



TECHNICAL REVIEW COMMITTEE (TRC)

Town of Angier, North Carolina
Planning Department
55 N. Broad Street West / PO Box 278, Angier, NC 27501
Phone: (919) 331-6702 / Fax: (919) 639-6130

Development Name:

Phase (If applicable):

Development Type:

- Major Subdivision Preliminary Plat
- Major Subdivision Final Plat
- Minor Subdivision Plat
- Planned Development (PUD)
- Commercial Site Plan
- Multi-Family Site Plan
- Partial Site Plan / Site Revision

Planning Staff only

File Number:

Applicant Information

1101 Slater Rd.

Owner of Record:

Name: DRB Group North Carolina, LLC
 Address: 1101 Slater Rd.
 City/State/Zip: Durham, N.C. 27703
 E-mail: Jashaugh@DRBgroup.com
 Phone: 919-796-5956
 Fax: _____
 Mobile: 919-796-5956

Developer:

Name: DRB Group North Carolina, LLC
 Address: 1101 Slater Rd.
 City/State/Zip: Durham, N.C. 27703
 E-mail: Jashaugh@DRBgroup.com
 Phone: 919-796-5956
 Fax: _____
 Mobile: 919-796-5956

Representative:

Name: Bass, Nixon & Kennedy, Inc.
 Address: 6310 Chapel Hill Rd Ste. 250
 City/State/Zip: Raleigh, N.C. 27607
 E-mail: Robbie.Bell@BNKInc.com
 Phone: 919-851-4422
 Fax: 919-851-8968
 Mobile: _____

Engineer/Surveyor:

Name: Kirby R. Bell Jr.
 Address: 6310 Chapel Hill Rd Ste. 250
 City/State/Zip: Raleigh, N.C. 27607
 E-mail: Robbie.Bell@BNKInc.com
 Phone: 919-851-4422
 Fax: 919-851-8968
 Mobile: _____

Property Description

PIN(s): _____ Acres: _____

<p>Deed Book: _____ Page: _____</p> <p>Current Zoning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Open Space & Recreation (OSR) <input type="checkbox"/> RA-30 <input type="checkbox"/> R-15 <input type="checkbox"/> R-10 <input checked="" type="checkbox"/> R-6 <input type="checkbox"/> Office & Institutional (O&I) <input type="checkbox"/> Central Business (CB) <input type="checkbox"/> General Commercial (GC) <input type="checkbox"/> Commerce Park (CP) <input type="checkbox"/> Conditional Zoning : 	<p>Future Land Use:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Open Space & Recreation (OSR) <input type="checkbox"/> Low Density Residential (LDR) <input type="checkbox"/> Medium Density Residential (MDR) <input type="checkbox"/> High Density Residential (HDR) <input type="checkbox"/> Residential Mixed Use (RMU) <input type="checkbox"/> Office Institutional (O&I) <input type="checkbox"/> Commercial Mixed Use (CMU) <input type="checkbox"/> Central Business (CB) <input type="checkbox"/> Commercial (COM) <input type="checkbox"/> Light Industrial (LI)
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Environmental Description

Does this site contain any perennial, intermittent streams or rivers? Yes No

Stream name(s): _____

Does this site contain any Flood Zone areas? Yes No

If YES, approximate acreage: _____ Acres

Does this site lie within a Watershed? Yes No

If applicable, what is the total amount of impervious surfaces? _____

Were any wetlands observed on the site? Yes No

Unique Features (Cemeteries, etc...): _____

Adjoining Agricultural Uses:

- Cattle
- Crops (Nursery or Row Crops)
- Equestrian
- Hog
- Poultry
- Voluntary Agricultural District
- Other:

Project Description

SINGLE FAMILY SUBDIVISIONS

- Site Built
- Modular Homes
- Doublewide Manufactured Homes

COMMERCIAL/MULTIFAMILY

- Masonry Structure
- Aluminum Structure
- Frame Structure
- Single Story Structure
- Multiple Story Structure

Total number of lots/units: 1

Total acreage of proposed open space: _____

0.9094 acres

COMMERCIAL DEVELOPMENTS

Business Type/Description: Pool and pool house

Hours & Days of Operation: _____

Hazardous Materials on Site: _____

Utilities Impact

Water: Public
 Private (Well)

Sewer: Public
 Private (Septic System)

Electrical: Above Ground
 Underground

Distance (in feet) to nearest water line: 20 ft.

Distance (in feet) to nearest sewer line: 30 ft.

Distance (in feet) to the nearest fire hydrant: 30 ft. to pool house

Final Plats:

Have all Town of Angier Public Works requirements been completed? Yes No } In process

Have inspections been completed by Public Works and Fire Marshal? Yes No

Traffic Analysis Impact

Has a Traffic Impact Analysis (TIP) been required by NC DOT for this development? Yes No

Please list any anticipated circulation improvements that will accompany the development: _____

Characteristics of road(s) within development:

Private Roads Town of Angier NC DOT

Have you received Street Name Pre-Approval? Yes No

Commercial/Multifamily:

Total Number of Proposed Parking Spaces: 8 spaces

Parking Area Surface Material: Asphalt

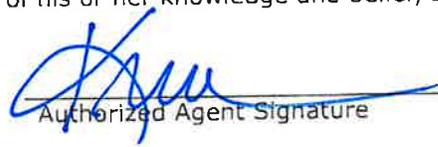
Attachments (Must be submitted with application)

	MAJOR SUB. PRELIMINARY PLAT	MAJOR SUB. FINAL PLAT	MINOR SUB. PLAT	COMMERCIAL SITE PLAN	MULTIFAMILY SITE PLAN	PARTIAL SITE PLAN
PLEASE PROVIDE 3 PAPER COPIES OF:						
Master Plan (Planned Developments)	•	•				
Plat Of Survey	•	•	•	•	•	•
As-Built Drawings		•	•	•	•	•
PLEASE PROVIDE 1 COPY OF: All items are required if applicable						
Street Name Pre-Approval Letter		•	•		•	
Preliminary Soils Report	•		•			
HOA/POA Documents & Restrict Covenants		•	•	•	•	
Land Use Application				•	•	•
Final Soils Report		•				
Traffic Impact Analysis (if required)	•			•		
Stormwater Management Permit & Plan		•	•	•	•	•
Erosion Control Plan		•	•	•	•	•

Item	Fee	Subtotal	Total Due
PLANNED DEVELOPMENT MASTER PLAN			
Master Plan Review Fee	\$300.00		
Additional Per Unit Fee	\$1.00		
MAJOR SUBDIVISION PRELIMINARY PLAT			
Plat Review Fee	\$300.00		
Additional Per Lot Fee	\$5.00		
MAJOR SUBDIVISION FINAL PLAT			
Planning Review Fee	\$200.00		
MINOR SUBDIVISION PLAT			
Planning Review Fee	\$200.00		
COMMERCIAL SITE PLAN			
Site Plan Review Fee	\$400.00	500.00	500.00
Partial/Revised Site Plan Review Fee	\$100.00		
Construction Review Fee	\$400.00		
Storm Drainage Review Fee	\$350.00		
Land Use Application Fee	\$35.00		

Signatures

The undersigned applicant hereby certifies that, to the best of his or her knowledge and belief, all information supplied with this application is true and accurate:


 _____ Date 7-16-25

 _____ Date 7/16/25

This document must be signed by the property owner and/or the authorized agent, or a letter of authorization must be provided. All questions provided herein must be addressed to prevent the application from being considered incomplete. All documents required must be submitted. If any of these items are not addressed the TRC will not review the application.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF ANGIER STANDARDS AND SPECIFICATIONS

STATION POINTE SUBDIVISION AMENITY

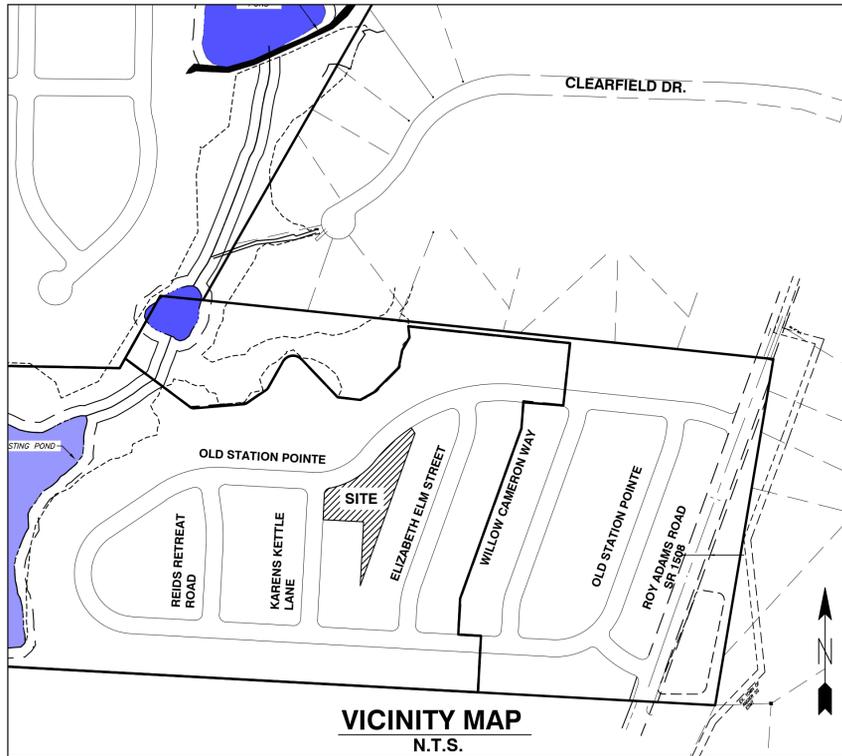
TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

TOWN OF ANGIER PROJECT NO.

SYMBOLS AND ABBREVIATIONS

ABC	AGGREGATE BASE COURSE		EXISTING CURB INLET
ALUM	ALUMINUM		EXISTING GRATE INLET/YARD INLET
AST2	ALUMINIZED STEEL - TYPE 2		EXISTING FLARED END SECTION
B-B	BACK TO BACK		EXISTING FIRE HYDRANT
BOA	BLOW-OFF ASSEMBLY		EXISTING BLOW-OFF ASSEMBLY
C&G	CURB AND GUTTER		EXISTING GATE VALVE
CFS	CUBIC FEET PER SECOND		EXISTING REDUCER
CI	CURB INLET		EXISTING WATER METER
CL	CENTER LINE		EXISTING SAN SEWER MANHOLE
CMP	CORRUGATED METAL PIPE		EXISTING CLEAN OUT
CO	CLEAN OUT		EXISTING POWER POLE
COM	COMMUNICATION		EXISTING TELEPHONE PEDESTAL
CONC	CONCRETE		EXISTING AREA LIGHT
DCV	DOUBLE CHECK VALVE		EXISTING SIGN
DDCV	DOUBLE DETECTOR CHECK VALVE		NEW CURB INLET
DI	DROP INLET		NEW GRATE INLET/YARD INLET
DIP	DUCTILE IRON PIPE		NEW FLARED END SECTION
EASE	EASEMENT		NEW FIRE HYDRANT
ELEC	ELECTRIC		NEW BLOW-OFF ASSEMBLY
EX	EXISTING		NEW GATE VALVE
FES	FLARED END SECTION		NEW REDUCER
FH	FIRE HYDRANT		NEW WATER METER
FM	FORCE MAIN		NEW TEE
FT	FEET		NEW PLUG
FT/SEC	FEET PER SEC		NEW MANHOLE
GALV	GALVANIZED		NEW CLEAN OUT
GV	GATE VALVE		NEW SIGN
HDPE	HIGH DENSITY POLYETHYLENE		IRON PIPE
L	LENGTH		BENCHMARK
LF	LINEAR FEET		TEMP SILT FENCE
MH	MANHOLE		TEMP TREE PROTECTION FENCE
PAVE	PAVEMENT		TEMP COMBINATION SILT/TREE PROTECTION FENCE
PE	FINISHED PAD ELEVATION		TEMP DIVERSION DITCH
PP	POWER POLE		DISTURBED LIMITS
PVC	POLYVINYL CHLORIDE		STREAM
R	RADIUS		EXISTING GAS LINE
R/W	RIGHT-OF-WAY		EXISTING COMMUNICATIONS LINE
RED	REDUCER		EXISTING UNDERGROUND TELEPHONE
RCP	REINFORCED CONCRETE PIPE		EXISTING UNDERGROUND ELECTRIC
RPZ	REDUCED PRESSURE ZONE		EXISTING OVERHEAD ELECTRIC
SS	SANITARY SEWER		EXISTING WATER LINE
STA	STATION		EXISTING SANITARY SEWER FORCE MAIN
TDD	TEMPORARY DIVERSION DITCH		EXISTING SANITARY SEWER
TELE	TELEPHONE		EXISTING STORM DRAINAGE
TSB	TEMPORARY SEDIMENT BASIN		NEW STORM DRAINAGE
UG	UNDERGROUND		NEW WATER LINE
WCR	WHEELCHAIR RAMP		NEW SANITARY SEWER
W/L	WATER LINE		NEW SANITARY SEWER FORCE MAIN
WM	WATER METER		NEW GAS MAIN
YI	YARD INLET		HANDICAPPED ACCESSIBLE ROUTE

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF ANGIER



SHEET INDEX

	COVER
C1.0	AMENITY AREA - EXISTING CONDITIONS PLAN
C1.1	AMENITY AREA - SITE PLAN
C2.1	AMENITY AREA - UTILITY / GRADING / EC PLAN
C5.1	DETAILS
C5.2	DETAILS
L1.1	AMENITY AREA - LANDSCAPE PLAN
	STATION POINTE POOL HOUSE PLANS

SITE DATA

ADDRESS:	TO BE DETERMINED
AREA:	39.616 (0.9093 AC)
ZONING:	R-6
PIN:	0673-53-1625
NUMBER OF LOTS:	1
UTILITIES:	PUBLIC WATER AND SANITARY
SANITARY SEWER TAP:	1
WATER TAPS (4"):	1
METERS (3/4"):	2 (POOL & IRRIGATION)
PARKING REQUIRED:	5 (1 / 400 SF OF POOL)
PARKING PROVIDED:	18
SOLID WASTE:	PRIVATE PICKUP OR PUBLIC ROLLOUT CARTS
DB:	4208 PAGES 404-408

OWNER:

DRB GROUP - NC, LLC
1101 SLATER ROAD, STE 300
DURHAM, NC 27703-5427

CONTACT: J. ADAM ASHBAUGH,
DIR OF LAND ENTITLEMENTS
PHONE: (919) 786-5956
EMAIL: jashbaugh@drbgroup.com

DEVELOPER:

DRB GROUP - NC, LLC
1101 SLATER ROAD, STE 300
DURHAM, NC 27703-5427

CONTACT: J. ADAM ASHBAUGH,
DIR OF LAND ENTITLEMENTS
PHONE: (919) 786-5956
EMAIL: jashbaugh@drbgroup.com

THESE PROPERTIES DO NOT LIE WITHIN A FEMA FLOOD HAZARD AREA PER FIRM NUMBER 3720066200J DATED OCTOBER 10, 2006.

CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPALITY STANDARDS, SPECIFICATIONS, AND DETAILS. WORK IN THIS PROJECT SHALL ALSO CONFORM TO THESE PLANS, THE LATEST EDITIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) ROAD AND BRIDGE SPECIFICATIONS, THE ROAD AND BRIDGE STANDARDS, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS, THE FINAL GEOTECHNICAL REPORT, AND GENERAL DESIGN STANDARDS, IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS, OR PLANS, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION.
- THE LOCATION AND SIZE OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE NORTH CAROLINA ONE-CALL UTILITIES LOCATION SERVICE (1-800-632-4949) FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE SITE.
- THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- TRAFFIC CONTROL ON PUBLIC STREETS SHALL BE IN CONFORMANCE WITH THE TRAFFIC CONTROL PLAN, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND AS FURTHER DIRECTED BY CITY AND STATE INSPECTORS.
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE THE MEETING WITH THE CITY ENGINEERING DIVISION.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND APPLICABLE MUNICIPALITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKFILL AROUND DRAINAGE STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AS SET OUT IN ASTM STANDARD D998. STONE BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST AS SET OUT IN ASTM STANDARD D1557. THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A CERTIFIED MATERIALS TESTING LABORATORY AND THE CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING THE LABORATORY.
- PROPOSED CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND ROADWAY PROFILES/SUPERELEVATIONS ARE TO BE USED IN CASE OF DISCREPANCY.
- THE CONTRACTOR SHALL REVIEW, VERIFY AND COORDINATE ALL DIMENSIONS SHOWN ON PLANS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER PRIOR TO STARTING PROJECT.
- ALL CURB JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1.5 FEET. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT.
- ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA REQUIREMENTS AND THE NORTH CAROLINA STATE BUILDING CODE, VOL. 1-C ACCESSIBILITY CODE.
- OWNER SHALL PROVIDE FENCING AND OTHER SAFETY MEASURES NECESSARY IN AND AROUND ANY PROPOSED STORMWATER MANAGEMENT MEASURES (PONDS, WETLANDS, ETC.) OBTAINING PROPER PERMITS SHALL BE THE RESPONSIBILITY OF THE OWNER.
- RETAINING WALLS EXCEEDING 30 INCHES IN HEIGHT SHALL INCLUDE FALL PROTECTION IN THE FORM OF A HANDRAIL OR FENCING ON THE HIGH SIDE OF THE RETAINING WALL.
- PROPER COMPACTION OF ALL FILL SOILS PLACED ON SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COMPACTION SHALL BE ADEQUATE TO SUPPORT THE PROPOSED USE OF AREAS IN WHICH FILL SOILS ARE PLACED. THE CONTRACTOR SHALL HIRE A GEOTECHNICAL ENGINEER TO TEST AND VERIFY THAT COMPACTION IS ADEQUATE FOR THE PROPOSED USE OF IN THE AREA OF FILL PLACEMENT.
- ALL ASPECTS OF THIS PROJECT SHALL BE IN FULL COMPLIANCE WITH CURRENT ADA STANDARDS. IF THE CONTRACTOR NOTES ANY ASPECTS OF THE PROJECT WHICH ARE NOT IN COMPLIANCE, THE ENGINEER SHALL BE NOTIFIED PRIOR TO ANY FURTHER WORK BEING PERFORMED. ANY WORK PERFORMED AFTER THE CONTRACTOR NOTES SUCH A NON COMPLIANCE IS SUBJECT TO REMOVAL AND REPAIR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OR THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR PONDS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF +/- TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D998. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS-BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.
- RETAINING WALLS SHOWN HEREIN SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER WITH EXPERIENCE DESIGNING RETAINING WALLS. AT LEAST 14 DAYS PRIOR TO BEGINNING CONSTRUCTION OF RETAINING WALLS, THE CONTRACTOR SHALL CONTACT THE OWNER'S GEOTECHNICAL ENGINEER TO SCHEDULE AND COORDINATE ALL APPROPRIATE INSPECTIONS, TESTING, AND VERIFICATION NECESSARY DURING RETAINING WALL CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL PROVIDE CONTINUOUS INSPECTION, TESTING AND VERIFICATION FOR THE DURATION OF RETAINING WALL CONSTRUCTION. PROPER SCHEDULING, EXECUTION, AND RECORD KEEPING FOR ALL REQUIRED INSPECTIONS, TESTING, AND VERIFICATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH RECORDS SHALL BE RETAINED AND SHALL BE PROVIDED TO THE OWNER AND BASS, NIXON & KENNEDY, INC. ALL MONITORING, TESTING, AND VERIFICATION SHALL CONFORM TO THE MOST RECENT VERSION OF THE NC BUILDING CODE CHAPTER 18, SECTION 1806 OR THE WALL DESIGN ENGINEER'S SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.



ENGINEER:



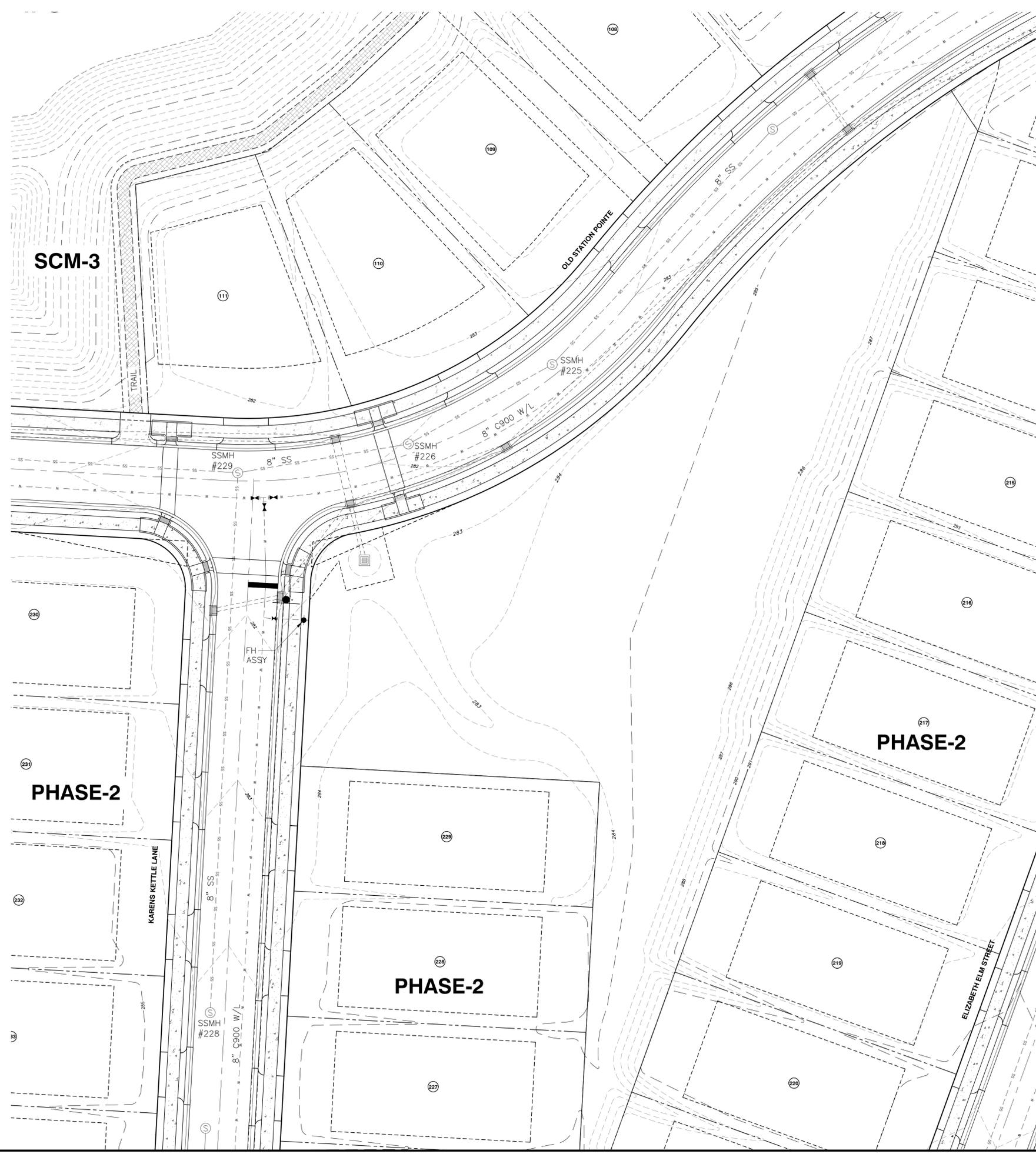
6310 CHAPEL HILL ROAD, SUITE 250
RALEIGH, NORTH CAROLINA 27607
TELEPHONE: (919) 851-4422
FAX: (919) 851-8968

CERTIFICATION NUMBERS: NCBELS (C-0110)
NCBOLA (C-0267)

CONTACT: KIRBY R. BELL, JR., PE CPESC
EMAIL: Robbie.Bell@BNKinc.com



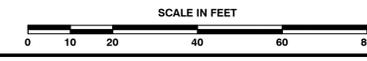
R1/2025/22069 - Degree Farm Subdivision CIVIL/04 Construction/15 Amenity/001 Amenity CDS/001-22069-CD-Amenity-ExCond.dwg, C1.0, 7/22/2025 9:36:52 AM, Brian O'Neill



- NOTES**
1. PHASE 2 INFRASTRUCTURE CURRENTLY UNDER CONSTRUCTION.
 2. EXISTING CONDITIONS SHOWN ON THIS PLAN SUBJECT TO CHANGE.

ALL CONSTRUCTION MUST CONFORM WITH UNDERGROUND UTILITY PROTECTION ACT. BEFORE YOU DIG! CONTACT ONE-CALL CENTER 1-800-632-4349

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF ANGIER



BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
 6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
 TELEPHONE: (919)851-4422 OR (919)354-1879 FAX: (919)851-8868
 CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY

03-22069
JOB NO. AMENITY EXISTING CONDITIONS PLAN

IP
DRAWN BY

PROGRESS DATE

CHK BY: KRB

SCALE: 1" = 20'

STATION POINTE SUBDIVISION
AMENITY

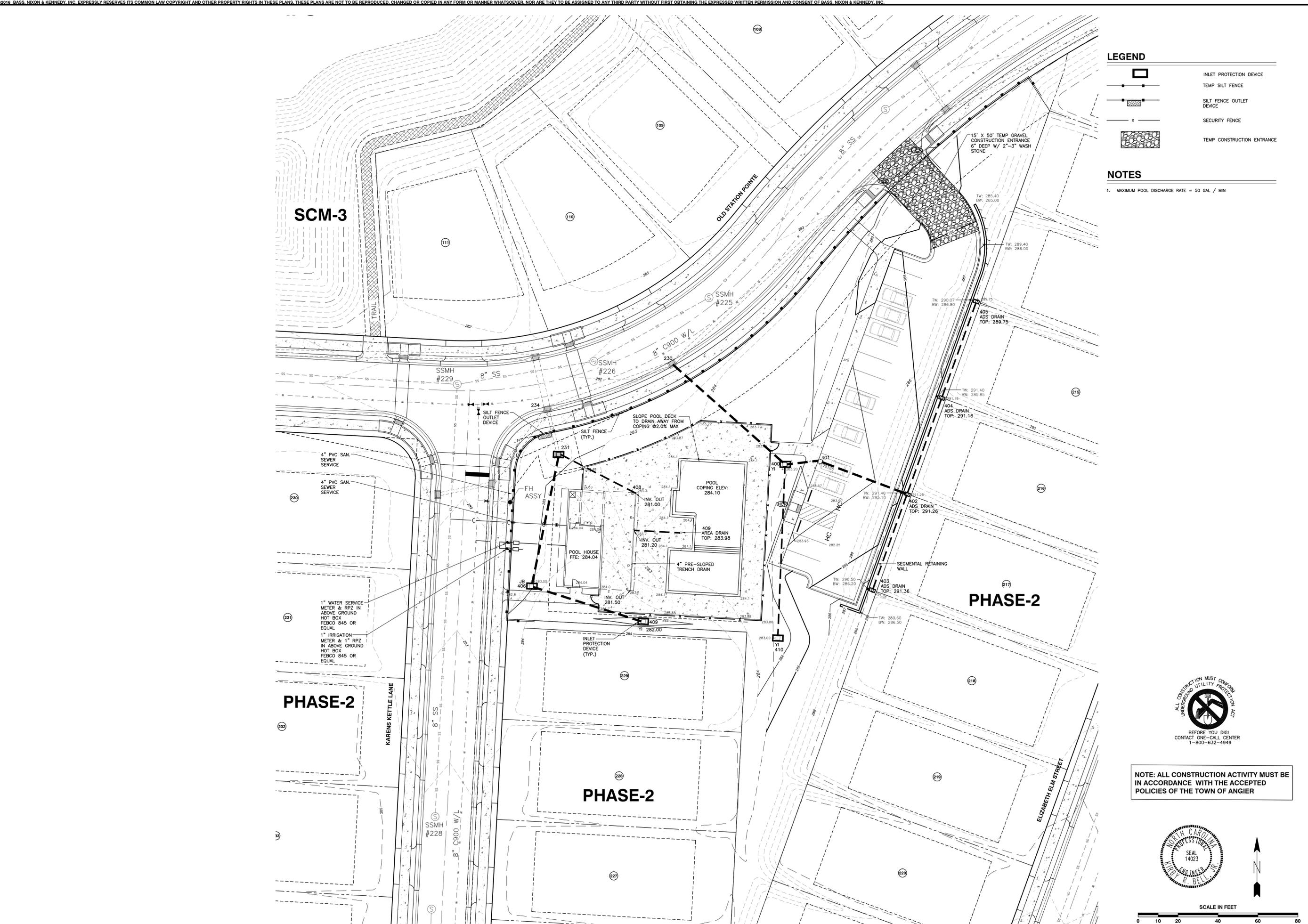
TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

SHEET **C1.0**

TOWN OF ANGIER PROJECT NO.

NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION

PL/2022/22069 - Durance Farm Subdivision CIVIL/04 Construction/1.5 Amenity CD/003/22069-CD-Amenity-Utilities-Creating.dwg, C2.1, 7/22/2023 9:51:19 AM, brian.cantall



LEGEND

- INLET PROTECTION DEVICE
- TEMP SILT FENCE
- SILT FENCE OUTLET DEVICE
- SECURITY FENCE
- TEMP CONSTRUCTION ENTRANCE

NOTES

- MAXIMUM POOL DISCHARGE RATE = 50 GAL / MIN



NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF ANGIER

SCALE IN FEET



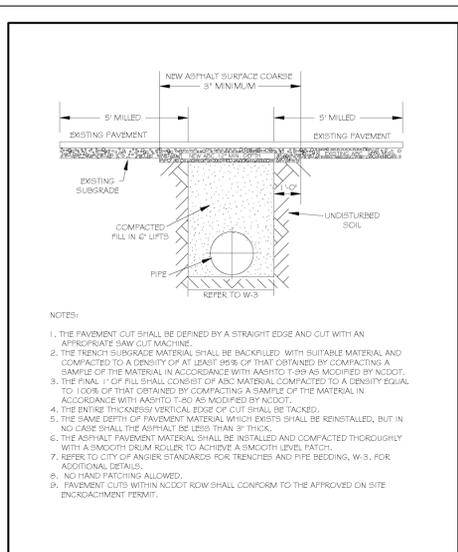
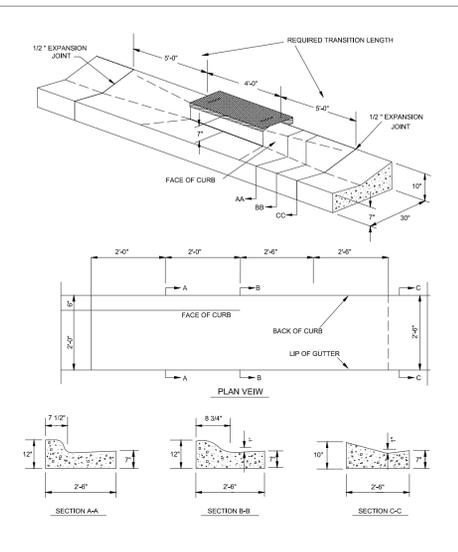
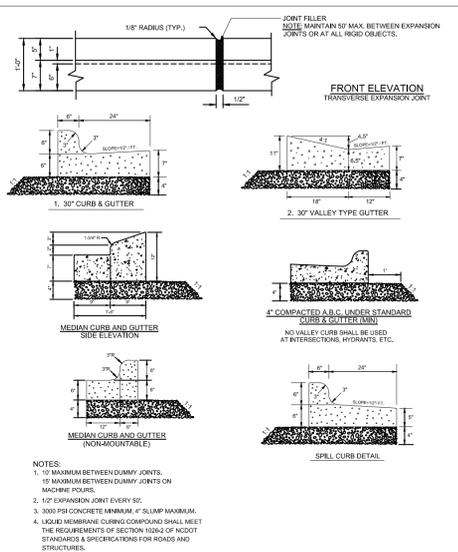
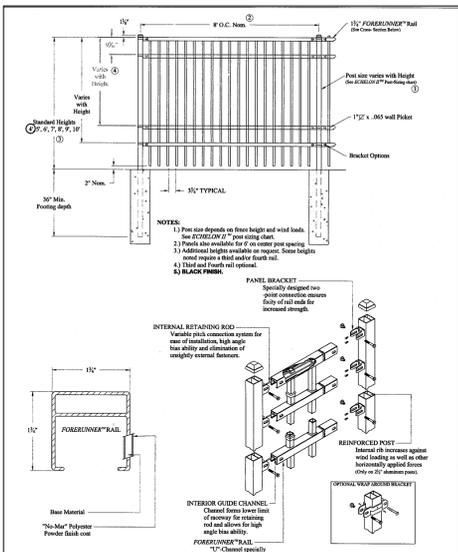
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NO.	DATE	DESCRIPTION	BY

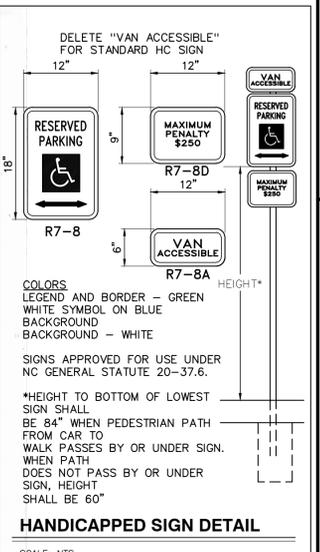
03-22069 IP
 JOB NO. DATE DRAWN BY
 AMENITY AREA
 UTILITY/ GRADING/
 EC PLAN
 SCALE: 1" = 20'
 CHK BY: KRB

STATION POINTE SUBDIVISION
AMENITY PLAN
 TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

SHEET
C2.1



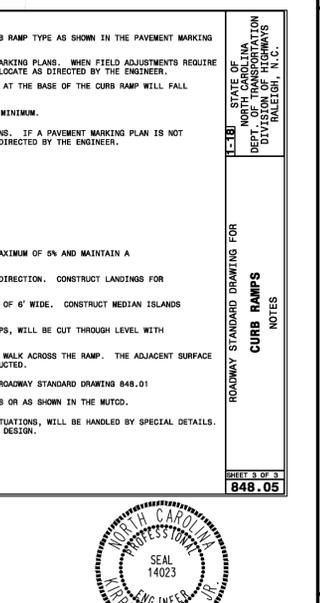
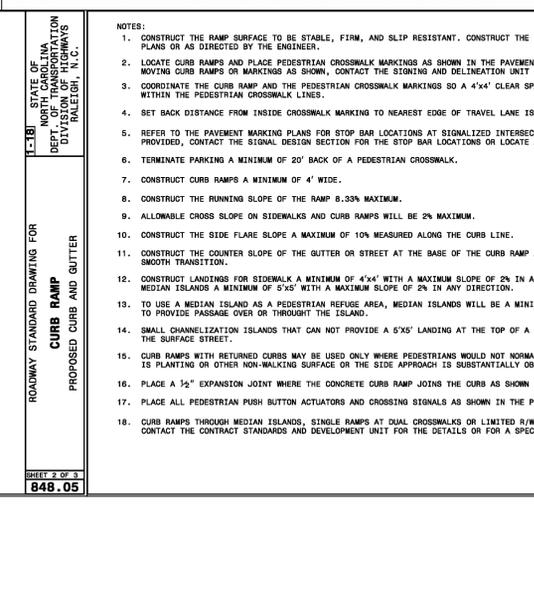
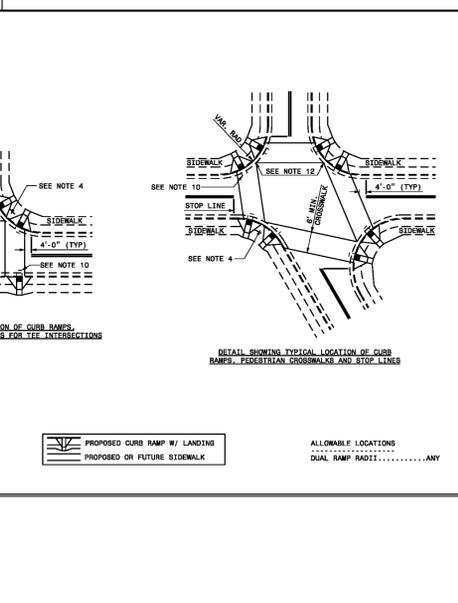
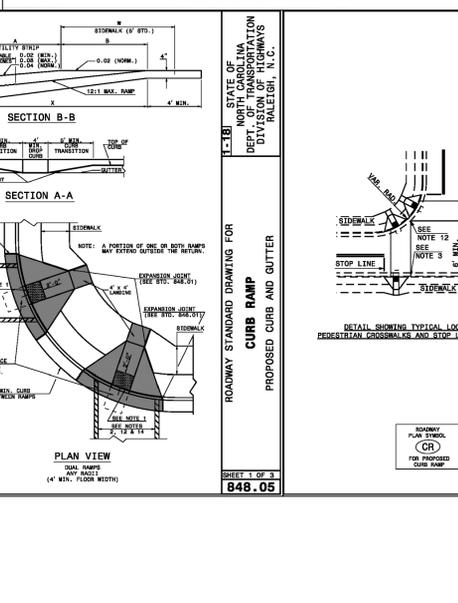
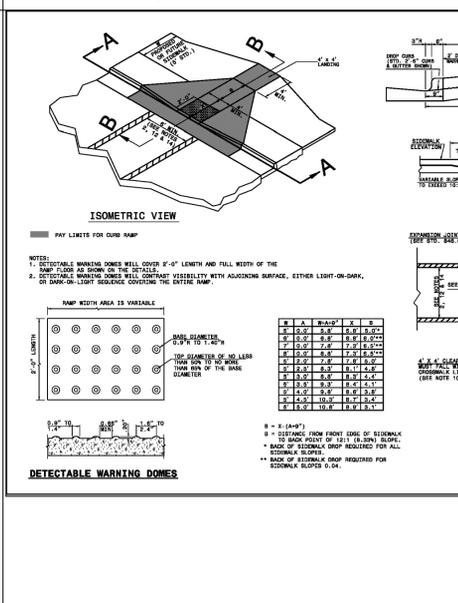
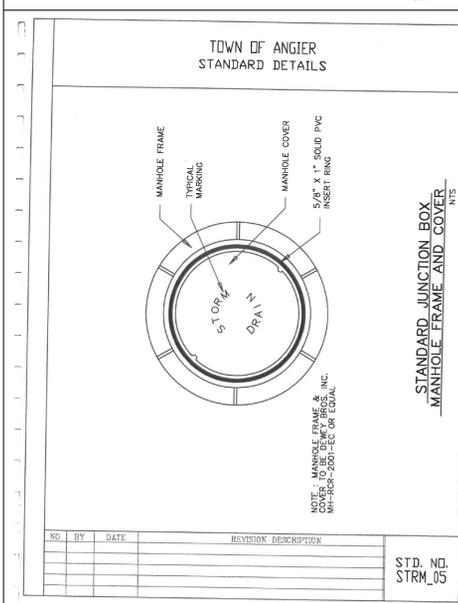
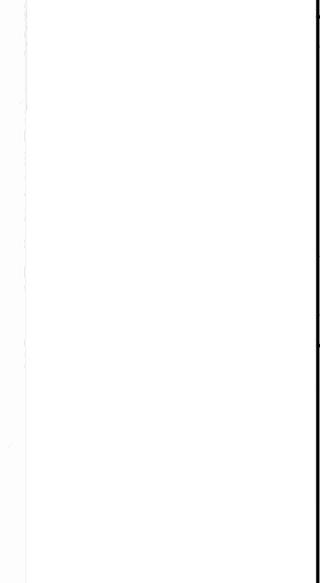
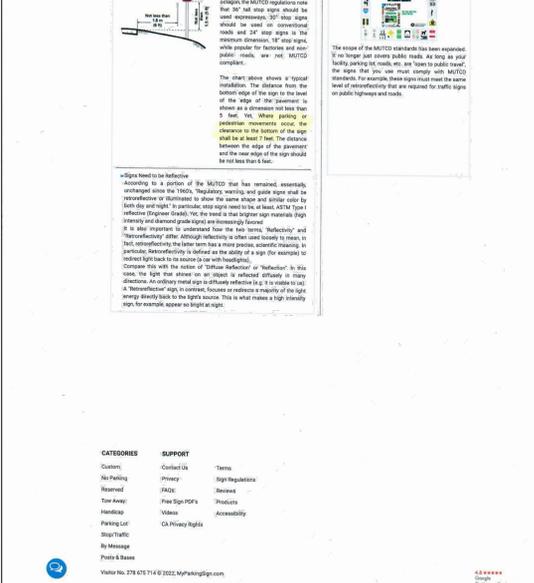
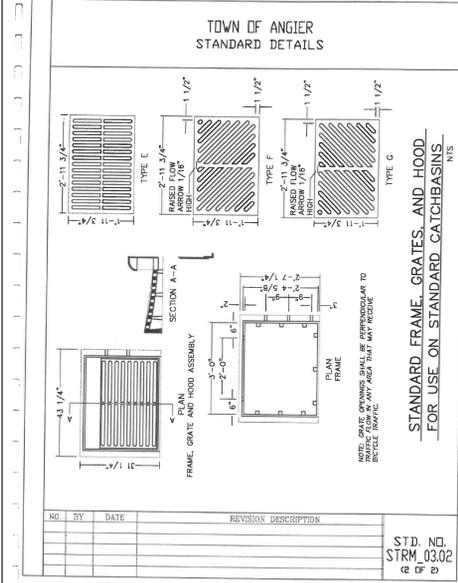
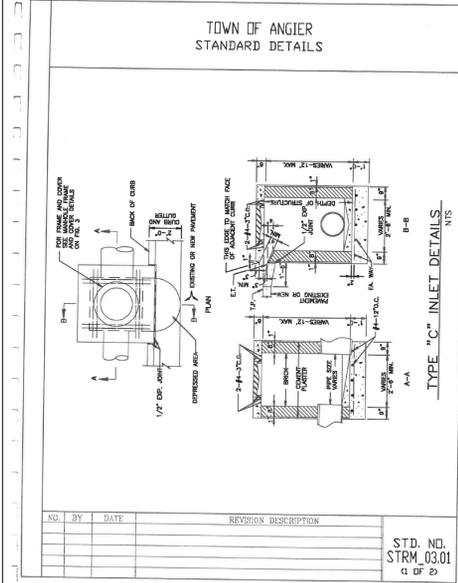
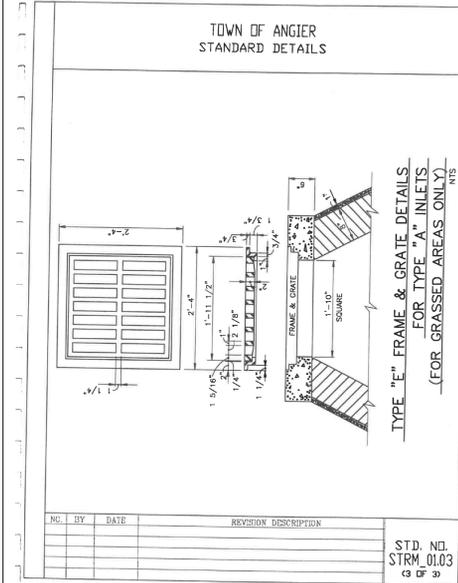
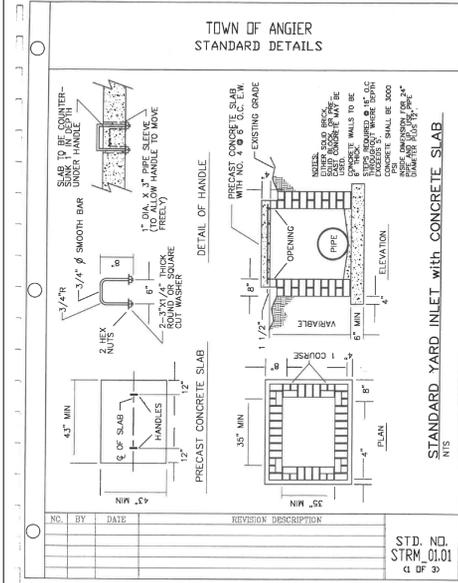
TOWN OF ANGIER SIGN SPECIFICATIONS
STREET NAME SIGNS: SUBSTRATE: 9"X NEEDED LENGTH X 100 ALUMINUM. BACKGROUND AND COPY TO BE HIGH INTENSITY PRISMATIC REFLECTIVE.
SIGN INSTALLATION: 12FTX2LB GALVANIZED U-CHANNEL POSTS. FOR STREET NAME SIGNS A POST CAP FOR ONE SIGN INSTALLATION AND A POST CAP AND SIGN-TO-SIGN CROSS FOR INTERSECTION INSTALLATION.
STOP SIGN AND STREET SIGNS SHALL BE ON ONE U-CHANNEL POST
ALL REGULATORY AND WARNING SIGNS TO BE HIGH INTENSITY PRISMATIC REFLECTIVE AND CONFORM TO MUTCD SPECIFICATIONS. IE: R1-1 STOP SHOULD BE 30"X30".
ANY AND ALL CUSTOM/NON-STANDARD SIGNS MUST BE APPROVED BY THE TOWN OF ANGIER AS TO VERBAGE AND REFLECTIVITY.
SPEED LIMIT SIGNS SHALL BE 25 MPH ON A 18" X 24" HIGH INTENSITY PRISMATIC REFLECTIVE SIGN
CONTACT THE TOWN OF ANGIER FOR SPEED LIMIT SIGN LOCATION
SIGNS SHALL BE INSTALLED TO NCDOT STANDARDS



INDUSTRIAL STRENGTH ALUMINUM
SCHEDULE 40 MAJESTIC 234-RAIL
DR: NIB SH: 1st I SCALE: DO NOT SCALE
CK: BS Date: 2-07-12 REV: c

AMERISTAR
1555 N. Mills
Tulsa, OK 74116
1-800-333-8423
www.ameristaraluminum.com

ANGIER
STANDARD ASPHALT PAVEMENT PATCH DETAIL
W-2



NO. BY DATE REVISION DESCRIPTION
STD. NO. STRM.01

BASS, NIXON & KENNEDY, INC. CONSULTING ENGINEERS
6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919)851-4522 OR (800)354-1879 FAX: (919)851-8868
CERTIFICATION NUMBERS: NCBELS (C-010); NCBELS (C-0267)

STATION POINTE SUBDIVISION AMENITY TIPPET ROAD
TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION

PROGRESS IP DATE DRAWN BY
JOB NO. DATE DRAWN BY
03-22-09 DATE DRAWN BY

DETAILS
NO. DATE DESCRIPTION REVISIONS

SCALE: N.T.S. CHK BY: KRB

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR CURB RAMPS AND GUTTER NOTES
SHEET 3 OF 3
848.05

ROADWAY STANDARD DRAWING FOR CURB RAMP AND GUTTER
SHEET 2 OF 3
848.05

ROADWAY STANDARD DRAWING FOR CURB RAMP AND GUTTER
SHEET 1 OF 3
848.05

FOR CONSTRUCTION DRAWING REVIEW ONLY

TOWN OF ANGIER PROJECT NO.

