

DRAWING LIST

MEN'S REENTRY CENTER MAINE DEPARTMENT OF CORRECTIONS

64 BASE ROAD, MACHIASPORT, MAINE 04655

ARCHITECTURE / ENGINEERING

SMRT ARCHITECTS & ENGINEERS 75 WASHINGTON AVE PORTLAND, ME 04102

CIVIL ENGINEERING

SEBEGO TECHNICS 75 JOHN ROBERS ROAD SOUTH PORTLAND, ME 04106

SEBAGO

KITCHEN

S1 FOOD SERVICE CONSULTING 231 HOMEWOOD DRIVE BOILINGBROOK, IL 60040



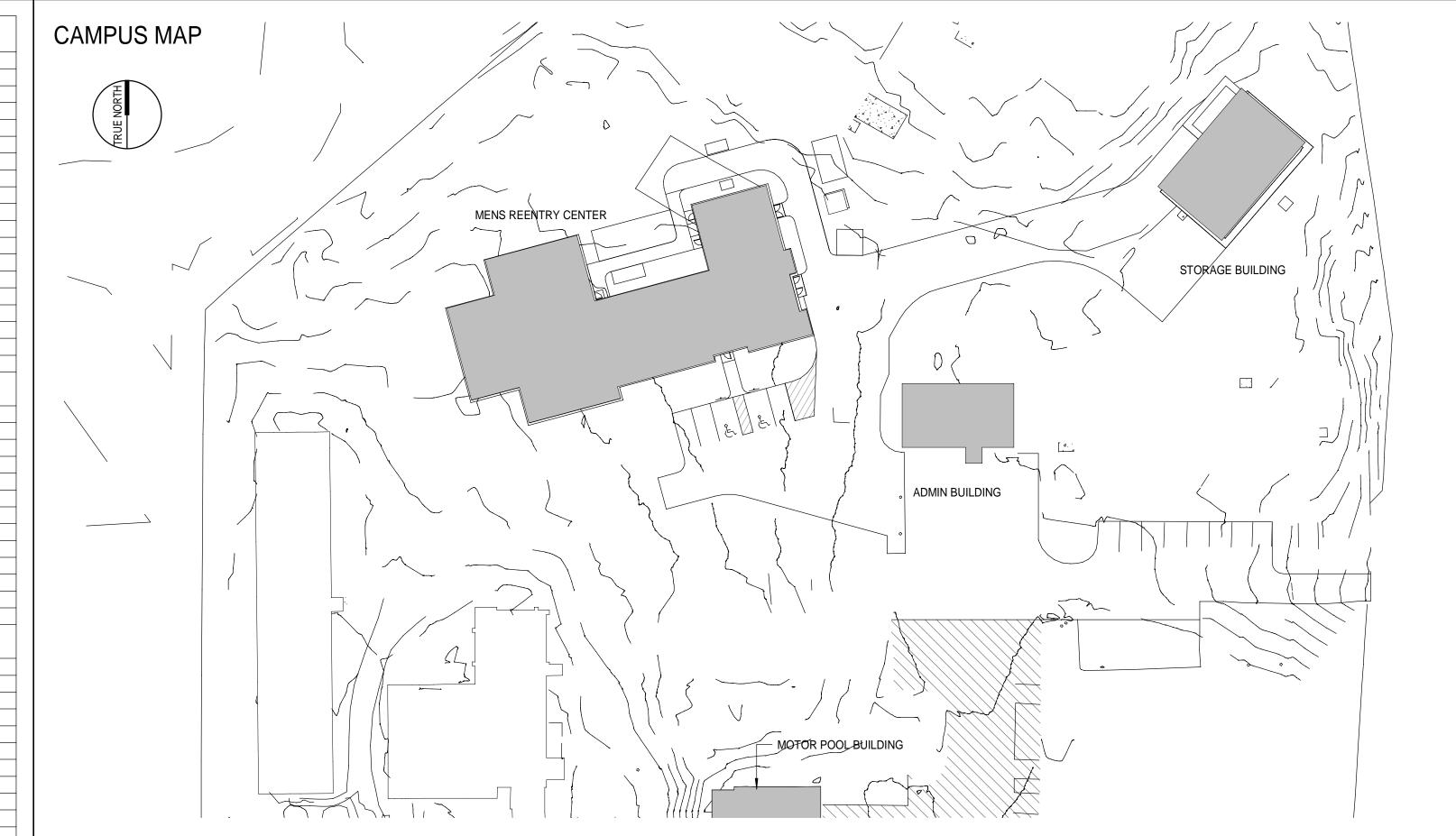


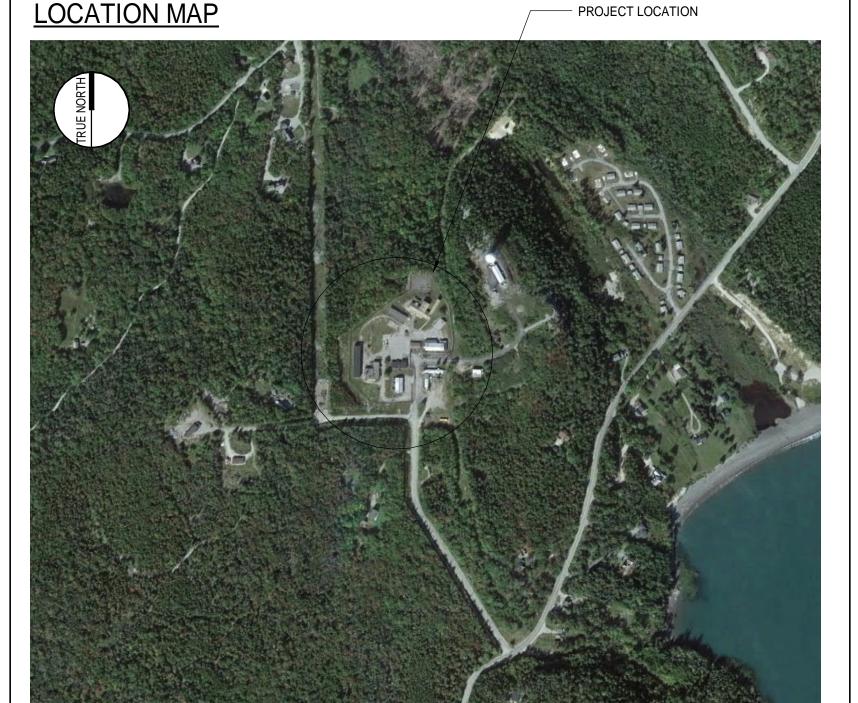


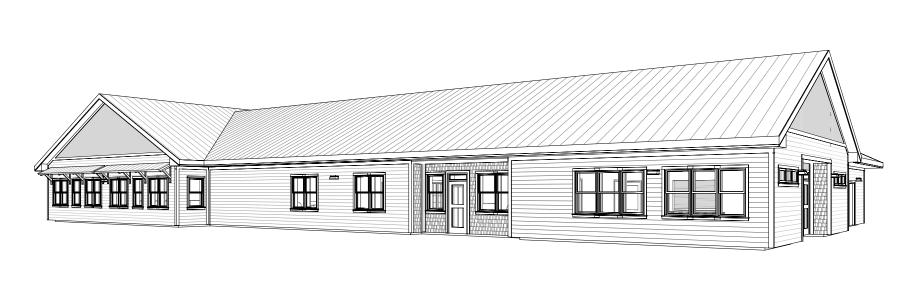
FIRE PROTECTION LEGEND AND ABBREVIATIONS MEN'S RE-ENTRY CENTER - FIRE PROTECTION PLAN

FIRE PROTECTION DETAILS FIRE PROTECTION DETAILS

SHEET NUMBER	SHEET NAME
12 - PLUMBING	
PL001	PLUMBING LEGEND AND ABBREVIATIONS
PD101	ADMIN BUILDING - PLUMBING DEMOLTION PLAN
PD102	STORAGE BUILDING - FIRST FLOOR DEMOLITION PLAN
PL101	MEN'S RE-ENTRY CENTER - DWV PIPING PLAN
PL102	ADMIN BUILDING - DWV PIPING PLAN
PL103	STORAGE BUILDING - FIRST FLOOR DWV PIPING PLAN
PP101	MEN'S RE-ENTRY CENTER - SUPPLY PIPING PLAN
PP102	ADMIN BUILDING - SUPPLY PIPING PLAN
PP103	STORAGE BUILDING FIRST FLOOR - SUPPLY PIPING PLAN
PU101	MEN'S RE-ENTRY CENTER - UNDERSLAB DWV PIPING PLAN
PU102	ADMIN BUILDING - PLUMBING UNDERSLAB PLAN
PU103	STORAGE BUILDING - FIRST FLOOR UNDERSLAB PLAN
P-401	MENS'S RE-ENTRY CENTER - PART PLANS
P-501	PLUMBING DETAILS
P-502	PLUMBING DETAILS
P-503	PLUMBING DETAILS
P-601	PLUMBING SCHEDULES
14 - MECHANICA M-001	MECHANICAL LEGEND AND ABBREVIATIONS
MH101	MEN'S REENTRY CENTER - HVAC DUCTWORK PLAN
MH102	ADMIN BUILDING - HVAC DUCTWORK PLAN
MP101	MEN'S REENTRY CENTER - HVAC PIPING PLAN
M-501	MECHANICAL DETAILS
M-502	MECHANICAL DETAILS
M-503	MECHANICAL DETAILS
M-504	MECHANICAL DETAILS
M-601	MECHANICAL SCHEDULES
M-602	MECHANICAL SCHEDULES
M-650	MECHANICAL CONTROLS LEGEND & ABBREVIATIONS
M-651	MECHANICAL SEQUENCE OF OPERATIONS
M-652	MECHANICAL SEQUENCE OF OPERATIONS
15 - ELECTRICAL	
E-001	LEGEND AND GENERAL NOTES
ES101	ELECTRICAL SITE PLAN
ES301	SITE ELECTRICAL DETAILS
EG101	MEN'S REENTRY CENTER - GROUNDING PLAN
EP101	MEN'S REENTRY CENTER - POWER PLAN - AREA A
EP102	MEN'S REENTRY CENTER - POWER PLAN - AREA B
EP601	PANEL SCHEDULES
EP651	ONE-LINE DIAGRAM
EL101	MEN'S REENTRY CENTER - LIGHTING PLAN - AREA A
EL102	MEN'S REENTRY CENTER - LIGHTING PLAN - AREA B
EY101	MEN'S REENTRY CENTER - SYSTEMS PLAN - AREA A
EY102	MEN'S REENTRY CENTER - SYSTEMS PLAN - AREA B
EY651	FIRE ALARM RISER



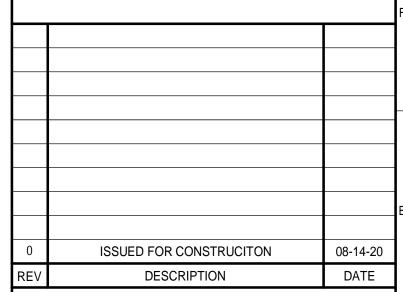




MEN'S REENTRY CENTER - PERSPECTIVE VIEW /

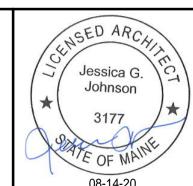
GENERAL NOTES:

- DO NOT SCALE CONSTRUCTION DOCUMENTS
- PROVIDE MEANS "FURNISH AND INSTALL".
- 10. ELEVATION 100'-0" ON ARCHITECTURAL AND STRUCTURAL DRAWINGS EQUALS ELEVATION 184'-0" ON



ISSUED FOR CONSTRUCITON 08-14-20

CURRENT ISSUE STATUS:



75 Washington Ave - Suite 3A Portland, Maine 04101 1.877.700.767 www.smrtinc.com

MDOC - DCF MEN'S REENTRY CENTER

MACHIASPORT, MAINE

COVER SHEET

SHEET TITLE:

JOB CAPTAIN:

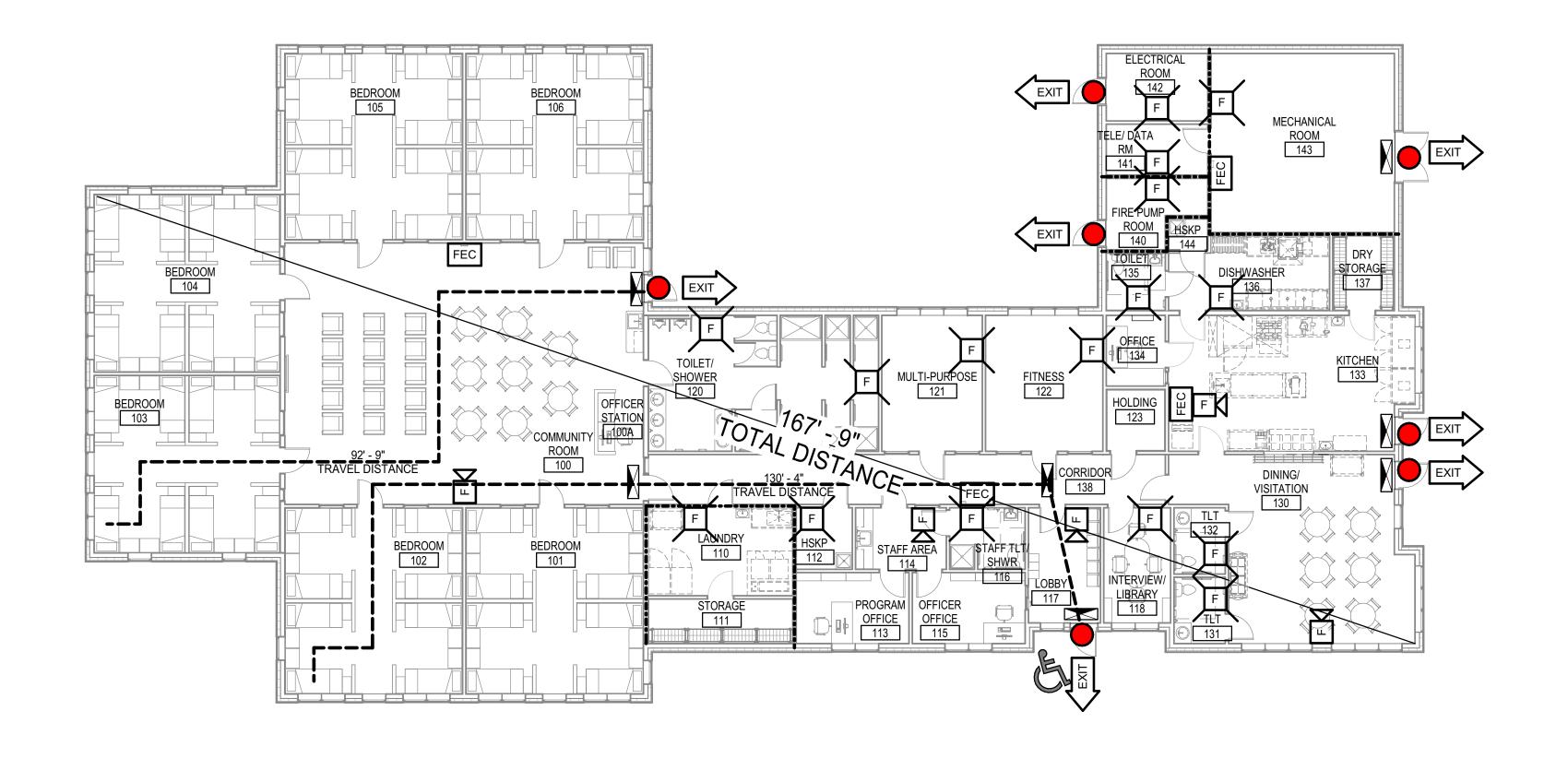
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SCALE: AS NOTED

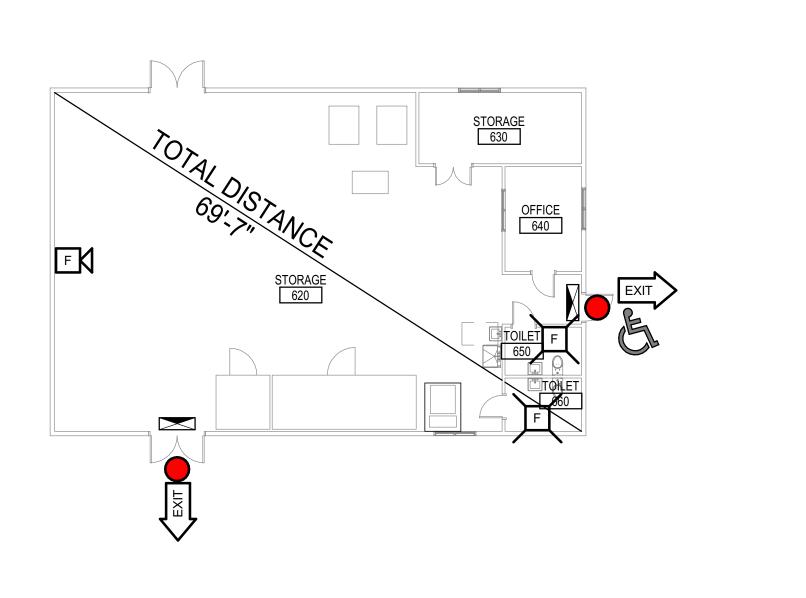
PROJECT MANAGER: JGJ PROJECT NO: A/E OF RECORD:

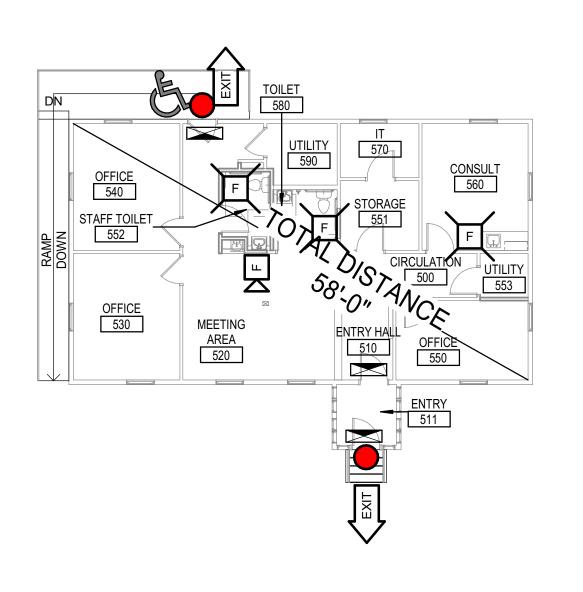
CAH/CBM

GI001-19176 SHEET No.



MEN'S REENTRY BUILDING CODE COMPLIANCE PLAN





BUSINESS OCCUPANCY: 1, 385 SF/100 SF = 14 OCCUPANTS

PLUMBING FIXTURE COUNT: 3 WC'S TOTAL HOUSING (R-2) WC MALE 1 PER 10, 1 ADDL PER 25 WC FEMALE 1 PER 8, 1 ADDL PER 20 NO FEMALE RESIDENTS (48 MALE RESIDENTS) URINAL 1 PER 25 = 48 MALE RESIDENTS 2 URINALS TOTAL LAV MALE 1 PER 12, 1 ADDL PER 20 3 LAVS TOTAL (5 ACTUAL) LAV FEMALE 1 PER 12, 1 ADDL PER 15 NO FEMALE RESIDENTS SHOWER 1 PER 8 6 SHOWERS TOTAL 1 DF PER 150 1 WATER 1 SERVICE SINK 1 SERVICE SINK WC MALE/FEMALE BUSINESS 2 WC TOTAL URINAL 1 URINAL LAV MALE/FEMALE **2 LAV TOTAL** 1 DF PER 150 1 WATER 1 SERVICE SINK 1 SERVICE SINK DINING/VISITOR (A-2) WC MALE 1 PER 50 1 WC TOTAL WC FEMALE 1 PER 25 1 WC TOTAL 1 URINAL LAV MALE/FEMALE **2 LAV TOTAL** 1 DF PER 150 1 WATER 1 SERVICE SINK 1 SERVICE SINK WC MALE/FEMALE 2 WC TOTAL **ADMIN BUILDING:** 1 URINAL URINAL LAV MALE/FEMALE **2 LAV TOTAL** 1 DF PER 150 1 WATER 1 SERVICE SINK 1 SERVICE SINK WC MALE/FEMALE 2 WC TOTAL STORAGE BUILDING: LAV MALE/FEMALE **2 LAV TOTAL** 1 DF PER 250 1 WATER 1 SERVICE SINK 1 SERVICE SINK

FIRE AND LIFE SAFETY CODE REVIEW AND ANALYSIS

<u>PROJECT DESCRIPTION</u>:
PROJECT CONSISTS OF A NEW 9,600 S.F. SINGLE-STORY RESIDENTIAL BUILDING WITH ASSOCIATED PROGRAM AND SUPPORT SPACES TO BE CONSTRUCTED ON LAND OWNED BY THE STATE OF MAINE, ON THE FORMER DOWNEAST CORRECTIONAL FACILITY SITE ON BASE ROAD IN MACHIASPORT. THE BUILDING WILL HOUSE 48 MALE COMMUNITY AND MINIMUM CUSTODY OFFENDERS. THE NEW BUILDING WILL ALSO CONTAIN ADMINISTRATIVE SPACE, A DINING/VISITATION ROOM, FITNESS AND MULTIPURPOSE ROOMS, COMMERCIAL KITCHEN AND LAUNDRY. THE PROJECT ALSO CONSISTS OF THE RENOVATION OF AN EXISTING 1,385 S.F., SINGLE-STORY, ADMINISTRATION BUILDING THAT WILL CONTAIN OFFICES, CONFERENCE SPACE AND A CONSULT ROOM AND LIGHTLY-RENOVATED, 2,520 S.F., SINGLE-STORY, STORAGE BUILDING THAT WILL CONTAIN A WALK-IN FREEZER AND COOLER, LAUNDRY EQUIPMENT, AND LOW-HAZARD STORAGE.

APPLICABLE CODES AND STANDARDS:

MUBEC (MAINE UNIFORM BUILDING AND ENERGY CODE, INTERNATIONAL BUILDING CODE, IBC), 2015 EDITION (AMENDED JANUARY 23, 2018) NATIONAL FIRE PROTECTION ASSOCIATION, (NFPA), LIFE SAFETY CODE 101, 2018 EDITION ADAAG (ADA ACCESSIBILITY GUIDELINES) 2010 IMC (INTERNATIONAL MECHANICAL CODE) 2015 UNIFORM PLUMBING CODE, 2015 NEC (NATIONAL ELECTRICAL CODE) 2017 IECC (INTERNATIONAL ENERGY CONSERVATION CODE) 2009 (AMENDED JANUARY 23, 2018).

BUILDING USE: MEN'S REENTRY CENTER - RESIDENTIAL HOUSING STORAGE BUILDING - STORAGE ADMINISTRATION BUILDING - BUSINESS

FULLY THROUGHOUT IN ACCORDANCE WITH IBC 903 (SECTION 903.2) AND NFPA 13R (REENTRY)

USE GROUP CLASSIFICATION: IBC: R-2 (REENTRY); S-2 (STORAGE, LOW HAZARD); B (ADMIN)

NFPA: CHAPTER 28 - NEW HOTELS AND DORMITORIES (REENTRY), STORAGE (STORAGE), BUSINESS

SPECIFIC OCCUPANCY AREAS/HAZARDOUS AREA PROTECTION:

IBC: CHAPTER 5, TABLE 508.2 NFPA: CHAPTER 28

TYPE OF CONSTRUCTION:

IBC: TYPE V-B IBC: TYPE V-B NFPA 101: TYPE V, 000 NFPA 101: TYPE V, 000 NFPA 101: TYPE V, 000

RATING OF BUILDING ELEMENTS, IBC TABLE 601 (NEW REENTRY BUILDING)

PRIMARY STRUCTURAL FRAME: 0 HOURS **BEARING WALLS** INTERIOR: 0 HOURS EXTERIOR: 0 HOURS **NONBEARING WALLS AND PARTITIONS:** 0 HOURS FLOOR CONSTRUCTION AND SECONDARY MEMBERS: 0 HOURS ROOF CONSTRUCTION AND SECONDARY MEMBERS: 0 HOURS

FIRE SEPARATION ASSEMBLIES:

EXIT CORRIDORS (TABLE 1020.1): 0.5 HOURS (FULLY SPRINKLERED)

BUILDING HEIGHT: 60' ACTUAL: 22' - 7" BUILDING HEIGHT ALLOWABLE (IBC TABLE 504.3)

ALLOWABLE WTIH AUTOMATIC SPRINKLER SYSTEM (300% FOR SINGLE STORY BUILDING)

ALLOWABLE ACTUAL 3 STORY 1 STORY

BUILDING AREA:

BUILDING AREA ALLOWABLE (IBC TABLE 506.2)

ALLOWABLE ACTUAL **R-2** 28,000 S.F. 9,600 S.F.

USING USE GROUP R-2, THE SPRINKLER INCREASE TO 28,000 S.F. EXCEEDS THE BUILDING SQUARE FOOTAGE,

THEREFORE THE FRONTAGE INCREASE DOES NOT NEED TO BE INCLUDED.

MEANS OF EGRESS (IBC CHAPTER 10, NFPA CHAPTER 22) (NEW REENTRY BUILDING)

(1094 S.F./100 S.F.) **BUSINESS AREAS: ASSEMBLY AREAS:** (ACCESSORY TO BUSINESS OCCUPANCY) 122.8 (ACTUAL WILL (1842 S.F./15 S.F.) BE 84 - 48 RESIDENTS IN DAYROOM PLUS 1 STAFF) MECHANICAL/ELECTRICAL/STORAGE AREAS:

(829 S.F./300 S.F.) **COMMERCIAL KITCHEN (AND LAUNDRY):** (984 S.F./200 S.F.)

HOUSING AREAS (R-2): (SLEEPING AREAS) (120 S.F. EACH)

TOTAL OCCUPANTS:

EGRESS CAPACITY: EXIT ACCESS CORRIDOR WIDTH: 44" MINIMUM CLEAR DOOR WIDTH: 32" MINIMUM CLEAR

BUILDING HAS EXCESS OF 5 EXIT DOORS. ARRANGMENT: DEAD END CORRIDOR: 50'

EXIT ACCESS TRAVEL DISTANCE: 300' IN BUSINESS OCCUPANCY AND 200' IN R-2 MAXIMUM COMMON PATH OF TRAVEL: 100' IN BUSINESS OCCUPANCY AND 75' IN OTHER AREAS.

ILLUMINATION OF MEANS OF EGRESS:

EMERGENCY LIGHTING WILL BE PROVIDED BY AN ESSENTIAL ELECTRICAL SYSTEM UTILIZING EMERGENCY POWER GENERATION AND CONFORMING WITH THE REQUIREMENTS OF NFPA 99.

190 (ACTUAL 151)

INTERIOR FINISH:

WALL AND CEILING FINISHES: IBC TABLE 803.11

CLASS C FOR R-2 AND BUSINESS AND CLASS B FOR ASSEMBLY **EXIT ACCESS CORRIDORS:**

ROOMS AND ENCLOSURE SPACES: CLASS C **FLOOR FINISHES:** CLASS II

DETECTION, ALARM AND COMMUNICATIONS SYSTEMS IBC CHAPTER 9, NFPA 101 CHAPTERS 7, 9 AND 22

A FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 101, 9.6 IS REQUIRED. THIS SYSTEM SHALL BE EQUIPPED WITH SECONDARY POWER SUPPLY IN ACCORDANCE WITH NFPA 101, 9.6.1.3.

OCCUPANT AUTOMATIC NOTIFICATION REQUIRED IN CONFORMANCE WITH NFPA 101, 9.6.4.

DETECTION: NFPA 101, SECTON 9.6.

ISSUED FOR CONSTRUCITON ISSUED FOR CONSTRUCITON 08-14-20 CURRENT ISSUE STATUS: SED ARC Jessica G Johnson 3177 08-14-20 SMRT Architects and Enginee 75 Washington Ave - Suite 3 Portland, Maine 04101 1.877.700.7678 www.smrtinc.com MDOC - DCF MEN'S REENTRY CENTER MACHIASPORT, MAINE CODE COMPLIANCE PLAN SHEET TITLE: 0" 1/4" 1/2" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER: A/E OF RECORD: JOB CAPTAIN: DRAWN BY: CAH/CBM

SMRT FILE:

GI002-19176 SHEET No.

LIFE SAFETY LEGEND

2 HOUR RATED FIRE BARRIER

1 HOUR RATED FIRE BARRIER

1 HOUR RATED SMOKE BARRIER

EXIT DISCHARGE

SMOKE CONTAINMENT BARRIER

FIRE DEPT. CONNECTION

FIRE EXTINGUISHER CABINET

ACCESSIBLE ENTRY/EGRESS

FIRE ALARM VISIBLE ONLY NOTIFICATION

FIRE ALARM AUDIBLE/VISIBLE NOTIFICATION

08-14-20

DATE

FIRE EXTINGUISHER WALL HUNG

TRAVEL DISTANCE

EGRESS DOOR

INDICATOR

INDICATOR

EXIT SIGN

STANDPIPE OR HOSE VALVE CABINET

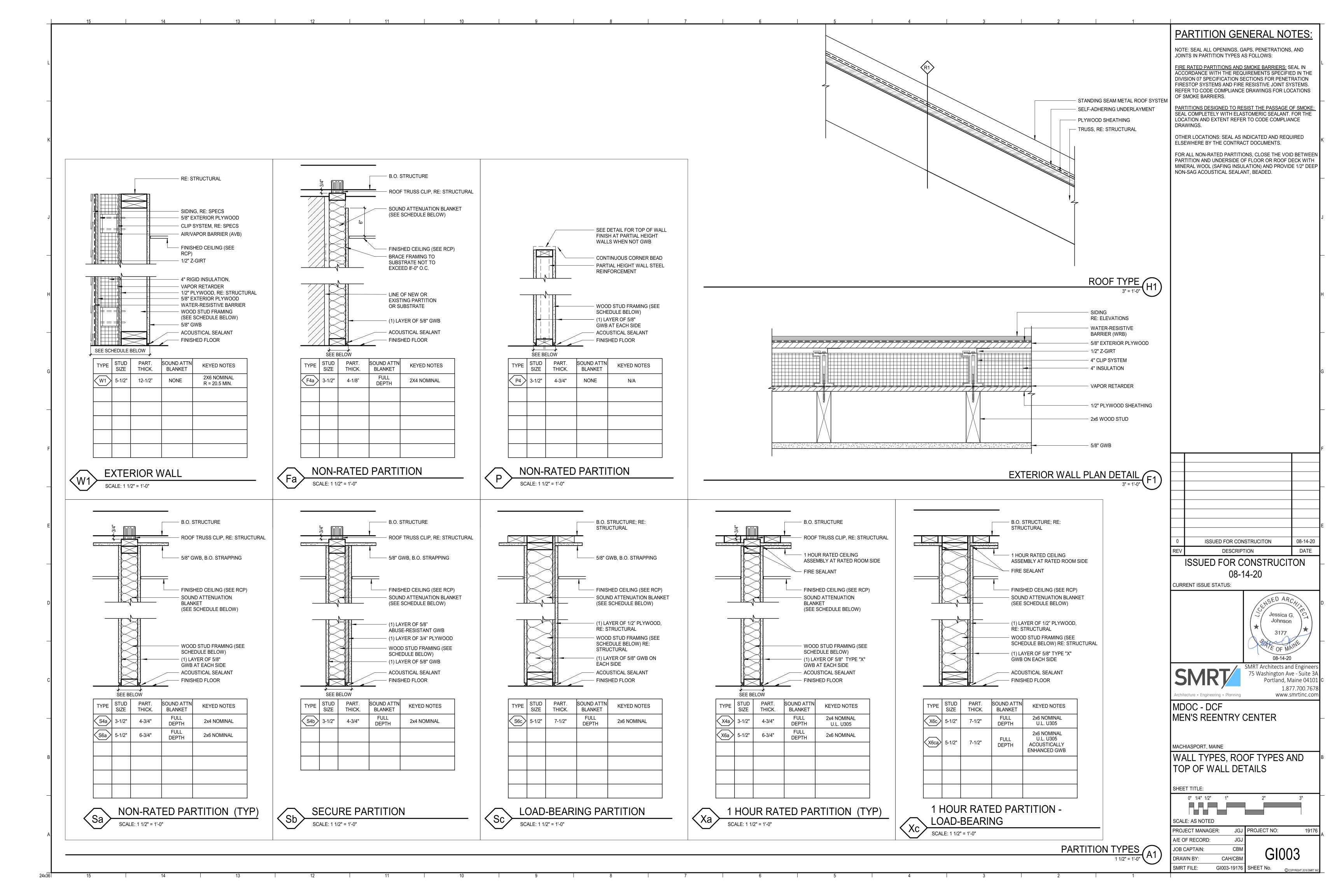
SMOKE PARTITION

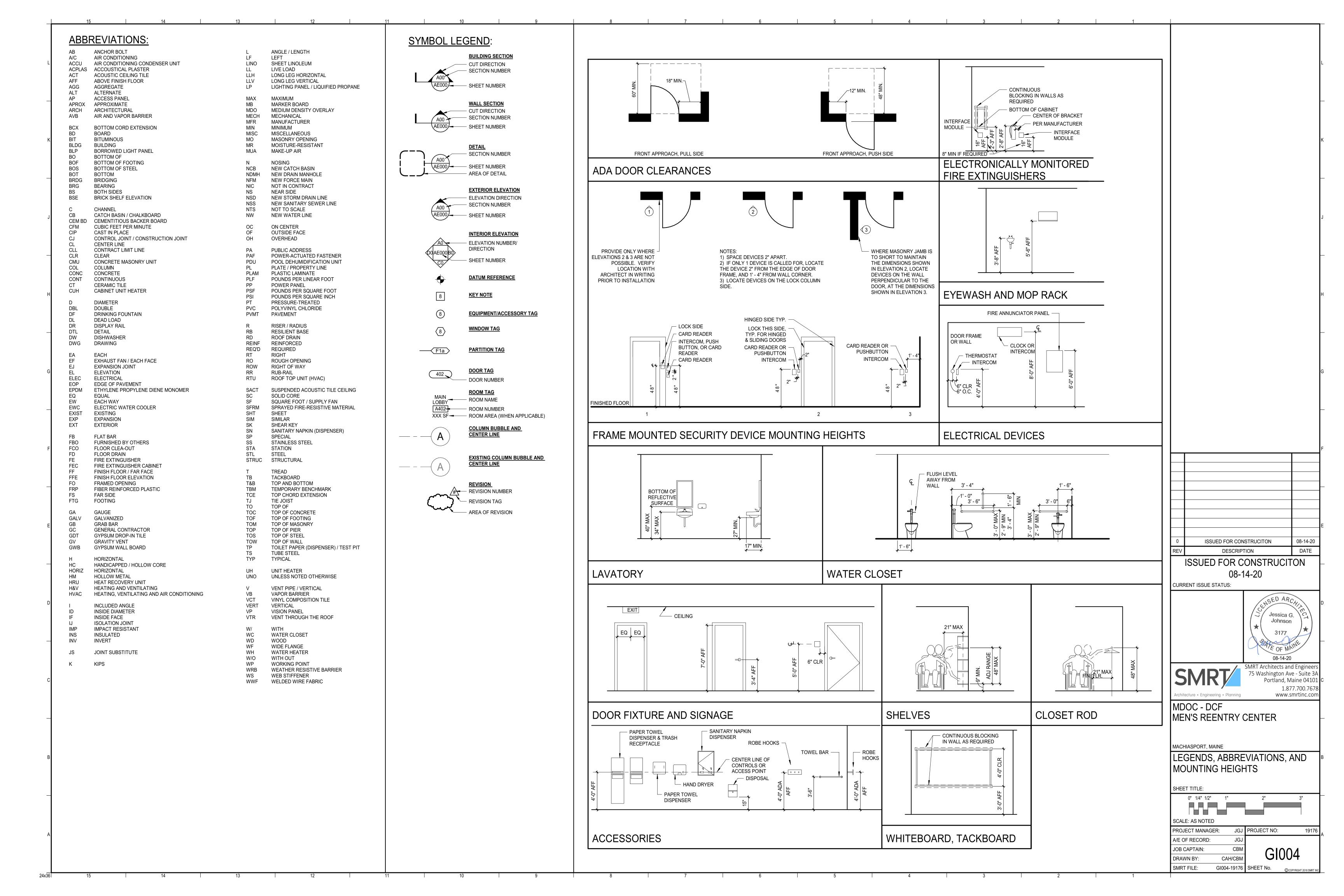
172'

STORAGE BUILDING CODE COMPLIANCE PLAN
(A12)

STORAGE OCCUPANCY: 2, 520 SF/300 SF = 9 OCCUPANTS

ADMINISTRATION BUILDING CODE COMPLIANCE PLAN A8





GENERAL NOTES

INSPECTION AND MAINTENANCE:

- A. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORM WATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AND BEFORE AND AFTER A STORM EVENT (RAINFALL), PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORM WATER CONTROLS. INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE
- B. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES, MAJOR OBSERVATIONS MUST INCLUDE: BMPS THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.
- THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT (PROVIDED UNDER SEPARATE COVER) FOR GENERAL SUBSURFACE CONDITIONS. GIVEN THE AGE OF THE SITE, EXISTING UTILITIES WILL BE ENCOUNTERED (SOME THAT ARE MARKED AND SOME THAT ARE NOT). CONTRACTOR SHALL COORDINATE WITH THE DEPARTMENT OF CORRECTIONS PRIOR TO AND DURING CONSTRUCTION TO REVIEW PROBABLE EXISTING UTILITIES. PROVIDE TEMPORARY SERVICES AS NEEDED TOGETHER WITH REMOVAL/ABANDONMENT OF THE UTILITIES.
- DEMOLITION WORK HAS BEEN PARTIALLY COMPLETED BY OTHERS FOR BUILDING STRUCTURES. THE CONTRACTOR UNDER THIS BID SHALL BE RESPONSIBLE FOR ANY ADDITIONAL ABOVE OR BELOW GRADE DEMOLITION TO COMPLETE THE PROJECT IMPROVEMENTS INCLUDING BUT NOT LIMITED TO FOUNDATIONS, UTILITIES, SLABS, FENCING, GATE, PAVEMENT, MISC, STRUCTURES, LIGHTING, POLES, CURBING, UTILITY STRUCTURES AND ALL OTHER PHYSICAL IMPROVEMENTS ENCOUNTERED DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO

GRADING & GEOTECHNICAL REPORT NOTES

- SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THESE PLANS. ALI SIDESLOPES STEEPER THAN 3:1 (H:V) SHALL BE LINÉD WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS
- ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 4" LOAM, SEED AND MULCH.
- 3. BUILDING TO BE CONSTRUCTED WITH MINIMUM 6" BETWEEN FINISH FLOOR AND PROPOSED EXTERIOR GRADE EXCEPT AT ENTRANCES, COORDINATE WITH BUILDING DRAWINGS.
- BORINGS SHOWN ARE REFERENCED FROM A DESIGN REPORT, 19-167705 S DATED DECEMBER 9, 2019, PRELIMINARY GEOTECHNICAL SERVICES, PROPOSED RE-ENTRY BUILDING, DOWNEAST CORRECTIONAL FACILITY, MACHIASPORT, MAINE. PREPARED BY S.W. COLE ENGINEERING SERVICES, INC. BY NATHAN D. STROUT, P.E. THE REPORT ALSO INCLUDES SUBSURFACE DATA AND NARRATIVE OF THE FINDINGS AND RECOMMENDATIONS.

TRAFFIC NOTES

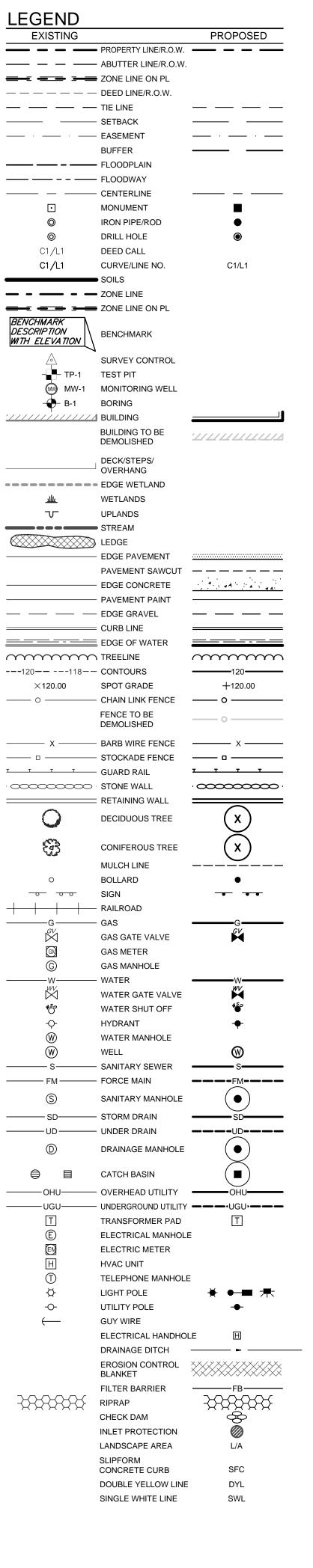
- 1. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION. THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL FOR BOTH WORK ZONE AND TRAFFIC CONTROL REQUIREMENTS SHALL APPLY.
- 2. CONTRACTOR SHALL MAINTAIN SAFE AND PASSABLE DRIVEWAY ACCESS AT ALL TIMES, TEMPORARY INTERRUPTIONS MAY BE ALLOWED WITH PROPERTY OWNER AUTHORIZATION.
- 3. CONTRACTOR IS RESPONSIBLE FOR INVENTORYING ALL SIGNS, MAILBOXES, STONE WALLS, ETC. PRIOR TO CONSTRUCTION AND SHALL RESTORE ALL FEATURES TO PRE-CONSTRUCTION CONDITION.
- 4. EMERGENCY VEHICLE ACCESS EGRESS MUST BE MAINTAINED AT ALL TIMES.

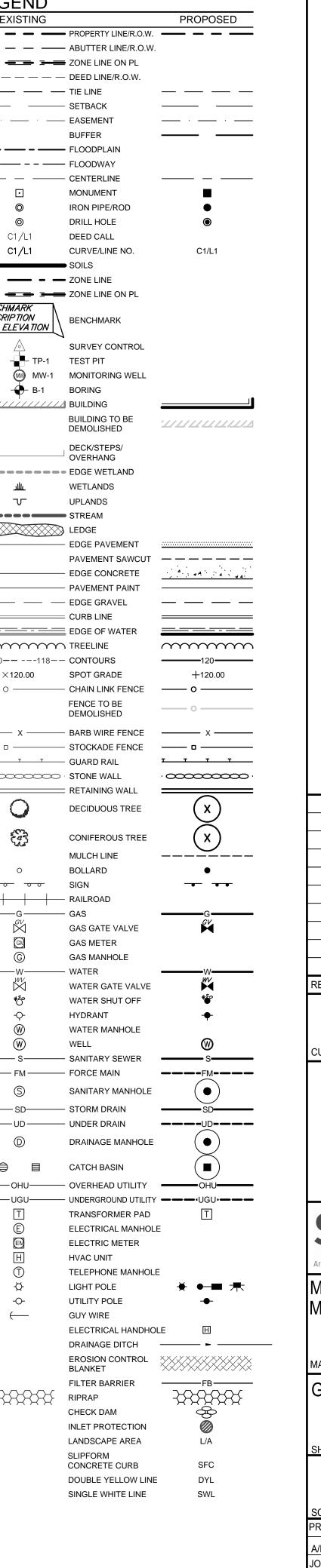
CONSTRUCTION NOTES

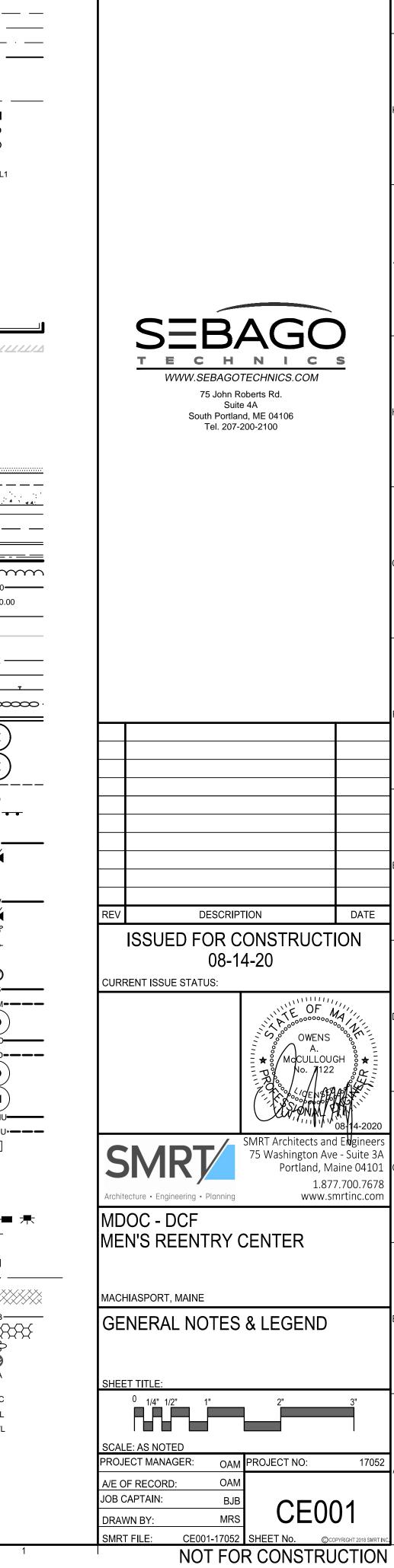
- 1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
- 2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS. FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- 3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN
- 4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE
- 5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
- 6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
- 7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION, CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
- 8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- 9. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPS" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES. REFER TO DETAIL EROSION CONTROL PLAN AND NOTES.
- 10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (811) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
- 11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN, CITY, STATE AND FEDERAL WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS
- 12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY
- 13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS
- 14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
- 15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
- 16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A PERMIT FROM THE TOWN AS APPLICABLE
- 17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING, THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.
- 8. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
- 19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK CAUSED BY THE CONTRACTOR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS NOT CAUSED BY THE OWNER OR PRISONERS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER
- 21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF SEBAGO TECHNICS, INC.
- 22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO
- 23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
- 24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER
- 25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
- 26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
- 27. ALL SUBSURFACE UTILITY LINES SHOWN HEREON ARE BASED SOLELY ON THE FIELD LOCATION OF VISIBLE STRUCTURES, SMH'S, CB'S, HYDRANTS, ETC.. IN CONJUNCTION WITH DESIGN AND OR AS-BUILT PLANS SUPPLIED TO SEBAGO TECHNICS INC. BY OTHERS. PRIOR TO ANY CONSTRUCTION, EXCAVATION, TEST BORINGS, DRILLING, ETC.. DIG SAFE MUST BE NOTIFIED AND A SITE IDENTIFICATION NUMBER ALONG WITH A SAFE TO DIG DATE OBTAINED. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITY LINES SHOWN HEREON AND ANY AND ALL OTHERS LOCATED ON SITE WITHIN THE CONSTRUCTION
- 28. ALL EXISTING AND PROPOSED CATCH BASINS, MANHOLES, CONNECTIONS, CONDUIT AND PIPING SHALL BE CLEANED AND LEFT IN NEW OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL
- 29. ALL LAWN AREAS, WALKWAYS, AND DRIVEWAYS OUTSIDE THE WORK AREA, DAMAGED BY THE CONTRACTOR, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE
- 30. EXISTING DRAINAGE STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED IN THE DRAWINGS OR APPROVED BY THE ENGINEER.
- 31. THE CONTRACTOR IS REQUIRED TO PROVIDE A SECURE PROJECT WORK AREA. ALL PIPE TRENCH EXCAVATIONS SHALL BE BACKFILLED AND "CLOSED" DURING CONTRACTOR NON-WORKING HOURS INCLUDING NIGHTS, HOLIDAYS AND WEEKENDS. THE CONTRACTOR MAY REQUEST IN WRITING TO THE ENGINEER AND OWNER TO SECURE OPEN EXCAVATION IN LIEU OF BACKFILLED AND "CLOSED." NOT ALLOWING A SECURE OPEN EXCAVATION SHALL NOT BE A BASIS FOR CLAIMS AGAINST THE OWNER.
- 32. CONTRACTOR SHALL COMPLETE WORK SPECIFIED ON EACH PLAN AND SHALL COORDINATE WORK WITH ENTIRE PROJECT PLAN SET.

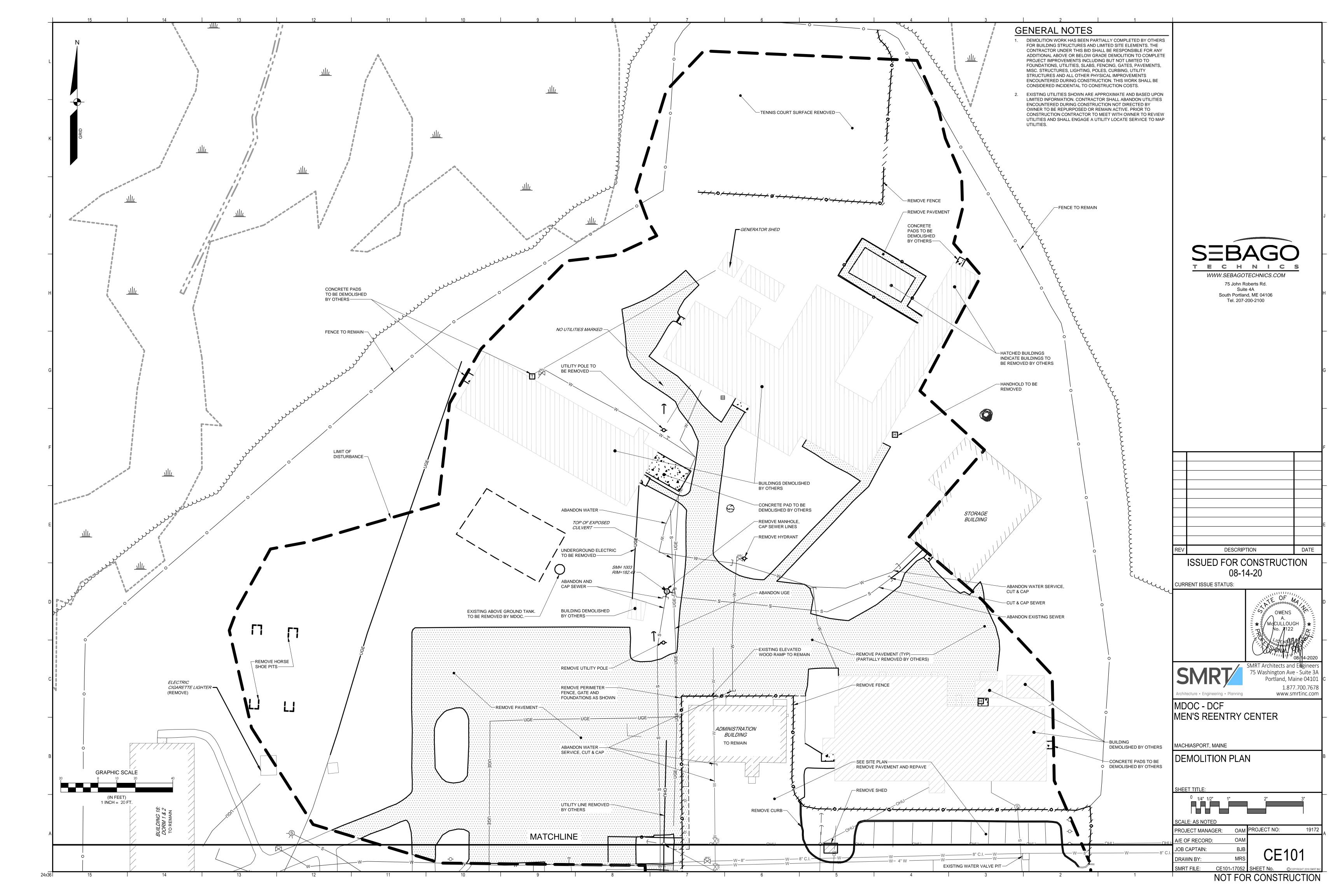
UTILITY NOTES

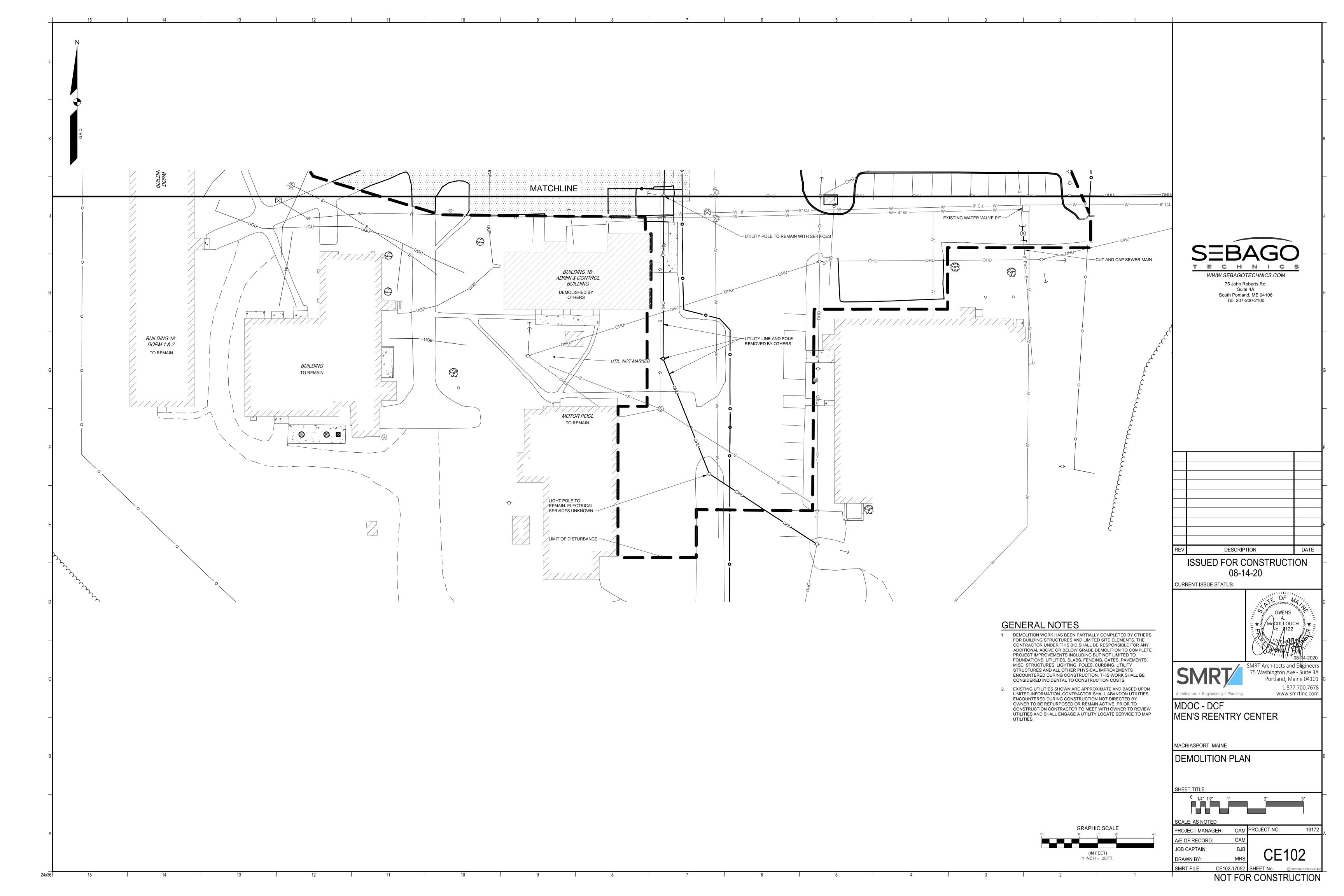
- 1. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE A GROUND LASER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK BETWEEN DIFFERENT UTILITIES IN CLOSE PROXIMITY. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY DEVIATION FROM THE DESIGN PLANS.
- 3. MAINTAIN MINIMUM 6'-0" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
- MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 12 INCHES VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
- LOWER WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL BE PROVIDE 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
- SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
- STORMDRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
- FIRE WATER SERVICE PIPE AND FITTINGS SHALL CONFORM TO WATER PIPING SPECIFICATIONS.
- DOMESTIC WATER SERVICE REFER TO WATER PIPING SPECIFICATION. • REFER TO TECHNICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 8. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH STRUCTURAL DRAWINGS.
- 9. COORDINATE UTILITY INVERTS AT BUILDING WITH STRUCTURAL, MECHANICAL AND PLUMBING DRAWINGS.
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
- 11. UTILITIES WITHIN 10 FEET FROM FACE OF BUILDING SHALL BE COORDINATED WITH RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
- 12. CONTRACTOR OWNS TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING OF WIRE. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
- 13. COORDINATE LIGHT POLE AND WALL MOUNTED LIGHT LOCATIONS WITH THE PHOTOMETRIC PLAN AND CONSTRUCTION MANAGER. THE CONTRACTOR SHALL EXTEND SECONDARY ELECTRIC TO ALL LIGHT POLES IN COORDINATION WITH THE CONSTRUCTION MANAGER.

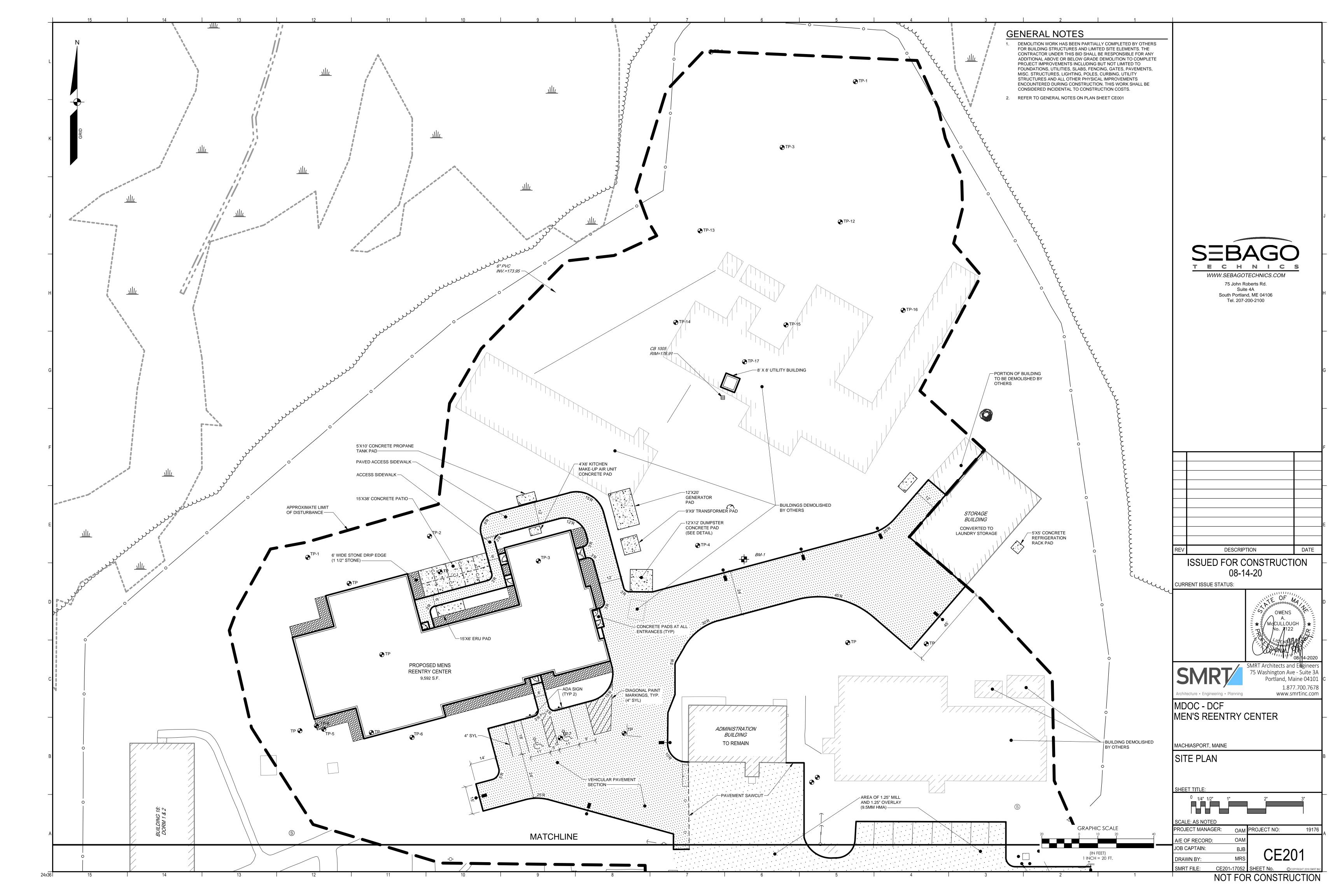


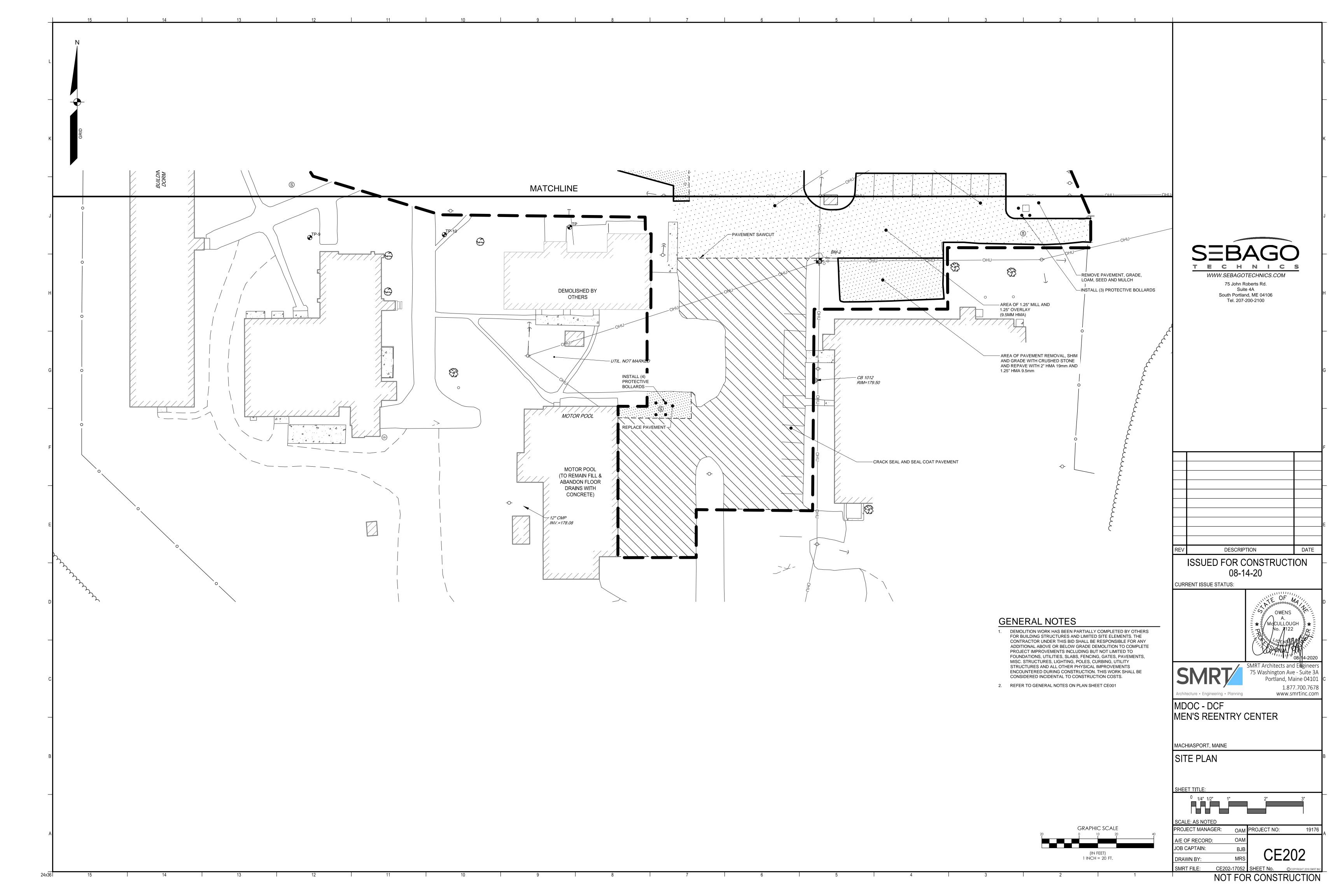


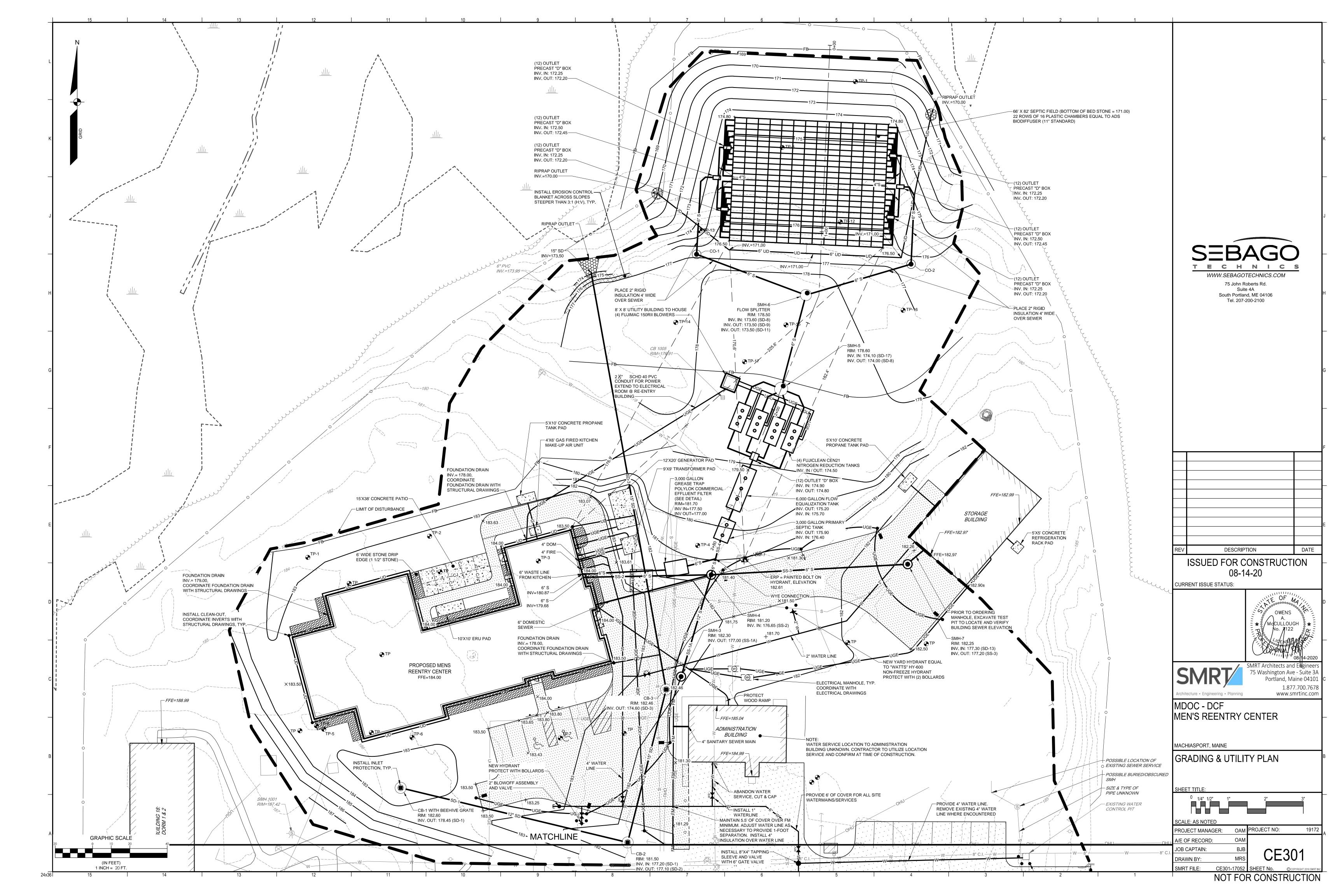


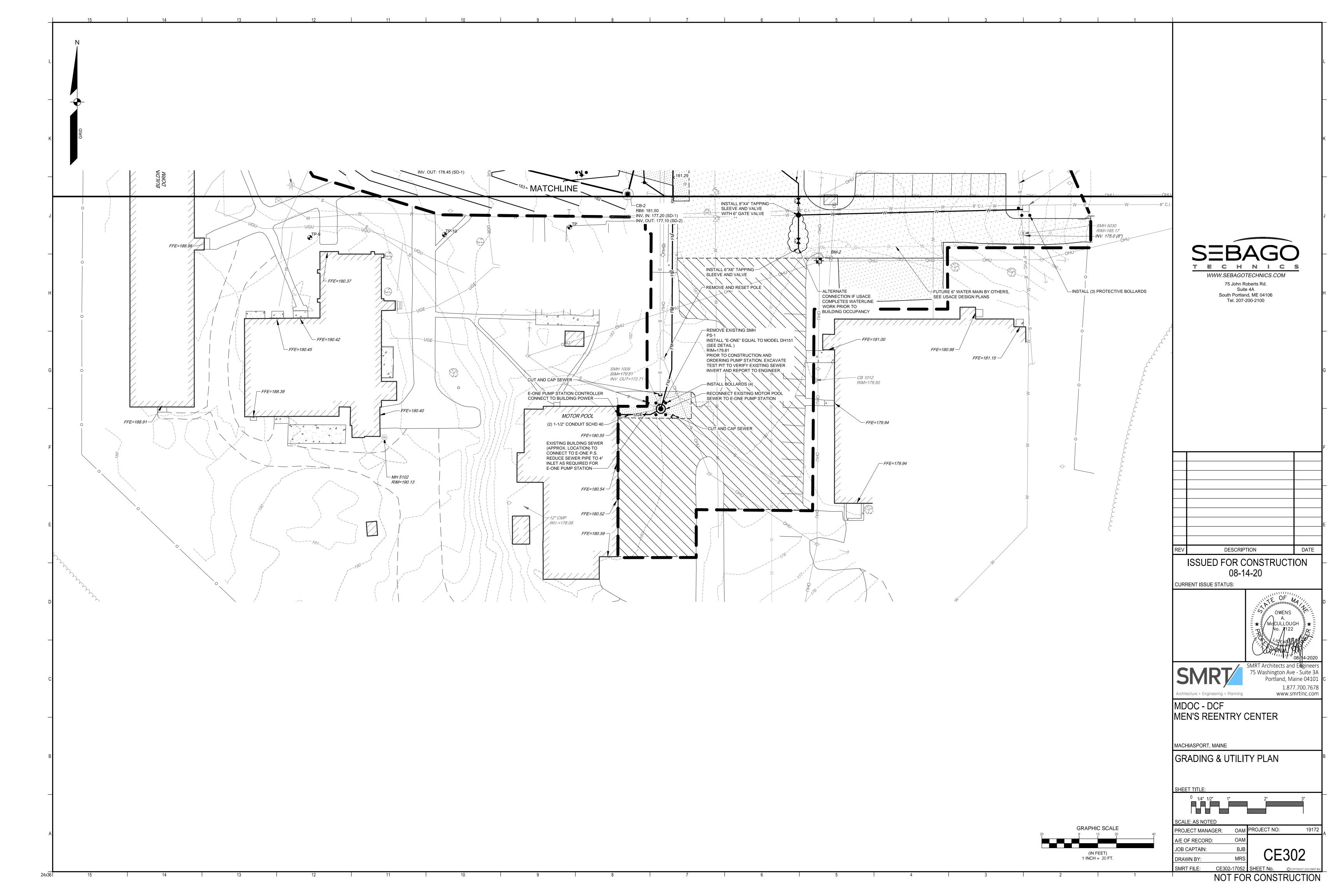


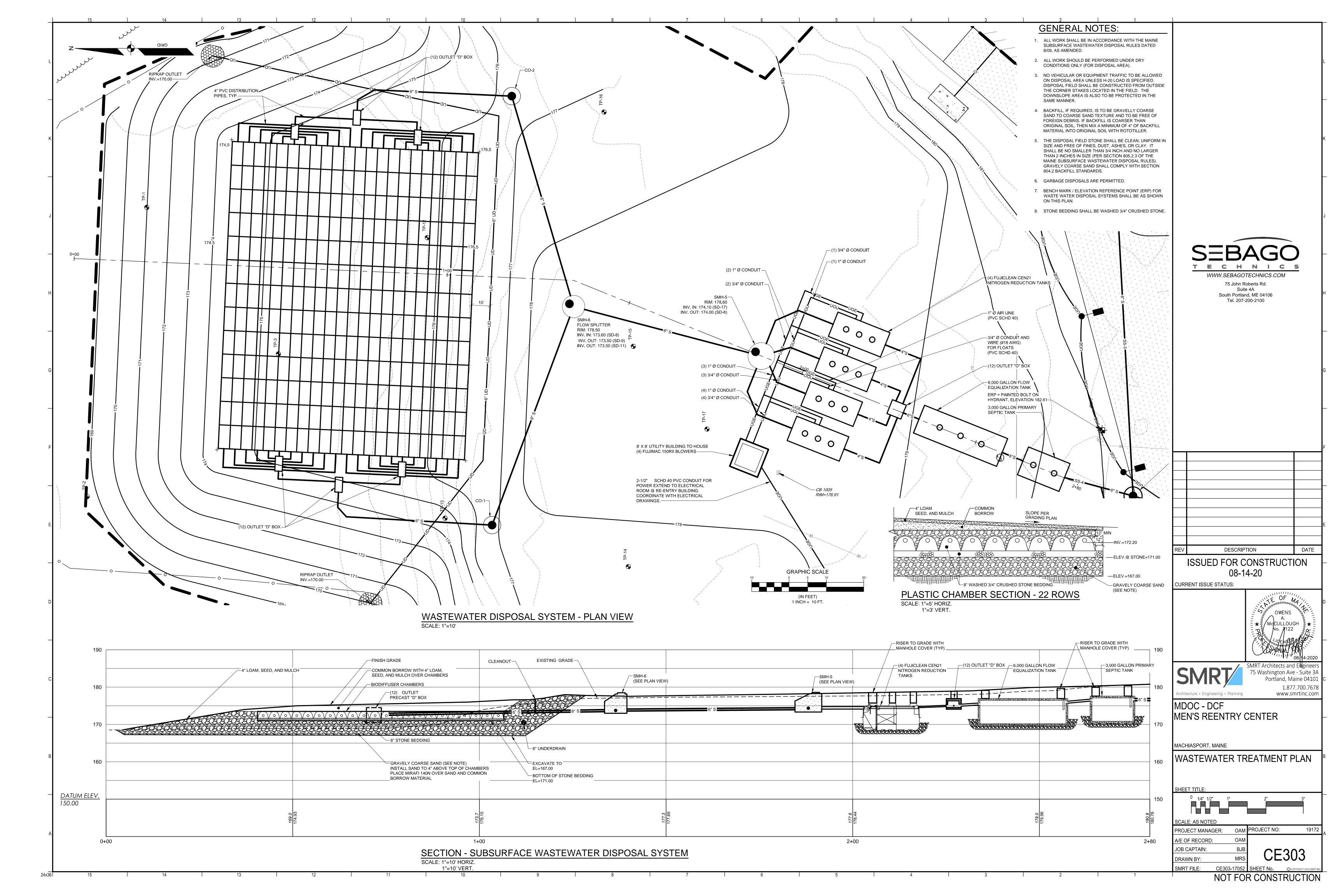












EROSION CONTROL MEASURES

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 7 DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR. NO MORE THAN ONE (1) ACRE SHOULD BE ACTIVELY WORKED ON AT ONE TIME, AND NO LARGER AREA SHOULD BE DISTURBED THAN CAN BE

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES
THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

OSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 90% MATURE VEGETATION CATCH, SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1. OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4. OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION OF THE BINDINGS. BALES SHALL BE

INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF

THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE TOP OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL. STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEPT OR WASHED TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL. STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)

GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)

138 LBS./1,000 S.F.

AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

A. <u>SEEDING:</u> SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

CREEPING RED FESCUE 0.46 LBS/1,000 S.F. (20 LBS/ACRE) REDTOP 0.05 LBS/1,000 S.F. (2 LBS/ACRE) TALL FESCUE

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER.

- HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH E SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
- C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

OLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C.) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D.) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER ISTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY OVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- D. STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C.) OF THIS STANDARD.
- B. STABILIZE THE SOIL WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER STALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS. ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- C. STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.
- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY. TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO FNTER MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

- GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND
- FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
- DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, FERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA. FITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
- AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE: A. DISCHARGES FROM FIREFIGHTING ACTIVITY:
- B. FIRE HYDRANT FLUSHINGS: VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND
- TRANSMISSION WASHING IS PROHIBITED); D. DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
- ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; F. PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN
- REMOVED) IF DETERGENTS ARE NOT USED; UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- H. UNCONTAMINATED GROUNDWATER OR SPRING WATER: . FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
- K. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND L. LANDSCAPE IRRIGATION.
- UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6) OF CHAPTER 500. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
- A. WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS:
- B. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND D. TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

NEEDED REPAIRS (AS IDENTIFIED DURING AN INSPECTION) WILL BE STARTED NO LATER THAN THE END OF THE NEXT WORKDAY AND BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE INSPECTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES, INCLUDING MATERIAL STORAGE AREAS AND ALL POINTS AT WHICH VEHICLES ACCESS THE SITE. THE INSPECTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE INSPECTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN. THE INSPECTOR SHALL MAINTAIN DOCUMENTATION OF ALL INSPECTIONS AS WELL AS MAINTENANCE OR CORRECTIVE ACTIONS THAT WERE TAKEN IN RESPONSE TO THE INSPECTION. THIS DOCUMENTATION SHALL BE MAINTAINED FOR AT LEAST THREE YEARS AFTER THE SITE IS PERMANENTLY STABILIZED

- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE INSPECTOR SHALL INSPECT THE WORK AREA SEMI-MONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE INSPECTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.
- A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING STANDARD AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM OCTOBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

- SOIL STOCKPILES: STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.
- NATURAL RESOURCES PROTECTION: ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.
- PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.
- DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE

PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED, HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1.000 SQUARE FEET (3TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THOUGH

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

MULCHING ON SLOPES AND DITCHES: SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN

3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND

MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4' OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING. SEED TYPE SHALL BE WINTER RYE.

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AT A MINIMUM, AFTER EACH

INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION.

RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL

FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/ OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS -- THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 15, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

INSTALL A SOD LINING IN THE DITCH -- THE APPLICANT WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS. ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS. INSTALL A STONE LINING IN THE DITCH --THE APPLICANT WILL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE APPLICANT WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE APPLICANT WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE APPLICANT WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE APPLICANT WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM III OF THIS CONDITION OR WITH STONE RIPRAP AS DESCRIBED IN ITEM IV OF THIS CONDITION.

STABILIZE THE SLOPE WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER . PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE APPLICANT WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON

STABILIZE THE SLOPE WITH STONE RIPRAP -- THE APPLICANT WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE APPLICANT WILL SEED AND MULCH ALL

THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE APPLICANT WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER

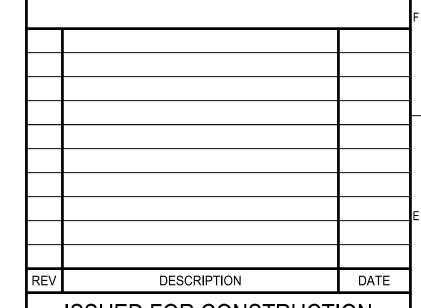
DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE APPLICANT FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN

STABILIZE THE SOIL WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

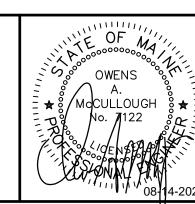
15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM III OF THIS STANDARD.

STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.





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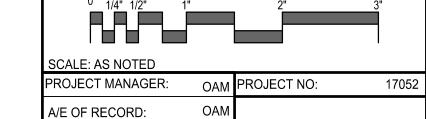
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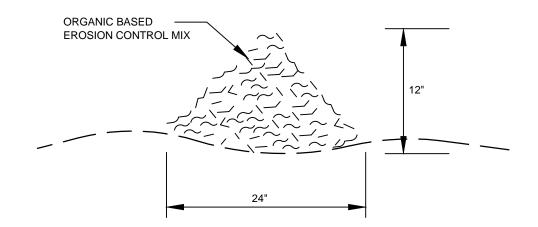
MACHIASPORT, MAINE

EROSION & SEDIMENT CONTROL INOTES & DETAILS

JOB CAPTAIN:

DRAWN BY



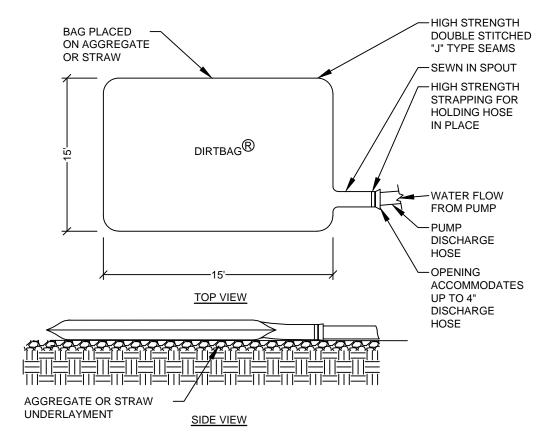


EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

- 1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
- 2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
- 3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL
- 4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS, AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM, GREATER THAN 8%, OR CONVEY FLOWING WATER.

EROSION CONTROL MIX BERM

NOT TO SCALE



INSTALLATION NOTES

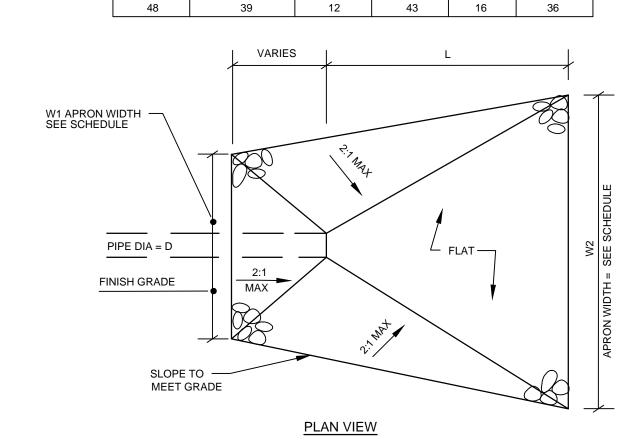
- DEWATERING IF NECESSARY FOR STORMWATER BMP CONSTRUCTION AND REMOVAL OF ACCUMULATED SEDIMENT SHALL BE ACCOMPLISHED WITHOUT
- DISCHARGING SEDIMENT LADEN WATER TO THE WETLANDS ABUTTING THE SITE.
- . CONTRACTOR MAY UTILIZE A GEOTEXTILE PUMPED SEDIMENT CONTROL DEVICE ("DIRTBAG" OR EQUIVALENT).
- 3. DIRTBAG SHALL BE INSTALLED TO MAINTAIN A MINIMUM 75' UNDISTURBED BUFFER FROM WETLANDS.
- 4. INSTALL DIRTBAG ON A 3" BED OF HAY TO MAXIMIZE FLOW OF WATER THROUGH ALL SURFACES OF THE BAG.
- 5. SURROUND DIRTBAG WITH A DOUBLE ROW OF SILTATION FENCE, OR AN EROSION CONTROL BERM BACKED BY SILTATION FENCE.

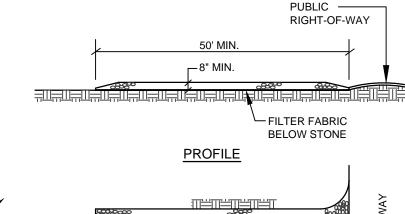
DIRTBAG PUMPED SILT CONTROL SYSTEM

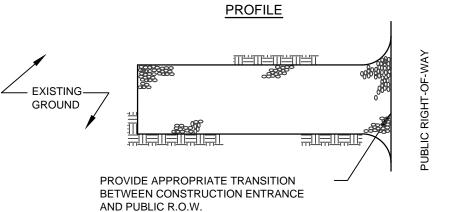
NOT TO SCALE

TYPICAL RIPRAP APRON SCHEDULE

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH -W1 (FT)	WIDTH -W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
<u>></u> 12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	29	9	32	11	25
42	33	11	37	12	27



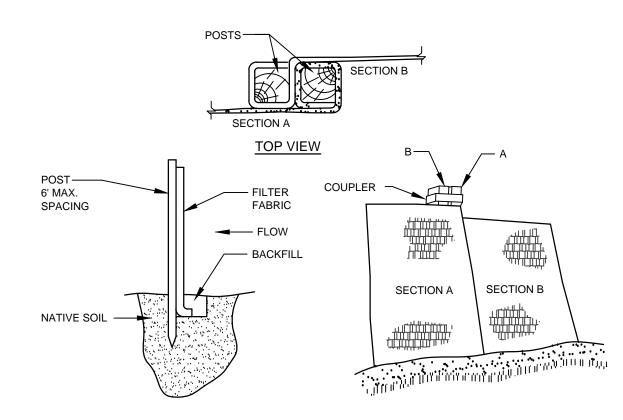




- 1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
- LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
- WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH
- WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED

STABILIZED CONSTRUCTION ENTRANCE/EXIT

NOT TO SCALE



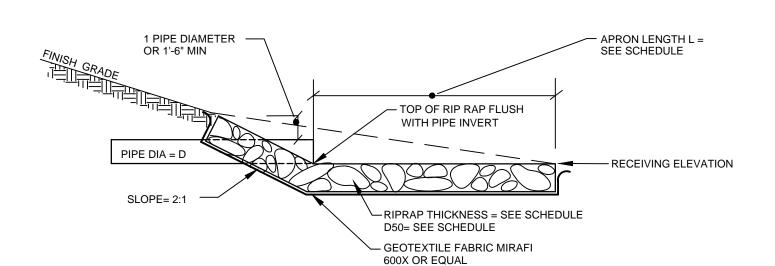
- 1. FILTER BARRIER SHALL NOT BE INSTALLED WITHIN ANY SECURED AREA WHERE PRISONER CONTACT MAY OCCUR.
- 2. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK
- (DOWNSTREAM) WALL OF THE TRENCH. 4. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE
- 5. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT
- THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH. JOIN SECTION AS SHOWN ABOVE. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

SILT FENCE DETAIL

NOT TO SCALE

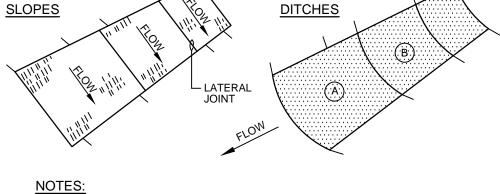
SURFACE.

- OTES:
 RIPRAP TO BE PROCESSED ANGULAR ROCK. 2. RIPRAP GRADATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D_{50} SIZE TO 25
- PERCENT OF THE D₅₀ SIZE. 3. THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE
- 4. STONES SHALL BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN
- 12" ONTO THE GEOTEXTILE. 5. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED



SECTION VIEW

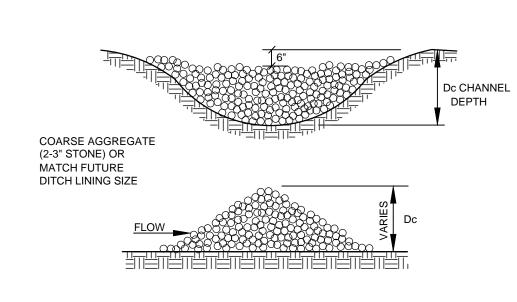
RIPRAP APRON NOT TO SCALE

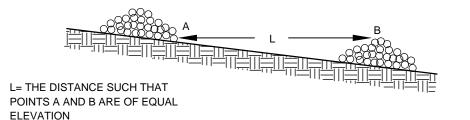


- 1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
- 2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED
- WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A. 3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
- 4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
- 5. WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE. 6. USE NORTH AMERICAN GREEN DS 150 OR APPROVED EQUAL.

EROSION CONTROL BLANKET

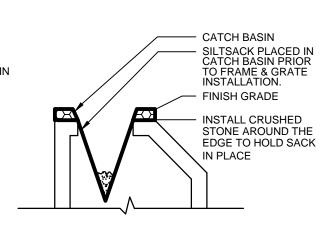
NOT TO SCALE





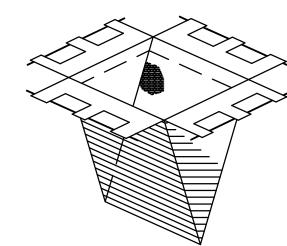
STONE CHECK DAM NOT TO SCALE

PLACE SILTSACK IN EX. FRAME, EX. GRATE MAY BE REPLACED DURING CONSTRUCTION. — CATCH BASIN EX. GRADE



EXISTING BASIN

NEW INSTALLATION



SILT SACK PROTECTION

PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG II) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

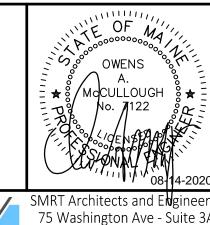
CATCH BASIN INLET PROTECTION DETAIL NOT TO SCALE



DESCRIPTION

ISSUED FOR CONSTRUCTION 08-14-20

CURRENT ISSUE STATUS:



Portland, Maine 04101

1.877.700.7678

www.smrtinc.con

MDOC - DCF MEN'S REENTRY CENTER

MACHIASPORT, MAINE

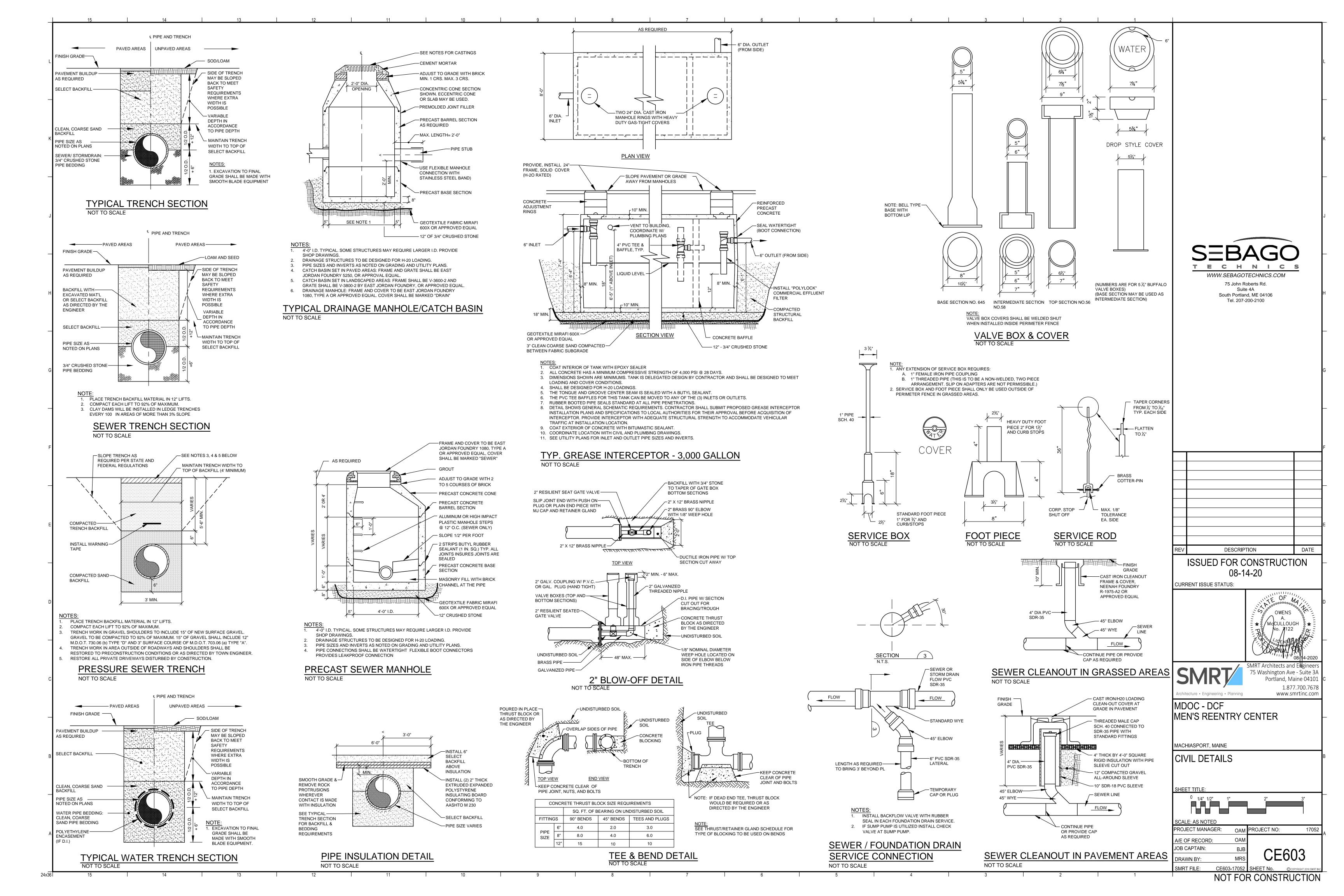
CIVIL DETAILS

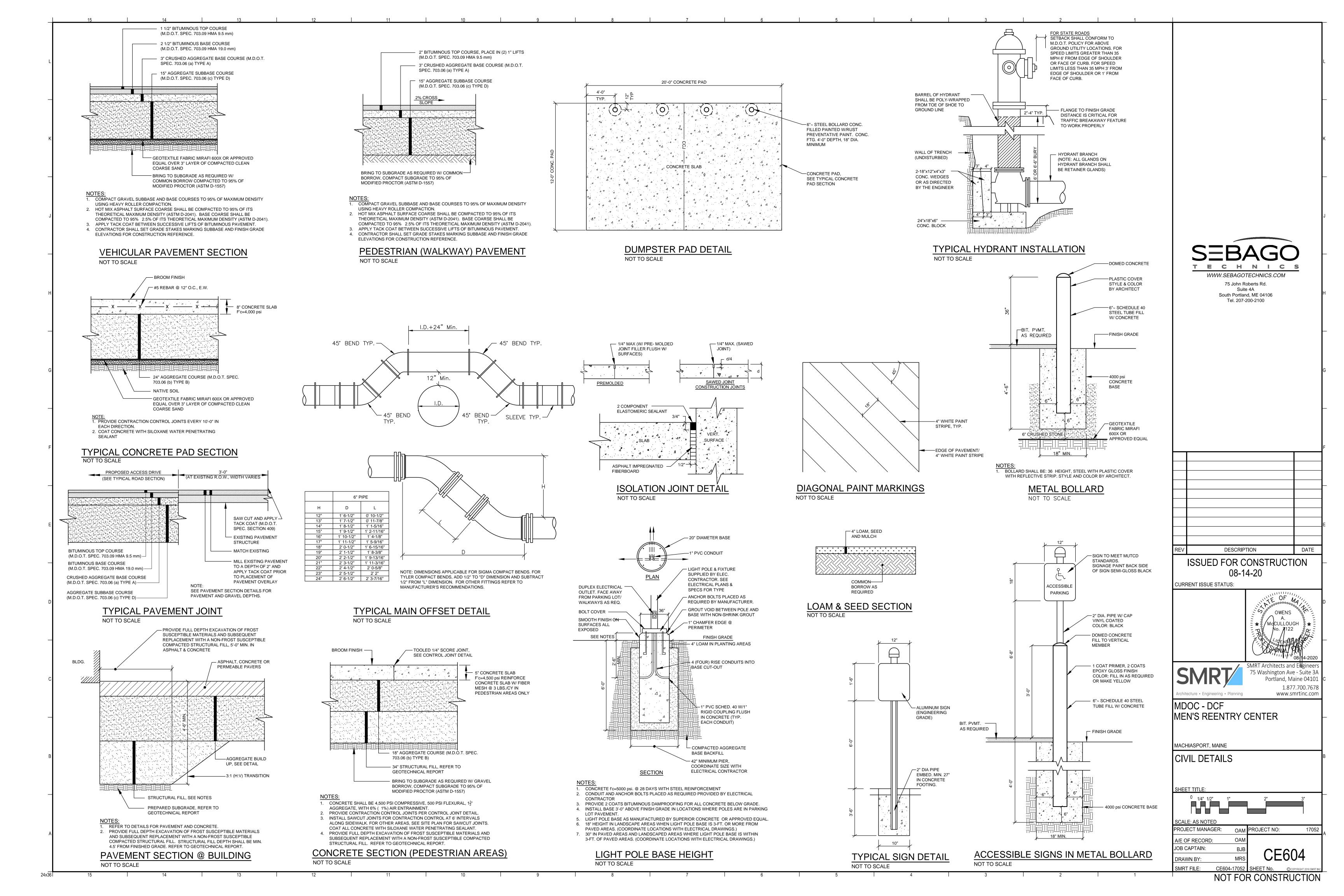
OAM PROJECT NO: PROJECT MANAGER:

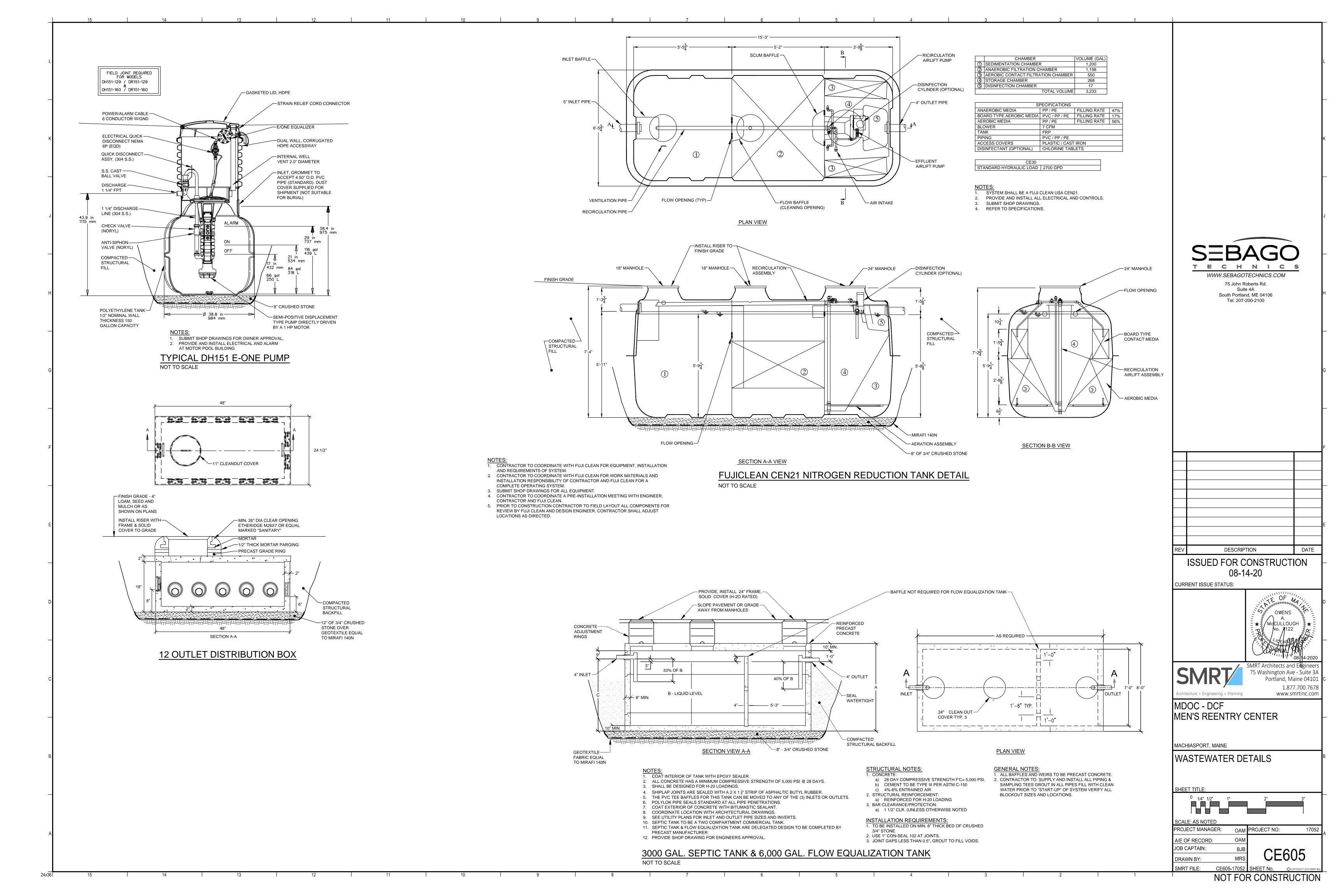
A/E OF RECORD: JOB CAPTAIN: DRAWN BY:

CE602

NOT FOR CONSTRUCTION







SUBSURF	ACE W	ASTEWATER DISP	OSA	AL SYSTE	M APPLIC	ATION	Division of En	vironmenta	Human Services al Health, 11 SHS (207) 287-4172	
	//////PROPERTY LOCATION //////////				>> CAUTION: LPI APPROVAL REQUIRED <<					
City, Town, or Plantation	MACHIASPORT			Town/City Permit #						
Street or Road	64 BASE F	ROAD	Date Permit Issued// Fee: \$ Double Fee Charged []							
Subdivision, Lot#	DOWNEAST	CORRECTIONAL CENTER	L.P.I. # Local Plumbing Inspector Signature							
		NT INFORMATION //////	Local	Flumbing inspector	Signature		□Owner	☐ Town	State	
Name (last, first, MI		CORRECTIONS Owner Applicant			Wastewater Dispos	•			il a	
Mailing Address of	25 TYSON	DRIVE 3RD FLOOR SHS 111			ued by the Local Plu ner or installer to in:	• .			nce	
Owner/Applicant	AUGUSTA, ME 04333-0111				tion and the Maine S		•			
Daytime Tel. #	(207) 287-	-2711		M	unicipal Tax Map#	12 Lot #	53			
I state and acknowled	derstand that any	ation submitted is correct to the best of falsification is reason for the Department			CAUTION: INSPECT I the installation authoir face Wastewater Dispo	rzed above and fou	ion.	n complian		
Sigr	nature of Owner or	Applicant Date		Local F	Plumbing Inspector Sign	nature	(2nd)	Date App	roved	
		////////////////////PÉ	ŔŴĬŤ	ĬŊ FÓŖ MAŢĮÓŊ				/////	////////	
TYPE OF APF		THIS APPLICATION RE	QUIRE	S		DSAL SYSTEM (Diete Non-engine				
1. First Time Syst		■ 1. No Rule Variance □ 2. First Time System Variance				tive System (gra				
■ 2. Replacement S Type replaced: 0		1	proval		☐ 3. Alternative Toilet, specify:					
Year installed: 19		a. Local Plumbing Inspector Ap b. State & Local Plumbing Inspe	proval							
□ 3. Replacement System Variance □ 3. Replacement System Variance □ 4. 25% Expansion □ 5. 25% Expansion □ 6. State & Local Plumbing Inspector App. □ 7. State & Local Plumbing Inspector App. □ 8. State & Local Plumbing Inspector App. □ 9. State & Local Plumbing Inspector App.				proval						
E4 Empiremental System						olete Engineered neered Treatmer	• •	٠.	or more)	
☐5. Seasonal Conv	-	☐ 4. Minimum Lot Size Variance			□10. Engir	neered Disposal	Field (only))		
SIZE OF PROPERTY DISPOSAL SYSTEM TO SE						reatment, specif ellaneous Comp		_		
		□1. Single Family Dwelling Unit, No.	of Bedr			<u>.</u>				
13±	☐ SQ. FT. ■ ACRES	□2. Multiple Family Dwelling, No. of ■3. Other: PRISON	Units: _		TYPE	OF WATER SU	JPPLY			
SHORELANI	ZONING	(specify)		_	□1. Drilled We	ell □2. Dug Wel	I □3. Priva	ite		
□Yes	■No	Current Use ☐ Seasonal ■ Year Ro			■4. Public □5					
	<u>/////////</u>	DESIGN DETAILS (EM LAYOUT SH	OWN ON PAGE	3)//////	<u>//////</u>	<u> </u>	<u>///////</u>	
TREATMEN ■ 1. Concrete	IT TANK	DISPOSAL FIELD TYPE & S	SIZE	GARBAGE DIS			DESIGN FL	LOW		
■ 1. Concrete ■ a. Regular		■ 3. Proprietary Device		■1. No □ 2. Yes	•	6,180		ons per d	ay	
□b. Low profile		■a. Cluster array □c. Linear	If Yes or Maybe, specify one below: □a. Multi-compartment tank			BAS ■1. Table 4A (SED ON:	nit(s))		
□2. Plastic □3. Other:		■b. Regular load □ d. H-20 load				□2. Table 4C (other facilit	ties)		
CAPACITY: 9,	000 GAL.	4. Other:	□c. Increase in tank capacity					other facilites		
	SIZE: <u>12,6/2</u> ■sq. ft. ☐ lin. ft.		t. □d. Filter on tank outlet EFFLUENT/EJECTOR PUMP			50 INMATES				
SOIL DATA & DE	SIGN CLASS ONDITION	DISPOSAL FIELD SIZING		□1. Not Required		□3. Section 4				
12(2)	AIII	☐1. Medium 2.6 sq. ft. / gpd		■2. May Be Require	ed.	ATTACH W	VATER ME	TER DA	ГА	
at Observation Hole	# <u>TP-12</u>	■2. Medium Large 3.3 sq. ft. / gp	pd	■2. May be Require □3. Required		1	TUDE AND			
Depth 45 "	il Factor	☐ 3. Large 4.1 sq. ft. / gpd ☐ 4. Extra Large 5.0 sq. ft. / gpd		Specify only for er	aineered systems:	Lat. 44	_ d <u>37</u>		44.9 s	
of Most Limiting So	II Factor	1 4. Extra Edigo 5.0 3q. it. 7 gpu		DOSE:	GAL.	Lon. <u>-67</u>	_ d 23	m _	48.7 s	
		////////////SITE EV	ÁĽŲÁ.	TÓR STATÉMEI	ŃŢ <i>///////</i>				///////	
I certify that on	6-15-20	(date) I completed a sit	e eval	uation on this pr	operty and state	that the data	reported	l are ac	curate and	
that the propose	ed system is	in compliance with the State of		ne Subsurface W	astewater Dispo)-144A C			
@	ite Evaluator	Signature		355 SE #		6-24-20 Date	- S	ΞB	AGO	
3	LValuatol	Oignaturo				Date	T	E C H	OTECHNICS.COM	
Gary M. Fullerton							gfullerton@sebagotechnics.com			
		Name Printed		Telephone N			il Addres			
Note: Chan	ges to or de	viations from the design sh	ould b	e confirmed wi	th the Site Eval	uator.	H		ige 1 of 3 Rev. 08/201	

		19231HHE						
	TER DISPOSAL SYSTEM APPLICA	(207) 287-5672 Fax: (207) 287-4172						
Town, City, Plantation MACHIASPORT	Street, Road, Subdivision 64 BASE ROAD	Owner or Applicant Name MAINE DEPARTMENT OF CORRECTION						
ERP= ELEVATION REFERENCE POINT PF = IRON PIN FOUND	SUBSURFACE WASTEWATER DISPOSAL PROPOSED DISP							
<u>NOTES</u> 1. ALLOW FOR POSITIVE DRAINAGE AROUND THE DISPOSAL FIELD.	22 ROWS OF	13 ADS						
2. REMOVE ALL VEGETATION AND SCARIFY THE AREA UNDER THE DISPOSAL FIELD, SHOULDER, AND FILL EXTENSION.	BIODIFFUSORS (11" HIGH) IN CLUSTER ARRAY							
3. IF A GARBAGE DISPOSAL IS USED, THEN CHANGES TO THIS DESIGN ARE NECESSARY.								
	SEE ATTACHED PLANS							
	ACCOR WATER AND SI	ATERIALS AND INSTALLATION SHALL BE IN DANCE WITH THE MAINE SUBSURFACE WASTE DISPOSAL RULES DATED 08/15, AS AMENDE UPPLEMENTED BY THE ATTACHED GENERAL WHICH BECOME A PART OF THIS DESIGN.						
BACKFILL REQUIREMENTS	CONSTRUCTION ELEVATIONS	ELEVATION REFERENCE POIN						
Depth of Fill (Upslope) Depth of Fill (Downslope)	Finished Grade Elevation Top of Distribution Pipe or Proprietary Device Bottom of Disposal Area (Bottom of Stone)	Location & Description Reference Elevation						
	DISPOSAL FIELD CROSS SECTION	SCALE:						
	CROSS SECTION A-B 12" SEPARATION USED IN DESIGN	VERTICAL: 1" = HORIZONTAL: 1" =						
	SEE ATTACHED PLANS							
	SEE ATTACHED PLANS							
	SEE ATTACHED PLANS							
	SEE ATTACHED PLANS							
	SEE ATTACHED PLANS	Page 3 of 3 6-24-20 HHF-200 Rev.						

SEBAGO TECHNICS, INC.

SOIL DESCRIPTION AND CLASSIFICATION Solid Description And Classification Observation Hole Test pt	
MACHIASPORT G4 BASE ROAD MAINE DEPARTMENT OF F = IRON PIN FOUND P = TEST PIT B = BORING SEE ATTACHED PLANS SEE ATTACHED PLANS SEE ATTACHED PLANS SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown of Companies	l Health, 11 SHS
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	: =
	Ground Water Restrictive Layer
Soil Classification Slope Limiting Ground Water Restrictive Layer Bedrock Bedrock Profile Condition % Profile Condition % Profile Condition % "	Bedrock Pit Depth
D 1-11	Page 2 of 3
Site Evaluator Signature SE # Date HH	Page 2 of 3 E-200 Rev. 02

General Notes (attachment to form HHE-200) >2,000 gpd Septic System

- 1. The nature of the site evaluation profession is one of interpretation of soil and site conditions. We, in the field, attempt to both provide a satisfactory service to the client, and comply by the rules by which we are bound the Maine Subsurface Wastewater Disposal Rules. If at any time you, the client, are not satisfied with the service provided or the results found, it is your right to hire another site evaluator for a second opinion.
- 2. Property information is supplied by the owner, applicant or representative. Such information presented herein shall be verified as correct by the owner or applicant prior to signing this application.
- 3. All work shall be in accordance with the Maine Subsurface Wastewater Disposal Rules dated 8/3/15, as amended.
- 4. All work on the disposal field should be performed under dry conditions.
- 5. No vehicular or equipment traffic to be allowed on disposal area unless H-20 load is specified. Disposal field shall be constructed from outside the corner stakes located in the field. The downslope area is also to be protected in the same manner.
- 6. Backfill, if required, is to be gravelly coarse sand texture and to be free of foreign debris (per Table 11A of the Maine Subsurface Wastewater Disposal Rules). If backfill is coarser than original soil, then mix a minimum of 4" of backfill material into original soil.
- 7. No neighboring wells are apparent (unless so indicated) within 300' of disposal area. Owner or applicant shall verify this prior to signing the application.
- 8. The disposal field stone shall be clean, uniform in size and free of fines, dust, ashes, or clay. It shall have a nominal size of 3/4" or 1½" (per Table 11B of the Maine Subsurface Wastewater Disposal Rules).
- 9. Minimum separation distances required (unless reduced by variance or special circumstance).

a) wells with water usage of 2000 or more gpd or public water supply wells: Disposal Fields: Treatment Tanks: 150' 300' b) potable water supply to disposal field: 100' c) potable water supply to treatment tank: d) treatment tank to lake, river, stream or brook: 100' for major watercourse, 50' for minor watercourse e) disposal field to lake, river, stream or brook: 300' for major watercourse, 150' for minor watercourse f) house to treatment tank: g) house to disposal field:

- For all other separation distances, use separations for greater than 2,000 gpd per Maine Subsurface Wastewater Disposal Rules Table 7B for first-time
- 10. Location of septic system near a wetland may require a separate permit. As such, the owner, prior to construction of the septic system, shall hire a professional to evaluate proximity of adjacent wetlands and prepare necessary permit applications.
- 11. Garbage disposals are not recommended and, if installed, are done so at the owner's risk. The additional waste load requires increased maintenance frequency and may cause premature failure of disposal field.
- 12. Pump stations, when required, shall be installed watertight to prevent infiltration of ground and/or surface water.
- 13. Force mains and pressure lines shall be flushed of any foreign material and pumps shall be checked for proper on/off cycle before being put into service.
- 14. Force mains, pump stations, and/or gravity piping subject to freezing shall be installed below frost line or adequately insulated.

Sebago Technics, Inc., 75 John Roberts Rd., Suite 4A, South Portland, ME 04106-6963 (207) 200-2063

02/18

08-14-20 CURRENT ISSUE STATUS: 75 Washington Ave - Suite 3A Portland, Maine 04101 1.877.700.7678 www.smrtinc.com MDOC - DCF MEN'S REENTRY CENTER MACHIASPORT, MAINE HHE DETAILS SHEET TITLE: PROJECT MANAGER: OAM PROJECT NO: A/E OF RECORD: JOB CAPTAIN: DRAWN BY: NOT FOR CONSTRUCTION

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.

South Portland, ME 04106

DESCRIPTION

ISSUED FOR CONSTRUCTION

GENERAL NOTES:

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE THE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO THE GENERAL NOTES. INCONSISTENCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL. MECHANICAL. ELECTRICAL AND SITE DRAWINGS. G.C. SHALL COORDINATE LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, ETC.
- ALL DIMENSIONS AND COORDINATES SHALL BE FIELD VERIFIED. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.
- THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS.
- REFERENCE ELEVATION 100'-0" ON STRUCTURAL DRAWINGS IS EQUAL TO 184.00' ON CIVIL DRAWINGS.

DESIGN NOTES

THIS BUILDING IS DESIGNED TO COMPLY WITH THE MAINE UNIFORM BUILDING CODE WHICH REFERENCES THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE AND ASCE7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES.

- 2. FLOOR LIVE LOADS ARE AS FOLLOWS:
- A. ENTIRE FLOOR = 100PSF
- DEAD LOADS: DESIGN INCLUDES THE SELF WEIGHT OF STRUCTURAL COMPONENTS PLUS 5 PSF ALLOWANCE FOR MISCELLANEOUS DUCTWORK, SPRINKLER PIPING AND OTHER HUNG ITEMS.
- SNOW LOAD:
- GROUND SNOW LOAD Pg = 50 PSF FLAT ROOF SNOW LOAD Pf = 42
- SNOW LOAD IMPORTANCE FACTOR I_S =1.0 SNOW EXPOSURE FACTOR Ce = 1.0
- SNOW THERMAL FACTOR Ct = 1.2
- SNOW DRIFTING IN ACCORDANCE WITH ASCE7
- WIND LOAD:
- BASIC WIND SPEED = 115 MPH RISK CATEGORY II
- WIND EXPOSURE = EXPOSURE B
- WIND INTERNAL PRESSURE COEFFICIENT GCpi = ±0.18 **DESIGN WIND LOADS:**
- COMPONENTS AND CLADDING IN WALL CONSTRUCTION (ASSUMING EFFECTIVE WIND AREA > 20 SQUARE FEET)
- a. WITHIN 3 FEET FROM CORNERS = ± 25.3 PSF b. AT ALL OTHER WALL SURFACES= ±21 PSF
- COMPONENTS AND CLADDING IN ROOF CONSTRUCTION. (ASSUMING EFFECTIVE WIND AREA >20 SQUARE FEET) a. WITHIN 3 FEET FROM CORNERS = -37.6 PSF
- b. OVERHANGS = 31.3 c. ALL ROOF SURFACES = -20.2 PSF
- 3. MAIN WIND FORCE RESISTING SYSTEM Pmax = ±19.7 PSF
- EARTHQUAKE LOAD:
- SEISMIC IMPORTANCE FACTOR, $I_E = 1.0$
- MAPPED SPECTRAL RESPONSE ACCELERATION, S_S = 0.229 g MAPPED SPECTRAL RESPONSE ACCELERATION, S₁ = 0.071 g
- SITE CLASS = CLASS C SPECTRAL RESPONSE COEFFICIENT, SDS = 0.183
- SPECTRAL RESPONSE COEFFICIENT, S_{D1} = 0.08
- SEISMIC DESIGN CATEGORY = CATEGORY B BASIC SEISMIC FORCE-RESISTING SYSTEM: LIGHT FRAMED (WOOD) WALLS SHEATHED WITH WOOD
- STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE RESPONSE MODIFICATION FACTOR, R = 6.5
- DESIGN BASE SHEAR, V = 82 K SEISMIC RESPONSE COEFFICIENT, C_S = 0.028
- ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

EARTHWORK NOTES

- ALL FOUNDATIONS AND SLABS SHALL BEAR ON SURFACES DECLARED IN THE GEOTECHNICAL REPORT
- WHERE THE SURFACE OF ACCEPTABLE BEARING OF EXISTING SOILS IS BELOW THE SPECIFIED BOTTOM OF CONCRETE ELEVATION, FILL TO THE SPECIFIED ELEVATION WITH COMPACTED STRUCTURAL FILL.
- WHERE FILL MATERIALS ARE PLACED BENEATH FOUNDATIONS, PLACE COMPACTED STRUCTURAL FILL (OR CRUSHED STONE AS DESCRIBED IN THE GEOTECHNICAL REPORT) WITHIN A ZONE OF INFLUENCE BOUNDED BY A ONE-TO-ONE SLOPE ORIGINATING AT 1'-0" FROM FACE OF FOUNDATION, EXTENDED TO THE ACCEPTABLE BEARING SUBSTRATE.
- BENEATH INTERIOR FLOOR SLABS ON GRADE PROVIDE THE FOLLOWING MATERIALS:
- VAPOR RETARDER: SEE SPECIFICATIONS 12" MIN. OF STRUCTURAL FILL, COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY IN ACCORDANCE
- A RADON PIT IS SPECIFIED, PLACE 8" MIN. OF STRUCTURAL FILL WITH A 6" MIN LAYER OF CRUSHED STONE ALL COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557.
- BACKFILL FOUNDATIONS WITH COMPACTED STRUCTURAL FILL.
- SPECIFIED FILL MATERIAL SHALL COMPLY WITH THE FOLLOWING GRADATIONS:
- COMPACT FILL MATERIALS IN ACCORDANCE WITH ASTM D-1554 AND THE GEOTECHNICAL REPORT GUIDELINES FOR THE FOLLOWING PERCENTAGES OF THE MAXIMUM DRY DENSITY:
- BUILDING INTERIOR: BUILDING EXTERIOR BENEATH EXTERIOR SLABS AND WALLS WITHIN 24" OF PAVEMENT OR CONCRETE
- BENEATH FOOTINGS WITH THE ZONE OF INFLUENCE DESCRIBED IN NOTE 3 = 95%
- BUILDING EXTERIOR AT ALL OTHER LOCATIONS = 90%

CONCRETE NOTES:

THESE NOTES ARE PROVIDED TO CLARIFY AND SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO SPECIFICATION SECTION 033000 FOR ADDITIONAL REQUIREMENTS.

- 1. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH ACI 318-14 AND ACI 301.
- CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:
 - 4000 PSI FOR INTERIOR SLABS
 - 5000 PSI FOR EXTERIOR SLABS 4500 PSI FOR FOUNDATION WALLS AND FOOTINGS

4. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

- 3. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315.
- SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACII 318 UNLESS OTHERWISE NOTED ON THE DRAWINGS. UNLESS NOTED OTHERWISE, ALL REINFORCING SHALL BE LAPPED IN ACCORDANCE WITH, THE SCHEDULE SHOWN ON SHEET SB501.
- COMPLETE SHOP DRAWINGS OF ALL REINFORCING STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK.

CONCRETE SLAB-ON-GRADE NOTES:

- 1. THE VAPOR RETARDER SHALL BE AS SPECIFIED IN SECTION 03300. EDGE LAPS AND PENETRATIONS SHALL BE
- BASE MATERIAL UNDER THE SLAB SHALL BE AS NOTED IN THE EARTHWORK NOTES. THE TOP SURFACE OF THE BASE SHALL BE LEVEL TO WITHIN 3/8" OF DESIGN GRADE.
- UNLESS NOTED OTHERWISE, SLABS-ON-GRADE SHALL BE 4" THICK. CONCRETE SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 1", WITH 90 TO 100 % PASSING A 1" SIEVE. SLABS SHALL BE REINFORCEMENT SHALL BE SUPPORTED WITH CHAIRS PLACED ON A MXIMUM SPACING OF 3 FT. IN BOTH PLAN DIRECTIONS. REFER TO NOTES ON FOUNDATION PLANS FOR ADDITIONAL SLAB-ON-GRADE REQUIREMENTS.
- ALL CONCRETE FLOOR SURFACES SHALL BE STEEL TROWELLED. FLOORS SHALL BE CURED FOR A MINIMUM OF 7 DAYS.
- AFTER 7 DAYS OF CURING, THE FLOOR SHALL BE CLEANED OF ALL DIRT, OIL, AND OTHER FOREIGN MATTER. FLOORS THAT RECEIVE A SEALER SHALL BE SEALED AT THIS TIME.
- THE DRAWINGS SHOW ONLY MANDATORY SLAB JOINTS (CJ), EITHER CONTROL OR CONSTRUCTION JOINTS ARE ACCEPTABLE. REFER TO SB501 FOR TYPICAL DETAILS. THE CONTRACTOR SHALL LAYOUT REMAINING JOINTS. THE PANELS SHALL BE RECTANGULAR WITH A MAXIMUM JOINT SPACING OF 12.0' FOR 4" & 5" THICK SLABS, 15.0' FOR 6" THICK SLABS & 17.0' FOR 8" THICK SLABS, U.N.O. ON DRAWINGS. THE LONG PANEL DIMENSION SHALL NOT BE MORE THAN 1.5 TIMES THE SHORT PANEL DIMENSION. SAW-CUT JOINTS MAY NOT TERMINATE AT CROSSING SAW-CUT JOINTS. SAW-CUT JOINTS MAY TERMINATE AT CONSTRUCTION JOINTS OR SAW-CUT JOINTS CUT FULL-DEPTH 12" EACH SIDE OF THE INTERSECTION.
- CONTINUE 50 PERCENT OF SLAB REINFOCEMENT THROUGH CONSTRUCTION AND/OR CONTROL JOINTS.
- ISOLATION JOINTS SHALL HAVE 3/8" PREFORMED, CLOSED-CELL FOAM JOINT MATERIAL. THE TOP 1/2" OF THE JOINT SHALL BE FILLED WITH POLYURETHANE SEALANT.

FOUNDATION NOTES:

- FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY S.W.COLE, ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED RE-ENTRY BUILDING DOWNEAST CORRECTIONAL FACILITY". THE CONTRACTOR SHALL OBTAIN, READ AND COMPLY WITH ALL REPORT RECOMMENDATIONS. PORTIONS OF INFORMATION FOUND IN THE REPORT ARE DUPLICATED BELOW FOR CONVENIENCE.
- FOUNDATIONS ARE DESIGNED TO BEAR ON SOILS WITH AN ALLOWABLE BEARING PRESSURE OF 4000 PSF.
- REMOVE ALL TOPSOIL, ORGANICS, PREVIOUS FILL MATERIAL, DEBRIS AND OTHER UNSUITABLE MATERIAL FROM WITHIN THE BUILDING FOOTPRINT AND 5 FEET BEYOND TO A MINIMUM DEPTH OF 12". EXCAVATE TO GREATER DEPTH WHERE REQUIRED TO REMOVE UNSUITABLE MATERIAL. EXTENSIVE REMOVALS ARE ANTICIPATED WITHIN THE PROJECT FOOTPRINT.
- WHERE OVEREXCAVATION IS REQUIRED BENEATH FOOTINGS, EXTEND THE LIMITS AT LEAST 2'-0" BEYOND THE VERTICAL SURFACES AND PROJECTING AT A 1.5H:1V SLOPE AWAY FROM THE VERTICAL FOOTING SURFACES. BACKFILL TO THE SPECIFIED BOTTOM OF FOOTING ELEVATION WITH STRUCTURAL FILL, COMPACTED TO 95% OF THE MINIMUM DRY DENSITY PER ASTM D1557, MODIFIED PROCTOR
- FOOTING SUBGRADES SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION
- ALL FILL MATERIAL SHALL BE NON-FROST SUSCEPTIBLE.
- DEWATER EXCAVATIONS TO AT LEAST 1' BELOW BOTTOM OF FOOTING ELEVATION.
- THE CONTRACTOR SHALL LIMIT THE EXPOSURE OF NATIVE SOILS TO WATER, FREEZING TEMPERATURES, VEHICLE, AND EXCESSIVE FOOT TRAFFIC AT FOOTING BEARINGS AND BENEATH FLOOR SLABS. PROVIDE TEMPORARY PROTECTION AS REQUIRED TO RETAIN THE INTEGRITY OF NATIVE SOILS.
- PROVIDE A MINIMUM OF 4'-6" OF FROST PROTECTION BETWEEN THE BOTTOM OF EXTERIOR FOOTINGS AND ADJACENT FINISH GRADE WHEN BEARING ON GRANULAR MATERIAL OR PROVIDE A MINIMUM OF 2'-6" OF FROST PROTECTION WHEN BEARING DIRECTLY ON BEDROCK.
- BACKFILL WITHIN 2'-0" OF FOUNDATION WALLS SHALL BE PLACED IN HORIZONTAL LIFTS WITH A MAXIMUM LOOSE THICKNESS OF 8 INCHES. THE MINIMUM COMPACTION PER ASTM D1557, MODIFIED PROCTOR. SHALL BE 95% OF THE MAXIMUM DRY DENSITY. WHERE COMPACTION IS PROVIDED BY THE USE OF HAND GUIDED EQUIPMENT, REDUCE THE MAXIMUM PARTICLE SIZE TO 3 INCHES AND LIMIT LIFT THICKNESS TO 6
- ALL FILL MATERIAL PLACED BELOW SLAB SUBGRADE WITHIN THE FOOTPRINT OF THE BUILDING SHALL BE STRUCTURAL FILL COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER ASTM D1557, MODIFIED
- INSTALL A VAPOR RETARDER BENEATH ALL INTERIOR SLABS-ON-GRADE. SEAL THE VAPOR RETARDER AROUND ALL PENETRATIONS, AT LAPPED SPLICES, AND TERMINATIONS AGAINST FOUNDATION WALLS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- 13. SEE CIVIL DRAWING FOR LOCATION OF FOUNDATION DRAINS AND DRAINAGE STRUCTURES

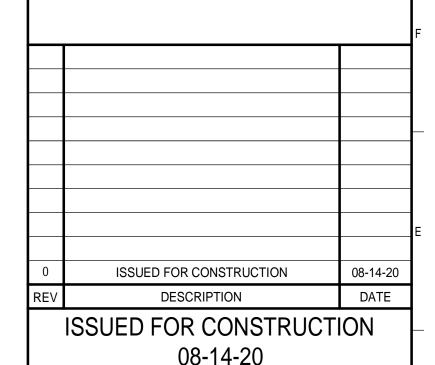
WOOD FRAMING NOTES:

THESE NOTES ARE PROVIDED TO CLARIFY AND SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO SPECIFICATION SECTION 061000 FOR ADDITIONAL REQUIREMENTS.

- INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED, MINIMUM GRADE NO.2 SPRUCE-PINE-FIR, U.O.N. MAXIMUM MOISTURE CONTENT SHALL BE 15% FOR MEMBERS W/ NOMINAL THICKNESS 2" OR LESS & 19% FOR THICKER MEMBERS.
- PRESSURE TREATED TIMBER SHALL BE USED FOR SILL AND COLUMN MEMBERS AND WHERE SHOWN ON DRAWINGS. PRESSURE TREATED TIMBER SHALL BE SOUTHERN PINE #2.
- ENGINEERED LUMBER BEAMS SHALL BE "VERSALAM" BY BOISE CASCADE, IN THE SIZE SHOWN ON THE DRAWINGS. UNITS BUILT UP WITH MULTIPLE PLIES SHALL BE INTERCONNECTED ACCORDING TO MANUFACTURER'S REQUIREMENTS.
- ROOF SHEATHING SHALL BE 5/8" APA RATED SHEATHING, PANEL SPAN RATING 40/20, EXPOSURE 1, NAILED WITH MINIMUM OF 10d NAILS AT 4" OC AT BLDG PERIMETER (EDGE OF ROOF AT OVERHANGS), AT 6" O.C. AT OTHER SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. A 1/8" GAP IS REQUIRED BETWEEN ROOF PANELS AT ALL END JOINTS.
- 5. END JOINTS FOR ROOF SHEATHING SHALL BE STAGGERED. LONG DIMENSION OF UNCUT SHEATHING PANELS SHALL BE PERPENDICULAR TO SUPPORTS.
- THE QUANTITY AND SIZE OF FASTENERS CONNECTING WOOD FRAME MEMBERS SHALL BE NOT LESS THAN SPECIFIED IN IBC 2015 TABLE 2304.9.1 FASTENING SCHEDULE. ALL NAILS SHALL BE COMMON TYP NAILS,
- HOLES FOR BOLTS SHALL BE DRILLED TO A DIAMETER THAT IS 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT. HOLES FOR THE UNTHREADED PORTION OF LAG SCREWS SHALL BE DRILLED TO A DIAMETER THAT IS THE SAME AS THE NOMINAL DIAMETER OF THE LAG SCREW SHANK. A PILOT HOLE FOR THE THREADED PORTION OF THE LAG SCREW SHALL BE DRILLED AND SHALL HAVE A DIAMETER THAT IS HALF THE NOMINAL DIAMETER OF THE LAG SCREW SHANK.
- ALL MISCELLANEOUS METAL HARDWARE (HANGERS, TIES, ETC.) SHALL BE AS MANUFACTURED BY SIMPSON STRONG TIE OR APPROVED EQUAL.
- 9. PRE-MANUFACTURED MATERIALS, INCLUDING ANCHOR BOLTS AND SIMPSON HANGERS, SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- 10. WALL SHEATHING SHALL BE 1/2" APA RATED SHEATHING, STRUCTURAL 1, EXTERIOR 32/16 RATED. INSTALL PANELS W/ LONG DIMENSION PERPENDICULAR TO SUPPORTS & END JOINTS STAGGERED. FASTEN TO SUPPORTS WITH 10d NAILS @ 4" OC ALONG PANEL EDGES AND @ 12" OC TO INTERMEDIATE SUPPORTS/AS
- 11. ALL TOP PLATE SPLICES SHALL BE OVER A STUD OR HEADER, WITH A 4'-0" OVERLAP EACH WAY WITH SECOND TOP PLATE.
- 12. ATTACH ALL BOTTOM PLATES TO MUD SILL PLATES W/ MIN. OF (6) 12D NAILS PER 16" OF PLATE.

QUALITY ASSURANCE/SPECIAL INSPECTIONS:

- 1. STRUCTURAL SPECIAL INSPECTIONS SHALL BE PROVIDED BY THE OWNER DURING CONSTRUCTION AS REQUIRED BY IBC 2015, CHAPTER 17. REFER TO THE SCHEDULE OF SPECIAL INSPECTION FOR THE REQUIRED INSPECTIONS SCOPE. THE SPECIAL INSPECTOR (OR INSPECTORS) FOR THE PROJECT IS TO BE RETAINED BY THE OWNER AND APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
- NO STATEMENTS OF COMPLETION WILL BE ISSUED BY THE SPECIAL INSPECTOR (OR INSPECTORS) WITHOUT COMPLETION OF THE SPECIAL INSPECTION REQUIREMENTS.
- SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF THE SPECIAL INSPECTOR (OR INSPECTORS), AND IN ACCORDANCE WITH THE "SCHEDULE OF SPECIAL INSPECTIONS", PREPARED BY THE STRUCTURAL ENGINEER OF RECORD. ONLY PERSONNEL AUTHORIZED BY THE APPROVED "LIST OF AGENTS" ARE QUALIFIED TO PERFORM THE TASKS OUTLINED IN THE SCHEDULE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE CONSTRUCTION ACTIVITIES AND SEQUENCES WITH THE SPECIAL INSPECTOR AND/OR HIS AGENTS TO PERFORM THE REQUIRED INSPECTION AND TESTING. ANY INSTALLED ITEMS THAT CONCEAL UNINSPECTED ITEMS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.



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STRUCTURAL GENERAL NOTES

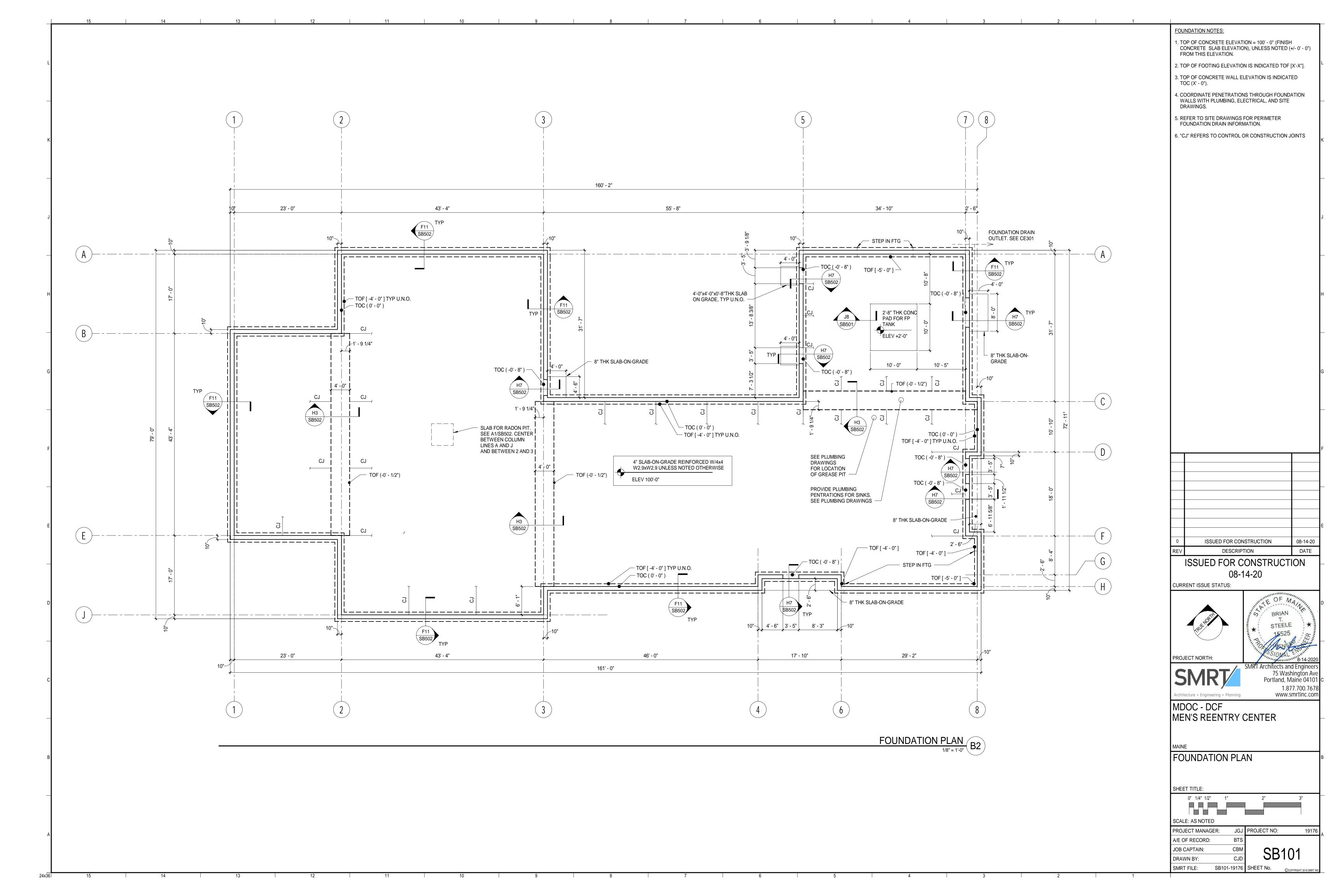
SHEET TITLE:

SMRT FILE:

SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER:

A/E OF RECORD: JOB CAPTAIN: DRAWN BY

S-001-19176 SHEET No.



