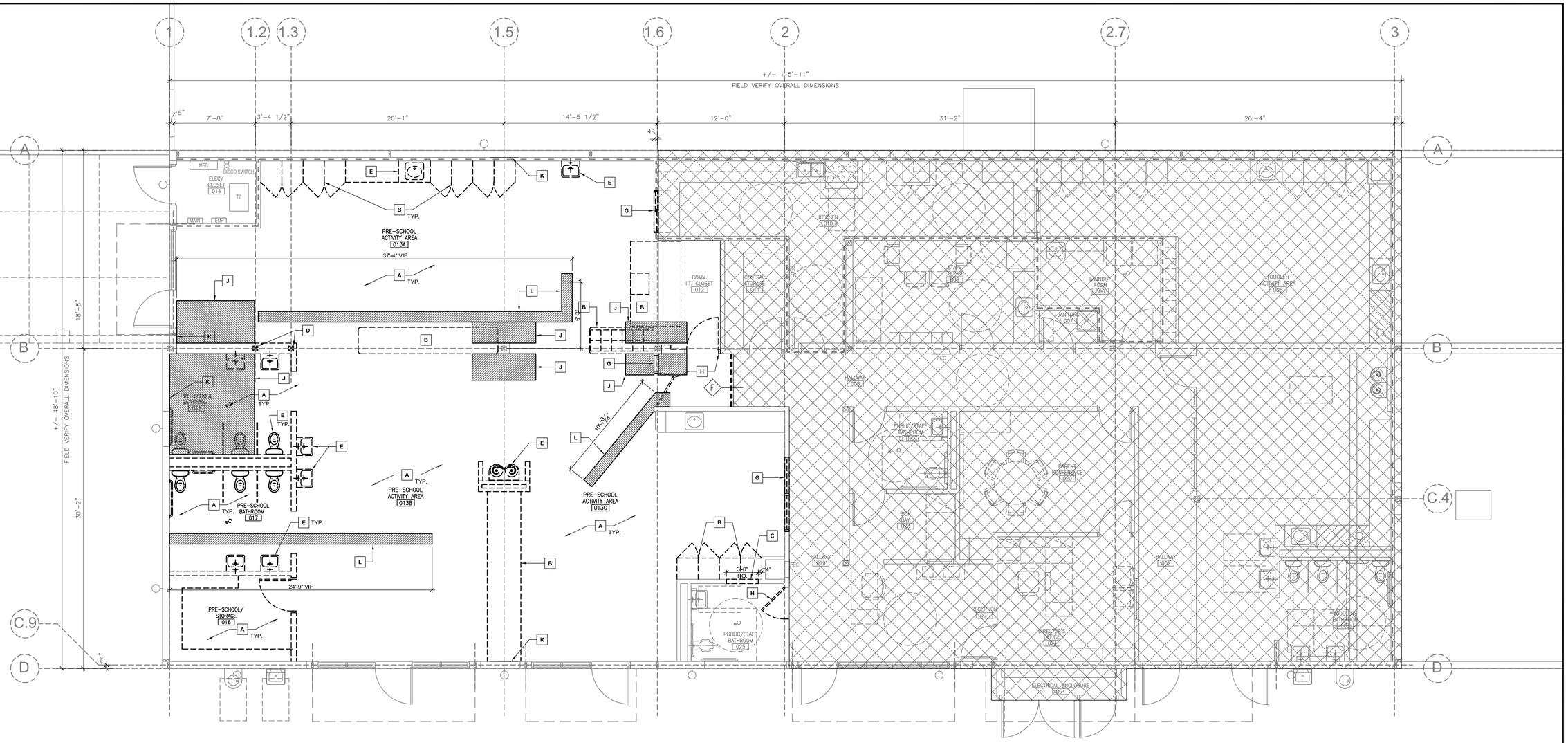

TYPICAL DEMOLITION NOTES:

1. DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS, FOLLOW PROCEDURES OUTLINED IN SPECIFICATIONS FOR REQUIREMENTS TO VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK.
2. PRIOR TO ANY DEMOLITION WORK CONTRACTOR MUST FIELD VERIFY ALL EXISTING MECHANICAL, PLUMBING AND ELECTRICAL WORK LOCATED IN THE SPACE WHICH AFFECTS THE SPACES. VA MUST BE NOTIFIED PRIOR TO SHUTDOWN OF ANY MECHANICAL, PLUMBING, FIRE ALARM AND ELECTRICAL SYSTEMS.
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5. EXISTING CONSTRUCTION SHOWN TO REMAIN INCLUDING BUT NOT LIMITED TO WALLS, PARTITIONS, DOORS, FRAMES, ETC. SHALL BE PROTECTED DURING DEMOLITION, DAMAGE TO EXISTING CONSTRUCTION SHOWN TO REMAIN SHALL BE RESTORED TO MATCH PRE-DAMAGED CONDITION.
6. PROTECT FROM DAMAGE ALL EXISTING FINISH WORK TO REMAIN IN PLACE AND WHICH BECOMES EXPOSED DURING DEMOLITION OPERATIONS.
7. PROVIDE TEMPORARY WEATHER PROTECTION AND SECURITY DEVICES DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR TO INTERIOR AREAS OF EXISTING BUILDING.
8. CONTRACTOR SHALL VERIFY AND COORDINATE REMOVAL AND/OR RELOCATION OF FIRE ALARM, FIRE SPRINKLER, SECURITY DEVISE, NURSE CALL & CABLING WITH VA REPRESENTATIVE PRIOR TO ANY DEMOLITION.
9. ALL UNFIXED FF&E SHALL BE REMOVED BY THE VA. ATTACHED FF&E SHALL BE REMOVED BY THE CONTRACTOR TO LOCATION DETERMINED BY THE VA.
10. ANY THRU-PENETRATION THAT ARE TO BE ABANDONED SHALL BE REPAIRED TO COMPLY WITH REQUIREMENTS OF THE 2021 I.B.C., REFER TO SHEET A4.100, DETAILS A2 & E1.
11. INFECTION CONTROL LEVEL 3. CONTRACTOR SHALL COORDINATE THE SPECIFIC INFECTION CONTROL REQUIREMENTS WITH THE VA PRIOR TO SUBMITTING BID.
12. CONTRACTOR SHALL INCLUDE THE CLEANING OF ALL EXISTING WINDOWS AND FRAMES WITHIN THE BOUNDARY OF THE AREA OF WORK IN THEIR SUBMITTED BID.
13. EXISTING FIRE RATED AND SMOKE RATED; BARRIERS AND PARTITIONS SHALL REMAIN FREE OF DAMAGE AND SHALL REMAIN CONTINUOUS DURING CONSTRUCTION.
14. CONTRACTOR SHALL REFER TO SPECIFICATION SECTIONS 017919 AND 024100.

KEYNOTES:

- A REMOVE ALL EXISTING FLOOR COVERINGS. CAP ALL (E) WASTE AND DRAINS. RE-LEVEL FLOOR WITH SELF LEVELING COMPOUND PRIOR TO INSTALLING NEW FLOOR FINISHES SHOWN ON A3.100
- B REMOVE EXISTING CASEWORK AND CEILING SOFFITS
- C REMOVE SECTION OF EXISTING WALL FOR NEW DOOR INSTALLATION AS SHOWN ON A3.100
- D REMOVE EXISTING (2) COLUMNS, PER 1/S1.100, KEYNOTE 1
- E REMOVE EXISTING PLUMBING FIXTURES. REMOVE SUPPLY AND WASTE PIPES AND CAP AT NEAREST JUNCTION. REFER TO DEMOLITION NOTE #10 ON SHEET A0.102
- G REMOVE (E) WINDOW AND FRAME, COMPLETE.
- H REMOVE (E) DOOR AND FRAME.
- J REMOVE SECTION OF (E) CONCRETE SLAB ON GRADE FOR NEW FOOTING ENLARGEMENT. SEE 1/S1.100
- K OPEN SECTION OF (E) WALL FOR NEW STRUCTURAL HSS. SEE 4/S2.100
- L SAW-CUT AND REMOVE (E) CONC. SLAB FOR NEW UTILITIES, SEE A1/A4.100

LEGEND:

- AREA NOT IN SCOPE
- F — CONSTRUCTION BARRIER - SEE DETAIL D2/A4.100. CONTRACTOR IS TO PROVIDE TEMPORARY DOORS AS NEEDED FOR EGRESS & OPERATION OF THE FACILITY
- REMOVE (E) PARTITION, FLOORING, CEILING, WINDOW, WINDOW FRAME, STORE-FRONT, DOOR, DOOR FRAME, DRINKING FOUNTAIN, WATER CLOSET, SINK, SHOWER AND CASEWORK

E1 DEMOLITION FLOOR PLAN

1/4"=1'-0"

Revisions	Date
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CONSULTANTS:

LICENSED ARCHITECT — REGISTERED — C-21579 — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
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Drawing Title: DEMOLITION FLOOR PLAN

Approved Project Director:

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A2.100

Dwg. Page 19 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

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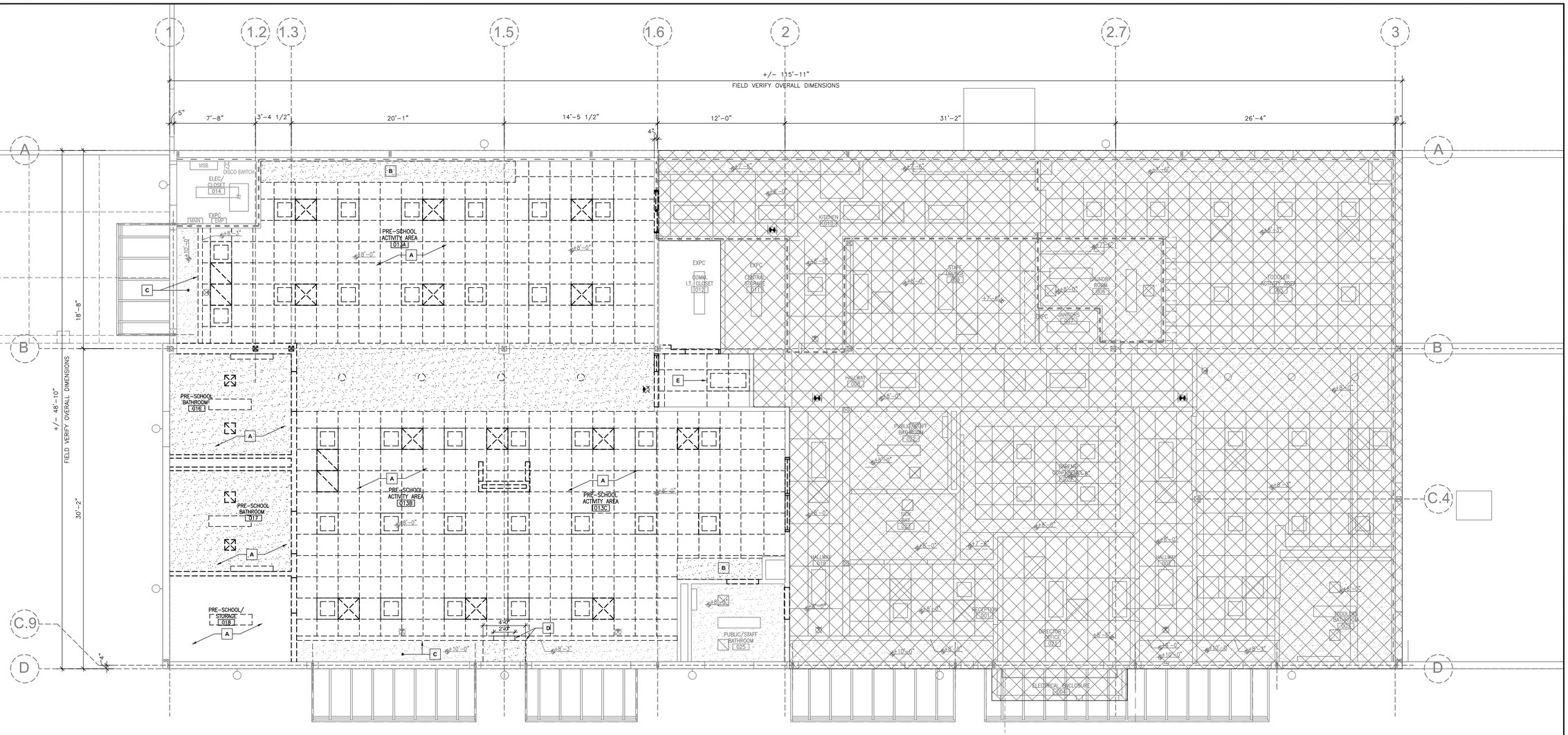
VA FORM 08-6231



TYPICAL DEMOLITION NOTES:

1. DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS, FOLLOW PROCEDURES OUTLINED IN SPECIFICATIONS FOR REQUIREMENTS TO VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK.
2. PRIOR TO ANY DEMOLITION WORK CONTRACTOR MUST FIELD VERIFY ALL EXISTING MECHANICAL, PLUMBING AND ELECTRICAL WORK LOCATED IN THE SPACE WHICH AFFECTS THE SPACES. VA MUST BE NOTIFIED PRIOR TO SHUTDOWN OF ANY MECHANICAL, PLUMBING, FIRE ALARM AND ELECTRICAL SYSTEMS.
3. WALLS, PARTITIONS, DOORS, FRAMES, CASEWORK, TOILET FIXTURES AND OTHER ITEMS TO BE REMOVED ARE SHOWN DASHED. SERVICES WITHIN WALLS AND PARTITIONS SHALL ALSO BE REMOVED, EDGES OF WALLS SHOWN TO REMAIN SHALL BE SAW-CUT OR CLEARLY PREPARED TO ACCEPT NEW CONSTRUCTION, REPAIR AND PATCH EXISTING WALLS (INTERIOR AND EXTERIOR) SHOWN TO REMAIN WHERE INTERSECTING WALLS, DOORS, FRAMES, ETC. ARE SHOWN TO BE REMOVED AND WHERE EXISTING CONSTRUCTION WILL NOW BE EXPOSED IN THE NEW CONSTRUCTION.
4. CONTRACTOR SHALL REFER TO DEMOLITION PLANS ON MECHANICAL, PLUMBING AND ELECTRICAL SHEETS FOR ADDITIONAL DEMOLITION NOTES
5. EXISTING CONSTRUCTION SHOWN TO REMAIN INCLUDING BUT NOT LIMITED TO WALLS, PARTITIONS, DOORS, FRAMES, ETC. SHALL BE PROTECTED DURING DEMOLITION, DAMAGE TO EXISTING CONSTRUCTION SHOWN TO REMAIN SHALL BE RESTORED TO MATCH PRE-DAMAGED CONDITION.
6. PROTECT FROM DAMAGE ALL EXISTING FINISH WORK TO REMAIN IN PLACE AND WHICH BECOMES EXPOSED DURING DEMOLITION OPERATIONS.
7. PROVIDE TEMPORARY WEATHER PROTECTION AND SECURITY DEVICES DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES AND INSTALLATION OF NEW CONSTRUCTION TO ENSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR TO INTERIOR AREAS OF EXISTING BUILDING.
8. CONTRACTOR SHALL VERIFY AND COORDINATE REMOVAL AND/OR RELOCATION OF FIRE ALARM, FIRE SPRINKLER, SECURITY DEVISE, NURSE CALL & CABLING WITH VA REPRESENTATIVE PRIOR TO ANY DEMOLITION.
9. ALL UNFIXED FF&E SHALL BE REMOVED BY THE VA. ATTACHED FF&E SHALL BE REMOVED BY THE CONTRACTOR TO LOCATION DETERMINED BY THE VA.
10. ANY THRU-PENETRATION THAT ARE TO BE ABANDONED SHALL BE REPAIRED TO COMPLY WITH REQUIREMENTS OF THE 2021 I.B.C., REFER TO SHEET A4.100 DETAILS A2 & E1.
11. INFECTION CONTROL LEVEL 3. CONTRACTOR SHALL COORDINATE THE SPECIFIC INFECTION CONTROL REQUIREMENTS WITH THE VA PRIOR TO SUBMITTING BID.
12. CONTRACTOR SHALL INCLUDE THE CLEANING OF ALL EXISTING WINDOWS AND FRAMES WITHIN THE BOUNDARY OF THE AREA OF WORK IN THEIR SUBMITTED BID.
13. EXISTING FIRE RATED AND SMOKE RATED; BARRIERS AND PARTITIONS SHALL REMAIN FREE OF DAMAGE AND SHALL REMAIN CONTINUOUS DURING CONSTRUCTION.
14. CONTRACTOR SHALL REFER TO SPECIFICATION SECTIONS 017919 AND 024100.

KEYNOTES:

- A — CONTRACTOR SHALL REMOVE THE EXISTING SUSPENDED CEILING AND ASSOCIATED SPLAY WIRES AND ANCHORAGE, LIGHT FIXTURES AND OTHER NON-STRUCTURAL ELEMENTS SUSPENDED FROM THE STRUCTURE ABOVE. FIRE SPRINKLERS AND CEILING DEVICES TO REMAIN.
- B — REMOVE EXISTING CASEWORK AND CEILING SOFFITS
- C — LIGHT WELL AND SOFFIT SHALL REMAIN
- D — REMOVE SECTION OF CEILING AND SOFFIT FOR NEW MOVEABLE PARTITION TRACK SHOWN ON A3.200
- E — REMOVE AND RELOCATE (E) 2X4 FIXTURE TO NEW LOCATION SHOWN ON A3.200

LEGEND:

- AREA NOT IN SCOPE
- CONSTRUCTION BARRIER - SEE DETAIL D2/A4.100. CONTRACTOR IS TO PROVIDE TEMPORARY DOORS AS NEEDED FOR EGRESS & OPERATION OF THE FACILITY
- REMOVE (E) PARTITION, FLOORING, CEILING, WINDOW, WINDOW FRAME, STORE-FRONT, DOOR, DOOR FRAME, DRINKING FOUNTAIN, WATER CLOSET, SINK, SHOWER AND CASEWORK
- REMOVE (E) HVAC RETURN AND SUPPLY DIFUSERS. REFER TO TYPICAL DEMOLITION NOTES AND SHEET M2.100
- REMOVE (E) LIGHT FIXTURES - UNO. REFER TO TYPICAL DEMOLITION NOTES AND SHEET EL2.101

E1 DEMOLITION CEILING PLAN

1/4"=1'-0"

Revisions:	Date
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CONSULTANTS:

LICENSED ARCHITECT — C-21579 — EXPIRATION: 08/31/2024 — STATE OF CALIFORNIA

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Drawing Title: DEMOLITION CEILING PLAN

Approved: Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A2.200

Dwg. Page 20 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot | one and one half inches = one foot | one inch = one foot | three quarters inch = one foot | one half inch = one foot | three eighths inch = one foot | one quarter inch = one foot | one eighth inch = one foot
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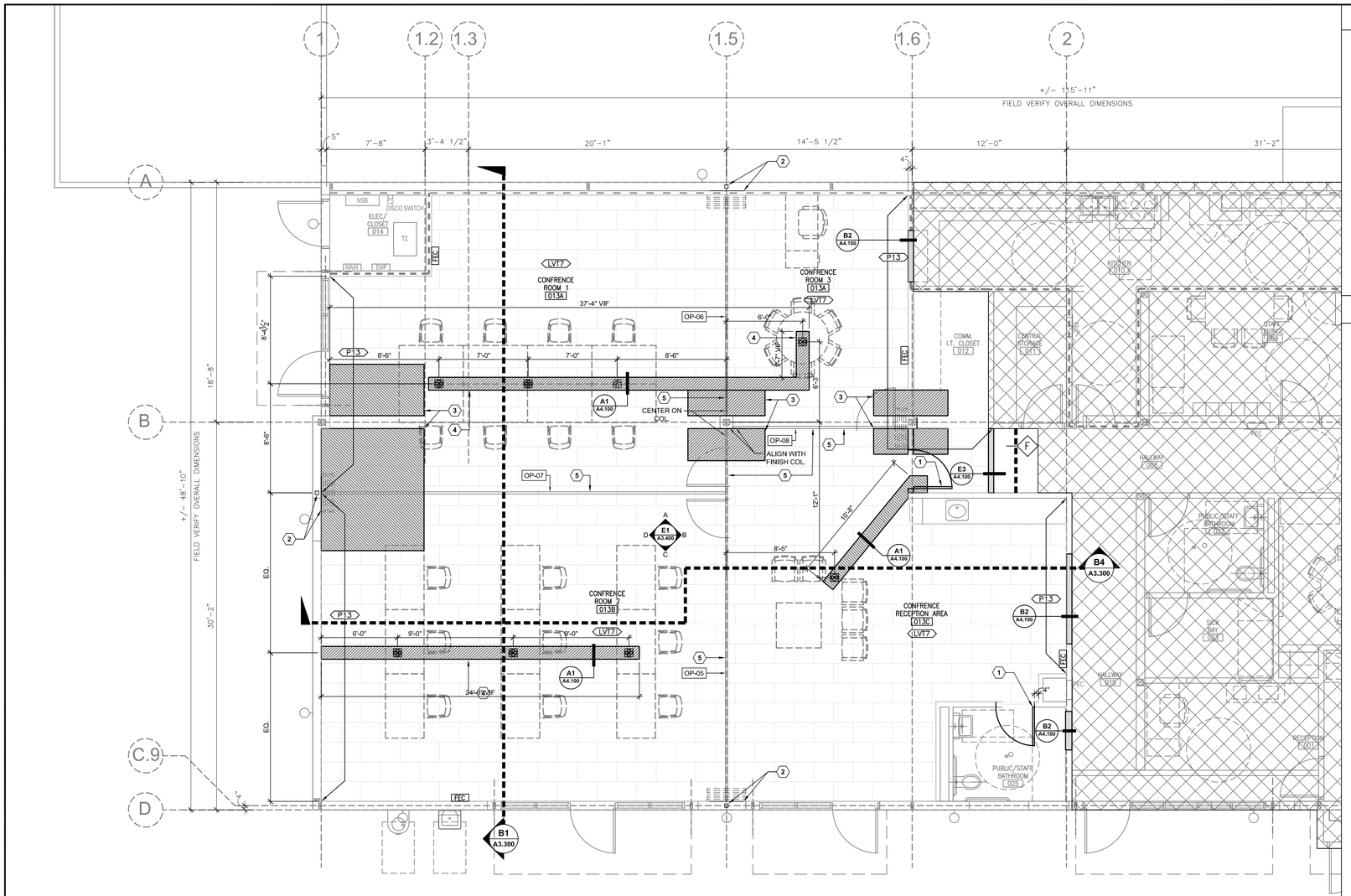

D1 REMODEL FLOOR PLAN
1/4"=1'-0"

FINISH SCHEDULE

LVT7 — LUXURY VINYL TILE:
MANNINGTON - EQUATOR WAVE AR0AEQ39
18" X 36" 2.5MM
4" BURKE BASE

P5 — PAINT: (ALL WALLS - U.N.O.)
SHERWIN WILLIAMS - HONIED WHITE SW7106
SATIN

P13 — PAINT: (ACCENT WALL)
SHERWIN WILLIAMS - NEEDLEPOINT NAVY SW0032
SATIN

GENERAL INTERIOR FINISH NOTES

FLOOR FINISH

1. REFER TO REMODEL FLOOR PLAN FOR FLOOR FINISH LOCATIONS.
2. ALL RESILIENT FLOORING SHEETS TO HAVE MATCHING COLOR HEAT WELD COLOR, BETWEEN TWO DIFFERENT FINISHES, IF TWO DIFFERENT COLORS, MATCH WELD TO THE DARKEST FINISH COLOR.
3. FLOORING TO CONTINUE UNDER CASEWORK, MILLWORK, AND WORKSURFACES.
4. TYPICAL FLOOR TRANSITIONS:
   - A. FINISH CHANGES AT DOORS = CENTERLINE OF THE DOOR CLOSED.
   - B. RESILIENT FLOORING TILE (LVT) TO RESILIENT FLOORING TILE (LVT) = LEVEL WITH LEVELING COMPOUND IF NOT LEVEL.
   - C. RESILIENT FLOORING TILE (LVT) TO RESILIENT FLOORING SHEET = LEVEL WITH LEVELING COMPOUND IF NOT LEVEL.
   - D. RESILIENT FLOORING TILE (LVT) / SHEET TO CERAMIC TILE = LEVELING COMPOUND WITH LVT UP TO SCHLUTER®-SHIENE ON TILE.
5. FLOOR TRANSITION EXCEPTIONS:
   - A. FOR TRANSITIONS TO EXISTING FINISHES, GC TO PROVIDE APPROPRIATE TRANSITION (IF ONE DOES NOT ALREADY EXIST) FOR REVIEW BY ARCHITECT.
6. FLOOR FINISH WITH SAME WALL BASE FINISH = SELF COVING BASE.
7. BASE HEIGHT STANDARD TO BE +4" HEIGHT WITH TRADITIONAL RUBBER BASE AND +6" HEIGHT WITH SELF COVE BASE. CUT HEIGHT UNDER CASEWORK TOE KICK. PROVIDE MATCHING FLOOR FINISH TOP CAP AND STANDARD COVE STICK FOR SELF COVE BASE.
8. EXTEND WALL BASE MATERIALS BEHIND ALL MOVABLE EQUIPMENT AND INTO ALL ALCOVE, KNEESPACES, AND SIMILAR AREAS, UNO.
9. ALL FINISHES SHALL COMPLY WITH IBC2021 CHAPTER 8.

WALL FINISH

1. REFER TO REMODEL FLOOR PLAN FOR WALL FINISH LOCATIONS.
2. ALL WALLS TO BE PAINTED FIELD PAINT PT-05 UNO ON PLANS, INTERIOR ELEVATIONS, NOTES, OR SCHEDULE ABOVE.
3. ALL PAINT COLOR TRANSITIONS TO OCCUR AT INSIDE CORNERS, UNO.

CEILING FINISHES

1. ALL GYPSUM BOARD AND CEMENT PLASTER CEILINGS, HEADERS, ALCOVE SOFFITS, ETC. TO BE PAINTED PT-05, UNO.

MISCELLANEOUS

1. PROVIDE BACKING PLATES OR BLOCKING BEHIND ALL WALL MOUNTED EQUIPMENT, CASEWORK, ACCESSORIES, AND/OR FIXTURES AS REQUIRED FOR POSITIVE ATTACHMENT TO STRUCTURE.

LEGEND

- (E) 1-HOUR FIRE PARTITION
- (E) NON-RATED PARTITION
- NEW WALL
- F — CONSTRUCTION BARRIER - SEE DETAIL D2/A4.100. CONTRACTOR IS TO PROVIDE TEMPORARY DOORS AS NEEDED FOR EGRESS & OPERATION OF THE FACILITY
- OP-05 — OPERABLE PANEL LAYOUT. SEE VENDOR DRAWINGS. VERIFY FINAL LOCATION OF CONTROLS WITH VA.
- LVT — LUXURY VINYL TILE - SEE FINISH SCHEDULE
- N.I.C.
- FEC — IN ACCORDANCE WITH NFPA 10 TABLES 6.2.1.1 & 6.3.1.1 PROVIDE CLASS A & B FIRE EXTINGUISHERS FOR USE IN THE EVENT OF A FIRE. DRY CHEMICAL ABC EXTINGUISHER RATING 2A:20B:C

KEYNOTES

1. NEW 3'-0" X 7'-0" DOOR AND FRAME. REUSE (E) HARDWARE, CONTRACTOR SHALL INSTALL NEW HM FRAME PER E4/A4.100
2. POST/COLUMN STRENGTHENING PER 1/S1.100. CONTRACTOR SHALL PATCH WALLS WHERE (E) FINISHES ARE REMOVED. REPAIRS SHALL MATCH ADJACENT WALL SYSTEM. REFER TO GENERAL NOTES ON SHEET A0.102.
3. PATCH AND REPAIR (E) CONCRETE SLAB ON GRADE. FLOOR SHALL BE FINISHED LEVEL AND SMOOTH TO RECEIVE NEW FLOOR FINISHES PER PLAN.
4. PROVIDE 18"W X 12"D TRENCH IN (E) CONCRETE SLAB ON GRADE FOR NEW CONDUIT AND POWER/DATA FLOOR OUTLETS - SEE ELECTRICAL DRAWING EP2.202
5. 'MODERNFOLD - ACOUSTIC-SEAL LEGACY" ELECTRIC OPERABLE PARTITIONS- OR EQUAL. SEE STRUCTURAL DRAWINGS FOR ANCHORAGE. REFER TO VENDOR DRAWINGS.

Revisions	Date
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CONSULTANTS:

LICENSED ARCHITECT — C-21579 — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: REMODEL FLOOR PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A3.100

Dwg. Page 21 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot 6 0
one and one half inches = one foot 1 0 6
one inch = one foot 2 0 6
three quarters inch = one foot 2 0 6
one half inch = one foot 4 0
three eighths inch = one foot 4 0 8
one quarter inch = one foot 4 0 8
one eighth inch = one foot 8 0 16
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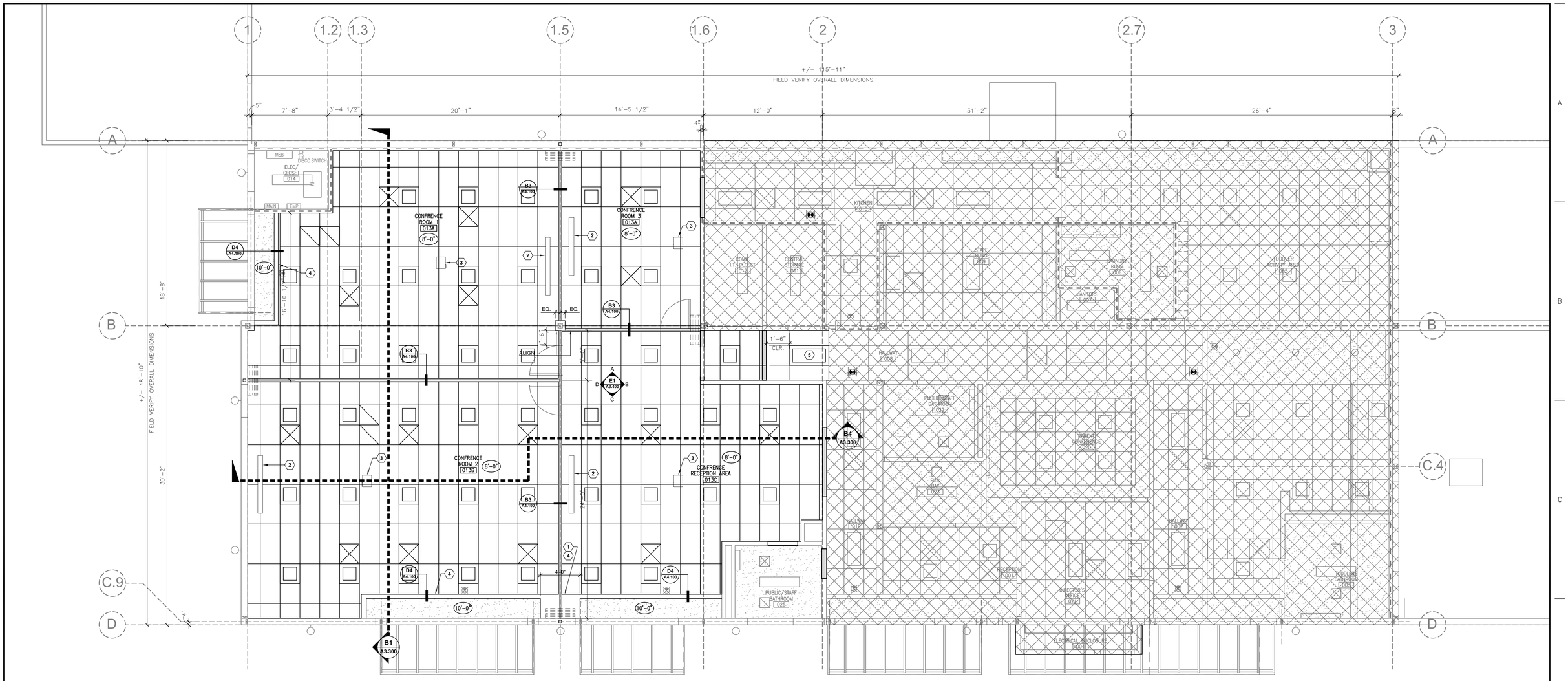

D1 REMODEL CEILING PLAN
1/4"=1'-0"

LEGEND

- (E) 1-HOUR FIRE PARTITION
- (E) NON-RATED PARTITION
- NEW WALL
- OP-05 — OPERABLE PANEL LAYOUT. SEE VENDOR DRAWINGS
- 24"X48" 'SECOND LOOK' ACOUSTICAL CEILING TILE AND 15/16" GRID SYSTEM PER ES/A4.100, (CLASS A & CAC 40). REFER TO BASSES OF DESIGN AND SPECIFICATIONS.
- N.I.C.
- 2'X2' LED LIGHT FIXTURE, 'CREE' - 'CR SERIES CR22' PER 'LBVA ENGINEERING SHOPS STANDARDS; VERSION 6.
- 2'X2' SUPPLY REGISTER, 'TITUS - #PCS' PER 'LBVA ENGINEERING SHOPS STANDARDS; VERSION 6.
- 2'X2' RETURN REGISTER, 'TITUS - #PAR' PER 'LBVA ENGINEERING SHOPS STANDARDS; VERSION 6.

KEYNOTES

1. PATCH AND REPAIR SOFFIT
2. MOTORIZED AV SCREEN. SEE DETAIL E2/A4.100. SEE SHEET EP2.202 FOR POWER AND DATA CONNECTIONS
3. CEILING MOUNTED PROJECTOR. SEE DETAIL C4/A4.100. SEE SHEET EP2.202 FOR POWER AND DATA CONNECTIONS
4. LOWER SOFFIT TO 8'-0" A.F.F. PER DETAIL D4/A4.100
5. RELOCATED (E) LIGHT FIXTURE. SEE KEYNOTE 'E' ON A2.200

TYPICAL CEILING PLAN

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CONSULTANTS:

LICENSED ARCHITECT — C-21579 — RENEWAL 08/31/2024 — STATE OF CALIFORNIA

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Drawing Title: REMODEL CEILING PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	JJ	DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A3.200

Dwg. Page 22 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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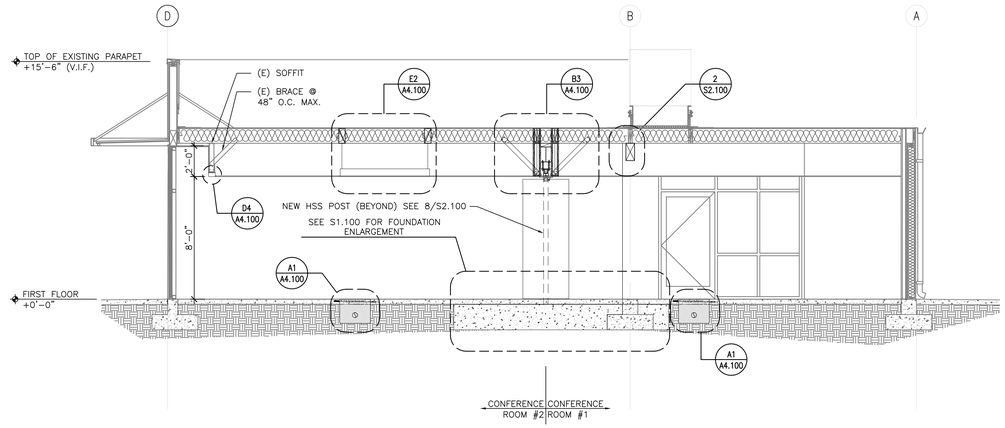
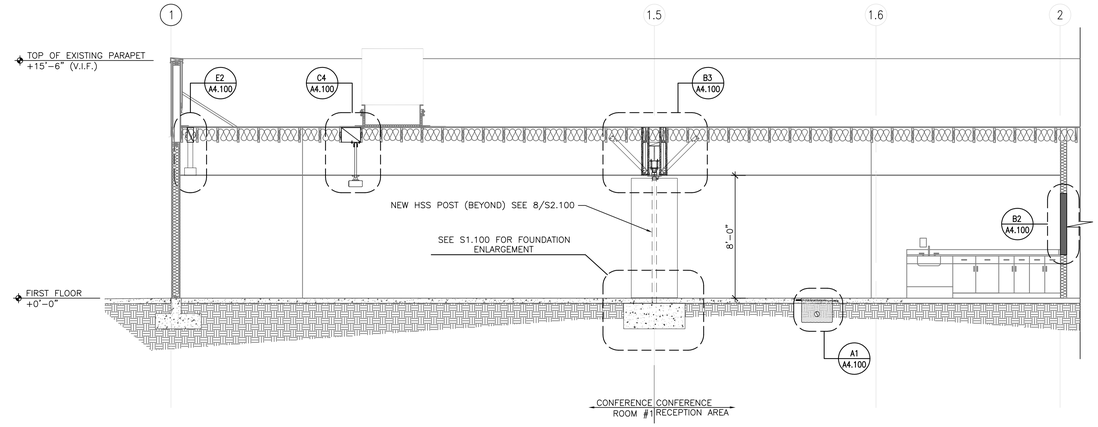
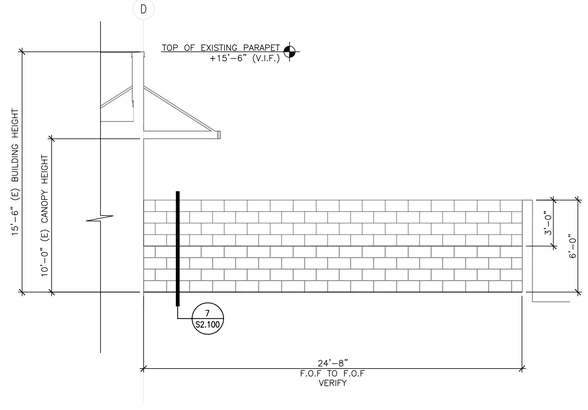


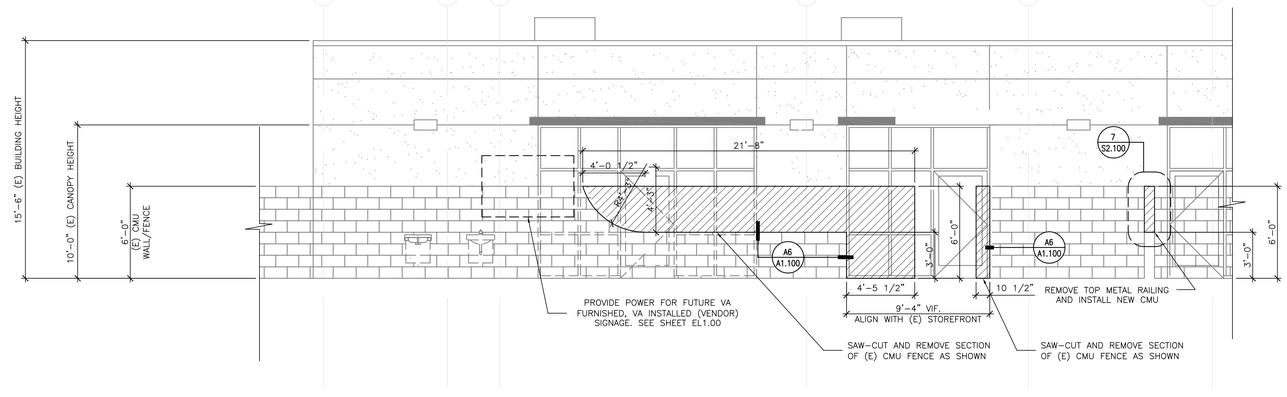
B1 BUILDING SECTION
1/4"=1'-0"



B4 BUILDING SECTION
1/4"=1'-0"



E1 CMU WALL ELEVATION
1/4"=1'-0"



E3 CMU WALL ELEVATION
1/4"=1'-0"

Revisions:	Date
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CONSULTANTS:

LICENSED ARCHITECT
C-21579
RENEWAL 2023
STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

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Drawing Title
BUILDING SECTIONS AND ELEVATIONS

Approved Project Director

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location
VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A3.300

Dwg. Page 23 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

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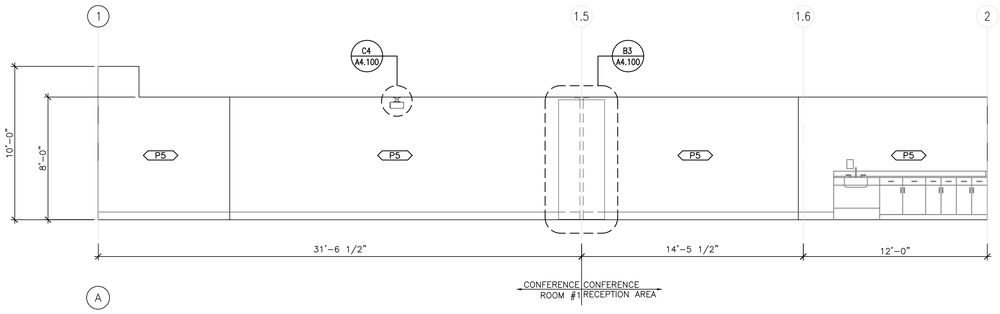

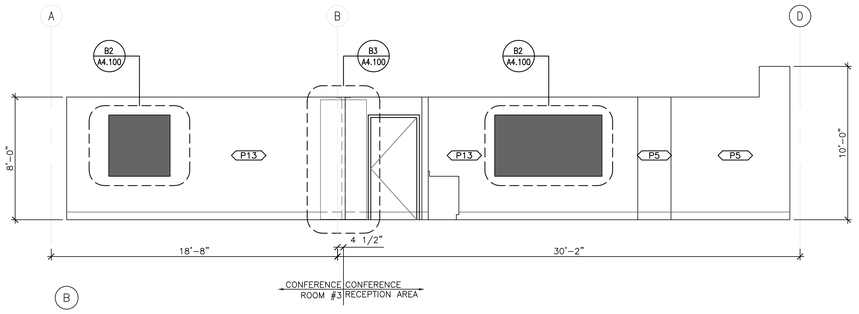

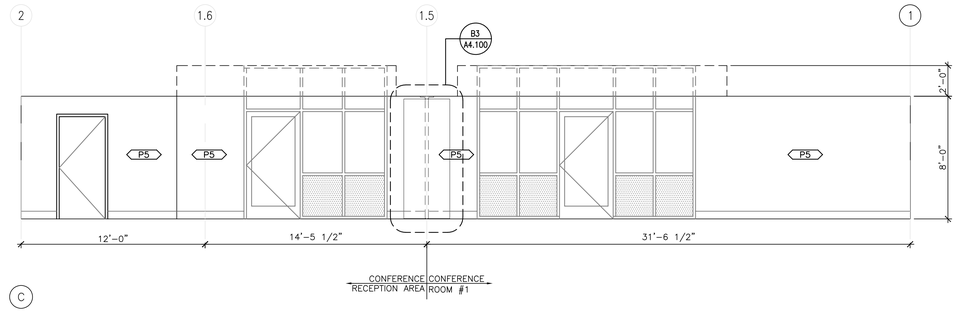

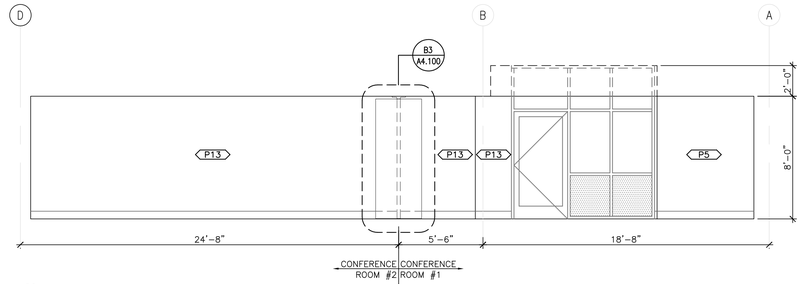

E1 INTERIOR ELEVATIONS

1/4"=1'-0"

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CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: INTERIOR ELEVATIONS

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Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: A3.400

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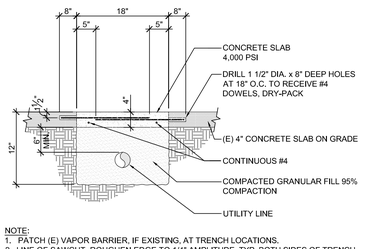
CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

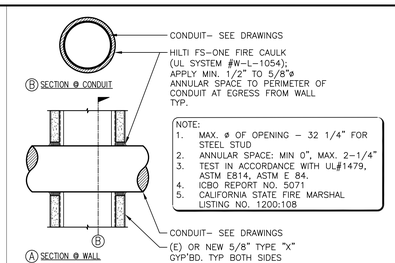
VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\NPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\Z. DWG CD\A. Arch-CD\Plot\A3.400 INTERIOR ELEVATIONS.dwg 1-11-23 10:57:44 AM Dorinhuska



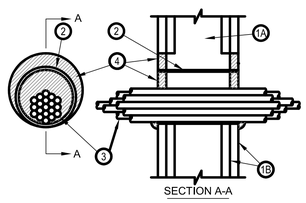
NOTE:
1. PATCH (E) VAPOR BARRIER, IF EXISTING, AT TRENCH LOCATIONS.
2. LINE OF SAWCUT, ROUGHEN EDGE TO 1/4" AMPLITUDE, TYP. BOTH SIDES OF TRENCH.