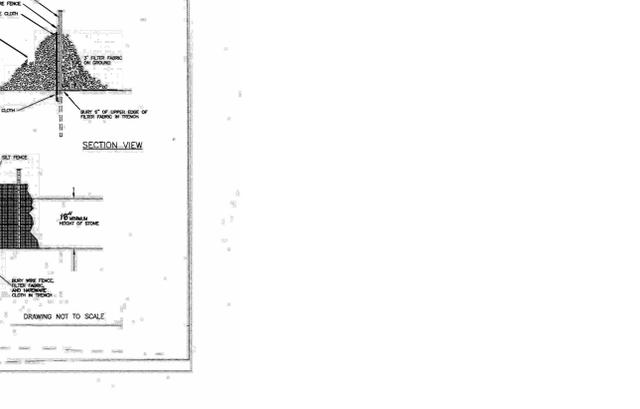
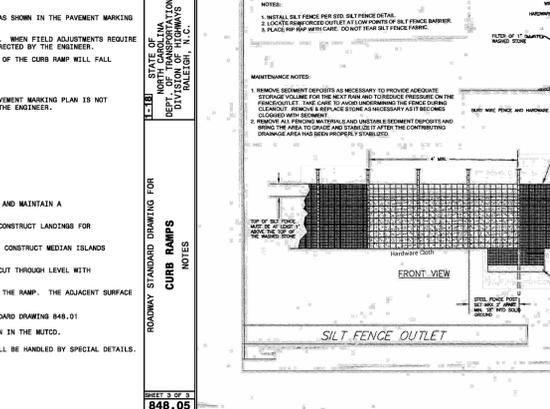
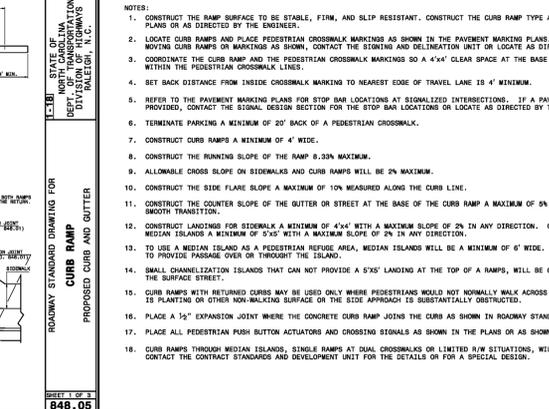
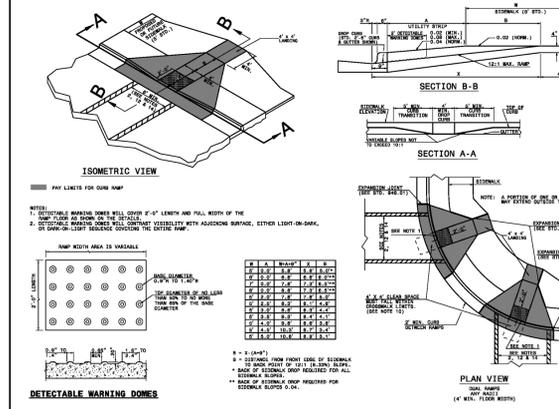
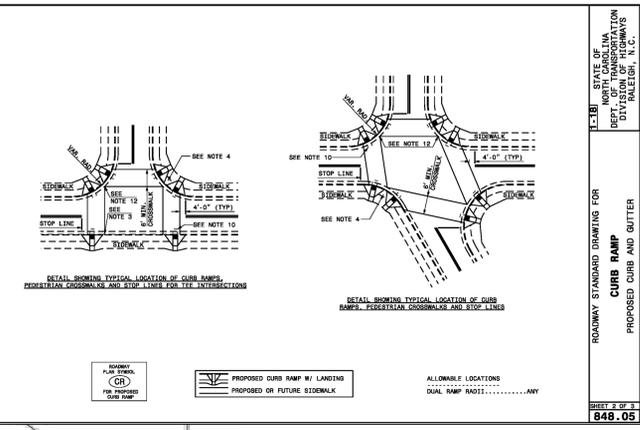
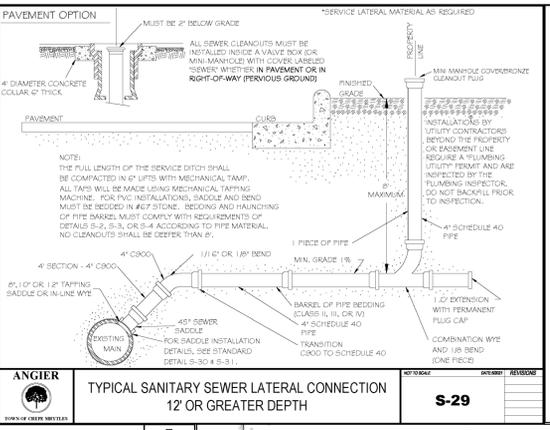
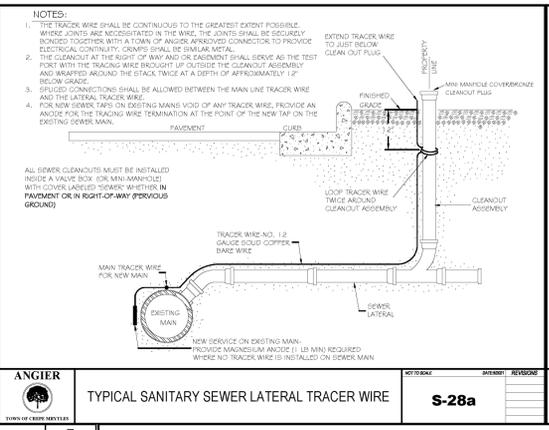
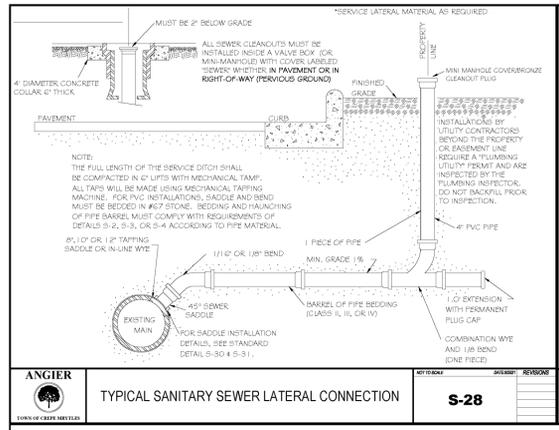
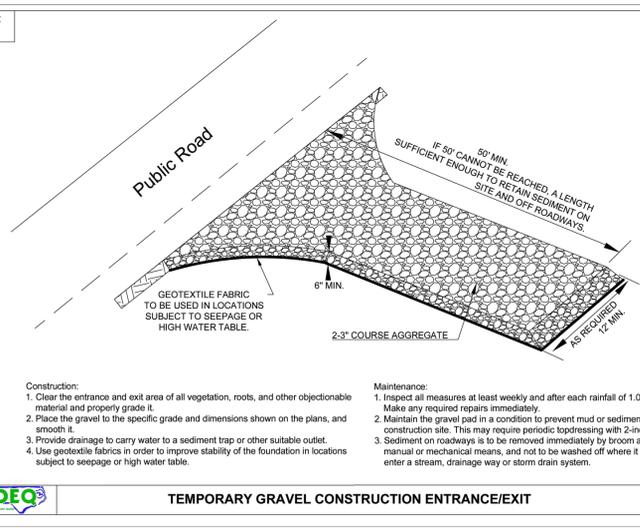
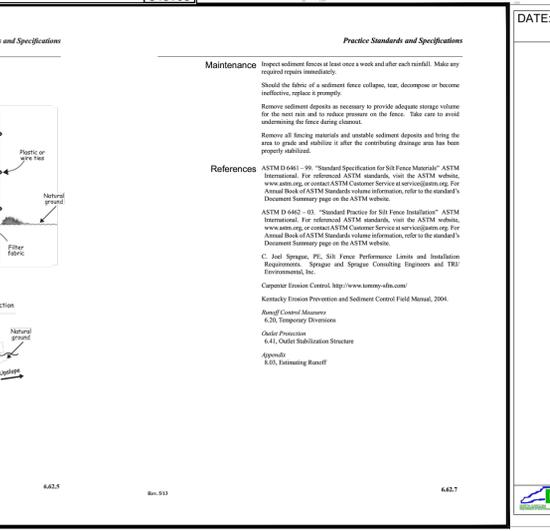
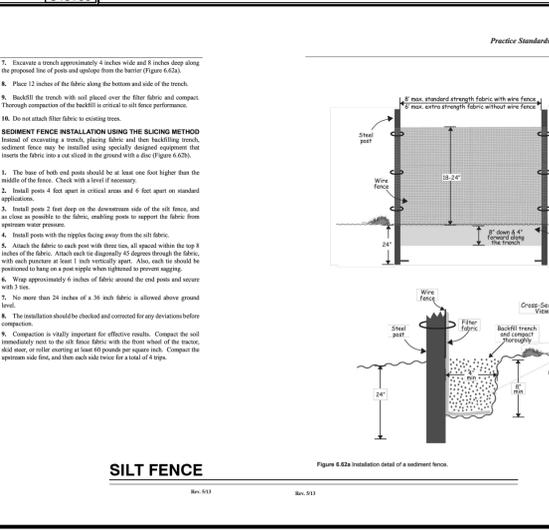


Table 6.62b Specifications For Sediment Fence Fabric

Test Method	Units	Unacceptable/Pass	Value
Grid Strength	ASTM D-4852	300	400
Machine Direction		400	500
Machine Direction		500	600
Permeability	ASTM D-4861	max 1	0.25
Apparent Opening Size	ASTM D-4751	max	0.85
Unbroken Stability	ASTM D-4852	70%	70%

CONSTRUCTION

- Construct the sediment fence to extend across the entire width of the excavation.
- Frame the fabric to the height of the sediment fence to extend 24 inches above the ground surface.
- Construct the fabric fabric from a continuous roll cut to the length of the barrier to avoid joints. When joints are necessary, overlap fabric the fabric only at a support post with a 4-foot minimum overlap to the next post.
- Support sediment fence fabric fabric by wire mesh secured to the upper side of the post. Extend the wire mesh to the bottom of the trench. Fasten the wire mesh to the bottom of the trench with the upper side of the post. Wire or plastic rope used should have minimum 10 pound tensile strength.
- When a wire mesh support fence is used, secure posts a maximum of 3 feet apart. Support posts should be driven vertically into the ground a minimum of 24 inches.
- Extra strength fabric with 6 foot post spacing does not require wire mesh support fence. Secure fabric to the fabric directly to posts. Wire or plastic rope used should have minimum 10 pound tensile strength.



SEEDING REQUIREMENTS

- Grade the site according to the plan.
- Install needed surface water and erosion control measures such as silt fence, etc.
- Check compact areas up to 6 inches spread 4 inches of topsoil or loam if required. See section "b" of this plan for top soil requirements.
- Remove all loose rocks, roots, and other obstructions leaving reasonably smooth and uniform surface.
- Incorporate the fertilizer and lime to 4 inches of topsoil.
- Apply seed.
- When hydraulic seeding is used, mix the fertilizer, seed and wool cellulose fiber mulch with water and apply the slurry uniformly over the area being treated. The slurry must be applied within one hour after mixing the seed with fertilizer.

TOP SOIL

Top soil shall be placed to a minimum depth of 4 inches when the following conditions exist:

- The structure, pile, or nutrient balance of the available soil cannot be amended by reasonable means to provide an adequate growth medium for the desired vegetation.
- The soil is too shallow to provide adequate rooting depth and will not supply necessary nutrients and nutrients for the growth of desired vegetation to desired vegetation.
- The top soil contains substances toxic to desired vegetation.

LIME

The state lab will run the necessary soil tests and make recommendations.

LIME

Apply lime according to soil test recommendation. For plants being grown in the absence of a soil test, apply as follows:

Soil Type	Lime (lb/1000 sq ft)
Clay and Clay Loam	3
Sandy Loam, Loam and Silty Loam	2
Clay and Clay Loam	1

FERTILIZER

Lime should be ground limestone containing not less than 85 percent calcium or manganese carbonate.

FERTILIZER

Fertilizer shall be 10-10-10 analysis applied at a rate of 800 to 1,000 lbs./acre. Superphosphate shall be applied at a rate of 500 lbs./acre (2000 analysis superphosphate).

MULCH

After completion of seeding grass (wheat, oat, barley, etc.) should be applied at a rate of 2 tons/acre. As much mulch, apply equal emulsion at the rate of 300 gallons/acre. In the step area and water ways, other mulch material and topsoil methods such as wood mulch, straw, etc. should be used.

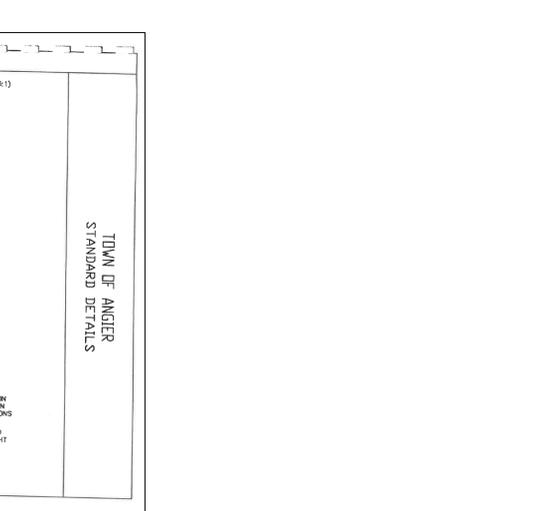
TOWN OF ANGIER STANDARD DETAILS

DATE	DESCRIPTION
10/15/05	PERMANENT SEEDING: SHOULDERS, SIDE DITCHES, UTILITY OUTFALLS, AND SLOPES (MAXIMUM 3:1)
AUG 15 - NOV 1	TALL FESCUE PLANTING RATE: 200 LBS/ACRE
NOV 1 - MARCH 1	TALL FESCUE AND BERMUDA GRASS (SCARIFIED) 200 LBS/ACRE
MARCH 1 - APRIL 15	TALL FESCUE (NURSE CROP) 25 LBS/ACRE
APRIL 1 - JUNE 30	HULLED COMMON BERMUDA GRASS 15 LBS/ACRE
PERMANENT SEEDING: SLOPES 3:1 UP TO 2:1	
AUG 15 - NOV 1	TALL FESCUE AND SERPENTINA LESPEDEZA (UNLIMBED, UNSCARIFIED) 200 LBS/ACRE
NOV 1 - MARCH 1	TALL FESCUE AND SERPENTINA LESPEDEZA (UNLIMBED, UNSCARIFIED) AND BERMUDA GRASS (SCARIFIED) 60-70 LBS/ACRE
MARCH 1 - JUNE 1	TALL FESCUE AND SERPENTINA LESPEDEZA (SCARIFIED) 40-50 LBS/ACRE
MARCH 15 - JUNE 30	WEDDING LONGGRASS AND SERPENTINA LESPEDEZA (SCARIFIED) 10 LBS/ACRE
MARCH 15 - JUNE 30	40-50 LBS/ACRE AND SERPENTINA LESPEDEZA (SCARIFIED) 15 LBS/ACRE
TEMPORARY SEEDING	
JUNE 1 - SEPT 1	TALL FESCUE AND BROWNTOP MILLET (NURSE CROP) 35 LBS/ACRE
	OR BORGHINI-SUDAN HYBRIDS (NURSE CROP) 30 LBS/ACRE

SEEDING SCHEDULE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OR CONSERVATION AREAS. THE ABOVE VEGETATION ARE POSSIBLE. USE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

NURSE CROP/TEMPORARY SEEDINGS: RESEED ACCORDING TO THE OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHAVED OUT.



SEEDING REQUIREMENTS

Apply lime according to soil test recommendation. For plants being grown in the absence of a soil test, apply as follows:

Soil Type	Lime (lb/1000 sq ft)
Clay and Clay Loam	3
Sandy Loam, Loam and Silty Loam	2
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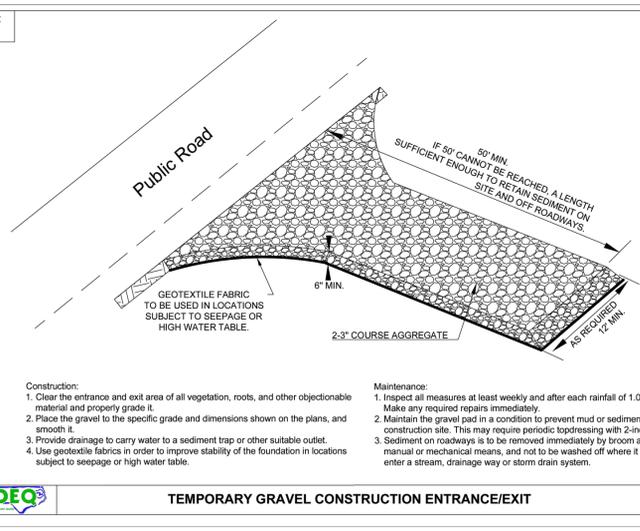
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SEEDING SCHEDULE

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NURSE CROP/TEMPORARY SEEDINGS: RESEED ACCORDING TO THE OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHAVED OUT.



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

Effective Date: 9/1/2023
Design Manual Updates



BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919) 851-4422 OR (800) 354-1879 FAX: (919) 851-9868
CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY

IP	DATE	DESCRIPTION

STATION POINTE SUBDIVISION
AMENITY
TIPPET ROAD
TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

SHEET C5.2

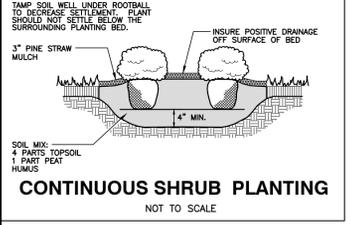
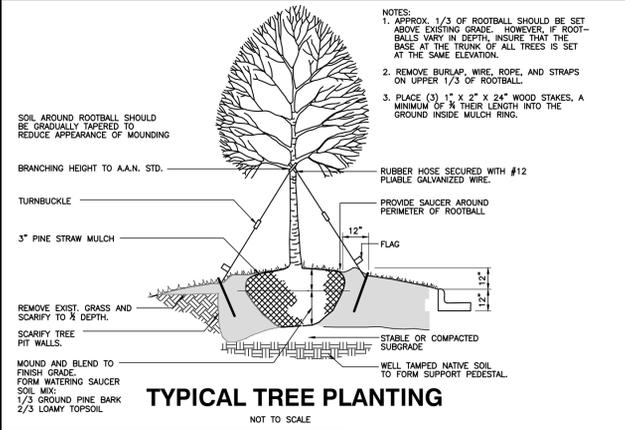
FOR CONSTRUCTION DRAWING REVIEW ONLY



FOR CONSTRUCTION DRAWING REVIEW ONLY

PLANT SCHEDULE

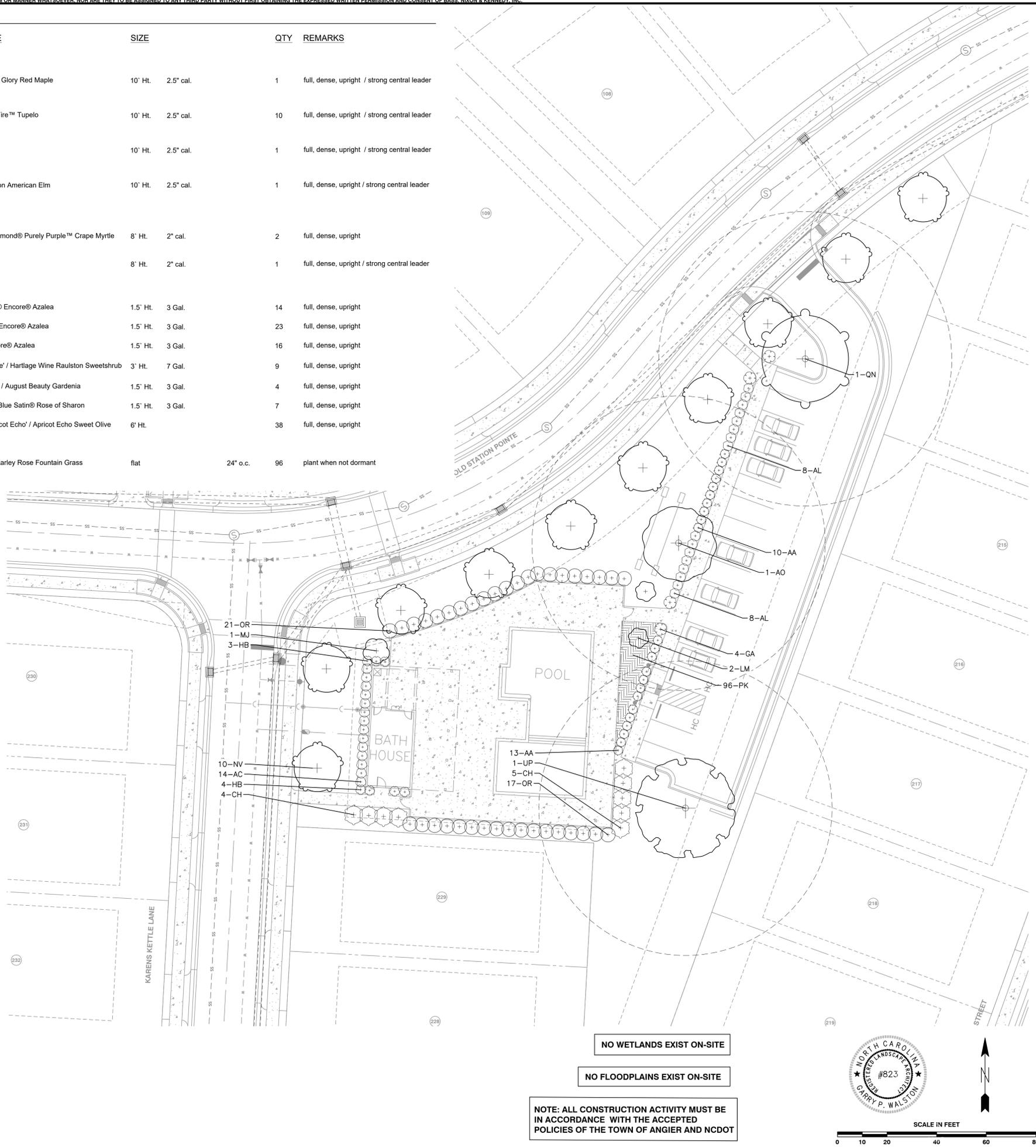
SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	QTY	REMARKS
CANOPY TREES					
	AO	Acer rubrum 'October Glory' / October Glory Red Maple	10' Ht. 2.5" cal.	1	full, dense, upright / strong central leader
	NV	Nyssa sylvatica 'The James' / Forest Fire™ Tupelo	10' Ht. 2.5" cal.	10	full, dense, upright / strong central leader
	QN	Quercus nuttallii / Nuttall Oak	10' Ht. 2.5" cal.	1	full, dense, upright / strong central leader
	UP	Ulmus americana 'Princeton' / Princeton American Elm	10' Ht. 2.5" cal.	1	full, dense, upright / strong central leader
UNDERSTORY TREES					
	LM	Lagerstroemia indica '18L1' / Black Diamond® Purely Purple™ Crape Myrtle	8' Ht. 2" cal.	2	full, dense, upright
	MJ	Magnolia x 'Jane' / Jane Magnolia	8' Ht. 2" cal.	1	full, dense, upright / strong central leader
SHRUBS					
	AC	Azalea x 'Conlee' / Autumn Amethyst® Encore® Azalea	1.5' Ht. 3 Gal.	14	full, dense, upright
	AA	Azalea x 'Roblee' / Autumn Sangria® Encore® Azalea	1.5' Ht. 3 Gal.	23	full, dense, upright
	AL	Azalea x 'Roblex' / Autumn Lily® Encore® Azalea	1.5' Ht. 3 Gal.	16	full, dense, upright
	CH	Calycanthus x raulstonii 'Hartlage Wine' / Hartlage Wine Raulston Sweetshrub	3' Ht. 7 Gal.	9	full, dense, upright
	GA	Gardenia jasminoides 'August Beauty' / August Beauty Gardenia	1.5' Ht. 3 Gal.	4	full, dense, upright
	HB	Hibiscus syriacus 'DVPazuri' / Azuri Blue Satin® Rose of Sharon	1.5' Ht. 3 Gal.	7	full, dense, upright
	OR	Osmanthus fragrans aurantiacus 'Apricot Echo' / Apricot Echo Sweet Olive	6' Ht.	38	full, dense, upright
ORNAMENTAL GRASS					
	PK	Pennisetum orientale 'Karley Rose' / Karley Rose Fountain Grass	flat	24" o.c.	96 plant when not dormant



GENERAL NOTES

- A/C UNITS, TRANSFORMERS AND OTHER MECHANICAL OR UTILITY EQUIPMENT, NOT SHOWN ON THE PLAN, SHALL BE SCREENED FROM VIEW EITHER BY ADJUSTING PLANTINGS SHOWN IN CLOSE PROXIMITY TO EQUIPMENT OR BY THE ADDITION OF WAX MYRTLES @ 24" HT, 5' OC (SEE GENERAL NOTES FOR EQUIPMENT ACCESSIBILITY AND PLANTING PROXIMITY, ETC.). DUMPSTER IS SCREENED FROM OFF-SITE VIEWS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLANTING.
- MULCH SHALL BE 3" DEEP PINE STRAW UNLESS OTHERWISE NOTED.
- VERIFICATION OF TOTAL QUANTITIES AS SHOWN IN THE PLANT LIST AND ON THE PLAN SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. ANY DISCREPANCIES BETWEEN PLANT LIST AND PLANTING PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION.
- ALL TREES, SHRUBS, GROUNDCOVER, ETC. SHALL CONFORM TO ACCEPTED STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL ROOTBALLS REMOVED FROM CONTAINERS SHALL BE SCARIFIED PRIOR TO PLANTING.
- B&B AS LISTED UNDER "ROOT" IN THE PLANT LIST INDICATES BALLED & BURLAPPED.
- ALL PLANTS/PLANTINGS SHALL BE MULCHED IMMEDIATELY AFTER PLANTING AND WATERED.
- ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO PREVIOUS EXISTING GRADE (UNLESS OTHERWISE NOTED).
- ALL TREES AND SHRUBS SHALL REQUIRE MULCH RINGS AT THEIR BASE IF LEFT WITHIN LAWN AREAS.
- MULCH EDGES AND PROPOSED PLANTINGS SHALL NOT DISTURB ANY EXISTING GROUPS OF TREES TO REMAIN. EDGES ARE SHOWN FOR APPROXIMATION ONLY, BUT ARE TO INDICATE SMOOTH, CLEAN CURVES.
- CULVERTS, RIP-RAP STRUCTURES, AND OTHER STORMWATER DEVICES SHALL BE SCREENED WITH EVERGREEN SHRUBS. IF STRUCTURES ARE NOT SHOWN ON THE PLAN, INSTALL WAX MYRTLES @ 24" HT. - 5' OC.
- A 2' BUMPER OVERHANG, FROM THE BACK OF CURB, SHALL BE ALLOTTED FOR MATURE SHRUBS.
- TREE PROTECTION FENCING SHALL BE MAINTAINED UNTIL ALL SITE WORK IS COMPLETED. THE FENCING SHALL BE REMOVED PRIOR TO THE FINAL SITE INSPECTION FOR THE CERTIFICATE OF OCCUPANCY (C.O.). THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A (C.O.).
- ALL TREES SHALL BE LOCATED A MINIMUM OF 6' FROM SIDEWALKS.

PLANTING NOTES:
LOCATE PLANTS AND PLANTING BEDS BY USING SCALED DIMENSIONS FROM STREET, PROPERTY LINES, BACK OF CURB, BUILDINGS, WALLS, ETC.
ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM STANDARDS SET BY THE U.S.D.A. FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., WASHINGTON, D.C. NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND/OR THE LANDSCAPE ARCHITECT.
SYMBOLS: B&B = BALLED & BURLAPPED; B.R. = BARE ROOT; CONT. = CONTAINER, O.C. = ON-CENTER



R1/2023/22069 - Degrace Farm Subdivision CIVIL/04 Construction/15 Amenity/001 Amenity CDS/003/22069-CD-Amenity-Landscape.dwg, L1.1, 7/22/2023 9:35:06 AM, brinn.oneill



BASS, NIXON & KENNEDY, INC.
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6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
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CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY

03-22069 PROGRESS IP
JOB NO. DATE DRAWN BY
AMENITY AREA
LANDSCAPE PLAN
SCALE: 1" = 20'
CHK BY: KRB

**STATION POINTE SUBDIVISION
AMENITY PLAN**

TOWN OF ANGIER, HARNETT COUNTY, NORTH CAROLINA

SHEET
L1.1

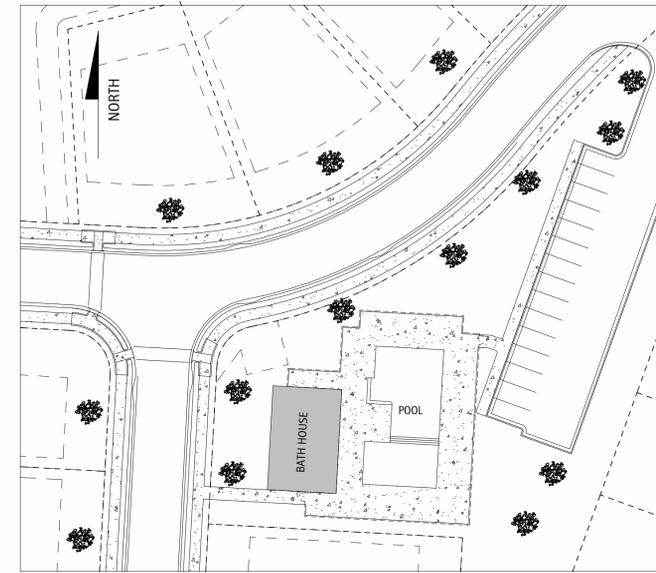
NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION



VICINITY MAP

STATION POINTE BATHHOUSE & POOL

ANGIER, NORTH CAROLINA



SITE MAP



DRAWING INDEX						
SHEET NUMBER	SHEET NAME	REV 01	REV 02	REV 03	REV 04	REV 05
0-GENERAL						
G0.1	COVER SHEET					
G0.2	BUILDING CODE SUMMARY					
G0.3	LIFE SAFETY PLAN					
G0.4	GENERAL NOTES					
1-ARCHITECTURAL						
A1.0	FOUNDATION & FLOOR PLANS					
A1.1	RCP & ROOF PLANS					
A2.0	EXTERIOR ELEVATIONS					
A2.1	EXTERIOR ELEVATIONS					
A3.1	SECTIONS AND DETAILS					
A4.0	ENLARGED PLANS & DETAILS					
A5.0	GENERAL BUILDING DETAILS					
A5.1	GENERAL SIDING DETAILS					
A6.0	SCHEDULES & DETAILS					
10-STRUCTURAL PLANS						
S1	SLAB & FOUNDATION PLAN					
S2	FRAMING PLANS					
S3	STRUCTURAL NOTES & DETAILS					
13-PLUMBING PLANS						
P1	PLUMBING NOTES & SCHEDULES					
P2	PLUMBING PLANS					
15-MECHANICAL						
M1	MECHANICAL NOTES, PLANS, & SCHEDULES					
16-ELECTRICAL						
E1	ELECTRICAL NOTES & SCHEDULES					
E2	LIGHTING & POWER PLANS					
E3	POWER RISER & PANEL SCHEDULE					
17-POOL						
SP1.0	CONTROL JOINT & DIMENSION PLAN					
SP2.0	OVERALL POOL LAYOUT PLAN					
SP2.1	POOL ELECTRICAL & PIPING PLAN					
SP3.0	POOL SECTIONS & DETAILS					
SP3.1	POOL SECTIONS & DETAILS					
SP4.0	SPECIFICATIONS					
SP4.1	SPECIFICATIONS					
SP4.2	SPECIFICATIONS					



NO.	REVISION	DATE

PROJECT #:	2024020
DATE ISSUED:	11/11/2024
DRAWING BY:	JGM
CHECKED BY:	DSC/PGC
100% I.F.P.	

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APPENDIX B BUILDING CODE SUMMARY

FOR ALL COMMERCIAL PROJECTS

Name of Project: Station Pointe Amenity
 Address: Angier, NC Zip Code: 27501
 Owner or Authorized Agent: John Moxley Phone #: 919-691-1170
 Email: john@clugston.com Fax #: _____
 Owned By: Privately City/County State
 Code Enforcement Jurisdiction: City County City/County
 Name of Jurisdiction: Town of Angier / Harnett County

PROJECT SUMMARY: A-3 New Building

Building Description: A-3, Seasonal Drain Down bath house Pool Amenity

Scope of Work: New Building full scope of architectural, structural, plumbing, mechanical, electrical, and pool plans

Lead Design Professional/Project Coordinator:	John Moxley	919-691-1170
DESIGNER FIRM NAME LICENSE # TELEPHONE #	Perry Cox Architect, PA	Perry Cox, AIA 9630 919-393-5411
Architectural:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Civil:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Electrical:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Fire Alarm:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Plumbing:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Mechanical:	Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Sprinkler-Standpipe	Ross Linden Engineers	Brian Ross, PE 25539 919-832-5680
Structural:	Truss Builders	Eric A Gilbert, PE 036322 919-467-9988
Precast:	Truss Builders	Eric A Gilbert, PE 036322 919-467-9988
Retaining Walls >5' High	Pool: Kilian Engineering	Jacob L. Hamilton 048012 252-438-8778
Other:		
Note:		

Building Code: 2018 North Carolina State Building Code (NCSBC) 2009 North Carolina State Building Code
 2009 NC Rehab 2006 NC Rehab 2006 North Carolina Building Code
 2009 Chapter 34 2006 Chapter 34 1995 Existing Building Code

New Building: New Building Shell Building First Time Interior Completion
 Addition Alteration to Shell

Existing Building: Renovation Interior Completion Tenant Alteration
 Reconstruction Repair Alteration to Shell
 Change of Use/Tenant Change of Occupancy

Note: Zoning Review May Be Required for Change of Use or Occupancy

Original Occupancy: _____
 Proposed Occupancy: (A-3) Assembly

OCCUPANCY INFORMATION

Primary Occupancies:
 Assembly: A-1 A-2 A-3 A-4 A-5
 Hazardous: H-1 H-2 H-3 H-4 H-5
 Institutional: I-1 Condition 1 2
 I-2 Condition 1 2
 I-3 Condition 1 2 3 4 5
 I-4
 Mercantile:
 Residential: R-1 R-2 R-3 R-4
 Storage: S-1 Moderate S-2 Low High-piled
 Parking Garage: Open Enclosed Repair Garage
 Utility and Miscellaneous:

Special Occupancies: 402 403 404 405 406 407 408 409 410 411
 412 413 414 415 416 417 418 419 420 421

Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____

Non-Separated Mixed Occupancy (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated Mixed Occupancy (508.3.3) - See below for area calculations for each story; the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

ALLOWABLE AREA AND HEIGHT CALCULATIONS

THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETIONS

Exterior Wall	Actual Length	Open Length	lic Way or Open Space 30'
North			
South			
East			
West			
Total	P	F	W

INCREASE FRONTAGE _____ %
 SPRINKLERS _____ %
 FRONTAGE INCREASE FORMULA ALLOWABLE AREA FORMULA
 $I_s = 100(F - 0.25) \frac{W}{30}$

BOTH BUILDING AND TENANT MUST BE INDICATED ON CHART BELOW

Story No.	DISCRIP & USE	BLDG AREA (ACTUAL SF)	TABLE 506.2 ALLOWABLE AREA (SF)	AREA FOR INCREASE	SPRINKLER RATING	ALLOWABLE FLOOR AREA	RATE OF ACTUAL/ALLOWABLE	MAXIMUM SEPARATION BUILDING AREA REQUIRED
Main Level	A-3	1,568	6000	N/A	N/A	N/A	0.261	6000 SF

- Frontage area increases from Section 506.3 are computed thus:
 - Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 - Total Building Perimeter = _____ (P)
 - Ratio (F/P) = _____ (F/P)
 - W = Minimum width of public way = _____ (W)
 - Percent of frontage increase $I = 100(F/P - 0.25) \times W/30 =$ _____ (%)
- Unlimited area applicable under conditions of Section 507.
- Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2)
- The maximum area of open parking garages must comply with Table 406.5.4
- Frontage increase is based on the unsprinklered area value in Table 506.2

ALLOWABLE HEIGHT

MOST RESTRICTIVE (GROUP)	ALLOWABLE BUILDING HEIGHT (TABLE 504.3)	INCREASE FOR SPRINKLERS	ACTUAL BUILDING HEIGHT AS SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type VB	Type VB	Type VB	403.3.1
Building Height in Feet	H = 40'-0"	N/A	H = 18'-0"	403.3.1
Building Height in Stories	S = 1	N/A	S = 1	403.3.1

BUILDING DATA

THIS SECTION REQUIRED FOR ALL PROJECTS

Construction Type: I-A I-B II-A II-B III-A III-B IV-HT V-A V-B

Mixed construction: Yes No Types: NFPA 13 NFPA 13R Partially Sprinklered Special Suppression

Standpipes: Yes No
 Fire District: Yes No
 Building Height: 18' Feet
 Basement: Yes No
 Mezzanine: Yes No
 High Rise: Yes No
 Life Safety Plan Sheet # (if provided): G0.3

FLOOR	EXISTING (SQFT)	NEW (SQFT)	SUB-TOTAL
First Floor	0	1,568	1,568

Area of Project/Tenant/Alteration/Renovation:
Area of Construction:

FIRE PROTECTION REQUIREMENTS

THIS SECTION REQUIRED FOR ALL PROJECTS

Life Safety Plan Sheet #, if Provided: G0.3

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D*	PROVIDED (W/REDUCTION)	DETAIL # & SHEET #	DESIGN # FOR RATED ASSEMBLY	RATED # FOR SHEET PENETRATION	SHEET # FOR RATED JOINTS
Bearing Walls Exterior							
North	0	0					
East	0	0					
West	0	0					
South	0	0					
Interior Bearing walls	0	0					
Nonbearing Walls Exterior							
North	0	0					
East	0	0					
West	0	0					
South	0	0					
Interior Bearing walls	0	0					
Structural Frame, including columns, girders, trusses							
Floor construction, including supporting beams and joists. List construction type.	0	0					
Floor Ceiling Assembly	0	0					
Columns Supporting Floors	0	0					
Roof construction, including supporting beams and joists**							
Roof Ceiling Assembly	0	0					
Columns Supporting Roof							
Shafts- Exit Enclosures	N/A	N/A					
Shafts- Other (describe)	N/A	N/A					
Corridor Separation	N/A	N/A					
Occupancy Separation	N/A	N/A					
Party/ Fire Wall Separation	N/A	N/A					
Incidental Use Separation	N/A	N/A					
Dwelling/ sleeping unit Separation	N/A	N/A					
Smoke Barrier Separation	N/A	N/A					
Tenant Separation							

* Indicate section number permitting reduction
** Indicated if using Table 601 Note C exception

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES/PROTECTION	DEGREE OF OPENINGS	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
N/A			

WALL LEGENDS

THIS SECTION REQUIRED FOR ALL PROJECTS

CHECK IF THE FOLLOWING ARE PRESENT AND INDICATE BY A WALL LEGEND ON ALL PLANS

- Fire Partitions 708 Fire Walls 705 Fire Barriers 706 Smoke Partitions 710
 Smoke Barriers 709 Shaft Enclosure 707

LIFE SAFETY SYSTEMS REQUIREMENTS

THIS SECTION IS REQUIRED FOR ALL PROJECTS

Emergency Lighting: Yes No
 Exit Signs: Yes No
 Fire Alarm: Yes No
 Smoke Detection Systems: Yes No
 Panic Hardware: Yes No

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet # _____ G0.3

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- Occupant loads for each area
- Exit access travel distance (1017)
- Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- Dead end lengths (1020.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1010.1.10)
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1030)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that have been utilized regarding the items above

EXIT REQUIREMENTS NUMBER AND ARRANGEMENT OF EXITS

- Corridor dead ends (Section 1017.3)
- Single exits (Section 1015.1, Section 1019.2)
- Common Path of Egress Travel (Section 1014.3)

FLOOR, ROOM AND/OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS REQUIRED	SHOWN ON PLANS	TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS	
			ALLOWABLE TRAVEL DISTANCE (TABLE 1016.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
POOL DECK	2	2	200'-0"	110'-2"	59'-6"	110'-6"

OCCUPANT LOAD AND EXIT WIDTH

Room Name	Area	Occupancy		Egress Width per Occupant(1005.3)		Required Width		Actual Width Shown	
		Load Factor	Load Count	Level	Stair	Level	Stair	Level	Stair
PUMP ROOM	220 SF	300 SF	1	0.2		0.2			
CHEM ROOM	31 SF	300 SF	1	0.2		0.2			
MENS	153 SF	0 SF		0.2					
WOMENS	152 SF	0 SF		0.2					
COVERED PORCH	924 SF	15 SF	62	0.2		12.4			
POOL	2017 SF	50 SF	41	0.2		8.2			
6' CLEAR AREA	2011 SF	15 SF	135	0.2		27			
POOL DECK	2335 SF	15 SF	156	0.2		31.2		92	
Grand total	7842 SF		396	1.6		79.2		92	0

- See Table 1004.1.1 to determine whether net or gross area is applicable
- Minimum stairway width (Section 1009.1); min. corridor width (Section 1017.2); min. door width (Section 1008.1.1)
- Minimum width of exit passageway (Section 1021.2)
- The loss of 1 means of egress shall not reduce the available capacity to less than 50% of the total required (Section 1005.1)
- Assembly occupancies (Section 1025)

ASSEMBLY OCCUPANCY INFORMATION

Name	Type	Occupancy		Exit Width (inches)	Exit Quantity
		Area	Load Count		
COVERED PORCH	Assembly - Unconcentrated (tables and chairs)	924 SF	15 SF	62	12.4
POOL	Swimming Pool water surface	2017 SF	50 SF	41	8.2
6' CLEAR AREA	Swimming Pool Deck	2011 SF	15 SF	135	27
POOL DECK	Swimming Pool Deck	2335 SF	15 SF	156	31.2
Grand total				394	78.8

PLUMBING FIXTURE REQUIREMENTS

THIS SECTION IS REQUIRED FOR ALL PROJECTS

USE	WATERCLOSETS		URINALS		LAVATORIES		RINSE SHOWERS		DRINKING FOUNTAINS	
	Male	Female	Male	Female	Male	Female	Regular	Accessible	Regular	Accessible
SPACE										
EXIST'G										
NEW	1	3	1	1	2	1	1	1	1	1
Total Required	2	3	0	1	2	1	1	1	1	1
Total Provided	1	3	1	1	2	1	1	1	1	1

384 PERSONS / 2 = 192 M / 192 F
 WATERCLOSETS: 192 MALE / 125 = 2 WC = 1 WC & 1 URINAL
 192 FEMALE / 65 = 3 WC = 3 WC
 LAVATORY: 192 MALE / 200 = 1 LAV. = 1 LAV
 192 FEMALE / 200 = 2 LAV. = 2 LAV

STRUCTURAL DESIGN LOADS

THIS SECTION IS REQUIRED FOR ALL PROJECTS

DESIGN LOADS:
 Importance Factors: Snow (I) _____
 Seismic (I) _____
 Live Loads: Roof _____ psf
 Mezzanine _____ psf
 Floor _____ psf
 Ground Snow Load: _____ psf
 Wind Load: Ultimate Wind Speed _____ mph (ASCE Exposure Category _____)

SEISMIC DESIGN CATEGORY: A B
 Provide the following Seismic Design Parameters:
 Risk Category (Table 1604.5) _____
 Spectral Response Acceleration Coefficient _____
 Site Classification: A B C D _____
 Basic S: Field Test _____ Presumptive _____ Historical Data _____
 Bearing Wall _____ Dual w/ Special Moment Frame _____
 Building Frame _____ Dual w/ Intermediate R/C or Special Steel _____
 Moment Frame _____ Inverted Pendulum _____
 Analysis Procedure: Simplified _____ Equivalent Lateral Force _____ Dynamic _____
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake _____ Wind _____

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing Capacity _____ psf
 Pile size, type, and capacity _____

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETION

Thermal Zone: _____
 Winter Dry Bulb: _____
 Summer Dry Bulb: _____

Interior Design Conditions:
 Winter Dry Bulb: _____
 Summer Dry Bulb: _____
 Relative Humidity: _____

Building Heating Load:
 Unitary _____
 Description of Unit: _____
 Heating Efficiency: _____
 Cooling Capacity: _____
 Size Category of Unit: _____

Boiler:
 Size Category, if oversized, state reason: _____

Chiller:
 Size Category, if oversized, state reason: _____

List equipment efficiencies: _____

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	1:5" ACCESS	1:32" ACCESS	
TOTAL					

ELECTRICAL SUMMARY

THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETION ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code ASHRAE 90.1 Performance Prescriptive
 Performance Prescriptive

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
 Total exterior wattage specified vs. allowed (including or space by space)

Additional Efficiency Points (When using the 2009 ASHRAE 90.1):
 C4.1: Required for ASHRAE 90.1
 C4.2: HVAC Equipment Performance
 C4.3: LED Lighting Power Density
 C4.4: Enhanced Digital Lighting Controls
 C406.5 On-site Renewable Energy
 C406.6 Dedicated Outdoor Air System
 C406.7 Reduced Energy Use in Service Water Heating

ENERGY SUMMARY

THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETION

OCCUPANCY SCHEDULE CLUBHOUSE					
Room Number	Room Name	Type	Occupancy		
			Area	Load Factor	Load Count
101	PUMP ROOM	Accessory Storage Areas, Mechanical Equipment Room	220 SF	300 SF	1
102	CHEM ROOM	Accessory Storage Areas, Mechanical Equipment Room	31 SF	300 SF	1
103	COVERED PORCH	Assembly - Unconcentrated (tables and chairs)	924 SF	15 SF	62
104	WOMENS	N/A	152 SF	0 SF	
105	MENS	N/A	153 SF	0 SF	
Grand total			1480 SF		64

OCCUPANCY SCHEDULE POOL					
Room Number	Room Name	Type	Occupancy		
			Area	Load Factor	Load Count
PL100	POOL	Swimming Pool water surface	2017 SF	50 SF	41
PL101	6' CLEAR AREA	Swiming Pool Deck	2011 SF	15 SF	135
PL102	POOL DECK	Swiming Pool Deck	2335 SF	15 SF	156
Grand total			6362 SF		332

GENERAL LIFE SAFETY NOTES:

USE: A-3 (ASSEMBLY)
 PRIMARY LOAD FACTOR: UNCONCENTRATED TABLES & CHAIRS (15 SF)
 OCCUPANT LOAD: 394 PPL
 CONSTRUCTION TYPE: V-B
 SPRINKLERS: NO

REQUIRED EXITS: 2
 PROVIDED EXITS: 2

DIAGONAL DISTANCE: 119'-0"
 REQUIRED EXIT SEPARATION: 119'-0"/2 = 59'-6"
 PROVIDED EXIT SEPARATION: 110'-6"

REQUIRED EGRESS WIDTH: 78.8"
 PROVIDED EGRESS WIDTH: 92"

MAXIMUM COMMON PATH OF TRAVEL: 75'-0"
 MAXIMUM ALLOWABLE TRAVEL DISTANCE: 200'-0"
 ACTUAL MAX TRAVEL DISTANCE: 110'-2"

-  **POOL DECK NON-CLEAR AREA**
2,335 SQ. FT / 15 SQ. FT PER PERSON:
156 PEOPLE
-  **8' CLEAR DECK AREA**
2,011 SQ. FT / 15 SQ. FT PER PERSON:
135 PEOPLE
-  **POOL AREA**
2,017 SQ. FT / 50 SQ. FT PER PERSON:
41 PEOPLE
- COVERED PORCH:**
924 SQ. FT / 15 SQ. FT PER PERSON:
62 PEOPLE
- TOTAL A-3 OCCUPANT LOAD:**
394 PEOPLE

GENERAL PLUMBING NOTES:

USE: A-3 (ASSEMBLY)
 OCCUPANT LOAD: 394 PPL / 2 = 197 PPL

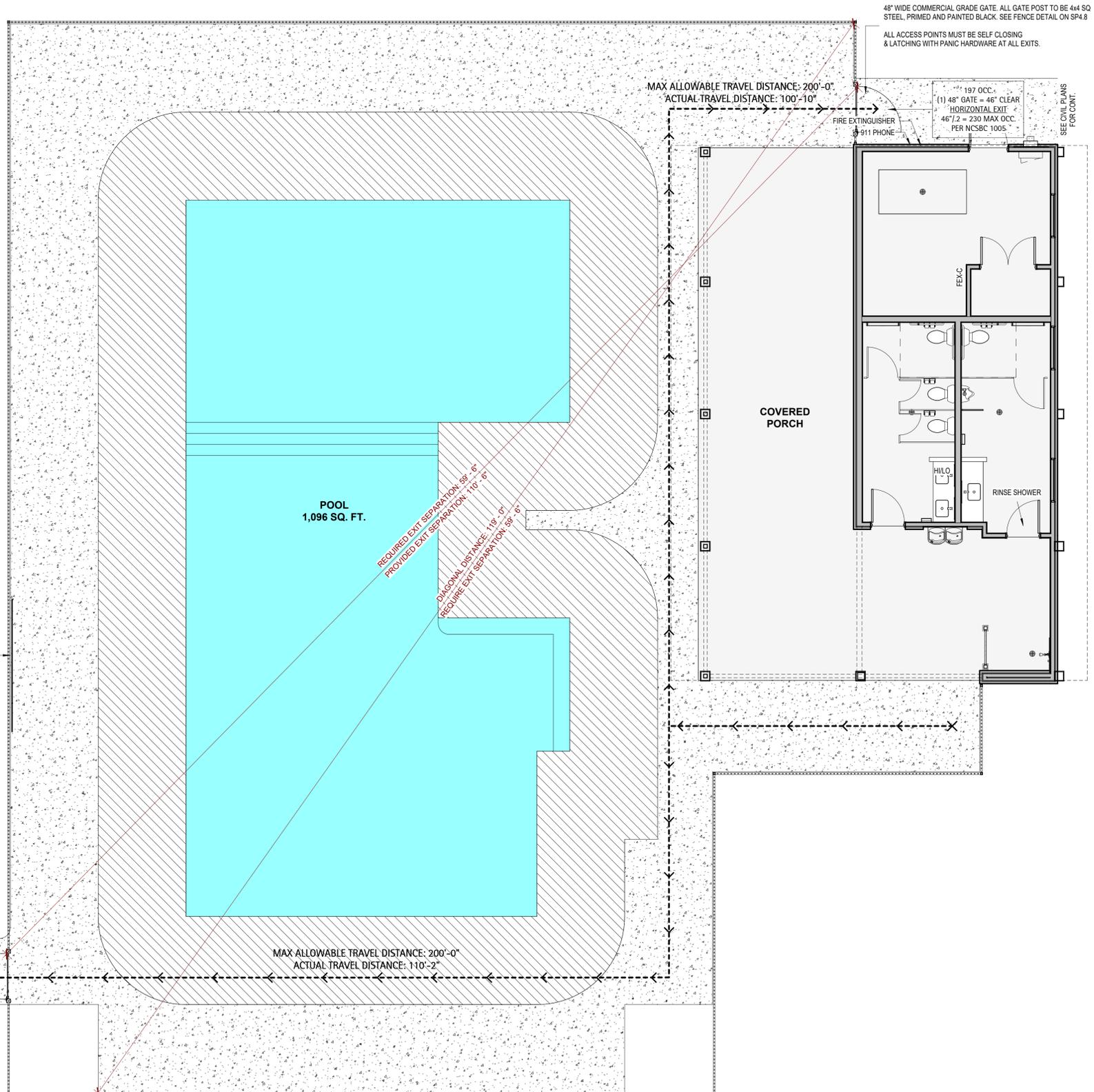
REQUIRED MALE WATER CLOSETS: 2 (1 PER 125 PPL)
 REQUIRED FEMALE WATER CLOSETS: 3 (1 PER 65 PPL)
 PROVIDED MALE WATER CLOSETS: 1 WC & 1 URINAL
 PROVIDED FEMALE WATER CLOSETS: 3

REQUIRED MALE LAVATORIES: 1 (1 PER 200)
 REQUIRED FEMALE LAVATORIES: 1 (1 PER 200)
 PROVIDED MALE LAVATORIES: 1
 PROVIDED FEMALE LAVATORIES: 2

REQUIRED WATERCOOLERS: 2 (1 PER 500)
 PROVIDED WATERCOOLERS: 2

REQUIRED SERVICE SINKS: 1
 PROVIDED SERVICE SINKS: 1(HOSE BIB & FLOOR DRAIN)

LIFE SAFETY SYMBOL LEGEND	
	EMERGENCY EXIT
FEX	SEMI-RECESSED 'ABC' TYPE FIRE EXTINGUISHER TO MEET NFPA-10 STANDARDS. MOUNT @ 15" MIN. - 48" MAX A.F.F.
FEX-C	BRACKET MOUNTED WATER TYPE FIRE EXTINGUISHER TO MEET NFPA-10 STANDARDS. MOUNT @ 15" MIN. - 48" MAX A.F.F.
	INDICATES TRAVEL DIRECTION



STATION POINTE AMENITY
 DRB GROUP
 ANGIER, NORTH CAROLINA

NO.	REVISION	DATE

PROJECT #: 2024020
 DATE ISSUED: 11/11/2024
 DRAWING BY: JGM
 CHECKED BY: DSC/PJC
 100% I.F.P.