CONCRETE REINFORCING SPLICE LENGTHS:

WHERE LAP SPLICE LENGTHS FOR REINFORCING STEEL ARE NOT SPECIFIED, PROVIDE SPLICE LENGTHS IN ACCORDANCE W/ THE FOLLOWING:

NOTES:

2. TABLE ASSUMPTIONS:

A. NORMAL WEIGHT CONCRETE B. UNCOATED REINFORCING

	3000 PSI				4000 PSI				4500 PSI			
BAR SIZE	0.75" <= CONCRETE COVER < 2.0"			CRETE R >= 2.0"	0.75" <= CONCRETE COVER < 2.0"		CONCRETE COVER >= 2.0"		0.75" <= CONCRETE COVER < 2.0"		CONCRETE COVER >= 2.0"	
	TOP	TOP OTHER TOP OTHER		TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	
#3	32"	25"	21"	16"	28"	21"	18"	14"	26"	20"	17"	16"
#4	43"	33"	29"	22"	37"	28"	25"	19"	35"	27"	23"	18"
#5	53"	41"	36"	27"	46"	36"	31"	24"	44"	34"	30"	22"
#6	64"	49"	43"	33"	55"	43"	37"	28"	52"	40"	35"	27"
#7	93"	72"	62"	48"	81"	62"	54"	42"	77"	59"	51"	39"
#8	107"	82"	71"	55"	92"	71"	62"	47"	87"	67"	58"	45"
#9	120"	93"	73"	62"	104"	80"	69"	53"	98"	75"	65"	50"
#10	135"	105"	90"	70"	116"	89"	77"	59"	111"	85"	74"	57"

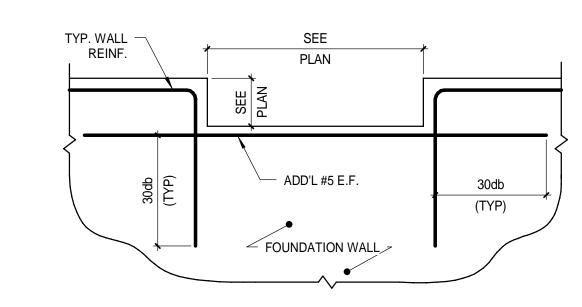
FIRE TANK AND ANCHORS BY MANUFACTURER UNTILITY SLAB, SEE PLAN 3/4" CHAMFER, TYP REINFORCEMENT, SEE PLAN INTERIOR SLAB-ON-GRADE, SEE PLAN FOR DETAILS -1' - 0"

CONCRETE PAD

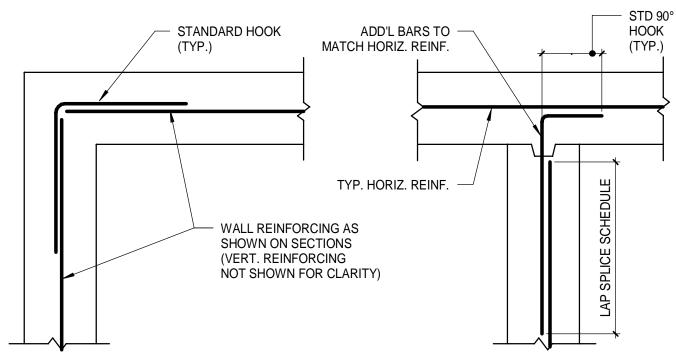
- CONCRETE SLAB

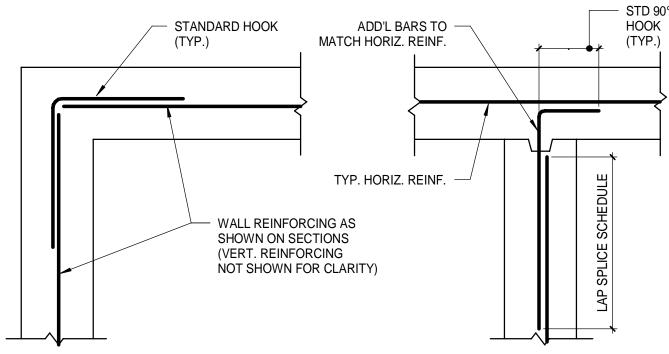
6x6 W2.9xW2.9 WWF UNO

BONDING COMPOUND



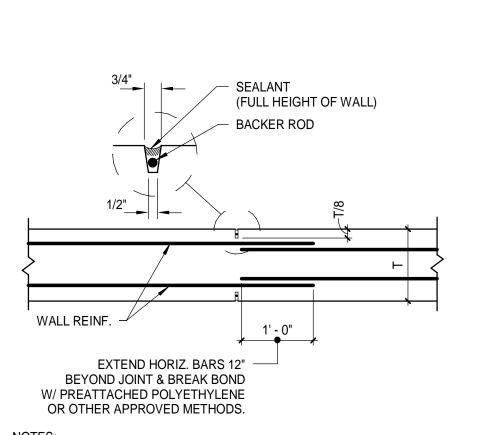
TYPICAL STEP IN TOP OF FOUNDATION WALL K1





SPLICE LENGTH TABLES (H11)

3/4" CHAMFER, TYP

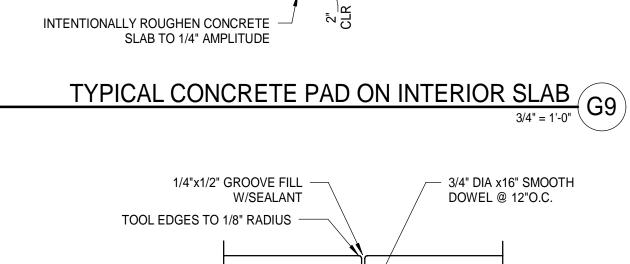


1. "TOP BARS" ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BAR.

C. CLEAR SPACE BETWEEN BARS IS TWICE BAR DIAMETER OR LARGER

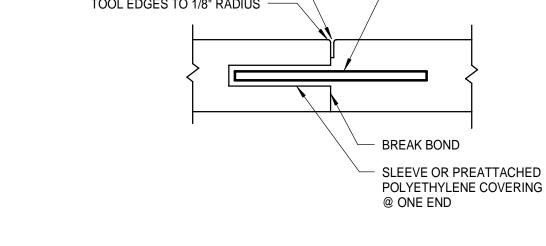
- NOTES: 1. MAX SPACING BETWEEN JOINTS SHALL BE 30'-0"
- 2. MAX DISTANCE FROM BUILDING CORNER TO JOINT SHALL BE 15'-0"
- 3. CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR CONTROL JOINTS AT CONTRACTOR'S OPTION.

TYPICAL CONTROL JOINT IN WALL E12



COORDINATE SIZES AND LOCATIONS

WITH MECH. DESIGNER



TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINT E9

TYPICAL SLAB-ON-GRADE CONTROL JOINT G5 TYPICAL WALL CORNER INTERSECTING REINFORCING (G1)

2" MIN RIGID INSULATION

(HYDROFOAM OR EQUAL)

VAPOR RETARDER

SAWCUT OR FORM JOINT W/PREMOLDED

PLASTIC, HARDBOARD, OR FIBERBOARD STRIP. TOOL SLAB EDGES TO 1/8"

> - WWF IF REQ'D BY TUBING MANUFACTURER

RADIUS FOR FORMED JOINTS.

- 2" DEEP TOOLED (NON-SAW CUT) CONTROL JOINT

─#4 @ 18"OC, EW

CONTROL JOINT

RADIANT HEAT

VAPOR RETARDER

WWF

TUBING

- RADIANT HEAT

TUBING

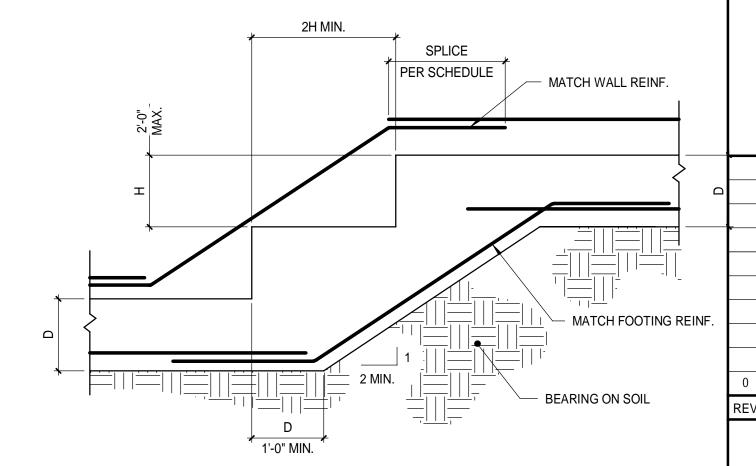
2" RIGID INSULATION

SEALANT

SEALANT

SEALANT

SECTION J8



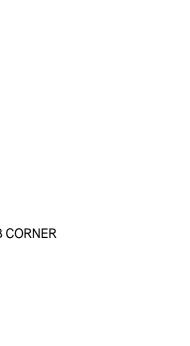
(2) #4 x 48" @ MID DEPTH - REENTRANT SLAB CORNER OF SLAB

TYPICAL REENTRANT SLAB REINFORCEMENT DETAIL D5

TYPICAL STEPPED FOOTING

3/4" = 1'-0"

D1



PIPE LOCATION CASES:

CASE 1 - PIPE ABOVE FOOTING:

SEE DETAIL A1/SB501 FOR TYPICAL FOUNDATION WALL REINFORCING. INDIVIDUAL PIPES W/ D < 12" SHALL BE INSTALLED W/ 8" MIN GAPS BETWEEN PIPES

MULTIPLE PIPES GROUPED TOGETHER CAN BE INSTALLED IN SINGLE BONDOUT:

18"x18" BONDOUTS MAY BE INSTALLED W/ A MIN 24" OF CONCRETE BETWEEN THEM. IF THE REQUIRED BONDOUT DOES NOT MEET CRITERIAL IN CASE 1B ABOVE,

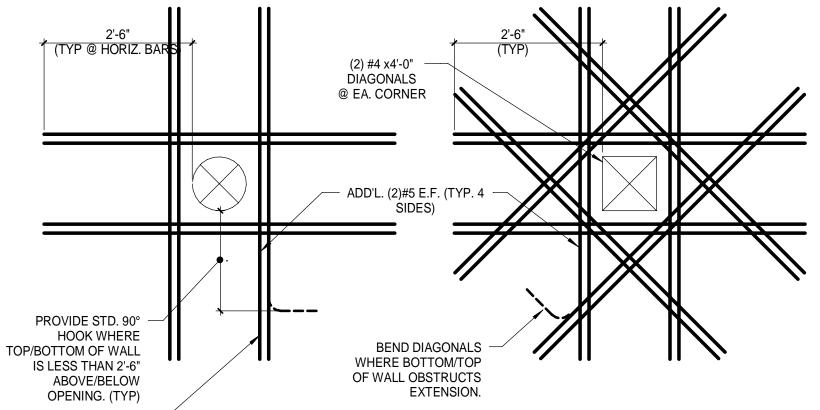
SUBMIT THE PROPOSED BONDOUT TO SER FOR REVIEW PRIOR TO CONSTRUCTION.

18"x18" MAX W/ A MIN OF 18" OF CONCRETE ABOVE THE BONDOUT. MULTIPLE

CASE 2 - PIPE AT BOT OF FOOTING: THICKEN FOOTING AS SHOWN ON DETAIL.

<u>CASE 3</u> - PIPE BELOW FOOTING: NO MODIFICATION TO FOOTING REQIRED UNLESS SHOWN OTHERWISE ON FDN

CASE 4 - PIPE LOCATED AT, OR NEAR, FOOTING AND NOT MEETING CRITERIA FOR CASE 2 STEP FOOTING SO THE PIPE IS LOCATED ABOVE THE TOP OF THE FOOTING. APPROX LOCATIONS ARE SHOWN ON FDN PLAN.



EXTEND VERTICAL BARS FOR FULL HEIGHT OF WALL

PROVIDE ADDITIONAL REINFORCEMENT AS SHOWN FOR OPENINGS IN FOUNDATION WALLS

REFER TO ARCHITECTURAL, PLUMBING, MECHANICAL, & ELECTRICAL DRAWINGS FOR LOCATIONS.

- WITH ANY DIMENSIONS >12", EXCEPT WHERE OTHERWISE NOTED.
- PROVIDE ONE LAYER OF ADDITIONAL REINFORCEMENT AT WALLS LESS THAN 10" THICK.
- PROVIDE 2 LAYERS AT WALLS 10" AND THICKER.

TYPICAL REINFORCED OPENING IN FOUNDATION WALL OR SLAB

3/4" = 1'-0"

A11

TYP @ CASES 1, 2, & 4: SEE PLUMBING SPECIFICATIONS FOR PIPE PENETRATIONS THRU CONCRETE/MASONRY CASE 4 REQUIREMENTS. CASE 1 CASE 2 T.O. SLAB T.O. FOOTING - TYP. FTG. REINF. 2' - 0" 2' - 0" MIN MIN CASE 3 STEEL SLEEVE NOTES: . CONTRACTOR SHALL CONFIRM IN FIELD LOCATIONS WHERE THICKER FTG. IS REQ'D. (SEE PLUMBING DWG. FOR REQ'D SLEEVE) 2. NO PIPE PENETRATIONS ARE ALLOWED THRU CONCRETE PIERS. 3. REFER TO ELECTRICAL DWG FOR ELEC CONDUIT PENETRATION DETAIL

CONSTRUCTION GUIDELINES - WALL FOOTING AT PIPE PENETRATION

3/4" = 1'-0"

A1

A/E OF RECORD: JOB CAPTAIN: DRAWN BY:

ISSUED FOR CONSTRUCTION 08-14-20 DATE **ISSUED FOR CONSTRUCTION** 08-14-20 CURRENT ISSUE STATUS: STATE OF MAIN STEELE 75 Washington Ave

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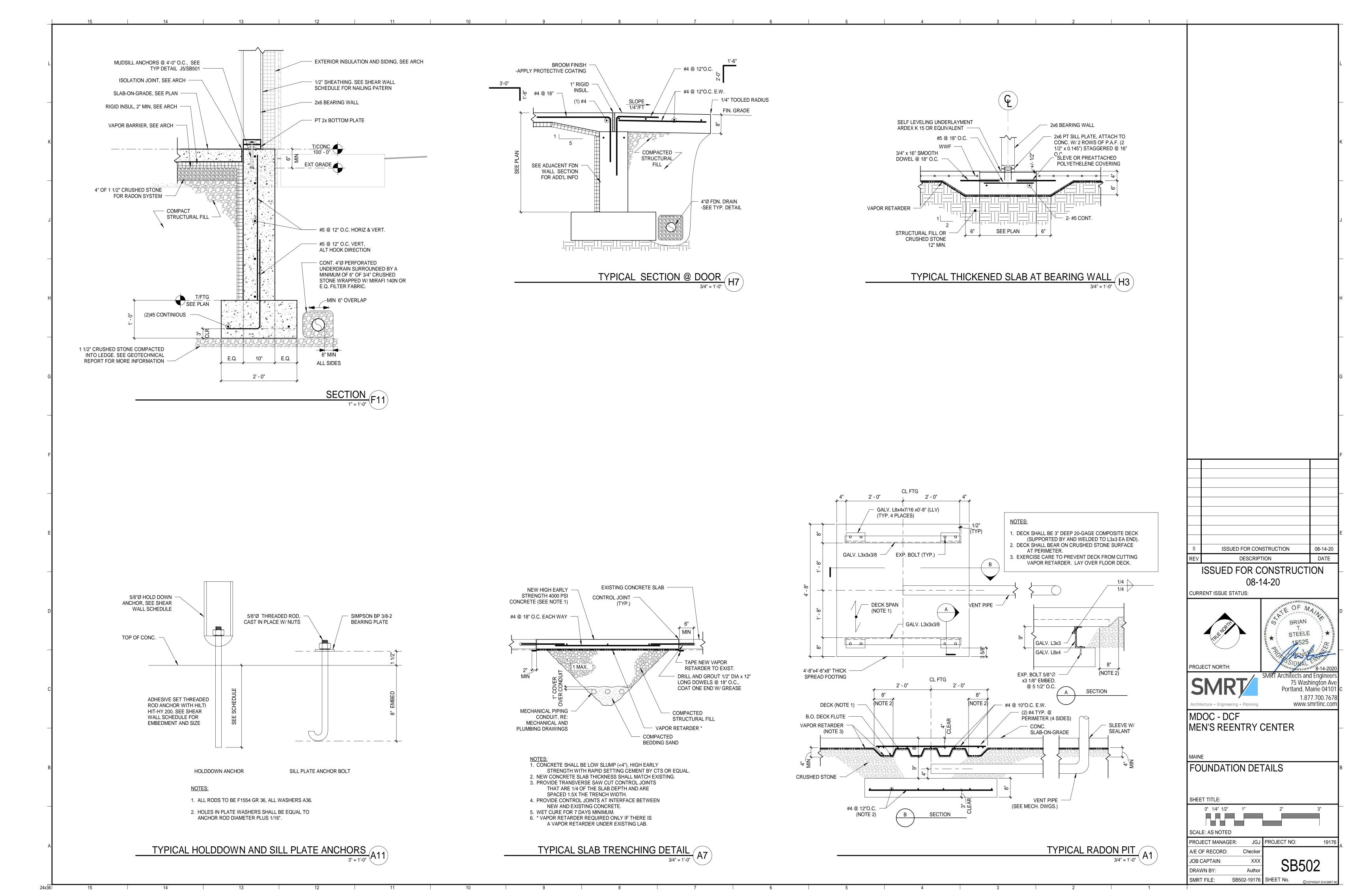
FOUNDATION DETAILS

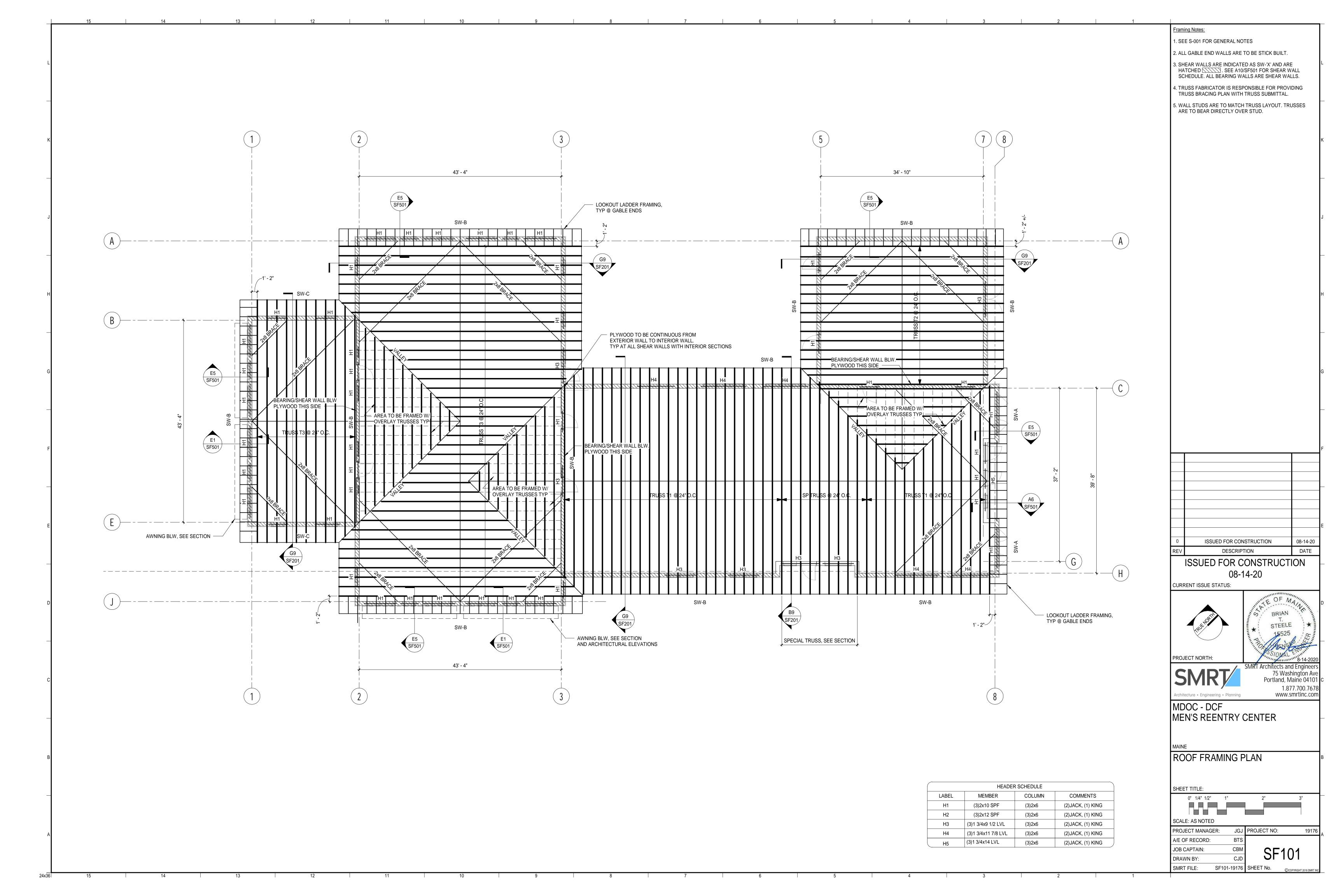
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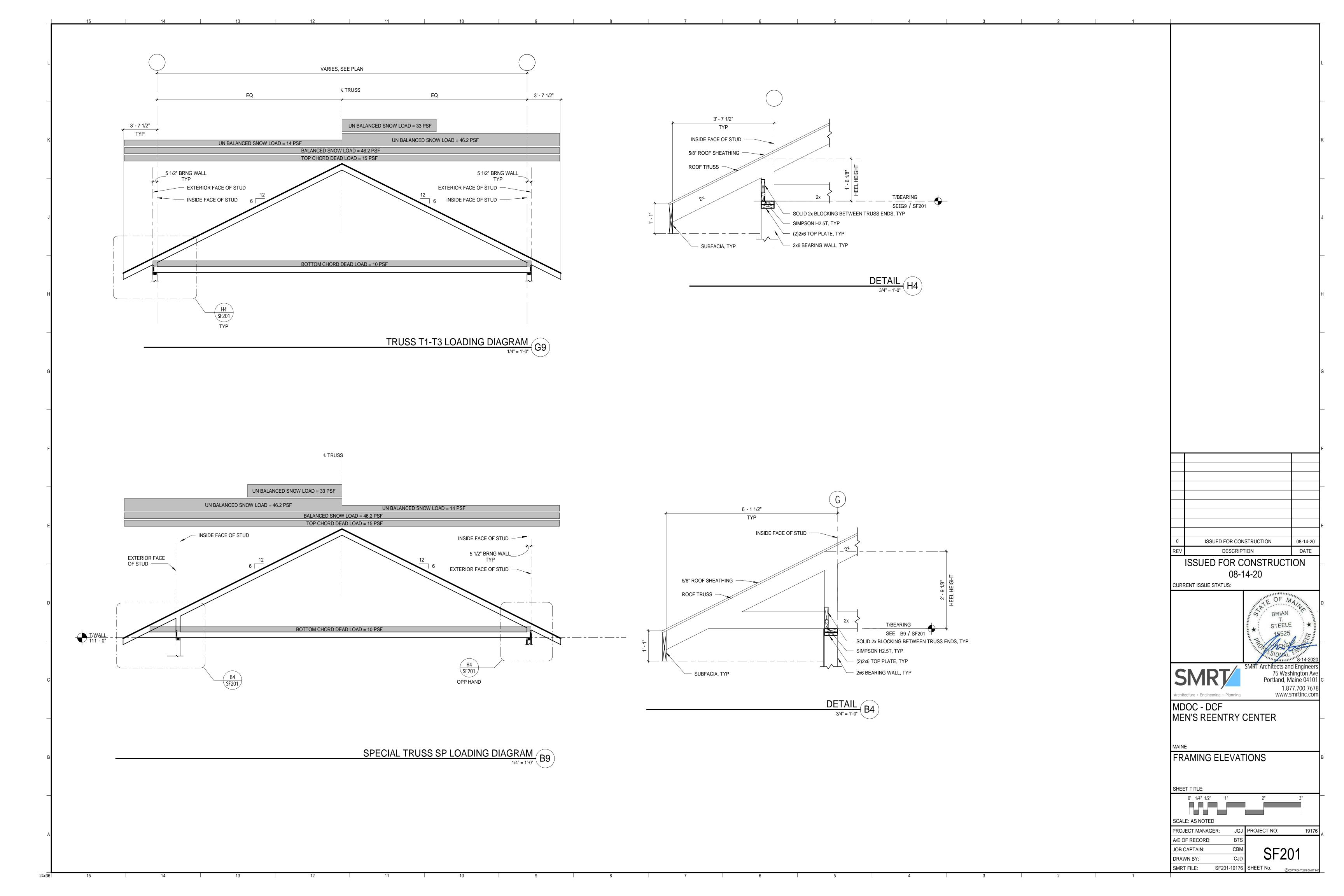
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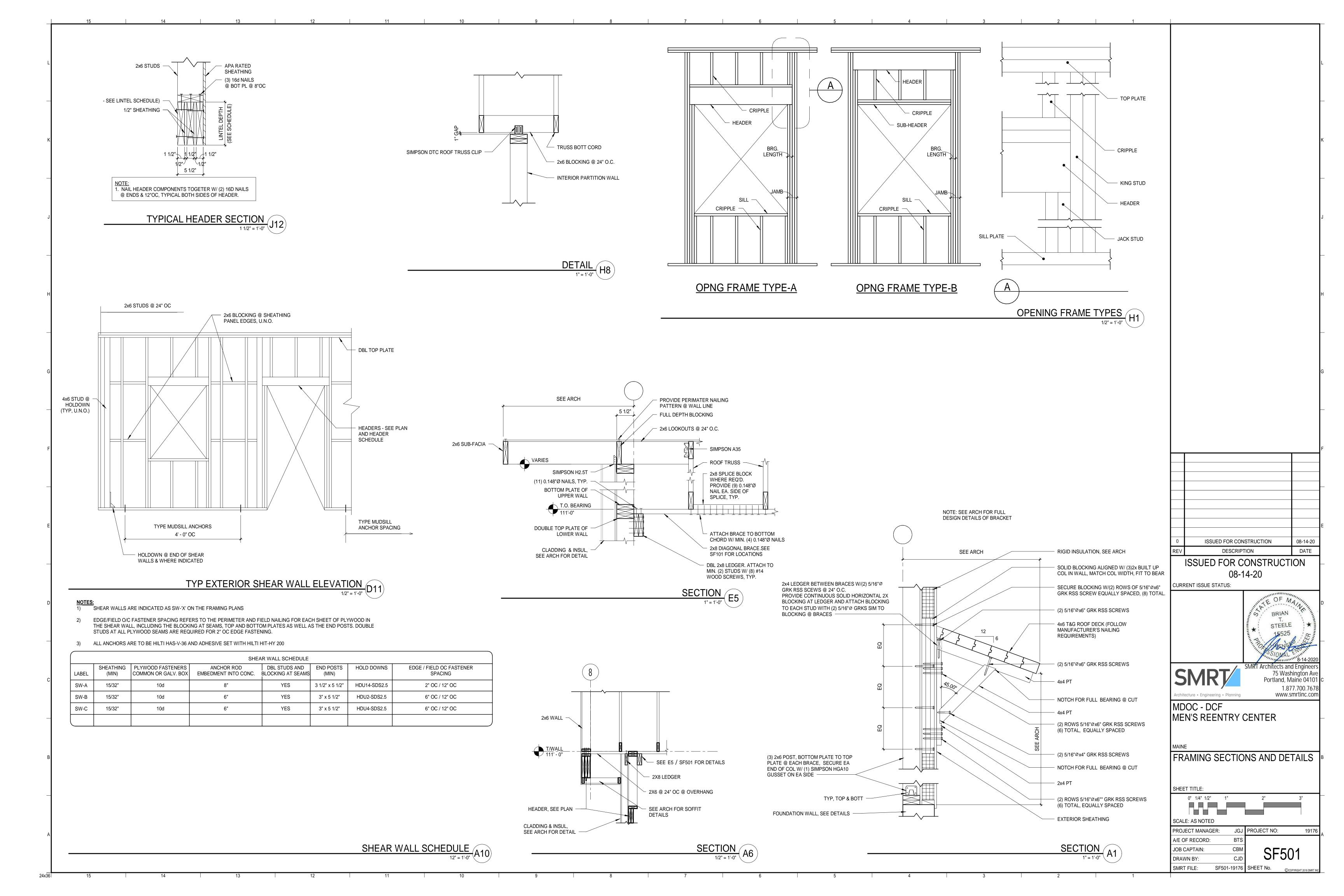
SCALE: AS NOTED PROJECT MANAGER: JGJ PROJECT NO:

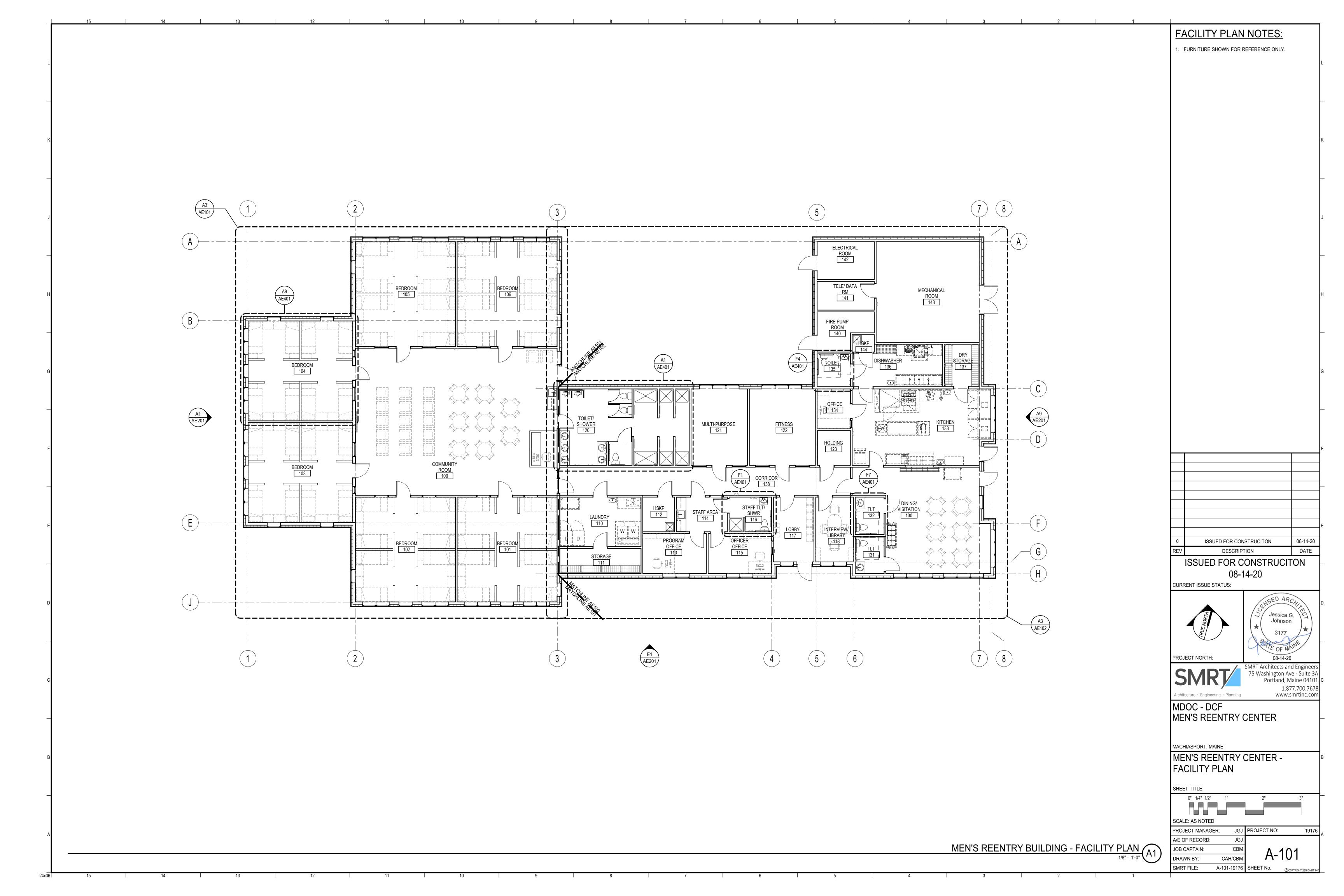
SB501-19176 SHEET No.











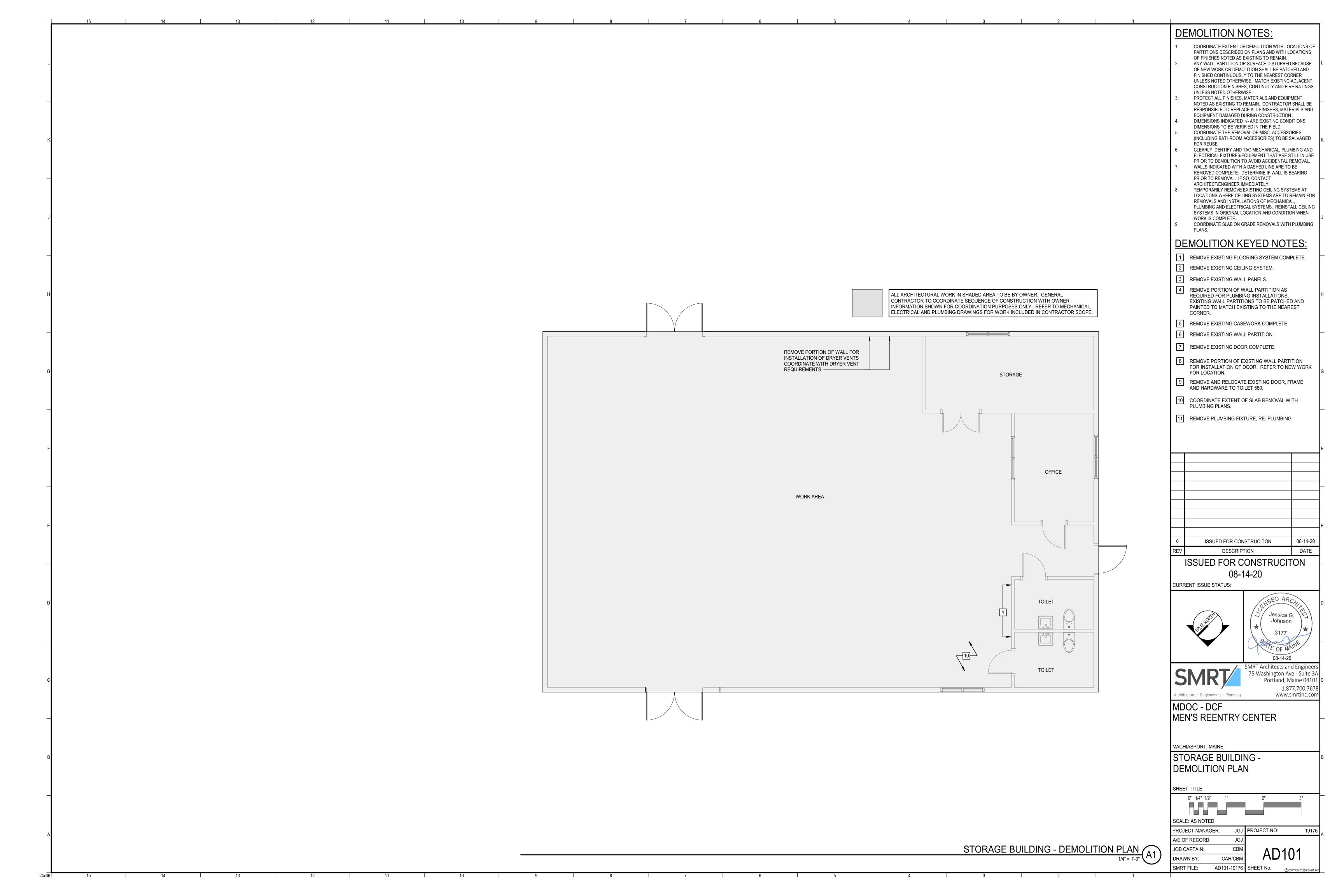
FACILITY PLAN NOTES: ALL ARCHITECTURAL WORK IN SHADED AREA TO BE BY OWNER. GENERAL CONTRACTOR TO COORDINATE SEQUENCE OF CONSTRUCTION WITH OWNER. 1. FURNITURE SHOWN FOR REFERENCE ONLY. INFORMATION SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR WORK INCLUDED IN CONTRACTOR SCOPÉ. A1 AE103 **/_____** ~-----570 53 SF OFFICE 540 167 SF CONSULT 560 166 SF OFFICE 640 99 SF STORAGE 620 1843 SF UTILITY 553 26 SF CIRCULATION 500 260 SF 08-14-20 ISSUED FOR CONSTRUCITON DATE OFFICE 530 167 SF OFFICE 550 130 SF ISSUED FOR CONSTRUCITON 08-14-20 CURRENT ISSUE STATUS: Jessica G Johnson 08-14-20 SMRT Architects and Engineers
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Portland, Maine 04101 1.877.700.7678 www.smrtinc.com MDOC - DCF MEN'S REENTRY CENTER MACHIASPORT, MAINE ADMIN BUILDING AND STORAGE BUILDING - FACILITY PLANS 0" 1/4" 1/2" 1" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER: STORAGE BUILDING FLOOR PLAN

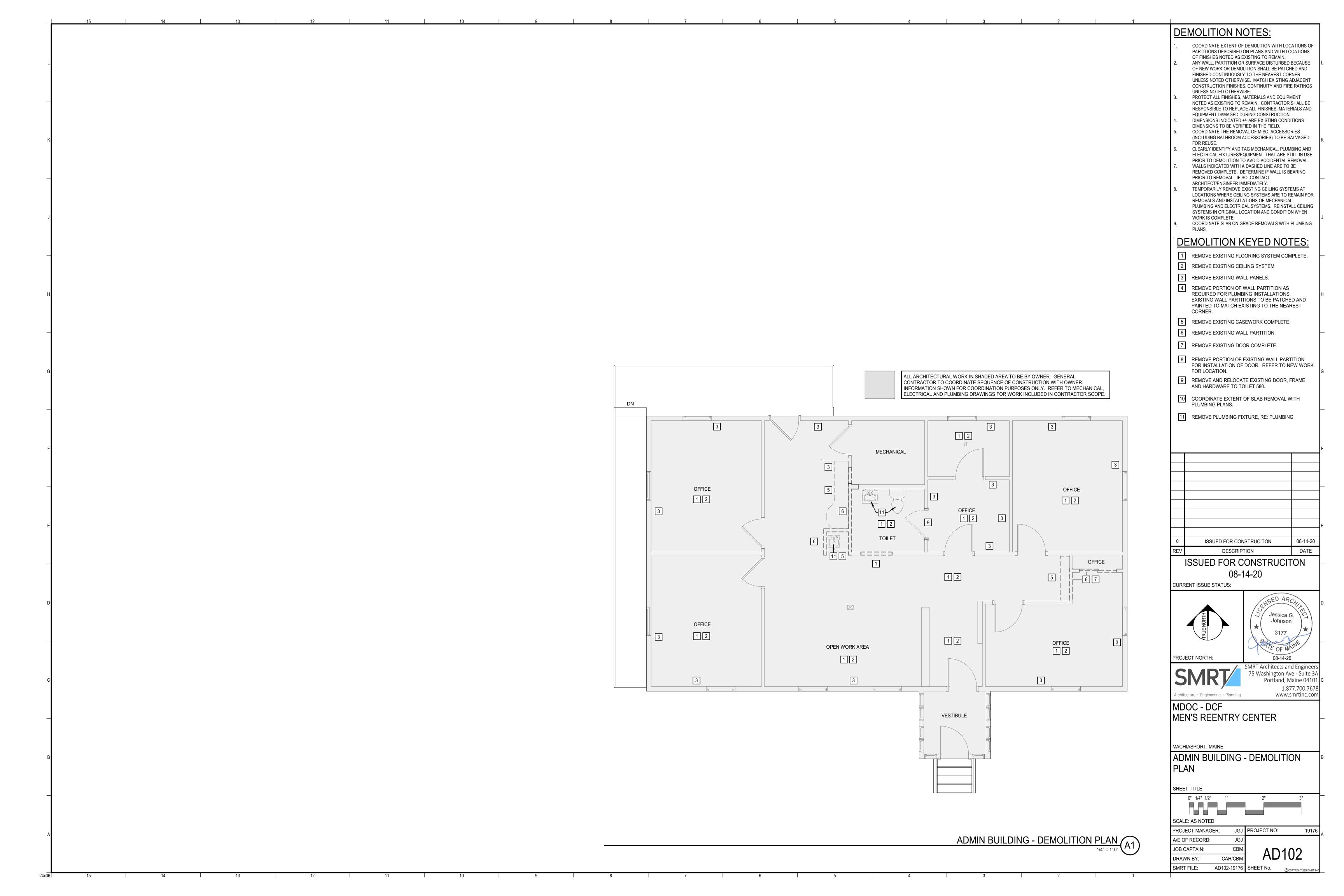
1/8" = 1'-0"

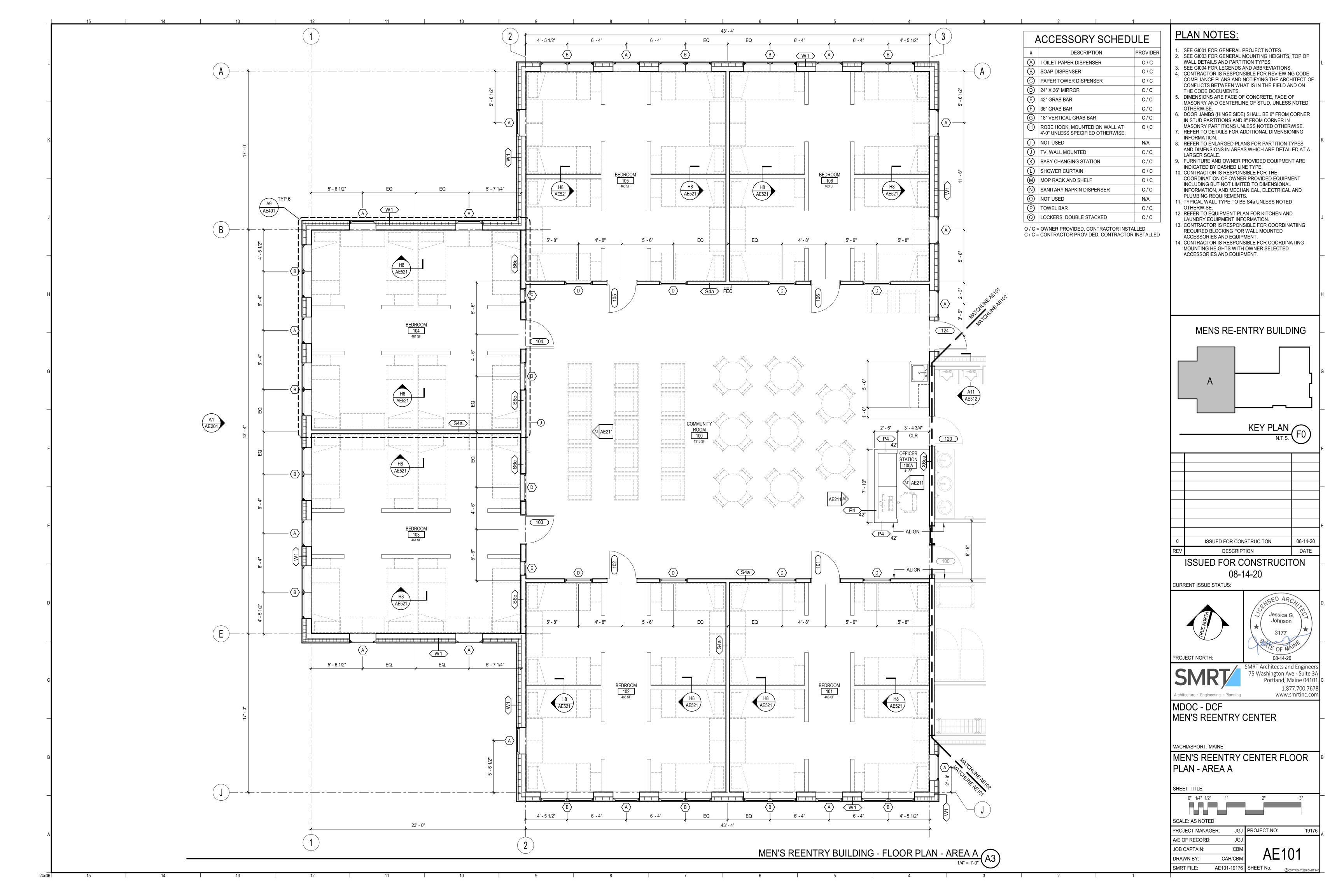
A9 ADMIN BUILDING FACILITY PLAN

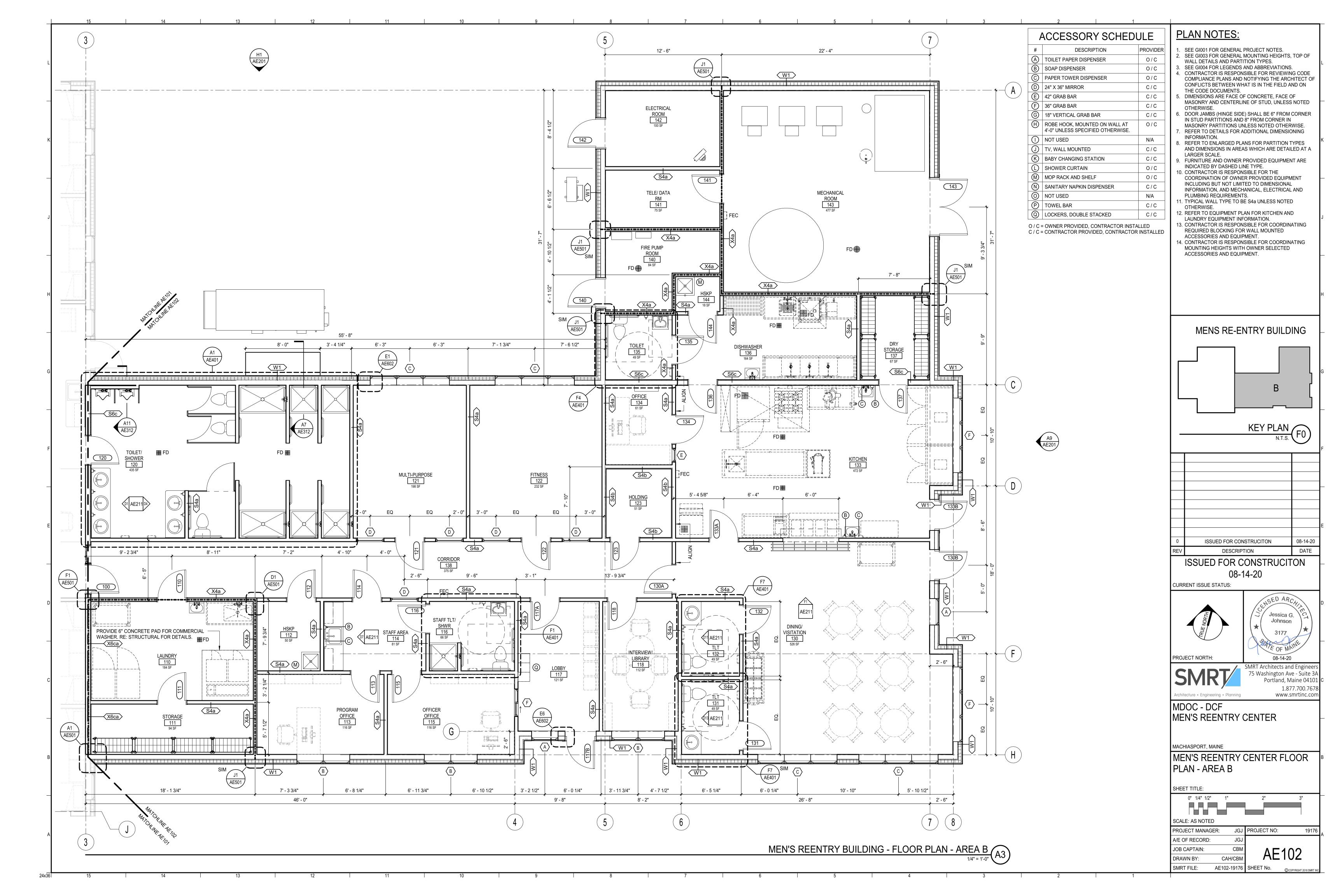
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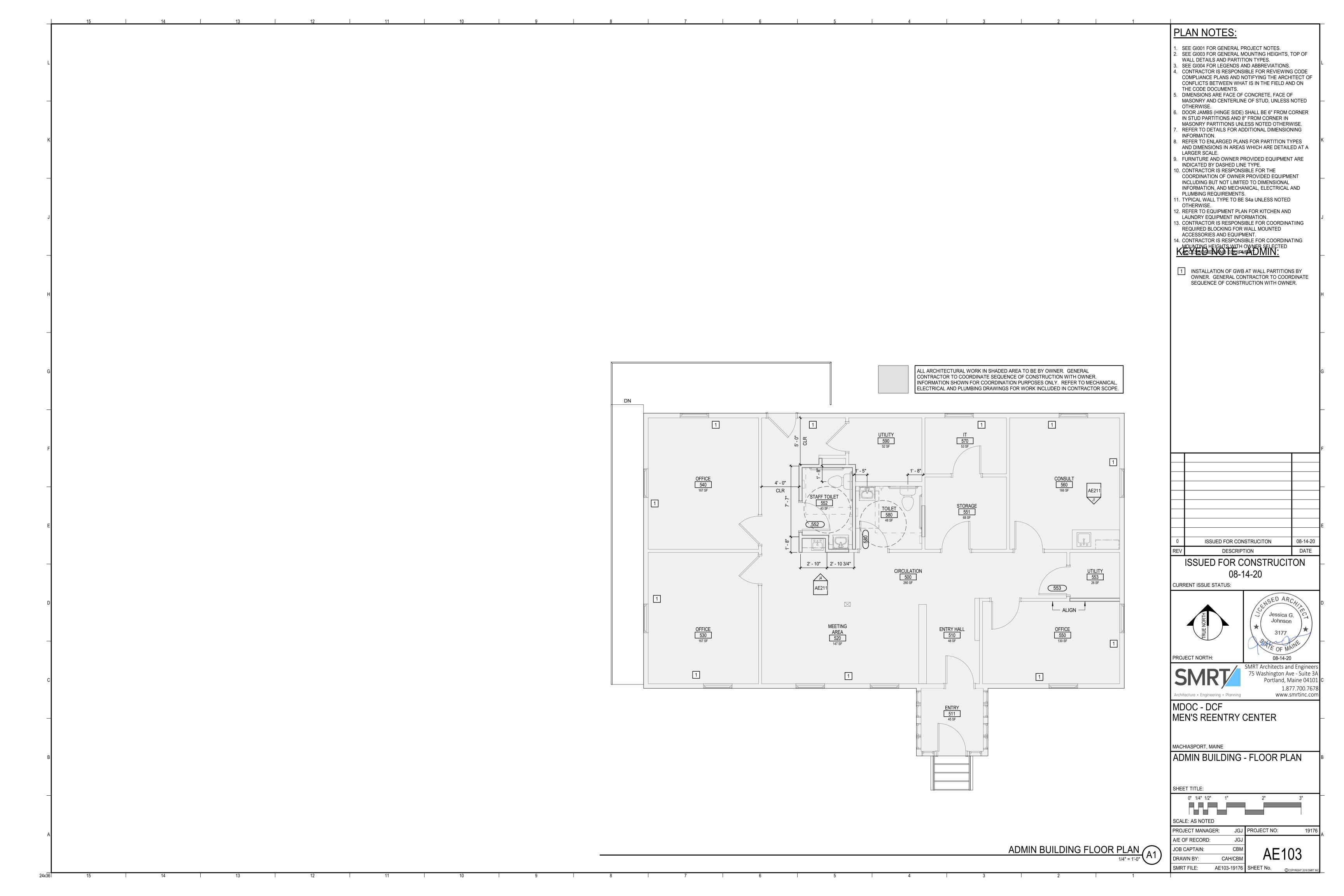
A2 A/E OF RECORD: JOB CAPTAIN: CAH/CBM DRAWN BY: A-102-19176 SHEET No. SMRT FILE:

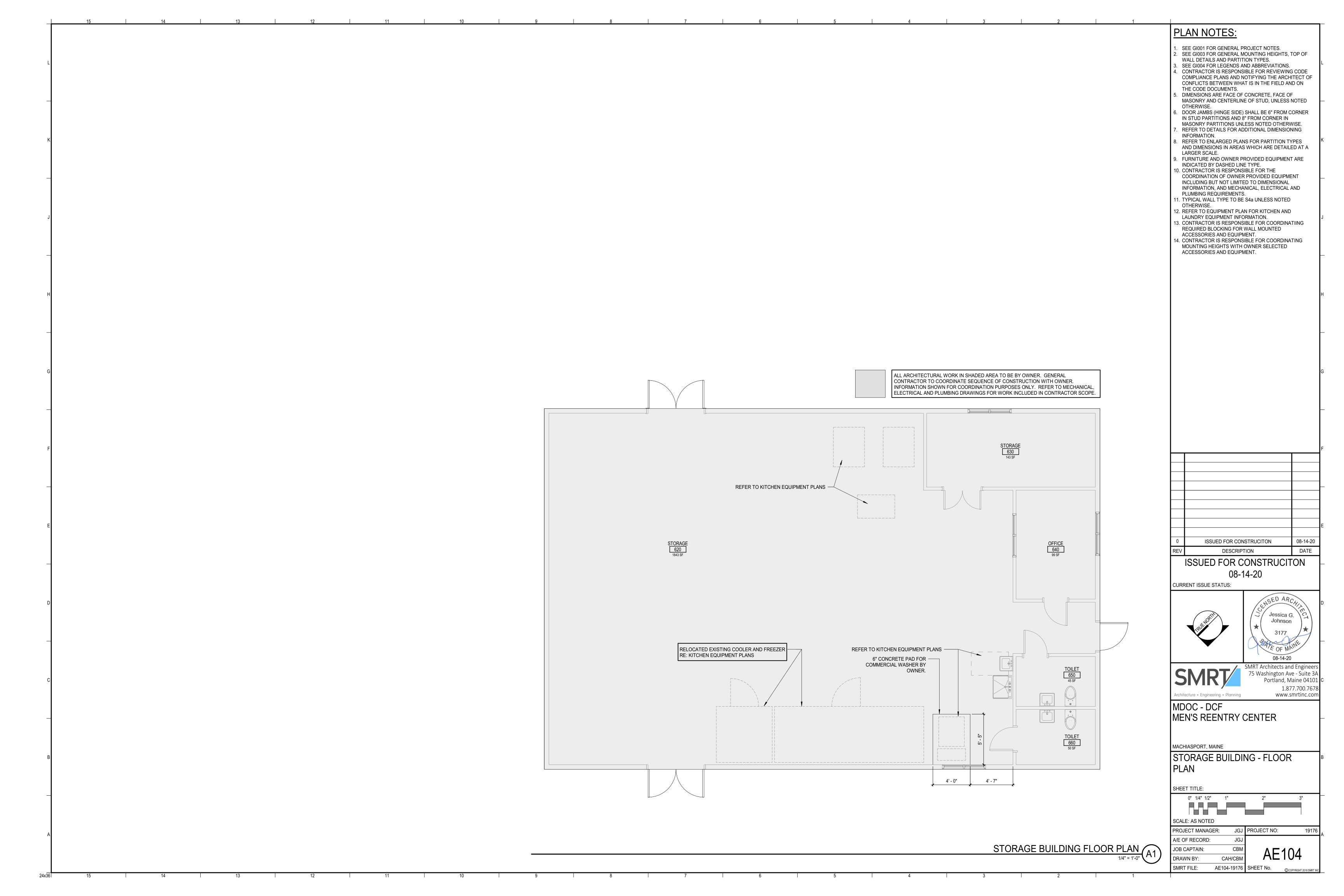


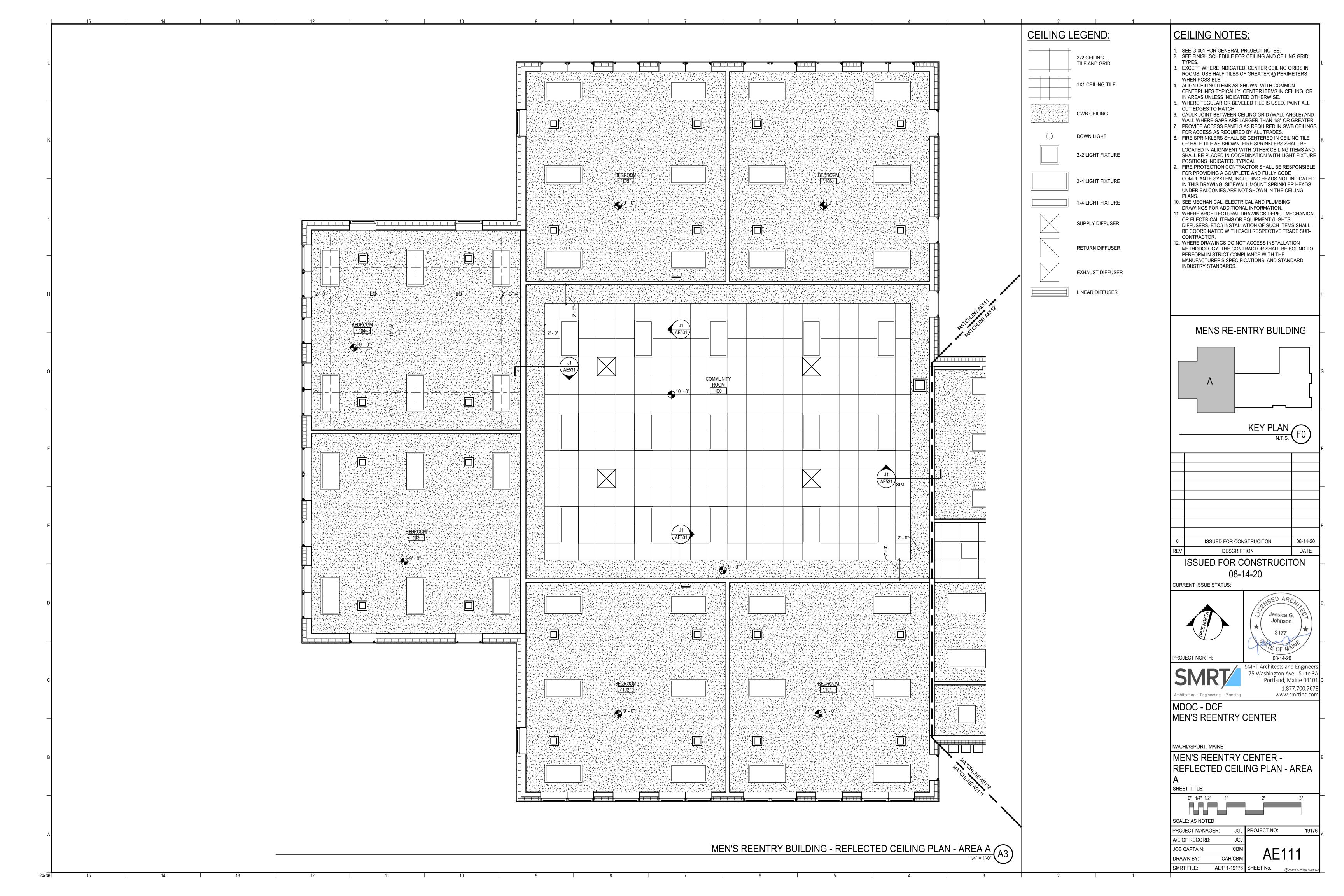


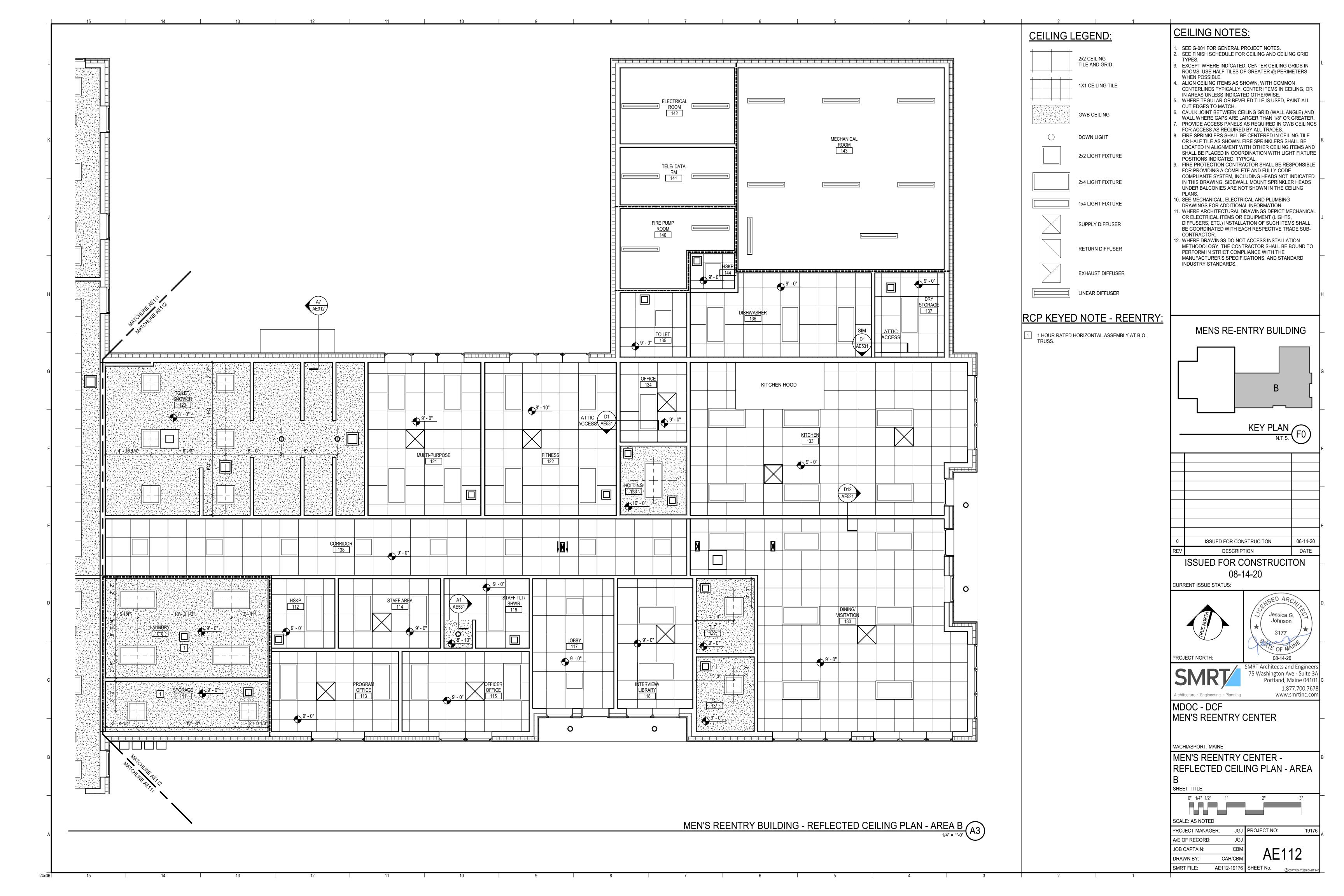


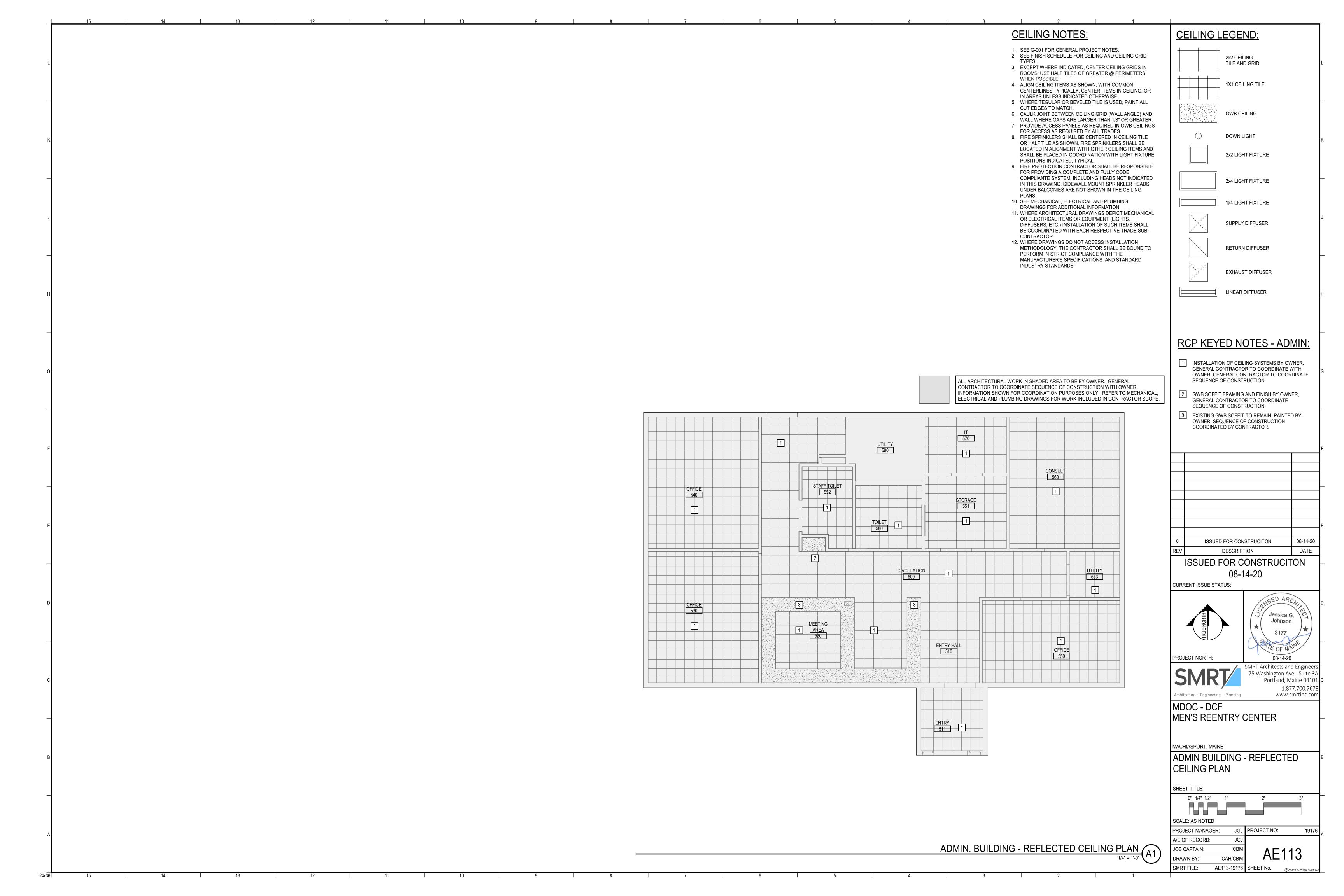


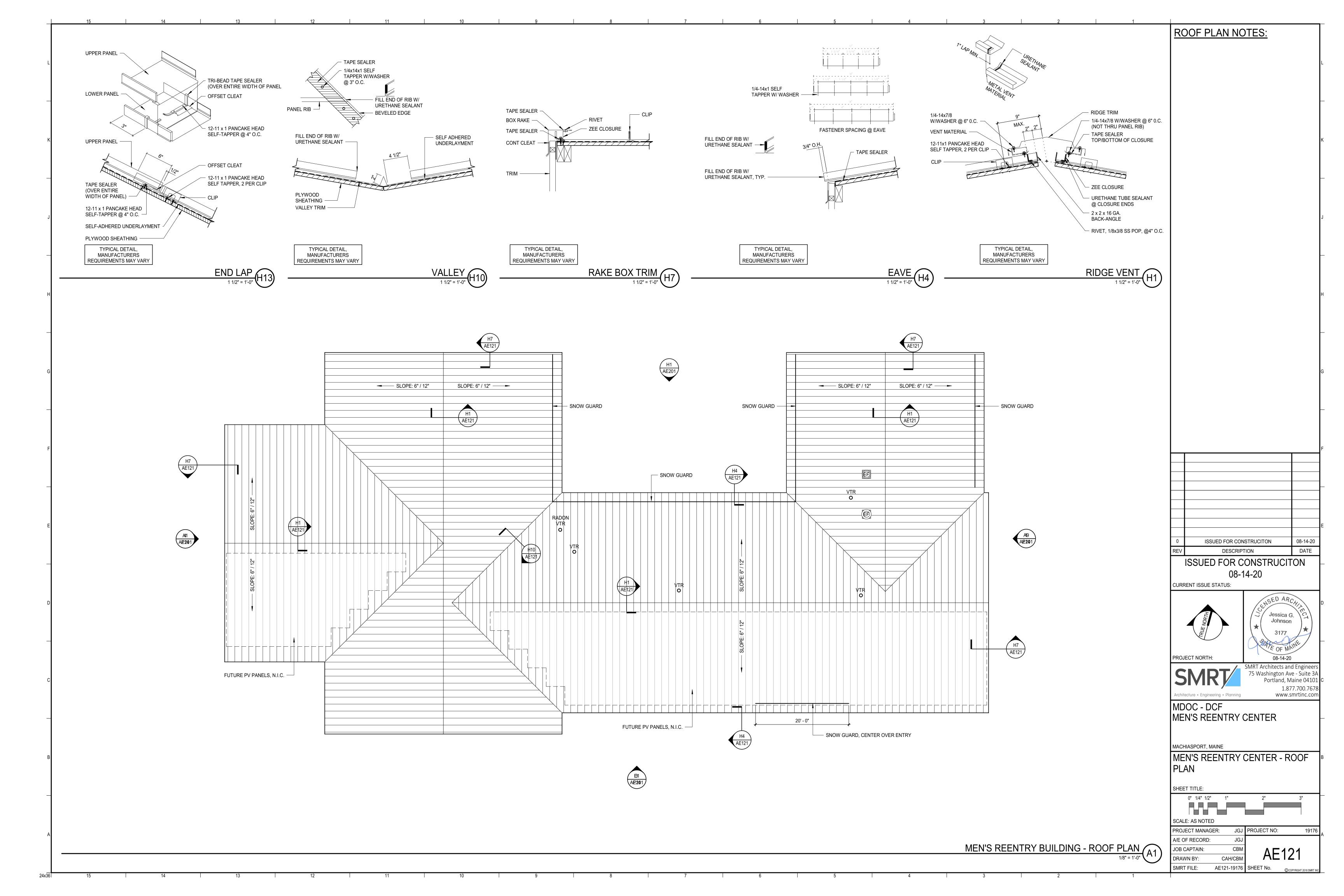


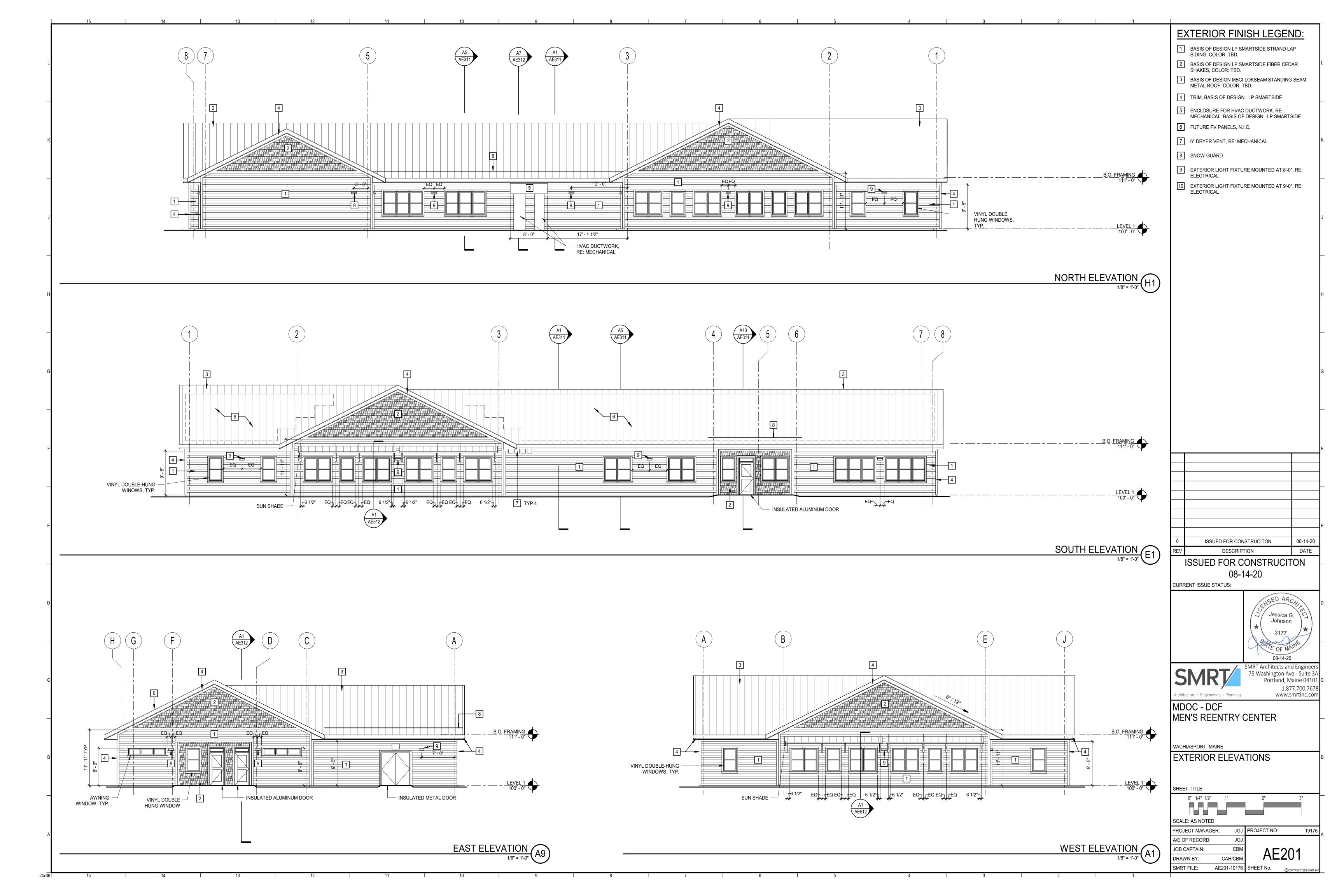


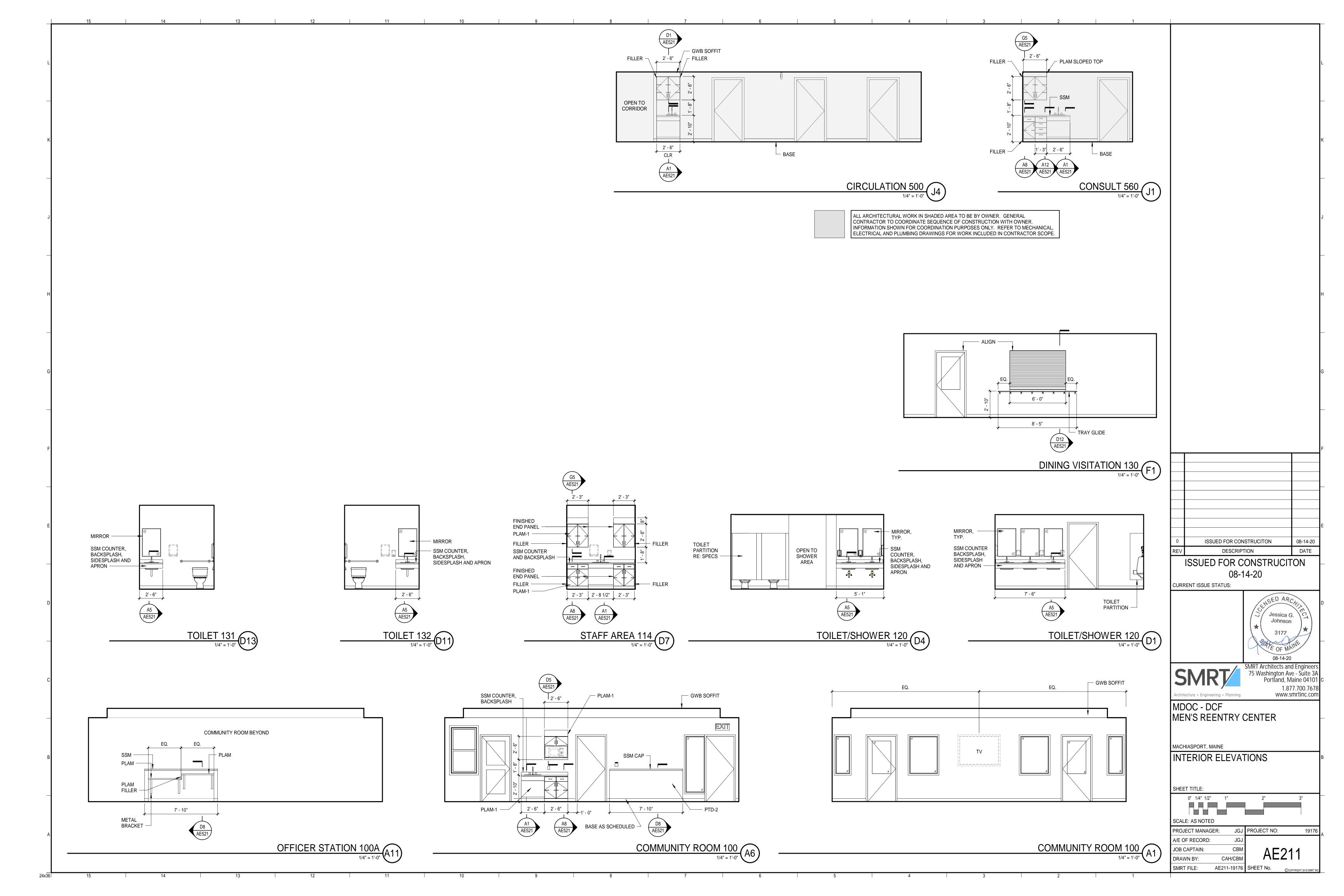


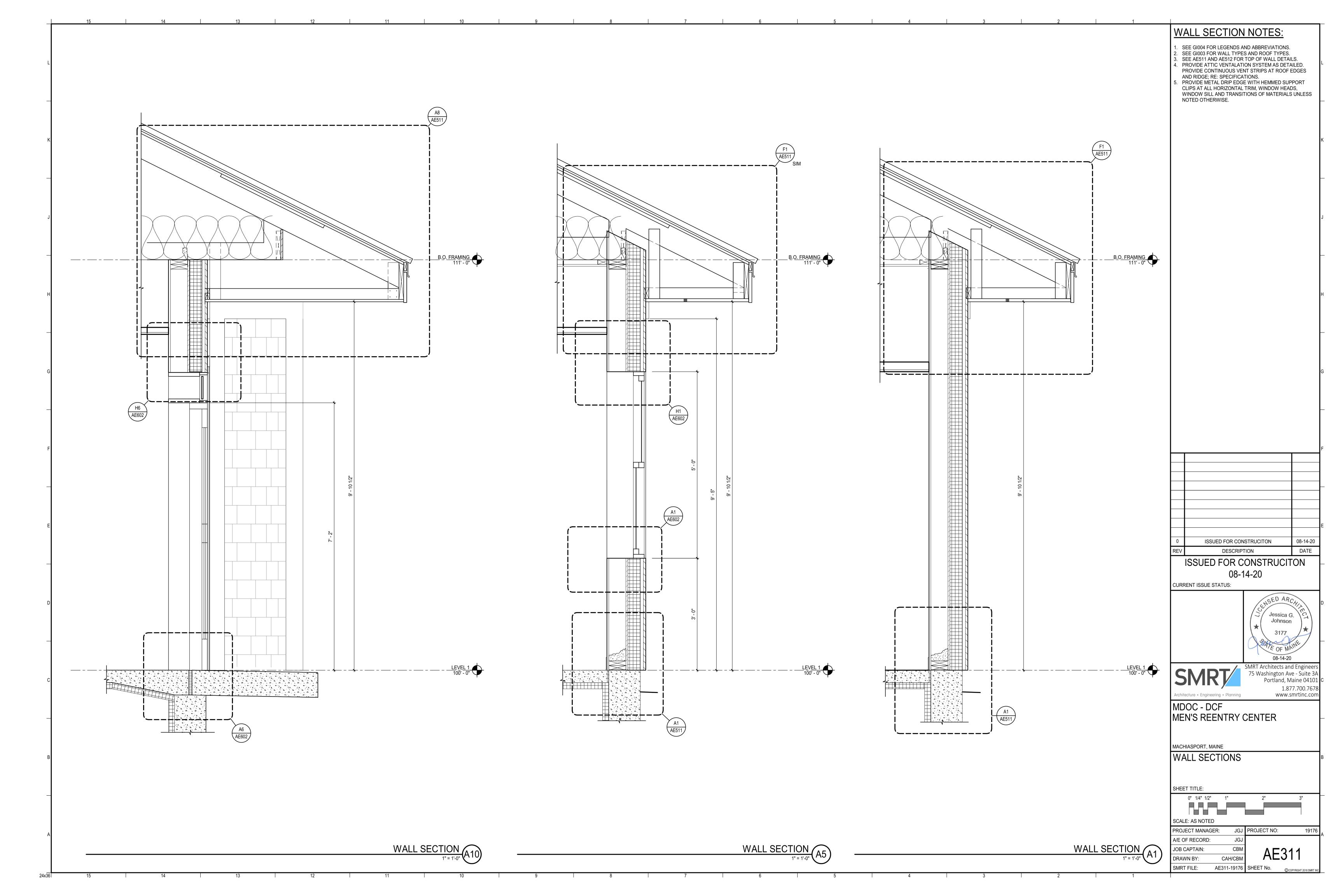


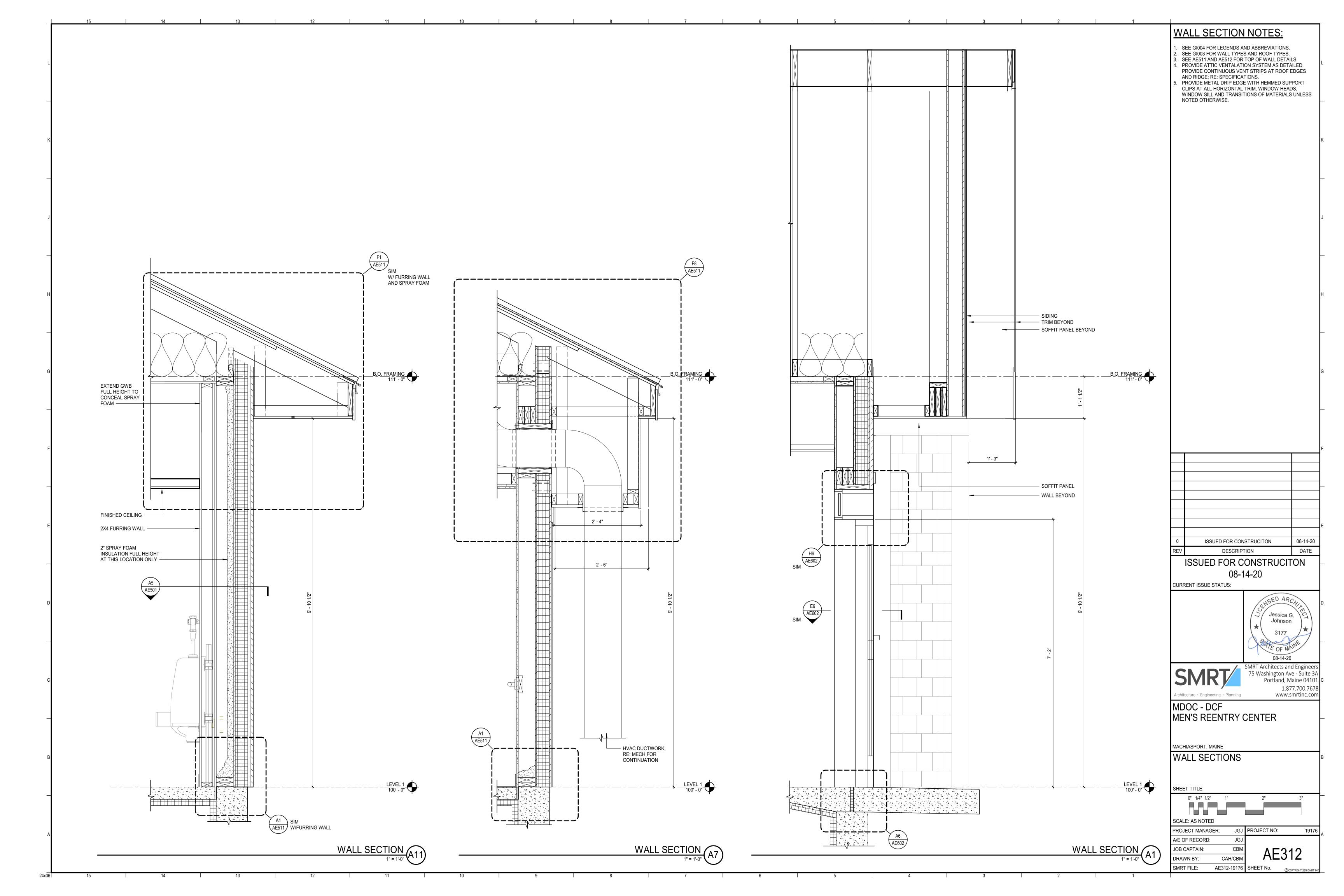


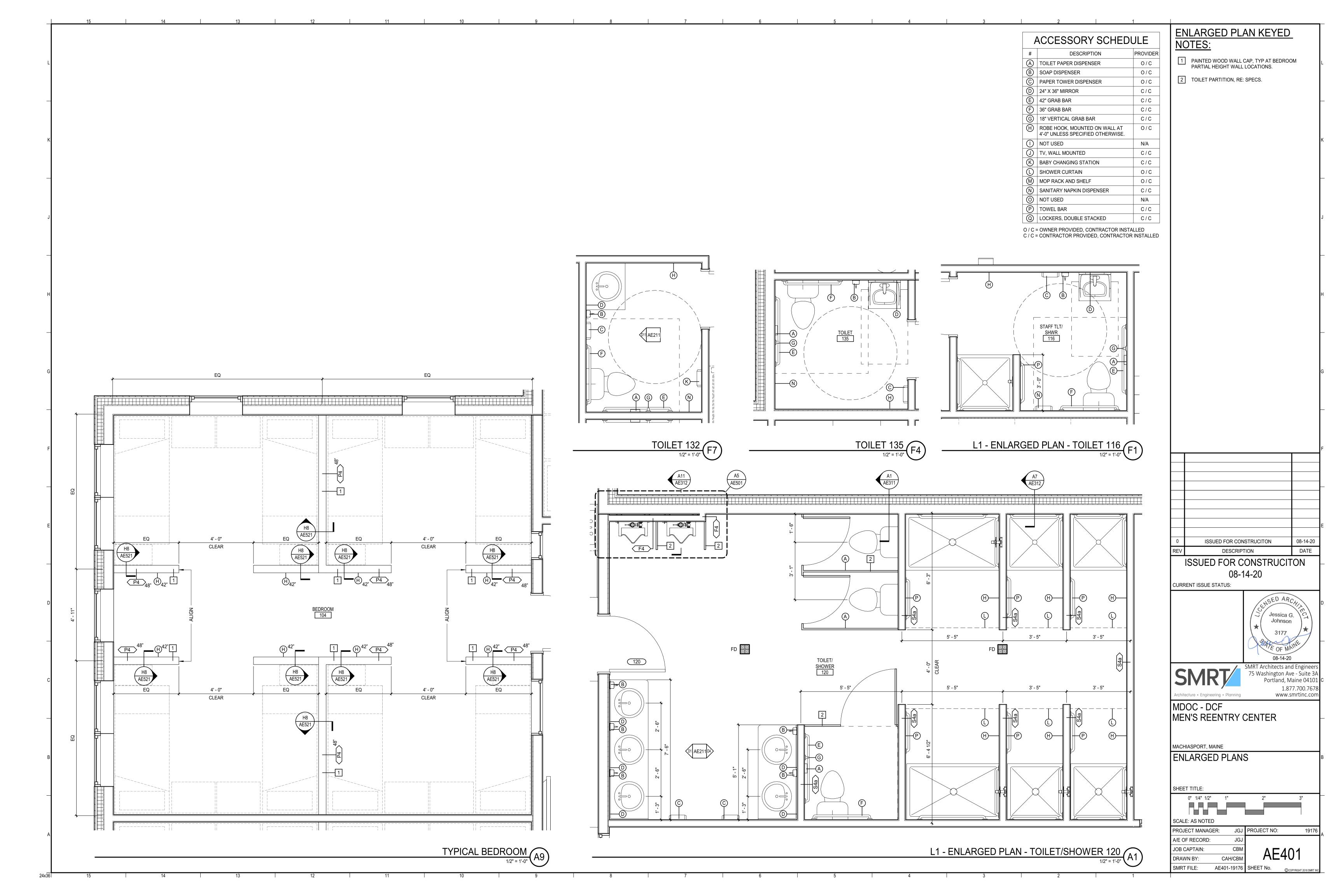


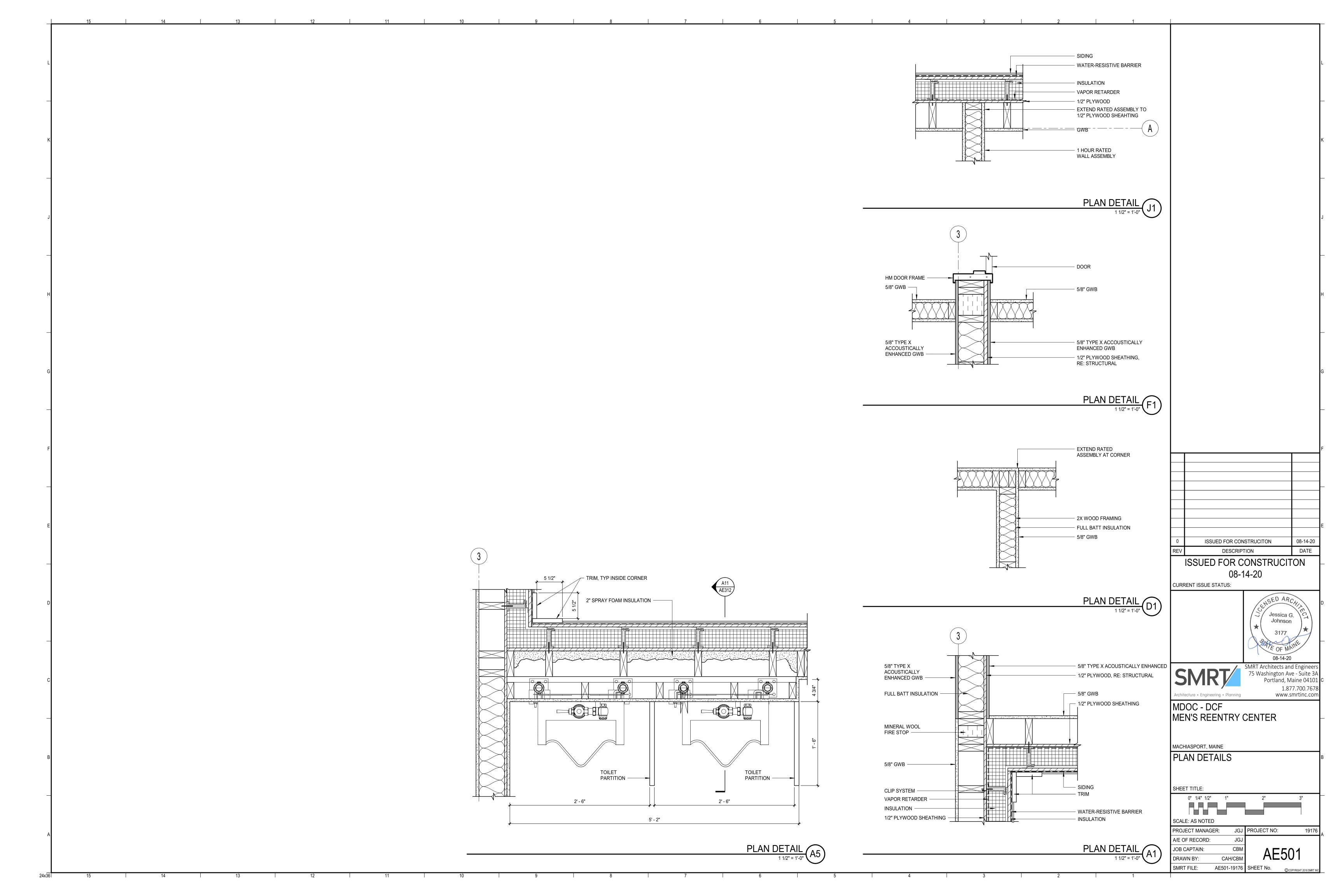


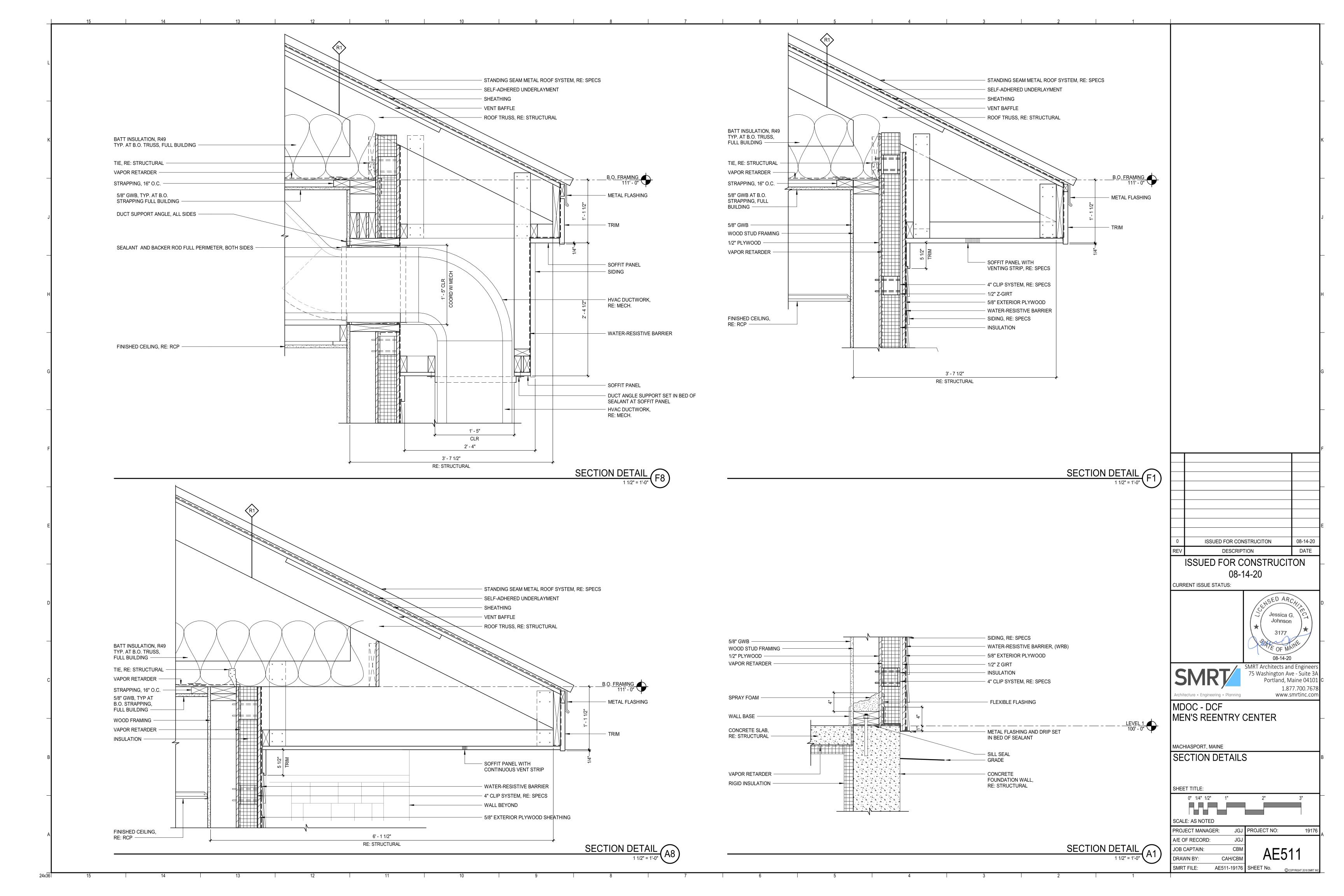


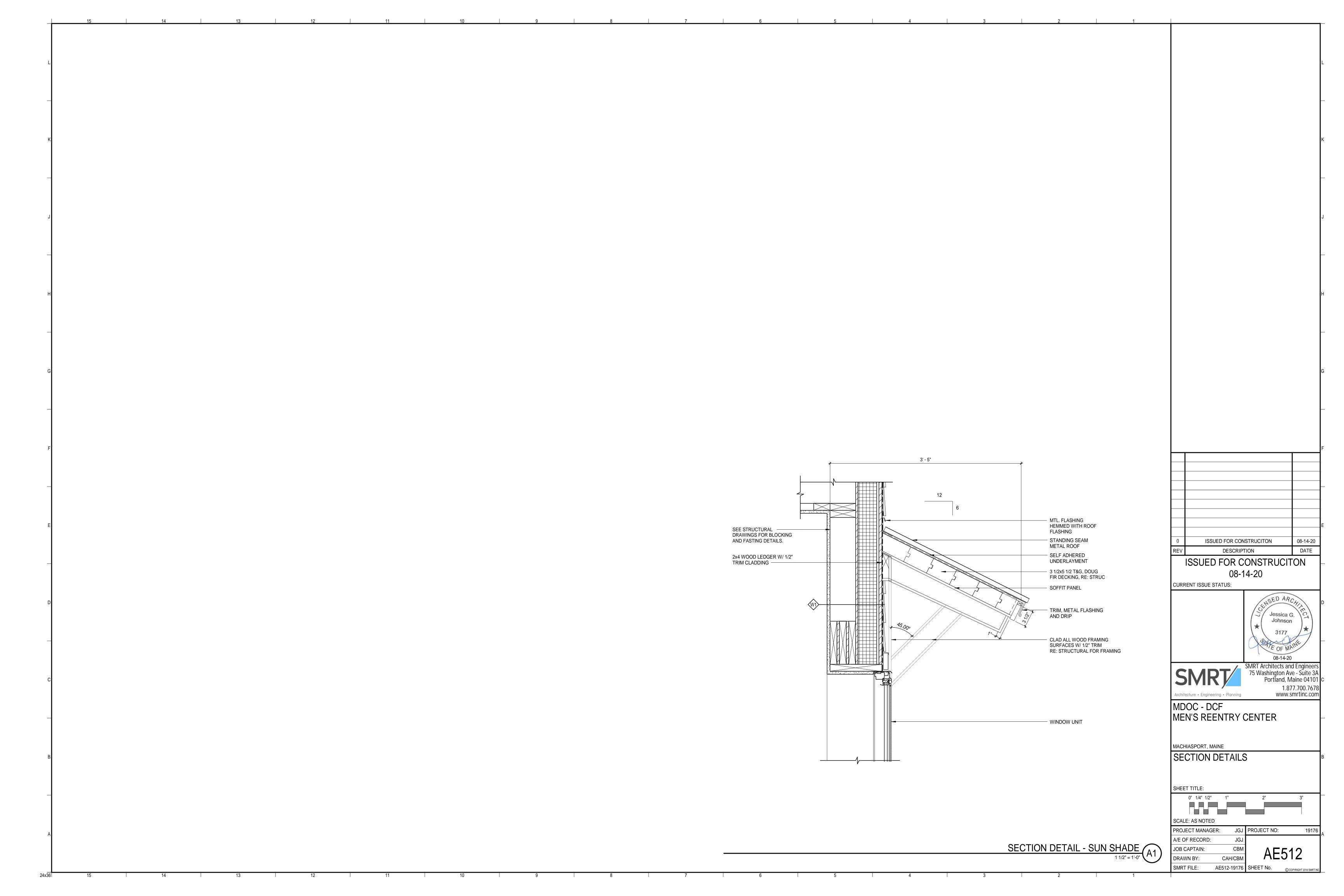


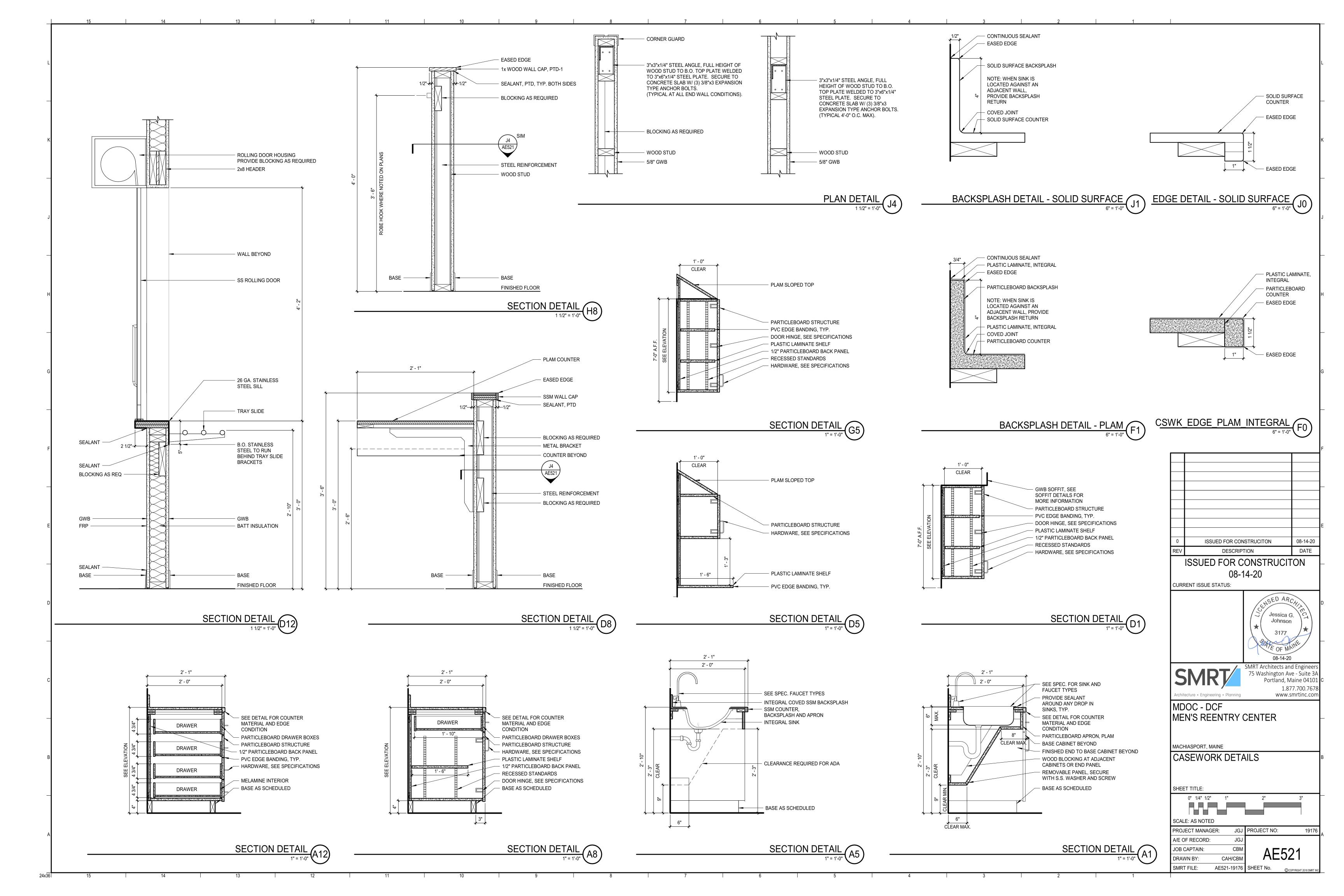


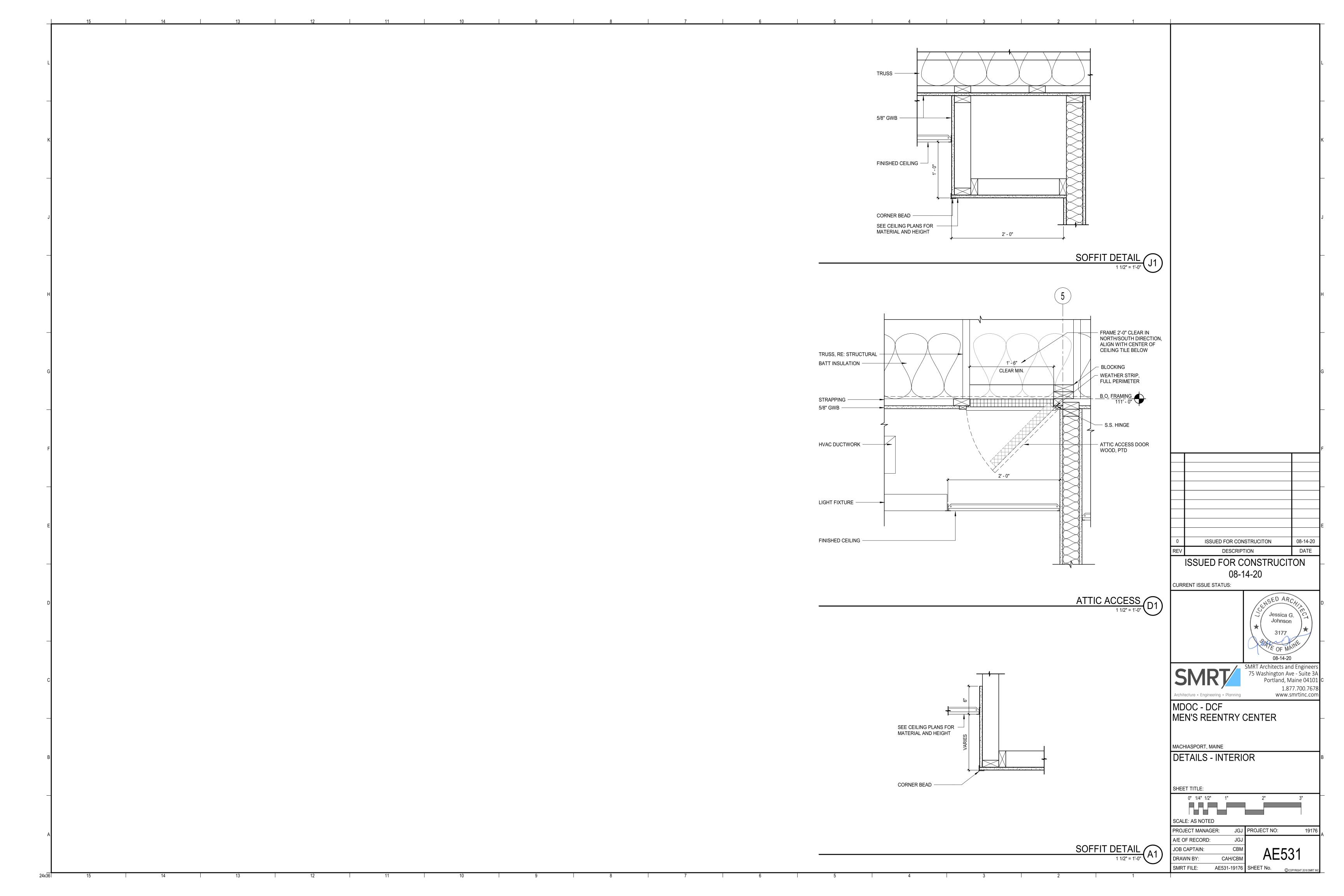




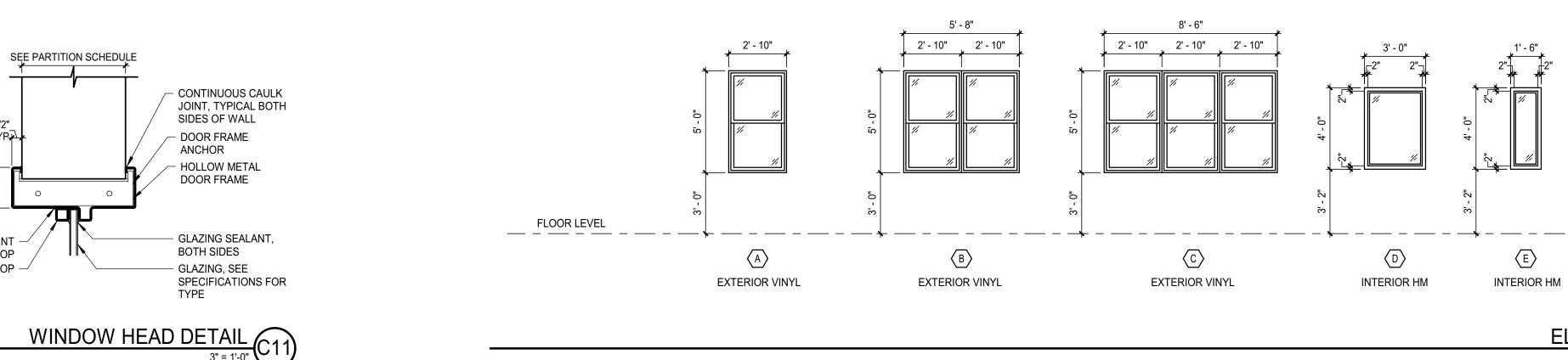


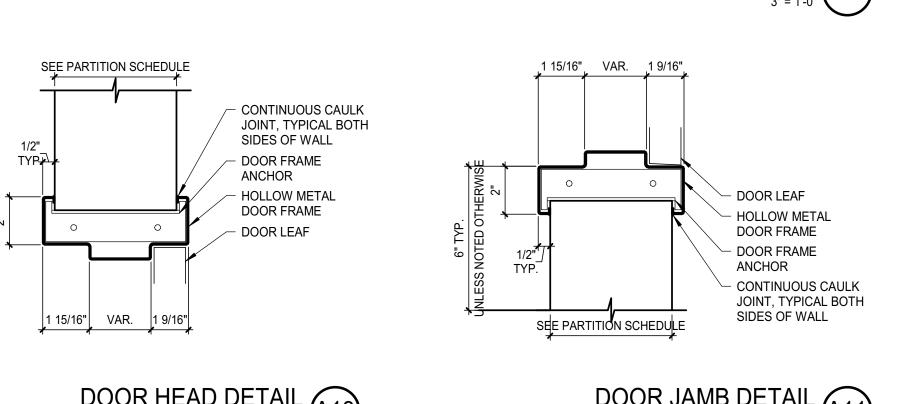






	T			DOOD			ı		DOOR SCHE	DULE	•			NOTES		ALL SWINGING DOORS TO BE
DOOR			THICKNES	DOOR				_	FRAME			HARDWAR	FIRE	NOTES	DOOR	OTHERWISE.
NUMBER	WIDTH	HEIGHT	S		E MATERIAL	GLAZING	TYPE	MATERIAL	. HEAD DTL JAMB DTL	SILL DTL	GLASS	E	RATING	REMARKS	NUMBER	ALL DOORS SHALL BE 3/4" UN WHEN THERE IS A BOTTOM F
100	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F3	НМ	A13/AE601 A11/AE601	-	TEMP	10	-		100	SPECIFICALLY NOTED OTHER
101	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	8	-		101	3. ALL DOORS WITH BOTTOM FI
102	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	НМ	A13/AE601 A11/AE601	-	-	8	-		102	THRESHOLDS SHALL HAVE M
103	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	8	-		103	RECOMMENDED STANDARD 4. GLAZING NOTED ON DOOR S
104	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	8	-		104	AND BORROWED LIGHT IN TH
105	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	8	-		105	5. SEE SPECIFICATIONS FOR G
106	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	8	-		106	INFORMATION. 6. GLAZING TO BE FREE OF STA
110	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	TEMP	10	45		110	UNLESS REQUIRED BY CODE
111	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	6	-		111	7. GLAZING STOPS ON BORROV
112	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	6a	-	CARD READER	112	LOCATED ON THE ROOM SID
113	3' - 0"	7' - 0"	1 3/4"	HG2	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	7	-		113	GLAZING STOP TIGHT TO FRA APPEARANCE.
114	3' - 0"	7' - 0"	1 3/4"	HG2	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	4	-	CARD READER	114	8. CAULK PERIMETER OF DOOR
115	3' - 0"	7' - 0"	1 3/4"	HG2	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	7	-		115	THE WALL. MATCH FRAME CO
116	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	9	-	0400 054050	116	9. CAULK EDGES AND VOIDS AL HOLLOW METAL FRAMES PR
117A	3' - 0"	7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	2	-	CARD READER	117A	PROVIDE A CLEAN FINISHED
117B	3' - 0"	7' - 0"	1 3/4"	HG2	ALUM	INSUL/TEMP	F1	AL	H6/AE602 E6/AE602	-	-	1 4	-	CARD READER	117B	10. ALL LABELS ON RATED DOOF
118	3' - 0"	7' - 0" 7' - 0"	1 3/4"	HG	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	-	-	CARD READER	118	CLEARLY VISIBLE UPON INSF
120 121	3' - 0" 3' - 0"	7 - 0"	1 3/4" 1 3/4"	HG2	WD WD	TEMP	F1 F1	HM HM	A13/AE601 A11/AE601 A13/AE601 A11/AE601	-	-	15	-	CARD READER	120 121	
121	3' - 0"	7' - 0"	1 3/4"	HG2	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	4	-	CARD READER	122	DOOR ABBREVI
123	3' - 0"	7' - 0"	1 3/4"	F	WD	I LIVIF	F1	HM	A13/AE601 A11/AE601	_	_	11		CARD READER	123	
124	3' - 0"	7' - 0"	1 3/4"	HG2	ALUM	TEMP	F1	AL	H6/AE602 E6/AE602	_	_	3	_	CARD READER	124	AL ALUMINUM
130A	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	HM	A13/AE601 A11/AE601	_	_	4	_	CARD READER	130A	FG FIBERGLASS
130B	3' - 0"	7' - 0"	1 3/4"	HG2	ALUM	TEMP	F1	AL	H6/AE602 E6/AE602	_	_	3	_	CARD READER	130B	HM HOLLOW METAL IN INSULATED
131	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	5	-		131	SF STOREFRONT
132	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	НМ	A13/AE601 A11/AE601	-	-	5	-		132	SS STAINLESS STEEL
133A	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	10	-		133A	TEMP TEMPERED GLASS WIRE WIRED GLASS
133B	3' - 0"	7' - 0"	1 3/4"	HG2	ALUM	TEMP	F1	AL	H6/AE602 E6/AE602	-	-	3	-	CARD READER	133B	WINE WINED GLASS
134	3' - 0"	7' - 0"	1 3/4"	HG2	WD	TEMP	F1	HM	A13/AE601 A11/AE601	-	-	4	-	CARD READER	134	
135	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	HM	A13/AE601 A11/AE601		-	9			135	DOOR HARDWA
136	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	4a	-	CARD READER	136	
137	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	6	-		137	1. CLASSROOM
140	3' - 0"	7' - 0"	1 3/4"	F	INSUL HM	-	F1	HM	H11/AE602 E11/AE602	-	-	13	45		140	LOCKABLE FROM OUTSIDE, ALWAYS UNLOCKED FROM INSID
141	3' - 0"	7' - 0"	1 3/4"	F	WD	-	F1	HM	A13/AE601 A11/AE601	-	-	14	45		141	ALWATO ONLOOKED I NOW INSIL
142	3' - 0"	7' - 0"	1 3/4"	F	INSUL HM	-	F1	HM	H11/AE602 E11/AE602	-	-	13	-		142	2. PASSAGE
143	6' - 0"	7' - 0"	1 3/4"	F,F	INSUL HM	-	F1	HM	H11/AE602 E11/AE602	-	-	12	45		143	NO LOCKS
144	3' - 0"	7' - 0"	1 3/4"	HG	WD	-	<u>F1</u>	HM	A13/AE601 A11/AE601	-	-	6	-		144	3. <u>PRIVACY</u> LOCKABLE FROM INSIDE, EMERGENCY UNLOCKABLE FROM
																4. <u>EGRESS</u> LOCKABLE FROM INSIDE LIMITING NOT LOCKABLE TO EGRESS,

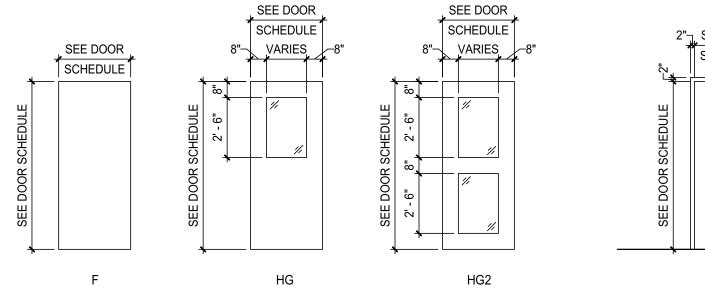




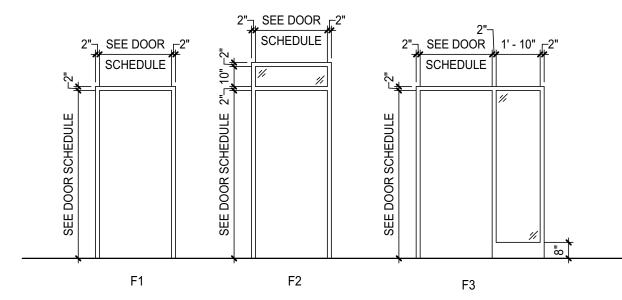
TYP,

CAULK JOINT -AT STOP

WINDOW STOP -







ELEV_DOOR FRAMES

1/4" = 1'-0"

A1

 $\langle F \rangle$

EXTERIOR VINYL

ELEV_WINDOW FRAMES

1/4" = 1'-0"

C1

DOOR NOTES:

- 1. ALL SWINGING DOORS TO BE 1 3/4" THICK UNLESS NOTED OTHERWISE.
- 2. ALL DOORS SHALL BE 3/4" UNDERCUT (TYPICAL) EXCEPT WHEN THERE IS A BOTTOM FRAME/THRESHOLD OR
- SPECIFICALLY NOTED OTHERWISE. 3. ALL DOORS WITH BOTTOM FRAMES OR SILL THRESHOLDS SHALL HAVE MANUFACTURERS
- RECOMMENDED STANDARD UNDERCUT. 4. GLAZING NOTED ON DOOR SCHEDULE IS FOR THE DOOR
- AND BORROWED LIGHT IN THE FRAME TYPICAL.
- 5. SEE SPECIFICATIONS FOR GLAZING TYPES AND INFORMATION.
- 6. GLAZING TO BE FREE OF STAMPS, MARKINGS, ETC. UNLESS REQUIRED BY CODE TO IDENTIFY A RATING. 7. GLAZING STOPS ON BORROWED LIGHTS SHALL BE LOCATED ON THE ROOM SIDE OF FRAME. BUTT JOINT ALL
- GLAZING STOP TIGHT TO FRAME FOR A CLEAN, FINISHED APPEARANCE. 8. CAULK PERIMETER OF DOOR AND WINDOW FRAMES TO
- THE WALL. MATCH FRAME COLOR. 9. CAULK EDGES AND VOIDS ALONG WINDOW STOPS OF
- HOLLOW METAL FRAMES PRIOR TO PAINTING TO PROVIDE A CLEAN FINISHED APPEARANCE. 10. ALL LABELS ON RATED DOORS TO BE FREE OF PAINT AND

DOOR ABBREVIATIONS:

DOOR HARDWARE TYPES:

5. OFFICE / STORAGE ALWAYS LOCKED FROM OUTSIDE,

KEYED ACCESS, ALWAYS UNLOCKED FROM INSIDE.

LOCKABLE FROM OUTSIDE NOT PERMITTING EGRESS FROM WITHIN.

0	ISSUED FOR CONSTRUCITON	08-14-20
REV	DESCRIPTION	DATE

ISSUED FOR CONSTRUCITON 08-14-20

CURRENT ISSUE STATUS:





SMRT Architects and Engineers 75 Washington Ave - Suite 3A Portland, Maine 04101 1.877.700.7678 www.smrtinc.com

MDOC - DCF

MEN'S REENTRY CENTER

MACHIASPORT, MAINE

DOOR AND WINDOW SCHEDULES

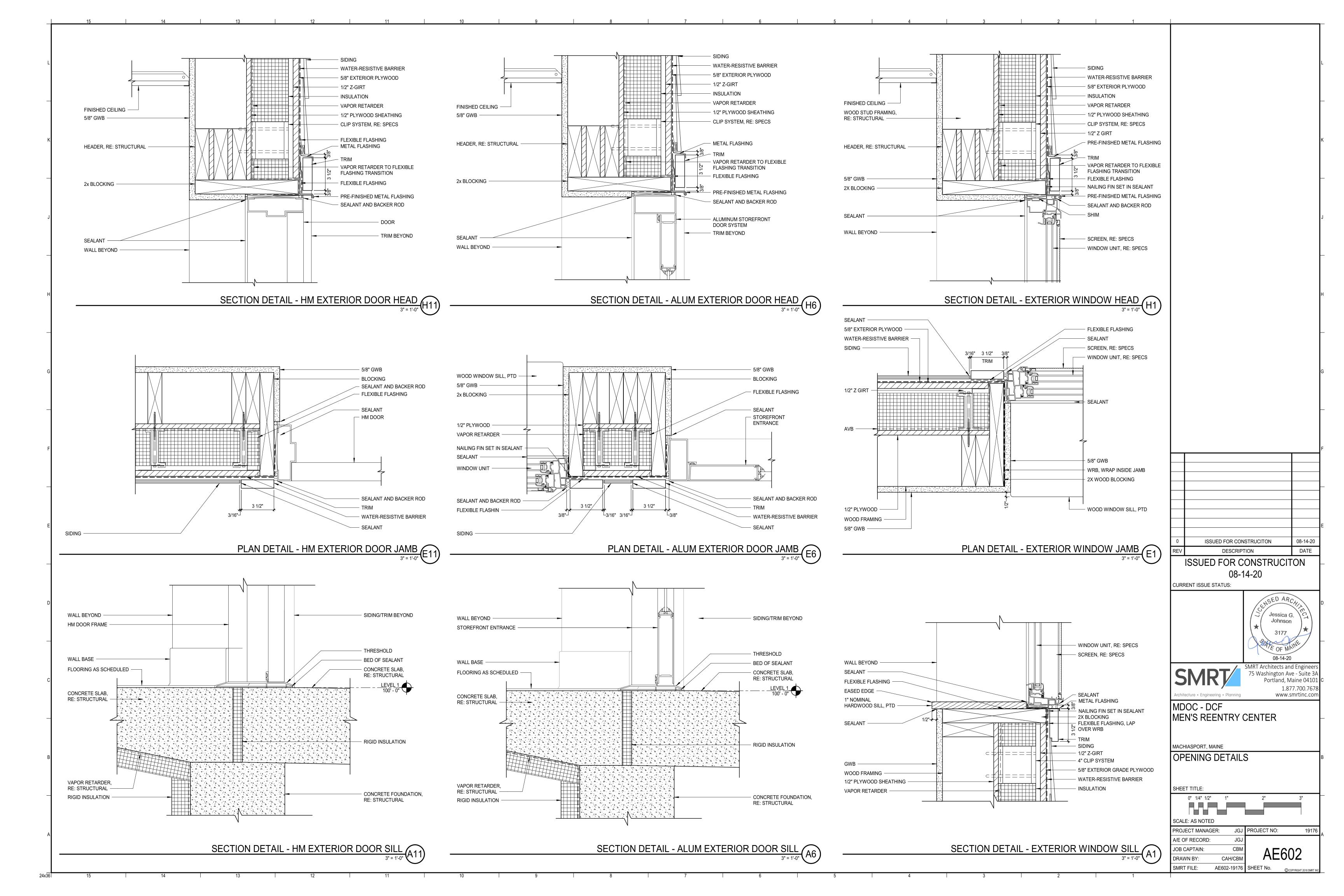
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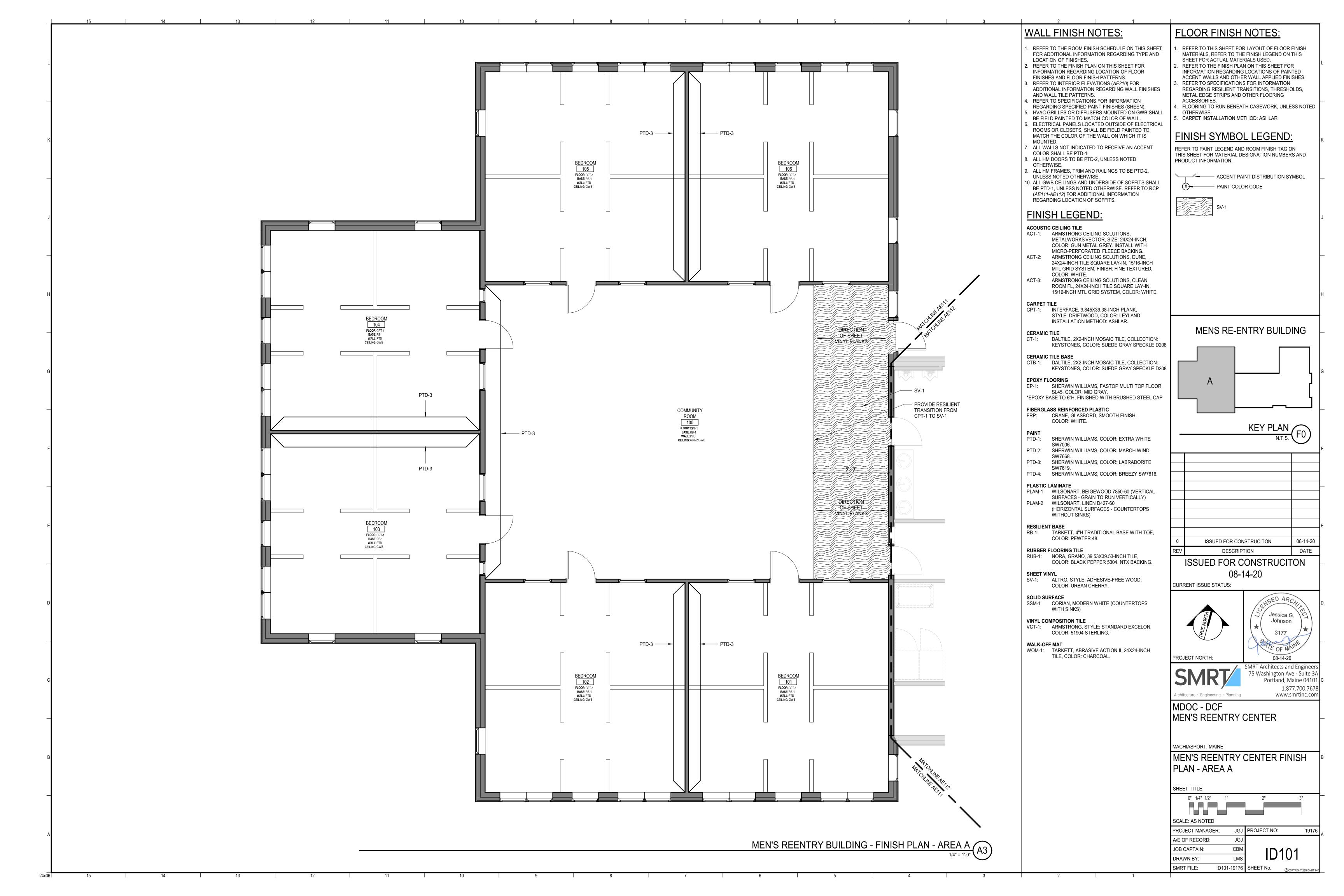
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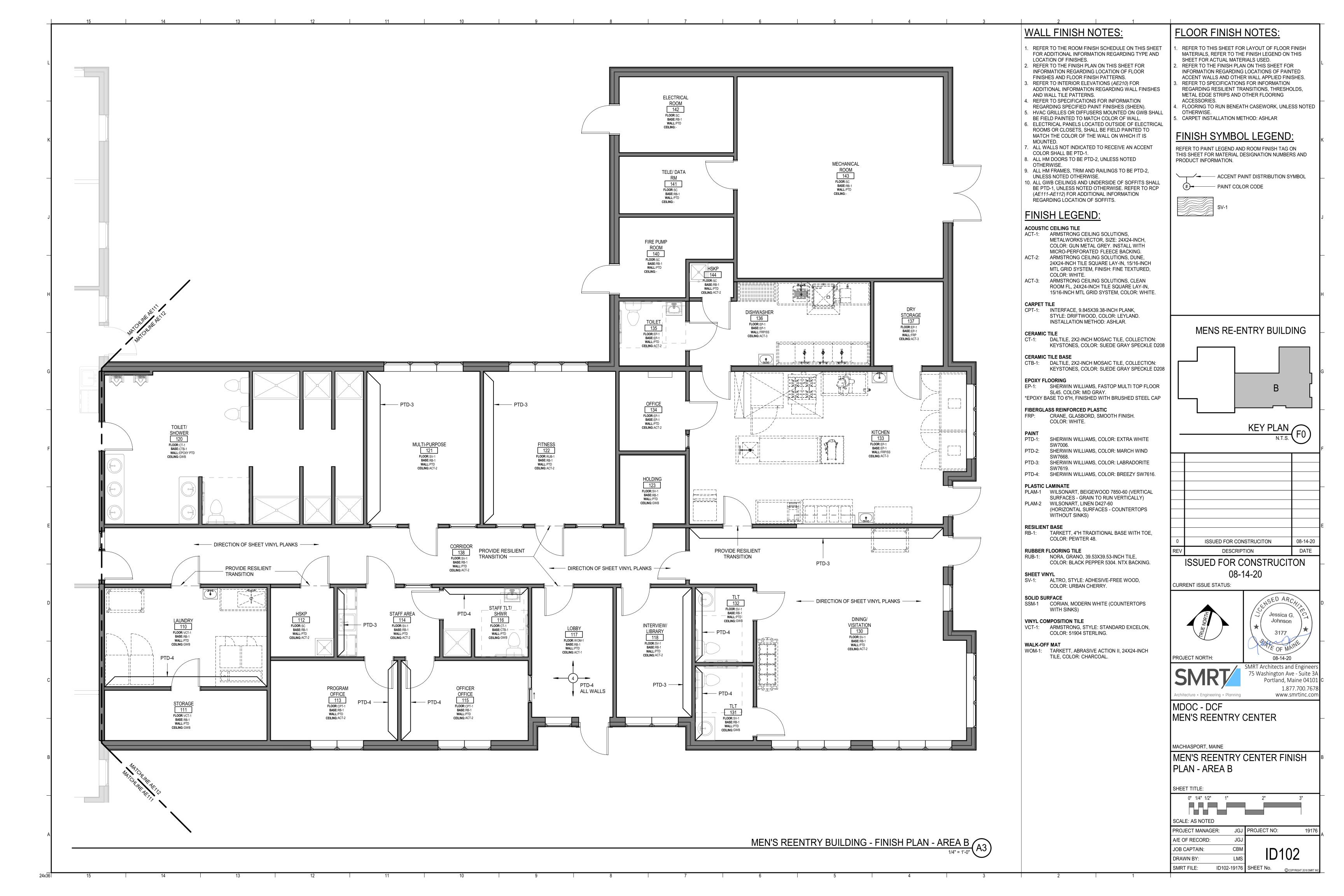
SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER:

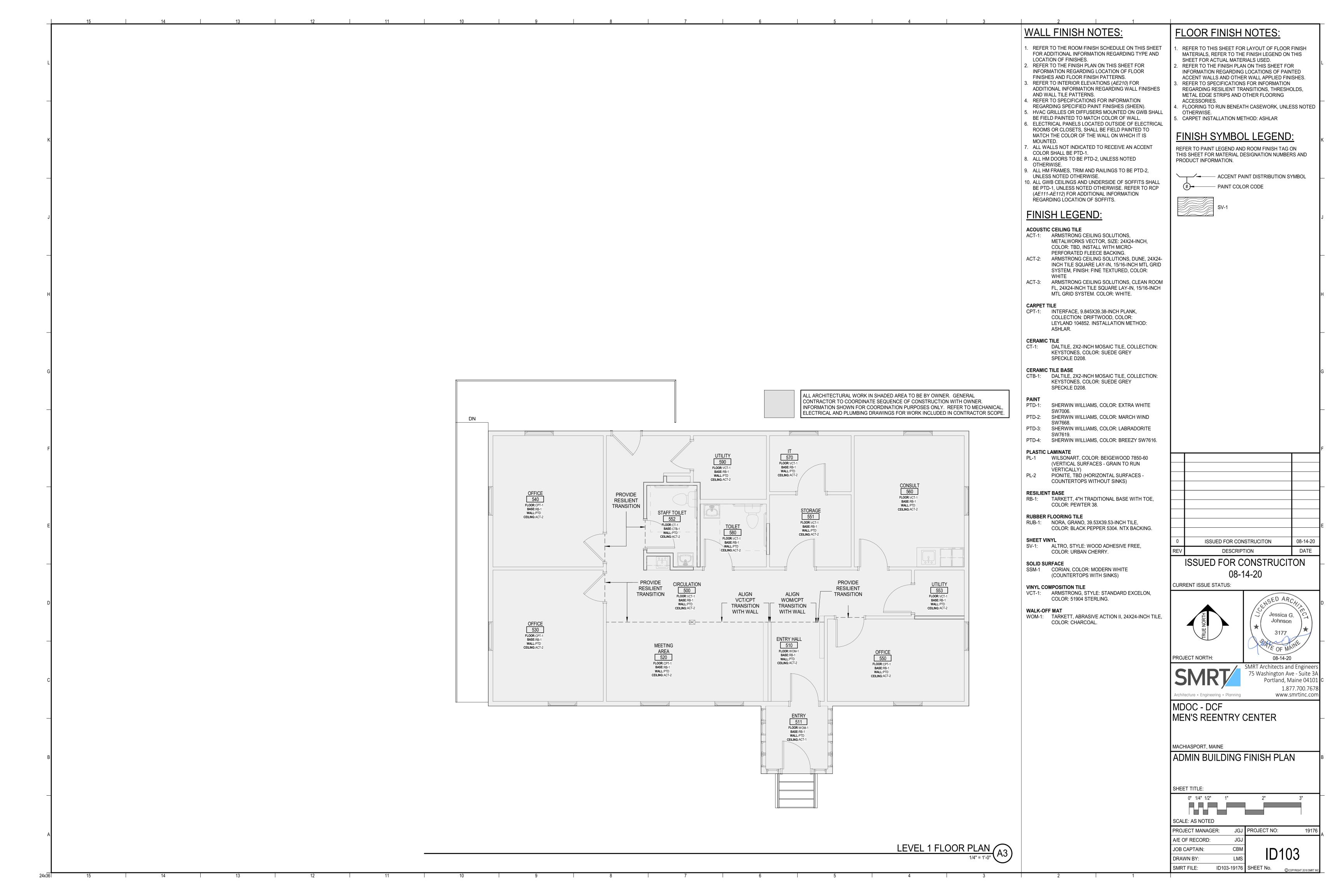
A/E OF RECORD: JOB CAPTAIN: DRAWN BY: CAH/CBM

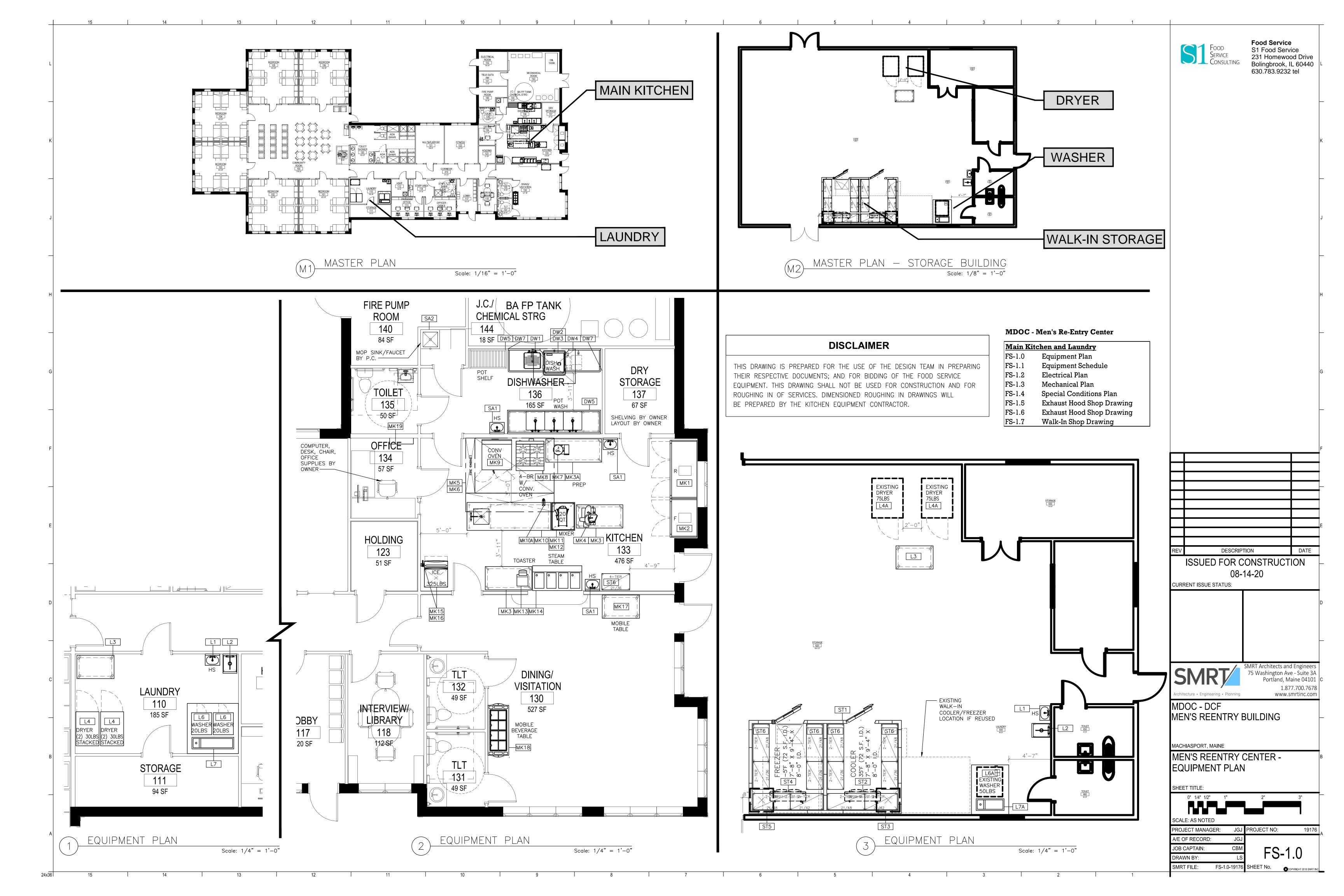
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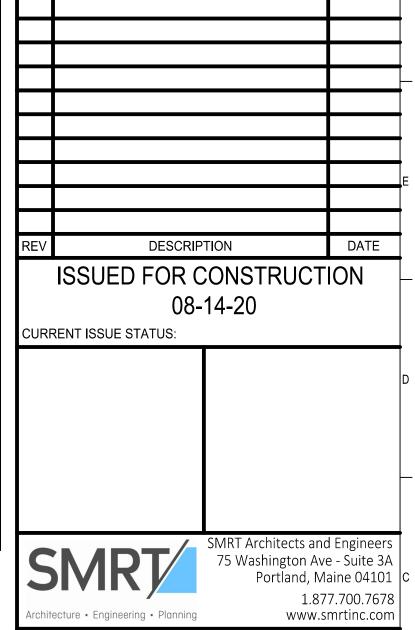






Food Service S1 Food Service 231 Homewood Drive Bolingbrook, IL 60440 630.783.9232 tel

										oing requirements				Electric	al requi	irements	
Item					Water		ı-in Wa	ste Rough-in	Pro	pane Gas Rough-in			Load			Rough-in	
o. Qty. Description	Manufacturer	Model No	Equipment Remarks	Equipment Size	Hot (Cold	AFF Dir	Indir AFF	Size	MBTU AFF Plumb	ing Remarks	Volts	Phase Amp	Kw HP	Direct	Plug NEMA I	AFF Electrical Remarks
STORAGE AND REFRIGERATION																	
1 1 WALK-IN COOLER / FREEZER	BALLY	CUSTOM	2-COMPARTMENT		+				-			120	1 20.0		x		CLG SEE SHOP DWG.
	BALLY		SEE SHOP DRAWING		1			3/4"		SEE SHO	OP DWG.	115	1 2.0		X		CLG SEE SHOP DWG.
1 EVAPORATOR COIL - COOLER 1 CONDENSER, COOLER	BALLY		SEE SHOP DRAWING; AIR-COOLED					3/4		SEE SIL	OF DWG.	208-230	3 5.8		$\frac{x}{x}$		CLG SEE SHOP DWG.
1 EVAPORATOR COIL - FREEZER	BALLY	BLP211LE-S2DT-SV+	•		+			3/4"		SEE SHO	OP DWG.	208-230	1 8.2		X		CLG SEE SHOP DWG.
5 1 CONDENSER, FREEZER	BALLY		SEE SHOP DRAWING; AIR-COOLED		+			0/ 1			OI DWO.	208-230	3 10.7		$\frac{x}{x}$		CLG SEE SHOP DWG.
5 12 SHELVING, WELDED	NEW AGE	TB SERIES	SIZED PER PLAN									200 200	0 10.1		1 22		DELETION DWG.
	NEW HOL				1												
SANITATION																	
A1 3 HAND SINK, WALL MOUNT	EAGLE GROUP	HSA-10			1/2"	1/2"	+18" 1-1/2	+20"	,								
A2 1 MOP SINK			BY PLUMBING CONTRACTOR			1/2"		-2"		VERIFY	REQUIREMENTS						
MAIN KITCHEN																	
K1 1 REFRIGERATOR, REACH-IN (3-DOOR)	UTILITY REFRIGERATOR	R-75-SS-3S-D										115	1 19.5	1/2		X 5-20P +	80"
K2 1 FREEZER, REACH-IN (2-DOOR)	UTILITY REFRIGERATOR	F-50-SS-2S-D					<u> </u>					115	1 12.8	1/2	1		-80"
K3 2 WORKTABLE, MOBILE	EAGLE GROUP	CUSTOM	W/ FIXED UNDERSHELF	60"L X 30"W X 36"H													
X3A 1 WORKTABLE, MOBILE	EAGLE GROUP	CUSTOM	W/ FIXED UNDERSHELF	72"L X 30"W X 36"H													
K4 1 SLICER	GLOBE	G12										115	1 6.0	1/2		X	PLUG TO TABLE MOUNTED FIXTURE
IK5 1 EXHAUST HOOD	HALTON	KVE	SEE SHOP DRAWINGS							 		120	1 20.0		x		LG. SEE SHOP DWG.
K6 1 FIRE EXTINGUISHING SYSTEM	ANSUL	R-102	SEE SHOP DRAWINGS		+ +					+ + + - +		120	1 20.0		x x		LG. SEE SHOP DWG.
IK7 1 KETTLE, ELECTRIC, TABLETOP	CLEVELAND	KET-3-T								+ + + - +		208	1 19.7	4.1	1		48"
IK8 1 4-BURNER RANGE W/ CONVECTION OVEN		JTRH-4-36C							3/4"	170 +30"		120	1 40	1/3	1		18"
K9 1 CONVECTION OVEN, DOUBLE	MONTAGUE	2-115A								4" 115 ea +30"/60"		(2) 115	1 7.4	3/4			18"
	EAGLE GROUP	CUSTOM	W/ FAUCET & FIXED UNDERSHELF	108"L X 36"W X 36"H	1 /2"	1/2"	CII	1-1/2"	(4) 3/4	4 115 ea 130 700		(2) 113	1 1.4	3/4		X 3-10F	10
	EDLUND		W/ FAUCET & FIXED UNDERSHELL	100 II X 30 W X 30 H	1/4	1/4	30.	1-1/2									
		S-11	IXI / PIVED LINDEDCLIELE	2011 37 0411287 37 041111		+										+ + -	
MK11 1 STAND, MOBILE	EAGLE GROUP	CUSTOM	W/ FIXED UNDERSHELF	30"L X 24"W X 24"H	+	+						115	1 10.0	1/0		Y CIED	PLUG TO TABLE MOUNTED FIXTURE
MK12 1 MIXER, 20 QT.	VARIMIXER	V20			 							115	1 10.9			X 5-15P	
MK13 1 TOASTER, CONVEYOR	STAR	QCS1-350						0 (41)				120	1 13.8	1.6		X 5-15P +	
MK14 1 HOT FOOD TABLE	EAGLE GROUP	SHT4-208	TID GOOLED			1 (01)		3/4"				208	1 13.7			X 6-20P +	
MK15 1 ICE MAKER W/BIN	MANITOWOC ICE	IYF0300A	AIR-COOLED			1/2"		1/2"		TEE CV	W FROM FILTER	115	1 10.8		X	+ + + + + + + + + + + + + + + + + + + +	·84"
MK16 1 FILTER SYSTEM, ICE MAKER	3M PURIFICATION	ICE165-S				1/2"	+96"										
MK17 1 WORKTABLE, MOBILE	EAGLE GROUP	CUSTOM	W/ FIXED UNDERSHELF	48"L X 30"W X 36"H	1		ze										
MK18 1 BEVERAGE COUNTER, MOBILE	CAMBRO	VBRT5110															
MK19 1 KNIFE CABINET	PERFECTION	ESC-UT-1-25															
DISHWASHING																	
DW1 1 DISHTABLE, SOILED	EAGLE GROUP	CUSTOM	W/ PRE-RINSE SPRAY AND SCRAPPING SINK	48"L X 30"W		1/2"		1-1/2"									
DW2 1 DISHWASHER, SINGLE TANK	STERO	SD3	W/BOOSTER HEATER		3/4"		+18"	1-1/2"		348 GP	H; 110 DEGREE REQ	. 208-240	3 45.4		Х	1 4	18" MIN. 60.0 AMPS CIRCUIT; SINGLE POIN
DW3 1 CONDENSATE HOOD	HALTON	СН	SEE SHOP DRAWING														
DW4 1 DISHTABLE, CLEAN	EAGLE GROUP	CUSTOM		48"L X 30"W													
DW5 1 3-COMPARTMENT SINK	EAGLE GROUP	CUSTOM	W/ FAUCETS	120"L X 30"W	(2) 1/2" (2	(2) 1/2"	+18"	1-1/2"									
DW6 1 POT AND PAN RACK	NEW AGE	1066TB															
DW7 LOT S/S WALL SHEATHING		CUSTOM															
LAUNDRY																	
L1 2 HAND SINK, WALL MOUNT - ADA	EAGLE GROUP	HSAP-14-FW			1/2"	1/2"	+18" 1-1/2	+24"	'								
L2 2 1-COMPARTMENT SINK	EAGLE GROUP	2118-1-16/4	W/FAUCET	18"L X 25"W		1/2"		1-1/2"									
L3 2 FOLDING TABLE	EAGLE GROUP	T3048E	MOBILE	48"L X 30"W X 36"H	<u> </u>	•	-										
L4 2 DRYER, STACKED	ADC LAUNDRY	AD-330	30 LB. CAPACITY; ELECTRIC		12	2) 3/4"	+48"			6" DIA	@ 400 CFM	(2) 208	3 46.4		х	+36	"/+60" 70.0 AMP CIRCUIT
L4A 2 DRYER (STORAGE BUILDING)	HUEBSCH	HT075LQTB1G2W01	75 LB. CAPACITY; ELECTRIC; OWNER SUPPLIED; EXISTING TO BE RELOCATED		 	, -, -	-		3/4"		@ 450 CFM	120	1 13.8		x		"/+60" 20.0 AMP CIRCUIT
L5 2 LINT COLLECTOR	CLEAN CYCLE	LL-8-10	NOT SHOWN ON PLAN; CONTRACTOR SUPPLIED, INSTALLED BY OTHERS			1/2"	+48"		 • • • • • • • • • • • • • • • • • • •		<u></u>	120	1 15.0		x		36" INTERCONNECT TO AIR COMPRESSOR
L6 2 WASHER	WASCOMAT	WLD720	20 LB. CAPACITY		3/4"			3"		ו פאוות	DRAIN TO TROUGH	208-240	3 2.4		x	+ + + + + + + + + + + + + + + + + + + +	36" 15.0 AMP CIRCUIT
L6A 1 WASHER (STORAGE BUILDING)	ELECTROLUX	W4250S	50 LB. CAPACITY; OWNER SUPPLIED; EXISTING TO BE RELOCATED		3/4"			3"	+		DRAIN TO TROUGH		1 7.6		X	+ + + + + + + + + + + + + + + + + + + +	36" 15.0 AMP CIRCUIT
L7 1 TROUGH LINT TRAP		CUSTOM	22. 311 11311 1, 3 THER BOTT MED, DEMOTING TO BE REBOOKTED	54"L X 15"W	3, <u>r</u>	5/ 1	3"	-2"		- BOWLE I		200-240	1.0		1 1	 	10.0111111 0110011
L7A 1 TROUGH LINT TRAP		CUSTOM		36"L X 15"W			3"	-2"									
IIA I INOUGH BINI INAF		COSTOM		20 HV 12 AA				-4	+								
MICCELL AND OTHER ADAM								 		+ + -							
MISCELLANEOUS EQUIPMENT		CIICTON						 		 							
M1 LOT CORNER GUARD		CUSTOM						 		 							
		•		i				1 1		I			1	1	1	1 1	



MDOC - DCF MEN'S REENTRY BUILDING

MACHIASPORT, MAINE

MEN'S REENTRY CENTER -EQUIPMENT SCHEDULE

SHEET TITLE:

O" 1/4" 1/2" 1" 2" 3"

SCALE: AS NOTED

PROJECT MANAGER: JGJ PROJECT NO:

A/E OF RECORD:	JGJ	ľ
JOB CAPTAIN:	CBM	EC 11
DRAWN BY:	LS	ГО-1.1
SMRT FILE:	FS-1.1-19176	SHEET No. ©COPYRIGHT 2018 SMRT INC.

