ACADEMY COMPLEX RENOVATIONS

WEBB, MCALLISTER & GIBSON FIELDS

CONCORD, NC

SHEET NO.	SHEET TITLE
C0.0	Cover
C100	Overall Park Plan
C101	Existing Conditions
C102	Demolition Plan
C103	Stormwater Permit Plan
C200	Erosion Control Notes
C201	Phase 1 Erosion Plan
C202	Phase 2 Erosion Plan
C203	Erosion Control Details
C204	Erosion Control Details
C205	Erosion Control Details
C206	Erosion Control Details
C300	Storm Drainage Plan
C301	Storm Profiles
C302	Storm Details
C400	Utility Plan
C401	Utility Details
L100	Layout Plan
L101	Dimension & Striping Plan
L102	Layout Plan Press Box
G100	Grading Plan
G101	Enlargement Grading & Drainage Plan
G102	Sport Field Drainage Plan
G103	Grading Plan Press Box Area
D100	Details
D101	Details
D102	Details
D103	Details
D104	Details
D105	Details
D106	Details
D107	Details
D108	Details
D109	Details
A0.1	Appendix B New Restroom
A1.0	New Restroom Floor Plans
A1.1	RCP Plan and Typical Mounting Heights
A1.2	Football Concession Floor Plans
A1.3	Gibson Field Concession Floor Plans
A1.4	McAlister Restroom and Storage Building Floor Plans
A1.5	Webb Baseball Press Box
A1.6	Finish Schedules Notes and Section
A1.7	Sections and Details
A2.0	New Restroom Elevations and Details
A2.1	Football Concessions Elevations
A2.2	McAlister Restroom Elevations
A3.0	Section and Details
A3.1	Section and Details
A3.2	Section and Details
A3.3	Section and Details
A4.0	Door Schedule and Details
A5.0	Window Schedule and Details
S1.0	New Restroom and Foundation and Framing Plans
M0.1	Mechanical HVAC Schedules and Notes
M1.0	Mechanical HVAC Plans and Notes
M1.1	Mechanical HVAC Plans and Notes
M2.0	Mechanical HVAC Details
E0.1	Electrical Schedule and Notes
E0.2	Electrical Panel Schedules Power Riser Diagrams
E1.0	Electrical Floor Plan
E1.1	Electrical Floor Plan
E2.0	Electrical Site Plan
P0.1	Plumbing Schedule Details and Notes
P1.0	Plumbing Plan and Notes
P1.1	Plumbing Plan and Notes
P1.2	Plumbing Plan and Notes
P1.3	Plumbing Plan and Notes
P2.0	Plumbing Details

PROJECT LOCATION MAP
ACADEMY COMPLEX -165 ACADEMY AVE NW
GIBSON FIELD - 323 MISENHEIMER Dr. NW
CONCORD NC 28025

GIBSON FIELD TRAIL CONNECTOR SITE ONLY DRAWINGS

SHEET NO.	SHEET TITLE
C900	Existing Conditions
C901	Layout and Grading Plan
C902	Erosion Control Plan
C903	Erosion Control Details

Owner
City of Concord, NC
35 Cabarrus Ave. W
Concord, NC 28025
Contact: Kate Wright
Email: wrightk@concordnc.gov
Phone: 704-920-5617

Landscape Architect
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C-389
314 Tom Hall Street
Fort Mill, SC 29715
Contact: Dan Dodd, PLA
Email: dan@fitfields.com

Civil Engineer
Roper Civil Engineering
3007 Hinsdale Street
Charlotte, NC 28210
Contact: Matthew Roper, PE
Email: matt@roperce.com

Architect
Citizen Design
2408 Commonwealth Avenue
Charlotte, NC 28205
Contact: Brian Conroy, Architect
Email: brian.citzendesign@gmail.com
Phone: 704-661-2337

MEP
Shultz Engineering Group, PC
212 N. MccDowell St, Suite 204
Charlotte, NC 28204
Contact: Charlie Curlin, PE
Phone: 704-334.7363

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314 TOM HALL ST.
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803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DANIEL A. DODD

NORTH CAROLINA FITFIELDS, PLLC COA# 389 CERTIFICATE OF AUTHORIZATION

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

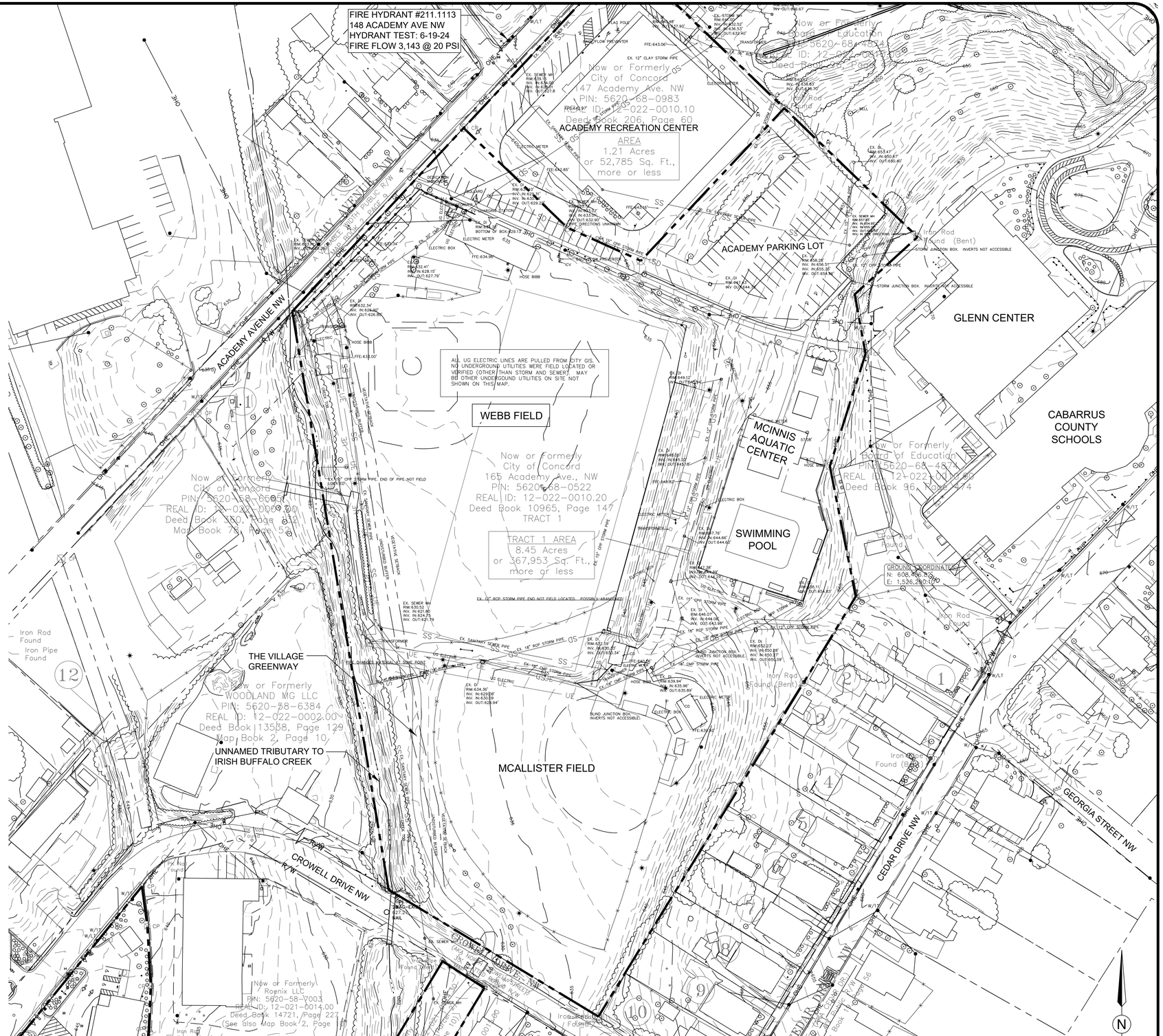
SCALE: NTS
DATE: 06-09-25
SHEET NAME: COVER
SHEET NO: C0.0

GENERAL INFORMATION:

1. PROJECT NAME: ACADEMY COMPLEX RENOVATIONS
2. OWNER: CITY OF CONCORD, 35 CABARRUS AVE. W, CONCORD, NC 28025
3. SITE ADDRESS: 165 ACADEMY AVE. NW, CONCORD, NC 28025
4. TOTAL SITE AREA: 8.447 ACRES
5. ZONING: O-I
6. TAX MAP ID#: 56206805220000
7. DEED BOOK / PAGE: 10965 / 147
8. THE PARCEL IS NOT LOCATED IN A FEMA FLOOD ZONE - FEMA MAP NO. 3710562000K DATED NOVEMBER 16, 2018.
9. EXISTING SURVEY AND INFORMATION PROVIDED BY AVIOIMAGE MAPPING SERVICES, INC.

LEGEND

- LANDSCAPE LIGHT
- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- CHAIN LINK FENCE
- CREEK
- OVERHEAD ELECTRIC
- BASEBALL FIELD
- TREES
- SHRUBS
- 634.5 EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPERTY LINE



North Carolina 811 www.ncc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW C. ROPER
06-09-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
- 2.14.25 PLAN REVIEW COMMENTS
- 6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS

165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 50'-0"

DATE: 06-09-25

SHEET NAME: OVERALL PARK PLAN

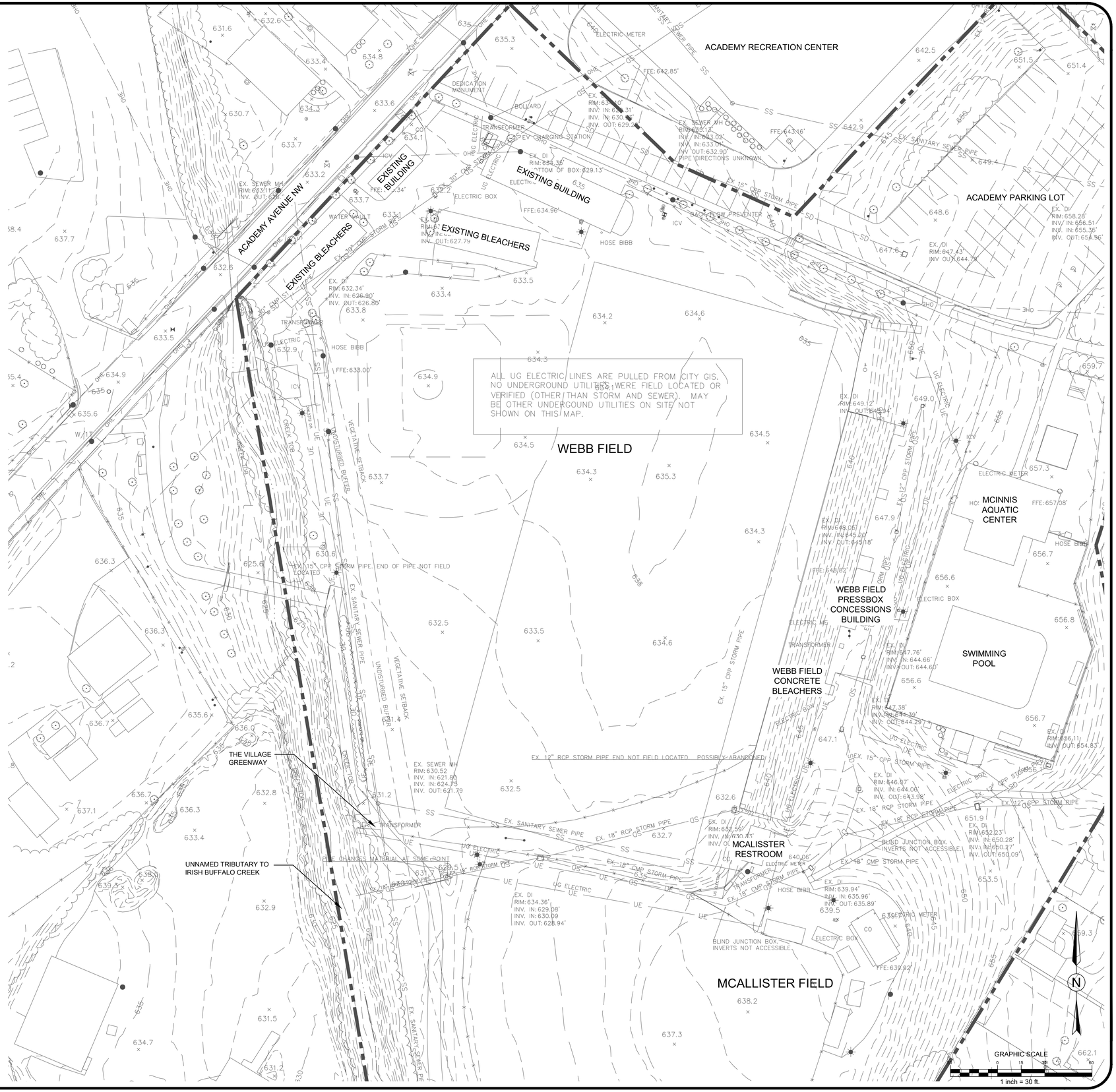
SHEET NO: C100

GENERAL INFORMATION:

1. PROJECT NAME: ACADEMY COMPLEX RENOVATIONS
2. OWNER: CITY OF CONCORD
   35 CABARRUS AVE. W
   CONCORD, NC 28025
3. SITE ADDRESS: 165 ACADEMY AVE. NW
   CONCORD, NC 28025
4. TOTAL SITE AREA: 8.447 ACRES
5. ZONING: O-I
6. TAX MAP ID#: 56206805220000
7. THE PARCEL IS NOT LOCATED IN A FEMA FLOOD ZONE - FEMA MAP NO. 3710562000K DATED NOVEMBER 16, 2018.
8. EXISTING SURVEY AND INFORMATION PROVIDED BY AVIOIMAGE MAPPING SERVICES, INC.

LEGEND

- LANDSCAPE LIGHT
- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- CHAIN LINK FENCE
- CREEK
- OHE OHE — OVERHEAD ELECTRIC
- BASEBALL FIELD
- TREES
- SHRUBS
- 634.5 — EXISTING SPOT ELEVATION
- 645 — EXISTING CONTOUR



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REVISIONS:
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OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"

DATE: 06-09-25

SHEET NAME: EXISTING CONDITIONS

SHEET NO: C101

DEMOLITION NOTES:

1. ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING UNLESS OTHERWISE SPECIFICALLY EXEMPTED BY THESE PLANS.
2. DEMOLITION DEBRIS, EXCEPT AS OTHERWISE NOTED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. ALL DEBRIS SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN A LEGAL LANDFILL IN A TIMELY MANNER. NO SALVAGE OR SALE OF DEMOLISHED MATERIALS ON SITE WILL BE ALLOWED WITHOUT PERMISSION FROM THE OWNER.
3. REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER. (PERMIT REQUIRED FOR OFF-SITE DISPOSAL)
4. LOCATE EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES IN AREAS OF WORK. IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING DEMOLITION OPERATION.
5. SHOULD UNCHARTED, OR INCORRECTLY CHARTED PIPING OR OTHER UTILITIES BE ENCOUNTERED DURING DEMOLITION, CONSULT ENGINEER AND UTILITY OWNER FOR IMMEDIATE ACTION.
6. DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTED "TO BE REMOVED".
7. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION.
8. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.
9. CONTRACTOR SHALL MAINTAIN POSITIVE STORM DRAINAGE DURING CONSTRUCTION TO INSURE NO DAMAGE TO ADJACENT PROPERTIES OCCURS DURING STORM EVENTS.
10. CONTRACTOR SHALL COORDINATE STORM DEMOLITION WITH STORM DRAIN IMPROVEMENTS TO MAINTAIN POSITIVE DRAINAGE.
11. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.
12. ALL DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE BUILDING CODES AND LOCAL RESTRICTIONS. THE CONTRACTOR MUST COMPLY WITH ALL OF THE CONTRACTOR REGISTRATION REQUIREMENTS OF ALL GOVERNING AUTHORITIES.
13. PRIOR TO THE COMMENCEMENT OF DEMOLITION, THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH ALL UTILITY COMPANIES SERVING THIS AREA. THE CONTRACTOR IS TO COORDINATE FULLY WITH THE UTILITY COMPANIES ON THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DEMOLITION, CONSTRUCTION, AND EXCAVATION.
14. ALL PROPOSED PAVEMENT CUTS SHALL BE SAW CUT ONLY.
15. CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS ADVANCE NOTICE TO THE OWNER PRIOR TO STARTING DEMOLITION ACTIVITIES.
16. CONTRACTOR SHALL VERIFY AND PROTECT ALL PUBLIC UTILITIES. ANY WORK ASSOCIATED WITH SAID UTILITIES TO BE COORDINATED WITH APPROPRIATE UTILITY COMPANY. DEMOLITION OF UTILITIES WHICH ARE ACTIVE SHALL BE SEQUENCED TO ALLOW FOR INSTALLATION OF NEW OR REROUTED LINES, PRIOR TO REMOVAL OF EXISTING PORTION.
17. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER AND ENGINEER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS AND SHALL WAIT FOR INSTRUCTIONS PRIOR TO PROCEEDING.
18. PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES AND SHALL BE THOROUGHLY FAMILIAR WITH CONDITIONS OF SAID PERMITS AND INSPECTION REQUIREMENTS.
19. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE THE CONSTRUCTION LIMITS.
21. CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC ARE PROTECTED FROM INJURY.
22. ENGINEER SHALL NOT BE IN CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR ACTUAL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, OR SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK, OR FOR THE ACTS OR OMISSIONS OF CONTRACTORS OR ANY OTHER PERSONS NOT UNDER THE EMPLOYMENT OF ENGINEER.
23. SHOULD THE CONTRACTOR ENCOUNTER ANY ADDITIONAL ITEMS THAT MAY REQUIRE DEMOLITION (FENCES, GUARD RAIL, ETC.) - THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR FURTHER DIRECTION.
24. IT IS THE RESPONSIBILITY OF THE BIDDING CONTRACTOR TO REVIEW THE PROJECT SITE IN PERSON AND IDENTIFY ANY ISSUES WITH THE DEMOLITION PLAN PRIOR TO BID. ANY ITEMS IDENTIFIED AFTER BID WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

LEGEND

- EXISTING DIRT TO BE REMOVED
- EXISTING NATURAL GRASS TO BE REMOVED
- EXISTING STRUCTURE/AREA TO BE REMOVED
- EXISTING STRUCTURE TO BE REMOVED.
- EXISTING CHAIN LINK FENCE TO BE REMOVED.
- TREE OR SHRUB TO BE REMOVED.

North Carolina 811 www.nc811.org

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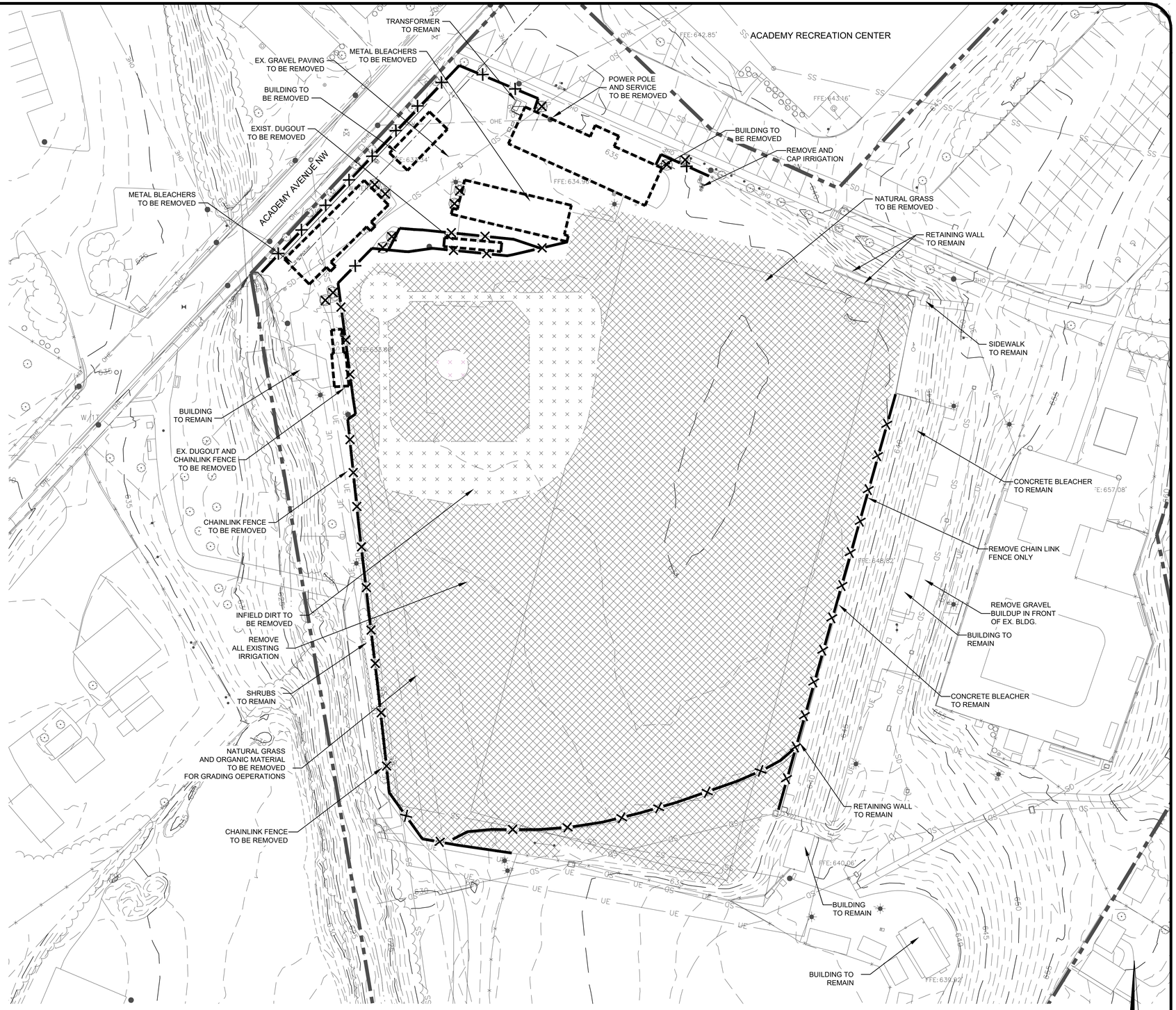

GRAPHIC SCALE

30 0 15 30 60

1 inch = 30 ft.

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NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW C. ROPER 06-09-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
- 2.14.25 PLAN REVIEW COMMENTS
- 6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"

DATE: 06-09-25

SHEET NAME: DEMOLITION PLAN

SHEET NO: C102

EXISTING BUA BREAKDOWN:	
EXISTING PARKING AREA:	29,550 SF
EXISTING BUILDINGS:	9,235 SF
EXISTING CONCRETE:	25,265 SF
EXISTING ASPHALT TRAILS:	1,840 SF
EXISTING GRAVEL AREAS:	18,475 SF
EXISTING BLEACHER PADS:	2,915 SF
TOTAL EXISTING BUA:	87,280 SF

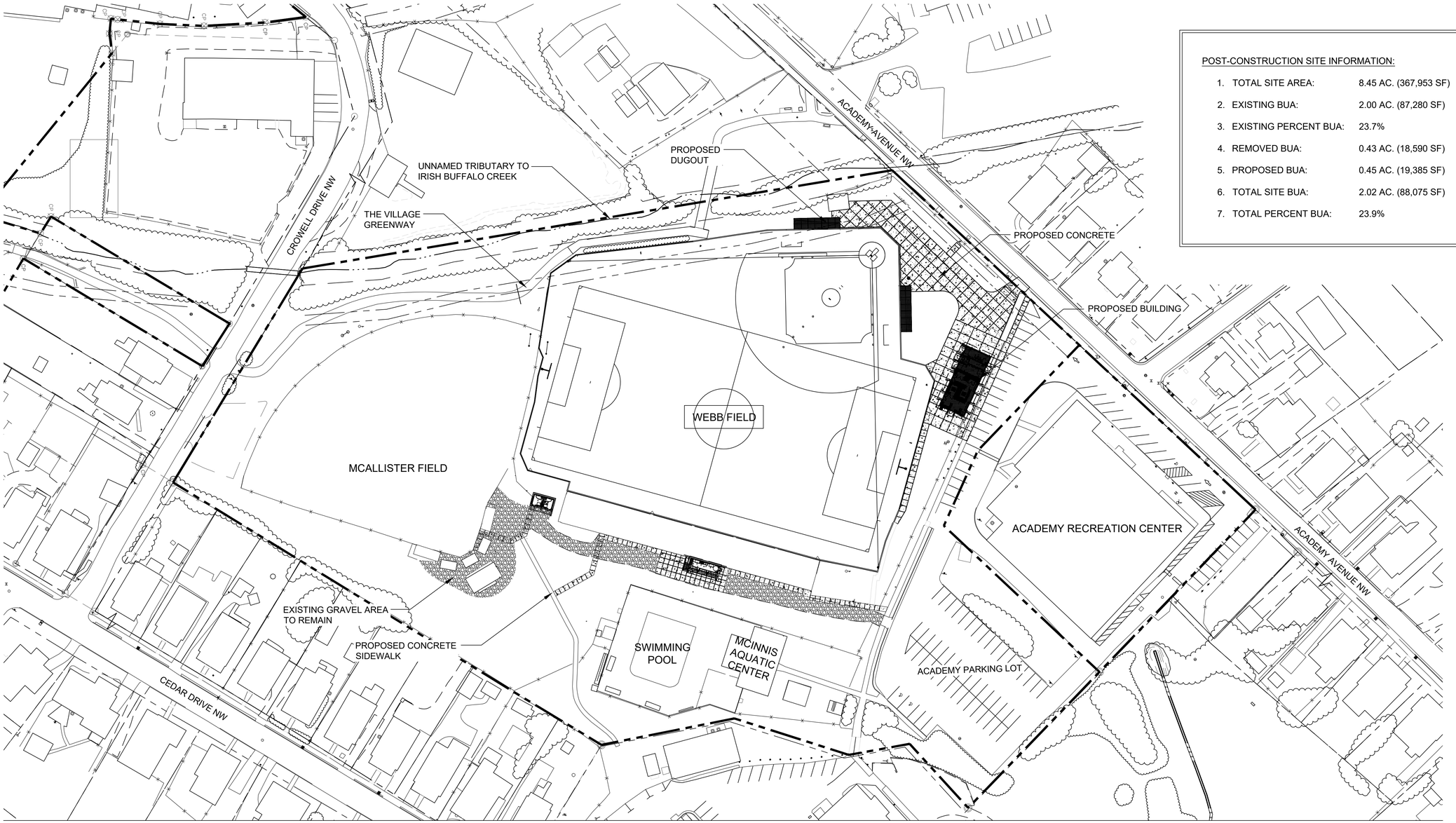
REMOVED BUA BREAKDOWN:	
REMOVED PARKING AREA:	- SF
REMOVED BUILDINGS:	3,225 SF
REMOVED CONCRETE:	1,250 SF
REMOVED ASPHALT TRAILS:	- SF
REMOVED GRAVEL AREAS:	10,600 SF
REMOVED BLEACHER PADS:	2,915 SF
TOTAL REMOVED BUA:	17,990 SF

PROPOSED BUA BREAKDOWN:	
PROPOSED PARKING AREA:	- SF
PROPOSED BUILDINGS:	2,800 SF
PROPOSED CONCRETE:	15,985 SF
PROPOSED ASPHALT TRAILS:	- SF
PROPOSED GRAVEL AREAS:	- SF
PROPOSED BLEACHER PADS:	- SF
TOTAL PROPOSED BUA:	18,785 SF

TOTAL SITE BUA BREAKDOWN:	
TOTAL PARKING AREA:	29,550 SF
TOTAL BUILDINGS:	8,810 SF
TOTAL CONCRETE:	40,000 SF
TOTAL ASPHALT TRAILS:	1,840 SF
TOTAL GRAVEL AREAS:	7,875 SF
TOTAL BLEACHER PADS:	- SF
TOTAL SITE BUA:	88,075 SF

SURFACING LEGEND

- EXISTING GRAVEL TO REMAIN
- PROPOSED CONCRETE AREA
- PROPOSED BUILDING



PROPOSED BUA

POST-CONSTRUCTION SITE INFORMATION:	
1. TOTAL SITE AREA:	8.45 AC. (367,953 SF)
2. EXISTING BUA:	2.00 AC. (87,280 SF)
3. EXISTING PERCENT BUA:	23.7%
4. REMOVED BUA:	0.43 AC. (18,590 SF)
5. PROPOSED BUA:	0.45 AC. (19,385 SF)
6. TOTAL SITE BUA:	2.02 AC. (88,075 SF)
7. TOTAL PERCENT BUA:	23.9%

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GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft.

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06-09-25

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REVISIONS:
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OWNER:
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35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 50'-0"
DATE: 06-09-25
SHEET NAME: STORMWATER PERMIT PLAN
SHEET NO: C103

ENHANCED EROSION CONTROL MEASURES:

1. THESE MEASURES ARE REQUIRED TO BE INSTALLED IN THE AREAS IDENTIFIED BY THE CITY OF CONCORD AND NCDEQ.
2. SURFACE WATER DRAW DOWN DEVICES (RISERS OR SKIMMERS) SHALL BE INSTALLED IN ALL SEDIMENT BASINS. ROCK COFFER FOREBAYS SHALL BE USED IN CONJUNCTION WITH ALL SEDIMENT BASINS. THE BASIN SHALL ALSO HAVE A VOLUME TWENTY-FIVE (25) PERCENT GREATER THAN THE 1800 CUBIC FEET PER DRAINAGE AREA, WHEN POSSIBLE.
3. POLYACRYLAMIDES (PAM) SHALL BE USED TO REDUCE TURBIDITY AND SUSPENDED SOLIDS WHENEVER A SEDIMENT TRAP, BASIN, PIT, HOLE, OR BUILDING FOUNDATION IS BEING PUMPED OUT TO REMOVE SEDIMENT LADEN WATER. PAM IS NOT REQUIRED WHEN ANY OF THE ABOVE IS BEING PUMPED TO AN APPROVED SEDIMENT BASIN ON SITE. THIS ACTIVITY MUST BE INSPECTED AND APPROVED BY THE CITY EROSION CONTROL INSPECTOR.
4. POLYACRYLAMIDES MAY BE REQUIRED ON SITE, AS DETERMINED BY THE CITY EROSION CONTROL INSPECTOR.
5. DOUBLE-ROW HIGH HAZARD SILT FENCE WITH WIRE BACKING AND STONE SHALL BE USED ALONG WETLANDS, STREAMS, LAKES, OR OTHER SURFACE WATER BODIES AS WELL AS ADJACENT TO ALL WATER QUALITY BUFFERS. SINGLE-ROW OF SILT FENCE WITH WIRE BACKING AND WASHED STONE MAY BE REQUIRED ON ALL OTHER AREAS, AS DETERMINED NECESSARY BY THE CITY ENGINEER OR FIELD INSPECTOR.
6. THE AMOUNT OF UNCOVERED AREA AT ANY ONE TIME SHALL BE LIMITED TO NO MORE THAN 20 ACRES, UNLESS APPROVED BY THE CITY.
7. A 10-FOOT UNDISTURBED BUFFER SHALL BE PROVIDED AROUND THE OUTSIDE EDGE OF DRAINAGE FEATURES SUCH AS INTERMITTENT AND PERENNIAL STREAMS, PONDS, AND WETLANDS. INCIDENTAL DRAINAGE IMPROVEMENTS OR REPAIRS WILL BE PERMITTED WITHIN THE BUFFER AS APPROVED BY CITY STAFF. THESE WOULD INCLUDE ANY ALLOWANCES STATED IN THE CITY ORDINANCES, IF APPLICABLE.
8. A GROUND COVER SUFFICIENT TO RESTRAIN ACCELERATED EROSION MUST BE PROVIDED WITHIN 7 CALENDAR DAYS OF THE DATE OF LAST LAND-DISTURBING ACTIVITY AN ANY PORTION OF THE PROJECT.
9. ALL DIVERSION DITCHES AND INTERIOR BASIN SLOPES MUST BE MATTED.
10. SUFFICIENT ACCESS FOR CONSTRUCTION AND MAINTENANCE MUST BE PROVIDED AT THE TOE OF ALL RETAINING WALLS THAT ARE 4' OR HIGHER. THE MINIMUM ACCESS WIDTH SHOULD BE NO LESS THAN SIX FEET.
11. FILL SLOPE STEEPNESS SHALL BE LIMITED TO 2:1. SLOPES STEEPER THAN 3:1 MUST BE TERRACED OR OTHERWISE PROVIDE AN APPROVED ENGINEERED SOLUTION. SLOPES 3:1 OR FLATTER MUST BE DESIGNED AS SET FORTH IN THE N.C. SOIL EROSION & SEDIMENT PLANNING & DESIGN MANUAL, STANDARD 6.02a.

EROSION CONTROL NOTES:

1. INLET PROTECTION IS REQUIRED FOR ALL INLETS LOCATED IN THE WORKING AREA AND REQUIRED UNTIL THE SITE IS FULLY STABILIZED
2. ANY GRADING BEYOND THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN IS SUBJECT TO A FINE.
3. GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND SUBJECT TO A FINE.
4. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN 15 WORKING DAYS OR 21 CALENDAR DAYS, WHICHEVER SHORTER. ALL OTHER AREAS, 15 WORKING DAYS OR 90 CALENDAR DAYS WHICHEVER IS SHORTER. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
5. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY OF CONCORD EROSION CONTROL DEPARTMENT.
6. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
7. ALL ELEVATIONS ARE IN REFERENCE TO THE SURVEYORS BENCHMARK WHICH MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
8. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH CITY OF CONCORD STANDARDS AND THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
9. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHOULD BE CONSTRUCTED AT 2:1(HORIZONTAL TO VERTICAL) OR FLATTER. PERMANENT SLOPES OF 3:1 SHOULD BE CONSTRUCTED WHERE MOWING IS DESIRABLE AND AS INDICATED. IF FILL MATERIAL IS BROUGHT ONTO THE PROPERTY OR IF WASTE MATERIAL IS HAULED FROM THE PROPERTY THEN THE CONTRACTOR SHALL DISCLOSE THE LOCATION OF ANY ON-SITE AND/OR OFF-SITE BORROW LOCATION AND/OR WASTE BURIAL LOCATION TO THE EROSION CONTROL INSPECTOR.
10. LIMITS OF CLEARING SHOWN ARE BASED ON CUT AND FILL SLOPES OR OTHER GRADING REQUIREMENTS.
11. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AS INDICATED PRIOR TO GRADING OPERATIONS. NO DEVICE MAY BE REMOVED UNTIL SITE IS STABILIZED.
12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS.
13. ALL DISTANCES ARE HORIZONTAL GROUND.
14. ANCHOR SILT FENCE WITH STONE ON TREE PROTECTION ZONES. DO NOT BURY.

CONSTRUCTION SEQUENCE PHASE 1:

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM NCDEQ - DEMLR AND STORMWATER PERMIT FROM CITY OF CONCORD, AND ALL OTHER NECESSARY PERMITS FROM OTHER APPLICABLE AGENCIES.
2. AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION, CONTACT THE DEMLR SECTION IN THE MOORESVILLE REGIONAL DEQ OFFICE AT (704)663-1699 AND THE ENGINEER. MEET WITH DEMLR REPRESENTATIVES AND THE ENGINEER ON-SITE AT THEIR REQUEST FOR A PRE-CONSTRUCTION MEETING.
3. PRIOR TO ANY CLEARING OR INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL STAKE CLEARING LIMITS AND STAKE ALL TREES, STRUCTURES AND WETLANDS TO REMAIN AND BE PROTECTED. ALL BUFFERS AND WETLANDS SHALL BE CLEARLY DELINEATED IN THE FIELD TO BE PROTECTED.
4. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND PERIMETER CONSTRUCTION FENCING AND SILT FENCE. TIRE WASH MAY BE REQUIRED IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT TO RETAIN SOIL. CONTRACTOR TO BLOCK ALL POSSIBLE ENTRANCES TO SITE BESIDES APPROVED CONSTRUCTION ENTRANCE W/ FENCING AND ORANGE BARRELS.
5. UPON COMPLETION OF INITIAL MEASURES, CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
6. INSTALL SILT FENCE, DIVERSION DITCHES, TREE PROTECTION, AND ANY OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
8. GENERAL CONTRACTOR SHALL ENSURE THAT EROSION CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PRIOR TO GRUBBING AND GRADING OPERATIONS.
9. BEGIN DEMO AND GRADING, INSTALLING ADDITIONAL EROSION CONTROL MEASURES AS INDICATED, AS REQUIRED, AND AS DEEMED NECESSARY BY THE EROSION CONTROL INSPECTOR.
10. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
12. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES. NO DEVICE SHALL BE REMOVED UNTIL SITE IS STABILIZED.
13. ALL EROSION CONTROL DEVICES SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM EVENT. IF ANY FAILURES ARE FOUND THEY SHOULD BE REPAIRED AS SOON AS POSSIBLE.
14. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CONCORD STANDARDS, THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, AND U.S. DEPT. OF AGRICULTURE.

STANDARD EROSION CONTROL NOTES:

1. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
2. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
3. GRADING MORE THAN ONE-ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE CITY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
4. ALL PERIMETER AREAS AND SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITHIN 7 DAYS. GROUND STABILIZATION ON ALL OTHER AREAS MUST BE COMPLETED WITHIN 14 DAYS. REFER TO THE EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
5. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY.
6. A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING EXCEEDING ONE ACRE THAT WAS NOT PREVIOUSLY APPROVED.
7. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT-OF-WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.
8. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. SLOPED GREATER THAN 10 VERTICAL FEET REQUIRE ADEQUATE TERRACING. SOILS ENGINEER TO VERIFY STABILITY OF SLOPES GREATER THAN 2:1.
9. SOIL COMPACTION TESTS ARE REQUIRED ON ANY BERM >=5' IN HEIGHT FROM THE NATURAL GRADE. SOIL COMPACTION MUST BE AT 95% PROCTOR AND CERTIFIED BY A LICENSED SOIL ENGINEER.

CONSTRUCTION SEQUENCE PHASE 2:

1. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL MEASURES AND DEVICES.
2. THE CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO THE REMOVAL OF ANY PHASE 1 EROSION CONTROL MEASURES.
3. FOR PHASED EROSION CONTROL PLANS, THE CONTRACTOR SHALL MEET WITH THE EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH THE NEXT PHASE OF THE EROSION CONTROL PLAN.
4. CONTRACTOR MAY INITIATE WORK ON UNDERGROUND UTILITIES INCLUDING STORM DRAINAGE.
5. INSTALL TEMPORARY INLET PROTECTION AS THE AREAS IN THE VICINITY OF THE STORM DRAINAGE IS BROUGHT UP TO FINISHED GRADE.
6. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS INDICATED, AS REQUIRED, AND AS DEEMED NECESSARY BY THE EROSION CONTROL INSPECTOR
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES
8. THE LAND DEVELOPMENT INSPECTOR SHOULD BE CALLED TO CONDUCT INSPECTIONS ON STORM DRAINAGE, SIDEWALKS, DRIVEWAY ON STORM DRAINAGE, DRIVEWAY IMPROVEMENTS, AND ALL ASPECTS OF ROAD/PARKING LOT CONSTRUCTION.
9. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
10. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS
11. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES. NO DEVICE SHALL BE REMOVED UNTIL SITE IS STABILIZED.
12. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CONCORD EROSION CONTROL ORDINANCE, THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, AND CHARLOTTE-MECKLENBURG LAND DEVELOPMENT STANDARDS.
13. CALL THE WATER QUALITY INSPECTOR TO SET-UP A BMP PRE-CONSTRUCTION MEETING PRIOR TO STARTING ANY WORK ON BMP'S. THIS MEETING SHOULD TAKE PLACE AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY BMP AND SHALL INCLUDE THE DESIGN ENGINEER TO ENSURE ENGINEER INSPECTIONS ARE PERFORMED AT KEY BMP INSTALLATION PHASES.
14. THE DESIGN ENGINEER MUST VERIFY AND CERTIFY THE DRAINAGE AREA IS PROPERLY STABILIZED, MEASURES ARE IN PLACE TO PREVENT SEDIMENTATION INTO THE BMP, THE STORM DRAINS, INLETS AND PAVEMENT HAVE BEEN PROPERLY CLEANED PRIOR TO COMMENCEMENT OF BMP CONSTRUCTION.
15. THE CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO THE REMOVAL OF ANY EROSION CONTROL MEASURES.
16. ONCE FINAL STABILIZATION HAS BEEN REACHED, THE NOTICE OF TERMINATION MAY BE FILED TO CLOSE-OUT THE LAND DISTURBANCE PERMIT.

DEWATERING NOTE:

DEWATERING MAY BE NECESSARY IN THE EXCAVATION AREAS (E.G. SUBGRADE AREAS). THEREFORE, THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE SITE. DURING PLACEMENT OF FILL WITHIN THESE AREAS, THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION / CONSTRUCTION AREAS. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDE SLOPES ARE STABLE, WITH NO SEDIMENT DISCHARGED FROM THE SITE (I.E. PUMPED WATER MAY NEED TO BE DIRECTED TO AN APPROVED EROSION CONTROL DEVICE PRIOR TO DISCHARGE).

EARTHWORK AND DISPOSAL NOTE:

ANY OFF-SITE BORROW AND/OR WASTE REQUIRED FOR THE PROJECT MUST COME FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN, A SITE REGULATED UNDER THE MINING ACT OF 1971, OR A LANDFILL REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT. TRASH OR DEBRIS FROM DEMOLITION ACTIVITIES OR GENERATED BY ANY ACTIVITIES ON SITE MUST BE DISPOSED OF AT A FACILITY REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT OR DIVISION OF WATER RESOURCES RULES AND REGULATIONS.

WETLANDS NOTE:

THERE ARE NO JURISDICTIONAL WETLANDS IN THE PROJECT AREA. NO JURISDICTIONAL WETLANDS WILL BE IMPACTED DURING CONSTRUCTION.

MAINTENANCE SCHEDULE:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY STORM EVENT, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY REPAIRS OR CLEANING NECESSARY TO MAINTAIN EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE COMPLETED IMMEDIATELY.
2. ALL SEEDED AREAS SHALL BE REFERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SEEDING SCHEDULE.

UTILITY NOTES:

1. ALL EXISTING UTILITIES TO BE ABANDONED SHOULD BE GROUTED; ADDITIONALLY ALL ABANDONED PIPES SHOULD BE CHECKED WITH FOOTING DEPTHS AND PROPOSED UTILITIES, AND REMOVED IF CONFLICT OCCURS.

North Carolina 811 www.ncc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER
06-9-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: N.T.S.
DATE: 06-09-25
SHEET NAME: EROSION CONTROL NOTES
SHEET NO: C200

CONSTRUCTION SEQUENCE PHASE 1:

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM NCDEQ - DEMLR AND STORMWATER PERMIT FROM CITY OF CONCORD, AND ALL OTHER NECESSARY PERMITS FROM OTHER APPLICABLE AGENCIES.
2. AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION, CONTACT THE DEMLR SECTION IN THE MOORESVILLE REGIONAL DEQ OFFICE AT (704)663-1699 AND THE ENGINEER. MEET WITH DEMLR REPRESENTATIVES AND THE ENGINEER ON-SITE AT THEIR REQUEST FOR A PRE-CONSTRUCTION MEETING.
3. PRIOR TO ANY CLEARING OR INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL STAKE CLEARING LIMITS AND STAKE ALL TREES, STRUCTURES AND WETLANDS TO REMAIN AND BE PROTECTED. ALL BUFFERS AND WETLANDS SHALL BE CLEARLY DELINEATED IN THE FIELD TO BE PROTECTED.
4. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND PERIMETER CONSTRUCTION FENCING AND SILT FENCE. TIRE WASH MAY BE REQUIRED IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT TO RETAIN SOIL. CONTRACTOR TO BLOCK ALL POSSIBLE ENTRANCES TO SITE BESIDES APPROVED CONSTRUCTION ENTRANCE W/ FENCING AND ORANGE BARRELS.
5. UPON COMPLETION OF INITIAL MEASURES, CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
6. INSTALL SILT FENCE, DIVERSION DITCHES, TREE PROTECTION, AND ANY OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
8. GENERAL CONTRACTOR SHALL ENSURE THAT EROSION CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PRIOR TO GRUBBING AND GRADING OPERATIONS.
9. BEGIN DEMO AND GRADING, INSTALLING ADDITIONAL EROSION CONTROL MEASURES AS INDICATED, AS REQUIRED, AND AS DEEMED NECESSARY BY THE EROSION CONTROL INSPECTOR.
10. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
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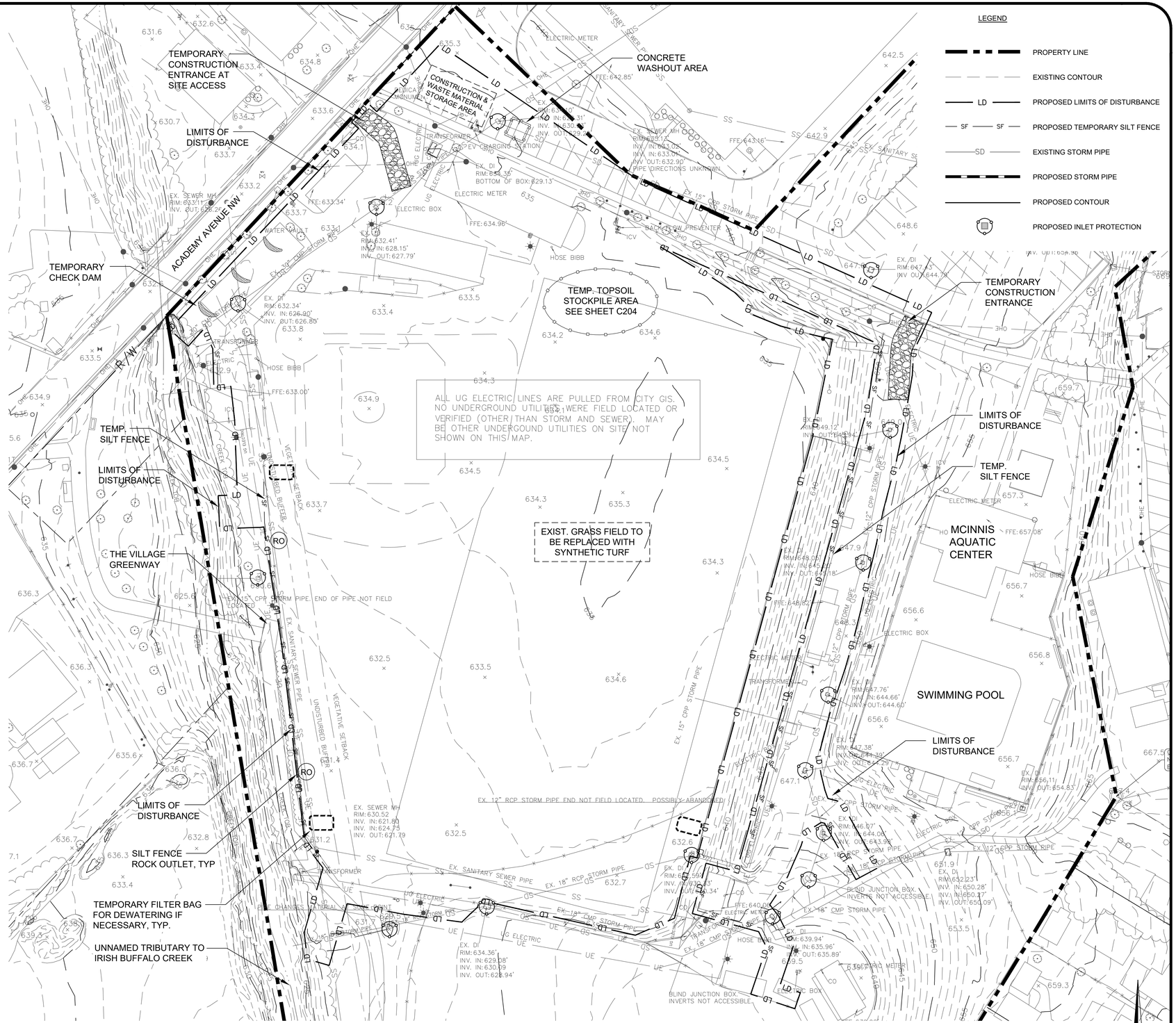
13. ALL EROSION CONTROL DEVICES SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM EVENT. IF ANY FAILURES ARE FOUND THEY SHOULD BE REPAIRED AS SOON AS POSSIBLE.
14. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CONCORD STANDARDS, THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, AND U.S. DEPT. OF AGRICULTURE.

EROSION CONTROL NOTES:

1. INLET PROTECTION IS REQUIRED FOR ALL INLETS LOCATED IN THE WORKING AREA AND REQUIRED UNTIL THE SITE IS FULLY STABILIZED
2. ANY GRADING BEYOND THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN IS SUBJECT TO A FINE.
3. GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND SUBJECT TO A FINE.
4. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN 15 WORKING DAYS OR 21 CALENDAR DAYS, WHICHEVER SHORTER. ALL OTHER AREAS, 15 WORKING DAYS OR 90 CALENDAR DAYS WHICHEVER IS SHORTER. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
5. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY OF CONCORD EROSION CONTROL DEPARTMENT.
6. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
7. ALL ELEVATIONS ARE IN REFERENCE TO THE SURVEYORS BENCHMARK WHICH MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
8. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH CITY OF CONCORD STANDARDS AND THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
9. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHOULD BE CONSTRUCTED AT 2:1(HORIZONTAL TO VERTICAL) OR FLATTER. PERMANENT SLOPES OF 3:1 SHOULD BE CONSTRUCTED WHERE MOWING IS DESIRABLE AND AS INDICATED. IF FILL MATERIAL IS BROUGHT ONTO THE PROPERTY OR IF WASTE MATERIAL IS HAULED FROM THE PROPERTY THEN THE CONTRACTOR SHALL DISCLOSE THE LOCATION OF ANY ON-SITE AND/OR OFF-SITE B0RROW LOCATION AND/OR WASTE BURIAL LOCATION TO THE EROSION CONTROL INSPECTOR.
10. LIMITS OF CLEARING SHOWN ARE BASED ON CUT AND FILL SLOPES OR OTHER GRADING REQUIREMENTS.
11. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AS INDICATED PRIOR TO GRADING OPERATIONS. NO DEVICE MAY BE REMOVED UNTIL SITE IS STABILIZED.
12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS.
13. ALL DISTANCES ARE HORIZONTAL GROUND.
14. ANCHOR SILT FENCE WITH STONE ON TREE PROTECTION ZONES. DO NOT BURY.

DEWATERING NOTE:

DEWATERING MAY BE NECESSARY IN THE EXCAVATION AREAS (E.G. SUBGRADE AREAS). THEREFORE, THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ANY PUMPING EQUIPMENT, ETC. NEEDED FOR REMOVAL OF WATER FROM VARIOUS PARTS OF THE SITE. DURING PLACEMENT OF FILL WITHIN THESE AREAS, THE CONTRACTOR SHALL KEEP THE WATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION / CONSTRUCTION AREAS. THE MANNER IN WHICH THE WATER IS REMOVED SHALL BE SUCH THAT THE EXCAVATION BOTTOM AND SIDE SLOPES ARE STABLE, WITH NO SEDIMENT DISCHARGED FROM THE SITE (I.E. PUMPED WATER MAY NEED TO BE DIRECTED TO AN APPROVED EROSION CONTROL DEVICE PRIOR TO DISCHARGE).



TOTAL DENUDED AREA = 3.6 ACRES

ROPER CIVIL ENGINEERING
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 24914 MATTHEW G. ROPER 06-09-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
1. 1.28.25 REV. PER NCDEQ COMMENT
2. 2.14.25 PLAN REVIEW COMMENTS
3. 6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"
DATE: 06-09-25
SHEET NAME: PHASE 1 EROSION PLAN
SHEET NO: C201

CONSTRUCTION SEQUENCE PHASE 2:

1. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL MEASURES AND DEVICES.
2. THE CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO THE REMOVAL OF ANY PHASE 1 EROSION CONTROL MEASURES.
3. FOR PHASED EROSION CONTROL PLANS, THE CONTRACTOR SHALL MEET WITH THE EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH THE NEXT PHASE OF THE EROSION CONTROL PLAN.
4. CONTRACTOR MAY INITIATE WORK ON UNDERGROUND UTILITIES INCLUDING STORM DRAINAGE.
5. INSTALL TEMPORARY INLET PROTECTION AS THE AREAS IN THE VICINITY OF THE STORM DRAINAGE IS BROUGHT UP TO FINISHED GRADE.
6. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS INDICATED, AS REQUIRED, AND AS DEEMED NECESSARY BY THE EROSION CONTROL INSPECTOR
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES
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13. CALL THE WATER QUALITY INSPECTOR TO SET-UP A BMP PRE-CONSTRUCTION MEETING PRIOR TO STARTING ANY WORK ON BMP'S. THIS MEETING SHOULD TAKE PLACE AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY BMP AND SHALL INCLUDE THE DESIGN ENGINEER TO ENSURE ENGINEER INSPECTIONS ARE PERFORMED AT KEY BMP INSTALLATION PHASES.
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EROSION CONTROL NOTES:

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MAINTENANCE SCHEDULE:

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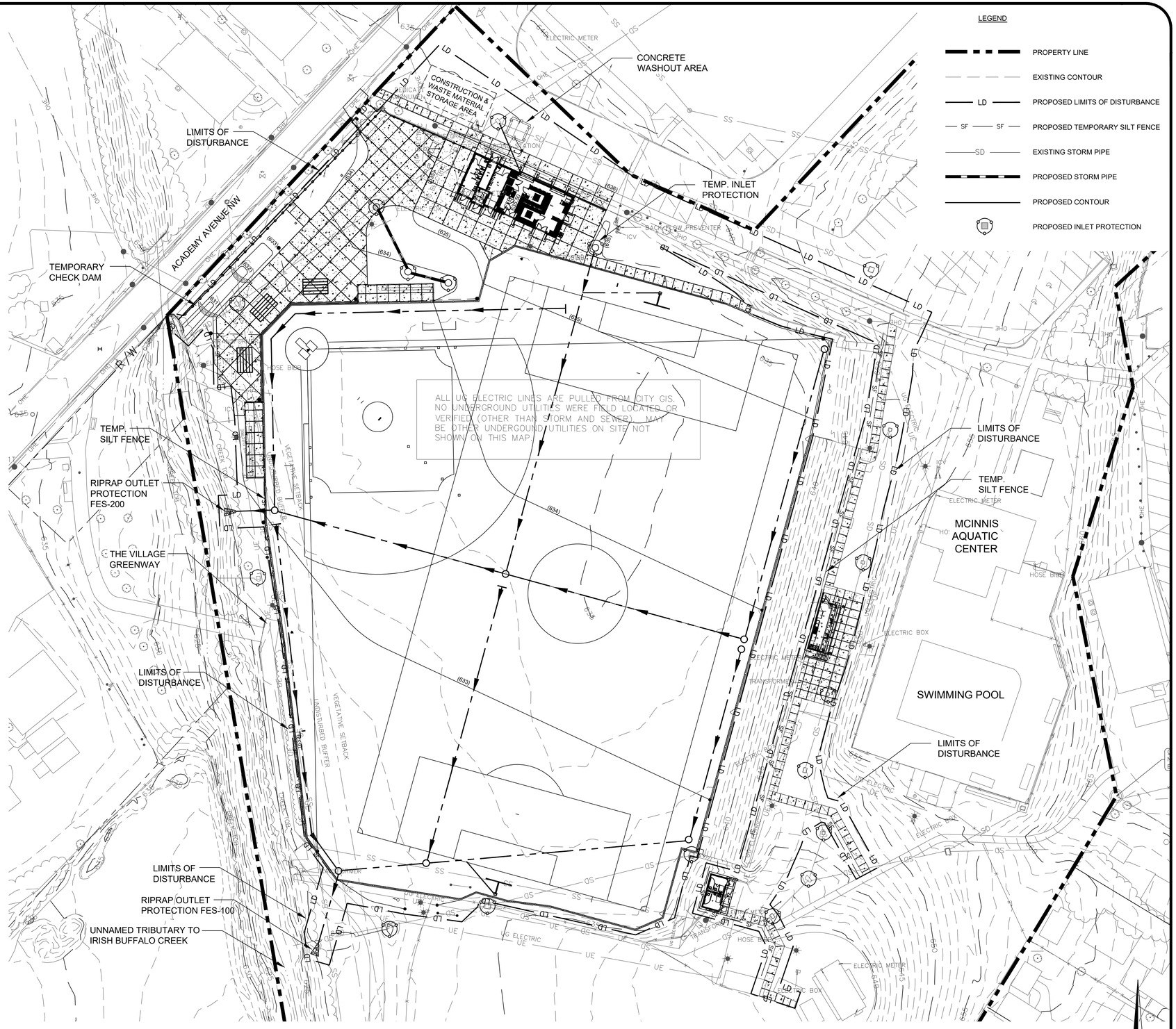
2. ALL SEEDED AREAS SHALL BE REFERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SEEDING SCHEDULE.

WETLANDS NOTE:

THERE ARE NO JURISDICTIONAL WETLANDS IN THE PROJECT AREA. NO JURISDICTIONAL WETLANDS WILL BE IMPACTED DURING CONSTRUCTION.



North Carolina 811 www.ncc811.org

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09-25

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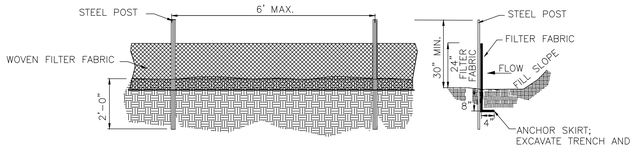
REVISIONS:
1. 28.25 REV. PER NCDEQ COMMENT
2. 14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"
DATE: 06-09-25
SHEET NAME: PHASE 2 EROSION PLAN
SHEET NO: C202



GENERAL NOTES:

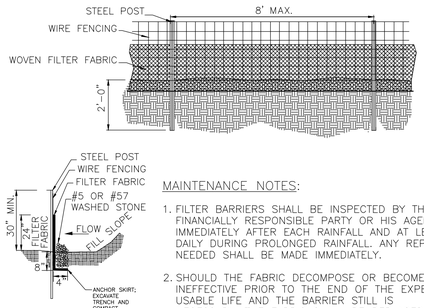
1. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

1 TEMPORARY SILT FENCE

NOT TO SCALE



GENERAL NOTES:

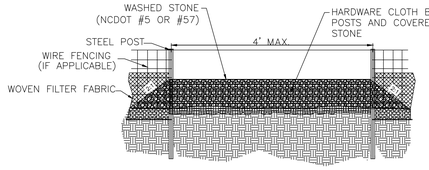
1. WIRE FENCING SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 6" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE AND WASHED STONE IS REQUIRED TO BE SHOWN ON PLANS AT THE TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE)
7. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
8. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
9. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
10. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

2 HIGH HAZARD TEMPORARY SILT FENCE

NOT TO SCALE



GENERAL NOTES:

1. SEDIMENT FILTER OUTLET AND HARDWARE CLOTH SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
2. HARDWARE CLOTH SHALL BE ANCHORED TO THE STEEL POSTS SECURELY USING APPROPRIATE ANCHORS. HARDWARE CLOTH SHALL BE KEYED IN A MINIMUM OF 12 INCHES IN LENGTH AND BACKFILLED PROPERLY AS SHOWN IN ABOVE DETAIL. HARDWARE CLOTH TO BE SAME AS STD. #30.09 (19 GAUGE, 1/4" SPACING).
3. POSTS SHALL BE NO MORE THAN 4 FEET APART.
4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.

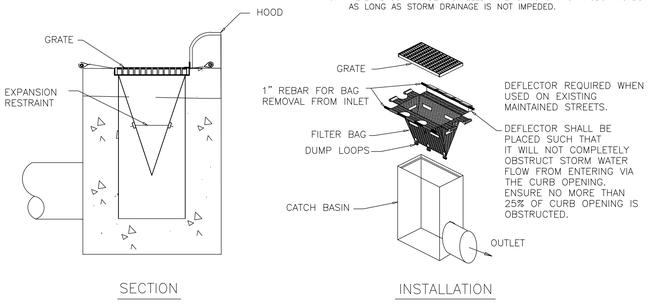
MAINTENANCE NOTES:

1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

3 SILT FENCE OUTLET OPTION 2

NOT TO SCALE

NOTES:
1. INLET MAINTENANCE SHALL BE DOCUMENTED IN PROJECT LOG BOOK.
2. FILTER TYPES SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.
3. FILTER BAGS MAY BE REMOVED WHEN SITE IS STABILIZED AT THE DIRECTION OF THE ENGINEER.
4. FILTER BAGS SHALL BE REMOVED PRIOR TO STREET ACCEPTANCE AND/OR CLOSE OUT OF GRADING PERMIT.
5. FILTER BAGS SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS (NOT BE MORE THAN HALF FULL AT ANY TIME).
6. FILTER BAGS MAY BE INSTALLED IN EXISTING CITY OR NCDOT ROADS AS LONG AS STORM DRAINAGE IS NOT IMPEDED.



DEFLECTOR REQUIRED WHEN USED ON EXISTING MAINTAINED STREETS.

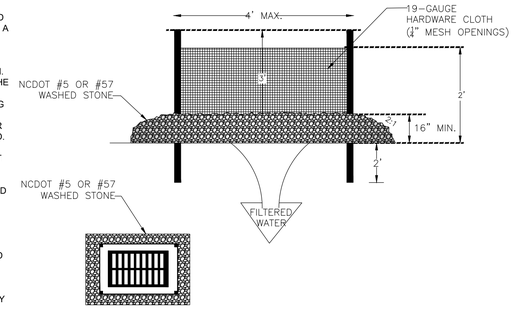
DEFLECTOR SHALL BE PLACED SUCH THAT IT WILL NOT COMPLETELY OBSTRUCT STORM WATER FLOW FROM ENTERING VIA THE CURB OPENING. ENSURE NO MORE THAN 25% OF CURB OPENING IS OBSTRUCTED.

4 BLOCK AND GRAVEL STONE INLET PROTECTION

NOT TO SCALE

GENERAL NOTES:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.



