CONSTRUCTION PLANS

LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING CIP200751

10450-10550 BUCKINGHAM ROAD FORT MYERS, FLORIDA 33905

SECTION 24, TOWNSHIP 44S, RANGE 25E

CONSULTANTS

OWNER/DEVELOPER: LEE COUNTY PO BOX 398 FORT MYERS, FL 33902

CIVIL ENGINEER/PRIME: STANTEC CONSULTING SERVICES, INC. 1412 JACKSON ST., SUITE 3 FORT MYERS, FL 33901

ARCHITECT: CASTELLANOS & TRAMONTE ARCHITECTS SPELMAN ENGINEERING, INC. 1228 LAFAYETTE ST., SUITE 1 CAPE CORAL, FL 39904 239-549-0997

MEP ENGINEER: 1923 SE 10TH PLACE CAPE CORAL, FL 33990 239-770-2930

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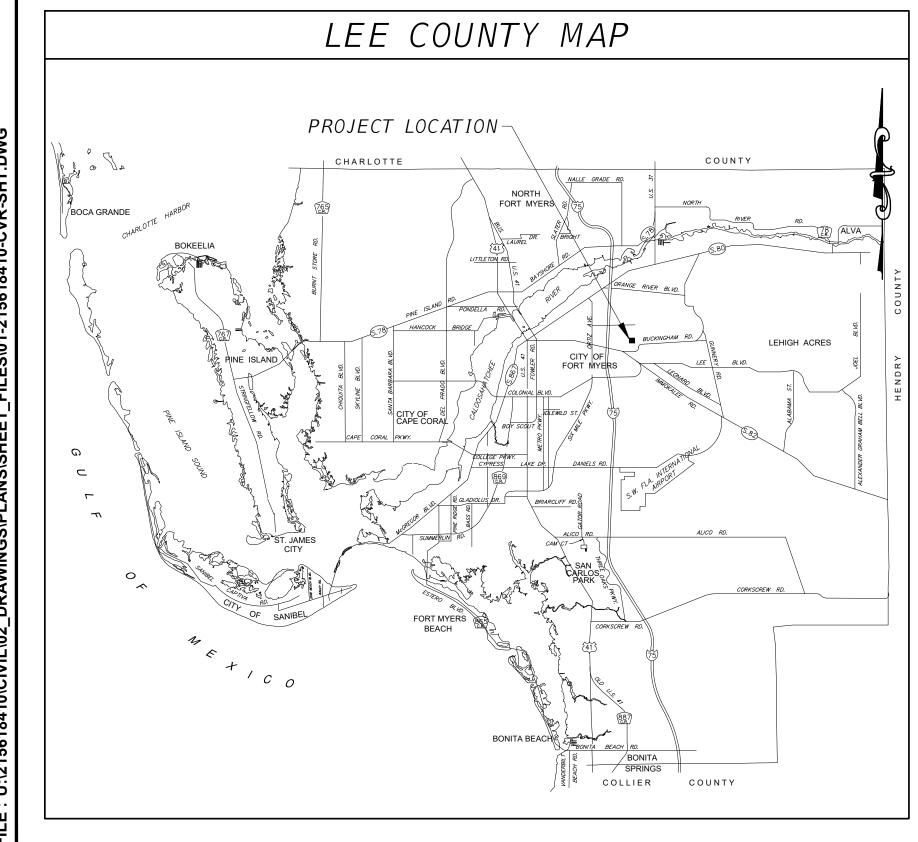
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1412 JACKSON ST., SUITE 3 FORT MYERS, Fl. 33901

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LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING

Project Address:

10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905 Client/Owner:

LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

Engineer Contact:

Kristina Connelly, P.E.
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Project Engineer:

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KRISTINA M. CONNELLY, P.E. NO. 54805

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SITE DATA:

SEC-TWP-RGE SEC 24-TWP 44S-RGE 25E

PROJECT MGR: DANIEL M. CRAIG

PROJECT # :2156184

FILE NAME :01-215618410-CVR-SHT.DWG

ORIGIN DATE:01-10-2024

DESIGNER :STS

CADD :STS

CHECKED BY :KC

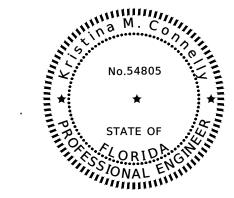
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COVER SHEET

SHEET NO. 01

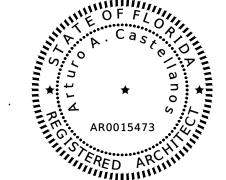
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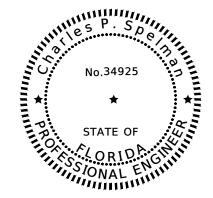
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Company SPELMAN ENGINEERING, INC. Address PO BOX 3519 Phone Eng/Arch N. FORT MYERS, FL 33918 239/770-2930

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FORT MYERS

1412 JACKSON ST., SUITE 3 FORT MYERS, Fl. 33901

Project Name:

LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING

Project Address: 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905 Client/Owner: LEE COUNTY PO BOX 398

Engineer Contact:

FORT MYERS, FL 33902

Kristina Connelly, P.E. Project Manager Phone: 239-347-5508 Email: kristina.connelly@stantec.com Project Engineer:

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No.54805 ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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FORT MYERS, FL 33901 KRISTINA M. CONNELLY, P.E. NO. 54805

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Revisions:

Ε	DATA:

SEC-TWP-RGE SEC 24-TWP 44S-RGE 25E PROJECT MGR: DANIEL M. CRAIG
PROJECT # :200061FILE NAME :02-200061-SIG.DWG
ORIGIN DATE:01-10-2024
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CADD :STS
CHECKED BY:KC
PLOT DATE :FRI. 8-23-2024-10:31 AM
PLOTTED BY :STSTUART

SHEET TITLE:

SHEET NO. 02

SIGNATURE

SHEET

GENERAL CONSTRUCTION NOTES:

- 1. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS OF ANY EXCAVATION OR DEMOLITION ACTIVITY THROUGH SUNSHINE ONE-CALL OF FLORIDA, INC. (1-800-432-4770) AND SHALL ALSO NOTIFY THOSE UTILITY OWNERS/AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAN (2) FULL BUSINESS DAYS IN ADVANCE OF THE BEGINNING OF CONSTRUCTION ON THE LOR SITE.
- 2. ANY PRIVATE OR PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS. AT NO ADDITIONAL COST THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES TO A CONDITION EQUAL OR BETTER THAN EXISTING, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR.
- 3. ALL DISTURBED AREAS ARE TO BE SODDED, UNLESS OTHERWISE NOTED, TO FDOT STANDARDS. ALL SOD IS TO BE MAINTAINED AND IRRIGATED BY CONTRACTOR UNTIL DEEMED ACCEPTED BY THE OWNER AND ENGINEER OF RECORD. ANY WASHOUTS, REGRADING, RESODDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED, BY THE OWNER, REGULATORY AGENCY AND ENGINEER OF RECORD AT NO ADDITIONAL COST.
- 4. THE CONTRACTOR SHALL UTILIZE A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA TO LOCATE AND FLAG ALL PROPERTY CORNERS PRIOR TO CONSTRUCTION AND BE MAINTAINED UNTIL FINAL ENGINEERING INSPECTION AND CERTIFICATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE PROPERTY CORNERS, WHICH HAVE BEEN LOST DURING CONSTRUCTION, REESTABLISHED BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA. ALL (P.R.M'S) IRONS AND MONUMENTS SHOWN ON THE PLANS OR FOUND SHALL BE PRESERVED. ANY PUBLIC LAND CORNERS WITHIN LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF ANY CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER WITHOUT DELAY.
- 5. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH LEE COUNTY MINIMUM DESIGN STANDARDS. ALL CONSTRUCTION MATERIALS, METHODS AND EQUIPMENT MUST CONFORM TO THE REQUIREMENTS OF LCU, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND FDOT DESIGN STANDARDS, CURRENT EDITION, AND SUCH OTHER EDITIONS, AMENDMENTS OR SUPPLEMENTS AS MAY BE ADOPTED BY FDOT. IN CASE OF SPECIFICATION DISCREPANCIES THE MORE STRINGENT CRITERIA GOVERNS.
- 6. THE CONTRACTOR SHALL FILE A NOTICE OF INTENT WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, CFM UTILITIES AND SFWMD A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 7. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN AND MAKE HIS/HER BID BASED ON THOSE VERIFICATIONS. IF ANY DISCREPANCIES IN QUANTITIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SUCH.
- 8. THESE DRAWINGS DO NOT INCLUDE INSTRUCTIONS FOR THE CONTRACTOR REGARDING CONSTRUCTION SAFETY. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE PUBLIC AND THE SAFETY OF HIS PERSONNEL.
- 9. WHEN WORKING ON OR ADJACENT TO EXISTING STRUCTURES OR APPURTENANCES, ALL PRECAUTIONS FOR CONTINUED SAFETY OF STRUCTURES AND ALL PERSONNEL SHALL BE EXERCISED IN ACCORDANCE WITH THE FLORIDA TRENCH SAFETY ACT AT A MINIMUM
- 10. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH FDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION, FDOT ROADWAY AND FDOT DESIGN STANDARDS LATEST EDITION, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL TRANSPORTATION ENGINEERING DESIGN STANDARDS. ALL ONSITE PAVEMENT MARKINGS SHALL BE PERMANENT REFLECTIVE TRAFFIC PAINT MEETING FDOT REQUIREMENTS. ALL HANDICAP REQUIREMENTS, BOTH SIGNAGE AND STRIPING WILL BE PER THE LATEST ADA CRITERIA USING THE APPROPRIATE COLORED TRAFFIC PAINT.
- 11. 24" STOP BARS SHALL BE CONSTRUCTED PER FDOT INDEX 17346 AND BE LOCATED AS SHOWN.
- 12. ALL STOP BARS SHALL BE THERMOPLASTIC
- 13. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE AT ALL TIMES. THE CONTRACTOR IS RESPONSIBLE TO READ AND UNDERSTAND ALL PERMITS INCLUDING ALL GENERAL AND SPECIAL CONDITIONS. AT OWNER'S OR ENGINEER'S REQUEST, THE CONTRACTOR SHALL PROVIDE APPROPRIATE DOCUMENTATION THAT ALL CONSTRUCTION RELATED CONDITIONS ARE ADHERED TO.
- 14. ASPHALT PAVEMENT DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- 15. ZONING FOR THE SITE IS INDUSTRIAL PLANNED DEVELOPMENT (IPD).

CLEARING AND EROSION CONTROL NOTES

AUTHORITIES.

- 1. THE CONTRACTOR SHALL CLEAR AND GRUB, ONLY THOSE PORTIONS OF THE SITE, NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SODDED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
- 2. THE TOP 4" TO 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 3. ANY CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO
- 4. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
- 6. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND.
- 7. IF THE CONTRACTOR SEES ANY EXISTING STRUCTURES AND/OR APPURTENANCES THAT ARE NOT CLEARLY MARKED FOR REMOVAL IN THE PLANS IT SHALL BE HIS RESPONSIBILITY TO CONTACT THE ENGINEER TO REQUEST A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
- 8. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED SYNTHETIC BALES, SOD, STONE, ETC., AS IDENTIFIED IN THE EROSION CONTROL PLAN, WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- 9. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- 10. WHEN CONSTRUCTION IS COMPLETED ANY DETENTION AREAS ERODED OR NOT CONSISTENT WITH THE APPROVED DESIGN WILL BE RESHAPED, CLEANED OF SILT, MUD AND DEBRIS, AND RE-SODDED IN ACCORDANCE TO THE PLANS.
- 11. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (SYNTHETIC BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR
- 12. SEE TEMPORARY EROSION CONTROL PLAN IN THIS PLAN SET FOR MINIMUM POLLUTION, EROSION, AND SEDIMENT CONTROL STANDARDS. CONTRACTOR SHALL ADD ADDITIONAL PROTECTIONS AS CONDITIONS REQUIRE.
- 13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
- 14. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING SWALE SYSTEM, LAKE SYSTEM, WETLAND, OR RIVER, WITHOUT THE USE OF SEDIMENT BASIN. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO THE EXISTING SWALE SYSTEM, LAKE SYSTEM OR RIVER, A SEDIMENT BASIN PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.
- 15. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE DEMOLITION AREA TO FULLY UNDERSTAND HIS RESPONSIBILITY FOR REMOVAL OF ALL PAVEMENT, SURFACE STRUCTURES, VEGETATION, TREES AND ALL UTILITIES BOTH SURFACE AND SUBSURFACE. CONTRACTOR SHALL REFER TO LANDSCAPE ARCHITECTS PLANS FOR SPECIFIC CLEARING SPECIFICATIONS AROUND VEGETATION TO BE PRESERVED.

PAVING, GRADING AND DRAINAGE NOTES:

- 1. PROPERTY IS LOCATED IN FIRM ZONE X (NAVD88), COMMUNITY 071C, PANEL 0295, AND MAP NUMBER 12071C0295G.
- 2. ALL ELEVATIONS REFER TO VERTICAL DATUM AS INDICATED ON THE SURVEY PROVIDED HEREIN; N.A.V.D. 88 BY AIM SURVEYING, INC., DATED 10/10/2023.
- 3. THE ENGINEER HAS ANALYZED THAT NO NEGATIVE IMPACTS TO GROUNDWATER OR SURFACE WATER ARE ANTICIPATED.
- 4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PROPOSED PRECAST AND MANUFACTURED STRUCTURES. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY CONTRACTOR SIGNATURE PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER.
- 5. ALL PROPOSED CONCRETE INLETS AND/OR CATCH BASINS SHALL HAVE GROUT IN THE BOTTOM OF THE SUMP PLACED TO MATCH PIPE INVERTS FOR UNIFORM HYDRAULIC TRANSITION WITH SIDE SLOPES AT 1/2" PER FOOT.
- 6. ALL INLETS SHALL HAVE PIPES CUT FLUSH WITH INSIDE FACE OF INLET BOXES IN ALL CASES.
- 7. ALL PROPOSED DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR AND CAPABLE OF WITHSTANDING H-20 LOADINGS.
- 8. PIPE LENGTHS SHOWN ARE THE MINIMUM REQUIRED TO THE INSIDE FACE OF THE DRAINAGE STRUCTURE OR BEGINNING OF MITERED END SECTION.
- 9. DRAINAGE STRUCTURE TYPE REFERS TO FDOT DESIGN STANDARD INDEX NO. 425-001 AND 425-024. ENDWALL STRUCTURES REFER TO FDOT DESIGN STANDARD INDEX NO. 430-030.
- 10. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCK, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
- 11. STANDARD INDICES REFER TO THE LATEST OF FDOT "STANDARD PLANS FOR ROAD CONSTRUCTION".
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. CONTRACTOR SHALL COMPLY WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT".
- 13. THE CONTRACTOR IS TO PROVIDE A $\frac{1}{2}$ " BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
- 14. UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED.
- 15. GREEN OPEN SPACE ELEVATIONS SHOWN ARE TO TOP OF SOD. FINISH GRADE TO WITHIN 2" OF PAVEMENT ELEVATIONS BEFORE LAYING SOD & MULCH BEDS. (STRICTLY ENFORCED). ALL AREAS TO BE GRADED AND SODDED MUST DRAIN WITHOUT ANY NOTICEABLE PONDING. THE CONTRACTOR WILL BE REQUIRED TO REGRADE AND RESOD ANY AREAS WHICH DO NOT COMPLY WITH POSITIVE DRAINAGE WITHOUT PONDING.
- 16. STORM DRAINAGE CULVERTS SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE AN
- 17. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- 18. ALL CONSTRUCTION SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC). CONTRACTOR SHALL NOTIFY ENGINEER OF ALL SIDEWALK CONSTRUCTION AND SCHEDULE INSPECTION OF CONCRETE FORMS.
- 19. ALL SIDEWALK CONSTRUCTION SHALL BE LAYED WITH A MAXIMUM CROSS SLOPE OF 2% (STRICTLY ENFORCED) AND UNLESS A CURB RAMP SHALL NOT HAVE A RUNNING SLOPE (LONGITUDINAL) GREATER THAN 5% OR ELSE IT WILL BE DEEMED A RAMP
- 20. ALL DETECTABLE WARNING SURFACES TO BE RECESSED IN THE PROPOSED SURFACE AND ANCHORED.
- 21. THE CONTRACTOR IS REQUIRED TO ADJUST ALL VALVE BOXES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH PROPOSED GRADES. ALL ADJUSTMENTS SHALL BE MADE IN ACCORDANCE WITH LEE COUNTY UTILITIES AND FDOT STANDARDS AND
- 22. BACKFILL MATERIAL SHALL BE COMPACTED TO FDOT SPECIFICATIONS AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP AND BELOW BOTTOM OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE FILLED IN 1 FT. MAXIMUM LIFTS AND COMPACTED TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99, MODIFIED PROCTOR. ALL OTHER AREAS TO BE FILLED SHALL ADHERE TO FDOT EMBANKMENT CONSTRUCTION AND QUALITY CONTROL ACCEPTANCE CRITERIA SPECIFICATIONS.
- 23. ALL UTILITY LINES (INCLUDING STORM) CLEAN OUT ACCESS PORTS IN HARDSCAPE AREAS (E.G. SIDEWALK) SHALL HAVE ADA COMPLIANT LIDS FLUSH WITH ADJACENT GRADES; ALL LIDS IN LANDSCAPED LOCATIONS SHALL BE PLACED IN A 2'X2' SQUARE 4" THK. CONCRETE PAD. (SEE DETAIL)
- 24. NO DEWATERING IS ANTICIPATED FOR THE PROPOSED CONSTRUCTION. IN THE EVENT DEWATERING IS REQUIRED THE CONTRACTOR SHALL APPLY FOR ALL APPLICABLE WATER USE PERMITS AT THAT TIME.
- 25. ALL HANDICAP SIDEWALK RAMPS SHALL BE CONSTRUCTED PER FDOT INDEX 522-022.
- 26. CONTRACTOR SHALL FLUSH ALL EXISTING AND PROPOSED ONSITE STORM DRAIN PIPES AND STRUCTURES WITHIN WORK AREAS. ALL DRAINAGE INFRASTRUCTURE IS TO BE CLEAR OF DEBRIS PRIOR TO CONTRACTOR'S REQUEST FOR ENGINEER'S FINAL INSPECTION, ALL DEBRIS IS TO BE REMOVED FROM SITE AND TRANSPORTED TO APPROVED LOCATION. CONTRACTOR SHALL PUMP DRAINAGE SYSTEM DRY FOR FINAL INSPECTION.
- 27. CONTRACTOR SHALL COMPACT PERIMETER BERMS AND EMBANKMENTS THAT WILL SUPPORT APPURTENANCES, MONUMENT STRUCTURES, AND ROADWAY ELEMENTS TO A MINIMUM OF 98 PERCENT OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) AS DETERMINED BY FM 1-T 180, METHOD D, UNLESS OTHERWISE SPECIFIED BY ARCHITECT OR GEOTECHNICAL ENGINEER. FOR ALL OTHER AREAS, THE CONTRACTOR SHALL COMPACT EMBANKMENT TO A MINIMUM 90 PERCENT OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) AS DETERMINED BY FM 1-T 180, METHOD D. THE CONTRACTOR SHALL PROVIDE SIGNED AND SEALED GEOTECHNICAL TEST REPORTS CERTIFYING THAT PLACED EMBANKMENT WAS COMPACTED TO ITS MAXIMUM LIFT THICKNESS PER FDOT SPECIFICATIONS. TESTING REPORTS ARE TO BE SUPPLIED TO THE CIVIL ENGINEER AS COMPLETED.
- 28. ALL BUILDING RELATED GEOTECHNICAL TESTING, SUBSURFACE INVESTIGATION, SPECIFIED SITE COMPACTION AND CLEARING SPECIFICATIONS ARE BY THE ARCHITECT.
- 29. TESTING OF ASPHALT PAVEMENT SECTIONS BY A CERTIFIED TESTING LAB, INCLUDING CORE SAMPLES, SHALL BE PROVIDED TO ENGINEER FOR EVERY 5,000 SQ. FT. AREA OF PAVEMENT IN GENERAL. CONTRACTOR TO CONFIRM TESTING LOCATIONS WITH ENGINEER PRIOR TO PAVEMENT STRUCTURE CONSTRUCTION. TESTING OF EACH AREA SHALL ADHERE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. FAILURE TO PROVIDE ENGINEER WITH SATISFACTORY TEST RESULTS WILL PREVENT CONSTRUCTION CERTIFICATION AND DELAY FINAL ACCEPTANCE BY OWNER.
- 30. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHERE THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN SIX AND ONE HALF INCHES (6.5"). SEE EXTRA BASE FOR CROSS CULVERTS UNDER FLEXIBLE PAVEMENT DETAIL.

AS-BUILT SURVEY NOTES:

- 1. AS-BUILT SURVEY WILL BE THE CONTRACTOR'S OBLIGATION AND SHALL BE SURVEYED IN THE FIELD BY A LICENSED SURVEYOR, REGISTERED IN THE STATE OF FLORIDA. THE FINAL DOCUMENT SHALL BE SUBMITTED TO THE ENGINEER AS A SIGNED AND SEALED PDF FOR THE ENGINEERS RECORDS.
- 2. IN ADDITION TO S&S PDF'S, FOR THE UTILITY PORTION OF THE AS-BUILT SURVEY THE CONTRACTOR SHALL SUBMIT THE SURVEYORS AUTOCAD DRAWING VERSION 2013 OR NEWER TO THE ENGINEER SHOWING SURVEYORS POINTS, FITTINGS, APPURTENANCES, PIPES AND MATERIALS, MEETING LEE COUNTY UTILITY STANDARDS, FOR INCORPORATION BY THE ENGINEER INTO THE ENGINEER'S ORIGINAL ENGINEERING AUTOCAD DATA BASE. THE ENGINEER WILL PRODUCE FINAL RECORD DRAWINGS AFTER UPDATING THE ENGINEERING AUTOCAD DATA BASE FROM THE UTILITY AS-BUILT INFORMATION. THE ENGINEERS UTILITY RECORD DRAWINGS WILL THEN BE SUBMITTED TO LEE COUNTY UTILITIES FOR THEIR APPROVAL. INFORMATION ABOUT LEE COUNTY UTILITIES AS-BUILT SPECIFICATIONS, REQUIREMENTS AND FINAL ACCEPTANCE PROCESS CAN BE FOUND AT https://www.leegov.com/utilities
- 3. FOR THE GRADING PORTION OF THE AS-BUILT SURVEY, DRAWINGS SHALL INCLUDE AS-BUILT CONSTRUCTION INFORMATION FOR ALL DRAINAGE SYSTEM STRUCTURES, DETENTION/RETENTION SYSTEM BOTTOM AREAS. SURVEY DATA WILL BE REQUIRED EVERY 100' FOR PERIMETER BERM ELEVATIONS, TOE ELEVATIONS AND SIDE SLOPES. SURVEYOR SHALL INCLUDE CONTROL STRUCTURE WEIR AND BLEEDER SIZE, INVERT ELEVATIONS AND WILL ALSO PLACE A PERMANENT BENCH MARK ON THE CONTROL STRUCTURE TOP.

UTILITY NOTES:

- 1. LEE COUNTY UTILITIES HAS BEEN ABBREVIATED AS LCU IN THESE PLANS, ANY REFERENCE TO LCU IS INTENDED TO IMPLY LEE COUNTY UTILITIES.
- 2. THE CONTRACTOR SHALL NOTIFY THE OWNER, ENGINEER AND ALL UTILITY COMPANIES IN THE AREA 48 HOURS (MIN.) PRIOR TO COMMENCING CONSTRUCTION.
- 3. UNLESS OTHERWISE NOTED, ALL UTILITY RELATED CONSTRUCTION, MATERIALS, TESTING AND RECORD KEEPING SHALL CONFORM TO ALL APPLICABLE DEP, DOH AND LCU STANDARDS AND SPECIFICATIONS. UTILITY COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTORS RESPONSIBILITY FOR CONSTRUCTION, TESTING, INSPECTION AND CERTIFICATION.
- 4. ALL COMPONENTS OF THE POTABLE WATER SYSTEM SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE/NSF INTERNATIONAL STANDARD NO. 61. ALL COMPONENTS, INSTALLATION AND TESTING OF THE POTABLE WATER SYSTEM SHALL BE IN ACCORDANCE WITH ALL APPLICABLE AWWA STANDARDS.
- 5. ALL PROPOSED CIVIL RESPONSIBILITY FOR UTILITY/DRAIN CONNECTIONS END 5' FROM BUILDING ENVELOPE.
- 6. ALL FITTINGS FOR PVC WATER MAIN PIPE 4" DIAMETER OR LARGER ARE TO BE DUCTILE IRON MECHANICAL JOINT (RESTRAINED JOINT) FITTINGS.
- 7. JOINT RESTRAINT DEVICES FOR C-900 PVC PIPE WITH DUCTILE IRON MECHANICAL JOINT FITTINGS SHALL BE EBAA IRON SALES, INC., SERIES PV, UNIFLANGE 1300, STAR PIPE PRODUCT, L.P., OR APPROVED EQUIVALENT.
- 8. ALL FITTINGS ARE NOT SHOWN FOR CLARITY, THE UTILITY LINE CONFIGURATIONS ARE SHOWN FOR LOCATION AND SIZE. PROPOSED WATER MAIN AND FORCE MAIN FITTINGS ARE SHOWN AT BENDS IN MAINS. ADDITIONAL FITTINGS MAY BE REQUIRED TO BEND MAINS AS SHOWN. ADDITIONAL FITTINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE MAINS AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THE FITTINGS. CONTRACTOR MAY DEFLECT PROPOSED MAINS TO ROUTE PIPES AS SHOWN, HOWEVER NO DEFLECTIONS SHALL EXCEED ALLOWABLE DEFLECTION LIMITS SET FORTH BY PIPE MANUFACTURER.
- 9. CONTRACTOR SHALL BE REQUIRED TO CHECK FOR CONFLICTS WITH WATER, SEWER AND DRAINAGE WHEN INSTALLING WATERLINES AND IN ALL CASES WILL BE RESPONSIBLE FOR DEFLECTING WATERLINES UNDER POTENTIAL CONFLICT AREAS. NO DEFLECTIONS SHALL EXCEED ALLOWABLE DEFLECTION LIMITS SET FORTH BY THE MANUFACTURER. AN ALTERNATE TO DEFLECTING THE PIPE WOULD BE TO INSTALL 4-45° BENDS MECHANICAL JOINT WITH RESTRAINED JOINT DUCTILE IRON PIPE FITTINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST OF FITTINGS AS REQUIRED TO COMPLETE THE PROJECT AND SHALL BE INCLUDED IN THE BASE BID.
- 10. UTILITY PIPE LENGTHS ARE APPROXIMATE AND ARE MEASURED TO THE FACE OF STRUCTURES OR CENTER OF FITTING.
- 11. THE CONTRACTOR SHALL BE REQUIRED TO FIELD VERIFY ALL EXISTING UTILITIES AND LOCATE ALL EXISTING UTILITY CONFLICTS IN ADVANCE OF INSTALLATION OF PROPOSED SEWER, WATER AND DRAINAGE LINES SUCH THAT ADJUSTMENTS HORIZONTALLY AND VERTICALLY CAN BE MADE AS REQUIRED TO AVOID EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OF ALL UTILITIES (IE...POWER, TELEPHONE, CABLE ETC...) AND THE COST SHALL BE INCLUDED IN THIS BID. IF ANY DESIGN CHANGES REQUIRE ADDITIONAL MATERIALS TO BE INSTALLED AS A RESULT OF CONFLICTS, THEN THESE CHANGES MUST BE APPROVED BY THE OWNER AND ENGINEER IN ACCORDANCE WITH PROPER PROCEDURES AS OUTLINED IN THE CONTRACT DOCUMENTS PRIOR TO EXECUTION OF THE WORK
- 12. IRRIGATION SOURCE: ONSITE NON-POTABLE MAIN.
- 13. CONTRACTOR IS TO CONTACT LEE COUNTY SOLID WASTE PROJECT MANAGER AND ENGINEER TO SET UP A PRECONSTRUCTION MEETING PRIOR TO STARTING CONSTRUCTION.
- 14. THE CONTRACTOR MAY ADJUST PROPOSED UTILITY LINES WITH ENGINEER'S PERMISSION TO PRESERVE OR AVOID EXISTING VEGETATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF POTENTIAL CONFLICTS OR VEGETATION PRESERVATION ADJUSTMENTS PRIOR TO ANY INSTALLATION SO THAT THE ENGINEER CAN MAKE ADJUSTMENTS IN HORIZONTAL OR VERTICAL ALIGNMENT OF THE PROPOSED UTILITIES. THIS WILL BE DONE AT NO ADDITIONAL INCREASE IN CONTRACT COST OR CONTRACT TIME.
- 15. ALL CLEAN-OUTS AND VALVES WILL HAVE A CONCRETE PAD AND COVER FLUSH WITH PROPOSED GRADE. (SEE DETAILS)
- 16. UNLESS SPECIFICALLY SHOWN, GRAVITY SEWERS OR FORCE MAINS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER AND JOINTS AND WATER JOINTS WILL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10' BETWEEN ANY 2 JOINTS WHERE THE MINIMUM 18" SEPARATION CAN'T BE MAINTAINED, THE SEWER SHALL BE PLACED IN A SLEEVE OR INCASED IN CONCRETE FOR 20' CENTERED ON THE POINT OF CROSSING.
- 17. LCU DETAILS REFERENCED IN THESE PLANS ARE FROM LEE COUNTY UTILITIES AND WILL BE USED TO PROVIDE THE STANDARD FOR MATERIALS AND INSTALLATION UNLESS OTHERWISE NOTED.
- 18. EXERCISE CARE TO PROTECT THE ROOTS OF TREES TO REMAIN. WITHIN THE DRIP LINE OF SUCH TREES, PERFORM ALL TRENCHING BY HAND. OPEN THE TRENCH ONLY WHEN UTILITIES CAN BE INSTALLED IMMEDIATELY. PRUNE INJURED ROOTS CLEANLY AND BACKFILL AS SOON AS POSSIBLE.
- 19. SHOP DRAWINGS FOR ALL WATER AND SEWER SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 20. IF THE CONTRACTOR CHOOSES TO IMPLEMENT APPURTENANCES OR TECHNIQUES SUCH AS TRENCH BOXES, SHEET PILING, DEWATERING, FLATTEN TRENCH SLOPES, ETC. TO FACILITATE CONSTRUCTION, THESE ITEMS SHALL BE IN INCORPORATED INTO THE COST OF THE RELATED AVAILABLE PAY ITEM AND NO ADDITIONAL COMPENSATION WILL BE MADE BY THE OWNER.
- 21. ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 30", 36" UNDER PAVEMENT AND A MAXIMUM OF 48" BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED.
- 22. ALL PROPOSED UTILITIES INCLUDING WATER MAINS AND GRAVITY MAINS ON THE PROPERTY WILL BE PRIVATELY OWNED, OPERATED AND MAINTAINED (UNLESS OTHERWISE NOTED).
- 23. CONTRACTOR IS TO UNCOVER ALL EXISTING UTILITY LINES BEING TIED INTO OR CROSSED AND VERIFY GRADES PRIOR TO CONSTRUCTION.
- 24. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE LOCATIONS, ELEVATIONS & DIMENSIONS OF THE EXISTING UTILITIES SHOWN IN THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES, AND THE CONTRACTOR SHALL COOPERATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS OR THOSE OMITTED FROM THESE PLANS.
- 25. CONTRACTOR SHALL BE REQUIRED TO INCLUDE IN HIS BID, RECONNECTION OF ALL EXISTING UTILITY SERVICES (E.G. WATER, SEWER, ELECTRIC, CABLE ETC.) IRREGARDLESS OF EXISTING CONDITIONS.
- 26. UPON COMPLETION OF UTILITY CONSTRUCTION AND REQUIRED INSPECTIONS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH NECESSARY CLOSEOUT DOCUMENTS PER LCU REQUIREMENTS. THESE DOCUMENTS ARE AVAILABLE ON THE LCU WEBSITE



FORT MYERS

1412 JACKSON ST., SUITE 3 FORT MYERS, Fl. 33901

Project Name:

LEE COUNTY
SOLID WASTE
TRANSFER STATION
EMPLOYEE BUILDING

Project Address:

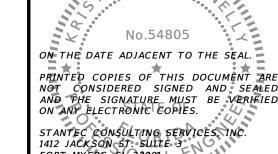
10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905

Client/Owner:

LEE COUNTY
PO BOX 398
FORT MYERS, FL 33902

Engineer Contact:

Kristina Connelly, P.E.
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Project Engineer:



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KRISTINA M. CONNELLY, P.E. NO. 54805

Revisi	ions

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CHECKED BY : KC

STRAP #

SEC-TWP-RGE SEC 24-TWP 44S-RGE 258

PROJECT MGR: DANIEL M. CRAIG

PROJECT # :2156184

FILE NAME :03-215618410-NOTES.DWG

ORIGIN DATE:01-10-2024

DESIGNER :STS

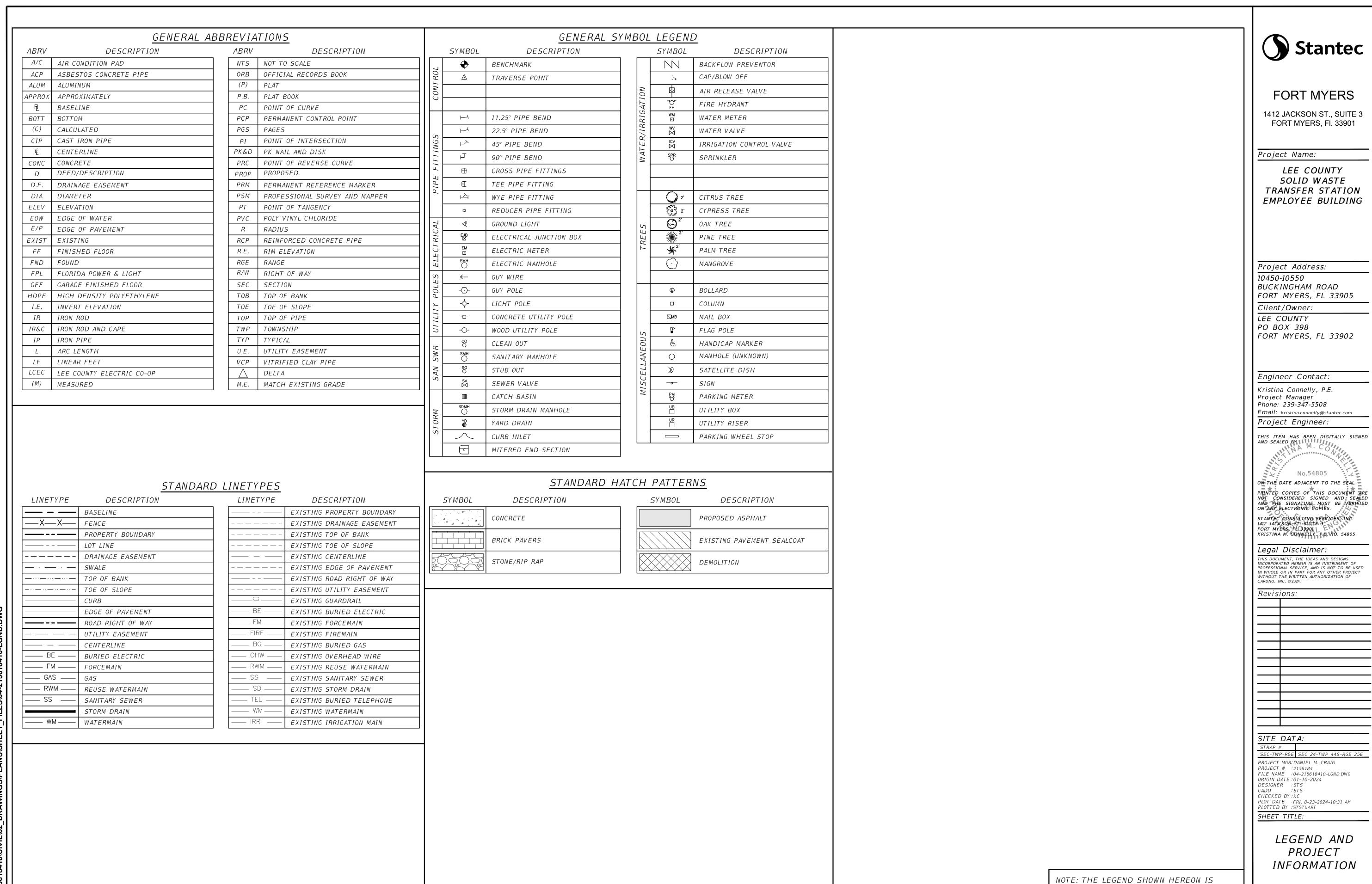
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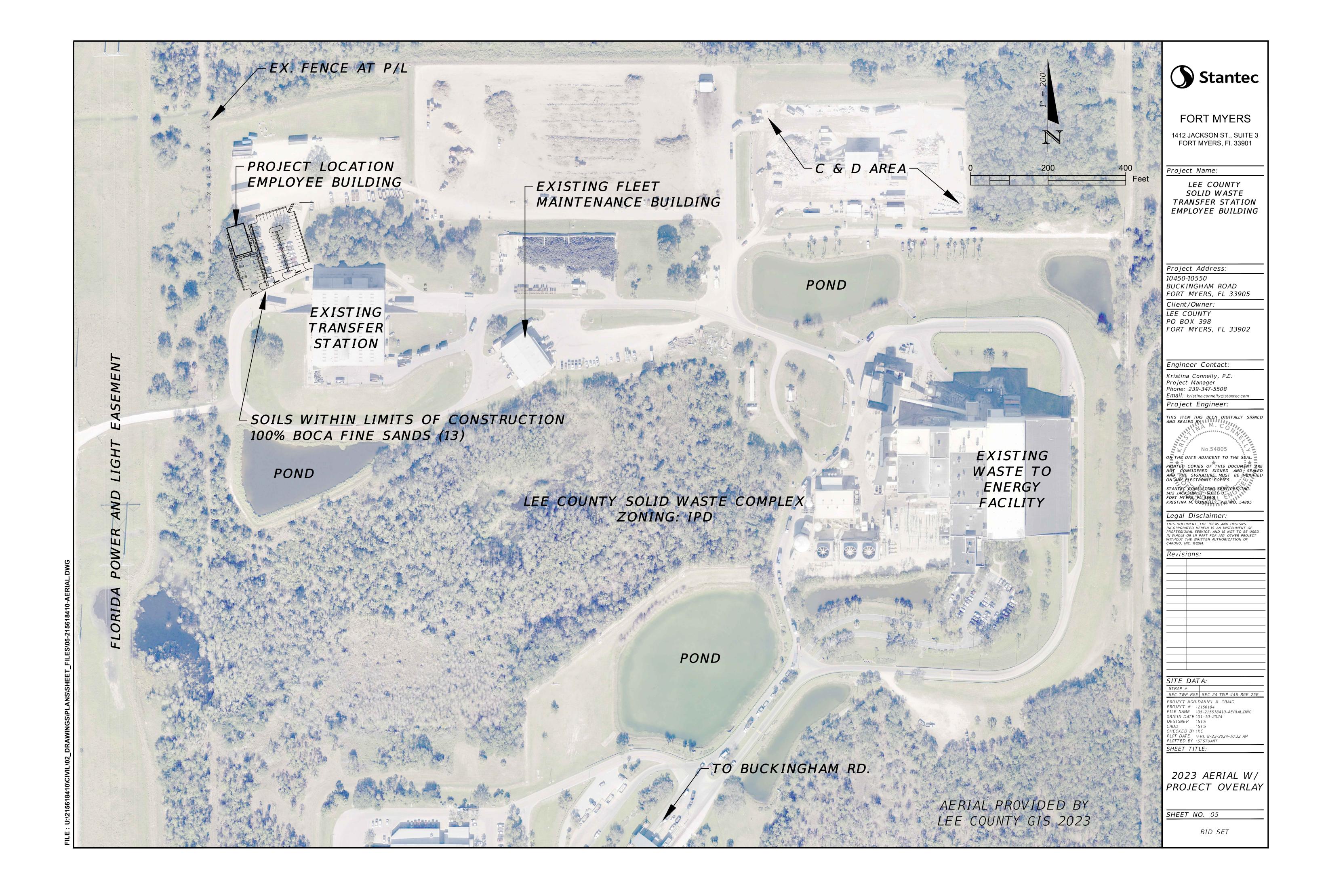
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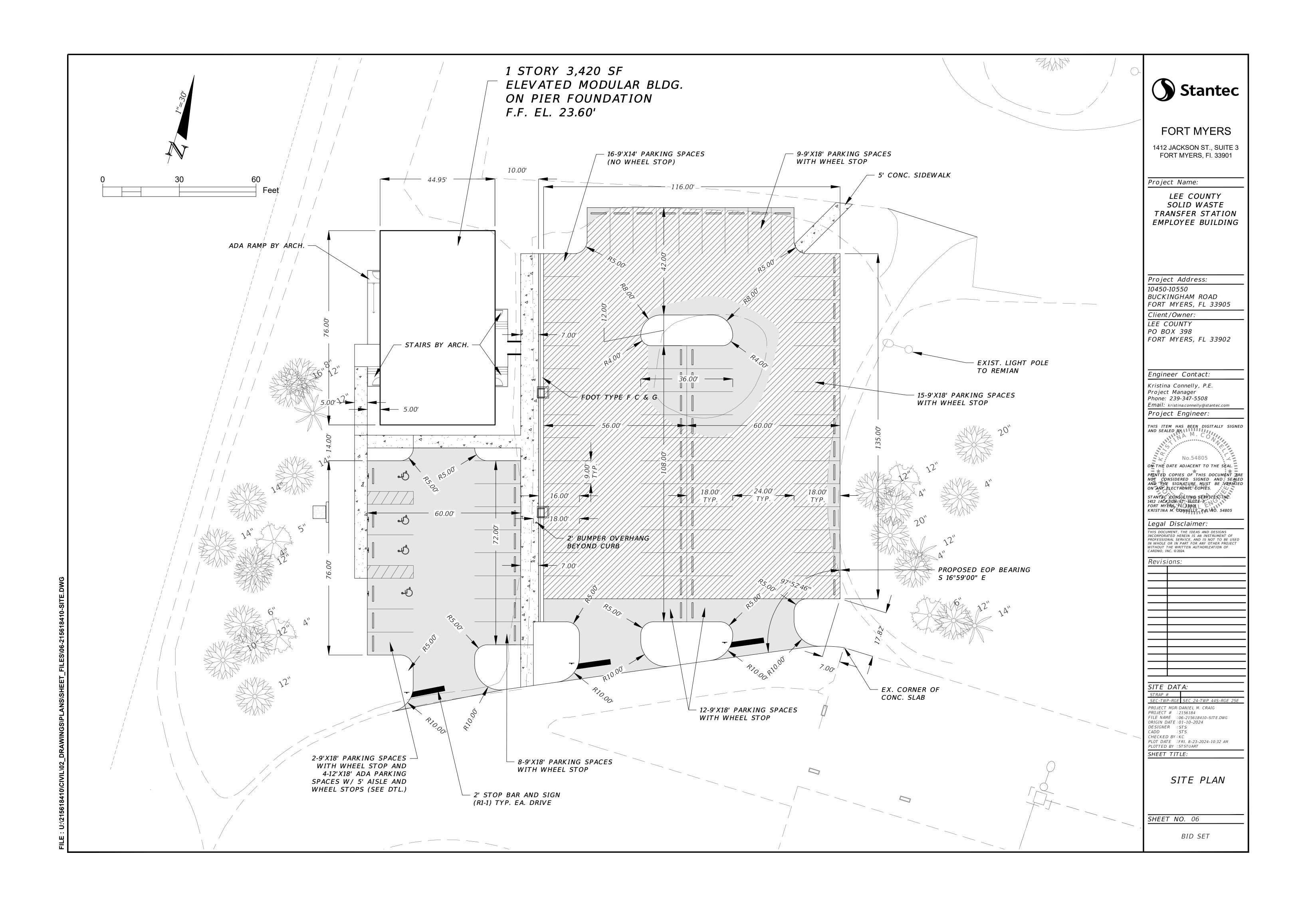
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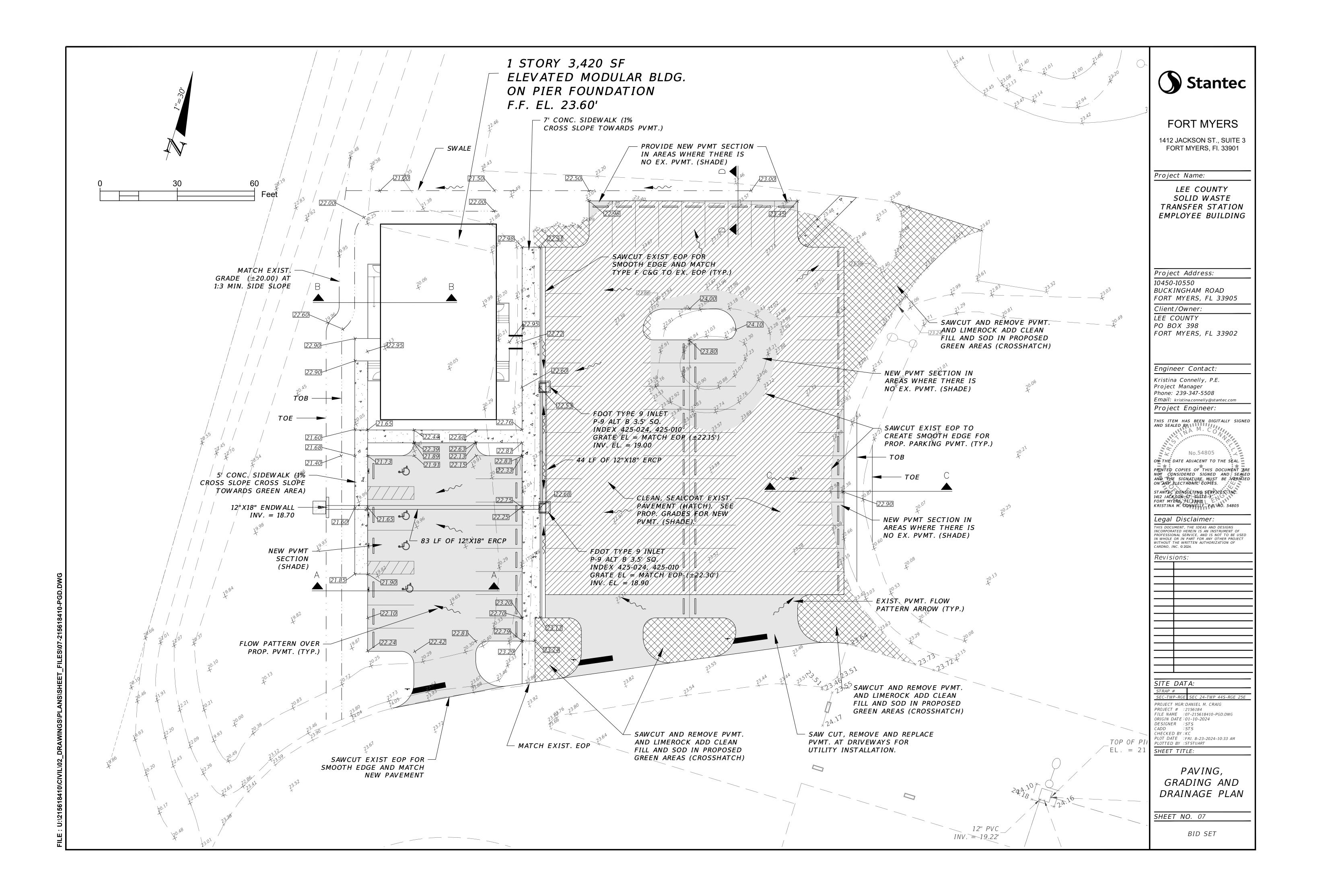


