

GENERAL NOTES & SPECIFICATIONS

DIV. 0 GENERAL

01 Dimensions

- A. INTERIOR PLAN DIMENSIONS ARE TO FACE OF STUD OR CONCRETE (CMU) UNLESS A CENTERLINE/GRIDLINE IS INDICATED, WHICH WILL THEN INDICATE THE DIMENSION IS TO CENTER OF ELEMENT. (COLUMN, WALL, STUD, ETC.).
- B. EXTERIOR PLAN DIMENSIONS ARE TO FACE OF STUD UNLESS A CENTERLINE OR GRIDLINE IS INDICATED, WHICH WILL THEN INDICATE THE DIMENSION IS CENTER OF ELEMENT. SEE EXTERIOR DETAILS FOR ADDITIONAL INFO.
- C. DOOR AND CASED OPENINGS WITHOUT LOCATION DIMENSIONS ARE THREE (3) INCHES FROM FACE OF ADJACENT PARTITION OR CENTERED BETWEEN PARTITIONS (UON).
- D. ALIGNMENT TAKE PRECEDENT OVER DIMENSIONS. VERIFY ALL DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- E. EXTERIOR WINDOWS ARE DIMENSIONED TO WINDOW SIZE AS INDICATED ON WINDOW SCHEDULE. CONTRACTOR SHALL DETERMINE WINDOW ROUGH OPENING REQUIREMENTS.
- G. DO NOT SCALE DRAWINGS THE CONTRACTORS SHALL USE DIMENSIONS SHOWN ON THE DRAWINGS AND ACTUAL FIELD MEASUREMENT. NOTIFY THE ARCHITECT IF ANY DISCREPANCIES ARE
- H. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE. AND REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR INTERPRETATION AND OR CORRECTIONS PRIOR TO INSTALLATION. COST OF CORRECTING WORK BASED ON MISINTERPRETATION BY CONTRACTOR OR UNREPORTED DIMENSIONAL DISCREPANCIES SHALL BE BORNE BY THE CONTRACTOR.
- WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE ON THE DRAWINGS. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS. DIMENSIONS GOVERN MEASUREMENTS.

A. ALL WORK SHALL CONFORM TO APPLICABLE BUILDING CODES AND LOCAL ORDINANCES AND REGULATIONS. IN CASE OF ANY CONFLICT WHERE SPECIFIED DOES NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES, THE LAWS OR ORDINANCES SHALL GOVERN. NOTIFY THE ARCHITECT OF ALL

03 Abbreviations and Symbols

A. THROUGHOUT THE PLAN ARE ABBREVIATIONS AND SYMBOLS WHICH ARE IN COMMON USE. THE LIST OF ABBREVIATIONS AND SYMBOLS PROVIDED IS NOT INTENDED TO BE COMPLETE OR REPRESENTATIVE OF CONDITIONS OR MATERIALS ACTUALLY USED ON THE PROJECT. THE ARCHITECT WILL DEFINE THE INTENT OF ANY IN QUESTION.

04 Elevation Datums

- A. FLOOR PLAN DATUM ELEVATIONS ARE INDICATED ON THE EXTERIOR ELEVATIONS.
- B. ALL ROOF ELEVATIONS ARE REFERENCED FROM DATUM AS INDICATED ON FLOOR PLAN.
- C. CEILING HEIGHTS INDICATED ON THE REFLECTED CEILING HEIGHTS ARE FROM TOP OF SLAB/OR FINISH FLOOR TO FINISH CEILING.

05 Accessibility Standards

- A. SEE ACCESSIBILITY NOTES AND DETAIL SHEETS FOR ACCESSIBILITY REQUIREMENTS.
- B. CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION CALL PUBLIC AND EMPLOYEE AREAS SHALL BE ACCESSIBLE. THE CONTRACTORS SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE DRAWINGS, AND/OR FIELD CONDITIONS AND THE ADA/LOCAL REGULATIONS.

DIV. 1 GENERAL CONDITIONS

- 1.1 THE ENTIRE WORK PROVIDED FOR HEREIN IS TO BE CONSTRUCTED AND FINISHED IN EVERY PART IN A GOOD AND SUBSTANTIAL MANNER IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. TO THE FULL INTENT OF THE SAME. ANY WORK REQUIRED BY LAW, BUT WHICH MAY NOT BE SPECIFICALLY MENTIONED BY LAW, SHALL BE DONE BY CONTRACTORS IN ACCORDANCE WITH THE LAWS OF THE COUNTY, DISTRICT, OR STATE UNDER WHICH JURISDICTION MAY COME AND COST SHALL BE BORNE BY CONTRACTORS. ANY SUCH WORK SHALL BE DONE IN CONFORMANCE WITH THE PLAN, BOTH AS TO MANNER AND APPEARANCE. ALL WORK SHALL BE DONE IN ACCORDANCE WITH UBC, TITLE 17, TITLE 24 AND THE AMERICANS WITH DISABILITY ACT (ADA) AND AS REQUIRED BY THE LOCAL GOVERNING AGENCIES.
- 1.2 THE DRAWINGS AND SPECIFICATIONS: THESE DRAWINGS COVER THE FURNISHING AND INSTALLATION OF ALL MATERIALS AND WORK AS CALLED FOR ON THE DRAWINGS OR IN THE SPECIFICATIONS (OR IN BOTH) WHICH ARE BOUND SEPARATELY AND ARE A PART OF THE CONTRACT, CIVIL, LANDSCAPING, INTERIOR DESIGN, KITCHEN AND LAUNDRY, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO CHECK WITH THE ARCHITECTURAL DRAWINGS PRIOR TO SUBMITTING THEIR BID AND BEFORE INSTALLATION OF THEIR WORK ANY DISCREPANCY BETWEEN THE ARCHITECTURAL AND THE CONSULTING ENGINEER(S) DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION BY WRITTEN REQUEST FOR CLARIFICATION. ANY WORK OMITTED OR INSTALLED IN CONFLICT WITH ARCHITECTURAL DRAWINGS SHALL BE PERFORMED OR CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
- 1.3 ALL SITE INFORMATION IS BELIEVED TO BE CORRECT, HOWEVER, IT IS ALL CONTRACTORS RESPONSIBILITY TO VERIFY ALL ACTUAL SITE CONDITIONS PRIOR TO SUBMITTING A BID.
- 1.4 THE CONTRACTORS SHALL FURNISH ALL LABOR, MATERIAL EQUIPMENT, SERVICES AND TRANSPORTATION REQUIRED TO FULLY CARRY OUT THE INTENTIONS OF THE PLANS AND SPECIFICATIONS AS PART OF THEIR CONTRACTS, WHETHER OR NOT SPECIFICALLY DOCUMENTED, THE CONTRACTORS SHALL PROVIDE FACH ITEM MENTIONED, INDICATED, OR IMPLIED TO ACHIEVE THE INTENDED BUILDING ACCORDING TO THE METHODS OF BEST CONSTRUCTION PRACTICE. THE ARCHITECT SHALL BE THE FINAL JUDGE AS TO THE QUALITY OF THE WORKMANSHIP, AND RESERVES THE RIGHT TO REJECT ANY WORK CONSIDERED INFERIOR.
- 1.5 ALL MANUFACTURED EQUIPMENT AND MATERIALS ARE TO BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, AND ARE TO BE NEW. MANUFACTURER'S RECOMMENDATIONS SHALL BE CONSIDERED A PART OF THESE CONTRACT DOCUMENTS AS THOUGH INCLUDED HEREIN.
- 1.6 THE ARCHITECT IS AUTHORIZED TO ORDER MINOR CHANGES DURING THE COURSE OF THE WORK WHICH WILL NOT INVOLVE EXTRA COST OR TIME AND WHICH ARE CONSISTENT WITH THE CONTRACT DOCUMENTS.
- 1.7 CONTRACTORS SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL HOURS.
- 1.8 THE CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF DRAWINGS AT THE JOB SITE FOR USE IN MAKING RECORD DRAWINGS ANY REVISIONS SHALL BE NOTED THEREON AND SUBMITTED TO THE ARCHITECT AT THE COMPLETION OF THE JOB PER THE PROJECT MANUAL. PROVIDE A COPY FOR THE OWNER PER CONSTRUCTION DOCUMENTS.

- 1.10 Building Permits
- A. THE OWNER SHALL OBTAIN THE STATE (IF REQUIRED), AND LOCAL BUILDING PERMITS
- B. SEPARATE PERMITS REQUIRED FOR GRADING OR DEMOLITION. FIRE PROTECTION, UTILITIES WORK, AND AS REQUIRED BY THE LOCAL GOVERNING AGENCIES, SHALL BE OBTAINED BY THE CONTRACTOR.
- C. ALL COSTS FOR PERMITS, OTHER THAN THOSE OBTAINED BY THE OWNER, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS.

1.11 Coordination

- A. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION AND COORDINATION WITH OTHER CONTRACTORS TO ASSURE COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS, AND THE ACCURATE LOCATION OF STRUCTURAL MEMBERS AND OPENINGS FOR MECHANICAL, ELECTRICAL, STAIRS, ELEVATORS AND MISCELLANEOUS EQUIPMENT.
- B. CONTRACTORS SHALL VERIFY SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PADS AND BASES AS WELL AS POWER AND WATER OR DRAIN INSTALLATION WITH FOUIPMENT MANUFACTURERS AND VERIFY CONFORMANCE WITHIN ARCHITECTURAL DOCUMENTATION BEFORE PROCEEDING WITH THE WORK.
- C. THE CONTRACTORS ARE REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING
- D. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC, UNLESS SPECIFICALLY DETAILED.
- E. ALL COMBUSTIBLES CONSISTING OF BOXES, SCRAP LUMBER, ETC. ON THE CONSTRUCTION SITE SHALL BE CLEANED UP AND DISPOSED OF IN AN APPROVED MANNER ON A DAILY BASIS.

- A. THE OWNER AND/OR ARCHITECT RESERVE THE RIGHT TO HAVE TESTS MADE WHEN DEEMED NECESSARY. SHOULD THE ARCHITECT ORDER SPECIAL TESTING OR INSPECTION OF A OLIESTIONARLE PART OF THE WORK WHICH REVEALS DEFECTS NOT IN CONFORMITY WITH THE CONTRACT DOCUMENTS, THE TRADE RELATED CONTRACTOR SHALL PAY THE COST OF BUCH SPECIAL TESTING OR INSPECTIONS INCLUDING THE ARCHITECT'S EXTRA SERVICES MADE NECESSARY THEREBY. OTHERWISE THE OWNER SHALL BEAR BUCH COST.
- B. TESTS SHALL BE MADE IN ACCORDANCE WITH RECOGNIZED STANDARDS BY A COMPETENT, INDEPENDENT TESTING LABORATORY. ANY MATERIAL FOUND DEFECTIVE OR NOT IN CONFORMITY WITH SPECIFICATION STANDARDS SHALL BE PROMPTLY REPLACED OR REPAIRED AT THE EXPENSE OF THE CONTRACTOR SAMPLES FOR TESTING WILL BE FURNISHED BY THE TRADE RELATED CONTRACTOR AND SELECTED REQUIRED AS DIRECTED BY THE ARCHITECT.

1.13 Miscellaneous

- A. THE CONTRACTORS SHALL COMPLY WITH REQUIREMENTS FOR THE STORAGE AND HANDLING OF HAZARDOUS MATERIALS AS REQUIRED BY LOCAL ORDINANCE.
- B. THE CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS FOR CONSTRUCTION WATER. DUST SHALL BE CONTROLLED BY WATERING AS REQUIRED.
- C. GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ARCHITECT FOR REVIEW IN ITEMS CALLED OUT AS 'OR EQUAL,' AND IN ACCORDANCE WITH THE PLANS, SPECS, AND NOTES.
- D. VEHICULAR ACCESS MUST BE PROVIDED AND MAINTAINED SERVICEABLE THROUGHOUT CONSTRUCTION AND IN COMPLIANCE WITH CONDITIONS OF APPROVAL.
- E. CONTRACTOR SHALL INCLUDE COST FOR ALL REQUIRED STAKING 1.14 Demolition
- A. ABSOLUTE CARE SHOULD BE EXERCISED IN THE REMOVAL OF EXISTING BUILDING FABRIC. REMOVE ONLY WHAT IS ABSOLUTELY NECESSARY FOR CONSTRUCTION OF THE NEW WORK. IF ANY DOUBT OR QUESTIONS ARE ENCOUNTERED, NOTIFY ARCHITECT.
- B. REFER TO THE STRUCTURAL DRAWINGS FOR FRAMING CONDITIONS THAT MAY REQUIRE DEMOLITION OR REINFORCING WORK PRIOR TO NEW CONSTRUCTION.
- C. PRIOR TO DEMOLITION WORK, REFER TO ALL OTHER DRAWINGS TO THOROUGHLY BECOME FAMILIAR WITH ALL CONSTRUCTION WORK TO MINIMIZE DEMOLITION.
- D. REMOVE ALL EXISTING PLUMBING PIPING THAT IS EXPOSED OR ENCOUNTERED.

E. REMOVE ALL EXPOSED PLUMBING PIPING AFTER REMOVING

- PLUMBING FIXTURES. CAP BELOW WALL OR FLOOR SURFACE IF COMPLETE REMOVAL IS NOT FEASIBLE. F. ALL PLASTER AND INSULATION WRAP AROUND PIPING AND DUCTWORK IS TO BE TESTED FOR THE PRESENCE OF ASBESTOS. IF ASBESTOS IS FOUND TO BE PRESENT, ABATEMENT AND
- DISPOSAL IS TO CONFORM WITH LOCAL, STATE, AND FEDERAL GUIDELINES. G. REFER TO THE ARCHITECTURAL DRAWINGS FOR NEW WORK THAT MAY REQUIRE DEMOLITION NOT SHOWN ON THE DEMOLITION PLANS

H. VERIFY ALL STRUCTURAL CONDITIONS PRIOR TO REMOVING ANY

- . DEMOLITION CONTRACTOR TO CAREFULLY LEAVE STRUCTURE THAT REMAINS IN GOOD CONDITION, AND TO USE TEMPORARY SUPPORT
- AS NEEDED TO INSURE STRUCTURE STABILITY. J. DEMOLITION CONTRACTOR SHALL BE HELD STRICTLY RESPONSIBLE TO ABIDE BY ALL RULES, REGULATIONS AND ORDINANCES AS DICTATED BY THE CITY OF PROJECT AND OR ANY OTHER GOVERNING AGENCY.
- K. DEMOLITION PROCEDURES AND REMOVAL OF REFUSE SHALL OCCUR IN AN ORDERLY FASHION. NO STORAGE OF REFUSE SHALL OCCUR ON SITE. NO SALE OF SCRAP OR REFUSE SHALL OCCUR ON SITE. NO BURNING OF REFUSE SHALL BE PERMITTED. NO USE OF EXPLOSIVES SHALL BE PERMITTED.
- .. DEMOLITION CONTRACTOR SHALL BE HELD RESPONSIBLE TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO DEMOLITION. CONTRACTOR ASSUMES ALL RESPONSIBILITIES AND LIABILITIES ASSOCIATED WITH REGARD TO DEMOLITION PRACTICES AND ASSUMES SUCH.
- M. DEMOLITION CONTRACTOR IS RESPONSIBLE FOR SAFETY AND SECURITY OF THE ENTIRE SITE AND FACILITY DURING PROCESS OF DEMOLITION AND SHALL OBTAIN INSURANCE'S PROTECTING THE OWNER, DESIGN BUILDER AND ARCHITECT.
- N. DEMOLITION CONTRACTOR TO TAKE ALL STEPS NECESSARY TO PREVENT POLLUTION OF AIR, WATER AND SOILS, AND SHALL;
- 1. COMPLY WITH ENVIRONMENTAL POLLUTION REGULATIONS.
- 2. NO STORAGE OF CONTAMINANTS ARE PERMITTED ON SITE. 3. DEMOLITION CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO
- PREVENT ACCIDENTS DUE TO PHYSICAL HAZARDS (i.e. BARRICADES, WARNING LIGHTS, SIGNS AS REQUIRED). CONTRACTOR IS REQUIRED TO INSURE PUBLIC SAFETY DURING THE DEMOLITION PROCESS AND ASSUME ALL LIABILITIES FOR
- 4. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO INSURE THAT ITEMS SCHEDULED OR NOTED TO REMAIN, STAY INTACT AND UNDAMAGED.
- 5. DEMOLITION CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION

- OF THE ENTIRE BUILDING FACILITIES STRUCTURE AND COORDINATE EFFORTS WITH THE GENERAL CONTRACTOR. DEMOLITION CONTRACTOR SHALL VERIFY ALL CONDITIONS AND SCOPE OF WORK AS DESCRIBED HERE IN. THESE DOCUMENTS ARE TO BE UTILIZED FOR INTENT ONLY. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR THE FULL EXTENT OF THE DEMOLITION.
- 6. DRAIN. PURGE OR OTHERWISE REMOVE, COLLECT AND LEGALLY DISPOSE OF CHEMICALS, GASES, EXPLOSIVES. ACIDS. FLAMMABLES, OR OTHER HAZARDOUS MATERIALS AND WASTE BEFORE PROCEEDING WITH DEMOLITION OPERATIONS.
- 7. CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO THE START OF DEMOLITION.
- O. PROTECT EXISTING FINISHES IN EXISTING AREAS TO REMAIN.

DIV. 2 SITEWORK

- 2.1 Site Clearing
- A. SECTION INCLUDES REMOVAL OF SURFACE DEBRIS, TREES, SHRUBS, PLANTLIFF AND TOPSOIL EXCAVATION.
- B. LOCATE, IDENTIFY AND PROTECT UTILITIES.
- C. PROVIDE PROTECTION OF FEATURES DESIGNATED TO REMAIN AS FINAL LANDSCAPING.
- D. PROVIDE PROTECTION OF BENCH MARKS, SURVEY CONTROL POINTS, AND EXISTING STRUCTURES FROM DAMAGE OR DISPLACEMENT. E. CLEAR AREAS REQUIRED FOR ACCESS TO SITE AND EXECUTION OF
- F. WHERE TREES ARE REMOVED REMOVE STUMPS AND ROOT SYSTEMS TO A DEPTH OF 18". APPLY HERBICIDE TO REMAINS OF STUMPS TO INHIBIT GROWTH, PER MANUUFACTURER AND IN STRICT COMPLIANCE W/ EPA.
- G. REMOVE DEBRIS, ROCK AND EXTRACTED PLANT LIFE FROM SITE.
- H. STOCKPILE TOPSOIL IN AREA DESIGNATED ON SITE TO A MAXIMUM DEPTH OF 8" AND PROTECT FROM EROSION.
- I. REMOVE EXCESS TOPSOIL NOT INTENDED FOR REUSE FROM SITE.
- 2.2 SEE CIVIL DRAWINGS FOR LOCATION OF BUILDING WORKING POINTS, ROUGH GRADING, ON-SITE UTILITIES, SITE IMPROVEMENTS, SITE RETAINING WALLS & SPECIFIC GENERAL NOTES. THE SOIL REPORT AND CIVIL DRAWINGS SHALL OVERRIDE CONFLICTS WITH SITEWORK NOTED HEREIN.

2.3 Landscape Grading

- A. SEE LANDSCAPE DRAWINGS FOR FINAL FINISH GRADES, PLANTING AND IRRIGATION.
- B. SECTION INCLUDES FINAL GRADE TOPSOIL FOR FINISH LANDSCAPING.
- C. PREPARE SUBGRADE TO RECEIVE TOPSOIL.
- D. PLACE TOPSOIL IN ALL AREAS DISTURBED BY CONSTRUCTION TO A NOMINAL DEPTH OF 4". PLACE TOPSOIL DURING DRY WEATHER.
- E. ROLL PLACED TOPSOIL.
- F. MANUALLY SPREAD TOPSOIL CLOSE TO BUILDING TO PREVENT DAMAGE.
- 2.4 EXCAVATION/GRADING REQUIREMENTS
- A. THE GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE PROJECT SHALL BE NOTIFIED BY THE GRADING CONTRACTOR THAT GRADING IS TO COMMENCE AND MAKE ALL NECESSARY ARRANGEMENTS FOR FIELD INSPECTOR.
- B. ALL BUILDING AREAS SHALL BE EXCAVATED AND RECOMPACTED IN ACCORDANCE WITH THE SOILS REPORT
- C. SOIL EXCAVATION AND RECOMPACTION SHALL BE DONE UNDER THE SUPERVISION OF A REGISTERED SOILS ENGINEER. ALL DENSITIES. MOISTURE CONTENT AND TESTING SHALL BE APPROVED BY THE PROJECT SOILS ENGINEER PRIOR TO APPLYING THE FINISH SURFACES INDICATED ON THE DRAWINGS. ONE COPY OF ALL CERTIFICATION AND TESTS SHALL BE SENT TO THE ARCHITECT.
- D. ALL FILL AND BACKFILL MATERIAL SHALL BE APPROVED BY THE
- SOILS ENGINEER. E. FOOTING EXCAVATIONS SHALL BE EXAMINED BY THE PROJECT SOILS
- ENGINEER BEFORE THE REINFORCING STEEL OR FRAMES ARE SET. F. ALL GRADING SHALL CONFORM TO LOCAL ORDINANCES AND STANDARDS.
- G. GRADING CONTRACTOR SHALL PROVIDE BARRICADES, LIGHTS, SIGNS AND SAFETY PRECAUTIONS REQUIRED BY GOVERNING CODES AND
- H. GRADING CONTRACTOR SHALL PROVIDE DUST CONTROL. GRADING CONTRACTOR SHALL COMPLY WITH CITY STANDARDS AND CONDITIONS OF APPROVAL. I. A THOROUGH SEARCH SHALL BE MADE FOR UNDERGROUND UTILITIES AND STRUCTURES, ETC, WITHIN THE BUILDING SITE.
- UTILITY CONTRACTOR SHALL REMOVE OR CAP OFF ALL SUCH ITEMS IN ACCORDANCE WITH THE ARCHITECT'S AND/OR ENGINEER(S) INSTRUCTIONS PERTAINING TO EACH DISCOVERY. IN ALL CASES OF THIS TYPE, THE ARCHITECT SHALL BE NOTIFIED BEFORE THE WORK PROCEEDS, EXCEPTING THAT IN ANY EMERGENCY AFFECTING SAFETY OF LIFE, OR OF ADJOINING PROPERTY, THE UTILITY CONTRACTOR SHALL ACT AT ONCE WITHOUT SUCH INSTRUCTIONS TO PREVENT SUCH THREATENED INJURY OR LOSS.
- J. DAMAGE TO ANY ADJACENT PROPERTY, STREETS AND THE LIKE CAUSED BY OPERATIONS OF THIS SECTION SHALL BE RESTORED TO ORIGINAL CONDITION WITHOUT ADDITIONAL COST OR LIABILITY TO
- K. EXCAVATE TO EXACT DIMENSIONS, LEVELS, AND ALIGNMENT SHOWN ON THE DRAWINGS. REMOVE ALL MATERIALS ENCOUNTERED. L. ALL BACKFILL SHALL BE PLACED IN ACCORDANCE TO GRADING
- M. COMPACTION BY FLOODING OR JETTING IS STRICTLY PROHIBITED. N. NO FILL MATERIALS SHALL BE PLACED, SPREAD, OR ROLLED

DURING UNFAVORABLE WEATHER CONDITIONS. WHEN WORK IS

RECOMMENDATIONS.

RESUMED UNTIL TESTS BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONTENT AND DENSITY OF THE FILL ARE AS O. REMOVE ALL WATER, INCLUDING RAINWATER, ENCOUNTERED DURING THE TRENCHING AND SUBSTRUCTURE WORK, TO AN APPROVED LOCATION BY THE USE OF PUMPS, DRAINS, AND OTHER APPROVED

INTERRUPTED BY HEAVY RAINS, FILL OPERATIONS SHALL NOT BE

- P. REPORT ANY UNUSUAL SOIL CONDITIONS OR VARIATIONS IN THE SOIL TO THE SOILS ENGINEER IMMEDIATELY FOR CONSULTATION
- Q. ALL AREAS SHALL BE GRADED AND FILLED AS SHOWN ON THE DRAWING TO A TOLERANCE OF PLUS OR MINUS 1/10TH OF ONE

ROCKS, VEGETATION AND BUILDING DEBRIS. GRADE SHALL SLOPE

1/4 INCH PER FOOT AWAY FROM BUILDING, WALKS, ETC, FOR A

R. FINISHED GRADE SHALL BE CLEAN, RAKED, LEVEL, FREE OF

MINIMUM OF TEN FEET AND TO THE NATURAL GRADE. MAKE ADJUSTMENTS REQUIRED TO PROVIDE PROPER SITE DRAINAGE. S. SECTION INCLUDES BACKFILLING FOR BUILDING FOUNDATIONS AND

SLAB ON GRADE AND AGGREGATE BASE COURSE UNDER FOOTING.

- T. REFERENCE STANDARDS: ASTM D1556, ASTM D1267, ASTM D2922, AND ASTM D3017.
- U. AGGREGATE BASE COURSE: NO. 57 STONE.

PRIVATELY OWNED ADJACENT PROPERTIES.

- V. MAINTAIN AND PROTECT ABOVE AND BELOW GRADE UTILITIES.
- W. DO NOT INTERFERE W/45 DEGREE BEARING SPLAY OF FOUNDATION. X. KEEP ALL EXCAVATIONS FREE FROM WATER AT ALL TIMES. PROVIDE PUMPS, HOSES AND DRAINAGE LINES FOR THIS PURPOSE. WATER REMOVED SHALL DRAIN AWAY FROM SITE, BUT NOT ONTO
- Y. REMOVE LUMPED SUBSOIL, BOULDERS AND ROCK UP TO 1/3 CU.
- Z. NOTIFY ARCHITECT OF UNEXPECTED SUBSURFACE CONDITIONS AND DISCONTINUE WORK IN AREA UNTIL NOTIFIED TO RESUME WORK.
- 1. PROVIDE COMPACTION TESTING IN ACCORDANCE W/ ASTM D698. BACKFILL BENEATH FLOOR SLABS SHALL BE COMPACTED TO 95%OF THE SOILS MAXIMUM DRY DENSITY. (STANDARD PROCTOR).
- 2. PROTECT EXCAVATIONS TO PREVENT CAVE-IN AND TO KEEP BOTTOM OF EXCAVATIONS ADJACENT TO AND BENEATH FOUNDATIONS FROM FREEZING.
- 3. RESHAPE/RE-COMPACT FILLS SUBJECTED TO VEHICULAR TRAFFIC DURING CONSTRUCTION.

2.4 Termite Control

- A. SECTION INCLUDES SOIL TREATMENT FOR TERMITE CONTROL BELOW GRADE. AT INTERIOR AND EXTERIOR FOUNDATION PERIMETER.
- B. CONFORM TO APPLICABLE CODE FOR AUTHORITY TO USE TOXICANT CHEMICALS IN ACCORDANCE W/ EPA.
- C. TOXICANT CHEMICAL SHALL BE EPA APPROVED: SYNTHETICALLY COLOR DYED TO PERMIT VISUAL IDENTIFICATION OF TREATED SOIL.
- D. APPLY TOXICANT IN ACCORDANCE W/ MANUFACTURERS' INSTRUCTIONS. APPLY EXTRA TREATMENT TO STRUCTURE PENETRATION SURFACES SUCH AS PIPE OR DUCTS, AND SOIL PENETRATIONS SUCH AS GROUNDING RODS OR POSTS.
- . PROVIDE 5-YEAR WARRANTY. WARRANTY: INCLUDE COVERAGE FOR DAMAGE AND REPAIRS TO BUILDING AND BUILDING CONTENTS CAUSED BY TERMITES. REPAIR DAMAGE, RE-TREAT WHERE
- F. LOCATIONS OF TREATMENT: UNDER SLABS-ON-GRADE, CRAWL SPACES AND BOTHE SIDES OF FOUNDATION WALLS.
- G. DO NOT PERMIT SOIL GRADING OVER TREATED WORK.

2.5 Site Utilities

- A. THE CONTRACTORS ARE REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES AT THE SITE SHOWN OR NOT SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.
- B. THE UTILITY CONTRACTOR SHALL LOCATE ALL UTILITY CONNECTIONS WITHIN 5 FT. OF THE BUILDING LINE, AND PROTECT UNTIL ALL CONNECTIONS AND TESTING ARE COMPLETED. UTILITY CONTRACTOR SHALL TAG ALL CONNECTION LOCATIONS WHERE FINISH SURFACES ARE PERMANENT. (I.E. CONCRETE, A.C., PAVING ETC).
- C. ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND.
- A. ALL CONCRETE SIDEWALKS SHALL SLOPE TO DRAIN AWAY FROM DOORS AND FACE OF BUILDING.
- B. ALL CONCRETE WALKS SHALL HAVE A MEDIUM BROOM FINISH U.O.N. ON THE DWGS. C. SEE CIVIL AND LANDSCAPE DRAWINGS FOR LAYOUT CONFLICTS IN
- DIV. 3 CONCRETE
- 3.1 SEE STRUCTURAL DRAWINGS FOR ALL STRUCTURAL CONCRETE AND REQUIRED REINFORCING.
- 3.2 SEE FOUNDATION PLAN FOR SLAB DIMENSIONS, DEPRESSIONS. 3.3 NO FLOORS TO BE POURED UNTIL ALL ELECTRICAL AND MECHANICAL INSTALLATIONS HAVE BEEN APPROVED BY

THE ARCHITECTS AND GOVERNING AGENCIES.

DIMENSIONS OF SITE PAYING.

- 3.4 Concrete Finishing A. TROWEL AND RE-TROWEL SLAB FOR SMOOTH FINISH WITH NO TROWEL MARKS SHOWING WHEREVER CONCRETE FLOOR IS
- B. INTERIOR CONCRETE SLABS SHALL BE POURED LEVEL (UNLESS OTHERWISE INDICATED) - 1/8 INCH TOLERANCE ON A 10 FOOT EDGE IN ANY GIVEN DIRECTION.
- C. THE FLOOR ADJACENT TO A DOORWAY SHALL BE LEVEL FOR A DISTANCE OF 5 FT FROM THE DOOR IN THE DIRECTION OF THE DOOR SWING AND SHALL EXTEND NOT LESS THAN 12 IN. BEYOND EACH SIDE OF THE DOOR AND SHALL BE NOT MORE THAN 1/2 IN. BELOW LEVEL OF DOORWAY THRESHOLD.
- BEFORE POURING ADJACENT CONCRETE SLABS OR ASPHALTIC CONCRETE PAYING. CONCRETE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING SPLASHING OF FRESH CONCRETE. E. DEPRESS CONCRETE FLOOR SLABS AS REQUIRED FOR FLOOR

D. COVER ALL CONCRETE SLAB SURFACES WITH CURING PAPER

STRUCTURAL DETAILS. 3.5 COVER ALL CONCRETE SLAB SURFACES WITH CURING PAPER BEFORE POURING ADJACENT CONCRETE SLABS OR ASPHALTIC CONCRETE PAVING. CONCRETE CONTRACTOR SHALL BE

FINISH MATERIALS AND AS NOTED ON ARCHITECTURAL/AND OR

RESPONSIBLE FOR CLEANING SPLASHING OF FRESH CONCRETE.

- 3.6 DEPRESS CONCRETE FLOOR SLABS AS REQUIRED FOR FLOOR FINISH MATERIALS AND AS NOTED ON ARCHITECTURAL AND/OR STRUCTURAL DETAILS.
- PROVIDE 4000 PSI @ 28 DAYS CONCRETE FOR ALL EQUIPMENT PADS AND FENCE POST ANCHORAGE AND ALL EXPOSED SITE

CONCRETE

- REFER TO STRUCTURAL DRAWINGS FOR LOAD BEARING UNIT MASONRY, MASONRY REINFORCEMENT, MORTAR AND GROUT.
- 4.1 VENEER MASONRY SYSTEM SHALL BE 4" BRICK VENEER AND SHALL COMPLY W/ ASTM C216, GRADE: SW, TYPE: FBS, STANDARD MODULAR SIZE. COLOR(S) AND TEXTURE(S) AS SELECTED BY THE OWNER FROM ALLOWANCE RANGE OF \$250.00 PER 1000 COST OF MATERIAL DELIVERED TO SITE. MINIMUM OF (2) COLORS SELECTED.
- 4.2 PROVIDE UNIT MASONRY SAMPLES SHOWING FULL COLOR AND TEXTURE RANGES AVAILABLE FOR EACH DIFFERENT MASONRY UNIT

4.3 MORTAR FOR UNIT MASONRY SHALL COMPLY W/ ASTM C 270,

PROPORTION SPECIFICATION, TYPE S. 4.5 GROUT FOR UNIT MASONRY SHALL COMPLY W/ ASTM C 476.

- 4.6 ADJUSTABLE MASONRY VENEER ANCHORS: PROVIDE 2-PIECE ASSEMBLIES ALLOWING VERTICAL OR HORIZONTAL DIFFERENTIAL MOVEMENT BETWEEN VENEER AND BEARING WALL SUBSTRATE. VENEER ANCHORS SHALL BE HOT DIP GALVANIZED CARBON STEEL WIRE ASTM A 82; WITH ASTM A 153, CLASS B-2 COATING FOR WIRE TIES AND ANCHORS IN EXTERIOR WALLS.
- 4.7 ADJUSTABLE ANCHORS SHALL BE AS MANUFACTURED BY DURAWALL OR EQUAL.

- 5.1 STEEL PLATES, SHAPES AND BARS SHALL BE SHOP PRIMED AND CONFORM TO ASTM A36.
- 5.2 EXPOSED METAL SURFACES SHALL BE FREE OF BLEMISHES AND ROUGHNESS.
- 5.3 SELECT FASTENERS FOR TYPE, GRADE AND CLASS REQUIRED.
- 5.4 PREVENTION OF ELECTROLYSIS: WHERE THE CONTACT OF DISSIMILAR METAL MAY CAUSE ELECTROLYSIS AND WHERE ALUMINUM WILL CONTACT CONCRETE, MORTAR, OR PLASTER, THE CONTACT SURFACE OF THE METAL SHALL BE SEPARATED USING ONE HEAVY COAT OF ALUMINUM PIGMENTED ASPHALT PAINT ON
- 5.5 SHOP COAT ALL MISCELLANEOUS STEEL WITH RUST INHIBITIVE PRIMER.

DIV. 6 WOOD AND PLASTICS

EACH SURFACE.

6.1 Framing

- A. THE FRAMING CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOLTS, NAILS, FRAMING CLIPS, WASHERS, PLATES, HANGERS, ETC. FOR A COMPLETE INSTALLATION WHETHER OR NOT SPECIFIED OR INDICATED ON THE DRAWINGS.
- B. IN ADDITION TO PROVIDING ALL LABOR, LUMBER, HARDWARE, & OTHER MATERIALS REQUIRED TO COMPLETE FRAMING TO PLANS & SPECIFICATIONS CONTRACTOR TO INSTALL:
- 1. WOOD BACKING FOR ALL TOWEL BARS, TOILET PAPER HOLDERS,
- GRAB BARS, & STAIRWAY HAND RAILS AND MEDICINE CABINETS. 2. FURNISH AND INSTALL ALL REQUIRED EAVE AND GABLE VENTS.

3. ALL ATTIC AND BATHTUB ACCESS PANELS.

7. FURNISH AND INSTALL ALL FIRE-BLOCKING.

- 4. COORDINATE WITH PLUMBER TO GET BATHTUBS INSTALLED IN BATHROOMS DURING FRAMING PROCESS — FURTHERMORE FRAMER TO BE RESPONSIBLE TO FURRING IN ALL TUBS AS
- 5. MASTIC AND CAULK PER REQUIREMENTS OF TITLE 24 RELATED
- TO FRAMEWORK. 6. INSTALL ALL SOFFITS

CONTRACTOR'S WORK.

AS FOLLOWS:

- 8. FURNISH AND INSTALL ALL REGISTER AND OTHER BLOCKING AS REQUIRED FOR THE SATISFACTORY COMPLETION OF HVAC
- 6.2 Wood Blocking A. PROVIDE WOOD BLOCKING FOR MILLWORK, WOOD WINDOWS AND
- DOOR JAMBS. 6.3 ALL SILLS SHALL BE PRESSURE TREATED WHITE PINE.
- 6.4 SCARF JOINT ALL EXPOSED CONTINUOUS WOOD TRIM MEMBERS 45 DEGREES. DO NOT BUTT JOINT. 6.5 WOOD STUDS SHALL BE 2X4 16" O.C. UNLESS NOTED OTHERWISE.
- 6.6 Firestopping A. SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (ROTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER AND SHALL BE USED IN SPECIFIC LOCATIONS

- 1. IN EXTERIOR OR INTERIOR STUD WALLS, AT CEILINGS, AND FLOOR LEVELS. 2. IN ALL STUD WALLS AND PARTITIONS, INCLUDING FURRED
- SPACE IS NOT OVER 10 FEET. 3. BETWEEN STUDS ALONG IN LINE WITH RUN OF STAIRS ADJOINING STUD WALLS AND PARTITIONS.

4. AROUND TOP, BOTTOM, SIDES AND ENDS OF SLIDING DOOR

SPACES, SO THAT THE MAXIMUM DIMENSION OF ANY CONCEALED

- POCKETS. 5. IN SPACES BETWEEN CHIMNEYS AND WOOD FRAMING, LOOSE NON-COMBUSTIBLE MATERIALS SHALL BE PLACED IN NON-COMBUSTIBLE SUPPORTS OR A METAL COLLAR TIGHTLY FITTED TO THE CHIMNEY AND NAILED TO THE WOOD FRAMING
- 6. ANY OTHER LOCATIONS NOT SPECIFICALLY MENTIONED ABOVE, SUCH AS HOLES FOR PIPES, SHAFTING, BEHIND FURRING STRIPS AND SIMILAR PLACES WHICH COULD AFFORD A PASSAGE FOR FLAMES. FIRESTOPS, WHEN OF WOOD, SHALL BE 2-INCH NOMINAL THICKNESS. IF THE WIDTH OF THE OPENING IS SUCH THAT MORE THAN ONE PIECE OF LUMBER IS NECESSARY THERE SHALL BE TWO THICKNESSES OF 3/4-INCH PLYWOOD. FIRESTOPS MAY ALSO BE OF GYPSUM BOARD, CEMENT, MINERAL WOOL OR OTHER APPROVED NON-COMBUSTIBLE MATERIALS,

SECURELY FASTENED IN PLACE. (MINERAL WOOL ONLY IS TO BE

USED IN DOUBLE FRAMED COMMON WALLS).

6.7 Fasteners

MAY BE USED.

- A. NAILS: GALVANIZED WIRE NAILS B. SCREWS: CADMIUM PLATED, GALVANIZED AND BRASS.
- C. BOLTS: GALVANIZED 6.8 PROVIDE NAILERS, NAILING STRIPS, AND GROUNDS AS NECESSARY AND RIGIDLY SECURE IN PLACE FOR ATTACHMENT OF TRIM, FINISH,

AND OTHER WORK. (ALL SHALL BE FIRE RETARDANT TREATED.)

- 6.9 DIMENSIONAL LUMBER FOR LIGHT FRAMING: PROVIDE "STANDARD" GRADE (2" TO 4" NOM. THICKNESS, 2" TO 4" NOM. WIDTH, 10'-0" AND SHORTER), ANY SPECIES.
- 6.10 FOR STRUCTURAL FRAMING AND IN WIDTHS GREATER THATN 5" NOM. UINLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING GRADE AND SPECIES COMPLYING WITH THE FOLLOWING STRESS RATINGS: A. ANY SPECIES AND GRADE COMPLIES WITH THE FOLLOWING

REQUIREMENTS FOR SPECIES GROUP AS DEFINED IN TABLE 8.1a

OF NFPA NATIONAL DESIGN SPECIFICATION, FOR EXTREME FIBER

STRESS IN BENDING "Fb" FOR SINGLE REPETITIVE MEMBERS, AND

- FOR MODULUS OF ELASTICITY "E". 1. "Fb" OF 1200 PSI FOR SINGLE MEMBER USE AND OF 1400 PSI FOR REPETITIVE MEMBER USE, AND "E" OF 1,700,000 PSI; "Fd" PARALLEL TO GRAIN 1250/1450 PSI; "Fc" PERPENDICULAR TO
- 6.11 PLYWOOD SHALL CONFORM WITH PS-1 AND BE OF TYPE AND THICKNESS AS INDICATED.
- 6.12 PROVIDE DRESSED LUMBER S4S, UNLESS OTHERWISE INDICATED.

DIV. 7 THERMAL AND MOISTURE 7.1 Waterproofing

GRAIN 385 PSI.

- A. CONTRACTOR TO WATERPROOF/FLASH AT ALL EXTERIOR SURFACES. B. KERF CUT FLASH WITH BITUTHENE ALL BEAMS THAT PENETRATE
 - EXTERIOR WALLS.
 - 7.2 Building Insulation
 - INSULATION. B. ALL PUBLIC AREA RESTROOMS AND GUEST BATHROOM WALLS AND CEILINGS SHALL BE INSULATED WITH SOUND INSULATION BATTS.
 - C. INSULATE THE FOLLOWING: EXTERIOR WALLS, BETWEEN JAMBS AND FRAMING, CEILINGS WITH COLD AREAS ABOVE ATTIC ACCESS PANEL, KNEE WALLS ADJACENT TO HEATED SPACE, BETWEEN COMBINATION RAFTER AND CEILING JOIST.

A. SEE A WALL SECTIONS AND DETAILS FOR BUILDING THERMAL

7.3 Roofing

A. CONTRACTOR TO VERIFY THAT ROOF ELEVATIONS SHOWN ON PLANS PROVIDE POSITIVE ROOF DRAINAGE AND THAT THEY CONFORM TO MINIMUM DRAINAGE STANDARDS PRIOR TO ROOFING.

7.4 Weatherproofing

- A. ALL EXTERIOR WALL OPENINGS, FLASHING, COUNTERFLASHING AND EXPANSION JOINTS SHALL BE CONSTRUCTED IN SUCH A MANNER TO MAKE THEM WEATHERPROOF. THE JUNCTION OF THE ROOF AND VERTICAL SURFACES SHALL BE FLASHED AND COUNTER-FLASHED IN A MANNER TO MAKE THEM WATERPROOF.
- B. ALL OPEN JOINTS IN THE BUILDING EXTERIOR AROUND CONDITIONED SPACES SHALL BE SEALED, CAULKED, GASKETED, OR WEATHER STRIPPED TO ELIMINATE AIR LEAKAGE.
- C. PROVIDE A MINIMUM OF 15 LB. FELT AS MOISTURE PROTECTION BEHIND EXTERIOR FINISHES AND TRIM. FELTS TO BE NON-ORGANIC
- TO ELIMINATE AIR LEAKAGE. D. ALL FLASHING. COUNTER-FLASHING. AND COPING WHEN OF METAL SHALL BE NOT LESS THAN NO. 24 GAUGE GALVANIZED IRON
- E. FLASH AND COUNTERFLASH ALL ROOF TO WALL CONDITIONS. FLASH AND CAULK WOOD BEAMS AND OUTLOOKERS PROJECTING THROUGH EXTERIOR WALLS OR ROOF SURFACES.
- F. FLASH ALL EXTERIOR OPENINGS WITH APPROVED WATERPROOFING. WHICH CONFORMS TO STANDARD LOCAL AND STATE CODES. G. PROVIDE FLASHING AND COUNTERFLASHING (WHEN REQUIRED) AND TERMINATE ROOFING TO INSURE NO LEAKAGE OCCURS AT ALL

ROOF PENETRATIONS. VALLEY FLASHING SHALL BE PROVIDED OF

NO LESS THAN NO. 24 GAUGE GALVANIZED IRON (U.N.O.) AND

SHALL EXTEND AT LEAST 12 INCHES FROM THE CENTERLINE EACH

WAY AND SHALL HAVE A SPLASH DIVERTED RIB NOT LESS THAN 1

FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN FOUR INCHES. 7.5 DRAFTSTOPPING AS SPECIFIED SHALL BE APPROVED WITHIN A

INCH HIGH AT THE FLOW LINE FORMED AS PART OF THE

CONCEALED FLOOR-CEILING ASSEMBLY FORMED OF

NONCOMBUSTIBLE CONSTRUCTION, PER CBC. 7.6 DRAFTSTOPPING AS SPECIFIED SHALL BE PROVIDED WITHIN ATTICS, MANSARDS, OVERHANGS AND SIMILAR CONCEALED SPACES FORMED

7.7 ATTIC VENTILATION: ENCLOSED ATTIC SPACES AND ENCLOSED ROOF

RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATED SPACE BY VENTILATING OPENINGS PROTECTED AGAINST ENTRANCE OF RAIN.

OF INCOMBUSTIBLE CONSTRUCTION.

DIV. 8 DOORS AND WINDOWS NOTES

8.2 Doors and Frames

- 8.1 SEE DOOR SCHEDULE FOR HARDWARE GROUPS FOR EACH DOOR. SEE SPECIFICATIONS FOR DEFINITIONS OF HARDWARE GROUPS.
- A. FRAMES SHALL HAVE MITRED CORNERS, WELDED AND GROUND SMOOTH AT JOINTS. JAMBS SHALL BE PRE-PUNCHED AND REINFORCED FOR ALL FINISH HARDWARE.
- GRAIN, FREE OF ALL DEFECTS OR KNOTS AND SHALL BE BACK PRIMED AND PAINTED, STAINED, OR FINISHED AS SCHEDULED.

WITH SOLID-CORE CONSTRUCTION, SEE DOOR SCHEDULE FINISH

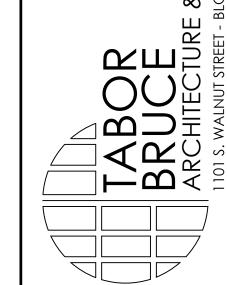
D. DOOR STOPS OF IN-SWINGING DOORS SHALL BE ONE-PIECE

AND RATING.

- 8.3 Hardware
- A. PANIC HARDWARE SHALL BE PROVIDED ON EXIT DOORS SERVING ROOMS, CORRIDORS, OR STAIRWAYS AS NOTED ON DRAWINGS. B. ALL PIN-TYPE HINGES WHICH ARE ACCESSIBLE FROM OUTSIDE THE SECURED AREA WHEN THE DOOR IS CLOSED SHALL HAVE NON-REMOVABLE HINGE PINS. IN ADDITION, THEY SHALL HAVE A
- REMOVAL OF THE DOOR IF THE HINGE PINS ARE REMOVED. C. AN ACCESSIBLE MORTISE OR RIM TYPE CYLINDER LOCK INSTALLED IN A HOLLOW METAL DOOR SHALL BE PROJECTED BY CYLINDER

GUARD IF THE CYLINDER PROJECTS BEYOND THE FACE OF THE

- DOOR OR IS ACCESSIBLE BY GRIPPING TOOLS. D. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED AND AS SHOWN ON THE DOOR TYPES. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH SINGLE EFFORT BY LEVER TYPE HARDWARE, BY PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT
- E. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 85 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLATE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OF AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS.
- F. ALL PRIMARY ENTRANCES SHALL BE ACCESSIBLE, DOORS AND HARDWARF.
- H. EXIT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE
- 8.3 Windows A. ALL GLASS AND GLAZING SHALL CONFORM TO THE IBC.
- SHALL MEET THE REQUIREMENTS SET FORTH IN THE IBC. C. ALL GLASS DOORS AND FIXED GLASS LESS THAN 18 INCHES ABOVE THE FLOOR LINE SHALL BE APPROVED SAFETY OR
- D. WIRE GLASS SPECIFIED IN DOORS OR WINDOWS SHALL BE SET IN A METAL FRAME WITH AN AREA NOT TO EXCEED 1,296 SQ. INCHES



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B. ALL WOOD DOORS RATED AND NON RATED SHALL HAVE STRAIGHT C. WOOD FLUSH-TYPE DOORS SHALL BE 1-3/4" THICK MINIMUM

CONSTRUCTION WITH THE JAMB OR JOINTED BY RABBET TO THE

- MINIMUM 1/4 IN. DIAMETER STEEL JAMB STUD WITH 1/4' MINIMUM PROJECTION UNLESS THE HINGES ARE SHAPED TO PREVENT
- REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. LOCKED EXIT DOORS SHALL OPERATE ABOVE IN EGRESS DIRECTION.
- WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15
- G. ALL DOOR THRESHOLDS (WHERE OCCURS) SHALL NOT EXCEED 1/2 INCH IN HEIGHT.

USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

B. IN LOCATIONS WHICH MAY BE SUBJECT TO HUMAN IMPACT, SUCH AS FRAMELESS GLASS DOORS, GLASS ENTRANCE/EXIT DOORS, SHOWER DOORS, TUB ENCLOSURES, AND STORM DOORS, GLAZING

TEMPERED GLASS.

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DOUGLAS REGISTERED S AR19900009 STATE OF NDIANA PCHITEC

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INFORMATION

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GENERAL PLAN

GENERAL NOTES & SPECIFICATIONS

DIV. 8 DOORS AND WINDOWS (CONT.)

8.4 Air Infiltration at Windows and Doors

- A. FOR OPENABLE EXTERIOR DOORS (REQUIRED STEEL FIRE-RATED DOORS ARE EXEMPT FROM THESE REQUIREMENTS), AIR INFILTRATION SHALL BE MITIGATED BY FOLLOWING THESE CONSTRUCTION REQUIREMENTS:
- 1. DOOR HEADS, SILLS, AND JAMBS SHALL HAVE SEALS, ASTRAGALS OR BAFFLES AS REQUIRED TO ELIMINATE AIR INFILTRATION
- 2. DOORS MOUNTED ON EITHER THE INSIDE OR OUTSIDE OF AN EXTERIOR WALL SHALL HAVE A MINIMUM ONE-INCH LAP AT
- 3. A CONTINUOUS ANGLE, SEALED GASKET OR WEATHERSTRIPPING SHALL BE USED WITH DOORS REQUIRING VERTICAL TRACTS OR GUIDES (EX. ROLLING INDUSTRIAL DOORS).
- 4. A CONTINUOUS SEAL OR BAFFLE SHALL BE INSTALLED AT EACH DOOR JAMB FOR DOORS MOUNTED BETWEEN JAMBS.
- 5. ALL SWING DOORS AND WINDOWS OPENING TO THE EXTERIOR OR TO UNCONDITIONED AREAS SHALL BE FULLY WEATHERSTRIPPED, GASKETED, OR OTHERWISE TREATED TO LIMIT AIR INFILTRATION.
- 8.5 SWINGING EXTERIOR GLASS DOORS, METAL OR WOOD DOORS WITH GLASS PANELS, SOLID WOOD OR METAL DOORS SHALL BE CONSTRUCTED OR PROTECTED AS FOLLOWS:
- 8.6 HOLLOW METAL DOORS SHALL BE CONSTRUCTED OF A MINIMUM EQUIVALENT TO SIXTEEN US. GAUGE STEEL AND HAVE SUFFICIENT REINFORCEMENT TO MAINTAIN THE DESIGNED THICKNESS OF THE DOOR WHEN ANY LOCKING DEVICE IS INSTALLED, SUCH REINFORCEMENT BEING ABLE TO RESTRICT COLLAPSING OF THE DOOR AROUND THE LOCKING DEVICE.
- 8.7 WOOD FLUSH TYPE DOORS SHALL BE I-3/8" THICK MINIMUM WITH SOLID- CORE CONSTRUCTION.
- 8.8 THE STRIKE PLATE FOR LATCHES AND THE HOLDING DEVICES FOR PROJECTING DEADBOLTS IN WOOD CONSTRUCTION SHALL BE SECURED TO THE JAMB AND THE WALL FRAMING WITH SCREWS NOT LESS THAN 2-1/2 IN LENGTH.
- 8.9 EQUIP DOORS WITH DEADBOLTS OR DEADLOCKING LATCHES, SEE SPECIFICATIONS.
- 8.10 DEADBOLTS SHALL CONTAIN HARDENED INSERTS OR EQUIVALENT.
- 8.11 STRAIGHT DEADBOLTS SHALL HAVE A MINIMUM THROW OF 1' WITH A 5/8 MINIMUM EMBEDMENT.
- 8.12 HOOD OR EXPANDING LUG DEADBOLT SHALL HAVE A MINIMUM THROW OF 3/4". BOLTS OF LOCKS WHICH AUTOMATICALLY ACTIVATE 2 OR MORE DEADBOLTS SHALL EMBED MINIMUM.
- 8.13 ALL SWING EXTERIOR WOOD AND STEEL DOORS SHALL BE FOUIPPED AS FOLLOWS: A SINGLE OR DOUBLE DOOR SHALL BE EQUIPPED WITH A DOUBLE OR SINGLE CYLINDER DEADBOLT. THE BOLT SHALL HAVE A MINIMUM PROJECTION OF ONE (1) INCH AND BE CONSTRUCTED SO AS TO REPEL CUTTING TOOL ATTACK. THE DEADBOLT SHALL HAVE AN EMBEDMENT OF AT LEAST THREE FOURTHS (3/4) INCH INTO THE STRIKE RECEIVING THE PROJECTED BOLT. THE CYLINDER SHALL HAVE A CYLINDER GUARD, A MINIMUM OF FIVE PIN TUMBLERS, AND SHALL BE CONNECTED TO THE INNER PORTION OF THE LOCK BY CONNECTING SCREWS OF AT LEAST ONE-FOURTH (1/4") IN DIAMETER.
- THE PROVISIONS OF THIS SUBSECTION DO NOT APPLY WHERE (1) PANIC HARDWARE IS REQUIRED, OR (2) AN EQUIVALENT DEVICE IS APPROVED BY THE ENFORCING AGENCY.
- 8.14 AT ACCESSIBLE LOCATIONS. DOOR HARDWARE SHALL BE OF THE LEVER OR PUSH TYPE MOUNTED 30 TO 44 ABOVE THE FLOOR AND BE OPERABLE WITH A MAXIMUM EFFORT OF 85 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS.

DIV. 9 FINISHES

SEE INTERIOR ELEVATIONS, REFLECTED CEILING PLANS, ROOM FINISH GROUPS AND ROOM FINISH SCHEDULE FOR WALL, CEILING AND FLOOR

9.1 Exposed mechanical equipment

- A. THERE SHALL BE NO EXPOSED PIPE, CONDUITS, DUCTS, VENTS, AND THE LIKE. ALL SUCH LINES SHALL BE CONCEALED OR FURRED AND FINISHED, UNLESS NOTED AS EXPOSED CONSTRUCTION ON DRAWINGS.
- B. ALL EXPOSED EXTERIOR METAL FITTINGS, FLASHING, CONDUIT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES.

9.2 Interior partitions

- A. ALL PARTITIONS EXTEND TO UNDERSIDE OF STRUCTURE UNLESS NOTED OTHERWISE.
- B. OFFSET STUDS WHERE REQUIRED, SO THAT FINISH WALL SURFACE WILL BE FLUSH. ALL INTERIOR WALLS AND PARTITIONS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST ALL LOADS TO WHICH THEY ARE SUBJECTED BUT NOT LESS THAN A FORCE OF 5 POUNDS PER SQUARE FOOT APPLIED PERPENDICULAR TO THE WALLS W/L/20 OR L/240 PER METAL OR WOOD STUD SCHEDULE SHOWN ON DRAWING.

9.3 Ceramic tile / Stone tile/ Finished concrete

- A. ALL TILE INSTALLATION SHALL BE IN ACCORDANCE WITH ACCEPTED CURRENT INDUSTRY STANDARD WITH THE BEST QUALITY IN CRAFTSMANSHIP.
- B. SEE INTERIOR DESIGN DRAWINGS OR TILE LAYOUT OF WALLS AND FLOOR PATTERNS.
- C. WHERE FLOOR DRAINS OR FLOOR SINKS OCCUR, ALL FINISH FLOORS SHALL SLOPE TO DRAIN.
- D. ALL FLOORS IN PUBLIC AREAS SHALL LBE OF A NON SLIP SURFACE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES
- ACT (ADA) 9.4 Interior finish flame retardant requirements
- A. INTERIOR FINISH FLAME RETARDANT REQUIREMENTS, INTERIOR FINISHES AND FLAMEPROOFING MUST CONFORM TO THE REQUIREMENTS.
- B. ALL DECORATIVE MATERIALS ARE REQUIRED TO BE MAINTAINED IN A FLAME-RETARDANT CONDITION.
- 9.5 PROVIDE GALVANIC INSULATION BETWEEN DISSIMILAR METALS.
- 9.6 IF STORING, USING, OR HANDLING ANY AMOUNTS OF HAZARDOUS MATERIALS, FLAMMABLE/COMBUSTIBLE LIQUIDS, OR CHEMICALS, CONTRACTOR SHALL COMPLY WITH STATE AND LOCAL HAZARDOUS MATERIAL ORDINANCES.
- 9.7 EXIT DOORS, EXIT SIGNS, FIRE ALARM SENDING STATIONS, FIRE EXTINGUISHER LOCATIONS SHALL NOT BE CONCEALED OR OBSTRUCTED BY ANY DECORATIVE MATERIALS

9.8 Painting

A. ALL EXTERIOR SURFACES ARE TO BE PAINTED AS PER THE SCHEDULE ON THE DRAWINGS.

- B. PAINTING CONTRACTOR SHALL BE RESPONSIBLE TO APPROVE CONDITION OF ALL SURFACES TO INSURE THAT THEY HAVE BEEN PROPERLY PREPARED FOR PAINTING.
- C. ALL COLORS SHALL BE APPROVED BY THE ARCHITECT. D. ALL ADJACENT WORK SHALL BE PROTECTED AGAINST PAINT
- SPLATTERING. E. DRYWALL AT BATHROOMS SHALL RECEIVE A MINIMUM OF TWO
- COATS OF GLOSS EPOXY ENAMEL WHEN SPECIFIED. F. UPON COMPLETION OF PAINTING REMOVE ALL PAINT SPOTS AND LEAVE JOB IN A CLEAN ACCEPTABLE MANNER-READY FOR OCCUPANCY.
- G. PAINT SHALL BE 'BENJAMIN MOORE' OR EQUAL REFER TO MANUFACTURER'S SPECIFICATIONS FOR APPLICATION.
- H. INTERIOR PAINTING PAINTING CONTRACTOR WILL:
- PREPARE ALL NAIL, JOINTS, CRACKS AND GOUGES, BY FILLING AND SANDING SO AS NOT TO BE VISIBLE UPON FINISHED PRODUCT.
- 2. PAINT BREAKER PANEL BOX DOORS WITH LATEX ENAMEL TO MATCH WALLS.
- 3. CLEAN-UP ALL SURFACES NOT DESIGNED FOR PAINT LEAVING NO EVIDENCE OF PAINT, PREPARATION OR MASKING MATERIAL.
- 4. KEEP SURFACES WHICH ARE TO RECEIVE LINOLEUM TYPE FLOORING FREE OF PAINT.
- 5. SEAL THE TOPS AND BOTTOMS OF ALL DOORS.
- 6. USE A PVA SEAL COAT ON ALL SURFACES TO RECEIVE PAINT PRIOR TO APPLICATION OF PRIME COAT.
- 7. PAINT INTERIOR WALLS, DOORS, TRIM, BASEBOARD, ETC. WITH ONE COAT PRIMER AND TWO COATS FINISH (EGGSHELL ENAMEL
- 8. INTERIOR PAINT MATERIAL, COLOR AND FINISH AS APPROVED BY OWNER.
- 9. PREP, FILL, STAIN, AND SEAL ALL CLUBHOUSE EXPOSED WOOD. METHOD, MATERIAL, AND COLOR TO BE APPROVED BY OWNER.
- 10. CAULK BASEBOARD TO VINYL FLOORS. I. EXTERIOR PAINTING - PAINTING CONTRACTOR WILL:
- 1. PRIME ALL WROUGHT IRON WITH ONE COAT METAL PRIMER AND FINISH WITH ONE COAT OF INDUSTRIAL ENAMEL.
- 2. PREPARE ALL SURFACES TO BE PAINTED THOROUGHLY BY CLEANING, CAULKING, AND SMOOTHING PRIOR TO RECEIVING
- 3. FINISH EXTERIOR DOOR FACES WITH ONE COAT OF WATER BASED ENAMEL (COLOR AND PAINT TO BE APPROVED BY OWNER) (PRIME ANY UNPAINTED SURFACES BEFORE APPLYING FINISH COATS.)
- 4. PRIME AND PAINT ALL EXTERIOR UTILITY BOXES. PIPES. VALVES, ELECTRICAL AND GAS PANELS AND METERS.
- 5. PAINT ROOFING METAL (COLOR TO BE APPROVED BY OWNER).
- 6. FILL, SAND AND SMOOTH ALL PAINTED SURFACES. INCLUDING NAIL HOLES, KNOT HOLES, CRACKS, JOINTS AND GOUGES SO AS TO NOT BE VISIBLE FOLLOWING APPLICATION OF PAINT.
- 7. MASK AND PROTECT ALL SURFACES NOT DESIGNATED FOR
- 8. PAINT EXTERIOR DRIP STRIPS, PLASTER REVEALS, VALVES, METER BOXES, MAIL BOXES, EXTERIOR DOOR JAMB, EXPOSED CONDUIT, PIPING, EXTERIOR METALS AND VENTS WITH COLOR APPROVED BY OWNER.
- 9. ALL EXTERIOR SURFACES TO RECEIVE INDUSTRIAL METAL PRIMERS AND INDUSTRIAL METAL ENAMEL FINISH COAT
- 10. PREP AND PAINT TRASH ENCLOSURE DOORS AND SUPPORTS.
- 11. CAULK AND PAINT EAVES WITH 2 COATS OF SOLID BODY STAIN (PRIME AS NECESSARY) STAIN AND COLOR TO BE APPROVED BY OWNER.)
- 12. PAINT ALL STUCCO VENTS TO MATCH STUCCO.
- 13. STRIP ALL OIL AND DEBRIS, PRIME AND PAINT GALVANIZED AND BARE METAL SEGMENTS OF THE CARPORT (OWNER TO APPROVE COLOR) CONTRACTOR MUST HAVE OWNER INSPECT AND APPROVE CLEANED STRUCTURE PRIOR TO PAINTING.
- 14. PREP, FILL, AND STAIN (WITH TWO COATS) ALL EXPOSED WOOD AT CLUBHOUSE.