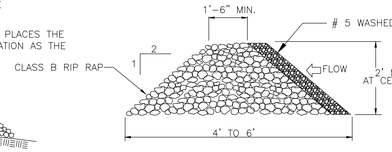
5 HARDWARE CLOTH AND GRAVEL INLET PROTECTION

NOT TO SCALE

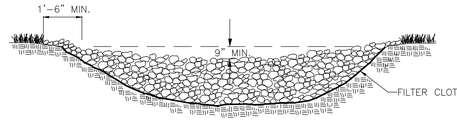
GENERAL NOTES:

1. RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
2. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
   ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).

A AND B ARE AT EQUAL ELEVATIONS



CROSS SECTION



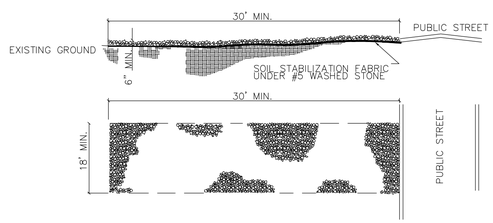
PLAN

6 TEMPORARY CHECK DAM

NOT TO SCALE

NOTES:

1. A STABILIZED ENTRANCE PAD OF #5 WASHED STONE AND RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY. ANY AGGREGATE TRACKED INTO THE ROADWAY MUST BE SWEPT BACK ONSITE ON A NIGHTLY BASIS.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.



7 STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

FOR LATE WINTER AND EARLY SPRING:

SEEDING MIXTURE:
RYE (GRAIN) – 120 LB/ACRE
ANNUAL LESPEDEZA (KOBE) – 50 LB/ACRE
(OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE)

SEEDING DATES:
JAN. 1 – MAY 1

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR SUMMER:

SEEDING MIXTURE:
GERMAN MILLET – 40 LB/ACRE
(A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)

SEEDING DATES:
MAY 1 – AUG. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR FALL:

SEEDING MIXTURE:
RYE (GRAIN) – 120 LB/ACRE

SEEDING DATES:
AUG. 15 – DEC 30

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER

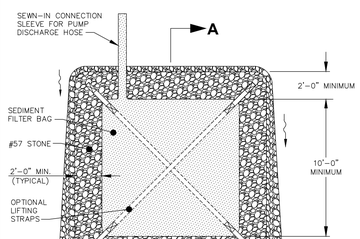
MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

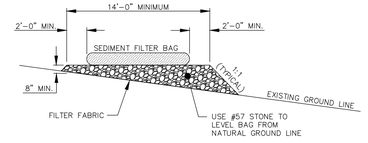
FOR ADDITIONAL INFORMATION, REFER TO NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (ESCPDM), SECTION 6.10.
FOR PERMANENT SEEDING SPECIFICATIONS, INCLUDING SEED BED PREP, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, THE KINDS OF SEED, AND THE RATES OF APPLICATION OF LIMESTONE, FERTILIZER, AND SEED, REFER TO NCDEQ ESCPDM SECTION 6.11

8 SEEDING SCHEDULE

NOT TO SCALE



PLAN VIEW



SECTION A–A

CONSTRUCTION SPECIFICATIONS

1. SEDIMENT FILTER BAGS SHALL BE EQUIPPED WITH A SEWN-IN SLEEVE OF SUFFICIENT SIZE TO ACCEPT A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE DISCHARGE HOSE SHOULD BE EXTENDED INTO THIS SLEEVE A MINIMUM OF 6 INCHES AND BE TIGHTLY SECURED WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE. HOSE CONNECTION THROUGH A SLIT IN THE BAG WILL NOT BE ACCEPTABLE.
2. PLACE FILTER BAG ON SUITABLE BASE LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 24 INCHES FROM EDGES OF BAG.
3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. THE PUMP DISCHARGE HOSE CONNECTION SLEEVE SHALL BE SECURELY TIED OFF DURING DISPOSAL OF THE SEDIMENT FILTER BAG IN ORDER TO PREVENT LEAKAGE OF COLLECTED SEDIMENTS. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

GRAB TENSILE	250 LB	ASTM D-4632
PUNCTURE	150 LB	ASTM D-4833
FLOW RATE	70 GAL/MIN/FT²	ASTM D-4491
PERMITTIVITY (SEC⁻¹)	1.2 SEC⁻¹	ASTM D-4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D-4355
APPARENT OPENING SIZE (AOS)	0.15–0.18 MM	ASTM D-4751
SEAM STRENGTH	90%	ASTM D-4632

6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

9 SEDIMENT FILTER BAG

NOT TO SCALE

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW C. ROPER
6-9-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS

DATE: 06-09-25

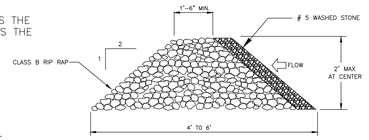
SHEET NAME:
ESC DETAILS

SHEET NO:
C203

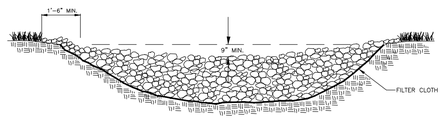
GENERAL NOTES:

1. RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
2. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
3. ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).

A AND B ARE AT EQUAL ELEVATIONS



CROSS SECTION

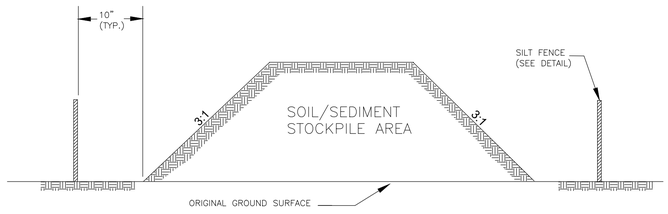


PLAN

1 TEMPORARY CHECK DAM

NOT TO SCALE

TEMPORARY STOCKPILE AREA



NOTES:

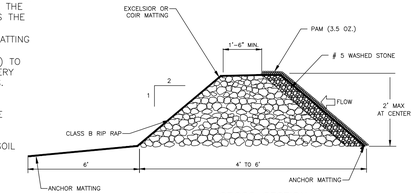
1. SILT FENCE TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE, OR IF STOCKPILE AREA IS LOCATED ON/NEAR A SLOP THE SILT FENCE IS TO EXTEND ALONG CONTOURS OF THE DOWN-GRADIENT AREA.
2. IF STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, TEMPORARY STABILIZATION MEASURES MUST BE IMPLEMENTED.
3. SILT FENCE SHALL BE MAINTAINED UNTIL STOCKPILE AREA HAS EITHER BEEN REMOVED OR PERMANENTLY STABILIZED.
4. THE KEY TO FUNCTIONAL TEMPORARY STOCKPILE AREAS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.

2 TEMPORARY STOCKPILE

NOT TO SCALE

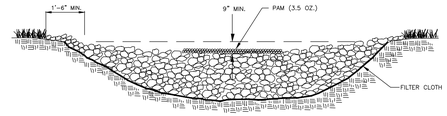
GENERAL NOTES:

1. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.
2. ENSURE THAT MAXIMUM SPACING BETWEEN DAMS PLACES THE TOE OF THE UPSTREAM DAM AT THE SAME ELEVATION AS THE DOWNSTREAM DAM (SEE DIAGRAM BELOW).
3. COIR MATTING SHALL BE SUBSTITUTED FOR EXCELSIOR MATTING IN HIGH FLOW AREAS.
4. INITIALLY APPLY 3.50 OUNCES OF POLYACRYLAMIDE (PAM) TO THE FACE AND TOP OF THE CHECK DAM AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.
5. ONLY PAMs THAT PASS THE CHRONIC TOXICITY TESTING REQUIREMENTS, ESTABLISHED BY NCDWQ, MAY BE USED.
6. A SEDIMENT BASIN OR SIMILAR STRUCTURE BETWEEN THE APPLICATION POINT OF PAMs AND SURFACE WATERS IS REQUIRED.
7. SUPPLIER TO DETERMINE APPROPRIATE PAM BASED ON SOIL TYPE.



CROSS SECTION

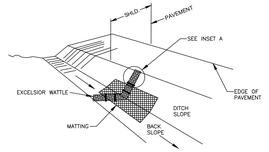
A AND B ARE AT EQUAL ELEVATIONS



PLAN

3 TEMP. ROCK CHECK DAM WITH MATTING AND PAM

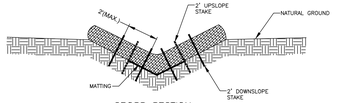
NOT TO SCALE



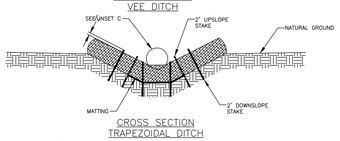
ISOMETRIC VIEW

GENERAL NOTES:

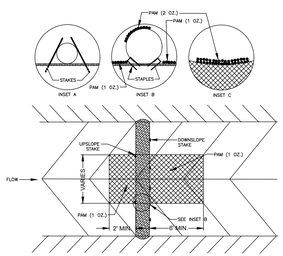
1. USE MINIMUM 12 INCH DIAMETER FIBER MATTLE.
2. USE 2 FT. WOODEN STAKES WITH A 2 IN. X 2 IN. NOMINAL CROSS SECTION
3. ONLY INSTALL MATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND MATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
4. INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE MATTLE TO BOTTOM OF DITCH.
5. PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
6. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF MATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
7. INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE NCDOT STANDARD SPECIFICATIONS.
8. PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH MATTLE.
9. INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER MATTLE WHERE WATER WILL FLOW AND 1 OUNCE ON MATTING ON EACH SIDE OF MATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



CROSS SECTION
VEE DITCH

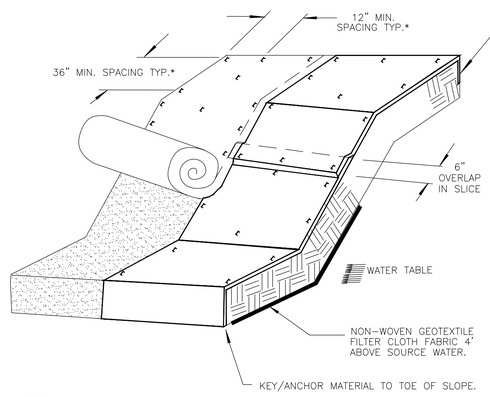


CROSS SECTION
TRAPEZOIDAL DITCH



4 TEMP. WATTLE CHECK DAM WITH MATTING AND PAM

NOT TO SCALE



GENERAL NOTES:

1. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
2. * DIMENSIONS SHOWN ARE MINIMUM. MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE MET.
3. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
4. THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO NCESCPDM STANDARD #6.17 AND MANUFACTURER'S GUIDELINES.
5. ALL MATTING SHALL BE 100% BIODEGRADABLE WITH ORGANIC NETTING. PLASTIC OR NON-BIODEGRADABLE NETTING WILL NOT BE ALLOWED. PLEASE NOTE TURF REINFORCED MATTING (TRM) IS PERMITTED WHERE DESIGN CRITERIA WARRANTS ITS USE.

5 EMBANKMENT MATTING DETAIL

NOT TO SCALE

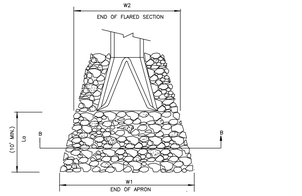
NOTES:

1. CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
3. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
4. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1
5. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
6. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
7. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
8. FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIP RAP.
9. ANY DISTURBED AREA FROM END OF APRON TO RECIEVING CHANNEL MUST BE STABILIZED.

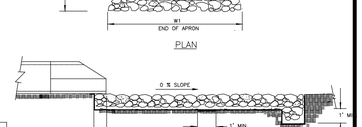
USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL

OUTLET	Lo	W1	W2	*T	H
FES-100	10.0'	9.0'	3.0'	1.0'	1.0'
FES-200	10.0'	9.0'	3.0'	1.0'	1.0'

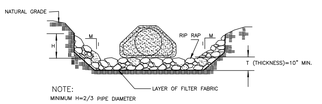
* d50 (see fig 8.06 a&b "NC SEDIMENT AND EROSION CONTROL MANUAL")
dmax = 1.5 x d50
T = 1.5 X dmax.
T(min.)=10"



PLAN



ELEVATION



NOTE:
MINIMUM H=2/3 PIPE DIAMETER

SECTION B-B

6 RIPRAP APRON AT PIPE OUTFALLS

NOT TO SCALE

7 RESERVED

NOT TO SCALE

8 RESERVED

NOT TO SCALE

9 RESERVED

NOT TO SCALE

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REVISIONS:
1.28.26 REV. PER NCDEQ COMMENT
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
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ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: ESC DETAILS
SHEET NO: C204

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

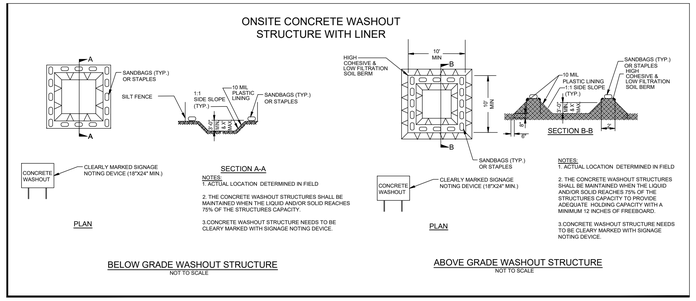
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

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SHEET NAME: ESC DETAILS
SHEET NO: C205

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

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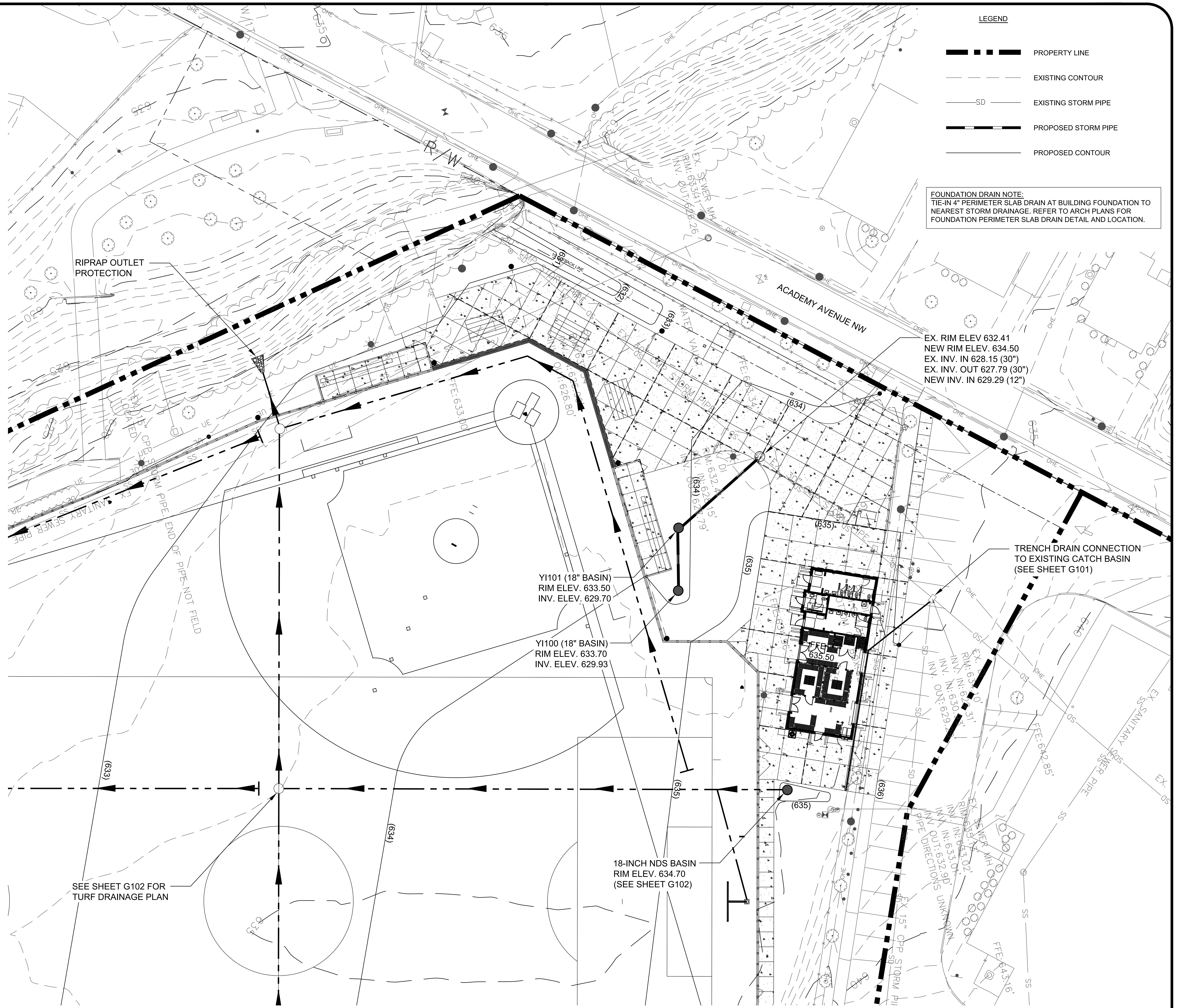
SCALE: NTS
DATE: 06-09-25
SHEET NAME: ESC DETAILS
SHEET NO: C206

GENERAL DRAINAGE NOTES:

1. ALL DESIGN AND CONSTRUCTION METHODS SHALL BE DONE IN ACCORDANCE CITY OF CONCORD, NCDOT STANDARD DETAILS, AND NCDEQ STANDARDS AND SPECIFICATIONS.
2. THE PURPOSE OF THE STORM DRAINAGE EASEMENT IS TO PROVIDE STORM WATER CONVEYANCE AND ANY STRUCTURES AND/OR OBSTRUCTION TO STORM WATER IS PROHIBITED.
3. PROPOSED ELEVATIONS ARE TO THE EDGE OF PAVEMENT.
4. IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON ALL PAVEMENT.
5. CURB AND GUTTER SHOWN ON PLANS MAY BE ADJUSTED BASED UPON FIELD STAKING BY ENGINEER OR LANDSCAPE ARCHITECT. STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED ON FIELD CONDITIONS.
6 ALL STORM PIPE 15" DIA. OR GREATER SHALL BE RCP. ALL YARD INLETS CONNECTED TO 15" DIA. OR GREATER PIPE SHALL BE STANDARD BRICK OR PRECAST DROP TYPE INLETS. RIM ELEVATIONS GIVEN ON PLANS FOR YARD INLETS REFER TO TOP OF GRATE.
7. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
8. RESPONSIBILITY FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SAFETY DEVICES FOR THE PROTECTION OF THE PUBLIC, THE WORKERS, AND GENERAL PROTECTION OF THE WORK SHALL REST WITH THE CONTRACTOR DOING THE WORK.
9. PROPOSED CONTOURS SHOWN ARE TO THE TOP PAVING IN AREAS TO RECIEVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDED.
10. GRADING CONTRACTORS SHALL NOTIFY AND COOPERATE WITH ALL UTILITY PROVIDERS BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING, OR CONNECTING TO SAID FACILITIES. CONTRACTORS SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES.
11. THE GRADING CONTRATOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES.
12. GRADING CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO OWNER.
13. GRADING CONTRACTOR TO COMPLY WITH ALL STATE AND LOCAL SEDIMENT CONTROL AND AIR POLLUTION ORDINANCE OR RULES.
14. CONTRACTOR SHALL REPAIR OR REPLACE IN-KIND ANY DAMAGE THAT OCCURS AS RESULT OF HIS WORK.
15. ALL LINEAR FOOTAGE FOR FOR ALL UTILITY PIPES ARE APPROXIMATE; ACTUAL INSTALLED QUANTITIES MAY VARY.



LEGEND

— ▪ ▪ —	PROPERTY LINE
— — —	EXISTING CONTOUR
—SD—	EXISTING STORM PIPE
━━━	PROPOSED STORM PIPE
———	PROPOSED CONTOUR

FOUNDATION DRAIN NOTE:
TIE-IN 4" PERIMETER SLAB DRAIN AT BUILDING FOUNDATION TO NEAREST STORM DRAINAGE. REFER TO ARCH PLANS FOR FOUNDATION PERIMETER SLAB DRAIN DETAIL AND LOCATION.

North Carolina 811
www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.
CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL".
REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER
6-9-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

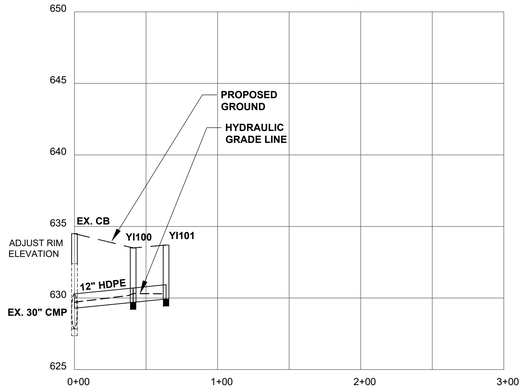
REVISIONS:
- 2.14.25 PLAN REVIEW COMMENTS
- 6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 20'-0"
DATE: 06-09-25
SHEET NAME:
STORM DRAINAGE PLAN
SHEET NO:
C300

YI101 - EXIST. CB



STORMCHART-100 PROPOSED 10-YR

LINE ID	D.A.	RIM EL.	INV. UP	INV. DN	Q	CAPACITY	VELOCITY	LENGTH	SLOPE	PIPE SIZE
	(AC)	(FT)	(FT)	(FT)	(CFS)	(CFS)	(FT/SEC)	(FT)	(%)	(IN)
YI100 - EX CB	0.10	633.50	629.70	629.29	1.3	3.6	3.8	41.0	1.00	12
YI101 - YI100	0.10	633.70	629.93	629.70	0.6	3.6	1.8	23.0	1.00	12

YI=YARD INLET
CB=CATCH BASIN

GRAPHIC SCALE IN FEET

HORIZ. 0 50 100

VERT. 0 5 10

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
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NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER 6-9-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 50'-0"
DATE: 06-09-25
SHEET NAME: STORM PROFILES
SHEET NO: C301

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
300.01	METHOD OF PIPE INSTALLATION – METHOD A	
310.02	PARALLEL PIPE END SECTION–PRECAST CONCRETE FOR 15" TO 24" PIPE	REQUIRED IN RIGHT OF WAY WITHIN THE ETJ
310.03	CROSS PIPE END SECTION–PRECAST CONCRETE FOR 18" TO 30" PIPE	REQUIRED IN RIGHT OF WAY WITHIN THE ETJ
310.10	DRIVEWAY PIPE CONSTRUCTION USING NO SPECIAL END SECTIONS	ONLY AT LOCATIONS APPROVED BY THE COUNTY ENGINEER
815.03	PIPE UNDERDRAIN AND BLIND DRAIN	
816.03	GEOCOMPOSITE SHOULDER DRAIN	
838.01	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 15" THRU 48" PIPE 90° SKEW	NOTE 1
838.02	CONCRETE ENDWALL AND SLUICE GATE 15" THRU 36" PIPE–90° SKEW	NOTE 1
838.04	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 17"x13" THRU 71"x47" PIPE ARCH 90° SKEW	NOTE 1
838.05	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	NOTE 1
838.06	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU 71"X47" PIPE ARCH	NOTE 1
838.07	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 40"X31" THRU 66"X51" PIPE ARCH 90° SKEW	NOTE 1
838.08	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 40"X31" THRU 66"X51" PIPE ARCH	NOTE 1
838.10	CONCRETE ENDWALL FOR OUTFALL 4", 6" OR 8" PIPE	NOTE 1
838.11	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 15" THRU 48" 90° SKEW	
838.14	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 17"X13" THRU 71"X47" PIPE ARCH 90° SKEW	
838.15	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	
838.16	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU 71"X47" PIPE ARCH	
838.17	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 40"X31" THRU 66"X51" PIPE ARCH 90° SKEW	
838.18	BRICK ENDWALL FOR SINGLE PIPE CULVERTS 40"X31" THRU 66"X51" PIPE ARCH	
838.20	BRICK ENDWALL FOR OUTFALL 4", 6" OR 8" PIPE	
838.21	REINFORCED CONCRETE ENDWALL FOR SINGLE 54" PIPE 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.22	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 54" PIPES 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.27	REINFORCED CONCRETE ENDWALL FOR SINGLE 60" PIPE 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.28	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 60" PIPES 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.33	REINFORCED CONCRETE ENDWALL FOR SINGLE 66" PIPE 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.34	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 66" PIPES 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.39	REINFORCED CONCRETE ENDWALL FOR SINGLE 72" PIPE 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.40	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 72" PIPES 90° SKEW	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE COUNTY REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL PROJECTS.

APPROVED DATE: 02/2007

1 NCDOT STANDARDS 1 OF 3

NOT TO SCALE

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
838.45	NOTES FOR REINFORCED CONCRETE ENDWALL STANDARD DRAWINGS 838.21 THRU 838.40	NOTE 1 SEE MCLDS 20.17 FOR SPLASH PAD
838.51	REINFORCED BRICK ENDWALL FOR SINGLE 54" PIPE 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.52	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 54" PIPES 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.57	REINFORCED BRICK ENDWALL FOR SINGLE 60" PIPE 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.58	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 60" PIPES 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.63	REINFORCED BRICK ENDWALL FOR SINGLE 66" PIPE 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.64	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 66" PIPES 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.69	REINFORCED BRICK ENDWALL FOR SINGLE 72" PIPE 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.70	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 72" PIPES 90° SKEW	SEE MCLDS 20.17 FOR SPLASH PAD
838.75	NOTES FOR REINFORCED BRICK ENDWALL STANDARD DRAWINGS 838.51 THRU 838.70	SEE MCLDS 20.17 FOR SPLASH PAD
838.80	PRECAST CONCRETE ENDWALLS FOR SINGLE 12" THRU 72" PIPE 90° SKEW	
840.00	CONCRETE BASE PAD FOR DRAINAGE STRUCTURES	
840.01	BRICK CATCH BASIN 12" THRU 54" PIPE	
840.02	CONCRETE CATCH BASIN 12" THRU 54" PIPE	
840.03	FRAME, GRATES AND HOOD FOR USE ON STANDARD BASIN 12" THRU 54" PIPE	TYPE F AND G GRATES ARE OPTIONAL WITHIN THE TOWN LIMITS
840.04	CONCRETE CATCH BASIN 12" THRU 48" PIPE	NOTE 1 – OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE STD. 840.54
840.05	BRICK OPEN THROAT CATCH BASIN 12" THRU 48" PIPE	OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE STD. 840.54
840.14	CONCRETE DROP INLET 12" THRU 30" PIPE	NOTE 1
840.15	BRICK DROP INLET 12" THRU 30" PIPE	
840.16	DROP INLET FRAME AND GRATES FOR USE WITH STANDARD DWGS. 840.14 & 840.15	
840.17	CONCRETE GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	NOTE 1
840.18	CONCRETE GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	NOTE 1
840.19	CONCRETE GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	NOTE 1
840.20	FRAMES AND WIDE SLOT FLAT GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.22	FRAMES AND WIDE SLOT SAG GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.24	FRAMES AND NARROW SLOT SAG GRATES	
840.25	ANCHORAGE FOR FRAMES BRICK OR CONCRETE	
840.26	BRICK GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	
840.27	BRICK GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	
840.28	BRICK GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	
840.29	FRAMES AND NARROW SLOT FLAT GRATES	
840.30	DRIVEWAY DROP INLET	

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE COUNTY REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL PROJECTS.

APPROVED DATE: 02/2007

2 NCDOT STANDARDS 2 OF 3

NOT TO SCALE

DWG	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
840.31	CONCRETE JUNCTION BOX (WITH OPTIONAL MANHOLE) 12" THRU 66" PIPE	NOTE 1 OPTIONAL MANHOLE IS REQUIRED
840.32	BRICK JUNCTION BOX 12" THRU 66" PIPE	OPTIONAL MANHOLE IS REQUIRED
840.34	TRAFFIC BEARING JUNCTION BOX FOR USE WITH PIPES 42" AND UNDER	NOTE 1 OPTIONAL MANHOLE IS REQUIRED
840.35	TRAFFIC BEARING DROP INLET FOR CAST IRON DOUBLE FRAME AND GRATES	NOTE 1 OPTIONAL MANHOLE IS REQUIRED
840.36	TRAFFIC BEARING DROP INLET FOR STEEL (840.37) DOUBLE FRAME AND GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.37	STEEL GRATE AND FRAME	NOT FOR USE IN PEDESTRIAN AREAS
840.41	SPRING BOX CONCRETE OR BRICK	NOTE 1
840.45	PRECAST DRAINAGE STRUCTURE (SOLID AND WAFFLE WALL)	WAFFLE WALL IS NOT PERMITTED. OPENINGS SHALL BE PRECAST
840.46	TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE	
840.51	BRICK MANHOLE 12" THRU 36" PIPE	
840.52	PRECAST MANHOLE 4", 5" AND 6" DIAMETER 12" THRU 42" PIPE	
840.53	PRECAST MANHOLE WITH MASONRY BASE 12" THRU 42" PIPE	
840.54	MANHOLE FRAME AND COVER	
840.66	DRAINAGE STRUCTURE STEPS	
840.71	CONCRETE AND BRICK PIPE PLUG	
840.72	PIPE COLLAR	
850.01	CONCRETE PAVED DITCHES	
852.04	METHODS FOR PLACEMENT OF DROP INLETS IN GRASSED MEDIAN (USING 1'-6" CURB AND GUTTER)	
852.05	MEDIAN CURB FOR CATCH BASIN (FOR USE WITH 1'-6" CURB AND GUTTER)	
852.06	METHOD OF PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS	
876.01	RIP RAP IN CHANNELS	
876.03	DRAINAGE DITCHES WITH CLASS "A" RIP RAP	
876.04	DRAINAGE DITCHES WITH CLASS "B" RIP RAP	

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE COUNTY REQUIRES 3600 PSI CONCRETE STRENGTH @ 28 DAYS. 3600 PSI CONCRETE SHALL BE USED IN ALL PROJECTS.

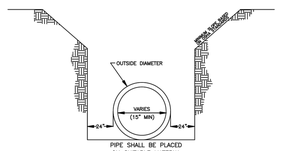
APPROVED DATE: 02/2007

3 NCDOT STANDARDS 3 OF 3

NOT TO SCALE

NOTES:

1. A MINIMUM OF 24" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR COMPACTION OF FILL MATERIAL. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER THE PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 6". UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED. COMPACTION REQUIREMENTS SHALL BE ATTAINED BY THE USE OF MECHANICAL TAMPS ONLY. EACH AND EVERY LAYER OF BACKFILL SHALL BE PLACED LOOSE AND THOROUGHLY COMPACTED INTO PLACE.
2. ALL BACKFILL MATERIAL SHALL HAVE AN IN PLACE COMPACTED DENSITY OF 95%.
3. STANDARD PROCTOR. THE FINAL 2' BELOW FINISHED GRADE SHALL BE 100%.
4. ALL TRENCHING OPERATIONS SHALL MEET OSHA STANDARDS.
5. BACKFILL MATERIAL BENEATH ROADWAY SHALL BE SELECT BACKFILL MATERIAL.

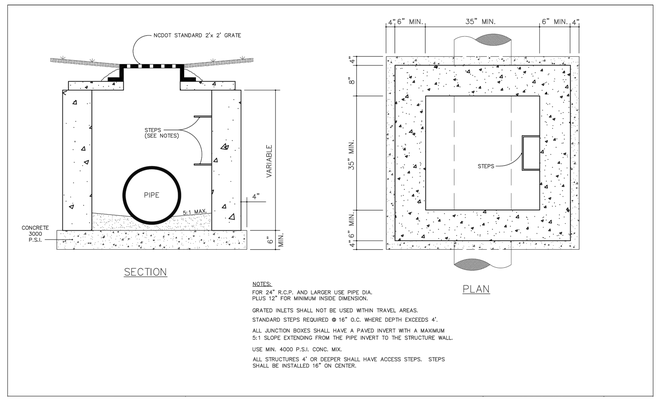


APPROVED DATE: 02/2007

NOT TO SCALE

4 TRENCH DETAIL FOR STORM DRAIN

NOT TO SCALE



NOTES:
FOR 24" R.C.P. AND LARGER USE PIPE DIA. PLUS 12" FOR MINIMUM INSIDE DIMENSION.

GRATED INLETS SHALL NOT BE USED WITHIN TRAVEL AREAS.

STANDARD STEPS REQUIRED @ 16' O.C. WHERE DEPTH EXCEEDS 4'.

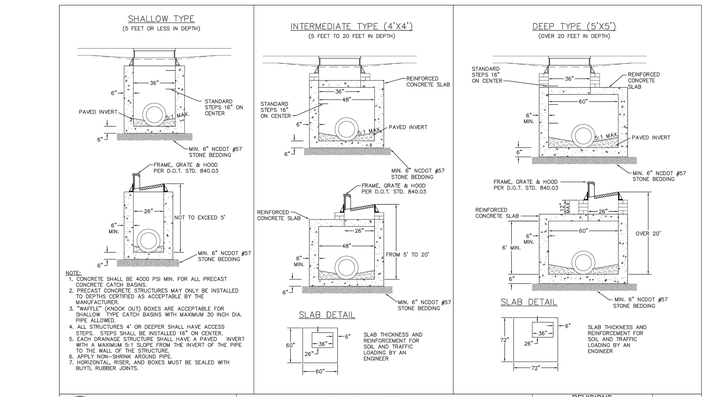
ALL JUNCTION BOXES SHALL HAVE A PAVED INVERT WITH A MAXIMUM 5:1 SLOPE EXTENDING FROM THE PIPE INVERT TO THE STRUCTURE WALL.

USE MIN. 4000 P.S.I. CONC. MIX.

ALL STRUCTURES 4' OR DEEPER SHALL HAVE ACCESS STEPS. STEPS SHALL BE INSTALLED 16" ON CENTER.

5 STANDARD YARD INLET WITH GRATE AND FRAME

NOT TO SCALE



NOTE:
1. CONCRETE SHALL BE 4000 PSI MIN. FOR ALL PRECAST STRUCTURES AND STEPS.
2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
3. "WAFFLE" (KNOCK OUT) BOXES ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS WITH MAXIMUM 30 INCH DIA. PIPE ALLOWED.
4. ALL STRUCTURES 4' OR DEEPER SHALL HAVE ACCESS STEPS. STEPS SHALL BE INSTALLED 16" ON CENTER.
5. EACH DRAINAGE STRUCTURE SHALL HAVE A PAVED INVERT WITH A MAXIMUM 5:1 SLOPE FROM THE INVERT OF THE PIPE TO THE WALL OF THE STRUCTURE.
6. APPLY NON–SHRINK GROUT AROUND PIPE.
7. HORIZONTAL, RISER, AND BOXES MUST BE SEALED WITH BUTYL RUBBER JOINTS.

6 PRECAST CONCRETE CATCH BASIN

NOT TO SCALE

Section 2721

Engineered Surface Drainage Products

GENERAL
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for structure sizes 8", 10", 12", 15", 18", 24", 30" and 36" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

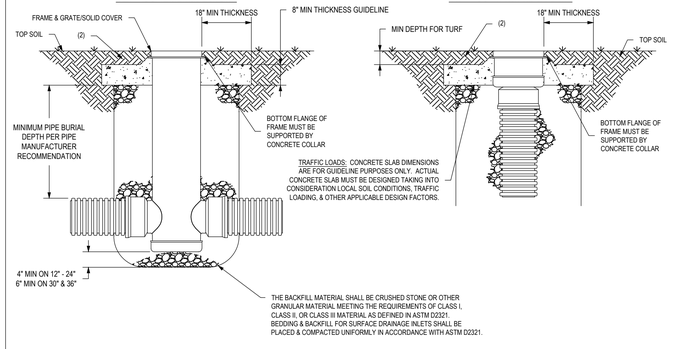
DRAWN BY	CJA	MATERIAL	
DATE	3-10-00		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	02-21-18		
DWG SIZE	A	SCALE 1:1	SHEET 1 OF 1

Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: 8 IN - 36 IN DRAIN BASIN SPECIFICATIONS

DWG NO. 7001-110-011 REV J

NYLOPLAST TURF TRAFFIC INSTALLATION



1. GRATES/SOLID COVERS SHALL MEET H-20 LOAD RATING FOR 30" PEDESTRIAN & 12" - 30" STANDARD & SOLID
2. DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS DO NOT FORM.

DRAWN BY	EBC	MATERIAL	
DATE	01-05-09		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	06-12-18		
DWG SIZE	A	SCALE 1:25	SHEET 1 OF 1

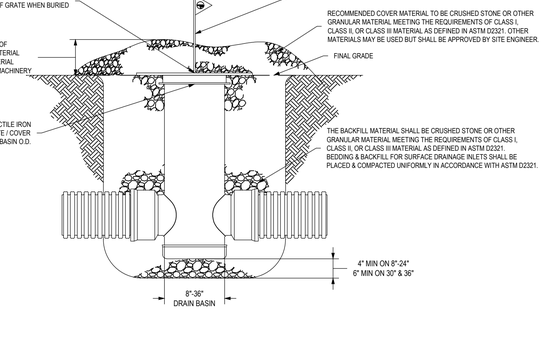
Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: DRAIN BASIN & INLINE DRAIN TURF TRAFFIC INSTALLATION

DWG NO. 7001-110-340 REV G

NYLOPLAST DRAIN BASIN CONSTRUCTION PROTECTION DETAIL - OPTION 1

(BURIED STRUCTURE DETAIL)



1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. IN THE EVENT A BASIN IS DAMAGED DURING CONSTRUCTION, RISER SECTIONS CAN BE USED FOR FIELD REPAIRS.
4 - COVER MATERIAL SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION OR APPROVED BY SITE ENGINEER. MATERIAL SHALL BE ABLE TO SUPPORT VEHICLE TRAFFIC AND SHALL COVER THE STRUCTURE A MINIMUM OF 6".

DRAWN BY	NMH	MATERIAL	
DATE	10-02-18		
APPD BY	NMH	PROJECT NO./NAME	
DATE	10-02-18		
DWG SIZE	A	SCALE 1:20	SHEET 1 OF 1

Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: DRAIN BASIN CONSTRUCTION PROTECTION DETAIL

DWG NO. 7001-110-552 REV A

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

PROFESSIONAL ENGINEER SEAL 24914 MATTHEW C. ROPER 6-9-25

CORPORATE SEAL P–1266 ROPER CIVIL ENGINEERING NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER: **CITY OF CONCORD**
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS

DATE: 06-09-25

SHEET NAME: STORM DETAILS

SHEET NO: C302

CONCORD GENERAL UTILITY NOTES:

1. PER CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98 (2) ALL MATERIALS, EQUIPMENT, LABOR, AND WORKMANSHIP ASSOCIATED WITH PUBLIC WATER AND /OR SEWER EXTENSION AND/OR MODIFICATION SHALL BE IN ACCORDANCE WITH AND SUBJECT TO THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATIONS; THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, AND THE NORTH CAROLINA ADMINISTRATIVE CODE FOR WASTEWATER COLLECTION AND WATER DISTRIBUTION SYSTEMS. IN THE EVENT OF CONFLICT BETWEEN THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATIONS;THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, OR THE NORTH CAROLINA ADMINISTRATIVE CODE, THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY.

2. REVIEW AND APPROVAL OF THE PLANS DOES NOT RELIEVE THE OWNER, CONTRACTOR, OR DEVELOPER FROM MEETING THE REQUIREMENTS OF THE CITY OF CONCORD'S OR CABARRUS COUNTY ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, (AS APPLICABLE), CONCORD WATER & SEWER POLICIES AND TECHNICAL SPECIFICATIONS, THE "STANDARD SPECIFICATION FOR WASTEWATER COLLECTION & WASTE DISTRIBUTION FOR CABARRUS COUNTY (WSACC MANUAL) AND ANY OTHER LOCAL, STATE, AND FEDERAL REGULATIONS & APPROVALS

3 THE CONTRACTOR MUST CONTACT THE CITY OF CONCORD ENGINEERING CONSTRUCTION MANAGER AT 704-920-5425 AT LEAST 24-HOURS PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY.

4. THE EXISTING WATER MAIN VALVE RIMS AND STEMS AND THE EXISTING SEWER MAIN MANHOLES RIMS ARE TO BE RAISED OR LOWERED TO FINAL GRADE, AS APPLICABLE AND AT LEAST 3-FT OF GROUND COVER IS TO BE MAINTAINED OVER THE EXISTING UTILITIES AT ALL TIMES PER THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98.

5. CONCORD CODE OF ORDINANCES CHAPTER 62, ARTICLE II WATER AND SEWER SERVICE, SEC. 62-34(I) - THE CUSTOMER SHALL BE RESPONSIBLE FOR INSTALLING THE NECESSARY APPROVED DEVICE(S) TO MAKE ANY ADJUSTMENTS TO THE WATER PRESSURE SUPPLIED BY CONCORD UTILITIES AND SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL SUCH DEVICES.

6. PER THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98- THE FOLLOWING MINIMUM SEPARATIONS MUST BE INDICATED, UNLESS OTHERWISE APPROVED BY THE CITY:

- A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION AND THE CITY'S WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. GREATER SEPARATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS.
- A MINIMUM VERTICAL SEPARATION OF TWO FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION, INCLUDING BUT NOT LIMITED TO ANY OTHER UTILITY PROVIDER'S LINES OR EQUIPMENT, AND THE CITY WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. IF AN EXCEPTION IS GRANTED, A MINIMUM VERTICAL SEPARATION OF ONE FOOT MUST BE MAINTAINED AND THE CITY WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR AN APPROVED FERROUS MATERIAL WITH JOINTS THAT ARE EQUIVALENT TO POTABLE WATER MAIN STANDARDS FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE POINT OF CROSSING. GREATER SEPARATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL,STATE, OR LOCAL REGULATIONS.
- A MINIMUM HORIZONTAL SEPARATION OF TEN FEET SHALL BE MAINTAINED BETWEEN THE CITY WATER DISTRIBUTION SYSTEM AND WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES,UNLESS AN EXCEPTION IS GRANTED.

UTILITY NOTES:

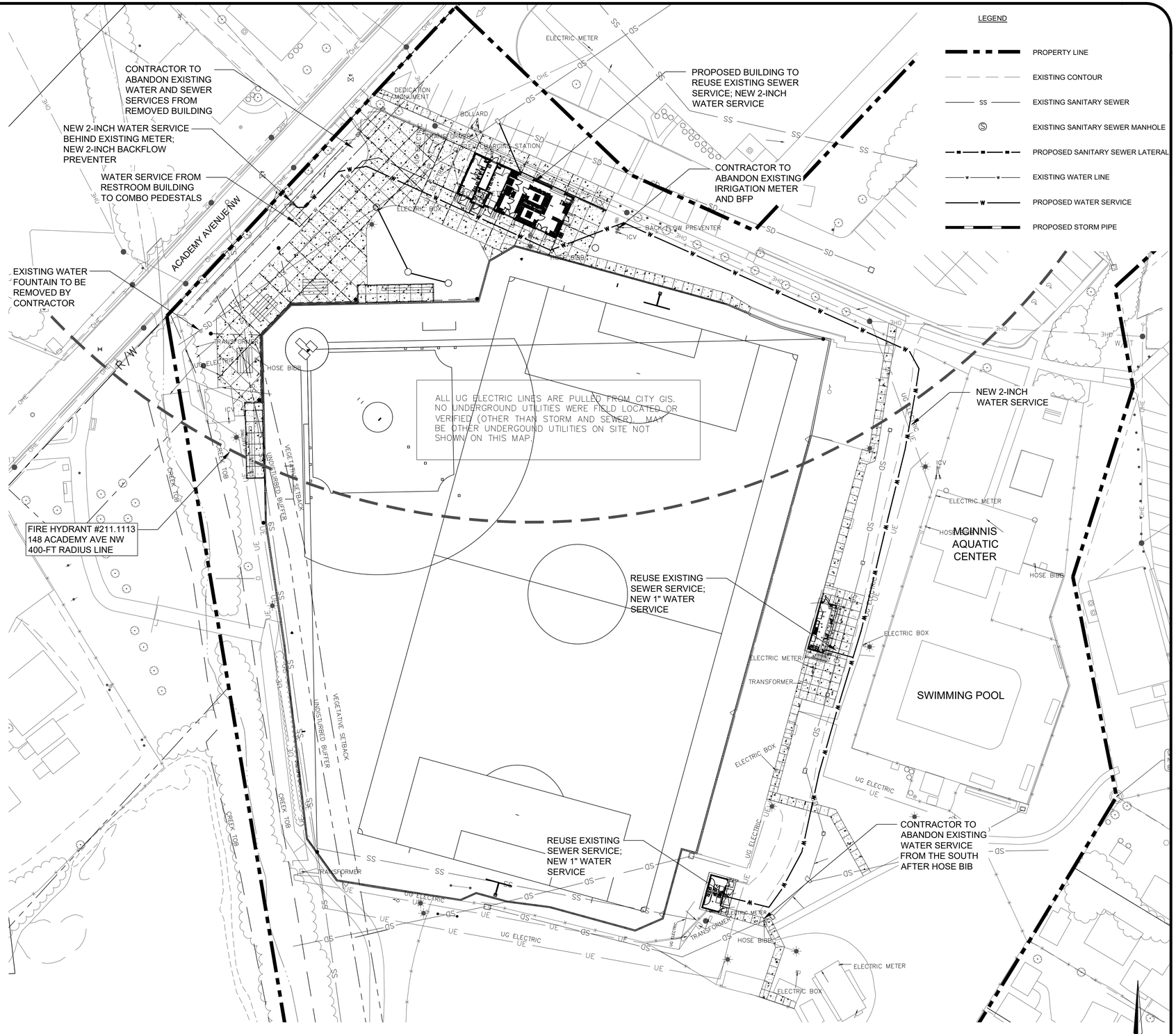
1. SEWER AND WATER SYSTEMS ARE TO BE CONSTRUCTED IN GENERAL ACCORDANCE WITH ALL CITY OF CONCORD AND NCDENR REGULATIONS, REFERENCE SEWER AND WATER STANDARDS AND PROJECT SPECIFICATIONS.
2. ALL APPLICABLE WATER/SEWER IMPACT AND METER FEES MUST BE PAID BEFORE ANY BUILDING PERMITS ARE ISSUED.
3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF LOCATING AND MARKING ALL EXISTING UNDERGROUND UTILITIES.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ANY UTILITY DAMAGED DURING CONSTRUCTION.
5. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPARTMENT CONNECTION POINTS, OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND THE REQUIRED BACKFLOW PREVENTER.
6. ALL WORK PERFORMED ON THE EXISTING SEWER LINE FOR THE INSTALLATION OF SEWER LATERALS SHALL BE COMPETED IN OFF-PEAK HOURS AND IN A MANNER SO AS NOT TO DISRUPT SERVICE TO THE SURROUNDING AREA.
7. A MINIMUM OF 36-INCHES OF GROUND COVER SHALL BE MAINTAINED OVER EXISTING AND PROPOSED UTILITIES AT ALL TIMES PER CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98.
8. EXISTING WATER MAIN VALVE RIMS AND STEMS, AND EXISTING SEWER MANHOLE RIMS ARE TO BE ADJUSTED TO THE FINAL GRADE, AS APPROPRIATE.
9. EACH REQUIRED BACKFLOW PREVENTER ASSEMBLY IS REQUIRED TO BE TESTED BY A CITY OF CONCORD APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.

UTILITY SERVICE NOTES:

1. PROPOSED SERVICES ARE TO BE INSTALLED BY THE DEVELOPER'S CONTRACTOR IN COORDINATION WITH THE DESIGNATED CITY OF CONCORD CONSTRUCTION INSPECTOR.
2. EXISTING SERVICES NOT PROPOSED FOR REUTILIZATION SHALL BE ABANDONED BY THE DEVELOPER'S CONTRACTOR AT THE PUBLIC MAIN AND ANY VOIDS FILLED WITH THE APPLICABLE STRUCTURAL FILL IN COORDINATION WITH THE DESIGNATED CITY OF CONCORD CONSTRUCTION INSPECTOR.

North Carolina 811 www.ncc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED.
CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER
6-9-25

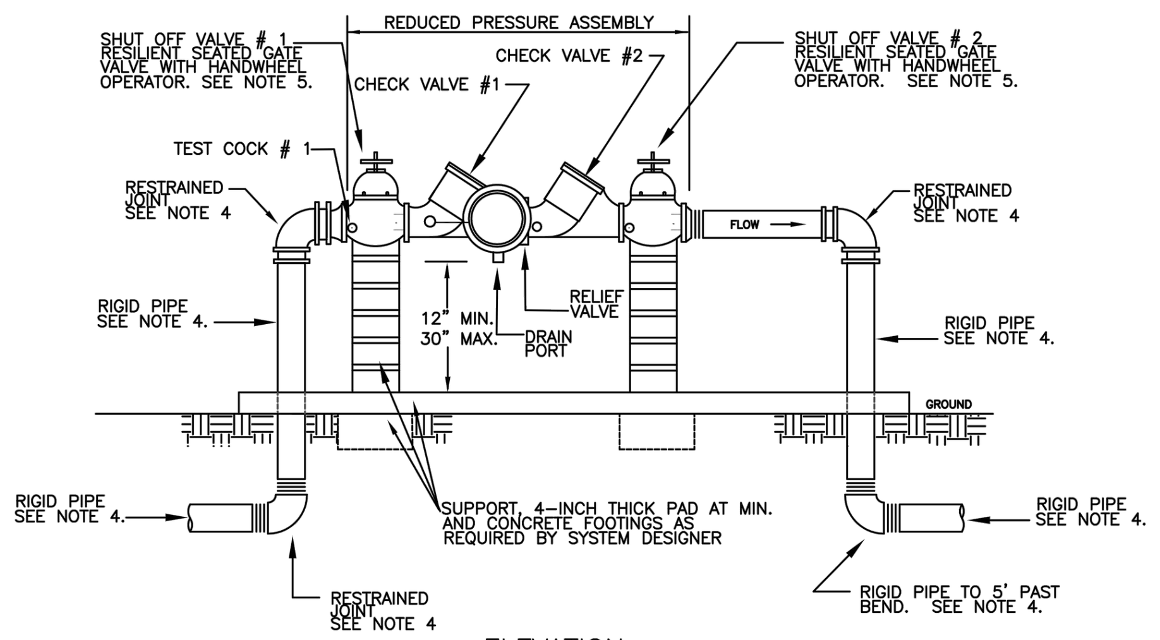
ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

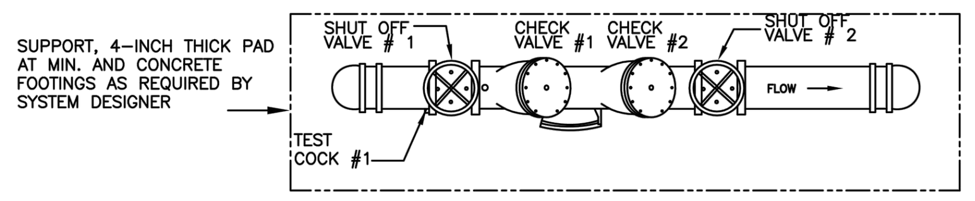
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"
DATE: 06-09-25
SHEET NAME: UTILITY PLAN
SHEET NO: C400

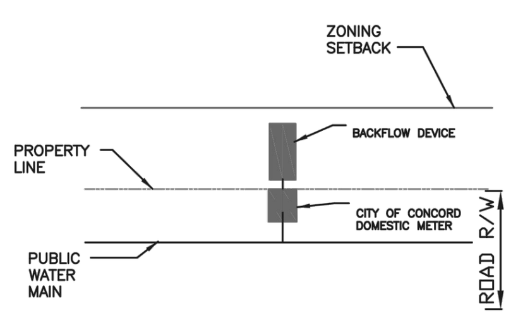


ELEVATION
N.T.S.



PLAN
N.T.S.

NOTES:
1. REDUCED PRESSURE ASEMBLIES (RP) MUST CONFORM TO CITY OF CONCORD SPECIFICATIONS.
2. 6" – 10" RP SHALL BE SUPPORTED WITH ADEQUATE SUPPORT PEDESTAL(S) SUPPORT PEDESTALS(S) SHALL NOT BLOCK RELIEF VALVE OR DRAIN PORT.
3. OUTDOOR INSTALLATION SHALL HAVE A PROTECTIVE ENCLOSURE AS SPECIFIED IN CITY OF CONCORD SPECIFICATIONS. HEATED ENCLOSURES ARE RECOMMENDED FOR THE ABOVE GROUND BACKFLOW ASSEMBLY.
4. 21/2" TO 3" BRASS, K-COPPER OR GALVANIZED PIPE, 4" TO 10" DIP. RESTRAINED JOINTS SHALL BE WITH MEGA LUG RESTRAINTS OR APPROVED EQUAL.
5. THE CITY OF CONCORD APPROVED 21/2" – 10" RP INCLUDES SHUT OFF VALVES #1 AND #2. AS PART OF THE ASSEMBLY. NO SUBSTITUTIONS SHALL BE PERMITTED.
6. TEST COCK #1 SHALL BE UPSTREAM OF SHUT OFF VALVE #1 AND IS PART OF THE APPROVED ASSEMBLY.



TYPICAL LOCATION REQUIREMENT
N.T.S.

CONCORD NORTH CAROLINA
a city meeting the future...

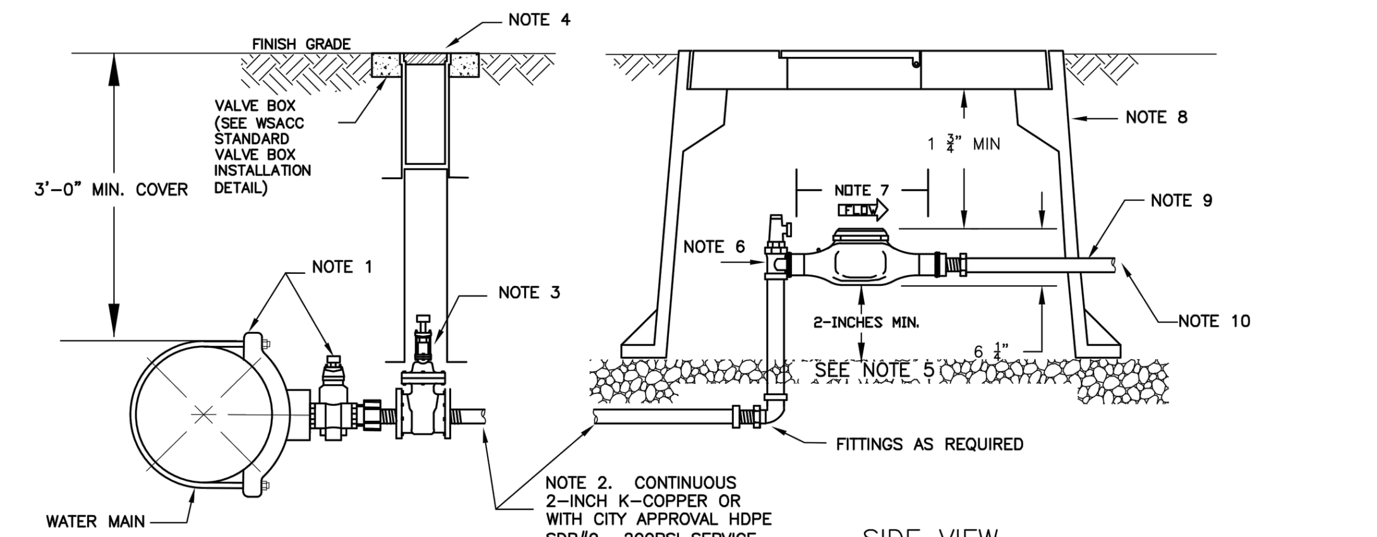
STANDARD DETAIL
BACKFLOW PREVENTION

ABOVE GROUND 2½ INCH TO 10 INCH REDUCED PRESSURE ASSEMBLY (RP) FOR DOMESTIC SERVICES

No.	Date	By	REVISION
3	9-13-07	SM	DOMESTIC DETAIL, PIPE EDITS
2	5-23-07	SM	TYPICAL LOCATION
1	6-13-06	SM	TEXT & LOCATION

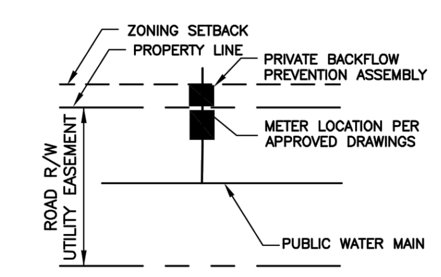
Drawn By:	Checked By:	Approved By:	Date	Sht	of
MP/SVM			11/94	2	15

1 ABOVE GROUND REDUCED PRESSURE ASSEMBLY
NOT TO SCALE



SIDE VIEW
NOT TO SCALE

GENERAL NOTES:
1. 2 – INCH WATER SERVICE SHALL BE INSTALLED BY THE CITY OF CONCORD, IF CONNECTION IS TO BE MADE TO AN EXISTING WATER MAIN, UNLESS SPECIFIED BY THE CITY.
   2-INCH TAPPING SADDLE: 2-INCH TAPPING SADDLES SHALL BE BRASS MANUFACTURED BY FORD "S-70", MUELLER "H-134-20", OR EQUAL. 6-INCH TO 12-INCH TAPPING SADDLE SHALL BE DOUBLE STRAP, STAINLESS STEEL, EPOXY OR NYLON COATED; OR SOLID BRASS MANUFACTURED BY SMITH BLAIR "317" OR ROMAC "202N". CORPORATION STOPS SHALL BE HIGH PRESSURE RATED AT 150 PSI BRASS COMPRESSION FITTING TYPE WITH STANDARD THREADS FOR INSERTION INTO THE TAPPING SADDLE AND WITH SERVICE PIPE CONNECTION INCLUDING COUPLING AND GASKET. CORPORATION STOPS MANUFACTURED BY MUELLER "H-25008", FORD, OR EQUIVALENT.
2. 2-INCH DIAMETER K-COPPER PIPE OR WITH CITY APPROVAL HDPE SDR#9 200PSI RATED WITH TRACING WIRE AND WITH EITHER "FRIALEN" ELECTROFUSION COUPLING FITTINGS "2"IPS-SDR#9" OR 2"IPSX2"IPS BRASS WITH PROTECTIVE SLEEVES BY "INDEPENDENT PIPE PRODUCTS" AND 2" BRONZE 90-DEGREE ELBOWS, AS APPLICABLE.
3. GATE VALVE SHALL BE 2-INCH EPOXY COATED CAST IRON RESILIENT WEDGE FIP TO FIP CONNECTION MANUFACTURE AMERICAN FLOW CONTROL, MODEL "304SS", MUELLER, OR AN APPROVED EQUIVALENT.
4. STANDARD VALVE BOX PROTECTION WITH 2'-0" X 2'-0" CONCRETE PROTECTOR RING, CAST IRON IN ACCORDANCE WITH CITY OF CONCORD DETAILS.
5. 4 TO 6-INCHES OF WASHED STONE IN METER BOX BASE AND FOOTINGS.
6. 2-INCH BRASS METER VALVE FLANGE MANUFACTURED BY FORD "BFA13-777W" OR EQUAL.
7. THE 2-INCH AMP METER WITH 2 BOLTS FLANGED ENDS, MANUFACTURED BY MUELLER SYSTEMS, MODEL: MVR160; OR AN APPROVED EQUIVALENT SHALL BE SET AFTER THE APPURTENANCES REQUIRED FOR THE METER INSTALLATION ARE IN PLACE AND DEEMED ACCEPTABLE BY THE CITY OF CONCORD.
8. METER BOX SHALL BE GLASMASTERS UNDERGROUND ENCLOSURE, 17X30 STRAIGHT WALL -OPEN BOTTOM TIER 8 LOAD RATING BOX TIER WITH TWO MOUSE HOLES; AND SHALL HAVE A MINIMUM 12-INCH HEIGHT AND BE GRAY IN COLOR, MODEL NUMBER S173012S2ON08-1; OR EQUIVALENT. ADDITIONAL BOX HEIGHT MUST BE AUTHORIZED BY THE CITY.
   METER BOX LID SHALL BE GLASMASTERS UNDERGROUND ENCLOSURES, 17X30 COVER WITH SINGLE AMR MOUNTING HOLE, 2 THRU W/4.125 DIA X 0.25 DEPTH COUNTER BORE, WITH TIER 08 LOAD RATING AND GRAY IN COLOR, MODEL NUMBER S1730SN08-1-WA; OR EQUIVALENT. THE METER BOX RIM AND COVER SHALL BE SET FLUSH WITH FINAL GRADE. METER BOX ASSEMBLY SHALL NOT BE LOCATED WITHIN AREAS SUBJECT TO VEHICULAR AND PEDESTRIAN TRAFFIC AND/OR DRAINAGE FEATURES.
9. 12-INCH BRASS NIPPLE PAST BOX
10. REQUIRED BACKFLOW PREVENTION ASSEMBLY IN ACCORDANCE WITH THE CITY OF CONCORD CROSS-CONNECTION CONTROL ORDINANCE.