LIFE SAFETY PLAN

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GENERAL NOTES

- The General Contractor shall be both licensed and bonded in North Carolina and shall provide documents upon the Architect's request.
- The Work shall be done in accordance with all rules and regulations of the North Carolina State Building Code 2018 along with city, county, and state regulations. The General Contractor is responsible for securing and paying for all permits required for the Work and for the scheduling of all required inspections during the course of the Work.
- General Contractor shall be responsible for the provisions for job safety. These drawings do not contain provisions for job safety.
- Dimensions are to face of framing unless otherwise noted.
- Do not scale drawings. Stated & written dimensions govern. The General Contractor shall verify all dimensions in the field and shall be responsible for their accuracy. No extra charge or compensation shall be allowed because of difference between actual dimensions and those indicated on the drawings, unless they contribute to a change in the scope of the Work. Any difference which may be found shall be submitted to the Architect for decision prior to ordering, manufacturing, or proceeding with the Work. Horizontal dimensions indicated are to/ from face of finish, unless noted otherwise. Vertical dimensions are from top of floor slab except where noted to be above finished floor (AFF). Dimensions are not adjustable without approval of Architect unless noted +/-.
- General Contractor shall be responsible for comparing all dimensions in the construction documents and existing conditions in the field.
- Framing Subcontractor shall coordinated framing with locations of HVAC vents, plumbing and light fixtures so as to avoid conflict.
- The General Contractor shall provide protection and be responsible for any existing finishes to remain and shall repair or replace any damaged areas as a result of the work. All existing finishes to remain shall be cleaned at the completion of construction.
- All materials and systems shall be installed as per manufacturer's specifications and all construction shall be of industry standard or better. The Architect shall be ultimate judge of quality.
- Only new items of recent manufacture, of standard quality, free from defects, will be permitted in the Work, unless otherwise noted. Rejected items shall be removed immediately from the Work and replaced with items of the quality specified. Failure to remove rejected materials and equipment shall not relieve the General Contractor from the responsibility for quality of items used nor from any other obligation imposed on him by the Contract.

- General Contractor shall be responsible for notifying the Architect immediately of construction deviating from depicted or implied information here-in. In the event of conflict between data shown on drawings and data shown in the specification, the specification shall govern. Detail drawings take precedent over drawings of larger scope. Should the General Contractor at any time discover an error in a drawing or specification, or any discrepancy, or variation between dimensions on the drawings and measurements at site, or lack of dimensions or other information, the Contractor shall not proceed with the work affected until clarification has been made by the Architect. In case of an inconsistency between Drawings and Specifications or within either Document, not clarified by addendum, the more specific provision will take precedence over less specific; more specific will take precedence over less stringent; more expensive item will take precedence over less expensive. Better quality or greater quantity of Work shall be provided in accordance with Architect's interpretation. On Drawings, figures take precedence over scaled dimensions. Scaling of dimensions, if done, is done at the Contractor's own risk.
- General Contractor shall verify that no conflicts exist in locations of any and all mechanical, telephone, electrical, plumbing and sprinkler equipment (to include all piping, duct work, sprinklers structural members and conduit) and that clearances for installation and maintenance of above equipment is provided. Elements in conflict shall be determined and reviewed with the Architect prior to work proceeding. Contractor to coordinate new work with existing conditions.
- The General Contractor shall provide shop drawings for the Architect's review and approval for the following: All shop fabricated millwork, carpet layout, flooring, light fixtures, doors, misc. steel, metal fabrication, glass/glazing, sprinkler layouts, hardware. Shop drawings shall be submitted in the form of 3 sets of prints. Shop drawings shall not be reproductions of Contract Documents. Material Submittals (3 samples) shall be provided for wood, fasteners, acrylic, carpet, tile, base, paint, laminate and any other materials indicated in the shop drawing.

- The General Contractor shall provide the Architect with manufacturer's cut sheets and specifications for all equipment including but not limited to: light fixtures, plumbing equipment, electrical equipment, fans, supplementary heating and cooling elements, all hardware and security equipment. General contractor shall be responsible for verifying all field dimensions prior to ordering equipment and/or casework.
- The General Contractor shall not proceed with work for which he expects additional compensation beyond the contract amount with out written authorization from the Architect and Owner. Failure to obtain such authorization shall invalidate a claim for extra compensation. The Contractor shall not proceed with work which, if completed in strict conformance with the Construction Documents, will result in additional work beyond the scope of the Contract without written authorization from the Architect and Owner. Any field conditions that significantly vary from the Contract Documents or will result in additional work, shall be brought to the attention of the Architect prior to proceeding with work.

- Contractor shall include all x-ray and core drill costs. All core drilling of the slab shall be approved by the Landlord's Structural Engineer prior to proceeding with the Work. Contractor shall submit proposed locations to Architect and Structural Engineer for review prior to proceeding with the work.
- Patch, repair and install all fireproofing as required by code. Fireproof any new penetrations required by the work.
- General Contractor to coordinate and review size and location of all slab penetrations. All required penetrations shall be made in accordance with the Owner's standard approval procedures and methods. All penetrations shall be properly sealed according to the Architect and the Owner's requirements and applicable codes.
- The General Contractor shall continuously check architectural and structural clearances for accessibility of equipment and mechanical and electrical systems. No allowances of any kind will be made for the General Contractor's negligence to foresee means of installing equipment into position.
- The finished work shall be firm, well-anchored, in true alignment, plumb, level, with smooth, clean, uniform, appearance without waves, distortions, holes, marks cracks, stains, or discoloration. Joining shall be close fitting, neat and well scribed. The finished work shall have no exposed unsightly anchors or fasteners and shall not present hazardous, unsafe corners. All work shall have the provision for expansion, contraction and shrinkage as necessary to prevent cracks, buckling, and warping due to temperature and humidity conditions.
- Attachments, connections or fasteners of any nature are to properly and permanently be secured in conformance with best practice and the General Contractor is responsible for improving them accordingly. The drawings highlight special conditions only and by no means illustrate every connection. The Contractor is responsible for improving connection accordingly.
- General Contractor shall waive "Common Practice" and "Common Usage" as construction criteria wherever details and Contract Documents of governing codes, ordinances, etc. require quantity or better quality than common practice or common usage would require.

GENERAL NOTES

- The General Contractor shall submit shop drawings and submittals order and schedule delivery of materials in ample time to avoid delays in construction. If an item is found to be unavailable or to have a long lead time, the General Contractor shall notify Architect immediately with a proposed alternative.
- The General Contractor shall notify the Owner, the Landlord, and the Architect in writing of any deficiencies, errors, conflicts or omissions found in the construction documents and/or specifications prior to the commencement of the work in this area. Any unreported deficiencies will become the responsibility of the General Contractor to correct.
- The General Contractor shall exercise extreme care and precaution during the construction of the Work, and schedule work, to minimize disturbances to adjacent spaces and /or structures and their occupants, property, public thoroughfares, etc. The General Contractor shall take precautions and be responsible for the safety of all building occupants from construction procedures. The General Contractor shall be responsible for any overtime costs incurred thereby.
- All debris shall be removed from the site on a daily basis when possible. Upon completion of the work, remove all debris from the building created by the work provided under this Contract and leave all areas clean. Trash is not permitted to be burned on site.
- All abandoned miscellaneous nails, hangers, staples, wires, conduits and debris shall be removed from the walls and areas of exposed ceilings. Remove all abandoned pipe sleeves in floor slabs. Patch existing slab as req. to maintain UL fire rating of floor slab where pipes and conduits have been removed.
- Slab penetrations less than 2" around new and existing piping, conduit, ductwork, etc. shall be filled with acoustic foam and/or sealant to ensure acoustical separation between floor slabs. Slab penetrations greater than 2" around new and existing piping, conduit, ductwork, etc. shall be filled with concrete. All piping, conduit, ductwork, etc. shall be wrapped with expansion material prior to filling with concrete. Expansion material shall be approved by the MEP Engineer.
- Contractor shall provide the Team with a construction schedule showing the proposed phasing. Any long lead items that will affect the Substantial Completion date shall be brought to the Architect's attention immediately.
- Provide protection for existing finishes to remain, including restrooms, lobbies and corridors and repair damages as a result of construction. Document any existing conditions or damages prior to the start of construction
- General Contractor shall be responsible for providing exhaust for dryers, bathrooms, and ranges to exterior with proper terminus (not to be located on street side elevation). Verify terminus type and location with owner prior to installation.
- The Architect shall not be responsible for constructed variations from the information contained here-in unless reviewed and approved by Architect.
- Do not scale drawings, but rather inquire of Architect. Reproduction of these drawings is prohibited unless written permission is obtained from the Architect.
- All Trades to caulk with Manicapapity Approved "Fire Caulk" at all top plate penetrations.

FLOOR FINISH NOTES

- Refer to Finish Plan & Schedule for extent and type of all floor finishes.
- GC to flashpatch floor to provide a level surface that shall not exceed 1/4" over 10 feet cumulative. At floor finish transitions flash patch to smooth transition of finished material to maintain level finished floor surface.
- All floors to slope to floor drains - 1/4" per 1'-0" U.N.O
- All exterior floor slabs to receive a light broom concrete finish. U.N.O.
- SEE STRUCTURAL DRAWINGS FOR ALL FOUNDATION SPECIFICATIONS.

INTERIOR FINISH NOTES

- Refer to Finish Schedule and Finish Plan for extent and type. All wall surfaces, metal frames, and trim shall be painted, UON. All surfaces to be painted shall be prepared for priming in accordance with the manufacturer's specifications.
- All painted surfaces shall receive 1 prime and 2 finish coats as follows:
GWB surfaces - Interior eggshell latex paint
GWB ceiling surfaces - Interior flat latex paint
Hollow Metal/Wood - Odorless interior semi-gloss alkyd latex
- Paint is to be applied by a roller or brush on all surfaces. Only the prime coat may be spray applied. Provide a 12"x12" GWB sample for each color for Owner's approval prior to the start of the Work.
- Toilet and bathing room floors shall have a smooth, hard, non-absorbant surface that extends upward onto the walls at least 6"
- Walls within 2' of urinals and waterclosets shall have a smooth, hard, non-absorbant surface to the height of 4' above the finish floor. Verify material with room schedule and/or Architect

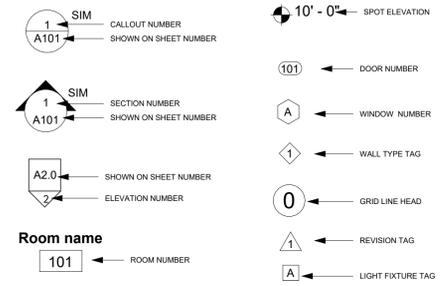
WALL SECTION NOTES

- Bituminous Damp Proofing shall be applied to exterior foundations of all habitable spaces.
- All treated lumber shall bear the designation AWPA C22. Pressure treated lumber shall be used in the following locations:
a. Wood in contact with concrete or masonry.
b. Siding within 6" of the ground;
c. Wood exposed to weather.
- Install 5/8" Densglass sheathing behind all tub and shower walls, use water-resistant GWB for all bathroom ceilings UNO.

ABBREVIATIONS

AC	ACOUSTIC	EG	EGG SHELL	KIT	KITCHEN	PBD	PARTICLE BOARD	TB	TACK BOARD
ACPL	ACOUSTICAL PLASTER	EXP	EXPOSED	KPL	KICKPLATE	PC	PRECAST CONCRETE	T&G	TONGUE AND GROOVE
ADH	ADHESIVE	EXPN	EXPANSION	LAM	LAMINATE	PG	PLATE GLASS	THK	THICK(NEED)
ADJT	ADJUSTABLE	FLR	FLOOR	LOQ	LACQUER	PGL-L	PATTERNED GLASS - LAMINATED	THR	THRESHOLD (SADDLE)
ALT	ALTERNATE	LT	LIGHT	LT	LIGHT	PLAM	PLASTIC LAMINATE	TM	TRAVERTINE MARBLE
AL	ALUMINUM	LTG	LIGHTING	LVR	LOUVER	PNL	PANEL	TPO	THERMOPLASTIC POLYEFIN
AP	ACOUSTIC PANEL	LVT	LIGHT WEIGHT	LT WT	LIGHT WEIGHT	PT	POINT/PAINT	TPTN	TOILET PARTITION
APC	ACOUSTIC PANEL CEILING	FL	FRAMELESS	PTH	PAPER TOWEL DISPENSER	PTD	PARTITION	TYP	TYPICAL
ASPH	ASPHALT	FR	FRAME	PTN	PAPER TOWEL RECEPTOR	PTN	PARTITION	TZ	TERRAZZO
AT	ASPHALT TILE	FRP	FIBRE REINFORCED PLASTIC	M	MILLWORK (TYPE)	PTR	PAPER TOWEL RECEPTOR	TZB	TERRAZZO BASE
B	BASE	FRT	FIRE RESISTANT TREATMENT	MAS	MASONRY	PVC	POLYVINYL CHLORIDE	UNF	UNFINISHED
BD	BOARD	FWP	FABRIC WALL PANEL/PAPER	MAT	MATERIAL	PWD	PLYWOOD	UON	UNLESS OTHERWISE NOTED
BIT	BITUMINOUS	FXD	FIXED (INOPERABLE)	MH	MANHOLE	PWT	PORCELIN WALL TILE	UNO	UNLESS NOTED OTHERWISE
BR	BRICK	GA	GUAGE, GAGE	MIN	MINIMUM	QT	QUARRY TILE	V	VENEER
BRZ	BRONZE	GALV	GALVANIZED	MISC	MISCELLANEOUS	RB	RUBBER BASE	VAR	VARIES
CAB	CABINET	GLS	GLASS (GLAZING)	ML	METAL LATH	RC	RECESS-MOUNTED CABINET	VEST	VESTIBULE
CB	CERAMIC TILE BASE	GL-L	GLASS-LAMINATED	MLDG	MOULDING	RCP	REFLECTED CEILING PLAN	VPLAS	VENEER PLASTER
CEM	CEMENT	GL-PS	GLASS PANEL SYSTEM	MT	MARBLE TILE	REFR	REFRIGERATOR	WA	WALL ART
CER	CERAMIC	GL-SS	GLASS STOREFRONT SYSTEM	MTL	METAL	RES	RESILIENT	WB	WOOD BASE
CG	CORNER GAURD	GL-T	GLASS TEMPERED	MULL	MULLION	RFG	ROOFING	WC	WALL COVERING
CI	CAST IRON	GRG	GRANITE	MV	MILLWORK-WOOD VENEER	RM	ROOM	WD	WOOD
CLG	CEILING	GRT	GLASS/FIBRE REINFORCED GYPSUM	MWK	MILLWORK	RVL	REVEAL	WD-PS	WOOD PANEL SYSTE.
CLR	CLEAR	GT	GLAZED TILE	N/A	NOT APPLICABLE	SC	SEALED CONCRETE	WDV	WOOD VENEER
C-MAR	COMPOSITE MARBLE	GWB	GYPSUM WALLBOARD	NF	NO FINISH	SF	SEAMLESS FLOORING / SPORT FLOORING	WDW	WINDOW
CONC	CONCRETE	GYP	GYPSUM CEILING PANEL	NOM	NOMINAL	SMC	SURFACE-MOUNTED CABINET SPECIFICATION(S)	WH	WALL HUNG
COR	CORRIDOR	HD	HEAVY DUTY	NR	NOT RATED	SS	STAINLESS STEEL	WMB	WALL-MOUNTED BRACKET
CPT	CARPET	HDW	HARDWARE (SET)	NTS	NOT TO SCALE	SSK	SERVICE SINK	WSCT	WAINSCOT
CR	CROWN	HM	HOLLOW METAL	OPNG	OPENING	SSM	SOLID SURFACE MATERIAL	WT	WINDOW TREATMENT
CS	CONCRETE SEALER	IGU	INSULATED GLASS UNIT	OPS	OFFICE PARTITION SYSTEM	STL	STEEL		
CT	CERAMIC TILE	INSUL	INSULATING/ INSULATION			STN	STONE		
DR	DOOR	INT	INTERIOR			SUSP	SUSPENDED		
DS	DOORSTOP/ DOWNSPOUT								

SYMBOLS



REFERENCED BUILDING CODES

- BUILDING: 2018 NORTH CAROLINA STATE BUILDING CODE
 ENERGY: 2018 NORTH CAROLINA ENERGY CONSERVATION CODE
 FIRE: 2018 NORTH CAROLINA FIRE PREVENTION CODE
 PLUMBING: 2018 NORTH CAROLINA STATE PLUMBING CODE
 MECHANICAL: 2018 NORTH CAROLINA STATE MECHANICAL CODE
 ELECTRICAL: 2020 NATIONAL ELECTRICAL CODE
 ACCESSIBILITY: 2009 ANSI A117.1
 POOL: 2015 INTERNATIONAL SWIMMING POOL AND SPA CODE
 NC DENR - 15A NCAC 18A.2500

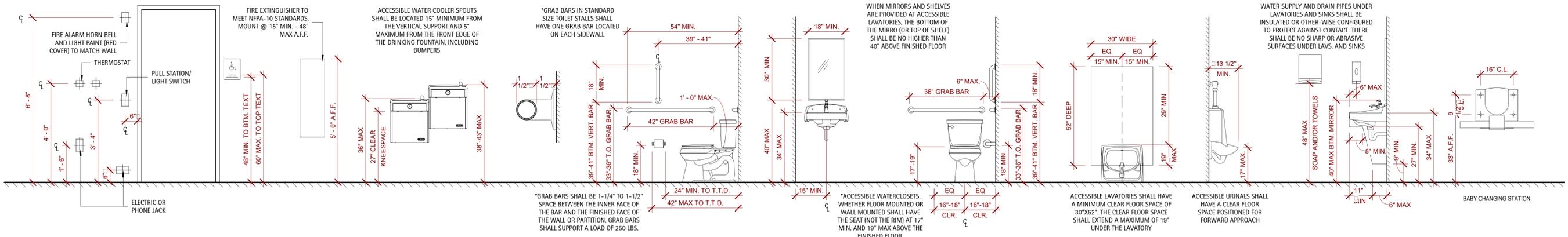


STATION POINTE AMENITY
DRB GROUP
ANGIER, NORTH CAROLINA

DATE	
REVISION	
NO.	
PROJECT #:	2024020
DATE ISSUED:	11/11/2024
DRAWING BY:	JGM
CHECKED BY:	DSC/PGC
	100% I.F.P.

GENERAL NOTES

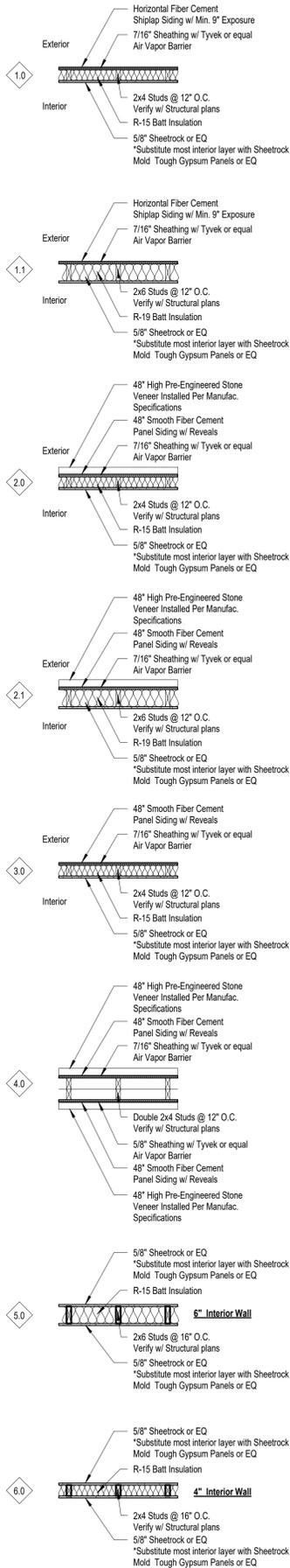
GO.4



TYPICAL MOUNTING HEIGHTS

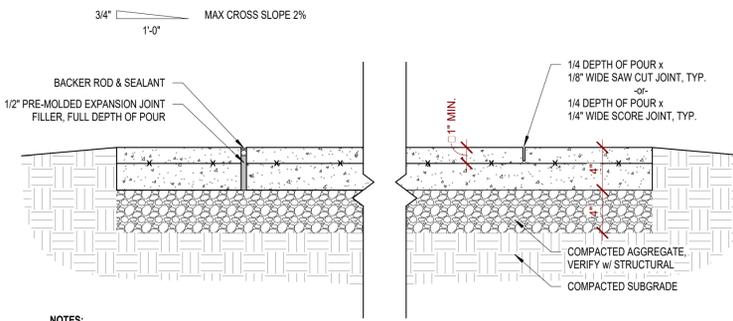
*PROVIDE REQ'D BLOCKING FOR GRAB BARS, WALL HUNG TOILETS, AND ACCESORIES DURING FRAMING

WALL TYPE DETAILS



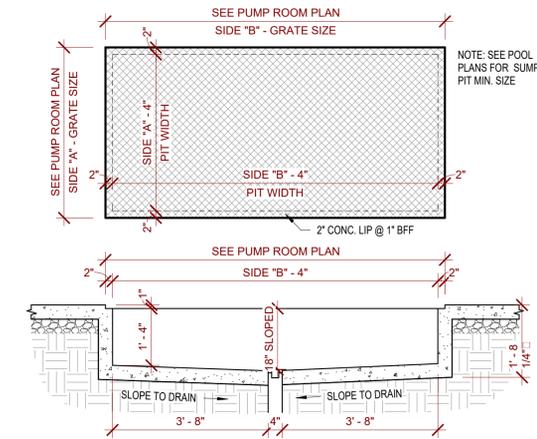
KEYNOTES

TAG	DISCRPTION	PROVIDED BY
A	HIGH / LOW WATER COOLER. SEE PLUMBING PLANS FOR SELECTIONS. SEE TYPICAL MOUNTING HEIGHT DETAILS.	C.P.C.I
B	ELECTRICAL METER w/ BACK TO BACK PANEL. SEE ELEC. DWGS. GC TO VERIFY LOCATION TO BE OUTSIDE OF POOL FENCING	C.P.C.I
C	10"x10" FAUX FRAMED COLUMN TO MATCH STRUCTURAL COLUMNS, WRAPPED W/ FINISH GRADE WOOD, STAINED.	C.P.C.I
D	STRUCT. STEEL PIPE COLUMNS. SEE STRUCT. DWGS FOR SIZE & INSTALLATION REQUIREMENTS. WRAP W/ FINISH GRADE WOOD, STAINED.	C.P.C.I
E	WATER HEATER TO BE INSTALLED IN ATTIC ABOVE WOMENS RESTROOM. SEE PLUMBING DWGS FOR SPECIFICATIONS & CLEARANCES.	C.P.C.I
F	4X4 TOJA GRID FRAME W/ 2X6 SLAT WALL @ RINSE SHOWER. STAIN ALL WOOD COMPONENTS TO MATCH COLUMNS.	C.P.C.I
G	ATTIC ACCESS TO BE MIN. 22"x36" OR TO ALLOW THE PASSAGE OF THE LARGEST EQUIPMENT IN ATTIC SPACE. COORDINATE LOCATION W/ STRUCTURAL FRAMING PLANS.	C.P.C.I



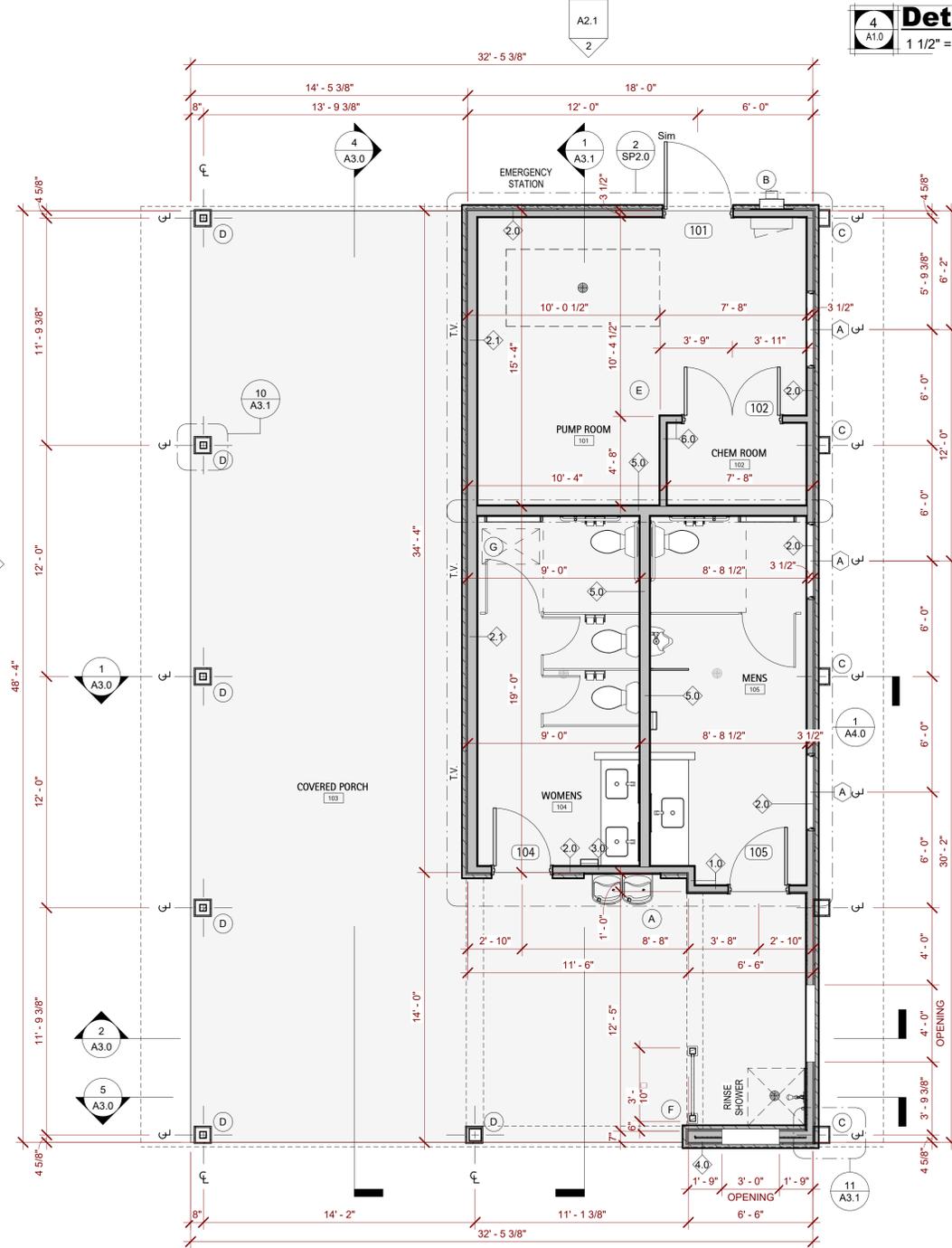
NOTES:

- ALL JOINTS TO BE CUT w/ WET WALK BEHIND SAW TO ENSURE ALL CUTS ARE PERPENDICULAR W/ FACE OF CONCRETE
- MAXIMUM CONTROL JOINT SPACINGS SHALL BE 10 FT. IN EACH DIRECTION UNLESS SHOWN OTHERWISE ON PLAN, SEE STRUCT.
- PROVIDE EXPANSION JOINT WHERE SLABS ARE POURED AGAINST VERTICAL SURFACES AND/OR DIFFERENT PAVING MATERIALS AND AS SPECIFIED ON PLANS OR 25'-0" MAX O.C.

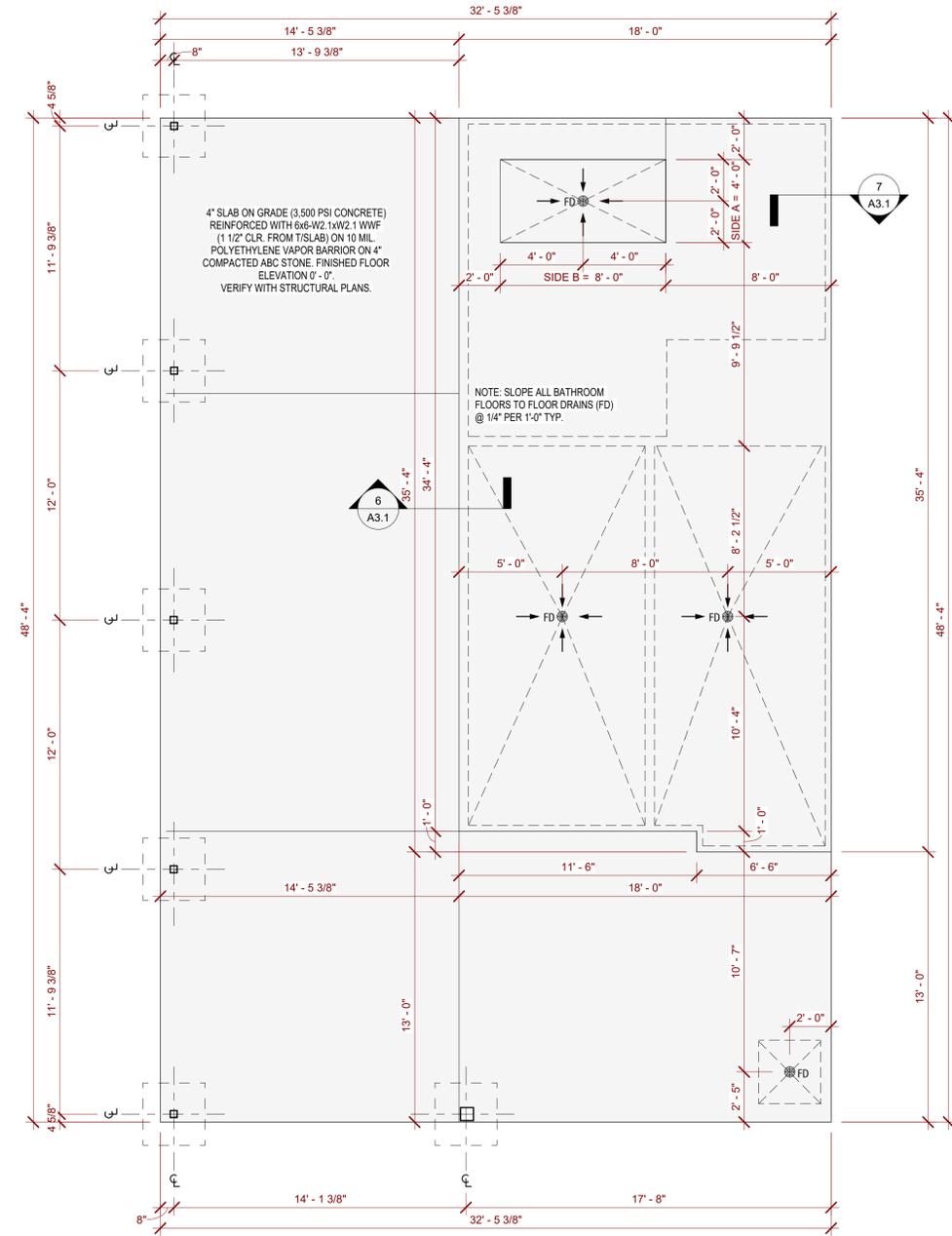


Detail - Sump Pit

Detail - Typ. Concrete Joints



First Floor Plan



Foundation Plan



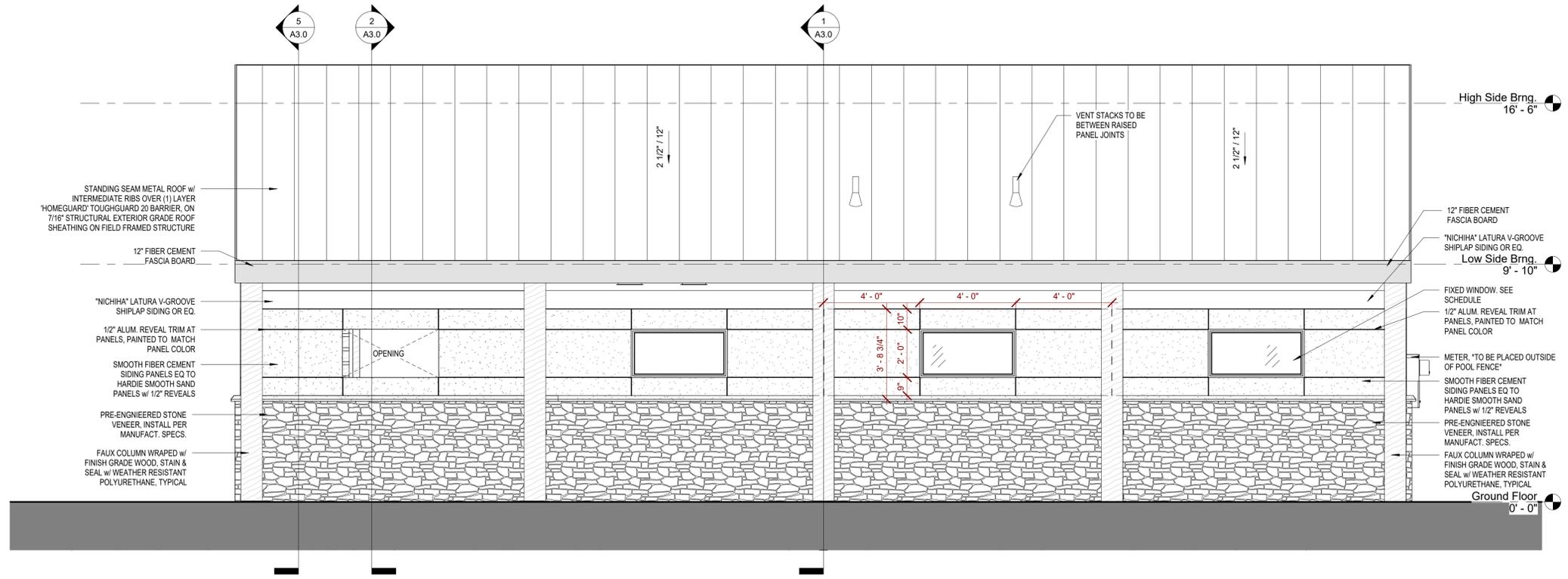
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 DRB GROUP
 ANGLIER, NORTH CAROLINA

NO.	REVISION	DATE

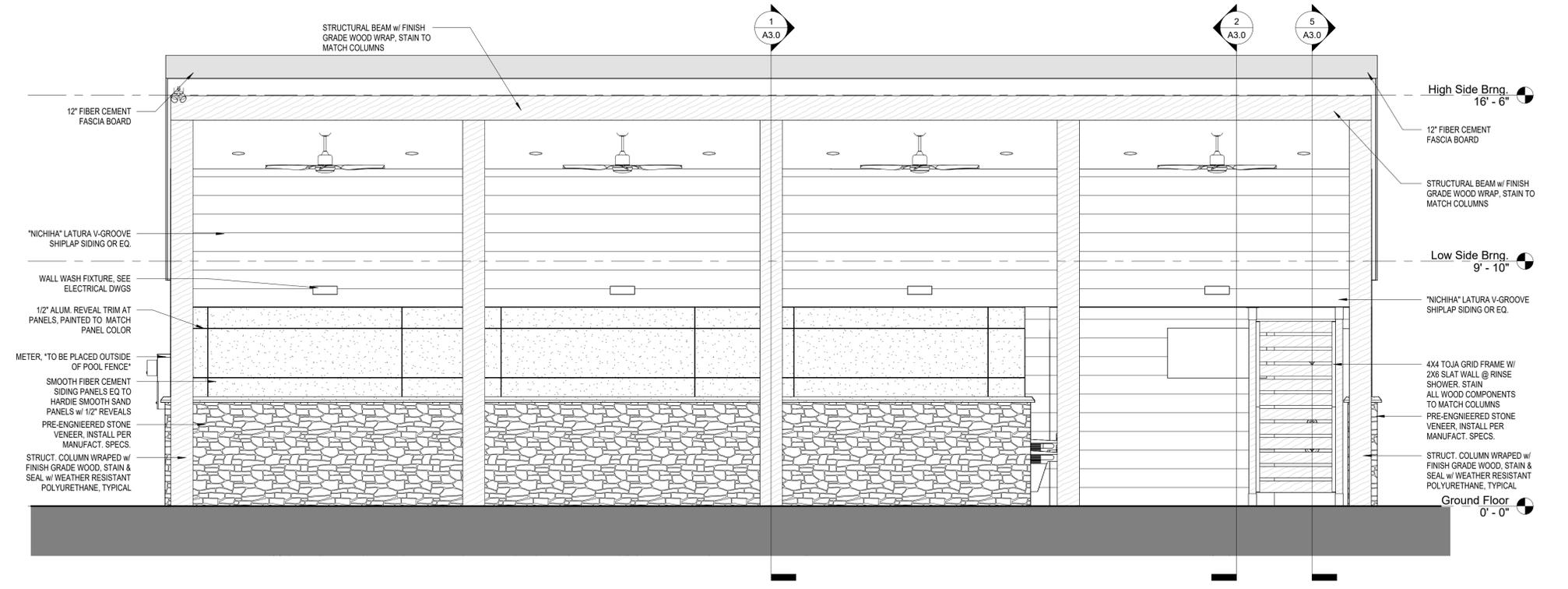
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FOUNDATION & FLOOR PLANS

A1.0



Elevation - Front
 2 A2.0
 3/8" = 1'-0"



Elevation - Rear
 1 A2.0
 3/8" = 1'-0"

STATION POINTE AMENITY

DRB GROUP

ANGIER, NORTH CAROLINA

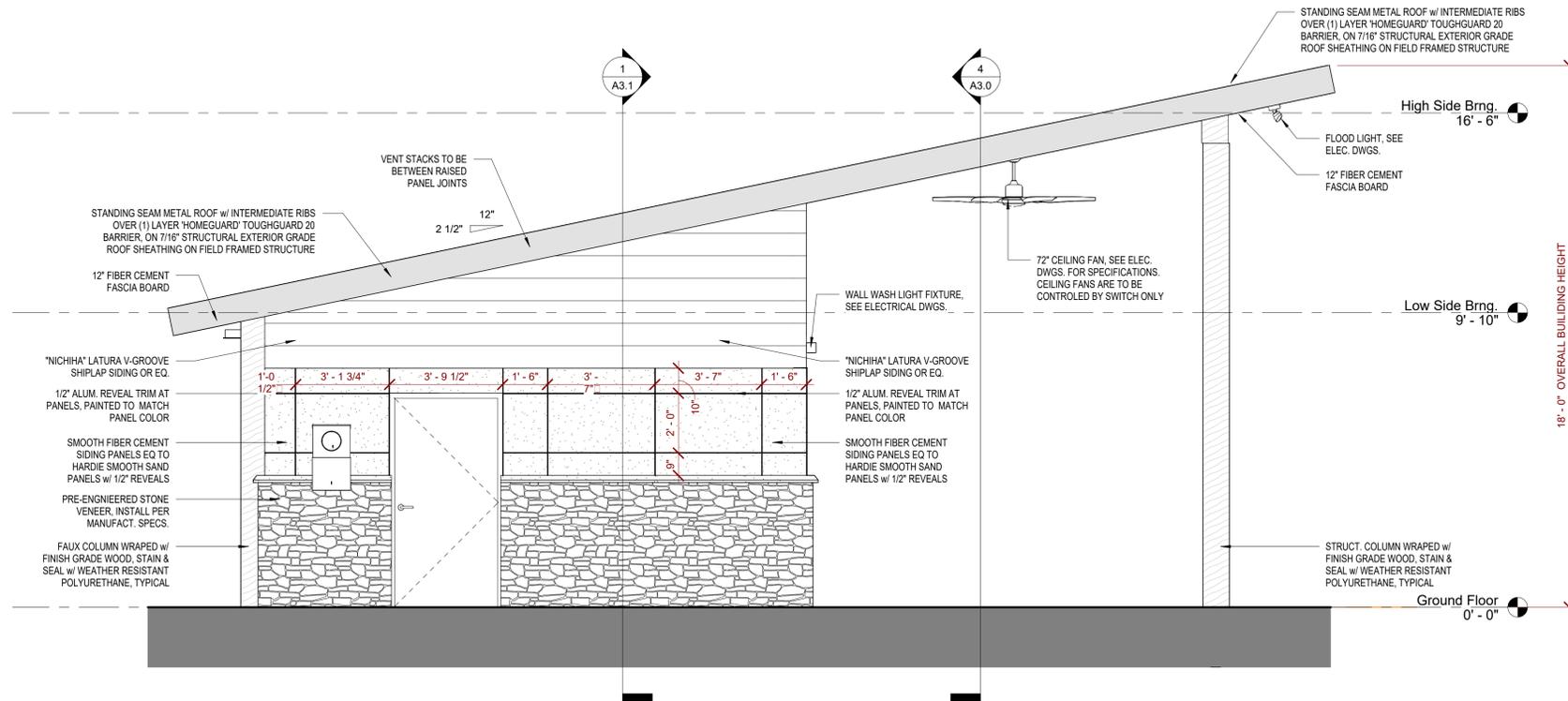
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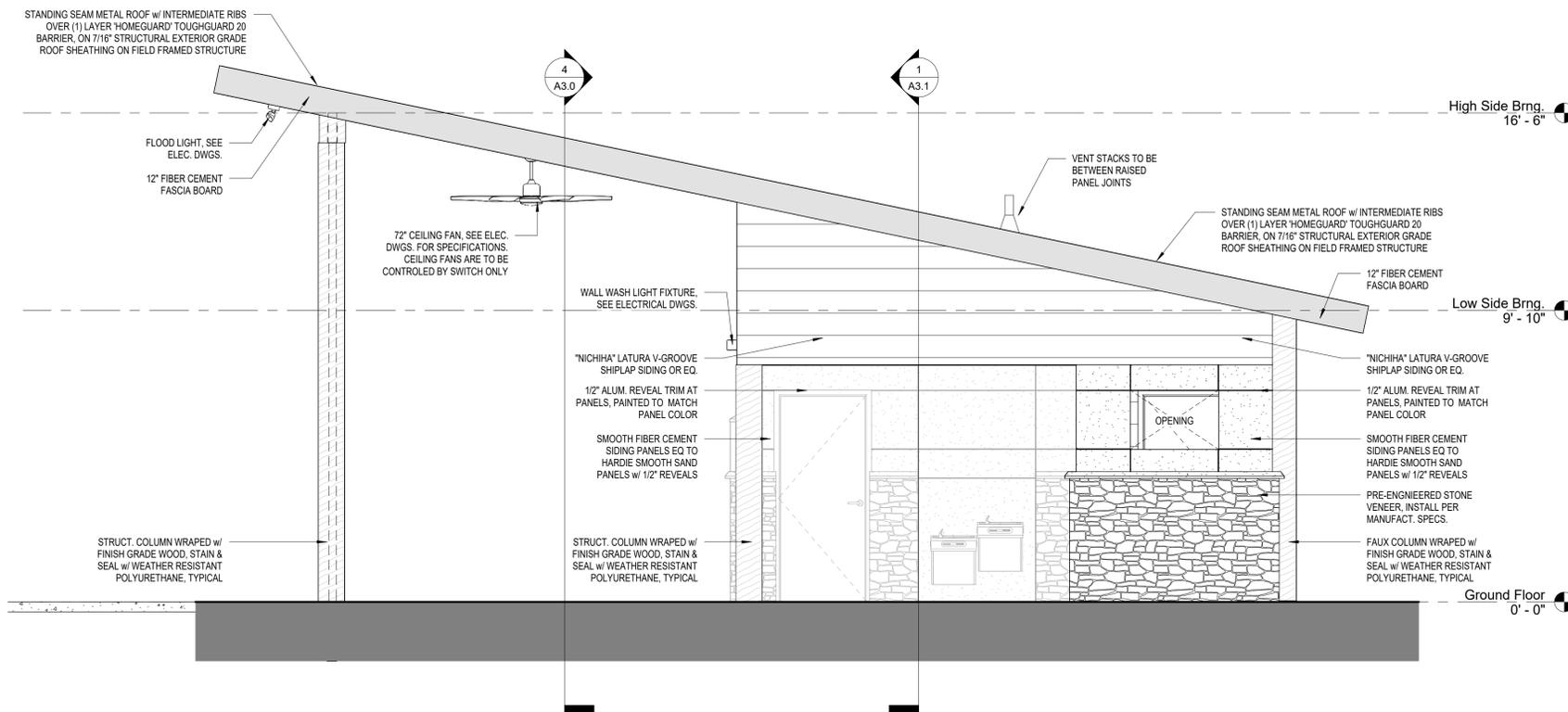
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EXTERIOR ELEVATIONS

A2.0



2
A2.1
Elevation - Right
3/8" = 1'-0"

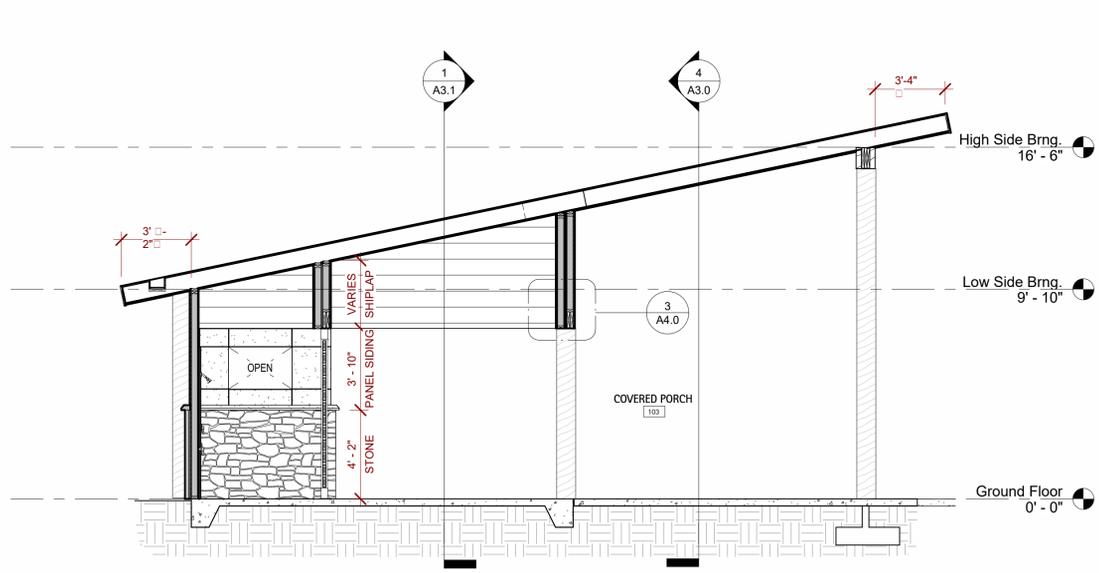


1
A2.1
Elevation - Left
3/8" = 1'-0"

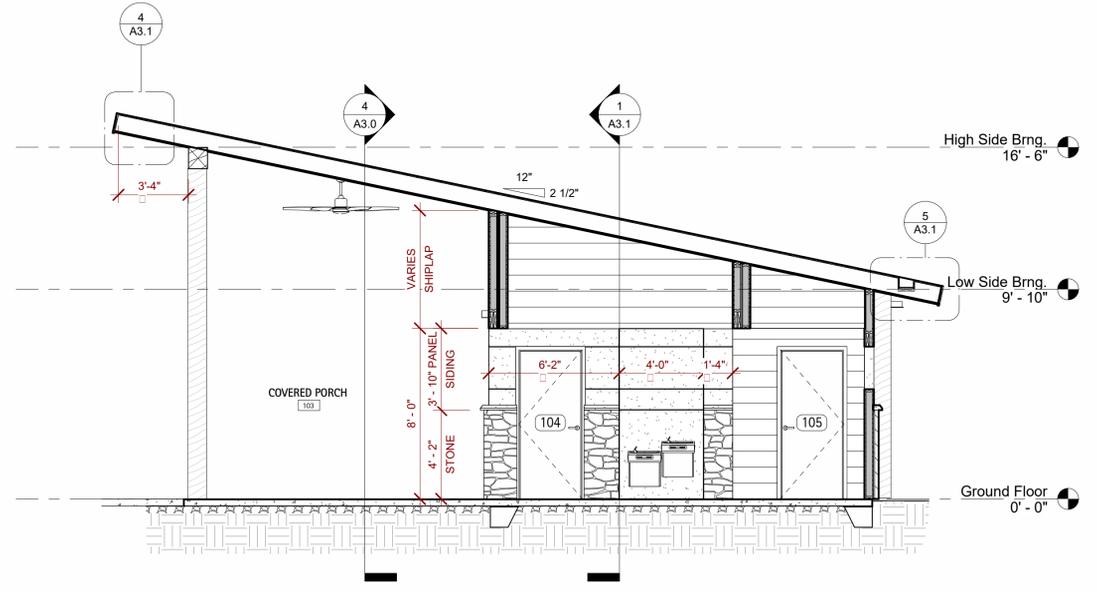


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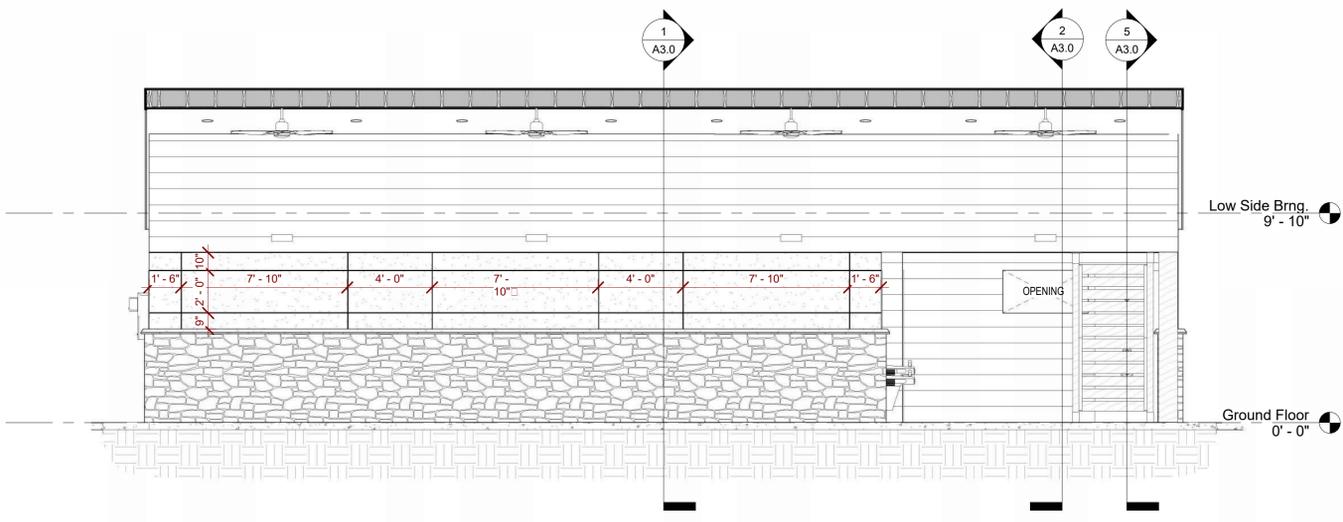
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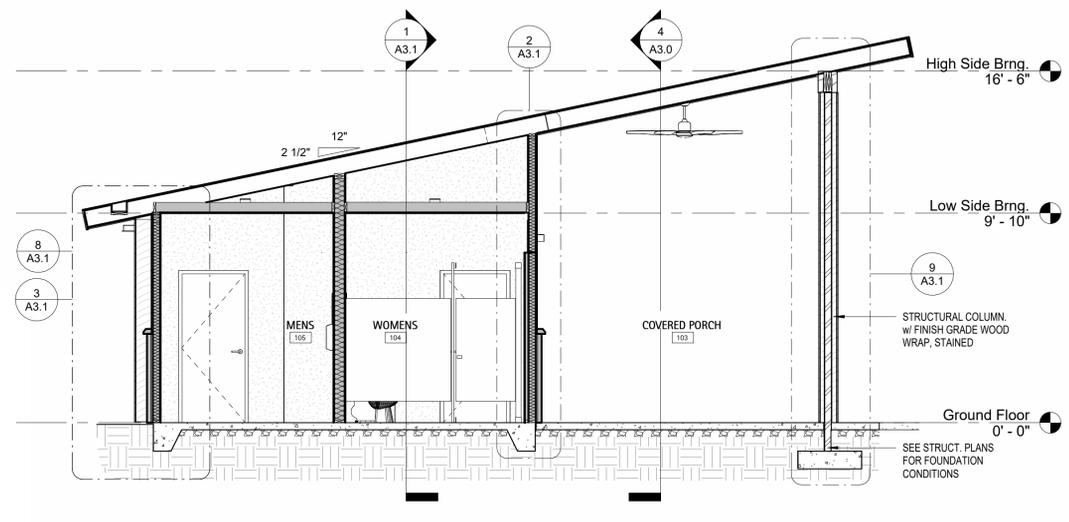
Section - Through Shower
1/4" = 1'-0"



Section - Through RR Vestibule
1/4" = 1'-0"



Section - Facing Front
1/4" = 1'-0"



Section - Through Restrooms
1/4" = 1'-0"

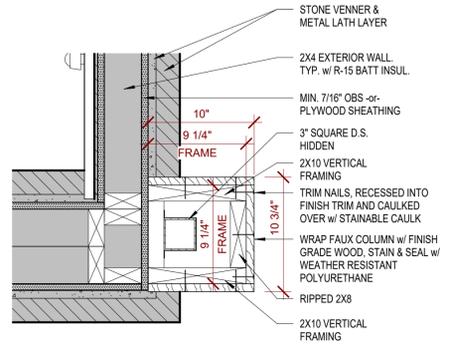
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PROJECT #: 2024020
DATE ISSUED: 11/11/2024
DRAWING BY: JGM
CHECKED BY: BSI

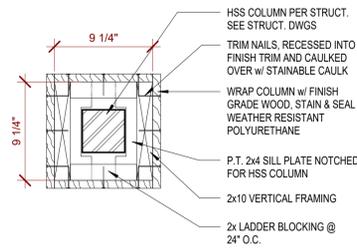
100% I.F.P.

