

LEXINGTON PLANTATION POOL

HARNETT COUNTY, NORTH CAROLINA



Draper Aden Associates
Engineering • Surveying • Environmental Services

114 Edinburg South Drive, Suite 200
Cary, NC 27511
919-473-1060 Fax: 919-473-1074
NC Firm License # F-1429

• Hampton Roads, VA
 • Fayetteville, NC
 • Northern Virginia
 • Virginia Beach, VA
 • Richmond, VA
 • Blacksburg, VA
 • Charlottesville, VA

COVER
LEXINGTON PLANTATION POOL
HARNETT COUNTY, NC

| |
|----------------------------|
| REVISIONS |
| DESIGNED BY: |
| DRAWN BY: |
| CHECKED BY: |
| SCALE: NONE |
| DATE: 4.26.22 |
| PROJECT NUMBER: 2101033-01 |
| C1.0 |

PARCEL DATA
OWNER/DEVELOPER: VOLA, LLC
PO BOX 1328
CARY, NC 27512

ZONING: RA-20R
SETBACKS:

30' - FRONT SETBACK - IF STREET R/W IS 60' OR MORE
35' - FRONT SETBACK - IF STREET R/W IS LESS THAN 60'
25' - REAR SETBACK
20' - CORNER SETBACK
10' / 5' SIDE SETBACK

PIN: 9594-09-9184

DEED REFERENCE: BOOK 2948, PAGE 429

FLOOD PLAIN INFO:
ZONE: X
MAP NUMBER: 3710958400J
EFFECTIVE DATE: OCT 3, 2006
PARCEL AREA: 3.61 ACRES
LAND USE CLASS: COMPACT MIXED USE/LDR

PARKING: 44 STANDARD & 4 HANDICAP = 48 TOTAL
SWIMMING: 1/15 sf OF POOL, 1200SF - 80 SWIMMERS MAX
EST. WATER/SEWER USAGE: 10 GAL/DAY/SWIMMER - 800 GAL/DAY

- NOTES:**
- PARKING AREAS, DRIVE AISLES, ACCESS ROADS WILL HAVE AN ASPHALT OR CONCRETE SURFACE.
 - PARKING AREAS AND DRIVE AISLES ARE REQUIRED TO BE SCREENED/LANDSCAPED.
 - PROPOSED DISTURBED AREA IS UNDER ONE ACRE - NO EROSION CONTROL PLAN IS REQUIRED PER NCDEQ
 - PROPERTY OWNER IS TO BE RESPONSIBLE FOR MAINTAINING PARKING AREAS, LANDSCAPING AND ALL OTHER SITE APURTENANCES
 - THIS DEVELOPMENT IS WITHIN THE FIVE MILE MILITARY CORRIDOR OVERLAY ZONE, AND MAY BE SUBJECT TO MILITARY TRAINING ACTIVITIES.
 - OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PARKING AREAS, DRIVE AISLES, AND ALL LANDSCAPE BUFFERING.
 - LANDSCAPE BUFFERING SHALL BE IN ACCORDANCE WITH THE HARNETT COUNTY ZONING ORDINANCE.
 - PROJECT WILL BE SERVED BY HRW FOR WATER AND SEWER.
 - THE WATER AND SEWER TAPS WILL BE INSTALLED BY PRIVATE UTILITY CONTRACTOR.
 - PROPERTY IS NOT IN A WATERSHED DISTRICT.

BUFFER REQUIREMENTS
ALL BUFFER TYPES SHALL INCLUDE:

1. A STAGGERED ROW OF LARGE MATURING TREES SPACED NOT MORE THAN 30 FEET APART, AND
2. LOW GROWING EVERGREEN SHRUBS, EVERGREEN GROUND COVER, OR MULCH COVERING THE BALANCE OF THE BUFFER AREA.

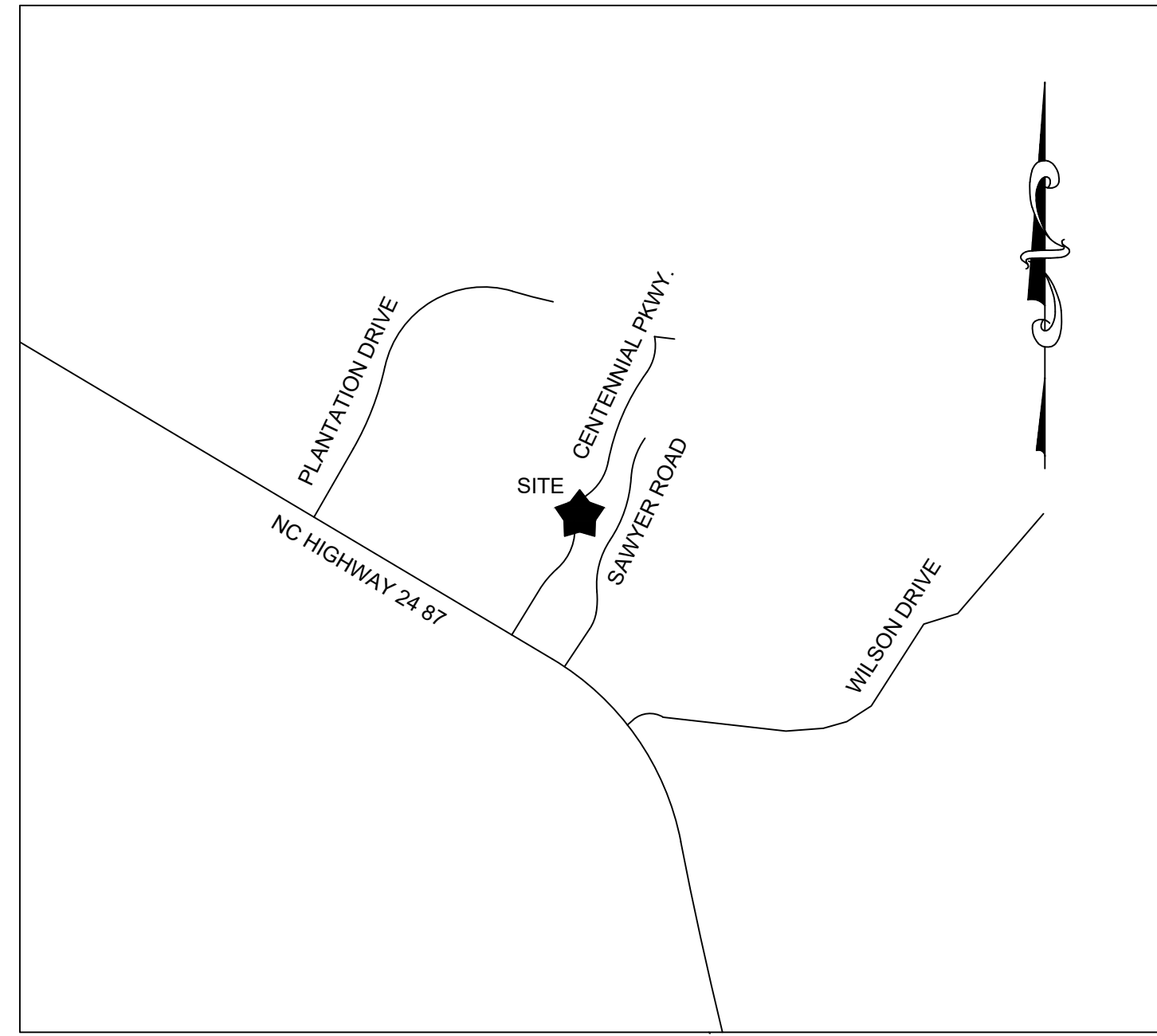
TYPE "A" - (MINIMUM WIDTH OF 15 FEET)
OPTION 1: A ROW OF EVERGREEN SHRUBS PLACED NOT MORE THAN FOUR(4) TO SIX(6) FEET APART WHICH WILL GROW TO FORM A CONTINUOUS HEDGE OF AT LEAST SIX(6) FEET IN HEIGHT WITHIN TWO(2) YEARS OF PLANTING; OR

OPTION 2: A MASONRY WALL LOCATED WITHIN THE REQUIRED BUFFER AREA; SUCH WALL SHALL BE A MINIMUM HEIGHT OF SIX(B) FEET (ABOVE FINISHED GRADE); AND, IF A BLOCK WALL, IT SHALL BE PAINTED ON ALL SIDES; OR AN OPAQUE FENCE SIX(6) FEET IT HEIGHT.

OPTION 3: A BERM MEETING THE REQUIREMENTS OF HARNETT COUNTY UDO

TYPE "D" - (MINIMUM WIDTH OF 15 FEET)
OPTION 1: A ROW OF EVERGREEN SHRUBS, 10 SHRUBS FOR EVERY REQUIRED LARGE MATURING TREE, PLACED NOT MORE FOUR(4) FEET APART WHICH WILL ROW TO FORM A CONTINUOUS HEDGE OF AT LEAST SIX (6) FEET IN HEIGHT WITHIN TWO(2) YEARS OF PLANTING; OR

OPTION 2: AN OPAQUE FENCE LOCATED WITHIN THE REQUIRED BUFFER AREA; SUCH FENCE SHALL BE A MINIMUM HEIGHT IF SIX(B) FEET IN HEIGHT.



VICINITY MAP
NOT TO SCALE

| Sheet List Table | |
|------------------|---------------------------------------|
| Sheet Number | Sheet Title |
| C1.0 | COVER |
| C2.0 | GENERAL NOTES |
| C2.1 | ESC NOTES |
| C2.2 | HRW NOTES |
| C3.0 | EXISTING CONDITIONS, DEMO, & ESC PLAN |
| C4.0 | SITE & UTILITY PLAN |
| C5.0 | GRADING PLAN |
| C6.0 | ESC & SITE DETAILS |
| C7.0 | HRW DETAILS |

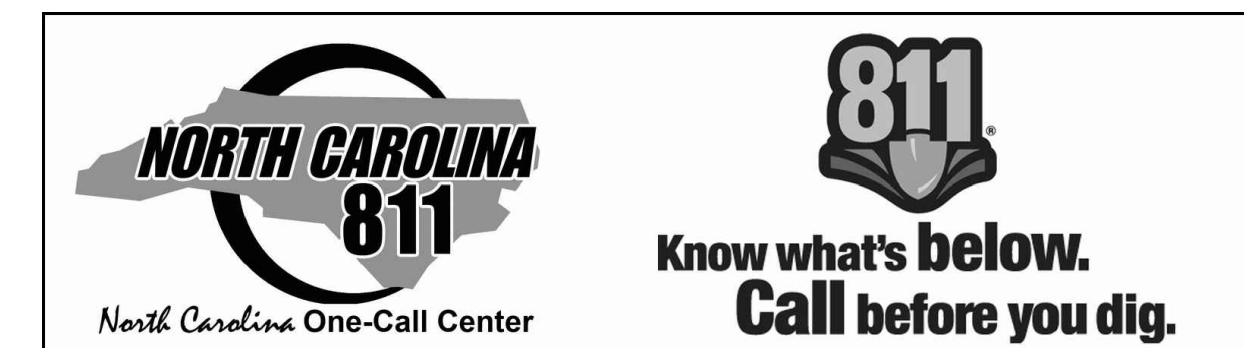
DRAPER ADEN ASSOCIATES REVIEW

THESE PLANS HAVE BEEN SUBJECTED TO TECHNICAL AND QUALITY REVIEWS BY:

NAME: _____ 01.??,2022
PROJECT DESIGNER SIGNATURE DATE

NAME: _____ 01.??,2022
PROJECT MANAGER SIGNATURE DATE

NAME: _____ 01.??,2022
QUALITY REVIEWER SIGNATURE DATE



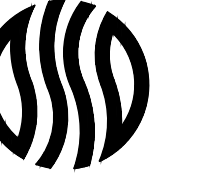
AS THE OWNER OF RECORD, I HEREBY FORMALLY CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON THIS SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES

DATE _____ OWNER SIGNATURE _____



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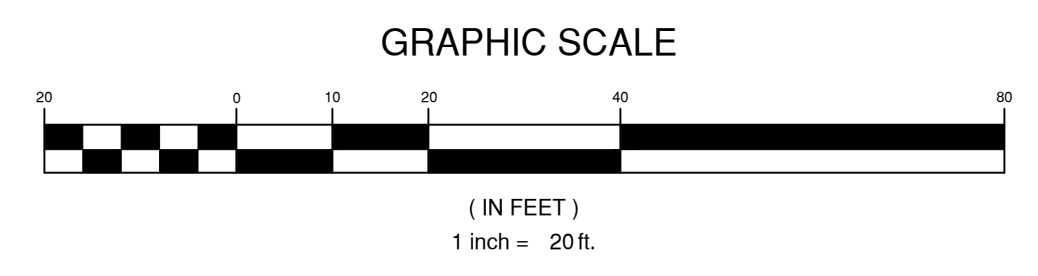
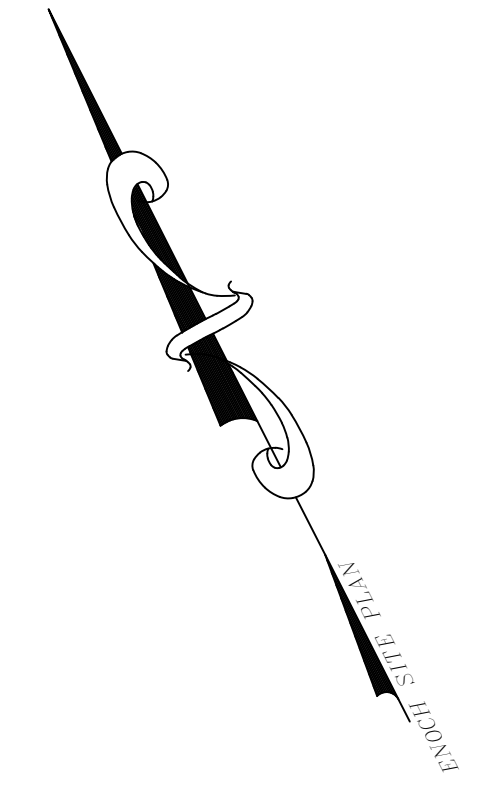
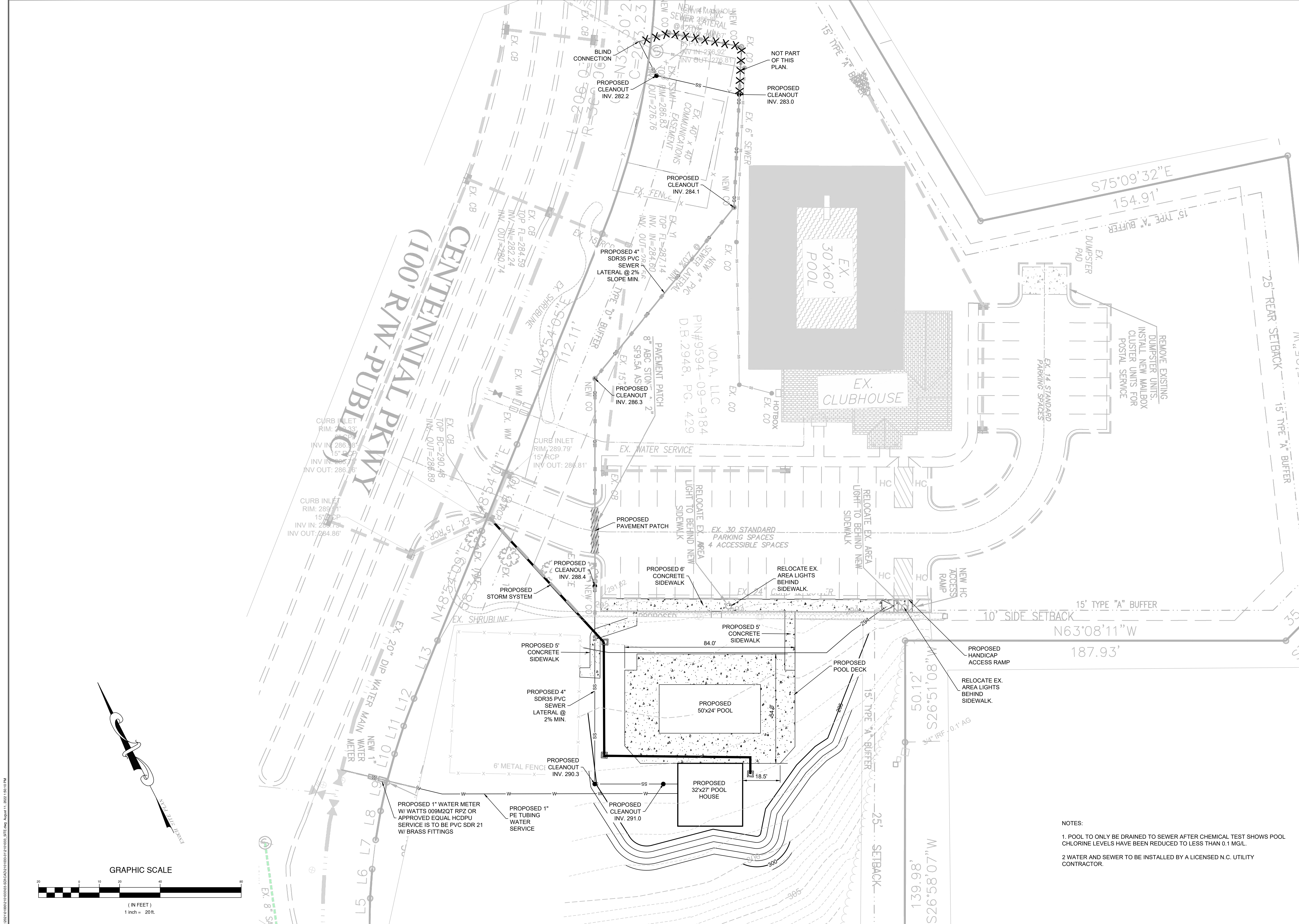
- Hampton Roads, VA
- Fayetteville, NC
- Northern Virginia
- Virginia Beach, VA
- Richmond, VA
- Blacksburg, VA
- Charlottesville, VA



SITE & UTILITY PLAN
LEXINGTON PLANTATION POOL
 HARNETT COUNTY, NC

| REVISIONS | |
|-----------------|------------|
| DESIGNED BY: | APM |
| DRAWN BY: | APM |
| CHECKED BY: | APM |
| SCALE: | 1" = 20' |
| DATE: | 4.26.22 |
| PROJECT NUMBER: | 2101033-01 |
| C4.0 | |

- NOTES:**
1. POOL TO ONLY BE DRAINED TO SEWER AFTER CHEMICAL TEST SHOWS POOL CHLORINE LEVELS HAVE BEEN REDUCED TO LESS THAN 0.1 MG/L.
 2. WATER AND SEWER TO BE INSTALLED BY A LICENSED N.C. UTILITY CONTRACTOR.

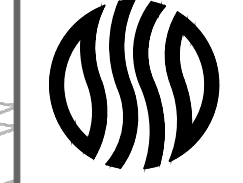


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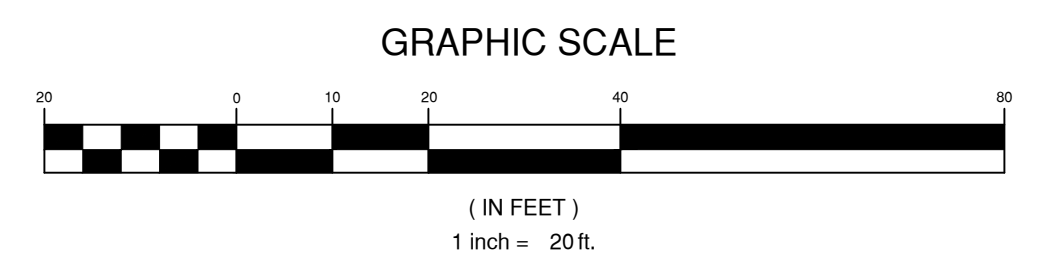
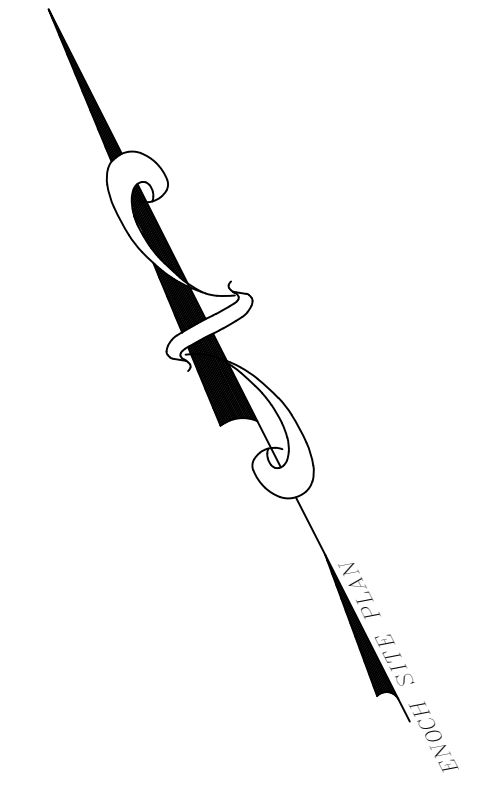
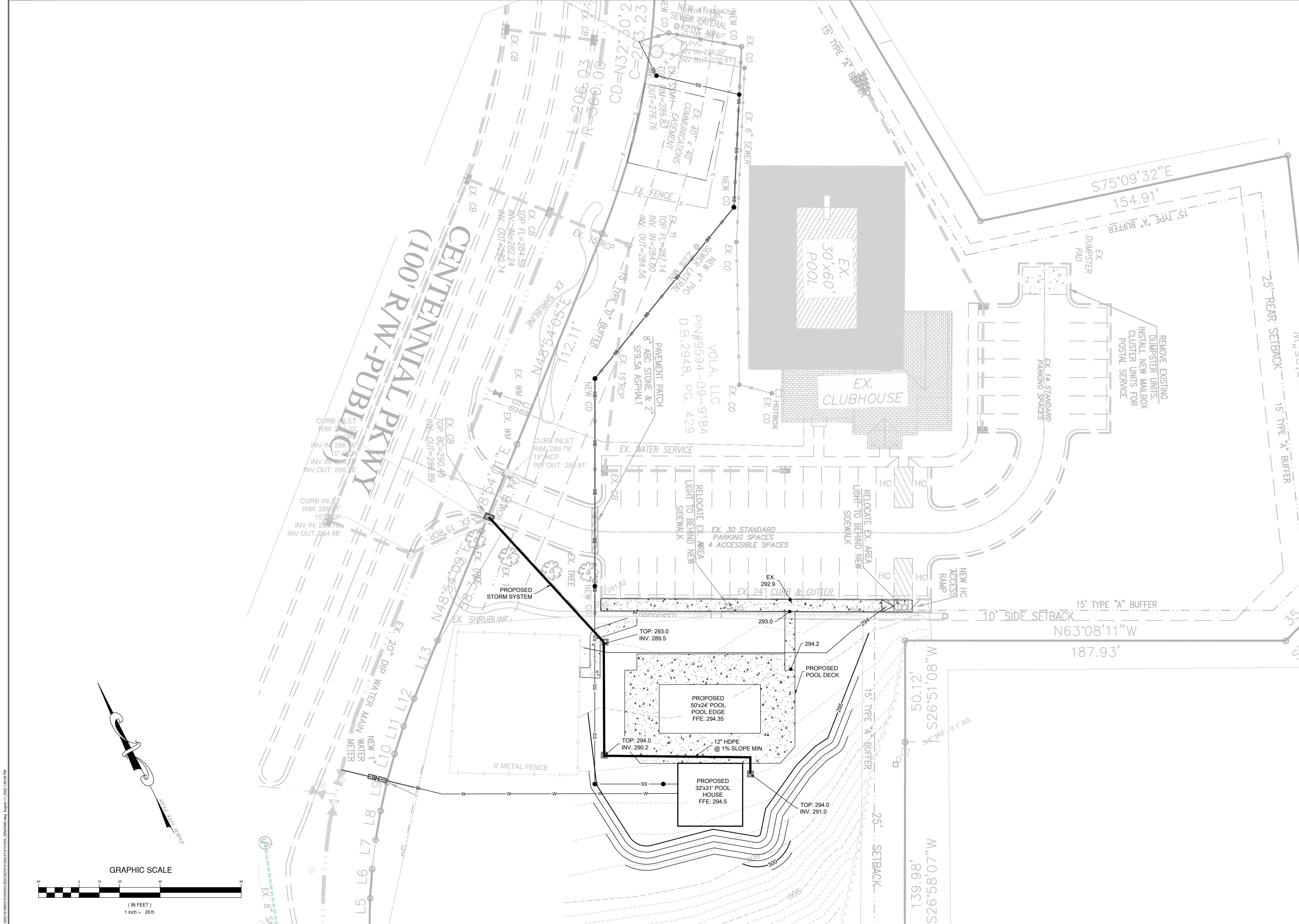
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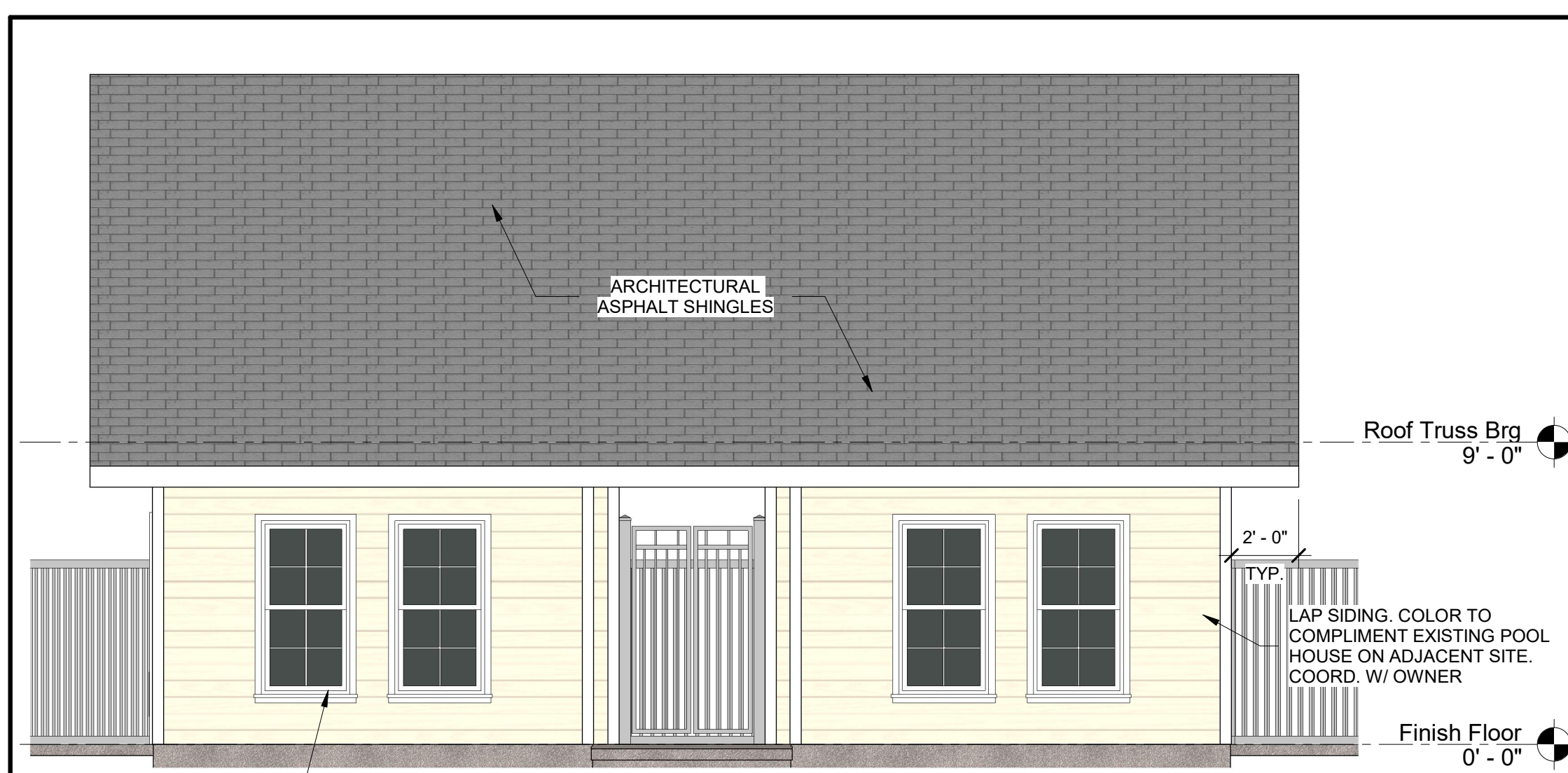