GENERAL LOCATION REQUIREMENT
N.T.S.
FINAL METER LOCATION TO BE IN COMPLIANCE WITH THE APPROVED DRAWINGS & CITY OF CONCORD ORDINANCE

Concord NORTH CAROLINA High Performance Living

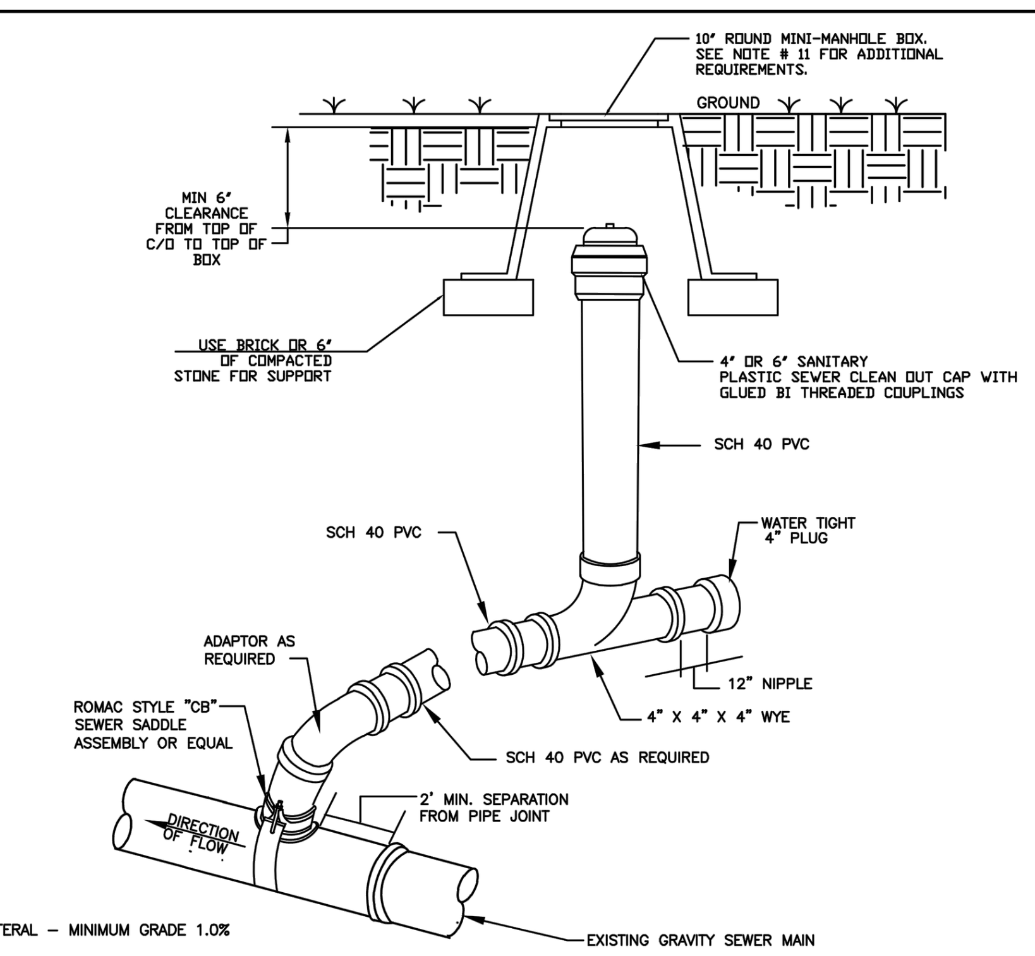
WATER METER
STANDARD DETAIL

2-INCH COMMERCIAL
WATER SERVICE METER

No.	Date	By	REVISION
2.	4/26/17	By	GENERAL NOTE 2 – K-COPPER PIPE MATERIAL
2.	2/25/16	By	GENERAL NOTE 11-SCRIBED "W", SVM
1.	9/7/07	By	CONTINUOUS PIPE & CONNECTION, SVM

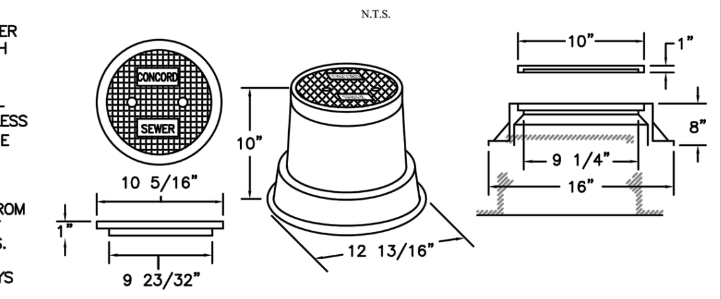
Drawn By:	Checked By:	Approved By:	Date	Sht	of
			9/21		

2 2-INCH COMMERCIAL WATER SERVICE METER
NOT TO SCALE



GENERAL NOTES:
1. 4" AND 6" SEWER LATERAL – MINIMUM GRADE 1.0%
2. THE LATERAL SHALL BE A MINIMUM OF 5' BELOW THE EDGE OF PAVEMENT, EXCEPT WHERE DEPTH OF SEWER MAIN WILL NOT PERMIT.
3. DUCTILE IRON PIPE (DIP) MATERIAL SHALL BE USED WHERE LESS THAN 3' BUT NOT LESS THAN 18" OF COVER IS MAINTAINED OVER THE SEWER LATERAL OR WHERE THE LATERAL HAS 18" OR MORE GROUND COVER OVER THE LATERAL.
5. ALL SCHEDULE 40 PVC LATERALS SHALL BE INSTALLED USING CLASS B BEDDING. DIP SERVICE LATERAL SHALL USE CLASS C BEDDING.
6. A ROMAC STYLE "CB" SEWER SADDLE OR EQUAL WITH STAINLESS STEEL STRAP, BOLTS, NUTS, AND WASHERS SHALL BE INSTALLED ACCORDING TO MANUFACTURES RECOMMENDATION ON EXISTING SEWER MAINS. IMPORTANT: THE STRAP IS TO BE TIGHTENED EVENLY TO ENSURE THE SADDLE REMAINS ON CENTER WITH THE SEWER SERVICE HOLE CUT OUT.
7. THE SEWER SADDLE TAP SHALL BE LOCATED ABOVE THE FLOW LINE OF THE SEWER MAIN SUCH THAT THE BRANCH PIPE AXIS FORMS AN ANGLE OF 30-DEGREES WITH THE HORIZONTAL.
6. WHERE THE DEPTH OF THE WYE BRANCH IS MORE THAN 10', A STANDPIPE SHALL BE INSTALLED TO BRING CONNECTIONS WITHIN 8' OF THE GROUND SURFACE, UNLESS A GREATER DEPTH THAN 8' IS REQUIRED TO PROVIDE THE MINIMUM SLOPE IN THE SERVICE.
7. SEWER LATERAL CLEANOUTS SHALL BE LOCATED AT THE EDGE OF THE RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT. SEWER LATAERALS THAT EXTEND FROM SEWER MAINS LOCATED WITHIN THE ROAD RIGHTS-OF-WAY SHALL BE LOCATED AT THE CENTER OF THE LOT OR AS INDICATED ON THE APPROVED DESIGN DRAWINGS.
8. SEWER LATERAL CLEANOUTS SHALL NOT BE LOCATED WITHIN SIDEWALKS, DRIVEWAYS OR ANY FEATURE CONVEYING OR POOLING STORMWATER.
9. SEWER LATERALS SHOULD TIE TO THE SEWER MAIN, BUT WHEN INDICATED ON THE DRAWINGS, THE SEWER LATERAL CAN BE INSTALLED INTO A MANHOLE. A MAXIMUM OF 3 LATERALS TO A DEADEND MANHOLE AND A MAXIMUM OF 2 LATERALS TO AN IN-LINE MANHOLE.
10. THE SEWER LATERAL MUST NOT EXTEND MORE THAN 6" BEYOND THE MANHOLE WALL AND THE LATERAL INVERT SHALL BE LEVEL WITH THE MANHOLE SHELF AND A CHANNEL SHALL BE BUILT TO PROVIDE SMOOTH FLOW FROM THE LATERAL TO THE MAIN LINE INVERT.
11. THE CLEANOUT SHALL BE HOUSED IN A STANDARD 10" ROUND MINI-MANHOLE. FOR SEWER LATERAL CLEANOUTS LOCATED OUTSIDE OF AREAS SUBJECT TO PEDESTRIAN AND VEHICULAR TRAFFIC, THE MINI-MANHOLE SHALL BE PLASTIC, MANUFACTURED BY DFW PLASTICS, INC OR EQUAL. FOR ALL OTHER LOCATIONS AND/OR AREAS WHERE THE SEWER LATERAL CLEANOUTS WILL BE SUBJECT TO ANY PEDESTRIAN AND VEHICULAR TRAFFIC, THE MINI-MANHOLES SHALL BE H-20 LOAD TRAFFIC RATED ASPHALTIC COATED CAST IRON MANUFACTURED BY EAST JORDAN WORKS, INC. OR EQUAL.
12. A "S" SHALL BE SCRIBED IN THE FACE OF THE CURB ABOVE THE LOCATION OF INSTALLED SEWER LATERAL.

STANDARD SANITARY SEWER CLEANOUT WITH MINI-MANHOLE
N.T.S.



Concord NORTH CAROLINA High Performance Living

CITY OF CONCORD
STANDARD DETAIL
SANITARY SEWER LATERAL INSTALLATION ON EXISTING SEWER MAIN

No.	Date	By	REVISION

Drawn By:	Checked By:	Approved By:	Date	Sht	of
BCC	SVM	MSH	07/21	1	1

3 SANITARY SEWER LATERAL INSTALLATION
NOT TO SCALE

4 RESERVED
NOT TO SCALE

5 RESERVED
NOT TO SCALE

6 RESERVED
NOT TO SCALE

ROPER CIVIL ENGINEERING
3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER
[illegible]
6-9-25

ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME:
UTILITY DETAILS
SHEET NO:
C401

LAYOUT NOTES:

1. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CONCORD, NC, AND STATE OF NORTH CAROLINA STANDARDS.

2. SHOULD ANY DISCREPANCIES BE FOUND IN THE FIELD THE CONTRACTOR SHALL CONTACT THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.

3. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

4. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES.

5. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE THE CONSTRUCTION LIMITS.

6. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UTILITIES MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO BEGINNING

7. ELECTRICAL, TELEPHONE, AND CABLE LINES AND POLES TO BE ELIMINATED OR RELOCATED, SHALL BE COORDINATED WITH CITY OF CONCORD AND ASSOCIATED UTILITY PROVIDERS.

8. DO NOT SCALE DRAWING FOR ACTUAL DIMENSIONS AS IT IS A REPRODUCTION AND IS SUBJECT TO DISTORTION.

9. CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE AND CLEAN MANNER.

10. STAKE LAYOUT PRIOR TO CONSTRUCTION. VERIFY LOCATIONS WITH LANDSCAPE ARCHITECT OR OWNER

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- EXISTING CHAIN LINK FENCE
- CREEK
- OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED NETTING (14' HT.) ABOVE FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED GATE LOCATION
- PROPOSED CONCRETE
- PROPOSED NATIVE GRASS
- PROPOSED GREEN TURF
- PROPOSED BROWN TURF
- PROPOSED SOD

GENERAL INFORMATION:

1.	PROJECT NAME:	ACADEMY COMPLEX RENOVATIONS
2.	OWNER:	CITY OF CONCORD 35 CABARRUS AVE. W CONCORD, NC 28025
3.	SITE ADDRESS:	165 ACADEMY AVE. NW CONCORD, NC 28025
4.	PIN	56206805220000
5.	D/B REFERENCE	10965/0147
6.	PARCEL ACRES	8.447 AC
7.	PROJECT ACRES	3.6 AC
8.	ZONING	O-I
9.	SETBACKS	10' FRONT/STREET
10.	MAX IMPERVIOUS	70%
11.	PROPOSED IMPERVIOUS	23.9%
12.	MAX HEIGHT	35'
13.	NEW RESTROOM/STORAGE BLDG SF	1,582

14. THE PARCEL IS NOT LOCATED IN A FEMA FLOOD ZONE - FEMA MAP NO. 3710562000K DATED NOVEMBER 16, 2018.
15. EXISTING SURVEY AND INFORMATION PROVIDED BY AVIOIMAGE MAPPING SERVICES, INC.

ADJACENT LAND OWNER
CITY OF CONCORD
PIN 5620-58-6555
REAL ID: 12-021-0014.00
DEEP BOOK 14721, Page 227

TIE BACK POST BACK STOP NETTING SYSTEM - 1/D104
DECORATIVE FENCE 155 LF 2/D102
DECORATIVE FENCE SINGLE GATE 4/D102
ACADEMY AVE NW
WOODED AREA TO REMAIN
CONTRACTOR TO RELOCATE ANY ELECTRICAL POWER THAT INTERFERES WITH BACKSTOP AND NET POST FOOTERS
HEAVY DUTY CONCRETE SIDEWALK 7/D100
POWER PEDESTAL SEE ELEC.
TIE BACK POST BACK STOP NETTING SYSTEM 1/D104
BRICK COLUMNS AND DECORATIVE FENCE 16' DOUBLE WIDE GATE 1,2,4/D102
WEBB PRESS BOX SEE A1.5
5 ROW BLEACHERS TYP. OWNER PROVIDES
SINGLE GATE 3/D101
DUGOUTS 2/D103
FENCE IN CURB 5/D101
CONCRETE SIDEWALK 5/D100
POWER PEDESTAL SEE ELEC.
BACKSTOP WALL 8/D104
EXPANSION JOINT TYP.
SPORTS NETTING (75 LF) 4/D101 FROM BACKSTOP POLE TO DEFLECTION ANGLE IN CURB.
TURF NAILER ATTACHED TO DUGOUT SLAB AND BACKSTOP WALL
SINGLE GATE 3/D101
DECORATIVE FENCE 50 LF 2/D102
HOME PLATE 2/D105
HOME PLATE AREA 2/D106
CHAIN LINK FENCE 1/D101 (160 LF)
TERMINAL POST BACK STOP NETTING SYSTEM - 1/D104
PITCHING MOUND 4/D105
HEAVY DUTY CONCRETE SIDEWALK 7/D100 (CONCOURSE AREA)
PITCHING MOUND TICK MARKS: 43' - 0" 46' - 0" 50' - 0" 60' - 6"
DUGOUTS 2/D103
STORAGE/RESTROOM BUILDING (SEE ARCH. DRAWINGS)
BASEBALL INFIELD 1/D106
FOUL POLE 4/D105 (303 LF to HP)
END POINT FOR 20' HT SPORTSNETTING ABOVE 6' HT FENCE
NEW RESTROOM SEE A1.0
ZOYSIA ZENNETH SOD AREA
EXPANSION JOINT AROUND BLDG
BULLPEN INLAY
TERMINAL POST BACK STOP NETTING SYSTEM 1/D104 TIED TO TOP OF FENCE
PROVIDE FULL SIZE FOOTBALL TIC MARKS (GRAY) AT EACH 10 YARD LINE INTERVAL (PAINTED BY OWNER)
SOCCER FIELD 4/D108
BASE, TYP. 1/D105
SINGLE GATE 3/D101
DOUBLE GATE 16' WIDE 2/D101
U10 SOCCER FIELD 4/D109
BULLPEN INLAY
FLAG POLE 5/D102
DOUBLE GATE 16' WIDE 2/D101
FENCE IN CURB 6/D101
BEGINNING POINT OF STANDARD CONCRETE SIDEWALK EAST TO FOUL POUL
SCOREBOARD TO BE RELOCATED
FOUR COLOR LOGO RED, WHITE, BLACK AND GRAY
FENCE IN CURB 5/D101
DOUBLE GATE 16' WIDE 2/D101 CONNECT TO BLDG AND EX. CLF
EX. CHAIN LINK FENCE TO REMAIN
FIELD GOAL POST 1/D107
FIELD GOAL POST 1/D107
FENCE IN CURB 6/D101
SINGLE GATE 3/D101
EX. CHAIN LINK FENCE TO REMAIN
PLANT HILLSIDE WITH A NO MOW NATIVE GRASS SEED MIX ERNST SEED MIX (ERNMX-310) OR APPROVED EQUAL (15 LBS REQUIRED)
SINGLE GATE 3/D101
CF FINISH POINT 18" FENCE IN CURB 412 LF (6/D101)
FENCE IN CURB 5/D101
SINGLE GATE 3/D101
SINGLE GATE 3/D101
RENOVATED RESTROOM BUILDING SEE A1.4
RENOVATED CONCESSION/ PRESS BOX BUILDING SEE A1.2
FENCE POSTS ON WALL TO REMAIN, NEW BLACK PVC FABRIC AND PAINT EX. POSTS BLACK
FOUL POLE 4/D105 (315 LF to HP)
SIDEWALK CONNECTION TO EXISTING BLEACHERS 5/D100
McALISTER PRESS BOX SEE A1.4
SIDEWALK 5/D100
EX. GRAVEL ROAD TO REMAIN
GRAPHIC SCALE
1 inch = 20 ft.

North Carolina 811 www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

FITFIELDS
314 TOM HALL ST.
FORT MILL, SC
803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID R. BOOK

NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
3.21.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 20'-0"
DATE: 06-09-25
SHEET NAME: LAYOUT PLAN
SHEET NO: L100

LAYOUT NOTES:

1. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CONCORD, NC, AND STATE OF NORTH CAROLINA STANDARDS.

2. SHOULD ANY DISCREPANCIES BE FOUND IN THE FIELD THE CONTRACTOR SHALL CONTACT THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.

3. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

4. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES.

5. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE THE CONSTRUCTION LIMITS.

6. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UTILITIES MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO BEGINNING

7. ELECTRICAL, TELEPHONE, AND CABLE LINES AND POLES TO BE ELIMINATED OR RELOCATED, SHALL BE COORDINATED WITH CITY OF CONCORD AND ASSOCIATED UTILITY PROVIDERS.

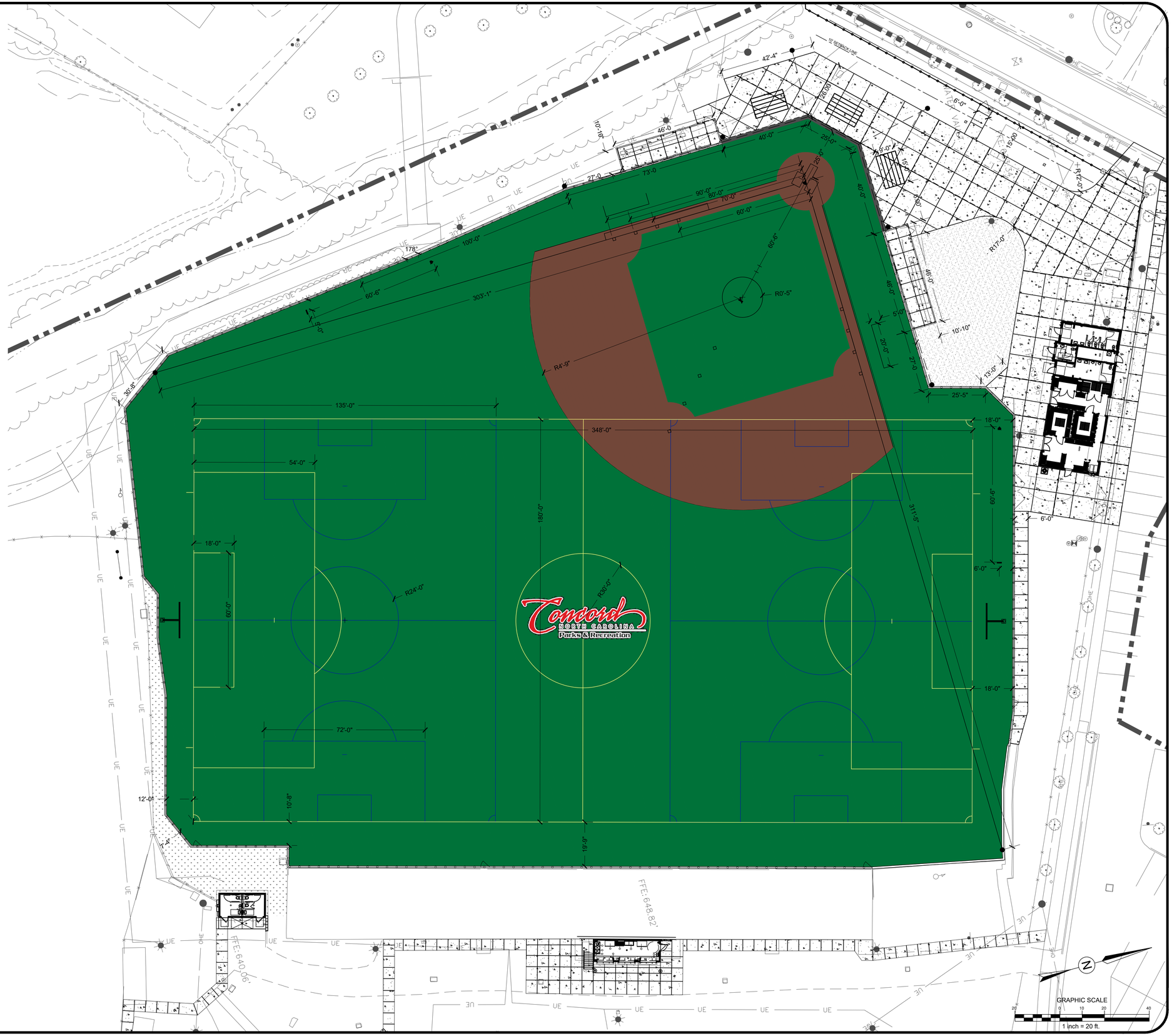
8. DO NOT SCALE DRAWING FOR ACTUAL DIMENSIONS AS IT IS A REPRODUCTION AND IS SUBJECT TO DISTORTION.

9. CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE AND CLEAN MANNER.

10. STAKE LAYOUT PRIOR TO CONSTRUCTION. VERIFY LOCATIONS WITH LANDSCAPE ARCHITECT OR OWNER

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- EXISTING CHAIN LINK FENCE
- CREEK
- OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED NETTING (14' HT.) ABOVE FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED GATE LOCATION
- PROPOSED CONCRETE
- PROPOSED NATIVE GRASS
- PROPOSED GREEN TURF
- PROPOSED BROWN TURF
- PROPOSED SOD



North Carolina 811
www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

FITFIELDS
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FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BOOTH

NORTH CAROLINA BOARD OF LANDSCAPE ARCHITECTURAL EXAMINERS FITFIELDS, PLLC COA# 389 CERTIFICATE OF AUTHORIZATION

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 20'-0"
DATE: 06-09-25
SHEET NAME: DIMENSION & STRIPING PLAN
SHEET NO: L101

LAYOUT NOTES:

1. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CONCORD, NC, AND STATE OF NORTH CAROLINA STANDARDS.

2. SHOULD ANY DISCREPANCIES BE FOUND IN THE FIELD THE CONTRACTOR SHALL CONTACT THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO PROCEEDING.

3. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

4. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REGULATORY AUTHORITIES.

5. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL INSIDE OR OUTSIDE THE CONSTRUCTION LIMITS.

6. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UTILITIES MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO BEGINNING

7. ELECTRICAL, TELEPHONE, AND CABLE LINES AND POLES TO BE ELIMINATED OR RELOCATED, SHALL BE COORDINATED WITH CITY OF CONCORD AND ASSOCIATED UTILITY PROVIDERS.

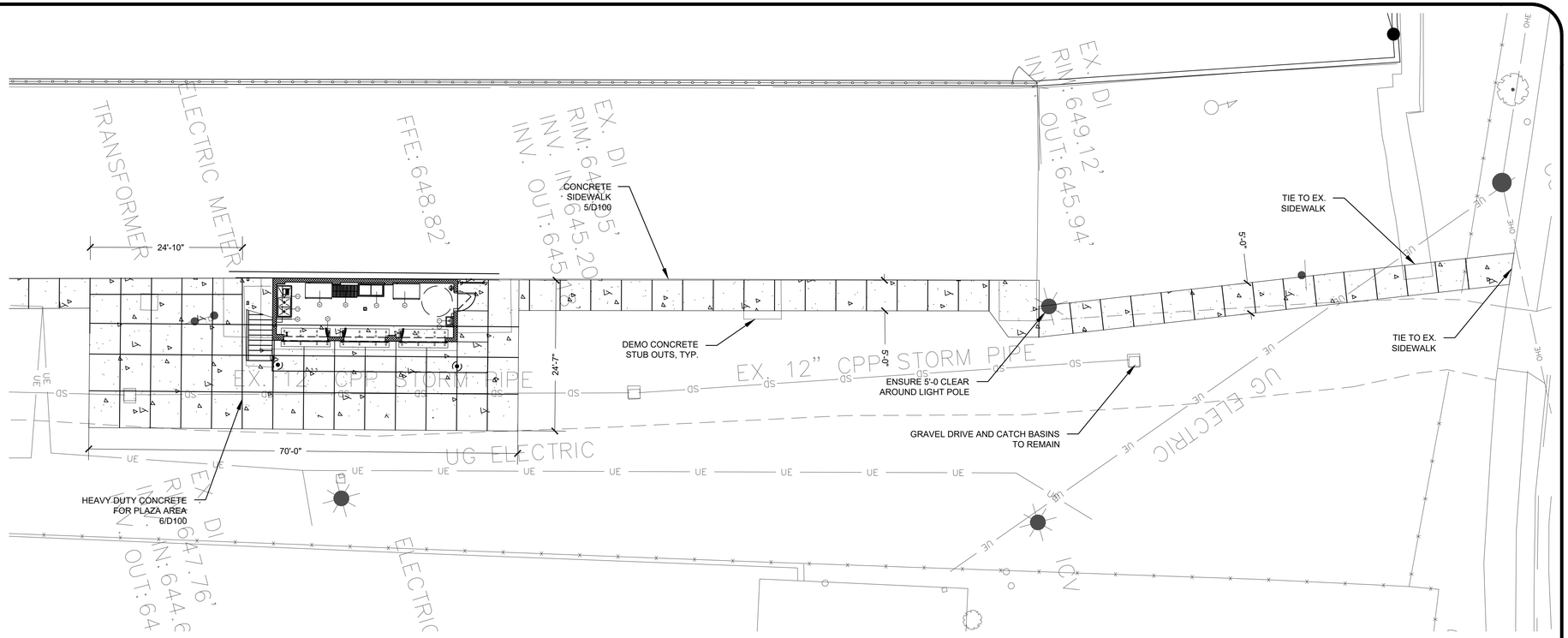
8. DO NOT SCALE DRAWING FOR ACTUAL DIMENSIONS AS IT IS A REPRODUCTION AND IS SUBJECT TO DISTORTION.

9. CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE AND CLEAN MANNER.

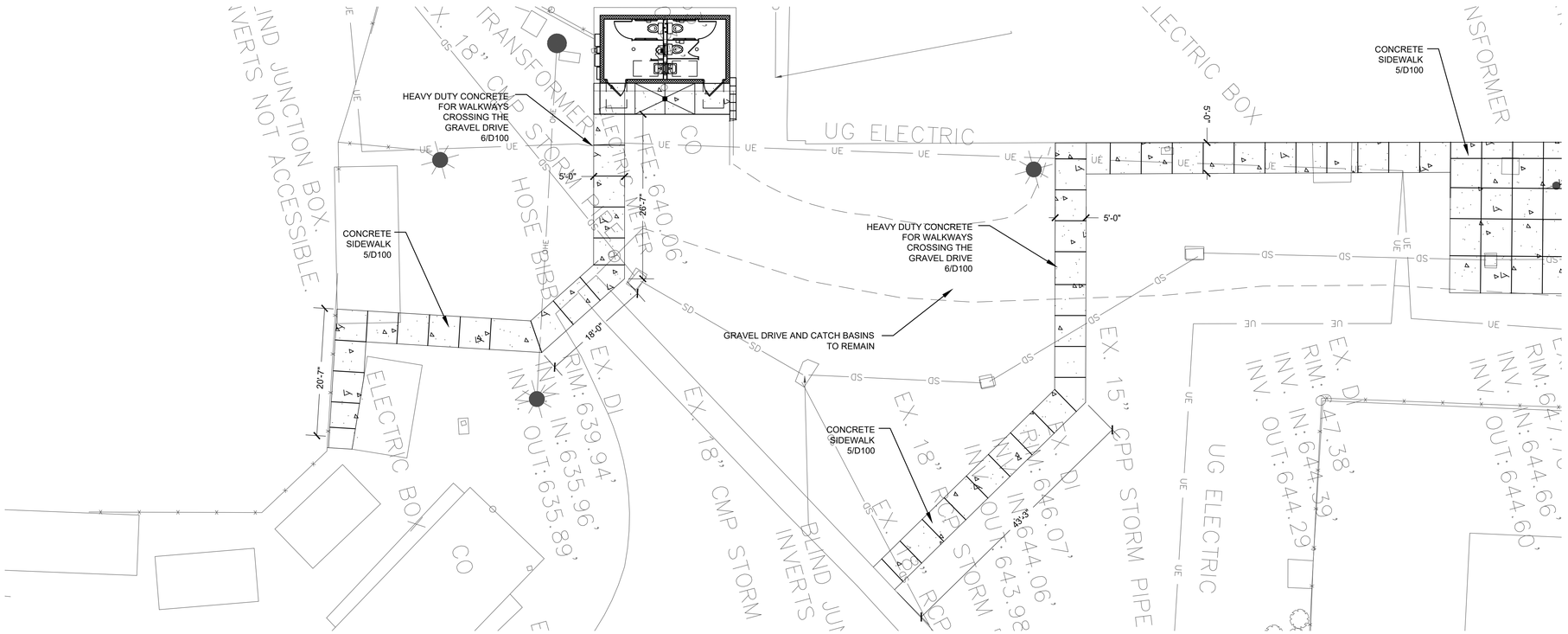
10. STAKE LAYOUT PRIOR TO CONSTRUCTION. VERIFY LOCATIONS WITH LANDSCAPE ARCHITECT OR OWNER

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- EXISTING CHAIN LINK FENCE
- CREEK
- OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED NETTING (14' HT.) ABOVE FENCE (6' HT.) (NOT TO SCALE-ILLUSTRATIVE PURPOSES ONLY)
- PROPOSED GATE LOCATION
- PROPOSED CONCRETE



PRESS BOX LAYOUT PLAN A



PRESS BOX LAYOUT PLAN B

GRAPHIC SCALE
10 0 5 10 20
1 inch =10 ft.

North Carolina 811 www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID R. BOOK

NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 10'-0"
DATE: 06-09-25
SHEET NAME: LAYOUT PLAN PRESS BOX
SHEET NO: L102

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL CALL NC 811 BEFORE DIGGING. SEE NC811.ORG FOR DETAILED INSTRUCTIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE UNTIL PROJECT COMPLETION AND FINAL STABILIZATION.

3. ALL CONTRACTORS TO HAVE APPROPRIATE LICENSES FOR WORK AT HAND.

4. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO CONSTRUCTION.

5. ALL CONTOURS AND SPOT ELEVATIONS TO REFLECT FINISHED GRADE.

6. CONTRACTOR TO VERIFY POSITIVE DRAINAGE ON ALL HARDSCAPE, SUBBASE, SYNTHETIC TURF FIELD AND SURROUNDING NATURAL GRASS AREAS. PONDING AREAS WILL NOT BE ACCEPTED.

7. SURVEY BENCHMARK TO BE VERIFIED BEFORE GRADING BEGINS.

8. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL PIPE STRUCTURES, CONNECTIONS AND CLEAN OUTS FOR APPROVAL.

9. CONTRACTOR AND SUB CONTRACTORS SHALL ADHERE TO ALL COUNTY RULES AND REGULATIONS

10. ALL GRADES SHALL MATCH SMOOTHLY AND CONSISTENTLY TO EXISTING GRADES OUTSIDE OF CONSTRUCTION LIMITS.

11. CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE JOB SITE AT ALL TIMES.

12. FINISHED GRADES IS TOP OF INFILL.

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- (645.00) PROPOSED 1' CONTOUR
- 645 EXISTING .5' CONTOUR
- 645.25 PROPOSED SPOT ELEVATION
- SLOPE SLOPE DIRECTION
- EOP (EDGE-OF-PAVEMENT)
- CHAIN LINK FENCE
- CREEK
- OHE OHE OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED CONCRETE
- TC TOP OF CURB
- BC BOTTOM OF CURVE

TIE TO GRADE
633.00
633.00 BW CONC. 633.30
633.20
633.10
633.20
BW CONC. 633.30
633.00
BW TURF 633.60
633.80
TOP OF BACK STOP WALL 635.90
BW CONC. 633.60
633.50
633.50
TOP OF BACK STOP WALL 635.90
TC 632.50
TOP OF INFILL 632.40
BC GRASS 632.00
633.80
633.80
634.00
633.90
634.10
633.80
635.20
635.30
SEE SHEET G101 FOR GRADING ENLARGEMENT
TOP OF INFILL 631.90
TC 632.00
BC GRASS 631.20
TOP OF INFILL 631.90
TC 632.00
BC GRASS 631.20
SLOPE
SLOPE
SLOPE
TOP OF INFILL 632.50
TC 633.10
TC 633.10
TOP OF INFILL 632.50
632.50
633.68
635.25
635.30
TC 633.70
TOP OF INFILL 633.00
SLOPE
SLOPE
TC 634.20
TOP OF INFILL 633.20
TC 634.20
TOP OF INFILL 633.20
635.30
633.00
633.00
633.00
633.00
633.50
634.00
MEET EX. GRADE
SLOPE
SLOPE
SLOPE
648.00
648.20
GRAPHIC SCALE
20 0 10 20 40
1 inch = 20 ft.

North Carolina 811 www.nc811.org

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FITFIELDS
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FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BRAY

NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 20'-0"
DATE: 06-09-25
SHEET NAME: GRADING PLAN
SHEET NO: G100

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL CALL NC 811 BEFORE DIGGING. SEE NC811.ORG FOR DETAILED INSTRUCTIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE UNTIL PROJECT COMPLETION AND FINAL STABILIZATION.

3. ALL CONTRACTORS TO HAVE APPROPRIATE LICENSES FOR WORK AT HAND.

4. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO CONSTRUCTION.

5. ALL CONTOURS AND SPOT ELEVATIONS TO REFLECT FINISHED GRADE.

6. CONTRACTOR TO VERIFY POSITIVE DRAINAGE ON ALL HARDSCAPE, SUBBASE, SYNTHETIC TURF FIELD AND SURROUNDING NATURAL GRASS AREAS. PONDING AREAS WILL NOT BE ACCEPTED.

7. SURVEY BENCHMARK TO BE VERIFIED BEFORE GRADING BEGINS.

8. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL PIPE STRUCTURES, CONNECTIONS AND CLEAN OUTS FOR APPROVAL.

9. CONTRACTOR AND SUB CONTRACTORS SHALL ADHERE TO ALL COUNTY RULES AND REGULATIONS

10. ALL GRADES SHALL MATCH SMOOTHLY AND CONSISTENTLY TO EXISTING GRADES OUTSIDE OF CONSTRUCTION LIMITS.

11. CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE JOB SITE AT ALL TIMES.

12. FINISHED GRADES IS TOP OF INFILL.

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- (645.00) PROPOSED 1' CONTOUR
- 645 EXISTING .5' CONTOUR
- 645.25 PROPOSED SPOT ELEVATION
- SLOPE SLOPE DIRECTION
- EOP (EDGE-OF-PAVEMENT)
- CHAIN LINK FENCE
- CREEK
- OHE OHE OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED CONCRETE
- TC TOP OF CURB
- BC BOTTOM OF CURVE

BW CONC. 633.30

633.30

633.00

BW TURF 633.60

633.80

BW CONC 633.60

633.50

TOP OF BACK STOP WALL 635.90

633.80

634.00

633.80

633.90

634.10

635.20

635.30

635.30

635.20

18" ROUND NYLOPLAST CATCH BASIN W/ DUCTILE PED. GRATE. RIM 634.50

18" ROUND NYLOPLAST CATCH BASIN W/ DUCTILE PED. GRATE. RIM 633.50

18" ROUND NYLOPLAST CATCH BASIN W/ DUCTILE PED. GRATE. RIM 633.70

18" ROUND NYLOPLAST CATCH BASIN W/ DUCTILE GRATE. RIM 634.70

FIELD TIE TRENCH DRAIN PIPE INTO EX. CATCH BASIN

TRENCH DRAIN 8/D100 FLUSH WITH FFE 635.50 TO PROTECT BLDG FROM PARKING LOT FLOWS - 57 LF

NEW SIDEWALK FORMED TO RETAIN EX. VALLEY GUTTER FLOW

SYNTHETIC TURF CURB TO BE FLUSH WITH CONCRETE SIDEWALK EXPANSION JOINT TO BE PROVIDED BEHIND THE CURB

SIDEWALK TO DRAIN AWAY FROM FIELD

FFE 635.50

635.50 635.50 635.50 635.50 635.50 635.50 635.50 635.30 635.25 635.10 635.30 635.80

(634) (634) (635) (635) (635) (636) (634)

EX. SEWER MH RIM: 635.70' IN: 633.02' IN: 633.04' OUT: 632.90' PIPE DIRECTIONS

FFE: 642.85'

North Carolina 811 www.nc811.org

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GRAPHIC SCALE
20 0 10 20 40
1 inch = 10 ft.

FITFIELDS
314 TOM HALL ST.
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803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BRASH

NORTH CAROLINA FITFIELDS, PLLC COA# 389 CERTIFICATE OF AUTHORIZATION

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 10'-0"
DATE: 06-09-25
SHEET NAME: ENLARGEMENT GRADING & DRAINAGE PLAN
SHEET NO: G101

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL CALL NC 811 BEFORE DIGGING. SEE NC811.ORG FOR DETAILED INSTRUCTIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE UNTIL PROJECT COMPLETION AND FINAL STABILIZATION.

3. ALL CONTRACTORS TO HAVE APPROPRIATE LICENSES FOR WORK AT HAND.

4. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO CONSTRUCTION.

5. ALL CONTOURS AND SPOT ELEVATIONS TO REFLECT FINISHED GRADE.

6. CONTRACTOR TO VERIFY POSITIVE DRAINAGE ON ALL HARDSCAPE, SUBBASE, SYNTHETIC TURF FIELD AND SURROUNDING NATURAL GRASS AREAS. PONDING AREAS WILL NOT BE ACCEPTED.

7. SURVEY BENCHMARK TO BE VERIFIED BEFORE GRADING BEGINS.

8. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL PIPE STRUCTURES, CONNECTIONS AND CLEAN OUTS FOR APPROVAL.

9. CONTRACTOR AND SUB CONTRACTORS SHALL ADHERE TO ALL COUNTY RULES AND REGULATIONS

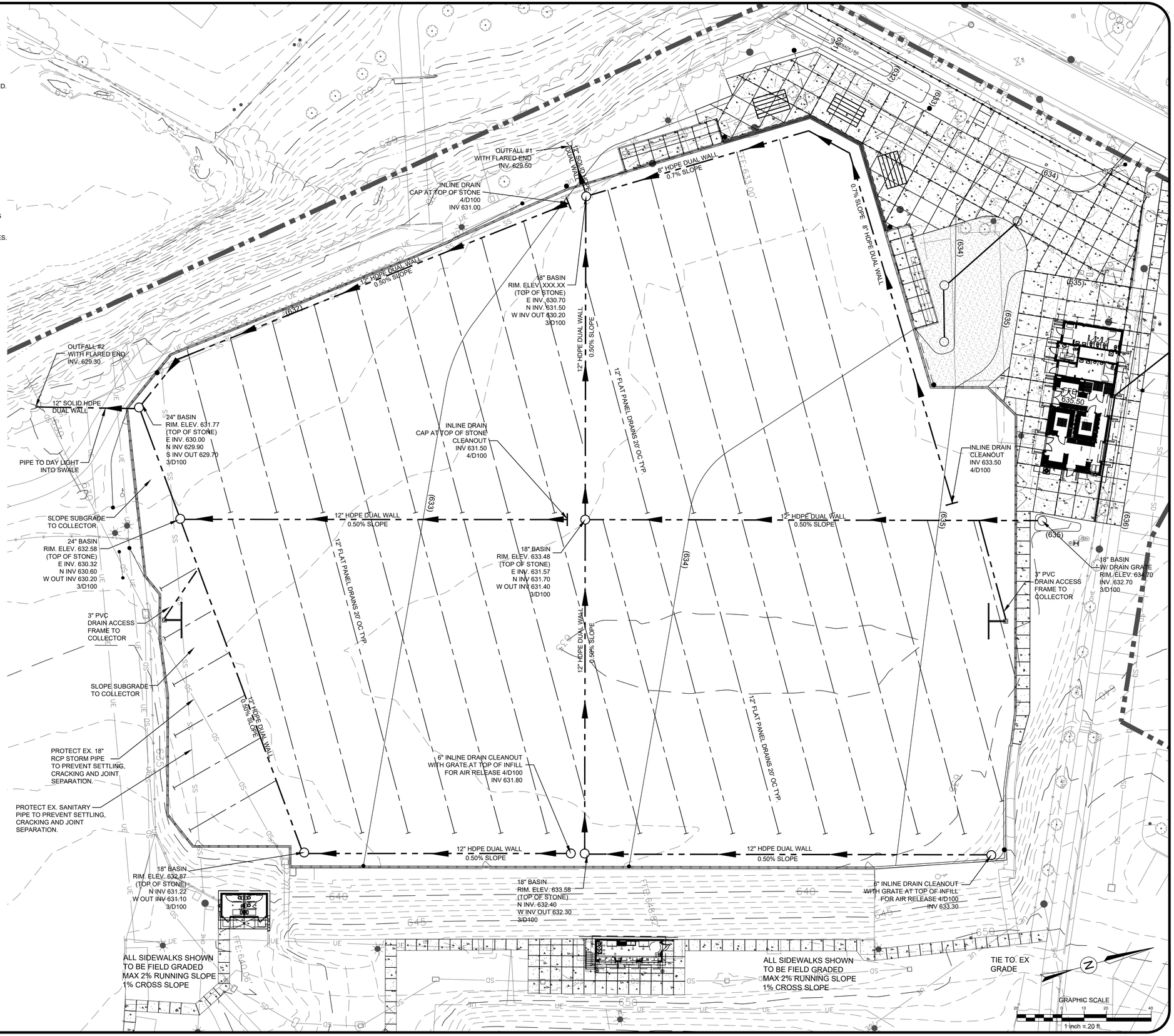
10. ALL GRADES SHALL MATCH SMOOTHLY AND CONSISTENTLY TO EXISTING GRADES OUTSIDE OF CONSTRUCTION LIMITS.

11. CONTRACTOR SHALL MAINTAIN A CLEAN AND SAFE JOB SITE AT ALL TIMES.

12. FINISHED GRADE IS TOP OF INFILL..

LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- (645.00) PROPOSED 1' CONTOUR
- 645 EXISTING .5' CONTOUR
- EOP (EDGE-OF-PAVEMENT)
- CHAIN LINK FENCE
- PROPOSED UNDERFIELD DRAINAGE-50MM LATERALS
- PROPOSED DRAIN BASIN/CLEANOUT
- PROPOSED FIELD COLLECTOR
- CREEK
- OHE OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED CONCRETE



North Carolina 811
www.nc811.org

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FORT MILL, SC
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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BRAY

NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 20'-0"

DATE: 06-09-25

SHEET NAME:
SPORT FIELD
DRAINAGE PLAN

SHEET NO:
G102

GRADING AND DRAINAGE NOTES

1. CONTRACTOR SHALL CALL NC 811 BEFORE DIGGING. SEE NC811.ORG FOR DETAILED INSTRUCTIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE UNTIL PROJECT COMPLETION AND FINAL STABILIZATION.

3. ALL CONTRACTORS TO HAVE APPROPRIATE LICENSES FOR WORK AT HAND.

4. CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO CONSTRUCTION.

5. ALL CONTOURS AND SPOT ELEVATIONS TO REFLECT FINISHED GRADE.

6. CONTRACTOR TO VERIFY POSITIVE DRAINAGE ON ALL HARDSCAPE, SUBBASE, SYNTHETIC TURF FIELD AND SURROUNDING NATURAL GRASS AREAS. PONDING AREAS WILL NOT BE ACCEPTED.

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8. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL PIPE STRUCTURES, CONNECTIONS AND CLEAN OUTS FOR APPROVAL.

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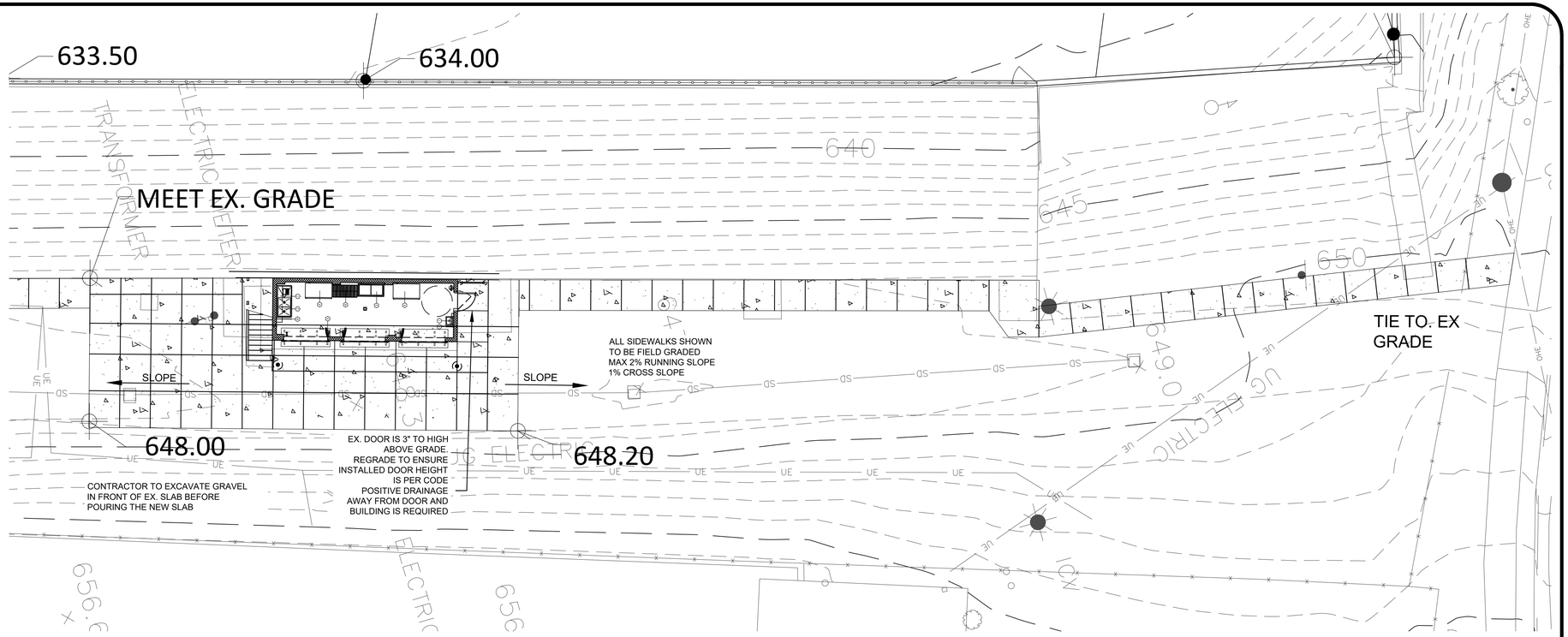
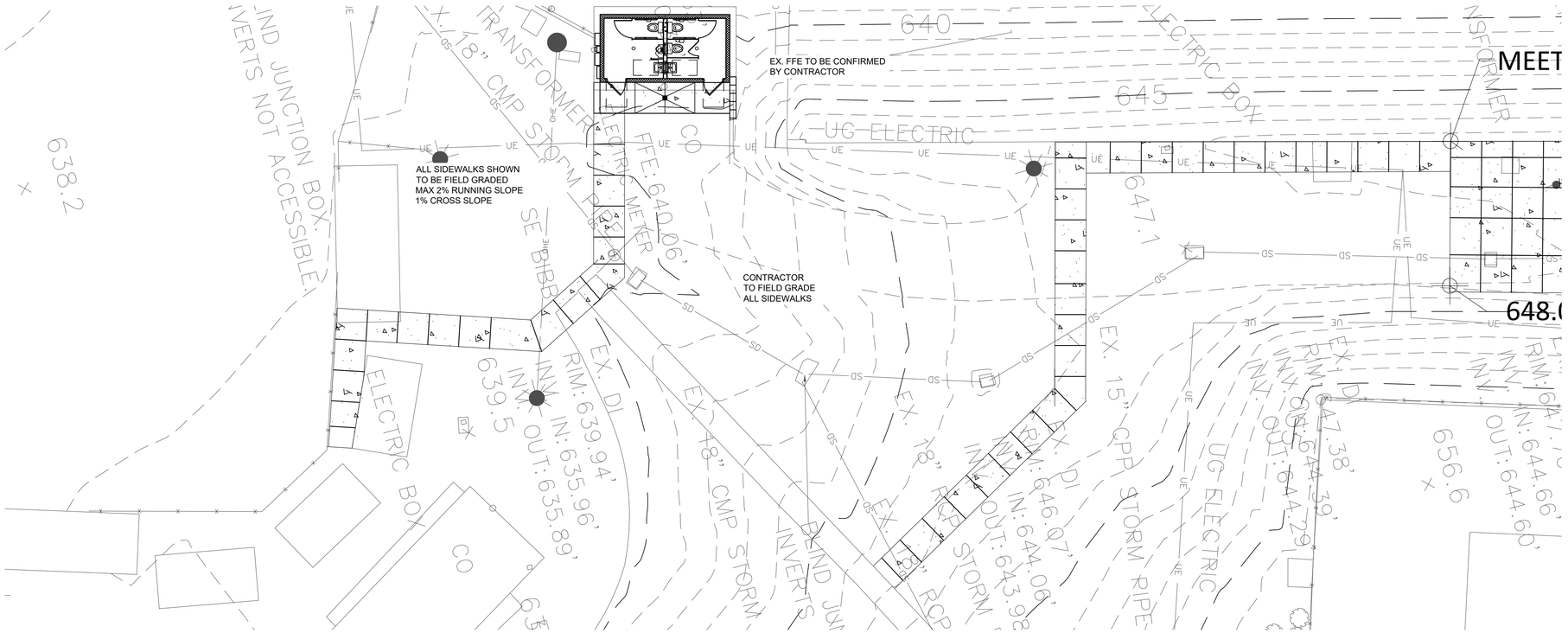
LEGEND

- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- (645.00) PROPOSED 1' CONTOUR
- 645 EXISTING .5' CONTOUR
- 645.25 PROPOSED SPOT ELEVATION
- EOP (EDGE-OF-PAVEMENT)
- CHAIN LINK FENCE
- CREEK
- OHE OVERHEAD ELECTRIC
- TREES
- SHRUBS
- PROPOSED CONCRETE



PRESS BOX GRADING PLAN A



PRESS BOX GRADING PLAN B

GRAPHIC SCALE
10 0 5 10 20
1 inch = 10 ft.

North Carolina 811 www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

FITFIELDS
314 TOM HALL ST.
FORT MILL, SC
803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. FITZ

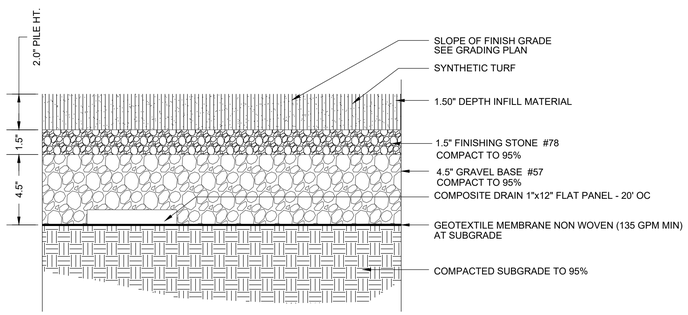
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W.
CONCORD, NORTH CAROLINA

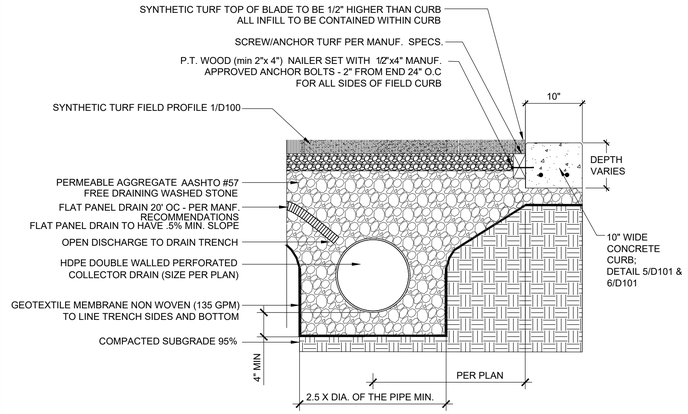
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 10'-0"
DATE: 06-09-25
SHEET NAME: GRADING PLAN PRESS BOX AREA
SHEET NO: G103



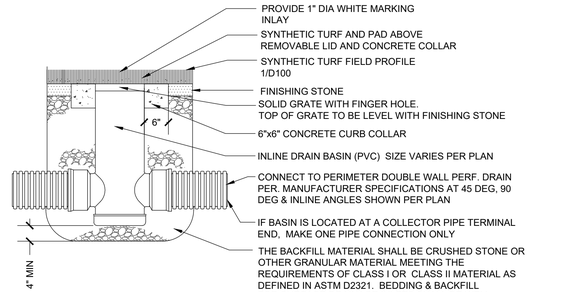
1 SYNTHETIC TURF FIELD PROFILE

NOT TO SCALE



2 SYNTHETIC TURF PERIMETER DRAIN

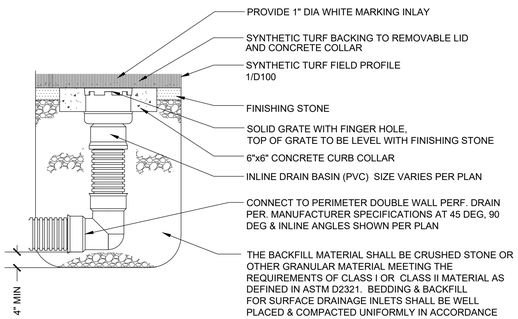
NOT TO SCALE



NOTE:
1. SHOP DRAWINGS ARE REQUIRED FOR ALL BASIN CONNECTIONS

3 SYNTHETIC TURF DRAIN BASIN

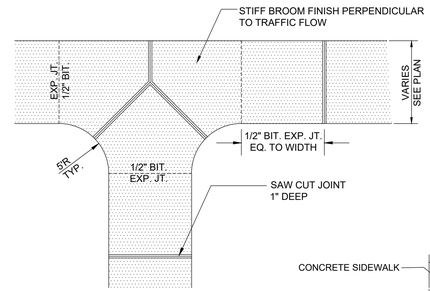
NOT TO SCALE



NOTE:
1. SHOP DRAWINGS ARE REQUIRED FOR ALL BASIN CONNECTIONS

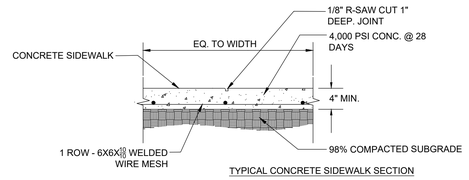
4 SYNTHETIC TURF INLINE DRAIN CLEANOUT

NOT TO SCALE



TYPICAL SCORING PATTERN AT INTERSECTIONS

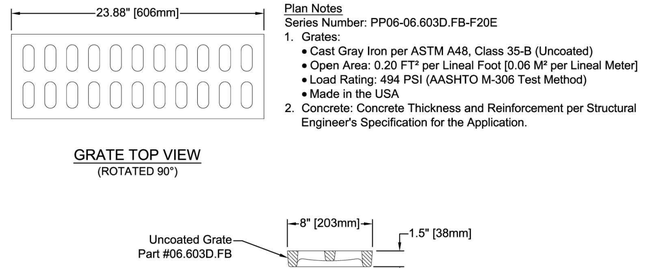
NOTES:
1. PROVIDE 1/2" BIT. EXPANSION JOINTS @ 40' MAXIMUM AND WHEN CONCRETE ABUTS A RIGID SURFACE.
2. SIDEWALK CROSS SLOPE NOT TO EXCEED 1/4" PER FOOT.



TYPICAL CONCRETE SIDEWALK SECTION

5 CONCRETE SIDEWALK

NOT TO SCALE

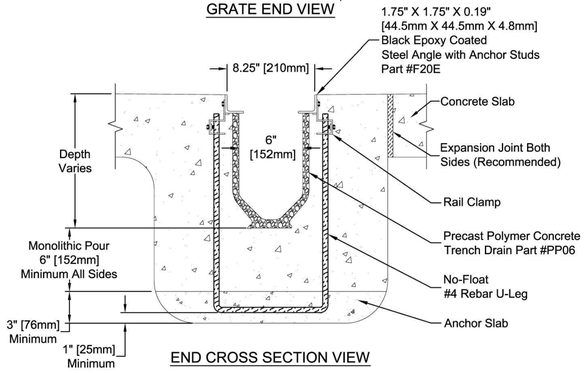


GRATE TOP VIEW
(ROTATED 90°)

Plan Notes
Series Number: PP06-06.603D.FB-F20E

1. Grates:
   - Cast Gray Iron per ASTM A48, Class 35-B (Uncoated)
   - Open Area: 0.20 FT² per Lineal Foot [0.06 M² per Lineal Meter]
   - Load Rating: 494 PSI (AASHTO M-306 Test Method)
   - Made in the USA
2. Concrete: Concrete Thickness and Reinforcement per Structural Engineer's Specification for the Application.

GRATE END VIEW

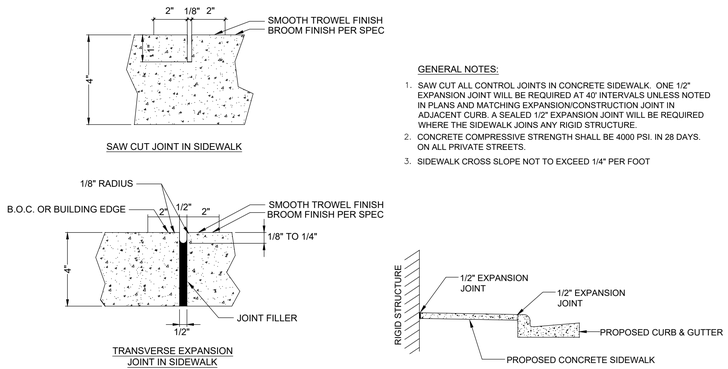


END CROSS SECTION VIEW

NOTES:
1. APPROVED EQUAL SUBMITTALS SHALL BE REVIEWED PRIOR TO BID.
2. BASIS OF DESIGN: ABT STANDARD SLOTTED TRENCH DRAIN

8 TRENCH DRAIN - 8" WIDTH CAST IRON GRATE

NOT TO SCALE



SAW CUT JOINT IN SIDEWALK

TRANSVERSE EXPANSION JOINT IN SIDEWALK

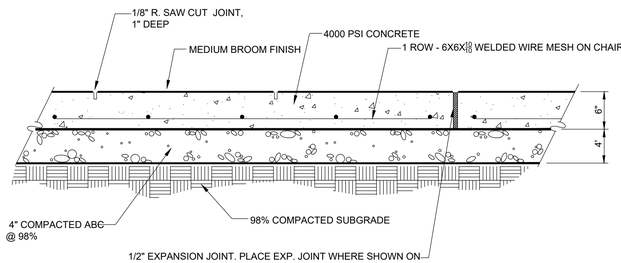
DETAILS SHOWING EXPANSION JOINTS IN CONCRETE SIDEWALK

GENERAL NOTES:

1. SAW CUT ALL CONTROL JOINTS IN CONCRETE SIDEWALK. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 40' INTERVALS UNLESS NOTED IN PLANS AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
2. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI. IN 28 DAYS. ON ALL PRIVATE STREETS.
3. SIDEWALK CROSS SLOPE NOT TO EXCEED 1/4" PER FOOT

6 JOINTS

NOT TO SCALE



TYPICAL SECTION

NOTE

1. CONCRETE WILL BE 5" THICK MIN. UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL ENGINEERS.

7 HEAVY DUTY CONCRETE SIDEWALK

NOT TO SCALE

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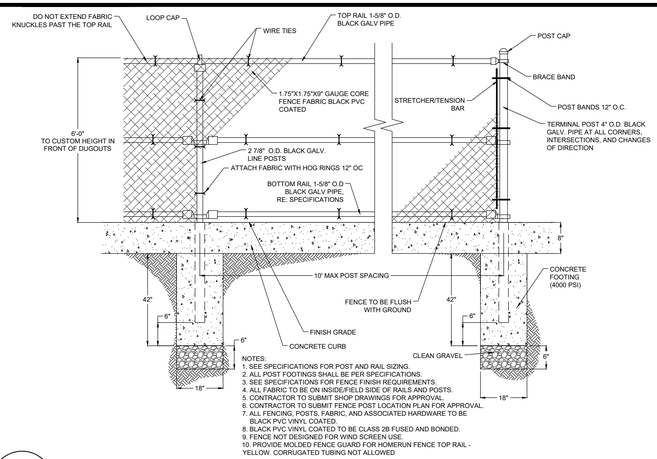
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

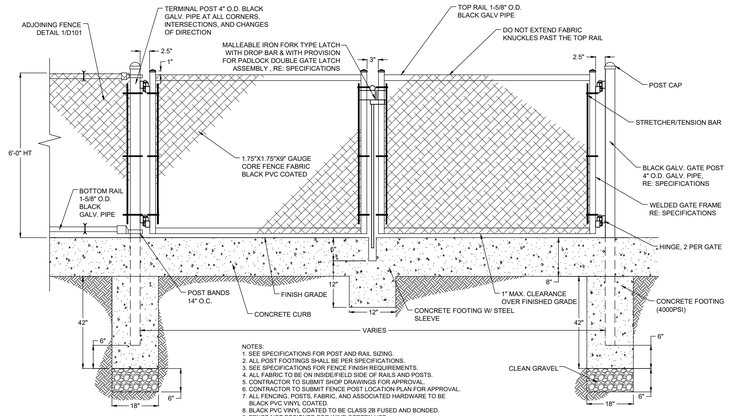
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D100



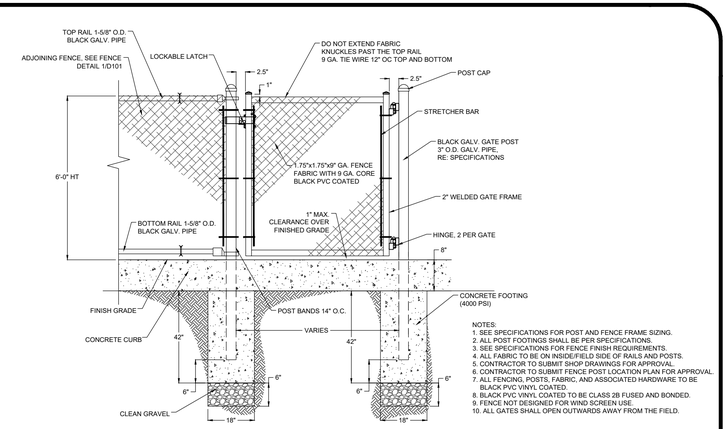
NOTES:
1. SEE SPECIFICATIONS FOR POST AND RAIL SIZING.
2. ALL POST FOOTINGS SHALL BE PER SPECIFICATIONS.
3. SEE SPECIFICATIONS FOR FENCE FINISH REQUIREMENTS.
4. ALL FABRIC TO BE ON INSIDE/FIELD SIDE OF RAILS AND POSTS.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
6. CONTRACTOR TO SUBMIT FENCE POST LOCATION PLAN FOR APPROVAL.
7. ALL FENCING, POSTS, FABRIC, AND ASSOCIATED HARDWARE TO BE BLACK PVC VINYL COATED.
8. BLACK PVC VINYL COATED TO BE CLASS 2B FUSED AND BONDED.
9. FENCE NOT DESIGNED FOR WIND SCREEN USE.
10. PROVIDE MOLDED FENCE GUARD FOR HOMERUN FENCE TOP RAIL - YELLOW. CORRUGATED TUBING NOT ALLOWED.

