# Administration Building Addition Holy Cross Catholic Church

7000 Morning Star / The Colony, Texas 75056 / 972-625-5252

Date: 2-12-25

DESIGN DEVELOPMENT FINAL

Project Number: 2402

# Jim Bransford Architect

2201 Westbrook Ave. Fort Worth, Texas 76111 (817) 421-0259

# Multatech/Lochmueller Group

Civil Engineers 2821 West 7th Street, Suite 400 Fort Worth, Texas 76107 (817)877-5571

# HnH

Structural Engineers 1151 W. Pioneer Parkway Arlington, Texas 76013 (817) 277-6686

# Wells Doak Engineers, Inc.

MEP Engineers 2800 S. Hulen, Suite 212 Fort Worth, Texas 76109 (817) 920-9545

Revisions:

Preliminary. Not for construction, permitting or regulatory approval.

# PHASE 3 NEW ADMINISTRATION BUILDING & SITE IMPROVEMENTS FOR: HOLY CROSS CATHOLIC CHURCH

7000 MORNINGSTAR DR. THE COLONY, 75056 DENTON COUNTY, TEXAS

**UTILITY CONTACTS:** CITY OF THE COLONY 972-624-3129 **PUBLIC WORKS & UTILITIES CALL - 811** FRANCHISE UTILITIES **CALL - 811 ATMOS ENERGY (GAS) VERIZON (TELEPHONE) CALL - 811 GTE (TELEPHONE) CALL - 811 ELECTRIC CALL - 811** LEGEND:

	CONTROL POINT	— – – — PROPERTY LINE
•	BENCHMARK	EASEMENT LINE

	UT	TILITY LEGEND	
GM $\bigtriangledown$	EX. GAS METER	<b>&gt;</b>	PROP. FIRE DEPT. CONNECTION
PP	EX. POWER POLE		- PROP. WATER VALVE
LP 🜣	EX. LIGHT POLE		- PROP. GAS MATER
$\Diamond$	EX. TELE RISER	GAS GAS	
FH 💢	EX. FIRE HYDRANT	ss ss	- PROP. SS CLEANOUT
wv	EX. WATER VALVE		- PROP. WATER LINE
WM ⇔	EX. WATER METER	ss	- PROP. SAN. SEWER LINE
IR $\oplus$	EX. IRRIG. VALVE	———— GAS ————	- PROP. GAS LINE
	EX. SAN. SEWER	UGE	PROP. ELECTRIC CONDUITS
SSMH (	MANHOLE		PROP. STORM DRAIN
SSCO O	EX. SAN. SEWER		PROP. GRATE INLET
	CLEANOUT		PROP. CURB INLET
9	EX. TRAFFIC SIGN	//	
	EX. TREE		
TF	EX. PAD MOUNT TRANSFORMER		

NORTH	COLONY BLVD	).		W E
F.M. NO. 423  SOUTH COLONY	PAIGE ROAD BLVD.		MORNING STAR	STATE HIGHWAY
		TION	DRIVE	STATE 121

LOCATION MAP

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**★** FOR REFERENCE PURPOSES ONLY

PRELIMINARY

DIOCESE OF FORT WORTH HOLY CROSS CATHOLIC CHURCH 7000 MORNINGSTAR DRIVE THE COLONY, TEXAS 75056 972-625-5252

COOMBS LAND SURVEYING, INC. P.O. BOX 6160 FORT WORTH, TEXAS 76115 (817) 920-7600

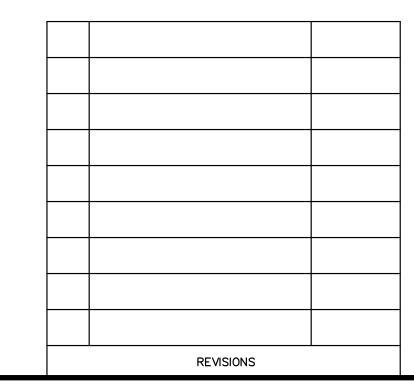
ron.coombs@sbcglobal.net

PROPERTY OWNER:

DIOCESE OF FORT WORTH HOLY CROSS CATHOLIC CHURCH 7000 MORNINGSTAR DRIVE THE COLONY, TEXAS 75056 972-625-5252

CIVIL ENGINEER: MULTATECH ARCHITECT/PLANNER: BRANSFORD ARCHITECTS 2201 WESTBROOK 2821 W. 7TH ST., #400 FORT WORTH, TX 76107 FORT WORTH, TX 76111 JIM BRANSFORD PAUL PADILLA 817-877-5571 817-834-1667

FEB, 2025



MULTATECH ENGINEERING, INC. Lochmueller Group

Company TBPE Reg #F26713 2821 West 7th Street Suite 400 Fort Worth, Texas 76107

SHT. C000

#### GENERAL NOTES

- 1. ALL EARTHWORK ACTIVITIES & PAVING CONSTRUCTION SHALL CONFORM TO THE LATEST TXDOT STANDARDS AND SPECIFICATIONS. ALL STORM DRAIN MATERIALS & CONSTRUCTION SHALL CONFORM TO THE LATEST TXDOT STANDARDS AND SPECIFICATIONS. ALL WATER AND SANITARY SEWER UTILITY MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST CITY STANDARDS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH ALL MATERIALS AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THIS PROJECT.
- THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
- 4. THE CONTRACTOR SHALL CONTACT ALL FRANCHISE UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISE UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS, IF ANY, ARE CONCEPTUAL.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION. PAYMENT FOR RELOCATION AND INSTALLATION WILL BE NEGOTIATED ONCE IDENTIFIED.
- 6. THE CONTRACTOR SHALL PROTECT ALL PUBLIC AND PRIVATE UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, POWER POLES, SIGNS, FIRE HYDRANTS, ETC., MUST BE ADJUSTED TO PROPER GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
- 7. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY
- 8. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, AND LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
- 9. THE CONTRACTOR SHALL REMOVE SURPLUS MATERIAL FROM THE PROJECT AREA. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND IS NOT A SEPARATE PAY ITEM.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- 11. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
- 12. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
- 13. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS SHALL BE SENT TO THE OWNER, OWNER'S REPRESENTATIVE, CIVIL ENGINEER. AND CONTRACTOR DIRECTLY FROM THE TESTING
- 14. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
- 15. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
- 16. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
- 17. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES UNLESS OTHERWISE NOTED ON PLANS.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 19. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE CIVIL ENGINEER A COPY OF RECORD DRAWINGS IDENTIFYING ALL DEVIATIONS OR VARIATIONS FROM THE ORIGINAL
- 20. ALL "RECORD" DIMENSIONS SHALL CONFORM TO THE DESIGN DIMENSIONS PLUS OR MINUS 0.02 FEET. ALL "RECORD" SLOPES SHALL CONFORM TO THE DESIGNED SLOPES PLUS OR MINUS 0.005 FOOT/FOOT.
- 21. CONTRACTOR SHALL GIVE NOTICE TO ALL AFFECTED PARTIES AND ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS, AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

#### PAVEMENT MARKINGS AND SIGNAGE NOTES

- ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" MUTCD, LATEST EDITION OR THE STATE'S VERSION OF THE MUTCD.
- ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT OF 1994, AS WELL AS SPECIFIC STATE STANDARDS.
- 3. ALL PAVEMENT DECALS AND STRIPING INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE CONTRACTOR GRADE ACRYLIC STRIPING PAINT FOR NEW ASPHALT OR COATEDASPHALT. PROVIDE CONTRACTOR GRADE ACRYLIC, ALKYD, OR CHLORINATED RUBBER STRIPING PAINT FOR EXISTING ASPHALT AND CONCRETE PAVEMENTS OR RESTRIPING.
- APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAR FEET OF FOUR (4) INCH WIDE STRIPES (OR TO MANUFACTURER'S SPECIFICATION).
- 6. APPLY STRIPES AND OTHER MARKINGS STRAIGHT AND EVEN AT COLORS AND WIDTHS IN ACCORDANCE WITH PLANS.

#### TRAFFIC CONTROL NOTES

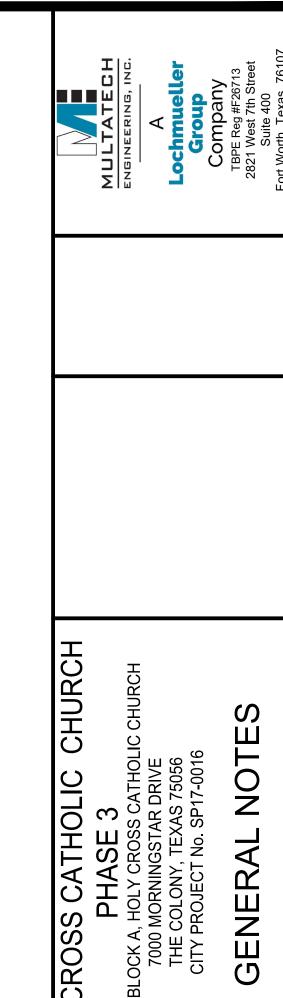
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL MEASURES, AS NEEDED, IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST VERSION.
- CONTRACTOR SHALL PROVIDE ANY NECESSARY TRAFFIC CONTROL PLANS TO THE OWNER, AT LEAST ONE WEEK PRIOR TO CONSTRUCTION
- THE CONTRACTOR SHALL COVER EXISTING SIGNS AND OBLITERATE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE INTENT OF THESE TRAFFIC CONTROL PLANS TO AVOID CONFUSION TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL UNCOVER EXISTING SIGNS AND REPLACE PAVEMENT MARKINGS IN-KIND AS ORIGINALLY CONFIGURED AT THE END OF CONSTRUCTION OPERATIONS AND PRIOR TO FINAL ACCEPTANCE BY THE OWNER.
- ALL TEMPORARY SIGNS, BARRICADES, WARNING LIGHTS AND OTHER MISCELLANEOUS TRAFFIC CONTROL MEASURES SHALL BE REMOVED AND ORIGINAL TRAFFIC CONTROL MEASURES REPLACED AT THE END OF THE CONTRACTOR'S CONSTRUCTION OPERATIONS.

#### EROSION CONTROL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. THE CONTRACTOR SHALL USE SEDIMENT FILTERS OR OTHER MEASURES APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM CLOGGING STORM SEWER PIPES OR PROPOSED OR EXISTING INLETS, OR FROM BEING TRANSPORTED TO ADJACENT PROPERTIES AND STREET RIGHT-OF-WAYS. ALL EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL FINAL GRADING AND PAVING IS COMPLETE AND PERMANENT SOIL STABILIZATION IS ACHIEVED.
- CONSTRUCTION OPERATIONS SHALL BE MANAGED SO THAT AS MUCH OF THE SITE AS POSSIBLE IS LEFT COVERED WITH EXISTING TOPSOIL AND
- 3. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED (OR SODDED), IRRIGATED, AND MAINTAINED UNTIL PERMANENT STAND OF GRASS IS ACHIEVED WITH A MINIMUM OF 70% COVERAGE. UNLESS OTHERWISE NOTED, PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD SIMILAR TO THAT EXISTING, UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION TRAFFIC UTILIZES THE STABILIZED ENTRANCE AT ALL TIMES FOR INGRESS/EGRESS TO THE SITE.
- THE AUTHORITIES HAVING SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON A PUBLIC ROADWAY SHALL BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE TO A PUBLIC ROADWAY, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR TRACKING ONTO PUBLIC ROADS SHALL BE PAID BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR PROPER MAINTENANCE OF THE REQUIRED EROSION CONTROL DEVICES THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. EROSION CONTROLS SHALL BE REPAIRED OR REPLACED AS INSPECTION DEEMS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ACCUMULATED SILT IN ANY EROSION CONTROL DEVICE SHALL BE REMOVED AND SHALL BE DISTRIBUTED ON SITE IN A MANNER NOT CONTRIBUTING TO ADDITIONAL SILTATION. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH IS DISTURBED.
- THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE ORGANIC FILTER TUBE (OR OTHER METHOD APPROVED BY THE ENGINEER) AS REQUIRED TO PREVENT ADVERSE OFF SITE IMPACTS OR STORM WATER QUALITY FROM SILT AND CONSTRUCTION DEBRIS FLOWING ONTO ADJACENT PROPERTIES.
- BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.
- 10. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (IF REQUIRED) WITH ALL

- CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY THE T.C.E.Q. OR
- 11. CONSTRAIN DISTURBED AREA TO THE MINIMUM NECESSARY TO CONSTRUCT PROJECT.
- 12. ESPECIALLY AVOID DISTURBANCE OF STEEP SLOPES LONGER THAN 20'. 13. KEEP TOPSOIL IN PLACE AS LONG AS REASONABLY POSSIBLE
- 14. STORE STOCKPILED TOPSOIL IN A SERIES OF SMALLER STOCKPILES RATHER THAN ONE LARGE STOCKPILE.
- 15. EXISTING TREES AND VEGETATION NOT DIRECTLY IMPACTED BY PROJECT SHALL BE PRESERVED AND PROTECTED.
- 16. TEMPORARY OR PERMANENT HYDRAULIC SEEDING SHALL BE PLACED WHEN ACTIVITIES HAVE CEASED FOR NO MORE THAN 14 DAYS.
- 17. ALL DISTURBED AREAS SHALL BE SEEDED WITH A TEMPORARY SEASONAL AND PERMANENT SEED MIX PER STATE DOT SEED MIX
- 18. FOR HYDRAULIC SEEDING, ON DISTURBED GRADES STEEPER THAN 5%, ANCHORED MULCH OR EROSION CONTROL BLANKET IS REQUIRED. BONDED FIBER MATRIX IS REQUIRED FOR SLOPES STEEPER THAN 5:1. GROOVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR
- 19. VEGETATION MAY BE USED BY ITSELF FOR PROTECTION OF THE EAST DITCHES. EROSION CONTROL BLANKETS SHALL BE USED IN THE DITCHES WHILE VEGETATION IS BEING ESTABLISHED.
- 20. IF THE VELOCITY OF THE TEMPORARY CONTROL DESIGN STORM IS GREATER THAN 2 FEET PER SECOND, EROSION CONTROL BLANKETS SHALL BE USED IN THE CHANNEL WHILE VEGETATION IS BEING ESTABLISHED. TURF REINFORCEMENT MATS ARE REQUIRED WHEN THE VELOCITY EXCEEDS 6 FEET PER SECOND.
- 21. STABILIZATION OF CHANNELS WITH VEGETATION IS LIMITED TO CHANNELS THAT HAVE SIDE SLOPES OF 3:1 OR FLATTER.

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED GRADING PERMIT AND PAYING ALL ASSOCIATED FEES PRIOR TO STARTING CONSTRUCTION.
- 2. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
- 3. ALL SPOT ELEVATIONS SHOWN ARE TO TOP OF PAVING SURFACE OR FINISHED EARTH GRADE UNLESS NOTED OTHERWISE.
- 4. ALL CUT OR FILL SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE
- 5. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM THE EXISTING AND PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS. CONTRACTOR ADJUSTMENTS TO SPOT GRADES TO MAINTAIN POSITIVE DRAINAGE IS ALLOWED WITH THE PRIOR APPROVAL OF THE ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PAVING IF ANY AREAS OF POOR DRAINAGE ARE ENCOUNTERED.
- THE CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES WHICH ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
- ALL EXISTING CONCRETE PAVING, CHANNEL IMPROVEMENTS, SIDEWALK, STRUCTURES AND CURB DEMOLITION SHALL BE REMOVED IN THEIR ENTIRETY AND DISPOSED OF BY THE CONTRACTOR, OFFSITE UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER.
- 8. ALL CLEARING, GRADING, COMPACTION AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE TO THE GEOTECHNICAL REPORT.
- 9. GRADING CONTRACTOR TO COORDINATE WITH THE FRANCHISE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR
- 10. THE CONTRACTOR SHALL CALCULATE HIS OWN EARTHWORK QUANTITIES AND USE TO DETERMINE HIS BID ACCORDINGLY.
- 11. BEFORE ANY EARTHWORK IS DONE, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROTECT AND PRESERVE CONTROL POINTS AT ALL TIMES DURING THE COURSE OF THE PROJECT. THE GRADING CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- 12. CONTRACTOR STAGING AREA TO BE AGREED UPON BY OWNER PRIOR TO BEGINNING CONSTRUCTION.



MLG PROJECT NO: 24043.00 DESIGNED BY: PJP

DRAWN BY: JDS CHECKED BY: EAC DATE: 02-12-25 CITY PROJECT NO:

**GENERAL NOTES** 

SHEET TITLE

C-002

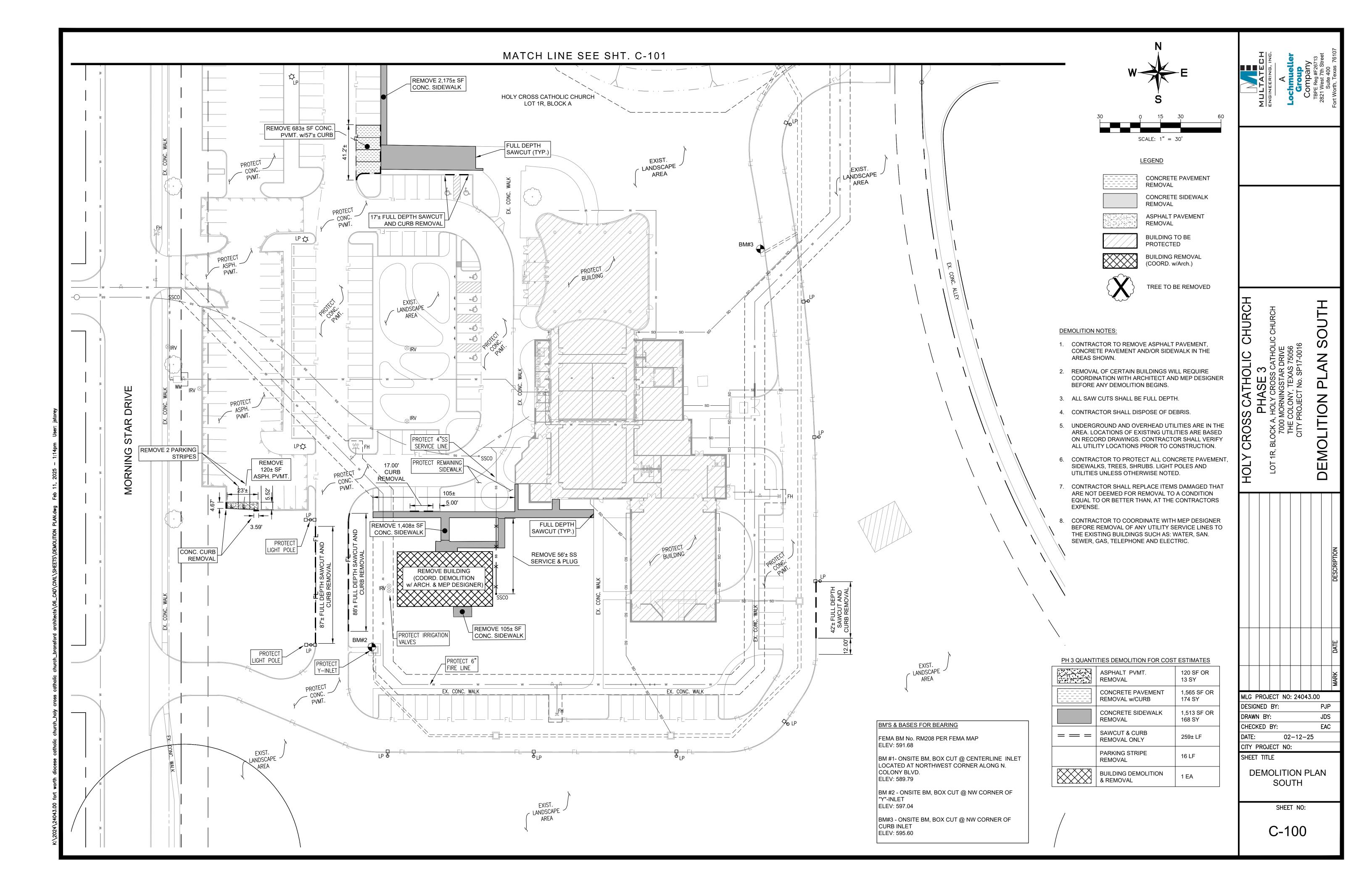
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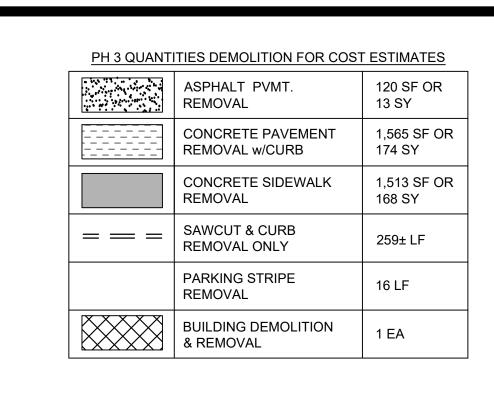
	CITY OF THE COLONY ENGINEERING DESIGN MANUAL	moisture content of the fill at the time of compaction should be near optimum to four percentage points above the proctor optimum value.  31. The Contractor shall contact the City of The Colony at locate@thecolonytx.gov operation of all water valves.
	APPENDIX "B"  PRIVATE DEVELOPMENT GENERAL NOTES	<ul> <li>a. All backfill material to be select native material (6" diameter clods and smaller unless directed otherwise by the City) and to be mechanically tamped and density controlled as described above.</li> <li>32. The cost of replacing all pavement markers, traffic buttons, striping, etc., disturbed during the construction shall be Contractor's responsibility to maintain, repair or replace.</li> </ul>
4		b. Water jetting is <u>not</u> permitted. c. Densities shall be taken every one (1) lift at staggered one 33. The Contractor shall maintain the flow of traffic at all times and provide access to all drives.
1.	All work shall be done in accordance with the City of The Colony standard details and specifications which has adopted the North Central Texas Council of Governments (N.C.T.C.O.G.) "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", Fifth Edition and Addenda. Copies may be obtained from the "NORTH	hundred-foot increments, and at typical locations in ditch lines as shown below:  34. The maximum deflection of pipe joints shall not exceed that recommended by the pipe manufacturer. If it is necessary to deflect the pipe (greater that the recommended amount) the Contractor shall provide fittings or specials.
	CENTRAL COUNCIL OF GOVERNMENTS", PO Drawer 5888, Arlington, Texas, 76005-5888, Phone (817) 640-3300; also available at <a href="https://www.nctcog.org">www.nctcog.org</a> . A copy of the contract documents, plans and specifications shall be available on-site at all times by the	0+00 0+50 1+00 1+50 2+00 2+50 3+00 the Contractor shall provide fittings or specials.    X   X   X
2.	Contractor.  The location and depth of all utilities shown on the plans are approximate and there may	X X X X X X X X X X X X X X X X X X X
	be other unknown existing utilities not shown on the plans. All existing utilities shall be field verified and protected by the Contractor prior to the start of construction. Also see <b>General Note No. 3(D)</b> . The contractor shall contact the following utility companies 72 hours prior	X
	to doing any work in the area:	
	a. Texas One Call 1 (800) 245-4545 b. City of The Colony Water Department Locate@thecolonytx.gov c. City of The Colony Irrigation irrigation@thecolonytx.gov d. Oncor (469) 504-2775	streets, and subject property shall remain clear of trash, silt, and debris at the end of each working day. The City reserves the right to shut down any construction activities where (Legend: X denotes densities.)
3.	e. Atmos Energy f. AT&T g. Time Warner Cable h. Coserv Electric coserv Gas (24 Hour Number)  It shall be the responsibility of the Contractor to perform the following:  a. Prevent any property damage to property owner's poles, fences, shrubs, mailboxes, etc. b. Provide access to all drives during construction. c. Protect all underground and overhead utilities and repair any damages. Also see General Note No. 2. d. Notify all Utility Companies and verify location of all utilities prior to the start of construction. e. Cooperate with the Utility Companies where utilities are required or specified to be relocated. f. Work in close proximity to and protect existing Utility Mains, traffic lights and poles. g. Any item not specifically called out to be removed shall be brought to the attention of the Engineer prior to removing that item or it shall be replaced at the Contractor's own expense. h. Any tree, shrub, or grassed areas damaged by the Contractor's work shall be repaired at the Contractor's expense	d. Densities shall also be taken during the backfill of each and every service line installed during the project in the same manner described above. If 100 feet sample staggering is not possible due to short service line length, staggering will be as directed by the City's construction inspector for the project.  e. Density will also be taken beneath and around each and every inelt, junction box and manhole installed during the project during backfill activities. Sample staggering will be as directed by the City's construction inspector for the project.  Contractor to fill all voids under existing pavement when installing new line. Also all ditch lines must be filled at the end of each day's work.  All pipe shall be keept free of trash and dirt at all time. At the end of each day, the pipe shall be temporarily connected/sealed.  The Contractor shall maintain the existing water mains in service during all phases of construction. Leaks caused by the Contractor shall be repaired immediately at the Contractor's expense. Leaks along the existing water main close to the working area, caused by vibration, etc. (during working hours) shall be repaired by the Contractor with the City only providing the required parts. The City will repair all leaks if the Contractor is the City only providing the required parts. The City will repaired by the Contractor with the City only providing the required parts. The City will repair all leaks if the Contractor is in advance, and the fee paid at the time of the inspection request.
	B-1 9/12/2023 5:35:18 PM	B-3 9/12/2023 5:35:18 PM B-5 9/12/2023 5:35:18 PM
4.	In the preparation of the plans and specifications, the Engineer has endeavored to indicate the location of existing underground utilities. It is not guaranteed that all lines or structures have been shown on the plans.	not on the job-site (primarily after working hours); if the leak is directly caused by the Contractor and not repaired, all charges incurred shall be billed to the Contractor.  39. All street paving over 10et in length shall be performed using appropriate slip form paving machine. Hand pours are not allowed unless under 100 feet in length.
5.	The Contractor shall verify, locate, and protect existing water, sanitary sewer, storm sewer, gas, electric and telephone mains and services and restore service in case of any damage.	22. All cutting and plugging of the existing water main where specified on the plans, shall include all labor, fittings and appurtenances required to perform this work, with the cost incidental to the project.
6.	The Contractor shall provide proper barricades and maintain traffic flow as per Manual on Uniform Traffic Control Devices (MUTCD) at all times.	23. The Contractor shall maintain the existing sanitary sewer mains and services in operation when installing the proposed sanitary sewer main. This shall include any temporary connections, if required.
7.	Unless otherwise approved by the City of The Colony Engineering department, the disposal of all construction material shall be hauled outside city limits and disposed of in accordance with the appropriate regulations and guidelines.	24. Clearances on water and wastewater lines shall meet State requirements. Minimum clearances for water and wastewater lines crossing storm drains shall be two (2) feet or one-half (0.5) feet when the water or wastewater line is concrete encased.
8.	All phases of construction must be coordinated with the Engineer. Also, the Contractor is required to coordinate with the property owners in order to minimize conflicts.	25. Street closing requests shall be submitted to the City of The Colony Engineering Department in writing, a minimum of two weeks in advance of any street closing for
9.	Field adjustments may be necessary and will be carried out as directed by the Engineer.  The Contractor shall contact the City of The Colony Engineering Department prior to any sign removal. Please See General Note No. 3. Sign removal and reinstallation/relocation	notifications to Police, Fire, Mail, Garbage and School. There are no guarantees that street closings will be approved by the City.  26. Seed/sod shall be furnished to establish ground cover over all disturbed areas as an
	shall be in good condition equal to or better than existing condition, and as per the Engineer's specifications.	erosion control measure. The Contractor shall not wait until the Completion of the entire project before doing this work. The project shall not be accepted by the City Engineer prior to the establishment of ground cover. Side slopes greater than 5:1 shall include staked
11.	All fences, signs, and property corner monuments removed for, or damaged during construction shall be replaced with new material as per the Engineer's specifications.	mats.  27. Sheeting, shoring, and bracing: The contractor will abide by all applicable federal, state,
12.	The Contractor shall relocate existing mailboxes in conflict with the proposed improvements and as specified on the plans, in good condition equal to or better than existing condition, complete in place. The mailboxes shall be accessible at all times for mail delivery.	and local laws governing excavation, Trench's side slopes shall meet Occupational Safety and Health Administration (OSHA) standards that are in effect at the time of construction. Sheeting shoring and bracing shall be required if side slope standards are not met. A pull box, meeting OSHA standards, will be acceptable. The Contractor will submit detailed plans and specifications for trench safety systems that meet OSHA standards that are in
13.	The Contractor shall be responsible for taking all precautions to protect existing trees outside the scope of this Project.	effect at the time of development of project when trench excavation will exceed a depth of five (5) feet. These plans will be sealed by an Engineer registered by the State of Texas and submitted to the City before obtaining a construction permit.
14. 15.	The Contractor shall be responsible for repairing any damage caused by the Contractor outside of the designated work area with new quality material at the Contractor's expense.  The Contractor shall locate, verify working condition and protect all existing sprinkler systems lines and heads (if any). Remove, adjust and reinstall in good condition equal to	28. Contractor shall conform activities to the SWPPP as specified, including installing, maintaining, and removing pollution controls, conducting and documenting inspections of pollution controls, sprinkling for dust control, maintaining spill response equipment on-site, and "good housekeeping". Pollution controls include silt fences (or straw bales), stabilized
4-	or better than existing condition; replace, if in direct conflict, with the same or better quality material and appurtenances.	construction entrance, establishing grass, sprinkling for dust control. The Contractor shall also be responsible for submitting Notice of Intent (NOI) and Notice of Termination (NOT) to the Texas Commission on Environmental Quality (TCEQ).
16.	All ditch lines and here pits shall be mechanically tamped. Backfill, other than select fill.	29. The Contractor shall maintain the existing water mains and services in operation when installing the proposed water main. This shall include any temporary connections, if
17.	All ditch lines and bore pits shall be mechanically tamped. Backfill, other than select fill, may consist of on-site or off-site inorganic soils and should be placed in loose lifts 6"-8" in thickness and should be mechanically compacted to 95 percent of the maximum dry	required in areas of conflict  30. Contractor must notify each property owner 24 hours prior to shutting off water for connection to new main.
	density as defined by ASTM D-698 (Standard Proctor) procedures under existing and proposed pavement, and to 90 percent standard proctor procedures elsewhere. The	

HOLY CROSS CATHOLIC CHURCH
PHASE 3

LOT 1R, BLOCK A, HOLY CROSS CATHOLIC CHURCH
7000 MORNINGSTAR DRIVE
THE COLONY, TEXAS 75056
CITY PROJECT No. SP17-0016 GENERAL NOTES MLG PROJECT NO: 24043.00 PJP DESIGNED BY: DRAWN BY: JDS EAC CHECKED BY: 02-12-25 CITY PROJECT NO: SHEET TITLE **GENERAL NOTES** 

SHEET NO:





#### **DEMOLITION NOTES:**

- 1. CONTRACTOR TO REMOVE ASPHALT PAVEMENT, CONCRETE PAVEMENT AND/OR SIDEWALK IN THE AREAS SHOWN.
- 2. REMOVAL OF CERTAIN BUILDINGS WILL REQUIRE COORDINATION WITH ARCHITECT AND MEP DESIGNER BEFORE ANY DEMOLITION BEGINS.
- 3. ALL SAW CUTS SHALL BE FULL DEPTH.
- 4. CONTRACTOR SHALL DISPOSE OF DEBRIS.
- 5. UNDERGROUND AND OVERHEAD UTILITIES ARE IN THE AREA. LOCATIONS OF EXISTING UTILITIES ARE BASED ON RECORD DRAWINGS. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- 6. CONTRACTOR TO PROTECT ALL CONCRETE PAVEMENT, SIDEWALKS, TREES, SHRUBS. LIGHT POLES AND UTILITIES UNLESS OTHERWISE NOTED.
- 7. CONTRACTOR SHALL REPLACE ITEMS DAMAGED THAT ARE NOT DEEMED FOR REMOVAL TO A CONDITION EQUAL TO OR BETTER THAN, AT THE CONTRACTORS EXPENSE.
- 8. CONTRACTOR TO COORDINATE WITH MEP DESIGNER BEFORE REMOVAL OF ANY UTILITY SERVICE LINES TO THE EXISTING BUILDINGS SUCH AS: WATER, SAN. SEWER, GAS, TELEPHONE AND ELECTRIC.

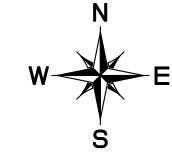
#### BM'S & BASES FOR BEARING

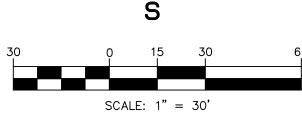
FEMA BM No. RM208 PER FEMA MAP ELEV: 591.68

BM #1- ONSITE BM, BOX CUT @ CENTERLINE INLET LOCATED AT NORTHWEST CORNER ALONG N. COLONY BLVD. ELEV: 589.79

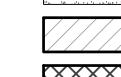
BM #2 - ONSITE BM, BOX CUT @ NW CORNER OF "Y"-INLET ELEV: 597.04

BM#3 - ONSITE BM, BOX CUT @ NW CORNER OF CURB INLET ELEV: 595.60

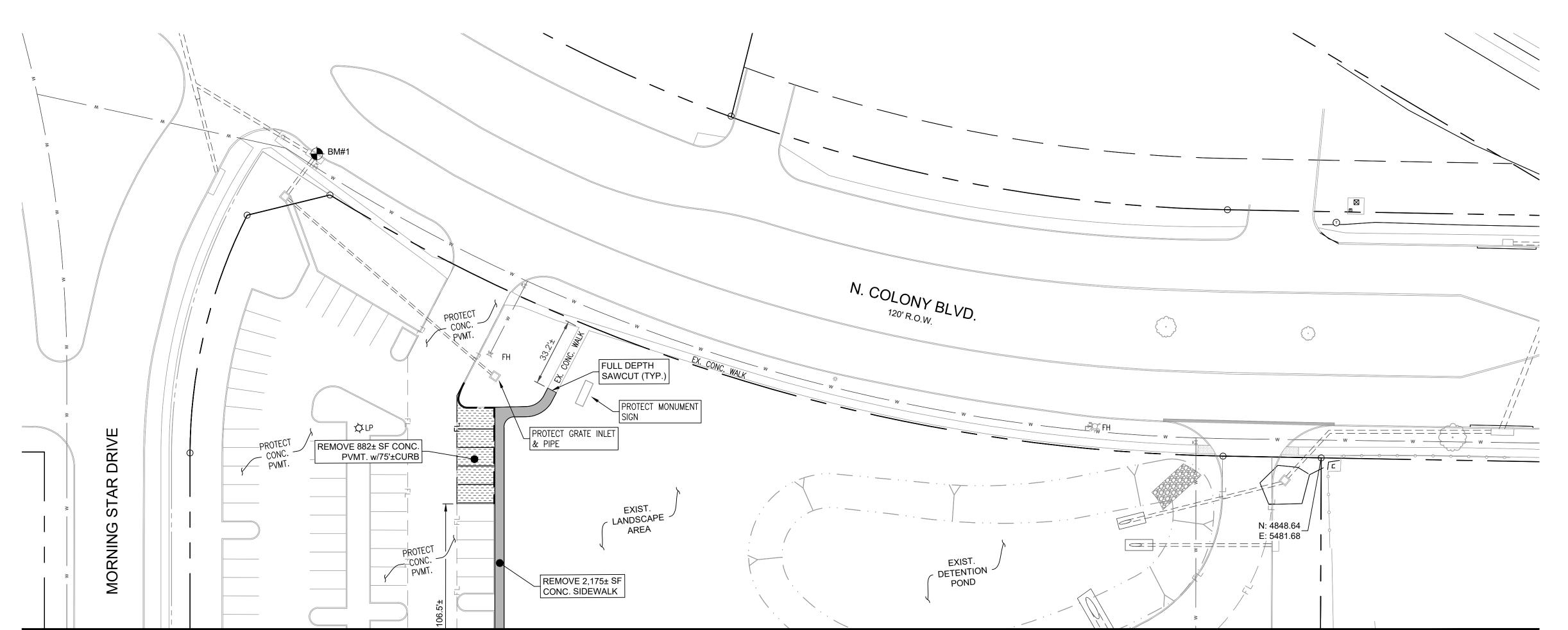




#### <u>LEGEND</u>



CONCRETE PAVEMENT REMOVAL CONCRETE SIDEWALK REMOVAL ASPHALT PAVEMENT REMOVAL **BUILDING TO BE** PROTECTED BUILDING REMOVAL (COORD. w/Arch.) TREE TO BE REMOVED



MATCH LINE SEE SHT. C-100

**EMOLITION** 

MLG PROJECT NO: 24043.00 DESIGNED BY: PJPDRAWN BY: JDS EAC CHECKED BY: 02-12-25

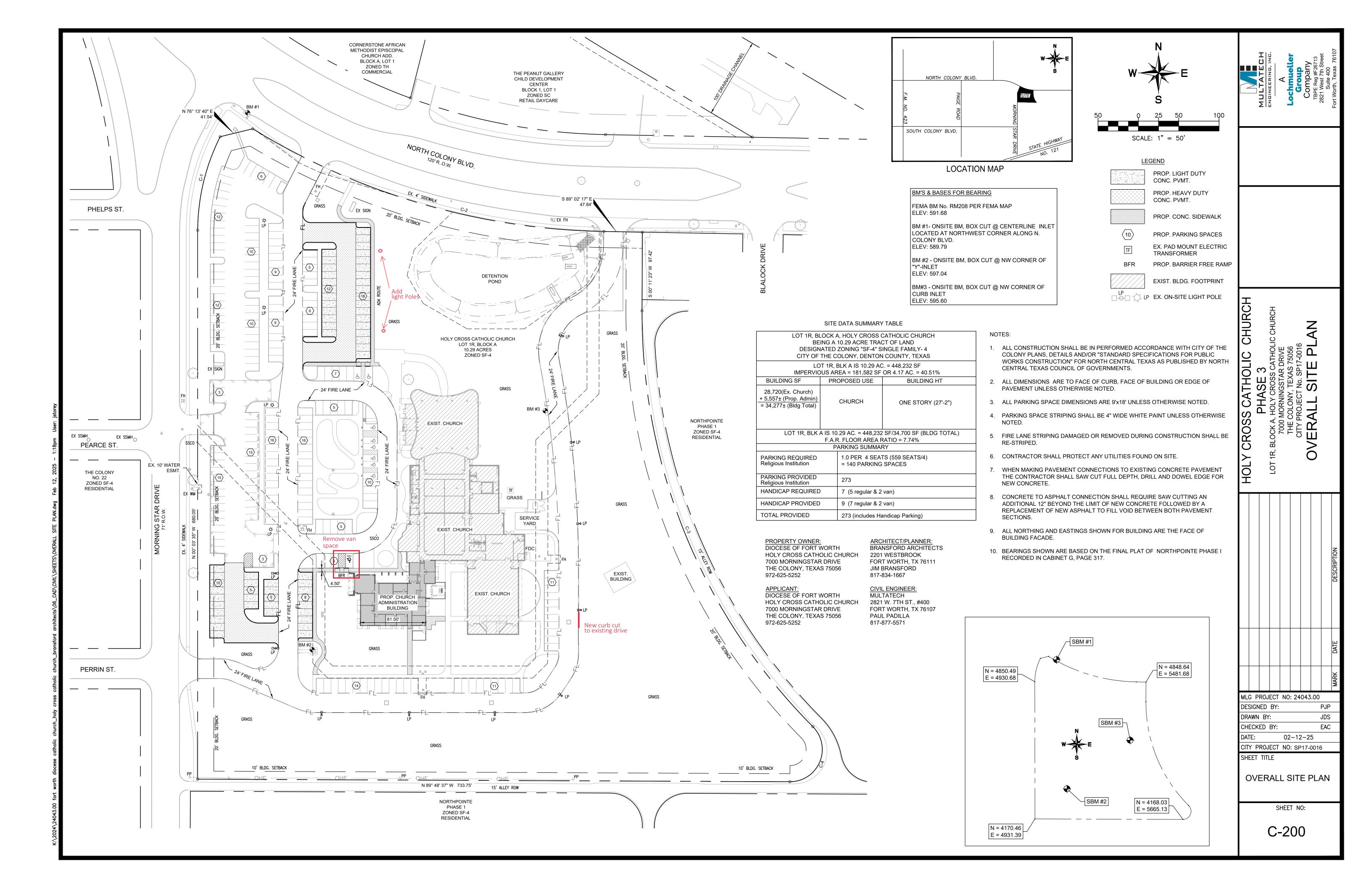
NORTH

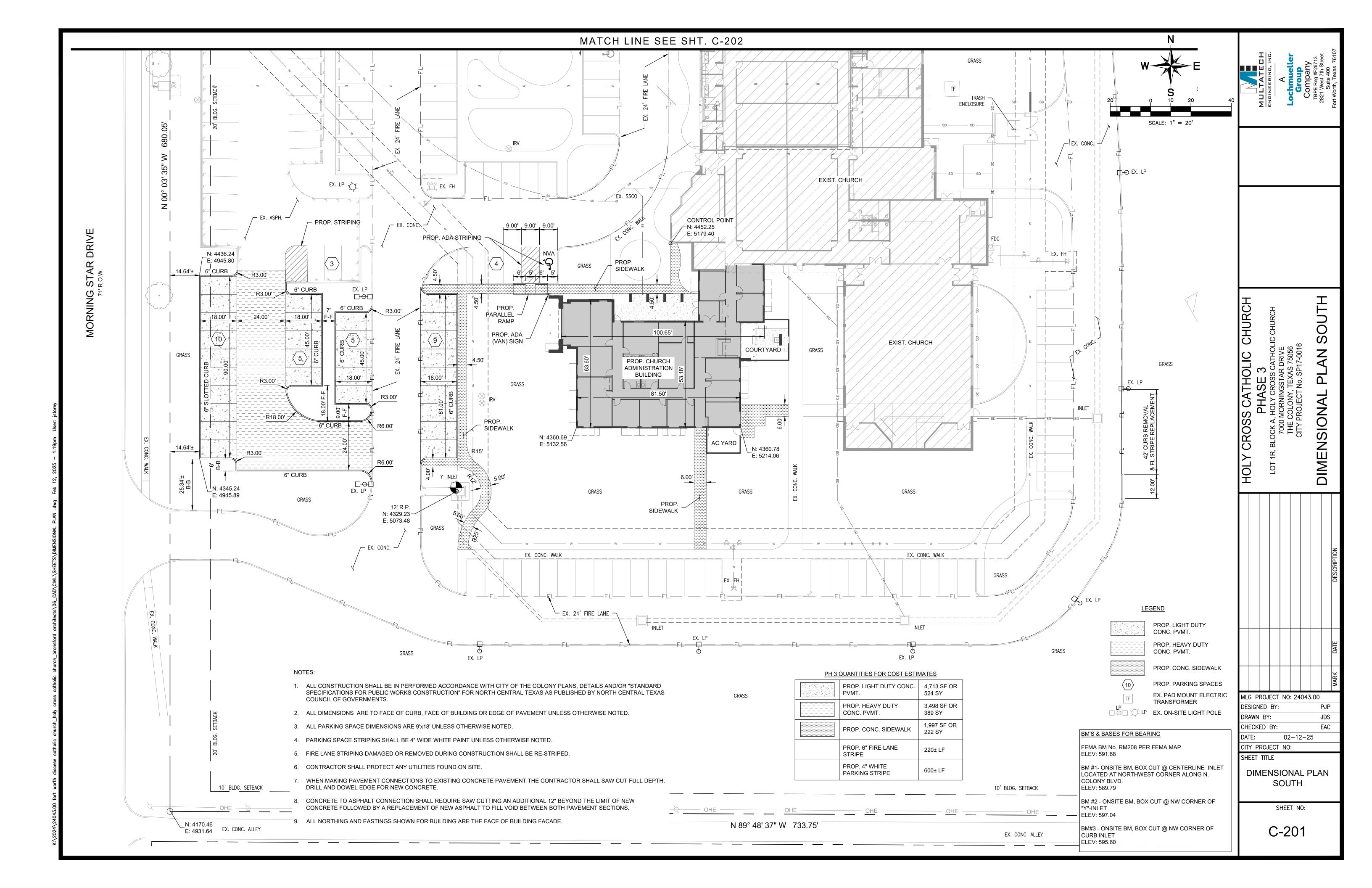
**DEMOLITION PLAN** 

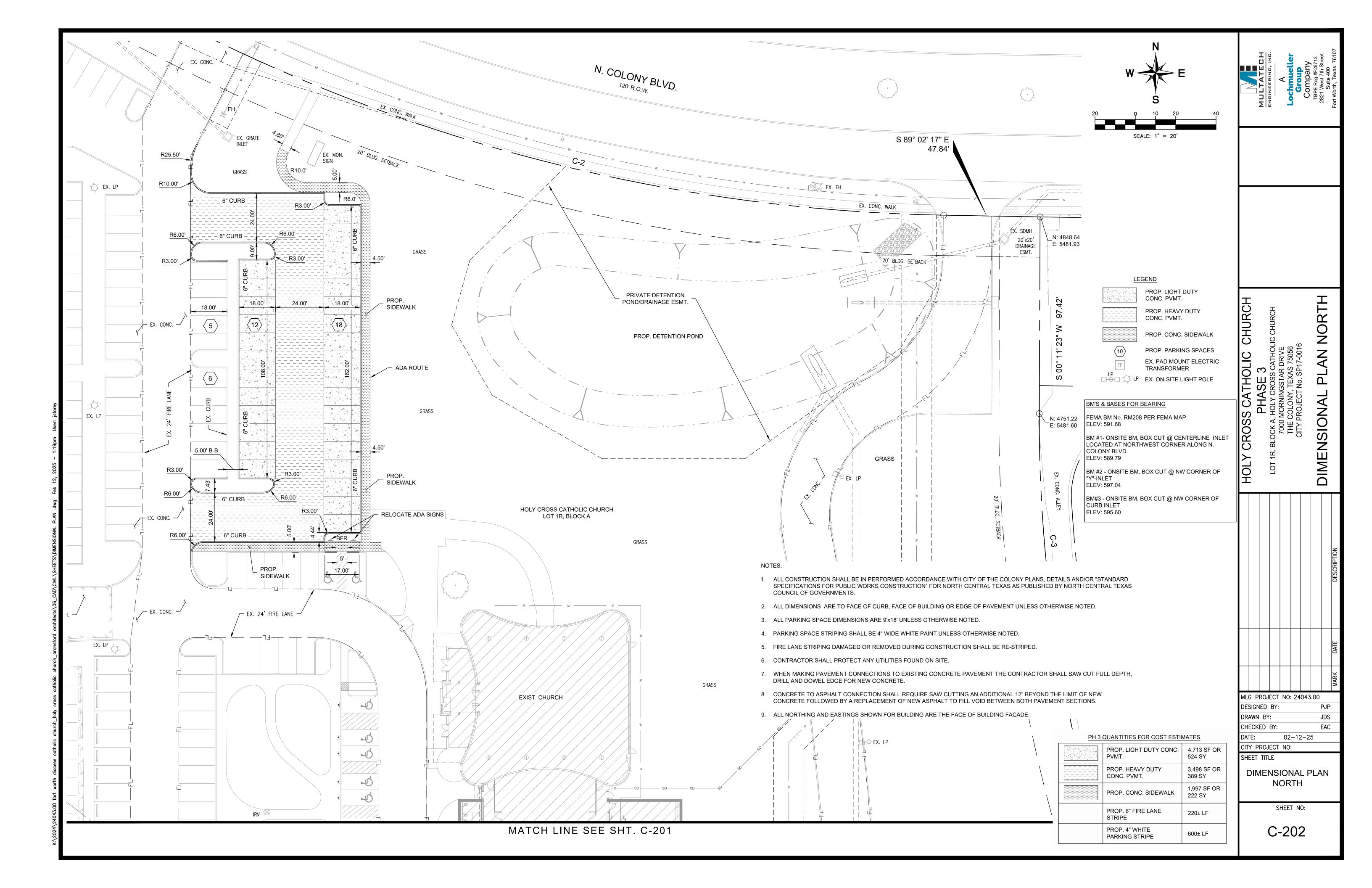
SHEET NO:

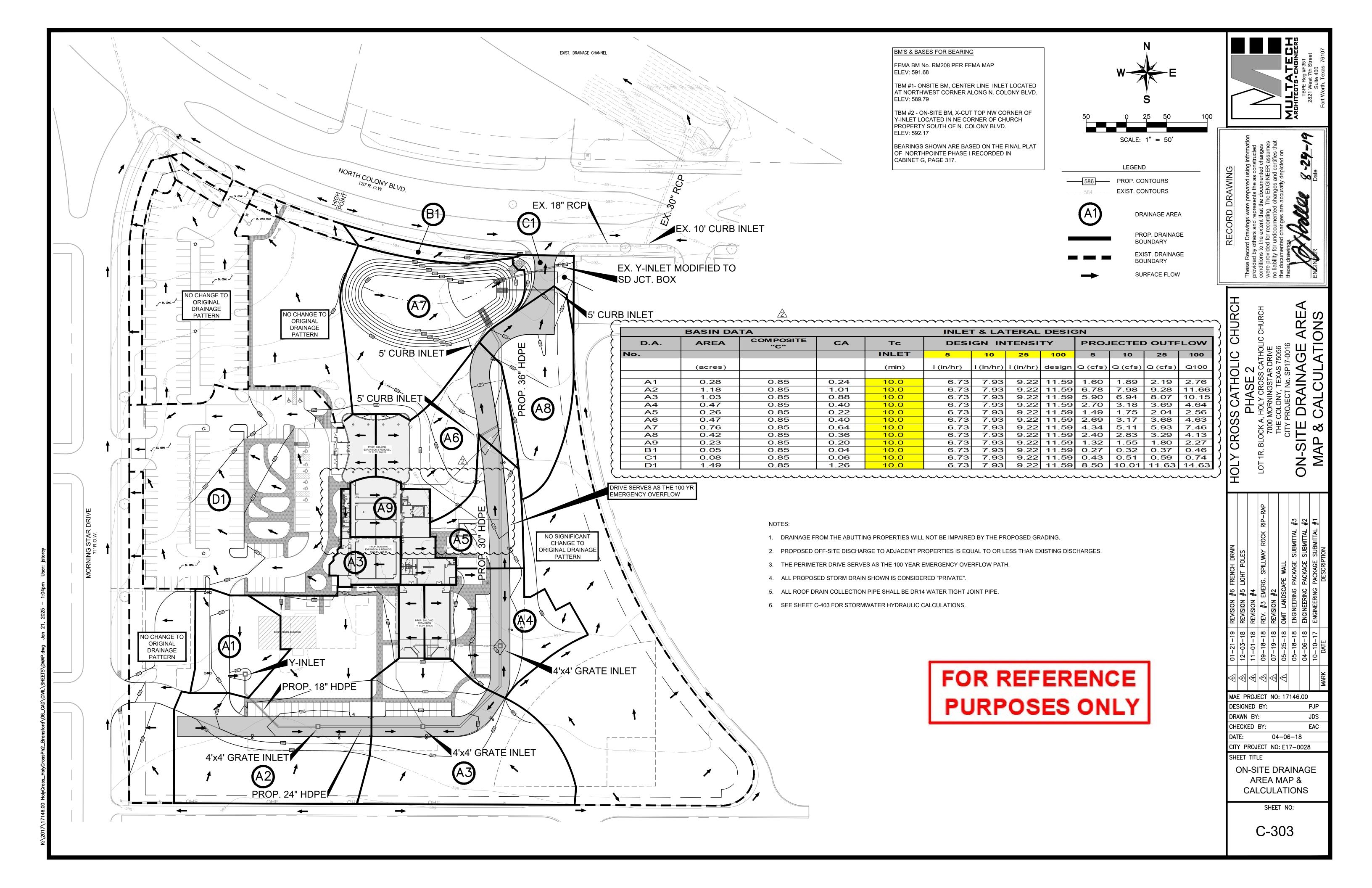
CITY PROJECT NO:

SHEET TITLE









Pond No. 1 - Northeast Pond

Pond Data **Contours** -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 587.50 ft

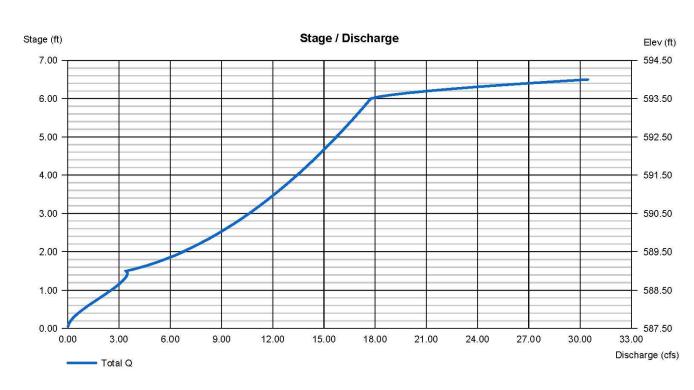
Stage / Storage Table

stage / Stor	age rable				
Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)	
0.00	587.50	125	0	0	
0.50	588.00	1,753	391	391	
1.00	588.50	3,273	1,237	1,628	
1.50	589.00	8,999	2,950	4,577	
2.00	589.50	9,837	4,707	9,284	
2.50	590.00	10,673	5,126	14,410	
3.00	590.50	11,565	5,557	19,967	
3.50	591.00	12,454	6,003	25,970	
4.00	591.50	13,395	6,460	32,430	
4.50	592.00	14,332	6,930	39,360	
5.00	592.50	15,321	7,411	46,771	
5.50	593.00	16,303	7,904	54,675	
6.00	593.50	17,348	8,411	63,086	
6.50	594.00	18.382	8.930	72.016	

Weir Structures

Crest El. (ft) 0.00 0.00 Span (in) 3.33 3.33 3.33 No. Barrels Weir Coeff. Invert El. (ft) = Rect Length (ft) = 82.160.00 0.00 0.00 Multi-Stage Slope (%) N-Value = .013 .013 .013 n/a Exfil.(in/hr) = 0.000 (by Contour) Orifice Coeff. = 0.60 0.60 0.60 0.60 TW Elev. (ft) = 0.00 Multi-Stage = n/a No No No

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



#### **Hydraflow Rainfall Report**

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Return Period	Intensity-Duration-Frequency Equation Coefficients (FHA)									
(Yrs)	В	D	E	(N/A)						
1	0.0000	0.0000	0.0000							
2	51.3930	9.0000	0.8411							
3	0.0000	0.0000	0.0000							
5	71.1540	12.0000	0.8142							
10	77.1030	12.0000	0.7995							
25	90.9820	13.0000	0.7938							
50	97.7210	13.0000	0.7826							

File name: Tarrant County ISWM 2014.IDF

#### Intensity = B / (Tc + D)^E

Intensity Values (in/hr)											
5 min	10	15	20	25	30	35	40	45	50	55	60
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.58	4.32	3.55	3.03	2.65	2.36	2.13	1.95	1.79	1.66	1.55	1.46
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.08	5.74	4.86	4.23	3.76	3.39	3.10	2.85	2.65	2.47	2.32	2.19
8.00	6.51	5.53	4.83	4.30	3.88	3.55	3.27	3.04	2.84	2.67	2.52
9.17	7.55	6.46	5.67	5.07	4.60	4.21	3.89	3.62	3.39	3.19	3.02
10.18	8.40	7.20	6.33	5.67	5.15	4.72	4.37	4.07	3.82	3.60	3.40
11.09	9.24	7.98	7.05	6.33	5.76	5.30	4.91	4.58	4.30	4.06	3.84
	0.00 5.58 0.00 7.08 8.00 9.17 10.18	0.00 0.00 5.58 4.32 0.00 0.00 7.08 5.74 8.00 6.51 9.17 7.55 10.18 8.40	0.00     0.00     0.00       5.58     4.32     3.55       0.00     0.00     0.00       7.08     5.74     4.86       8.00     6.51     5.53       9.17     7.55     6.46       10.18     8.40     7.20	0.00     0.00     0.00     0.00       5.58     4.32     3.55     3.03       0.00     0.00     0.00     0.00       7.08     5.74     4.86     4.23       8.00     6.51     5.53     4.83       9.17     7.55     6.46     5.67       10.18     8.40     7.20     6.33	5 min         10         15         20         25           0.00         0.00         0.00         0.00         0.00           5.58         4.32         3.55         3.03         2.65           0.00         0.00         0.00         0.00         0.00           7.08         5.74         4.86         4.23         3.76           8.00         6.51         5.53         4.83         4.30           9.17         7.55         6.46         5.67         5.07           10.18         8.40         7.20         6.33         5.67	5 min         10         15         20         25         30           0.00         0.00         0.00         0.00         0.00         0.00           5.58         4.32         3.55         3.03         2.65         2.36           0.00         0.00         0.00         0.00         0.00         0.00           7.08         5.74         4.86         4.23         3.76         3.39           8.00         6.51         5.53         4.83         4.30         3.88           9.17         7.55         6.46         5.67         5.07         4.60           10.18         8.40         7.20         6.33         5.67         5.15	5 min         10         15         20         25         30         35           0.00         0.00         0.00         0.00         0.00         0.00         0.00           5.58         4.32         3.55         3.03         2.65         2.36         2.13           0.00         0.00         0.00         0.00         0.00         0.00         0.00           7.08         5.74         4.86         4.23         3.76         3.39         3.10           8.00         6.51         5.53         4.83         4.30         3.88         3.55           9.17         7.55         6.46         5.67         5.07         4.60         4.21           10.18         8.40         7.20         6.33         5.67         5.15         4.72	5 min         10         15         20         25         30         35         40           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           5.58         4.32         3.55         3.03         2.65         2.36         2.13         1.95           0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00           7.08         5.74         4.86         4.23         3.76         3.39         3.10         2.85           8.00         6.51         5.53         4.83         4.30         3.88         3.55         3.27           9.17         7.55         6.46         5.67         5.07         4.60         4.21         3.89           10.18         8.40         7.20         6.33         5.67         5.15         4.72         4.37	5 min         10         15         20         25         30         35         40         45           0.00	5 min         10         15         20         25         30         35         40         45         50           0.00         <	5 min         10         15         20         25         30         35         40         45         50         55           0.00 <td< td=""></td<>

#### Tc = time in minutes. Values may exceed 60.

CrossPh2\_Bransford\05 ENGINEERING\CIVIL\CALCS\Hvdrologv\Hvdradraphs\Rainfall\Tarrant County from TXDet per

		Rainfall Precipitation Table (in)								
Storm Distribution	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr		
SCS 24-hour	0.00	3.95	0.00	5.50	6.47	7.55	8.61	9.58		
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

#### **Hydrograph Report**

Friday, 11 / 3 / 2017 Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

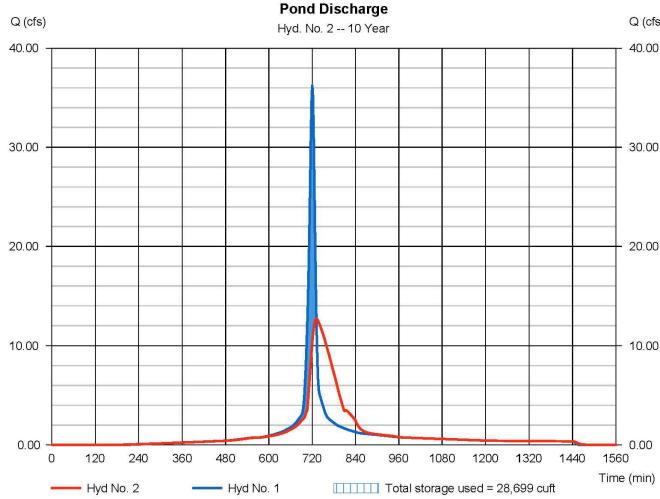
#### Hyd. No. 2

Friday, 11 / 3 / 2017

Friday, 11 / 3 / 2017

Pond Discharge = Reservoir Peak discharge = 12.67 cfs Hydrograph type = 732 min Storm frequency = 10 yrs Time to peak = 100,592 cuft Time interval Hyd. volume = 2 min = 1 - Holy Cross East DA 2-8 Max. Elevation = 591.21 ft Inflow hyd. No. Reservoir name = Northeast Pond = 28,699 cuft Max. Storage

Storage Indication method used.



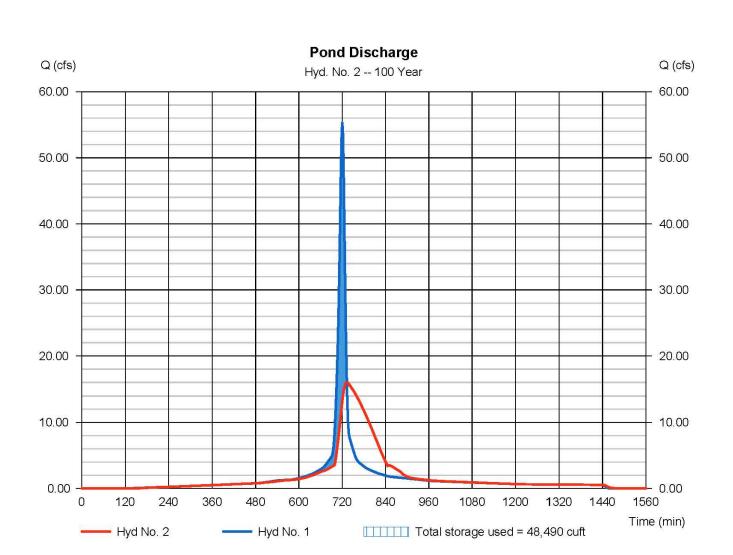
#### **Hydrograph Report**

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5

Hyd. No. 2 Pond Discharge = 15.96 cfs Hydrograph type = Reservoir Peak discharge Storm frequency = 100 yrs Time to peak = 732 min

= 157,587 cuft Time interval Hyd. volume = 2 min = 592.62 ft = 1 - Holy Cross East DA 2-8 Max. Elevation Inflow hyd. No. = 48,490 cuft Reservoir name = Northeast Pond Max. Storage

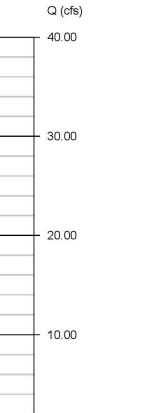
Storage Indication method used.



#### Elev (ft) Elev (ft) Hyd. No. 2 -- 10 Year 592.00 591.00 590.00 589.00

--- 1. Northeast Pond

Pond Discharge



Friday, 11/3/2017

#### Pond Discharge Elev (ft) Hyd. No. 2 -- 100 Year 594.00 593.00 591.00 0 2 4 6 8 10 12 14 16 18 20 22 24 26 1. Northeast Pond

# FOR REFERENCE **PURPOSES ONLY**

	Rainfall Precipitation Table (in)										
Storm Distribution	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr			
SCS 24-hour	0.00	3.95	0.00	5.50	6.47	7.55	8.61	9.58			
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			



RECORD DRAWING

CHURCH

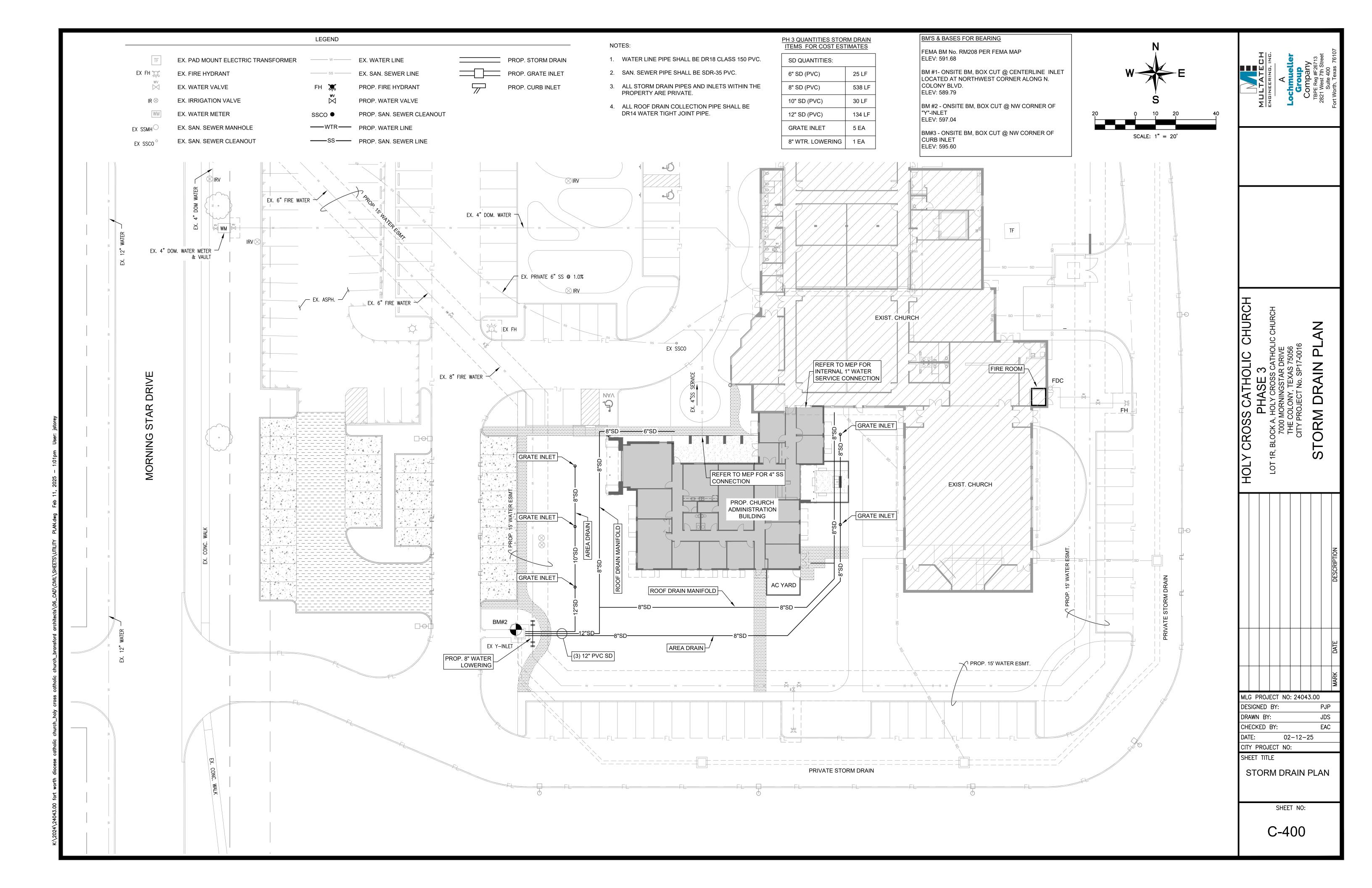
CROS

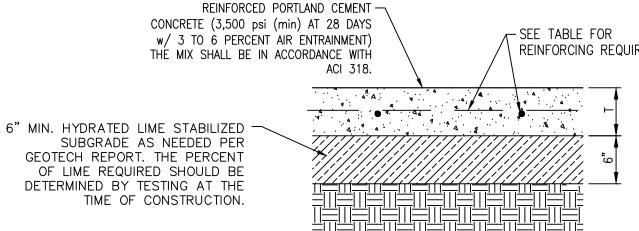
REVISION #6 FRENCH DI	REVISION #5 LIGHT POL	REVISION #4	REV. #3 EMERG. SPILLW	REVISION #2	OMIT LANDSCAPE WALL	ENGINEERING PACKAGE	ENGINEERING PACKAGE	ENGINEERING PACKAGE	DESCRIPT	
01-21-19	12-03-18	11-01-18	09-18-18	07-19-18	05-25-18	05-18-18	04-06-18	10-10-17	DATF	
<b>®</b>	\$	$\forall$	$\overline{\mathbb{V}}$	$\overline{\mathbb{Q}}$	$\mathbb{V}$				MARK	
MAI	E P	ROJI	ECT	NO	: 17	146	.00			
DESIGNED BY: PJP										
DRAWN BY: JDS										
CHI	CHECKED BY: EAC									

CITY PROJECT NO: E17-0028 SHEET TITLE POND CALCULATIONS

04-06-18

SHEET NO:



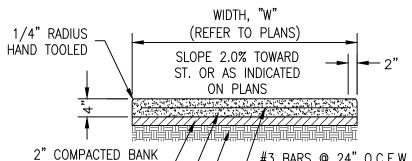


Т	CONCRETE CLASSIFICATION	STEEL REINFORCING
6"	HEAVY DUTY CONCRETE (FIRELANE)	#3 @ 18" O.C.E.W.
5"	STD. DUTY CONCRETE (PARKING)	#3 @ 18" O.C.E.W.

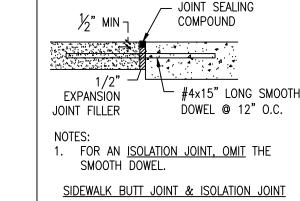
# JNT. & JNT. SEALANT BLDG. FOUNDATION CONC. SIDEWALK

SIDEWALK TO BLDG CONNECTION DETAIL Scale: NTS

FIBER BOARD EXPANSION

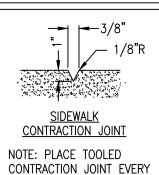


#3 BARS @ 24" O.C.E.W. (OR 6 SAND CUSHION ga. 6"x6"—W3xW3 WWM) MINIMUM, PLACED AT MID DEPTH 3,000 PSI CONCRETE COMPACTED SUBGRADE



SUBGRADE SHALL BE COMPACTED TO 95% STD PROCTOR DENSITY AND SAND SHALL BE COMPACTED TO 70% RELATIVE DENSITY.

FORMS SHALL BE SET TRUE TO LINE AND GRADE SHALL BE A MIN. OF 5-1/2 INCHES DEEP. FORMS SHALL BE SET UP SO THAT NO CONCRETE MAY FLOW UNDER THEM. 4. ISOLATION JOINT IS REQUIRED WHERE PROPOSED CONCRETE SIDEWALK ABUTS WITH CONCRETE DRIVEWAY OR OTHER CONCRETE PAVEMENT OR CURB.



"W" TO "W"\*1.2 FEET.

**CONCRETE SIDEWALK & SIDEWALK JOINTING** 

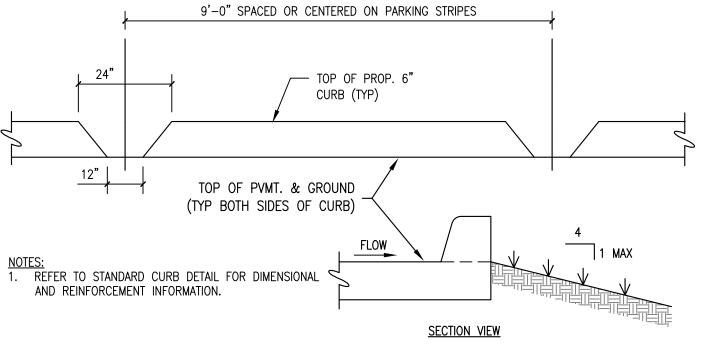
Scale: NTS

DESIGN DRAWN CHECK REV. DATE SCALE FILE NO.

\_\_\_\_\_\_ M.S. \_\_\_\_\_\_ JULY 7 2009 N.T.S. P-2 \_\_\_\_\_

TYPICAL CONCRETE PAVING SECTION DETAIL

GREASE THIS SIDE TRANSLUCENT CLOSED END DOWEL SLEEVE 5" LONG EX. PVMT. D . . Use 10—inch reinforced concrete pavement over 4—inch HMAC and 8—inch lime stabilized subgrade. , , Use 8-inch reinforced concrete pavement over 6-inch lime stabilized subgrade. - ¾" REDWOOD EXP. BOARD OR PREMOLD MINOR ARTERIALS (4D-C & 4U-A & 4U-B) Use 8—inch reinforced concrete pavement over 6—inch lime stabilized subgrade.
Use 8—inch reinforced concrete pavement on streets leading into industrial districts, and on designated truck routes. TYPE-A CONCRETE HEADER COLLECTORS (2U-C) NOT TO SCALE EXPANSION JOINT Use 7—inch reinforced concrete pavement over 6—inch lime stabilized subgrade. RESIDENTIAL (A) - #4 BARS ON 24" CENTERS BOTH WAYS - JOINT SEALING COMPOUND 1" MINIMUM Use 6—inch reinforced concrete pavement over 6—inch lime stabilized subgrade. Use 7—inch reinforced concrete pavement over 6—inch lime stabilized subgrade 2ND POUR PRIVATE PARKING AREAS Use minimum 5—inch reinforced concrete pavement over 6—inch lime stabilized subgrade. JOINT SEALING COMPOUND NOTE: TYPE-B HEADER TO BE USED FOR FUTURE STREET EXTENSION ORWHEN SPECIFIED ON PLANS TO BE USED. PRIVATE FIRELANE AND DRIVEWAYS TYPE A Use 6-inch reinforced concrete pavement over 6-inch lime stabilized subgrade. FOR PAVEMENT THICKNESS 6" (OR AS SPECIFIED) TYPE-B CONCRETE HEADER #4 BARS ON 24" CENTERS BOTH WAYS NOT TO SCALE 12" LAP FOR #4 BARS TYPICAL PAVING THICKNESS UNLESS TYPE 'A' OR 'B' HEADERS ARE SPECIFIED, WHEN CONSTRUCTING NEW PAVEMENT, THE CONTRACTOR MUST: STANDARDS 2ND POUR 2 1ST POUR A) EXPOSE THE REINFORCING STEEL FROM THE EXISTING PAVEMENT AND TIE IT TO THE PROPOSED STEEL MAT, OR B) DOWEL #3 REINFORCING STEEL BARS INTO THE EXISTING PAVEMENT A MINIMUM OF (6) SIX INCHES AT 24" CENTERS AND HAVE A MINIMUM OF 15" LAP. JOINT SEALING COMPOUND TYPE B FOR PAVEMENT THICKNESS GREATER THAN 6" (OR AS SPECIFIED) CONSTRUCTION JOINT
NOT TO SCALE PAVEMENT STANDARD DETAILS THIS CITY OF THE COLONY STANDARD DETAIL SHEET IS AUTHORIZED FOR USE IN THIS PROJECT BY THE ENGINEER WHOSE SEAL
APPEARS ON THIS SHEET.
THIS ENGINEER IS ALSO THE CITY OF THE COLONY CERTIFYING THAT THE CONTENT OF THE DETAILS TEXAS 6" MONOLITHIC CONCRETE CURB JOINT SEALING
NOT TO SCALE



**6" SLOTTED CURB DETAIL** 

MLG PROJECT NO: 24043.00 DESIGNED BY: PJPDRAWN BY: JDS CHECKED BY: EAC DATE: 02-12-25 CITY PROJECT NO:

CITY CONCRETE PAVEMENT STANDARD DETAILS (SHEET 2 OF 2)

HAVE NOT BEEN ALTERED FROM THAT RECEIVED FROM THE CITY OF THE COLONY.

SHEET TITLE

**DETAILS** 

SHEET NO:

C-500

REINFORCING REQUIRED

GENERAL NOTES:

1. PRIOR TO PLACEMENT OF THE PAVEMENT STRUCTURE, THE SITE SHALL BE CLEARED, GRUBBED AND STRIPPED TO REMOVE ALL ORGANIC MATTER AND PREPARED PER GEOTECHNICAL ENGINEERING STUDY FOR ADDITIONS TO HOLY CROSS CATHOLIC CHURCH IN THE COLONY, TEXAS BY CMJ ENGINEERING, INC. PROJECT No 398-17-46 (REVISED). PREPARED JULY, 2017.

2. CONTRACTOR SHALL NOTIFY ENGINEER IF SITE CONDITIONS EXIST WHICH REQUIRE SPECIAL CONSIDERATION. 3. THE MATERIALS AND CONSTRUCTION PROCEDURES FOR THE

PAVEMENT SHOULD BE IN ACCORDANCE WITH TXDOT STD. SPECS. ITEM 360 FOR CONCRETE AND ITEM 260 FOR HYDRATED LIME MODIFIED SUBGRADE.

4. FOR LIME STABILIZED SUBGRADE A MINIMUM OF 8 PERCENT HYDRATED LIME ON THE ORDER OF 36 POUNDS PER SQUARE YARDS FOR A 6 INCH DEPTH. THE HYDRATED LIME SHOULD BE THOROUGHLY MIXED AND BLENDED WITH THE UPPER 6 INCHES OF THE CLAY SUBGRADE AND SHOULD EXTEND PAST THE EDGE OF PAVEMENT ONE FOOT.

1. TIE BARS SHOULD BE AT ALL CONSTRUCTION JOINTS PARALLEL TO TRAFFIC AND CONSIST OF GRADE 40, #4 REINFORCING BARS 24" LONG @ 48" O.C.

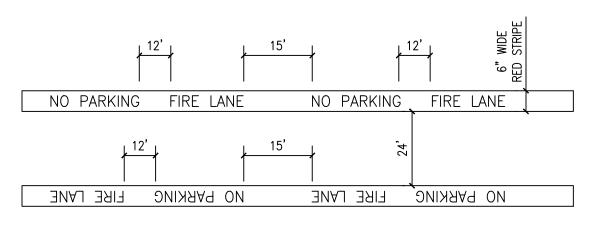
2. #6 LUBRICATED SMOOTH DOWEL BARS SHOULD BE AT ALL CONTROL JOINTS PERPENDICULAR TO TRAFFIC. DOWEL BARS SHOULD BE 24" LONG AND 12" O.C.

ACI 330R-08 (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS) APPROXIMATE SQUARE PANELS. THE LENGTH OF A PANEL SHOULD NOT BE MORE THAN 25%

STEEL REINFORCEMENT & JOINTING NOTES:

3. CONTROL JOINT SPACING SHOULD BE DETERMINED IN ACCORDANCE WITH THE CURRENT ACI CODE. RECOMMENDS A MAXIMUM CONTRACTION JOINT SPACING OF 15 FEET FOR A PAVEMENT THICKNESS 5 INCHES OR GREATER IN BOTH DIRECTION. CONTRACTION PANELS SHOULD DIVIDE PAVEMENT INTO GREATER THAN THE WIDTH.

Scale: NTS

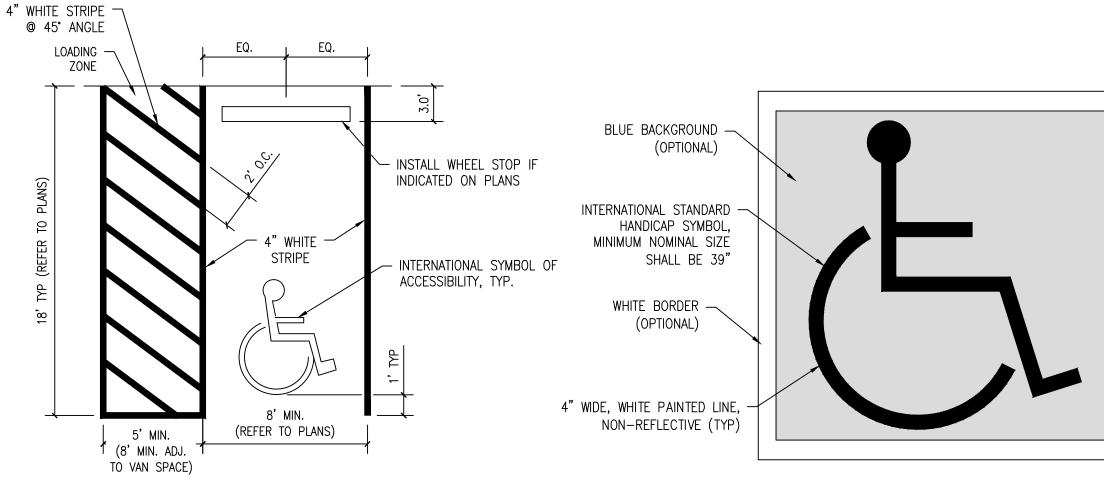


FIRE LANES SHALL BE MARKED BY SIX INCH (6") WIDE LINES USING RED TRAFFIC PAINT, WITH THE WORDING "NO PARKING" AND "FIRE LANE" PAINTED ON THE LINES. THE LETTERING WILL BE FOUR INCHES (4") HIGH WITH A ONE INCH (1") WIDE STROKE PAINTED WITH WHITE TRAFFIC PAINT.

#### FIRE LANE STRIPE DETAIL Scale: NTS

#### FIRE LANE GENERAL NOTES:

- FIRE LANES SHALL BE CONCRETE PAVED AND HAVE THE CAPABILITY TO SUPPORT A 60,000 LB VEHICLE. AS A MINIMUM, FIRE LANES CONSIST OF 6—INCH THICK REINFORCED CONCRETE ON A 6—INCH THICK LIME TREATED SUBGRADE (6% LIME BY DRY UNIT WEIGHT). THE DEVELOPER SHALL HAVE THE OPTION OF SUBSTITUTING 2 ADDITIONAL INCHES OF CONCRETE (FOR A TOTAL OF 8 INCHES THICK) IN LIEU OF LIME SUBGRADE. IN THIS CASE, THE SUBGRADE MUST BE SCARIFIED AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. CONCRETE FOR FIRE LANE PAVING MUST BE 4,000 PSI AT 28 DAYS.
- ALL FIRE LANES MUST BE 24 FEET WIDE. IF CURBED, THE WIDTH FROM FACE OF CURB TO FACE OF CURB MUST BE AT LEAST 24 FEET.
- A MINIMUM OF 14 FEET OF CLEAR HEIGHT MUST BE MAINTAINED ABOVE THE FIRE LANE.
- WHEN IT IS NOT POSSIBLE TO CONNECT BOTH ENDS OF THE FIRE LANE TO A DIDICATED STREET, APPROVED TURN—AROUNDS MUST BE PROVIDED. DEAD END FIRE LANES WITHOUT APPROVED TURN—AROUNDS MUST NOT EXCEED 150 FEET IN LENGTH.
- ALL FIRE LANES SHOULD HAVE A MINIMUM 26 FOOT INSIDE RADIUS AND A MINIMUM 50 FOOT OUTSIDE RADIUS.
- ALL FIRE LANES MUST RUN IN FRONT OF THE STRUCTURE AND BE NO MORE THAN 35 FEET FROM THE STRUCTURE.
- ALL FIRE LANES SHALL BE MARKED IN ACCORDANCE WITH THE DIAGRAM AND AS APPROVED BY THE FIRE MARSHALL AND BUILDING OFFICIAL.
- "FIRE LANE NO PARKING" TO BE PAINTED THE ENTIRE LENGTH OF THE FIRE LANE.
- WHERE PRACTICAL ALL FIRE LANE MARKINGS ARE REQUIRED TO BE PLACED ON THE CURB.
- WHERN RE-STRIPING ADDITIONS TO OR RECONFIURATIONS OFFIRE LANES IS NOT PERMISSIBLE UNLESS PREVIOUSLY APPROVED



#### NOTES:

- 1. DETAILS DEPICT MINIMUM DIMENSIONAL REQUIREMENTS.
- 2. VERIFY COMPLIANCE WITH SPECIFIC LOCAL STANDARDS.
- 3. ANY UPDATES TO STATE AND FEDERAL ADA STANDARDS SHALL IN ALL CASES SUPERCEDE THIS DETAIL.

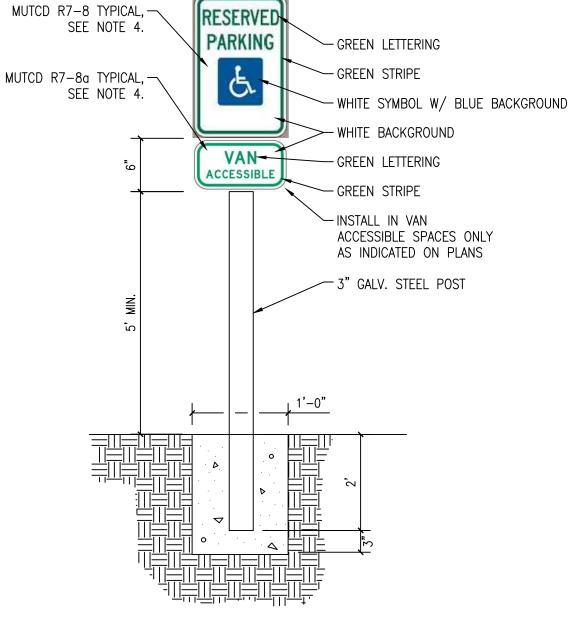
Scale: NTS

4. ADA PARKING STALLS AND LOADING ZONES SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN <u>ALL DIRECTIONS.</u>

TYPICAL ADA PARKING SPACE STRIPING

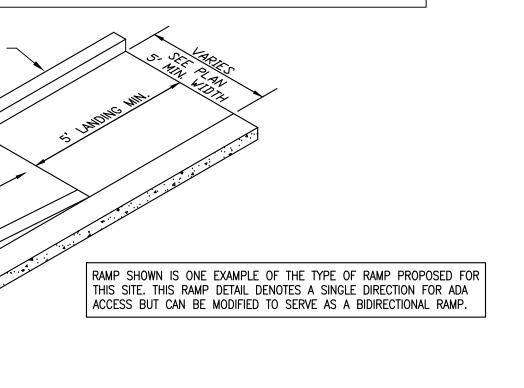
- 1. SPECIFIC MUNICIPAL ADA STANDARDS SHALL SUPERCEDE THIS DETAIL. 2. ANY UPDATES TO STATE AND FEDERAL ADA STANDARDS SHALL IN ALL
- CASES SUPERCEDE THIS DETAIL. 3. CONTRACTOR SHALL MATCH EXISTING SYMBOL TYPE BEING USED ON SITE IF IT IS IN COMPLIANCE WITH ALL APPLICABLE STANDARDS.
- 4. DECAL MAY BE USED IN LIEU OF PAINT. 5. HANDICAP SYMBOL DIMENSIONS SHALL COMPLY WITH INTERNATIONAL STANDARD. MINIMUM ALLOWABLE SIZE SHALL BE 39" (1 METER).





1. SPECIFIC MUNICIPAL ADA STANDARDS SHALL SUPERCEDE THIS DETAIL. 2. ANY UPDATES TO STATE AND FEDERAL ADA STANDARDS SHALL IN ALL CASES SUPERCEDE THIS DETAIL.

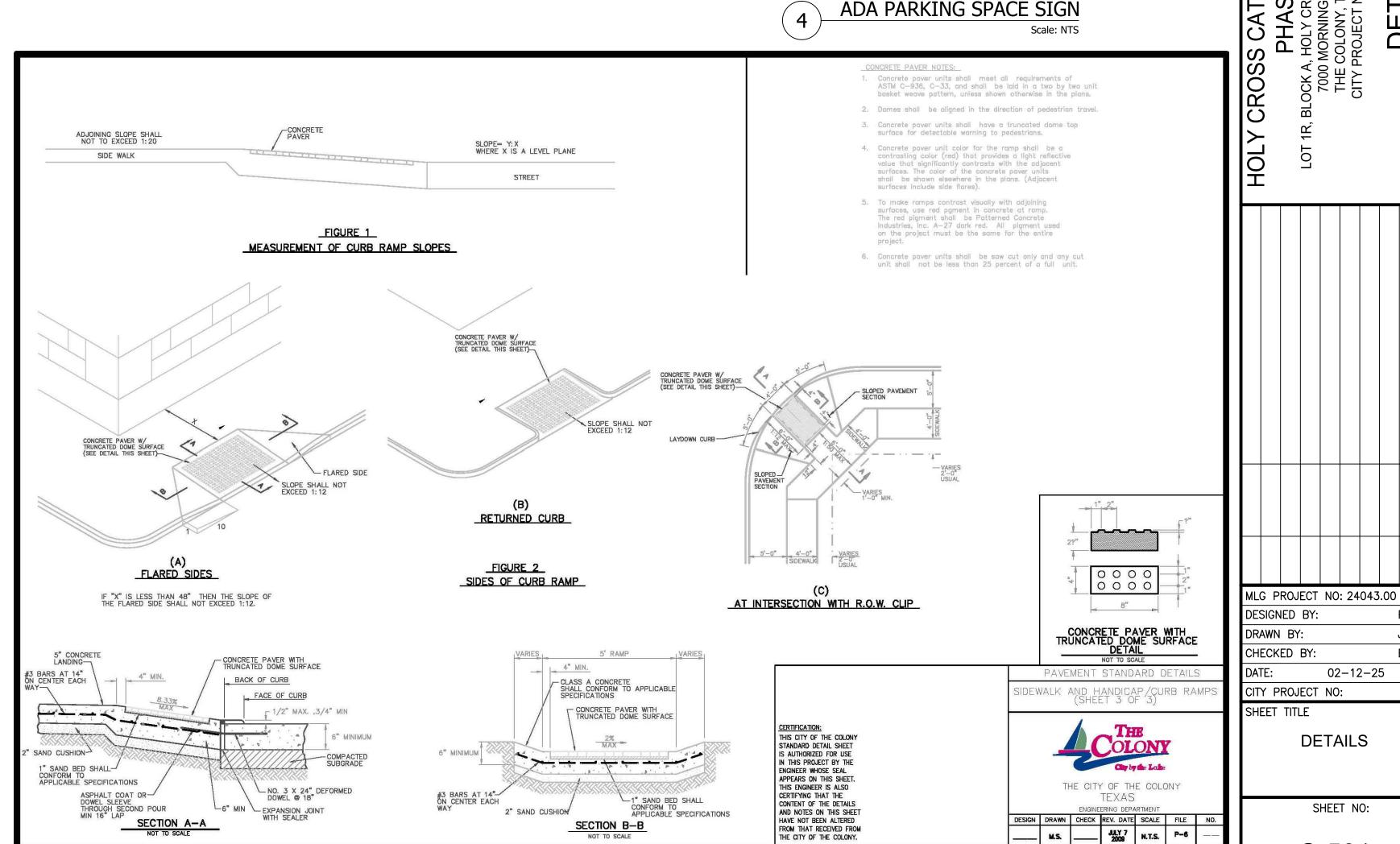
- 3. MOUNT SIGN PER MANUFACTURER'S RECOMMENDATIONS.
- 4. IF EXISTING SIGNS USED ON-SITE ARE NOT CODE COMPLIANT, OWNER SHALL DIRECT CONTRACTOR WHETHER OR NOT TO REPLACE THOSE SIGNS WITH MUTCD R7-8 & R7-8a.
- 5. INSTALL POST SO THAT FACE OF SIGN IS MINIMUM 12" FROM BACK OF SIDEWALK CENTERED WITH THE ADA PARKING STALL, TYPICAL. IN NO CASE SHALL SIGN PROTRUDE INTO ADA ROUTE, DECREASING THE CLEAR WIDTH OF ROUTE TO LESS THAN 3'.



1. SPECIFIC MUNICIPAL ADA STANDARDS SHALL SUPERCEDE THIS DETAIL IF THE MUNICIPALITY DICTATES THAT THEIR DETAIL APPLIES TO PRIVATE FACILITIES.

- 2. ANY UPDATES TO STATE AND FEDERAL ADA STANDARDS SHALL IN ALL CASES SUPERCEDE
- 3. ADA RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 1:12.0 AND MAXIMUM TRANSVERSE (CROSS) SLOPE OF 2.0%.
- 4. ADA RAMP LANDINGS SHALL BE A MINIMUM 3' FEET LONG AND SHALL HAVE A MAXIMUM SLOPE OF 2.0% IN ALL DIRECTIONS.
- 5. ADA ROUTES SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0% AND MAXIMUM TRANSVERSE (CROSS) SLOPE OF 2.0%.

PARALLEL CURB RAMP DETAIL Scale: NTS



CITY STANDARD SIDEWALK & HANDICAP/CURB RAMP DETAILS (SHEET 3 OF 3) Scale: NTS

C-501

PHAS HOLY CR MORNING COLONY, PROJECT I

OCK A, 7000 L THE C

PJP

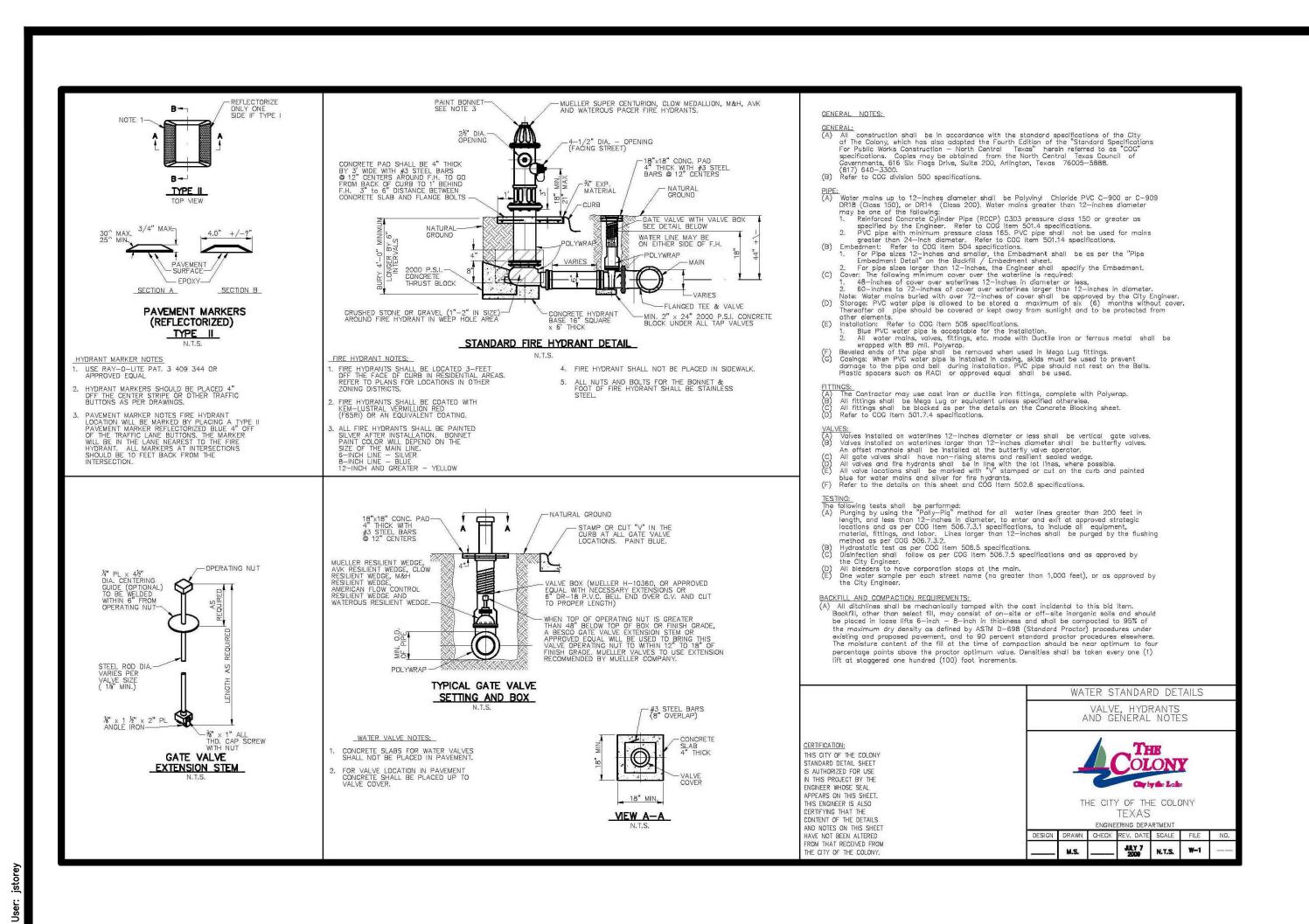
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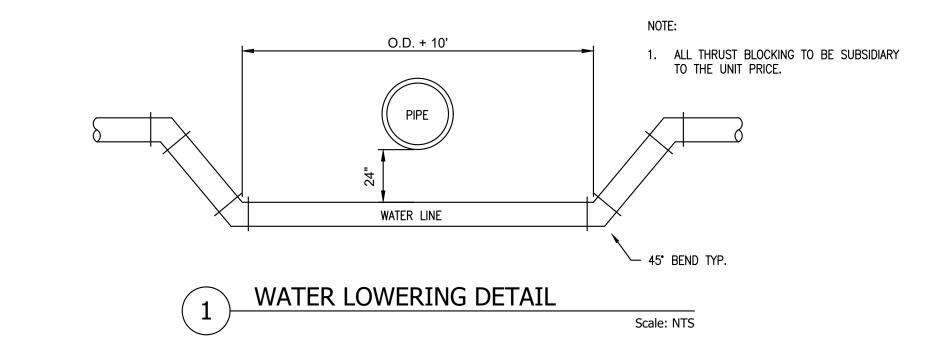
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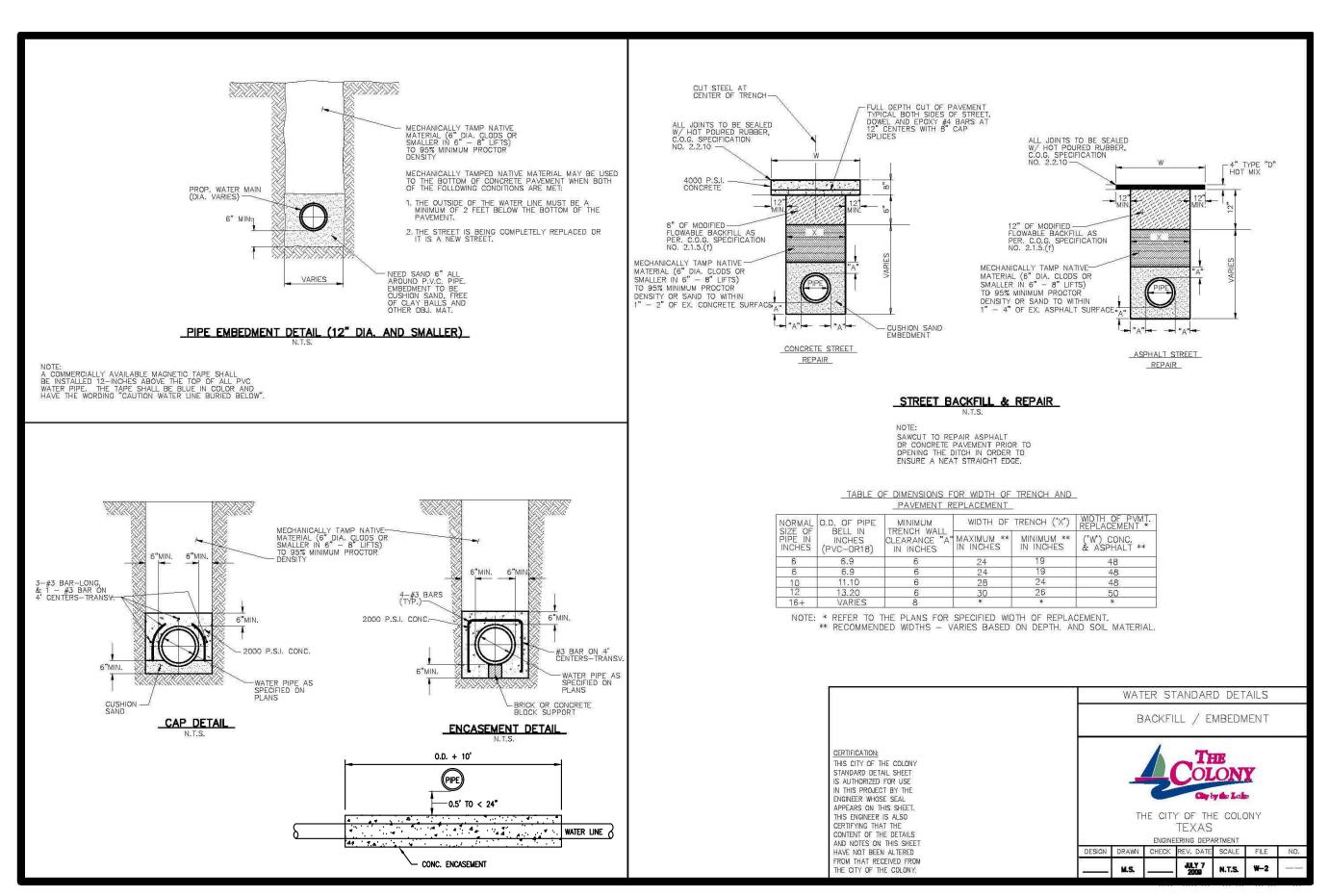
02-12-25