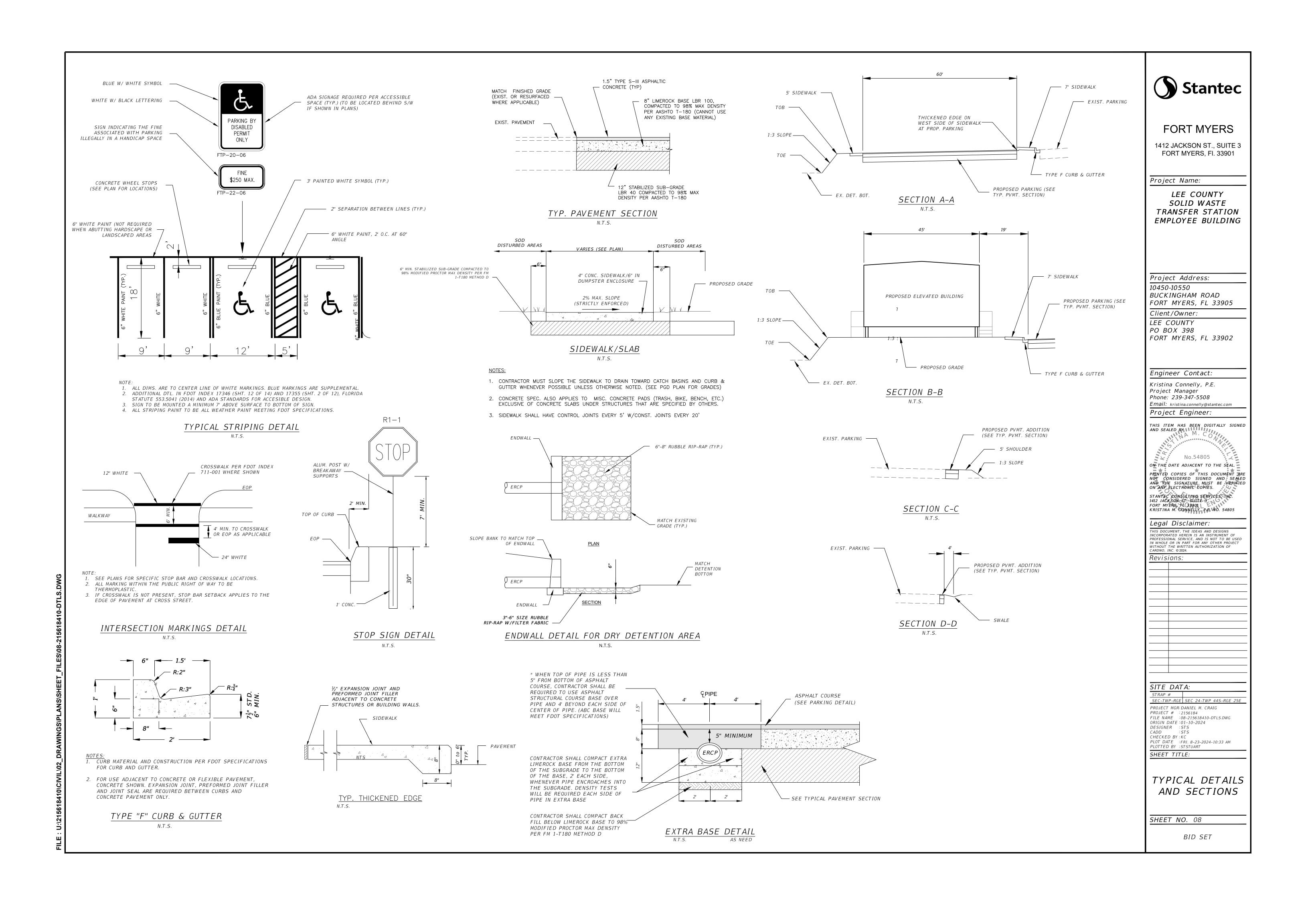
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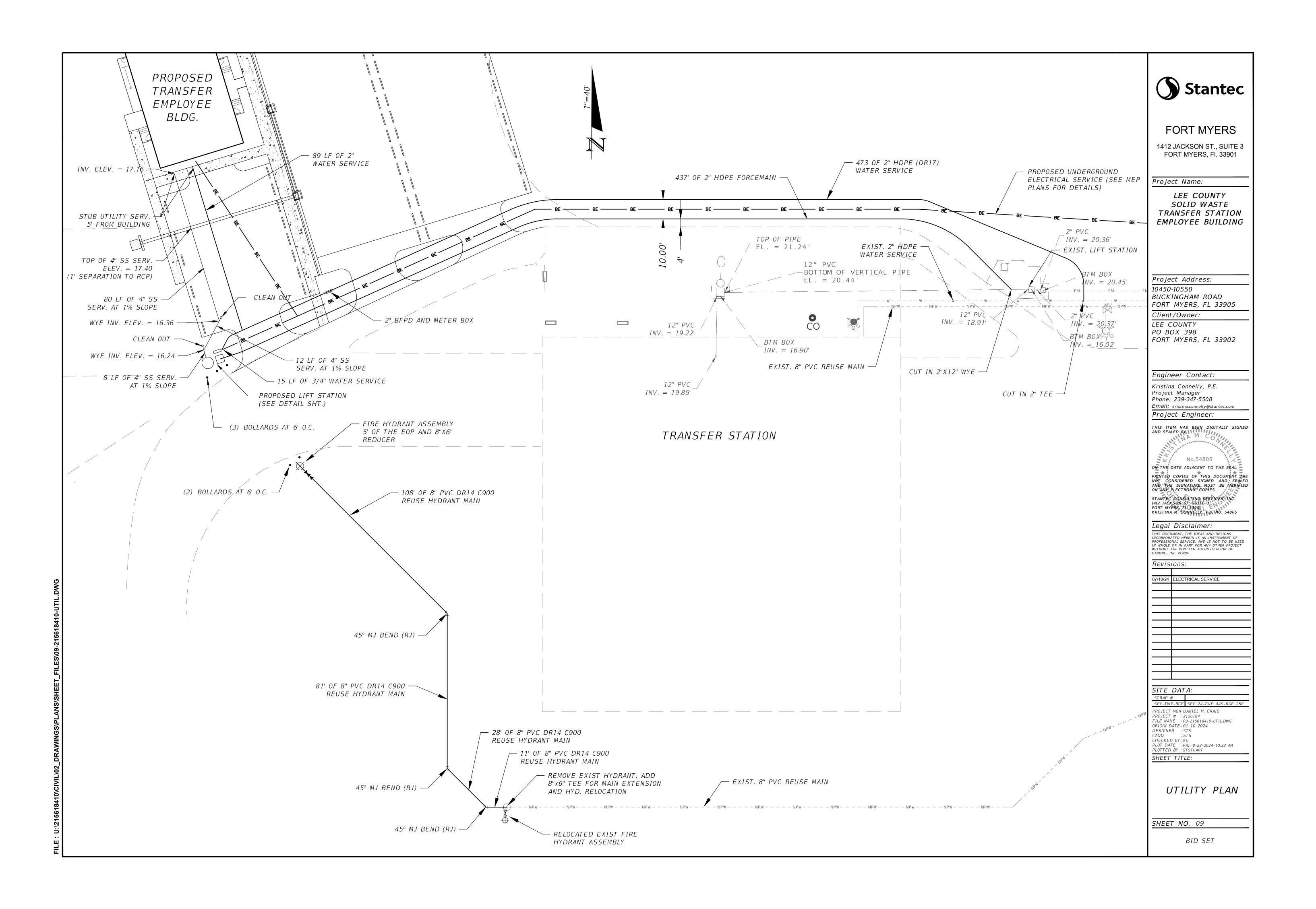
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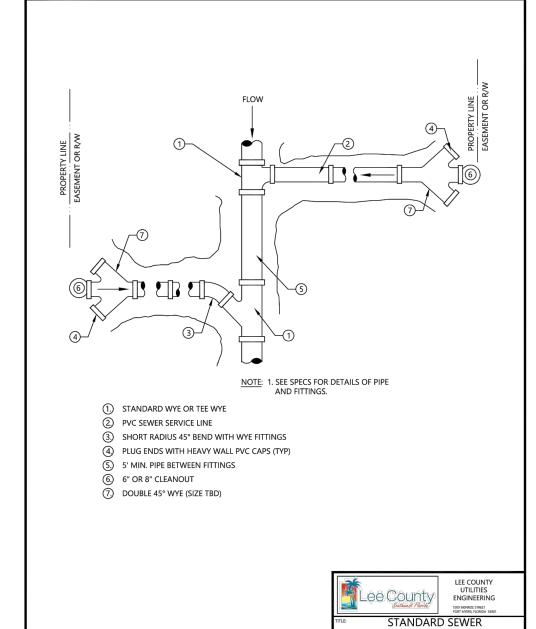




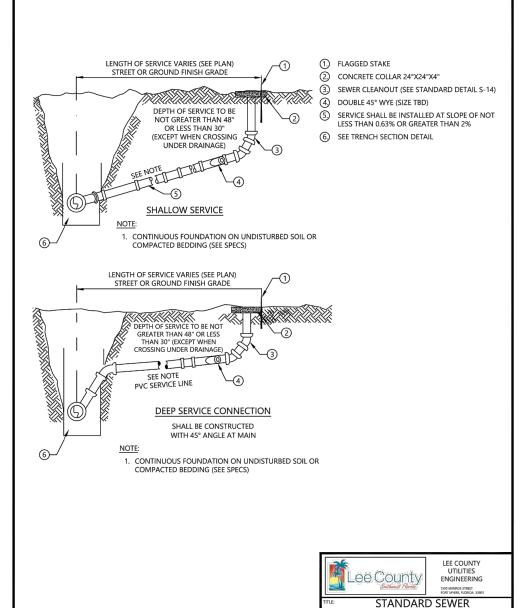
THE STANDARD NOTES SHOWN BELOW SHALL BE INCLUDED ON ALL WATER AND SEWER PLANS SUBMITTED FOR APPROVAL TO LEE COUNTY UTILITIES (LCU).

- 1. ALL WORK SHALL CONFORM TO LATEST REVISION OF THE LCU DESIGN MANUAL WHICH IS AVAILABLE ON OUR WEB-PAGE VIA THE FOLLOWING LINK: HTTPS://WWW.LEEGOV.COM/UTILITIES/DESIGN-MANUAL
- 2. ALL REGULATORY AND PERMITTING AGENCIES' REQUIREMENTS SHALL BE COMPLIED WITH AS WELL.
- 3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY LCU.
- 4. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS THAT MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- 5. ALL CONSTRUCTION WORK PERFORMED MUST BE DONE BY A CONTRACTOR LICENSED IN THE STATE OF FLORIDA TO DO THE WORK INTENDED.
- 6. A PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE WORK MAY BEGIN. REQUIRED ATTENDEES INCLUDE BUT ARE NOT LIMITED TO; THE ENGINEER OF RECORD OR HIS DESIGNEE, THE UNDERGROUND CONTRACTOR AND THE LCU INSPECTOR ASSIGNED TO THE PROJECT. LCU IS TO BE NOTIFIED TWO (2) WORKING DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.
- 7. ONE COPY OF THE LCU APPROVED/STAMPED CONSTRUCTION PLANS, ALL CONTRACT DOCUMENTS, REFERENCE DOCUMENTS AND TECHNICAL DOCUMENTS SUBMITTED MUST BE KEPT AT THE SITE AND MAINTAINED IN GOOD ORDER.
- 8. ALL WORK AND MATERIALS, WHICH DO NOT CONFORM TO LCU SPECIFICATIONS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 9. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF LCU IS SUBJECT TO RE-EXCAVATION, REMOVAL AND REPLACEMENT OF SAME TO BE DONE AT THE CONTRACTOR'S EXPENSE.
- 10. LCU INSPECTION STAFF IS TO BE PRESENT FOR ALL HOT TAPS, PRESSURE TESTS, LIFT STATION START-UPS AND FOR ANY NECESSARY INSPECTION. THE CONTRACTOR IS TO PROVIDE A MINIMUM OF TWO (2) WORKING DAYS NOTICE PRIOR TO SCHEDULING ANY OF THE ABOVE WITH THE EXCEPTION OF THE LIFT STATION START-UP WHICH REQUIRES ONE-WEEK NOTICE.
- 11. TRAFFIC MUST BE MAINTAINED AT ALL TIMES AS PER LEE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT) AND PER FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- 12. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES BEFORE BEGINNING CONSTRUCTION.
- 13. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. LCU WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS OR THOSE OMITTED FROM THESE PLANS.
- 14. THE CONTRACTOR SHALL VERIFY ALL UTILITIES AND PROVIDE AT LEAST TWO (2) WORKING DAYS NOTICE TO THE INDIVIDUAL UTILITY COMPANIES, FDOT AND LCDOT PRIOR TO CONSTRUCTION.
- 15. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND TAKE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO ALL UNDERGROUND PIPELINES, TELEPHONE, CABLE TV, ELECTRIC LINES/CONDUITS AND STRUCTURES IN ADVANCE OF ANY CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES THAT MAY OCCUR DUE TO HIS FAILURE TO EXACTLY LOCATE AND PROTECT EXISTING UTILITIES AND STRUCTURES.
- 16. ANYTHING NOT SHOWN ON THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND SHALL NOT CONSTITUTE AN EXTRA, UNLESS APPROVED BY THE ENGINEER OF RECORD.
- 17. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND LCU IMMEDIATELY CONCERNING ANY CONFLICTS WITH LCU UTILITIES/STRUCTURES ARISING DURING CONSTRUCTION OF ANY FACILITIES SHOWN ON THESE DRAWINGS.
- 18. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THE PLANS. IF ANY DISCREPANCIES IN QUANTITIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD AND LCU.
- 19. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, ETC., WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RESTORE ALL AREAS AFFECTED BY THE CONSTRUCTION TO ITS ORIGINAL CONDITION, OR BETTER.
- 20. WITHIN THE FDOT AND LCDOT RIGHT-OF-WAY, ALL DISTURBED AREAS SHALL RECEIVE GRASSING (SEEDING) OR SODDING MATERIALS IN ACCORDANCE WITH FDOT SPECIFICATIONS. THOSE AREAS THAT ARE CLASSIFIED AS DRAINAGE DITCHES SHALL RECEIVE FULL SOLID SOD.
- 21. ALL FRAMES, COVERS VALVE BOXES, METER BOXES AND MANHOLES SHALL BE ADJUSTED TO FINISHED GRADE UPON COMPLETION OF PAVING OR RELATED CONSTRUCTION. ALL VALVE PADS SHALL BE POURED IN PLACE. NO PRE-FORMED VALVE PADS WILL BE ALLOWED.
- 22. APPROPRIATE TURBIDITY CONTROL DEVICES (E.G. SILT FENCES, HAY BALES) WILL BE UTILIZED DURING ALL PHASES OF INSTALLATION AND GRADING. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE NOTICE OF INTENT AND NOTICE
- OF TERMINATION TO THE EPA IN COMPLIANCE WITH LEE COUNTY'S NPDES PERMIT.

 23. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND MAINTAINING AN EFFECTIVE STORM WATER POLLUTION PREVENTION PLAN.
- 24. LCU REQUIRES 30" OF COVER FOR ALL UNDERGROUND PIPING EXCEPT UNDER PAVEMENT, WHERE 36" OF COVER IS REQUIRED. IF LCU REQUIRED COVER CANNOT BE MAINTAINED, THE CONTRACTOR SHALL PROVIDE OTHER METHODS OF CONSTRUCTION OR PIPE PROTECTION, WHICH SHALL FIRST BE APPROVED BY LCU AND THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY. IF STATE AGENCIES REQUIRE ADDITIONAL COVER, MEETING THE REQUIREMENTS SHALL BE DONE AT NO ADDITIONAL COST TO THE COUNTY.
- 25. LCU REQUIRES THERE TO BE A MINIMUM OF TEN (10) FEET HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN POTABLE WATER & SANITARY SEWER MAINS. LCU ALSO REQUIRES MINIMUM OF TEN (10) FEET HORIZONTAL SEPARATION BETWEEN OTHER PUBLIC AND/OR PRIVATE UTILITIES, STRUCTURE(S), BUILDING(S), WALL(S), FOUNTAIN(S), FENCE(S) AND LCU INFRASTRUCTURE UNLESS SPECIFICALLY APPROVED BY LCU.
- 26. LCU REQUIRES THERE TO BE A MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION BETWEEN LCU INFRASTRUCTURE AND DRAINAGE INFRASTRUCTURE, MITERED END SECTIONS, INLETS, ETC. LCU ALSO REQUIRES MINIMUM OF FIVE (5) FEET HORIZONTAL SEPARATION BETWEEN LCU INFRASTRUCTURE AND ALL NEW LIGHT POLE FOUNDATIONS.
- 27. THE ROOT BALL OF PALM TREES SHALL BE A MINIMUM OF FIVE (5) FEET AND THE ROOT BALL OF SHADE TREES SHALL BE A MINIMUM OF TEN (10) FEET FROM ANY EXISTING OR PROPOSED LCU OWNED AND MAINTAINED PIPE/INFRASTRUCTURE.
- 28. AS THE WORK PROGRESSES THE CONTRACTOR SHALL RECORD ALL CHANGES AND DEVIATIONS FROM THE LCU STAMPED/APPROVED CONSTRUCTION PLANS. IN ADDITION, HE SHALL RECORD THE EXACT LOCATION OF ALL CHANGES IN VERTICAL AND HORIZONTAL ALIGNMENT WITH COORDINATES WITH RESPECT TO THE NAVD 1988 STATE PLANE FLORIDA WEST COORDINATE SYSTEM AS WELL AS ALL REQUIREMENTS SET FORTH IN THE LCU DESIGN MANUAL. THIS INFORMATION IS TO BE FORWARDED TO THE ENGINEER OF RECORD WHO PREPARED, SIGNED AND SEALED THE APPROVED CONSTRUCTION PLANS SO THAT HE CAN PREPARE 'RECORD DRAWINGS' PER THE REQUIREMENTS SET FORTH IN THE LCU DESIGN MANUAL.

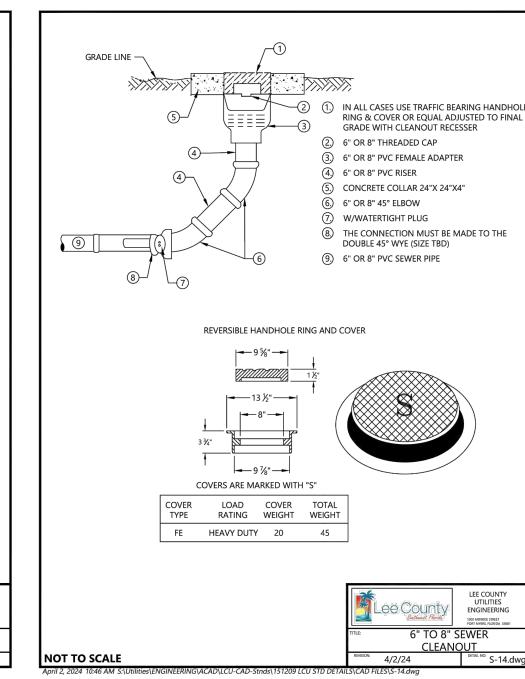


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SERVICE LATERAL





FORT MYERS

1412 JACKSON ST., SUITE 3 FORT MYERS, FI. 33901

Project Name:

LEE COUNTY
SOLID WASTE
TRANSFER STATION
EMPLOYEE BUILDING

Project Address:

10450-10550
BUCKINGHAM ROAD
FORT MYERS, FL 33905
Client/Owner:
LEE COUNTY

Engineer Contact:

PO BOX 398

Kristina Connelly, P.E.
Project Manager
Phone: 239-347-5508
Email: kristina.connelly@stantec.com
Project Engineer:

FORT MYERS, FL 33902

THIS ITEM HAS BEEN DIGITALLY SIGNE

No.54805

ON THE DATE ADJACENT TO THE SEAL.

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STANTEC CONSULTING SERVICES, INC. 1412 JACKSON ST. SULTE 3 FORT MYERS, FL 33901 KRISTINA M. CONNELLY, P.E. NO. 54805

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Revisions:

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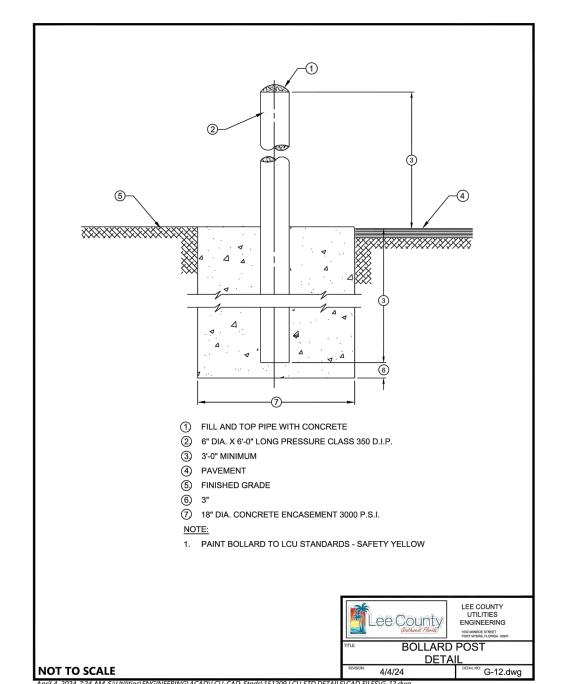
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PROJECT # :2156184
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ORIGIN DATE:01-10-2024
DESIGNER :STS
CADD :STS
CHECKED BY :KC
PLOT DATE :FRI. 8-23-2024-10:33 AM

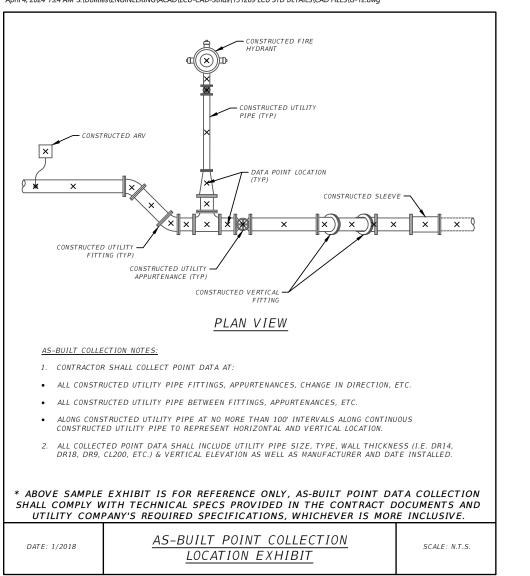
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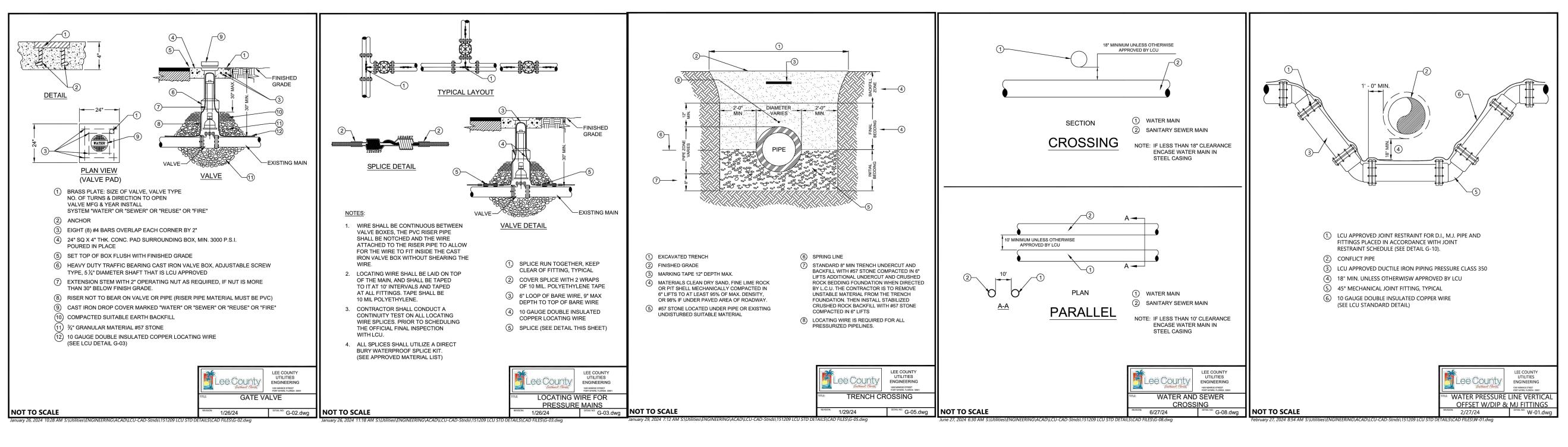
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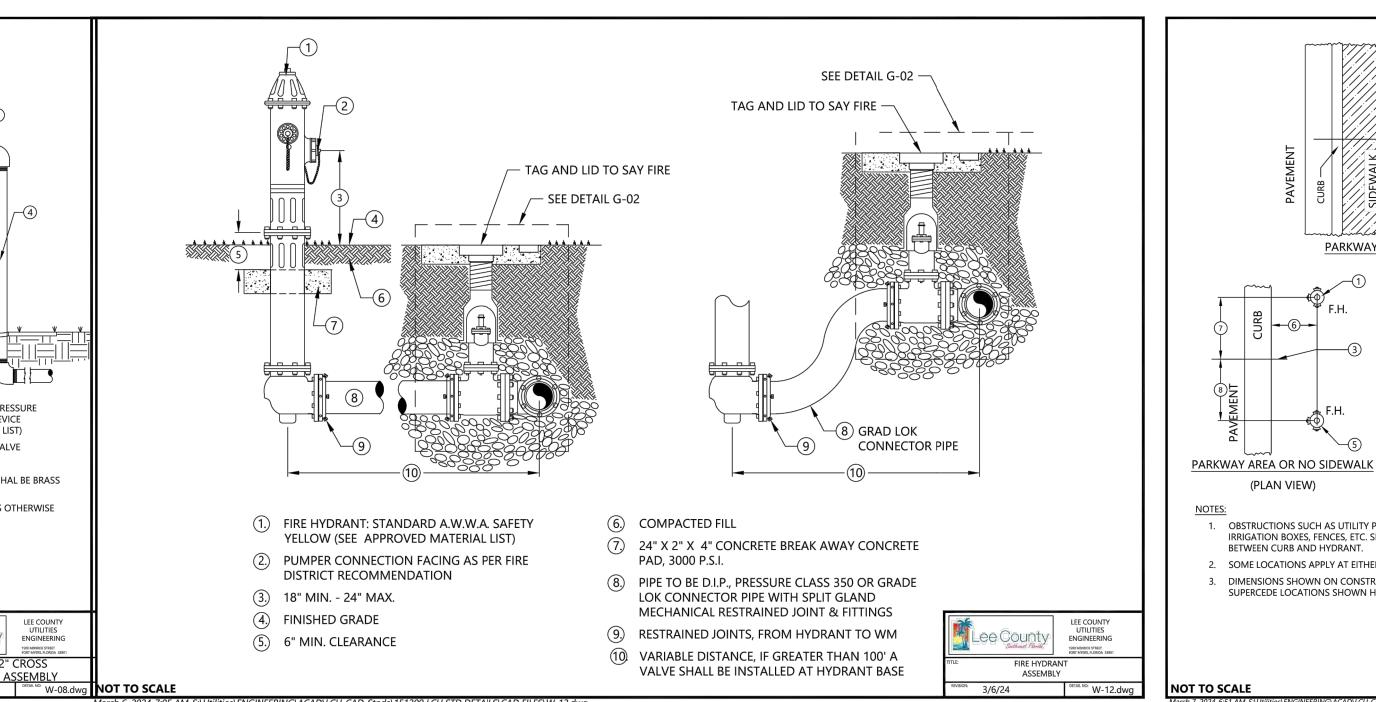
UTILITY DETAILS

SHEET NO. 10











FORT MYERS, Fl. 33901

Project Name:

LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING

Project Address: 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905 Client/Owner: LEE COUNTY

PO BOX 398 FORT MYERS, FL 33902

Engineer Contact:

Kristina Connelly, P.E. Project Manager Phone: 239-347-5508 Email: kristina.connelly@stantec.com Project Engineer:

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

No.54805 ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES. STANTEC CONSULTING SERVICES, INC. FORT MYERS, FL 33901 KRISTINA M. CONNELLY, P.E. NO. 54805

Legal Disclaimer: HIS DOCUMENT, THE IDEAS AND DESIGNS NCORPORATED HEREIN IS AN INSTRUMENT OF PROFESSIONAL SERVICE, AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT VITHOUT THE WRITTEN AUTHORIZATION OF

CARDNO, INC. © 2024. Revisions:

PARKWAY AREA WITH SIDEWALK

(PLAN VIEW)

(PLAN VIEW)

BETWEEN CURB AND HYDRANT.

1. OBSTRUCTIONS SUCH AS UTILITY POLES, STREET SIGNS,

3. DIMENSIONS SHOWN ON CONSTRUCTION DRAWINGS

SUPERCEDE LOCATIONS SHOWN HERE.

IRRIGATION BOXES, FENCES, ETC. SHALL NOT BE PLACED

2. SOME LOCATIONS APPLY AT EITHER END OF CURB RETURNS.

(1.) PREFERRED LOCATION

(2) F.H. TO BE LOCATED 2' MINIMUM FROM EDGE OF SIDEWALK 3. P.T. OR P.C. OF CURB RETURN (4) PROPERTY LINE RIGHT-OF-WAY OR LIMIT OF EASEMENT

(5.) ACCEPTABLE LOCATION WITH CURB

6. BETWEEN 5'-0" MIN. AND 10'-0" MAX.

(PLAN VIEW)

WATER PRESSURE LINE VERTICAL

OFFSET W/DIP & MJ FITTINGS

RADIUS OF 20' OR MORE

(7) 6'-0"

8. 4'-0"

(6) (5) (6)				

SITE DATA:

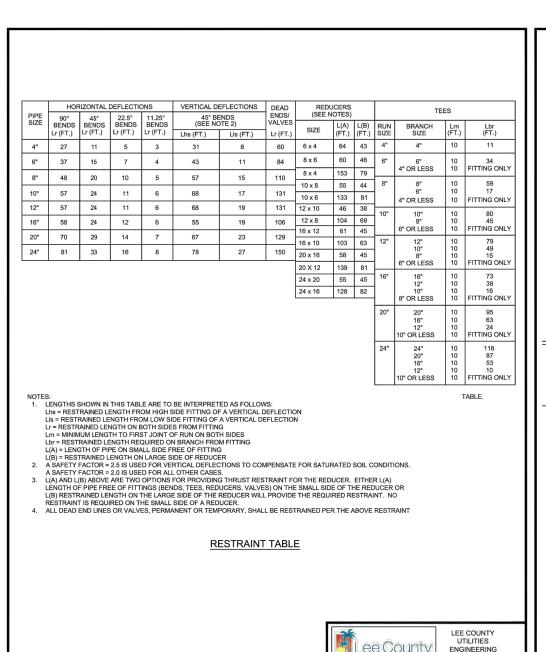
STRAP # EC-TWP-RGE SEC 24-TWP 44S-RGE 25E PROJECT MGR: DANIEL M. CRAIG PROJECT # :2156184 FILE NAME :11-215618410-UTIL-DTLS.DWG ORIGIN DATE: 01-10-2024 DESIGNER :STS CADD :STS CHECKED BY : KC

PLOT DATE :FRI. 8-23-2024-10:34 AM PLOTTED BY :STSTUART SHEET TITLE:

UTILITY **DETAILS**

SHEET NO. 11

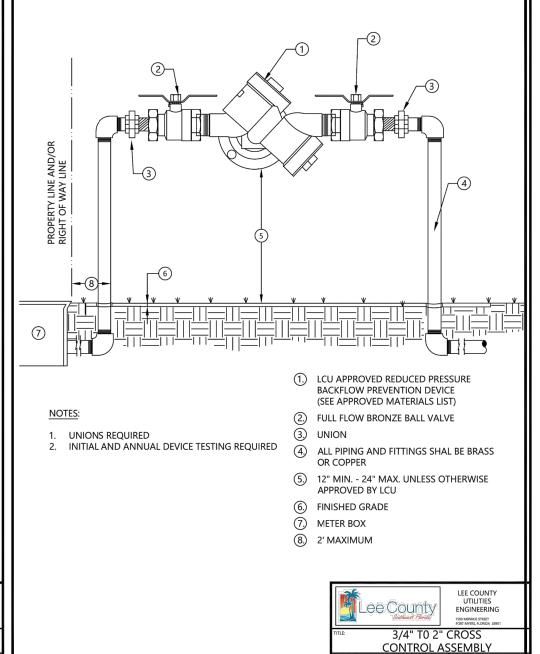
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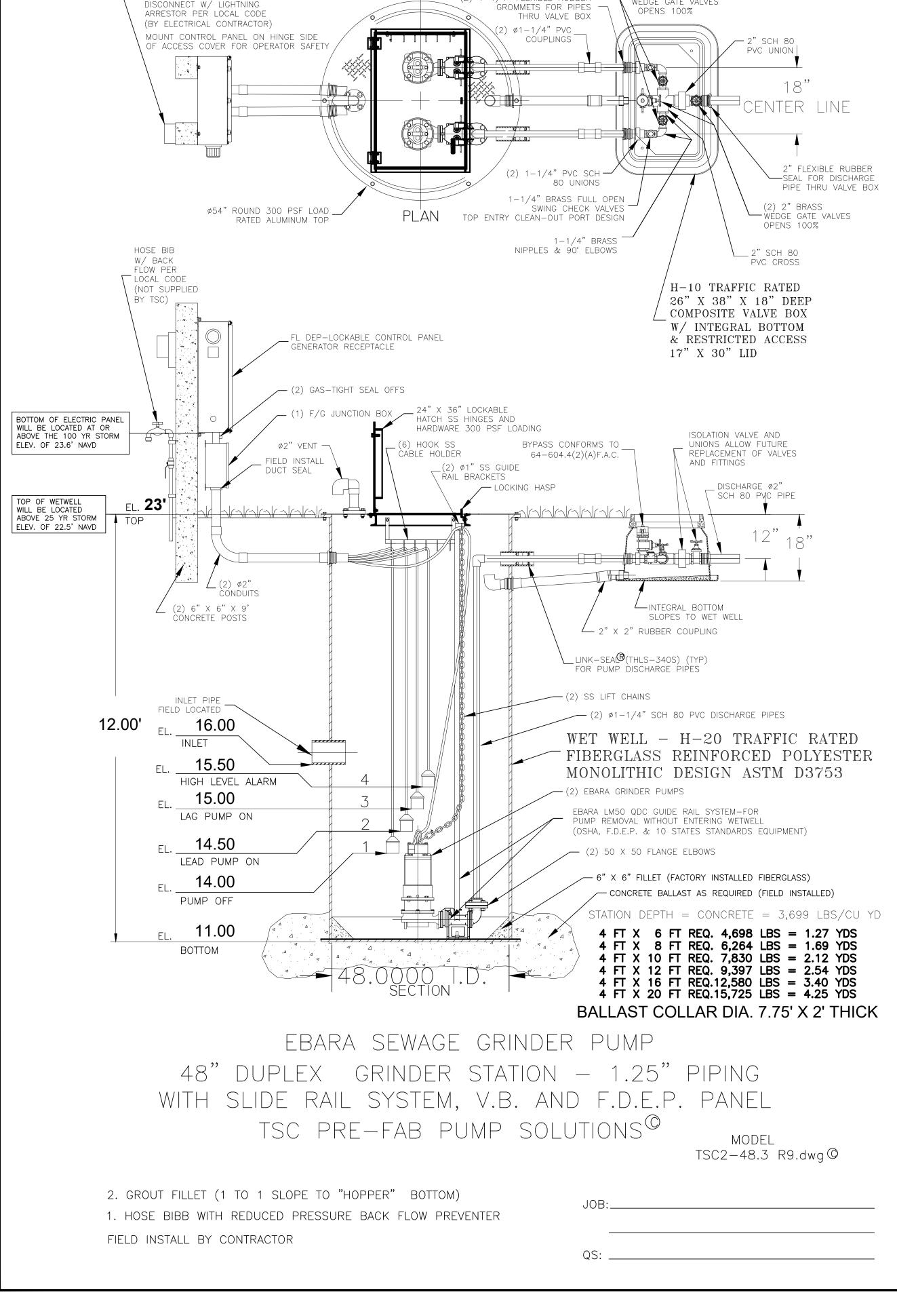


NOT TO SCALE

SCHEDULE

NOT TO SCALE





(2) 1-1/4" FLEXIBLE RUBBER

WEDGE GATE VALVES

--- MOUNTING POST AND SERVICE

GENERAL NOTES

FURNISH AND INSTALL EBARA SUBMERSIBLE GRINDER PUMPS:

DESIGN CONDITION

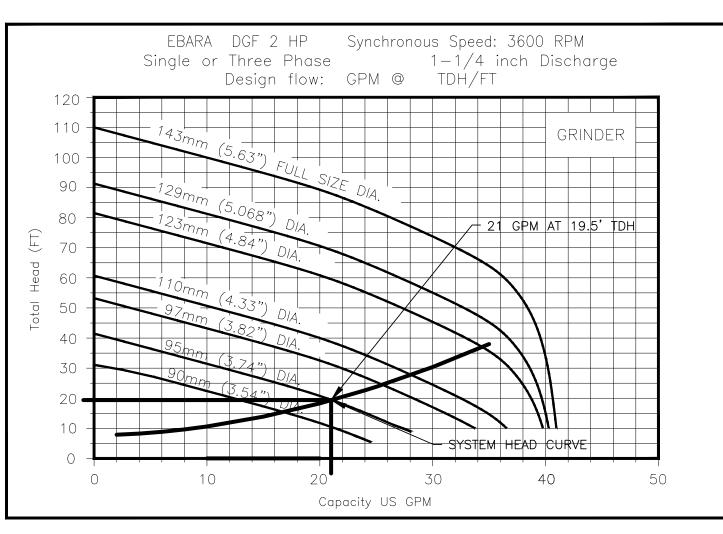
MODEL	32 DGFM	2	HP
GPM	21	19.5	_ _ FT/TDH
VOLTAGE	240	1	PHASE
DISCHARGE	1.25"	95 MM	_ _ IMPELLER

SEWAGE GRINDER PUMP:

RATED FOR TWENTY (20) STARTS PER HOUR.

- 2. AIR FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS F INSULATION.
- 3. DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE) LOCATED OUT OF THE PUMPAGE, IN A SEPARATE OIL FILLED CHAMBER.
- 4. HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 60,000 HOURS, UPPER BEARING - SINGLE ROW AND LOWER BEARINGS - DOUBLE ROW TYPE.
- 5. PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.
- 6. SINGLE PHASE MOTORS SHALL BE DUAL WOUND, CAPACITOR START-RUN AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260). THREE PHASE MÓTORS SHALL BE DUAL WOUND AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP
- FIBERGLASS WET WELL: SHALL BE A ONE PIECE UNIT WITH INTEGRAL BOTTOM, WALL AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL BE REQUIRED AS MINIMUM.
- <u>ALUMINUM HATCH:</u> TSC MODEL—54R (54") ROUND WITH 24" X 36" LOCKABLE HATCH, REINFORCED FOR LOAD RATING OF 300 LBS/FT WITH HOLD OPEN SAFETY ARM, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE.
- <u>VALVE BOX:</u> FIBERGLASS COMPOSITE (H-10) TRAFFIC RATED) WITH INTEGRAL BOTTOM. (FOR 1 1/4" AND 2" DISCHARGE PIPING SXS HEADER SYSTEM) SHALL BE 26" X 38" X 18" WITH 17" X 30" LIMITED ACCESS LID
- ACCESSORIES: #304 S/S GUIDE RAILS, UPPER GUIDE RAIL BRACKETS, CABLE HOLDER, ANCHOR BOLTS AND PUMP LIFTING CHAINS.
- <u>VALVES</u>: SHALL BE SEWAGE SERVICE DESIGN BRASS SWING CHECK VALVES WITH TOP ENTRY CLEAN-OUT PORT AND BRASS WEDGE GATE VALVES OPEN 100%.
- PIPING: 1-1/4" SCHEDULE 80 PVC.
- FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO).
- PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCH AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY.
- THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING ASSEMBLED BY TECHNICAL SALES CORPORATION READY TO SHIP FOR FIELD INSTALLATION. THE MANUFACTURER OF PRE-FAB PUMP SOLUTIONSO:
- TECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-9256

Ebara Submersible Pumps



PUMP PERFORMANCE CURVE

SEE PLANS PREPARED BY ----- FOR PANEL MOUNTING AND ELECTRICAL DESIGN SPECIFICATIONS

48" DUPLEX GRINDER STATION-1.25" PIPING W/ SLIDE RAIL SYSTEM, V/BOX AND F.D.E.P. PANEL TSCE2-48.3 R9

TSC DUPLEX GRINDER PUMP STATION FIBERGLASS WET WELL

TECHNICAL SALES CORPORATION TSC PRE-FAB PUMP SOLUTIONS®

WATERWORKS & WASTEWATER SPECIALTIES

Representing Innovative Manufacturers MODEL TSCE2-48.3© 4621 N. HALE AVENUE PH (813)876-9256

TAMPA, FL 33614 FAX (813)874-1194 EMAIL: Sales@TSCTampa.com REV-9 SCALE: N.T.S.