1 CHAIN LINK FENCE
NOT TO SCALE



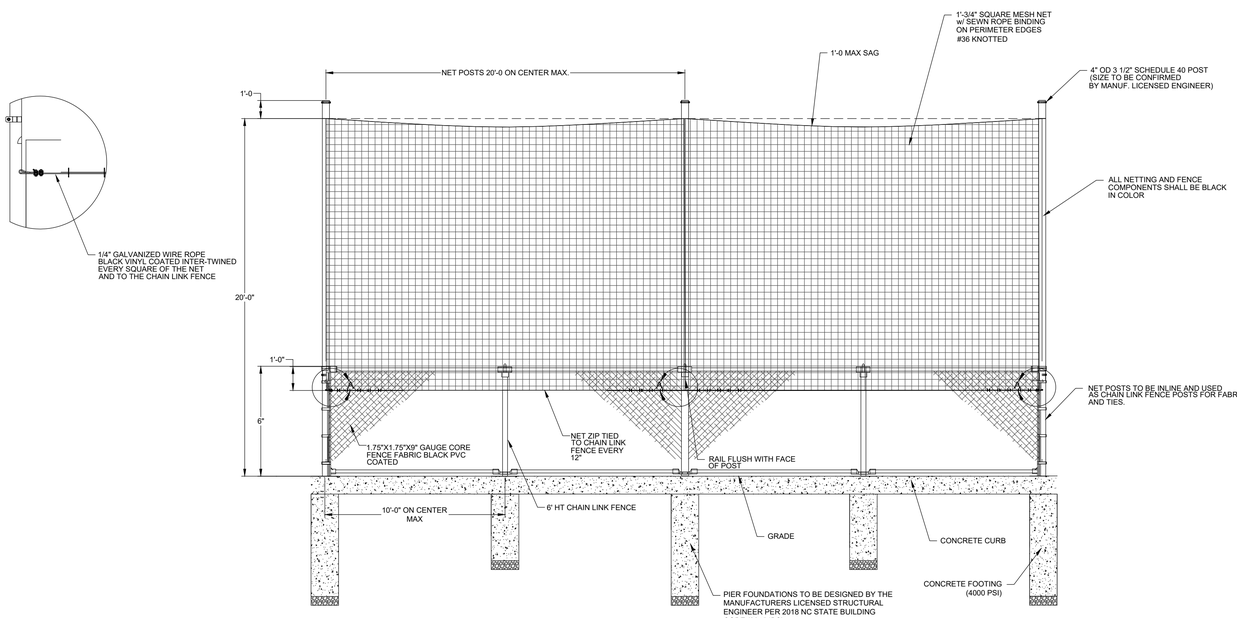
NOTES:
1. SEE SPECIFICATIONS FOR POST AND RAIL SIZING.
2. ALL POST FOOTINGS SHALL BE PER SPECIFICATIONS.
3. SEE SPECIFICATIONS FOR FENCE FINISH REQUIREMENTS.
4. ALL FABRIC TO BE ON INSIDE/FIELD SIDE OF RAILS AND POSTS.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
6. CONTRACTOR TO SUBMIT FENCE POST LOCATION PLAN FOR APPROVAL.
7. ALL FENCING, POSTS, FABRIC, AND ASSOCIATED HARDWARE TO BE BLACK PVC VINYL COATED.
8. BLACK PVC VINYL COATED TO BE CLASS 2B FUSED AND BONDED.
9. FENCE NOT DESIGNED FOR WIND SCREEN USE.
10. ALL FENCE POST TO BE HIGH STRENGTH 50,000 PSI POST.
11. ALL GATES SHALL OPEN OUTWARDS AWAY FROM THE FIELD.

2 DOUBLE GATE (6' HT)
NOT TO SCALE

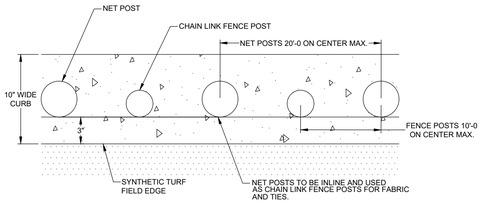


NOTES:
1. SEE SPECIFICATIONS FOR POST AND FENCE FRAME SIZING.
2. ALL POST FOOTINGS SHALL BE PER SPECIFICATIONS.
3. SEE SPECIFICATIONS FOR FENCE FINISH REQUIREMENTS.
4. ALL FABRIC TO BE ON INSIDE/FIELD SIDE OF RAILS AND POSTS.
5. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL.
6. CONTRACTOR TO SUBMIT FENCE POST LOCATION PLAN FOR APPROVAL.
7. ALL FENCING, POSTS, FABRIC, AND ASSOCIATED HARDWARE TO BE BLACK PVC VINYL COATED.
8. BLACK PVC VINYL COATED TO BE CLASS 2B FUSED AND BONDED.
9. FENCE NOT DESIGNED FOR WIND SCREEN USE.
10. ALL GATES SHALL OPEN OUTWARDS AWAY FROM THE FIELD.

3 SINGLE GATE (6' HT)
NOT TO SCALE

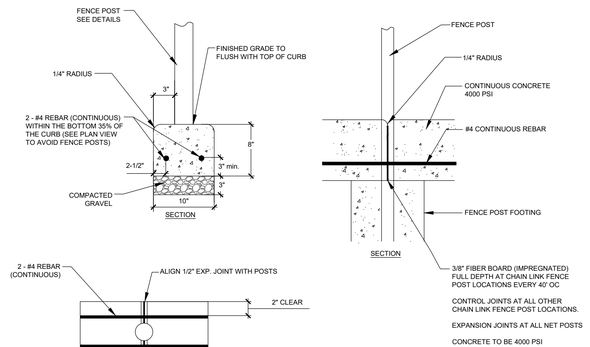


NOTES:
1. REQUIRED ENGINEERED SHOP DRAWINGS SIGNED AND SEALED BY A LICENSED NC STRUCTURAL ENGINEER FOR COMPLETE NETTING, POLES AND FOUNDATIONS AS PART OF THE PRICE BID.
2. CONTRACTOR TO SUBMIT POST LOCATION PLAN FOR APPROVAL
3. ALL FENCING, POSTS, FABRIC AND ASSOCIATED HARDWARE TO BE BLACK PVC VINYL COATED.
4. BLACK VINYL PVC COATED TO BE CLASS 2B FUSED AND BONDED
5. ALL FENCE FABRIC UNDER BALL NETTING TO BE 1.75"x1.75" DIAMOND MESH
6. FENCE NOT DESIGNED FOR WIND SCREEN USE
7. ALL FENCE POST TO BE HIGH STRENGTH 50,000 PSI POST.
8. BASIS OF DESIGN: SPORT FIELD SPECIALTIES TFBSS412P-SG (WWW.SPORTFIELDSPECIALTIES.COM)

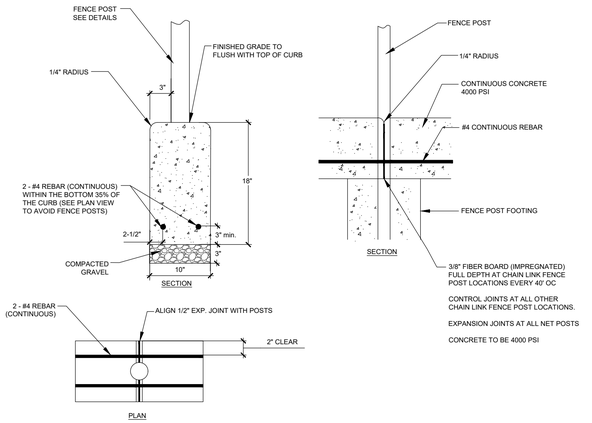


NET/FENCE POST ALIGNMENT DIAGRAM

4 SPORTS NETTING
NOT TO SCALE



5 FENCE IN CURB - 8"x10"
NOT TO SCALE



6 FENCE IN CURB - 8"x18"
NOT TO SCALE

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314 TOM HALL ST.
FORT MILL, SC
803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BOOK

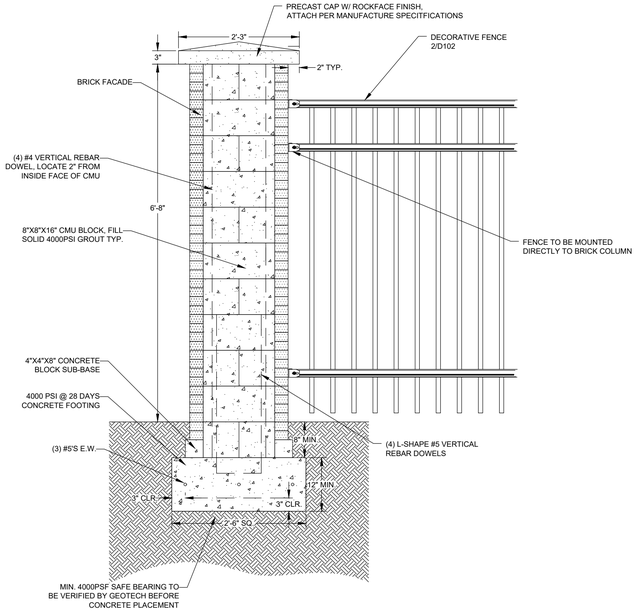
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

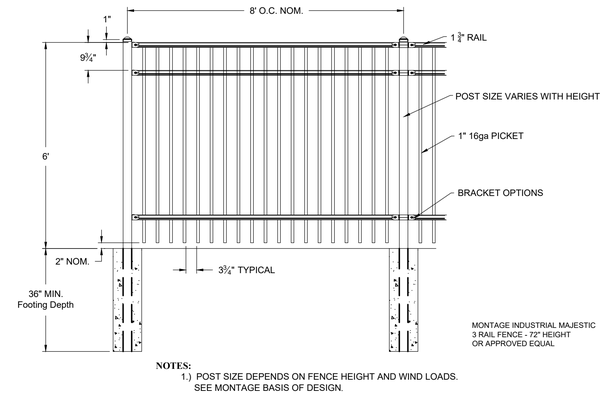
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D101

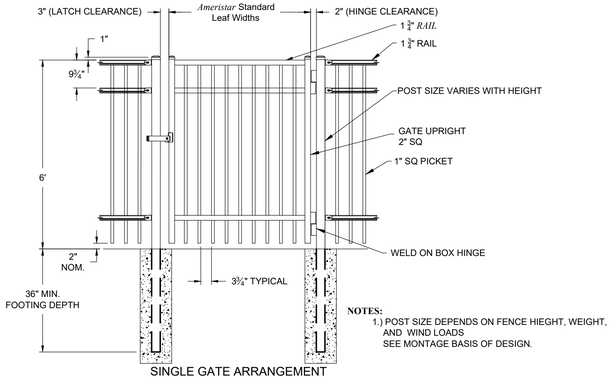


1 BRICK COLUMN
NOT TO SCALE



NOTES:
1.) POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS.
SEE MONTAGE BASIS OF DESIGN.

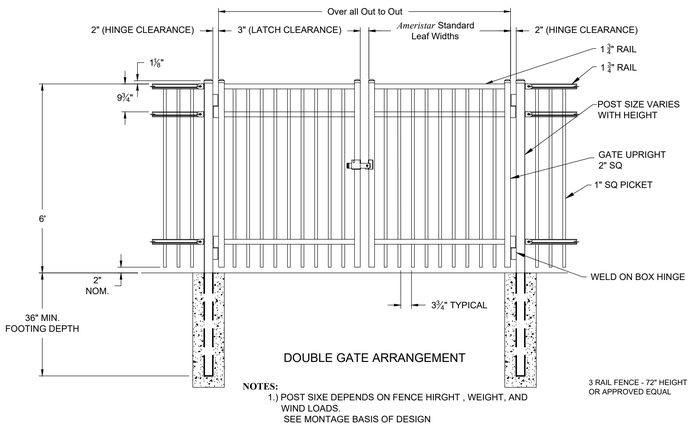
2 DECORATIVE FENCE - BLACK COLOR
NOT TO SCALE



NOTES:
1.) POST SIZE DEPENDS ON FENCE HIEGHT, WEIGHT,
AND WIND LOADS
SEE MONTAGE BASIS OF DESIGN.

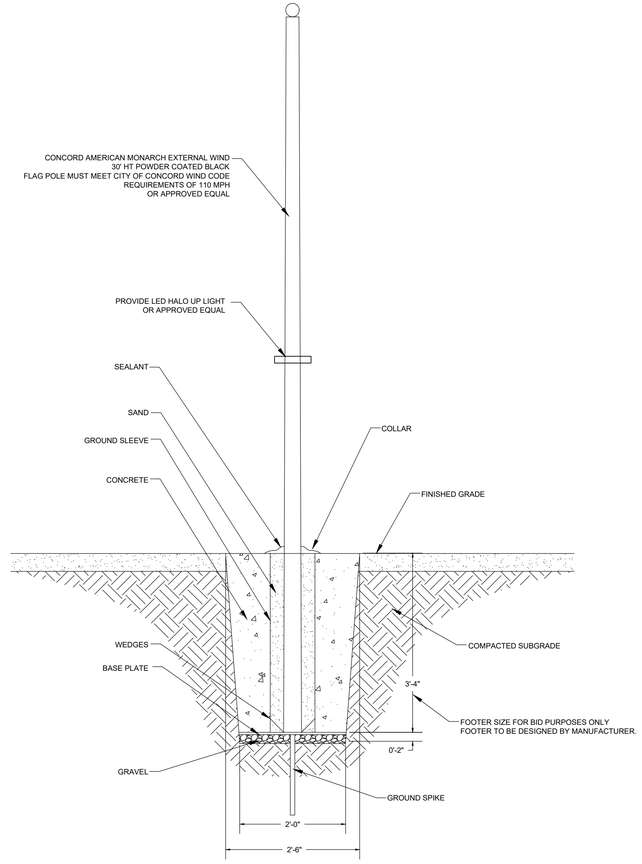
MONTAGE INDUSTRIAL MAJESTIC
3 RAIL FENCE - 72" HEIGHT
OR APPROVED EQUAL

3 DECORATIVE FENCE SINGLE WIDE GATE - BLACK COLOR
NOT TO SCALE



NOTES:
1.) POST SIXE DEPENDS ON FENCE HIRGHT , WEIGHT, AND
WIND LOADS.
SEE MONTAGE BASIS OF DESIGN

4 DECORATIVE FENCE DOUBLE WIDE GATE - BLACK COLOR
NOT TO SCALE



NOTES:
1. FOOTER TO BE DESIGNED BY THE SELECTED MANUFACTURER.
2. POLE AND FOOTER TO MEET WIND CODE REQUIREMENTS OF 110 MPH AND ALL CITY CODES AND STANDARDS.
3. PRODUCT SUBMITTAL IS REQUIRED.
4. CONTRACTOR TO PROVIDE POWER TO LIGHT POLE FOR HALO LIGHT AND INCLUDE IN BID.

5 FLAGPOLE
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

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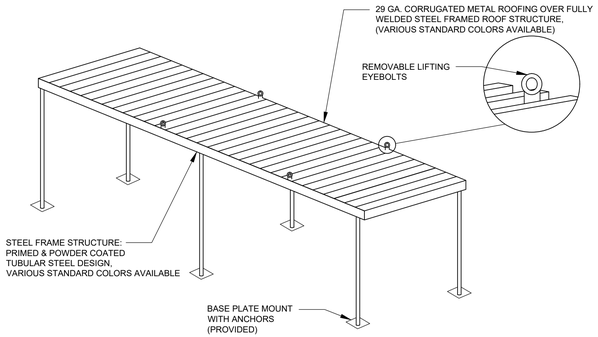
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

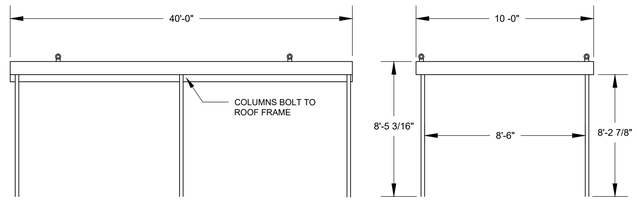
REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
3.21.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

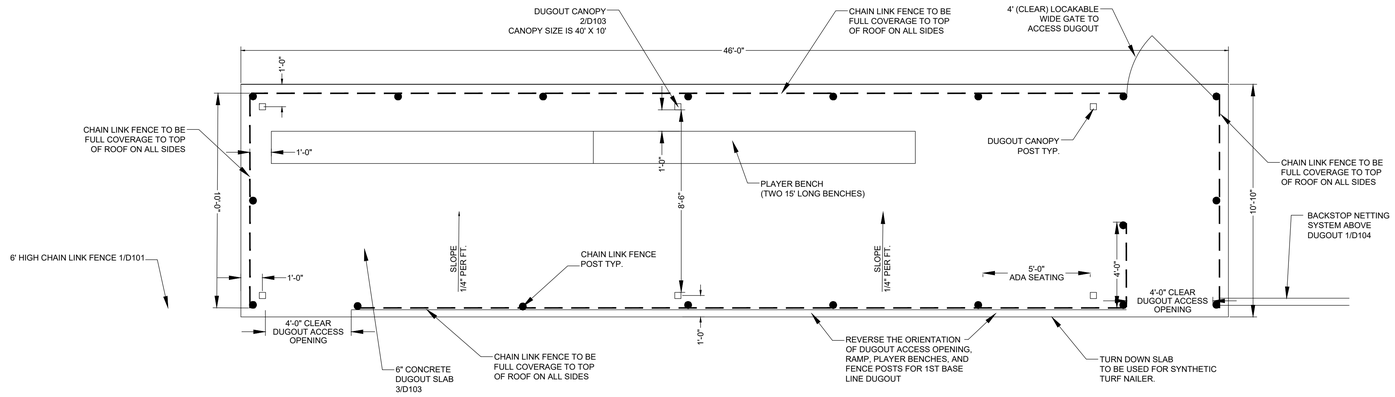
SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D102



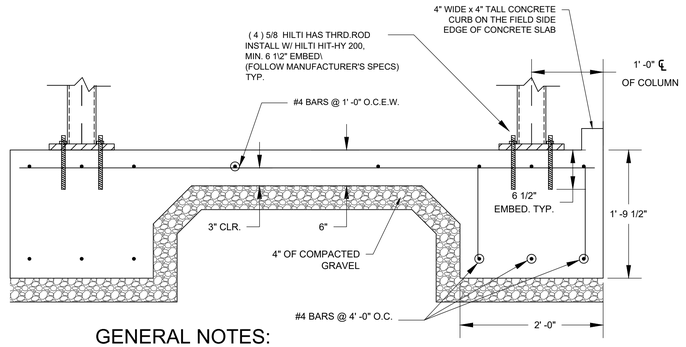


NOTE:
1. BASIS OF DESIGN: SPORTFIELD SPECIALITIES GAMESHADE DUGOUT
2. 40' X 10' (GD10X40).

1 DUGOUT CANOPY
NOT TO SCALE



2 DUGOUTS
NOT TO SCALE



GENERAL NOTES:

1. 3" CLR U.N.O.
2. F'C = 4000 PSI (28 DAY)
3. REBAR: ASTM A615 GR. 60
4. ALLOWABLE BEARING PRESSURE = 2000 PSF

3 DUGOUT CANOPY SLAB CONNECTION
NOT TO SCALE

4 RESERVED
NOT TO SCALE

5 RESERVED
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

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FORT MILL, SC
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NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

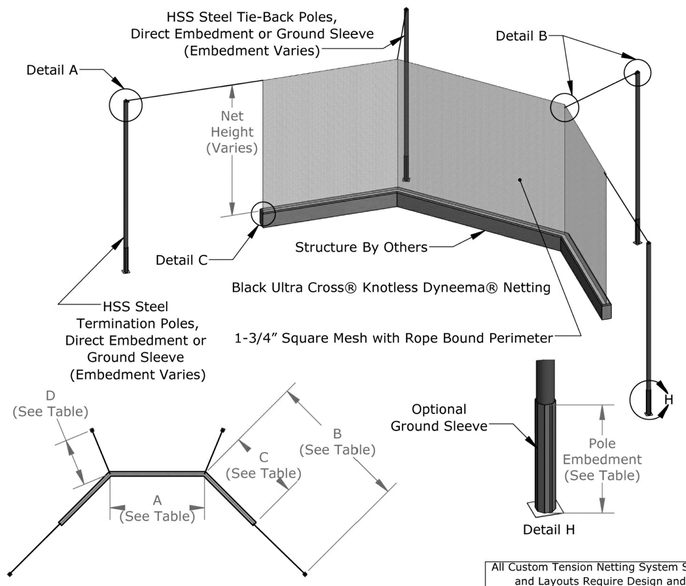
REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D103

Standard Black Powder Coated Finish



All Custom Tension Netting System Sizes and Layouts Require Design and Professional Engineering

SSI Tension Netting System Poles are Designed to Strength, Not Deflection. As a Result Some Deflection Will Occur During Installation and Should Be Considered Normal. Deflection May Also Be Evident in Calm Conditions, Particularly on the Outer Most Poles of a Given Tension Netting System

Foundation Requirements Based on Local Codes and Soil Conditions

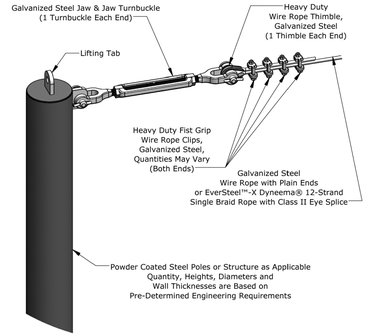
Part No.	Model	Net Material	System Height	Pole Size	Pole Embedment	A	B	C	D
TNTBB36	Standard Baseball	#36 Nylon	40'-0"	HSS 12.750 x 0.375	5'-0"	40'-0"	80'-0"	40'-0"	30'-0"
TNTBBUC	Standard Baseball	Ultra Cross	40'-0"	HSS 10.750 x 0.250	5'-0"	40'-0"	80'-0"	40'-0"	30'-0"
TNTBS36	Standard Softball	#36 Nylon	30'-0"	HSS 8.625 x 0.322	4'-0"	20'-0"	70'-0"	30'-0"	30'-0"
TNTBSUC	Standard Softball	Ultra Cross	30'-0"	HSS 8.625 x 0.250	4'-0"	20'-0"	70'-0"	30'-0"	30'-0"
TNTB36	Custom System	#36 Nylon	Varies	Varies	Varies	Varies	Varies	Varies	Varies
TNTBUC	Custom System	Ultra Cross	Varies	Varies	Varies	Varies	Varies	Varies	Varies

NOTES:

1. CONTRACTOR TO PROVIDE A COMPLETE SET OF NC PE SIGNED AND SEALED CONSTRUCTION PLANS FOR THE TIE BACK NETTING SYSTEM, INCLUDING BUT NOT LIMITED TO FOOTER DESIGN, POLE, CABLES SIZES AND INSTALLATION DETAILS.
2. NETTING TO BE 30' TALL.
3. A 6 POLE SYSTEM IS ACCEPTABLE, IF THE SPAN OF THE WINGS ARE TO LONG FOR A 4 POLE SYSTEM OR IF THERE IS A COST SAVINGS TO THE PROJECT.
4. NET DIMENSIONS TO BE VERIFIED BY CONTRACTOR. LEFT WING 113 LF, BACKSTOP 25 LF, RIGHT WING 113 LF
5. APPROVED EQUAL SUBMITTALS SHALL BE REVIEWED PRIOR TO BID.
6. BASIS OF DESIGN: SPORTFIELD SPECIALTIES TNTBUC

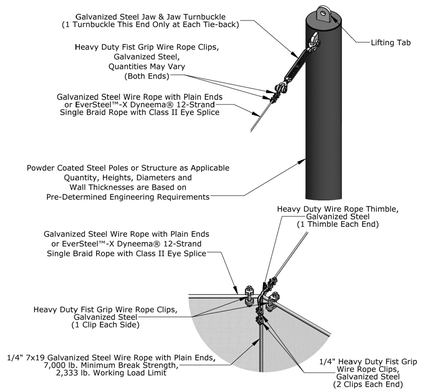
1 TIE-BACK TENSION BACKSTOP NETTING SYSTEM - 30' HT

NOT TO SCALE



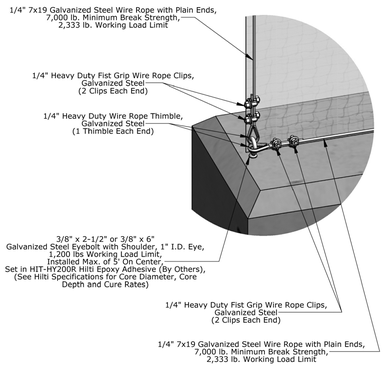
2 TERMINATION POLES AND MAIN CABLE - DETAIL A

NOT TO SCALE



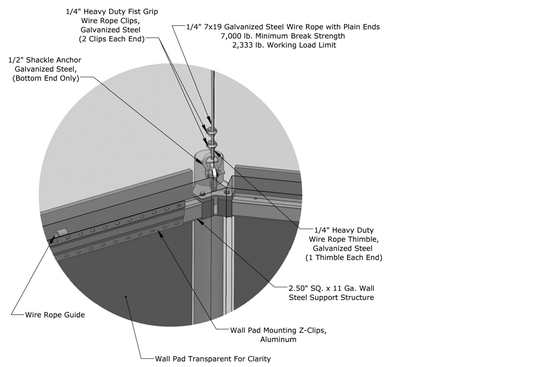
3 POLES AND SUPPORT CABLE - DETAIL B

NOT TO SCALE



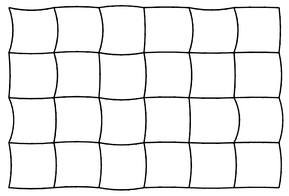
4 CABLE TERMINATION - DETAIL C

NOT TO SCALE



5 BOTTOM TERMINATION CONNECTION - DETAIL D

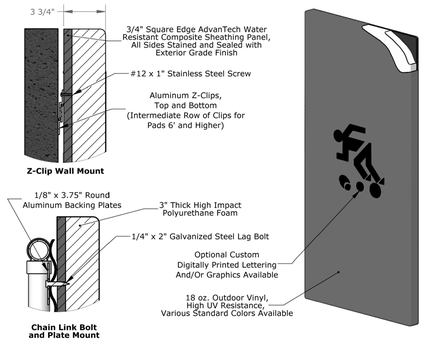
NOT TO SCALE



- LENGTH, HEIGHT AND CONFIGURATION AS REQUIRED
-ULTRA CROSS KNOTLESS DYNEEMA NETTING
- DYNEEMA ULTRA -HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWPE) SK-75 BLACK FIBER CONSTRUCTION
- 4 PLY, 1.2mm (0.0472") DIAMETER TWINE
- 95% OPEN MESH AREA (SEE-THROUGH VISBILITY)
- 58,445 PSI MINIMUM BREAKING STRENGTH
- 30% MAXIMUM ELONGATION AT BREAK
- 1-3/4" (44mm) SQUARE MESH SIZE, 0.009 LBS. PER SQUAE FOOT
- 4 STRAND, BRAIDED, CONTINUOUS MONOFILMENT DYNEEMA FIBER
- SEWN PERIMETER BLACK MULTI-FILAMENT POLYPROPYLENE SOILD BRAID ROPE BOND BORDER - 1/4" DIAMETER, 530 LB. MINIMUM BREAKING STRENGTH
- URETHANE BLACK BONDED FINISH (OTHER COLOR CHOICES AVAILABLE)
- STRONG RESISTANCE TO ULTRAVIOLET (UV) LIGHT DEGRADATION
- EXCELLENT RESISTANCE TO CHEMICALS AND WATER ABSORPTION

6 ULTRA CROSS KNOTLESS DYNEEMA NETTING (BACKSTOP ONLY)

NOT TO SCALE

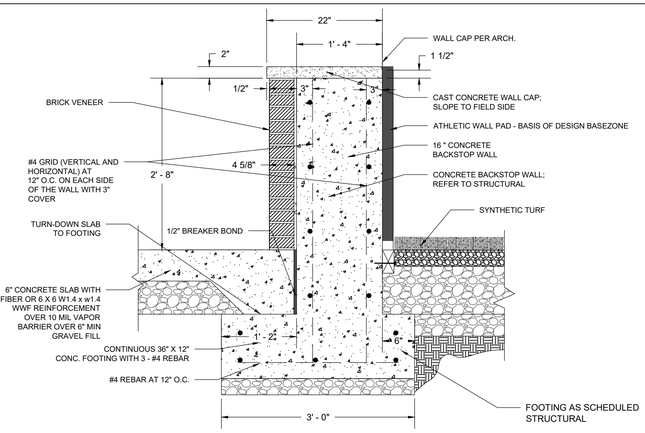


NOTES:

1. PAD TO BE ATTACHED TO FIELD SIDE OF THE BACKSTOP WALL
2. COLOR TBD BY OWNER VIA SUBMITTAL.
3. BASIS OF DESIGN: BASEZONE BY SPORTFIELD SPECIALITES.
4. APPROVED EQUAL SUBMITTALS SHALL BE REVIEWED PRIOR TO BID.

7 BACKSTOP PADDING

NOT TO SCALE



8 BACKSTOP WALL SECTION

NOT TO SCALE

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314 TOM HALL ST.
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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID L. BOOK

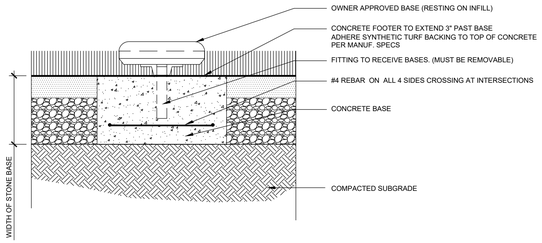
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

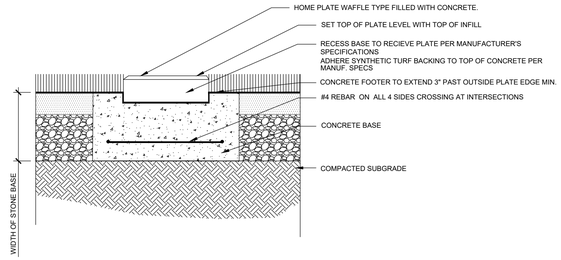
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D104

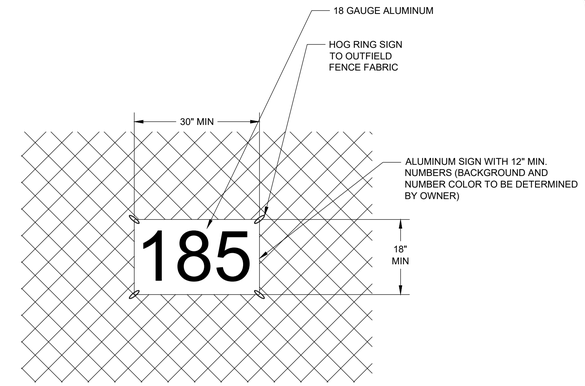


NOTES:
1. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR ALL BASES, PITCHING RUBBER AND HOMEPLATE FOR APPROVAL.
2. BASES AND HOME PLATE MUST MEET BASEBALL STANDARDS AND MEET THE WARRANTY PROVISIONS BY THE SYNTHETIC TURF MANUFACTURER.
3. BASES, PITCHING RUBBER, HOMEPLATE, FOOTERS, ANCHORS AND ASSOCIATED HARDWARE WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
4. PROVIDE 2 SETS OF BASES AND FOAM PLUGS.

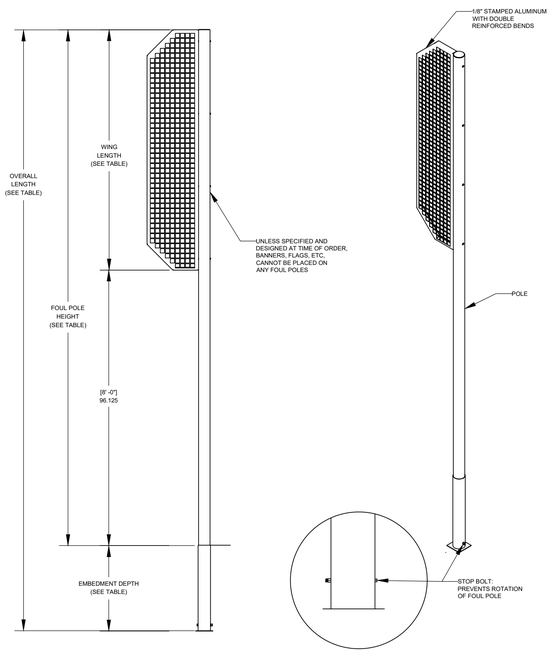
1 BASE MOUNT
NOT TO SCALE



2 HOME PLATE MOUNT
NOT TO SCALE



3 OUTFIELD SIGNS (5 QT)
NOT TO SCALE - LOCATE AT LF POLE, LC, CF, RC and RF POLE



FOUL POLE HEIGHT	OVERALL LENGTH	EMBEDMENT DEPTH	WING LENGTH	# OF WING PANELS	POLE MATERIAL	MINIMUM FOUNDATION DIAMETER
30'	34'	4' -0"	22'	4	6 -5/8" OD X 0.280" WALL ALUMINUM	24'

4 FOUL POLE - YELLOW
NOT TO SCALE

5 RESERVED
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

8 RESERVED
NOT TO SCALE

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DANIEL BOYD

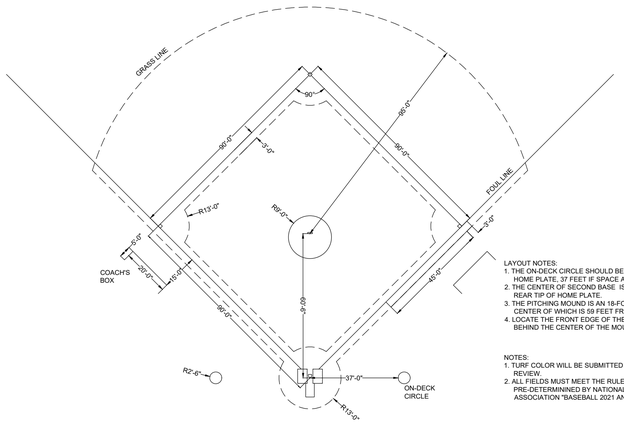
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

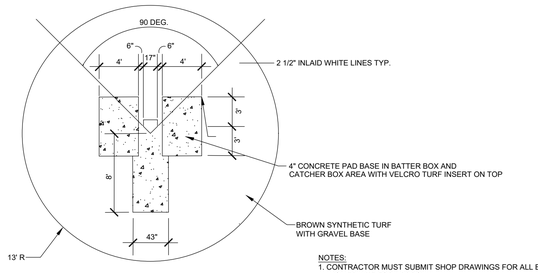
SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D105



LAYOUT NOTES:
1. THE ON-DECK CIRCLE SHOULD BE TO THE SIDE AND AWAY FROM HOME PLATE, 37 FEET IF SPACE ALLOWS.
2. THE CENTER OF SECOND BASE IS 127 FEET 3 3/8 INCHES FROM THE REAR TIP OF HOME PLATE.
3. THE PITCHING MOUND IS AN 18-FOOT DIAMETER CIRCLE, THE CENTER OF WHICH IS 59 FEET FROM THE REAR TIP OF HOME PLATE.
4. LOCATE THE FRONT EDGE OF THE PITCHING RUBBER 18 INCHES BEHIND THE CENTER OF THE MOUND.

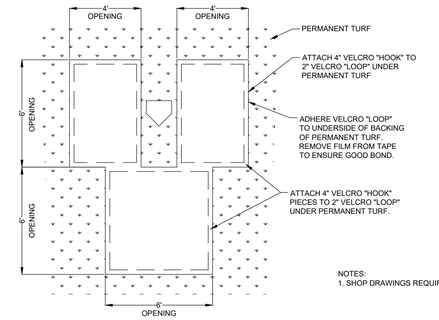
NOTES:
1. TURF COLOR WILL BE SUBMITTED IN SHOP DRAWINGS FOR OWNER REVIEW.
2. ALL FIELDS MUST MEET THE RULES AND REGULATIONS PRE-DETERMINNED BY NATIONAL COLLEGIATE ATHLETIC ASSOCIATION "BASEBALL 2021 AND 2022 RULES BOOK".

1 NCAA BASEBALL INFIELD
NOT TO SCALE



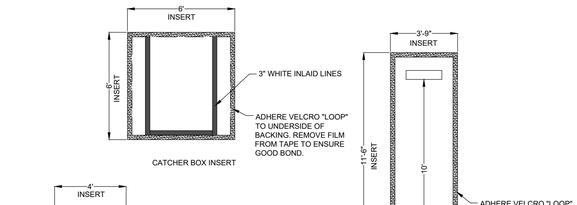
NOTES:
1. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR ALL BASES, PITCHING RUBBER AND HOMEPLATE FOR APPROVAL.
2. BASES, PITCHING RUBBER, AND HOME PLATE MUST MEET NCAA STANDARDS AND MEET THE WARRANTY PROVISIONS BY THE SYNTHETIC TURF MANUFACTURER.
3. BASES, PITCHING RUBBER, HOMEPLATE, FOOTERS, ANCHORS AND ASSOCIATED HARDWARE WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
4. HOME PLATE TO BE BEVELED AND LEVEL WITH GROUND INFILL SURFACE.

2 HOME PLATE AREA
NOT TO SCALE



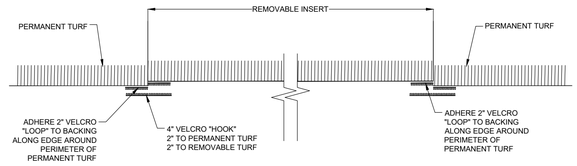
NOTES:
1. SHOP DRAWINGS REQUIRED

3 REMOVABLE INSERTS LOCATIONS
NOT TO SCALE



NOTES:
1. SHOP DRAWINGS REQUIRED

4 REMOVABLE INSERTS
NOT TO SCALE



NOTES:
1. SHOP DRAWINGS REQUIRED

5 REMOVABLE INSERT SECTION
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

8 RESERVED
NOT TO SCALE

9 RESERVED
NOT TO SCALE

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID L. HOOD

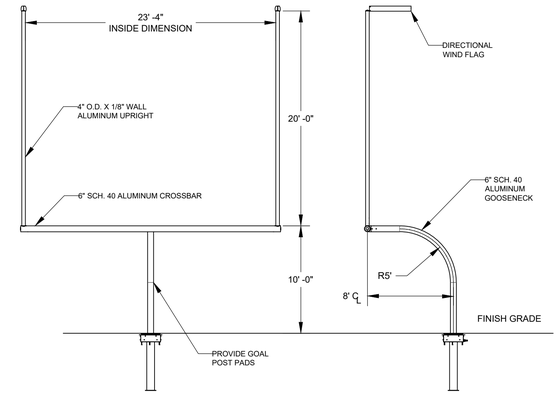
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

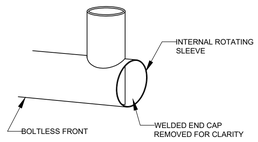
REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

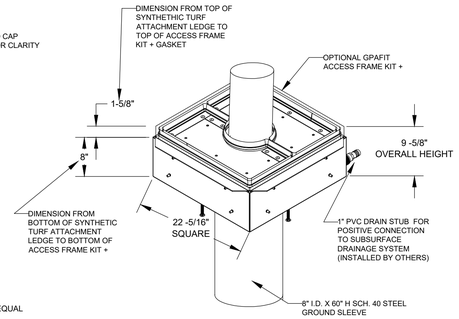
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D106

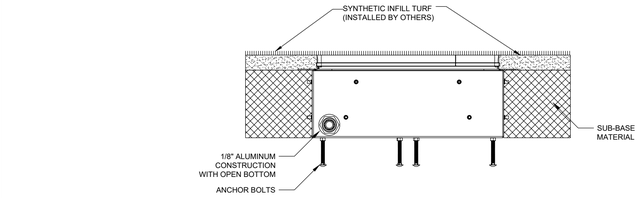


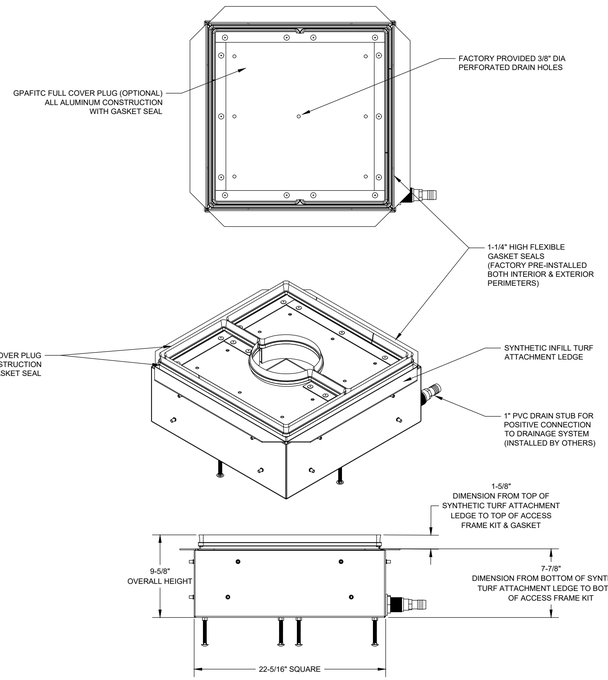




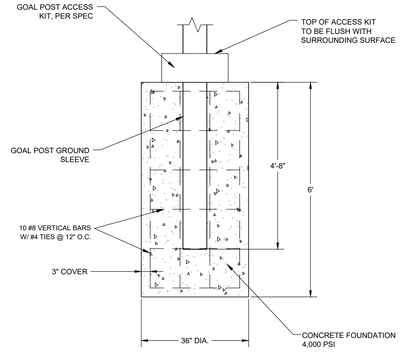
NOTES:
1. SPORTFIELD SPECIALTIES OR APPROVED EQUAL
MODEL # GP820HS
2. PROVIDE GOAL POST PADDING

1 HIGH SCHOOL FIELD GOAL POST (COLOR YELLOW)
NOT TO SCALE





2 FIELD GOAL ACCESS FRAME KIT
NOT TO SCALE



FIELD GOAL POST FOOTERS:
1. FOOTERS SHOWN FOR BID PURPOSES.
2. STRUCTURAL ENGINEERING DRAWINGS REQUIRED FOR ALL GOAL POST FOOTERS SIGNED AND SEALED BY NC STRUCTURAL ENGINEER PROVIDED BY CONTRACTOR.

3 FIELD GOAL FOUNDATION
NOT TO SCALE

4 RESERVED
NOT TO SCALE

5 RESERVED
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID L. HOOD

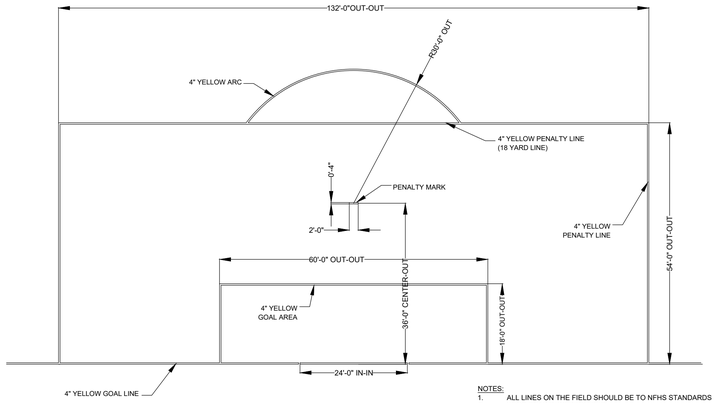
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

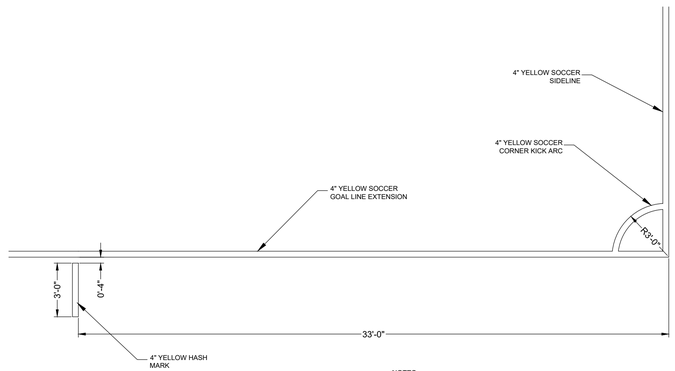
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D107



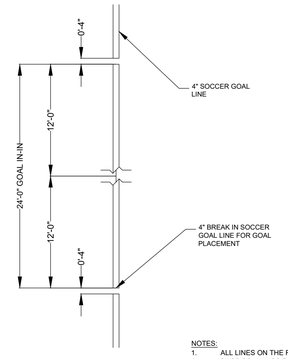
NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO NFHS STANDARDS
2. SHOP DRAWINGS REQUIRED.

1 SOCCER GOAL AREA
NOT TO SCALE



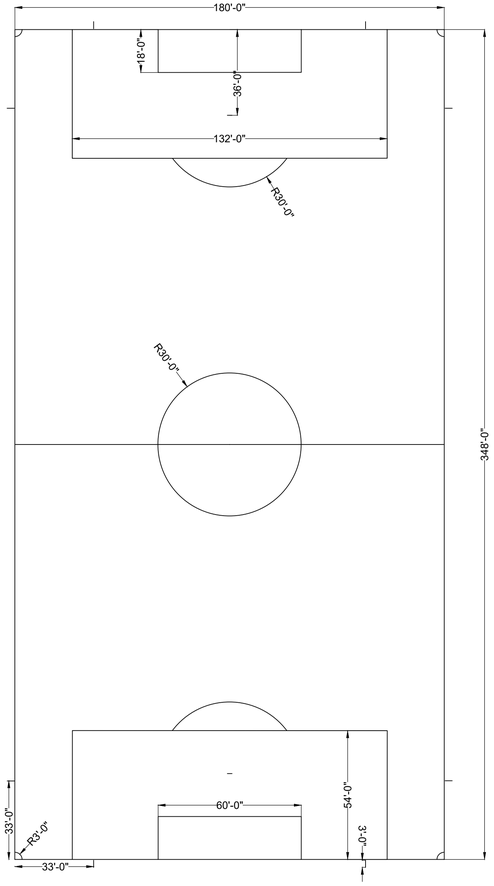
NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO NFHS STANDARDS
2. SHOP DRAWINGS REQUIRED.

2 SOCCER CORNER KICK
NOT TO SCALE



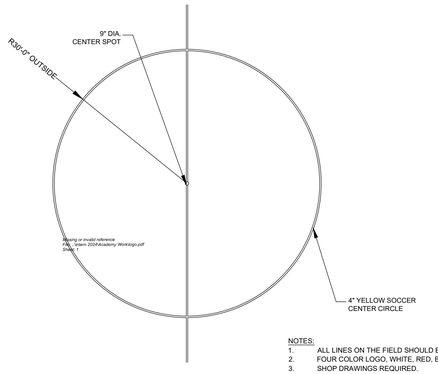
NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO NFHS STANDARDS
2. SHOP DRAWINGS REQUIRED.

3 SOCCER GOAL MARKS
NOT TO SCALE



NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO NFHS STANDARDS
2. SHOP DRAWINGS REQUIRED.
3. ALL SOCCER LINES AND MARKINGS TO BE YELLOW.

4 SOCCER FIELD
NOT TO SCALE



NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO NFHS STANDARDS
2. FOUR COLOR LOGO, WHITE, RED, BLACK & GRAY
3. SHOP DRAWINGS REQUIRED.

5 SOCCER CENTER CIRCLE
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

8 RESERVED
NOT TO SCALE

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. HOOD

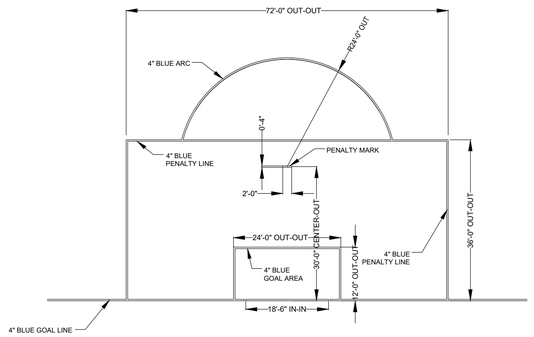
NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

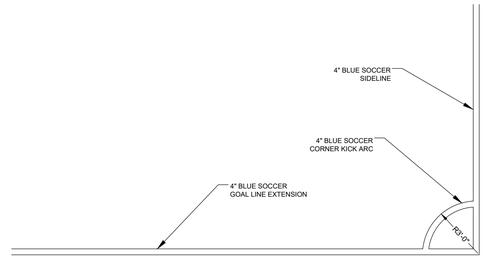
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

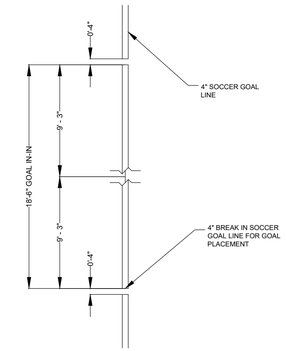
SCALE: NTS
DATE: 06-09-25
SHEET NAME: DETAILS
SHEET NO: D108



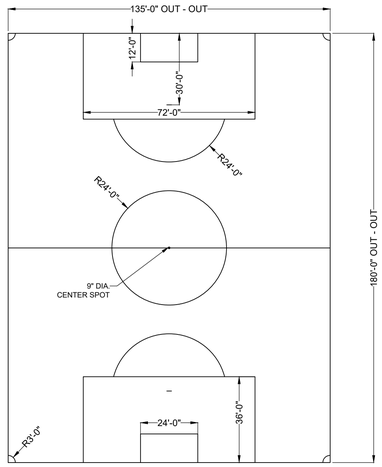
1 SOCCER GOAL AREA (U10 FIELD)
NOT TO SCALE



2 SOCCER CORNER KICK (U10 FIELD)
NOT TO SCALE

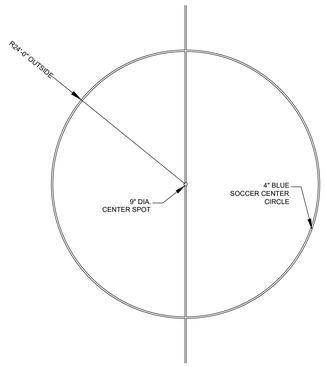


3 SOCCER GOAL MARKS (U10 FIELD)
NOT TO SCALE



NOTES:
1. ALL LINES ON THE FIELD SHOULD BE TO US YOUTH SOCCER U10 STANDARDS
2. SHOP DRAWINGS REQUIRED.
3. ALL U10 SOCCER LINES AND MARKINGS TO BE BLUE IF NOT COMMON WITH NFHS SIZE SOCCER LINES.

4 SOCCER FIELD DIAGRAM (U10 FIELD)
NOT TO SCALE



5 CENTER FIELD CIRCLE (U10 FIELD)
NOT TO SCALE

6 RESERVED
NOT TO SCALE

7 RESERVED
NOT TO SCALE

8 RESERVED
NOT TO SCALE

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FORT MILL, SC
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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DANIEL J. HOLT

NORTH CAROLINA FITFIELDS, PLLC COA# 389 CERTIFICATE OF AUTHORIZATION

REVISIONS:
2.14.25 PLAN REVIEW COMMENTS
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME:
DETAILS
SHEET NO:
D109

2018 APPENDIX B: Academy Recreation Center Sports Fields New Restroom

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: Academy Recreation Center Sports Field Restroom

Address: 165 Academy Avenue, Concord NC Zip Code 28025

Owner/Authorized Agent: Brian Conroy Phone No.: 704.661.2337 E-Mail: Brian.citizendesign@gmail.com

Owned By: ■ City/County ☐ Private ☐ State

Code Enforcement Jurisdiction: ☐ City Concord ■ County Cabarrus ☐ State NC

CONTACT: Brian Conroy

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	citizen design	Brian Conroy	12145	704.661.2337	Brian.citizendesign@gmail.com
Civil	Roper Civil Engin.	Matthew Roper	24914	704.582.3751	matt@roperce.com
Electrical	Shults Engineering	Brian D. Winkler	33160	980.202.5646	Bwinkler@shultzeg.com
Fire Alarm					
Plumbing	Shults Engineering	Charlie Curlin	25028	704.334.7363	ccurlin@shultzeg.com
Mechanical	Shults Engineering	Charlie Curlin	25028	704.334.7363	ccurlin@shultzeg.com
Retaining Walls > 5'-0"					
Structural	IDE Charlotte	MARCEL PAPINEAU	32627	704.634.3328	marcel@IDEcharlotte.com
Other					

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ■ New Building ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____

RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3): B

RISK CATEGORY (Table 1604.5): **Current:** ☐ I ■ II ☐ III ☐ IV
Proposed: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ■ V-B

Sprinklers: ■ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ■ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ■ No ☐ Yes **Flood Hazard Area:** ■ No ☐ Yes

Special Inspections Required: ■ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor	0sqft	1,582sqft	1,582sqft
Basement			
TOTAL			1,582sqft

ALLOWABLE AREA

Primary Occupancy Classification(s): Select one Select one Select one Select one Select one Select one

- Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
- Business ■
- Educational ☐
- Factory ☐ F-1 Moderate ☐ F-2 Low
- Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
- 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 ☐

Accessory Occupancy Classification(s): _____

Incidental Uses (Table 509): _____

Special Uses (Chapter 4 - List Code Sections): _____

Special Provisions: (Chapter 5 - List Code Sections) : _____

Mixed Occupancy: ☐ No ■ Yes Separation: ____ Hr. Exception: _____

■ Non-Separated Use (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 Use (508.4) - 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.

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

NOT USED + NOT USED + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED [2,3]
1	RESTROOMS	565	9,000	0	9,000
1	STORAGE	1,017	13,200		
	TOTAL BLDG.	1,582	9,000	0	9,000

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = NA (F)
b. Total Building Perimeter = NA (P)
c. Ratio (F/P) = NA (F/P)
d. W = Minimum width of public way = NA (W)
e. Percent of frontage increase $I_f = 100[F/P - 0.25] \times W/30$ = NA (%)

[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	17'-4"	
Building Height in Stories (Table 504.4)	2	1	

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____ * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	30' < X	0	0	2/A-3.0			
Bearing Walls	30' < X	0	0	2/A-3.0			
Exterior							
North							
East							
West							
South							
Interior		0	0	NONE			
Nonbearing Walls and Partitions		0	0	1/A-3.2			
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions		0	0	1/A-1.0			
Floor Construction Including supporting beams and joists		0	0	2/A-3.0			
Floor Ceiling Assembly		NA					
Columns Supporting Floors		NA					
Roof Construction, including supporting beams and joists		0	0	2/A-3.0			
Roof Ceiling Assembly		0	0	2/A-3.0			
Columns Supporting Roof		NA					
Shaft Enclosures - Exit		NA					
Shaft Enclosures - Other		NA					
Corridor Separation		NA					
Occupancy/Fire Barrier Separation		NA					
Party/Fire Wall Separation		NA					
Smoke Barrier Separation		NA					
Smoke Partition		NA					
Tenant/Dwelling Unit/ Sleeping Unit Separation		NA					
Incidental Use Separation		NA					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30'< X	UP, NS	NO LIMIT	5%

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ■ Yes
Exit Signs: ■ No ☐ Yes
Fire Alarm: ■ No ☐ Yes
Smoke Detection Systems: ■ No ☐ Yes ☐ Partial _____
Carbon Monoxide Detection: ■ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: 2/A-1.0

☐ 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 distances (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 may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
NA							

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED: REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
TOTAL						

* EXISTING PARKING UNCHANGED

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS MALE	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS / TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXIST'G *	1	2	0	1	1	1	0	0		0
	NEW	1	4	1	2	2	2	1	0		1
	TOTAL	2	6	1	3	3	3	1	0		1

* INCLUDES FIXTURE COUNT FROM EXISTING McALISTER RESTROOM TO SERVICE TOTAL DEMAND IN PARK

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)

Exempt Building: ☐ No ☐ Yes (Provide code or statutory reference) : _____

Climate Zone: ■ 3A ☐ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ■ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: WOOD RAFTER/ WOOD TRUSS
U-Value of total assembly: _____
R-Value of insulation: R-38 BATT
Skylights in each assembly: NONE
U-Value of skylight: _____
total square footage of skylights in each assembly: 0

Exterior Walls (each assembly)
Description of assembly: WOOD STUDS
U-Value of total assembly: _____
R-Value of insulation: R-20 BATT
Openings (windows or doors with glazing)
U-Value of assembly: 0.45 MAX.
Solar heat gain coefficient: 0.40 MAX.
projection factor: 1.6
Door R-Values: 2.22 MIN.

Walls below grade (each assembly)
Description of assembly: NONE
U-Value of total assembly: _____
R-Value of insulation: _____

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: NONE

Floors slab on grade
Description of assembly: 4" SLAB ON GRADE
U-Value of total assembly: F-0.730
R-Value of insulation: NONE
Horizontal/vertical requirement: _____
slab heated: NONE

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 1.0; Seismic (I_E) 1.0

Live Loads: Roof 20 psf; Mezzanine NA psf; Floor 100 psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7); Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ■ B ☐ C ☐ D

Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ■ II ☐ III ☐ IV
Spectral Response Acceleration S_s 18.2 %g S_1 7.8 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ■ D ☐ E ☐ F
Data Source: ☐ Field Test ■ Presumptive ☐ Historical Data
Basic structural system ■ 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) N/A psf
Presumptive Bearing capacity 1,500 psf
Pile size, type, and capacity N/A

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS: SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: _____
summer dry bulb: _____

Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category. If oversized, state reason.: _____
Chiller
Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

SEE MECHANICAL DRAWINGS

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code ☐ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ 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 (whole building or space by space)
total exterior wattage specified vs. allowed

SEE ELECTRICAL DRAWINGS

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient HVAC Equipment Performance
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 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

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Fort Mill, SC 29715
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www.fitfields.com

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture ▪ Planning ▪ Stuff

REVISIONS:
BID SET 06/09/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

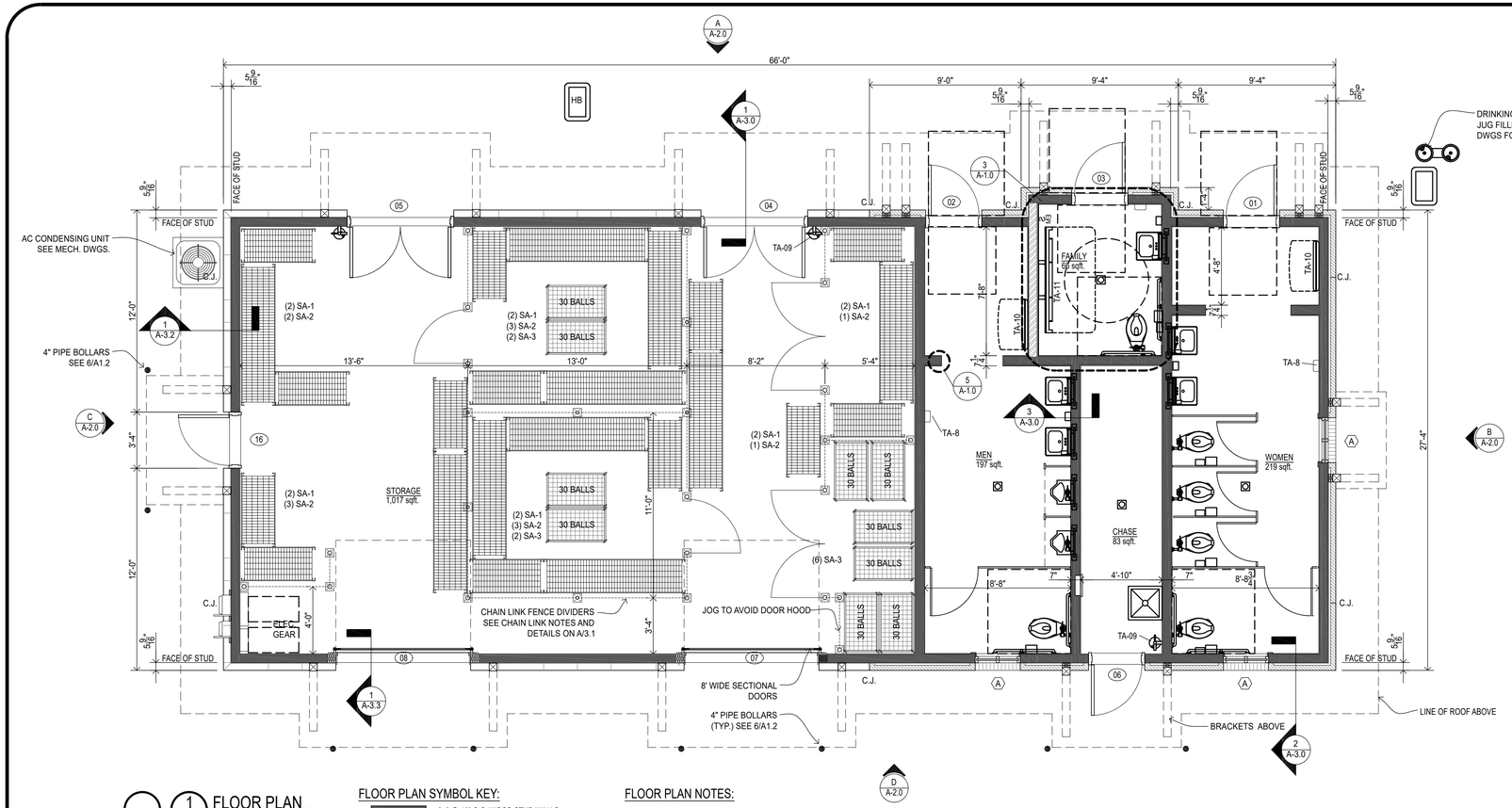
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

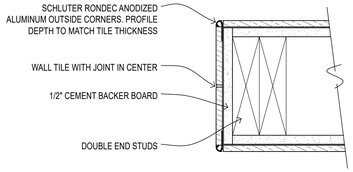
SCALE: AS NOTED

DATE: 05-21-25

SHEET NAME:
APPENDIX B NEW RESTROOM

SHEET NO:
A 0.1





5 A1.0 TYP. OUTSIDE TILED CORNER
SCALE: 3" = 1'-0"

1 A1.0 FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN SYMBOL KEY:

- 2x6 @ 16" O.C. WOOD STUD WALLS. (SEE DRAWING A-3.0)
- 4" BRICK VENEER (SEE NOTES ON A/2.0)
- REINFORCED 2x6 WOOD STUD WALLS. (SEE DETAIL 4/A1.0)
- C.J. BRICK CONTROL JOINT (SEE DETAIL 1/A2.0)

FLOOR PLAN NOTES:

1. INTERIOR DIMENSIONS SHOWN ON FLOOR PLAN ARE FROM FACE OF FINISH WALL
2. EXTERIOR DIMENSIONS SHOWN ARE FROM FACE OF STUD
3. MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48
4. INTERIOR CONCRETE FLOOR SLAB CURED AND PREPARED PER FINISH FLOOR COVERING MANUFACTURES WRITTEN INSTRUCTIONS. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL. (SEE FOUNDATION PLAN FOR CONTROL JOINT LOCATIONS)
5. EXTERIOR CONCRETE TO HAVE LIGHT BROOM FINISH. (SEE SITE PLAN FOR ADDITIONAL INFORMATION)
6. COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP AND SITE DRAWINGS.
7. FOUNDATIONS AND SLABS TO REST ON UNDISTURBED SUITABLE SOIL OR SELECTECT STRUCTURAL FILL COMPACTED TO 100% MAXIMUM DRY DENSITY. 2.000PSF MINIMUM SOIL BEARING PRESSURE

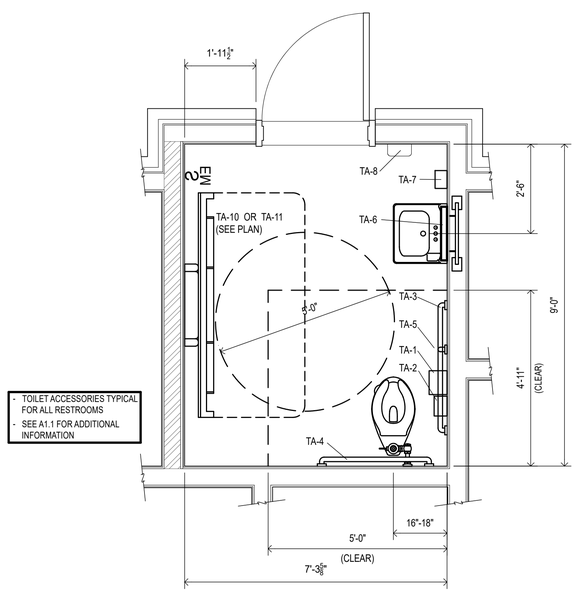
STORAGE ROOM ACCESSORIES: (CONTRACTOR FURNISHED AND ASSEMBLED)

SA-1: (13) 24"W x 48"L x 96"H 14GA STEEL SHELVING UNITS WITH (5) 4GA OPEN WIRE SHELVES WITH WELDED FOOT PLATES. 3,000# PER SHELF CAPACITY. (U-LINE, #H-5417 WITH FLOOR MOUNT KIT) (OWNER TO BOLT TO FLOOR AFTER INSTALLATION IN SPACE).