BUILDING & WALL SECTIONS

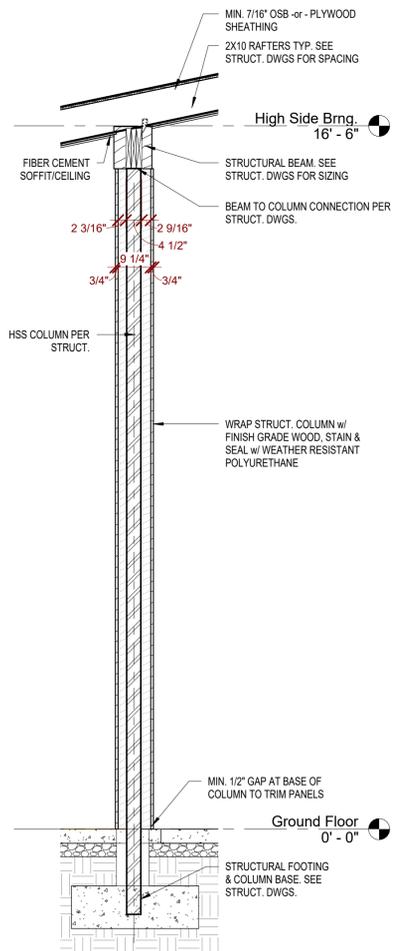
A3.0



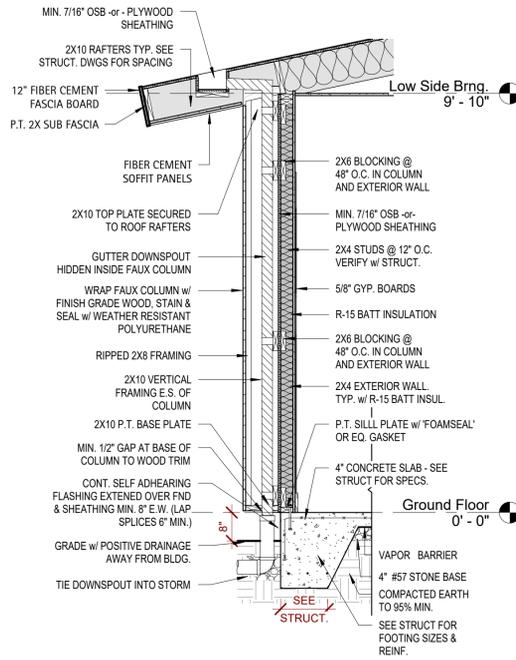
11 Detail - Faux Column Frame
1 1/2" = 1'-0"



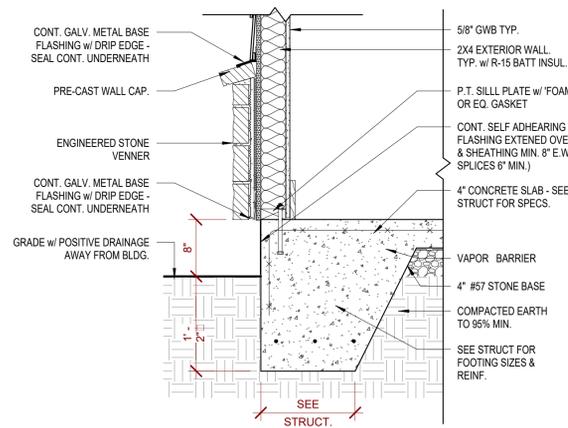
10 Detail - Structural Column
1 1/2" = 1'-0"



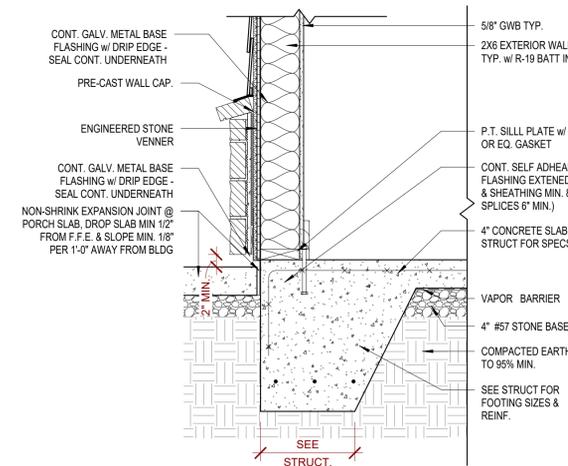
9 Detail - Structural Column
1/2" = 1'-0"



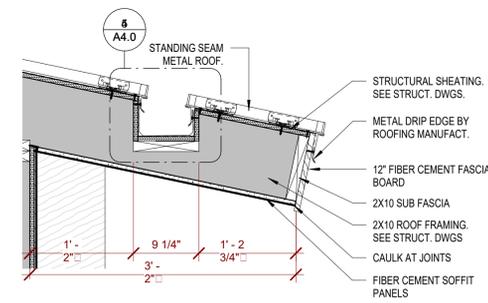
8 Section - Faux Column
1/2" = 1'-0"



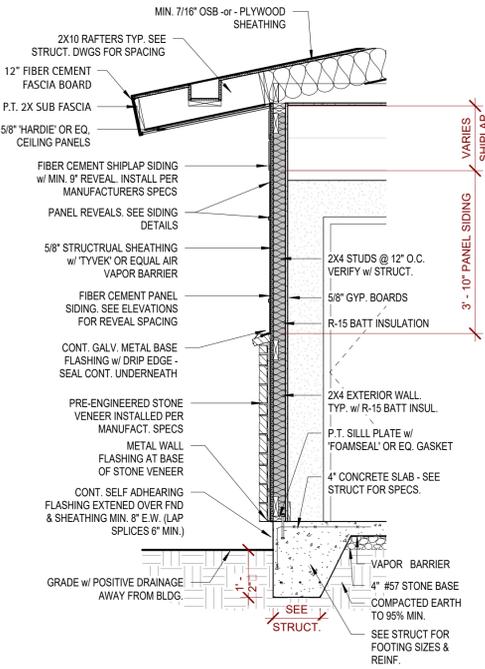
7 Detail - Turn Down Slab @ Grade
1" = 1'-0"



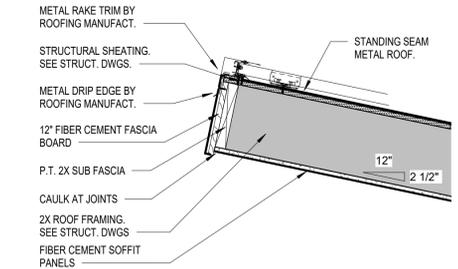
6 Detail - Turn Down Slab @ Hardscapes
1" = 1'-0"



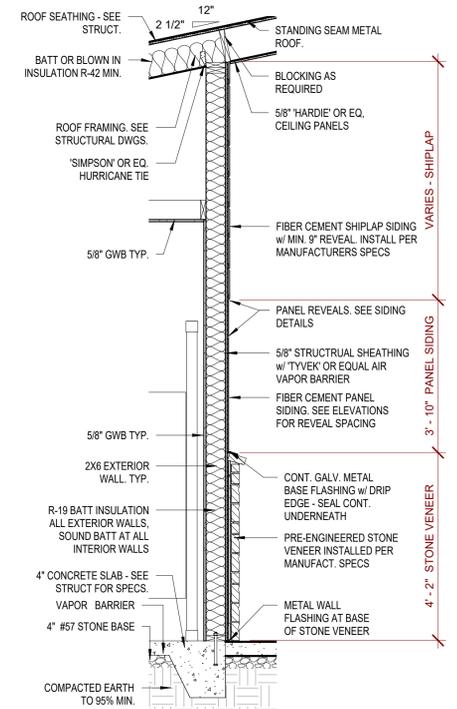
5 Detail - Low Side Fascia
1" = 1'-0"



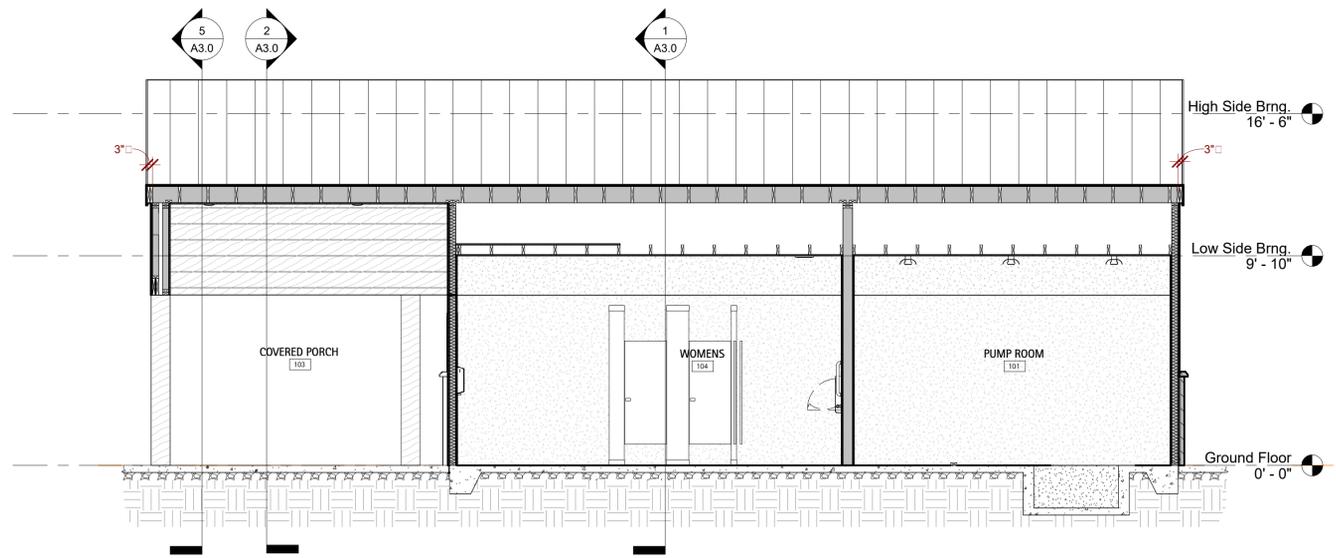
3 Section - Low Bearing Wall
1/2" = 1'-0"



4 Detail - High Side Fascia
1" = 1'-0"



2 Section - High Bearing Wall
1/2" = 1'-0"



1 Section - Facing Rear
1/4" = 1'-0"



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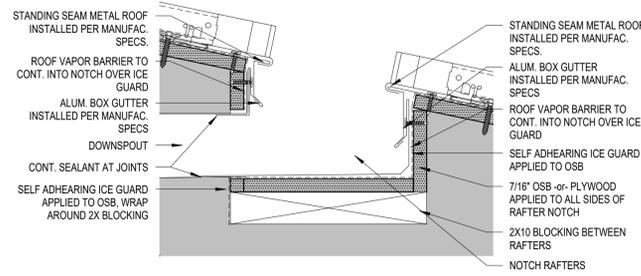


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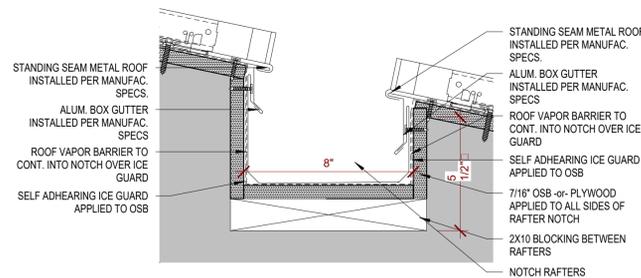
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ENLARGED
PLANS &
DETAILS

A4.0

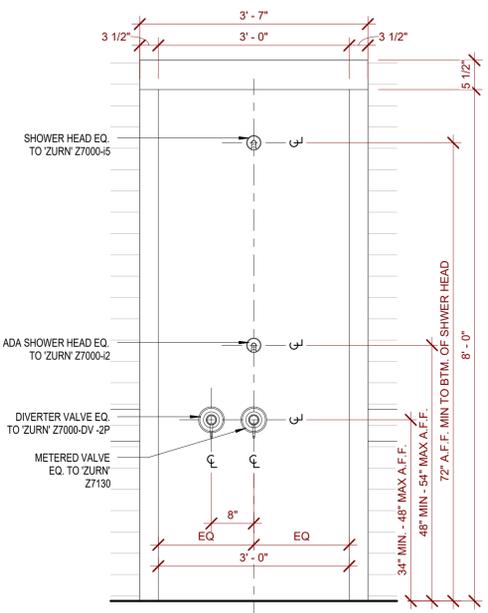


5 Detail - Downspout @ Gutter
3" = 1'-0"

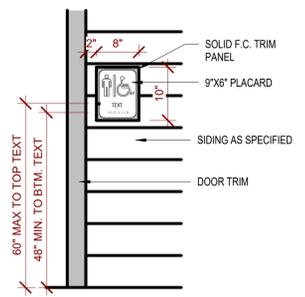


4 Detail - Recessed Box Gutter
3" = 1'-0"

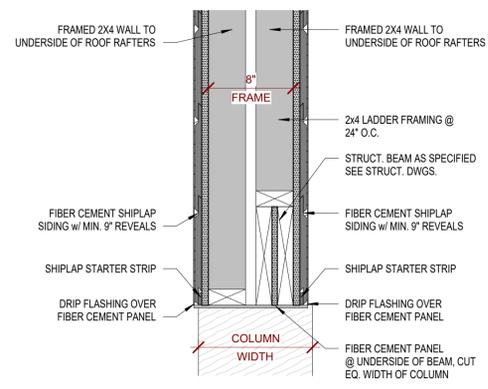
TOILET ACCESSORIES			
MARK	ITEM	MANUFACTURER	MODEL NUMBER
TTD	SURFACE MOUNTED DUAL ROLL TOILET TISSUE HOLDER	AMERICAN SPECIALTIES, INC	0715
GB	GRAB BAR - 1 1/2" DIA., S/S, PREENED GRIP, SNAP FLANGE 36", 42" & 18"	AMERICAN SPECIALTIES, INC	3800 TYPE-01
MIR	INTERLOK S.S. FRAMED MIRROR W/ SHATTER RESISTANT GLASS	AMERICAN SPECIALTIES, INC	0600
CH	SURFACE MOUNTED COAT HOOK	AMERICAN SPECIALTIES, INC	0714
PTD	SURFACE MOUNTED PAPER TOWEL DISPENSER	AMERICAN SPECIALTIES, INC	0210
CS	SURFACE MOUNTED BABY CHANGING STATION	AMERICAN SPECIALTIES, INC	9012
TP	TOILET PARTITION - FLOOR SUPPORTED W/ HEADRAIL, POWDER COATED STEEL FINISH	GENERAL PARTITIONS	SERIES 40-5



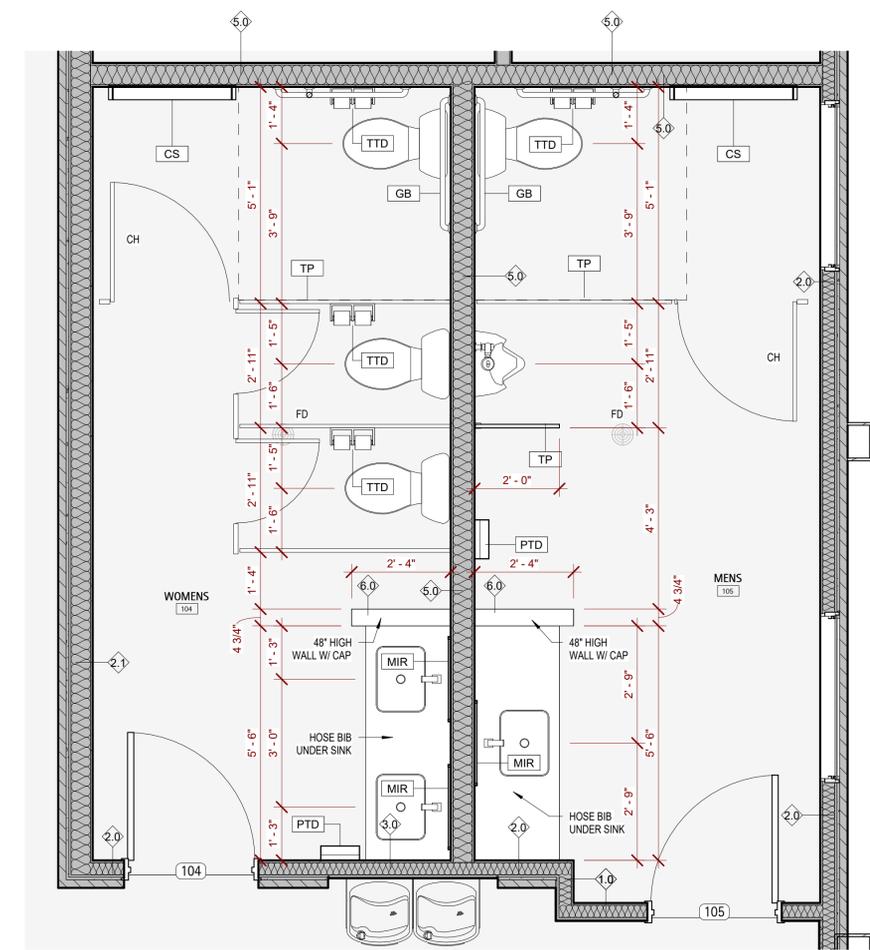
1011.7 OUTDOOR RINSE SHOWERS. OUTDOOR RINSING SHOWERS SHALL PROVIDE AT LEAST TWO FIXED SHOWER HEADS. ONE FIXED SHOWER HEAD SHALL BE 48 INCHES (1220 MM) MINIMUM AND 54 INCHES (1370 MM) MAXIMUM ABOVE THE GROUND SURFACE, AND ONE FIXED SHOWER HEAD SHALL BE 72 INCHES (1830 MM) MINIMUM ABOVE THE GROUND SURFACE. EXCEPTION: A HAND HELD SHOWER SPRAY UNIT COMPLYING WITH 608.6 SHALL BE PERMITTED INSTEAD OF THE FIXED SHOWER HEAD 48 INCHES (1220 MM) MINIMUM AND 54 INCHES (1370 MM) MAXIMUM ABOVE GROUND SURFACE



7 Detail - Exterior Sign Trim
3/4" = 1'-0"

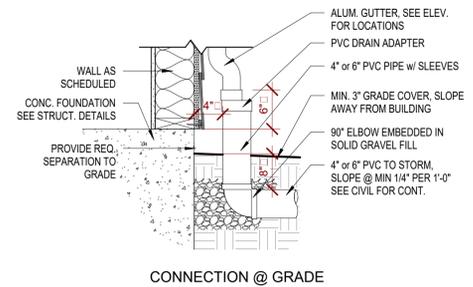


3 Detail - Drop Beam
1 1/2" = 1'-0"

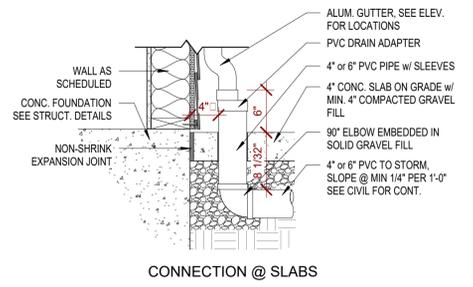


1 Enlarged Restroom Plan
1/2" = 1'-0"

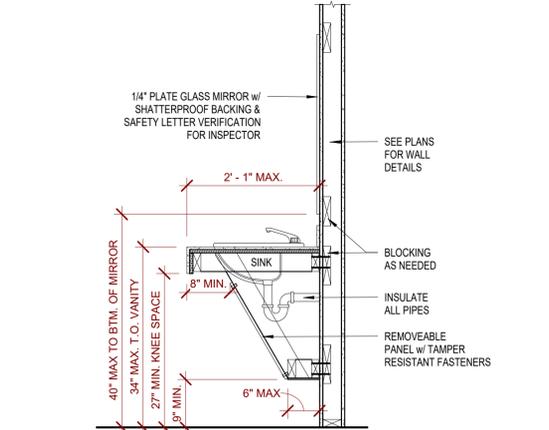
8 Detail - Rinse Shower
3/4" = 1'-0"



CONNECTION @ GRADE



CONNECTION @ SLABS

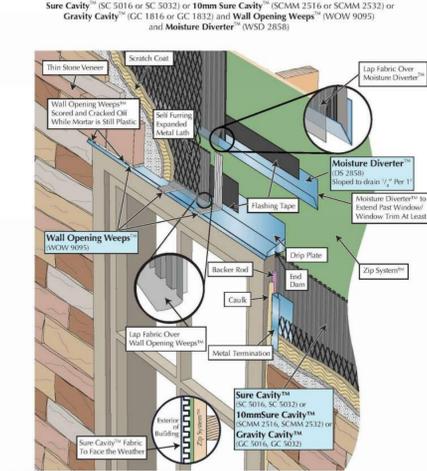


2 Detail - Typical Vanity Section
3/4" = 1'-0"

6 Detail - Downspout to Storm
1" = 1'-0"

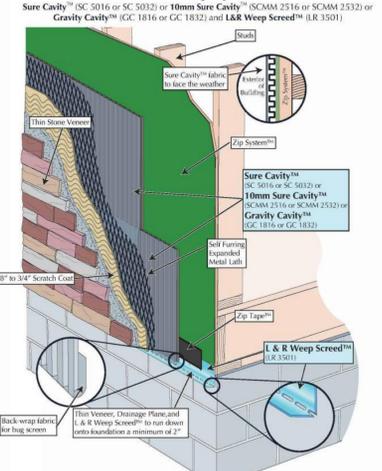


Thin Stone Veneer with Drainage Plane and Weeps on Zip System™ with Moisture Diverter™ at Top of Window



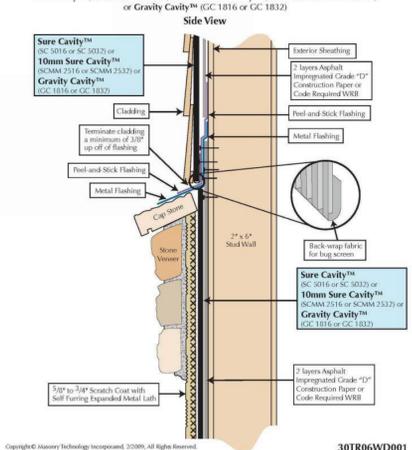
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L&R Weep Screenshot at Bottom of Thin Stone Veneer Wall With Zip System™



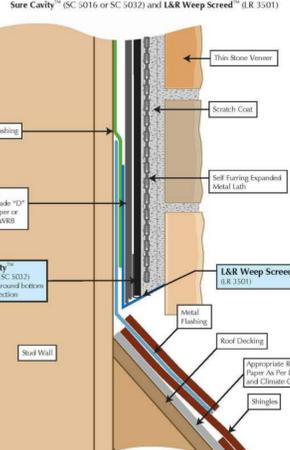
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Cladding Systems to Thin Stone Veneer Installation



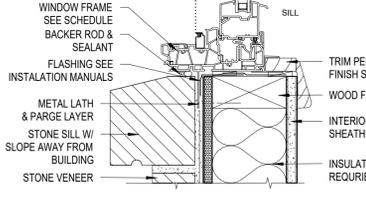
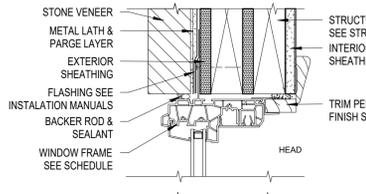
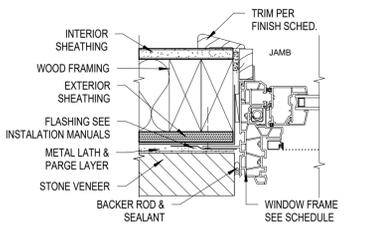
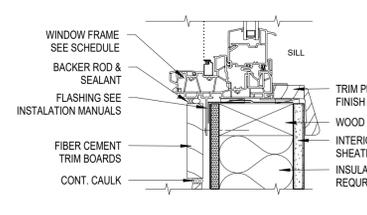
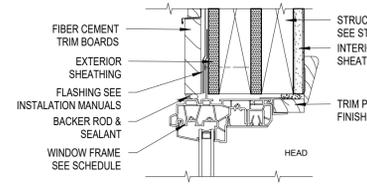
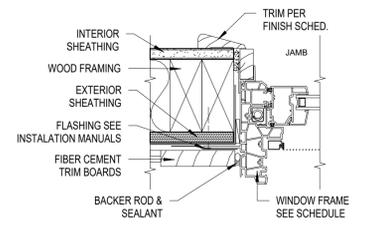
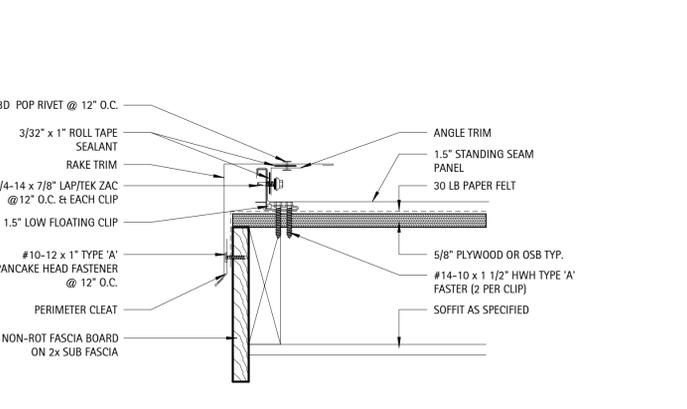
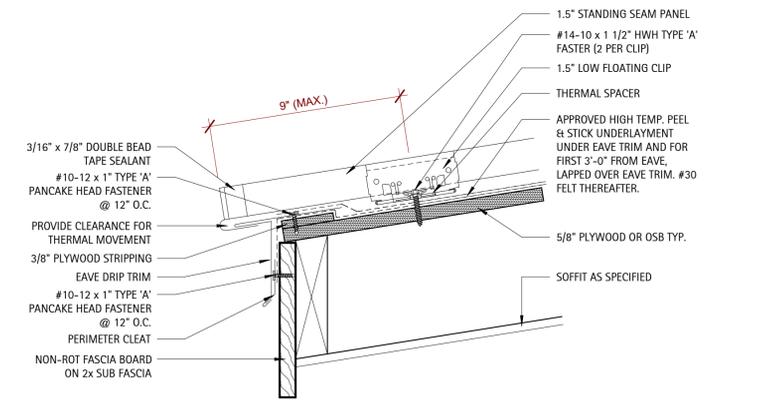
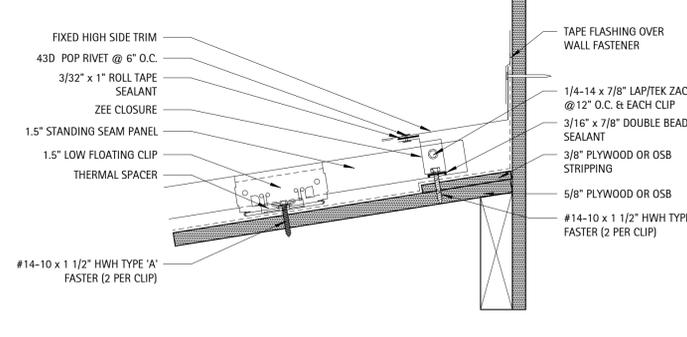
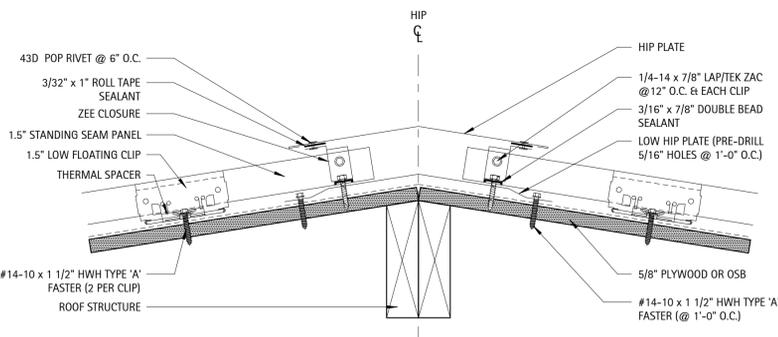
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Thin Stone Veneer Side Wall to Roof Termination Detail



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3 Detail - Stone Veneer
12" = 1'-0"



2 Detail - Standing Seam Roof
3" = 1'-0"

1 Detail - Window Treatments
3" = 1'-0"

STATION POINTE AMENITY

DRB GROUP

ANGIER, NORTH CAROLINA

NO.	REVISION	DATE

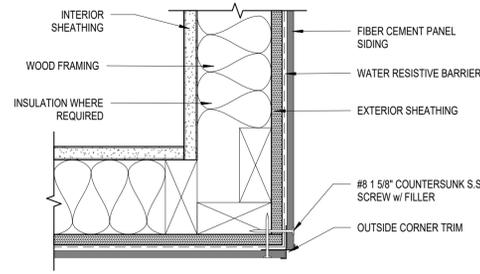
PROJECT #:	2024020
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CHECKED BY:	DSC/PBC

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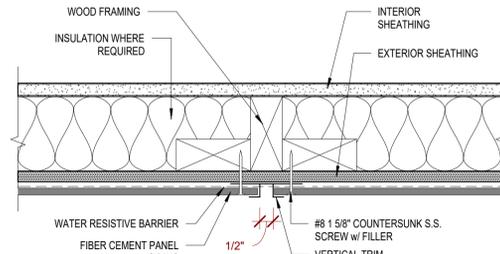
GENERAL BUILDING DETAILS

A5.0

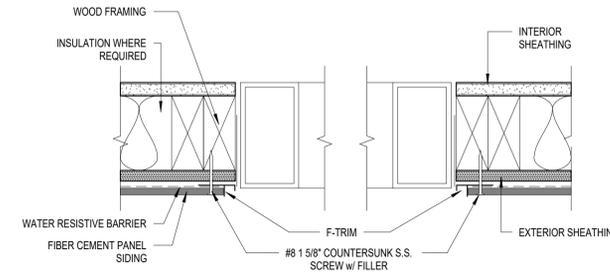
NOTE: SEE MANUFACTURERS
INSTALLATION INSTRUCTIONS



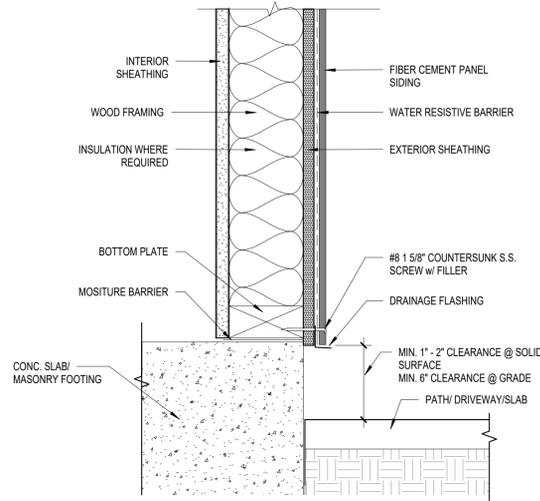
OUTSIDE CORNER



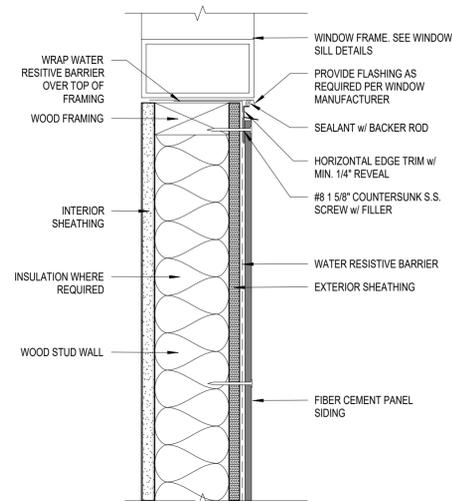
TYPICAL VERTICAL REVEAL TRIM



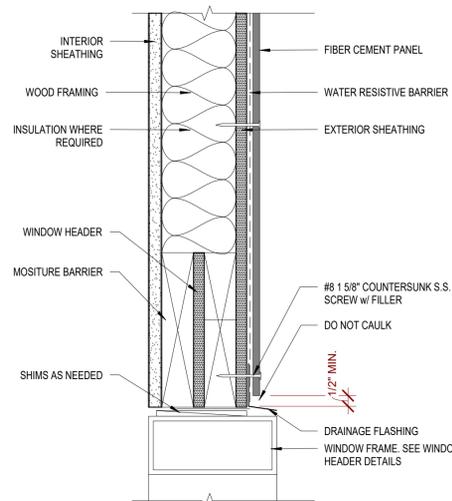
WINDOW / DOOR REVEAL TRIM



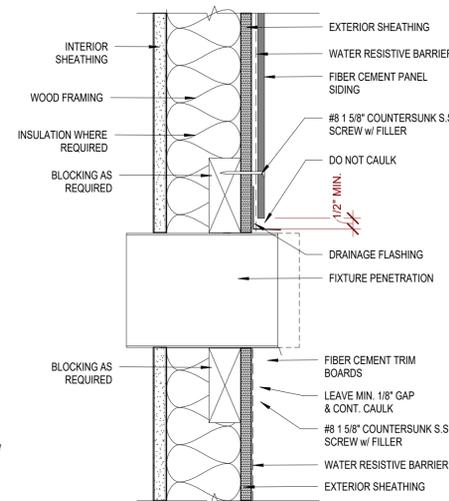
SIDING @ FOUNDATION



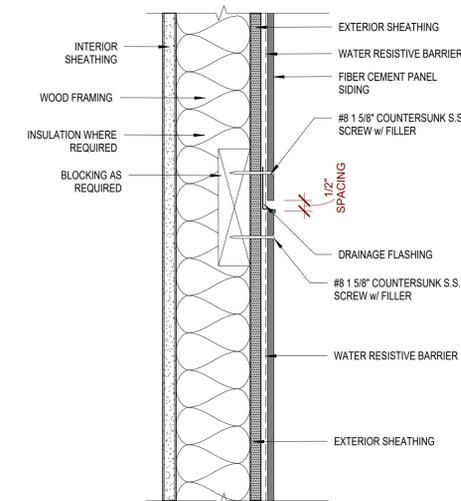
TYPICAL WINDOW SILL
TRIM



TYPICAL WINDOW &
DOOR HEADER TRIM

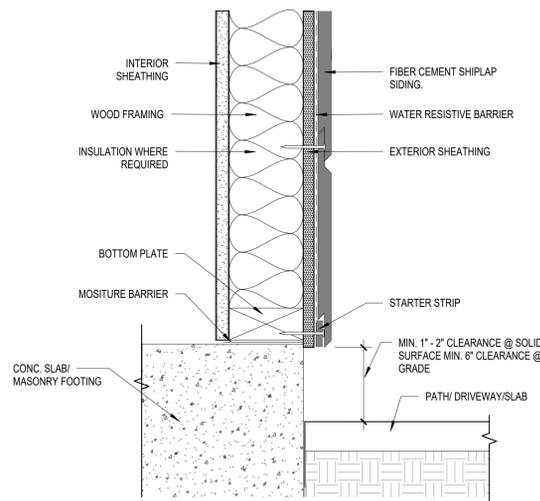


TYPICAL FIXTURE
TRIM

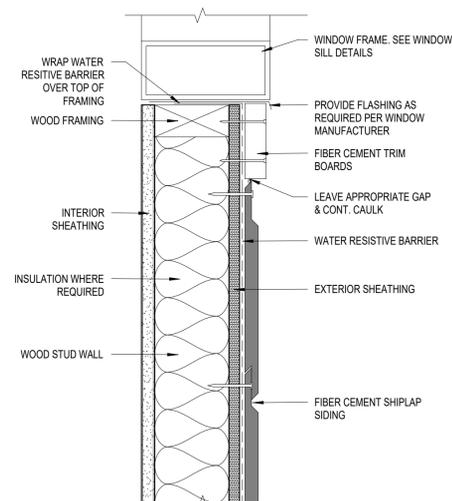


TYPICAL HORIZONTAL
REVEAL TRIM

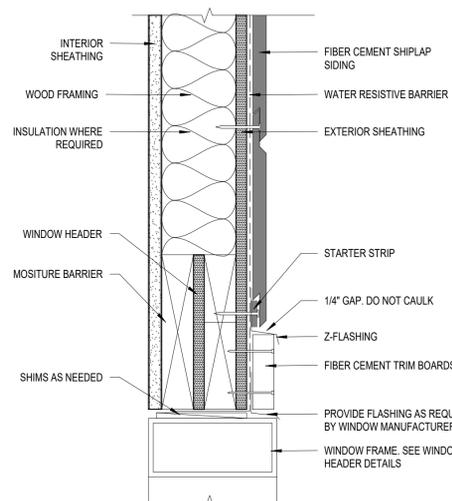
2
A5.1
Detail - Reveal Panel Siding
3" = 1'-0"



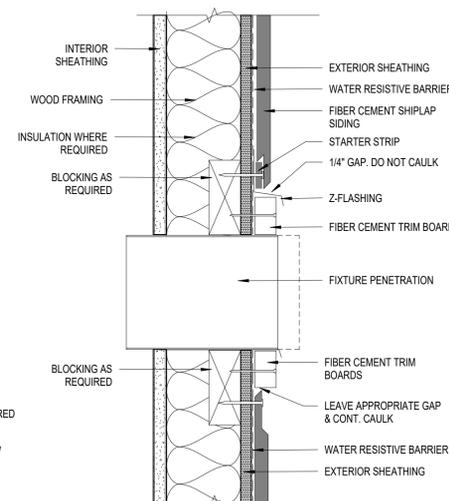
SIDING @ FOUNDATION



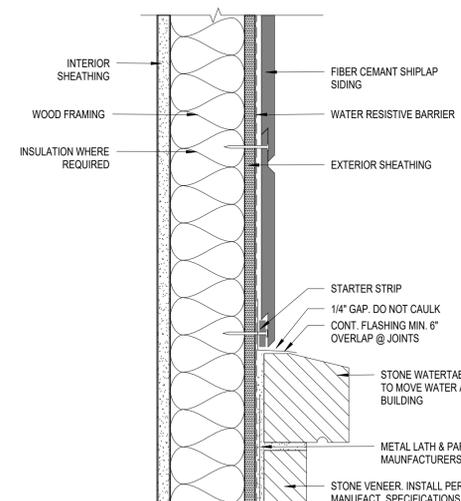
TYPICAL WINDOW SILL
TRIM



TYPICAL WINDOW &
DOOR HEADER TRIM



TYPICAL FIXTURE
TRIM



SIDING @ STONE
VENEER

1
A5.1
Detail - Shiplap Siding
3" = 1'-0"



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DOORS, FRAMES, HARDWARE NOTES

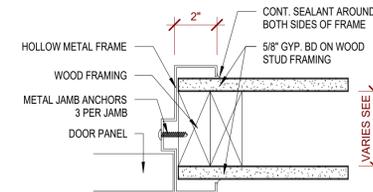
- Refer to Door and Hardware Schedule for extent, type and additional notes. Acceptable wood door manufacturers to be Weyerhaeuser, Eggers, Mohawk or Architect approved equal. General Contractor shall provide a hardware schedule and catalogue cuts for all finish hardware for approval by the Architect indicating location of hardware set, cross-referenced to indications on Drawings, manufacturer's name and product number, finish, and other similar information describing hardware to be provided. Items of hardware not definitely specified, but needed for satisfactory installation of hardware shall be provided. Such items shall be of type and quality suitable for service needed and comparable to adjacent hardware.
- All doors shall be set 6" off adjacent perpendicular wall, UON. Doors shall not be undercut, UON. All levers, pulls, and locks are to be provided per the schedule. All hinges and other miscellaneous exposed hardware shall be in similar and compatible finishes as indicated on Hardware Schedule.
- General Contractor shall coordinate keying system with Owner (Building Management), Landlord, and Architect. General Contractor shall coordinate security system with system vendor and scheduled hardware and the submittal of all security hardware specifications and cut sheets to the proper authorities for review and approval during building permit process.
- Provide hardware, door pulls, hinges, closers, electromagnetic devices, etc. needed to provide a full and complete installation. Provide silencers at metal frame doors. Provide floor mounted door stops unless existing conditions require wall mounted. Ensure adequate blocking for wall mounted stops. Submit to Architect for approval.
- Provide 4 1/2 x 4 1/2, full mortise, template, 5-knuckle, heavy duty, button tip hinges with non-rising loose pins and anti-friction, ball type bearing. Doors with locksets shall be furnished with non-removable pins hinges. Provide 1-1/2" pair hinges for doors up to 90" in height. Add 1 hinge for every additional 30" in height.
- Heavy duty cylindrical locksets and latches shall conform to ANSI A156.2, Series 4000, Grade 1. Functions as listed in schedule. Heavy duty mortise locksets and latches, levers shall conform to ANSI A156.13 Series, 1000, Grade 1. Overhead Closers shall be surface mounted or concealed overhead as noted in the hardware schedule and shall be heavy duty, fully hydraulic, rack and pinion action and sized to be in compliance with requirements for accessibility for handicapped and recommendations of manufacturer. Furnish complete with all necessary hardware. Furnish 2 keys per lock with a maximum of 8 keys per keyed alike set. Before final completion, adjust hardware so that doors operate in perfect order. Test and adjust hardware for quiet, smooth operation and adjust closers for proper operation. At final completion, properly tag and identify keys and deliver to Owner.
- All Hardware shall be medium grade commercial if not otherwise noted or specified. See allowance per door.
- All interior egress doors and a minimum of one exterior egress door shall be readable openable from the egress side without use of a key or special knowledge.
- All Glazing within 24" of either side of a door in a closed position, and on the same wall plane shall be tempered. Tempered glass shall be installed by code in the following locations:
 - Door Glazing;
 - Glazing for bathroom fixture enclosures (showers, etc)
 - Glazing less than 60" above tub and shower drains;
 - Glazing within 24" of an adjacent door w/ sill less than 60 degrees;
 - Individual panels of Glazing greater than 9 sqft and sill less than 18" above floor and top edge greater than 36".
- Provide an interior door signage allowance of \$25.00 per door.
- Fire Extinguisher cabinets shall be similar to JLI Industries Mod. Clear VU 1525F26 with a clear bubble and A#10 S/S Finish. ADA approved and mounted. Place where shown on plans (FX)
- Door closers shall be LCN series 4040 or equivalent

CLUBHOUSE ROOM SCHEDULE								
Room Number	Room Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Ceiling Height	Crown	Comments
100	ELEC.	Concrete - Light Broom	1x8 Fiber Cement - Painted	MR GWB - Painted	MR GWB - Painted	Varies - Sloped	No	
101	PUMP ROOM	Concrete - Light Broom	1x8 Fiber Cement - Painted	MR GWB - Painted	MR GWB - Painted	Varies - Sloped	No	See plans for sump pit layout - Slope all floors to drain.
102	CHEM ROOM	Concrete - Light Broom	1x8 Fiber Cement - Painted	MR GWB - Painted	MR GWB - Painted	Varies - Sloped	No	Provide non -rot chemical shelf @ 16" A.F.F.
103	COVERED PORCH	Concrete - Light Broom	N/A	N/	Hardie Panels or EQ - Painted	Varies - Sloped	No	Slope all floors away from building walls @ Min. 1/8" per 1'-0"
104	WOMENS	Acrylic Chip Flooring	1x8 Fiber Cement - Painted	MR GWB - Painted	MR GWB - Painted	Varies - Sloped	No	Slope floor to drain.
105	MENS	Acrylic Chip Flooring	1x8 Fiber Cement - Painted	MR GWB - Epoxy Paint at Urinals	MR GWB - Painted	Varies - Sloped	No	Slope floor to drain.