FORT MYERS

1412 JACKSON ST., SUITE 3 FORT MYERS, Fl. 33901

Project Name:

LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING

Project Address:

10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905 Client/Owner:

LEE COUNTY PO BOX 398 FORT MYERS, FL 33902

Engineer Contact:

Kristina Connelly, P.E. Project Manager Phone: 239-347-5508 Email: kristina.connelly@stantec.com Project Engineer:

AND SEALED BY

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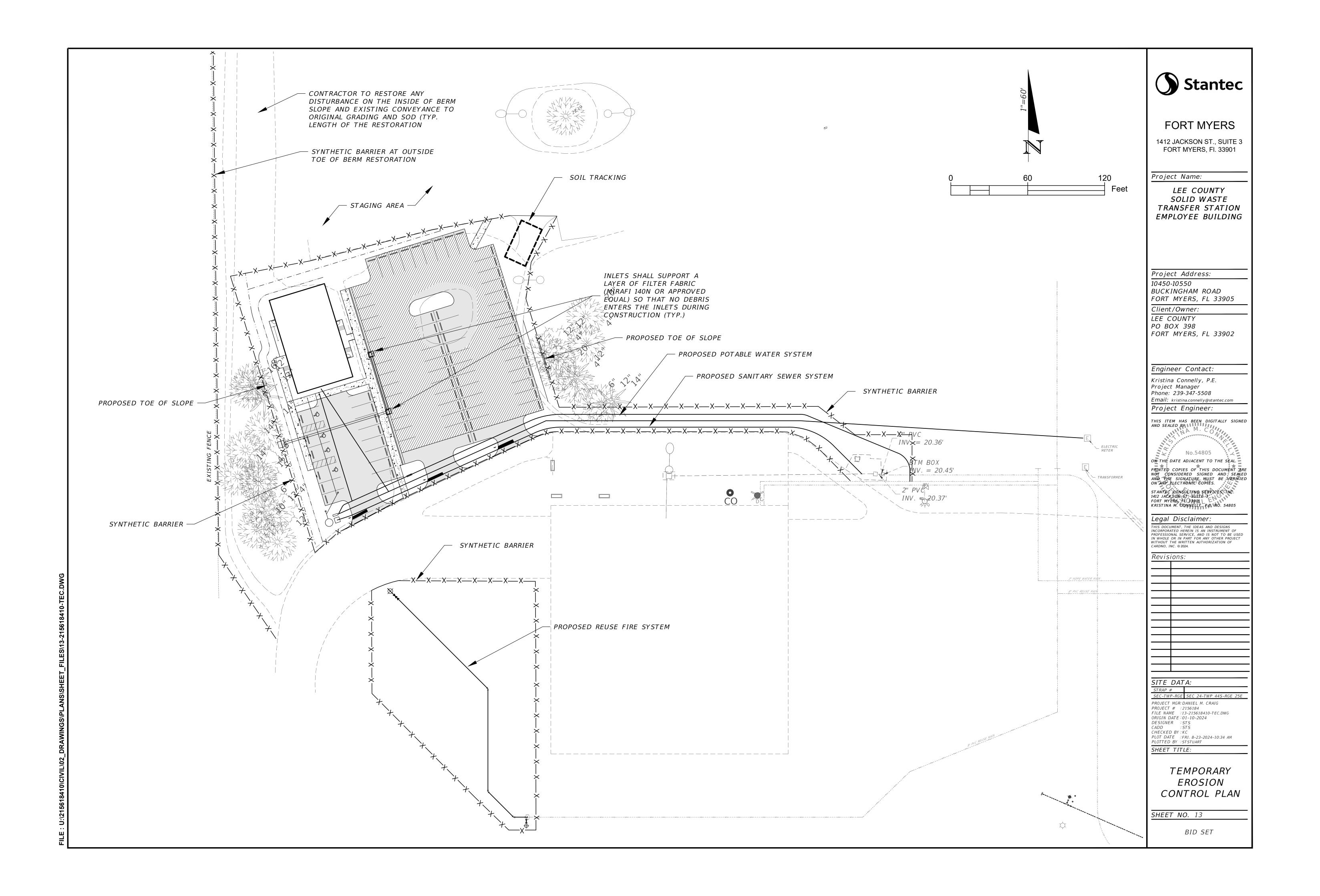
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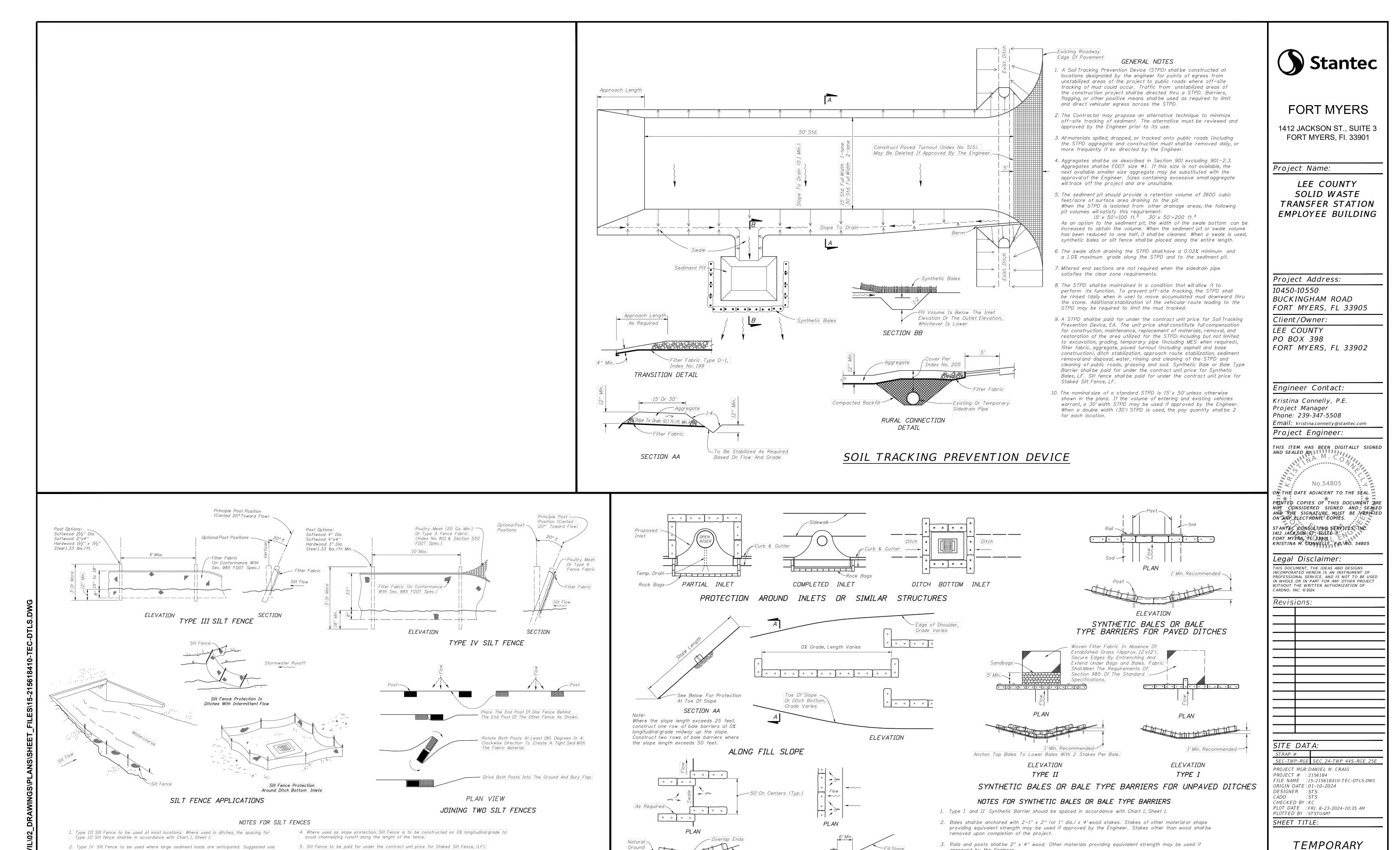
SEC-TWP-RGE SEC 24-TWP 44S-RGE 25E PROJECT # :2156184 FILE NAME :12-215618410-LS-DTLS.DWG ORIGIN DATE:01-10-2024 DESIGNER :STS CHECKED BY : KC PLOT DATE :FRI. 8-23-2024-10:34 AM PLOTTED BY :STSTUART SHEET TITLE:

> LIFT STATION **DETAILS**

SHEET NO. 12







ELEVATION

SLOPES TOWARD THE TOE OF SLOPE

TO BE USED WHERE THE NATURAL GROUND

BARRIERS FOR FILL SLOPES

is where fill slope is 1:2 or steeper and length of slope exceeds 25 feet. Avoid use where the detained water may back into travellanes or off the right of way.

3. Do not construct silt fences across permanent flowing watercourses. Silt fences are to be

TEMPORARY EROSION AND SEDIMENT CONTROL

at upland locations and turbidity barriers used at permanent bodies of water.

EROSION CONTROL DETAILS

SHEET NO. 15

approved by the Engineer.

TEMPORARY EROSION AND SEDIMENT CONTROL

ELEVATION

TO BE USED WHERE THE NATURAL GROUND

SLOPES AWAY FROM THE TOE OF SLOPE

4. Adjacent bales shall be butted firmly together.

5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.

6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include

the cost of filter fabric for Type I and II Barriers. Sandbags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING

10450-10550 BUCKINHAM ROAD FORT MYERS, FL 33905

CASTELLANOS + TRAMONTE ARCHITECTS

1228 LAFAYETTE ST. SUITE #1 CAPE CORAL, FLORIDA 33904 239-549-0997

PME ENGINEER SPELMAN ENGINEERING 1923 SE 10TH PLACE CAPE CORAL, FL 33990 239-770-2930

PROJECT DATA SUMMARY

GENERAL NOTES:

INDUSTRY STANDARDS: INDUSTRY STANDARDS SHALL HAVE THE SAME FORCE AND EFFECT ON PERFORMANCE OF WORK AS IF COPIES DIRECTLY INTO THE CONTRACT DOCUMENTS OR BOUND AND PUBLISHED THERE WITH. COMPLY WITH STANDARDS IN EFFECT AS OF DATE OF CONTRACT DOCUMENTS, UNLESS OTHERWISE NOTED OR REQUIRED BY GOVERNING AUTHORITIES.

THE ARCHITECT HAS NOT BEEN RETAINED, NOR IS RESPONSIBLE, FOR THE FIELD SUPERVISION OF CONSTRUCTION ADMINISTRATION OF THIS PROJECT. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE FIELD SUPERVISION, CONSTRUCTION ADMINISTRATION, REVIEW AND APPROVAL OF ALL SHOP DRAWINGS, VERIFICATION ON SITE OF ALL DIMENSIONS, AND STRICT COMPLIANCE WITH THESE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING WITHIN 10 DAYS OF RECEIPT OF CONSTRUCTION DOCUMENTS OF ANY ERROR OR OMISSION OF THE

THE GENERAL CONTRACTOR AGREES TO ASSUME LIABILITY FOR CORRECTIVE MEASURES SHOULD THE ARCHITECT NOT BE INFORMED AS NOTED. THE GENERAL CONTRACTOR SHALL NOT DEVIATE FROM CONSTRUCTION DOCUMENTS, OR MAKE SUBSTITUTES WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. THE GENERAL CONTRACTOR SHALL ASSIGN A QUALIFIED CONSTRUCTION SUPERVISOR TO THE PROJECT, THE GENERAL CONTRACTOR AND HIS SUPERVISION SHALL BE RESPONSIBLE FOR THE COORDINATION OF SURVEYING/RECORDING, INSPECTIONS AND TESTING, GENERAL INSTALLATION PROVISIONS, CUTTING AND PATCHING, AND CLEANING/PROTECTING.

WELL IN ADVANCE OF EVERY MAJOR UNIT OF WORK WHICH REQUIRES COORDINATING AND INTERFACING WITH OTHER WORK, MEET AT PROJECT SITE WITH INSTALLER AND/OR REPRESENTATIVES OF MANUFACTURERS AND FABRICATORS WHO ARE INVOLVED IN OR EFFECTED BY THE UNIT OF WORK WHICH HAS PROCEEDED OR WILL FOLLOW, RECORD DISCUSSIONS. COMPLY WITH MANUFACTURER'S APPLICABLE INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION. INSPECT EACH ITEM OF MATERIAL OR EQUIPMENT IMMEDIATELY PRIOR TO INSTALLATION, AND REJECT DAMAGED OR DEFECTIVE ITEMS. PROVIDE ATTACHMENT AND CONNECTION DEVICES AND METHODS FOR SECURING WORK PROPERLY AS IT IS INSTALLED, TRUE TO LINE AND LEVEL, AND WITHIN RECOGNIZED INDUSTRY TOLERANCE. ALLOW FOR EXPANSIONS AND BUILDING MOVEMENTS, PROVIDE UNIFORM JOINT WIDTHS IN EXPOSED WORK. ORGANIZE FOR BEST VISUAL EFFECT.

RECHECK MEASUREMENTS AND DIMENSIONS OF THE WORK, AS IN INTEGRAL STEP OF STARTING EACH INSTALLATION AND MAKING EACH PURCHASE OF EQUIPMENT. INSTALL WORK DURING CONDITIONS OF TEMPERATURE, HUMIDITY, EXPOSURE, FORECASTED WEATHER,

AND STATUS OF PROJECT COMPLETION WHICH WILL ENSURE BEST POSSIBLE RESULTS FOR EACH UNIT OF WORK, IN COORDINATION WITH THE ENTIRE WORK. ISOLATE EACH UNIT OF WORK FROM NON-COMPATIBLE WORK, AS REQUIRED TO PREVENT DETERIORATION. COORDINATE ENCLOSURE (CLOSING IN) OF WORK WITH REQUIRED INSPECTIONS AND TESTS, SO AS TO MINIMIZE THE NECESSITY OF UNCOVERING WORK FOR THAT PURPOSE. WHERE MOUNTING HEIGHTS AND LOCATIONS ARE NOT INDICATED, MOUNT INDIVIDUAL UNITS OF WORK AT INDUSTRY-RECOGNIZED STANDARDS MOUNTING HEIGHTS (LOCATIONS) FOR APPLICATIONS INDICATED. REFER QUESTIONABLE CHOICES TO ARCHITECT/ENGINEER.

REFER TO THE "GENERAL CONDITIONS OF THE CONTRACT OF CONSTRUCTION" FOR BASIC COMMITMENTS TO PROVIDE THE FOLLOWING SERVICES AS REQUIRED TO PERFORM THE WORK.

TEMPORARY CONSTRUCTION FACILITIES: WATER DISTRIBUTION, DEWATERING, ENCLOSURE, POWER

DISTRIBUTION, TEMPORARY LIGHTING, TEMPORARY ROADS, TEMPORARY ELEVATOR/HOISTING, AND MISC. CONSTRUCTION FACILITIES. TEMPORARY SUPPORT FACILITIES: CONTRACTOR'S FIELD OFFICE, DRINKING WATER, TOILETS, ECT.

GENERAL CONTRACTOR SHALL PROVIDE PROJECT IDENTIFICATION SIGN (TO INCLUDE NAME OF PROJECT OWNER, CONTRACTOR, ARCHITECT, AND ADDITIONAL INFORMATION AS REQUESTED BY THE OWNER, CONTRACTOR SHALL SUBMIT LAYOUT FOR ARCHITECT'S APPROVAL PRIOR TO FABRICATION. GENERAL: FIRE PROTECTION, BARRICADES, FENCING, LOCKUP AND SECURITY, SIDEWALK PROTECTION.

WATCHMAN SERVICE (WHEN REQUIRED BY OWNER OR CONTRACTOR), ENVIRONMENTAL PROTECTION, REFER ALL PRODUCT SELECTIONS AND SUBSTITUTIONS TO THE OWNER FOR FINAL APPROVAL PRIOR TO ACTUAL PURCHASE OF MATERIALS.

ONE YEAR WRITTEN GUARANTEE IS REQUIRED ON ALL WORK UNDER THIS CONTRACT. SPECIFIC PRODUCT WARRANTIES WHERE THEY APPLY SHALL ALL ACCRUE TO THE OWNER. PROVIDE WRITTEN STATEMENTS AND/OR COPIES OF ALL WARRANTIES/GUARANTEE TO THE OWNER.

WARRANTY AND GUARANTEE:

AT PROJECT CLOSEOUT TIME, CLEAN OR RECLEAN ENTIRE WORK TO NORMAL LEVEL FOR "FIRST CLASS" MAINTENANCE/CLEANING OR BUILDING PROJECTS OF SIMILAR NATURE. REMOVE NON-PERMANENT PROTÉCTIONS AND LABELS, POLISH GLASS, CLEAN EXPOSED SURFACES, TOUCH-UP MINOR DAMAGE, REPLACE FILTERS, REMOVE DEBRIS, REPLACE BURNED OUT LIGHTS, SWEEP AND WASH PAVED AREAS, POLICE YARDS AND GROUNDS AND SANITIZE PLUMBING.

APPLICABLE CODES:	
BUILDING CODE:	2023 FLORIDA BUILDING CODE, BUILDING, 8TH EDITION.
MECHANICAL CODE:	2023 FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION.
PLUMBING CODE:	2023 FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION.
ELECTRICAL CODE:	FLORIDA ELECTRICAL CODE 2020, NFPA 70, 2020.
FIRE CODE:	FLORIDA FIRE PREVENTION CODE (FFPC), 8TH EDITION — FIRE CODE. (NFPA 1 — FIRE CODE FLORIDA 2021 EDITION)
LIFE SAFETY CODE:	FLORIDA FIRE PREVENTION CODE (FFPC), 8TH EDITION — LIFE SAFETY CODE (NFPA 101 — LIFE SAFETY CODE 2021 EDITION).
ACCESSIBILITY CODE:	2023 FLORIDA BUILDING CODE, ACCESSIBILITY.

FBC: B BUSINESS (SECTION 304.1) FFPC: BUSINESS GROUP

TYPE OF CONSTRUCTION (TABLE 601)

TYPE VB, UNPROTECTED, NON-SPRINKLERED

FLOOR AREA FLORIDA BUILDING CODE, 8TH EDITION (2023) TABLE 504.3, 504.3 504.4, 506.2

OCCUPANCY: B BUSINESS	<u>ALLOWED</u>	<u>PROPOSED</u>
BUILDING AREA:	9,000 SF.	3,375 SF.
HEIGHT OF BUILDING:	40'-0"	< 14'-0"
NO. OF STORIES:	2	1

OCCUPANT LOAD (TABLE 1004.1.5)

[GROSS	AREA/	SF	PER	PERSON	=	#	PERSON

HERC 3RD FLOOR:		<u>F1</u>	<u>3C</u>	<u>FFPC</u>		
	B BUSINESS	1,932/150 =	13 PERSONS	1,928/150 =	13 PERSONS	
	CONCENTRATED BUSINESS	1,065/50 =	22 PERSONS	1,069/50 =	22 PERSONS	
	TOTAL OCCUPANT LOAD =		35 PERSONS		35 PERSONS	

WIND DESIGN

RISK CATEGORY:		(EXISTI
EXPOSURE:	C	(EXISTI

BASIC WIND SPEED: 160 MPH (EXISTING) ASCE 7-10 CHAPTER 26

INTERNAL PRESSURE COEFFICIENT, GCPI +/- 0.18 (ENCLOSED, PROTECTED OPENINGS)

FIRE RESISTANCE RATING	PER TABLE	601 (TYPE	<u>VB)</u>	
	REQUIRED	RATING	PROPOSED	RA
STRUCTURAL FRAME	0		0	
BEARING WALLS				

	INTERIOR	Ü
ODE	NONBEARING WALLS EXTERIOR (X≥30) INTERIOR	0 0
	FLOOR CONSTRUCTION	0

ROOF CONSTRUCTION

INTERIOR FINISH CLASSIFICATION (FBC 2023 TABLE 803.11

EXIT ENCLOSURES:	<u>B BUSINESS (NON-SPRINKLERE</u>
INTERIOR EXIT PASSAGEWAYS:	А
CORRIDORS:	В
ROOMS & ENCLOSED SPACES:	С

INTERIOR FINISH CLASSIFICATION (FFPC, 8TH EDITION - FIRE CODE 2021 SECTION 20.13.3.2)

	<u>D DUSIIN</u>
/ - · · · · · · · · · · · · · · · · · ·	

EXITS & EXIT ACCESS CORRIDORS (20.13.3.3.1):	CLASS A OR B
OTHER THAN EXISTS:	CLASS A, B OR C

B BUSINESS	REQUIRED	PROPOSED
COMMON PATH OF EGRESS TRAVEL (TABLE 1006.2.1):	75 FEET	< 75 FEET
MIN. OPENING WIDTH (1010.1.1):	32 INCHES	34 INCHES
EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2):	200 FEET	< 200 FEET
MINIMUM CORRIDOR WIDTH (TABLE 1020.2):	36 INCHES	> 36 INCHES
MAX. DEAD END CORRIDOR (1020.4):	20 FEET	< 20 FEET

SHEET INDEX PLUMBING CALCULATIONS

<u>JSE GROUP: B BUSINESS</u> (TABLE 403)	OCCUPANT LOAD: 35 PERSONS 17 MALE / 18 FEMALE	T-1 TITLE PAGE, CODE DATA & LS-1 LIFE SAFETY PLAN	NOTE
VATER CLOSETS:	<u>REQUIRED</u> <u>PROPOSED</u>	A-1 FLOOR PLAN, ROOM SCHED	ULES (
MALE (1 PER 25)	1 5	A-2 REFLECTED CEILING PLAN	
FEMALE (1 PER 25)	1 3	A = 3 FNLARGED PLANS & INTERI	OR FI

EV#TO 4 EV#T 400E00 00DDDD00

DESIGN NO.

N/A

N/A N/A

N/A

N/A

N/A

N/A

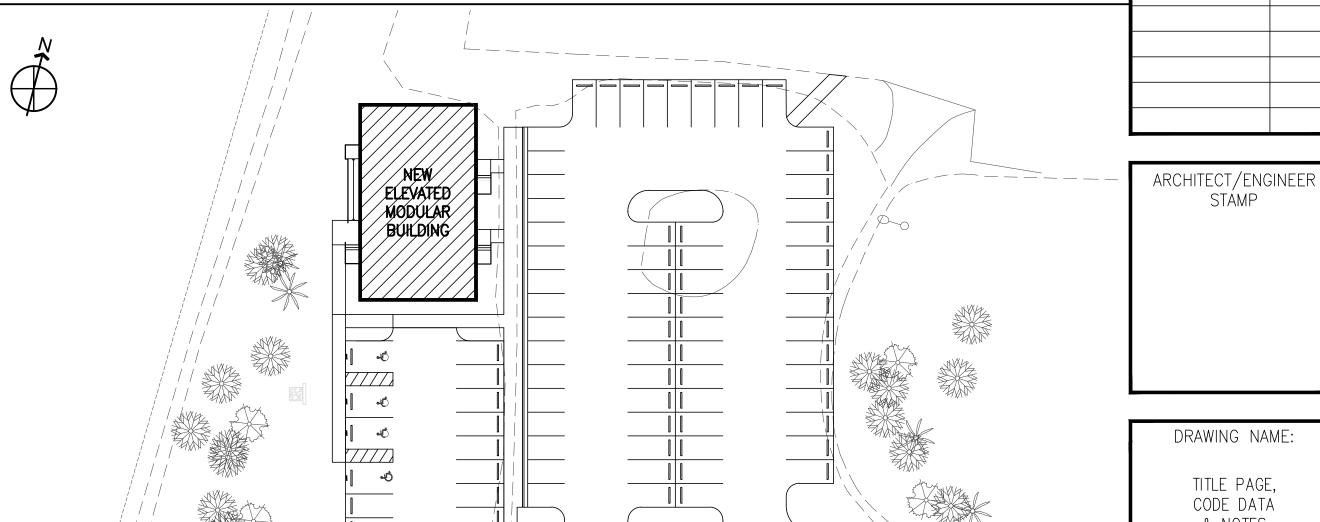
B BUSINESS	<u>REQUIRED</u>	<u>PROPOSED</u>
COMMON PATH OF EGRESS TRAVEL (TABLE 1006.2.1):	75 FEET	< 75 FEET
MIN. OPENING WIDTH (1010.1.1):	32 INCHES	34 INCHES
EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2):	200 FEET	< 200 FEET
MINIMUM CORRIDOR WIDTH (TABLE 1020.2):	36 INCHES	> 36 INCHES
MAY DEAD END CORRIDOR (1000 4).	20 FFFT	∠ 20 EEET

USE GROUP: B BUSINESS (TABLE 403) WATER CLOSETS: MALE (1 PER 25) FEMALE (1 PER 25) LAVATORIES: MALE (1 PER 40) FEMALE (1 PER 40)	OCCUPANT LOA 17 MALE / 18 REQUIRED 1 1	D: 35 PERSONS FEMALE PROPOSED 5 3	T-1 LS-1 A-1 A-2 A-3 A-4 A-5 A-6 SP-1	TITLE PAGE, CODE DATA & NOTES LIFE SAFETY PLAN FLOOR PLAN, ROOM SCHEDULES & WALL TYPES REFLECTED CEILING PLAN ENLARGED PLANS & INTERIOR ELEVATIONS BUILDING ELEVATIONS BUILDING SECTIONS & WALL SECTIONS LOW VOLTAGE PLAN SPECIFICATIONS
DRINKING FOUNTAINS:				
1 PER 100	1	1	SP-2	SPECIFICATIONS
SERVICE SINK:			P-1	PLUMBING DETAILS, NOTES AND SCHEDULES
			P-2	PLUMBING SANITARY PLAN
1 SERVICE SINK	1	1	P-3	PLUMBING WATER PLAN
			P-4	PLUMBING ISOMETRICS
			M-1	HVAC DETAILS, NOTES AND SPECIFICATIONS
			M-2	HVAC FLOOR PLAN
			M-3	HVAC DETAILS AND OUTSIDE AIR CALCS
			E-1	ABBREVIATIONS, SPECIFICATIONS, SYMBOL LEGEND
			E-2	SITE PLAN
			E-3	LIGHTING PLAN, LIGHTING FIXTURE & PANEL SCHEDULE
			E-4	POWER AND SYSTEMS PANEL SCHEDULES
			E-5	EGRESS PHOTOMETRY PLAN AND SCHEDULES
NOTES TO DIAMS E				

NOTES TO PLANS EXAMINER

- 1. THIS PROJECT IS FULLY ACCESSIBLE TO THE PHYSICALLY HANDICAPPED.
- 2. FIRE EXTINGUISHERS PROVIDED PER NFPA 10, SEE FLOOR PLAN A-1.
- 3. METAL STAIRS BY STAIR MANUFACTURER TO BE SUBMITTED UNDER A SEPARATE

		,)
PUMP STATION	<u> </u>	
	DRAWN BY:	DDG
	CHECKED BY:	BAM
	ISSUED FOR:	
	PRELIMINARY SET:	11/7/23
	60% REVIEW COMMENTS	4/24/24



'0% REVIEW COMMENTS

PERMIT/BID SET

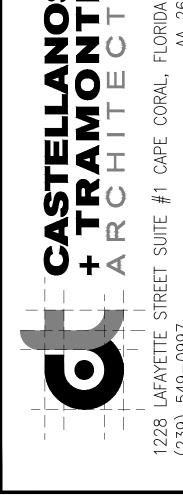
6/7/24

8/23/24

& NOTES

SHEET

ART A. CASTELLANOS NO. AR0015473



Y SOLID WASTE TRANSFER
I EMPLOYEE BUILDING
S50 BUCKINGHAM ROAD
MYERS, FL 33905

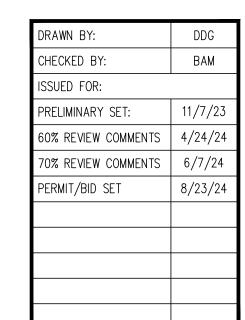
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COUNTY STATION 1450-105 FORT

EE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905





ARCHITECT/ENGINEER STAMP

DRAWING NAME:

LIFE SAFETY PLAN

SHEET

34" EGRESS WIDTH: EXIT CAPACITY: 170 PERSONS 34" EGRESS WIDTH: EXIT CAPACITY: 170 PERSONS EXIT DISTANCE: 32'-0"

MAX: 75'-0" MEN'S LOCKER ROOM (42 LKRS.) MEN'S RESTROOM WOMEN'S LOCKER ROOM & RESTROOM EXIT DISTANCE: 59'-6" HALLWAY OFFICE 2 BREAK ROOM 106 101 TRAINING ROOM 107 34" EGRESS WIDTH: EXIT CAPACITY: 170 PERSONS 34" EGRESS WIDTH: EXIT CAPACITY: 170 PERSONS

GENERAL NOTES

1. DO NOT SCALE DRAWINGS.

2. ALL DOORS IN THE MEAN OF EGRESS SHALL BE SINGLE ACTION RELEASE AND SHALL NOT REQUIRE THE USE OF A KEY, TOOL, OR SPECIAL KNOWLEDGE TO OPEN FROM EGRESS SIDE.

3. EXIT AND EMERGENCY LIGHTS SHALL BE FULLY OPERABLE AT THE TIME OF THE FIRE FINAL INSPECTION.

- 4. PLANS SHALL COMPLY WITH ALL REQUIREMENTS OF THE FLORIDA FIRE PREVENTION CODE, CURRENT EDITION, NFPA 101 (LIFE SAFETY CODE), CURRENT EDITION, AND NFPA 1 (UNIFORM FIRE CODE), CURRENT EDITION.
- 5. ALL EMERGENCY LIGHTS AND EXIT SIGNS HAVE BATTERY BACK-UP.
- 6. PROVIDE HAND HELD FIRE EXTINGUISHERS ACCORDING TO THE LOCAL FIRE MARSHALL REQUIREMENTS - PROVIDE 2A:10BC FIRE EXTINGUISHERS EVERY 3,000 SF AS PER NFPA 10 TABLE 6.2.1.1 (LIGHT HAZARD)

LEGEND

EMERGENCY LIGHTS WITH BATTERY BACKUP EMERGENCY EXIT SIGN WITH BATTERY BACKUP EMERGENCY LIGHTS AND EXIT SIGN WITH BATTERY BACKUP

FE FIRE EXTINGUISHER ON HOOK - 2A:10B:C FIRE EXTINGUISHER IN CABINET - 2A:10B:C

----- INDICATES LONGEST PATH OF EGRESS TRAVEL

ALUMINUM EXTERIOR WINDOWS SHALL BE PGT INDUSTRIES INC. PW7720A ALUMINUM FIXED WINDOW LARGE & SMALL MISSILE IMPACT RESISTANT ANNODIZED ALUMINUM PREFINISH WITH: 7/16" LAMINATE GLASS CONSISTING OF: 3/16" ANNEALED "GRAY" .090 CLEAR PVB 3/16" HEAT STRENGTHENED GLASS HIGH PERFORMANCE LOW-E

.35 SHGC

.42 SHADING COEFFICIENT

• PRODUCT APPROVAL: FL 243.8

IMPACT RESISTANT

TYPE C TYPE A <u>TYPE B</u> SOLID CORE SOLID CORE WOOD

T.G.: 5/16" CLEAR TEMPERED GLASS

DOOR TYPES: I.R.G.: IMPACT RESISTANT GLASS

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FRAME TYPES:

HOLLOW METAL DOOR WITH LITE WOOD WITH LITE

TYPE F-1 HOLLOW METAL FRAME

IMPACT WINDOW

ROOM FINISH SCHEDULE										
DOOM NAME	ROOM #	WALL DACE	FLOOR	WALLS			CEILING		DEMARKS	
ROOM NAME	ROOM #	WALL BASE	FLOOR	N	S	Е	W	MATERIAL	HEIGHT	REMARKS
HALLWAY	101	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
HALLWAY	102	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
OFFICE 1	103	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
OFFICE 2	104	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
RESOURCES	105	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
BREAK ROOM	106	VB	LVT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
TRAINING ROOM	107	VB	MCT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
MEN'S LOCKER ROOM	108	VB	LVT	PTD	PTD	PTD	PTD	ACT	9'-0"	_
MEN'S RESTROOM	109	VB	LVT	FRP	FRP	FRP	FRP	ACT	9'-0"	_
JANITOR'S CLOSET	110	VB	LVT	FRP	FRP	FRP	FRP	ACT	9'-0"	-
WOMEN'S LOCKER ROOM & RESTROOM	111	VB	LVT	FRP	FRP	FRP	FRP	ACT	9'-0"	_

ROOM FINISH LEGEND

& RESTROOM

- 1. TAPE, FLOAT, AND SAND DRYWALL TO A SMOOTH (LEVEL 4) FINISH.
- 2. PAINT ALL SURFACES AS DIRECTED BY OWNER.
- 3. OWNER SHALL SELECT ALL COLORS, PATTERNS, TRIM & OTHER ITEMS REQUIRED FOR A COMPLETE PROJECT.
- 4. ALL FINISHES TO BE SELECTED BY OWNER.

ROOM FINISH LEGEND

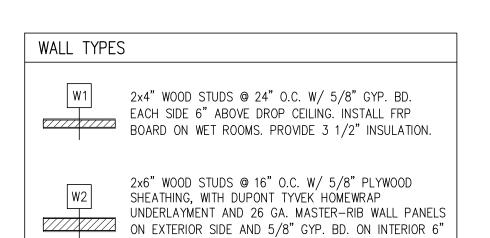
- LVT LUXURY VINYL TILE. MCT MODULAR CARPET TILE
- 4" H. VINYL WALL BASE. PTD PAINTED GYP BD., SEE SPEC.
- ACT ACOUSTIC CEILING TILE. FRP MOISTURE RESISTANT PANELS

WALLS: (PAINT COLOR TBD)

FIRST COAT SHERWIN WILLIAMS PREPRITE 200 INTERIOR LATEX PRIMER SECOND & THIRD COATS SHERWIN WILLIAMS PROMAR 200 INTERIOR LATEX EGGSHELL PAINT TYPE ACRYLIC LATEX/EGGSHELL

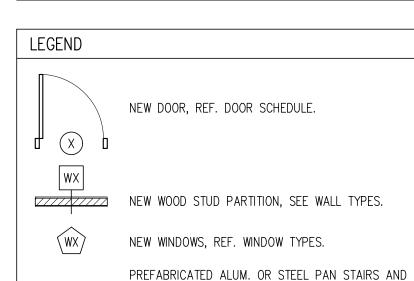
TRIM: (PAINT COLOR TBD)

SHERWIN WILLIAMS INTERIOR DOOR & TRIM ACRYLIC ENAMEL SEMI-GLASS



ROOMS. PROVIDE R-19 INSULATION.

ABOVE DROP CEILING. INSTALL FRP BOARD ON WET

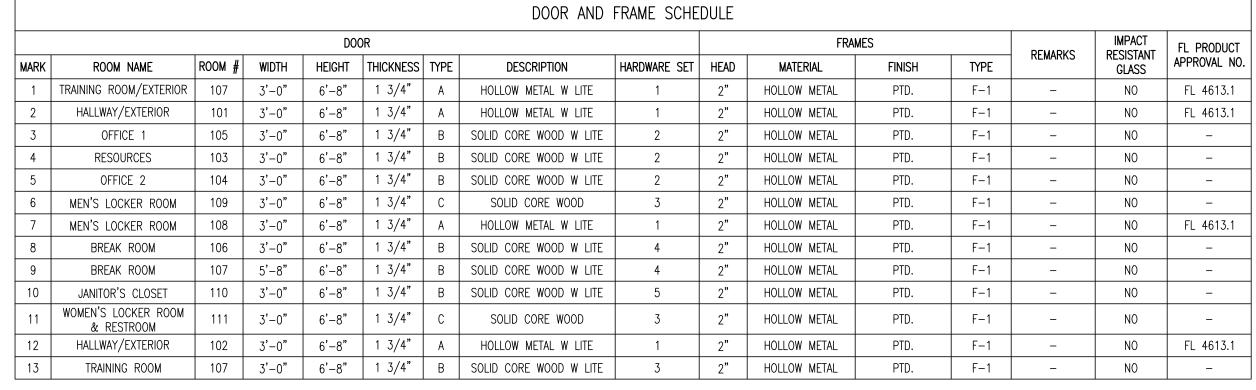


LANDING BY STAIRS MANUFACTURER W/ NON-SLIP GRIPPING SURFACE AND 36" H HANDRAILS ON BOTH SIDES. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION W/ A DIAMETER OF 1-1/4" TO 2" AND A 12" EXTENSION AT THE BOTTOM. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE A MINIMUM OF 2-1/4". THREADS MUST BE 11", RISERS 7" MAX. HEIGHT. TYP.

PREFABRICATED ALUM. OR STEEL PAN RAMP AND LANDING BY STAIRS MANUFACTURER W/ NON-SLIP GRIPPING SURFACE AND 36" H HANDRAILS ON BOTH SIDES. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION W/ A DIAMETER OF 1-1/4" TO 2" AND A 12" EXTENSION AT THE BOTTOM. CLEAR SPACE BETWEEN HANDRAIL AND WALL SHALL BE A MINIMUM OF 2-1/4". SLOPE MUST BE NOT STEEPER THAN 1:12.

GENERAL NOTES

- . PROVIDE ALL WOOD BLOCKING NECESSARY FOR THE ATTACHMENT OF MISCELLANEOUS EQUIPMENT INCLUDING BUT LIMITED TO TOILET ACCESSORIES, DOOR HARDWARE, ELECTRICAL DEVICES, GRAB BARS, HANDRAILS, CASEWORK AND MILLWORK.
- . THE TRANSITION OF DIFFERENT FLOORING MATERIALS AT A DOORWAY SHALL OCCUR AT THE CENTERLINE OF DOOR UNLESS INDICATED OTHERWISE.
- 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED MEASUREMENTS. DO NOT SCALE DRAWINGS.
- 4. PROVIDE FIRE EXTINGUISHERS (FE) AND FIRE EXTINGUISHER CABINETS (FEC) AS INDICATED ON LIFE SAFETY PLAN. PROVIDE TYPE AND SIZE AS SPECIFIED. MOUNT AT 42" AFF TO TOP OF FE AND 48" AFF TO TOP OF FEC.
- 5. PROVIDE MOISTURE RESISTANT GYPSUM WALLBOARD AT WALLS AT ALL DAMP LOCATIONS (RESTROOMS, BREAK AREA, JAN. CL.)
- 6. PROVIDE F.R.P. WALL PANEL LAID-UP ON GYPSUM (CLASS C) FULL HEIGHT ON RESTROOM WALLS, STORAGE ROOM WALLS & BREAK ROOM WALLS <u>ONLY</u>.
- 7. UNLESS OTHERWISE NOTED ON THE PLAN OR AS CLEAR DIMENSIONS, ALL PLAN DIMENSIONS ARE TAKEN FROM FACE OF CMU OR CONCRETE TO FACE OF STUD OR FACE OF STUD TO FACE OF STUD.
- 8. DOORS NOT OTHERWISE DIMENSIONED SHALL BE 4" FROM FACE OF ADJACENT CMU OR CONCRETE WALL TO ROUGH DOOR OPENING AND 4" FROM FACE OF ADJACENT STUD WALL TO ROUGH DOOR OPENING.



HARDWARE SCHEDULE: BASIS OF DESIGN BELOW IS SCHLAGE ND SERIES LEVERS RHODES (RHO) EACH

- 1. 1 1/2 PAIR HINGES, ENTRANCE LOCK (ND53PD), LATCH PROTECTION DEVICE, CLOSER 1, RAIN DRIP CAP TOP & BOTTOM, WEATHERSEAL, SWEEP, KICK PLATE AND ALUMINUM SADDLE THRESHOLD.
- 2. 1 1/2 PAIRS HINGES, OFFICE LATCH (ND50PD), SILENCERS & WALL STOP.
- 3. 1 1/2" PAIR HINGES, PASSAGE LATCH (ND105), CLOSER 2, SILENCERS & WALL STOP.
- 4. 1 1/2" PAIR HINGES, PASSAGE LATCH (ND105), SILENCERS & WALL STOP.

5. 1 1/2" PAIR HINGES, STOREROOM LOCK (ND50PD), SILENCERS & WALL STOP.

HARDWARE GENERAL NOTE:

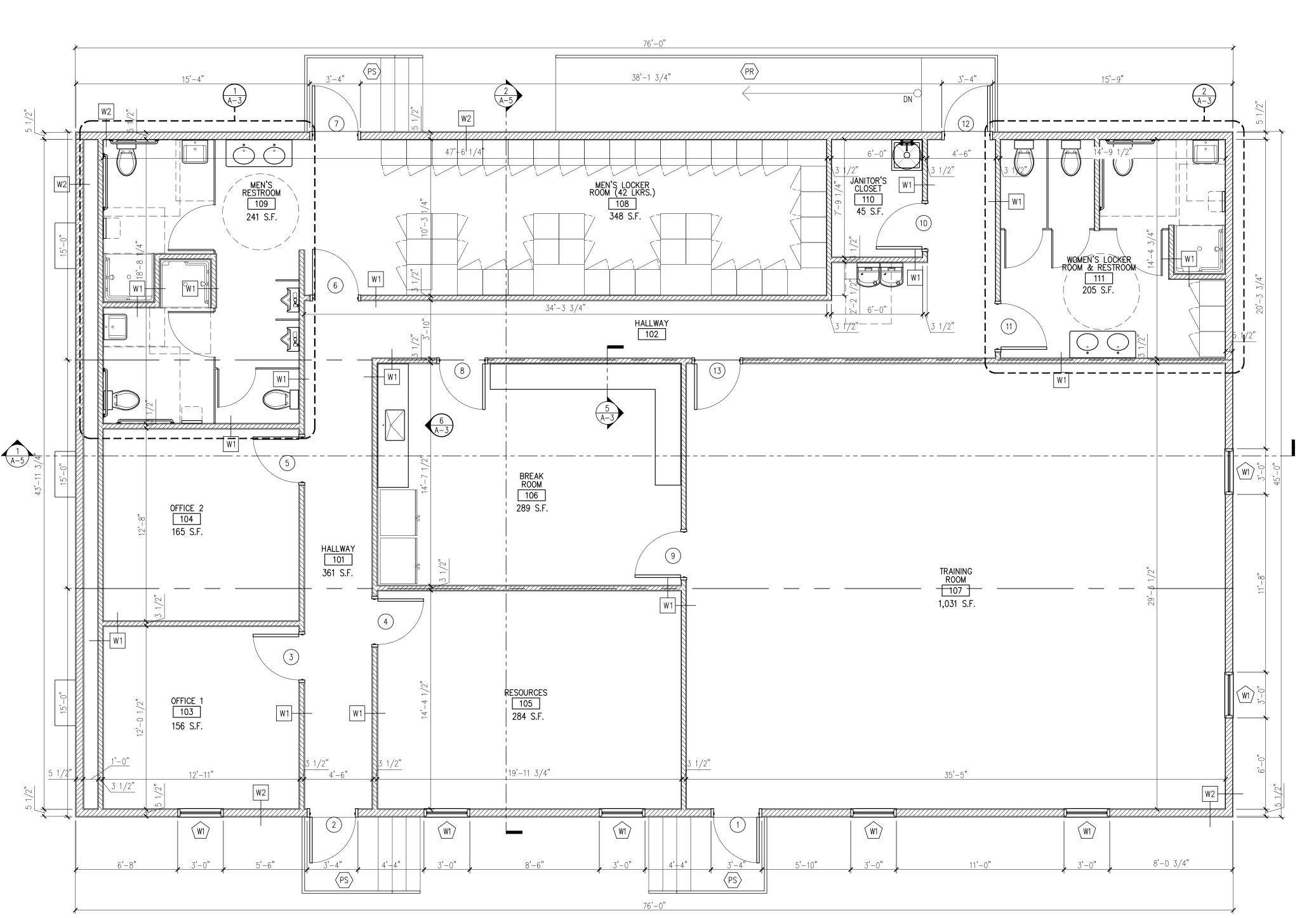
- 1. ALL HARDWARE FINISHES SHALL BE US26D UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE OWNER.
- 2. SUBSTITUTIONS SHALL BE PERMITTED WITH ARCHITECT'S APPROVAL.
- 3. HARDWARE SUPPLIER TO PROVIDE NEW HINGES ON ALL PRE-HUNG DOORS AS SPECIFIED.