9.9 Gypsum Wallboard

- A. ALL GYPSUM WALLBOARD SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT EDITION OF THE IBC STATE AND LOCAL CODES.
- B. GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSTALLATION IS APPROVED.
- C. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING EDGES EXCEPT THOSE EDGES AND ENDS WHICH ARE PERPENDICULAR TO THE FRAMING MEMBERS. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE-RESISTIVE CONSTRUCTION OR DIAPHRAGM IS NOT REQUIRED.
- D. THE SIZE AND SPACING OF FASTENERS SHALL COMPLY WITH THE CURRENT EDITIONS OF THE IBC STATE AND LOCAL CODES. FASTENERS SHALL BE SPACED NOT LESS THAN 3/8" FROM FDGES AND ENDS OF GYPSUM WALLBOARD.
- E. FASTENERS SHALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTENER HEAD.

F. DRYWALL CONTRACTOR WILL:

- INSTALL AND TAPE ALL FIRE WALLS PER APPROVAL OF BUILDING OFFICIAL.
- 2. INSTALL SOUND-BOARD BETWEEN ALL PARTY WALLS WHERE INDICATED (OWNER TO APPROVE SOUNDBOARD MATERIAL.)
- INSTALL DRYWALL FOR SOFFITS WHICH WILL BE CONSTRUCTED AFTER THE INITIAL INSTALLATION OF DRYWALL.(APPLICABLE AT FIRE RATED WALLS AND CEILINGS.)
- 4. FASTEN DRYWALL WITH SCREWS ONLY.
- 5. INSTALL BULL NOSED CORNERS/CORNER BEAD ON ALL OUTSIDE CORNERS.
- 6. INSTALL RESILIENT SOUND CHANNEL AS PER PLANS.
- 7. FURNISH AND INSTALL DRYWALL (GREEN BOARD) ON ALL WALLS BEHIND ALL TUBS.
- MASK AND PROTECT ALL AREAS NOT DESIGNATED FOR DRYWALL TEXTURE TAKING SPECIAL CARE TO PROTECT TUBS AND TUB WALLS, WINDOWS, DUCT WORK OPENINGS, AND FLOORS WHICH WILL RECEIVE LINOLEUM.

- 9. TEXTURE ALL WALLS AND CEILINGS WITH A LIGHT SKIP TROWEL
- 10. REMOVE ALL MASKING AND CLEAN UP TEXTURE IN AREAS NOT DESIGNATED FOR TEXTURE.
- 11. CLEAN UP AND REMOVE ALL EXCESS DRYWALL, TAPE, AND TEXTURE FROM THE CONSTRUCTIONS SITE. 12. CLEAN WINDOW FRAMES AFTER TEXTURE.

- A. GYP-CRETE CONTRACTOR IS TO GET INSPECTION AND WRITTEN APPROVAL FROM OWNER PRIOR TO APPLICATION OF GYP-CRETE.
- B. ALL GYP-CRETE SEALER IS TO BE APPLIED TO A SMOOTH CLEAN SURFACE FREE OF PAINT, DIRT AND CONSTRUCTION DEBRIS.
- C. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, TOOLS AND EQUIPMENT TO COMPLETE GYP-CRETE AND ACOUSTIMAT II WORK IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- D. KITCHEN AND BATHROOM FLOORS TO RECEIVE ACOUSTIMAT II UNDERLAYMENT PRIOR TO APPLICATION OF GYP-CRETE.

9.11 Exterior Plaster

A. SEE EXTERIOR ELEVATIONS. B. PLASTER FINISH TO BE APPROVED BY ARCHITECT.

9.12 Finish Carpentry

- A. FINISH CONTRACTOR TO FURNISH ALL FASTENING MATERIALS AND INSTALLATION EQUIPMENT REQUIRED TO COMPLETE FINISH WORK PER PLANS AND SPECIFICATIONS.
- B. PRIOR TO INSTALLATION OF BASE AT ALL AREAS THAT REQUIRE RESILIENT FLOORING, FINISH CARPENTER WILL CAULK THE WALL AREA BETWEEN THE END OF THE DRYWALL OR END OF THE CABINET AND THE FLOOR. FINISH CONTRACTOR TO FURNISH CAULK.
- C. ALL MATERIAL INSTALLED SHALL BE STRAIGHT, PLUMB, TRUE AND LEVEL WITH EVEN MARGINS AT ALL DOORS, JAMBS, CASING AND TRIM. DOORS SHALL OPERATE FREELY AND HAVE A MAXIMUM 1/8" EVEN MARGIN BETWEEN DOOR EDGE BANDING, TRIM, BASE, ETC. SHORTER THAT 6" IS TO BE GLUED IN PLACE.
- D. SHELF AND POLE SUPPORTS NOT TO EXCEED 3' ON CENTER. SHELF AND POLE SUPPORTS TO BE BACKED BY SAME MATERIAL
- AS SHELF LEDGER. E. ALL EXPOSED SHELF CORNER EDGES TO BE ROUNDED.
- F. FINISH CONTRACTOR TO INSTALL:
- MEDICINE CABINETS. INTERIOR DOORS, CLOSET SHELVING AND POLES. CASING. BASEBOARD, AND INT. AND EXT. DOOR HARDWARE AS DIRECTED
- 3. EXTERIOR DOORS, THRESHOLDS, STUCKOMOULD AND WEATHER STRIPPING AT FINISH.
- 4. TRIM (BASEBOARD MATERIAL) WHERE UNDERSIDE OF KITCHEN FORMICA COUNTERTOP MEETS TOP OF STEM WALL.
- CABINETS.
- 6. CLOSET DOORS (MIRROR AND WOOD), SHELVES AND POLES.
- 7. KITCHEN CABINET SHELVE.S
- 8. TOILET PAPER HOLDERS AND TOWEL BARS AND GRAB-BARS. 9. SHOWER POLES, AND OTHER SUCH ACCESSORIES.

10. TRIM AND SILLS.

- 1. UNIT ENTRY DEADBOLT AND UNIT ENTRY LEVER TO BE KEYED
- 2. DOOR STOPS TO BE INSTALLED AT LOCATIONS AS DIRECTED BY
- 3. ALL STRIKE PLATES TO BE INSTALLED WITH 3" SCREWS.
- 4. ALL EXT. DOORS TO RECEIVE DEAD BOLTS. ALL BATHROOMS AND BEDROOMS TO RECEIVE PRIVACY LOCKS.
- 5. EASE EDGES OF DOORS AS NECESSARY TO PREVENT SPLINTERING. 6. ALL HARDWARE TO CONFORM WITH HANDICAP REQUIREMENTS
- 7. DOORS SHALL HAVE DOOR STOPS INSTALLED AT THE BOTTOM KNOB SIDE OF DOOR (NO WALL MOUNTED STOPS) USE HEAVY
- DUTY TYPE STOPS AS SUPPLIED BY OWNER. 8. TOWEL BARS AND TOILET PAPER HOLDERS TO BE SECURED TO WOOD BACKING WITH MINIMUM 11/2 INCH WOOD SCREWS.

A. LAYOUT RULES: EVERYTHING IS TO BE POWER-STRETCHED. ANY

- DAMAGE TO PAINT AND BASEBOARDS WILL BE BACK CHARGED RO CONTRACTOR. CARPET IS TO BE LAID OUT WITH CONSIDERATION TO TRAFFIC PATTERNS AND SEAM PLACEMENT. ALL MATERIALS SHALL BE ON THE JOB SITE PRIOR TO THE BEGINNING OF THE INSTALLATION TO ASSURE UNIFORMITY OF THE APPLICATION.
- B. PILE DIRECTION: WHERE TWO OR MORE PIECES OF THE SAME CARPET ARE ADJACENT, THE PILE DIRECTION SHALL RUN THE SAME AS IN OTHER AREAS OF THE ROOM. PILE DIRECTION SHALL BE TOWARD THE ENTRANCE.

- 1. FULL LENGTH PIECES OF TACK STRIP SHALL BE INSTALLED AROUND THE WALL PERIMETER WITH PINS POINTING TOWARD THE WALL. BEND TACK STRIP PINS OVER IN CLOSET DOORWAYS, THRESHOLDS, AND OTHER SUCH TRAFFIC AREAS.
- 2. THE PROPER GULLY SHALL BE SLIGHTLY LESS THAN THE THICKNESS OF THE CARPET, BUT NOT TO EXCEED 3/8-INCH.
- 3. THE TACK STRIP SHALL BE CUT TO PROPER LENGTHS TO MAINTAIN THE SAME GULLY REGARDLESS OF THE SHAPE OF THE WALL. THE TACK STRIP SHALL BE SECURELY FASTENED TO MAINTAIN THE PROPER STRETCH PROVIDED BY POWER STRETCHING. TWO NAILS OR FASTENING POINTS ARE REQUIRED FOR THE SMALLEST PIECES OF TACK STRIP. CARPET SHALL NOT BE STAPLED TO THE TACK STRIP.

D. SEAMS:

- TRIMMED SEAM EDGES SHOULD BE SEALED WITH AN APPROPRIATE SEAM SEALER. SEAM CARPETS ACCORDING TO EXACT SPECIFICATIONS OF MANUFACTURER. MAKE SURE THAT ENTIRE SEAM IS GLUED. WHER SEAM TIES INTO TACK STRIP USE EXTRA GLUE.
- 2. CONTRACTOR IS TO SUBMIT FOR APPROVAL SEAM LAYOUTS TO OWNER PRIOR TO INSTALLATION OF ANY FLOOR COVERING.
- E. CARPET TYPE AND COLOR: TO BE APPROVED BY OWNER.

F. PAD: TO BE APPROVED BY OWNER.

- . PADDING SHALL BE SECURELY FASTENED TO THE SUB FLOOR WITH STAPLES OR NONFLAMMABLE CUSHION ADHESIVE. SEAMS SHALL BE SECURED WITH STAPLES OR NONFLAMMABLE CUSHION ADHESIVE. GLUE PAD IF ON CONCRETE; STAPLE IF ON WOOD. IN ADDITION TO GLUE AND/OR STAPLES, VINYL-COVERED FABRIC TAPE SUCH AS DUCT TAPE, OR ADHESIVES, SHALL ALSO BE USED FOR SEAMS ON FOAM
- 2. ALL CARPET TO LINOLEUM TRANSITION SEAMS SHALL RECEIVE STEEL MOLDING AS APPROVED BY OWNER.

DIV. 10 SPECIALITIES

10.1 Fire Extinguishers

A. PROVIDE PORTABLE CLASS 2A:10BC FIRE EXTINGUISHER LOCATED WITHIN 75' FROM ANY POINT WITHIN THE SPACE AND PROVIDE ADDITIONAL PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY THE FIRE DEPARTMENT. SEE LIFE SAFETY DRAWINGS.

10.2 Signage

A. EXIT SIGNS WHERE NOTED SHALL BE WORDED 'EXIT' IN LETTERS SIX INCHES HIGH AND SHALL CONFORM WITH GOVERNING BUILDING CODES AND REGULATIONS. PROVIDE ILLUMINATED EXIT SIGNS WHERE NOTED AND/ OR REQUIRED BY CODE. ILLUMINATED EXIT SIGNS SHALL BE LIGHTED AND WIRED ON SEPARATE CIRCUIT, WITH BATTERY BACKUP.

10.3 Building Address Signage

- A. STREET ADDRESS SHALL CONFORM TO THE FOLLOWING:
- 1. NUMBERS SHALL BE NO SMALLER THAN APPROVED BY APPLICABLE AGENCY, WIDTH PROPORTIONATE TO HEIGHT.
- 2. NUMBERS SHALL BE OF A COLOR CONTRAST TO THAT OF THE BACKGROUND UPON WHICH THEY ARE MOUNTED.
- 3. NUMBERS SHALL BE LOCATED ON:
- 3.a. A SIGN LOCATED NEAR THE ENTRANCE TO THE BUILDING OR COMPLEX WITH STREET NUMBERS AND NAME OF COMPLEX ON IT , OR
- 3.b. ON A PROMINENT PORTION OF THE BUILDING NEAREST THE STREET SO THAT THE NAME AND/ OR NUMBER CAN BE EASILY SEEN FROM THE STREET FRONTING THE PROPERTY.
- 4. THE SIGN SHALL BE KEPT CLEAR OF ALL FOLIAGE.

10.04 Toilet Accessories

- A. ALL GRAB BARS SHALL BE 1- 1/2" DIAMETER STAINLESS STEEL TUBE OF WELDED CONSTRUCTION. GRAB BARS IN SHOWERS SHALL HAVE A PEENED FINISH. GRAB BAR AND MOUNTING SHALL BE ABLE TO WITHSTAND A MINIMUM OF 259 LB/FT. IN BENDING. SHEAR AND TENSION AND SHALL NOT ROTATE IN ITS FITTING.
- B. FRAMING CONTRACTOR SHALL INSTALL SOLID BLOCKING FOR ALL REQUIRED AND FUTURE GRAB BAR CONNECTIONS,
- C. ACCESSORIES SUCH AS GRAB BARS, TOWEL BARS, PAPER DISPENSERS AND SOAP DISHES, ETC PROVIDED ON OR WITHIN WALL, SHALL BE INSTALLED AND SEALED TO PROTECT STRUCTURAL FLEMENTS FROM MOISTURE

DIV. 15 MECHANICAL NOTES

15.1 SEE MECHANICAL DRAWINGS FOR MECHANICAL, PLUMBING AND FIRE PROTECTION NOTES.

- 15.2 Access Panels A. FRAMING CONTRACTORS SHALL FRAME AND DRYWALL CONTRACTORS SHALL PROVIDE ACCESS PANELS AS REQUIRED BY PLUMBING AIR CONDITIONING AND OTHER INSTALLERS AS REQUIRED BY CODE.
- B. FRAMING CONTRACTORS SHALL SUBMIT LOCATION OF ALL ACCESS PANELS PRIOR TO ARCHITECT FOR REVIEW- PRIOR TO INSTALLATION.
- C. NO ACCESS PANELS TO BE LOCATED IN PUBLIC AREA WALLS. 15.3 NO STRUCTURAL MEMBERS SHALL BE CUT FOR PIPES, DUCTS, ETC,
- UNLESS SPECIFICALLY DETAILED. 15.4 THE CONCRETE CONTRACTOR SHALL COORDINATE AND VERIFY WITH THE PLUMBING, MECHANICAL AND ELECTRICAL CONTRACTORS THE SIZE AND LOCATION OF ALL PIPING, DUCTWORK, TRENCHES SLEEVES, SPECIAL BOLTING FOR EQUIPMENT CONDUITS, ETC. THROUGH AND UNDER CONCRETE SLABS PRIOR TO POURING OF

FOOTING AND SLABS.

- 15.5 Fire Protection Systems A. PROVIDE FIRE DEPARTMENT KNOX-BOX' KEY ENTRY SYSTEMS FOR EACH BUILDING OR PORTION THEREOF AS DIRECTED BY THE LEGAL GOVERNING FIRE DEPT, THAT WILL HOUSE KEYS TO UNLOCK DOORS AT ALL TENANT ENTRIES. ALSO PROVIDE KNOX SYSTEM PADLOCK ON ALL SPRINKLER SYSTEM VALVE (AS DIRECTED BY
- LEGAL GOVERNING FIRE DEPT.) B. FIRE DAMPERS SHALL BE PROVIDED WHERE AIR DUCTS PENETRATE
- C. ALL PLUMBING AND HEATING WORK SHALL CONFORM TO GOVERNING CODES.
- D. HVAC CONTRACTOR SHALL PROVIDE AND INSTALL ADEQUATE VENTS FOR ALL GAS APPLIANCES.

FIRE- RATED WALLS OR CEILINGS.

- A. PLUMBING CONTRACTOR SHALL INSULATE ALL PLUMBING PIPING IN ATTICS. CANOPIES, AND WALLS. SEE PLUMBING DRAWINGS AND
- INSULATED FROM BUILDING AND EXTENDED 6' BELOW FROST LINE. SEE PLUMBING DRAWINGS AND SPECS. C. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS TO COMPLETE THE PLUMBING AS PER PLANS AND SPECIFICATIONS INCLUDING BUT NOT LIMITED TO: LAYOUT, TRENCHING, UTILITY CONNECTIONS, BACKFILL, COMPACTION TO A MINIMUM OF 90% DENSITY, ROUGH-IN INSTALLATIONS, TOP OUT AND FINISH PLUMBING INCLUDING CONNECTIONS EQUIPMENT AND APPLIANCES FURNISHED BY OTHERS. ALSO INCLUDES BUT NOT LIMITED TO:

B. ALL PLUMBING PIPING EXPOSED TO THE EXTERIOR SHALL BE

POOL EQUIPMENT FURNISHED BY OTHERS.

D. PLUMBING CONTRACTOR TO PROVIDE: 1. JACKS FOR OWN TRADE TO BE INSTALLED BY ROOFER.

CONNECTIONS TO HEATING/COOLING UNITS (INCLUDING DRAINS),

WASHER/DRYER UNITS, WATER HEATERS, KITCHEN RANGES AND

3. CONNECTIONS FOR FUTURE INSTALLATION OF INDIVIDUAL WATER METERS IN EACH UNIT.

. PRIOR TO COMMENCEMENT OF CONSTRUCTION, TEMPORARY

WATER CONNECTIONS SUFFICIENT TO MEET THE NEEDS OF THE

4. AND FURNISH RECESSED FAUCET BOX (AS APPROVED BY OWNER) AT LAUNDRY AREAS.

- 5. CONNECTIONS TO UTILITY MAINS INSTALLED BY UTILITY
- CONTRACTOR AT POINTS COORDINATED WITH SAME. 6. PLUMBING AND GAS LINES TO POOL EQUIPMENT AREA.
- 7. FURNISH ANY CAULKING AS REQUIRED BY CODE.

15.7 Heating Ventilating and Air Conditioning A. REFER TO MECHANICAL PLAN FOR SPECS AND NOTES.

SPECIFICATIONS AND AS FURTHER DESCRIBED BELOW:

- B. AIR CONDITIONING CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS TO COMPLETE THE HEATING, AIR CONDITIONING, AND OTHER ASSOCIATED SHEETMETAL AND DUCTING WORK PER PLANS AND
- THERMOSTATS AND WIRING.
- 2. REGISTERS WHITE REGISTERS
- 3. DUCTING: THERM-A-FLEX (MKC) INSULATED HEATING DUCT
- 4. AIR CONDITIONING CONDENSER UNIT AND CONDENSATE LINES:
- 5. DRYER VENTS: INCLUDE BIRD GUARDS 6. RANGE EXHAUST DUCT

DRYERBOX.COM"

7. COMBUSTION AIR VENTS TO LAUNDRY AND WATER HEATER ROOMS PER PLANS AND TO THE SATISFACTION OF THE LOCAL

BUILDING OFFICIAL. C. CONTRACTOR SHALL:

- 1. PURCHASE AND INSTALL DRYERBOXES FROM "THE
- 2. INCLUDE CONNECTIONS TO AND FROM VENTING EQUIPMENT AND APPLIANCES FURNISHED BY OTHERS INCLUDING BUT NOT

LIMITED TO BATHROOM EXHAUST FANS WHICH 15.8 Insulation

(MUMINIM)

- 1. DUCT WORK INSULATION:
- (OUTSIDE) AIR IN CONDITIONED SPACES— INSULATE ENTIRELY. MATERIAL : 0.75LB/CU. FT. FLEXIBLE FIBERGLASS 11/2" THICK FLAME RESISTANT ALUMINÚM KRAFT FOIL JACKET. B. SERVICE: AIR CONDITIONING AND HEATING SUPPLY AND RETURN, FRESH (OUTSIDE) AIR IN UNCONDITIONED SPACES— INSULATE ENTIRELY. MATERIAL 0.75LB/CU.FT. FLEXIBLE FIBERGLASS 2" THICK

A. SERVICE: AIR CONDITIONING AND HEATING SUPPLY, FRESH

ALL INSULATION: RATING NOT TO EXCEED 25 FLAME, 50 SMOKE AND

WITH FLAME RESISTANT ALUMINUM KRAFT FOIL JACKET. (R6

- RATED FOR USE IN RETURN AIR PLENUM.
- 15.9 "Low Pressure" Ductwork and Accessories 1. CONSTRUCT RECTANGULAR DUCT OF FIRST QUALITY MATERIALS IN ACCORDANCE WITH SMACNA-HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE, CROSSBREAK EXCEPT WHERE RIGID INSULATION IS SPECIFIED CONSTRUCT ROUND. DUCT ACCORDING TO RECOMMENDATIONS OF ASHRAE GUIDE. ROUND DUCT SHOULD BE GALVANIZED SPIRAL UNLESS NOTED OTHERWISE. LONGITUDINAL LOCK- SEAM DUCT IS NOT
- 2. KEEP ALL DUCTWORK, DUCT SYSTEM AND EQUIPMENT OPENINGS COVERED WITH ADHESIVE DUCT PROTECTIVE WRAP LIKE VENTURE TAPE 1512, UNTIL SYSTEM START-UP, THIS IS TO PREVENT INTRUSION OF CONSTRUCTION DIRT AND DEBRIS INTO THE DUCT SYSTEM AND HVAC EQUIPMENT.

3. PHENOLIC DUCT BY PAL-DUCT OR KOOL-DUCT IS AN

ACCEPTABLE ALTERNATIVE TO SHEET METAL DUCT AND INSULATION IN CONCEALED SPACES. USE FLANGED JOINTS SUBMIT DETAILED DUCT DRAWINGS FOR ENGINEER VIEW. 4. SUPPORT HORIZONTAL DUCT IN WALL WITH BANK IRON STRAP

HANGER IF WIDTH IS UNDER 18" AND WITH SHELF TYPE

5. SUPPORT DUCTS SUSPENDED FROM ROOF STRUCTURE WITH BAND-TYPE HANGERS IF MAXIMUM IS INSIDE 48" AND WITH

BRACKET IF OVER 18".

ANGLE TO PROJECTED SAME SIDE.

TRAPEZE-TYPE HANGERS IF OVER 48".

A. ELBOWS (LESS THAN 24" WIDE): USE STANDARD RADIUS ELBOW.

- RADIUS SHALL BE 1.5 TIMES WIDTH OF FITTINGS. B. ELBOWS (24" WIDE AND OVER): SHALL BE SQUARE ELBOWS WITH TURNING VANES. ELBOWS LESS THAN 36" WIDE SHALL HAVE SINGLE- BLADED VANES. ELBOWS 36" WIDE AND OVER SHALL
- . MAIN TEE CONNECTIONS SHALL BE RADIUS OR SQUARE DEPENDING ON THE SIZE DUCT REDUCED TO ADJUSTABLE SPLITTER DAMPER SHALL BE PROVIDED AHEAD OF TEE.

HAVE DOUBLE- BLADED VANES IN AIRFOIL PATTERN.

D. BRANCH TEE CONNECTIONS SHALL BE 45° BRANCH TAKE-OFFS. PROVIDE BALANCING DAMPERS IN BRANCHES UNLESS OTHERWISE DIRECTED TO DELETE THEM. E. TRANSITIONS, RAISES AND DROPS SHALL BE BUILT SO THAT

CHANGE IN DIRECTION OF SIDE OF DUCT DOES NOT EXCEED 30°

2. PROVIDE FLEXIBLE CONNECTIONS (FC) AT EACH INLET AND OUTLET DUCT CONNECTION TO EVERY PIECE OF FAN EQUIPMENT. FABRIC FASTENED TO METAL WITH DOUBLE LOCK SEAM. FABRIC FOR ORDINARY HVAC USES TO BE WATERPROOF, FIRE RETARDANT AND SUITABLE FOR TEMPERATURE OF 200°F.

MANUFACTURERS: DURO-DYNE, VENTFABRICS OR EQUAL.

3. RUNS OF FLEXIBLE DUCT SHALL NOT EXCEED 5'0". FLEXIBLE

DUCT SHALL NOT BE USED AS AN ELBOW. PROVIDE A SHEET METAL ELBOW AT DIFFUSER NECK WHERE TAP IS NOT OUT OF THE BOTTOM OF THE SUPPLY MAIN. 4. FURNISH AND INSTALL BALANCING DAMPERS FOR EACH SUPPLY AIR RUNOUT AND AT ADDITIONAL LOCAL AS SHOWN ON THE DRAWINGS. CONSTRUCTION TO BE GALVANIZED STEEL, TWO GAUGES HEAVIER THAN DUCT. SHAFT SHALL BE STEEL WITH

BRASS BEARINGS. BLADES SHALL NOT EXCEED 12" WIDE AND

48" LONG. FRAMES OF SAME GAUGE METAL ARE REQUIRED

5. BALANCING DAMPERS TO HAVE LOCK-TYPE DAMPER OPERATE AND LINKAGE AS BEST SUITS CONSTRUCTION AND ACCESS CONDITIONS. DAMPERS WITH ACCESSIBLE OPERATORS TO BE PROVIDED WITH LOCKING DAMPER QUADRANTS COMPLETE WITH LOCKING NUTS AND GRADUATED SCALE. DAMPERS WITH NON-ACCESSIBLE OPERATORS PROVIDED WITH YOUNG SERIES 335 ADJUSTABLE COVER REGULATORS.

WHERE TWO BLADES OR MORE ARE USED.

6. DUCT SEALING: COMPLY WITH SMACNA STANDARD DUCT SEALING REQUIREMENTS FOR CLASS "A" DUCTS FOR ALL O/A, SUPPLY RETURN AND EXHAUST DUCTWORK.

A. WATER-BASED JOINT AND SEAM SEALANT:

A.1. APPLICATION METHOD: BRUSH ON.

- A.2. SOLID CONTENT: MINIMUM 65%
- A.3. SHORE A HARDNESS: MINIMUM 20.

- A.4. WATER RESISTANT.
- A.5. MOLD AND MILDEW RESISTANT.
- A.6. VOC: MAXIMUM 75G/L (LESS WATER).
- A.7. MAXIMUM STATIC-PRESSURE CLASS: 10-INCH WG (2500PA),
- POSITIVE AND NEGATIVE. A.8. SERVICE: INDOOR OR OUTDOOR.
- A.9. SUBSTRATE: COMPATIBLE WITH GALVANIZED SHEET STEEL (BOTH PVC COATED AND BARE), STAINLESS STEEL, OR
- ALUMINUM SHEETS.
- A.10. TAE SHALL NOT BE ACCEPTABLE. A.11. TOTAL DUCT LEAKAGE RATES SHALL NOT EXCEED 10%.
- B. FIRE DAMPERS: AT EACH PENETRATION THROUGH FIRE- RATED PARTITIONS, PROVIDE FIRE DAMPERS WHERE INDICATED ON

DRAWINGS TO MEET OR EXCEED BARRIER RATING.

SHALL BE 301 STEEL. FINISH SHALL BE MILL.

C. FIRE DAMPERS SHALL BE TYPE "B", U.L. CLASSIFIED AND MEET ALL NFPA CRITERIA FOR PRIMARY FIRE DAMPERS FRAME SHALL BE 20 GAUGE MINIMUM. BLADES SHALL BE 24 GAUGE MINIMUM. BLADES SHALL NOT INFRINGE ON DUCT FREE ARE FOR AIRFLOW. FUSIBLE LINK SHALL BE RATED AT 165°F. CLOSURE SPRINGS

- 15.10 Smoke Damper A. FABRICATE IN ACCORDANCE WITH NFPA 90A AND UL 5555, AND AS
- INDICATED. B. NORMALLY CLOSE SMOKE VENT DAMPER: CURTAIN TYPE, OPENING BY GRAVITY UPON ACTUATION OF ELECTRO THERMAL LINK. FLEXIBLE STAINLESS STEEL BLADE EDGE SEALS TO PROVIDE
- CONSTANT SEALING PRESSURE. C. NORMALLY OPEN SMOKE VENT DAMPER: CURTAIN TYPE, CLOSING UPON ACTUATION OF ELECTRO THERMAL LINK, FLEXIBLE STAINLESS STEEL BLADE EDGE SEALS TO PROVIDE CONSTANT SEALING PRESSURE, STAINLESS STEEL SPRINGS WITH LOCKING DEVICE

ENSURE POSITIVE CLOSURE FOR UNITS MOUNTED HORIZONTALLY

16.3 ELECTRICAL CONTRACTOR SHALL:

DIV. 16 ELECTRICAL NOTES

16.1 REFER TO ELECTRICAL PLANS FOR SPECS AND NOTES.

- 16.2 ELECTRICAL CONTRACTOR TO PROVIDE ALL MATERIAL AND LABOR REQUIRED TO COMPLETE ELECTRICAL INSTALLATION PER PLANS AND SPECIFICATIONS.
- ACCESS AND TELEPHONE SYSTEMS. B. INSTALL LIGHT BULBS FOR LIGHT FIXTURES AS PROVIDED BY

A. FURNISH AND INSTALL CABLE TELEVISION AND HIGHSPEED INTERNET

- C. FURNISH AND INSTALL ALL SWITCHES. RECEPTACLES AND COVER PLATES (WHICH ARE TO BE WHITE) INCLUDING THOSE FOR TELEPHONE AND INTERNET AND TELEVISION.
- D. INSTALL ALL LIGHTING FIXTURES (INCLUDING ANY FOUNDATIONS FOR EXTERIOR FIXTURES).

E. INSTALL SMOKE DETECTORS.

EXTERIOR LIGHTING.

ABOVE GRADE.

- F. WIRE BATHROOM EXHAUST FANS INSTALLED BY OTHERS. G. FURNISH AND INSTALL DOOR CHIMES.
- INSTALL EXTERIOR LIGHTING STANDS OR POLES IN HOLES FILLED WITH CONCRETE.
- BY OTHERS REQUIRING ELECTRICAL POWER(EXAMPLE PROVIDE PIGTAILS ON GARBAGE DISPOSALS ETC.). K. FURNISH AND INSTALL WIRING FROM CLOSEST TEMPORARY POWER
- M. INSTALL ALL COMMON AREA SITE LIGHTING WHICH SHALL BE CONTROLLED WITH A PHOTO CELL SWITCH.

N. LIMIT HEIGHT OF EXTERIOR A/C-DISCONNECT BOXES TO 18"

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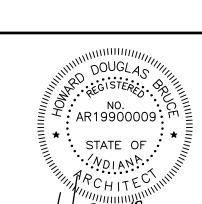
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H. FURNISH AND INSTALL UNDERGROUND WIRING IN CONDUIT FOR

J. INSTALL POWER TO ALL EQUIPMENT AND APPLIANCES FURNISHED

POLE TO OFFICE TRAILER (INCLUDES CABLE DROP IF NECESSARY).

L. INSTALL CONNECTIONS TO UTILITY MAINS INSTALLED BY UTILITY CONTRACTOR AT POINTS COORDINATED WITH SAME.



D. BRUCE

INFORMATION

PROJECT NO.

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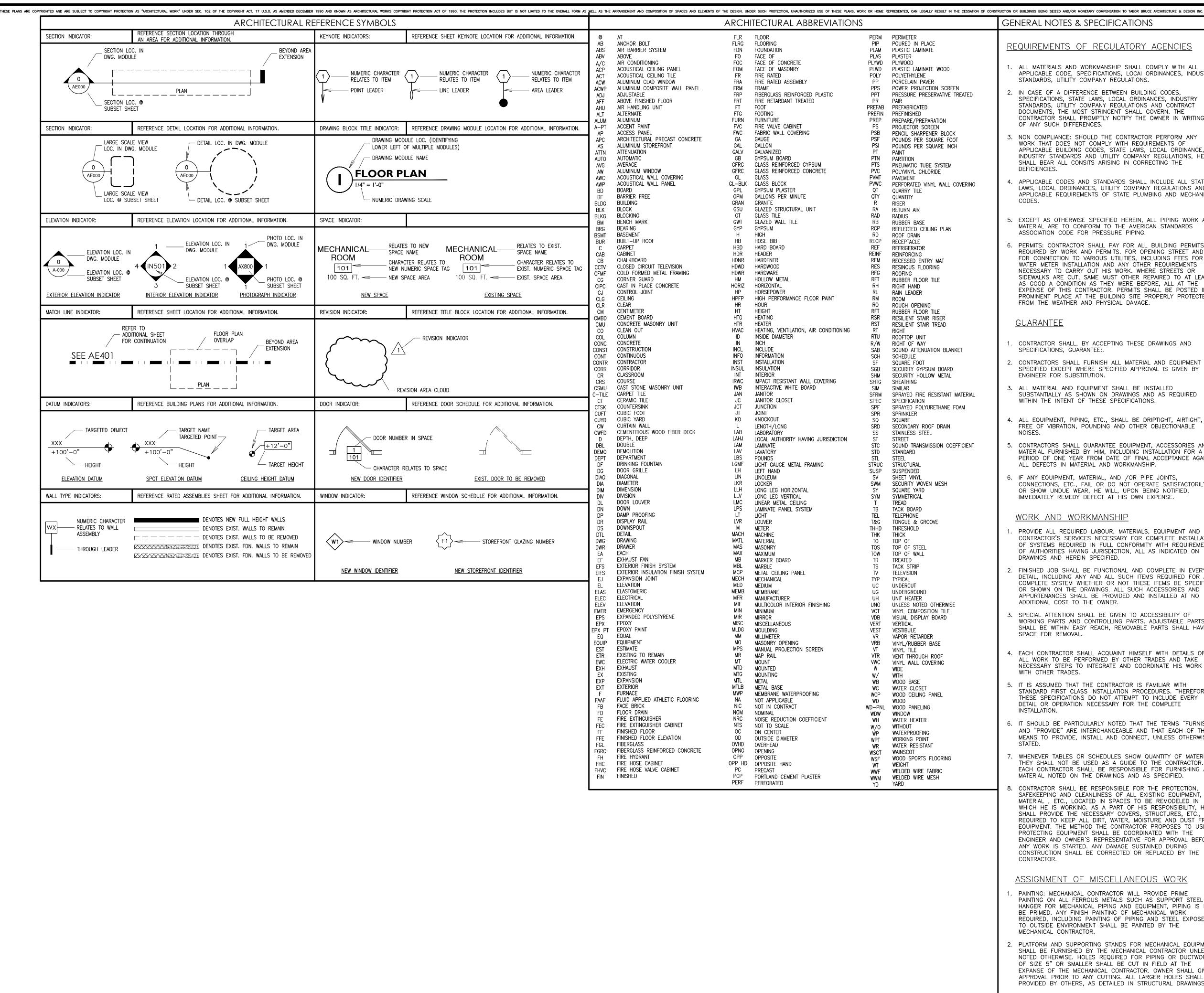
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MARCH 26, 2024

A. NOWLIN

CHECKED BY SHEET NAME GENERAL PLAN



- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODE, SPECIFICATIONS, LOCAI ORDINANCES, INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS.
- . IN CASE OF A DIFFERENCE BETWEEN BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS AND CONTRACT DOCUMENTS. THE MOST STRINGENT SHALL GOVERN. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER IN WRITING OF ANY SUCH DIFFERENCES.
- . NON COMPLIANCE: SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH REQUIREMENTS OF APPLICABLE BUILDING CODES, STATE LAWS, LOCAL ORDINANCE INDUSTRY STANDARDS AND UTILITY COMPANY REGULATIONS, HE SHALL BEAR ALL CONSITS ARISING IN CORRECTING THE
- . APPLICABLE CODES AND STANDARDS SHALL INCLUDE ALL STATE LAWS, LOCAL ORDINANCES. UTILITY COMPANY REGULATIONS AND APPLICABLE REQUIREMENTS OF STATE PLUMBING AND MECHANICAL
- . EXCEPT AS OTHERWISE SPECIFIED HEREIN, ALL PIPING WORK AND MATERIAL ARE TO CONFORM TO THE AMERICAN STANDARDS ASSOCIATION CODE FOR PRESSURE PIPING.
- PERMITS: CONTRACTOR SHALL PAY FOR ALL BUILDING PERMITS REQUIRED BY WORK AND PERMITS. FOR OPENING STREET AND FOR CONNECTION TO VARIOUS UTILITIES, INCLUDING FEES FOR WATER METER INSTALLATION AND ANY OTHER REQUIREMENTS NECESSARY TO CARRY OUT HIS WORK, WHERE STREETS OR SIDEWALKS ARE CUT. SAME MUST OTHER REPAIRED TO AT LEAST AS GOOD A CONDITION AS THEY WERE REFORE ALL AT THE EXPENSE OF THIS CONTRACTOR. PERMITS SHALL BE POSTED IN A PROMINENT PLACE AT THE BUILDING SITE PROPERLY PROTECTED FROM THE WEATHER AND PHYSICAL DAMAGE.

- CONTRACTOR SHALL, BY ACCEPTING THESE DRAWINGS AND
- CONTRACTORS SHALL FURNISH ALL MATERIAL AND EQUIPMENT AS SPECIFIED EXCEPT WHERE SPECIFIED APPROVAL IS GIVEN BY ENGINEER FOR SUBSTITUTION.
- . ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED SUBSTANTIALLY AS SHOWN ON DRAWINGS AND AS REQUIRED WITHIN THE INTENT OF THESE SPECIFICATIONS.
- 4. ALL EQUIPMENT, PIPING, ETC., SHALL BE DRIPTIGHT, AIRTIGHT, FREE OF VIBRATION, POUNDING AND OTHER OBJECTIONABLE
- CONTRACTORS SHALL GUARANTEE EQUIPMENT, ACCESSORIES AND MATERIAL FURNISHED BY HIM. INCLUDING INSTALLATION FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN MATERIAL AND WORKMANSHIP.
- . IF ANY EQUIPMENT, MATERIAL, AND /OR PIPE JOINTS, CONNECTIONS, ETC., FAIL OR DO NOT OPERATE SATISFACTORILY OR SHOW UNDUE WEAR, HE WILL, UPON BEING NOTIFIED, IMMEDIATELY REMEDY DEFECT AT HIS OWN EXPENSE.

WORK AND WORKMANSHIP

- PROVIDE ALL REQUIRED LABOUR, MATERIALS, EQUIPMENT AND CONTRACTOR'S SERVICES NECESSARY FOR COMPLETE INSTALLATION OF SYSTEMS REQUIRED IN FULL CONFORMITY WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, ALL AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.
- . FINISHED JOB SHALL BE FUNCTIONAL AND COMPLETE IN EVERY DETAIL, INCLUDING ANY AND ALL SUCH ITEMS REQUIRED FOR A COMPLETE SYSTEM WHETHER OR NOT THESE ITEMS BE SPECIFIED OR SHOWN ON THE DRAWINGS. ALL SUCH ACCESSORIES AND APPURTENANCES SHALL BE PROVIDED AND INSTALLED AT NO ADDITIONAL COST TO THE OWNER.
- SPECIAL ATTENTION SHALL BE GIVEN TO ACCESSIBILITY OF WORKING PARTS AND CONTROLLING PARTS. ADJUSTABLE PARTS SHALL BE WITHIN EASY REACH, REMOVABLE PARTS SHALL HAVE SPACE FOR REMOVAL.
- 4. EACH CONTRACTOR SHALL ACQUAINT HIMSELF WITH DETAILS OF ALL WORK TO BE PERFORMED BY OTHER TRADES AND TAKE NECESSARY STEPS TO INTEGRATE AND COORDINATE HIS WORK WITH OTHER TRADES.
- . IT IS ASSUMED THAT THE CONTRACTOR IS FAMILIAR WITH STANDARD FIRST CLASS INSTALLATION PROCEDURES. THEREFORE, THESE SPECIFICATIONS DO NOT ATTEMPT TO INCLUDE EVERY DETAIL OR OPERATION NECESSARY FOR THE COMPLETE
- 5. IT SHOULD BE PARTICULARLY NOTED THAT THE TERMS "FURNISH" AND "PROVIDE" ARE INTERCHANGEABLE AND THAT EACH OF THESE MEANS TO PROVIDE, INSTALL AND CONNECT, UNLESS OTHERWISE
- WHENEVER TABLES OR SCHEDULES SHOW QUANTITY OF MATERIALS, THEY SHALL NOT BE USED AS A GUIDE TO THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL NOTED ON THE DRAWINGS AND AS SPECIFIED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION, SAFEKEEPING AND CLEANLINESS OF ALL EXISTING EQUIPMENT, MATERIAL, ETC., LOCATED IN SPACES TO BE REMODELED IN WHICH HE IS WORKING, AS A PART OF HIS RESPONSIBILITY, HE SHALL PROVIDE THE NECESSARY COVERS, STRUCTURES, ETC., AS REQUIRED TO KEEP ALL DIRT, WATER, MOISTURE AND DUST FROM EQUIPMENT. THE METHOD THE CONTRACTOR PROPOSES TO USE IN PROTECTING EQUIPMENT SHALL BE COORDINATED WITH THE ENGINEER AND OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE ANY WORK IS STARTED. ANY DAMAGE SUSTAINED DURING CONSTRUCTION SHALL BE CORRECTED OR REPLACED BY THE

ASSIGNMENT OF MISCELLANEOUS WORK

- PAINTING: MECHANICAL CONTRACTOR WILL PROVIDE PRIME PAINTING ON ALL FERROUS METALS SUCH AS SUPPORT STEEL OR HANGER FOR MECHANICAL PIPING AND EQUIPMENT, PIPING IS NOT BE PRIMED. ANY FINISH PAINTING OF MECHANICAL WORK REQUIRED, INCLUDING PAINTING OF PIPING AND STEEL EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE PAINTED BY THE MECHANICAL CONTRACTOR.
- . PLATFORM AND SUPPORTING STANDS FOR MECHANICAL EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE. HOLES REQUIRED FOR PIPING OR DUCTWORK OF SIZE 5" OR SMALLER SHALL BE CUT IN FIELD AT THE EXPANSE OF THE MECHANICAL CONTRACTOR. OWNER SHALL GIVE APPROVAL PRIOR TO ANY CUTTING. ALL LARGER HOLES SHALL BE PROVIDED BY OTHERS, AS DETAILED IN STRUCTURAL DRAWINGS.

3. CEILING AND WALL ACCESS PANELS: MECHANICAL CONTRACTOR SHALL CUT AND PATCH FINISHED AREAS FOR PANELS AS REQUIRED BY THE MECHANICAL CONTRACTOR; PROVIDE ACCESS PANELS AS SPECIFIED, WHERE SHOWN OR REQUIRED FOR ACCESS

TO COILS, VALVES, ETC.

- A. ACOUSTICAL TILE WALL OR CEILING: 24"X12" UNLESS OTHERWISE NOTED. CONSTRUCTED TO RECEIVE TILE TO MATCH
- B. PLASTERED WALL OR CEILING UNLESS OTHERWISE NOTED. CONSTRUCTED TO RECEIVE PLASTER TO MATCH ADJACENT
- 4. CUTTING AND PATCHING: MECHANICAL CONTRACTOR SHALL CUT AND PATCH FINISHED AREAS AS REQUIRED BY THE MECHANICAL CONTRACTOR. CUT STRUCTURAL MATERIALS ONLY WHERE REQUIRED AFTER APPROVAL FROM THE ARCHITECT AND ENGINEER.
- 4. DISPOSITION OF EXISTING EQUIPMENT WHICH IS TO BE REMOVED AND SALVAGED SHALL REMAIN THE PROPERTY OF THE OWNER AND BE STORED BY THE CONTRACTOR AS DIRECTED BY THE
- 5. TEMPORARY PARTITIONS OR BARRIERS REQUIRED TO PROTECT EXITING BUILDING OR FACILITIES SHALL BE PROVIDED B THE MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL COORDINATE NECESSITY AND LOCATION OF SUCH PROTECTION WITH OWNER.

COUNTERFLASHING BY THE MECHANICAL CONTRACTOR.

BY THE MECHANICAL CONTRACTOR.

- 6. ROOF OPENINGS AND FLASHING BY MECHANICAL CONTRACTOR SHALL BE BY THE SAME. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE CORRECT SIZE AND LOCATION OF SAME.
- 7. PADS AND FOUNDATIONS FOR MECHANICAL WORK SHALL BE FORMED AND POURED BY THE MECHANICAL CONTRACTOR. THE
- SAME SHALL VERIFY PADS AND ALL ANCHORING DEVICES. 8. EXCAVATING AND BACKFILLING FOR MECHANICAL WORK SHALL BE
- 9. ALL OUTSIDE DOWNSPOUT SHALL BE BY THE GENERAL CONTRACTOR. DOWNSPOUT SHOE SHALL BE BY THE MECHANICAL
- 10. ROOF CURBS AND BASES FOR VENTILATORS, ROOF INTAKES AND RELIEF AND FANS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR

DRAWINGS

MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT OF ALL PIPING, EQUIPMENT AND APPURTENANCES. THEY SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT. MECHANICAL WORK SHALL CONFORM TO REQUIREMENTS SHOWN ON ALL DRAWINGS. GENERAL AND STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MECHANICAL DRAWINGS.

BECAUSE OF THE SMALL SCALE OF MECHANICAL DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS. FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. CONTRACTOR SHALL INVESTIGATE STRUCTURAL AND FINISH CONDITIONS AFFECTING WORK AND SHALL ARRANGE HIS WORK ACCORDINGLY, PROVIDING SUCH FITTINGS, VALVES AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNFR

COORDINATION BETWEEN CONTRACTORS

EACH CONTRACTOR AND SUBCONTRACTOR SHALL STUDY AL DRAWINGS APPLICABLE TO THIS WORK SO COMPLETE COORDINATION BETWEEN TRADES WILL BE AFFECTED. SPECIAL ATTENTION SHALL BE GIVEN TO POINTS WHERE DUCTS CROSS OTHER DUCTS OR PIPING, WHERE LIGHTS, FIT INTO CEILINGS AND WHERE PIPE, DUCTS AND CONDUITS PASS THROUGH WALLS AND COLUMNS.

IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO LEAVE NECESSARY ROOM FOR OTHER TRADES. NO EXTRA COMPENSATION WILL BE ALLOWED TO COVER THE COST OF REMOVING PIPING, CONDUITS, DUCTS, OR EQUIPMENT FOUND ENCROACHING ON SPACE REQUIRED BY OTHERS.

MINOR DEVIATIONS

FOR THE PURPOSE OF CLARITY AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC ALTHOUGH SIZE AND LOCATION OF EQUIPMENT AND PIPING ARE DRAWN NEAR TO SCALE WHEREVER POSSIBLE. VERIFY CONTRACT DOCUMENT INFORMATION AT SITE.

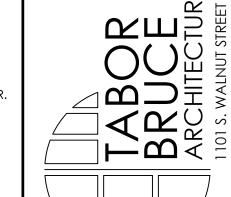
DRAWINGS INDICATE REQUIRED SIZES AND POINTS OF TERMINATION OF PIPES AND DUCTS AND SUGGESTED ROUTED. IT IS NOT THE NTENTION OF DRAWINGS TO INDICATE ALL NECESSART OFFSETS. INSTALL WORK IN A MANNER TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOMS AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. DO NOT SCALE FROM DRAWINGS.

ATTACHING TO BUILDING CONSTRUCTION

EQUIPMENT AND PIPING SUPPORTS SHALLL BE ATTACHED TO STRUCTURAL MEMBERS (BEAMS, JOISTS, ETC.) RATHER THAN TO FLOOR OR ROOF SLABS. DO NOT ATTACHED HANGARS TO BOTTOM CHORD OF STRUCTURAL MEMBERS.

DEMOLITION AND REMOVAL OF EQUIPMENT

- 1. CONTRACTORS SHALL REMOVE ALL EQUIPMENT, PIPES, DUCTWORK, HANGERS AND SUPPORT FOR PORTION IF MECHANICAL SYSTEM IN PRESENT BUILDING AS SHOWN ON DRAWINGS AND/ OR IMPLED BY NATURE OF THE WORK INDICATED TO BE REMOVED.
- 2. CONTRACTOR SHALL PROPERLY REMAINING PORTION OF WORK. CONTRACTOR SHALL PROVIDE VALVES, PLUGS, VENTS ETC. AS REQUIRED FOR COMPLETE OPERATING SYSTEM . ALL PIPES, DUCTWORKS, ETC., REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR SHALL BE REMOVED FROM THE PREMISES UNLESS SPECIFIED OTHERWISE.
- 3. CONTRACTOR SHALL CAP ALL ABANDONED PIPING WHICH CANNOT BE REMOVED. THIS WOULD PERTAIN TO PIPING WHICH RUNS INTO CONCRETE FLOOR, THRU OUTSIDE WALLS BELOW GRADE, ETC.



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GENERAL PLAN

INFORMATION

A. WALKS & SIDEWALKS

- 1. WALKS & SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2", & SHALL BE A MIN. OF 48" IN WIDTH.
- 2. WHEN ABRUPT CHANGES IN LEVEL NOT EXCEEDING 1/2" OCCUR, THEY SHALL BE BEVELED W/ A SLOPE NO GREATER THAN 1:2, EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL.
- 3. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE EXCEEDING ½" SHALL COMPLY W/ THE REQUIREMENTS FOR CURB RAMPS.
- 4. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL IT SHALL COMPLY W/ THE PROVISIONS OF SECTION 1007 AS A PEDESTRIAN RAMP.
- 5. WALK & SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4" PER
- 6. WALKS SHALL BE PROVIDED W/ A LEVEL AREA NOT LESS THAN 60" BY 60" @ A DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 48" WIDE BY 44" DEEP @ A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK
- 7. WALKS SHALL EXTEND A MIN. OF 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK.
- 8. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE LEVEL AREAS @ LEAST 5' IN LENGTH @ INTERVALS OF AT LEAST EVERY 400'.
- 9. WALK & SIDEWALK SURFACES SHALL BE SLIP-RESISTANT AS FOLLOWS:
- A. SURFACES W/ A SLOPE OF LESS THAN 6% GRADIENT SHALL BE @ LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIUM SALTED FINISH.
- B. SURFACES W/ A SLOPE OF 6% GRADIENT SHALL BE SLIP-RESISTANT.
- 10. WALKS, SIDEWALKS, & PEDESTRIAN WAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE NO GREATER THAN ½" WIDE IN ONE DIRECTION. IF GRATINGS HAVE ELONGATED OPENINGS, THEY SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

B. CURB RAMPS

- 1. CURB RAMPS SHALL BE A MIN. OF 4' IN WIDTH & SHALL LIE, GENERALLY, IN A SINGLE SLOPED PLANE, W/ A MIN. OF SURFACE WARPING & CROSS SLOPE.
- 2. THE SLOPE OF CURB RAMPS SHALL NOT EXCEED 1 VERTICAL TO 12 HORIZONTAL.
- 3. MAX. SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE, SHALL NOT EXCEED 1:20 WITHIN 4' OF THE TOP & BOTTOM OF THE CURB RAMP. THE SLOPE OF THE FANNED OR FLARED SIDES OF CURB RAMPS SHALL NOT EXCEED 1 VERTICAL TO 8 HORIZONTAL.
- 4. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH & FREE OF ABRUPT CHANGES, EXCEPT THAT THE LOWER END OF EACH CURB RAMP SHALL HAVE A 1/2" LIP BEVELED @ 45 DEGREES.
- 5. IF DIAGONAL (CORNER TYPE) CURB RAMPS HAVE RETURNED CURBS OR OTHER WELL-DEFINED EDGES, SUCH EDGES SHALL BE PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE 48" MIN. CLEAR SPACE. IF DIAGONAL CURB RAMPS ARE PROVIDED @ MARKED CROSSINGS, THE 48" CLEAR SPACE SHALL BE WITHIN THE MARKINGS. IF DIAGONAL CURB RAMPS HAVE FLARED SIDES, THEY SHALL ALSO HAVE @ LEAST A 24" LONG SEGMENT OF STRAIGHT CURB LOCATED ON EACH SIDE OF THE CURB RAMP & WITHIN THE MARKED CROSSING.
- 6. THE SURFACE OF EACH CURB RAMP & ITS FLARED SIDES SHALL BE STABLE, FIRM, & SLIP—RESISTANT & SHALL BE OF CONTRASTING FINISH FROM THAT OF THE ADJACENT SIDEWALK.
- 7. ALL CURB RAMPS SHALL HAVE A GROOVED BORDER 12" WIDE @ THE LEVEL SURFACE OF THE SIDEWALK ALONG THE TOP & EACH SIDE APPROXIMATELY 3/4" ON CENTER. ALL CURB RAMPS CONSTRUCTED BETWEEN THE FACE OF THE CURB & THE STREET SHALL HAVE A GROOVED BORDER @ THE LEVEL SURFACE OF THE SIDEWALK.
- 8. A CURB RAMP SHALL HAVE A DETECTABLE WARNING THAT EXTENDS THE FULL WIDTH & DEPTH OF THE CURB RAMP INSIDE THE GROOVED BORDER WHEN THE RAMP SLOPE IS LESS THAN 1 VERTICAL TO 15 HORIZONTAL. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9" THE BASE TAPERING TO 0.45" THE TOP, A HEIGHT OF NOMINAL 0.2", & A CENTER—TO—CENTER SPACING OF NOMINAL 2.35", IN COMPLIANCE W/ FIGURE 11B—23. "NOMINAL", AS USED HERE, SHALL BE IN ACCORDANCE W/ SECTION 12—31—102, STATE REFERENCED STANDARDS CODE. THE DETECTABLE WARNING SHALL CONTRAST VISUALLY W/ ADJOINING SURFACES, EITHER LIGHT—ON—DARK OR DARK ON—LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. THE DOMES MAY BE CONSTRUCTED IN A VARIETY OF METHODS, INCLUDING CAST—IN—PLACE OR STAMPED, OR MAY BE PART OF A PREFABRICATED SURFACE TREATMENT. (SEC 1127B.5 (7))
- 9. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED CARS.

C PARKING

- 1. WHERE SINGLE ACCESSIBLE PARKING SPACES ARE PROVIDED, THEY SHALL BE 14' WIDE & OUTLINED TO PROVIDE A 9' PARKING AREA & A 5' LOADING & UNLOADING ACCESS AISLE ON THE PASSENGER SIDE OF THE VEHICLE.
- 2. WHEN MORE THAN ONE ACCESSIBLE PARKING SPACE IS PROVIDED, IN LIEU OF PROVIDING A 14' WIDE SPACE FOR EACH PARKING SPACE, TWO SPACES CAN BE PROVIDED WITHIN A 23' WIDE AREA LINED TO PROVIDE A 9' PARKING AREA ON EACH SIDE OF A 5' LOADING & UNLOADING ACCESS AISLE IN THE CENTER.
- 3. THE MIN. LENGTH OF AN ACCESSIBLE PARKING SPACE SHALL BE 18'. (OR BY LOCAL ORDINANCE)
- 4. SURFACE SLOPES OF ACCESSIBLE PARKING SPACES SHALL BE THE MIN. POSSIBLE & SHALL NOT EXCEED 2% IN ANY DIRECTION.
- 5. ALL ENTRANCES TO & VERTICAL CLEARANCES WITHIN PARKING STRUCTURES SHALL HAVE A MIN. VERTICAL CLEARANCE OF 8'-2" WHERE REQUIRED FOR ACCESSIBILITY TO ACCESSIBLE PARKING SPACES.
- 6. PEDESTRIAN WAYS WHICH ARE ACCESSIBLE TO PEOPLE W/ DISABILITIES SHALL BE PROVIDED FROM EACH SUCH PARKING SPACE TO RELATED FACILITIES, INCLUDING CURB CUTS OR RAMPS AS NEEDED.
- 7. ACCESSIBLE PARKING SPACES SHALL BE SO LOCATED THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND PARKED CARS OTHER THAN THEIR OWN.

PARKING SIGNAGE

- 1. EACH PARKING SPACE RESERVED FOR PERSONS WITH DISABILITIES SHALL BE IDENTIFIED BY A REFLECTORIZED SIGN PERMANENTLY POSTED IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH STALL OR SPACE, CONSISTING OF A PROFILE VIEW OF A WHEELCHAIR W/ OCCUPANT IN WHITE ON DARK BLUE BACKGROUND. THE SIGN SHALL NOT BE SMALLER THAN 70 SQUARE INCHES IN AREA &, WHEN IN A PATH OF TRAVEL, SHALL BE POSTED AT A MIN. HEIGHT OF 80" FROM THE BOTTOM OF THE SIGN TO THE PARKING SPACE FINISHED GRADE.
- 2. SIGNS TO IDENTIFY ACCESSIBLE PARKING SPACES MAY BE CENTERED ON THE WALL @ THE INTERIOR END OF THE PARKING SPACE @ A MIN. HEIGHT OF 36" FROM THE PARKING SPACE FINISHED GRADE, GROUND OR SIDEWALK.
- 3. VAN ACCESSIBLE PARKING SPACES SHALL HAVE AN ADDITIONAL SIGN STATING "VAN-ACCESSIBLE" MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY.
- 4. THE SURFACE OF EACH ACCESSIBLE PARKING SPACE OR STALL SHALL HAVE A SURFACE IDENTIFICATION DUPLICATING EITHER OF THE FOLLOWING SCHEMES:
- A. BY OUTLINING OR PAINTING THE STALL OR SPACE IN BLUE & OUTLINING ON THE GROUND IN THE STALL OR SPACE IN WHITE OR SUITABLE CONTRASTING COLOR A PROFILE VIEW DEPICTING A WHEELCHAIR W/OCCUPANT;
- B. BY OUTLINING A PROFILE VIEW OF A WHEELCHAIR W/ OCCUPANT IN WHITE ON BLUE BACKGROUND. THE PROFILE VIEW SHALL BE LOCATED SO THAT IT IS VISIBLE TO A TRAFFIC ENFORCEMENT OFFICER WHEN A VEHICLE IS PROPERLY PARKED IN THE SPACE & SHALL BE 36" HIGH BY 36" WIDE.