A1 UTILITY TRENCH AT (E) CONC. SLAB ON GRADE
NTS



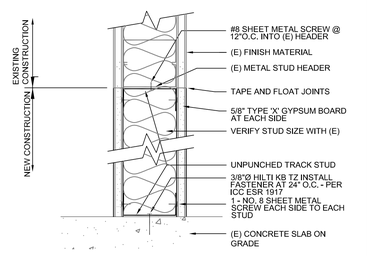
A2 FIRE WALL PENETRATION
NTS

System No. W-L-3065
C UL US
Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115
F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 and ¾ Hr (See Item 3)

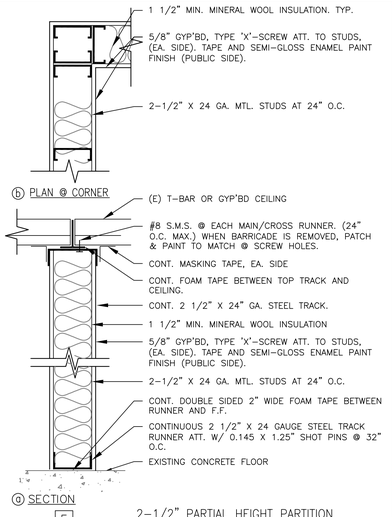


SECTION A-A

1. Wall Assembly — The 1 or 2 fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* — Nom 5/8 in. (16 mm) thick gypsum board, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max dim of opening is 5-1/2 in. (138 mm) when sleeve (Item 2) is employed. Max dim of opening is 4 in. (102 mm) when sleeve (Item 2) is not employed.
   The F Rating of the firestop system is equal to the fire rating of the wall assembly.
2. Metallic Sleeve — (Optional) - Nom 4 in. (102 mm) dim (or smaller) steel electrical metallic tubing (EMT) or Schedule 5 (or heavier) steel pipe or min 0.016 in. thick (0.41 mm, No. 28 ga) galv steel sleeve installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25mm). When Schedule 5 steel pipe or EMT is used, sleeve may extend up to 18 in. (457 mm) beyond the wall surfaces. As an option when Schedule 5 steel pipe or EMT is used, sleeve may extend continuously beyond one wall surfaces. When cable bundle penetrates wall assembly at an angle of 45 degrees, no metallic sleeve is used.
3. Cables — Aggregate cross-sectional area of cable in opening to be max 45 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (0 mm, point contact) to max 1 in. (25 mm) Cables to be rigidly supported on both sides of the wall assembly. Cable bundle, using cables described below, may penetrate the wall at an angle not greater than 45 degrees. Any combination of the following types and sizes of copper conductor cables may be used:
   A. Max 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
   B. Max 25 pair No. 24 AWG telephone cable with PVC insulation and jacket.
   B1. Max 4 pr No. 22 AWG Cat 5 or Cat 6 computer cables.
   C. Type RG/U coaxial cable with polyethylene (PE) insulation and PVC jacket having a max outside diameter of ½ in. (13 mm).
   C1. Max RG 6/U coaxial cable with fluorinated ethylene insulation and jacketing.
   D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 5/8 in. (16 mm).
   E. Through Penetrating Products*— Max three copper conductor No. 8 AWG .Metal-Clad Cable+.
   AFC CABLE SYSTEMS INC
   F. Max 3/C (with ground)(or smaller) No. 8 AWG copper conductor cable with PVC insulation and jacketing.
   G. Max 3/4 in. (19 mm) diam copper ground cable with or without a PVC jacket.
   H. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of cable.
   I. Max 4/C with ground 300 kcmil (or smaller) aluminum SER cable with PVC insulation and jacket.
   J. Through Penetrating Product* - Any cables, Metal-Clad Cable+ or Armored Cable+ currently Classified under the Through Penetrating Products category.
   K. Maximum 3/C No. 8 AWG metal-clad cable.
   L. Maximum 5/8 diam fiber-optic cable with PVC jacket.
   For cable bundle penetrating the wall assembly at an angle of 45 degrees, the T rating is ¾ hr for a 2 hr wall assembly.
   See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.
4. Fill, Void or Cavity Material*— Sealant or Putty — Fill material applied within the annulus, flush with each end of the steel sleeve or wall surface. Fill material installed symmetrically on both sides of the wall. A min 5/8 in. (16 mm) thickness of sealant is required for the 1 or 2 hr F Rating . An additional 1/2 in. (13 mm) diam bead of fill material shall be applied around the perimeter of sleeve on both sides of the wall when sleeve extends beyond surface of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S, CP606 OR EQUAL, FS-One Sealants or CP618 Putty
   *Bearing the UL Classification Mark
   +Bearing the UL Listing Mark

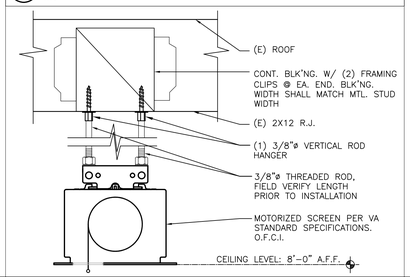


B2 DOOR INFILL (WINDOW SIM.)
NTS



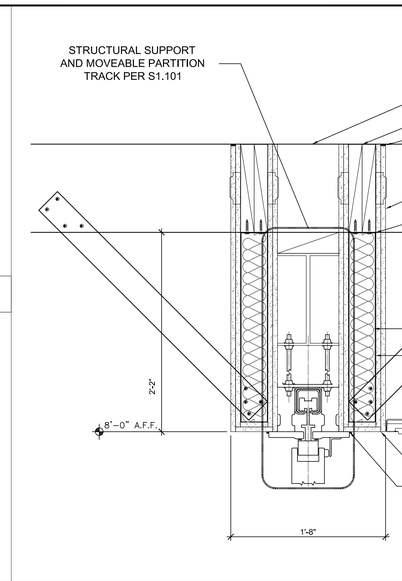
NOTE:
– ONE–HOUR RATED WALL PER U.L. DESIGN # U419

D2 TEMPORARY CONSTRUCTION BARRIER
NTS

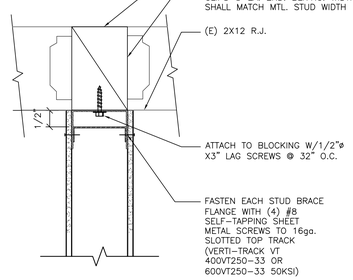


E1 FIRE WALL PENETRATION
NTS

E2 MOTORIZED SCREEN
NTS

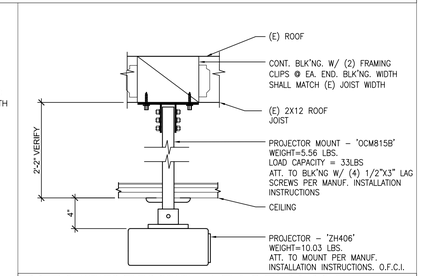


B3 MOVEABLE PARTITION TRACK
1–1/2"=1'–0"

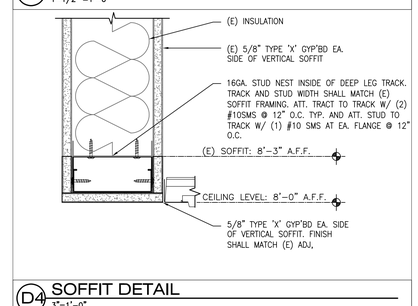


NOTE:
1. SEE DETAIL E5/– FOR TYPICAL WALL FRAMING ELEVATION.
2. BASSES OF DESIGN BASED ON "AER–09038_ ONE & TWO HOUR HORIZONTAL CAVITY CEILING MEMBRANE (CORRIDOR CEILING OR UNDERSIDE STAIR APPLICATIONS)"

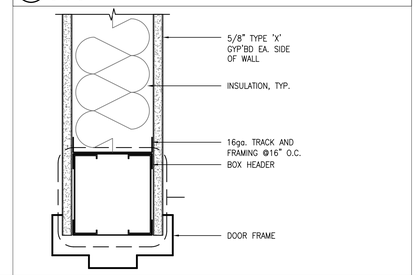
E3 FULL HEIGHT PARTITION
3"=1'–0"



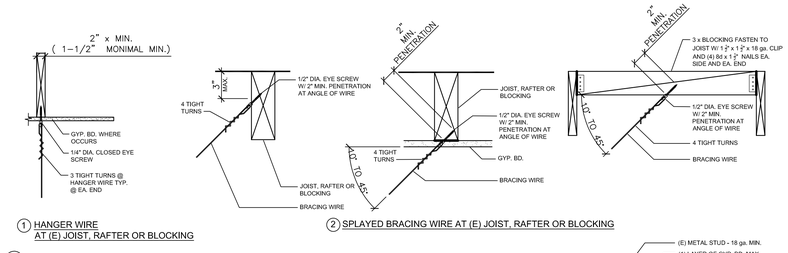
C4 CEILING MOUNTED PROJECTOR
1–1/2""=1'–0"



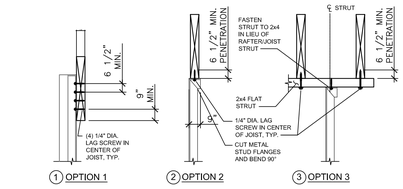
D4 SOFFIT DETAIL
3"=1'–0"



E4 DOOR FRAME
3"=1'–0"



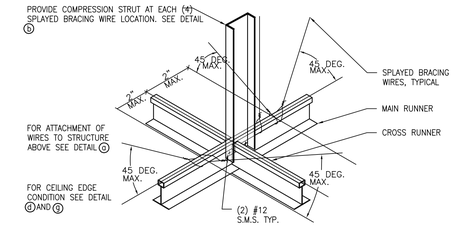
a TYPICAL WIRE ATTACHMENTS AT (E) JOIST, RAFTER OR BLOCKING



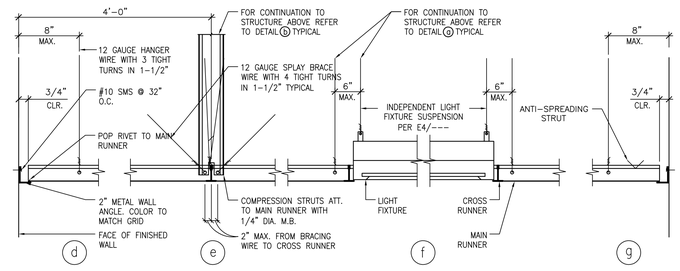
b TYPICAL COMPRESSION STRUT TOP CONNECTIONS AT (E) JOIST, RAFTER OR BLOCKING

"H"	PLAN VIEW	METAL STUD SIZE
LESS THAN 8'–0"		(1)4"x20 GA.
8'–0" LESS THAN 20'–0"	H	(2)4"x20 GA. JOINED W/ #10 S.M.S. @ 12" O.C.
CONNECTION @ DECK		CONNECTION TO BEAM ONLY
3/8" DIA. HILTI KB–TZ A.B. WITH 2–1/2" MIN. EMBEDMENT. ICC ESR–1917		(2) #12 MACHINE THRU BOLTS W/ LOCK WASHERS

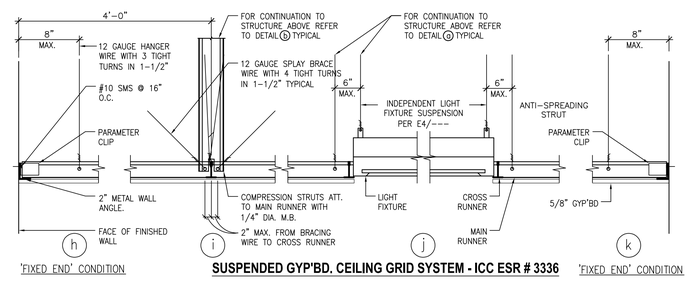
b TYPICAL COMPRESSION STRUT ATTACHMENT



c TYPICAL COMPRESSION ISOMETRIC



'FIXED END' CONDITION — **ACOUSTICAL TILE LAY-IN CEILING GRID SYSTEM** — 'FREE END' CONDITION



'FIXED END' CONDITION — **SUSPENDED GYP'BD. CEILING GRID SYSTEM - ICC ESR # 3336** — 'FIXED END' CONDITION

E5 TYPICAL SUSPENDED CEILING DETAILS
NTS

Revisions	Date
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CONSULTANTS:

LICENSED ARCHITECT — REGISTERED PROFESSIONAL — C–21579 — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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858.344.8900

Drawing Title: DETAILS
Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA [redacted] CA
Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

CONSTRUCTION DOCUMENTS
Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: A4.100
Dwg. Page 25 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08–6231

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FIRE ALARM NOTES:

1. APPLICALBLE CODES AND STANDARDS

DEPARTMENT OF VETERAN'S AFFAIRS (VA):

VA	FIRE PROTECTION DESIGN GUIDE

NATIONAL FIRE CODES, NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS INCLUDING:

NFPA 1	UNIFORM FIRE CODE, 2021 EDITION
NFPA 10	PORTABLE FIRE EXTINGUISHERS, 2022 EDITION
NFPA 13	SPRINKLER SYSTEMS, 2019 EDITION
NFPA 70	NATIONAL ELECTRICAL CODE, 2020 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE, 2019 EDITION
NFPA 101	LIFE SAFETY CODE, 2021 EDITION

INTERNATIONAL BUILDING CODES:

IBC	INTERNATIONAL BUILDING CODE, 2021 EDITITION

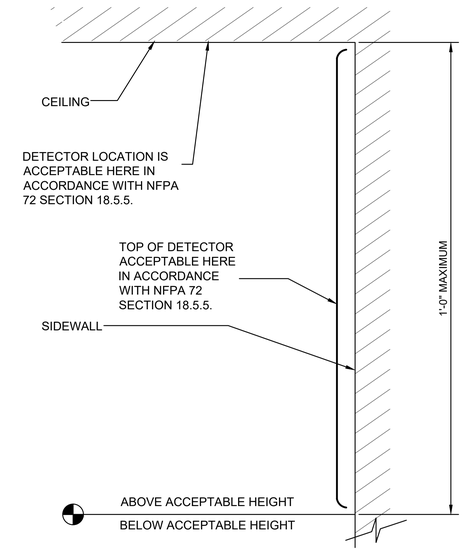
1. SCOPE OF WORK: MODIFICATION OF EXISTING FIRE ALARM SYSTEM WITHIN THE RENOVATED SPACE. MODIFICATIONS MAY INCLUDE DEMOLITION, RELOCATION AND/OR ADDITION OF INITIATING DEVICES AND NOTIFICATION APPLIANCES AS REQUIRED BY PROJECT SPECIFICATIONS, RFP, AND ALL RELEVANT CODES AND STANDARDS.
2. THE FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE VA FIRE PROTECTION DESIGN MANUAL, NFPA 72 (2019) AND SPECIFICATION SECTION 28 31 00.
3. ALL DEVICES AND EQUIPMENT SHALL BE U.L. LISTED OR FM APPROVED AND COMPATIBLE WITH EXISTING EDWARDS EST-3 FIRE ALARM CONTROL PANEL LOCATED AT ELECTRICAL ROOM B231.
4. DEVICE LOCATIONS ARE CONCEPTUAL. DEVICES ARE SHOWN IN SUGGESTED LOCATIONS. FINAL QUANTITY AND LAYOUT SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS, AND EQUIPMENT LISTINGS. COORDINATE LOCATIONS WITH CEILING MOUNTED EQUIPMENT.
5. ADDED WALLS/CEILINGS AND DEMOLITION OF EXISTING WALLS/CEILINGS WITHIN THE AREA WILL REQUIRE MODIFICATION IN THE FORM OF RELOCATION AND ADDITION OF SPEAKERS, STROBES, AUDIOVISUAL DEVICES, AND SMOKE DETECTORS THAT MUST COMPLY WITH NFPA 72 IN THE MODIFICATION AREA. ANY ADDITIONAL DEVICES SHALL BE TIED INTO THE EXISTING SYSTEM.
6. SYNCHRONIZE ALL VISUAL NOTIFICATION APPLIANCES. SYNCHRONIZE ALL AUDIBLE NOTIFICATION APPLIANCES.
7. VISUAL NOTIFICATION APPLIANCES SHALL BE SPACED IN ACCORDANCE WITH NFPA 72.
8. CONNECTION TO CEILING MOUNTED DEVICES SHALL INCLUDE A 6'-0" FLEXIBLE CONDUIT DROP.
9. PROVIDE FIRE ALARM INITIATING AND INDICATING DEVICES THAT ARE COMPATIBLE WITH THE EXISTING FIRE ALARM SYSTEM.
10. SHOP DRAWING DESIGN SHALL BE BY A NICET LEVEL III OR IV FIRE ALARM TECHNICIAN OR A REGISTERED FIRE PROTECTION ENGINEER. INSTALLATION SHALL BE ACCOMPLISHED BY AN ELECTRICAL CONTRACTOR WITH A MINIMUM OF FIVE YEARS EXPERIENCE IN THE INSTALLATION OF FIRE ALARM SYSTEMS.
11. CONDUCTORS MUST MATCH EXISTING IN GAUGE, TYPE AND COLOR CODING. ALL CONDUCTORS WHICH ARE TERMINATED, SPLICED, OR OTHERWISE INTERRUPTED IN ANY ENCLOSURE, CABINET, MOUNTING OR JUNCTION BOX SHALL BE CONNECTED TO TERMINAL BLOCKS. USE OF WIRE NUTS IS PROHIBITED.
12. INSTALL ALL CONDUCTORS IN RIGID METAL CONDUIT OR ELECTRICAL METALLIC TUBING, WITH A MINIMUM DIAMETER OF ¾ INCHES (19 MM). RUN CONDUIT OR TUBING CONCEALED UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE DRAWINGS. ALL WIRING FOR THE FIRE ALARM SYSTEM MUST BE INSTALLED IN SEPARATE CONDUIT. NO OTHER BUILDING WIRING IS PERMITTED IN CONDUIT THAT CONTAINS FIRE ALARM WIRING.
13. SUBMIT SHOP DRAWINGS NOT SMALLER THAN 30 INCHES BY 44 COMPLETE DESCRIPTION OF THE SYSTEM OPERATION.
14. PROVIDE A COMPLETE LIST OF DEVICE ADDRESSES AND CORRESPONDING MESSAGES.
15. PROVIDE POINT-TO-POINT WIRING DIAGRAMS SHOWING THE POINTS OF CONNECTION AND TERMINALS USED FOR ALL ELECTRICAL FIELD CONNECTIONS IN THE SYSTEM, INCLUDING ALL INTERCONNECTIONS BETWEEN THE EQUIPMENT OR SYSTEMS WHICH ARE SUPERVISED OR CONTROLLED BY THE SYSTEM.
16. INCLUDE ANNOTATED CATALOG DATA SHOWING MANUFACTURER'S NAME, MODEL, VOLTAGE, AND CATALOG NUMBERS FOR ALL EQUIPMENT AND COMPONENTS.
17. INCLUDE BATTERY CALCULATIONS FOR BOTH THE ALARM AND SUPERVISORY POWER REQUIREMENTS. AMPERE-HOUR REQUIREMENTS FOR EACH SYSTEM COMPONENT SHALL BE SUBMITTED WITH THE CALCULATIONS.
18. PROVIDE A COLOR CODE SCHEDULE FOR THE WIRING AND FLOOR PLANS SHOWING THE LOCATION OF ALL DEVICES AND EQUIPMENT. MATCH EXISTING COLORS OR PROVIDE REMEDY IF COLORS CAN NOT BE MATCHED.
19. PRELIMINARY TESTING: CONTRACTOR TO PERFORM INITIAL TEST OF THE FIRE ALARM ZONE PRIOR TO ANY WORK TO VERIFY AND DOCUMENT ANY EXISTING FAULT OR TROUBLE CONDITIONS NOT PART OF THIS SCOPE OF WORK. TESTING TO INCLUDE VERIFICATION OF EXISTING SEQUENCE OF OPERATIONS AND VERIFICATION THAT THE SYSTEM IS COMPLETELY OPERATIONAL. TESTING SHALL BE PERFORMED WITH VA REPRESENTATIVE AND ARCHITECT/ENGINEER OF RECORD.
20. FINAL TESTING: NOTIFY THE CONTRACTING OFFICER IN WRITING WHEN THE SYSTEM IS READY FOR FINAL ACCEPTANCE TESTING. SUBMIT THE REQUEST FOR TESTING AT LEAST 15 CALENDAR DAYS PRIOR TO TEST DATE. THE FINAL TESTS SHALL BE WITNESSED BY THE CONTRACTING OFFICERS REPRESENTATIVE. AT THIS TIME, ANY AND ALL REQUIRED TESTS SHALL BE REPEATED AT THE DISCRETION OF THE GOVERNMENT.
21. SUBMIT AS-BUILT DRAWINGS TO THE PROJECT MANAGER UPON COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL INDICATE CHANGES FROM THE ORIGINAL LAYOUT, MARKED IN RED.
22. CONNECT TO EXISTING CIRCUITS, IF FULL, PROVIDE NEW CIRCUIT TO EXISTING FIRE ALARM TERMINAL FOR THE AREA WITHIN SCOPE.
23. ALL FIRE ALARM WIRING SHALL BE SOLID COPPER AND INSTALLED IN CONDUIT. STRANDED WIRING MUST NOT BE USED.
24. THE FIRE ALARM SEQUENCE OF OPERATIONS WILL REMAIN UNCHANGED. ALL NEW DEVICES SHALL BE TIED INTO THE SYSTEM AND THE SYSTEM RESPONSE WILL REMAIN UNCHANGED.

FIRE ALARM SYMBOLS:

F	MANUAL PULL STATION, MOUNTED 48" AFF TO TOP
S 15W C	SPEAKER ONLY, CEILING-MOUNT
CD 1W	COMBINATION SPEAKER / VISUAL, WALL-MOUNT
CD 1W C	COMBINATION SPEAKER / VISUAL, CEILING-MOUNT
CD 1W WP	WEATHERPROOF COMBINATION SPEAKER / VISUAL, WALL-MOUNT
	STROBE ONLY, CEILING-MOUNT

FIRE ALARM ABBREVIATIONS:

AFF	-	ABOVE FINISHED FLOOR
CD	-	CANDELA
FACP	-	FIRE ALARM CONTROL PANEL
WP	-	WEATHERPROOF



SMOKE DETECTOR CEILING MOUNT DETAIL 1
SCALE: NTS

CONSTRUCTION DOCUMENTS

Revisions	Date
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CONSULTANTS:
COFFMAN ENGINEERS
1455 Frazee Rd., Suite 600
San Diego, CA 92108
ph 619.232.4673
www.coffman.com

REGISTERED PROFESSIONAL ENGINEER WILLIAM BARNSLEY LEWIS CHIEF FP 2051 FIRE PROTECTION STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:
npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: **FIRE ALARM PLAN - GENERAL NOTES**

Approved Project Director

Project Title: **EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA**

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JB | Drawn: WF

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: **FA001**

Dwg. Page 26 of 61

Office of Construction and Real Estate Management

VA FORM 08-6231

three inches = one foot 6" 0
one and one half inches = one foot 1 6" 0
one inch = one foot 2 6" 0
three quarters inch = one foot 2 6" 0
one half inch = one foot 4 0
three eighths inch = one foot 4 0
one quarter inch = one foot 8 0
one eighth inch = one foot 16 8 4 0
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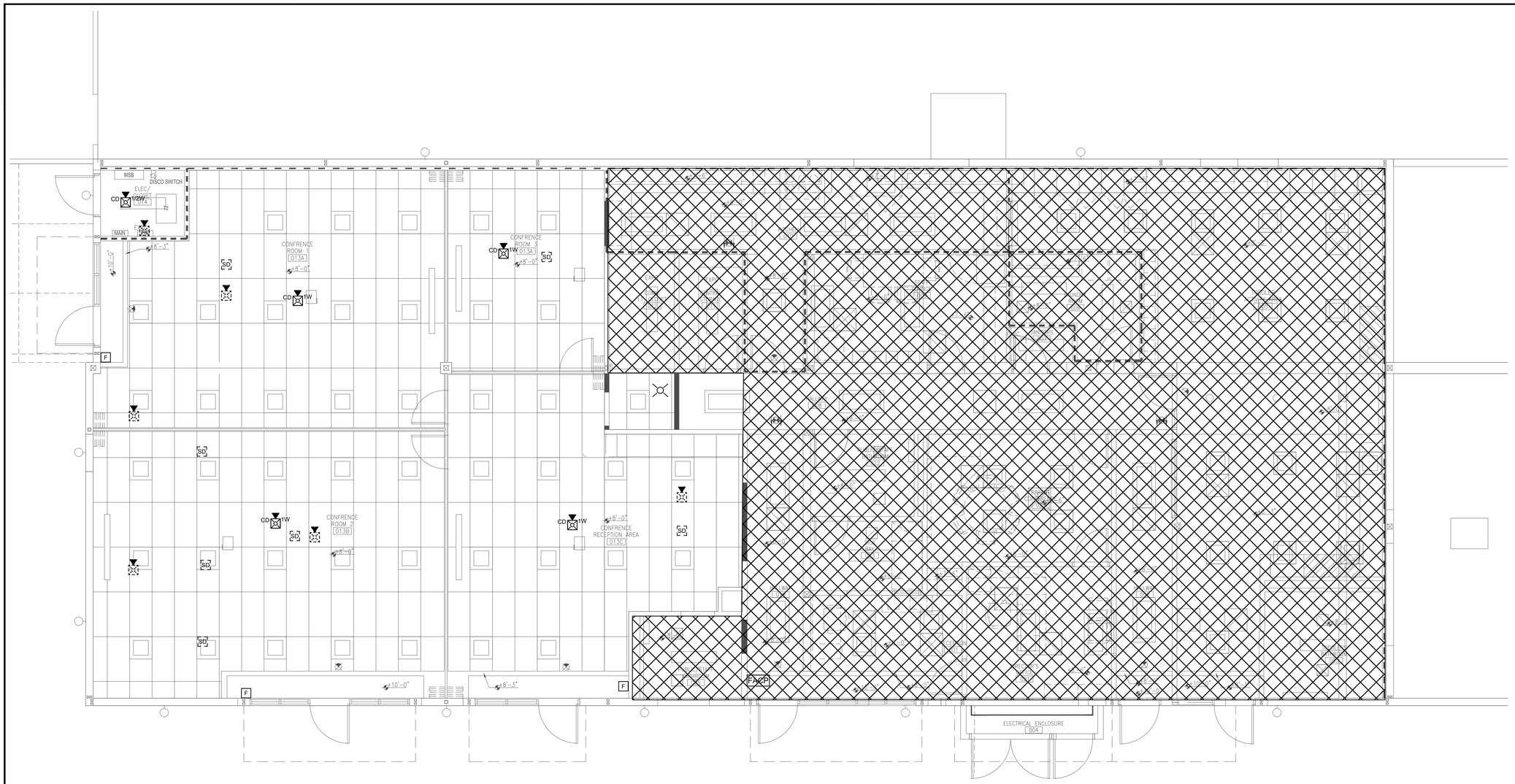

1 FA101 FIRE ALARM PLAN

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

1/4"=1'-0" 0 1 2 3 4 6 8 12

SHEET NOTES

1. ALL EXISTING FIRE ALARM COMPONENTS WITHIN THE SCOPE SHALL BE DEMOLISHED OR RELOCATED DURING THE PROJECT SUCH THAT THE SYSTEM REMAINS IN SERVICE IN AREAS THAT ARE NOT IN CONSTRUCTION. NEW DEVICES SHALL BE TIED INTO THE EXISTING FIRE ALARM SYSTEM. PROGRAMING MODIFICATIONS FOR A FULLY OPERATIONAL SYSTEM IN ACCORDANCE WITH NFPA 72 SHALL BE PROVIDED.
2. EXISTING FIRE ALARM PANELS AND BOOSTER PANELS ARE NOT SHOWN ON THE DRAWINGS, HOWEVER ALL DEVICES AND APPLIANCES SHALL BE CONNECTED TO THE APPROPRIATE EQUIPMENT AS REQUIRED.
3. CONTRACTOR TO COORDINATE WITH MECHANICAL AND ELECTRICAL FOR FIRE ALARM DEVICE PLACEMENT.

SYMBOLS LEGEND

- AREA NOT IN SCOPE
- F — NEW MANUAL PULL STATION, MOUNTED 48" AFF TO TOP
- CD 1W — NEW COMBINATION SPEAKER / VISUAL, CEILING-MOUNT
- NEW STROBE ONLY, CEILING-MOUNT
- SD — DEMO EXISTING SMOKE DETECTOR
- DEMO EXISTING FIRE ALARM NOTIFICATION DEVICE

Revisions	Date
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CONSULTANTS:

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REGISTERED PROFESSIONAL ENGINEER WILLIAM BARNSLEY FLETCHER FIRE PROTECTION STATE OF CALIFORNIA FP 2051

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Drawing Title: FIRE ALARM PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JB | Drawn: WF

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. 646

Drawing Number: FA101

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Office of Construction and Real Estate Management

VA FORM 08-6231

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three inches = one foot; one and one half inches = one foot; one inch = one foot; three quarters inch = one foot; one half inch = one foot; three eighths inch = one foot; one quarter inch = one foot; one eighth inch = one foot

FIRE PROTECTION NOTES:

1. APPLICALBLE CODES AND STANDARDS

DEPARTMENT OF VETERAN'S AFFAIRS (VA):

VA	FIRE PROTECTION DESIGN GUIDE

NATIONAL FIRE CODES, NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS INCLUDING:

NFPA 1	UNIFORM FIRE CODE, 2022 EDITION
NFPA 10	PORTABLE FIRE EXTINGUISHERS, 2021 EDITION
NFPA 13	SPRINKLER SYSTEMS, 2019 EDITION
NFPA 70	NATIONAL ELECTRICAL CODE, 2020 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE, 2019 EDITION
NFPA 101	LIFE SAFETY CODE, 2021 EDITION

INTERNATIONAL BUILDING CODES:

IBC	INTERNATIONAL BUILDING CODE, 2021 EDITION

SCOPE OF WORK: MODIFICATION OF EXISTING FIRE SPRINKLER SYSTEM WITHIN THE RENOVATED SPACE. MODIFICATIONS MAY INCLUDE DEMOLITION, RELOCATION AND/OR ADDITION OF SPRINKLER HEADS AND PIPING AS REQUIRED BY PROJECT SPECIFICATIONS, RFP, AND ALL RELEVANT CODES AND STANDARDS DUE TO NEW WALL AND CEILING LAYOUTS. SPRINKLER PROTECTION SHALL BE PROVIDED ABOVE DROPPED CEILINGS WITH COMBUSTIBLE CONSTRUCTION.

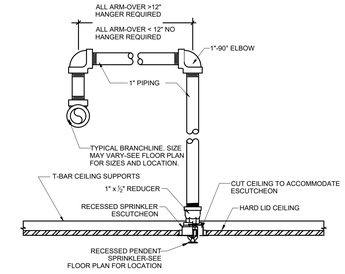
1. THE SPRINKLER SYSTEM DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE VA FIRE PROTECTION DESIGN MANUAL, NFPA 13-2019 AND SPECIFICATION SECTION 21 13 13.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SPRINKLER SYSTEM COMPONENTS AND COORDINATE WITH THE VARIOUS TRADES, I.E. FIRE ALARM, ELECTRICAL, ETC.
3. DRAWINGS ARE INTENDED TO BE DIAGRAMMATIC AND REFLECT EXISTING CONDITIONS THAT WERE ABLE TO BE OBSERVED BY THE DESIGN TEAM. DUE TO DIAGRAMMATIC NATURE OF THE CONTRACT DOCUMENTS, THEY DO NOT REVEAL ALL OFFSETS, BENDS, ELBOWS, COMPONENTS, MATERIALS, AND OTHER SPECIFIC ELEMENTS THAT MAY BE REQUIRED FOR PROPER INSTALLATION. THE CONTRACT DOCUMENTS ARE NOT INTENDED TO SHOW EVERY PIPE AND FITTING IN ITS EXACT DIMENSIONS, OR DETAILS OF EQUIPMENT OR PROPOSED SYSTEMS LAYOUT. VERIFY ACTUAL DIMENSIONS OF SYSTEMS AND EQUIPMENT AND ROUTING OF CONDUIT, PIPE, DUCTWORK, CABLE TRAY PROPOSED PRIOR TO BIDDING TO ASSURE THAT SYSTEMS AND EQUIPMENT WILL FIT IN AVAILABLE SPACE. IF ANY DEPARTURE FROM THE CONTRACT DOCUMENTS IS DEEMED NECESSARY, OR IN THE EVENT OF CONFLICTS, THE CONTRACTOR SHALL SUBMIT DETAILS OF SUCH DEPARTURES OR CONFLICTS IN WRITING TO THE OWNER FOR REVIEW, COMMENT AND APPROVAL BEFORE INITIATING WORK. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION COSTS INCURRED FOR ITEMS THAT ARE NOT VERIFIED PRIOR TO BIDDING.
4. ALL DEVICES AND EQUIPMENT SHALL BE UL LISTED AND FM APPROVED.
5. AUTOMATIC WET PIPE SPRINKLER PROTECTION SHALL BE PROVIDED THROUGHOUT THE AREA OF WORK.
6. NEW PIPING SHALL BE PROVIDED WITH SEISMIC PROTECTION IN ACCORDANCE WITH NFPA 13. BRANCH LINES SHALL BE RESTRAINED IN ACCORDANCE WITH NFPA 13.
7. SPRINKLER PIPING SHALL BE IN ACCORDANCE WITH NFPA 13. ALL PIPING AND FITTINGS SHALL BE BLACK STEEL. PIPE SIZES LESS THAN 2.5 INCHES SHALL BE SCHEDULE 40, ALL OTHER PIPING SHALL BE MINIMUM SCHEDULE 10. CPVC AND COPPER PIPING SHALL NOT BE PERMITTED.
8. THE SPRINKLER DESIGN INDICATED ON THE DRAWINGS IS CONCEPTUAL AND SHOULD NOT BE INTERPRETED TO DEPICT A COMPLETE LAYOUT OF THE SPRINKLER SYSTEM. SPRINKLER HEAD LOCATIONS SHALL NOT BE ALTERED EXCEPT WITH THE APPROVAL OF THE ARCHITECT AND ENGINEER. THE CONTRACTOR SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THE APPLICABLE CODES, SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS, AND EQUIPMENT LISTINGS.
9. CONSTRUCTION DOCUMENTS CONSIST OF DESIGN DRAWINGS AND WRITTEN SPECIFICATIONS. WHEREVER DISCREPANCIES OR CONFLICTS ARE FOUND BETWEEN DWG AND SPEC, THE MORE STRINGENT REQUIREMENTS/CRITERIA SHALL GOVERN
10. IT IS RECOMMENDED THAT BIDDERS SHALL VISIT THE PREMISES AND THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL DETAILS OF WORK AND WORKING CONDITIONS BEFORE SUBMITTING THEIR BID. REASONABLE MODIFICATIONS IN LOCATION AND ARRANGEMENTS TO SUIT JOB CONDITIONS SHALL NOT CONSTITUTE BASIS FOR REQUESTING OF ADDITIONAL FUNDS FROM THE VA.
11. PRIOR TO ORDERING MATERIALS AND PROCURING EQUIPMENT, SUCCESSFUL BIDDER (CONTRACTOR) SHALL BE REQUIRED TO VERIFY ALL EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO EQUIPMENT, MATERIALS, SIZES, DIMENSIONS, AND OBSTRUCTIONS THAT AFFECT THIS WORK. SUBMIT A LETTER TO THE ENGINEER CONFIRMING THAT THIS WAS DONE. IF WRITTEN CONFIRMATION IS NOT RECEIVED BY THE ENGINEER, SHOP DRAWINGS AND OTHER SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. SHOW ALL DISCREPANCIES ON SHOP DRAWINGS AND NOTIFY THE ENGINEER IN WRITING OF SUCH DISCREPANCIES PRIOR TO PROCUREMENT.
12. FIRE SPRINKLER HEADS AND PIPING INDICATED ON FLOOR PLANS ARE INTENDED TO SHOW GENERAL ROUTING OF PIPING AND TO PROVIDE CONTROL OF CEILING APPEARANCE. THEY SHOULD NOT BE INTERPRETED TO MEAN COMPLETE LAYOUT OF SPRINKLER SYSTEM. FIRE SPRINKLER HEAD LOCATIONS SHALL NOT BE ALTERED EXCEPT WITH THE APPROVAL OF THE ARCHITECT AND ENGINEER.
13. PROVIDE SPARE SPRINKLER HEADS, PROPER STOPPERS, AND SPECIAL SPRINKLER WRENCH STORED IN A METAL CABINET IN A LOCATION TO BE DETERMINED BY THE VA. SPRINKLER WRENCH TO BE USED IN THE REMOVAL AND INSTALLATION OF SPRINKLER HEADS PER NFPA 13.
14. DESIGN SHALL BE BY A NICET LEVEL III OR IV TECHNICIAN OR A REGISTERED FIRE PROTECTION ENGINEER. INSTALLATION SHALL BE PERFORMED BY A CERTIFIED SPRINKLER CONTRACTOR OR A SPECIALIST WHO IS EXPERIENCED IN THE DESIGN AND INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS. THE SYSTEM SHALL BE HYDRAULICALLY CALCULATED.
15. LOCATION OF SPRINKLER HEADS: THE SPACING OF SPRINKLER HEADS SHALL NOT EXCEED THAT PERMITTED BY NFPA 13 FOR THE HAZARD OCCUPANCY.
16. FITTINGS INTO WHICH SPRINKLER HEADS, SPRINKLER HEAD RISER NIPPLES, OR DROP NIPPLES SHALL BE WELDED, THREADED, OR GROOVED-END TYPE. PLAIN END FITTINGS SHALL NOT BE PERMITTED. RUBBER GASKETED GROOVED-END PIPE AND FITTINGS WITH MECHANICAL COUPLINGS SHALL BE PERMITTED IN PIPE SIZES 2 INCHES AND LARGER. FITTINGS SHALL BE UL LISTED OR FM APPROVED FOR USE IN SPRINKLER SYSTEMS.
17. PIPE AND HANGER SUPPORTS: PROVIDE PIPE SUPPORTS, SWAY BRACES, HANGERS, AND CLAMPS IN ACCORDANCE WITH NFPA 13.
18. BRANCH OUTLET FITTINGS: USE WELDED, THREADED OR GROOVED OUTLETS ONLY. MECHANICAL FASTENED TEES ARE NOT PERMITTED. WHERE WELDED OUTLETS ARE USED, CUTOUTS SHALL BE FASTENED TO THE PIPE FROM WHICH THEY ARE CUT.
19. SPRINKLER HEADS LOCATED IN DROP CEILING TILES SHALL NOT HAVE OVERSIZED ESCUTCHEONS. SPRINKLERS SHALL BE PROVIDED ABOVE DROPPED CEILINGS UNLESS ONE OF THE ACCEPTABLE OMISSIONS IS UTILIZED IN ACCORDANCE WITH NFPA 13 SECTION 9.3.14.
20. ALL SPRINKLER HEADS WITHIN SCOPE OF WORK AREA SHALL BE REMOVED AND REPLACED WITH QUICK RESPONSE TYPE SPRINKLERS UNLESS OTHERWISE NOTED ON THE PLANS.
21. USE OF CONCEALED SPRINKLER HEADS IS STRICTLY PROHIBITED IN VETERAN'S AFFAIRS FACILITIES.
22. PROVIDE HANGERS AT EACH SPRINKLER DROP TO PREVENT PIPE DEFLECTION.
23. THE MINIMUM DISTANCE ABOVE FINISHED FLOOR OF ALL SPRINKLER SYSTEM COMPONENTS SHALL BE 7'-0". SPRINKLERS SHALL BE PROVIDED WITH 18 INCHES OF VERTICAL CLEAR HEIGHT FROM OBSTRUCTIONS OR RACKS BELOW.

FIRE SPRINK SYMBOLS:

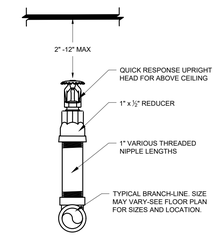
N — NEW BRANCHLINE WITH QUICK-RESPONSE SPRINKLER

RELOCATED ARM-OVER WITH NEW QUICK-RESPONSE SPRINKLER

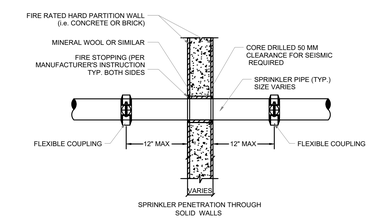
R — EXISTING SPRINKLER HEAD TO BE REPLACED AND RELOCATED



ARMOVER RECESSED PENDENT SPRINKLER (2)
SCALE: NTS



UPRIGHT SPRINKLER (3)
SCALE: NTS



FIRE STOP FRANGIBLE AND SOLID WALL (4)
SCALE: NTS

CONSTRUCTION DOCUMENTS

Revisions	Date
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Drawing Title: FIRE SPRINKLER PLAN - GENERAL NOTES

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	JB	WF

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: FS001

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1 FS101 FIRE SPRINKLER PLAN

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

1/4"=1'-0" 0 1 2 3 4 6 8 12

SHEET NOTES

1. THE PROJECT INVOLVES MODIFICATIONS TO THE EXISTING SYSTEM WITHIN THE TYPE V-B BUILDING OF COMBUSTIBLE CONSTRUCTION. AS SUCH, SPRINKLER PROTECTION IS REQUIRED ABOVE AND BELOW THE CEILING PER NFPA 13. ALTHOUGH NOT SHOWN ON THE PLANS, PROVIDE ABOVE CEILING SPRINKLER HEADS TO COMPLY WITH LIGHT HAZARD SPACING UNLESS UTILIZING ONE OF THE OMISSIONS ALLOWED BY NFPA 13 SECTION 9.3.14.
2. EXISTING RISERS, MAINS, AND CONTROL ASSEMBLIES ARE TO REMAIN.
3. THE FDC AND 4" RISER ARE LOCATED TO THE NORTH OF THE PAGE AT COLUMN LINES 4 AND B.

SYMBOLS LEGEND

- AREA NOT IN SCOPE
- N — NEW BRANCHLINE WITH QUICK-RESPONSE SPRINKLER
- RELOCATED ARM-OVER WITH NEW QUICK-RESPONSE SPRINKLER
- R — EXISTING SPRINKLER HEAD TO BE REPLACED AND RELOCATED

DESIGN CRITERIA

LIGHT HAZARD: CONFERENCE ROOMS, RECEPTION AREA, RESTROOMS, COMBUSTIBLE CONSTRUCTION ABOVE CEILING.

- 0.10 GPM/SQ.FT OVER 1,500 SQ.FT
- HOSE STREAM ALLOWANCE - 100 GPM
- SPRINKLER SPACING TO COMPLY WITH LIGHT HAZARD REQUIREMENTS, MAX 225 SQ. FT. COVERAGE AREA PER SPRINKLER

Revisions	Date
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MASONRY

1. ALL MASONRY CONSTRUCTION SHALL CONFORM WITH CHAPTER 21 OF THE CODE AND THE PROVISIONS OF TMS 602/ACI 530.1/ASCE 6, "SPECIFICATION FOR MASONRY STRUCTURES"
2. CONCRETE BLOCK SHALL BE HOLLOW LOAD-BEARING CONCRETE MASONRY UNITS CONFIRMING TO ASTM C-90, MEDIUM WEIGHT UNITS. CONCRETE MASONRY UNITS SHALL MEET THE FOLLOWING REQUIREMENTS:
   A. PROVIDE STRUCTURAL UNIT MASONRY THAT DEVELOPS SPECIFIED NET-AREA COMPRESSIVE STRENGTH OF MASONRY, f'm AT 28 DAYS.
   B. VERIFY NET-AREA COMPRESSIVE STRENGTH OF MASONRY FROM AVERAGE NET-AREA COMPRESSIVE STRENGTHS OF MASONRY UNITS AND MORTAR TYPE (UNIT STRENGTH METHOD) AS FOLLOWS:

SPECIFIED MASONRY NET-AREA COMPRESSIVE STRENGTH, f'm	CMU NET-AREA COMPRESSIVE STRENGTH	GROUT STRENGTH	MORTAR TYPE
2,000 PSI	2,000 PSI	2,000 PSI	S

3. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE. MASONRY CEMENT SHALL NOT BE USED.
4. REINFORCING BARS: SEE NOTES UNDER "REINFORCING STEEL" FOR REQUIREMENTS.
5. ALL CELLS SHALL BE GROUTED SOLID, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
6. USE RUNNING BOND PATTERN UNLESS NOTED OTHERWISE BY THE ARCHITECT. USE UNITS WITH OPEN ENDS WHERE STACK BOND PATTERN IS SPECIFIED.
7. ADMIXTURES SHALL NOT BE USED IN GROUT EXCEPT BY SPECIFIC CONSENT OF ARCHITECT.
8. PROVIDE A MINIMUM OF 1/2" CLEAR BETWEEN MAIN REINFORCING AND MASONRY UNITS.
9. EMBEDDED ITEMS IN CMU: DO NOT EMBED PIPES IN CMU EXCEPT WHERE SPECIFICALLY DETAILED. VERTICAL CONDUITS MAY BE EMBEDDED IF THE FOLLOWING CONDITIONS ARE MET:
   A. CONDUITS ARE < 3/4" IN DIAMETER.
   B. CONDUITS ARE NOT PLACED IN A CELL WITH REINFORCEMENT.
   C. CONDUITS ARE A MINIMUM OF 24" FROM JAMB/END REINFORCEMENT.
   D. CELLS WITH CONDUITS ARE SPACED 32" OC MIN.
   (2) MAX PER UNREINFORCED CELL, 3 DIAMETERS (MIN) O.C.
10. PROVIDE 1" GROUT OR 1/2" MORTAR AROUND REINFORCING STEEL, ANCHOR BOLTS, INSERTS, ETC PENETRATING MASONRY SHELL.
11. MECHANICALLY VIBRATE GROUT IN CELLS.

HEADED STUDS

1. ALL HEADED STUDS WELDED TO BEAMS OR CONCRETE CONNECTIONS SHALL BE "NELSON STUD" PER ICC ESR-2856 REPORT OR APPROVED EQUAL.
2. ALL HEADED STUDS SHALL BE AUTOMATICALLY END WELDED IN SHOP OR FIELD WITH EQUIPMENT RECOMMENDED BY MANUFACTURER OF STUDS.
3. HEADED STUD MATERIAL, WELDING AND INSPECTION, SHALL BE IN ACCORDANCE WITH AWS "STRUCTURAL WELDING CODE", D1.1 LATEST EDITION. PROVIDE STUDS 3/4" DIAMETER BY 5" LONG SPACED AT 12" OC MAXIMUM, AT ALL STEEL BEAMS WITH CONCRETE OVER METAL DECK UNLESS A LARGER NUMBER OF STUDS OR DIFFERENT SIZE STUD OR LENGTH IS NOTED ON THE DRAWINGS.

FOUNDATION

1. FOUNDATION DESIGN BASED ON INFORMATION CONTAINED IN RECORD DRAWINGS BY INSIGHT STRUCTURAL ENGINEERS DATED 10/05/12 FOR "VA LONG BEACH MEDICAL CENTER CHILD CARE CENTER EXPANSION". SOILS REPORT NOTED IS CURRENTLY UNAVAILABLE ("REPORT OF LIMITED GEOTECHNICAL EXPLORATION PROPOSED CHILD CARE BUILDING RENOVATION, VA MEDICAL CENTER", BY TWINING LABORATORIES, PROJECT NO. 100398.1, DATED 7/27/10)
2. FOUNDATIONS AND SLABS-ON-GRADE SHALL BEAR ON FIRM NATURAL SOIL OR COMPACTED FILL. ALL UNSUITABLE SOILS SHALL BE REMOVED AND RECOMPACTED UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS/HER REPRESENTATIVE. REFER TO THE GEOTECHNICAL REPORT AND PROJECT SPECIFICATIONS FOR EXTENT OF REMOVAL AND COMPACTION REQUIREMENTS.
3. FOOTINGS ARE DESIGNED BASED ON THE FOLLOWING INFORMATION:
   ALLOWABLE BEARING(*) = 1,200 PSF (MIN 12" WIDE & MIN 12" EMBED BELOW GRADE)
   * ALLOWABLE BEARING MAY BE INCREASED BY 150 PSF FOR EACH ADDITIONAL FOOT OF WIDTH & 400 PSF FOR EACH ADDITIONAL FOOT OF EMBEDMENT, UP TO 2,000 PSF MAX.
4. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING. CONTRACTOR TO NOTIFY THE SOILS ENGINEER WHEN INSPECTION OF EXCAVATION IS READY. SOILS ENGINEER TO SUBMIT LETTER OF COMPLIANCE.
5. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH. BRACE OR PROTECT ALL BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHING FLOORS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH. CON TRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.
6. FOOTING BACKFILL AND UTILITY BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE SOILS REPORT AND APPROVED BY THE SOILS ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER REPRESENTATIVE.
7. REMOVE ALL ABANDONED FOOTINGS, UTILITIES, ETC.
8. PLACE A MOISTURE BARRIER MEMBRANE OVER SAND AND GRAVEL BASE UNDER SLABS-ON-GRADE PER THE GEOTECHNICAL REPORT, OR AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.