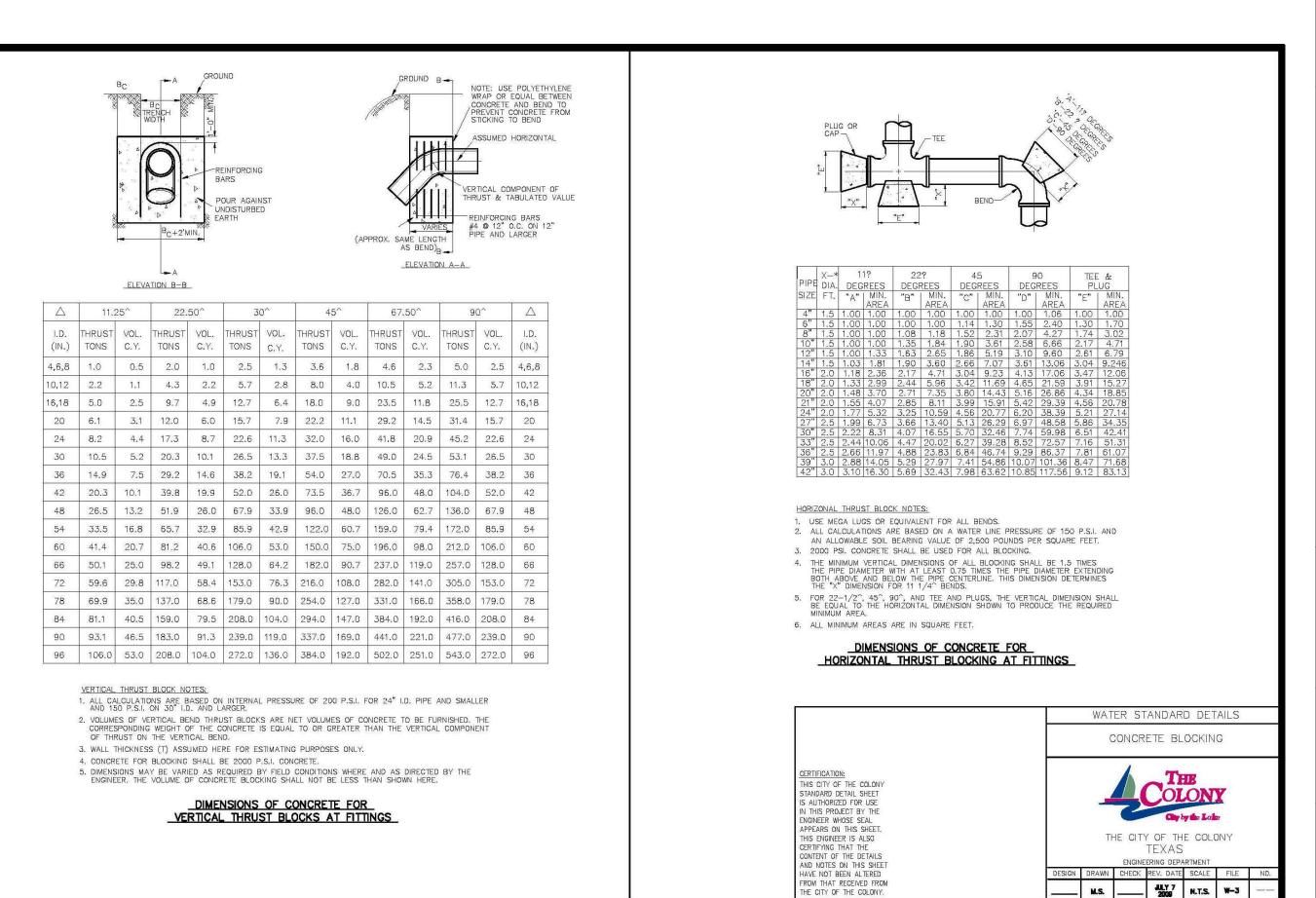
**DETAILS** 

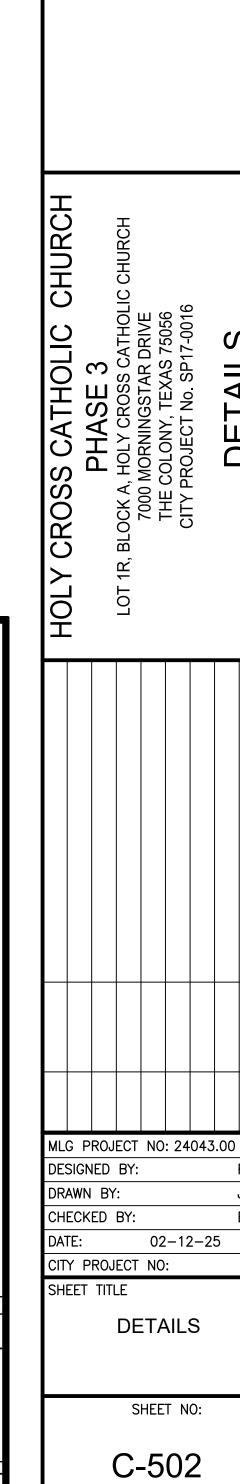
SHEET NO:









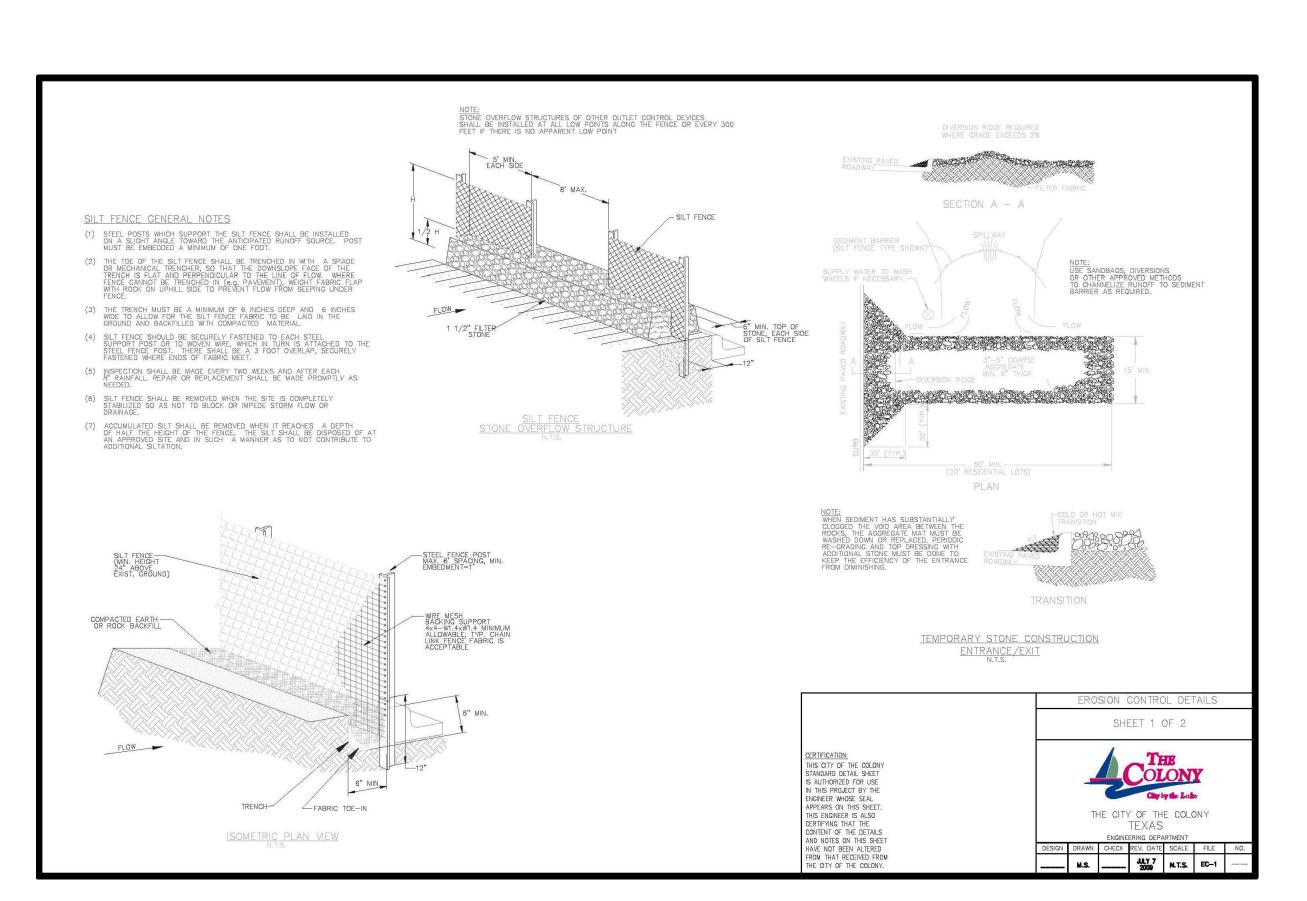


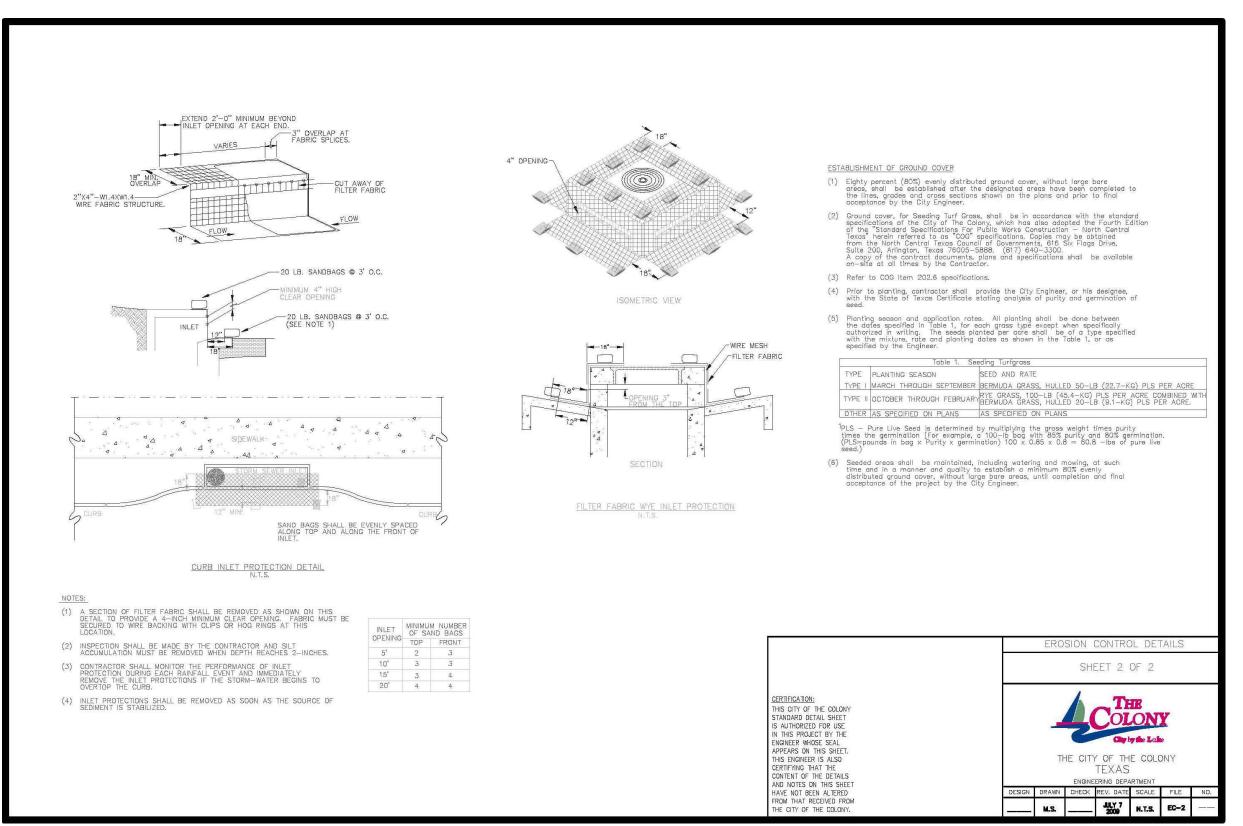
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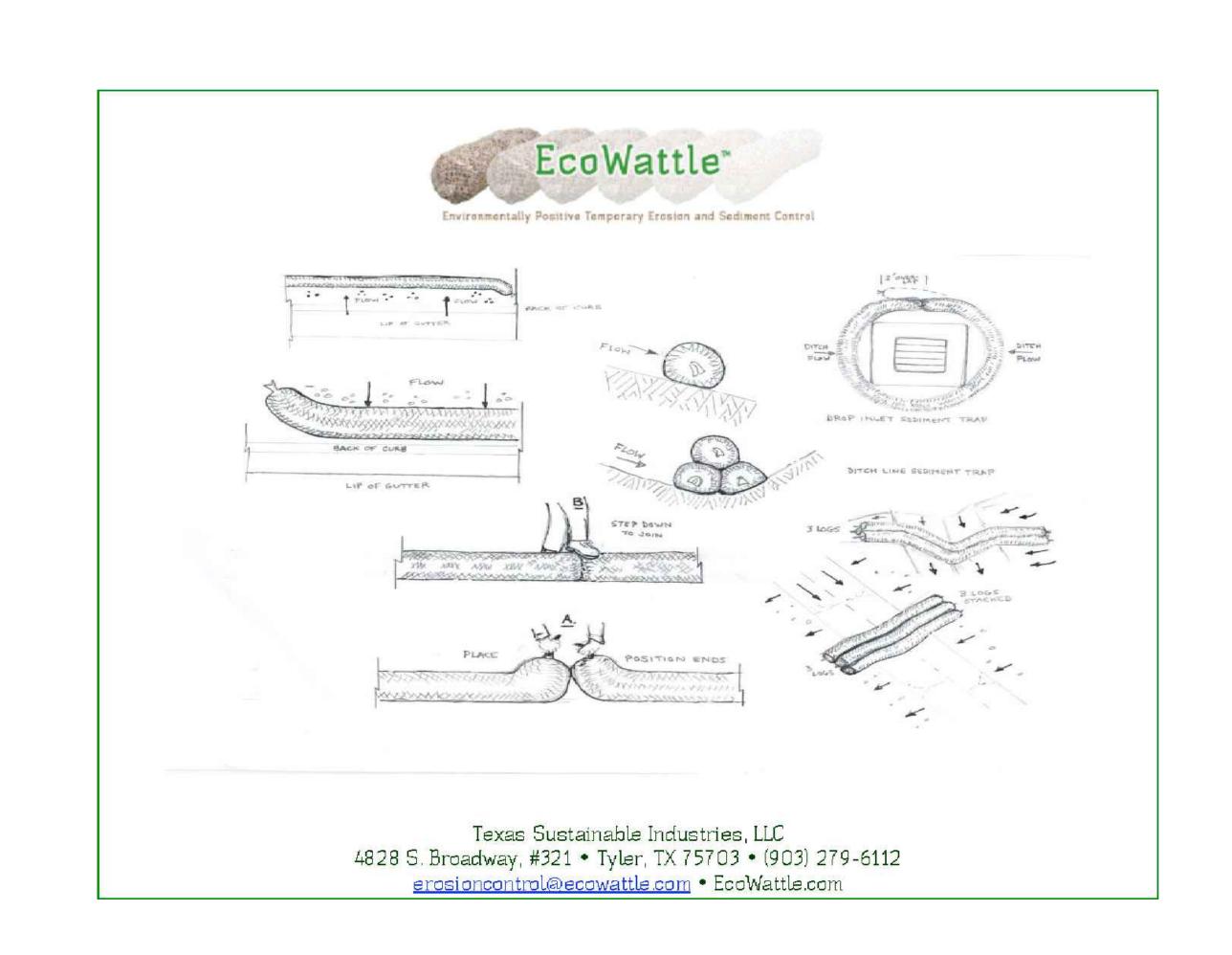
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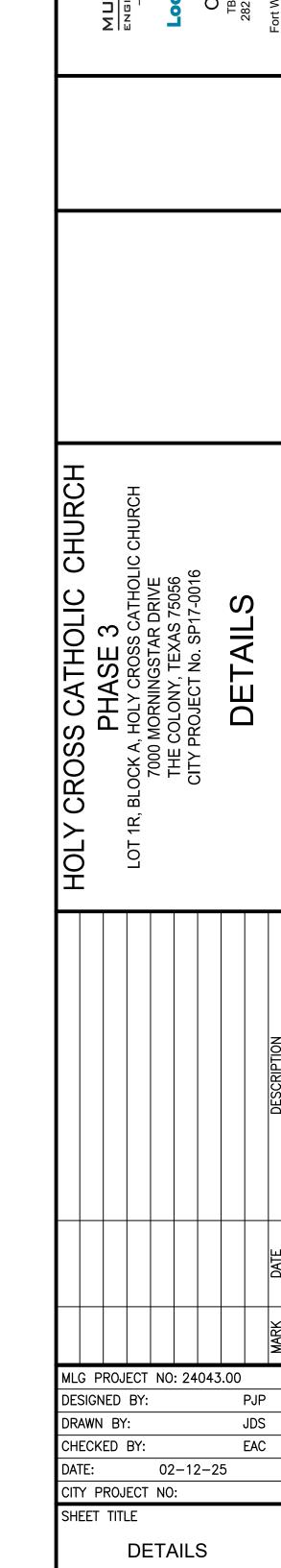
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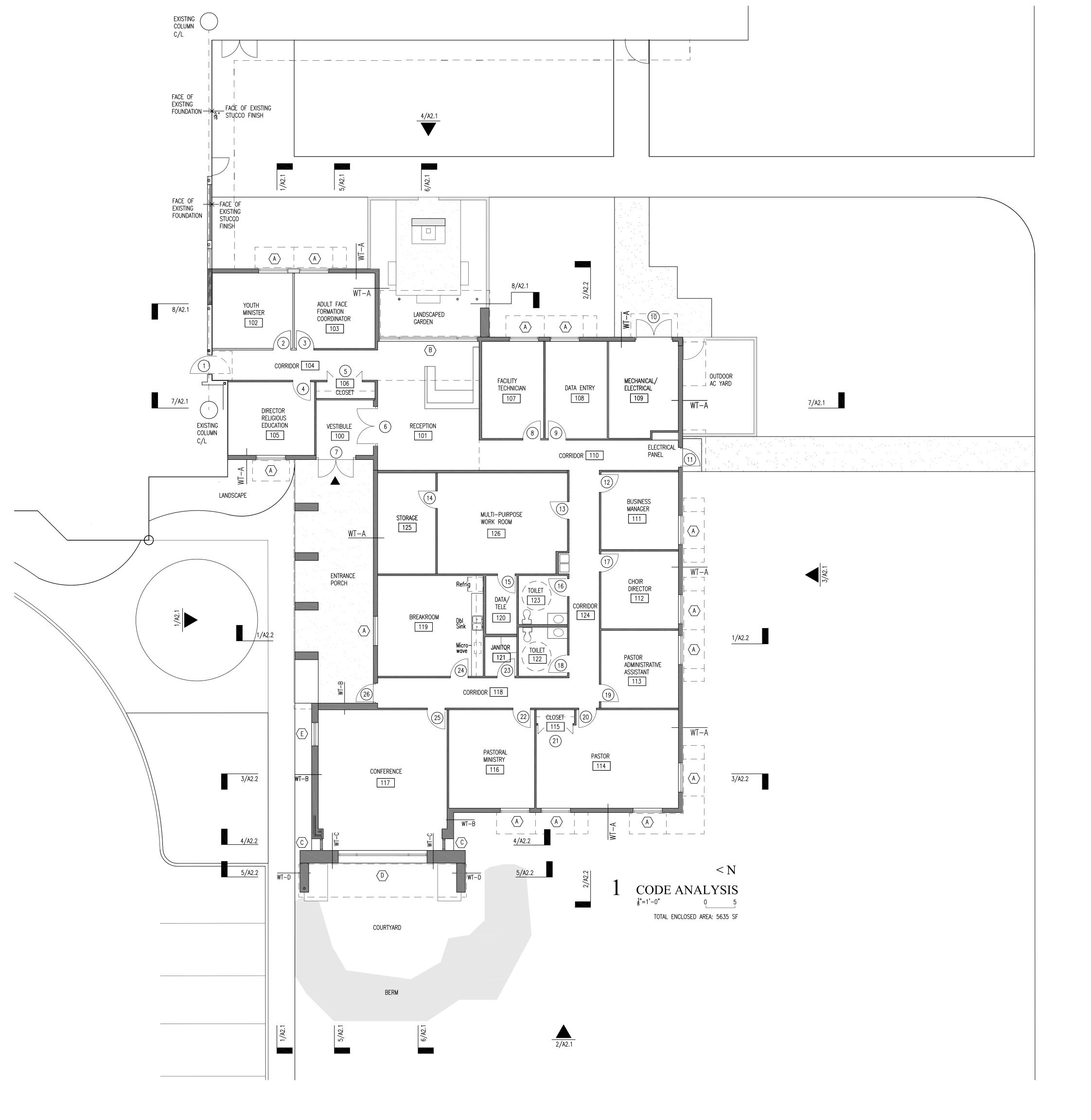




SHEET NO:

1 of 7 DDA Sheets





### 3 CODE ANALYSIS NOTES

PRODUCTION FACILITIES.

1. PROJECT DESCRIPTION: THE PRIMARY PURPOSE OF THE ADMINISTRATIVE BUILDING ADDITION TO HOLY CROSS CATHOLIC CHURCH IS THE PROVISION OF A PARISH GREETING CENTER, OFFICES FOR THE ADMINISTRATIVE STAFF, AND MULTI-PURPOSE

THE PROJECT INCLUDES A VISITOR RECPTION AREA, 9 STAFF OFFICES, A PASTORS OFFICE, A STAFF BREAK ROOM, A CONFERENCE ROOM, A MULTIPURPOSE WORK ROOM, 2 NEW TOILETS AND SITE IMPROVEMENTS REQUIRED FOR FUNCTION AND AS DICTATED BY THE CITY OF THE COLONY CODES AND ORDINANCES.

2. PROJECT BUILDING AREA: EXISTING BUILDING AREA\_28,720sf NEW ADMINISTRATION BUILDING ADDITION\_5635sf TOTAL PROJECT BUILDING AREA\_ 34,355sf BUILDING OCCUPANCY GROUP: A3\_ACCESSORY TO PLACE OF RELIGIOUS WORSHIP

4. TOTAL ALLOWABLE AREA (2021 IBC TABLE 506.2) = XXXXsf

5. THE ENTIRE BUILDING WILL BE EQUIPPED WITH AN NFPA13 AUTOMATIC FIRE SPRINKLER SYSTEM AND AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM.

6. TOTAL ALLOWABLE HEIGHT (2021 IBC TABLE 504.3) = 75'

7. OVERALL BUILDING HEIGHT: 47'-6" TO TOP OF EXISTING BELL TOWER (EXCLUDEING CROSS).

8. DETACHED BUILDINGS ON SITE SEPARATED FROM PROJECT >30' EXISTING STORAGE BUILDING: 670sf\_ SEPARATION 86'

9. PROPOSED CONSTRUCTION TYPE: VB A. TABLE 601: FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS: 0 HOURS B. TABLE 602. FIRE RESISTANCE RATING FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE: FIRE SEPARATION DISTANCE < 30': 0 HOURS B. EXISTING BUILDING CONSTRUCTRUCTION TYPE: 2B

10. THE ENTIRE BUILDING WILL BE EQUIPPED WITH AN NFPA13 FIRE SPRINKLER SYSTEM AND AN EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM.

11. MINIMUM CORRIDOR WIDTH REQUIRED (TABLE 1018.2 AND SECTION 303.1.4): OCCUPANCY GROUP A3 AND ACCESSORY RELIGIOUS EDUCATION ROOMS WITH OCCUPANT LOADS OF LESS THAN 100 = 44". MINIMUM CORRIDOR WIDTH PROVIDED = 60"

12. EXIT ACCESS TRAVEL DISTANCE = XXX FROM THE MOST REMOTE POINT ON THE GROUND FLOOR TO AN EXIT. 250' IS ALLOWED IN A BUILDING WITH SPRINKLER SYSTEM. TABLE 1016.2.

13. THE DISTANCE BETWEEN EXIT X AND EXIT X IS THE FURTHEST COMMON PATH OF EGRESS TRAVEL. XXX/2=XXX. IN A BUILDING WITH SPRINKLER SYSTEM 75' IS ALLOWED. TABLE 1014.3.

14. SURFACE BURNING CHARACTERISTICS OF INTERIOR MATERIALS AND FINISHES: THE CONTRACTOR WILL CONFIRM THAT ALL MATERIALS AND FINISHES USED ON THIS PROJECT WILL CONFORM TO THE REQUIREMENTS OF 2021 IBC TABLE XXX.X FOR SPRINKLERED BUILDINGS IN GROUP A.3 OCCUPANCIES AS FOLLOWS: A. INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS, AND EXIT PASSAGEWAYS: CLASS B FLAME SPREAD INDEX 26-75; SMOKE-DEVELOPED INDEX 0-450 B. CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS, AND EXIT ACCESS RAMPS: CLASS C FLAME SPREAD INDEX 76-200; SMOKE-DEVELOPED INDEX 0-450.

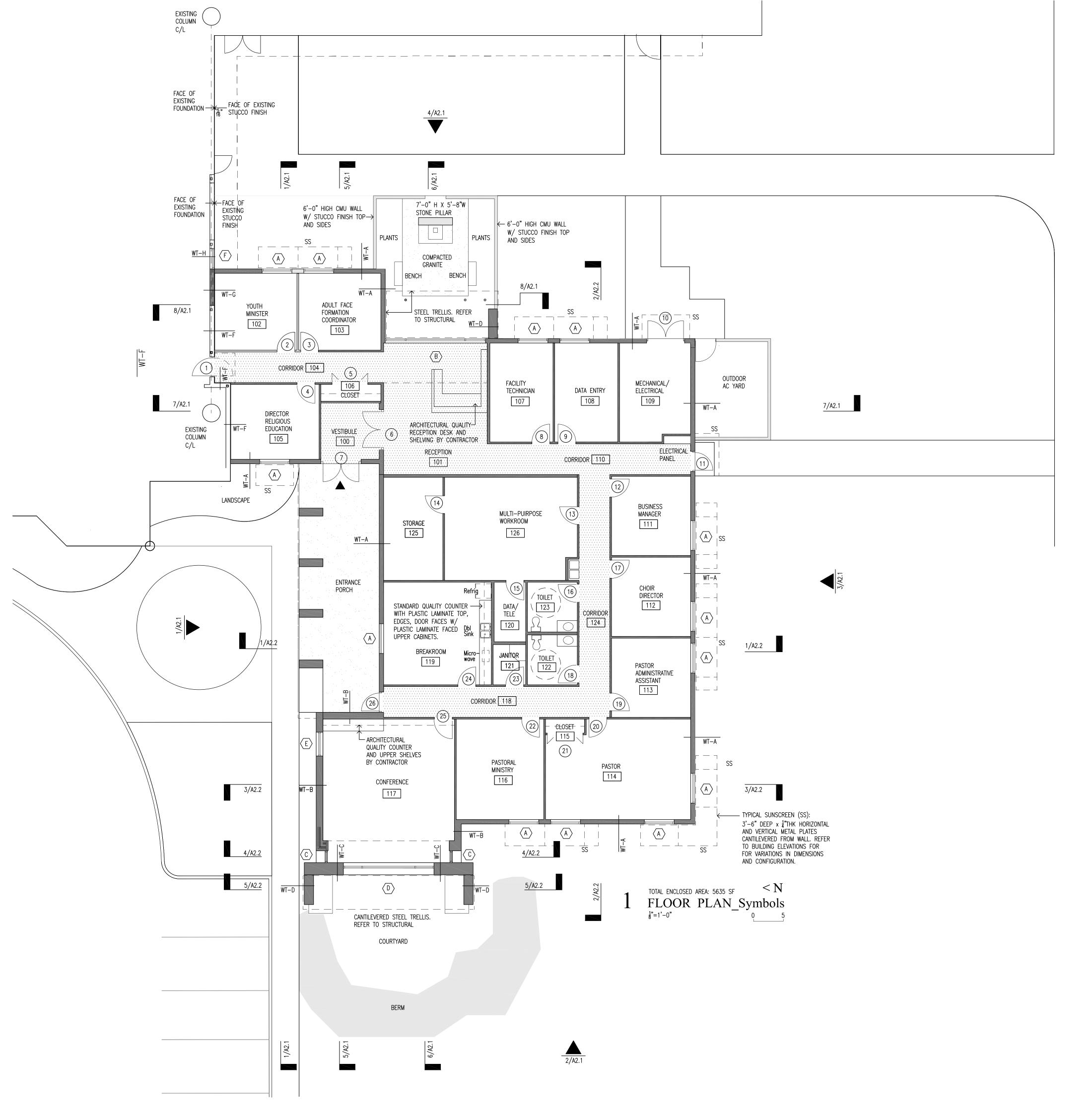
Design Development

Not for construction, permitting or regulatory approval.

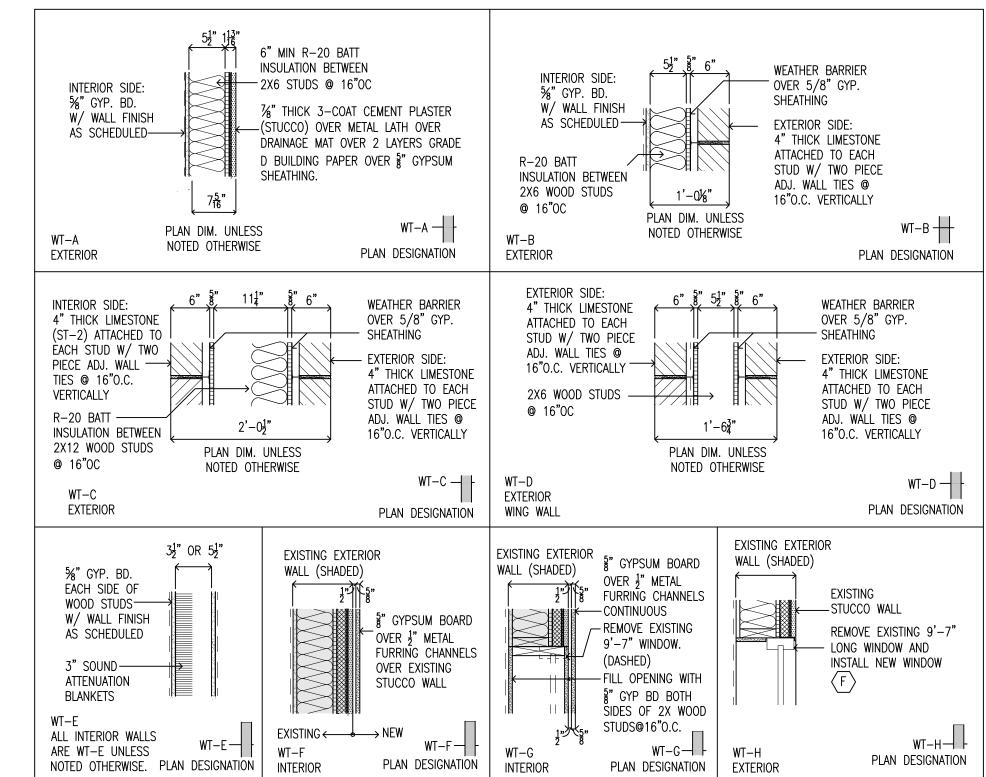
C. ROOMS AND ENCLOSED SPACES: CLASS C FLAME SPREAD INDEX 76-200; SMOKE-DEVELOPED INDEX 0-450. D. REFER TO TABLE 803.9 FOR NOTES AND EXCEPTIONS.

INDICATES 5' HANDICAP TURNING RADIUS

16. FEC INDICATES CLASS A LIGHT HAZARD SEMI-RECESSED FIRE EXTINGUISHER CABINET LOCATED AT A MAXIMUM TRAVEL DISTANCE OF 75'. FINAL LOCATION AND TYPE MUST BE APPROVED BY THE FIRE MARSHALL PRIOR TO INSTALLATION.



# WALL TYPE SCHEDULE



WALL TYPE SCHEDULE NOTES:

1. ALL INTERIOR WALLS ARE WT-E UNLESS NOTED OTHERWISE.

2. DO NOT SCALE DETAILS.

# ROOM FINISH SCHEDULE (RFS)

	ROOM TITLES			FL	00R			E	BASE	•	V	/ALLS	<u> </u>		CE	EILING	_				RFS NOTES
ROOM NUMBER	ROOM NAME	LDA 1	N 12"X12"CERAMIC TILE	ン ½"X12"X12"GAUGED SLATE	A       CARPET         C3       EXPOSED CONCRETE SEALED	6 7	∞ WOOD 3/4"x3 1/2"	RUBBER	CERAMIC TILE (	11 SLATE 3"x1/2" GAGED	CYP. BD. TBTP		516		2X4 ACOUSTICAL LAY—IN	6 2X4 LEGULAR ACOUS LAY SEE NOIE 2	21	CEILING HEIGHT	FLOOR ELEVATION	١	
						- 1 -							-1		-	-		FIN CONC EL	XXX.XX' =100'	-0"	
100	VESTIBULE			3						11	13			17				SLOPED	99'-11 <u>1</u> "		NOTE 1
101	RECEPTION			3						11	13			17				VARIES	99'-11 <u>1</u> "		NOTE 1
102	YOUTH MINISTER				4			9			13					9		9'-0"	100'-0"		NOTE 2
103	ADULT FACE FORMATION OFFICE				4			9			13				1	9		9'-0"	100 <b>'</b> -0 <b>"</b>		NOTE 2
104	CORRIDOR			3						11	13			17				9'-0"	99'-11 <u>1</u> "		NOTE 1
105	DIRECTOR RELIGIOUS EDUCATION				4			9			13				1	9		9'-0"	100'-0"		NOTE 2
106	CLOSET	1						9			13			17				9'-0"	100'-0"		
107	FACILITY TECHNICIAN				4			9			13					9		9'-0"	100'-0"		NOTE 2
108	DATA ENTRY				4			9			13				1	9		9'-0"	100'-0"		NOTE 2
109	MECHANICAL/ELECTRICAL				12			9			13			17				11'-4"	100'-0"		
110	CORRIDOR			3						11	13			17				9'-0"	99'-11 <u>1</u> "		NOTE 1
111	BUSINESS MANAGER				4			9			13				1	9		9'-0"	100'-0"		NOTE 2
112	CHOIR DIRECTOR				4			9			13					9		9'-0"	100'-0"		NOTE 2
113	PASTOR ADMINISTRATIVE ASST				4			9			13					9		9'-0"	100'-0"		NOTE 2
114	PASTOR				4		8				13				1	9		9'-0"	100'-0"		NOTE 2
115	CLOSET			$\dashv$	4		1	9	$\Box$		13	$\top$		17				9'-0"	100'-0"		
116	PASTORAL MINISTRY			$\dashv$	4		1	9	$\Box$		13	$\top$		П	1	9		9'-0"	100'-0"		NOTE 2
117	CONFERENCE			$\dashv$	4		8		$\Box$		13	$\top$		17				VARIES	100'-0"		
118	CORRIDOR			3					$\Box$	11	13			17	1			9'-0"	99'-11 <del>1</del> "		NOTE 1
119	BREAKROOM	1					1	9			13			П	1	9		9'-0"	100'-0"		NOTE 2
120	DATA/ TELEPHONE ROOM	1		$\dashv$			1	9	$\Box$	$\top$	13			17				9'-0"	100'-0"		
121	JANITOR	1					1	9	$\Box$		13	$\top$		17				9'-0"	100'-0"		
122	TOILET		2						10		ľ	14		17				9'-0"	100'-0"		NOTE 3
123	TOILET		2						10			14		17				9'-0"	100'-0"		NOTE 3
124	CORRIDOR			3						11	13			17				9'-0"	99'-11 <u>1</u> "		NOTE 1
125	STORAGE	1						9			13				18			9'-0"	100'-0"		
126	MULTI-PURPOSE WORKROOM	1						9			13				18			9'-0"	100'-0"		
127						$\perp$	<u> </u>			$\perp$	$\sqcup$	$\perp$	_	$\sqcup$	_						
128					$\perp \downarrow \perp \downarrow$	$\perp$	<u> </u>			$\perp$	$\sqcup$		_	$\sqcup$	$\perp$						
129						$\perp$	<u> </u>	Ш			$\sqcup$			Ш							
130				- 1			1	ıl		- [	1 1	- 1	1	1 1				1			

ROOM FINISH SCHEDULE (RFS) NOTES:

1. RECESS CONCRETE SLAB 1 FOR SLATE WHERE SHOWN ON THE FLOOR PLANS.

2. 2X4 TEGULAR ACOUSTICAL LAY—IN CEILING WILL HAVE CENTER GROOVE WITH 2X2 APPEARANCE 3. INSTALL CERAMIC WALL TILE OVER §" CEMENT

DESIGN DEVELOPMENT Not for construction, permitting or regulatory approval. New Administration Building Y CROSS CATHOLIC CHURCH

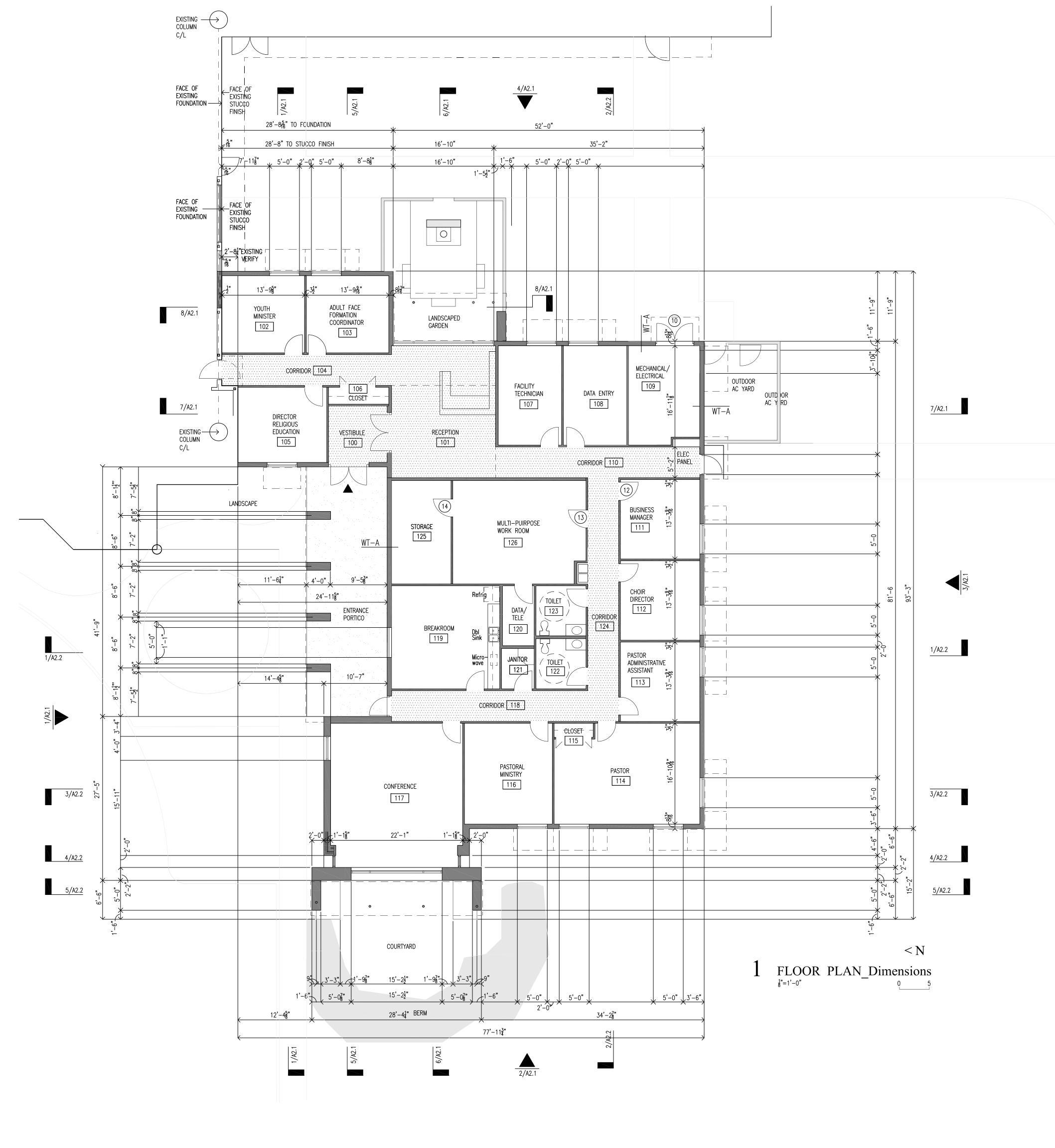
Architect Bransford Jim

Project: 2402 Date: 2-12-25

FINAL DD

Revisions:

DDA1.1 3 of 7 DDA Sheets



# 2 door schedule

			DOC	OR				FRAME			DETAILS				DOOR NOTES		
					SIZE												
DOOR NUMBER	TYPE	MATERIAL	FINISH	WIDTH	НЕІСНТ	THICKNESS	ТҮРЕ	MATERIAL	FINISH	НЕАБ	JAMB	THRESHOLD	FIRE RATING (MIN)	HARDWARE SET			
					"	7.0											
1	A	WD WD	STN	3'-0" 3'-0"	7-0" 7-0"	13"	A	WD	STN				0		VIEW LITE		
3	A	WD	STN STN	3'-0"	7-0 7-0"	1 <sup>3</sup> / <sub>4</sub> "	A	WD	STN				0		VIEW LITE		
4	A	WD	STN	3'-0"	7-0 7-0"	1 <sup>3</sup> / <sub>4</sub> "	A A	WD WD	STN STN				0		VIEW LITE VIEW LITE		
5	D	WD	STN	6'-0"	7-0 <b>"</b>	137	D	WD WD	STN				0		VIEW LITE		
6	C	AL	KYN	PR 3'-0"	7-0"	137	C	AL	KYN				0				
7	C	AL	KYN	PR 3'-0"	7-0"	13"	C	AL	KYN				0		SIDELIGHT/TRANSON	, GLASS. RE:DDA/2.2	
8	A	WD	STN	3'-0"	7-0"	137	A	WD	STN				0		VIEW LITE	00100. NE.DD/y 2.2	
9	Α	WD	STN	3'-0"	7-0"	137	A	WD	STN				0		VIEW LITE		
10	В	НМ	Р	PR 3'-0"	7-0"	13/2"	В	НМ	Р				0				
11	В	НМ	р	3'-0"	7-0"	137	В	НМ	Р				0				
12	С	WD	STN	3'-0"	7-0"	137	A	WD	STN				0		VIEW LITE		
13	Α	WD	STN	3'-0"	7-0"	13/2"	Α	WD	STN				0		VIEW LITE		
14	Α	WD	STN	3'-0"	7-0"	13/4"	Α	WD	STN				0		VIEW LITE		
15	Α	WD	STN	3'-0"	7-0"	13/3"	Α	WD	STN				0		VIEW LITE		
16	Α	WD	STN	3'-0"	7-0"	13/2"	Α	WD	STN				0		VIEW LITE		
17	Α	WD	STN	3'-0"	7-0"	137	Α	WD	STN				0		VIEW LITE		
18	Α	WD	STN	3'-0"	7–0"	1 <del>3</del> "	Α	WD	STN				0		VIEW LITE		
19	A	WD	STN	3'-0"	7-0"	1 <del>3</del> "	Α	WD	STN				0		VIEW LITE		
20	Α	WD	STN	3'-0"	7-0"	137		WD	STN				0		VIEW LITE		
21	D	WD	STN	6'-0"	7-0"	13"	D	WD	STN								
22	Α	WD	STN	3'-0"	7-0"	13"	Α	WD	STN				0		VIEW LITE		
23	A	WD	STN	3'-0"	7-0"	137	Α	WD	STN				0		VIEW LITE		
24	A	WD	STN	3'-0"	7-0"	137	A	WD	STN				0		VIEW LITE		
25	A	WD	STN	3'-0"	7-0"	13"	A	WD	STN				0		VIEW LITE		
26	С	AL	KYN	PR 3'-0"	7–0"	137	С	AL	KYN				0				
	-	-	-						-					-			
	1	1	<del>                                     </del>						-					-			

DOOR SCHEDULE ABBREVIATIONS:

SS = STAINLESS STEEL PF = PREFINISHEDP = PAINT

A SOLID CORE WOOD DOOR
B HOLLOW METAL DOOR
C ALUMINUM STOREFRONT DOOR
D WOOD BI-FOLD DOOR

DOOR TYPES

HM = HOLLOW METALCTR HGT = COUNTER HEIGHT CLRAN = CLEAR ANODIZED

MFR = MANUFACTURER

# 3 WINDOW SCHEDULE

WINDOW TYPE	DESCRIPTION	HEAD HGT A.F.C.	SIZE
A	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW—E	7'-2 <del>1</del> "	5"-0"H x 5'-0"W
B	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW—E	9'-0"	9'-0"H x 16'-10"W
C	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW—E	14'-1"	12'-7"H X 2-0"W
D	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW-E	7'-21"	7'-2¼"H x 15'-2½"W
E	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW-E	7'-2 <del>1</del> "	4'-0"H x 4'-0"W
F	REMOVE EXISTING WINDOW AND REPLACE WITH 2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW-E	7'-2 <del>1</del> "	4'-2½"H x 3'-5¼"W
G	2"X4½" ALUMINUM FRAME W/ KYNAR FINISH GLASS: 1" INSULATING CLEAR LOW-E	23'-0"	8'-0"H x 14'-10"W

WINDOW TYPE NOTES:

1. INDICATES WINDOW TYPE. 3. DIMENSIONS OF OPENING ARE ROUGH OPENING (R.O.)
FIELD VERIFY THE DIMENSIONS OF ALL WINDOW OPENINGS
PRIOR TO FABRICATION.

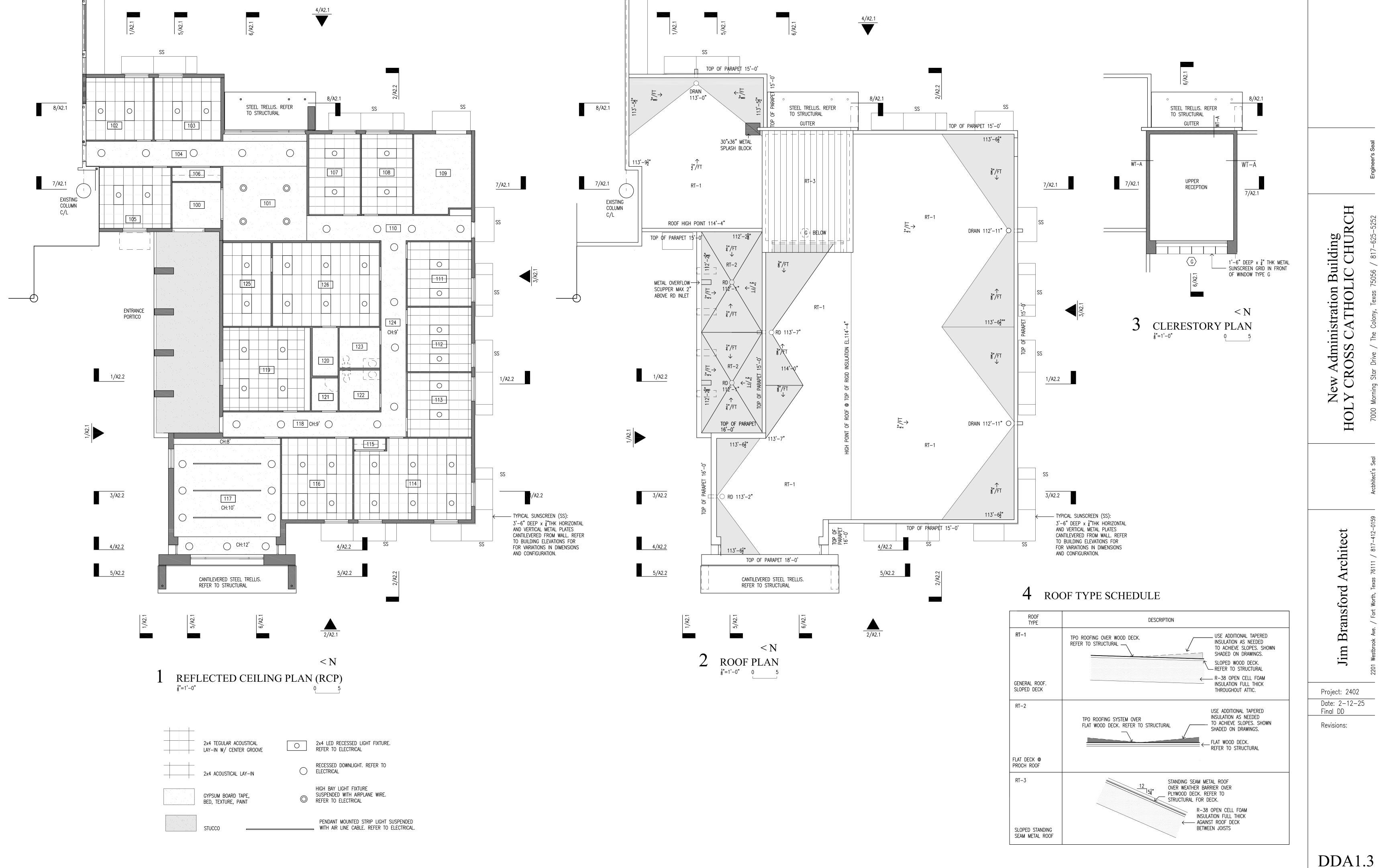
4. A.F.C. = ABOVE FINISH CONCRETE. 2. ALL EXTERIOR GLASS WILL BE CLEAR LOW E, NON-REFLECTIVE.
3. DIMENSIONS OF OPENING ARE ROUGH OPENING (R.O.)
5. PROVIDE TEMPERED SAFETY GLASS IN HARARDOUS LOCATIONS AS REQUIRED BY APPLICABLE BUILDING CODES. 6. U.N.O. = UNLESS NOTED OTHERWISE.