D. ENTRANCES & EXITS

- ALL ENTRANCES & ALL EXTERIOR GROUND FLOOR EXIT DOORS TO BUILDINGS
 & FACILITIES SHALL BE MADE ACCESSIBLE TO PERSONS W/ DISABILITIES.
- 2. DURING PERIODS OF PARTIAL OR RESTRICTED USE OF A BUILDING OR FACILITY, THE ENTRANCES USED FOR PRIMARY ACCESS SHALL BE ACCESSIBLE TO & USABLE BY PERSONS WITH DISABILITIES.
- 3. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- 4. MANUALLY OPERATED EDGE OR SURFACE—MOUNTED FLUSH BOLTS & SURFACE BOLTS ARE PROHIBITED. WHEN EXIT DOORS ARE USED IN PAIRS & APPROVED AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF HAVING THE AUTOMATIC FLUSH BOLTS SHALL HAVE NO DOORKNOB OR SURFACE—MOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
- 5. LATCHING & LOCKING DOORS THAT ARE HAND ACTIVATED & WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE W/ A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH—PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. LOCKED EXIT DOORS SHALL OPERATE AS ABOVE IN EGRESS DIRECTION.
- 6. HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" & 48" ABOVE THE FLOOR. LEVER DOOR HARDWARE REQUIRED @ EXTERIOR FACE OF PRIMARY UNIT ENTRY DOOR.
- 7. EVERY DOORWAY WHICH IS LOCATED WITHIN AN ACCESSIBLE PATH OF TRAVEL SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3' IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. WHEN INSTALLED, EXIT DOORS SHALL BE CAPABLE OF OPENING SO THAT THE CLEAR WIDTH OF THE EXIT IS NOT LESS THAN 32", MEASURED BETWEEN THE FACE OF THE DOOR & THE OPPOSITE STOP.
- 8. WHERE A PAIR OF DOORS IS UTILIZED, @ LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" W/ THE LEAF POSITIONED @ AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
- 9. WHEN AN AUTOMATIC DOOR OPERATOR IS UTILIZED TO OPERATE A PAIR OF DOORS, @ LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" W/ THE DOOR POSITIONED @ AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
- 10. THERE SHALL BE A LEVEL & CLEAR FLOOR OR LANDING ON EACH SIDE OF A DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF @ LEAST 60" & THE LENGTH OPPOSITE THE DIRECTION OF DOOR SWING OF 48" AS MEASURED @ RIGHT ANGLES TO THE PLANE OF THE DOOR IN THE CLOSED POSITION.
- 11. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND A MIN. OF 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS & A MIN. OF 18" PAST THE STRIKE EDGE FOR INTERIOR DOORS.
- 12. THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY.
- 13. THE SPACE BETWEEN TWO CONSECUTIVE DOOR OPENINGS IN A VESTIBULE, SERVING OTHER THAN A REQUIRED EXIT STAIRWAY, SHALL PROVIDE A MIN. OF 48" OF CLEAR SPACE FROM ANY DOOR OPENING INTO SUCH VESTIBULE WHEN THE DOOR IS POSITIONED @ AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION. DOORS IN A SERIES SHALL SWING EITHER IN THE SAME DIRECTION OR AWAY FROM THE SPACE BETWEEN THE DOORS.
- 14. ALL OTHER PASSAGE DOORS LEADING TO ROOMS & USABLE CLOSETS DEEPER THAN 24" IN CLEAR DEPTH WITHIN DWELLING UNITS ARE TO BE USABLE @ 32" MIN.

E. SANITARY FACILITY FIXTURES & ACCESSORIES

- 1. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MIN. OF 17" & A MAX. OF 19" MEASURED TO THE TOP OF A MAX. 2" HIGH TOILET SEAT, EXCEPT THAT 3" SEATS SHALL BE PERMITTED ONLY IN ALTERATIONS WHERE THE EXISTING FIXTURE IS LESS THAN 15" HIGH.
- 2. A CLEAR FLOOR SPACE 30" BY 48" SHALL BE PROVIDED IN FRONT OF A LAVATORY TO ALLOW A FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE & SHALL EXTEND INTO KNEE & TOE SPACE UNDERNEATH THE LAVATORY.
- 3. LAVATORIES ADJACENT TO A WALL SHALL BE MOUNTED W/ A MIN. DISTANCE OF 18" TO THE CENTER LINE OF THE FIXTURE.
- 4. LAVATORIES SHALL BE MOUNTED W/ THE RIM OR COUNTER SURFACE NO HIGHER THAN 34" ABOVE THE FINISHED FLOOR & W/ A CLEARANCE OF @ LEAST 29" FROM THE FLOOR TO THE BOTTOM OF THE APRON W/ KNEE CLEARANCE UNDER THE FRONT LIP EXTENDING A MIN. OF 30" IN WIDTH & 8" MIN. DEPTH @ THE TOP. TOE CLEARANCE SHALL BE THE SAME WIDTH & SHALL BE A MIN. OF 9" HIGH FROM THE FLOOR & A MIN. OF 17" DEEP FROM THE FRONT OF THE LAVATORY.
- 5. HOT WATER & DRAIN PIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
- 6. WHERE URINALS ARE PROVIDED, @ LEAST ONE SHALL HAVE A CLEAR FLOOR SPACE 30" BY 48" IN FRONT OF THE URINAL TO ALLOW FORWARD APPROACH.
- 7. WHERE ONE OR MORE URINALS ARE PROVIDED, @ LEAST ONE WITH A RIM PROJECTING A MIN. OF 14" FROM THE WALL & @ A MAX. OF 17" ABOVE THE FLOOR SHALL BE PROVIDED.
- 8. WATER CLOSET & URINAL FLUSH VALVE CONTROLS, FAUCET & OPERATING MECHANISM CONTROLS, SHALL BE OPERABLE W/ ONE HAND, SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST, & SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR.
- 9. SELF-CLOSING FAUCET CONTROL VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR @ LEAST 10 SECONDS.
- 10. MIRRORS SHALL BE MOUNTED W/ THE BOTTOM EDGE NO HIGHER THAN 40" FROM THE FLOOR.
- 11. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, & OTHER SIMILAR DISPENSING & DISPOSAL FIXTURES ARE PROVIDED, @ LEAST ONE OF EACH TYPE SHALL BE LOCATED WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, WITHIN 40" FROM THE FINISHED FLOOR.
- 12. TOILET TISSUE DISPENSERS SHALL BE LOCATED ON THE WALL WITHIN 12" OF THE FRONT EDGE OF THE TOILET SEAT & NO LOWER THAN 19" FROM THE FLOOR. DISPENSERS THAT CONTROL DELIVERY OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

F. GRAB BARS

- 1. GRAB BARS SHALL BE LOCATED ON EACH SIDE, OR ON ONE SIDE & THE BACK OF THE ACCESSIBLE TOILET STALL OR COMPARTMENT.
- 2. GRAB BARS AT THE SIDE SHALL BE @ LEAST 42" LONG W/ THE FRONT END POSITIONED 24" IN FRONT OF THE WATER CLOSET STOOL & WITH THE BACK END POSITIONED NO MORE THAN 12" FROM THE REAR WALL. GRAB BARS @ THE BACK SHALL BE NOT LESS THAN 36" LONG.
- 3. GRAB BARS SHALL BE SECURELY ATTACHED 33" ABOVE & PARALLEL TO THE FLOOR, EXCEPT THAT WHERE A TANK-TYPE TOILET IS USED WHICH OBSTRUCTS PLACEMENT @ 33", THE GRAB BAR MAY BE AS HIGH AS 36".
- 4. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1-1/4" TO 1-1/2" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL & THE GRAB BARS SHALL BE 1-1/2".
- 5. A GRAB BAR & ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MIN. RADIUS OF 1/8".

G. ELECTRICAL

- 1. THE CENTER OF ELECTRICAL & COMMUNICATION SYSTEM RECEPTACLE OUTLETS SHALL BE INSTALLED NOT LESS THAN 15" ABOVE THE FLOOR OR WORKING PLATFORM WITH THE EXCEPTION OF OUTLETS & SWITCHES LOCATED ABOVE COUNTERTOPS TO BE MOUNTED @ 46" MAX.
- 2. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF CONTROLS OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING & RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING, & VENTILATING EQUIPMENT SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR OR WORKING PLATFORM.
- 3. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 48" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE, OR SIDEWALK.



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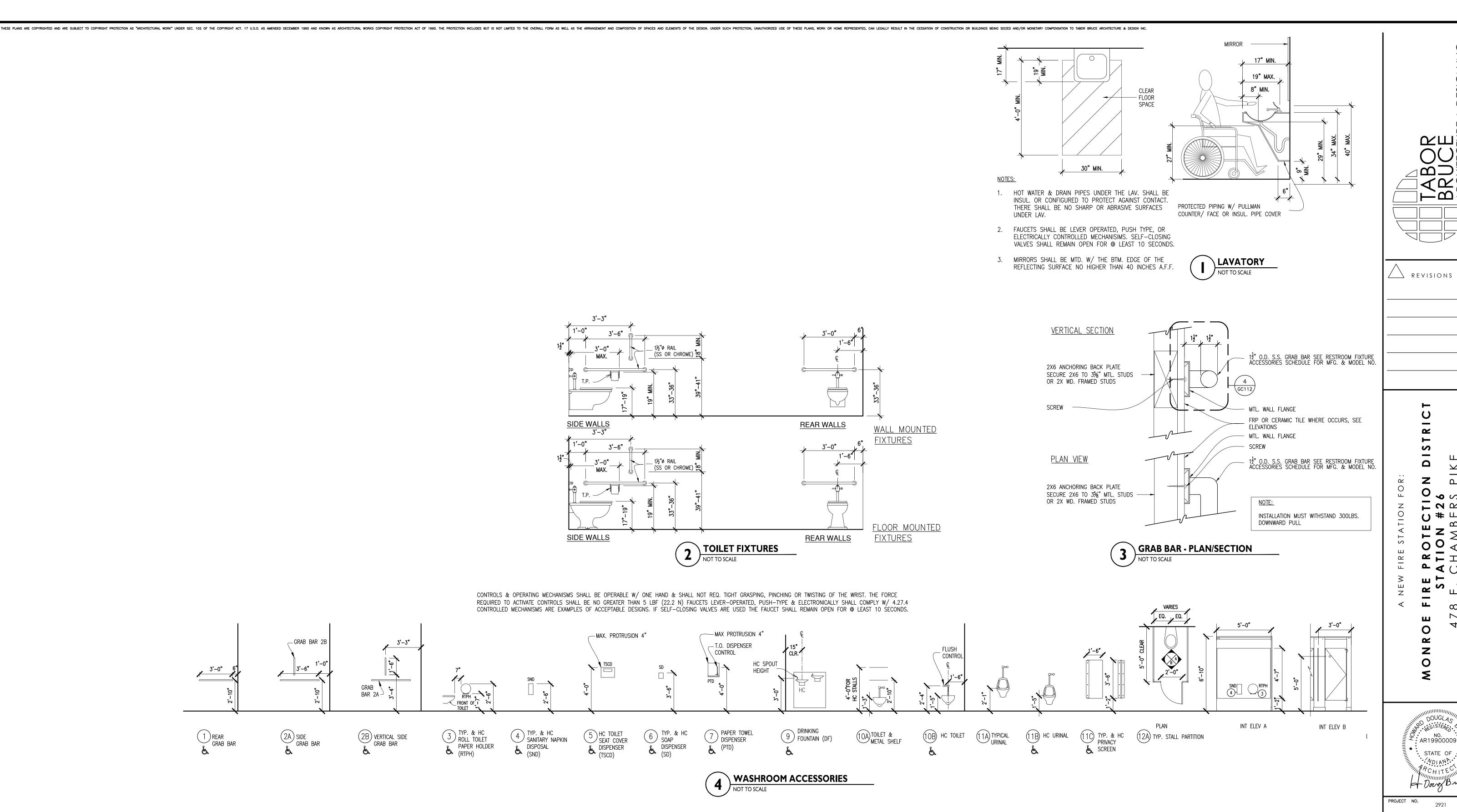
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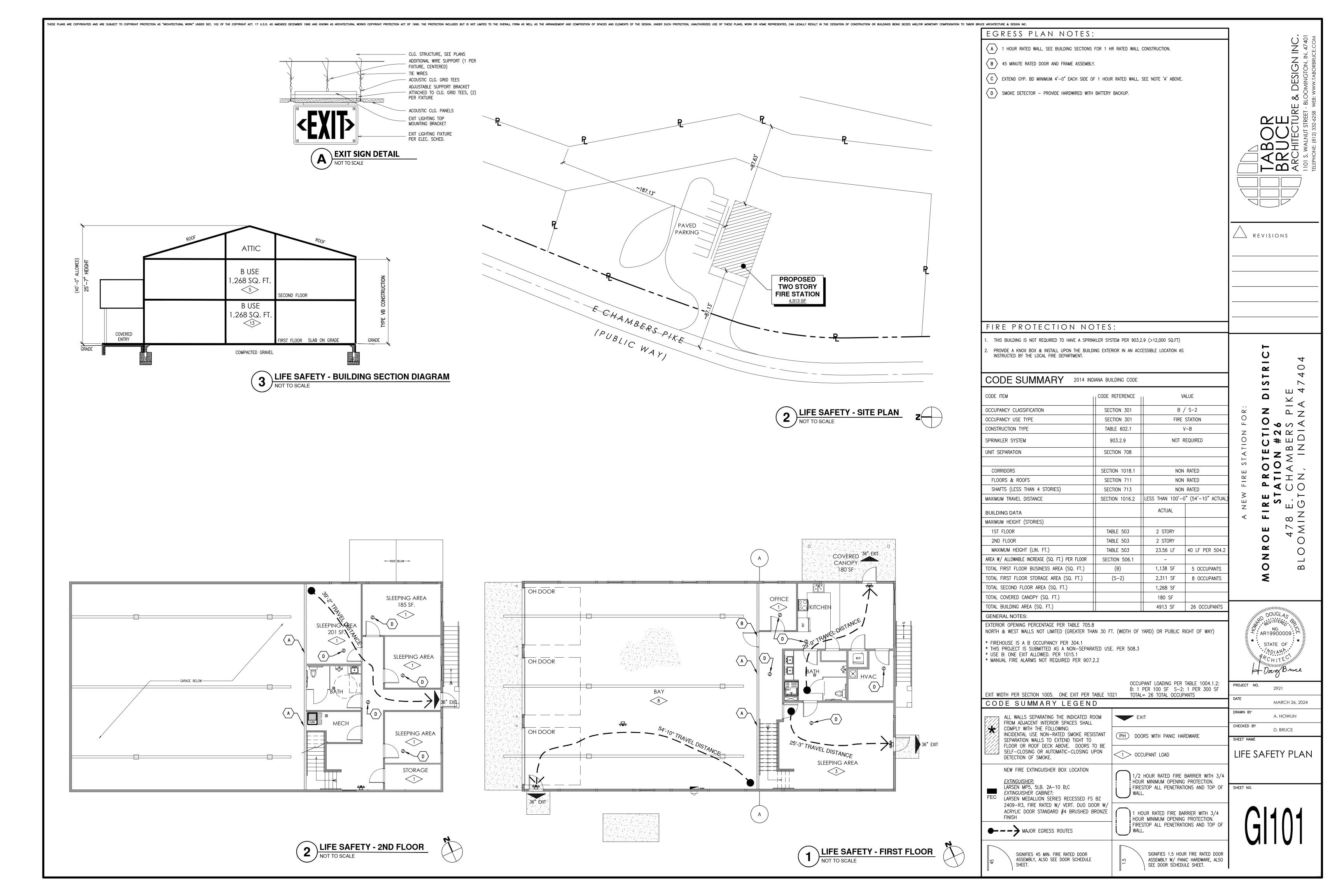
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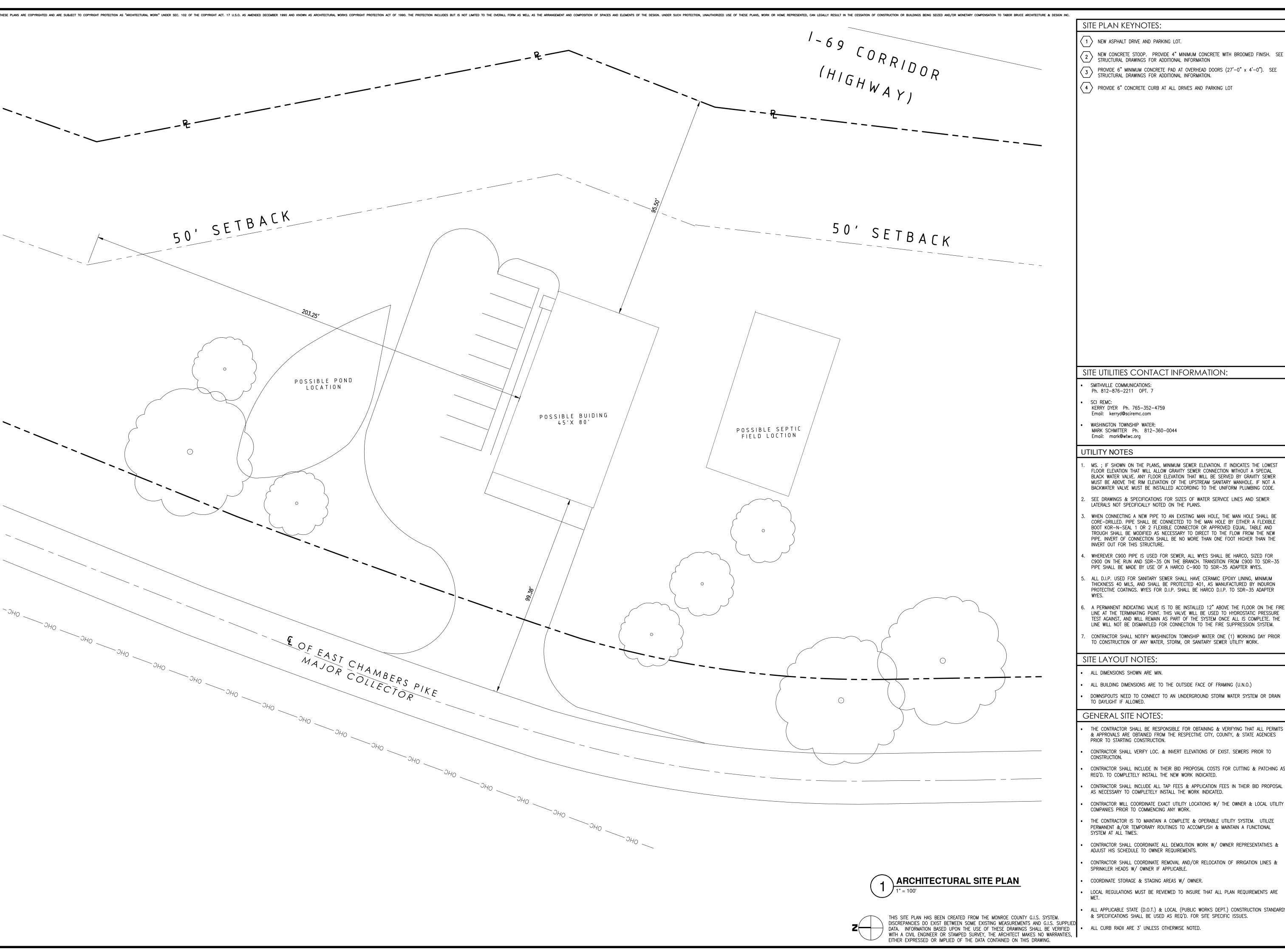
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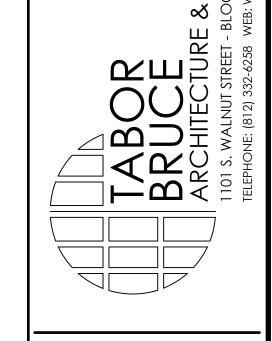
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SITE PLAN KEYNOTES:

- (1) NEW ASPHALT DRIVE AND PARKING LOT.
- 2 NEW CONCRETE STOOP. PROVIDE 4" MINIMUM CONCRETE WITH BROOMED FINISH. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
- PROVIDE 6" MINIMUM CONCRETE PAD AT OVERHEAD DOORS (27'-0" x 4'-0"). SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 4 > PROVIDE 6" CONCRETE CURB AT ALL DRIVES AND PARKING LOT



____ REVISIONS

SITE UTILITIES CONTACT INFORMATION:

SMITHVILLE COMMUNICATIONS: Ph. 812-876-2211 OPT. 7

SCI REMC:

KERRY DYER Ph. 765-352-4759 Email: kerryd@sciremc.com

WASHINGTON TOWNSHIP WATER:

MARK SCHMITTER Ph. 812-360-0044 Email: mark@wtwc.org

UTILITY NOTES

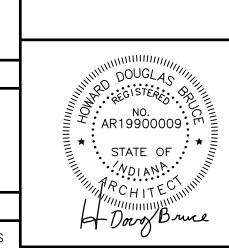
- MS.; IF SHOWN ON THE PLANS, MINIMUM SEWER ELEVATION. IT INDICATES THE LOWEST FLOOR ELEVATION THAT WILL ALLOW GRAVITY SEWER CONNECTION WITHOUT A SPECIAL BLACK WATER VALVE. ANY FLOOR ELEVATION THAT WILL BE SERVED BY GRAVITY SEWER MUST BE ABOVE THE RIM ELEVATION OF THE UPSTREAM SANITARY MANHOLE. IF NOT A BACKWATER VALVE MUST BE INSTALLED ACCORDING TO THE UNIFORM PLUMBING CODE.
- SEE DRAWINGS & SPECIFICATIONS FOR SIZES OF WATER SERVICE LINES AND SEWER LATERALS NOT SPECIFICALLY NOTED ON THE PLANS.
- WHEN CONNECTING A NEW PIPE TO AN EXISTING MAN HOLE, THE MAN HOLE SHALL BE CORE-DRILLED. PIPE SHALL BE CONNECTED TO THE MAN HOLE BY EITHER A FLEXIBLE BOOT KOR-N-SEAL 1 OR 2 FLEXIBLE CONNECTOR OR APPROVED EQUAL. TABLE AND TROUGH SHALL BE MODIFIED AS NECESSARY TO DIRECT TO THE FLOW FROM THE NEW PIPE. INVERT OF CONNECTION SHALL BE NO MORE THAN ONE FOOT HIGHER THAN THE INVERT OUT FOR THIS STRUCTURE.
- WHEREVER C900 PIPE IS USED FOR SEWER, ALL WYES SHALL BE HARCO, SIZED FOR C900 ON THE RUN AND SDR-35 ON THE BRANCH. TRANSITION FROM C900 TO SDR-35 PIPE SHALL BE MADE BY USE OF A HARCO C-900 TO SDR-35 ADAPTER WYES.
- ALL D.I.P. USED FOR SANITARY SEWER SHALL HAVE CERAMIC EPOXY LINING, MINIMUM THICKNESS 40 MILS, AND SHALL BE PROTECTED 401, AS MANUFACTURED BY INDURON PROTECTIVE COATINGS. WYES FOR D.I.P. SHALL BE HARCO D.I.P. TO SDR-35 ADAPTER
- A PERMANENT INDICATING VALVE IS TO BE INSTALLED 12" ABOVE THE FLOOR ON THE FIRE LINE AT THE TERMINATING POINT. THIS VALVE WILL BE USED TO HYDROSTATIC PRESSURE TEST AGAINST, AND WILL REMAIN AS PART OF THE SYSTEM ONCE ALL IS COMPLETE. THE LINE WILL NOT BE DISMANTLED FOR CONNECTION TO THE FIRE SUPPRESSION SYSTEM.
- CONTRACTOR SHALL NOTIFY WASHINGTON TOWNSHIP WATER ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM, OR SANITARY SEWER UTILITY WORK.

SITE LAYOUT NOTES:

- ALL DIMENSIONS SHOWN ARE MIN.
- ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF FRAMING (U.N.O.)
- DOWNSPOUTS NEED TO CONNECT TO AN UNDERGROUND STORM WATER SYSTEM OR DRAIN TO DAYLIGHT IF ALLOWED.

GENERAL SITE NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING & VERIFYING THAT ALL PERMITS & APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, & STATE AGENCIES PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY LOC. & INVERT ELEVATIONS OF EXIST. SEWERS PRIOR TO
- CONTRACTOR SHALL INCLUDE IN THEIR BID PROPOSAL COSTS FOR CUTTING & PATCHING AS REQ'D. TO COMPLETELY INSTALL THE NEW WORK INDICATED.
- CONTRACTOR SHALL INCLUDE ALL TAP FEES & APPLICATION FEES IN THEIR BID PROPOSAL
- AS NECESSARY TO COMPLETELY INSTALL THE WORK INDICATED.
- COMPANIES PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR IS TO MAINTAIN A COMPLETE & OPERABLE UTILITY SYSTEM. UTILIZE PERMANENT &/OR TEMPORARY ROUTINGS TO ACCOMPLISH & MAINTAIN A FUNCTIONAL
- SYSTEM AT ALL TIMES. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK W/ OWNER REPRESENTATIVES &
- ADJUST HIS SCHEDULE TO OWNER REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE REMOVAL AND/OR RELOCATION OF IRRIGATION LINES &
- COORDINATE STORAGE & STAGING AREAS W/ OWNER.
- LOCAL REGULATIONS MUST BE REVIEWED TO INSURE THAT ALL PLAN REQUIREMENTS ARE



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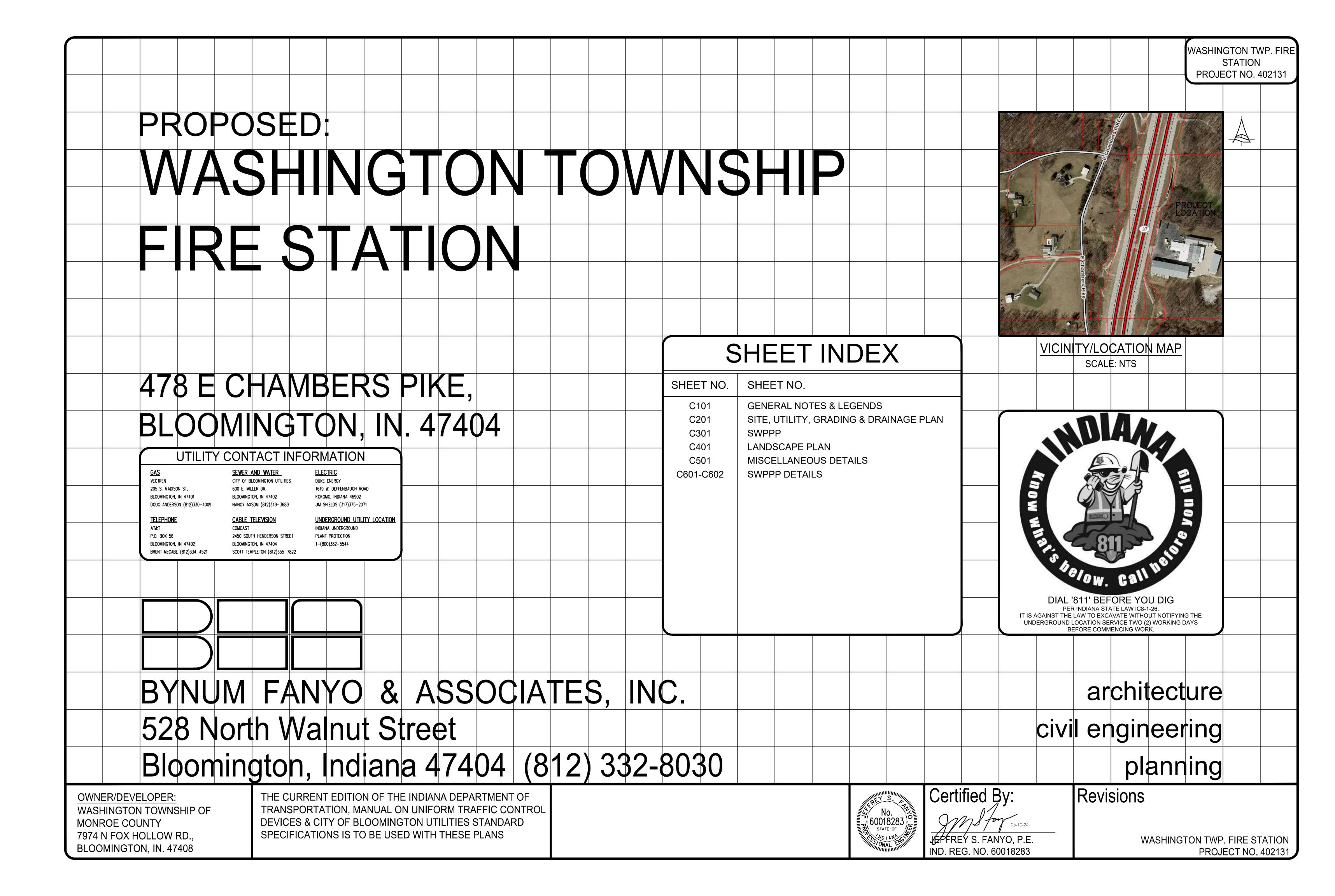
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ARCHITECTURAL SITE PLAN

SHEET NO.

PROJECT NO.

ALL APPLICABLE STATE (D.O.T.) & LOCAL (PUBLIC WORKS DEPT.) CONSTRUCTION STANDARDS & SPECIFICATIONS SHALL BE USED AS REQ'D. FOR SITE SPECIFIC ISSUES. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.



EROSION CONTROL LEGEND

SF TEMPORARY SILTATION FENCE - REFER TO DETAILS CL CONSRUCTION LIMITS: DELINEATED BY PROPERTY LINE UNLESS OTHERWISE SPECIFIED

MULCH SEEDING - REFER TO DETAILS

D-50 RIP-RAP STORM OUTLET PROTECTION - REFER TO DETAIL AND

25' X 75' STONE PAD, 6" DEEP TO KEEP FROM TRACKING MUD OFF SITE - REFER TO DETAIL (TEMPORARY DURING CONSTRUCTION)

TEMPORARY CONCRETE WASHOUT AREA - REFER TO DETAIL

REINFORCEMENT MATTING - PERMANENT - APPLY TO OUTLET FROM PERMANENT EROSION CONTROL MATTING - CURLEX NET-FREE BRAND 100% BIO-DEGRADABLE EROSION CONTROL BLANKET OR APPROVED EQUAL - REFER TO DETAIL

TEMPORARY ROCK CHECK DAM - REFER TO DETAILS

GRADING LEGEND

EXISTING CONTOUR

PROPOSED CONTOUR

AT BOTTOM OF CURB

FINISH FLOOR ELEVATION

PROPOSED FLOWLINE DIRECTION

PROPOSED SPOT GRADE ELEVATIONdash

FINISH EDGE OF PAVEMENT AT GRADE

TC=PROPOSED TOP OF CURB ELEVATION

EP=PROPOSED EDGE OF PAVEMENT ELEVATION

MATCH THE EXISTING'S CONDITIONS GRADES ELEVATION FOR BEST FIT OF PROPOSED GRADING ADJACENT TO THE EXISTING CONDITION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES

PROPOSED STORM PIPE AND INLET/MANHOLE, REFER TO

SPECIFICATIONS AND INLET/MANHOLE SPECIFICATIONS PER

PLAN FOR INLET DESIGN AND DETAILS FOR BACKFILL

1. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL -----XXX----CONFORM TO THE MANUAL ON UNIFORM TRAFFIC DEVICES, 1988 EDITION AS _____XXX —— FL> —— XXX,XX

TC=XXX,XX

EP-XXX.XX

FF = XXX, XX

EP=XXX,XX

MEG=XXX.XX

2. ALL PAVEMENT MARKINGS SHALL BE PAINTED WHITE ON ASPHALT PAVEMENT / YELLOW ON CONCRETE PAVEMENT AND SHALL BE FOUR (4) INCHES WIDE UNLESS

3. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT UNLESS INDICATED OTHERWISE. ALL CURB RADIUS ARE TO BE 5' UNLESS INDICATED OTHERWISE.

PARKING AND PAVEMENT NOTES

4. CONTRACTOR SHALL FURNISH AND INSTALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

5. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES WITH OTHER CONTRACTORS ON

6. JOINTS OR SCORE MARKS ARE TO BE SHARP AND CLEAN WITHOUT SHOWING EDGES OF JOINTING TOOLS.

7. CONTRACTOR SHALL SAW-CUT TIE-INS AT EXISTING CURBS AS NECESSARY TO INSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAW-CUT AND TRANSITION TO MEET EXISTING PAVEMENT AS NECESSARY AND AS DIRECTED BY INSPECTOR TO INSURE POSITIVE DRAINAGE. (TYPICAL AT ALL INTERSECTIONS).

8. CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL" OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY A.G.C. OF AMERICA, INC. AND THE HEALTH AND SAFETY REGULATIONS FOR CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.

UTILITY LEGEND

PROPOSED DUAL WALL TYPE 'S' HDPE
PERFORATED STORM PIPE UNDERDRAIN WITH SOCK SLOPED AT 1.0% MIN. TO OUTLET
CONTROL STRUCTURE AS INDICATED ON SHEET C501. REFER TO PLAN FOR
LOCATIONS. AND STORM SEWER CLEAN-OUT DETAIL, REFER TO POND DETAILS ON
SHEET C501 FOR MORE INFORMATION AND STORM CLEAN-OUT DETAIL

FINAL SIZE OF LATERAL TO BE SIZED BY THE PLUMBING ENGINEER, 48" COVER MIN., TYPE 'K COPPER (SDR-21 PRESSURE PVC MAY ALSO BE USED FROM THE METER TO THE PROPOSED BUILDING ONLY) AND PRESSURE RATED FITTINGS PER CBU SPECIFICATIONS PROPOSED SANITARY SEWER PVC PIPE SSL C.C

4" MIN. SANITARY LATERAL AND SANITARY SEWER CLEAN-OUT, REFER TO SEPTIC SYSTEM PLAN SET FOR DETAILS AND SPECIFICATIONS, 24" COVER MIN., REFER TO 'MONROE FIRE PROTECTION DISTRICT FIRE STATION 26 SEPTIC SYSTEM PLANS FOR PROPOSED PIPE SIZE, LOCATIONS, INVERT ELEVATIONS, AND SLOPES TO PROPOSED SEPTIC SYSTEM.

SEE ARCHITECTURAL & STRUCTURAL DRAWINGS FOR ALL

NOTE: ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF BLOOMINGTON UTILITY SPECIFICATIONS.

NOTE: ALL INVERT ELEVATIONS PROVIDED DIRECTLY OUTSIDE THE BUILDINGS WERE GIVEN BY THE PLUMBING ENGINEER, CONTRACTOR SHALL COORDINATE WITH 'P' SERIES DRAWINGS FOR FINAL EXITING BUILDING UTILITY INVERT ELEVATIONS

NOTE: CONTRACTOR TO USE A STEEL SLEEVE WHEN IT IS SHOWN TO ROUTE PIPING THROUGH WALL, COORDINATE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS



DIAL '811' BEFORE YOU DIG PER INDIANA STATE LAW IC8-1-26. IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

OWNER CONTACT INFO.

DEVELOPER: WASHINGTON TOWNSHIP OF MONROE COUNTY, 7974 N FOX HOLLOW RD., BLOOMINGTON, IN. 47408. CONTACT: (812)-269-8975 OR BARB@JESTTECH.COM

PROJECT NATURE & USE

THE PROPERTY'S USE WILL BE 'GOVERNMENTAL FACILITY' AND CLASSIFIED AS A HIGH INTENSITY USE. THIS SITE WILL INCLUDE THE ADDITION OF A NEW FIRE STATION AND PARKING LOT WITH ASSOCIATE LANDSCAPING AND DRAINAGE STRUCTURES. THE PROPERTY IS ZONED 'IP' IN THE MONROE COUNTY ZONING DISTRICT.

SITE IMPROVEMENT LEGEND

- PROPOSED ROAD BITUMINOUS PAVING REFER TO DETAIL
- PROPOSED CONCRETE PATIO OR SIDEWALK. REFER TO PLAN FOR LOCATIONS AND
- PROPOSED GRAVEL PAVEMENT. REFER TO PLAN FOR LOCATIONS AND REFER TO

PROPOSED REINFORCED CONCRETE PAVEMENT - REFER TO DETAIL

- PROPOSED MONOLITHIC CURB AND SIDEWALK REFER TO DETAIL
- PROPOSED 6" STANDING CONCRETE CURB REFER TO DETAIL
- PROPOSED CONCRETE CURB TRANSITION, 6' LENGTH FROM 0" TO 6" CURB HEIGHT
- PROPOSED SIDEWALK ACCESSIBLE RAMP, 1:12 SLOPE MAX., SEE GRADING PLAN. 5/8" DEEP GROOVES SPACED 2" O.C. - TRANSITION CURB FROM 0" TO 6" CURB HEIGHT OVER 6' LENGTH
- PROPOSED PARKING MARKING; PAINTED, SOLID, WHITE, 4" WIDE
- PROPOSED ADA PARKING MARKING; PAINTED, SOLID, (BLUE FOR SYMBOL, WHITE FOR CROSS-HATCHED SPACE) - REFER TO DETAIL
- ACCESSIBLE RESERVED PARKING SIGN, REFER TO DETAIL VAN ACCESSIBLE SUPPLEMENTAL SIGN ACCORDING TO NATIONAL ADA STANDARDS -
- FASTEN BELOW ACCESSIBLE RESERVED PARKING SIGN WHERE INDICATED, REFER TO DETAIL SEE ARCHITECTURAL & STRUCTURAL DRAWINGS, DETAILS AND SPECIFICATIONS FOR ALL

EXISTING LEGEND

EXISTING FENCE	
EXISTING WATER LINE	W
EXISTING OVERHEAD UTILITY LINES	———— OHU ————
EXISTING UNDERGROUND ELECTRIC LINES	———— UGE ————
EXISTING UNDERGROUND TELEPHONE LINES	———— UGT ————
EXISTING UNDERGROUND FIBER OPTIC LINES	——— F0 ———
EXISTING GAS LINE	———— GAS ————
EXISTING SANITARY FORCEMAIN	FM
EXISTING ELEVATION CONTOUR LINE	XXX
EXISTING SANITARY SEWER AND MANHOLE	
EXISTING STORM SEWER AND INLET	_ = = =
PROPERTY LINE	

GENERAL LEGEND

	TO BE REMOVED TO REMAIN UNDISTURBED SETBACK LINE PROPOSED ACCESSIBLE PARKING SPACE SANITARY SEWER EASEMENT GAS EASEMENT WATER LINE EASEMENT			
	PROPERTY LINE			
xxx/xxx	DEED BOOK AND PAGE			
T.B.R.	TO BE REMOVED			
T.R.U.	TO REMAIN UNDISTURBED			
X' SBL	SETBACK LINE			
Ġ	PROPOSED ACCESSIBLE PARKING SPACE			
S.S.E.	SANITARY SEWER EASEMENT			
G.E.	GAS EASEMENT			
W.L.E.	WATER LINE EASEMENT			
E.E.	ELECTRIC EASEMENT			
D.E.	DRAINAGE EASEMENT			
U.E.	UTILITY EASEMENT			

LANDSCAPE NOTES

- 1. ALL PLANT MATERIAL SHALL ARRIVE ONSITE IN A HEALTHY, VIGOROUS CONDTION AND BE FREE OF PESTS AND DISEASE.
- 2. ALL PLANTS SHALL BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
- ☑ 3. ALL TREES SHALL BE STRAIGHT-TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
- 4. ALL TREES SHALL BE GUYED OR STAKED PLUMB AS SHOWN IN THE DETAILS.
- 5. ALL PLANTING MASS BEDS SHALL BE SPADE CUT UNLESS SPECIFIED WITH A MOW STRIP OR OTHER INSTALL EDGING. TREES TO HAVE A 5' DIAMETER MULCH RING.
- 6. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED WHERE SPECIFIED.
- 7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION. PLANTING LOCATIONS MAY REQUIRE ADJUSTMENTS IN FIELD TO AVOID OVERHEAD AND UNDERGROUND UTILITIES.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND SPECIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING AND LAWN AREAS INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, PRUNING, FERTILIZING, ETC., UNTIL WORK IS ACCEPTED IN FULL BY THE OWNER.
- 10. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
- ☐ 11. THE OWNER SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION.
- 12. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST OR DRIP IRRIGATION SYSTEM PRIOR TO INSTALLATION. WATER ALL SPECIMENS WITHIN 24 HOURS OF PLANTING.
- DEFOLIATES PRIOR TO TOTAL ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY AND SIZE TO MEET ALL PLANT LIST SPECIFICATIONS.
- REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- │ 15. ALL SHRUB, GROUNDCOVER, ANNUAL AND HERBACEOUS PERENNIAL PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH HARDWOOD MULCH TO A MINIMUM DEPTH OF FOUR INCHES.
- □ 16. DURING THE GROWING SEASON ALL ANNUALS AND HERBACEOUS PERENNIALS SHALL REMAIN IN A HEALTHY CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- 17. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT

SPACING SHOWN ON PLANS.

- 19. ALL DISTURBED AREAS NOT INCLUDED IN LANDSCAPE MULCH BEDS ARE TO BE DEBRIS-RAKED AND FINED-GRADED AS NEEDED, THEN MULCH SEEDED (OR SODDED, PER PLAN) AND WATERED UNTIL A HEALTHY STAND OF TURF IS ESTABLISHED.
- 20. ANY PLANT OR OTHER LANDSCAPE MATERIAL SUBSTITUTIONS INSTALLED WITHOUT DESIGNER AND/OR OWNER APPROVAL SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNER BEFORE, DURING AND AFTER INSTALLATION.

GRADING NOTES

- 1. NEW FINISHED CONTOURS SHOWN ARE TOP OF FUTURE PAVING IN AREAS TO RECEIVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDED OR PLANTED.
- 2. AREAS OUTSIDE OF THE PARKING LOT PERIMETERS SHOWN TO BE SEEDED OR PLANTED SHALL RECEIVE 6" OF TOPSOIL. THIS TOPSOIL IS TO BE PLACED AND LEVELED
- 3. CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING. ALTERING. REMOVING, RELOCATING, ADJUSTING, OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF THE
- 4. ALL AREAS NOT COVERED BY BUILDING OR PAVING ARE TO BE VEGETATED (SEEDED OR PER LANDSCAPE PLAN).
- 5. UNUSABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE BY CONTRACTOR.
- 6. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
- 7. BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. THE LACK OF PROPER WORKING POINTS AND GRADE STAKES MAY REQUIRE CESSATION OF OPERATIONS UNTIL SUCH
- POINTS AND GRADES HAVE BEEN PLACED TO THE OWNER'S SATISFACTION. 8. CONTRACTOR SHALL COMPACT AND MAINTAIN A 30,000 SQ. FT. STONEBASE CONSTRUCTION LAYDOWN AREA W/ STONE ACCESS FROM THE CONSTRUCTION ENTRANCE AND STONE ACCESS TO THE BUILDING PAD.
- 9. THESE DOCUMENTS ARE SCHEMATIC IN NATURE AND CANNOT SHOW EVERY ITEM NEEDED FOR A COMPLETE OPERATIONAL STORM SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE OPERATING STORM SYSTEM.
- 10. ALL FILL SHALL BE FREE OF VEGETABLE MATTER, RUBBISH, LARGE ROCK. AND OTHER DELETERIOUS MATERIAL. THE FILL MATERIAL SHOULD BE PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES IN LOOSE THICKNESS AND SHOULD BE SPRINKLED WITH WATER AS REQUIRED TO SECURE SPECIFIED COMPACTION. EACH LAYER SHOULD BE UNIFORMLY COMPACTED BY MEANS OF SUITABLE EQUIPMENT AS DICTATED BY THE TYPE OF FILL MATERIAL. UNDER NO CIRCUMSTANCES SHOULD A BULLDOZER OR SIMILARLY TRACKED VEHICLE BE USED AS COMPACTING EQUIPMENT. MATERIAL CONTAINING AN EXCESS OF WATER SHOULD BE SPREAD AND DRIED TO A MOISTURE CONTENT THAT WILL PERMIT PROPER COMPACTION. ALL FILL SHOULD BE COMPACTED TO THE SPECIFIED PERCENTAGE OF THE MAXIMUM DENSITY OBTAINED IN ACCORDANCE WITH ASTM DENSITY TEST D-698 (95 PERCENT OF MAXIMUM DRY DENSITY). IF THE SPECIFIED COMPACTION LIMITS ARE NOT MET, SUCH AREAS SHOULD BE REWORKED AND RETESTED AS REQUIRED UNTIL THE SPECIFIED LIMITS ARE REACHED.

GENERAL NOTES

- 1. BOUNDARY AND TOPO BY BYNUM FANYO AND ASSOCIATES, 528 NORTH WALNUT STREET, BLOOMINGTON, INDIANA 47404, PHONE (812) 332-8030
- 2. DEVELOPER: WASHINGTON TOWNSHIP OF MONROE COUNTY
- 3. PROJECT ADDRESS: 8650 NORTH CROSSOVER ROAD., BLOOMINGTON, IN. 47404
- 4. ALL WORK IS TO BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. 5. ALL PERMITS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START
- OF CONSTRUCTION. 6. HYDRANT LOCATION SHALL BE APPROVED BY THE LOCAL FIRE MARSHALL.
- 7. EXISTING UTILITIES ON SITE SHALL BE RELOCATED AS REQUIRED. CONTRACTOR SHALL PAY ALL COSTS ASSOCIATED WITH RELOCATION.
- 8. SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.

ON-SITE UTILITY NOTES

- ____ 1. ALL WATER PIPE 6" AND LARGER SHALL BE PRESSURE CLASS 350 DIP WATER PIPE CONFORMING TO ALL STATE AND LOCAL STANDARDS.
- 2. WATER MAIN FITTINGS 6" AND LARGER SHALL BE DUCTILE IRON CONFORMING TO
- AWWA/ANSI STANDARD SPECIFICATIONS C153/A21.53, LATEST REVISION. ☑ 3. 2" WATER MAINS SHALL BE SDR-21 (PR200) AND 4" PIPE MAY BE EITHER
- 4. ALL WATER SERVICE LINES CONNECTING TO 2" PVC MAINS SHALL BE 1" TYPE "K" COPPER. ALL SERVICE LINES FROM MAIN TO METER SHALL BE TYPE "K" COPPER WITH FLARED ENDS.

SDR-21 (PR200) OR C900 (DR-14).

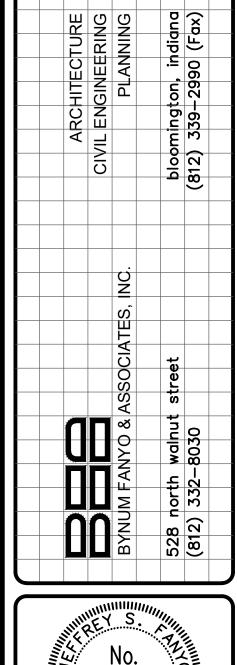
- OFFSETS, TEES, PLUGS, ETC...
- 6. ALL WATER LINE GATE VALVES OTHER THAN AIR RELEASE VALVES AND TAPPING VALVES SHALL BE CAST IRON BODY. FULLY BRONZE MOUNTED. WITH RESILIENT SEAT AND NON-RISING STEM AND SHALL BE MANUFACTURED BY M & H VALVE COMPANY, DARLING VALVE AND MANUFACTURING COMPANY, KENNEDY VALVE COMPANY, OR MUELLER COMPANY.
- 7. FLUSH HYDRANTS SHALL BE PLACED AT THE ENDS OF ALL WATER MAINS AND AT ANY HIGH POINTS IN THE LINE.
- 8. AIR RELEASE VALVES SHALL BE PROVIDED AT ALL HIGH POINTS OF WATER MAINS AND SHALL BE VAL-MATIC BRAND AND SHALL INCORPORATE THE OPTIONAL VACUUM-CHECK FEATURE.
- 9. ALL FIRE HYDRANTS SHALL BE MANUFACTURED BY KENNEDY GUARDIAN OR MUELLER CENTURION.
- 10. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
- 11. WATER AND SANITARY SEWER MAINS SHALL HAVE A MINIMUM COVER OF 4'-0"
- 12. ALL SPRINKLER, DOMESTIC, AND SANITARY LEADS TO THE BUILDING SHALL END AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
- oxtimes 13. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS TEN FEET (10'). THE MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER AND SEWER LINE IS EIGHTEEN INCHES (18").
- 14. GRAVITY SANITARY SEWER PIPE 6" TO 15" SHALL BE CONSTRUCTED OF SDR-35
- │ 15. THE UPSTREAM ENDS OF ALL SANITARY SEWER LATERALS SHALL BE CLEARLY MARKED WITH A 4x4 TREATED POST EXTENDING 3' BELOW GRADE AND 1' ABOVE
- 16. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH
- 17. SEE SITE SPECIFICATIONS FOR BACKFILLING AND COMPACTION REQUIREMENTS.
- \boxtimes 18. SITE CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
- 19. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH SITE WORK SPECIFICATIONS.
- 🔀 20. ALL CATCH BASIN GRATE AND FRAMES ARE TO BE BY EAST JORDAN IRON
- 21. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
- 22. BUILDING CONTRACTOR SHALL PROVIDE & INSTALL A PERMANENT INDICATING VALVE 12" ABOVE THE FLOOR ON THE FIRE LINE AT THE TERMINATION POINT. THIS VALVE WILL BE USED TO HYDROSTATIC PRESSURE TEST AGAINST & WILL REMAIN AS PART OF THE SYSTEM ONCE ALL TESTING IS COMPLETED. THE FIRE LINE MAIN WILL NOT BE DISMANTLED FOR CONNECTION TO THE FIRE SUPPRESSION SYSTEM. SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FIRE MAIN WITH THE BUILDING CONTRACTOR.
- 23. ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE CITY OF BLOOMINGTON UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT TOM AXSOM AT (812)349-3633 TO SCHEDULE THE MEETING.
- 24. CONTRACTOR SHALL NOTIFY THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER. STORM OR SANITARY SEWER UTILITY WORK. A CBU INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS WEEKENDS, A CBU DESIGNATED HOLIDAY, OR BEYOND NORMAL CBU WORK HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR CBU WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE CITY OF BLOOMINGTON UTILITIES ENGINEERING DEPARTMENT AT (812)349-3660.

NOTE: ONLY NOTES ON THIS SHEET MARKED WITH AN X APPLY TO THIS PROJECT

NOTE TO CONTRACTOR

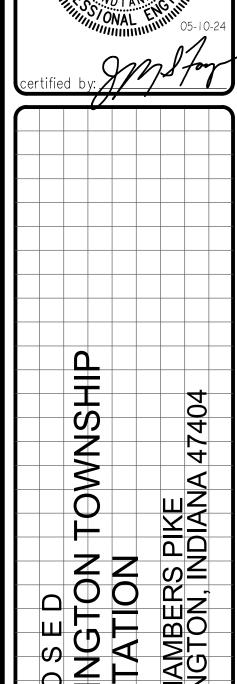
CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.

7/16/24 - Revision 1 items. Decrease water size to 1" per state comment



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STATE OF



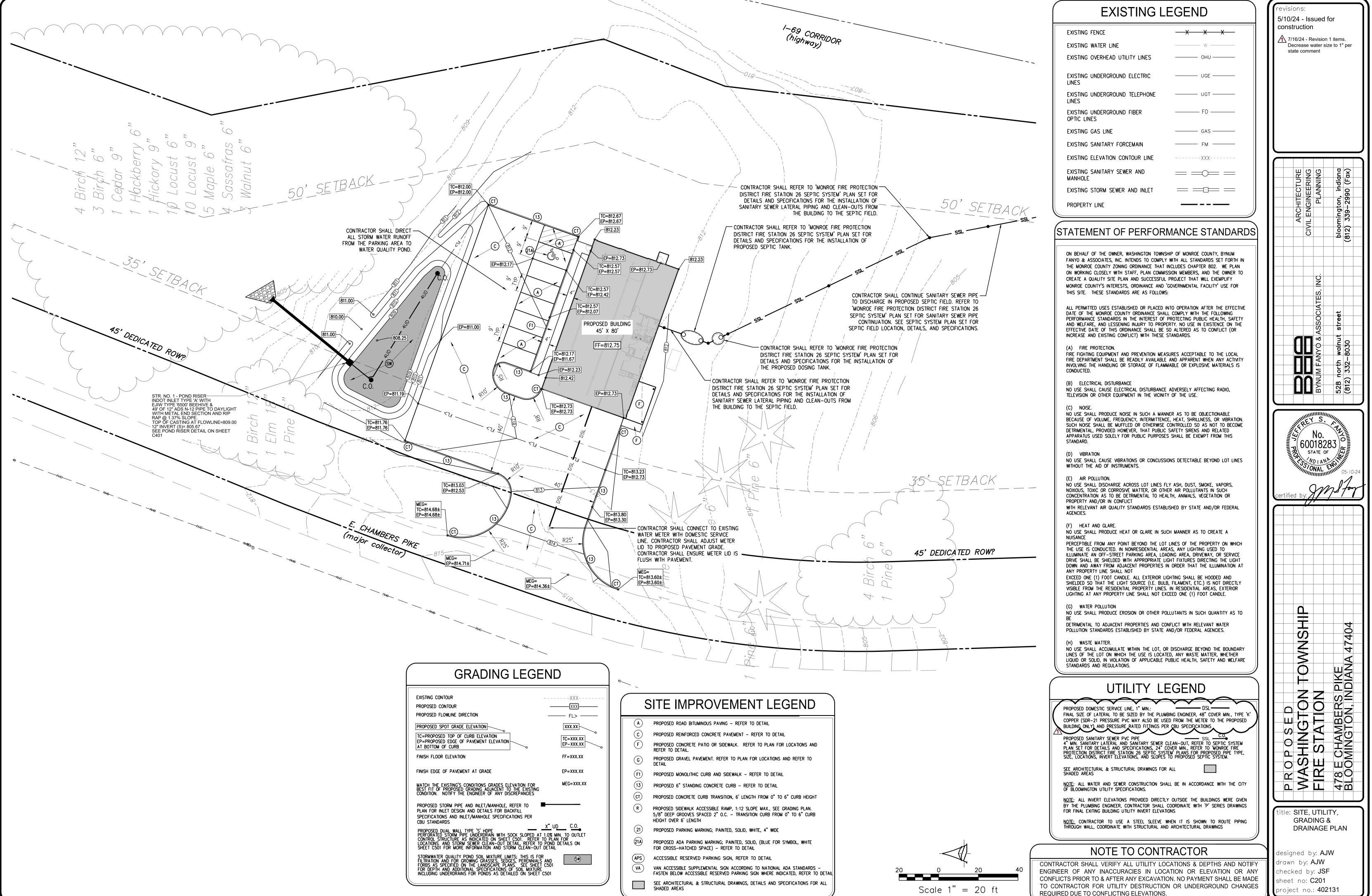
le: **GENERAL NOTES** & LEGENDS

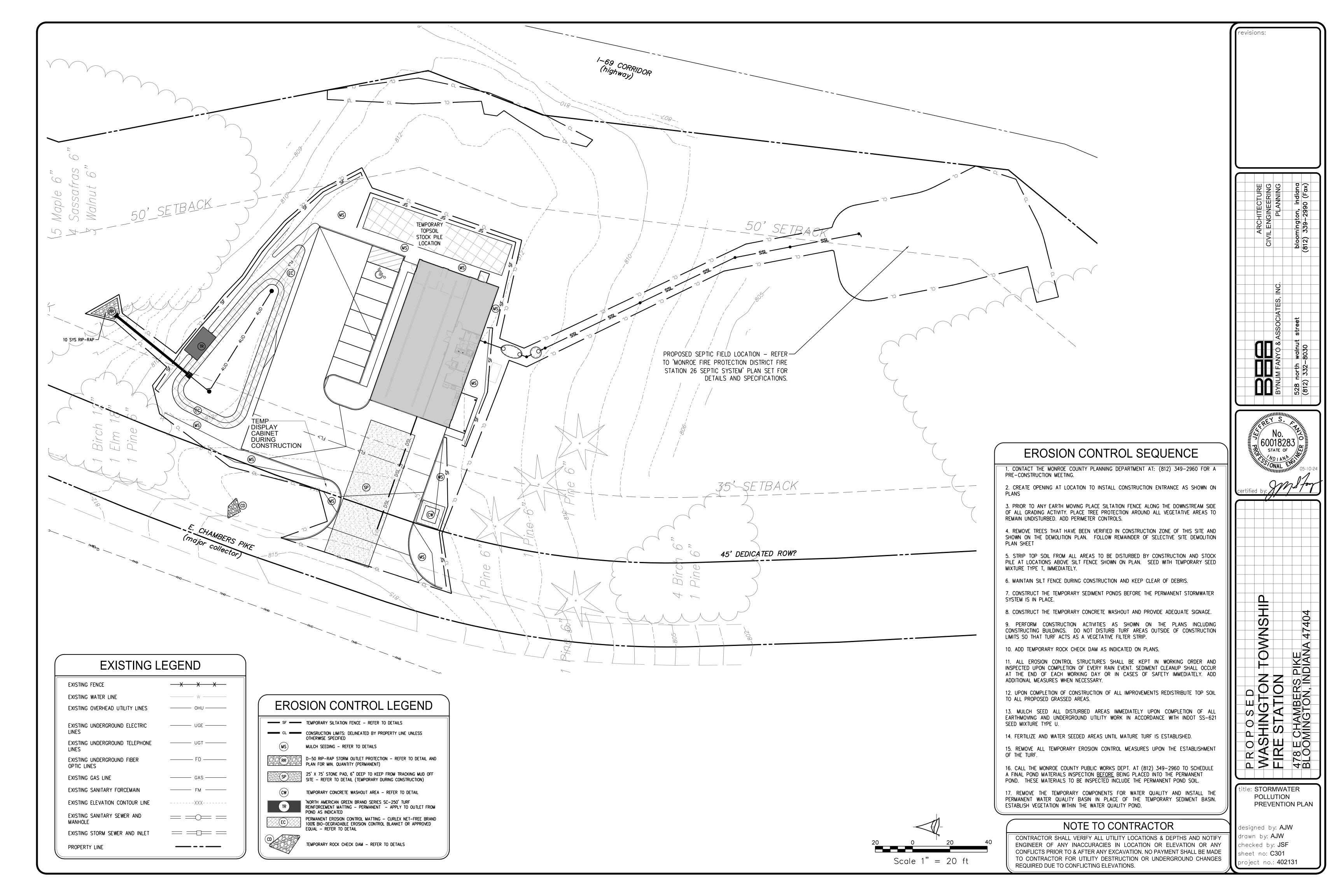
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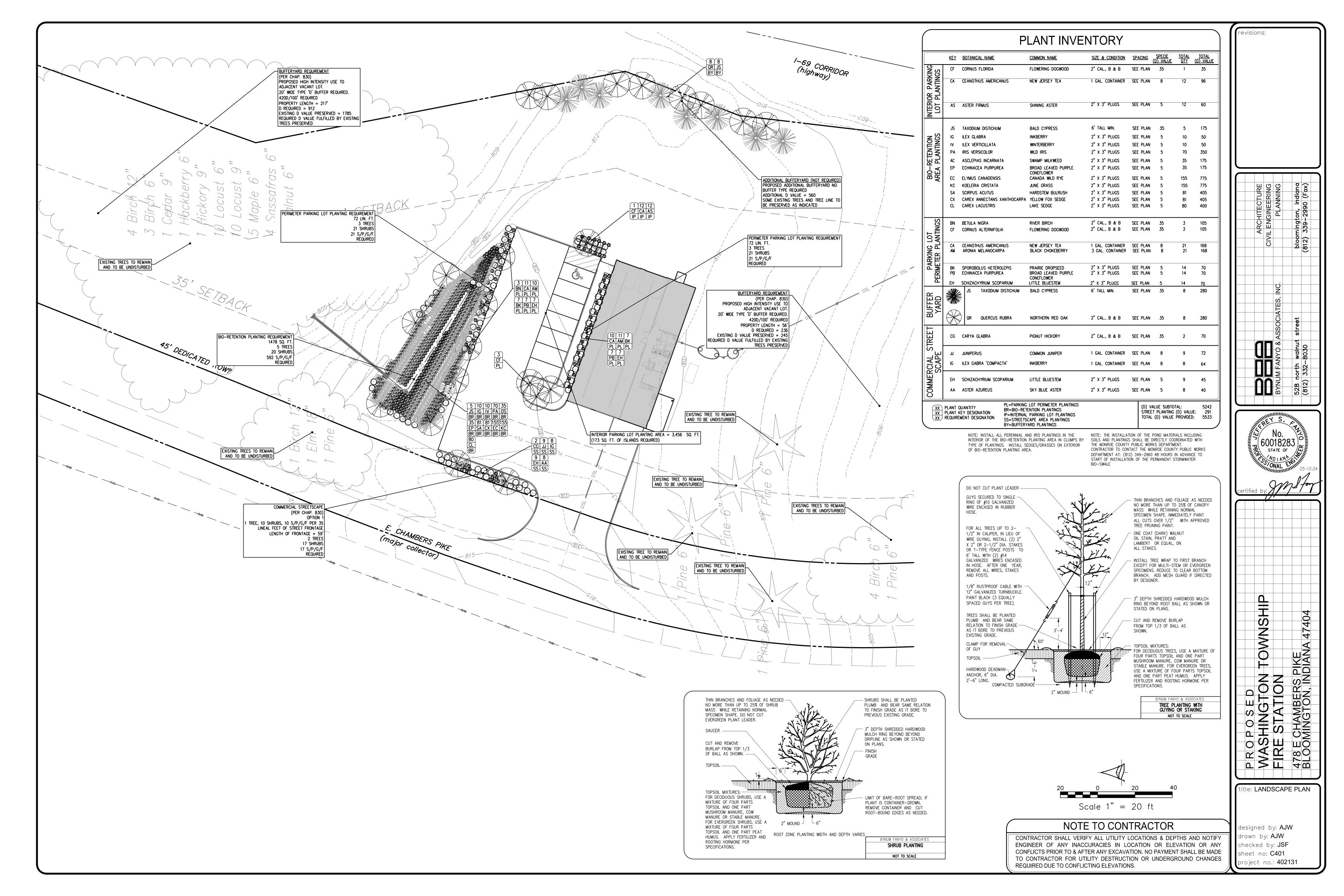
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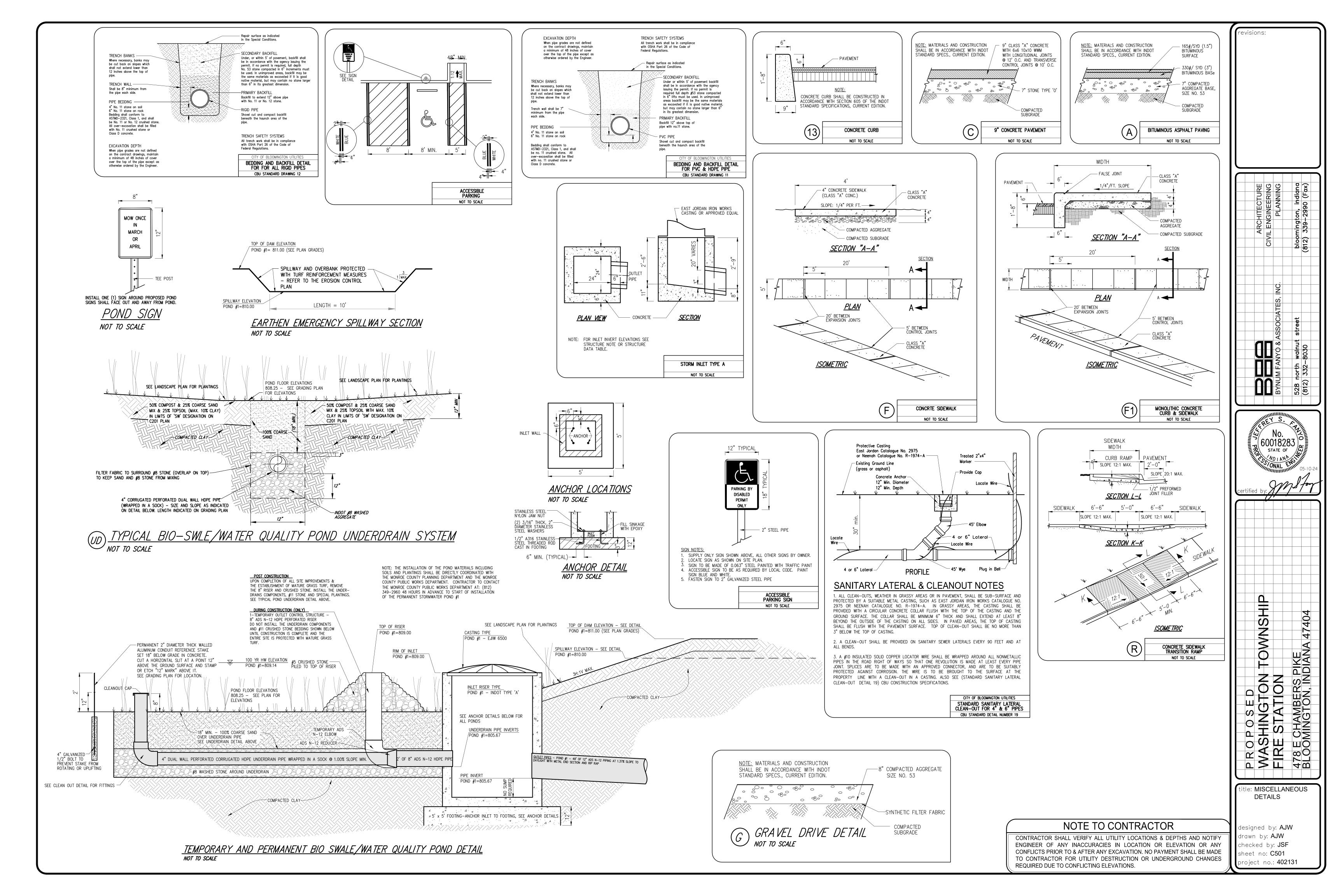
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designed by: AJW drawn by: **AJW** checked by: **JSF** sheet no: C101 project no.: **402131**







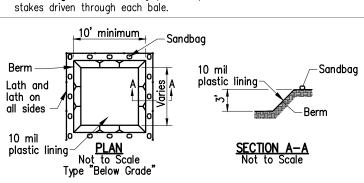


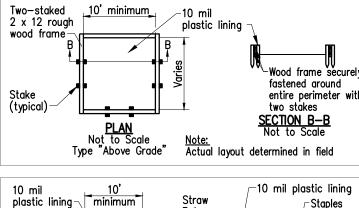
TEMPORARY **CONCRETE WASHOUT AREA**

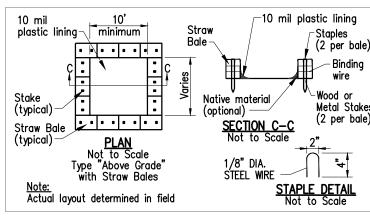
REQUIREMENTS Capacity: Temporary washout facilities shall be constructed below grade following below grade notes and details below. Temporary washout facilities shall be constructed and maintained in sufficient quality and size to contain all liquid and concrete waste generated by washout operations. Type: Below grade concrete washout facilities are typical. Above grade facilities

are used only if excavation is not practical. **Location:** Facilities shall be located a minimum of 50' from storm drain inlets, open drainage facilities, and water courses. Plastic Lining Material: Minimum 10 mil polyethylene sheeting and should be free of holes, tears or other defects.