STRUCTURAL STEEL

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (LATEST EDITION), AND WITH CHAPTER 22 OF THE CODE AND THE FOLLOWING REFERENCES:

A. AISC 303 – "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
B. AISC 360 – "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS"
C. AISC 341 – "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS" FOR MEMBERS OF THE SEISMIC FORCE RESISTING SYSTEM (SFRS)
D. RCSC's – "SPECIFICATIONS FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS"

2. COMPLY WITH THE FOLLOWING PROVISIONS FOR ALL WELDED JOINTS:
   A. AWS D1.1 – "STRUCTURAL STEEL WELDING CODE"
   B. AWS D1.8 – "SEISMIC SUPPLEMENT" FOR CONNECTIONS OF THE SEISMIC FORCE RESISTING SYSTEM (SFRS)
3. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (UNO):

	ASTM SPECIFICATION
W SHAPES AND WT SHAPES	A992 OR A913, GR 50 (S75)
ANGLES & CHANNELS	A36
PLATES & BARS	A36 A572, GR 50 (WHERE INDICATED)
PIPE SECTIONS	A53, GR B
HSS SECTIONS	A500 GR B A1085 (WHERE INDICATED)
HIGH STRENGTH BOLTS (AS INDICATED IN DETAILS)	A325 OR F1582 (TWIST-OFF TYPE) A490 OR F2280 (TWIST-OFF TYPE)
ANCHOR RODS	F1554 GR 55 F1554 GR 36/105 (WHERE INDICATED)
COMMON/MACHINE BOLTS	A307, GR A
SHEAR CONNECTORS	A108, GRADES 1015 TROUGH 1020 AWS D1.1, TYPE B

4. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS TO THE ARCHITECT OF ALL STEEL FOR ARCHITECTS AND STRUCTURAL ENGINEERS FOR REVIEW AND APPROVAL BEFORE FABRICATION.
5. BOLT HOLES USED IN STEEL SURFACES THAT ARE ENCASED IN CONCRETE OR MASONRY OR SPRAY ON FIREPROOFING SHALL BE LEFT UNPAINTED.
6. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX ELECTRODES (UNO). ALL WELDS SHALL BE IN CONFORMITY WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1 LATEST EDITION) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTION SECTION FOR WELDING INSPECTION REQUIREMENTS.
7. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN AISC 360 SECTION J2.2b.
8. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. PROTECT FIELD WELDS EXPOSED TO THE WEATHER VIA PRIME AND PAINT OR BRUSH/COLD GALVANIZING. REFER TO ARCHITECTURAL DRAWINGS FOR STEEL FINISH.
9. DO NOT CUT OR DAMAGE EXISTING REINFORCEMENT. PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED TO REINFORCED CONCRETE/MASONRY USING POST-INSTALLED ANCHORS, LOCATE ALL REINFORCEMENT AND CONFIRM CONSTRUCTABILITY OF ANCHOR LOCATIONS. SHOULD CONFLICTS WITH REINFORCEMENT OCCUR, SUBMIT ALTERNATE ANCHOR LOCATIONS AND REVISED STEEL FABRICATIONS TO ARCHITECT FOR REVIEW AND APPROVAL.
10. THE USE OF E70T-4 WELDING WIRE IS NOT ALLOWED FOR ANY APPLICATION. ALL WELD FILLER METAL SHALL BE OF THE LOW HYDROGEN TYPE.
11. WRITTEN WELDING PROCEDURE SPECIFICATIONS (WPS) PER THE RECOMMENDATION OF THE AMERICAN WELDING SOCIETY (AWS) SHALL BE DEVELOPED BY THE FABRICATOR/ERECTOR AND SUBMITTED FOR REVIEW TO THE ENGINEER PRIOR TO ANY WELDING OF THE STRUCTURAL STEEL. THE WELDING PROCEDURES SHALL INCLUDE ALL THE WELDED JOINTS AND CONFIGURATIONS TO BE USED ON THIS PROJECT-ONLY WPS WHICH ARE RELEVANT TO THIS PROJECT SHALL BE SUBMITTED. ALL WELDED JOINTS SHALL BE PREQUALIFIED PER AWS OR BE QUALIFIED BY TEST PER AWS. A PROCEDURE QUALIFICATION RECORD (PQR) SHALL BE INCLUDED WITH THE WPS IF THE WELDING PROCEDURE OR JOINT IS QUALIFIED BY TESTING. THE ELECTRODE MANUFACTURER AND PRODUCT/TRADE NAME SHALL BE IDENTIFIED IN THE WPS IN ADDITION TO THE AWS ELECTRODE CLASSIFICATION NAME. A COPY OF THE ELECTRODE MANUFACTURER'S TECHNICAL DATA SHEETS WITH THE RECOMMENDED WELDING PARAMETERS SHALL BE SUBMITTED WITH THE WPS.

CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19 OF THE CODE AND WITH THE PROVISIONS OF ACI 318, LATEST EDITION.
2. REINFORCED CONCRETE IS DESIGNED BY THE "ULTIMATE STRENGTH DESIGN METHOD".
3. CONCRETE MIXTURES SHALL BE DESIGNED BY THE APPROVED TESTING LABORATORY AND REVIEWED BY THE STRUCTURAL ENGINEER. THE COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE PROPORTIONED BASED AS INDICATED ON ACI 318, LATEST EDITION.
4. SCHEDULE OF STRUCTURAL CONCRETE 28-DAY STRENGTH AND TYPES

LOCATIONS IN STRUCTURE	STRENGTH (PSI)	DENSITY (PCF)	MAX W/C RATIO
FOOTINGS AND FOUNDATION WALLS	4,000	145	0.45
SLAB ON GRADE	3,000	145	0.45

5. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT AND IN MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT.
6. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II, OR AS REQUIRED BY THE GEOTECHNICAL REPORT AND PROJECT SPECIFICATIONS.
7. AGGREGATE FOR HARDROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS.
8. CONCRETE MIXING OPERATIONS, ETC. SHALL CONFORM TO ASTM C-94..
9. PLACEMENT OF CONCRETE SHALL CONFORM TO THE CODE CHAPTER 19 AND PROJECT SPECIFICATIONS. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED.
10. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS, INCLUDING PIPES AND CONDUITS, SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
11. PROVIDE SLEEVES FOR PIPES AND CONDUITS PASSING THROUGH CONCRETE MEMBERS INCLUDING CONCRETE OVER METAL DECK BEFORE PLACING. DO NOT CUT REINFORCING WHICH MAY CONFLICT. SLEEVES SHALL NOT EXCEED 6-INCHES IN DIAMETER AND BE SPACED A MINIMUM OF 3 DIAMETERS APART FROM OTHER SLEEVES USING THE LARGER SLEEVE DIAMETER, OR AS INDICATED ON THE DRAWINGS. CLUSTERS OF SLEEVES ARE NOT PERMITTED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
12. CONDUITS LARGER THAN 1 1/2" DIAMETER SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY STRUCTURAL ENGINEER. CONDUITS SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS. DO NOT STACK CONDUITS. SPACE EMBEDDED CONDUITS A MINIMUM OF 3 DIAMETERS CLEAR FROM OTHER EMBEDDED CONDUITS USING THE LARGER CONDUIT DIAMETER, AND 1 1/2" CLEAR FROM REINFORCING BARS. NO CONDUITS SHALL BE PLACED IN CONCRETE FILL OVER METAL DECK. EMBEDDED CONDUITS SHALL BE PLACE IN THE MIDDLE THIRD OF SLABS, BEAMS, WALLS, FOOTINGS, ETC. CLUSTERS OF CONDUITS ARE NOT PERMITTED WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
13. PIPES ARE NOT PERMITTED TO BE EMBEDDED IN CONCRETE.

INTENDED USE OF DRAWINGS

THESE SCHEMATIC DESIGN DRAWINGS ARE INTENDED FOR PRELIMINARY COST ESTIMATING, OWNER REVIEW, AND OVERALL DESIGN TEAM COORDINATION. DRAWINGS ARE NOT INTENDED FOR:

1. PLAN REVIEW OR PERMITTING
2. BASIS OF SUBMITTAL OR SHOP DRAWING PREPARATION
3. PROCUREMENT OF MATERIALS OR HARD BIDDING OF CONSTRUCTION CONTRACTS.

REINFORCING STEEL

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19 OF THE CODE, ASTM 706, GRADE 60 (UNO). DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A-305.
2. BARS SHALL BE CLEAN OF RUST GREASE OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. DETAIL, FABRICATE, AND INSTALL REINFORCING IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 301, ACI 117, AND THE "CRSI MANUAL OF STANDARD PRACTICE."
4. REINFORCING BAR SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN MASONRY SHALL BE 72 BAR DIAMETERS, 36" MINIMUM. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE AS REQUIRED FOR CLASS B SPLICE PER ACI 318 SECTION 25.5.2 UNO. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS.
5. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
6. WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER. IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING E90XX OR APPROVED ELECTRODES. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF STRUCTURAL WELDING CODE REINFORCING STEEL AWS-D1.4 LATEST REVISION. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-706.
7. BARS IN SLABS SHALL BE SECURELY SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, PRIOR TO PLACING CONCRETE.
8. COMPLETE AND DETAILED REINFORCING PLACEMENT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE CODES. THESE DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO PLACING OF CONCRETE.
9. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED PRIOR TO PLACEMENT OF CONCRETE.
10. CONTINUOUS INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT SLEEVES AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OF REINFORCING STEEL.
11. CONCRETE PROTECTION FOR REINFORCEMENT:
    CAST-IN-PLACE CONCRETE: THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

	MINIMUM COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 & LARGER	2"
#5 & SMALLER	1 1/2"
SLABS, WALLS, OR JOISTS NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND	
#14 & LARGER	1 1/2"
#11 & SMALLER	3/4"

STRUCTURAL OBSERVATIONS

1. STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD OR DESIGNEE IN ACCORDANCE WITH SECTION 1704.6 OF THE CODE.
2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATION. STRUCTURAL OBSERVATION DOES NOT WAVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE CITY OR DEPUTY INSPECTORS.
3. THE CONTRACTOR SHALL COORDINATE AND CALL FOR A PRE-CONSTRUCTION MEETING BETWEEN THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN. STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTORS, PROJECT INSPECTOR. THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY THE MAJOR STRUCTURAL ELEMENTS AND CONNECTIONS THAT AFFECT THE VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS.
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 FOLLOWING SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER.

CONSTRUCTION STAGES	ELEMENTS/CONNECTIONS TO BE OBSERVED
FOUNDATIONS	REINF/CONC/ANCHOR BOLTS
STEEL ERECTION	FRAMING/CONNECTIONS

5. THE STRUCTURAL OBSERVER SHALL PREPARE A REPORT FOR EACH SIGNIFICANT STATE OF CONSTRUCTION OBSERVED. A COPY OF THE OBSERVATION REPORT SHALL BE SENT TO THE OWNER, CONTRACTOR AND INSPECTOR OF RECORD (IOR).

SPECIAL INSPECTIONS

1. THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL HAVE CONTINUOUS INSPECTION BY A PROJECT INSPECTOR APPROVED BY THE VA. REFERENCE SPECIFICATION 014535.
   A. CONCRETE.
   B. BOLTS INSTALLED IN CONCRETE.
   C. PLACING OF REINFORCING STEEL.
   D. ALL STRUCTURAL WELDING, INCLUDING REINFORCING STEEL.
   E. EXPANSION ANCHORS.
   F. EPOXY ANCHORS.
   G. POWDER ACTUATED FASTENERS/SHOT PINS.
   H. HIGH STRENGTH BOLTS.
   I. SEE GEOTECHNICAL ENGINEER'S REPORT FOR SPECIFIC INSPECTION REQUIREMENTS BY A SOILS ENGINEER REPRESENTATIVE.
   J. CONCRETE MASONRY.
2. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704 OF THE CODE AND ANY ADDITIONAL REQUIREMENTS STATED IN THESE DRAWINGS AND/OR THE PROJECT SPECIFICATIONS.

TEST AND INSPECTION REQUIREMENTS

1. TEST AND INSPECTIONS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 17, SECTION 1704 OF THE CODE.
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR CHANGE ORDER APPROVED BY THE VA.
3. A PROJECT INSPECTOR EMPLOYED BY THE OWNER AND APPROVED BY THE VA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24 CALIFORNIA CODE OF REGULATIONS.
4. SEE SPECIFICATION 014529 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS

1. EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613 OF THE CODE
2. Ip = 1.5 FOR ALL NONSTRUCTURAL COMPONENTS
3. EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS, Fp, ARE DETERMINED IN ACCORDANCE WITH ASCE7-16 CHAPTER 13 USING THE VALUE OF Sds FROM DESIGN LOADS NOTE 1
4. THE MAXIMUM AND MINIMUM VALUES FOR Fp SHALL BE DETERMINED FROM ASCE-16 EQUATIONS 13.3-2 AND 13.3-3 RESPECTIVELY
5. ALL EARTHQUAKE LOADS ON NONSTRUCTURAL COMPONENTS SHALL BE BASED ON THE VALUES OF ap AND Rp FROM ASCE7-16 TABLES 13.5-1 AND 13.6-1

GENERAL

1. ALL DRAWINGS, SPECIFICATIONS AND DOCUMENTS ENUMERATED IN THE OWNER/CONTRACTOR AGREEMENT ARE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
2. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES:
   2021 INTERNATIONAL BUILDING CODE (IBC), AND DEPARTMENT OF VETERAN AFFAIRS STADARDS AS FOLLOWS:
   DVA H-18-8 "SEISMIC DESIGN REQUIREMENTS, "NOVEMBER 1, 2019, REVISED MAY 1, 2020;
4. ALL REFERENCED STANDARDS SHALL BE THE VERSION INDICATED IN CHAPTER 35 OF THE CODE.
5. DESIGN OF SUPPORT FRAMING FOR OPERABLE PARTITIONS IS IN ACCORDANCE WITH ASTM E 557.
6. DOCUMENTATION OF EXISTING CONDITIONS AND STRUCTURAL FRAMING SIZES IS BASED ON LIMITED OBSERVATIONS CONDUCTED BY KPFF DURING A SITE VISIT ON 5/4/22 AND RECORD DRAWINGS BY INSIGHT STRUCTURAL ENGINEERS DATED 10/05/12 FOR "VA LONG BEACH MEDICAL CENTER CHILD CARE CENTER EXPANSION". CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AFFECTED BY WORK SHOWN AND NOTIFY ARCHITECT AND SEOR OF ANY DISCREPANCIES.
7. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
   A. SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS, EXCEPT AS NOTED.
   B. SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS UNLESS NOTED AND/OR DETAILED ON THE STRUCTURAL DRAWINGS.
   C. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
   D. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS EXCEPT AS SHOWN.
   E. FLOOR AND ROOF FINISHES.
   F. MISCELLANEOUS DRAINAGE AND WATERPROOFING.
   G. ALL FIREPROOFING REQUIREMENTS INCLUDING FIREPROOFING OF STRUCTURAL STEEL.
   H. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
8. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
   A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
   B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
   C. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES, EXCEPT AS SHOWN OR NOTED.
   D. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
9. THE CONTRACT DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, INCLUDING BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER DO NOT INCLUDE REVIEW OF THE ABOVE ITEMS.
10. OPENINGS, POCKETS, PENETRATIONS, NON-STRUCTURAL EMBEDS, ETC. SHALL NOT BE PLACED IN ANY STRUCTURAL MEMBER EXCEPT AS NOTED OR DETAILED ON THESE DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW SUCH ITEMS PLACED IN A MANNER THAT IS NOT CONSISTENT WITH THE STRUCTURAL DRAWINGS.
12. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED STRENGTH.
13. OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY IDENTIFICATION NUMBER AT LEAST TWO WORKING DAYS BEFORE STARTING WORK WITH THIS PERMIT.
   A. FOR PROJECTS IN SOUTHERN CALIFORNIA TELEPHONE NO. 1-800-422-4133.
   B. FOR PROJECTS IN NORTHERN CALIFORNIA TELEPHONE NO. 1-800-227-2600.
14. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
19. VERIFY THAT THE ACTUAL OPERATING WEIGHT OF ALL EQUIPMENT DOES NOT EXCEED THAT SHOWN ON THE DRAWINGS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO INSTALLATION.

DESIGN LOADS

1. SEISMIC LOADS:
   SEISMIC ANALYSIS ARE IN ACCORDANCE WITH CHAPTER 16 OF THE 2018 IBC AND DEPARTMENT OF VETERAN AFFAIRS "SEISMIC DESIGN REQUIREMENTS H-18-8" DATED NOVEMBER 1, 2019, REVISED MAY 1, 2020.

SEISMIC IMPORTANCE FACTOR	I_e = 1.25
RISK CATEGORY	III
CLASSIFICATION: CRITICAL FACILITY	
MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS	S_S = 1.553 S_1 = 0.560
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS	S_{DS} = 1.035 S_{D1} = 0.650
SEISMIC DESIGN CATEGORY	D
SITE CLASS	D

   SEISMIC FORCE RESISTING SYSTEM:
   R = 6.5 – WOOD STRUCTURAL PANEL SHEAR WALLS
   Ω_0 = 3
   C_d = 4
2. WIND LOADS:
   WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609 OF THE CODE
   RISK CATEGORY: III
   WIND SPEED: V = 101 MPH (3-SECOND GUST, ULTIMATE)
   WIND EXPOSURE: C
   INTERNAL PRESSURE COEFFICIENT: GCpi = +/- 0.18
2. ROOF LIVE LOADS:
   ROOF 20 PSF (NON-REDUCIBLE)

SCHEMATIC DESIGN	6-8-22
DESIGN DEVELOPMENT	8-24-22
95% CONSTRUCTION DOCUMENT	10-7-22
100% CONSTRUCTION DOCUMENT	1-6-23
-	-
-	-
-	-
-	-
-	-
Revisions	Date

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Drawing Title: GENERAL NOTES

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUP

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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WOOD

1. COMPLY WITH THE REQUIREMENTS IN CHAPTER 23 OF THE CODE AND AF&PA'S WCD 1, "DETAILS FOR CONVENTIONAL WOOD FRAME CONSTRUCTION," UNLESS OTHERWISE INDICATED.
2. STUD WALLS SHOWN ON PLANS ARE NONBEARING PARTITIONS WALLS, BEARING WALLS OR SHEAR WALLS BELOW THE FRAMING LEVEL, UNLESS NOTED OTHERWISE. STUDS SHALL BE SIZE AND SPACING AS NOTED IN THE DRAWINGS, SEE PLANS AND ARCHITECTURAL DRAWINGS. UNLESS OTHERWISE NOTED, STUD WALLS SHALL BE 2 X 4 AT 16" OC
3. DIMENSIONAL LUMBER FRAMING:
   A. SPECIES, GRADE, AND MOISTURE CONTENT NOTED BELOW:

DIMENSIONAL LUMBER			
USE	SPECIES	GRADE	MOISTURE CONTENT
LUMBER 2" TO 4" THICK x 5" OR WIDER (JOISTS/RAFTERS)	DOUGLAS FIR-LARCH	#2 & BETTER	KD (15%)
LUMBER 2" TO 3" THICK x 4" TO 6" WIDE (STUDS)	DOUGLAS FIR-LARCH	#2 & BETTER	KD (15%)
LUMBER 5x5 AND GREATER (BEAMS)	DOUGLAS FIR-LARCH	#1	S-DRY (19%)
LUMBER 5x5 AND GREATER (POSTS)	DOUGLAS FIR-LARCH	#1	S-DRY (19%)

4. ENGINEERED WOOD PRODUCTS:
   A. STRUCTURAL COMPOSITE LUMBER MADE FROM WOOD VENEERS WITH GRAIN PRIMARILY PARALLEL TO MEMBER LENGTHS, EVALUATED AND MONITORED ACCORDING TO ASTM D 5456 AND MANUFACTURED WITH AN EXTERIOR-TYPE ADHESIVE COMPLYING WITH ASTM D 2559. PROVIDE PRODUCTS THAT CONFORM TO THE FOLLOWING MINIMUM DESIGN STRESS:

STRUCTURAL COMPOSITE LUMBER			
PRODUCT TYPE & USE	FLEXURAL STRESS, F_b	SHEAR STRESS, F_v	MODULUS OF ELASTICITY
LAMINATED VENEER LUMBER (LVL)	2,600 psi	285 psi	2.0 x 10psi
PARALLEL STRAND LUMBER (PSL)			
BEAM	2,900 psi	290 psi	2.0 x 10psi
COLUMN	2,400 psi	190 psi	1.8 x 10psi
LAMINATED STRAND LUMBER (LSL)			
BEAM	2,325 psi	310 psi	1.55 x 10psi
COLUMN	1,700 psi	425 psi	1.3 x 10psi

5. FASTENERS:
   A. WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, PRESERVATIVE TREATED, FIRE RETARDANT TREATED, OR IN AREA OF HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A 153.
   B. NAILS: ASTM F1667, COMMON TYPE.
6. WOOD CONNECTORS:
   A. PROVIDED BASIS OF DESIGN HANGERS, STRAPS, TIES, HOLD DOWNS, ETC, AS INDICATED ON THE DRAWINGS.
   B. WHERE CONNECTORS ARE IN EXPOSED, EXTERIOR APPLICATIONS OR IN CONTACT WITH PRESERVATIVE TREATED LUMBER, PROVIDE HOT-DIP GALVANIZED OR STAINLESS STEEL CONNECTORS.
7. ALL LUMBER IN 2 HOUR FIRE RATED WALLS AND 3 HOUR FIRE SEPARATION WALLS SHALL USE FIRE RETARDANT TREATED WOOD PER CBC SECTION 2303.2. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL LOCATIONS AND DETAILS.
8. WHERE POSTS OR MULTIPLE STUDS UNDER BEAMS OR HEADERS ARE CALLED FOR ON DRAWINGS THOSE POSTS OR MULTIPLE STUDS SHALL BE CARRIED TO THE FOUNDATION/PODIUM LEVEL U.N.O.
9. JOIST BLOCKING AND BRIDGING:
   A. PROVIDE FULL DEPTH SOLID BLOCKING BETWEEN JOISTS OVER SUPPORT AND BELOW PARTITION WALLS.
   B. PROVIDE FULL DEPTH BRIDGING AT 8'-0" O.C. MAX, NOT MORE THAN 8'-0" FROM SUPPORT.
10. PROVIDE DOUBLE JOISTS UNDER NON-BEARING WALLS RUNNING PARALLEL TO JOISTS.
11. PROVIDE REQUIRED FIRE STOPPING, BACKING FOR INTERIOR FINISHES, NONBEARING WALLS, AND OTHER NON-STRUCTURAL FRAMING THAT ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
12. ALL STRUCTURAL PLYWOOD SHEATHING SHALL BE DOUGLAS FIR STANDARD GRADE STRUCTURAL I WITH EXTERIOR GLUE CONFORMING TO THE LATEST EDITION OF PS1-09. ALL PANELS SHALL BEAR LEGIBLE DFPA STAMPS.
13. ORIENTED STRAND BOARD (OSB) MAY BE SUBSTITUTED FOR PLYWOOD PROVIDED IT HAS THE SAME APA PERFORMANCE STANDARD RATING AND CONTAINS THE SAME NUMBER OF LAYERS AS THE PLYWOOD SPECIFIED.
14. ALL SHEATHING SHALL BE LAID FACE GRAIN PERPENDICULAR TO FRAMING AND SHALL BE APPROVED BY THE BUILDING INSPECTOR BEFORE COVERING.
15. ALL NAILING/SCREWING SHALL CONFORM TO THE APPLICABLE BUILDING CODE AND REGULATIONS.
16. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED AND SHALL BE APPROVED BY THE BUILDING INSPECTOR PRIOR TO COVERING.
17. UNLESS OTHERWISE NOTED, ALL WOOD SILL PLATE UNDER BEARING, EXTERIOR OR SHEAR WALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED AND BOLTED TO CONCRETE OR MASONRY WITH ANCHORS AS INDICATED ON THE DRAWINGS.
18. ALL BOLT HEADS AND NUTS WHICH BEAR AGAINST THE FACE OF WOOD MEMBERS SHALL BE PROVIDED WITH METAL WASHERS (1/4"x3"x3" MIN).
19. ALL 1/2" DIAMETER AND LARGER BOLTS CALLED OUT ON DRAWINGS, INCLUDING ANCHOR BOLTS (A.B.) SHALL HAVE STEEL SQUARE PLATE WASHERS AS LISTED BELOW UNDER THE HEAD AND/OR NUT BEARING ON WOOD. (ALL ANCHOR BOLTS SHALL BE 12" LONG, UNLESS NOTED OTHERWISE.

BOLT DIAMETER	1/2"	5/8"	3/4"	7/8"	1"
WASHER – THICKNESS	1/4"	5/16"	3/8"	7/16"	1/2"
WASHER – WIDTH	2 1/2"	2 3/4"	3"	3 1/2"	4"

20. ALL ANCHOR BOLTS OR ANY OTHER BOLT ANCHORING THE FOUNDATION SILL PLATE SHALL HAVE STEEL SQUARE PLATE WASHERS PER THE BELOW SCHEDULE BETWEEN THE FOUNDATION SILL PLATE AND THE NUT (UNO).

BOLT DIAMETER	1/2"	5/8"	3/4"	7/8"	1"
WASHER – THICKNESS	5/16"	5/16"	3/8"	7/16"	1/2"
WASHER – WIDTH SQUARE	3"	3"	3"	3 1/2"	4"

21. FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG TIE (OR ENGINEER APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. HARDWARE SHALL BE FULLY NAILED FOR MAXIMUM CAPACITY, UNLESS NOTED OTHERWISE.
22. LAG BOLTS (LAG SCREWS): PROVIDE LEAD HOLE 40% – 70% OF THREADED SHANK DIAMETER AND FULL DIAMETER FOR SMOOTH SHANK PORTION.
23. ALL NAILS CONNECTING WOOD MEMBERS SHALL BE COMMON NAILS. MINIMUM NAILING REQUIREMENTS OUTLINED IN TABLE 2304.10.1 SHALL BE FOLLOWED UNLESS OTHERWISE NOTED.
24. RETIGHTEN BOLTS BEFORE CLOSING-IN.
25. ALL HOLD DOWN ANCHORS AND ALL OTHER ANCHORS AND MISCELLANEOUS METAL HANGERS ARE BY SIMPSON OR APPROVED EQUAL.

Revisions	Date
SCHEMATIC DESIGN	6-8-22
DESIGN DEVELOPMENT	8-24-22
95% CONSTRUCTION DOCUMENT	10-7-22
100% CONSTRUCTION DOCUMENT	1-6-23
-	-
-	-
-	-
-	-
-	-

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Drawing Title: GENERAL NOTES

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: MN | Drawn: JR

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

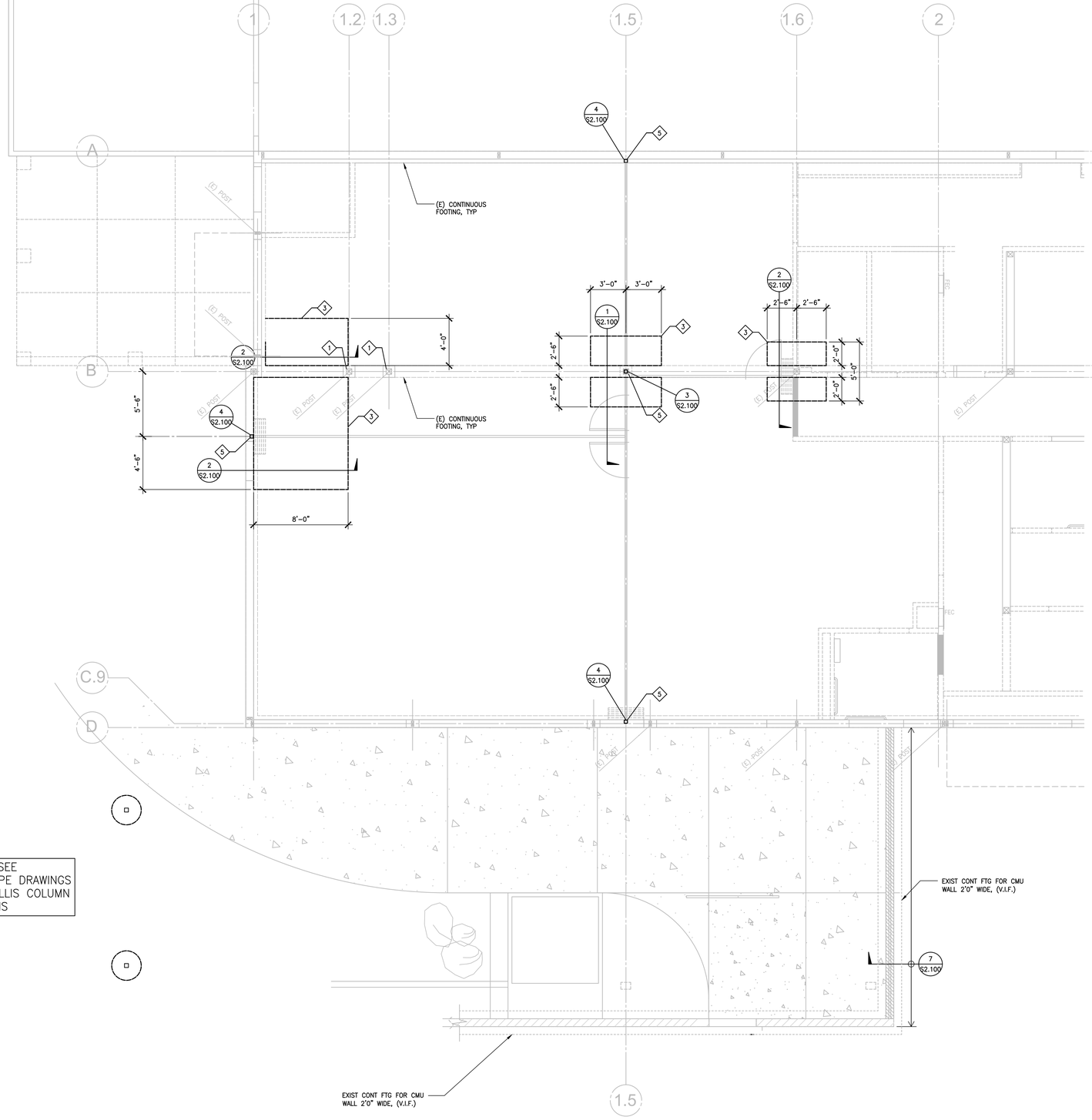
Building Number: BLDG. #46

Drawing Number: S0.101

Dwg. Page 31 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs



1 PARTIAL FOUNDATION PLAN
SCALE: 1/4"=1'-0"

SHEET NOTES

1. SEE GENERAL NOTE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION NOT SHOWN.
3. SEE SHEET S2.100 FOR FOUNDATION DETAILS.
4. SEE SHEET S2.101 – S2.102 FOR FRAMING DETAILS.
5. SEE ARCHITECTURAL ELEVATIONS A3.300 FOR INFORMATION NOT SHOWN

KEYNOTES

1. EXISTING COLUMN TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING REQUIRED UNTIL NEW SUPPORTING ELEMENTS INDICATED ARE INSTALLED.
3. ENLARGEMENT REQUIRED TO ACCOMMODATE INCREASE IN LOADS IMPOSED BY NEW HUNG OPERABLE PARTITION SYSTEMS. MILESTONE. SEE PRICING NOTES 1 & 2.
5. NEW HSS 3 1/2" x 3 1/2" x 1/4" COLUMN.

PRICING NOTES

COST ESTIMATOR SHALL INCLUDE ALLOWANCES FOR:

1. FOUNDATION ENLARGEMENTS NOTED, INCLUDING DEMOLITION AND REPLACEMENT OF SLAB ON GRADE AND EXCAVATION NECESSARY TO ACCESS EXISTING FOOTINGS.
2. DRAWINGS REPRESENT APPROXIMATELY 95% LEVEL OF DEVELOPMENT. COST ESTIMATOR SHALL INCLUDE APPROPRIATE DESIGN AND CONSTRUCTION ALLOWANCES.

SCHEMATIC DESIGN	6-8-22
DESIGN DEVELOPMENT	8-24-22
95% CONSTRUCTION DOCUMENT	10-7-22
100% CONSTRUCTION DOCUMENT	1-6-23
-	-
-	-
-	-
-	-
-	-
Revisions	Date

CONSULTANTS:

REGISTERED PROFESSIONAL ENGINEER MARK J. NADAL S5494 STRUCTURAL STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

Drawing Title: PARTIAL FOUNDATION PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: MN | Drawn: JR

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: S1.100

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CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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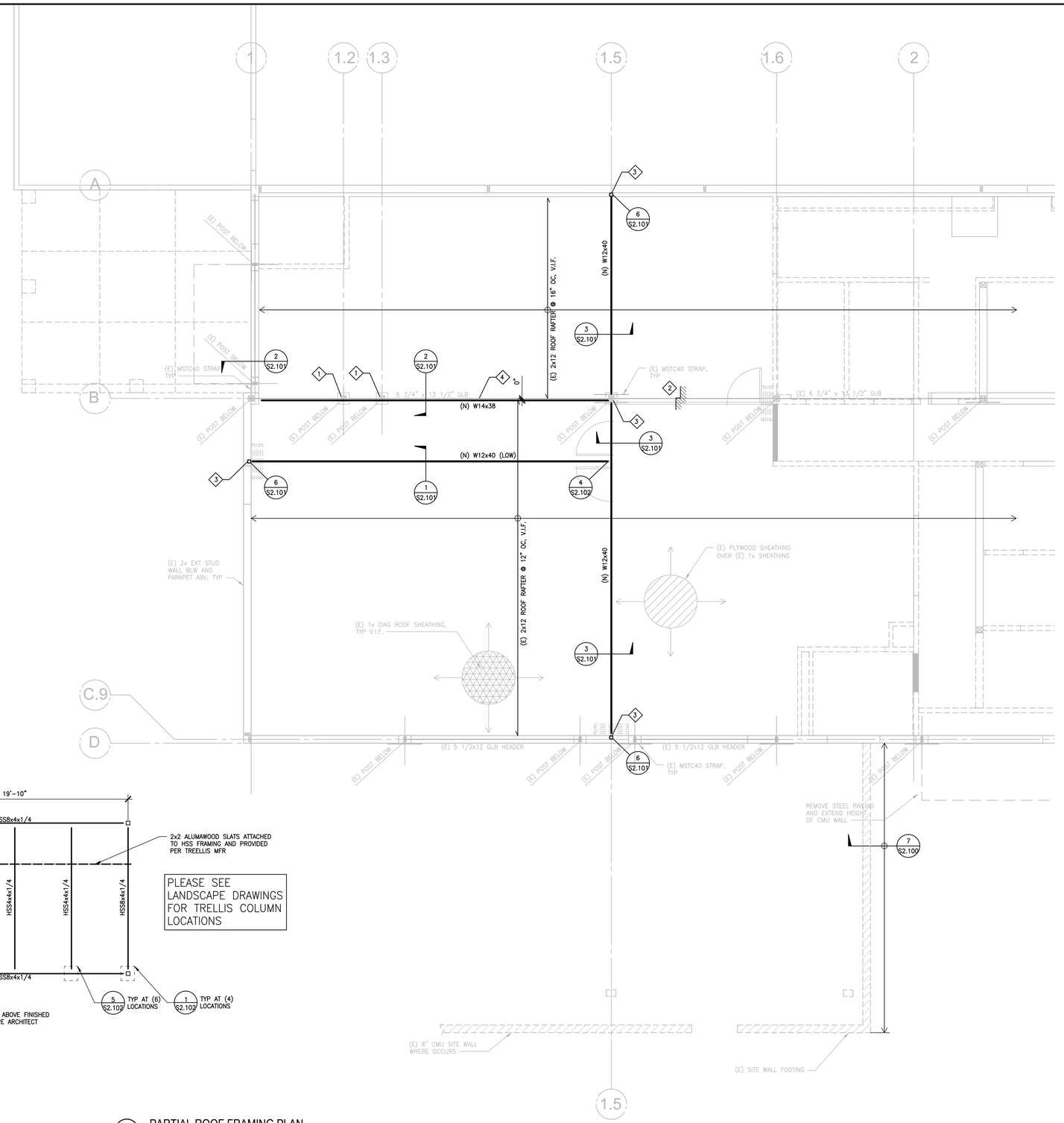

1 PARTIAL ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

SHEET NOTES

1. SEE GENERAL NOTE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION NOT SHOWN.

KEYNOTES

1. EXISTING COLUMN TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING REQUIRED UNTIL NEW SUPPORTING ELEMENTS INDICATED ARE INSTALLED.
2. BASED ON LIMITED FIELD OBSERVATIONS, THERE APPEARS TO BE AN APPROXIMATELY 2" STEP IN TOP OF ROOF FRAMING (RAFTERS) ACROSS GRIDLINE B. CONTRACTOR SHALL VERIFY IN FIELD.
3. NEW HSS 3 1/2" x 3 1/2" x 1/4" COLUMN.
4. EXISTING GLUE LAM BEAM TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING REQUIRED UNTIL NEW SUPPORTING ELEMENTS INDICATED ARE INSTALLED.

PRICING NOTES

COST ESTIMATOR SHALL INCLUDE ALLOWANCES FOR:

1. FOUNDATION ENLARGEMENTS NOTED, INCLUDING DEMOLITION AND REPLACEMENT OF SLAB ON GRADE AND EXCAVATION NECESSARY TO ACCESS EXISTING FOOTINGS.
2. STENGTHENING OF EXISTING POSTS/COLUMNS NOTED. ASSUME A TOTAL OF (4) HSS 6x3x1/4 x 10'-6" LONG POSTS TO BE BOLTED TO FACE(S) OF EXISTING WOOD COLUMNS TO PROVIDE SUPPORT FOR NEW STEEL WIDE FLANGE BEAMS.
3. DRAWINGS REPRESENT APPROXIMATELY 60% (DESIGN DEVELOPMENT) LEVEL OF DEVELOPMENT. COST ESTIMATOR SHALL INCLUDE APPROPRIATE DESIGN AND CONSTRUCTION ALLOWANCES.

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95% CONSTRUCTION DOCUMENT	10-7-22
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Drawing Title: PARTIAL ROOF FRAMING PLAN

Approved Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: MN | Drawn: JR

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: S1.101

Dwg. Page 33 of 61

CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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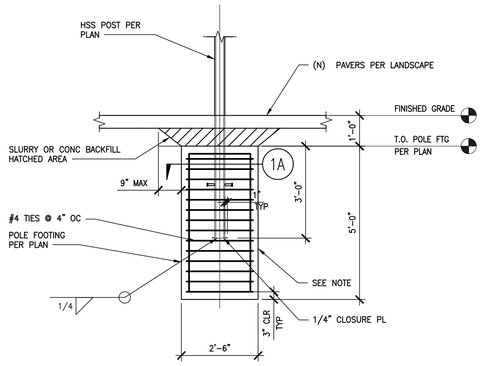
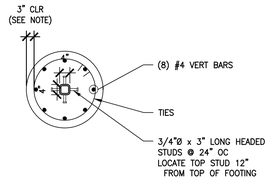


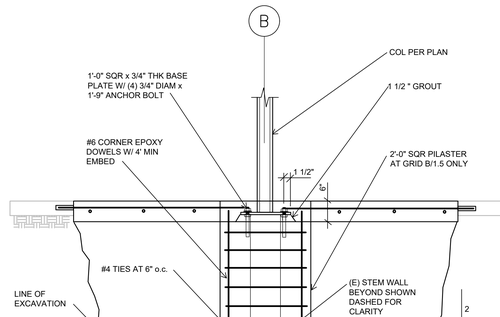


5A SECTION

NOTE:

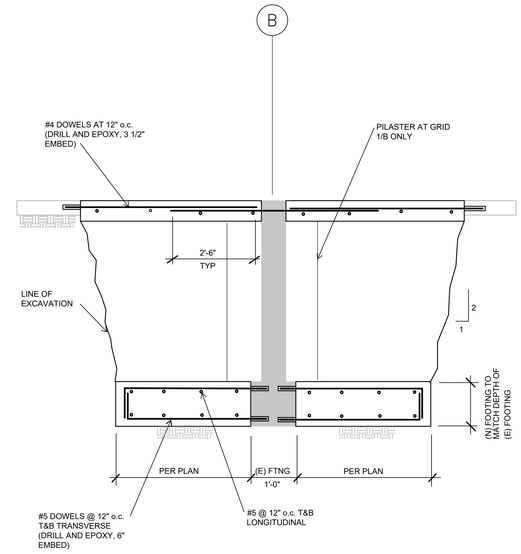
IF USING FORM, 2" CLR ACCEPTABLE

5 TYPICAL POLE FOUNDATION
1/2"=1'-0"

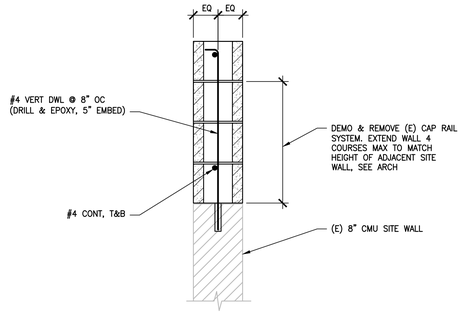


NOTE:
FOR BALANCE OF INFORMATION REFER TO 1/-

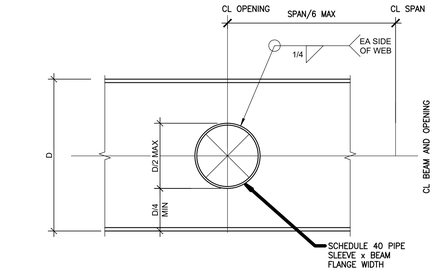
3 SECTION AT FOUNDATION ENLARGEMENT
3/4"=1'-0"



1 SECTION AT FOUNDATION ENLARGEMENT
3/4"=1'-0"



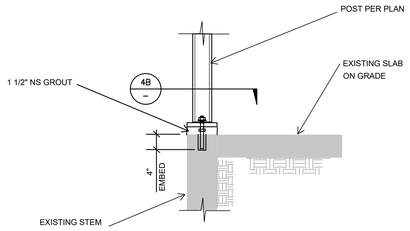
7 CMU SITE WALL EXTENSION DETAIL
SCALE: 1"=1'-0"



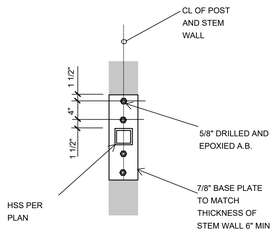
NOTES:

1. WHERE ROUND OPENING DIAMETER IS D/6 OR LESS, REINFORCING SHOWN IS NOT REQUIRED.
2. MOMENT FRAME BEAMS, DRAG BEAMS, AND CHORD BEAMS MAY NOT BE PENETRATED WITHOUT STRUCTURAL ENGINEER'S APPROVAL.

6 DETAIL
SCALE: 1"=1'-0"

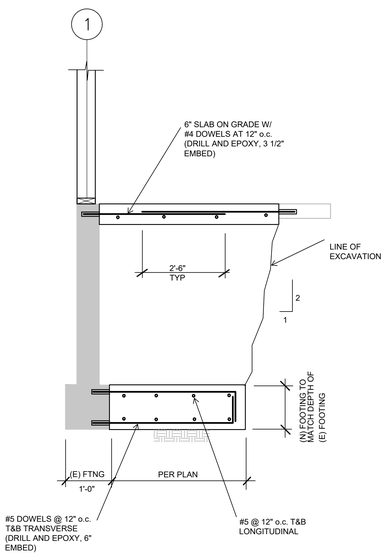


4A SECTION



4B SECTION

4 TYPICAL PERIMETER BASE PLATE DETAIL AT NEW STEEL COL
3/4"=1'-0"



2 SECTION AT FOUNDATION ENLARGEMENT
3/4"=1'-0"

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95% CONSTRUCTION DOCUMENT	10-7-22
100% CONSTRUCTION DOCUMENT	1-6-23
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Drawing Title: FOUNDATION DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: MN | Drawn: JR

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: S2.100

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Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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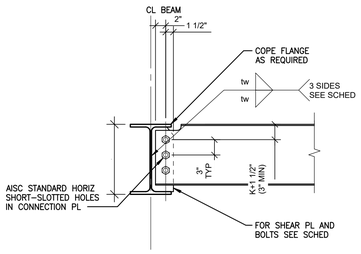
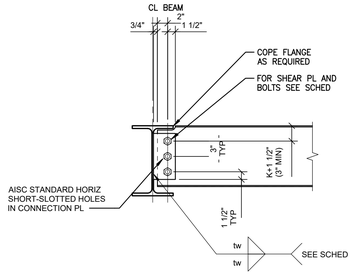
K:\2022\220144 - VALB - Bldg 46 Electronic Health Record Modernization\S Struct\220144 - S2.100 - FOUNDATION DETAILS.dwg 1-06-23 03:13:11 PM mcarlos



5B BEAM TO BEAM W/ FULL-HT STIFF PLATE



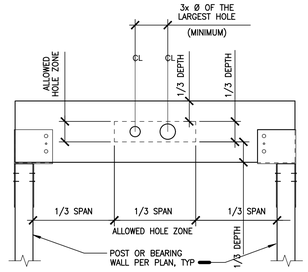
5A BEAM TO BEAM

STANDARD BOLTED CONNECTION SCHEDULE			
BEAM SIZE	NO. & SIZE OF BOLTS REQUIRED	PLATE THICKNESS	WELD SIZE (tw)
W8 C8	(2) 7/8" DIA	1/4"	3/16"
W10 C10	(2) 7/8" DIA	1/4"	3/16"
W12 C12	(3) 7/8" DIA	1/4"	3/16"
W14	(3) 7/8" DIA	1/4"	3/16"

CONNECTION NOTES:

1. ALL BOLTS TO BE ASTM A325-N.
2. BOLTS SHALL BE TIGHTENED TO AISC "SNUG TIGHT" CONDITION UNLESS NOTED OTHERWISE.
3. CONNECTION PLATES TO HAVE AISC STANDARD HORIZONTAL SHORT SLOTTED HOLES UNLESS NOTED OTHERWISE.
4. USE A572 GR 50 STEEL FOR SHEAR TABS.
5. [X] <SC> SHOWN ON PLANS INDICATES NUMBER OF BOLTS ENQUIRED IF DIFFERENT FROM ABOVE. FOR NUMBER OF BOLTS EXCEEDING ABOVE SCHEDULE -/---.
6. SEE DETAIL K" PER AISC, LARGER OF THE TWO CONNECTING BEAMS FOR DETAILS -/---.
7. REFER TO 3/SS-03 FOR SHEAR TAB WELD @ SKEW CONDITION.
8. * USE AISC STANDARD HORIZ SHORT-SLOTTED HOLES IN CONNECTION PLATE.
9. WHERE CROSS BEAMS OCCUR, USE FULL HEIGHT STIFFENER OF THE THICKNESS REQ'D FOR THE CROSS BEAM CONNECTION IN LIEU OF THE 1/4" STIFFENER.