GRADING PLAN
LEXINGTON PLANTATION POOL
 HARNETT COUNTY, NC

| REVISIONS | |
|-----------------|------------|
| DESIGNED BY: | APM |
| DRAWN BY: | APM |
| CHECKED BY: | APM |
| SCALE: | 1" = 20' |
| DATE: | 4.26.22 |
| PROJECT NUMBER: | 2101033-01 |
| C5.0 | |

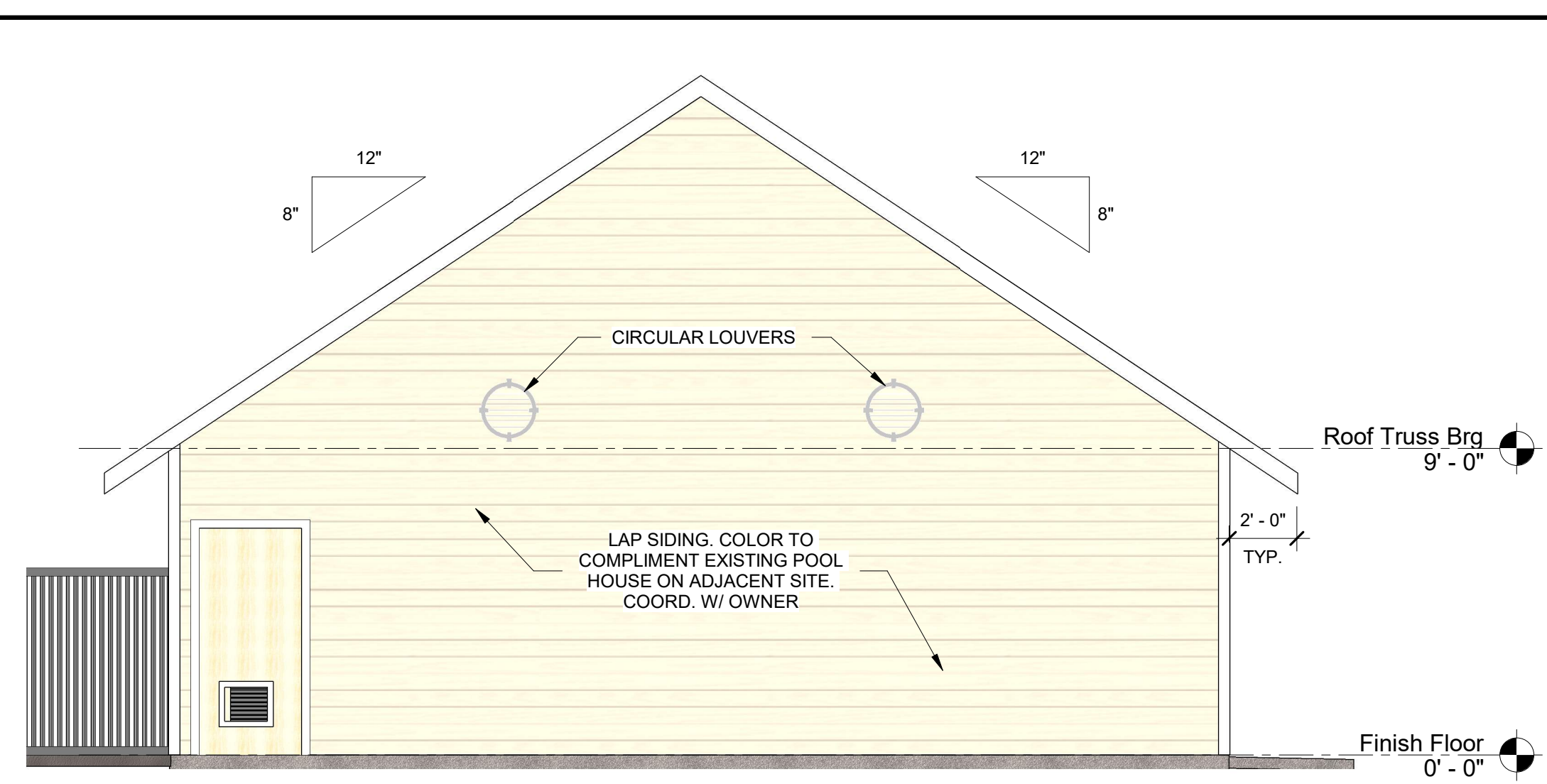


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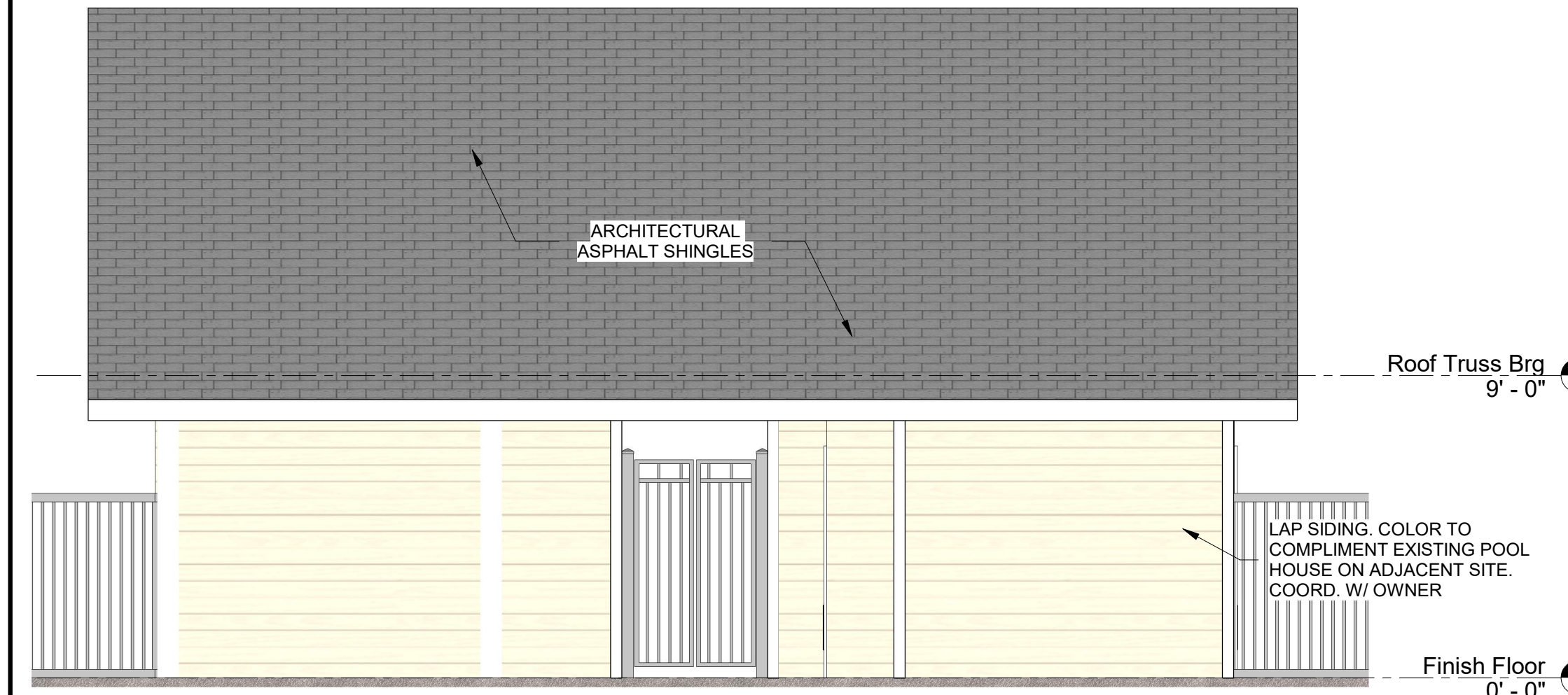
FRONT ELEVATION