Straw Bale Dimensions: Approximately 14i n. x 18 in. x 36 in. **Bale Anchoring:** Two 36—in. long (minimum) steel rebars or 2 x 2—in. hardwood







the above details, and as described below. All temporary washout facilities shall have at minimum 10' width, 3' depth, and sufficient length to contain all liquid and concrete waste generated.

"Below Grade" 1. A pit shall be excavated with a minimum width of 10', depth of 3' and to contain all liquid and concrete waste generated.

> 3. Sandbags shall be placed on top of the plastic lining at 3' intervals along the rim of the excavated pit. 4. Lath and flagging shall be installed on all sides of the excavated pit to clearly mark its location

with a minimum width of 10' and length sufficient to contain all liquid and concrete waste generated. The wood frame shall be securely fastened around the entire perimeter using steel rebar or 2 in. x 2 in. hardwood stakes.

attached to the outside face of the wood frame.

The straw bales shall be securely staked using steel rebar or 2 in. x 2 in. hardwood stakes. (two per bale) 3. The basin shall be lined with 10 mil plastic sheeting which is attached to

concrete materials should be removed and disposed of. * Washout facilities must be cleaned, or new facilities must be constructed

ready for use once the washout is 75% full.

PRACTICE 3.11 **TEMPORARY SEEDING**

REQUIREMENTS Site and seedbed preparation: Graded and fertilizer applied.

Plant Species: Selected on the basis of quick germination, growth, and time of year to be seeded (see Exhibit 3.11-B). **Mulch:** Clean grain, straw, hay, wood, fibre, etc., to protect seedbed and encourage plant growth.

Seeding Frequency: As often as possible following construction activity. Daily seeding of rough graded areas when the soil is loose and moist is usually most effective.

SITE PREPARATION:

1. Install practices needed to control erosion, sedimentation, and water runoff, such as temporary and permanent diversions, sediment traps or basins, silt fences, and straw bale dams (practices 3.21, 3.22, 3.72, 3.73, 3.74, and 3.75).

SEEDBED PREPARATION:

- 1. Test soil to determine its nutrient levels. (Contact your county SWDC or Cooperative Extension office for assistance and soils information, 2. Fertilize as recommended by the soil test. If testing is not done,
- 3. Work the fertilizer into the soil 2-4 in. deep with a disk or rake operated across the slope.
- depth and on dates shown.
- including available soil testing services.) 2. Apply seed uniformly with a drill or cultipacker-seeder or by broadcasting, and cover to the depth shown in Exhibit 3.11-B.
- 4. Mulch seeded areas to increase seeding success. Anchor all mulch by crimping or tackifying. Use of netting or erosion control blankets is possible, but may not be cost-effective for

Seed Species*	Rate/acre	Planting Depth	Optimum dates*
Wheat or rye	150 lbs.	1 to 1 1/2 in.	9/15 to 10/30
Spring oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	3/1 to 5/1
, ,		,	8/1 to 9/1
German millet	40 lbs.	1 to 2 in.	5/1 to 6/1
Sudanaraea	35 lbs.	1 to 2 in.	5/1 to 7/30

- MAINTENANCE * Inspect periodically after planting to see that vegetative stands are adequately established; reseed if necessary.
 - * Check for erosion damage after storm events and repair; reseed and mulch if necessary. * Topdress fall seeded wheat or rye seedings with 50 lbs./acre of nitrogen

shows only wheat/rye fall seeded.)

in February or March if nitrogen deficiency is apparent. (Exhibit 3.11-B

PRACTICE 3.13 DORMANT AND FROST SEEDING

PURPOSES * To provide early germination and soil stabilization in the spring. * To reduce sediment runoff to downstream areas. * To improve the visual aesthetics of the construction area.

REQUIREMENTS Site and seedbed preparation: Graded as needed, and lime and fertilizer applied. Plant species: Selected on the basis of soil type, adaptability to the region, and planned use of the area (see Exhibits 3.13-B and 3.13-C).

APPLICATION SITE PREPARATION: (Exhibit 3.13-B 1. Grade the area to be seeded.

* To repair previous seedings.

Install needed erosion/water runoff control practices, such as temporary or permanent diversions, sediment basins, silt fences, or straw bale dams (Practices 3.21, 3.22, 3.72, 3.74 or 3.75).

FOR DORMANT SEEDING Site and seedbed preparation and mulching can be done months ahead of actual seeding or if the existing ground cover is adequate, seeding can be

directly into it. Seeding dates: Dec. 1—Feb. 28 (north of US 40), Dec. 10—Jan. 15 (south of US 40). Broadcast Fertilizer as recommended by a soil test; or if testing was not done consider applying 400-600 lbs./ acre of 12-12-12 analysis or equivalent,

Apply mulch upon completion of grading (Practice 3.15). Select an appropriate seed species or mixture from Exhibit 3.13—B or Exhibit 3.13—C, and broadcast on top of the mulch and/or into existing ground cover at rate shown.

FOR FROST SEEDING

Seed is broadcast over the prepared seedbed and incorporated into the soil by natural freeze-thaw action. Seeding dates: Feb. 28—Mar. 28 (north of US 40), Feb. 15—Mar. 15 (south of US 40). . Broadcast Fertilizer as recommended by a soil test; or if testing was not

done consider applying 400-600 lbs./ acre of 12-12-12 analysis or equivalent,

Apply mulch upon completion of grading (Practice 3.15). Select an appropriate seed species or mixture from Exhibit 3.13-B or Exhibit 3.13-C, and broadcast on top of the mulch and/or into existing ground cover at rate shown. Do not work the seed into the soil.

Exhibit 3.13-B.	Temporary Dormo	int or Frost Seeding	Recommendations
Seed	species*	Rate per	acre
Wheat	or rye	150lbs	S.
Spring	oats	150 lt	os.
Annuc	l ryegrass	60 lb:	3.

Exhibit 3.13-C. Permanent Dormant of Frost Seeding Recommendations.
This table provides several seeding options. Additional seed species
and mixtures are available commercially. When selecting a mixture,
consider site conditions, including soil properties, slope aspect and
the tolerance of each species to shade and droughtiness

	0-1	0-19
Seed species*	Rate per acre	Optimum soil pl
OPEN AND DISTRIBUTED AREA	S (REMAINING IDLE	MORE THAN 1 YR
1. Perennial ryegrass	50 to 75 lbs.	5.6 to 7.0
+ white or ladino clover*	1 1/2 to 3 lbs.	
2. Kentucky bluegrass	30 lbs.	5.5 to 7.5
+ emooth bromegrase	-15 lbe	
+ switchgrass	5 lbs.	
1 timethy	6 lba	

+ white or ladino clover*	1 1/2 to 3 lbs.	
	,	F C 7 O
Perennial ryegrass	22 to 45 lbs.	5.6 to 7.0

1. Smooth bromegrass	35 to 50 lbs.	5.5 to 7.5
2. Prarie switch grass	50 to 75 lbs.	5.5 to 7.5
+ white or ladino clover* 3. Prarie switch grass	1 1/2 to 3 lbs. 50 to 75 lbs.	5.5 to 7.5
+ red clover* (Recommended north of US 46	,	
 Orchardgrass + red clover* 	30 to 45 lbs. 15 to 30 lbs.	5.6 to 7.0
+ ladino clover*	1 1/2 to 3 lbs.	56 to 70
+ prairie ewitchgrace	30 to 45 lbe.	
 LAWNS AND HIGH MAINTENANG	CE AREAS	
1. Bluegrass	160 to 210 lbs.	5.5 to 7.5
2. Perennial ryegrass (turf-type)	70 to 90 lbs.	5.6 to 7.0

105 to 135 lbs. + bluegrass CHANNELS AND AREAS OF CONCENTRATED FLOW 1. Parennial ryegrass 5.6 to 7.0 150 to 225 lbs. + white or ladino clover* 1 1/2 to 3 lbs. 50 to 75 lbs. 5.5 to 7.5 2. Prarie switch grass 15 to 30 lbs. + red clover* (Recommended north of US 40.) 3. white or ladino clover* 1 1/2 to 3 lbs. 5.5 to 7.5

* For best results: (a) legume seed should be inoculated: (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and the legume frost-seeded; (c) if legumes are fall-seeded, do so in early fall. NOTE: If using mixtures other than those listed here, increase the seeing rate by 50% over the conventional rate.

MAINTENANCE * Apply 200-300 lbs./acre of 12-12-12 or equivalent fertilizer between Apr. 15 and May 10 or during periods of vigorous growth. * Re-seed and mulch any areas that have inadequate cover by mid to late Apr. For best results, re-seed within the recommended dates shown in Practices 3.11 for temporary seeding or 3.12 for permanent seeding.

PRACTICE 3.12 PERMANENT SEEDING

C, and D)

REQUIREMENTS Site and seedbed preparation: Graded, and lime and fertilizer applied. Plant Species: Selected on the basis of soil type, soil pH, region of the state, time of year, and planned use of the area to be seeded (see **Mulch:** Clean grain, straw, hay, wood, fibre, etc., to protect seedbed and encourage plant growth. The mulch may need to be anchored to reduce

removal by wind or water, or erosion control blankets may be considered. Permanently seed all final grade areas (e.g., landscape berms, drainage swales, erosion control structures, etc.) as each is completed and all areas where

additional work is not scheduled for a period of more than a year. SITE PREPARATION:

1. Install practices needed to control erosion, sedimentation, and runoff prior to seeding. These include temporary and permanent diversions, sediment traps and basins, silt fences, and straw bale dams (Practices 3.21, 3.22, 3.72, 3.73, 3.74, and 3.75).

Grade the site and fill in depressions that can collect water. 3. Add topsoil to achieve needed depth for establishment of vegetation (Practice 3.02).

SEEDBED PREPARATION: 1. Test soil to determine pH and nutrient levels. (Contact your county SWDC or Cooperative Extension office for assistance and soils information,

including available soil testing services. 2. If soil pH is unsuitable for the species to be seeded, apply lime according to test recommendations.

3. Fertilize as recommended by the soil test. If testing was not done, consider applying 400—600 lbs./acre of 12—12—12 analysis, or equivalent, fertilizer. 4. Till the soil to obtain a uniform seedbed, working the fertilizer and

lime into the soil 2-4 in. deep with a disk or rake operated across the slope (Exhibit 3.12-B).

Optimum seeding dates are Mar. 1—May 10 and Aug. 10—Sept. 30. Permanent seeding done between May 10 and Aug. 10 may need to be irrigated. As an alternative, use temporary seeding (Practice 3.11) until the preferred date 1. Select a seeding mixture and rate from Exhibit 3.12-C, based on site INSTALLATION 1. Avoid locating on steep slopes or at curves in public roads.

conditions, soil pH, intended land use, and expected level of maintenance. 2. Apply seed uniformly with a drill or cultipacker-seeder (Exhibit

3.12-D) or by broadcasting, and cover to a depth of 1/4-1/2 in. 3. If drilling or broadcasting, firm the seedbed with a roller or

4. Mulch all seeded areas (Practice 3.15).Consider using erosion blankets on sloping areas (Practice 3.17). (NOTE: If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.)

Exhibit 3.12-C. Permanent Seeding Recommendations This table provides several seeding options. Additional seed species and mixtures are available commercially. When selecting a mixture, consider site conditions, including soil properties (e.g., soil pH and drainage), slope aspect and the tolerance of each species to shade and droughtiness. Seed species and mixtures Rate per acre Optimum soil pH OPEN AND DISTURBED AREAS (REMAINING IDLE MORE THAN 1 YR.) Perennial ryegrass 35 to 50 lbs. 5.6 to 7.0

+ white or ladino clover* 1 2. Kentucky bluegrass	to	_	lbs. lbs.	5.5 to 7.5	
		3	lbs.	(CANNOT INCLUDE TH	HESE)
switchgrass (Fameum virgatam)		0	ibo.	_'	
+ timothy		4	lbs.		
+ perennial ryegrass		10	lbs.		

+ perennial ryegrass	10 lbs.	
+ white or ladino clover*	1 to 2 lbs.	
3. Perennial ryegrass	15 to 30 lbs.	5.6 to 7.0

STEEP BANKS AND CUTS, LOW N	MAIN	ΈΝ	ANC	E AREAS	(NOT M	OWED)
 Prarie switch grass (Panicum virgatum) 	35	to	50	lbs.	5.5 to	7.5
+ white or ladino clover*	1	to	2	lbs.		
Prarie switch grass (Panicum virgatum)	n 35	to	50	lbs.	5.5 to	7.5
+ red clover* (Recommended north of US 40)	10	to	20	lbs.		
3. Orchardgrass	20	to	30	lbs.	5.6 to	7.0
+ red clover*	10	to	20	lbs.		
+ ladino clover*	1	to	2	lbs.		
LAWNS AND HIGH MAINTENANCE	ARE	AS				
1. Bluegrass	105	to	150	lbs.	5.5 to	7.0
2. Perennial ryegrass (turf-type)	45	to	60	lbs.	5.6 to	7.0
+ bluegrass	70	to	90	lbs.		

i bidogi doo	70 to 30 lbs.	
CHANNELS AND AREAS OF (501.70
 Perennial ryegrass + white or ladino clover* 	100 to 150 lbs. 1 to 2 lbs.	5.6 to 7.0
	20 lbs.	5.5 to 7.5
2. Prarie switch grass	50 to 75 lbs.	5.5 to 7.5
+ red clover* (Recommended north of US	15 to 30 lbs. 5 40.)	5.5 to 7.5

* For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring-seeded, although the grass may be fall-seeded and the legume frost-seeded (Practice 3.13); and (c) if legumes are fall—seeded, do so in early

NOTE: An oat or wheat companion or nurse crop may be used with any of the above permanent seeding mixtures. If so, it is best to seed during the fall seeding period, especially after Sept. 15, and at the following rates: spring oats—1.4 to 3/4 bu./acre; wheat—no more than 1/2 bu./acre.

MAINTENANCE * Inspect periodically, especially after storm events, until the stand is successfully established. (Characteristics of a successful stand include: vigorous dark green or bluish-green seedlings; uniform density with nurse plants, legumes, and grasses well inter-mixed; green leaves; and the perennials remaining green throughout the summer, at least at the

* Plan to add fertilizer the following growing season according to soil test recommendations. * Repair damaged, bare or sparse areas by filling any gullies, re-fertilizing,

over- or re-seeding, and mulching. * If plant cover is sparse or patchy, review the plant materials chosen, soil fertility, moisture condition, and mulching; then repair the affected area either by over—seeding or by re—seeding and mulching after re-preparing the seedbed.

* If vegetation fails to grow, consider soil testing to determine acidity or nutrient deficiency problems. (Contact your SWCD or Cooperative Extension office for assistance.)

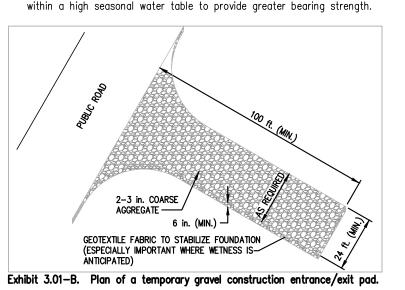
* If additional fertilization is needed to get a satisfactory stand, do so according to soil test recommendations.

PRACTICE 3.01 EMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD

* To provide a stable entrance/exit condition from the construction site. * To keep mud and sediment off public roads. **REQUIREMENTS** Material: 2-3 in. washed stone (INDOT CA No. 2) over a stable foundation.

Thickness: 6 in. minimum

Width: 20 ft. minimum or full width of entrance/exit roadway, whichever is **Length:** 100 ft. minimum. The length can be shorter for small sites such as for an individual home. Washing facility (optional): Level area with 3 in. washed stone minimum or a commercial rack, and waste water diverted to a sediment trap or basin (Practice 3.72). Geotextile fabric underliner: May be used under wet conditions or for soils



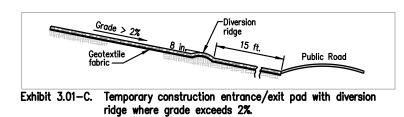
Remove all vegetation and other objectionable material from the foundation

area, and grade and crown for positive drainage. 3. If slope towards the road exceeds 2%, construct a 6-8 in.—high water bar (ridge) with 3:1 side slopes across the foundation area about 15 ft. from the entrance to divert runoff away from the road (Practice 3.24)

(see Exhibit 3.01-C).

4. Install pipe under the pad if needed to maintain proper public road drainage. 5. If wet conditions are anticipated, place geotextile fabric on the graded foundation to improve stability. 6. Place stone to dimensions and grade shown in the erosion/sediment control

plan, leaving the surface smooth and sloped for drainage. 7. Divert all surface runoff and drainage from the stone pad to a sediment



MAINTENANCE * Inspect entrance pad and sediment disposal area weekly and after storm events or heavy use. * Reshape pad as needed for drainage and runoff control.

> * Top dress with clean stone as needed. * Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used if the water

is conveyed into a sediment trap or basin. * Repair any broken road pavement immediately.



PRACTICE 3.16 RIPRAP

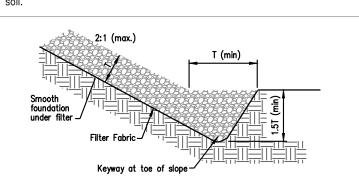
* To protect slopes, streambanks, channels, or similar areas subject to erosion by water.

REQUIREMENTS Rock: Hard, angular, and weather—resistant, having a specific gravity of at **Gradation:** Well-graded stone, 50% (by weight) larger than the specified d_{50} ; however, the largest pieces should not exceed two times the specified d_{50} , and no more that 15% of the pieces (by weight) should be less than 3 in. Filter: Use geotextile fabric for stabilization and filtration or sand/gravel layer placed under all permanent riprap installations. **Slope:** 2:1 or flatter, unless approved in the erosion and sediment control plan.

Minimum thickness: Two times the specified d_{50} stone diameter.

INSTALLATION SUBGRADE PREPARATION:

(Exhibit 3.16-B) 1. Remove brush, trees, stumps, and other debris. 2. Excavate only deep enough for both filter and riprap; over—excavation increases the amount of spoil considerably (Practice 3.32).



3. Compact any fill material to the density of the surrounding undisturbed

Exhibit 3.16-B. Proper riprap installation on a slope.

4. Cut a keyway in stable material at the base of the slope to reinforce the toe; keyway depth should be 1 1/2 times the design thickness of the riprap and should extend a horizontal distance equal to the design thickness. 5. Smooth the graded foundation.

FILTER PLACEMENT: 1. If using geotextile fabric, place it on the smoothed foundation, overlap The edges at least 12 in., and secure with anchor pins spaced every 3 ft. along the overlap. (For large riprap, consider a 4—in. layer of sand to protect the fabric.)

2. If using a sand/gravel filter, spread the well—graded aggregate in a uniform layer to the required thickness (6 in. minimum); if two or more layers are specified, place the layer of smaller gradation first, and avoid mixing RIPRAP PLACEMENT:

1. Immediately after installing the filter, add the riprap to full thickness in one operation. (Do not dump through chutes or use any method that causes segregation of rock sizes or that will dislodge or damage the underlying filter material.)

2. If fabric is damaged, remove the riprap and repair by adding another layer

of fabric, overlapping the damaged area by 12 in. 3. Place smaller rock in voids to form a dense, uniform, well-graded mass. (Selective loading at the quarry and some hand placement may be needed to ensure an even distribution of rock material.)

edges, especially downstream or downslope. (Properly designed and installed

4. Blend the rock surface smoothly with the surrounding area to eliminate protrusions or overfalls. MAINTENANCE * Inspect periodically for displaced rock material, slumping, and erosion at

riprap usually requires very little maintenance if promptly repaired.)

(SF)

PRACTICE 3.74 SILT FENCE (SEDIMENT FENCE)

To retain sediment from small, sloping disturbed areas by reducing the velocity (NOTE: Silt fence captures sediment by ponding water to allow deposition, not by filtration. Although the practice usually works best in conjunction with temporary basins, traps, or diversions, it can be sufficiently effective to be used alone. A silt fence is not recommended for use as a diversion; nor is it to be used across a stream, channel or anywhere that concentrated flow is anticipated.)

REQUIREMENTS Drainage Area: Limited to 1/4 acre per 100 ft. of fence; further restricted by slope steepness (see Exhibit 3.74-B). **Location:** Fence nearly level, approximately following the land contour, and at least 10 ft. from toe of slope to provide a broad, shallow sediment pool. **Trench:** 8 in. minimum depth, flat-bottom or v-shaped, filled with compacted soil or gravel to bury lower portion of support wire and/or fence fabric. Support posts: 2 x 2-in. hardwood posts (if used) or steel fence posts set at least 1 ft. deep.* (Steel posts should projections for fastening fabric.) Exhibit 3.74—B. Maximum Land

Spacing of posts: 8 ft. maximum if Slope and Distance for Which a fence supported by wire, 6 ft. for | Silt Fence Is Applicable. extra-strength fabric without wire Max. distance Land slope above fence Fence height: High enough so depth of impounded water does not exceed | Less than 2% 1 1/2 ft. at any point along fence line. 2 to 5% Support wire (optional): 14 gauge, 6 in. 5 to 10% 50 ft. wire fence (needed if using standard- | 10 to 20% 25 ft.

More than 20%

textile fabric with specified filtering efficiency and tensile strength (see Exhibit 3.74—C) and containing UV inhibitors and stabilizers to ensure 6—mo. minimum life at temperatures 0°-120°F.

strenath fabric).

Fence fabric: Woven or non-woven geo-

* Some commercial silt fences come ready to install, with support posts

attached and requiring now wire support. Exhibit 3.74—C. Specifications Minimums for Silt Fence Fabric. Woven Fabric Physical Property Non-woven fabric 85% Filtering efficiency 85% Tensile strenath at 20% elongation: Standard strength 30lbs./linear in. 50lbs./linear in. 50lbs./linear in. 70lbs./linear in. Extra strength Slurry flow rate 0.3 gal./min./sq.ft. 4.5 gal./min./sq.ft. 15 gal. /min./sq.ft. Water flow rate 220 gal./min./sq.ft. **UV** resistance

Outlet (optional): To allow for safe storm flow bypass without overtopping fence. Placed along fence line to limit water depth to 1 1/2 ft. maximum; crest--1 ft. high maximum; weir width--4 ft. maximum; splash pad--5 ft. wide, 3 ft. long, 1 ft. thick minimum.

INSTALLATION SITE PREPARATION: . Plan for the fence to be at least 10 ft. from the toe of the slope to

provide a sediment storage area. 2. Provide access to the area if sediment cleanout will be needed. OUTLET CONSTRUCTION (OPTIONAL)

1. Determine the appropriate location for a reinforced, stabilized bypass flow 2. Set the outlet elevation so that water depth cannot exceed 1 1/2 ft. at the lowest point along the fence line.

3. Locate the outlet weir support posts no more than 4 ft. apart, and install a horizontal brace between them. (Weir height should be no more than 1 ft. and water depth no more than $1 \frac{1}{2}$ ft. anywhere else along the fence.) 4. Excavate the foundation for the outlet splash pad to minims of 1 ft. deep,

5 ft. wide and 5 ft. long on level grade 5. Fill the excavated foundation with INDOT CA No. 1 stone, being careful that the finished surface blends with the surrounding area, allowing no overfall.

6. Stabilize the area around the pad. OUTLET CONSTRUCTION (OPTIONAL)

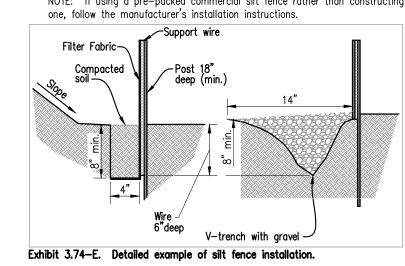
V-shaped trench. 2. On the downslope side of the trench, drive the wood or steel support posts at least 1 ft. into the ground, spacing them no more than 8 ft. apart if if the fence is supported by wire or 6 ft. if extra strength fabric is used without support wire. Adjust spacing, if necessary, to ensure that posts are set at the low points along the fence line. (NOTE: If the fence has pre attached posts or stakes, drive them deep enough so the fabric is satisfactory

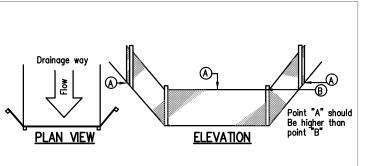
1. Along the entire intended fence line, dig an 8 in. deep flat-bottomed or

in the trench as described in step 6.) 3. Fasten support wire fence to the upslope side of the posts, extending it 8 in. into the trench. 4. Run a continuous length of geotextile fabric in front of the support wire

and posts avoiding joints, particularly at low points in the fence line. 5. If a joint is necessary, nail the overlap to the nearest post with a lath. 6. Place the bottom 1 ft. of fabric in the 8 in. deep trench, extending the

remaining 4 in. toward the upslope side. 7. Backfill the trench with compacted earth or gravel. NOTE: If using a pre-packed commercial silt fence rather than constructing





Remove deposited sediment when it reaches half the height of the fence at

MAINTENANCE * Inspect the silt fence periodically and after each storm event. * If fence fabric tears, starts to decompose or in any way becomes ineffective, replace the affected portion immediately.

> its lowest point or is causing the fabric to bulge. * Take care to avoid undermining the fence during clean out. * After the contributing area has been stabilized, remove the fence and sediment

deposits, bring the disturbed area to grade, and stabilize.

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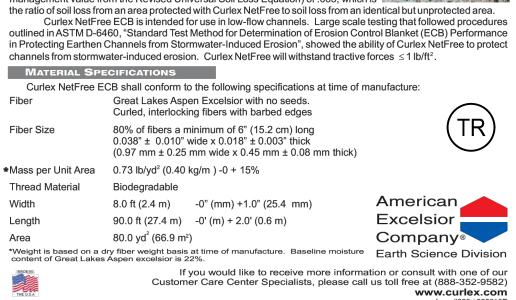
designed by: AJW drawn by: **AJW** checked by: **JSF** sheet no: C601

CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY

oroject no.: **402131**

NOTE TO CONTRACTOR

ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.



2. Grade the site as specified in the construction plan.

consider applying 400-600 lbs./acre of 12-12 analysis, or equivalent,

1. Select a seeding mixture and rate from Exhibit 3.11—B, and plant at

3. If drilling or broadcasting, firm the seedbed with a roller or

Exhibit 3.11-B. Temporary Seeding Recommendations			
Seed Species*	Rate/acre	Planting Depth	Optimum dates*
Wheat or rye	150 lbs.	1 to 1 1/2 in.	9/15 to 10/30
Spring oats	100 lbs.	1 in.	3/1 to 4/15
Annual ryegrass	40 lbs.	1/4 in.	3/1 to 5/1
· · · · · · · · · · · · · · · · · · ·		,	8/1 to 9/1
Compan millet	40 lbs	1 to 0 to	E /1 L- C /1
		1 to 2 iii.	5/1 to 5/1

INSTALLATION * Temporary concrete washout facilities shall be constructed as shown in

2. The pit should be lined with a minimum 10 mil plastic lining which overhangs the pit rim by 5' in each direction.

A wood frame shall be constructed using two 2 x 12 boards staked on edge

3. The wood farm shall be lined with 10 mil plastic sheeting which shall be "Above Grade" 1. Straw bales shall be arranged such that they create a basin with a minimum with Straw Bales width of 10' and length sufficient to contain all liquid and concrete waste

the straw bales using 4" steel wire staples. (two per bale)

MAINTENANCE * Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 in. for above grade facilities and 12 in. for below grade facilities. Maintaining temporary concrete washout facilities should include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened

> * At the conclusion of concrete construction activities the temporary concrete washout area shall be removed and returned to its original condition.

Curlex®NetFree™ **Excelsior Erosion Control Blankets** Curlex® NetFree™ Tech Note

The Industry's First ECB Without Netting

American Excelsior Company is proud to release another innovation - Curlex NetFree Erosion Control Blanket (ECB). Curlex NetFree is the first ECB that does not contain netting of any type; however, the product still possesses all the unique and beneficial properties of the Curlex fiber.

American Excelsior Company recognized the erosion control industry's need for an ECB that did not contain any

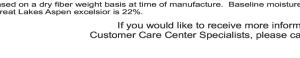
netting. Many applications of ECBs require netting materials to degrade or decompose sooner than nettings are

capable of. Residential projects, golf courses, environmentally sensitive areas are a few example applications. Curlex NetFree has solved the many problems that are associated with ECB netting: · No more entrapment of wildlife or pets

No more netting tangled in mowing equipment

• No more worries about future environmental risks - Curlex NetFree is 100% biodegradable No more tripping on netting No more waiting for netting to decompose

Curlex NetFree ECB is intended for use on slopes ≤ 3H:1V. Large scale testing that followed procedures outlined in ASTM D-6459, "Standard Test Method for Determination of Erosion Control Blanket (ECB) Performance in Protecting Hillslopes from Rainfall-Induced Erosion" showed the ability of Curlex NetFree to protect slopes from rainfall-induced erosion. Curlex NetFree has a C factor (cover management value from the Revised Universal Soil Loss Equation) of .063, which is the ratio of soil loss from an area protected with Curlex NetFree to soil loss from an identical but unprotected area.





MATERIAL HANDLING AND SPILL PREVENTION PLAN:

ALL TRASH DUMPSTERS ON SITE MUST BE COVERED WHEN NOT IN USE AND AT THE END OF EACH DAY. WASTE THAT IS NOT DISPOSED OF IN TRASH RECEPTACLES MUST BE REMOVED FROM THE SITE AT THE END OF EACH DAY AND SHOULD BE DISPOSED OF PROPERLY. ALL MATERIALS ON-SITE WILL BE HANDLED PER THE REQUIREMENTS OF THE MSDS SHEETS. THE CONTRACTOR SHALL HAVE AN EMERGENCY SPILL CLEAN-UP KIT ON SITE FOR RECOVERY OF PETROLEUM PRODUCT SPILLS AT ALL TIMES. DESIGNATED FUELING AREAS ARE SHOWN ON SHEETS C301. ANY FUEL STORED ON SITE SHOULD BE PROTECTED, LABELED, AND BE DOUBLE-WALLED OR HAVE SECONDARY CONTAINMENT. SEE ADDITIONAL FUEL HANDLING DETAILS ON THIS SHEET. IF A REPORTABLE AMOUNT OF SEDIMENT LADEN WATER OR OTHER POLLUTANT IS ALLOWED TO LEAVE THE SITE, THE CONTRACTOR IS OBLIGATED TO NOTIFY IDEM'S SPILL LINE AT (317) 233-7745 WITHIN 24 HOURS. NOTIFY THE MS4 COORDINATOR AT (812) 349-2499 IN THE EVENT OF ANY SPILLS OR OFF-SITE DISCHARGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINES AND ANY LIABILITY ASSOCIATED WITH SUCH AN EVENT. SEDIMENT LADEN WATER. WHICH OTHERWISE WOULD FLOW FROM THE PROJECT SITE, SHALL BE TREATED BY EROSION AND SEDIMENT CONTROL MEASURES APPROPRIATE TO MINIMIZE SEDIMENTATION. ALL WATER (INCLUDING STORMWATER, GROUNDWATER, OR ANY OTHER WATER) THAT LEAVES THE CONSTRUCTION SITE MUST HAVE A TOTAL SUSPENDED SOLIDS LEVEL OF LESS THAN 50 PARTS PER MILLION OR HAVE NO VISIBLE SEDIMENT. THIS CAN BE DETERMINED ON SITE BY TAKING A SETTLEABLE SOLIDS SAMPLE WITH AN IMHOFF CONE WITH A RESULT OF LESS THAN 0.5 ML PER LITER. IT SHOULD BE EXPECTED THAT ALL MATERIALS NECESSARY TO CONSTRUCT THE PROPOSED SITE IMPROVEMENTS WILL BE ENCOUNTERED ON SITE AT ONE TIME OR ANOTHER. ALL MATERIALS THAT APPEAR ON SITE WILL BE ACCOMPANIED WITH MSDS SHEETS IN ACCORDANCE WITH OSHA GUIDELINES AND THE CODE OF FEDERAL REGULATION (CFR). MSDS SHEETS PROVIDE AMONG OTHER THINGS, THE PROCEDURES FOR CLEAN-UP OF SPILLS AND LEAKS. REFER TO ITEM B1 ABOVE FOR ADDITIONAL INFORMATION.

POST CONSTRUCTION DETAILS

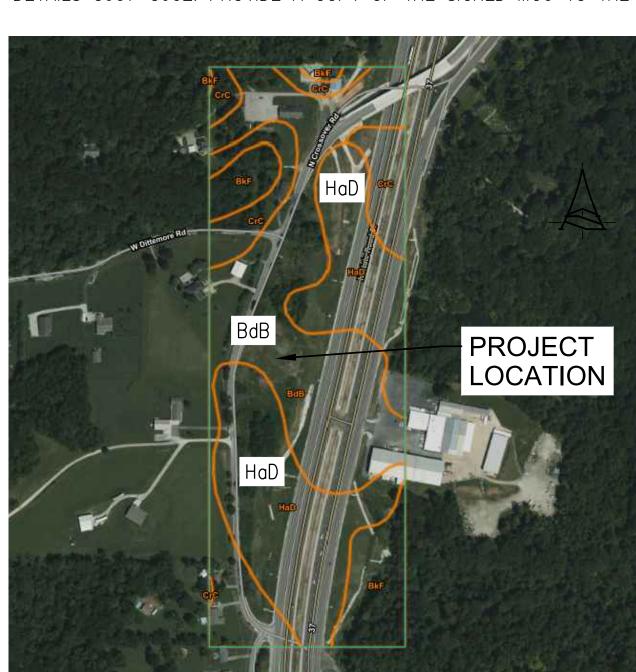
DESCRIPTION OF POLLUTANTS, THEIR SOURCES ASSOCIATED WITH WITH THE PROPOSED LAND USE: THE MAIN POST CONSTRUCTION POLLUTANTS ARE OIL, GAS, ANTI FREEZE, AND OTHER TYPICAL POLLUTANTS FROM CARS IN PARKING AREAS.

SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION: THE POST CONSTRUCTION STORMWATER QUALITY MEASURES WILL BE INSTALLED AS PART OF AND DURING CONSTRUCTION OF THE STORMWATER COLLECTION AND CONVEYANCE SYSTEM AND THE FINAL VEGETATION OF THE SITE. SEE THE SEQUENCE ON SHEET C301.

DESCRIPTION OF PROPOSED POST CONSTRUCTION STORMWATER QUALITY MEASURES: THE MAJORITY OF STORMWATER WILL BE CONVEYED THROUGH. THE STORMWATER POND INTENDED TO REDUCE SEDIMENT AND POLLUTANT TRANSPORT.

LOCATION, DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY MEASURE: SEE THE GRADING & DRAINAGE PLAN AND THE STORMWATER POLLUTION PREVENTION PLAN, SHEET C201 & C301 AS WELL AS THE DETAILS SHOWN ON THIS SHEET AND SHEET C601.

AN OPERATION AND MAINTENANCE MANUAL FOR PROPOSED POST-CONSTRUCTION WATER QUALITY MEASURES: SEE THE MAINTENANCE NOTES AND GUIDELINES FOR EACH POST CONSTRUCTION MEASURE WITHIN THE DETAILS C601-C602. PROVIDE A COPY OF THE SIGNED MOU TO THE MS4 ASSISTANT.



SOILS MAP SCALE: NTS

HaD—Hagerstown silt loam, 12 to 20 percent slopes National map unit symbol: 2z8v Elevation: 370 to 1,060 feet Mean annual precipitation: 44 to 58 inches Mean annual air temperature: 46 to 68 degrees F Frost-free period: 165 to 205 days Farmland classification: Not prime farmland

Hagerstown and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hagerstown Properties and qualities

Map Unit Composition

Slope: 12 to 20 percent Depth to restrictive feature: 40 to 62 inches to lithic bedrock

Drainage class: Well drained Runoff class: Medium Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 2 percent Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: C Ecological site: F122XY002KY - Deep Well Drained Limestone Uplands Other vegetative classification: Trees/Timber (Woody Vegetation) Hydric soil rating: No

Potential Storm Water Pollutants Material Handling and Spill Prevention Trade Name Chemical/Physical Remedial Action /Material Description **Pollutants** Nitrogen, Phosphorus Fertilizer Landscaping Activities Liquid or solid grains (1), (2), (3) Colorless, blue or vellov Seal drains and inlets with plas Solvents Operation green liquid methylene chloride. and or tape and collect excess, trichloroethylene, petroleum (1), (2), (3), (4) distillates Site Construction runoff before curing is complete Bridge Construction Concrete White solid Concrete washout areas shall be Limestone, sand tilized and concrete disposed of properly once hardened (2) Roadway Striping Metal oxides, stoddard Care should be taken to carbonate, arsenic overspray (1), (2), (3), (4) Site Construction Creamy white liquid (1), (2), (3), (4) Compounds astewater from Construction Equipmen executed In a location which does constr. equipment not cause wastewater to drain washing directly to storm sewers or ditches (i e. flat vegetated area) (2) Construction Equipment oil/fluids hydrocarbon hooded outlet preventing oatables from exiting site, (3), (4) n site storage tanks cars | Colorless pale brown or Benzene, ethyl benzene Storage tanks shall have toluene, xylene, MTBE pink petroleum hydrocarbon nergency storage capacity below construction equipment. tank in case of rupture, 3'x3'x6" fueling operations spill pans shall be used during fueling. (3), (4) On site storage tanks Bpetroleum distillate, oil and Storage tanks shall hove Clear, blue-green to cars, construction yellow liquid grease, naphthalene, xylenes emergency storage capacity below equipment, fueling lank in case of rupture, 3x3x6" operations spill pans shall be used during fueling. (3), (4) 3'x3'x6" spill pans shall be used Pale vellow liquid petroleum Coal oil, petroleum Cleaning Operations, distillates, arsenic, copper during fueling operations and cleaning of equip. to catch excess (1), (2), (3), (4) Clear green/yellow liquid (1), (2), (3), (4) Construction Equipment. Ethylene glycol, propylene Coolant Cars glycol, heavy metals (copper, lead, zinc) Soil Erosion Exposed Soil Solid particles Soil sediment Erosion control measures (this sht.) Normal Business rash cans shall be utilized o Operation during and after construction

This table was provided for general information only to supplement information used in the Rule 5 permitting process. The contractor is esponsible for material handling and spill mitigation procedures.

- 1. All excess materials shall be collected and disposed of in accordance with all federal, state and local regulations. 2 Material shall not be applied immediately preceding during or following rainfall (when applicable).
- . Spillage should be cleaned immediately by a trained individual and disposed of per Note (2).
- . Store in sealed containers appropriate for specific use.

FUEL HANDLING Preventative measures are the best means of avoiding accidental release of petroleum

- Welding, cutting, burning, heavy equipment operations in the immediate area of a fueling operation shall be suspended during refueling.
- Unreeling of fuel transfer hose and nozzle shall be done with the nozzle in the upright position. The nozzle shall be kept clear of the ground when returned to the reel or storage position.
- Wrap absorbent pads around the fuel inlet of the receiving equipment prior to dispensing fuel. Transfer of fuel is to be stopped prior to overflowing, leaving room for expansion.

- In the event of an accidental spill, the following shall occur:
- Stop the leak. 2. Block off any drains or access to drainage ways.
- 3. If spill has entered or is in danger of entering a waterway, boom-off area to contain spill.
- 4. Assess the level of the spill and report spill to the IDEM Spill Lline at (317)233-7745 and the local Connie Griffin of the local MS4 Office at (812)349-2960.
- 5. Assess the method of cleanup. Proceed with recovery of spilled fuel and clean-up.
- 7. Arrange appropriate disposal of recovered fuel and debris at a landfill site. 8. Maintain a record of the spill and cleanup.
- Typical spill cleanup kit contents: Four 3" dia. x 48" oil socks
- Twenty-five 17" x 19" oil pads Disposable material containment bags
- Latex gloves
- Granular absorbent PVC Bag container

BdB-Bedford silt loam, 2 to 6 percent slopes Map Unit Settina

National map unit symbol: 2s2cy Elevation: 420 to 1,210 feet Mean annual precipitation: 40 to 66 inches Mean annual air temperature: 41 to 68 degrees F Frost-free period: 139 to 205 days Farmland classification: All areas are prime farmland

Map Unit Composition Bedford and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bedford

Properties and qualities

Depth to restrictive feature: 21 to 35 inches to fragipan

Drainage class: Moderately well drained

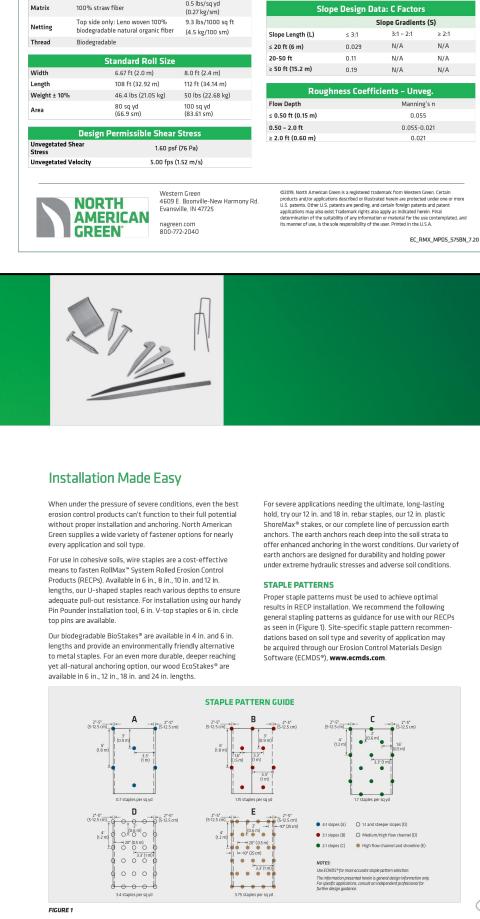
Runoff class: Medium Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.20 in/hr) Depth to water table: About 18 to 33 inches Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C/D Other vegetative classification: Trees/Timber (Woody Vegetation) Hydric soil rating: No



The following slope guide outlines general recommendations for installing RollMax™ System temporary and/or permanent RECPs o

sloping applications. Consult the staple pattern guide (Figure 1) for fastener spacing recommendations based on the slope severity.

ROLLMAX

BioNet® 575BN™ Erosion Control Blanket

The short-term single net erosion control blanket shall be a machine

limatic conditions, soil, geographical location, and elevation). The

distributed over the entire area of the mat. The blanket shall be

organic fiber net. The netting shall consist of machine directional

strands interwoven through the twisted machine strands (commonly

2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81

m) centers with degradable thread. The blanket shall be manufac-

ared with a colored thread stitched along both outer edges (approxi

mately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for

The S75BN shall meet Type 2.C specification requirements established

by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17

produced mat of 100% agricultural straw with a functional longevity of

to 12 months. (NOTE: functional longevity may vary depending upon

Specification Sheet

Matrix 100% straw fiber

Slope Installation

Drawings Not To Scale

SLOPE INSTALLATION STEPS

1. Prepare soil before installing RECPs, including any n

2. Begin at the top of the slope by anchoring the RECPs in

portion of the trench. Anchor the RECPs with a row of

a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approxi

staples/stakes approximately 12 in. (30 cm) apart in the

bottom of the trench. Backfill and compact the trench

after stapling. Apply seed to the compacted soil and fold

the remaining 12 in. (30 cm) portion of RECPs back over

soil with a row of staples/stakes spaced approximately

the seed and compacted soil. Secure RECPs over compacted

mately 12 in. (30 cm) of RECPs extended beyond the upslope

application of lime, fertilizer and seed.

DESCRIPTION

portion of the trench. For supplemental scour protection, wide trench. Backfill and compact the trench after stapling. use RevetMax™ System ShoreMax® Mat at the channel/ 6. Adjacent RECPs must be overlapped approximately 2 in. culvert outlet as needed. Anchor the RECPs with a row of staples/stakes approximately 12 in. (30 cm) apart in the 5 in. (5-12.5 cm) (depending on RECP type) and stapled bottom of the trench. Backfill and compact the trench after 7. In high flow channel applications a staple check slot is recommended at 30 to 40 ft (9-12 m) intervals. Use a remaining 12 in. (30 cm) portion of RECPs back over the seed ind compacted soil. Secure RECPs over compacted soil with 4 in. (10 cm) on center over entire width of the channel a row of staples/stakes spaced approximately 12 in. (30 cm) 8 The terminal end of the BECPs must be anchored with a row of staples/stakes approximately 12 in. (30 cm) apar 3. Roll center RECPs in direction of water flow in bottom of in a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench. Backfil channel. RECPs will unroll with appropriate side against the and compact the trench after stapling. soil surface. All RECPs must be securely fastened to soil as shown in the staple pattern guide. Shoreline Installation applications. Consult the staple pattern guide (Figure 1) for fastener spacing recommendations based on the bank severit STATE OF Level B before installation to allow bottom trenching. 2. Prepare soil before installing RECPs, including any necessary 5. The edges of all horizontal and vertical seams must be

stapled with an approximately 2 in.-5 in. (5-12.5 cm) overlap

. The edges of the RECPs at or below normal water level must

be anchored by placing the RECPs in a 12 in. (30 cm) deep x 6 in. (15 cm) wide anchor trench. Anchor the RECPs with

row of staples/stakes spaced approximately 12 in. (30 cm)

part in the trench. Backfill and compact the trench after

stapling (stone or soil may be used as backfill). For installa-

on top of the RECP or geotextile may be recommended.

NOTE: In adverse soil conditions longer stanles/stakes or earth anchors ma

ShoreMax Mat over RECP along the bottom edge.

be necessary to properly secure the RECPs.

shingled in the predominant flow direction.

4. Place consecutive RECPs end-over-end (shingle style)

5. Full-length edge of RECPs at top of side slopes must be

12 in (30 cm) apart in a 6 in (15 cm) deep x 6 in (15 cm)

center to secure RECPs.

with a 4 in.-6 in. (10-15 cm) overlap. Use a double row of

taples staggered 4 in. (10 cm) apart and 4 in. (10 cm) on

(EC)

Channel Installation

on the channel severity.

Drawings Not To Scale

CHANNEL INSTALLATION STEPS

application of lime, fertilizer and seed.

1. Prepare soil before installing RECPs, including any necessar

2. Begin at the top of the channel by anchoring the RECPs in

mately 12 in. (30 cm) of RECPs extended beyond the upslope

ECTC Guidelines 81.4%

ASTM D6818 10.9%

(1.62 kN/m)

ASTM D6818

Elongation - TD ASTM D6818 14.3%

liomass Improvement ASTM D7322 398%

ASTM D1117

concentrated flow applications. Consult the staple pattern guide (Figure 1) for fastener spacing recommendations based



application of lime, fertilizer and seed.

3. Begin at the top of the shoreline by anchoring the RECPs in

portion of the trench. Anchor the RECPs with a row of

staples/stakes approximately 12 in. (30 cm) apart in the

after stanling. Apply seed to the compacted soil and fold

the seed and compacted soil. Secure RECPs over compacted

the remaining 12 in. (30 cm) portion of RECPs back over

soil with a row of staples/stakes spaced approximately

(top to bottom) or (B) horizontally across the shoreline

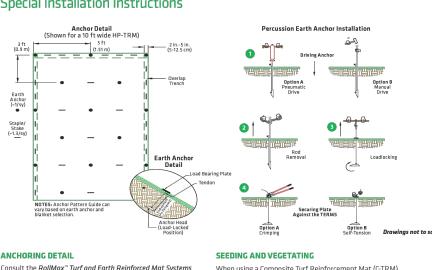
slope. RECPs will unroll with appropriate side against the

12 in. (30 cm) apart across the width of the RECPs.

4. Roll RECPs either (A) down the shoreline for long banks

a 6 in. (15 cm) deep x 6 in. (15 cm) wide trench with approxi

mately 12 in. (30 cm) of RECPs extended beyond the upslope



ANCHORING DETAIL Consult the RollMax™ Turf and Earth Reinforced Mat Systems ERMS) Installation Guide for details about using earth anchors with RollMax RECPs. The performance of ground project specific variables. It is the responsibility of the project engineer and/or contractor to select the appropriate anchor. 1. Staples and/or stakes should be at least 6 in. (15 cm) in

2. The percussion earth anchor assembly includes an anchor head, a tendon, a faceplate, and an end-piece device. Consult Earth Anchor specification for detailed informa

tion on assembly components and associated pull-out PERCUSSION EARTH ANCHOR INSTALLATION 1. Insert the drive rod into the assembly's anchor head then

2. After the desired anchor depth is achieved, retract the 3. Lock the anchor assembly by swiftly pulling the cable upwards until the anchor head rotates as signaled by

* INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY SEVEN CALENDAR DAYS. * CHECK FOR EROSION OR DISPLACEMENT OF THE BLANKET * IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING THI ERODED AREA, ADD SOIL AND TAMP, RESEED THE AREA, REPLACE AND STAPLE THE BLANKET.

3. Roll the RECPs (3A) down or (3B) horizontally across the

The edges of parallel RECPs must be stapled with a

slope. RECPs will unroll with appropriate side against the

oil surface. All RECPs must be securely fastened to soil

surface by placing staples/stakes in appropriate locations

pproximately 2 in.-5 in. (5-12.5 cm) overlap depending on

over-end (shingle style) with an approximate 3 in. (7.5 cm)

overlap. Staple through overlapped area, approximately

12 in. (30 cm) apart across entire RECPs width*

with fiber components:

length and with sufficient ground penetration to resist pullout. Longer staples and/or stakes may be needed in 1. Install the HP-TRM as directed prior to seed and soil filling.

the anchor to the desired depth.

sudden resistance to pulling. A hooked setting tool may be 4. Secure the faceplate to the HP-TRM surface by locking the

end-piece. If using a copper or aluminum stop, crimp the ferrule to secure. If using a self-tensioning end-piece (grip against the faceplate. If needed, cut the remaining cable to

REQUIRED DUE TO CONFLICTING ELEVATIONS.