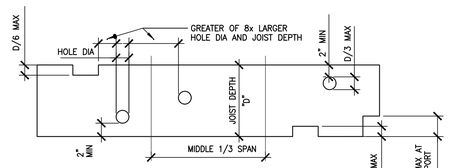
5 STANDARD BOLTED BEAM CONNECTION DETAILS
SCALE: 1"=1'-0"



NOTES:

1. THE ALLOWED HOLE ZONE IN THIS CHART IS SUITABLE FOR UNIFORMLY LOADED BEAMS HOLES NOT ALLOWED IN BEAMS SUPPORTING OTHER BEAMS WITHOUT ENGINEER'S APPROVAL.
2. MAXIMUM HOLE SIZE IS 2" DIAMETER OR A HOLE DIAMETER EQUAL TO 1/6 THE BEAM DEPTH WHICHEVER IS SMALLER.
3. RECTANGULAR HOLES ARE NOT ALLOWED.
4. HOLES IN CANTILEVERS OR MULTISPAN BEAMS SHALL NOT BE PERMITTED WITHOUT ENGINEERS APPROVAL.
5. DO NOT STACK HOLES VERTICALLY.
6. NOTCHING OF BEAMS NOT PERMITTED WITHOUT STRUCTURAL ENGINEER'S APPROVAL.

8 BORING OF BEAMS
SCALE: 1"=1'-0"

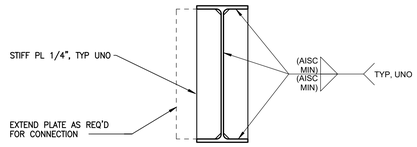


JOIST SIZE	MAX BORE DIA "d"	MAX NOTCH DEPTH x WIDTH
2x6 / 4x6	1 3/4"	7/8"x1 3/4"
2x8	2 3/8"	1"x2 3/8"
2x10	3"	1 1/2"x3"
2x12	3 3/4"	1 7/8"x3 3/4"

NOTES:

1. NOTCHING AND BORING NOT PERMITTED IN THE SAME JOIST SECTION WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
2. NOTCHING NOT PERMITTED IN MIDDLE-THIRD OF JOIST SPAN.
3. NOTCH WIDTHS GREATER THAN SHOWN ABOVE ARE NOT PERMITTED WITHOUT STRUCTURAL ENGINEER'S APPROVAL.
4. FOR BEAM WIDTHS > 3.5" OR GLU-LAM BEAMS, SEE BORING OF BEAMS DETAIL.
5. FOR JOISTS SPACED > 24" OC, BORING AND NOTCHING REQUIRES STRUCTURAL ENGINEER'S APPROVAL.
6. DO NOT NOTCH OR BORE 2x4 JOISTS.

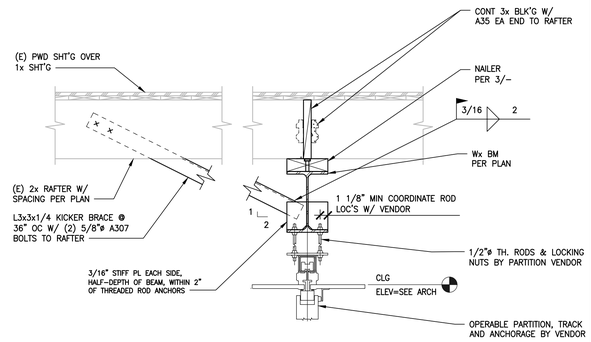
9 NOTCHING AND BORING OF JOISTS
SCALE: 1"=1'-0"



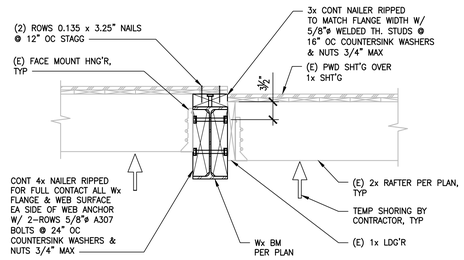
NOTE:

USE LARGER PLATE AND WELD AS REQ'D BY BEAM CONNECTION SCHEDULE.

6 TYPICAL FULL-DEPTH STIFFENER PLATES
SCALE: 1"=1'-0"



1 SECTION AT LOW Wx BEAM - (PERPENDICULAR TO RAFTERS)
SCALE: 1"=1'-0"



NOTE:
SEE ROOF FRAMING PLAN FOR DEMOLITION NOTES. SHORE (E) RAFTERS PRIOR TO REMOVAL OF (E) GLB RENAIL/RESCREW RAFTER HANGERS & 1x LDG'R TO NAILERS

2 SECTION AT FLUSH Wx BEAM
SCALE: 1"=1'-0"

NOTE:
FOR BALANCE OF INFO NOT SHOWN, SEE DETAIL 2/-.

3 SECTION AT LOW Wx BEAM - (PARALLEL TO RAFTERS)
SCALE: 1"=1'-0"

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

Revisions	Date
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Drawing Title: FRAMING DETAILS

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Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: MN | Drawn: JR

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: S2.101

Dwg. Page 35 of 61

CONSTRUCTION DOCUMENTS

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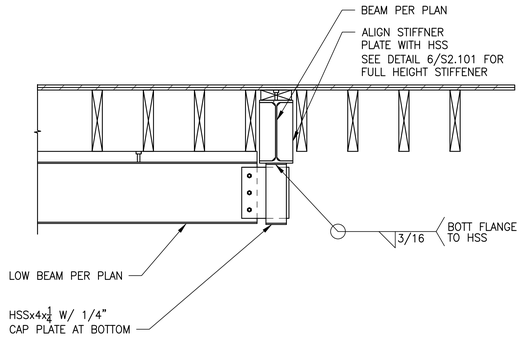
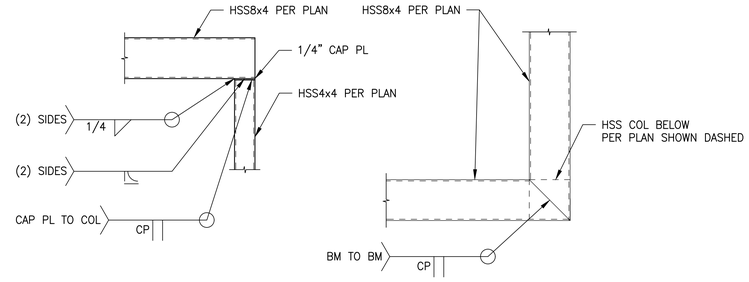
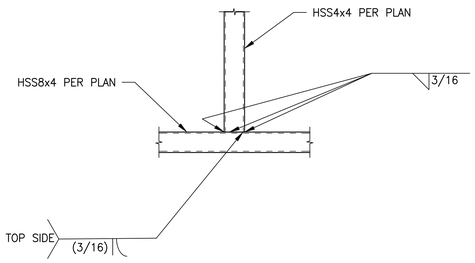


NOTE:
FOR BALANCE OF INFORMATION NOT SHOWN, REFER TO 3/– AND 9/–.

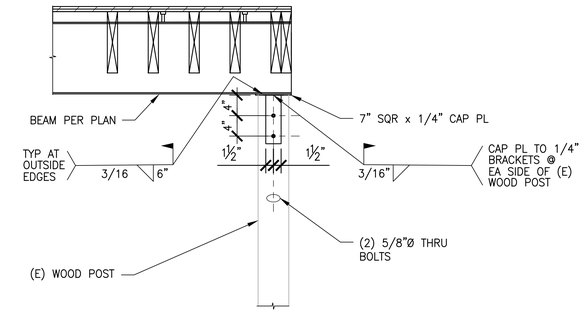
4 BEAM TO BEAM CONNCECTION AT OFF-SET
3/4"=1'-0"



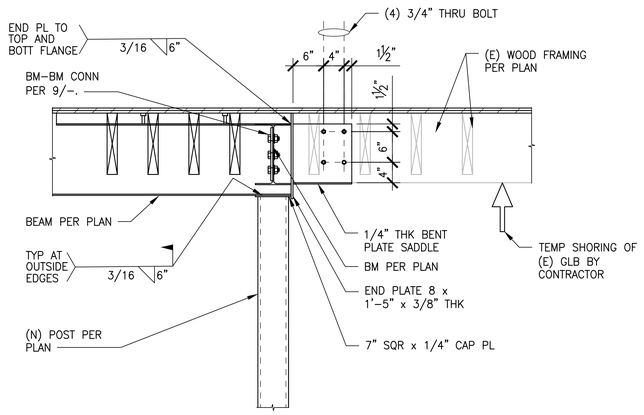
1 CORNER DETAIL @ TRELLIS
3/4"=1'-0"



5 HSS4x4 TO HSS8x4 DETAIL
3/4"=1'-0"



2 BEAM TO (E) POST CONNECTION
3/4"=1'-0"



3 BEAM TO BEAM CONNCECTION AT OFF-SET
3/4"=1'-0"

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VA FORM 08-6231

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MECHANICAL ABBREVIATIONS

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
ABV	ABOVE	KW	KILOWATT
AC	AIR CONDITIONING	LAT	LEAVING AIR TEMPERATURE
AD	ACCESS DOOR	LBS	POUNDS
AFC	ABOVE FINISH CEILING	LF	LINEAR FEET
AFCO	ACID FLOOR CLEANOUT	LG	LENGTH, LONG
AFF	ABOVE FINISHED FLOOR	LPC	LOW PRESSURE STEAM CONDENSATE
AHU	AIR HANDLING UNIT	LPR	LOW PRESSURE RETURN
AI	ANALOG INPUT	LPS	LOW PRESSURE STEAM
ALT	ALTITUDE	LRA	LOCKED ROTOR AMPS
AMS	AIR MONITORING STATION	LRE	LONG RADIUS ELBOW
AO	ANALOG OUTPUT	LVG	LEAVING
AP	ACCESS PANEL	LVL	LEVEL
APPROX	APPROXIMATE	LWT	LEAVING WATER TEMPERATURE
AS	AIR SEPARATOR	MAX	MAXIMUM
AUTO	AUTOMATIC	MBD	MANUAL BALANCING DAMPER
AV	AIR VENT	MBH	1000 BTU PER HOUR
AVG	AVERAGE	MECH	MECHANICAL
B	BOILER	MFG	MANUFACTURER
BF	BELOW FLOOR	MIN	MINIMUM
BG	BELOW GRADE	MOD	MANUAL OPERATED DAMPER
BHP	BRAKE HORSEPOWER (BOILER HP)	MVD	MANUAL VOLUME DAMPER
BOD	BOTTOM OF DUCT	N/A	NOT APPLICABLE
BOP	BOTTOM OF PIPE	NC	NORMALLY CLOSED
BOS	BOTTOM OF STEEL	NIC	NOT IN CONTRACT
BTU	BRITISH THERMAL UNIT	NO	NORMALLY OPEN
BTUH	BTU PER HOUR	NTS	NOT TO SCALE
BDD	BACKDRAFT DAMPER	O&M	OPERATIONS AND MAINTENANCE
CC	COOLING COIL	OA	OUTSIDE AIR
℄	CENTERLINE	OBD	OPPOSED BLADE DAMPER
CFM	CUBIC FEET PER MINUTE	OD	OUTSIDE DIAMETER
CG	CEILING GRILLE, CENTER OF GRAVITY	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
CHWR	CHILLED WATER RETURN	OFOI	OWNER FURNISHED, OWNER INSTALLED
CHWS	CHILLED WATER SUPPLY	OH	OVERHEAD
CLR	CLEAR	P	PUMP
CMPR	COMPRESSOR	ΔP	PRESSURE DROP OR DIFFERENTIAL
CO	CLEAN OUT	PC	PUMPED CONDENSATE RETURN
CONC	CONCRETE	PDI	PRESSURE DROP INDICATOR
CONN	CONNECTION	PH	PHASE (ELECTRICAL)
CONT	CONTINUATION	PLBG	PLUMBING
CONTR	CONTRACTOR	POC	POINT OF CONNECTION
COTG	CLEAN OUT TO GRADE	PRESS	PRESSURE
CP	CONDENSATE PUMP	PSI	POUNDS PER SQUARE INCH
C_V	COEFFICIENT, VALVE FLOW	PSIG	PSI GAGE
D	INDIRECT DRAIN	Ø	ROUND OR DIAMETER
DB	DRY-BULB	R/EF	RETURN/EXHAUST FAN
DBL	DOUBLE	RA	RETURN AIR
DI	DIGITAL INPUT	RAD	RETURN AIR DUCT
DIA	DIAMETER	RET	RETURN
DN	DOWN	REQD	REQUIRED
DRN	DRAIN	RF	RETURN OR RELIEF FAN
(E)	EXISTING	RG	RETURN GRILLE
EA	EXHAUST AIR	RH	RELATIVE HUMIDITY
EAT	ENTERING AIR TEMPERATURE	RHC	REHEAT COIL
EF	EXHAUST FAN	RLA	RUNNING LOAD AMPS
EFF	EFFICIENCY	RPM	REVOLUTIONS PER MINUTE
EG	EXHAUST GRILLE	SA	SUPPLY AIR
ELEV	ELEVATION	SD	SIDEWALL DIFFUSER
ENT	ENTERING	SE	SIDEWALL EXHAUST
EQUIP	EQUIPMENT	SENS	SENSIBLE
ESP	EXTERNAL STATIC PRESSURE	SF	SUPPLY FAN
EWT	ENTERING WATER TEMPERATURE	SG	SUPPLY GRILLE
EXH	EXHAUST	SEC	SECOND
EWC	ELEC. WATER COOLER	SP	STATIC PRESSURE
°F	DEGREES FAHRENHEIT	SPEC	SPECIFICATION
FCU	FAN COIL UNIT	SQ	SQUARE
FD	FIRE DAMPER	SR	SIDEWALL RETURN
FFU	FAN FILTER UNIT	SS	STAINLESS STEEL
FIN	FINISH	STD	STANDARD
FLA	FULL LOAD AMP	STL	STEEL
FLR	FLOOR	SYM	SYMBOL
FPM	FEET PER MINUTE	SYS	SYSTEM
FRP	FIBERGLASS REINFORCED PLASTIC	ΔT	TEMPERATURE DIFFERENCE
FS	FLOOR SINK	TSTAT	THERMOSTAT
FSD	COMBINATION FIRE & SMOKE DAMPER	TEMP	TEMPERATURE
FT	FOOT, FEET	TOD	TOP OF DUCT
FOB	FLAT ON BOTTOM	TOP	TOP OF PIPE
FO	FAIL OPEN	TOT	TOTAL
GA	GAGE OR GAUGE	TT	TEMPERATURE TRANSMITTER
GAL	GALLONS	TYP	TYPICAL
GALV	GALVANIZED	TU	TERMINAL UNIT
GPM	GALLONS PER MINUTE	TV	TURNING VANES
GPH	GALLONS PER HOUR	UC	UNDERCUT
GR	GRAVITY RELIEF	UG	UNDERGROUND
GSM	GALVANIZED SHEET METAL	UNO	UNLESS NOTED OTHERWISE
HC	HEATING COIL	V	VOLT
HD	HEAD	VA	VALVE
HGT	HEIGHT	VAC	VACUUM
HP	HORSE POWER	VAV	VARIABLE AIR VOLUME
HPU	HEAT PUMP UNIT	VEL	VELOCITY
HR	HOUR(S)	VERT	VERTICAL
HRC	HEAT RECOVERY COIL	VFD	VARIABLE FREQUENCY DRIVE
HS	HAND SWITCH	VOL	VOLUME
HT	HUMIDITY TRANSMITTER	W	WATT
HTG	HEATING	WB	WET-BULB
HSTAT	HUMIDISTAT	W/O	WITHOUT
HVAC	HEATING, VENTILATING & AIR CONDITIONING	WT	WEIGHT
HHWR	HEATING WATER RETURN	WTR	WATER
HHWS	HEATING WATER SUPPLY		
ID	INSIDE DIAMETER		
IN	INCH, INCHES		

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
10x6	NEW DUCTWORK (1ST NUMBER INDICATES SIDE SHOWN)	HHWR	HEATING HOT WATER RETURN
	SQUARE ELBOW WITH TURNING VANES	HHWS	HEATING HOT WATER SUPPLY
	ROUND ELBOW OR RECTANGULAR RADIUS ELBOW	LPS	LOW PRESSURE STEAM
	SMOKE DAMPER	LPC	LOW PRESSURE STEAM CONDENSATE
	MANUAL VOLUME DAMPER	CWS	CONDENSER WATER SUPPLY
	MOTOR OPERATED DAMPER	PCR	PUMPED CONDENSATE RETURN
	COMBINATION FIRE AND SMOKE DAMPER	OF	OVERFLOW DRAIN PIPE
	FLEXIBLE CONNECTION TO EQUIPMENT	CA	COMPRESSED AIR
	LINED DUCTWORK (OR PLENUM)	D	DRAIN
UP	DUCT RISE		EXISTING DUCT OR PIPE
DN	DUCT DROP		EXISTING TO BE REMOVED
	ROUND DUCT UP		EXISTING TO BE ABANDONED IN PLACE
	ROUND DUCT DOWN		PIPE ANCHOR
	RECTANGULAR DUCT UP		ECCENTRIC REDUCER
	RECTANGULAR DUCT DOWN		CONCENTRIC REDUCER
	DUCT TRANSITION (RECTANGULAR OR ROUND)		EXPANSION JOINT
	DUCT TRANSITION (RECTANGULAR TO ROUND)		PIPE TO FLOOR SINK
	SUPPLY REGISTER WITH EXTRACTOR		VALVE ON RISE OR DROP
	WALL REGISTER OR GRILLE		FLEXIBLE CONNECTION (PIPE)
	FLEXIBLE DUCTWORK		RISE OR RISER
AIR FLOW	FLEXIBLE DUCT WITH SPIN-IN FITTING AND DAMPER		DOWN OR DROP
	SMOKE DETECTOR		CAPPED LINE
	TERMINAL BOX		BLIND FLANGE
	TERMINAL BOX WITH REHEAT		CLEAN OUT
	ACCESS DOOR/ACCESS PANEL		COMBINATION BALANCING VALVE OR FLOW INDICATOR
	SUPPLY AIR DUCT		AUTOMATIC FLOW CONTROL VALVE
	RETURN AIR DUCT/OUTSIDE AIR DUCT		BALL VALVE
	EXHAUST AIR DUCT		BUTTERFLY VALVE
OR	CEILING DIFFUSER		MOTORIZED BUTTERFLY VALVE
OR	RETURN REGISTER / GRILLE		CHECK VALVE
OR	EXHAUST REGISTER OR GRILLE		CONTROL VALVE (2-WAY)
	TRANSFER ASSEMBLY (WALL)		CONTROL VALVE (3-WAY)
	TRANSFER ASSEMBLY (CEILING WITH LINED DUCT)		PRESSURE REDUCING VALVE
	TRANSFER ASSEMBLY (CEILING WITH FLEX DUCT)		GATE VALVE/SHUT-OFF VALVE
	PIPE DOWN		GATE, ANGLE
	PIPE UP		GLOBE VALVE
UP	PIPE RISE		TRIPLE DUTY VALVE (COMBINATION SHUT-OFF, CHECK AND GLOBE, ANGLE
	PIPE GUIDE		BALANCING
	DIRECTION OF FLOW IN PIPE		PRESSURE RELIEF VALVE
T	THERMOSTAT		PRESSURE GAUGE WITH GAUGE COCK
H	HUMIDISTAT		STRAINER WITH BLOWDOWN
	POINT OF CONNECTION		STRAINER WITH DRAIN VALVE AND HOSE END
	POINT OF DISCONNECTION		THERMOMETER/TEMPERATURE GAUGE
△T	TEMPERATURE DIFFERENCE		TEST WELL (PETE'S PLUG - PRESSURE AND/OR TEMPERATURE)
△	DIFFERENTIAL		UNION
DL	DOOR LOUVER	DN	DIRECTION OF SLOPE DOWN
UC	UNDER CUT (DOOR 1/2")		AIR ELIMINATOR/VACUUM BREAKER
	THROW ARROW		CIRCUIT SETTER
OCD	OVERFLOW CONDENSATE DRAIN	FS	FLOW SWITCH
CHWS	CHILLED WATER SUPPLY		INSTRUMENT TEST CONNECTION
CHWR	CHILLED WATER RETURN		

MECHANICAL GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CODES ADOPTED BY THE DEPARTMENT OF VETERAN AFFAIRS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND PROVIDE REPAIR OF ADJACENT EXISTING SURFACES, EQUIPMENT, AREAS, AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF ANY DEMOLITION AND/OR NEW WORK.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION, AND SERVICES NECESSARY FOR THE COMPLETION OF THE WORK. ALL MATERIALS & WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND GOVERNING REGULATIONS AND SHALL MEET WITH THE APPROVAL OF THE CITY AND STATE FIRE MARSHAL.
4. ALL DRAWINGS ARE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS PRIOR TO ANY CONSTRUCTION, INCLUDING ARCHITECTURAL, STRUCTURAL, AIR CONDITIONING, PLUMBING, AND ELECTRICAL. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION MAY BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENT SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND AT NO EXPENSE TO THE OWNER.
5. DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND JOB SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF CONSTRUCTION AND / OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
6. CONTRACTOR SHALL COORDINATE ALL DUCT, PIPE AND EQUIPMENT LOCATIONS WITH PLUMBING, ELECTRICAL, STRUCTURAL, AND ALL OTHER TRADES.
7. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED & TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS AND PROCEDURES DETAILED IN THE A.S.H.R.A.E. HANDBOOK OF FUNDAMENTALS OR THE APPLICABLE STANDARDS ADOPTED BY S.M.A.C.N.A. PROVIDE RECTANGULAR DUCTS OF GALVANIZED STEEL & PREFABRICATED SPIRAL LOCKSEAM DUCTS AND FITTINGS.
8. DUCT MATERIALS SHALL COMPLY WITH SECTION 603 OF I.E.C.C.
9. PROVIDE DUCT MANUAL VOLUME DAMPERS IN EACH BRANCH DUCT AND IN EACH MAIN DUCT TO PROVIDE FOR COMPLETE AIR BALANCE OF THE SYSTEM. PROVIDE ADEQUATE ACCESS AND IDENTIFICATION.
10. ALL DUCTWORK AND PIPING SHALL BE INSULATED CONSISTENTLY WITH THE REQUIREMENTS OF SECTION 604 OF I.E.C.C.
11. ROOM THERMOSTATS SHALL BE CAPABLE OF BEING SET TO MAINTAIN SPACE TEMPERATURE SET POINTS FROM 55 °F. TO 85 °F. AND BE CAPABLE OF OPERATING THE HEATING AND COOLING IN SEQUENCE. THERMOSTATS SHALL BE ADJUSTABLE TO PROVIDE A TEMPERATURE RANGE OF UP TO 10°F. BETWEEN FULL HEATING AND FULL COOLING BEING SUPPLIED. CONTROLS SHALL HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NOT MORE THAN 70 °F. AND COOLING AT A TEMPERATURE NOT LESS THAN 78 °F.
12. ELECTRICAL INTERLOCK BETWEEN AIR HANDLING UNIT AND EXHAUST AIR TO BE PROVIDED.
13. TEMPERATURE CONTROL SYSTEM SHALL OPERATE IN ACCORDANCE WITH THE BASE BUILDING SEQUENCE OF OPERATION.
14. WALL MOUNTED THERMOSTATS SHALL BE MOUNTED 48" A.F.F. TEMPERATURE SENSORS SHALL BE WALL MOUNTED 48" A.F.F.
15. PROVIDE SMOKE DETECTORS AT HVAC SYSTEMS EXCEEDING 2,000 CFM AT MAIN SUPPLY AND RETURN DUCTS. PROVIDE DUCT SMOKE DETECTORS LOCATED AT EACH STORY FOR RETURN AIR SYSTEMS WHICH SERVE MORE THAN ONE STORY AND EXCEED 15,000 CFM - PER NFPA 90A.
16. SEE PLUMBING DRAWINGS FOR PRIMARY AND SECONDARY CONDENSATE DRAINS .
17. NO COMBUSTION VENTS, DRYER VENTS, RANGE HOOD VENTS, OR HEATING DUCTS ARE PERMITTED IN AREA SEPARATION WALLS.
18. MATERIAL EXPOSED WITHIN A DUCT OR PLENUM SHALL COMPLY WITH SECTION 602 I.M.C.
19. ALL OUTLETS FOR FUTURE CONNECTIONS SHALL BE INSTALLED SO AS TO PERMIT EASY CONNECTION. COORDINATE DUCTWORK, STRUCTURAL CONDITIONS AND ARCHITECTURAL LAYOUT.
20. SEE ARCHITECTURAL DRAWINGS FOR ROOF ACCESS AND ADDITIONAL ENERGY CONSERVATION NOTES.
21. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DIFFUSERS AND GRILLES.
22. ALL CEILING DIFFUSERS SHALL BE 4-WAY THROW UNLESS SHOWN OTHERWISE.
23. MINIMUM OUTDOOR AIR REQUIREMENTS : 15 C.F.M. / PERSON.
24 AIRCRAFT CABLE SHALL BE PRE-STRETCHED.
25. ALL H.V.A.C. SYSTEMS SHALL MEET THE REQUIREMENTS PER SECTION 503 I.E.C.C.
26. ALL H.V.A.C. PIPING SHALL MEET THE REQUIREMENTS PER SECTION 504 I.E.C.C.
27. **SEISMIC BRACING AND RESTRAINTS/SUPPORTS ARE REQUIRED PER SPECIFICATION SECTION 13 05 41.**
28. **ALL DUCTWORK IN SCOPE AND CONNECTED TO SYSTEM WILL BE CLEANED PER SPECIFICATION SECTION 23 01 30.52.**

MECHANICAL AND PLUMBING SHEET INDEX

M1.100	MECHANICAL LEGENDS AND NOTES
M1.200	MECHANICAL SCHEDULES AND AIR BALANCE TABLE
M2.100	MECHANICAL DEMO FLOOR PLAN
M3.100	MECHANICAL NEW WORK FLOOR PLAN
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M5.100	MECHANICAL DETAILS
P2.100	PLUMBING DEMO FLOOR PLAN

Revisions	Date
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Drawing Title: MECHANICAL LEGENDS AND NOTES

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JD | Drawn: YL

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: M1.100

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CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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AIR CONDITIONER HEAT PUMP UNIT SCHEDULE (EXISTING FOR REFERENCE)

UNIT NO.	MFR. & MODEL NO.	LOCATION	SERVICE	SUPPLY FAN				COOLING COILS							HEATING COILS				ELECTRICAL			FILTERS		OPER. WEIGHT (LBS.)	MIN. O.A. (CFM)	REMARKS
				C.F.M.	T.S.P (in.)	E.S.P (in.)	DRIVE	TOTAL MBH	SENS. MBH	E.A.T.(°F) D.b.	E.A.T.(°F) W.b.	L.A.T.(°F) D.b.	L.A.T.(°F) W.b.	OSA(°F) DESIGN	SENS. MBH	E.A.T.(°F) D.b.	L.A.T.(°F) D.b.	OSA(°F) DESIGN	MCA	MOCP	V/PH/HZ	FILTER	QTY., EACH			
(E)46-HPH-1	YORK BHX 060	ROOF	ROOMS 1, 3	1700	-	0.5	-	60	-	79.5	61.1	55	51.5	91.2	26.5	61.4	76	41.2	33.6	45	208/3/60	(E) 30% EFF.	-	-	400	(E) MOTORIZED OSA DAMPER. (E) PROGRAMMABLE THERMOSTAT TO BE RE-USED, PROVIDE NEW SPACE TEMPERATURE SENSOR.
(E)46-HPH-2	YORK BHX 060	ROOF	ROOMS 1, 3	1700	-	0.5	-	60	-	79.5	61.1	55	51.5	91.2	26.5	61.4	76	41.2	33.6	45	208/3/60	(E) 30% EFF.	-	-	400	(E) MOTORIZED OSA DAMPER. (E) PROGRAMMABLE THERMOSTAT TO BE RE-USED, PROVIDE NEW SPACE TEMPERATURE SENSOR.

AIR DISTRIBUTION SCHEDULE

TAG	MAKE & MODEL	FACE SIZE	REMARKS
A	TITUS - MCD	24x24, 12x12	STEEL MODULAR CORE DIFFUSER, ADJUSTABLE PATTERN, T-BAR LAY-IN OR HARD CEILING. ROUND OR SQUARE NECK. SEE FLOOR PLANS FOR NECK SIZES. TYPICAL DIFFUSER UNLESS NOTED OTHERWISE.
B	TITUS - PAR	24X24, 12x12	STEEL RETURN DIFFUSER, 3/4" BLADE SPACING, 35° FIXED DEFLECTION, T-BAR LAY-IN OR HARD CEILING, ROUND OR SQUARE NECK. SEE FLOOR PLANS FOR NECK SIZES. TYPICAL CEILING RETURN/EXHASUT GRILLE, UNLESS NOTED OTHERWISE.

AIR DISTRIBUTION LEGEND

	SUPPLY AIR DIFFUSER	- / - DIFFUSER NECK SIZE (SUPPLY) AIRFLOW (CFM)
	EXHAUST GRILLE	- / - GRILLE NECK SIZE (EXHAUST FOR THIS PROJECT) AIRFLOW (CFM)
	EXHAUST REGISTER	- / - REGISTER NECK SIZE (EXHAUST) AIRFLOW (CFM)
	SLOT & BAR DIFFUSERS	- / - PLENUM NECK SIZE (SUPPLY/RETURN) AIRFLOW (CFM)

MECHANICAL NOTE

ALL HVAC SYSTEM CONTROLS SHALL BE INTERFACED WITH THE EXISTING BUILDING AUTOMATION SYSTEM/CONTROLS (BAS/CONTROLS) JOHNSON METASYS CONTROLS (CONTRACTOR TO VERIFY), EXISTING DIRECT DIGITAL CONTROLS (DDC), AND NETWORK AUTOMATION ENGINE (NAE). HVAC SYSTEM GRAPHICS SHALL BE DEVELOPED AND INCORPORATED INTO EXISTING JOHNSON METASYS BAC. ALL HVAC SYSTEMS SHALL BE COMPATIBLE WITH THE EXISTING BUILDING AUTOMATION CONTROLS.

ROOM AIR CHANGE RATES & AIR BALANCE RELATIONSHIPS

TAKE OFF ROOM #	ROOM NAME	AREA DESIGNATION	RM. AREA (S.F.)	CLG. HT. (FT)	RM. VOL (C.F.)	CODE REQ'D A.C.H. O.A.	CODE REQ'D A.C.H. TOTAL	CODE REQ'D A.C.H. EXH.	AIR BAL P,N,NR	CODE REQ'D C.F.M. O.A.	CODE REQ'D C.F.M. TOTAL	CODE REQ'D C.F.M. EXH.	DESIGN A.C.H. O.A.	DESIGN A.C.H. TOTAL	DESIGN A.C.H. EXH	DESIGN CFM O.A.	DESIGN CFM SUPPLY	DESIGN CFM RETURN	DESIGN CFM EXHAUST	DESIGN CFM TRANSFER
#1	CONFERENCE ROOM	ADMIN/OFFICE/CONF	664	8.25	5,478	2	6	0	**NR**	183	548	0	2.4	9.8	0.0	216	900	680		220
#2	CONFERENCE ROOM	ADMIN/OFFICE/CONF	752	8.25	6,204	2	6	0	**NR**	207	620	0	3.0	12.5	0.0	312	1300	980		320
#3	CONFERENCE ROOM	ADMIN/OFFICE/CONF	253	8.25	2,087	2	6	0	**NR**	70	209	0	2.1	8.6	6.3	72	300	220		80
#4	CONFERENCE RECEPTION AREA	ADMIN/OFFICE/CONF	636	8.25	5,247	2	6	0	**NR**	175	525	0	2.1	8.5	6.5	180	750	570		180

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one eighth inch = one foot 16 8 4 0
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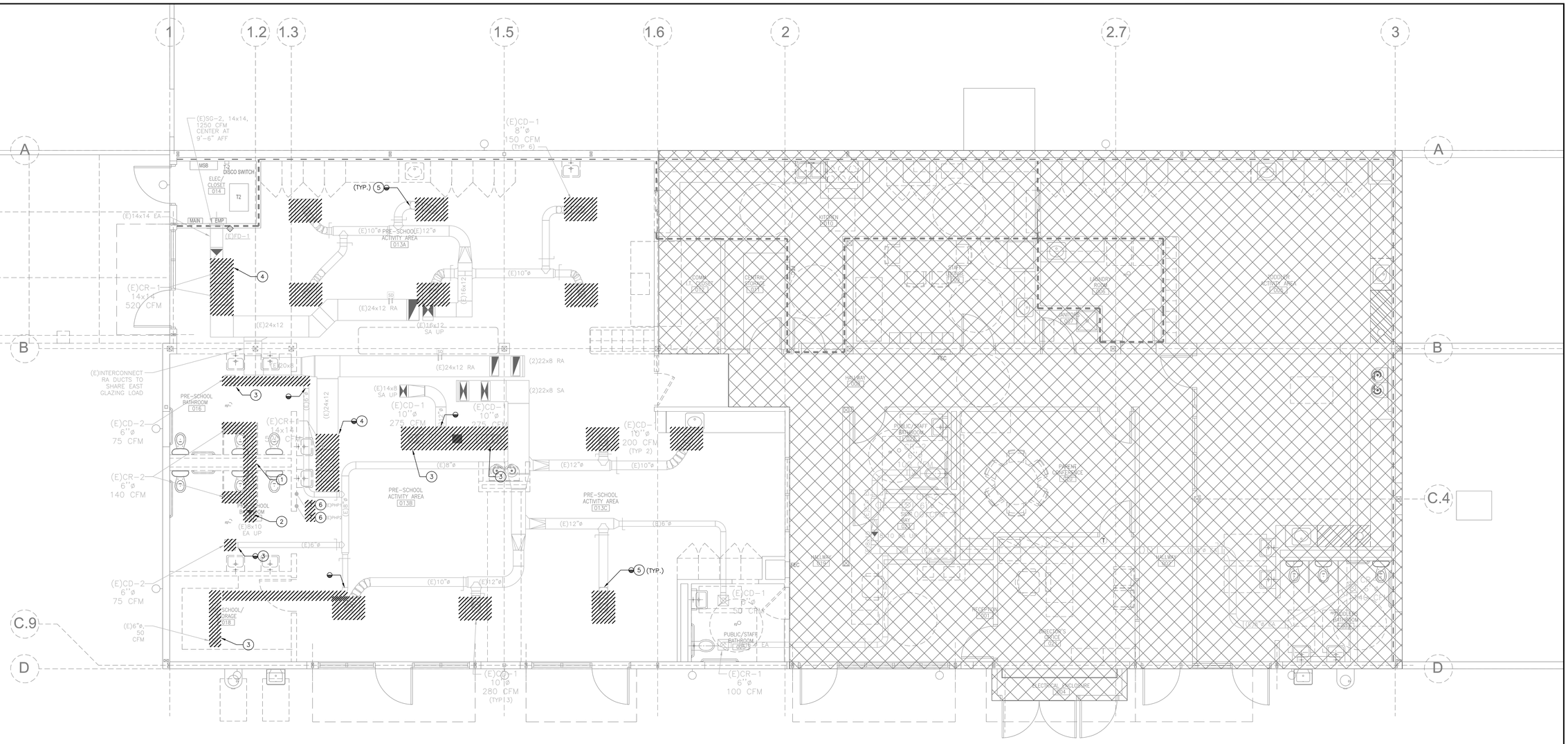

DEMO GENERAL NOTES

1. DEMOLITION PLAN SHOWS APPROXIMATE LAYOUT OF EXISTING BUILDING AND IS NOT INTENDED TO REPRESENT "AS-BUILT" CONDITIONS, FOLLOW PROCEDURES OUTLINED IN SPECIFICATIONS FOR REQUIREMENTS TO VISIT SITE AND OTHERWISE BECOME FAMILIAR WITH ACTUAL CONDITIONS WHEN BIDDING THE WORK.
2. PRIOR TO ANY DEMOLITION WORK CONTRACTOR MUST FIELD VERIFY ALL EXISTING MECHANICAL WORK LOCATED IN THE SPACE WHICH AFFECTS THE SPACES. THE OWNER MUST BE NOTIFIED PRIOR TO SHUTDOWN OF ANY MECHANICAL SYSTEMS.
3. DUCTS, PIPES, AIR DIFFUSERS, TERMINAL UNITS, AND HVAC EQUIPMENT AND OTHER ITEMS TO BE REMOVED ARE SHOWN HATCHED.
4. EXISTING CONSTRUCTION SHOWN TO REMAIN INCLUDING BUT NOT LIMITED DUCTS, PIPES, DIFFUSERS, ETC. SHALL BE PROTECTED DURING DEMOLITION, DAMAGE TO EXISTING CONSTRUCTION SHOWN TO REMAIN SHALL BE RESTORED TO MATCH PRE-DAMAGED CONDITION. NOTIFY THE ENGINEER IMMEDIATELY FOR ANY DISCREPANCIES.
5. PROTECT FROM DAMAGE ALL EXISTING FINISH WORK TO REMAIN IN PLACE AND WHICH BECOMES EXPOSED DURING DEMOLITION OPERATIONS.
6. THE SCOPE OF DEMOLITION AND NEW WORK WILL REQUIRE CLOSE COORDINATION BETWEEN ALL TRADES. CONTRACTOR SHALL TAKE PROVISIONS FOR THIS FACT AND IDENTIFY CONFLICTS AND PROPOSE SOLUTIONS TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

DEMO KEY NOTES

1. REMOVE EXISTING EXHAUST DUCTS AND GRILLES AS SHOWN.
2. REMOVE EXISTING RISER, EXHAUST FAN AND CONTROL WIRING ON ROOF.
3. REMOVED EXISTING SUPPLY AIR DIFFUSERS AND DUCT. REFER TO NEW WORK PLAN FOR NEW CONNECTION.
4. REFER TO NEW WORK PLAN FOR RETURN AIR GRILLES RELOCATION TO MATCH WITH NEW CEILING.
5. REFER TO NEW WORK PLAN FOR SUPPLY AIR DIFFUSERS RELOCATION TO MATCH WITH NEW CEILING (TYPICAL).
6. REMOVE EXISTING THERMOSTATS. REFER TO NEW WORK PLAN FOR NEW SENSORS.

one quarter inch = one foot (0, 4, 8)

NTS

Revisions:	Date
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REGISTERED PROFESSIONAL ENGINEER — LESHRET A. DUFOE — NO. 32824 — EXP. 06-30-24 — MECHANICAL — STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: MECHANICAL DEMO FLOOR PLAN

Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JD | Drawn: YL

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: M2.100

Dwg. Page 39 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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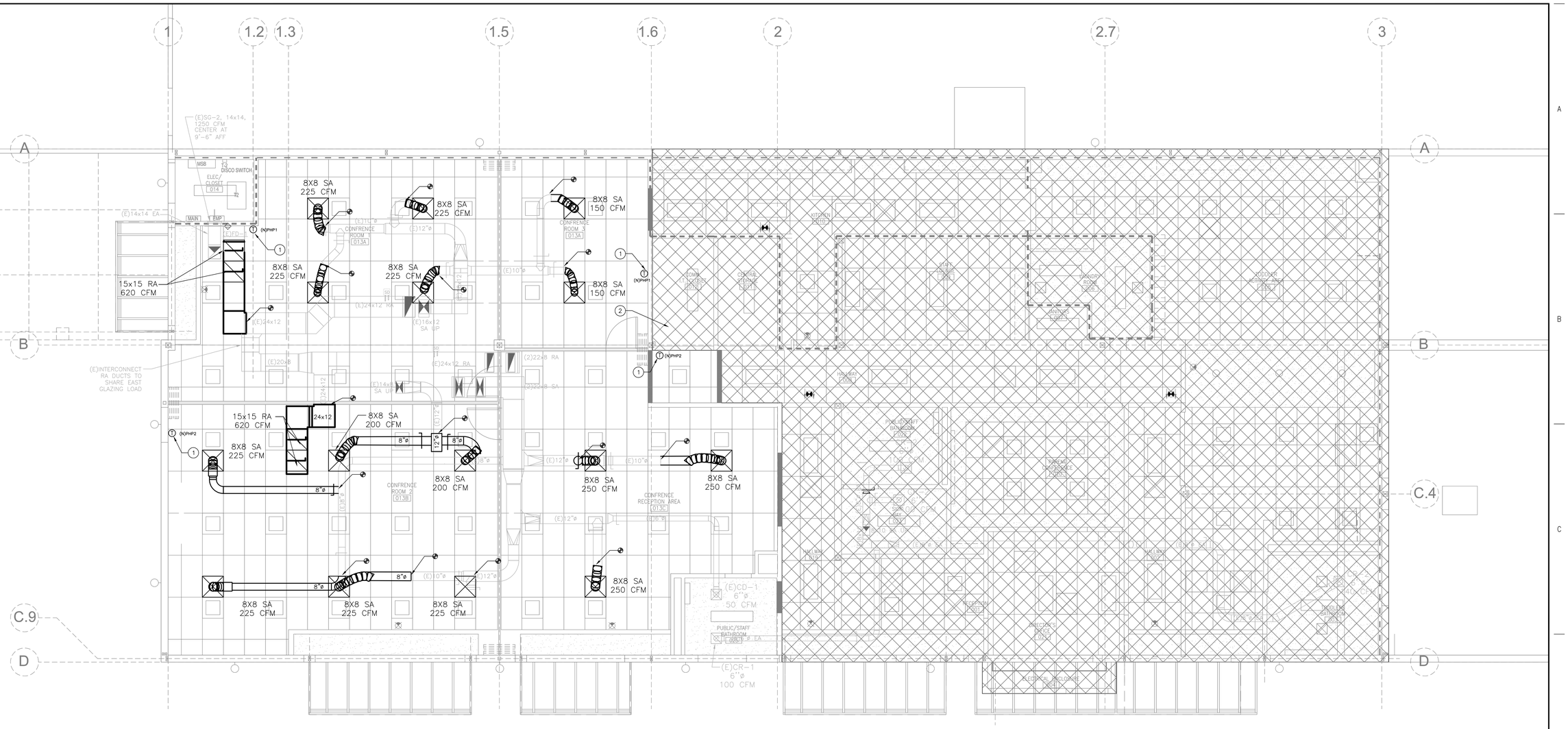

GENERAL NOTES

1. DUCT SIZE FROM MAIN SUPPLY AIR DUCT TO DIFFUSER SHALL BE INSULATED ROUND SHEET METAL DUCT TO WITHIN 5 FEET OF DIFFUSER THEN INSULATED FLEXIBLE DUCT TO DIFFUSER.
2. PROVIDE NEW VOLUME DAMPER AT TAKE-OFF FROM SUPPLY AND EXHAUST AIR MAINS AS NEEDED (TYPICAL).
3. REFER TO SHEET METAL DETAILS ON DETAIL SHEETS FOR METHOD OF BRANCH DUCT TAKE-OFF FROM MAIN DUCT.
4. ALL DUCTWORK IN SCOPE AND CONNECTED TO SYSTEM WILL BE CLEANED PER SPECIFICATION SECTION 23 01 30.52.

KEY NOTES

(1) NEW SPACE SENSORS FOR EXISTING HEAT PUMP UNIT(S). INSTALL NEW RTU APP CONTROLLER IN HEAT PUMP. PROVIDE ALL WIRING REQUIRED TO INSTALL NEW FIELD SENSORS AND INTERCONNECT WRING TO NAE CONTROLLER IN IT ROOM.

(2) OWNER CONTROLLED IT ROOM WITH NAE CONTROLLER. COORDINATE ALL WORK WITH OWNER.

one quarter inch = one foot
0 4 8
NTS

Revisions	Date
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CONSULTANTS:
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REGISTERED PROFESSIONAL ENGINEER JEFFREY A. DUFOE NO. 32824 EXP. 06-30-24 MECHANICAL STATE OF CALIFORNIA

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Drawing Title: MECHANICAL NEW WORK FLOOR PLAN

Approved Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: JD | Drawn: YL

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: M3.100

Dwg. Page 40 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
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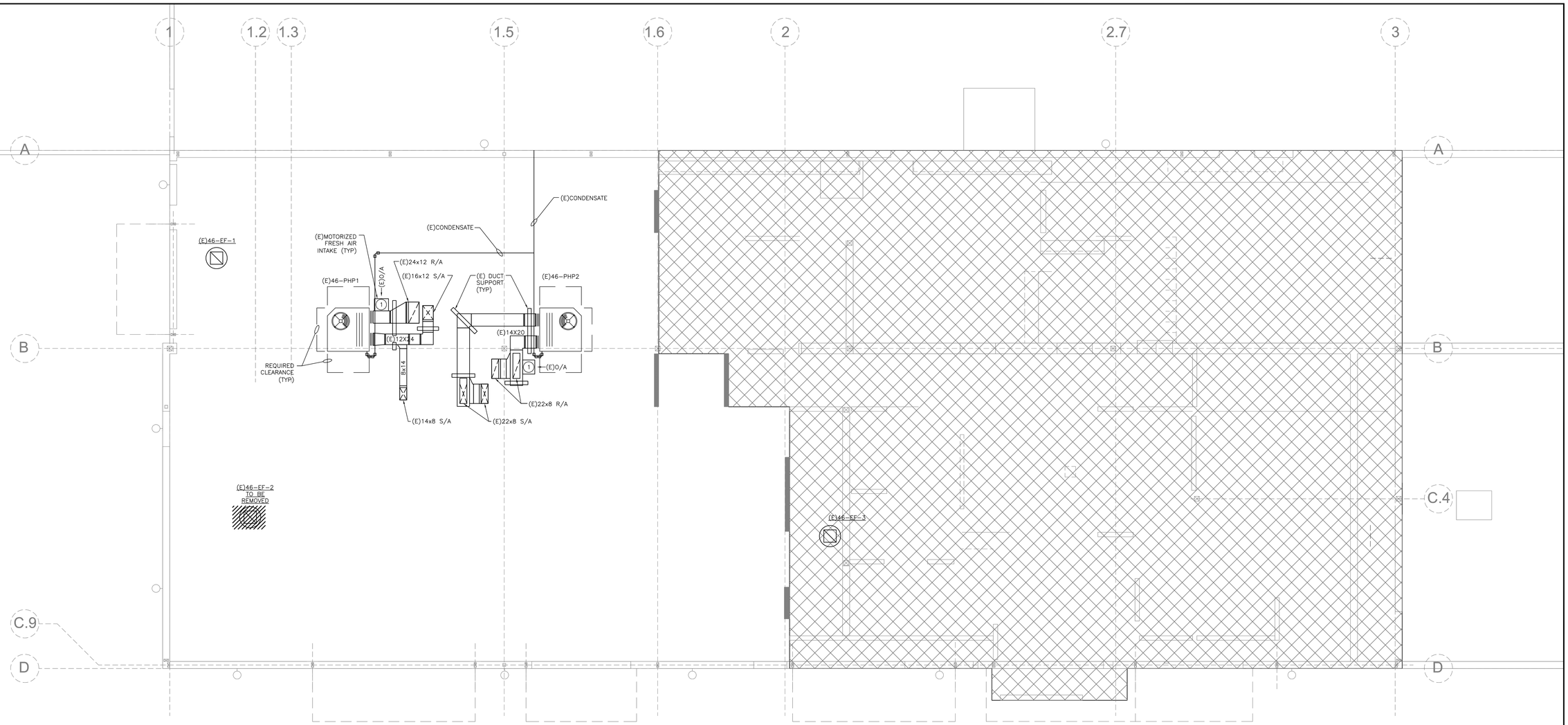

GENERAL NOTES

1. EXISTING UNITS, CONTROLS AND DUCTWORKS TO REMAIN.

KEY NOTES

(1) ADJUST EXISTING OUTSIDE AIR DAMPERS AS NEEDED. REFER TO AIR BALANCE TABLE FOR REQUIREMENTS.

one quarter inch = one foot
0 4 8
NTS

CONSTRUCTION DOCUMENTS

Revisions:	Date
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REGISTERED PROFESSIONAL ENGINEER
JEFFREY A. DUFOE
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EXP. 06-30-24
MECHANICAL
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Drawing Title: MECHANICAL ROOF PLAN
Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA LONG BEACH CA
Date: 11 JANUARY, 2023
Checked: JD
Drawn: YL

Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: M4.100
Dwg. Page 41 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

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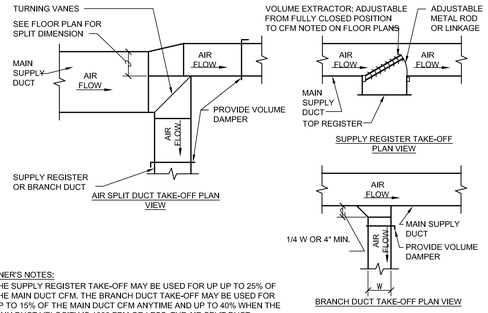
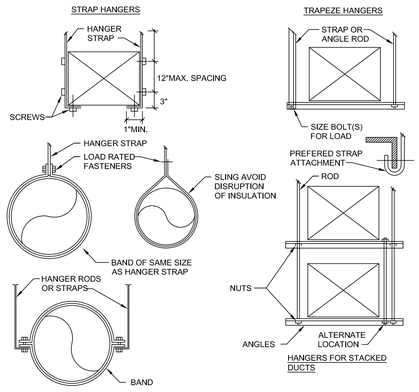


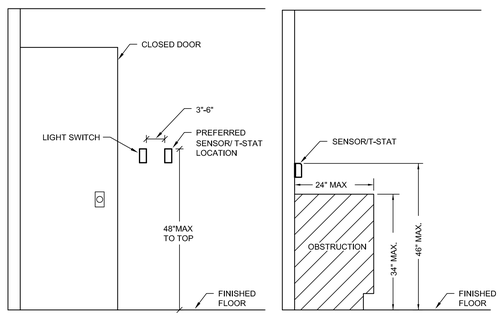
DESIGNER'S NOTES:

1. THE SUPPLY REGISTER TAKE-OFF MAY BE USED FOR UP UP TO 25% OF THE MAIN DUCT CFM. THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM ANYTIME AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES AND MAY BE USED AT ANYTIME.
2. SHOW ALL VOLUME DAMPERS ON FLOOR PLANS.