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



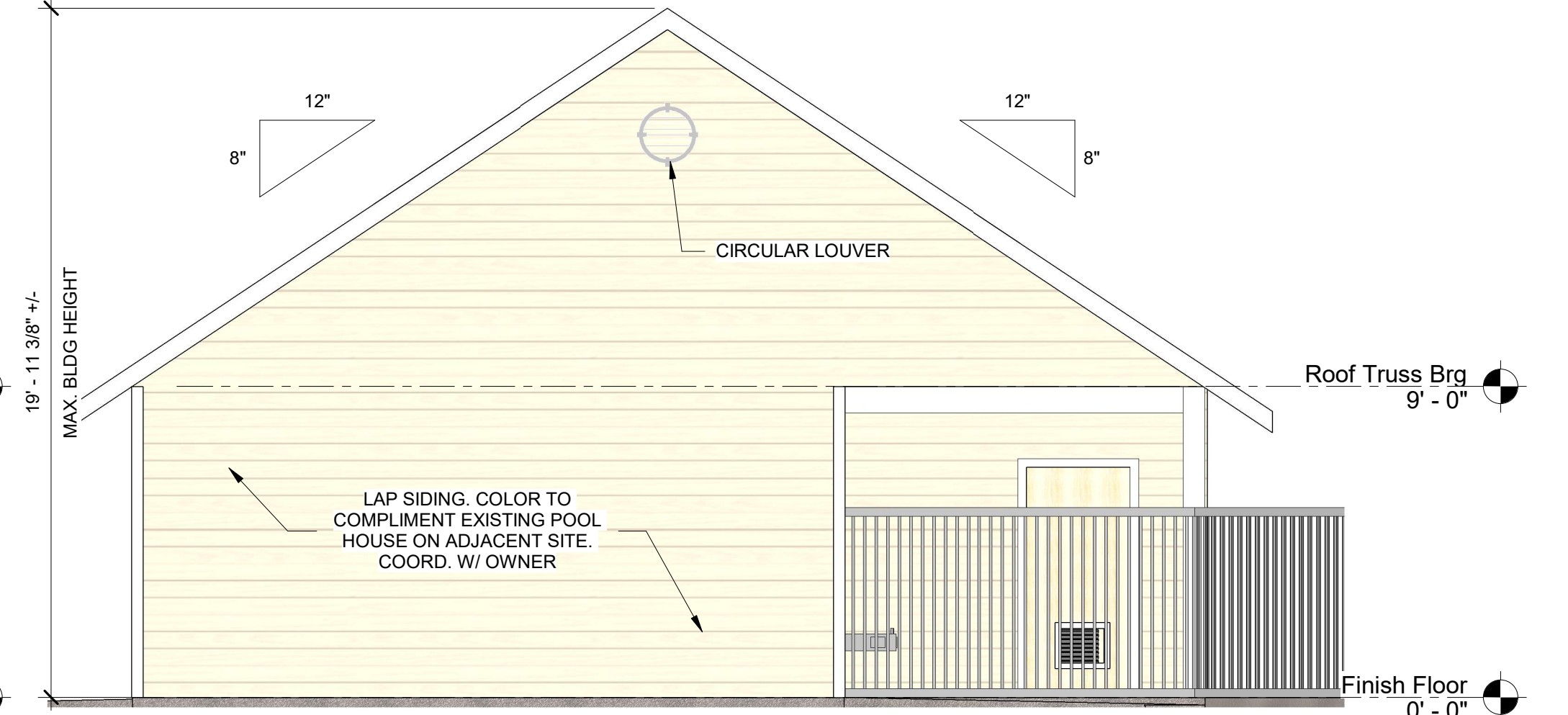
LEFT ELEVATION

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



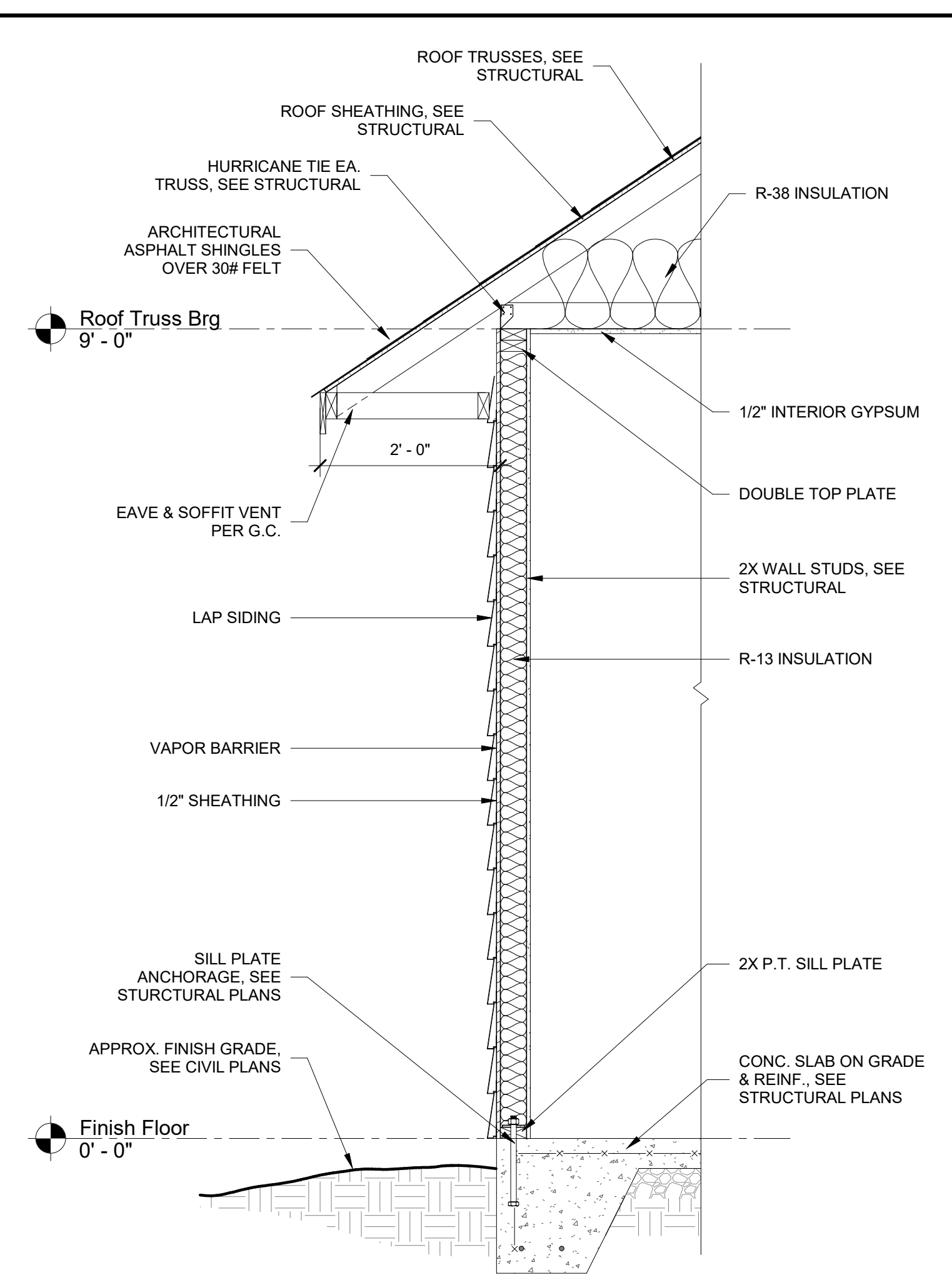
REAR ELEVATION

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



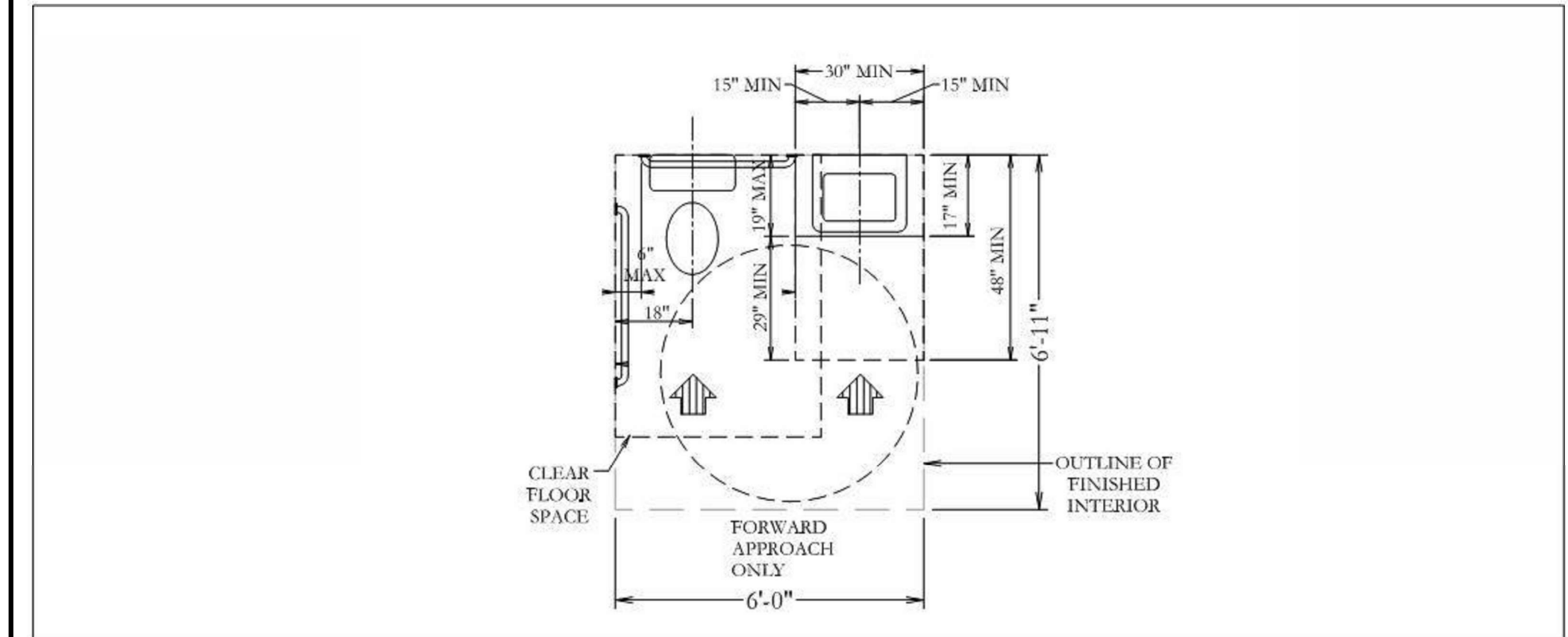
RIGHT ELEVATION

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

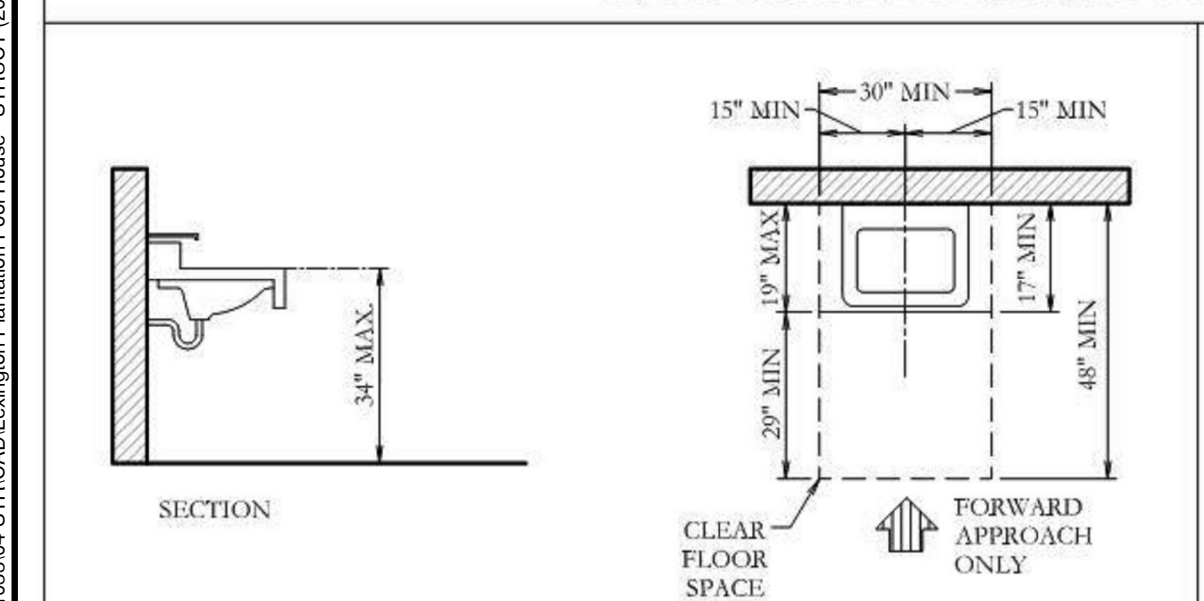


TYP. WALL SECTION

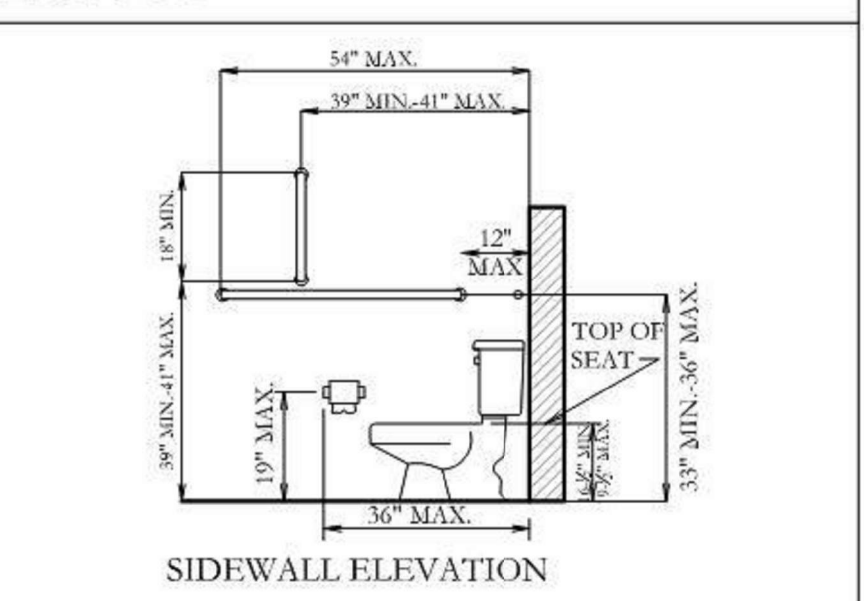
SCALE: 3/4" = 1'-0"