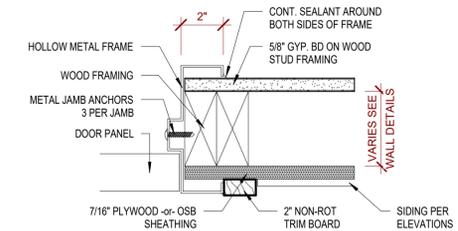
CLUBHOUSE DOOR SCHEDULE																								
Door Number	Style	Door			Rough Width	Rough Height	Door		Fire Rating	Hardware							Comments							
		Width	Height	Thickness			Material	Finish		Material	Frame	Material	Push / Pull	Passage Set	Privacy Set	Office Set		Storage Set	Deadbolt	Panic Hardware	Closer	Weather strip	Threshold	FOB Access
101	TYPE B	3' - 6"	7' - 0"	0' - 1 3/4"	3' - 8"	7' - 1"	HM	PAINT	METAL	N/A	No	No	No	No	Yes	No	No	Yes	Yes	Yes	No	No		
102	TYPE B	5' - 0"	7' - 0"	0' - 1 3/4"	5' - 2 1/2"	7' - 1 1/4"	HM	PAINT	METAL	N/A	No	Yes	No	No	No	No	No	Yes	No	No	No	No	No	PROVIDE T-ASTRIGAL
104	TYPE A	3' - 0"	7' - 0"	0' - 1 3/4"	3' - 2"	7' - 1"	HM	PAINT	METAL	N/A	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No	
105	TYPE A	3' - 0"	7' - 0"	0' - 1 3/4"	3' - 2"	7' - 1"	HM	PAINT	METAL	N/A	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No	
G001		6' - 0"	6' - 0"				Alum.	PAINT	METAL	N/A	Yes	No	No	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	GATE
G002		6' - 0"	6' - 0"				Alum.	PAINT	METAL	N/A	Yes	No	No	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	GATE

Grand total: 6

CLUBHOUSE WINDOW SCHEDULE									
Mark	Count	Size		Rough Width	Rough Height	Type	Finish	Head Height	Comments
		Width	Height						
A	3	4' - 0"	2' - 0"	4' - 0 1/2"	2' - 0 1/2"	FIXED	VINYL - PLYGEM 1500 SERIES	7' 0" AFF	

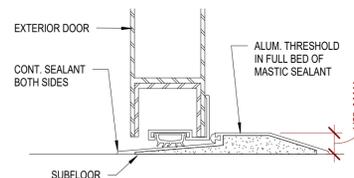


INTERIOR DOOR JAMB



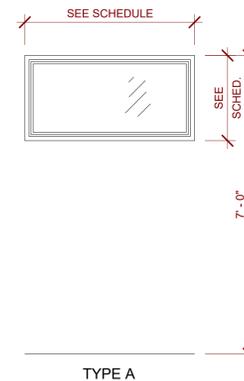
EXTERIOR DOOR JAMB

4 Detail - Typ. Door Jamb
3" = 1'-0"



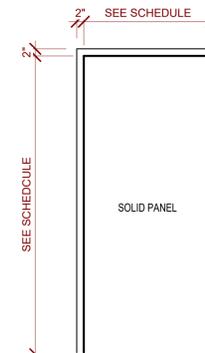
EXTERIOR DOORS THRESHOLD

3 Detail - Typ. Threshold
6" = 1'-0"

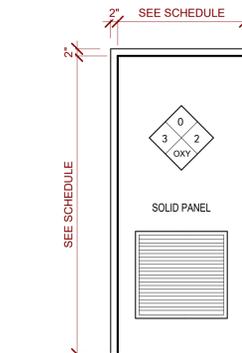


TYPE A

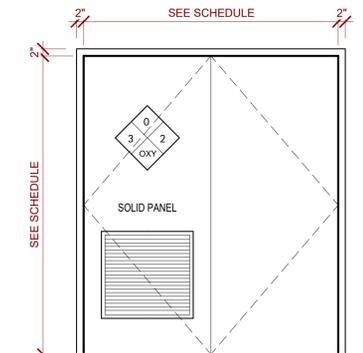
2 Detail - Window Types
1/2" = 1'-0"



TYPE A



TYPE B



TYPE C

1 Detail - Door Frames
1/2" = 1'-0"



STATION POINTE AMENITY

DRB GROUP

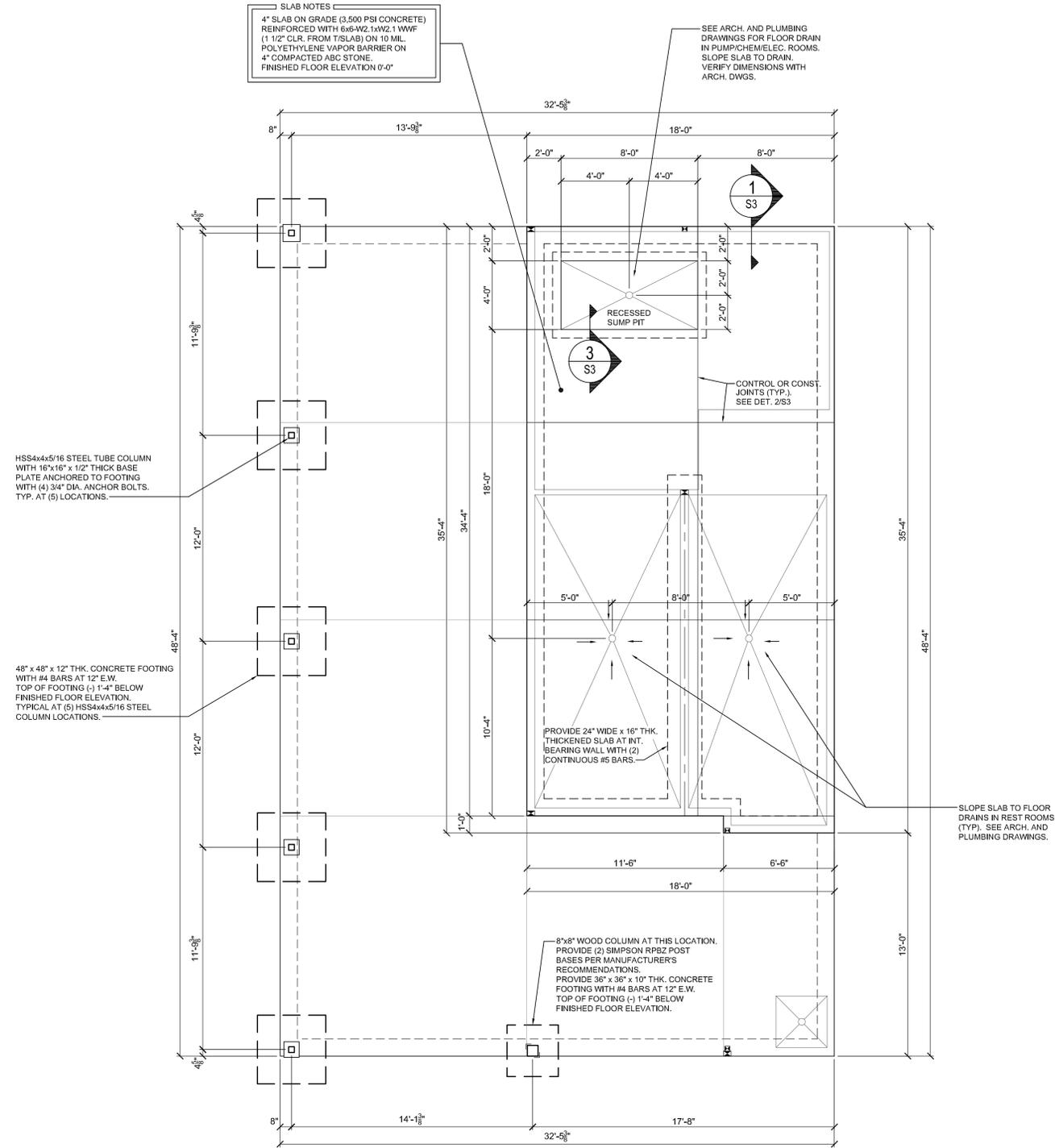
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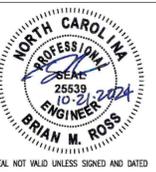
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CHECKED BY:	DSC/PGC
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SCHEDULES & DETAILS

A6.0



1 SLAB AND FOUNDATION PLAN
 S1 1/4" = 1'-0"



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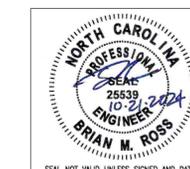
STATION POINTE
 DAN RYAN BUILDERS
 ANGIER, NORTH CAROLINA

NO.	REVISION	DATE

PROJECT #: C240801
 DATE ISSUED: 10/21/2024
 DRAWING BY: BR
 CHECKED BY: BR/JM

100% I.F.C.

Slab and Foundation Plan



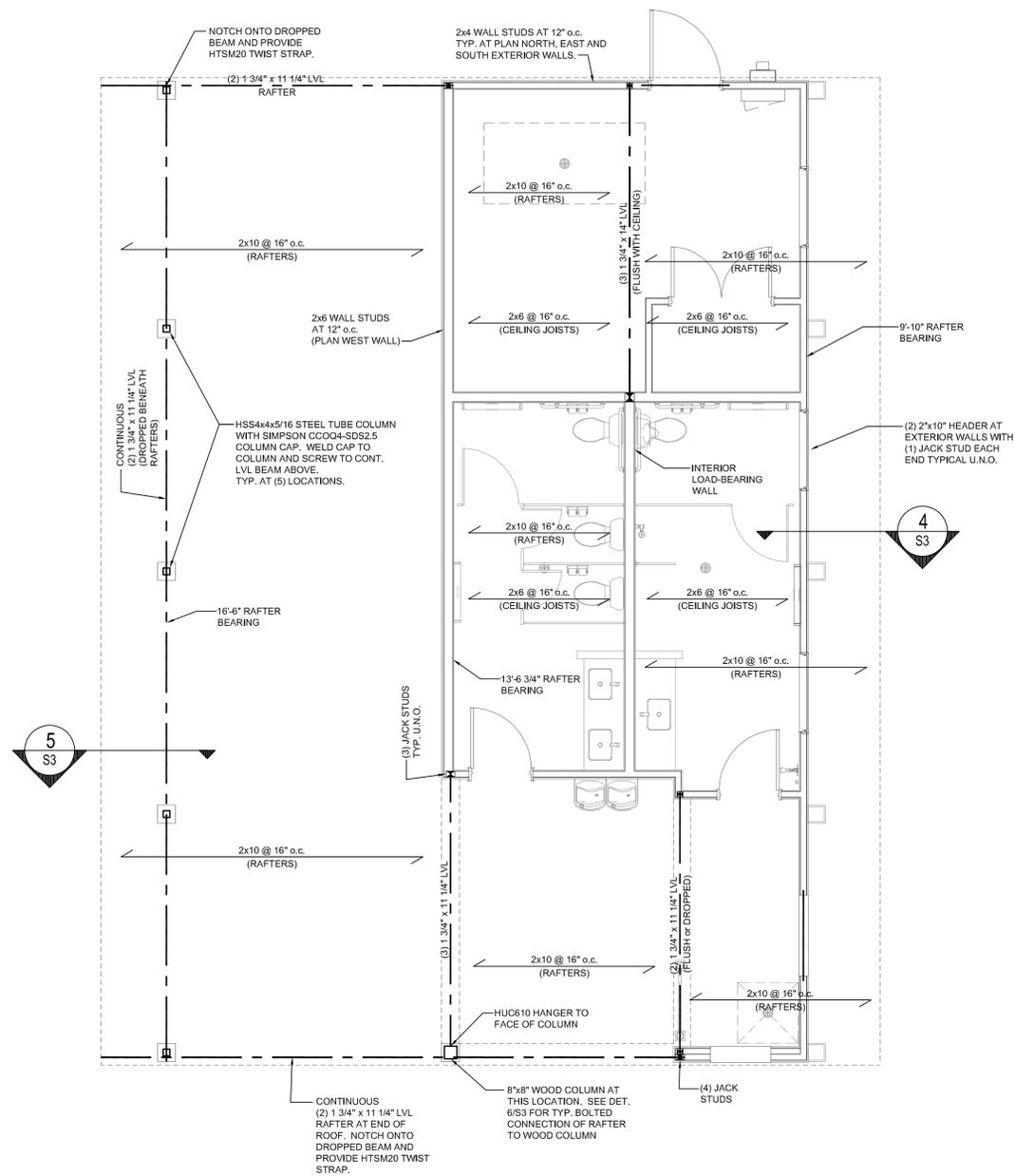
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STATION POINTE
DAN RYAN BUILDERS
 ANGLIER, NORTH CAROLINA

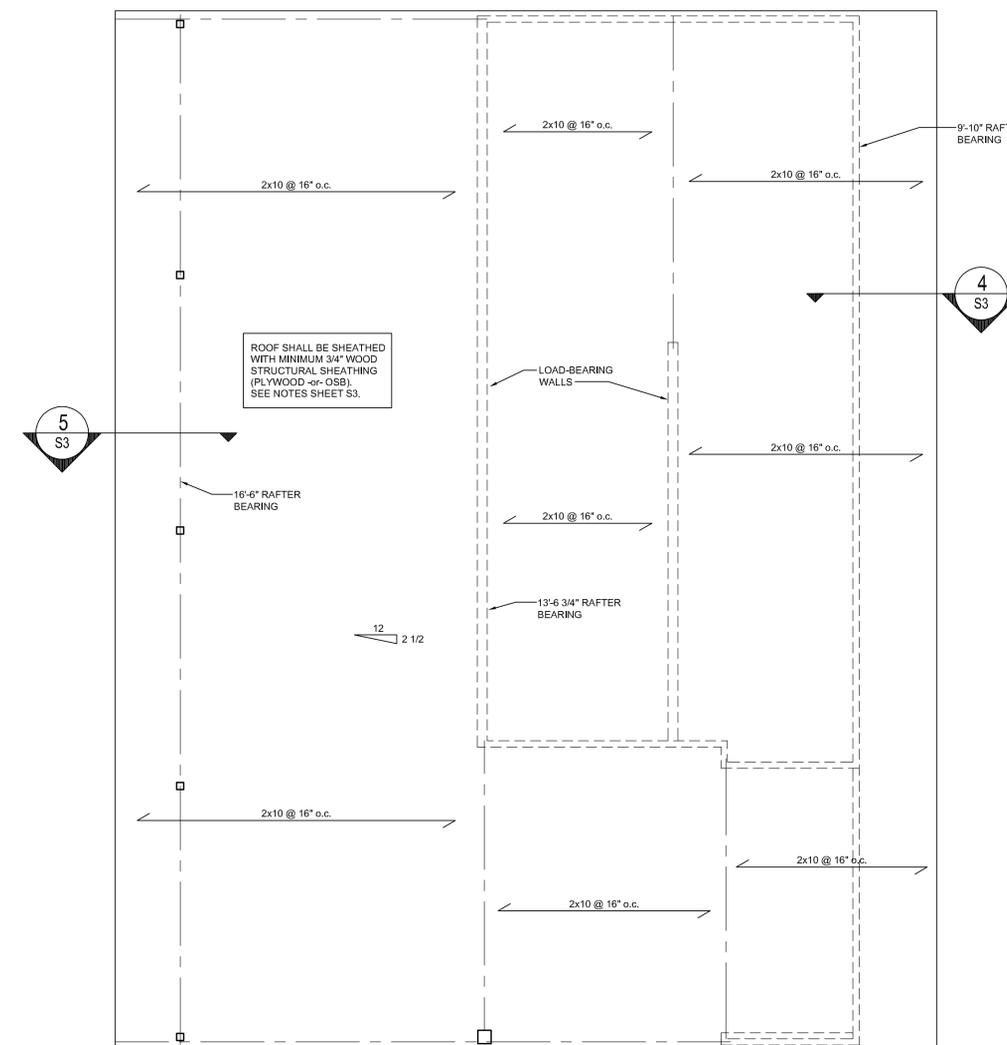
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PROJECT #: C240801
 DATE ISSUED: 10/21/2024
 DRAWING BY: BR
 CHECKED BY: BR/JM
 100% I.F.C.

Framing Plans



1 WALL AND CEILING FRAMING PLAN
 1/4" = 1'-0"



2 ROOF FRAMING PLAN
 1/4" = 1'-0"

STRUCTURAL NOTES

I. GENERAL

- DESIGN CODES
 - NORTH CAROLINA BUILDING CODE, 2018 EDITION (AMENDED 2015 INTERNATIONAL BUILDING CODE)
 - ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)
 - AISC MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN NINTH EDITION
 - ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- DESIGN LOADS
 - LIVE LOADS: FLOOR: 100 PSF ROOF: 20 PSF
 - ULTIMATE DESIGN WIND SPEED: 116 MPH
 - GROUND SNOW LOAD 15 PSF
 - SEISMIC DESIGN CATEGORY B
 - SITE CLASS D
 - Ss = 0.172
 - S1 = 0.083
- ALL ELEVATIONS ARE REFERENCED FROM FINISHED FLOOR ELEVATION OF 0'-0". SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- DETAILED SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CERTIFY ARCHITECTURAL LAYOUT OR DIMENSIONAL ACCURACY.
- ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR CHANGES OR MODIFICATIONS MADE TO THESE DRAWINGS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THESE DRAWINGS.

II. CONCRETE

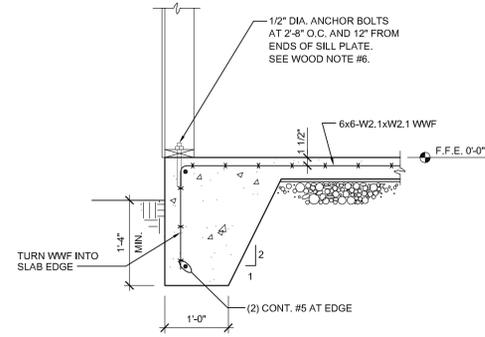
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL HAVE THE FOLLOWING STRENGTH AND SLUMP REQUIREMENTS: 3500 PSI 28-DAY COMPRESSIVE STRENGTH, MAX. 5" SLUMP.
- ALL CONCRETE SHALL BE MOIST CURED PER ACI 301 OR CURED WITH AN APPROVED CURING COMPOUND. CONTRACTOR SHALL VERIFY THAT THE CURING COMPOUND IS COMPATIBLE WITH FLOOR COVERING ADHESIVES, COATINGS, OR TOPPING TO BE USED. CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.
- UNLESS OTHERWISE NOTED, ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615, GRADE 60, DEFORMED.
- UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. (ACI 315)
- ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES PER ACI 318-14, UNLESS OTHERWISE SHOWN.
- ANCHOR BOLTS TO BE ASTM A36 OR A307.
- CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- ALL SPREAD FOOTINGS BEARING ON NATIVE SOIL OR STRUCTURAL FILL ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2500 PSF. A GEOTECHNICAL REPRESENTATIVE SHALL INSPECT ALL FOOTING EXCAVATIONS TO CONFIRM ALLOWABLE BEARING PRESSURES.
- PROVIDE TWO (2) #5 x 4'-0" LONG DIAGONAL BARS IN TOP FACE OF ALL SLABS (1" CLEAR) AT ALL RE-ENTRANT CORNERS. SEE PLAN FOR LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RELOCATING AS REQUIRED ALL SERVICE AND UTILITY LINES IN VICINITY OF THE WORK SITE.
- CONTRACTOR SHALL VERIFY ALL SIZES AND LOCATIONS OF ALL MECHANICAL AND ELECTRICAL OPENINGS AND EQUIPMENT PADS WITH THE MECHANICAL AND ELECTRICAL DETAILS AND SHOP DRAWINGS BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL OPENINGS AND SLEEVES FOR PROPER DISTRIBUTION FOR ALL UTILITIES THROUGHOUT THE BUILDING.
- ALL DOWELS WHICH ARE TO BE DRILLED AND GROUTED INTO EXISTING CONCRETE SHALL BE DONE WITH AN EPOXY GROUT. DRILL HOLE WITH DIAMETER 1/8" LARGER THAN DOWEL OR AS RECOMMENDED BY GROUT SUPPLIER. USE HIT-RE 500 V3 BY HILTI OR APPROVED EQUAL.

III. WOOD

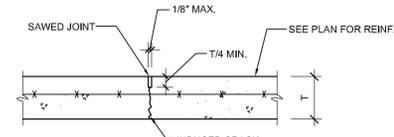
- FRAMING LUMBER SHALL BE #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES: Fb = 800 PSI Fv = 175 PSI E = 1,466 PSI
- FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE #2 SOUTHERN YELLOW PINE (SYP) TREATED IN ACCORDANCE WITH AWPA C22 WITH THE FOLLOWING DESIGN PROPERTIES: Fb = 800 PSI Fv = 175 PSI E = 1,466 PSI
- ENGINEERED WOOD BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES: Fb = 2600 PSI Fv = 285 PSI E = 1,966 PSI
- ENGINEERED WOOD BEAMS SHALL BE INSTALLED WITH ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
- SOLID BLOCKING SHALL BE PROVIDED AT ALL POINT LOADS TO TRANSFER LOADS THROUGH FLOOR LEVELS. COLUMNS SHALL BE CONTINUOUS TO THE FOUNDATION OR TO OTHER STRUCTURAL ELEMENTS.
- WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS SPACED A MAXIMUM OF 2'-8" O.C. AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. PROVIDE 1/2" DIAMETER HILTI HIT-RE 500 V3 INJECTION ADHESIVE ANCHORS WITH MINIMUM 4" 1/2" EMBEDMENT INTO THE FOUNDATION AT ALL EXTERIOR, LOAD-BEARING, AND SHEAR WALLS AS SHOWN ON THE PLAN.
- ALL EXTERIOR WALLS SHALL BE SHEATHED WITH MINIMUM 7/16" WOOD STRUCTURAL SHEATHING (PLYWOOD -OR- OSB) WITH BLOCKING AT ALL JOINTS. FASTEN ALL PANELS WITH 8d NAILS AT 3" O.C. AT ALL EDGES AND AT 6" O.C. AT INTERMEDIATE FRAMING. AT DOUBLE TOP PLATE, FASTEN PANELS WITH A DOUBLE ROW OF 8d NAILS STAGGERED AT 3" O.C. ALL FASTENERS SHALL HAVE 1 3/8" PENETRATION INTO THE FRAMING MEMBERS.
- PROVIDE MINIMUM 1/2" GYPSUM BOARD ON BOTH SIDES OF FULL-HEIGHT INTERIOR WALLS WITH INTERMEDIATE SUPPORT AT ALL JOINTS. FASTEN ALL PANELS WITH 1 1/4" SCREWS AT 7" O.C. AT TOP AND BOTTOM PLATES AND ALL STUDS. GYPSUM SHALL BE APPLIED PERPENDICULAR TO FRAMING.
- SEE TYPICAL WALL SECTION FOR ADDITIONAL INFORMATION.
- THE ROOF SHALL BE SHEATHED WITH MINIMUM 3/4" WOOD STRUCTURAL SHEATHING (PLYWOOD -OR- OSB). PROVIDE PLYWOOD EDGE CLIPS BETWEEN PANELS.

ABBREVIATIONS

CONC	CONCRETE
CONT	CONTINUOUS
DBL	DOUBLE
DJ	DOUBLE JOIST
DSP	DOUBLE STUD POCKET
EA	EACH
FL PT	FLAT PLATE
FTG	FOOTING
HGR	HANGER
LVL	LAMINATED VENEER LUMBER
NTS	NOT TO SCALE
OC	ON CENTER
PT	PRESSURE TREATED
RS	RAFTER SUPPORT
SC	STUD COLUMN
SP	STUD POCKET
TJ	TRIPLE JOIST
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
XJ	EXTRA JOIST

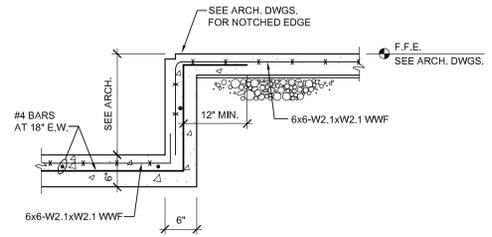


1 DETAIL - TYP. SLAB EDGE
S3 3/4" = 1'-0"

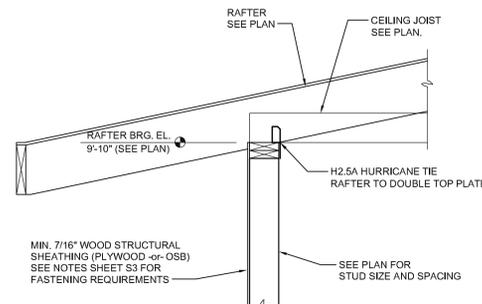


- NOTES:
- SAW JOINTS AS SOON AS CONCRETE WILL NOT RAVEL UNDER SAW BLADE.
 - ADD 20" LONG SMOOTH DOWELS WITH INSERTS AT ALL CONSTRUCTION JOINTS (IF USED).
 - CONTRACTOR'S OPTION TO CUT ALTERNATING WIRES AT JOINTS FOR ADDITIONAL CRACK CONTROL.

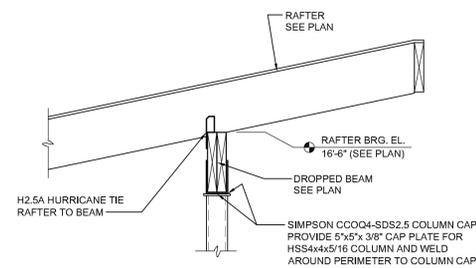
2 DETAIL - TYP. SLAB CONTROL JOINT
S3 1" = 1'-0"



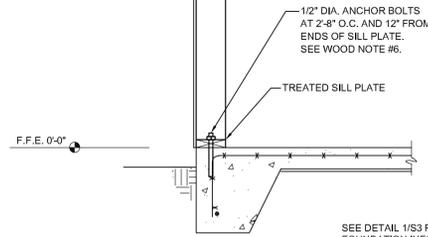
3 SECTION AT SUMP
S3 3/4" = 1'-0"



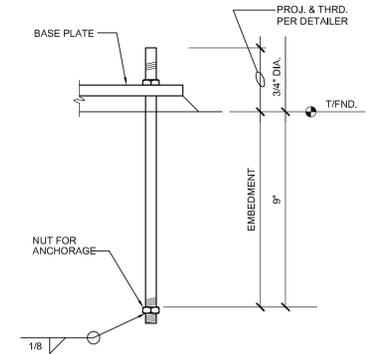
4 TYPICAL WALL SECTION
S3 3/4" = 1'-0"



5 FRAMING SECTION
S3 3/4" = 1'-0"



4 TYPICAL WALL SECTION
S3 3/4" = 1'-0"



8 TYP. ANCHOR BOLT DETAIL
S3 NO SCALE

STRUCTURAL DESIGN

DESIGN LOADS:

Occupancy Category	II	
Importance Factors:	Wind (IW)	1.0
	Snow (IS)	1.0
	Seismic (IE)	1.0
Live Loads:	Roof	20 psf
	Mezzanine	N/A psf
	Floor	100 psf
Ground Snow Load:	15 psf	
Wind Load:	Ultimate Wind Speed	116 mph (ASCE 7-10)
	Exposure Category	B
	Wind Base Shears (for MWFRS)	Vx = 10.7K Vy = 4.8K

SEISMIC DESIGN CATEGORY A B C D

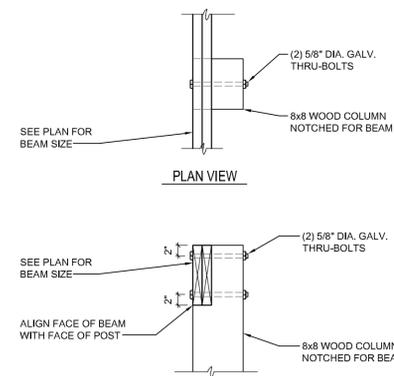
Provide the following Seismic Design Parameters:

Spectral Response Acceleration SS 0.172 %g S1 0.083 %g
 Site Classification D Field Test Presumptive Historical Data

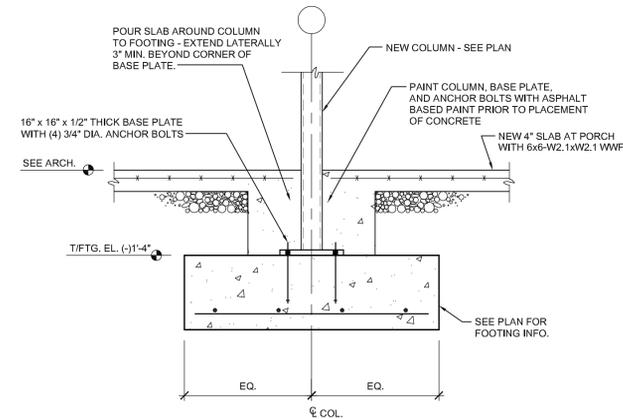
Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Seismic base shear VX = 1.3K VY = 1.3K
 Analysis Procedure Simplified Equivalent Lateral Force Modal
 Architectural, Mechanical, Components anchored? _____

Lateral design Control: Earthquake _____ Wind

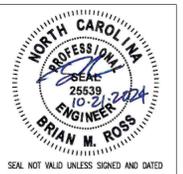
Soil Bearing Capacities:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing capacity 2500 psf
 Pile size, type, and capacity _____



6 CONNECTION DETAIL
S3 3/4" = 1'-0" END RAFTER TO WOOD COLUMN



7 SECTION - COLUMN FOOTING
S3 3/4" = 1'-0" TYP. AT (5) STEEL COLUMNS



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STATION POINTE
 DAN RYAN BUILDERS
 ANGIER, NORTH CAROLINA

DATE	
REVISION	
NO.	

PROJECT #: C240801
 DATE ISSUED: 10/21/2024
 DRAWING BY: BR
 CHECKED BY: BR/JM

100% I.F.C.

Structural Notes and Details



DATE

REVISION

NO.

PROJECT #: 240664

DATE ISSUED: 2024 11 12

DRAWING BY: SLT

CHECKED BY: JLH

00% I.F.B.

PLUMBING
PLANS &
SCHEDULES

P1



11.12.2024

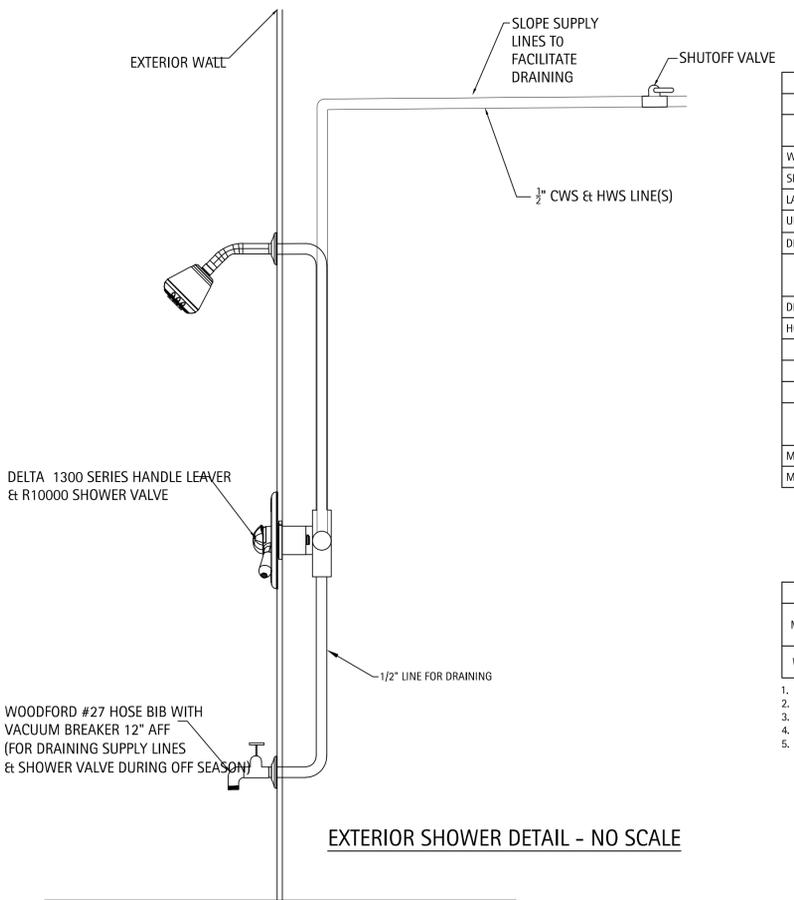
PLUMBING SCHEDULES | 2

PLUMBING FIXTURE SCHEDULE						
SYMBOL	FIXTURE	MANUFACTURER	FITTING	HW	CW	WASTE
P1	TWO PIECE TANK TYPE WATER CLOSET	KOHLER 4369 OR EQUAL BY AMERICAN STANDARD OR TOTO	TWO-PIECE VITREOUS CHINA TOILET WITH HIGH-PROFILE TANK, KOHLER K-5309 ELONGATED FRONT BOWL AND CHROME TRIP LEVER, 1.28 GPF. PROVIDE SC534 OPEN FRONT SEAT LESS COVER. ASME 112.19.2 COMPLIANCE.	-	1/2"	3"
P1H	TWO PIECE TANK TYPE ADA WATER CLOSET	KOHLER 4369 OR EQUAL BY AMERICAN STANDARD OR TOTO	TWO-PIECE VITREOUS CHINA TOILET WITH HIGH-PROFILE TANK, KOHLER K-5309 ELONGATED FRONT BOWL AND CHROME TRIP LEVER, 1.28 GPF. PROVIDE SC534 OPEN FRONT SEAT LESS COVER. ASME 112.19.2 COMPLIANCE. TOP OF SEAT SHALL BE 17-19 INCHES AFF FOR ADA. LEVER MOUNTED ON WIDE SIDE FOR ADA.	-	1/2"	3"
P2	WALL MOUNT LAVATORY	KOHLER K-2005 OR EQUAL BY AMERICAN STANDARD OR TOTO	VITREOUS CHINA LAVATORY WITH BACKSPASH COMPLYING WITH ASME 112.19.2. TOP OF RIM SHALL BE 34 INCHES AFF FOR ADA. PROVIDE WITH LAV-GUARD PROTECTORS FOR SUPPLY AND DRAIN LINES. USE A METERING TYPE FAUCET SIMILAR TO CHICAGO 3300-E2805A8 (VERIFY EXACT FAUCET WITH OWNER).	1/2"	1/2"	2"
P2A	UNDER MOUNT LAVATORY	KOHLER K-20000 OR EQUAL BY AMERICAN STANDARD OR TOTO	VITREOUS CHINA SELF-RIMMING LAVATORY COMPLYING WITH ASME 112.19.2. MOUNT SO RIM IS 34 INCHES AFF AND 2 INCHES FROM FRONT EDGE FOR ADA. PROVIDE WITH LAV-GUARD PROTECTORS SUPPLY AND DRAIN LINES. USE A KOHLER K-103177-SANL FAUCET (COORDINATE WITH EC FOR FAUCET POWER).	1/2"	1/2"	2"
P3	URINAL	KOHLER K-4991-ET OR EQUAL BY AMERICAN STANDARD OR TOTO	VITREOUS CHINA, WALL-MOUNTED, ADA COMPLIANT, LOW CONSUMPTION WASHOUT URINAL COMPLYING WITH ASME 112.19.2. 1 GPF. KOHLER K-76319 FLOWMETER VALVE OR EQUAL BY ZURN OR TOTO. TOP OF RIM SHALL BE 17 INCHES AFF FOR ADA.	-	3/4"	2"
P4	HAND SHOWER	AMERICAN STANDARD 1600,766 OR EQUAL	1.5 GPM 3-FUNCTION SHOWER W/ PAUSE FEATURE MEETING ADA AND ANSI 117.1, 90° WALL SUPPLY (AMERICAN STANDARD 8888.068), METERED SHOWER VALVE (SYMMONS 4-420), WALL SHOWER HEAD & DIVERTER (ZURN Z70000-12)(Z7000-0V-2P), AND ADJUSTABLE VERTICAL VALVE ROD. COORDINATE FINISH WITH OWNERS.	1/2"	1/2"	-
P5	DRINKING FOUNTAIN	ELKAY VRC1FRD5SC	ADA COMPLIANT FOR ADULT AND CHILD, 8.0 GPH OF 50°F WATER AT 90°F AMBIENT. PROVIDE ACCESSORY APRON FOR ADA COMPLIANCE AS NECESSARY. VANDAL AND FROST RESISTANT.	-	3/8"	2"
P6	FLOOR DRAIN	WATTS FD-200-A OR EQUAL BY ZURN OR JR SMITH	ON GRADE EPON COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, WEEP HOLES, ADJUSTABLE ROUND NICKEL BRONZE STRAINER, AND NO HUB OUTLET. PROVIDE WITH A RUBBER GASKET. PROVIDE TRAP PRIMER CONNECTION OPTION IF NOTED.	-	-	3"
P7	SUMP PIT FLOOR DRAIN	ZURN FD1 OR EQUAL BY WATTS OR JR SMITH	ON GRADE ADJUSTABLE FLOOR DRAIN, ABS OR CAST IRON BODY, AND HUB OUTLET. PROVIDE WITH A RUBBER GASKET. PROVIDE TRAP PRIMER CONNECTION OPTION IF NOTED.	-	-	SEE PLAN
P8	FLOOR DRAIN TRAP SEAL	JAY R. SMITH OR EQUAL	RUBBER TRAP SEAL INSTALLED PRIOR TO P-TRAP, CAN BE INTEGRAL TO FLOOR DRAIN.	-	-	MATCH DRAIN
P9	FREEZEPROOF HOSE BIBB	ZURN Z1346 OR EQUAL BY WOODFORD OR MIFAB	EXPOSED NON-FREEZE ANTI-SIPHON AUTOMATIC DRAINING WALL FAUCET COMPLETE WITH EXTERIOR CHROME FINISH, BRASS CASING, ALL BRONZE INTERIOR PARTS, Z1399-V8 ANTI-SIPHON INTEGRAL VACUUM BREAKER, OPERATING ROD WITH FREE FLOATING PRESSURE CLOSURE VALVE, REPLACEABLE SEAT WASHER, COMBINATION 1/2 FEMALE SOLDER INLET AND 1/2 MALE IP INLET CONNECTION STANDARD, AND 3/4 MALE HOSE CONNECTION.	-	1/2	-
P10	INTERIOR HOSE BIBB	ZURN Z1341-BFP OR EQUAL BY MIFAB OR WOODFORD	PROVIDE CHECK VALVE AND ANTI-SIPHON PROTECTION IF NOT INTEGRAL TO UNIT	-	1/2"	-
P11	EXPANSION TANK	AMTROL ST-5 OR EQUAL BY WATTS OR BELL & GOSSETT	INSTALL ON COLD WATER LINE BETWEEN WATER HEATER AND RPZ	-	3/4"	-
P12	3/4" RPZ BACKFLOW PREVENTER	WATTS LF909 QT OR EQUAL BY CONBRACO OR WILKINS	RPZ ASSEMBLY CONSISTING OF A PRESSURE DIFFERENTIAL RELIEF VALVE LOCATED IN A ZONE BETWEEN TWO POSITIVE SEATING CHECK VALVES. THE ASSEMBLY SHALL INCLUDE TWO TIGHTLY CLOSING SHUTOFF VALVES BEFORE AND AFTER THE ASSEMBLY, TEST COCKS AND A PROTECTIVE STRAINER UPSTREAM OF THE FIRST SHUTOFF VALVE. THE ASSEMBLY SHALL MEET THE REQUIREMENTS OF ASSE 1013 AND AWWA C511	-	3/4"	-
P13	1" RPZ BACKFLOW PREVENTER	WATTS LF909 QT OR EQUAL BY CONBRACO OR WILKINS	RPZ ASSEMBLY CONSISTING OF A PRESSURE DIFFERENTIAL RELIEF VALVE LOCATED IN A ZONE BETWEEN TWO POSITIVE SEATING CHECK VALVES. THE ASSEMBLY SHALL INCLUDE TWO TIGHTLY CLOSING SHUTOFF VALVES BEFORE AND AFTER THE ASSEMBLY, TEST COCKS AND A PROTECTIVE STRAINER UPSTREAM OF THE FIRST SHUTOFF VALVE. THE ASSEMBLY SHALL MEET THE REQUIREMENTS OF ASSE 1013 AND AWWA C511	-	1"	-
YHD	YARD HYDRANT	WOODFORD MODEL S4H OR APPROVED EQUAL	AUTO DRAIN W. BACKFLOW PREVENTION. BURY DEPTH TO BE BELOW FROST LINE. COORDINATE WITH SITE CONDITIONS.	-	-	-
FCO	FLOOR CLEANOUT	ZURN, WATTS, JR SMITH	EPoxy COATED CAST IRON FLOOR CLEANOUT WITH ROUND ADJUSTABLE GASKETED NICKEL BRONZE TOP, REMOVABLE GAS TIGHT GASKETED BRASS CLEANOUT PLUG, AND NO HUB INLET.	-	-	4"
WCO	WALL CLEANOUT	ZURN, WATTS, OR JR SMITH	CAST IRON CLEANOUT FERRULE WITH THREADED BRASS COUNTERSUNK CLEANOUT PLUG, STAINLESS STEEL ACCESS COVER, AND ANCHOR PROOF STAINLESS STEEL SCREW	-	-	4"
AAV	AIR ADMITTANCE VALVE	STUDDOR REDIVENT OR APPROVED EQUAL	ANSI/ASSE 1051 LISTED, NSF STANDARD 14. PROVIDE PVC OR ABS CONNECTOR AS NECESSARY. CONNECT VALVE TO PIPING PER MANUFACTURER. INSTALL IN THE VERTICAL, UPRIGHT POSITION AFTER ROUGH-IN AND PRESSURE TESTING OF THE SYSTEM. PROVIDE WALL BOX IF NOT ABOVE CEILING OR OTHERWISE CONCEALED.	-	-	2"

NOTE:
PC TO VERIFY ALL FIXTURES WITH ARCHITECT AND OWNER PRIOR TO PURCHASING

LINETYPE LEGEND	
COLD WATER SUPPLY	----
HOT WATER SUPPLY	----
SANITARY SEWER LINE	----
VENT LINE	----

DO NOT TAP WATER LINE AHEAD OF RPZ.



EXTERIOR SHOWER DETAIL - NO SCALE

GENERAL PLUMBING NOTES:

- ADMINISTRATIVE:**
- THE FOLLOWING ABBREVIATIONS SHALL APPLY TO NOTES AND PLANS:
PC - PLUMBING CONTRACTOR, EC - ELECTRICAL CONTRACTOR, MC - MECHANICAL CONTRACTOR, GC - GENERAL CONTRACTOR, FASC - FIRE ALARM SYSTEM CONTRACTOR.
 - "PROVIDE" MEANS TO FURNISH AND INSTALL. THE PLUMBING CONTRACTOR SHALL ALSO INSTAL ALL MATERIALS FURNISHED BY OTHERS AND THE GENERAL CONTRACTOR.
 - THE PC SHALL BE RESPONSIBLE FOR A COMPLETE AND OPERATIONAL SYSTEM AS DESCRIBED BY THESE PLANS AND SPECIFICATIONS.
 - ALL MATERIALS AND EQUIPMENT SHALL BE DELIVERED TO THE SITE AND UNLOADED AT AN APPROVED LOCATION. PC SHALL PROTECT ALL MATERIALS AND EQUIPMENT FROM BREAKAGE, THEFT, AND THE ELEMENTS. ALL MATERIALS AND EQUIPMENT SHALL REMAIN THE PROPERTY OF THE PC UNTIL THE PROJECT HAS BEEN COMPLETED AND TURNED OVER TO THE OWNER.
 - MATERIALS USED SHALL BE NEW AND FREE OF DEFECTS. ANY MATERIALS FOUND TO BE DEFECTIVE SHALL BE REPLACED AT NO EXPENSE TO THE OWNER. ALL MATERIALS AND EQUIPMENT SHALL BEAR APPROVAL FROM UL OR AN APPROVED THIRD PARTY AGENCY. WHERE MANUFACTURER AND MODEL NUMBER IS GIVEN, IT IS TO ESTABLISH A STANDARD OF QUALITY AND NOT TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DETERMINED TO BE EQUAL BY THE ENGINEER WILL BE ACCEPTED.
 - THE PLUMBING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA PLUMBING CODE AND ANY APPLICABLE LOCAL CODES. WHERE A CONFLICT EXISTS BETWEEN THE ABOVE REQUIREMENTS, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ENGINEER OR IN THE EVENT ANY PART OF THESE PLANS CONFLICTS WITH THE ABOVE REQUIREMENTS.
 - THE PC SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY FOR THE COMPLETION OF THE WORK UNDER THIS CONTRACT.
 - DO NOT SCALE THESE DRAWINGS-REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS.
 - THESE PLANS ARE DIAGRAMMATIC. THE PC SHALL ADJUST THE LOCATIONS OF EQUIPMENT, FIXTURES, PIPING, ETC. TO ACCOMMODATE PLANNED AND UNEXPECTED INTERFERENCES. THE DRAWINGS DO NOT SHOW ALL BENDS, OFFSETS, AND FITTINGS THAT MAY BE REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THE PC SHALL MAKE ALLOWANCES FOR SUCH DEVIATIONS AND CONTINGENCIES IN BID TO IMPLEMENT THEM WITHOUT ADDITIONAL COST TO THE OWNER. THE PC SHALL VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS. CONTRACTOR SHALL CONTACT THE ENGINEER TO RESOLVE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS. TO AVOID POTENTIAL CONFLICTS, COORDINATE WITH OTHER TRADES PRIOR TO THE START OF CONSTRUCTION. ALL UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO ANY DIGGING.
 - TRENCHING, COMPACTION, AND BACKFILL SHALL BE BY PC AND SHALL BE IN ACCORDANCE WITH SECTION 306 OF THE NC PLUMBING CODE. UNDERGROUND LINES SHALL BE LOCATED IN SUCH MANNER THAT THEY DO NOT ENDANGER FOOTINGS OR FOUNDATION WALLS.
 - THE PC SHALL PROVIDE FIRESTOPPING AT ALL PENETRATIONS OF RATED FLOOR/CEILING ASSEMBLIES AND RATED WALL ASSEMBLIES TO PRESERVE OR RESTORE THE FIRE RESISTANCE RATING. SEAL ALL PENETRATIONS USING A UL LISTED SYSTEM FOUND IN THE UL DIRECTORY SPECIFIC TO THE UL LISTING OF THE ASSEMBLY BEING PENETRATED. SEE ARCHITECTURAL PLANS FOR UL RATED ASSEMBLIES SPECIFIC TO THE PROJECT.
 - SYSTEM TESTING SHALL BE PERFORMED BY PLUMBING CONTRACTOR IN ACCORDANCE WITH NORTH CAROLINA PLUMBING CODE, SECTIONS 312.2, 312.3, AND 312.5.
 - PC SHALL DISINFECT THE ENTIRE DOMESTIC WATER PIPING SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
 - AT THE COMPLETION OF WORK AND PRIOR TO ACCEPTANCE BY OWNER, THE PC SHALL CLEAN ALL EXPOSED FIXTURES, MATERIALS, AND EQUIPMENT UNDER THIS CONTRACT.
 - PC SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO ENSURE ALL APPLICABLE CONSTRUCTION WASTE IS RECYCLED DURING THE CONSTRUCTION PHASE OF THE PROJECT.