When using a Composite Turf Reinforcement Mat (C-TRM) 1. Pre-seed prepared soils prior to the installation of the TRM. Install matting as directed. C-TRM does not requir soil infill or a top dressing of seed. Overseeding may be

2. Sod may be installed in place of seeding on top of the C-TRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be irrigated until ooting through the mat and into subgrade occurs. When using a woven HP-TRM:

2. Place seed into the installed HP-TRM. After seeding, spread a layer of fine soil into the mat. Using the flat sid of a rake, broom or other tool, completely fill the voids. HP-TRM matrix. Do not place excessive soil above the mat 3. Additional seed, hydraulic mulching, or the use of a temporary Erosion Control Blanket (ECB) can be applied

5. Consult with a manufacturer's technical representative for installation assistance if unique conditions apply.

over the soil-filled mat for increased protection. 4. Sod may be installed in place of seeding. Install HP-TRM and soil-fill as outlined above. Place sod directly onto the soil-filled HP-TRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be

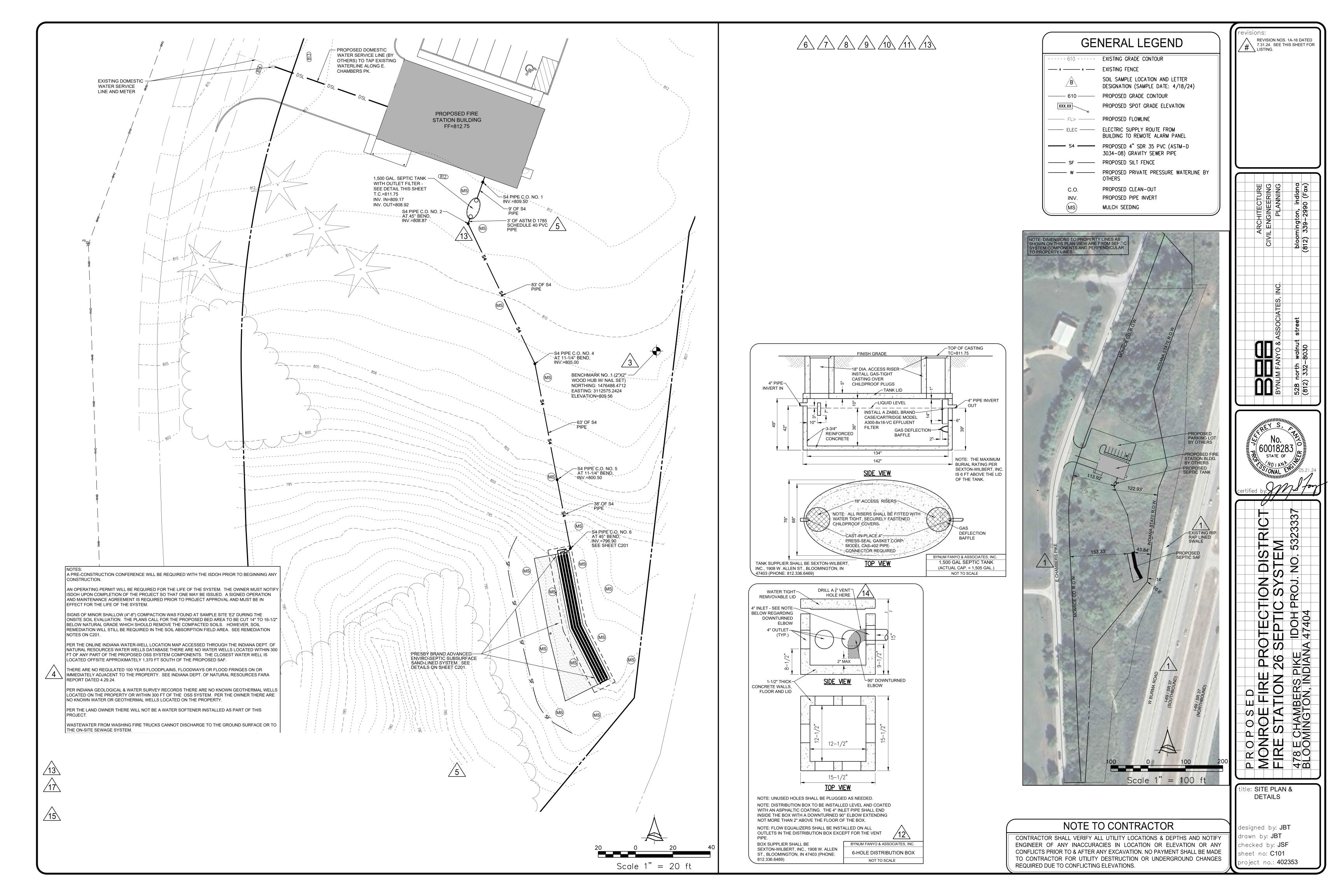
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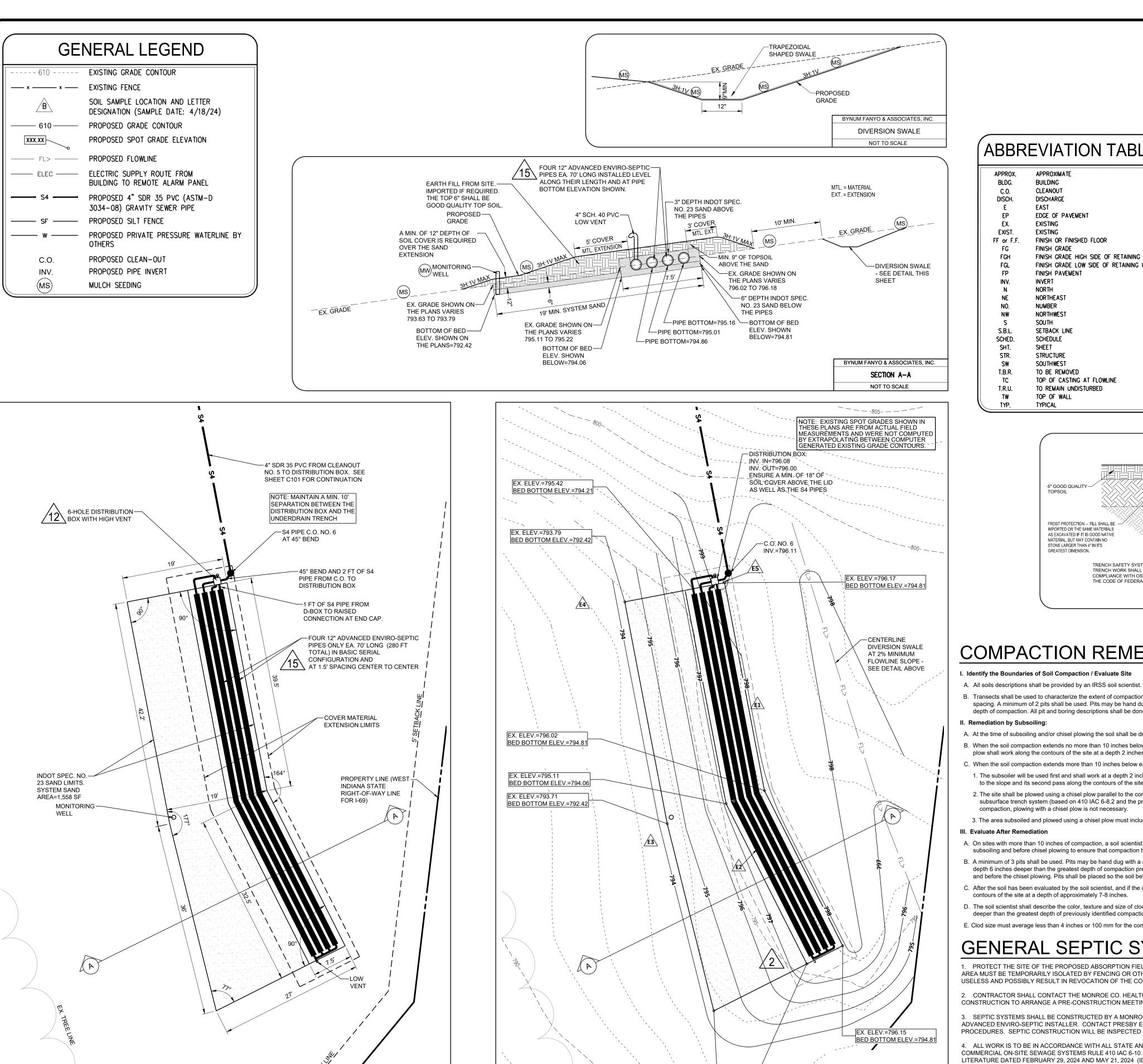
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NOTE TO CONTRACTOR

designed by: AJW drawn by: **AJW** CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY checked by: **JSF** CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE sheet no: **C602** TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES project no.: **402131**





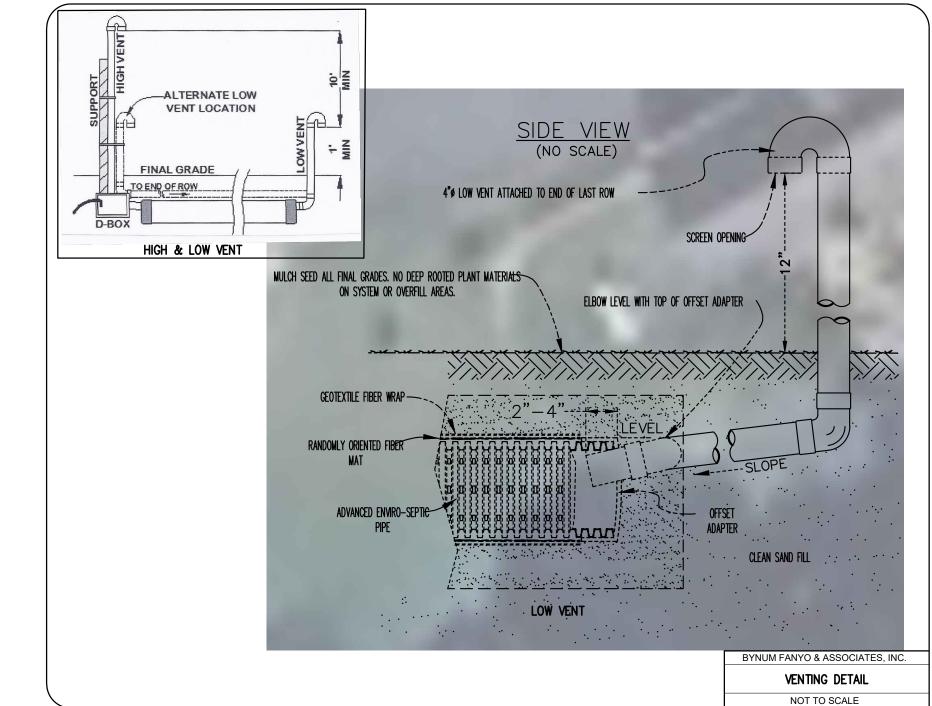


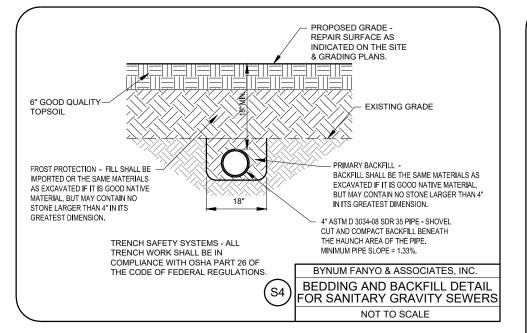
SCHEMATIC

ABBREVIATION TABLE APPROXIMATE BLDG. BUILDING C.O. CLEANOUT DISCH. DISCHARGE EDGE OF PAVEMENT EXISTING **EXISTING** EXIST. FF or F.F. FINISH OR FINISHED FLOOR FINISH GRADE FINISH GRADE HIGH SIDE OF RETAINING WALL FINISH GRADE LOW SIDE OF RETAINING WALL FINISH PAVEMENT NORTHEAST NUMBER NORTHWEST SOUTH SETBACK LINE S.B.L. SCHED. SCHEDULE SHEET STR STRUCTURE SOUTHWEST TO BE REMOVED T.B.R. TOP OF CASTING AT FLOWLINE

TO REMAIN UNDISTURBED

TOP OF WALL TYPICAL



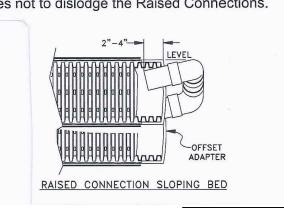


Installation Notes for Raised Connections:

1) Insert PVC a minimum of 2 in. and a maximum of 4 in. into the offset adapters. Inserting the PVC more than 4 in. could cut off the flow of air through the system. If the PVC does not extend at least 2 in. into the offset adapter, they may become dislodged during backfilling.

2) Install the Raised Connection so that the top of the 90° elbow is level with the top of the of Enviro-Septic® pipe as shown in the drawings below.

3) Pack sand under and around the raised connection to prevent movement, settling or shifting. Take care during backfilling procedures not to dislodge the Raised Connections.



BYNUM FANYO & ASSOCIATES, INC. RAISED CONNECTION DETAIL NOT TO SCALE

COMPACTION REMEDIATION NOTES

I. Identify the Boundaries of Soil Compaction / Evaluate Site

B. Transects shall be used to characterize the extent of compaction. Descriptions along a transect shall come from borings or pits on a 10 - 25 foot spacing. A minimum of 2 pits shall be used. Pits may be hand dug with a minimum width of 18 inches and a depth at least 6 inches deeper than the depth of compaction. All pit and boring descriptions shall be done to a depth 6 inches deeper than the depth of compaction. II. Remediation by Subsoiling:

A. At the time of subsoiling and/or chisel plowing the soil shall be dry enough that its plastic limit will not be exceeded.

- B. When the soil compaction extends no more than 10 inches below existing grade, a chisel plow shall be used to break up the compaction. The chisel plow shall work along the contours of the site at a depth 2 inches deeper than the greatest depth of compaction identified.
- 2. When the soil compaction extends more than 10 inches below existing grade, a subsoiler and a chisel plow shall be used to break up the compaction. 1. The subsoiler will be used first and shall work at a depth 2 inches deeper than the greatest depth of compaction. Its first pass shall be perpendicular to the slope and its second pass along the contours of the site.
- 2. The site shall be plowed using a chisel plow parallel to the contour of the site to a depth of seven (7) to fourteen (14) inches. If the site is suitable for a subsurface trench system (based on 410 IAC 6-8.2 and the provisions of this document), and if the subsoiler has sufficiently broken up the compaction, plowing with a chisel plow is not necessary.
- 3. The area subsoiled and plowed using a chisel plow must include the dispersal area if the same limiting conditions exist in the dispersal area.
- III. Evaluate After Remediation A. On sites with more than 10 inches of compaction, a soil scientist shall describe the condition of the previously described compacted layer after
- subsoiling and before chisel plowing to ensure that compaction has been amended. B. A minimum of 3 pits shall be used. Pits may be hand dug with a minimum size of 18 inches horizontally. All pits and descriptions shall be done to a
- depth 6 inches deeper than the greatest depth of compaction previously identified. All pits and descriptions shall be done after the 2 subsoiling passes and before the chisel plowing. Pits shall be placed so the soil between grooves left by subsoiler shanks can be evaluated. C. After the soil has been evaluated by the soil scientist, and if the compacted soil has been amended, the site shall be chisel plowed parallel to the
- D. The soil scientist shall describe the color, texture and size of clods in inches or mm. The description shall extend from the surface to a depth 6 inches deeper than the greatest depth of previously identified compaction.
- E. Clod size must average less than 4 inches or 100 mm for the compacted soil to be considered amended.

GENERAL SEPTIC SYSTEM NOTES

PROTECT THE SITE OF THE PROPOSED ABSORPTION FIELD FROM COMPACTING, GRADING OR FILLING PRIOR TO INSTALLATION. THE AREA MUST BE TEMPORARILY ISOLATED BY FENCING OR OTHER MEANS. OTHERWISE, DISTURBANCE OF THE SITE MAY RENDER THE AREA USELESS AND POSSIBLY RESULT IN REVOCATION OF THE CONSTRUCTION PERMIT.

2. CONTRACTOR SHALL CONTACT THE MONROE CO. HEALTH DEPARTMENT AT (812)349-2542 AT LEAST 15 DAYS PRIOR TO ANY SEPTIC CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING AT THE SITE.

3. SEPTIC SYSTEMS SHALL BE CONSTRUCTED BY A MONROE COUNTY HEALTH DEPARTMENT APPROVED AND CERTIFIED PRESBY ADVANCED ENVIRO-SEPTIC INSTALLER. CONTACT PRESBY ENVIRONMENTAL AT (800)473-5298 EXT. 22 FOR THE CERTIFICATION PROCEDURES. SEPTIC CONSTRUCTION WILL BE INSPECTED BY THE MONROE COUNTY HEALTH DEPARTMENT DURING CONSTRUCTION.

4. ALL WORK IS TO BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. THE INDIANA DEPT. OF HEALTH 'S (ISDOH) COMMERCIAL ON-SITE SEWAGE SYSTEMS RULE 410 IAC 6-10.1 AS WELL AS THE ISDOH TECHNICAL DATA SHEET AND ACCOMPANYING LITERATURE DATED FEBRUARY 29, 2024 AND MAY 21, 2024 (IDOH PROJECT NO. 5323337) ARE HEREBY A PART OF THESE PLANS.

5. ALL PERMITS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

6. CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATION, ADJUSTING, OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF THE FACILITY.

BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED IN THE SEPTIC PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION.

8. NEW CONTOURS SHOWN ARE TOP OF TOPSOIL IN AREAS TO BE SEEDED.

EX. ELEV.=795.14

EX. ELEV.=793.63

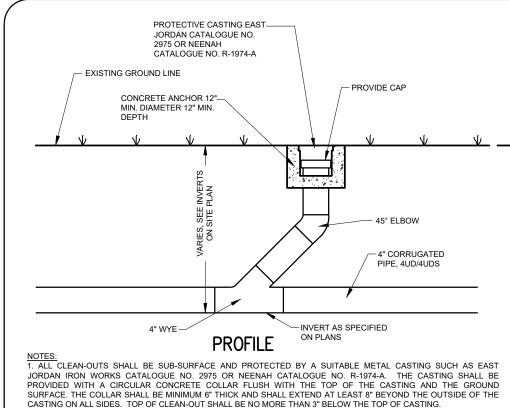
GRADING

BED BOTTOM ELEV.=792.42

BED BOTTOM ELEV.=794.0

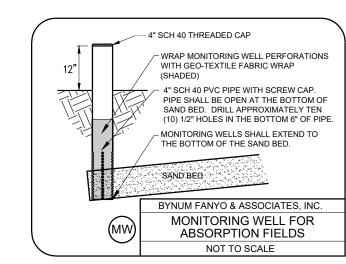
- 9. ALL DISTURBED AREAS SHALL BE MULCH SEEDED IMMEDIATELY UPON COMPLETION OF ALL EARTH DISTURBING ACTIVITIES.
- 10. PRESBY BRAND ADVANCED ENIRO-SEPTIC PIPES SHALL BE INSTALLED LEVEL ALONG THEIR LENGTH.

11. TANKS SHALL BE PLACED ON SOLID GRADE TO ALLEVIATE SETTLING. AN 8" LAYER OF COMPACTED SAND IS RECOMMENDED AS BEDDING. BACKFILL AROUND THE TANKS SHALL BE DONE SO AS TO MINIMIZE SETTLING WITHOUT HARMING THE CONCRETE WALLS OF THE TANKS. ALL TANK SURFACES, CONNECTIONS AND ACCESSES SHALL BE ADEQUATELY SEALED TO PREVENT. GROUND AND SURFACE WATER INFILTRATION INTO THE SYSTEM. THEY SHALL ALSO HAVE GAS-TIGHT, SAFELY SECURED ACCESS RISERS EXTENDING TO THE GROUND SURFACE.



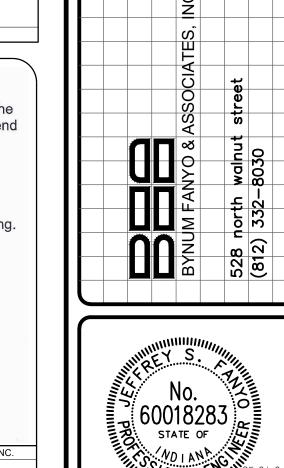
CASTING ON ALL SIDES. TOP OF CLEAN-OUT SHALL BE NO MORE THAN 3" BELOW THE TOP OF CASTING. 2. A CLEAN-OUT SHALL BE PROVIDED ON PERIMETER DRAIN PIPES A MINIMUM OF EVERY 90 FEET AND AT ALL BENDS.

STANDARD PERIMETER DRAIN CLEAN-OUT NOT TO SCALE



NOTE TO CONTRACTOR

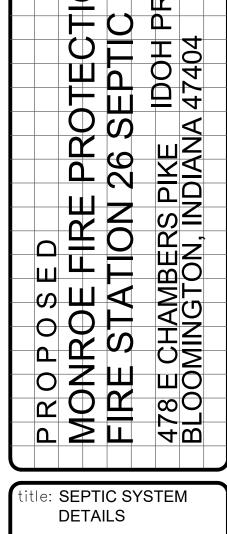
CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS & DEPTHS AND NOTIFY ENGINEER OF ANY INACCURACIES IN LOCATION OR ELEVATION OR ANY CONFLICTS PRIOR TO & AFTER ANY EXCAVATION. NO PAYMENT SHALL BE MADE TO CONTRACTOR FOR UTILITY DESTRUCTION OR UNDERGROUND CHANGES REQUIRED DUE TO CONFLICTING ELEVATIONS.



REVISION NOS. 1A-16 DATED

4 / # \ LISTING.

7.31.24. SEE SHEET C201 FOR



designed by: **JBT** drawn by: **JBT** checked by: **JSF** sheet no: C201 project no.: **402353**

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PRACTICE 3.12 PERMANENT SEEDING

EQUIREMENTS Site and seedbed preparation: Graded, and lime and fertilizer applied. **Plant Species:** Selected on the basis of soil type, soil pH, region of the state, time of year, and planned use of the area to be seeded (see Exhibit 3.12-C).

Mulch: Clean grain, straw, hay, wood, fibre, etc., to protect seedbed and encourage plant growth. The mulch may need to be anchored to reduce removal by wind or water, or erosion control blankets may be considered.

PPLICATION Permanently seed all final grade areas (e.g., landscape berms, drainage swales, additional work is not scheduled for a period of more than a year.

SITE PREPARATION:

1. Install practices needed to control erosion, sedimentation, and runoff prior to seeding. These include temporary and permanent diversions, sediment traps and basins, silt fences, and straw bale dams (Practices 3.21, 3.22, 3.72, 3.73, 3.74, and 3.75).

2. Grade the site and fill in depressions that can collect water. 3. Add topsoil to achieve needed depth for establishment of vegetation (Practice 3.02). SEEDBED PREPARATION:

- 1. Test soil to determine pH and nutrient levels. (Contact your county SWDC or Cooperative Extension office for assistance and soils information, including available soil testing services.)
- 2. If soil pH is unsuitable for the species to be seeded, apply lime according to test recommendations. 3. Fertilize as recommended by the soil test. If testing was not done, consider applying 400-600 lbs./acre of 12-12-12 analysis, or
- 4. Till the soil to obtain a uniform seedbed, working the fertilizer and lime into the soil 2-4 in. deep with a disk or rake operated across the slope (Exhibit 3.12-B).

Optimum seeding dates are Mar. 1—May 10 and Aug. 10—Sept. 30. Permanent seeding done between May 10 and Aug. 10 may need to be irrigated. As an alternative, use temporary seeding (Practice 3.11) until the preferred date for permanent seeding.

- 1. Select a seeding mixture and rate from Exhibit 3.12—C, based on site conditions, soil pH, intended land use, and expected level of
- 2. Apply seed uniformly with a drill or cultipacker—seeder (Exhibit 3.12-D) or by broadcasting, and cover to a depth of 1/4-1/2 in. 3. If drilling or broadcasting, firm the seedbed with a roller or
- 4. Mulch all seeded areas (Practice 3.15). Consider using erosion blankets on sloping areas (Practice 3.17). (NOTE: If seeding is done with a hydroseeder, fertilizer and mulch can be applied with the seed in a slurry mixture.)

Exhibit 3.12-C. Permanent Seeding Recommendations

This table provides several seeding options. Additional seed species and mixtures are available commercially. When selecting a mixture, consider site conditions, including soil properties (e.g., soil pH and drainage), slope aspect and the tolerance of each species to shade and droughtiness.

Seed species and mixtures	Rate per acre Op	timum soil pH
OPEN AND DISTURBED AREAS 1. Perennial ryegrass	(REMAINING IDLE MORE 35 to 50 lbs.	THAN 1 YR.) 5.6 to 7.0
+ white or ladino clover* 2. Kentucky bluegrass	1 to 2 lbs. 20 lbs.	5.5 to 7.5
+ smooth bromograss	10 lbs.	
+ switchgrass + timothy	3 lbs. 4 lbs.	
+ perennial ryegrass	10 lbs.	
+ white or ladino clover* 3. Perennial ryegrass	1 to 2 lbs. 15 to 30 lbs.	5.6 to 7.0
+ prarie switch grass	15 to 30 lbs.	3.0 10 7.0
4. Prarie switch grass+ ladino or white clover*	35 to 50 lbs. 1 to 2 lbs.	5.5 to 7.5

+ ladino or white clover*	1	to	2	lbs.			
TEEP BANKS AND CUTS, LOW	MAINT	ΈΝ	ANC	E AREAS	(NOT		WE
L red closest	10	10	20	lhe	0.0		7.00
Prarie switch grass	35	to	50	lbs.	5.5	to 7	7.5
+ white or ladino clover*	1	to	2	lbs.			
Prarie switch grass	35	to	50	lbs.	5.5	to 7	7.5
+ red clover*	10	to	20	lbs.			
(Recommended north of US 40)							
Orchardgrass	20	to	30	lbs.	5.6	to 7	7.0
+ red clover*	10	to	20	lbs.			
+ ladino clover*	1	tο	2	lbs			

(Recommended earth of US 40)	_	
LAWNS AND HIGH MAINTENA	NCE AREAS	
1. Bluegrass	105 to 150 lbs.	5.5 to 7.
 Perennial ryegrass (turf-ty + bluegrass 	ype) 45 to 60 lbs. 70 to 90 lbs.	5.6 to 7.
3. Prarie switch grass(turf- + bluegrass	-type)130 to 107 lbs. 20 to 30 lbs.	5.5 to 7.

CHANNELS AND AREAS OF CONCENTRATED FLOW Perennial ryegrass 100 to 150 lbs. + white or ladino clover* 1 to 2 lbs. 5.5 to 7.5 Kentucky bluegrass 20 lbs. + switchgrass 3 lbs. + timothy 4 lbs. + perennial ryegrass 10 lbs. + white or ladino clover* 1 to 2 lbs. 5.5 to 7.5 3. Prarie switch grass 100 to 150 lbs. + ladino or white clover*

4. Prarie switch grass

+ Perennial ryegrass

+ Kentucky bluegrass

* For best results: (a) legume seed should be inoculated; (b) seeding mixtures containing legumes should preferably be spring—seeded, although the grass may be fall—seeded and the legume frost—seeded (Practice 3.13); and (c) if legumes are fall—seeded, do so in early

1 to 2 lbs.

15 to 20 lbs.

15 to 20 lbs.

100 to 150 lbs.

5.5 to 7.5

NOTE: An oat or wheat companion or nurse crop may be used with any of the above permanent seeding mixtures. If so, it is best to seed during the fall seeding period, especially after Sept. 15, and at the following rates: spring oats—1.4 to 3/4 bu./acre; wheat—no more than 1/2 bu./acre.

AINTENANCE * Inspect periodically, especially after storm events, until the stand is successfully established. (Characteristics of a successful stand include: MAINTENANCE * Inspect the silt fence periodically and after each storm event. vigorous dark green or bluish-green seedlings; uniform density with nurse plants, legumes, and grasses well inter-mixed; green leaves; and the perennials remaining green throughout the summer, at least at the plant base.)

- * Plan to add fertilizer the following growing season according to soil test recommendations. * Repair damaged, bare or sparse areas by filling any gullies, re-fertilizing,
- over— or re—seeding, and mulching. * If plant cover is sparse or patchy, review the plant materials chosen, soil fertility, moisture condition, and mulching; then repair the affected area either by over—seeding or by re—seeding and mulching after re-preparing the seedbed.
- * If vegetation fails to grow, consider soil testing to determine acidity or nutrient deficiency problems. (Contact your SWCD or Cooperative Extension office for assistance.)

according to soil test recommendations.

* If additional fertilization is needed to get a satisfactory stand, do so

PRACTICE 3.74 SILT FENCE (SEDIMENT FENCE)

revisions:

To retain sediment from small, sloping disturbed areas by reducing the velocity PURPOSE of sheet flow.

(NOTE: Silt fence captures sediment by ponding water to allow deposition, not by filtration. Although the practice usually works best in conjunction with temporary basins, traps, or diversions, it can be sufficiently effective to be used alone. A silt fence is not recommended for use as a diversion; nor is it to be used across a stream, channel or anywhere that concentrated flow is anticipated.)

khibit 3.12-B, erosion control structures, etc.) as each is completed and all areas where **REQUIREMENTS Drainage Area:** Limited to 1/4 acre per 100 ft. of fence; further restricted (Exhibit 3.74–B by slope steepness (see Exhibit 3.74–B). Location: Fence nearly level, approximately following the land contour, and at least 10 ft. from toe of slope to provide a broad, shallow sediment pool. **Trench:** 8 in. minimum depth, flat-bottom or v-shaped, filled with compacted soil or gravel to bury lower portion of support wire and/or fence fabric.

Support posts: 2 x 2-in. hardwood posts (if used) or steel fence posts set at least 1 ft. deep.* (Steel posts should projections for fastening fabric.)

Spacing of posts: 8 ft. maximum if fence supported by wire, 6 ft. for

extra-strength tabric without wire		Max. distance
backing.	Land slope	above fence
Fence height: High enough so depth of	· · · · · · · · · · · · · · · · · · ·	
impounded water does not exceed	Less than 2%	100 ft.
1 $1/2$ ft. at any point along fence line.	2 to 5%	75 ft.
Support wire (optional): 14 gauge, 6 in.	5 to 10%	50 ft.
wire fence (needed if using standard—	10 to 20%	25 ft.
strength fabric).	More than 20%	15 ft.

Fence fabric: Woven or non-woven geotextile fabric with specified filtering efficiency and tensile strength (see Exhibit 3.74—C) and containing UV inhibitors and stabilizers to ensure 6—mo. minimum life at temperatures 0°-120°F.

* Some commercial silt fences come ready to install, with support posts attached and requiring now wire support.

Exhibit 3.74-C. Specifications Minimums for Silt Fence Fabric. Physical Property Woven Fabric Non-woven fabric Filtering efficiency 85% 85% Tensile strength at 20% elongation: 50lbs./linear in. 30lbs./linear in. Standard strength 50lbs./linear in. 70lbs./linear in. Extra strength 0.3 gal./min./sq.ft. Slurry flow rate 4.5 gal./min./sq.ft.

Outlet (optional): To allow for safe storm flow bypass without overtopping fence. Placed along fence line to limit water depth to 1 1/2 ft. maximum; crest—1 ft. high maximum; weir width—4 ft. maximum; splash pad—5 ft. wide, 3 ft. long, 1 ft. thick minimum.

15 gal. /min./sq.ft.

220 gal./min./sq.ft.

INSTALLATION SITE PREPARATION:

Water flow rate

UV resistance

. Plan for the fence to be at least 10 ft. from the toe of the slope to provide a sediment storage area. 2. Provide access to the area if sediment cleanout will be needed. OUTLET CONSTRUCTION (OPTIONAL)

- 2. Set the outlet elevation so that water depth cannot exceed 1 1/2 ft. at the lowest point along the fence line.
- 3. Locate the outlet weir support posts no more than 4 ft. apart, and install a horizontal brace between them. (Weir height should be no more than 1 ft. and water depth no more than 1 1/2 ft. anywhere else along the fence.) 4. Excavate the foundation for the outlet splash pad to minims of 1 ft. deep,

1. Determine the appropriate location for a reinforced, stabilized bypass flow

- 5 ft. wide and 5 ft. long on level grade 5. Fill the excavated foundation with INDOT CA No. 1 stone, being careful that the finished surface blends with the surrounding area, allowing no overfall.
- 6. Stabilize the area around the pad. OUTLET CONSTRUCTION (OPTIONAL)

1. Along the entire intended fence line, dig an 8 in. deep flat—bottomed or

- 2. On the downslope side of the trench, drive the wood or steel support posts at least 1 ft. into the ground, spacing them no more than 8 ft. apart if if the fence is supported by wire or 6 ft. if extra strength fabric is used without support wire. Adjust spacing, if necessary, to ensure that posts are set at the low points along the fence line. (NOTE: If the fence has pre attached posts or stakes, drive them deep enough so the fabric is satisfactory in the trench as described in step 6.)
- 3. Fasten support wire fence to the upslope side of the posts, extending it 8 in. into the trench.
- 4. Run a continuous length of geotextile fabric in front of the support wire and posts avoiding joints, particularly at low points in the fence line. 5. If a joint is necessary, nail the overlap to the nearest post with a lath. 6. Place the bottom 1 ft. of fabric in the 8 in. deep trench, extending the remaining 4 in. toward the upslope side.
- 7. Backfill the trench with compacted earth or gravel. NOTE: If using a pre-packed commercial silt fence rather than constructing

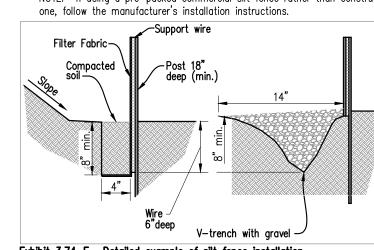
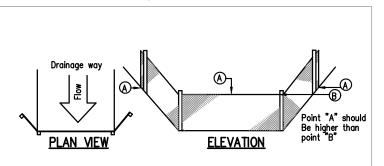


Exhibit 3.74—E. Detailed example of silt fence installation.



- * If fence fabric tears, starts to decompose or in any way becomes ineffective,
- replace the affected portion immediately. * Remove deposited sediment when it reaches half the height of the fence at
- its lowest point or is causing the fabric to bulge.
- * Take care to avoid undermining the fence during clean out. * After the contributing area has been stabilized, remove the fence and sediment deposits, bring the disturbed area to grade, and stabilize.

tle: **SEPTIC SYSTEM** DETAILS CONTINUED

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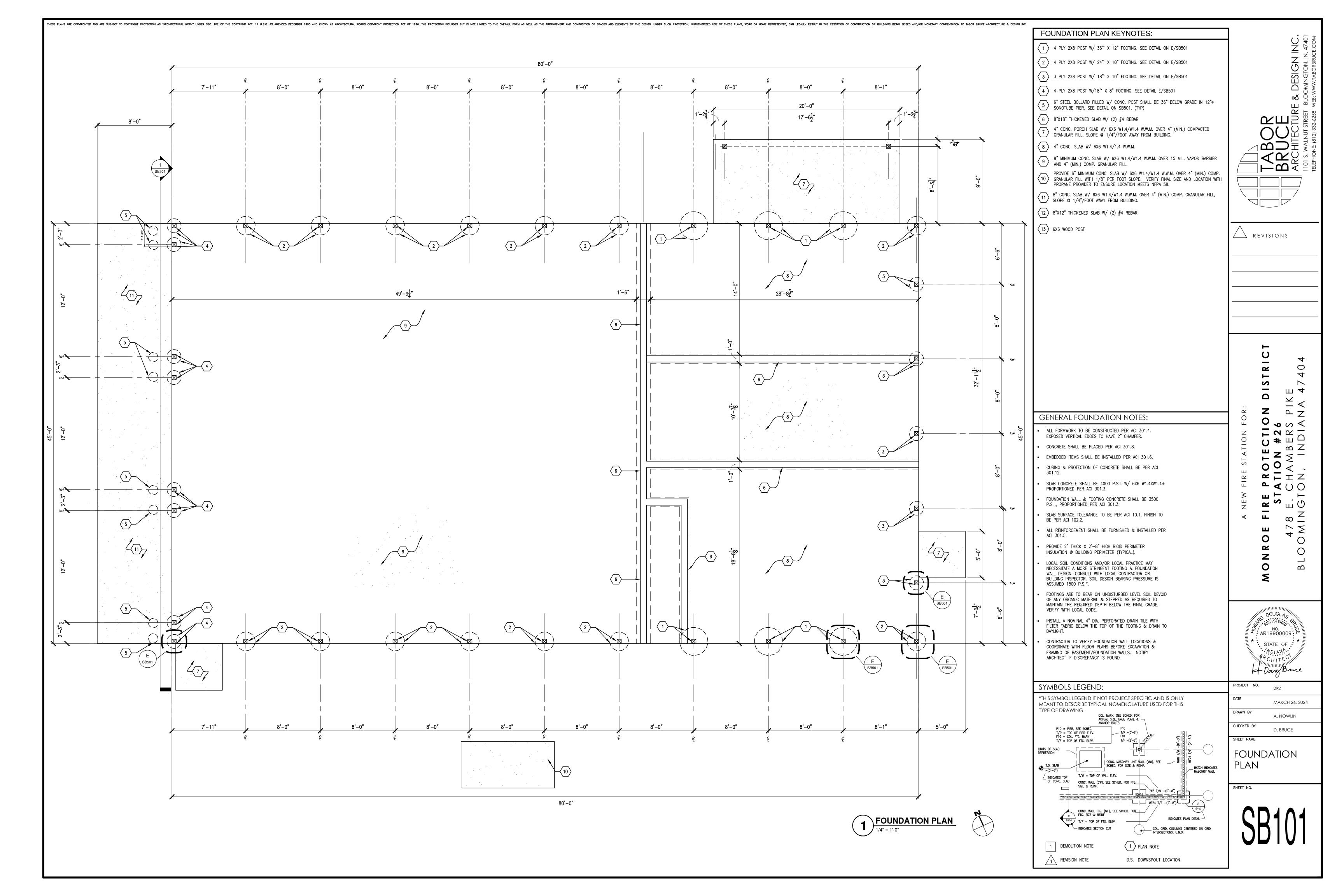
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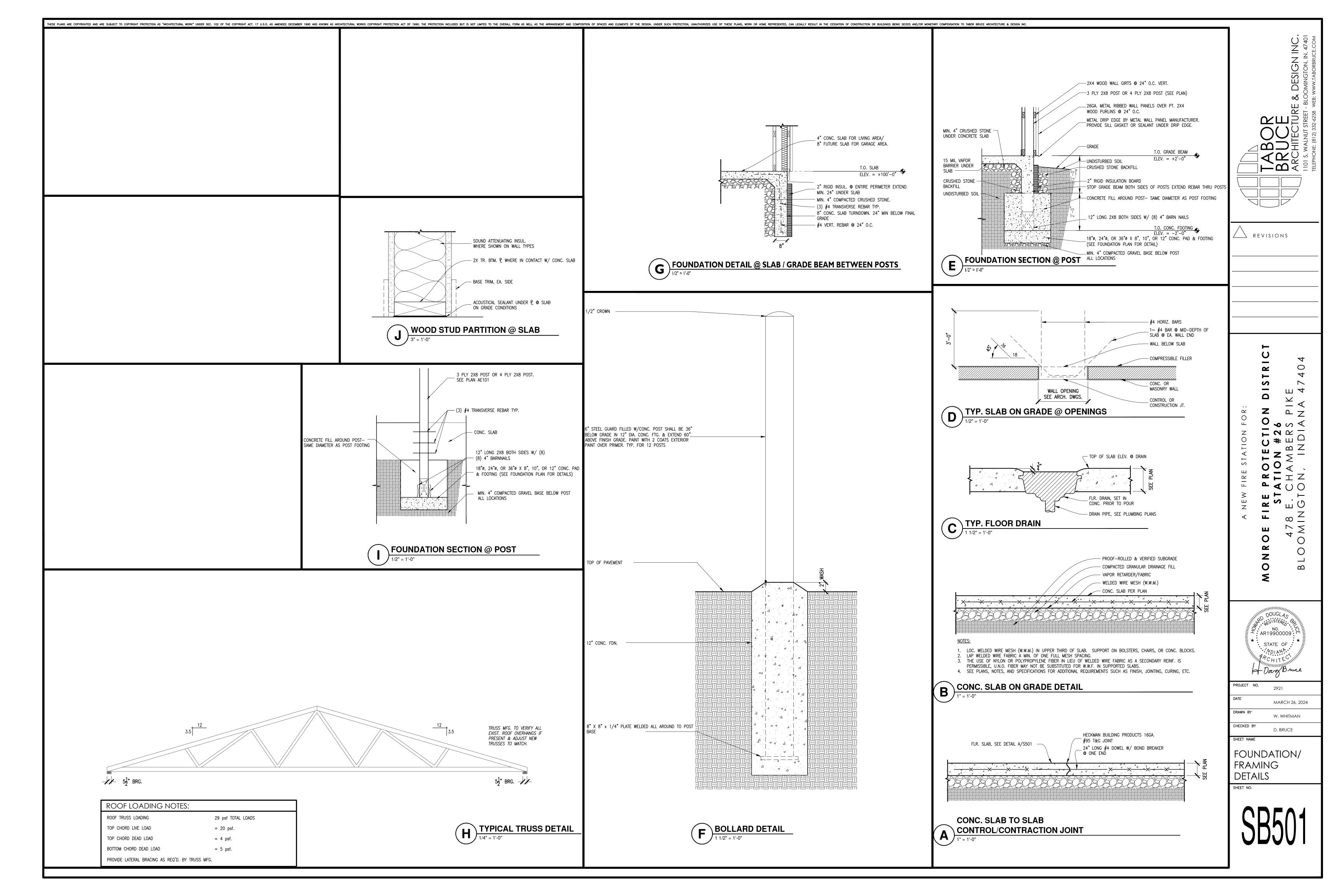
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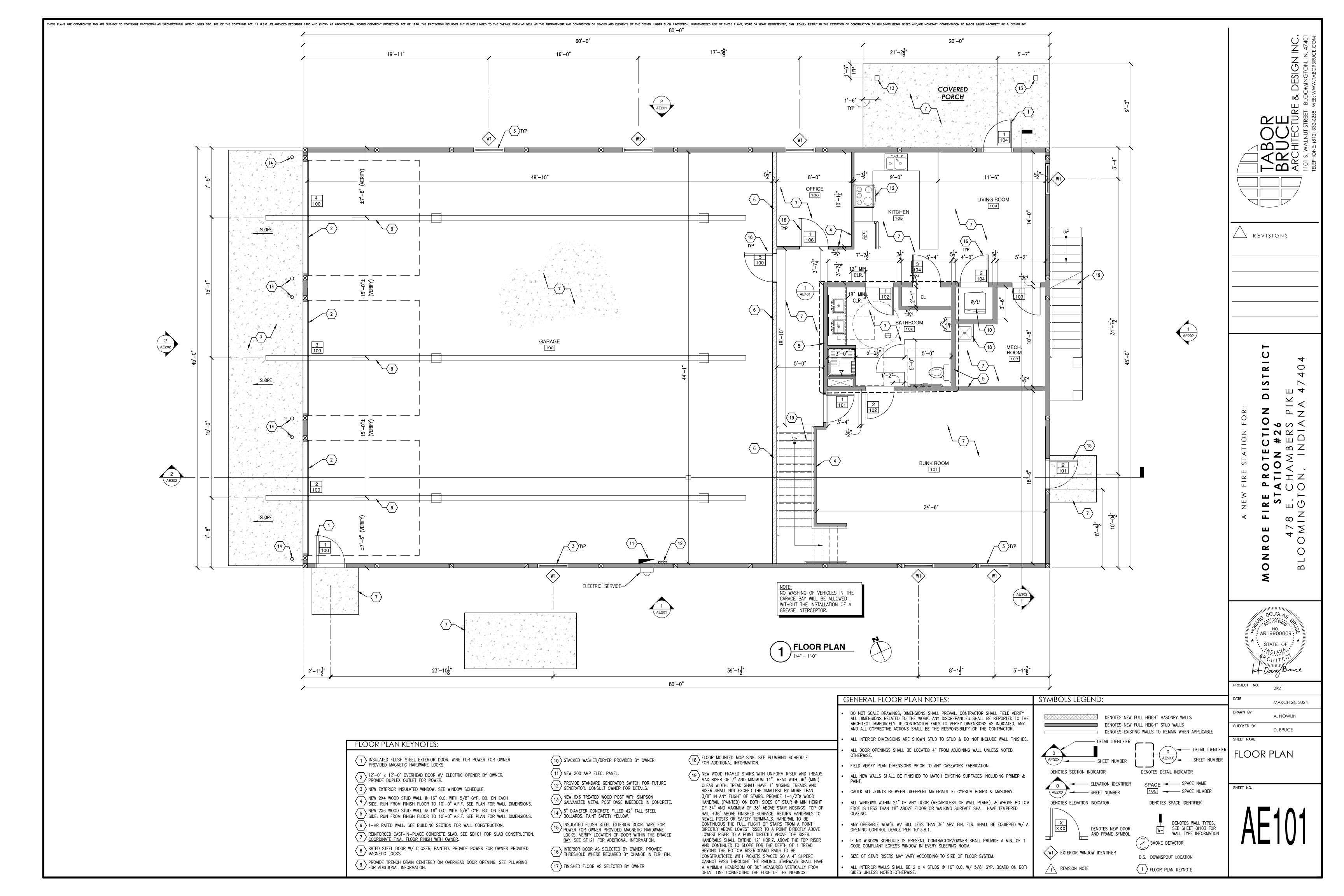
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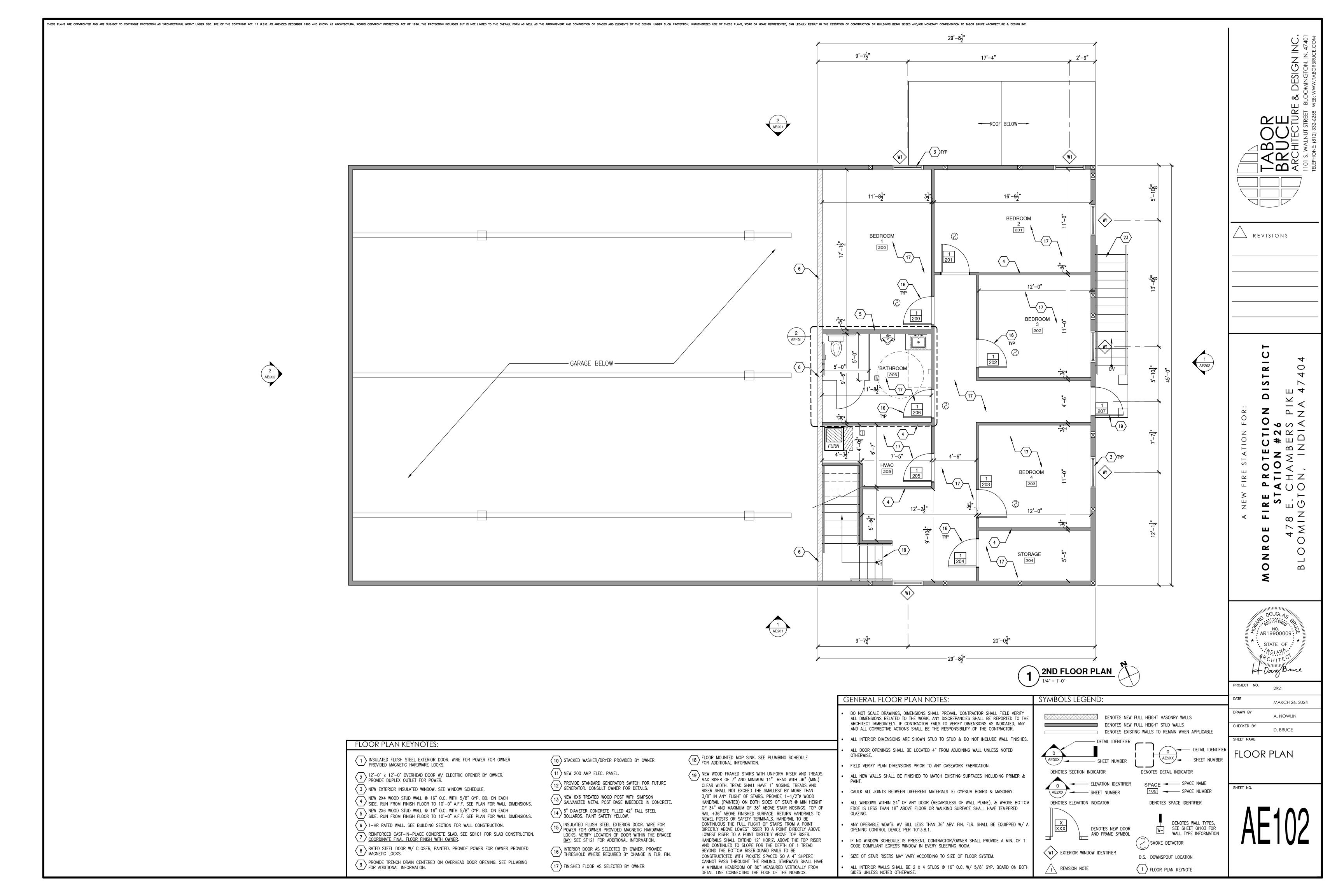
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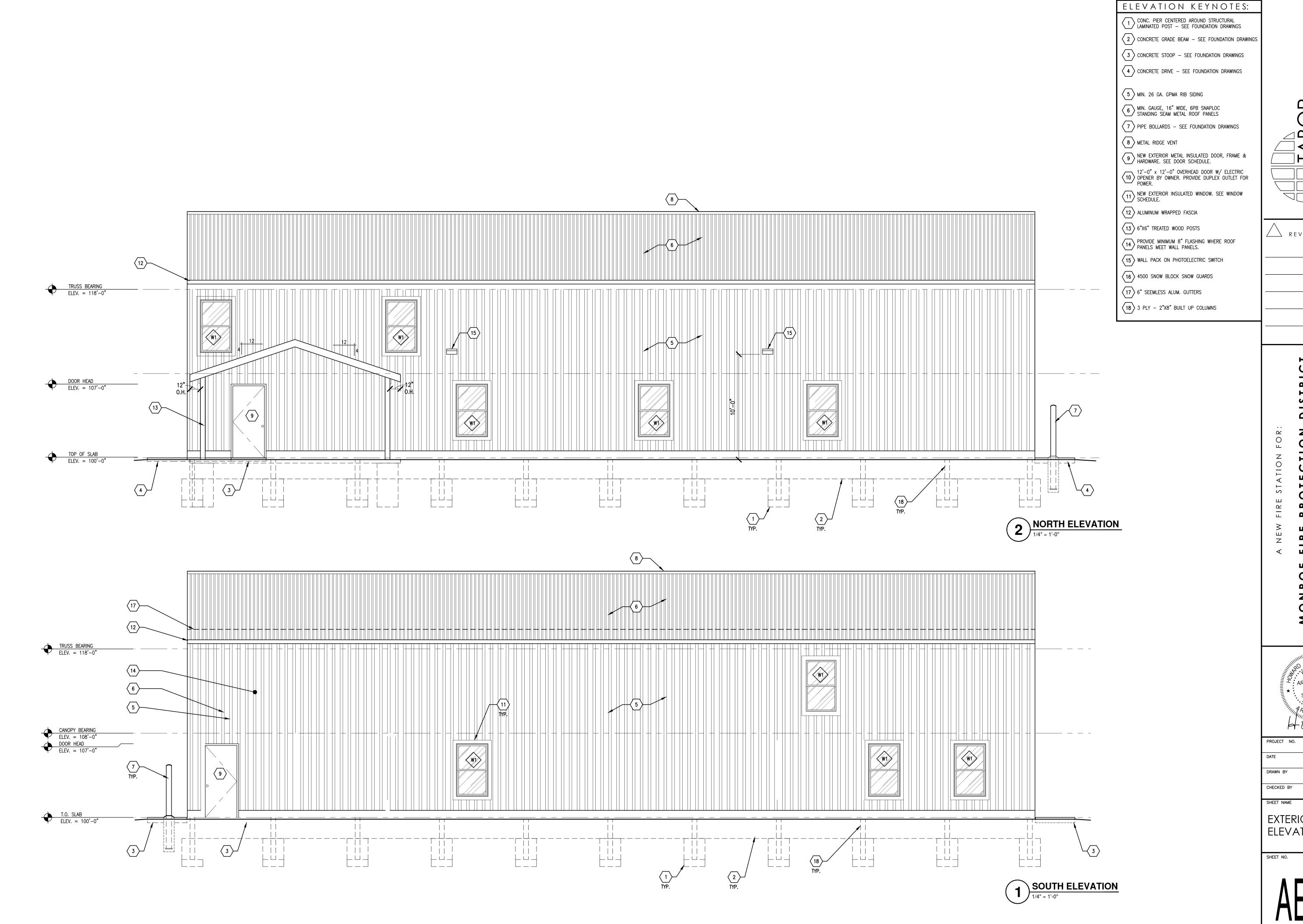
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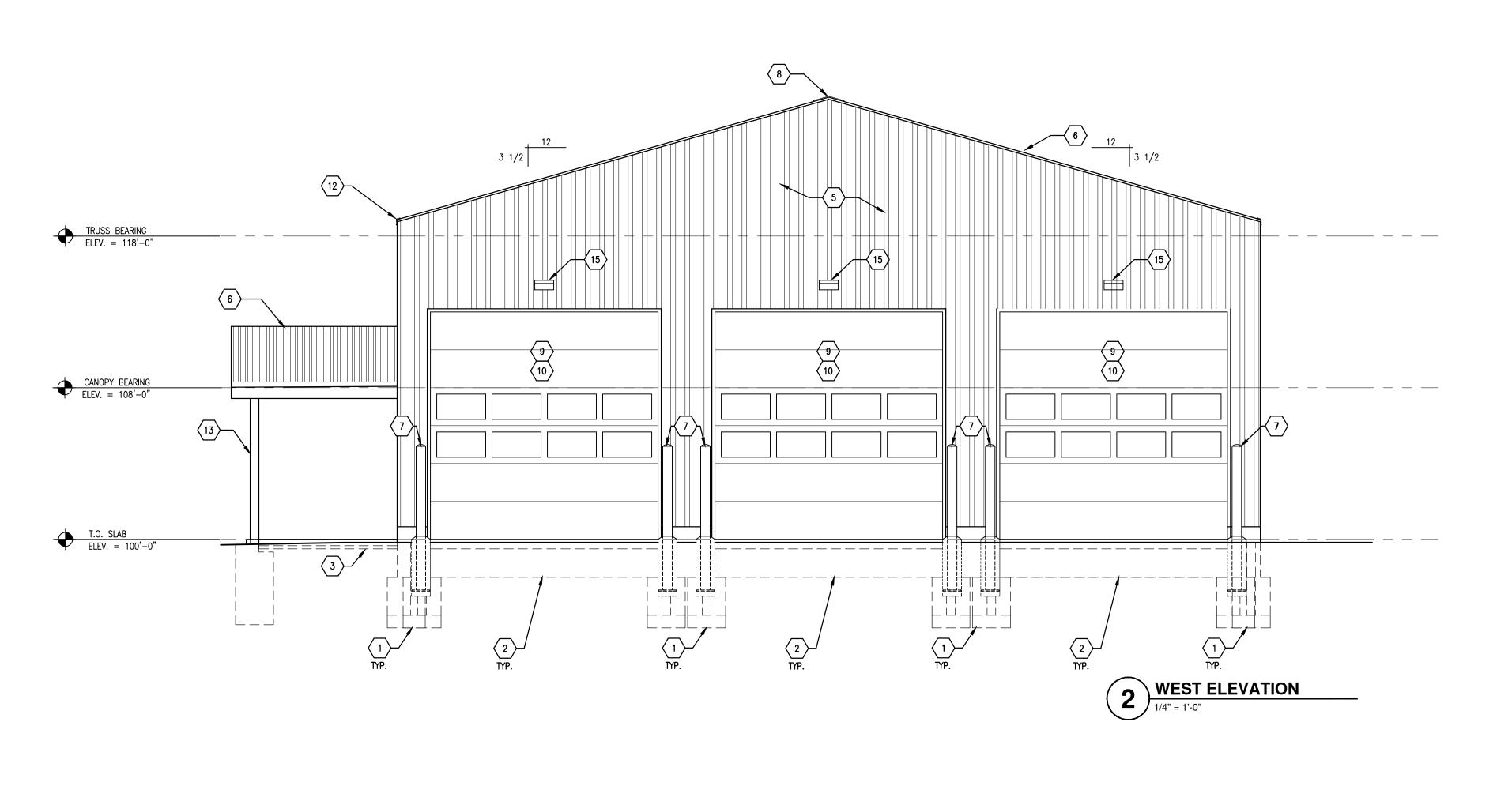
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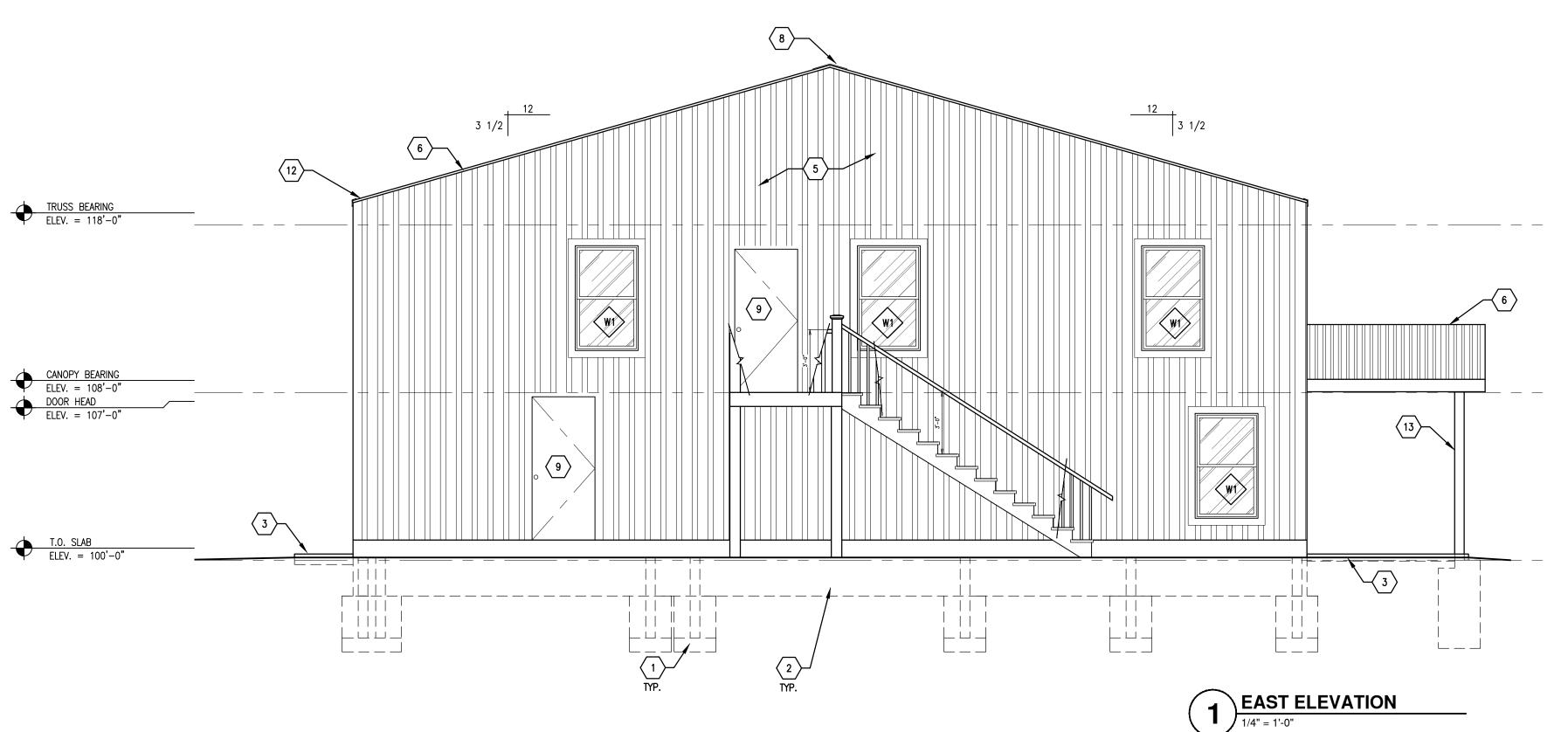
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D. BRUCE

EXTERIOR ELEVATIONS



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ELEVATION KEYNOTES:

- 1 CONC. PIER CENTERED AROUND STRUCTURAL LAMINATED POST SEE FOUNDATION DRAWINGS
- 2 CONCRETE GRADE BEAM SEE FOUNDATION DRAWINGS
- $\langle 3 \rangle$ concrete stoop See foundation drawings 4 CONCRETE DRIVE - SEE FOUNDATION DRAWINGS
- 36" METAL WALL PANELS (26 GAUGE MINIMUM) AS PERMA—CLAD OR EQUAL WITH EXPOSED FASTENERS.