HARDWARE SPECIFICATIONS:

CLOSER 1 - HAGER 5100 W/5108 HOLD OPEN ARM CLOSER 2 - HAGER 5100 SERIES

HINGES - HAGER BB1279 DRIP - NGP 16A WEATHER SEAL - NGP 5050CL DOOR SWEEP - NGP 200NA

KICK PLATE - HAGER 190S 12"H. X 34"W. (US28) WALL STOP - ROCKWOOD 409 SILENCERS - IVES SR64





WASTE TRANSFE DYEE BUILDING JCKINGHAM ROAD S, FL 33905

SOLID EMPLO 550 BU

COUNTY STATION 450-105 FORT

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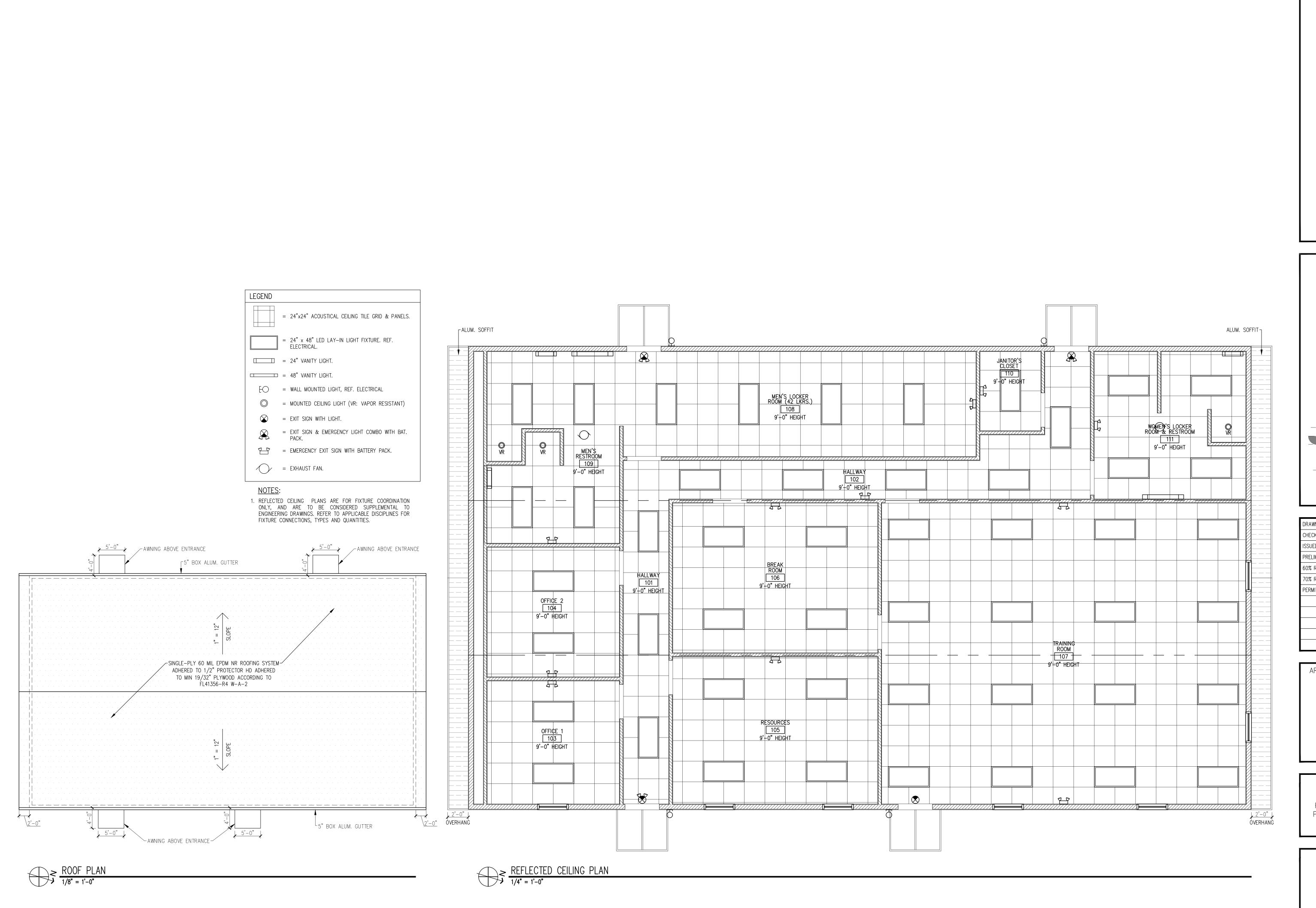
DRAWN BY: DDG CHECKED BY: BAM SSUED FOR: PRELIMINARY SET: 60% REVIEW COMMENTS 4/24/24 70% REVIEW COMMENTS 6/7/24 PERMIT/BID SET 8/23/24

ARCHITECT/ENGINEER STAMP

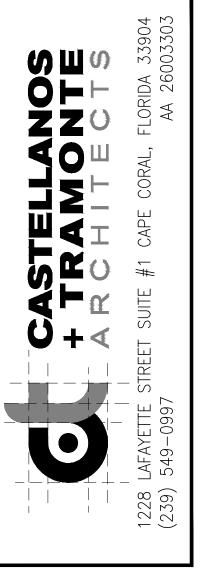
> DRAWING NAME: FLOOR PLAN, SCHEDULES &

WALL TYPES

SHEET



LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905

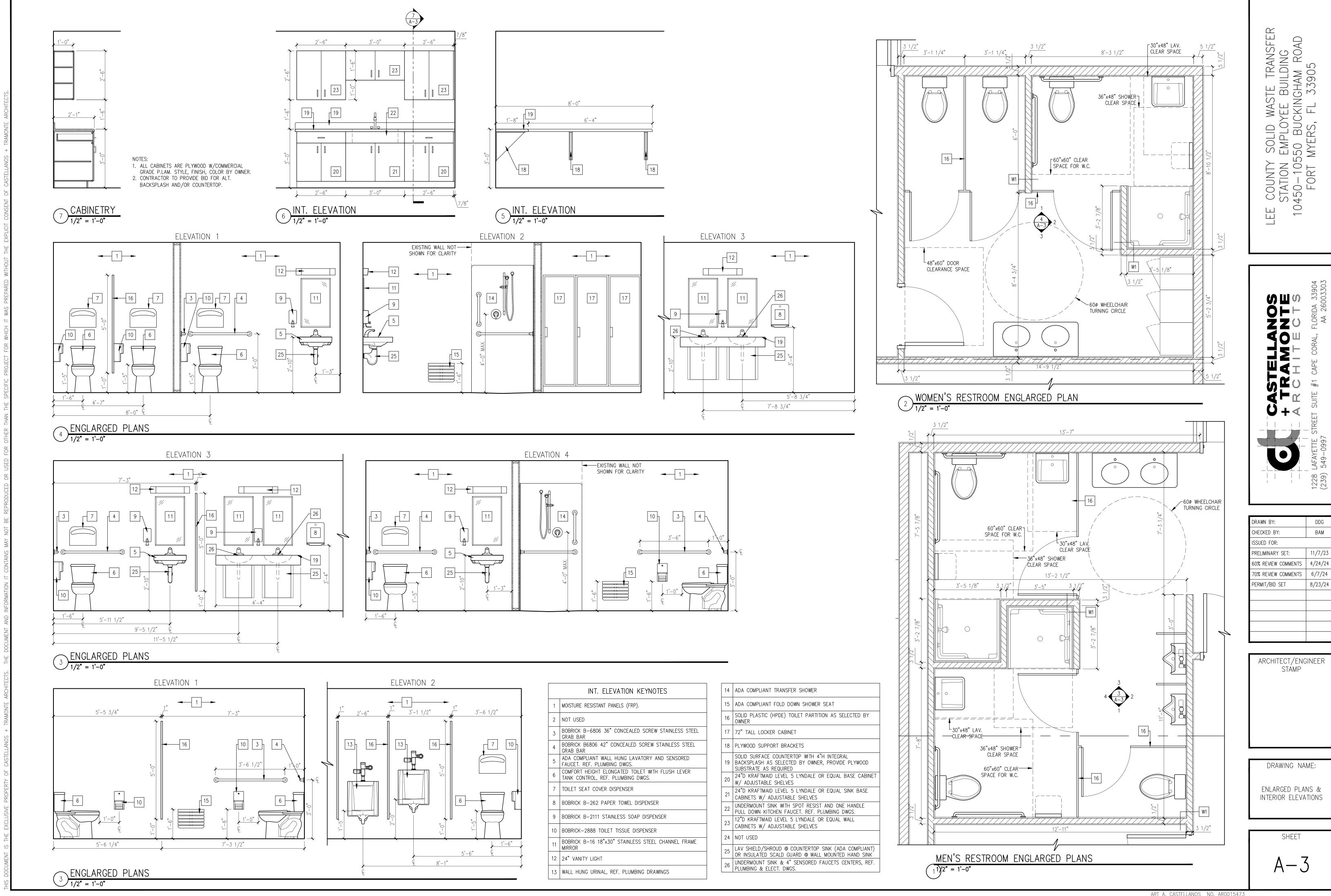


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DRAWN BY:	DDG
CHECKED BY:	BAM
ISSUED FOR:	
PRELIMINARY SET:	11/7/23
60% REVIEW COMMENTS	4/24/24
70% REVIEW COMMENTS	6/7/24
PERMIT/BID SET	8/23/24

ARCHITECT/ENGINEER STAMP

DRAWING NAME: REFLECTED CEILING PLAN & ROOF PLAN

> SHEET A-2

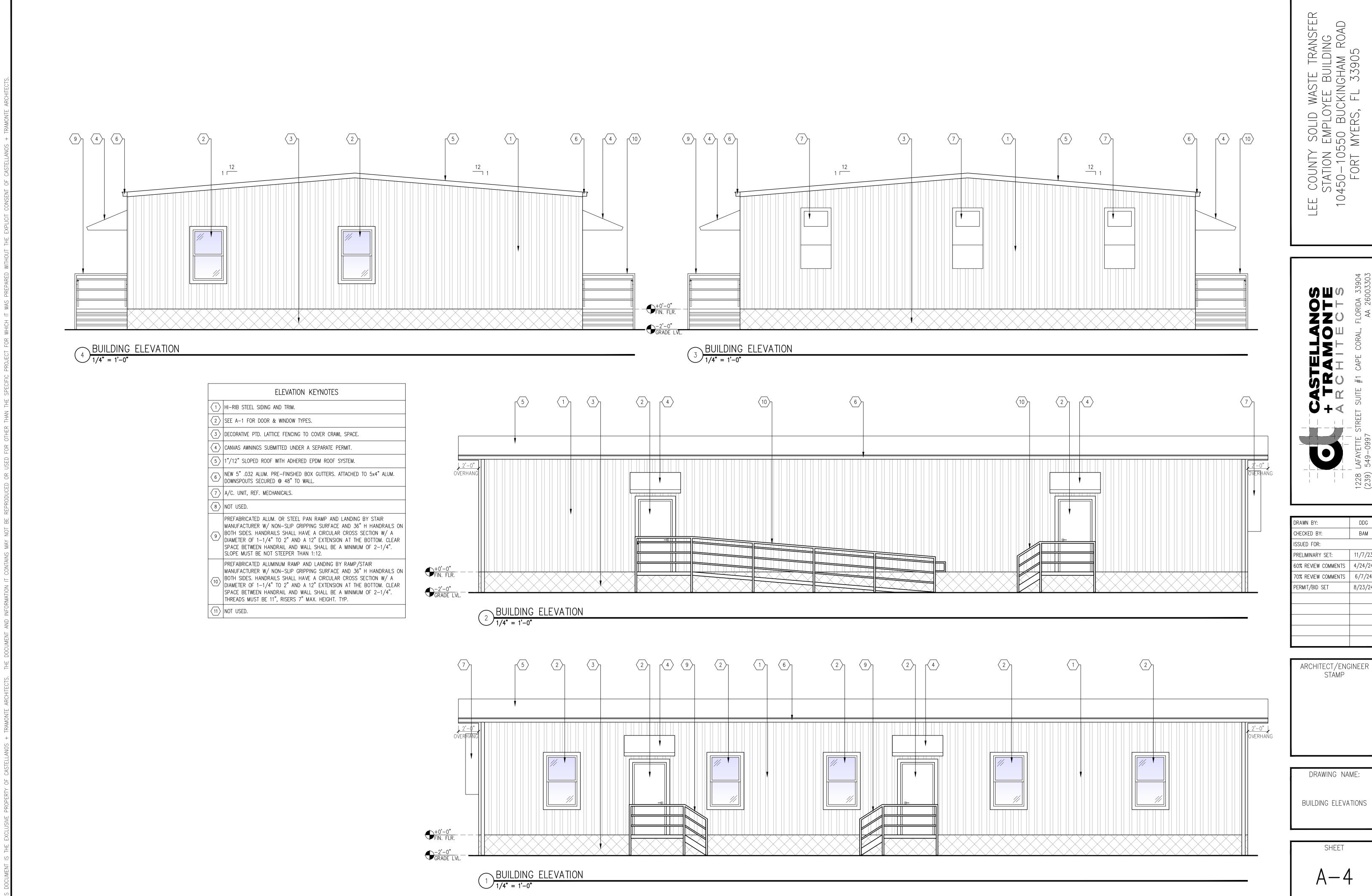


ART A. CASTELLANOS NO. AR0015473

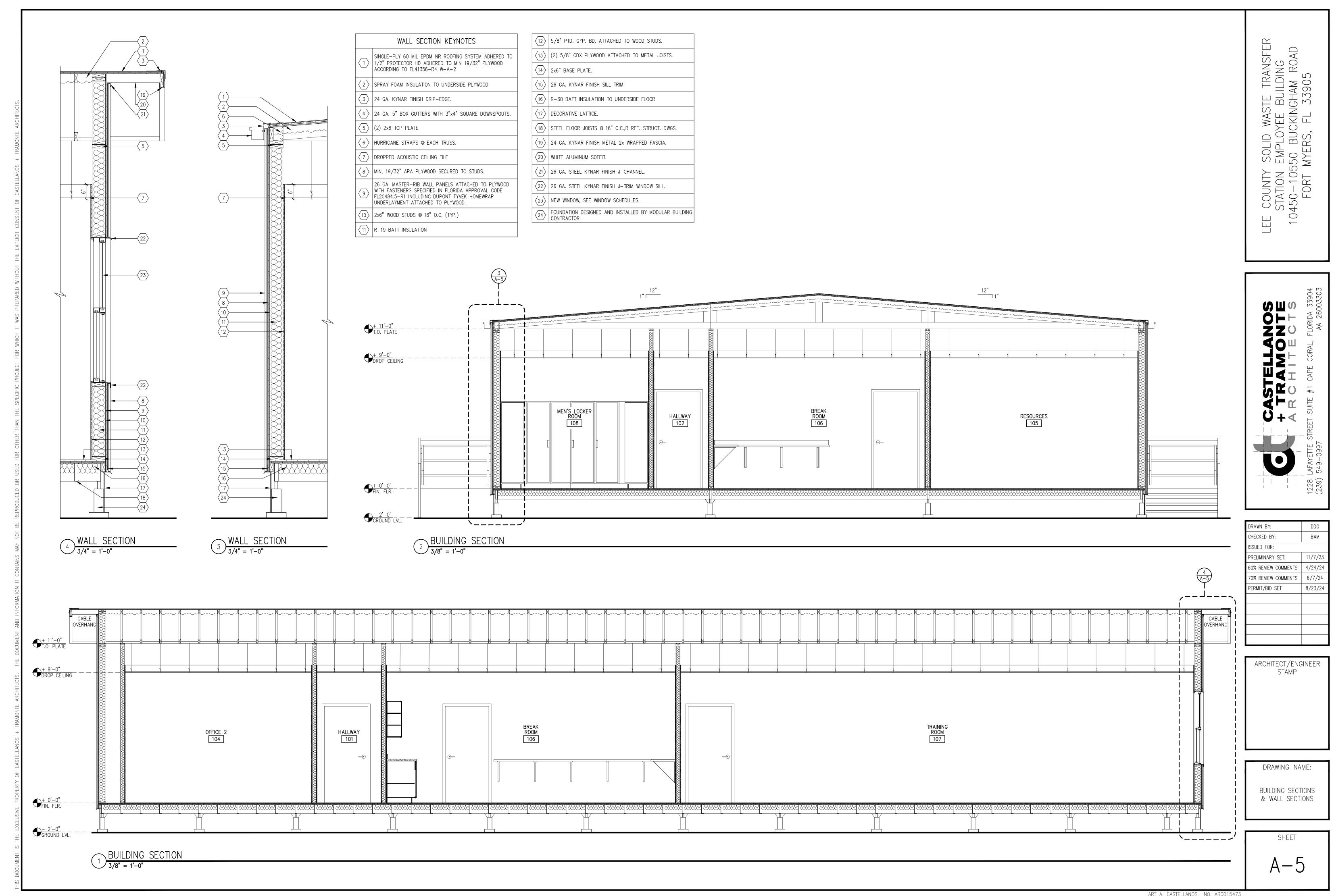
DDG

 BAM

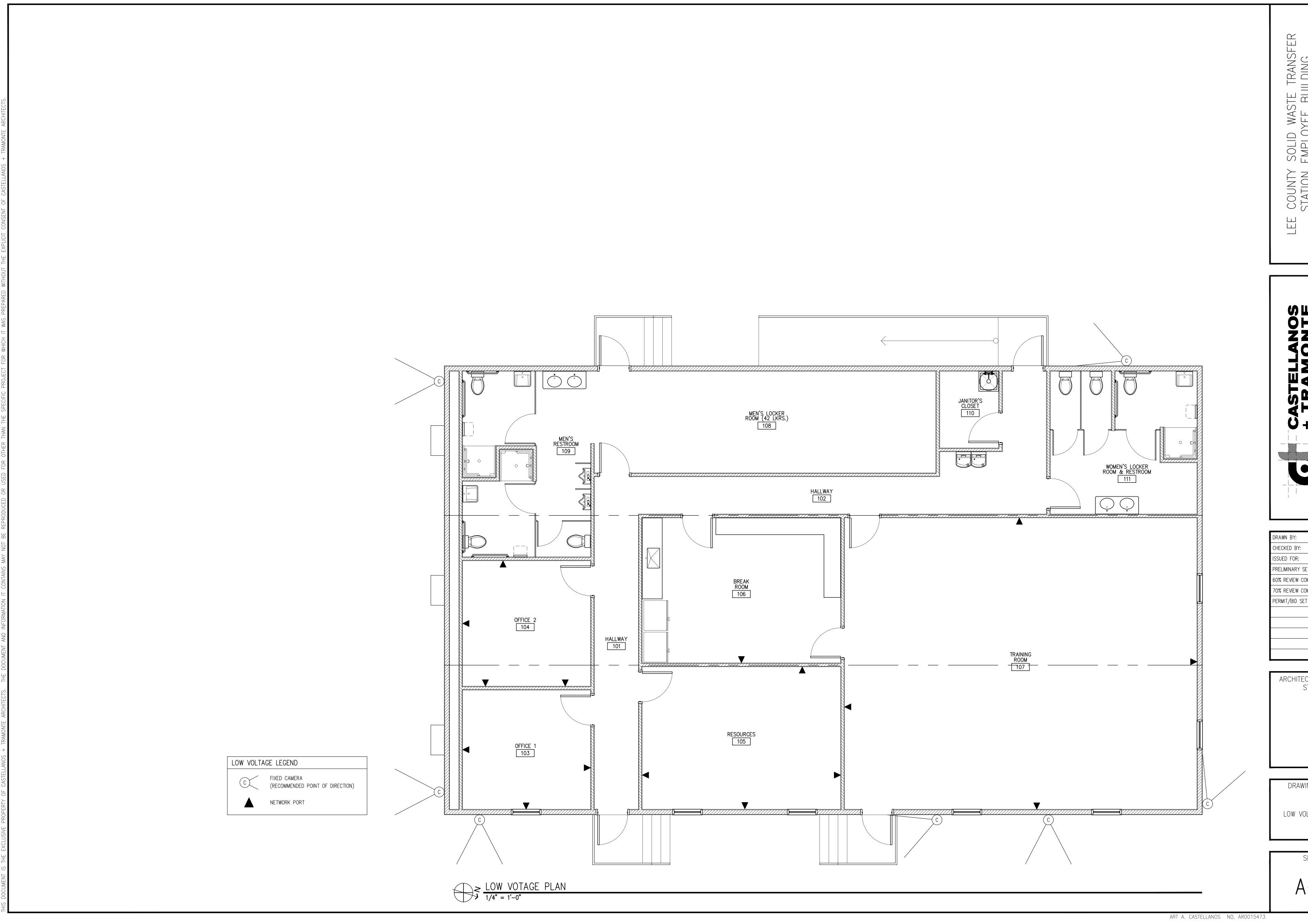
8/23/24



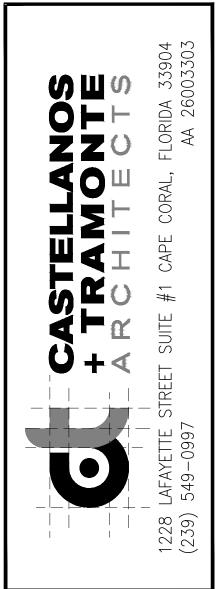
BAM 60% REVIEW COMMENTS 4/24/24 70% REVIEW COMMENTS 6/7/24 8/23/24



ART A. CASTELLANOS NO. AR0015473



LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905



DRAWN BY:	DDG
CHECKED BY:	BAM
ISSUED FOR:	
PRELIMINARY SET:	11/7/23
60% REVIEW COMMENTS	4/24/24
70% REVIEW COMMENTS	6/7/24
PERMIT/BID SET	8/23/24

ARCHITECT/ENGINEER STAMP	

DRAWING	NAME:
LOW VOLTA	GE PLAN

A-6

C. Architect: CASTELLANOS + TRAMONTE ARCHITECTS.
D. THE WORK CONSIST ON A NEW MODULAR BUILDING.
1.2 WORK RESTRICTIONS
A. Contractor's Use of Premises: During construction, Contractor will have full use of site indicated.

PART 2 - PRODUCTS (Not Applicable)
PART 3 - EXECUTION (Not Applicable)
END OF SECTION 01100

SECTION 01200 - PRICE AND PAYMENT PROCEDURES PART 1 - GENERAL

1.1 PAYMENT PROCEDURES
 A. Submit a Schedule of Values at least 5 days before the initial Application for Payment. Break down the Contract Sum into at least one line item for each Specification Section. Coordinate the Schedule of Values with Contractor's Construction Schedule.

Round amounts to nearest whole dollar; total shall equal the Contract Sum.

Provide line item in the Schedule of Values for cost of materials and total installed value of that part of the

materials and total installed value of that part of the Work.

B. Submit 5 copies of each application for payment[on AIA Document G702/703, according to the schedule

established in Owner/Contractor Agreement

mechanic's liens from subcontractors,
sub—subcontractors, and suppliers for construction
period covered by the previous application.

2. Submit final Application for Payment after completion of
Project closeout procedures with release of liens and

1. With each Application for Payment, submit waivers of

supporting documentation.

a. Include consent of surety to final payment[on AIA Document G707 and insurance certificates.

PART 2 — PRODUCTS (Not Applicable)
PART 3 — EXECUTION (Not Applicable)
END OF SECTION 01200

SECTION 01300 - ADMINISTRATIVE REQUIREMENTS

1.1 PROJECT MANAGEMENT AND COORDINATION

A. Coordinate construction to ensure efficient and orderly

installation of each part of the Work.
B. Conduct progress meetings at Project site at monthly intervals. Notify Owner and Architect of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
1. Contractor will record minutes and distribute to each party present and to parties who should have been present.

1.2 SUBMITTAL PROCEDURES
 A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities

that require sequential activity.
 No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 Architect will return submittals, without review received

Architect will return submittals, without review received from sources other than Contractor.
 Identify deviations from the Contract Documents on submittals.

4. Submit three copies of each submittal.
B. Place a permanent label or title block on each submittal for identification. Provide a 6- by 8-inch space on the label or beside title block to record review and approval markings and action taken. Include the following information on the label:
1. Project name.

Date.
 Name and address of Contractor.
 Name and address of subcontractor or supplier.
 Number and title of appropriate Specification Section.
 Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect

D. Architect will review each action submittal, make marks to indicate corrections or modifications required, stamp and mark as appropriate to indicate action taken, and return copies less those retained.
E. Contractor's Construction Schedule Submittal Procedure: Submit two copies of schedule within 15 days after date

Submit two copies of schedule within 15 do established for Commencement of the Work. PART 2 — PRODUCTS 2.1 ACTION SUBMITTALS

A. Product Data: Mark each copy to show applicable choices and options. Include the following:
1. Data indicating compliance with specified standards and requirements.

Notation of coordination requirements.
 For equipment, include rated capacities, dimensions, weights, required clearances, and furnished specialties and accessories.

B. Shop Drawings: Submit Project—specific information drawn to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data. Submit three opaque copies on sheets at least 8—1/2 by 11 inches but no larger than 30 by 42 inches. Architect will return one copy. Include the following:

Dimensions, fabrication and installation drawings, roughing—in and setting diagrams, and relationship to adjoining construction.

Identification of products and materials.
 Wiring diagrams showing field—installed wiring.
 Notation of coordination requirements.
 Notation of dimensions established by field measurement.

C. Samples: Submit Samples finished as specified and physically identical with material or product proposed for use. Where variations are inherent in the material, submit three sets of paired units to show full range of variations. Include name of manufacturer and product name on label.

D. Qualification Pate: Include lists of completed projects

D. Qualification Data: Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

2.2 INFORMATION SUBMITTALS

A. Product Certificates: Prepare written statements on manufacturer's letterhead, including signature of entity responsible for preparing certification, certifying that product complies with requirements. 2.3 DELEGATED DESIGN
A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
1. If criteria indicated are not sufficient to perform services or certification required, submit a written

request for additional information to Architect.

B. Delegated—Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor, to be designed or certified by a design professional.

1. Indicate that products and systems comply with

designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Chart Schedule: Submit a comprehensive, fully developed, horizontal chart—type schedule within 15 days of date established for the Notice to Proceed.
 B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.

Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
 Distribute copies of approved schedule to Owner,

Architect, subcontractors, testing and inspecting agencies, and parties identified by Contractor with a need—to—know schedule responsibility.

D. Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled

As the Work progresses, indicate Actual Completion percentage for each activity.
 Revise the schedule after each meeting or activity where revisions have been made. As Work progresses, mark each bar to indicate actual completion. Distribute updated copies to same parties.
 PART 3 — EXECUTION (Not Applicable)
 END OF SECTION 01300

SECTION 01400 - QUALITY REQUIREMENTS

PART 1 — GENERAL

1.1 SECTION REQUIREMENTS

A. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
1. Testing and inspecting services are specified in other Sections of these Specifications or are required by authorities having jurisdiction and shall be performed by independent testing agencies.
2. Where quality—control services are indicated as

Contractor's responsibility, engage a qualified testing agency to perform these services.

3. Contractor is responsible for scheduling times for tests, inspections, and obtaining samples and notifying testing agency.

4. Retesting and Reinspecting: Contractor shall pay for

additional testing and inspecting required as a result of tests and inspections indicating noncompliance with requirements.

B. Submittals: Testing agency shall submit a certified written report of each test and inspection to Contractor, Architect, and to authorities having jurisdiction when they so direct. Reports of each inspection, test, or similar

service shall include the following:

1. Name, address, and telephone number of testing agency.

Project title and number.

Date of issue.

Dates and locations of samples and tests or

inspections.

Record of temperature and weather conditions at time of sample taking and testing and inspecting.

Names of individuals making tests and inspections.

of sample taking and testing and inspecting.

6. Names of individuals making tests and inspections.

7. Description of the Work and test and inspection method.

8. Complete test or inspection data, test and inspection results, an interpretation of test results, and comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.

9. Recommendations on retesting and reinspecting.

Name and signature of laboratory inspector.
 Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting indicated; and where required by authorities having jurisdiction, that is acceptable to authorities.

D. Testing Agency Responsibilities: Testing agency shall cooperate with Architect and Contractor in performing its duties and shall provide qualified personnel to perform inspections and tests.

1. Agency shall promptly notify Architect and Contractor of

irregularities or deficiencies in the Work observed during performance of its services.

2. Agency shall not release, revoke, alter, or increase requirements of the Contract Documents nor approve or accept any portion of the Work.

3. Agency shall not perform any duties of Contractor.

Agency shall not perform any duties of Contractor.
 Auxiliary Services: Cooperate with testing agencies and provide auxiliary services as requested, including the following:

Access to the Work.
 Incidental labor and facilities necessary to facilitate tests and inspections.
 Adequate quantities of materials for testing, and assistance in obtaining samples.

4. Facilities for storage and field curing of test samples.
5. Security and protection for samples and for testing and inspecting equipment.
F. Special Tests and Inspections: Contractor will engage a

qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction.

G. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specification Sections.

H. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits.

PART 2 — PRODUCTS (Not Applicable)

PART 2 - PRODUCTS (Not Applicable)
PART 3 - EXECUTION (Not Applicable)
END OF SECTION 01400

SECTION 01420 — REFERENCES PART 1 — GENERAL

PARI 1 — GENERAL
1.1 GENRAL REQUIREMENTS
A. Publication Dates: Comply with standards in effect as of

date of the Contract Documents, unless otherwise indicated.

B. Abbreviations and Acronyms: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up—to—date as of the date of the Contract Documents.

AA Aluminum Association, Inc. (The) (202) 862-5100 www.aluminum.org

AA BCAssociated Air Balance Council (202) 737-0202 www.aabchq.com

AAMA American Architectural Manufacturers Association (847) 303-5664 www.aamanet.org

AASHTO American Association of State Highway and Transportation Officials (202) 624-5800 www.aashto.org

ACI American Concrete Institute/ACI International (248) 848-3700 www.aci-int.org

AFPA American Forest & Paper Association (See AF&PA)

AF&PA American Forest & Paper Association (800) 878-8878 www.afandpa.org (202) 463-2700

AGA American Gas Association (202) 824-7000 www.aga.org

AHA American Hardboard Association (847) 934-8800

www.hardboard.org

Al Asphalt Institute(859) 288-4960 www.asphaltinstitute.org

AlA American Institute of Architects (The) (202) 626-7300

www.aia.org

AISC American Institute of Steel Construction, Inc.(800) 644–2400 www.aisc.org(312) 670–2400
AISI American Iron and Steel Institute(202) 452–7100 www.steel.orgAITCAmerican Institute of Timber Construction (303) 792–9559 www.aitc-glulam.org
ALSC American Lumber Standard Committee (301) 972–1700 www.alsc.org
AMCA Air Movement and Control Association International, Inc. (847) 394–0150 www.amca.org

AMCA Air Movement and Control Association International, Inc (847) 394-0150 www.amca.org ANSI American National Standards Institute(202) 293-8020 www.ansi.org APA APA-The Engineered Wood Association(253) 565-6600 www.apawood.org APA Architectural Precast Association (239) 454-6989

www.archprecast.org
ARI Air-Conditioning & Refrigeration Institute (703) 524-8800
www.ari.org
ASCE American Society of Civil Engineers (800) 548-2723
www.asce.org (703) 295-6300
ASHRAE American Society of Heating, Refrigerating and (800)
527-4723 Air-Conditioning Engineers (404) 636-8400

527-4723 Air-Conditioning Engineers (404) 636-8400 www.ashrae.org
ASME ASME International (800) 843-2763 (The American Society of Mechanical Engineers (212) 591-7722International) www.asme.org
ASSE American Society of Sanitary Engineering (440) 835-3040 www.asse-plumbing.org

835-3040 www.asse-plumbing.org
ASTM ASTM International(610) 832-9585 www.astm.org
AWCI AWCI International(703) 534-8300(Association of the Wall
and Ceiling IndustriesInternational)www.awci.org
AWI Architectural Woodwork Institute(800)
449-8811www.awinet.org(703) 733-0600
AWPA American Wood-Preservers' Association (817)

326-6300www.awpa.com
AWS American Welding Society(800) 443-9353 www.aws.org
(305) 443-9353
AWWA American Water Works Association (800) 926-7337
www.awwa.org(303) 794-7711BHMABuilders Hardware
Manufacturers Association(212)

297-2122www.buildershardware.com
BOCA BOCA International, Inc.(708) 799-2300 www.bocai.org
CABO Council of American Building Officials (See ICC)
CCC Carpet Cushion Council (203) 637-1312
www.carpetcushion.org

CDA Copper Development Association Inc. (800) 232–3282 www.copper.org (212) 251–7200 CFFA Chemical Fabrics & Film Association, Inc. (216) 241–7333 www.chemicalfabricsandfilm.com CFR Code of Federal Regulations (888) 293–6498 www.access.gpo.gov/nara/cfr(202) 512–1530 CISCA Ceilings & Interior Systems Construction Association (630) 584–1919 www.cisca.org CISPI Cast Iron Soil Pipe Institute (423) 892–0137 www.cispi.org

www.cispi.org
CRD Army Corps of Engineers (601) 634-2355 Handbook for Concrete and Cement www.wes.army.mil
CRI Carpet and Rug Institute (The) (800) 882-8846
www.carpet-rug.com(706) 278-3176CRSIConcrete Reinforcing
Steel Institute(847) 517-1200www.crsi.orgCSACSA
International(800) 463-6727(Formerly: IAS - International
Approval Services)(416) 747-4000 www.csa-international.org
CSSB Cedar Shake & Shingle Bureau (604) 820-7700
www.cedarbureau.ora

DHI Door and Hardware Institute (703) 222—2010 www.dhi.org
DOC Department of Commerce (202) 482—2000 www.doc.gov
DOD Department of Defense (215) 697—6257 Military
Specifications and Standards www.dodssp.daps.mil
EIMA EIFS Industry Members Association (800) 294—3462
www.eima.com (770) 968—7945
EPA Environmental Protection Agency (202) 260—2090

www.epa.gov

FDA Food and Drug Administration (888) 463–6332 www.fda.gov
FMG FM Global (401) 275–3000 (Formerly:
FM — Factory Mutual System) www.fmglobal.com
FS Federal Specification Available from Department of Defense Single Stock Point (215) 697–6257 www.dodssp.daps.dla.mil
Available from General Services Administration(202) 619–8925 www.gsa.gov Available from National Institute of Building
Sciences (202) 289–7800 www.nibs.org
GA Gypsum Association (202) 289–5440 www.gypsum.org
GANA Glass Association of North America (785) 271–0208
(Formerly:

FGMA — Flat Glass Marketing Association)
www.glasswebsite.com
HI Hydraulic Institute (888) 786—7744 www.pumps.org (973)
267—9700
HPVA Hardwood Plywood & Veneer Association (703)
435—2900 www.hpva.org
HUD Department of Housing and Urban Development (202)
708—1112 www.hud.gov
IAS International Approval Services (See CSA International) ICC
International Code Council (703) 931—4533 (Formerly: CABO

International Code Council (703) 931–4533 (Formerly: CABO – Council of American Building Officials)www.intlcode.org ICBO International Conference of Building Officials (800) 284–4406 www.icbo.org (562) 699–0541 ICEA Insulated Cable Engineers Association, Inc. (770) 830–0369 www.icea.net IEEE Institute of Electrical and Electronics Engineers, Inc. (The) (212) 419–7900 www.ieee.org IESNA Illuminating Engineering Society of North America (The) (212) 248–5000 www.iesna.org IGCC Insulating Glass Certification Council (315) 646–2234 www.iqcc.org

233—1510 (Formerly:
SIGMA — Sealed Insulating Manufacturers Association)
www.igmaonline.org
ITS Intertek Testing Services (800) 345—3851
www.itsglobal.com (607) 753—6711
KCMA Kitchen Cabinet Manufacturers Association (703)
264—1690 www.kcma.org

IGMA Insulating Glass Manufacturers Alliance (The) (613)

LMA Laminating Materials Association (201) 664—2700 B. (Formerly:

ALA — American Laminators Association) www.lma.org
LPI Lightning Protection Institute (800) 488—6864
www.lightning.org (847) 577—7200
MBMA Metal Building Manufacturers Association (216)
241—7333 www.mbma.com
D.
MFMA Maple Flooring Manufacturers Association (847)
480—9138 www.maplefloor.org
MSS Manufacturers Standardization Society of The Valve and
Fittings Industry, Inc. (703) 281—6613 www.mss—hq.com
NEBB National Environmental Balancing Bureau (301)
977—3698 www.nebb.org
F.
NECA National Electrical Contractors Association (301)

NEMA National Electrical Manufacturers Association (703)
841-3200 www.nema.org
NETA InterNational Electrical Testing Association (303)
697-8441 www.netaworld.org
NFPA NFPA International (800) 344-3555 www.nfpa.org (617)
770-3000
NFRC National Fenestration Rating Council (301) 589-1776
www.nfrc.org
NLGA National Lumber Grades Authority (604) 524-2393
www.nlga.org
NOFMA National Oak Flooring Manufacturers Association (901)

NeLMA Northeastern Lumber Manufacturers' Association (207)

657-3110 www.necanet.org

829-6901 www.nelma.org

526-5016 www.nofma.org
NRCA National Roofing Contractors Association (800)
323-9545 www.nrca.net (847) 299-9070
NSF NSF International (800) 673-6275 (National Sanitation Foundation International) (734) 769-8010 www.nsf.org
NWWDA National Wood Window and Door Association (See WDMA)

PCI Precast/Prestressed Concrete Institute (312) 786-0300 www.pci.org
PDCA Painting and Decorating Contractors of America (800) 332-7322 www.pdca.com (703) 383-0800
RCSC Research Council on Structural Connectionsc/o AISC www.boltcouncil.org
SDI Steel Deck Institute (847) 462-1930 www.sdi.org

SDI Steel Door Institute (440) 899-0010

www.steeldoor.org

SIGMA Sealed Insulating Glass Manufacturers Association (See IGMA)

SJI Steel Joist Institute (843) 626—1995 www.steeljoist.org

SMACNA Sheet Metal and Air Conditioning Contractors' National Association (703) 803—2980 www.smacna.org

SPIB Southern Pine Inspection Bureau (The) (850) 434—2611 www.spib.org

SPRI SPRI (781) 647—7026 (Single Ply Roofing Institute) www.spri.org

SBCCI Southern Building Code Congress International, Inc.

(205) 591-1853 www.sbcci.org
SSPC SSPC: The Society for Protective Coatings (412)
281-2331 www.sspc.org (877) 281-7772
STI Steel Tank Institute (847) 438-8265 www.steeltank.com
TCA Tile Council of America, Inc. (864) 646-8453
www.tileusa.com
TFS Texas Forest Service (936) 639-8180

www.txforestservice.tamu.edu
TIA/EIA Telecommunications Industry Association/Electronic
Industries (703) 907-7700 Alliancewww.tiaonline.org
TPI Truss Plate Institute, Inc. (608) 833-5900 www.tpinst.org
UL Underwriters Laboratories Inc. (800) 704-4050 www.ul.com
(847) 272-8800
WCLIB West Coast Lumber Inspection Bureau (800) 283-1486
www.wclib.org (503) 639-0651

WCMA Window Covering Manufacturers Association (212) 661–4261 (See WCSC)
WCSC Window Covering Safety Council (800) 506–4636 www.windowcoverings.org (212) 661–4261
WDMA Window & Door Manufacturers Association (800) 223–2301 (Formerly:

NWWDA — National Wood Window and Door Association) (847) 299-5200 www.wdma.com
WIC Woodwork Institute of California (916) 372-9943 www.wicnet.org
WMMPA Wood Moulding & Millwork Producers Association (800) 550-7889 www.wmmpa.com (530) 661-9591
WWPA Western Wood Products Association (503) 224-3930

www.wwpa.org
PART 2 - PRODUCTS (Not Applicable)
PART 3 - EXECUTION (Not Applicable)
END OF SECTION 01420

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS PART 1 - GENERAL

1.1 SECTION REQUIREMENTS
A. Use Charges: Cost or use charges for temporary facilities shall be included in the Contract Sum.
B. Use water and electric power from Owner's existing system with metering and with payment of use charges.
C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service.

System with metering and with payment of use charges.

C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

PART 2 — PRODUCTS

2.1 EQUIPMENT

A. Heating Equipment: Provide vented, self—contained

heaters with thermostatic control.

1. Use of gasoline—burning space heaters, open—flame heaters, or salamander—type heating units is prohibited.

prohibited.

2. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

PART 3 — EXECUTION

3.1 TEMPORARY UTILITIES

A. General: Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking—water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
C. Heating and Cooling: Provide temporary heating and cooling required for curing or drying of completed installations or for protecting installed construction from

adverse effects of low temperatures or high humidity.

Select equipment that will not have a harmful effect on completed installations or elements being installed.

Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

3.2 TEMPORARY SUPPORT FACILITIES
A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations.
B. Provide waste—collection containers in sizes adequate to handle waste from construction operations. Collect waste daily and, when containers are full, legally dispose

of waste off—site. Comply with requirements of authorities having jurisdiction.

Install project identification and other signs in locations approved by Owner to inform the public and persons seeking entrance to Project.

TEMPORARY SECURITY AND PROTECTION FACILITIES
 Provide temporary environmental protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

B. Provide measures to prevent soil erosion and discharge of soil—bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.

adjacent properties and walkways, according to requirements of authorities having jurisdiction.

Provide temporary enclosures for protection of construction and workers from inclement weather and for containment of heat.

PART 3 - FXFCUTION

EXAMINATION AND PREPARATION

survey and existing benchmarks.

trimmina durina installation.

3.2 CUTTING AND PATCHING

occupied areas.

3.3 INSTALLATION

3.4 FINAL CLEANING

Completion:

floors broom clean.

CLOSFOUT PROCEDURES

similar releases.

kevs to Owner.

final record information.

smooth, even—textured surface.

why the Work is not complete.

A. Examine substrates and conditions for compliance with

manufacturer's written requirements including, but not

clean, and free of deleterious substances; substrates

after unsatisfactory conditions have been corrected.

B. Before proceeding to lay out the Work, verify layout

C. Take field measurements as required to fit the Work

within installation tolerances; and application conditions

information shown on Drawings, in relation to property

properly. Where fabricated products are to be fitted to

A. Do not cut structural members or operational elements

without prior written approval of Architect.

B. Where existing services/systems are required to be

C. Patch with durable seams that are as invisible as

A. Comply with manufacturer's written instructions for

B. Clean Project site and work areas daily, including

A. Complete the following cleaning operations before

Remove labels that are not permanent.

requesting inspection for certification of Substantial

Clean transparent materials, including mirrors. Remove

excess glazing compounds. Replace chipped or broken

Clean exposed finishes to a dust-free condition. free of

stains, films, and foreign substances. Sweep concrete

Vacuum carpeted surfaces and wax resilient flooring.

Wipe surfaces of mechanical and electrical equipment

Remove excess lubrication. Clean plumbing fixtures.

Clean Project site, yard, and grounds, in areas disturbed

by construction activities. Sweep paved areas; remove

stains, spills, and foreign deposits. Rake grounds to a

Clean light fixtures, lamps, globes, and reflectors.

Substantial Completion: Before requesting Substantial

Prepare a list of items to be completed and corrected

Obtain and submit releases permitting Owner unrestricted

use of the Work and access to services and utilities.

Include occupancy permits, operating certificates, and

Submit Record Drawings and Specifications, operation

Deliver tools, spare parts, extra materials, and similar

Make final changeover of permanent locks and deliver

Complete final cleaning requirements, including touchup

Completion. On receipt of request. Architect will proceed

Contractor of items that must be completed or corrected

Submit a copy of Substantial Completion inspection list

stating that each item has been completed or otherwise

Instruct Owner's personnel in operation, adjustment, and

maintenance of products, equipment, and systems.

inspections as incomplete is completed or corrected.

with inspection or advise Contractor of unfulfilled

E. Submit a written request for final inspection for

Request reinspection when the Work identified in previous

acceptance. On receipt of request, Architect will proceed

requirements. Architect will prepare final Certificate for

Payment after inspection or will advise Contractor of

items that must be completed or corrected before

A. Engage qualified instructors to instruct Owner's personnel

Include instruction for basis of system design and

operational requirements, review of documentation,

emergency procedures, operations, adjustments,

troubleshooting, maintenance, and repairs.

DIVISION 2 SITE CONSTRUCTION

to adjust, operate, and maintain systems, subsystems.

and equipment not part of a system. Include a detailed

requirements. Architect will prepare the Certificate of

Substantial Completion after inspection or will advise

Touch up and otherwise repair and restore marred

and maintenance manuals, property surveys, and similar

(punch list), the value of items on the list, and reasons

Completion inspection, complete the following:

Advise Owner of pending insurance changeover

Submit specific warranties, maintenance service

gareements, and similar documents.

Complete startup testing of systems.

Remove temporary facilities and controls.

10. Submit changeover information related to Owner's

occupancy, use, operation, and maintenance.

exposed finishes to eliminate visual defects.

with inspection or advise Contractor of unfulfilled

C. Request inspection for Final Completion, once the

before certificate will be issued.

following are complete:

esolved for acceptance

certificate will be issued.

review of the following

SECTION 02230 - SITE CLEARING

SECTION 02300 - EARTHWORK

PART 1 - GENERAL (Not Applicable)

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

PART 1 - GENERAL (Not Applicable)

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

SEE SITE CIVIL DRAWING SPECS.

SEE SITE CIVIL DRAWING SPECS.

END OF SECTION 01701

3.6 DEMONSTRATION AND TRAINING

B. Submit a written request for inspection for Substantial

installation. Anchor each product securely in place,

accurately located and aligned with other portions of the

Work. Clean exposed surfaces and protect from damage.

requirements specified in other Sections

removed, relocated, or abandoned, bypass such

other construction, verify dimensions by field measurement

before fabrication and, when possible, allow for fitting and

services/systems before cutting to prevent interruption to

possible. Provide materials and comply with installation

limited to, surfaces that are sound, level, plumb, smooth,

within environmental limits. Proceed with installation only

D. Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
E. Furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
F. Install and maintain temporary fire—protection facilities.

Comply with NFPA 241.

3.4 TERMINATION AND REMOVAL

A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service.

temporary service to use of permanent service.

B. Remove temporary facilities and controls no later than Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

SECTION 01600 - PRODUCT REQUIREMENTS

END OF SECTION 01500

1.1 SECTION REQUIREMENTS

B. The term "product" includes the terms "material,"
"equipment," "system," and terms of similar intent.

C. Product Substitutions: Substitutions include changes in

products, materials, equipment, and methods of

construction from those required by the Contract
Documents and proposed by Contractor after award of
the Contract.

1. Submit three copies of each request for product

Submit requests within 5 days after the Notice to Proceed.
 Do not submit unapproved substitutions on Shop Drawings or other submittals.

Identify product to be replaced and show compliance with requirements for substitutions. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified, a list of changes needed to other parts of the Work required to accommodate proposed substitution, and any proposed changes in the Contract Sum or the Contract Time should the substitution be accepted.

Architect will review the proposed substitution and notify Contractor of its acceptance or rejection.

C. Comparable Product Requests:
1. Submit three copies of each request for comparable product. Do not submit unapproved products on Shop Drawings or other submittals.
2. Identify product to be replaced and show compliance with requirements for comparable product requests. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified.

Architect will review the proposed product and notify
Contractor of its acceptance or rejection.
 Deliver, store, and handle products using means and
methods that will prevent damage, deterioration, and loss,
including theft. Comply with manufacturer's written
instructions.

 Schedule delivery to minimize long—term storage at Project site and to prevent overcrowding of construction spaces.
 Deliver products to Project site in manufacturer's

original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.

3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

4. Store materials in a manner that will not endanger Project structure.
5. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent

condensation.

E. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract

Documents.

PART 2 — PRODUCTS

2.1 PRODUCT OPTIONS

A. Provide products that comply with the Contract
Documents, are undamaged, and are new at the time of installation.

Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
 Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

Product Selection Procedures:

 Where Specifications name a single product or manufacturer, provide the item indicated that complies with requirements.
 Where Specifications include a list of names of products or manufacturers, provide one of the items indicated

that complies with requirements.

3. Where Specifications include a list of names of products or manufacturers, accompanied by the term "available products" or "available manufacturers," provide one of the named items that complies with requirements. Comply with provisions for "comparable product requests" for consideration of an unnamed product.

4. Where Specifications name a product as the

provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by the other named manufacturers. Where Specifications name a single product as the "basis—of—design" and no other manufacturers are named, provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by another

"basis—of—design" and include a list of manufacturers,

manufacturer.

C. Unless otherwise indicated, Architect will select color, pattern, and texture of each product from manufacturer's full range of options that includes both standard and premium items.

PART 3 — EXECUTION (Not Applicable)
END OF SECTION 01600

SECTION 01701 — EXECUTION AND CLOSEOUT REQUIREMENTS PART 1 — GENERAL

1.1 CLOSEOUT SUBMITTALS
A. Record Drawings: Maintain a set of prints of the Contract Drawings as Record Drawings. Mark to show actual installation where installation varies from that shown originally.
1. Identify and date each Record Drawing; include the

designation "PROJECT RECORD DRAWING" in a prominent location.

B. Operation and Maintenance Data: Submit two copies] of manual. Organize data into three—ring binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:

Manufacturer's operation and maintenance

Maintenance and service schedules.

Maintenance service contracts.
Emergency instructions.
Spare parts list.
Wiring diagrams.

documentation.

7. Copies of warranties.
PART 2 — PRODUCTS (Not Applicable)

SECTION 02361 — TERMITE CONTROL

PART 1 — GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: Product Data and product certificates for each type of product indicated. Include the

EPA—Régistered Label.