MATERIALS:

- ALL OVERHEAD DOMESTIC WATER PIPING SHALL HAVE 95/5 LEAD FREE SOLDER, AND ALL BELOW GRADE WATER PIPING SHALL BE TYPE K COPPER WITH NO JOINTS. ALL PIPING SHALL HAVE MANUFACTURER'S NAME AND THE APPLICABLE STANDARD TO WHICH IT WAS MANUFACTURED CLEARLY MARKED ON EACH LENGTH. PIPING SHALL COMPLY WITH ASTM B-88. USE BRAZED JOINTS ON ALL COPPER PIPING 1-1/2 INCH AND LARGER. *** PC MAY USE PEX (ASTM F 877) WITH APPROVED FITTINGS (ASTM F 1807) WITH OWNER'S APPROVAL. *** CPVC PIPING (ASTM D 2846 OR ASTM F 441) WITH APPROVED FITTINGS (ASTM D 2846, ASTM F 438, OR ASTM F 493) MAY ALSO BE USED WHERE NOT LOCATED IN PENUMAS. ALL PLASTIC PIPE, FITTINGS, AND COMPONENTS SHALL BE THIRD PARTY CERTIFIED AS CONFORMING TO NSF 14. ALL PIPE AND PIPE FITTINGS, INCLUDING VALVES AND FAUCETS, USED IN THE WATER DISTRIBUTION SYSTEM SHALL HAVE A MAXIMUM LEAD CONTENT OF .25-PERCENT AND SHALL CONFORM TO NSF 61. HOT WATER DISTRIBUTION PIPE AND TUBING SHALL HAVE A MINIMUM PRESSURE RATING OF 100 PSI AT 180°F. COLD WATER DISTRIBUTION PIPE AND TUBING SHALL HAVE A MINIMUM PRESSURE RATING OF 160 PSI AT 73.4°F. DO NOT INSTALL PEX OR CPVC PIPING IN RETURN AIR PLENUMS.
- BALL VALVES SHALL HAVE BRASS BODY, FULL PORT, CHROME PLATED BALL, WITH TEFLON SEATS, 150 PSI WSP, AND COMPLY WITH MSS SP-110. GATE VALVES SHALL HAVE BRONZE BODY, CLASS 150, AND COMPLY WITH MSS SP-90, TYPE 2 STANDARD. VALVE BODY SHALL BE ASTM B 62. BRONZE WITH INTEGRAL SEAT AND UNION RING BONNET. ENDS SHALL BE THREADED OR SOLDER WITH COPPER-SILICON BRONZE STEM AND SOLID-WEDGE BRONZE DISC. INSTALL VALVES IN LOCATIONS THAT PERMIT EASY ACCESS WITHOUT DAMAGE TO BUILDING OR FINISHED MATERIALS; PROVIDE ACCESS DOORS IF REQUIRED. VALVES SHALL BE BY NIBCO, WATTS, OR STOCKHAM.
- COLD WATER LINES SHALL BE INSULATED WITH 1/2 INCH THICK FIBROUS GLASS INSULATION WITH A FLAME DENSITY RATING LESS THAN 25 AND A SMOKE DENSITY RATING LESS THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. HOT WATER LINES UP TO 2 INCHES DIAMETER SHALL HAVE 1 INCH THICK INSULATION CONFORMING TO THE SAME STANDARD. PIPING LARGER THAN 2 INCHES SHALL RECEIVE 1-1/2 INCH THICK INSULATION. CLOSED CELL RUBBER INSULATION MEETING THE SMOKE AND FLAME RATINGS ABOVE MAY BE SUBSTITUTED FOR FIBROUS GLASS TYPE IF SO DESIRED. INSULATION INSTALLED ON PIPING OPERATING BELOW AMBIENT TEMPERATURES MUST HAVE A CONTINUOUS VAPOR RETARDER. ALL JOINTS, SEAMS AND FITTINGS MUST BE SEALED. ON SYSTEMS OPERATING ABOVE AMBIENT, THE BUTT JOINTS SHOULD NOT BE SEALED. ON COLD SURFACES WHERE A VAPOR SEAL MUST BE MAINTAINED, INSULATION SHALL BE APPLIED WITH A CONTINUOUS UNBROKEN MOISTURE AND VAPOR RETARDER. ALL HANGERS, SUPPORTS, ANCHORS, OR OTHER PROJECTIONS SECURED TO COLD SURFACES SHALL BE INSULATED AND VAPOR SEALED TO PREVENT CONDENSATION. ALL PIPE INSULATION SHALL BE CONTINUOUS THROUGH WALLS, CEILING OR FLOOR OPENINGS, OR SLEEVES EXCEPT WHERE FIRESTOP OR FIRE-RATING MATERIALS ARE REQUIRED. INSULATION SHALL HAVE A FACTORY APPLIED ALL-SERVICE JACKET WITH SELF-SEALING LAP. WHITE-KRAFT PAPER BONDED TO ALUMINUM FOIL AND REINFORCED WITH GLASS FIBERS; CONFORMING TO ASTM C 1136 TYPE 1; VAPOR RETARDER; WITH A SELF-SEALING ADHESIVE. VERIFY THAT PIPING HAS BEEN TESTED, SURFACES ARE CLEAN AND DRY, AND ALL FOREIGN MATERIALS ARE REMOVED BEFORE APPLYING INSULATION MATERIALS. INSULATION SHALL BE BY KNAUF, ARMACELL, JOHNS-MANVILLE, OR OWENS-CORNING.
- ALL INSULATION CONTAINING FIBROUS MATERIALS EXPOSED TO AIRFLOW SHALL BE RATED FOR THAT EXPOSURE OR SHALL BE ENCAPSULATED. INSULATING PROPERTIES FOR ALL MATERIALS SHALL MEET OR EXCEED INDUSTRY STANDARDS. POLYSTYRENE PRODUCTS SHALL MEET ASTM C578 91. ALL INSULATION SHALL BE LOW-EMISSIONS WITH NOT GREATER THAN 0.05 PPM FORMALDEHYDE EMISSIONS. THE MAXIMUM FLAME SPREAD AND SMOKE DEVELOPMENT INDEX FOR INSULATION SHALL MEET THE

METHODS:

- EXTEND DOMESTIC WATER PIPE FROM FIVE (5) FEET OUTSIDE THE BUILDING INTO THE BUILDING AS INDICATED ON THE PLANS AND INSTALL DOMESTIC WATER DISTRIBUTION PIPING TO ALL FIXTURES AND EQUIPMENT REQUIRING THE SAME. WATER SERVICE PIPE AND THE BUILDING SEWER SHALL BE SEPARATED BY 5 FEET OF UNDISTURBED OR COMPACTED EARTH IN ACCORDANCE WITH 603.2. PROVIDE ALL FITTINGS, VALVES, AND OTHER ACCESSORIES AS NECESSARY FOR A COMPLETE INSTALLATION. ALL DOMESTIC WATER PIPING SHALL BE CONCEALED IN FINISHED AREAS. ANY OPEN ENDS SHALL BE PROTECTED UNTIL FINAL CONNECTIONS ARE MADE.
- ABOVE GRADE DOMESTIC WATER PIPING SHALL BE SLOPED AT A MINIMUM OF 1/32 INCH PER FOOT AND ARRANGED TO DRAIN AT LOW POINTS. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT. ROUTE PIPING IN AN ORDERLY MANNER-PARALLEL OR PERPENDICULAR TO WALLS WHEN POSSIBLE-AND MAINTAIN GRADIENT. EACH SUPPLY BRANCH LINE SERVING MORE THAN ONE FIXTURE SHALL HAVE A SHUTOFF VALVE INSTALLED TO ISOLATE ALL FIXTURES AND PIECES OF EQUIPMENT SUPPLIED BY THE BRANCH LINE. THE SHUTOFF VALVE SHALL BE LABELED AND LOCATED AS CLOSE TO THE CONNECTION TO THE SUPPLY MAIN AND RISER AS POSSIBLE. EACH PIPE SHALL HAVE AN OPEN VALVE ON THE BASE OF EVERY WATER RISER PIPE AND ON THE TOP OF EVERY WATER DOWN-FEED PIPE. PROVIDE VALVE HANDLE EXTENSIONS AS NECESSARY FOR INSULATION.
- IT SHALL BE THE RESPONSIBILITY OF THE PC TO SUSPEND AND SUPPORT ALL PIPING SYSTEMS FOLLOWING RECOGNIZED ENGINEERING PRACTICES AND USING STANDARD, COMMERCIALY ACCEPTED PIPE HANGERS AND SUSPENSION EQUIPMENT. ALL FIXTURES, DEVICES, AND EQUIPMENT SHALL BE SECURELY MOUNTED TO THE BUILDING STRUCTURE AND SHALL NOT RELY ON CEILING OR WALL SURFACES FOR SUPPORT. THE SUPPORT ATTACHMENT SHALL SUPPORT THE WEIGHT OF THE FIXTURE OR EQUIPMENT PLUS THE WEIGHT OF THE SUPPORT ATTACHMENT ITSELF. SUPPORT FROM THE TOP CHORD OF THE ROOF JOISTS, GIRDERS, AND BEAMS. THE BOTTOM CHORD IS NOT TO BE USED FOR EQUIPMENT AND PIPING SUPPORT. HANGERS SHALL NOT BE ATTACHED TO CORRUGATED STEEL DECKING. USE STEEL HANGERS FOR STEEL AND PLASTIC PIPE AND COPPER OR COPPER-PLATED HANGERS FOR COPPER PIPE. PROVIDE PROTECTION FOR COPPER PIPING IN CONTACT WITH DISSIMILAR METALS. WHERE COPPER PIPING IS SUPPORTED ON HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH OTHER METALS. IN GENERAL, HANGERS SHALL BE CLEVIS TYPE, STANDARD WEIGHT. FOR PIPING, HANGER SPACING SHALL BE IN ACCORDANCE WITH TABLE 308.5 OF THE NC PLUMBING CODE. HANGERS AND ACCESSORIES SHALL BE GRINNEL, MASON, OR B-LINE.
- SLEEVE ALL PIPES PASSING THROUGH PARTITIONS, WALLS, AND FLOORS. SLEEVES IN FLOORS AND IN ACCORDANCE WITH ASSE 1022. CONCRETE, BRICK, TILE, OR MASONRY SHALL BE SCHEDULE 40 STEEL PIPE, MACHINE CUT. SLEEVES IN GYPSUM BOARD WALLS SHALL BE 22 GAUGE, ROLLED GALVANIZED SHEET METAL. TACK WELD ON THE LONGITUDINAL SEAM. PROVIDE SLEEVES WHERE PIPES PASS THROUGH FLOORS AND WALLS ABOVE AND BELOW CEILINGS. PROVIDE SPLIT PIPE SLEEVES IN NEW WALLS BUILT UP AROUND EXISTING PIPES. TACK WELD SPLIT SLEEVES TOGETHER. SLEEVES IN WALLS SHALL BE INSTALLED FLUSH WITH THE WALL. SLEEVES IN FLOORS SHALL EXTEND 3/4 INCH ABOVE THE FLOOR-EXCEPT THEY SHALL BE FLUSH FOR 2 HOUR RATED FLOORS-AND SHALL BE FLUSH WITH THE STRUCTURE BELOW. EACH SLEEVE SHALL HAVE AN INSIDE DIAMETER 1 INCH LARGER THAN THE OUTSIDE DIAMETER OF THE COVERING OF EACH COVERED PIPE TO ALLOW CONTINUOUS INSULATION-BUT NOT LESS THAN TWO PIPE SIZES LARGER THAN EACH UNCOVERED. ANNULAR SPACES BETWEEN SLEEVES AND PIPES SHALL BE FILLED OR CAULKED IN AN APPROVED MANNER.
- THE TOP OF WATER PIPES INSTALLED BELOW GRADE OUTSIDE THE BUILDING SHALL BE BELOW THE FROST LINE OR A MINIMUM OF 12 INCHES BELOW FINISHED GRADE WHICHEVER IS GREATER. WATER PIPING INSTALLED IN A WALL EXPOSED TO THE EXTERIOR SHALL BE LOCATED ON THE HEATED SIDE OF THE WALL INSULATION. WATER PIPING INSTALLED IN AN UNCONDITIONED UTILITY ROOM OR UNCONDITIONED ATTIC SHALL BE INSULATED TO A MINIMUM OF R6.5 DETERMINED IN ACCORDANCE WITH ASTM C 177.
- HOT WATER PROVIDED TO PUBLIC HAND-WASHING FACILITIES(LAVATORIES SHALL BE TEMPERED WATER DELIVERED THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B125.3.
- INSULATE ALL EXPOSED WASTE AND SUPPLY PIPING UNDER LAVATORIES, SINKS, AND ELECTRIC WATER COOLERS WITH THE HANDI-LAV GUARD INSULATION KIT BY TRUEBERO OR EQUAL.
- POTABLE WATER OUTLETS SHALL BE PROTECTED FROM BACKFLOW IN ACCORDANCE WITH 603.15. PRESSURE TEST VACUUM BREAKERS SHALL CONFORM TO ASSE 1020 AND SPILLPROOF VACUUM BREAKERS SHALL COMPLY WITH ASSE 1056. HOSE-CONNECTION VACUUM BREAKERS SHALL CONFORM TO ASSE 1011, ASSE 1019, ASSE 1035, OR ASSE 1052. CONNECTIONS TO BEVERAGE DISPENSERS, COFFEE MACHINES, AND NON-CARBONATED BEVERAGE DISPENSERS SHALL BE PROTECTED BY A BACKFLOW PREVENTER IN ACCORDANCE WITH ASSE 1022.
- THE PC SHALL INSTALL WATER HAMMER ARRESTORS ON BRANCH LINES WITH QUICK CLOSING VALVES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- THE PC SHALL PROVIDE CHECK VALVES AT ALL FIXTURES WITH THREADED OUTLETS AS REQUIRED BY CODE. TRAP PRIMERS SHALL BE PROVIDED AS SHOWN ON THE PLANS OR AS REQUIRED.



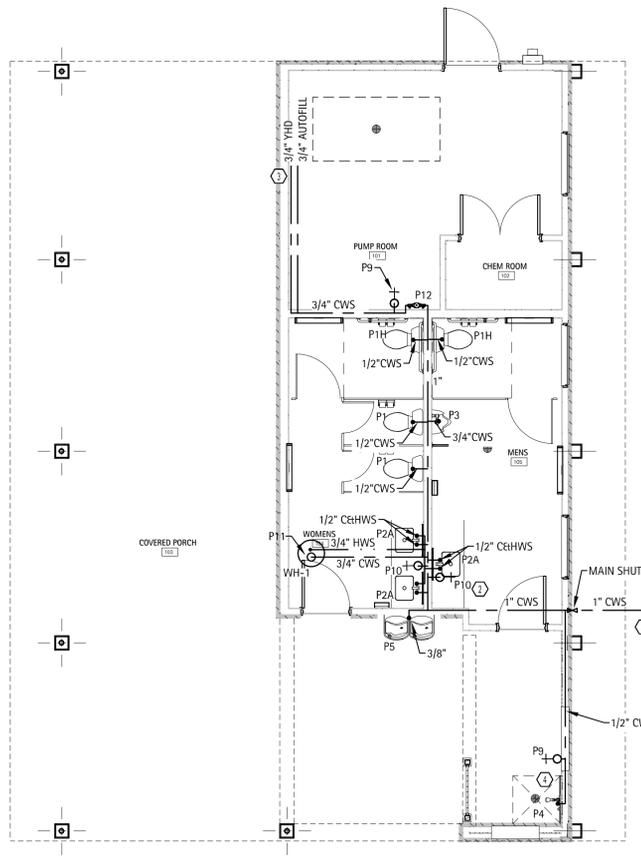
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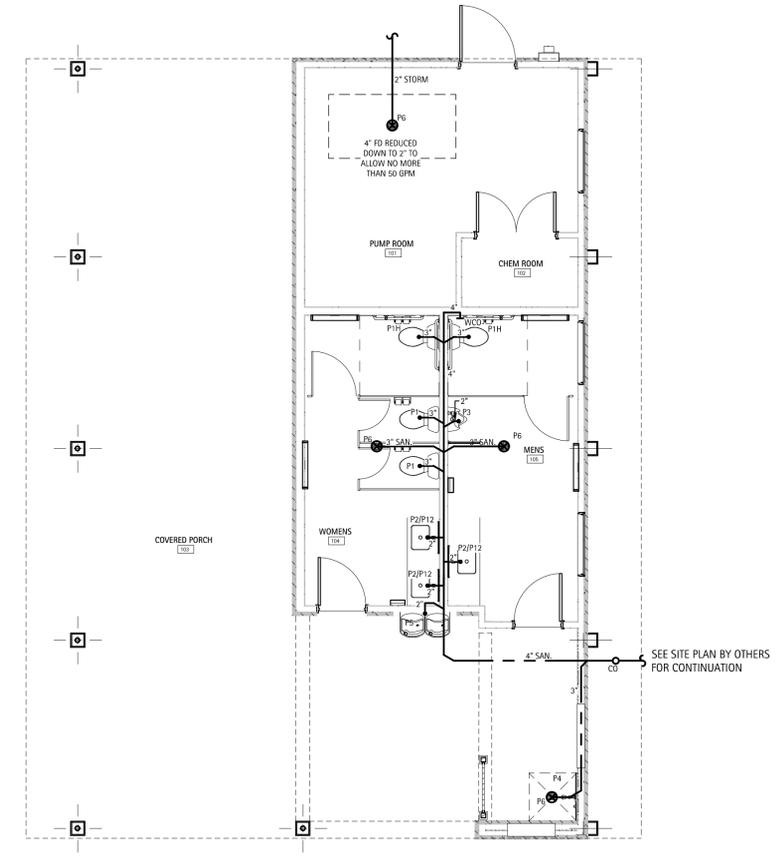
PLUMBING PLANS

P2

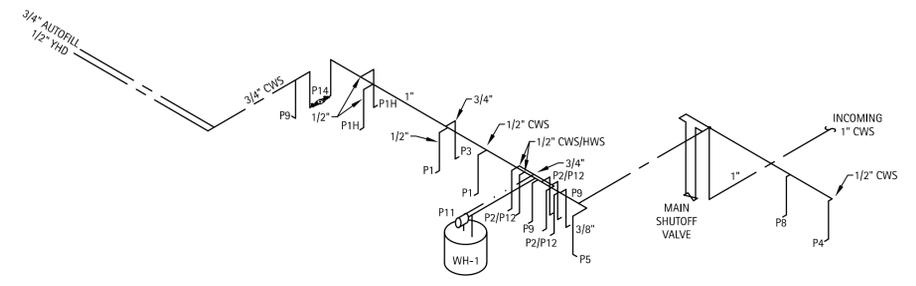
- SUPPLY PLAN HEX NOTES**
1. CONTINUE 1" DOMESTIC WATER LINE TO BACKFLOW PREVENTION IN HOTBOX. PC TO PROVIDE 1" RPZ (P13) IN HOTBOX. SEE SITE PLAN BY OTHERS FOR HOTBOX AND METER LOCATIONS.
 2. WATER HEATER MOUNTED ABOVE CEILING.
 3. VERIFY EXACT LOCATION OF YARD HYDRANT WITH ARCHITECT/GC.
 4. PC TO COORDINATE WITH EC TO PROVIDE HEAT TRACE FOR FIXTURES WITH THIS NOTE.



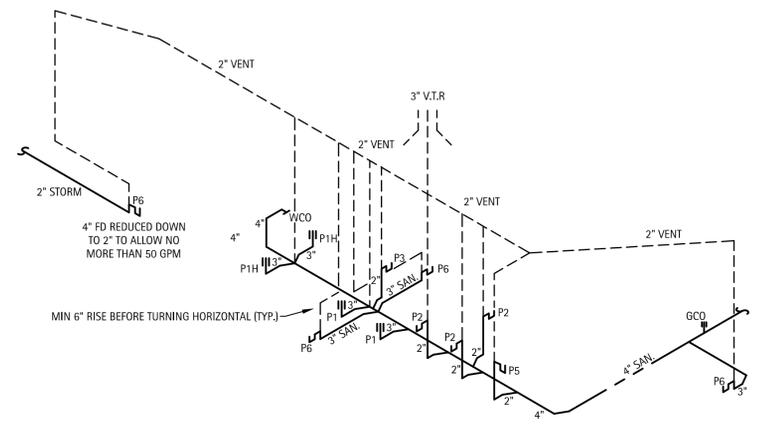
WATER SUPPLY PLAN - SCALE: 3/16" = 1'-0" 1



SANITARY WASTE PLAN - SCALE: 3/16" = 1'-0" 2



WATER SUPPLY RISER - NO SCALE 3



SANITARY WASTE RISER - NO SCALE 4



GENERAL MECHANICAL NOTES:

- ADMINISTRATIVE**
- THE FOLLOWING ABBREVIATIONS SHALL APPLY TO NOTES AND PLANS:
 PC - PLUMBING CONTRACTOR, EC - ELECTRICAL CONTRACTOR,
 MC - MECHANICAL CONTRACTOR, CC - CONCRETE CONTRACTOR,
 FASC - FIRE ALARM SYSTEM CONTRACTOR, AU - AUTHORITY HAVING JURISDICTION.
 - "PROVIDE" MEANS TO FURNISH AND INSTALL. MC SHALL ALSO INSTALL MATERIALS FURNISHED BY OTHERS AND GENERAL CONTRACTOR AS SHOWN ON THE PLANS OR NECESSARY FOR A COMPLETE INSTALLATION.
 - THE MC SHALL BE RESPONSIBLE FOR A COMPLETE AND OPERATING SYSTEM AS DESCRIBED BY THESE PLANS AND SPECIFICATIONS.
 - ALL MATERIALS AND EQUIPMENT SHALL BE DELIVERED TO THE SITE AND UNLADDED BY THE CONTRACTOR AT AN APPROVED LOCATION. THE MC SHALL PROTECT ALL MATERIALS AND EQUIPMENT FROM BREAKAGE, THEFT, AND THE ELEMENTS. ALL MATERIALS AND EQUIPMENT SHALL REMAIN THE PROPERTY OF THE MC UNTIL THE PROJECT HAS BEEN COMPLETED AND TURNED OVER TO THE OWNER.
 - THE MC SHALL INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH THE 2018 NORTH CAROLINA MECHANICAL AND BUILDING CODES AND ANY APPLICABLE LOCAL CODES. WHERE A CONFLICT EXISTS BETWEEN THE ABOVE REQUIREMENTS, THE MC SHALL OBTAIN CLARIFICATION FROM THE ENGINEER OR IN THE EVENT ANY PART OF THESE PLANS CONFLICTS WITH THE ABOVE REQUIREMENTS.
 - THE MC SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY FOR THE COMPLETION OF THE WORK UNDER THIS CONTRACT.
 - DO NOT SCALE THESE DRAWINGS-REFER TO ARCHITECTURAL SHEETS FOR DIMENSIONS.
 - THE MC SHALL MEET THE SITE PRIOR TO BEGINNING TO BECOME FAMILIAR WITH EXISTING CONDITIONS. THE MC SHALL CONTACT THE ENGINEER TO RESOLVE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS. THE MC SHALL COORDINATE WITH OTHER TRADES PRIOR TO THE START OF CONSTRUCTION.
 - ALL MECHANICAL MATERIALS SHALL BE NEW AND FREE OF DEFECT AND LISTED AND LABELED BY UL OR AN APPROVED THIRD PARTY AGENCY. ANY MATERIALS FOUND TO BE DEFECTIVE SHALL BE REPLACED BY THE MC WITHOUT ADDITIONAL COST TO THE OWNER. WHERE A MANUFACTURER AND MODEL NUMBER IS GIVEN, THE CITED EXAMPLE IS INTENDED TO ESTABLISH A STANDARD OF QUALITY AND NOT TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. SIMILAR EXAMPLES ARE USED TO CONVEY A GENERAL STYLE, TYPE, CHARACTER, OR QUALITY OF THE PRODUCT DESIRED; PRODUCTS DETERMINED TO BE EQUAL BY THE ENGINEER WILL BE ACCEPTED.
 - THESE PLANS ARE DIAGNOSTIC. THE MC SHALL ADJUST THE LOCATIONS OF EQUIPMENT, DUCTS, REGISTER, GRILLES, ETC. TO ACCOMMODATE PLANNED AND UNENCOUNTERED INTERFERENCES. THE DRAWINGS DO NOT SHOW ALL BENDS, OFFSETS, AND FITTINGS THAT MAY BE REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THE MC SHALL MAKE ALLOWANCES FOR SUCH OPERATIONS AND CONTINGENCIES AND BID TO PREVENT THEM WITHOUT ADDITIONAL COST TO THE OWNER.
 - THE MC SHALL VERIFY THE FUNCTIONALITY AND OPERATION OF ALL EXISTING MECHANICAL EQUIPMENT IN THE AREA OF WORK. REPLACE FILTERS, LEAK TEST AND RE-CHARGE REFRIGERANT LINES, REPLACE OR LUBRICATE BEARINGS, CHECK LINKAGES AND ACTUATORS, AND PERFORM OTHER MAINTENANCE SERVICE AS NECESSARY TO GET THE EQUIPMENT IN PROPER ORDER.
 - ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER CONNECTIONS TO THE MECHANICAL EQUIPMENT. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL WIRING.
 - IT IS THE MC'S RESPONSIBILITY TO VERIFY THAT ITEMS FURNISHED FOR THIS CONTRACT WILL FIT IN THE SPACE AVAILABLE. THE MC SHALL MAKE FIELD MEASUREMENTS AS NECESSARY TO DETERMINE SPACE REQUIREMENTS. IF THE MC MUST ALTER EQUIPMENT DUE TO SPACE CONSIDERATIONS, THE MC SHALL PROVIDE SIZES AND SHAPES THAT FIT THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS.
 - MC SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR REGARDING THE ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT BEING PROVIDED.
 - MAINTAIN CLEARANCES FOR ALL EQUIPMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS FOR SERVICABILITY. ALL ROOFTOP EQUIPMENT MUST BE A MINIMUM OF 10 FEET FROM ROOF EDGE.
 - MC SHALL FURNISH A BOUND SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF THE PROJECT. MC SHALL PROVIDE ALL DOCUMENTATION TO THE OWNER AS NECESSARY TO SUBMIT FOR FACTORY WARRANTIES.
 - CONTRACTOR SHALL PROTECT ALL HVAC EQUIPMENT FROM CONSTRUCTION AND SHEET ROCK DUST DURING CONSTRUCTION. ALL FILTERS SHALL BE REPLACED WITH NEW AT THE COMPLETION OF THE PROJECT.
 - ALL EQUIPMENT INSTALLED ON ROOF MUST BE WITHIN THE ROOF SCREEN.
 - IF A ROOF PENETRATION IS REQUIRED AND THE ROOF IS UNDER WARRANTY, USE THE AUTHORIZED ROOFER. PROVIDE DOCUMENTATION.
 - ALL PIPING, WIRING, CONDUIT, INSULATION, EQUIPMENT, SUPPORTS, ETC. SHALL BE SUITABLE FOR INSTALLATION IN A RETURN PLENUM AS NECESSARY. COORDINATE WITH OTHER TRADES ON LOCATIONS OF ALL PLenums.
 - MC SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO ENSURE ALL APPLICABLE CONSTRUCTION WASTE IS RECYCLED DURING THE CONSTRUCTION PHASE OF THE PROJECT.

MATERIALS

- THE MC SHALL PROVIDE ALL UNITARY HEATING AND COOLING EQUIPMENT AS SCHEDULED ON THE DRAWINGS. AIR-COOLED SYSTEMS SHALL BE BY TRANE, CARNER, OR YORK. AIR-CONDITIONERS SHALL BE BY TRANE, CARNER, OR YORK. GAS FURNACES SHALL BE BY TRANE, CARNER, OR YORK. THE MC SHALL PROVIDE FACTORY AND FIELD INSTALLED ACCESSORIES AS SCHEDULED OR AS NECESSARY FOR A COMPLETE AND OPERATIONAL HVAC SYSTEM.
- THE MC SHALL PROVIDE ALL EXHAUST AND SUPPLY FANS AS SCHEDULED. FANS SHALL BE BY GREENHECK, LOREN COOK, TWIN CITY, OR PENNBARRY.
- DUCTWORK IS SHOWN WITH FREE AREA DIMENSIONS. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT STANDARD, 2 INCH S.P.
- EXTERNAL DUCT INSULATION AND FACTORY-INSULATED FLEXIBLE DUCT SHALL BE LEGIBLY PRINTED OR IDENTIFIED AT INTERVALS NOT GREATER THAN 36 INCHES WITH THE NAME OF THE MANUFACTURER, THE THERMAL RESISTANCE R-VALUE AT THE SPECIFIED INSTALLED THICKNESS AND THE FLAME SPREAD AND SMOKE-DEVELOPED INDEXES OF THE COMPOSITE MATERIALS. ALL DUCT INSULATION PRODUCTS R-VALUES SHALL BE BASED ON INSULATION ONLY, EXCLUDING AIR FLAME, VAPOR RETARDERS, OTHER DUCT COMPONENTS, AND SHALL BE TESTED TO ASTM C 1190 AT 75°F MEAN TEMPERATURE AT THE INSTALLED THICKNESS. IN ACCORDANCE WITH RECOGNIZED INDUSTRY PROCEDURES, THE INSTALLED THICKNESS OF DUCT INSULATION USED TO DETERMINE ITS R-VALUES SHALL BE DETERMINED AS FOLLOWS:
 4.1. FOR DUCT BOARD, DUCT LINER AND FACTORY-MADE RIBBED DUCTS NOT NORMALLY SUBJECTED TO COMPRESSION, THE NOMINAL INSULATION THICKNESS SHALL BE USED.
 4.2. FOR DUCT WRAP, THE INSTALLED THICKNESS SHALL BE ASSUMED TO BE 75 PERCENT (0.75-PERCENT COMPRESSION) OF NOMINAL THICKNESS.
 4.3. FOR FACTORY-MADE FLEXIBLE AIR DUCTS, THE INSTALLED THICKNESS SHALL BE DETERMINED BY DIVIDING THE DIFFERENCE BETWEEN THE ACTUAL OUTSIDE DIAMETER AND NOMINAL INSIDE DIAMETER BY TWO.
 4.4. DUCT LINER MAY BE SUBSTITUTED FOR EXTERNAL DUCT WRAP. DUCT LINER INSULATION MATERIALS SHALL MEET THE REQUIREMENTS OF ASTM C 1071 AND ASTM G 21. EXTERIOR DUCT R-VALUE SHALL BE R-8 AND INTERIOR R-VALUE SHALL BE R-6. INSULATION SHALL BE 2018 NORTH CAROLINA ENERGY CONSERVATION CODE, NOMINAL DUCT SIZES SHALL BE ADJUSTED AS NECESSARY SO THAT FREE AREA DIMENSIONS ARE PROVIDED AS SHOWN ON THE PLANS. FABRICATION AND INSTALLATION SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS AND TO THE REQUIREMENTS OF THE LATEST EDITION OF THE NORTH AMERICAN INSULATION MANUFACTURERS ASSOCIATION FIBROUS GLASS DUCT LINER STANDARDS AND/OR SMACNA HVAC DUCT CONSTRUCTION STANDARDS. DUCT LINER SHALL HAVE A BLACK PIGMENTED MAT ON THE AIRSTREAM SIDE TO RESIST DAMAGE DURING INSTALLATION AND SERVICE. EDGES SHALL BE FACTORY COATED WITH BLACK PIGMENTED COATING TO COMPLY WITH SMACNA'S REQUIREMENTS. ALL PORTIONS OF DUCT EXPOSED TO WEATHER SHALL BE PROPERLY INSTALLED, OPEN ALL DAMPER DAMPERS AND TURN ON FANS TO BLOW ALL SOAPS AND OTHER LOOSE PIECES OF MATERIAL OUT OF THE DUCT SYSTEM. ALLOW FOR A MEANS OF REMOVAL OF SUCH MATERIAL.
- ALL INSULATION CONTAINING FIBROUS MATERIALS EXPOSED TO AIRFLOW SHALL BE RATED FOR THAT EXPOSURE OR SHALL BE ENCAPSULATED. INSULATING PROPERTIES FOR ALL MATERIALS SHALL MEET OR EXCEED INDUSTRY STANDARDS. POLYESTER PRODUCTS SHALL MEET ASTM C 578. ALL INSULATION SHALL HAVE FORMALDEHYDE EMISSIONS NOT GREATER THAN 0.05 PPML. THE MAXIMUM FLAME SPREAD AND SMOKE DEVELOPED INDEX FOR INSULATION SHALL MEET THE REQUIREMENTS OF THE LOCAL CODES AND ORDINANCES ADOPTED BY THE JURISDICTION IN WHICH THE BUILDING IS LOCATED.
 5.1. MASTIC USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 181-95 OR UL 181B-96. MAINTAIN AMBIENT TEMPERATURES AND CONDITIONS REQUIRED BY MANUFACTURER OF ADHESIVES, MASTICS, AND INSULATION CEMENTS. DO NOT INSTALL DUCT SEALANT WHEN TEMPERATURES ARE LESS THAN THOSE RECOMMENDED BY THE SEALANT MANUFACTURER.
 5.2. ALL ADHESIVES AND SEALANTS SHALL HAVE VOC CONTENT BELOW 50 GRAMS PER LITER AND WHICH MEET THE REQUIREMENTS OF THE MANUFACTURER OF THE PRODUCTS BEING ADHERED OR INVOLVED. ADHESIVES AND SEALANTS SHALL CONTAIN NO HEAVY METALS OR FORMALDEHYDE.
 5.3. FACTORY-MADE AIR DUCTS AND CONNECTORS SHALL COMPLY WITH UL 181-96.
 5.4. FLEXIBLE DUCT SHALL BE UL LISTED CLASS D OR CLASS 1, INSULATED, AND COMPLY WITH UL 181. FLEXIBLE DUCT SHALL BE FACTORY FORMED, COMPOSED OF SPIRAL WOUND CORROSION RESISTANT WIRE BONDED TO AN INNER FABRIC LINER. DUCT SHALL BE FACTORY INSULATED WITH A FOIL VAPOR BARRIER JACKET, CONNECT TO RIBB DUCT WITH SPIRAL FITTING AND DAMPER. FLEXIBLE DUCTS AND AIR CONNECTORS SHALL NOT PASS THROUGH ANY FIRE RESISTANCE RATED ASSEMBLY.
- THE MC SHALL PROVIDE: ALL DIFFUSERS, GRILLES, LOUVERS, AND OTHER AIR DISTRIBUTION OUTLETS AND INLETS. LOUVERS, GRILLES, AND DIFFUSERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. FOR LAY-ON CEILING, INSTALL SUPPORT FROM THE STRUCTURE FOR EACH DIFFUSER OR DAMPER. AIR DISTRIBUTION OUTLETS AND INLETS SHALL BE BY HART & COOLEY, PRICE, METAL-ALRE, NALOR, OR CARNES.

METHODS

- INSULATE DUCTWORK WITH FIBERGLASS DUCT WRAP. INSTALLED R-VALUE SHALL BE A MINIMUM R-4. COVERINGS AND LININGS, INCLUDING ADHESIVES WHEN USED, SHALL HAVE A FLAME SPREAD INDEX NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL NEW DUCTWORK SHALL RECEIVE INSULATION ON THE OUTSIDE. INSTALL DUCT WRAP INSULATION WITH FINISH OUTSIDE SO THAT TAPE FLAP OVERLAPS INSULATION AND FINING OF ADJACENT PEECE OF DUCT WRAP. INSULATION SHALL BE TIGHTLY BUTTED. FOR RECTANGULAR DUCTS, INSTALL 50 INSULATION IS NOT EXCESSIVELY COMPRESSED AT DUCT CORNERS. STAPLE SEAMS APPROXIMATELY 6 INCHES ON CENTER WITH OUTWARD CURVING STAPLES. SEAL SEAMS WITH PRESSURE SENSITIVE TAPE MATCHING THE FACINGS. FOR RECTANGULAR DUCTS 24 INCHES IN WIDTH OR GREATER, SECURE DUCT WRAP TO THE BOTTOM OF THE DUCT WITH MECHANICAL FASTENERS SPACED 18 INCHES ON CENTER TO PREVENT SAGGING OF INSULATION. ADJACENT SECTIONS OF DUCT WRAP SHALL BE TIGHTLY BUTTED WITH 1/2 INCH TAPE FLAP OVERLAP. ALL TEARS, PUNCTURES, ETC. OF THE DUCT WRAP INSULATION SHALL BE SEALED WITH TAPE OR MASTIC TO PROVIDE A VAPOR TIGHT SYSTEM. INSULATION SHALL BE BY MAUI INSULATION, OWENS CORNING CORP. OR CERTAINTED CORPORATION.
- VERIFY THAT DUCTS HAVE BEEN TESTED BEFORE APPLYING INSULATION MATERIALS. VERIFY THAT DUCT SURFACES ARE CLEAN, DRY AND FREE OF FOREIGN MATERIAL PRIOR TO INSULATING. DUCT COVERINGS SHALL NOT PENETRATE A WALL OR FLOOR REQUIRED TO HAVE A FIRE-RESISTANCE RATING OR REQUIRED TO BE FIRE BLOCKED.
- WHERE DUCTS ARE CONNECTED TO EXTERIOR WALL LOUVERS AND DUCT OUTLET IS SMALLER THAN LOUVER FRAME, PROVIDE BLANK-OUT PANELS SEALING LOWER AREA AROUND DUCT. USE SAME MATERIAL AS DUCT, PAINTED BLACK ON EXTERIOR SIDE. SEAL TO LOUVER FRAME AND DUCT.
- DUCTS CONNECTING TO A FURNACE SHALL HAVE A CLEARANCE TO COMBUSTIBLES IN ACCORDANCE WITH THE FURNACE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- FOR STRUCTURES IN FLOOD HAZARD AREAS, DUCTS SHALL BE LOCATED ABOVE THE DESIGN FLOOD ELEVATION. DUCT SHALL NOT BE INSTALLED IN OR WITHIN 4 INCHES OF THE EARTH.
- PROVIDE DUCT ACCESS DOORS FOR INSPECTION AND CLEANING BEFORE AND AFTER FILTERS, COILS, FANS, AUTOMATIC DAMPERS, AT FREE DAMPERS, COMBINATION FREE AND SMOKE DAMPERS.
- CONSTRUCT T, BENDS, AND ELBOWS WITH RADII OF NOT LESS THAN 1-1/2 TIMES THE WIDTH OF THE DUCT ON CENTERLINE. WHERE NOT POSSIBLE AND WHERE RECTANGULAR ELBOWS MUST BE USED, PROVIDE TURNING VANES.
- INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE, MAXIMUM OF 30 DEGREES DIVERGENCE SYSTEM OF EQUIPMENTS AND 45 DEGREES CONVERGENCE DOWNSTREAM.
- IT SHALL BE THE RESPONSIBILITY OF THE MC TO SUSPECT AND SUPPORT ALL EQUIPMENT, DUCTWORK, DIFFUSERS, AND OTHER MATERIALS FOLLOWING RECOGNIZED ENGINEERING PRACTICES AND LIVES STANDARD. COMMERCIALY ACCEPTED HANGERS AND SUSPENSION EQUIPMENT, ALL HVAC EQUIPMENT SHALL BE SECURELY MOUNTED TO THE BUILDING STRUCTURE AND SHALL NOT RELY ON CEILING OR WALL SURFACES FOR SUPPORT. THE SUPPORT ATTACHMENT SHALL SUPPORT THE WEIGHT OF THE EQUIPMENT PLUS THE WEIGHT OF THE SUPPORT ATTACHMENT. SUPPORT FROM THE TOP CHORD OF THE ROOF JOISTS, BRIDGES, AND BEAMS, THE BOTTOM CHORD IS NOT TO BE USED FOR EQUIPMENT OR PIPING SUPPORT. HANGERS SHALL NOT BE ATTACHED TO CORROHATED STEEL DECKING.
- DUCTS SHALL BE SUPPORTED IN ACCORDANCE WITH SMACNA AT INTERVALS NOT EXCEEDING 10 FEET. DUCTS 36 INCHES OR LARGER SHALL HAVE TRAPEZIE TYPE HANGERS SUSPENDED WITH THREADED ROD, SUPPORT DUCTS FROM BAR JOISTS, BRIDGES, OR BEAMS.
- CHECK LOCATIONS OF AIR OUTLETS AND INLETS AND INLETS AND MAKE NECESSARY ADJUSTMENTS IN POSITION TO CONFORM WITH ARCHITECTURAL FEATURES, SYMMETRY, AND LIGHTING ARRANGEMENT. COORDINATE WITH SPRINKLER CONTRACTOR IF APPLICABLE.
- PROVIDE BALANCING DAMPERS AT POINTS ON SUPPLY WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS AS REQUIRED FOR AIR BALANCING. INSTALL MINIMUM 2 DUCT WADHS FROM DUCT TAKE-OFF. PROVIDE BALANCING DAMPERS ON DUCT TAKE-OFFS TO DIFFUSERS, AND REGISTER, REGARDLESS OF WHETHER DAMPERS ARE SPECIFIED AS PART OF THE DIFFUSER OR REGISTER ASSEMBLY. ADJUST AIR HANDLING AND DISTRIBUTION SYSTEMS TO PROVIDE DESIGN SUPPLY, RETURN, AND EXHAUST AIR QUANTITIES AS SET FORTH IN THE DRAWINGS AND AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. FREE DAMPERS SHALL BE UL LABELED UL 555, CURTAIN TYPE, WITH INTEGRAL FACTORY SLEEVE AND BLADES LOCATED OUTSIDE THE AIR STREAM. INSTALLATION OF ALL FREE DAMPERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SECTION 607 OF THE 2018 NC MECHANICAL CODE. PROVIDE ACCESS PANELS FOR TESTING AND SERVICE AS NECESSARY. MC SHALL PROVIDE PARALLEL DAMPERS AND THERMAL BRANES FOR ALL PENETRATIONS OF RATED CEILING ASSEMBLIES. PROHIBITION DAMPERS SHALL BE UL LABELED UL 555S AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFIC INSTALLATION INSTRUCTIONS. FREE DAMPERS, COMBINATION FREE AND SMOKE DAMPERS, AND CEILING RADIAION DAMPERS SHALL BE BY RUSKO, NALOR, OR LOVIO INDUSTRIES.
- MC SHALL INSTALL A SMOKE DETECTOR-UL LISTED FOR DUCT INSTALLATION (UL 268A) IN EACH UNIT'S RETURN UPSTREAM OF ANY FILTER, OUTSIDE AIR CONNECTIONS, OR DECONTAMINATION EQUIPMENT. DUCT SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72. DUCT SMOKE DETECTOR SUPERVISORY SIGNALS SHALL COMPLY WITH 604.4 OF THE 2018 NC MECHANICAL CODE. IF THE BUILDING IS TO BE BEIIPPED WITH A FIRE ALARM SYSTEM, THE FIRE ALARM SYSTEM CONTRACTOR SHALL FURNISH AND WIRE ALL DUCT SMOKE DETECTORS. IF THE BUILDING IS NOT PROVIDED WITH A FIRE ALARM SYSTEM, THE MC SHALL FURNISH AND WIRE THE DUCT SMOKE DETECTORS AND AV SERVICE. IT SHALL BE THE RESPONSIBILITY OF THE MC TO INSTALL ALL SMOKE DUCT DETECTORS PER NFPA AND MPFS INSTALLATION INSTRUCTIONS REGARDLESS OF WHO FURNISHES THE DEVICES.
- MC SHALL INSTALL PROGRAMMABLE THERMOSTATS AS SHOWN ON THE PLANS. THERMOSTAT SHALL BE MOUNTED AT 48 INCHES AFF. THERMOSTATS SHALL MEET THE REQUIREMENTS OF SECTION C402.2.2 OF THE 2018 NORTH CAROLINA ENERGY CONSERVATION CODE.
- FRESH AIR INTAKES SHALL BE INSTALLED ON ALL UNITS AS SHOWN ON DRAWINGS. MAINTAIN 10 FEET OF DISTANCE BETWEEN FRESH AIR INTAKES AND EXHAUST TERMINATIONS AND PLUMBING WITH THRU ROOFS.
- UNITS PROVIDED WITH ECONOMIZERS SHALL ALSO BE PROVIDED WITH POWERED EXHAUST AND COMPARATIVE ENTHALPY CONTROLS.
- MC SHALL INSTALL ALL EXHAUST FANS AND VENT TO THE BUILDING'S EXTERIOR. EC SHALL SWITCH FANS WITH LIGHTS OR ON SEPARATE SWITCH AS SHOWN.
- F-TAPS MUST BE INSTALLED ON ALL UNITS. MC SHALL INSTALL AUXILIARY DRAIN PANS UNDER OVERHEAD AIR HANDLES AND AN AUTOMATIC CUP-OFF FLOAT SWITCH FOR EACH P-TAP AND CONDENSATE LINES SHALL BE 1 INCH. P-TAPS AND CONDENSATE LINES MAY BE PVC, WHERE NOT LOCATED IN PLenums, OTHERWISE, THEY SHALL BE TYPE M COPPER. CONDENSATE LINES SHALL BE ROUTED TO DAYLIGHT OR STORM DRAIN.
- INSTALL BACKDRAFT DAMPERS ON FRESH AIR AND EXHAUST DUCTS WHERE THEY PENETRATE THE THERMAL ENVELOPE PER NORTH CAROLINA ENERGY CONSERVATION CODE C402.5.

EXHAUST FAN SCHEDULE								
MARK	MFG / MODEL #	TYPE	ESP (in WG)	CFM	VOLT/PH	FLA	SONES	NOTES
EF-1	GREENHECK SP-A200	CEILING	0.40	179	120/1	0.43	3.0	1-3
EF-2	GREENHECK SP-A410	CEILING	0.40	265	120/1	1.75	3.5	1-3
EF-3	GREENHECK CSP-A410	INLINE	0.40	265	120/1	1.75	2.7	1-6

ELECTRIC UNIT HEATER SCHEDULE						
MARK	MFG / MODEL #	HEATER	VOLT/PH	HEAT	MOCF	NOTES
		KW		KW	AMPS	
UH-1,2	MARKEL J/HF3315T2SRPW	3.0	240/1	3.0	20.0	1-4
UH-3	MARKEL J/H1HUH03003	3.3	240/1	3.3	30.0	1,2,5

REGISTER & GRILLE SCHEDULE						
MARK	MFG	MODEL #	SIZE	MOUNTING	DESCRIPTION	NOTES
A	NALOR	S145H	12X12	CEILING	ALUMINUM LOUVERED RETURN GRILLE	1
R	HART & COOLEY	RH45	12X12	SURFACE	ALUMINUM SURFACE MOUNT RETURN GRILLE	1

- OR EQUAL BY PRICE, METAL-ALRE, CARNES, TITUS OR NALOR.

HEX PLAN NOTES

- EXHAUST DUCT TO VENT ON UNDERSIDE OF ROOF SOFFIT. PROVIDE WITH INSECT SCREEN, COORDINATE EXACT LOCATION WITH G.C. VENT AWAY FROM POOL/POOL DECK.
- LOUVERED EXHAUST GRILLE INSTALLED IN GYPSUM CEILING. TURN LOUVERED BLADES TOWARDS WALL.
- SUSPENDED INLINE EXHAUST FAN TO BE INSTALLED IN ATTIC. ENSURE ALL MANUFACTURER CLEARANCES ARE MAINTAINED. COORDINATE WITH G.C. TO PROVIDE ACCESS FOR MAINTENANCE.
- DOOR WITH WEATHER PROOF LOUVER BY G.C. LOUVER TO BE 18"X18".
- MC TO KEEP PUMP ROOM EXHAUST AND BATHROOM EXHAUST SEPARATE.
- COMBINE BATHROOM EXHAUST TO ONE 12" EXHAUST DUCT.
- EXHAUST FAN TO BE WIRED FOR CONTINUOUS OPERATION.
- CORROSION RESISTANT UNIT HEATER.
- GRILLES AND DUCTWORK TO ALLOW FOR OUTSIDE AIR TO REDUCE NEGATIVE PRESSURE WHEN BATHROOM EXHAUST FANS ARE IN OPERATION.

VENTILATION CALCS

CHEMICAL STORAGE:
 18 SOFT X 10' HIGH CEILING = 180 CU. FT @ 10 ACH = 30 CFM
 *50 CFM PROVIDED

PUMP ROOM:
 108 SOFT X 10' HIGH CEILING = 1080 CU. FT @ 10 ACH = 180 CFM
 *215 CFM PROVIDED

MECHANICAL SYSTEM, SERVICE SYSTEMS, AND EQUIPMENT

METHOD OF COMPLIANCE THERMAL ZONE	PRESCRIPTIVE ZONE 4A
EXTERIOR DESIGN CONDITIONS HEATING DESIGN DRY BULB COOLING DESIGN DRY BULB COOLING DESIGN WET BULB	23.1°F 91.7°F 75.6°F
INTERIOR DESIGN CONDITIONS HEATING DESIGN DRY BULB COOLING DESIGN DRY BULB COOLING RELATIVE HUMIDITY	70°F 75°F 50%
MENS RESTROOM (DESIGNED AT 50°F HEATING DRY BULB) HEATING LOAD:	6,151 BTU/H
WOMENS ROOM (DESIGNED AT 50°F HEATING DRY BULB) HEATING LOAD:	8,308 BTU/H
PUMP ROOM (DESIGNED AT 50°F HEATING DRY BULB) HEATING LOAD:	6,672 BTU/H

MECHANICAL SPACING CONDITIONING SYSTEM:	
UNITARY	AIR COOLED DX
DESCRIPTION OF UNITS)	UNIT HEATERS
BOILER	N/A
TOTAL BOILER OUTPUT	N/A
CHILLER	N/A
TOTAL CHILLER CAPACITY	N/A

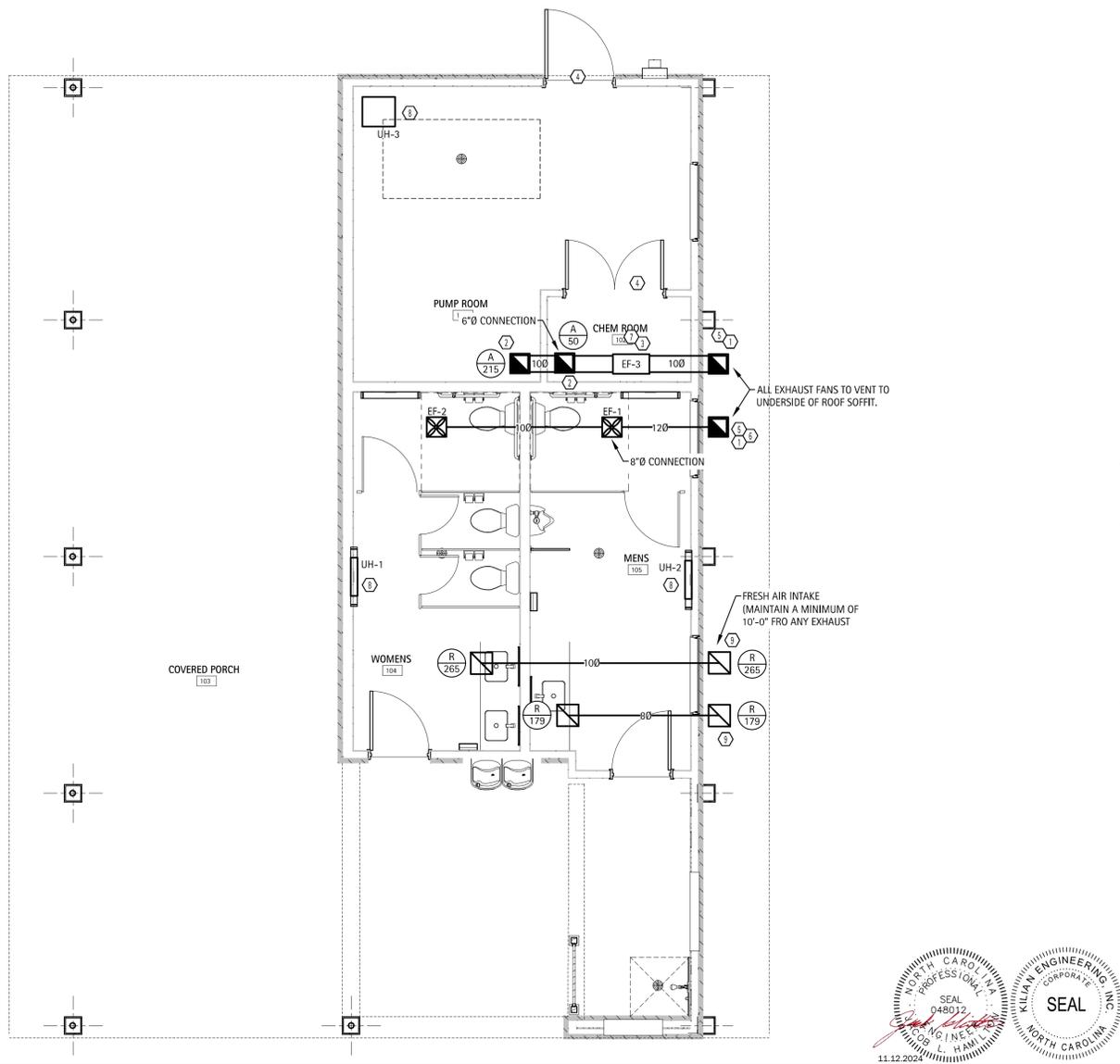
EQUIPMENT EFFICIENCIES: SEE SCHEDULES

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS): SEE SCHEDULES

DESIGNER STATEMENT:

TO THE BEST OF MY KNOWLEDGE, THE MECHANICAL DESIGN FOR THIS BUILDING COMPLIES WITH MECHANICAL AND EQUIPMENT REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE AND 2018 NORTH CAROLINA ENERGY CONSERVATION CODE.

MECHANICAL SCHEDULES & DESIGNER'S STATEMENT | 2



STATION POINTE
 DAN RYAN BUILDERS
 ANGLIER, NORTH CAROLINA

NO.	REVISION	DATE

PROJECT #: 240664
 DATE ISSUED: 2024 11 12
 DRAWING BY: SLT
 CHECKED BY: JLH
 00% I.F.B.