ELECTRICAL SYMBOLS

- \$ SWITCH
- 3 WAY SWITCH
- DUPLEX OUTLET 110 V.
- DOUBLE DUPLEX OUTLET 110 V.
- CEILING MOUNT FIXTURE
- J JUNCTION BOX
- ▼ DATA OUTL
- DATA OUTLET

POWER FEED JUMPER
FLOURECENT LIGHT (SIZE OF FIXTURE VARIES)

REFER TO SHEET FS-1.1 FOR ELECTRICAL FOODSERVICE LOAD SCHEDULE

NOTE: E.C. TO RE-USE EXISTING UTILITIES WHERE POSSIBLE WITH NEW DESIGN

DISCLAIMER

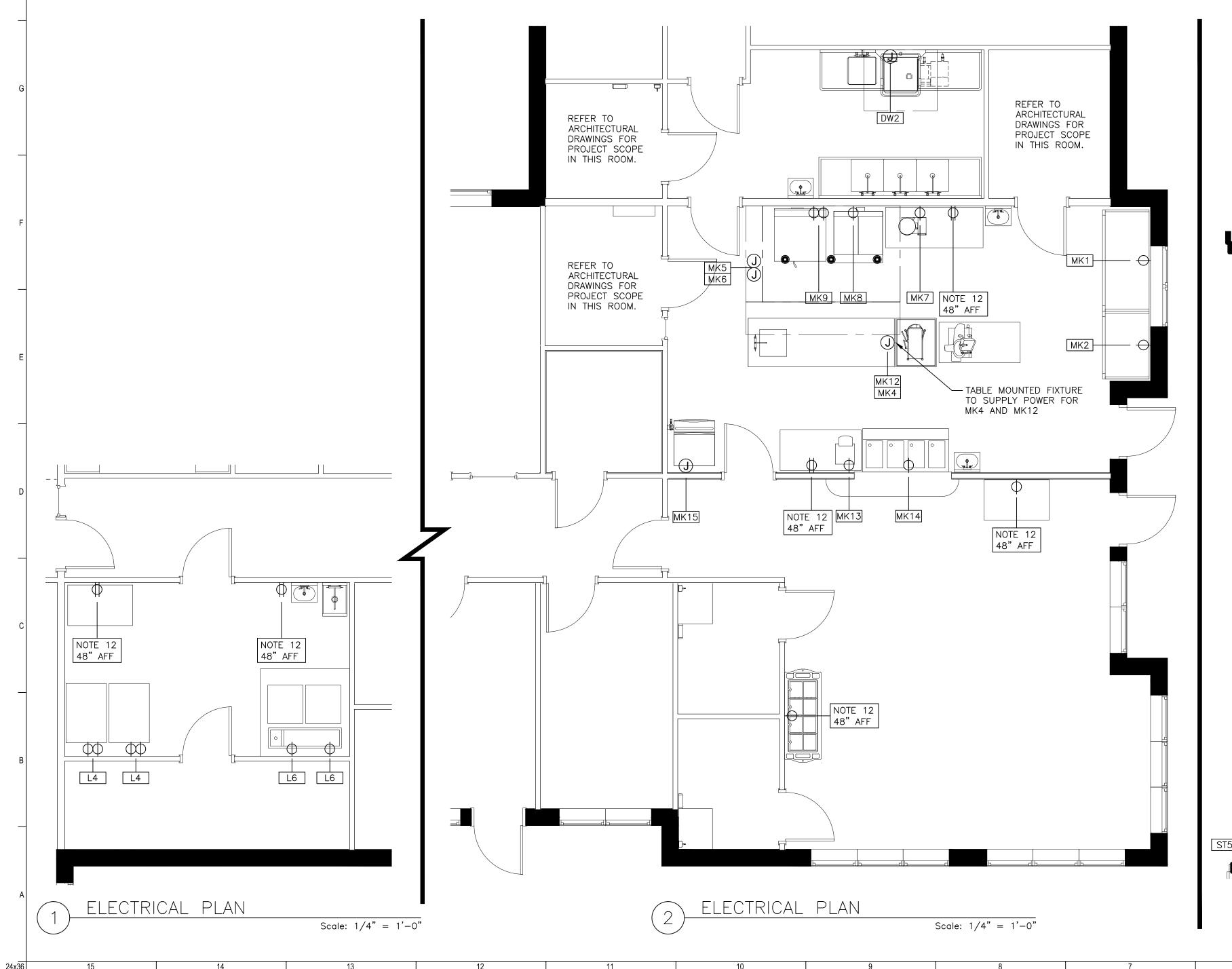
THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS; AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

FIRE EXTINGUISHING SYSTEM NOTES - ELECTRIC

- A. INTERCONNECT SHUNT TRIP CONTROL AND MICRO SWITCH TO SHUT OFF POWER TO EQUIPMENT UNDER THE EXHAUST HOOD.
- B. INTERCONNECT MICRO SWITCH TO REMOTE NOTIFICATION LOCATION (CENTRAL ALARM, FIRE HOUSE, ETC) PER NFPA 96.

FIRE EXTINGUISHING SYSTEM NOTES - ELECTRIC

- A. INTERCONNECT SHUNT TRIP CONTROL AND MICRO SWITCH TO SHUT OFF POWER TO EQUIPMENT UNDER THE EXHAUST HOOD.
- B. INTERCONNECT MICRO SWITCH TO REMOTE NOTIFICATION LOCATION (CENTRAL ALARM, FIRE HOUSE, ETC) PER NFPA 96.



REFRIGERATION NOTES - ELECTRICAL

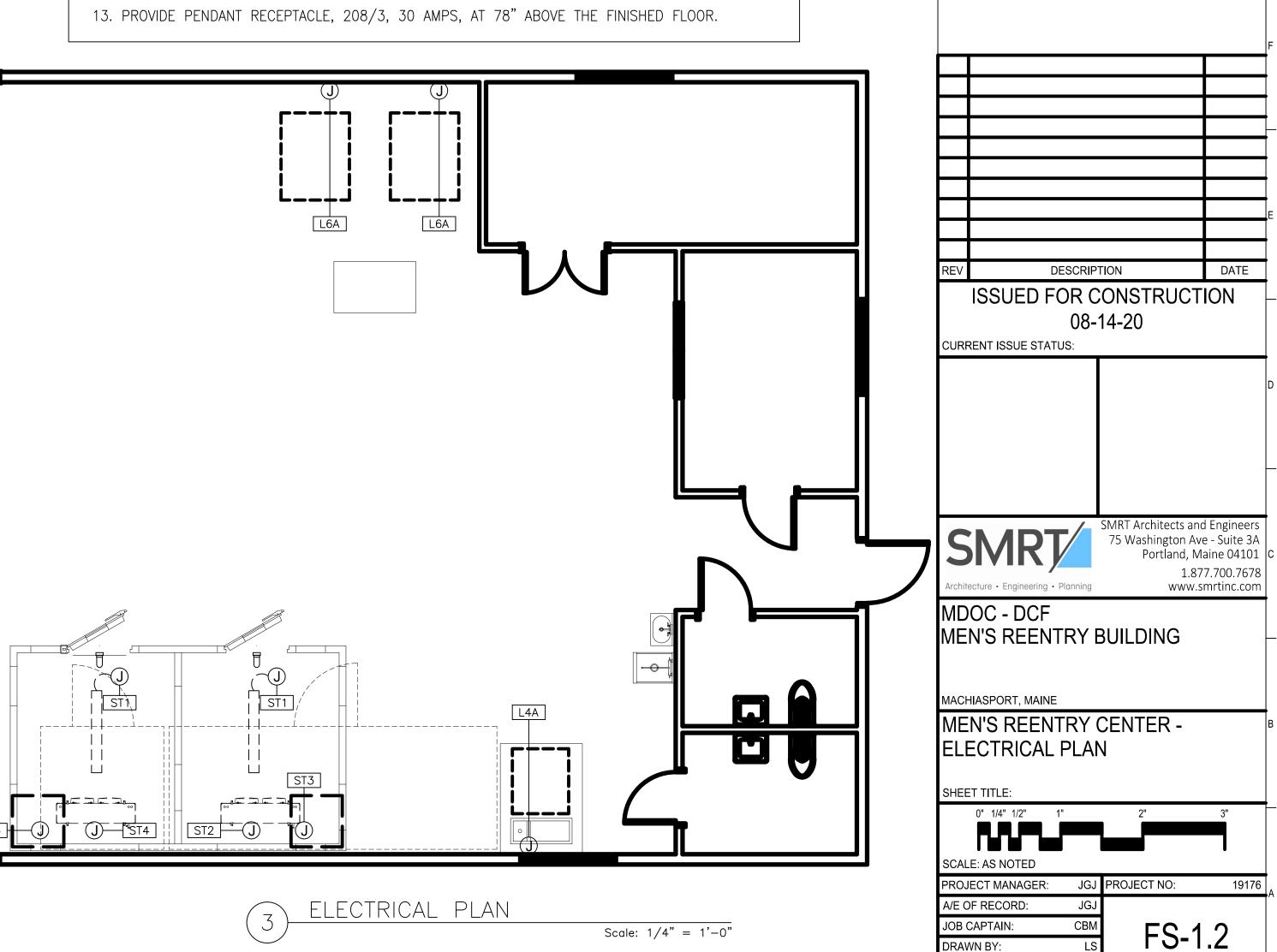
NOTE A: PROVIDE FIVE (5) #12 THHN WIRES FROM THE COMPRESSOR LOCATION TO THE EVAPORATOR COIL. (FREEZER SYSTEMS ONLY)

NOTE B: PROVIDE WIRING CONCEALED IN CONDUIT TO CONNECTION ON EVAPORATOR COIL.

ELECTRICAL NOTES

TO BE PROVIDED BY ELECTRICAL CONTRACTOR, DIVISION 26

- 1. DRAWING SHOWS CONNECTION POINTS ON EQUIPMENT. ROUGH—IN POINTS ARE NOT THE SAME AND ALLOWANCES SHALL BE MADE FOR DISCONNECTS, ACCESS, ETC. ALL ROUGH—INS AND CONNECTIONS SHALL BE PER APPLICABLE CODE.
- 2. DRAWING SHOWS REQUIREMENTS FOR FOOD SERVICE EQUIPMENT ONLY; SEE DIVISION 26 DRAWINGS FOR ADDITIONAL INFORMATION.
- 3. ALL CONDUITS, BOXES, ETC. SHALL BE CONCEALED WITHIN WALLS AND STUBBED OUT AS CLOSE AS POSSIBLE TO THE CONNECTION POINT. DO NOT RUN EXPOSED ON THE WALL.
- 4. CONDUIT EXPOSED ABOVE THE WORKING SURFACE OF THE EQUIPMENT SHALL BE STAINLESS STEEL, CHROME PLATED, OR SHROUDED IN A STAINLESS STEEL COVER.
- 5. ALL ELECTRICAL SERVICES UNDER A TYPE I EXHAUST HOOD MUST BE FED FROM A BREAKER PANEL WITH SHUNT TRIP PROTECTION INTERWIRED WITH THE EXTINGUISHING SYSTEM.
- 6. THE EXTINGUISHING SYSTEM REQUIRES AN EMPTY J-BOX AT THE EXIT FROM THE HAZARD AREA FOR INSTALLATION OF THE REMOTE PULL. REMOTE PULL TO BE FURNISHED AND INSTALLED AS PART OF THE EXTINGUISHING SYSTEM PACKAGE.
- 7. INTERCONNECT EXTINGUISHING SYSTEM TO SHUNT TRIP BREAKERS AND REMOTE NOTIFICATION, PER REQUIREMENTS OF NFPA 96.
- 8. PROVIDE FIVE (5) #12 THHN WIRES FROM THE COMPRESSOR LOCATION TO THE EVAPORATOR COIL. (FREEZER SYSTEMS ONLY)
- 9. NOT USED
- 10. NOT USED
- 11. PROVIDE DOUBLE DUPLEX CONVENIENCE OUTLET, 120/1, AT HEIGHT INDICATED.
- 12. PROVIDE DUPLEX CONVENIENCE OUTLET (DCO), 120/1, 20 AMPS AT HEIGHT INDICATED.



SMRT FILE:

FS-1.2-19176 SHEET No.



Food Service
S1 Food Service
231 Homewood Drive
Bolingbrook, IL 60440
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MECHANICAL SYMBOLS HOT WATER COLD WATER INDIRECT WASTE DIRECT WASTE GAS CONNECTION COOLING WATER TOWER COOLING WATER TOWER RETURN STEAM SUPPLY CONDENSATE RETURN FLOOR SINK FUNNEL FLOOR DRAIN AREA FLOOR DRAIN COMPRESSED AIR REFRIGERATION LINE **EXHAUST DUCT** SUPPLY DUCT WATER FILTER INTERCONNECT

REFER TO SHEET FS-1.1 FOR

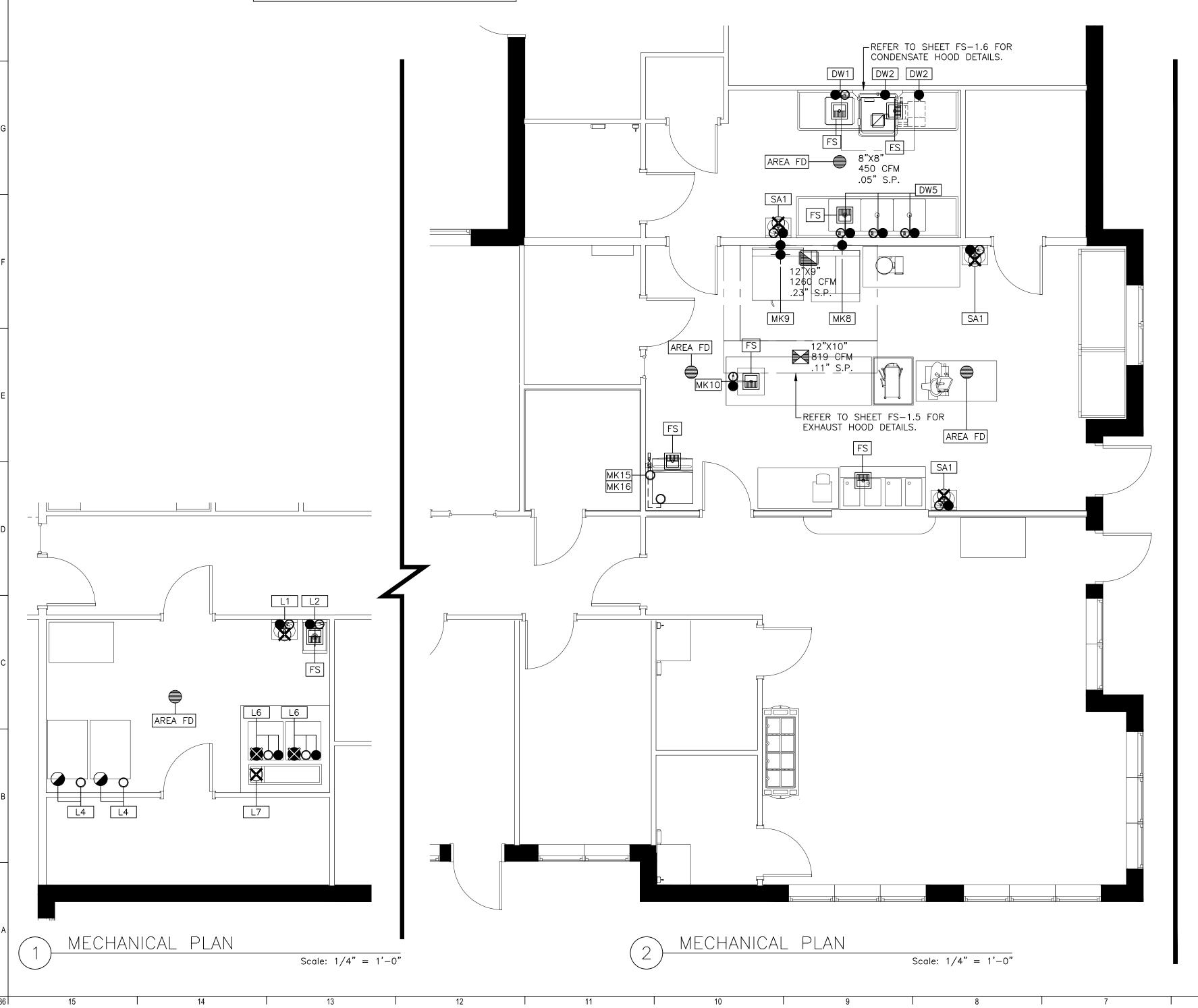
MECHANICAL FOODSERVICE LOAD SCHEDULE

EXHAUST HOOD ROOF FANS NOT IN KITCHEN EQUIPMENT CONTRACT

DISCLAIMER

THIS DRAWING IS PREPARED FOR THE USE OF THE DESIGN TEAM IN PREPARING THEIR RESPECTIVE DOCUMENTS; AND FOR BIDDING OF THE FOOD SERVICE EQUIPMENT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION AND FOR ROUGHING IN OF SERVICES. DIMENSIONED ROUGHING IN DRAWINGS WILL BE PREPARED BY THE KITCHEN EQUIPMENT CONTRACTOR.

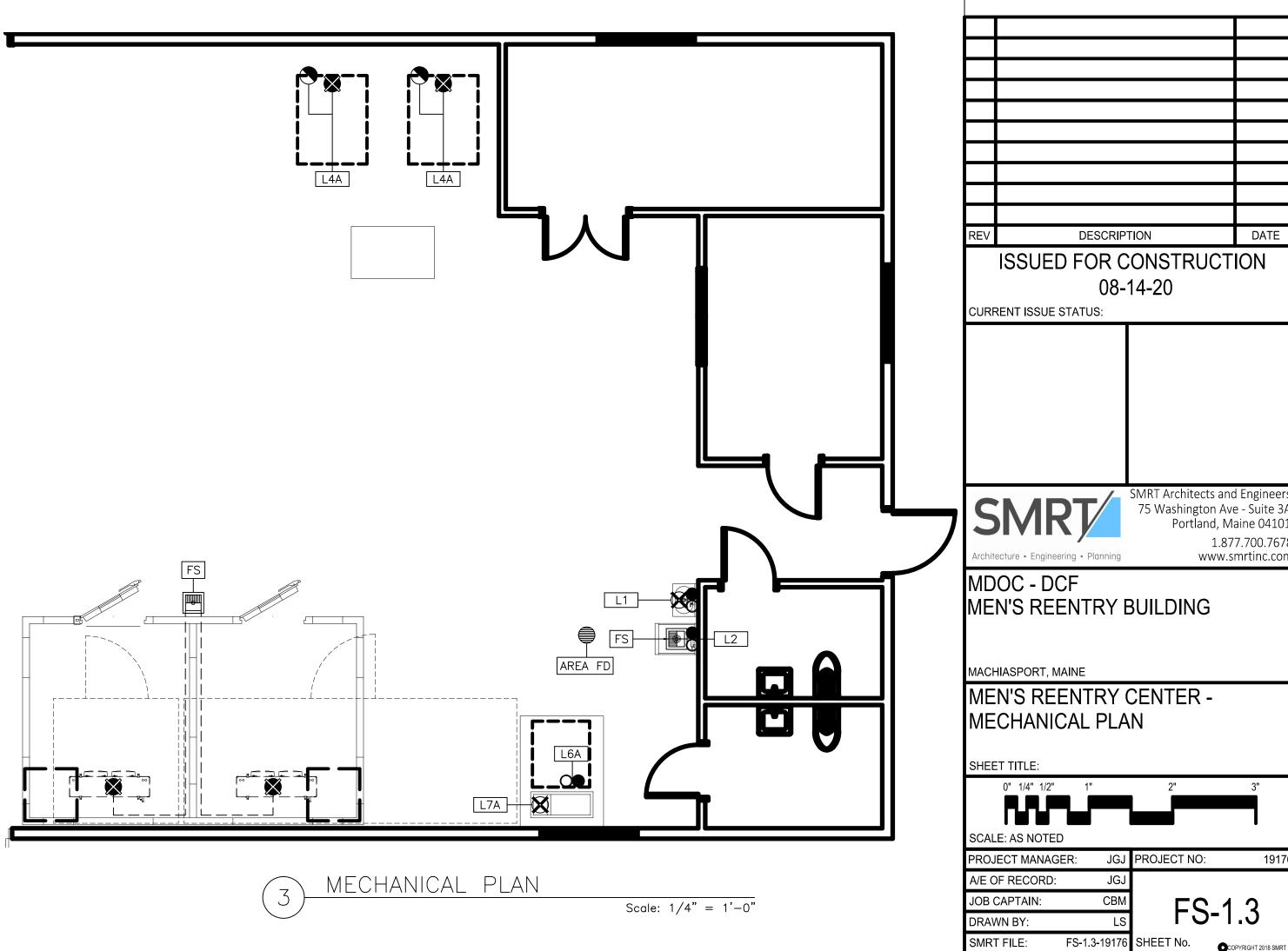
NOTE: P.C. TO RE-USE EXISTING UTILITIES WHERE POSSIBLE WITH NEW DESIGN



MECHANICAL NOTES

THESE NOTES APPLY TO THE WORK OF THE TRADES IN DIVISIONS 14 AND 15.

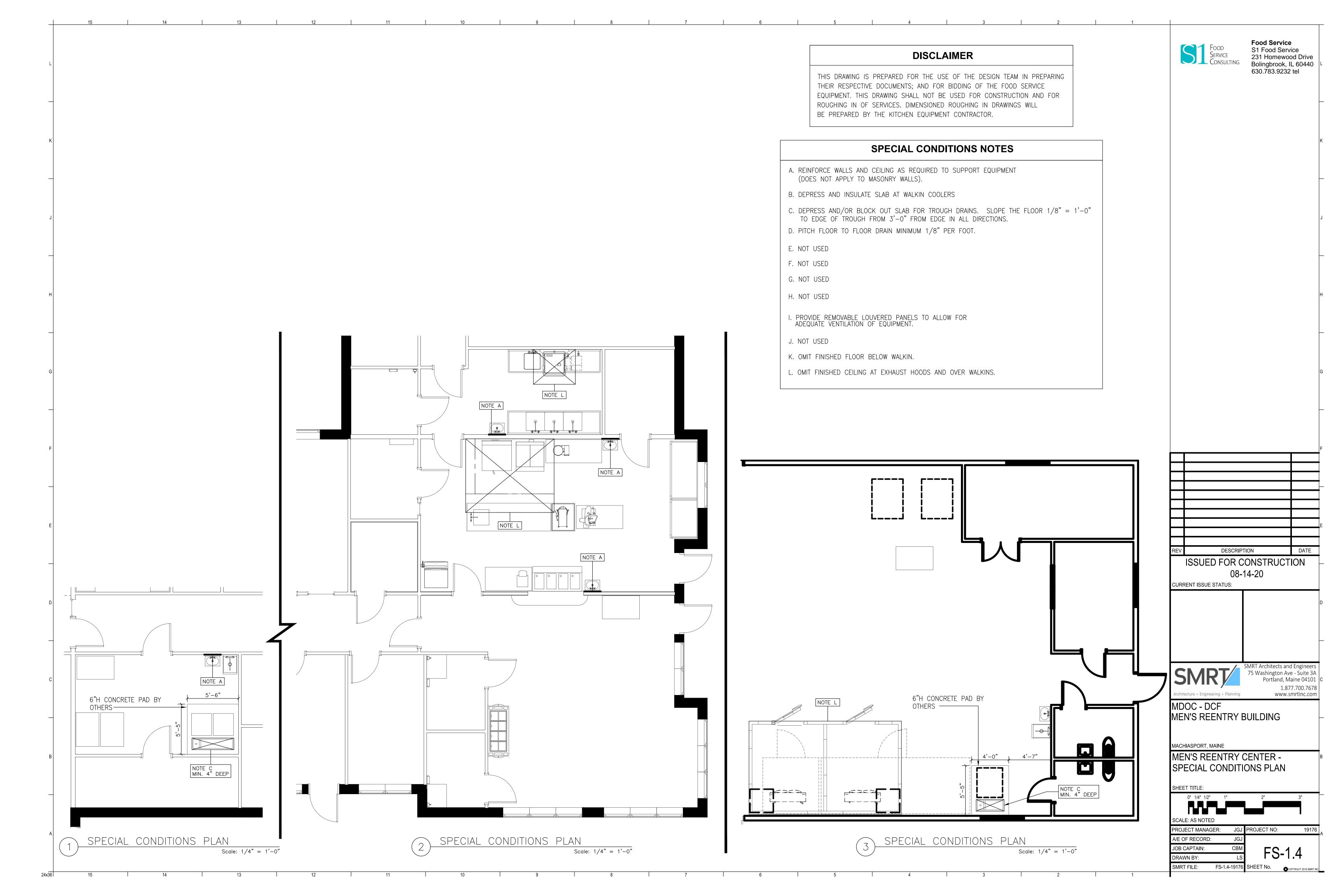
- 1. DRAWING SHOWS CONNECTION POINTS ON EQUIPMENT. ROUGH-IN POINTS ARE NOT THE SAME AND ALLOWANCES SHALL BE MADE FOR VALVES, STOPS, ACCESS, ETC. ALL ROUGH-INS AND CONNECTIONS SHALL BE PER APPLICABLE CODE.
- 2. DRAWING SHOWS REQUIREMENTS FOR FOOD SERVICE EQUIPMENT ONLY; SEE DIVISION 14 AND 15 DRAWINGS FOR ADDITIONAL INFORMATION.
- 3. ALL PIPE, FITTINGS, ETC. SHALL BE CONCEALED WITHIN WALLS AND STUBBED OUT AS CLOSE AS POSSIBLE TO THE CONNECTION POINT. DO NOT RUN EXPOSED ON THE WALL.
- 4. PIPING EXPOSED ABOVE THE WORKING SURFACE OF THE EQUIPMENT SHALL BE STAINLESS STEEL, CHROME PLATED, OR SHROUDED IN A STAINLESS STEEL COVER.
- 5. ALL PIPING SHALL BE AT LEAST 6" ABOVE THE FLOOR TO ALLOW FOR EASE OF CLEANING.
- 6. TYPE I HOODS REQUIRE WELDED DUCTWORK PER CODE.
- 7. TYPE II HOODS AND VENTS ABOVE DISHWASHERS AND OTHER STEAM AND VAPPOR PRODUCING EQUIPMENT SHALL BE PROVIDED WITH DUCTWORK PER APPLICABLE CODE.
- 8. TYPE I DUCTS SHALL BE PROVIDED WITH FIRE EXTINGUISHING PER CODE.
- 9. KITCHEN EQUIPMENT CONTRACTOR WILL FURNISH MECHANICAL OR ELECTRICAL SOLENOID GAS VALVES LOOSE FOR FIELD INSTALLATION.
- 10. WE RECOMMEND CENTRAL GREASE TRAPS EXTERNAL OF THE BUILDING OR FOOD SERVICE SPACE. IF THIS IS NOT POSSIBLE, THEN RECESSED, POINT-OF-USE GREASE TRAPS ARE PERMITTED; COORDINATE LOCATION WIT KITCHEN DESIGNER.
- 11. REFRIGERATED EQUIPMENT IS DESIGNED FOR OPERATION IN AN AMBIENT TEMPERATURE NOT EXCEEDING 100 DEGREES FAHRENHEIT. AIR COOLED EQUIPMENT REQUIRES VENTILATION AT 1,000 CFM PER HORSEPOWER; WATER-COOLED EQUIPMENT REQUIRES COOLING WATER AT 70 DEGREES FAHRENHEIT AT THE RATE OF 1.5 GPM PER HORSEPOWER.
- 12. SOME EQUIPMENT MAY REQUIRE COMPRESSED AIR. INTERCONNECT FROM THE AIR COMPRESSOSR TO THIS EQUIPMENT.
- 13. AREA FLOOR DRAINS ARE SHOWN IN SUGGESTED LOCATIONS. PLUMBING CONTRACTORS WILL NEED TO DETERMINE LOCATIONS PER LOCAL CODES.

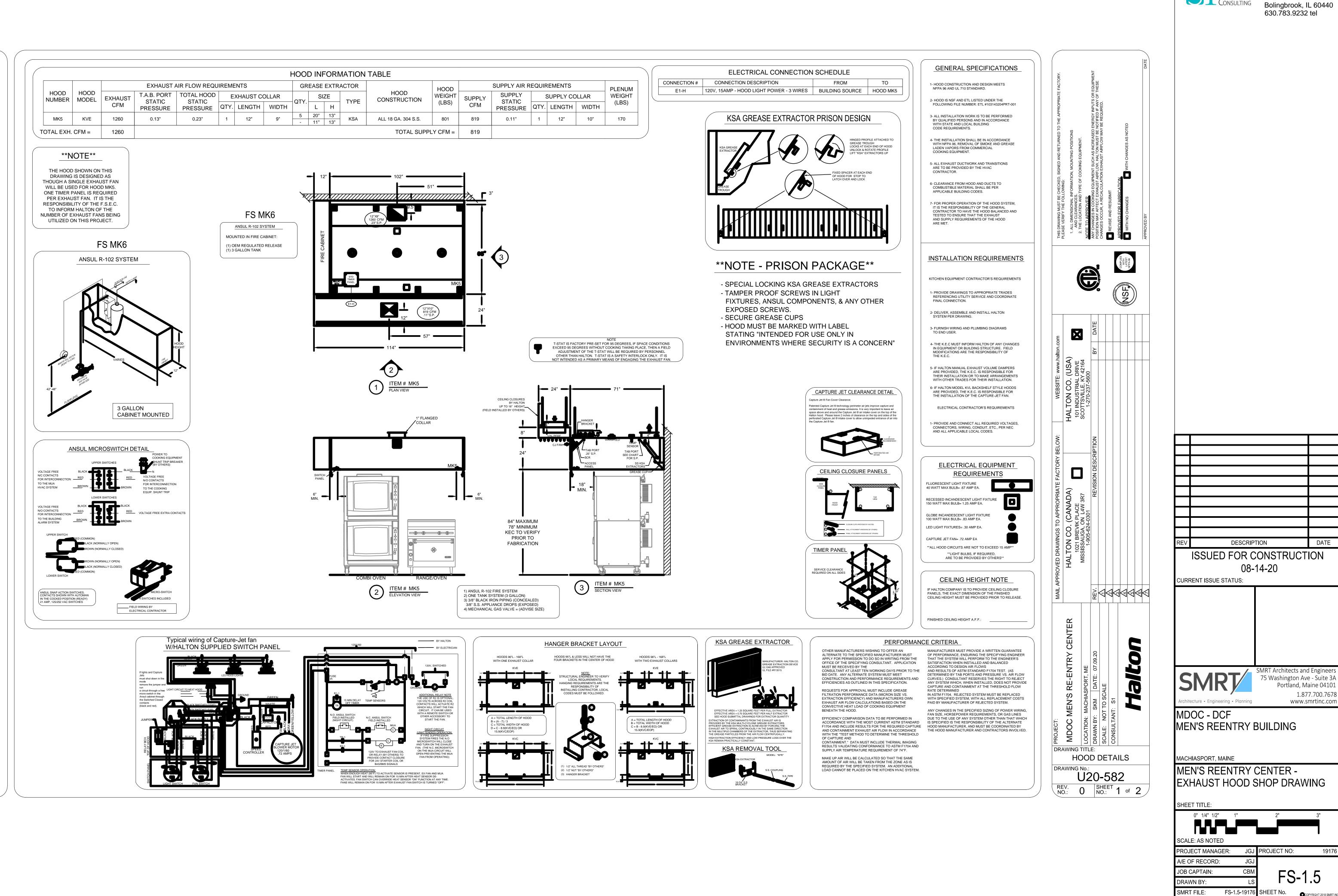




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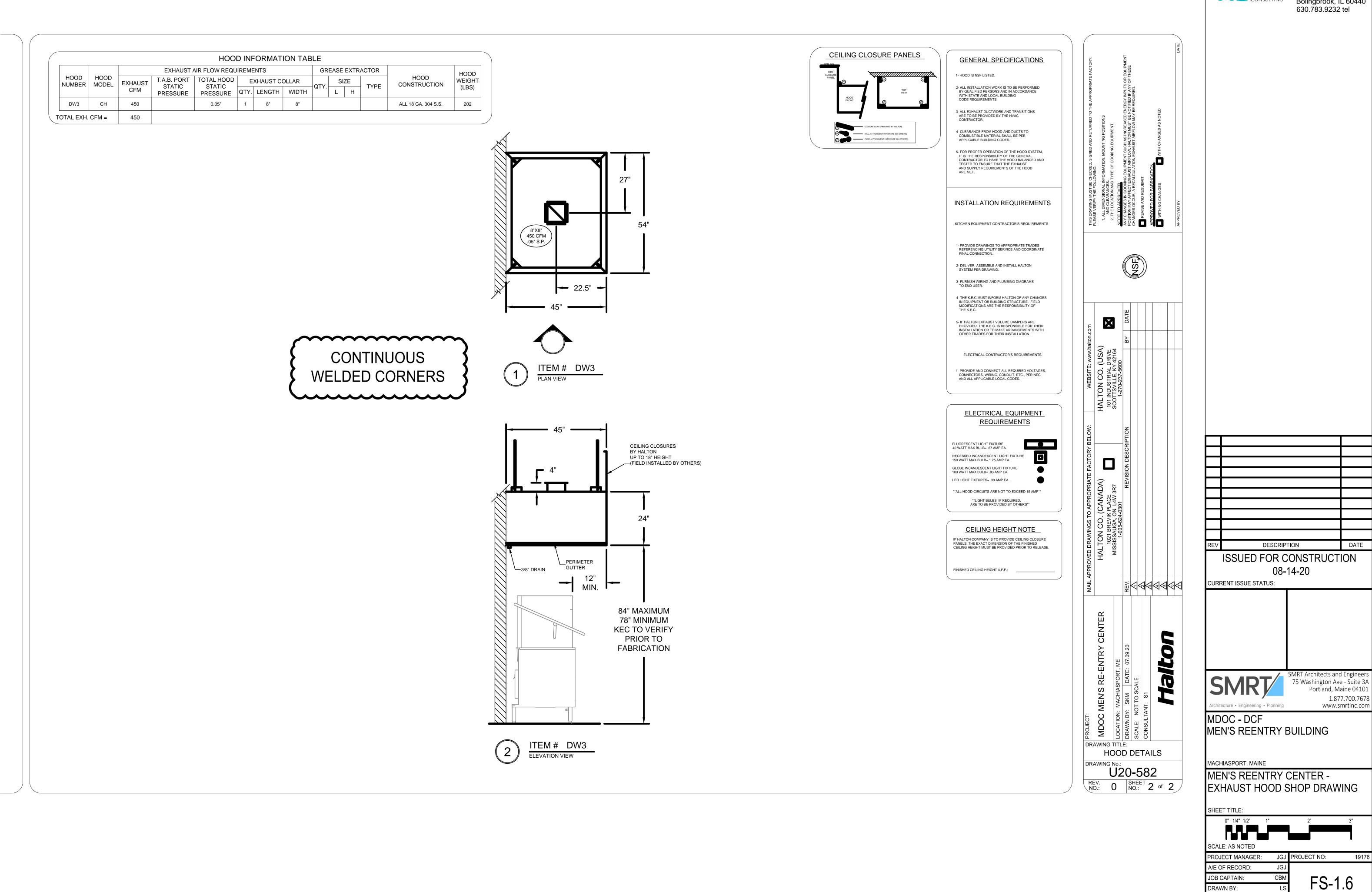
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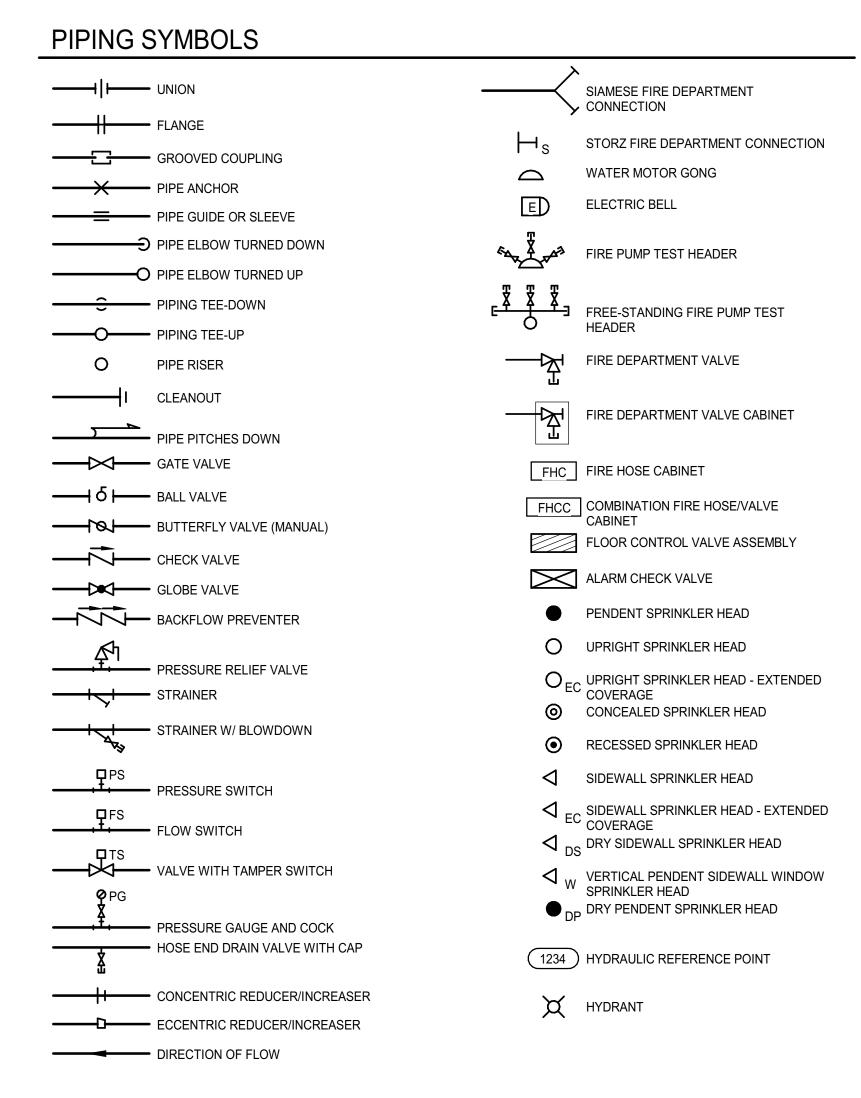


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_PIPING SYSTEMS							
CLEAN AGENT							
DRY PIPE SPRINKLER							
———— DR——— DRAIN							
FIRE SERVICE							
—— G —— DELUGE SPRINKLER							
PRE-ACTION SPRINKLER							

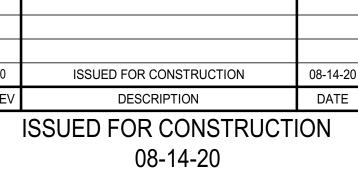
SPK (X)—— WET-PIPE SPRINKLER (ZONE X)

ABBREVIATIONS

AD	ACCESS DOOR	GC	GENERAL CONTRACTOR
AHJ	AUTHORITY HAVING JURISDICTION	GPM	GALLONS PER MINUTE
AP	ACCESS PANEL	HVAC	HEATING, VENTILATING AND AIR CONDITIONING
BFP	BACKFLOW PREVENTER	I.T.S.	INSPECTOR'S TEST STATION
BLDG	BUILDING	LFPC	LIMIT OF FIRE PROTECTION CONTRACT
ВОР	BOTTOM OF PIPE	MAX	MAXIMUM
CA	CLEAN AGENT	MFR	MANUFACTURER
CFF	CAPPED FOR FUTURE	MIN	MINIMUM
CLG	CEILING	MTD	MOUNTED
CONT	CONTINUATION	NTS	NOT TO SCALE
COORD	COORDINATION	PACV	PRE-ACTION ALARM CHECK VALVE
CTE	CONNECT TO EXISTING	PC	(FIRE DEPARTMENT) PUMPER CONNECTION
CU	COPPER	PIV	POST INDICATING VALVE
CW	COLD WATER	PLBG	PLUMBING
DACV	DRY PIPE ALARM CHECK VALVE	PRV	PRESSURE REDUCING VALVE
DIA	DIAMETER	PS	PRESSURE SWITCH
DIC	DOWN IN CHASE	(R)	REMOVE
DIW	DOWN IN WALL	(REL.)	RELOCATED
DCVA	DOUBLE CHECK VALVE ASSEMBLY	RM	ROOM
DN	DOWN	RPZ	REDUCED PRESSURE ZONE BFP
DR	DRAIN	RV	RELIEF VALVE
DS	DOWNSPOUT	SACV	(WET PIPE) SPRINKLER ALARM CHECK VALVE
DT	DROP AND TRANSITION	SD	SMOKE DETECTOR
DWG	DRAWING	SP	STAND PIPE
ENC	ENCLOSURE	SPK	SPRINKLER
(E)	EXISTING	TH	(FIRE DEPARTMENT) TEST HEADER
EXIST.	EXISTING	TOP	TOP OF PIPE
FBO	FURNISHED BY OWNER	TS	TAMPERS SWITCH
FC	FLEXIBLE CONNECTION	TTS	TIGHT TO STEEL
FCVA	FLOOR CONTROL VALVE ASSEMBLY	TYP	TYPICAL
FDC	FIRE DEPARTMENT CONNECTION	UIC	UP IN CHASE
FDV	FIRE DEPARTMENT VALVE	UIW	UP IN WALL
FDVC	FIRE DEPARTMENT VALVE CABINET	UL	UNDERWRITER'S LABORATORY
FEX	FIRE EXTINGUISHER	VCFF	VALVED AND CAPPED FOR FUTURE
FH	FIRE HOSE	W/	WITH
FHC	FIRE HOSE CABINET	WIV	WALL INDICATING VALVE
FM	FACTORY MUTUAL	WMG	WATER MOTOR GONG
FS	FLOW SWITCH		

FIRE PROTECTION GENERAL NOTES:

- 1. ALL SPRINKLER GENERAL NOTES, SYMBOLS LISTS & DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL SPRINKLER DRAWINGS FOR THIS PROJECT.
- 2. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND EXACT LOCATIONS AND ARRANGEMENTS OF NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER COMPONENTS SHALL BE DETERMINED IN THE FIELD WITH DUE CONSIDERATION OF STRUCTURAL, ELECTRICAL AND ARCHITECTURAL SYSTEMS. EXISTING STRUCTURAL SYSTEMS SHALL NOT BE MODIFIED WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER.
- 3. IF REQUIRED THE PROJECT SHALL BE PHASED IN ACCORDANCE WITH THE APPROVED PHASING PLAN. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE SEQUENCING AND TIMING OF OPERATIONS PRIOR TO COMMENCING WORK. SEE SPECIFICATIONS.
- 4. COORDINATE REMOVALS AND RELOCATIONS INCLUDING SELECTIVE CUTTING AND PENETRATIONS WITH ARCHITECTURAL, MECHANICAL, STRUCTURAL AND ELECTRICAL CONTRACTORS.
- 5. MOST PARTITIONS ARE FULL HEIGHT AND REQUIRE PENETRATIONS TO BE SEALED, SEE ARCHITECTURAL DRAWINGS FOR PARTITION HEIGHTS. UTILITIES SHOWN FOR CLARITY THAT MAY RUN PARALLEL TO WALL PARTITIONS WILL REQUIRE LOCATING IN THE FIELD TO MINIMIZE CONFLICT WITH PARTITIONS.
- 6. AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A CLEAN AND NEAT CONDITION.
- 7. FIRE PROTECTION SYSTEM AS SHOWN IS DIAGRAMMATIC AND FOR REFERENCE. CONTRACTOR MAY ALTER PIPING AND HEAD LOCATION WITH APPROVAL OF OWNER.
- 8. FIRE PROTECTION CONTRACTOR SHALL ENSURE PROPOSED FIRE PROTECTION SYSTEM DESIGN MEETS ALL REQUIREMENTS OF NFPA-13 AND AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- 9. SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED BY SPRINKLER CONTRACTOR TO PROVIDE MINIMUM FLOW RATES AT HYDRAULICALLY MOST REMOTE AREA AS REQUIRED BY OWNER'S INSURANCE UNDERWRITER AND
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING A HYDRANT FLOW TEST TO OBTAIN CURRENT FLOW DATA FOR THEIR USE IN THE DESIGN. PROVIDE COPIES OF TEST RESULTS TO THE OWNER AND ENGINEER.
- 11. SPRINKLER CRITERIA: A. WET SYSTEM PER NFPA-13. B. NFPA-101 LIFE SAFETY CODE.
- C. INTERNATIONAL BUILDING CODE. 12. REFER TO PERFORMANCE SPECIFICATIONS.
- 13. TAMPER SWITCHES ON SHUT-OFF VALVES SHALL REPORT 'TROUBLE' SIGNAL TO FIRE ALARM PANEL.
- 14. INSPECTION/TEST DRAIN ASSEMBLES SHALL BE PIPED TO GRADE. COORDINATE LOCATIONS WITH THE ARCHITECT.
- 15. ALL PIPE PENETRATIONS THRU FIRE RATED FLOOR/CEILING ASSEMBLIES SHALL BE FIRE PROOFED BY THE SPRINKLER CONTRACTOR AS REQUIRED TO MEET RATING.
- 16. DO NOT ORDER SPRINKLER HEADS UNTIL APPROVAL IS RECEIVED FROM ARCHITECT FOR ALL AREAS AND APPLICATIONS. REFER TO ARCHITECTURAL PLANS, DETAILS, AND SPECIFICATIONS FOR COMPLETE BUILDING
- 17. MANUFACTURERS NAME & MODEL NUMBER ARE USED FOR DESCRIPTIVE PURPOSES ONLY & ARE INTENDED TO INDICATE THE STANDARD OF MATERIAL OR ARTICLES REQUIRED.
- 18. INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND GOOD PRACTICE NORMAL TO THE TRADE. INSTALLATION SHALL INCLUDE PROVISIONS FOR ACCESS TO NORMAL MAINTENANCE ITEMS. PROVIDE ADEQUATE STRUCTURAL SUPPORTS AND SECURE MOUNTING METHODS WITH PROVISIONS FOR VIBRATION ISOLATION AND EXPANSION WHERE REQUIRED.
- 19. INSTALLATION SHALL PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT OF EQUIPMENT PROVIDED. PROVIDE ACCESS PANELS TO ALLOW ACCESS TO SPRINKLER SYSTEMS COMPONENTS THAT REQUIRE INSPECTION AND MAINTENANCE ACCORDING TO MANUFACTURERS LITERATURE.
- 20. PROVIDE CLAMPS, OFFSETS, EXPANSION JOINTS. ANCHORS & GUIDES AS NECESSARY TO PREVENT UNDUE STRAIN
- 21. PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- 22. SEE DETAILS, PIPING DIAGRAMS AND MANUFACTURER'S RECOMMENDATIONS FOR ADDITIONAL VALVES & FITTINGS NECESSARY FOR COMPLETE PIPING SYSTEM.
- 23. SPRINKLER CONTRACTOR TO COORDINATE ALL WORK WITH OTHER BUILDING TRADES. SPRINKLER CONTRACTOR SHALL SUBMIT A COORDINATION DRAWING WITH PIPING ELEVATIONS SHOWN TO PREVENT CONSTRUCTION AND OPERATING INTERFERENCE.
- 24. INFILL ALL NEW FLOOR SLAB PENETRATIONS WITH GROUT, FILL THICKNESS OF SLAB. MAINTAIN FIRE RATING. ALL EXISTING CONCRETE FLOORS AND CHASES ARE 2 HOUR FIRE RATED.
- 25. FILL AND PATCH ALL OPENINGS IN WALLS WHERE CONDUITS, PIPES, ETC. ARE OR HAVE BEEN REMOVED WITH UL LISTED FIRE ASSEMBLY APPROVED BY THE ARCHITECT. MAINTAIN 2HR FIRE RATING IF APPLICABLE.
- 26. TIE-IN POINT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE EXACT LOCATIONS IN THE FIELD BASED ON FIELD CONDITIONS.
- 27. SPRINKLER CONTRACTOR SHALL PROVIDE STAMPED DRAWINGS AS REQUIRED BY STATE AND SPECIFICATIONS.
- 28. LOCATE SPRINKLER HEADS IN CENTER OF CEILING TILES.
- CURRENT ISSUE STATUS:



DINEEN



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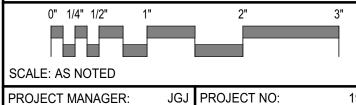
MDOC - DCF MEN'S REENTRY CENTER

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FIRE PROTECTION LEGEND AND **ABBREVIATIONS**

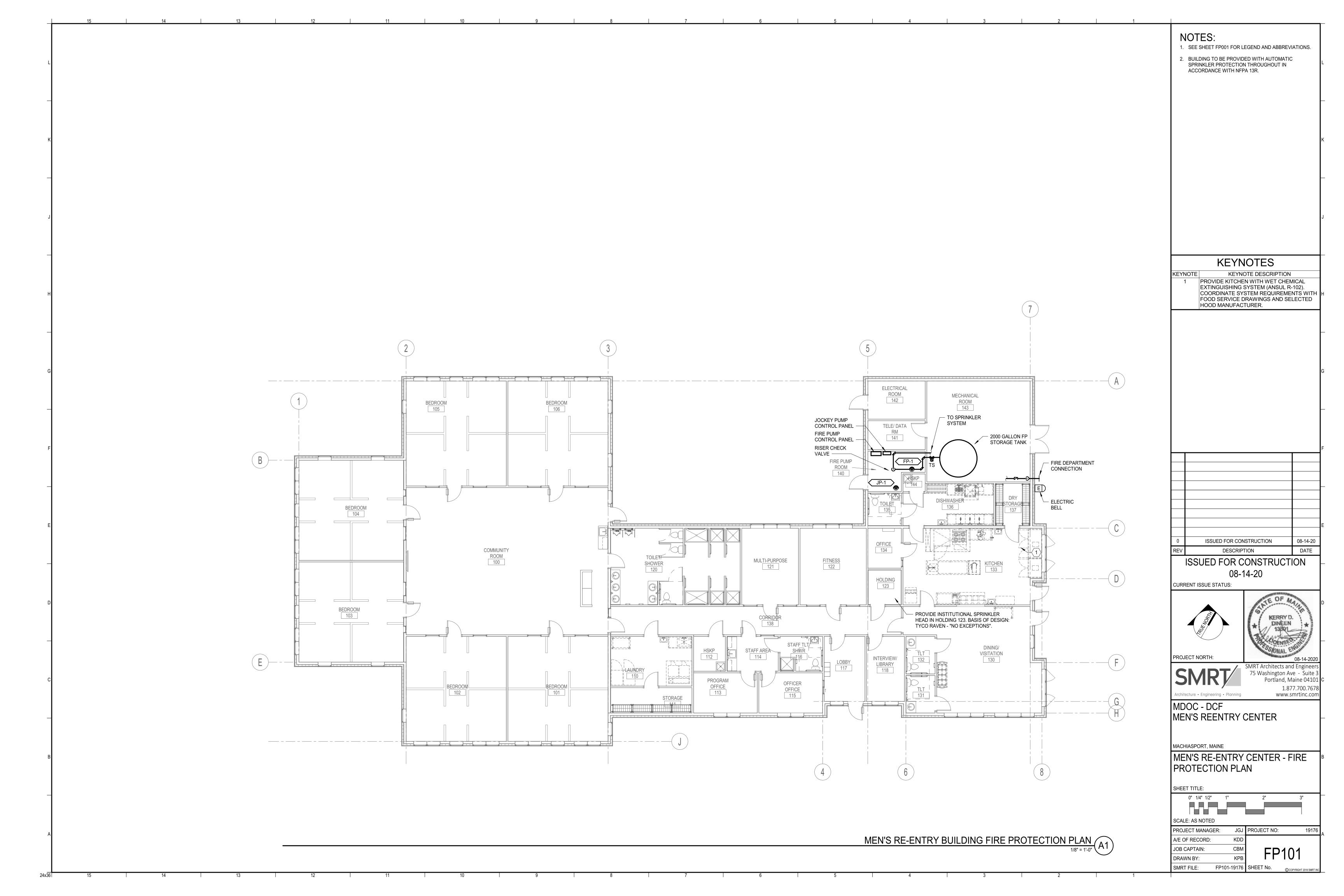
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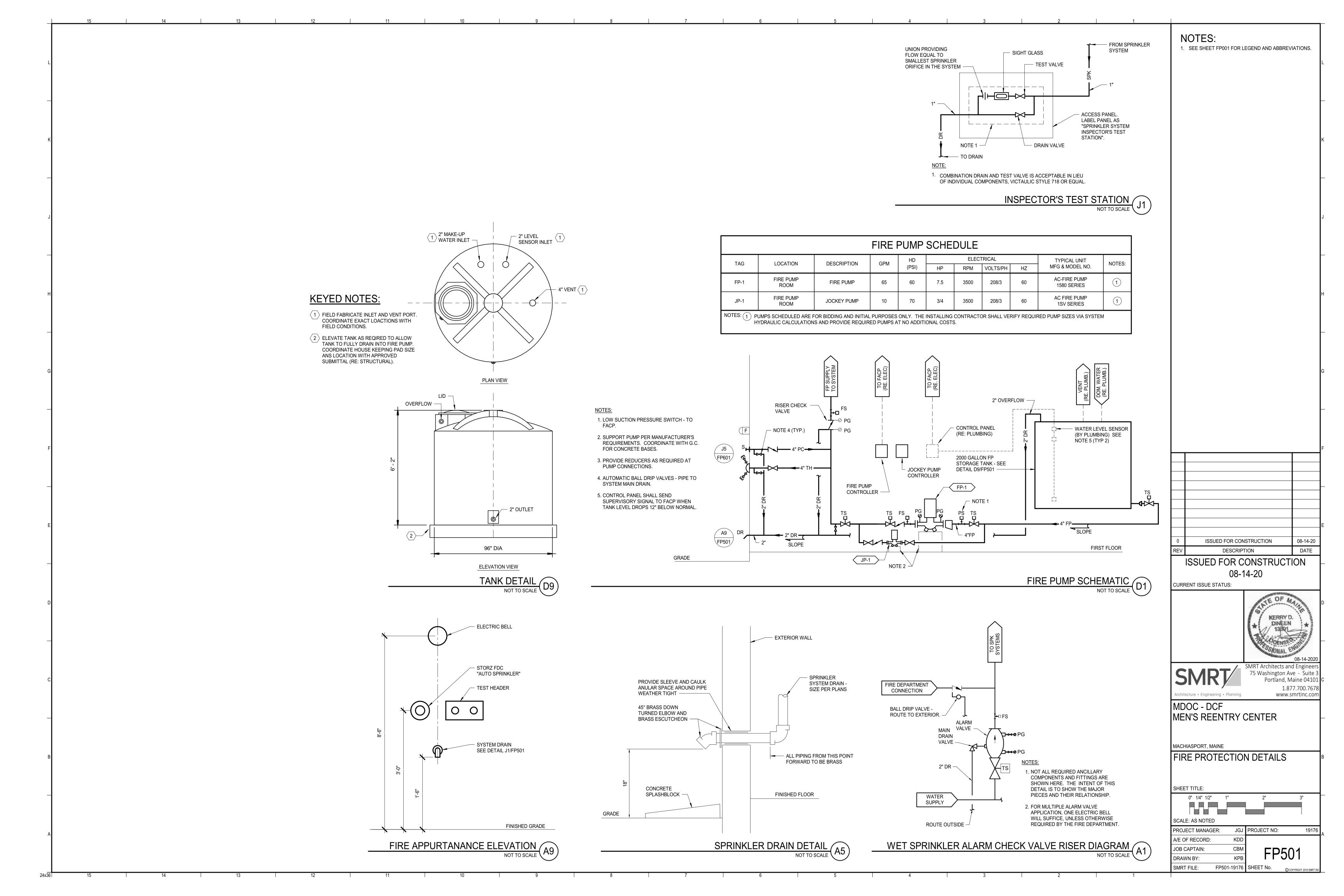
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KDD A/E OF RECORD: JOB CAPTAIN: DRAWN BY:

FP001-19176 SHEET No.





<u>SPECIFICATIONS</u>

THE KITCHEN FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

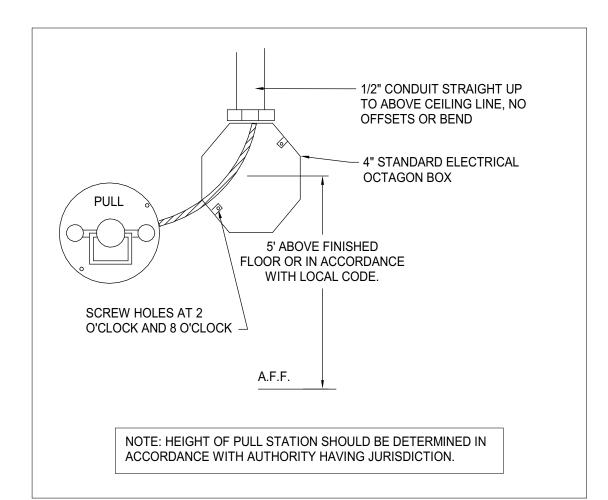
THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

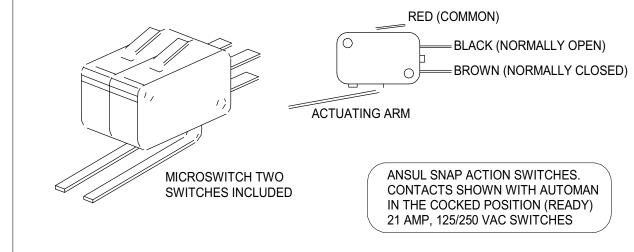
THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/LINKAGE ASSEMBLY.

HOOD AND ANSUL SYSTEM SEQUENCE OF OPERATION

THE HOOD WILL BE EQUIPPED WITH AN ANSUL R-102 SYSTEM THAT HAS USEABLE LINKS FOR AUTOMATIC DETECTION OF A FIRE. THESE LINKS ARE SET TO MELT AT A PREDETERMINED TEMPERATURE AND WILL ACTIVATE THE ANSUL SYSTEM ONCE THAT TEMPERATURE IS EXCEEDED. THE ANSUL SYSTEM CAN ALSO BE ACTIVATED BY PULLING THE REMOTE PULL STATION HANDLE. ONCE ONE OF THESE TWO EVENTS HAVE OCCURRED, THE FOLLOWING SEQUENCE WILL TAKE PLACE.