B. Installer Qualifications: A specialist who is licensed according to regulations of authorities having jurisdiction to apply termite control treatment and products in jurisdiction where Project is located, and who employs workers trained and approved by manufacturer to install manufacturer's products.

C. Regulatory Requirements: Formulate and apply termiticides according to the EPA—Registered Label.

D. Continuing Service: Provide 12 months' continuing service including monitoring, inspection, and re—treatment for

including monitoring, inspection, and reoccurrences of termite activity. PART 2 — PRODUCTS 2.1 TERMITE CONTROL PRODUCTS

A. Soil Treatment Termiticide: Provide an EPA—registered termiticide complying with requirements of authorities having jurisdiction, in an aqueous solution.

PART 3 — EXECUTION
3.1 INSTALLATION

A. General: Comply with the most stringent requirements of authorities having jurisdiction and with manufacturer's EPA—Registered Label for products.
B. Soil Treatment Application: Provide quantity required for application at the label volume and rate for the maximum specified concentration of termiticide, according to manufacturer's EPA—Registered Label, to the following

so that a continuous horizontal and vertical termiticidal

barrier or treated zone is established around and under

At foundations.
 Under concrete floor slabs on grade.

building construction.

At hollow masonry.
 At expansion and control joints and slab penetrations.
 Treat all areas including around entrance platform, porches, and equipment bases.

C. Post warning signs in areas of soil treatment application.
 D. Reapply soil termiticide treatment solution to areas disturbed by subsequent excavation or other construction activities following application.
 END OF SECTION 02361

DIVISION 3 CONCRETE

SECTION 03300 — CAST—IN—PLACE CONCRETE
PART 1 — GENERAL
1.1 SECTION REQUIREMENTS (SEE SHEET S—1 FOR ADDITIONAL STRUCTURAL NOTES)

A. Submittals: Product Data, concrete mix designs and submittals required by ACI 301.
 B. Ready—Mixed Concrete Producer Qualifications: ASTM C 94/C 94M.
 C. Comply with ACI 301 "Specification for Structural

C. Comply with ACI 301, "Specification for Structural Concrete"; ACI 117, "Specifications for Tolerances for Concrete Construction and Materials"; and CRSI's "Manual of Standard Practice."

PART 2 — PRODUCTS

2.1 MATERIALS

A. Reinforcing Bars: ASTM A 615, Grade 60, deformed.
B. Plain Steel Wire: ASTM A 82, as drawn.
C. Plain—Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as—drawn steel wire into flat sheets.
D. Deformed—Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.
E. Portland Cement: ASTM C 150, Type I or II.

F. Fly Ash: ASTM C 618, Type C or F.
G. Aggregates: ASTM C 33, uniformly graded.
H. Air-Entraining Admixture: ASTM C 260.
I. Chemical Admixtures: ASTM C 494, Do not use calcium chloride or admixtures containing calcium chloride.
J. Vapor Retarder: Clear 6-mil thick polyethylene sheet.

K. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
L. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
M. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
N. Clear, Solvent-Borne, Membrane-Forming Curing and

Sealing Compound: ASTM C 1315, Type 1, Class A.

O. Clear, Waterborne, Membrane—Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

2.2 MIXES

A. Comply with ACI 301 requirements for concrete mixtures.

B. Normal—Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:

Minimum Compressive Strength: 3000 pp. for

Minimum Compressive Strength: 3000 psi for foundations & 4000 psi for slabs at 28 days.
 Maximum Water—Cementitious Materials Ratio: 0.50
 Slump Limit: 5 inches plus or minus 1 inch.
 Air Content: Maintain within range permitted by ACI 301. Do not allow air content of floor slabs to receive troweled finishes to exceed 3 percent.
 Measure, batch, mix, and deliver concrete according to

ASTM C 94.

1. When air temperature is above 90 deg F , reduce mixing and delivery time to 60 minutes.

PART 3 — EXECUTION

3.1 CONCRETING

tolerances and surface irregularities within ACI 347R limits of Class A, 1/8 inch for concrete exposed to view and Class C, 1/2 inch for other concrete surfaces. Place vapor retarder on prepared subgrade, with joints lapped 6 inches and sealed.

Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

Install construction, isolation, and contraction joints

where indicated. Install full—depth joint—filler strips at

Construct formwork according to ACI 301 and maintain

E. Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.
F. Protect concrete from physical damage, premature drying, and reduced strength due to hot or cold weather during mixing, placing, and curing.
G. Formed Surface Finish: Smooth-formed finish for concrete exposed to view, coated, or covered by waterproofing or other direct-applied material; rough-formed finish elsewhere.
H. Slab Finishes: Comply with ACI 302.1R for screedina.

surfaces. Do not wet concrete surfaces. Provide the following finishes:

Float finish for interior steps and ramps and surfaces to receive waterproofing, roofing, or other direct—applied material.

Troweled finish for floor surfaces and floors to receive

restraightening, and finishing operations for concrete

floor coverings, paint, or other thin film—finish coatings.

Nonslip—broom finish to exterior concrete platforms, steps, and ramps.

Begin curing concrete slabs after finishing. Apply membrane—forming curing and sealing compound to concrete

concrete.

K. Contractor will engage a testing agency to perform field tests and to submit test reports.

L. Protect concrete from damage. Repair surface defects in formed concrete and slabs.

END OF SECTION 03300

SOLID WASTE TRALEMPLOYEE BUILDIN 50 BUCKINGHAM RAMYERS, FL 33905

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+ TRAMONTI

TES LAFAYETTE STREET SUITE #1 CAPE CORAL, FLORIDA

AA 260

DDG

 BAM

11/7/23

4/24/24

6/7/24

8/23/24

DRAWN BY:

CHECKED BY:

SSUED FOR:

PRELIMINARY SET:

PERMIT/BID SET

60% REVIEW COMMENTS

'0% REVIEW COMMENTS

ARCHITECT/ENGINEER STAMP

DRAWING NAME:

SPECIFICATIONS

SHEET

inspection agency indicated: Concealed Boards: 19 percent maximum moisture content: Mixed southern pine: No. 2 per SPIB rules. Miscellaneous Lumber: Standard, Stud, or No. 3 grade of any species for nailers, blocking, and similar Roof Sheathing: Plywood: Exposure 1, Structural I. Telephone and Electrical Equipment Backing Panels: Plywood, Exposure 1, C-D Plugged, fire-retardant treated, not less than 1/2 inch thick. 2.4 MISCELLANEOUS PRODUCTS Fasteners: Size and type indicated. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153. Power-Driven Fasteners: CABO NER-272. Bolts: Steel bolts complying with ASTM A 307, Grade A, with ASTM A 563 hex nuts and, where indicated, flat washers.

INSTALL ATION Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction. Securely attach rough carpentry to substrates, complying with the following: CABO NER-272 for power-driven fasteners. Published requirements of metal framing anchor manufacturer. Florida Building Code "Building" 2017 6th edition for 170 mph windspeed. Fastening Methods: Comply with recommendations in

felt), unperforated.

PART 3 - EXECUTION

END OF SECTION 06100

1.1 SECTION REQUIREMENTS

A. Hardboard: AHA A135.4.

Submittals

type of finish. B. Quality Standard: Architectural Woodwork Institute's "Architectural Woodwork Quality Standards." C. Environmental Limitations: Do not deliver or install woodwork until building is enclosed, wet work is completed, and HVAC system is operating. PART 2 - PRODUCTS 2.1 MATERIALS

B. Medium-Density Fiberboard: ANSI A208.2. Grade MD. made with binder containing no urea formaldehyde. C. $\frac{3}{4}$ " PLYWOOD: ANSI A208.1, Grade M-2. Softwood Plywood: DOC PS 1. Thermoset Decorative Overlay: Comply with LMA SAT — High-Pressure Decorative Laminate: NEMA LD 3. Wilson Art. Formica Brand or approved equal. 2.2 CABINET HARDWARE AND ACCESSORY MATERIALS A. Hardware Standards: Comply with BHMA A156 series

C. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln dried to 15 percent moisture 2.3 INTERIOR WOODWORK A. Complete fabrication before shipping to Project site to maximum extent possible. Disassemble only as needed for shipping and installing. Where necessary for fitting at Project site, provide for scribing and trimming. B. Backout or groove backs of flat trim members, kerf backs of other wide, flat members, except for members with ends exposed in finished Work.

C. Laminate—Clad Cabinets (Plastic—Covered Casework): Custom grade. AWI Type of Cabinet Construction: Flush overlay. Laminate Cladding: Horizontal surfaces other than Drawer Sides and Backs: Thermoset decorative overlav. Drawer Bottoms: Thermoset decorative overlay. D. Plastic-Laminate Countertops: Custom grade. Laminate Grade: HGS for flat countertops, Edge Treatment: Same as laminate cladding on 2.4 SHOP FINISHING OF INTERIOR ARCHITECTURAL WOODWORK A. Finishes: Same grades as items to be finished.

SECTION 06100 - ROUGH CARPENTRY PART 1 — GENERAL 1.1 SECTION REQUIREMENTS

otherwise indicated.

2.3 LUMBER

Submittals: Model code evaluation reports for treated PART 2 - PRODUCTS 2.1 WOOD PRODUCTS, GENERAL

Lumber: Provide dressed lumber, S4S, 19 percent maximum moisture content for 2-inch nominal thickness or less, marked with grade stamp of 2.2 TREATED MATERIALS Preservative—Treated Materials: AWPA C2 lumber and

Dimension Lumber: The following grades are per

Metal Framing Anchors: Hot—dip galvanized steel of

complying with ASTM D 226, Type I (No. 15 asphalt

structural capacity, type, and size indicated.

Building Paper: Asphalt-saturated organic felt

APA Form No. E30K and the following:

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

materials, Shop Drawings and Samples showing the full

B. Exposed Hardware Finishes: Comply with BHMA A156.18

tops, HGS; ; vertical surfaces, VGS; Edges, HGS, and

for BHMA code number indicated.

horizontal surfaces.

Finish: Satin Stainless Steel: BHMA 630.

range of colors, textures, and patterns available for each

r plastic laminate surfacina

Sheathing: Screw to framing.

Catches: Magnetic catches, BHMA A156.9, B03141. AWPA C9 plywood, labeled by an inspection agency Adiustable Shelf Standards: BHMA A156.9, B04071; with approved by ALSC's Board of Review. After treatment. shelf rests, BHMA A156.9, B04081 kiln-dry lumber and plywood to 19 and 15 percent E. Drawer Slides: Side-mounted, zinc-plated steel drawer moisture content, respectively. Treat indicated items slides with steel ball bearings, complying with BHMA and the followina: A156.9. Grade 1 and rated for the following loads: Wood members in connection with roofing, flashing,

vapor barriers, and waterproofing. Concealed members in contact with masonry or concrete. B. Fire-Retardant-Treated Materials: Comply with

Drawer Locks: BHMA A156.11, E07041 performance requirements in AWPA C20 lumber and Grommets for Cable Passage through Countertops: AWPA C27 plywood, labeled by a testing and inspecting 1-inch- OD, brown, molded-plastic grommets with agency acceptable to authorities having jurisdiction brown plastic cap. Use treatment for which chemical manufacturer END OF SECTION 06402 publishes physical properties of treated wood after exposure to elevated temperatures, when tested by a auglified independent testing agency according to ASTM

DIVISION 7 THERMAL AND MOISTURE PROTECTION SECTION 07210 - BUILDING INSULATION PART 1 — GENERAL

PART 3 - EXECUTION

A. Condition cabinets to prevailing conditions before

surfaces, and repair damaged finish at cuts.

3.2 CABINET HARDWARE AND ACCESSORY SCHEDULE

3.3 SEE DRAWINGS FOR ADDITIONAL CABINET NOTES

A. Concealed (European-Type) Hinges: BHMA A156.9,

B. Pulls: Wire pulls, 4 inches long, 5/16 inches in

between backsplash and wall.

Box Drawer Slides: 75 lbf

File Drawer Slides: 150 lbf

Pencil Drawer Slides: 45 lbf.

Door Locks: BHMA A156.11, F0712

B. Scribe and cut cabinets to fit adjoining work, seal cut

Anchor countertops securely to base units. Seal space

3.1 INSTALLATION

1.1 SECTION REQUIREMENTS Submittals: Product Data Surface—Burning Characteristics: ASTM E 84, and as Flame-Spread Index: 25 or less where exposed; otherwise, as indicated in Part 2 "Insulation Products"

Smoked-Developed Index: 450 or less. PART 2 - PRODUCTS 2.1 INSULATION PRODUCTS Usually select Type IV below if extruded polystyrene is used. A. Foil-Faced Polyisocyanurate Board Insulation: ASTM C 1289. Type I. Class 1 or 2, faced on both sides with

aluminum foil, with flame-spread index of 75 or less. Manufacturer: RMAX TRX- 8500 or equal. Mineral-Fiber-Blanket Insulation: ASTM C 665, Type vinyl backed with fibers manufactured from alass, with flame—spread index of 25 or less. Manufacturer: Johns-Manville, Owens Corning or approved equal. (R-38)

CFILINGS Rigid Board Insulation on CMU walls: RMAX TSX 8500 PART 3 - EXECUTION 3.1 INSTALLATION

A. Install insulation in areas and in thicknesses indicated or required to produce R-values indicated. Cut and fit tightly around obstructions and fill voids with insulation.

SECTION 07920 - JOINT SEALANTS PART 1 — GENERAL

1.1 SECTION REQUIREMENTS Submittals: Product Data and color Samples. B. Environmental Limitations: Do not proceed with installation of joint sealants when ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 40 deg F.. PART 2 - PRODUCTS 2.1 JOINT SEALANTS

Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under service and application conditions. Sealant for General Exterior Use Where Another Type Is Not Specified[, One of the Following]:

Single-component, neutral-curing silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses T, NT, M. G. A. and O. Sealant for Exterior Traffic—Bearing Joints, Where Slope Precludes Use of Pourable Sealant: Single-component, nonsag urethane sealant, ASTM C

920, Type S; Grade NS; Class 25; Uses T, NT, M, G, D. Sealant for Exterior Traffic-Bearing Joints, Where Slope Allows Use of Pourable Sealant: Single—component, pourable urethane sealant, ASTM C 920, Type S; Grade P; Class 25; Uses T, M, G, A, and

Sealant for Use in Interior Joints in Hard Surfaces in Wet Areas, Toilet Rooms and Around Plumbing Fixtures: Single-component, mildew-resistant silicone sealant, ASTM C 920, Type S; Grade NS; Class 25; Uses NT, G, A and O: formulated with fungicide.

F. Sealant for Interior Use at Perimeters of Door and Window Frames: 1. Latex sealant, single-component, nonsag, mildew-resistant, paintable, acrylic-emulsion sealant complying with ASTM C 834.

2.2 JOINT-SEALANT BACKING A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant

manufacturer. B. Cylindrical Sealant Backings: ASTM C 1330, of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance. Bond-Breaker Tape: Polyethylene tape or other plastic

tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. PART 3 - EXECUTION

3.1 INSTALLATION A. Comply with ASTM C 1193. END OF SÉCTION 07920

DIVISION 8 DOORS AND WINDOWS

SECTION 08110 - STEEL DOORS AND FRAMES PART 1 - GENERAL 1.1 SECTION REQUIREMENTS Submittals: Product Data and door schedule B. Comply with ANSI A 250.8. Revise below if positive-pressure testing is required. PART 2 - PRODUCTS 2.1 MATERIALS

A. Hot-Rolled Steel Sheets: ASTM A 1011/A 1011M. B. Cold-Rolled Steel Sheets: ASTM A 1008/A 1008M or ASTM A 620/A 620M. Galvanized Steel Sheets: ASTM A 653 G40 coating. 2.2 STEEL DOORS AND FRAMES

Manufacturers: CECO DOOR.(ASSA ABLOY). REPUBLIC DOORS AND FRAMES STEELCRAFT (AN ALLEGION BRAND)

OR APPROVED EQUAL. B. Steel Doors: Complying with ANSI 250.8 for level and model and ANSI A250.4 for physical-endurance level indicated, 1-3/4—inch thick, unless otherwise indicated. Interior Doors: Level 2 and Physical Performance Level B (Heavy Duty), Model 1 (Full Flush)

2. Exterior Doors: Level 2 and Physical Performance Level B (Heavy Duty), Mode [1 (Full Flush), galvanized steel A. Frames: ANSI A250.8; conceal fastenings, unless otherwise indicated. Steel Sheet Thickness for Heavy—Duty Interior Doors:

0.053 inch (16Ga.). 2. Steel Sheet Thickness for Heavy Duty Exterior Doors: 0.053 inch (16Ga.) 3. Fabricate with interior frames with mitered or coped and continuously welded corners, Fabricate with exterior frames from galvanized steel

sheet, with mitered or coped and continuously welded Glazing Stops: Nonremovable stops on outside of exterior doors and on secure side of interior doors; screw-applied, removable, glazing stops on inside. Door Silencers: Three on strike jambs of single-door

frames and two on heads of double-door frames. Plaster Guards: Provide where mortar might obstruct hardware operation. . Supports and Anchors: Not less than 0.042—inch (18 Ga.) thick galvanized steel sheet.

Prepare doors and frames to receive mortised and concealed hardware according to ANSI A250.6 and ANSI A115 Series standards. Reinforce doors and frames to receive surface—applied hardware. Prime Finish: Manufacturer's standard, factory—applied

coat of rust-inhibiting primer complying with ANSI A250.10 for acceptance criteria. PART 3 - EXECUTION 3.1 INSTALLATION Place steel frames to comply with SDI 105. Install doors to comply with ANSI A250.8. Shim as

necessary to comply with SDI 122 and ANSI/DHI A115.1G. After installation, remove protective wrappings from doors and frames and touch up prime coat with compatible air-drying primer.

END OF SECTION 08110

SECTION 08710 - FINISH HARDWARE

PART 1 - GENERAL 1.01 RELATED DOCUMENTS

A. Application provisions of the general conditions are a part of this section Work covered by this Section of Specifications consists of furnishing and delivering to the jobsite for fitting and installation, all Finish Hardware complete, in accordance with this Section and applicable drawings and subject to terms and conditions of Contract. It is intended that the following list of hardware will cover all Finish Hardware to complete the project. Omissions and/or discrepancies

shall be brought to the Architect's attention during the 1.02 ITEMS SPECIFIED IN OTHER SECTIONS A. Finish Hardware shall be installed as specified in the Section "Carpentry and Millwork."

Hardware for the following items are specified as a part of the items in their respective sections. Cabinet and Casework

Overhead Doors Folding Doors Rough and Constructional

Aluminum Door Hardware except Cylinders A. Finish Hardware shall be furnished by one approved by the Architect as having appropriate technical knowledge and experience to correctly interpret drawings and specifications. Supplier shall be prepared at all times during progress of installation to promptly provide competent and efficient Architectural Hardware Consultant, 'AHC", to approve its complete installation in order that all items shall be installed in the best manner and function properly. This will necessitate a job visit prior to final inspection. Supplier shall be bona-fide direct distributor of all material furnished.

1.04 TYPE AND QUALITY A. For purposes of designating type and quality of work of this Section, specifications are based on products of companies named. Products of other manufacturers may be approved if submitted for consideration, ten days prior to bid date, and approved by Addendum. 1.05 DELIVERY

A. All items of Finish Hardware shall be delivered to the project site, or as otherwise specified or required, and shall be checked in for completeness and familiarization with the Contractor. All items of Finish Hardware shall be packaged, numbered, labeled to identify each opening for which it is intended, and to correspond with item numbers on the approved Hardware Schedule.

SECTION 09260 - GYPSUM BOARD ASSEMBLIES

A. All Finish Hardware to be installed on or in metal doors and/or frames shall be manufactured to template. Template machine screws shall be furnished for all such materials. This supplier shall furnish Hardware Schedule as approved by the Architect and all necessary templates to metal door and frame fabricators for their coordinations

1.07 SCHEDULES A. Submit 6 complete typewritten Hardware Schedules to the Architect for approval. After approval, provide required number of copies of approved Hardware Schedule for distribution. No factory order shall be placed for materials until approval has been given by the Architect. B. Two current copies of catalog cuts shall be submitted

with the Hardware Schedule for each item of the Hardware listed in the Schedule.

C. Each item in the Schedule shall be identified on the first page of the Schedule by the manufacturer's name.

1.08 RESPONSIBILITY A. It shall be the supplier's responsibility to furnish Hardware in accordance with the intent of this Specification. Where, by virtue of Architectural design or by function, a change is necessary. Hardware of equal design and quality shall be furnished upon written approval of the Architect. All Hardware shall meet the requirements of applicable codes. i.e. Underwriters Laboratory, Americans with Disabilities Act Title III.

1.09 LOCATIONS A. Hardware locations dimension shall be as follows: Distance from finish floor to center line of: Door Knob Door Pull

Butt Hinges Bottom Hinge - Finish floor to bottom of hinge 10". Top hinge head rabbet to top of hinge 5". Center hinge - equal distance between top and bottom hinges. 1.10 180 DEGREE OPENINGS

A. Other than those doors that are restricted to less than 180 degree opening by building or by overhead holders or stops, all butts and/or closer arms shall be of sufficient size to allow full 180 degree opening of doors. PART 2 - PRODUCTS - SEE DRAWING Ă-9 FÖR HÄRDWARE SPECIFICATIONS

SECTION 08800 - GLAZING PART 1 - GENERAL

Deadlock

Push Plate

Exit Bolt Cross Bar

1 06 INSTALLATION

1.1 SECTION REQUIREMENTS Submittals: Product Data[and 12-inch square Samples. Safety Glass: Category II materials complying with testing requirements in 16 CFR 1201 and ANSI Z97.1.

Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. GANA Publications: "Glazing Manual" and "Laminated Glass Design Guide.'

AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing SIGMA Publications: SIGMA TM-3000, "Vertical Glazing Guidelines.

PART 2 - PRODUCTS 2.1 GLASS Heat—Treated Float Glass: Tempered Glass ASTM C 1048, Condition C (coated)], Type I, Class 1 (clear) and 2 (tinted)] Gray, Quality q3, Kind FT (fully FABRICATED GLASS PRODUCTS

Impact Resistant Laminated Glass shall be level E. Glass Makeup: 1/4" PPG Solar Gray - 180 Clear PVB-1/4", PPG Solarban 70 Low E #3. Missile Level E Impact Rated.

PART 3 - EXECUTION INSTALLATION Comply with combined recommendations of glazing materials, unless more stringent requirements are contained in GANA's "Glazing Manual." Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

Install One Way Mirror Glass with coating toward

subject side. END OF SECTION 08800

DIVISION 9 FINISHES SECTION 09220 - PORTLAND CEMENT PLASTER PART 1 - GENERAL

1.1 SECTION REQUIREMENTS Submittals: Product Data and finish Samples. B. STC-Rated Assemblies: Provide materials and construction identical to assemblies whose STC ratings were determined according to ASTM E 90 and classified according to ASTM E 413 by a qualified independent

C. Fire—Resistance—Rated Assemblies: Provide materials and construction identical to assemblies tested according to ASTM E 119 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS 2.1 METAL FRAMING AND SUPPORTS Ceiling Support Components: Comply with ASTM C 1063. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc

coating, soft temper. Rod Hangers and Flat Hangers: Mild steel, zinc Cold-Rolled Steel Carrying Channels: Minimum 0.0598-inch thick base (uncoated) metal, 1-1/2inches deep, 475 lb/1000 feet and 7/16-inch wide

flanges, with hot-dip galvanized finish, ASTM A 653 4. Cold-Rolled Steel Furring Channels: Minimum 0.0598—inch thick base (uncoated) metal, 3/4 inch deep, 300 lb/1000 feet and 7/16-inch wide flanges, with hot-dip galvanized finish, ASTM A 653/A 653M,

5. Studs for Furring Channels: ASTM C 645, in depth indicated, minimum 0.0179—inch thick base (uncoated) metal, with ASTM A 653 G40 hot—dip galvanized B. Non-Load-Bearing Studs and Runners: ASTM C 645 with

ASTM A 653 G40 hot-dip galvanized coating. Minimum

0.0179—inch thick base (uncoated) metal for studs and minimum 0.0329-inch thick base (uncoated) metal for head and sill runners, and jamb and cripple studs at C. Load-Bearing Studs and Runners: ASTM C 955 with ASTM A 653 G40 hot-dip galvanized coating. Grade 33 for thickness of 0.0329 inch or less Grade 50 Class 1 for thickness of 0.0428 inch or more].

PART 1 - GENERAL SECTION REQUIREMENT: Submittals: Product Data.

PART 2 - PRODUCTS 2.1 METAL FRAMING AND SUPPORTS Steel Framing Members, General: ASTM C 754 Steel Sheet Components: ASTM C 645, with manufacturer's standard corrosion-resistant zinc

Partition and Soffit Framing: Studs and Runners: In depth indicated and minimum 20 gauge thick, unless otherwise indicated.

Flat Strap and Backing: 0.0179 inch or 0.027 inch Rigid Hat—Shaped Furring Channels: In depth indicated

and 0.0179 inch or 0.0312 inch thick. Cold—Rolled Furring Channels: 0.0538 inch thick, 3/4 2.2 PANEL PRODUCTS A. Interior regular gypsum wallboard: Provide type III,

grade R, class 1, 5/8" thick. Fire-retardant Wallboard: Provide Type III, Grade X, Class 1, UL listed, 5/8" thick. Interior moisture-resistant avosum wallboard: provide moisture resistant gypsum wallboard at walls and ceilings at damp locations, equal to 'Gold Bond' 5/8" M.R. (moisture resistant) board, by National Gypsum

D. Corner Beads: Provide angle shapes with wings not less than 7/8" wide and perforated for nailing and joint treatment, equal to USG dur-a-bead corner bead. Casing Beads: Provide galvanized steel channel—shaped casing beads at exposed wallboard edges, equal to USA series NO 200 at locations including but not limited to horizontal edges at top of partial height partitions, and

abuts other materials. Control Joints: Provide staple-applied roll-formed zinc control joints equal to USG control joint no. 093, at 30'-0" o.c. max. Provide flush caulk bead to fill 1/4" open slot after protective tape is removed after adjacent wallboard finishing. Provide fire-safing at fire rated partitions.

vertical and horizontal edges where gypsum wallboard

Provide a jointing system, including reinforcing tape and compound, designed as a system to be used together and as recommended for this use by the manufacturer of the gypsum wallboard approved for use on this work. Jointing compound may be used for finishing if so recommended by its manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION Install steel framing to comply with ASTM C 754 and with ASTM C 840 requirements that apply to framing installation and with United States Gypsum's "Gypsum Construction Handbook."

B. Isolate steel framing from building structure, except at floor, to prevent transfer of loading imposed by structural movement. Where studs are installed directly against exterior walls,

install asphalt-felt or foam-gasket isolation strip between studs and wall. Install and finish gypsum panels to comply with ASTM C 840 and GA-216

Isolate avpsum board assemblies from abutting structural and masonry work. Provide edge trim and acoustical sealant. Single—Layer Fastening Methods: Fasten gypsum panels to supports with screws.

3. Multilayer Fastening Methods: Fasten base layers and face layer separately to supports with screws. D. STC-Rated Assemblies: Comply with ASTM C 919 for location of edge trim and closing off sound-flanking paths around or through gypsum board assemblies.

E. Finishing Gypsum Board Assemblies: 1. Unless otherwise indicated, provide Level 4 finish: Embed tape and apply separate first, fill, and finish coats of joint compound to tape, fasteners, and trim 2. At concealed areas, unless a higher level of finish is required for fire-resistance-rated assemblies, provide

SECTION 09511 - ACOUSTICAL PANEL CEILINGS

Level 1 finish: Embed tape at joints.

END OF SECTION 09260

H. Thickness: 5/8 inch.

PART 1 - GENERAL 1.1 SECTION REQUIREMENTS Submittals: Product Data and material Samples. Surface—Burning Characteristics of Panels: ASTM E 1264, Class [A] [B] materials, tested per ASTM E 84. C. Fire—Resistance—Rated Assemblies: Provide materials and construction identical to those tested in assemblies per ASTM E 119 by an independent testing and

inspecting agency acceptable to authorities having PART 2 - PRODUCTS 2.1 ACOUSTICAL PANELS (All areas as scheduled) Products:

Armstrong: Optima Square Tegular 9/16" #3251 Other Manufacturer's: Classification: Type III, Form 2. Pattern: C D Color: White.

Light Reflectance (LR) Coefficient: Not less than .82. Noise Reduction Coefficient (NRC): Not less than.55 Ceiling Attenuation Class (CAC): Not less than 35. G. Edge Detail: Beveled tegular reveal sized to fit exposed flange of suspension system].

I. Size: 24 X 24 inches. 2.2 CEILING SUSPENSION SYSTEM A. Direct—hung; ASTM C 635,intermediate duty structural ARMSTRONG Prelude ML 15/16" Exposed Tee. #7300

Color: White. Attachment Devices: Sized for 5 times the design load indicated in ASTM C 635, Table 1, Direct Hung, unless otherwise indicated. Wire Hangers, Braces, and Ties: Zinc-coated

carbon-steel wire; ASTM A 641 Class 1 zinc coating, soft 1. Size: Provide yield strength at least 3 times the hanger design load (ASTM C 635, Table 1, (Direct Hung). PART 3 - EXECUTION

3.1 INSTALLATION A. Ceiling Suspension System Installation: Comply with ASTM C 636 and CISCA's "Ceiling Systems Handbook." END OF SECTION 09511

SECTION 09653 - RESILIENT WALL BASE AND ACCESSORIES

PART 1 – GENERAL SECTION REQUIREMENTS

manufacturer's standard lengths.

Trowelable Leveling and Patching Compounds:

Latex-modified, portland cement- or blended hydraulic

manufacturer to suit products and substrate conditions.

cement—based formulation provided or approved by

flooring manufacturer for applications indicated

Adhesives: Water-resistant type recommended by

A. Prepare concrete substrates according to ASTM F 710.

Verify that substrates are dry and free of curing

Adhesively install resilient wall base and accessories

fixtures in rooms or areas where base is required.

Install reducer strips at edges of floor coverings that

Install wall base in maximum lengths possible. Apply to

walls, columns, pilasters, casework, and other permanent

Summary: Paint exposed surfaces, unless otherwise

Do not paint prefinished items, items with an integral

finish, operating parts, and labels, unless otherwise

Mockups: Full-coat finish Sample of each type of

Obtain block fillers and primers for each coating

system from same manufacturer as finish coats.

Extra Materials: Deliver to Owner 1 quart of each

Material Compatibility: Provide materials that are

compatible with one another and with substrates.

Material Quality: Manufacturer's best-quality paint

and recommended by manufacturer for application

Remove hardware lighting fixtures and similar items

be removed. Reinstall items in each area after

Clean and prepare all surfaces in an area before

cleaning operations will not damage newly painted

Apply coatings by brush, roller, spray or other

use of other applicators is not practical.

that are not to be painted. Mask items that cannot

beginning painting in that area. Schedule painting so

applicators according to coating manufacturer's writter

Use brushes only for exterior painting and where the

Use rollers for finish coat on interior walls and

surfaces to provide a smooth, opaque surface of

Transparent (Clear) Finishes: Use multiple coats to

produce a glass-smooth surface film of even luster.

Provide a finish free of laps, runs, cloudiness, color

irregularity, brush marks, orange peel, nail holes, or

Low-Luster Acrylic: Two coats over rust-inhibitive

Low-Luster Alkyd Enamel: Two coats over galvanized

Low-Luster, Acrylic Enamel: Two coats over block

Low-Luster, Acrylic Enamel: Two coats over primer.

EPOXY Two coats over PROMAR 200 LATEX WALL

Low-Luster, Alkyd Enamel: Two coats over ferrous

Low-Luster Semigloss, Acrylic Enamel: Two coats over

Semigloss Sherwin Williams MACROPOXY 646 FASTCURE

Semigloss, Sherwin Williams MACROPOXY 646

ASTCURE EPOXY Two coats over 1 coat of

cloudiness, spotting, holidays, laps, brush marks, runs,

Pigmented (Opaque) Finishes: Completely cover

uniform appearance. Provide a finish free of

sags, repines, or other surface imperfections.

Low-Luster Acrylic: Two coats over primer.

Low-Luster Acrylic: Two coats over primer.

other surface imperfections

Ferrous Metal:

Zinc-Coated Metal:

Plastic Stucco Trim:

Concrete: FPOXY

metal primer.

EXTERIOR PAINT APPLICATION SCHEDULE

INTERIOR PAINT APPLICATION SCHEDULE

Concrete Masonry Units: NON EPOXY

Two coats over block filler

Concrete Masonry Units: EPOXY

KEM-CATI-COAT HS block filler

Gypsum Board: NON EPOXY

Gypsum Board EPOXY

PRIMFR..

END OF SECTION 09910

Ferrous Metal:

metal primer.

Zinc-Coated Metal:

galvanized metal primer..

Concrete, Stucco, and Masonry:

Design Criteria: Sherwin Williams (Duration)

material of coating types specified that are formulated

color and type of finish coat paint used on Project, in

coating, color, and substrate, applied where directed.

Paint the back side of access panels.

Submittals: Product Data and Samples.

containers, properly labeled and sealed.

MCM, Sherwin Williams, PPG

Colors: As selected.

painting is complete.

compounds, sealers, and hardeners.

would otherwise be exposed.

END OF SECTION 09653

PART 1 - GENERAL

PART 2 - PRODUCTS

Products:

indicated.

PART 3 - FXECUTION

PREPARATION

APPLICATION

instructions.

PAINT

2.1

SECTION 09910 - PAINTING

SECTION REQUIREMENTS

Outside Corners: premolded.

Inside Corners: premolded.

INSTALLATION ACCESSORIES

A. Products:

INSTALLATION

A. Submittals: Product Data and Samples. B. Extra Materials: Deliver to Owner at least 25 linear feet, of each type and color of resilient wall base installed. PART 2 - PRODUCTS 2.1 WALL BASE

Johsonite Resilient Vinyl Wall Base. Other Plastic Laminate: High-pressure laminate engraving manufacturer's: ROPPE, ARMSTRONG WORLD INDUSTRIES. stock with face and core in contrasting colors. Color and Pattern: SELECTED BY OWNER Aluminum Sheet: ASTM B 209 (ASTM B 209M), allow ASTM F 1861, Type TV (vinyl). Group (Manufacturing Method): I (solid, homogeneous). Style: Cove with top-set toe

and temper recommended by aluminum producer and finisher, with not less than the strength and durability of 5005-H15. Minimum Thickness: 0.080 inch Aluminum Extrusions: ASTM B 221 (ASTM B 221M), Height: 4 inches. alloy and temper recommended by aluminum producer Lengths: Cut lengths 48 inches long or coils in and finisher, with not less than the strength and

> durability properties of 6063-T5. D. Bronze Castings: ASTM B 584, Alloy UNS C83600 (No. l manganese bronze). Vinyl Film: Opaque nonreflective vinyl film, 0.0035-inch minimum thickness, with pressure—sensitive adhesive backing, suitable for exterior as well as interior

Submittals: Product Data, Shop Drawings, and Samples.

Submit full—size rubbings for metal plaques.

DIVISION 10 SPECIALTIES

SECTION 10431 - SIGNS

SECTION REQUIREMENTS

PART 1 - GENERAL

PART 2 - PRODUCTS

MATERIALS

applications. 2.2 SIGNS Unframed Panel Signs: Engraved plastic laminate square—cut edges and square corners.

Provide signs for all rooms mounted on the room door

Text as listed for names of rooms on the floor plan.

Dimensional Letters and Numbers: Cast-aluminum

Provide a Universal Handicapped sign for each restroom.

Helvetica font, size as shown. Text as listed on the exterior elevations & front sheet. Plagues: Cast-bronze, free from pits, scale, sand holes, and other defects. Provide manufacturer's standard satin polished finish on borders and raised copy. Text to be as listed on title sheet of the

PART 3 - EXECUTION INSTALL ATION Locate signs where indicated or directed by Architect. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in

SECTION 10520 - FIRE- PROTECTION SPECIALTIES PART 1 — GENERAL

END OF SECTION 10431

PART 2 - PRODUCTS

SECTION REQUIREMENTS Submittals: Product Data. Fire Extinguishers: NFPA 10, listed and labeled for the type, rating, and classification of extinguisher.

FIRE EXTINGUISHERS AND CABINETS Portable Fire Extinguishers Multipurpose dry—chemical type, UL-rated (5 A 10BC.)

Kidde,(United Technologies), Larsen's Manufacturing Corp., First Strike Corp. of America. Fire Protection Cabinets: Enameled steel. semi-recessed cabinets for fire extinguisher.

Kidde,(United Technologies), Larsen's Manufacturing Corp., First Strike Corp. of America. Trim Style: Rolled trim. Door and Trim Material: Enameled steel.

Door Glazing: Tempered float glass.

Door Style: Fully glazed with frame. Accessories: Mounting brackets. PART 3 - EXECUTION 3.1 INSTALLATION Install cabinets and brackets at heights indicated or, if not indicated, at heights to comply with applicable

regulations of authorities having jurisdiction.

FND OF SECTION 10520 DIVISION 11 EQUIPMENT

NOT APPLICABLE

NOT APPLICABLE

DIVISION 12 FURNISHINGS NOT APPLICABLE

NOT APPLICABLE DIVISION 14 CONVEYING SYSTEMS

DIVISION 15 MECHANICAL REFERENCE MECHANICAL DRAWINGS

DIVISION 16 ELECTRICAL REFERENCE ELECTRICAL DRAWINGS

MODULAR BUILDING SPECIALTIES

DESIGN CRITERIA:

BUSINESS OCCUPANCY TYPE V NON-RATED CONSTRUCTION 170 MPH WIND LOAD FORT MYERS, LEE COUNTY

FRAME CONSTRUCTION:

PERIMETER TYPE 12" STEEL 1 BEAM, DETACHABLE HITCH

FLOOR CONSTRUCTION:

.040 SIMPLEX BOTTOM BOARD, R-19 INSULATION, STEEL FLOOR JOIST @ 16" O.C. DOUBLE 5/8" T&G FLOORING DECKING HELD BACK WITH A 1/2" LUXURY VINYL TILE - 12"x24" MOHAWK ULTIMATEFLEX PLUS

LUXURY VINYL TILE AND PLAN. INSTALLED IN A 50% OFFSET

EXTERIOR WALL CONSTRUCTION

ROOF/CEILING CONSTRUCTION:

TRANSVERSE TRUSS WITH A 24" OVERHANG ON GABLES. 5/8" PLYWOOD SHEATHING PER CODE. 2'x2' T-GRID CEILING. 9'-0" A.F.F.

PHOTOCELL AND NO SWITCH. - (8) LED WALL PACKS ON A PHOTOCELL FOR EXTRA LIGHTING. FXHAUST FAN.

- EMERGENCY AND EXIT LIGHTING REQUIRED. - (24) TELEPHONE J-BOX AND CONDUIT ROUGH IN ABOVE THE

- FIRE ALARM ROUGH IN THE J-BOXES AND CONDUIT. - TRAINING ROOM LIGHT SWITCHES ON A 3-WAY AND DIMMER. - (18) GFCI RECEPTACLES, (5) EXTERIOR, (8) DEDICATED AT WET

- (2) FLOOD QUAD OUTLETS.

<u>PLUMBING:</u>

- (10) QUAD OUTLETS.

 WALL HUNG LAVATORY FLUSH VALVE URINALS - (3) STAND UP SHOWERS - TWO OF THESE MAY HAVE TO BE

- REFRIGERATED DRINKING FOUNTAIN, HANDICAP WITH (2) BOTTLE

MISCELLANEOUS:

SKIRTING TO MATCH SIDING. 8' BASE OVERHEAD CABINET WITH 22x22" SINK. 18" "L" SHAPED BASE & OVERHEAD CABINET. BRAND NEW ALUMINUM - (3) STEPS AND 30' HANDICAP RAMP FOR A BUILDING SET AT 34" ABOVE FINISHED GRADE.

DRAWN BY: DDG

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 BAM CHECKED BY: SSUED FOR: 11/7/23 PRELIMINARY SET: 60% REVIEW COMMENTS 4/24/24 70% REVIEW COMMENTS 6/7/24 PERMIT/BID SET 8/23/24

ARCHITECT/ENGINEER

STAMP

DRAWING NAME:

SHEET

ART A. CASTELLANOS NO. AR0015473

SPECIFICATIONS

TRANSI DING M ROA E B S $\stackrel{>}{>}\stackrel{\square}{\square}\stackrel{\square}{>}\stackrel{\square}{\square}$

CHECKER PATTERN.

2x6" WOOD STUDS @ 16" O.C. R-19 INSULATION HI-RIB STEEL WITH VERTICAL SIDING AND TRIM 5/8" SHEATHING PER CODE

4" VINYL FLOOR COVE BASE TRIM.

INTERIOR WALL CONSTRUCTION:

2x4" WOOD STUDS @ 16" O.C. TEXTURED PAINTED 5/8" GYPSUM BOARD WITH SOUND BATT INSULATION IN THE TWO OFFICES, RESOURCE ROOM, BREAK ROOM, HALLWAYS AND THE TRAINING ROOM FRP PANEL IN MEN'S RESTROOM AND LOCKER ROOM, WOMEN'S RESTROOM AND LOCKER ROOM, AND JANITOR'S CLOSET. SOUND BOARD ON ALL OF THE TWO OFFICE WALLS (EXCEPT THE EXTERIOR WALLS).

R-38 INSULATION WHITE .60 MIL EPDM ROOF WITH A 20-YEAR ROOF WARRANTY. 6" STEAL FAST TAPE ON THE MATE LINE THEN AN ADDITIONAL 12" ROOF CAP OVER THE MATELINE

ELECTRICAL:

- (3) 125 AMP I PHASE I 120/240 VOLT LOAD CENTERS W/ MAIN 2'x4' LED LIGHT - (4) EXTERIOR INCANDESCENT ENTRANCE LIGHTING. WITH

- FULL LIGHT IN THE RESTROOM.

BAR, (5) RESTROOM. - (4) OUTLET & J-BOX @ 80" A.F.F.

- CPVC SUPPLY, PVC DRAIN, WASTE, VENT. FLUSH VALVE HANDICAP WATER CLOSET

- TOILET PAPER HOLDER, FRAMED MIRROR.

HANDICAP. DIVISION 13 SPECIAL CONSTRUCTION WATER HEATER.

H.V.A.C.:

- (3) 5.0 TON 10 KW WALL MOUNT, HAVE UNIT(S) - (2) OF THE FLOÒRS WITH ERV & DEHUM FOR THE LARGE ARÈÁS. - OVERHEAD DUCTED SUPPLY SYSTEM WITH BUTTER FLY DAMPERS. - OVERHEAD DUCTED RETURN SYSTEM W/ PLENUM WALL.

a. TYPE CATVP b. TYPE CATVP CABLE SUPPORTED BY AN OPEN METALLIC CABLE TRAY OR OPEN CABLE TRAY SYSTEM

c. TYPE CATVP, CATVR, AND CATV CABLES IN EMT RACEWAY

CABLES IN VERTICAL RISERS SHALL BE a. TYPE CATVR CABLE

OTHER LOCATIONS NOT LISTED ABOVE,

a. TYPE CATVP, CATVR, CATV CABLES b. TYPE CATVP, CATVR, CATV CABLES IN EMT RACEWAY

VOICE, AUDIO, VIDEO, DATA, INTERACTIVE SERVICES, NOT INCLUDING FIRE LARM AND SECURITY (BURGLAR) ALARM SYSTEMS SHALL BE AS LISTED BELOW:

FABRICATED DUCT USED FOR ENVIRONMENTAL AIR SHALL BE PERMITTED TO BE, a. TYPE CMR, CMP, CMG, AND CM, CABLES INSTALLED IN EMT RACEWAY

RETURN AIR PLENUMS SHALL BE PERMITTED TO BE,

 a. TYPE CMP b. TYPE CMP CABLE SUPPORTED BY AN OPEN METALLIC CABLE TRAY OR OPEN CABLE TRAY SYSTEM

c. TYPE CMP, CMR, CMG, AND CM CABLES INSTALLED IN EMT RACEWAY

TYPE CATVP, CATVR, AND CATV CABLES IN EMT RACEWAY CABLES IN VERTICAL RISERS SHALL BE,

a. TYPE CMR CABLE b. TYPE CMP, CMR, CMG, AND CM CABLES INSTALLED IN EMT RACEWAY

OTHER BUILDING LOCATIONS NOT LISTED ABOVE SHALL BE PERMITTED TO BE,

a. TYPES CMP, CMR, CMG, AND CM CABLES TYPES CMP, CMR, CMG, AND CM CABLES IN EMT RACEWAY

ATTENTION TO CONTRACTOR

A. THE CONTRACTOR MAY SUBMIT TO THE OWNER, THROUGH THE ARCHITECT TO THE ENGINEER, PROPOSALS THAT CHANGE THE CONTRACT DOCUMENTS RESULTING IN CONSTRUCTION COST SAVINGS AND/OR TIME SAVINGS.

B. THE 'VE' PROPOSAL MUST MAINTAIN THE ESSENTIAL FUNCTIONS AND CHARACTERISTICS OF THE FACILITY INCLUDING BUT NOT LIMITED TO SAFETY, SERVICE LIFE, EASE OF MAINTENANCE, AND APPEARANCE.

C. THE CONTRACTOR'S CONCEPTUAL 'VE' PROPOSAL WILL BE SUBMITTED, THROUGH THE ARCHITECT TO THE ENGINEER FOR REVIEW, PRIOR TO SUBMISSION TO THE OWNER.