SA-2: (10) 24"W x 96"L x 96"H 14GA STEEL SHELVING UNITS WITH (5) 4GA OPEN WIRE SHELVES WITH WELDED FOOT PLATES. 2,150# PER SHELF CAPACITY. (U-LINE, #H-4328 WITH FLOOR MOUNT KIT) (OWNER TO BOLT TO FLOOR AFTER INSTALLATION IN SPACE).

NOTE: TWO DIRECTLY ADJACENT AND PARRALLEL SHELVING UNITS CAN SHARE VERTICAL COLUMNS TO REDUCE SPACE (ADD-ON UNIT)

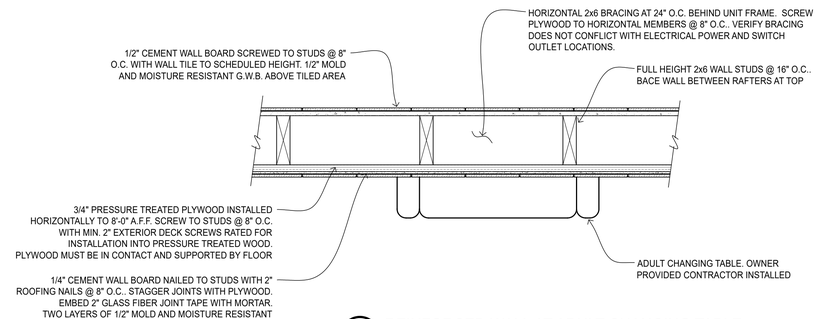
SA-3: (10) 42"L x 24"W x 30"H, 30 BALL CAPICITY, ROLLING STORAGE CARTS. LOCKABLE, POWEDER COATED STEEL WITH CASTER WHEELS. (CHAMPION SPORTS, LRCL, LARGE STORAGE BIN, OR APPROVED EQUAL)



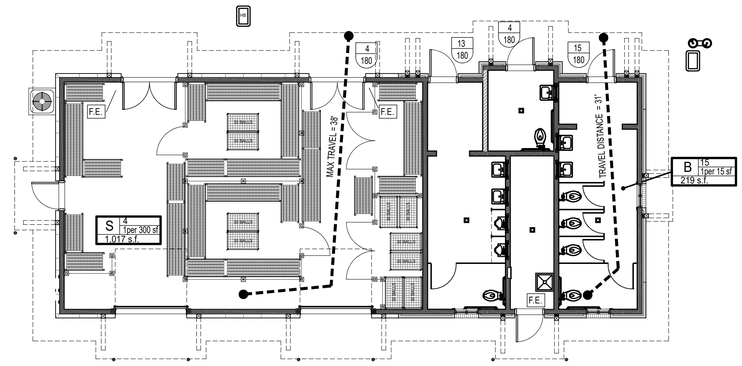
- TOILET ACCESSORIES TYPICAL FOR ALL RESTROOMS
- SEE A1.1 FOR ADDITIONAL INFORMATION

3 A1.0 ENLARGED FAMILY RESTROOM
SCALE: 1/2" = 1'-0"

NOTE: VERIFY INSTALLATION OF STUDS, HORIZONTAL BRACING AND POWER OUTLET LOCATIONS WITH KOALA KARE KB3000-AHL INSTALLATION INSTRUCTIONS BEFORE COVERING WALL



4 A1.0 REINFORCED WALL AT ADULT CHANGING TABLE
SCALE: 1-1/2" = 1'-0"



2 A1.0 LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"

LIFE SAFETY LEGEND

- OCCUPANCY SYMBOL — OCCUPANCY CLASSIFICATION / OCCUPANCY LOAD / ALLOWABLE AREA PER OCCUPANT / AREA
- EGRESS OPENING SYMBOL — XX / XX — ACTUAL OCCUPANT LOAD OF OPENING / ALLOWABLE OCCUPANT LOAD OF OPENING
- MAXIMUM TRAVEL DISTANCE IN SPACE
- F.E. PORTABLE ABC FIRE EXTINGUISHER

ISO REQUIRED FIRE FLOW

NFF = $(C_i)(O_i)$ [1.0 + (X + P)]
= (1,000)(.85) [1.0 + (0.09)]
= 1,000gpm*

* PER 06.19.24 CONCORD FD HYDRANT TEST. 3,143 gpm @20psi AVAILABLE AT HYDRANT LOCATED 148 ACADEMY AVENUE

WHERE:
NFF = NEEDED FIRE FLOW (GPM)
C_i = 18F (√A)
F = 1.5 FOR WOOD FRAME CONSTRUCTION
A = AFFECTIVE AREA = 1,633sgft.
= 18(1.5)(√1,633)
= 1,091 (CAN BE ROUNDED TO 1,000 PER ISO)
O_i = OCCUPANCY FACTOR = .85 FOR C-2 (LIMITED COMBUSTIBILITY)
= .85 FOR C-2
(X + P) = EXPOSURE AND COMMUNICATION FACTOR
= .09

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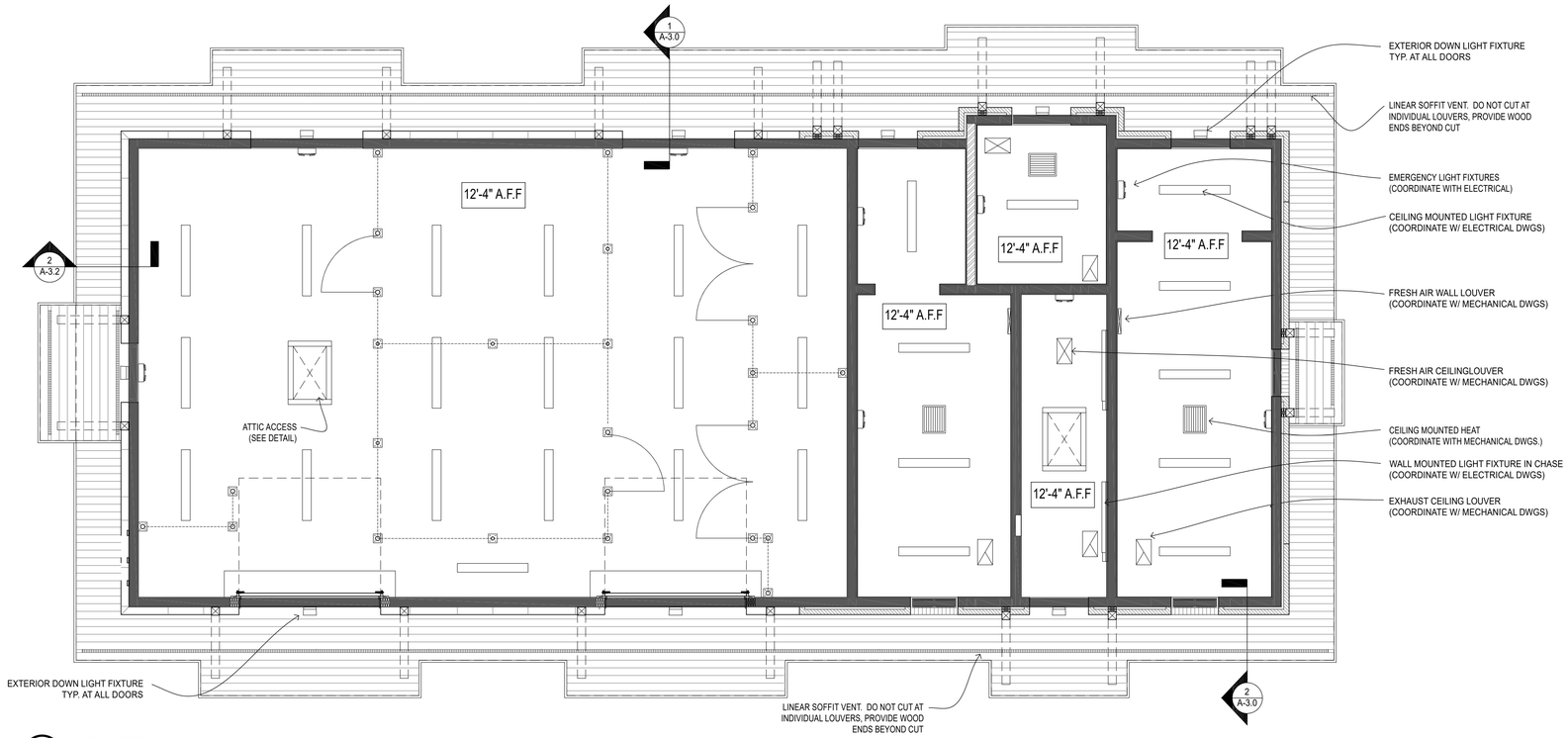
REVISIONS:		
1	PLANNING COMMENTS	1/6/25
	BID SET	6/9/25
2	SILL CHANGE	6/9/25

OWNER: CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

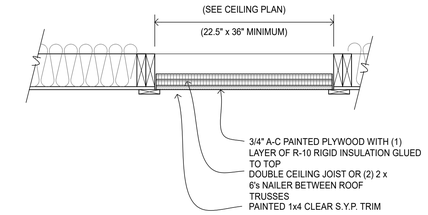
SCALE: AS NOTED
DATE:
SHEET NAME: NEW RESTROOM FLOOR PLANS
SHEET NO: A 1.0



1 A1.1 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

REFLECTED CEILING NOTES:

1. GYPSUM WALLBOARD CEILING @ 12'-4" A.F.F.:
   - APPLY ONE LAYER OF 1/2" M.M.R.G.W.B. TO UNDERSIDE OF ALL INTERIOR CEILING JOISTS.
2. NEW ATTIC ACCESS DOOR:
   - SEE DETAIL 2/A-1.1
3. EXPOSED 1x6 T&G DECK BOARDS WITH V-GROOVED EDGES. SOUTHERN YELLOW PINE No. 1. CONTRACTOR SHALL PROVIDE 2x BLOCKING AS REQUIRED TO SUPPORT SOFFIT.
4. COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CEILING FIXTURE LOCATIONS.



2 A1.1 ATTIC ACCESS
SCALE: 1" = 1'-0"

TOILET PARTITIONS: (SEE REQUIRED W.C. CLEARANCES A/1.1)

SOLID THRU-COLOR HDPE FLOOR MOUNTED, OVERHEAD BRACED WITH HEAVY-GAUGE INSTITUTIONAL DUTY TYPE 304 STAINLESS STEEL. FULL HEIGHT MOUNTING HARDWARE AND TAMPER RESISTANT FASTENERS.

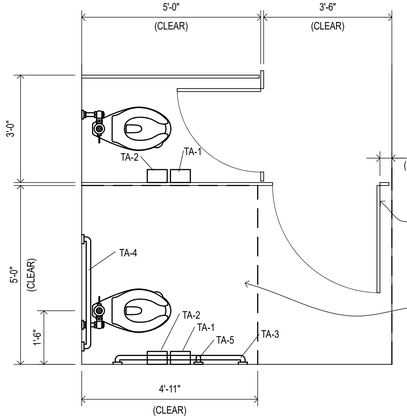
- 1" THICK GRAFFITI-RESISTANT PANELS. COLOR SELECTION APPROVED BY OWNER FROM STANDARD COLORS, INCLUDING BLACK WITH WHITE CONFETTI SPECS.
- SOLID COLOR FOR FULL THICKNESS, NON-GHOSTING GRAFFITI REMOVAL.
- URINAL SCREENS TO BE 18" DEEP, OVERHEAD BRACE
- WALL PARTITION SUPPORTS SHALL BE FULL LENGTH.
- STAINLESS STEEL INSTITUTIONAL GRADE HARDWARE TO INCLUDE COAT HOOK, DOOR STOPS, LATCH AND PULLS ON BOTH SIDES OF DOOR.
- FULL HEIGHT SELF CLOSING PARTITION DOOR HINGES
- PROVIDE STAINLESS STEEL IN LINE STILE STIFFENER
- 15-YEAR WARRANTY
- PARTITIONS TO MEET ACCESSIBILITY REQUIREMENTS OF ANSI117.1 2017

TOILET ACCESSORIES: (SEE REQUIRED MOUNTING HEIGHTS A-1.1)

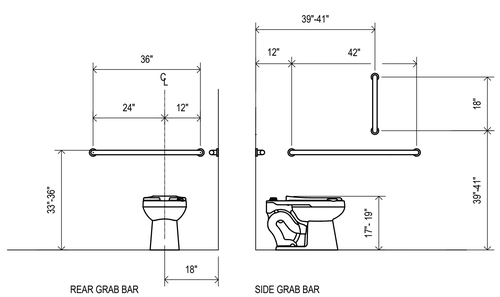
1.	O.P.C.I. - OWNER PROVIDED CONTRACTOR INSTALLED
2.	CONTRACTOR TO PROVIDE 2x BLOCKING BEHIND ALL WALL AND CEILING MOUNTED TOILET ACCESSORIES AND PARTITIONS.
TA-1:	O.P.C.I. - SINGLE ROLL TOILETTE PAPER DISPENSER
TA-2:	SANITARY NAPKIN DISPOSAL: STAINLESS STEEL 22 GA. RADIUSED CORNERS ALL WELDED, PIANO HINGE (BOBRICK B-270 OR APPROVED EQUAL).
TA-3:	18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x42"
TA-4:	18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x36"
TA-5:	18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x18" (VERTICAL)
TA-6:	18"x36" MIRROR WITH WELDED STAINLESS STEEL FRAME. SHATTER PROOF GLASS (BOBRICK B-2908 OR EQUAL)
TA-7:	O.P.C.I. - PLASTIC FOAM SOAP DISPENSER
TA-8:	ELECTRIC HAND DRIER - XLERATOR, MODEL: THINAIR TS-SB W/ STAINLESS COVER COORDINATE WITH ELECTRICAL DRAWINGS
TA-9:	FIRE EXTINGUISHER: WALL MOUNTED, MINIMUM RATED 2-A, TYPE ABC
TA-10:	BABY CHANGING STATION: KOALA KARE PRODUCTS KB300-SSWM. 4" MAX PROJECTION
TA-11:	POWERED, ADULT SPECIAL NEEDS CHANGING STATION: O.P.C.I. FLOOR AND WALL SUPPORTED, KOALA KARE, MODEL KB3000-AHL. SEE WALL DETAIL 6/A3.1 FOR SPECIFIC WALL BRACING INSTRUCTIONS.
TA-12:	O.P.C.I. - SINGLE ROLL PAPER TOWEL DISPENSER

ROOM SIGNAGE

6 A1.1 AMBULATORY COMPARTMENT LAYOUT
SCALE: 1/2" = 1'-0"

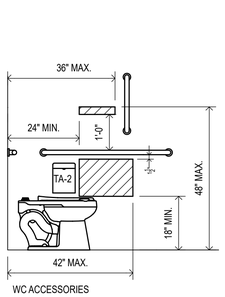


4 A1.1 ACCESSIBLE COMPARTMENT LAYOUT
SCALE: 1/2" = 1'-0"

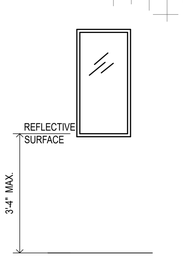


REAR GRAB BAR

SIDE GRAB BAR

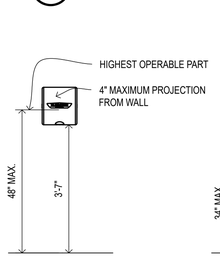


WC ACCESSORIES
ACCEPTABLE TA-1 OUTLET LOCATIONS

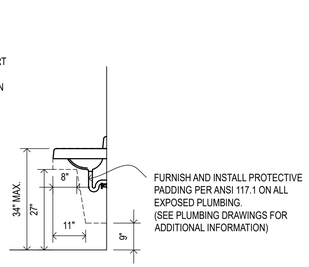


MIRROR

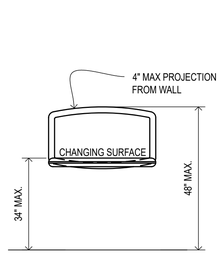
URINAL



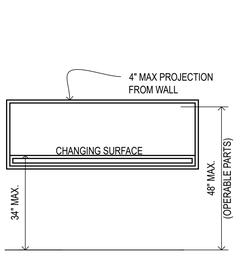
HAND DRYER



LAVATORY



BABY CHANGING STATION



ADULT CHANGING STATION

FITFIELDS
314 Tom Hall St.
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(T) 803.981.4330
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BRIAN H. CONROY
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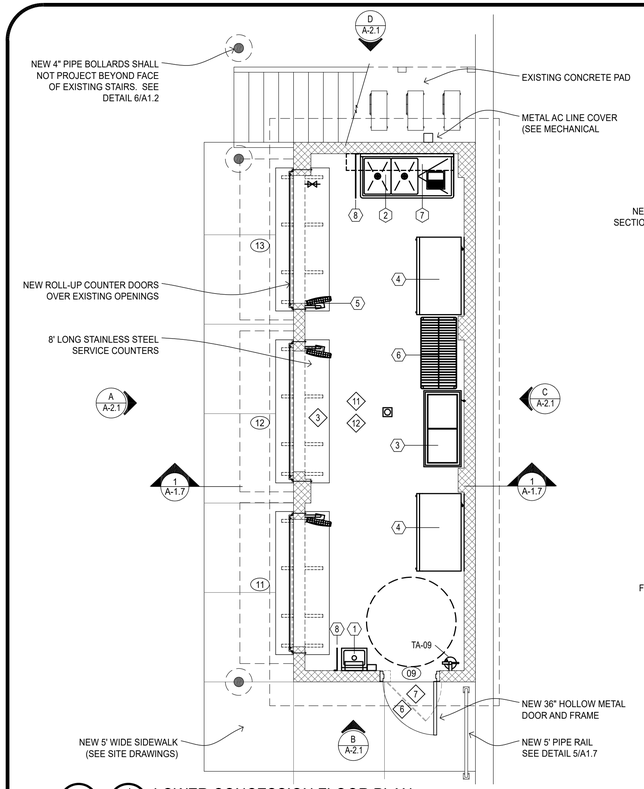
REVISIONS:		
1	PLANNING COMMENTS	1/6/25
	BID SET	6/9/25
2	SILL CHANGE	6/9/25

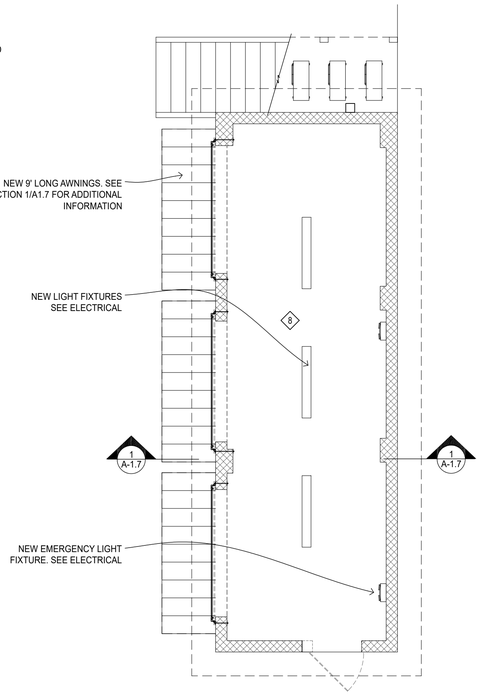
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

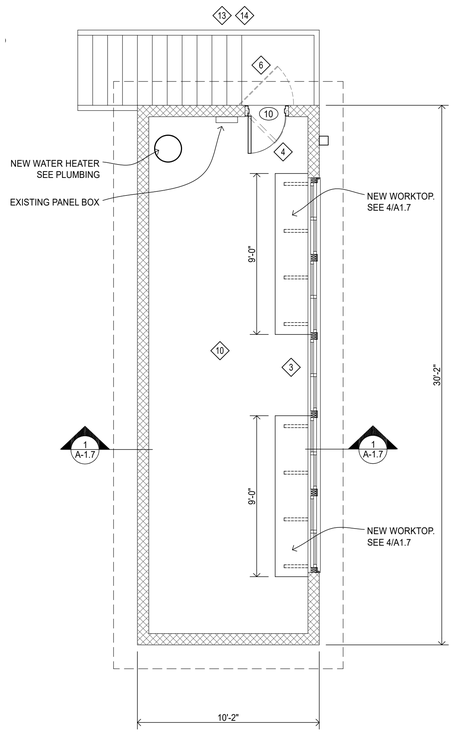
SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME:
RCP PLAN AND TYPICAL MOUNTING HEIGHTS
SHEET NO:
A 1.1



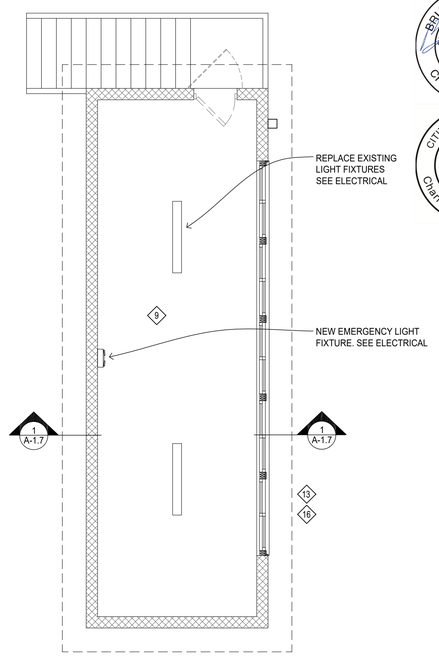
1 A1.2 LOWER CONCESSION FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 A1.2 LOWER CONCESSION RCP PLAN
SCALE: 1/4" = 1'-0"



2 A1.2 UPPER PRESS BOX FLOOR PLAN
SCALE: 1/4" = 1'-0"



4 A1.2 UPPER PRESS BOX RCP PLAN
SCALE: 1/4" = 1'-0"

ACADEMY FOOTBALL CONCESSION EQUIPMENT SCHEDULE

NUMBER	NAME	MAKE	MODEL	COMMENTS
1	HAND SINK	EAGLE	HSAE-10-FA	INSTALL OWNER PROVIDED SOAP & PAPER TOWEL DISPENSER
2	2 - COMPARTMENT SINK	ADVANCE TABCO	FC-2-1824-24R	WITH (1) 24" DRAINBOARD, 140LBS 14" DEEP WATER LEVEL
3	GLASS TOP ICE CREAM FREEZER	BEVERAGE-AIR	NC51HC	(N.I.C.) 9.43cuft, 2" HEAVY DUTY CASTERS, INTERIOR LIGHT
4	REACH IN BEVERAGE COOLER	QBD	CD45-HC	(N.I.C.) 500 BOTTLE CAPACITY, SLIDING DOORS, INTERIOR LIGHT
5	12" FLY FAN	TPI CORPORATION	U-12-TE	CEILING MOUNTED, ABOVE COUNTERS. AIM ACROSS OPENING
6	24"x48" WIRE SHELVING UNIT	METRO	SUPER ERECTA SHELF	(N.I.C.) 5-TIER, CHROME PLATED, 86" POSTS, FOOT PLATE BOTTOM OPTION
7	12"x72" POT RACK WITH UTENSIL HOOKS	REGENCY	600PS1272	285 POUND CAPACITY WITH 18 GALVANIZED HOOKS
8	S.S. SPLASH GUARD	CUSTOM		WALL MOUNTED (SEE DETAIL 5/A1.2)
9				
10				

CONCESSION EQUIPMENT NOTES:

1. (N.I.C.) NOT IN CONTRACT. INFORMATION PROVIDED FOR SIZING PURPOSES ONLY
2. COORDINATE WITH PLUMBING DRAWINGS FOR ADDITIONAL EQUIPMENT INFORMATION
3. NO COOKING OF ANY RAW FOODS TO TAKE PLACE. PREPACKAGED, SINGLE SERVING FOOD ONLY
4. MAINTAIN 3" CLEAR BETWEEN SINKS, SPLASH GUARDS AND SIDE WALLS.
5. ALL REACH-IN COOLERS SHALL HAVE AN INTERIOR LIGHT.

FLOOR PLAN SYMBOL KEY:

- EXISTING WOOD STUD WALL TO REMAIN SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.
- EXISTING CMU WALL TO REMAIN. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.

DEMOLITION BULLET KEY:

1. REMOVE ALL EXISTING PLUMBING FIXTURES , TOILET ACCESSORIES, PARTITIONS BACK TO WALL. (SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION).
2. REMOVE EXISTING WALL MATERIAL FROM WOOD STUD WALL. REPLACE DAMAGED WOOD STUDS IN KIND. APPLY NEW SCHEDULED WALL SHEATHING AND FINISH (SEE TYPICAL WALL SECTION X/A-1.6)
3. REMOVE EXISTING COUNTER/ WALL CABINETS TO BARE CMU. REPAIR DAMAGED CMU FOR APPLICATION OF SCHEDULED FINISH
4. REMOVE EXISTING DOOR AND FRAME FROM OPENING. CLEAN, PATCH AND PREP OPENING FOR NEW FINISH.
5. REMOVE EXISTING DOOR FROM FRAME. CLEAN, PATCH AND PREP EXISTING FRAME FOR NEW DOOR.
6. REMOVE EXISTING PLATE STEEL DOOR. PATCH AND PREP EXISTING CMU. RE-POINT ANY LOOSE CMU AT HINGES.
7. SAW CUT EXISTING WALL FOR MODIFIED OPENING. TOOTH IN NEW CMU END UNITS. GROUT JAMB SOLID
8. REMOVE ENTIRE EXISTING CEILING IN WORK AREA. EXISTING EQUIPMENT/ CONDUIT SCHEDULED TO REMAIN SHALL BE REHUNG IN A CODE COMPLIANT MANNER. CLEAN AND PREP EXISTING JOISTS FOR APPLICATION OF SCHEDULED FINISH. SEE M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
9. CLEAN AND PREP EXISTING CEILING FOR APPLICATION OF SCHEDULED FINISH.
10. INSTALL NEW FLOOR COVERING. ENSURE EXISTING SHEATHING IS PROPERLY SCREWED TO EXISTING FLOOR JOISTS @ 12" O.C. FIELD, 6" O.C. EDGES.
    - FOOTBALL PRESSBOX: REMOVE AND REPLACE EXISTING WOOD SUB FLOOR WITH 23/32" ADVANTECH SUBFLOOR.
11. WET SAW CUT EXISTING FLOOR SLAB FOR INSTALLATION OF NEW PLUMBING LINES. SEE DETAIL 7/A1.2
12. CLEAN AND PREP EXISTING CONCRETE FLOOR FOR NEW SCHEDULED COVERING. ROUTE AND SEAL EXISTING CRACKS. DIAMOND GRIND EXISTING FLOOR PER NEW FLOORING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
13. REMOVE EXISTING ROOF COVERING COMPLETELY. REPLACE FASCIA, SOFFIT AS DETAILED. REPLACE DAMAGED/ ROTTED SHEATHING IN KIND. NEW FULL LENGTH 2x6 RAFTERS MAY BE SISTERED ON TO EXISTING WITH (2) ROWS OF 0.131x3" NAILS @ 12" O.C. STAGGERED
14. PRESSURE WASH, CLEAN AND STAIN EXISTING WOOD STAIRS, LANDINGS, RAILINGS ETC. (SEE NOTES ON A1.6)
15. CLEAN AND PREP EXISTING CMU WALLS PER DEMOLITION NOTES FOR NEW WALL TILE AND PAINT ABOVE.
16. BUILDING EXTERIOR: CLEAN AND PAINT ALL EXTERIOR SURFACES INCLUDING TRIM, METALS DOORS, ALUMINUM SOFFITS AND GUTTERS PER PAINT MANUFACTURER'S PREPARATION INSTRUCTIONS. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION.

DEMOLITION PLAN NOTES:

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3. INFILL CMU WALLS WHERE RECESSED EQUIPMENT HAS BEEN REMOVED HAND DRYERS, DRINKING FOUNTAINS, HEATERS, ETC.) INFILL CMU WALLS WITH CUT CMU TO MATCH EXISTING.
4. DAMAGED OR BROKEN EXISTING C.M.U. IN REMAINING WALLS TO BE REMOVED AND REPLACED IN-KIND.
5. COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
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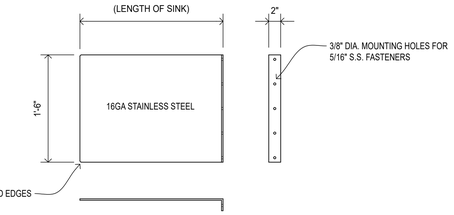
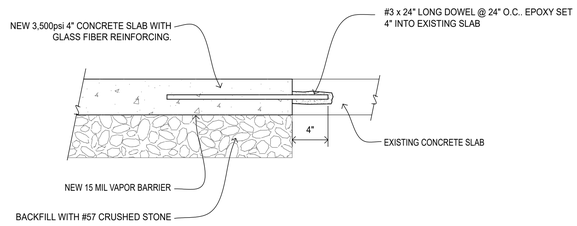
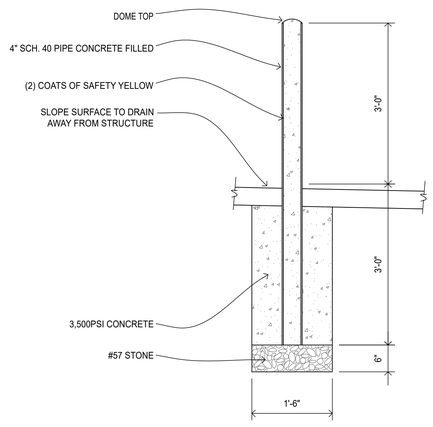
7. ALL TEMPORARY SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.



5 A1.2 SPLASH GUARD
SCALE: 1" = 1'-0"



7 A1.2 NEW TO EXISTING SLAB REPAIR DETAIL
SCALE: 1-1/2" = 1'-0"



6 A1.2 PIPE BOLLARD
SCALE: 3/4" = 1'-0"

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citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
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REVISIONS:
1 PLANNING COMMENTS 3/21/25
BID SET 6/9/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

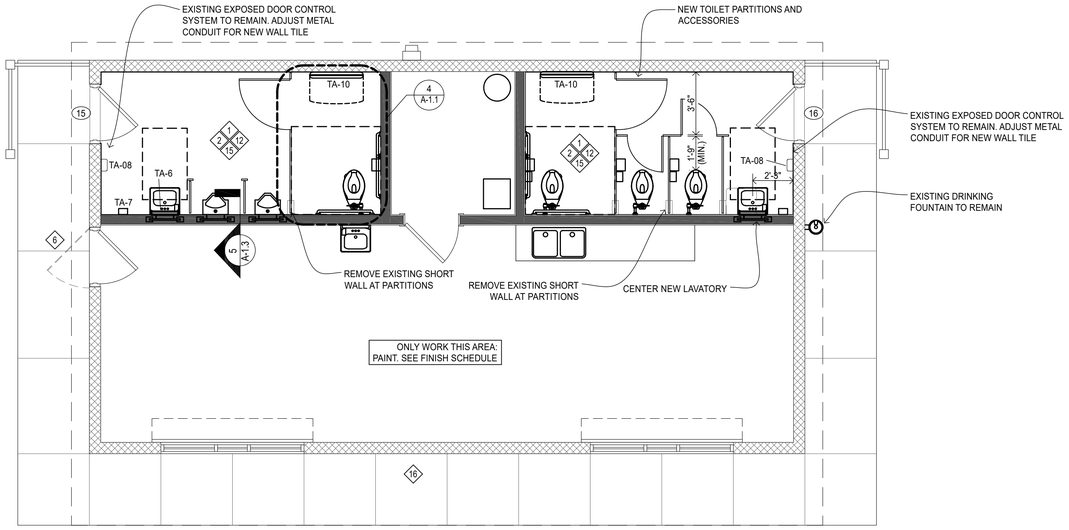
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS NOTED

DATE: 05-21-25

SHEET NAME:
FOOTBALL CONCESSION FLOOR PLANS

SHEET NO:
A 1.2

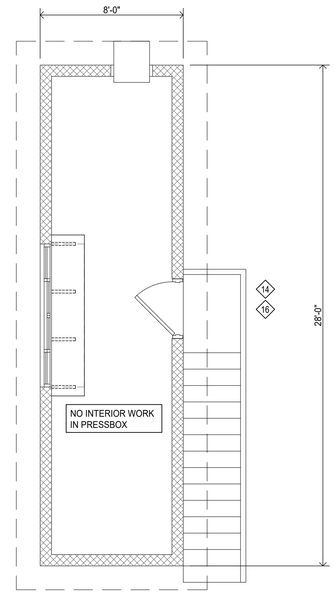


1 A1.3 GIBSON RESTROOM FLOOR PLAN
SCALE: 1/4" = 1'-0"

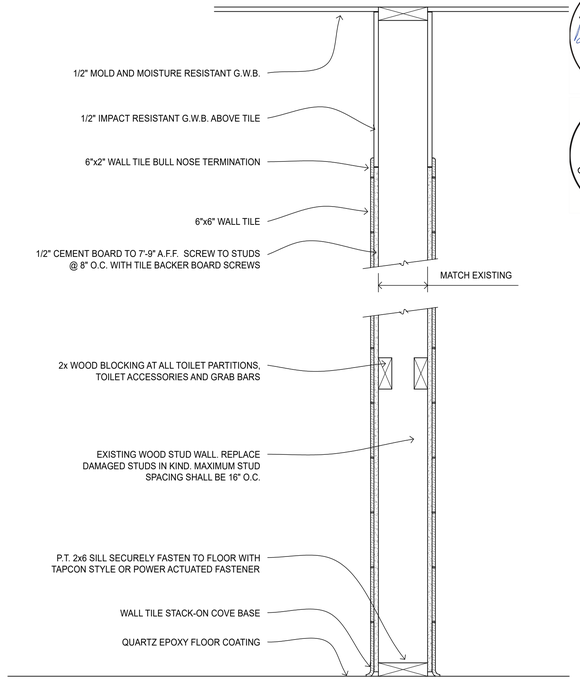
FLOOR PLAN SYMBOL KEY:

EXISTING WOOD STUD WALL TO REMAIN SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.

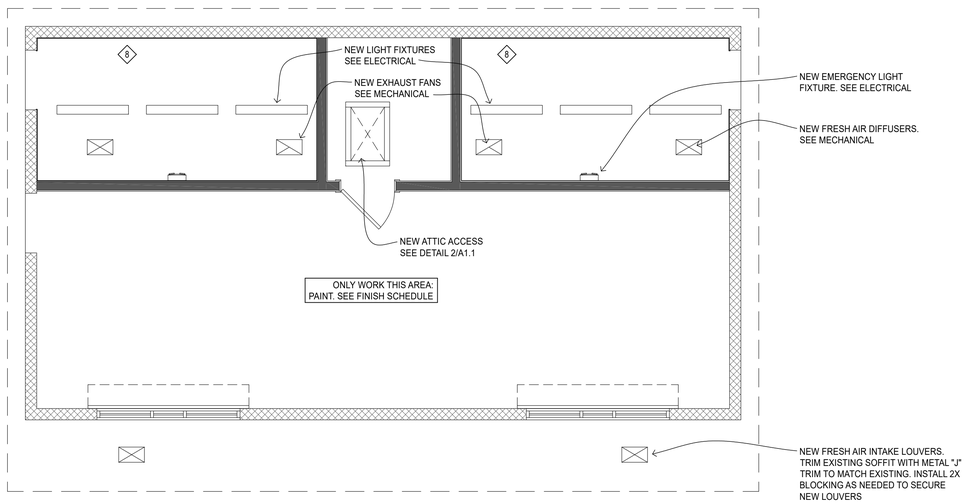
EXISTING CMU WALL TO REMAIN. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.



2 A1.3 GIBSON PRESS BOX FLOOR PLAN
SCALE: 1/4" = 1'-0"



5 A1.3 TYPICAL RESTROOM EXISTING WOOD STUD WALL
SCALE: 1-1/2" = 1'-0"



3 A1.3 GIBSON RESTROOM RCP
SCALE: 1/4" = 1'-0"

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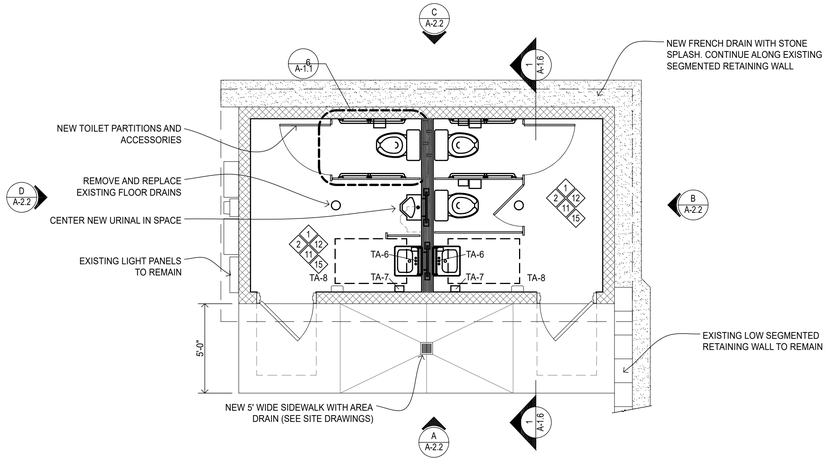
CONCORD, NORTH CAROLINA

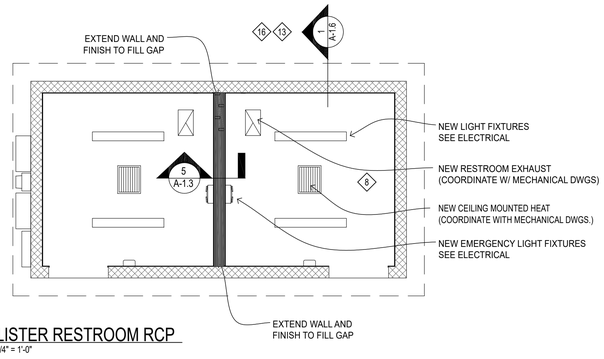
SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: GIBSON FIELD CONCESSION FLOOR PLANS
SHEET NO: A 1.3



1 McALISTER RESTROOM FLOOR PLAN
A1.4 — SCALE: 1/4" = 1'-0"

FLOOR PLAN SYMBOL KEY:

- EXISTING WOOD STUD WALL TO REMAIN SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.
- EXISTING CMU WALL TO REMAIN. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.



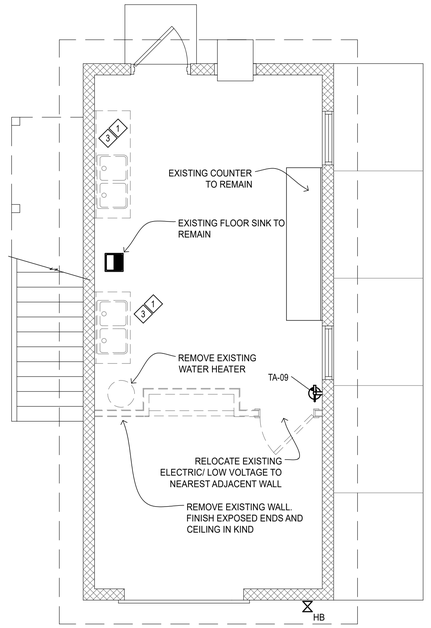
2 McALISTER RESTROOM RCP
A1.4 — SCALE: 1/4" = 1'-0"

DEMOLITION BULLET KEY:

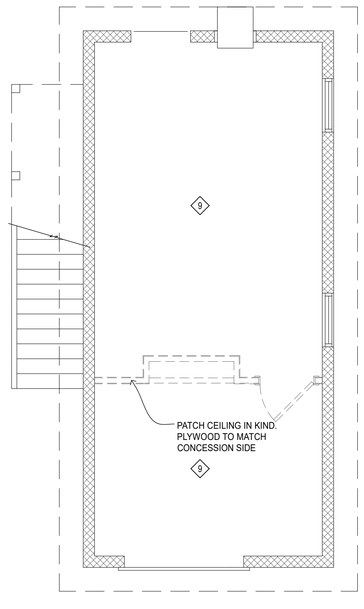
1. REMOVE ALL EXISTING PLUMBING FIXTURES , TOILET ACCESSORIES, PARTITIONS BACK TO WALL. (SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION).
2. REMOVE EXISTING WALL MATERIAL FROM WOOD STUD WALL. REPLACE DAMAGED WOOD STUDS IN KIND. APPLY NEW SCHEDULED WALL SHEATHING AND FINISH (SEE TYPICAL WALL SECTION X/A-1.6)
3. REMOVE EXISTING COUNTER/ WALL CABINETS TO BARE CMU. REPAIR DAMAGED CMU FOR APPLICATION OF SCHEDULED FINISH
4. REMOVE EXISTING DOOR AND FRAME FROM OPENING. CLEAN, PATCH AND PREP OPENING FOR NEW FINISH.
5. REMOVE EXISTING DOOR FROM FRAME. CLEAN, PATCH AND PREP EXISTING FRAME FOR NEW DOOR.
6. REMOVE EXISTING PLATE STEEL DOOR. PATCH AND PREP EXISTING CMU. RE-POINT ANY LOOSE CMU AT HINGES.
7. SAW CUT EXISTING WALL FOR MODIFIED OPENING. TOOTH IN NEW CMU END UNITS. GROUT JAMB SOLID
8. REMOVE ENTIRE EXISTING CEILING IN WORK AREA. EXISTING EQUIPMENT/ CONDUIT SCHEDULED TO REMAIN SHALL BE REHUNG IN A CODE COMPLIANT MANNER. CLEAN AND PREP EXISTING JOISTS FOR APPLICATION OF SCHEDULED FINISH. SEE M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
9. CLEAN AND PREP EXISTING CEILING FOR APPLICATION OF SCHEDULED FINISH.
10. INSTALL NEW FLOOR COVERING. ENSURE EXISTING SHEATHING IS PROPERLY SCREWED TO EXISTING FLOOR JOISTS @ 12" O.C. FIELD, 6" O.C. EDGES.
    - FOOTBALL PRESSBOX: REMOVE AND REPLACE EXISTING WOOD SUB FLOOR WITH 23/32" ADVANTECH SUBFLOOR.
11. WET SAW CUT EXISTING FLOOR SLAB FOR INSTALLATION OF NEW PLUMBING LINES. SEE DETAIL 7/A1.2
12. CLEAN AND PREP EXISTING CONCRETE FLOOR FOR NEW SCHEDULED COVERING. ROUTE AND SEAL EXISTING CRACKS. DIAMOND GRIND EXISTING FLOOR PER NEW FLOORING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
13. REMOVE EXISTING ROOF COVERING COMPLETELY. REPLACE FASCIA, SOFFIT AS DETAILED. REPLACE DAMAGED/ ROTTED SHEATHING IN KIND. NEW FULL LENGTH 2x6 RAFTERS MAY BE SISTERED ON TO EXISTING WITH (2) ROWS OF 0.131x3" NAILS @ 12" O.C. STAGGERED
14. PRESSURE WASH, CLEAN AND STAIN EXISTING WOOD STAIRS, LANDINGS, RAILINGS ETC. (SEE NOTES ON A1.6)
15. CLEAN AND PREP EXISTING CMU WALLS PER DEMOLITION NOTES FOR NEW WALL TILE AND PAINT ABOVE.
16. BUILDING EXTERIOR: CLEAN AND PAINT ALL EXTERIOR SURFACES INCLUDING TRIM, METALS DOORS, ALUMINUM SOFFITS AND GUTTERS PER PAINT MANUFACTURER'S PREPARATION INSTRUCTIONS. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION.

DEMOLITION PLAN NOTES:

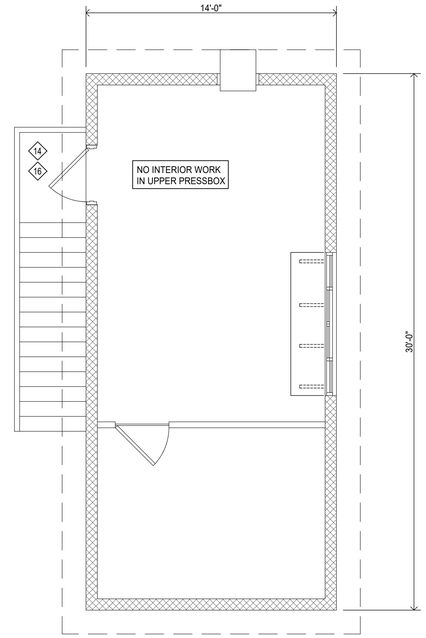
1. THIS DEMOLITION PLAN IS INTENDED TO PROVIDE A GENERAL OVERALL VIEW OF ITEMS TO BE REMOVED. IT IS NOT A COMPLETE LIST OF ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK.
2. C.M.U. WALLS TO REMAIN: SCRAPE, CLEAN AND PREP CMU WALLS TO A SMOOTH SURFACE TO ACCEPT SCHEDULED FINISH. EXISTING EQUIPMENT/ CONDUIT SCHEDULED TO REMAIN SHALL BE REHUNG IN A CODE COMPLIANT MANNER.
3. INFILL CMU WALLS WHERE RECESSED EQUIPMENT HAS BEEN REMOVED HAND DRYERS, DRINKING FOUNTAINS, HEATERS, ETC.) INFILL CMU WALLS WITH CUT CMU TO MATCH EXISTING.
4. DAMAGED OR BROKEN EXISTING C.M.U. IN REMAINING WALLS TO BE REMOVED AND REPLACED IN-KIND.
5. COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
6. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE AND PROPERLY RECYCLED AND OR DISPOSED OF AT THE APPROPRIATE CABARRUS COUNTY FACILITY.
7. ALL TEMPORARY SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.



3 McALISTER STORAGE FLOOR PLAN
A1.4 — SCALE: 1/4" = 1'-0"



4 McALISTER STORAGE RCP
A1.4 — SCALE: 1/4" = 1'-0"



5 McALISTER PRESS BOX FLOOR PLAN
A1.4 — SCALE: 1/4" = 1'-0"

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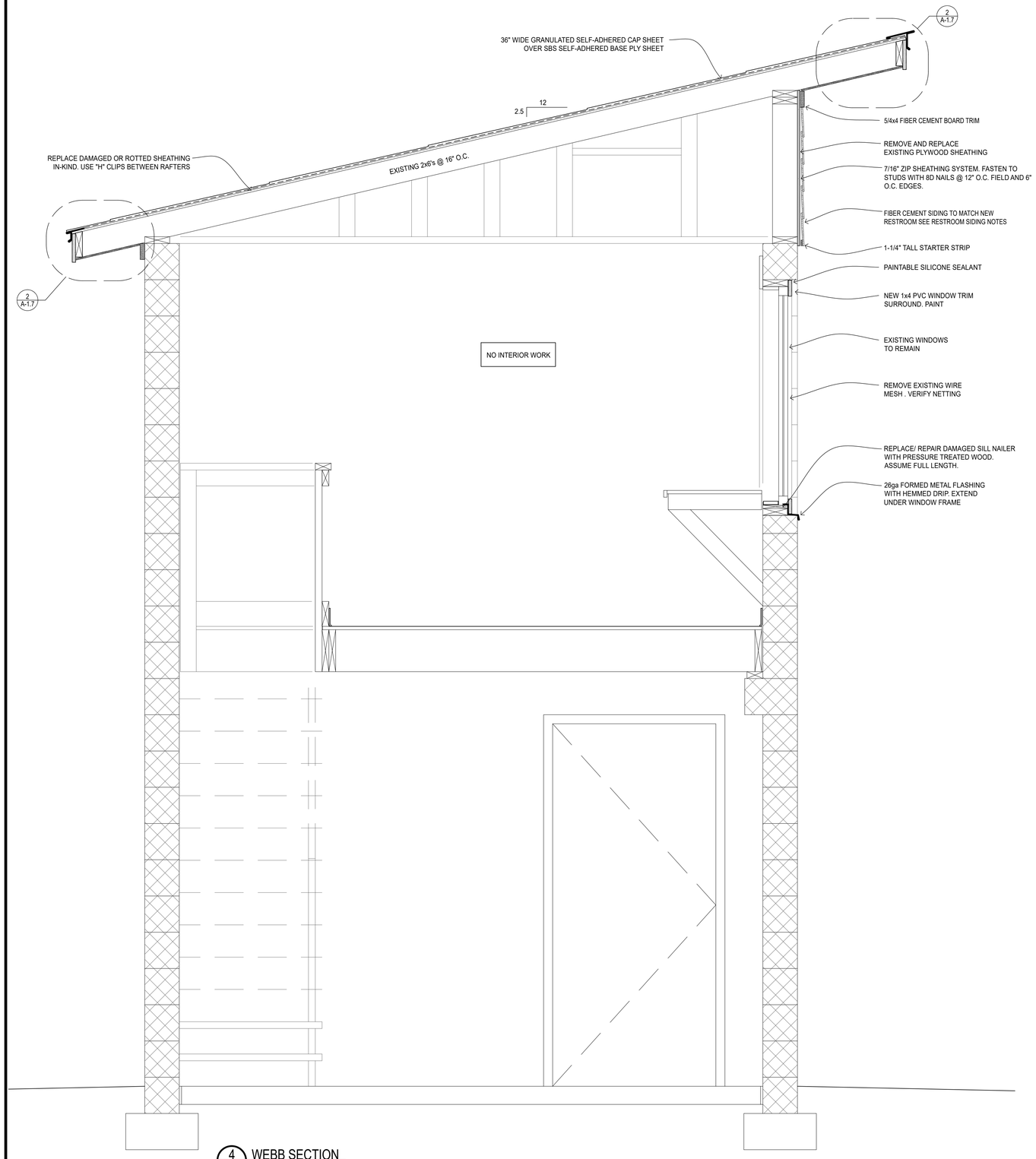
REVISIONS:
1 PLANNING COMMENTS 3/21/25
2 BID SET 6/9/25

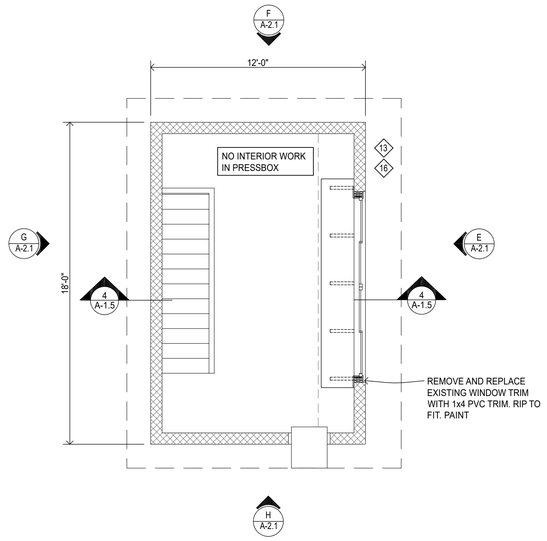
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: McALISTER RSTRM. AND STORAGE BLDG. FLOOR PLANS
SHEET NO: A 1.4



4 A1.5 WEBB SECTION
SCALE: 1" = 1'-0"



N 2 A1.5 WEBB UPPER FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN SYMBOL KEY:

- EXISTING WOOD STUD WALL TO REMAIN SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.
- EXISTING CMU WALL TO REMAIN. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.

DEMOLITION BULLET KEY:

1. REMOVE ALL EXISTING PLUMBING FIXTURES , TOILET ACCESSORIES, PARTITIONS BACK TO WALL. (SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION).
2. REMOVE EXISTING WALL MATERIAL FROM WOOD STUD WALL. REPLACE DAMAGED WOOD STUDS IN KIND. APPLY NEW SCHEDULED WALL SHEATHING AND FINISH (SEE TYPICAL WALL SECTION X/A-1.6)
3. REMOVE EXISTING COUNTER/ WALL CABINETS TO BARE CMU. REPAIR DAMAGED CMU FOR APPLICATION OF SCHEDULED FINISH
4. REMOVE EXISTING DOOR AND FRAME FROM OPENING. CLEAN, PATCH AND PREP OPENING FOR NEW FINISH.
5. REMOVE EXISTING DOOR FROM FRAME. CLEAN, PATCH AND PREP EXISTING FRAME FOR NEW DOOR.
6. REMOVE EXISTING PLATE STEEL DOOR. PATCH AND PREP EXISTING CMU. RE-POINT ANY LOOSE CMU AT HINGES.
7. SAW CUT EXISTING WALL FOR MODIFIED OPENING. TOOTH IN NEW CMU END UNITS. GROUT JAMB SOLID
8. REMOVE ENTIRE EXISTING CEILING IN WORK AREA. EXISTING EQUIPMENT/ CONDUIT SCHEDULED TO REMAIN SHALL BE REHUNG IN A CODE COMPLIANT MANNER. CLEAN AND PREP EXISTING JOISTS FOR APPLICATION OF SCHEDULED FINISH. SEE M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION.
9. CLEAN AND PREP EXISTING CEILING FOR APPLICATION OF SCHEDULED FINISH.
10. INSTALL NEW FLOOR COVERING. ENSURE EXISTING SHEATHING IS PROPERLY SCREWED TO EXISTING FLOOR JOISTS @ 12" O.C. FIELD, 6" O.C. EDGES.
    - FOOTBALL PRESSBOX: REMOVE AND REPLACE EXISTING WOOD SUB FLOOR WITH 23/32" ADVANTECH SUBFLOOR.
11. WET SAW CUT EXISTING FLOOR SLAB FOR INSTALLATION OF NEW PLUMBING LINES. SEE DETAIL 7/A1.2
12. CLEAN AND PREP EXISTING CONCRETE FLOOR FOR NEW SCHEDULED COVERING. ROUTE AND SEAL EXISTING CRACKS. DIAMOND GRIND EXISTING FLOOR PER NEW FLOORING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
13. REMOVE EXISTING ROOF COVERING COMPLETELY. REPLACE FASCIA, SOFFIT AS DETAILED. REPLACE DAMAGED/ ROTTED SHEATHING IN KIND. NEW FULL LENGTH 2x6 RAFTERS MAY BE SISTERED ON TO EXISTING WITH (2) ROWS OF 0.131x3" NAILS @ 12" O.C. STAGGERED
14. PRESSURE WASH, CLEAN AND STAIN EXISTING WOOD STAIRS, LANDINGS, RAILINGS ETC. (SEE NOTES ON A1.6)
15. CLEAN AND PREP EXISTING CMU WALLS PER DEMOLITION NOTES FOR NEW WALL TILE AND PAINT ABOVE.
16. BUILDING EXTERIOR: CLEAN AND PAINT ALL EXTERIOR SURFACES INCLUDING TRIM, METALS DOORS, ALUMINUM SOFFITS AND GUTTERS PER PAINT MANUFACTURER'S PREPARATION INSTRUCTIONS. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION.

DEMOLITION PLAN NOTES:

1. THIS DEMOLITION PLAN IS INTENDED TO PROVIDE A GENERAL OVERALL VIEW OF ITEMS TO BE REMOVED. IT IS NOT A COMPLETE LIST OF ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK.
2. C.M.U. WALLS TO REMAIN: SCRAPE, CLEAN AND PREP CMU WALLS TO A SMOOTH SURFACE TO ACCEPT SCHEDULED FINISH. EXISTING EQUIPMENT/ CONDUIT SCHEDULED TO REMAIN SHALL BE REHUNG IN A CODE COMPLIANT MANNER.
3. INFILL CMU WALLS WHERE RECESSED EQUIPMENT HAS BEEN REMOVED HAND DRYERS, DRINKING FOUNTAINS, HEATERS, ETC.) INFILL CMU WALLS WITH CUT CMU TO MATCH EXISTING.
4. DAMAGED OR BROKEN EXISTING C.M.U. IN REMAINING WALLS TO BE REMOVED AND REPLACED IN-KIND.
5. COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
6. ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE AND PROPERLY RECYCLED AND OR DISPOSED OF AT THE APPROPRIATE CABARRUS COUNTY FACILITY.
7. ALL TEMPORARY SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR.

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CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: WEBB BASEBALL PRESS BOX
SHEET NO: A 1.5

NEW RESTROOM AND STORAGE BUILDING FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	MEN'S	EPOXY	STACK-ON COVE	CEMENT BRD/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	
02	WOMEN'S	EPOXY	STACK-ON COVE	CEMENT BRD/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	
03	FAMILY RESTROOM	EPOXY	STACK-ON COVE	CEMENT BRD/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	
04	CHASE	SEALED CONCR.	NONE	5/8" M.M.R.G.W.B.	PT-2	1/2" M.M.R.G.W.B.	PT-2	INSTALL FRP 4' x 4' BEHIND MOP SINK
05	STORAGE	SEALED CONCRETE	4" RUBBER	5/8" M.M.R.G.W.B.	PT-2	1/2" M.M.R.G.W.B.	PT-2	
06	EXTERIOR	——	——	FIBER CEMENT LAP/ PVC	PT-1	EXPOSED WOOD	PT-3	
07	EXTR. BRACKETS	——	——	——	——	WOOD	PT-1	
08								

EXISTING FOOTBALL CONCESSION FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	CONCESSION	EPOXY	EPOXY	PAINTED CMU	PT-2	1/2" M.M.R.G.W.B.	PT-2	SEE NOTE 7
02	PRESS BOX	LVT	4" RUBBER	PAINTED CMU	PT-6	EXPOSED	PT-4	SEE NOTE 7
03	EXTERIOR	——	——	PAINTED CMU	PT-1	CEMENT BOARD/ PVC	PT-1	SEE NOTE 7, 8
04	WOOD STEPS	——	——	——	——	——	PT-5	SEE EXISTING WOOD STAIR NOTES
05								

EXISTING GIBSON FIELD RESTROOM AND CONCESSION BUILDING FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	MEN'S	EPOXY	STACK-ON COVE	CMU/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	SEE NOTE 7
02	WOMEN'S	EPOXY	STACK-ON COVE	CMU/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	SEE NOTE 7
03	CONCESSION	——	——	CMU/ PLYWOOD	PT-2	PLYWOOD	PT-2	SEE NOTE 7
04	STORAGE	——	——	CMU/ PLYWOOD	PT-2	PLYWOOD	PT-2	SEE NOTE 7
05	EXTERIOR	——	——	PAINTED CMU	PT-1	ALUMINUM	PT-1	SEE NOTE 7, 8
06								

EXISTING GIBSON FIELD PRESS BOX FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	STORAGE	——	——	——	——	——	——	
02	PRESS BOX	——	——	——	——	——	——	
03	EXTERIOR	——	——	PAINTED CMU	PT-1	ALUMINUM	PT-1	SEE NOTE 7, 8
04	WOOD STEPS	——	——	——	——	——	PT-5	SEE EXISTING WOOD STAIR NOTES
05								

EXISTING McALISTER FIELD RESTROOM FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	MEN'S	EPOXY	STACK-ON COVE	CMU/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	SEE NOTE 7
02	WOMEN'S	EPOXY	STACK-ON COVE	CMU/ M.M.R.G.W.B.	TILE/ PT-2	1/2" M.M.R.G.W.B.	PT-2	SEE NOTE 7
03	EXTERIOR	——	——	C.M.U.	PT-1	CEMENT BOARD/ PVC	PT-1	SEE NOTE 7, 8

EXISTING McALISTER FIELD PRESS BOX FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	STORAGE	——	——	PAINTED CMU	PT-2	PLYWOOD	PT-2	SEE NOTE 7
02	PRESS BOX	——	——	——	——	——	——	
03	UPPER STORAGE	——	——	——	——	——	——	
04	EXTERIOR	——	——	PAINTED CMU	PT-1	CEMENT BOARD	PT-1	SEE NOTE 7, 8
05	WOOD STEPS	——	——	——	——	——	PT-5	SEE EXISTING WOOD STAIR NOTES

EXISTING WEB BASEBALL FIELD PRESS BOX FINISH SCHEDULE

ROOM NUM.	ROOM NAME	FLOOR	BASE	WALLS (ALL) MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	LOWER STORAGE	——	——	——	——	——	——	
02	PRESS BOX	——	——	——	——	——	——	
03	EXTERIOR	——	——	PAINTED CMU	PT-1	CEMENT BOARD/ PVC	PT-1	SEE NOTE 7, 8
04	INTERIOR WOOD STEPS	——	——	——	——	——	——	
05								

ABBREVIATION KEY

CEMENT BRD. 1/2" THICK CEMENT WALLBOARD SCREWED TO STUDS WITH AT 8" O.C

M.M.R.G.W.B. 1/2" or 5/8" THICK MOLD AND MOISTURE RESISTANT GYPSUM WALLBOARD FASTENED WITH SCREWS AT 6" O.C. EDGES, 12" O.C. FIELD

OVERALL FINISH NOTES:

1. OWNER APPROVED PRODUCT SUBMITTALS AND COLOR SELECTION REQUIRED PRIOR TO INSTALLATION OF ANY FINISH MATERIAL. CONTRACTOR TO ANTICIPATE UP TO THREE FIELD APPLIED 12"x12" EXTERIOR PAINT SWATCH SCHEMES ON FINISHED STRUCTURE FOR BOTH BODY AND TRIM COLORS FOR OWNER SELECTION.
2. FINISH LEVEL TO MEET OR EXCEED ASTM C840 LEVEL 5. CONTRACTOR TO PRESSURE WASH, CLEAN, SAND SURFACES AS REQUIRED TO ACHIEVE REQUIRED FINISH.
3. ALL FINISHES SHALL BE STORED, APPLIED AND CURED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. BUILDING MATERIALS TO RECEIVE FINISH APPLICATION SHALL BE CLEANED AND PREPARED FOR APPLIED FINISH ACCORDING MANUFACTURER'S SPECIFICATIONS.
5. THE MAXIMUM VERTICAL DIFFERENCE BETWEEN ANY TWO ADJACENT FLOOR SURFACES SHALL NOT EXCEED 1/2".
6. ALL ROOM SURFACES AND INTERSECTIONS SHALL BE SMOOTH, HARD AND NON-ABSORBENT PER REQUIREMENTS OF SECTION 1210 OF THE NORTH CAROLINA BUILDING CODE.
7. EXISTING C.M.U. WALLS: REMOVE ALL LOOSE PAINT, SURFACE CONTAMINATION AND MILDEW FROM SURFACE PER MANUFACTURER'S WRITTEN INSTRUCTIONS FOR APPLICATION OF SPECIFIED FINISH.