Design Development Not for construction, permitting or regulatory approval.

DDA1.2 4 of 7 DDA Sheets

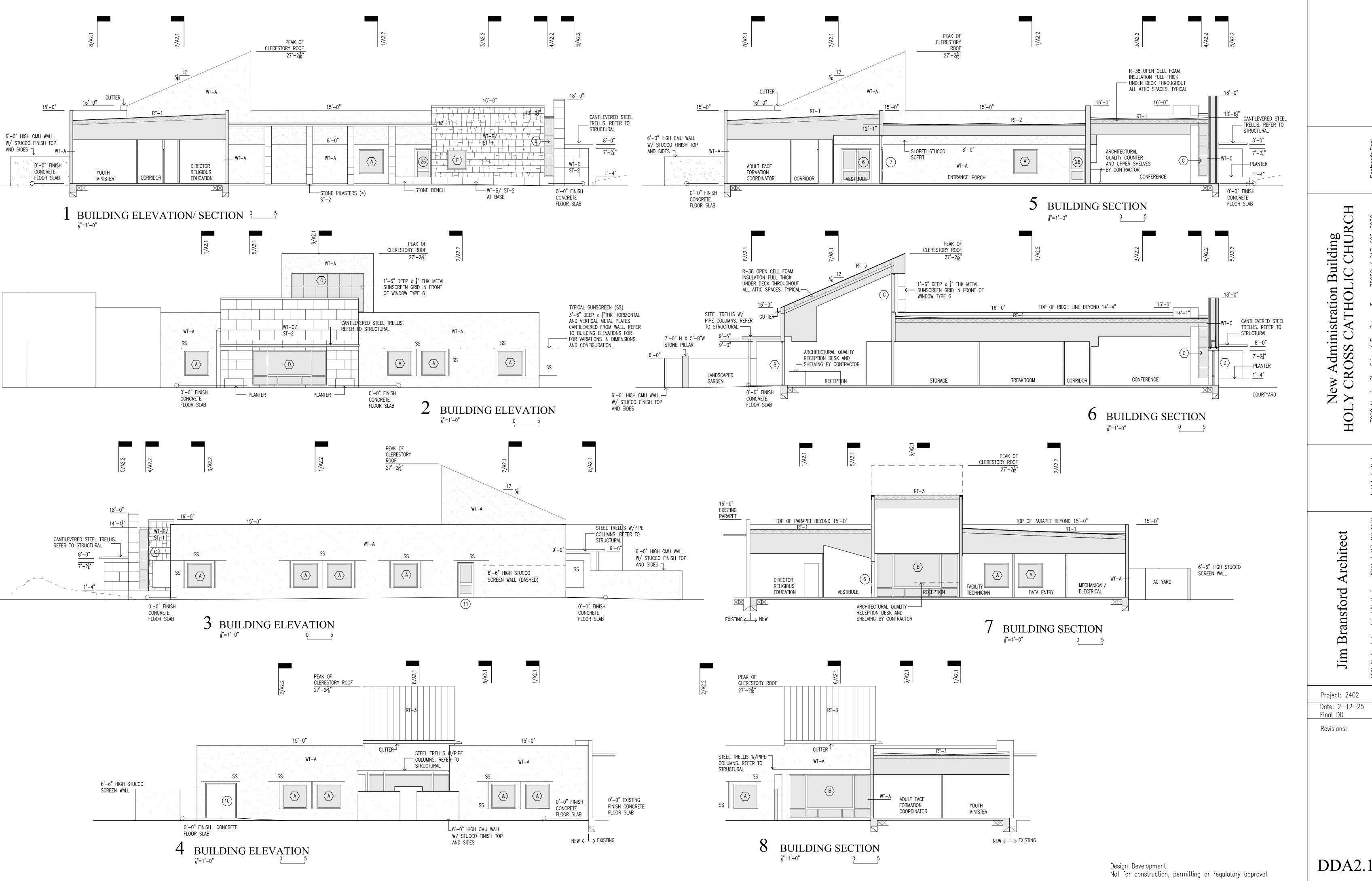
Project: 2402 Date: 2-12-25 FINAL DD

Revisions:



Design Development
Not for construction, permitting or regulatory approval.

5 of 7 DDA Sheets

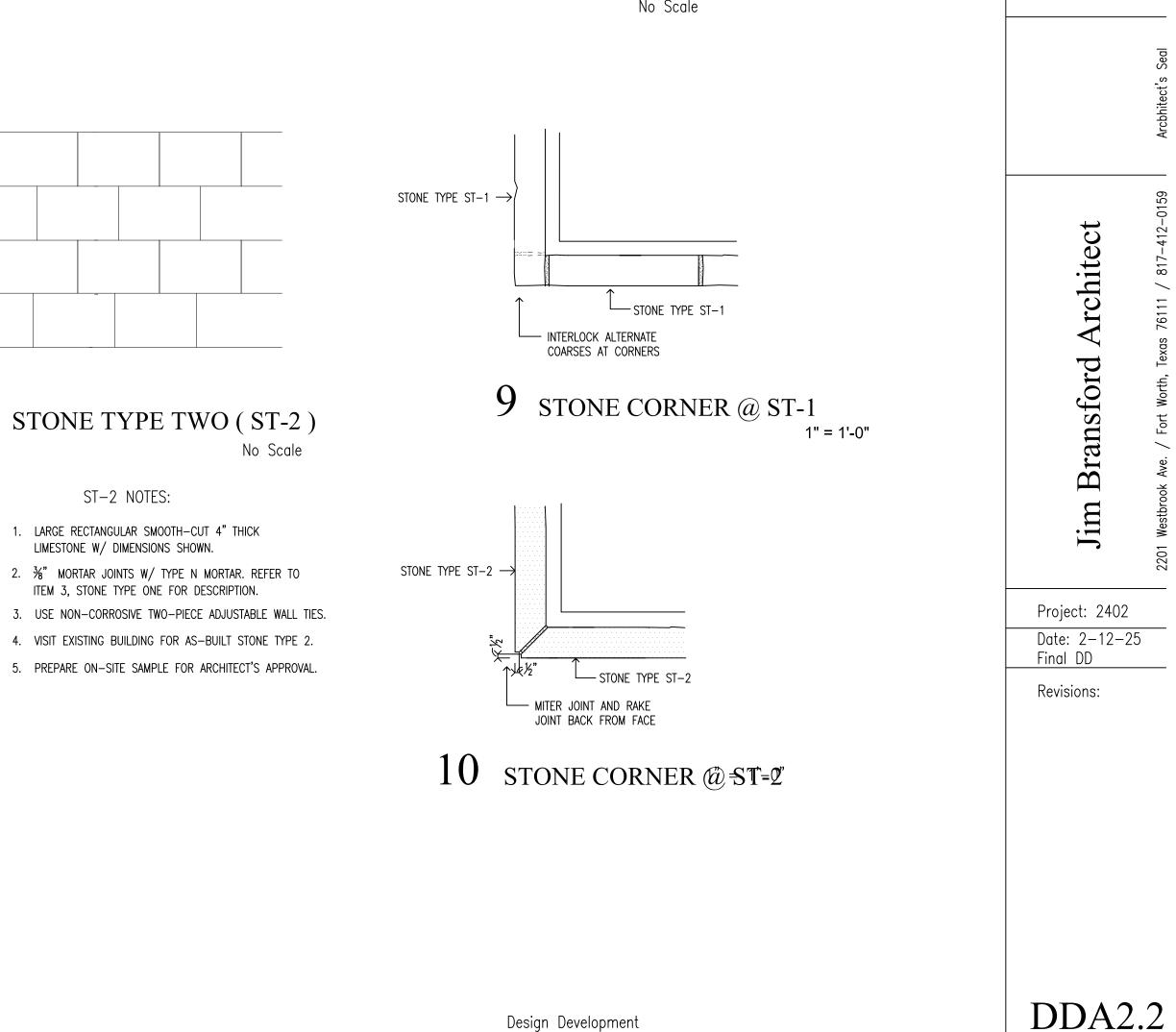


DDA2.1 6 of 7 DDA Sheets

Jim Bransford Architect

Revisions:

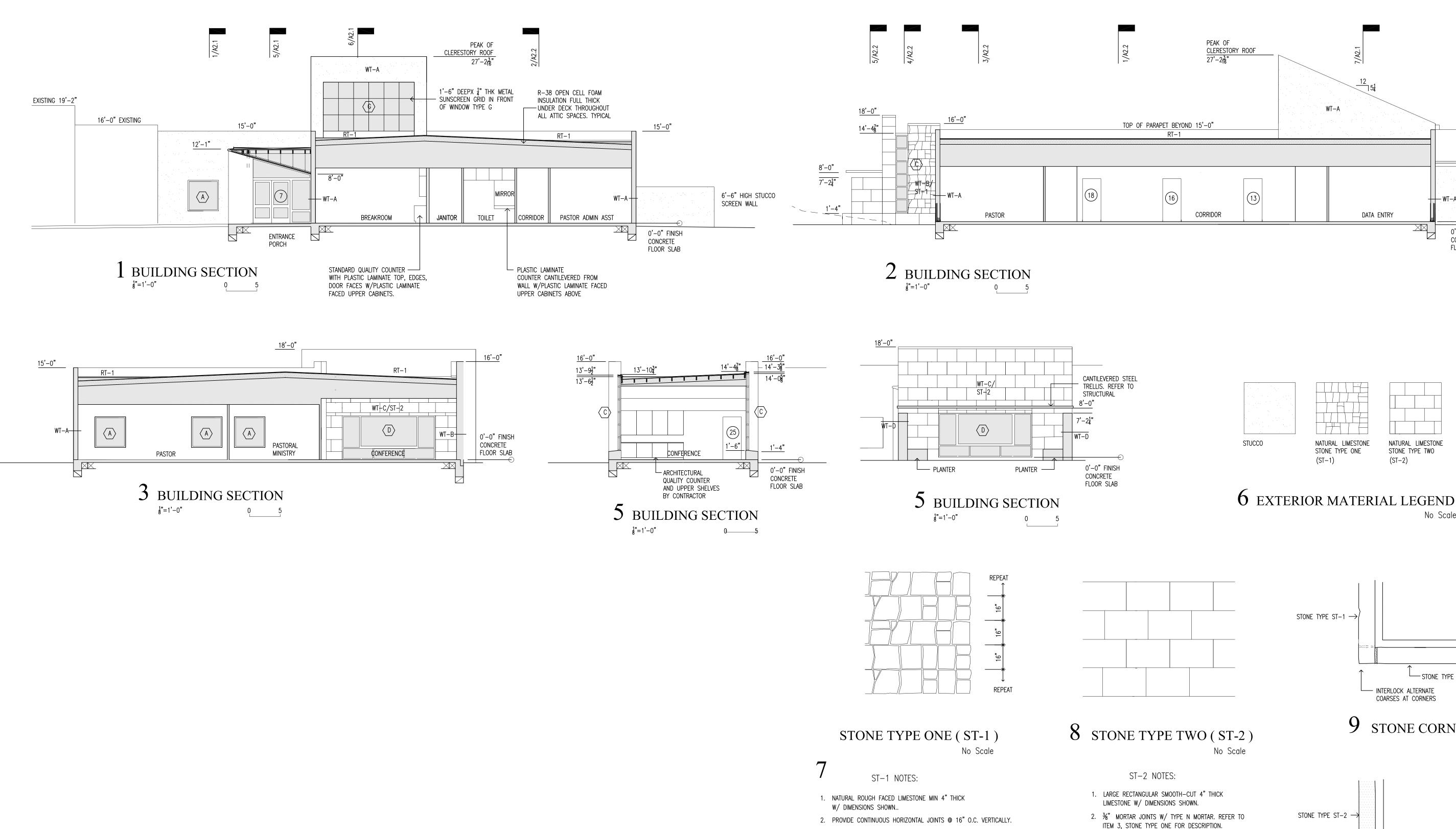




STEEL TRELL'S W/PIPE
COLUMNS. REFER TO
STRUCTURAL
9'-6"
6'-0"
W/ S

0'-0" FINISH CONCRETE FLOOR SLAB

6'-0" HIGH CMU WALL W/ STUCCO FINISH TOP AND SIDES J



3. USE MOSTLY LARGE FLAT NATURAL LIMESTONE, 16" HIGH X VARIES.

3. USE TYPE N MORTAR: 1 PART WHITE PORTLAND, 1 PART WHITE LIME, TO 6 PARTS TOPWAY SAND. KEEP MORTAR JOINTS WET WHILE

FACE USING "GERMAN SMEAR" TECHNIQUE.

4. YISHT EXISTING BUILDING FOR AS-BUILT STONE TYPE 1. 5. PREPARE ON-SITE SAMPLE FOR ARCHITECT'S APPROVAL.

CURING TO PREVENT CRACKS.

SMALLER IN-FILL STONE MAY BE USED. MAINTAIN 16" HIGH COARSE. JOINTS 3/8" TO 11/2". SLUSH MORTAR JOINTS FLUSH WITH STONE

6. CONSULT ARCHITECT FOR LOCATION OF STONE EXPANSION JOINTS (S.E.J.)

Date: 2/12/25

Project: 2025.011

Revisions:

S1.1

Required Inspection Verification, or Test	Verification Monitoring Frequency	Type and/or Frequency of Testing	IBC Section & Reference Criteria	Inspector Qualifications
SOILS			IBC 1705.6	
A. Site Preparation				
Visual Observation	Periodic	At the Contractor's expense, instrument readings shall be taken by a licensed surveyor to verify final subgrade elevations and slopes.	Geotechnical Report; Structural Notes	Qualifications base on ASTM D3740 Licensed Surveyor
Proofrolling     Observations	Continuous	Proofrolling shall be monitored by a Geotechnical Engineer. The Geotechnical Engineer shall approve the type of proofrolling equipment and procedures.	Geotechnical Report; Structural Notes	Qualifications based on ASTM D3740
	Periodic	Verify materials below shallow foundations are adequate to achieve the design bearing capacity.		
	Periodic	Verify excavations are extended to proper depth and have reached proper material.		
	Periodic	Prior to placement of compacted fill, observe subgrade and verify that site has been properly prepared.		
Moisture Conditioning     & Recompaction	Continuous or Periodic	Provide (1) one density test for each 2000 sq. ft. Refer to Notes on Building Pad for Testing Specifications.	Geotechnical Report; Structural Notes	Qualifications base on ASTM D3740
B. Chemical Injection	Continuous	Quality controlled testing and evaluation prior and subsequent to injection shall be performed by the Geotechnical Engineer to determine effectiveness of the chemical injection process. The Geotechnical Engineer or his representative shall monitor the injection process to verify area coverage, injection depth and review & monitor swell test results.	Geotechnical Report; Structural Notes	Qualifications based on ASTM D3740
C. During Fill Placement	Continuous or Periodic	Visual Observation: During placement and compaction of fill, Special Inspector shall determine that material being used and the maximum lift thickness comply with project requirements. Perform classification and testing of compacted fill materials. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill. Pit run materials shall be visually monitored by the lab with additional samples tested each day, or more often if material appears to vary.	Geotechnical Report; Structural Notes	Qualifications based on ASTM D3740
D. Evaluation of In-place Density of Fill	Continuous or Periodic	Provide (1) one density test for each 2000 sq. ft. Refer to Notes on Building Pad for Testing Specifications.	Geotechnical Report; Structural Notes	Qualifications based on ASTM D3740
E. Trench Backfilling	Continuous or Periodic	Trench Backfilling: Trench backfilling with clay cap and placing of clay plug shall be monitored by Geotechnical Engineer with a written report sent to Structural Engineer.	Geotechnical Report; Structural Notes	Qualifications based on ASTM D3740

Required Inspection Verification, or Test	Verification Monitoring Frequency	Type and/or Frequency of Testing	IBC Section & Reference Criteria	Inspector Qualifications	
WOOD CONSTRUCTION			IBC 1705.5	1	
A. Prefabricated Structural Elements & Assemblies	Periodic	Inspect structural load bearing members and assemblies. Verify that the fabricator maintains detailed fabrication and quality control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards The special inspector shall review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work.  Exception: Special inspections shall not be required where the fabricator is enrolled in a nationally accepted inspections program acceptable to the registered design professionally is responsible charge.		Technical Representative under direction of Licensed Engineer.	
B. Site Built Assemblies	Periodic	Site built assemblies shall be inspected in accordance with IBC Section 1705.5		Licensed Engineer or his/her	
C. Diaphragms	Periodic	High load diaphragms shall be inspected in accordance with IBC Section 1705.10, and sheathing checked for proper grade, thickness, size of framing members at adjoining panel edges, nail/staple diameter and length, and fastener pattern.		representative.	
D. Truss Bracing	Periodic	Check that all required permanent and lateral bracing has been installed according to structural drawings and fabricator design/shop drawings.			

	Required Inspection Verification, or Test	Verification Monitoring Frequency		Type and/or Frequency of Testing	IBC Section & Reference Criteria	Inspector Qualifications
PIE	R FOUNDATIONS	IBC 1705.8				
A. 1. 2.	Pier Installation  The Geotechnical Engineer shall be present during the excavation of the first pier shaft.  All piers monitored by a representative of the Geotechnical Engineer.	Continuous	1. 2. 3.	accurate records for each pier. Address unforeseen subsurface conditions, if any.  Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Verify the bearing stratum is encountered at the anticipated depth. Report concrete volumes.  Verify conformance with the foundation recommendations provided in the project "Geotechnical Engineering Report" and the Structural Drawings issued for the project.	Geotechnical Report; Structural Notes	Geotechnical Engineer Qualifications based on ASTM E329 & ASTM C1077
B.	Additional Inspections	Continuous	1.	For concrete piers, perform additional inspections in accordance with IBC 1705.3		Qualifications based on ASTM E329 & ASTM C1077

	Required Inspection Verification, or Test	Verification Monitoring Frequency	Type and/or Frequency of Testing	IBC Section & Reference Criteria	Inspector Qualifications
СО	NCRETE CONSTRUCTION			IBC 1705.3	
A.	Reinforcing Steel	Periodic	Provide periodic inspection of reinforcing sizes, spacing, grade of rebar, and placement at the following frequency:  Columns: 10% Beams: 30% Joist: 10% Other members: randomly @ 20	IBC 1910.4 ACI 318: 3.5, 7.1-7.7 Structural Notes	Geotechnical Engine Qualifications based on ASTM E329 & ASTM C1077
B.	Reinforcing Steel Welding		No field welding permitted.	AWS D1.4, ACI 318: 3.5.2 IBC Table 1705.2.2, Item 2b	CWI or Associate CV
C.	Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used	Periodic	(Increase of allowable loads not recommended)	IBC 1908.5, 1909.1 ACI 318: 8.1.3, 21.2.8	Technician trained in field of work and has at least one year of experience.
D.	Inspection of anchors post-installed in hardened concrete members	Periodic		IBC 1909.1 ACI 318 3.8.6, 8.1.3, 21.2.8	Qualifications based on ASTM C1077
E.	Verify use of required mix design	Periodic	Each concrete placement.	IBC 1904.2, 1910.2, 1910.3 ACI 318 Ch.4, 5.2-5.4	Qualifications based on ASTM C1077
F.	Sampling of fresh concrete.	Continuous Each Concrete Placement	<ol> <li>All concrete testing is to be made after water, if any, is added at site.</li> <li>Provide a set of (4) four cylinders to be taken for every 75 cubic yards of concrete, or fraction thereof, by testing lab.</li> <li>Monitor slump, temperature and air content of concrete and notify delivery driver if slump deviates more than plus or minus 1 inch from recommended value. Contact supplier for further directions.</li> </ol>	IBC 1910.10 ASTM C 172 ASTM C31 ACI 318 5.6, 5.8	Qualifications based on ASTM C1077
G.	Inspection of concrete and shotcrete placement for proper application techniques.	Continuous		IBC 1910.6, 1910.7, 1910.8 ACI 318 Ch. 5.9, 5.10	Qualifications based on ASTM C1077
H.	Inspection for maintenance of specified curing temp & techniques	Periodic	Each concrete placement.	IBC 1910.9 ACI 318 5.11-5.13	Qualifications based on ASTM C1077
I.	Pre-stressed concrete	Continuous	Application of prestressing forces.     Grouting of bonded prestressing tendons in seismic-force resisting systems.	ACI 318: 18.20 ACI 318: 18.18.4	Qualifications based on ASTM C1077
J.	Erection of precast concrete members	Periodic		ACI 318: Ch.16	Technician trained in field of work and has at least one year of experience.
K.	Post-Tensioned Concrete	Periodic	Verify in-situ concrete strength prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	ACI 318: 6.2	Qualifications based on ASTM E329
L.	Formwork	Periodic	Inspect formwork for shape, location and dimensions of the concrete member being formed.	ACI 318: 6.1.1	Qualifications based on ASTM E329

	Material verification of	Periodic	. Identification markings to conform to ASTM standards	IBC 1705.2 Structural Notes	CWI / Associate /
	high-strength bolts, nuts and washers		specified in the approved construction documents.  Manufacturer's certificate of compliance required.	Applicable ASTM material specs; AISC 360, Section A3.3, A3.4	Technical Graduate - AWS or CRSI
В.	High-strength bolting	Periodic	. Bearing-type connections.	Structural Notes	CWI / Associate / Technical Graduate
		Continuous or Periodic	2. Slip-critical connections.	AISC 360, Section M2.5	AWS or CRSI
C.	Material verification of Structural Steel	Periodic	. Identification markings to conform to ASTM standards specified in the approved construction documents.	Structural Notes	CWI / Associate / Technical Graduate AWS or CRSI
		Periodic	. Manufacturers' certified mill test reports.	ASTM A6 or ASTM A568	AWS OF CRSI
D.	Material verification of weld filler materials	Periodic	. Identification markings to conform to AWS specification in the approved construction documents.	Structural Notes	CWI / Associate / Technical Graduate
		Periodic	. Manufacturers' certificate of compliance required.	AISC 360, Section A3.6	AWS or CRSI
E.	Welding of Structural	Continuous	. Complete and partial penetration groove welds.	Structural Notes	CWI and ASNT
	Steel	Continuous	. Multipass fillet welds.	AWS D1.1	CWI or Licensed
		Continuous	s. Single-pass fillet welds > 5/16"		Engineer
		Periodic	. Single-pass fillet welds ≤ 5/16"		
		Periodic	i. Floor and roof deck welds.	AWS D1.3	
F.	Welding of Reinforcing Steel	Periodic	. Verification of weldability of reinforcing steel other than A706.	AWS D1.4 ACI 318.3.5.2	CWI / Associate / Technical trained in
		Continuous	<ol> <li>Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.</li> </ol>		field of work and ha at least one year of experience.
		Continuous	S. Shear reinforcement.		
		Periodic	Other reinforcing steel.		
G.	Steel frame joint details: Compliance with	Periodic	. Details such as bracing & stiffening.	IBC 1704.3.2 Structural Drawings	CWI or Licensed Engineer
	approved construction	Periodic	Member locations.	Otructural Drawings	Linginoci
	documents	Periodic	Application of joint details at each connection.		
_			I		
	Required Inspection Verification, or Test	Verification Monitoring Frequency	Type and/or Frequency of Testing	IBC Section & Reference Criteri	Inspector a Qualificatio

Type and/or Frequency of Testing

IBC Section & Reference Criteria

Inspector Qualifications

Verification Monitoring Frequency

Required Inspection Verification, or Test

Required Inspection Verification, or Test	Verification Monitoring Frequency	Type and/or Frequency of Testing	IBC Section & Reference Criteria	Inspector Qualifications
NSPECTION OF FABRICATOR	S FOR STRUCTURA	L STEEL	IBC 1704.2.5.2	
Fabrication & Implementation Procedures	Periodic	The Special Inspector shall verify that the fabricator maintains detailed fabrication and quality control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards. The Special Inspector shall review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work.  Exception: Special inspections shall NOT be required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents.		CWI or Licensed Engineer

	ABOVE FINISHED FLOOR		CAST-IN-PLACE	C.I.P.	DRAWING (S)	DWG (S)
<u>လ</u>	ADDITIONAL		CEILING	CLG	DOUBLE	
$\frac{2}{2}$	ADJACENT		CENTERLINE		DOWEL (S)	
$\cong$	ANO. 5		Connx Design Specialty Engineer	CDSE		( )
4	ANGLE		CLEAR		EACH	EA
€	APPROXIMATE	APPROX	COLUMN	COL	EDGE OF DECK	EOD
⊌│	ADCUITECT	ADCII	CONCRETE		ELECTRICAL	ELEC
፼	ARCHITECTARCHITECTURAL		CONCRETE MASONRY UNIT	CMU	ELEVATION	ELEV
ABBREVIATIONS			CONNECTION (S)	CONNX	EMBEDMENT	<b>EMBED</b>
9	ATAIR CONDITIONER		CONTINUOUS	CONT	ENGINEER	<b>ENGR</b>
7. 1	AIR HANDLING UNIT		CONSTRUCTION JOINT	CJ	EQUAL	EQ
₹I	AIR HANDLING ONT	AI IU			EQUIPMENT	
₢	BEAM	DM	DETAIL		EXPANSION	EXP
₽∣	BEARING		DEAD LOAD		EXPANSION JOINT	EJ
5	BELOW FINISHED FLOOR		DEFORMED BAR ANCHOR	DBA	EXISTING	EXIST
<b>5</b>	BETWEEN		DIAGONAL	DIAG	EXTERIOR	EXT
TRUCTURAL	BOTTOM		DIAMETER		EXTRA STRONG	X-STR
ST	BUILDING LINE		DIMENSION (S)	DIM (S)		
۱ ر	DOILDING LINE	D.L				

FIELD VERIFY F.V. FINISHED (ED) FIN FINISHED FLOOR FIN FL FLANGE FLG FLOOR FL FLOOR DRAIN FD FOOTING FTG  GAGE OR GAUGE GA GALVANIZE (D) GALV GLUE LAMINATED WOOD BEAM GLB GRADE GRADE GR GRADE BEAM GR BM  HEADED STUD ANCHOR HSA HEIGHT HT HOLLOW STRUCTURAL SECTION HSS HORIZONTAL HORIZ	INFORMATION	ME ME MIL MIS NO NO OP OP OP OP PL

INFO	MECHANICAL MECH	
I.D.	MEZZANINE MEZZ	
INT	MIDDLE MID	
	MISCELLANEOUS MISC	
JT		
JST (S)	NOMINAL NOM	
, ,	NOT TO SCALE NTS	
K	NUMBER No. OR #	
KLF		
TKSF	ON CENTER OC	
RETELWT CONC	OPPOSITE OPP	
LL	OPPOSITE HAND OH	
LONG	OUTSIDE DIAMETER O.D.	
ALLLH		
LLV	PERPENDICULAR PERP	
	PLATE PL	
MFR	PLYWOOD PLYWD	
MAX	POINT PT	
		<u> </u>

POUNDS PER SQUARE FOOT	PSF	SCHEDULE (D)	SCHED
POUNDS PER SQUARE INCH	PSI	SECTION	SECT
POWDER ACTUATED FASTENER	PAF	SHEET	SHT
PRECAST CONCRETE	P/C	SIMILAR	SIM
PRE ENGINEERED METAL BUILDING	PEMB	SPECIFICATION (S)	SPEC (S)
PREFABRICATED	PREFAB	SQUARE FOOT (FÉET)	SF `´
		STANDARD	STD
PRELIMINARY	PRELIM	STEEL	STL
PROJECTION		STIFFENER	STIFF
		STIRRUPS	STIR
RADIUS	R	STRUCTURE	STRUCT
REFERENCE (REFER TO)	REF	STRUCTURAL	STRUCT'L
REINFORCE (ÌNG) (ED) (MENT)		SYMMETRICAL	SYM
REQUIRED	REQ'D	SUBCONTRACTOR	SUBCONTR
ROOF DRAIN	RD		
ROOF OPENING	R.O.	TEMPERATURE	TEMP
ROOM	RM	THICK	THK
ROUND	RND	TONGUE AND GROOVE	T&G
		TOP OF BEAM	TOP/BM
SAWN JOINT	SJ		

.... TOP/BM .... TOP/FTG

...TOS .. TOW

.. TOP/PIER

...TOP/PER CAP

TOP OF BEAM..... TOP OF FOOTING.... TOP OF PIER.....

TOP OF PIER CAP...

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REINFORCING STEEL:
                                                                                                                                                            Reinforcing steel shall be new deformed billet steel conforming to ASTM A615, Grade 60.

    The structural design is in accordance with the 2021 International Building Code.

                                                                                                                                                            Detailing of reinforcing steel and accessories shall conform to ACI 315.
                                                                                                                                                            Required minimum reinforcing cover:
                                                                                                                                                            Concrete cast against soil
                                                                                                                                                            Grade Beams on void carton 1 1/2" top, 2" sides, 3" bottom
                                                                                                                                                           Drilled Shafts
                                                                                                                                                                                           3/4" top [not exposed to weather], 2" bottom
                                                                                                                                                           Slabs on void carton
                                                                                                                                                           Lap all reinforcing bar splices 30 bar diameters or 2'-0" whichever is greater unless noted otherwise.
                                                                                                                                                            Reinforcing call-out legend: #4(2-0,2-0)@12
The structure has been designed to resist design loads only as a completed structure. Applications of construction loads to the partially completed structure
shall be considered by the contractor and so included in the design of shoring, bracing, formwork, and any other supporting elements provided for
                                                                                                                                                               Length of bar from bend to bend Spacing of bars
construction of the structure. During erection and until all permanent connections are made, the contractor must provide temporary bracing to brace the
                                                                                                                                                              or length of bar from bend to end
The engineer shall not have control or charge of, and shall not be responsible for, construction means, methods techniques, sequences, or procedures for Provide #4 (2-0,2-0) corner bars to match grade beam exterior reinforcing longitudinal bars
safety precautions and programs in connection with the work, for the acts or omission of the contractor, subcontractor, or any other persons performing any
of the work, or for the failure of any of them to carry out the work in accordance with the contract documents.
                                                                                                                                                           Hook top and bottom beam reinforcing bars at discontinuous ends.
The Contractor shall verify all existing conditions prior to the start of work. On-site survey is required to verify as-built dimensions, structural conditions, and STRUCTURAL STEEL:
dimensional requirements for supplied equipment prior to fabrication of any new elements. Notify Architect/Engineer of any potential conflicts arising from
Where a section is cut on the drawings, it shall apply to all like or similar conditions (U.N.O).
                                                                                                                                                                                                 ASTM A992
                                                                                                                                                                                                                             Fy = 50 ksi
                                                                                                                                                            Wide Flange Shapes
                                                                                                                                                            Other Rolled Shapes and Plates
                                                                                                                                                                                               ASTM A36
                                                                                                                                                                                                                              Fy = 36 \text{ ksi}
                                                                                                                                                            Rectangular HSS Shapes
                                                                                                                                                                                                ASTM A500 Gr. C
                                                                                                                                                                                                                             Fy = 50 ksi
                                                                                                                                                                                                                             Fv = 35 ksi
                                                                                                                                                            Structural Pipe
                                                                                                                                                                                                 ASTM A53
                                                                                                                                                            Structural Bolts
                                                                                                                                                                                                 ASTM A325
                                                                                                                                                                                                                              Fy = 92 ksi
                                                                                                                                                                                                 ASTM F1554 Gr. 36
                                                                                                                                                                                                                             Fy = 36 ksi
                                                                                                                                                           Anchor Rods
                                                                                                                                                            Headed Stud Anchors
                                                                                                                                                                                                ASTM 108
                                                                                                                                                                                                                             Fu = 65 ksi
                                                                                                                                                            Welding Electrodes
                                                                                                                                                                                                 AWS D1.1
                                                                                                                                                            Structural steel details and connections shall conform to the standards of the AISC.
                                                                                                                                                           Unless noted otherwise, all structural steel shall be shop primed in accordance with the "Steel Structures Painting Manual", Volumes 1 and 2, as published
                                                                                                                                                           by the steel Structures Painting Council (SSPC).
                                                                                                                                                           Full and partial penetration welds performed in the field shall be ultrasonically tested.
Any inspections, special or otherwise, that are required by the building codes, local Building Departments, or these plans, shall be done by a qualified
                                                                                                                                                           All welding shall be performed by welders certified within the last 6 months.
independent inspection company. Job site visits by the Engineer do not constitute, or substitute, inspections.
                                                                                                                                                            WOOD FRAMING:
The drawings in the structural documents are not to be scaled for any purpose, including the determination of quantities and the fit up of materials.
                                                                                                                                                           Exterior wall studs shall be 2x6 @ 16" o.c. (Reference Wood Material Schedule). Studs shall be doubled at all angles, corners, and openings.
The roof structure and its supporting elements have been designed with the assumption that sufficient drainage has been provided to prevent any ponding
                                                                                                                                                            Unless otherwise indicated, place a single plate at the bottom and a double plate at the top of all stud walls. Exterior sill plates shall be bolted to the
                                                                                                                                                           foundation with 1/2" diameter A36 anchor bolts @ 48" o.c.
                                                                                                                                                            All framing members shall be visually graded structural lumber (Reference Wood Material Schedule). Provide bridging for all spans over 5'-0".
All work is to be done using material from approved shop drawings. The contractor shall submit an electronic PDF copy for review by the Engineer of
Record (EOR). Work may begin using materials from shop drawings marked "no exceptions taken" or "exceptions as noted" only.
                                                                                                                                                            Unless otherwise indicated, headers over openings with spans less than 8'-0" shall be 3 - 2x12.
The General Contractor shall pre-check all shop drawings before submission to the Engineer for review. All submittal materials must bear the Review
                                                                                                                                                           All exterior lumber, sill plates, and any lumber in contact with concrete or masonry shall be pressure treated.
                                                                                                                                                            All exterior exposed framing members shall be pressure treated, visually graded structural lumber (Reference Wood Material Schedule). Provide bridging
The General Contractor shall schedule submittals sufficiently in advance of the date required to allow reasonable time for delivery, processing and review by for all spans over 5'-0".
the Design Team. This shall include a minimum of ten (10) working days, excluding delivery time, for Engineer's processing and review of shop drawings.
                                                                                                                                                            Provide all blocking and fire stops required by the Building Official and/or Truss Manufacturer.
The review of the shop drawings by the EOR is only for general compliance with the structural drawings and specifications. This review does not guarantee STRUCTURAL GLUE LAMINATED VENEER LUMBER (LVL):
in any way that the shop drawings are correct or complete, nor does it infer that they supersede the structural drawings. Corrections or comments made (or
not made) on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans, general notes, or
                                                                                                                                                           Members shall be laminated in a press with all grain parallel with the length of the member. Adhesives shall be of the waterproof type conforming to the
specifications. Approval of a specified item shall not include approval of an assembly of which the item is a component.
Signed and sealed calculations for a particular system submitted as part of a shop drawing are reviewed for load criteria and general conformance with the

Appearance Shall be Framing Appearance Grade or better. Reference "Wood Material Schedule" for minimum required properties.
contract documents. Calculation review and comments do not infer a detailed check of the calculations, nor do they relieve the system engineer or the
The use of reproductions or electronic files of the structural drawings for the preparation of shop drawings is not acceptable without prior written
                                                                                                                                                            Prefabricated I-JOIST and their connectors shall be designed by a registered professional engineer in accordance with the latest edition of the National
                                                                                                                                                            Forest Products Association - Design Specification for Wood Construction.
Omission from the shop drawings of any requirements of the contract documents shall not relieve the contractor of the responsibility of complying with the
                                                                                                                                                           I-JOISTS shall be APA performance rated and be manufactured in conformance with PRI-400 Performance Standard for APA EWS I-JOISTS. All I-JOIST
                                                                                                                                                            shall be 11 7/8" deep PRI-60 with EI=584x10 lbf-in or greater.
                                                                                                                                                            PLYWOOD OR ORIENTED STRAND BOARD:
Foundation Design basis: Geotechnical Report No. 398-24-25 prepared by CMJ Engineering, Inc. dated December 19, 2024.
                                                                                                                                                            Roofs and wall sheathing shall be Plywood or Oriented Strand Board APA-RATED EXT1 sheathing installed in accordance with the latest APA
                                                                                                                                                            recommendations for roof and wall construction. Provide nominal 3/4" thick roof deck and nominal 5/8" thick wall sheathing.
                                                                                                                                                            Long panel dimension for roof sheathing shall be placed perpendicular to supports and shall be continuous over two or more spans.
                                                                                                                                                            Provide a minimum 1/8" space between panels along all edges unless noted otherwise by panel manufacturer.
                                                                                                                                                            Unless indicated otherwise, nail sheathing w/ 8d common nails @ 6" o.c. along panel edges and @ 12" o.c. along intermediate framing members
                                                                                                                                                            2x6 TONGUE & GROOVE ROOF DECKING:
Piers not specifically located on the plan shall be located on centerline of the column above. Where no column occurs, locate pier on centerline of wall or
                                                                                                                                                           Decking shall receive a factory applied clear penetrating sealer on all exposed surfaces designed for exterior use applications.
                                                                                                                                                           Fastening schedule: At each support, toenail deck through the tongue and face nail using 16d common nails.
                                                                                                                                                            PREFABRICATED WOOD TRUSSES:
                                                                                                                                                            Prefabricated wood trusses and their connectors shall be designed by a registered professional engineer in accordance with the latest edition of the National
                                                                                                                                                            Forest Products Association - Design Specification for Wood Construction.
The contractor shall verify depths of piers before pier steel is cut. Pier steel may be delivered to the jobsite in standard lengths and cut as required. Provide
                                                                                                                                                            Truss members shall be designed, with a maximum allowable stress increase, for the following loads:
All piers shall be inspected by a representative of a qualified geotechnical laboratory in order to ensure that the proper bearing material has been reached in
                                                                                                                                                              ROOF TRUSSES:
                                                                                                                                                               Top Chord
                                                                                                                                                                             DL = 15 psf; LL = 20 psf (reducible)
                                                                                                                                                              Bottom Chord DL = 10 psf
Do not allow tops of piers to "mushroom". The top of pier shall be of the specified diameter.
                                                                                                                                                            The truss manufacturer shall submit the following certifications, sealed by the Engineer in responsible charge of the work:
                                                                                                                                                           Certification of the rated load capacity of the connectors used to secure the members by an independent testing agency.
Unless noted otherwise, all concrete shall be normal weight, with a maximum aggregate size of 1", a maximum slump of 5" (6" +/- 1" for piers), and the
                                                                                                                                                           Certification that the manufacturer is licensed to fabricate trusses utilizing the connector system proposed.
                                                                                                                                                            Certification that the trusses are designed to meet the load criteria requirements specified herein.
                                                                                                                                                            Fabrication and installation drawing shall be submitted to the Contractor for approval of size, shape, and layout, prior to fabrication of materials.
                                                                                                                                                            Bridging for trusses shall be provided as required for in-place loads as well as stability for safe erection. Bridging shall be designed in accordance with the
                                                                                                                                                            National Forest Products Association - National Design Specification for Wood Construction.
Provide normal weight concrete with cured density of 145 ± 5 pcf, and aggregate conforming to ASTM C33, UNO.
                                                                                                                                                           It is the responsibility of the installer (builder, building contractor, licensed contractor, erector, or erection contractor) to safely install and brace metal
All concrete work shall conform to the requirements of the latest edition of ACI 301 Specification for Structural Concrete and ACI 318 Building Code
                                                                                                                                                            connected wood trusses to protect life and property. All temporary bracing shall comply with the latest edition of Commentary and Recommendations for
Requirements for Structural Concrete unless noted otherwise in the Contract Documents.
                                                                                                                                                            Handling, Installing, and Bracing Metal Plate Connected Wood Trusses published by the Truss Plate Institute.
Concrete mix designs shall be prepared by a qualified testing agency or material supplier in accordance with ACI 318. Contractor to submit mix designs for