10 SUPPLY DUCTWORK TAKEOFF
NO SCALE



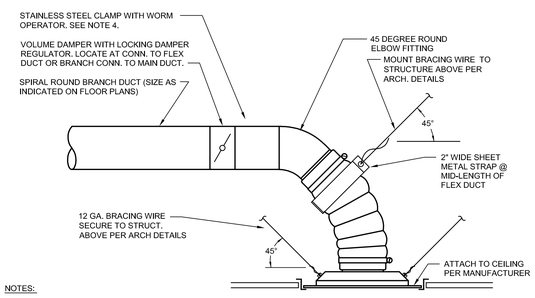
11 DUCT SUPPORT DETAIL
NONE



NOTES:

1. DO NOT INSTALL T-STATS ON EXTERIOR WALLS.

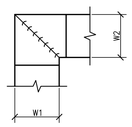
11 THERMOSTAT/SENSOR HEIGHT & LOCATION
NONE



NOTES:

1. ROUND NECK CEILING DIFFUSER SHOWN. PROVIDE SQUARE TO ROUND TRANSITION (8" MIN. HEIGHT) FOR SQUARE NECK DIFFUSERS.
2. FOR HARD CEILINGS PROVIDE SURFACE MOUNTED TYPE CEILING DIFFUSERS AND REMOTE OPERATED DAMPERS.
3. WHERE FACTORY INSTALLED SHEET METAL FITTING ENDS ARE PROVIDED, ATTACH TO BRANCH DUCT WITH SHEET METAL SCREWS AND DUCT SEALER.

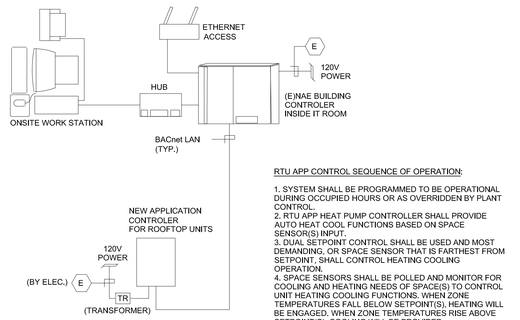
7 CEILING DIFFUSER DETAIL
NO SCALE



NOTE:

1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

8 DUCTWORK SQUARE VANE ELBOWS
NO SCALE

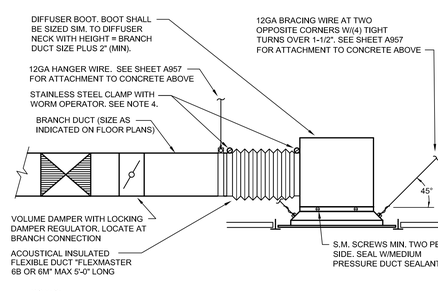


NOTES:
EXISTING NAE COMMS ARE LOCATED AT IT ROOM. INTERCONNECT NEW RTU APP CONTROLLERS TO NAE CONTROL. ALL NEW EQUIPMENT PROGRAMMED AS REQUIRED FOR INTERFACE TO PLANT.

RTU APP CONTROL SEQUENCE OF OPERATION:

1. SYSTEM SHALL BE PROGRAMMED TO BE OPERATIONAL DURING OCCUPIED HOURS OR AS OVERRIDDEN BY PLANT CONTROL.
2. RTU APP HEAT PUMP CONTROLLER SHALL PROVIDE AUTO HEAT COOL FUNCTIONS BASED ON SPACE SENSOR(S) INPUT.
3. DUAL SETPOINT CONTROL SHALL BE USED AND MOST DEMANDING, OR SPACE SENSOR THAT IS FARTHEST FROM SETPOINT, SHALL CONTROL HEATING COOLING OPERATION.
4. SPACE SENSORS SHALL BE POLLED AND MONITOR FOR COOLING AND HEATING NEEDS OF SPACE(S) TO CONTROL UNIT HEATING COOLING FUNCTIONS. WHEN ZONE TEMPERATURES FALL BELOW SETPOINT(S), HEATING WILL BE ENGAGED. WHEN ZONE TEMPERATURES RISE ABOVE SETPOINT(S), COOLING WILL BE PROVIDED.
5. DURING UNOCCUPIED MODE AS PROGRAMMED BY PLANT CONTROL, UNIT WILL CYCLE TO MAINTAIN SPACE(S) SETPOINTS WITHIN ACCEPTABLE DEADBAND LIMITS.
6. UNIT CONTROLLERS SHALL BE INTERFACED TO FIRE ALARM FOR UNIT SHUTDOWN AS SIGNALED FROM FIRE ALARM INTERFACE PROVIDED BY OTHERS.

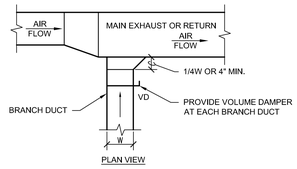
9 BMS SYSTEM ARCHITECTURE
NO SCALE



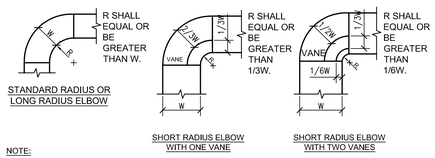
NOTES:

1. RETURN AND EXHAUST REGISTERS INSTALLED SIMILARLY.
2. FOR HARD CEILINGS PROVIDE SURFACE MOUNTED TYPE CEILING DIFFUSERS AND REMOTE OPERATED DAMPERS.
3. SEE SPECIFICATION & DRAWINGS FOR AIR DISTRIBUTION TYPE.
4. ATTACH DIFFUSER BOOT TO TERMINAL WITH SHEET METAL SCREWS AND MEDIUM PRESSURE DUCT SEALANT.

4 LOW CLEARANCE CEILING DIFFUSER DETAIL
NO SCALE



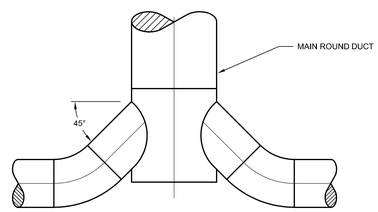
5 EXHAUST OR RETURN BRANCH DUCT
NO SCALE



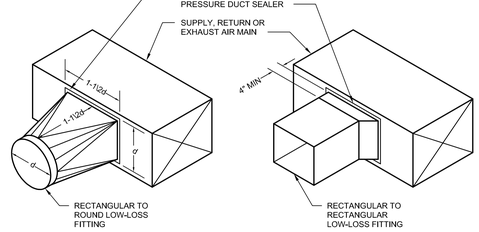
NOTE:

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

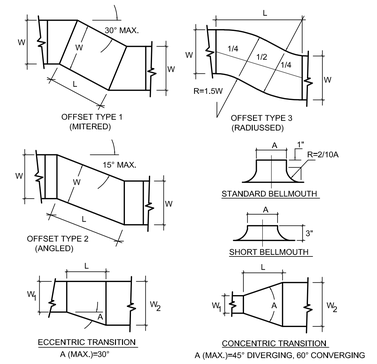
6 DUCTWORK RADIUS ELBOWS
NO SCALE



1 BRANCH DUCT LOW-LOSS FITTING DETAIL
NO SCALE



2 DUCT OFFSET AND TRANSITION DETAILS
NO SCALE



OFFSETS 1 AND 3 AND TRANSITIONS MAY HAVE EQUAL INLET AND OUTLET AREAS. TRANSITIONS MAY CONVERT DUCT PROFILES TO ANY COMBINATION FOR RECTANGULAR, ROUND OR FLAT OVAL SHAPES.

3 ROUND DUCT TAKE-OFF
NO SCALE

Revisions:	Date
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Drawing Title: MECHANICAL DETAILS

Approved: Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Project Number: 600-22-703

Building Number: BLDG. #46

Location: VA LONG BEACH CA

Drawing Number: M5.100

Date: 11 JANUARY, 2023 | Checked: JD | Drawn: YL

Dwg. Page 42 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

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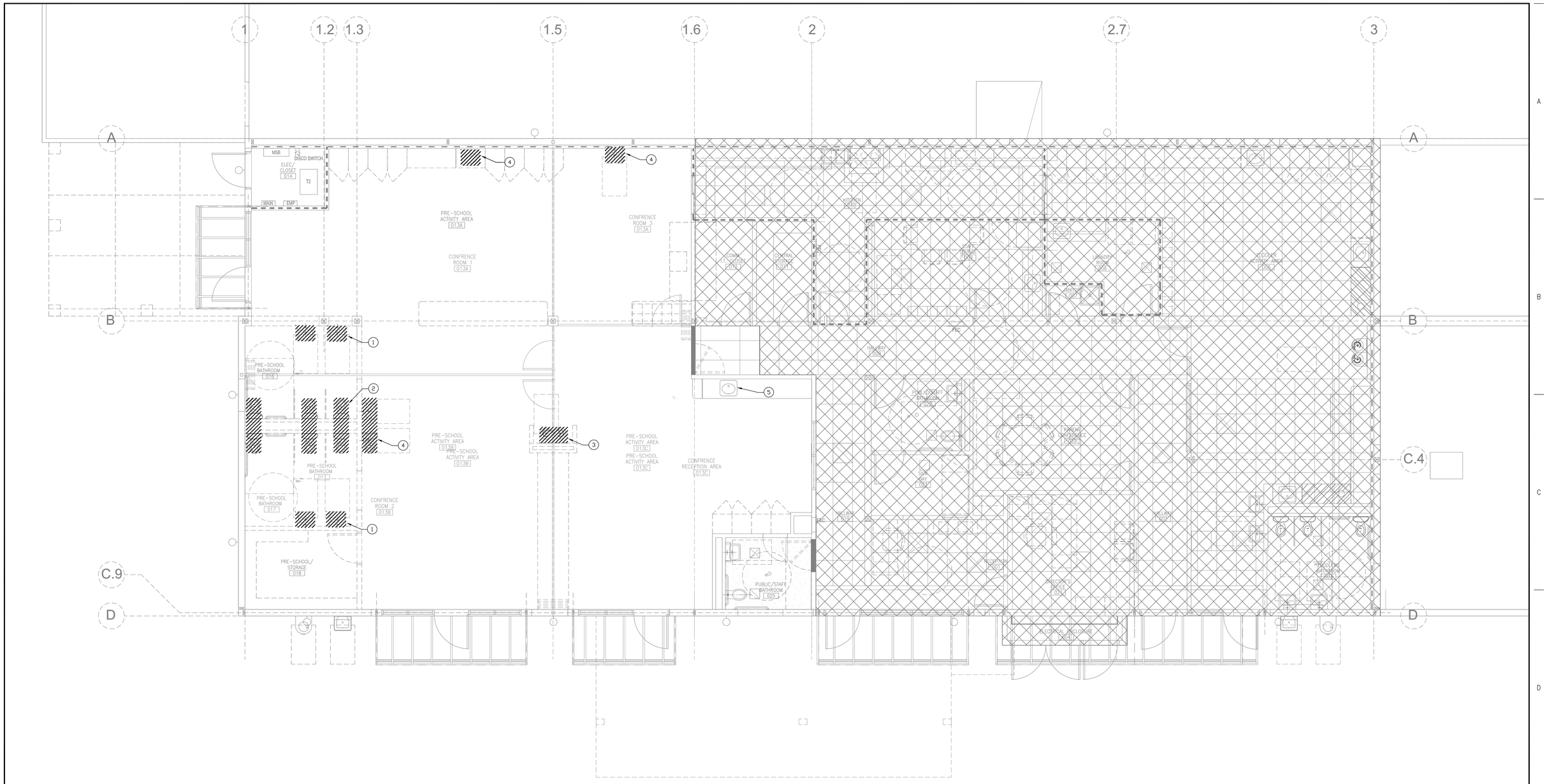

DEMO GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND PROVIDE REPAIR OF ADJACENT EXISTING SURFACES, EQUIPMENT, AREAS, AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF ANY DEMOLITION AND/OR NEW WORK.
2. CONTRACTOR SHALL VERIFY ALL LOCATIONS, SIZES, P.O.C'S, INVERT ELEVATIONS, AND AVAILABILITY OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF ANY MATERIAL OR EQUIPMENT.
3. THESE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ARE NOT INTENDED TO INDICATE ALL DETAILS AND NECESSARY OFFSETS OF PIPING. THE CONTRACTOR SHALL INSTALL MATERIAL AND EQUIPMENT IN A MANNER AS TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. ALL INSTALLATIONS SHALL BE CONSISTENT WITH NORMALLY ACCEPTABLE INDUSTRY STANDARDS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR CONFLICTS THAT WOULD EFFECT THE SYSTEM PERFORMANCE OR INCUR ADDITIONAL COSTS. THIS NOTIFICATION SHALL BE SUBMITTED PRIOR TO INSTALLATION OF THE ITEMS CONCERNED.

DEMO KEY NOTES

1. REMOVE (E) LAVATORY. REMOVE DRAIN LINE BACK TO UNDERGROUND MAINS AND PLUG. REMOVE VERTICAL WATER LINES AND VENT AS REQUIRED, TAKE BACK TO MAINS AND CAP IN CEILING.
2. REMOVE (E) WATER CLOSET. REMOVE DRAIN LINE BACK TO UNDERGROUND MAINS AND PLUG. REMOVE VERTICAL WATER LINES AND VENT AS REQUIRED, TAKE BACK TO MAINS AND CAP IN CEILING.
3. REMOVE (E) ELECTRIC WATER COOLER AND ASSOCIATED POWER WIRING, REMOVE DRAIN LINE BACK TO UNDERGROUND MAINS AND PLUG. REMOVE HORIZONTAL WATER LINES AND VENT AS REQUIRED IN DEMOED KICK SPACE, TAKE BACK AND CAP NEAR MAINS IN CEILING.
4. REMOVE (E) SINK, REMOVE DRAIN LINE BACK TO UNDERGROUND MAINS AND PLUG. REMOVE VERTICAL WATER LINES AND VENT AS REQUIRED, TAKE BACK TO MAINS AND CAP IN CEILING.
5. (E) SINK TO REMAIN.

one quarter inch = one foot (0, 4, 8)

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CONSTRUCTION DOCUMENTS

Revisions:	Date
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858.344.8900

Drawing Title: PLUMBING DEMO FLOOR PLAN

Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | **Checked:** JD | **Drawn:** YL

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: P2.100

Dwg. Page 43 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

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VA FORM 08-6231

APPLICABLE CODES AND STANDARDS

1.7.1 GENERAL

THE A/E SHALL USE AND COMPLY WITH LATEST PERTINENT CODES, STANDARDS AND EXECUTIVE ORDERS FOR THE DESIGN. REFER TO PG-18-3, TOPIC 1, CODES, STANDARDS OF THE EXECUTIVE ORDERS. UNLESS OTHERWISE INDICATED BY VA CRITERIA, USE THE LATEST CODES AND STANDARDS OF THE FOLLOWING ORGANIZATIONS:

(a) AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

(b) AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)

(c) ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)

(d) INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)

(e) INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO), STANDARDS FOR PROTOCOLS AND INTERFACES THAT INCLUDE OPEN SYSTEM INTERCONNECTIONS (OSI)

(f) JOINT COMMISSION ON ACCREDITATION HEALTHCARE ORGANIZATIONS (JCAHO), ENVIRONMENT OF CARE GUIDELINES AND STANDARDS.

(g) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA): THE A/E SHALL PAY PARTICULAR ATTENTION TO THE FOLLOWING PUBLICATIONS:

- NFPA 20 – STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
- NFPA 70 – NATIONAL ELECTRICAL CODE
- NFPA 70 B – RECOMMENDED PRACTICE FOR ELECTRICAL EQUIPMENT MAINTENANCE
- NFPA 70 E – STANDARD ELECTRICAL SAFETY IN THE WORKPLACE
- NFPA 72 – NATIONAL FIRE ALARM AND SIGNALING CODE

(g) NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

(i) UNDERWRITERS LABORATORIES, INC (UL)

1.7.2 LOCAL CODES AND CONDITIONS

THE A/E SHALL BRING TO THE ATTENTION OF CO, PM AND COR, IN WRITING, LOCAL AND REGIONAL CLIMATIC AND GEOGRAPHIC CONDITIONS, AND PROVISIONS OF LOCAL BUILDING CODES THAT ARE SIGNIFICANTLY DIFFERENT FROM CODES AND STANDARDS LISTED ABOVE. THE A/E SHALL PROVIDE CO, PM AND COR, IN WRITING, WITH SPECIFIC INFORMATION ON HOW THE PROPOSED DESIGN WILL REFLECT THESE CONDITIONS AND CODES. THE A/E SHALL FOCUS ON LOCAL CODES, CODE AMENDMENTS, AND/OR CONDITIONS RELATED TO COASTAL, HURRICANE-PRONE, ARCTIC OR SEISMICALLY-ACTIVE REGIONS, OR OTHER CLIMATIC OR REGIONAL CONDITIONS THAT WARRANT ADDITIONAL MEASURES TO PROTECT THE INTEGRITY OF SYSTEMS.

FIRE PROTECTION CODES:

- INTERNATIONAL BUILDING CODES (IBC) – 2021 EDITION
- VA DESIGN MANUAL FOR FIRE PROTECTION – 2015 EDITION
- NFPA 101 LIFE SAFETY CODE (LSC) – 2021 EDITION
- NFPA 70 NATIONAL ELECTRIC CODE – 2020 EDITION
- NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE – 2019 EDITION
- NFPA 10 STANDARD FOR POTABLE FIRE EXTINGUISHER – 2018 EDITION

DEFERRED APPROVAL FIRE ALARM SYSTEM

1. DESIGN BUILD FIRE ALARM SYSTEM: CONTRACTOR SHALL PROVIDE ALL FIRE ALARM COMPONENTS REQUIRED BY CITY, COUNTY AND STATE CODES ALONG WITH ANY OWNER REQUIREMENTS.
2. CONTRACTOR SHALL COMPLY WITH THE LATEST ADOPTED CITY, COUNTY AND STATE CODES.
3. CONTRACTOR SHALL PROVIDE ARCHITECT, ENGINEER AND OWNER WITH FULL SET OF FIRE ALARM DRAWINGS AND SUBMITTAL BOOKLET FOR REVIEW.
4. CONTRACTOR SHALL BE REQUIRED TO HAVE PRIOR APPROVAL OF THE FIRE ALARM DESIGN FROM THE ARCHITECT, ENGINEER AND OWNER PRIOR TO SUBMITTING FOR PERMIT.
5. CONTRACTOR SHALL OBTAIN PERMIT PRIOR TO STARTING ANY WORK.
6. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATING BUILDING STANDARD REQUIREMENTS WITH OWNER'S REPRESENTATIVE PRIOR TO THE START OF WORK. ANY SPECIFIED OR OPERATIONAL FEATURE NOT SPECIFICALLY ADDRESSED PRIOR TO THE BID DATE WILL BE REQUIRED TO BE MET WITHOUT EXCEPTION/CHANGE ORDER.
7. THE FIRE ALARM VENDOR/CONTRACTOR/DESIGN BUILDER SHALL PROVIDE ALL OF THE APPLICATION ENGINEERING, DOCUMENTATION, AND TESTING REQUIRED OBTAIN LOCAL AND STATE FIRE MARSHAL'S APPROVAL AND SYSTEM ACCEPTANCE.
8. CONTRACTOR SHALL PROVIDE THE EQUIPMENT AND DEVICES INDICATED HEREIN AND ON THE DRAWINGS AND VARIOUS OTHER COMPONENTS INCLUDING FIRE ALARM PANEL, FIRE SYSTEM ANNUNCIATOR, REMOTE POWER SUPPLIES, ADDRESSABLE SMOKE DETECTORS, ADDRESSABLE HEAT DETECTOR, ADDRESSABLE RELAY MODULE, ETC. AS REQUIRED.
9. CONTRACTOR SHALL PROVIDE A SYSTEM DIAGRAM INCLUDING RISER DIAGRAMS AND FLOOR PLANS INDICATING ALL CONDUIT AND WIRE SIZES AND QUANTITIES BETWEEN ALL DEVICES. COLOR CODING FOR DEVICE WIRINGS SHALL MATCH THE EXISTING INSTALLATIONS.
10. CONTRACTOR SHALL PROVIDE ALL CONDUITS, WIRES AND CABLES AS REQUIRED AND RECOMMENDED BY FIRE ALARM MANUFACTURER. CONTRACTOR SHALL INSTALL AND CONNECT ALL SYSTEM COMPONENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
11. CONTRACTOR SHALL PROVIDE VOLTAGE DROP AND BATTERY BACK-UP CALCULATIONS REQUIRED BY THE APPROVED AGENCIES.
12. CONTRACTOR SHALL SUBMIT CATALOG CUTS, TECHNICAL DATA, CONDUCTOR TYPE AND DESCRIPTIVE LITERATURE ON ALL COMPONENTS TO BE FURNISHED INCLUDING STATE FIRE MARSHAL LISTINGS (CALIFORNIA).
13. CONTRACTOR SHALL SUBMIT CALIBRATION AND TESTS REPORTS PRIOR TO FINAL ACCEPTANCE.
14. CONTRACTOR SHALL PROVIDE ADDITIONAL DEVICES REQUIRED BY THE FIRE MARSHAL FOR THE FINAL ACCEPTANCE TEST, IT SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
15. CONTRACTOR SHALL PROVIDE A MINIMUM 1 YEAR GUARANTEE CERTIFICATE FOR LABOR AND MATERIALS, INSTRUCTIONS AND MAINTENANCE MANUAL WITH A 24 HOUR FACTORY REPRESENTATIVE SUPPORT PHONE NUMBER. PROVIDE 8 HOURS OF INSTRUCTION TIME TO SHOW THE OWNER'S REPRESENTATIVE THE FUNCTION OF THE SYSTEM.

FIRE ALARM SYSTEM SYMBOLS

- FIRE CONTROL PANEL +72" A.F.F. TO TOP OF DEVICE
- REMOTE POWER SUPPLY +72" A.F.F. TO TOP OF DEVICE
- FIRE TERMINAL CABINET
- FIRE SYSTEM ANNUNCIATOR +48" A.F.F. TO TOP OF DEVICE
- CONTROL MODULE
- RELAY MODULE CONTROL RELAY, SPDT, W/ LED
- MONITOR MODULE
- PULL STATION +48" A.F.F. TO TOP OF DEVICE
- WATER FLOW SWITCH
- TAMPER SWITCH
- DOOR HOLD OPEN DEVICE
- SUPERVISION RELAY
- DETECTOR 120 VAC W/9VDC BATTERY
- PHOTOELECTRIC SENSOR
- HEAT SENSOR W/ RATE-OF-RISE
- IN-DUCT DETECTOR PROVIDED BY MECHANICAL
- 24VDC AUDIBLE/STROBE UNIT (15CD) +80" A.F.F. TO TOP OF DEVICE (CD=CANDELA)
- 24VDC STROBE UNIT (15CD) +80" A.F.F. TO TOP OF DEVICE (CD=CANDELA)
- FIRE SMOKE DAMPER IN MECHANICAL DUCTWORK INITIATED VIA SMOKE DETECTOR (PROVIDED BY MECHANICAL)
- 24VDC HORN +90" A.F.F. TO TOP OF DEVICE

GENERAL NOTES

1. THESE DRAWINGS AND RELATED CONSTRUCTION WORK SHOWN ARE FOR AN APPROVAL OF THE VETERANS ADMINISTRATION, FIRE MARSHAL, UTILITY COMPANY, BUILDING INSPECTOR AND OTHER AGENCIES AUTHORITY HAVING JURISDICTIONS (AHJ), BY THE ACT OF SUBMITTING A BID PROPOSAL FOR WORK, THE CONTRACTOR HAVING REVIEWED THE PLANS THOROUGHLY AND INCLUDED CONTINGENCY CONSTRUCTION COST FOR ALL ADDITIONAL PLAN CORRECTIONS AND ASSOCIATED CONSTRUCTION COSTS IN BID.
2. PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO ACHIEVE A COMPLETE AND OPERATING SYSTEM. INTENT OF ELECTRICAL WORKS ARE INDICATED HERE IN AND DESCRIBED IN THESE CONTRACT DRAWINGS AND SPECIFICATIONS.
3. COORDINATE AND OBTAIN APPROVALS FROM ALL RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES, AND ANY AUTHORITY HAVING JURISDICTION (AHJ) AS REQUIRED FOR A COMPLETE AND OPERATING INSTALLATION. CONTRACTOR TO PAY ALL FEES LEVIED BY UTILITY COMPANIES AND GOVERNMENT AGENCIES.
4. INSTALL RACEWAY SYSTEMS AS FOLLOWS:
   a. ALL CONDUITS INSTALLED IN EXTERIOR AND AREA OF HEAVY MACHINERY TRAFFIC SHALL BE RIGID STEEL WITH THREADED FITTINGS
   b. INTERIOR CONDUITS SHALL BE ELECTRICAL METALLIC TUBING WITH COMPRESSION TYPE FITTINGS.
   c. USE FLEXIBLE METALLIC CONDUIT FOR SHORT CONNECTION TO LIGHTING FIXTURE (6'MAX.) AND CONNECTION TO EQUIPMENT REQUIRING VIBRATION ISOLATION AND ONLY IN AREAS AS PERMITTED BY AHJ. USE SEAL-TITE IN AREAS EXPOSED TO WEATHER.
   d. USE P.V.C. CONDUIT UNDERGROUND WITH CODE SIZED GROUND. CONDUIT RISERS AND STUBS ABOVE GRADE SHALL BE I.M.C. WITH HALF-LAPPED TAPE COVERING OR P.V.C. COATING.
5. ALL NEW WIRING SHALL BE COPPER 600 VOLT INSULATION TYPE "THHN/THWN" – U.O.N.
6. DO NOT SCALE THE ELECTRICAL DRAWING FOR LOCATION OF EQUIPMENT OR DEVICES. ALL LOCATION OF RECEPTACLE, FIXTURE, DEVICE, EQUIPMENT ETC... SHALL BE VERIFIED WITH ARCHITECT DRAWINGS AS WELL AS EQUIPMENT SUPPLIER REQUIREMENTS PRIOR TO ANY ROUGH-IN WORK.
7. CONTRACTOR SHALL PERFORM ALL WORK IN STRICT ACCORDANCE WITH ALL LOCAL AND NATIONAL GOVERNING CODES.
8. ALL EQUIPMENT SHOWN SHALL BE NEW AND BEAR A "UL" LABEL – U.O.N.. MANUFACTURED WITHIN 6 MONTHS. ALL EXISTING EQUIPMENT, FIXTURES AND DEVICES RE-USED ON THIS PROJECT REQUIRES INSPECTION AND APPROVAL OF AHJ AND NEW U.L. LISTING MAY BE REQUIRED. ALL RE-USED EQUIPMENT ON THIS PROJECT SHALL HAVE SAME VALIDITY AS NEW EQUIPMENT REQUIRING SAME WARRANTIES.
9. COMPLETE ELECTRICAL INSTALLATION SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF ONE YEAR – U.O.N..
10. THIS CONTRACTOR SHALL INCLUDE IN BID –COSTS FOR ALL HVAC CONTROL COMPONENTS, CONDUITS, DEVICES, ETC. AS DEEMED NECESSARY FOR A COMPLETE AND OPERATING HVAC SYSTEM. REFER TO MECHANICAL DRAWINGS, DIAGRAMS AND SPECS FOR THOSE ITEMS INDICATED THERE ON.
11. CONTRACTOR SHALL VISIT SITE PRIOR TO BID DATE, TO VERIFY ALL EXISTING CONDITIONS TO BE ENCOUNTERED IN THE INSTALLATION OF ALL NEW EQUIPMENT, FIXTURES DEVICES, FEEDERS, ETC... EXACT INSTALLATION METHOD AND REQUIREMENTS SHALL BE VERIFIED AND DETERMINED PRIOR TO BID DATE. CONTRACTORS SHALL IMMEDIATELY NOTIFY THIS ENGINEER OF ANY REQUIRED MODIFICATIONS WHICH ARE NOT SHOWN ON THESE DRAWINGS. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED.
12. ALL EQUIPMENT ELECTRICAL CHARACTERISTICS, LOCATIONS, AND CONNECTION REQUIREMENTS SHALL BE VERIFIED PRIOR TO ANY ROUGH-IN WORK. CONTRACTOR IS REQUIRED TO VERIFY ELECTRICAL CHARACTERISTIC OF EACH EQUIPMENT AGAINST PLAN & SPECIFICATION IMMEDIATELY UPON DELIVERY TO THE SITE. DO NOT WAIT TILL INSTALLATION TIME.
13. THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND REPRESENT THE INTENT OF THE ELECTRICAL WORK AND MAY NOT REPRESENT A COMPLETE OPERATING SYSTEM. CONTRACTOR IS REQUIRED TO PROVIDE COORDINATED SCALED CONSTRUCTION DRAWING IN A FORM OF SHOP DRAWING FOR APPROVAL SHOWING EXACT ROUTING OF CONDUITS, WIRING DIAGRAMS, POINT TO POINT CONNECTION AND ANY DETAIL REQUIRED FOR CONSTRUCTION OF COMPLETE OPERATING SYSTEM. DO NOT SCALE THESES ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS.
14. ELECTRICAL CONTRACTOR SHALL FURNISH THE FOLLOWING SHOP DRAWINGS FOR PRIOR APPROVAL:
   a. LIGHTING FIXTURES AND CONTROLLERS.
   b. CIRCUIT BREAKERS.
   c. DISCONNECT SWITCHES.
   d. DEVICES.
   e. CONDUIT AND CONDUCTORS.
   f. OTHER ITEMS AS SPECIFICALLY INDICATED AND ALL MATERIAL USED IN CONSTRUCTION.
15. THESE ITEMS SHALL BE REVIEWED BY THIS OFFICE PRIOR TO ANY COMMENCEMENT OF PLACING ORDERS OR PERFORMING ANY ROUGH-IN WORK. CONTRACTOR IS RESPONSIBLE TO REVIEW ALL SHOP DRAWINGS FOR PHYSICAL SIZE AND ELECTRICAL CHARACTERISTICS AND PROVIDE STAMP OF ACCEPTANCE PRIOR TO SUBMITTAL TO THE ARCHITECT. SHOP DRAWING WILL NOT BE REVIEWED WITHOUT THE ACCEPTANCE STAMP BY CONTRACTOR. ANY EQUIPMENT USED IN THIS PROJECT WITHOUT WRITTEN APPROVAL OF ARCHITECT OR ENGINEER AND THE DEVICES FAIL TO MEET THE STANDARD OF QUALITY SHALL BE REPLACED BY CONTRACTOR AT HIS EXPENSES AND LIQUIDATED DAMAGES AND DELAY CHARGES BY PROPERTY OWNER.
16. ALL POWER BRANCH CIRCUITS SHALL BE INSTALLED WITH #12 GREEN GROUND WIRE U.O.N. COMPLETE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH THE PRESENTLY ADOPTED EDITION OF THE C.E.C.
17. UPDATING AND PROVIDING A TYPE WRITTEN PANEL DIRECTORY FOR ALL PANELS WORKED ON PART OF PROJECT. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CIRCUITS WHETHER OR NOT AFFECTED BY REMODEL.
18. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT. PHENOLIC ENGRAVED NAMEPLATES FOR NEW PANELS, SWITCHBOARDS, DISTRIBUTION BOARDS, DISTRIBUTION PANELS, TRANSFORMERS, ATS'S, DISC. SW'S INDICATING: EQ ID NO., VOLTAGE, AMPS, WHERE FED FROM (FOR ATS BOTH E & N) NORMAL. DEVICE NAME PLATES ARE BLACK BACKGROUND IN WHITE LETTER AND EMERGENCY NAME PLATE ARE RED BACKGROUND IN WHITE LETTER.
19. ALL JUNCTION BOXES SHALL HAVE CIRCUIT NUMBERS MARKED WITH PERMANENT MARKER ON J-BOX COVER (ON FRONT IF CONCEALED ABOVE CEILING OR EXPOSED IN ELEC. OR MECH. ROOMS OR ON INSIDE/BACKSIDE OF COVER IF EXPOSED IN PUBLIC AREAS).
20. ALL MANUFACTURER'S AND MODEL NUMBERS INDICATED ON THESE DRAWINGS SPECIFY A LEVEL OF QUALITY/STANDARD. "OR EQUAL" SUBSTITUTIONS MAY BE PROVIDED IF APPROVED BY THE ARCHITECT.
21. PENETRATIONS OF ALL RATED STRUCTURES, FLOOR, WALLS OR CEILING SHALL BE SEALED. PROVIDE FIRE STOP METHOD DETAIL AND DESIGN PER CBC-714,709.6, 709.7, 710.2 & 710.3. AND MAINTAIN FIRE RATING IN ACCORDANCE WITH U.L. SYSTEM WL #1003. SEAL AND FIRE STOP TO BE PROVIDED IN ALL OPENINGS FOUND IN CONSTRUCTION AREA NEW OR EXISTING TO ENSURE THE RATING OF STRUCTURES. DO NOT PENETRATE OR RUN CONDUITS IN AND OUT OF RATED CORRIDOR OR STAIRWELL ENCLOSURE FOR CIRCUITS NOT INTENDED TO SERVE THE EQUIPMENT WITHIN THE ENCLOSURE. CONDUIT MUST BE RUN OUTSIDE OF RATED ENCLOSURE ENVELOPS.
22. FINAL LOCATION, ROUTING, INSTALLATION METHOD AND HEIGHT SHALL BE DETERMINED IN THE FIELD AT THE TIME OF INSTALLATION. COORDINATE ELECTRICAL WORK WITH ALL OTHER TRADES TO AVOID CONFLICTIONS AND DELAYS.
23. ANY DEVIATION FROM ORIGINAL DESIGN MUST BE APPROVED BY OMB ENGINEERING BEFORE EXECUTION AND RED LINE "AS-BUILT" DRAWINGS MUST BE SUBMITTED AT THE COMPLETION OF PROJECT.
24. COORDINATE ALL PHASES OF CONSTRUCTION AND OBTAIN APPROVAL OF WORK SCHEDULE, SHUTDOWN, CUTOVER, OVERTIME WORK, ETC. WITH DIRECTOR OF PLANT OPERATIONS. PROVIDE ALL TEMPORARY SERVICE, TEMPORARY POWER FEEDERS, 24 HOURS FIRE WATCH, ETC. AS REQUIRED TO MAINTAIN UNINTERRUPTED FACILITY OPERATION DURING CONSTRUCTION WORK. COORDINATE REQUIREMENTS WITH OWNER.
25. THE CONTRACTOR AGREE THAT, IN ACCORDANCE WITH GENERALLY CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT AT ALL TIME. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
26. PROVIDE THE OWNER AND THIS ENGINEER WITH ONE SET OF ELECTRICAL "AS-BUILTS" SHOWING DIMENSIONS OF ELECTRICAL LOCATION AT THE COMPLETION OF JOB. AS-BUILT SHALL BE STAMPED AND DATED WITH CONTRACTOR NAME ADDRESS AND 24 HOUR TELEPHONE NUMBER. PROVIDE ALL INSTRUCTION MANUALS, SPARE PARTS, TEST DATA, RECOMMENDED MAINTENANCE PROCEDURE, TROUBLE SHOOTING AND ALL OTHER MATERIAL USED IN PROJECT AT THE PROJECT CLOSING.
27. ALL WORK TO COMPLY WITH 2019 NATIONAL ELECTRICAL CODE CODE.
28. PROVIDE SWITCH AND RECEPTACLE HEIGHTS PER STATE OF CALIFORNIA ACCESSIBLE REQUIREMENTS.
29. GIVE THE LOS ANGELES DEPARTMENT OF WATER AND POWER (DWP) WRITTEN NOTICE OF THE EXTENT AND NATURE OF ANY MATERIAL CHANGE IN THE SIZE, CHARACTER, OR EXTENT OF THE UTILIZING EQUIPMENT OR OPERATIONS FOR WHICH THE DEPARTMENT OF WATER AND POWER IS SUPPLYING ELECTRIC SERVICE BEFORE MAKING ANY SUCH CHANGE.
30. THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGINATION – NEC.
31. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES – NEC.
32. PROVIDE SEPARATE SUBMITTAL FOR ALL ELECTRICAL SUBSYSTEMS WITH POWER SUPPLY(S) OF MORE THAN 50VA AND/OR 24V. (E.G. SECURITY, CARD READERS, TELCO/DATA, PA, AUDIO/VISUAL, NURSE CALL, HVAC AND REFRIGERATION CONTROLS, ETC.).
33. ALL INSTALLED MATERIALS AND EQUIPMENT SHALL BE LISTED U.L. NTRL OR LISTED AND APPROVED BY AN APPROVED TESTING LABORATORY.
34. TEST FOR ILLUMINATION AND EXIT SIGNS, INCLUDING DIRECTIONAL EXIT SIGNS POWERED BY EITHER THE NORMAL PREMISIS WIRING OR ANY ADDITIONALLY REQUIRED EMERGENCY SYSTEMS SHALL BE CONDUCTED IN THE PRESENCE OF THE BUILDING INSPECTION STAFF TO ENSURE COMPLIANCE. THE TEST TIMES FOR THE EMERGENCY SYSTEMS SHALL BE ARRANGED IN ADVANCE AND ALL STAFFING COST ASSOCIATED WITH THE EITHER PRE-HOURS OR AFTER-HOURS SHALL BE PAID AT THIS TIME. THE TESTING AND APPROVAL OF SUCH SYSTEMS SHALL OCCUR PRIOR TO THE ISSUANCE OF A TEMPORARY CERTIFICATE OF APPROVAL OR FINAL APPROVAL OF THE PROJECT. APPROVED DATE: _____ APPROVED BY: _____.
35. ELECTRICAL SWITCHES. CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE LOCATED NO MORE THAN 48 INCHES (1219 mm) MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES (381 mm) MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM.
36. ELECTRICAL RECEPTACLE OUTLETS. ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES (1219 mm) MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES (381 mm) MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM.
37. INSTALLATION HEIGHTS OF ELECTRICAL SWITCHES AND RECEPTACLE OUTLETS PER CBC
38. EACH MODIFIED CIRCUIT SHALL BE IDENTIFIED SUCH THAT IT CAN BE DISTINGUISHED FROM ALL OTHERS.
39. USE RIGID METAL CONDUIT IN ALL AREAS EXPOSED TO WEATHER. USE GROUND WIRE INSIDE ALL FLEXIBLE METAL CONDUITS. METAL CONDUIT SHALL NOT BE INSTALLED IN CONTACT WITH EARTH.
40. ALL EQUIPMENT TO BE U.L. LISTED OR EQUIVALENT.
41. PROVIDE SEPARATE NEUTRAL CONDUCTORS FOR ALL CIRCUITS.
42. ALL OUTLET COVERPLATES SHALL BE ENGRAVED WITH PANEL AND CIRCUIT NUMBER OR TELEPHONE I.D. NUMBER AS IS APPLICIBLE

DEMOLITION NOTES

1. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS.
2. THE EXISTING CONDITIONS SHOWN ARE FROM AVAILABLE RECORD DRAWINGS AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID. ALL DEMOLITION, ALTERATION, EXTENSION, RELOCATION, REHABILITATION WORK SHALL BE INCLUDED IN CONTRACT. NO ADDITIONAL ALLOWANCE OR CHANGE ORDERS WILL BE ACCEPTED.
3. CONTRACTOR IS RESPONSIBLE TO RELOCATE OR REMOVE FROM WALLS, CEILINGS, FLOOR SPACES, ETC. ANY EXISTING CONDUITS, WIRES, BOXES, FITTINGS, FIXTURES OR OTHER ELECTRICAL EQUIPMENT WHICH INTERFERES WITH PLANNED REMODEL WORK. PROVIDE CIRCUIT CONTINUATION REQUIRED FOR ALL EXISTING OUTLETS, FIXTURES, EQUIPMENT, ETC. SCHEDULED TO REMAIN.
4. NOTIFY THE ENGINEER IMMEDIATELY WHEREVER EXISTING EQUIPMENT IS ENCOUNTERED WHICH MUST BE RELOCATED DUE TO THE NEW CONSTRUCTION, OR NOT INDICATED ON "AS-BUILT" DRAWINGS OR WAS BURIED UNDERGROUND OR EMBEDDED IN STRUCTURE WALLS.
5. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
6. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
7. DEMOLITION WORK SHALL BE DONE IN A MANNER WHICH WILL NOT CAUSE UNNECESSARY INCONVENIENCE OR DANGER TO USERS OF THE PREMISES AND ADJACENT SITE, AND NOT INTERFERE WITH ITS OPERATION. ANY DEMOLITION WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE.
8. DO ALL DRILLING, CUTTING, ETC. REQUIRED TO DEMOLISH ELECTRICAL WORK AS INDICATED OR PROVIDE BLANK COVER PLATE ON ALL OUTLETS EXPOSED BY REMOVAL OF FIXTURE OF DEVICES.
9. RESEAL ALL PENETRATIONS OR OPENING THROUGH WALLS, CEILING, FLOORS, ETC., TO MAINTAIN THE RATING OF STRUCTURE.
10. ALL REMOVED MATERIALS AND EQUIPMENT WHICH IS SALVAGED MATERIALS SHALL REMAIN IN THE PROPERTY OF THE OWNER. DELIVER SUCH SALVAGED MATERIALS AND EQUIPMENT ON THE PREMISES AS DIRECTED BY OWNER AND NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGED. DISPOSE OF ALL HAZARDOUS MATERIAL PER GUIDELINE OF THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AND OTHER AGENCIES HAVING JURISDICTION.
11. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDUIT/WIRING RUNS, REUSE AS REQUIRE AND REMOVED ALL UNUSED CONDUIT/WIRING. UNUSED CONDUIT IN INACCESSIBLE LOCATIONS (WALLS TO REMAIN) CAN BE ABANDONED IN PLACE. REMOVE UNUSED WIRING.

PANELBOARD NOTES

1. PROVIDE NEW BREAKERS AS REQUIRED. EXISTING BREAKERS MAY BE REQUIRED TO BE REARRANGED. ALL NEW DEVICES TO MATCH EXISTING EQUIPMENT MANUFACTURER. ALL EXISTING EQUIPMENT RE-USED ON THIS PROJECT SHALL BE WARRANTEED AS SAME AS NEW FOR PERIOD OF ONE YEAR. CONTRACTOR SHALL HAVE OPTION TO PROVIDE NEW EQUIPMENT.
2. NEW CIRCUIT BREAKERS IN EXISTING PANEL BOARD OR SWITCHBOARD BE 100%%% RATED SHORT CIRCUIT DUTY FOR AVAILABLE FAULT.
3. NEW PANELBOARDS SHALL HAVE FLUSH LOCKABLE DOOR KEY ALIKE TO MATCH EXISTING FACILITY MASTER KEY.
4. ALL CIRCUIT BREAKERS IN THE PANEL BOARD SHALL HAVE PADLOCK OFF DEVICE AND ALL CIRCUIT BREAKERS FEEDING ESSENTIAL LOAD SHALL HAVE LOCK ON DEVICE AS INDICATED.
5. PANELBOARD SHALL BE PROVIDED WITH PANEL FRONT, DOOR-IN-DOOR WITH CONTINUOUS PIANO HINGE.