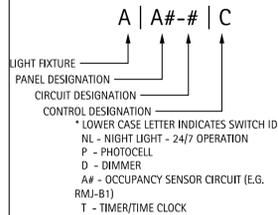


MECHANICAL NOTES | 1

MECHANICAL PLAN - SCALE: 1/4" = 1'-0" | 3

M1

LIGHTING CIRCUIT DESIGNATIONS

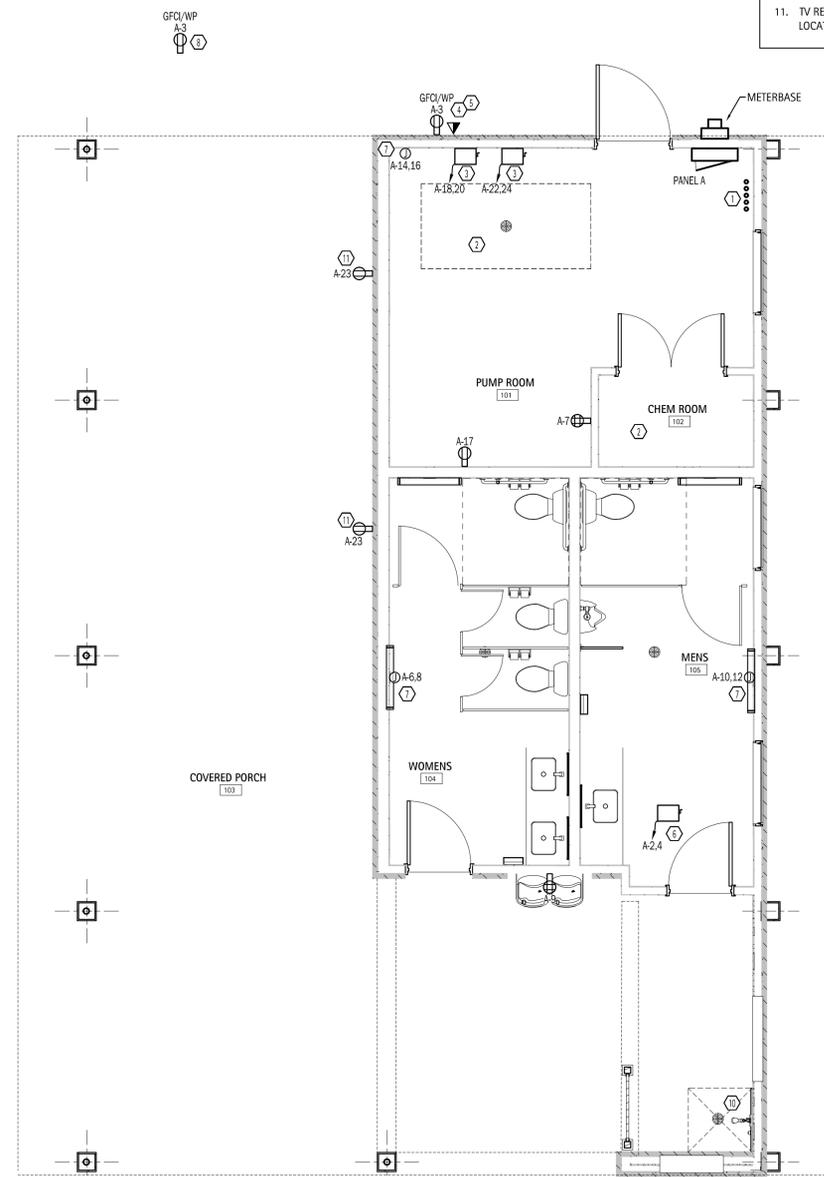
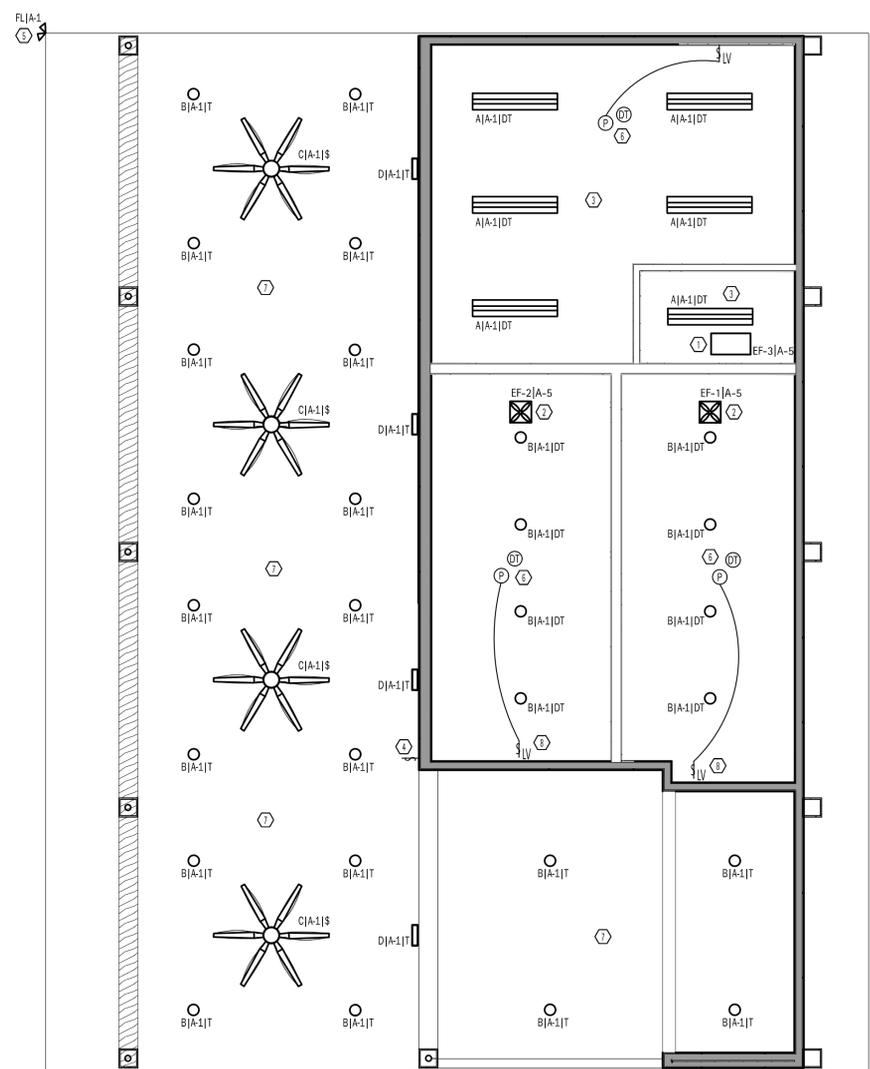


LIGHTING PLAN HEX NOTES

- EXHAUST FAN SUSPENDED IN ATTIC TO BE WIRED FOR CONTINUOUS OPERATION. COORDINATE WITH M.C. PROVIDE LOCKABLE BREAKER AT PANEL.
- EC TO TIE EXHAUST FAN AND LIGHTING FIXTURES TO SAME MOTION SENSOR.
- PUMP ROOM AND CHEM. ROOM LIGHTS TO BE TIED TO SAME MOTION SENSOR.
- PROVIDE 60 MINUTE SWITCH FOR FAN. PROVIDE IN WEATHERPROOF ENCLOSURE.
- FLOOD LIGHT HAS BUILT IN MOTION DETECTION. AIM TOWARD POOL DECK.
- MOTION SENSOR TO BE SET ON 20 MINUTE TIMER.
- EC TO LOCATE TIME CLOCK FOR EXTERIOR LIGHTING BESIDE PANEL. VERIFY WITH OWNER FOR SETTINGS.
- BATHROOM SWITCHES TO BE KEYED

POWER PLAN HEX NOTES

- PROVIDE (2) 1" CONDUITS WITH CIRCUITS AS SHOWN TO POOL FOR POOL LIGHTS AND OTHER POOLSIDE EQUIPMENT. PROVIDE (3) 1" CONDUITS FROM SPARE POOL CIRCUITS AS SHOWN AND CAP RIGHT OUTSIDE ELECTRICAL ROOM. COORDINATE EXACT LOCATIONS WITH G.C. AND POOL CONTRACTOR. CIRCUIT TO BE CONTROLLED VIA TIME CLOCK AT PANEL. POOL LIGHTS TO BE WIRED VIA INTERMATIC JUNCTION BOX TRANSFORMER (MODEL PJBX52100). REFER TO PANEL SCHEDULE FOR CIRCUIT DESIGNATIONS.
- AREA IS CORROSIVE ENVIRONMENT PER NEC 680.14.
- PROVIDE POWER TO NON-FUSED DISCONNECT FOR POOL AND FEATURE PUMPS. PUMPS MUST HAVE GFCI PROTECTION. PROVIDE GFCI BREAKER IN PANEL. DISCONNECT MUST HAVE NEMA 4X RATED ENCLOSURE. COORDINATE EXACT LOCATION AND SPEC WITH G.C. AND POOL CONTRACTOR BEFORE BEGINNING WORK. FINAL CONNECTIONS BY E.C.
- PROVIDE POWER TO EMERGENCY PHONE RECEPTACLE. FIELD VERIFY LOCATION WITH LOCAL AHJ.
- PROVIDE EMERGENCY "PUSH IN" POWER OFF SWITCH FOR POOL PUMPS. VERIFY LOCATION WITH LOCAL AHJ. WIRE TO SHUNT TRIP BREAKERS IN PANEL. SEE PANEL SCHEDULE.
- WATER HEATER DISCONNECT LOCATED ABOVE CEILING.
- FLUSH MOUNT JUNCTION BOX FOR UNIT HEATER.
- E.C. TO COORDINATE WITH POOL CONTRACTOR TO ENSURE A GFCI/WEATHER PROOF RECEPTACLE IS WITHIN 20' OF EDGE OF POOL (BUT NO CLOSER THAN 6') AS REQUIRE BY NEC 680.22(A)(1). PROVIDE ON CIRCUIT 3 IN PANEL A.
- RECEPTACLE IN HOTBOX FOR FREEZE PROTECTION. VERIFY EXACT LOCATION OF HOTBOX WITH UTILITY PLANS BY OTHERS.
- EC TO COORDINATE WITH PC FOR HEAT TRACE ON COLD WATER SUPPLY LINES. USE FREE CIRCUITS IN PANEL A.
- TV RECEPTACLE MOUNTED @ 72" A.F.F. VERIFY EXACT LOCATION/MOUNTING HEIGHT WITH OWNER/ARCHITECT.



STATION POINTE
 DAN RYAN BUILDERS
 ANGIER, NORTH CAROLINA

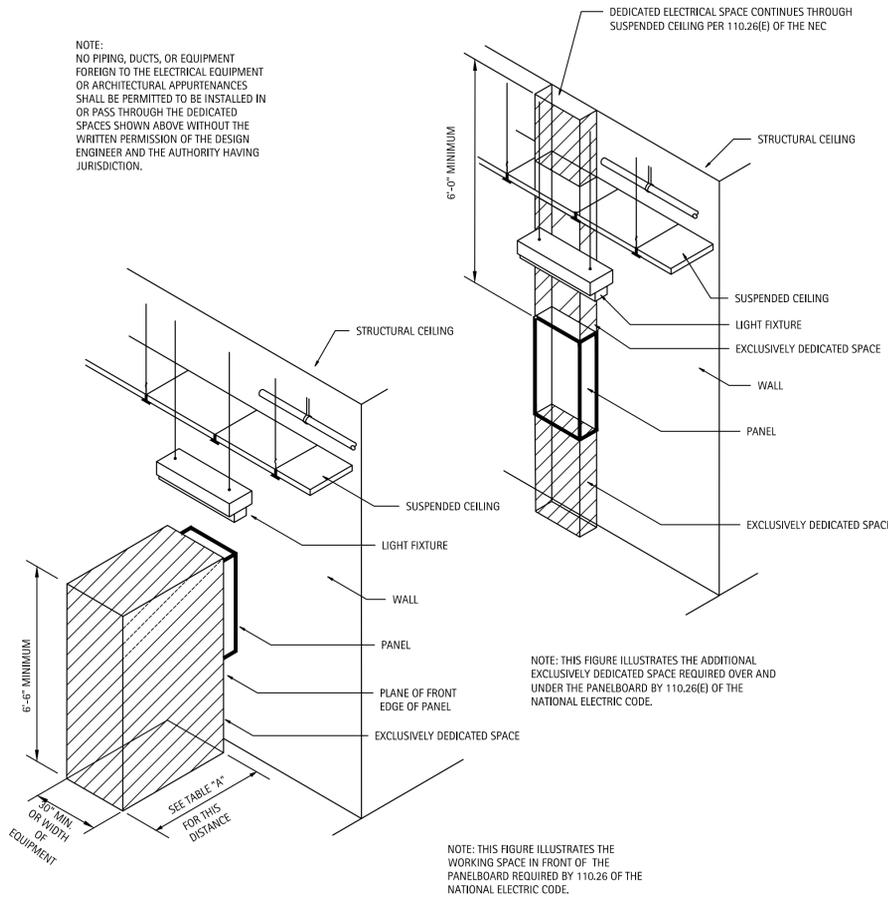
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NOTE:
NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN OR PASS THROUGH THE DEDICATED SPACES SHOWN ABOVE WITHOUT THE WRITTEN PERMISSION OF THE DESIGN ENGINEER AND THE AUTHORITY HAVING JURISDICTION.



NOTE: THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER THE PANELBOARD BY 110.26(E) OF THE NATIONAL ELECTRIC CODE.

NOTE: THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE PANELBOARD REQUIRED BY 110.26 OF THE NATIONAL ELECTRIC CODE.

NOTE: WHERE THE CONDITIONS ARE AS FOLLOWS:

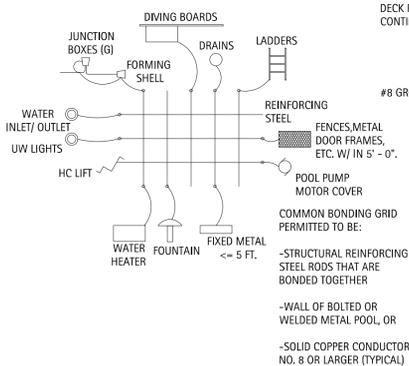
CONDITION 1 - EXPOSED LIVE PARTS ON ONE SIDE OF THE WORKING SPACE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORKING SPACE THAT ARE EFFECTIVELY GUARDED BY INSULATING MATERIALS.

CONDITION 2 - EXPOSED LIVE PARTS ON ONE SIDE OF THE WORKING SPACE AND GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, CONCRETE, BRICK, OR TILE WALLS SHALL BE CONSIDERED AS GROUNDED.

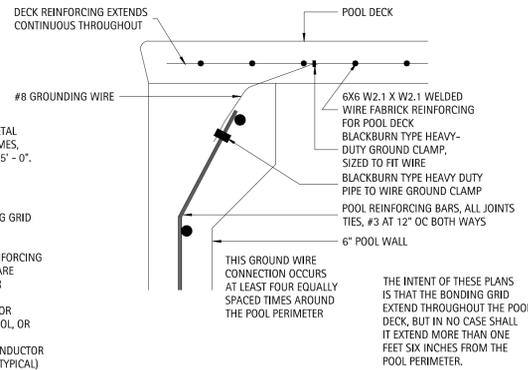
CONDITION 3 - EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORKING SPACE.

VOLTAGE TO GROUND, NOMINAL	MINIMUM CLEAR DISTANCE (FEET)		
	CONDITION 1	2	3
0-150	3	3	3
151-600	3	3-1/2	4

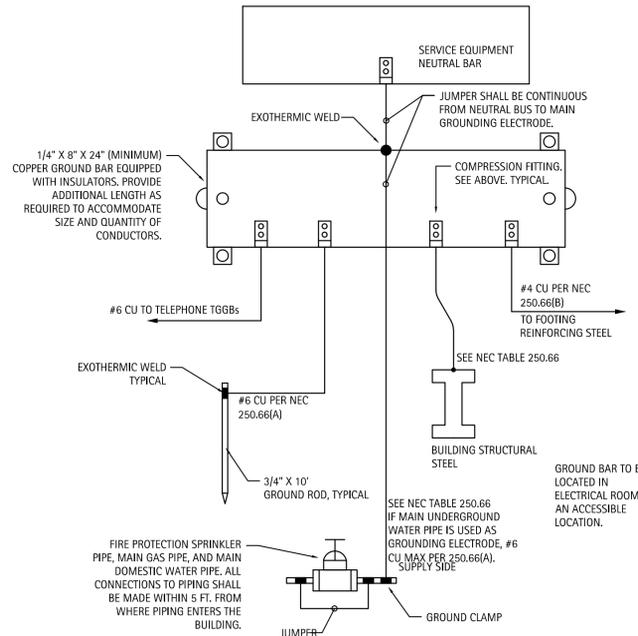
REQUIRED CLEARANCES - NO SCALE



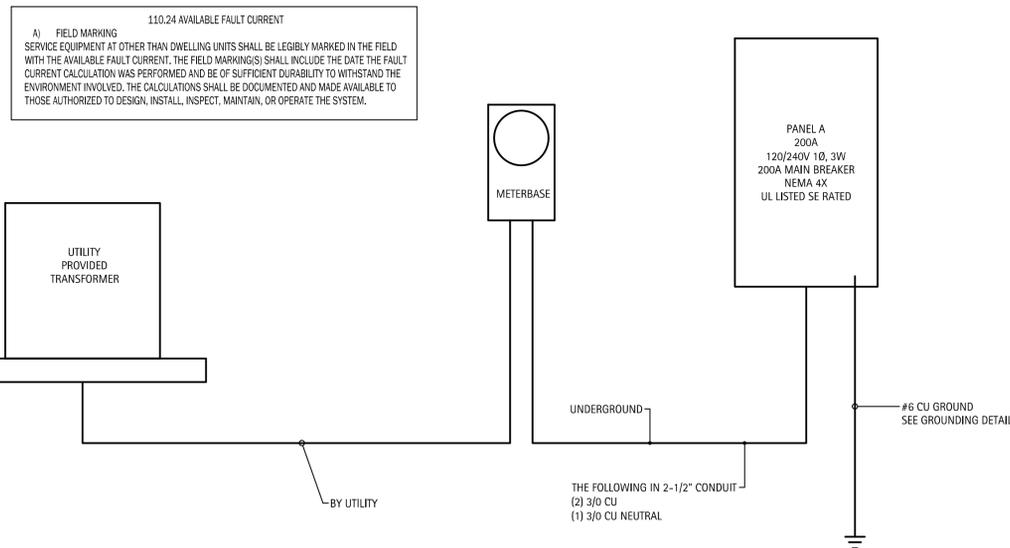
SWIMMING BONDING RISER DETAIL - NO SCALE



EQUIPOTENTIAL BONDING GRID DETAIL - NO SCALE



GROUNDING DETAIL - NO SCALE



POWER RISER - NO SCALE

PANEL A							
CKT	LOAD	BKR	LOAD		BKR	LOAD	CKT
			kVA	PH			
1	LIGHTING	20/1	1.17	A	2.25		2
3	EM PHONE/POOL DECK RECEPT.	20/1	0.36	B	2.25	30/2	WH-1
5	EXHAUST FANS	20/1	0.47	A	1.50		6
7	PUMP RM RECEPTACLE	20/1	0.36	B	1.50	20/2	UH-1
9	WATER FOUNTAIN	20/1	0.48	A	1.50		8
11	HOTBOX RECEPTACLE	20/1	0.18	B	1.50	20/2	UH-2
13	POOL LIGHTS & ACCESSORIES	20/1	1.20	A	1.65		12
15	POOL LIGHTS & ACCESSORIES	20/1	1.20	B	1.65	30/2	UH-3
17	SALT CHLORINATOR	20/1	0.36	A	2.04		14
19	POOL SPARE	20/1	0.00	B	2.04	35/2	3 HP POOL PUMP
21	POOL SPARE	20/1	0.00	A	2.04		16
23	TV RECEPTACLES	20/1	0.36	B	2.04	35/2	3 HP POOL PUMP
25	SPARE	20/1	0.00	A	0.00	20/1	POOL SPARE
27	SPACE	--	0.00	B	0.00	--	28
29	SPACE	--	0.00	A	0.00	--	30
31	SPACE	--	0.00	B	0.00	--	32
33	SPACE	--	0.00	A	0.00	--	34
35	SPACE	--	0.00	B	0.00	--	36
37	SPACE	--	0.00	A	0.00	--	38
39	SPACE	--	0.00	B	0.00	--	40
41	SPACE	--	0.00	A	0.00	--	42
			kVA	PH	AMP S		
			14.7	A	122		
			13.4	B	112		
VOLTAGE/PHASE					120/240, 1P, 3W		
BUS RATING					200A		
MAIN CIRCUIT BREAKER RATING					200A MAIN BREAKER		
AIC RATING					22K - EC TO VERIFY		
SERVICE ENTRANCE RATED					YES		
ENCLOSURE					NEMA 4X		
MOUNTING					SURFACE		

○ DENOTES GFCI BREAKER

NEC ELECTRIC DEMAND SUMMARY 120/240V, 1P, 3W						
EQUIPMENT	DEMAND FACTOR	kVA		LOAD kVA	NEC REFERENCE	NOTES/CALCULATIONS
		A	B			
LIGHTING	125%	1.30	1.30	2.60	220.12	1510 SF X 1.4 VA/SF X 1.25
RECEPTACLES < 10 kVA	100%	0.80	1.30	2.10	220.44	
HVAC	100%	5.12	4.65	9.77	--	BASED ON MCA
WATER HEATER	125%	2.25	2.25	4.50	422.13	STORAGE TANK <120 GAL @ 125%
POOL EQUIPMENT	100%	5.28	5.28	10.56	430.24	LARGEST MOTOR @ 125%
DEMAND kVA PER PHASE		14.75	14.78			
DEMAND AMPS PER PHASE		123	123			

THE CALCULATED LIGHTING LOAD EXCEEDS THE CONNECTED LIGHTING LOAD.

110.24 AVAILABLE FAULT CURRENT
A) FIELD MARKING
SERVICE EQUIPMENT AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATIONS SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM.



DATE

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PROJECT #: 240664
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POWER RISER & PANEL SCHEDULES





NO.	REVISION	DATE

PROJECT #: 2024020
DATE ISSUED: 11/01/2024
DRAWING BY: JVD
CHECKED BY: DSC/JLH

BATHHOUSE.F.B.
POOL ELECTRICAL & PIPING PLAN

SP3.0

POOL EQUIPMENT SCHEDULE

TAG	COUNT	MANUFACTURER	MODEL	COMMENTS
1	1	PENTAIR	WHISPERFLOXF VS (22035)	5 HP SELF-PRIMING PUMP W/ STRAINER BASKET + EXTRA BASKET
2	1	PENTAIR	147400	TANDEM FILTER PIPING KITS FOR 2 & 3 IN FILTERS
3	2	PENTAIR	TR-140-C3	36" DIA HIGH RATE SAND FILTER W/ 7.61 SQ FT OF MEDIA
4	1	PENTAIR	HC-3315	HIGH CAPACITY CHLORINE/BROMINE FEEDER
5	1	FLO-VIS	FV-3-40	3" IN-LINE COMMERCIAL FLOW METER
6	2	AQUASTAR	WAV9WR101 W/ FBS-50-809-3	9"x9" VGB SUCTION OUTLET COVER W/ A.S.A. MFG FIBERGLASS SUMP
7	1	AQUASTAR	HVC101	SELF-CONTAINED HYDROSTATIC RELIEF VALVE
8	6	PENTAIR	BERMUDA	WHITE COMMERCIAL GRADE SKIMMER
9	1	AQUASTAR	ES1022SI2001 W/ VLK15T01	VACUUM LINE FITTING W/ LOCK CAP
10	1	AQUASTAR	GDD101	COMMERCIAL OVERFLOW DRAIN
11	9	AQUASTAR	ES1022SI2001 W/ 8101	WALL RETURN INLET - DIRECTIONAL
12	3	AQUASTAR	ES1022SI2001 W/ BP101	FLOOR RETURN INLET W/ BUBBLER PLATE
13	1	AQUASTAR	AFB101	FILLSTAR - AUTOFILL LINE - WHITE
14	2	PENTAIR	620428	12W EQUIVALENT MICROBRITTE WHITE LED LIGHT
15	2	PENTAIR	602141	500W EQUIVALENT INTELLIBRITE WHITE LED LIGHT
16	2	INTERMATIC	PJB4175	4 LIGHT CONNECTION POOL & SPA JUNCTION BOX
17	1	SR SMITH	DMS-101B - MG	MARINE GRADE DECK MOUNTED HANDRAILS - SHORT
18	2	SR SMITH	DMS-102B - MG	MARINE GRADE DECK MOUNTED HANDRAILS - STANDARD
19	2	SR SMITH	10054-MG	MARINE GRADE DECK MOUNTED COMMERCIAL LADDER
HC	1	SR SMITH	MULTI-LIFT	ADA COMPLIANT MULTI-LIFT

UNDERWATER LIGHTING DATA

MAIN POOL AREA: 2,018 SQFT.
2,018 SF x 0.5 WATTS = 1,009 WATTS

LIGHTING PROVIDED (12V LED EQ.)
2 MICROBRITTE @ 12 WATTS
2 INTELLIBRITE @ 500 WATTS

TOTAL LIGHTING PROVIDED:
1,024 WATTS

PUMP FLOW PIPE SIZING

CIRCULATION:
INTELLIFLO VSF PUMP FLOW AT 65 FT OF WATER IS 128 GPM, WITH SPECIFIED:
3" MAIN DRAIN PIPING VELOCITY IS 5.56 FPS.
3" SKIMMER PIPING VELOCITY IS 5.56 FPS.
3" RETURN PIPING VELOCITY IS 5.56 FPS.

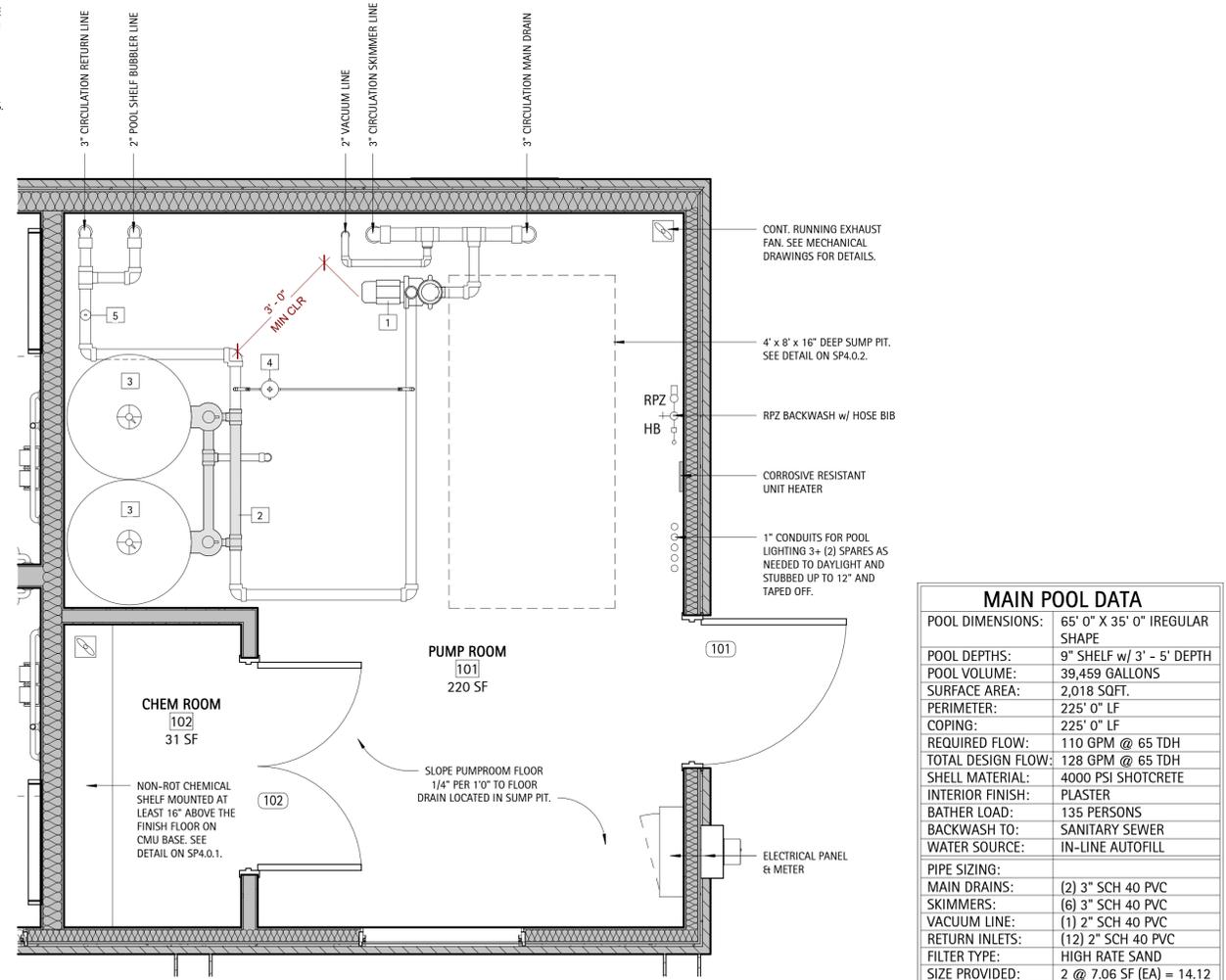
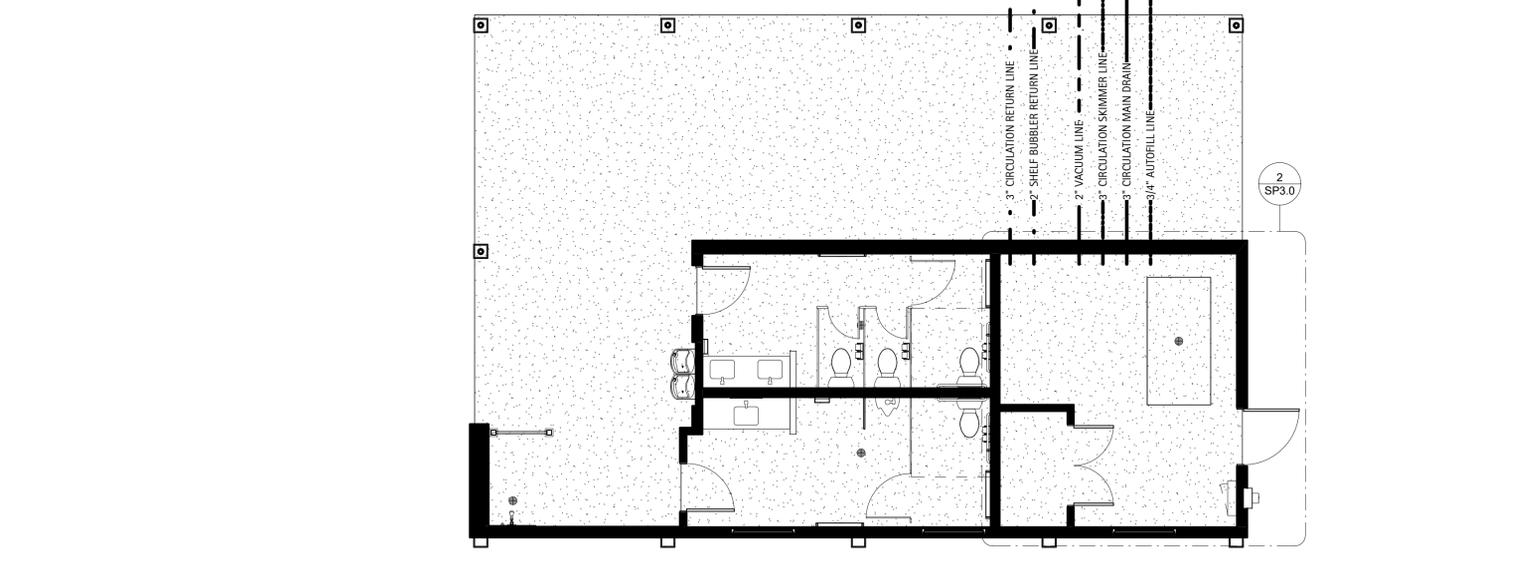
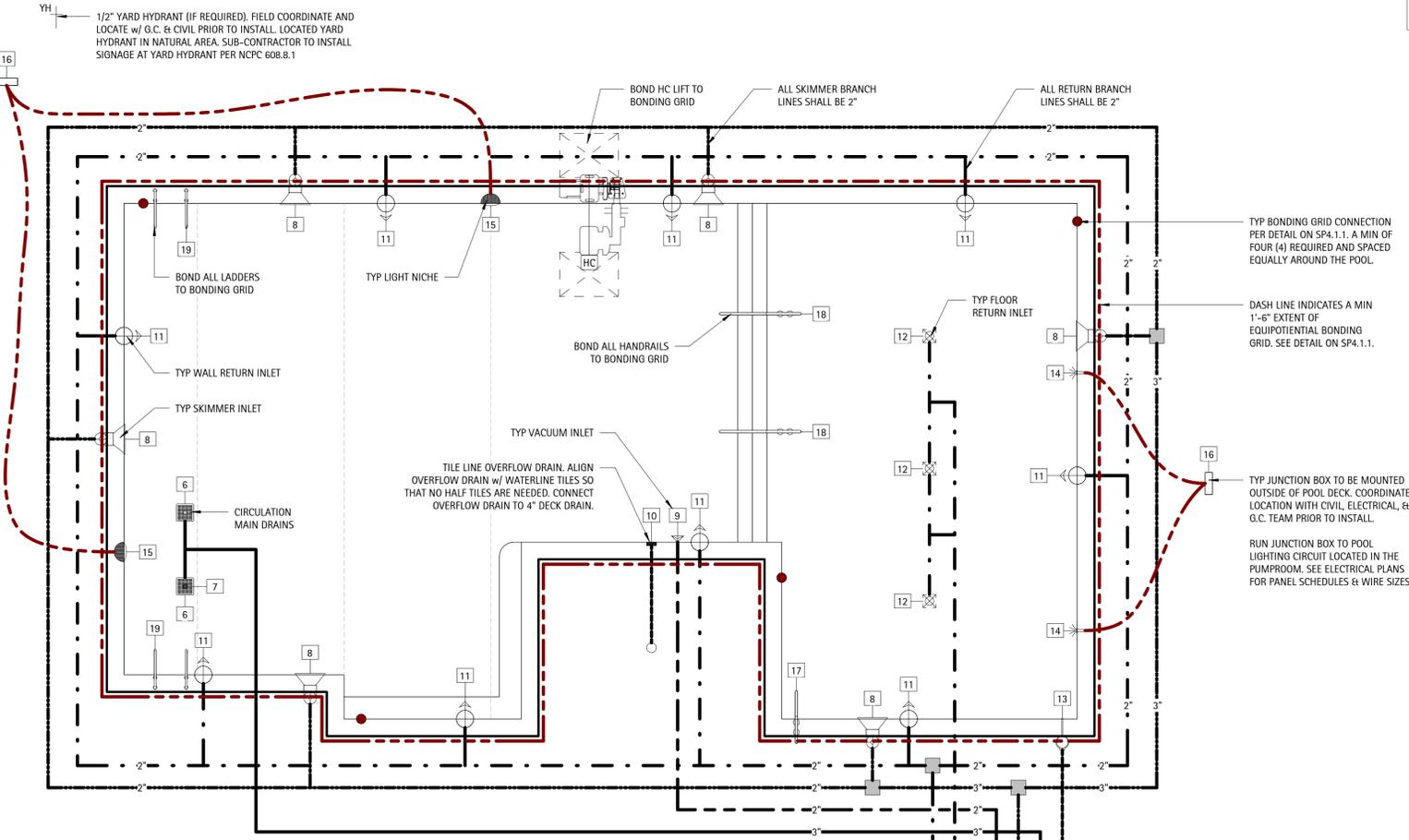
CHEMICAL STORAGE DATA

CHEMICAL STORAGE REQUIREMENTS FOR A 39,459 GALLON POOL ARE:
5 SF FOR FIRST 10,000 GALLONS OF WATER +
+ 1 SF FOR EACH ADDITIONAL 3,000 GALLONS OF POOL UP TO 100 SF OF STORAGE
+ 10 29,459 / 3,000 SF = 9.82

POOL REQUIRES A MIN OF 15 SF FOR CHEMICAL STORAGE.
-SEE BUILDING PLANS BY OTHERS FOR EXACT LAYOUT. 31 SF PROV.
-SEE DETAIL SP4.0.1 FOR TYP CHEMICAL ROOM SHELVING W/ QUANTITIES

PUMP ROOM & CHEMICAL ROOM NOTES

- A. ALL PUMPS, CHEMICAL FEEDING APPARATUS AND OTHER MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ENCLOSED IN A WEATHERPROOF STRUCTURE WITH A MINIMUM CEILING HEIGHT OF SEVEN FEET.
- B. THE EQUIPMENT ROOM SHALL BE PROVIDED WITH A DOOR WITH A PERMANENT LOCK THAT MUST BE KEPT LOCKED WHEN NOT IN USE BY THE POOL OPERATOR.
- C. VALVES AND CONTROL DEVICES SHALL BE ACCESSIBLE AND VISIBLE TO THE POOL OPERATOR. AT LEAST THREE FEET OF CLEAR WALKWAY SHALL BE PROVIDED TO ALLOW ACCESS TO EQUIPMENT.
- D. DRAINAGE IN AND AROUND THE EQUIPMENT ROOM SHALL PRECLUDE THE POSSIBILITY OF WATER ENTERING OR ACCUMULATING ON ANY INTERIOR SURFACE OF THE ENCLOSURE. EQUIPMENT ROOM FLOORS SHALL BE SLOPED NOT LESS THAN 1/4" PER FOOT TOWARD THE DRAINS.
- E. NATURAL CROSS DRAFT OR CONTINUOUS FORCED VENTILATION IS REQUIRED.
- F. A PERMANENT MEANS OF ACCESS SHALL BE PROVIDED TO ALL EQUIPMENT ROOMS.
- G. A HOSE BIB WITH AN APPROVED BACKFLOW PREVENTION DEVICE SHALL BE PROVIDED WITHIN 50 FEET OF THE EQUIPMENT ROOM.



1 Electrical & Piping Plan
3/16" = 1'-0"

2 Enlarged Pump Room Plan
1/2" = 1'-0"

MAIN POOL DATA

POOL DIMENSIONS:	65' 0" X 35' 0" IRREGULAR SHAPE
POOL DEPTHS:	9" SHELF w/ 3' - 5' DEPTH
POOL VOLUME:	39,459 GALLONS
SURFACE AREA:	2,018 SQFT.
PERIMETER:	225' 0" LF
COPING:	225' 0" LF
REQUIRED FLOW:	110 GPM @ 65 TDH
TOTAL DESIGN FLOW:	128 GPM @ 65 TDH
SHELL MATERIAL:	4000 PSI SHOTCRETE
INTERIOR FINISH:	PLASTER
BATHER LOAD:	135 PERSONS
BACKWASH TO:	SANITARY SEWER
WATER SOURCE:	IN-LINE AUTOFILL
PIPE SIZING:	
MAIN DRAINS:	(2) 3" SCH 40 PVC
SKIMMERS:	(6) 3" SCH 40 PVC
VACUUM LINE:	(1) 2" SCH 40 PVC
RETURN INLETS:	(12) 2" SCH 40 PVC
FILTER TYPE:	HIGH RATE SAND
SIZE PROVIDED:	2 @ 7.06 SF (EA) = 14.12
SIZE REQUIRED:	8.54 SF TOTAL
MEDIA CIRC. RATE:	15 GPM/SF
BACKWASH RATE:	15 GPM/SF
TURNOVER RATE:	6 HOURS

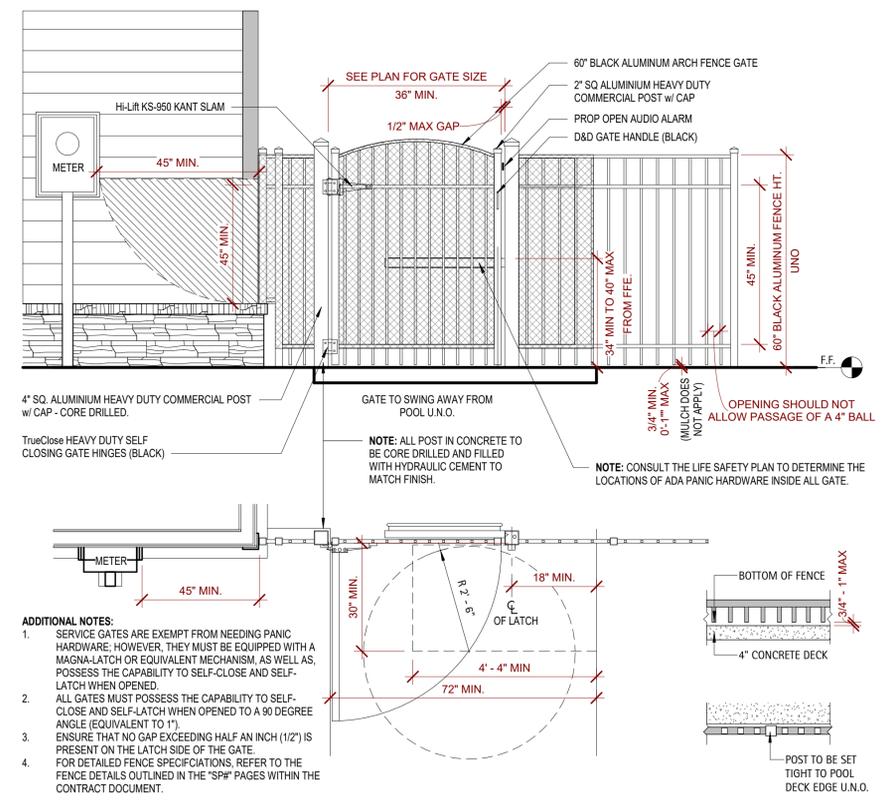


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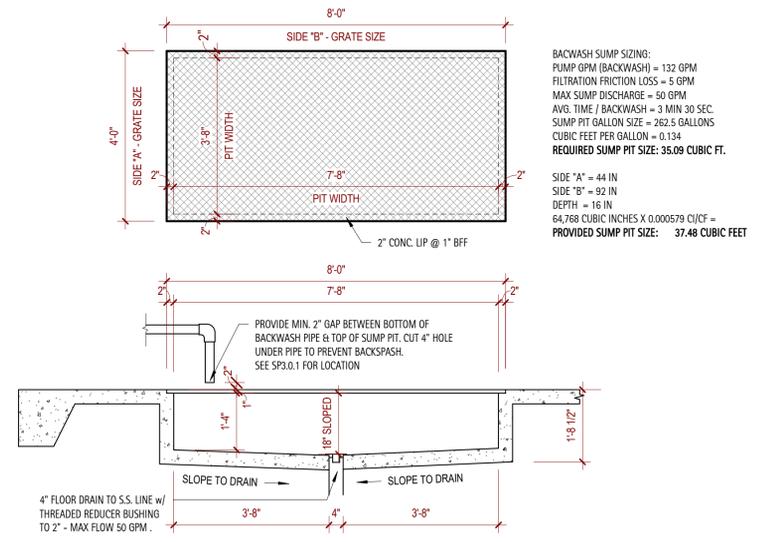
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BATHHOUSE.F.B.
POOL SECTIONS & DETAILS

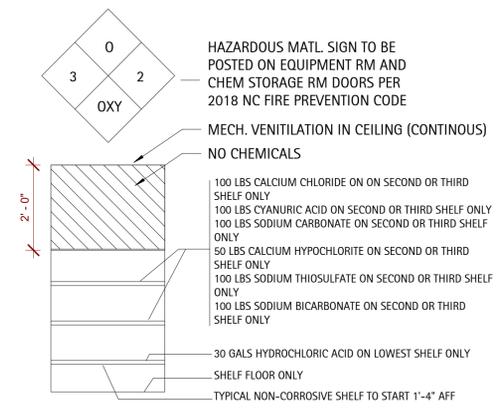
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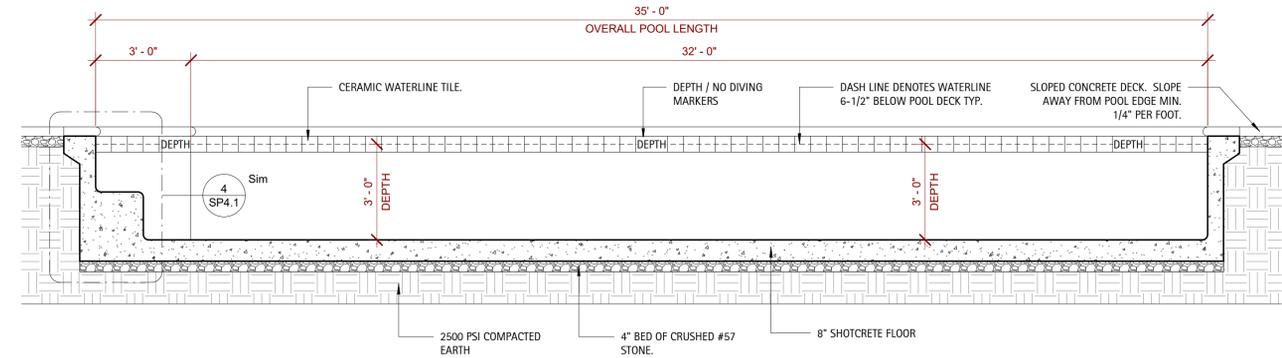
3 Detail - Fence
 1/2" = 1'-0"



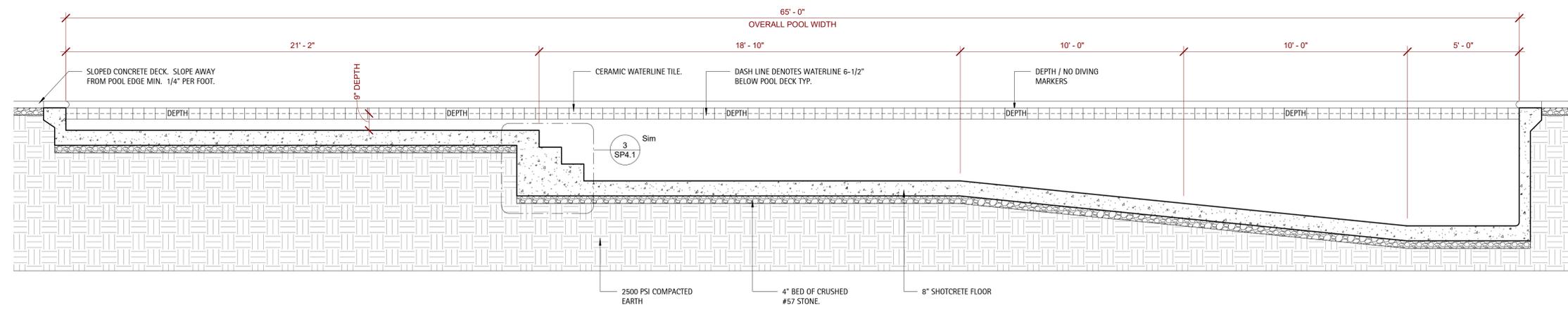
2 Detail - Sump Pit
 1/2" = 1'-0"



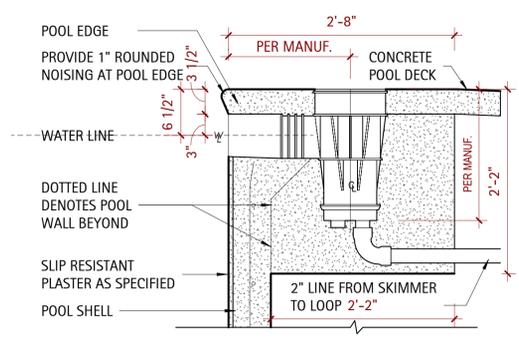
1 Detail - Chemical Storage
 1/2" = 1'-0"



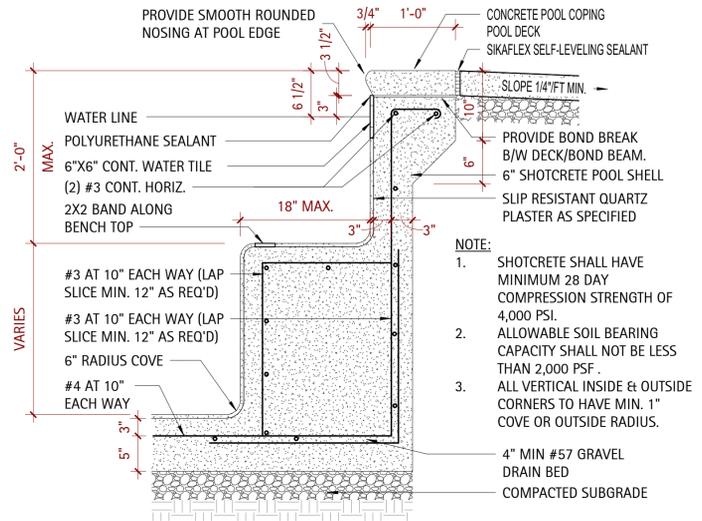
4 Detail - North / South Pool Section
 3/8" = 1'-0"



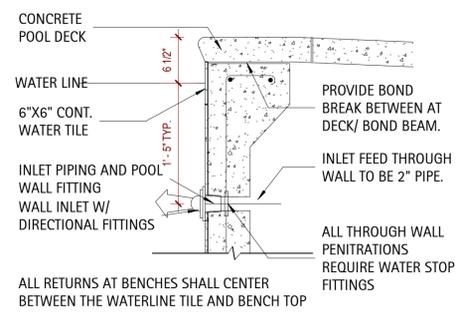
5 Detail - East / West Pool Section
 3/8" = 1'-0"



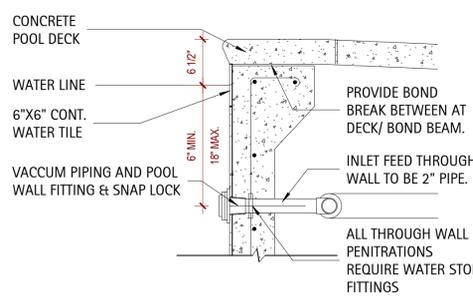
7 Detail - Pool Skimmer
1" = 1'-0"



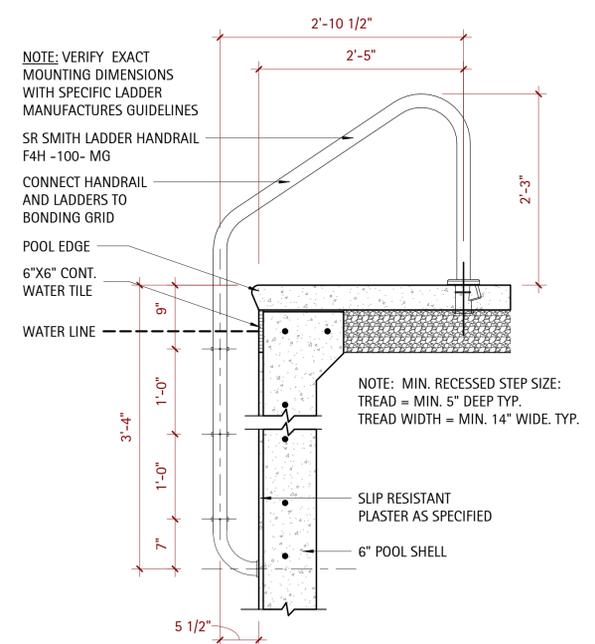
4 Detail - Pool Bench
1" = 1'-0"



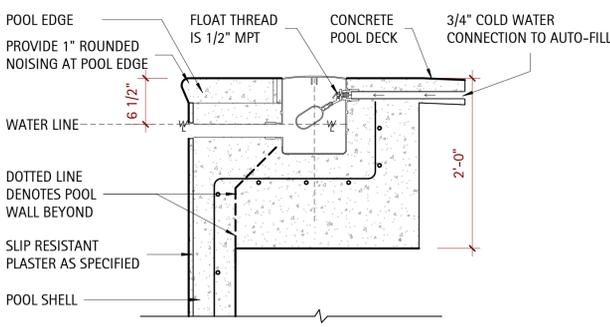
8 Detail - Wall Return Inlet
1" = 1'-0"



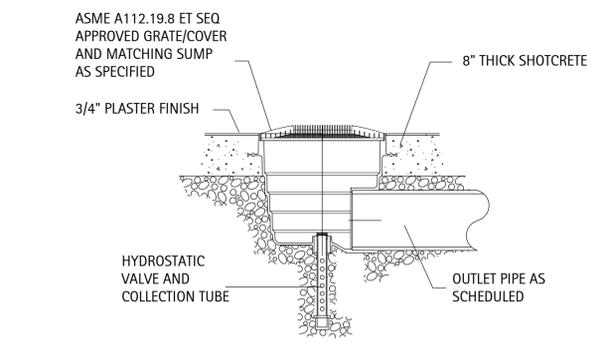
9 Detail - Vacuum Inlet w/ Lock Cap
1" = 1'-0"