 5 FINISH TO BE SELECTED FROM MANUFACTURERS STANDARD COLORS. INSTALL OVER 2x4 PURLINS SPACED AT 24"o.c. PER MANUFACTURERS INSTALLATION
- INSTRUCTIONS. $\langle 6 \rangle$ METAL ROOF PANEL – 2" RIBBED, SEE ROOF PLAN
- 7 PIPE BOLLARDS SEE FOUNDATION DRAWINGS
- 8 METAL RIDGE VENT
- 9 NEW EXTERIOR METAL INSULATED DOOR, FRAME & HARDWARE. SEE DOOR SCHEDULE.
- 12'-0" x 12'-0" OVERHEAD DOOR W/ ELECTRIC OPENER BY OWNER. PROVIDE DUPLEX OUTLET FOR POWER.
- NEW EXTERIOR INSULATED WINDOW. SEE WINDOW SCHEDULE.
- (12) ALUMINUM WRAPPED FASCIA
- (13) 6"X6" TREATED WOOD POSTS
- PROVIDE MINIMUM 8" FLASHING WHERE ROOF PANELS MEET WALL PANELS.
- (15) WALL PACK ON PHOTOELECTRIC SWITCH



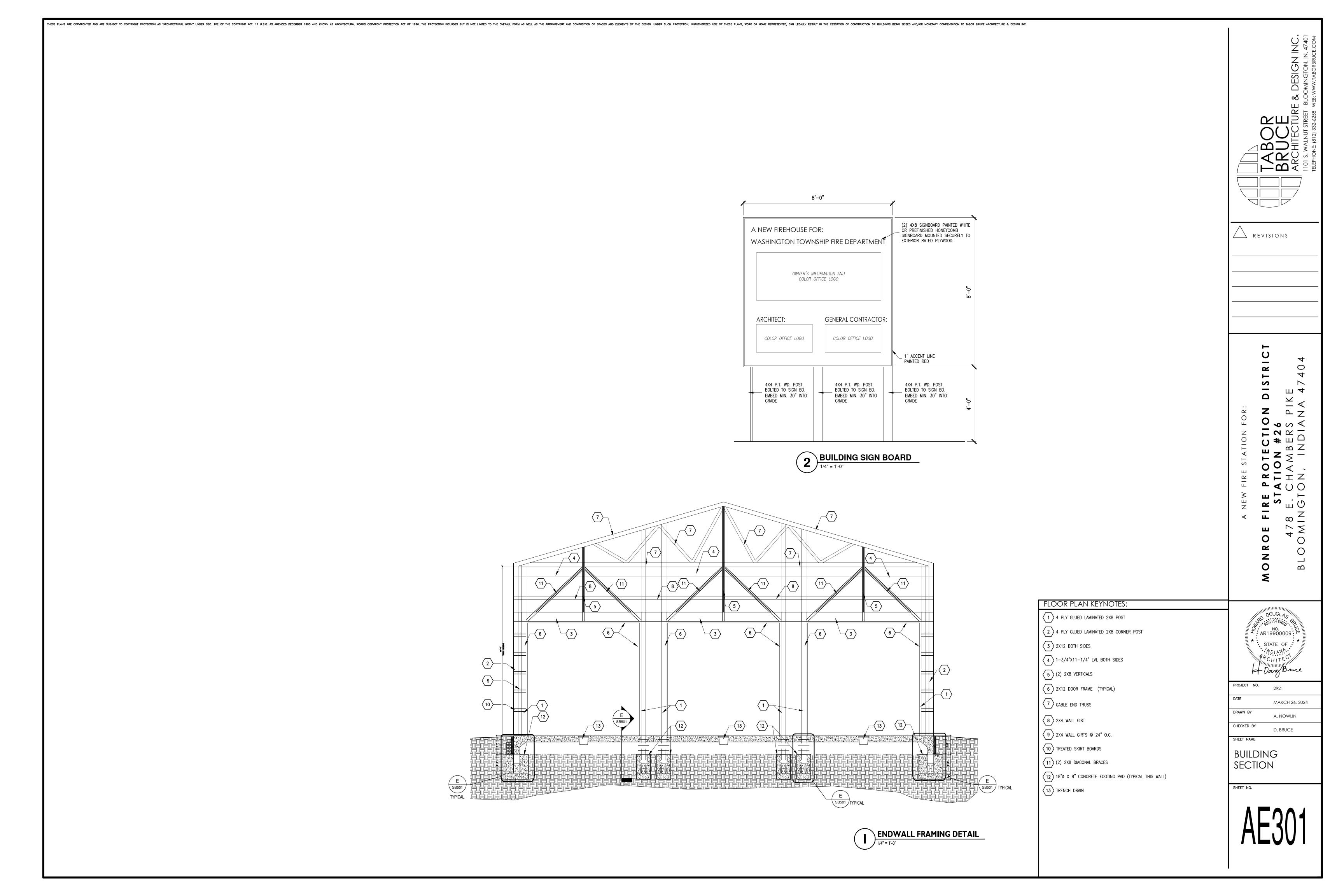
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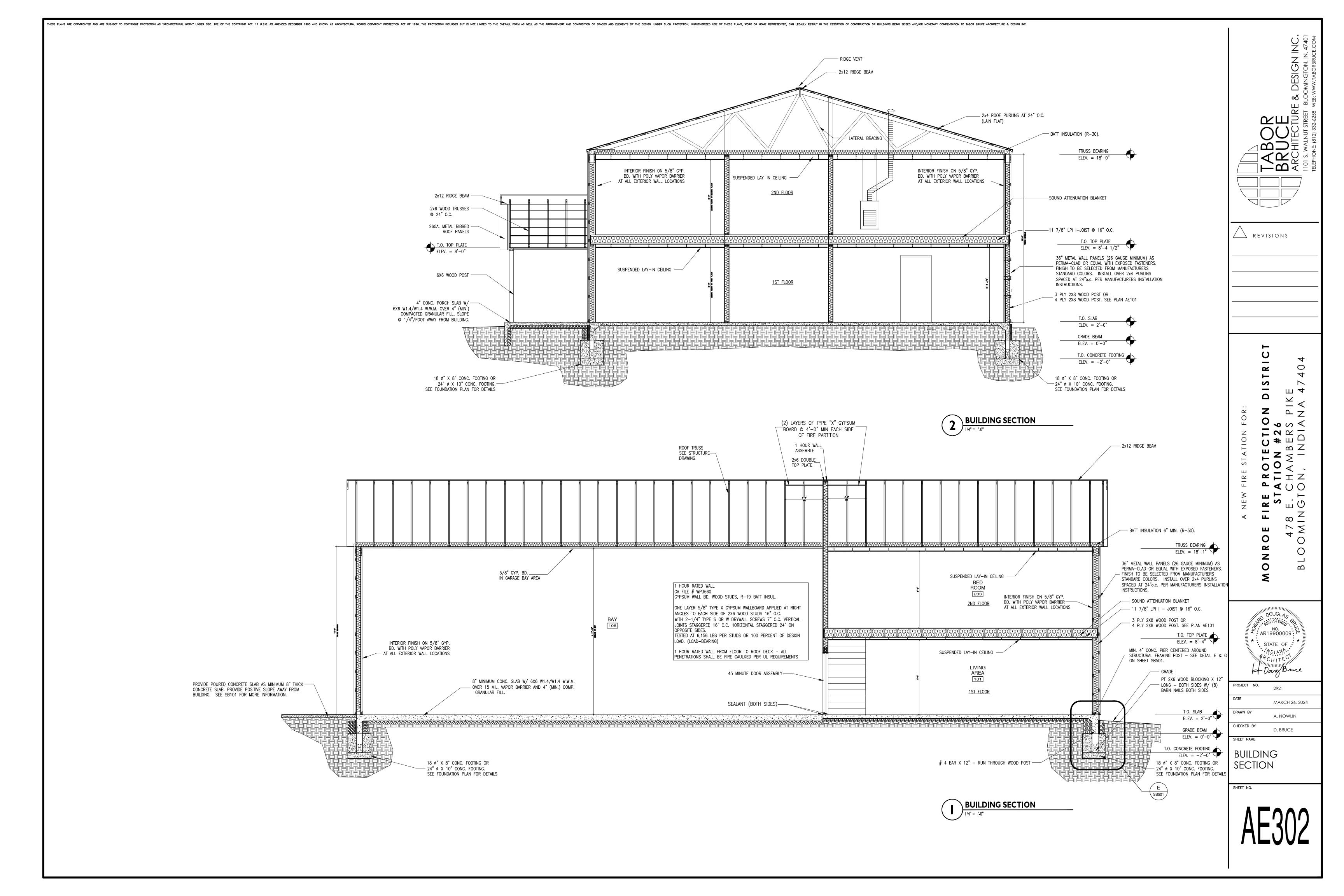
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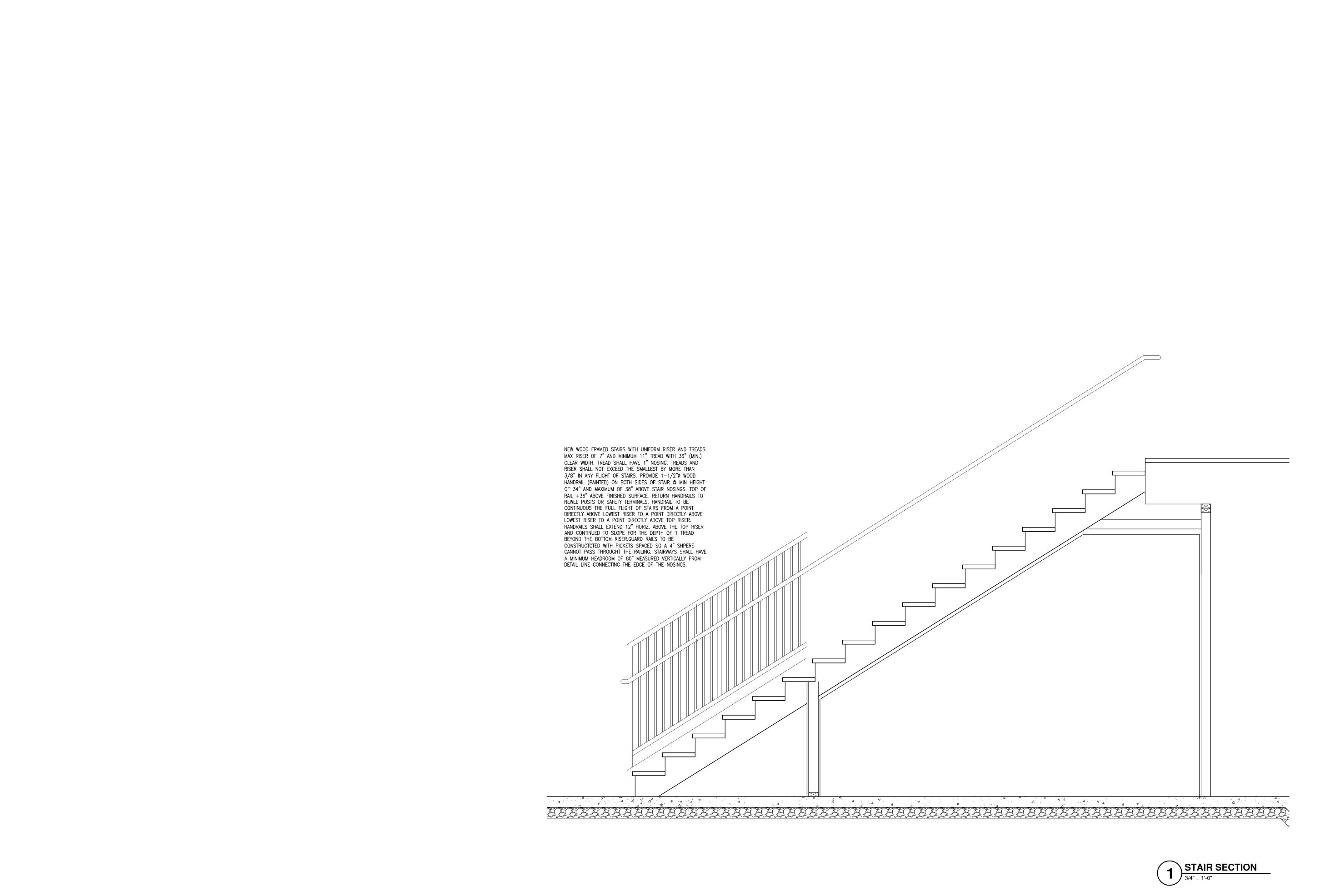
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PROJECT NO.	2921
DATE	MARCH 26, 2024
DRAWN BY	A. NOWLIN

CHECKED BY D. BRUCE

EXTERIOR ELEVATIONS







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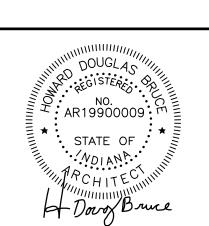
ARCHITECTURE & DESIGN INC
1101 S. WALNUT STREET - BLOOMINGTON, IN. 474
TELEPHONE: (812) 332-6258 WEB: WWW.TABORBRUCE.CO

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MONROE FIRE PRO STATIC 478 E. CHA BLOOMINGTON,



PROJECT NO. 2921

DATE MARCH 26, 2024

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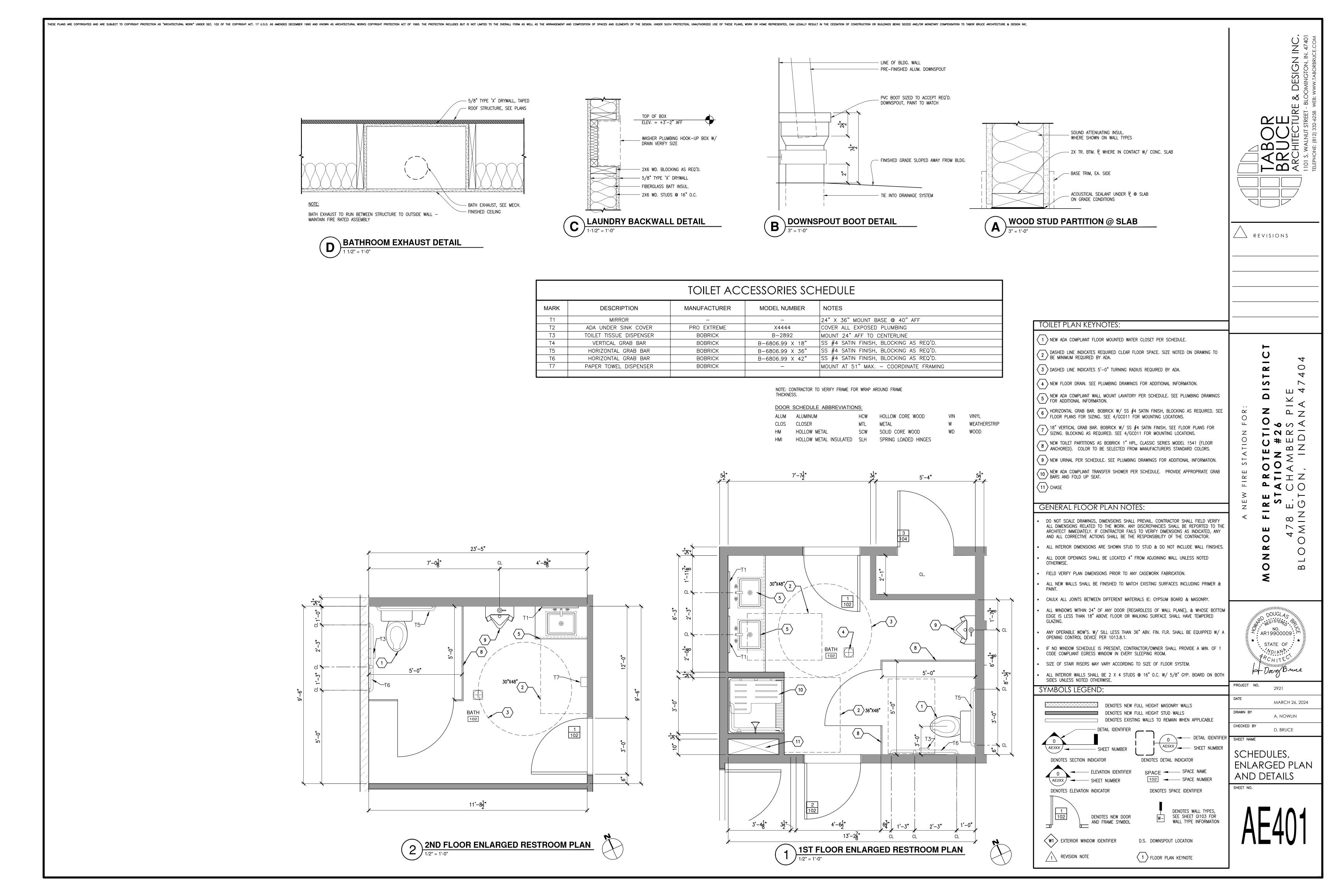
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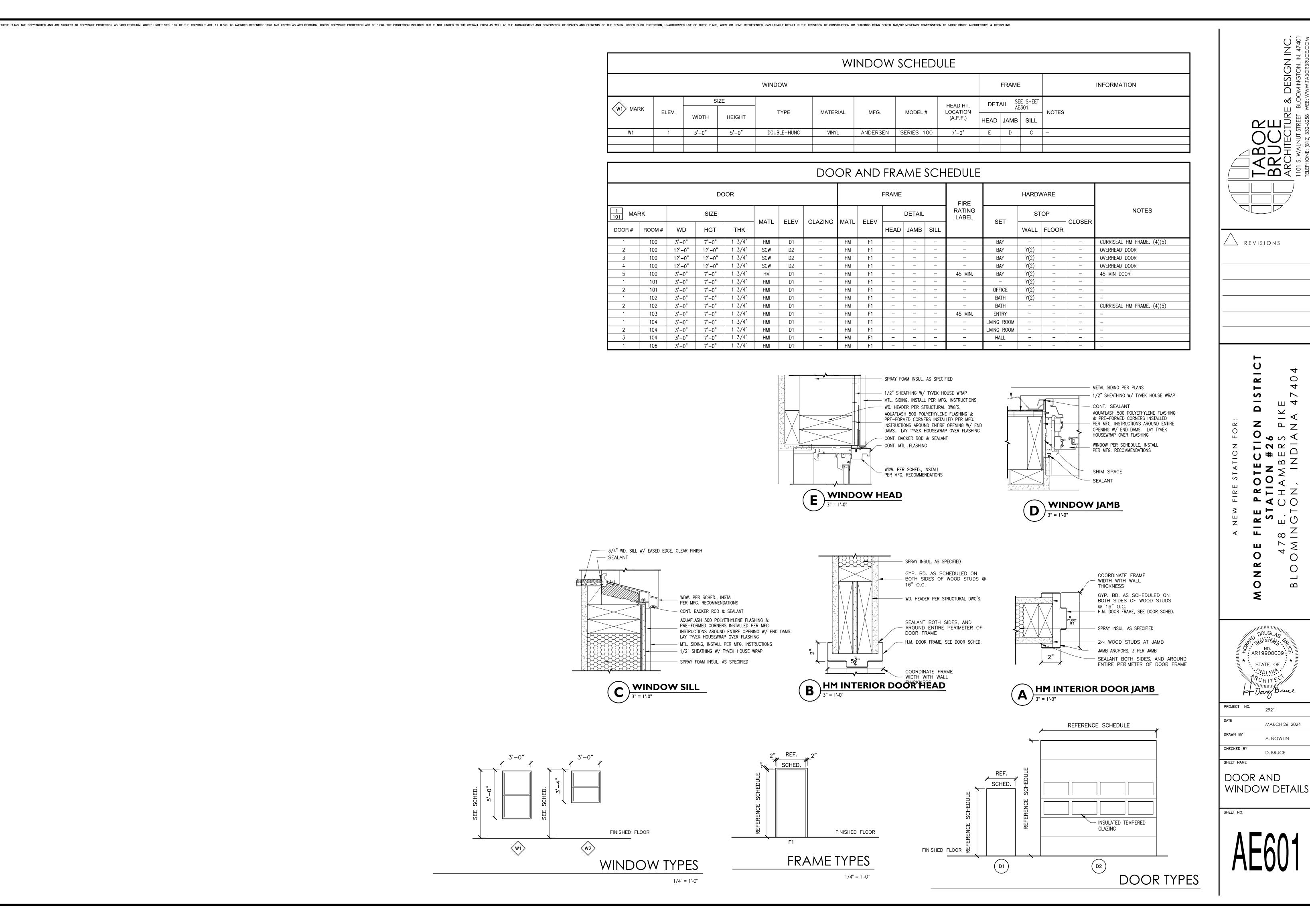
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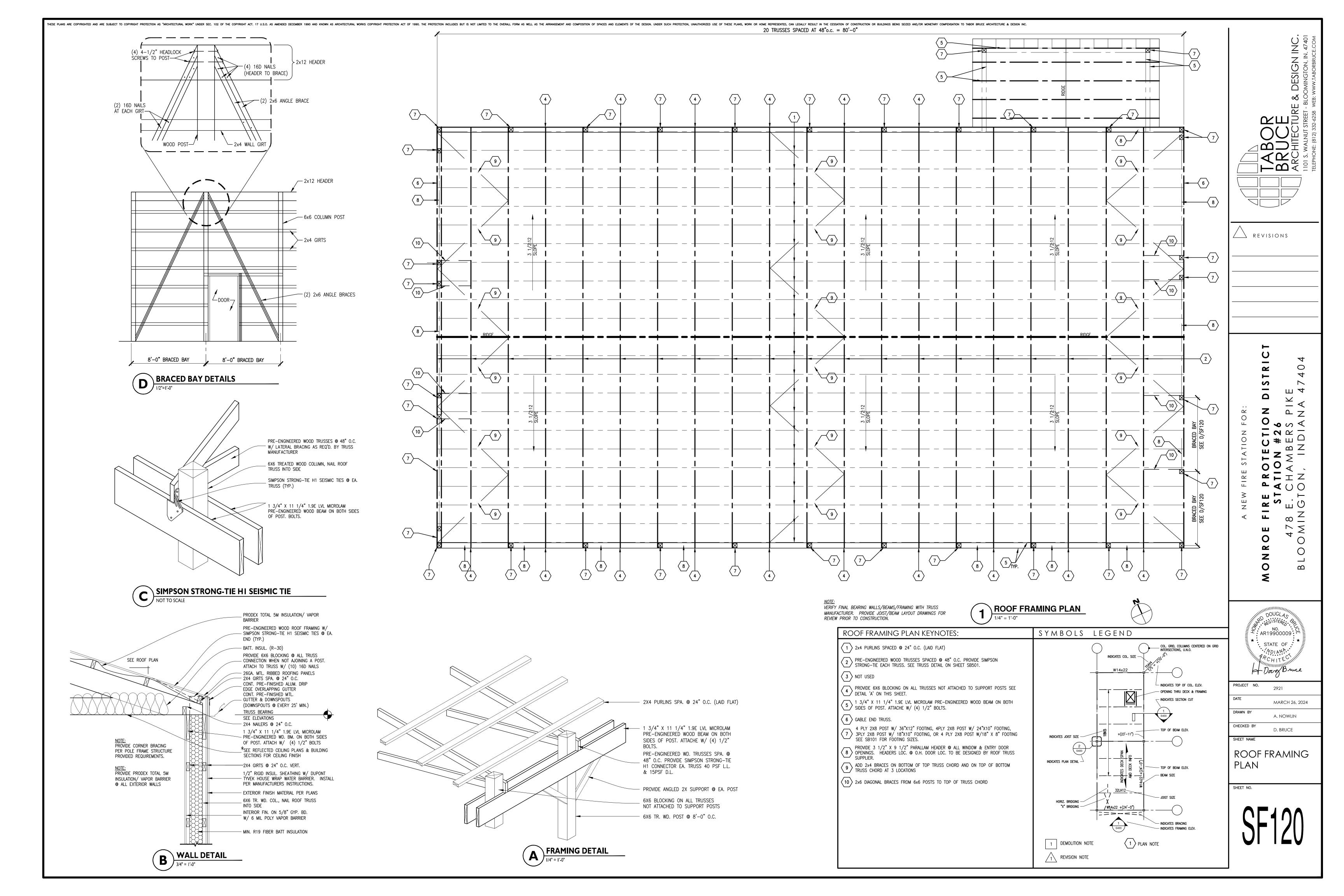
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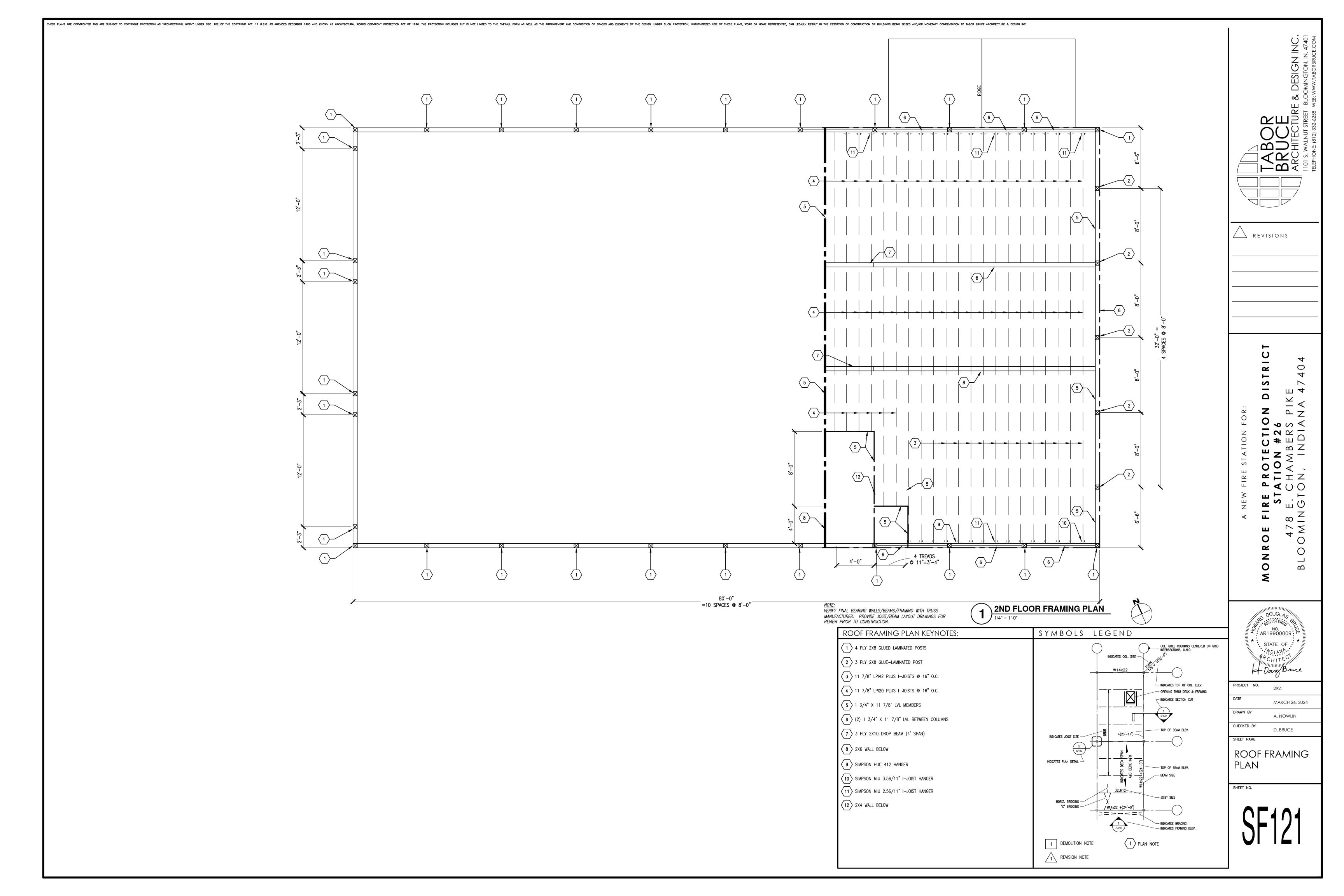
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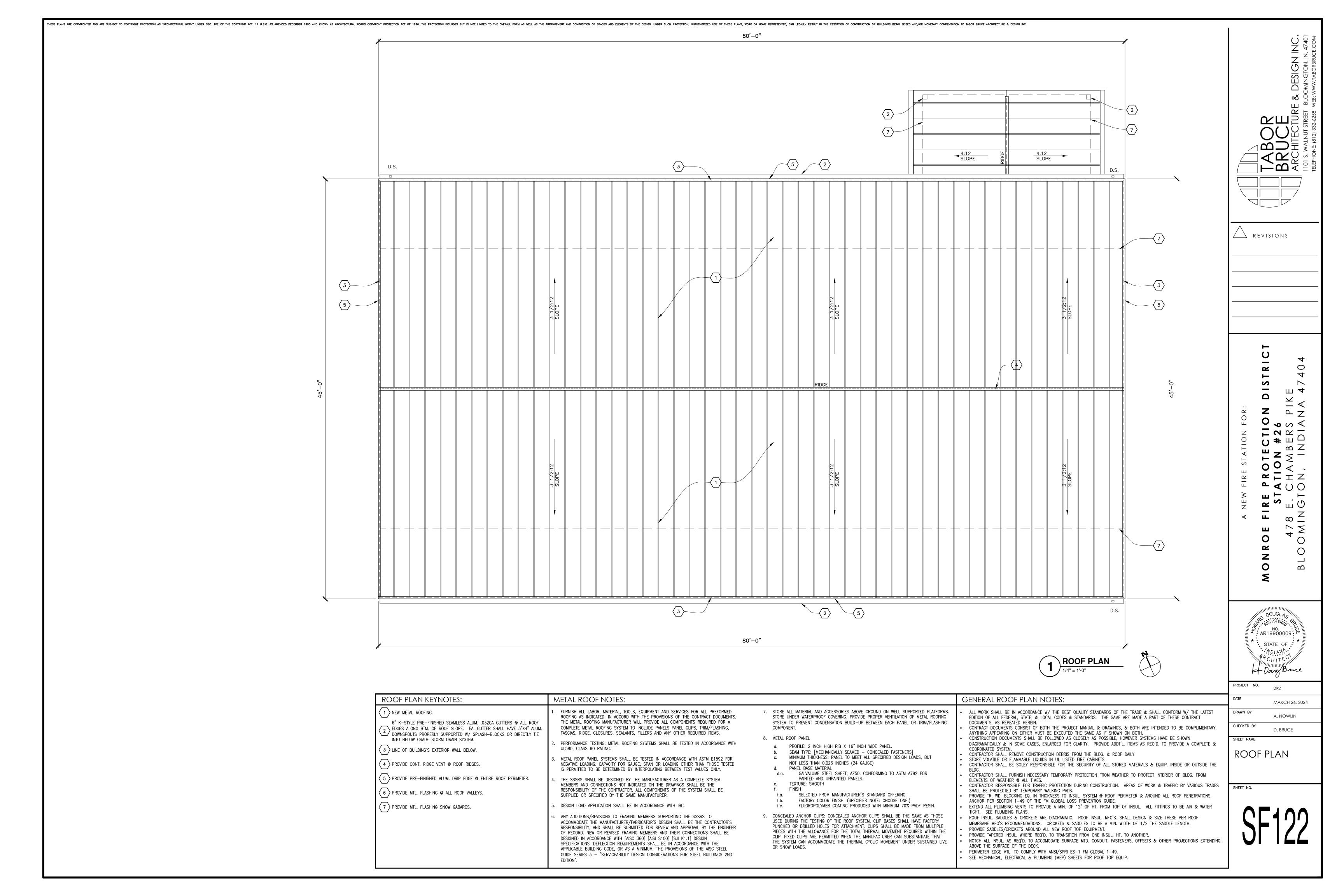
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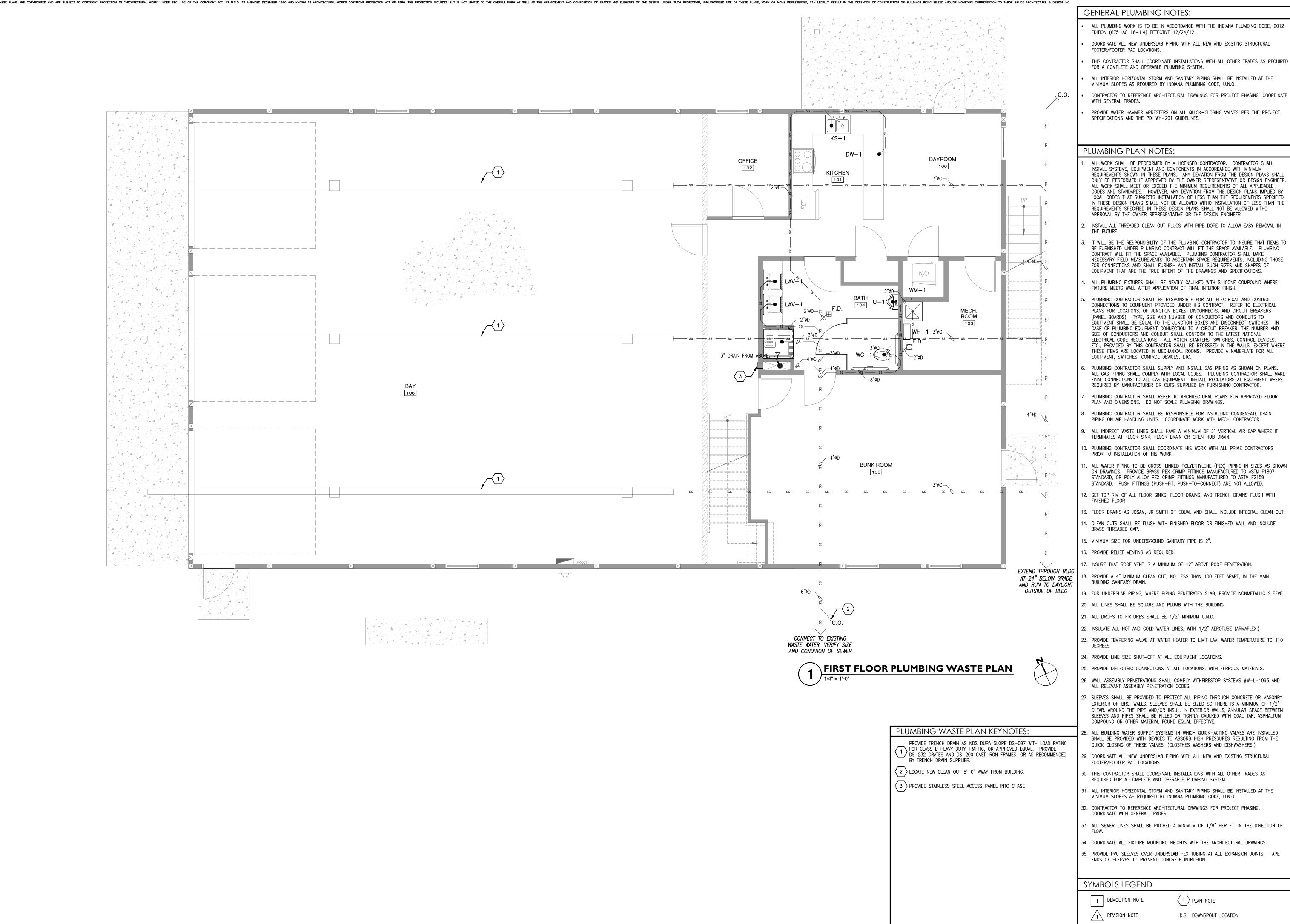
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DOUGLAS NO.

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Dovo Bruce

PROJECT NO. 2921

DATE MARCH 26, 2024

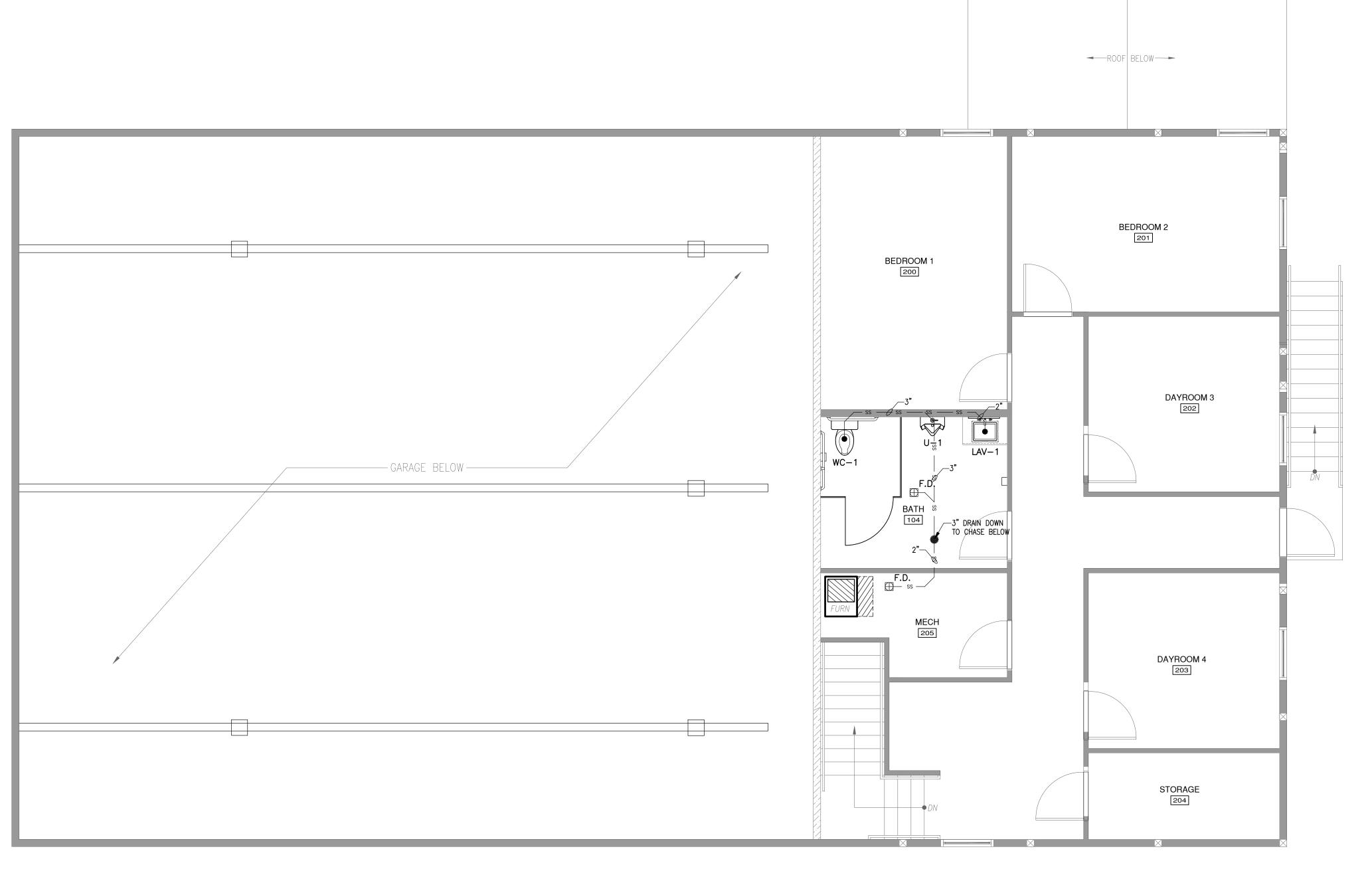
DRAWN BY B. CASEY

CHECKED BY D. BRUCE

FIRST FLOOR PLUMBING

PLUMBING WASTE PLAN

PL101



THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCH PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF CONSTRUCTION OF CONSTRUC





- PROVIDE TRENCH DRAIN AS NDS DURA SLOPE DS-097 WITH LOAD RATING FOR CLASS D HEAVY DUTY TRAFFIC, OR APPROVED EQUAL. PROVIDE ☐ DS-232 GRATES AND DS-200 CAST IRON FRAMES, OR AS RECOMMENDED BY TRENCH DRAIN SUPPLIER.
- $\langle 2 \rangle$ LOCATE NEW CLEAN OUT 5'-0" AWAY FROM BUILDING.

PLUMBING WASTE PLAN KEYNOTES:

(3) PROVIDE STAINLESS STEEL ACCESS PANEL INTO CHASE

GENERAL PLUMBING NOTES:

- ALL PLUMBING WORK IS TO BE IN ACCORDANCE WITH THE INDIANA PLUMBING CODE, 2012 EDITION (675 IAC 16-1.4) EFFECTIVE 12/24/12.
 - COORDINATE ALL NEW UNDERSLAB PIPING WITH ALL NEW AND EXISTING STRUCTURAL FOOTER/FOOTER PAD LOCATIONS.
- THIS CONTRACTOR SHALL COORDINATE INSTALLATIONS WITH ALL OTHER TRADES AS REQUIRED FOR A COMPLETE AND OPERABLE PLUMBING SYSTEM.
 - ALL INTERIOR HORIZONTAL STORM AND SANITARY PIPING SHALL BE INSTALLED AT THE
- MINIMUM SLOPES AS REQUIRED BY INDIANA PLUMBING CODE, U.N.O. CONTRACTOR TO REFERENCE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING. COORDINATE
- WITH GENERAL TRADES.
- PROVIDE WATER HAMMER ARRESTERS ON ALL QUICK-CLOSING VALVES PER THE PROJECT SPECIFICATIONS AND THE PDI WH-201 GUIDELINES.

PLUMBING PLAN NOTES:

- ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR. CONTRACTOR SHALL INSTALL SYSTEMS, EQUIPMENT AND COMPONENTS IN ACCORDANCE WITH MINIMUM REQUIREMENTS SHOWN IN THESE PLANS. ANY DEVIATION FROM THE DESIGN PLANS SHALL ONLY BE PERFORMED IF APPROVED BY THE OWNER REPRESENTATIVE OR DESIGN ENGINEER. ALL WORK SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES AND STANDARDS. HOWEVER, ANY DEVIATION FROM THE DESIGN PLANS IMPLIED BY LOCAL CODES THAT SUGGESTS INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHO INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHO APPROVAL BY THE OWNER REPRESENTATIVE OR THE DESIGN ENGINEER.
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- TERMINATES AT FLOOR SINK, FLOOR DRAIN OR OPEN HUB DRAIN.
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- ALL WATER PIPING TO BE CROSS-LINKED POLYETHYLENE (PEX) PIPING IN SIZES AS SHOWN ON DRAWINGS. PROVIDE BRASS PEX CRIMP FITTINGS MANUFACTURED TO ASTM F1807 STANDARD, OR POLY ALLOY PEX CRIMP FITTINGS MANUFACTURED TO ASTM F2159
- 2. SET TOP RIM OF ALL FLOOR SINKS, FLOOR DRAINS, AND TRENCH DRAINS FLUSH WITH
- 3. FLOOR DRAINS AS JOSAM, JR SMITH OF EQUAL AND SHALL INCLUDE INTEGRAL CLEAN OUT.
- 4. CLEAN OUTS SHALL BE FLUSH WITH FINISHED FLOOR OR FINISHED WALL AND INCLUDE BRASS THREADED CAP.
- 8. PROVIDE A 4" MINIMUM CLEAN OUT, NO LESS THAN 100 FEET APART, IN THE MAIN
- 20. ALL LINES SHALL BE SQUARE AND PLUMB WITH THE BUILDING
- 21. ALL DROPS TO FIXTURES SHALL BE 1/2" MINIMUM U.N.O.
- 23. PROVIDE TEMPERING VALVE AT WATER HEATER TO LIMIT LAV. WATER TEMPERATURE TO 110
- 24. PROVIDE LINE SIZE SHUT-OFF AT ALL EQUIPMENT LOCATIONS.
- 25. PROVIDE DIELECTRIC CONNECTIONS AT ALL LOCATIONS. WITH FERROUS MATERIALS.
- 26. WALL ASSEMBLY PENETRATIONS SHALL COMPLY WITHFIRESTOP SYSTEMS #W-L-1093 AND
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- 34. COORDINATE ALL FIXTURE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS.

SYMBOLS LEGEND

1 DEMOLITION NOTE 1 REVISION NOTE

(1) PLAN NOTE

D.S. DOWNSPOUT LOCATION

SECOND FLOOR

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WASTE PLAN

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D. BRUCE

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EQUIPMENT THAT ARE THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS.

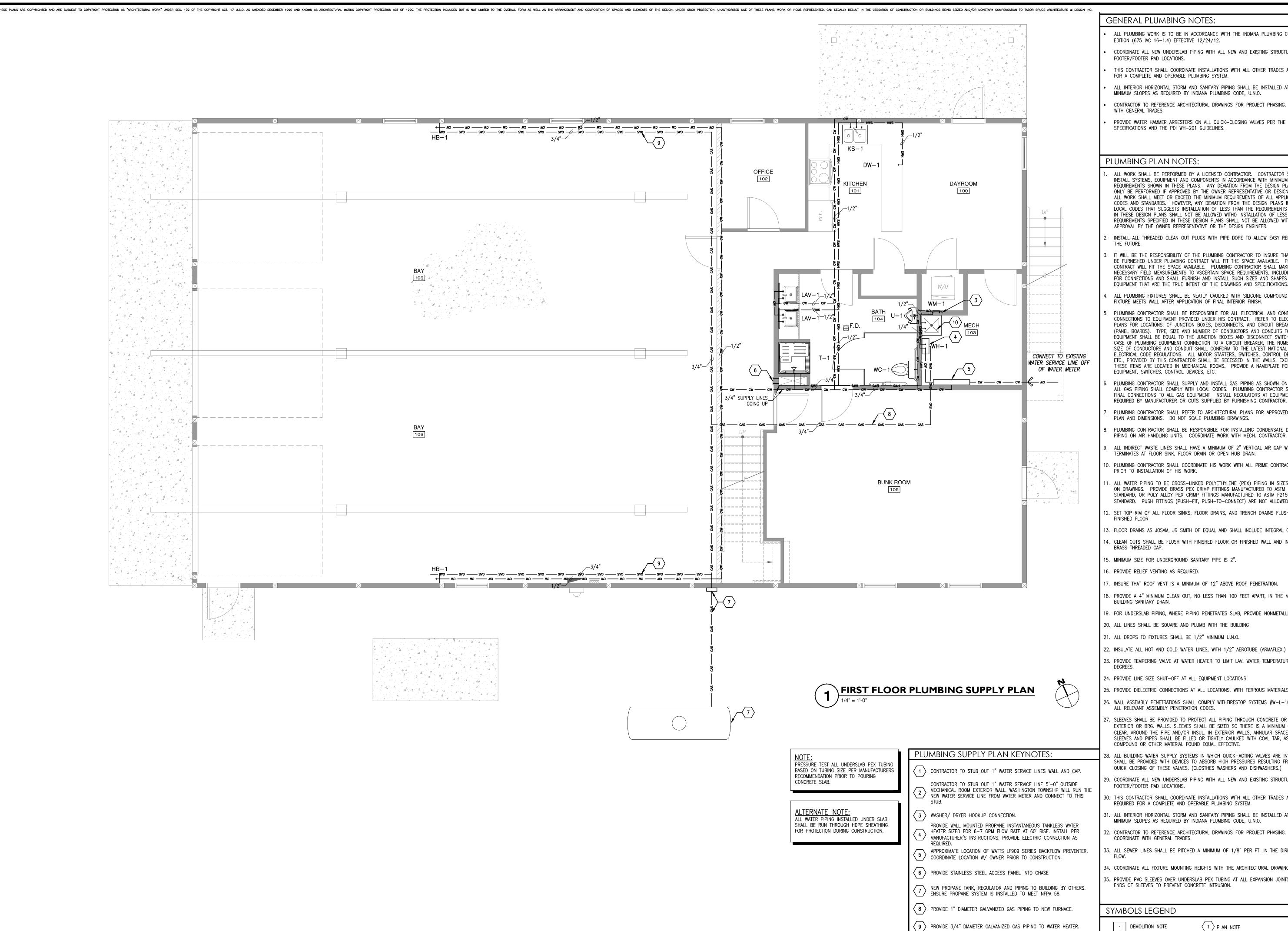
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- STANDARD. PUSH FITTINGS (PUSH-FIT, PUSH-TO-CONNECT) ARE NOT ALLOWED.
- FINISHED FLOOR
- 15. MINIMUM SIZE FOR UNDERGROUND SANITARY PIPE IS 2".
- 16. PROVIDE RELIEF VENTING AS REQUIRED.
- 7. INSURE THAT ROOF VENT IS A MINIMUM OF 12" ABOVE ROOF PENETRATION.
- BUILDING SANITARY DRAIN.
- 19. FOR UNDERSLAB PIPING, WHERE PIPING PENETRATES SLAB, PROVIDE NONMETALLIC SLEEVE.

- 22. INSULATE ALL HOT AND COLD WATER LINES, WITH 1/2" AEROTUBE (ARMAFLEX.)

- ALL RELEVANT ASSEMBLY PENETRATION CODES.
- COMPOUND OR OTHER MATERIAL FOUND EQUAL EFFECTIVE.
- QUICK CLOSING OF THESE VALVES. (CLOSTHES WASHERS AND DISHWASHERS.)
- FOOTER/FOOTER PAD LOCATIONS.
- REQUIRED FOR A COMPLETE AND OPERABLE PLUMBING SYSTEM.
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- 33. ALL SEWER LINES SHALL BE PITCHED A MINIMUM OF 1/8" PER FT. IN THE DIRECTION OF

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SYMBOLS LEGEND

1 REVISION NOTE

 $\langle 10 \rangle$ FLOOR MOUNTED MOP SINK.

1 DEMOLITION NOTE

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D.S. DOWNSPOUT LOCATION

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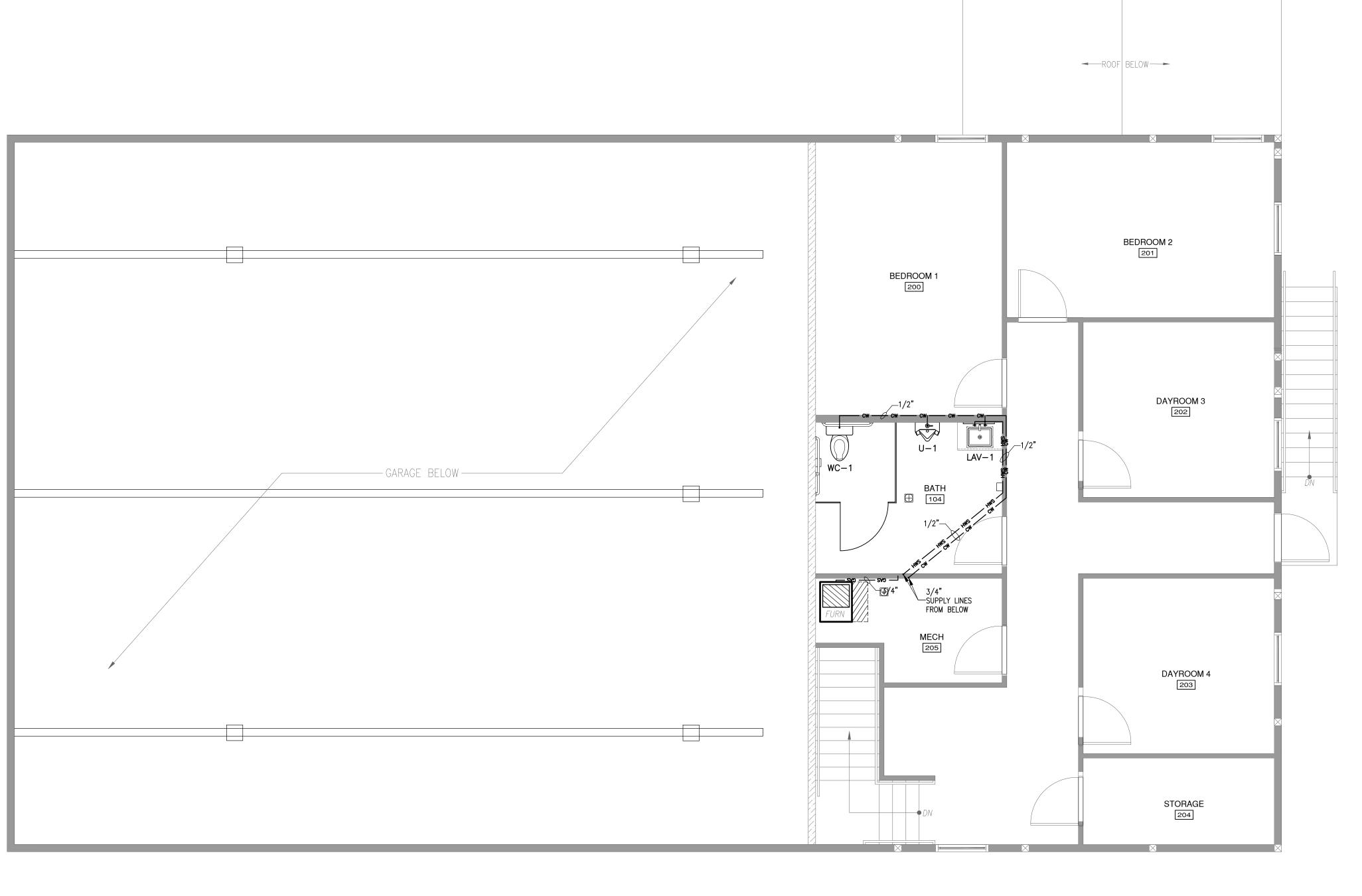
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> SHEET NAME FIRST FLOOR

PLUMBING SUPPLY PLAN



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PRESSURE TEST ALL UNDERSLAB PEX TUBING BASED ON TUBING SIZE PER MANUFACTURERS RECOMMENDATION PRIOR TO POURING CONCRETE SLAB.

ALTERNATE NOTE: ALL WATER PIPING INSTALLED UNDER SLAB SHALL BE RUN THROUGH HDPE SHEATHING FOR PROTECTION DURING CONSTRUCTION.

PLUMBING SUPPLY PLAN KEYNOTES:

- \langle 1 \rangle Contractor to stub out 1" water service lines wall and cap.
- CONTRACTOR TO STUB OUT 1" WATER SERVICE LINE 5'-0" OUTSIDE ackslash MECHANICAL ROOM EXTERIOR WALL. WASHINGTON TOWNSHIP WILL RUN THE NEW WATER SERVICE LINE FROM WATER METER AND CONNECT TO THIS
- 3 > WASHER/ DRYER HOOKUP CONNECTION.
- PROVIDE WALL MOUNTED PROPANE INSTANTANEOUS TANKLESS WATER HEATER SIZED FOR 6-7 GPM FLOW RATE AT 60° RISE. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE ELECTRIC CONNECTION AS
- APPROXIMATE LOCATION OF WATTS LF909 SERIES BACKFLOW PREVENTER. (3) COORDINATE LOCATION W/ OWNER PRIOR TO CONSTRUCTION.
- 6 PROVIDE STAINLESS STEEL ACCESS PANEL INTO CHASE
- NEW PROPANE TANK, REGULATOR AND PIPING TO BUILDING BY OTHERS.
- (8) PROVIDE 1" DIAMETER GALVANIZED GAS PIPING TO NEW FURNACE.
- (9) PROVIDE 3/4" DIAMETER GALVANIZED GAS PIPING TO WATER HEATER.

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- 8. PROVIDE A 4" MINIMUM CLEAN OUT, NO LESS THAN 100 FEET APART, IN THE MAIN BUILDING SANITARY DRAIN.
- 19. FOR UNDERSLAB PIPING, WHERE PIPING PENETRATES SLAB, PROVIDE NONMETALLIC SLEEVE.
- 20. ALL LINES SHALL BE SQUARE AND PLUMB WITH THE BUILDING
- 21. ALL DROPS TO FIXTURES SHALL BE 1/2" MINIMUM U.N.O.
- 22. INSULATE ALL HOT AND COLD WATER LINES, WITH 1/2" AEROTUBE (ARMAFLEX.)
- 23. PROVIDE TEMPERING VALVE AT WATER HEATER TO LIMIT LAV. WATER TEMPERATURE TO 110

COMPOUND OR OTHER MATERIAL FOUND EQUAL EFFECTIVE.

- 24. PROVIDE LINE SIZE SHUT-OFF AT ALL EQUIPMENT LOCATIONS. 25. PROVIDE DIELECTRIC CONNECTIONS AT ALL LOCATIONS. WITH FERROUS MATERIALS.
- 26. WALL ASSEMBLY PENETRATIONS SHALL COMPLY WITHFIRESTOP SYSTEMS #W-L-1093 AND
- ALL RELEVANT ASSEMBLY PENETRATION CODES. . SLEEVES SHALL BE PROVIDED TO PROTECT ALL PIPING THROUGH CONCRETE OR MASONRY EXTERIOR OR BRG. WALLS. SLEEVES SHALL BE SIZED SO THERE IS A MINIMUM OF 1/2" CLEAR. AROUND THE PIPE AND/OR INSUL. IN EXTERIOR WALLS, ANNULAR SPACE BETWEEN SLEEVES AND PIPES SHALL BE FILLED OR TIGHTLY CAULKED WITH COAL TAR, ASPHALTUM
- ALL BUILDING WATER SUPPLY SYSTEMS IN WHICH QUICK-ACTING VALVES ARE INSTALLED SHALL BE PROVIDED WITH DEVICES TO ABSORB HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. (CLOSTHES WASHERS AND DISHWASHERS.)
- 29. COORDINATE ALL NEW UNDERSLAB PIPING WITH ALL NEW AND EXISTING STRUCTURAL FOOTER/FOOTER PAD LOCATIONS.
-). THIS CONTRACTOR SHALL COORDINATE INSTALLATIONS WITH ALL OTHER TRADES AS
- REQUIRED FOR A COMPLETE AND OPERABLE PLUMBING SYSTEM. ALL INTERIOR HORIZONTAL STORM AND SANITARY PIPING SHALL BE INSTALLED AT THE
- MINIMUM SLOPES AS REQUIRED BY INDIANA PLUMBING CODE, U.N.O. 2. CONTRACTOR TO REFERENCE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING.
- COORDINATE WITH GENERAL TRADES.
- 33. ALL SEWER LINES SHALL BE PITCHED A MINIMUM OF 1/8" PER FT. IN THE DIRECTION OF
- 34. COORDINATE ALL FIXTURE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS. 5. PROVIDE PVC SLEEVES OVER UNDERSLAB PEX TUBING AT ALL EXPANSION JOINTS. TAPE ENDS OF SLEEVES TO PREVENT CONCRETE INTRUSION.

SYMBOLS LEGEND

1 REVISION NOTE

1 DEMOLITION NOTE

1 PLAN NOTE

D.S. DOWNSPOUT LOCATION

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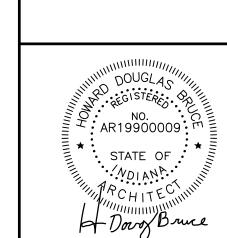
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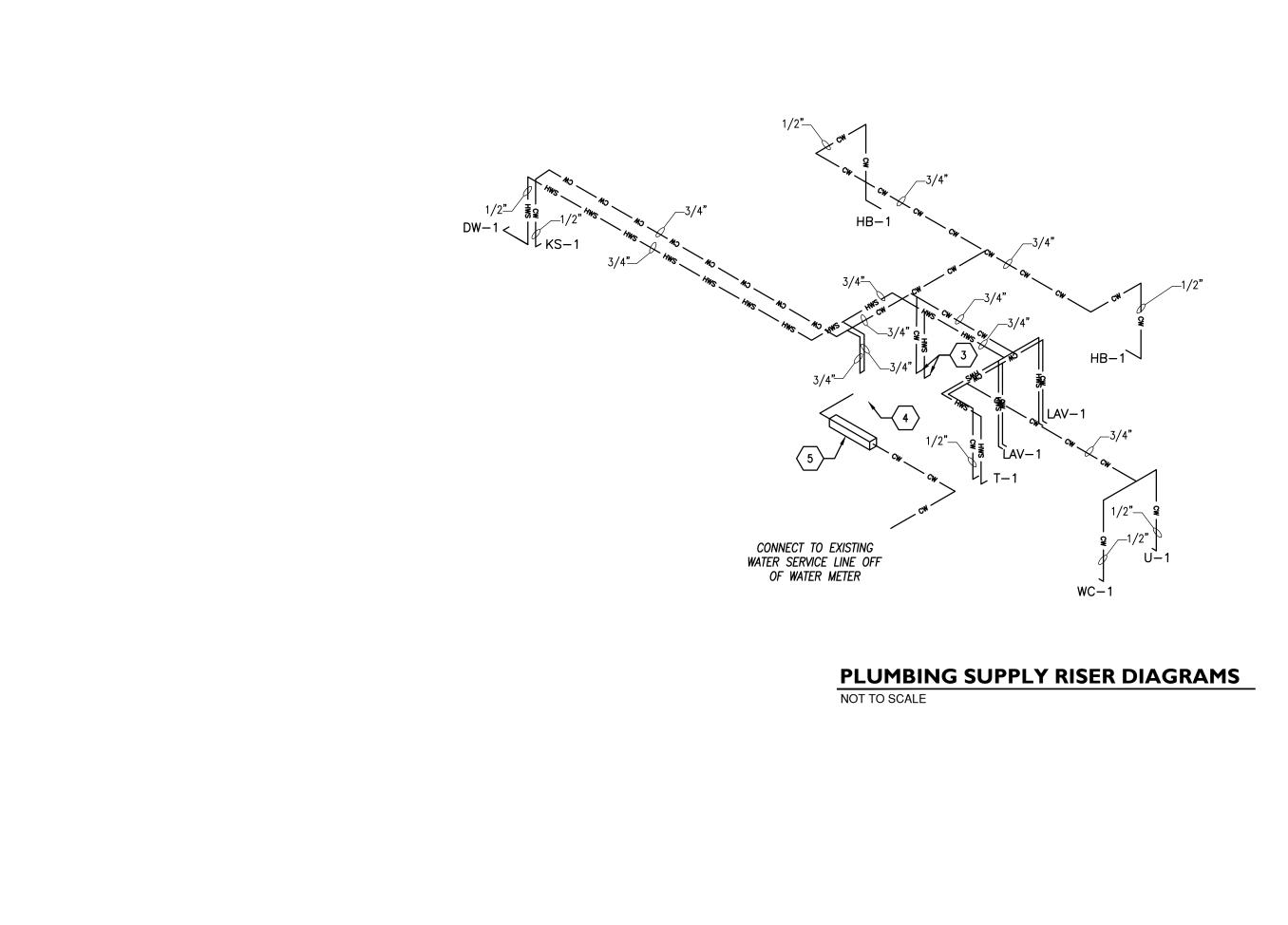
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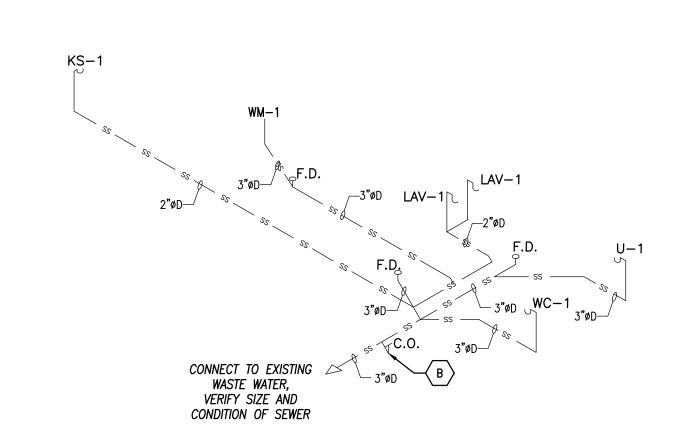
PROJECT NO. 2921 MARCH 26, 2024 DRAWN BY B. CASEY

CHECKED BY D. BRUCE

SECOND FLOOR PLUMBING SUPPLY PLAN



THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCH PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE CESATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SEC. 102 OF THE COPYRIGHT PROTECTION OF CONSTRUCTION OF CONSTRUC



PLUMBING WASTE RISER DIAGRAMS

PLUMBING WASTE PLAN KEYNOTES: PLUMBING SUPPLY PLAN KEYNOTES: (A) NEW TRENCH DRAIN. \langle 1 \rangle contractor to stub out 1" water service lines wall and cap. CONTRACTOR TO STUB OUT 1" WATER SERVICE LINE 5'-0" OUTSIDE $\langle B \rangle$ LOCATE NEW CLEAN OUT 5'-0" AWAY FROM BUILDING. MECHANICAL ROOM EXTERIOR WALL. WASHINGTON TOWNSHIP WILL RUN THE NEW WATER SERVICE LINE FROM WATER METER AND CONNECT TO THIS (3) WASHER/ DRYER HOOKUP CONNECTION. PROVIDE WALL MOUNTED PROPANE INSTANTANEOUS TANKLESS WATER HEATER SIZED FOR 6-7 GPM FLOW RATE AT 60° RISE. APPROXIMATE LOCATION OF WATTS LF909 SERIES BACKFLOW PREVENTER. COORDINATE LOCATION W/ OWNER PRIOR TO CONSTRUCTION.