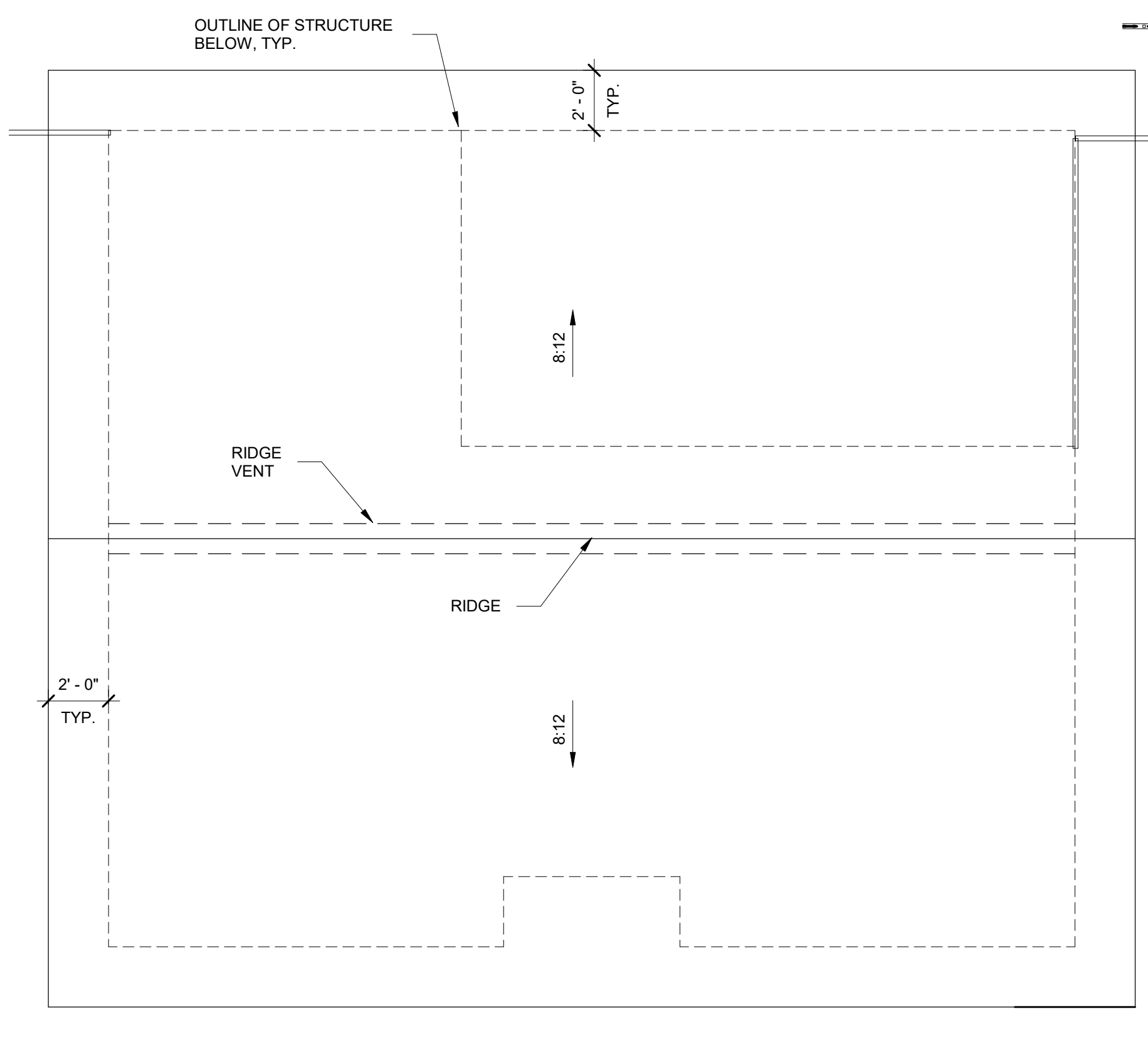
ACCESSIBLE BATHROOM LAYOUT



SINKS

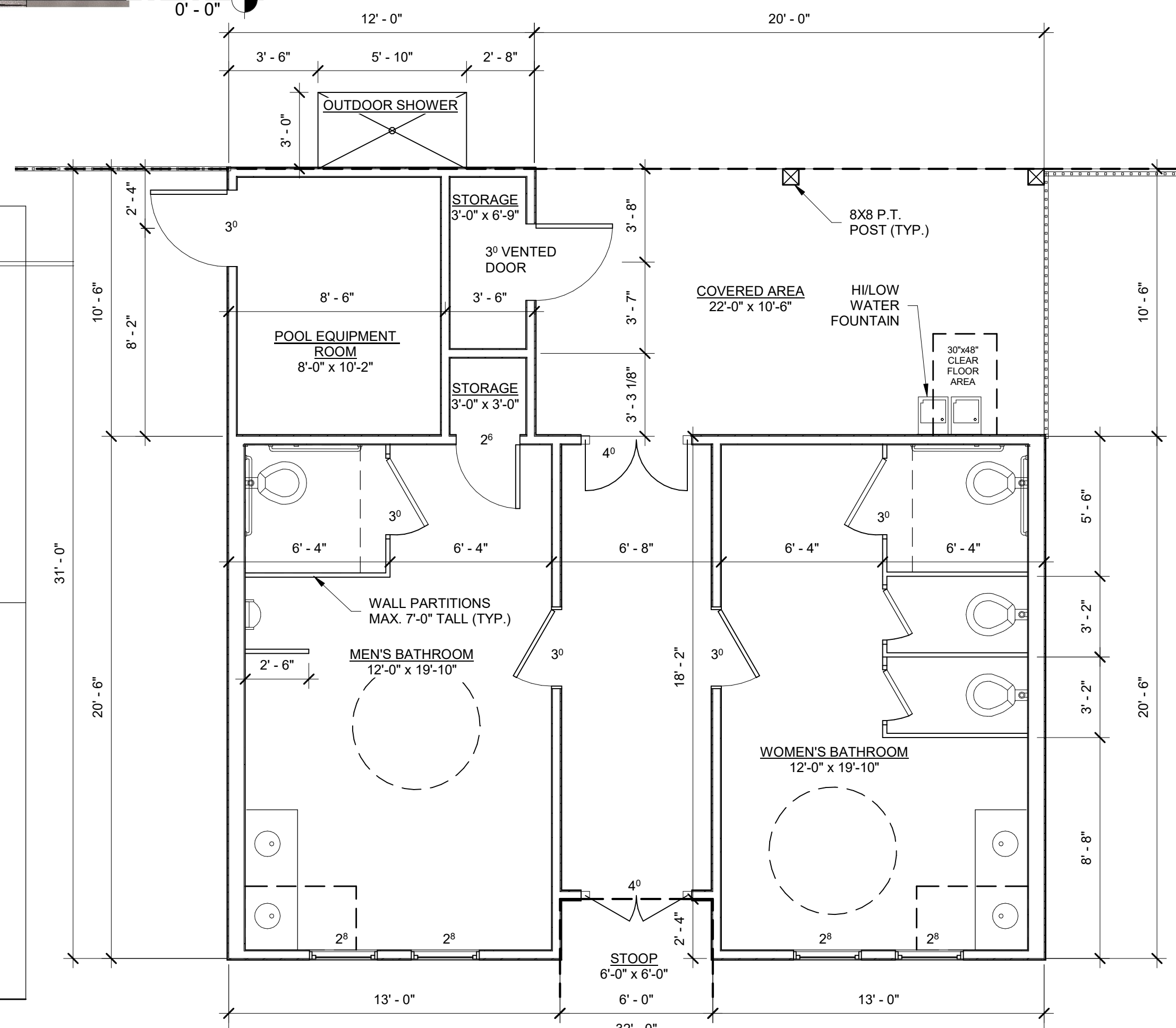


TOILET ACCESSORIES



ROOF PLAN

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



FLOOR PLAN

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

NOTE: ALL DIMENSIONS TO EXTERIOR WALLS ARE TO OUTSIDE FACE OF STUD, TYP.

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 NC Firm License # F-1423

ELEVATIONS & FLOOR PLAN

Lexington Plantation Pool House

400 Centennial Parkway Cameron, NC 28326

| REVISIONS | | |
|-----------|-------------|------|
| NO. | DESCRIPTION | DATE |
| | | |
| | | |

DESIGNED BY: CGH
 DRAWN BY: CGH
 CHECKED BY: AC
 SCALE: As indicated
 DATE: 8/11/22
 PROJECT NUMBER: 2101033

A1.0

P:\2021\10\2021\10\1033\04\STR\CADD\Lexington Plantation Pool House - STRUCT (2023).dwt



ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE AS WELL AS ALL LOCAL AND OTHER APPLICABLE CODES.

ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN.

WATER LINES BELOW GRADE SHALL BE TYPE "K" COPPER (NO JOINTS BELOW GRADE) AND ABOVE GRADE TYPE "L" COPPER SUPPORTED AS REQUIRED AND SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS AT 100 PSI. ALL WATER PIPING AT WATER FIXTURES SHALL BE PROVIDED WITH 18" AIR CHAMBERS OR SHOCK ABSORBERS. STOPS SHALL BE PROVIDED ON HOT AND COLD WATER LINES. HOT WATER PIPING SHALL BE INSULATED WITH 1" CLOSED CELL RUBBER. THE ENTIRE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE. PVC/PEX MAYBE SUBSTITUTED FOR COPPER.

SANITARY SEWER LINES SHALL BE PVC.

PROVIDE PRESSURE REDUCING VALVE IF STREET WATER EXCEEDS 80 PSI.

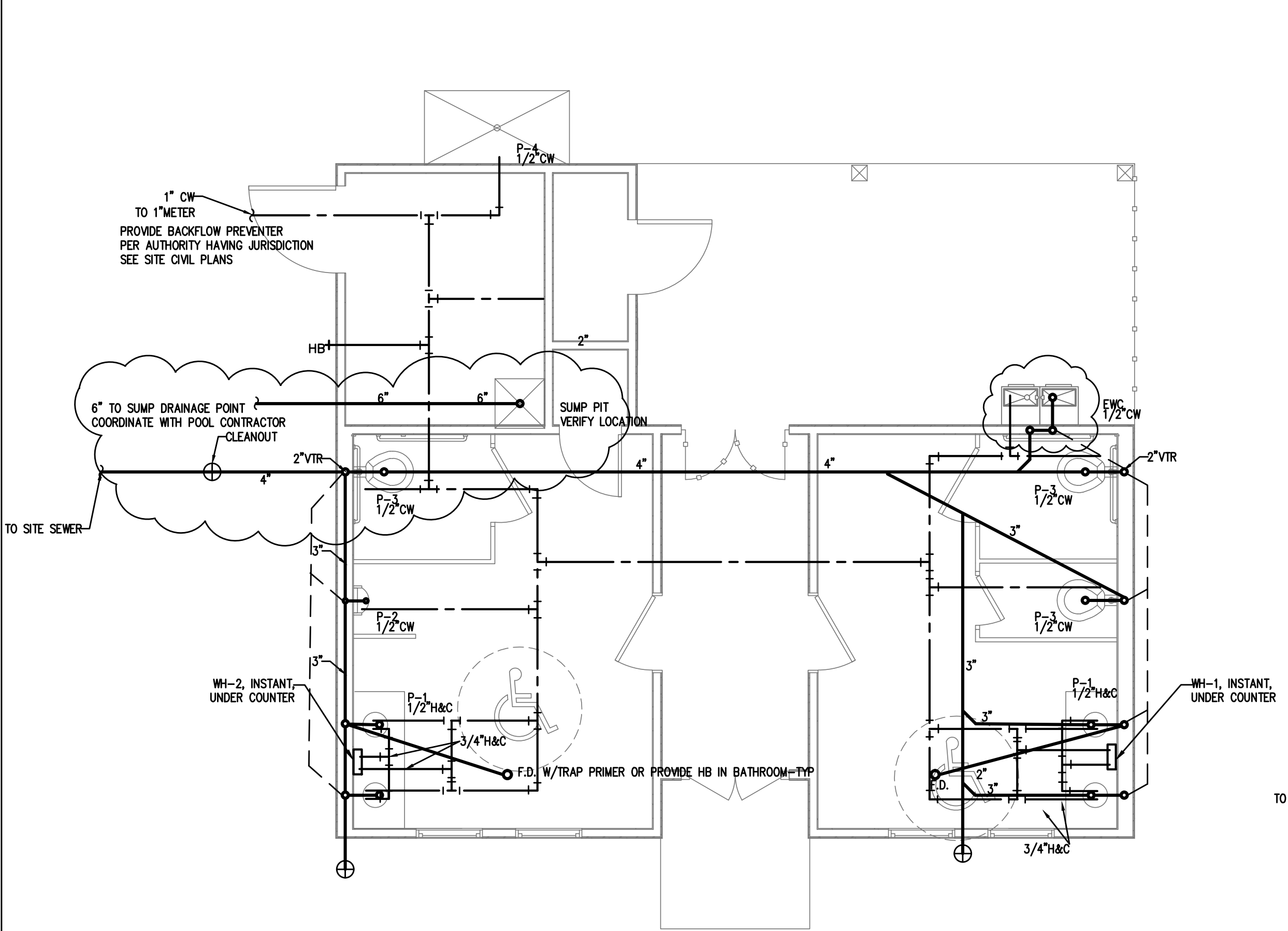
GAS PIPING WILL BE SCHEDULE 40 BLACK STEEL WITH BLACK MALLEABLE IRON SCREW-TYPE FITTINGS.

THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE PLUMBING WORK AND SHALL INSTALL FIRE RATED SLEEVES WHEREVER PENETRATIONS OF RATED WALLS OR FLOORS ARE MADE. THE PATCHING SHALL BE BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS AND ARCHITECTURAL SITE PLANS FOR WORK BY OTHERS.