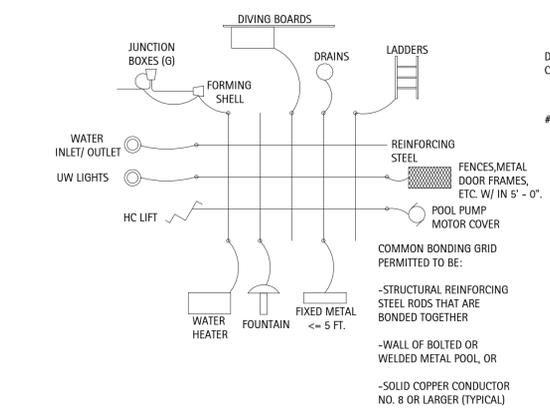
5 Detail - Ladder Steps
1" = 1'-0"



10 Detail - Pool Autofill
1" = 1'-0"

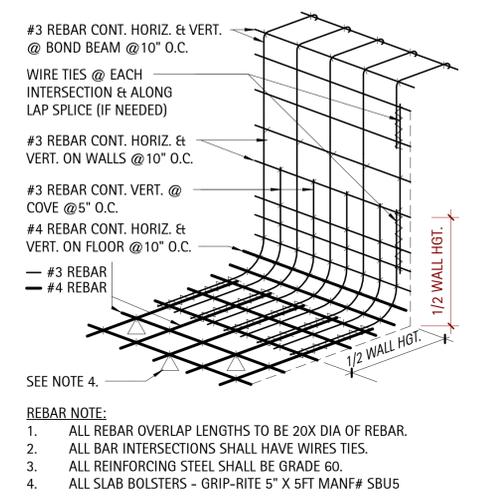


6 Detail - Main Drain
1" = 1'-0"

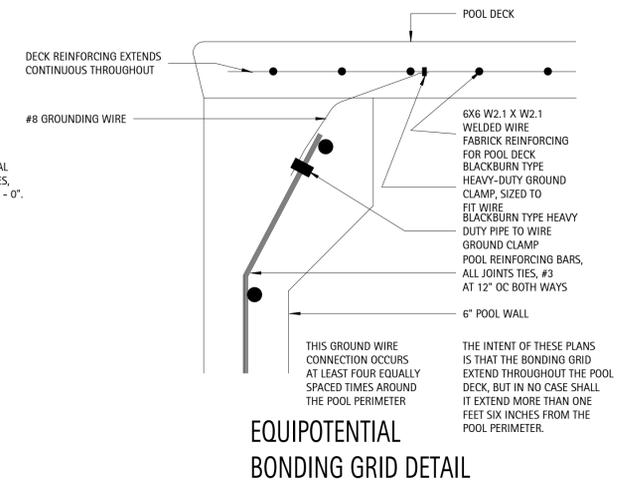


SWIMMING POOL BONDING RISER

1 Detail - Pool Bonding
1" = 1'-0"

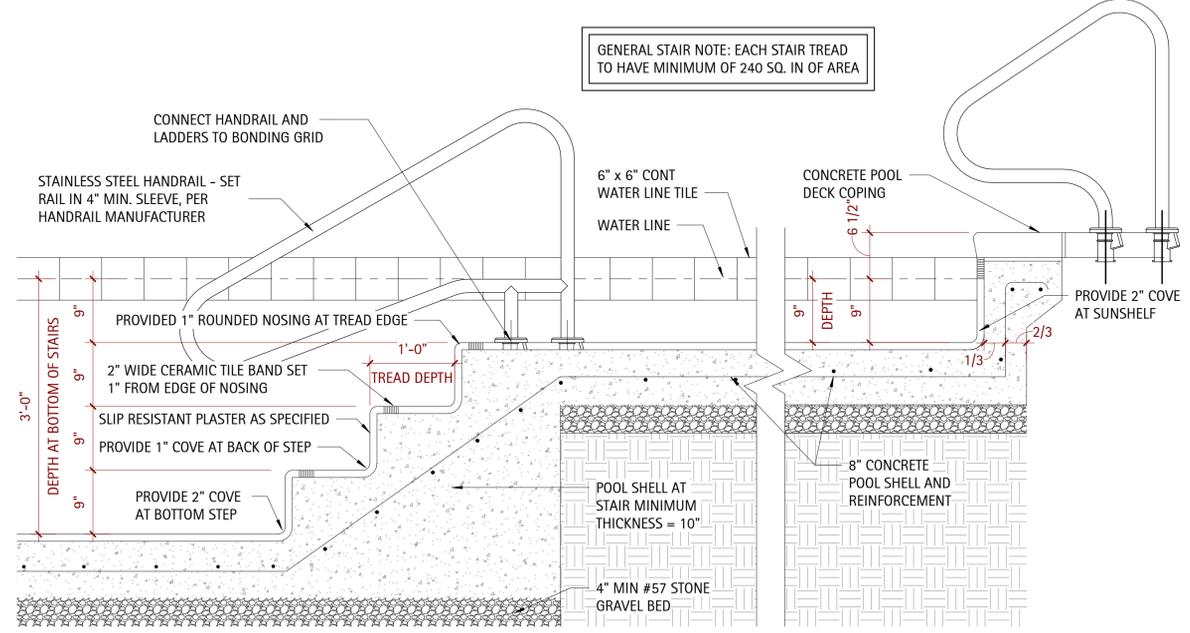
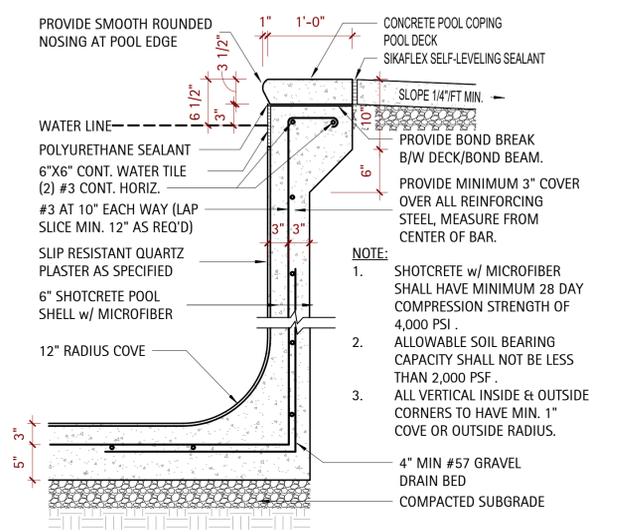


REBAR NOTE:
1. ALL REBAR OVERLAP LENGTHS TO BE 20X DIA OF REBAR.
2. ALL BAR INTERSECTIONS SHALL HAVE WIRES TIES.
3. ALL REINFORCING STEEL SHALL BE GRADE 60.
4. ALL SLAB BOLSTERS - GRIP-RITE 5" X 5FT MANF# SBU5



EQUIPOTENTIAL BONDING GRID DETAIL

2 Detail - Pool Wall
1" = 1'-0"



GENERAL STAIR NOTE: EACH STAIR TREAD TO HAVE MINIMUM OF 240 SQ. IN OF AREA

3 Detail - Pool Shelf w/ Step
1" = 1'-0"

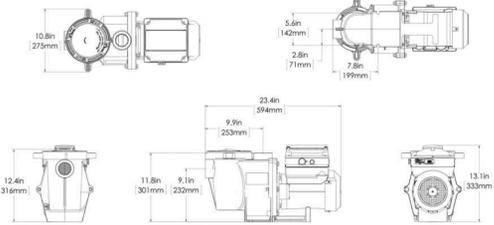
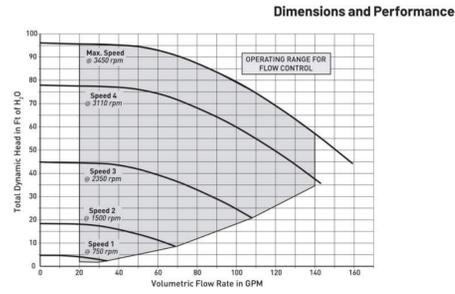


DATE	
REVISION	
NO.	

PROJECT #:	2024020
DATE ISSUED:	11/01/2024
DRAWING BY:	JVD
CHECKED BY:	DSC/ JIH
BATHHOUSE#:	

INTELLIFLO® VSF
VARIABLE SPEED AND FLOW PUMP (CONT'D)

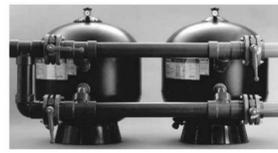
PUMPS - INGROUND



See page 494 for replacement parts.

SCH 40 & 80 FOR TR100C, TR140C, TR100C-3 & TR140C-3
TANDEM FILTER PIPING KITS FOR 2 & 3 IN. FILTERS

FILTERS - COMMERCIAL



These Tandem Filter Piping Kits are designed specifically for use with the Triton® TR100C, TR140C, Triton TR100C-3 and TR140C-3 Sand Filters to make the best even better.

We are providing this additional service for your convenient one-stop shopping. Pipe and filters are all you need.

Pipe is not included in kits.

Tandem Filter Piping Kits for Triton TR100C, TR140C, TR100C-3 and TR140C-3 Sand Filters

CALIFORNIA PROPOSITION 65 WARNING
WARNING: Cancer and Reproductive Harm.
AVERTISSEMENT: Peut Causer le Cancer
ou les Déficiences de Système Reproducteur.
ADVERTENCIA: Cáncer y Daño Reproductor.
www.cdph.ca.gov

Ordering Information

Product	Model	Product	Model
For Plumbing Two TR100C or TR140C Filters			
146400	3 in. Two filter kit, SCH 40 (200 GPM)	146406	4 in. Single filter kit, SCH 40
146402	4 in. Two filter kit, SCH 40 (300 GPM)	146408	6 in. Single filter kit, SCH 40
146404	6 in. Two filter kit, SCH 40 (700 GPM)	146407	4 in. Single filter kit, SCH 80
146403	4 in. Two filter kit, SCH 80 (300 GPM)	146409	6 in. Single filter kit, SCH 80
146405	6 in. Two filter kit, SCH 80 (700 GPM)	Adder Kits for TR100C-3 and TR140C-3 Filters	
For Plumbing Two TR100C-3 or TR140C-3 Filters			
147400	3 in. Two filter kit, SCH 40 (200 GPM)	147406	4 in. Single filter kit, SCH 40
147402	4 in. Two filter kit, SCH 40 (300 GPM)	147408	6 in. Single filter kit, SCH 40
147404	6 in. Two filter kit, SCH 40 (700 GPM)	147407	4 in. Single filter kit, SCH 80
147401	3 in. Two filter kit, SCH 80 (200 GPM)	147409	6 in. Single filter kit, SCH 80
147403	4 in. Two filter kit, SCH 80 (300 GPM)	Note: All kits include hardware, fittings, gaskets.	
147405	6 in. Two filter kit, SCH 80 (700 GPM)		

Note: All kits include hardware, fittings, gaskets and butterfly valves.

Filters	Filter Area Sq. Ft.	Manifold Pipe Dia.	Filter Rate Sq. Ft.		Turnover Capacity		
			15 GPM	20 GPM	8 Hours	8 Hours	10 Hours
TANDEM TRITON 140C FILTER INSTALLATION							
6 TR 140's	42.36	6 in.	635	—	228,600	304,800	381,000
8 TR 140's	—	8 in.	—	847	304,920	406,560	508,200
7 TR 140's	49.42	6 in.	741	—	266,760	355,680	444,600
8 TR 140's	—	8 in.	—	988	355,680	474,240	592,800
8 TR 140's	56.48	8 in.	847	—	304,920	406,560	508,200
8 TR 140's	—	8 in.	—	1130	406,800	542,400	678,000

TRITON® C SERIES
COMMERCIAL SAND FILTERS

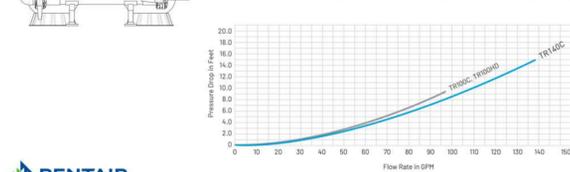
TRITON HD FILTER

The Triton heavy duty (HD) filter is a thirty-inch fiberglass filter that offers a maximum operating pressure of 75 PSI. This filter is specifically designed for special high-pressure commercial applications that require up to 98 gpm, and is ideal for all heavy-duty commercial applications.



Model Number	Filter Area Sq. Ft.	Flow Rate @ 15 GPM/ft.²	Turnover Capacity @ 8 Hours	Dimension	Media Required
TR100C	4.38	74	38,880	38 1/2" x 38 1/2" x 38 1/2"	800 lbs./275 lbs.
TR100C-3	7.06	108	59,880	42 1/2" x 38 1/2" x 38 1/2"	825 lbs./275 lbs.
TR140C-3	4.81	74	24,640	35 1/2" x 30 1/2" x 30 1/2"	600 lbs./150 lbs.
TR140C	7.06	108	38,880	50 1/2" x 38 1/2" x 38 1/2"	825 lbs./275 lbs.

Two Filter System	A	B	C	D	Total Wt.
3" - TR100C	62 1/2"	17 1/2"	48 7/8"	38 7/8"	2,300 lbs.
3" - TR140C	88 1/2"	17 1/2"	54 7/8"	38 7/8"	3,300 lbs.
4" - TR100C	89 1/2"	18 1/2"	54 7/8"	38 7/8"	2,350 lbs.
6" - TR140C	111 1/2"	24 1/2"	54 7/8"	38 7/8"	3,550 lbs.



PENTAIR

1620 HAWKINS AVE | SANFORD, NC 27330 | UNITED STATES | 800.831.7133 | pentair.com

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HIGH CAPACITY CHLORINE/BROMINE FEEDERS

The performance leader in automatic sanitation for large residential and commercial pools.

The INLET control valve side of the feeder connects to the plumbing on the discharge side of the pump, before the filter. The OUTLET side of the feeder connects to the pool return line after the filter and/or heater, pool cleaner, diverter valves or any other installed equipment. Installation of a corrosion-resistant check valve, such as RITZ2289 by Pentair, between the feeder inlet and outlet and the equipment is strongly recommended to check backflow of chemicals. This helps ensure equipment longevity.

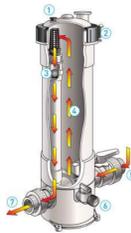
KEY FEATURES

Heavy-duty control valve
For accurate feed rate adjustment.

Completely enclosed system
Prevents fumes from escaping—no special venting required.

Easy access design
For easy recharging, servicing and simple maintenance.

Threaded fittings included
Standard threaded inlet and outlet fittings included for easy installation.



- Vent valve** bleeds air to ease lid removal.
- Lock ring** spins off, freeing lid and providing easy access. Snap-lock provides secure seal.
- Screen and check ball** are easy to reach for cleaning and periodic maintenance.
- Flow-through circulation** allows maximum output of sanitized water.
- External dial control** for easy flow rate adjustment.
- Drain valve** makes it easy to drain feeder for safer recharging and winterizing.
- Unions** are included for easy installation.

CALCULATED HYDROLYTIC IS NOT TO BE USED IN ANY FORM. Use of chemicals other than those recommended by manufacturer may be hazardous.

PENTAIR

1620 Hawkins Ave | Sanford, NC 27330 | United States | 800.831.7133 | pentair.com

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MODELS & SPECIFICATIONS

Model	HC-3316	HC-3330	HC-3340
Part Number	RIT7016	RIT7330	RIT7340
Height	21.5"	33.05"	48.75"
Width	8"	8"	8"
Depth	15"	30"	30"
Maintenance Clearance	22.75"	40.75"	57"
Capacity (lbs.)	15	30	40
Flow Rate (GPM)	34	34	34
Maximum Output Rate, Chlorine* (lbs./hr.) - Pool at Listed Flow Rate	3.85	5.2	8.54
Maximum Output Rate, Chlorine* (lbs./hr.) - Spa at Listed Flow Rate	3.67	6.59	8.89
Maximum Output Rate, Bromine* (lbs./hr.) - Pool at Listed Flow Rate	1.58	2.63	2.57
Flow Rate (GPM)	17.0	17.0	17.0
Output Rate, Chlorine* (lbs./hr.) - Pool at Listed Flow Rate	1.28	2.81	3.39
Output Rate, Chlorine* (lbs./hr.) - Spa at Listed Flow Rate	1.19	2.54	3.86
Output Rate, Bromine* (lbs./hr.) - Pool at Listed Flow Rate	0.68	1.26	1.51
Maximum Pool Size @ 34 GPM (Chlorine-Gal)	224,000	389,000	668,500
Maximum Pool Size @ 34 GPM (Bromine-Gal)	98,200	164,000	292,600
Maximum working pressure - 60 psi			Maximum operating flow - 34 GPM
*Results based on use of 1" Fitter's tests.			



STATION POINTE AMENITY
DAN RYAN BUILDERS
ANGIER, NORTH CAROLINA

DATE	
REVISION	
NO.	
PROJECT #:	2024020
DATE ISSUED:	11/01/2024
DRAWING BY:	JVD
CHECKED BY:	DSC/JLH
BATHHOUSE#:	

SP5.0

WHEN ACCURACY IS CRITICAL, DON'T JUST TAKE OUR WORD FOR IT!

FlowVis® was the first - and is now the most - NSF 50 certified flow meter in the world. Because when accuracy matters, you should put your trust in the experts.

NSF 50 CERTIFIED L1

FLOWVIS® MODELS

Feature	FV-15	FV-15-U	FV-2	FV-2-U	FV-2.5	FV-3	FV-3-40	FV-4	FV-6	FV-8
NSF 50 Certified	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pipe Size	1.5"	1.5"	2"	2"	2.5"	3"	4"	6"	8"	8"
Operating Range (GPM)	10-80	10-90	10-100	10-110	10-110	70-240	70-240	150-460	300-1000	600-1800
Average Accuracy	98.7%	98.7%	99.4%	99.0%	99.2%	98.9%	99.2%	99.6%	98.1%	N/A
NSF 50 Level	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1

FLOWVIS® DIGITAL MODELS

Feature	FV-15	FV-15-U	FV-2	FV-2-U	FV-2.5	FV-3	FV-3-40	FV-4	FV-6	FV-8
NSF 50 Certified	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pipe Size	1.5"	1.5"	2"	2"	2.5"	3"	4"	6"	8"	8"
Operating Range (GPM)	10-80	10-90	10-100	10-110	10-110	70-240	70-240	150-460	300-1000	600-1800
Average Accuracy	98.6%	99.0%	98.8%	98.5%	98.3%	98.4%	98.0%	98.3%	98.9%	98.9%
NSF 50 Level	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1

Guide for NSF 50 Accuracy Levels

Level 1 (L1): Average of absolute values of all single point deviations must be <2%. Single point deviations shall not exceed +4%.

Level 2 (L2): Average of absolute values of all single point deviations must be <5%. Single point deviations shall not exceed +7.5%.

Level 3 (L3): Average of absolute values of all single point deviations must be <10%. Single point deviations shall not exceed +12.5%.

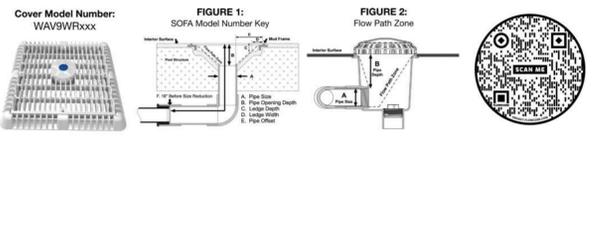
Level 4 (L4): Average of absolute values of all single point deviations must be <12.5%. Single point deviations shall not exceed +15%.

Level 5 (L5): Average of absolute values of all single point deviations must be <15%. Single point deviations shall not exceed +20%.

AQUASTAR VGBA-2017 PRODUCT SPECIFICATIONS
Suction Outlet Fitting Assembly (SOFA)
VGBA-2017 Flow Ratings, Sump Dimensions, and Sump Flow Path Zone

NSF Certified to NSF/ANSI/CAN 50 ANSI/APSP/ICC 16-2017

DIRECTIONS: Read and follow the instructions provided with the product. Never exceed a SOFA Model flow rating when the pool is in use. SOFA Covers shall only be installed over sumps that meet or exceed the minimum flow path zone defined by: minimum pipe size and sump exit orientation, and the minimum pipe depth. Please see page 2 of 2 for help determining the proper flow rating for any pipe size changes within 16 inches of the pool interior finish. AquaStar SOFA covers are authorized for use over any compatible manufactured or field-built sump (§ 3.5.1). Scan the QR code or visit: www.aquastarpoolproducts.com/flowcode for the most current version of these specifications, instructions, and product information.



SOFA Model No.	(A) Pipe Size (Nominal)	(B) Pipe Depth (Minimum)	Orientation (Wall / Floor)	Flow Rating (GPM)	Head Loss Curve
WAV9WR-9F-A-2b_B3_C1.6_D0.5_E2.8_F16	2" (b)	3"	Floor (f)	140	A
WAV9WR-9F-A-2.5b_B3_C1.6_D0.5_E2.8_F16	2.5" (b)	3"	Floor (f)	226	B
WAV9WR-9F-A-3b_B3_C1.6_D0.5_E2.8_F16	3" (b)	3"	Floor (f)	200	C
WAV9WR-9F-A-4b_B9.8_C1.6_D0.5_E1.7_F16 (Sump P/N 9-358)	4" (s)	5.8"	Floor (f)	224	D
WAV9WR-9F-A-4b_B9.8_C1.6_D0.5_E1.8_F16	4" (b)	9.8"	Floor (f)	280	E
WAV9WR-9w-A-1.5b_B3_C1.6_D0.5_E1.6_F16	1.5" (b)	3"	Wall (w)	126	F
WAV9WR-9w-A-2b_B3_C1.6_D0.5_E2.8_F16	2" (b)	3"	Wall (w)	140	G
WAV9WR-9w-A-2.5b_B3_C1.6_D0.5_E2.8_F16	2.5" (b)	3"	Wall (w)	226	H
WAV9WR-9w-A-3b_B3_C1.6_D0.5_E2.8_F16	3" (b)	3"	Wall (w)	200	I
WAV9WR-9w-A-4b_B9.8_C1.6_D0.5_E1.8_F16	4" (b)	9.8"	Wall (w)	280	J

Note 1: "SOFA Model No" nomenclature: bottom pipe = (b), side pipe = (s). See Fig 1 for capital letters A through E.
Note 2: Head loss H₉₀ is measured 16 to 24 inches from the finish surface of the pool. Reference Fig 1 dimension F.

Revision Date: 04/02/2024 Sump specifications defined in conformance with ANSI/APSP/ICC-16 2017 (§ 3.5.1.1)
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Fiberglass Field Built Sumps

A.S.A. MFG. INC. FIBERGLASS PRODUCTS

* Premium fiberglass & resin for maximum structural strength
* Durable smooth gelcoat interior
* Exterior perimeter FRP waterstop flange
* Non-Metallic- No grounding
* Rough sand exterior finish

* 2" Bottom flt.x lft for hydro relief valve
* Threaded PVC SCH 40 pressure test plug for outlet (up to 8")
* All PVC connections are ASTM 2466 compliant
* Designed to ANSI/APSP/ICC-16 2017 for use only with approved SOFA (Suction Outlet Fitting Assembly) Covers.



Size (inches)	ASA Part #	A	B	C	D	E	SOFA Outlet ft x sq
9 x 9 x 12	FBS-50-809-3	11"	9"	12"	4.5"	6.5"	3"
12 x 12 x 12	FBS-50-812-4	14"	12"	12"	4.5"	7"	4"
12 x 12 x 18	FBS-50-812-18-4	14"	12"	18"	4.5"	8"	4"
12 x 12 x 18	FBS-50-812-18-6	14"	12"	18"	4.5"	10"	6"
18 x 18 x 20	FBS-50-818-6	20"	18"	20"	4.5"	10"	6"
18 x 18 x 24	FBS-50-818-24-6	20"	18"	24"	4.5"	13"	6"
18 x 18 x 24	FBS-50-818-24-8	20"	18"	24"	4.5"	13.5"	8"
24 x 24 x 30	FBS-50-824-30-10	26"	24"	30"	4.5"	17"	10" sq x sq

- SOFA COVER NOTES:**
(SOFA = Suction Outlet Fitting Assembly)
- Please see the Manufacturer's (Aquastar, Hayward, Waterway) SOFA Cover (Grate) Installation Instructions for a Field Fabricated Sump to confirm minimum Sump dimensions and tested outlet sizes before installing.
 - All SOFA Cover Manufacturers require different minimum Sump depth dimensions, outlet placement (bottom or side), and suction outlet size (diameter in inches). Please confirm the SOFA Cover you are using is designed for this Fiberglass Field Fabricated Sump.
 - Please refer to the SOFA Cover (Grate) specification data sheet for VGBA tested flow rates. Every SOFA Cover has different an open area and flow path. Do not install a SOFA Cover over a Field Fabricated Sump that does not meet the minimum specifications determined by the SOFA Manufacturer.
 - A.S.A. MFG. Inc. Fiberglass Sumps have been fabricated to the original ASME 112.19.8 Standard - Suction Fittings for Pools & Spas (1.5x Figure 2 A) since 1992.
 - All Field Built Sumps shall be installed in accordance with the manufacturer's installation instructions.
 - All SOFA covers shall be installed in accordance with the manufacturer's installation instructions.
 - The A.S.A. MFG Inc. Fiberglass Field Built Sump is intended only to be installed in a reinforced concrete pool structure.
 - Any field modifications made to the SOFA and not authorized by the manufacturer's installation instructions shall void the SOFA certification. No modification shall be made to the SOFA structure or flow path unless a new configuration has been certified as a new SOFA.
 - Fiberglass Field Built Sump Life = Life of the Aquatic Center.

A.S.A. MFG Inc. 14879 SW 111th St. Dunellon, FL 34432 352-465-0236 Fax 352-465-0239 email: info@asamfg.com

AQUASTAR Hydrostatic Relief Valves

Self-Contained Hydrostatic Valve Assembly

Part # HVCxxx

FEATURES

- Self-contained unit has a built-in collector tube
- Installs directly into the pool finish with no additional plumbing connection required
- Helps prevent swimming pool damage due to hydrostatic pressure beneath the pool shell when the pool is drained

12 per case

STANDARD COLORS

- HVC101
- HVC102
- HVC103
- HVC104
- HVC105
- HVC108

2" Hydrostatic Relief Valve

Part # HVxxx

FEATURES

- Equalizes pressure for high water tables
- Fits enable easy twist for installation and removal
- Fits any AquaStar and most other manufacturers' 2" threads
- Manufactured from superior UV-resistant engineered polymers
- Includes 2" x 1/2" reducer bushing
- Reducer bushing must be glued into hydrostatic relief valve using ABS glue

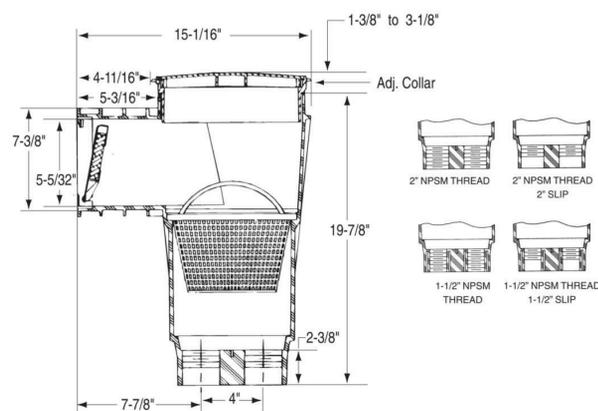
25 per case

STANDARD COLORS

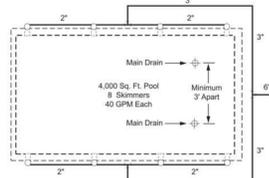
- HV101
- HV102
- HV103
- HV104
- HV105
- HV108

P 877-768-2717 F 877-276-POOL Outside the US: P +1-805

4 Bermuda™ Skimmer Dimensions



Multi-Skimmer Installation and Pipe Sizing



Pool Surface Area In Square Ft.	No. of Skimmers Req.	30	35	40	45	50
Up to 600	1	2"	2"	2"	2"	2"
1,000	2	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
1,500	3	2 1/2"	3"	3"	3"	3"
2,000	4	3"	4"	4"	4"	4"
2,500	5	4"	4"	4"	4"	4"
3,000	6	4"	4"	4"	4"	4"
3,500	7	4"	4"	5"	5"	5"
4,000	8	4"	5"	5"	5"	5"
4,500	9	4"	5"	5"	6"	6"
5,000	10	5"	5"	6"	6"	6"
5,500	11	5"	6"	6"	6"	6"
6,000	12	5"	6"	6"	6"	6"

Figure 4: Multi-Skimmer Installation with pipe sizing. Note multiple main drains.

BERMUDA™ Gunite Skimmer Installation and User's Guide

TAG 8 - SKIMMER - BERMUDA - WHITE COMMERCIAL GRADE SKIMMER

STANDARD COLORS 01/101 02/102 03/103 05/105 08/108

5" Umbrella Stand with Sleeve and Center Cap

FEATURES
Great for umbrellas, volleyball poles, etc. touches with 1 1/2" pipe diameter. Install into hole in gunite, apply pool finish on top of the stand. Install decorative sleeve and center cap after pool finish. Can be installed on face, side, or deck. Integrated water stop reduces leaks. Manufactured from engineered polymer UV-resistant ABS material. Umbrella maximum water diameter: 1.621" 25 per case. Also available in clear (p/n 5801100). Also available Umbrella Stand Cap with Gasket Seal 1 1/2" only (p/n 052000), 250 per case.

Part # 5MU5xxx

Safety Vacuum Lock Wall Fitting

FEATURES
For use with an automatic pool cleaner. Hook pool cleaner hose in place and snaps closed when in use. Meets SPI-9 2009 standard. Available in 1 1/2" or 2" NPT. 25 per case. Also available in blue (p/n VLK15104), only available for 1 1/2" NPT.

Part # VLK15Txxx (1 1/2" NPT)
Part # VLK20Txxx (2" NPT)

Wall and Deck Spouts

FEATURES
Creates an adjustable water stream from the line or deck. Manufactured from UV-resistant ABS material. Fiberglass model (p/n WJFxxx) includes face plates, body, gaskets, plug, screws, plumbing adapter, single and dual stream nozzles. Gunite model (p/n WJxxx) includes face plates, body, plug, plumbing adapter, single and dual stream nozzles. 25 per case.

Part # WJxxx, WJFxxx

AquaStop® Pipe Sleeves (1" / 1 1/2" / 2" / 2 1/2" / 3")

FEATURES
Prevents leaks. Helps avoid costly repairs. Available in five sizes. Manufactured from engineered PVC material. White only. 250 per case for WS601, WS901, WS1001, WS101. 200 per case for WS1201.

Part # WS601 - 1"
WS901 - 1 1/2"
WS1001 - 2"
WS101 - 2 1/2"
WS1201 - 3"

The most common cause of leaks in a pool is the surface materials not bonding with the pipes. Our AquaStop® pipe sleeves provides a longer surface area for increased bonding with the pool finish. This creates a barrier around the pipe to prevent water from leaking.

For vinyl and fiberglass fittings, see pages 139-140

TAG 9 - VACUUM INLET - ES1022S2001 W/ VLK15T01 - VACUUM LINE FITTING W/ LOCK CAP

2" X 4" GUTTER DECK DRAIN (FITS 2" PIPE)

Compatibility, durability, and performance

FEATURES
Fits over 2" pipe. 1 1/2" threaded FPT inside for pressurizing/wintering. Manufactured from engineered polymer UV-resistant PVC material (p/n GDD101) is manufactured from engineered polymer UV-resistant ABS material. 1 1/2" reducer body available (p/n B0101-2x1 1/2"). 1 1/2" stackable extender available (p/n PE20101). Stainless steel screws. Also available as grate only with two screws. CAUTION: Not to be used as a suction outlet under any circumstances. 25 per case. Grate only p/n GDDxxx.

Part # GDDxxx

STANDARD COLORS
GDD101 - White
GDD102 - Black
GDD103 - Light Gray
GDD105 - Dark Gray
GDD108 - Tan

Part # GDD101 - White
GDD102 - Black
GDD103 - Light Gray
GDD105 - Dark Gray
GDD108 - Tan

1. Gutter/Deck Drain Body, 2" x 4"
2. Gutter/Deck Drain Cover, 2" x 4"
3. 10 x 3/4" Flat Head Phillips Screw, Qty 2

P 877-768-2717 F 877-276-POOL Outside the US: P +1-949-336-1940 F +1-949-336-1940
info@aquastarpoolproducts.com www.aquastarpoolproducts.com CS128-020224

TAG 10 - OVERFLOW DRAIN - GDD101 - COMMERCIAL OVERFLOW DRAIN

Three-Piece Directional Eyeball Fitting 1 1/2" MPT

Product Image and Dimensions

Part # 81xx

FEATURES
Screws into 1 1/2" FPT. Manufactured from engineered polymer UV-resistant ABS material. 250 per case.

STANDARD COLORS
8101 Additional orifice size suffix:
8102 82xx - 3/4"
8103 83xx - 1/2"
8104 84xx - Slotted Down-Jet (i.e. 8201 = white 3/4" orifice)
8105 Also available in Clear (p/n 8100, 8200, 8300, 8400)
8108

AquaStar Specific Eyeball GPM, Velocity and Head Loss Ratings

GPM	81xx (1")			82xx (3/4")			83xx (1/2")			84xx (Down-Jet)		
	Velocity (fps)	Head Loss (ft)	Velocity (fps)	Head Loss (ft)								
5	2.2	0.1	3.6	0.5	8.2	2.4	10.1	2.1	16.3	8.7	20.2	8.1
10	4.4	0.5	7.3	1.8	16.3	8.7	20.2	8.1	32.4	18.6	30.3	20.7
15	6.6	1.1	10.9	3.7	24.5	18.6	30.3	20.7	32.4	32.0	-	-
20	8.8	1.9	14.5	6.2	32.4	32.0	-	-	-	-	-	-
25	11.0	3.0	18.2	9.4	-	-	-	-	-	-	-	-
30	13.2	4.4	21.8	13.1	-	-	-	-	-	-	-	-
35	15.4	6.1	25.4	17.3	-	-	-	-	-	-	-	-
40	17.6	8.0	-	-	-	-	-	-	-	-	-	-
45	19.7	10.2	-	-	-	-	-	-	-	-	-	-
50	21.9	12.7	-	-	-	-	-	-	-	-	-	-

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TAG 11 - RETURN INLET - ES1022S2001 W/ 8101 - RETURN WALL INLETS - DIRECTIONAL

AQUASTAR BUBBLER PLATE

A Safe Drain is No Accident™

FEATURES
Available in six standard colors. No exposed components. Installs flush with bottom of pool/spa.

Part # BPxxx

STANDARD COLORS
101 104
102 105
103 108

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info@aquastarpoolproducts.com www.aquastarpoolproducts.com

TAG 12 - FLOOR RETURN - BP101 - FLOOR RETURN INLET W/ BUBBLER PLATE

AQUASTAR FillStar™ Water Level Control System for Pools and Spas

A Safe Drain is No Accident™

FEATURES
Can be installed alone or with drain/vacuum pool or spa at all times. Easy to install. Overflow protection and adjustable presets. Uses the same size lid and collar as AquaStar skimmers. Includes a 2" to 1 1/2" adapter. 3/4" plug included if overflow is not needed. 1/2" water supply inlet. Valve is made of high-strength engineered resin. Float is injection-molded; thread is pre-molded. All fittings are made of PVC. No transition glue needed. Float thread is 1/2" MPT. 1 per case.

Part # AFBxxx

Also available float only part # AFBV

STANDARD COLORS
AFB101 - White
AFB102 - Black
AFB103 - Light Gray
AFB104 - Blue
AFB105 - Dark Gray
AFB108 - Tan

P 877-768-2717 F 877-276-POOL Outside the US: P +1-805-620-5060 F +1-949-336-1940
info@aquastarpoolproducts.com www.aquastarpoolproducts.com

TAG 13 - AUTOFILL - AFB101 - FILLSTAR - AUTOFILL LINE - WHITE

Let your imagination take you to brighter places.

Whether you're upgrading an older lighting system or building a new pool or spa, MicroBrite® Color and White LED Lights give you the freedom to add dynamic, energy-efficient, uniform lighting in pool places you never thought possible.

ORDERING INFORMATION

PART NO.	DESCRIPTION	TYPE	NUMBER OF LIGHTS	CABLE LENGTH	VOLTAGE
MICROBRITE LED LIGHT					
620424	MicroBrite Light	Color LED	One	50'	12V
620425	MicroBrite Light	Color LED	One	100'	12V
620426	MicroBrite Light	Color LED	One	150'	12V
602166	MicroBrite-G Light	Color LED, for installation in Pentair GloBrite Niche or Pentair Color/Vision Bubbler	One	150'	12V
620428	MicroBrite Light	White LED	One	50'	12V
620429	MicroBrite Light	White LED	One	100'	12V
620430	MicroBrite Light	White LED	One	150'	12V
602165	MicroBrite-G Light	White LED, for installation in Pentair GloBrite Niche or Pentair Color/Vision Bubbler	One	150'	12V
602167	MicroBrite-G Light	White LED, for installation in Pentair GloBrite Niche or Pentair Color/Vision Bubbler	One	150'	12V
602157	MicroBrite Light	Warm White LED	One	522045	12V
602155	MicroBrite Light	Warm White LED	One	522045	12V
602167	MicroBrite-G Light	Warm White LED, for installation in Pentair GloBrite Niche or Pentair Color/Vision Bubbler	One	522045	12V
602157	MicroBrite Light	Turtle Edition*	One	522045	12V
618040	Adapter for MicroBrite to GloBrite	Adapter allows a MicroBrite light to be installed into a Pentair GloBrite Niche or Pentair Color/Vision Bubbler	-	-	-
EACH MICROBRITE COMBO INCLUDES ONE PENTAIR 500-WATT TRANSFORMER, 120V INPUT, 12V OUTPUT					
602130	MicroBrite 2 Light Combo Kit	Color LED	Two	100'	12V
602131	MicroBrite 2 Light Combo Kit	White LED	Two	100'	12V
602132	MicroBrite 2 Light Combo Kit	Warm White LED	Two	100'	12V
602133	MicroBrite 4 Light Combo Kit	Color LED	Four	100'	12V
602134	MicroBrite 4 Light Combo Kit	White LED	Four	100'	12V
602135	MicroBrite 4 Light Combo Kit	Warm White LED	Four	100'	12V

*500W redwiring light, for special oceanfront pool applications in certain areas with regulations intended to protect sea turtles.

TRADEGRADE

The TradeGrade family of products is exclusively made for and sold by the world's most demanding pool professionals.

FOR THE FULL SPECTRUM OF NIGHTTIME POOL POSSIBILITIES, GO TO PENTAIR.COM/POLLIGHTS.

PENTAIR

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Appearance of color and white LED light may vary between various models of lights. Appearance and perception of pool lighting may vary depending on a number of factors including, but not limited to, the particular model of light, the location/height/angle of the light's installation, pool finish/material, pool depth/shape/geometry, ambient light sources, subjective factors and more. For best results when using multiple lights, use all the same model and do not mix multiple models of lights within a single installation.

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PI-762 9/2023

TAG 14 - LIGHT - 602428 - 12W EQUIVALENCE MICROBRITE WHITE LED LIGHTS

INTELLIBRITE® ARCHITECTURAL SERIES LIGHTS

Illuminate your customers' nighttime pool experiences.

You're a leading pool pro. We're a pool lighting leader. Together, we can help your customers' pool experiences shine brighter and more beautifully than ever before with our biggest illumination innovation to enter the pool industry.

- IntelliBrite Architectural Series Color Pool Light is now 60% brighter and 50% more energy efficient.*
- IntelliBrite Architectural Series White Pool Light is now 80% more energy efficient, consuming 44% less power and maintaining the same brightness.**

Get total control from anywhere with the Pentair Home app to help you move, improve and enjoy all of your home's water. Go to pentair.com/home

PRODUCT SPECIFICATION

SIZE	MODEL	VOLTAGE	POWER	PART NUMBER BY CORD LENGTH (FEET)					
				50'	100'	150'	200'	250'	300'
Pool	Color	120V	25W	602166	602167	602168	602169	602218	-
Spa	Color	120V	25W	602166	602167	602168	602169	602218	-
Spa	Color	120V	50W	602201	602202	602203	602204	602205	-
Spa	Color	12V	50W	602197	602198	602199	602200	-	-
Pool	White-300W Equipment	120V	25W	602180	602181	602182	602183	602184	602207
Pool	White-300W Equipment	120V	50W	602142	602143	602144	602145	602146	-
Pool	White-300W Equipment	120V	25W	602177	602178	602179	602180	602181	602208
Pool	White-300W Equipment	12V	25W	602138	602139	602140	602141	-	-
Spa	White-100W Equipment	120V	50W	602163	602164	602165	602166	602167	602209
Spa	White-100W Equipment	12V	50W	602176	602177	602178	602179	-	-
Spa	Warm-White	120V	25W	602169	602170	602171	602172	602221	-
Spa	Warm-White	12V	25W	602247	602248	602249	602250	-	-
Spa	Warm-White	120V	50W	602225	602226	602227	602228	602229	-
Spa	Warm-White	12V	50W	602238	602239	602240	602241	-	-

MORE OPTIONS AVAILABLE: Scan the QR code to view the full list

PENTAIR

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TAG 15 - LIGHT - 602141 - 500W EQUIVALENCE INTELLIBRITE WHITE LED LIGHTS



STATION POINTE AMENITY
DAN RYAN BUILDERS
ANGIER, NORTH CAROLINA

DATE	
REVISION	
NO.	
PROJECT #:	2024020
DATE ISSUED:	11/01/2024
DRAWING BY:	JVD
CHECKED BY:	DSC/JLH
BATHHOUSE#:	B.

SPECIFICATIONS

SP5.1



DATE	
REVISION	
NO.	

PROJECT #:	2024020
DATE ISSUED:	11/01/2024
DRAWING BY:	JVD
CHECKED BY:	DSC/JLH
BATHHOUSE.F.B.	

Junction Box - PJB4175

Junction Box - 4 Light Connection Pool & Spa Junction Box

Item PJB4175

PRODUCT DESCRIPTION
These polymeric junction boxes are code compliant and provide safe, reliable connections for low-voltage lights. Specifically designed for pools, pool-spa combinations, and landscape applications. Junction boxes are for outdoor use only.

FEATURES

- Accommodates flexible cords and non-metallic conduits from 1/2" to 1"
- Weatherproof, moisture enclosure
- Easy access ground bar
- PA114 Wall/Post Mounting Bracket (sold separately)
- Complies with NEC Code 680.24 requirements for junction boxes
- 1-year warranty

APPLICATIONS

- Landscape Lighting
- Underwater Lighting

TECHNICAL DATA

General	
Model Number	PJB4175
Description	4 Light Connection Pool & Spa Junction Box
UPC Code	07827594048
Brand	Intermatic
Country of Origin (Intermatic)	MEXA
Warranty Period	1-Year limited
Control Specifications	
Number of Light Connectors	4
Mechanical Specifications	
Mounting Options	Bracket, Post, Rod, Wall
Dimensions	
Product Dimensions (H x W x D) in	8.75 x 5 x 4.825 in
Non-Metallic Conduit Size	1/2"-1"
Material Specifications	
Body Material	Plastic
Electrical Specifications	
Number of Receptacle Knockouts	5
Packaging	
Unit Carton Dimensions (H x W x L) in	5.25 x 5 x 9 in
Standards and Certifications	

Technical specifications and other information are subject to change without notice. Images can vary from original. © 12/22/2022 1/3

TAG 16 - JUNCTION BOX - PJB4175 - 4 LIGHT CONNECTION POOL & SPA LIGHT JUNCTION BOX

Deck-Mounted Hand & Stair Rails

- Tubing: 1.90" OD
- Wall Thickness*: .049" or .065"
- Stainless Steel: 304 or 316L Marine Grade** (add -MG to part number)
- Bends: 6" Radius
- Recommended Anchors: AS-100P or AS-100B (order separately)
- Recommended Escutcheon: EP-100F (order separately)
- Sold as a single rail

* Minimum rail thickness is .065 for Commercial
** Minimum requirement for salt pools is 316L Marine Grade

DMS-100

Part No.	Description	Weight	Length	Width	Height
DMS-100A	51" Center Grab Rail, .049"	18 lbs	59"	39"	2"
DMS-100V	51" Center Grab Rail, .065"	8kg	150cm	99cm	5cm
DSD049	55" Center Grab Rail, .049"				
DMS-100S	60" Center Grab Rail, .065"				

DMS-101

Part No.	Description	Weight	Length	Width	Height
DMS-101A	48" Center Grab Rail, .049"	16 lbs	59"	39"	2"
DMS-101B	48" Center Grab Rail, .065"	7kg	150cm	99cm	5cm

DECK TO DECK MOUNTED

Part No.	Description	Weight	Length	Width	Height
D4D049	4 Bend Stair Rail, .049"	16 lbs	53"	39"	2"
DSD049	5 Bend Stair Rail, .049"	7kg	145cm	99cm	5cm

May be available in Powder-Coated finishes. Please reach out to CustomerCare@SRSmith.com to confirm the color and finish availability.

12 RAILS + LADDERS

TAG 17 - HANDRAIL - DMS-101B-MG - MARINE GRADE DECK MOUNTED HANDRAILS - SHORT

pool access equipment

multilift™

A flanged pool lift, with left or right side mounting, and optional folding seat version.

- Third-party tested & verified ADA compliant
- Integrated armrests
- State of California compliant
- 350 lb/159kg lifting capacity
- Retrofit anchor jig is standard
- Optional folding seat assembly
- LiftOperator® Intelligent Controller
- Powder-coated stainless steel and aluminum construction

Lift Color

GRAY HST

Due to printing technology actual color may differ.

Parts & Accessories

- 1001-495 Battery
- 500-5200T Cover
- 500-5500 Wheel-A-Way
- 900-1000 Seat Belt
- 300-6700A Anchors, set of 4
- 300-6900 Retrofit Anchor Jig
- 300-6800A Anchor Bolts, set of 4
- 970-5000T Seat Saver Cover
- 900-4000 Stability Strap
- 170-3000A Armrest Replacement (pair)
- 170-2320 Armrest Assembly, gray, left & right

multilift with Folding Seat

Model No.	Description	Shipping - (Class 77.2)
575-0100	multilift with folding seat	225 lbs/103kg
575-0102	multilift with folding seat, no anchor	225 lbs/103kg
575-0105	multilift with armrests and folding seat	220 lbs/104kg
575-0102N	multilift with armrests and folding seat, no anchor	220 lbs/104kg

New Construction Guidelines

Scenario	Pool Lift	Anchor Jig
Order pool lift and new construction jig at same time	575-3000	500-5000 (no anchors)
Order new construction jig ahead of pool lift	575-3000N	500-5000A (comes with anchors)

SR Smith, LLC PO Box 400, Carby, OR 97013
P 503.266.2231 TF 800.824.4387 arsmith.com
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TAG HC - MULTI-LIFT - ADA COMPLIANT MULTI-LIFT W/ FOLDING SEAT

S.R. Smith LLC Commercial Division

Product Specifications - Drawing

Standard Plus Commercial Ladder (With Stainless Steel Tread)

MODEL NUMBER	A	B	C	D	(E)
10037 TO 10038	26.00	23.00	26.00	17.50	54.00
10040 TO 10042	26.00	23.00	40.00	17.50	66.00
10043 TO 10045	26.00	23.00	52.00	17.50	78.00
10046 TO 10048	26.00	23.00	64.00	17.50	90.00
10049 TO 10051	26.00	29.00	28.00	23.50	54.00
10052 TO 10054	26.00	29.00	40.00	23.50	66.00
10055 TO 10057	26.00	29.00	52.00	23.50	78.00
10058 TO 10060	26.00	29.00	64.00	23.50	90.00
10061 TO 10063	31.00	35.00	28.00	29.50	59.00
10064 TO 10066	31.00	35.00	40.00	29.50	71.00
10067 TO 10069	31.00	35.00	52.00	29.50	83.00
10070 TO 10072	31.00	35.00	64.00	29.50	95.00

Specification Number: **SRS-506**
Product Description: **Standard Plus Commercial Ladder (With Stainless Steel Tread)**
S.R. Smith Part Number: **10037 to 10072**
Revision: **A**
Written By: **T. Weil**
Approved By: **B. Bicegalla**

Scale: 1:1/2
Date: 06/11/03
Date: 06/13/03
Date: 06/13/03

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Carby, Oregon 97011
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Fax: (503) 266-4334
www.srsmith.com

Page 1 of 2

TAG 19 - LADDER - 10054 - MG - MARINE GRADE DECK COMMERCIAL LADDER

Deck-Mounted Hand & Stair Rails

- Tubing: 1.90" OD
- Wall Thickness*: .049" or .065"
- Stainless Steel: 304 or 316L Marine Grade** (add -MG to part number)
- Bends: 6" Radius
- Recommended Anchors: AS-100P or AS-100B (order separately)
- Recommended Escutcheon: EP-100F (order separately)
- Sold as a single rail

* Minimum rail thickness is .065 for Commercial
** Minimum requirement for salt pools is 316L Marine Grade

DMS-102

Part No.	Description	Weight	Length	Width	Height
DMS-102A	54" Center Grab Rail, .049"	19 lbs	59"	39"	2"
DMS-102B	54" Center Grab Rail, .065"	19 lbs	59"	39"	2"
DMS-102P	54" Center Grab Rail, .049" w/ welded mounting plate	19 lbs	59"	39"	2"

DECK TOP MOUNT

Part No.	Description	Weight	Length	Width	Height
D4BD049-FL	48" Center Grab Rail, .049" w/ flanges and escutcheons	17 lbs	59"	39"	2"

DMS-103

Part No.	Description	Weight	Length	Width	Height
DMS-103A	54" Center Grab Rail, .049"	14 lbs - 18 lbs	59"	39"	2"
DMS-103B	54" Center Grab Rail, .065"	6 - 8kg	150cm	99cm	5cm

DECK TOP MOUNT

Part No.	Description	Weight	Length	Width	Height
D3DS0049-FL	50" 3-Bend Stair Rail, .049" w/ flanges and escutcheons	27 lbs	61"	38"	7"

May be available in Powder-Coated finishes. Please reach out to CustomerCare@SRSmith.com to confirm the color and finish availability.

TAG 18 - HANDRAIL - DMS-102B-MG - MARINE GRADE DECK MOUNTED HANDRAILS - STANDARD