NOT TO SCALE

GENERAL PLUMBING NOTES:

- ALL PLUMBING WORK IS TO BE IN ACCORDANCE WITH THE INDIANA PLUMBING CODE, 2012 EDITION (675 IAC 16-1.4) EFFECTIVE 12/24/12.
- COORDINATE ALL NEW UNDERSLAB PIPING WITH ALL NEW AND EXISTING STRUCTURAL FOOTER/FOOTER PAD LOCATIONS.
- THIS CONTRACTOR SHALL COORDINATE INSTALLATIONS WITH ALL OTHER TRADES AS REQUIRED
- FOR A COMPLETE AND OPERABLE PLUMBING SYSTEM. ALL INTERIOR HORIZONTAL STORM AND SANITARY PIPING SHALL BE INSTALLED AT THE
- MINIMUM SLOPES AS REQUIRED BY INDIANA PLUMBING CODE, U.N.O.
- CONTRACTOR TO REFERENCE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING. COORDINATE WITH GENERAL TRADES.
- PROVIDE WATER HAMMER ARRESTERS ON ALL QUICK-CLOSING VALVES PER THE PROJECT SPECIFICATIONS AND THE PDI WH-201 GUIDELINES.

PLUMBING PLAN NOTES:

- ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR. CONTRACTOR SHALL INSTALL SYSTEMS, EQUIPMENT AND COMPONENTS IN ACCORDANCE WITH MINIMUM REQUIREMENTS SHOWN IN THESE PLANS. ANY DEVIATION FROM THE DESIGN PLANS SHALL ONLY BE PERFORMED IF APPROVED BY THE OWNER REPRESENTATIVE OR DESIGN ENGINEER. ALL WORK SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES AND STANDARDS. HOWEVER, ANY DEVIATION FROM THE DESIGN PLANS IMPLIED BY LOCAL CODES THAT SUGGESTS INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHO INSTALLATION OF LESS THAN THE REQUIREMENTS SPECIFIED IN THESE DESIGN PLANS SHALL NOT BE ALLOWED WITHO APPROVAL BY THE OWNER REPRESENTATIVE OR THE DESIGN ENGINEER.
- INSTALL ALL THREADED CLEAN OUT PLUGS WITH PIPE DOPE TO ALLOW EASY REMOVAL IN
- IT WILL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO INSURE THAT ITEMS TO BE FURNISHED UNDER PLUMBING CONTRACT WILL FIT THE SPACE AVAILABLE. PLUMBING CONTRACT WILL FIT THE SPACE AVAILABLE. PLUMBING CONTRACTOR SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- ALL PLUMBING FIXTURES SHALL BE NEATLY CAULKED WITH SILICONE COMPOUND WHERE FIXTURE MEETS WALL AFTER APPLICATION OF FINAL INTERIOR FINISH.
- PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL AND CONTROL CONNECTIONS TO EQUIPMENT PROVIDED UNDER HIS CONTRACT. REFER TO ELECTRICAL PLANS FOR LOCATIONS. OF JUNCTION BOXES, DISCONNECTS, AND CIRCUIT BREAKERS (PANEL BOARDS). TYPE, SIZE AND NUMBER OF CONDUCTORS AND CONDUITS TO EQUIPMENT SHALL BE EQUAL TO THE JUNCTION BOXES AND DISCONNECT SWITCHES. IN CASE OF PLUMBING EQUIPMENT CONNECTION TO A CIRCUIT BREAKER, THE NUMBER AND SIZE OF CONDUCTORS AND CONDUIT SHALL CONFORM TO THE LATEST NATIONAL ELECTRICAL CODE REGULATIONS. ALL MOTOR STARTERS, SWITCHES, CONTROL DEVICES, ETC., PROVIDED BY THIS CONTRACTOR SHALL BE RECESSED IN THE WALLS, EXCEPT WHERE THESE ITEMS ARE LOCATED IN MECHANICAL ROOMS. PROVIDE A NAMEPLATE FOR ALL EQUIPMENT, SWITCHES, CONTROL DEVICES, ETC.
- PLUMBING CONTRACTOR SHALL SUPPLY AND INSTALL GAS PIPING AS SHOWN ON PLANS. ALL GAS PIPING SHALL COMPLY WITH LOCAL CODES. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL GAS EQUIPMENT INSTALL REGULATORS AT EQUIPMENT WHERE REQUIRED BY MANUFACTURER OR CUTS SUPPLIED BY FURNISHING CONTRACTOR.
- PLUMBING CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR APPROVED FLOOR PLAN AND DIMENSIONS. DO NOT SCALE PLUMBING DRAWINGS.
- PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONDENSATE DRAIN PIPING ON AIR HANDLING UNITS. COORDINATE WORK WITH MECH. CONTRACTOR.
- ALL INDIRECT WASTE LINES SHALL HAVE A MINIMUM OF 2" VERTICAL AIR GAP WHERE IT TERMINATES AT FLOOR SINK, FLOOR DRAIN OR OPEN HUB DRAIN.
- . PLUMBING CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL PRIME CONTRACTORS
- PRIOR TO INSTALLATION OF HIS WORK.
- ALL WATER PIPING TO BE CROSS-LINKED POLYETHYLENE (PEX) PIPING IN SIZES AS SHOWN ON DRAWINGS. PROVIDE BRASS PEX CRIMP FITTINGS MANUFACTURED TO ASTM F1807 STANDARD, OR POLY ALLOY PEX CRIMP FITTINGS MANUFACTURED TO ASTM F2159 STANDARD. PUSH FITTINGS (PUSH-FIT, PUSH-TO-CONNECT) ARE NOT ALLOWED.
- 2. SET TOP RIM OF ALL FLOOR SINKS, FLOOR DRAINS, AND TRENCH DRAINS FLUSH WITH
- 3. FLOOR DRAINS AS JOSAM, JR SMITH OF EQUAL AND SHALL INCLUDE INTEGRAL CLEAN OUT.
- 4. CLEAN OUTS SHALL BE FLUSH WITH FINISHED FLOOR OR FINISHED WALL AND INCLUDE BRASS THREADED CAP.
- 5. MINIMUM SIZE FOR UNDERGROUND SANITARY PIPE IS 2".
- 6. PROVIDE RELIEF VENTING AS REQUIRED.
- 7. INSURE THAT ROOF VENT IS A MINIMUM OF 12" ABOVE ROOF PENETRATION.
- 8. PROVIDE A 4" MINIMUM CLEAN OUT, NO LESS THAN 100 FEET APART, IN THE MAIN BUILDING SANITARY DRAIN.
- FOR UNDERSLAB PIPING, WHERE PIPING PENETRATES SLAB, PROVIDE NONMETALLIC SLEEVE.
- 20. ALL LINES SHALL BE SQUARE AND PLUMB WITH THE BUILDING
- 21. ALL DROPS TO FIXTURES SHALL BE 1/2" MINIMUM U.N.O.
- 22. INSULATE ALL HOT AND COLD WATER LINES, WITH 1/2" AEROTUBE (ARMAFLEX.)
- 24. PROVIDE LINE SIZE SHUT-OFF AT ALL EQUIPMENT LOCATIONS. 25. PROVIDE DIELECTRIC CONNECTIONS AT ALL LOCATIONS. WITH FERROUS MATERIALS.
- 6. WALL ASSEMBLY PENETRATIONS SHALL COMPLY WITHFIRESTOP SYSTEMS #W-L-1093 AND

23. PROVIDE TEMPERING VALVE AT WATER HEATER TO LIMIT LAV. WATER TEMPERATURE TO 110

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-). THIS CONTRACTOR SHALL COORDINATE INSTALLATIONS WITH ALL OTHER TRADES AS REQUIRED FOR A COMPLETE AND OPERABLE PLUMBING SYSTEM.
- . ALL INTERIOR HORIZONTAL STORM AND SANITARY PIPING SHALL BE INSTALLED AT THE MINIMUM SLOPES AS REQUIRED BY INDIANA PLUMBING CODE, U.N.O.
- 2. CONTRACTOR TO REFERENCE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING. COORDINATE WITH GENERAL TRADES.
- 3. ALL SEWER LINES SHALL BE PITCHED A MINIMUM OF 1/8" PER FT. IN THE DIRECTION OF
- 34. COORDINATE ALL FIXTURE MOUNTING HEIGHTS WITH THE ARCHITECTURAL DRAWINGS. 5. PROVIDE PVC SLEEVES OVER UNDERSLAB PEX TUBING AT ALL EXPANSION JOINTS. TAPE ENDS OF SLEEVES TO PREVENT CONCRETE INTRUSION.

YMBOLS LEGEND	

(1) PLAN NOTE 1 DEMOLITION NOTE $/_1$ REVISION NOTE D.S. DOWNSPOUT LOCATION

REVISIONS

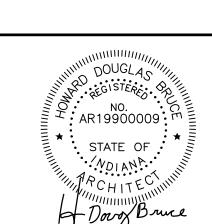
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PROJECT NO. 2921 MARCH 26, 2024 DRAWN BY A. NOWLIN CHECKED BY D. BRUCE

> PLUMBING RISER DIAGRAMS

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AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990. MECHANICAL ABBREVIATIONS OPP ORIG OPPOSITE ANODIZED ALUMINUM EXPANSION ORIGINAL EXP PUMP AIR CONDITIONING EXTERIOR AIR COOLED CHILLER PRIMARY AIR FACE AREA ACCH AIR COOLED CONDENSING UNIT FAN COIL UNIT PUMPED CONDENSATE FCU ADD ADDITION FLEXIBLE CONNECTION PRESSURE DROP ACCESS DOOR FIRE DAMPER PNEUMATIC ELECTRIC FLOOR DRAIN AIR FLOW CONTROL VALVE POST INDICATOR VALVE AFCV ABOVE FINISHED FLOOR FIRE HOSE CABINET PREFAB PREFABRICATED AFMS AIR FLOW MEASURING STATION FINISH PRESS PRESSURE FIN FIRE LINE PROP PROPELLER AIR HANDLING UNIT PRV PRESSURE REDUCING VALVE ALTERNATE FLEXIBLE POUNDS PER SQUARE INCH **FLOOR** AMBIENT FUEL OIL GAUGE ACCESS PANEL PTU POWERED TERMINAL UNIT A/P FOG ACID PROOF FUEL OIL RETURN PUH PROPELLER UNIT HEATER APPLICATION PART LOAD VALUE FUEL OIL SUPPLY RETURN AIR API V APROX APPROXIMATE RAD RADIATION FUFI OII TANK VENT FOV RACP RADIANT CEILING PANEL AIR RELIEF VENT FAN POWERED VAV BOX ROOF DRAIN AUTOMATIC FIRE AND SMOKE DAMPER AUTO REC RECEIVER ACID VENT FINNED TUBE RADIATION AVERAGE FEET PER MINUTE RECIR RECIRCULATING RECTANGULAR ACID WASTE FLOAT & THERMOSTATIC (TRAP) BACKDRAFT DAMPER RFG REGISTER BDD **FURNACE** FURN BOILER FEED WATER FACE VELOCITY ROOF EXHAUST FAN BFW REINF REINFORCED BUILDING BLDG GAS REL RELIEF BI OW-OFF GAUGE RET BSMT BASEMENT RETURN GALVANIZED GALV REQ'D REQUIRED BATH TUB GENERAL CONTRACTOR BOTTOM RODDING HOLF BTM GENERATOR BTUH BRITISH THERMAL UNIT / HOUR GALLONS PER MINUTE RELATIVE HUMIDITY GPM CAP CAPACITY GREASE TRAP REVOLUTIONS PER MINUTE CATCH BASIN HOSE BIBB CABINET CONVECTOR HEIGHT ROOF VENT CUBIC FEET PER MINUTE SOUND ATTENUATOR HEPA FILTER SUPPLY AIR CHILLED WATER RETURN HORIZONTAL HORIZ HORSE POWER SANITARY CHILLED WATER SUPPLY SILL COCK HIGH PRESSURE STEAM RETURN CAST IRON SOFT COLD WATER COOLING HIGH PRESSURE STEAM SUPPLY SCW CLSK CLINICAL SERVICE SINK HYDRONIC RADIANT CEILING PANEL SHOWER DRAIN SMOKE DAMPER CI FANOUT HFATING SECTION COMP COMPRESSOR HEATING, VENTILATING, & AIR CONDITIONING HVAC CONC CONCRETE HOT WATER (DOMESTIC) SHOWER HEAD HW SHEET COND CONDENSATE HOT WATER RETURN (HVAC) HWR SINK CONN CONNECTION HOT WATER SUPPLY (HVAC) HWS STATIC PRESSURE CONSTRUCTION INLINE CENTRIFUGAL FAN ICF SPECIFICATIONS CONT CONTINUOUS INSIDE DIAMETER SPRINKI FR CONTR CONTRACTOR INCIN INCINERATOR CONVECTOR SQUARE INCLUDE INCL STAINLESS STEEL CONDENSATE PUMP INSULATION INSUL STORM COEFFICIENT OF PERFORMANCE INTERIOR STAT THERMOSTAT CONDENSER WATER RETURN INVERT INV STANDARD CONDENSER WATER SUPPLY STD JANITORS DRAIN STEAM CABINET SINK STM KILOWATT COOLING TOWER STR STRUCTURAL LEAVING AIR TEMPERATURE LAT SUPPLY CABINET UNIT HEATER LAVATORY SUSPENDED CW COLD WATER SUSP LBS/HR POUNDS PER HOUR TEMPERATURE DIFFERENCE DECIBELS LAVATORY IN CABINET TEMPERATURE DRY BULB (TEMPERATURE) LINEAR FEET TOTAL DETAIL TOT LOCATION TOTAL STATIC PRESSURE DRINKING FOUNTAIN LOW PRESSURE STEAM RETURN LPR TEMPERED WATER DIAMETER LOW PRESSURE STEAM SUPPLY LPS TYPICAL DIFF DIFFUSER TYP LOCAL TEMPERATURE CONTROL PANEL DISCH UNDERCUT DISCHARGE LVG UNIT HEATER DOOR LOUVER LEAVING WATER TEMPERATURE URINAI MAXIMUM UNIT VENTILATOR DOWNSPOUT THOUSANDS OF BTU/HR MBH DRAWING MOTOR CONTROL CENTER MCC VAI VF DIRECT EXPANSION MECH MECHANICAL VACUUM ENTERING AIR TEMPERATURE MIXING FAUCET VARIABLE AIR VOLUME EXHAUST AIR MANUFACTURER MFR VOLUME DAMPER EQUIPMENT DRAIN MANHOLE VELOCITY FLECTRIC DUCT AIR MINIMUM VENT VENTILATOR ENERGY EFFICIENCY RATIO MISCELLANEOUS MISC VSMC VARIABLE SPEED MOTOR CONTROLLER EXHAUST FAN MEDIUM PRESSURE STEAM RETURN VITRIFIED TILE FFFICIENCY MEDIUM PRESSURE STEAM SUPPLY VENT THRU ROOF VTR ELEVATION MTD WASTF END OF MAIN DRIP (STEAM) NORMALLY CLOSED WITH EXPANDED METAL GRILLE NEGATIVE WB WET BULB (TEMPERATURE) ENCL ENCLOSURE NIC NOT IN CONTRACT NORMALLY OPEN WALL EXHAUST FAN END OF MAIN DRIP NOT TO SCALE WFR WALL FIN RADIATION EQUIP EQUIPMENT PHASE OR DIAMETER (DUCT) WITHOUT EXTERNAL STATIC PRESSURE OUTSIDE AIR WEATHERPROOF EXPANSION TANK OUTSIDE DIAMETER WT WEIGHT ELECTRIC UNIT HEATER OFD OVERFLOW ROOF DRAIN WTR WATER

OPNG OPENING

ENTERING WATER TEMPERATURE

EXHAUST

	PIPING SYMBOLS
	DOMESTIC COLD WATER
—— нws ——	DOMESTIC HOT WATER
FS	FIRE SUPPRESSION
——— GAS ———	NATURAL GAS SERVICE
ss	SANITARY SEWER
SD	STORM DRAIN
	VENT
с——	RISER DOWN (ELBOW)
<u> </u>	RISER UP (ELBOW)
├ - ─ -	CAPPED PIPE OR TEE
——	FLOW IN DIRECTION OF ARROW
──	WATER HAMMER ARRESTER
$\begin{array}{c c} & & \\ & & \\ \hline \end{array}$	SHUTOFF VALVE
⊢-ф	BALL VALVE
<u></u>	CHECK VALVE
	BALANCING VALVE
├ 1888 — 1888 — 1888 →	THERMOMETER
 	UNION (DIELECTRIC OR AS NOTED)
A	TEMPERATURE & PRESSURE RELIEF VALVE
C.0.	FLOOR/GRADE CLEAN-OUT
F.D.	FLOOR DRAIN
+	HOSE BIBB
RD RDO	ROOF DRAIN/OVERFLOW

REFERENCE SECTION LOCATION THROUGH

REFERENCE DETAIL LOCATION FOR ADDITIONAL INFORMATION.

REFERENCE ELEVATION LOCATION FOR ADDITIONAL INFORMATION.

_ ELEVATION LOC. IN

ELEVATION LOC. @

SUBSET SHEET

INTERIOR ELEVATION INDICATOR

DETAIL LOC. IN DWG. MODULE

Left Detail Loc. @ Subset sheet

BEYOND AREA

EXTENSION

DWG. MODULE

PHOTO LOC. @

SUBSET SHEET

PHOTOGRAPH INDICATOR

101

AN AREA FOR ADDITIONAL INFORMATION.

SECTION INDICATOR:

\AE000 /

SECTION INDICATOR:

ELEVATION INDICATOR:

SECTION LOC. IN DWG. MODULE

SECTION LOC. @

LARGE SCALE VIEW

LOC. IN DWG. MODULE

LARGE SCALE VIEW LOC. @ SUBSET SHEET

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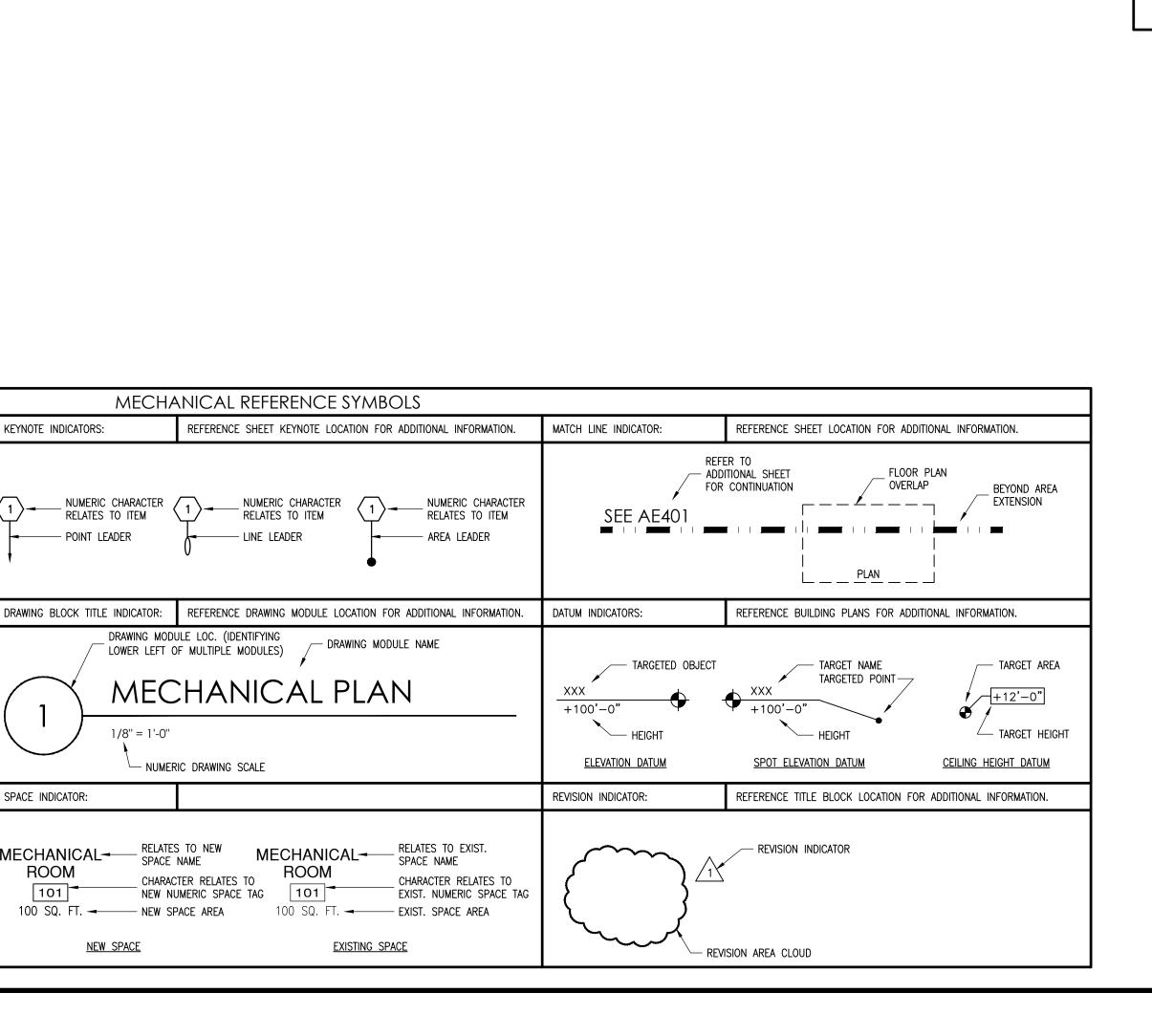
ELEVATION LOC. @

SUBSET SHEET

EXTERIOR ELEVATION INDICATOR

DWG. MODULE

	MECHANIC	al Symbol	_\$
	MECHANICAL EQUIPMENT	∑ ∆300	SQUARE DIFFUSER (TYPE & AIR QUANTITY IN CFM INDICATED)
	SUPPLY AIR DUCT UP	∑ 6000	ROUND DIFFUSER (TYPE & AIR QUANTITY IN CFM INDICATED)
×	SUPPLY AIR DUCT DOWN	<u></u>	SUPPLY OUTLET (NOMINAL SIZE, TYPE, & AIR QUANTITY IN CFM INDICATED)
	RETURN/EXHAUST AIR DUCT UP	₹	EXHAUST OR RETURN INLET (NOMINAL SIZE, TYPE, & AIR QUANTITY IN CFM INDICATED)
	RETURN/EXHAUST AIR DUCT DOWN	\$\begin{align*} \sum_{(+12")}^{400} \\ \end{align*}	ALL UNITS LOCATED IN OR NEAR CEILING, UNLESS DIMENSION SHOWN INDICATING (HEIGHT A.F.F.)
Z 10X8 Z	RECTANGULAR DUCT SIZE (FIRST DIMENSION LISTED IS DIMENSION SHOWN IN VIEW)	UC 1/2"	DOOR, UNDERCUT (SIZE & AIR QUANTITY IN CFM INDICATED)
10"ø {	ROUND DUCT SIZE	□ DG 1 Ф 600	DOOR GRILLE (FREE AREA REQUIRED & AIR QUANTITY IN CFM INDICATE
	AIR DIVERTER (EXTRACTOR)		
VD VD	VOLUME DAMPER		
BDD	BACK DRAFT DAMPER		
		T	THERMOSTAT
	TURNING VANES	-	SUPPLY AIR DIRECTION
CRER A		~ ~~~	RETURN, EXHAUST, OR RELIEF AIR DIRECTION
	MANUAL SPLITTER DAMPER	SACD	SUPPLY AIR CEILING DIFFUSER
		SAWD	SUPPLY AIR WALL DIFFUSER
<u> </u>	FLEXIBLE CONNECTION	RACG	RETURN AIR CEILING GRILLE
	TEMBLE CONNECTION	RAWG	RETURN AIR WALL GRILLE



GENERAL MECHANICAL NOTES:

- HVAC SUBCONTRACTOR SHALL COORDINATE W/ GENERAL CONTRACTOR FOR ALL REQUIREMENTS OF SIZE, LOC., SCHEDULES, ETC., OF ALL THRU-ROOF & WALL
- ALL SUPPLY & RETURN DUCTWORK SHALL BE GALV. STL. SIZED AS INDICATED, CONSTRUCTED & INSTALLED IN ACCORDANCE W/ THE LATEST EDITION OF SMACNA 1/2" INSULATIVE DUCT LINERS. DUCT SIZES INDICATED ON PLANS ARE IN INCH DIMENSIONS EXCLUSIVE OF LINER.
- ALL REGISTERS & GRILLS SHALL BE HART & COOLEY & SIZED AS REQ'D. FOR CFM NOTED
- EXTEND PVC CONDENSATE DRAIN TO 2" STANDPIPE, COORDINATE W/ PLUMBING CONTRACTOR.
- . COORDINATE ALL OPENINGS THROUGH NEW WALL & FLR. CONSTRUCTION W/ GENERAL
- REVIEW RETURN AIR PATH BACK TO ALL HVAC EQUIPMENT. PROVIDE RETURN AIR OPENINGS AND/OR TRANSFER DUCTS IN WALLS ABOVE THE CEILING WHERE REQUIRED. COORDINATE WITH GENERAL TRADES. VELOCITY THRU R.A. OPENINGS SHALL NOT EXCEED 500 FPM. REFERENCE ARCHITECTURAL DRAWINGS FOR WALL EXTENDING TO DECK.
- 13. COORDINATE ROUTING OF DUCTWORK, PIPING & EQUIPMENT W/ ALL OTHER TRADES.
- 4. PROVIDE 45'/90' FITTING W/ VOLUME DAMPER LIKE FLEXMASTER MODEL STO @ ALL SUPPLY AIR BRANCH DUCTWORK TAKEOFFS.
- 5. COORDINATE LOC'S. OF ALL GRILLES, REGISTERS & DIFFUSERS IN CEILINGS W/ THE CLG. SYSTEM AND LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING PLANS.
- 3. PROVIDE VOLUME DAMPERS IN ALL SUPPLY AIR BRANCH DUCTWORK AS REQ'D. TO BALANCE EA. SYSTEM & LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING
- 7. ROUND DUCT SIZE TO BE THE SAME SIZE AS THE DIFFUSER INLET NECK, U.N.O.
- 8. MAX. LENGTH OF FLEXIBLE DUCTWORK SHALL BE 5'-0".
- 9. ALL FURNACE SYSTEM LOW PRESSURE RECTANGULAR SUPPLY & RETURN AIR DUCTWORK SHALL BE INTERNALLY INSUL. ROUND SUPPLY & RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSUL. OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSUL. SEE SPECS FOR ADDT'L INSUL. REQUIREMENTS.
- 20. BOX AROUND DUCT SIZE INDICATES INTERNALLY LINED DUCTWORK. SIZE SHOWN INDICATES ACTUAL FREE AREA. REF. MECHANICAL SPECS.
- TRANSFER AIR DUCTS SHALL BE INTERNALLY LINED W/ INSUL. TO DETER NOISE TRANSFER. SIZE SHOWN ON PLAN INDICATES ACTUAL FREE SPACÉ.
- 22. SQUARE DIFFUSERS ARE 4-WAY BLOW U.N.O..
- 23. WIRING TO THERMOSTATS SHALL BE CONCEALED WITHIN THE WALL.
- 24. DUCTWORK SHALL BE LOC. IN THE CLG. PLENUM (ABOVE LAY-IN CEILING U.N.O.

THESE NOTES APPLY TO ALL MECHANICAL SHEETS.

- ALL MECHANICAL WORK IS TO BE IN ACCORDANCE W/ THE INDIANA MECHANICAL CODE, 1997 EDITION (IMC, 1996 EDITION) (675 IAC 18-1.3) EFFECTIVE 1/23/98 - REPEALED
- HVAC SUBCONTRACTOR SHALL COORDINATE W/ THE ELECTRICAL SUBCONTRACTOR FOR ANY & ALL ELECTRICAL REQUIREMENTS OF ACTUAL MECHANICAL EQUIPMENT UTILIZED, INCLUDING LOW & HIGH VOLTAGE WIRING, DISCONNECTS, CIRCUIT BREAKERS, ETC.
- PENETRATIONS REQ'D. FOR INSTALLATION OF ALL MECHANICAL SYSTEMS & DUCTWORK.
- STANDARDS FOR HVAC & DUCTWORK CONSTRUCTION. ALL SUPPLY AIR DUCTS SHALL HAVE
- @ 500 FPM MAX. FACE VELOCITY. ALL REGISTERS SHALL HAVE REGULATING DAMPERS.
- PROVIDE ALL CONTROL & INTERLOCK WIRING COMPLETE FOR THIS PROJECT.
- COORDINATE INSTALLATION OF WORK W/ ALL OTHER TRADES & CONDITIONS AS REQ'D. FOR A COMPLETE & OPERABLE HVAC SYSTEM. CLEARANCES ABOVE CEILINGS ARE EXTREMELY TIGHT IN CERTAIN AREAS.
- 2. COORDINATE EXACT LOC. OF ALL EQUIP. & DUCTWORK W/ THE CLG. SYSTEM & LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING PLANS.
- PROVIDE FLEXIBLE DUCT UPSTREAM OF EA. DIFFUSER WHERE SHOWN.
- PLANS. PROVIDE FLEXIBLE DUCT UPSTREAM OF EA. DIFFUSER WHERE SHOWN.

- 5. COORDINATE ALL DUCTWORK ROUTING & DUCTWORK ELEVATIONS W/ STRUCTURAL SUPPORTS FOR PARTITION WALLS. REF. STRUCTURAL DRAWINGS FOR SIZE & LOC'S. OF PARTITION WALL SUPPORTS.

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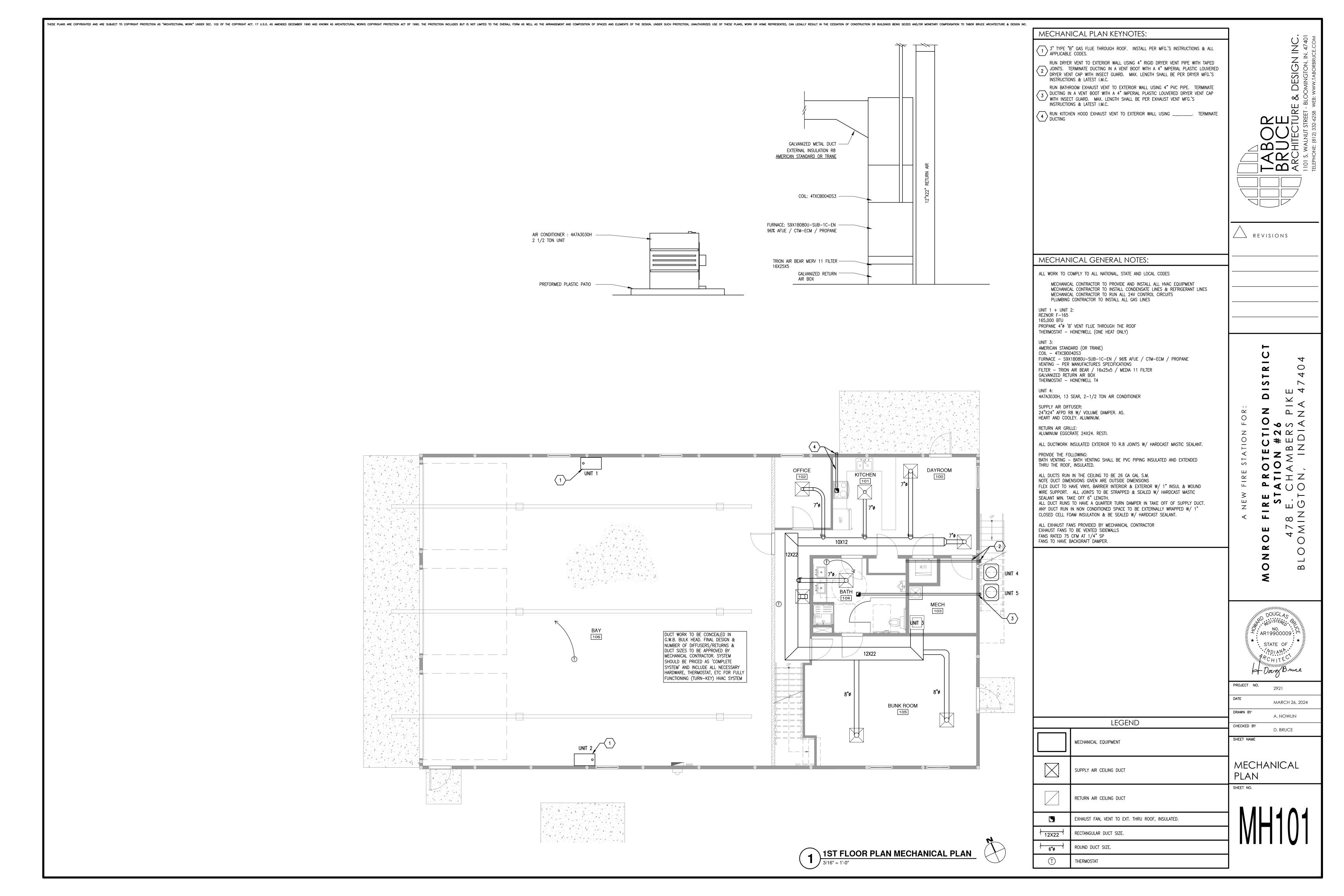
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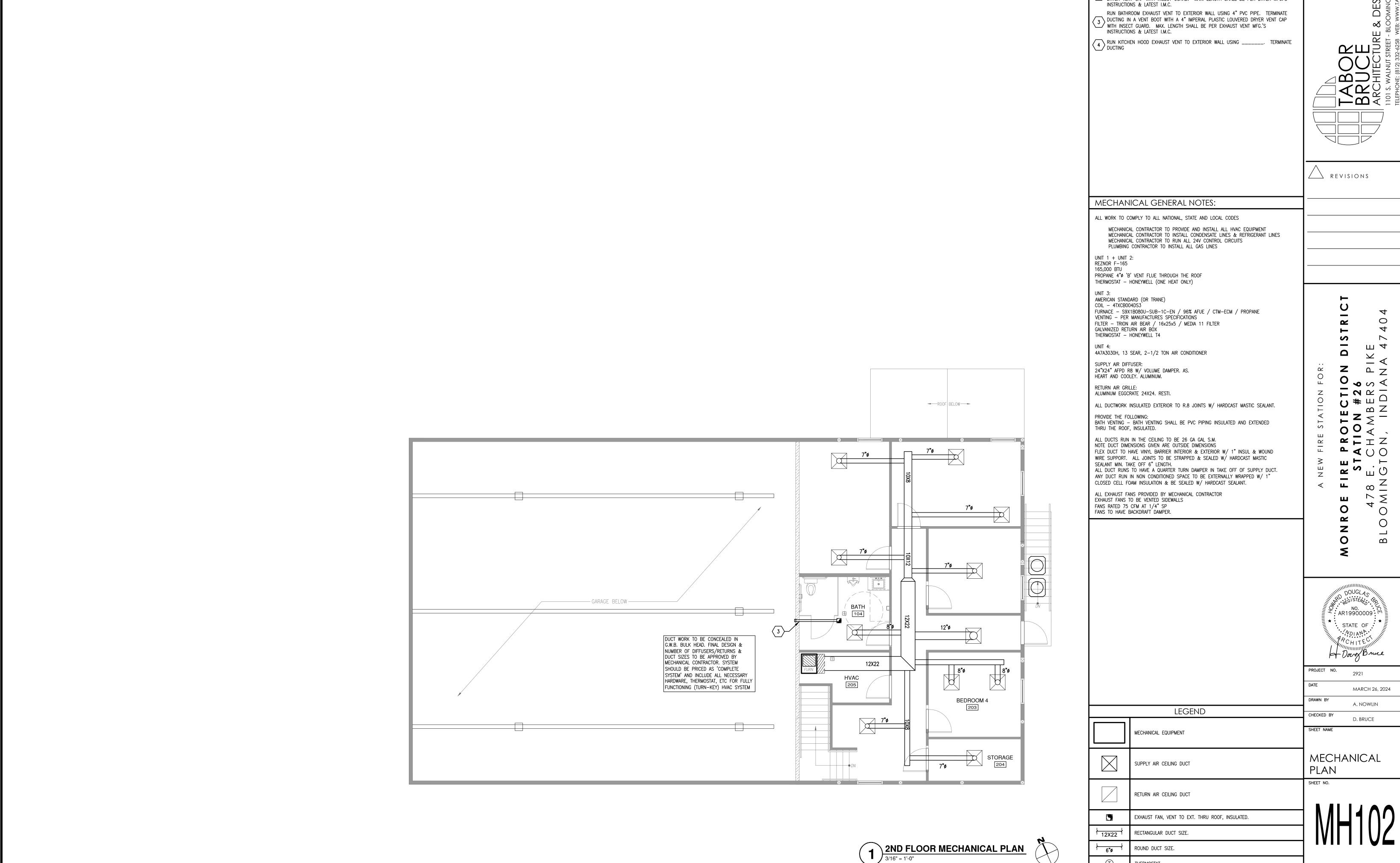
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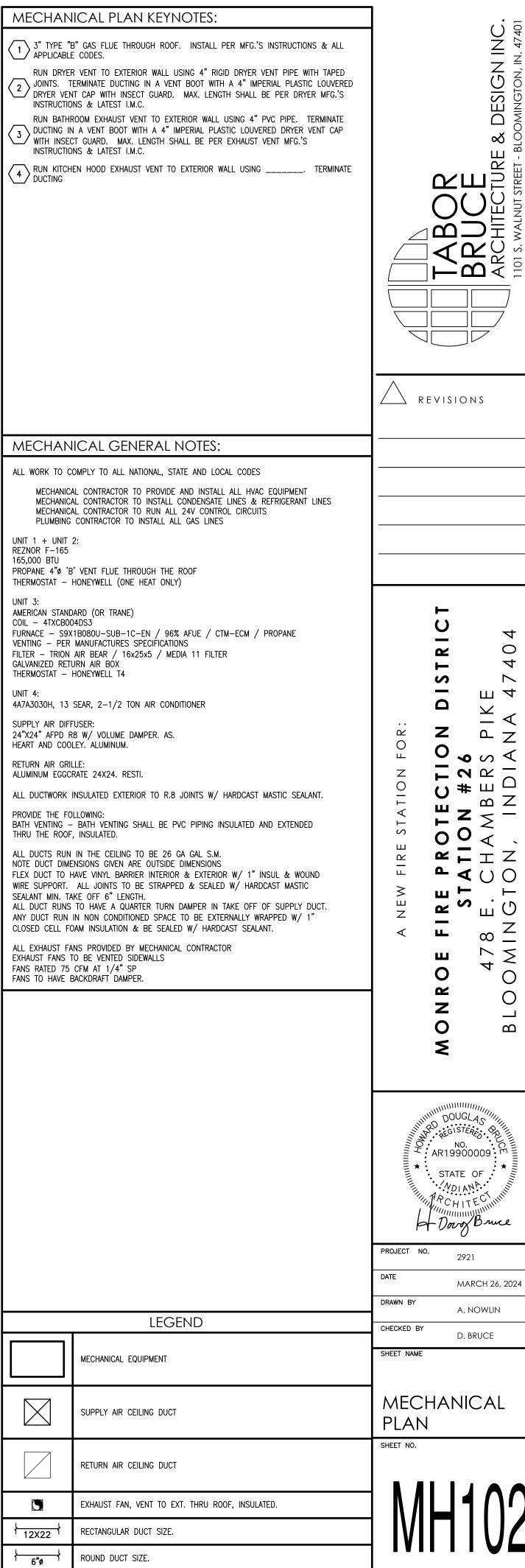
SYMBOLS & **ABBREVIATIONS**

SHEET NO.





THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORKS COPYRIGHT PROTECTION OF SPACES AND ELEMENTS OF THE DESIGN UNC. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORKS COPYRIGHT PROTECTION OF SPACES AND ELEMENTS OF THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE COPYRIGHT PROTECTION ACT OF T



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				PLUME	BING FIXT	URE SCH	HEDULE					
MARK	VO.	LAV-1	MB-1	NFWH-1	KS-1	T-1	U-1	WC-1	WH-1	WM-1	HB-1	MB-1
DESCR	PTION	LAVATORY	MOP BASIN	WALL HYDRANT	KITCHEN SINK	SHOWER	URINAL	WATER CLOSET	WATER HEATER	WASHER BOX	HOSE BIB	MOP BASIN
1ANUF	ACTURER	KOHLER	MUSTEE	WOODFORD	ELKAY	SWAN	KOHLER	KOHLER	RINNAI	GUY GRAY	-	MUSTEE
IODEL	NAME	MEMOIRS	-	_	GOURMET	VERITEK	DEXTER	PERSUADE	SENSEI	_	-	63 M
IODEL	NUMBER	2337-1-0	63M	B65	CR3321	R-3636	K-5452-ER-0	K-7579-0	RU199	B200	_	_
ONTR	DLS		-	_	AMERICAN STANDARD	DELTA CLASSIC	-	-	_	_	_	_
NO	HW	3/8"ø	1/2"ø	_	3/8"ø	1/2 " ø	_	_	3/4"ø	1/2"ø	_	_
CONNECTION	CW	3/8"ø	1/2"ø	_	3/8"ø	1/2"ø	3/4"ø	3/8"ø	3/4"ø	1/2"ø	1/2"ø	1/2 " ø
NC	WASTE	1 1/2"ø	3"ø	_	2"ø	2"ø	2"ø	3"ø	-	2"ø	_	_
	VENT	1 1/2"ø	1 1/2"ø	_	1 1/2"ø	1 1/2"ø	1 1/2"ø	2"ø	2"ø	2"ø	_	_
PIPE	TRAP	1 1/2"ø	3"ø	_	1 1/2"ø	2"ø	2"ø	3"ø	_	_	_	_
MAGE												
PEC.	SECTION	_	-	_	_	_	_	_	_	_		
REMARKS		COLOR; WHITE DROP-IN, SINGLE HOLE, W/ GROHE 23577EN3 FAUCET (BRUSHED NICKEL)	FLOOR MOUNTED, MUSTEE SERVICE FAUCET 63.600A	RECESS MOUNTED, LOCKING COVER, 3/4" HOSE OUTLET W/ REMOVABLE TEE SPOUT OUTLET VB W/ 3/4" INLET/OUTLET		SW-7036 SHOWER WALL KIT, DELTA CLASSIC 132900 CONTROLS	COLOR; WHITE (ADA COMPLIANT IF RIM IS MOUNTED MAX 17" A.F.F.)	COLOR; WHITE PROVIDE SEAT AS KOHLER STONEWOOD, K-20466-0	WALL MOUNT MINI—TANK PROPANE WATER HEATER, MAX INPUT CAPACITY 199000 BTU, 6.4 GPM AT 60° RISE		FREEZE PROOF, ANTI-SIPHON HOSE BIB. INSTALL AT 30" ABOVE FINISHED FLOOR	24"W X 24"L 10"D MOP BASI FAUCET HARDWA IS SPEAKMAN SC-5811-RCF

	PIPING INSULATION SCHEDULE								
SYSTEM	М	DOMESTIC HOT WATER & RETURN	DOMESTIC HOT WATER & RETURN, & TEMPERED	DOMESTIC COLD WATER & RETURN	HORIZ. STORM WATER (NOTE 3)				
FLUID	TEMP RANGE (F°)	131-160	100-130	40-75	40-75				
INSULA	ITION TYPE	MF	MF OR FE	MF OR FE	MF OR FE				
JACKET	T TYPE	_	_	_	_				
VAPOR	BARRIER REQ'D.	-	-	YES	YES				
:55	RUNOUTS (NOTES 1 & 2)	0.5	0.5	-	_				
THICKNESS CHES)	1" AND LESS	0.5	0.5	0.5	_				
L. THICKN (INCHES)	1 1/4" - 2"	1.0	0.5	0.5	1.0				
<u>.</u> E	2 1/2" - 4"	1.5	1.0	.75	1.0				
INSNL. (IN	5" AND ABOVE	_	-	-	1.0				

1. RUNOUTS NOT EXCEEDING 12 FEET IN LEGTH AND 2" PIPE TO INDIVIDUAL HVAC UNITS. 2. RUNOUTS THAT ARE NOT LARGER THAN 1" AND NON-CIRCULATING TO INDIVIDUAL PLUMBING UNITS. 3. INCLUDES ROOF DRAIN BODY AND VERTICAL RUN UP TO THE ROOF DRAIN BODY.

INSULATION TYPES:

JACKET TYPES: FP FOIL & KRAFT PAPER FE FLEXIBLE ELASTOMERIC CG CELLULAR GLASS MF MINERAL FIBER (FIBERGLASS) AL ALUMINUM

PO POLYOLEFIN CS CALCIUM SILICATE

CCF CLOSED-CELL FOAM

PVC POLYVINYL CHLORIDE SS STAINLESS STEEL

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PROJECT NO. MARCH 26, 2024 A. NOWLIN

D. BRUCE

PLUMBING SCHEDULES

CHECKED BY

PLUMBING FIXTURE NOTES:

- 1. PROVIDE SHOWER CURTAIN ROD FOR EACH SHOWER UNIT AS DIRECTED BY OWNER.
- 2. PROVIDE ADA COMPLIANT WATER CLOSET IN ALL TOILET LOCATIONS IN THE FIRST FLOOR. REFER TO PLUMBING FIXTURE SCHEDULE.

THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK OR HOME REPRESENTED, CAN LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OR BUILDINGS BEING SEIZED AND/OR MONETARY COMPOSITION OF SPACES AND ELEMENTS OF THE PROTECTION AS "ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT PROTECTION ACT OF 1990. THE OVERALL FORM AS WELL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE PROTECTION, UNDER SEC. 102 OF THE COPYRIGHT PROTECTION, UNDER SUCL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK OF THE DESIGN. UNDER SUCL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN. UNDER SUCL AS THE ARRANGEMENT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF CONSTRUCTION OF SPACES AND ELEMENTS OF THE DESIGN OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE DESIGN OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE DESIGN OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE COPYRIGHT AND LEGALLY RESULT IN THE CESSATION OF THE CESSATI

- 3. REFER TO PLUMBING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
- 4. ALL RESTROOM/BATHROOM ACCESSORIES ARE TO BE PROVIDED BY AND INSTALLED BY THE CONTRACTOR AND INCLUDE:
- A. ONE SÚRFACE MOUNTED MIRROR EACH OVER ALL LAVATORY SINKS.
- ONE TOILET PAPER HOLDER AT ALL TOILET LOCATIONS. C. GRAB BARS OVER TOILET.
- 8. PROVIDE INSULATION FOR ALL DOMESTIC WATER PIPING THROUGHOUT THE BUILDING AS ARMAFLEX BRAND PIPING INSULATION.
- 9. ALL FLR. DRAINS ARE TO BE METALLIC TYPE & INCLUDE AN INTEGRAL TRAP SEAL OR PRIMING DEVICE PER STATE OF INDIANA REQUIREMENTS, REF. MFG. IS TO BE JR SMITH, OR APPROVED EQ.

CLEAN-OUT SCHEDULE								
MARK NO.	CO-F							
BASE OF DESIGN	JR SMITH - 4020 SERIES	JR SMITH - 4532 SERIES	JR SMITH - 4263 SERIES					
BODY MATERIAL	CAST IRON	CAST IRON	CAST IRON					
OUTLET CONN.	SPIGOT	SPIGOT	SPIGOT					
CLOSURE	BRONZE PLUG	BRONZE PLUG	BRONZE PLUG					
COVER MATERIAL	NICKLE BRONZE	STAINLESS STEEL	CAST IRON					
COVER FINISH	SATIN	POLISHED	SCORIATED					
COVER SHAPE	ROUND	ROUND	ROUND					
LOADING CLASS	MEDIUM DUTY	-	HEAVY DUTY					
REMARKS	FINISHED FLOOR APPLICATION	FINISHED WALL APPLICATION	EXTERIOR APPLICATION					

	FLOOR DRAIN SCHEDULE													
		DI	rain Boi	ΣY	STRAINER			INTEGRAL TYPE VANDAL PROOF SEDIMENT		EN EN	EL	SPECIFICATION	MANUFACTURER	
MARK	DESCRIPTION	MATERIAL	OUTLET SIZE	OUTLET TYPE	MATERIAL	SIZE	TYPE	integral Type	VAND PRO(SEDIMEN BUCKET	FUNNEL	SECTION	WITH MODEL NUMBER	NOTES
FD-1	GENERAL USE IN FINISHED AREAS	CAST IRON	-	SPIGOT	NICKLE BRONZE	_	ROUND	YES	YES	NO	NO	22 13 16	J.R. SMITH #2041S-A	DEEP SEAL 'P'-TRAP WITH FLOOR CLEANOUT
FD-2	GENERAL USE IN FINISHED AREAS	CAST IRON	-	NO-HUB	NICKLE BRONZE	-	ROUND	NO	YES	NO	NO	22 13 16	J.R. SMITH #2005Y-A	DEEP SEAL 'P'-TRAP
FD-3	USED IN MECH AREAS ON GRADE	CAST IRON	-	NO-HUB	CAST IRON	-	ROUND	NO	NO	NO	NO	22 13 16	J.R. SMITH #2220Y	DEEP SEAL 'P'-TRAP WITH FLOOR CLEANOUT
FD-4	USED IN MECH. AREAS ABOVE GRADE	CAST IRON	-	NO-HUB	CAST IRON	-	ROUND	NO	NO	YES	NO	22 13 16	J.R. SMITH #2220Y	DEEP SEAL 'P'-TRAP
FD-5	FLOOR SINK	CAST IRON	-	CAULK	DUCTILE IRON	_	3/4 GRATE	NO	YES	YES	NO	22 13 16	J.R. SMITH #2450-13	DEEP SEAL 'P'-TRAP WITH FLOOR CLEANOUT
FD-6	FLOOR SINK	CAST IRON	_	NO-HUB	NICKLE BRONZE	-	1/2 GRATE	NO	NO	YES	NO	22 13 16	J.R. SMITH #3161-12	DEEP SEAL 'P'-TRAP
AD-1	EXTERIOR RAIN WATER USAGE	CAST IRON	-	NO-HUB	CAST IRON	-	ROUND	NO	NO	YES	NO	22 13 16	J.R. SMITH #2220Y	LESS TRAP
<u>NOTES:</u> 1.														

THE CESAGTION OF THE COPYRIGHTED AND ARE COPYRIGHT AND AS WELL AS THE ARRANGEMENT AND ELEMENTS OF THE CESAGTION OF SPACES AND ELEMENTS OF THE DESIGN. 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AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990. MECHANICAL ABBREVIATIONS OPP ORIG OPPOSITE ANODIZED ALUMINUM EXPANSION ORIGINAL EXP PUMP AIR CONDITIONING EXTERIOR AIR COOLED CHILLER PRIMARY AIR FACE AREA ACCH AIR COOLED CONDENSING UNIT FAN COIL UNIT PUMPED CONDENSATE FCU ADD ADDITION FLEXIBLE CONNECTION PRESSURE DROP ACCESS DOOR FIRE DAMPER PNEUMATIC ELECTRIC FLOOR DRAIN AIR FLOW CONTROL VALVE POST INDICATOR VALVE AFCV ABOVE FINISHED FLOOR FIRE HOSE CABINET PREFAB PREFABRICATED AFMS AIR FLOW MEASURING STATION FINISH PRESS PRESSURE FIN FIRE LINE PROP PROPELLER AIR HANDLING UNIT PRV PRESSURE REDUCING VALVE ALTERNATE FLEXIBLE POUNDS PER SQUARE INCH **FLOOR** AMBIENT FUEL OIL GAUGE ACCESS PANEL PTU POWERED TERMINAL UNIT A/P FOG ACID PROOF FUEL OIL RETURN PUH PROPELLER UNIT HEATER APPLICATION PART LOAD VALUE FUEL OIL SUPPLY RETURN AIR API V APROX APPROXIMATE RAD RADIATION FUFI OII TANK VENT FOV RACP RADIANT CEILING PANEL AIR RELIEF VENT FAN POWERED VAV BOX ROOF DRAIN AUTOMATIC FIRE AND SMOKE DAMPER AUTO REC RECEIVER ACID VENT FINNED TUBE RADIATION AVERAGE FEET PER MINUTE RECIR RECIRCULATING RECTANGULAR ACID WASTE FLOAT & THERMOSTATIC (TRAP) BACKDRAFT DAMPER RFG REGISTER BDD **FURNACE** FURN BOILER FEED WATER FACE VELOCITY ROOF EXHAUST FAN BFW REINF REINFORCED BUILDING BLDG GAS REL RELIEF BI OW-OFF GAUGE RET BSMT BASEMENT RETURN GALVANIZED GALV REQ'D REQUIRED BATH TUB GENERAL CONTRACTOR BOTTOM RODDING HOLF BTM GENERATOR BTUH BRITISH THERMAL UNIT / HOUR GALLONS PER MINUTE RELATIVE HUMIDITY GPM CAP CAPACITY GREASE TRAP REVOLUTIONS PER MINUTE CATCH BASIN HOSE BIBB CABINET CONVECTOR HEIGHT ROOF VENT CUBIC FEET PER MINUTE SOUND ATTENUATOR HEPA FILTER SUPPLY AIR CHILLED WATER RETURN HORIZONTAL HORIZ HORSE POWER SANITARY CHILLED WATER SUPPLY SILL COCK HIGH PRESSURE STEAM RETURN CAST IRON SOFT COLD WATER COOLING HIGH PRESSURE STEAM SUPPLY SCW CLSK CLINICAL SERVICE SINK HYDRONIC RADIANT CEILING PANEL SHOWER DRAIN SMOKE DAMPER CI FANOUT HFATING SECTION COMP COMPRESSOR HEATING, VENTILATING, & AIR CONDITIONING HVAC CONC CONCRETE HOT WATER (DOMESTIC) SHOWER HEAD HW SHEET COND CONDENSATE HOT WATER RETURN (HVAC) HWR SINK CONN CONNECTION HOT WATER SUPPLY (HVAC) HWS STATIC PRESSURE CONSTRUCTION INLINE CENTRIFUGAL FAN ICF SPECIFICATIONS CONT CONTINUOUS INSIDE DIAMETER SPRINKI FR CONTR CONTRACTOR INCIN INCINERATOR CONVECTOR SQUARE INCLUDE INCL STAINLESS STEEL CONDENSATE PUMP INSULATION INSUL STORM COEFFICIENT OF PERFORMANCE INTERIOR STAT THERMOSTAT CONDENSER WATER RETURN INVERT INV STANDARD CONDENSER WATER SUPPLY STD JANITORS DRAIN STEAM CABINET SINK STM KILOWATT COOLING TOWER STR STRUCTURAL LEAVING AIR TEMPERATURE LAT SUPPLY CABINET UNIT HEATER LAVATORY SUSPENDED CW COLD WATER SUSP LBS/HR POUNDS PER HOUR TEMPERATURE DIFFERENCE DECIBELS LAVATORY IN CABINET TEMPERATURE DRY BULB (TEMPERATURE) LINEAR FEET TOTAL DETAIL TOT LOCATION TOTAL STATIC PRESSURE DRINKING FOUNTAIN LOW PRESSURE STEAM RETURN LPR TEMPERED WATER DIAMETER LOW PRESSURE STEAM SUPPLY LPS TYPICAL DIFF DIFFUSER TYP LOCAL TEMPERATURE CONTROL PANEL DISCH UNDERCUT DISCHARGE LVG UNIT HEATER DOOR LOUVER LEAVING WATER TEMPERATURE URINAI MAXIMUM UNIT VENTILATOR DOWNSPOUT THOUSANDS OF BTU/HR MBH DRAWING MOTOR CONTROL CENTER MCC VAI VF DIRECT EXPANSION MECH MECHANICAL VACUUM ENTERING AIR TEMPERATURE MIXING FAUCET VARIABLE AIR VOLUME EXHAUST AIR MANUFACTURER MFR VOLUME DAMPER EQUIPMENT DRAIN MANHOLE VELOCITY FLECTRIC DUCT AIR MINIMUM VENT VENTILATOR ENERGY EFFICIENCY RATIO MISCELLANEOUS MISC VSMC VARIABLE SPEED MOTOR CONTROLLER EXHAUST FAN MEDIUM PRESSURE STEAM RETURN VITRIFIED TILE FFFICIENCY MEDIUM PRESSURE STEAM SUPPLY VENT THRU ROOF VTR ELEVATION MTD WASTF END OF MAIN DRIP (STEAM) NORMALLY CLOSED WITH EXPANDED METAL GRILLE NEGATIVE WB WET BULB (TEMPERATURE) ENCL ENCLOSURE NIC NOT IN CONTRACT NORMALLY OPEN WALL EXHAUST FAN END OF MAIN DRIP NOT TO SCALE WFR WALL FIN RADIATION EQUIP EQUIPMENT PHASE OR DIAMETER (DUCT) WITHOUT EXTERNAL STATIC PRESSURE OUTSIDE AIR WEATHERPROOF EXPANSION TANK OUTSIDE DIAMETER WT WEIGHT ELECTRIC UNIT HEATER OFD OVERFLOW ROOF DRAIN WTR WATER

OPNG OPENING

ENTERING WATER TEMPERATURE

EXHAUST

	PIPING SYMBOLS
	DOMESTIC COLD WATER
—— нws ——	DOMESTIC HOT WATER
FS	FIRE SUPPRESSION
——— GAS ———	NATURAL GAS SERVICE
ss	SANITARY SEWER
SD	STORM DRAIN
	VENT
с——	RISER DOWN (ELBOW)
<u> </u>	RISER UP (ELBOW)
├ - ─ -	CAPPED PIPE OR TEE
——	FLOW IN DIRECTION OF ARROW
──	WATER HAMMER ARRESTER
$\begin{array}{c c} & & \\ & & \\ \hline \end{array}$	SHUTOFF VALVE
⊢-ф	BALL VALVE
<u></u>	CHECK VALVE
	BALANCING VALVE
├ 1888 — 1888 — 1888 →	THERMOMETER
 	UNION (DIELECTRIC OR AS NOTED)
A	TEMPERATURE & PRESSURE RELIEF VALVE
C.0.	FLOOR/GRADE CLEAN-OUT
F.D.	FLOOR DRAIN
+	HOSE BIBB
RD RDO	ROOF DRAIN/OVERFLOW

REFERENCE SECTION LOCATION THROUGH

REFERENCE DETAIL LOCATION FOR ADDITIONAL INFORMATION.

REFERENCE ELEVATION LOCATION FOR ADDITIONAL INFORMATION.

_ ELEVATION LOC. IN

ELEVATION LOC. @

SUBSET SHEET

INTERIOR ELEVATION INDICATOR

DETAIL LOC. IN DWG. MODULE

Left Detail Loc. @ Subset sheet

BEYOND AREA

EXTENSION

DWG. MODULE

PHOTO LOC. @

SUBSET SHEET

PHOTOGRAPH INDICATOR

101

AN AREA FOR ADDITIONAL INFORMATION.