D. IF ACCEPTED, THE CONTRACTOR SHALL SUBMIT A FORMAL VE PROPOSAL, LISTING THE

1. ENGINEERING RECOMMENDATIONS AND/OR COMMENTS.

2. MATERIAL COST SAVINGS 3. LABOR COST SAVINGS

4. ADVANTAGES AND/OR DISADVANTAGES.

5. TOTAL COST PER PLAN AND SPECIFICATION BEFORE AND FOLLOWING ACCEPTED

E. COSTS FOR REVIEW AND REVISIONS TO THE CONTRACT DOCUMENTS WILL BE BORN BY

T. THE OWNER WILL BE THE SOLE JUDGE OF THE VALUE ENGINEERING PROPOSAL IN DETERMINING THE FOLLOWING:

1. ACCEPTED OR REJECTED 2. CONSTRUCTION COST SAVINGS

3 LABOR COSTS/TIME SAVINGS 4. ADVANTAGES AND/OR DISADVANTAGES

AMPS OR AMPERE

ALUMINUM

BREAKER

BKR

ELEC

ELEV

EMT

EWC

[EG]

GEC

GRD

GFCI

GRS

HVAC

HTR

KCMIL

KVA

ABOVE COUNTER TOP

ABOVE FINISHED FLOOR

AIR HANDLING UNIT

CIRCUIT BREAKER

CONDENSING UNIT

DISCONNECT

EXHAUST FAN

ELECTRIC

EXISTING

HOMERUN

HIGH VOLTAGE

JUNCTION BOX

KILOWATTS

LOW VOLTAGE

1000 CIRCULAR MILS

KILOVOLT AMPERES

HEATER

HERTZ

ELEVATION

EMERGENCY

AMERICAN WIRE GAUGE

ABOVE BASE FLOOD ELEVATION

ARC FAULT CIRCUIT INTERRUPTER

AMPERE INTERRUPTING CAPACITY

EQUIPMENT GROUNDING CONDUCTOR

ELECTRICAL METALLIC CONDUIT

ELECTRIC WATER COOLER

FLEXIBLE METALLIC CONDUIT

GROUNDING ELECTRODE CONDUCTOR

GROUND FAULT CIRCUIT INTERRUPTER

HEATING, AIR-CONDITIONING, REFRIGERATION

HEATING VENTILATION AIR CONDITIONING

LIQUIDTIGHT FLEXIBLE METAL CONDUIT

LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT

FLORIDA POWER & LIGHT

GALVANIZED RIGID STEEL

EQUIPMENT GROUND

AUTOMATIC TRANSFER SWITCH

3. THE OWNER RESERVES THE RIGHT TO DISREGARD THE CONTRACT UNIT BID PRICES IF, IN THE JUDGMENT OF THE OWNER AND/OR ARCHITECT, SUCH PRICES DO NOT REPRESENT FAIR VALUE FOR THE WORK TO BE PERFORMED OR DELETED. THE ARCHITECT WILL ADJUST THE CONTRACT UNIT BID PRICES IN EVALUATING THE CONSTRUCTION COST SAVINGS OF THE VALUE ENGINEERING PROPOSAL. IF THE OWNER APPROVES THE 'VE' PROPOSAL, THE OWNER WILL ORDER CHANGES TO THE CONTRACT DOCUMENTS THAT REFLECT THE 'VE' PROPOSAL. COST SHALL BE AT STANDARD PROPOSAL RATES

. THE OWNER WILL NOT REIMBURSE THE CONTRACTOR FOR ANY ENGINEERING OR PREPARATION EXPENDITURES OF THE 'VE' PROPOSAL.

MATERIAL OR CIRCUITRY CHANGES MADE TO DOCUMENTS WITHOUT THE SUBMITTAL REVIEW PROCESS, AND ACCEPTED BY THE ENGINEER, SHALL BE AT DOUBLE THE HOURLY RATE. CHANGES OR REVISIONS NOT ACCEPTED BY THE ENGINEER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND NOT CAUSE A DELAY OF THE PROJECT.

I: CHANGE ORDERS. WHEN THE OWNER REQUEST CHANGES TO THE DOCUMENT, THE CONTRACTOR SHALL PROVIDE A CHANGE ORDER WITH . MATERIAL LABOR. SALES TAX. MARK -UP (OVERHEAD & PROFIT), IN AN ITEMIZED BREAKOUT. MARK-UP FOR CHANGE ORDERS SHALL BE NOTED IN THE CONTRACTORS PROPOSAL OR NOT TO EXCEED 20%.

ABBREVIATIONS

MCA

MOCP

NEMA

NTS

QTY

TBBD

UPS

MAXIMUM

METAL-CLAD

MAIN LUGS ONLY

MEDIUM VOLTAGE

NORMALLY CLOSED

NOT IN CONTRACT

NOT TO SCALE

PUSHBUTTON

PHOTO-ELECTRIC CELL

POLYVINYL CHLORIDE

SURGE SUPPRESSION DEVICE

TIME TO CLOSE OR TRAY CABLE

UNINTERRUPTIBLE POWER SUPPLY

VARIABLE FREQUENCY DRIVE WIRE, WATTS, WITH, WIDTH

TELEPHONE BACKBOARD

OVERHEAD

QUANTITY

RECEPTACLE

SECONDARY

SOLID NEUTRAL

STAINLESS STEEL

SWITCHBOARD

UNDERCOUNTER

UNDERGROUND

VOLT AMPERES

WEATHERPROOF

TRANSFORMER

WEATHER RESISTANT

VOLTS

TELEPHONE

NON FUSE

MINIMUM CIRCUIT AMPACITY

MANUAL TRANSFER SWITCH

NORMALLY OPEN OR NUMBER

MAXIMUM OVER-CURRENT PROTECTION DEVICE

NATIONAL ELECTRICAL MANUF ASSOCIATION

PANEL, PANELBOARD OR LOADCENTER

MOTOR CONTROL CENTER

ELECTRICAL SPECIFICATIONS

1. THE GENERAL CONDITIONS OF THE CONTRACT, CURRENT EDITION, PUBLISHED IN STANDARD FORM BY THE AMERICAN INSTITUTE OF ARCHITECTS SHALL BE PART OF THIS CONTRACT.

UPON RECEIPT OF SUBMITTALS FOR EACH SECTION AS NOTED BELOW THE ENGINEER SHALL REVIEW BY ITEM. REJECTED PRODUCT SUBMITTALS SHALL REQUIRE CONTRACTOR TO RESUBMIT FOR A SECOND REVIEW.

SUBMITTALS NOT CORRECTED OR MISSING FROM THE SECOND REVIEW, THE CONTRACTOR SHALL COMPENSATE THE ENGINEER FOR SECOND REVIEW AND ALL SUBSEQUENT REVIEWS, BORNE BY THE CONTRACTOR AT ADDITIONAL SERVICES HOURLY RATES.

2A. THE CONTRACTOR SHALL BE A LICENSED MASTER ELECTRICIAN, AND SHALL SUPERVISE THE ENTIRE INSTALLATION TO BE PERFORMED IN A 'NEAT AND WORKMANLIKE' MANNER, PLUMB AND LEVEL, COORDINATED WITH ALL OTHER TRADES, CODE COMPLIANCE WITH APPLICABLE CODES, POWER UTILITY AND INSPECTION AUTHORITY.

2B. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A TRADESMAN WITH A MINIMUM CERTIFICATE OF COMPETENCY JOURNEYMAN ELECTRICIAN FOR THIS PROJECT. ENGINEERING STAFF WHEN VISITING THE SITE MAY REQUEST EVIDENCE OF LICENSE HOLDER. IF A LICENSE HOLDER IS NOT ON SITE WITH LIKE TRADESMEN AND/OR THE ENGINEER OBSERVES MANNER OF WORK NOT COMPLYING WITH (2A) THE PROPERTY OWNER SHALL BE

3. THE 'CONTRACTOR' IN THESE SPECIFICATIONS SHALL REFER TO THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.

4. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL PLANS AND SPECIFICATIONS. SUCH PLANS AND SPECIFICATIONS ARE CONTRACT DOCUMENTS. VERIFY ALL MECHANICAL REQUIREMENTS PRIOR TO INSTALLATION.

5. DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW APPROXIMATE LOCATIONS. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY AND ALL DETAILS OF CONSTRUCTION. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS TO PROVIDE A COMPLETE ELECTRICAL INSTALLATION WITH ALL EQUIPMENT IN PROPER WORKING ORDER.

6. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT, CONFIRM WITH OWNER'S REPRESENTATIVE.

7. BIDDERS SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS SURROUNDING THE WORK. IN SOME AREAS, EXISTING PLANS ARE NON-EXISTENT OR VAGUE. IT SHALL BE THE RESPONSIBILITY OF THE BIDDERS TO VISIT THE SITE OF THE WORK AND ACQUAINT THEMSELVES WITH ALL AVAILABLE INFORMATION REGARDING THE LOCATION OF ALL EXISTING FACILITIES. FAILURE OF THE BIDDERS TO SO INFORM THEMSELVES OF EXISTING CONDITIONS AND TO INCLUDE IN THEIR PROPOSALS A SUM SUFFICIENT TO COVER SAME WILL NOT ENTITLE THEM TO AN EXTRA.

8. SHOULD ELECTRICAL WORK BE INSTALLED WHICH INTERFERES WITH CLEARANCES REQUIRED FOR GENERAL CONSTRUCTION OR WORK WITH OTHER TRADES, SUCH WORK SHALL BE CORRECTED AT NO ADDITIONAL COST

9. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.

10. THE ENGINEER SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION AND THE CONTRACTOR OF INSTALLATIONS THAT DO NOT QUALIFY AS 'NEAT AND WORKMANLIKE', TO BE CORRECTED PRIOR TO SUBSEQUENT INSPECTION.

11. EQUIPMENT SHALL BE INSTALLED ABOVE THE BASE FLOOD ELEVATION. SERVICE DISCONNECT(S) AND BREAKERS USED AS SWITCHES ABOVE 6'-7" SHALL BE ACCESSIBLE FROM FLOOR OR WORKING PLATFORM 30" WIDTH, 36" DEPTH WORK SPACE IN FRONT OF EQUIPMENT.

12. CONTRACTOR SHALL BE RESPONSIBLE TO SEAL PENETRATIONS IN RATED WALLS OR FLOORS WITH LISTED SMOKE/FIRE RATED ASSEMBLIES.

13. UPON COMPLETION OF THE WORK, THIS CONTRACTOR SHALL REMOVE ALL RUBBISH CAUSED BY HIS WORK AND SHALL THOROUGHLY CLEAN ALL ELECTRIC EQUIPMENT.

14. PROVIDE AUTOCAD COMPATIBLE AS-BUILT DRAWINGS AT COMPLETION OF

15. ALL WORK SHALL BE GUARANTEED FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY.

16. MOTOR STARTERS AND CONTROLS FURNISHED BY THE MECHANICAL CONTRACTOR SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING OF MECHANICAL CONTRACTORS EQUIPMENT SHALL INSTALLED AND TERMINATED BY THE MECHANICAL CONTRACTOR. THE E.C. SHALL PROVIDE POWER SUPPLY WIRING, WHEN APPLICABLE.

CONSTRUCTION WITH GFCI PROTECTION.

17. THE CONTRACTOR SHALL PROVIDE DISCONNECT SWITCHES, EXCEPT WHEN 18. ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER FOR

> 19. DISTRIBUTION PANELS, PANELBOARDS, AND TRANSFORMERS SHALL BE IDENTIFIED USING ENGRAVED, LAMINATED ACRYLIC OR MELAMINE LABEL

WHITE LETTERS ON BLACK BACKGROUND, LETTER HEIGHT TO BE 3/8" AFFIXED TO COVER. 20. DISCONNECTS, STARTERS, MOTOR CONTROL CENTERS SHALL BE IDENTIFIED

ON FACE OF COVER.

WITH EQUIPMENT SERVED AND PANEL/CIRCUIT NUMBER. {EXAMPLE: AHU-1 21. JUNCTION AND PULL BOXES SHALL HAVE PANEL/CIRCUIT NUMBER MARKED

22. THE ENGINEER MAY REQUEST FROM THE CONTRACTOR MANUFACTURERS PRODUCT INSTALLATION INSTRUCTIONS. PRODUCTS NOT INSTALLED PER THE INSTALLATION INSTRUCTIONS, FIELD ALTERED, OR SUBSTANDARD HARDWARE SHALL BE CORRECTED OR REPLACED AT CONTRACTORS COST. THE ENGINEER SHALL DEEM WHICH FIELD ALTERED PRODUCTS SHALL BE

23. ALL ELECTRICAL DEVICES SHALL BE NEW, SPECIFICATION GRADE AND BE LISTED FOR USE BY U.L. OR AN EQUAL TESTING LABORATORY.

24. NOMINAL MOUNTING HEIGHT OF DEVICES IN EXPOSED CONCRETE BLOCK, TILE OR BRICK WALLS SHALL ALL OCCUR WITHIN A STRUCTURAL COURSE. A MINIMUM AMOUNT OF BLOCK, TILE OR BRICK WALLS SHALL BE CUT.

25. THIS CONTRACTOR SHALL TOUCH UP OR REFINISH THE FACTORY FINISH OF EQUIPMENT MARRED DURING SHIPMENT OR INSTALLATION.

26. CONNECTIONS TO ELECTRICAL EQUIPMENT EXPOSED TO WEATHER SHALL BE MADE WITH WATER TIGHT FITTINGS AND BE NEMA 3R RATED.

27.ALL EQUIPMENT SHALL BE FULLY RATED UNLESS MARKED OR NOTED OTHERWISE. SERIES-RATING OF CIRCUIT BREAKERS SHALL BE PERMITTED WHERE LISTED FOR USE WITH SAME MANUFACTURER AND WHEN NOTED 'SERIES RATED' IN THE RISER NOTES OR PANEL SCHEDULE. CIRCUIT BREAKERS PROTECTING HVAC EQUIPMENT SHALL BE HACR RATED. (EQUIPMENT IS SPECIFIED TO MEET THESE REQUIREMENTS)

28. VERIFY AND COMPLY WITH ALL REQUIREMENTS OF POWER COMPANY, TELEPHONE & CABLE COMPANIES PRIOR TO INSTALLATION.

29. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITER'S LABELS, WHERE

30. ALL CIRCUIT BREAKERS, TWO AND THREE POLE, TO BE COMMON TRIP NO TIE HANDLES, TANDEMS OR "WAFER BREAKERS" WILL NOT BE ACCEPTED.

31. THE FIRE ALARM CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, PERMIT(S) AND PAY ALL FEES ASSOCIATED WITH HIS WORK.

32. IN COMPLIANCE WITH THE RESIDENTIAL SWIMMING POOL SAFETY ACT EACH ENTRYWAY FROM THE HOUSE TO THE POOL INCLUDING WINDOW OPENINGS, SHALL BE EQUIPPED WITH A SINGLE POLE SINGLE THROW MICROSWITCH, ALL SWITCHES ARE TO BE WIRED BY THE ELECTRICAL CONTRACTOR TO AN EXIT ALARM WITH A MINIMUM LEVEL OF 85 DBA AT 10 FEET, POWERED BY A LOCKABLE CIRCUIT BREAKER ON A DEDICATED CIRCUIT. ONE OR MORE ALARM ON A DEDICATED CIRCUIT. ONE OR MORE ALARM DEVICES TO BE IN REAR PORTION OF HOUSE AT LOCATION OR LOCATIONS SPECIFIED BY OWNER. IF OTHER PROVISIONS ARE MADE FOR COMPLIANCE THE ABOVE MAY BE OMITTED.OR MODIFIED.

33. ALL SMOKE DETECTORS TO BE UL APPROVED, SINGLE STATION, EACH POWERED BY 120 V.A.C. FROM UNIT PANEL (MAY BE WIRED TO CLOSEST UN-SWITCHED CIRCUIT) AND WITH 9 V.D.C. INTERNAL BATTERY BACKUP WITH LOW BATTERY INDICATION. ALL DETECTORS TO BE INTERCONNECTED WITH APPROVED #12 OR LARGER CONDUCTORS OR CABLE (SO THAT THE ACTIVATION OF ANY ONE WILL CAUSE ALL TO SOUND). INTERCONNECTION WITH SECURITY SYSTEM PERMITTED IF UL LISTING IS MAINTAINED.

34. PROVIDE THE FOLLOWING SIGNAGE: a. THE ELECTRICAL SERVICE ENTRANCE MUST BE FIELD MARKED, SUITABLE FOR THE CONDITIONS WHERE INSTALLED, SHOWING THE MAXIMUM FAULT CURRENT WITH THE DATE CALCULATED, NEC 110.24(A)

b. THE PANELBOARDS WITH FEEDERS MUST BE MARKED SHOWING THE LOCATION OF THE DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES. NEC 408.4(B).

35. FOR METALLIC CONDUIT FEEDERS CONNECTED TO METALLIC ENCLOSURES USING ECCENTRIC OF CONCENTRIC KNOCK OUTS, PROVIDE FITTINGS TO CONNECT BONDING JUMPERS SIZED PER TABLE 250.122

36. TERMINATIONS IN SALT-AIR ENVIRONMENT: GULF-SIDE AND BAY SIDE OF GULF SHORE BLVD AND GULF OF MEXICO WATER CHANNELS SHALL APPLY OXIDANT TO COPPER AND ALUMINUM MECHANICAL TERMINATIONS OF SERVICE ENTRANCE AND FEEDER CONDUCTORS.

NEW SPECIFICATION

SUBMIT CLEAN, MARKED IN RED INK OR YELLOW HIGHLIGHTER, AS ONE PDF SET OF SHOP DRAWING(S) FOR APPROVAL, FOR THE FOLLOWING APPLICABLE 1995 DIVISIONS:

☐ 16110 - RACEWAYS, BOXES, FITTINGS HARDWARE AND SUPPORTS 16120 - WIRE , CABLE, TERMINATIONS AND MARKERS 16140 - WIRING DEVICES, PLATES AND COVERS

16150 - DISCONNECTS, STARTERS, CONTACTORS, SURGE PROTECTION DEVICES, & FUSES

16430 - SERVICE EQUIPMENT AND METERING 1 16450 - GROUNDING SYSTEM

16470 - DISTRIBUTION, PANELBOARDS AND TRANSFORMERS 16510 - LIGHTING FIXTURES AND ACCESSORIES

1 16860 - AUTOMATIC TRANSFER SWITCHES 16880 - GENERATOR 16990 - UNDERGROUND CONDUIT DRAWING WITH TRADE SIZES (THIS MAY BE

PROVIDED SEPARATELY AS A DWG FILE OR LEGIBLY MARKED IN RED INK ON 24" X 36" SHEET)

APPLICABLE CODES

FLORIDA BUILDING CODE 8th EDITION (2023) FLORIDA FIRE PREVENTION CODE 8th EDITION 2023 FLORIDA PLUMBING CODE 8th EDITION

2023 FLORIDA MECHANICAL CODE 8th EDITION 2018 NFPA 10, STANDARD FOR PORTABLE FIRE EXTINGUISHERS 2019 NFPA 20, (**) OF STATIONARY FIRE PUMPS FOR FIRE PROTECTION 2021 NFPA 37, (**) AND USE OF STATIONARY COMBUSTION ENGINES AND GAS TURBINES

2020 NFPA 58, LIQUID PETROLEUM GAS CODE 2020 NFPA 70, NATIONAL ELECTRICAL CODE 2015 NFPA 70E, STANDARD FOR ELECTRICAL SAFETY IN THE WORK PLACE

 \square 2020 NFPA 780, (**) OF LIGHTNING PROTECTION SYSTEMS

2019 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE 2021 NFPA 90A, (**) OF AIR-CONDITIONING AND VENTILATION SYSTEMS 2019 NFPA 110, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS 2021 NFPA 99, HEALTHCARE FACILITIES CODE

** - (STANDARD FOR THE INSTALLATION)

ELECTRICAL SHEET INDEX

ABBREVIATIONS, SPECIFICATIONS, SYMBOL LEGEND SITE PLAN, RISER DIAGRAM LIGHTING PLAN & SCHEDULES POWER & SYSTEMS PLAN EGRESS PHOTOMETRY PLAN

E-3

E-4

RACEWAY, WIRING & SUPPORT METHODS THE METHODS IDENTIFIED BELOW SHALL BE USED FOR THIS PROJECT:

■ EMT CONDUIT

☐ MC CABLE

☐ EMT CONDUIT HOMERUNS, MC CABLE BEYOND THE SWITCH FOR LIGHTING

■ EMT/PVC SCHEDULE 40 AND MC CABLE FOR BRANCH CIRCUITRY

PVC SCHEDULE 40 UNDER SLAB OR GRADE AND WITHIN MASONRY WALLS WITH LISTED FITTINGS (3/4" TRADE SIZE MINIMUM)

■ PVC SCHEDULE 80 (SERVICE ENTRANCE)

PVC SCHEDULE 80 WHERE EXPOSED OUTDOORS AND WHERE SUBJECT TO PHYSICAL DAMAGE FROM GRADE TO 8 FEET ABOVE.

☐ MC CABLE, PLENUM RATED

☐ MC CABLE WITH HVAC CIRCUITS IN OUTSIDE DWELLING UNIT IN CONDUIT

☐ SCHEDULE 40 PVC FOR FEEDERS

PVC SCHEDULE 40 ABOVE SLAB OR GRADE DUE TO CORROSIVE ELEMENTS RIGID STEEL OR IMC CONDUIT, LIQUIDTITE FLEXIBLE METAL CONDUIT (LFMC)

☐ FLEXIBLE METAL CONDUIT

RACEWAY AND WIRING METHODS FOR DATA AND COMMUNICATIONS:

3/4" EMT CONDUIT FROM 4" SQ OUTLET BOX WITH 1 GANG PLASTER RING TO ACCESSIBLE CEILING AREA WITH THROAT INSULATORS AT EACH END

☐ EMT CONDUIT FROM 4" SQ OUTLET BOX TO CABLE TRAY

□ PVC SCHEDULE 40 UNDER SLAB FROM OUTLET BOX TO TERMINAL BACKBOARD

☐ FREE WIRE IN WALLS AND CEILING

CONDUCTORS USED ON THIS PROJECT:

COPPER CONDUCTORS , 75°C RATED, THWN INSULATION (MIN. 12 AWG) COMPACT ALUMINUM CONDUCTORS, 75°C RATED, XHHW INSULATION (AS NOTED)

USE COMPRESSION LUGS AT ALL TERMINATIONS COMPACT ALUMINUM CONDUCTORS, TYPE USE-2 / RHH / RHW-2 DIRECT BURIAL RATED, USED FOR 'TEMPORARY POWER ONLY'

SUPPORTS AND HARDWARE USED ON THIS PROJECT:

ZINC COATED, HOT DIPPED GALVANIZED (**)

☐ STAINLESS STEEL (316)

☐ FIBERGLASS REINFORCED PLASTIC (FRP) (**)

(**) RESEAL CUT MATERIAL

FBC 107.3.5

1A) BRANCH WIRING: MINIMUM 1/2" EMT CONDUIT AND HOMERUNS IN MINIMUM 3/4" WITH THWN CONDUCTORS. AND MINIMUM 3/4" PVC CONDUIT AND THWN CONDUCTORS FOR OUTDOOR WIRING

1B) SERVICE(S): THE SERVICE SYSTEM VOLTAGE OF 480Y/277V, 3Ø, 4-WIRE AND A DOWNSTREAM 208Y/120V STEPDOWN XFMR. SEE SHEET E-2 FOR RISER DIAGRAM AND PANEL SCHEDULE

1C) FEEDERS: PROVIDE SCHEDULE 40 PVC CONDUIT WITH THWN CONDUCTORS.

1D) OVERCURRENT PROTECTION: SEE RISER DIAGRAM ON SHEET E-2 1E) GROUNDING: THE GROUNDING ELECTRODE SYSTEM SHALL DRIVEN

ENCASED ELECTRODE. ALL ELECTRICAL OR ELECTRICALLY CONNECTED EQUIPMENT ACCORDING TO NEC SECTION 250 1F) WIRING METHODS: SHALL COMPLY WITH NEC CHAPTER 3. ALL BOXES, PLASTER RINGS SHALL BE METAL, WIRING SHALL BE 75°C THWN INSULATION, 20 AMPERE, SWITCHES AND RECEPTACLE OUTLETS WITH

ROD ELECTRODE AT THE METER. THE BUILDING SHALL HAVE A CONCRETE

IDENTIFY THE PANEL/CIRCUIT DESIGNATION. 1G) GFCI: OUTDOOR WEATHERPROOF, RESTROOM AND KITCHENETTE

PLASTIC PLATES FOR FLUSH MOUNTING, ALL OUTLET COVERS SHALL

OUTLETS IDENTIFIED WITH SEPARATE SYMBOL FOR GFCI PROTECTION 2) EQUIPMENT: SERVICE RATED TRANSFER SWITCH, METERING EQUIPMENT (2) PANELBOARDS, A GENERATOR DOCKING BOX FOR FUTURE GENERATOR AND A 480 TO 208Y/120V STEP DOWN TRANSFORMER

3) SPECIAL OCCUPANCIES: NOT APPLICABLE

4) EMERGENCY SYSTEMS: NO STANDBY POWER GENERATION SYSTEM. EMERGENCY EGRESS LIGHTING IS PROVIDED BY RECHARGEABLE BATTERY LIGHTING FIXTURES.

5) COMMUNICATION SYSTEMS: NOT APPLICABLE TO THE SCOPE OF WORK 6) LOW VOLTAGE: TYPES CMP, CMR, CMG, AND CM CABLES. LOW VOLTAGE WIRING SHALL BE PERMITTED SEPARATELY FROM THESE PLANS

7) LOAD CALCULATION: SEE PANEL 'H' FOR TOTAL CONNECTED LOAD. 8) DESIGN FLOOD ELEVATION: REFER TO ARCHITECTURAL PLANS

SCOPE OF WORK

A NEW RESOURCES BUILDING

This item has been digitally signed and sealed by Charles P. Spelman on the date adjacent to the seal

Printed copies of this document are not considered signed and sealed and the signature must be verified on any

ELECTRICAL LEGEND

DUPLEX RECEPTACLE 20A, 125V (*)

DUPLEX GFCI 20A, 125V RECEPTACLE (*)

DEADFRONT GFCI 20A, 125V, EQUAL TO LEVITON DUPLEX RECEPTACLE 15A, 125V (HALF SWITCHED)

QUAD RECEPTACLE 20A, 125V (*)

SINGLE RECEPTACLE 125/250V, 4-WIRE, 30A OR 50A

SINGLE RECEPTACLE 20A, 125V (*)

DUPLEX FLOOR RECEPTACLE 20A, 125V

SPECIAL RECEPTACLE (SEE NOTE) SINGLE RECEPTACLE 15A, 125V, WITH (2) USB CHARGER

PORTS, EQUAL TO LEVITON T5631 DUPLEX RECEPTACLE 15A, 125V, WITH (2) USB CHARGER PORTS, EQUAL TO LEVITON T5632 USB SPECIAL RECEPTACLE (4) USB CHARGING PORTS,

LEGRAND FLOOR BOX RFB4 WITH (2) RFB2DP AND (2) RFBRFB22AB COMMUNICATION BRACKETS

SINGLE POLE SWITCH 15A, 120/277V

EQUAL TO LEVITON T5632

3 WAY SWITCH 15A, 120/277V 4 WAY SWITCH 15A, 120/277V

SMOKE DETECTOR

UTILITY METER DISCONNECT

COMBINATION MOTOR STARTER LOADCENTER OR PANELBOARD

— CIRCUIT WIRING HOMERUN

PANEL (CIRCUIT) DESIGNATION

EXTERIOR SECURITY LIGHTS RECESSED DOWNLIGHT

RECESSED DOWNLIGHT (WALL WASHER) SURFACE MOUNT LIGHTING FIXTURE

WALL MOUNT LIGHTING FIXTURE

VAPORTITE ENCLOSED & GASKETED LIGHTING FIXTURE

PENDANT / CHANDELIER BATHROOM EXHAUST FAN

SCONCE OR STEP LIGHTING FIXTURE

FAN RATED OUTLET BOX, FAN SWITCH LEG ONLY F L FAN RATED OUTLET BOX WITH LIGHT/FAN DESIGNATION

JUNCTION BOX 2' X 2' OR 2' X 4' LIGHTING FIXTURE, SEE LIGHTING

FIXTURE SCHEDULE FOR DETAILS

ILLUMINATED EXIT SIGN → EGRESS DIRECTIONAL CHEVRONS

EXIT SIGN / EMERGENCY LIGHTING FIXTURE COMBO BATTERY BACKUP EMERGENCY EGRESS FIXTURE

PHONE/DATA OUTLET

USB 4-PORT CHARGER, EQUAL TO LEVITON USB4P COMPUTER/DATA (POINT OF ENTRY)

CATV / SATELLITE TELEVISION OUTLET

CHIME DOOR CHIME PUSH BUTTON POWER PACK EQUAL TO ACUITY BRANDS NPP26 D EFP

POWER PACK 2 RELAY, 120-277V, 20A DEVICE FOR LIGHTING AND/OR RECEPTACLES ON SEPARATE CIRCUITS CEILING MOUNT OCCUPANCY/VACANCY SENSOR SWITCH

120-277V, 20A, SINGLE RELAY, LIGHTING & RECP DEVICE

WALL MOUNT OCCUPANCY/VACANCY SENSOR SWITCH LV WALL MOUNT LOW VOLTAGE SWITCH

LV WALL MOUNT LOW VOLTAGE DIMMER SWITCH WALL MOUNTED VACANCY SENSOR EQUAL TO ACUITY

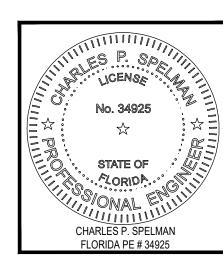
> ALL SYMBOLS MAY NOT APPLY TO THIS PROJECT (*) UNLESS NOTED OTHERWISE

BRANDS nWVPDT 16

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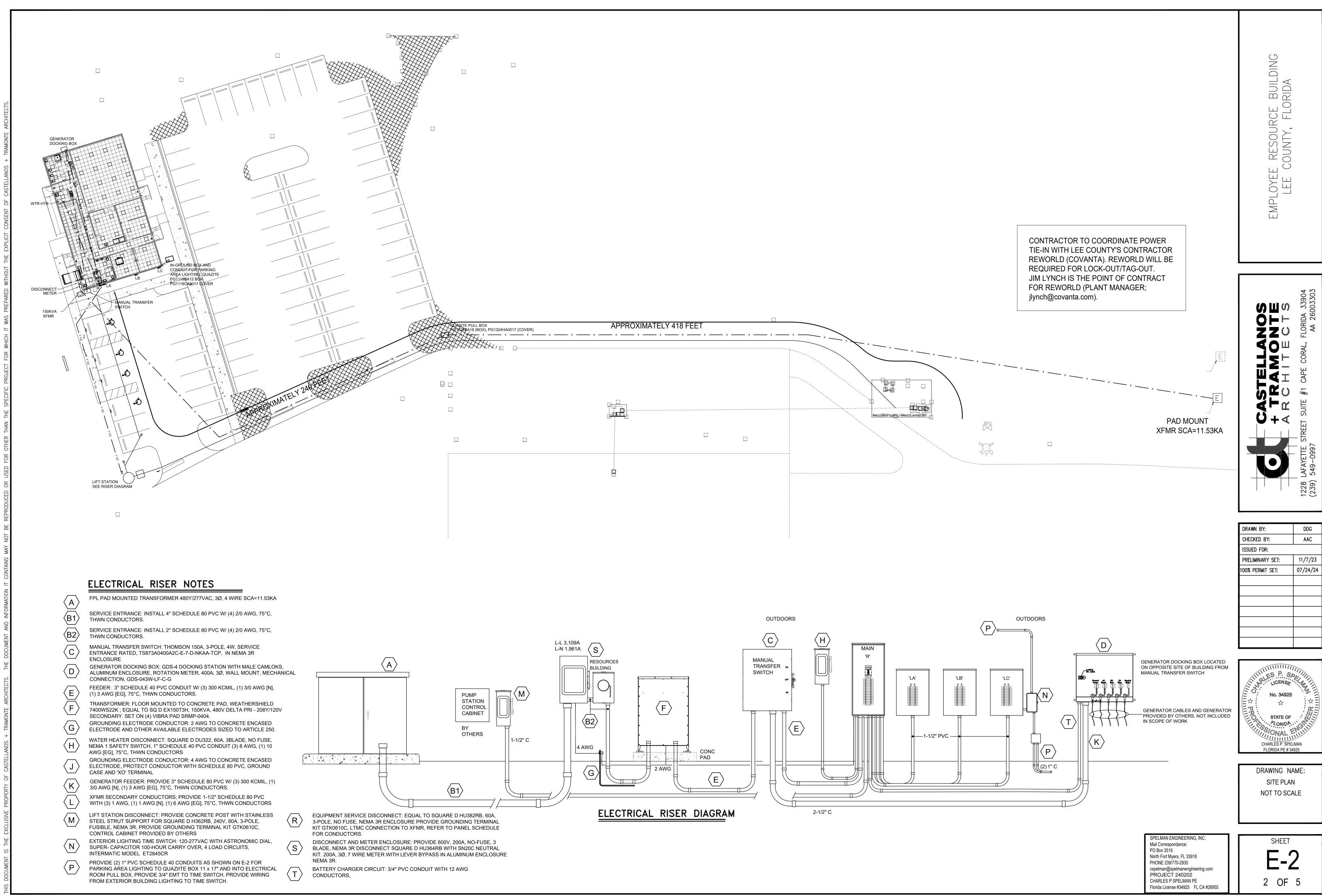
ART A. CASTELLANOS NO. AR0015473

DRAWN BY: CHECKED BY: SSUED FOR: 11/7/23 PRELIMINARY SET: 07/24/24 100% PERMIT SET:



DRAWING NAME: ABBREVIATIONS, SPECIFICATIONS, SYMBOL LEGEND

SHEET



ART A. CASTELLANOS NO. AR0015473

CHARLES P. SPELMAN FLORIDA PE # 34925

DRAWN BY:

CHECKED BY:

ISSUED FOR:

PRELIMINARY SET:

100% PERMIT SET:

DDG

AAC

07/24/24

DRAWING NAME:
LIGHTING PLAN
LIGHTING FIXTURE
& PANEL SCHEDULE

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SHEET

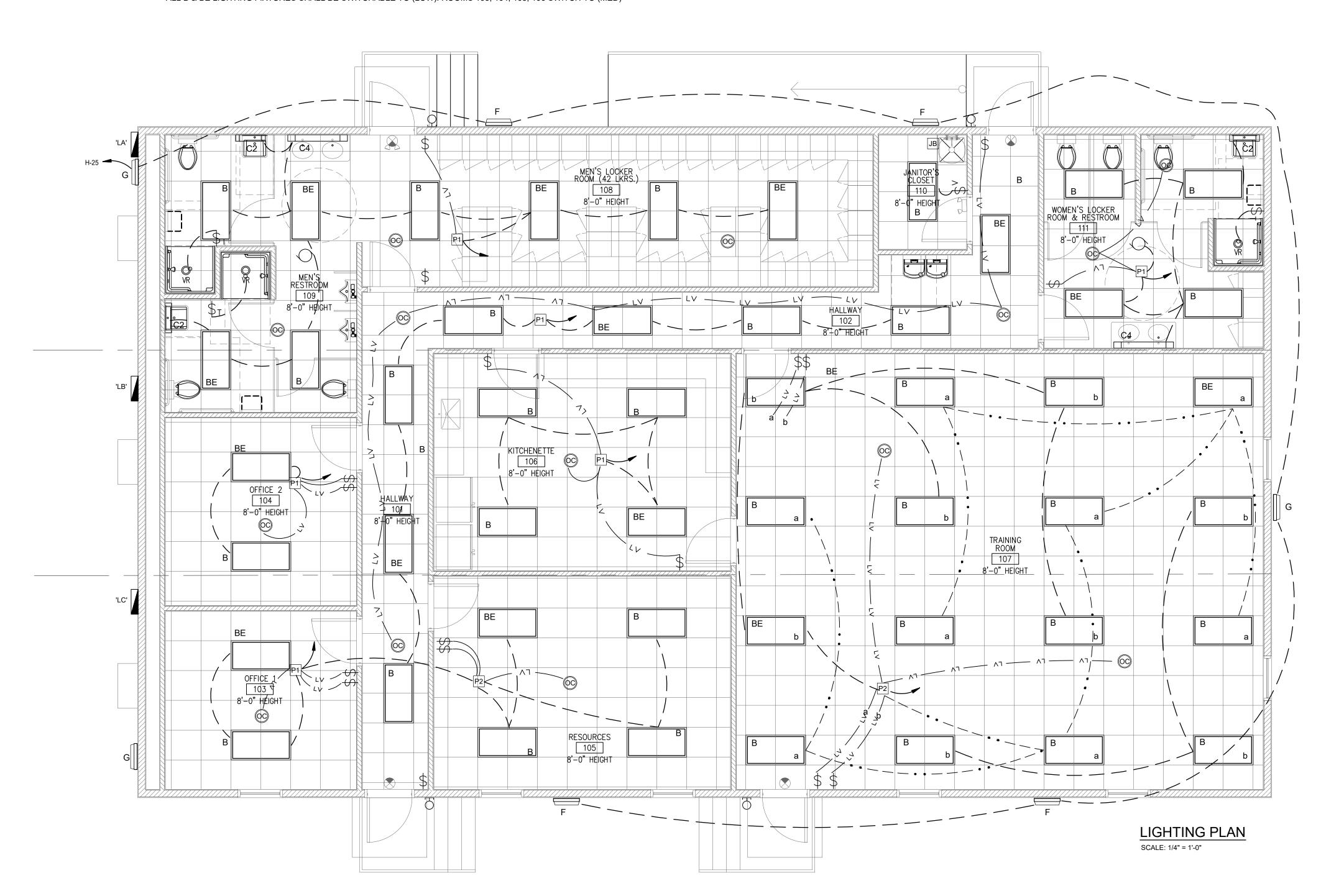
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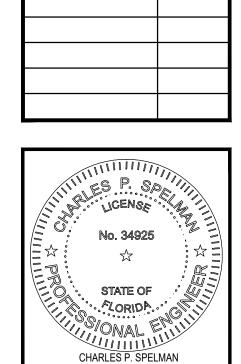
N PE
5 FL CA #26955

				LIG	HTING	3 FIXT	TURE SCHE	DULE	
SYMBOL	MOUNTING	LUMENS	KELVIN TEMP	LAMP TYPE	VOLTS	INPUT WATTS	MANUFACTURER	CATALOG NUMBER	REMARKS
В	GRID MOUNTED 2 X 4	3672 4982	3500 4000 5000	LED	MVOLT	35	LITHONIA	CPX 2X4 AL07 80CRI SWW7 SWL MVOLT SSE ADPT BAA	SWITCHABLE LUMENS
BE	GRID MOUNTED 2 X 4	3672 4982	3500 4000 5000	LED	MVOLT	35	LITHONIA	CPX 2X4 AL07 80CRI SWW7 SWL MVOLT E7W SSE ADPT BAA	SWITCHABLE LUMENS EMERGENCY BATTERY
C2	VANITY	1763	4000	LED	120	16	BROWNLEE	5150-26-GM-H16-40K-BAC	
C4	VANITY	3490	4000	LED	120	32	BROWNLEE	5150-32-GM-H32-40K-BAC	
EM	WALL MOUNTED	1300		LED	120	5.40	COMPASS	CU2HLHO	EMERGENCY LIGHT NIMh BATTERY
EMX	WALL MOUNTED			LED	120	2.80	COMPASS	CCRGRC	COMBO EXIT EMERGENCY NiMh BATTERY
EX	WALL/CEILING		GREEN	LED	120	3.4	COMPASS	CERG	NICAD BATTERY
F	WALL PACK	8500	3000	LED	120	59	LITHONIA	TWR1 LED ALO SWW2 UVOLT PE DDBTXD	ADJUSTABLE, SWITCHABLE, PHOTOCELL
G	WALL PACK	12,100	3000	LED	120	152	LITHONIA	TWR2 LED ALO SWW2 UVOLT PE DDBTXD	ADJUSTABLE, SWITCHABLE, PHOTOCELL
Н	4" SHOWER RECESSED	800	4000	LED	120	9	GOTHAM	EVO4RSH 30/ 10 DFR SMO MVOLT EZ10 NLT (277V)	

ALL B & BE LIGHTING FIXTURES SHALL BE SWITCHABLE TO (LOW). ROOMS 103, 104, 105, 106 SWITCH TO (MED)







CHECKED BY: ISSUED FOR:

PRELIMINARY SET:

100% PERMIT SET:

AAC

07/24/24

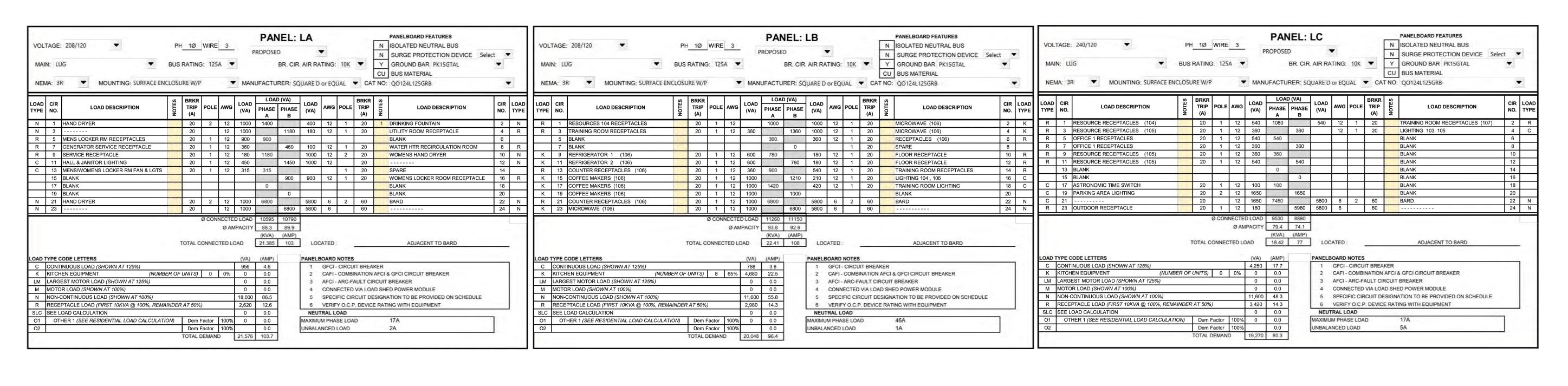
DRAWING NAME:
POWER AND SYSTEMS
PANEL SCHEDULES

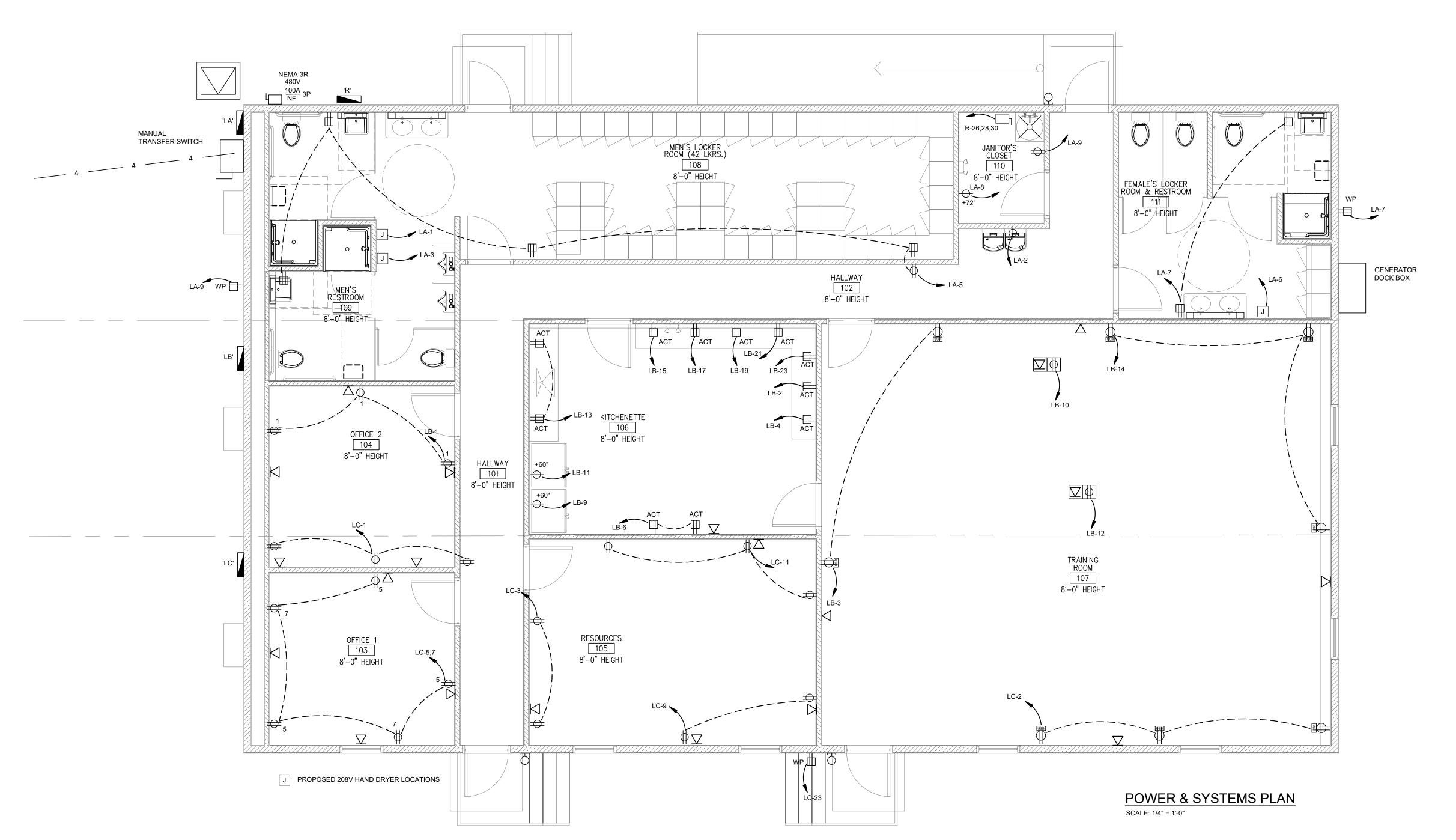
FLORIDA PE # 34925

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ART A. CASTELLANOS NO. AR0015473