Truss manufacturer shall be responsible for calculating anchorage forces to resist code required uplift for roof trusses and shall recommend the appropriate
```

each concrete strength and intended use for review by the Engineer prior to placement. Air entrained admixture is not allowed for concrete to receive a steel hold down clip adequate for the required anchorage. Contractor shall install the recommended hold down clips with the required number of nails to fully

Unless indicated on drawings, concrete beam or wall sections are not designed for construction imposed lateral earth pressures. Provide temporary bracing

Prior to fabrication of wood trusses obtain all required mechanical opening requirements from the General Contractor and/or the Mechanical Contractor.

develop the recommended clip.

Provide final trusses designed, detailed, and fabricated with the required mechanical openings.

**GENERAL NOTES** 

**DESIGN CRITERIA:** 

DESIGN LIVE LOADS Roof:

DESIGN WIND LOAD

structure in all directions.

the as-built survey.

**SHOP DRAWINGS:** 

Stamp of the General Contractor.

authorization of the EOR.

**FOUNDATION NOTES:** 

**CONCRETE:** 

Grade Beams

Slabs on Void Cartons

Pier Caps

trowel finish.

following 28 day compressive strength:

Drilled and Underreamed Shafts

Allowable end bearing: 4,000 psf

Building Risk Category II

Wind Speed (3 sec gust) 105 mph

See architectural drawings for the following:

Floor and Roof finishes

Details of veneer attachment

Location & extent of insulation

Concrete and asphalt site paving.

Size & location of all roof openings

Size & location of all doors and windows

See mechanical, plumbing, electrical and civil drawings for the following:

 Pipe runs, sleeves, hangers, trenches, wall and floor openings, etc Electrical conduit runs, boxes, outlets in walls and floors

Concrete inserts for electrical, mechanical, or plumbing fixtures

Include time for Contractor's resubmission and subsequent review if necessary.

omitted requirements, even if the shop drawings have been reviewed and returned.

Reference plans and pier schedule for pier size, bell diameter, and reinforcing.

accordance with the recommendations given in the geotechnical report.

Cast concrete for all drilled shafts within 8 hours of drilling completion.

Provide dowels from piers into concrete above per the typical pier detail or sections.

3000 psi

4000 psi

4000 psi

as required to prevent damage from lateral pressures from earth fill operations or equipment surcharge loads.

Placement of sleeves or openings through beams is not permitted unless indicated on the structural drawings or approved in writing from the Architect

4000 psi

**DRILLED AND UNDERREAMED PIER FOUNDATIONS:** 

Bearing Stratum: Hard light brown and/or gray shaly clay

Depth of Bearing Stratum: 18 feet below existing grade

minimum 64 bar diameter laps in all vertical pier reinforcing.

Elevation of top of pier is noted on drawings.

Underground concrete ducts, trenches, pits, or manholes

Exposure Category C

Floor:

**GENERAL:** 

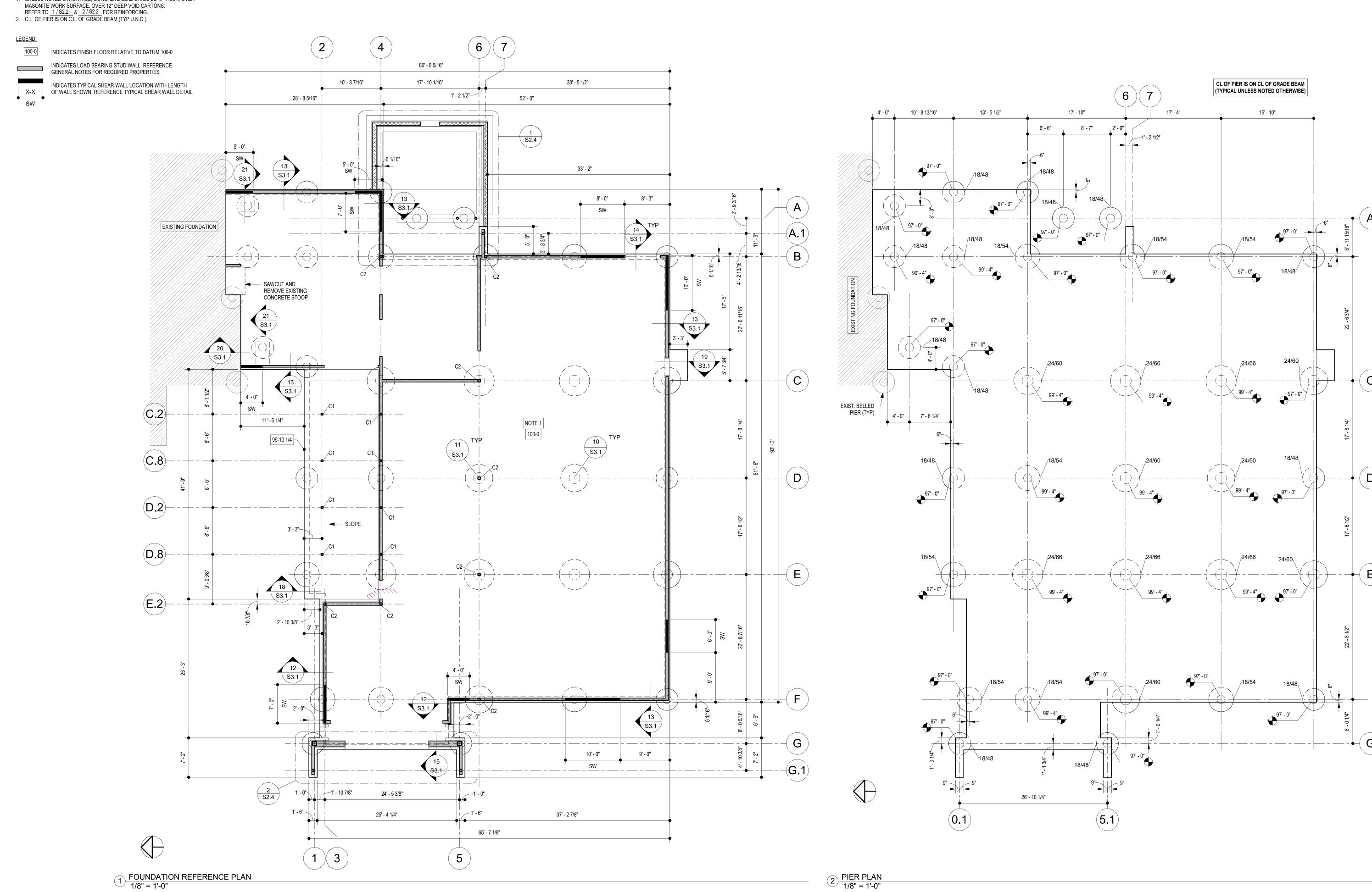
20 psf

100 psf

**DESIGN CODE:** 

of Sheets

S2.1



**FOUNDATION PLAN NOTES** 

LEGEND:

1. UNLESS NOTED OTHERWISE, CONCRETE SLAB SHALL BE 8" THICK, OVER

\*\*PRELIMINARY\*\*

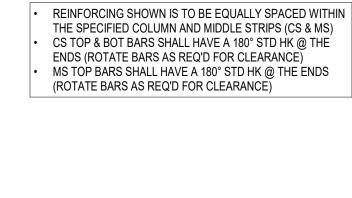
NOT FOR

Project: 2025.011 Date: 2/12/25

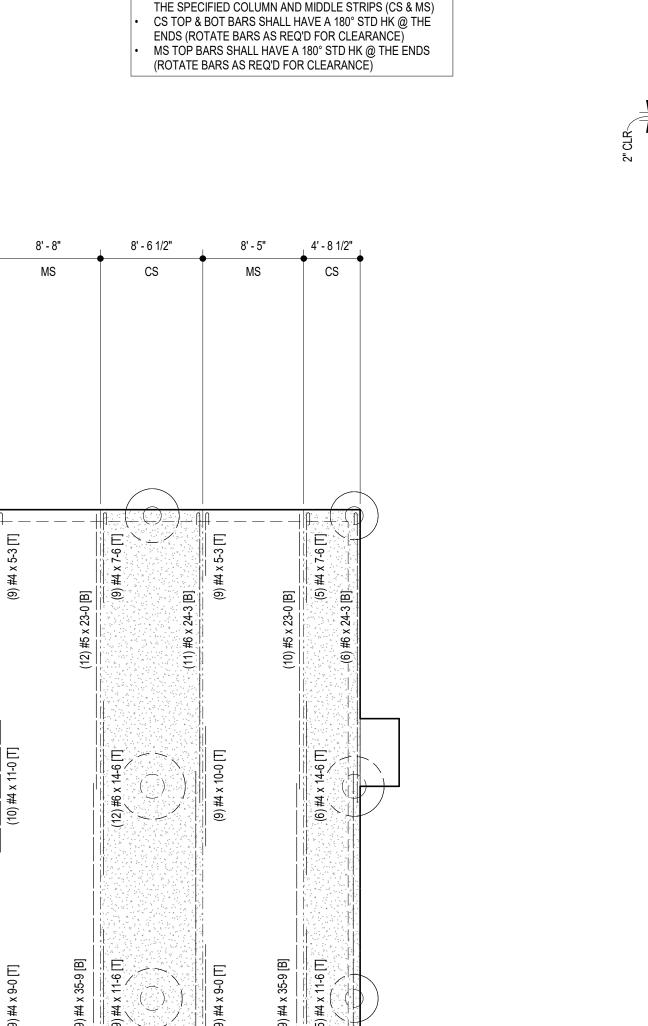


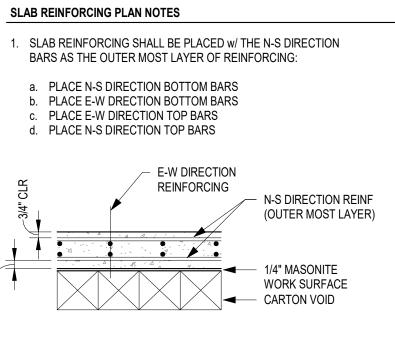


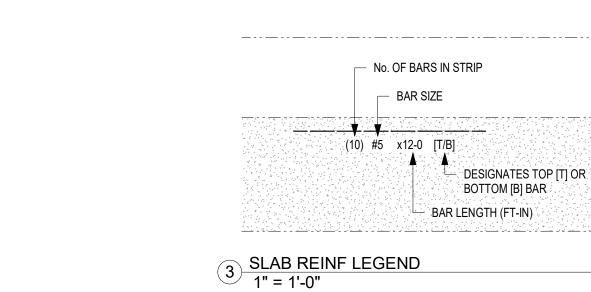
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1/8" = 1'-0"



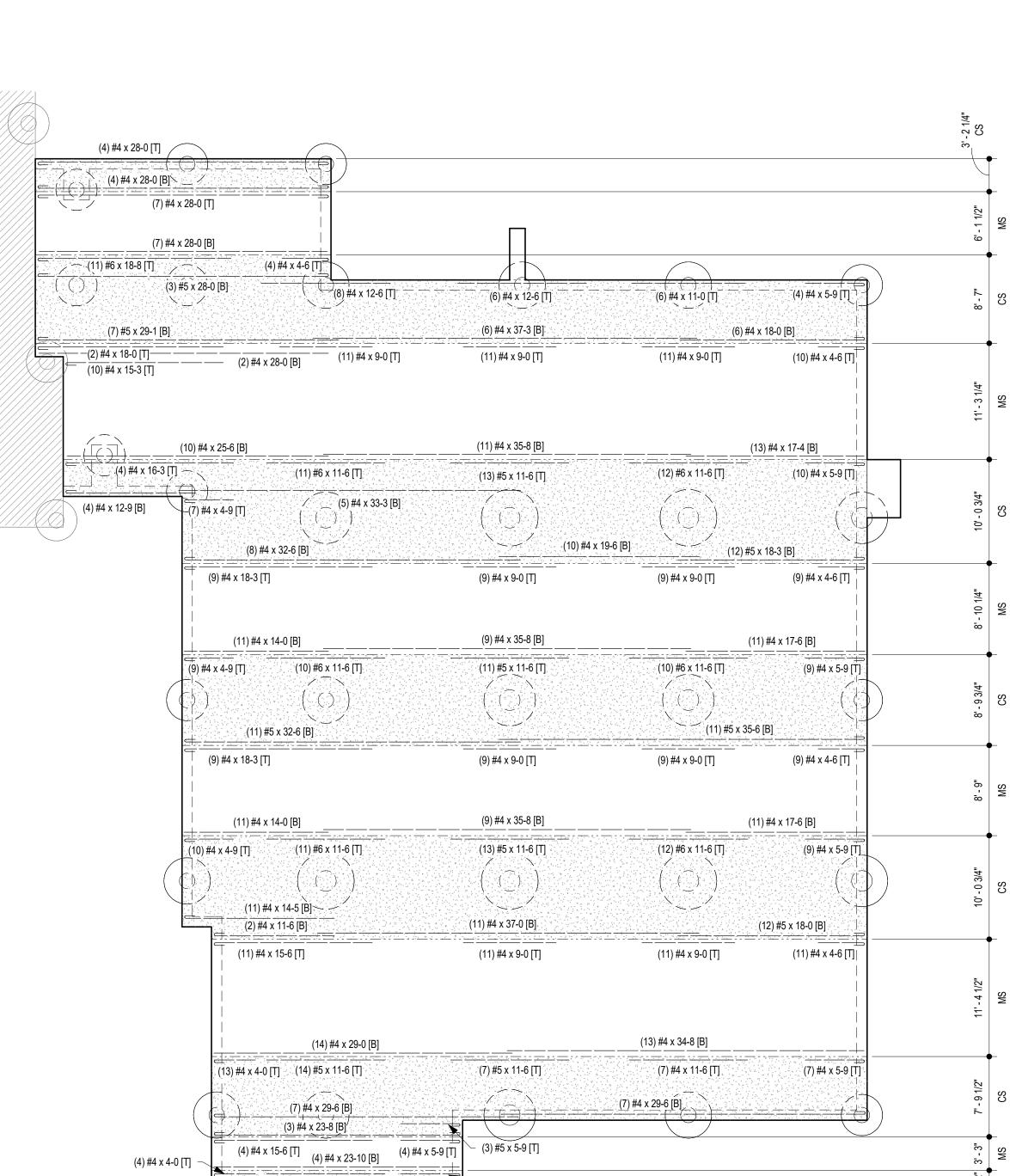




SPACE DESIGNATED REINF

**EQUALLY IN SPECIFIED STRIP** 

BOTTOM [B] BAR



(4) #4 x 5-9 [T]

(3) #4 x 27-6 [B]

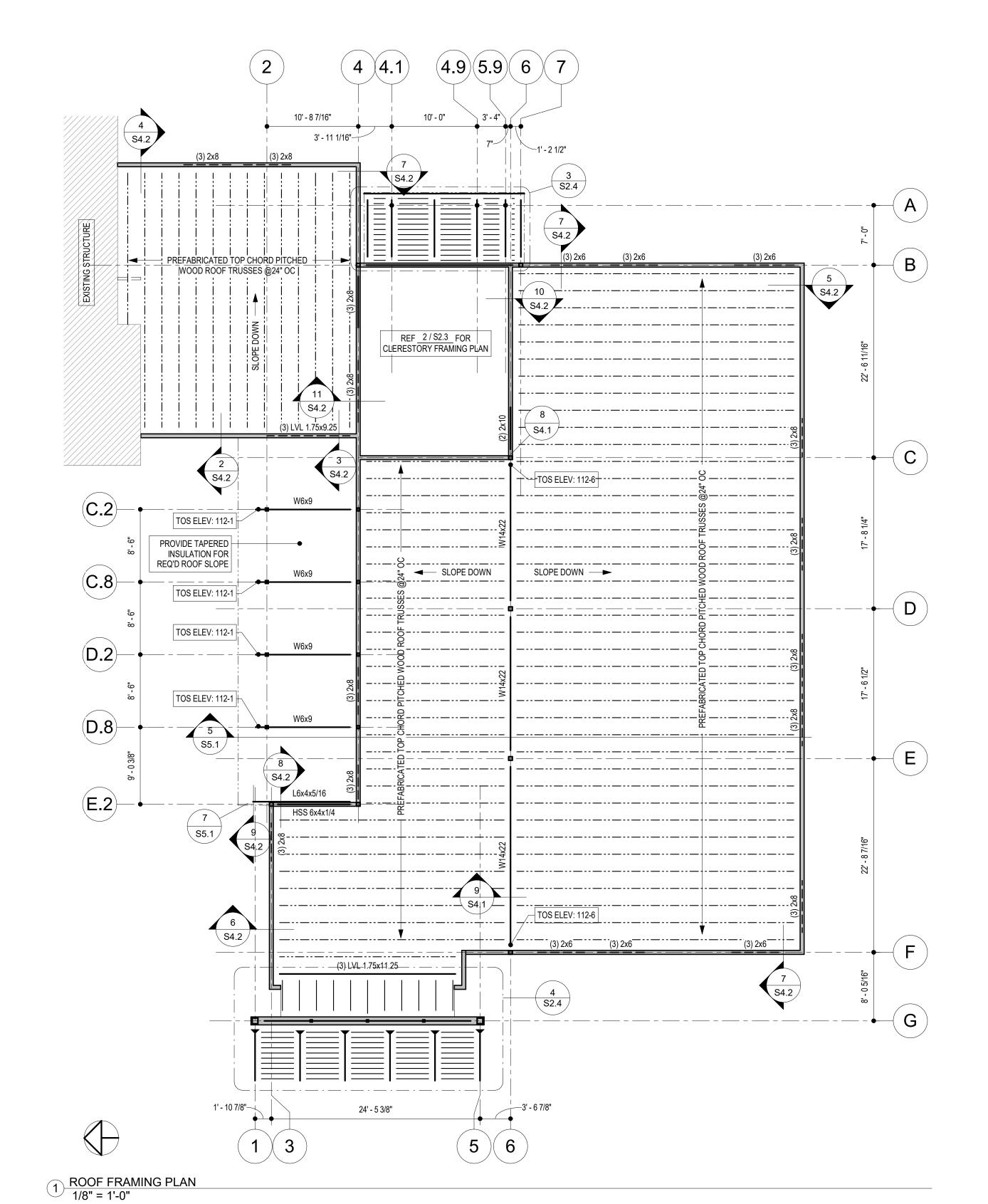
2 N-S SLAB REINFORCING 1/8" = 1'-0"

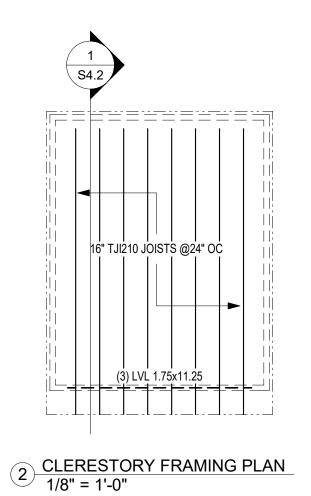
\*\*PRELIMINARY\*\*

CONSTRUCTION

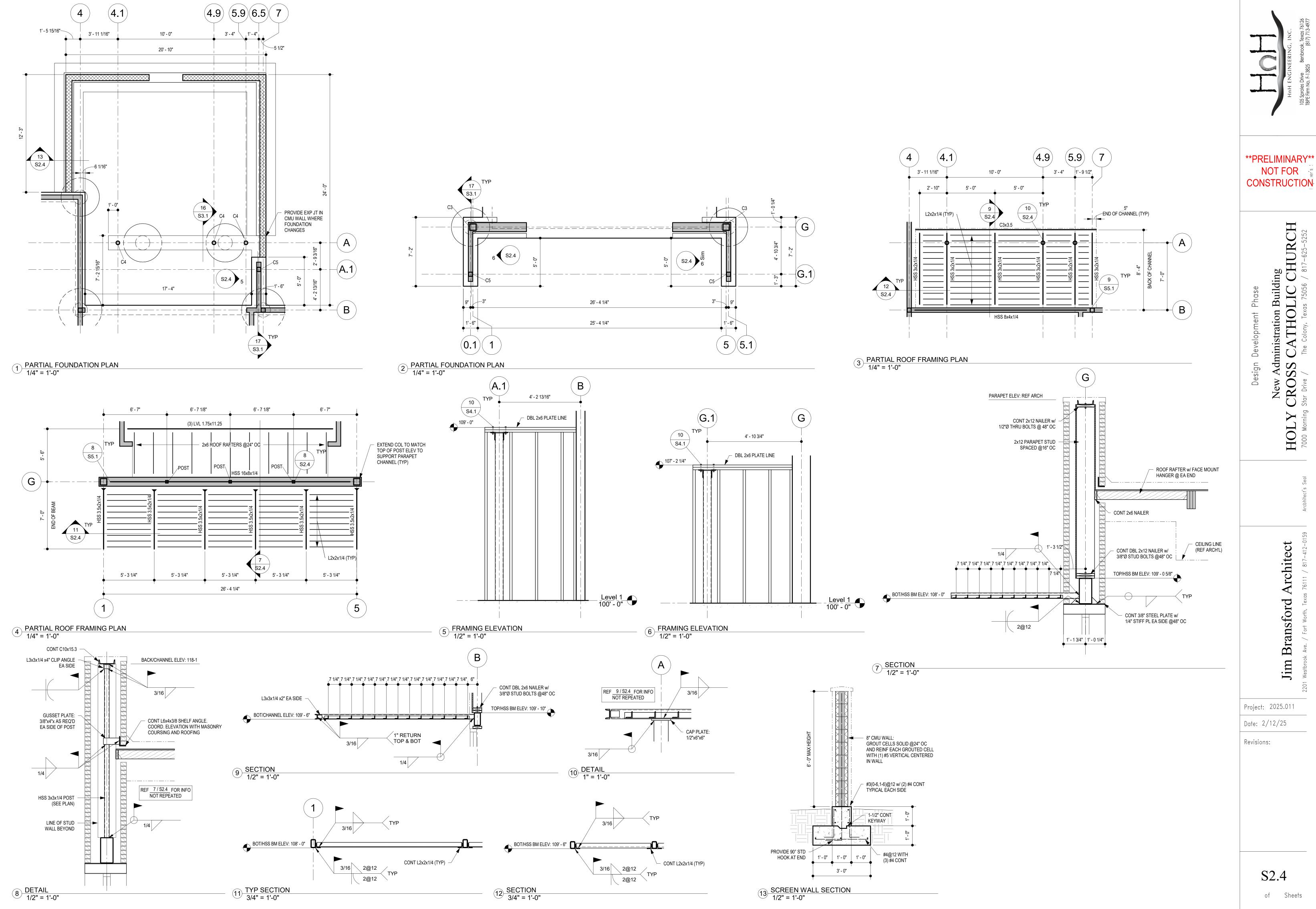
NOT FOR

New Administration Building
CROSS CATHOLIC CH





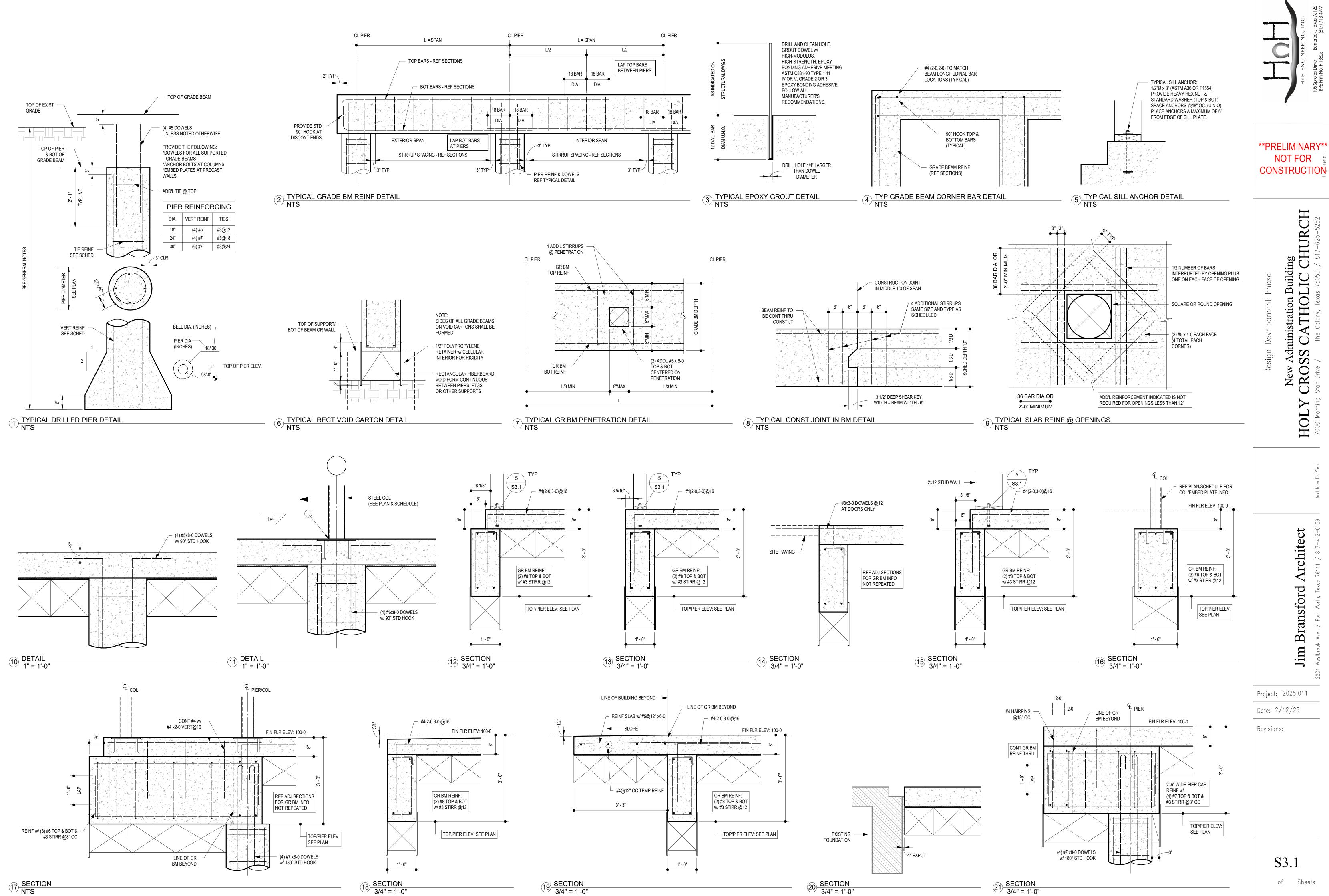
LEGEND							
	LOAD BEARING WALL						
	LOAD BEARING WALL BELOW						
	HEADER BELOW						
	GIRDER						
	JOIST / RAFTER						
	PREFABRICATED WOOD TRUSS						



Bransford

S2.4

of Sheets



CONSTRUCTION -

NOT FOR

Building LIC CF New Adr

Bransford

Project: 2025.011

Date: 2/12/25

Revisions:

S3.1

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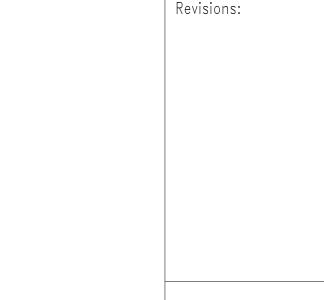




Project: 2025.011 Date: 2/12/25

S4.1

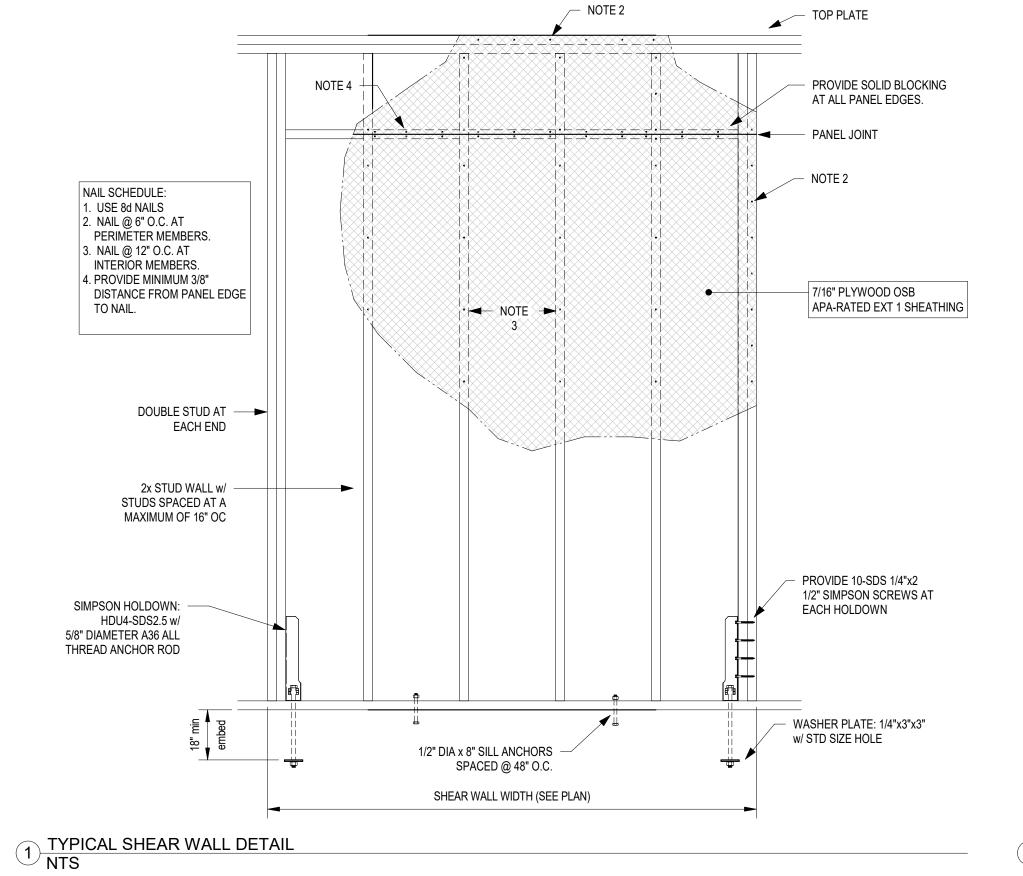
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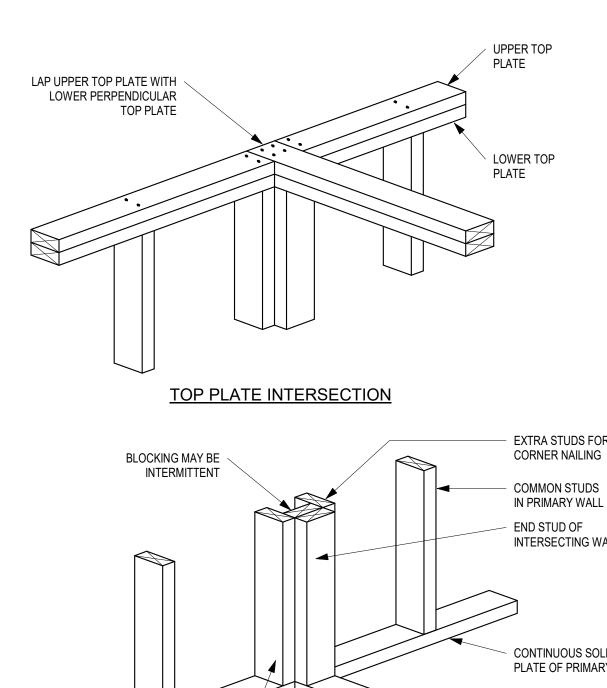


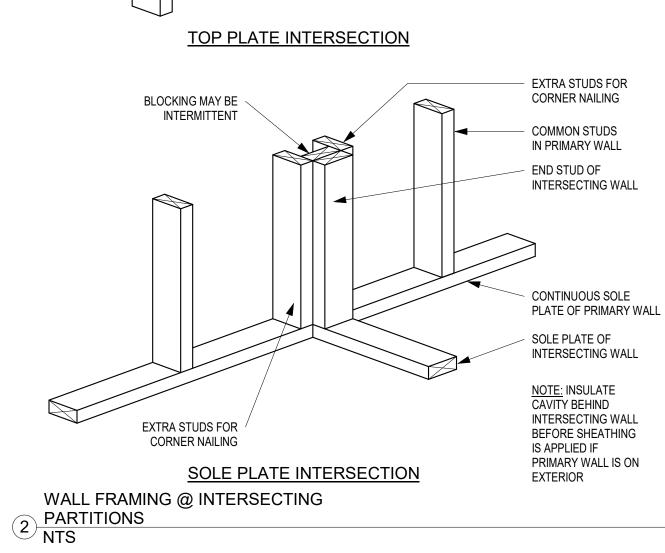
DOUBLE TOP PLATE

L5x3x5/16 x4"

EACH SIDE

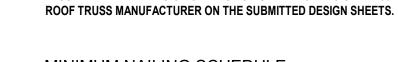


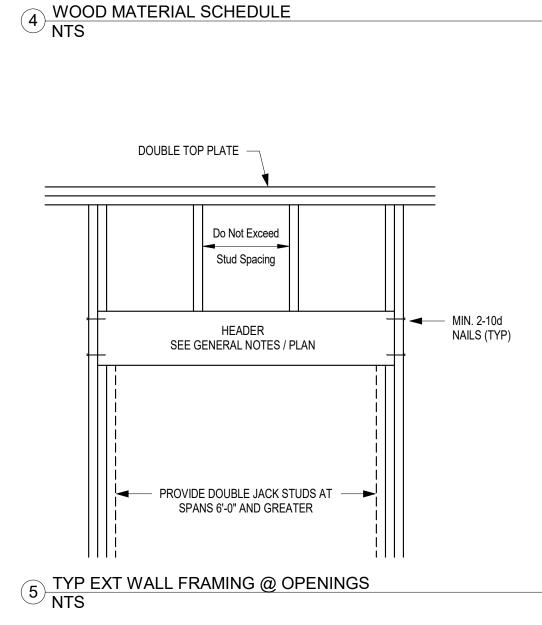




MINIMUM NAILING SCHEDULE					
CONNECTION	FASTENING	LOCATION			
TRUSS TO SILL OR GIRDER	(3) 0.131" x 3" NAILS	TOENAIL			
BRIDGING TO JOIST	(2) 0.131" x 3" NAILS	TOENAIL EA. END			
SOLE PLATE TO JOIST OR BLOCKING	0.131" x 2.5" @ 8" O.C.	TYPICAL FACE NAIL			
TOP PLATE TO STUD	(2) 0.162" x 3.5" NAILS (3) 0.131" x 3" NAILS	END NAIL			
STUD TO SOLE PLATE	(2) 0.162" x 3.5" NAILS (4) 0.131" x 3" NAILS	END NAIL TOENAIL			
DOUBLE STUDS FACE NAIL 2X4 2X6, 2X8	0.131" x 3" @ 8" O.C. 0.131" x 3" @ 8" O.C. TWO ROWS	FACE NAIL FACE NAIL			
DOUBLE TOP PLATES	0.313" x 3" @ 12" O.C. 14-0.131" x 3" NAILS	FACE NAIL LAP SPLICE			
TOP PLATE AT INTERSECTIONS	(3) 0.131" x 3" NAILS	FACE NAIL			
CONTINUOUS HEADER, TWO PIECES	0.136" x 3.5" @ 16" O.C.	ALONG EACH EDGE			
CEILING JOISTS TO PLATE	(5) 0.131" x 3" NAILS	TOENAIL			
CONTINUOUS HEADER TO STUD	(4) 0.131" x 3" NAILS	TOENAIL			
CEILING JOISTS, LAPS OVER PARTITIONS	(4) 0.131" x 3" NAILS	FACE NAIL			
CEILING JOISTS, PARALLEL RAFTERS	(4) 0.131" x 3" NAILS	TOENAIL			
RAFTER OR TRUSS TO PLATE	*(3) 0.313" x 3" NAILS	TOENAIL			
BUILD-UP CORNER STUDS	(3) 0.313" x 3" NAILS	@ 16" O.C.			
BUILD-UP WOOD COLUMNS 2X4 2X6, 2X8	0.313" x 3" @ 8" O.C. 0.131" x 3" @ 8" O.C. TWO ROWS	FACE NAIL FACE NAIL			
BUILD-UP GIRDER	REFER TO THE TRUSS MANUFACTURER'S DESIGN REQUIREMENTS AS PER THE ENGINEERED DESIGN SHEETS	FACE NAIL			
NAILING LEDGER FOR ROOF JACK TRUSSES OF 8'-0" OR LESS	(3) 0.313" x 3" @ 6" O.C.	FACE NAIL			
NAILING AND BOLTING FOR TREATED PLATES (TP)	ALL FASTENERS, NAILS, BOLTS, ANCHORS IN CONTACT WITH TP SHALL BE HOP-DIPPED GLAV. REFER TO PLANS FOR SIZE AND SPACING				

\* - SUPPLY RATED CLIPS OR STRAPS FOR UPLIFT FORCES OVER 200 LBS. AS NOTED BY THE





1/2" DIA THRU BOLT

(TYPICAL)

10 TYPICAL COL CONNX TO PLATE LINE NTS

WOOD MATERIAL SCHEDULE

SIZE Species/Grade

2x6 So. Pine No. 2 2x8 So. Pine No. 2 2x10 So. Pine No. 2 2x12 So. Pine No. 2

So. Pine stud gr.

STUDS\*\*

STUDS\*\*

BEAMS

**BEAMS** 

\* MULTIPLY ALL "E" VALUES BY 1,000,000 TO OBTAIN UNITS OF PSI.
\*\* STUDS MAY BE INDUSTRY APPROVED FINGER JOINTED MATERIAL.

SAWN LUMBER

SAWN LUMBER

DOUBLE 2x8 NAILER w/ 1/2"Ø STUD BOLTS

@48" OC.

MINIMUM CAPACITY (psi) | Fb | Fv | E\* | Fc // Fc PERP.

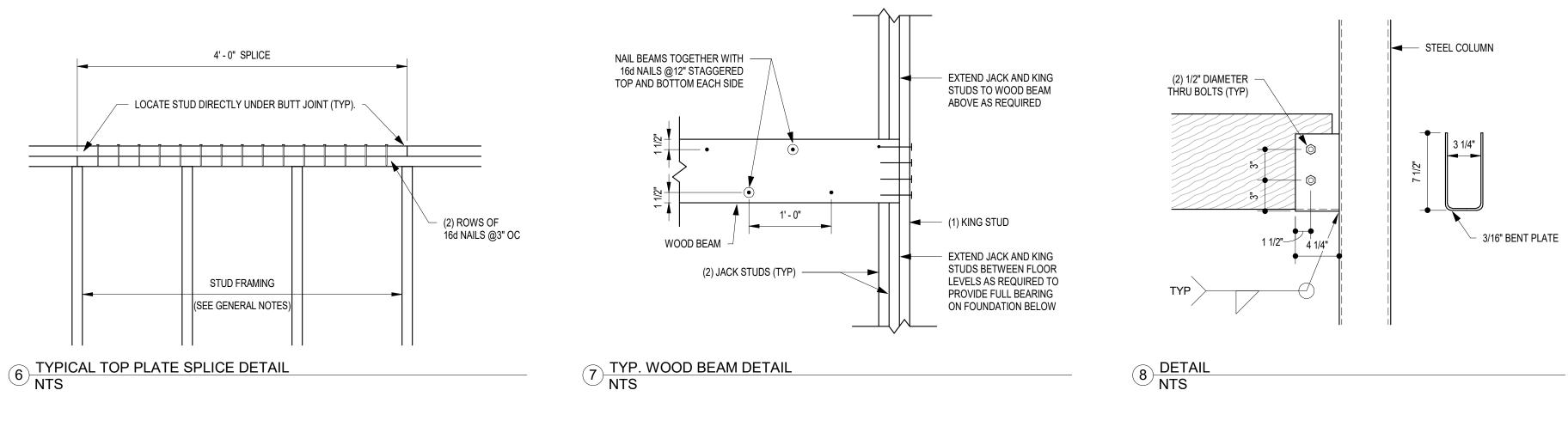
1000 175 1.4 1400 565 925 1350

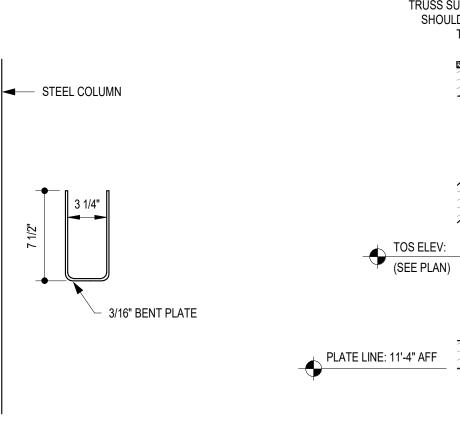
2900 | 285 | 2.0 | 2750 | 750

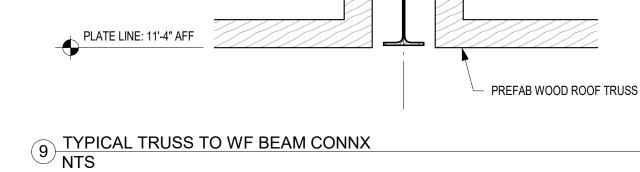
1250

Douglas Fir stud gr. 675 180 1.1 850 520

MINIMUM NAILING SCHEDULE	
(3)	







TRUSS SUPPLIER TO PROVIDE A -SHOULDER SEAT CONNX FOR TRUSSES ALONG GRID

REF 2 / S4.2 FOR INFO NOT REPEATED

SLOPE 1/2" PER FT ----

REF \_ 7 / S4.2 \_ FOR

INFO NOT REPEATED

PARAPET ELEV: REF ARCH

CONT 2x6 NAILER

PARAPET ELEV: REF ARCH

3/16 2@12

TOP/HSS BM ELEV: 113-0

CONT L8x4x7/16 (LLH) -SHELF ANGLE

CONT L6x4x5/16 (LLV) w/ — (2) 1/2"Ø x 4" LAG SCREWS AT EACH STUD

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

3 <u>SECTION</u> 1/2" = 1'-0"

PARAPET ELEV: REF ARCH

2x6 PARAPET STUD -ADJ TO EACH TRUSS

FASTEN PARAPET STUD TO TRUSS w/ (2) 8d NAILS @6" OC

PL LINE ELEV: 111-4

\_ 1-1/2" T&G ROOF DECK (REF GEN NOTES)

CONT 2x6 NAILER

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

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

5/8" PLYWOOD/OSB EACH
 SIDE OF PARAPET STUD

■ SLOPE 1/2" PER FT

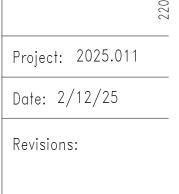
SIMPSON H2.5A TIE @ EACH TRUSS

New Administration Building 'ROSS CATHOLIC CF

Jim Bransford

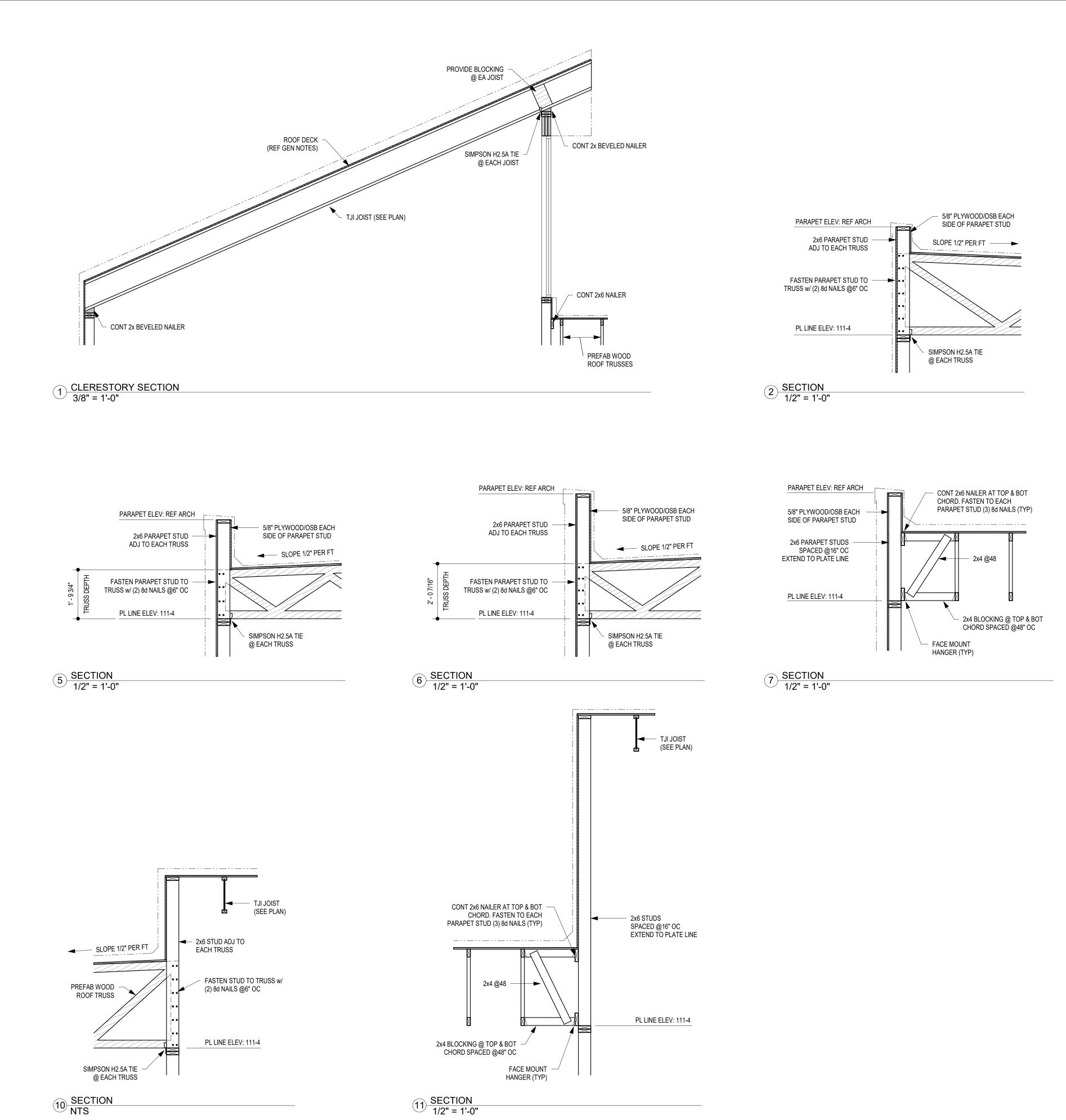




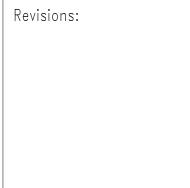


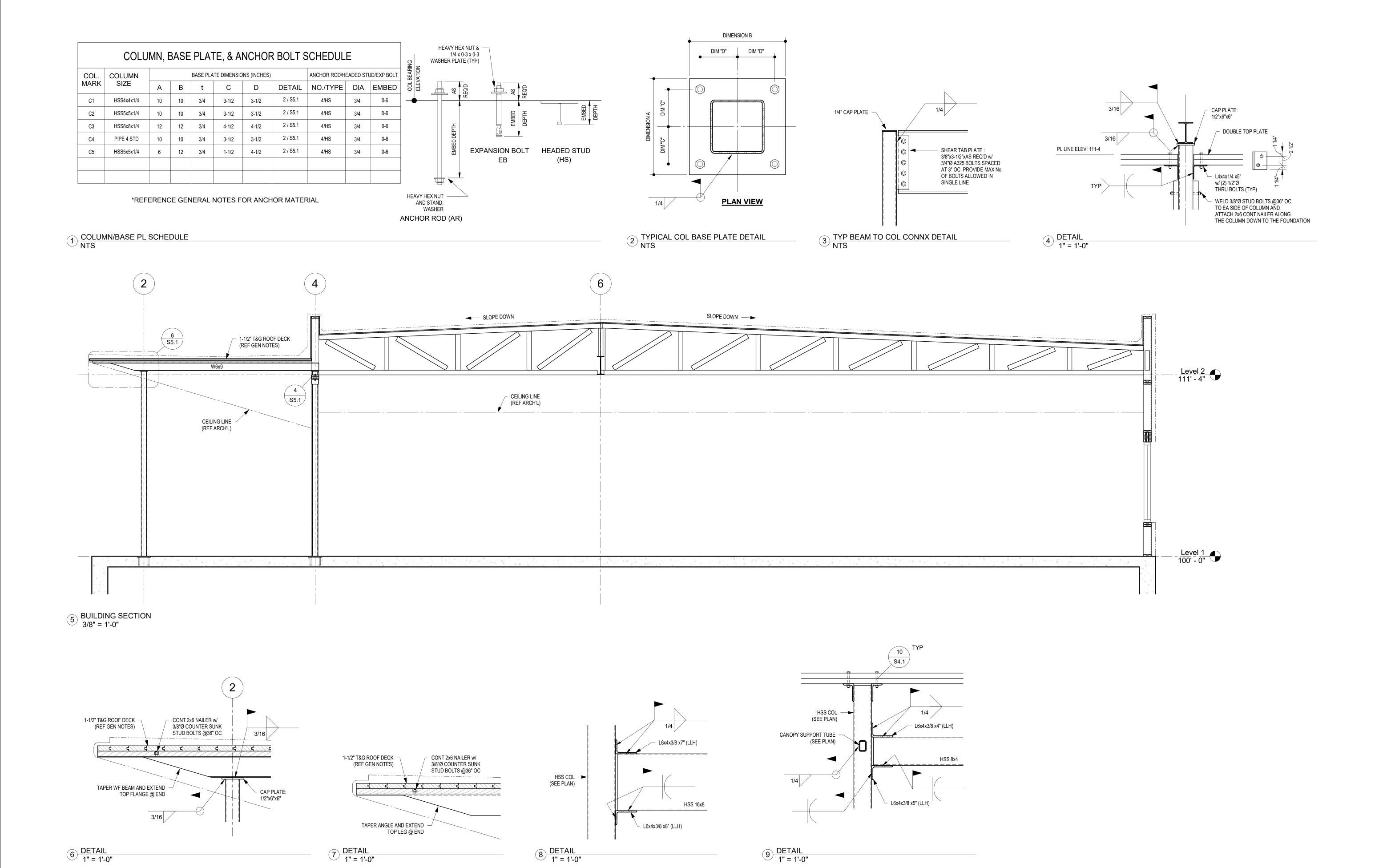


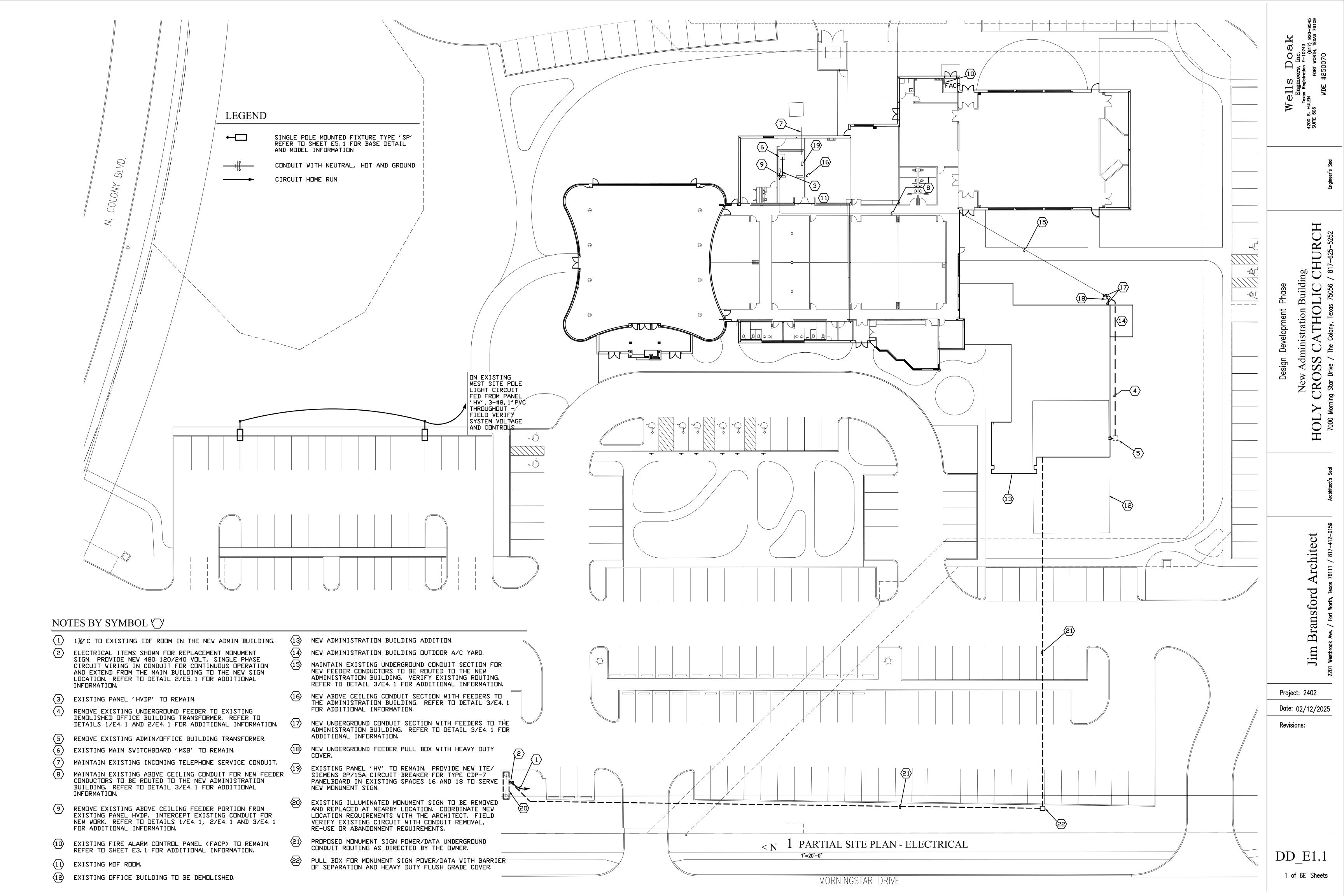
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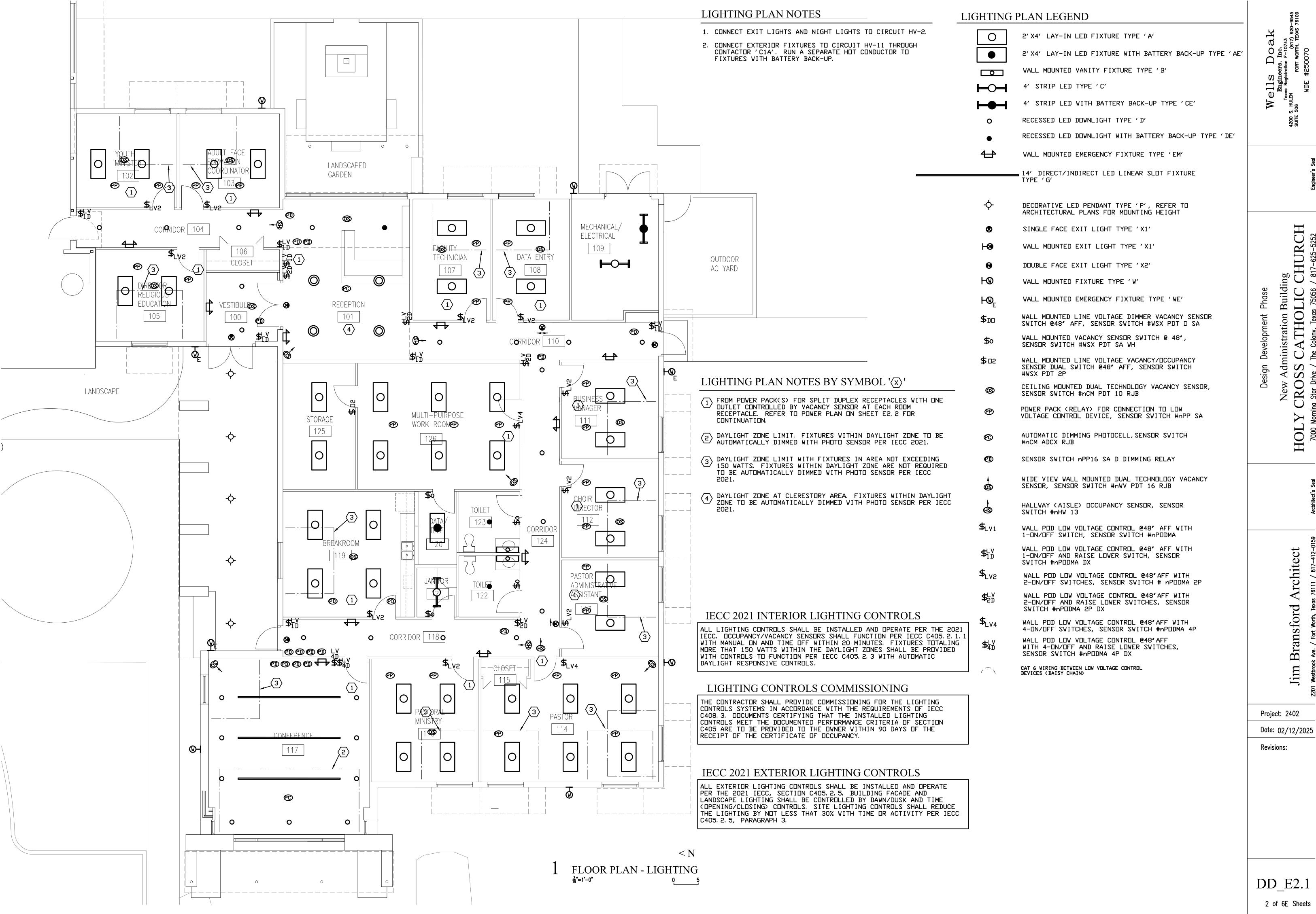












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Br

New Administration Building CROSS CATHOLIC Congress of the Colony, Texas 75056 / 8

2 of 6E Sheets

New Administration Building
CROSS CATHOLIC CHURCH
ng Star Drive / The Colony, Texas 75056 / 817-625-5252

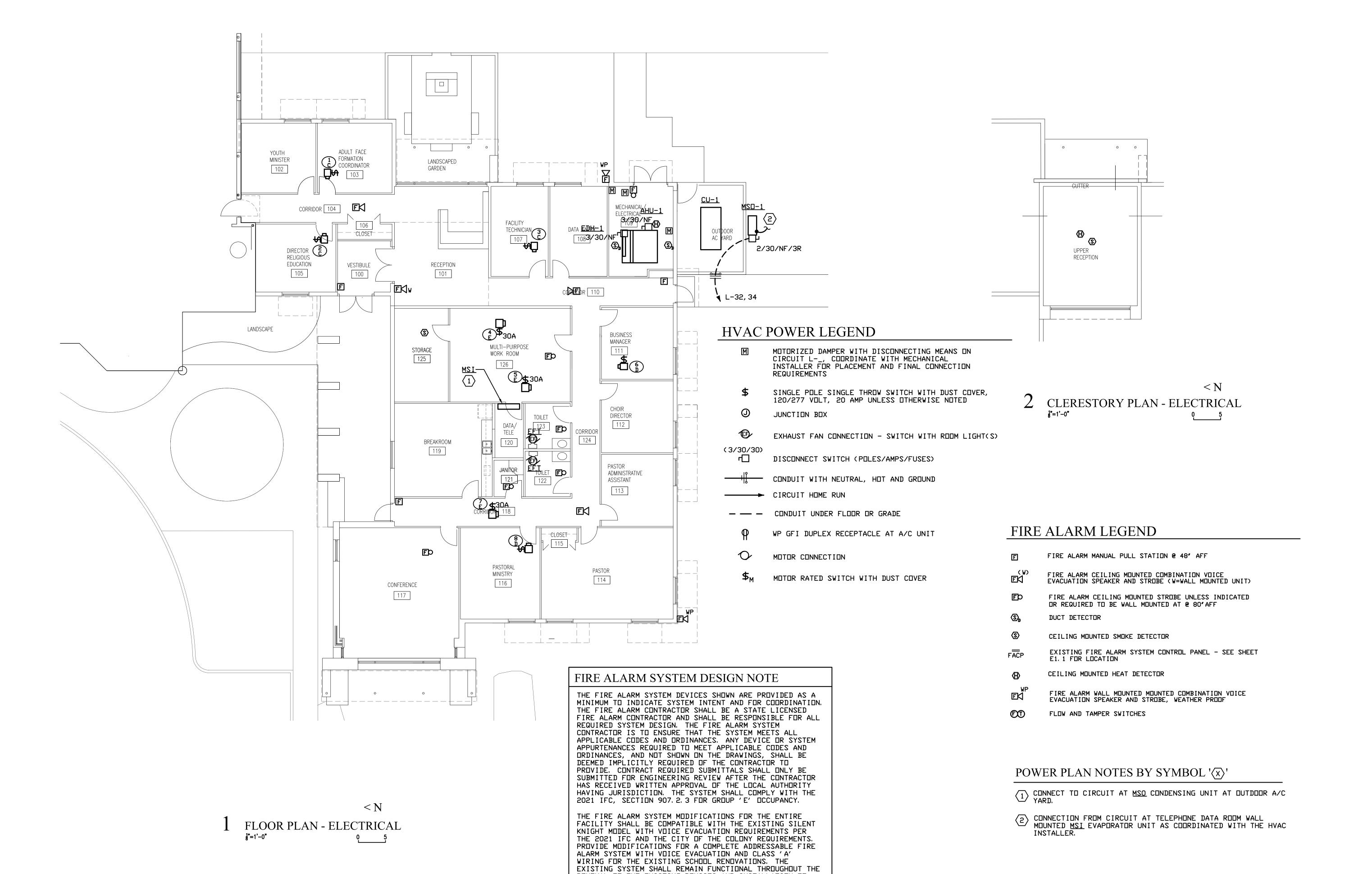
Project: 2402 Date: 02/12/2025

Revisions:

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DD E3.1 4 of 6E Sheets

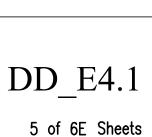


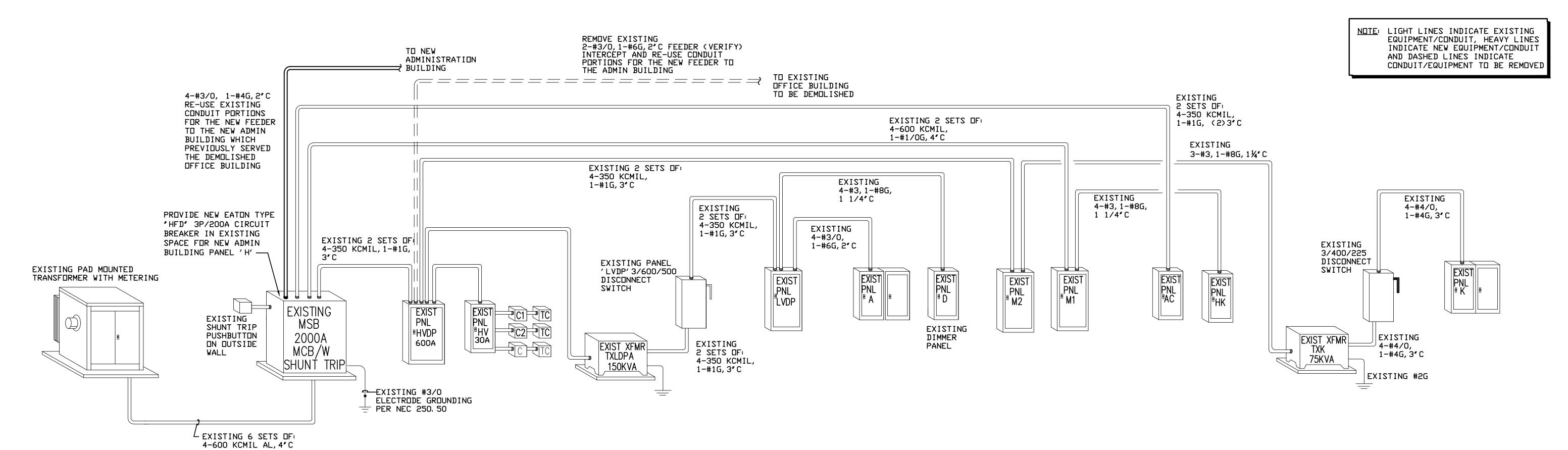
REMOVAL OF THE EXISTING DEVICES AND INSTALLATION OF THE NEW DEVICES. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BIDDING FOR REQUIREMENTS

ASSOCIATED WITH THE ADDITION OF VOICE EVACUATION

SPEAKERS TO THE EXISTING FACILITY.

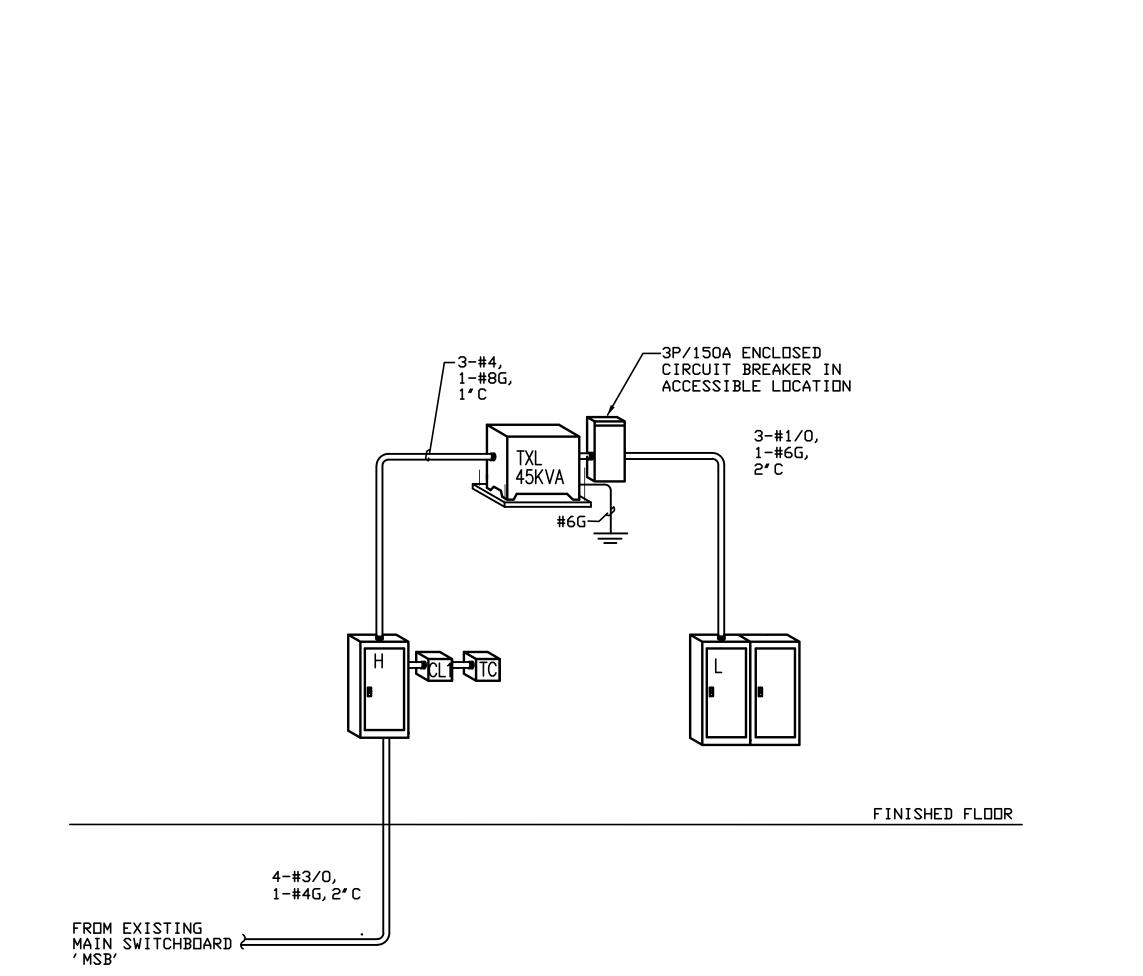
Revisions:

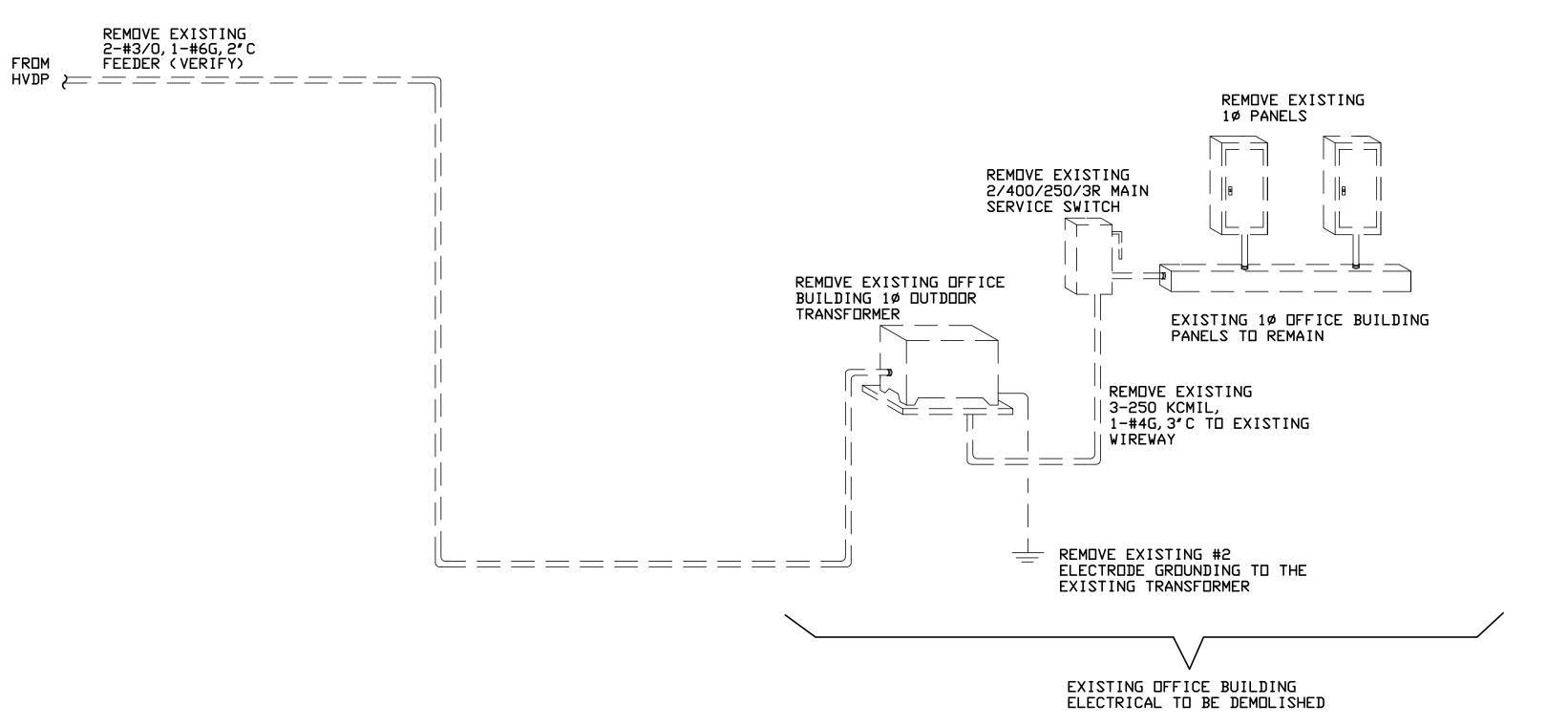




EXISTING MAIN BUILDING ELECTRICAL RISER DIAGRAM

REMOVE EXISTING 2-#3/0,1-#6G,2"C FEEDER (VERIFY)





EXISTING OFFICE BUILDING BUILDING ELECTRICAL RISER DIAGRAM - DEMOLITION

	. 11 11								
PANEL				_		ELEC RM MOUNT FLU		0	
-				_		us 150A volts 120/20			
	IR. BRK.			<u> </u>	AMP RM	S SYS CONDUIT 1 1/2		LE 4-#1,	<u>/U  </u>
	CONNEC			_		TOTAL CONNECTED			
	ATED DE			_		ESTIMATED DEMAND			
	CAPAC			_		SPARE CAPACTIY A			450.0
	L. DES					54.0 CALCUL. DESIGN A	MPS		<u>150. 0</u>
POLE		BRKR.		DUTLET		REMARKS		SE LOAD	
ND.	POLE	AMP	LTS	REC	MISC		A	В	C
1	1	20		_		RECEPTACLES		$\gg$	
2	1	20		_		RECEPTACLES		> <	
3	1	50		_		RECEPTACLES	$\langle \rangle$	_	>
4	1	20		_		RECEPTACLES	$\langle \rangle$		
5	1	50		_		RECEPTACLES	$\langle \rangle$	$\ll >$	_
6	1	20		_		RECEPTACLES		$\iff$	
7	1	20		_		RECEPTACLES	_	$\langle \rangle$	$\langle \rangle$
8	1	20		_		RECEPTACLES	<u> </u>		
9	1	20		_		RECEPTACLES	$\langle \rangle$	_	
10	1	20		_		RECEPTACLES	$\langle \rangle$		
11	1	20	-	_		RECEPTACLES	$\bowtie$	$\langle \tilde{} \rangle$	
12	1	20		-		RECEPTACLES		$\langle \tilde{} \rangle$	
13	1	20	-	<del>-</del>		RECEPTACLES	-	$\langle \tilde{} \rangle$	
14	1	20	-	-		RECEPTACLES	<b>-</b>		
15	1	20		_		RECEPTACLES	$\bowtie$	_	
16	1	20		_		RECEPTACLES	$\langle \rangle$		
17	1	20		-		RECEPTACLES	$\bowtie$	$\langle \tilde{} \rangle$	
18	1	20				RECEPTACLES		< >	
19	1	20		_		RECEPTACLES		$\langle \rangle$	
20	1	20		_		RECEPTACLES	<u> </u>		
21	1	20		-		RECEPTACLES	$\langle \rangle$	_	
22	1	20		_		RECEPTACLES	$\langle \rangle$		
23	1	20				RECEPTACLES	$\langle \rangle$	$\ll >$	-
24	1	20				RECEPTACLES	1000	$\langle \rangle$	
25	1	20				COUNTER RECEPTACLE	1000	$\ll >$	
26	1	20			-	COPIER	1000	1100	
27	1	20				MICROWAVE	$\langle \rangle$	1100	
28	1	20			<del>-</del> -	COUNTER RECEPTACLE	$\Longrightarrow$	1000	
29	1	20				REFRIGERATOR COUNTER RECEPTACLE	$\langle \rangle$	>	800
30 31	1	20 20			H	MOTORIZED DAMPERS	100	$\iff$	1000
32	1 2	15			<del>-</del>	MSI & MSD	1000	$\iff$	$\bowtie$
33	1	20				LIGHTING CONTROLS	1000	100	$\bowtie$
33 34						LIGHTING CUNTRUES	$\Longrightarrow$	1000	$\bowtie$
35	1	20				EVC	$\Longrightarrow$	1000	
35 36	1	20			<del>-</del> -	EWC	$\Longrightarrow$	$\iff$	600
35	1	20				SPARE		$\iff$	
38	1	20				SPARE	<del>-</del>	$\iff$	$\bowtie$
39	1	20				SPARE			$\bowtie$
40	1	20				SPARE	$\Longrightarrow$	_	$\bowtie$
41							$\Longrightarrow$		
42	1	20 20	-			SPARE SPARE	$\bowtie$	$\iff$	
43	1	20	-			SPACE ONLY		$\Longrightarrow$	
								$\iff$	$\bowtie$
44 45	-		-			SPACE ONLY			$\bowtie$
45 46			-			SPACE ONLY	$\bowtie$		$\bowtie$
46			-			SPACE ONLY	$\bowtie$		
47			-			SPACE ONLY	$\bowtie$	$\Longrightarrow$	$\vdash$
48 49			1					$\Longrightarrow$	
<del>49</del> 50	<u> </u>		-			SPACE ONLY	-	$\Longrightarrow$	$\bowtie$
51			-			SPACE ONLY SPACE ONLY			$\bowtie$
52			-			SPACE UNLY	$\bowtie$		$\bowtie$
52 53			-				$\bowtie$		
			-			SPACE ONLY	$\bowtie$	$\iff$	
54 55			-			SPACE ONLY		$\Longrightarrow$	
55 54	<u> </u>		-			SPACE ONLY		$\Longrightarrow$	$\bowtie$
56 57						SPACE ONLY	<b>_</b>		
57 58			-			SPACE DNLY	$\bowtie$		
	<u> </u>		-			SPACE ONLY	$\bowtie$		
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_00	<u> </u>		Ь	<u> </u>		SPACE ONLY TOTAL VA			$\vdash$

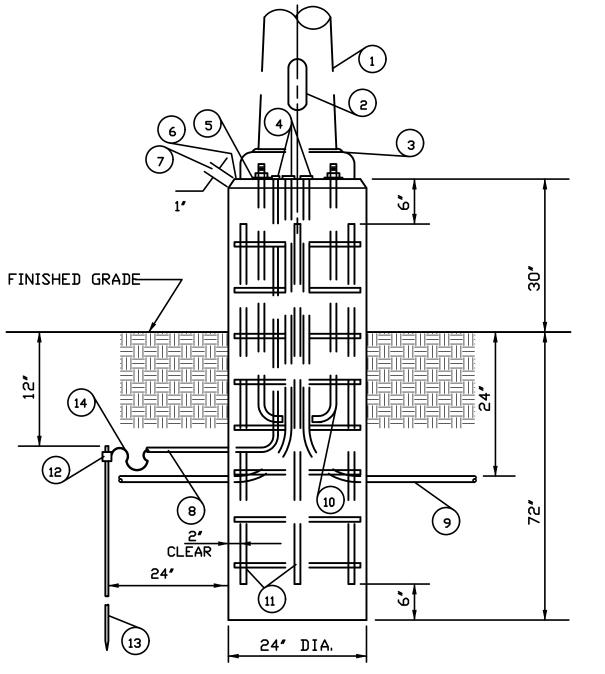
## PANEL H

1 1		. لايا	<u> </u>						
PANEL	_H	L	_OCAT 1	ON <u>N</u>	1ECH/	<u>ELECT RM</u> MOUNT <u>SUR</u>	FACE		
						BUS 200A VOLTS 277/48		3 WIRE	<u> </u>
						NS SYS CONDUIT 2"			
	CONNEC			_		TOTAL CONNECTED			
ESTIM	ATED DE	EMAND K	(VA			ESTIMATED DEMAND	AMPS		
SPARE	CAPAC	ITY KVA	4	_		SPARE CAPACTIY A	MPS		
CALCUI	L. DES	IGN KVA	4			166.3 CALCUL. DESIGN A	MPS		200. 0
POLE	CIRC	. BRKR.		DUTLET				SE LOAD '	/A
ND.	POLE	AMP	LTS	REC	MISC	REMARKS	Α	В	С
1	1	20	_			EXIT LIGHTS		$\overline{}$	$\overline{}$
2	1	50				SPARE	_		
3	1	20	_			LIGHTS	$\sim$		
4	1	20				SPARE		_	
5	1	20	_			LIGHTS	>		
6	1	20				SPARE	>		
7	•					SPACE ONLY			
8	1	20			<b> </b>	WH-1	2500	>	>
9	2	15			_	SITE SIGN XFMR		2500	$\Longrightarrow$
10	1	20			<b> </b>	VAV-1C	>	2500	>
11	_	_				100	>		2500
12	1	20			<del> </del>	VAV-2C	>	>	2500
13	1	20			<del> </del>	VAV-3C	2500	$\iff$	
14	1	30			<b>-</b>	VAV-4E	6000	$\iff$	$\iff$
15	1	30			_	VAV-5E	0000	6000	$\iff$
16	1	20			<del>                                     </del>	VAV-6D	$\iff$	4000	$\iff$
17	1	20			<u> </u>	VAV-7E	$\iff$	4000	6000
18	1	20			<del>                                     </del>	VAV-8D	$\iff$	>	4000
19	3	15			<del>-</del>	AHU-1	2100	$\iff$	4000
20	3	40			<del>                                     </del>	CU-1		$\iff$	$ \bigcirc $
21	<u> </u>	-			<del>                                     </del>		00	2100	$\iff$
55							$\iff$		$ \bigcirc $
23							$\iff$	00	2100
24							$\iff$	$\iff$	
25	3	40				EDIL 1	6700	$\iff$	6700
	3	40 70			-	EDH-1		$\iff$	$\iff$
26	3	70			<del>  -</del>	TRANSFORMER T-L	00	(700	$\iff$
27	_						$\iff$	6700	$\iff$
28							$\iff$	00	<b>7700</b>
29	_						$\iff$	$\iff$	6700
30	_	_						>	00
31						SPACE ONLY		>	$\iff$
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34						SPACE ONLY	$\langle \rangle$		
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37						SPACE ONLY		$\langle \tilde{} \rangle$	$\langle \rangle$
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41						SPACE ONLY	$\langle \sim \rangle$	$\langle \rangle$	
42			<u> </u>			SPACE ONLY	$\geq \leq$		
						TOTAL VA	_	_	_

## PANEL SCHEDULE NOTES

- 1. ^ = HANDLE LOCK-ON DEVICE.
- 2. \* = CLASS A GROUND FAULT CIRCUIT INTERRUPTING (GFI) BREAKER FOR PERSONNEL PROTECTION.
- 3. [ = THRU CONTACTOR 'CL#' INDICATED, REFER TO DETAIL

- 1/E-5. 1.
- 4. > = VERIFY ELECTRICAL REQUIREMENTS WITH THE OWNER.



POLE BASE DETAIL