SECTION INDICATOR:

\AE000 /

SECTION INDICATOR:

ELEVATION INDICATOR:

SECTION LOC. IN DWG. MODULE

SECTION LOC. @

LARGE SCALE VIEW

LOC. IN DWG. MODULE

LARGE SCALE VIEW LOC. @ SUBSET SHEET

ELEVATION LOC. IN

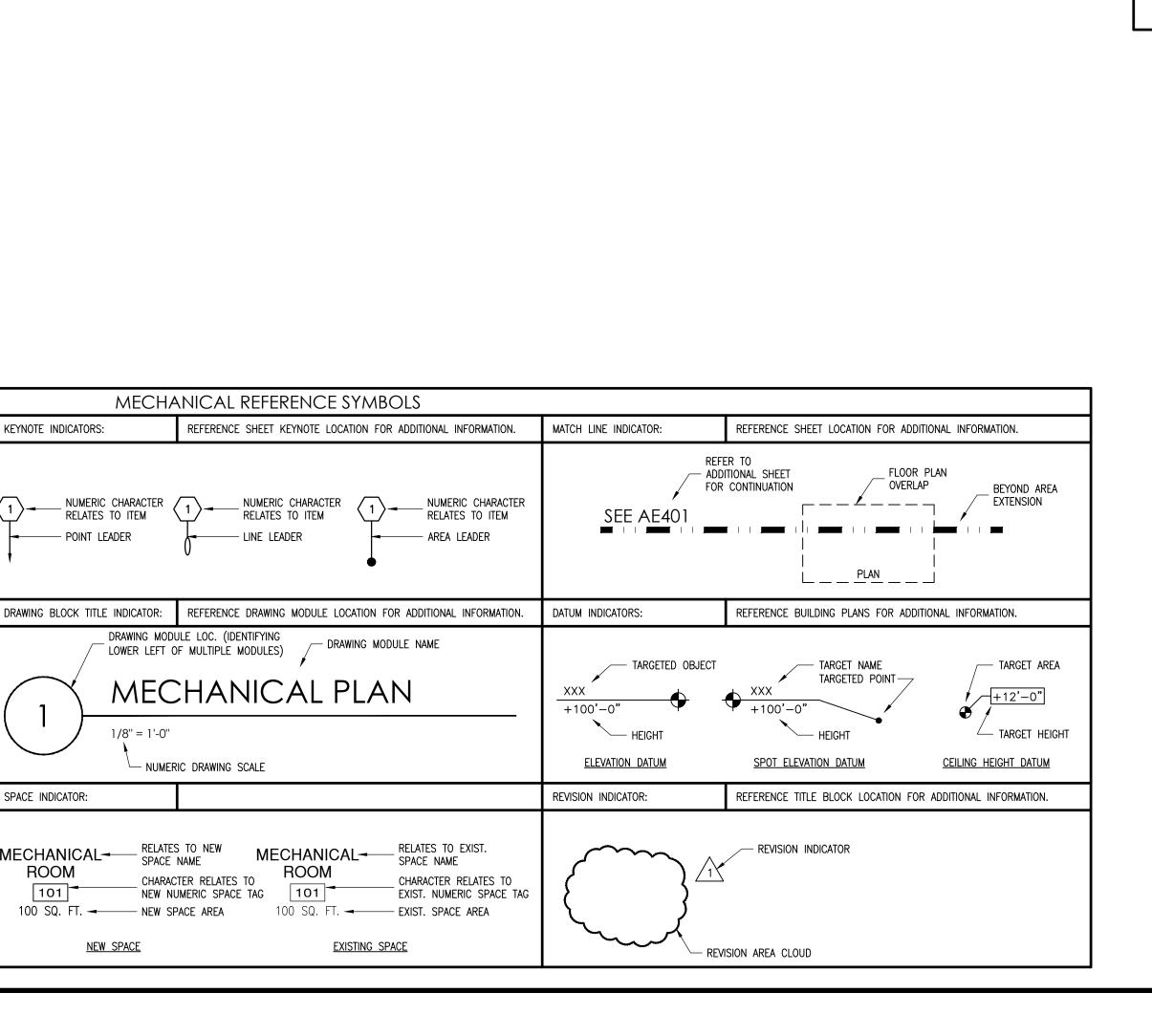
ELEVATION LOC. @

SUBSET SHEET

EXTERIOR ELEVATION INDICATOR

DWG. MODULE

	MECHANIC	al Symbol	_\$
	MECHANICAL EQUIPMENT	∑ ∆300	SQUARE DIFFUSER (TYPE & AIR QUANTITY IN CFM INDICATED)
	SUPPLY AIR DUCT UP	∑ 6000	ROUND DIFFUSER (TYPE & AIR QUANTITY IN CFM INDICATED)
×	SUPPLY AIR DUCT DOWN	<u></u>	SUPPLY OUTLET (NOMINAL SIZE, TYPE, & AIR QUANTITY IN CFM INDICATED)
	RETURN/EXHAUST AIR DUCT UP	₹	EXHAUST OR RETURN INLET (NOMINAL SIZE, TYPE, & AIR QUANTITY IN CFM INDICATED)
	RETURN/EXHAUST AIR DUCT DOWN	\$\begin{align*} \sum_{(+12")}^{400} \\ \end{align*}	ALL UNITS LOCATED IN OR NEAR CEILING, UNLESS DIMENSION SHOWN INDICATING (HEIGHT A.F.F.)
Z 10X8 Z	RECTANGULAR DUCT SIZE (FIRST DIMENSION LISTED IS DIMENSION SHOWN IN VIEW)	UC 1/2"	DOOR, UNDERCUT (SIZE & AIR QUANTITY IN CFM INDICATED)
10"ø {	ROUND DUCT SIZE	□ DG 1 Ф 600	DOOR GRILLE (FREE AREA REQUIRED & AIR QUANTITY IN CFM INDICATE
	AIR DIVERTER (EXTRACTOR)		
VD VD	VOLUME DAMPER		
BDD	BACK DRAFT DAMPER		
		T	THERMOSTAT
	TURNING VANES	-	SUPPLY AIR DIRECTION
CRER A		~ ~~~	RETURN, EXHAUST, OR RELIEF AIR DIRECTION
	MANUAL SPLITTER DAMPER	SACD	SUPPLY AIR CEILING DIFFUSER
		SAWD	SUPPLY AIR WALL DIFFUSER
<u> </u>	FLEXIBLE CONNECTION	RACG	RETURN AIR CEILING GRILLE
	TEMBLE CONNECTION	RAWG	RETURN AIR WALL GRILLE



GENERAL MECHANICAL NOTES:

- HVAC SUBCONTRACTOR SHALL COORDINATE W/ GENERAL CONTRACTOR FOR ALL REQUIREMENTS OF SIZE, LOC., SCHEDULES, ETC., OF ALL THRU-ROOF & WALL
- ALL SUPPLY & RETURN DUCTWORK SHALL BE GALV. STL. SIZED AS INDICATED, CONSTRUCTED & INSTALLED IN ACCORDANCE W/ THE LATEST EDITION OF SMACNA 1/2" INSULATIVE DUCT LINERS. DUCT SIZES INDICATED ON PLANS ARE IN INCH DIMENSIONS EXCLUSIVE OF LINER.
- ALL REGISTERS & GRILLS SHALL BE HART & COOLEY & SIZED AS REQ'D. FOR CFM NOTED
- EXTEND PVC CONDENSATE DRAIN TO 2" STANDPIPE, COORDINATE W/ PLUMBING CONTRACTOR.
- . COORDINATE ALL OPENINGS THROUGH NEW WALL & FLR. CONSTRUCTION W/ GENERAL
- REVIEW RETURN AIR PATH BACK TO ALL HVAC EQUIPMENT. PROVIDE RETURN AIR OPENINGS AND/OR TRANSFER DUCTS IN WALLS ABOVE THE CEILING WHERE REQUIRED. COORDINATE WITH GENERAL TRADES. VELOCITY THRU R.A. OPENINGS SHALL NOT EXCEED 500 FPM. REFERENCE ARCHITECTURAL DRAWINGS FOR WALL EXTENDING TO DECK.
- 13. COORDINATE ROUTING OF DUCTWORK, PIPING & EQUIPMENT W/ ALL OTHER TRADES.
- 4. PROVIDE 45'/90' FITTING W/ VOLUME DAMPER LIKE FLEXMASTER MODEL STO @ ALL SUPPLY AIR BRANCH DUCTWORK TAKEOFFS.
- 5. COORDINATE LOC'S. OF ALL GRILLES, REGISTERS & DIFFUSERS IN CEILINGS W/ THE CLG. SYSTEM AND LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING PLANS.
- 3. PROVIDE VOLUME DAMPERS IN ALL SUPPLY AIR BRANCH DUCTWORK AS REQ'D. TO BALANCE EA. SYSTEM & LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING
- 7. ROUND DUCT SIZE TO BE THE SAME SIZE AS THE DIFFUSER INLET NECK, U.N.O.
- 8. MAX. LENGTH OF FLEXIBLE DUCTWORK SHALL BE 5'-0".
- 9. ALL FURNACE SYSTEM LOW PRESSURE RECTANGULAR SUPPLY & RETURN AIR DUCTWORK SHALL BE INTERNALLY INSUL. ROUND SUPPLY & RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSUL. OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSUL. SEE SPECS FOR ADDT'L INSUL. REQUIREMENTS.
- 20. BOX AROUND DUCT SIZE INDICATES INTERNALLY LINED DUCTWORK. SIZE SHOWN INDICATES ACTUAL FREE AREA. REF. MECHANICAL SPECS.
- TRANSFER AIR DUCTS SHALL BE INTERNALLY LINED W/ INSUL. TO DETER NOISE TRANSFER. SIZE SHOWN ON PLAN INDICATES ACTUAL FREE SPACÉ.
- 22. SQUARE DIFFUSERS ARE 4-WAY BLOW U.N.O..
- 23. WIRING TO THERMOSTATS SHALL BE CONCEALED WITHIN THE WALL.
- 24. DUCTWORK SHALL BE LOC. IN THE CLG. PLENUM (ABOVE LAY-IN CEILING U.N.O.

THESE NOTES APPLY TO ALL MECHANICAL SHEETS.

- ALL MECHANICAL WORK IS TO BE IN ACCORDANCE W/ THE INDIANA MECHANICAL CODE, 1997 EDITION (IMC, 1996 EDITION) (675 IAC 18-1.3) EFFECTIVE 1/23/98 - REPEALED
- HVAC SUBCONTRACTOR SHALL COORDINATE W/ THE ELECTRICAL SUBCONTRACTOR FOR ANY & ALL ELECTRICAL REQUIREMENTS OF ACTUAL MECHANICAL EQUIPMENT UTILIZED, INCLUDING LOW & HIGH VOLTAGE WIRING, DISCONNECTS, CIRCUIT BREAKERS, ETC.
- PENETRATIONS REQ'D. FOR INSTALLATION OF ALL MECHANICAL SYSTEMS & DUCTWORK.
- STANDARDS FOR HVAC & DUCTWORK CONSTRUCTION. ALL SUPPLY AIR DUCTS SHALL HAVE
- @ 500 FPM MAX. FACE VELOCITY. ALL REGISTERS SHALL HAVE REGULATING DAMPERS.
- PROVIDE ALL CONTROL & INTERLOCK WIRING COMPLETE FOR THIS PROJECT.
- COORDINATE INSTALLATION OF WORK W/ ALL OTHER TRADES & CONDITIONS AS REQ'D. FOR A COMPLETE & OPERABLE HVAC SYSTEM. CLEARANCES ABOVE CEILINGS ARE EXTREMELY TIGHT IN CERTAIN AREAS.
- 2. COORDINATE EXACT LOC. OF ALL EQUIP. & DUCTWORK W/ THE CLG. SYSTEM & LIGHT FIXTURES. REF. REFLECTED CLG. PLANS & ELECTRICAL LIGHTING PLANS.
- PROVIDE FLEXIBLE DUCT UPSTREAM OF EA. DIFFUSER WHERE SHOWN.
- PLANS. PROVIDE FLEXIBLE DUCT UPSTREAM OF EA. DIFFUSER WHERE SHOWN.

- 5. COORDINATE ALL DUCTWORK ROUTING & DUCTWORK ELEVATIONS W/ STRUCTURAL SUPPORTS FOR PARTITION WALLS. REF. STRUCTURAL DRAWINGS FOR SIZE & LOC'S. OF PARTITION WALL SUPPORTS.

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DESIGN OMINGTON, IN

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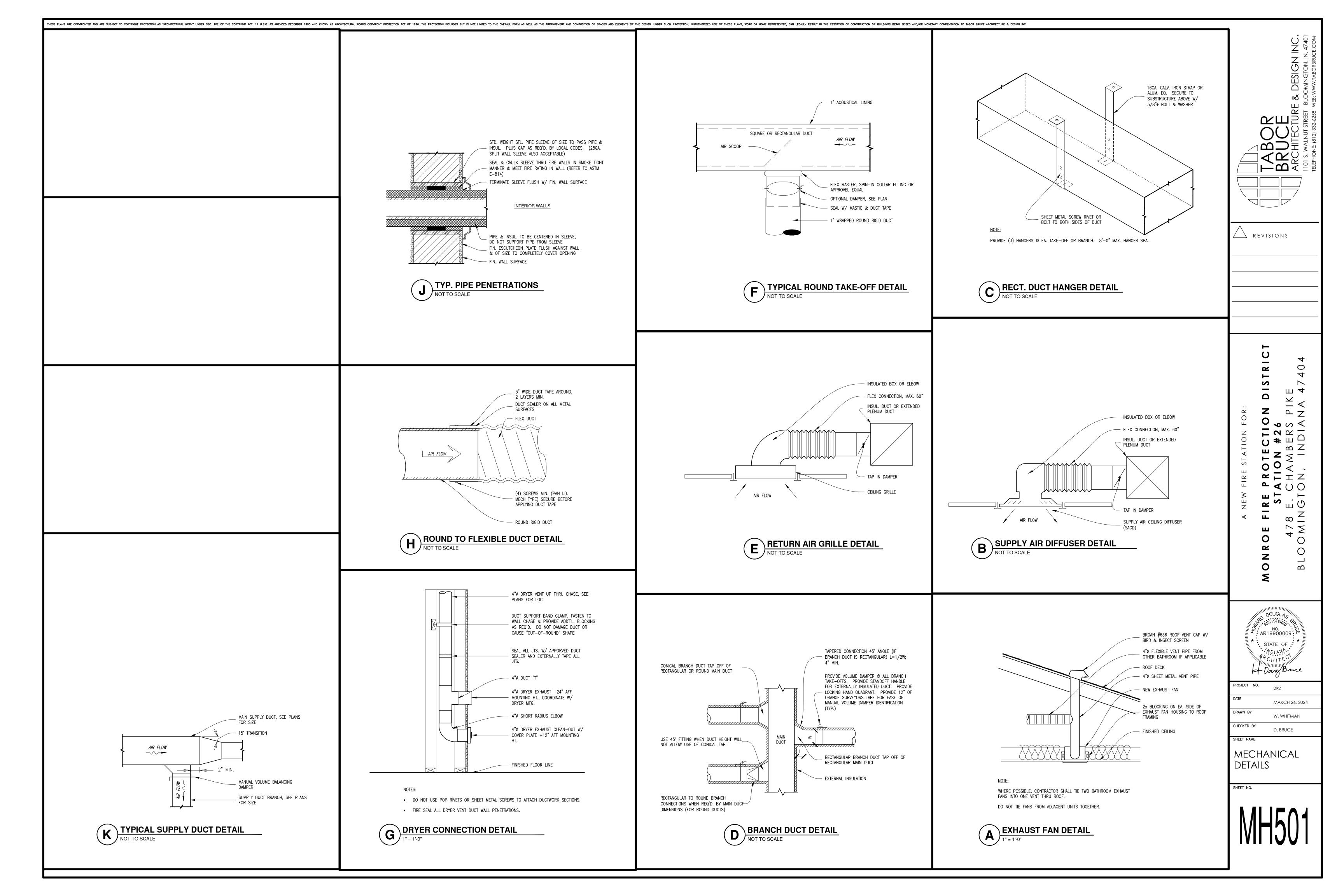
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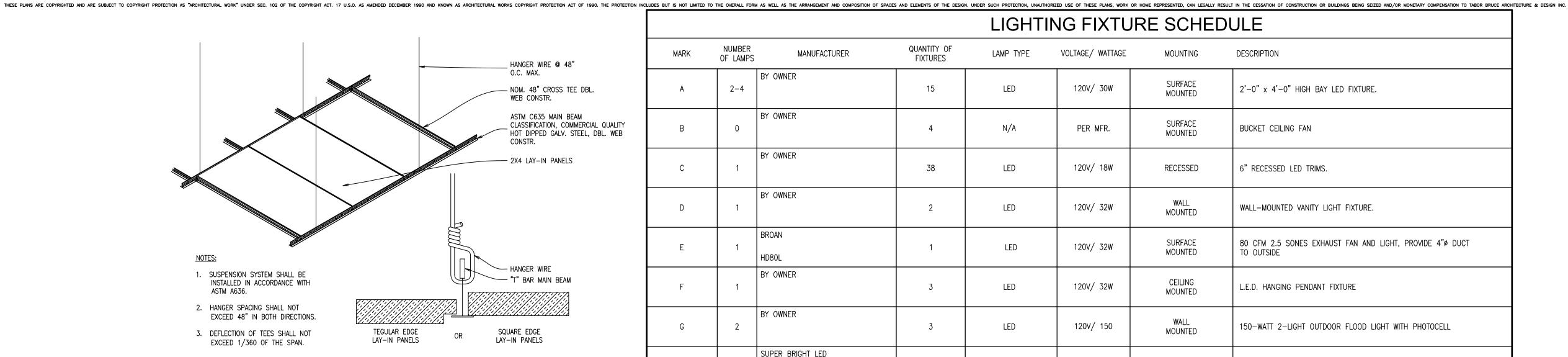
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MECHANICAL

SYMBOLS & **ABBREVIATIONS**

SHEET NO.





SUSPENDED LAY-IN CEILING

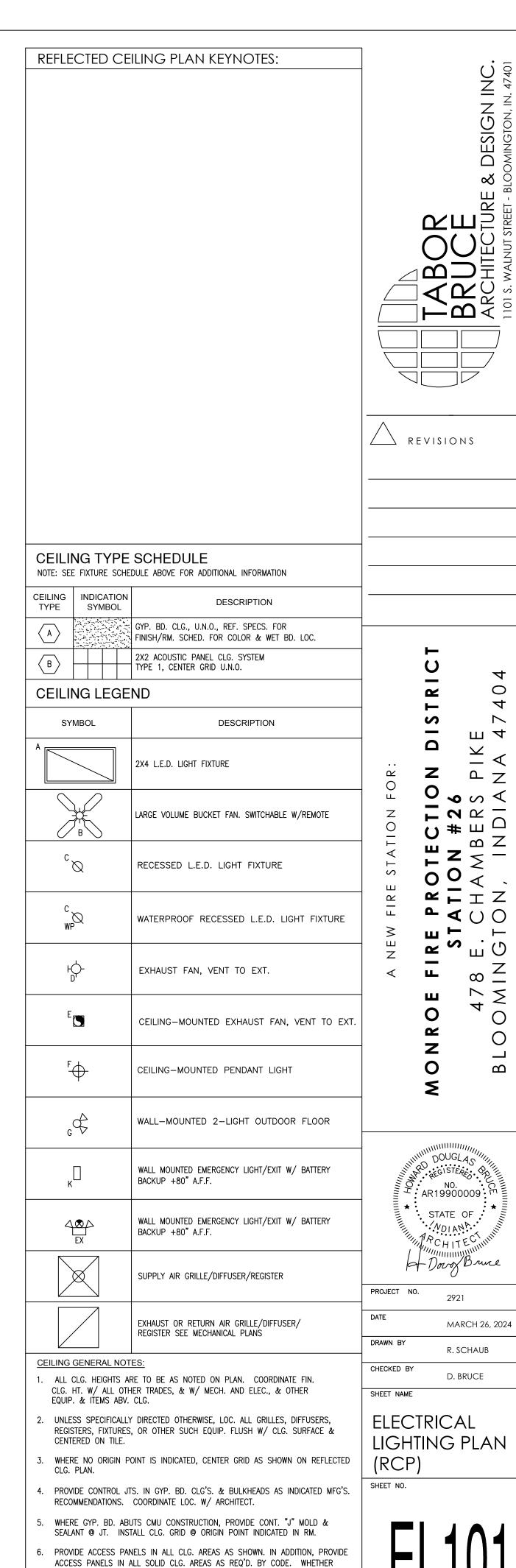
				LIGHTI	NG FIXTU	IRE SCHED	ULE
MARK	NUMBER OF LAMPS	MANUFACTURER	QUANTITY OF FIXTURES	LAMP TYPE	VOLTAGE/ WATTAGE	MOUNTING	DESCRIPTION
A	2-4	BY OWNER	15	LED	120V/ 30W	SURFACE MOUNTED	2'-0" x 4'-0" HIGH BAY LED FIXTURE.
В	0	BY OWNER	4	N/A	PER MFR.	SURFACE MOUNTED	BUCKET CEILING FAN
С	1	BY OWNER	38	LED	120V/ 18W	RECESSED	6" RECESSED LED TRIMS.
D	1	BY OWNER	2	LED	120V/ 32W	WALL MOUNTED	WALL-MOUNTED VANITY LIGHT FIXTURE.
E	1	BROAN HD80L	1	LED	120V/ 32W	SURFACE MOUNTED	80 CFM 2.5 SONES EXHAUST FAN AND LIGHT, PROVIDE 4"Ø DUCT TO OUTSIDE
F	1	BY OWNER	3	LED	120V/ 32W	CEILING MOUNTED	L.E.D. HANGING PENDANT FIXTURE
G	2	BY OWNER	3	LED	120V/ 150	WALL MOUNTED	150-WATT 2-LIGHT OUTDOOR FLOOD LIGHT WITH PHOTOCELL
K	1	SUPER BRIGHT LED WPFC-RI-50K80-LD	4	LED	120V/277V/80W	WALL MOUNTED	PROVIDE PHOTO CELL.
EX		LHQM S 3 R 120/277 N R O	6	LED	120	WALL OR CEILING	LED EXIT SIGN. WALL MOUNTED. DOUBLE FACE RED LED. WHITE TRIM.

1 IST FLOOR ELECTRICAL LIGHTING PLAN

B.O. A.C.T. ± 17'-10" A.F.F. TYP @ BAYS **√**Ø∇EX B.O. A.C.T. 8'-0" A.F.F. LIVING ROOM WALL MOUNT AT -104 TYP @ 1ST FLOOR © OF O.H. DOOR ▼ WALL MOUNT AT € OF O.H. DOOR \ B.O. A.C.T. 8'-0" A.F.F. \bigcirc GARAGE TYP @ 1ST FLOOR 100 SWITCH _ _ _ _ _ _ 0 _ _ _ _ _ ____ _ _ _ _ ROOM EQ EQ EQ #= = = =| WALL MOUNT AT € OF O.H. DOOR \ EQ A └ — — |--|

1. SEE SPECIFICATIONS FOR BALLAST MFG'S. FOR LINEAR FLUORESCENT & COMPACT FLUORESCENT LAMPS.

2. ALL FIXTURE COUNTS AND LOCATIONS ARE TO BE VERIFIED WITH OWNER PRIOR TO ORDERING/INSTALLING



INDICATED OR NOT, COORDINATE SIZE & LOCATIONS W/ ARCHITECT; 24"X24"

WHERE MECH. DUCT WORK IS TO BE CONCEALED IN NEW GYP. BD. SOFFITS, GENERAL CONTRACTOR SHALL COORDINATE EXACT SIZE REQ'D. TO COMPLETELY

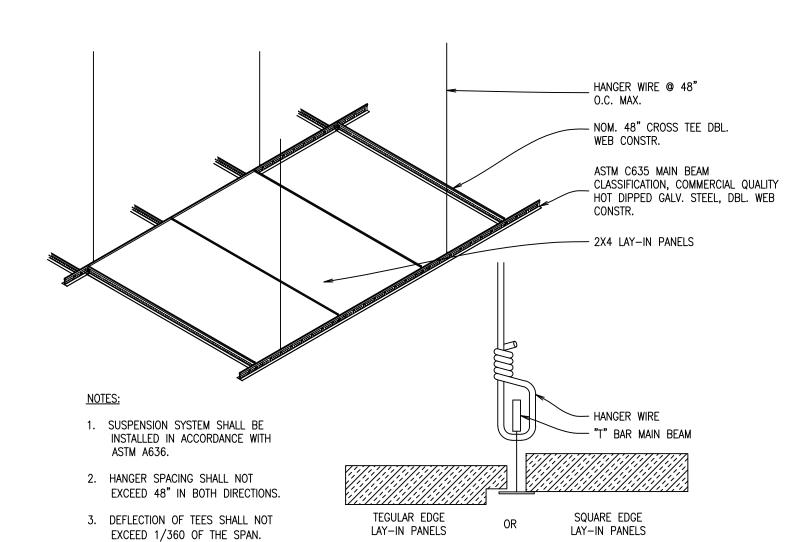
CONCEAL DUCT WORK W/ MECH. CONTRACTOR.

TYP.SIZE, U.N.O.

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SUSPENDED LAY-IN CEILING

				LIGHT	ING FIXTU	IRE SCHED	ULE
MARK	NUMBER OF LAMPS	MANUFACTURER	QUANTITY OF FIXTURES	LAMP TYPE	VOLTAGE/ WATTAGE	MOUNTING	DESCRIPTION
А	2-4	BY OWNER	0	LED	120V/ 30W	SURFACE MOUNTED	2'-0" x 4'-0" HIGH BAY LED FIXTURE.
В	2	BY OWNER	0	N/A	PER MFR.	SURFACE MOUNTED	BUCKET CEILING FAN
С	1	BY OWNER	37	LED	120V/ 18W	RECESSED	6" RECESSED LED TRIMS.
D	1	BY OWNER	1	LED	120V/ 32W	WALL MOUNTED	VANITY LIGHT FIXTURE.
E	1	BROAN HD80L	1	LED	120V/ 32W	SURFACE MOUNTED	80 CFM 2.5 SONES EXHAUST FAN AND LIGHT, PROVIDE 4"Ø DUCT TO OUTSIDE
F	1	BY OWNER	0	LED	120V/ 32W	CEILING MOUNTED	L.E.D. HANGING PENDANT FIXTURE
G	2	BY OWNER	1	LED	120V/ 150	WALL MOUNTED	150-WATT 2-LIGHT OUTDOOR FLOOD LIGHT WITH PHOTOCELL
К	1	SUPER BRIGHT LED WPFC-RI-50K80-LD	0	LED	120V/277V/80W	WALL MOUNTED	PROVIDE PHOTO CELL.
EX		LITHONIA LHQM S 3 R 120/277 N R 0	3	LED	120	WALL OR CEILING	LED EXIT SIGN. WALL MOUNTED. DOUBLE FACE RED LED. WHITE TRIM.

2. ALL FIXTURE COUNTS AND LOCATIONS ARE TO BE VERIFIED WITH OWNER PRIOR TO ORDERING/INSTALLING ROOF BELOW --TYP @ 2ND FLOOR BEDROOM 2 BEDROOM 1 200 BEDROOM 3 – GARAGE BELOW – B.O. A.C.T. 8'-0" A.F.F. TYP @ 2ND FLOOR SWITCH STORAGE C

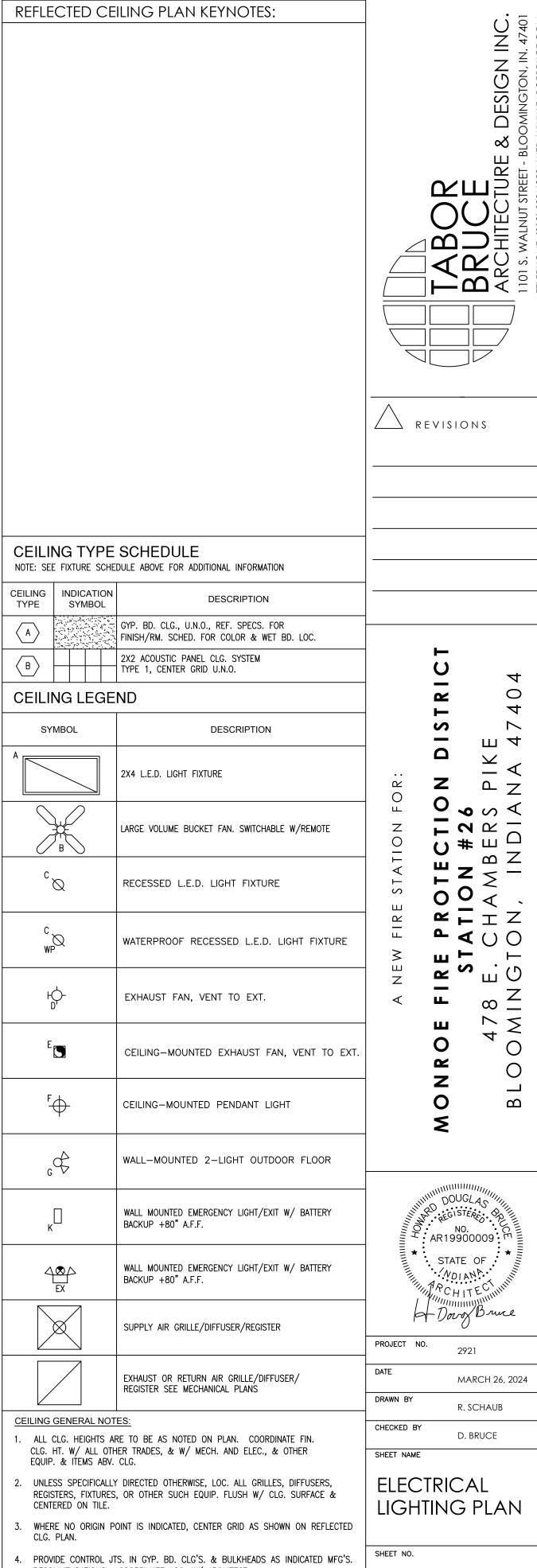
I. SEE SPECIFICATIONS FOR BALLAST MFG'S. FOR LINEAR FLUORESCENT & COMPACT FLUORESCENT LAMPS.

THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION, UNDER SUCH PROTECTION OF THE DESIGN. UNDER SUCH PROTECTION AS ARCHITECTURAL WORK" UNDER SEC. 102 OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK" UNDER SUCH PROTECTION, UNAUTHORIZED USE OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK" UNDER SUCH PROTECTION OF THE DESIGN. UNDER SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK" UNDER SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK" UNDER SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK" UNDER SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 17 U.S.O. AS AMENDED DECEMBER 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AND KNOWN AS ARCHITECTURAL WORK SUCH PROTECTION OF THE COPYRIGHT ACT. 1990 AN

2ND FLOOR ELECTRICAL LIGHTING PLAN

1/4" = 1'-0"



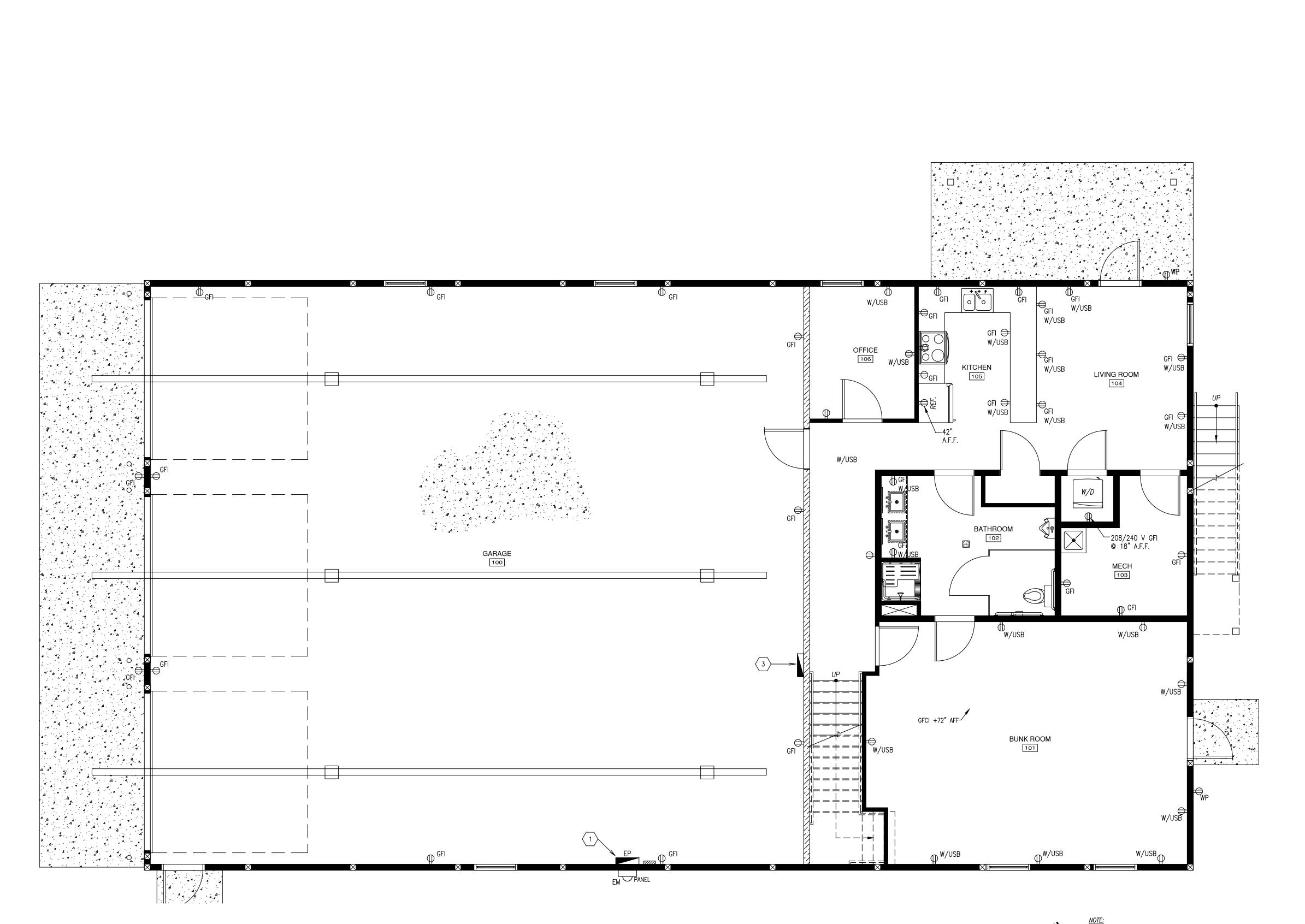


RECOMMENDATIONS. COORDINATE LOC. W/ ARCHITECT.

5. WHERE GYP. BD. ABUTS CMU CONSTRUCTION, PROVIDE CONT. "J" MOLD & SEALANT @ JT. INSTALL CLG. GRID @ ORIGIN POINT INDICATED IN RM.

6. PROVIDE ACCESS PANELS IN ALL CLG. AREAS AS SHOWN. IN ADDITION, PROVIDE ACCESS PANELS IN ALL SOLID CLG. AREAS AS REQ'D. BY CODE. WHETHER INDICATED OR NOT, COORDINATE SIZE & LOCATIONS W/ ARCHITECT; 24"X24" TYP.SIZE, U.N.O.

WHERE MECH. DUCT WORK IS TO BE CONCEALED IN NEW GYP. BD. SOFFITS, GENERAL CONTRACTOR SHALL COORDINATE EXACT SIZE REQ'D. TO COMPLETELY CONCEAL DUCT WORK W/ MECH. CONTRACTOR.





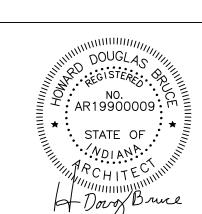
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MONROE FIRE PROTEC STATION # 478 E. CHAMBE BLOOMINGTON. IN

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PROJECT NO. 2921

DATE MARCH 26, 2024

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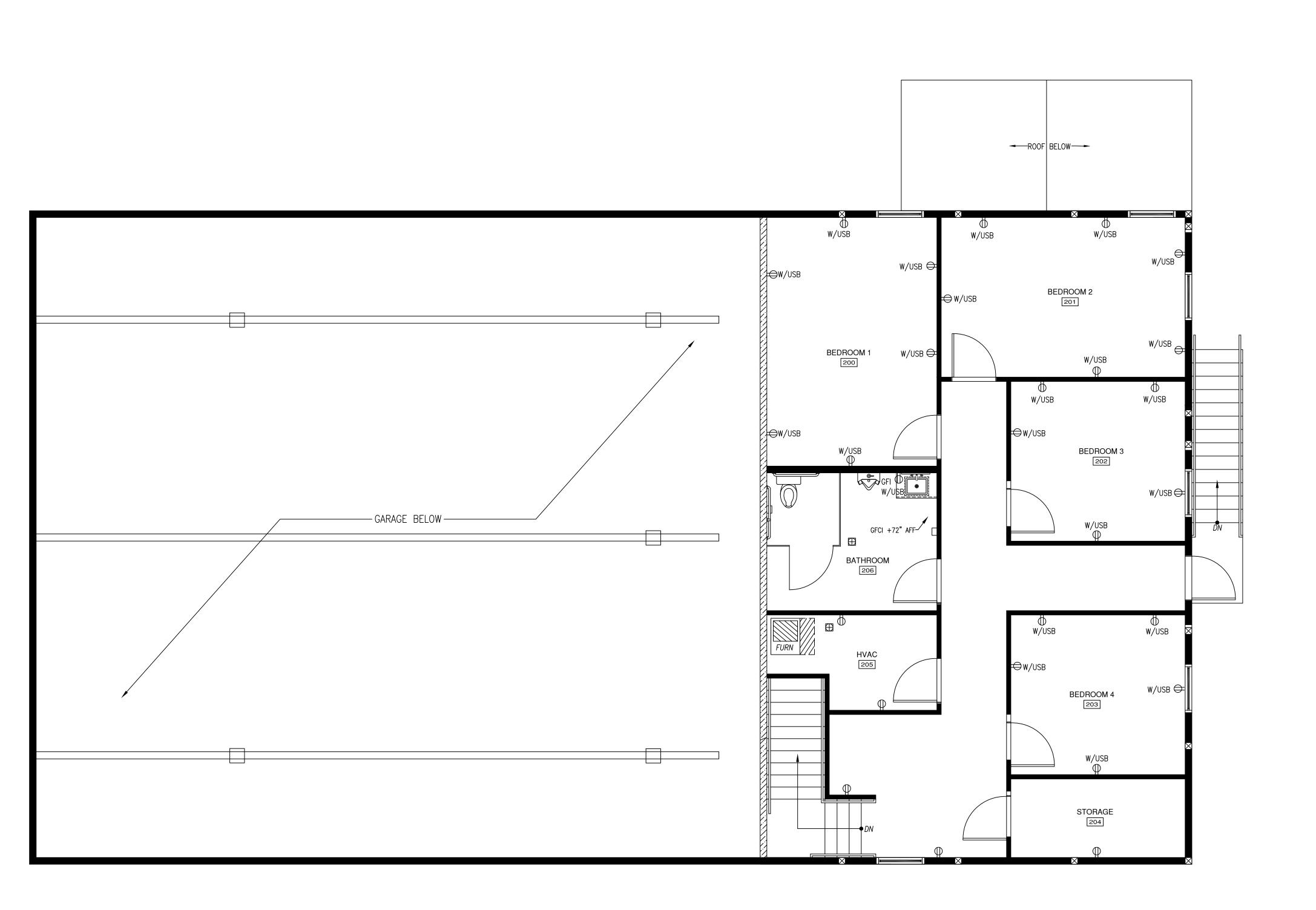
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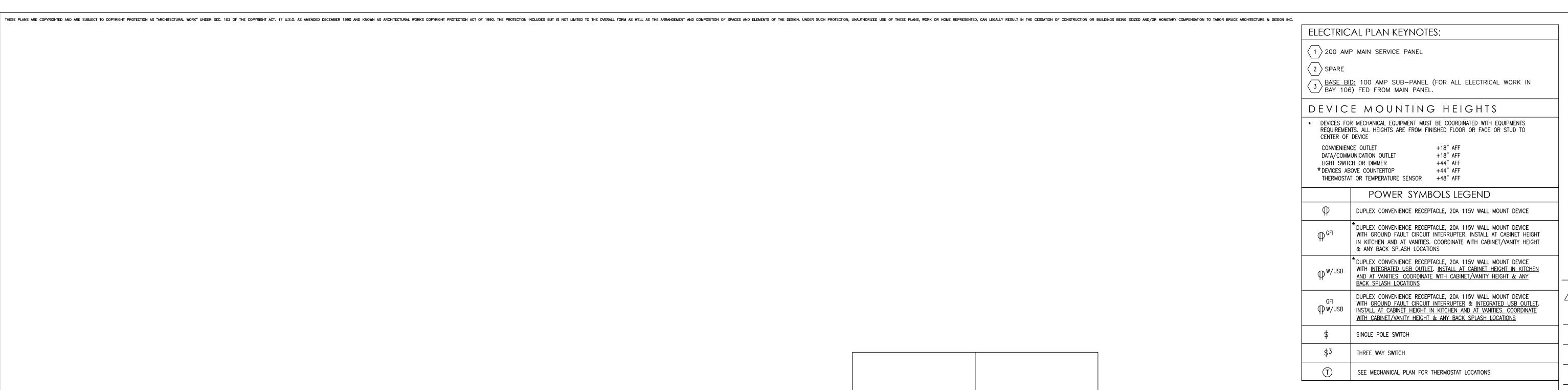
ELECTRICAL POWER PLAN

SHEET NO

EP101

NOTE:
ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL
POWER SUPPLY REQUIREMENTS FOR MECHANICAL EQUIPMENT
(FURNACE, CONDENSERS, EVAPORATORS, ETC.) WITH MECHANICAL
CONTRACTOR.



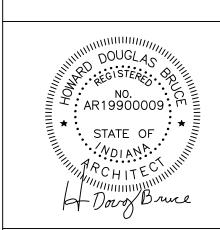


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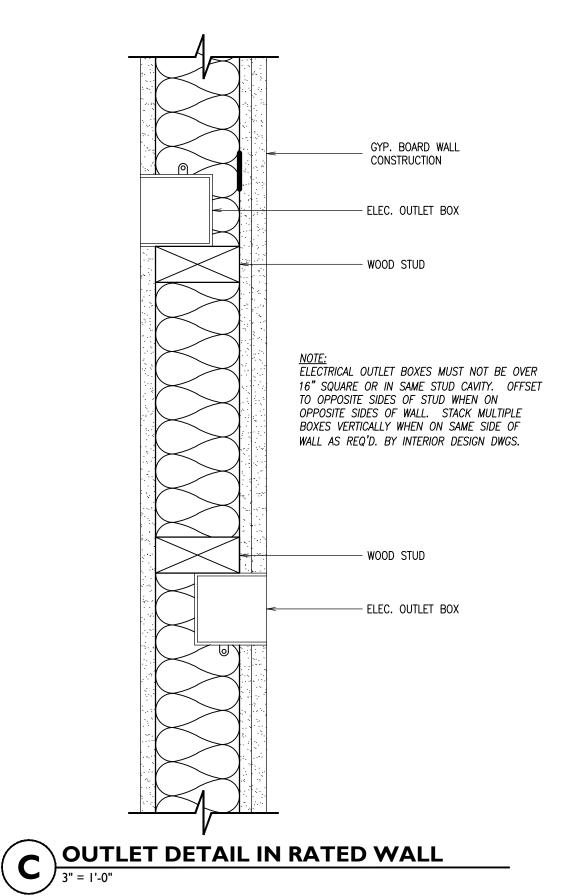
OR CETURE & DESIGN INC.



PROJECT NO.	2921
DATE	MARCH 26, 2024
DRAWN BY	A. NOWLIN
CHECKED BY	D. BRUCE

SHEET NAME

ELECTRICAL POWER PLAN



ABBREVIATIONS

EXC EXISTING WATER COOLER

FAN COIL UNIT

FPVAV FAN POWERED VAV UNIT

GENERAL CONTRACTOR

HAND-OFF-AUTOMATIC

GROUND FAULT INTERRUPTING

HEATING ONLY ROOFTOP UNIT

THOUSAND BTU PER HOUR

MECHANICAL CONTRACTOR

MINIMUM CIRCUIT AMPS

MOTOR CONTROL CENTER

NATIONAL ELECTRIC CODE

OD OUTSIDE DIAMETER, OVERFLOW DRAIN

HEATING HOT WATER PUMP

FOOT, FEET

HUB OUTLET

HORIZONTAL

HOUR(S)

HERTZ

INVFRT

KELVIN

KILOWATT

POUNDS

LIGHTING

MAXIMUM

MANUFACTURER

MISCELLANEOUS

NOT APPLICABLE

NON-LINEAR

NOT TO SCALE

NOMINAL

MEDIUM VOLTAGE

NOT IN CONTRACT

MINIMUM

MOUNTED

HORSEPOWER

INSIDE DIAMETER

INCH, INCHES

INTERIOR

FURNACE

GROUND

FXISTING

FLOOR

FCU

FT

HHWP

HORIZ

HRTU

MFR

MISC

NTS

HO

DEGREES FAHRENHEIT

AIR COOLED CONDENSING UNIT

AMPERES INTERRUPTING CAPACITY

BRITISH THERMAL UNIT PER HOUR

AMERICAN NATIONAL STANDARDS INSTITUTE

ABOVE FINISHED COUNTER

ABOVE FINISHED FLOOR

AIR CONDITIONING

AMPERES FUSED

AIR HANDLING UNIT

BYPASS ISOLATION

CIRCUIT BREAKER

COUNTERCLOCKWISE

BOTTOM ELEVATION

BRAKE HORSEPOWER

AMPERES

ARCHITECT

AVERAGE

BUILDING

CHILLER

CEILING

COMPR COMPRESSOR

COND CONDENSER

CHWP CHILLED WATER PUMP

CONVECTOR

CLOCKWISE

DRAWING

FACH

COOLING TOWER

CONDENSING UNIT

DIRECT CURRENT

DEDICATED CIRCUIT

EXHAUST FAN

EXISTING TO REMAIN

FFFICIENCY

ELEVATION

DISCONNECT SWITCH

CABINET UNIT HEATER

CLASSROOM UNIT VENTILATOR

CONDENSER WATER PUMP

ELECTRICAL CONTRACTOR

BSMT BASEMENT

ACCU

ARCH

AVG

BLDG

BTUH

CCW

CONV

OF/CI OWNER FURNISHED/CONTRACTOR INSTALLED

OVERLOAD

PNEUMATIC ELECTRIC

POUNDS PER SQUARE INCH

PTAC PACKAGED TERMINAL AIR CONDITIONER

REVOLUTIONS PER MINUTE

REVOLUTIONS PER SECOND

POUNDS PER SQUARE INCH ABSOLUTE

POUNDS PER SQUARE INCH GAUGE

OUNCE

POLF.

RCPT RECEPTACLE

ROOM

REVOLUTIONS

ROOFTOP UNIT

SQUARE FOOT

SPECIFICATION

SHUNT TRIP

TO BE INSTALLED

TO BE REMOVED

TOP ELEVATION

TRANSFER FAN

UNIT VENTILATOR

VARIABLE AIR VOLUME

VACUUM BREAKER

VENTILATION FAN

WIRE/WATT

WITH

WITHOUT

WEATHERPROOF

UNLESS NOTED OTHERWISE

VARIABLE FREQUENCY DRIVE

TEMPERATURE

UNIT HEATER

VOLTS

VERT VERTICAL

VFD

W/0

STANDARD

TO REMAIN

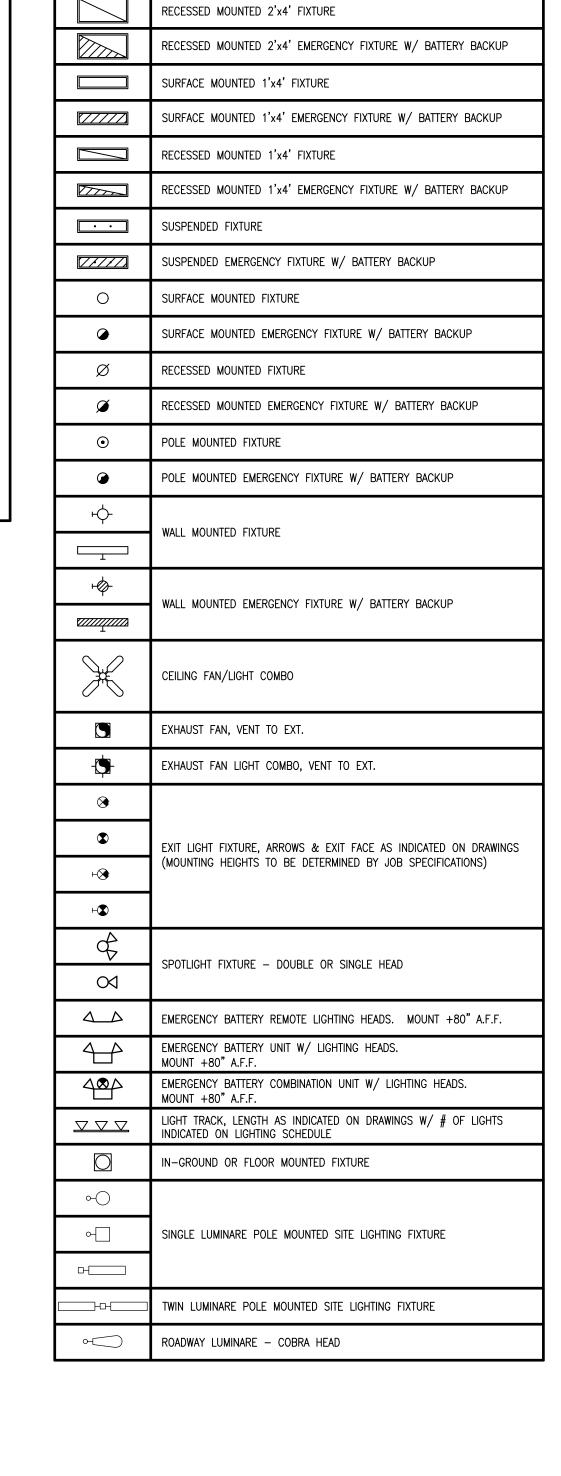
SQUARF

SWITCH

TRANS TRANSITION TYPICAL

PSIG

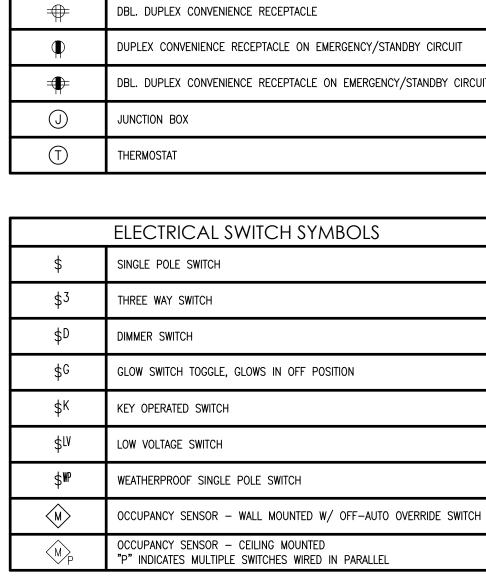
REV



LIGHTING SYMBOLS

SURFACE MOUNTED 2'x4' EMERGENCY FIXTURE W/ BATTERY BACKUP

SURFACE MOUNTED 2'x4' FIXTURE



FIRE ALARM SYMBOLS

KB

PIV

CR

FACP

RTS

F

 $\left(H\right) _{\mathsf{F}}$

KNOX BOX

POST INDICATOR VALVE

CONTROL RELAY

HORN & STROBE

HORN UNIT ONLY

STROBE UNIT ONLY

SPEAKER & STROBE

FLAME DETECTOR

AUTOMATIC HEAT DETECTOR

MANUAL PULL STATION

FIRE ALARM CONTROL PANEL

SMOKE DETECTOR - CEILING MOUNTED

AREA TYPE SMOKE DETECTOR USED @ DUCT WORK OPENING

SELF CONTAINED SMOKE DETECTOR - SINGLE STATION TYPE

REMOTE STATION FOR DUCT DETECTOR USED @ DUCT WORK OPENING

CARBON MONOXIDE DETECTOR, LINE VOLTAGE W/ BATTERY BACKUP

AUTOMATIC HEAT DETECTOR, "F" INDICATES FIXED TEMPERATURE 190 F

DUPLEX CONVENIENCE RECEPTACLE, 20A 115V WALL MOUNT DEVICE

DUCT SMOKE DETECTOR W/ TWO AUXILIARY CONTACTS

ELEVATOR RECALL W/ AUXILIARY CONTACTS

SMOKE DETECTOR — VISUAL & AUDIBLE SIGNAL

MOTOR OPERATED FIRE/SMOKE DUCT DAMPER

POWER SYMBOLS

SMOKE DETECTOR - WALL MOUNTED

	•	DUPLEX CONVENIENCE RECEPTACLE ON EMERGENCY/STANDBY CIRCUIT		
	-	DBL. DUPLEX CONVENIENCE RECEPTACLE ON EMERGENCY/STANDBY CIRCUIT		
	\bigcirc	JUNCTION BOX		
THERMOSTAT				
[ELECTRICAL SWITCH SYMBOLS		
	\$	SINGLE POLE SWITCH		
	\$ 3	THREE WAY SWITCH		
Ī	\$D	DIMMER SWITCH		
	\$ G	GLOW SWITCH TOGGLE, GLOWS IN OFF POSITION		
Ī	\$K	KEY OPERATED SWITCH		
Ī	\$LV	LOW VOLTAGE SWITCH		
Ī	\$WP	WEATHERPROOF SINGLE POLE SWITCH		
Ī	⟨ M⟩	OCCUPANCY SENSOR - WALL MOUNTED W/ OFF-AUTO OVERRIDE SWITCH		
Ī	⟨M⟩ _P	OCCUPANCY SENSOR — CEILING MOUNTED "P" INDICATES MULTIPLE SWITCHES WIRED IN PARALLEL		

	DBL. DUPLEX CONVENIENCE RECEPTACLE			
DUPLEX CONVENIENCE RECEPTACLE ON EMERGENCY/STANDBY CIRCUIT				
DBL. DUPLEX CONVENIENCE RECEPTACLE ON EMERGENCY/STANDBY CIT				
J JUNCTION BOX				
T	THERMOSTAT			
	ELECTRICAL SWITCH SYMBOLS			
\$	SINGLE POLE SWITCH			
\$3 THREE WAY SWITCH				
\$D DIMMER SWITCH				
\$G GLOW SWITCH TOGGLE, GLOWS IN OFF POSITION				
\$K	KEY OPERATED SWITCH			
\$LV LOW VOLTAGE SWITCH				
\$WP WEATHERPROOF SINGLE POLE SWITCH				
⟨ M⟩	OCCUPANCY SENSOR - WALL MOUNTED W/ OFF-AUTO OVERRIDE SWITCH			
OCCUPANCY SENSOR — CEILING MOUNTED "P" INDICATES MULTIPLE SWITCHES WIRED IN PARALLEL				

CCTV	CCTV COAXIAL CABLE OUTLET & POWER OUTLET		
MTV	CCTV MONITOR OUTLET		
OB.	DOORBELL		
B	DOOR BUZZER		
B	DOOR CHIME		
DR	ELECTRIC DOOR OPENER		
ES	ELECTRIC DOOR STRIKE		
IC	INTERCOM UNIT - FLUSH MOUNT		
MI	MASTER INTERCOM & DIRECTORY UNIT		
MD	MOTION DETECTOR		
ML	SECURITY DOOR ALARM MAGNETIC LOCK		
CR	SECURITY CARD READER. "WP" INDICATES WEATHER PROOF		
SCP	SECURITY CONTROL PANEL		
DC	SECURITY DOOR CONTACTS		
•	SECURITY PUSH BUTTON		
K	SECURITY KEYPAD		
	POWER DISTRIBUTION SYMBOLS		
	LIGHTING OR POWER DISTRIBUTION PANEL, RECESSED		

SECURITY SYMBOLS

CCTV CAMERA "WP" INDICATES WEATHER-PROOF EXTERIOR CAMERA

	POWER DISTRIBUTION SYMBOLS
	LIGHTING OR POWER DISTRIBUTION PANEL, RECESSED
	LIGHTING OR POWER DISTRIBUTION PANEL, SURFACE
	SERVICE DISCONNECT PANEL
	SERVICE METER
	SERVICE DISCONNECT SWITCH
/ // \ \	ELECTRICAL CIRCUITRY

	COMMUNICATION SYMBOLS
∇	DATA OUTLET
	DATA OUTLET — FLOOR TYPE
$oldsymbol{ abla}$	TELEPHONE/DATA OUTLET
▼	TELEPHONE OUTLET — WALL MOUNTED
	CALL IN SWITCH
₹V>	CABLE ANTENNA SYSTEM OUTLET (CATV)
TVM	MASTER ANTENNA SYSTEM OUTLET (MATV)
M	MICROPHONE OUTLET - FLOOR MOUNTED
M	MICROPHONE OUTLET - WALL MOUNTED
SP)	SPEAKER — CEILING MOUNTED
\$	SPEAKER — WALL MOUNTED
SP	SPEAKER HORN

ECTRICAL	PLAN	NOTES:	
L ELECTRICAL WORK IS			/

ΕL

NA ELECTRICAL CODE 2009 EDITION (NFPA 70-2008) (6/5 IAC 1/-1.5) EFFECTIVE 8/26/09.

ELECTRICAL WORK SHALL BE DONE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE

AS INCORPORATED BY THE INDIANA ELECTRICAL RULES.

EQUIPMENT FURNISHED FOR THIS JOB SHALL BE NEW & LISTED BY U.L.

ELECTRICAL CONTRACTOR SHALL PAY ALL FEES REQUIRED FOR ELECTRICAL WORK & ANY PERMITS NECESSARY TO PERFORM WORK.

COORDINATE ALL REVISIONS TO SERVICE ENTRANCE EQUIPMENT WITH DUKE ENERGY.

ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL TEMPORARY LIGHTING & POWER AS REQUIRED FOR OTHER CONSTRUCTION TRADES PERFORMING WORK ON THE PROJECT.

WORK SHALL BE DONE IN STRICT COMPLIANCE WITH LAST PUBLISHED CODES AND

STANDARDS AS LISTED BELOW AS EACH SHALL APPLY:

A. INDIANA OSHA STANDARDS.

B. NATIONAL ELECTRICAL CODE AS INCORPORATED INTO THE INDIANA ELECTRICAL RULES.

C. NATIONAL ELECTRICAL MANUFACTURE'S ASSOCIATION. D. APPLICABLE CODES & STANDARDS INCLUDING STATE LAWS, LOCAL ORDINANCES, UTILITY

COMPANY REGULATIONS, & NATIONALLY ACCEPTED CODES & STANDARDS.

FURNISH & INSTALL FIXTURES WHERE INDICATED ON THE DRAWINGS.

A. RECEPTACLES: 1.5 AMPERE, 125 VOLT, HUBBELL #5252-I

B. WALL SWITCHES: 20 AMPERE, 120 VOLT, HUBBELL #1201-I FOR 1 POLE; USE MATCHING FOR 3-WAY APPLICATIONS.

C. GFI RECEPTACLES: 15 AMPERE, 125 VOLT, HUBBELL #GF-5252-I WITH A #PJ26 COVER PLATE FOR INDOORS AND A #WP-26 COVER PLATE FOR OUTDOORS.

D. WP SWITCHES: 15 AMPERE, 125 VOLT, HUBBELL #5252-I WITH A #5206 WO COVER

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN CLEAN UP. DEBRIS

SHALL BE REMOVED DAILY, & THE SITE SHALL BE LEFT IN BROOM CLEAN CONDITION AT THE END OF THE PROJECT.

THE ELECTRICAL CONTRACTOR SHALL ACQUAINT HIMSELF WITH DETAILS OF THE WORK TO BE PERFORMED & TAKE NECESSARY STEPS TO INTEGRATE & COORDINATE WORK.

2. ALL DISTRIBUTION PANELS SHALL HAVE TYPE WRITTEN LABELS.

. ELECTRICAL SUBCONTRACTOR TO COORDINATE W/ HVAC SUBCONTRACTOR FOR ALL ELECTRICAL REQUIREMENTS OF ACTUAL EQUIPMENT UTILIZED, INCLUDING HIGH & LOW VOLTAGE WIRING REQUIREMENTS, DISCONNECTS, ETC.

. ELECTRICAL SUBCONTRACTOR SHALL PROVIDE & INSTALL ALL ELECTRICAL REQUIREMENTS, INCLUDING CONDUIT, WIRE, CIRCUIT BREAKERS, DISCONNECTS, ETC, FOR MECHANICAL

EQUIPMENT, SEE PLANS FOR MECHANICAL EQUIPMENT LOCATIONS. . SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP & CONNECTED TO THE SAME

CIRCUIT. SMOKE ALARM PLACEMENT TO BE PER MFG.'S RECOMMENDATION W/ RESPECT TO PROXIMITY & DISTANCE FROM RETURN AIR REGISTERS.

. PROVIDE 30A/2Ø INSULATED & WEATHERPROOFED CONNECTION FOR ALL OUTDOOR CONDENSING UNITS & FUSES PER MFG.'S NAMEPLATE.

. PROVIDE A GROUND FAULT CIRCUIT INTERRUPTER OUTLET (120V/20A) WITHIN TWENTY FEET OF ANY EXTERIOR CONDENSING UNIT AND WITHIN ALL HVAC ROOMS.

. PROVIDE GROUND FAULT CIRCUIT INTERRUPTERS OUTLETS AT ALL BATH, KITCHEN, ROOFTOPS, AND OUTDOOR AREAS WITHIN SIX FEET OF ANY SINK.

DEVICE MOUNTING HEIGHTS

DEVICES FOR MECHANICAL EQUIPMENT MUST BE COORDINATED WITH EQUIPMENT

REQUIREMENTS. ALL HEIGHTS ARE FROM FINISHED FLOOR OR FACE OR STUD TO

+18" AFF CONVIENIENCE OUTLET +18" AFF DATA/COMMUNICATION OUTLET +44" AFF +44" AFF +96" AFF

LIGHT SWITCH OR DIMMER DEVICES ABOVE COUNTERTOP +48" AFF +48" AFF +96" AFF

THERMOSTAT OR TEMPERATURE SENSOR FIRE ALARM PULL STATION FIRE ALARM HORN FIRE ALARM STROBE FIRE ALARM HORN/STROBE COMBO FIRE ALARM REMOTE ALARM LAMP

EXIT LIGHT

+80" AFF +80" AFF +96" AFF

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2921 MARCH 26, 2024 DRAWN BY S. MATTHEWS CHECKED BY D. BRUCE

PROJECT NO.

SHEET NO.

ELECTRICAL

SYMBOLS AND **ABBREVIATIONS**