REFERENCES & ABBREVIATIONS

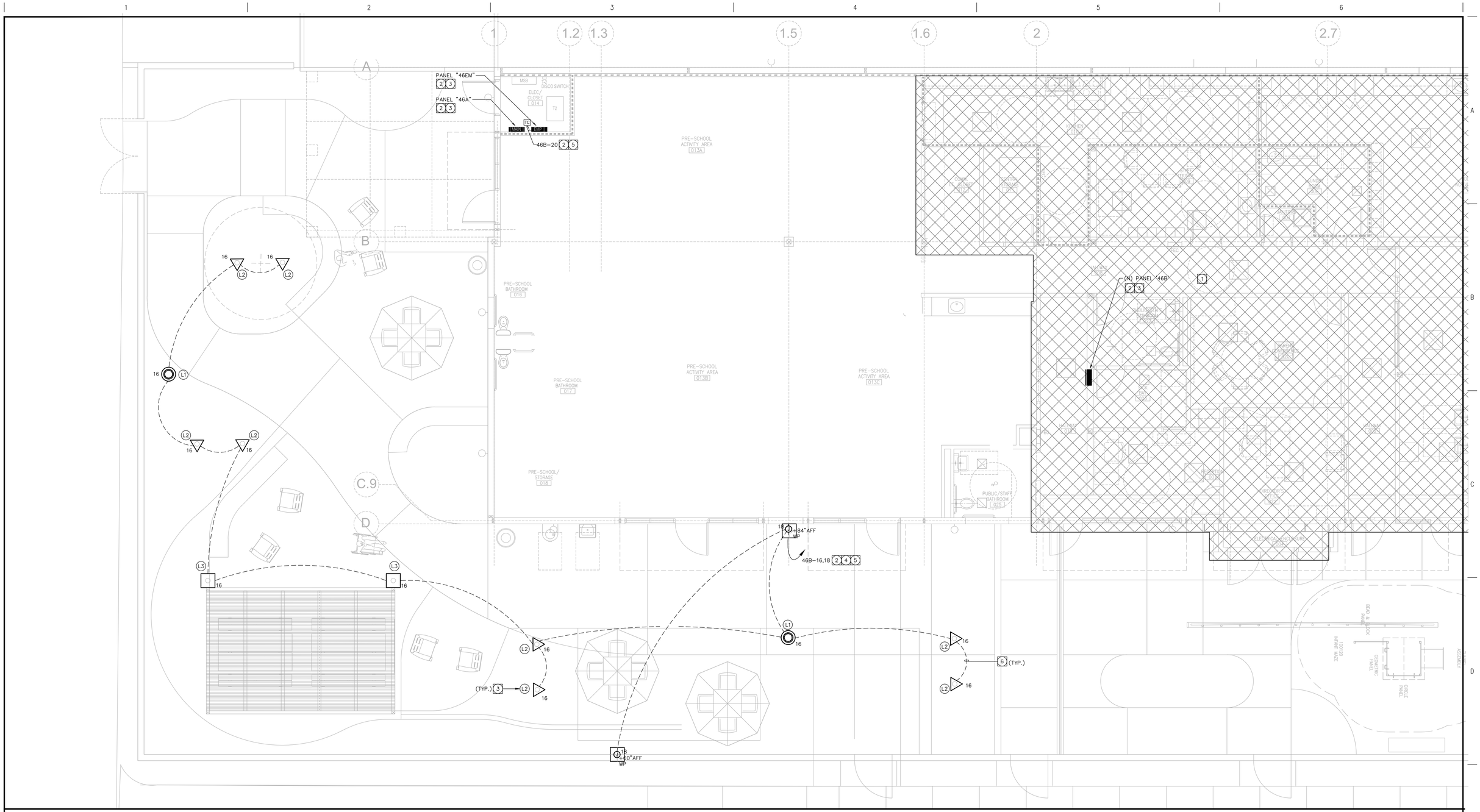
(A)	LIGHTING FIXTURE DESIGNATION	G	GROUND
(D)	DETAIL REFERENCE	GFI	GROUND FAULT INTERRUPTER
(K)	KEYNOTE REFERENCE	MCB	MAIN CIRCUIT BREAKER
EF 2	EQUIPMENT DESIGNATION	MLO	MAIN LUGS ONLY
A	AMPS	NL	NIGHT LIGHT
AFF	ABOVE FINISH FLOOR	OC	ON CENTER
C	CONDUIT	UON	UNLESS OTHERWISE NOTED
CO	CONDUIT ONLY W/PULL ROPE	WP	WEATHER PROOF
CU	COPPER	(E)	EXISTING TO REMAIN
EM	EMERGENCY	FLA	FULL LOAD AMPS

SHEET INDEX

E0.101	ELECTRICAL SYMBOLS LIST, GENERAL NOTES AND SHEET INDEX
EL1.00	ELECTRICAL SITE LIGHTING PLAN
EL2.101	LIGHTING DEMOLITION PLAN
EL2.102	LIGHTING RENOVATION PLAN
EL2.103	LIGHTING PHOTOMETRIC OVERALL PLAN
EL2.104	LIGHTING PHOTOMETRIC EGRESS PLAN
EP2.201	POWER AND SIGNAL DEMOLITION PLAN
EP2.202	POWER AND SIGNAL RENOVATION PLAN
ESL2.601	ELECTRICAL SINGLE LINE DIAGRAM AND LOAD CALCULATIONS
ES2.701	ELECTRICAL SCHEDULES
ES2.702	PANEL SCHEDULES
EK2.801	ELECTRICAL DETAILS
EK2.802	LIGHTING CONTROL DETAILS

ELECTRICAL SYMBOLS LIST

- RECESSED MOUNTED LED TYPE LIGHTING FIXTURE (2'X4')
- RECESSED MOUNTED LED TYPE LIGHTING FIXTURE "EM" (2'X4') AND/OR SHADED CONNECTION POINT INDICATES FIXTURE CONNECTED TO EMERGENCY BATTERY
- RECESSED MOUNTED LED TYPE LIGHTING FIXTURE "EM" (2'X2')
- SURFACE MOUNTED LED TYPE LIGHTING FIXTURE "EM" (2'X2') AND/OR SHADED CONNECTION POINT INDICATES FIXTURE CONNECTED TO EMERGENCY BATTERY
- RECESSED MOUNTED LED TYPE LIGHT FIXTURE (6"X4')
- SURFACE MOUNTED LED TYPE LIGHT FIXTURE (6"X4')
- RECESSED MOUNTED LED TYPE DOWN LIGHTING FIXTURE
- WALL MOUNTED LED TYPE AREA LIGHTING FIXTURE
- ILLUMINATED EXIT SIGN WITH NUMBER OF FACES AND DIRECTION OF EGRESS ARROWS AS INDICATED
- SWITCH (# SUBSCRIPT AS INDICATED BELOW):
  BLANK = SINGLE POLE
  3 = THREE-WAY
  D = DIMMER
  P = WITH PILOT LIGHT
  PB= PUSH BUTTON STATION
  Mo= OCCUPANCY SENSOR
  4 = FOUR-WAY
  K = KEY OPERATED
  RC= REMOTE CONTROL
  T = TIMER OPERATED
- CEILING MOUNTED DAYLIGHT HARVESTING SENSOR
- CEILING MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSOR
- WALL MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSOR SWITCH
- STANDARD 20A, 120V-1ø GROUNDING TYPE DUPLEX RECEPTACLE RECESSED MOUNTED NOT LESS THAN 15" AFF TO BOTTOM OF BOX
- STANDARD 20A, 120V-1ø GROUNDING TYPE FOUR-PLEX RECEPTACLE RECESSED MOUNTED AT NOT LESS THAN 15" TO BOTTOM OF BOX
- RECEPTACLE, DUPLEX WITH GROUND FAULT CIR



GENERAL NOTES:

1. COORDINATE ROUGH-IN LOCATION OF DEVICES WITH ARCHITECTURAL ELEVATIONS, DETAILS AND PLANS. INSTALL DEVICES FLUSH WITH FINISHED SURFACE.
2. THE CONTRACTOR SHALL NOTE THAT THE DRAWING IS DIAGRAMMATIC. EXACT ROUTING OF NEW CONDUITS AND LOCATION OF JUNCTION BOXES AND PULL BOXES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. NEW CONDUIT, JUNCTION BOXES AND PULL BOXES SHALL BE ROUTED CONCEALED IN THE CEILING SPACE AND IN SUCH A MANNER AS TO AVOID INTERFERENCE WITH EXISTING BUILDING STRUCTURES, UTILITIES AND THE WORK BEING PERFORMED BY OTHER TRADES.
3. REFER TO GENERAL NOTES, SHEET E0.101 FOR ADDITIONAL REQUIREMENTS.
4. COORDINATE NEW UNDERGROUND CONDUIT ROUTING WITH EXISTING UTILITY STRUCTURES AND CONDUITS PRIOR TO EXCAVATION.

RENOVATION SHEET NOTES:

1. EXISTING ELECTRICAL ITEMS OIN THIS AREA TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. SEE PANEL SCHEDULE, SHEET EPS2.701.
3. INDICATES LIGHTING FIXTURE TYPE. SEE SCHEDULE, SHEET ES2.701.
4. PROVIDE 3/4"C-1#10, 1#10GRD. AND CONNECT TO PANEL VIA NEW TIMECLOCK IN ELECTRICAL ROOM.
5. PROVIDE A 120V, 365/7 DAY DIGITAL ASTRONOMIC LIGHTING CONTROL WITH 2 ZONES (TORK #EW7120 OR EQUAL). CONNECT TO EXTERIOR SITE LED LIGHT FIXTURES AND BUILDING SIGNS. THE AUTOMATIC SCHEDULING CONTROLS SHALL ALLOW A MINIMUM OF 2 NIGHT TIME PERIODS WITH INDEPENDENTLY PROGRAMMED LIGHTING LEVELS.
6. INSTALL PVC SCHED 80 CONDUIT 18" BELOW FINISHED GRADE. PATCH UNDISTURBED FINISH GRADE OR CONCRETE TO MATCH.

1 ELECTRICAL SITE LIGHTING PLAN

1/4"=1'-0"

Revisions:	Date
-	-
-	-
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-	-
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-	-

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Drawing Title: ELECTRICAL SITE LIGHTING PLAN

Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	RR	GS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: EL1.00

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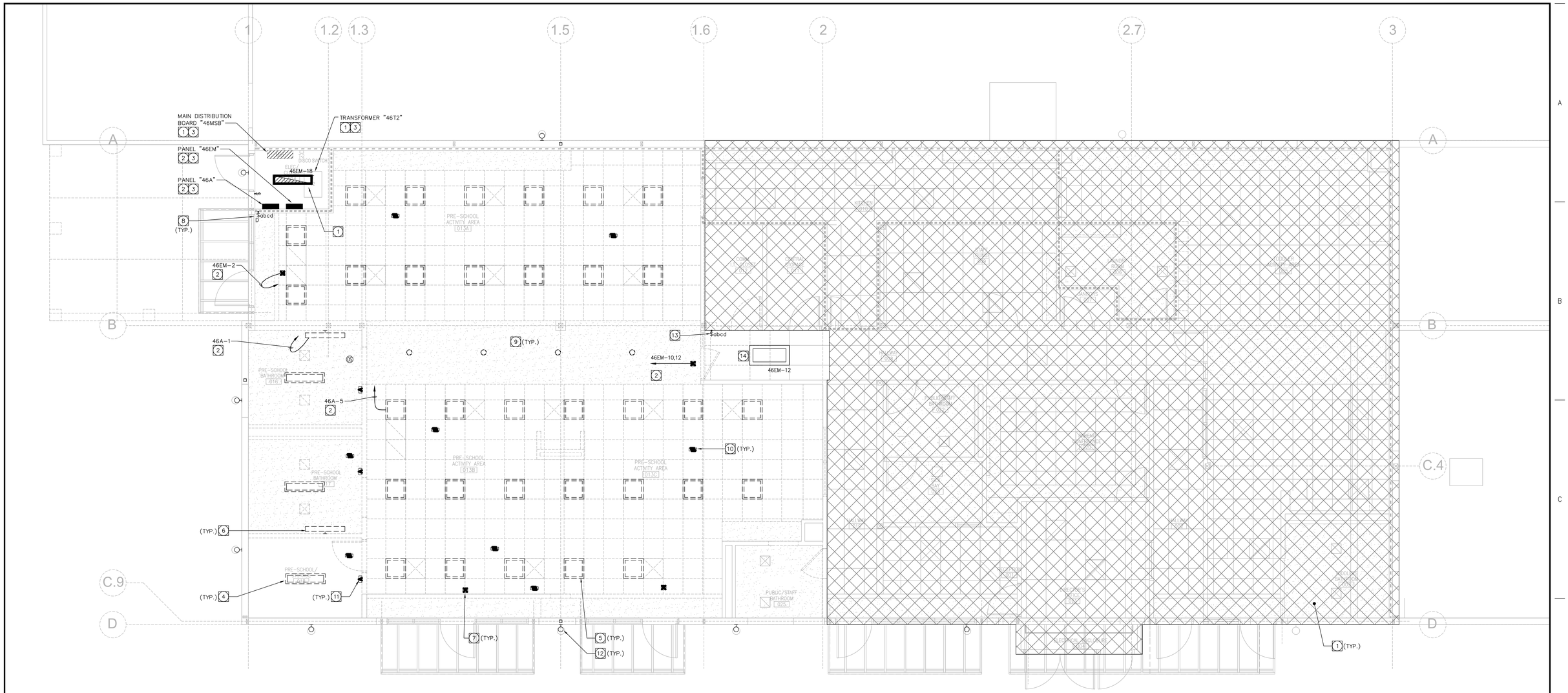
CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231



GENERAL NOTES:

1. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS.
2. THE EXISTING CONDITIONS SHOWN ARE FROM AVAILABLE RECORD DRAWINGS AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID. ALL DEMOLITION, ALTERATION, EXTENSION, RELOCATION, REHABILITATION WORK SHALL BE INCLUDED IN CONTRACT. NO ADDITIONAL ALLOWANCE OR CHANGE ORDERS WILL BE ACCEPTED.
3. CONTRACTOR IS RESPONSIBLE TO RELOCATE OR REMOVE FROM WALLS, CEILINGS, FLOOR SPACES, ETC. ANY EXISTING CONDUITS, WIRES, BOXES, FITTINGS, FIXTURES OR OTHER ELECTRICAL EQUIPMENT WHICH INTERFERES WITH PLANNED REMODEL WORK. PROVIDE CIRCUIT CONTINUATION REQUIRED FOR ALL EXISTING OUTLETS, FIXTURES, EQUIPMENT, ETC. SCHEDULED TO REMAIN.
4. NOTIFY THE ENGINEER IMMEDIATELY WHEREVER EXISTING EQUIPMENT IS ENCOUNTERED WHICH MUST BE RELOCATED DUE TO THE NEW CONSTRUCTION, OR NOT INDICATED ON "AS-BUILT" DRAWINGS OR WAS BURIED UNDERGROUND OR EMBEDDED IN STRUCTURE WALLS.
5. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
6. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
7. DEMOLITION WORK SHALL BE DONE IN A MANNER WHICH WILL NOT CAUSE UNNECESSARY INCONVENIENCE OR DANGER TO USERS OF THE PREMISES AND ADJACENT SITE, AND NOT INTERFERE WITH ITS OPERATION. ANY DEMOLITION WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE.
8. DO ALL DRILLING, CUTTING, ETC. REQUIRED TO DEMOLISH ELECTRICAL WORK AS INDICATED OR PROVIDE BLANK COVER PLATE ON ALL OUTLETS EXPOSED BY REMOVAL OF FIXTURE OF DEVICES.
9. RESEAL ALL PENETRATIONS OR OPENING THROUGH WALLS, CEILING, FLOORS, ETC., TO MAINTAIN THE RATING OF STRUCTURE.
10. ALL REMOVED MATERIALS AND EQUIPMENT WHICH IS SALVAGED MATERIALS SHALL REMAIN IN THE PROPERTY OF THE OWNER. DELIVER SUCH SALVAGED MATERIALS AND EQUIPMENT ON THE PREMISES AS DIRECTED BY OWNER AND NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGED. DISPOSE OF ALL HAZARDOUS MATERIAL PER GUIDELINE OF THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AND OTHER AGENCIES HAVING JURISDICTION.
10. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDUIT/WIRING RUNS, REUSE AS REQUIRE AND REMOVED ALL UNUSED CONDUIT/WIRING. UNUSED CONDUIT IN INACCESSIBLE LOCATIONS (WALLS TO REMAIN) CAN BE ABANDONED IN PLACE. REMOVE UNUSED WIRING.

DEMOLITION SHEET NOTES:

1. EXISTING ELECTRICAL ITEMS IN THIS AREA TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. SEE PANEL SCHEDULE, SHEET ES2.702.
3. SEE SINGLE LINE DIAGRAM, SHEET ESL2.601.
4. DISCONNECT AND REMOVE 1' x 4' 62W, 120VAC. RECESSED FLUORESCENT FIXTURE WITH CONDUIT AND WIRING.
5. DISCONNECT AND REMOVE 2' x 2' 62W, 120VAC. RECESSED FLUORESCENT FIXTURE WITH CONDUIT AND WIRING.
6. DISCONNECT AND REMOVE 6" x 4' 35W, 120VAC. SURFACE WRAP-AROUND FLUORESCENT FIXTURE WITH CONDUIT AND WIRING.
7. DISCONNECT AND REMOVE WALL OR CEILING MOUNTED 120VAC FLUORESCENT EXIT LIGHT FIXTURE WITH CONDUIT AND WIRING.
8. DISCONNECT AND REMOVE SPST, 120VAC SWITCH WITH CONDUIT AND WIRING (WHERE CONDUIT CONCEALED IN WALL, REMOVE CONDUCTORS AND ABANDON).
9. DISCONNECT AND REMOVE 7" DIAMETER 28W, 120VAC FLUORESCENT DOWNLIGHT WITH CONDUIT AND WIRING.
10. DISCONNECT AND REMOVE CEILING MOUNTED LIGHTING OCCUPANCY SENSOR WITH CONDUIT AND WIRING,
11. DISCONNECT AND REMOVE WALL OR CEILING MOUNTED LIGHTING OCCUPANCY SENSOR WITH CONDUIT AND WIRING.
12. EXISTING EXTERIOR LIGHTS TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
13. DISCONNECT AND REMOVE SPST, 120VAC SWITCH WITH CONDUIT AND WIRING AND RELOCATE AS SHOWN ON SHEET EL2.102.
14. DISCONNECT AND REMOVE AND RELOCATE AS SHOWN ON SHEET EL2.102.

1 LIGHTING DEMOLITION PLAN

1/4"=1'-0"

Revisions:	Date
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Drawing Title: LIGHTING DEMOLITION PLAN

Approved Project Director:

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS

Project Number: 600-22-703

Building Number: BLDG. #46

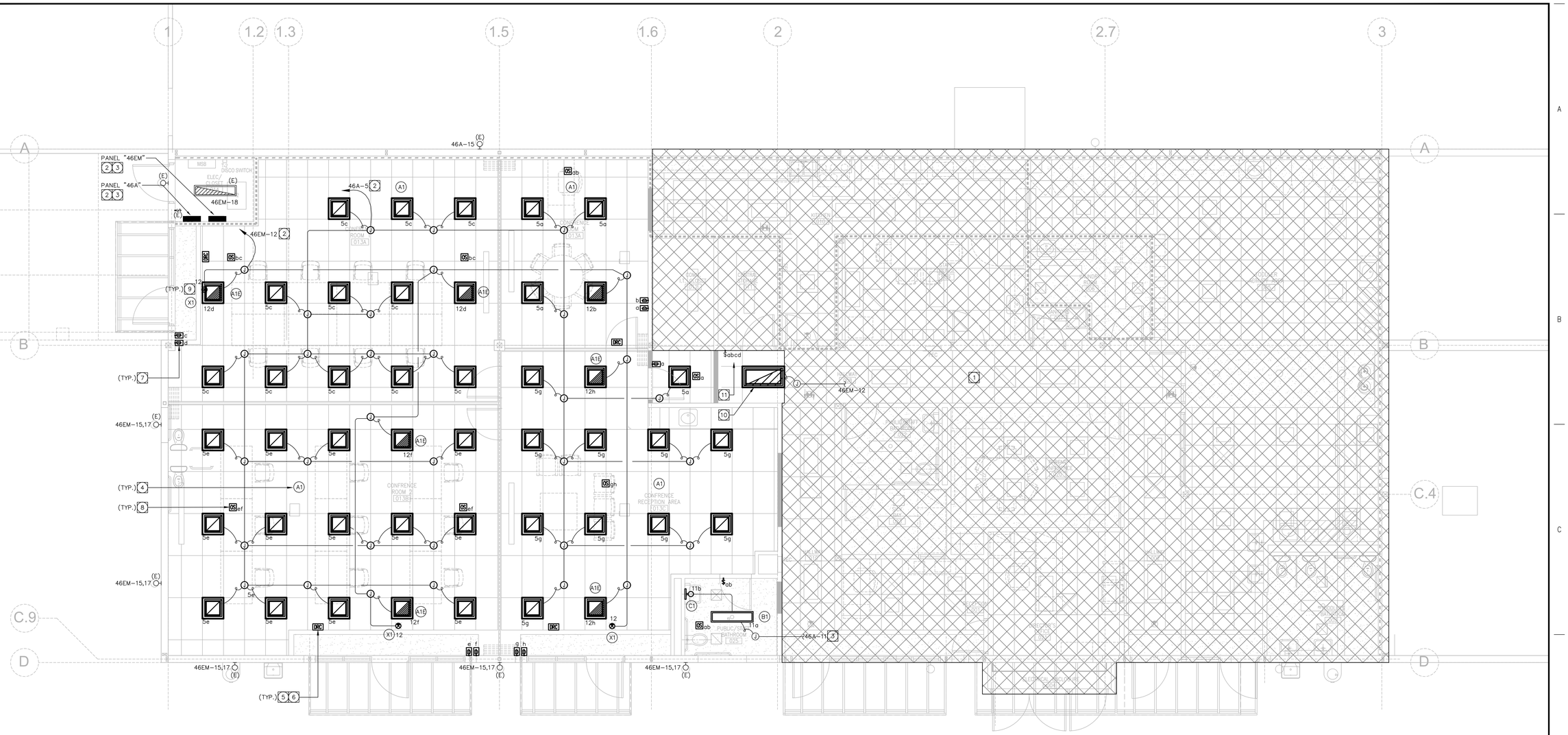
Drawing Number: EL2.101

Dwg. Page 46 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231



GENERAL NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN (RCP) FOR EXACT LOCATION OF LIGHT FIXTURES. FURNISH FIXTURES WITH TRIM COMPATIBLE WITH TYPE OF CEILING AS INDICATED ON THE RCP.
2. EXIT LIGHT FIXTURES ARE CEILING MOUNTED, UON. CONNECT TO UN-SWITCHED CIRCUIT SERVING SPACE IN WHICH FIXTURE IS INSTALLED.
3. COORDINATE PLACEMENT OF FIXTURES WITH ACTUAL INSTALLATION OF MECHANICAL EQUIPMENT AND DUCTWORK.
4. COORDINATE ROUGH-IN LOCATION OF DEVICES WITH ARCHITECTURAL ELEVATIONS, DETAILS AND PLANS. INSTALL DEVICES FLUSH WITH FINISHED SURFACE.
5. FURNISH POWER PACKS AND HARD-CELING RACEWAY ADAPTER KITS FOR OCCUPANCY SENSORS AS REQUIRED.
6. REFER TO LIGHTING FIXTURE SCHEDULE, SHEET ES2.701 FOR DETAILS OF LIGHTING FIXTURES SHOWN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE OCCUPANCY SENSOR MANUFACTURER REPRESENTATIVE PRIOR TO CONSTRUCTION TO DETERMINE THE EXACT LOCATION AND QUANTITIES OF SENSORS TO PROVIDE THE PROPER COVERAGE THROUGHOUT THE ENTIRE ROOM AND TO DETERMINE THE PROPER SENSOR TO BE USED FOR THE APPLICATION.
8. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN; WHERE DEVICES ARE SHOWN IN GYPSUM BOARD CEILINGS, INSTALL CONDUIT FROM DEVICE TO ABOVE ACCESSIBLE CEILING IN NEARBY CORRIDOR.
9. THE CONTRACTOR SHALL NOTE THAT THE DRAWING IS DIAGRAMMATIC. EXACT ROUTING OF NEW CONDUITS AND LOCATION OF JUNCTION BOXES AND PULL BOXES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. NEW CONDUIT, JUNCTION BOXES AND PULL BOXES SHALL BE ROUTED CONCEALED IN THE CEILING SPACE AND IN SUCH A MANNER AS TO AVOID INTERFERENCE WITH EXISTING BUILDING STRUCTURES, UTILITIES AND THE WORK BEING PERFORMED BY OTHER TRADES.
10. REFER TO GENERAL NOTES, SHEET E0.101 FOR ADDITIONAL REQUIREMENTS.
11. ALL BRANCH CIRCUITS TO CONTAIN SEPARATE NEUTRAL CONDUCTORS PER NEC.
12. REFER TO ARCHITECTURAL PLANS FOR ALL CEILING MOUNTING HEIGHTS.
12. PROVIDE ENGRAVE COVERPLATES FOR ALL LIGHTING CONTROLLERS WITH PANEL AND CIRCUIT NUMBER INDICATED.
13. REFER TO SHEET EK2.802 FOR ALL REQUIRED CONTROLS, INFORMATION AND LIGHTING CONTROLS SYMBOLS LIST. USE STAINLESS STEEL COVERPLATES.
14. PURCHASED/INSTALLED DEVICES MUST BE COMPATIBLE WITH SELECTED LIGHTING CONTROL SYSTEM MANUFACTURER.
15. PLACEMENT OF CONTROLS FOR REFERENCE ONLY. COORDINATE PLACEMENT OF SENSORS WITH CONTROLS MANUFACTURER FOR OPTIMAL PERFORMANCE PRIOR TO INSTALLATION.

RENOVATION SHEET NOTES:

1. EXISTING ELECTRICAL ITEMS OIN THIS AREA TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. SEE PANEL SCHEDULE, SHEET EPS2.702.
3. RECONNECT NEW LIGHTING FIXTURES TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY.
4. INDICATES LIGHTING FIXTURE TYPE. SEE SCHEDULE, SHEET ES2.701.
5. PROVIDE POWER RELAY ABOVE CEILING FOR INTERCONNECTION TO LIGHTING.
6. LOW VOLTAGE WIRING BETWEEN FIXTURES AND CONTROLLERS. SEE SHEET EK2.802.
7. PROVIDE RAISE/LOWER/ON/OFF 0-10V DIMMER SWITCH FLUSH IN WALL.
8. PROVIDE CEILING MOUNTED DUAL-TECHNOLOGY OCCUPANCY SENSOR FOR CONTROL OF LIGHTING IN ROOM (SEE SHEET EK2.802).
9. MAINTAIN HOT CONDUCTOR TO EXIT LIGHTS.
10. RECONNECT RELOCATED LIGHTING FIXTURE TO EXISTING CIRCUIT. MAINTAIN CIRCUIT CONTINUITY.
11. RECONNECT RELOCATED CORRIDOR LIGHT SWITCHES.

1 LIGHTING RENOVATION PLAN

1/4"=1'-0"

Revisions:	Date
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Drawing Title: LIGHTING RENOVATION PLAN

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: EL2.102

Dwg. Page 47 of 61

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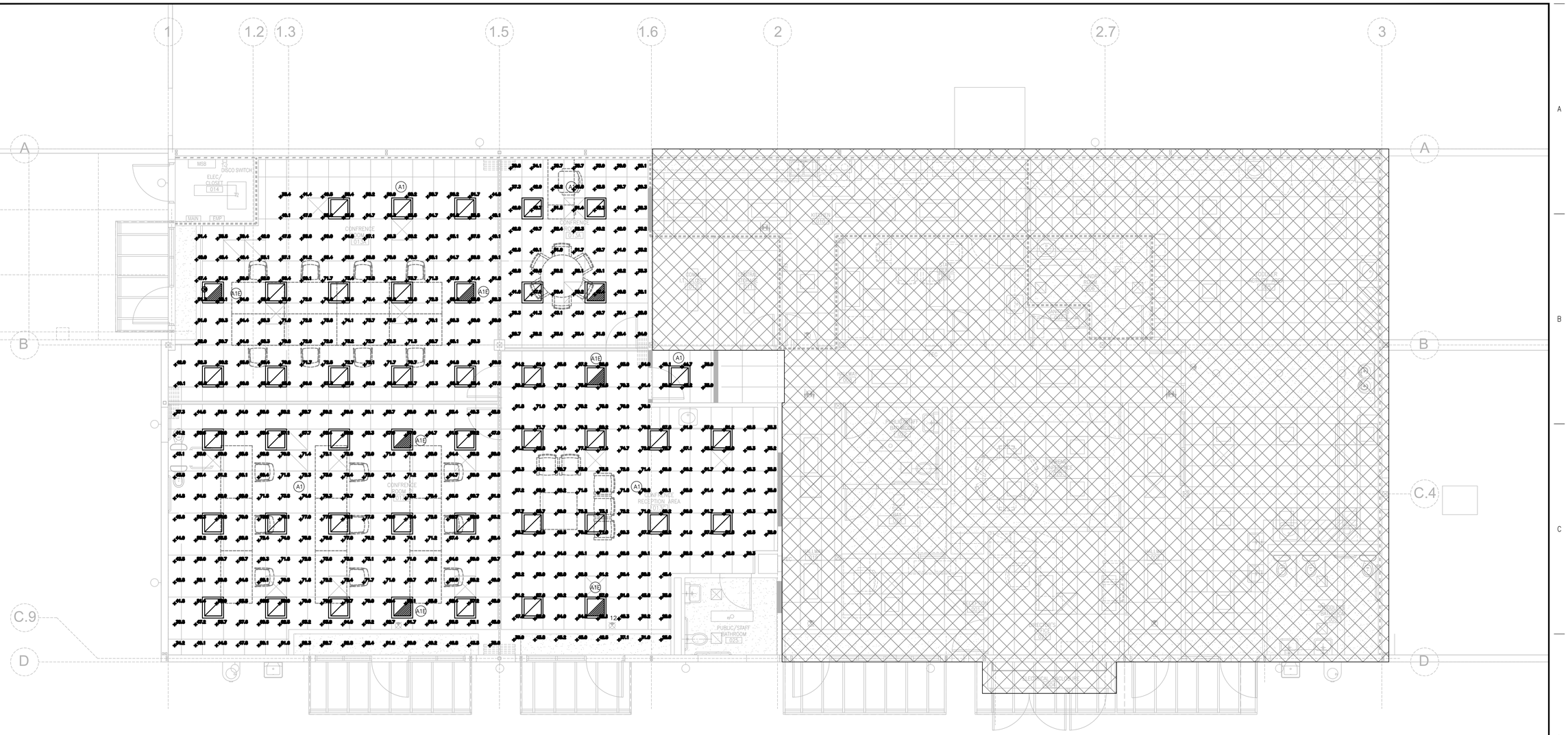
Department of Veterans Affairs

VA FORM 08-6231



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Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Conference Room 1	+	61.9 fc	75.5 fc	31.4 fc	2.4:1	2.0:1
Conference Room 2	+	62.1 fc	78.1 fc	34.2 fc	2.3:1	1.8:1
Conference Room 3	+	40.8 fc	52.4 fc	24.0 fc	2.2:1	1.7:1
Conference/Reception	+	59.1 fc	80.2 fc	25.0 fc	3.2:1	2.4:1

1 LIGHTING PHOTOMETRIC OVERALL PLAN
1/4"=1'-0"

Revisions	Date
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Drawing Title: LIGHTING PHOTOMETRIC OVERALL PLAN

Approved Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS

Project Number: 600-22-703

Building Number: BLDG. #46

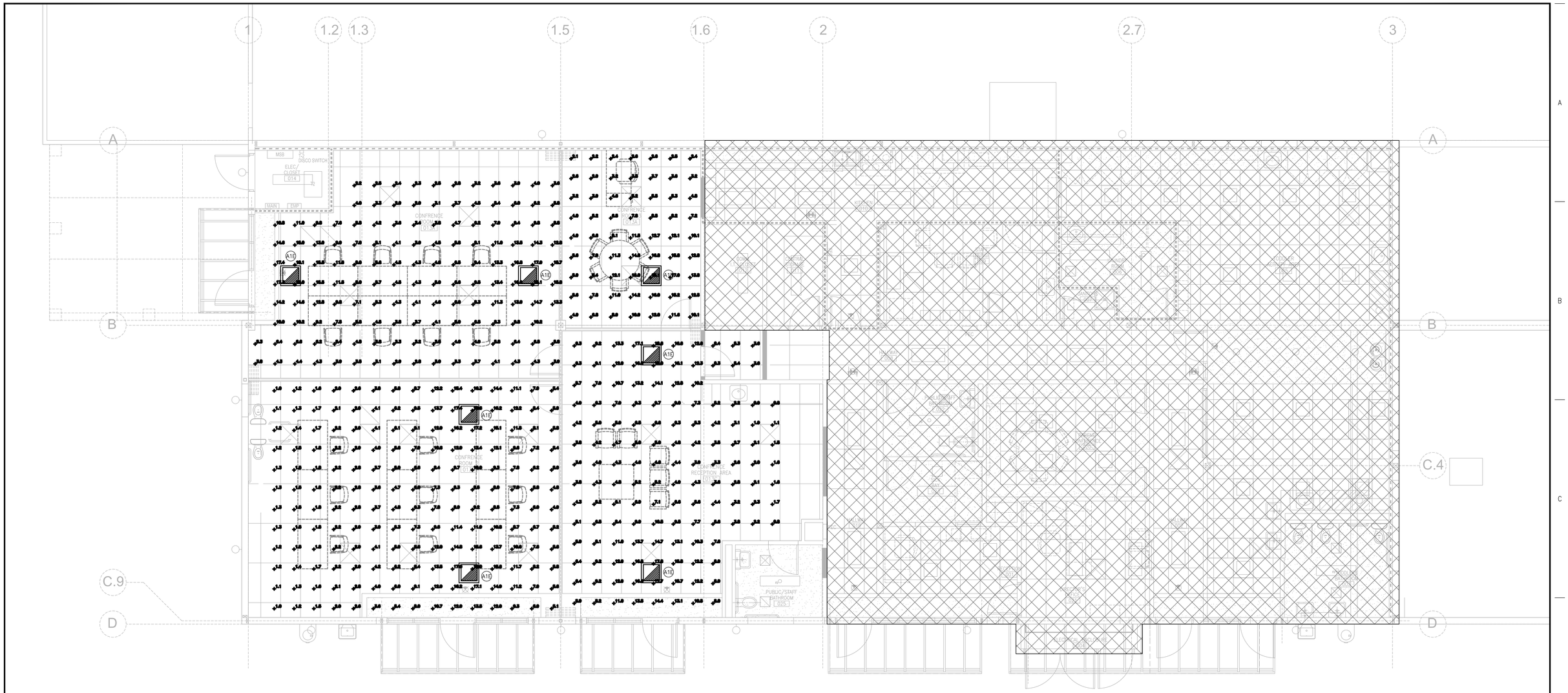
Drawing Number: EL2.103

Dwg. Page 48 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Conference Room 1	+	7.4 fc	18.1 fc	2.2 fc	8.2:1	3.4:1
Conference Room 3	+	8.1 fc	18.1 fc	2.1 fc	8.6:1	3.9:1
Conference Room 2	+	6.7 fc	18.6 fc	1.0 fc	18.6:1	6.7:1
Conference/Reception	+	7.5 fc	18.6 fc	0.8 fc	23.3:1	9.4:1

1 LIGHTING PHOTOMETRIC EGRESS PLAN
1/4"=1'-0"

Revisions	Date
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Drawing Title: LIGHTING PHOTOMETRIC EGRESS PLAN

Approved Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023

Checked: RR

Drawn: GS

Project Number: 600-22-703

Building Number: BLDG. #46

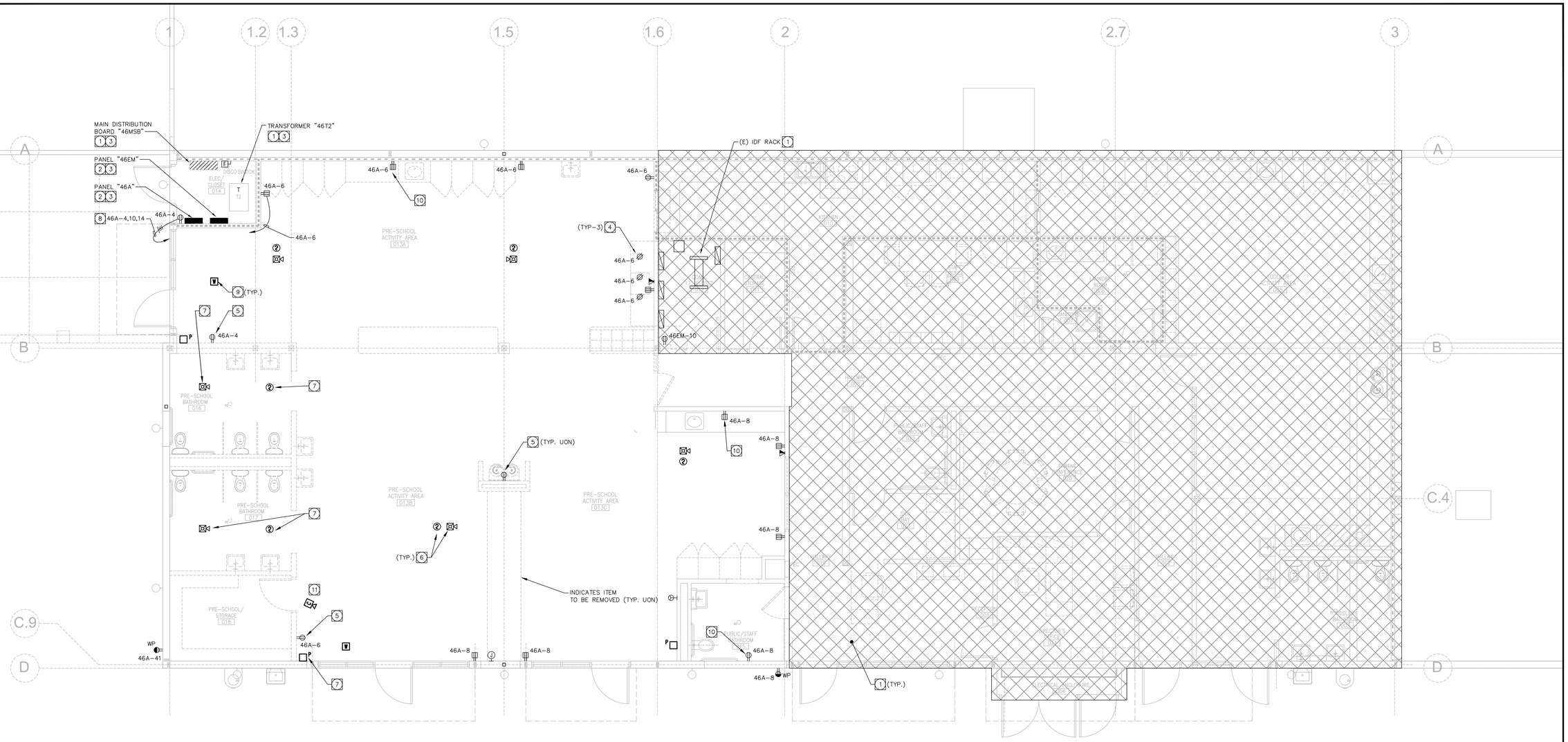
Drawing Number: EL2.104

Dwg. Page 49 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231



GENERAL NOTES:

1. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. DO NOT SCALE THE ELECTRICAL DRAWINGS TO DETERMINE THE LOCATION OF EQUIPMENT OR OUTLETS.
2. THE EXISTING CONDITIONS SHOWN ARE FROM AVAILABLE RECORD DRAWINGS AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ACTUAL EXISTING CONDITIONS AT SITE PRIOR TO SUBMITTING BID. ALL DEMOLITION, ALTERATION, EXTENSION, RELOCATION, REHABILITATION WORK SHALL BE INCLUDED IN CONTRACT. NO ADDITIONAL ALLOWANCE OR CHANGE ORDERS WILL BE ACCEPTED.
3. CONTRACTOR IS RESPONSIBLE TO RELOCATE OR REMOVE FROM WALLS, CEILINGS, FLOOR SPACES, ETC. ANY EXISTING CONDUITS, WIRES, BOXES, FITTINGS, FIXTURES OR OTHER ELECTRICAL EQUIPMENT WHICH INTERFERES WITH PLANNED REMODEL WORK. PROVIDE CIRCUIT CONTINUATION REQUIRED FOR ALL EXISTING OUTLETS, FIXTURES, EQUIPMENT, ETC. SCHEDULED TO REMAIN.
4. NOTIFY THE ENGINEER IMMEDIATELY WHEREVER EXISTING EQUIPMENT IS ENCOUNTERED WHICH MUST BE RELOCATED DUE TO THE NEW CONSTRUCTION, OR NOT INDICATED ON "AS-BUILT" DRAWINGS OR WAS BURIED UNDERGROUND OR EMBEDDED IN STRUCTURE WALLS.
5. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
6. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
7. DEMOLITION WORK SHALL BE DONE IN A MANNER WHICH WILL NOT CAUSE UNNECESSARY INCONVENIENCE OR DANGER TO USERS OF THE PREMISES AND ADJACENT SITE, AND NOT INTERFERE WITH ITS OPERATION. ANY DEMOLITION WORK TO BE PERFORMED MUST BE PLANNED IN ADVANCE.
8. DO ALL DRILLING, CUTTING, ETC. REQUIRED TO DEMOLISH ELECTRICAL WORK AS INDICATED OR PROVIDE BLANK COVER PLATE ON ALL OUTLETS EXPOSED BY REMOVAL OF FIXTURE OF DEVICES.
9. RESEAL ALL PENETRATIONS OR OPENING THROUGH WALLS, CEILING, FLOORS, ETC., TO MAINTAIN THE RATING OF STRUCTURE.
10. ALL REMOVED MATERIALS AND EQUIPMENT WHICH IS SALVAGED MATERIALS SHALL REMAIN IN THE PROPERTY OF THE OWNER. DELIVER SUCH SALVAGED MATERIALS AND EQUIPMENT ON THE PREMISES AS DIRECTED BY OWNER AND NEATLY PILE OR STORE THEM AND PROTECT FROM DAMAGED. DISPOSE OF ALL HAZARDOUS MATERIAL PER GUIDELINE OF THE STATE OF CALIFORNIA, DEPARTMENT OF HEALTH SERVICES AND OTHER AGENCIES HAVING JURISDICTION.
11. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDUIT/WIRING RUNS, REUSE AS REQUIRE AND REMOVED ALL UNUSED CONDUIT/WIRING. UNUSED CONDUIT IN INACCESSIBLE LOCATIONS (WALLS TO REMAIN) CAN BE ABANDONED IN PLACE. REMOVE UNUSED WIRING.

DEMOLITION SHEET NOTES:

1. EXISTING ELECTRICAL ITEMS IN THIS AREA TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. SEE PANEL SCHEDULE, SHEET ES2.702.
3. SEE SINGLE LINE DIAGRAM, SHEET ES2.601.
4. DISCONNECT RECEPTACLES WITH CONDUIT AND WIRING FLUSH IN COUNTER BEING REMOVED.
5. DISCONNECT AND REMOVE 20A, 2P, 3W, 120VAC RECEPTACLE WITH CONDUIT AND WIRING FLUSH IN WALL/COUNTER BEING REMOVED.
6. PROTECT FIRE ALARM IN PLACE AND REINSTALL/RECONNECT IN NEW CEILING TILES.
7. DISCONNECT AND REMOVE FIRE ALARM DEVICE IN CEILING OR WALL WITH CONDUIT AND WIRING.
8. PROTECT CONDUIT HOMERUN TO PANEL IN PLACE. PROVIDE NEW CONDUCTORS AND REUSE FOR RENOVATION. SEE SHEET EP2.202.
9. REMOVE AND STORE WIFI DEVICES IN DEMOLITION PHASE. RE-INSTALL DEVICES IN RENOVATION. REFER TO ARCHITECTURAL PLANS FOR NEW LOCATIONS.
10. MODIFY EXISTING NON-GFI OUTLET – SEE SHEET EP2.202.
11. PROTECT CCTV CAMERA AT CEILING. REINSTALL PER SHEET EP2.202.

1 POWER AND SIGNAL DEMOLITION PLAN

1/4"=1'-0"

Revisions:	Date
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CONSULTANTS:

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Drawing Title: POWER AND SIGNAL DEMOLITION PLAN

Approved Project Director

CONSTRUCTION DOCUMENTS

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS

Project Number: 600-22-703

Building Number: BLDG. #46

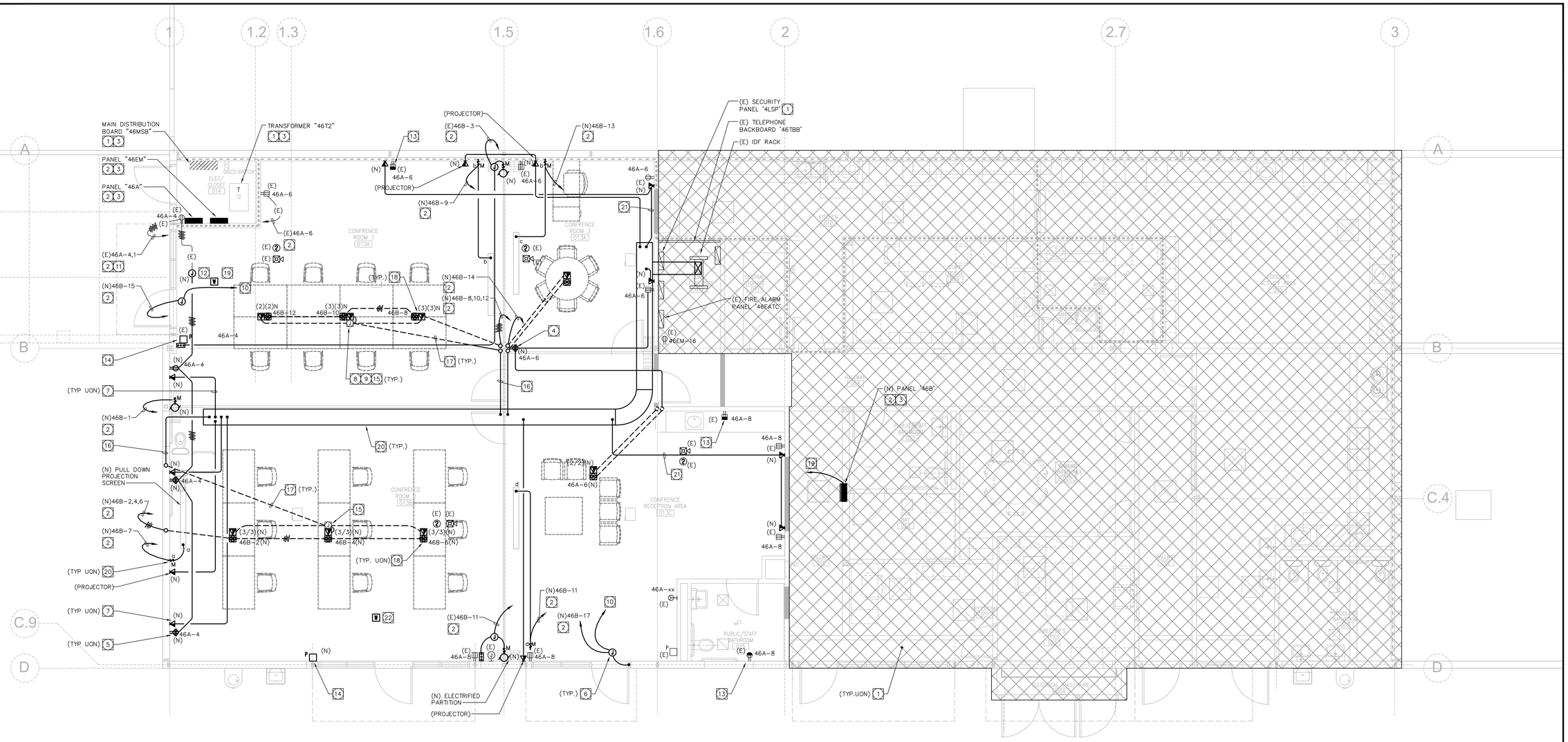
Drawing Number: EP2.201

Dwg. Page 50 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231



GENERAL NOTES:

1. COORDINATE ROUGH-IN LOCATION OF DEVICES WITH ARCHITECTURAL ELEVATIONS, DETAILS AND PLANS. INSTALL DEVICES FLUSH WITH FINISHED SURFACE.
2. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN; WHERE DEVICES ARE SHOWN IN GYPSUM BOARD CEILINGS, INSTALL CONDUIT FROM DEVICE TO ABOVE ACCESSIBLE CEILING IN NEARBY CORRIDOR.
3. THE CONTRACTOR SHALL NOTE THAT THE DRAWING IS DIAGRAMMATIC. EXACT ROUTING OF NEW CONDUITS AND LOCATION OF JUNCTION BOXES AND PULL BOXES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. NEW CONDUIT, JUNCTION BOXES AND PULL BOXES SHALL BE ROUTED CONCEALED IN THE CEILING SPACE AND IN SUCH A MANNER AS TO AVOID INTERFERENCE WITH EXISTING BUILDING STRUCTURES, UTILITIES AND THE WORK BEING PERFORMED BY OTHER TRADES.
4. SEE GENERAL NOTES, SHEET E0.101 FOR ADDITIONAL REQUIREMENTS.
5. ALL BRANCH CIRCUITS TO CONTAIN SEPARATE NEUTRAL CONDUCTORS PER CEC 210.4.
6. COORDINATE EQUIPMENT FURNISHED BY OWNER AND VERIFY ELECTRICAL CHARACTERISTICS PRIOR TO ROUGH-IN.
7. PROVIDE ENGRAVED COVERPLATES FOR ALL RECEPTACLES WITH PANEL AND CIRCUIT NUMBERS.
8. PROVIDE ENGRAVED COVERPLATES FOR ALL TEL/DATA OUTLETS. COORDINATE WITH IT DEPARTMENT.
9. SEE SHEET E0.101 FOR FIRE ALARM DEFERRED APPROVAL NOTES.
10. USE RIGID METAL CONDUIT IN ALL AREAS EXPOSED TO WEATHER
11. USE GROUND WIRE INSIDE ALL FLEXIBLE METAL CONDUIT.
12. METAL CONDUIT SHALL NOT BE INSTALLED IN CONTACT WITH EARTH.
13. A METALLIC RACEWAY/CABLE TYPE LISTED FOR GROUNDING AND CONTAINING A FULL-SIZED INSULATED EQUIPMENT GROUND CONDUCTOR.
14. PROVIDE A POSITIVE CONNECTION OF THE INSULATED EQUIPMENT GROUNDING CONDUCTOR PER CEC 517.13(B) TO BOTH THE METALLIC OUTLET BOX AND THE GROUNDING TERMINAL OF THE OUTLET DEVICE.
15. ALL COMMUNICATION CONDUCTORS SHALL BE CAT 6A.