SHEET **E-4**4 OF





1	STATE OF	

DRAWN BY:

CHECKED BY:

ISSUED FOR:

PRELIMINARY SET:

100% PERMIT SET:

DDG

AAC

07/24/24

DRAWING NAME: GRESS PHOTOMETRY PLAN AND SCHEDULES

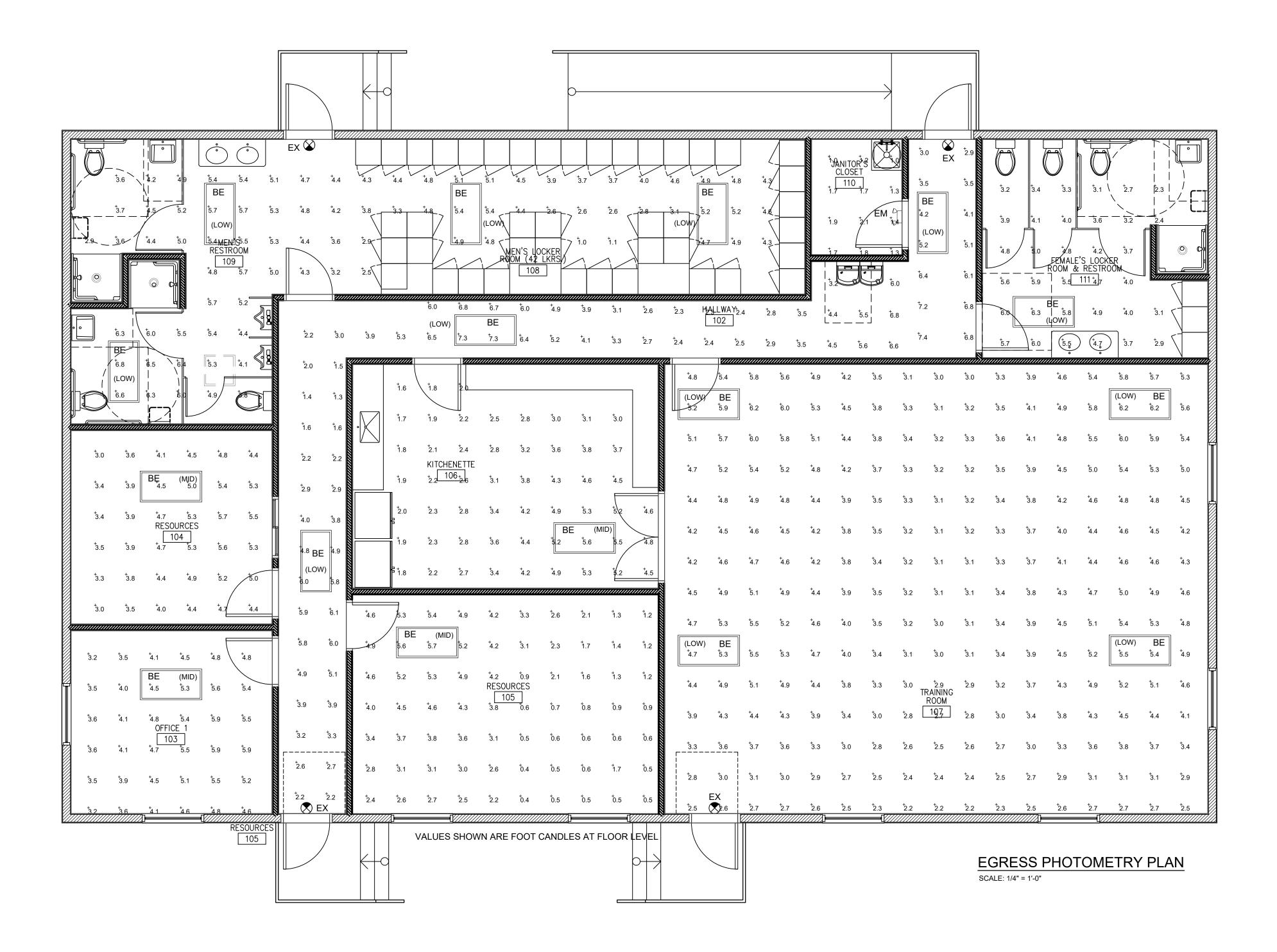
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5 OF 5

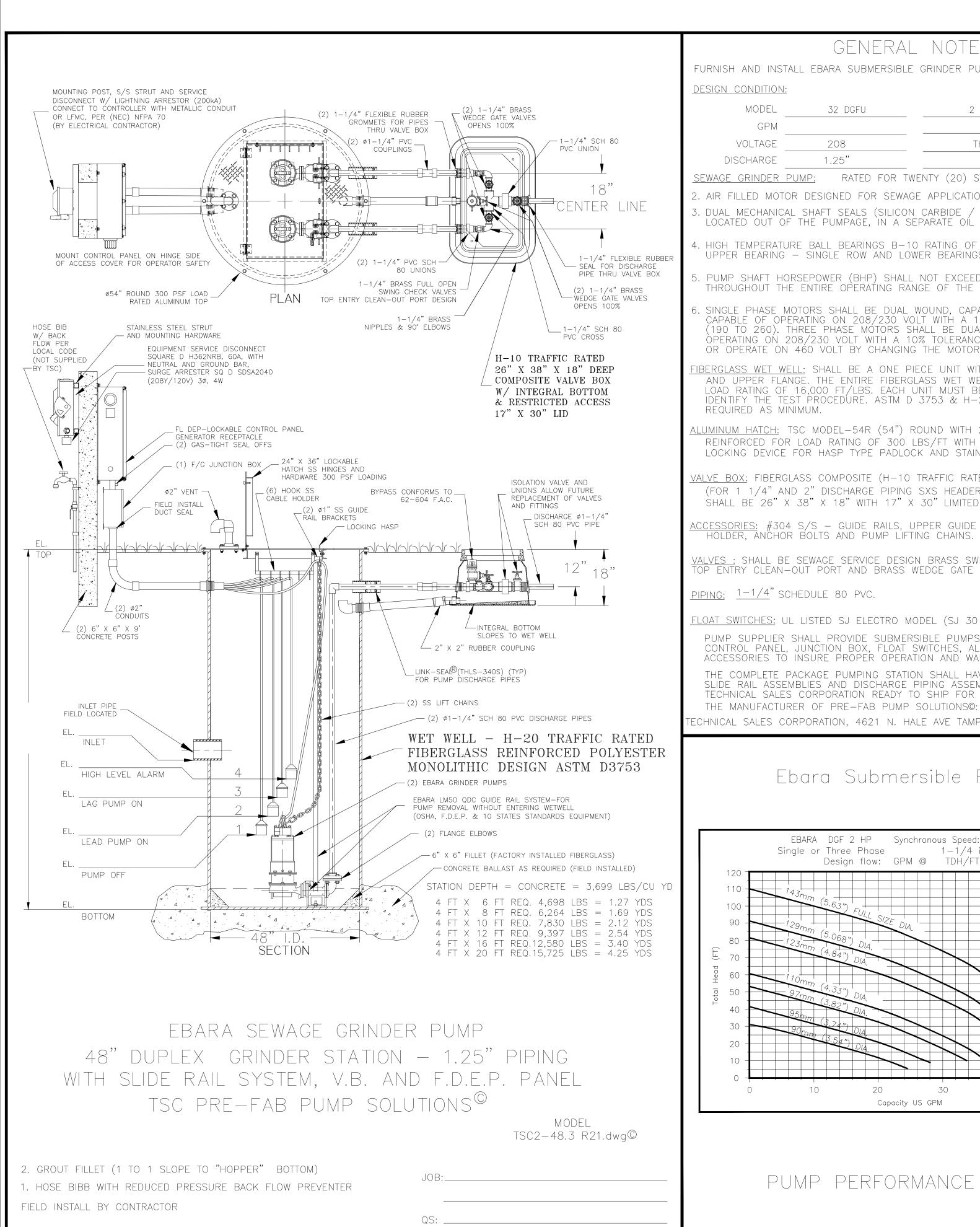
Luminaire Sch	edule						
Symbol	Label	Arrangement	Description	Tag	LLF	Luminaire	Luminaire
						Lumens	Watts
+	COMPASS_LED	Single	CC Series, CU2, CIR, COR		1.000	52	0.6
	CPX 2X2 ALO7 (Mid) SWW7 (40K)_1	Single	CPX 2X2 ALO7 (Mid) SWW7 (40K)	BE	0.270	3588	25.98
			SWL MVOLT				
	CPX 2X2 ALO7 (Low) SWW7 (40K)_1	Single	CPX 2X2 ALO7 (Low) SWW7 (40K)	BE	0.270	2668	25.98
			SWL MVOLT				

LLF - ADJUSTED FOR 7W 'EM' BATTERY PACK SEE LIGHTING PLAN NOTE FOR SWITCHABLE SETTINGS OF LUMEN FIXTURES

Calculation Sum	ımary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
101 & 102	Illuminance	Fc	4.00	7.4	1.3	3.08	5.62
103	Illuminance	Fc	4.58	5.9	3.2	1.43	1.84
104	Illuminance	Fc	4.43	5.7	3.0	1.48	1.90
105A & 105B	Illuminance	Fc	2.54	5.7	0.4	6.35	14.25
106	Illuminance	Fc	3.35	5.6	1.6	2.09	3.50
107	Illuminance	Fc	4.01	6.2	2.2	1.82	2.82
108 & 109	Illuminance	Fc	4.57	6.8	1.0	4.57	6.80
110	Illuminance	Fc	1.51	2.1	1.3	1.16	1.62
111	Illuminance	Fc	4.29	6.3	2.3	1.87	2.74



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GENERAL NOTES FURNISH AND INSTALL EBARA SUBMERSIBLE GRINDER PUMPS: 2 HP FT/TDH THREE PHASE ENTRY INTO CONTROL PANEL. IMPELLER <u>sewage grinder pump:</u> rated for twenty (20) starts per hour 2. AIR FILLED MOTOR DESIGNED FOR SEWAGE APPLICATION WITH CLASS F INSULATION 3. DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE / SILICON CARBIDE) LOCATED OUT OF THE PUMPAGE, IN A SEPARATE OIL FILLED CHAMBER. +. HIGH TEMPERATURE BALL BEARINGS B-10 RATING OF 60,000 HOURS, UPPER BEARING — SINGLE ROW AND LOWER BEARINGS — DOUBLE ROW TYPE. 5. PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSEPOWE THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE. 6. SINGLE PHASE MOTORS SHALL BE DUAL WOUND, CAPACITOR START—RUN AND CAPABLE OF OPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260). THREE PHASE MOTORS SHALL BE DUAL WOUND AND CAPABLE OF ÓPERATING ON 208/230 VOLT WITH A 10% TOLERANCE VOLTAGE (190 TO 260) OR OPERATE ON 460 VOLT BY CHANGING THE MOTOR LEADS INSIDE THE PUMP <u>fiberglass wet well:</u> shall be a one piece unit with integral bottom, wall AND UPPER FLANGE. THE ENTIRE FIBERGLASS WET WELL SHALL HAVE A DYNAMIC LOAD RATING OF 16,000 FT/LBS. EACH UNIT MUST BE SERIAL NUMBERED TO IDENTIFY THE TEST PROCEDURE. ASTM D 3753 & H-20 SPECIFICATIONS SHALL B <u>aluminum hatch:</u> tsc model—54R (54") round with 24" x 36" lockable hatch REINFORCED FOR LOAD RATING OF 300 LBS/FT WITH HOLD OPEN SAFETY ARM, LOCKING DEVICE FOR HASP TYPE PADLOCK AND STAINLESS STEEL HARDWARE. VALVE BOX: FIBERGLASS COMPOSITE (H-10 TRAFFIC RATED) WITH INTEGRAL BOTTOM. (FOR 1 1/4" AND 2" DISCHARGE PIPING SXS HEADER SYSTEM) SHALL BE 26" X 38" X 18" WITH 17" X 30" LIMITED ACCESS LID .CCESSORIES: #304 S/S — GUIDE RAILS, UPPER GUIDE RAIL BRACKETS, CABLE <u>VALVES</u>: SHALL BE SEWAGE SERVICE DESIGN BRASS SWING CHECK VALVES WITH TOP ENTRY CLEAN—OUT PORT AND BRASS WEDGE GATE VALVES OPEN 100%. <u>FLOAT SWITCHES:</u> UL LISTED SJ ELECTRO MODEL (SJ 30 SWENO). PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, ALUMINUM HATCH AND ACCESSORIES TO INSURE PROPER OPERATION AND WARRANTY. THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, SLIDE RAIL ASSEMBLIES AND DISCHARGE PIPING ASSEMBLED BY ECHNICAL SALES CORPORATION, 4621 N. HALE AVE TAMPA, FL 33614 (813)876-925 Ebara Submersible Pumps Synchronous Speed: 3600 RPM 1-1/4 inch Discharge

Design flow: GPM @ TDH/FT Capacity US GPM PUMP PERFORMANCE CURVE

Single or Three Phase

MODEL

GPM

32 DGFU

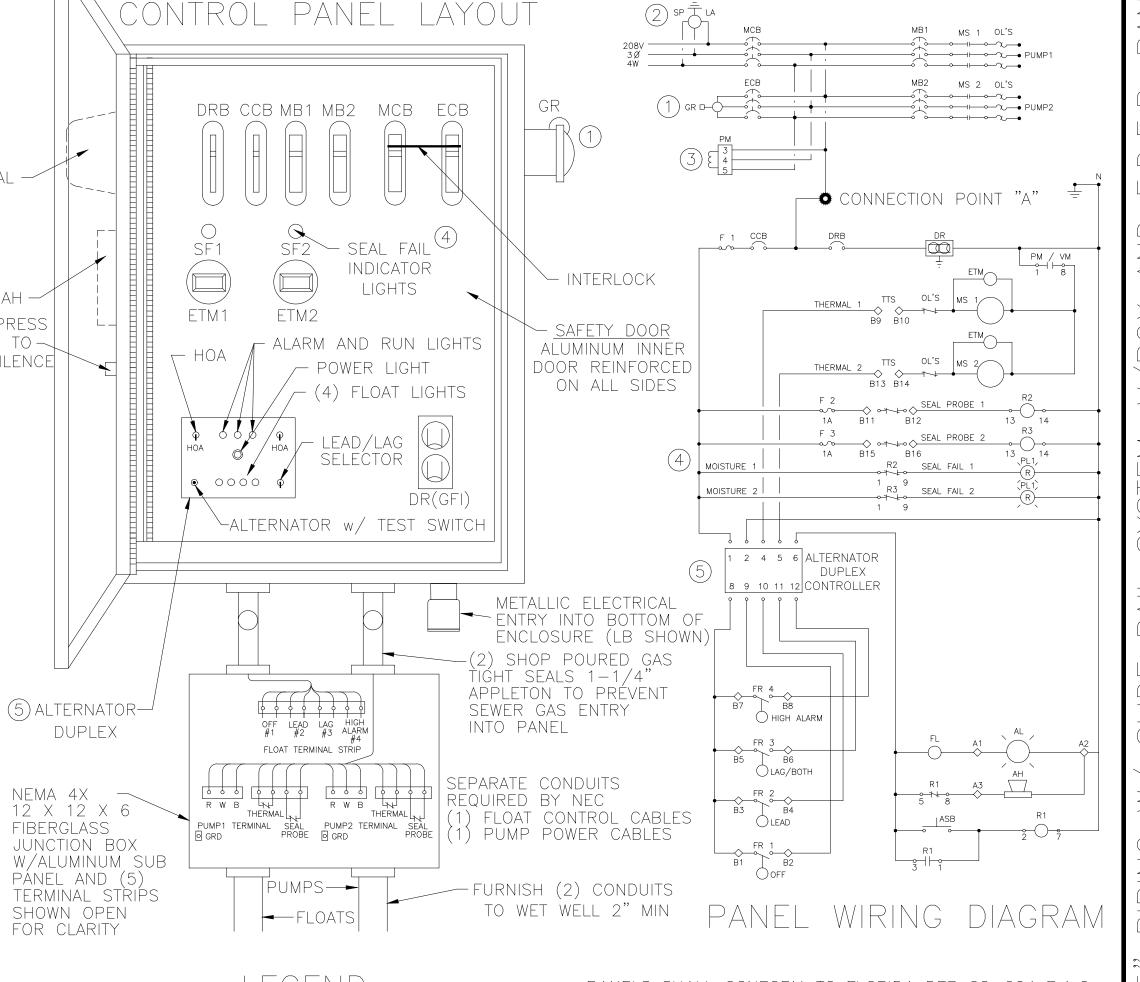
208

CONTROL PANEL -SHALL CONFORM TO FL DEP 62-604 F.A.C. CONTROL PANEL SHALL BE TSC MODEL # 38-D IN NEMA 4X FIBERGLASS ENCLOSURE. THE PANEL SHÄLL MEET STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP), ENVIRONMENTAL PROTECTION COMMISSION (EPC) AND LOCAL CODE REQUIREMENTS GOVERNING PRIVATE LIFT STATIONS.

FLOAT SWITCHES AND CONTROL SYSTEM SHALL BE UL LISTED AND INTRINSICALLY SAFE. ALL COMPONENTS SHALL BE UL LISTED. A JUNCTION BOX IS REQUIRED. WITH SHOP POURED SEALS BETWEEN BOX AND CONTROL PANEL TO PREVENT SEWER GAS

ELECTRICAL CONTRACTOR TO PROVIDE SERVICE DISCONNECT WITH LIGHTNING ARRESTOR TO BE MOUNTED ON BOTTOM LOAD SIDE TERMINALS, LEADS TO BE SHORT AND STRAIGHT AS POSSIBLE.

THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.



LEGEND (1) GENERATOR RECEPTACLE FOR EMERGENCY POWER CONNECTION WITH INTERLOCK ALARM LIGHT ASB ALARM SILENCE BUTTON (5) ATS ALTERNATOR W/ TEST SWITCH CONTROL CIRCÚIT BREAKER DUPLEX RECEPTACLE DRB DUPLEX RECEPTACLE BREAKER EMERGENCY CIRCUIT BREAKER ELAPSED TIME METER FLASHER FLOAT SWITCH (REGULATOR) GENERATOR RECEPTACLE GROUND HAND-OFF-AUTOMATIC SELECTOR LIGHTNING ARRESTOR MOTOR BREAKER MCB MAIN CIRCUIT BREAKER MOTOR STARTER NEUTRAL OL'S OVERLOAD HEATERS PHASE MONITOR PTS PUMP TERMINAL STRIP RELAY RUN CAPACITOR DISCHARGE RESISTOR

PUMP RUN INDICATORS

START CAPACITOR

START RELAY

SEAL FAIL (SHAFT)

SURGE PROTECTOR

REGULATOR TERMINAL STRIP

THERMAL TERMINAL STRIP

PANELS SHALL CONFORM TO FLORIDA DEP 62-604 F.A.C.

SINGLE PHASE WIRING DIAGRAM

U-RED V-WHITE Y-BLACK

THREE PHASE WIRING DIAGRAM

U-RED V-WHITE W-BLACK

RELAYS ARE PANEL MOUNTED

CONNECTION POINT "A"

MB2 MS 2 OL'S SPM2

(2) SURGE PROTECTION AND LIGHTNING PROTECTION ON ALL INCOMING LEGS

(3) PHASE PROTECTION SHALL BE PROVIDED

(4) SHAFT SEAL FAIL DETECTION

(5) ALTERNATOR w/ TEST SWITCH

PANEL MANUFACTURER SHALL BE A "UL" LISTED SHOP. TSC DUPLEX GRINDER PUMP STATION

> FIBERGLASS WET WELL TECHNICAL SALES CORPORATION

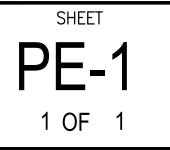
TSC PRE-FAB PUMP SOLUTIONS® WATERWORKS & WASTEWATER SPECIALTIES Representing Innovative Manufacturers MODEL TSCE2-48.3 © 4621 N. HALE AVENUE PH (813)876-9256 TAMPA, FL 33614 FAX (813)874-1194 EMAIL: Sales@TSCTampa.com

REV-21 SCALE: N.T.S.

DRAWING NAME: PUMP STATION NOT TO SCALE

NOTE: THIS SHEET CONCERNS ELECTRICAL COMPONENTS ONLY. PLEASE REFER TO CIVIL ENGINEERING PLANS FOR ADDITIONAL INFORMATION.

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ART A. CASTELLANOS NO. AR0015473

TE TRANSFE BUILDING SHAM ROAD 33905

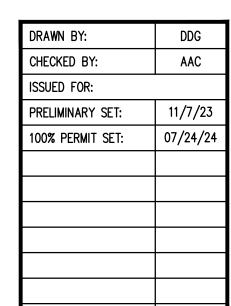
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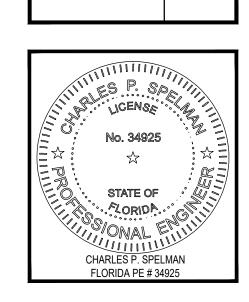
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NOTES AND SPECIFICATIONS

- THE MECHANICAL CONTRACTOR SHALL COMPLY WITH THE 8th EDITION 2023 FLORIDA BUILDING CODES. THIS SHALL INCLUDE THE MECHANICAL CODE, ENERGY CODE, AND ALL LOCAL CODES AS MAY BE APPLICABLE. SIX SHOP DRAWING SUBMITTALS OF ALL MAJOR EQUIPMENT SHALL BE REQUIRED FOR APPROVAL PRIOR TO ORDERING AND PROCUREMENT
- MECHANICAL PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION, AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR OR DIFFERENT FEATURES WILL NOT BE REQUIRED. ALL RISES AND DROPS IN PIPING AND DUCTWORK NOT NECESSARILY SHOWN.
- WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE NECESSARY FOR THE INSTALLATION OF A COMPLETE AND SATISFACTORY OPERATIONAL AIR CONDITIONING SYSTEM.
- 4. THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL, ETC.).
- 5. VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS OR FIELD DIMENSIONS.
- UNLESS NOTED, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE MANUFACTURER'S WARRANTY, AND BE U.L. APPROVED IF APPLICABLE. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
- GENERAL CONTRACTOR SHALL FURNISH AND INSTALL CURBS AND BASES FOR ALL EQUIPMENT AS SHOWN ON PLAN. THIS CONTRACTOR SHALL CONFIRM ALL CURB REQUIREMENTS AND THEIR SIZES.
- PROVIDE INSULATION FOR REFRIGERANT LINES SIMILAR TO ARMAFLEX. WEATHER-EXPOSED INSULATION TO BE PROVIDED WITH WEATHER PROOF COATING AS RECOMMENDED BY MANUFACTURER. EXPOSED CONDENSATE LINES THOSE CONCEALED IN WALLS AND CEILINGS TO BE PROVIDED WITH SAME TYPE OF INSULATION.
- EQUIPMENT AS PER SCHEDULED LIST OF ACCEPTABLE MANUFACTURERS:
 - A/C EQUIPMENT: CARRIER, LENNOX, TRANE, MITSUBISHI, SAMSUNG A/C GRILLES: PRICE, METALAIRE, TITUS ACME, NUTONE, COOK WALL LOUVERS: POTTORFF, RUSKIN
- ALL EQUIPMENT SHALL BE STARTED, TESTED, ADJUSTED AND BALANCED FOR AIR DELIVERY AS INDICATED ON THE PLANS. AND PLACED IN SATISFACTORY OPERATIONAL CONDITION BY THE MECHANICAL CONTRACTOR. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE EQUIPMENT MANUFACTURER. FURNISH THE OWNER WITH THE MANUFACTURER'S WRITTEN WARRANTEE
- ALL EQUIPMENT SHALL BE PROPERLY SUPPORTED AND ISOLATED TO PREVENT NOISE AND VIBRATION TRANSMISSION. ALL AIR HANDLING EQUIPMENT SHALL BE SUPPORTED WITH SPRING ISOLATORS.
- 12. ALL EQUIPMENT SHALL BE LOCATED WITH ADEQUATE CLEARANCES FOR FILTER REMOVAL, REPAIR, AND MAINTENANCE. ALL PIPING AND DUCTWORK SHALL BE INSTALLED TO PROVIDE ADEQUATE CLEARANCE FOR ACCESS TO ALL EQUIPMENT.
- 13. ALL EQUIPMENT SHALL BE MOUNTED AND SECURED TO WITH-STAND HURRICANE WIND CODE.
- 14. PROVIDE FLEXIBLE DUCT CONNECTIONS FOR CONCEALED SHEET METAL DUCTS FOR ALL AIR HANDLING UNITS AND FXHAUST FANS.
- 15. ALL CONTROL AND LOW VOLTAGE WIRING BY MECHANICAL CONTRACTOR.

EXHAUST FAN SCHEDULE

0.017 BHP

DRIVE

BELT

BELT

VOLT/PHASE/HERTZ

120/1/60

120/1/60

FINISH

GALV STL

GALV STL

MOTOR DATA:

225 | 0.125 | 1/4 HP | 717 | 0.01 BHP

WATTS | RPM

CFM

SERVICE

MENS

I. COORDINATE WITH ELECTRICAL CONTRACTOR TO TIE INTO OCCUPANCY SENSOR TO RUN CONTINUOUSLY

WOMENS

TSP

340 | 0.125 | 1/4 HP | 884

- 16. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. IN GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN CONCEALED IN CEILING AND PIPE SPACES PROVIDED UNLESS NOTED OR INDICATED OTHERWISE. ROUTING SHALL BE COORDINATED WITH TRUSS MANUFACTURER. DO NOT INSTALL ANY DUCTWORK OR PIPING OF ANY KIND ABOVE ELECTRICAL PANEL.
- 17. ALL DUCTWORK, INSTALLATION AND EQUIPMENT SHALL MEET STATE OF FLORIDA ENERGY CODE REQUIREMENTS.
- RIGID FIBERGLASS DUCTWORK SHALL BE EQUAL TO MANVILLE "SUPERDUCT", 1.5" THICK R-6.5 FOR UNDER ATTIC INSTALLATIONS. DUCT TO HAVE ACRYLIC POLYMER AIRSTREAM SURFACE COATING TO INHIBIT BIOLOGICAL GROWTH. DUCT SHALL BE REINFORCED AND FABRICATED PER LATEST EDITION SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS. ALL JOINTS SHALL BE ASSEMBLED SHIP-LAPPED USING STAPLES AND TAPE WITH FISSION 0810 DUCT TAPE WITH UL181B-FX RATING PROVIDING A LEAK PROOF JUNCTURE.
- METAL DUCTWORK IN EXPOSED CEILING AREAS SHALL BE AS FOLLOWS: SUPPLY AND RETURN DUCTWORK SHALL BE DOUBLE WALL SPIRAL DUCTWORK MEETING THE 3RD EDITION OF 2005 SMACNA STANDARDS. DROPS FROM ROOFTOP UNITS SHALL BE GALVANIZED SHEET METAL DUCT IN ACCORDANCE WITH FMC SECTION 603 AND HAVE INTERNAL DUCT INSULATION.
- FLEXIBLE DUCTWORK, WHERE SHOWN ON THE DRAWINGS, SHALL BE EQUAL TO FLEXAIRE WITH WIRE HELIX FRAME, R-6 INSULATION, POLYESTER LINER, HIGH DENSITY FIBERGLASS INSULATION AND METALIZED REINFORCED VAPOR BARRIER EXTERIOR COVERS. PROVIDE SPIN-IN FITTINGS WITH SCOOP OR BELL MOUTH TYPE FITTINGS WITH ADJUSTABLE DAMPERS. DUCT SHALL BE PROPERLY SUPPORTED WITH GALVANIZED STEEL STRAPS 2" WIDE AND SHALL BE RUN AS STRAIGHT AS POSSIBLE WITH NO KINKS OR BENDS TO RESTRICT AIRFLOW.
- 21. OUTSIDE AIR AND TOILET EXHAUST DUCTWORK SHALL BE METAL. ALUMINUM FLEXIBLE PIPE ACCEPTABLE FOR SHORT EXHAUST DUCTS. DUCT TOILET EXHAUST TO ROOF, SOFFIT, OR WALL CAP AS SHOWN ON PLANS. CAPS SHALL BE ALUMINUM CONSTRUCTION WITH INSECT SCREEN.
- 22. HVAC SUPPLY DIFFUSERS AND RETURN GRILLES SHALL BE WHITE FINISH, ALUMINUM CONSTRUCTION. SEE PLANS FOR THROAT CONNECTION SIZES.
- 23. WALL MOUNTED THERMOSTAT(S) SHALL BE INSTALLED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED. PROGRAMMABLE THERMIDISTAT FOR COOLING, HEATING, FAN, AUTO AND MANUAL MODE WHEN SPECIFIED ON FLOOR
- PROVIDE AIR HANDLING UNITS OR ROOFTOP UNITS WITH DUCT MOUNTED SMOKE DETECTORS IN THE SUPPLY DUCT FOR ANY UNIT OF 2000 CFM OR GREATER.

WEIGHT | WALL/ROOF OPENING | REMARKS

78 lbs | WITH 14" ROOF CURB | 1-3

78 lbs | WITH 14" ROOF CURB | 1-3

HVAC UNITS CONTROL SEQUENCE

HVAC UNIT CONTROL SEQUENCE

THE HVAC UNITS SHALL BE ENERGIZED BASED UPON OCCUPIED/UNOCCUPIED OPERATING REQUIREMENTS AS ESTABLISHED BELOW:

IN THE OCCUPIED COOLING MODE, THE SUPPLY AIR FAN SHALL BE ENERGIZED AND SHALL CONTINUOUSLY OPERATE. A PROGRAMMABLE, AUTOMATIC CHANGE OVER THERMOSTAT/HUMIDISTAT SHALL LOAD/UNLOAD THE COMPRESSOR AND MAINTAIN THE SPACE SETPOINT OF 75 DEGREES F AND/OR 50% RELATIVE HUMIDITY. UPON UNIT OPERATION IN OCCUPIED MODE, THE OUTSIDE AIR DAMPER(S) SHALL GO FROM FULLY CLOSED TO FULLY OPEN. WHEN RELATIVE HUMIDITY IS ABOVE 60% THE OUTSIDE AIR DAMPERS SHALL CYCLE CLOSED UNTIL THE RELATIVE HUMIDITY IS UNDER 50% AND THEN THEY SHALL REOPEN AS DESCRIBED ABOVE.

IN THE OCCUPIED HEATING MODE, THE SUPPLY AIR FAN IN THE UNIT SHALL BE AS IN THE COOLING MODE DESCRIBED ABOVE. EXCEPT THE ELECTRIC RESISTANCE HEATING COILS OR GAS FIRED HEAT EXCHANGER WILL BE STAGED TO MAINTAIN A SPACE SETPOINT OF 70 DEGREES F.

IN THE UNOCCUPIED COOLING MODE, THE SUPPLY AIR FAN IN THE UNIT SHALL BE ENERGIZED TO CYCLE ON AND OFF BASED UPON SPACE TEMPERATURE, THE THERMOSTATS SHALL CYCLE THE FAN AND STAGE (OR LOAD/UNLOAD) THE COMPRESSORS TO MAINTAIN THE SPACE SETPOINT OF 80 DEG. F. THE OUTSIDE AIR DAMPER SHALL BE 100% CLOSED.

IN THE UNOCCUPIED HEATING MODE, THE OPERATION OF THE UNIT SHALL BE AS IN THE COOLING MODE DESCRIBED ABOVE, EXCEPT THE ELECTRIC RESISTANCE HEATING COILS OR GAS FIRED HEAT EXCHANGERS WILL BE STAGED TO MAINTAIN A SPACE SETPOINT OF 60 DEGREES F. THE OUTSIDE AIR DAMPER SHALL BE

ALL FANS SHALL SHUT DOWN UPON ACTIVATION OF THE FIRE ALARM.

TEST AND BALANCE

MECHANICAL CONTRACTOR TO ADJUST VOLUME DAMPERS AND VERIFY THAT ALL EQUIPMENT SERVING THE AIR CONDITIONING AND HEATING OF THE BUILDING SHALL BE OPERATING TO VOLUMES SHOWN ON CONTRACT DOCUMENTS.

TEST AND BALANCE SHALL DOCUMENT THE FOLLOWING: (THIS IS THE MINIMUM REQUIREMENT ALLOWED)

PRESSURE THROUGH OUT UNIT IE, DISCHARGE, RETURN IN INCHES WG OUTSIDE AIR TEMPERATURE (DB/WB) OUTSIDE AIR VOLUME (CFM) RETURN AIR TEMPERATURE (DB/WB) RETURN AIR VOLUME (CFM) MIXED AIR TEMPERATURE (DB/WB)

MIXED AIR VOLUME (CFM) SUPPLY AIR TEMPERATURE (DB/WB) SUPPLY AIR VOLUME (CFM) DIFFUSER DISCHARGE TEMPERATURE (DB) DIFFUSER AIR VOLUME SUPPLY AND RETURN (CFM) POSITION AND SETTING OF OUTSIDE AIR DAMPER AT THE TIME OF DATA COLLECTION. MOTOR HP, VOLTAGE

SKETCH OF SYSTEM: DUCTWORK AND DIFFUSERS INDICATE LOCATION AND SETTING OF TEMPERATURE OR SENSOR/THERMIDISTAT

<u>PUMPS</u> INLET GPM, PRESSURE IN FT HD DISCHARGE GPM AND PRESSURE IN FT HD INLET TEMPERATURE

ABBREVIATIONS

AIR CONDITIONING ABOVE FINISHED FLOOR AIR HANDLING UNIT AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS BAROM BAROMETERIC BTUH BRITISH THERMAL UNIT PER HOUR CONDENSATE DRAIN CUBIC FEET PER MINUTE CONDENSING UNIT CONDENSATE LINE DIFFERENTIAL PRESSURE DAMPER DRAWING ENTERING AIR TEMPERATURE EXHAUST FAN EXTERNAL STATIC PRESSURE EXH **EXHAUST** FROM ABOVE FROM BELOW FIRE DAMPER HEATING VENTILATING AND AIR CONDITIONING INSUL INSULATION KW KII OWATT LEAVING AIR TEMPERATURE MANUF MANUFACTURER MAX MAXIMUM BTUH X 1000 MECH MECHANICAL MIN MINIMUM NFPA NATIONAL FIRE PROTECTION ASSOCIATION OUTSIDE AIR OPNG **OPENING** PRESSURE DROP REFG REFRIGERANT REQ'D RFQUIRFD

RTU ROOFTOP AIR CONDITIONING UNIT SUPPLY AIR SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION SMACNA STATIC PRESSURE TSTAT THERMOSTAT UNDERWRITERS LABORATORIES VARIABLE AIR VOLUME VOL VOLUME

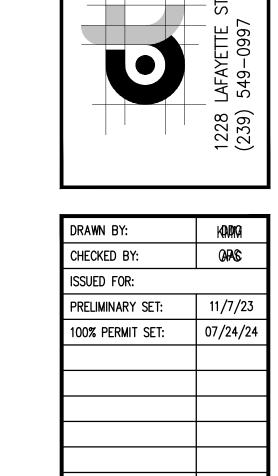
WITHOUT W/0 WET BULB WATER GAUGE WG

MARK CFM		AIF	R DISTRIBU	JTION	I SC	HED)ULE	_ - -		
IARK	MAKE	MODEL	SIZE / RANGE	MATERIAL	CONN	DAMPER	THROW	NC/MAX	USE	REMARKS
	PRICE	CVD	6"x4" / 30-100 CFM	SEE NOTE 4	6" RND	т/о	7–10 FT	-/30	SUPPLY	2, 4
	PRICE	SCD	24"x24" / 30-135 CFM	SEE NOTE 4	6" RND	Т/0	3-8 FT	24/30	SUPPLY	1, 2, 4
	PRICE	SCD	24"x24" / 140-250 CFM	SEE NOTE 4	8" RND	т/0	3–8 FT	21/30	SUPPLY	1, 2, 4
	PRICE	SCD	24"x24" / 251-450 CFM	SEE NOTE 4	10" RND	Т/0	4-12 FT	24/30	SUPPLY	1, 2, 4
	PRICE	81	6"x6" / 50-100 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	RETURN	3, 4
1	PRICE	81	8"x8" / 105-300 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	RETURN	3, 4
	PRICE	81	10"x10"/ 305-500 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	RETURN	3, 4
1	PRICE	81	20"x20"/ 1680-3000 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	RETURN	3, 4
	PRICE	81	10"x10" / 50-100 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	TRANSFER	3, 4
	PRICE	81	12"x12" / 105-300 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	TRANSFER	3, 4
	PRICE	81	14"x14" / 305-500 CFM	SEE NOTE 4	SEE PLAN	N/A		28/30	TRANSFER	3, 4

REMARKS:

- SUPPLIES BASED ON PRICE WHITE FIXED PATTERN CONE DIFFUSER FOR LAY-IN OR DRYWALL CEILING. IF DIFFUSER $\overset{\smile}{}$ NECK SIZE DOES NOT MATCH DUCT SIZE, PROVIDE NECK SIZE TO MATCH FLEX DUCT SIZE.
- (2) CONTRACTOR TO PROVIDE 1.5" INSULATION ON TOP RATED AT R-6.
- TRANSFER, RETURN AND EXHAUST GRILLES BASED ON PRICE EGG CRATE 1/2"x1/2"x1". PROVIDE SUPPLEMENTAL STEEL SUCH THAT GRILLES ARE NOT SUPPORTED BY THE CEILING TILE ALONE. TYPICALLY CEILING TBAR IS USED.
- (4) ACCEPTABLE MANUFACTURERS: METALAIRE, TITUS
- (5) PAINT BEHIND ANY DIFFUSER, REGISTER OR GRILLE FLAT BLACK.

										quipment											
UNIT MARK				CFM		INDOO	R FAN	ELEC	CTRIC HI	EATER**	COIL	EAT	COL	. LAT	COOLING	CAPACITY	REQUIRED	U	VIT	EFFICIENCY	
OINII IMAININ	MFR.	MODEL	TOTAL	O.A.	ESP(IN)	H.P.	FLA	MBH	KWH	VOLTAGE	DB (F)	WB (F)	DB (F)	WB (F)	ТМВН	SMBH	LMBH	VOLTAGE	мсамоср	EER2/SEER2*	REMARKS
AHU-1	BARD	W30AYDA10XXXXXE	845	XX	0.5	1/2	0.0	34.1	10.0	208/1/60	78.0	63.0	55.6	52.5	20.2	15.2	4.9	208/1/60	57/60	/14.3	ALL
AHU-2	BARD	W60AYDA10RXXXXE	1780	450	0.5	3/4	0.0	34.1	10.0	208/1/60	78.0	63.5	56.6	53.4	62.0	36.2	25.8	208/1/60	59/60	/13.8	ALL
AHU-3	BARD	W42AYDA10MXXXXE	1160	XX	0.5	1/2	0.0	34.1	10.0	208/1/60	78.8	63.5	55.7	52.4	33.2	24.6	8.7	208/1/60	58/60	/14.3	ALL
	* (STAR) ON F	FFECIENCY INDICATES M	INIMI IM RA	TING R	FOLIRE	TO PAS	SS THE I	FNERGY	CODE	CALCIII ATI	ONS AT	TACHE	-D								
	, ,	BH AS REQUIRED		· · · · · · · · · · · · · · · · · · ·		1017	JO TITLE	LITEROI	CODE	J, 120 0 L, 111	011071	1710111									
	Notes:																				
	1. Provide Har	sh Environment Coating on (Cabinet, Co	ndensei	Coil, Eva	porator	Coil, Reh	eat Coil :	and Sub	cooling Coil											
	2. Provide a sp	pare set of 1" pleated media	MERV 8 file	ters for t	he owner.																
	3. Provide mot	orized 2-Position Outside ai	r damper w	ith 2-Po	sition Actu	uator.															
	4. Outside ven	tilation intake; motorized dar	nner to one	n durina	occunied	hours a	nd close	during un	occunie	d hours as di	escribe	l in one	ration s	eallend	e ahove						



TRANSFE JUILDING HAM ROA 3905

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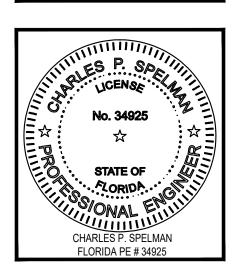
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DRAWING NAME: HVAC, DETAILS NOTES AND **SPECIFICATIONS**

SPELMAN ENGINEERING INC Mail Correspondance: PO Box 3519 North Fort Myers, FL 33918 PHONE 239/770-2930

SHEET

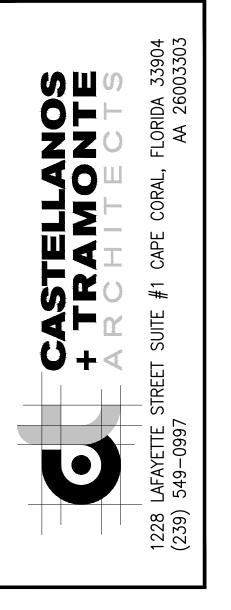
cspelman@spelmanengineering.com CHARLES P SPELMAN PE Florida License #34925 FL CA #26955

ROUND FLEXIBLE DUCT (D = DIAMETER)MFGR. MARK MODEL EF-1 ACME PV075E4 ION ROOF EF-2 ACME PV075E4 ON ROOF

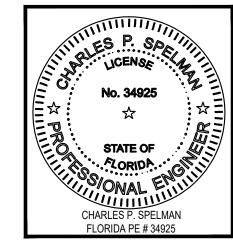
2. PROVIDE UNIT WITH GRAVITY BACKDRAFT DAMPER.