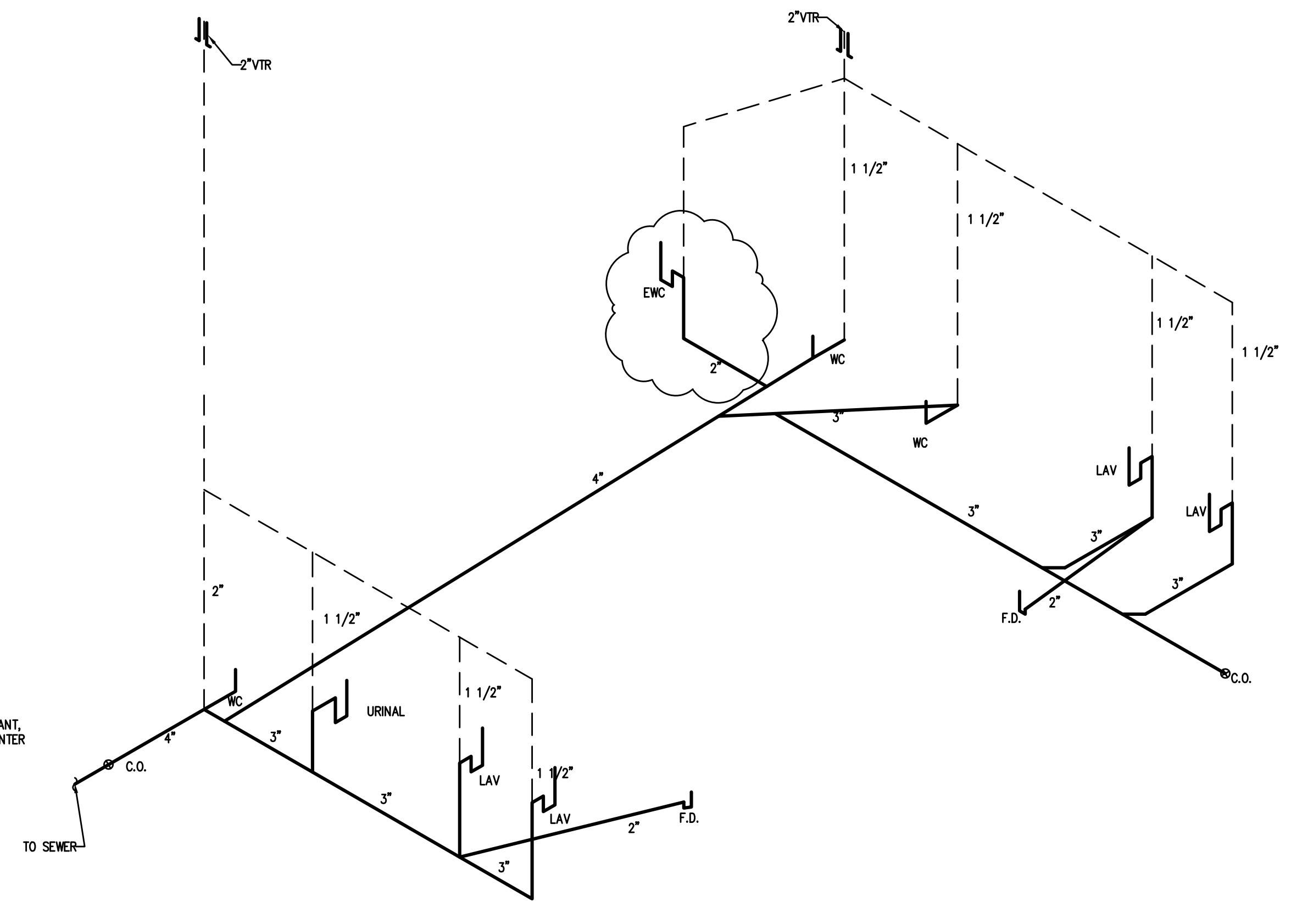
LOCATION OF UTILITIES (WASTE AND WATER LINES, MANHOLES ETC.) THAT ARE TO BE CONNECTED TO ARE ASSUMED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE LOCATIONS AND MAKE THE FINAL CONNECTION AS REQUIRED.

ALL FLOOR DRAINS SHALL BE PROVIDED WITH TRAP PRIMERS.

2 PLUMBING NOTES
N.T.S.

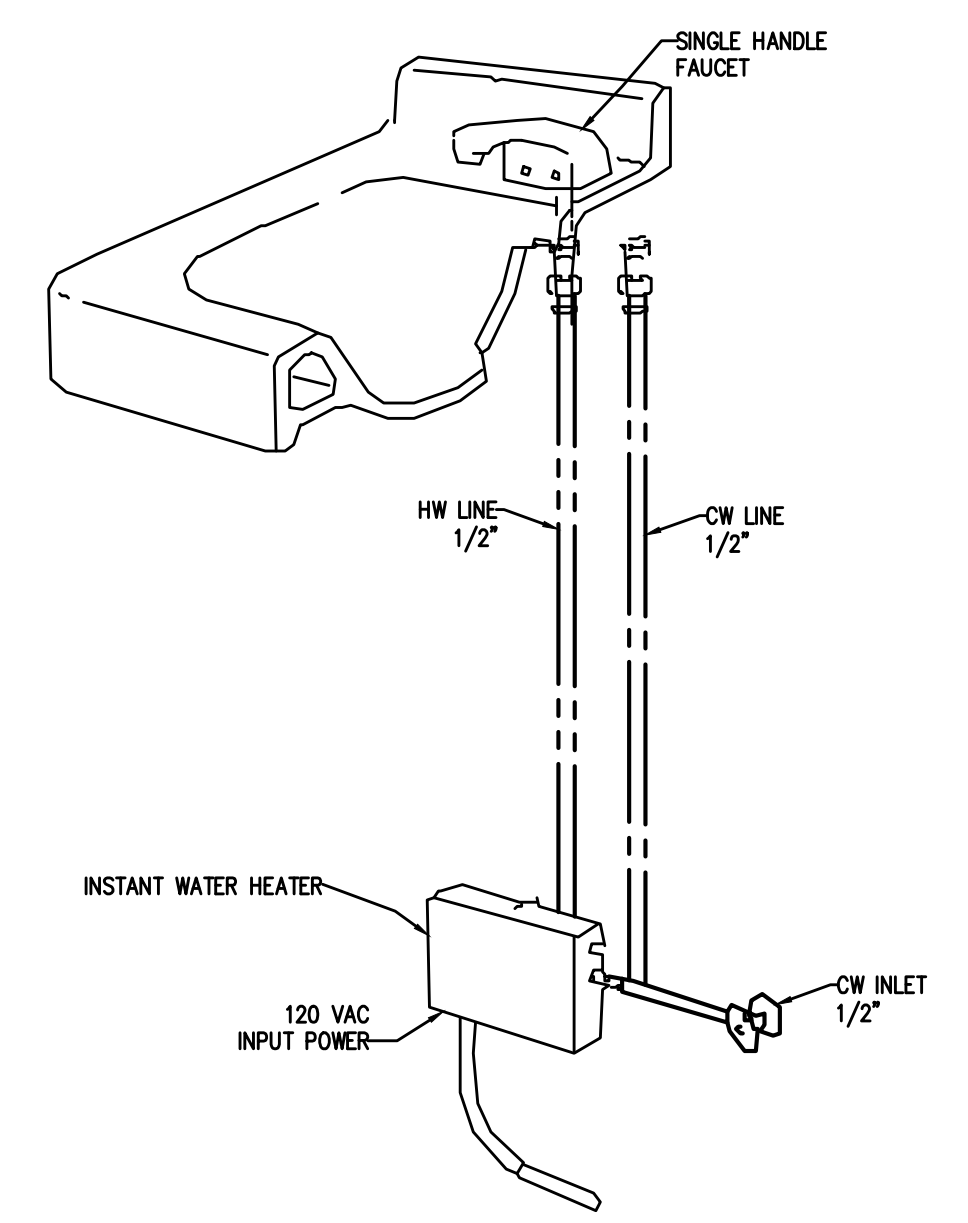


1 PLUMBING PLAN
1/4"=1'-0"



4 WASTE RISER
N.T.S.

| SYMBOL | MANUFACTURER | MODEL # | FIXTURE DESCRIPTION | ACCESSORIES | SUPPLY | WASTE | VENT | REMARKS |
|--------|---------------|---------------|--|---|----------------|-------|--------|---|
| P-1 | AMERICAN STD. | 0490.011 | OVAL LAVATORY, COUNTER TOP | DELTA 2507LF-HDF TWO HANDLE METERING FAUCET | 1/2" H.W./C.W. | 2" | 1-1/2" | PROVIDE TRUEBRO LAV GUARD 2 UNDERSINK PIPING COVERS |
| P-2 | AMERICAN STD. | 6541.132 | URINAL, WALL-TYPE | SLOAN ROYAL 186-1, FLUSH VALVE | 1/2" C.W. | 2" | 1-1/2" | |
| P-3 | AMERICAN STD. | 270AB.001.020 | WATER CLOSET (FLUSH TANK), FLOOR-TYPE ADA | PROVIDE COMPATIBLE TOILET SEAT | 1/2" H.W./C.W. | 3" | 1-1/2" | |
| P-4 | AQUAMASTER | PM-750 ADA | STAINLESS STEEL WALL MOUNTED POOL SHOWER W/ SLOW CLOSING PUSH BUTTON VALVE | | 1/2" C.W. | - | - | |
| WH-1,2 | EEMAX OR EQ. | SP2412 | TANKLESS WATER HEATER ELECTRIC, 120V, 10,2400W | - | 1/2" H.W./C.W. | - | - | |
| EWC | ELKAY | EZSTLBSC | WALL MOUNT BI-LEVEL ADA WATER COOLER | - | 1/2" H.W./C.W. | 2" | 1-1/2" | |



3 INSTANT WATER HEATER DETAIL
N.T.S.

Coastal Plains Engineering, P.A.
295 LOCKLEAR RD
P.O. Box 1117 28572
Walterboro, SC 29588
Voice: 810-321-7213
Fax: 810-321-7213
www.coastalplainseng.com
License No: C-2060

LEXINGTON PLANTATION POOL HOUSE
HARNETT COUNTY NC

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PROJECT NO: 2021-1068
DRAWN BY: JLD
DATE:
REVISIONS:

SHEET NO:
P1



ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 NC MECHANICAL CODE.
 ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL IN ACCORDANCE WITH ASHRAE & SMACNA. DUCT SIZES SHOWN ARE NET FREE AREA REQUIRED. ALL SUPPLY AND RETURN DUCTS AND FLEX SHALL BE INSULATED WITH MIN. R-6.0 INSULATION UNLESS OTHERWISE NOTED IN THE DRAWING.
 ALL EXPOSED ROUND DUCT SHALL BE DOUBLE WALL INSULATED, EXPOSED RECTANGULAR DUCT SHALL BE INTERNALLY LINED WITH INSULATION.
 ALL DUCTS SHALL BE AIR TIGHT, RIGID AND FREE FROM VIBRATION AND NOISE. ALL LAP JOINTS SHALL BE IN THE DIRECTION OF FLOW. VOLUME OR SPLITTER DAMPERS SHALL BE INSTALLED WHERE NECESSARY TO GUIDE AND CONTROL THE AIR FLOW. PROVIDE SHEET METAL SLEEVES AND COLLARS WHERE DUCTS PASS THROUGH WALLS.

STRUCTURAL MEMBERS OF THE BUILDING SHALL NOT BE CUT IN ANY MANNER FOR THE INSTALLATION OF ANY EQUIPMENT UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ARCHITECT.

MECHANICAL CONTRACTOR TO CONFIRM BREAKER/DISCONNECT SIZES OF HIS EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

FURNISH AND INSTALL A DUCT MOUNTED SMOKE DETECTOR IN THE RETURN DUCT OF THE A/C UNIT IN ACCORDANCE WITH 2018 NC MECHANICAL CODE. THE DETECTOR SHALL BE WIRED TO SHUT DOWN THE FAN IN THE EVENT THE DETECTOR IS ACTIVATED. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL THE DUCT DETECTOR AND RUN THE NECESSARY CONTROL WIRING FROM THE DETECTOR TO HIS EQUIPMENT. SMOKE DETECTORS ARE ONLY REQUIRED FOR UNITS SUPPLYING 2000 CFM OR MORE.