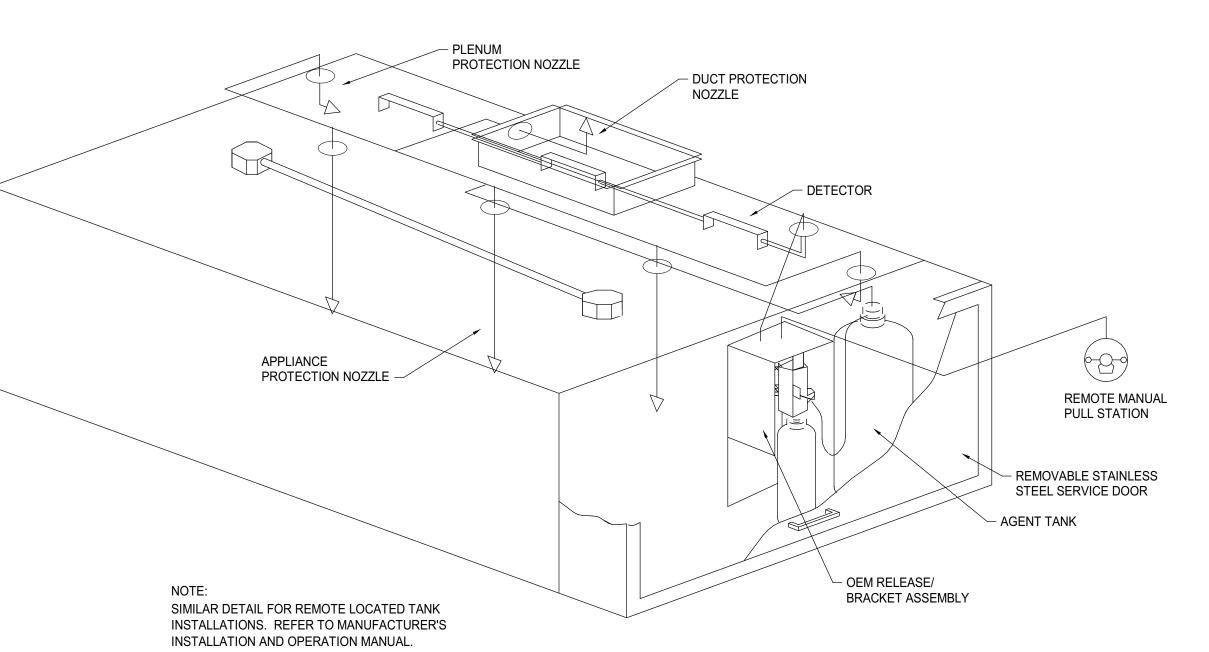
- 1. TENSION IN THE WIRE CABLE THAT CONNECTS THE FUSEABLE LINKS, REMOTE PULL STATION, AND THE MECHANICAL GAS VALVE TO THE ANSUL REGULATED RELEASE ASSEMBLY WILL BE RELEASED. AT THIS TIME THE FOLLOWING WILL TAKE PLACE.
- A. THE GAS VALVE WILL SHUT OFF THE FLOW OF GAS TO THE COOKING APPLIANCES. SHUNT TRIP BREAKER WILL SHUT OFF POWER TO ELECTRIC COOKING APPLIANCES.
- B. THE REGULATED RELEASE ASSEMBLY WILL ALLOW THE SYSTEM TO START SPRAYING THE ANSULEX LOW PH LIQUID FIRE SUPPRESSANT INTO THE PLENUM AREA, THE FILTERS, COOKING SURFACE, AND THE EXHAUST DUCT SYSTEM AT A PREDETERMINED FLOW RATE TO SUPPRESS THE FIRE.
- C. THE REGULATED RELEASE ASSEMBLY WILL CHANGE THE STATE OF A SET OF MICRO SWITCHES THAT ARE WIRED TO THE HOODS ELECTRICAL CONTROL PACKAGE.
- 2. ONCE THE MICRO SWITCHES CHANGE STATE THE FOLLOWING EVENTS WILL TAKE PLACE.
- A. THE EXHAUST FAN WILL TURN ON IF IT WAS OFF OR REMAIN RUNNING IF IT WAS ON AT THE TIME THE FIRE OCCURRED.
- B. THE MAKE UP AIR FAN WILL SHUT DOWN
- C. THE SHUNT TRIP DEVICE WIRED TO THE ELECTRICAL CONTROL PACKAGE WILL RECEIVE A SIGNAL TO SHUT DOWN THE APPLIANCES WIRED TO IT SO THAT THERE IS NO ELECTRICAL APPLIANCE UNDER THE HOOD RECEIVING POWER FROM THE BUILDING.
- D. ADDITIONAL EVENTS MAY ALSO OCCUR AT THIS TIME DEPENDING ON LOCAL CODES SUCH AS A SIGNAL BEING SENT TO ACTIVATE THE BUILDING ALARM OR THE LIGHTS IN THE HOOD WILL TURN OFF.





ANSUL MICROSWITCH DETAIL

ANSUL PULL STATION DETAIL



ANSUL R-102 SYSTEM LAYOUT NOT TO SCALE A1

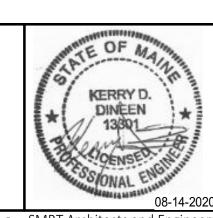
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ISSUED FOR CONSTRUCTION 08-14-20

CURRENT ISSUE STATUS:

NOTES:

1. SEE SHEET FP001 FOR LEGEND AND ABBREVIATIONS.



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FIRE PROTECTION DETAILS

SHEET TITLE:

0" 1/4" 1/2" 1" 2" 3"

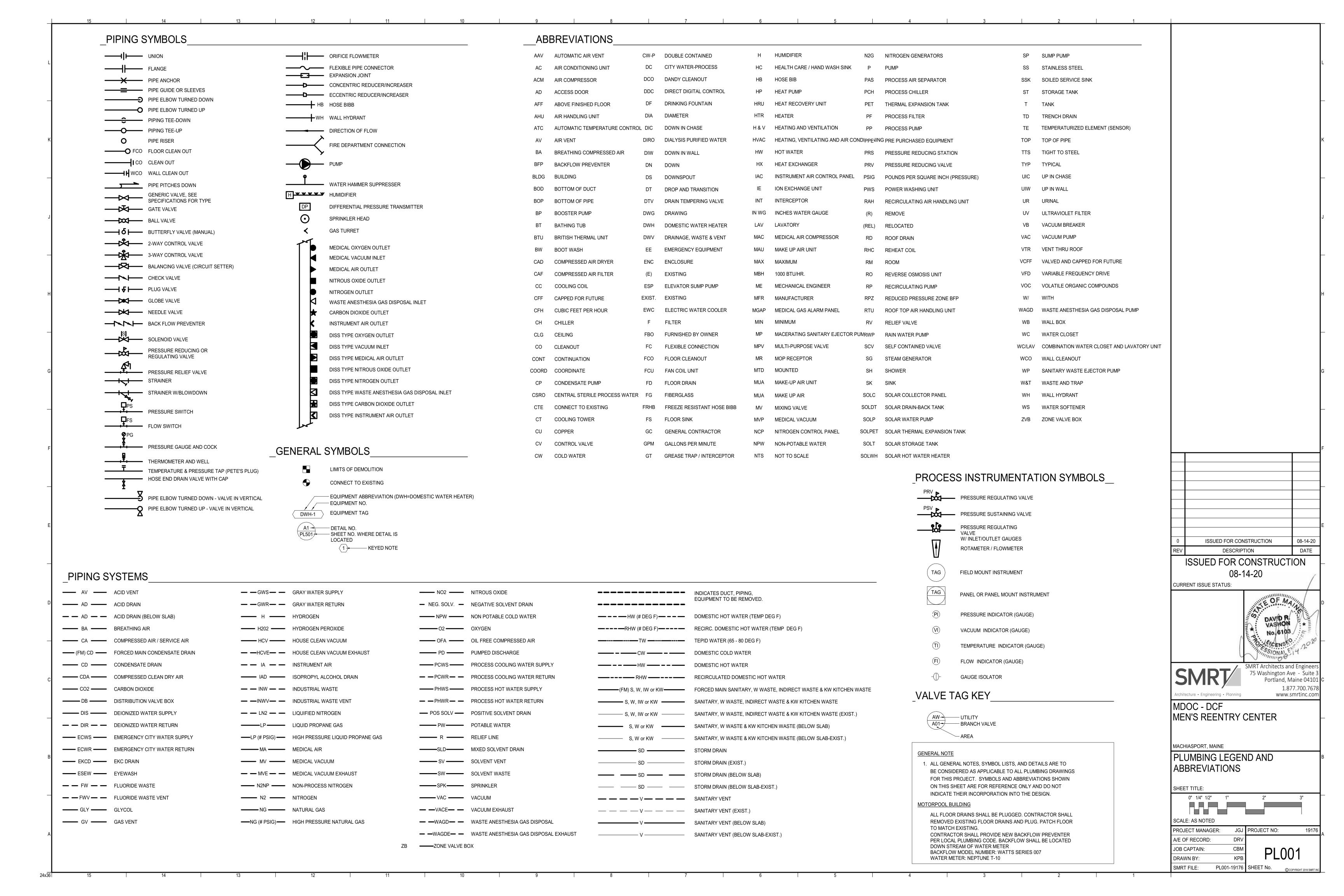
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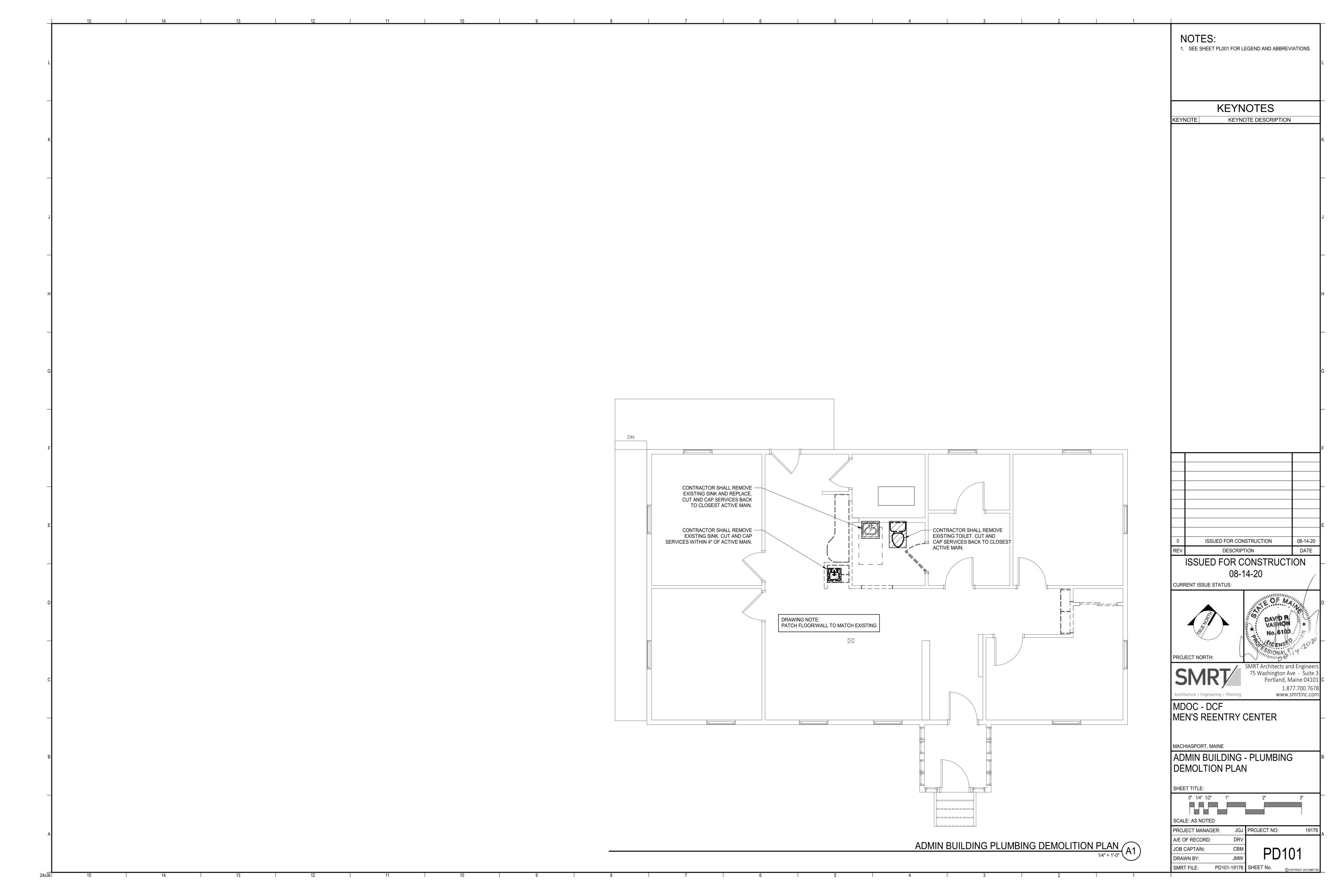
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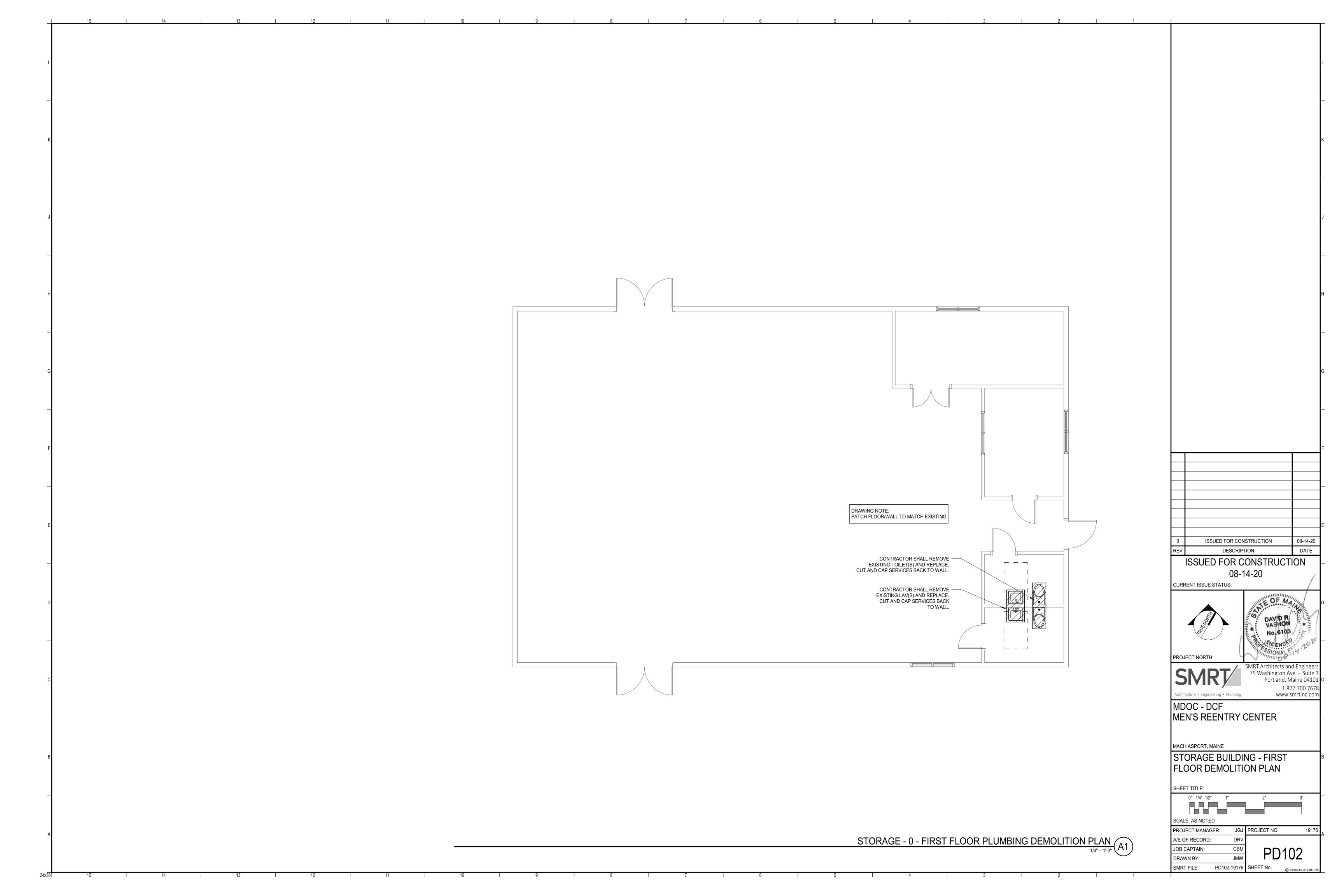
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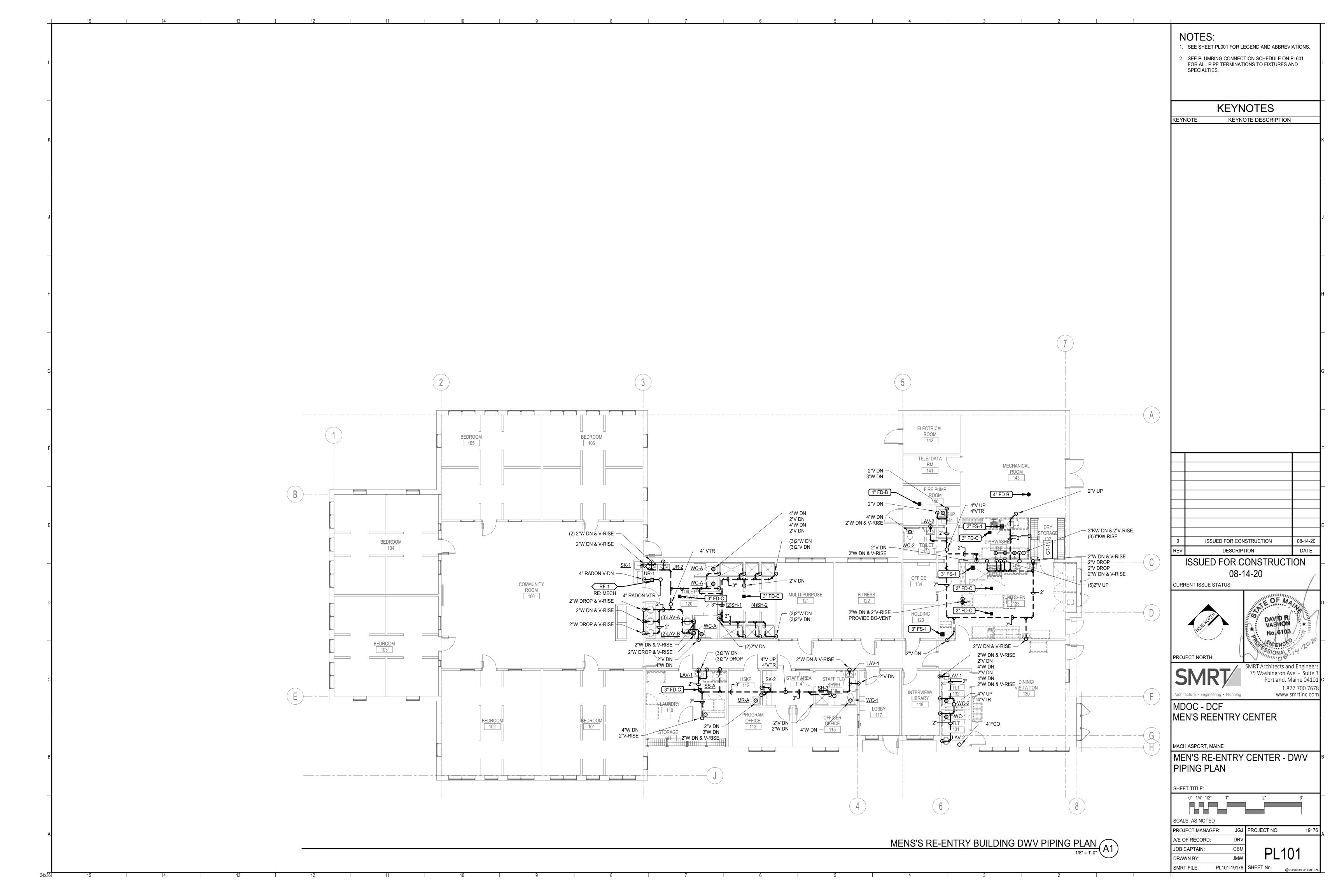
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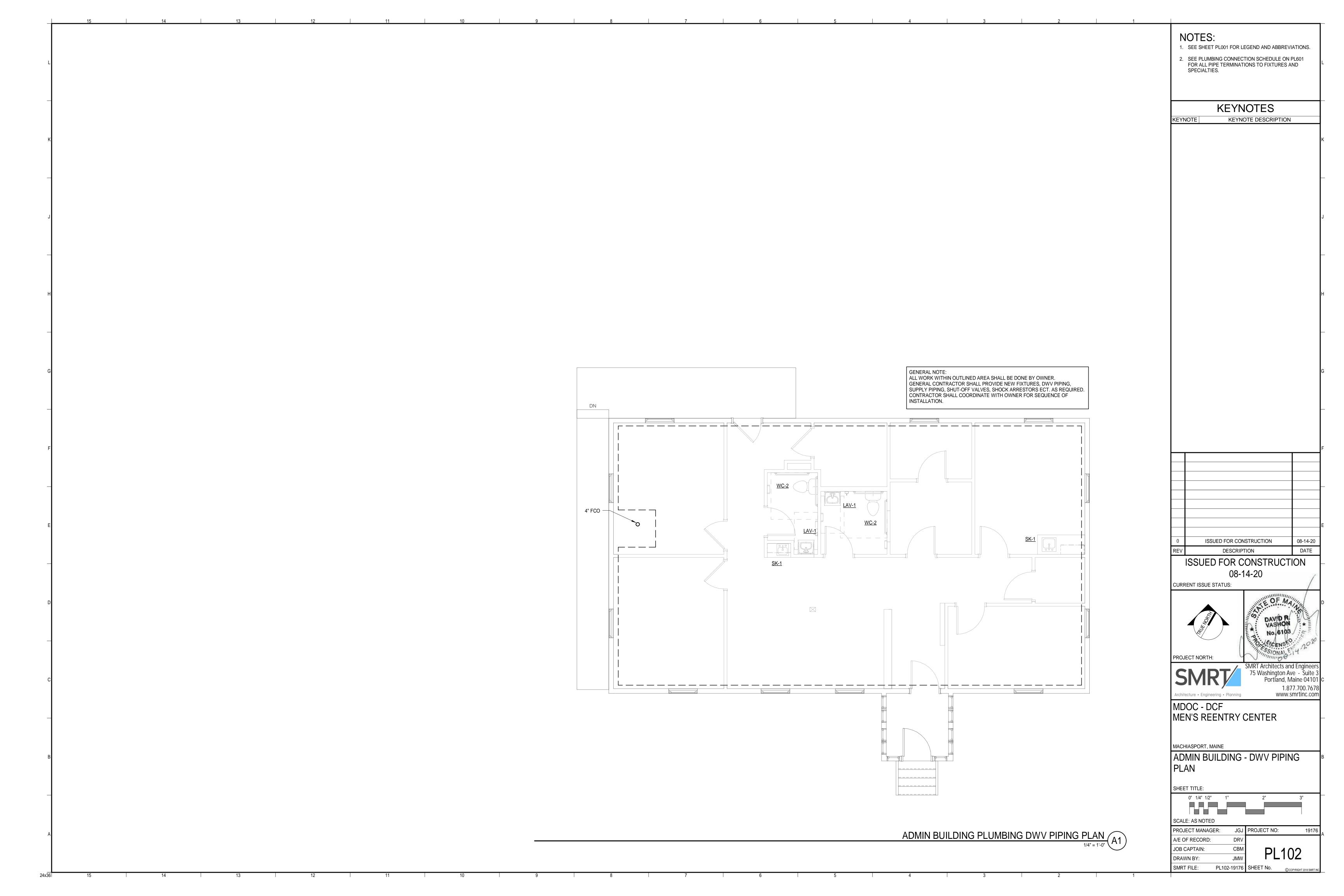
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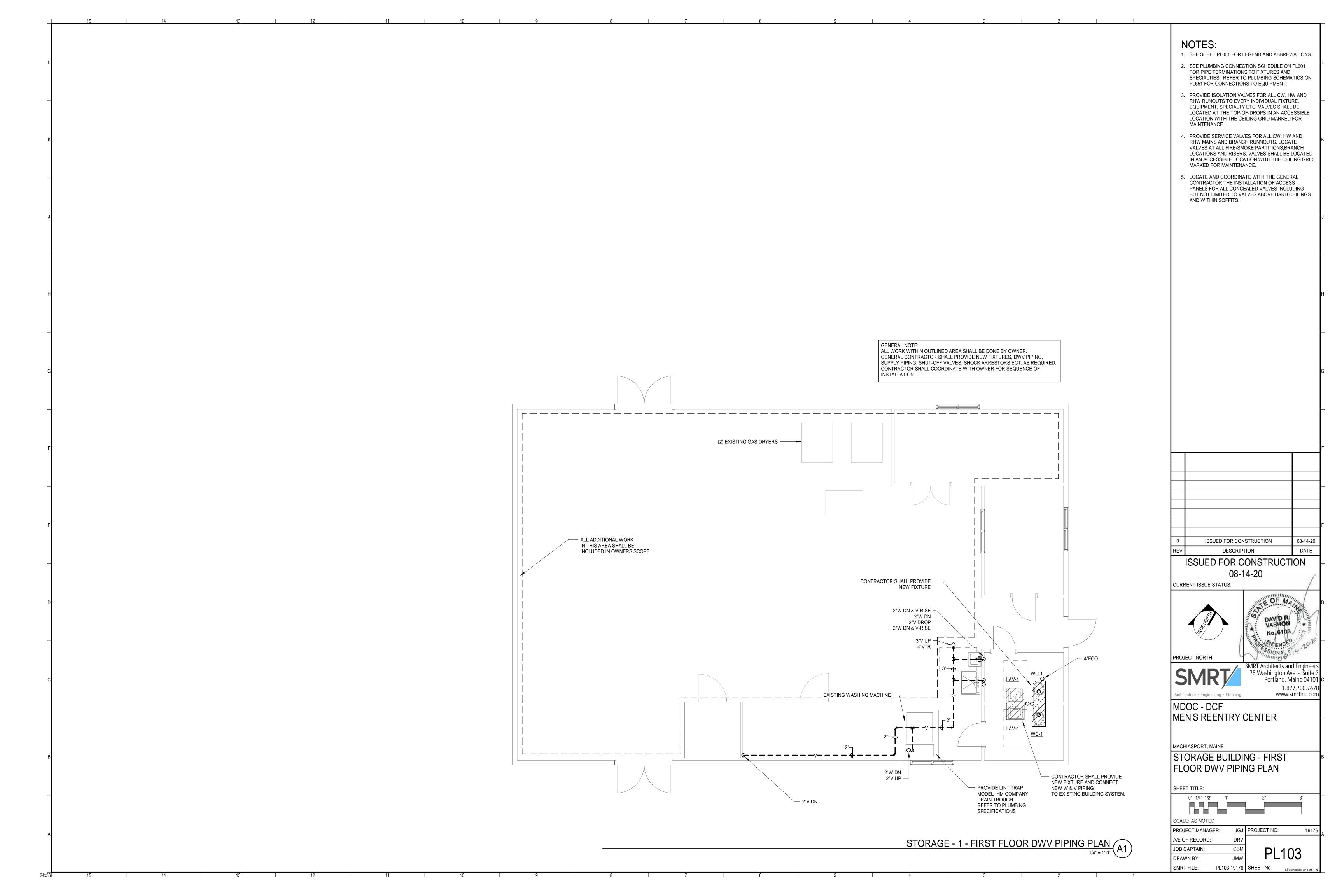


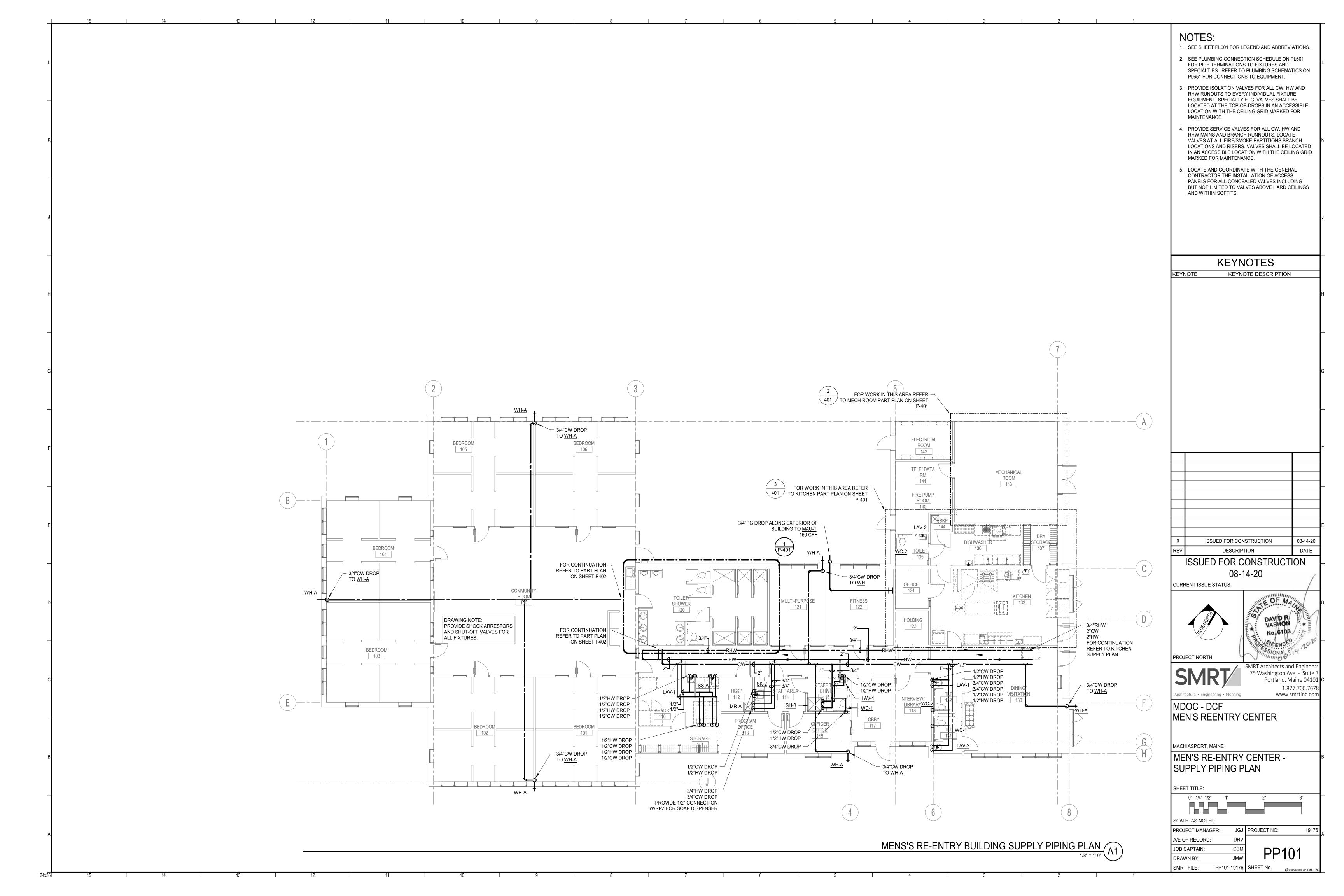


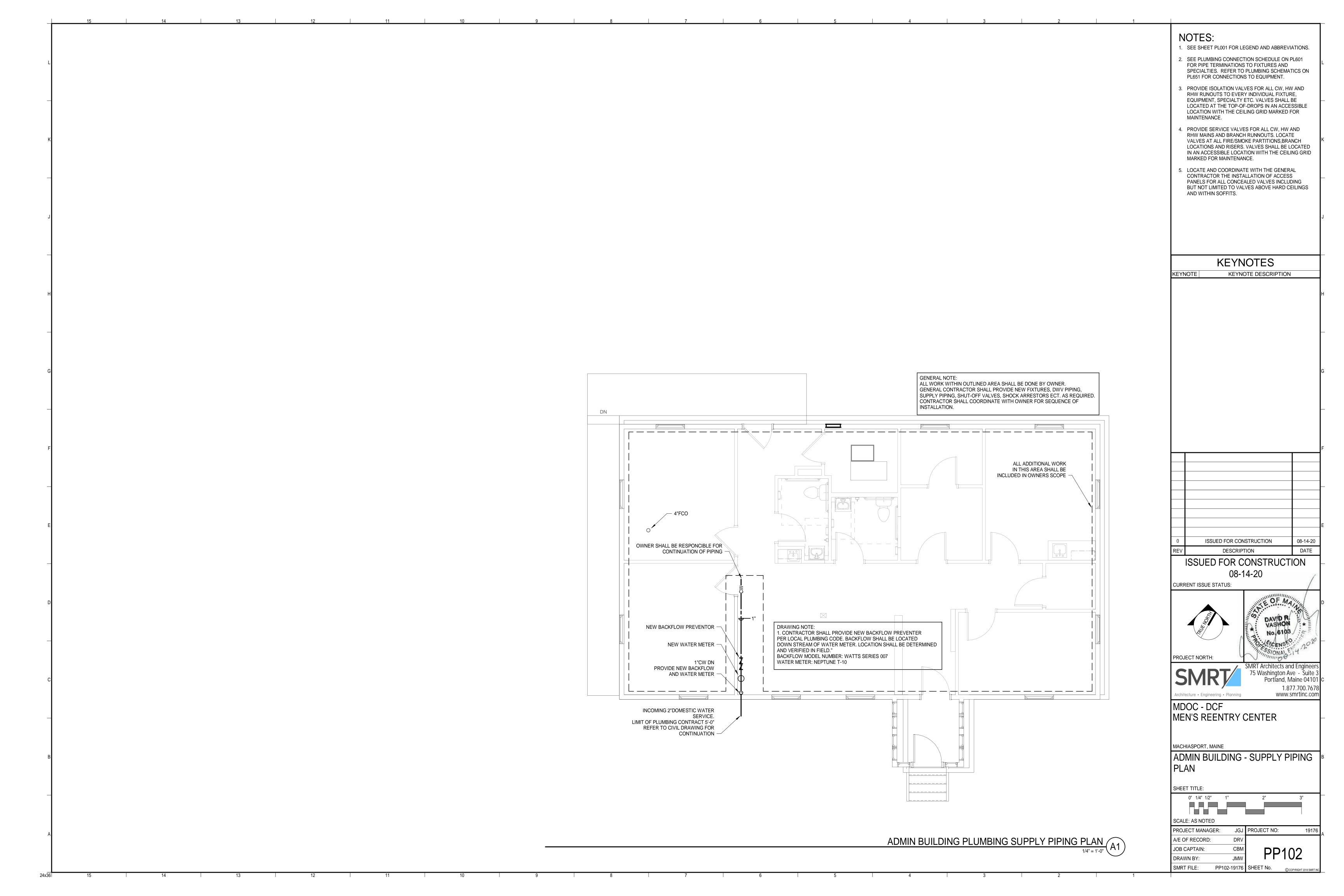


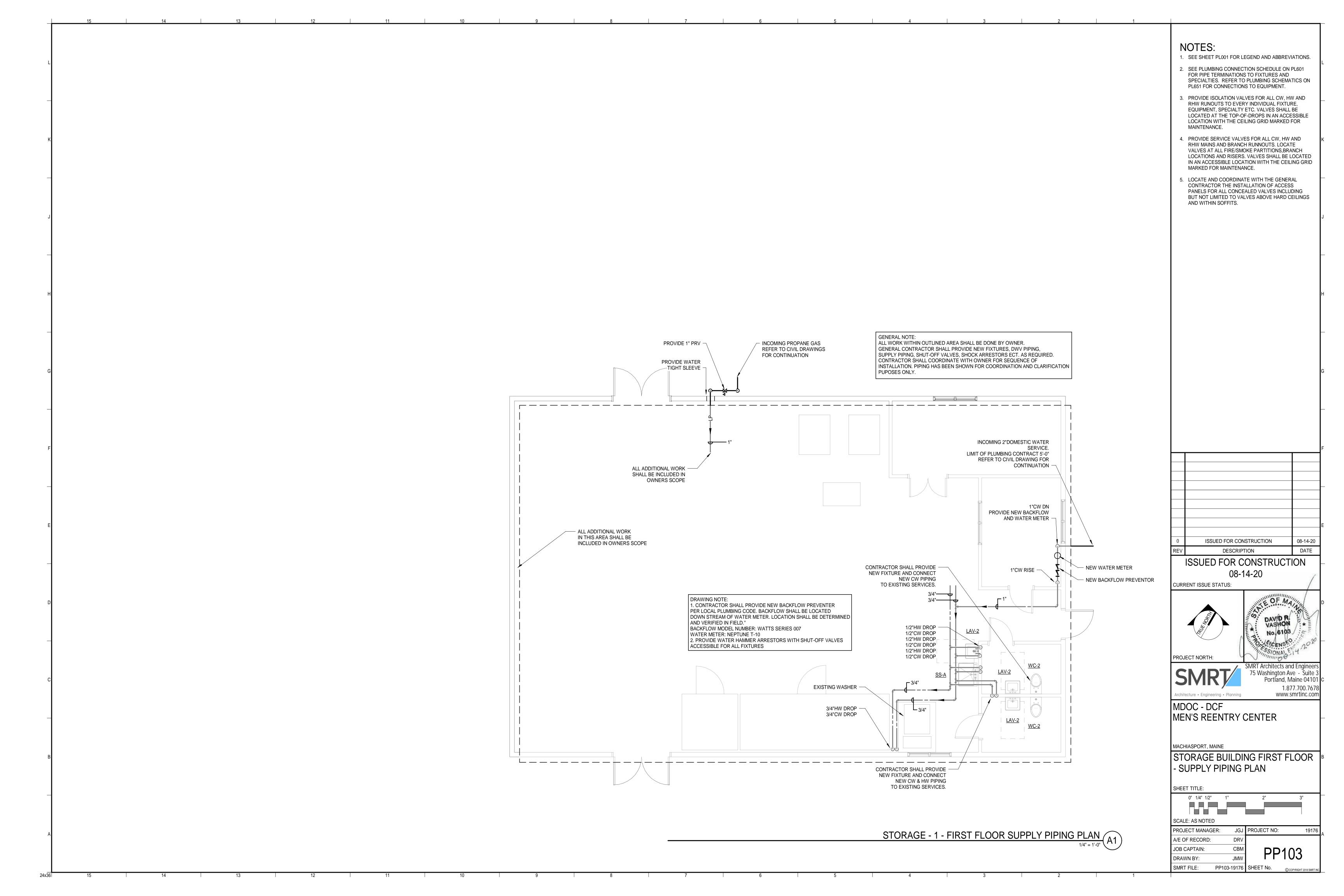


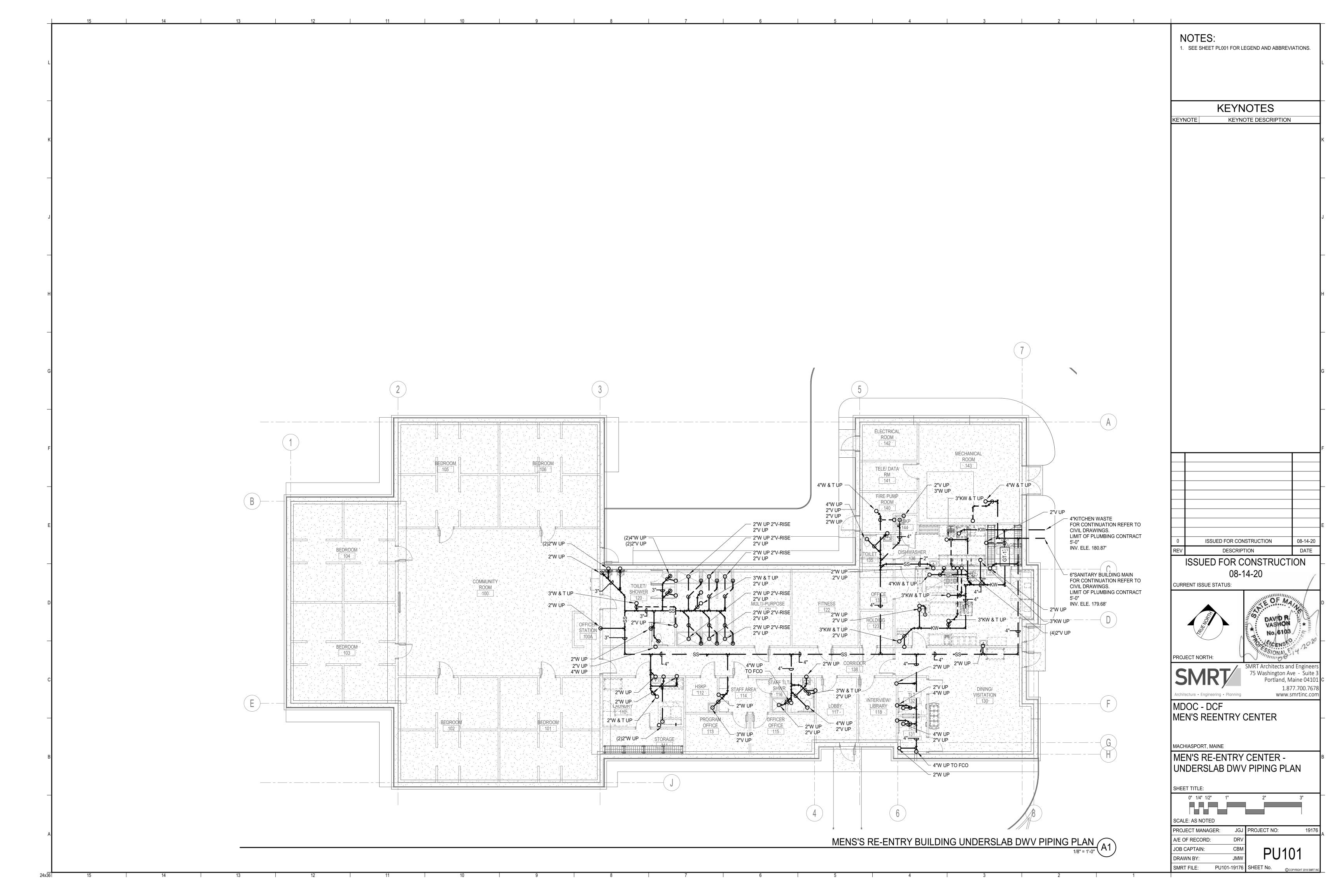


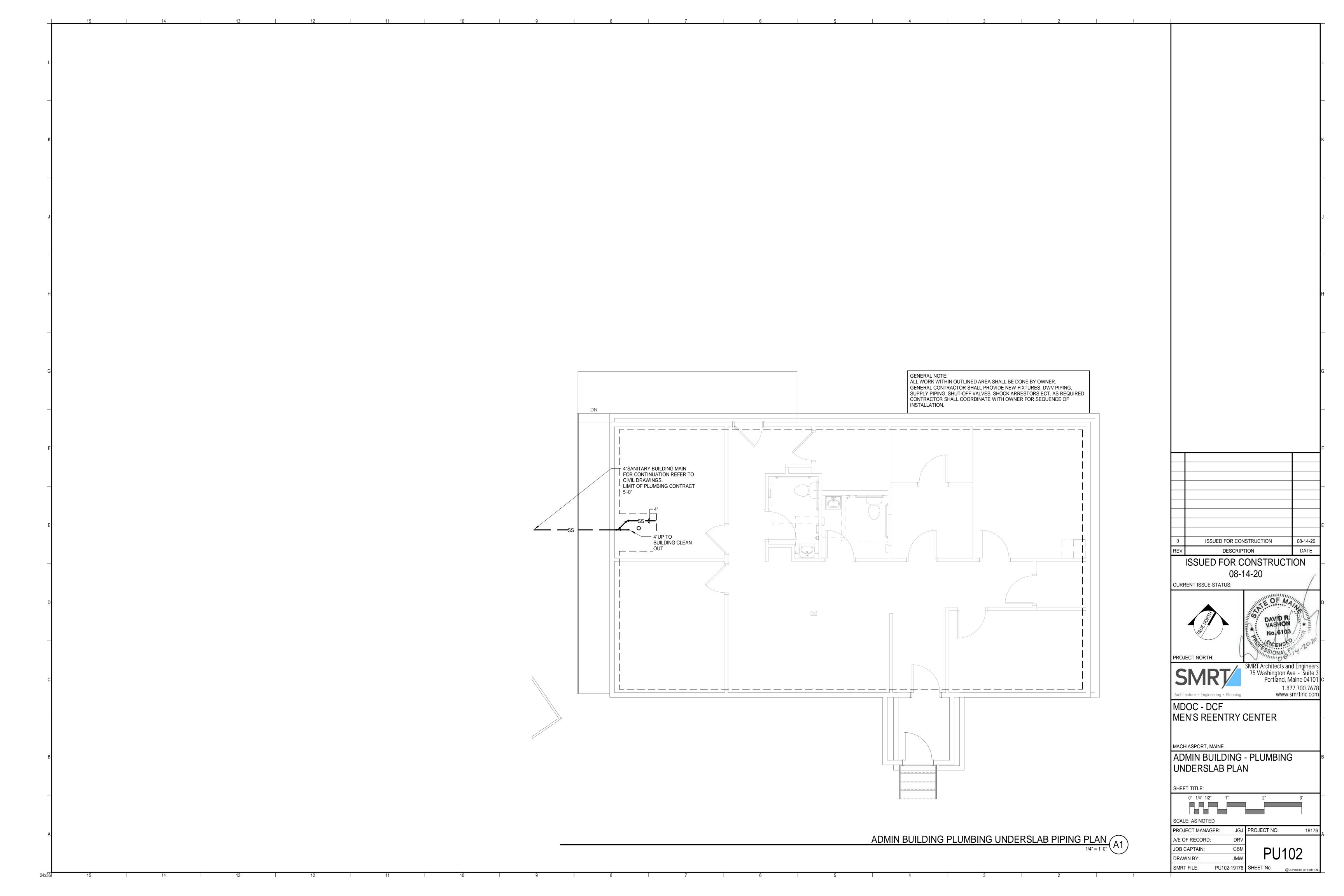


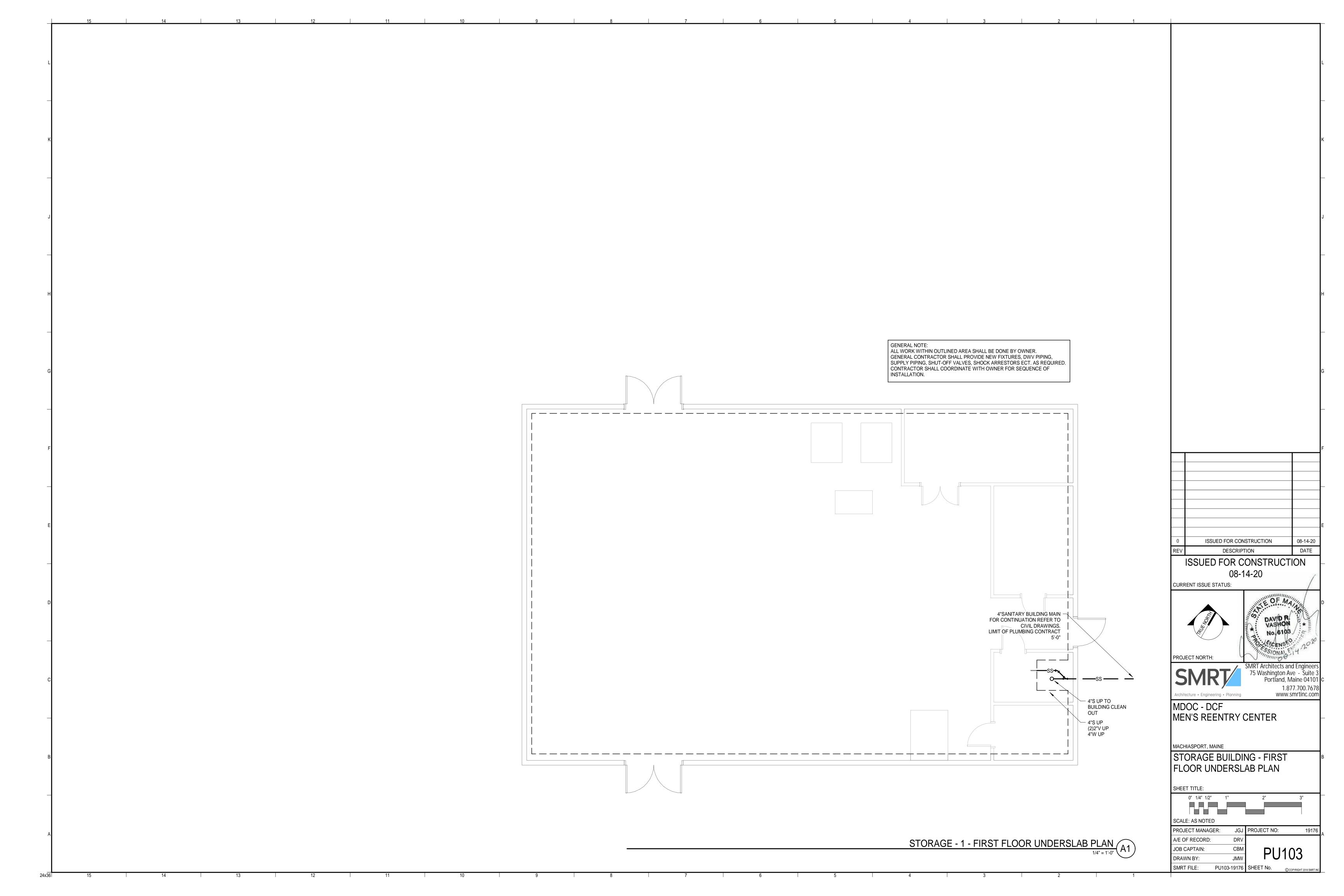


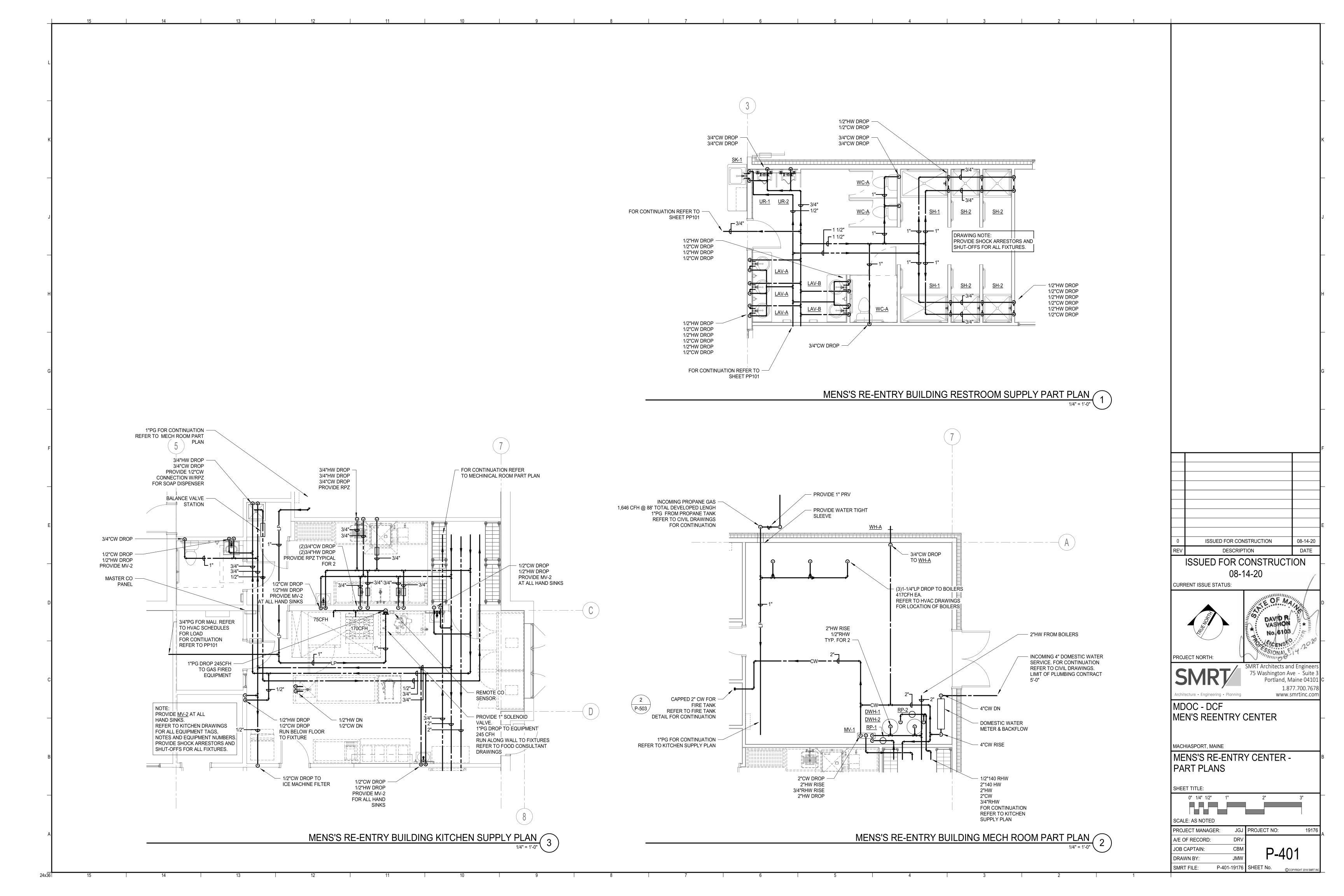


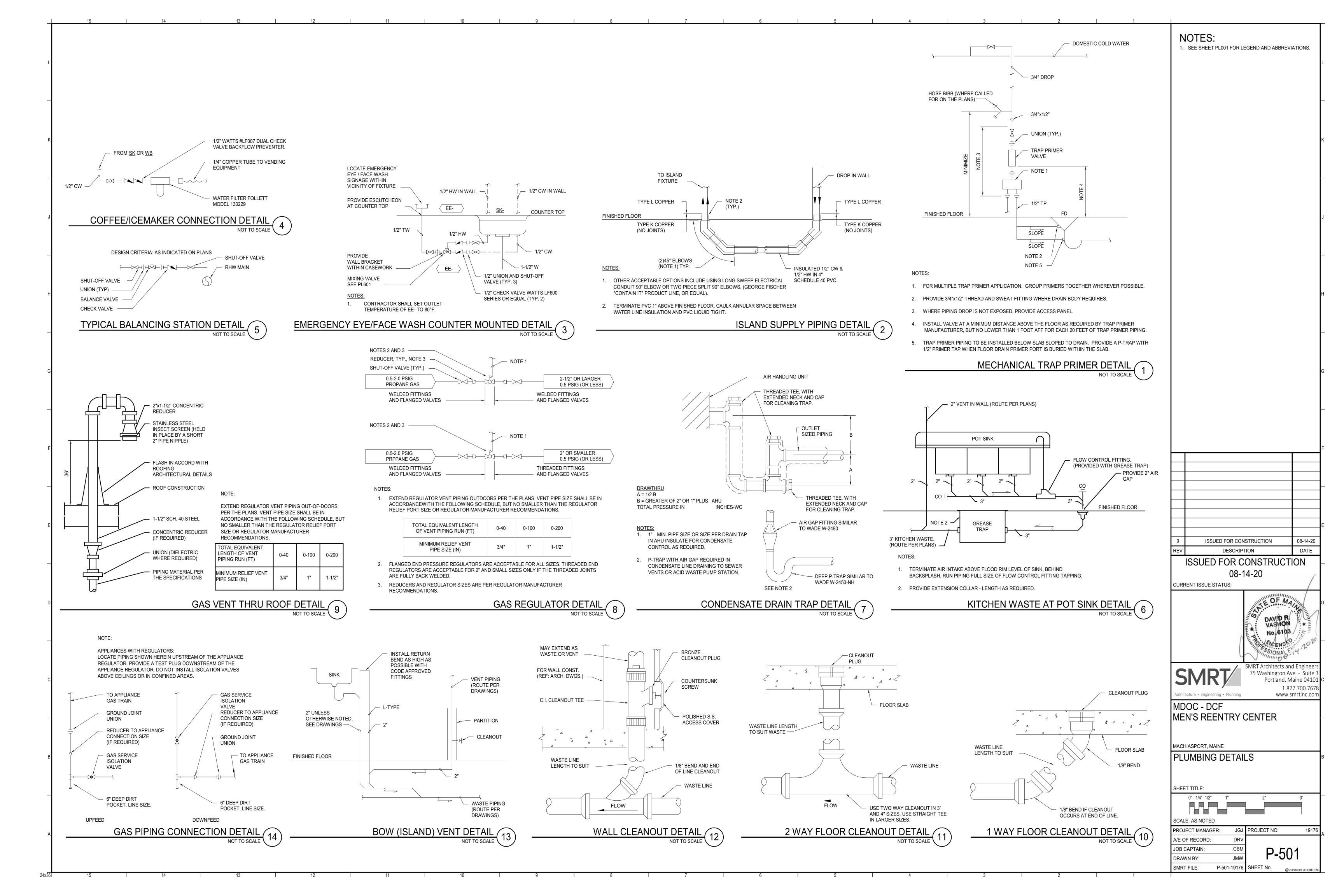


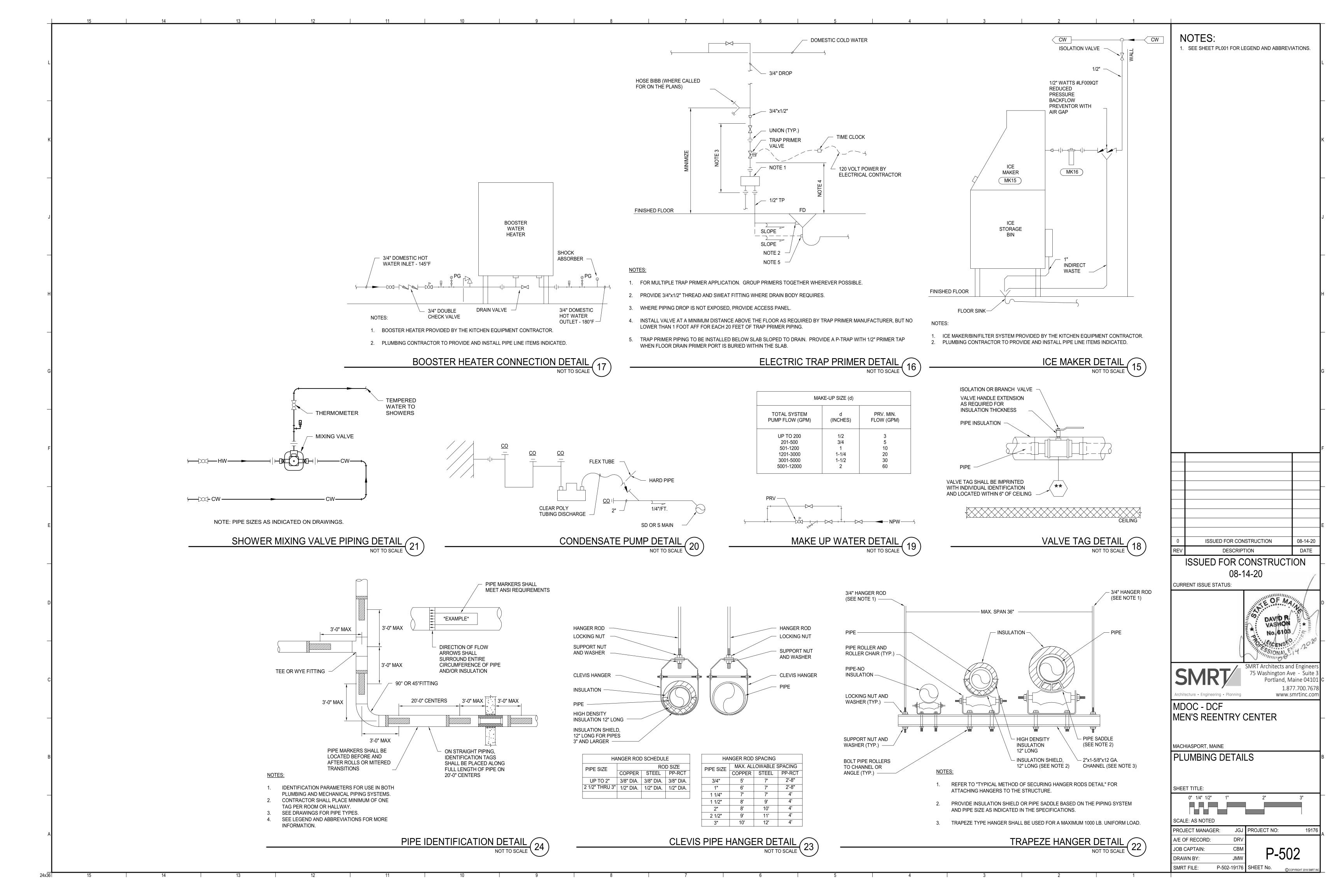


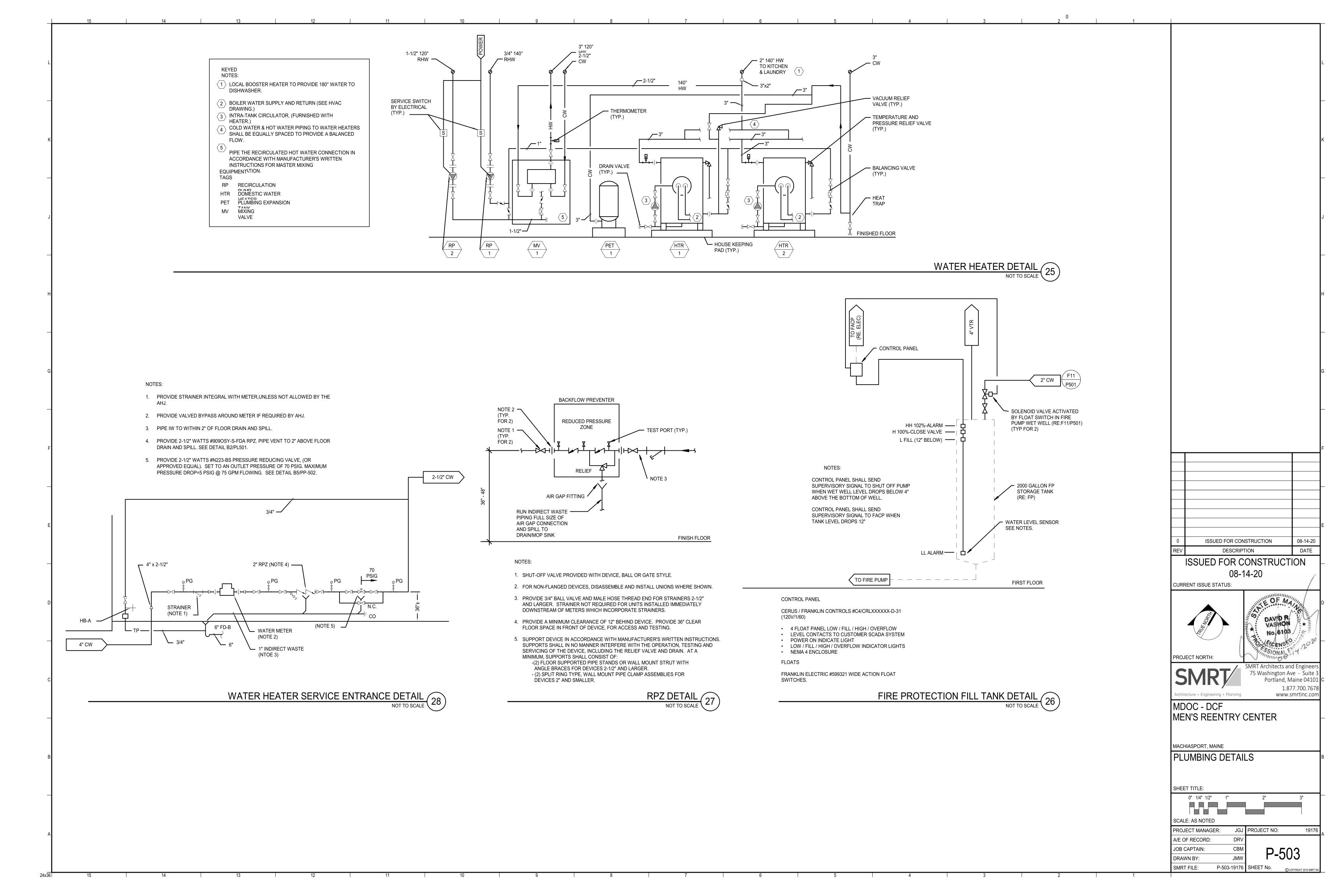












				WATE	R HEATER SCH	EDULE					
TAG	LOCATION	FUEL	BOILER INPUT	RECOVERY RATE GPH 40 - 140 F	STORAGE TANK SIZE/GAL.	ELECTRI Hz	CAL DATA VOLTS/PH	INLET/OUTLET	OPERATING WEIGHT(lbs.)	TYPICAL UNIT MFG AND MODEL NO.	NOTES:
DWH-1	MECHANICAL ROOM	INDIRECT	40 GPM	950	119	60	120/1	2"	-	PVI 1900-L-150A-QWD	1
DWH-2	MECHANICAL ROOM	INDIRECT	40 GPM	950	119	60	120/1	2"	-	PVI 1900-L-150A-QWD	1
NOTES:	1. PROVIDE DOUBLE-WALL P TEMPERATURE IS 160 DEG. I				ER WATER CONTROL VALVE.	PROVIDE CON	TACTS FOR RE	MOTE START/ST	TOP AND MONIT	ORING FROM BAS. BOILER W	ATER

					MIXIN	G VALVE SCHE	DULE				
TAG	LOCATION	SERVICE	MANUFACTURER & MODEL NUMBER	MIN. FLOW (GP	DESIGN FLOW (GPM)	OUTLET TEMP. SET POINT DEG. F	MAX. PRESS. DROP @ DESIGN FLOW (PSI)	INLETS (IN)	OUTLETS (IN)	TYPICAL UNIT MFG AND MODEL NO.	NOTES:
MV-1	MECHANICAL ROOM	DOM. HOT WATER	LEONARD NV-150-LF	0.5	72	140	10	1.5"	1.5"	LEONARD	1,2
MV-2	ALL HAND SINKS	POINT OF USE	WATTS	0.5	-	120	-	1/2"	1/2"	WATTS	<u>-</u>
NOTES:	1. CENTRAL WATER HEATING 2. 3/4" RHW CONNECTION AS										

			PLUME	BING PU	MP SCH	IEDULE				
TAC	LOCATION	CED/ICE	CDM	LID/ET \		ELECTR	ICAL DATA		TYPICAL UNIT MFG AND	NOTES:
TAG	LOCATION	SERVICE	GPM	HD(FT.)	HP	RPM	VOLTS/ PH	AMP	MODEL NO.	NOTES:
RP-1	MECHANICAL ROOM	DOMESTIC HW 120 DEG. F	5	10	1/25	3250	120/1	<3	TACO 0011-SF3	1
RP-2	MECHANICAL ROOM	DOMESTIC HW 140 DEG. F	5	10	1/25	3250	120/1	<3	TACO 0011-SF3	1
NOTES:	1. ALL BRONZE OR STAINLES	140 DEG. F	5	10	1/25	3250	120/1	<3		

EXPANSION TANK SCHEDULE													
TAG	LOCATION	SERVED	ACCEPT. GAL.	DIA (IN.)	HEIGHT (IN.)	MAX OPERATING TEMP (DEGREES)	TYPICAL UNIT MFG AND MODEL NO.	NOTES:					
PET-1	MECHANICAL ROOM	DOMESTIC HOT WATER	11	16"	45"	200	AMTROL THERM-X-TROL ST-70VC	1					
NOTES:	1. PROVIDE ASME RATED SHE	ELL AND NSF RATED BLADE	DER										

TAG	APPLICATION	TYPICAL UNIT MFG & MODEL NO.	DESCRIPTION	NOTES
GI-A	GREASE INTERCEPTOR	SCHIRER GB-75	75-GPM, 86-LB. GREASE CAPACITY, ACID RESISTANT COATED STEEL, EXTENSION, ANCHOR FLANGE	1

TAG	APPLICATION	TYPICAL UNIT MFG & MODEL NO.	DESCRIPTION	NOTES
GI-A	GREASE INTERCEPTOR	SCHIRER GB-75	75-GPM, 86-LB. GREASE CAPACITY, ACID RESISTANT COATED STEEL, EXTENSION, ANCHOR FLANGE	1

SHO	CK ABSORBER	SCHED	ULE
TYPE	FIXTURE UNIT RATING	BASIS OF	DESIGN
	TIXTORE ONLY RATING	MANUF.	FIGURE NO.
A'	1-10	ZURN	100
В'	12-32	ZURN	200
C'	33-60	ZURN	300
D'	61-113	ZURN	400
E'	114-154	ZURN	500
F'	155-330	ZURN	600
NOTES:			

TAG	DESCRIPTION		BRANC	H SIZES		NOTES
TAG	DESCRIPTION	CW	HW	VENT	WASTE	NOTES
WC-A	ADA WATER CLOSET, OFFENDER	1"	-	2"	4"	
WC-1	ADA WATER CLOSET, STAFF	1"	-	2"	4"	
WC-2	WATER CLOSET, STAFF	1"	-	2"	4"	
UR-1	ADA URINAL, OFFENDER	3/4"	-	2"	2"	
UR-2	URINAL, OFFENDER	3/4"	-	2"	2"	
LAV-A	ADA LAVATORY, WALL HUNG - OFFENDER	1/2"	1/2"	2"	2"	
LAV-B	ADA LAVATORY, WALL HUNG - OFFENDER	1/2"	1/2"	2"	2"	
LAV-1	LAVATORY, WALL HUNG - STAFF	1/2"	1/2"	2"	2"	
LAV-B	ADA LAVATORY, WALL HUNG - STAFF	1/2"	1/2"	2"	2"	
SK-1	SINK, COUNTER MOUNTED BREAK ROOM	1/2"	1/2"	2"	2"	
SK-2	SINK, COUNTER MOUNTED GENERAL PURPOSE	1/2"	1/2"	2"	2"	
SH-1	ADA SHOWER, OFFENDER	1/2"	1/2"	2"	2"	
SH-2	SHOWER, OFFENDER	1/2"	1/2"	2"	2"	
SH-3	SHOWER, STAFF	1/2"	1/2"	2"	2"	
MR-A	MOP SERVICE BASIN - OFFENDER	3/4"	3/4"	2"	3"	
SS-A	SERVICE SINK - STAFF	3/4"	3/4"	2"	2"	
HB-A	HOSE BIBB (INTERIOR)	3/4"	-	-	-	
WH-A	WALL HYDRANT	3/4"	-	-	-	
WB-A	ICEMAKER WALL BOX	1/2"	-	-	-	
EWC-2	ELECTRIC WATER COOLER	1/2"	-	2"	1-1/2"	
FD-A	FLOOR DRAIN, UNFINISHED EQUIPMENT SPACES	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FD-B	FLOOR DRAIN, KITCHEN	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FD-C	FLOOR DRAIN, FINISHED SPACES	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FD-D	FLOOR DRAIN, OFENDER FINISHED SPACES	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FD-E	LAUNDRY TRENCH - 4"	-	-	2"	4"	ROOF DRAIN - LAUNDRY APPLICATION. W/ TRAP PRIME CONNECTION. BRONZE DOME AND BRONZE MESH SCREEN.
FS-A	FLOOR SINK, KITCHEN 1/2 GRATE	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FS-B	FLOOR SINK, KITCHEN FULL GRATE	-	-	2"	3" OR 4"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE
FT-A	FLOOR TROUGH, CART WASH TRENCH	-	-	2"	3"	W/ TRAP PRIMER CONNECTION. REFER TO DRAWINGS FOR WASTE CONNECTION SIZE

1. SEE SHEET PL001 FOR LEGEND AND ABBREVIATIONS.

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MEN'S REENTRY CENTER

MACHIASPORT, MAINE

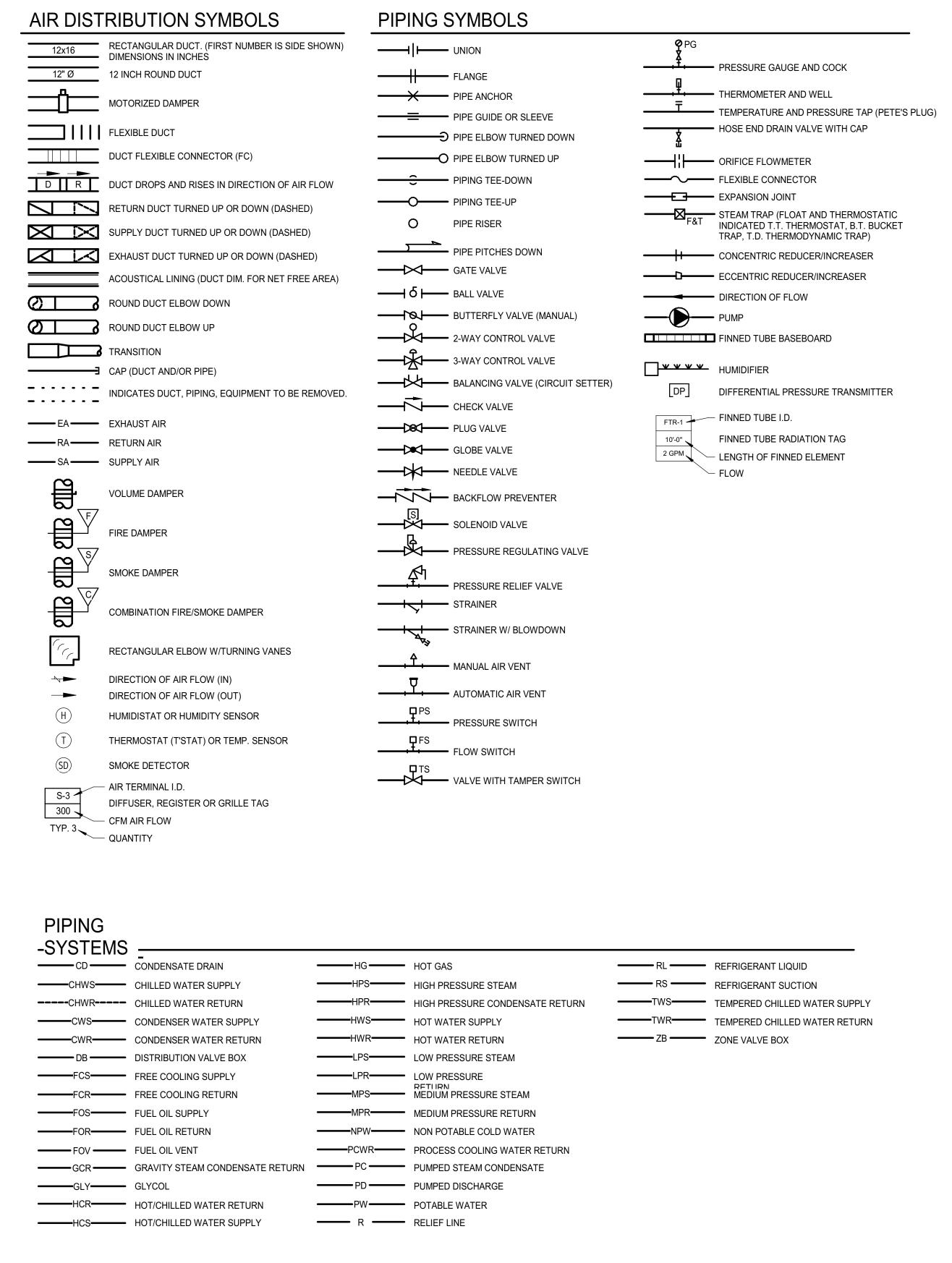
PLUMBING SCHEDULES

SHEET TITLE:

0" 1/4" 1/2" 1" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER: A/E OF RECORD:

JOB CAPTAIN: P-601-19176 SHEET No. ©COPYRIGHT 2018 SMRT INC

SMRT FILE:



GENERAL SYMBOLS

DETAIL I.D. DETAIL TAG SHEET NO. WHERE DETAIL IS LOCATED $\langle 1 \rangle$ KEYED NOTE MECHANICAL EQUIPMENT TAG LIMIT OF DEMOLITION CONNECTION OF NEW WORK TO EXISTING

ABBREVIATIONS

AAV	AUTOMATIC AIR VENT	ENC	ENCLOSURE	PSE	PROCESS SOLVENT EXHAUST
ACC	AIR COOLED CONDENSER	ERU	ENERGY RECOVERY UNIT	PP	POLY-PROPYLENE
ACU	AIR CONDITIONING UNIT	ERV	ENERGY RECOVERY VENTILATOR	PPE	PREPURCHASED EQUIPMENT
AD	ACCESS DOOR	ER	EXHAUST REGISTER	PRS	PRESSURE REDUCING STATIO
AE	ACID EXHAUST	ET	EXPANSION TANK	PRV	PRESSURE REDUCING VALVE
AFF	ABOVE FINISHED FLOOR	(E)	EXISTING	PVD	PNEUMATIC VOLUME DAMPER
AFMS	AIR FLOW MEASURING STATION	EXIST.	EXISTING	Р	PUMP
AHU	AIR HANDLING UNIT	FBO	FURNISHED BY OWNER	(R)	REMOVE
ATC	AUTOMATIC TEMPERATURE	FBP	FACE AND BYPASS	RA	RETURN AIR
A \ /	CONTROL	FC	FLEXIBLE CONNECTOR	(REL.)	RELOCATED
AV	AIR VENT	FD	FIRE DAMPER	RF	RETURN FAN
BB	BASEBOARD	FG	FIBERGLASS	RG	RETURN GRILLE
BDD	BACKDRAFT DAMPER	F&T	FLOAT AND THERMOSTATIC	RHC	REHEAT COIL
BG	BLAST GATE	FO	FLAT OVAL	RM	ROOM
BLDG	BUILDING	FTR	FINNED TUBE RADIATION	RR	RETURN REGISTER
В	BOILER	FS	FLOW SWITCH	RV	RELIEF VALVE
BOD	BOTTOM OF DUCT	GC	GENERAL CONTRACTOR	SA	SUPPLY AIR
BOP	BOTTOM OF PIPE	GPM	GALLONS PER MINUTE	SCV	SELF CONTAINED VALVE
BTU	BRITISH THERMAL UNIT	Н	HUMIDIFIER	SD	SMOKE DETECTOR
CBD	COUNTER BALANCED DAMPER	НВ	HOSE BIBB	SF	SUPPLY FAN
CD	CEILING DIFFUSER	HRU	HEAT RECOVERY UNIT	SG	SUPPLY GRILLE
CFF	CAPPED FOR FUTURE	HTR	HEATER	SR	SUPPLY REGISTER
CFM	CUBIC FEET PER MINUTE	H & V	HEATING AND VENTILATING	SS	STAINLESS STEEL
CLG	CEILING	HVAC	HEATING, VENTILATING AND AIR	TE	TEMPERATURIZED ELEMENT
CONT	CONTINUATION		CONDITIONING	(SENSOR)
COORD	COORDINATION	HW	HOT WATER	TG	TRANSFER GRILLE
СТ	COOLING TOWER	HX	HEAT EXCHANGER	TOD	TOP OF DUCT
CTE	CONNECT TO EXISTING	IN WG	INCHES WATER GAUGE	TOP	TOP OF PIPE
CU	COPPER	KH	KITCHEN HOOD	TTS	TIGHT TO STEEL
CUH	CABINET UNIT HEATER	MAU	MAKEUP AIR UNIT	TV	TURNING VANE(S)
CV	CONTROL VALVE	MAX	MAXIMUM	TYP	TYPICAL
CW	COLD WATER	MBH	1000 BTU/HR	UH	UNIT HEATER
DC	DOUBLE CONTAINED	MD	MOTORIZED DAMPER	UIC	UP IN CHASE
DDC	DIRECT DIGITAL CONTROL	ME	MECHANICAL ENGINEER	UIW	UP IN WALL
DIA	DIAMETER	MFR	MANUFACTURER	UV	UNIT VENTILATOR
DH	DISHWASHER HOOD	MIN	MINIMUM	VAV	VARIABLE AIR VOLUME BOX
DIC	DOWN IN CHASE	MPV	MULTI-PURPOSE VALVE	VB	VACUUM BREAKER
DIW	DOWN IN WALL	MTD	MOUNTED	VCFF	VALVED AND CAPPED FOR
DN	DOWN	MUA	MAKE UP AIR	\ <i>\</i> _	FUTURE
DT	DROP AND TRANSITION	L	LOUVER	VD	MANUAL VOLUME DAMPER
DWG	DRAWING	NPW	NON-POTABLE WATER	VFD	VARIABLE FREQUENCY DRIVE
DWH	DOMESTIC WATER HEATER	NTS	NOT TO SCALE	VRF	VARIABLE REFRIGERANT FLOV
EA	EXHAUST AIR	OA	OUTSIDE AIR	VOC	VOLITILE ORGANIC COMPOUNI
EF	EXHAUST FAN	OBD	OPPOSED BLADE DAMPER	VTR	VENT THROUGH ROOF
		OED	OPEN ENDED DUCT	W/	WITH
		PAE	PROCESS ACID EXHAUST		

GENERAL NOTE:

PHE PROCESS HEAT EXHAUST

ALL GENERAL NOTES, SYMBOL LISTS, AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL MECHANICAL DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION INTO THE DESIGN.