   NEW CMU: ONE COAT HEAVY DUTY BLOCK FILLER PRIOR TO APPLICATION OF PRIMER (SHERWIN WILLIAMS PrepRite B25W25, OR EQUAL).
8. EXISTING BUILDING EXTERIORS: CLEAN AND PAINT ALL EXTERIOR SURFACES INCLUDING TRIM, METALS DOORS, ALUMINUM SOFFITS AND GUTTERS PER PAINT MANUFACTURER'S PREPARATION INSTRUCTIONS.

MATERIAL NOTES:

EPOXY FLOOR: CONTRACTOR TO COORDINATE SLAB PREP WITH EPOXY FLOORING INSTALLER. SLIP RESISTANT, SEAMLESS EPOXY FLOOR WITH URETHANE TOP COAT. FLOOR PREPARATION, MOISTURE TESTING (IN SITU PROBE TEST), INSTALLATION AND APPLICATION PER MANUFACTURER'S SPECIFICATIONS. CONCRETE FLOOR TO BE DIAMOND GROUND PER FLOORING MANUFACTURER INSTALLATION INSTRUCTIONS. BASIS OF DESIGN RIO-X FLOORING SYSTEMS AS DISTRIBUTED BY TURNING POINT SUPPLY, tim@theconcreteexperts.com, 704.333.4235.

- EXISTING FLOORS: APPLY BASE COAT OF A 2-PART EPOXY MOISTURE MITIGATION BARRIER: APPLICATION THICKNESS BETWEEN 15 TO 23MILS, AS DETERMINED BY RESULTS OF MOISTURE TEST: RIO-COAT EVS.
- SINGLE BROADCAST QUARTZ EPOXY COAT: RIO-COAT EMP. COLOR AS SELECTED BY OWNER.
- 2ND. GROUT COAT TO CONTROL ABRASION: RIO-COAT EMP.
- URETHANE TOP COAT: . RIO-COAT UHW. SATIN FINISH

SEALED CONCR.: HEAVY DUTY, HEAVY SOLIDS, GLOSS URETHANE FLOOR COATING. MEETING ADA REQUIREMENTS FOR SLIP RESISTANCE. APPLIED 3 TO 4.5 MILLS WET. ACCEPTABLE MANUFACTURES: (SHERWIN WILLIAMS, ARMORSEAL REXTHANE 1 OR EQUAL) COLOR: HAZE GRAY

WALL TILE: 6"x6" BRIGHT WHITE SEMI-GLOSS GLAZED CERAMIC WALL TILE WITH MATCHING 6"x6" STACK-ON COVE BASE AND 2"x6" BULLNOSE CAP AND TRIM PIECES. TILE HEIGHT TO NEAREST FULL COURSING AT 7'-10" A.F.F. (DALTILE , CLASSIC COLOR WHEEL COLLECTION, OR APPROVED EQUAL).

- OUTSIDE CORNERS: SCHLUTER ANODIZED ALUM RONDEC. (SEE DETAILS).
- DOOR FRAME EDGES: SCHLUTER SCHIENE ANODIZED ALUMINUM (SEE DETAILS)
- GROUT: NON-SANDED DELOREAN GREY EPOXY GROUT, 3/32" WIDE GROUT LINE.

F.R.P.: FIBER REINFORCED PLASTIC. SMOOTH FINISH, NOMINAL 3/32" THICK. PANEL INSTALLED PER MANUFACTURES INSTALLATION INSTRUCTIONS. USE MANUFACTURER'S APPROVED ADHESIVE. MANUFACTURER'S MOLDINGS SHALL SURROUND ALL PANELS AND BE PROPERLY SEALED WITH A CONTINUOUS BEAD OF SILICONE SEALANT.

UNFINISHED METALS: SHOP PRIMED AND PAINTED WITH TWO COATS OF SEMI-GLOSS POLYAMIDE EPOXY PAINT.

GALVANIZED METALS: SAND AND PRIME DAMAGED AREA WITH AN ALUMINIZED PAINT. SHERWIN-WILLIAMS GALVITE HS PRIMER UNDER SHERWIN-WILLIAMS SILVER-BRITE ALUMINUM PAINT.

BRICK VENEER: SEE BRICK VENEER NOTES ON A2.0

PAINTS:

PT-1: ONE COAT EXTERIOR LATEX PRIMER/ SEALER (SHERWIN WILLIAMS B51-450 SERIES) PLUS, MINIMUM TWO COATS PREMIUM EXTERIOR, VINYL SAFE, ACRYLIC, SATIN FINISH. SHERWIN WILLIAMS DURATION K33-200 SERIES OR EQUAL. (5.3-6.4 MILS WET, 2.1-2.6 MILS DRY PER COAT)

PT-2: PRIMER: ONE COAT LATEX PRIMER SHERWIN-WILLIAMS PRO-MAR 200 B28W2600 OR EQUAL.

FINISH: TWO COATS INDUSTRIAL PRE-CATALYZED WATER BASE EPOXY. (SHERWIN-WILLIAMS PRO INDUSTRIAL B73-300 SERIES, OR EQUAL) (4.0MILS WET, 1.5 MILS DRY PER COAT)
COLOR: SW 6176, LIVEABLE GREEN SEMI-GLOSS

PT-3: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURES APPROVED METHODS. SAND ANY DETERIORATED OR MARKED WOOD TO A FRESH SURFACE. APPLY MINIMUM TWO COATS CLEAR SATIN FINISH URETHANE EXTERIOR TOP COAT, CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS MINWAX HELMSMAN SPAR URETHANE OR EQUAL

PT-4: EXPOSED WOOD CEILINGS: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURER'S APPROVED METHODS. SAND ANY DETERIORATED OR MARKED WOOD TO A FRESH SURFACE. APPLY 1 COAT LATEX PRIMER-SEALER (SHERWIN-WILLIAMS PrepRite ProBlock B51-W620), 2 COATS LATEX ACRYLIC MATTE (SHERWIN-WILLIAMS PRO INDUSTRIAL ACRYLIC B66-1150 SERIES).

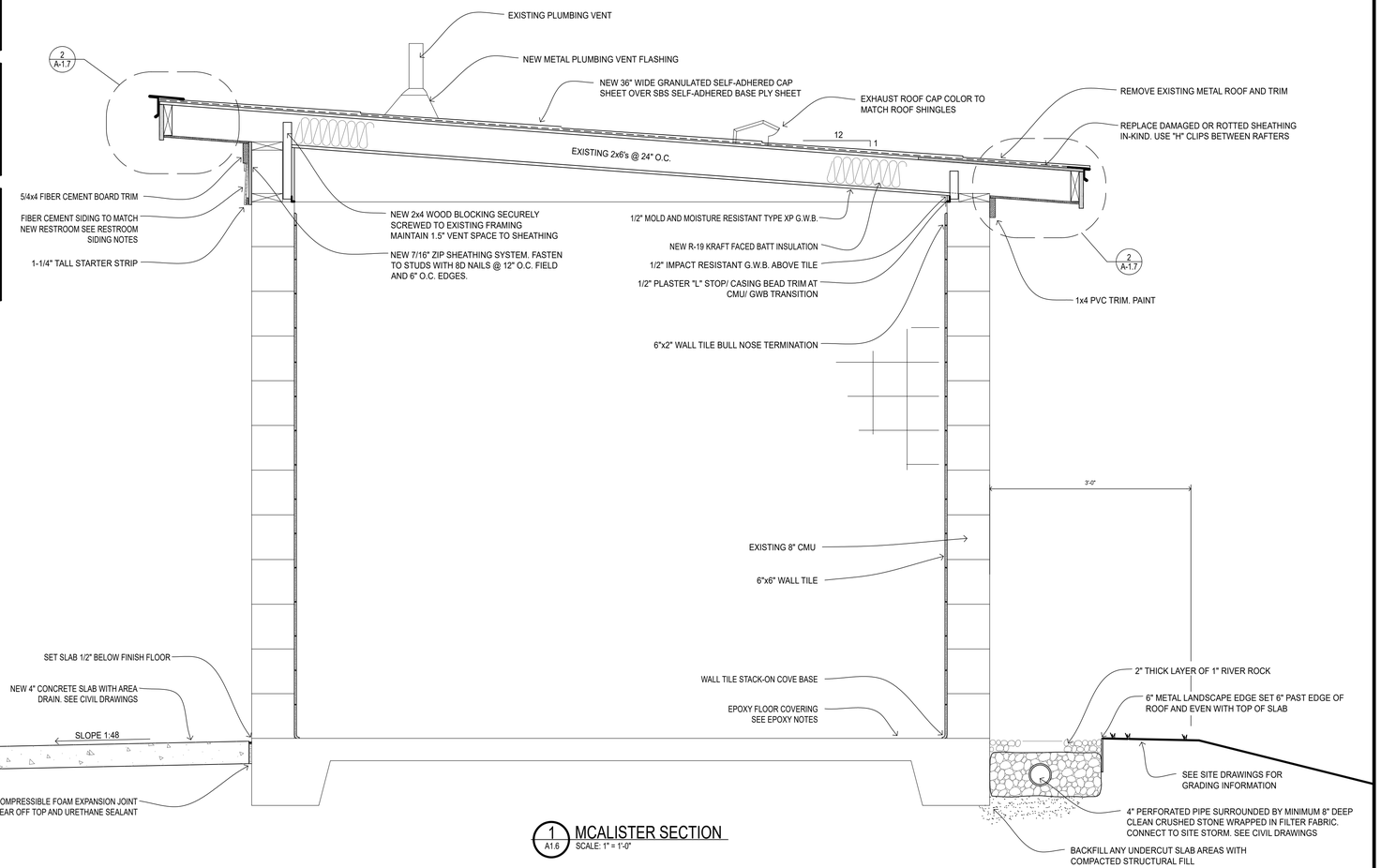
PT-5: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURES APPROVED METHODS. APPLY MINIMUM TWO COATS SEMI-TRANPARENT SATIN FINISH EXTERIOR LOG HOME STAIN AND SEALER, CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS SUPERDECK LOG HOME & DECK STAIN OR APPROVED EQUAL

PT-6: INTERIOR CMU: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURES APPROVED METHODS.

- PREVIOUSLY PAINTED CMU: PRIME COAT - LATEX PRIMER/ SEALER (SHERWIN-WILLIAMS PrepRite PROBLOCK PRIMER SEALER, B51W620). PLUS TWO COATS LATEX INTERIOR VINYL ACRYLIC EGGSHELL FINISH (SHERWIN-WILLIAMS ProMar 200 B20-1260 SERIES
- UNPAINTED PAINTED CMU: ONE COAT HEAVY DUTY BLOCK FILLER PRIOR TO APPLICATION OF PRIMER (SHERWIN WILLIAMS PrepRite B25W25). PRIME COAT - LATEX PRIMER/ SEALER (SHERWIN-WILLIAMS PrepRite PROBLOCK PRIMER SEALER, B51W620). PLUS TWO COATS LATEX INTERIOR VINYL ACRYLIC EGGSHELL FINISH (SHERWIN-WILLIAMS ProMar 200 B20-1260 SERIES

EXISTING EXTERIOR WOOD STAIRS:

1. PREPARATION: CLEAN EXISTING WOOD SURFACES WITH A STAIN AND SEALER REMOVER AND WOOD BRIGHTENER (SHERWIN WILLIAMS SuperDeck Stain and Sealer Remover AND SuperDeck Revive Deck and Siding Brightener, OR APPROVED EQUALS). APPLICATION OF PRODUCTS MUST ADHERE TO MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
2. DO NOT APPLY STAIN AND SEALER REMOVER TO NEW WOOD SURFACES. PRODUCT WILL DARKEN NEW WOOD.
3. COVER ALL METAL AND FINISHED SURFACES TO PROTECT FROM CONTACT WITH PRODUCT. THOROUGHLY RINSE SURROUNDING WORK AREA AND VEGETATION WITH WATER AFTER APPLICATION.
4. ALLOW APPROXIMATELY 2 DAYS FOR WOOD TO THOROUGHLY DRY BEFORE APPLICATION OF PROTECTIVE FINISH
5. PROTECTIVE FINISH: APPLY MINIMUM OF TWO COATS OF SATIN FINISH SEMI-TRANSPARENT STAIN (SHERWIN WILLIAMS SuperDeck Log Home & Deck Stain, OR APPROVED EQUAL). APPLICATION OF PRODUCTS MUST STRICTLY FOLLOW MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
6. COVER ALL FINISHED SURFACES TO PROTECT FROM SPLATTER.



1 A1.6 MCALISTER SECTION
SCALE: 1" = 1'-0"

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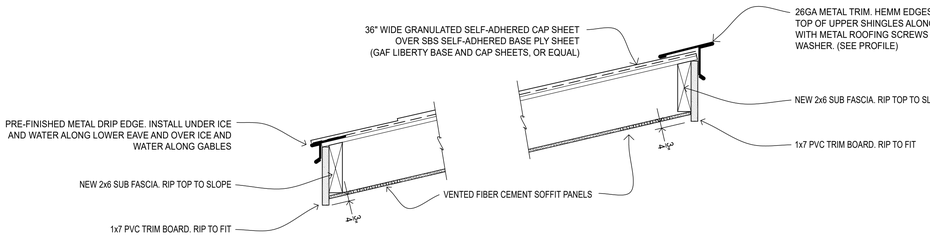
SCALE: AS NOTED

DATE: 05-21-25

SHEET NAME:
FINISH SCHEDULES, NOTES AND SECTION

SHEET NO:
A 1.6



2 A1.7 EXISTING SOFFIT DETAIL
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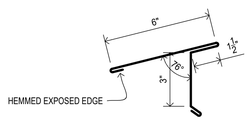
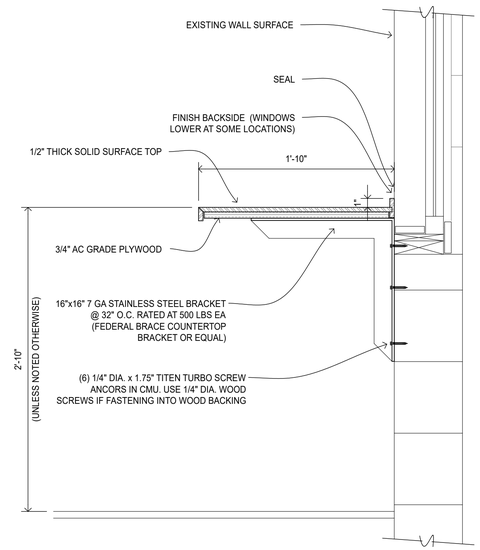


3 A1.7 ENLARGED PEAK TRIM DETAIL
SCALE: 3" = 1'-0"



4 A1.7 DESKTOP SECTION
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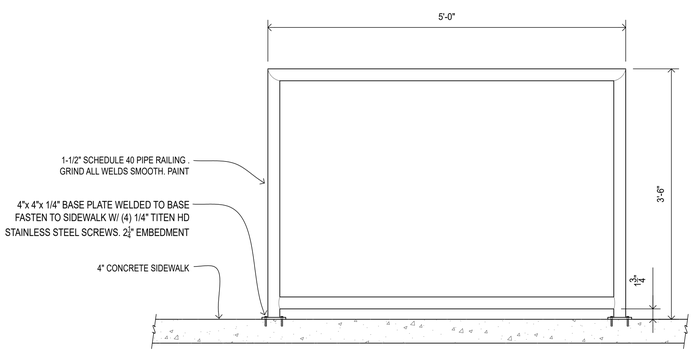
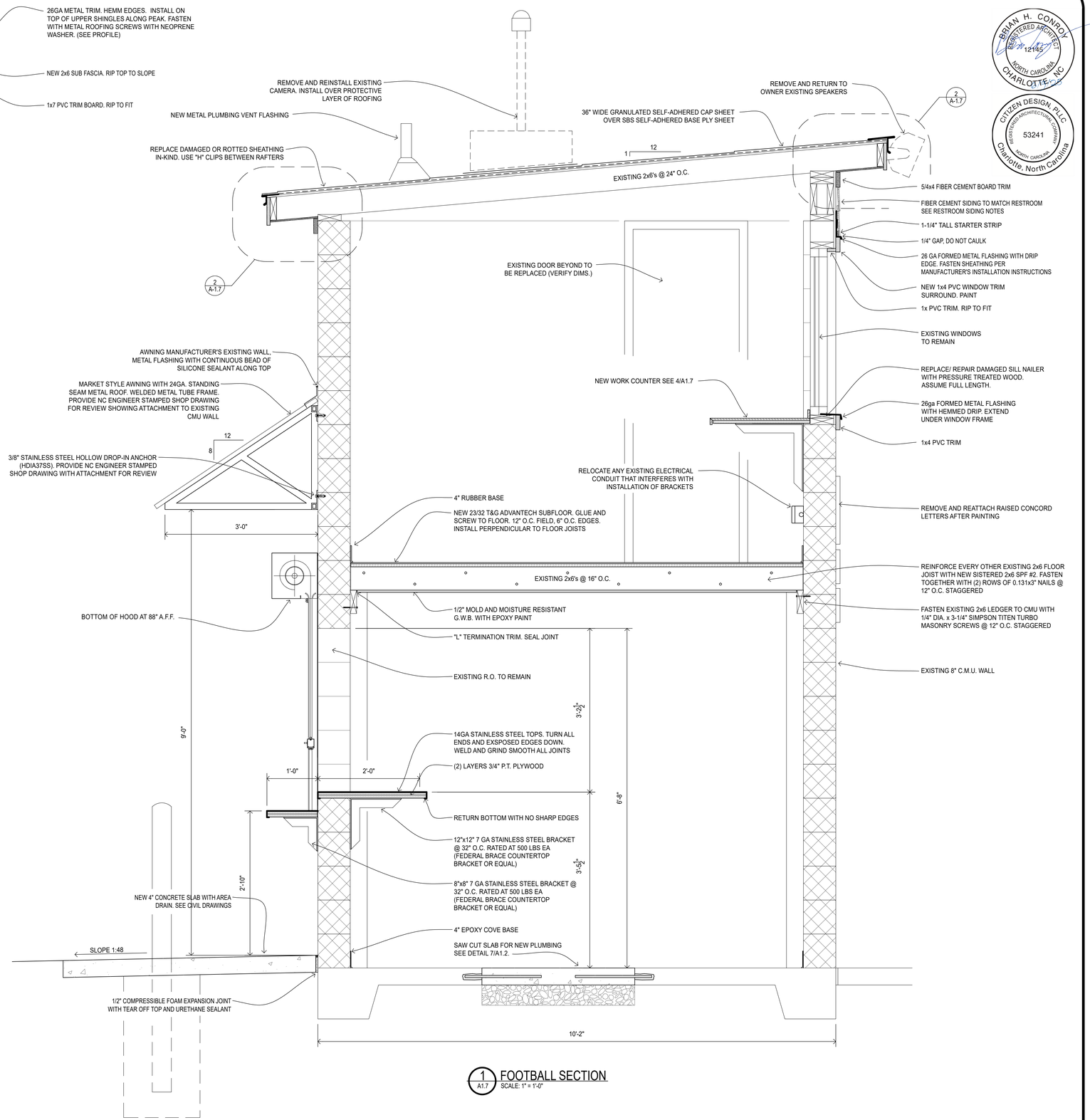


5 A1.7 RAIL DETAIL
SCALE: 1" = 1'-0"



1 A1.7 FOOTBALL SECTION
SCALE: 1" = 1'-0"

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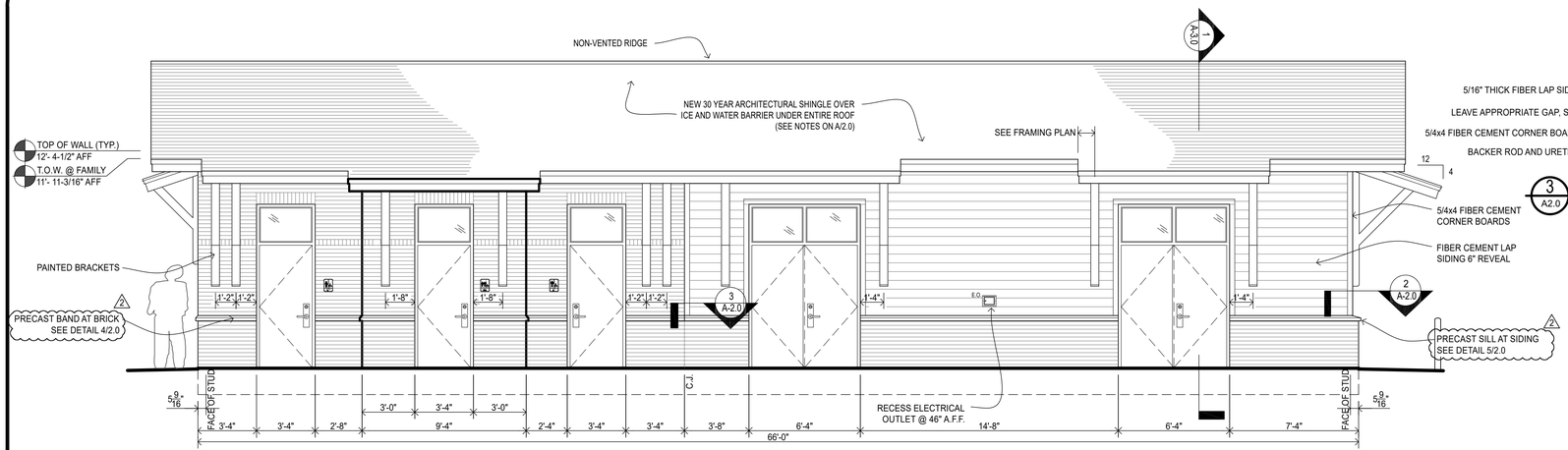
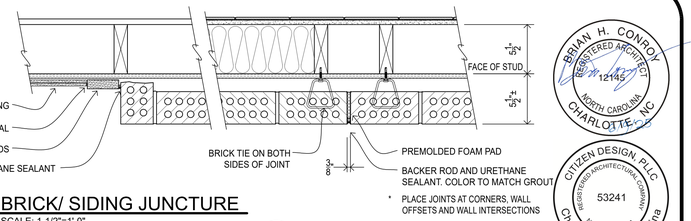
DATE: 05-21-25
SHEET NAME:
SECTIONS AND DETAILS
SHEET NO:
A 1.7

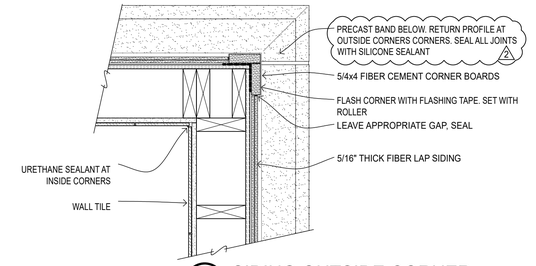


A SOUTH (BASEBALL) FIELD ELEVATION
A2.0 SCALE 1/4" = 1'-0"

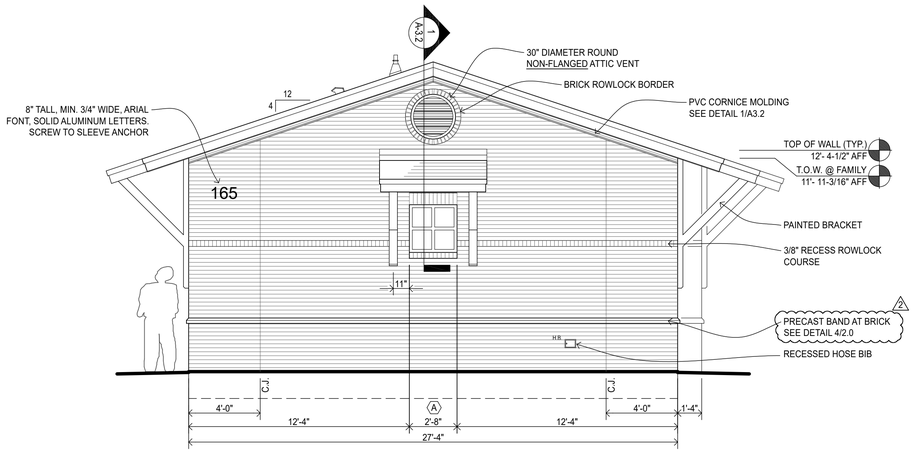


3 BRICK/ SIDING JUNCTURE
A2.0 SCALE: 1-1/2"=1'-0"

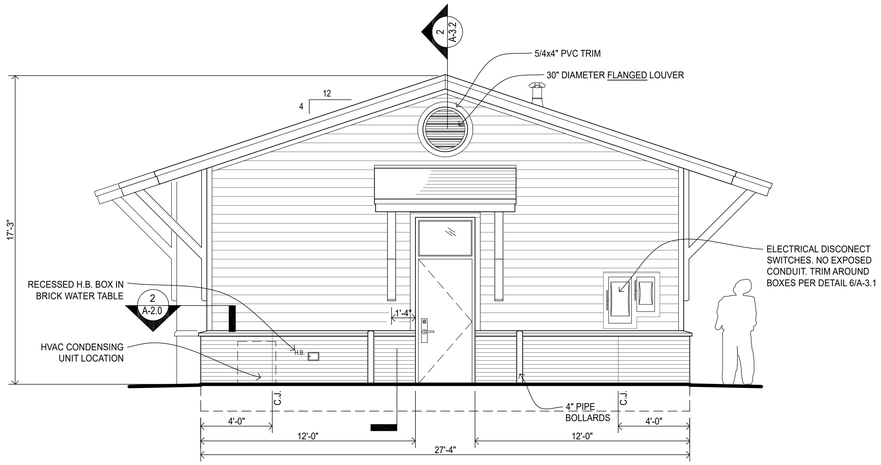
1 BRICK CONTROL JOINT
A2.0 SCALE: 1-1/2"=1'-0"



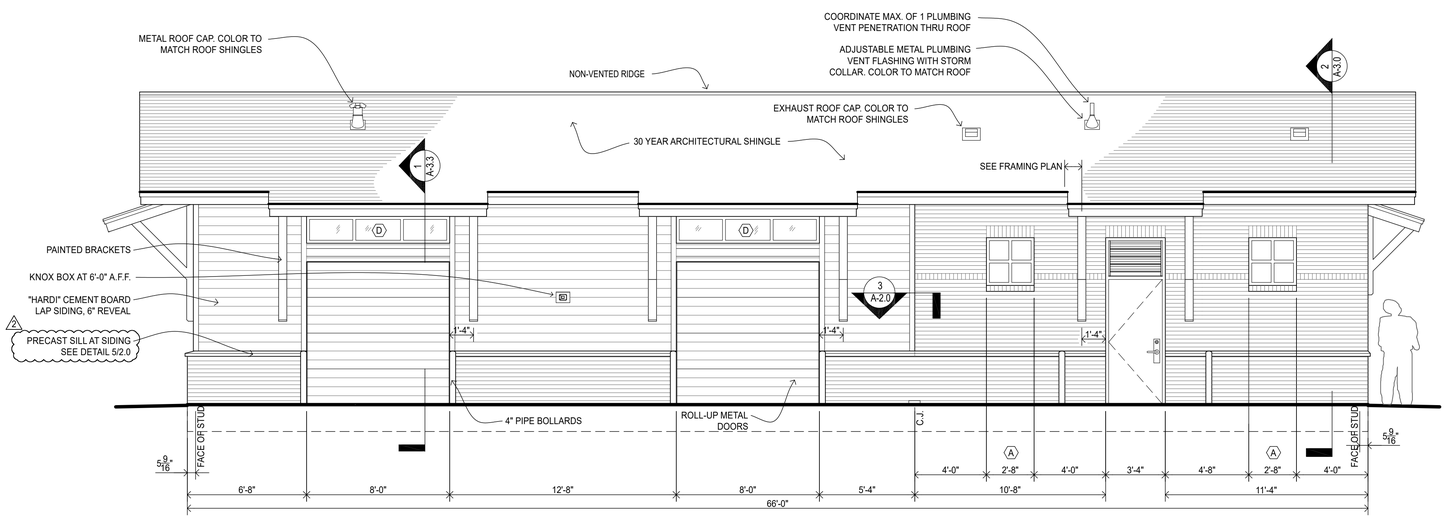
2 SIDING OUTSIDE CORNER
A2.0 SCALE: 1-1/2"=1'-0"



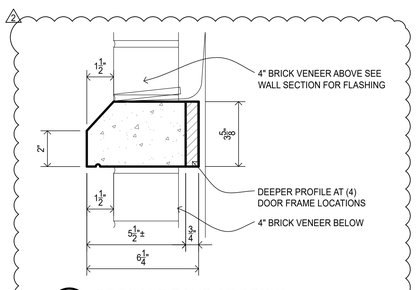
B WEST (ACADEMY AVE.) ELEVATION
A2.0 SCALE 1/4" = 1'-0"



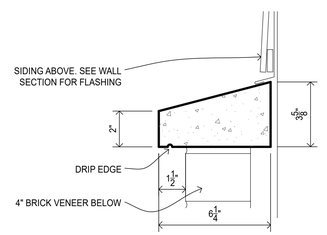
C EAST ELEVATION
A2.0 SCALE 1/4" = 1'-0"



D NORTH ELEVATION
A2.0 SCALE 1/4" = 1'-0"



4 PRECAST BAND AT BRICK
A2.0 SCALE: 3" = 1'-0"



5 PRECAST SILL AT SIDING
A2.0 SCALE: 3" = 1'-0"

FIBER CEMENT BOARD LAP SIDING:

1. LAP SIDING: 7-1/4" TALL x 5/16" THICK BOARDS WITH 6" REVEAL. SEE ELEVATIONS FOR PATTERN. FINISH: SMOOTH TEXTURE.

   FLASH SIDING BUTT JOINTS: SHINGLE IN 6" WIDE FLASHING STRIPS AT ALL SIDING BUTT JOINTS TO ALLOW FOR EXPANSION IN LONG RUNS.

   TRIM BOARDS: 5/4" AND 3/4" THICK FIBER CEMENT BOARDS, (3/4" PVC SPECIFIED IN SOME AREAS) SMOOTH TEXTURE. MINIMUM LENGTH OF BOARD BETWEEN CUT JOINTS SHALL BE 6'-0"
2. FIBER CEMENT PANELS AND TRIM TO BE INSTALLED BY CERTIFIED MANUFACTURER INSTALLER PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
3. ALL SIDING AND TRIM MUST BE FLASHED IN ACCORDANCE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS
4. MANUFACTURER'S RECOMMENDED FASTENERS AND FASTENER SPACINGS FOR INSTALLATION INTO SPECIFIED MATERIALS SHALL BE USED.
5. SAMPLE WALL PANEL: A MINIMUM 4'x8' WALL PANEL WITH ALL BASE, CAP AND RAIN SCREEN FLASHINGS SHALL BE CONSTRUCTED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO INSTALLATION ON THE BUILDING. THE SAMPLE SHALL BE SEPPARTE FROM THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.

ARCHITECTURAL ROOF SHINGLES

1. 30 YEAR MINIMUM WARRANTY. ARCHITECTURAL FIBERGLASS REINFORCED ASPHALT SHINGLES. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD AND PREMIUM COLORS.
2. APPLY 40 MIL. MINERAL SURFACED SELF ADHERING, SELF SEALING ICE AND WATER BARRIER UNDER ENTIRE ROOF. BARRIER SHALL BE SUITABLE FOR USE UNDER ASPHALT SHINGLED ROOF SYSTEMS
3. NON-VENTED RIDGE
4. PROVIDE PERIMETER PRE-FINISHED METAL DRIP EDGE WITH 3.5" LONG NAILING FLANGE.
5. ROOF SHEATHING SHALL BE APA RATED 5/8" T&G ROOF SHEATHING.
6. MANUFACTURER'S APPROVED INSTALLER, PROPERLY TRAINED BY MANUFACTURER, SHALL INSTALL ROOF SYSTEM. SHINGLES SHALL BE INSTALLED IN STRAIGHT AND TRUE LINES ACROSS THE ROOF.

LOW-SLOPE ROLL ROOFING

1. 20 YEAR MINIMUM WARRANTY. 36" WIDE, MODIFIED BITUMEN SELF-ADHERING GRANULATED CAP SHEET OVER 36" WIDE SBS SELF-ADHERING BASE PLY SHEET. (GAF LIBERTY, SBS CAP AND BASE SHEETS OR APPROVED EQUAL)

BRICK VENEER

1. BRICK AND MORTAR TO MATCH EXISTING ACADEMY RECREATION CENTER, ADJACENT ON SITE.
2. MANUFACTURER: GENERAL SHALE. BRICK: RED RANGE SEMI SMOOTH
3. MORTAR COLOR: SAVANNAH IVORY BY ARGOS TO MATCH EXISTING ADJACENT ACADEMY RECREATION CENTER.
4. DO NOT INSTALL BRICK WHEN AIR TEMPERATURE FALLS BELOW 40 DEGREES FAHRENHEIT
5. PROTECT ADJACENT WORK FROM MORTAR AND DAMAGE.
6. CLEAN AND REMOVE ACCESS MORTAR FROM BRICK AFTER INSTALLATION PER MANUFACTURES INSTRUCTIONS.
7. SAMPLE WALL PANEL: A MINIMUM 4' WIDE x8' TALL WALL PANEL SEPPARATE FROM BUILDING WITH ALL BASE AND CAP FLASHINGS CONSTRUCTED FOR APPROVAL BY OWNER PRIOR TO INSTALLATION ON THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.

   BOND: RUNNING WITH ROWLOCKS, SOLDIER COURSES AND SILLS AS SHOWN ON BUILDING ELEVATIONS.

   JOINTING: CONCAVE AND STRUCK WITH A SMOOTH STEEL TOOL

   HEAD JOINTS: SHALL BE PLUMB. VERTICAL ALIGNMENT SHALL NOT VARY MORE THAN 1/2" OR EVERY 6 VERTICAL FEET

PRECAST BAND 2

1. SUBMIT LAYOUT SHOP DRAWING FOR REVIEW PRIOR TO FABRICATION. RETURN PROFILE AT CORNERS, DO NOT SAWCUT CORNERS. THICKEN BRICK PROFILE AT DOORS - NO RETURN
2. UNITS SHALL CONFORM TO ASTM-C1364 (STANDARD SPECIFICATION FOR ARCHITECTURAL CAST STONE). MINIMUM COMPRESSIVE STRENGTH OF 6,500psi AND MAXIMUM ABSORPTION 6% (COLD WATER METHOD)
3. UNITS SHALL BE MANUFACTURED WITH INTEGRAL WATER REPELLENT COMPLYING WITH ASTM-E 514
4. BASIS OF DESIGN: PRESTIGE ARCHITECTURAL CAST STONE, COLOR AS SELECTED BY OWNER FROM FULL RANGE. MANUFACTURED BY JOHNSON CONCRETE COMPANY, CONCORD, NC. . CONTACT STARLING JOHNSON AT sjohnson@johnsonproductsusa.com. 704.636.5231

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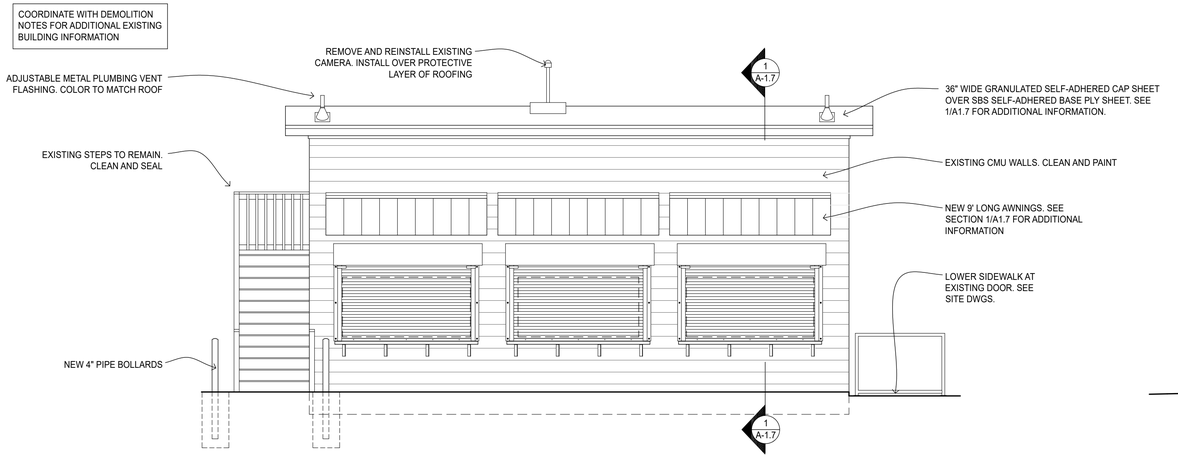
SCALE: AS NOTED

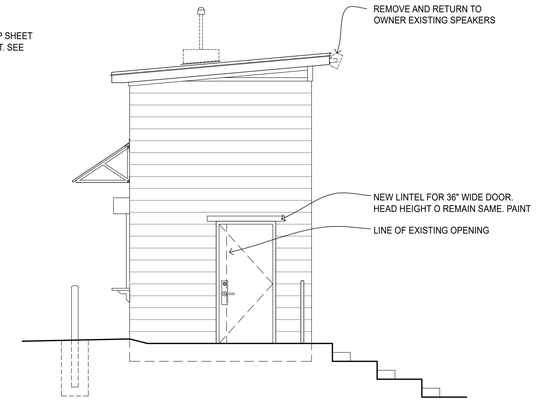
DATE: 05-21-25

SHEET NAME:
NEW RESTROOM ELEVATIONS AND DETAILS

SHEET NO:
A 2.0

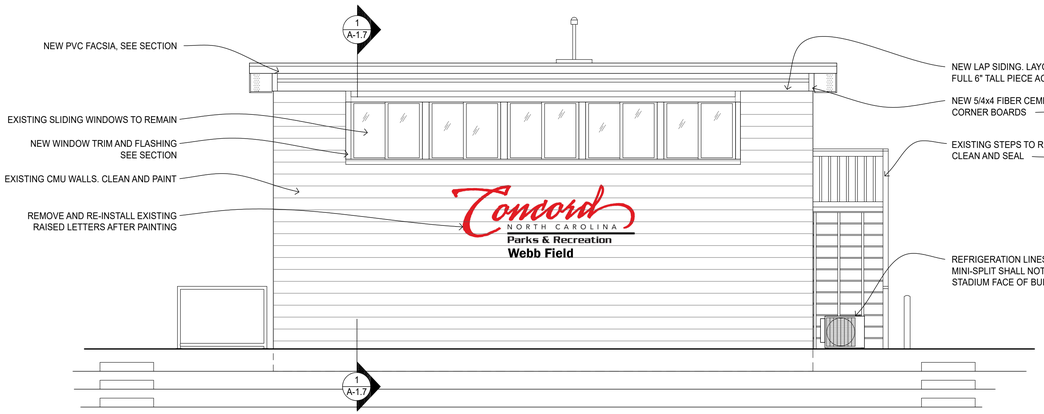


A A2.1 FOOTBALL CONCESSION EAST ELEVATION
SCALE: 1/4" = 1'-0"

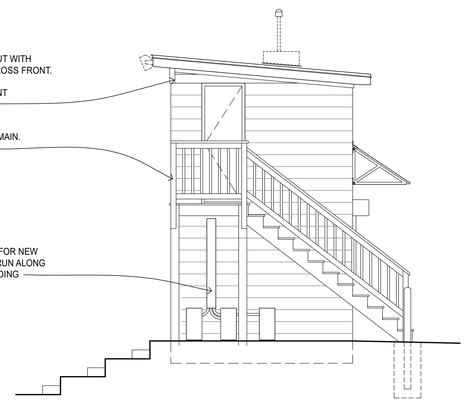


B A2.1 FOOTBALL CONCESSION NORTH ELEVATION
SCALE: 1/4" = 1'-0"

EXISTING FOOTBALL CONCESSION

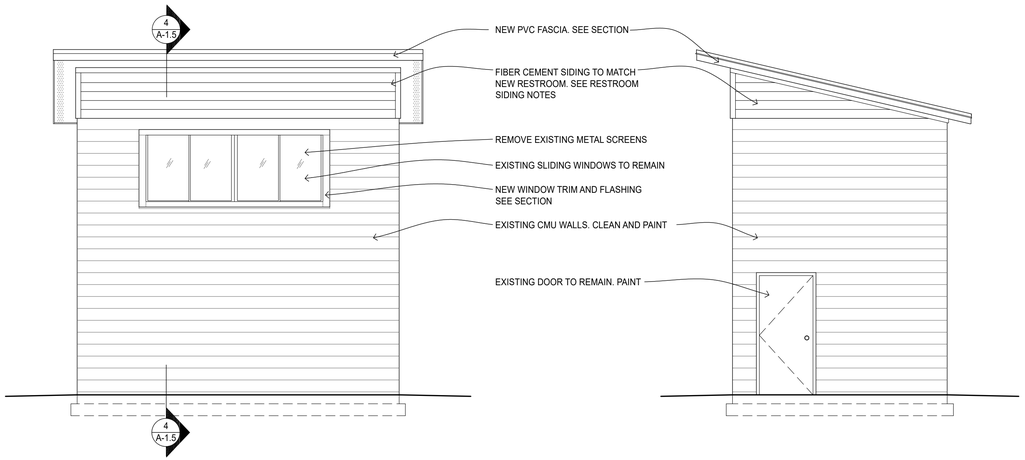


C A2.1 FOOTBALL CONCESSION WEST ELEVATION
SCALE: 1/4" = 1'-0"



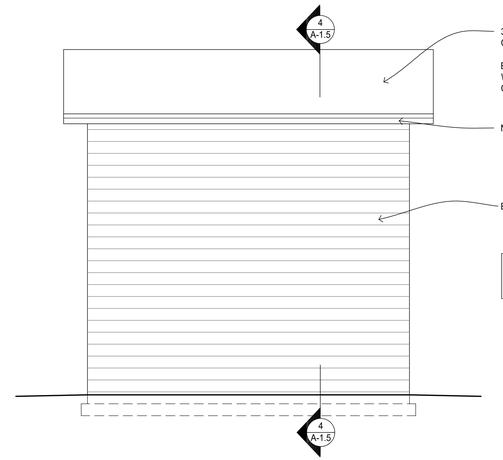
D A2.1 FOOTBALL CONCESSION SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

EXISTING WEB BASEBALL

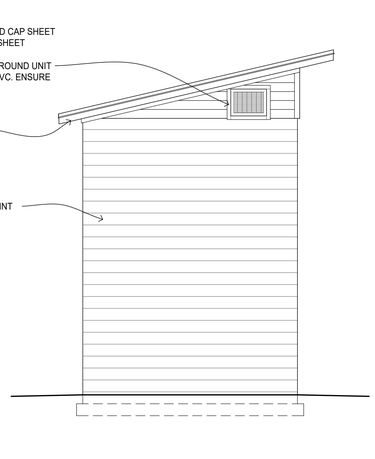


E A2.1 WEB BASEBALL EAST ELEVATION
SCALE: 1/4" = 1'-0"

F A2.1 WEB BASEBALL NORTH ELEVATION
SCALE: 1/4" = 1'-0"



G A2.1 WEB BASEBALL WEST ELEVATION
SCALE: 1/4" = 1'-0"



H A2.1 WEB BASEBALL SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

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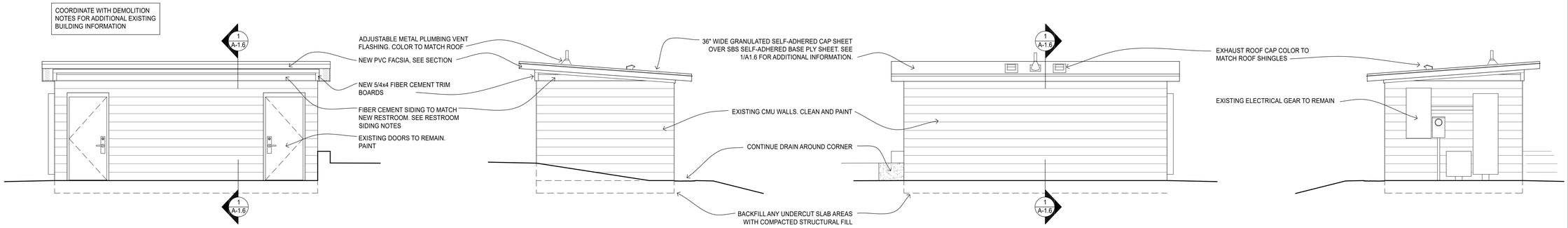
SHEET NAME: FOOTBALL CONCESSION ELEVATIONS
SHEET NO: A 2.1



A A2.2 McALISTER RESTROOM EAST ELEVATION
SCALE: 1/4" = 1'-0"

B A2.1 McALISTER RESTROOM NORTH ELEVATION
SCALE: 1/4" = 1'-0"

C A2.1 McALISTER RESTROOM WEST ELEVATION
SCALE: 1/4" = 1'-0"

D A2.1 McALISTER RESTROOM SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

EXISTING McALISTER RESTROOM

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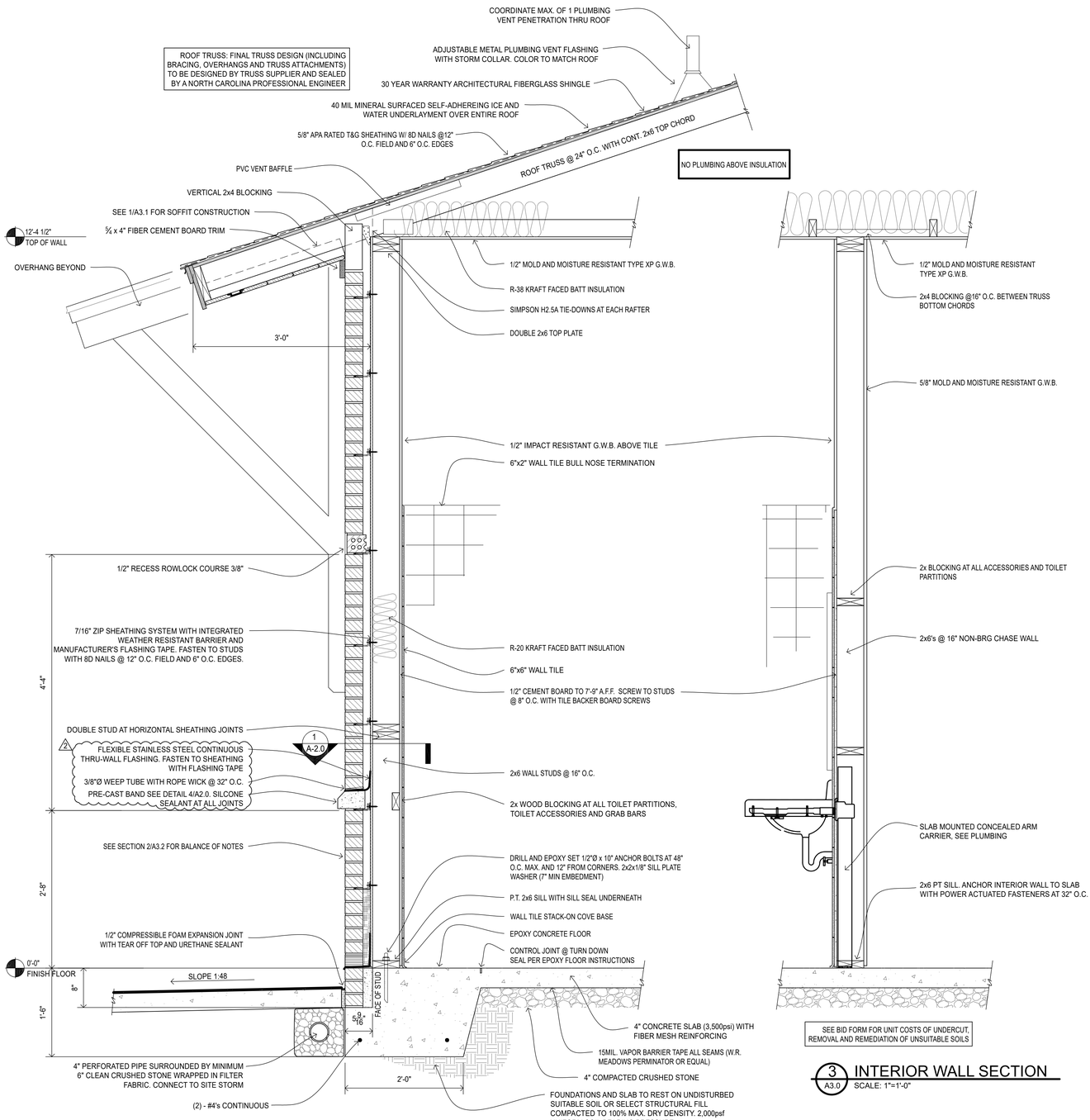
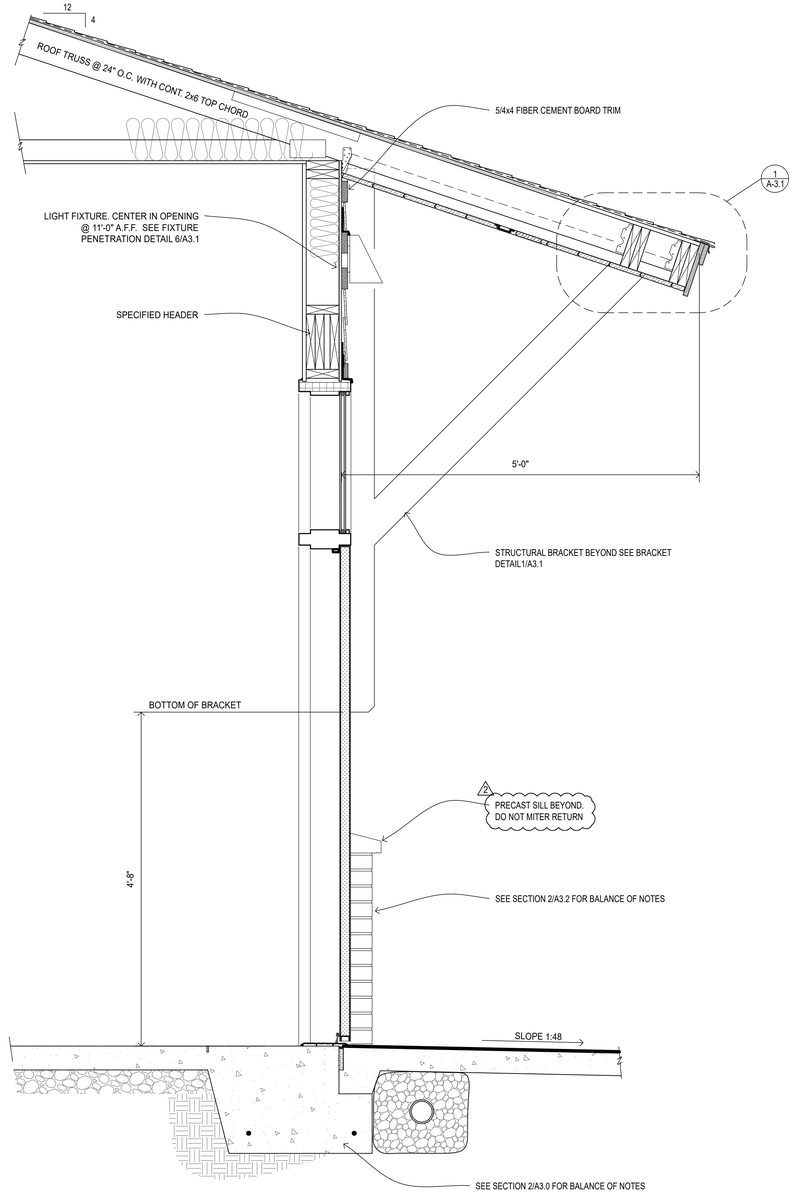
SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: McALISTER RESTROOM ELEVATIONS
SHEET NO: A 2.2



2 A3.0 WALL SECTION AT BRICK VENEER
SCALE: 1"=1'-0"

3 A3.0 INTERIOR WALL SECTION
SCALE: 1"=1'-0"



1 A3.0 WALL SECTION AT SIDING
SCALE: 1"=1'-0"

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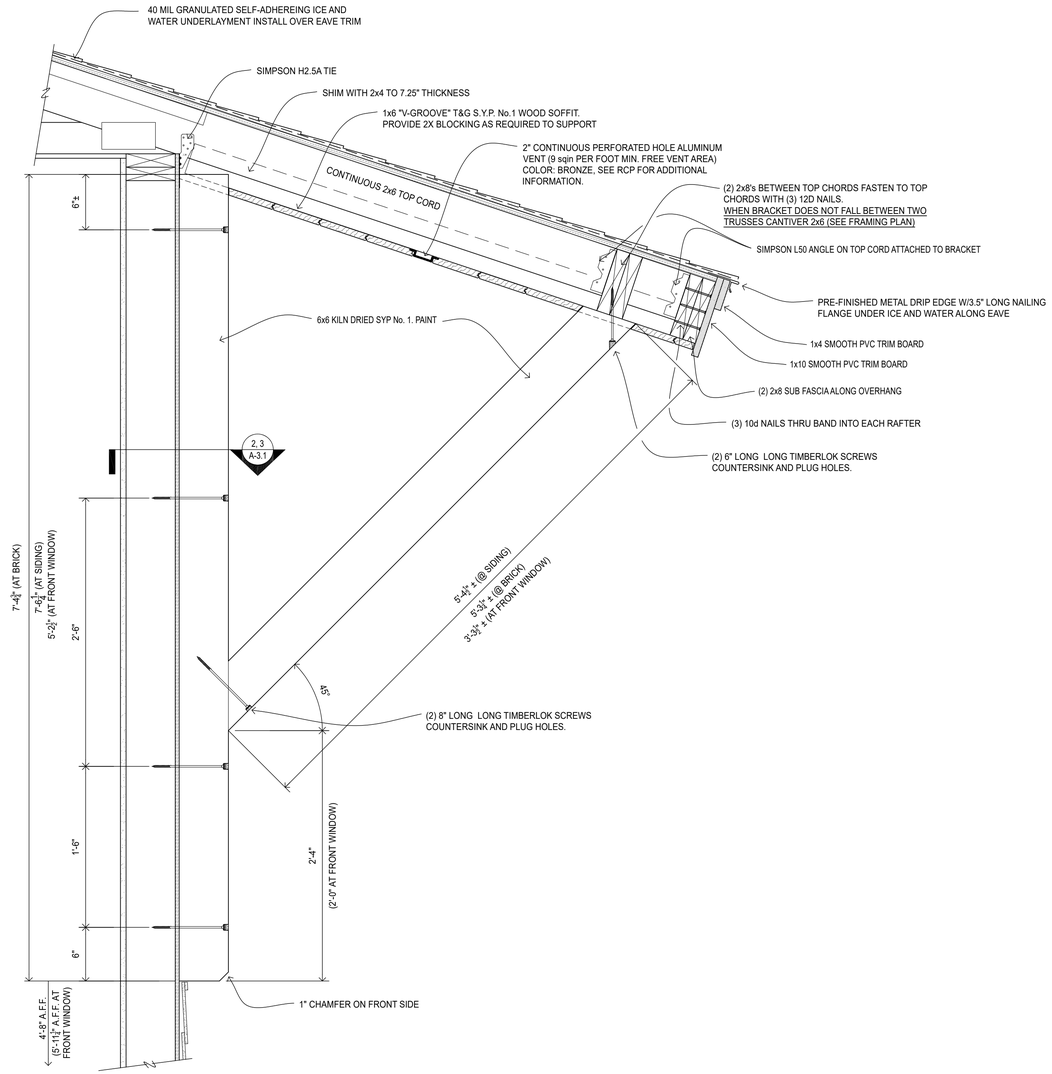
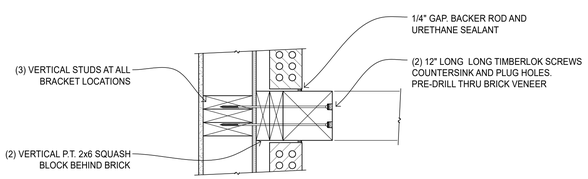
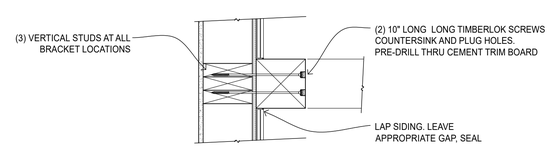
SHEET NO: A 3.0



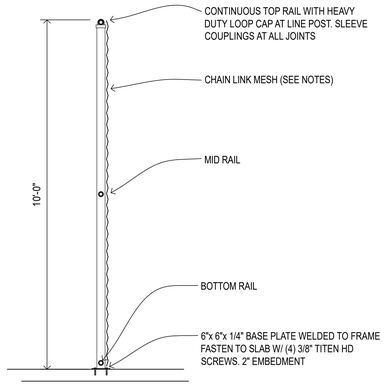
1 A3.1 BRACKET SECTION
SCALE: 1-1/2"=1'-0"



2 A3.1 BRACKET SECTION @ BRICK
SCALE: 1-1/2"=1'-0"



3 A3.1 BRACKET SECTION @ SIDING
SCALE: 1-1/2"=1'-0"



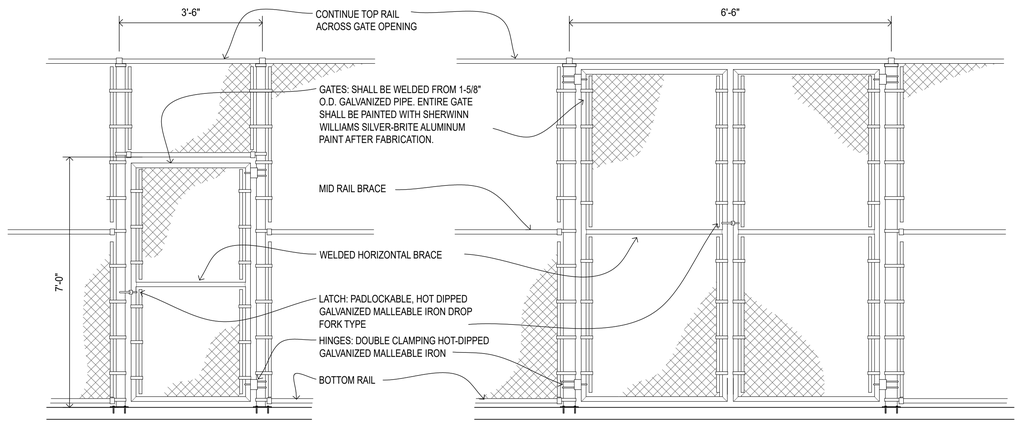
FENCE POST AND BRACE NOTES:

- ALL POSTS SHALL BE GALVANIZED. LOCATE AS SHOWN ON PLAN. NO POSTS SHALL EXCEED 8'-0" O.C. SPACING
- GATE AND TERMINAL POSTS SHALL BE 3" SCH. 40 (2-7/8"O.D.)
- LINE POSTS SHALL BE 2-1/2" SCH. 40 (2-3/8"O.D.)
- TOP, BOTTOM AND MID RAILS BRACES SHALL BE 1-5/8" SCH. 40

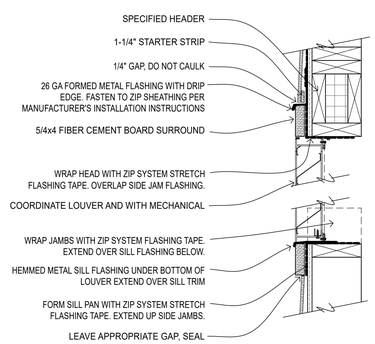
CHAIN LINK MESH

- 10'-0" TALL, GALVANIZED 9 GAUGE CORE WIRE WITH 2" DIAMOND PATTERN.
- ATTACH TO POSTS W/ 9 GAUGE WIRE AT 12" O.C. TENSION BARS SHALL BE USED AT TERMINAL AND GATE POSTS
- ENDS OF FABRIC SHALL BE BENT KNUCKLED SELVAGE TOP & BOTTOM