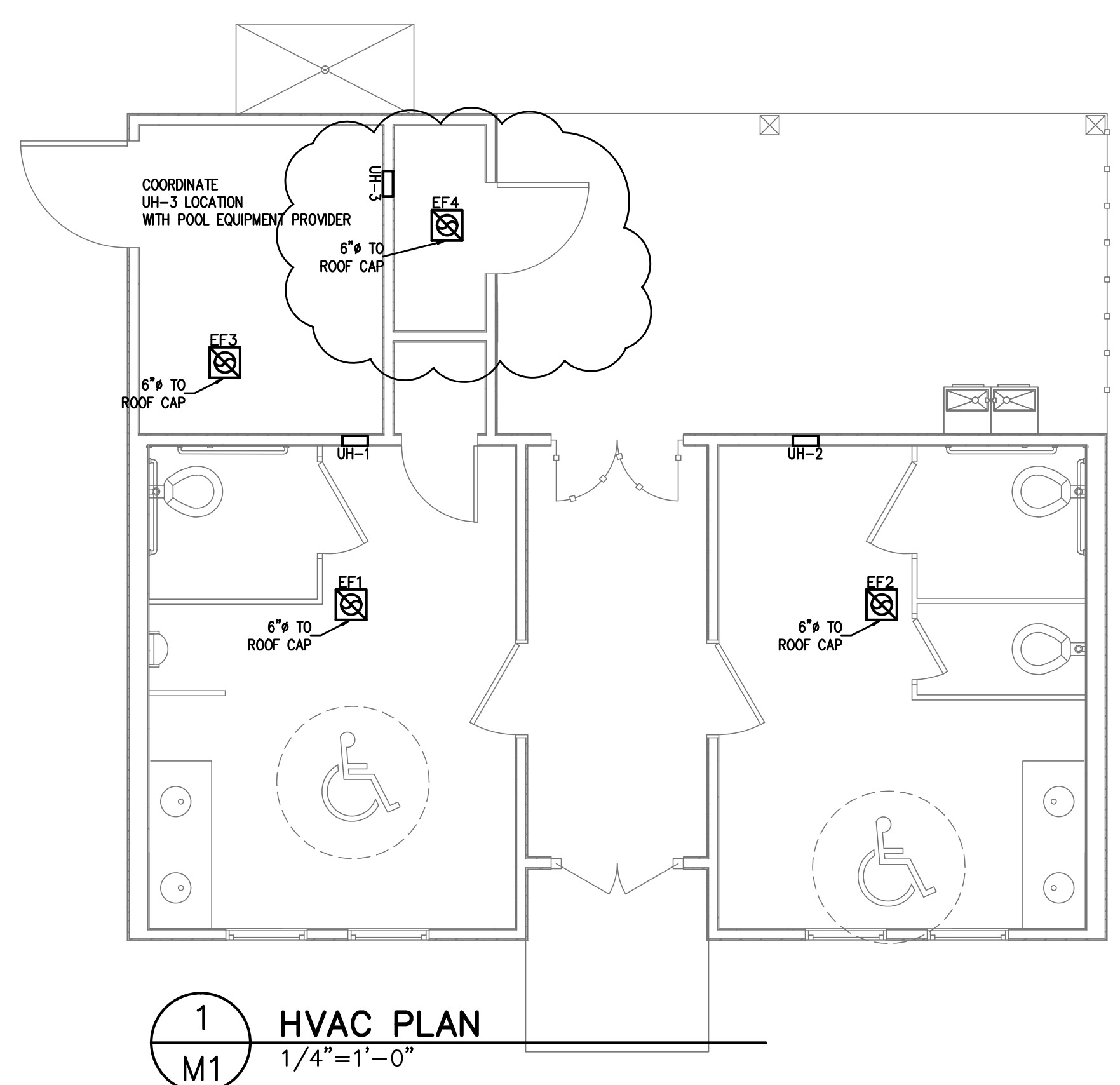
MECHANICAL CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT SYSTEM COMPLIANCE STATEMENT REQUIRES A WRITTEN TAB REPORT. FINAL PROJECT SIGNOFF WILL BE DENIED WITHOUT THIS REPORT.

MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND ROUTING OF ALL DUCTWORK WITH OTHER TRADES TO AVOID CONFLICTS.

ALL EQUIPMENT MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK OR IN ACCORDANCE WITH THE PARTICULAR MANUFACTURER'S STANDARD GUARANTEE IF LONGER. ANY FAULTY MATERIAL OR WORKMANSHIP OR FAILURE OF ANY PART OF THE SYSTEM DURING NORMAL OPERATIONS UNDER THIS GUARANTEE SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

ALL THERMOSTATS SHALL BE OF A PROGRAMMABLE TYPE.
 BUILDING CONTRACTOR SHALL PROVIDE PERMANENT ACCESS TO ROOF STRUCTURE FOR ACCESS TO MECHANICAL EQUIPMENT WHEN ROOF STRUCTURE IS GREATER THAN 16'-0" HIGH.

2 HVAC NOTES
 M1 N.T.S.



1 HVAC PLAN
 M1 1/4"=1'-0"

MECHANICAL DESIGN
 (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone 4A

winter dry bulb: 18°F
 summer dry bulb: 94°F

Interior design conditions

winter dry bulb: 75°F
 summer dry bulb: 75°F
 relative humidity: 50%

Building heating load: N/A

Building cooling load: N/A

Mechanical Spacing Conditioning System

Binary
 Description of unit: N/A
 heating efficiency: N/A
 cooling efficiency: N/A
 size category of units: N/A

Description of units: ELECTRIC UNIT HEATERS
 heating efficiency: N/A
 cooling efficiency: N/A
 size category of units: N/A

Boiler
 Size category. If oversized, state reason.: _____
 Chiller
 Size category. If oversized, state reason.: _____

List equipment efficiencies: 14.0 SEER

SIGNED: _____
 NAME: Christopher Locklear
 TITLE: Engineer

| FAN SCHEDULE | | | | | | | | | | |
|--------------|----------|-------------|-----|--------|-------|------|------|-------|--------|---|
| MARK | LOCATION | SERVICE | CFM | S.P. | WATTS | RPM | VOLT | PHASE | DRIVE | REMARKS |
| EF1 | CEILING | TOILETS | 140 | 0.125" | 185 | 980 | 120 | 1 | DIRECT | CEILING MOUNTED FAN. PROVIDE W/B.D.D. AND ROOF CAP GREENHECK SPB-150 OR EQ. 6" TO ROOF/WALL CAP |
| EF2 | | | | | | | | | | |
| EF3,4 | CEILING | POOL EQUIP. | 120 | .125" | 52.5 | 1100 | 120 | 1 | DIRECT | CEILING MOUNTED FAN. PROVIDE W/B.D.D. AND ROOF CAP GREENHECK SPA-125 OR EQ. 6" TO ROOF/WALL CAP |

OUTSIDE AIR CALCULATION -2018 NC MECHANICAL CODE (TABLE 403.3.1.1) $V_{bz} = R_p P_z + R_a A_z$

| OCCUPANCY TYPE: | | SF (Az) | # OF OCCUPANTS (Pz) | O.A. CFM PER PERSON (Rp) | O.A. CFM PER SqFt (Ra) | O.A. CFM REQUIRED (Vbz) | EXHAUST CFM REQUIRED |
|------------------------------|---------------------|---------|---------------------|--------------------------|------------------------|-------------------------|----------------------|
| ELECTRIC UNIT HEATERS | POOL EQUIPMENT ROOM | 61 | 0 | 0 | 0.12 | 7.32 | 81 |
| | STORAGE/CHEMICALS | 30 | 0 | 0 | 0.12 | 3.6 | 40 |
| | MENS RESTROOM | 190 | 0 | 0 | 0 | 0 | 140 |
| | WOMEN RESTROOM | 190 | 0 | 0 | 0 | 0 | 140 |
| | TOTAL CFM REQUIRED | | | | | 10.92 | 401 |
| | TOTAL CFM FURNISHED | | | | | 10.92 | 401 |

| UNIT HEATER SCHEDULE | | | | | | | |
|----------------------|------|-----------|------------|------|----------------------|-----------|------------|
| CAPACITIES | | | | | | | |
| UNIT NO. | FLA | UNIT VOLT | UNIT PHASE | MOCP | WIRE SIZE (Du: 75 C) | INPUT BTU | OUTPUT BTU |
| UH-1,2,3 | 12.5 | 120 | 1 | 20 | #12 | 5,120 | 5,120 |

Coastal Plains Engineering, P.A.
 License No: C-2050
 295 LOCKLEAR RD
 P.O. Box 1117 28572
 Wake Forest, NC 27157
 Phone: 910-521-7213
 Fax: 910-521-7213
 www.coastalplainseng.com

LEXINGTON PLANTATION POOL HOUSE
 HARNETT COUNTY NC

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PROJECT NO: 2021-006
 DRAWN BY: ALD
 DATE: _____
 REVISIONS: _____

SHEET NO:
M1



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LEXINGTON PLANTATION POOL HOUSE
 HARNETT COUNTY NC

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PROJECT NO: 2021-1068
 DRAWN BY: AJO
 DATE:
 REVISIONS:

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E1

CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR SERVICE. A COMPLETE AND WORKING SYSTEM IS REQUIRED FOR COMPLIANCE WITH THESE DOCUMENTS. DETERMINE THE POINT OF CONNECTION TO THE UTILITY WITH THE UTILITY REPRESENTATIVE AND PROVIDE ACCORDINGLY FOR A COMPLETE WORKING SYSTEM.

WIRE AND CABLE SHALL BE INSULATED, TYPE THHN OR THWN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTORS SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED. NO ROMEX PERMITTED.

EMT SHALL BE GALVANIZED STEEL TUBING, 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSON FITTINGS.

PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM NON-METALLIC, HEAVY DUTY, HIGH IMPACT, POLYVINYLCHLORIDE (PVC), TYPE 1 WILL BE USED FOR CONCRETE ENCASMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.

FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH 72 INCHES FOR LIGHTING AND 36" FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUIDTIGHT OR WATERIGHT WITH PVC JACKET WHERE USED IN DAMP, WET OR OUTSIDE AREAS, AND LIQUIDTIGHT OR WATERIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TEL. OUTLETS TO BE MOUNTED BACK TO BACK, KEEP AT LEAST 2 INCHES BETWEEN RECEPTACLES AND TEL. OUTLETS.

ALL CONDUCTOR SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA.

CONTRACTOR SHALL ALIGN FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. AT NO TIME WILL AN IONIZATION DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN AIR GRILLE.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT THE CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED, RECOMPUTING WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

ALL CONDUIT TERMINATING IN THE CEILING CAVITIES IS TO BE LABELED.

ALL CONDUIT SHALL BE COLOR CODED WITH 1/2" WIDE TAPE, 10'-0" ON CENTER IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE.

THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT AND OWNER, PRIOR TO INSTALLATION. FOR USE WITH ACTUAL EQUIPMENT.

EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER/ARCHITECT. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER/ARCHITECT AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE.

ALL FUSES DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALL OR ROOF THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ARCHITECT/ENGINEER.

ALL WORK IS TO BE DONE IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THE NEC AND APPLICABLE STATE CODES

RECESSED FIXTURES INSTALLED IN RATED ASSEMBLIES SHALL BE INSTALLED WITH AN ENCLOSURE SO AS TO MAINTAIN THE RATING OF ASSEMBLY