0	ISSUED FOR CONSTRUCTION	08-14-20
REV	DESCRIPTION	DATE
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08-14-20

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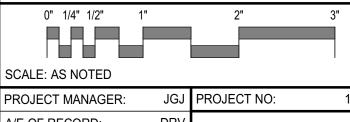
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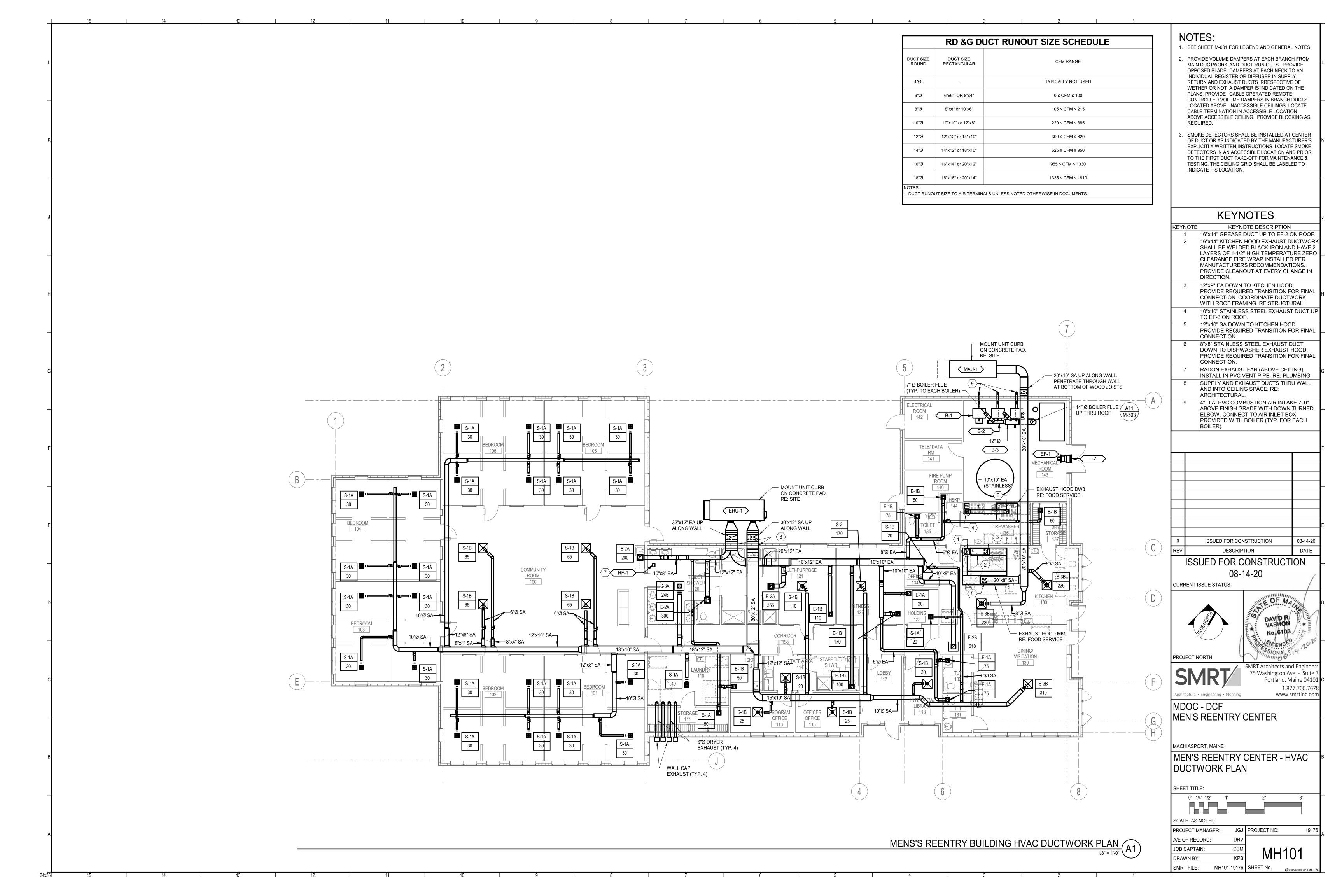
MECHANICAL LEGEND AND ABBREVIATIONS

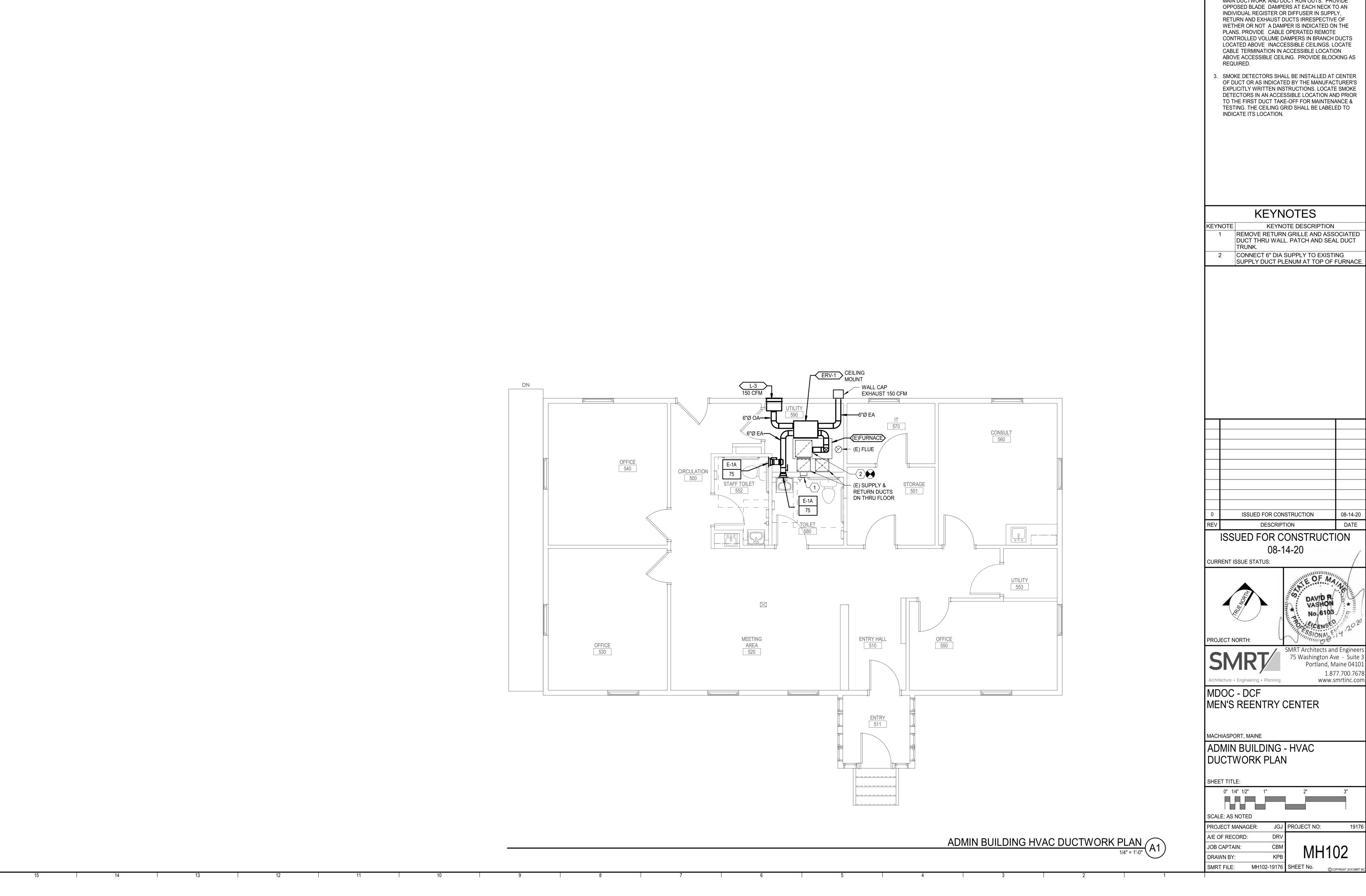
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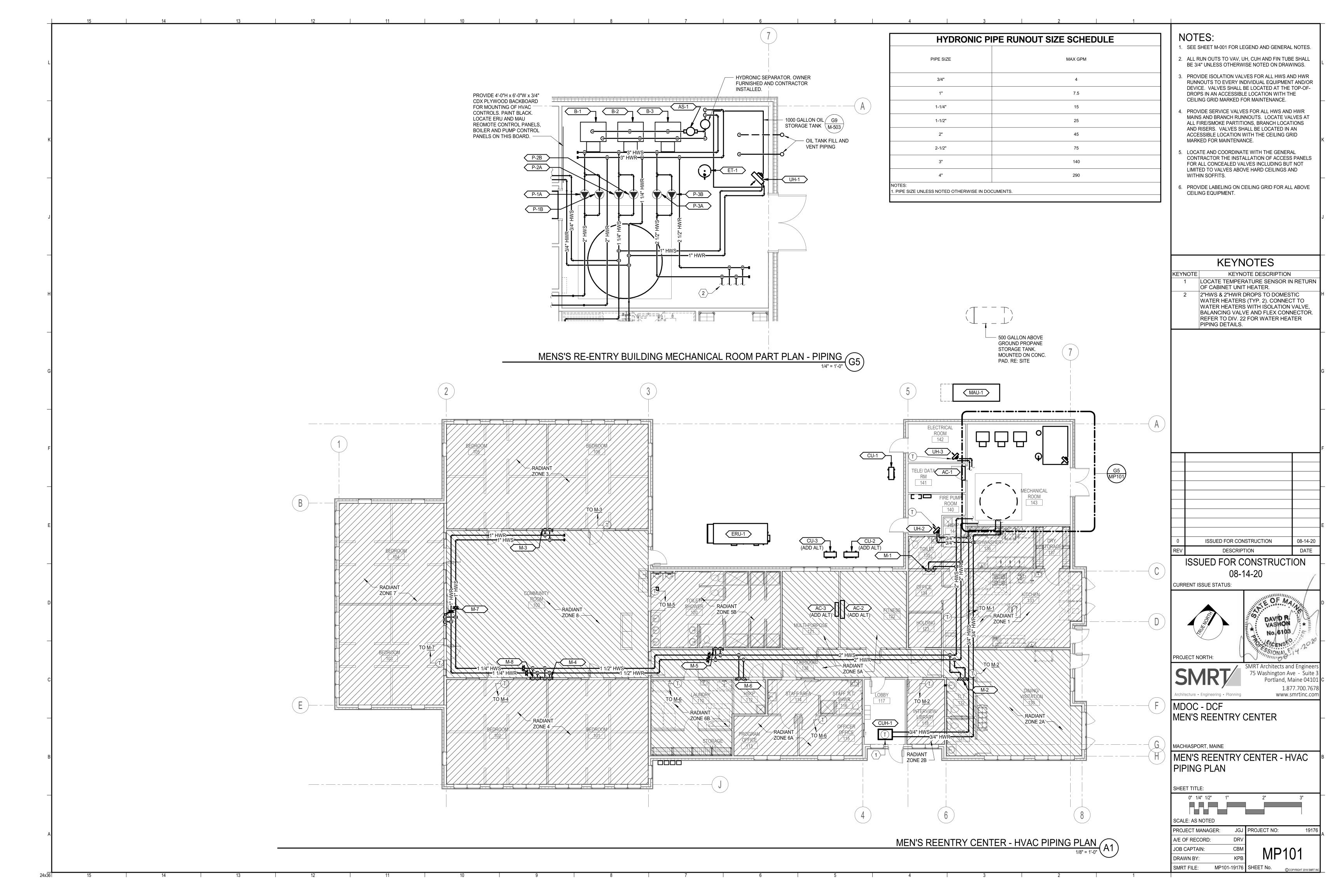


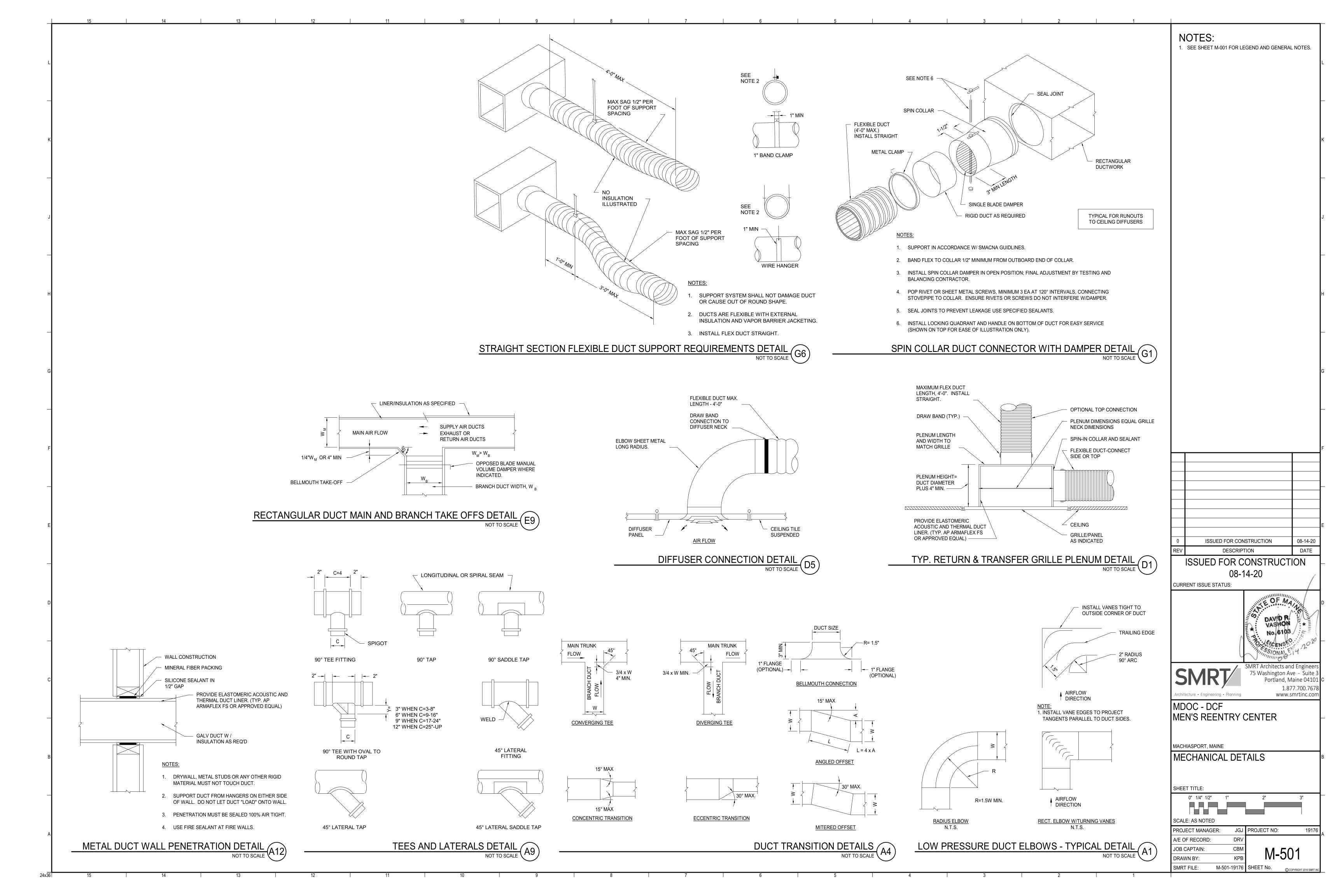


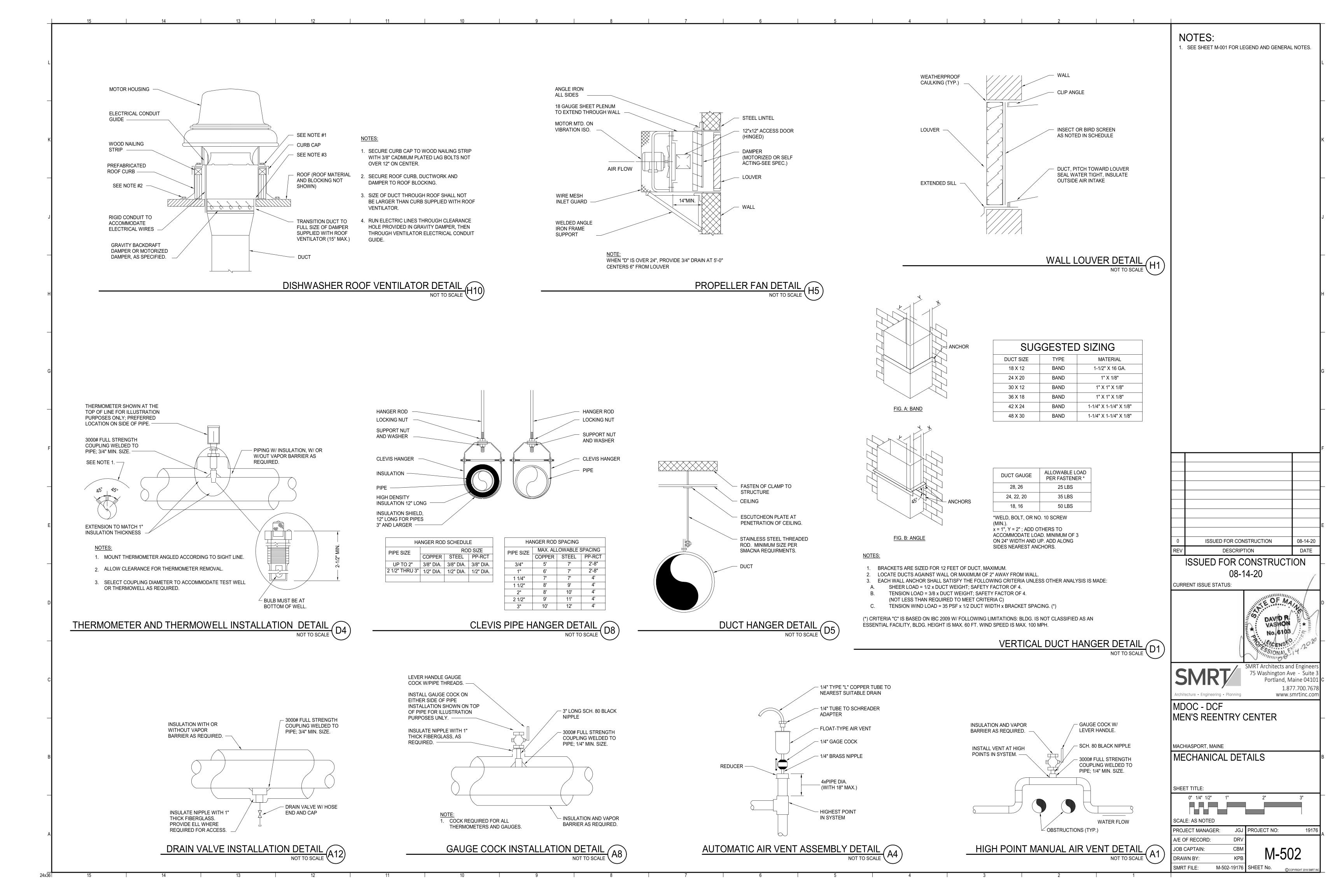
1. SEE SHEET M-001 FOR LEGEND AND GENERAL NOTES.

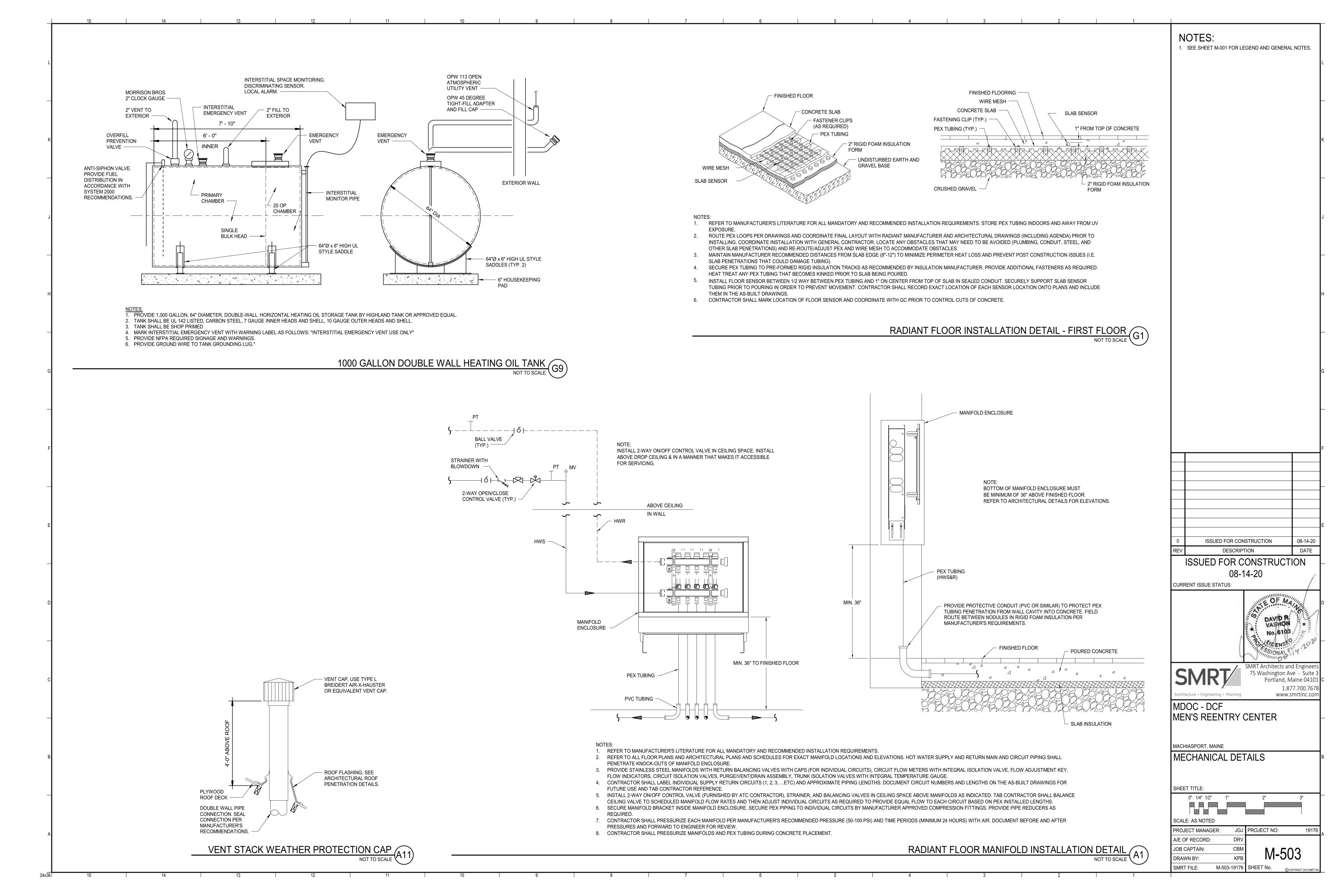
2. PROVIDE VOLUME DAMPERS AT EACH BRANCH FROM MAIN DUCTWORK AND DUCT RUN OUTS. PROVIDE

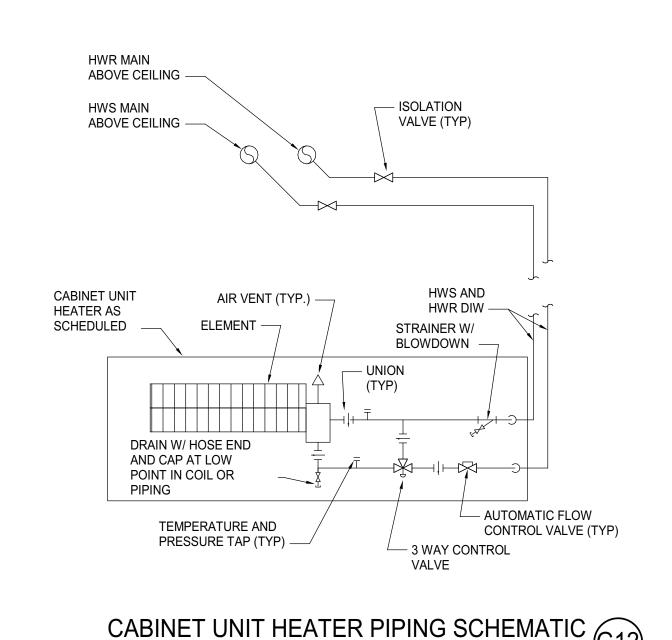
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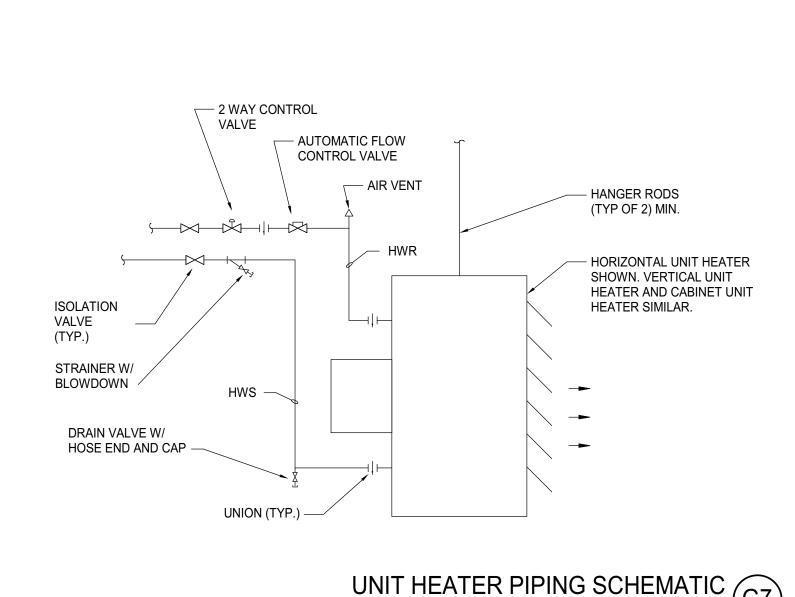


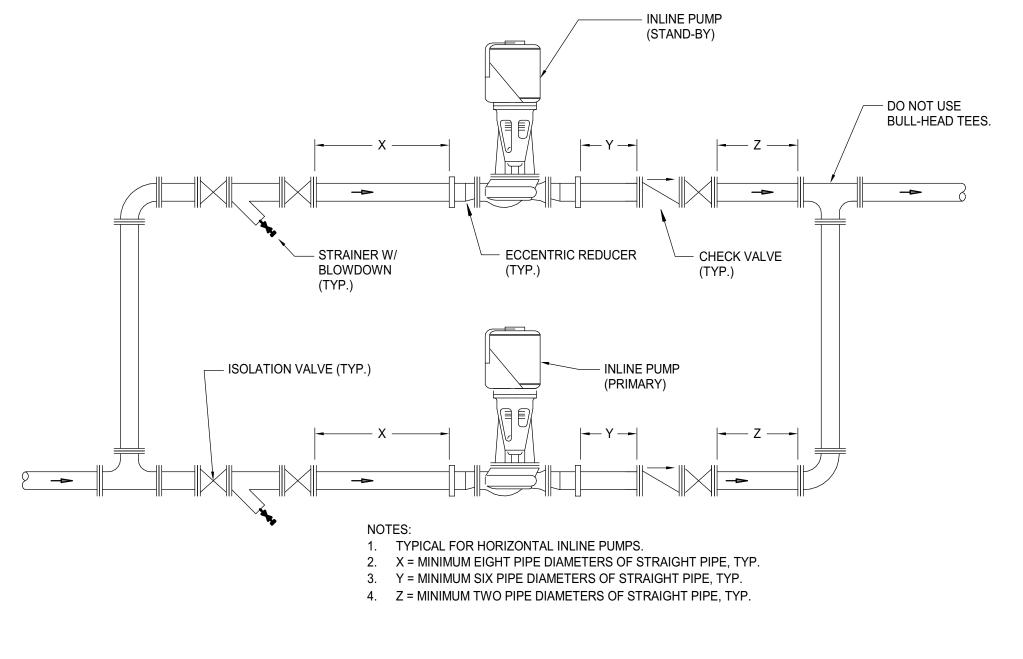












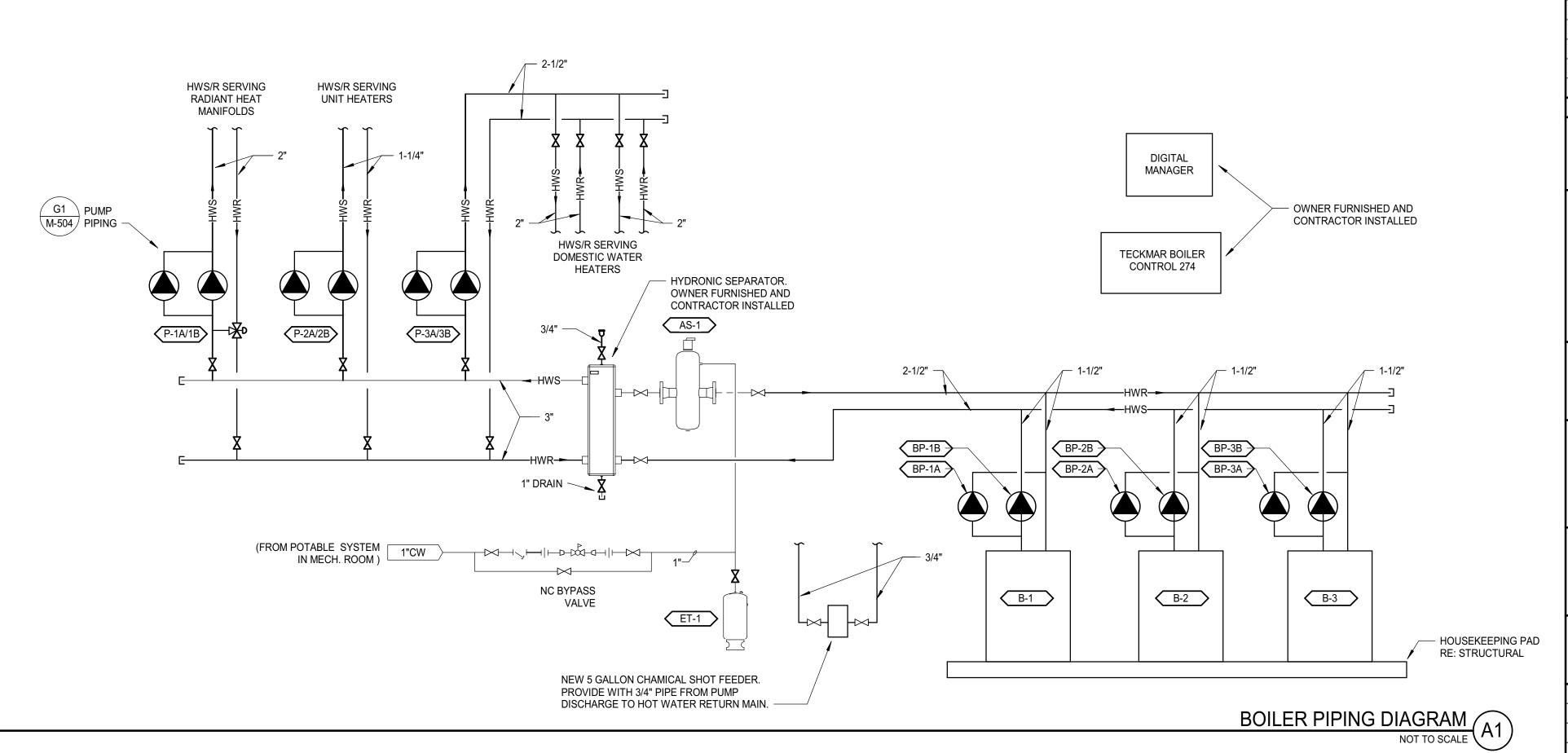
INLINE DUPLEX PUMP PIPING DETAIL G1

GENERAL NOTES:

- 1. THE THREE EK3 BOILERS WERE PREVIOUSLY INSTALLED ON THIS CAMPUS AND ARE STORED ON SITE.
- 2. UNDER THIS CONTRACT, RELOCATE AND REINSTALL THE THREE EK3 BOILERS AND THE SYSTEM 2000 DIGITAL MANAGER CONTROL SYSTEM.
- 3. PROVIDE NEW 7" BOILER FLUES AND MAIN FLUE. L-VENT CHIMNEY PIPE IS SUITABLE FOR USE WITH THE SYSTEM 2000 BOILERS. L-VENT MUST BE U.L. LISTED TO U.L. 641.
- 4. INSTALL NEW OIL BURNER NOZZLES. FIRING RATE SHALL BE 2.25 GPH.
- 5. PROVIDE BOILER CLEANING AND ADJUSTMENTS OF EXISTING BECKETT CF 500 BURNER, PROVIDE BOILER WATER PASSAGE CLEANING.
- 6. REUSE EXISTING TIGARLOOP FUEL SUPPLY.
- 7. MODIFY AND PROVIDE NEW AS REQUIRED FOR A COMPLETE SYSTEM 2000 BOILER SUPPLY, RETURN AND BYPASS PIPING ARRANGEMENT.
- 8. REPLACE EXISTING BYPASS PUMPS AND INJECTION PUMPS.
- 9. REPLACE AIR VENTS.
- 10. REPLACE ASME 30 PSI RELIEF VALVES.
- 11. THE SYSTEM 2000 IS A COLD START, COLD FINISH OPERATION WITH ENERGY RECOVERY. THE SYSTEM 2000 BOILER HAS A TEMPERATURE SENSOR FOR CONDENSING PROTECTION AND A RELAY FOR CONTROL OF INJECTION CIRCULATION.
- 12. REUSE EXISTING AIR INLET BOXES FOR SEALED COMBUSTION AIR. PROVIDE 4-INCH PVC COMBUSTION AIR DUCT.
- 13. BOILER WEIGHT IS APPROXIMATELY 675 LBS. WATER CONTENT IS 7.5 GALLONS, AIR INLET PIPE SIZE IS 4-INCHES, BOILER FLUE OUTLET IS 7-INCHES, AND THE SUPPLY AND RETURN PIPING IS 1.5-INCHES.
- 14. THE BOILER BYPASS PUMP WAS FACTORY PIPED. THE BYPASS PUMP PIPING AND WIRING MUST BE REINSTALLED TO IT'S ORIGINAL CONFIGURATION. THE BYPASS PUMPS RUN WHENEVER THE BURNER IS POWERED FOR HEAT AND ENSURES THE PROPER FLOW RATE THROUGH THE BOILER.
- 15. INSTALL OWNER FURNISHED HYDRONIC SEPARATOR WITH NEW MANIFOLDS
- 16. THE EXISTING BOILERS HAVE INDIVIDUAL MAKE-UP AND EXPANSION TANKS. REMOVE THE INDIVIDUAL MAKE-UP WATER AND THE EXPANSION TANKS. PROVIDE A NEW SYSTEM MAKE-UP WATER/FILL AND A NEW SYSTEM EXPANSION TANK (ET-1).

SEQUENCE OF OPERATIONS:

- 1. THE BOILERS SHALL SIT COLD UNTIL THEY HAVE A CALL FOR HEAT. ON A CALL FOR HEAT, THE DIGITAL MANAGER ENERGIZES THE BYPASS PUMP AND BURNER
- 2. WHEN HEATING HOT WATER IS AVAILABLE, ZONE PUMPS AND VALVES OPERATE. WHEN THE CALL FOR HEAT IS SATISFIED THE DIGITAL MANAGER DE-ENERGIZES THE BURNER AND ENTERS THE ENERGY RECOVERY STAGE. THE ZONE PUMPS AND VALVES STAY ENERGIZED TO DELIVER THE HEAT REMAINING IN THE BOILER.
- 3. THE DIGITAL MANAGER SHALL MONITOR RETURN TEMPERATURE AND WILL TURN DE-ENERGIZE THE ZONE OUTPUTS IF THE RETURN TEMPERATURE DROPS BELOW 120 DEG. F.
- 4. BOILER SEQUENCING SHALL BE CONTROLLED BY THE EXISTING TECKMAR BOILER CONTROL 274
- RADIANT HEAT MANIFOLDS CONTROL VALVE SHALL MODULATE TO MAINTAIN 150 DEG F (ADJUSTABLE)



DESCRIPTION ISSUED FOR CONSTRUCTION 08-14-20 **CURRENT ISSUE STATUS:** SMRT Architects and Engineer 75 Washington Ave - Suite 3 Portland, Maine 04101 1.877.700.7678 www.smrtinc.con chitecture • Engineering • Planning MDOC - DCF MEN'S REENTRY CENTER MACHIASPORT, MAINE MECHANICAL DETAILS SHEET TITLE: 0" 1/4" 1/2" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER: A/E OF RECORD: IOB CAPTAIN: DRAWN BY: M-504-19176 SHEET No. SMRT FILE:

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										SUPPLY	′ FAN					EXH.	AUST FAN						DIRECT	EXPANSI	ON COOLII	IG									OPERATIN	NG			ELI	ECTRICAL	REQUIRE	MENTS		
TAG	LOCATION	OA (CFN	A SA M) (CF		EA I	RA CFM)	ELECTRIC PREHEAT	FAN TYPE	T.S.P.		RPM	HP	ВНР	FAN TYP	E T.S.P (IN. Wo	. E.S. C) (IN. V	P. /C) RF	РМ Н	ΗP	ВНР	TOTAL MBH	SENS MBH	FACE ARE SQ FT.	ROWS	EAT ° DB/W	LAT °F DB/WB	APE IN-W.		LAT °F	МВН	EAT °F	LAT °F	INPUT MBH (8:	ENERGY RECOVERY WHEEL	WEIGHT (LE EXCLUDIN CURB	BS) - S	SUPPLY FILTERS	RETURN FILTER	V/PH	MCA	MAX FUSE	VFD(S)	MAKE / MODE NO.	NOTES:
ERU-1	OUTDOOR	200	00 200	0 2	2000 2	000	N/A	PLENUM	4.04	2	2729	3	2.89	PLENUN	1 3.05	2	26	67 4	4	2.78	83.8	57.4	10.83	6	78.9 / 6	5.4 70.7 / 59.6	0.31	52.9	66.7	-	45.5	101.1	150	ERW-1	1960	N	MERV 8	MERV 14	208 / 3	53.2	70	Y	TRANE HORIZO	ON 1,2,3,4
NOTES:	1. PROVIDE E	RU WITH	1 2" INSULA	TED DOL	JBLE WALL	ED CONS	STRUCTION,	SOUND ATTE	NUATION PA	ACKAGE, HIN	GED ACCES	SS DOORS, C	CONDENSE	R AIR GUAF	RD, OUTDOO	R AIR AND	RETURN A	IR FILTER S	SECTION	IS, AND SE	RVICE LIG	SHTS.			•		'		•	•			•			,				•	•		•	

2. PROVIDE ERU WITH ENERGY RECOVERY WHEEL. SEE ENERGY RECOVERY WHEEL PERFORMACE SCHEDULE FOR DETAILS.

2. PROVIDE ERU WITH 14" CURB SUPPLIED BY MANUFACTURER. 3. PROVIDE TRANE HORIZON OAB/G MODEL OR EQUAL ERU

		REGIS	TER, DI	FFUSEF	R & GRIL	L SCHE	DULE	
TAG	MAX CFM	NECK SIZE	TYPE	DELTA - P	MAX NC	THROW	PRICE MODEL NO.	NOTES
S-1A	100	6" Ø	PLAQUE DIFFUSER	0.06	<20	4'	SPD 12"x12", TYPE 31 SURFACE MOUNT	1
S-1B	100	6" Ø	PLAQUE DIFFUSER	0.02	<20	4'	SPD 24"x24", TYPE 31 T-BAR MOUNT	1,2,3
S-2	175	8" Ø	PLAQUE DIFFUSER	0.03	<20	6'	SPD 24"x24", TYPE 31 SURFACE MOUNT	1
S-3A	325	10" Ø	PLAQUE DIFFUSER	0.07	<20	5'	SPD 24"x24", TYPE 31 SURFACE MOUNT	1
S-3B	325	10" Ø	PLAQUE DIFFUSER	0.07	<20	5'	SPD 24"x24", TYPE 31 T-BAR MOUNT	1,2,3
E-1A	195	8"x8"	LOUVERED EXHAUST	0.10	22	-	535 / F 12"x12" SURFACE MOUNT	1
E-1B	195	8"x8"	LOUVERED EXHAUST	0.02	22	-	535 / TB 24"x24" LAY IN MODULE	1,2,3
E-2A	455	12"x12"	LOUVERED EXHAUST	0.10	26	-	535 / F 24"x24" SURFACE MOUNT	1
E-2B	455	12"x12"	LOUVERED EXHAUST	0.10	26	-	535 / TB 24"x24" LAY IN MODULE	1,2,3
E-3	90	8"x4"	LOUVERED EXHAUST	0.02	<20	-	530 / F SIDEWALL GRILLE	1

GENERAL NOTES: 1. ALL REGISTERS, DIFFUSERS AND GRILLES SHALL HAVE WHITE FINISH UNLESS OTHERWISE INDICATED.

2. PROVIDE FACE OPERABLE DAMPERS IN RGD'S WHERE DUCT MOUNTED BALANCE DAMPERS ARE NOT ACCESSIBLE (I.E. GYPSUM CEILINGS)

KEYED NOTES:

1. STEEL CONSTRUCTION

2. PROVIDE MOUNTING FRAME FOR 24"x24" LAY-IN CEILING GRID

3. PROVIDE CROSS NOTCH FOR STRADDLING T-BAR

			LOUVER S	CHED	ULE				
TAG	LOCATION	SERVICE	TYPE	FREE AREA (SQ. FT.)	CFM RANGE	SP (IN WG)	SIZE W&H (IN)	MANUFACTURER & MODEL (AS BASIS OF DESIGN)	NOTES
L-2	MECHANICAL ROOM 143	EXHAUST	HORIZONTAL BLADE WIND-DRIVENT RAIN LOUVER	0.4	< 2800	0.1	18 x 12	GREENHECK EHH-401	1,3,4,5
L-3	ADMIN BUILDING UTILITY 590	INTAKE	HORIZONTAL BLADE WIND-DRIVENT RAIN LOUVER	0.6	< 2720	< 0.05	18 x 18	GREENHECK EHH-401	1,2,4,5

NOTES: 1. AMCA CERTIFIED RATINGS SEAL FOR WATER PENETRATION, AIR PERFORMANCE AND WIND-DRIVEN RAIN

- 2. INTAKE LOUVER WITH INSECT SCREEN
- 3. EXHAUST LOUVER WITH BIRD SCREEN
- 4. 4-INCH DEEP FRAME WITH HORIZONTAL BLADES AT 2-INCH SPACING
- 5. EXTRUDED ALUMINUM LOUVER WITH KYNAR FINISH IN COLOR AS APPROVED BY OWNER / ARCHITECT.

										E	NERGY I	RECOVER	Y WHEE	L PE	ERF	ORM	ANC	CE S	SCH	EDU	LE					
									WIN	TER CONDITIONS											SUM	MMER CONDITIONS				
		WHEE	EL EN	NTERING	€	WHEEL	LEAVI	NG CON	DITIONS	ENERGY RECOVE	RY @ WINTER	EFFECTIVENES	S @ WINTER	W	HEEL EI	ITERING	€	WHEE	L LEAVI	NG CONE	DITIONS	ENERGY RECOVE	RY @ SUMMER	EFFECTIVENES:	S @ SUMMER	
TAG	ou	ITSIDE /	AIR	RETUI	RN AIR	SUPPL	LY AIR	EXHAL	IST AIR	DESIG		DESIG	GN	OUTS	IDE AIR	RETUI	RN AIR	SUPP	PLY AIR	EXHAU	IST AIR	DECK		DESIG		NOTES
	DB	°F W	B °F	DB °F	WB °F	DB °F	WB °F	DB °F	WB °F	SENSIBLE MBH	LATENT MBH	SENSIBLE %	LATENT %	DB °F	WB °F	DB °F	WB °F	DB °F	WB °F	DB °F	WB °F	SENSIBLE MBH	LATENT MBH	SENSIBLE %	LATENT %	
ERW-	1 -3	.0 -4	4.0	72.0	53.0	45.5	35.5	24.7	24.4	136.7	-10.0	0.76	0.52	87.0	71.0	75.0	62.5	78.9	66.4	82.4	67.1	22.8	10.1	0.74	0.52	*

							FAN	SCHEDU	JLE							
TAG	LOCATION	SERVICE	TYPE	CFM	ESP	MAX FAN	FAN BHP		MOTOR / ELECT	TRICAL DA	ATA		- VFD	ON GENERATOR	MANUFACTURER & MODEL	NOTES:
TAG	LOCATION	SERVICE	TTPE	CFIVI	(IN WC)	RPM	PAN BHP	DRIVE TYPE	MOTOR TYPE	HP	VOLTS	PH	VPD	POWER	(AS BASIS OF DESIGN)	NOTES.
EF-1	MECHANICAL ROOM 143	MECHANICAL ROOM 143	PROPELLER WALL	270	0.25	1725	0.09	DIRECT	VARI-GREEN	1/4	120	1	ECM	NO	GREENHECK AER - E20C-605-VG	1,2,3
EF-2	ROOF	KITCHEN HOOD	CENTRIFUGAL UPBLAST	1,260	1.00	1725	0.35	DIRECT	VARI-GREEN	1/3	120	1	ECM	NO	GREENHECK CUE-121-VG	4 - 10
EF-3	ROOF	DISHWASHER HOOD	CENTRIFUGAL UPBLAST	450	0.63	1725	0.1	DIRECT	VARI-GREEN	1/10	120	1	ECM	NO	GREENHECK CUE-090-VG	9 - 12
RF-1	ATTIC	RADON MITIGATION	INLINE	166	2.00	2533	-	DIRECT		1/12	120	1	-	NO	FANTECH RN* INLINE RADON FAN	-
NOTES:	4 AMOA OFFICIE	D FOR SOUND & AIR PE	DEODMANOE													

IOTES: 1. AMCA CERTIFIED FOR SOUND & AIR PERFORMANCE

2. UL 705 LISTED FAN ASSEMBLY WITH MOTOR MANUFACTURED IN USA 3. PROVIDE FAN MANUFACTURER'S WALL COLLAR WITH OSHA GUARD AND THERMALLY BROKEN, INSULATED CONTROL DAMPER WITH 24 VOLT ACTUATOR

4. UL 762 FOR RESTAURANT EXHAUST APPLIANCES 5. PROVIDE GREASE TRAP WITH ABSORBENT MATERIAL

6. PROVIDE GREENHECK MODEL GPFHL ROOF CURB 24-INCH HEIGHT WITH 5-INCH FLASHING FLANGE , 14-GAUGE GALVANIZED STEEL

7. PROVIDE HINGED BASE

- 8. NFPA REQUIRED 40-INCH MINIMUM DISCHARGE ABOVE THE ROOF
- 9. PROVIDE SPEED CONTROLLER FOR SYSTEM BALANCING
- 10. PROVIDE DISCONNECT SWITCH
- 11. PROVIDE ROOF CURB 18-INCH HEIGHT
- 12. PROVIDE BACKDRAFT DAMPER

					DUCTLE	SS SPLI	T SY	STEM SC	CHEDU	LE							
INDOOR SECTION		TYPE	INDOOR UNIT LOCATION	REFRIGERANT PIPING (LIQUID /	COOLING CAPACITY	HEATING CAPACITY	SEER		INDOOR SE	ECTION		OUTD	OOR SE	CTION	OUTDOOR SECTION	INDOOR SECTION	NOTES:
TAG	SECTION TAG	IIFL	INDOOR ONLY LOCATION	GAS)	(BTUH)	(BTUH)	SLLIN	CFM (DRY)	MCA	FLA	V/PH/HZ	LOCATION	MCA	V/PH/HZ	BASIS OF	BASIS OF	NOTES.
AC-1	CU-1	WALL	TELE/DATA 141	3/8" / 5/8"	18.0	-	15.3	425	1	0.33	208/ 1 / 60	GRADE	13	208/ 1 / 60	MITSUBISHI	MITSUBISHI	1,2,3
AC-2 ADD ALTERNATE	CU-2	WALL	FITNESS 122	3/8" / 5/8"	18.0	-	15.3	425	1	0.33	208/ 1 / 60	GRADE	13	208/ 1 / 60	MITSUBISHI PUZ18	MITSUBISHI PKA18	1,2,3
AC-3 ADD ALTERNATE	CU-3	WALL	MULTI-PURPOSE 121	3/8" / 5/8"	18.0	-	15.3	425	1	0.33	208/ 1 / 60	GRADE	13	208/ 1 / 60	MITSUBISHI PUZ18	MITSUBISHI PKA18	1,2,3
NOTES:			1				1					1		1		1	

2. PROVIDE INDOOR UNITS WITH WIRED THERMOSTAT/CONTROLLER - NO WIRELESS THERMOSTATS PERMITTED. 3. PROVIDE DUCTLESS SPLIT SYSTEM BY MITSUBISHI, DAIKIN, CARRIER OR EQUAL.

1. PROVIDE OUTDOOR UNITS WITH ADVANCED WIND BAFFLES FOR LOW AMBIENT COOLING DOWN TO -20°F, DISCONNECT SWITCH AND MOUTING BASE.

						MA	KE UP	AIR UN	NIT SC	HEDUL	.E				
TAG	NOM. CFM		FAN DATA		EL	ECTRICAL DA	TA		IEATING DAT		FUEL	TURNDOWN	WT (LBS)	BASIS OF DESIGN UNIT	NOTES:
		NOM. RPM	EXT. SP	HP	VOLT	PH	HZ	TEMP RISE °F	INPUT MBH	OUTPUT MBH	TYPE		, ,	MFG & MODEL	
MAU-1	1260	1726	1	0.5	208	3	60	66	150	120	LP	4:1	1192	GREENHECK IGX-P112-H12-MF-E	1,2,3

NOTES: 1. PROVIDE MAU WITH INSULATED 36-INCH HIGH CURB.

2. PROVIDE MAU WITH INTAKE WEATHER HOOD, END DISCHARGE AND SUPPLY AIR MOTORIZED DAMPER. 3. PROVIDE 2" MERV 8 SUPPLY AIR FILTERS

						EN	ERGY REC	OVERY VE	NTIL	ATOF	R SCHE	DULE (A	DMI	NIST	RATION	BUIL	DING)				
		SUI	PPLY FAN DAT	'A	EXH	IAUST FAN DA	ТА	FIXED PL	ATE EN	ERGY CO	RE		FILTER	DATA		ELECTF	RICAL DATA					1 N
TAG	TYPE	CFM	ESP (IN. W.C.)	HP	CFM	ESP (IN. W.C.)	HP NOMINAL EFFICIENCY	SUPPLY SUMMER & LAT (°F)	-AI WIN	UPPLY ITER EAT _AT (°F)	EXHAUST SUMMER EAT (°F)	EXAHUST WINTER EAT (°F)	TYPE	P.D. (IN W.C.)	DIV. 26 PROVIDE VFD?	FLA	V/P	DIV. 26 PROVIDE STANDBY POWER?	WEIGHT (LBS)	TYPICAL UNIT MFG & MODEL NO.	NOTES:	SH
ERV-1	CONSTANT VOLUME	150	0.6	0.10	150	0.6	0.10 79%	87 75	-3	48	75	70	MERV 8	0.1	NO	1.5	120/1	NO	68	RENEWAIRE EV200	1,2	
NOTES:	1. INSTALL UNIT	PER MAI	NUFACTURER'	'S RECC	DMMEND	ATIONS.									•							S

2. OR APPROVED EQUAL

1. SEE SHEET M-001 FOR LEGEND AND GENERAL NOTES.

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MACHIASPORT, MAINE

SMRT FILE:

MECHANICAL SCHEDULES

0" 1/4" 1/2"

SCALE: AS NOTED PROJECT MANAGER: JGJ PROJECT NO: A/E OF RECORD: JOB CAPTAIN:

M-601-19176 SHEET No.

									PUMP :	SCHEDU	JLE							
									E	LECTRICAL DAT	ΓΑ							
TAG	TYPE	LOCATION	SERVICE	GPM	IMPELLER SIZE (IN)	NOMINAL RPM	HD (FT.)	kW/HP	VOLTS/Ø	FLA	MCA	МОР	VFD (Y/N)	DIV. 26 PROVIDE VFD	DIV. 26 PROVIDE DISCONNECT	DIV. 26 PROVIDE STANDBY POWER	TYPICAL UNIT MFG & MODEL NO.	NOTES:
P-1A P-1B	IN-LINE CIRCULATOR	MECHANICAL ROOM	RADIANT FLOOR HEAT	30	-	-	38	.606kW	120 / 1	-	-	-	N	NO	YES	NO	GRUNDFOS MAGNA3 40-180	3
P-2A P-2B	IN-LINE CIRCULATOR	MECHANICAL ROOM	UNIT HEATERS	9	-	-	25	.178kW	120 / 1	-	-	-	N	NO	YES	NO	GRUNDFOS MAGNA1 32-100	3
P-3A P-3B	IN-LINE CIRCULATOR	MECHANICAL ROOM	DOMESTIC WATER HEATER	80	-	-	25	.636kW	120 / 1	-	-	-	N	NO	YES	NO	GRUNDFOS MAGNA3 50-100	3
BP-1A	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-1	2.5	-	3250	10	1/25	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 007	1
BP-1B	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-1	25	-	3250	10	1/8	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 012	2
BP-2A	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-2	2.5	-	3250	10	1/25	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 007	1
BP-2B	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-2	25	-	3250	10	1/8	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 012	2
BP-3A	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-3	2.5	-	3250	10	1/25	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 007	1
BP-3B	IN-LINE CIRCULATOR	MECHANICAL ROOM	B-3	25	-	3250	10	1/8	120 / 1	N/A	N/A	N/A	N	NO	NO	NO	TACO 012	2
		ISTING BOILER I	/PASS PUMP. ELECT NJECTION PUMP. EL JMP				IIT											

			HO	WA	TER	UNIT	HEA	TER S	CHE	DULE				
TAG	LOCATION	TYPE	CFM	HP/W	MBH	GPM	ΔΡ	EAT °F	EWT (F)	LWT (F)	AMPS	VOLT/Ø	TYPICAL UNIT MFG & MODEL NO.	NOTES:
CUH-1	LOBBY 117	CEILING RECESSED	230	1/15 HP	14	1.5	0.15	60	180	160	0.8	115/1	STERLING RC-1200-02	
UH-1	MECHANICAL ROOM 143	HORIZONTAL	630	1/20 HP	31.3	3.5	0.12	60	180	160	2.2	115/1	STERLING HS-048B	1-2
UH-2	FIRE PUMP ROOM 140	HORIZONTAL	420	16 W	15.6	2	2.2	60	180	160	0.8	115/1	STERLING HS-118A	1-2
UH-3	ELECTRICAL ROOM 142	HORIZONTAL	420	16 W	15.6	2	2.2	60	180	160	0.8	115/1	STERLING HS-118A	1-2
NOTES						'			ı	1	ı	1		

1. UNITS SELECTED AT LOW SPEED, PROVIDE WITH UNIT MOUNTED SPEED CONTROLLERS AND DISCONNECT SWITCH.

2. HEAT CAPACITIES AND FLOW RATES INCLUDE HOT WATER TEMPERATURE CORRECTION FACTORS.

		AIR AND	DIRT	SEP	ARATOR SC	HED	ULE		
TAG	LOCATION	SERVED	GPM	SIZE (IN)	PRESSURE DROP (FT WATER)	DIA. (IN)	LNG. (IN)	TYPICAL UNIT MFG & MODEL NO.	NOTES:
AS-1	MECHANICAL ROOM	HOT WATER SYSTEM	55	2 1/2	1.75	10	16 1/2	TACO 49025ADT-125	1-2
NOTES:	1. PROVIDE REMOVABL	E 304 STAINLESS ST	EEL STRA	AINER.					
	2 TANK RATED FOR 12	5 PSIG							

		R	ADIANT F	LOOR HE	AT SCHE	DULE						
MANIFOLD TAG	ROOM(S)	AREA	PIPE CONNECTION SIZE (IN)	TUBING SIZE (IN)	CIRCUIT CONNECTIONS	SUPPLY TEMP (°F)	AVERAGE TUBE SPACING	AVG. BTU/SF	LOOP FLOW (GPM)	LOOP P.D. (FT HEAD)	MANUFACTURER	NOTES
M-1	HOLDING 123, KITCHEN 125, OFFICE 135, TOILET 134, DISHWASHER 137, FOOD STORAGE 136	643	1	1/2	6	150	12	25.0	3.30	9.70	UPONOR RADIANT	1-6
M-2	TLT 131, TLT 132, INTERVIEW LIBRARY 118, DINING/VISITATION 130	712	1	1/2	6	150	12	25.0	3.36	6.10	UPONOR RADIANT	1-6
M-3	BEDROOM 105, BEDROOM 106	951	1	1/2	6	150	12	25.0	3.50	7.40	UPONOR RADIANT	1-6
M-4	BEDROOM 101, BEDROOM 102	952	1	1/2	4	150	12	25.0	3.23	7.70	UPONOR RADIANT	1-6
M-5	MULTI-PURPOSE 121, FITNESS 122, HOLDING 123, CORRIDOR 410	1,241	1	1/2	7	150	12	25.0	5.70	10.10	UPONOR RADIANT	1-6
M-6	LAUNDRY 110, STORAGE 111, 112 HSKP, PROGRAM OFFICE 113, STAFF AREA 114, OFFICER OFFICE 115, STAFF TLT/SHWR 116	676	1	1/2	7	150	12	25.0	2.91	6.20	UPONOR RADIANT	1-6
M-7	BEDROOM 103, BEDROOM 104	949	1	1/2	7	150	12	25.0	3.67	4.60	UPONOR RADIANT	1-6
M-8	COMMUNITY ROOM 100	1,370	1	1/2	5	150	12	25.0	4.61	10.50	UPONOR RADIANT	1-6

1. PROVIDE RADIANT PEX TUBING LAYOUT AS SHOWN ON PIPING FLOOR PLANS. CONFIRM FINAL LAYOUT AND SPACE WITH ARCHITECTURAL PLANS AND MANUFACTURER PRIOR TO ORDERING AND INSTALLING RADIANT FLOORS 2. PROVIDE STAINLESS STEEL MANIFOLDS WITH BALANCING FLOW VALVES, FLOW ADJUSTMENT KEY, CIRCUIT ISOLATION VALVES, PURGE/ VENT/ DRAIN VALVE, MANIFOLD ISOLATION VALVE W/ INTEGRAL THERMOMETER, ENCLOSURES AND CIRCUIT FLOW METERS. PROVIDE COMPRESSION FITTINGS FOR PEX CONNECTIONS TO MANIFOLDS.
3. BALANCING CONTRACTOR SHALL ADJUST THE CIRCUIT BALANCING FLOW VALVES TO PROVIDE EQUAL FLOW TO EACH CIRCUIT.
4. REFER TO MANUFACTURER'S LITERATURE FOR INSTALLATION REQUIREMENTS AND ARCHITECTURAL DRAWINGS FOR FLOOR CONSTRUCTION DETAILS. COORDINATE WITH GENERAL CONTRACTOR AND ALL TRADES WHEN INSTALLING RADIANT PIPING. WITH UPONION FAST TRAK FLOORING OR SIMILAR KNORRED MAT SYSTEM.