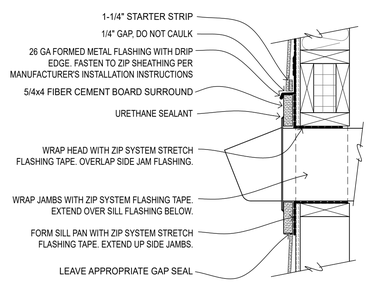
7 A3.1 STORAGE FENCE DETAILS AND NOTES
SCALE: 1/2"=1'-0"



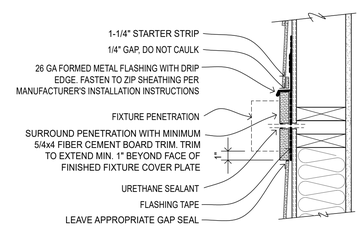
8 A3.1 STORAGE GATE DETAILS AND NOTES
SCALE: 1/2"=1'-0"



4 A3.1 LOUVER PENETRATION
SCALE: 1-1/2"=1'-0"



5 A3.1 HOODED EXHAUST
SCALE: 1-1/2"=1'-0"



6 A3.1 TYPICAL PLUMBING/ ELECT. PENETRATION
SCALE: 1-1/2"=1'-0"

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CHARLOTTE, NC

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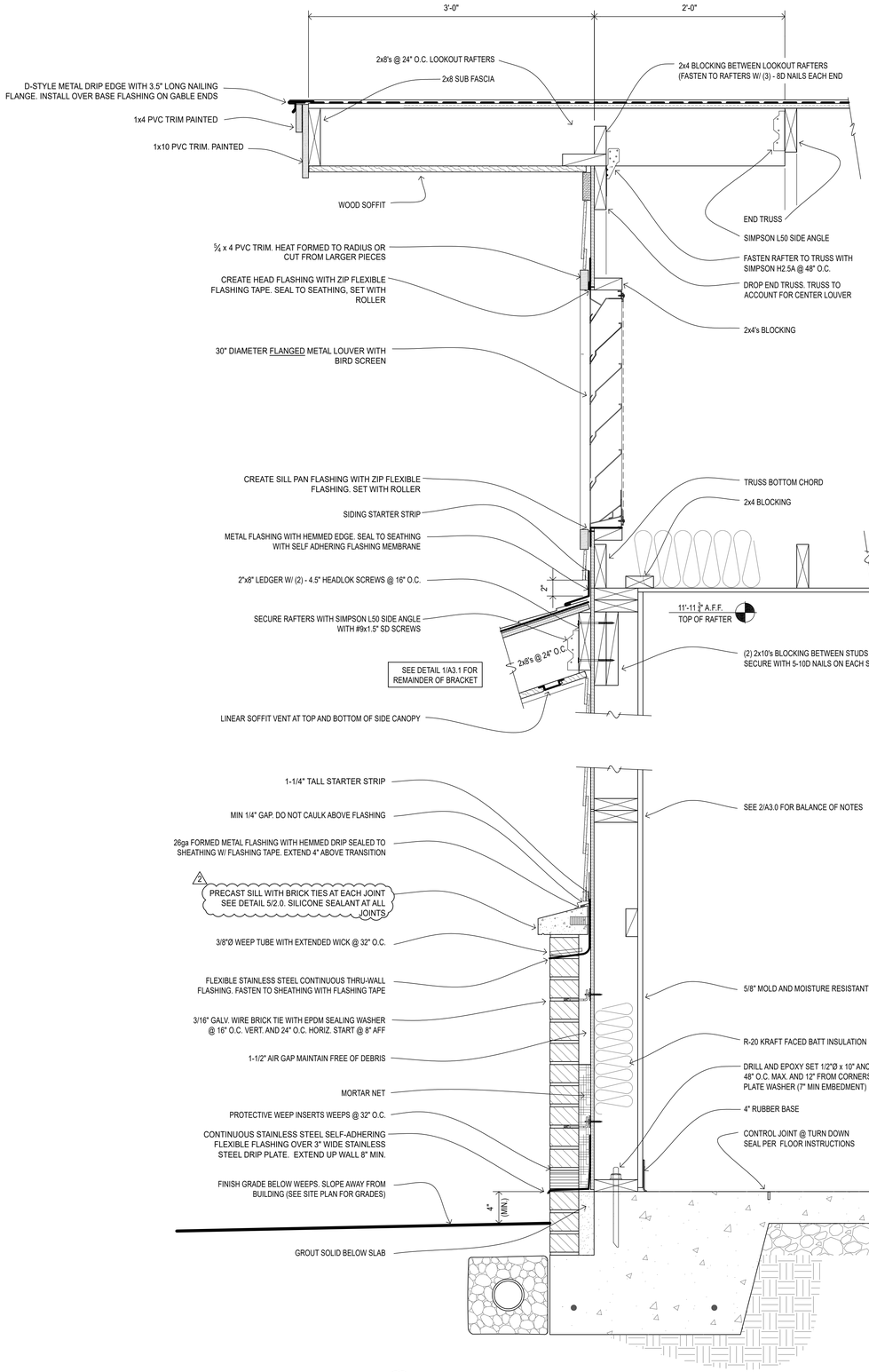
REVISIONS:
1 PLANNING COMMENTS 1/6/25
BID SET 6/9/25

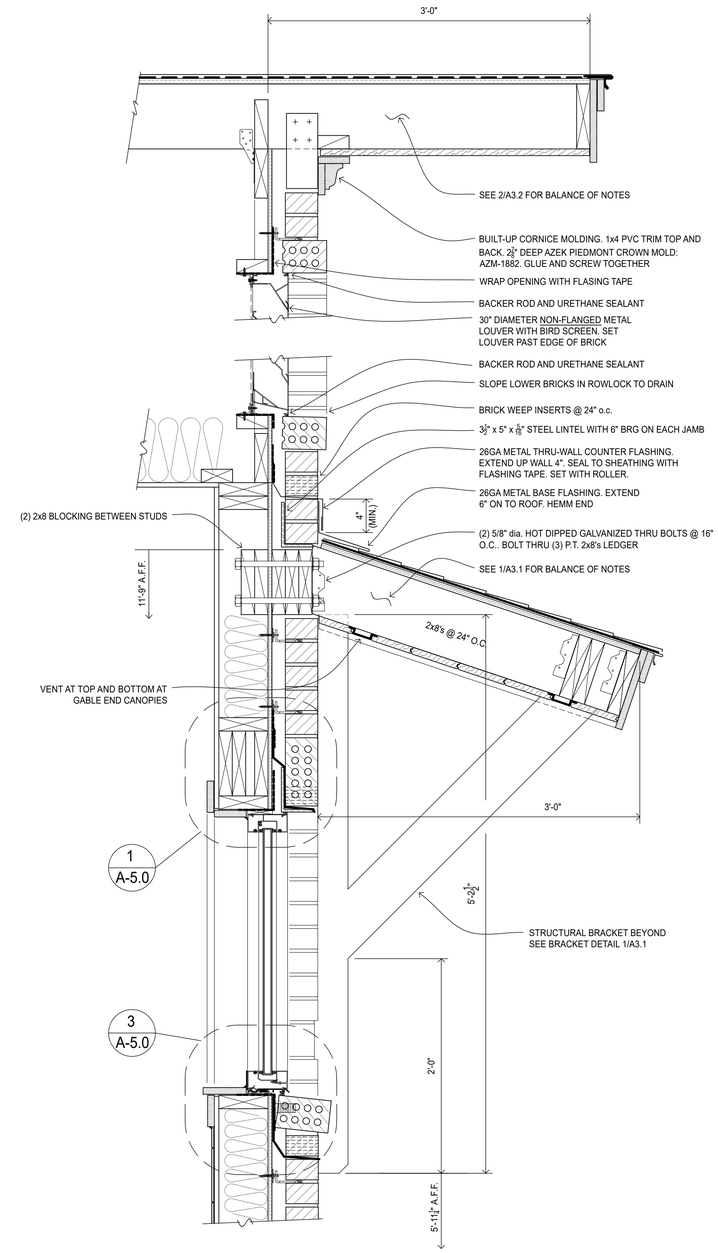
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME:
SECTIONS AND DETAILS
SHEET NO:
A 3.1



2 A3.2 WALL SECTION
SCALE: 1-1/2"=1'-0"



1 A3.2 SECTION AT ROUND BRICK LOUVER
SCALE: 1-1/2"=1'-0"

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REVISIONS:

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	BID SET	6/9/25
2	SILL CHANGE	6/9/25

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ACADEMY COMPLEX RENOVATIONS
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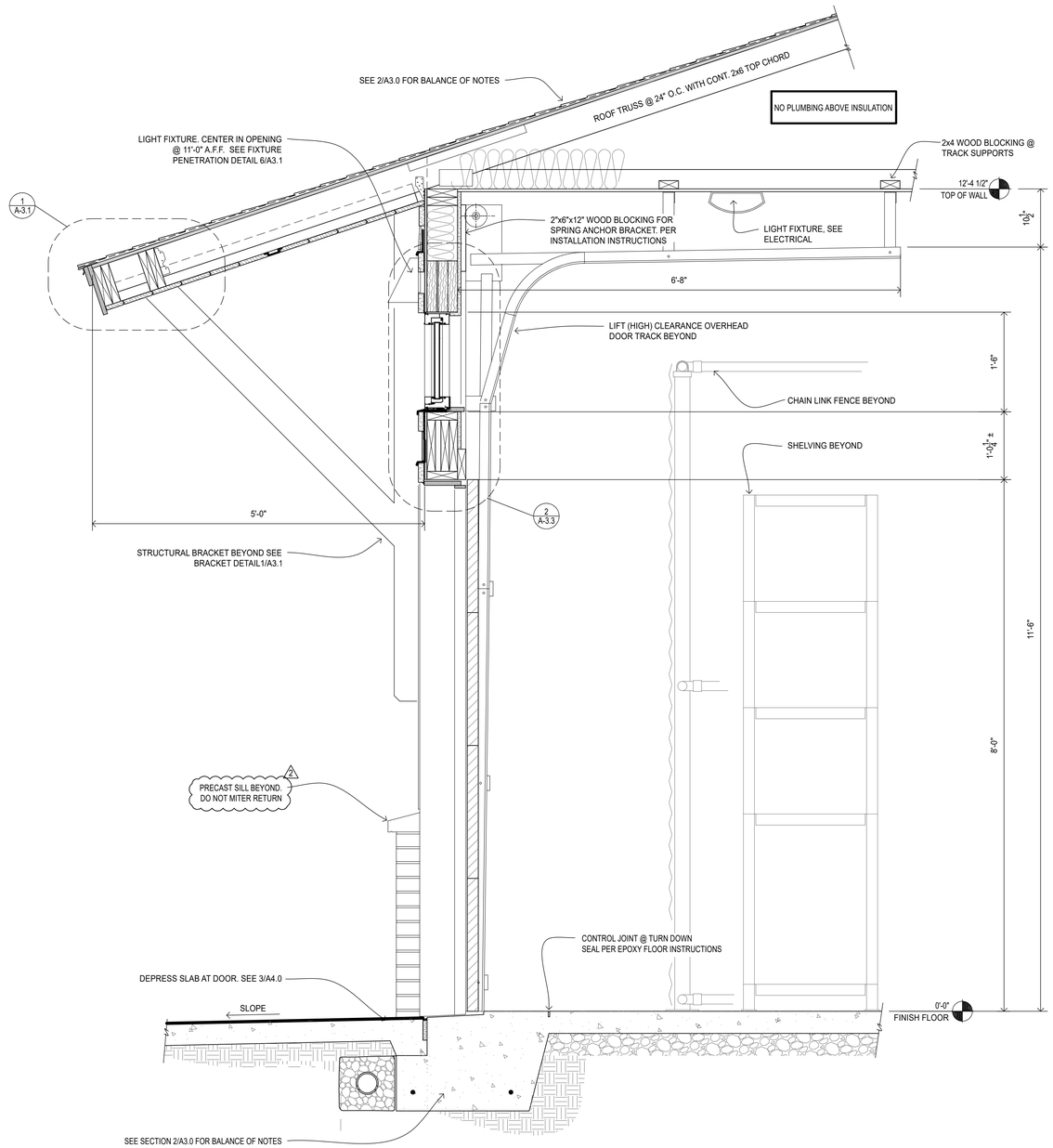
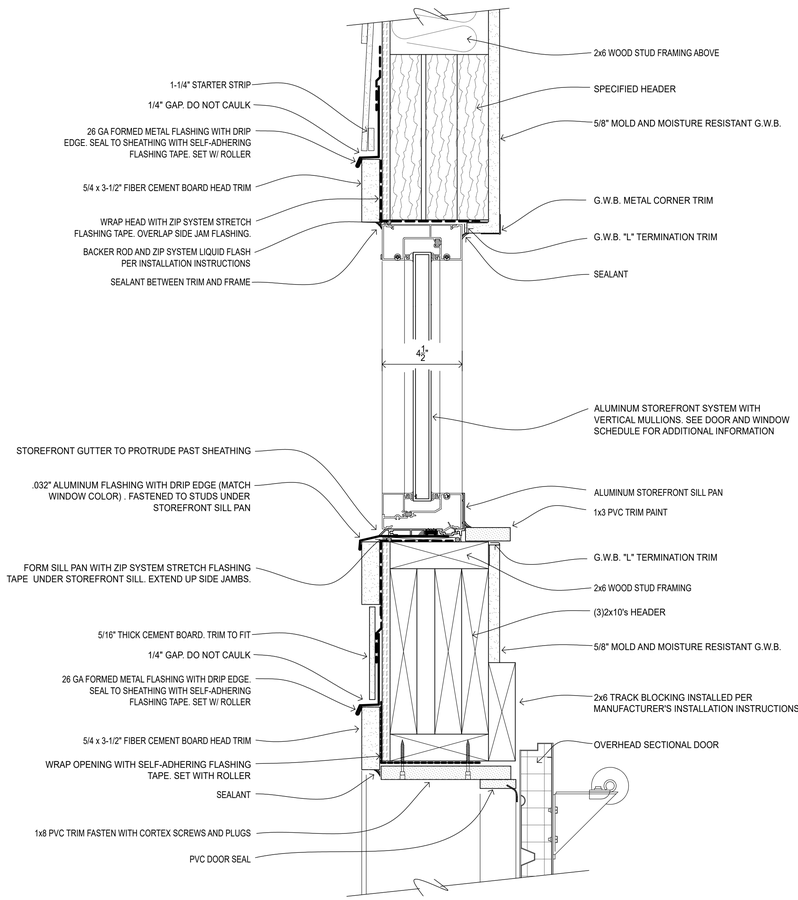
CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: SECTIONS AND DETAILS
SHEET NO: A 3.2



1 A3.3 WALL SECTION AT OVERHEAD DOOR
SCALE: 1"=1'-0"



2 A3.3 WINDOW TRANSOM SECTION
SCALE: 3"=1'-0"

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REVISIONS:

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	BID SET	6/9/25
2	SILL CHANGE	6/9/25

OWNER: CITY OF CONCORD
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CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
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CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 05-21-25
SHEET NAME: SECTIONS AND DETAILS
SHEET NO: A 3.3

DOOR SCHEDULE

DOOR No.	DOOR	NOMINAL DOOR SIZE	FRAME	HRDWR SET	COMMENTS
NEW RESTROOM AND STORAGE BUILDING					
01	H.M.	3'-0"x7'-0"	A	01	REEDED GLASS TRANSOM ABOVE
02	H.M.	3'-0"x7'-0"	A	01	REEDED GLASS TRANSOM ABOVE
03	H.M.	3'-0"x7'-0"	A	02	REEDED GLASS TRANSOM ABOVE
04	H.M.	(2) 3'-0"x7'-0"	C	04	GLASS TRANSOM ABOVE
05	H.M.	(2) 3'-0"x7'-0"	C	04	GLASS TRANSOM ABOVE
06	H.M.	3'-0"x7'-0"	B	03	
07	O.H.	8'-0"x8'-0"	E	-	SEE OVERHEAD SECTIONAL DOOR NOTES
08	O.H.	8'-0"x8'-0"	E	-	SEE OVERHEAD SECTIONAL DOOR NOTES
16	H.M.	3'-0"x7'-0"	G	03	GLASS TRANSOM ABOVE
FOOTBALL CONCESSION AND PRESS BOX					
09	H.M.	3'-0" x 6'-8"	D	05	NEW DOOR, FRAME AND LINTEL INTO EXISTING R.O.
10	H.M.	2'-1" x 6'-8"	D	05	EXISTING HEADER TO REMAIN
11	ROLL-UP	85 3/8" x 43"	F	-	SEE ROLL-UP COUNTER DOOR NOTES
12	ROLL-UP	81" x 43"	F	-	SEE ROLL-UP COUNTER DOOR NOTES
13	ROLL-UP	85 3/8" x 43"	F	-	SEE ROLL-UP COUNTER DOOR NOTES
GIBSON RESTROOM					
14	H.M.	3'-0"x6'-8"	E.T.R.	06	NEW THRESHOLD ONLY, ROUTE AND SEAL CRACKS
15	H.M.	3'-0"x6'-8"	E.T.R.	06	NEW THRESHOLD ONLY, ROUTE AND SEAL CRACKS

E.T.R.: EXISTING TO REMAIN

DOOR NOTES:

1. OWNER APPROVED SUBMISSION BY AHC CERTIFIED DOOR HARDWARE CONSULTANT REQUIRED BEFORE INSTALLATION OF DOORS AND HARDWARE.
2. ALL DOORS AND FRAMES TO BE PAINTED WITH TWO COATS OF HIGH GLOSS EPOXY PAINT. CLEAN PREP AND PAINT EXISTING DOORS AND FRAMES TO REMAIN. REPAIR ANY DENTS in EXISTING WITH METAL FILLER.
3. DOOR HARDWARE TO MEET THE ACCESSIBILITY REQUIREMENTS OF ANSI117.1 AND NC BUILDING CODE.
4. ALL DOOR HARDWARE TO MEET ANSI GRADE 1 STANDARDS FOR INSTITUTIONAL DUTY. INCLUDE ALL APPURTENANCES TO MAKE FULLY FUNCTIONAL AS INTENDED BY OWNER.
5. ALL HARDWARE TO BE STAINLESS STEEL. SATIN FINISH
6. OWNER TO PROVIDE PERMANENT 7-PIN MEDECO CORES AT SUBSTANTIAL COMPLETION. CONTRACTOR TO PROVIDE REMOVABLE CONSTRUCTION CORES.
7. CONTRACTOR TO PROVIDE AND INSTALL KNOX BOX ON EXTERIOR OF BUILDINGS. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

FRAME:
- 14 GAGE GALVANIZED WELDED HOLLOW METAL FRAME. KNOCKDOWN FRAMES ARE NOT PERMITTED. EXPOSED WELDS TO BE GROUND AND FINISHED SMOOTH.
- ALL HARDWARE LOCATIONS TO BE REINFORCED
- GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH

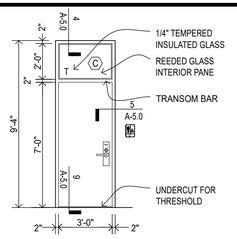
METAL DOORS:
- 16 GAGE FACE SHEETS AND INTERNAL STEEL STIFFENER CHANNELS
- GALVANIZED FLUSH HOLLOW METAL DOOR. INSULATED CORE (R2.2min.)
- GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH
- DOUBLE DOORS: EXTERIOR FACING OVERLAPPING STEEL ASTRAGAL ON ACTIVE LEAF.

HARDWARE SET 01:

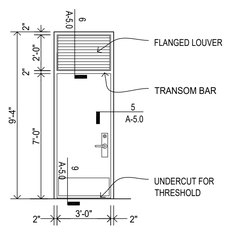
CORE	MEDECO INTERCHANGEABLE - TO MATCH OWNER'S LARGE FORMAT 7-PIN
CYLINDER:	TO ACCEPT MEDECO INTERCHANGEABLE CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
LOCKSET:	CLASSROOM FUNCTION. SINGLE CYLINDER FULL MORTISE, INSTITUTIONAL DUTY WITH ANSI-117.1 COMPLIANT CAST STAINLESS STEEL WITHNELL ROUNDED PROFILE LEVERS. ONLY LOCKABLE WITH KEY FROM EXTERIOR. LATCH BOLT ALWAYS RETRACT FROM INTERIOR (INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EGRESS). LATCH SHALL BE RETRACTABLE TO OPERATE AS PUSH/ PULL DOOR WHEN FACILITY IS OPEN TO PUBLIC.
*	PROVIDE POWER, CONDUIT AND JUNCTION BOXES FOR OWNERS FUTURE DOOR ACCESS SYSTEM. SEE DIAGRAM BELOW.
ESCUTCHEONS:	ADA COMPLIANT ENGRAVED 4"x16" ESCUTCHEONS. .050 STAINLESS STEEL BEVELED. PROVIDE ON BOTH SIDES OF DOOR. EXTERIOR TO BE ENGRAVED WITH "PULL".
HINGES:	HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
CLOSER:	VANDAL RESISTANT WITH CAST IRON BODY, FORGED PARALLEL ARMS AND SPRING LOADED POSITIVE STOP HOLD OPEN, METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR (LCN4040XP-3077SCNS OR EQUAL)
THRESHOLD:	7" WIDE INDUSTRIAL DUTY ALUMINUM (NGP 427E OR EQUAL) ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR THICKNESS).
KICK PLATE:	12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
DRIP CAP:	ALUMINUM MOUNTED TO FRAME EXTERIOR
SWEEP:	ALUMINUM WITH NYLON BRISTLES
SEALS:	ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
ROOM SIGN:	CAST ALUMINUM RESTROOM NAME SIGN WITH CONTRASTING RAISED BORDER AND TEXT MEETING THE ACCESSIBILITY REQUIREMENTS OF ANSI-117.1. SECURELY ANCHOR TO BRICK VENEER.

HARDWARE SET 02:

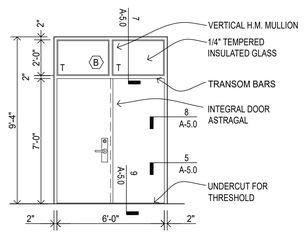
CORE	MEDECO INTERCHANGEABLE - TO MATCH OWNER'S LARGE FORMAT 7-PIN
CYLINDER:	TO ACCEPT MEDECO INTERCHANGEABLE CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
LOCKSET:	CLASSROOM FUNCTION. SINGLE CYLINDER FULL MORTISE, INSTITUTIONAL DUTY WITH ANSI-117.1 COMPLIANT WITHNELL ROUNDED PROFILE CAST STAINLESS STEEL LEVERS. LOCKABLE/ UNLOCKABLE WITH KEY FROM EXTERIOR. LATCH BOLT ALWAYS RETRACTS FROM INTERIOR (INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EGRESS). PROVIDE INTERIOR LOCKING TOGGLE ON MORTISE LOCKSET THAT IS RELEASED WHEN LEVER PUSHED
*	PROVIDE POWER, CONDUIT AND JUNCTION BOXES FOR OWNERS FUTURE DOOR ACCESS SYSTEM. SEE DIAGRAM BELOW.
ESCUTCHEONS:	INTEGRAL 2"x 8" MINIMUM SIZE, .050 STAINLESS STEEL BOTH SIDES OF DOOR
HINGES:	HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
CLOSER:	VANDAL RESISTANT WITH CAST IRON BODY, FORGED PARALLEL ARMS AND SPRING LOADED POSITIVE STOP HOLD OPEN, METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR (LCN4040XP-3077SCNS OR EQUAL)
THRESHOLD:	7" WIDE INDUSTRIAL DUTY ALUMINUM (NGP 427E OR EQUAL) ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR THICKNESS).
KICK PLATE:	12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
DRIP CAP:	ALUMINUM MOUNTED TO FRAME EXTERIOR
SWEEP:	ALUMINUM WITH NYLON BRISTLES
SEALS:	ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
ROOM SIGN:	CAST ALUMINUM FAMILY RESTROOM NAME SIGN WITH CONTRASTING RAISED BORDER AND TEXT MEETING THE ACCESSIBILITY REQUIREMENTS OF ANSI-117.1. SECURELY ANCHOR TO BRICK VENEER.



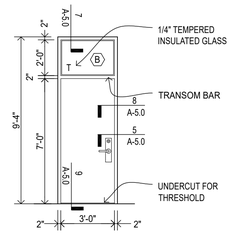
A H.M. AT BRICK EXTERIOR



B H.M. AT BRICK EXTERIOR



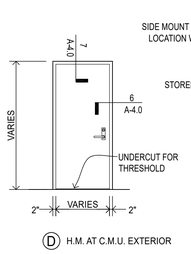
C H.M. DOUBLE DOOR AT SIDING



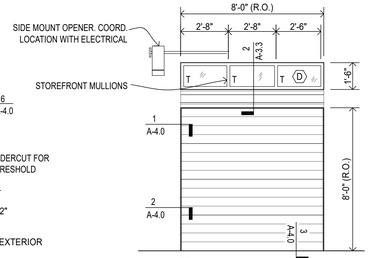
G H.M. AT SIDING

OVERHEAD SECTIONAL DOOR:
- LIFT CLEARANCE (APPROX. 3'-6" ABOVE HEADER). INSTALL TRACK AS CLOSE TO CEILING AS POSSIBLE.
- 20 GAUGE RIBBED EXTERIOR SKIN, 26 GAUGE INTERIOR SKIN. (OVERHEAD DOOR, MODEL: 422, OR EQUAL)
- 16 GAUGE STILES
- 2" THICK INSULATED R-7.35 MIN.
- WIND LOAD RATED TO MINIMUM 115MPH WIND SPEED
- ELECTRIC OPERATOR: SIDE MOUNT, RATED FOR DOOR WEIGHT. INTERIOR PUSH BUTTON OPENER. UL 325 LISTED PHOTO EYE SAFETY DEVICE. VERIFY MOTOR WITH PROVIDED 120V 20A 1ϕ POWER. (OVERHEAD DOOR, MODEL: RSX, OR EQUAL)

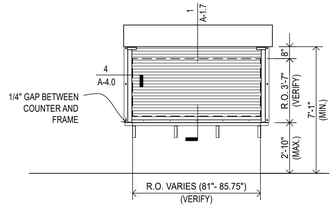
ROLL-UP COUNTER DOORS:
- (3) COUNTER DOORS SHALL BE SAME SIZE. VERIFY ALL THREE ROUGH OPENINGS TO NOTE ANY POSSIBLE CONFLICTS WITH MANUFACTURER'S DOOR CLEARANCES.
- ROLLING COUNTER DOOR, AWNING CRANK OPERATED. DESIGNED AND FULLY GALVANIZED FOR EXTERIOR MOUNTING. GREY FACTORY APPLIED PAINT FINISH OVER GALVANIZED PARTS.
- SLATS: 20PSF WIND RATED. 22GA 2" INTERLOCKING FLAT SLATS WITH END LOCKS. BOTTOM BAR: DOUBLE ANGLE GALVANIZED WITH WEATHER SEAL.
- GUIDES: ROLL-FORMED 3-ANGLE GALVANIZED WITH FULL LENGTH BRUSH WEATHER STRIPS. BOLTED THRU 8" HOLLOW CMU WALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- LOCKING: (2) INTERIOR MOUNTED SLIDE BOLTS SUITABLE FOR OWNER PROVIDED PADLOCKS
- HOOD: ROUND 24GA GALVANIZED STEEL WITH MINIMUM 3/16" THICK END CAPS
- BASIS OF DESIGN: WAYNE DALTON ROLLING DOOR, MODEL 922 WITH #17 SLAT.



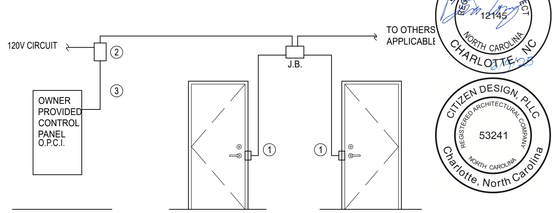
D H.M. AT C.M.U. EXTERIOR



E OVERHEAD SECTIONAL DOOR

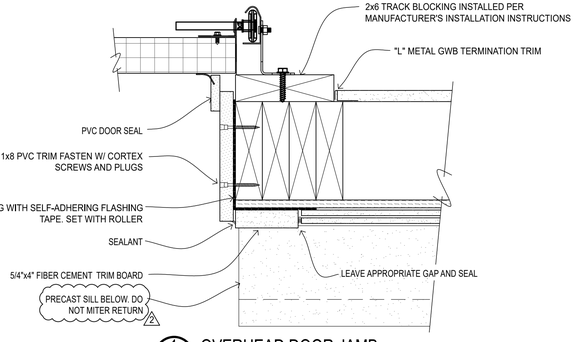


F CONSESSION ROLL-UP

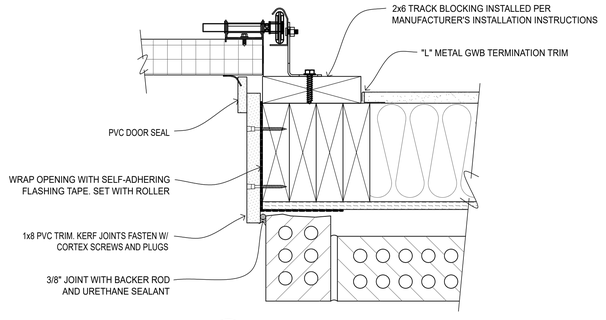


(FUTURE) DOOR ACCESS CONTROL SCHEMATIC (SEE ELECTRICAL DRAWINGS):

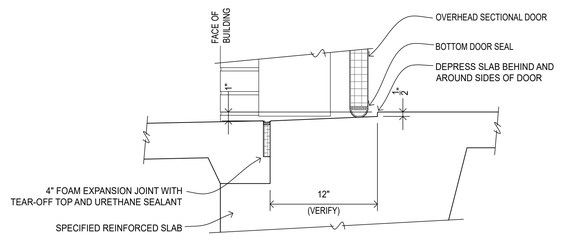
1. PROVIDE POWER, CONDUIT AND JUNCTION BOXES TO ALL RESTROOM DOORS FOR FUTURE ELECTRONIC STRIKE (HES 1006-630, FAIL SAFE OPTION). STRIKE SHALL PREVENT ENTRY WHEN ACTIVATED AND ALLOW EXIT AT ALL TIMES. DOOR SHALL AUTOMATICALLY UNLOCK DUE TO LOSS OF POWER
2. JUNCTION BOX FOR FUTURE 120V SINGLE POLE CONTACTOR/ RELAY WITH MANUAL SWITCH LOCATED AT ELECTRICAL PANELS.
3. PROVIDE 3/4"Ø CONDUIT TO REMOTE CONTROL PANEL.



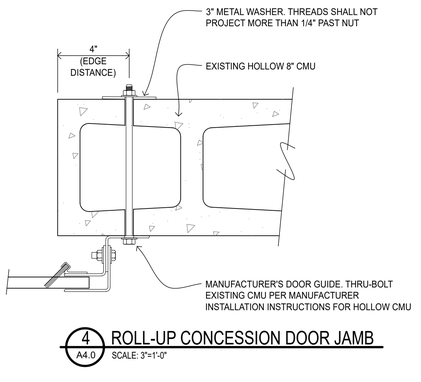
1 OVERHEAD DOOR JAMB
A4.0 SCALE: 3"=1'-0"



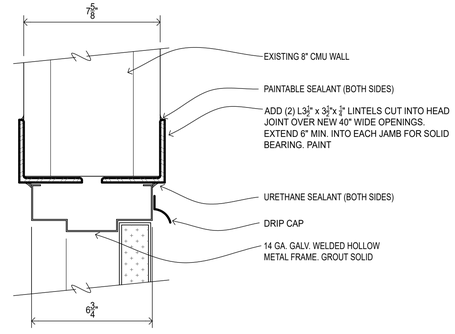
2 OVERHEAD DOOR JAMB
A4.0 SCALE: 3"=1'-0"



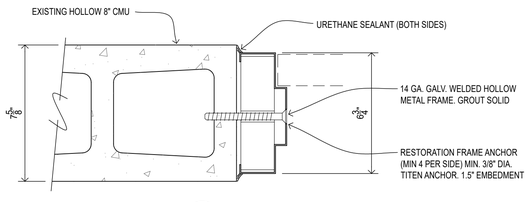
3 OVERHEAD DOOR SILL
A4.0 SCALE: 1-1/2"=1'-0"



4 ROLL-UP CONCESSION DOOR JAMB
A4.0 SCALE: 3"=1'-0"



7 EXISTING CMU DOOR HEADER
A4.0 SCALE: 3"=1'-0"



6 EXISTING CMU DOOR JAMB
A4.0 SCALE: 3"=1'-0"

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BRIAN H. CONROY REGISTERED ARCHITECT 12145 NORTH CAROLINA CHARLOTTE, NC

CITIZEN DESIGN, P.L.L.C. REGISTERED ARCHITECTURAL COMPANY 53241 NORTH CAROLINA Charlotte, North Carolina

REVISIONS:		
1	PLANNING COMMENTS	1/6/25
2	BID SET	6/9/25
3	SILL CHANGE	6/9/25

OWNER: CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

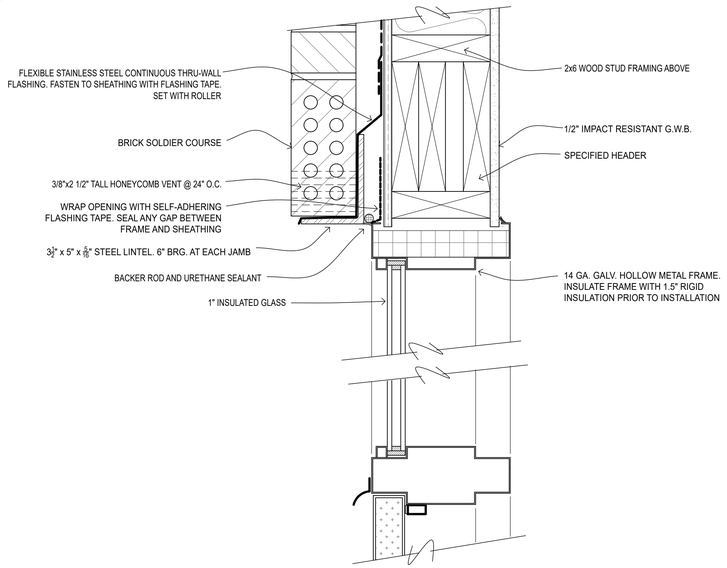
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS NOTED

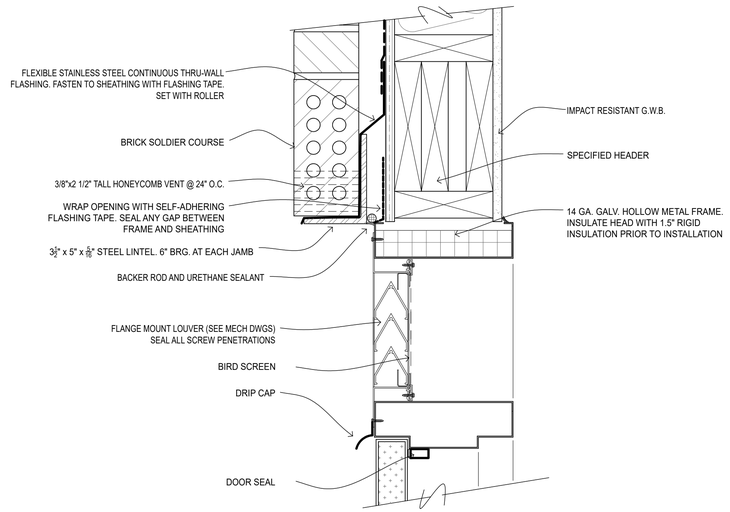
DATE: 05-21-25

SHEET NAME: DOOR SCHEDULE AND DETAILS

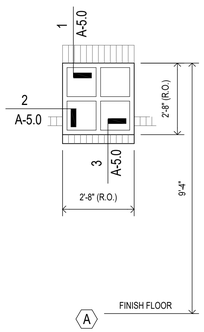
SHEET NO: A 4.0



4 DOOR HEAD
A5.0 SCALE: 3"=1'-0"



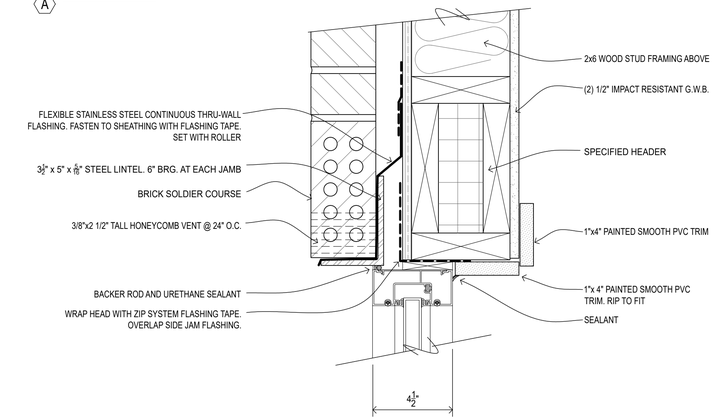
6 DOOR HEAD
A5.0 SCALE: 3"=1'-0"



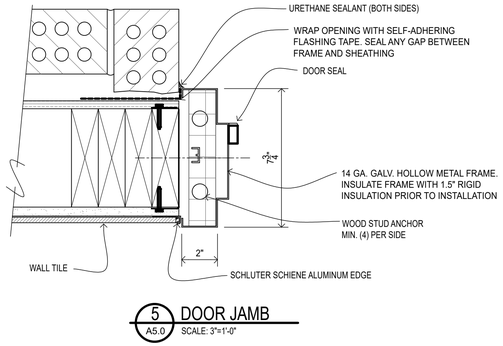
WINDOW SCHEDULE

WINDOW TYPE	FRAME AND MULLIONS	MAX. SHGC	MAX. U VALUE	COMMENTS
A	2"x4-1/2" ALUMINUM STOREFRONT	0.33	0.45	REEDED GLASS IN INTERIOR PANE 1" INSULATED GLAZING
B	HOLLOW METAL DOOR TRANSOM	0.33	0.45	1" INSULATED GLAZING TEMPERED
C	HOLLOW METAL DOOR TRANSOM	0.33	0.45	1" INSULATED GLAZING TEMPERED. REEDED INTERIOR GLASS
D	2"x4-1/2" ALUMINUM STOREFRONT TRANSOM	0.33	0.45	1" INSULATED GLAZING TEMPERED.

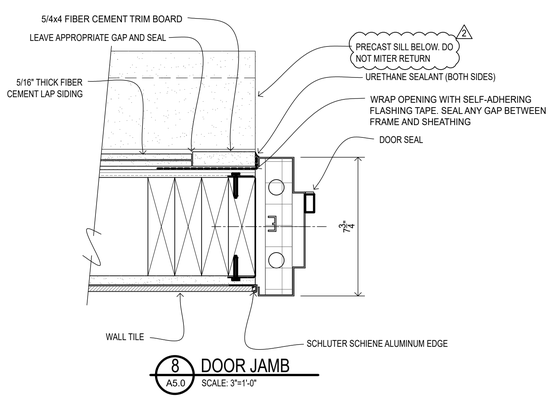
ALUMINUM STOREFRONT: THERMALLY BROKEN, SCREW SPLINED, BRONZE ANODIZED



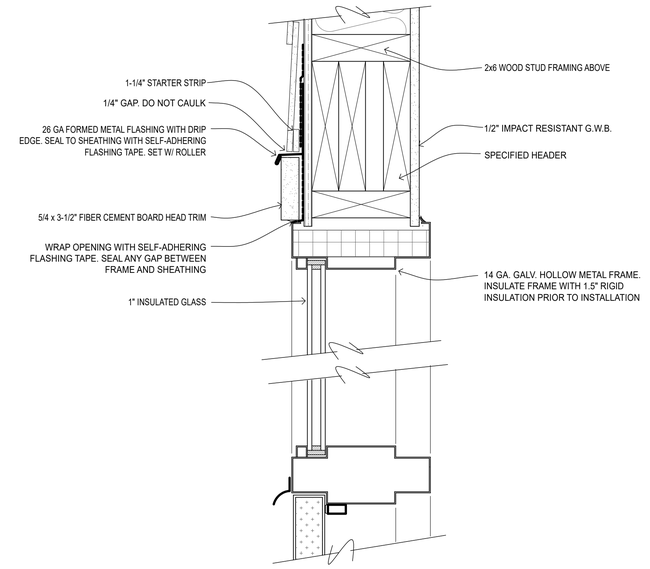
1 WINDOW HEAD
A5.0 SCALE: 3"=1'-0"



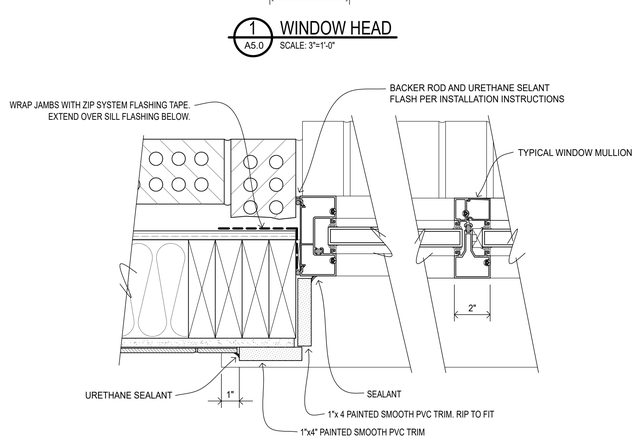
5 DOOR JAMB
A5.0 SCALE: 3"=1'-0"



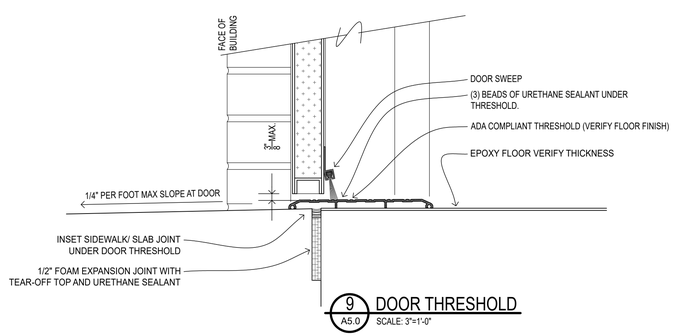
8 DOOR JAMB
A5.0 SCALE: 3"=1'-0"



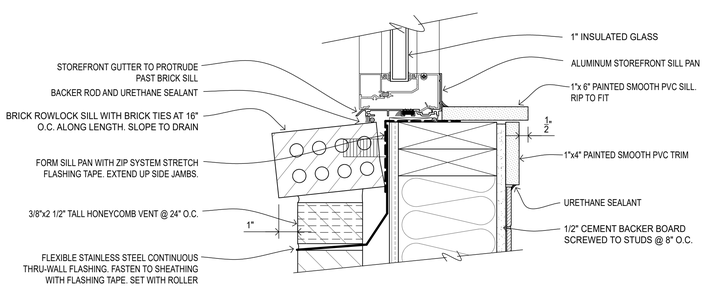
7 DOOR HEAD
A5.0 SCALE: 3"=1'-0"



2 WINDOW JAMB
A5.0 SCALE: 3"=1'-0"



9 DOOR THRESHOLD
A5.0 SCALE: 3"=1'-0"



3 WINDOW SILL
A5.0 SCALE: 3"=1'-0"

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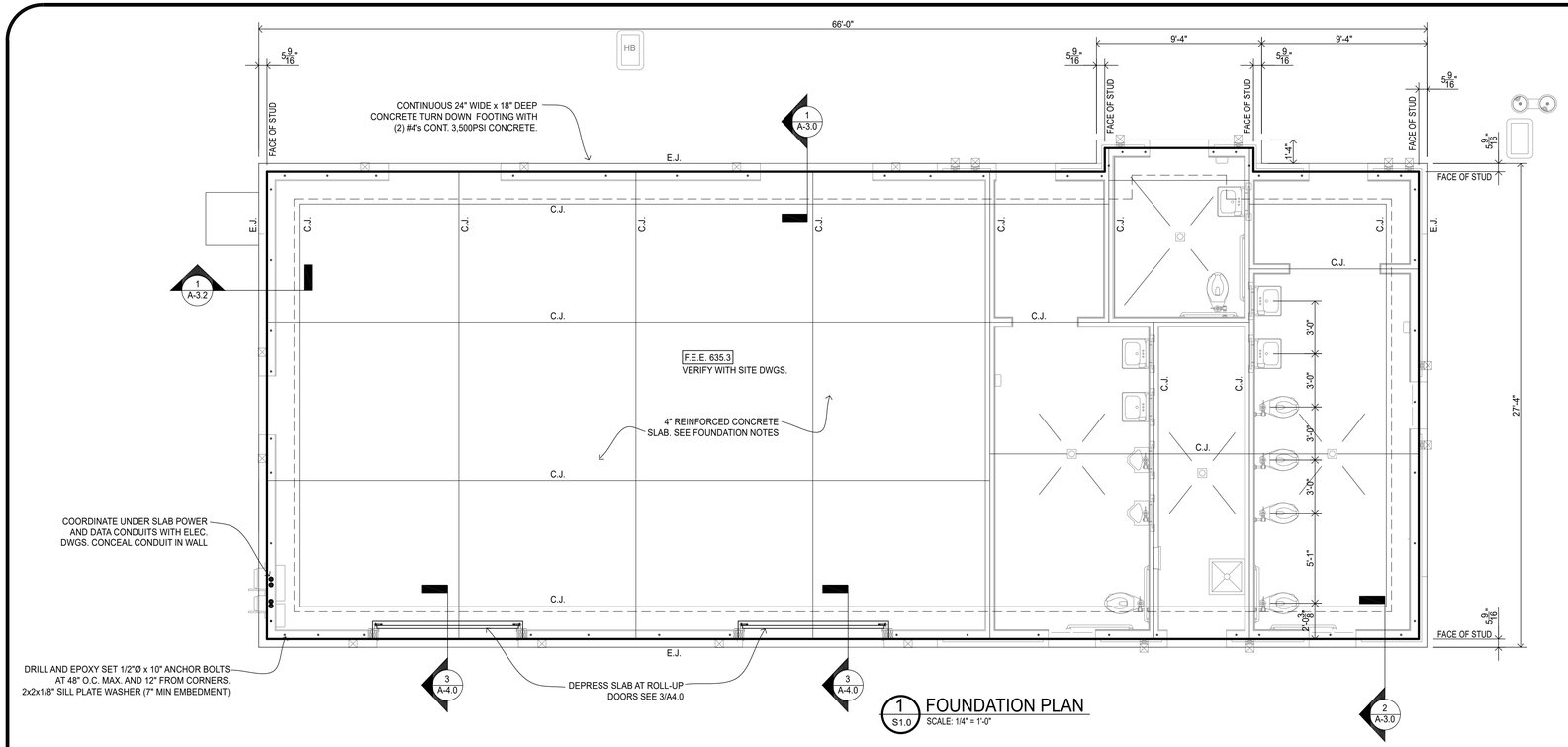


1 S1.0 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. PERIMETER CONTINUOUS FOOTING SHALL BE MONOLITHIC 24" WIDE x 18" DEEP MINIMUM, WITH (2) #4's CONT. 3,500PSI CONCRETE (TYPICAL).
2. SLAB ON GRADE SHALL BE 4" THICK 3,500PSI CONCRETE WITH FIBERMESH REINFORCING OR 6x6xW1.4x1.4 WWF OVER 15 MIL VAPOR BARRIER OVER 4" CLEAN CRUSHED STONE OVER SOLID SOIL.
3. MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48
4. INTERIOR CONCRETE FLOOR SLAB CURED AND PREPARED PER FINISH FLOOR COVERING MANUFACTURES WRITTEN INSTRUCTIONS. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL.
5. EXTERIOR CONCRETE TO HAVE LIGHT BROOM FINISH. E.J. - EXPANSION JOINT WITH TOOLED EDGES, 1/2" COMPRESSIBLE EXPANSION JOINT FILLER AND URETHANE SEALANT. C.J. - CONTROL JOINT WITH TOOLED EDGES ON EXTERIOR AND SAW CUT INTERIOR. JOINT SPACING NO GREATER THAN 12' O.C. IN EACH DIRECTION UNLESS NOTED OTHERWISE.
6. COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP AND SITE DRAWINGS.
7. FOUNDATIONS AND SLABS TO REST ON UNDISTURBED SUITABLE SOIL OR SELECTECT STRUCTURAL FILL COMPACTED TO 100% MAXIMUM DRY DENSITY. 2,000PSF MINIMUM SOIL BEARING PRESSURE
8. SEE BID FORM FOR UNIT COSTS OF UNDERCUT, REMOVAL AND REMEDIATION OF UNSUITABLE SOILS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032627 1/6/25 ENGINEER MARCEL D. PAPINEAU

IDE STRUCTURAL ENGINEERS
1945 JN PEASE PLACE, SUITE #204
CHARLOTTE, NC 28262
CORPORATE LICENSE #:C3118
PHONE: 704-335-7200

BRACED WALL LINE NOTE:

THIS STRUCTURE HAS BEEN ANALYZED FOR LATERAL LOADING USING CONTINUOUSLY SHEATHED 7/16" OSB WALL SHEATHING USING 8d NAILS AT 6" o.c. ALONG EDGES AND 12" o.c. AT INTERMEDIATE FRAMING. BLOCK AND NAIL ALL PANEL EDGES.

FRAMING NOTES:

1. ALL LOAD BEARING HEADERS SHALL BE (3)2X8 SPF#2 UNLESS NOTED OTHERWISE
2. ALL WALLS UP TO 12'-4.5". TALL SHALL BE A MINIMUM OF 2X6 SPF#2 @ 16" o.c. UNLESS NOTED OTHERWISE ON THE PLAN. DOUBLE 2x6 BLOCKING AT SHEATHING JOINTS.
3. NUMBER OF KING STUDS BASED ON OPENING WIDTH:

2X6 WALL	
LESS THAN < 5'-0"	= 1 KING
5'-1" TO 10'-0"	= 2 KINGS
GREATER THAN > 10'-1"	= 3 KINGS

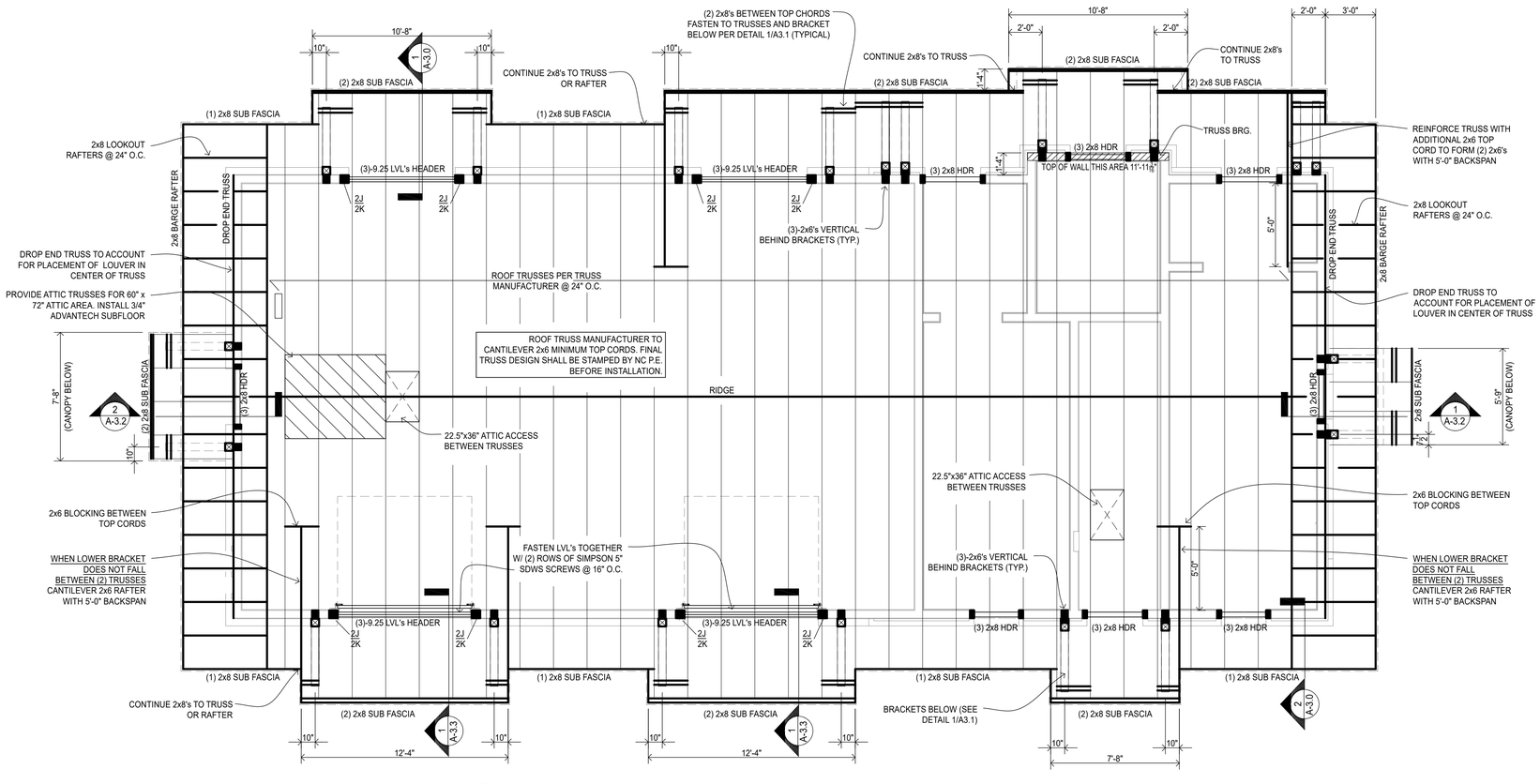
4. ALL FRAMING MEMBERS TO BE SPF#2 OR SYP#2 UNLESS NOTED OTHERWISE
5. WOOD BEAMS SHALL BE SUPPORTED BY METAL HANGERS OF ADEQUATE CAPACITY WHERE FRAMING INTO BEAMS OR LEDGERS. THE FOLLOWING HANGER SCHEDULE MAY BE USED UNLESS NOTED OTHERWISE ON THE PLAN: (HANGERS WITH EQUIVALENT CAPACITIES TO THOSE LISTED BELOW ARE ALSO ACCEPTABLE)

MEMBER SIZE	SIMPSON HANGERS
(2) 2X8	LUS 28-2
(2) 2X10, (2) 2X12	LUS 210-2
(3)-2x10, (3)-2x12	LUS 210-3
(2) 1¾" X 9¼" LVL	HUS 410

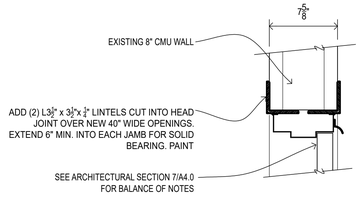
6. FILL ALL OF THE HOLES IN BEAM HANGERS WITH 16d x 3½" COMMON NAILS (3½"x 0.162") OR 16d x2½" (2½"x 0.162") NAILS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DO NOT BEND OR MODIFY THE HANGER OR USE INAPPROPRIATE FASTENERS. **DO NOT USE 10dX 1½"** "HANGER NAILS" UNLESS OTHERWISE NOTED ON THE PLANS OR IN SITUATIONS WHERE ONLY 1½" OR LESS OF WOOD IS PROVIDED TO NAIL INTO.
12. CONTRACTOR TO PROVIDE 22"x36" MIN. ACCESS TO ATTIC AREAS MORE THAN 400 SF.
13. CONTRACTOR RESPONSIBLE FOR ALL WATERPROOFING AND FLASHING.
14. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DIMENSIONS.

ROOF CONSTRUCTION NOTES:

1. IN ADDITION TO THE CODE'S FASTENER SCHEDULE, UNLESS NOTED OTHERWISE ON THE PLAN, INSTALL (1)-SIMPSON H2.5A HURRICANE CLIP AT EACH END OF TRUSSES. FASTEN TO THE OUTSIDE OF THE WALL PLATE WITH 8d COMMON NAILS AND TO THE RAFTER OR TRUSS WITH 8dX1½" NAILS. INSTALLING OVER WALL SHEATHING IS ACCEPTABLE.
2. ROOF FRAMING TO CONSIST OF PRE-MANUFACTURED ROOF TRUSSES SPACED PER MANUF. WITH 5/8" T&G ROOF SHEATHING SECURED WITH 8D NAILS @ 6"O.C. ALONG EDGES AND 12" O.C. IN FIELD. COVER ENTIRE ROOF WITH SELF-ADHERED ICE AND WATER UNDERLAYMENT.
3. ROOF TRUSS MANUFACTURER TO DESIGN OVERHANG. TOP CORDS SHALL BE MINIMUM 2x6.
4. TRUSS MANUFACTURER TO PROVIDE N.C. P. E. STAMPED DRAWINGS SHOWING ENGINEER OF RECORD WITH TRUSS DRAWINGS AND LAYOUT FOR APPROVAL PRIOR TO CONSTRUCTION OF TRUSSES.
5. AREAS OF STICK FRAMING SHALL CONSIST OF FRAMING AS SHOWN ON PLANS.
6. EXTEND ROOF SHEATHING TO TOP OF ROOF TRUSS HEELS. IF HEEL IS TALLER THAN 9", THEN INSTALL 2X4 HORIZONTAL BLOCKING AT TOP OF HEEL. NAIL WALL SHEATHING TO TRUSSES AND BLOCKING WITH 8d NAILS AT 6"o.c.



2 S1.0 FRAMING PLAN
SCALE: 1/4" = 1'-0"



3 S1.0 NEW CONCESSION DOOR HEADER
SCALE: 1-1/2" = 1'-0"

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REVISIONS:
1 01/06/2025 PLANNING COMMENTS
06/09/2025 RELEASED FOR BID

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CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS NOTED
DATE: 01/06/2025
SHEET NAME: NEW RESTROOM FOUNDATION AND FRAMING PLANS
SHEET NO: S 1.0

DAIKIN SPLIT SYSTEM HEAT PUMP WALL MOUNTED SCHEDULE

UNIT DESIG. AH/HP	AREA SERVED	FAN COIL UNIT DATA													OUTDOOR UNIT									
		MODEL #	TOTAL CFM	O.A. CFM	EXT. S.P. (IN.WG)	FAN RPM	ELECTRICAL DATA					COOLING MBH	HEATING MBH	WEIGHT LBS	MODEL #	WEIGHT LBS	ELECTRICAL DATA					COOLING	HEATING	NOTES
							UNIT VOLT/PH	MCA	MOCP	COOLING AMPS	HEATING AMPS						VOLT/PH	MCA	MOCP	COOLING MBH	HEATING MBH	EER2 SEER2	HSPF2 COP	
FC–1, 2, 3 HP–1, 2, 3	SEE PLAN	FTZF12AXVJU	SEE SCH	NA	–	BY MFG	208V/1ø	–	–	BY MFG	BY MFG	12	13.5	21	RXF12AXVJU	60	208V/1ø	14	24	12	13.5	12.5 21.0	10.2 3.8	SEE BELOW

1. COOLING CAP. RATED IN ACCORDANCE WITH ARI STD. 210/290 AT 95°F AMBIENT OUTDOOR AIR TEMP., 80°F DRY BULB, 67° WET BULB ENTERING AIR TEMP.& NOM. AIR QTY. LISTED.
2. OUTDOOR UNIT SHALL HAVE A MINIMUM EFFICIENCY RATING AS STATED ABOVE
3. AUTOMATIC UNIT SHUTDOWN VIA FLOAT SWITCH IN SECONDARY DRAIN PANS.
4. OUTDOOR UNIT TO SUPPLY POWER TO INDOOR UNITS.
5. REFRIGERANT PIPING TO BE SIZED PER TOTAL INSTALLED EQUIVALENT LENGTH. LONG–LINE APPARATUS TO BE PROVIDED WHENEVER MFG. RECOMMENDED LENGTHS ARE EXCEEDED, INCLUDING LIQUID LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.L. IS 100'. INSTALL ALL REFRIGERANT LINES AND ACCESSORIES PER MANUFACTURER INSTRUCTIONS.
6. PROVIDE R32 REFRIGERANT TYPE UNITS.
7. INSTALL CONDENSATE PUMP AS NECESSARY

SPLIT SYSTEM UNIT SCHEDULE

UNIT NO.	LOCATION	AREA SERVED	SUPPLY – FAN DATA					COOLING CAPACITY		AUX. HEATER		REFRIG. LINES		ELECTRICAL DATA			WEIGHT (LBS.)	MANUFACTURER & MODEL AHU/COND	NOTES
			TOTAL CFM	MIN. O.A. CFM	MIN.EXT. S.P. (IN.WG)	FAN RPM	MOTOR H.P.	TOTAL B.T.U.H	SENSIBLE B.T.U.H.	KW # STEPS	VOLT/PH	SUCTION	LIQUID	VOLT/PH	MCA	MOCP			
AHU–1 CU–1	SEE PLANS	ACADEMY STORAGE	600	SEE O.A. TABLE	0.3	HIGH	1/3	18,700	13,400	3.60	208/1ø	SEE MFGR.	SEE MFGR.	208/1 208/1	25 12	25 20	116 133	TRANE TEM4B0B24M21 TRANE 4TTR3018N1	

NOTES:
1. CONDENSING UNITS SHALL BE MINIMUM 13.0 SEER
2. INDOOR UNIT: MCA & MOCP ARE FOR SINGLE POINT POWER CONNECTIONS
3. 30% THROWAWAY FILTERS
4. SECONDARY DRAIN PAN WITH FLOAT SWITCH
5. OUTDOOR AIR VOLUME MEETS THE REQUIREMENTS OF ASHRAE STANDARD 62
6. PROVIDE MANUFACTURERS AUTOMATIC CHANGEOVER HEAT/COOL THERMOSTAT.
7. DISCONNECT SWITCHES BY E.C.
8. PLENUM RATED CONDENSATE PUMP SHALL BE PROVIDED AS NECESSARY.
9. PROVIDE VIBRATION ISOLATION AND INSULATED RETURN ELBOWS FOR EACH AIR HANDLER

DIFFUSER SCHEDULE

SYMBOL	CFM	NECK SIZE	MODULE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	MANUFACTURER & MODEL No.	NOTES
(A)	AS NOTED	AS NOTED	AS NOTED	MATCH CEILING	4–WAY UNO	NO	ALUM.	SUPPLY	NOTE 2	TITUS TDC	SEE BELOW
(B)	AS NOTED	AS NOTED	AS NOTED	SURFACE MOUNTED	DBL. DEFLECTION	NO	ALUM.	SUPPLY	NOTE 2	TITUS 300FS	SEE BELOW
(B)	AS NOTED	AS NOTED	AS NOTED	MATCH CEILING	0 DEFLECTION	NO	STEEL	EXHAUST	NOTE 2	TITUS 50F	SEE BELOW

NOTES:
1. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS: DIFFUSER OR NECK SIZE. / AIR QUANTITY — 12x12 / 300 (A) — DIFFUSER TYPE AS NOTED ABOVE
2. COORDINATE COLOR WITH ARCHITECT/OWNER PRIOR TO ORDERING.
3. ALL EXPOSED DUCT AND DIFFUSERS TO BE PAINTED AS DIRECTED BY ARCHITECT.
4. PROVIDE PROPER MOUNT FOR CEILING TYPE LAY–IN OR GYPSUM CEILING.