PP1

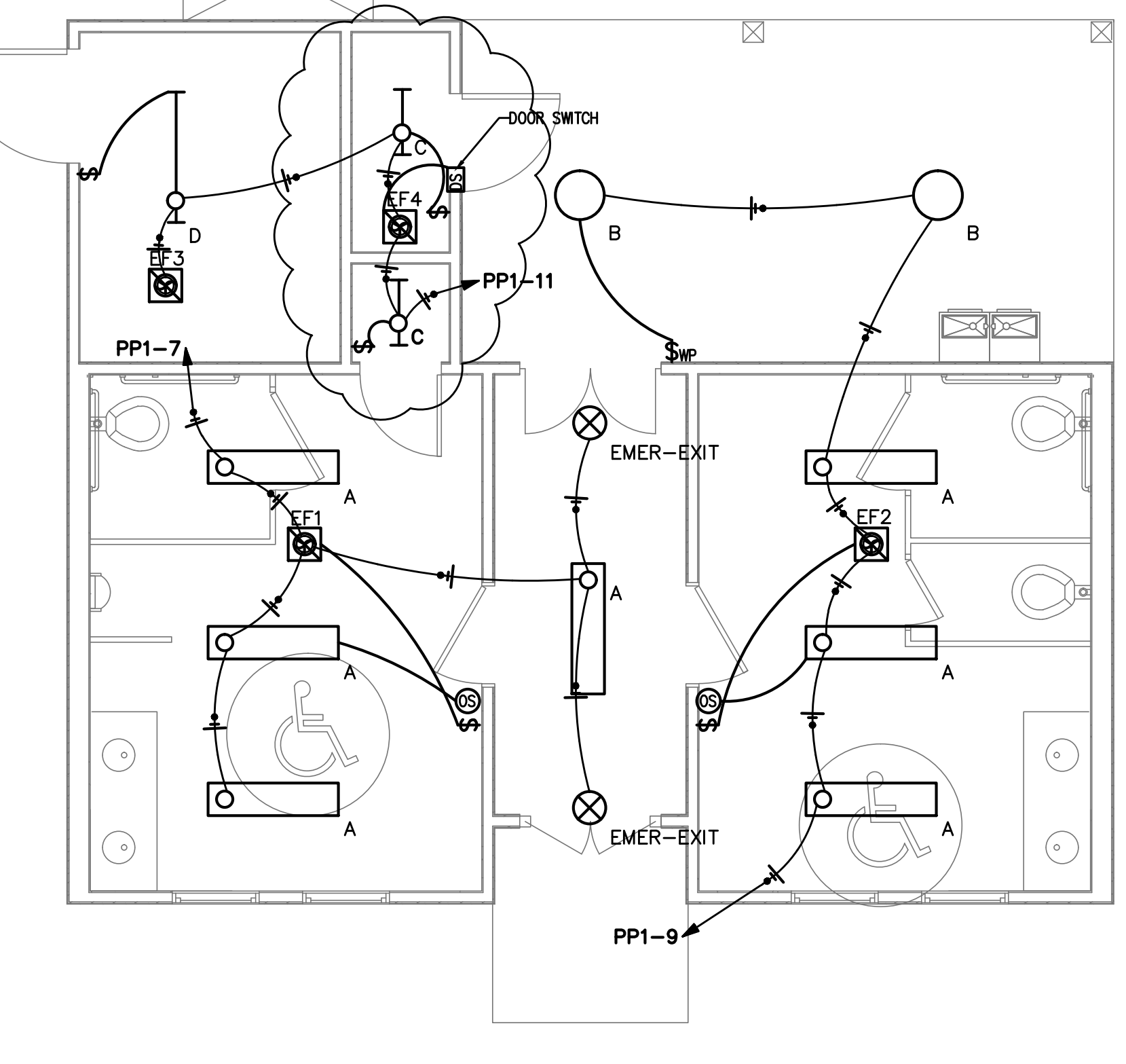
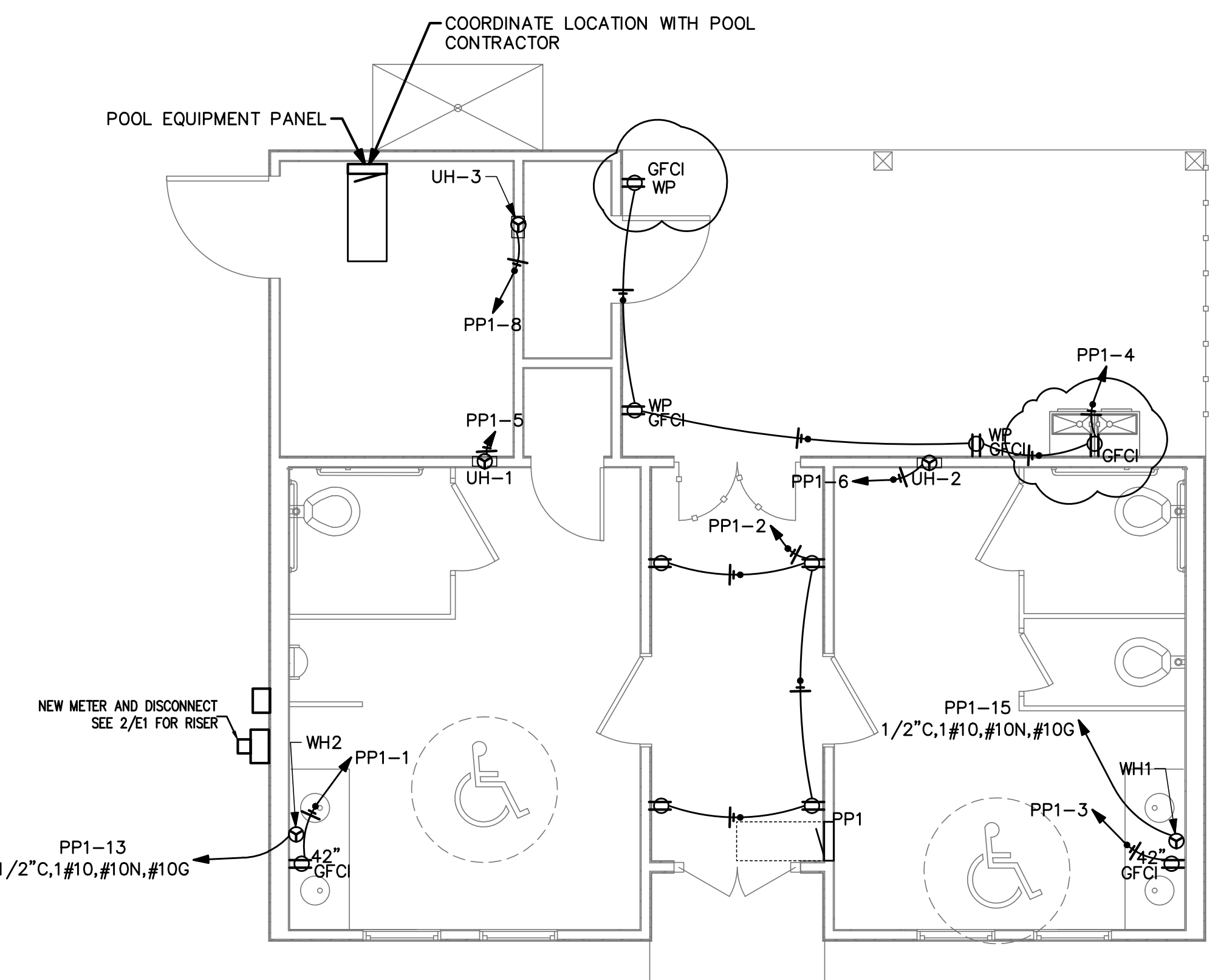
| | | | |
|----------|----------------------|--|---------------|
| ROOM | VOLTS 240/120V 2P 3W | | AIC 22,000 |
| MOUNTING | BUS AMPS 200 | | MAIN BKR MLO |
| FED FROM | UTILITY | | LUGS STANDARD |
| NOTE | | | |

| CKT # | CKT BKR | CIRCUIT DESCRIPTION | LOAD KVA | | CKT # | CKT BKR | CIRCUIT DESCRIPTION | LOAD KVA | |
|-------------------------------------|---------|----------------------------|----------|-------|-------|---------|---------------------|----------|------|
| | | | A | B | | | | A | B |
| 1 | 20/1 | RECEPTACLE | 0.18 | | 2 | 20/1 | RECEPTACLE | 0.72 | |
| 3 | 20/1 | RECEPTACLE | | 0.18 | 4 | 20/1 | RECEPTACLE | | 0.72 |
| 5 | 20/1 | UH-1 | 1.5 | | 6 | 20/1 | UH-2 | 1.5 | |
| 7 | 20/1 | EF1, LIGHTING | | 0.359 | 8 | 20/1 | UH-3 | | 1.5 |
| 9 | 20/1 | EF2, LIGHTING | 0.431 | | 10 | 20/1 | SPACE | 0 | 0 |
| 11 | 20/1 | EF3, EF4, LIGHTING | | 0.13 | 12 | 20/1 | SPACE | 0 | 0 |
| 13 | 30/1 | WH2 | 2.4 | | 14 | 20/1 | SPACE | 0 | 0 |
| 15 | 30/1 | WH1 | | 2.4 | 16 | 20/1 | SPACE | 0 | 0 |
| 17 | 100/2 | PANEL POOL EQUIPMENT PANEL | 0 | 0 | 18 | 20/1 | SPACE | 0 | 0 |
| 19 | | | 0 | 0 | 20 | 20/1 | SPACE | 0 | 0 |
| 21 | 20/1 | SPACE | 0 | 0 | 22 | 20/1 | SPACE | 0 | 0 |
| 23 | 20/1 | SPACE | 0 | 0 | 24 | 20/1 | SPACE | 0 | 0 |
| 25 | 20/1 | SPACE | 0 | 0 | 26 | 20/1 | SPACE | 0 | 0 |
| 27 | 20/1 | SPACE | 0 | 0 | 28 | 20/1 | SPACE | 0 | 0 |
| 29 | 20/1 | SPACE | 0 | 0 | 30 | 20/1 | SPACE | 0 | 0 |
| 31 | 20/1 | SPACE | 0 | 0 | 32 | 20/1 | SPACE | 0 | 0 |
| 33 | 20/1 | SPACE | 0 | 0 | 34 | 20/1 | SPACE | 0 | 0 |
| 35 | 20/1 | SPACE | 0 | 0 | 36 | 20/1 | SPACE | 0 | 0 |
| 37 | 20/1 | SPACE | 0 | 0 | 38 | 20/1 | SPACE | 0 | 0 |
| 39 | 20/1 | SPACE | 0 | 0 | 40 | 20/1 | SPACE | 0 | 0 |
| 41 | 20/1 | SPACE | 0 | 0 | 42 | 20/1 | SPACE | 0 | 0 |
| TOTAL CONNECTED KVA BY PHASE | | | | | | | | 6.73 | 5.29 |

| | CONN KVA | CALC KVA | | CONN KVA | CALC KVA |
|---------------|----------|----------|--------|---------------|----------|
| LIGHTING | 0.479 | 0.598 | (125%) | RECEPTACLES | 1.8 |
| LARGEST MOTOR | 0.185 | 0.046 | (25%) | CONTINUOUS | 4.8 |
| MOTORS | 0.44 | 0.44 | (100%) | HEATING | 4.5 |
| | | | | TOTAL LOAD | 13.4 |
| | | | | BALANCED LOAD | 55.8 A |

2 ELECTRICAL NOTES
 E1 N.T.S.

1 POWER PLAN
 E1 1/4"=1'-0"

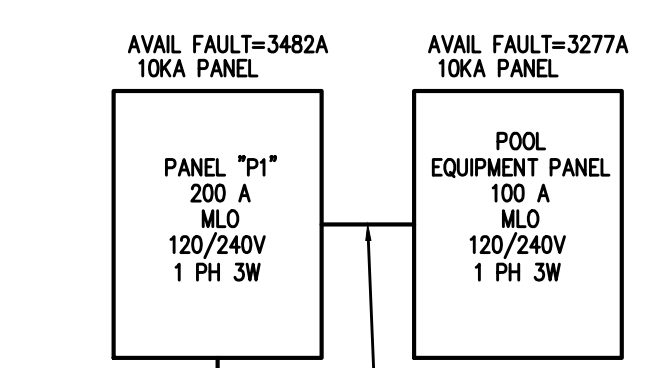


2 LIGHTING PLAN
 E1 1/4"=1'-0"

LUMINAIRE SCHEDULE

| CALLOUT | SYMBOL | LAMP | DESCRIPTION | BALLAST | MOUNTING | MODEL | INPUT WATTS | VOLTS | LUMENS / LAMP |
|-----------|--------|----------------------------------|---|------------|----------|---|-------------|------------|---------------|
| A | ○ | (1) 42W LED | 1 X 4 LED WRAPAROUND FIXTURE | | CEILING | COOPER LIGHTING SOLUTIONS - METALUX (FORMERLY EATON), 4WPLD4040C OR EQ | 42 | 120V 1P 2W | 4557 |
| B | ○ | (1) MAX 2013W MED BASE LED BULBS | ROUND CLOSE TO CEILING FIXTURE | | CEILING | PROGRESS P550042-129 OR EQ. | 60 | 120V 1P 2W | 0 |
| C | ⊢ | (1) 19.68W LED | 2' LED STRIP LIGHT | | CEILING | COOPER LIGHTING SOLUTIONS - METALUX (FORMERLY EATON), 2ST2L2040R OR EQ. | 19.68 | 120V 1P 2W | 2298 |
| D | ⊢ | (1) 39.09W LED | 4' LED STRIP LIGHT | | CEILING | COOPER LIGHTING SOLUTIONS - METALUX (FORMERLY EATON), 4ST2L4040R OR EQ. | 39.09 | 120V 1P 2W | 4433 |
| EMER-EXIT | ⊗ | (1) | COMBINATION EXIT/EMERGENCY UNIT W/DUAL SEALED-BEAM REMOTE HEADS | ELECTRONIC | CEILING | LITHONIA LHQM S W 1 R 120/277 ELA NX H0606 OR EQ. | 3 | 120V 1P 2W | 0 |

AVAILABLE FAULT CALCULATIONS
 1 150' RUN OF 3 #3/0 TO 25KVA TRANSFORMER 1.592
 3,556A AT METER



GROUNDING ELECTRODE DETAILS

- GROUNDING ELECTRODE CONDUCTORS SHALL BE #6 BARE COPPER. OTHER MATERIAL AND INSTALLATION PER NEC
- ① CONNECT TO METALIC WATER PIPE AS REQ'D.
 - ② #6 COPPER GROUND PLACED TO BLDG STEEL
 - ③ 3/4"x10' LONG COPPER CLAD GROUNDING ROD W/ COPPER GROUND.
- A=#4 CU P1
 A=#6 CU P2

3 ELECTRIC RISER
 E1 N.T.S.

APPENDIX B 2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

ELECTRICAL DESIGN

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:

- Energy Code: Prescriptive Performance
 ASHRAE 90.1: Prescriptive Performance

Lighting schedule (each fixture type)

- lamp type required in fixture
 - number of lamps in fixture
 - ballast type used in the fixture
 - number of ballasts in fixture
 - total wattage per fixture
 - total interior wattage specified vs. allowed (whole building or space by space)
 - total exterior wattage specified vs. allowed
- SEE FIXTURE SCHEDULE

Additional Prescriptive Compliance

- 506.2.1 More Efficient HVAC Equipment
- 506.2.2 Reduced Lighting Power Density
- 506.2.3 Energy Recovery Ventilation Systems
- 506.2.4 Higher Efficiency Service Water Heating
- 506.2.5 On-Site Supply of Renewable Energy
- 506.2.6 Automatic Daylighting Control Systems