RENOVATION SHEET NOTES:

1. EXISTING ELECTRICAL ITEMS IN THIS AREA – TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. SEE PANEL SCHEDULE, SHEETS EP2.702
3. SEE SINGLE LINE DIAGRAM, SHEET ESL2.601.
4. PROVIDE NEW 20A, 2P, 3W, 120VAC SPECIFICATION GRADE RECEPTACLE WITH CONDUIT/WIRING FLUSH NEW WALL.
5. PROVIDE NEW 20A, 2P, 3W, 120VAC HOSPITAL GRADE RECEPTACLE WITH CONDUIT/WIRING FLUSH IN EXISTING WALL. PATCH/PAINT TO MATCH.
6. PROVIDE 120VAC TO 12"SQ X 4" NEMA 1 JUNCTION BOX ABOVE SECURITY DOOR WITH 3/4"C.O. TO DOOR OPEN DEVICE ROUGH-IN BOX. SEE DETAIL 7/EK2.801.
7. PROVIDE 4/S ROUGH-IN BOX FLUSH IN EXISTING WALL WITH 3/4"C.O. WITH PULLING LINE AND END BUSHING TO IDF RACK IN BUILDING VIA NEW CABLE TRAY. (COMMUNICATION DEVICES, CONDUCTORS AND FINAL CONNECTIONS IN IT CONTRACT.)
8. PROVIDE 3M FIRE KIT FOR ALL CONDUIT PENETRATIONS IN FIRE RATED WALLS.
9. ALL OUTLET BOXES IN RATED WALL SHALL BE FIRE RATED (SEE DETAILS 8/EK2.801).
10. PROVIDE 3/4"C.O. WITH PULLING LINE AND END BUSHING TO EXISTING SECURITY PANEL "46SP" IN IDF ROOM.
11. PROVIDE NEW CONDUCTORS IN EXISTING CONDUIT TO PANEL.
12. INTERCEPT EXISTING CONDUIT ABOVE CEILING. PROVIDE NEW WIRING AND EXTEND AS INDICATED.
13. PROVIDE NEW 20A, 2P, 3W, 120VAC GFI SPECIFICATION GRADE RECEPTACLE IN EXISTING OUTLET BOX. REUSE COVERPLATE AND RECONNECT.
14. PROVIDE 4/S ROUGH-IN BOX WITH 3/4"C.O. WITH PULLING LINE AND END BUSHINGS TO EXISTING FIRE ALARM PANEL "46FATC" (DEVICE CONDUCTORS AND FINAL CONNECTION IN FIRE ALARM DEFERRED APPROVAL CONTRACT).
15. PROVIDE 12" X 12" X 6"DP RECESSED PULLBOX FLUSH WITH FLOOR.
16. PROVIDE 1 1/2"C–WITH 18 CAT 6A CONDUCTORS TO EXISTING SERVER RACK VIA CABLE TRAY.
17. SAWCUT EXISTING SLAB FOR NEW UNDERGROUND PVC SCHED 40 CONDUITS. (PATCH TO MATCH)
18. PROVIDE 20A, 2P, 3W 120VAC QUAD RECEEPTACLE IN STEEL OUTLET BOX FLUSH WITH FLOOR WITH BLACK UNHINGED COVERS (HUBBELL "SCRUB-SHIELD" #SISBAVCR STEEL BOX; #SISP2X4 SUB-PLATE; #SICFCBLPWR COVER).
19. REINSTALL EXISTING WIFI ACCESS OUTLET ON NEW CEILING AS DIRECTED BY FACILITY.
20. PROVIDE 18"W x 4"H OPEN ALUMINUM CABLE TRAY WITH 9" RUNG SPACING, SECURE WITH 3/8"THREADED RODS TO ROOF STRUCTURE ABOVE CEILING. (SEE STRUCTURAL DRAWINGS)
21. PROVIDE 4/S ROUGH-IN BOX FLUSH IN EXISTING WALL WITH 1/4"C.O. WITH PULLING LINE AND END BUSHING TO IDF RACK IN BUILDING VIA NEW CABLE TRAY. (COMMUNICATION DEVICES, CONDUCTORS AND FINAL CONNECTIONS IN IT CONTRACT.)
22. PROVIDE WI-FI ACCESS POINT.

1 POWER RENOVATION PLAN

1/4"=1'-0"

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Revisions:	**Date**

CONSULTANTS:

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LA JOLA, CA 92037
858.344.8900

Drawing Title
POWER RENOVATION PLAN

Approved Project Director

Project Title
EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location
VA LONG BEACH CA

Date	Checked	Drawn
11 JANUARY, 2023	RR	GS

Project Number
600-22-703

Building Number
BLDG. #46

Drawing Number
EP2.202

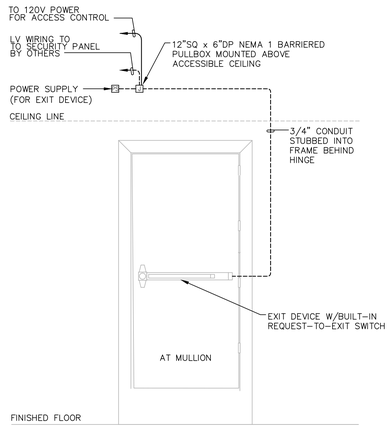
Dwg. Page 51 of 61

CONSTRUCTION DOCUMENTS

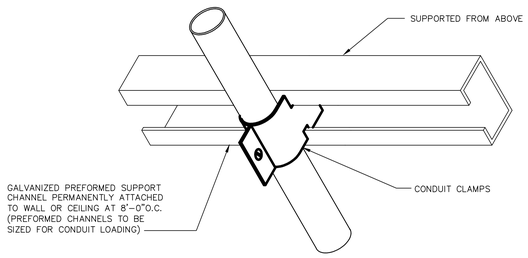
Office of Construction and Real Estate Management

Department of Veterans Affairs

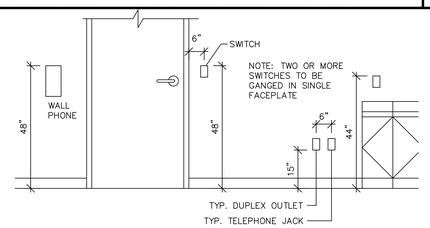
VA FORM 08-6231



SECURITY DOOR DETAIL | SCALE: NONE | 9

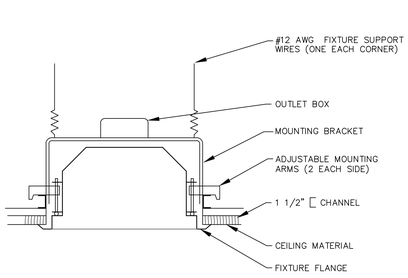


SINGLE CONDUIT SUPPORT DETAILS | SCALE: NONE | 7

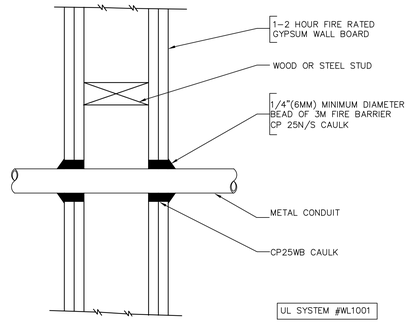


1. ALL SWITCHES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM.
2. ALL RECEPTACLES AND COMMUNICATION SYSTEM SHALL BE LOCATED NOT LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM.
3. PROVIDE ONE-HOUR PROTECTION AT ALL OUTLETS AND SWITCHES LOCATED IN ONE-HOUR RATED PARTITIONS.

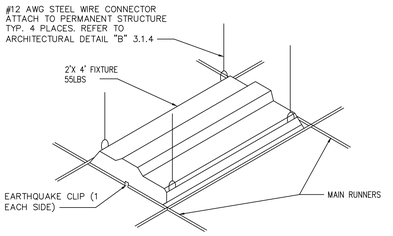
OUTLET MOUNTING DETAILS | SCALE: NONE | 6



RECESSED LIGHTING IN HARD CEILING DETAIL | SCALE: NONE | 5



WALL PENETRATION DETAIL | SCALE: NONE | 3



RECESSED MOUNTED LIGHTING FIXTURE DETAIL | SCALE: NONE | 2

3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

Color: Dark Red

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Excellent adhesion
- Re-enterable/repositable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

4 in. x 8 in. (101.6mm x 203.3mm), 7 in. x 7 in. (177.8mm x 177.8mm) and 9.5 in. x 9.5 in. (241.2mm x 241.3mm) pad sizes available.

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.

**Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly.*

FIRE BARRIER: UL 4 HOUR Fire Protection
SMOKE SEAL: L 400 Meets National Requirements
WALL OPENING: UL 2 HOUR Fire Protection
SOUND BARRIER: STC 52 Helps Minimize Sound Transmission
FM APPROVED — SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP SYSTEM AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE
UL LISTED — FILL, VOID OR CAVITY MATERIALS WW39
CLASSIFIED UL — WALL OPENING PROTECTIVE SYSTEMS SEE UL CLASSIFICATION SEE UL FIRE RESISTANCE DIRECTORY WW39
CLASSIFIED UL — FILL, VOID OR CAVITY FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY WW39

2. Applications

4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm x 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping

Related Sections
Section 07 84 16 – Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop

4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10–12 lbs./gal. (1.2–1.45kg/L)
Nominal Thickness:	1/10 in. (2.54mm)
Surface Burning (ASTM E 84)**:**	Flame Spread 0, Smoke Development 0
Heat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413)**:**	52 when tested on back-to-back electrical boxes
Tested in STC 53 rated wall assembly	
VOC Less H_2O and Exempt Solvents:	< 250g/L

Dimensions:	4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm)
Unit Volume:	2.52 in.^{3} (41.4cm^3)
Unit Weight:	2.7 oz (76g)
Dimensions:	7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)
Unit Volume:	4.63 in.^{3} (76.8cm^3)
Unit Weight:	4.1 oz (116g)
Dimensions:	9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm)
Unit Volume:	6.1 in.^{3} (139.8cm^3)
Unit Weight:	7.6 oz (215g)

5. Packaging, Storage, Shelf Life

Packaging: Corrugated cardboard box with liner between individual pads.

Storage: 3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.

Shelf Life: 3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) — refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the back of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.

Limitations: Over application (i.e., using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying.

7. Maintenance

No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at new/existing putty overlap.

8. Availability

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information

Consult product's Material Safety Data Sheet (MSDS) from country-of-use prior to handling and disposal.

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-328-1687
877-369-2923 (Fax)
www.3M.com/firestop

Important Notice to User:
Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty and Limited Remedy:** 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

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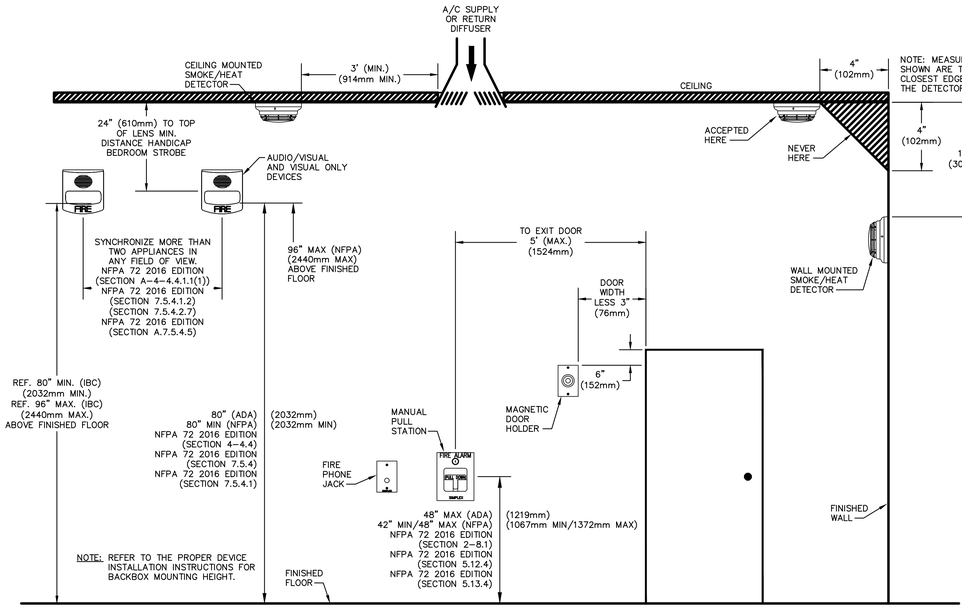
Please Recycle. Printed in U.S.A. © 3M 2015. All rights reserved. Reference Number 98-0213-4620-4 RevB

FIRE STOPPING OUTLET BOX DETAILS | SCALE: NONE | 6



FIRE ALARM DEVICE MOUNTING HEIGHTS (PER NFPA 72) | SCALE: NONE | 1

CONSTRUCTION DOCUMENTS

Revisions	Date
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CONSULTANTS:
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Drawn	GS
Project Number	600-22-703
Building Number	BLDG. #46
Drawing Number	EK2.801
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Office of Construction and Real Estate Management
Department of Veterans Affairs

LIGHTING CONTROL SYSTEM SPECIFICATIONS

1. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED LOW-VOLTAGE CABLING, HARDWARE, ACCESSORIES, MODULES, DEVICES, CONTROLLERS, ETC. (SHOWN OR NOT SHOWN) FOR A COMPLETE AND OPERABLE SYSTEM TO ACCOMMODATE THE TOTAL NUMBER OF CONTROL POINTS AND MEET THE DESIGN INTENT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS, INCLUDING THE SEQUENCE OF OPERATIONS.

2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL PLANS ASSOCIATED WITH THE LIGHTING AND CONTROLS SYSTEMS (FIXTURE SCHEDULE, PLANS, DETAILS, ETC.) TO THE REQUIRED PARTIES (DISTRIBUTORS, VENDORS, ETC.) FOR AN ACCURATE ALL-INCLUSIVE BID.

3. CONTROLS SYSTEM LAYOUT: THE FLOOR/CEILING PLANS IDENTIFIED IN THIS DETAILS SHEET ARE TYPICALS ONLY. ELECTRICAL CONTRACTOR AND SELECTED MANUFACTURER ARE RESPONSIBLE FOR ADAPTING THE ACTUAL LIGHTING AND CONTROLS SYSTEM TO THE ACTUAL CONDITIONS OF THIS PROJECT.

4. WIRELESS: WIRELESS DEVICES OR COMPONENTS ARE NOT ALLOWED UNLESS OTHERWISE NOTED EXCEPT FOR PROGRAMMING DEVICES.

5. SYSTEM CONTROLLING MULTIPLE SPACES: A SYSTEM CONTROLLING MULTIPLE SPACES (I.E., ONE CONTROLLER FOR TWO OFFICES, CLASSROOMS, ETC.) IS ACCEPTABLE HOWEVER A MAXIMUM OF TWO SPACES PER CONTROLLER SHALL NOT BE EXCEEDED. IN ALL CASES, PROPER SIGNAGE SHALL BE PROVIDED WITHIN THE SPACE TO IDENTIFY LOCATION OF IT'S CONTROLLER.

6. ACCEPTABLE MANUFACTURER'S AND SYSTEMS:
   a. PERFORMNCE LIGHTING (nLIGHT).

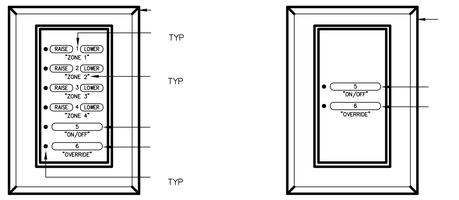
7. SUBMITTALS: SUBMITTALS FOR THE LIGHTING CONTROL PACKAGE MUST BE PROVIDED TO INCLUDE THE FOLLOWING INFORMATION:
   a. PROPOSED MANUFACTURER AND SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS.
   b. PROPOSED CONTROLS SYSTEM LAYOUT SHOWING TYPES AND LOCATIONS FOR ALL DEVICES, LOW-VOLTAGE CABLING, ETC. ASSOCIATED WITH AND SPECIFIC TO THIS PROJECT.
   c. RISER/SINGLE LINE DIAGRAMS SHOWING COMPLETE SYSTEM LAYOUT AND CONNECTIVITY.
   d. OWNER'S DESIRED ON / OFF TIME SCHEDDULES FOR ALL INTERIOR AND EXTERIOR CONTROL ZONES.

8. WARRANTY, SUPPORT, AND COMMISSIONING: IN ADDITION TO MINIMUM 1-YEAR MANUFACTURER'S WARRANTY, INCLUDE IN BID ALL REQUIRED TECHNICAL SUPPORT AND COMMISSIONING BY THE MANUFACTURER TO SUCCESSFULLY EXECUTE AND MEET THE DESIGN INTENT OF THIS COMPLETE CONSTRUCTION DOCUMENT PACKAGE.

9. ALTERNATES: APPROVAL FOR ALTERNATE SYSTEMS IS REQUIRED PRIOR TO BID. SUBMIT PRIOR (15) DAYS PRIOR TO BID DEADLINE FOR PROPOSED ALTERNATE SYSTEM ALL INFORMATION IDENTIFIED IN ITEM #7 ABOVE.

10. EMERGENCY LIGHTING: FURNISH AND INSTALL COMPONENTS AND WIRING NECESSARY TO PROVIDE A COMPLETE AND OPERABLE EMERGENCY LIGHTING SYSTEM IN ACCORDANCE WITH THE SELECTED MANUFACTURER'S REQUIREMENTS TO ACCOMMODATE THE BACKUP POWER SOURCE(ES) PROVIDED IN THIS PROJECT. [GENERATOR VS. BATTERY PACKS VS. INVERTER]. INCLUDE SHUNT RELAY DEVICES AND/OR SEPARATE DRC DEVICES AS NEEDED. INSTALLED LIGHTING CONTROL SYSTEM SHALL BE WIRED, CONFIGURED, PROGRAMMED, AND PROVIDED SUCH THAT DESIGNATED EMERGENCY LIGHTS RETURN TO FULL-BRIGHTNESS AUTOMATICALLY IN THE EVENT OF A POWER LOSS.

TYPICAL PUSHBUTTON STATION DIAGRAM



MULTI-FUNCTION | ON/OFF/OVERRIDE ONLY

DIAGRAM NOTES:

TYPICAL PUSHBUTTON STATION SHALL OF SAME MANUFACTURER AS, AND COMPATIBLE WITH, SELECTED OVERALL LIGHTING CONTROL SYSTEM MANUFACTURER. WHERE PUSHBUTTON STATION IS IN ADDITION TO STAND-ALONE DIMMER STATION, IT SHALL FUNCTION ONLY AS 2-HR OVERRIDE AND CONTAIN ONE BUTTON. WHERE PUSHBUTTON STATION IS TO FUNCTION AS 2-HR OVERRIDE AND LOCAL CONTROL, IT SHALL CONSIST OF TWO-BUTTONS PER "ZONE" FOR "RAISE" AND "LOWER" FUNCTIONS PER ZONE. SEE PLANS FOR ACTUAL LOCATIONS AND QUANTITIES. ELECTRICAL CONTRACTOR TO INCLUDE PUSHBUTTON CONTROL WIRE ROUTING IN AS-BUILT DOCUMENTATION.
*NUMBER OF BUTTONS PER SCHEDULE.
**BUTTON AND PLATE COVER COLORS BY ARCHITECT OR INTERIOR DESIGNER.

PUSHBUTTON POSITION IDENTIFICATION, SHOWN FOR REFERENCE ONLY. REFER TO PUSHBUTTON SCHEDULE FOR ASSIGNED CONTROL DESIGNATION.

ENGRAVING TO BE INCLUDED WITH PUSHBUTTON, WITH LABELING SPECIFIC TO THE ZONE CONTROLLED AS INDICATED IN PUSHBUTTON SCHEDULE, UNLESS OTHERWISE NOTED.

MASTER ON/OFF BUTTON TO CONTROL ON/OFF OPERATION OF ALL BUTTONS WITHIN THIS PUSHBUTTON STATION ONLY.

CEC TITLE 24 REQUIRED 2-HOUR OVERRIDE BYPASS BUTTON. REFER TO PUSHBUTTON SCHEDULE FOR ZONES TO BE OPERATED BY THIS BYPASS BUTTON. LIGHTS CONTROLLED BY THIS PUSHBUTTON TO "FLASH" OR PROVIDE OTHER MEANS OF NOTIFICATION PRIOR TO TURNING OFF.

LED INDICATOR LIGHT.

NOTES:

WHEN MULTIPLE STATIONS ARE REQUIRED DUE TO MANUFACTURER SELECTED AND AVAIALBLE BUTTON CONFIGURATIONS, LOCATE STATIONS IN MULTI-GANG JUNCTION BOX AND NECESSARY MULTI-GANG FACEPLATE.

DO NOT PROVIDE EXCESS OR INOPERABLE "DUMMY" BUTTONS WHICH ARE NOT NECESSARY WITHIN PUSHBUTTON STATIONS. PROVIDE ONLY THE NUMBER OF BUTTONS REQUIRED FOR THE ZONES SHOWN AT EACH STATION.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

1. INTERIOR DAYLIGHT HARVESTING: LIGHTING WITHIN DAYLIGHT ZONES [SKYLIT, PRIMARY, AND SECONDARY] SHALL BE PROGRAMMED SUCH THAT ARTIFICIAL DAYLIGHT AUTOMATICALLY DIMS AS NEEDED WHEN AVAILABLE NATURAL DAYLIGHT CONTRIBUTION RESULTS IN LIGHT LEVES WITHIN SPACE EXCEEDING 50-FOOTCANDLES AT 30-INCHES A.F.F.. ARTIFICIAL LIGHTING POWER SHALL AUTOMATICALLY INCREASE AS NATURAL DAYLIGHT DECREASES AND LIGHT LEVELS FALL BELOW 50-FOOTCANDLES.

2. CORRIDOR LIGHTING: SYSTEM SHALL BE PROGRAMMED SUCH THAT CORRIDOR LIGHTS ARE DIMMED DOWN 50% WHEN NO ACTIVITY IS DETECTED BY THE CORRIDOR OCCUPANCY SENSOR(S). LIGHTS SHALL RETURN TO 100% UPON OCCUPANCY BEING DETECTED.

LIGHTING CONTROL SYSTEM LEGEND

DRC — LOCAL AREA ROOM CONTROLLER OR DESIRED MANUFACTURES EQUIVALENT. PROVIDE LINE VOLTAGE CONNECTION TO CONTROLLER AND LIGHTING FIXTURES AS NEEDED. PROVIDE LOW VOLTAGE CONNECTION BETWEEN CONTROLLER AND CONTROL COMPONENTS. PROVIDE ADDITIONAL RELAY AND/OR REQUIRED CONTROLLER WHEN EMERGENCY LIGHTING IS CONNECTED TO CONTROLLER.

ER — EMERGENCY RELAY PACK IS USED IN CONJUNCTION WITH DIGITAL ROOM CONTROLLER TO SWITCH LUMINAIRES POWERED VIA AN EMERGENCY CIRCUIT.

RR — CONTROLLED RECEPTACLE RELAY CONNECTED TO LOCAL ROOM CONTROLLER. REFER TO POWER PLAN FOR MORE INFORMATION.

D — DIGITAL ON/OFF-RAISE/LOWER CONTROL STATION CONNECTED TO LOCAL ROOM CONTROLLER. REFER TO PLAN SHEETS FOR ZONING AND VERIFY CONTROL REQUIREMENTS WITH OWNER/OWNERS REPRESENTATIVE. INSTALL PER CCR T24 Part 6 130.1(b)

DOS — DIGITAL CEILING MOUNT PARTIAL-OFF OCCUPANT OR MOTION SENSOR, WITH CORRIDOR TYPE COVERAGE, CONNECTED TO LOCAL ROOM CONTROLLER. SENSOR TO AUTOMATICALLY REDUCE LIGHTING BY 50% WHEN AREA IS UNOCCUPIED AND TURN LIGHTING FULLY ON WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)7

OS — DIGITAL CEILING MOUNTED OCCUPANCY SENSOR CONNECTED TO LOCAL ROOM CONTROLLER. OCCUPANCY SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND TURN ON LIGHTING WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)

VS — CEILING MOUNTED VACANCY SENSOR CONNECTED TO LOCAL ROOM CONTROLLER. VACANCY SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND RESPONDS TO MANUAL ON INPUT ONLY. INSTALL PER CCR T24 Part 6 130.1(c)5

PN — CEILING MOUNTED PARTIAL-ON SENSOR CONNECTED TO LOCAL ROOM CONTROLLER. PARTIAL-ON SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND BE CAPABLE OF ACTIVATING BETWEEN 50-70 PERCENT OF CONTROLLED LIGHTING POWER WHEN OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)5

PF — CEILING MOUNTED PARTIAL-OFF OCCUPANT OR MOTION SENSOR, CONNECTED TO LOCAL ROOM CONTROLLER. SENSOR TO AUTOMATICALLY REDUCE LIGHTING BY 50% WHEN AREA IS UNOCCUPIED AND TURN LIGHTING FULLY ON WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)7

PS — DIGITAL CEILING MOUNT PHOTO SENSOR CONNECTED TO LOCAL ROOM CONTROLLER. SENSOR TO ADJUST THE POWER OF THE INSTALLED LIGHTING UP AND DOWN TO KEEP THE TOTAL LEVEL STABLE AS THE INCOMING DAYLIGHT CHANGES. INSTALL PER CCR T24 Part 6 130.1(d)

WS — WALL MOUNTED OCCUPANCY SENSOR. OCCUPANCY SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND TURN ON LIGHTING WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)

WVS — WALL MOUNTED COMBINATION VACANCY SENSOR/DIMMER. VACANCY SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND RESPONDS TO MANUAL ON INPUT ONLY. INSTALL PER CCR T24 Part 6 130.1(c)5

WPN — WALL MOUNTED COMBINATION PARTIAL-ON OCCUPANT OR MOTION SENSOR/ DIMMER. PARTIAL-ON SENSOR TO SHUT OFF LIGHTING WHEN AREA IS UNOCCUPIED AND BE CAPABLE OF ACTIVATING BETWEEN 50-70 PERCENT OF CONTROLLED LIGHTING POWER WHEN OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)5

WPF — WALL MOUNTED COMBINATION PARTIAL-OFF OCCUPANT OR MOTION SENSOR/ DIMMER. SENSOR TO AUTOMATICALLY REDUCE LIGHTING BY 50% WHEN AREA IS UNOCCUPIED AND TURN LIGHTING FULLY ON WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.1(c)7

WOS — MOTION SENSOR USED OUTDOORS. SENSOR TO AUTOMATICALLY REDUCE POWER BY AT LEAST 50% AND NO MORE THAN 90% OR TURN LIGHTS OFF AFTER 15 MINUTES WHEN AN AREA IS UNOCCUPIED. SENSOR TO ALSO TURN LIGHTS ON WHEN AREA IS OCCUPIED. INSTALL PER CCR T24 Part 6 130.2(c)3

WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR MOUNTED AT +45" AFF. PROVIDE WATTSTOPPER #DW-100 OR EQUAL.
ab - PROVIDE WATTSTOPPER #DW-200 OR EQUAL.

CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR. PROVIDE WATTSTOPPER #DT-300 AND #BZ-50 POWER PACK OR EQUAL.
ab - PROVIDE WATTSTOPPER #DT-300 SENSOR WITH (2) #BZ-50 POWER PACKS OR EQUAL.

$ab STANDARD 20A, 120/277V-1ø SPST TOGGLE SWITCH MOUNTED AT +45" AFF.
ab - INDICATES QUANTITY OF SWITCHES TO BE LOCATED AT THIS LOCATION AND THEIR CONTROL IDENTIFICATION
3 - INDICATES 3-WAY SWITCH

PRIMARY DAY LIT ZONE-AREA IN PLAN VIEW DIRECTLY ADJACENT TO EACH VERTICAL GLAZING, ONE WINDOW HEIGHT DEEP INTO THE AREA, AND WIDOW WIDTH PLUS 0.5 TIMES WINDOW HEAD HEIGHT ON EACH SIDE OF WINDOW.

SECONDARY DAY LIT ZONE-AREA IN PLAN VIEW DIRECTLY ADJACENT TO EACH VERTICAL GLAZING, TWO WINDOW HEIGHT DEEP INTO THE AREA, AND WIDOW WIDTH PLUS 0.5 TIMES WINDOW HEAD HEIGHT ON EACH SIDE OF WINDOW.

ALL NECESSARY EQUIPMENT/ COMPONENTS ARE TO BE PROVIDED BY THE CONTRACTOR FOR A COMPLETE AND OPERATING CONTROL SYSTEM. INCLUDING BUT NOT LIMITED TO EMERGENCY LIGHTING, OCCUPANCY SENSOR, DAYLIGHT CONTROLS, CONTROLLED RECEPTACLE RELAYS, DIMMING CONVERTERS, AND DIMMING TO MEET ALL CALIFORNIA TITLE 24 REQUIREMENTS AT TIME OF PERMIT SUBMITTAL.

ab - INDICATES ZONE CONTROL IDENTIFICATION UON

TYPICAL ROOM CONTROLLER WIRING DIAGRAM

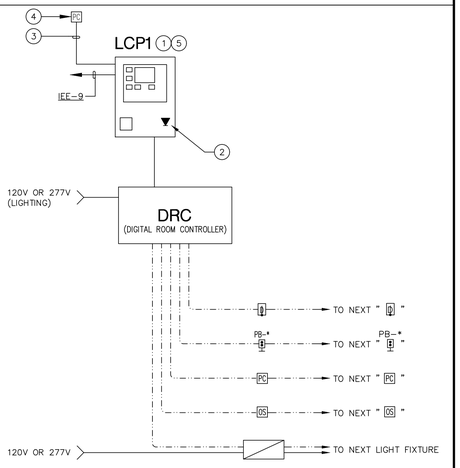


DIAGRAM NOTES:

1. MASTER LIGHTING CONTROL PANEL. 8-RELAY WITH INTEGRAL ASTRONOMICAL TIMECLOCK, MODEM, AND DEMAND RESPONSE CAPABILITY. SEE ELECTRICAL PLANS FOR PANEL AND PUSHBUTTON LOCATIONS. SEE PUSHBUTTON AND RELAY SCHEDULES FOR CIRCUITS ROUTED VIA THIS RELAY PANEL. PROVIDE WITH PROPER NEC APPROVED AND UL 924 ETL LISTED RELAY RATINGS AND BARRIERS TO SEPARATE LIFE SAFETY EMERGENCY LOADS FROM NORMAL ("LCP1": LC&D #GR24322-NC-FMNEI WITH #GR248-INT-NCL-DICD-V2VB.
2. EXISTING VOICE/DATA OUTLET ADJACENT TO LIGHTING CONTROL PANEL WITH 3/4" CONDUIT (INCLUDING PULLROPE) TO NEAREST VOICE/DATA NETWORK HEAD-END EQUIPMENT ROOM. COORDINATE WITH OWNER'S IT DEPARTMENT PRIOR TO START OF WORK.
3. EXISTING 3/4"C WITH CATEGORY-5, 4-TWISTED PAIR CABLES.
4. EXISTING OUTDOOR PHOTOCELL - LOCATE ON ROOF FACING NORTH.
5. PROVIDE 3/4" CONDUIT (INCLUDING PULLROPE) FROM LIGHTING CONTROL PANEL "DR SIGNAL" CONNECTION TO NEAREST VOICE-DATA NETWORK HEAD-END EQUIPMENT. COORDINATE WITH OWNER'S IT DEPARTMENT PRIOR TO START OF WORK.

NOTES:

1. IT IS ACCEPTABLE FOR LOW VOLTAGE WIRING TO BE INSTALLED WITHIN THE SAME RACEWAY AS THE LINE VOLTAGE WHERE ALLOWED BY CODE AND THE SYSTEM MANUFACTURE AS LONG AS THE LOW-VOLTAGE CABLING IS RATED FOR 600V CLASS
2. RELAYS PROVIDED FOR CONTROLLED RECEPTACLES MUST BE RATED FOR 20A AND 1-HP MOTORS.
3. DRC FOR SELECTED MANUFACTURER MUST CONTAIN CONTACT RELAY FOR INTERFACING WITH LIGHTING CONTROL PANEL, BUILDING MANAGEMENT SYSTEM, OR DEMAND RESPONSE.
4. THE DIAGRAM ABOVE SHOWS POSSIBLE WIRING CONFIGURATIONS - NOT ALL THAT IS / ARE REQUIRED. FURNISH AND INSTALL WIRING IN ACCORDANCE WITH THE SELECTED MANUFACTURER'S SYSTEM REQUIREMENTS FOR A COMPLETE AND OPERABLE SYSTEM.
5. THE ROOM CONTROLLER(S) ASSOCIATED WITH THIS PROJECT:
   ☐ MUST BE INTERLOCKED WITH A BUILDING LIGHTING CONTROL PANEL.
   ☒ IS/ARE NOT REQUIRED TO BE INTERLOCKED WITH A BUILDING LIGHTING CONTROL PANEL.

Revisions	Date
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Drawing Title: LIGHTING CONTROL DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked | Drawn

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: EK2.802

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CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

EXTERIOR LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER CATALOG	LAMP QTY/TYPE	DRIVER	FIXTURE WATTAGE	VOLTS	REMARKS
L1	FORMS + SURFACES #LPLCO-612	(1) 32W LED (3000K) (3783L)	0-10V 1% DIMMING DRIVER	32	120	6" DIAMETER TUBULAR LED STAINLESS STEEL LIGHT COLUMN WITH WHITE FROSTED ACRYLIC LENS
L2	FX LUMINAIRE #NP-6LED-BZ STEP DOWN TRANSFORMER #ST-UV	(1) 9.3W LED (3500K) (512L)	DIMMING DRIVER	12	120	TREE UPLIGHT ACCENT LED FIXTURE WITH BRONZE METALLIC FINISH WITH REMOTE TRANSFORMER
L3	BK LIGHTING (2)ARTISTAR LED AR-LED-TR-E65-MFL-A9-BLP-12-11-C-6-WM	(1) 7W LED (3000K) (1766L)	DIMMING DRIVER	12	120	WALL MOUNT CANOPY LED FIXTURE WITH INTEGRAL ELECTRONIC TRANSFORMER

INTERIOR LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER CATALOG	LAMP QTY/TYPE	DRIVER	FIXTURE WATTAGE	VOLTS	REMARKS
A1	CREE LIGHTING #CR24-50L-35K-10V	(1) 50W LED (3000K) (5000L)	0-10V 1% DIMMING DRIVER	50	120	2' x 4' RECESSED T-GRID LED INDIRECT FIXTURE WITH ACRYLIC DIFUSSER AND BUILT-IN 0-10VAC 1% DIMMING DRIVER
B1	CREE LIGHTING #CR14-22L-35K-10V	(1) 22W LED (3500K) (2200L)	0-10V 1% DIMMING DRIVER	22	120	1' x 4' SURFACE LED FIXTURE WITH ACRYLIC DIFUSSER AND BUILT-IN 0-10VAC 1% DIMMING DRIVER
C1	TECH LIGHTING (GIA VANITY KIT) #700BCBND-24-C-S-LED LED930	(1) 21W LED (3000K) (791L)	0-10V 1% DIMMING DRIVER	21	120	24"L X 1" X 1" WALL MOUNTED WHITE LED FIXTURE WITH ACRYLIC LENS AND REMOTE TRANSFORMER AND 0-10V DIMMING DRIVER
X1	ISOLITE #ELT-EM-G-2M-AG-BA-MRC-AU-SD	(1) 4W LED		4	120	CEILING MOUNTED BRUSHED ALUMINUM TRIM LED EXIT SIGN WITH SINGLE MIRROR GREEN LETTERS (ARROWS AS INDICATED)

INTERIOR LIGHTING FIXTURE GENERAL NOTES

1. FIXTURES SHALL HAVE APPROPRIATE UL LABEL, DAMP, OR WET AS REQUIRED BY CODES AND ORDINANCES.
2. LIGHTING FIXTURE CATALOG NUMBERS ARE SERIES TYPE ONLY. PROVIDE ALL NECESSARY HARDWARE AS REQUIRED BY THE SPECIFICATIONS, DRAWINGS, AND PROJECT CONDITIONS FOR A COMPLETE AND OPERABLE INSTALLATION.
3. PRIOR TO ORDERING ANY LIGHTING EQUIPMENT, THE CONTRACTOR SHALL COORDINATE ALL FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND CEILING CAVITY DEPTHS.
4. CONTRACTOR SHALL VERIFY FIXTURE VOLTAGES AND CEILING TRIM COMPATIBILITY PRIOR TO ORDERING FIXTURE.
5. PROVIDE APPROVED FIRE-RATED ENCLOSURES FOR ALL LIGHTING FIXTURES LOCATED IN FIRE-RATED CEILINGS.
6. UPON INITIAL ENERGIZING OF ALL NEW FLUORESCENT LAMPS AND LED FIXTURES, A CONTINUOUS PERIOD OF 30 HOURS SHALL OCCUR PRIOR TO DE-ENERGIZING OF LAMPS OR LED'S , FOR MANUFACTURER REQUIRED BURN-IN AND MAXIMUM LIFE.
7. ENSURE COMPATIBILITY OF ALL LIGHTING SYSTEM COMPONENTS SUCH AS DIMMING SYSTEMS. FIXTURES, LEDS, DRIVERS AND DIMMING SYSTEMS/INDIVIDUAL CONTROLS MUST BE FACTORY CERTIFIED AND CONFORM TO LIGHTING AND CONTROLS SPECIFICATION 265100.
8. PROVIDE CLEARANCES FROM COMBUSTIBLES A MINIMUM OF 1/2" (OTHER THAN AT POINTS OF SUPPORT) AND 3" FROM INSULATION FOR RECESSED LIGHTING FIXTURES.
9. PROVIDE A MINIMUM OF TWO (2) #12 SUPPORT WIRES ATTACHED TO BUILDING FRAME IN ADDITION TO T-BAR CLIPS FOR FIXTURES RECESSED IN SUSPENDED T-BAR CEILING.
10. PROVIDE (4) SHEET METAL SCREWS, ONE INSTALLED IN EACH CORNER OF THE FIXTURE ATTACHING THE FIXTURE TO THE GRID. SCREWS SHALL NOT BE VISIBLE NOR IMPEDE INSTALLATION OF GRID PANELS.
11. PROVIDE DOOR-TO-FRAME AND LENS-TO-DOOR GASKETING, INVERTED LENS, AND FOOD SERVICE RATING FOR ALL FIXTURES LOCATED IN FOOD SERVICE AREAS.
12. LAMPS AND LEDS SHALL BE PROVIDED AND INSTALLED ACCORDING TO THIS FIXTURE SCHEDULE AND PROJECT SPECIFICATIONS. ENSURE COMPATIBILITY BETWEEN FIXTURE, LAMP AND BALLAST(S), LEDS AND DRIVERS.
13. FIXTURES SHALL BE ORDERED WITH APPROPRIATE BALLAST(S) THAT HAVE UL AND CBM LABELS. ALL BALLASTS MUST CONFORM TO TITLE 24 REQUIREMENTS FOR PERFORMANCE AND EFFICIENCY.
14. FLUORESCENT FIXTURES TO BE SUPPLIED WITH "QUICK DISCONNECT" SAFETY BALLAST HARDWARE WHICH ARE UL AND CSA CERTIFIED IN ACCORDANCE WITH NEC 410.73(G) AND CEC 30-308(4).
15. FLUORESCENT BALLASTS SHALL BE ELECTRONIC TYPE. PROVIDE END OF LIFE (EOL) SHUT-DOWN PROTECTION FOR COMPACT FLUORESCENT LAMPS. LED DRIVERS SHALL BE 0-10VOLT DIMMING TYPE AS INDICATED.
16. FIXTURES, TRIMS, REFLECTORS, AND LAMPS SHALL BE CLEANED FREE FROM DIRT, DUST, LABEL ADHESIVE, AND FINGER PRINTS.
17. ALL LIGHT FIXTURES SHALL BE MOUNTED AND SUPPORTED IN ACCORDANCE WITH OSHA STANDARDS AND ALL LOCAL, STATE, AND NATIONAL ELECTRICAL CODES. PROVIDE ALL REQUIRED SEISMIC RESTRAINTS PER MANUFACTURERS REQUIREMENTS.
18. PROVIDE LIGHT FIXTURE MOUNTING KITS AS REQUIRED TO SUIT THE EXACT TYPE OF CEILING TO WHICH THEY ARE MOUNTED.
19. FOR LED FIXTURES, THE DRIVER, LED AND FIXTURE SHALL BE FULLY UL CERTIFIES AS A SYSTEM, INCLUDING ANY OPTIONAL EMERGENCY BATTERY PACKS, SPECIAL DRIVERS (DIMMING). COMPONENTS LISTED DISCRETELY SHALL NOT BE PERMITTED.
20. PHOTOMETRIC TESTING FOR ALL LED FIXTURES SHALL BE FOR IES LM-70-80 AND TEST REPORTS SHALL BE INCLUDED WITH ALL FIXTURES SUBMITTALS.
21. LUMEN MAINTENANCE REPORTS (IES LM-80) REPORTS ARE ALSO REQUIRED WITH ALL LED FIXTURE SUBMITTALS. LM-80 RESULTS ARE TO INCLUDE A MINIMUM OF 10,000 HOURS TESTING AND REFERENCED TO TM-21 FOR TOTAL LUMEN MAINTENANCE. NO EXTRAPOLATED L-70 ESTIMATES WILL BE ACCEPTED.
22. PROVIDE A MINIMUM 5 YEAR WARRANTY ON AN LED FIXTURES.
23. PROVIDE STANDARD DEVIATION OF COLOR MATCHING (SDCM) BASED ON THE MAC ADAM ELLIPSE, AND NUMBER'S OR QUANTITIES OF ELLIPSE VARIATIONS FOR LED COLOR ACCURACY.
24. ALL LED FIXTURES SUBMITTALS SHALL INCLUDE DATA ON LED CHIP MANUFACTURER AND CHIP DATA, AS WELL AS DRIVER MANUFACTURER, DATA AND CUT SHEETS.