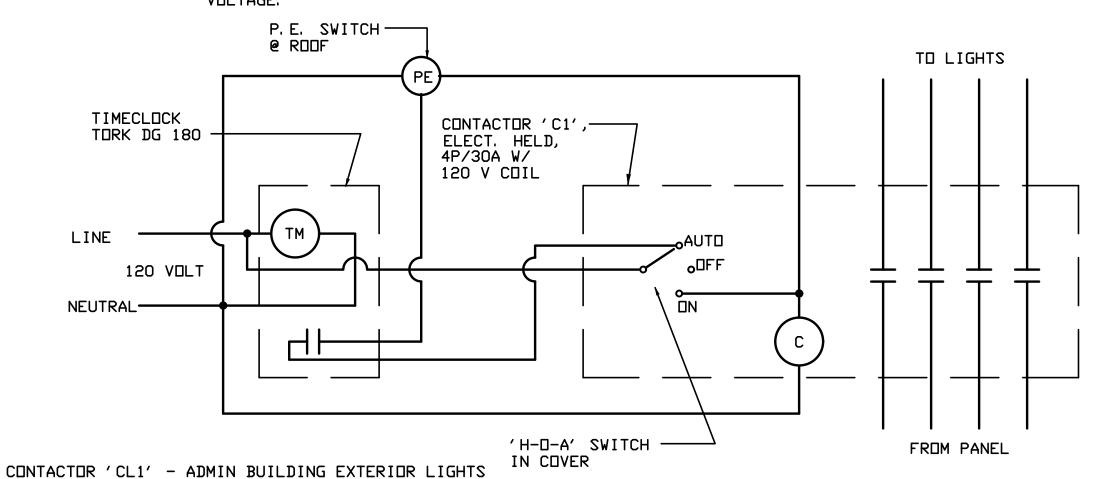
## LIGHTING BASE NOTES:

1. LIGHTING STANDARD.

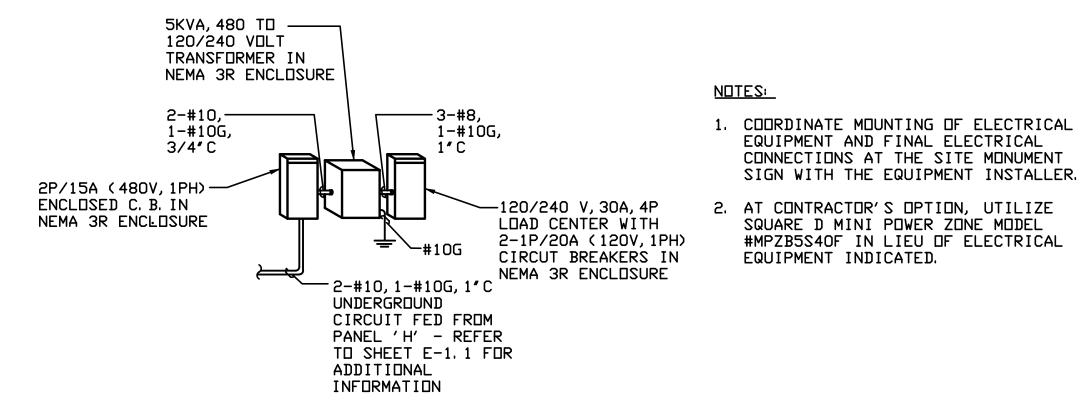
- 2. WIRING ACCESS PROVIDE INTERIOR GROUNDING LUG ACCESSIBLE FROM OPENING.
- 3. PROVIDE ANCHOR BOLT COVER TO MATCH MATERIAL OF POLE. 4. CONNECT CONDUITS TO GROUNDING LUG & GROUNDING
- CONDUCTOR TO GROUND ROD.
- 5. PROVIDE STANDARD SHIMS UNDER ANCHOR BOLT LUGS FOR LEVELING AS REQUIRED.
- 6. FILL ALL GAPS BETWEEN METAL BASE AND CONCRETE BASE WITH CEMENT GROUT.
- 7. CHAMFER EDGES ON BASE.
- 8. 1/2" RIGID CONDUIT.
- 9. RIGID GALVANIZED STEEL CONDUITS TO EDGE OF CONCRETE
- 10. GALVANIZED STEEL ANCHOR BOLTS AS REQUIRED BY MANUFACTURER FURNISHING POLE.
- 11. EIGHT (8) NO. 4 STEEL VERTICAL REINFORCING RODS. INTERCONNECT WITH HORIZONTAL NO. 4 STEEL REINFORCING HOOP RODS AT 12" O.C.
- 12. CONNECTOR.
- 13. 3/4" X 8'-0" COPPER CLAD GROUND ROD.
- 14. NO. 8 BARE STRANDED COPPER GROUND WIRE CONNECT TO GROUND ROD, CONDUITS & GROUNDING LUG.

### LIGHTING FIXTURE SCHEDULE TYPE | VOLTS DESCRIPTION MOUNT LAMPS REMARKS 47. 7W LED INCLUDED 2'X4' BASKET LAY-IN - LITHONIA #2VTL4 60L ADP EZ1 LP835 47.7W LED INCLUDED 2'X4' BASKET EMERGENCY - LITHONIA #2VTL4 60L ADP EZ1 LP835 EL14L 27W LED INCLUDED 3' VANITY FIXTURE-LITHONIA#FMVCCLS 36IN MVDLT 30K35K40K 90CRI BN 21W LED INCLUDED 4'STRIP-LITHONIA #CLX L48 3000LM SEF RDL MVOLT 35K 80CRIWH HC36M12 SUSPEND 21W LED INCLUDED 4'STRIP W/EMERG-LITHONIA#CLX L48 3000LM SEF RDL MVOLT 35K 80CRI WH HC36M12 E10W 19.7W LED INCLUDED RECESSED DOWNLIGHT - GOTHAM #EVO6 35/20 AR LSS MD MVOLT EZ1 19.7W LED INCLUDED DOWNLIGHT W/EMERG-GOTHAM #EVO6 RECESS 35/20 AR LSS MD MVOLT EZ1 EL INCLUDED WALL MTD. LED EMERGENCY FIXTURE LITHONIA# ELM2L 14' LINEAR 2" SLOT LED - ALCON 140W LED INCLUDED SUSPEND #12100-22-P-L-CR14-WH-H-AC5-R 48W LED INCLUDED LED PENDANT 16" DOME LIGHT- ALCON **PENDANT** #15240-38L-AC8-35K-WHWH 75W MAXIMUM PENDANT FIXTURE SUSPEND SELECTED BY ARCHITECT 213W LED INCLUDED SINGLE POLE MTD FIXTURE - LSI #SLM LED 30L SIL 3 + DIM 40 70CRI POLE SINGLE FIXTURE IMSBT2L PCI208-277+ BRZ 25W LED INCLUDED LED WALL PACK-LITHONIA #WST LED P2 30K VW MVOLT DDBXD 25W LED INCLUDED EMERGENCY WALL PACK LITHONIA #WST LED P2 30K VW MVOLT DDBXD E7WC INCLUDED SINGLE FACE EXIT LIGHT SHOWN LITHONIA #EDG 1 G EL INCLUDED DOUBLE FACE EXIT LIGHT SHOWN LITHONIA #EDG 2 GMR EL

- 1. SET SELECTABLE WHITE COLOR TEMPERATURE TO 3500°K OR AS DIRECTED BY THE ARCHITECT.
- 2. SET SELECTABLE DIRECT AND INDIRECT LED LIGHTING LEVELS AS COORDINATED WITH THE ARCHITECT.
- 3. BOTTOM OF FIXTURE SHALL BE AT ELEVATION AS COORDINATED WITH THE ARCHITECT
- 4. PROVIDE FACTORY LABEL MODIFICATION TO LAMP SOCKET FOR MAXIMUM WATTAGE RATING OF LAMP INDICATED WITH THE MANUFACTURER.
- 5. FINAL SELECTION OF FIXTURE BY ARCHITECT.
- 6. ON 25' HIGH 5" SSS POLE PAINTED TO MATCH THE FIXTURE.
- 7. SYMBOL (+) INDICATES TO VERIFY EXISTING WEST SIDE SITE LIGHTING CIRCUIT VOLTAGE.



EXTERIOR LIGHTING CONTROL SCHEMATIC NO SCALE



ELECTRICAL RISER DIAGRAM - SITE MONUMENT SIGN

ell Engi

Administration Building SS CATHOLIC CF

₹ N Þ Nev CR(

Revisions:

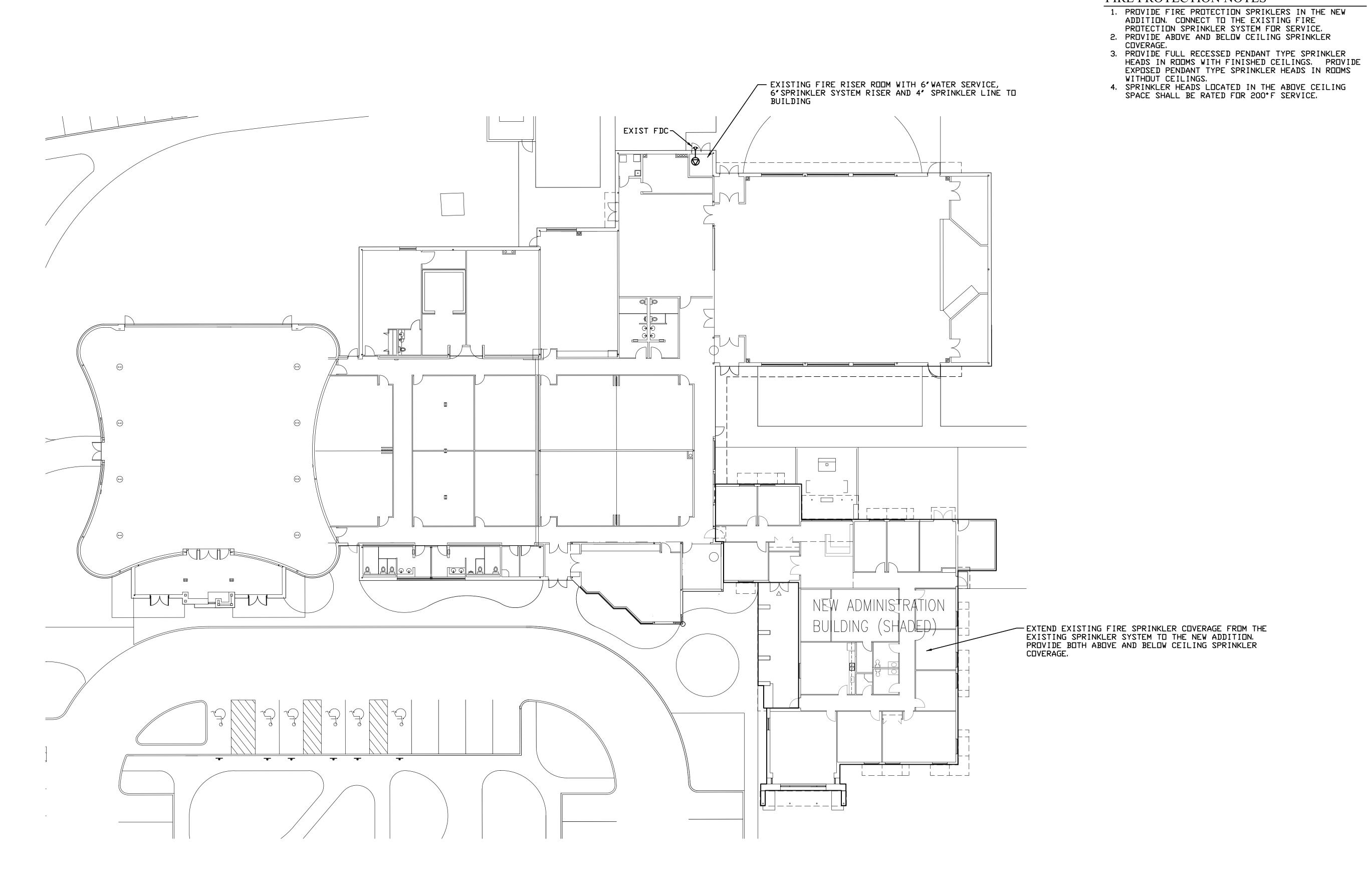
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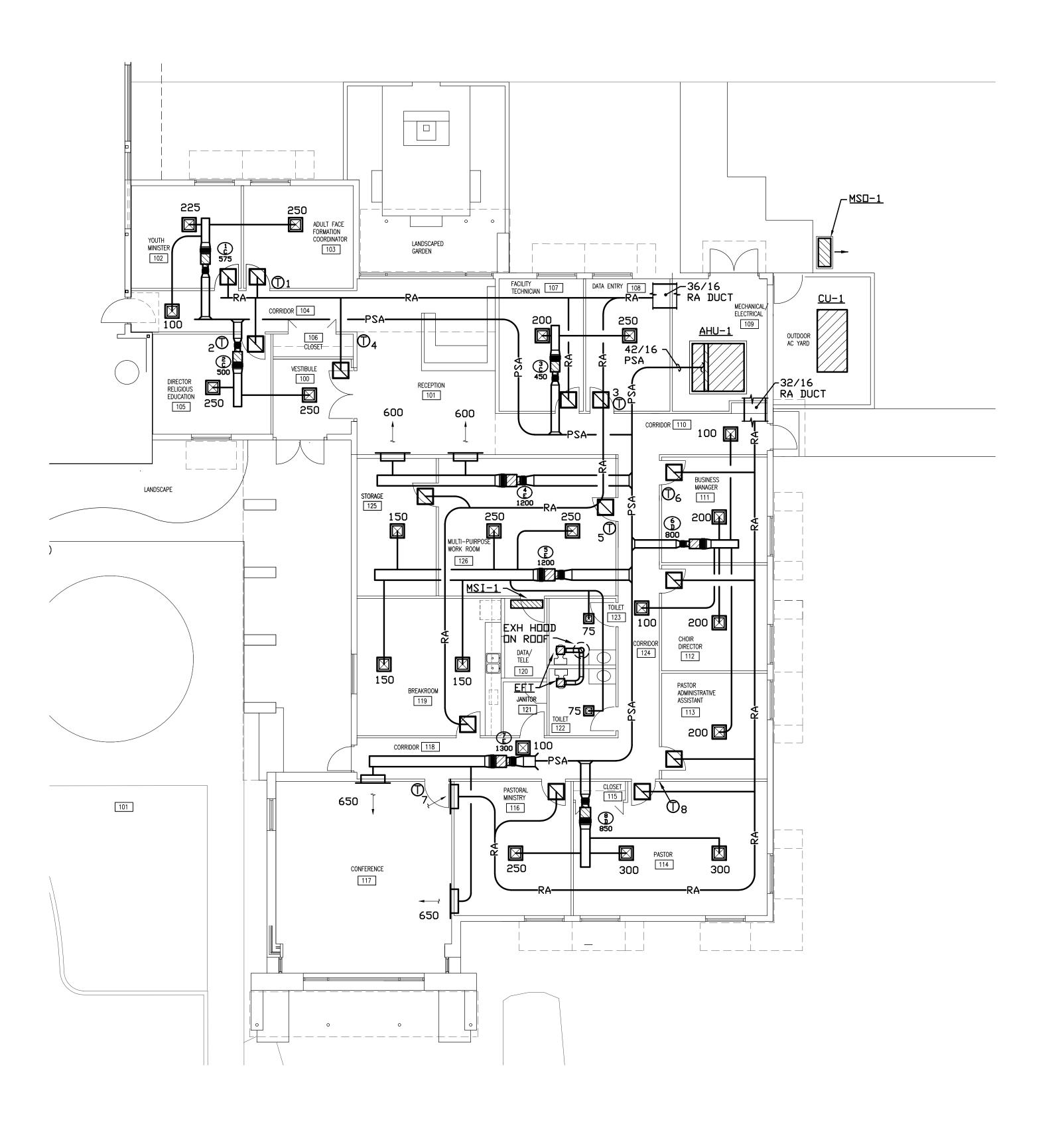
6 of 6E Sheets

FIRE PROTECTION NOTES



1 of 1FP Sheets





< NFLOOR PLAN - HVAC <del>1</del>"=1'-0"

**HVAC LEGEND** 

RETURN AIR

200

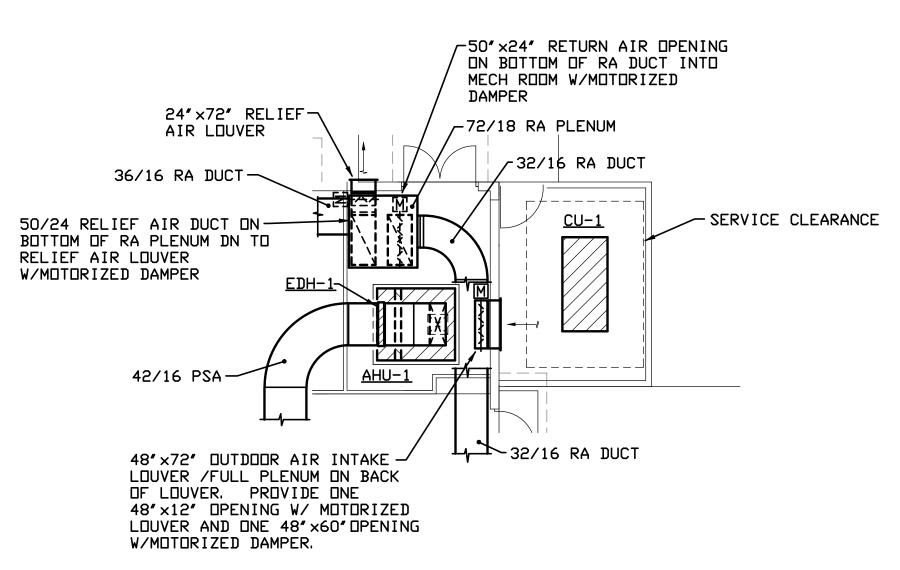
AIR DIFFUSER AND AIR FLOW

RETURN AIR GRILLE

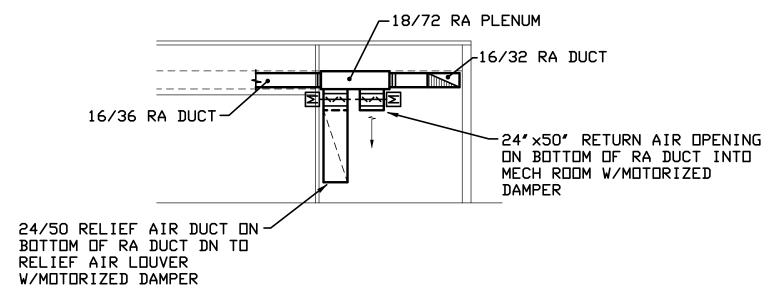
PRIMARY SUPPLY AIR

VARIABLE AIR VOLUMN BOX

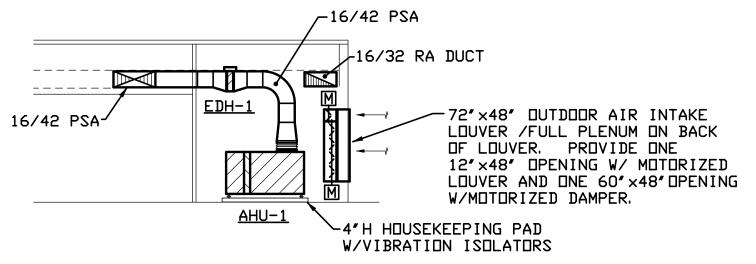
VAV BOX NUMBER, SIZE DESIGNATION AND AIR FLOW SPACE THERMOSTAT & VAV BOX CONTROLLED



# MECHANICAL ROOM PLAN



SECTION AT RETURN/RELIEF DUCT



SECTION AT AHU-1 1"=1'-0"

THE FOLLOWING VAV BOX SIZES AND DUCT SIZES ARE TO BE USED UNLESS NOTED OTHERWISE ON THE PLANS.
SECONDARY DUCT SIZE CAN BE AIR DEVICE NECK SIZE WHERE BOX SERVES ONLY ONE AIR DEVICE.

## VAV BOX SIZE SCHEDULE W/ ELECTRIC HEAT

VAV B□X DESIGNATI□N	AIR FLOW RANGE - CFM	INLET SIZE	PRIMARY DUCT	SECONDARY DUCT
A	0 - 250	6 <b>"</b> ø	8 <b>″</b> Ø	10/10
В	255 - 400	8″ Ø	10 <b>"</b> Ø	10/10
С	405 – 650	8 <b>"</b> Ø	12″ø □R 10/10	12/12
D	655 - 1000	10 <b>"</b> Ø	14″ø □R 14/12	14/14 □R 16/12
E	1005 - 1400	12 <b>"</b> Ø	16″ø □R 18/12	16/14 OR 20/12
F	1405 - 1600	14" Ø	18″ø □R 20/12	16/16 □R 22/12

New Administration Building CROSS CATHOLIC C

Architect Jim Bransford

Project: 2402

Date: 02/12/2025

Revisions:

DD\_M2.1

1 of 5M Sheets

Al	R HANDLING UNIT SCHEDU	JLE	
	DESCRIPTION	AHU−1	
	TOTAL AIR FLOW - CFM	6000	
AN	OUTSIDE AIR FLOW - CFM	600	
F,	EXTERNAL S. P INCHES WATER	1. 50	
וח	ENTERING AIR D.B. F*	73. 0	
NI	ENTERING AIR W.B. F*	65. 0	
COOL ING	TOTAL SENSIBLE LOAD - BTUH	137, 000	
	TOTAL LATENT LOAD - BTUH	30, 000	
	GRAND TOTAL LOAD - BTUH	167, 000	
		SEE ELECTRIC	
NG		DUCT HEATER	
Ţ		SCHEDULE	
HEATING			
	NOMIZER	YES	
	AND CONTROL VENTILATION	YES	
	TERS	2 <b>"</b> TA	
	l H. P.	5	
	TAGE / PHASE	480/3	
	T TYPE: DX COOLING/ ELEC HEATING		
TRA	NE MODEL NO.	UCCA12	

- REMARKS: 1. EXTERNAL STATIC PRESSURE CONSISTS OF DUCTWORK, AIR DEVICES,
  - VAV BOXES AND FILTERS.
  - 2. UNITS AND ASSOCIATED CONDENSING UNITS MUST MEET OR EXCEED THE LATEST IECC EER/SEER EFFICIENCY RATING REQUIREMENTS.

  - 3. REFER TO THE CONDENSING UNIT SCHEDULE. 4. REFRIGERANT LINE SIZES ARE TO BE SELECTED BY THE EQUIPMENT
    - SUPPLIER.

AIR (	COOLED CC	NDENSI	NG UNIT	SCHED	ULE		
N□.	NET REFRIG. EFFICT. BTUH	AMBIENT TEMP. FØ	V□LTAGE/ PHASE	UN MCA	IT MOCP	TRANE MDDEL NO.	REMARKS
CU-1	167,000	105*	480/3	33	40	TTA180	

- REMARKS: 1. PROVIDE METAL HAIL GUARDS/SCREENS ON CONDENSING UNITS.
  - INSTALL CONDENSING UNITS ON HOUSEKEEPING PADS.
  - 3. CONDENSING UNITS AND ASSOCIATED AIR HANDLING UNITS SHALL
  - MEET THE LATEST IECC ENERGY EFFICIENCY REQUIREMENTS.

GRAV	TTY HOOD SCH	EDULE					
NUMBER	SERVICE	MAX. AIR FL⊡W CFM	THR□AT AREA SQ. FT.	THROAT VELOCITY FPM	MAX. T□TAL PRESS. DR□P IN. W. G.	COOK MODEL NO.	NOTES
EAH	TDILET EXHAUST AIR	205	0, 41	505	0, 05	8 PR	1,2
RAH	RELIEF AIR	5, 400	3, 5	1,542	0, 1	12×42 GR	1,2
NOTES:						_	

- PROVIDE INSULATED ROOF CURB AND ALUMINUM BIRD SCREEN. ROOF CURB SHALL BE PITCHED TO MATCH ROOF SLOPE.
- DUCTED APPLICATION. PROVIDE THROAT SIZED DUCT RISER ULESS NOTED OTHERWISE.

MINI-SPLIT SCHEDULE	
DESCRIPTION	MSI-1 & MS□-1
TOTAL AIR FLOW - CFM	380
TOTAL COOLING - BTUH	8, 360
HEATING @ 17°F - BTUH	9, 830
VOLTAGE / PHASE	13, 080
DUTDOOR UNIT MCA	208/230V/1ø
OUTDOOR UNIT RECOMMENDED BREAKER	9. O A
SEER	15. O A
HSPF	22. 5
	12. 0
UNIT TYPE:	HEAT PUMP
CARRIER MODEL NO.	
INDOOR UNIT MSI	40MAQB12B-3
OUTDOOR UNIT MSO	38MAQB12R-3

- 1. PROVIDE A WALL MOUNTED THERMOSTAT HARD-WIRED TO THE
- UNIT. 2. THE ELECTRIC POWER FOR THE INDOOR AIR HANDLING UNIT IS
- SUPPLIED FROM THE CONDENSING UNIT. 3. THE OUTDOOR CONDENSING UNIT IS TO BE FURNISHED WITH A
- METAL HAIL GUARD ON THE COIL. 4. PROVIDE CONDENSATE PUMP EQUAL TO LITTLE GIANT VCMA-15 SERIES. PUMP SHALL BE RATED FOR (115-240V/1ø) AND 2 GPM AT 10 FEET OF HEAD.

AIR DIS	STRIBUTION	I DEVICE	SCHEDUI	LE	
DESIGNAION	TYPE	NECK SIZE	FACE SIZE	METALAIRE MODEL NO.	NDTES:
CDA	CEIL DIFFUSER	AS N□TED	24"× 24"	5800	4 CONE
CDB	CEIL DIFFUSER	AS NOTED	12"× 12"	5800	4 CONE
CDC	CEIL DIFFUSER	AS NOTED	24"× 24"	5000	W/ FACE PANEL, SQ-RD TRANS
CDD	CEIL DIFFUSER	AS NOTED	NECK + 6"	5000	W/ SQ-RD TRANS
RGA	RETURN GRILLE	22 <b>"</b> × 22 <b>"</b>	24"× 24"	7500R	LAY-IN CEILING
RGB	RETURN GRILLE	10"× 10"	12"× 12"	7500R	
RGC	RETURN GRILLE	10"× 22"	12"× 24"	7500R	
RGA	RETURN GRILLE	22 <b>"</b> × 22 <b>"</b>	24"× 24"	7500R	GYP BD CEILING
SWS	SIDEWALL	AS SHOWN	NECK + 2"	2015	W/ PLENUM & OBD
ER	EXH. REG.	AS NOTED	NECK + 2"	RHD	W/ DBD

1. CEILING MOUNTED AIR DEVICES ARE TO BE FURNISHED WITH THERMAL BLANKETS.

FAN	SCHEI	DULE							
NUMBER	C. F. M.	E. S. P. IN. W. G.	TYPE	H. P.	VOLTAGE/ PHASE	DRIVE	COOK MODEL NO.	SERVICE	NOTES
EFT	75	0, 40	CEIL	70w	120	DIRECT	GN-140	TOILET	1 A

- 1. FURNISH WITH BACKDRAFT DAMPER, DISCONNECT, SPEED CONTROLLER, INTEGRAL GRILLE
- A. SWITCH WITH LIGHTS

VAV	BOX W/	ELECTR	IC HEA	T						
	VAV BOX	VAV BOX	VAV BOX	MINIMUM				HEATER		METALAIRE TL-500
DESIG	C.F.M. @ 0.1" INLET	MAX. NC @ 0.35 SP	INLET	COOLING CFM	EAT 'F/ LAT 'F	MIN. HTG CFM	MIN. BTUH	MAX. KW	VOLTAGE/ PHASE	MODEL NO.
Α	0- 250	35	6 <b>″</b> ø	50	55/95	75	3, 240	1	277/1	UNIT SIZE 6
В	255- 400	35	8 <b>″</b> ø	80	55/95	120	5, 185	1. 5	277/1	UNIT SIZE 8
С	405- 650	35	8 <b>″</b> ø	130	55/95	200	8, 640	2. 5	277/1	UNIT SIZE 8
D	655-1000	35	10 <b>″</b> ø	200	55/95	300	13,000	4. 0	277/1	UNIT SIZE 10
Е	1005-1400	35	12 <b>″</b> ø	280	55/95	420	18,000	6. 0	277/1	UNIT SIZE 12
F	1405-1600	35	14" ø	320	55/95	480	21,000	6. 0	277/1	UNIT SIZE 14

- BOXES SHALL HAVE A MAXIMUM NC RATING OF 35 AT 0.50° INLET STATIC PRESSURE.
- 2. PROVIDE BOX WITH FACTORY INTERNAL INSULATION, 2LB DENSITY, FOIL FACED AND SEALED FROM THE
- 3. ELECTRIC COILS SHALL BE CONTAINED WITHIN THE BOX. PROVIDE SCR CONTROLLER FOR MODULATING HEAT. HEATING SIZE IS BASED ON A 40°F DELTA ON 30% OF MAXIMUM COOLING CFM.
- 4. UPON A DECREASING COOLING DEMAND, THE VAV INLET DAMPER SHALL MODULATE CLOSED TO MINIMUM COOLING CFM SCHEDULED. ON AN INCREASE IN COOLING DEMAND, THE VAV INLET DAMPER SHALL MODULATE OPEN.
- WHEN THE INLET DAMPER HAS CLOSED TO MINIMUM COOLING AIR FLOW AND THERE IS STILL A HEATING DEAMND, THE ELECTRIC HEATER SHALL BE ENERGIZED AND THE INLET DAMPER OPEN TO PROVIDE THE HEATING CFM.
- ON A DEMAND FOR COOLING, THE REVERSE SEQUENCE OF OPERATION SHALL OCCUR. 5. PROVIDE UNIT MOUNTED/WIRED FACTORY POWER & CONTROL PANEL WITH DISCONNECT SWITCH -
- 277V/1PH POWER TO HEATER. 120V POWER TO CONTROLS TRANSFORMER (IF NEEDED). 6. VAV DAMPER CFM DELIVERY SHALL BE ACCURATE WITHIN 5% FROM 100% TO 25% FLOW RATE. 7. CONTROLS SHALL BE FURNISHED AND SHIPPED TO BOX FACTORY BY TEMPERATURE CONTROLS CONTRACTOR, CONTROLS SHALL BE INSTALLED BY BOX MANUFACTURER, PROVIDE ALL AND ANY

NECESSARY ITEMS TO INTERFACE WITH THE EXISTING PNEUMATIC CONTROL SYSTEM.

DUCT H	EATER	SCHEI	OULE -	- ELE	CTRIC									
NUMBER		DUCT		MIN.	HEATING	MAX. KW	VOLT/	MIN.	P. D.	ENT. AIR	MIN. TEMP	TUTCO	SERVICE	NOTES
	CFM	W-IN.	H-IN.	CAP.	- BTUH	INPUT	PHASE	STAGES	IN. W. G.	DEG. F	RISE DEG. F	SERIES		
EDH-1	6, 000	42	20	65	5, 000	20. 0	480/3	SCR	0, 20	62. 0	10. 0	DHD	AHU-1	1, 2, 3, 4, 5

- 1. UNITS SHALL BE DUCT INSERTION TYPE. PROVIDE FLANGED UNITS WHERE DUCT WIDTH EXCEEDS 55". VERIFY CONTROL BOX ORIENTATION PRIOR TO ORDERING.
- CONTROL BOXES MUST BE REMOTE MOUNTED. PROVIDE NEMA 12 CABINET WHERE INSTALLED ACCESSIBLE ABOVE CEILING.
- 2. PROVIDE HEATER RATED FOR CAPACITY AT SCHEDULED VOLTAGE.
- 3. INTERLOCK HEATER WITH ASSOCIATED UNIT SUPPLY FAN PER MANUFACTURER INSTRUCTIONS.
- 4. PROVIDE MANUFACTURER SCR CONTROL OPTION FOR INFINITE MODULATION OF HEATER OUTPUT.
- 5. MAXIMUM AIR VELOCITY = 1000 FPM.

	EXISTING EQUIPMENT, DUCTWORK, ETC. TO REMAIN OR BE ABANDONED AS NOTED
	EXISTING EQUIPMENT, DUCTWORK, ETC. TO BE REMOVED
	NEW EQUIPMENT, DUCTWORK, ETC.
	CEILING SUPPLY DIFFUSERS
	CEILING RETURN/EXHAUST GRILLE
lacktriangle	THERMOSTAT
${\Bbb R}$	REMOTE TEMPERATURE SENSOR
<b>S</b>	DUCT SMOKE DETECTOR
©	CO2 SENSOR (CARBON DIOXIDE - PEOPLE)
	ROUND DUCT UP
$\overline{\bigcirc}$	ROUND DUCT DOWN
	RECTANGULAR SUPPLY DUCT UP
	RECTANGULAR RETURN DUCT UP
×	RECTANGULAR SUPPLY DUCT DOWN
$\overline{\Sigma}$	RECTANGULAR RETURN DUCT DOWN
<b>✓</b>	FLEXIBLE DUCT
MBD	MANUAL BALANCING DAMPER (MBD)
→ FD FSD	FIRE DAMPER FIRE/SMOKE DAMPER
ABBREVIAT	IONS
2P0S T\	/O POSITION

ABBREVI	ATIONS
2POS	TWO POSITION
ABV AFF	ABOVE ABOVE FINISHED FLOOR
AFG AFR	ABOVE FINISHED GRADE ABOVE FINISHED ROOF
BOD	BOTTOM OF DUCTWORK (SHEETMETAL)
BYP CA	BYPASS COMBUSTION AIR
CLG CD	CEILING CARBON MONOXIDE (FUEL PRESENCE)
CDNN.	CARBON DIOXIDE (PEOPLE PRESENCE) CONNECT, CONNECTION
DMPR	DAMPER
DN DX	DOWN DIRECT EXPANSION (REFRIGERANT)
е	PREFIX "e" DENOTES EXISTING EQUIPMENT, DUCTWORK, AIR
ELEC	DEVICES, ETC. ELECTRIC, ELECTRICAL
ELF	EQUIVALENT LINEAR FEET OF DUCTWORK
EMS EQ	ENERGY MANAGEMENT SYSTEM EQUAL
EX, EXIST EXH	EXISTING EXHAUST AIR
FA FB	FROM ABOVE FROM BELOW
FD FLR	FIRE DAMPER FLOOR
FSD	FIRE SMOKE DAMPER
HD KEC	HUB DRAIN KITCHEN EQUIPMENT CONTRACTOR
KES LF	KITCHEN EQUIPMENT SUPPLIER LINEAR FEET
MA MBD	MIXED AIR MANUAL BALANCE DAMPER
MDD MTR	MDDULATING MDTDR, MDTDRIZED
MUA	MAKE-UP AIR
MZ NC_	MULTIZONE NORMALLY CLOSED
NIC N□	NDT IN CONTRACT NORMALLY OPEN
□A □BD	OUTSIDE AIR OPPOSED BLADE DAMPER
□C □CEW	ON CENTERS ON CENTERS EACH WAY
PBD RA	PARALLEL BLADE DAMPER RETURN AIR
RATB	RETURN AIR TRANSFER BOOT, SEE DETAIL
RLF RTU	RELIEF AIR ROOFTOP UNIT
SA SM	SUPPLY AIR SHEETMETAL
SS SZ	STAINLESS STEEL SINGLE ZONE
TA TAB	TRANSFER AIR TEST-ADJUST-BALANCE
TABC	TEST-ADJUST-BALANCE CONTRACTOR
TDD TRANS	TOP OF DUCTWORK (SHEETMETAL) TRANSITION
TSTAT UN□	THERMOSTAT OR TEMPERATURE SENSOR UNLESS NOTED OTHERWISE
VFD XFFR	VARIABLE FREQUENCY DRIVE

XFER

TRANSFER

Date: 02/12/2025 Revisions:

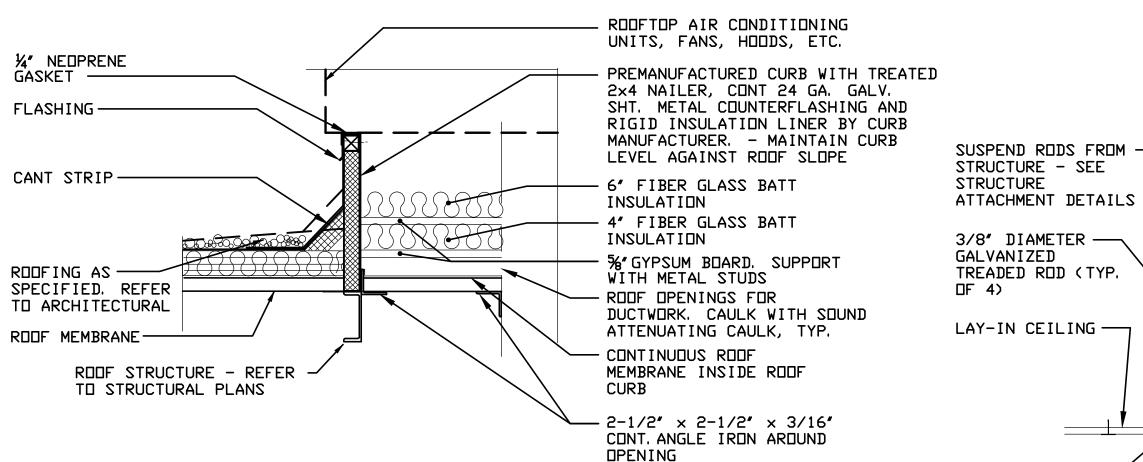
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Bransford

DD M3.1

2 of 5M Sheets

DD\_M4.1 3 of 5M Sheets

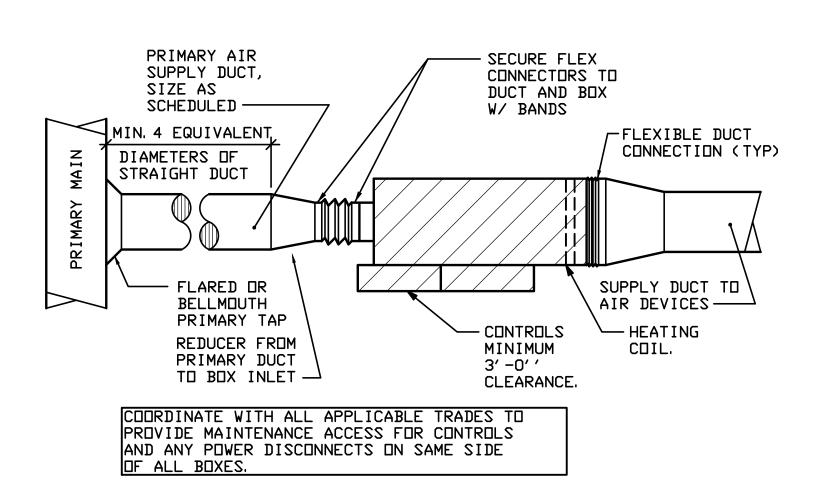


## **ROOF CURB NOTES**

- COORDINATE ROOFING, WATER PROOFING, FLASHING/COUNTER FLASHING, AND SUPPORT DETAILS WITH ARCHITECTURAL DRAWINGS, STRUCTURAL DRAWINGS AND DR DWNER/LANDLORD'S ROOFING WARRANTY.
- 2. INSULATION INSIDE ROOF CURB SHALL MATCH ROOF INSULATION SPECIFIED BY ARCHITECT OR SHALL BE 4" BATT ON 2" RIGID IF NOT SPECIFIED, ALL DUCTWORK PENETRATING THE ROOF SHALL BE WITHIN THE CONFINES OF THE ROOF CURB.
- 3. REFER TO ARCHITECTURAL DETAILS FOR CONDUIT AND PIPING ROOF PENETRATION DETAILS.
- 4. EQUIPMENT CURB SHALL BE PRE-MANUFACTURED AND ALL-WELDED. KNOCK-DOWN CURBS NOT ALLOWED.

## **EQUIPMENT CURB DETAIL**

NOT TO SCALE



VARIABLE AIR VOLUME BOX W/ RE HEAT DETAIL

## CEILING EXHAUST FAN DETAIL 02 NOT TO SCALE

SUSPEND RODS FROM —

STRUCTURE - SEE

TREADED ROD (TYP.

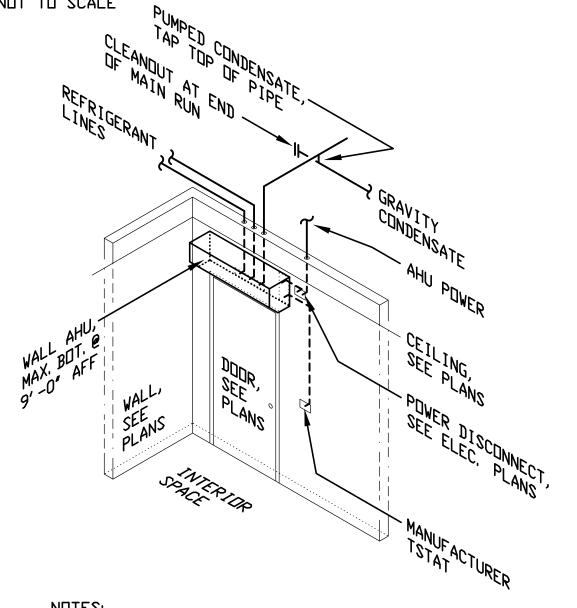
PROVIDE DOUBLE-

TOP & BOTTOM OF

LOCKWASHER AT

HTIW STUN

FLANGE



NOTES:

1. PROVIDE MANUFACTURER WALL MOUNTING BOARD/PLATE.

2. ALL REFRIGERANT PIPING, CONDENSATE DRAIN PIPING, CONDUITS, WIRING, ETC. MUST BE REAR ENTRY AND CONCEALED IN WALL. COORDINATE WITH ALL DISCIPLINES.

SEE PLAN FOR

DUCT COLLAR

EXHAUST FAN (SUPPORT FROM

EXHAUST DUCT SIZE

TRANSITION DUCT AS

FURNISHED WITH FAN

PROVIDED WITH FAN

STRUCTURE-NEITHER

FAN NOR DUCT SHALL

BEAR ON CEILING>

SECURE GRILLE TO

CEILING> - GRILLE

BE FLUSH WITH

FAN (GRILLE FACE TO

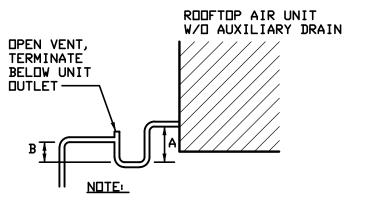
AND SCREWS PROVIDED

BY FAN MANUFACTURER

BACKDRAFT DAMPER

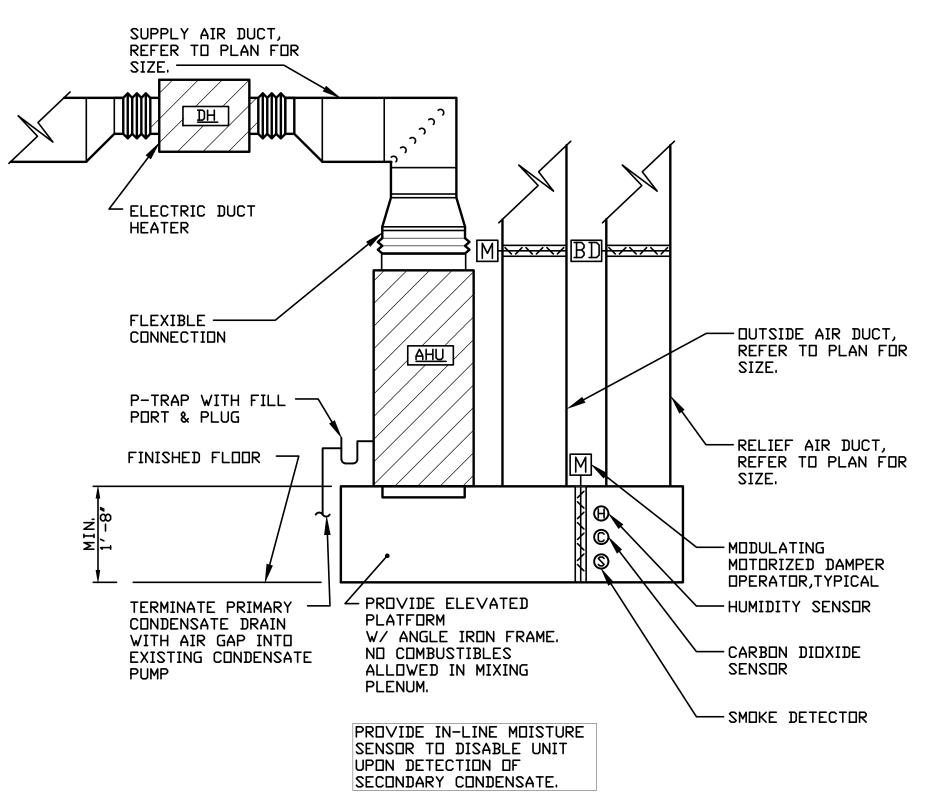
REQUIRED TO FIT

# 05 TYPICAL WALL MOUNTED MINI-SPLIT DETAIL NOT TO SCALE



- 1. B = 1" DEEPER THAN UNIT TOTAL STATIC PRESSURE.
- 2. D = DRAIN PIPE DIAMETER.
- 3. A IS GREATER THAN B, MINIMUM OF (B + (2 × D)).

CONDENSATE DRAIN DETAIL



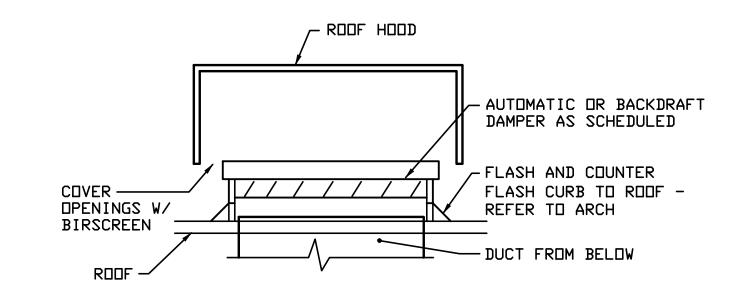
VERTICAL AHU W/ **ECONOMIZER DETAIL** NOT TO SCALE

SOLENDID -VALVE SENSING BULB SLEEVE PENETRATION WITH RIGID METALLIC CHARGING VALVE — (TYP.) PIPE AND SEAL WATER TIGHT. TRAP (TYP.) CONDENSING -UNIT GRADE SIGHTGLASS/ MDISTURE REINFORCED -CONC. PAD