5. INSTALL TUBING WITH UPONOR FAST TRAK FLOORING OR SIMILAR KNOBBED MAT SYSTE
6. RADIANT SYSTEM SHALL BE BY UPONOR, WATTS, VIEGA OR EQUAL.

					ВО	ILER SC	HEDUL	E - HOT W	/ATER					
									ELECTR	CAL DATA				
TAG	LOCATION	FUEL TYPE	BOILER HP	INPUT MBH	OUTPUT MBH	THERMAL EFF. %	OIL GPH	GROSS I.B.R. RATING MBH	HP	VOLTS/Ø	FLUE SIZE (IN.)	OPERATING WT. LBS.	TYPICAL UNIT MFG & MODEL NO.	NOTES:
B-1	MECH 143	NO.2 OIL	-	417	357	85.6	3	357	1/3	120 / 1	7	738	SYSTEM 2000 EK3 FRONTIER	1
B-2	MECH 143	NO.2 OIL	-	417	357	85.6	3	357	1/3	120 / 1	7	738	SYSTEM 2000 EK3 FRONTIER	1
B-3	MECH 143	NO.2 OIL	-	417	357	85.6	3	357	1/3	120 / 1	7	738	SYSTEM 2000 EK3 FRONTIER	1
NOTES:		1.BOILER TO B	E SUPPLIED BY	OWNER		•	•							

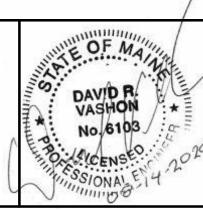
			E	XPAI	NSION T	TANŁ	SCHE	DULE				
TAG	LOCATION	SERVED	WORKING PRESSURE PSIG	TOTAL GAL.	ACCEPT GAL.	DIA (IN.)	HEIGHT (IN.)	WEIGHT (LBS.)	FILL PRESSURE PSIG	PRE-CHARGE PSIG	TYPICAL UNIT MFG & MODEL NO.	NOTES:
ET-1	MECHANICAL ROOM	HOT WATER SYSTEM	125	33.6	11.6	16	45	98	15	12	EXTROL AX-60(V)	1
NOTES:	1. EXPANSION TANK SH	HALL BE ASME CER	TIFIED CONSTRUCTI	ON.								

1. SEE SHEET M-001 FOR LEGEND AND GENERAL NOTES.

0	ISSUED FOR CONSTRUCTION	08-14-20
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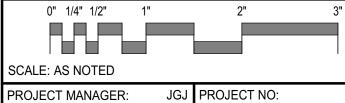
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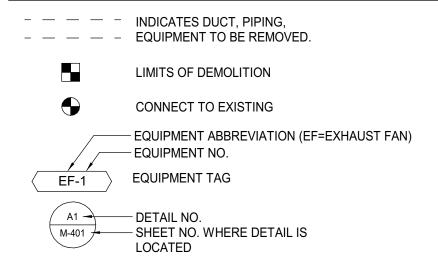
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M-602-19176 SHEET No.





CONTROL SYMBOLS

CO	CARBON DIOXIDE SENSOR		FAN
C	CARBON MONOXIDE SENSOR		.,,,,
CS	CURRENT SENSOR		PUMP
DP	DIFFERENTIAL PRESSURE SENSOR		MOTOR STARTER
D	DEW POINT SENSOR		
(LD)	LEAK DETECTOR		
(H)	MOISTURE (HUMIDITY) SENSOR		PRE-FILTER (MERV 8)
NX	NITROGEN DIOXIDE SENSOR		
(OC)	OCCUPANCY SENSOR		
OP	OPTICAL SENSOR		
<u>O2</u>	OXYGEN SENSOR	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	MID-FILTERS (MERV 13)
PC	PARTICLE COUNTER	$\leq \leq$	
P	PRESSURE SENSOR	\$ \$\$	
SD	SMOKE DETECTOR		
SP	STATIC PRESSURE SENSOR		FINAL FILTERS (MERV 14 OR 15)
TS	TEMPERATURE SENSOR	255	
TS ——~	TEMPERATURE SENSOR - WITH AVERAGING ELEMENT	H	
T	THERMOSTAT - ROOM / SPACE TEMPERATURE SENSOR	c	HEATING COIL
(WL)	WATER LEVEL SENSOR		
AFS	AIR FLOW SWITCH	C	
APS	AIR PROVING SWITCH		COOLING COIL
ALM	ALARM	/ C	
DP	DIFFERENTIAL PRESSURE SWITCH	D /	
SS	SAIL SWITCH		
EPT	ELECTRONIC TO PNEUMATIC TRANSDUCER		DIRECT EXPANSION COIL
ES	END SWITCH	/ X	
FMS	FLOW MONITORING STATION	P	
FS	(FREEZESTAT) TEMPERTURE SWITCH		PRE HEAT COIL
[FL]	FLOW SWITCH	/ н	
H	HUMIDIFIER		
HS C ▼	HIGH LIMIT DUCT HUMIDISTAT	E /	
MD \	FIRE / SMOKE DAMPER (COMBINATION)		ELECTRIC COIL
PSH	MOTORIZED DAMPER	/ c	
PSL	PRESSURE SWITCH - HIGH LIMIT	ER /	
S √	PRESSURE SWITCH - LOW LIMIT SMOKE DAMPER		
0.40			ENERGY RECOVERY COIL
S/S	START / STOP	/ C	
VFD	VARIABLE FREQUENCY DRIVE CONTROL VALVE - MODULATING	G	
X	CONTROL VALVE - MODULATING CONTROL VALVE - TWO POSITION		GAS HEATER
	CONTROL VALVE - TWO POSITION CONTROL VALVE THREE WAY -	/ H	5.0
	MODULATING	V	
	CONTROL VALVE THREE WAY - TWO POSITION		
	SOLENOID VALVE		

ABBREVIATIONS

ACC	AIR COOLED CONDENSER	H & V	HEATING AND VENTILATION
ACCU	AIR COOLED CONDENSING UNIT	HVAC	HEATING, VENTILATION & AIR CONDITIONING
ACU	AIR CONDITIONING UNIT	HW	HOT WATER
ACV	AUTOMATIC CONTROL VALVE	HX	HEAT EXCHANGER
AD	ACCESS DOOR	IN WG	INCHES WATER GAUGE
AE	ACID EXHAUST	MA	MIXED AIR
AFF	ABOVE FINISHED FLOOR	MAU	MAKE UP AIR UNIT
AFMS	AIR FLOW MEASURING STATION	MAX	MAXIMUM
AHU	AIR HANDLING UNIT	MBH	1000 BTU/HR.
ATC	AUTOMATIC TEMPERATURE CONTROL	ME	MECHANICAL ENGINEER
BDD	BACKDRAFT DAMPER	MFR	MANUFACTURER
BMS	BUILDING MANAGEMENT SYSTEM	MIN	MINIMUM
BTU	BRITISH THERMAL UNIT	MD	MOTOR OPERATED DAMPER
BLDG	BUILDING	MPV	MULTI-PURPOSE VALVE
CBD	COUNTER BALANCED DAMPER	MTD	MOUNTED
CFM	CUBIC FEET PER MINUTE	MUA	MAKE UP AIR
CLG	CEILING	NPW	NON-POTABLE WATER
CONT	CONTINUATION	NTS	NOT TO SCALE
COORD	COORDINATE	OA	OUTSIDE AIR
CP	CONDENSATE PUMP & RECEIVER	OBD	OPPOSED BLADE DAMPER
CT	COOLING TOWER	OED	OPEN ENDED DUCT
CTE	CONNECT TO EXISTING	PPE	PRE PURCHASED EQUIPMENT
CU	COPPER	PRS	PRESSURE REDUCING STATION
CUH	CABINET UNIT HEATER	PRV	PRESSURE REDUCING VALVE
CV	CONTROL VALVE	PVD	PNEUMATIC VOLUME DAMPER
CW	COLD WATER	(R)	REMOVE
DC	DOUBLE CONTAINED	RA	RETURN AIR
DDC	DIRECT DIGITAL CONTROL	RCP	RADIANT CEILING PANEL
DIA	DIAMETER	(REL.)	RELOCATED
DWG	DRAWING	RF	RETURN FAN
DWH	DOMESTIC WATER HEATER	RHC	REHEAT COIL
EA	EXHAUST AIR	RM	ROOM
EF	EXHAUST FAN	SA	SUPPLY AIR
(E)	EXISTING	SCV	SELF CONTAINED VALVE
EXIST.	EXISTING	SD	SMOKE DETECTOR
FBO	FURNISHED BY OWNER	SF	SUPPLY FAN
FBP	FACE AND BYPASS	SG	STEAM GENERATOR
FMS	FLOW MEASURING STATION	SS	STAINLESS STEEL
FD	FIRE DAMPER	TE	TEMPERATURIZED ELEMENT (SENSOR)
FG	FIBERGLASS	TYP	TYPICAL
F&T	FLOAT AND THERMOSTATIC	UH	UNIT HEATER
FTR	FINNED TUBE RADIATION	UV	UNIT VENTILATOR
FS	FLOW SWITCH	VAV	VARIABLE AIR VOLUME BOX
GC	GENERAL CONTRACTOR	VB	VACUUM BREAKER
GPM	GALLONS PER MINUTE	VTR	VENT THRU ROOF
Н	HUMIDIFIER	VD	MANUAL VOLUME DAMPER
НВ	HOSE BIB	VCFF	VALVED AND CAPPED FOR FUTURE
HRU	HEAT RECOVERY UNIT	VFD	VARIABLE FREQUENCY DRIVE
HTR	HEATER	W/	WITH

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MECHANICAL CONTROLS LEGEND & ABBREVIATIONS

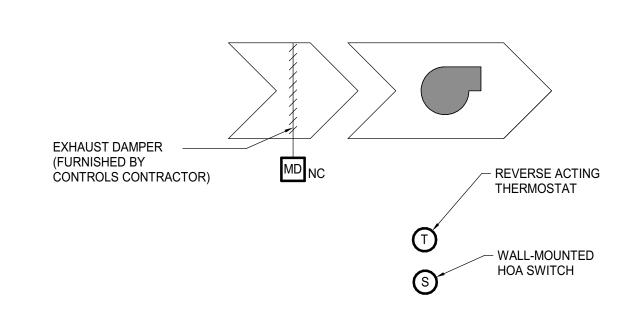
SHEET TITLE:

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0" 1/4" 1/2" 1" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER:

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M-650 M-650-19176 SHEET No.



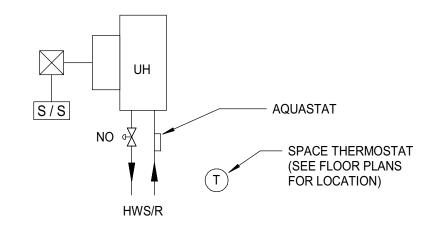
GENERAL:

- 1. EXHAUST DAMPERS ARE FURNISHED BY THE FAN MANUFACTURER.
- 2. CONTROLS CONTRACTOR SHALL PROVIDE EXHAUST AIR DAMPER AND EXHAUST AIR CONTROL DAMPER ACTUATOR.
- 3. CONTROL DAMPER ACTUATORS SHALL BE DIRECT-COUPLED ELECTRONIC.
- 4. CONTROLS CONTRACTOR SHALL PROVIDE WALL-MOUNTED HAND-OFF-AUTO (HOA) SWITCH.
- 5. CONTROLS CONTRACTOR SHALL MOUNT AND WIRE ALL CONTROLS AND COMPONENTS THAT REQUIRED FIELD INSTALLATION AND SHALL PROVIDE ALL FIELD WIRING REQUIRED FOR COMPLETE AND PROPERLY FUNCTIONING FAN VENTILATION SYSTEM.
- 6. PROVIDE CONTROL DAMPER ACTUATORS WITH AUXILIARY END SWITCHES TO PROVE DAMPER OPEN PRIOR TO THE FAN STARTING.

FAN (EF-1) CONTROL:

- 1. FAN SWITCH IN THE "HAND" POSITION: THE EXHAUST AIR CONTROL DAMPER SHALL OPEN. ONCE THE DAMPER HAS BEEN PROVEN FULLY OPEN, THE FAN SHALL START.
- 2. FAN SWITCH IN THE "OFF" POSITION: THE FAN IS DE-ENERGIZED, THE EXHAUST AIR CONTROL DAMPER IS FULLY CLOSED.
- 3. FAN SWITCH IN THE "AUTO" POSITION": CONTROL SHALL BE THROUGH THE WALL-MOUNTED THERMOSTAT SUCH THAT UPON A RISE IN TEMPERATURE ABOVE SET-POINT (85°F - ADJUSTABLE), THE EXHAUST AIR CONTROL DAMPER SHALL OPEN. ONCE THE DAMPER HAS BEEN PROVEN FULLY OPEN, THE FAN SHALL START. THE FAN SHALL OPERATE CONTINUOUSLY UNTIL THE TEMPERATURE DROPS BELOW AN ADJUSTABLE DEAD BAND OF 5°F, AT WHICH POINT THE FAN SHALL STOP AND THE DAMPER SHALL

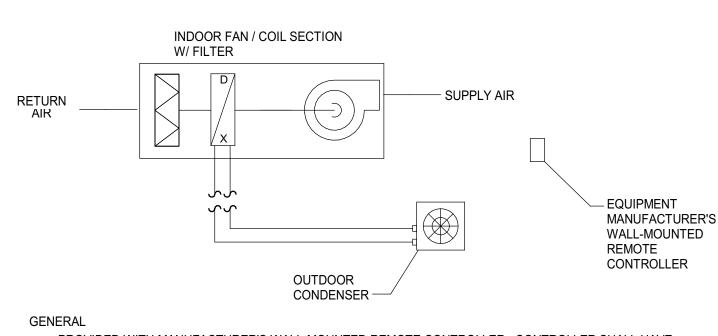




UNIT HEATER (HYDRONIC):

- 1. UH / CUH SHALL BE CONTROLLED VIA STAND-ALONE THERMOSTATS AND CONTROL VALVES.
- 2. PROVIDE UH WITH SPACE THERMOSTAT, 2-WAY, 2-POSITION CONTROL VALVE AND STRAP-ON AQUASTAT. ALL CONTROL DEVICES SHALL BE WIRED UNDER THE WORK OF THE CONTROLS CONTRACTOR.
- 3. ALL TEMPERATURE SETPOINTS SHALL BE ADJUSTABLE. TEMPERATURES LISTED ARE FAHRENHEIT.
- 4. MOTOR RATED RELAYS SHALL BE PROVIDED TO INTERFACE MANUAL MOTOR STARTER WITH CONTROL WIRING TO SATISFY CONTROL SEQUENCE.
- 5. THE UNIT HEATER'S FAN SHALL NORMALLY BE DE-ENERGIZED. UPON A DROP IN TEMPERATURE BELOW SET POINT (65°F), AS SENSED BY THE LOCAL SPACE THERMOSTAT, THE CONTROL VALVE SHALL OPEN AND AFTER AN ADJUSTABLE TIME DELAY, THE UNIT HEATER'S FAN SHALL BE ENERGIZED. THE REVERSE SHALL OCCUR UPON A RISE IN TEMPERATURE ABOVE 68°F.
- 6. STRAP-ON AQUASTAT ON THE SUPPLY WATER PIPING SHALL PREVENT THE OPERATION OF THE FAN IF THE HOT WATER TEMPERATURE IS BELOW 100°F.

HYDRONIC UNIT HEATER - SEQUENCE OF OPERATION NOT TO SCALE E1



- PROVIDED WITH MANUFACTURER'S WALL-MOUNTED REMOTE CONTROLLER. CONTROLLER SHALL HAVE AS A MINIMUM: MODE OF OPERATION, ADJUSTABLE TEMPERATURE SET-POINTS AND FAN SPEED SELECTION BUTTONS.
- INSTALL, WIRE AND TEST MANUFACTURER'S CONTROLS. DEMONSTRATE PROPER FUNCTIONALITY OF EACH CONTROL MODE (I.E. AUTO, OFF, COOL, FAN ONLY), TEMPERATURE ACCURACY AND FAN SPEED OPERATION.
- TEMPERATURE SET-POINTS ARE MANUALLY ADJUSTABLE AT THE ROOM CONTROLLER.

OPERATING MODES

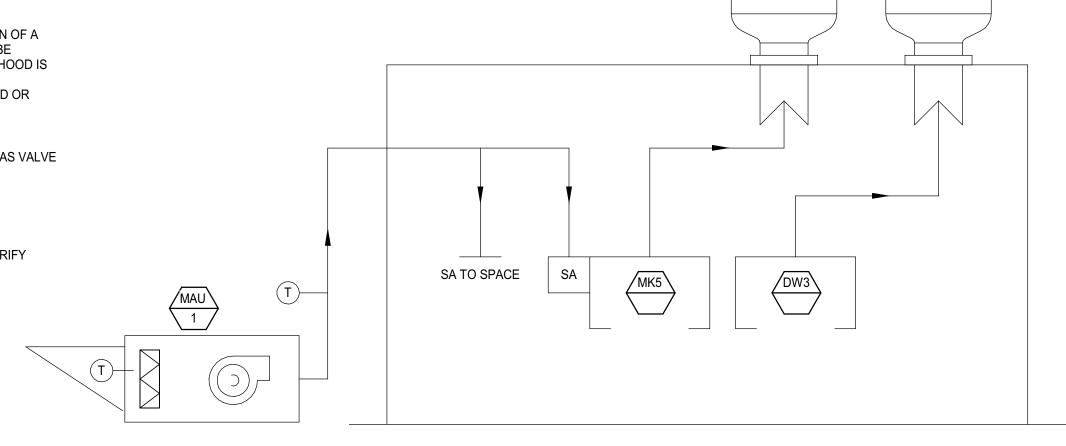
THE SYSTEM (OUTDOOR CONDENSER AND INDOOR COIL / FAN SECTION) SHALL OPERATE IN COOLING MODE PER MANUFACTURER'S SYSTEM CONTROLS. THE SYSTEM SHALL BE CAPABLE OF COOLING THE

SINGLE ZONE DUCTLESS A/C SEQUENCE OF OPERATION A11

KITCHEN VENTILATION SEQUENCE OF OPERATION

- 1. KITCHEN HOOD VENDOR'S CONTROL PACKAGE SHALL PERFORM ALL OPERATIONS BELOW.
- 2. EXHAUST FAN OPERATION: KITCHEN HOOD EXHAUST FAN (EF-2) SHALL BE ENABLED UPON ACTIVATION OF A HOOD-MOUNTED CONTROL PANEL. WHEN EF-2 IS ENERGIZED, THE MAKE-UP AIR UNIT (MAU-1) SHALL BE ENERGIZED. EF-2 SHALL NOT RUN UNTIL THE MAKE-UP AIR UNIT IS PROVEN ON. WHEN THE KITCHEN HOOD IS SWITCHED TO THE OFF POSITION, EF-2 AND MAU-1 SHALL BE DISABLED. DISHWASHER HOOD EXHAUST FAN (EF-3) SHALL BE MANUALLY ACTIVATED AND DEACTIVATED BY HOOD OR WALL-MOUNTED SWITCH, PROVIDED BY HOOD MANUFACTURER.
- 3. MAU-1: A. MAKE-UP AIR UNIT SHALL BE CONTROLLED VIA THE KITCHEN HOOD CONTROLLER. B. LP GAS FIRED HEAT SHALL ACTIVATE WHEN DISCHARGE AIR TEMPERATURE DROPS BELOW 55 F. GAS VALVE SHALL MODULATE TO MAINTAIN DISCHARGE AIR TEMP AT 55 F MINIMUM.
- 4. SAFETIES: A. ACTIVATION OF THE ANSUL SYSTEM SHALL BE REPORTED TO THE FIRE ALARM SYSTEM.
- ACTIVATION OF THE ANSUL SYSTEM SHALL CLOSE ALL GAS SOLENOID VALVE TO THE KITCHEN
- C. GAS VALVE SHALL REQUIRE MANUAL RESET. PROVIDE SIGNAGE TO INDICATE OPERATE TO VERIFY

PILOT IGNITION ON ALL DEVICES AFTER GAS VALVE IS RESET.



KITCHEN VENTILATION SEQUENCE OF OPERATION NOT TO SCALE A1

EF 3

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NOTES:

1. SEE SHEET M-650 FOR LEGEND AND ABBREVIATIONS.

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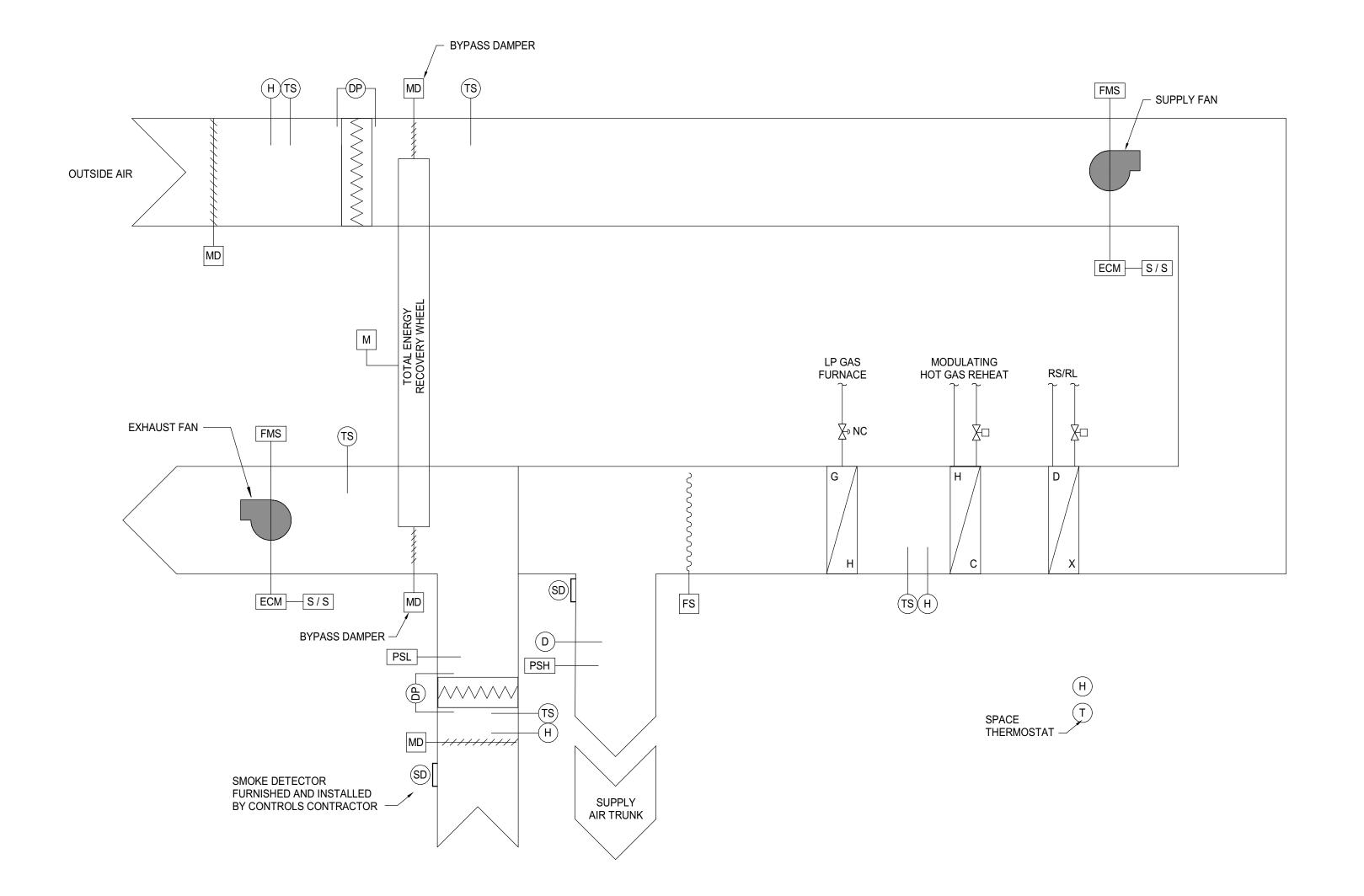
MECHANICAL SEQUENCE OF **OPERATIONS**

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SMRT FILE: M-651-19176 SHEET No.



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1. SEE SHEET M-650 FOR LEGEND AND ABBREVIATIONS.

DEDICATED OUTSIDE AIR UNIT WITH ENERGY RECOVERY SEQUENCE OF OPERATION

OCCUPIED OPERATION BEGINS WHEN THE UNIT (ERU) IS PLACED IN OCCUPIED MODE WHEN OAUTS-7 & 8 ARE CLOSED ON THE FIELD WIRING TERMINAL STRIP. THE ERU MUST NOT BE IN ESTOP TO BEGIN STARTING SEQUENCE. OAUTS-9 & 10 ON THE FIELD WIRING TERMINAL STRIP ARE USED AS AN EXTERNAL ESTOP FOR THE ERU. DURING THE STARTING SEQUENCE, THE OUTDOOR AIR DAMPER IS OPENED TO ITS STARTING POSITIONS

SUPPLY FAN SEQUENCE
THE OA DAMPER END SWITCH MUST BE MADE TO BEGIN SUPPLY FAN SEQUENCE ON THE ERU WITH A TWO-POSITION OUTDOOR AIR DAMPER. THE SUPPLY FAN SEQUENCE SHALL START IMMEDIATELY. IF AFTER 90 SECONDS THE SUPPLY FAN PROVING SWITCH IS NOT MADE, THE ERU SHALL LOCK OUT ON SUPPLY FAN

CONSTANT VOLUME WITH ECM: USING THE SUPPLY AIR FLOW ACTIVE FROM THE SUPPLY FAN PIEZO READING, THE ERU CONTROLS SUPPLY FAN SPEED TO THE SUPPLY AIR FLOW SETPOINT.

VENTILATION MODE SHALL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE IS BETWEEN THE OUTDOOR AIR COOLING SETPOINT (OACS) AND OUTDOOR AIR HEATING SETPOINT (OAHS) AND MUST NOT BE IN DEHUMIDIFICATION MODE. DURING VENTILATION MODE THE HEATING AND COOLING ARE LOCKED OUT.

DURING HEATING MODE, THE HEATING SIGNAL SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT ACTIVE. MAXIMUM SUPPLY AIR TEMPERATURE SHALL BE SET TO (95°F) FOR GAS HEATING. HOT GAS REHEAT IS INACTIVE DURING HEATING MODE. IN THE EVENT OF AN IGNITION FAILURE ON INDIRECT FIRED GAS HEAT, THE MAIN ERU CONTROLLER SHALL RETRY TO IGNITE THE GAS HEATER THREE TIMES BEFORE LOCKING OUT THE HEATER.

SPACE CONTROL: HEATING MODE SHALL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE ACTIVE FALLS BELOW THE OUTDOOR AIR HEATING SETPOINT (OAHS). IF THE OUTDOOR AIR TEMPERATURE IS ABOVE THE OUTDOOR AIR HEATING SETPOINT BUT BELOW THE OUTDOOR AIR COOLING SETPOINT (OACS) AND THE ERU IS NOT IN DEHUMIDIFICATION MODE, THEN THE ERU WILL CHANGE MODES AS NEEDED TO MAINTAIN THE SPACE TEMPERATURE SETPOINT ACTIVE.

DURING DEHUMIDIFICATION MODE THE COOLING CAPACITY MODULATES TO MAINTAIN THE TEMPERATURE OFF THE INDOOR COIL TO THE EVAPORATOR LEAVING TEMPERATURE SETPOINT. THE HOT GAS RE-HEAT WILL CONTROL TO THE DISCHARGE AIR TEMPERATURE SETPOINT ACTIVE.

SPACE CONTROL: IF THE DISCHARGE AIR DEW POINT RISES ABOVE 58°F (ADJ.) FOR 5 MINUTES (ADJ.), THE DX COIL SHALL BE CONTROLLED BETWEEN 50°F AND 55°F AND THE HOT GAS REHEAT COIL SHALL BE MODULATED TO MAINTAIN COOLING SETPOINT. UPON A DROP IN DEW POINT BELOW 57°F (ADJ.) FOR 10 MINUTES THE DEHUMIDIFICATION CYCLE SHALL END.

HOT GAS REHEAT PURGE: FOLLOWING CONTINUOUS 30-MINUTE HOT GAS REHEAT OPERATION AT LESS THAN 50% REHEAT CAPACITY A PURGE CYCLE SHALL BE INITIATED. DURING THE PURGE CYCLE, THE HOT GAS REHEAT SIGNAL IS SET AND HELD AT 100% FOR A PERIOD OF THREE MINUTES. FOLLOWING THE PURGE CYCLE, NORMAL OPERATION SHALL RESUME.

COOLING MODE

DURING COOLING MODE, THE COOLING CAPACITY SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE ACTIVE TO THE DISCHARGE AIR TEMPERATURE SETPOINT ACTIVE. THE HOT GAS RE-HEAT SHALL BE ENGAGED TO PREVENT CYCLING OF THE COMPRESSORS AND BRING THE DISCHARGE AIR TEMPERATURE TO SETPOINT.

SPACE CONTROL: COOLING MODE SHALL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE ACTIVE IS ABOVE THE OUTDOOR AIR COOLING SETPOINT (OACS). IF THE ERU IS BELOW THE OUTDOOR AIR COOLING SETPOINT (OACS) BUT ABOVE THE OUTDOOR AIR HEATING SETPOINT (OAHS), THEN THE ERU SHALL ALTERNATE BETWEEN HEATING AND COOLING MODES TO MAINTAIN THE SPACE TEMPERATURE SETPOINT

DISCHARGE CONTROL: COOLING MODE SHALL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE ACTIVE IS ABOVE THE OUTDOOR AIR COOLING SETPOINT (OACS).

EXHAUST FAN CONTROL IS INTERLOCKED WITH SUPPLY FAN OPERATION. THE ERU SHALL BE INSTALLED WITH ISOLATION DAMPERS ON THE POWERED EXHAUST. THE DAMPER PROVING SWITCHES MUST BE PROVEN BEFORE THE EXHAUST FAN IS ENABLED. THE EXHAUST FAN STATUS SHALL BE MONITORED USING A PROVING SWITCH.

ECM EXHAUST WITH 2-POSITION OA DAMPER: USING THE EXHAUST AIR FLOW ACTIVE FROM THE EXHAUST FAN PIEZO READING, THE ERU CONTROLS EXHAUST FAN SPEED TO A CONSTANT VOLUME ACCORDING TO THE EXHAUST AIR FLOW SETPOINT.

ENERGY RECOVERY WHEEL OPERATION

THE ENERGY RECOVERY WHEEL (ERW) IS INTERLOCKED WITH THE SUPPLY AND EXHAUST FAN OPERATION IN OCCUPIED HEATING, DEHUMIDIFICATION OR COOLING MODES. WHEN OPERATING IN ECONOMIZER OR VENTILATION MODE, THE ERW IS DISABLED AND THE ERW BYPASS DAMPERS WILL OPEN, BUT POWERED EXHAUST REMAINS ON. IF ECONOMIZER OR VENTILATION MODE HAS BEEN ENABLED FOR TEN MINUTES THE ERW WILL JOG FOR ONE MINUTE TO PREVENT MOLD BUILDUP. ERW OPERATION SHALL BE DISABLED DURING UNOCCUPIED MODE.

ENERGY WHEEL WITH MODULATING BYPASS ON SUPPLY DURING ERW OPERATION, IF THE EXHAUST TEMPERATURE DROPS BELOW 15°F, THE OUTDOOR AIR BYPASS DAMPER SHALL MODULATE OPEN TO PREVENT FROST ACCUMULATION.

SUPPLY AND EXHAUST DUCT SMOKE DETECTOR SHALL STOP FANS, CLOSE OUTSIDE AIR DAMPERS AND SIGNAL ALARM IF SMOKE IS DETECTED.

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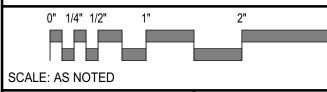
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MECHANICAL SEQUENCE OF OPERATIONS

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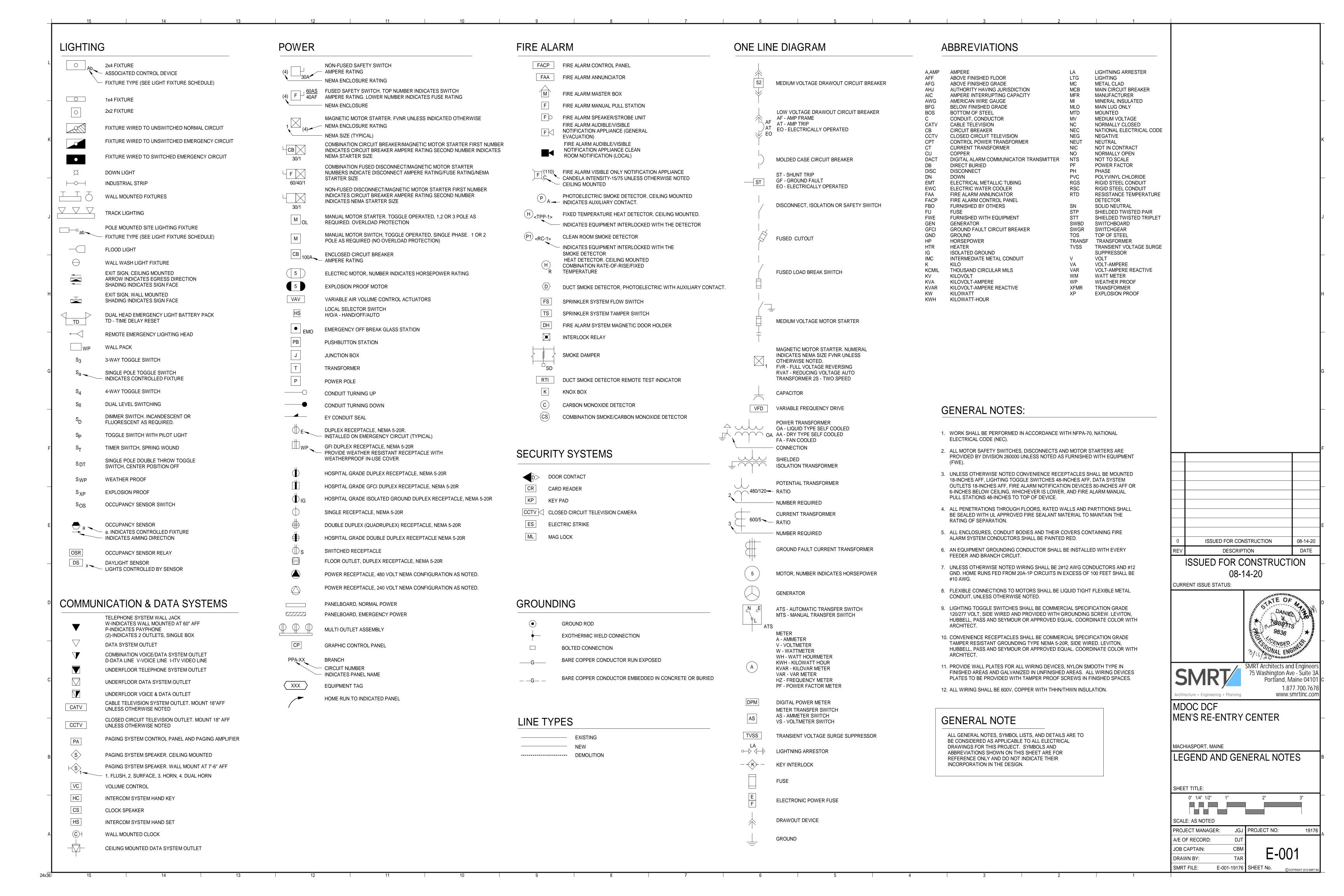
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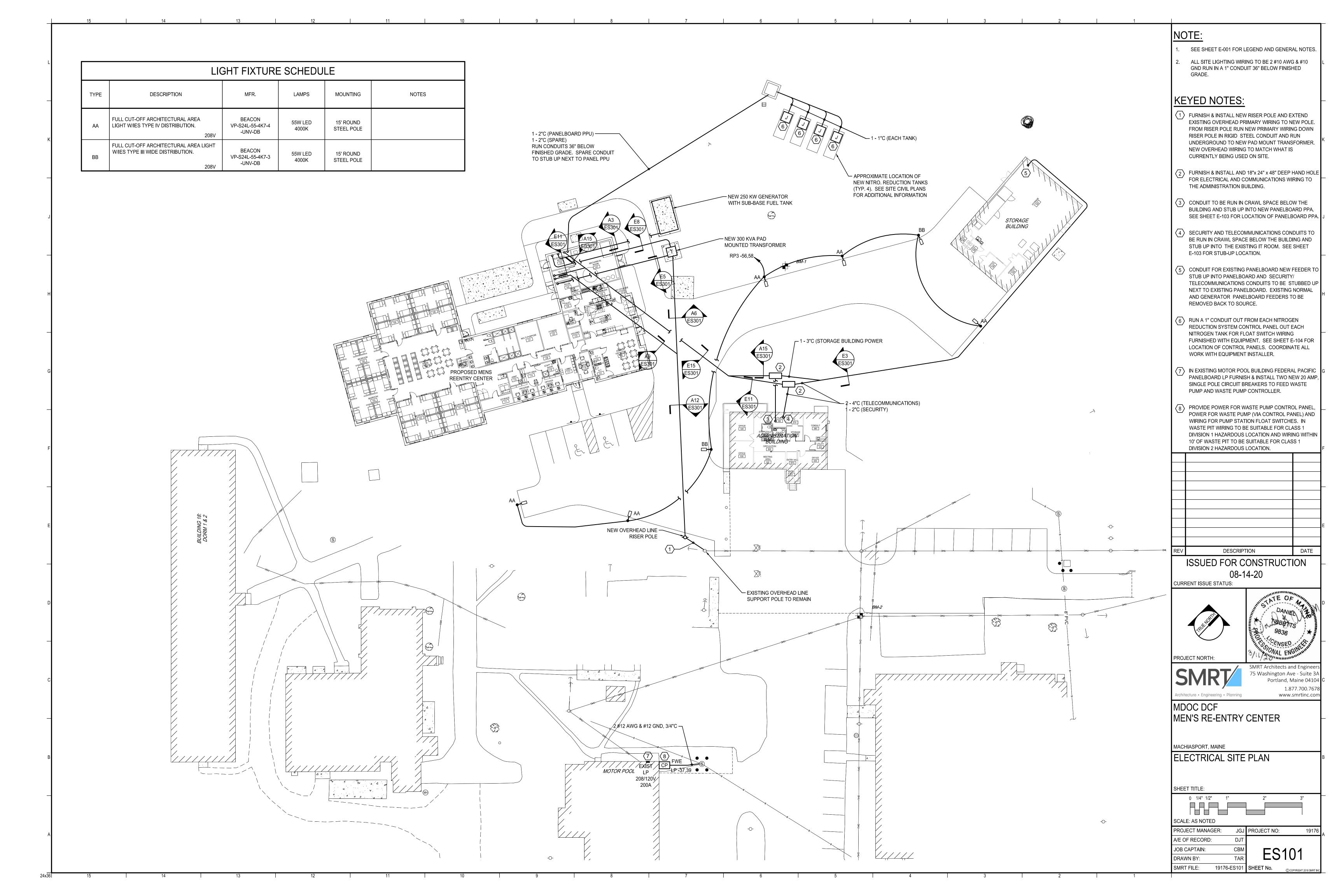


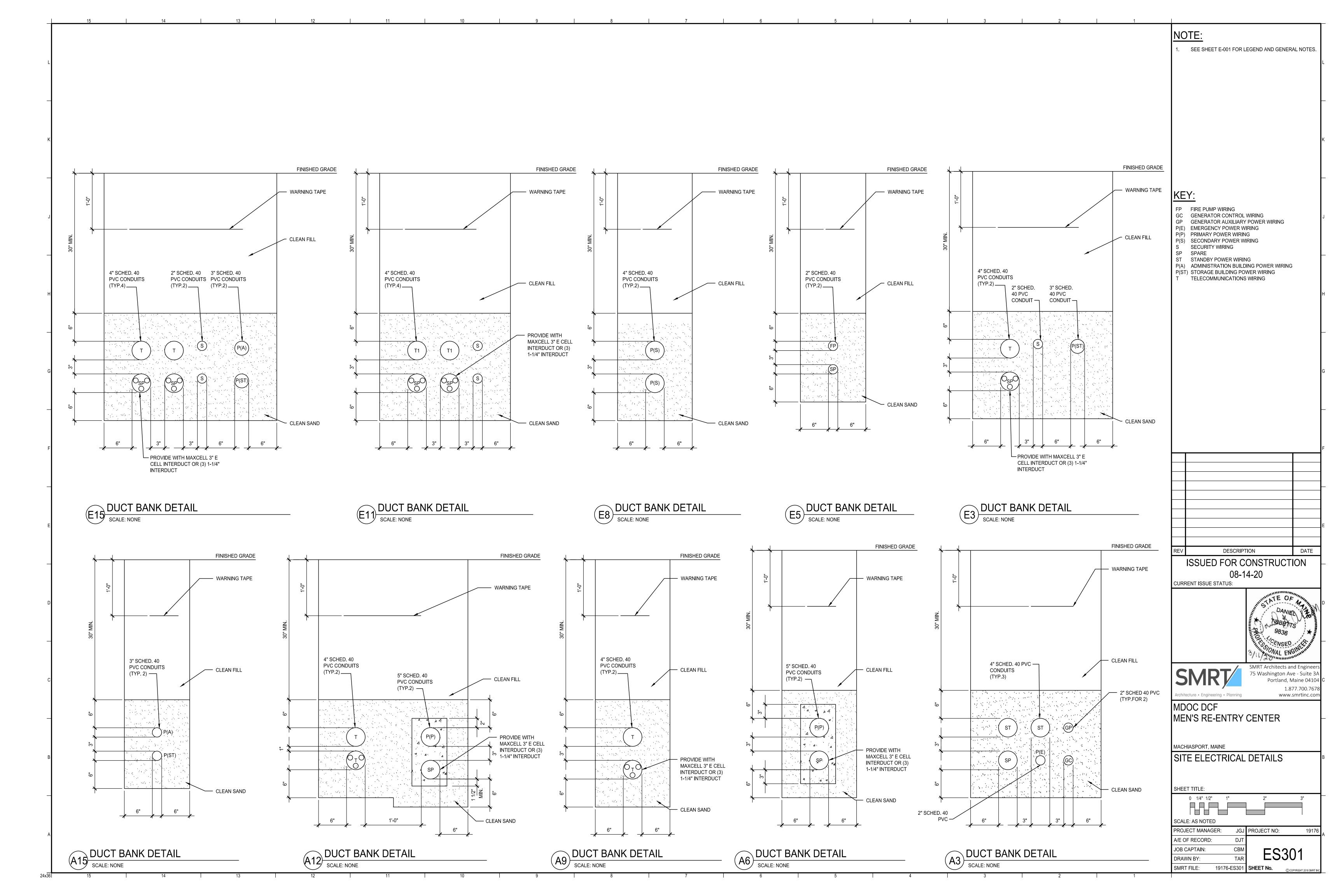
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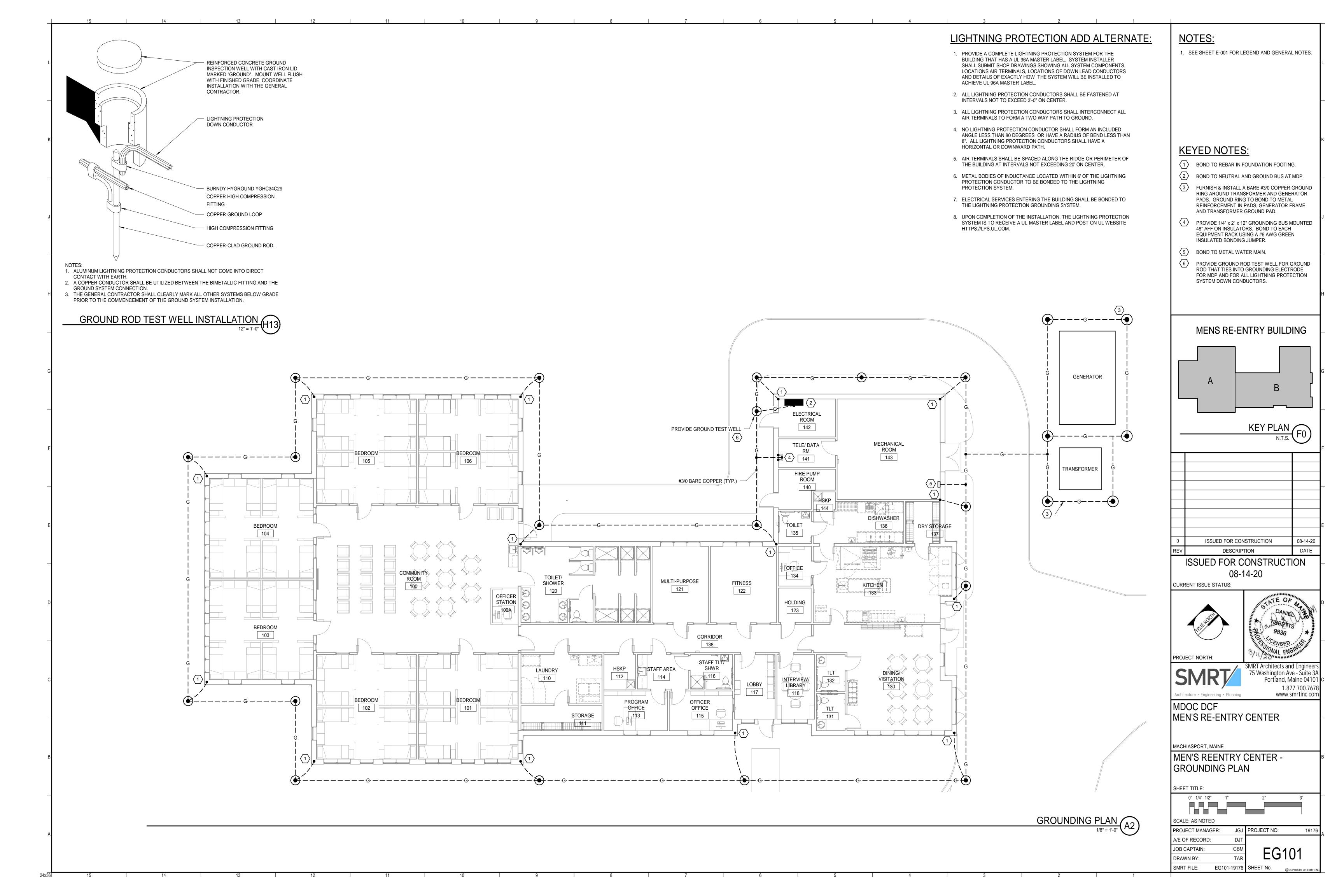
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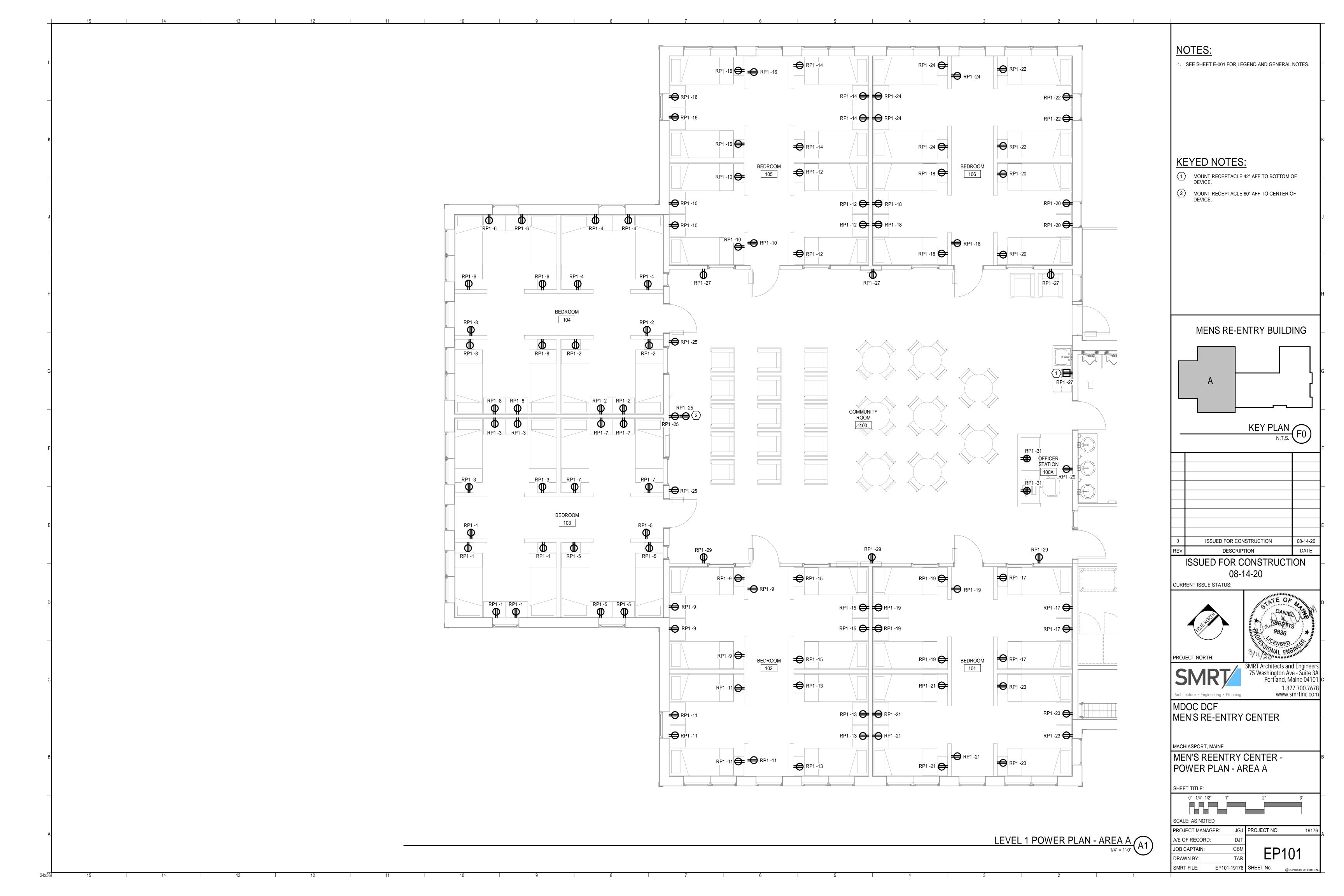
ENERGY RECOVERY UNIT - SEQUENCE OF OPERATIONS

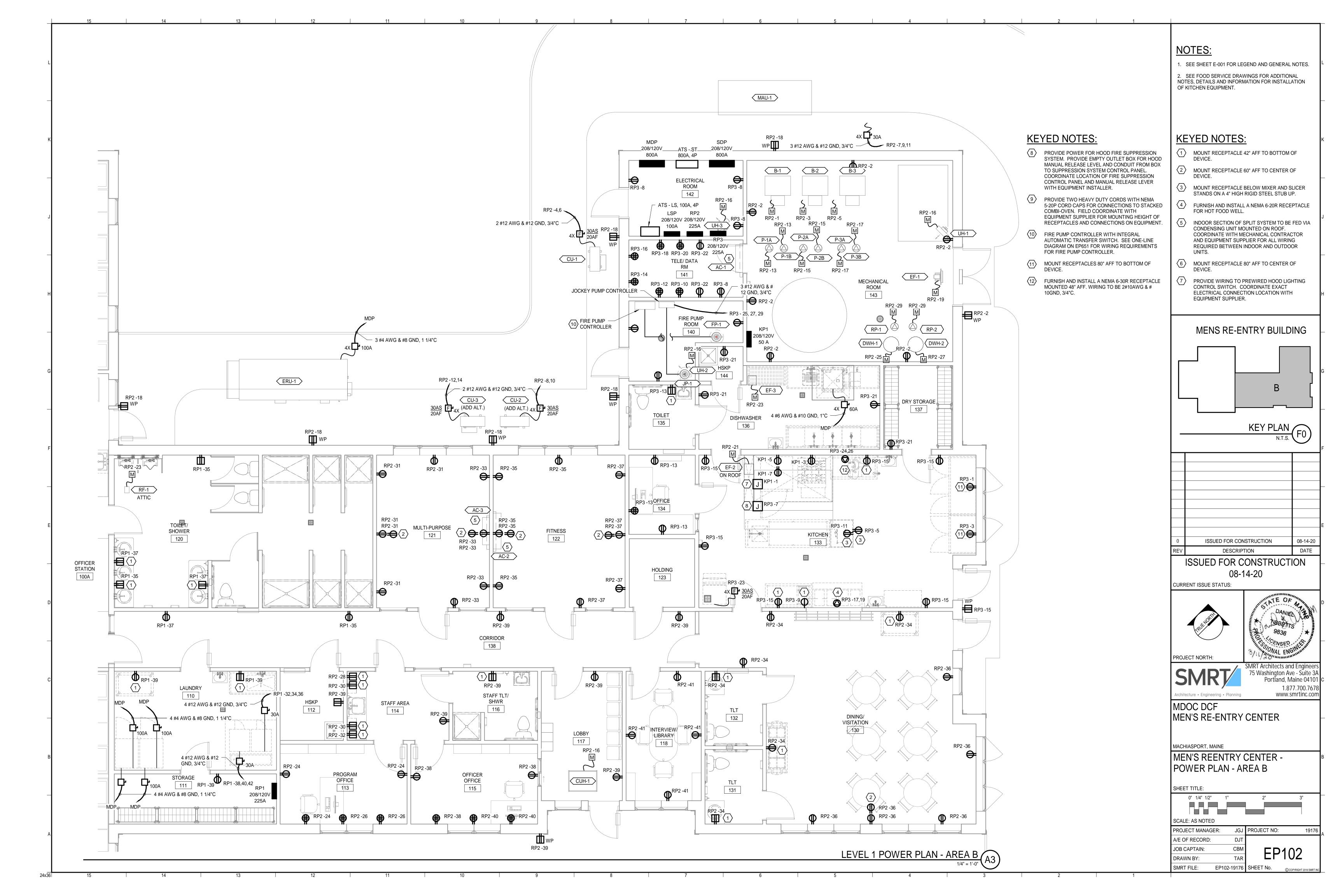












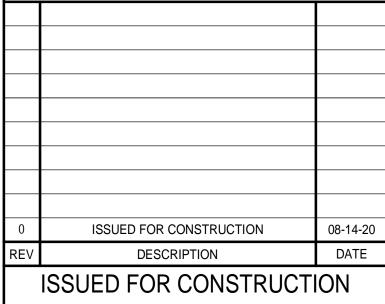
DIRECTORY	k'	VA LOA	νD	CKT NO.	AMPS		B C	BKR AMPS	T NO.	k۱	/A LOA	۸D		DIRECTORY
	Α	В	С	충	BKR	ST)		BKR	CKT	Α	В	С		
HOOD LIGHTS / CONTROLS	0.5			1	20	-		20	2					SPARE
(1) 4 BURNER CONVECTION OVEN		0.5		3	20			20	4					SPARE
(1) COMBI OVER			1.5	5	20		-	20	6					SPARE
(1) COMBI OVER	1.5			7	20			20	8					SPARE
SPARE				9	20			20	10					SPARE
SPARE				11	20		-	20	12					SPARE
SPACE				13					14					SPACE
SPACE				15					16					SPACE
SPACE				17			•		18					SPACE
SUB-TOTAL	2.0	0.5	1.5	_			NEUTFGROU			0.0	0.0	0.0	SUB-TOTAL	
VOLTAGE: 208Y/120V 3 PHA	SE	4 W	IRE	100) AM	P BUS	TOTAL k	VA A			2.0	•	PANEL NO.	I/D4
MAIN SHUNT TRIP BREAKER:				50	AM	P TRIP	TOTAL k	VA B			0.5			KP1
MOUNTING: SURFACE							TOTAL k	VA C			1.5		LOCATION	MECHANICAL 143
SC RATING: 42,000 AIC							TOTAL k	VA			4.0			MECHANICAL 143
NOTES: (1) PROVIDE GFCI BREAKER WITH	5mA SI	ENSITI	/ITY				•							

DIRECTORY	k'	VA LOA	\D	CKT NO.	AMPS	A	B C	AMPS	T NO.	k۱	/A LOA	'D		DIRECTORY
	Α	В	С	S	BKR			BKR	CKT	Α	В	С		
FIRST FLOOR EMERGENCY LTG	1.2			1	20				2	3.0				
EXTERIOR LIGHTING		1.1		3	20			50	4		3.0		F	FIRE PUMP FP-1
LTG ELECT / TELE / SECURITY / ME			0.8	5	20				6			3.0		
FIRE ALARM CONTROL PANEL	1.0			7	20			20	8					SPARE
SPARE				9	20			20	10					SPARE
SPARE				11	20		•	20	12					SPARE
SPACE				13					14					SPACE
SPACE				15					16					SPACE
SPACE				17					18					SPACE
SUB-TOTAL	2.2	1.1	0.8				NEUTFGROU			3.0	3.0	3.0	SUB-TOTAL	
VOLTAGE: 208Y/120V 3 PHAS	E	4 W	IRE	100) AM	P BUS	TOTAL k	VA A			5.2		PANEL NO.	100
MAIN SHUNT TRIP BREAKER:				100) AM	P TRIP	TOTAL k	VA B			4.1			LSP
MOUNTING: SURFACE							TOTAL k	VA C			3.8		LOCATION	ELECTRICAL ROOM 142
SC RATING: 42,000 AIC							TOTAL k	VA			13.1			ELECTRICAL ROOM 142
NOTES:														

DIRECTORY	k'	VA LOA	AD	N O	AMPS	A	B 	С	BKR AMPS	NO.	k۱	/A LOA	νD		DIRECTORY
	Α	В	С	Ä	BKR				BKR	CKT	Α	В	С		
BOILER B-1	1.2			1	20	-			20	2	1.3			RECEPT	TS MECHANICAL ROOM
BOILER B-2		1.2		3	20		•	$+$ \Box	20	4		1.4		TELE	DATA SPLIT SYSTEM
BOILER B-3		_	1.2	5	20				20	6			1.4	TELE /	DATA SPLIT STSTEM
KITCHEN HOOD MAKE-UP PWR	0.3	0.3		7	15		•		20	8 10	1.4	1.4		FITN	IESS SPLIT SYSTEM
DUMBO D. 4A / D. 4B	4.0		0.3	11					20	12			1.4	MULTI - F	PURPOSE SPLIT SYSTEM
PUMPS P-1A / P-1B	1.6	0.5		13	20		+		00	14	1.4	4.0			ATED CHILA IIII 4 0 0
PUMPS P-2A / P-2B		0.5	4.0	15	20		*		20	16		1.0	0.0		ATER CUH-1, UH - 1,2,3
PUMPS P-3A / P-3B	0.7		1.6	17	20				20	18	4.0		0.9		TERIOR RECEPTS
EXHAUST FAN EF 2	0.7	0.0		19	20				20	20	1.3	0.4			18, 122, 123, 130 - 137, 144
EXHAUST FAN EE 2 DADON DE 4		0.9	0.0	21	20		*		20	22		0.4	0.0		MECHANICAL ROOM
EXHAUST FAN EF-3, RADON RF-1 DOMESTIC WATER HEATER DWH-1	4.0		0.6	23	20		+		20	24	0.0		0.8		TS PROGRAM OFFICE
	1.2	4.0		25	20		\perp		20	26	0.8	0.0			TS PROGRAM OFFICE
DOMESTIC WATER HEATER DWH-2		1.2		27	20		*		20	28		0.2	0.4		REA COUNTER RECEPT
RECIRC PUMP RP-1, RP-2	0.0		0.6	29	20				20	30	0.0		0.4		REA COUNTER RECEPT
RECEPTS MULTI - PURPOSE	0.9	0.0		31	20		Ŧ		20	32	0.2	4.4			REA COUNTER RECEPT
RECEPTS MULTI - PURPOSE		0.9	0.0	33	20				20	34		1.1			INING / VISITATION / TOILE
RECEPTS FITNESS	0.0		0.9	35	20				20	36	0.0		1.1		DINING / VISITATION / EXT
RECEPTS FITNESS	0.9	4.0		37	20				20	38	0.8	0.0			PTS OFFICER OFFICE
RECEPTS RM 114, 116, 117, 138 EXT		1.3	0.0	39	20				20	40		8.0		RECEI	PTS OFFICER OFFICE
RECEPTS INTERVIEW			0.8	41	20				20	42					SPARE
SPARE				43	20		\perp		20	44					SPARE
SPARE				45	20				20	46					SPARE
SPARE				47	20				20	48					SPARE
SPARE				49	20				20	50					SPARE
SPARE				51	20				20	52					SPARE
SPARE				53	20				20	54					SPARE
SPARE				55	20		\pm		20	56					SPARE
SPARE				57	20		*		20	58					SPARE
SPACE				59	20		+		20	60					SPACE
SPACE				61						62					SPACE
SPACE				63			**			64					SPACE
SPACE				65						66					SPACE
SUB-TOTAL	6.8	6.3	6.0					NEUTF GROU			7.2	6.3	6.0	SUB-TOTAL	
OLTAGE: 208Y/120V 3 PHA	SE	4 W	IRE	225	5A AM	P BUS	TC	OTAL k	/A A			14.0		PANEL NO.	RP2
AIN LUGS ONLY:				225	5A AM	P LUGS	TC	OTAL k	/A B			12.6			Kr2
OUNTING: RECESSED	JNTING: RECESSED							TOTAL kVA C 12.0						LOCATION	ELECTRICAL DOOM 440
C RATING: 42,000 AIC							TC	OTAL k	/A			38.6		ELECTRICAL ROOM 142	

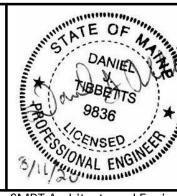
DIRECTORY		k	VA LOA	ΔD	CKT NO.	AMPS	A	B 	C	AMPS	CKT NO.	k۱	/A LOA	D		DIRECTORY
		Α	В	С	충	BKR				BKR	S	Α	В	С		
REACH IN REFRIGERATO	R	1.8			1	20	-		$+$ \bigcirc		2	1.4				
REACH IN FREEZER			1.8		3	20		•	+	50	4		1.4		P	ANELBOARD KP1
) SLICER TABLE RECEPTS	3			1.0	5	20					6			1.4		
HOOD LIGHTING / CONTRO	DLS	0.5			7	20				20	8	0.8			RECEF	PTS ELECT / TEL DATA
TOASTER RECEPT			1.6		9	20		•		20	10		0.4		TE	L / DATA RECEPT
) 20 QT. MIXER				1.4	11	20			•	20	12			0.4	TE	L / DATA RECEPT
RECEPTS OFFICE / TOILE	T	0.9			13	20	-			20	14	0.4			TE	L / DATA RECEPT
) KITCHEN RECEPTS			0.9		15	20				20	16		0.4		TE	L / DATA RECEPT
HOT FOOD TABLE				1.5	17	20			•	20	18			0.4	TE	L / DATA RECEPT
HOT FOOD TABLE		1.5			19	20				20	20	0.4			TE	L / DATA RECEPT
) RECEPTS RMS 136, 137, 1	44		0.8		21	20		•	+	20	22		0.4		TE	L / DATA RECEPT
ICE MAKER WITH BIN		0.5		1.3	23 25	20				30	24 26	2.0		2.0	TA	BLE TOP KETTLE
JOCKEY PUMP CONTROLL	ER		0.5		27	15		•		20	28					SPARE
				0.5	29					20	30					SPARE
					31		- 1-•			20	32					SPARE
SPARE					33	15		•		20	34					SPARE
					35					20	36					SPARE
SPARE					37	20	-			20	38					SPARE
SPARE					39	20		•		20	40					SPARE
SPARE					41	20			•	20	42					SPARE
SPARE					43	20	-			20	44					SPARE
SPARE					45	20		•		20	46					SPARE
SPARE					47	20			•	20	48					SPARE
SPARE					49	20	-			20	50					SPARE
SPARE					51	20		•		20	52					SPARE
SPARE					53	20			•	20	54					SPARE
SPACE					55		-		1	00	56	0.5				OITE LIQUITINO
SPACE					57			•		20	58		0.5			SITE LIGHTING
SPACE					59			+	•		60					SPACE
SPACE					61			+	1		62	1.3				
SPACE					63			•	+	50	64		1.3		P	ANELBOARD KP1
SPACE					65						66			1.3		
SU	B-TOTAL	5.2	5.6	5.7	_				NEUTF GROU			6.8	4.4	5.5	SUB-TOTAL	
/OLTAGE: 208Y/120V	3 PHAS	⊥ SF	4 W	⊥ /IRF	225	5Δ ΔΝ/	IP BUS	-	TOTAL k				11.0		PANEL NO.	
MAIN LUGS ONLY:	U ITIAC	<u></u>	-T VV				IP LUGS		TOTAL K				10.0		. /	RP3
MOUNTING: RECESSED									TOTAL k				11.2		LOCATION	
SC RATING: 42,000 AIC					_	TOTAL k				33.2 ELECTRICAL ROOF						
NOTES: (1) PROVIDE GFCI BREA	VED WITH	Γ Λ C	ENOIT	\/\T\/									JJ.2			

DIRECTORY	k'	VA LOA	ΛD	NO.	AMPS	A	B 	C 	AMPS	T NO.	k\	/A LOA	.D		DIRECTORY
	Α	В	С	X	BKR				BKR	CKT	Α	В	С		
RECEPTS BEDROOM 103	0.9			1	20				20	2	0.9			RECE	PTS BEDROOM 104
RECEPTS BEDROOM 103		0.8		3	20		•		20	4		0.8		RECE	PTS BEDROOM 104
RECEPTS BEDROOM 103			0.9	5	20			•	20	6			0.8	RECE	PTS BEDROOM 104
RECEPTS BEDROOM 103	0.9			7	20	-			20	8	0.9			RECE	PTS BEDROOM 104
RECEPTS BEDROOM 102		0.9		9	20		•		20	10		0.9		RECE	PTS BEDROOM 105
RECEPTS BEDROOM 102			0.9	11	20				20	12			0.8	RECE	PTS BEDROOM 105
RECEPTS BEDROOM 102	0.8			13	20			-	20	14	0.8			RECE	PTS BEDROOM 105
RECEPTS BEDROOM 102		8.0		15	20		•	$+^-$	20	16		0.9		RECE	PTS BEDROOM 105
RECEPTS BEDROOM 101			0.8	17	20			•	20	18			0.9	RECE	PTS BEDROOM 106
RECEPTS BEDROOM 101	0.9			19	20	-		+	20	20	0.8			RECE	PTS BEDROOM 106
RECEPTS BEDROOM 101		0.9		21	20		•	+^-	20	22		0.8		RECE	PTS BEDROOM 106
RECEPTS BEDROOM 101			8.0	23	20			◆ ^	20	24			0.9	RECE	PTS BEDROOM 106
RECEPTS COMMUNITY RM 100	0.8			25	20			+	20	26	1.3			LTG BEI	DROOMS 101, 102, 103
RECEPTS COMMUNITY RM 100		0.8		27	20		•	$+^-$	20	28		1.3		LTG BEI	DROOMS 104, 105, 106
RECEPTS COMMUNITY RM 100			0.8	29	20			◆ ^	20	30			1.1	LTG COMM	JNITY ROOM / SHOWERS
RECEPTS COMMUNITY OFFICER	0.8			31	20			$+$ \cap		32	0.3				
SPARE		-		33	20		•	+1 $-$	20	34		0.3		ELEC.	TRIC 50LB WASHER
RECEPTS TOILET / SHOWER / CORRIDOR		_	0.6	35	20			•		36			0.3		
RECEPTS TOILET / SHOWER / CORRIDOR	0.6			37	20			+1 $-$		38	0.3				
RECEPTS LAUNDRY		0.6		39	20		•	+1	20	40		0.3		ELEC.	TRIC 50LB WASHER
LTG RMS 110-117, 121, 138			1.2	41	20			•		42			0.3		
SPARE				43	20			+^-	20	44					SPARE
SPARE				45	20		•	+^-	20	46					SPARE
SPARE				47	20			<u> </u>	20	48					SPARE
SPARE				49	20			+ `	20	50					SPARE
SPARE				51	20		•	<u> </u>	20	52					SPARE
SPARE				53	20			•	20	54					SPARE
SPARE				55	20			+ -	20	56					SPARE
SPARE				57	20		•	+ -	20	58					SPARE
SPARE				59	20			<u></u> ←	20	60					SPARE
SPACE				61				+ -		62					SPACE
SPACE				63			•		-	64					SPACE
SPACE				65						66					SPACE
SUB-TOTAL	5.7	4.8	6.0						RAL BU JND BU		5.5	5.5	5.1	SUB-TOTAL	
VOLTAGE: 208Y/120V 3 PHAS	SE	4 W	IRE	225	SA AM	P BUS	TC	OTAL k	XVA A			11.2		PANEL NO.	
MAIN LUGS ONLY:			225	SA AM	P LUGS	з то	OTAL k	VA B			10.3		1	RP1	
MOUNTING: RECESSED								VA C			11.1		LOCATION		
SC RATING: 22,000 AIC							OTAL k				32.6		STORAGE 111		
NOTES:								-						1	



08-14-20

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MDOC DCF MEN'S RE-ENTRY CENTER

MACHIASPORT, MAINE

PANEL SCHEDULES

SHEET TITLE:

0" 1/4" 1/2" 1" SCALE: AS NOTED JGJ PROJECT NO: PROJECT MANAGER:

A/E OF RECORD:

SMRT FILE: EP601-19176 SHEET No.