3. ACCEPTABLE MANUFACTURERS: ACME, COOK, BROAN, NUTONE.





DRAWN BY:	KANDIG
CHECKED BY:	OARS
ISSUED FOR:	
PRELIMINARY SET:	11/7/23
100% PERMIT SET:	07/24/24



DRAWING NAME:

HVAC
FLOOR PLAN



AHU-1

AHU-2

AHU-3

14x12

EF-1

12x12

12x10

20x14

14x10

20x14

SUPPLY DUCTWORK TO BE RUN AS HIGH AS POSSIBLE TO THE ROOF TRUSSES

SEAL RETURN DUCTWORK
AIR TIGHT TO THE RETURN
AIR PLENUM SUPPLIED BY
THE MODULE MANUFACTURER

10"ø DOWN

8x10

F 240 10x10

20x14

4 445 10"ø DOWN 14x12

TRAINING ROOM

EF-2

7**"**ø

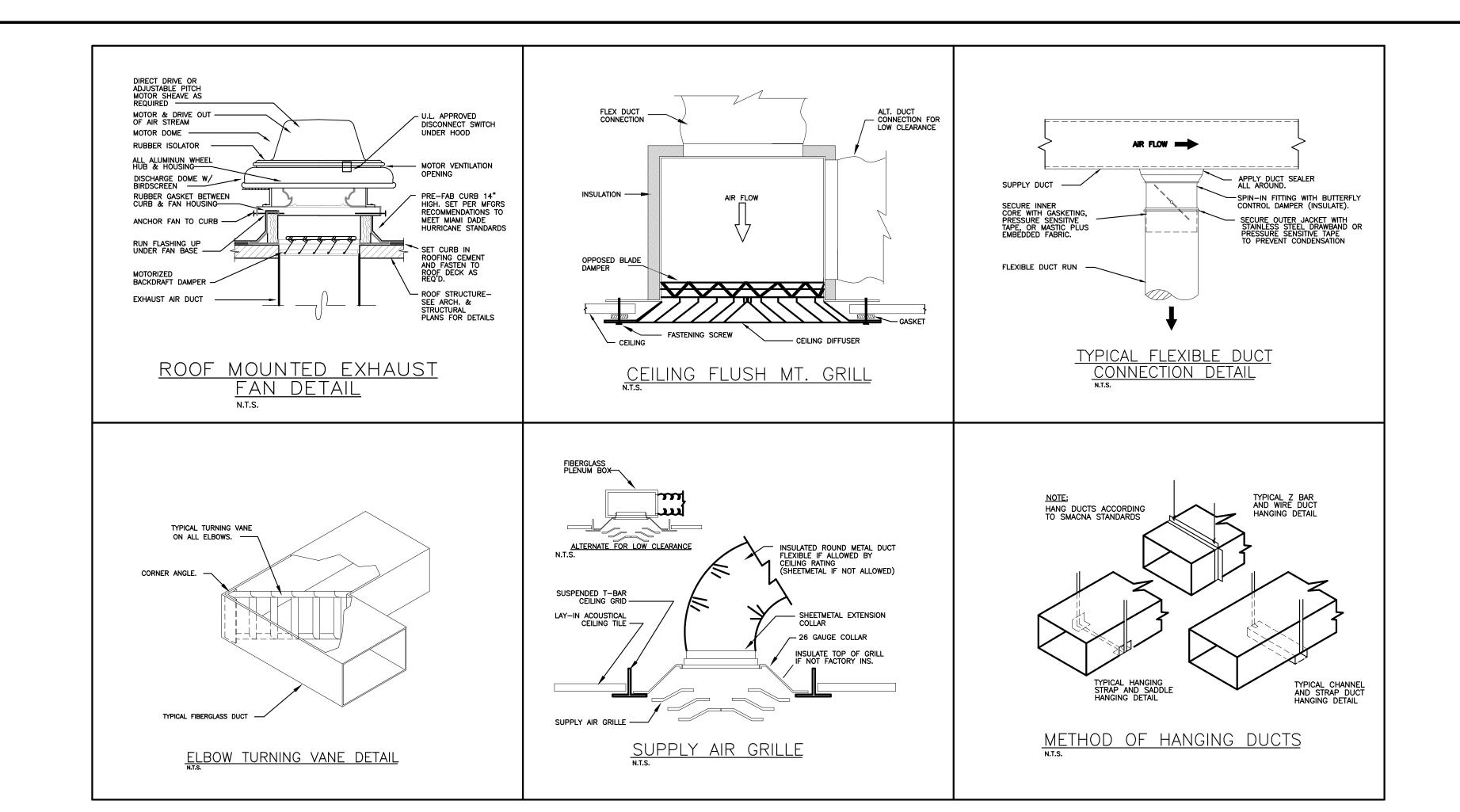
4 445 10"ø DOWN

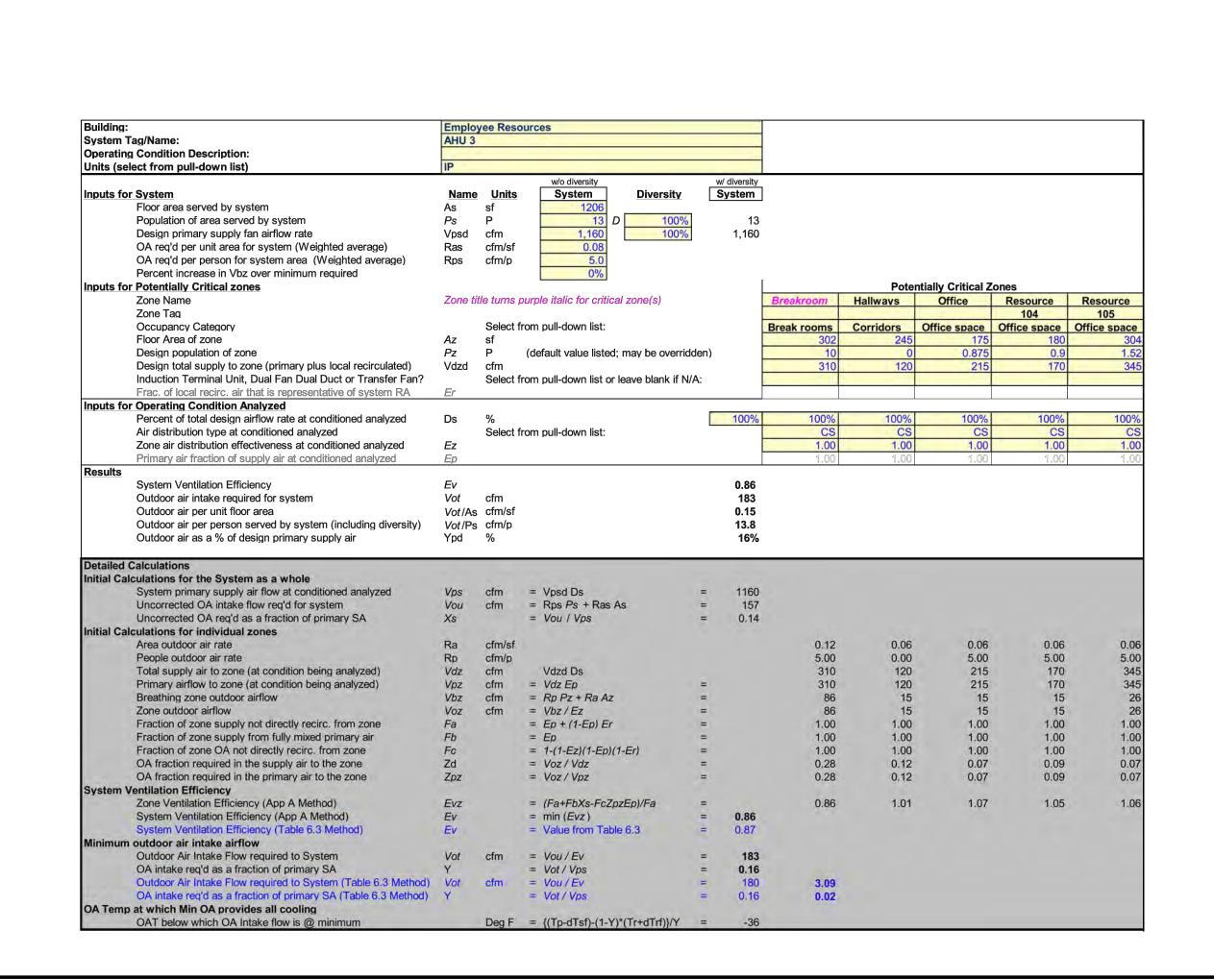
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cspelman@spelmanengineering.com
CHARLES P SPELMAN PE
Florida License #34925 FL CA #26955

M-2 2 OF 3

Building:		Employ	ee Resc	urces				
System Ta	_	AHU 1						
	Condition Description: ect from pull-down list)	IP				-		
Inputs for		Name	Units	w/o diversity System Divers	itv [w/ diversity System		
	Floor area served by system	As	sf	1080		_	Default entry ha	s been overric
	Population of area served by system	Ps	Р		00%	1		
	Design primary supply fan airflow rate	Vpsd	cfm	845		845	Default entry ha	s been overri
	OA reg'd per unit area for system (Weighted average)	Ras	cfm/sf	0.06				
	OA req'd per person for system area (Weighted average) Percent increase in Vbz over minimum required	Rps	cfm/p	0.0				
	Potentially Critical zones			0%			Potentially C	ritical Zones
_	Zone Name	Zone tit	le turns t	ourple italic for critical zone(s)			Hallways	Janitor
	Zone Tag		,	,			Training's	
							Corridors	Electrical
	Occupancy Category							equipment
				rom pull-down list:				rooms
	Floor Area of zone	Az	sf				137	
	Design population of zone	Pz	P	(default value listed; may be ov	erridden))	1	
	Design total supply to zone (primary plus local recirculated)	Vdzd	cfm	rom null down list or last a blast	if NI/A -		120	
	Induction Terminal Unit, Dual Fan Dual Duct or Transfer Fan? Frac. of local recirc. air that is representative of system RA	Er	Select	rom pull-down list or leave blank	IT N/A:			
	Operating Condition Analyzed	<u> </u>						
	Percent of total design airflow rate at conditioned analyzed	Ds	%	May need to manually e	edit Ds:	19%	100%	100
	Air distribution type at conditioned analyzed			rom pull-down list:		1070	CS	C
	Zone air distribution effectiveness at conditioned analyzed	Ez		·			1.00	1.0
	Primary air fraction of supply air at conditioned analyzed	Ер					1.00	1.0
Results								
	System Ventilation Efficiency	Ev				1.00		
	Outdoor air intake required for system	Vot	cfm			50		
	Outdoor air per unit floor area	Vot/As				0.05		
	Outdoor air per person served by system (including diversity) Outdoor air as a % of design primary supply air	Vot/Ps Ypd	cim/p %			49.7 6%		
	Outdoor all as a 76 or design primary supply all	i pu	70			070		
Detailed C	Calculations							
nitial Cald	culations for the System as a whole							
	System primary supply air flow at conditioned analyzed	Vps	cfm	= Vpsd Ds	=	160		
	Uncorrected OA intake flow req'd for system	Vou	cfm	= Rps Ps + Ras As	=	65		
	Uncorrected OA req'd as a fraction of primary SA	Xs		= Vou / Vps	=	0.41		
	culations for individual zones	-						
	Area outdoor air rate	Ra	cfm/sf				0.06	0.0
	People outdoor air rate Total supply air to zone (at condition being analyzed)	Rp	cfm/p	Vdzd Ds			0.00 120	0.0
	Primary airflow to zone (at condition being analyzed)	Vdz Vpz	cfm cfm	= Vdz Ep	_		120	4
	Breathing zone outdoor airflow	Vbz	cfm	= Rp Pz + Ra Az	_		8	
	Zone outdoor airflow	Voz	cfm	= Vbz/Ez	=		8	
	Fraction of zone supply not directly recirc. from zone	Fa	Ollin	= Ep + (1-Ep) Er	-		1.00	1.0
	Fraction of zone supply from fully mixed primary air	Fb		= Ep	=		1.00	1.0
	Fraction of zone OA not directly recirc. from zone	Fc		= 1-(1-Ez)(1-Ep)(1-Er)	=		1.00	1.0
	OA fraction required in the supply air to the zone	Zd		= Voz/Vdz	=		0.07	0.
	OA fraction required in the primary air to the zone	Zpz		= Voz/Vpz	=		0.07	0.
	entilation Efficiency						2.64	
	Zone Ventilation Efficiency (App A Method)	Evz		= (Fa+FbXs-FcZpzEp)/Fa	=	2.00	1.34	1.3
	System Ventilation Efficiency (App A Method)	Ev		= min (Evz)	=	1.30		
	System Ventilation Efficiency (Table 6.3 Method)	Ev		= Value from Table 6.3	=	1.05		
	outdoor air intake airflow Outdoor Air Intake Flow required to System	Vot	cfm	= Vou/Ev	=	50		
	OA intake reg'd as a fraction of primary SA	Y	Citt	= Vot/Vps	=	0.31		
	Outdoor Air Intake Flow required to System (Table 6.3 Method)	Vot	cfm	= Vou/Ev	-	62		
	OA intake req'd as a fraction of primary SA (Table 6.3 Method)	Y	2/10	= Vot/Vps	=	0.39		
	at which Min OA provides all cooling					2.10.10		
	OAT below which OA Intake flow is @ minimum		Deg F	= ${(Tp-dTsf)-(1-Y)*(Tr+dTrf)}/$	Y =	17		

Building:	Employ	ee Reso	urces		3		
System Tag/Name:	AHU 2				- 8		
Operating Condition Description:					N.		
Jnits (select from pull-down list)	IP						
			w/o diversity		w/ diversity		
nputs for System Floor area served by system	Name		System Diversity	L	System		
Population of area served by system	As <i>Ps</i>	sf P	820 53 D 1009	V.	53		
Design primary supply fan airflow rate		cfm	1,780		1,780		
OA req'd per unit area for system (Weighted average)	Vpsd Ras	cfm/sf	0.06	0	1,700		
OA req'd per driit area for system (Weighted average) OA req'd per person for system area (Weighted average)			7.5				
Percent increase in Vbz over minimum required	Rps	cfm/p	0%				
nputs for Potentially Critical zones			0 %		I	Potentially C	ritical Zones
inputs for Potentially Critical Zones						Training	intical Zones
Zone Name	Zone tit	le turns n	urple italic for critical zone(s)			room	
Zone Tag	20110 111	io tarrio p	anpro reaso for critical zorro(c)			100111	
20110 1009						Lecture	Sales (excep
Occupancy Category						classroom	as below)
		Select f	rom pull-down list:			J.L.J.J. J. J.	ac below)
Floor Area of zone	Az	sf				820	
Design population of zone	Pz	P	(default value listed; may be over	ridden)		53.3	
Design total supply to zone (primary plus local recirculated)	Vdzd	cfm	, ,	/		1,780	
Induction Terminal Unit, Dual Fan Dual Duct or Transfer Fan?	-		rom pull-down list or leave blank if	N/A:			
Frac. of local recirc. air that is representative of system RA	Er		·				
nputs for Operating Condition Analyzed							
Percent of total design airflow rate at conditioned analyzed	Ds	%			100%	100%	1009
Air distribution type at conditioned analyzed		Select f	rom pull-down list:			CS	C
Zone air distribution effectiveness at conditioned analyzed	Ez					1.00	1.0
Primary air fraction of supply air at conditioned analyzed	Ер					1.00	1.0
<u>Results</u>							
System Ventilation Efficiency	Ev				1.00		
Outdoor air intake required for system	Vot	cfm			449		
Outdoor air per unit floor area	Vot/As				0.55		
Outdoor air per person served by system (including diversity)	Vot/Ps	•			8.4		
Outdoor air as a % of design primary supply air	Ypd	%			25%		
Detailed Calculations							
nitial Calculations for the System as a whole							
System primary supply air flow at conditioned analyzed	Vps	cfm	= Vpsd Ds	=	1780		
Uncorrected OA intake flow req'd for system	Vou	cfm	= Rps Ps + Ras As		449		
Uncorrected OA reg'd as a fraction of primary SA	Xs	Oiiii	= Vou / Vps	4	0.25		
nitial Calculations for individual zones	710		- 100 / 100		0.20		
Area outdoor air rate	Ra	cfm/sf				0.06	0.1
People outdoor air rate	Rp	cfm/p				7.50	7.5
Total supply air to zone (at condition being analyzed)	Vdz	cfm	Vdzd Ds			1780	7.5
Primary airflow to zone (at condition being analyzed)	Vpz	cfm	= Vdz Ep	9		1780	
Breathing zone outdoor airflow	Vbz	cfm	= Rp Pz + Ra Az			449	
Zone outdoor airflow	Voz	cfm	= Vbz/Ez	=		449	
Fraction of zone supply not directly recirc. from zone	Fa		= Ep + (1-Ep) Er	=		1.00	1.0
Fraction of zone supply from fully mixed primary air	Fb		= Ep	=		1.00	1.0
Fraction of zone OA not directly recirc. from zone	Fc		= 1-(1-Ez)(1-Ep)(1-Er)	-		1.00	1.0
OA fraction required in the supply air to the zone	Zd		= Voz/Vdz			0.25	0.0
OA fraction required in the primary air to the zone	Zpz		= Voz/Vpz	1=1		0.25	0.0
System Ventilation Efficiency	2.42		022000			2.20	3.0
Zone Ventilation Efficiency (App A Method)	Evz		= (Fa+FbXs-FcZpzEp)/Fa	=		1.00	1.2
System Ventilation Efficiency (App A Method)	Ev		= min (Evz)	=	1.00		
System Ventilation Efficiency (Table 6.3 Method)	Ev		= Value from Table 6.3	-	0.90		
Minimum outdoor air intake airflow							
Outdoor Air Intake Flow required to System	Vot	cfm	= Vou/Ev	=	449		
OA intake req'd as a fraction of primary SA	Y	2000	= Vot/Vps	-	0.25		
Outdoor Air Intake Flow required to System (Table 6.3 Method)	Vot	cfm	= Vou/Ev	=	500		
OA intake req'd as a fraction of primary SA (Table 6.3 Method)	Υ	2.11	= Vot/Vps	=	0.28		
DA Temp at which Min OA provides all cooling							





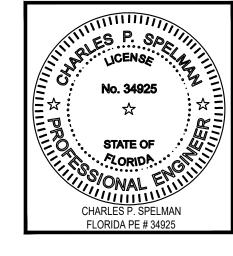


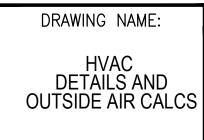
E COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 0450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905

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DRAWN BY:	KONDIG
CHECKED BY:	O/PAS
ISSUED FOR:	
PRELIMINARY SET:	11/7/23
100% PERMIT SET:	07/24/24

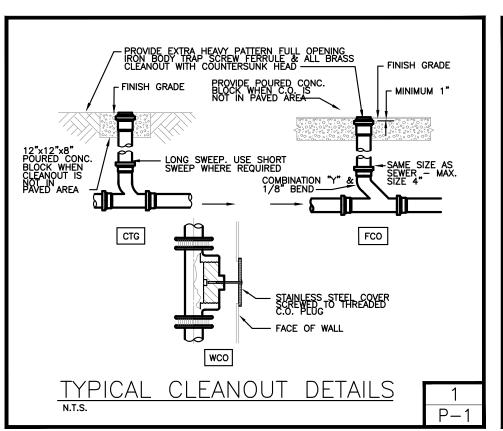


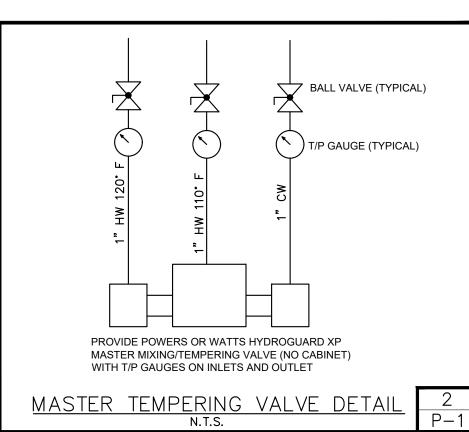


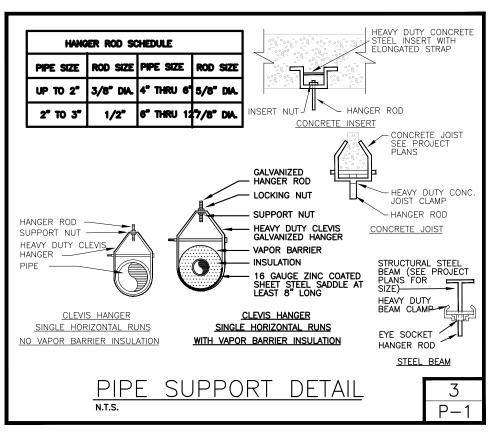
SPELMAN ENGINEERING, INC. Mail Correspondance: PO Box 3519 North Fort Myers, FL 33918 PHONE 239/770-2930 cspelman@spelmanengineering.com CHARLES P SPELMAN PE Florida License #34925 FL CA #26955

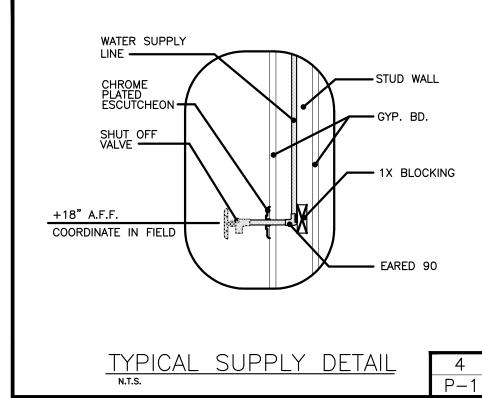
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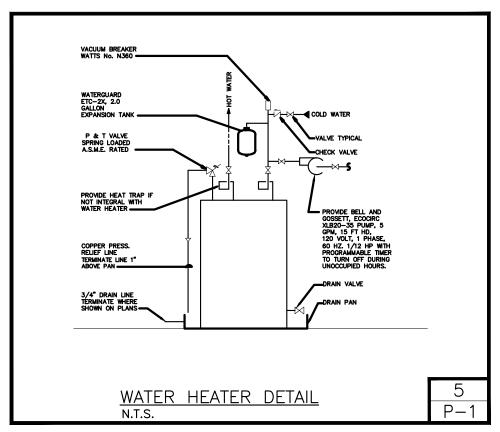
- (1) FINAL FIXTURE COLOR SELECTION BY INTERIOR DESIGNER OR OWNER.
- (2) EXPOSED TRAPS, FITTINGS, AND ACCESSORIES SHALL BE CHROME (NO PVC). ALL PUBLIC LAVS WITH GRID STRAINER. (3) PROVIDE WITH FLOOR-MOUNT CONCEALED ARM CARRIER SUPPORT, SMITH INDUSTRIES, ZURN, OR AS APPROVED.











,	WATER HEATER S	SCHEDULE							
MARK	DESCRIPTION	MANUFACTURER	MODEL	CAPACITY (GALLONS)	ELEMENTS	cw		ENERGY FACTOR	NOTES
EWH	ELECTRIC WATER HEATER	RHEEM	ME85-12-G		TOTAL WATTAGE: 12,000 208/3/60	1"	1"		
NOTE	10 YEAR WARRA	ANTY TERNATE MANUFACTURERS	S INCLUDE RHEEM, RUL	JD, AND AM	MERICAN STANDARD				

PLUMBING SYMBOLS LEGEND BRANCH - TOP CONNECTION GAS LINE PIPE → BRANCH — BOTTOM CONNECTION EXISTING GREASE WASTE LINE S EXISTING HOT WATER PIPE NEW GREASE WASTE LINE NEW HOT WATER PIPE SANITARY LINE EXISTING COLD WATER PIPE CONDENSATE LINE NEW COLD WATER PIPE EXISTING PLUMBING TO REMAIN - BRANCH - SIDE CONNECTION NEW VENT LINE — EXISTING HOT WATER RECIRCULATING PLUMBING TO BE REMOVED ELBOW UP ELBOW DOWN WATER METER W / SHUT-OFF VALVE IN CONCRETE BOX GRADE CLEANOUT FLOOR CLEANOUT WATER HAMMER ARRESTOR WALL OR END OF LINE CLEANOUT VTR | | | VENT THROUGH ROOF HOSE BIBB W / VACUUM BREAKER AND SHUT-OFF VALVE POINT OF CONNECTION BETWEEN EXISTING AND NEW S GAS COCK, GAS STOP LINE SIZE GATE VALVE (SHUT-OFF VALVE) LINE SIZE BALL VALVE (BALANCING OR SHUT-OFF VALVE) ──|▽├────**∫** BALANCING VALVE - NOT ALL SYMBOLS APPLY TO THIS PROJECT. - SEE PLUMBING SPECIFICATIONS FOR MATERIALS CONSTRUCTION.

		TYPE of SUPPLY				Count of Fixtures			
FIXTURE	OCCUPANCY	CONTROL	COLD	нот	TOTAL	Base on ONE as Multipler	COLD	нот	TOTAL
Bathroom Group	Private	Flush tank	2.7	1.5	3.6	-			
Bathroom Group	Private	Flush valve	6.0	3.0	8.0	-			
Bathtub	Private	Faucet	1.0	1.0	1.4	-			
Bathtub	Public	Faucet	3.0	3.0	4.0	-			
Bidet	Private	Faucet	1.5	1.5	2.0	-			
Combination fixture	Private	Faucet	2.25	2.25	3.0	-			
Dishwashing machine	Private	Automatic	0.0	1.4	1.4	-			
Drinking fountain	Office, etc.	3/8" valve	0.25	0.0	0.25	-			
Kitchen sink	Private	Faucet	1.0	1.0	1.4	-			
Kitchen sink	Hotel, restaurant	Faucet	3.0	3.0	4.0	1	3.00	3.00	4.00
Laundry trays (1 to 3)	Private	Faucet	1.0	1.0	1.4	-			
Lavatory	Private	Faucet	0.5	0.5	0.7	-			
Lavatory	Public	Faucet	1.5	1.5	2.0	7	10.50	10.50	14.00
Service sink	Office, etc.	Faucet	2.25	2.25	3.0	1	2.25	2.25	3.00
Shower head	Public	Mixing valve	3.0	3.0	4.0	3	9.00	9.00	12.00
Shower head	Private	Mixing valve	1.0	1.0	1.4	-			
Urinal	Public	1" flush valve	10.0	0.0	10.0	-			
Urinal	Public	3/4" flush valve	5.0	0.0	5.0	2	10.00		10.00
Urinal	Public	Flush tank	3.0	0.0	3.0	-			
Washing machine (8 lb)	Private	Automatic	1.0	1.0	1.4	-			
Washing machine (8 lb)	Public	Automatic	2.25	2.25	3.0	-			
· ,	Public	Automatic	3.0	3.0	4.0	-			
Water Closet	Private	Flushometer valve	6.0	0.0	6.0	-			
Water Closet	Private	Flush tank	2.2	0.0	2.2	-			
Water Closet	Public	Flushometer valve	10.0	0.0	10.0	-			
Water Closet	Public	Flush tank	5.0	0.0	5.0	6	30.00		30.00
Water Closet	Public or private	Flushometer valve	2.0	0.0	2.0	-			
					Total wsfu	20	64.75	24.75	73.00
						-	FLUSH TAN		. 0.00
				FBCP Table E103.3(3) list data below					
BUILDING					_	PM	34.00	21.50	36.00
					I L				30.00
					_	BCP Figure E10	<u>`</u>		
					I L	Pipe Size	2"	1-1/4"	2"
					I E	UILDING TOTAL	REFER TO	PI ANS	

FIXTURE	TYPE	DFU	Minimum Trap Size	Count of Fixtures Base on ONE as Multipler	TOTA
Automatic Clothes Washer	Commercial	3.0	2.0	-	
Automatic Clothes Washer	Residential	2.0	2.0	-	
Bathroom Group	As defined under 202 (1.6 gpf water closet)	5.0	-	-	
Bathroom Group	As defined under 202 (water closet greater	6.0	-	-	
-	than 1.6 gpf)				
Bathtub	With or with overhead shower or				
	whirlpool attachments	2.0	1.5	_	
Bidet		1.0	1.25	_	
Combination sink and tray		2.0	1.5	_	
Dental Lavatory		1.0	1.25	_	
Dental Unit Cuspidor		1.0	1.25	_	
Dishwashing Machine	Domestic	2.0	1.5	_	
Drinking Fountain		0.5	1.25	_	
Emergency Floor Drain		0.0	2.0	-	
Floor Drain		2.0	2.0	_	
Floor Sink		note h	2.0	-	
Kitchen Sink	Domestic	2.0	1.5	-	
Kitchen Sink	Domestic with Dishwasher & Food Grinder	4.0	4.0	1 1	4.00
Laundry Tray	1 or 2 Compartment	2.0	1.5	<u>'</u>	4.00
Lavatory	i oi z compartment	1.0	1.25	7	7.00
Shower Head based on spray	-	1.0	1.23	'	7.00
Shower Flead based on spray	5.7 gpm or less	2.0	1.5	3	6.00
	Greater 5.7 gpm or less than 12.3 gpm	3.0	2.0	-	0.00
	Greater 12.3 gpm or less than 25.8 gpm	5.0 5.0	3.0	-	
	Greater 25.8 gpm to 55.6 gpm	6.0	4.0	-	
Service Sink	Greater 25.6 gpm to 55.6 gpm		1.5	<u>-</u> 1	2.00
		2.0	1.5	<u> </u>	2.00
Sink Urinal		4.0	note d	-	
Urinal	One gallon per flush or less	2.0		2	4.00
Urinal	One gallon per flush or less Non water supplied	0.5	note d		4.00
Wash Sink	(Circular or multiple) each set of faucets	2.0	note d 1.5		
Water Closet		4.0	note d	-	
Water Closet	Flushometer, tank public or private Private, 1.6 gallon per flush	3.0	note d	-	-
		4.0		-	-
Water Closet	Private, greater than 1.6 gpf Public, 1.6 gpf	4.0	note d	6	24.00
Water Closet				-	24.00
Water Closet	Public, flushing greater than 1.6 gpf	6.0	note d	-	
			Total dfu	20	47.00
BUILDIN	G				
			FBCP Tab	le 710.1(1) list da	ita below
			Pipe Size (. ,	4.00

PLUMBING NOTES AND SPECIFICATIONS

- 1. THE PLUMBING PLAN SHALL COMPLY WITH THE 2023 FLORIDA BUILDING CODE (FPC), THE STATE OF FLORIDA ENERGY CODE AND ALL LOCAL CODES AS MAY BE APPLICABLE. SIX SHOP DRAWINGS SUBMITTALS OF ALL MAJOR EQUIPMENT SHALL BE REQUIRED FOR APPROVAL PRIOR TO ORDERING AND PROCUREMENT OF SAME.
- 2. PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER SIMILAR OR
- 3. THIS CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS TO INSURE THAT EACH TRADE SHALL
- HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL WORK, ETC.).
- 4. IN GENERAL, ALL PIPING SHALL BE RUN CONCEALED IN CEILING AND PIPE SPACES PROVIDED UNLESS NOTED
- 5. VERIFY ALL DIMENSIONS FORM ARCHITECTURAL PLANS FOR FIELD DIMENSIONS.
- 6. PROVIDE STOP OR ANGLE VALVES ON EACH WATER CONNECTION TO EACH PLUMBING FIXTURE.
- 7. BURIED PIPING NEAR FOUNDATION SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLUMBING CODE
- 8. PLUMBING SYSTEM INSTALLER SHALL PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC., REQUIRED TO INSTALL A COMPLETE SYSTEM.
- 9. AN AIR CHAMBER/SHOCK ABSORBER WATER HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE USED TO PREVENT WATER HAMMER, SUCH AS ON WASHING MACHINES, ICE MAKERS, DISHWASHERS, AND DRINKING FOUNTAINS. THE ARRESTOR SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, BE ACCESSIBLE, AND SHALL CONFORM TO ASSE 1010.
- 10. UNLESS NOTED OTHERWISE, ALL MATERIALS SHALL BE NEW, COMPLETE, INCLUDE MANUFACTURER'S WARRANTY AND SHALL BE U.L. APPROVED IF APPLICABLE. ALL WORK SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
- 11. ALL RISES AND DROPS IN PIPING NOT NECESSARILY SHOWN.

ACCORDANCE TO FLORIDA PLUMBING CODE CHAPTER 7.

- 12. CONTRACTOR SHALL VERIFY ELEVATIONS OF UTILITY CONNECTIONS ON SITE PRIOR TO COMMENCING WORK.
- 13. ALL WATER PIPING SHALL BE TYPE CPVC ABOVE GRADE AND SCHEDULE 40 SOLID PVC BELOW GRADE IN ACCORDANCE WITH FLORIDA PLUMBING CODE CHAPTER 6.
- 14. ABOVE GRADE DWV PIPING SHALL BE AT A MINIMUM SCHEDULE 40 SOLID PVC TYPE DWV OR COEXTRUDED PIPING WITH CELLULAR CORE. ALL UNDER GROUND OR ABOVE GROUND DRAINAGE PIPING SHALL BE IN
- 15. FIXTURES SHALL BE AS SCHEDULED OR AS SELECTED BY ARCHITECT. SEE LIST OF ACCEPTABLE
- LAVS, SERVICE SINKS, WATER CLOSETS, URINALS, BATH TUBS: AMERICAN STANDARD, CRANE CO.,
- STAINLESS STEEL SINKS: AMERICAN STANDARD, ELKAY MFG. CO., DAYTON
- FAUCETS: AMERICAN STARDARD, CHICAGO FAUCET CO., DELTA FAUCET CO., ELJER PLUMBING WARE DIV., KOHLER CO., T&S BRASS, SPEAKER MAN.
- FLUSH VALVES: COYONE & DELNAY CO., SLOAN VALVE CO.
- WATER CLOSET SEATS: BEMIS MFG. CO., KOHLER CO., BENEKE CORP., FORBES-WRIGHT INDUSTRIES, INC., CHURCH PRODUCTS, OLSONITE CORP., OLSONITE SEATS.
- FIXTURE SUPPORTS: JOSAM MFG. CO., KOHLER CO., TYLER PIPE, ZURN INDUSTRIES INC.,
- ROOF DRAINS: ZURN OR SIOUX CHIEF.
- WATER COOLERS: HAWS, ELKAY OR HALSEY-TAYLOR.
- 16. THIS CONTRACTOR IS RESPONSIBLE FOR ALL HVAC CONDENSATE DRAINS INCLUDING PIPING, INSULATION THEREOF, AND DRYWELLS/RECEPTORS.
- 17. PLUMBING CONTRACTOR RESPONSIBILITY TO BE TO 5' BEYOND BUILDING LINE FINAL CONNECTION TO SITE
- 18. PROVIDE CLEAN-OUTS AT EACH STACK RISER, AT EACH 90 DEGREE CHANGE IN HORIZONTAL DIRECTION,
- AND AT EACH EXIT FROM BUILDING. 19. PROVIDE MAIN SHUTOFF VALVE, RUBBER FACED CHECK VALVE, VACUUM, BREAKER AND HOSE BIB ON COLD
- WATER MAIN ENTERING THE BUILDING. PROVIDE SHUTOFF VALVE ON THE WATER SUPPLY PIPE TO EVERY 20. SILLCOCKS, HOSE BIBS, AND OTHER OPENINGS WITH A HOSE CONNECTION SHALL BE PROTECTED BY AN
- ATMOSPHERIC-TYPE VACUUM BREAKER OR PERMANENTLY ATTACHED HOSE CONNECTION VACUUM BREAKER.
- 21. CONNECT WATER MAIN TO VALVE OR STUB PROVIDED BY SITE UTILITY CONTRACTOR. PROVIDE FOR CHLORINATION OF FINAL WATER CONNECTION.
- 22. PROVIDE AT LEAST ONE 3" MAIN VENT-THRU-ROOF IN BUILDING.
- 23. PROVIDE AT ALL REFRIGERATOR LOCATIONS A MINIMUM 3/8" C.W. LINE TO 1/4" PETCOCK 6" ABOVE FLOOR. FURNISH 48" OF 1/4" SOFT COPPER TUBING FOR CONNECTION TO REFRIGERATOR.
- ALL DOMESTIC HOT WATER LINES WITH ARMAFLEX RUBBER INSULATION OR 1/2" THICK FIBERGLAS PREJACKETED INSULATION WITH SELF SEALING LAP JOINT. EXCEPT FOR CPVC PIPING.
- 25. CHILLED WATER FROM REMOTE CHILLER TO DRINKING FOUNTAINS SHALL BE COPPER WITH LEAD FREESOLDER JOINTS. INSULATE CHILLED WATER LINES FROM CHILLER TO WATER FOUNTAINS WITH 1/2"
- THICK FIBERGLAS THE FIBERGLAS SHALL HAVE AN ALL SERVICE JACKET AND BE SELF SEALING. 26. WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND OTHER COSTS AS ARE NECESSARY FOR THE INSTALLATION OF A COMPLETE AND SATISFACTORY OPERATIONAL PLUMBING SYSTEM.
- 27. ALL EQUIPMENT FIXTURES, ETC. SHALL BE TESTED, ADJUSTED AND OPERATED AS INDICATED ON THE PLANS AND PLACED IN SATISFACTORY OPERATIONAL CONDITION BY THE PLUMBING CONTRACTOR. THIS CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP. MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. THIS IS IN ADDITION TO ANY WARRANTY OR GUARANTEE FROM THE EQUIPMENT MANUFACTURER. FURNISH THE OWNER WITH THE
- NOTICE TO CONTRACTOR: REVISIONS TO THESE DRAWINGS AND CERTIFICATION THERETO WHICH MAY BE REQUIRED BECAUSE OF CONTRACTOR OPTED REVISIONS, SHALL BE COMPENSATED TO THE ENGINEER BY THE REQUESTING CONTRACTOR, PAYMENT SHALL BE REQUIRED AT THE TIME OF CERTIFICATION DELIVERY

VOLUME	DEB	SEE NOTE
(GALLONS)	<u>UNITS</u>	BELOW
1.6	FLUSH	5
1.6	FLUSH	
1.0	FLUSH	
2.2	MINUTE	6
0.5	MINUTE	6
0.25	CYCLE	2
2.5	MINUTE	3 4
	1.6 1.6 1.0 2.2 0.5 0.25	(GALLONS) UNITS 1.6 FLUSH 1.6 FLUSH 1.0 FLUSH 2.2 MINUTE 0.5 MINUTE 0.25 CYCLE

- MAXIMUM ALLOWABLE WATER USAGE FOR PLUMBING FIXTURES AND FIXTURE FITTING NOT LISTED IN THIS TABLE SHALL CONFORM TO THE APPLICABLE ANSI STANDARD LISTED IN TABLE 405. BLOWOUT FIXTURES, PANELWEAR, CLINIC SINKS AND SERVICE SINKS SHALL BE EXEMPTED FROM THESE LIMITATIONS.
- LAVATORY FAUCETS SHALL BE OF THE METERING TYPE WHEN LOCATED IN THE FOLLOWING PUBLIC
- A. ALL OCCUPANCIES IN RESTROOMS WHICH HAVE SIX OR MORE LAVATORIES
- B. SCHOOL OCCUPANCIES IN STUDENT-USE RESTROOMS C. ASSEMBLY OCCUPANCIES IN ALL CUSTOMER OR PUBLIC-USE RESTROOMS
- SHOWERHEAD FLOW RATE AS TESTED AT 80 PSI (552 kPA) IN ACCORDANCE WITH ANSI STANDARD A112.18.1M.
- SPECIAL PURPOSE SAFETY SHOWERS ARE EXEMPTED FROM MAXIMUM FLOW RATE LIMITATIONS.
- AVERAGE WATER CONSUMPTION FOR LOW CONSUMPTION WATER CLOSETS OVER A RANGE OF TEST PRESSURES SHALL NOT EXCEED 1.6 GPF. THE CONSUMPTION SHALL NOT EXCEED 2.0 GPG AT ANY ONE
- MEASURED AT 60 P.S.I.

TEST PRESSURE.

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SHEET

DRAWING NAME:

PLUMBING

DETAILS, NOTES

AND SCHEDULES

ART A. CASTELLANOS NO. AR0015473

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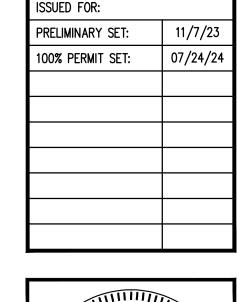
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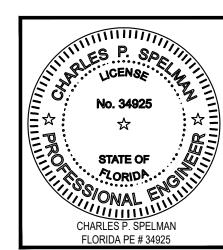


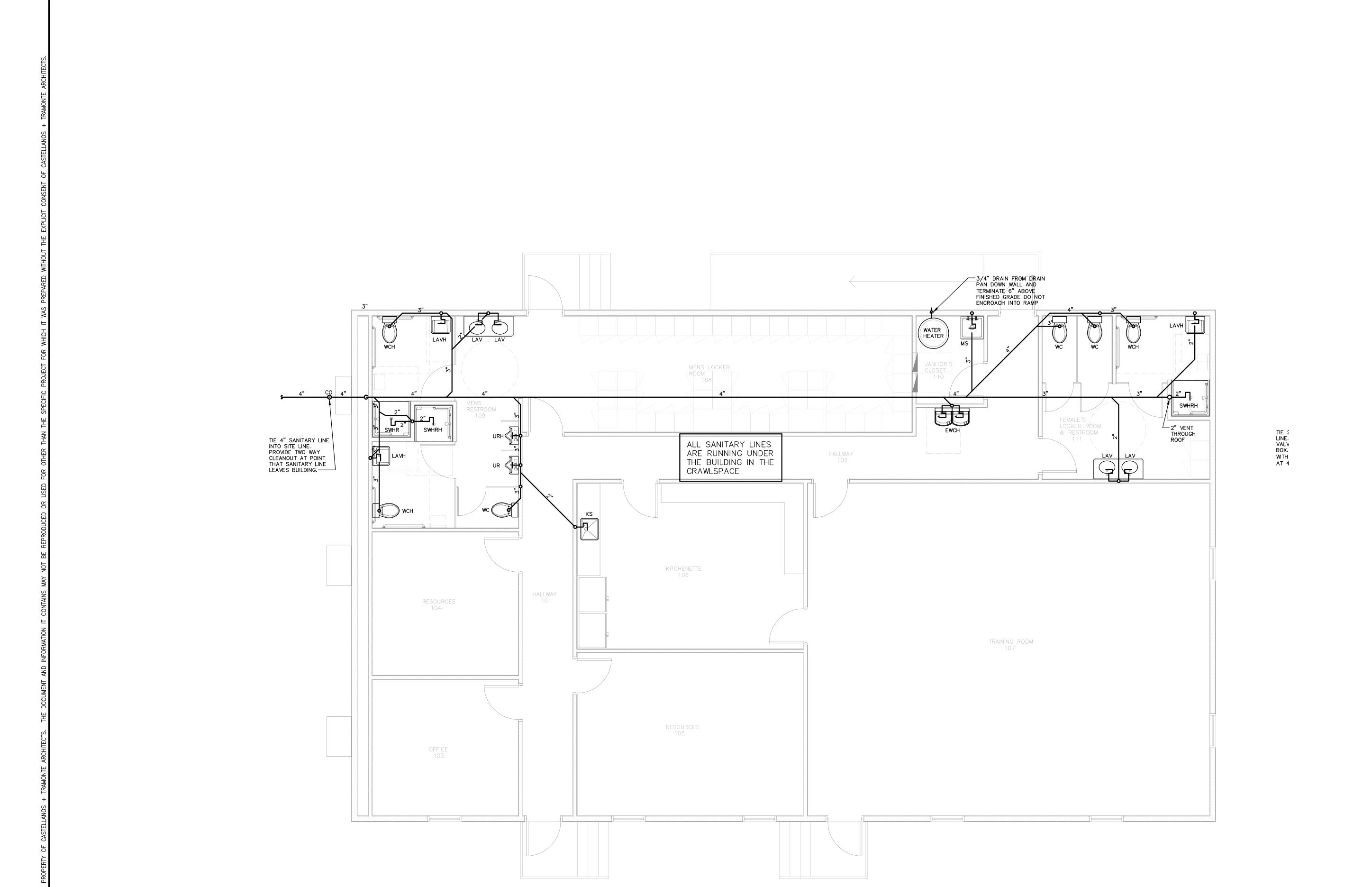
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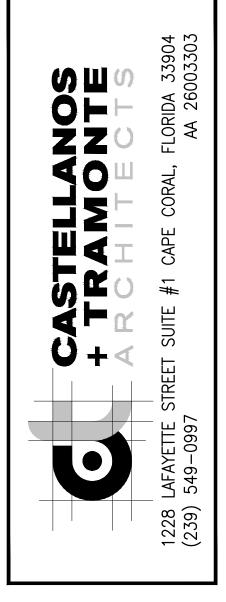
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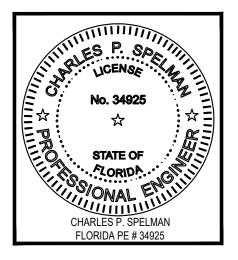




LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905



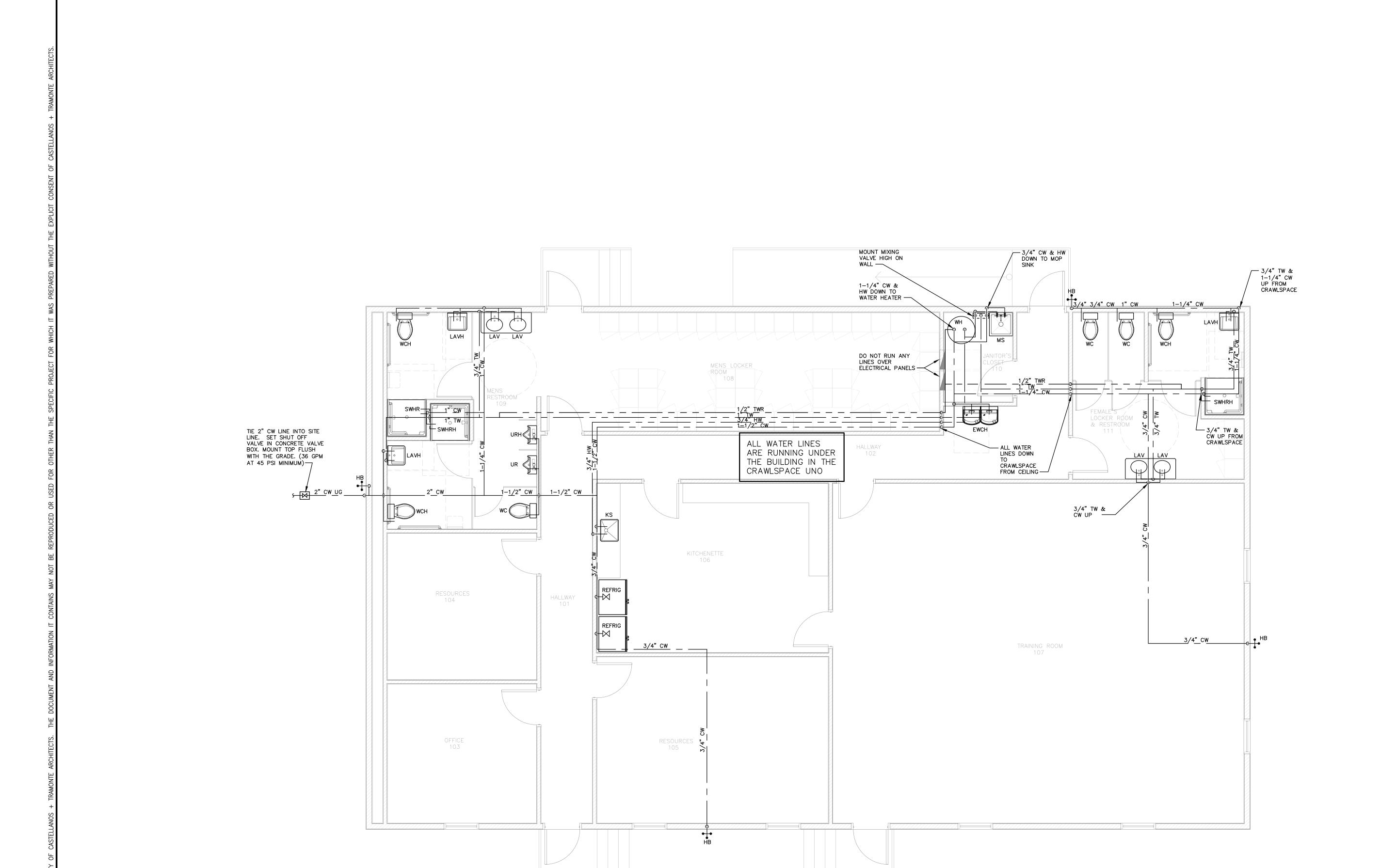
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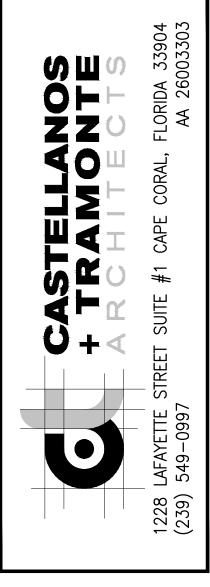
DRAWING NAME:
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SANITARY PLAN

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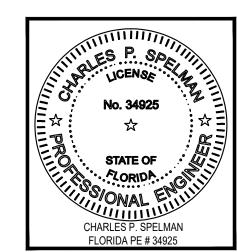
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LEE COUNTY SOLID WASTE TRANSFER STATION EMPLOYEE BUILDING 10450-10550 BUCKINGHAM ROAD FORT MYERS, FL 33905



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