NEOPRENE WAFFLE ----

PAD TYPE ISOLATOR (TYP.)

## CONDENSING UNIT DETAIL NOT TO SCALE



- FILTER-DRIER

HOOD SHALL BE EQUAL TO COOK GI/GR

**ROOF HOOD DETAIL** 

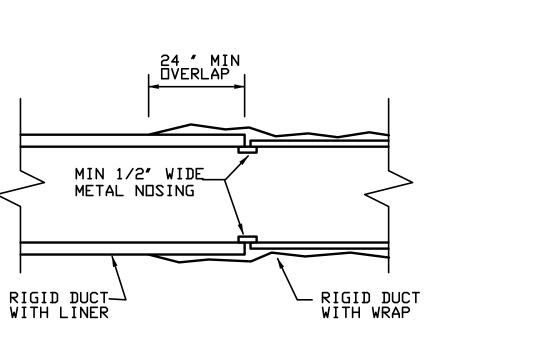


New Administration Building
CROSS CATHOLIC CHURCH
ng Star Drive / The Colony, Texas 75056 / 817-625-5252

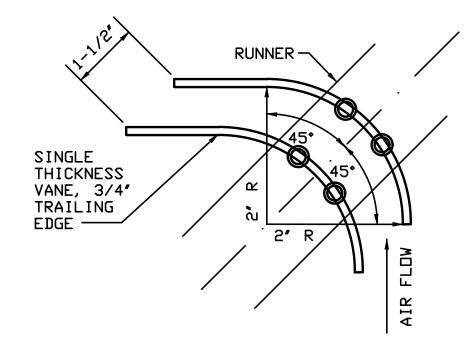
Project: 2402

Date: 02/12/2025

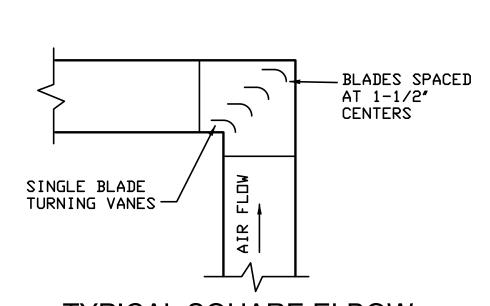
Revisions:



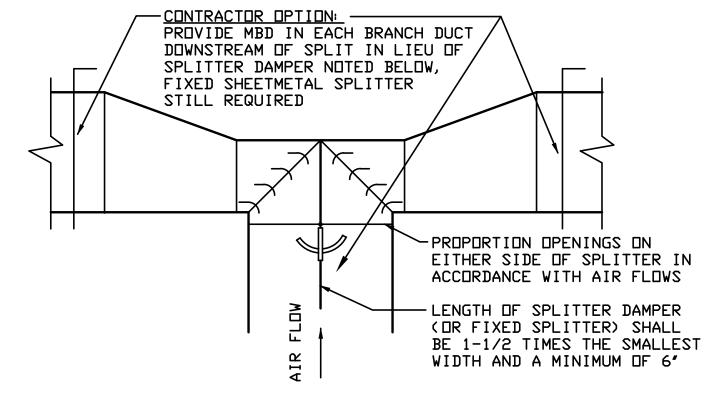
## DUCT WRAP TO LINER TRANSITION 02 NOT TO SCALE







TYPICAL SQUARE ELBOW



-2" WIDE GALVANIZED SHEET METAL DUCT STRAP (2 MIN.)

- INSULATED FLEXIBLE DUCT - INSIDE DIAMETER AS INDICATED

ON THE PLANS. MAXIMUM LENGTH = 6' -0".

- COVER BACK OF

CEILING

DIFFUSER (REFER TO AIR DEVICE

<u>TYPICAL</u>

SCHEDULE)

DIFFUSER WITH

THERMAL

BLANKET

INSULATION

TYPICAL SPLITTER DAMPER DETAIL

SPIN-IN TAP W/ MANUAL BALANCING DAMPER

SECURE FLEXIBLE DUCT TO ROUND RIGID DUCT WITH STAINLESS STEEL SCREW —

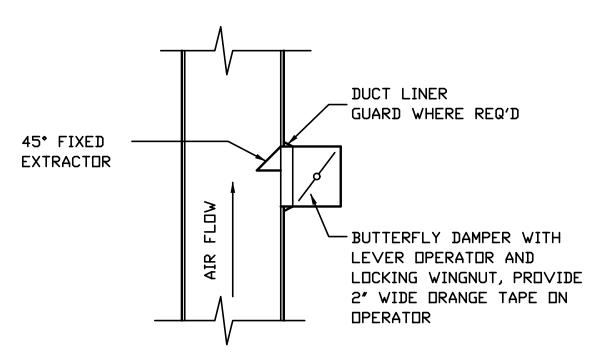
MAINTAIN TURNING RADIUS OF 1-1/2 x DIAMETER OF DUCT - IF NOT POSSIBLE, USE LOW CLEARANCE ASSEMBLY INDICATED

SECURE FLEXIBLE DUCT TO ROUND RIGID DUCT WITH STAINLESS

SUPPLY DUCT

AT RIGHT

STEEL SCREW CLAMP



TYPICAL ROUND DUCT TAKEOFF

FLEXIBLE DUCT

**DUCT TRANSITION** 

NOT TO SCALE

SHEETMETAL TO FLEXIBLE

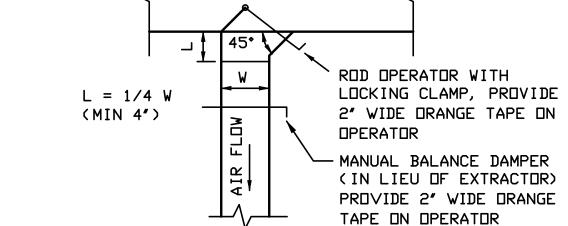
ROUND OR RECTANGULAR

TRANSITION AS REQUIRED

— COLLAR CLAMP AND HARD

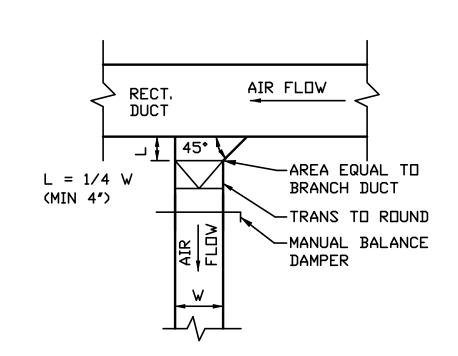
CAST PRESSURELESS TAPE

SHEETMETAL DUCT

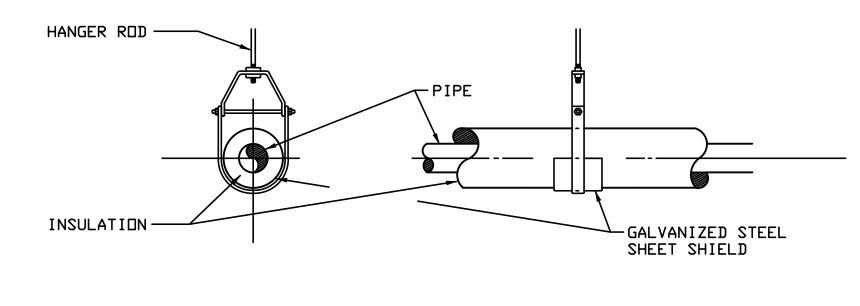


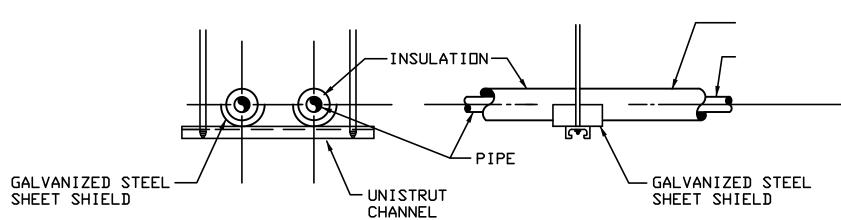
TYPICAL RECTANGULAR DUCT TAKEOFF

AIR FLOW

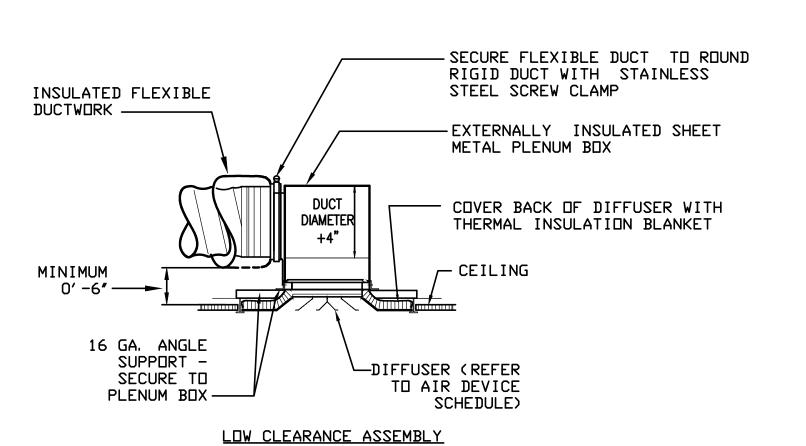


ALTERNATE BRANCH TAKE-OFF DETAIL









FOR DUCT LENGTHS GREATER THAN 6'-O", USE EXTERNALLY INSULATED RIGID ROUND DUCT FOR THE ADDITIONAL LENGTH. RIGID ROUND DUCT SHALL BE THE SAME SIZE AS FLEXIBLE DUCT.

## FLEXIBLE DUCT TO DIFFUSER DETAIL NOT TO SCALE

DD\_M4.2 4 of 5M Sheets

Revisions:

Date: 02/12/2025

Project: 2402

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES THE CONTRACTOR IS TO COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND THE WORK OF OTHER TRADES.

PROVIDE TEST-ADJUST-BALANCE (TAB) SERVICES PERFORMED BY AN INDEPENDENT AIR BALANCE AGENCY CERTIFIED BY THE NEBB.

•BALANCE AIR DEVICES TO AIR QUANTITIES INDICATED ON PLANS. • BALANCE AIR CONDITIONING UNITS TO SCHEDULED AIR QUANTITIES.

• BALANCE EXHAUST AIR FANS TO SCHEDULED AIR QUANTITIES.

• BALANCE VAV TERMINAL BOXES TO SCHENDULED AIR QUANTITIES.

•AT COMPLETION OF AIR BALANCE, BALANCING DAMPERS SHALL BE TIGHTENED, POSITION MARKED, AND PROPERLY SEALED WITH FOIL TAPE. •PROVIDE A TEST AND BALANCE REPORT FOR THE OWNER LISTING ALL EQUIPMENT, DESIGN AND ACTUAL AIR FLOWS, DESIGN AND ACTUAL AIR ENTERING DB/WB TEMPERATURES, ACTUAL LEAVING DB/WB TEMPERATURES, DESIGN AND ACTUAL AIR STATIC PRESSURES, MOTOR SIZES, AMP DRAWS, MODEL AND MANUFACTURER. THE REPORT SHALL INCLUDE AND LIST ANY MAJOR DEVIATIONS FROM THE CONTRACT DOCUMENTS. •AIR FLOWS SHALL BE WITHIN MAXIMUM 10% VARIANCE OF DESIGN.

4. ALL MATERIALS IN RETURN AIR PLENUMS MUST COMPLY WITH ASTM E-84 MAXIMUM FLAME SPREAD & SMOKE DEVELOPED INDICES OF 25/50. ANY MATERIAL NOT IN COMPLIANCE MUST BE WRAPPED WITH A HIGH TEMPERATURE INSULATION WRAP EQUAL TO FYRE-WRAP INSULATION.

COORDINATE WITH GENERAL CONTRACTOR AND OTHER TRADES. COORDINATE ALL ROOFTOP EQUIPMENT LOCATIONS AND ORIENTATIONS TO PROVIDE MINIMUM 10'-0" CLEAR BETWEEN ALL EXHAUST AIR, FLUE

VENT, & PLUMBING VENT DUTLETS AND ALL EQUIPMENT DUTDOOR AIR INTAKES AND COMBUSTION AIR INTAKES. UNLESS OTHERWISE NOTED, PROVIDE MINIMUM 10'-0" CLEAR BETWEEN ALL FAN, ROOFTOP UNIT AND CONDENSING UNIT LOCATIONS AND EDGE

OF ROOF WHERE PARAPET IS LESS THAN 3'-6" TALL

COORDINATE LOCATION OF HVAC EQUIPMENT WITH BUILDING STRUCTURE. PROVIDE FRAMING TO PROPERLY SUPPORT EQUIPMENT FURNISHED FOR THIS PROJECT.

SECURE ALL ROOFTOP HOODS TO ROOF CURBS AS RECOMMENDED BY MANUFACTURER

PROVIDE CONDENSER COIL HAIL GUARDS ON ALL CONDENSING UNITS. 4. PROVIDE FLEXIBLE DUCT CONNECTORS AT ALL DUCTWORK CONNECTIONS TO AIR HANDLING UNITS. TRANSITION FROM UNIT INLET AND OUTLET

CONNECTIONS TO DUCTWORK SIZES INDICATED, UNLESS NOTED OTHERWISE. ALL COOLING EQUIPMENT IS TO MEET OR EXCEED THE IECC EFFICIENCY RATING REQUIREMENTS.

PROVIDE FILTERS ON ALL AIR CONDITIONING EQUIPMENT. FILTERS ARE TO BE 2" THICK WITH A MINIMUM 8 MERV RATING. EQUIPMENT SHALL BE INSTALLED AS SHOWN OR INDICATED ON THE DRAWINGS AND AS RECOMMENDED BY THE MANUFACTURER(S). SUSPEND

EQUIPMENT IN ATTIC SPACEWITH ALL-THREAD RODS AND SPRING ISOLATORS. INTAKE AND EXHAUST AIR HOODS SHALL BE MANUFACTURED AND FURNISHED WITH ALUMINUM BIRDSCREEN, INSULATED ROOF CURB AND BACKDRAFT OR MOTORIZED DAMPER AS INDICATED.

10. PAINT ALL ROOF MOUNTED EQUIPMENT AND CURBS TO MATCH FINISHED ROOF. COORDINATE ADDITIONAL REQUIREMENTS WITH ARCH. DRAWINGS. PROVIDE VIBRATION ISOLATORS FOR ALL SUSPENDED AND FLOOR MOUNTED MOTOR DRIVEN MECHANICAL EQUIPMENT, UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

11. PROVIDE CEILING ACCESS DOORS BELOW FANS, BYPASS AIR DAMPERS, ZONE CONTROL DAMPERS, FAN SPEED CONTROLLERS, DUCT SMOKE DETECTORS, CARBON DIOXIDE SENSORS, PRESSURE SENSORS, ETC. INSTALLED INACCESSIBLE ABOVE GYPBOARD CEILINGS. ACCESS DOORS

MUST BE SIZED FOR MAINTENANCE ACCESS AND/OR EQUIPMENT REPLACEMENT AS APPLICABLE. 12. FAN SPEED CONTROLLERS ARE FOR TEST-ADJUST-BALANCE ONLY. • FANS INSTALLED IN GYPBOARD CEILINGS:

INSTALL SPEED CONTROLLERS ABOVE CEILING ON THE FAN, IN IMMEDIATE PROXIMITY OF THE FAN, OR ACCESSIBLE FROM ABOVE AN ADJACENT LAY-IN CEILING. •FANS INSTALLED ABOVE GYPBOARD CEILINGS: INSTALL SPEED CONTROLLERS ABOVE CEILING ON THE FAN, IN IMMEDIATE PROXIMITY OF THE FAN, OR ACCESSIBLE FROM ABOVE AN

•FANS INSTALLED IN OR ABOVE LAY-IN CEILING: INSTALL SPEED CONTROLLERS ABOVE CEILING ON THE FAN, OR IN PROXIMITY OF THE FAN. 13. LABEL ALL REMOTE INSTALLED SPEED CONTROLLERS WITH FAN NUMBER SERVED. COORDINATE WITH ELECTRICAL CONTRACTOR.

1. UNITS SHALL BE A UL LISTED, SPLIT DX SYSTEM WITH VARIABLE SPEED MOTOR FOR BALANCING PURPOSES, AUXILIARY DRAIN PAN & SINGLE POINT ELECTRICAL CONNECTION. FURNISH WITH DEMAND CONTROL VENTILATION AND A MANUFACTURED DIFFERENTIAL ENTHALPY ECONOMIZER KIT WITH DAMPER(S), MODULATING MOTORIZED ACTUATOR(S), MIXING BOX, SENSORS AND CONTROLLER EQUAL TO RUSKIN RSI 01-424-01D. •CASING SHALL BE FACTORY INSULATED WITH ONE-INCH (1:) FIBERGLASS INSULATION (OR EQUAL). •PROVIDE TXV, TIME DELAY RELAY & ALL ACCESSORY EQUIPMENT TO OBTAIN A MATCHED SYSTEM SEER RATING AS INDICATED. •PROVIDE AN AUXILIARY DRAIN PAN UNDER AIR HANDLING UNITS. •UNITS SHALL BE CARRIER, TRANE OR LENNOX.

ADJACENT LAY-IN CEILING.

1. TERMINAL CASING: FURNISH AND INSTALL SINGLE DUCT TERMINALS OF THE SIZES AND CAPACITIES (CFM) INDICATED ON THE DRAWINGS. TERMINALS SHALL BE CONSTRUCTED OF NOT LESS THAN 24-GAUGE ZINC-COATED STEEL, MECHANICALLY ASSEMBLED AND SEALED TO FORM AN AIR-TIGHT CASING; MAXIMUM AIR LEAKAGE OF 2 PERCENT AT THREE INCHES (3") W. G. SPOT WELDED CASINGS ARE NOT ACCEPTABLE. INTERIOR WALLS OF THE TERMINAL CASING SHALL BE LINED WITH THREE-FOURTHS INCH (3") DUAL-DENSITY FIBERGLASS WITH FOUR (4) POUNDS DER CUBIC FOOT SKIN DENSITY; RATED FOR A MAXIMUM AIR VELOCITY OF 4500 FPM. INSULATION SHALL MEET ALL REQUIREMENTS OF UL 181 AND NFPA 90-A, RAW EDGES EXPOSED TO THE AIRSTREAM SHALL BE COATED AND SEALED, BOXES SHALL BE BY TRANE, METALAIRE OR

2. AIR CONTROLS VALVE ASSEMBLY: TERMINAL AIR CONTROL VALVE SHALL BE DUAL-WALL CONSTRUCTION, CONSISTING OF TWO METAL THICKNESSES WITH THREE-FOURTHS (3") DUAL-DENSITY INSULATION SANDWICHED BETWEEN, CREATING AN EFFECTIVE RADIATED SOUND BARRIER, INSULATION SHALL BE AS SPECIFIED FOR TERMINAL CASING, THE CONTROL BLADE OF THE AIR VALVE SHALL BE 16 GAUGE. THE CONTROL BLADE SHALL BE BOLTED OR WELDED TO A CONTINUOUS SHAFT WHICH ROTATES IN SELF-LUBRICATING NYLON BEARINGS. THE BLADE SHALL CLOSE AGAINST A CLOSED-CELL GASKET SEAT; IT SHALL BE PRELOADED TO INSURE A TIGHT SEAL. BLADE SHALL NOT DEFLECT AT

INLET PRESSURES UP TO SIX INCHES (6") W. G. 3. VAVS WITH ELECTRIC RE-HEAT SHALL HAVE SCR CONTROLS FOR MODULATING RE-HEAT CAPABILITY.

DX CONDENSING UNIT 1. WHERE APPROVED BY THE MANUFACTURER, REFRIGERANT LINE SET PIPING SHALL BE SEAMLESS ACR SOFT-DRAWN COPPER TUBING, WHERE ALLOWED BY THE LOCAL JURISDICTION AND MANUFACTURER, TYPES K.L AND M SEAMLESS SOFT-DRAWN COPPER TUBING MAY BE USED. PROVIDE WITH 1"THICK ARMAFLEX INSULATION AND SEAL WITH UV BARRIER PAINT, JOINTS SHALL BE WROUGHT COPPER BRAZED JOINTS,

UNITS SHALL BE CARRIER, TRANE OR LENNOX. 3. THE UNIT SHALL BE A UL LISTED, FACTORY PACKAGED UNIT WITH 2-STAGE COOLING, LOW-AMBIENT CONTROL, FACTORY LOUVERED HAIL RACEWAYS, ETC. SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL AMENDMENTS. •ALL WIRING SHALL BE PLENUM RATED. •ALL EXPOSED WIRING SHALL BE RUN IN CONDUIT

DUCTWORK SHALL BE GALVANIZED SHEETMETAL AND CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF LOCAL BUILDING CODES AND SMACNA.

•THE COMPRESSOR SHALL HAVE A FIVE-YEAR WARRANTY. UNITS SHALL BE SUITABLE FOR OPERATION DOWN TO 20 DEGREES F.

WITH 1"THICK ARMAFLEX INSULATION AND SEAL WITH UV BARRIER PAINT, JOINTS SHALL BE WROUGHT COPPER BRAZED JOINTS.

FURNISH DUCT HEATERS WITH SCR CONTROL, AIR FLOW SWITCH, DISCONNECT, HIGH-TEMPERATURE SAFETY SWITCH.

THE DUCTLESS MINI-SPLIT FAN-COIL SHALL BE A WALL HUNG TYPE WITH VARIABLE SPEED FAN CONTROL. THE CONDENSING UNIT SHALL HAVE

WHERE APPROVED BY THE MANUFACTURER, REFRIGERANT LINE SET PIPING SHALL BE SEAMLESS ACR SOFT-DRAWN COPPER TUBING. WHERE

1. HEATING COIL ELEMENTS SHALL BE UL LISTED, OPEN-COIL FLANGED TYPE WITH HEAVY-DUTY, NICKEL-CHROMIUM ALLOY HEATING ELEMENTS.

CDIL FACE AREA SHALL BE SIZED FOR MAXIMUM 1,000 FPM FACE VELOCITY OR AS RECEDMMENDED BY MANUFACTURER WHICHEVER IS LESS.

1. CONTROLLER SHALL HAVE 10 HR. BATTERY BACK-UP, BE 7 DAY PROGRAMMABLE WITH 4 DAILY SETTINGS, WITH AUTO-CHANGE-OVER, NIGHT SET BACK, OPTIMUM START CAPABILITY AND AN ECONOMIZER FAULT DETECTION AND DIAGNOSTICS (FDD) UTILITY. UNIT CONTROLLER SHALL

3. REMOTE TEMPERATURE SENSORS SHALL BE DIGITAL WITH LCD INTERFACE AND ALLOW A TEMPORARY 3 HOUR OVERRIDE OF COOLING AND HEATING

PROVIDE ALL LOW VOLTAGE CONTROL WIRING, EQUIPMENT, DEVICES, SENSORS, INTERLOCKS, CONTACTORS, RELAYS, ETC. AS NECESSARY TO

MEET ALL EQUIPMENT CONTROLS REQUIREMENTS FOR NORMAL OPERATION AND LIFE SAFETY MODE(S) OF OPERATION. ALL CONTROLS WIRING,

•THE CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL WIRING NEEDED FOR INTERFACING AND OR THE OPERATION OF THE HVAC SYSTEM.

INVERTER TECHNOLOGY TO MODULATE COOLING CAPACITY AND PROVIDE PASSIVE HUMIDITY CONTROL. PROVIDE ALL ACCESSORY EQUIPMENT AND

ALLOWED BY THE LOCAL JURISDICTION AND MANUFACTURER, TYPES K. L AND M SEAMLESS SOFT-DRAWN COPPER TUBING MAY BE USED. PROVIDE

PRIMARY AIR DUCT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA WITH A PRESSURE CLASSIFICATION WHICH IS A MINIMUM O. 15 INCH WATER COLUMN LARGER THAN SCHEDULED VALUES.

UNLESS NOTED OTHERWISE, ALL DUCTS WHICH PENETRATE A FIRE/RATED SMOKE ASSEMBLY SHALL BE MINIMUM 28 GAUGE GALVANIZED SHEET STEEL OR MINIMUM 26 GAUGE ALUMINUM. RECTANGULAR DUCTWORK BENDS SHALL BE MITERED ELBOWS WITH TURNING VANES, OR LONG SWEEP BENDS (WITHOUT VANES) WITH CENTERLINE

RADIUS OF R=1.5W 5. SEAL ALL DUCTWORK JOINTS AND SEAMS WITH APPROVED MASTICS OR TAPES LISTED AND LABELED IN ACCORDANCE WITH UL 1814:

• 'A-P' FOR PRESSURE-SENSITIVE TAPE, •'A-M' FOR MASTIC, • 'A-H' FOR HEAT-SENSITIVE TAPE.

CLOSURES, TAPES AND MASTICS USED FOR FLEXIBLE DUCTS AND FLEXIBLE AIR CONNECTIONS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181B • 'B-FX' FOR PRESSURE SENSITIVE TAPE,

• 'B-M' FOR MASTIC,

GUARDS, HARD START KIT AND FILTER DRIER.

3. UNITS SHALL BE CARRIER, TRANE OR LENNOX.

**ELECTRIC DUCT HEATERS** 

INDICATE STATUS OF: a. FREE COOLING

DESIGN SET-POINTS.

b. ECONOMIZER ENABLED

c. COMPRESSOR ENABLED

d. MIXED AIR LOW LIMIT CYCLE ACTIVE

DEVICES TO OBTAIN A MATCHED SYSTEM SEER RATING AS INDICATED.

3. DUCT HEATERS SHALL BE CONFIGURED FOR FLANGED INSTALLATION.

e. CURRENT VALUE OF OUTSIDE AIR, SUPPLY AIR, AND RETURN AIR SENSORS

•• FURNISH AND INSTALL ALL LOW VOLTAGE ELECTRICAL WIRING.

CONTROLLER/THERMOSTAT INTERFACE SHALL BE MOUNTED AT 48" AFF UNLESS NOTED OTHERWISE.

•• COORDINATE REQUIREMENTS FOR 120V WIRING AND GREATER WITH ELECTRICAL CONTRACTOR.

PROVIDE INSULATED SUB-BASES WHERE CONTROLLER/THERMOSTATS ARE INSTALLED ON EXTERIOR WALLS.

• 'B-C' FOR MECHANICAL FASTENERS. FLEXIBLE DUCTWORK SHALL HAVE A MINIMUM "R" VALUE OF 6.0. FLEXIBLE DUCTWORK SHALL BE CLASS 1 AIR DUCT PER UL 181 AS REQUIRED BY NFPA 90 A, A MINIMUM OF ONE-INCH (1") FIBERGLASS INSULATION AND A REINFORCED VAPOR BARRIER JACKET, AND SPIRAL METAL REINFORCING IN THE DUTER JACKET. MAXIMUM LENGTH SHALL BE 6'-0". FLEXIBLE DUCTWORK SHALL BE SUPPORTED BY BANDS A MINIMUM OF ONE INCH WIDE ON 6'-0" CENTERS.

SAGGING SHALL BE LIMITED TO ONE-HALF INCH (1/2°) PER SIX-FOOT (6′) SECTION, LIMIT ELBOWS OR TURNS TO ONE TURN PER SIX-FOOT (6′) SECTION PROVIDE FLEXIBLE DUCT CONNECTIONS AT THE INLET AND OUTLET DUCT CONNECTIONS OF ALL AIR MOVING EQUIPMENT.

ALL SUPPLY AIR, RETURN AIR AND DUTDOOR AIR DUCTWORK SHALL BE INSULATED. •PROVIDE ACOUSTICAL LINER IN RETURN AIR DUCTWORK. •ALL CONCEALED SUPPLY AIR AND MAKE-UP AIR DUCTS SHALL HAVE 2" FIBERGLASS DUCT WRAP WITH A MINIMUM INSTALLED 'R' VALUE OF

•ALL EXPOSED SUPPLY AIR AND MAKE-UP AIR DUCTS SHALL HAVE 1.0" THERMAL LINER WITH A MINIMUM INSTALLED 'R' VALUE OF 4. •PROVIDE 1.5LB/CF DENSITY OF ACOUSTICAL LINER FOR ALL RIGID SUPPLY AIR SECONDARY DUCT DOWNSTREAM OF VAV TERMINAL BOXES. • DUCT SIZES ARE AIR STREAM DIMENSIONS AND DO NOT INCLUDE ALLOWANCES FOR LINER.

ROUND EXPOSED AIR DUCT SHALL BE SINGLE-WALL, SPIRAL TYPE EQUAL TO L & L FABRICATION. PROVIDE WITH PAINT GRIP FINISH & COORDINATE DUCT COLOR WITH ARCHITECT & OWNER.

10. ALL ROUND CONCEALED SUPPLY AIR DUCTS SHALL BE SINGLE-WALL TYPE EQUAL TO L & L FABRICATION. 11. PROVIDE SPIN-IN TAPS WITH BUTTERFLY DAMPERS FOR EACH AIR DEVICE UNLESS OTHERWISE NOTED.

1. CONDENSATE DRAIN PIPING SHALL BE TYPE L COPPER WITH 1"FIBERGLASS INSULATION.

MINIMUM PIPE SIZE SHALL BE 3/4" 3. PROVIDE UL LISTED APPROVED COMPOUND FOR PENETRATIONS OF RATED FIRE/SMOKE ASSEMBLES.

AIR CONDITIONING SYSTEMS SEQUENCE OF OPERATION

GENERAL •INTERFACE AHU TO A DEDICATED DDC CONTROLLER AND ASSOCIATED ZONE VAV TERMINAL BOXES. COORDINATE LOCATION OF CONTROLLER(S) WITH OWNER. •INTERLOCK AHU WITH A DUCT MOUNTED RETURN AIR HUMIDITY SENSOR AND CARBON-DIOXIDE SENSOR.

•INTERLOCK AHU TO A RETURN AIR DUCT SMOKE DETECTOR. IF ACTIVATED, THE SYSTEM SHALL BE DISABLED AND AN

2. UNDCCUPIED MODE

• DUTDOOR AIR DAMPERS SHALL MODULATE TO THE CLOSED POSITION.

ALARM SIGNAL SHALL BE SENT TO THE FIRE ALARM CONTROL PANEL (FACP).

800 PPM CO2 CONCENTRATION LEVELS OR AS RECOMMENDED BY MANUFACTURER.

•RETURN AIR DAMPERS SHALL MODULATE TO THE OPEN POSITION. • AHU SUPPLY FAN SHALL OPERATE IN AUTO MODE AND CYCLE AS NEEDED TO MAINTAIN NIGHT SET-BACK DESIGN