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

Revisions:	Date
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Drawing Title: ELECTRICAL SCHEDULES

Approved: Project Director

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA LONG BEACH CA

Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: ES2.701

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CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

(1)

MOUNTING: SURFACE — EXISTING **PANEL 46A** — BUS: 125A
A.I.C. RATING: 10,000 AMPS (minimum) — 208 / 120 VOLTS, 3 PHASE, 4 WIRE — MAIN: MLO
LOCATION: ELECT. CLOSET — Feeder OCPD: — Fed From:

NOTE	DESCRIPTION	Volt-Amps Ø AN	Ø BN	Ø CN	Ltg	Rec	Misc	Ckt Brkr	Ckt No	A B C	Ckt No	Ckt Brkr	Misc	Rec	Ltg	Volt-Amps Ø AN	Ø BN	Ø CN	DESCRIPTION	NOTE
	SPARE							20/1	1		2	20/1				450			(E) HVAC TERMINAL UNITS	
	(E) KITCHEN LIGHTS / ROOF		312					20/1	3		4	20/1		**6**			**1080**		**(E) (N) RECEPTS-CONF WEST, ELEC. ROOM**	
	(N) LTS - CONF/RECEPTION			**950**	**19**			20/1	5		6	20/1						1260	(E) RECEPTS - EAST	
	(E) ROOF RECEPTS - GFCI	360						20/1	7		8	20/1							SPARE	
	(E) CORRIDOR LIGHTS		808					20/1	9		10	20/1					360		(E) IT ROOM SECURITY SYSTEM RECEPT	
	(E) RECEPTION, DIRECTORS, CONF LTS			1087				20/1	11		12	20/1						540	(E) STORAGE ROOM RECEPTS	
	(E) LUNCH ROOM TODDLER RM LIGHTS	941						20/1	13		14	20/1				1200			(E) DISHWASHER RM 011	
	(E) LIGHTS EXTERIOR WEST WALL		260					20/1	15		16	20/1					1200		(E) REFRIGERATOR RM 011	
	(E) HALLWAY RECEPTS			720				20/1	17		18	20/1						720	(E) KITCHEN S COUNTERTOP RECEPTS	
	(E) STAFF LOUNGE	180						20/1	19		20	20/1				720			(E) KITCHEN NORTH RECEPTS	
	(E) STAFF LOUNGE REFRIGERATOR		1200					20/1	21		22	20/1					720		(E) DISPOSAL/COUNTER RECEPTS	
	(E) IIT ROOM LIGHTS			124				20/1	23		24	20/1						720	(E) RECEPTION AREA RECEPTS	
	(E) LAUNDRY ROOM WASHER	1500						20/1	25		26	20/1				720			(E) DIRECTORS OFFICE RECEPTS	
	(E) L/R & TODDLER/W RECEPTS, CIRCP		1080					20/1	27		28	20/1					720		(E) PARENT CONF RM RECEPTS	
	(E) TODDLER ROOM EAST RECPTS			720				20/1	29		30	20/1						600	(E) PARENT CONF RM PROJ RECEPT	
	(E) LUNCHROOM MICROWAVE RECPT	1200						20/1	31		32	20/1				540			(E) RECEPTS - SICK, BATH	
	(E) NORTH WATER FOUNTAIN		600					20/1	33		34	20/1					500		(E) LUNCH ROOM COFFEE MAKER	
	(E) SOUTH WATER FOUNTAIN			600				20/1	35		36	20/1						720	(E) RECEPTION RECPTS	
	(E) COUNTER RECPT EAST OF RANGE	180						20/1	37		38	20/1							SPARE	
	(E) EXHAUST FANS EF-2, EF-3		720					20/1	39		40	20/1					500		(E) EXHAUST FAN EF-5 LAUNDRY LTS	
	(E) LANDSCAPE CONTROLLER			500				20/1	41		42	20/1						920	(E) EXHAUST FANS KF-1, EF-4	
	PANEL CALCULATION															Ø AN		Ø CN	**Ø A + Ø B + Ø C**	
	CONNECTED LOAD															7,991 VA		10,181 VA	**28,232 VA**	
																CONNECTED BALANCED LINE CURRENT = 78.4 A			HIGH LINE CURRENT (ØC) = 84.8 A	
	DEMAND LOAD															7,991 VA		10,419 VA	**28,470 VA**	
																DEMAND BALANCED LINE CURRENT = 79.1 A			HIGH LINE CURRENT (ØC) = 86.8 A	

(1)

MOUNTING: SURFACE — EXISTING **PANEL 46EM** — BUS: 125A
A.I.C. RATING: 10,000 AMPS (minimum) — 208 / 120 VOLTS, 3 PHASE, 4 WIRE — MAIN: 125A
LOCATION: ELECT. CLOSET — Feeder OCPD: — Fed From:

NOTE	DESCRIPTION	Volt-Amps Ø AN	Ø BN	Ø CN	Ltg	Rec	Misc	Ckt Brkr	Ckt No	A B C	Ckt No	Ckt Brkr	Misc	Rec	Ltg	Volt-Amps Ø AN	Ø BN	Ø CN	DESCRIPTION	NOTE
	(E) JOHNSON CONTROL UNIT	500						20/1	1		2	20/1				600			(E) FIRE ALARM PANEL	
	SPARE							20/1	3		4	20/1					500		(E) MAIN GATE ENTRANCE CONTROL	
	(E) IT ROOM PLUGS			520				20/1	5		6	20/1							SPARE	
	SPARE							20/1	7		8	20/1				100			(E) EXIT SIGN - SOUTH	
	SPARE							20/1	9		10	20/1					500		(E) EXIT SIGN - NORTH	
	SPARE							20/1	11		12	20/1		**6**				**300**	**(N) EXIST SIGNS/CONFERENCE RM EGRESS EMERG LTS**	
	SPARE							20/1	13		14	20/1				50			(E) RANGE SHUNT TRIP CONTROL	
	(E) EXTERIOR LIGHTS		600					20/1	15		16	20/1							SPARE	
	(E) EXTERIOR LIGHTS			600				20/1	17		18	20/1						800	(E) EF-1	
	SPACE								19		20								SPACE	
	SPACE								21		22								SPACE	
	SPACE								23		24								SPACE	
	SPACE								25		26								SPACE	
	SPACE								27		28								SPACE	
	SPACE								29		30								SPACE	
	SPACE								31		32								SPACE	
	SPACE								33		34								SPACE	
	SPACE								35		36								SPACE	
	SPACE								37		38								SPACE	
	SPACE								39		40								SPACE	
	SPACE								41		42								SPACE	
	PANEL CALCULATION															Ø AN		Ø CN	**Ø A + Ø B + Ø C**	
	CONNECTED LOAD															1,250 VA		2,220 VA	**5,070 VA**	
																CONNECTED BALANCED LINE CURRENT = 14.1 A			HIGH LINE CURRENT (ØC) = 18.5 A	
	DEMAND LOAD															1,250 VA		2,295 VA	**5,145 VA**	
																DEMAND BALANCED LINE CURRENT = 14.3 A			HIGH LINE CURRENT (ØC) = 19.1 A	

(1)(3)

MOUNTING: FLUSH — NEW **PANEL 46B** — BUS: 100A
A.I.C. RATING: 10,000 AMPS (minimum) — 208 / 120 VOLTS, 3 PHASE, 4 WIRE — MAIN: 100A
LOCATION: CORRIDOR 019 — Feeder OCPD: 100A — Fed From: 46MSB'

NOTE	DESCRIPTION	Volt-Amps Ø AN	Ø BN	Ø CN	Ltg	Rec	Misc	Ckt Brkr	Ckt No	A B C	Ckt No	Ckt Brkr	Misc	Rec	Ltg	Volt-Amps Ø AN	Ø BN	Ø CN	DESCRIPTION	NOTE
	ELECTRIFIED PARTITION - CONF. 013B	1000					1	20/1	1		2	20/1	2			900			RECEPTS - WORKSTATION - CONF. 013B	
	ELECTRIFIED PARTITION - CONF. 013A		1000				1	20/1	3		4	20/1	2				900		RECEPTS - WORKSTATION - CONF. 013B	
	ELECTRIFIED PARTITION - CONF. 013C			1000			1	20/1	5		6	20/1	2					900	RECEPTS - WORKSTATION - CONF. 013B	
	PROJECTION SCREEN - CONF. 013B	800					1	20/1	7		8	20/1	2			900			RECEPTS - WORKSTATION - CONF. 013A	
	PROJECTION SCREEN - CONF. 013A		800				1	20/1	9		10	20/1	2				900		RECEPTS - WORKSTATION - CONF. 013A	
	PROJECTION SCREEN - CONF. 013C			800			1	20/1	11		12	20/1	2					900	RECEPTS - WORKSTATION - CONF. 013A	
	PROJECTION SCREEN - CONF. 013D	800					1	20/1	13		14	20/1		2		360			RECEPTS - WORKSTATION - CONF. 013D	
	EXTERIOR DOOR		800				1	20/1	15		16	20/1			12		184		LTS-EXTERIOR SITE	
	EXTERIOR DOOR			800			1	20/1	17		18	20/1	2					500	EXTERIOR SIGN	
	SPARE							20/1	19		20	20/1	1			50			EXTERIOR LIGHTING TIMECLOCK	
	SPARE							20/1	21		22	20/1							SPARE	
	SPARE							20/1	23		24	20/1							SPARE	
	SPACE								25		26								SPACE	
	SPACE								27		28								SPACE	
	SPACE								29		30								SPACE	
	PANEL CALCULATION															Ø AN		Ø CN	**Ø A + Ø B + Ø C**	
	CONNECTED LOAD															4,810 VA		4,900 VA	**14,294 VA**	
																CONNECTED BALANCED LINE CURRENT = 39.7 A			HIGH LINE CURRENT (ØC) = 40.8 A	
	DEMAND LOAD															4,810 VA		4,900 VA	**14,340 VA**	
																DEMAND BALANCED LINE CURRENT = 39.8 A			HIGH LINE CURRENT (ØC) = 40.8 A	

46A	46EM
47B	—
—	—

SHEET NOTES:

1. PROVIDE NEW UPDATE TYPEWRITTEN PANEL SCHEDULE.
2. CONNECT TO SPARE CIRCUIT BREAKER.
3. PROVIDE ENGRAVED NAMEPLATE ON DOOR WITH PANEL AND VOLTAGE.

CONSTRUCTION DOCUMENTS

Revisions:	Date
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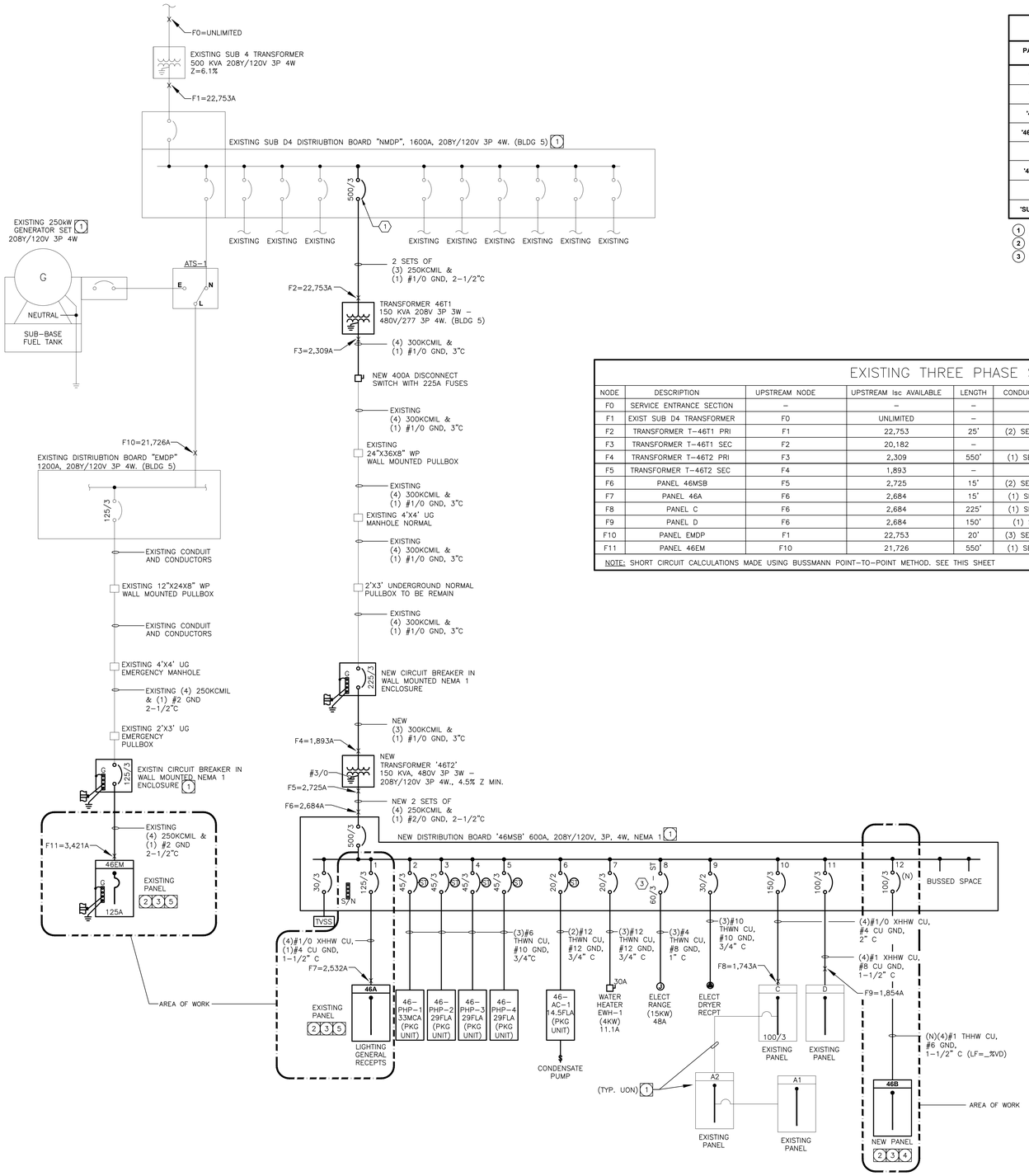
Drawing Title: PANEL SCHEDULES
Approved: Project Director
Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA LONG BEACH CA
Date: 11 JANUARY, 2023 | Checked: RR | Drawn: GS
Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: ES2.702
Dwg. Page 55 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231



1 ELECTRICAL SINGLE LINE DIAGRAM
NO SCALE

PANEL / DISTRIBUTION BOARD LOAD VERIFICATION

PANEL	RATING	BRANCH	FED FROM	EXIST LOAD (1) (KVA)	CODE LOAD (2) (KVA)	LOAD REMOVED (KVA)	LOAD ADDED (KVA)	NET LOAD (KVA)	REMARKS
'D'	225A 208/120V 3Ø 4W	NORMAL	46MSB	2.5	3.1	NA	NA	3.1	REFEED (EX) PANEL
'C'	225A 208/120V 3Ø 4W	NORMAL	46MSB	16.2	20.2	NA	NA	20.2	REFEED (EX) PANEL
'46A'	225A 208/120V 3Ø 4W	NORMAL	46MSB	-	-	NA	30	30	-
'46MSB'	500A 208/120V 3Ø 4W	NORMAL	SUB D4	-	-	NA	137.3	137.3	-
'46EM'	100A 208/120V 3Ø 4W	EMER	SUB D4	-	-	NA	5.5	5.5	-
'SUB-D4'	1390A 208/120V 3Ø 4W	NORMAL	-	(3) 137.5	-	NA	142.8	280.3	'SUB-D4' HAS CAPACITY

(1) EXISTING DEMAND LOADS FROM 30 DAYTEST PER NEC 220.87. KVA VALUE BASED ON HIGHEST RECORDED PHASE.
(2) CODE LOAD REPRESENTS DEMAND LOAD AT 125% PER NEC 220.87.
(3) DEMAND LOAD RECEIVED FROM VA. 0.8 PF ASSUMED.

EXISTING THREE PHASE SHORT-CIRCUIT CALCULATIONS

NODE	DESCRIPTION	UPSTREAM NODE	UPSTREAM Isc AVAILABLE	LENGTH	CONDUCTORS PER PHASE	RACEWAY TYPE	XFMR KVA	XFMR %Z	C-FACTOR	VOLTAGE	M	Isc	NOTES
F0	SERVICE ENTRANCE SECTION	–	–	–	–	–	–	–	–	–	–	UNLIMITED	
F1	EXIST SUB D4 TRANSFORMER	F0	UNLIMITED	–	–	NM	500	6.1	–	208	–	22,753	
F2	TRANSFORMER T-46T1 PRI	F1	22,753	25'	(2) SETS: – 250 KCMIL	M	–	–	18,593	208	0.887	20,182	
F3	TRANSFORMER T-46T1 SEC	F2	20,182	–	–	–	150	5.75	–	208-480	0.115	2,309	
F4	TRANSFORMER T-46T2 PRI	F3	2,309	550'	(1) SET: – 300 KCMIL	NM	–	–	20,867	480	0.820	1,893	
F5	TRANSFORMER T-46T2 SEC	F4	1,893	–	–	–	150	5.75	–	480-208	1.440	2,725	
F6	PANEL 46MSB	F5	2,725	15'	(2) SETS: – 250 KCMIL	M	–	–	18,593	208	0.985	2,684	
F7	PANEL 46A	F6	2,684	15'	(1) SET: – #1/0 AWG	M	–	–	9,317	208	0.943	2,532	
F8	PANEL C	F6	2,684	225'	(1) SET: – #1/0 AWG	M	–	–	9,317	208	0.649	1,743	
F9	PANEL D	F6	2,684	150'	(1) SET: – #1 AWG	M	–	–	7,493	208	0.691	1,854	
F10	PANEL EMDP	F1	22,753	20'	(3) SETS: – 500 KCMIL	M	–	–	26,706	208	0.955	21,726	
F11	PANEL 46EM	F10	21,726	550'	(1) SET: – 250 KCMIL	M	–	–	18,593	208	0.158	3,421	

NOTE: SHORT CIRCUIT CALCULATIONS MADE USING BUSSMANN POINT-TO-POINT METHOD. SEE THIS SHEET

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTE THAT THE DRAWING IS DIAGRAMMATIC. EXACT ROUTING OF NEW CONDUITS AND LOCATION OF JUNCTION BOXES AND PULL BOXES SHALL BE COORDINATED AND DETERMINED IN THE FIELD. NEW CONDUIT, JUNCTION BOXES AND PULL BOXES SHALL BE ROUTED CONCEALED IN THE CEILING SPACE AND IN SUCH A MANNER AS TO AVOID INTERFERENCE WITH EXISTING BUILDING STRUCTURES, UTILITIES AND THE WORK BEING PERFORMED BY OTHER TRADES.
2. REFER TO GENERAL NOTES, SHEET E0.101 FOR ADDITIONAL REQUIREMENTS.
3. ALL BRANCH CIRCUITS TO CONTAIN SEPARATE NEUTRAL CONDUCTORS PER NEC.
4. COORDINATE EQUIPMENT FURNISHED BY OWNER AND VERIFY ELECTRICAL CHARACTERISTICS PRIOR TO ROUGH-IN.
5. PROVIDE ENGRAVED NAME PLATES FOR ALL DEVICES AND PANELBOARDS WITH NAME AND VOLTAGE AS INDICATED.
6. PROVIDE COMPLETE UPDATED TYPEWRITTEN PANEL DIRECTORIES FOR ALL MODIFIED PANELBOARDS.
7. ALL CONDUCTORS ARE AWG COPPER, UNLESS OTHERWISE NOTED.

SHEET NOTES:

1. EXISTING ELECTRICAL ITEM TO REMAIN. MAINTAIN CIRCUIT CONTINUITY.
2. PROVIDE NEW TYPEWRITTEN PANEL DIRECTORY.
3. SEE PANEL SCHEDULES, SHEET ES2.702.
4. PROVIDE ENGRAVED NAMEPLATE.
5. EXISTING PANELBOARD TO BE MODIFIED FOR THIS PROJECT.

LOAD CALCULATIONS:

(E)MAIN SWITCHBOARD "46MSB":
500A, 208/120V-3ø-4W

AS-BUILT LOAD:	=	137.3KVA
DELETED LOAD:	=	1.3KVA
ADDED LOAD:	=	16.6KVA
TOTAL LOAD:	=	152.6KVA
	=	423.8AMPS

(E)PANEL "46A":
125A, 208/120V-3ø, 4W

AS-BUILT LOAD:	=	27.7KVA
DELETED LOAD:	=	1.3KVA
ADDED LOAD:	=	2.0KVA
TOTAL LOAD:	=	28.4KVA
=	78.8AMPS	

(E)DISTRIBUTION BOARD "EMDP"
1200A, 208/120V-3ø, 4W

AS-BUILT LOAD:	=	330.0KVA
DELETED LOAD:	=	0.0KVA
ADDED LOAD:	=	0.3KVA
TOTAL LOAD:	=	330.3KVA
	=	917.2AMPS

(E)PANEL "46EM"
125A, 208/120V-3ø, 4W

AS-BUILT LOAD:	=	4.8KVA
DELETED LOAD:	=	0.0KVA
ADDED LOAD:	=	0.3KVA
TOTAL LOAD:	=	5.1KVA
	=	14.1AMPS

Revisions:	Date
-	-
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-	-
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-	-
-	-
-	-

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npd ARCHITECTURE ENGINEERING DEVELOPMENT
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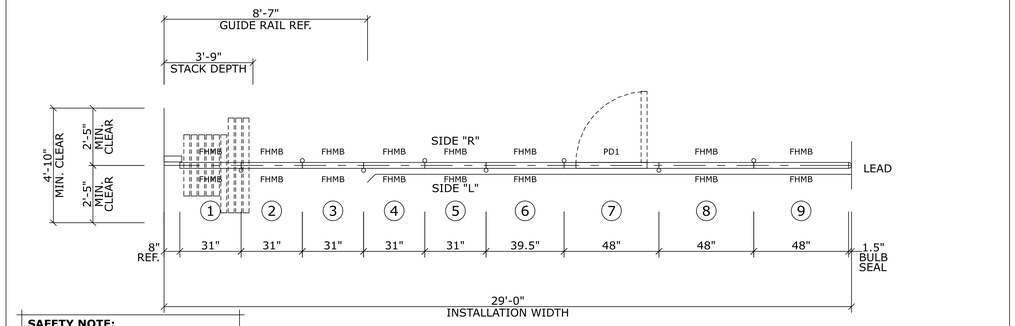
LA JOLA, CA 92037
858.344.8900

Drawing Title: **ELECTRICAL SINGLE LINE DIAGRAM AND LOAD CALCULATIONS**
Approved Project Director:
Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA
Location: VA LONG BEACH CA
Date: 11 JANUARY, 2023
Checked: RR
Drawn: GS
Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: **ESL2.601**
Dwg. Page 56 of 61

CONSTRUCTION DOCUMENTS
Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231



SAFETY NOTE:

SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

ARCHITECT / GENERAL CONTRACTOR NOTES

1. MINIMUM DIMENSIONS PROVIDE FOR CLEARANCE FROM ALL ADJACENT CONSTRUCTION/FIXTURES FOR ADJUSTMENT, OPERATION, AND SAFETY.
2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL SUPPORT, ADJOINING CONSTRUCTION AND TRIM.
3. WALL CONSTRUCTION AT JAMBS MUST BE ADEQUATE FOR SECURING JAMBS.
4. AFS INDICATES ADJUSTABLE FIXED SEALS.
   ▼ INDICATES OPERABLE PANEL ACCESS HOLE.
   ▼ INDICATES BOTTOM SEAL OPERATOR HANDLE.
5. HINGE POINTS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.

PD1- 3'-0" X 7'-0" PASS DOOR HAND PULL W/ ROLLER LATCH CONCEALED DOOR CLOSER.

FHMB - STANDARD MARKERBOARD FULL HEIGHT, COATED STEEL NON-POROUS WRITING SURFACE FORMED AROUND PANEL EDGES WITH NO EXPOSED TRIM. COLOR SELECTION: WHITE

PANEL LAYOUT
OP-05

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

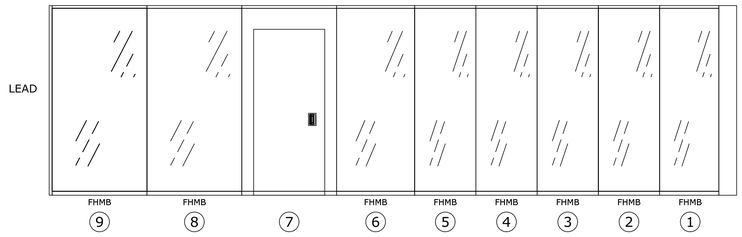
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

DATE	REV	ISSUED FOR	DRN.
08/26/22	1	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-05-D1 | ORDER NO: | SHEET: 1 OF 7



ELEVATION RIGHT
OP-05

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

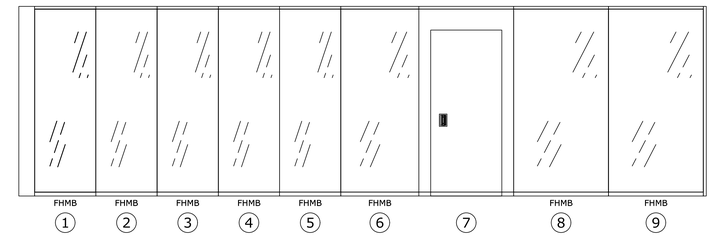
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

DATE	REV	ISSUED FOR	DRN.
08/26/22	1	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-05-D3 | ORDER NO: | SHEET: 3 OF 7



ELEVATION LEFT
OP-05

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

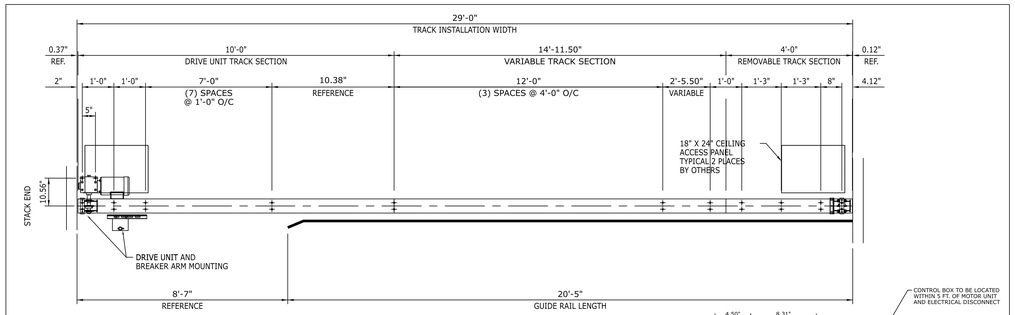
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

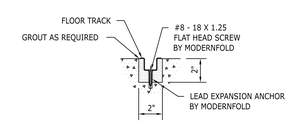
MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

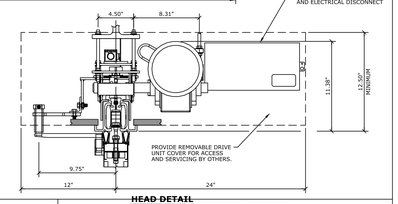
DATE	REV	ISSUED FOR	DRN.
08/26/22	1	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-05-D2 | ORDER NO: | SHEET: 2 OF 7





FLOOR GUIDE TRACK



HEAD DETAIL

NOTES:

1. PUNCH OR DRILL 0.44" DIAMETER HOLES, 2.25" EACH SIDE OF CENTERLINE, 4.50" GAGE, AT ALL LOCATIONS AS NOTED.
2. DRIVE UNIT TO BE 1 HP, 208-230 VOLT, 60 CYCLE, 3 PHASE, 4. FULL LOAD AMPS, WITH TWO (2) PUSH BUTTON AND ONE (1) KEY CONTROLLED OPERATING STATION.
3. CONTROL STATION #112220
4. 9" HANGER RODS
5. DISCONNECT BOX AND POWER TO DISCONNECT BOX BY OTHERS.
6. ONE (1) POCKET DOOR INTERLOCK SWITCH ASSEMBLY, REFERENCE DRAWING #109959.

SAFETY NOTE:

SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

TRACK LAYOUT
OP-05

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

DATE	REV	ISSUED FOR	DRN.
08/26/22	1	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-05-05 | ORDER NO: | SHEET: 5 OF 7

E1 VENDOR PROVIDED REFERENCE DRAWINGS
N.T.S.

Revisions	Date
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-	-
-	-
-	-

CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
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LA JOLA, CA 92037
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Drawing Title: **OPERABLE PANEL OP-05**

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

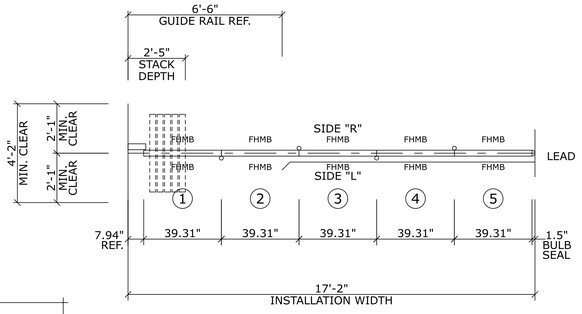
Drawing Number: VD1.100

Dwg. Page 57 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\NPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\2. DWG CD\VA Arch-CD\Plot\A3.400 INTERIOR ELEVATIONS.dwg 10-08-22 11:11:30 AM DornHuska
VA FORM 08-6231



SAFETY NOTE:

SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

ARCHITECT / GENERAL CONTRACTOR NOTES

1. MINIMUM DIMENSIONS PROVIDE FOR CLEARANCE FROM ALL ADJACENT CONSTRUCTION/FIXTURES FOR ADJUSTMENT, OPERATION, AND SAFETY.
2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL SUPPORT, ADJOINING CONSTRUCTION AND TRIM.
3. WALL CONSTRUCTION AT JAMBS MUST BE ADEQUATE FOR SECURING JAMBS.
4. AFS INDICATES ADJUSTABLE FIXED SEALS.
   ▼ INDICATES OPERABLE PANEL ACCESS HOLE.
   ▼ INDICATES BOTTOM SEAL OPERATOR HANDLE.
5. HINGE POINTS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.

FHMB - STANDARD MARKERBOARD
FULL HEIGHT, COATED STEEL NON-POROUS WRITING SURFACE
FORMED AROUND PANEL EDGES WITH NO EXPOSED TRIM.
COLOR SELECTION: WHITE

PANEL LAYOUT
OP-06

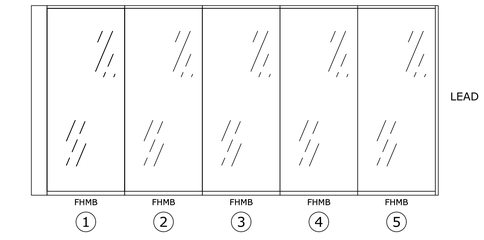
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-06-D1 | ORDER NO: | SHEET: 1 OF 7



ELEVATION LEFT
OP-06

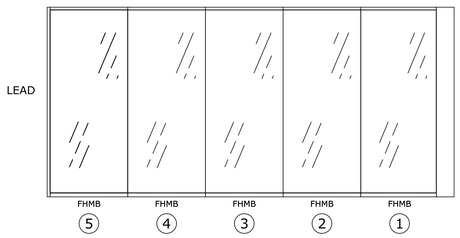
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-06-D2 | ORDER NO: | SHEET: 2 OF 7



ELEVATION RIGHT
OP-06

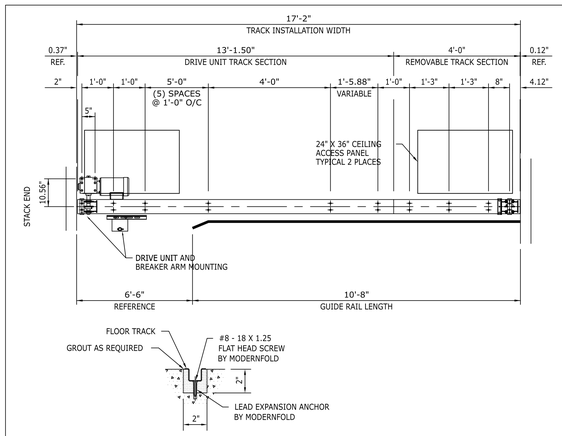
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-06-D3 | ORDER NO: | SHEET: 3 OF 7



NOTES:

1. PUNCH OR DRILL 0.44" DIAMETER HOLES, 2.25" EACH SIDE OF CENTERLINE, 4.50" GAGE, AT ALL LOCATIONS AS NOTED.
2. DRIVE UNIT TO BE 1 HP, 208-230 VOLT, 60 CYCLE, 3 PHASE, 4, FULL LOAD AMPS, WITH TWO (2) PUSH BUTTON AND ONE (1) KEY CONTROLLED OPERATING STATION.
3. CONTROL STATION #112220
4. 9" HANGER RODS
5. DISCONNECT BOX AND POWER TO DISCONNECT BOX BY OTHERS.
6. ONE (1) POCKET DOOR INTERLOCK SWITCH ASSEMBLY, REFERENCE DRAWING # 109959.

SAFETY NOTE:

SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

TRACK LAYOUT
OP-06

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-06-D5 | ORDER NO: | SHEET: 5 OF 7

E1 VENDOR PROVIDED REFERENCE DRAWINGS
N.T.S.

Revisions	Date
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CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT

4275 EXECUTIVE
SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title
OPERABLE PANEL OP-06

Approved Project Director

Project Title
EHRM TRAINING AND
ADMIN SPACE SUPPORT
LONG BEACH, CA

Location
VA SAN DIEGO CA

Date	Checked	Drawn
11 JANUARY, 2023	JJ	DH

Project Number
600-22-703

Building Number
BLDG. #46

Drawing Number
VD1.200

Dwg. Page 58 of 61

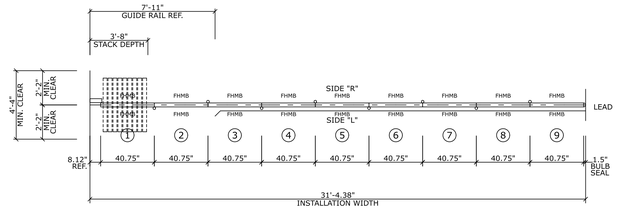
CONSTRUCTION DOCUMENTS

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\VNPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\Z. DWG CD\A. Arch-CD\Plot\A3.400 INTERIOR ELEVATIONS.dwg 10-08-22 11:11:30 AM Dannhuska



SAFETY NOTE:
SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

ARCHITECT / GENERAL CONTRACTOR NOTES

1. MINIMUM DIMENSIONS PROVIDE FOR CLEARANCE FROM ALL ADJACENT CONSTRUCTION/FIXTURES FOR ADJUSTMENT, OPERATION, AND SAFETY.
2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL SUPPORT, ADJOINING CONSTRUCTION AND TRIM.
3. WALL CONSTRUCTION AT JAMBS MUST BE ADEQUATE FOR SECURING JAMBS.
4. AFS INDICATES ADJUSTABLE FIXED SEALS.
   ▼ INDICATES OPERABLE PANEL ACCESS HOLE.
   ▼ INDICATES BOTTOM SEAL OPERATOR HANDLE.
5. HINGE POINTS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.

FHMB - STANDARD MARKERBOARD
FULL HEIGHT, COATED STEEL NON-POROUS WRITING SURFACE FORMED AROUND PANEL EDGES WITH NO EXPOSED TRIM.
COLOR SELECTION: WHITE

PANEL LAYOUT
OP-07

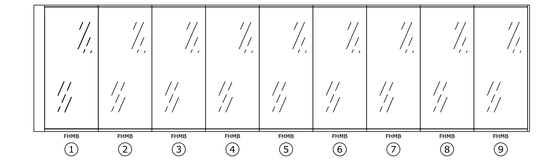
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-07-D1 | ORDER NO: | SHEET: 1 OF 7



ELEVATION LEFT
OP-07

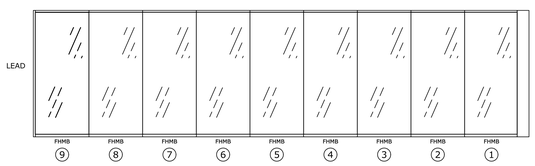
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-07-D2 | ORDER NO: | SHEET: 2 OF 7



ELEVATION RIGHT
OP-07

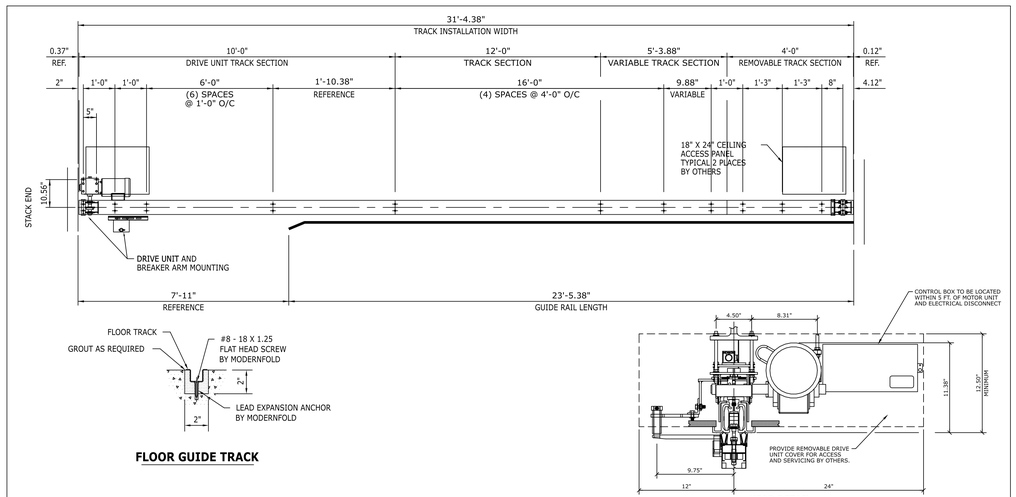
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-07-D3 | ORDER NO: | SHEET: 3 OF 7



FLOOR GUIDE TRACK

HEAD DETAIL

NOTES:

1. PUNCH OR DRILL 0.44" DIAMETER HOLES, 2.25" EACH SIDE OF CENTERLINE, 4.50" GAGE, AT ALL LOCATIONS AS NOTED.
2. DRIVE UNIT TO BE 1 HP, 208-230 VOLT, 60 CYCLE, 3 PHASE, 4. FULL LOAD AMPS, WITH TWO (2) PUSH BUTTON AND ONE (1) KEY CONTROLLED OPERATING STATION.
3. CONTROL STATION #112220
4. 9" HANGER RODS
5. DISCONNECT BOX AND POWER TO DISCONNECT BOX BY OTHERS.
6. ONE (1) POCKET DOOR INTERLOCK SWITCH ASSEMBLY, REFERENCE DRAWING #109959.

SAFETY NOTE:
SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

TRACK LAYOUT
OP-07

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-07-D5 | ORDER NO: | SHEET: 5 OF 7

E1 VENDOR PROVIDED REFERENCE DRAWINGS
N.T.S.

Revisions:	Date
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CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLLA, CA 92037
858.344.8900

Drawing Title: **OPERABLE PANEL OP-07**

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

CONSTRUCTION DOCUMENTS

Project Number: 600-22-703

Building Number: BLDG. #46

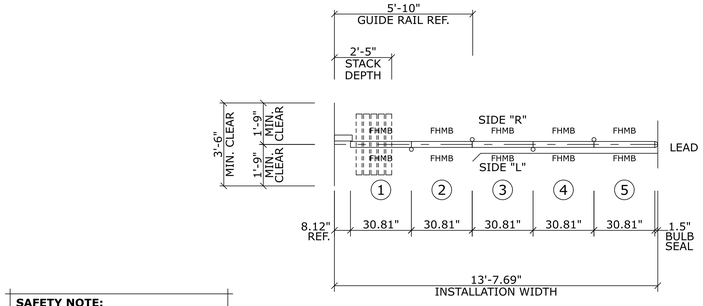
Drawing Number: VD1.300

Dwg. Page 59 of 61

Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

Z:\Projects\VPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\2. DWG CD\A. Arch-CD\Plot\A3.400 INTERIOR ELEVATIONS.dwg 10-08-22 11:11:30 AM Dannhuska
three inches = one foot
one and one half inches = one foot
two inches = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
three sixteenths inch = one foot
one eighth inch = one foot



SAFETY NOTE:
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ARCHITECT / GENERAL CONTRACTOR NOTES

1. MINIMUM DIMENSIONS PROVIDE FOR CLEARANCE FROM ALL ADJACENT CONSTRUCTION/FIXTURES FOR ADJUSTMENT, OPERATION, AND SAFETY.
2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL SUPPORT, ADJOINING CONSTRUCTION AND TRIM.
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4. AFS INDICATES ADJUSTABLE FIXED SEALS.
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   ▼ INDICATES BOTTOM SEAL OPERATOR HANDLE.
5. HINGE POINTS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY.

FHMB - STANDARD MARKERBOARD
FULL HEIGHT, COATED STEEL NON-POROUS WRITING SURFACE FORMED AROUND PANEL EDGES WITH NO EXPOSED TRIM.
COLOR SELECTION: WHITE

PANEL LAYOUT
OP-08

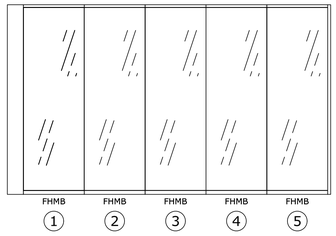
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-01 | ORDER NO: | SHEET: 1 OF 7



ELEVATION LEFT
OP-08

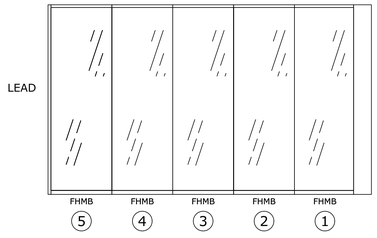
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-02 | ORDER NO: | SHEET: 2 OF 7



ELEVATION RIGHT
OP-08

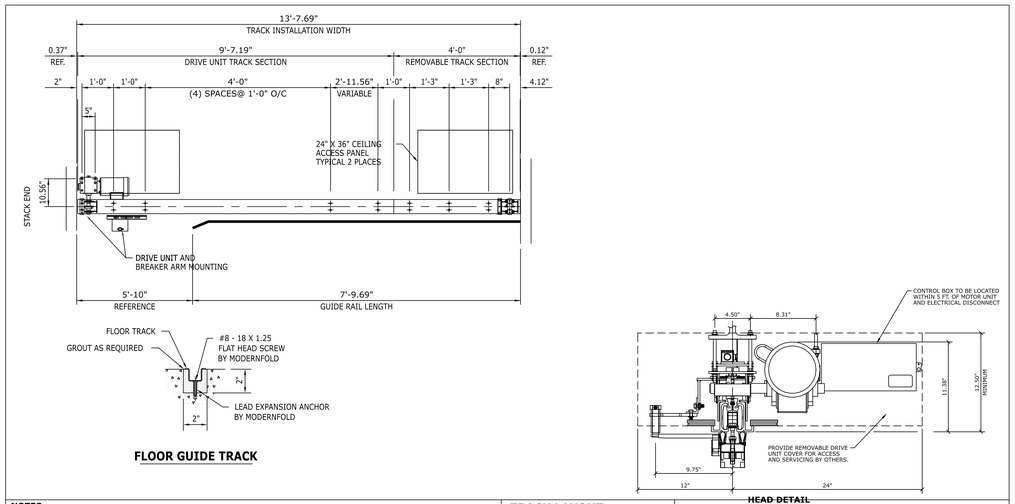
CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-03 | ORDER NO: | SHEET: 3 OF 7



NOTES:

1. PUNCH OR DRILL 0.44" DIAMETER HOLES, 2.25" EACH SIDE OF CENTERLINE, 4.50" CAGE, AT ALL LOCATIONS AS NOTED.
2. DRIVE UNIT TO BE 1 HP, 208-230 VOLT, 60 CYCLE, 3 PHASE, 4. FULL LOAD AMPS, WITH TWO (2) PUSH BUTTON AND ONE (1) KEY CONTROLLED OPERATING STATION.
3. CONTROL STATION #112220
4. 9" HANGER RODS
5. DISCONNECT BOX AND POWER TO DISCONNECT BOX BY OTHERS.
6. ONE (1) POCKET DOOR INTERLOCK SWITCH ASSEMBLY, REFERENCE DRAWING #109959.

SAFETY NOTE:
SEE THE ELECTRIC SWITCH DRAWING "IMPORTANT SAFETY INSTRUCTIONS" TO ENSURE SAFE OPERATION, (2) CONTROLLED OPERATING STATIONS, WHICH ARE WIRED IN SERIES AND REQUIRING (2) PERSON OPERATION, ARE PROVIDED. THESE SWITCHES SHOULD BE LOCATED WITH A CLEAR UNOBSTRUCTED VIEW OF BOTH SIDES OF THE OPERABLE PARTITION DURING IT'S OPERATION.

TRACK LAYOUT
OP-08

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

JOB NAME: EHRM
LEGACY ELECTRIC PANELS
LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-05 | ORDER NO: | SHEET: 5 OF 7

E1 VENDOR PROVIDED REFERENCE DRAWINGS
N.T.S.

Revisions	Date
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CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

Drawing Title: **OPERABLE PANEL OP-08**

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT
LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

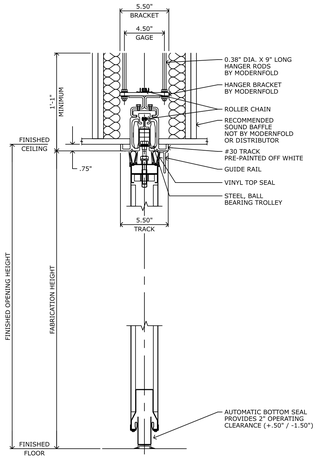
CONSTRUCTION DOCUMENTS

Project Number: 600-22-703
Building Number: BLDG. #46
Drawing Number: VD1.400
Dwg. Page 60 of 61

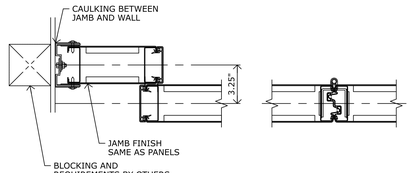
Office of Construction and Real Estate Management
Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\NPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\2. DWG CD\VA Arch-CD\Plot\A3-400 INTERIOR ELEVATIONS.dwg 10-08-22 11:11:30 AM DanHuska



PARTIAL ELEVATION - STACK END



STACK JAMB

HINGED PANEL JOINT

BULB SEAL

DETAIL SHEET
OP-08

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

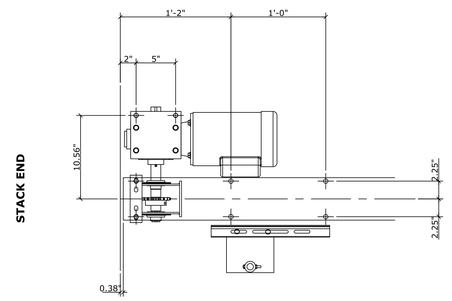
ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-D4 | ORDER NO: | SHEET: 4 OF 7



MOTOR DETAIL
OP-08

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

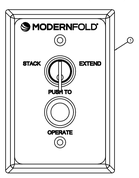
MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

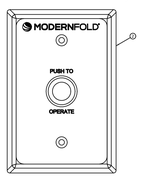
DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-D6 | ORDER NO: | SHEET: 6 OF 7

KEY SWITCH (STACK)



PUSH BUTTON (LEAD)



IMPORTANT SAFETY INSTRUCTIONS

PARTITION HAS A SELECTOR SWITCH COMBINED WITH A DUAL PUSH BUTTON SETUP. BOTH BUTTONS MUST BE DEPRESSED CONTINUOUSLY FOR THE SYSTEM TO OPERATE.

THE SELECTOR SWITCH WITH PUSH BUTTON SETUP MUST ALWAYS BE LOCATED AT THE STACK END OF THE PARTITION.

SINGLE PUSH BUTTON CONTROL MUST ALWAYS BE AT THE LEAD END AND OPPOSITE SIDE OF THE PARTITION, FROM THE SELECTOR SWITCH WITH PUSH BUTTON.

THESE SAFETY INSTRUCTIONS ENABLE THE OPERATORS TO OBSERVE BOTH SIDES OF THE PARTITION WHILE IT IS BEING STACKED AND/OR EXTENDED. THE OPERATORS SHOULD ONLY OPERATE THE PARTITION WHEN THEY OBSERVE THE AREA IS SAFE FOR OPERATION.

KEY SWITCH
OP-08

CLOSURE METHOD	SIDE JAMB (ELECTRIC WALL)
TRAIL JAMB HEIGHT	8'-0"
PANEL FABRICATION HEIGHT	8'-0"
LEAD JAMB HEIGHT	N/A
SUSPENSION SYSTEM	#30 4.50
BOTTOM SEALS	2" (51MM) AUTOMATIC
PANEL ACOUSTICAL RATING	52 STC
HANGING WEIGHT	11 LBS./SQ.FT.
PANEL SKIN/FACING	STEEL
HINGE/TRIM COLOR	TO BE ADVISED/TO BE ADVISED
PANEL FINISH	VINYL
PANEL FINISH COLOR	TO BE ADVISED

ACOUSTI-SEAL
LEGACY - ELECTRIC PANEL

MODERNFOLD

JOB NAME: EHRM
LEGACY ELECTRIC PANELS

DATE	REV.	ISSUED FOR	DRN.
08/26/22	0	APPROVAL	MPM

LOCATION: SAN DIEGO, CA
ARCHITECT: NPD ARCHITECTURE
CONTRACTOR: UNKNOWN
DISTRIBUTOR: PARTITION SPECIALTIES, INC.
DRAWING NO. A33244-08-D7 | ORDER NO: | SHEET: 7 OF 7

E1 VENDOR PROVIDED REFERENCE DRAWINGS
N.T.S.

Revisions:	Date
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CONSULTANTS:

ARCHITECT/ENGINEERS:

npd ARCHITECTURE ENGINEERING DEVELOPMENT
4275 EXECUTIVE SQUARE
SUITE #200
LA JOLA, CA 92037
858.344.8900

CONSTRUCTION DOCUMENTS

Drawing Title: VENDOR TYP. DETAILS

Approved Project Director:

Project Title: EHRM TRAINING AND ADMIN SPACE SUPPORT LONG BEACH, CA

Location: VA SAN DIEGO CA

Date: 11 JANUARY, 2023 | Checked: JJ | Drawn: DH

Project Number: 600-22-703

Building Number: BLDG. #46

Drawing Number: VD1.500

Dwg. Page 61 of 61

Office of Construction and Real Estate Management

Department of Veterans Affairs

VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
Z:\Projects\VAPD\VA LONG BEACH\VALB22101 - EHRM Trng Admin Space Support\4. CD\2. DWG CD\4. Arch-CD\Plot\A3.400 INTERIOR ELEVATIONS.dwg 10-08-22 11:11:30 AM Dannhuska