TEMPERATURES OF 80°F(SUMMER) AND 60°F (WINTER) ADJUSTABLE. •COORDINATE NIGHT SET-BACK TEMPERATURES AND OPTIMUM START REQUIREMENTS WITH CRFW.

3. OCCUPIED MODE

•SUPPLY FAN SHALL OPERATE CONTINUOUSLY. • BARDMETRIC RELIEF AIR DAMPER AT GRAVITY VENTILATOR(S) SHALL MAINTAIN A MAXIMUM O, 1" W. C. POSITIVE BUILDING PRESSURE DIFFERENTIAL

•RETURN AND DUTSIDE AIR DAMPERS SHALL MODULATE TO MINIMUM OPEN DAMPER POSITIONS BASED ON SCHEDULED AIRFLOW QUANTITIES. •DEMAND CONTROL VENTILATION SHALL MODULATE OUTDOOR AIR AND RETURN AIR DAMPER POSITIONS BASED ON MAXIMUM

4. HEATING MODE •ECONOMIZER MODE SHALL BE DISABLED.

> •• WHEN DUTSIDE AIR TEMPERATURE FALLS BELDW 50°F (ADJUSTABLE), THE ELECTRIC DUCT FURNACE SHALL ENERGIZE AND MODULATE ELECTRIC HEAT TO MAINTAIN A LEAVING AIR TEMPERATURE OF 55°F (ADJUSTABLE).

•• THE RELIEF AIR BY-PASS DUCT SHALL MODULATE DAMPER POSITION TO MAINTAIN SYSTEM DUCT PRESSURE. •• ON A FALL IN ZONE TEMPERATURE, THE ZONE TERMINAL UNIT SHALL MODULATE THE DAMPER POSITION BETWEEN MINIMUM SET-STOP AND HEATING FLOW AND MODULATE HEATING CAPACITY TO MAINTAIN THE ZONE DESIGN SET POINT OF 70°F (ADJUSTABLE)

•• ON A FALL IN SPACE TEMPERATURE BELOW SETPOINT, THE REFRIGERANT CIRCUIT SHALL ENERGIZE AND STAGE

## 5. COOLING MODE

• <u>AHU</u>

 AHU •• WHEN DUTSIDE AIR TEMPERATURE RISES ABOVE 55°F (ADJUSTABLE), THE REFRIGERANT CIRCUIT SHALL ENERGIZE AND STAGE CAPACITY AS NEEDED TO MAINTAIN A DISCHARGE LEAVING AIR TEMPERATURE OF

CAPACITY TO MAINTAIN A ROOM DESIGN SET POINT OF 70°F (ADJUSTABLE) IN HEAT PUMP MODE.

55°F(ADJUSTABLE). •• THE BY-PASS DUCT SHALL MODULATE DAMPER POSITION TO MAINTAIN THE INDICATED SYSTEM DUCT PRESSURE. •• ON A RISE IN ZONE TEMPERATURE, THE TERMINAL UNIT DAMPER POSITION SHALL MODULATE BETWEEN MINIMUM SET-STOP AND COOLING FLOW AS SCHEDULED TO MAINTAIN A ZONE DESIGN SET POINT OF 75°F (ADJUSTABLE). ••• ON A RISE IN SPACE HUMIDITY ABOVE 60%RH (ADJUSTABLE), THE VAV SHALL ENERGIZE THE RE-HEAT COIL

AND MODULATE CAPACITY TO MAINTAIN THE ZONE COOLING DESIGN SET-POINT. •• ON A RISE IN SPACE TEMPERATURE ABOVE SETPOINT, THE REFRIGERANT CIRCUIT SHALL ENERGIZE AND STAGE CAPACITY TO MAINTAIN A ROOM DESIGN SET POINT OF 72°F (ADJUSTABLE.

ECONOMIZER MODE < DIFFERENTIAL ENTHALPY>

•• WHEN DUTDOOR AIR ENTHALPY IS BELOW THE RETURN AIR ENTHALPY,

ECONOMIZER MODE SHALL BE ENABLED.

•• ECONOMIZING MODE SHALL OVER-RIDE DEMAND CONTROL VENTILATION. •• THE DUTDOOR AIR DAMPER SHALL MODULATE TO THE FULL OPEN AND THE RETURN AIR DAMPER SHALL MODULATE TO THE FULL CLOSED POSITION.

•• WHEN DUTDOOR AIR IS LESS THAN 55°F (ADJUSTABLE), THE REFRIGERANT CIRCUIT SHALL BE DISABLED AND

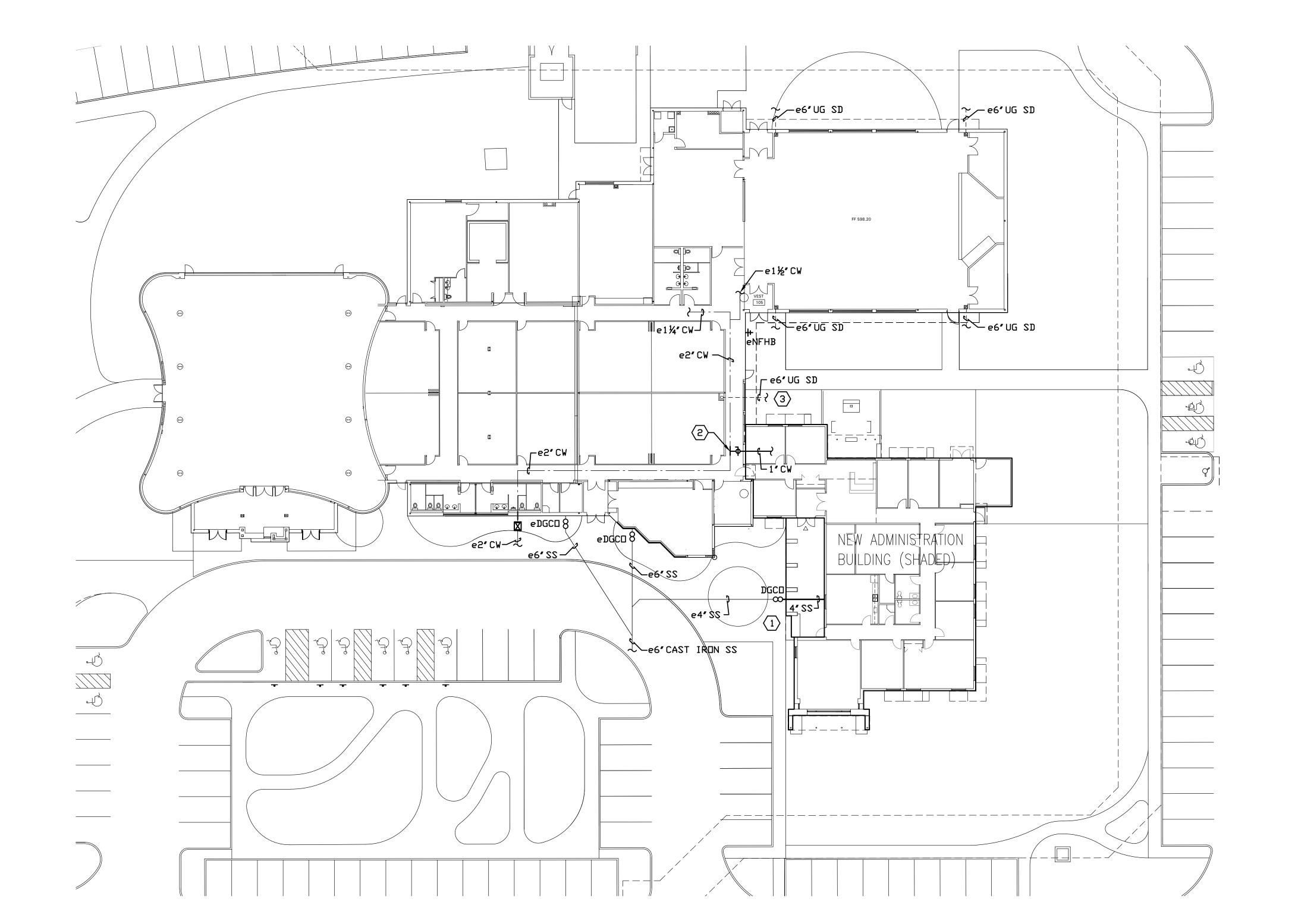
•• MECHANICAL COOLING SHALL ENERGIZE AS NEEDED TO MAINTAIN SUPPLY AIR TEMPERATURE SETPOINT.

DAMPERS SHALL MODULATE POSITIONS TO MAINTAIN SUPPLY AIR TEMPERATURE SETPOINT.

• <u>MSI</u>

5 of 5M Sheets

1 of 5P Sheets



# 1 PARTIAL SITE PLAN - PLUMBING 1"=20'-0"

## PLUMBING LEGEND

## EXISTING PIPING

EXISTING SANITARY SEWER EXISTING DOMESTIC COLD WATER ----eUG SD----- EXISTING UNDERGROUND STORM DRAIN

## NEW PIPING

DOMESTIC COLD WATER SANITARY SEWER UNDERGROUND STORM DRAIN DOUBLE GRADE CLEANOUT GRADE CLEANDUT

## PLUMBING NOTES

- 1. LOCATIONS AND ELEVATIONS OF UTILITIES HAVE BEEN OBTAINED FROM UTILITY MAPS AND/OR OTHER SOURCES AND ARE OFFERED AS A GENERAL GUIDE ONLY, WITHOUT GUARANTEE AS TO ACCURACY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF UTILITIES AND THEIR RELATION TO THE WORK BEFORE ENTERING INTO A CONTRACT.
- 2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE INSTALLING ANY NEW SERVICES. PIPING INSTALLED BEFORE SUCH VERIFICATION THAT HAS TO BE RELOCATED DUE TO INTERFERENCES SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- 3. THE CONTRACTOR SHALL VERIFY THE FOLLOWING WITH THE AUTHORITY HAVING JURISDICTION & UTILITY COMPANY:

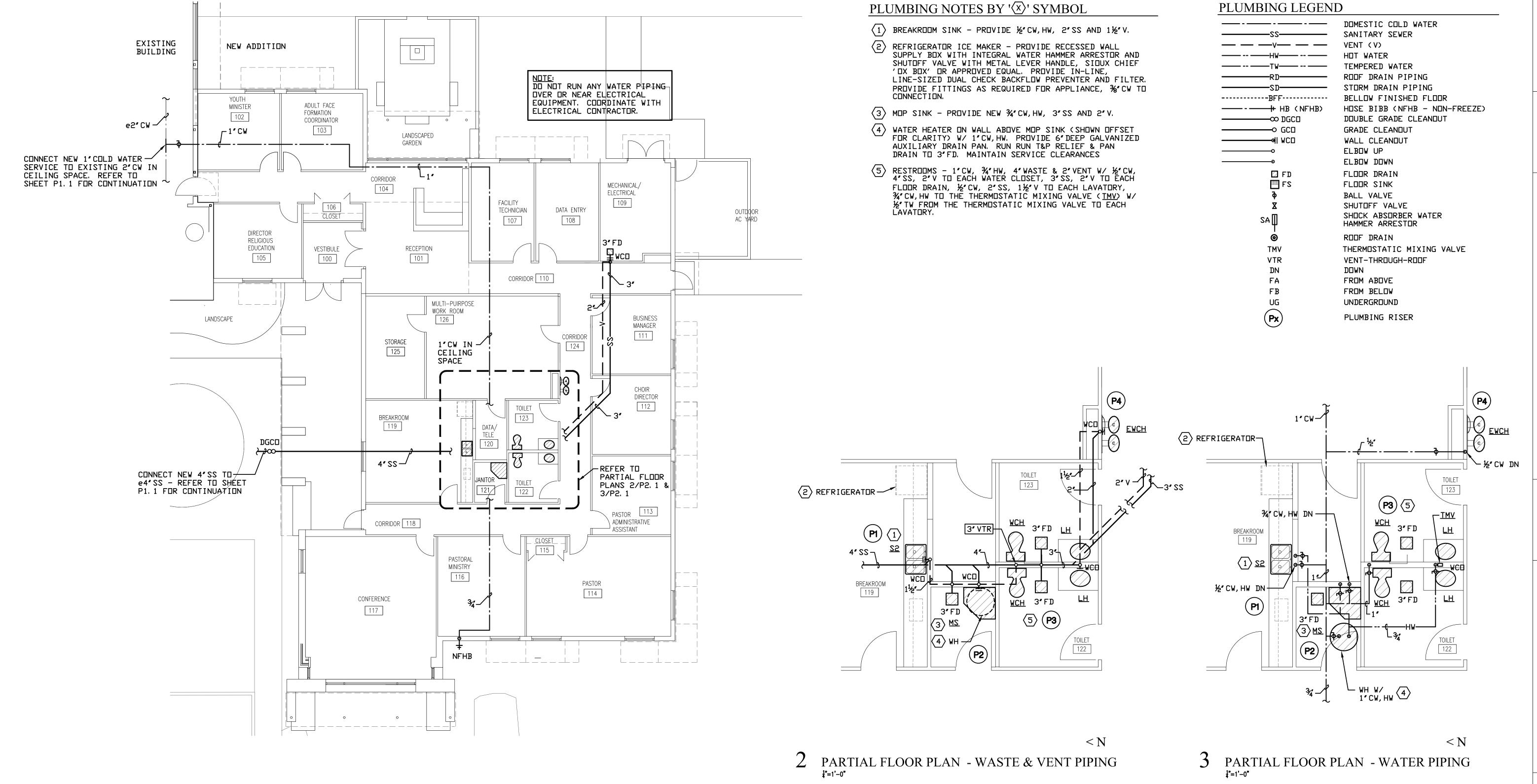
  - SITE UTILITY TAP REQUIREMENTS
     SITE METER SIZE, STYLE & VAULT REQUIREMENTS
     SITE BACKFLOW ASSEMBLY TYPE & VAULT VAULT REQUIREMENTS.
- 4. IN THE EVENT CONFLICTS OCCUR BETWEEN PROPOSED AND EXISTING UTILITIES, CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE TO COORDINATE ADJUSTMENT OF PROPOSED UTILITY. PROPOSED UTILITY LINES MAY BE ADJUSTED HORIZONTALLY OR VERTICALLY TO AVOID CONFLICTS. NO EXTRA COST SHALL BE ALLOWED FOR ADJUSTMENT OF PROPOSED LINES AROUND EXISTING UTILITIES.

## NOTES BY '&' SYMBOL

- CONNECT NEW CAST IRON 4"SS TO e4"SS. FIELD VERIFY LOCATION AND DIRECTION OF FLOW AND DEPTH. COORDINATE WITH SITE UTILITY CONTRACTOR.
- CONNECT AND EXTEND NEW DOMESTIC 1"COLD WATER PIPING FROM EXISTING MAIN BUILDING 2"DOMESTIC COLD WATER IN CEILING SPACE AND PROVIDE SHUTOFF VALVE FOR MAIN WATER SUPPLY TO NEW ADDITION. FIELD VERIFY SIZE AND LOCATION.
- (3) EXISTING STORM DRAIN PIPING FIELD VERIFY EXISTING CONDITIONS AND ADJUST PIPE ROUTING AS NEEDED.

REFER TO CIVIL FOR CONTINUATION OF UNDERGROUND STORM DRAIN PIPING.



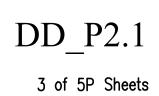


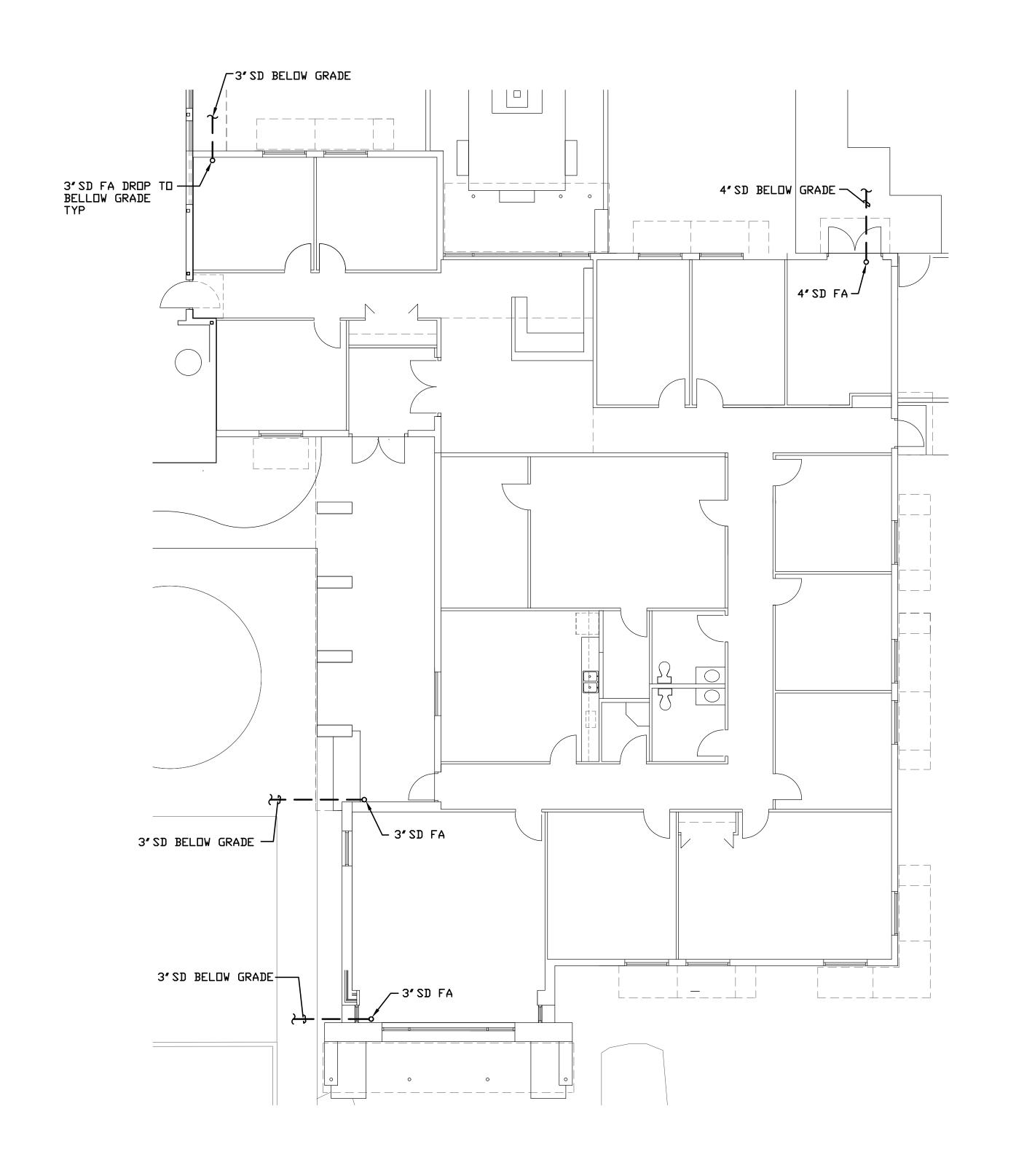
FLOOR PLAN - PLUMBING

DD\_P2.1

2 of 5P Sheets

Revisions:





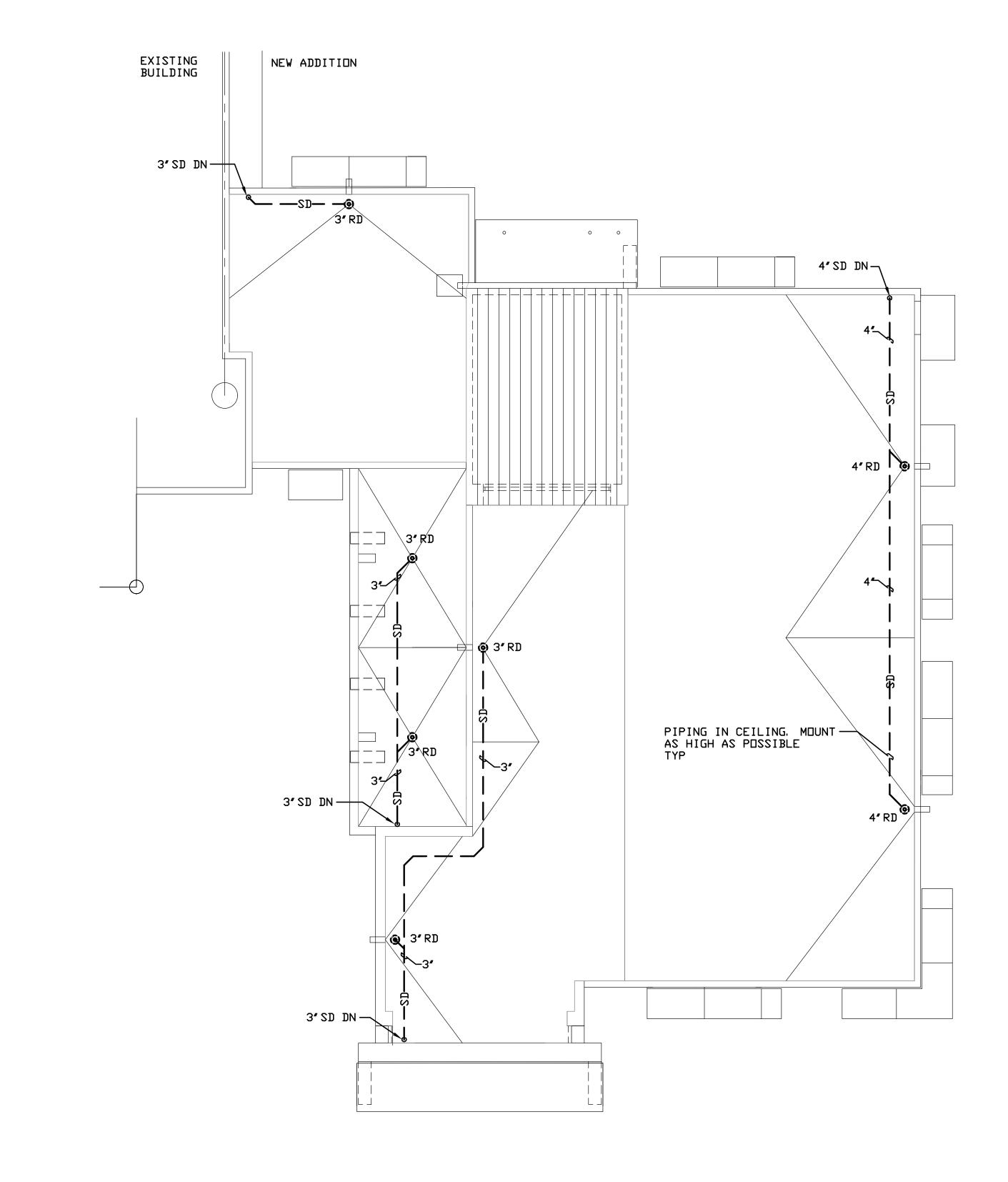
< NFLOOR PLAN - STORM DRAIN PIPING

§"=1'-0"

5

LEGEND	
— — — RD— — —	ROOF DRAIN PIPING
— — — SD— — —	STORM DRAIN PIPING
<b>@</b>	ROOF DRAIN

STORM PIPING NOTES REFER TO SHEET P3. 1



< N 2 ROOF PLAN - STORM DRAIN PIPING

### GENERAL PLUMBING NOTES

- 1. THE CONTRACTOR IS TO COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND THE WORK OF OTHER TRADES.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE SIZES AND LOCATIONS OF EXISTING WATER, VENT, SEWER PIPING BEFORE BEGINNING ANY WORK AND ADJUST THE LOCATIONS OF CONNECTIONS OF THE NEW PIPING TO THE EXISTING.
- 3. THE CONTRACTOR SHALL EXTEND THE NEW PIPING BRANCH LINES SERVING FIXTURE GROUP TO THE NEAREST EXISTING PIPING MAIN LINES OF ADEQUATE SIZE.
- 4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL
- 5. INSTALL ALL FIXTURES AT HEIGHTS DETAILED ON ARCHITECTURAL PLANS AND AS REQUIRED BY ADA, TAS AND ANSI 117.1. FLUSH VALVES SHALL BE INSTALLED ON ACCESS SIDE OF FIXTURES. PROVIDE INSULATION COVERS ON ALL EXPOSED PIPING BELOW HANDICAP FIXTURES.
- 6. PROVIDE 18" LONG RED RIBBONS ON THE HANDLES OF ALL VALVES ABOVE THE
- CEILING. 7. WATER SHUTOFF HANDLES SHALL BE EASILY ACCESSIBLE AND SHALL NOT BE PLACED WHERE THEY ARE BLOCKED OR INACCESSIBLE BY OTHER PLUMBING PIPING, HVAC
- DUCTWORK, LIGHTING, ELECTRICAL CONDUIT, STRUCTURE, ETC. 8. ALL NEW DOMESTIC WATER PIPING SHALL BE PRESSURE TESTED WITH AIR OR NITROGEN TO 100 PSI FOR ONE HOUR. NOTIFY MANAGEMENT & OWNER PRIOR TO TEST TO ALLOW FOR FIELD OBSERVATION. FURNISH ALL NECESSARY TAPS, SHUT-OFFS, ETC.
- 9. PROVIDE WATER HAMMER ARRESTORS AT THE END OF EACH WATER SUPPLY AT EACH FIXTURE GROUPING.
- 10. COORDINATE PLUMBING VENTS-THRU-ROOF LOCATIONS WITH AIR INTAKES TO PROVIDE MINIMUM 10'-0" CLEAR BETWEEN AIR INTAKES AND PLUMBING VENTS.
- 11. ALL MATERIALS IN RETURN AIR PLENUMS MUST COMPLY WITH ASTM E-84 MAXIMUM FLAME SPREAD & SMOKE DEVELOPED INDICES OF 25/50. ANY MATERIAL NOT IN COMPLIANCE MUST BE WRAPPED WITH A HIGH TEMPERATURE INSULATION WRAP EQUAL TO FIRE-WRAP INSULATION, COORDINATE WITH GENERAL CONTRACTOR AND OTHER

## FIXTURES & EQUIPMENT

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATIONS AND MOUNTING
- HEIGHTS. 2. ALL FIXTURES MUST MEET THE REQUIREMENTS OF TEXAS WATER CONSERVATION ACT,
- SB-587. 3. ALL FIXTURES PROVIDED FOR HANDICAPPED USE MUST MEET THE REQUIREMENTS OF
- ADA & TAS. 4. PROVIDE SHUTOFF VALVE PRIOR TO FINAL CONNECTION TO EACH FIXTURE,
- APPLIANCE OR PIECE OF EQUIPMENT.
- 5. PROVIDE WATER HAMMER ARRESTORS AT EACH FIXTURE OR FIXTURE BANK. 6. FLOOR DRAINS ARE TO HAVE SQUARE BRONZE NICKEL STRAINERS TO MATCH FLOOR
- TILE CONFIGURATION.
- 7. PROVIDE THERMAL WRAP INSULATION ON ALL EXPOSED PIPING UNDER ADA ACCESSIBLE SINKS AND LAVATORIES.
- 8. REFER TO THE PLUMBING FIXTURE SCHEDULE AND EQUIPMENT SCHEDULES FOR DESCRIPTIONS AND REQUIREMENTS.
- 9. ALL FLOOR DRAINS ARE TO HAVE A TRAP SEAL PRIMER JOSAM 88250. 10. FLOOR DRAIN - JOSAM SERIES 30000-S WITH SQUARE SATIN BRONZE STRAINER,
- CAST IRON BODY AND TRAP SEAL PRIMER CONNECTION. 11. TRAP SEAL PRIMER - JOSAM 88250, CONNECT TO COLD WATER INLET FROM THE
- NEAREST LAVATORY OR SINK. 12. WALL CLEANDUTS - JOSAM 58790 WITH STAINLESS STEEL ROUND FLAT COVER.
- 13. GRADE CLEANDUT JOSAM 58680 WITH HEAVY DUTY SCORIATED COVER LABELED 'CO' 14. WALL MOUNTED NON-FREEZE HOSE BIBB - WOODFORD MODEL B65 WITH LOCKING COVER,

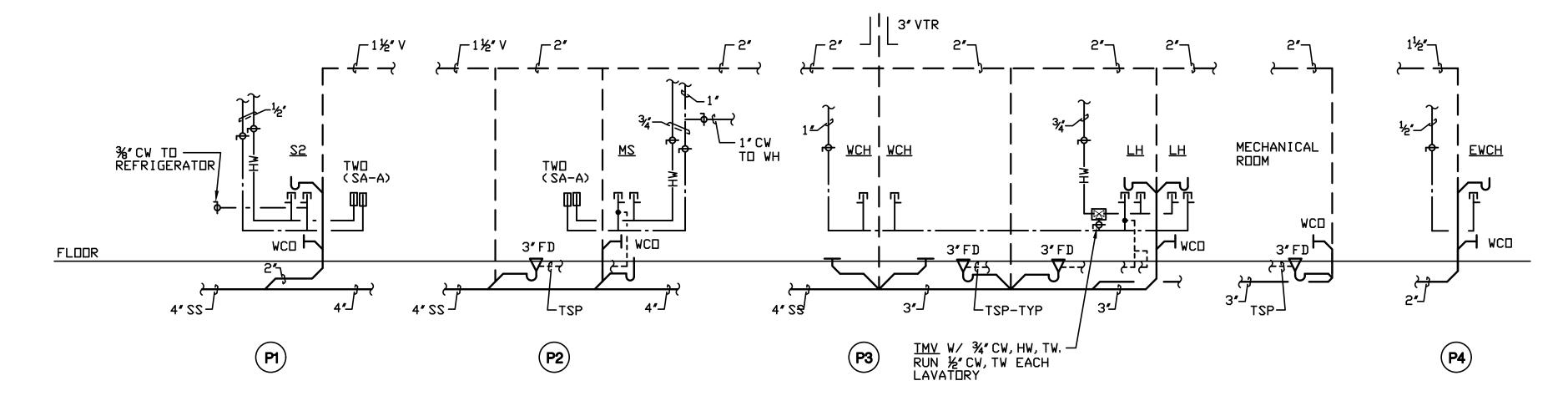
SCREWS, WITH UNDER DECK CLAMP, JOSAM 21500-23-1-30, OR APPROVED EQUAL.

OR APPROVED EQUAL. 15. ROOF DRAIN - CAST IRON, BOTTOM OUTLET, HIGH BRONZE DOME, VANDAL-PROOF

- **PIPING**
- DOMESTIC WATER PIPING SHALL BE TYPE L COPPER WITH SOLDER FITTINGS. 2. DOMESTIC WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON WITH
- NO-HUB FITTINGS. 3. STORM DRAIN PIPING SHALL BE SERVICE WEIGHT CAST IRON WITH NO-HUB FITTINGS.
- 4. WATER HEATER RELIEF PIPING SHALL BE TYPE L COPPER WITH SOLDER FITTINGS.
- 5. PIPING ABOVE THE CEILING SHALL BE SUSPENDED USING PIPE HANGERS. INSULATED PIPING SHALL HAVE SADDLES BETWEEN THE INSULATION AND THE HANGER. PERFORATED STRAPS ARE NOT ACCEPTABLE.

### PIPE INSULATION

- DOMESTIC WATER PIPING SHALL HAVE 1" FIBERGLASS INSULATION WITH VAPOR SEAL. PROVIDE SHEETMETAL SADDLES AT HANGERS TO PROTECT THE INSULATION.
- 3. HORIZONTAL STORM DRAIN PIPING SHALL HAVE 1"FIBERGLASS INSULATION.
- 4. PROVIDE INSULATION COVERS ON ALL EXPOSED PIPING BELOW HANDICAP FIXTURES.
- 5. WHERE PVC OR OTHER NON-PLENUM RATED PIPING IS INSTALLED IN A RETURN AIR PLENUM, PROVIDE A FIRE RESISTANT WRAP PROVIDING A NON-COMBUSTIBLE ENCLOSURE AS TESTED TO UL 910 WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. INSULATION ON ALL NON METALLIC PIPING IN RETURN PLENUMS SHALL BE ONE-HALF INCH (%") THICK OR AS REQUIRED BY THE WRAP MANUFACTURER TO MEET THE REQUIRED FIRE RATING IN ADDITION TO ANY OTHER INSULATION REQUIRED BY THESE SPECIFICATIONS. FIRE BARRIER PLENUM INSULATION SHALL BE 3M FIRE BARRIER PLENUM WRAP 5A OR APPROVED EQUAL.



PLUMBING RISER DIAGRAM

## PLUMBING FIXTURE SCHEDULE

DESTANTION	R	JUGH-IN	SIZES		
DESIGNATION	CW	HW	W	٧	
WCH FLUSH TANK	1/2*	_	4*	2*	ACCESSIBLE FLOOR MOUNT, FLUSH TANK, WHITE VITREOUS CHINA, 16½ HIGH, SIPHON JET, AMERICAN STANDARD TOILET MODEL CADET 2467.100, PRESSURE ASSISTED, HIGH EFFICIENCY, 1.1 GPF, W/ BOLT CAPS, W/ CHURCH 295CT WHITE OPEN-FRONT SEAT LESS COVER. TRIP HANDLE MUST MEET ADA AND BE MOUNTED ON ACCESSIBLE SIDE OF TANK.
LH (CW,TW)	1 <sub>2</sub> ,	<sup>1</sup> ⁄2*	2*	1 <sup>1</sup> ⁄2 <b>″</b>	ACCESSIBLE COUNTERTOP LAVATORY, WHITE VITREOUS CHINA, AMERICAN STANDAR 0476.028, THREE HOLE FAUCET DRILL (4"CENTERS), 20%"×17%", WITH MOEN COMMERCIAL TWO HANDLE FAUCET MODEL 8215, W/ WRISTBLADE HANDLES, AERATOR 0.5 GPM, SOLID GRID STRAINER, SUPPLIES, STOPS, P-TRAP. PROVIDE THERMAL INSULATION PER TAS, TRUEBRO MODEL 102. REFER TO ARCHITECT FOR EXACT MOUNTING HEIGHT.
S2 (ADA) 5½″DEEP FOP MOUNT	1 <sup>5</sup> 4.	1/2°	2*	1 <sup>1</sup> ⁄2*	DOUBLE COMPARTMENT KITCHEN SINK, UNDERMOUNT, STAINLESS STEEL, 30¾"x18½"x5¾"dp., 3 FAUCET HOLES, MODEL ELKAY LUSTERTONE ELUHAD311855 W/ MOEN COMMERCIAL GOOSENECK KITCHEN TYPE FAUCET MODEL #8225, W/ TWO WRISTBLADE HANDLES ON 8" CENTERS, REMOVABLE BASKET STRAINER, SUPPLIES, STOPS, P-TRAP. REFER TO ARCH. FOR EXACT MOUNTING HEIGHT. PROVIDE THERMAL WRAP INSULATION PER TAS/ADA ON ALL EXPOSED PIPING UNDER SINK. IF NEEDED PROVIDE GARBAGE DISPOSER: BADGER-1 OR APPROVED EQUAL.
1S CCW, HW) CORNER	3/4	3/4	3*	2"	MOP SINK - CORNER, FLOOR MOUNT, FIAT MODEL TSBC-6010, 24×24×12"DEEP, PRECAST TERRAZZO, COLOR CHOICE BY OWNER, W/ 830-AA HEAVY DUTY SERVICE FAUCET WITH INTEGRAL VACUUM BREAKER, THREAD SPOUT WITH PAIL HOOK. PROVIDE 832-AA HOSE AND HOSE BRACKET, 889-C MOP HANGER AND E-77-AA VINYL BUMPER GUARD. MOUNT FAUCET AT 36" A.F.F. PROVIDE HOT WATER.

ELECTRIC WATER COOLER W/ BOTTLE FILLING STATION, ADA WALL MOUNTED MODEL

HALSEY TAYLOR HTHB-DVLSER-I, BI-LEVEL, FILTERED, REFRIGERATED, CHILLING

CAPACITY OF 8 GPH OF 50°F DRINKING WATER, W/ SUPPLY, STOP, P-TRAP AND

FILTER. REFER TO ARCHITECTURAL FOR EXACT LOCATION AND MOUNTING HEIGHT.

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS & FIXTURE/EQUIPMENT MOUNTING HEIGHTS.

2. ALL FIXTURES PROVIDED FOR HANDICAPPED USE MUST MEET THE REQUIREMENTS OF ADA.

3. PROVIDE INSULATION ON ALL EXPOSED PIPING UNDER LAVATORY AND SINKS PER ADA & TAS.

WATER HEATERS SCHEDULE								
DESIGNATION	LOCATION	TYPE	STORAGE CAPACITY	QUANTITY	RECOVERY @ 100°F RISE	ELECTRICAL DATA	MFG. & MODEL	NOTES
<u>WH-1</u>	ABOVE MOP	COMMERCIAL ELECTRIC	20 GALLON	S	10 GPH	2.5 KW 277V/1ø	A. O. SMITH COMMERCIAL DEL-20	1,2

EWCH W/

BOTTLE FILLER

1. WATER HEATER TO HAVE FULL SIZE T&P VALVE AND RELIEF LINE PIPED TO FLOOR DRAIN. 2. PROVIDE 2.1 GALLON CAPACITY EXPANSION TANK

THERMOSTATIC MIXING VALVE SCHEDULE								
DESIGNATION	MANUFACTURER	MODEL NUMBER	MIN FLOW	INLET SIZE	OUTLET SIZE	MAX FLOW @ 5 PSI	OUTLET TEMP	NOTES
TMV	WATTS	LFMMV-M1	0, 5	3/4	3/4	8 GPM	110° F.	1, 2, 3

NOTES:
1. THERMOSTATIC MIXING VALVES INSTALLED ON DOMESTIC COLD AND HOT WATER SUPPLY PIPING

SHALL BE LEAD-FREE AND BE ASSE 1017, 1070 CERTIFIED.

2"

2. THERMOSTATIC MIXING VALVE SHALL BE INSTALLED RECESSED IN WALL BEHIND A STAINLESS STEEL ACCESS PANEL WITH A HINGED VANDAL-PROOF LOCKING COVER.

3. PROVIDE SHUTOFF VALVES UPSTREAM AND DOWNSTREAM OF THERMOSTATIC MIXING VALVE FOR EASE OF INSPECTION, MAINTENANCE, REMOVAL AND REPLACEMENT

WATER HAMMER ARRESTOR (SA-X)							
SIZE	FIXTURE UNITS SERVED	AIR PRELOAD PSI	CROSS REFERENCE PDI STANDARD				
<sup>1</sup> ⁄2″	1-11	60	" A"				
3/4	12-32	60	" B"				
1"	33-60	60	" C"				
11/4"	61-113	60	" D"				
1 <sup>1</sup> /2″	114-154	60	" E"				
2"	155-330	60	"F"				

\*\* REFER TO MANUFACTURER FOR EXACT SIZE AND INSTALLATION RECOMMENDATIONS.

Project: 2402

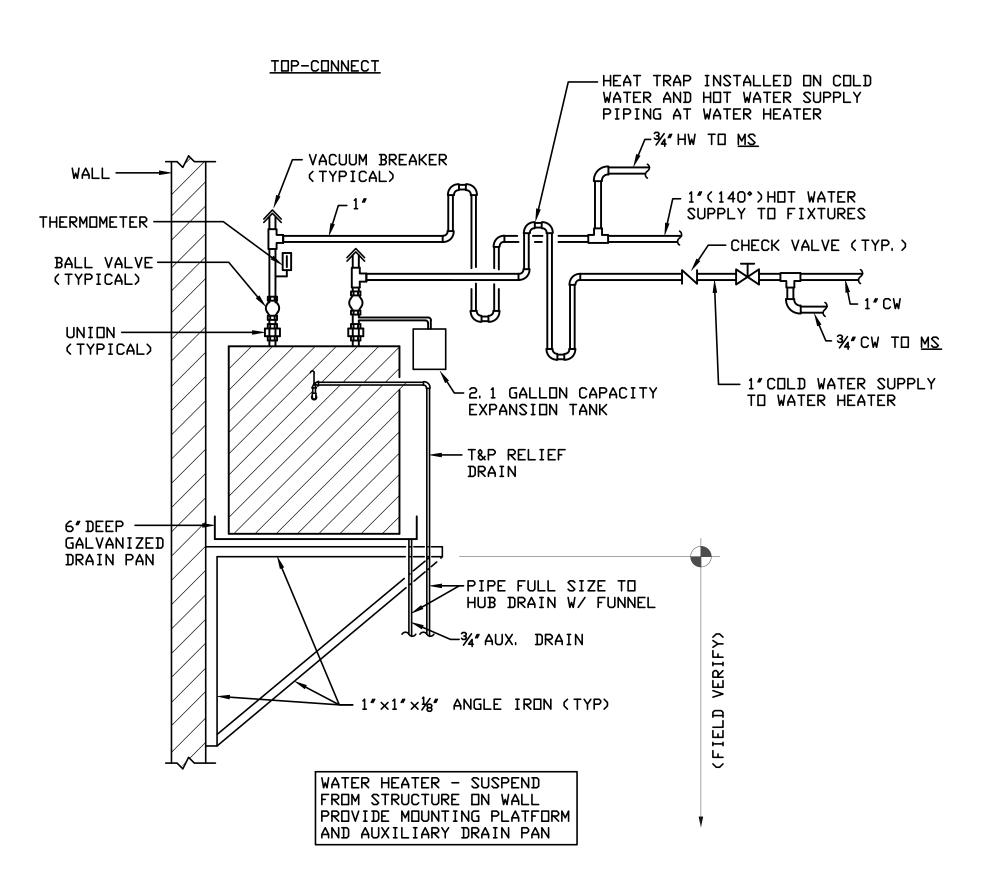
Revisions:

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New Administration Building
CROSS CATHOLIC CHURCH
ng Star Drive / The Colony, Texas 75056 / 817-625-5252

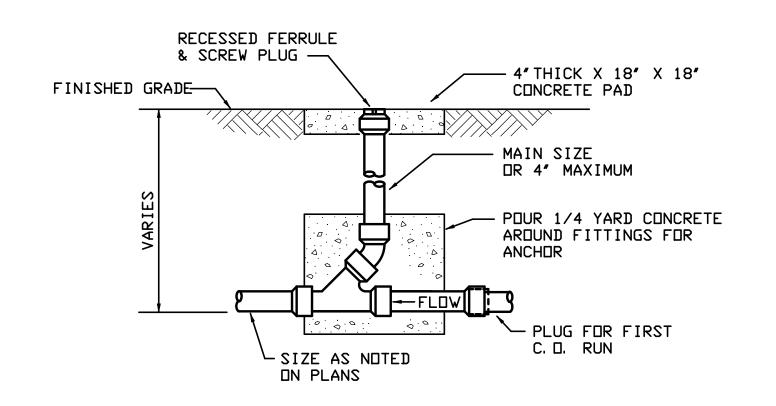
Project: 2402 Date: 02/12/2025

DD\_P3.2 5 of 5P Sheets



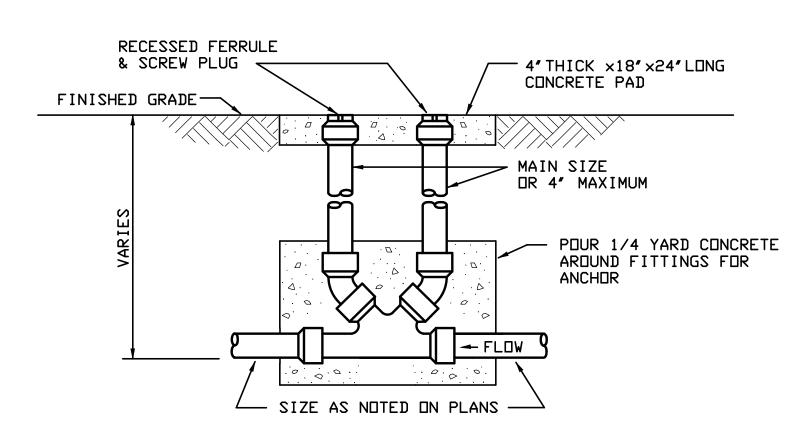
REFER TO THE MANUFACTURER'S RECOMMENDATIONS AND COMMERCIAL INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING ANY NEW WORK. ALL WORK MUST MEET OR EXCEED THE CODE REQUIREMENTS GOVERNED BY THE LOCAL CODE AUTHORITY HAVING JURISDICTION OVER PLUMBING CODES.

### ELECTRIC WATER HEATER MOUNTED ON WALL RACK ABOVE MOP SINK NO SCALE



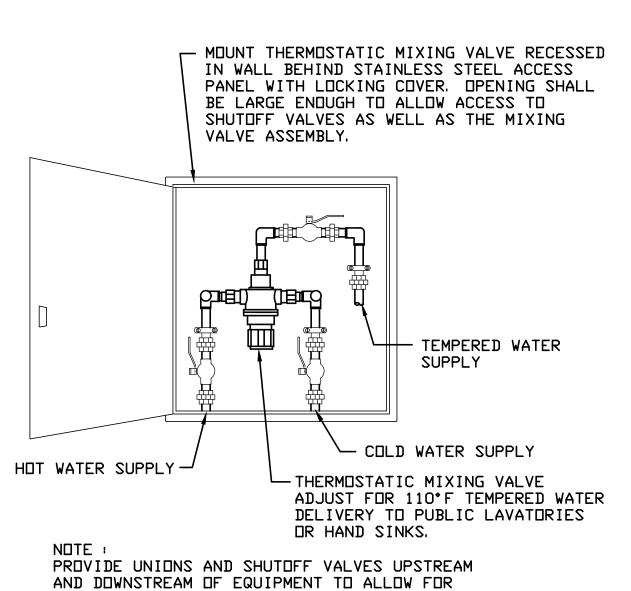
## GRADE CLEANOUT DETAIL

NO SCALE



DOUBLE GRADE CLEANOUT DETAIL

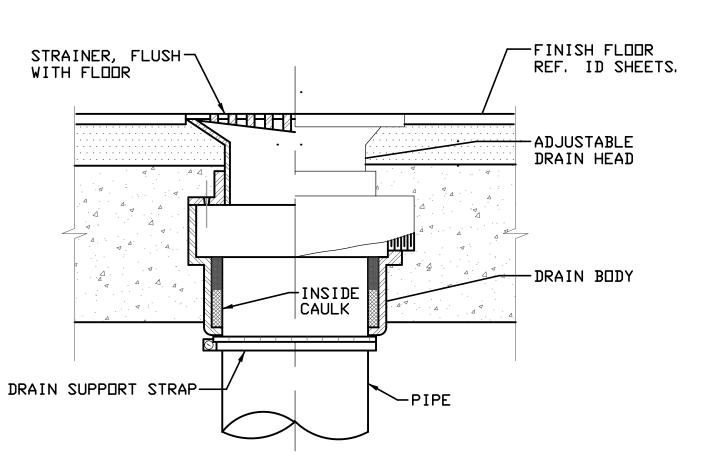
NO SCALE



THERMOSTATIC MIXING VALVE RECESSED IN WALL BEHIND STAINLESS STEEL PANEL W/ LOCKING COVER

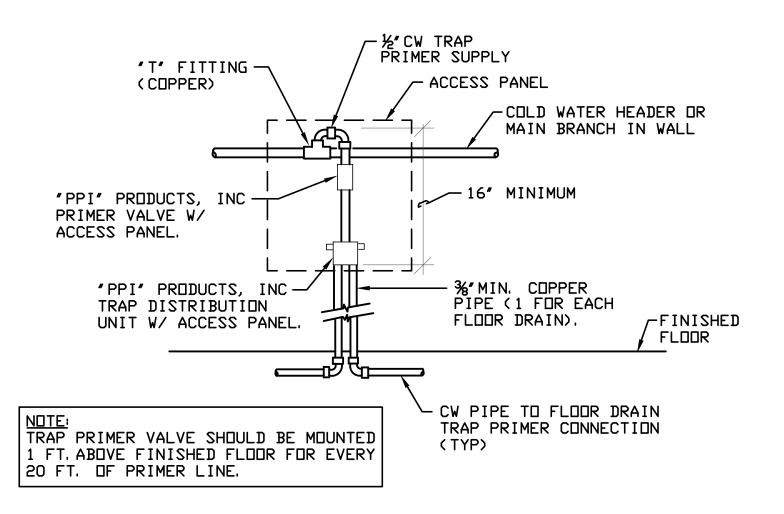
EASE OF MAINTENANCE, REMOVAL OR REPLACEMENT.

NO SCALE



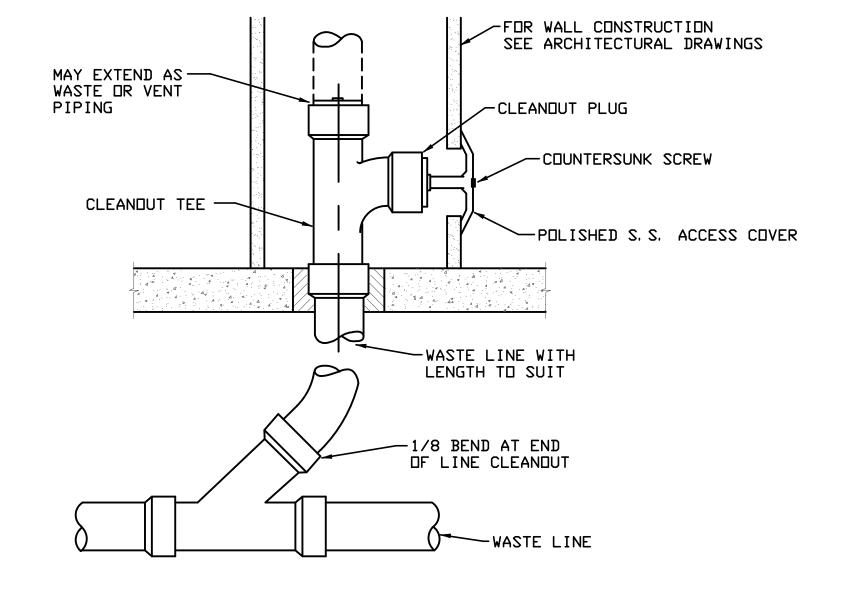
FLOOR DRAIN DETAIL

NO SCALE



TRAP SEAL PRIMER DETAIL

NO SCALE



WALL CLEANOUT DETAIL

NO SCALE