FAN SCHEDULE

UNIT DESIG.	SERVICE	AREA SERVED	MANUFACTURER & MODEL #	FAN TYPE & ARRANGEMENT	CFM	S.P.	RPM	FLA	DRIVE TYPE	ELECTRICAL DATA		CONTROL SCHEME	ACCESSORIES NOTES
										WATTS	VOLT/PH		
EF–1	EXHAUST	SEE PLANS	GREENHECK CSP–A390	INLINE	350	0.5"	SEE MANF.	SEE MANF.	DIRECT	318	120/1ø	A	SEE BELOW
EF–2	EXHAUST	SEE PLANS	GREENHECK CSP–A390	INLINE	300	0.5"	SEE MANF.	SEE MANF.	DIRECT	318	120/1ø	A	SEE BELOW
EF–3,4	EXHAUST	SEE PLANS	GREENHECK CSP–A290	INLINE	225	0.5"	SEE MANF.	SEE MANF.	DIRECT	102	120/1ø	A	SEE BELOW
EF–5	EXHAUST	SEE PLANS	GREENHECK SP–L80	CEILING	75	0.125"	SEE MANF.	SEE MANF.	DIRECT	27	120/1ø	A	SEE BELOW
EF–6	EXHAUST	SEE PLANS	GREENHECK SP–L80	CEILING	75	0.125"	SEE MANF.	SEE MANF.	DIRECT	27	120/1ø	A	SEE BELOW

NOTES:
1. INTEGRAL DISCONNECT SWITCH
2. BACKDRAFT DAMPER
3. UL RATED
4. PROVIDE WITH METAL ROOF CAP. COLOR TO MATCH ROOF
5. SPEED CONTROLLER BY MANUFACTURER

CONTROL:
A. OCCUPANCY SENSOR

ELECTRIC HEATER SCHEDULE

TAG	AREA SERVED	MANUFACTURER & MODEL #	HEATING CAP. (kW)	ELECTRICAL DATA	NOTES
				VOLT/PH	
EH–1,2,3,5,6	SEE PLANS	QMARK EFF4004	3.0	208V/1ø	1–5
EH–4	SEE PLANS	QMARK LFK151	1.5	120V/1ø	1–4, 6

NOTES:
1. PROVIDE MOUNTING ACCESSORIES
2. INTEGRAL DISCONNECT
3. FAN DELAY
4. UL RATED
5. TAMPER–RESISTANT THERMOSTAT CONCEALED UNDER FACE PLATE
6. INTEGRAL TAMPER–RESISTANT THERMOSTAT

LOUVER SCHEDULE

L–1 – RESTROOM EXHAUST MAKEUP LOUVER
RUSKIN MODEL ELF211 – 36" WIDE x 24" TALL

ELF211 IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE. PROVIDE WITH INTEGRAL FLANGE.

650 CFM (TOTAL INTAKE), 1.56 SF FREE AREA, 416 FPM INTAKE / EXHAUST VELOCITY, 0.03" PRESSURE DROP.

PROVIDE LOUVER TO FIT THE SPECIFIED DOOR FRAME (SEE ARCHITECTURAL PLANS). COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLATION INTO DOOR FRAME.

PROVIDE LOUVER L–1 WITH: (1) (2) (3)

L–2 – ATTIC VENTILATION LOUVER
RUSKIN MODEL ELF211 – 30"ø – ROUND SHAPE

ELF211 IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

LOUVER L–2A TO BE NON–FLANGED
LOUVER L–2B TO BE PROVIDED WITH INTEGRAL FLANGE

PROVIDE LOUVER L–2 WITH: (1) (2) (3)

L–3 – RESTROOM EXHAUST MAKEUP LOUVER
RUSKIN MODEL ELF211 – 20" WIDE x 14" TALL

ELF211 IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONSTRUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE. PROVIDE WITH INTEGRAL FLANGE.

225 CFM (TOTAL INTAKE), 0.58 SF FREE AREA, 390 FPM INTAKE VELOCITY, 0.03" PRESSURE DROP.

PROVIDE LOUVER L–3 WITH: (1) (2) (3)

ACCESSORIES:
(1) INSECT SCREEN (2) KYNAR FINISH (3) COLOR AS DIRECTED BY THE ARCHITECT

MECHANICAL GENERAL NOTES

1. FURNISH ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETE INSTALLATION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH RECOMMENDED PRACTICE AND ALL APPLICABLE CODES.
2. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS & REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
3. ALL MECHANICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE MECHANICAL CONTRACTOR.
4. MECHANICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR, EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER. REFRIGERANT COMPRESSORS SHALL BE GUARANTEED FOR FIVE YEARS.
5. DRAWINGS ARE DIAGRAMMATIC AND MAY NOT SHOW ALL REQUIRED FITTINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE TYPE, SIZE AND LOCATION OF ALL AIR DEVICES, DUCTWORK, PIPING AND EQUIPMENT WITH THE CEILING PLAN, LIGHTS, STRUCTURAL ELEMENTS AND OTHER TRADES. CONTRACTOR TO FURNISH AND INSTALL ALL BENDS, OFFSETS, ELBOWS, ETC. AS REQUIRED. VERIFY ALL CLEARANCES PRIOR TO FABRICATING DUCTWORK OR ORDERING EQUIPMENT.
6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING MATERIALS AND INSTALLING THE WORK IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.
7. DUCTWORK
   A. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS WITH A MINIMUM PRESSURE CLASSIFICATION OF 2", SEAL CLASS C, WITH A MAXIMUM LEAKAGE RATE OF 5%.
   B. ALL SQUARE ELBOWS SHALL HAVE TURNING VANES. ALL RECTANGULAR ELBOWS SHALL BE LONG RADIUS UNLESS SPACE LIMITATIONS REQUIRE SQUARE ELBOWS.
   C. ALL DUCT DIMENSIONS SHOWN ARE INTERIOR CLEAR DIMENSIONS.
   D. PROVIDE A MANUAL BALANCING DAMPER AT ALL SUPPLY AND RETURN BRANCH TAKEOFFS.
   E. FLEXIBLE DUCT, IF SHOWN ON DRAWINGS, SHALL BE INSULATED ROUND DUCT WITH AN OUTER GLASS REINFORCED SILVER MYLAR JACKET ENCLOSING MIN. 1–1/2" THICK GLASS FIBER INSULATION AROUND A CONTINUOUS INNER LINER, AND SHALL CONFORM TO THE REQUIREMENTS OF U.L. 181 FOR CLASS 1 FLEXIBLE AIR DUCTS. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 6 FEET. "R" VALUE TO MEET/EXCEED ENERGY CODE.
   F. ALL DUCT SYSTEMS ARE TO BE PER U.L. STANDARDS. DUCTS ARE TO BE INSTALLED WITH NO RESTRICTIONS AND AN ABSOLUTE MINIMUM AMOUNT OF AIR LEAKAGE.
   G. ALL DUCT INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS AND PARTITIONS.
   H. ALL EXPOSED DUCTWORK SHALL BE PROVIDED WITH PAINT GRIP SURFACE WITH PAINT COLOR DETERMINED BY ARCHITECT
   I. ALL RETURN DUCTWORK SHALL BE LINED.
8. INSULATION
   A. DUCT LINER – FIBROUS GLASS DUCT LINER, MINIMUM 1–1/2" THICK WITH R–VALUE TO MEET LOCAL ENERGY CODE, WITH COATED SURFACE EXPOSED TO AIR STREAM. APPLY WITH MECHANICAL FASTENERS AND 100% COVERAGE OF ADHESIVE.
   B. DUCT WRAP – MINERAL FIBER BLANKET, MINIMUM 2" THICK WITH R–VALUE TO MEET LOCAL ENERGY CODE, WITH REINFORCED FOIL AND PAPER VAPOR RETARDANT JACKET. APPLY WITH MECHANICAL FASTENERS AND ADHESIVE.
   C. AIR DISTRIBUTION – INSULATE TOP–SIDE AS REQUIRED PER CODE
9. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS & ROOF SHALL BE FLASHED & COUNTER–FLASHED IN A WATERPROOF MANNER.
10. LOCATE ALL THERMOSTATS AND SWITCHES 4'–0" ABOVE FINISHED FLOOR. FURNISH A THERMOSTAT FOR EVERY DEVICE REQUIRING ONE WHETHER SHOWN ON DRAWINGS OR NOT.
11. ALL EQUIPMENT SHALL BE INSTALLED PER CODE & MANUFACTURER'S REQUIREMENTS FOR SERVICE AND ACCESS CLEARANCES.
12. ALL EQUIPMENT SHALL BE U.L LISTED.
13. MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE A COMPLETE BALANCING REPORT IN ACCORDANCE WITH NEBB OR AABC STANDARDS.
14. ALL CONTROL WIRING SHALL BE BY MECHANICAL CONTRACTOR.
15. PROVIDE A CLEAN SET OF FILTERS FOR ALL AIR HANDLING EQUIPMENT AT SUBSTANTIAL COMPLETION.
16. MAINTAIN A MINIMUM 10'–0" BETWEEN OUTDOOR AIR INTAKES AND EXHAUST FAN DISCHARGE AND PLUMBING VENTS, ETC. FIELD COORDINATE.
17. RUN DUCT UP WITHIN STRUCTURE OR THROUGH JOIST WEBS WHERE POSSIBLE & WHERE REQUIRED TO MAINTAIN CEILING HEIGHTS. PROVIDE OFFSETS IN DUCT WHERE REQ'D WITH MAX. 45° ELBOWS. MAKE BRANCH TAPS OFF TOP, SIDES OR BOTTOM AS REQ'D. NO BACK TO BACK 90° ELBOWS ALLOWED.
18. ALL EQUIPMENT SHALL BE LABELED ACCORDING TO NUMBERING / IDENTIFICATION SYSTEM PER PLANS.
19. ELECTRICAL CONTRACTOR TO PROVIDE ALL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ETC. TO HEAT PUMPS AND AIR HANDLERS. ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.
20. PRIOR TO BEGINNING ANY WORK, MECHANICAL CONTRACTOR IS RESPONSIBLE TO NOTIFY THE OWNER'S REPRESENTATIVE, ARCHITECT OR ENGINEER IF THE MECHANICAL DESIGN CONFLICTS WITH EXISTING OR UNFORESEEN FIELD CONDITIONS.

ENERGY REQUIREMENTS:

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

THERMAL ZONE	3A
EXTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	18
SUMMER DRY BULB	94
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	72
SUMMER DRY BULB	75
RELATIVE HUMIDITY	50
BUILDING HEATING LOAD	44 MBH
BUILDING COOLING LOAD	33 MBH
MECHANICAL SPACE CONDITIONING SYSTEM	
UNITARY	
DESCRIPTION OF UNIT	SEE SCHEDULES
HEATING EFFICIENCY	SEE SCHEDULES
COOLING EFFICIENCY	SEE SCHEDULES
HEAT OUTPUT OF UNIT	SEE SCHEDULES
COOLING OUTPUT OF UNIT	SEE SCHEDULES
BOILER	
TOTAL BOILER OUTPUT	NA
CHILLIER	
TOTAL CHILLIER OUTPUT	NA
LIST EQUIPMENT EFFICIENCIES	SEE SCHEDULES
EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)	
MOTOR HORSEPOWER	SEE SCHEDULES
NUMBER OF PHASES	SEE SCHEDULES
MINIMUM EFFICIENCY	SEE SCHEDULES
MOTOR TYPE	SEE SCHEDULES
NUMBER OF POLES	SEE SCHEDULES

MECHANICAL SHEET INDEX

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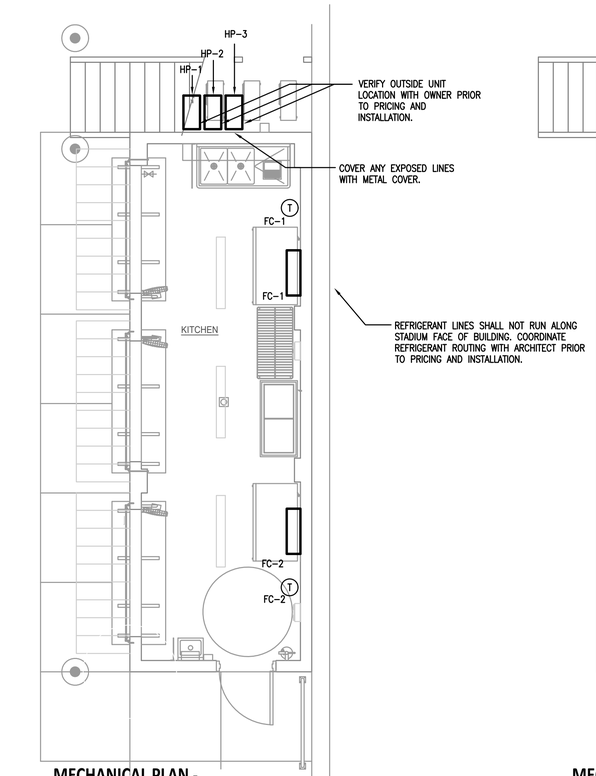
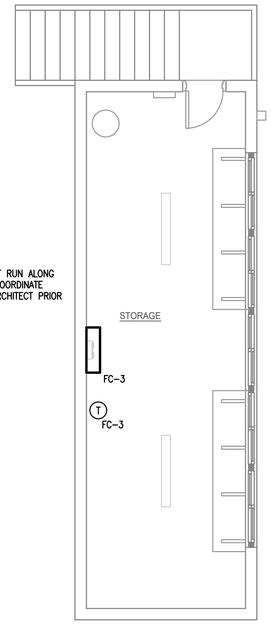
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: 1/4"= 1'–0"
DATE: 05/21/2025
SHEET NAME: MECHANICAL HVAC SCHEDULES AND NOTES
SHEET NO: M0.1



1 M1.0 MECHANICAL PLAN - ACADEMY FOOTBALL CONCESSION LOWER LEVEL

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



2 M1.0 MECHANICAL PLAN - ACADEMY FOOTBALL CONCESSION UPPER LEVEL

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

NOTE:

REFRIGERANT LINES SHALL NOT RUN ALONG STADIUM FACE OF BUILDING. COORDINATE REFRIGERANT ROUTING WITH ARCHITECT PRIOR TO PRICING AND INSTALLATION.

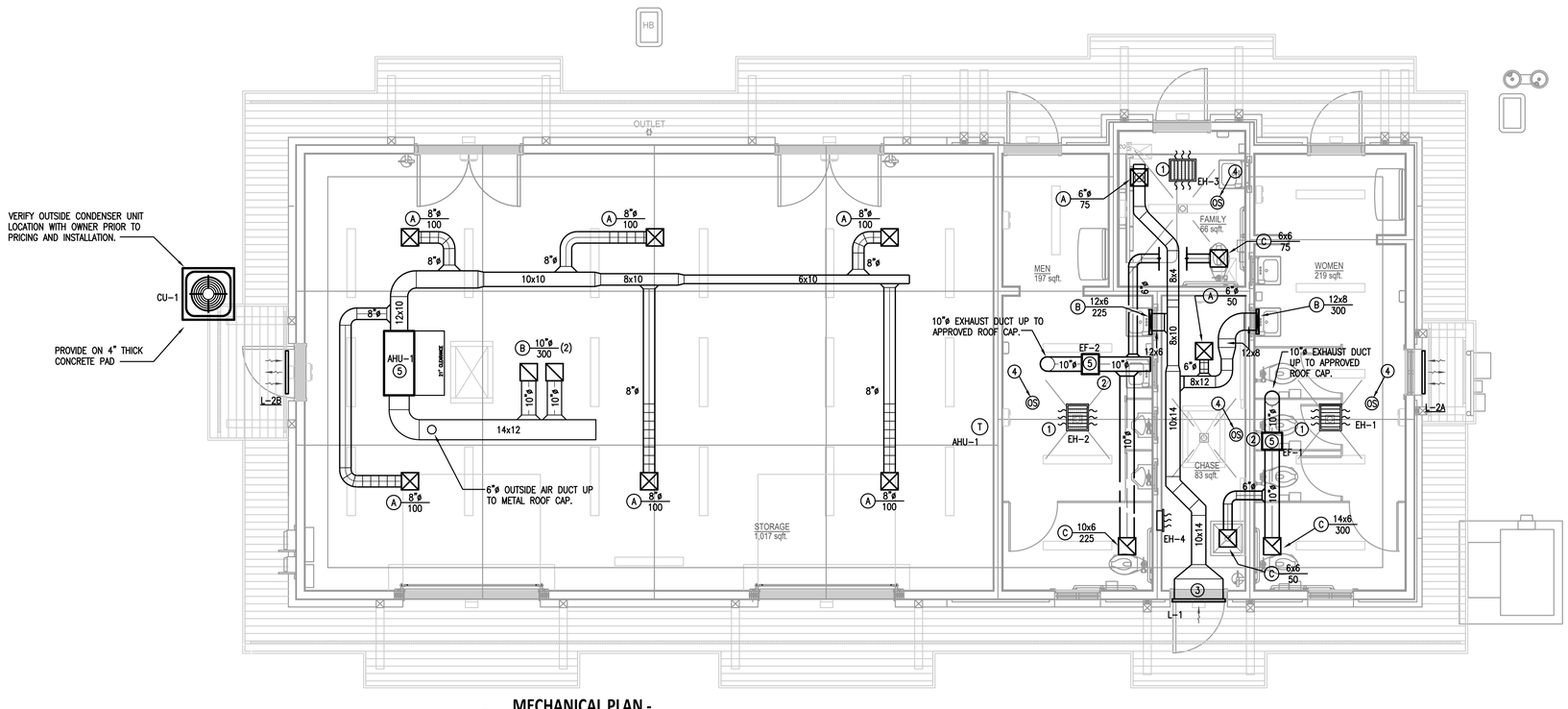
NATURAL VENTILATION CALCULATION

ACADEMY FOOTBALL CONCESSION LOWER LEVEL
WORKING AREA SQ. FT: 255 SQ.FT.
TOTAL OPERABLE AREA: 67.4 SQ.FT.
% OPERABLE: 26.4%
ALLOW. %: 4%

ACADEMY FOOTBALL CONCESSION UPPER LEVEL
WORKING AREA SQ. FT: 257 SQ.FT.
TOTAL OPERABLE AREA: 31.2 SQ.FT.
% OPERABLE: 12.1%
ALLOW. %: 4%

MECHANICAL LEGEND

⊠	CEILING SUPPLY AIR DIFFUSER
⊘	CEILING RETURN AIR DIFFUSER
⊠	EXHAUST FAN
(T)	THERMOSTAT / UNIT CONTROL
	NEW ROUND METAL DUCT
	NEW ROUND FLEX DUCT
AHU	AIR HANDLING UNIT
CFM	CUBIC FEET PER MINUTE
AFF	ABOVE FINISHED FLOOR
EER	ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
⊢	DOOR UNDER CUT 3/4"
BDD	BACK DRAFT DAMPER
V.D.	VOLUME DAMPER



3 M1.0 MECHANICAL PLAN - ACADEMY Restroom and Storage Extra

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

KEYED NOTES

KEY	NOTE
1	RECESSED MOUNTED HEATER IN CEILING
2	CEILING CABINET EXHAUST FAN
3	MAKEUP FROM FIELD-FABRICATED PLENUM. BUILD PLENUM TO MATCH THE PROFILE OF THE INTAKE LOUVER AT DOOR. SEE ARCHITECTURAL PLANS FOR MORE INFORMATION.
4	OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL – MOUNTED ON CEILING
5	COORDINATE MECHANICAL WITH ATTIC ACCESS TO AVOID CONFLICTS AND ALLOW FOR EQUIPMENT SERVICE.

NOTES

1. VERIFY ALL THERMOSTAT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
2. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT WITH OWNER AND ARCHITECT PRIOR TO PRICING AND INSTALLATION. ENSURE MANUFACTURE'S REQUIRED CLEARANCES ARE MAINTAINED.
3. COORDINATE ALL BUILDING PENETRATION LOCATIONS WITH BUILDING OWNER PRIOR TO PRICING AND CONSTRUCTION.
4. MAINTAIN A MINIMUM 10'-0" BETWEEN OUTDOOR AIR INTAKES AND ANY SOURCE OF CONTAMINATED AIR I.E. EXHAUST FAN DISCHARGE AND PLUMING VENTS, ETC. FIELD COORDINATE.

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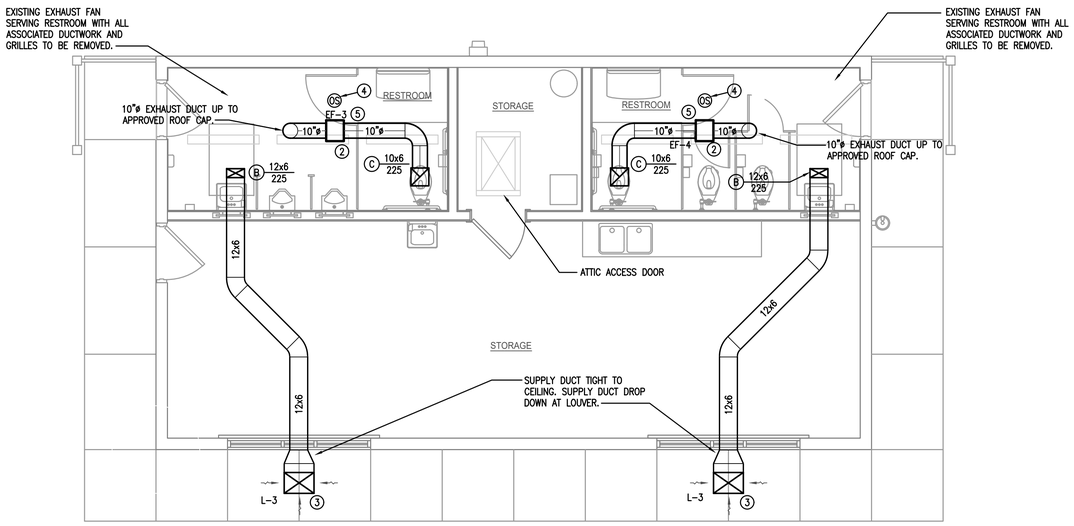
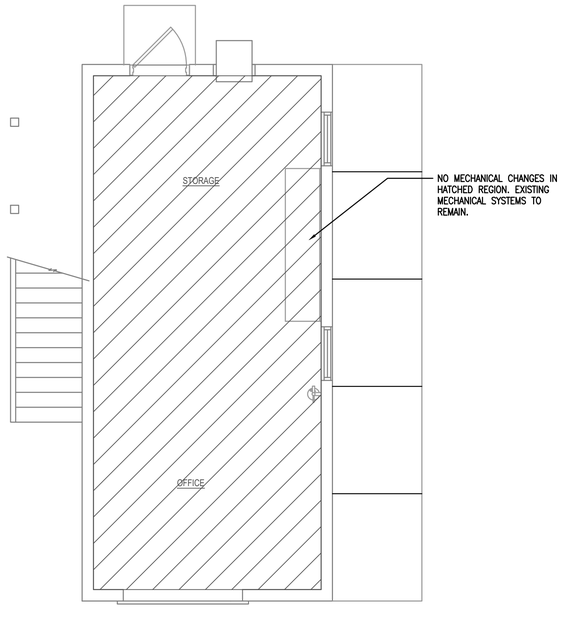
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: MECHANICAL HVAC PLANS AND NOTES
SHEET NO: M1.0



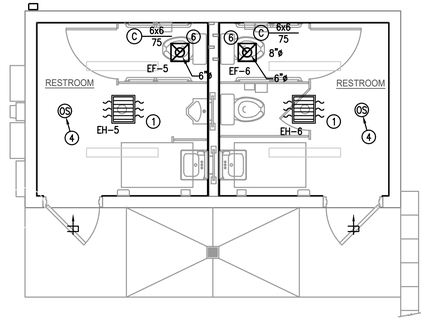
Mechanical Plan - Gibson Concession

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



MECHANICAL PLAN - McAlister Field Press Box LOWER LEVEL

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



Mechanical Plan - McAlister Field Restroom

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

MECHANICAL LEGEND

	CEILING SUPPLY AIR DIFFUSER
	CEILING RETURN AIR DIFFUSER
	EXHAUST FAN
T	THERMOSTAT / UNIT CONTROL
	NEW ROUND METAL DUCT
	NEW ROUND FLEX DUCT
AHU	AIR HANDLING UNIT
CFM	CUBIC FEET PER MINUTE
AFF	ABOVE FINISHED FLOOR
EER	ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
	DOOR UNDER CUT 3/4"
BDD	BACK DRAFT DAMPER
V.D.	VOLUME DAMPER

KEYED NOTES

KEY	NOTE
1	SURFACE MOUNTED HEATER ON CEILING
2	CEILING CABINET EXHAUST FAN
3	MAKEUP FROM FIELD-FABRICATED PLENUM. BUILD PLENUM TO MATCH THE PROFILE OF THE INTAKE LOUVER AT GABLE. SEE ARCHITECTURAL PLANS FOR MORE INFORMATION.
4	OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL – MOUNTED ON CEILING
5	COORDINATE MECHANICAL WITH ATTIC ACCESS TO AVOID CONFLICTS AND ALLOW FOR EQUIPMENT SERVICE.
6	CEILING MOUNTED LOW PROFILE EXHAUST FAN. PROVIDE 6"ø EXHAUST DUCT UP TO ROOF CAP.

NOTES

1. VERIFY ALL THERMOSTAT LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
2. COORDINATE EXACT LOCATION OF MECHANICAL EQUIPMENT WITH OWNER AND ARCHITECT PRIOR TO PRICING AND INSTALLATION. ENSURE MANUFACTURE'S REQUIRED CLEARANCES ARE MAINTAINED.
3. COORDINATE ALL BUILDING PENETRATION LOCATIONS WITH BUILDING OWNER PRIOR TO PRICING AND CONSTRUCTION.
4. MAINTAIN A MINIMUM 10'-0" BETWEEN OUTDOOR AIR INTAKES AND ANY SOURCE OF CONTAMINATED AIR I.E. EXHAUST FAN DISCHARGE AND PLUMING VENTS, ETC. FIELD COORDINATE.

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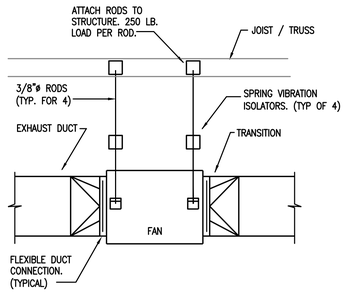
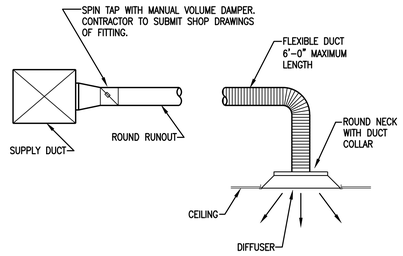
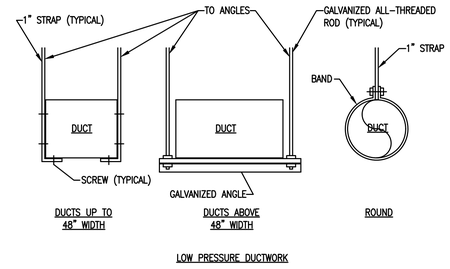
SHEET NO: M1.1



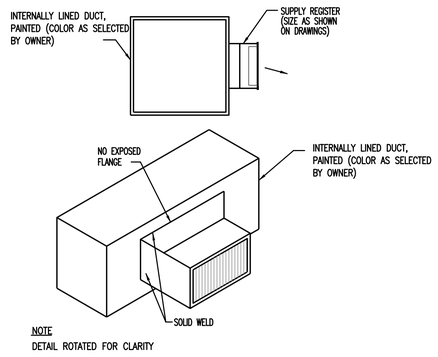
1 M2.0 **IN-LINE EXHAUST FAN DETAIL**
NO SCALE



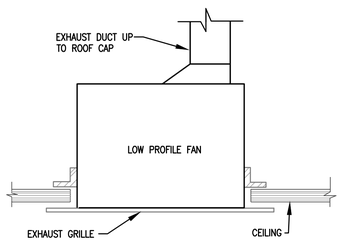
2 M2.0 **SPIN TAP TO ROUND NECK DIFFUSERS**
NO SCALE



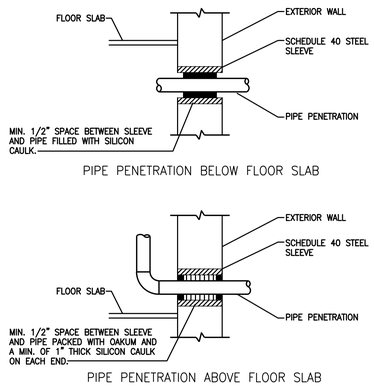
3 M2.0 **RECT. DUCT SUPPORT TRAPEZE AND STRAP HANGERS**
NO SCALE



4 M2.0 **SIDEWALL GRILLE DETAIL**
NO SCALE



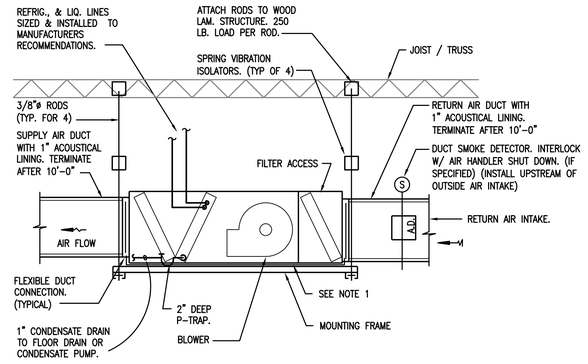
7 M2.0 **CEILING EXHAUST FAN DETAIL**
NO SCALE



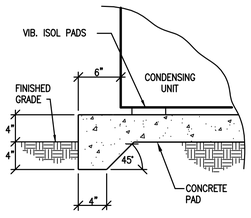
6 M2.0 **EXTERIOR WALL PIPE PENETRATIONS**
NO SCALE

NOTES:

1. AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH. INTERLOCK FLOAT SWITCH WITH AIR HANDLER SHUT-DOWN. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.
2. VERTICAL CONFIGURATION SIMILAR



5 M2.0 **HORIZONTAL DX AC AHU**
NO SCALE



8 M2.0 **CONDENSING UNIT PAD ON GRADE**
NO SCALE

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DATE: 05/21/2025
SHEET NAME:
MECHANICAL HVAC DETAILS
SHEET NO:
M2.0

ELECTRICAL SPECIFICATIONS

SECTION 16010
ELECTRICAL SYSTEMS DESCRIPTIONS

A. PROJECT INCLUDES
1. ELECTRICAL SYSTEMS FOR THE FOLLOWING APPLICATIONS: REFER TO INDIVIDUAL SPECIFICATION SECTIONS FOLLOWING FOR DETAILED REQUIREMENTS.
   a. POWER AND DISTRIBUTION.
   b. LIGHTING, INCLUDING EXIT AND EMERGENCY LIGHTING.
   c. POWER CONNECTIONS FOR HVAC, PLUMBING AND OWNER-PROVIDED EQUIPMENT.

B. PRODUCTS
1. SYSTEMS, PRODUCTS, AND STANDARDS ARE LISTED IN INDIVIDUAL SPECIFICATION SECTIONS WHICH FOLLOW.
2. ALL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE.

C. GENERAL PROJECT REQUIREMENTS
1. PROVIDE ALL WORK AND MATERIALS FOR THE INSTALLATION OF COMPLETE WIRING SYSTEMS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.
2. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
3. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
4. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT ADOPTED VERSION OF THE N.F.P.A., NATIONAL ELECTRICAL CODE (N.E.C.), AND ALL APPLICABLE STATE AND LOCAL CODES.
5. THE REQUIREMENTS OF THE ARCHITECT'S DIVISION 1, GENERAL AND SPECIAL CONDITIONS, AND THE CONTRACT SHALL APPLY TO THIS WORK.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CUTTING, FIRE SEALING, PATCHING, TRENCHING, AND BACKFILLING FOR INSTALLATION OF ELECTRICAL WORK AND REPAIR ANY DAMAGE DONE.
7. THE WORD "PROVIDE" MEANS THAT THIS CONTRACTOR SHALL FABRICATE, ERECT, CONNECT AND COMPLETELY INSTALL SYSTEMS PLACED IN PROPER AND COMPLIANT OPERATING CONDITION. THIS SHALL INCLUDE ALL LABOR, EQUIPMENT OPTIONS, ACCESSORIES, AND INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
8. THE CONTRACTOR SHALL NOT SCALE THESE DRAWINGS AS DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND/OR CIVIL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, UNLESS NOTED OTHERWISE. IT SHALL NOT BE THE INTENT OF THESE DOCUMENTS TO SHOW EVERY MINOR DETAIL OR EVERY ITEM OF MATERIAL OR EQUIPMENT REQUIRED FOR CONSTRUCTION. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. ALL CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY, EXACT ROUTING SHALL BE DETERMINED IN THE FIELD UNLESS NOTED OTHERWISE.
9. SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED FOR LIGHTING FIXTURES, SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, STARTERS, WIRING DEVICES AND MISCELLANEOUS MATERIALS. SHOP DRAWINGS SHALL BE SUBMITTED AS SPECIFIED IN ARCHITECTURAL SPECIFICATIONS, OR AT A MINIMUM, PROVIDE AN ELECTRONIC "PDF" FILE OF ALL SUBMITTAL MATERIALS.
10. COORDINATE POWER SERVICE LOCATION AND REQUIREMENTS WITH LOCAL POWER COMPANY. ANY REQUIREMENTS SET FORTH BY THE POWER COMPANY, CONTRACTOR SHALL PROVIDE AND INSTALL AS REQUIRED FOR INSTALLATION OF SERVICE TO THE FACILITY. IF REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL CONCRETE SERVICE TRANSFORMER PAD, DISCONNECTS, TERMINAL CABINETS, ETC., PER POWER COMPANY REQUIREMENTS. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS WITH THE LOCAL POWER COMPANY PRIOR TO SUBMISSION OF BID. ANY ADDITIONAL COSTS REQUIRED BY THE POWER COMPANY SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE INCLUDED IN THE BID.
11. ELECTRICAL CONTRACTOR SHALL TEST ALL WIRING FOR CONTINUITY AND GROUNDS PRIOR TO WIRING BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED.
12. ELECTRICAL CONTRACTOR SHALL CONNECT ALL HVAC, PLUMBING, AND OTHER CONTRACTOR OR OWNER FURNISHED EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED). CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR, SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR. COORDINATE WITH EQUIPMENT SHOP DRAWINGS AND EQUIPMENT CONTRACTOR FOR DISCONNECT SWITCH, CONDUIT, WIRING REQUIREMENTS, FUSE AND BREAKER SIZES, AND VOLTAGE REQUIREMENTS PRIOR TO ORDERING ANY ELECTRICAL EQUIPMENT. <ELECTRICAL CONTRACTOR SHALL PROVIDE A TIMER (AS REQUIRED BY CODE) FOR ALL PLUMBING RECIRCULATION PUMPS.> ALL FINAL CONNECTIONS TO JUNCTION BOXES SHALL BE BY THE ELECTRICAL CONTRACTOR.
13. EACH BIDDER SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE HIMSELF/HERSELF WITH EXISTING CONDITIONS. FAILURE TO VISIT SITE SHALL NOT EXCUSE CONTRACTOR FROM PERFORMING REQUIRED WORK, NOR SHALL IT BE AN ACCEPTABLE REASON FOR REQUESTING ADDITIONS TO THE CONTRACT.
14. THE EXISTING PORTIONS OF THIS FACILITY WILL REMAIN IN OPERATION DURING THIS CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL CAUSE AS LITTLE DISRUPTION AS POSSIBLE TO THE FUNCTIONING OF THE FACILITY IN ORDER TO MAINTAIN THE COMFORT AND SAFETY OF THE OCCUPANTS.
15. THIS PROJECT INVOLVES SOME WORK ON EXISTING ELECTRICAL FACILITIES. EXISTING FEEDER, BRANCH CIRCUITS, COMMUNICATIONS, RACEWAYS, ETC. WHICH ARE DISRUPTED BY THIS PROJECT SHALL BE RE-ROUTED AND/OR RE-FED FROM A NEW SOURCE AS REQUIRED TO MAINTAIN THEM IN FULL AND PERMANENT SERVICE.
16. THIS PROJECT INVOLVES SOME DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER REMOVAL OF WIRING, RACEWAY, FIXTURES, OUTLETS, ETC. AS NECESSARY TO ACCOMPLISH THE DEMOLITION WORK.
17. IF APPLICABLE, PROVIDE MIN. 24" HORIZONTAL SEPARATION BETWEEN BOXES INSTALLED IN OPPOSITE SIDES OF THE SAME FIRE-RATED WALL AS REQUIRED BY N.E.C. ART. 300.21
18. IF APPLICABLE, FIRE-STOPPING OF PENETRATIONS IN RATED WALLS AND FLOORS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF THE STATE BUILDING CODE USING APPROVED ASSEMBLIES SUCH AS THE FOLLOWING:

    CONDUIT PENETRATIONS OF 1, 2 OR 4 HOUR GYPBOARD WALLS - U.L. #W-L-1080.

    CONDUIT PENETRATIONS OF 1 OR 2 HOUR CONCRETE WALLS OR FLOORS, OR BLOCK WALLS - U.L. #C-AJ-1044.

    CONDUIT PENETRATIONS OF 4 HOUR CONCRETE WALLS OR FLOORS, OR BLOCK WALLS - U.L. #C-AJ-1044.
19. IF APPLICABLE, IN REQUIRED FIRE-RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY A THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE RATING IS MAINTAINED
20. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES. THE REQUIREMENTS OF THESE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR HIS EMPLOYEES' USE, ON THE PROJECT, TO ASSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.
21. WHENEVER THERE ARE DISCREPANCIES BETWEEN DRAWINGS, OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR CONFLICTS WITHIN THE SPECIFICATIONS AND/OR DRAWINGS, AND SUCH DISCREPANCY IS NOT CALLED TO THE ENGINEER'S ATTENTION IN TIME TO PERMIT CLARIFICATION BY ADDENDUM, THE CONTRACTOR SHALL BASE HIS BID UPON PROVIDING THE BETTER QUALITY OR GREATER OF WORK OR MATERIAL CALLED FOR, SHALL SUBMIT A WRITTEN STATEMENT WITH HIS PROPOSAL NOTING SUCH DISCREPANCIES, AND SHALL SO FURNISH AND INSTALL SUCH BETTER QUALITY OR GREATER QUANTITY UNLESS OTHERWISE ORDERED IN WRITING.
22. CONTRACTOR SHALL ASSUME FULL LIABILITY FOR ANY WORK, EQUIPMENT AND MATERIALS PURCHASED AND/OR INSTALLED THAT ARE IN DISCREPANCY, IF IT IS NOT FIRST BROUGHT TO THE ATTENTION OF THE ENGINEER, IN WRITING, FOR CLARIFICATION. ANY WORK DONE IN DISCREPANCY PRIOR TO BRINGING TO THE ENGINEER'S ATTENTION, CONTRACTOR SHALL PAY FOR ANY EQUIPMENT, MATERIALS AND WORK THAT MUST BE ALTERED AND/OR REPLACED.

SECTION 16011
ELECTRICAL DEMOLITION

A. EXECUTION
1. THE EXTENT OF THE ELECTRICAL DEMOLITION WORK IS INDICATED ON THE ELECTRICAL AND ARCHITECTURAL DRAWINGS AND SPECIFIED HEREIN.
2. WHILE DEMOLISHING THE EXISTING ELECTRICAL SYSTEMS, ALL NECESSARY MODIFICATIONS TO THE PORTIONS OF THE EXISTING SYSTEMS, WHICH ARE TO REMAIN, SHALL BE MADE SO THAT THE ENTIRE SYSTEM(S) CONTINUES TO FUNCTION AS INTENDED, EVEN AFTER DEMOLITION AND ASSOCIATED NEW CONSTRUCTION.
3. ELECTRICAL DEMOLITION, RELOCATION OF EXISTING EQUIPMENT, AND ANY CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THIS NEW ELECTRICAL WORK IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
4. THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING BUILDING AND WITH THE WORK OF ALL OTHER TRADES AND INCLUDE ALL WORK NECESSARY TO COMPLY WITH THE INTENT OF THE DEMOLITION.
5. IT SHALL BE UNDERSTOOD THAT FIELD CONDITIONS MAY BE ENCOUNTERED DURING THE EXECUTION OF THIS CONTRACT, WHICH WILL REQUIRE EXTENSION OR RELOCATION OF EXISTING SYSTEMS OR EQUIPMENT WHICH ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REQUIRED TO MEET THE STATED INTENT THAT THE BUILDING CONTINUES TO FUNCTION UNAFFECTED BY THE DEMOLITION AND ASSOCIATED NEW CONSTRUCTION. THIS CONTRACT SHALL INCLUDE SUCH WORK AS WOULD NORMALLY BE EXPECTED IN AN EXISTING BUILDING OF THIS AGE AND TYPE.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, REGARDING DEMOLITION OF THE EXISTING ELECTRICAL SYSTEMS, AS IS NECESSARY, SO THAT THE DEMOLITION OF THE GENERAL CONTRACTOR SHALL NOT DAMAGE THOSE PORTIONS OF THE ELECTRICAL SYSTEMS THAT ARE TO REMAIN IN SERVICE, ARE TO BE REUSED, OR ARE TO BECOME THE PROPERTY OF THE OWNER.
7. ALL SALVAGEABLE MATERIALS RESULTING FROM DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER. THE OWNER SHALL DETERMINE WHAT IS SALVAGEABLE. SALVAGEABLE ITEMS SHALL BE TURNED OVER TO THE OWNER. NON-SALVAGEABLE ITEMS SHALL BE PROPERLY DISPOSED OF BY THE ELECTRICAL CONTRACTOR.
8. EQUIPMENT OR MATERIALS WHICH ARE TO BE REUSED OR TURNED OVER TO THE OWNER SHALL BE CAREFULLY REMOVED AND STORED IN A CLEAN, DRY AREA. SHOULD THE CONTRACTOR ENCOUNTER SUCH EQUIPMENT WHICH IS NOT IN SATISFACTORY CONDITION FOR REUSE AND NOT IN WORKING ORDER, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY.
9. ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT REQUIRING REMOVAL, AND SHALL DISCONNECT AND REMOVE ALL RECEPTACLES AND TELEPHONE OUTLETS FROM PARTITIONS TO BE DEMOLISHED. CONDUIT SHALL BE REMOVED BACK TO THE POINT WHERE IT WILL BE CONCEALED AT THE COMPLETION OF THIS CONTRACT. WIRE AND CABLE SHALL BE REMOVED BACK TO THE FIRST OUTLET BOX, PANELBOARD, CABINET OR TERMINATION POINT WHICH IS TO REMAIN.
10. WHERE NEW WALL OR FLOOR FINISHES CONFLICT WITH EXISTING ELECTRICAL WORK THAT IS TO REMAIN, RELOCATE THE ELECTRICAL WORK INVOLVED OR PROVIDE BOX EXTENSIONS OR SIMILAR DEVICES AND REINSTALL ON THE NEW FINISH.
11. REMOVE ANY ABANDONED CONDUITS, WIRING AND BOXES ENCOUNTERED WITHIN THE PROJECT EXTENTS.
12. ELECTRICAL CONTRACTOR SHALL REMOVE ANY TYPE NM CABLE (ROMEX) FOUND IN TENANT SPACE. WHERE REQUIRED TO REMAIN IN SERVICE, REPLACE NM CABLE WITH MC CABLE OR EMT CONDUIT AND WIRE.

SECTION 16110
RACEWAYS AND BOXES

A. PROJECT INCLUDES
1. ELECTRICAL CONDUIT, TUBING, SURFACE RACEWAYS, BOXES, AND CABINETS FOR ELECTRICAL POWER AND SIGNAL DISTRIBUTION.

B. PRODUCTS
1. WIRING METHODS:
   a. CONCEALED OR EXPOSED INDOOR WIRING: ZINC-COATED ELECTRICAL METALLIC TUBING FOR SIZES 1/2" THROUGH 4", INTERMEDIATE STEEL CONDUIT FOR SIZES LARGER THAN 4".
   b. EXPOSED OUTDOOR WIRING: RIGID OR INTERMEDIATE STEEL CONDUIT.
   c. CONCEALED OUTDOOR WIRING: INTERMEDIATE STEEL CONDUIT OR SCHEDULE 80 OR 40 PVC.
   d. UNDERGROUND WIRING, SINGLE RUN: SCHEDULE 80 OR 40 PVC.
   e. UNDERGROUND WIRING, GROUPED: SCHEDULE 80 OR 40 PVC.
   f. CONNECTION TO EQUIPMENT: FLEXIBLE METAL CONDUIT, LIQUIDTIGHT AT EXTERIOR OR IN DAMP LOCATIONS.
2. FITTINGS FOR ELECTRICAL METALLIC TUBING SHALL BE HEXAGONAL, GALVANIZED STEEL, GLAND TYPE, COMPRESSION <OR SET-SCREW> TYPE AND THREADLESS.
3. RACEWAY ACCESSORY MATERIALS:
   a. CONDUIT BODIES: SHALL COMPLY WITH N.E.C. REQUIREMENTS.
   b. SURFACE RACEWAYS, METALLIC: GALVANIZED STEEL, WITH SNAP-ON COVERS AND IVORY ENAMEL FINISH. SURFACE RACEWAY MAY ONLY BE USED WITH PRIOR, WRITTEN APPROVAL FROM OWNER, ARCHITECT AND ENGINEER.
   c. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL WIRES AND NYLON BUSHINGS AT BOTH ENDS.
4. BOXES AND FITTINGS:
   a. CABINET BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
   b. PULL AND JUNCTION BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
   c. METAL OUTLET, DEVICE AND SMALL WIRING BOXES: SHALL COMPLY WITH UL 514A.
   d. CONDUIT RUN THROUGH BUILDING EXPANSION JOINTS SHALL HAVE APPROPRIATE CONDUIT EXPANSION FITTINGS.

C. EXECUTION
1. PROPERLY SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS PER THE MOST RECENT, ADOPTED EDITIONS OF THE N.E.C. AND STATE BUILDING CODE. RUN ALL CONDUITS PARALLEL OR PERPENDICULAR TO BUILDING WALLS/SURFACES.
2. MINIMUM CONDUIT SIZE ABOVE SLAB/GRADE SHALL BE 1/2". MINIMUM CONDUIT SIZE IN OR BELOW FLOOR SLAB SHALL BE 3/4".
3. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, FIRE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT CURB.
4. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATER-TIGHT BY USING A POLYTETRA-FLUOROETHYLENE TAPE. ALL METALLIC UNDERGROUND CONDUITS SHALL BE THOROUGHLY COATED WITH TWO COATS OF ASPHALTUM OR BITUMASTIC. <APPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE N.E.C.>
5. PROVIDE PULLWIRE IN ALL EMPTY CONDUITS.

SECTION 16120
WIRES AND CABLES

A. PROJECT INCLUDES
1. WIRES, CABLES, AND CONNECTORS FOR POWER, LIGHTING, SIGNAL, CONTROL AND RELATED SYSTEMS RATED 600 VOLTS AND LESS.

B. PRODUCTS
1. WIRE COMPONENTS:
   a. CONDUCTORS FOR POWER AND LIGHTING CIRCUITS: SOLID CONDUCTORS FOR SIZES #14 AWG THROUGH #8 AWG, STRANDED CONDUCTORS FOR #6 AWG AND LARGER.
   b. CONDUCTOR MATERIAL: COPPER.
   c. INSULATION: THHN/THWN.
   d. JACKETS: FACTORY-APPLIED NYLON OR PVC, COLOR CODED: "BLACK AND RED" FOR "A" AND "B" PHASES, NEUTRAL RESPECTIVELY FOR 120/240-VOLT SYSTEM."BLACK/RED/BLUE/WHITE" FOR "A", "B" AND "C" PHASES, NEUTRAL, RESPECTIVELY FOR 120/208-VOLT SYSTEM. "BROWN/ORANGE/YELLOW/LIGHT GRAY" FOR "A", "B" AND "C" PHASES, NEUTRAL, RESPECTIVELY FOR 277/480-VOLT SYSTEM.
   e. BRANCH CIRCUIT CONDUCTORS: SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.
   f. NEUTRAL CONDUCTORS: #10 AWG MINIMUM FOR ALL MULTIWIRE BRANCH CIRCUITS.
   g. "MC" TYPE CABLE WITH INTEGRAL, GREEN, INSULATED GROUND CONDUCTOR, MAY ONLY BE UTILIZED WHERE CONCEALED TO SERVE BRANCH CIRCUITS SIZED #8 AWG OR SMALLER <NOT BE USED>.
   h. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY U.L. LABEL.
2. CABLES:
   a. PORTABLE CORD FOR FLEXIBLE PENDANT LEADS TO OUTLETS AND EQUIPMENT: UL TYPE S.
   b. CONTROL/SIGNAL TRANSMISSION MEDIA: TWISTED PAIR TYPE.
3. CONNECTORS: UL LISTED SOLDERLESS METAL CONNECTORS WITH APPROPRIATE TEMPERATURE RATINGS.

SECTION 16140
WIRING DEVICES

A. PROJECT INCLUDES
1. WIRING DEVICES FOR ELECTRICAL SERVICE.

B. PRODUCTS
1. WIRING DEVICES AND COMPONENTS:
   a. RECEPTACLES: 15-AMP DUPLEX (HUBBELL #5252, OR APPROVED EQUIVALENT), 20-AMP DUPLEX (HUBBELL #5362, OR APPROVED EQUIVALENT).
   b. GROUND-FAULT INTERRUPTER (GFI) RECEPTACLES: FEED-THRU TYPE GROUND-FAULT CIRCUIT INTERRUPTER WITH INTEGRAL DUPLEX RECEPTACLES. (HUBBELL #GF-5362, OR APPROVED EQUIVALENT).
   c. ISOLATED GROUND RECEPTACLES: LISTED AND LABELED, EQUIPMENT GROUNDING CONTACTS INTEGRAL TO RECEPTACLE CONSTRUCTION.
   d. PLUGS AND PLUG CONNECTOR: AS SPECIFIED ON DRAWINGS.
   e. SNAP SWITCHES: SINGLE-POLE, 20 AMPERE (HUBBELL #1221, OR APPROVED EQUIVALENT), THREE-WAY, 20 AMPERE (HUBBELL #1223, OR APPROVED EQUIVALENT).
   f. WALL PLATES: SINGLE AND COMBINATION TYPES, STAINLESS STEEL UNLESS OTHERWISE NOTED ON DRAWINGS.
   g. TELEPHONE/POWER SERVICE POLES: COMBINATION TELEPHONE AND POWER POLES WITH APPROPRIATE CEILING AND FLOOR TRIM PLATES AND METAL DIVIDER BETWEEN POWER AND TELE./DATA COMPARTMENTS.
   h. COLOR OF ALL DEVICES TO BE GRAY , UNLESS OTHERWISE NOTED ON DRAWINGS.
   i. ALL 125V AND 250V NON-LOCKING TYPE RECEPTACLES SHALL BE TAMPER RESISTANT TYPE UNLESS PERMITTED OTHERWISE BY NEC 406.12.
   j. ALL 125V AND 250V RECEPTACLES LOCATED WITHIN 6' OF WATER SOURCES AND OUTDOORS SHALL BE WEATHER RESISTANT TYPE WITH THE LISTING "WR" ON FACE OF RECEPTACLE.

C. EXECUTION
1. DUPLEX RECEPTACLES SHALL BE 20-AMP, UNLESS NOTED OTHERWISE.
2. DEVICE/OUTLET BOXES SHALL NOT BE MOUNTED BACK-TO-BACK IN WALLS.
3. WEATHERPROOF COVERS SHALL PROTECT THE OUTLET WHILE IN USE, EQUIVALENT TO LEVITON #M5999. COVERS SHALL BE EXTRA DEEP, METALLIC WITH OUTLET MOUNTED IN HORIZONTAL ORIENTATION.
4. PROVIDE ALL OUTLETS (INCLUDING TELEPHONE) WITH APPROPRIATE COVERPLATES.

SECTION 16400
SERVICE AND DISTRIBUTION

A. PROJECT MAY INCLUDE
1. ELECTRICAL SERVICE AND DISTRIBUTION INCLUDING SERVICE ENTRANCE, SWITCHBOARDS, GROUNDING, PANELBOARDS, OVERCURRENT PROTECTIVE DEVICES, MOTOR CONTROLLERS, DISCONNECT SWITCHES, AND TRANSFORMERS.

B. PRODUCTS
1. GROUNDING:
   a. GROUNDING EQUIPMENT: COPPER CONDUCTORS, N.E.C. APPROVED CONNECTORS.
   b. GROUNDING ELECTRODES: COPPER-CLAD STEEL GROUND RODS.
   c. GROUNDING SYSTEM: SHALL COMPLY WITH N.E.C. ARTICLE 250.
   d. SERVICE GROUND IMPEDANCE SHALL BE MEASURED, AND SHALL BE 5 OHMS OR LESS. IF UPON MEASUREMENT, SERVICE GROUND READING EXCEEDS 5 OHMS, THEN ADDITIONAL GROUND RODS SHALL BE DRIVEN TO REDUCE READING TO 5 OHMS OR LESS. NOTIFY ENGINEER OF FINAL SERVICE GROUND MEASUREMENT.
2. PANELBOARDS:
   b. PANELBOARDS: WITH OVERCURRENT PROTECTIVE DEVICES, DEAD-FRONT SAFETY ENCLOSURE SUITABLE FOR USE (20" WIDE MINIMUM WITH 4" WIRING GUTTERS AT TOP, SIDES, AND BOTTOM), COPPER BUS, MECHANICAL TYPE MAIN AND NEUTRAL LUGS.
   c. PANELBOARD TYPE: LIGHTING AND APPLIANCE BRANCH CIRCUIT PANELBOARDS, BOLT ON CIRCUIT BREAKERS.
   d. SERIES RATING IS NOT ALLOWED FOR ALL NEW PANELBOARDS, CIRCUIT BREAKERS AND DEVICES.
   e. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
3. DISCONNECT SWITCHES:
   a. HEAVY-DUTY TYPE.
   b. NEMA 1 ENCLOSURE - INDOORS, NEMA 3R ENCLOSURE - OUTDOORS AND WET AREAS.
   c. FUSED OR NON-FUSED AS INDICATED ON DRAWINGS.
   d. FUSED SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS.
   e. ALL DISCONNECTS SHALL BE HEAVY-DUTY RATED, AND SHALL HAVE A MECHANICAL INTERLOCK TO PREVENT THE DOOR FROM BEING OPENED, WITHOUT DEFEATING THE INTERLOCK. THE MECHANICAL INTERLOCK SHALL ALSO PREVENT ACTIVATING THE SWITCH WHEN THE DOOR IS OPEN. THE MECHANICAL INTERLOCK SHALL BE DE-FEATABLE BY A SPECIAL TOOL, AND SHALL BE U.L. LISTED AS PART OF THE DISCONNECT.
   f. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER
4. OVERCURRENT PROTECTIVE DEVICES:
   a. OVERCURRENT PROTECTIVE DEVICES: INTEGRAL TO PANELBOARDS OR SWITCHBOARDS.
   b. FUSIBLE SWITCHES: RATING AS INDICATED ON DRAWINGS AND SUITABLE FOR USE.
   c. MOLDED CASE CIRCUIT BREAKERS: BOLT-ON TYPE, AUTOMATIC THERMAL MAGNETIC TYPE CALIBRATED FOR 40-DEGREES C, OR AMBIENT COMPENSATION.
   d. ALL CIRCUIT BREAKERS RATED 1200A OR HIGHER SHALL BE EQUIPPED WITH ARC ENERGY REDUCTION MAINTENANCE SWITCH WITH STATUS INDICATOR.
   e. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
5. FUSES:
   a. SIZES INDICATED ON DRAWINGS.
   b. CLASS R-5, TIME DELAY, UNLESS OTHERWISE NOTED.
   c. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.
   d. ACCEPTABLE MANUFACTURERS: BUSSMAN, GOULD SHAWMUT OR LITTLE FUSE.
6. TRANSFORMERS:
   a. DRY TYPE TRANSFORMERS: COPPER WINDINGS, 2 WINDING TYPE, ENCLOSURE TYPE, 115-DEGREE C. RISE, INSULATION CLASS, INSULATION TEMPERATURE RISE SUITABLE FOR USE, K4 RATED.
   b. CONTROL AND SIGNAL TRANSFORMERS: SELF-COOLED, TWO-WINDING DRY TYPE, CONTINUOUS DUTY RATING.
   c. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, OR CUTLER-HAMMER.

C. EXECUTION
1. ALL MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210-4B.
2. ALL TERMINATION'S ON ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.
3. PROVIDE A COMPLETE PANEL DIRECTORY FOR EACH PANEL. DIRECTORY SHALL BE TYPE WRITTEN FOR ALL CIRCUITS. PER NEC 408.4.
4. ALL SPARE BREAKER HANDLES SHALL BE IN THE OFF POSITION.
5. PROVIDE REINFORCED CONCRETE HOUSEKEEPING PAD UNDER ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT. PAD SHALL BE CONSTRUCTED OF CONCRETE WITH REINFORCEMENT. PAD SHALL BE 4" TALL WITH CHAMFERED EDGES EXTENDED TO A MINIMUM OF 3" ON ALL SIDES OF THE EQUIPMENT.
6. ALL MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION IN COMPLIANCE WITH PART III OF NEC 430. PROVIDE A SEPARATE OVERLOAD DEVICE FOR MOTORS NOT ALREADY EQUIPPED WITH THERMAL PROTECTION OR INTEGRAL PROTECTIVE DEVICE. THE OVERLOAD DEVICE RATING SHALL BE SELECTED BASED ON THE NAMEPLATE RATING.

SECTION 16515
INTERIOR AND EXTERIOR LIGHTING

A. PROJECT INCLUDES
1. INTERIOR AND EXTERIOR LIGHTING FIXTURES, LAMPS, BALLASTS, EMERGENCY LIGHTING UNITS, EXIT SIGNS AND ACCESSORIES.

B. PRODUCTS
1. INTERIOR AND EXTERIOR LIGHTING COMPONENTS (SEE "LIGHT FIXTURE SCHEDULE"):
   a. EXIT SIGNS: L.E.D., SELF-POWERED NI-CAD BATTERY TYPE, MIN 90 MINUTE CAPACITY.
   b. EMERGENCY LIGHTING UNITS: L.E.D. LAMPS, INTEGRAL, NI-CAD BATTERY, MIN. 90 MINUTE CAPACITY.
   c. ACRYLIC LENS: A-12, .125" MINIMUM.
   d. FLUORESCENT LAMPS TO BE 3500 KELVIN, 2850 LUMENS, T8, CRI GREATER THAN 80, UNLESS NOTED OTHERWISE ON LIGHT FIXTURE SCHEDULE.
   e. L.E.D. LAMPS SHALL BE MINIMUM OF 85 CRI, 3500 KELVIN IN INTERIOR LIGHT FIXTURES AND 5000 KELVIN IN EXTERIOR LIGHT FIXTURES, UNLESS NOTED OTHERWISE ON LIGHT FIXTURE SCHEDULE.

C. EXECUTION
1. LAY-IN FIXTURES SHALL BE SUSPENDED FROM BUILDING STRUCTURE WITH MINIMUM OF ONE SUPPORT WIRE AT EACH CORNER. FIXTURES SHALL ALSO BE ATTACHED TO GRID SYSTEM WITH EARTHQUAKE CLIPS. DO NOT SUPPORT FIXTURES FROM CEILING GRID.
2. SEE ARCHITECTURAL "REFLECTED CEILING PLANS" OR ELECTRICAL LIGHTING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
3. COORDINATE LIGHT FIXTURE MOUNTING METHODS WITH ARCHITECTURAL FINISHES PRIOR TO ORDERING MATERIAL. COORDINATE FIXTURE TYPE AND TRIM WITH CEILING CONSTRUCTION.
4. DOWNLIGHTS INSTALLED AT INACCESSIBLE CEILINGS SHALL HAVE BOTTOM ACCESS LISTING.
5. COORDINATE LIGHT FIXTURE VOLTAGE WITH VOLTAGE OF LIGHTING CIRCUIT SERVING LIGHT FIXTURE.
6. ANY FIXTURES INDICATED ON THE PLANS TO BE CONTROLLED WITH A DIMMER SHALL BE PROVIDED WITH DIMMING BALLAST/DRIVER COMPATIBLE WITH THE LIGHTING CONTROLS. PROVIDE ALL ACCESSORIES AND/OR WIRING TO MAKE COMPLETE.
7. CONNECT ALL BATTERY UNITS IN EXIT AND EMERGENCY EGRESS LIGHT FIXTURES TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING UNLESS NOTED OTHERWISE.
8. LIGHTING FIXTURES INDICATED TO BE INSTALLED IN WET OR DAMP LOCATIONS SHALL BE UL LISTED AND LABELED "WET" OR "DAMP" ACCORDINGLY.
9. IN COMPLIANCE WITH THE ENERGY CONSERVATION CODE, ALL RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE IC-RATED AND LABELED FOR MEETING ASTM E 283. THESE FIXTURES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING.
10. CATALOG NUMBERS GIVEN ON PLANS OR IN SPECIFICATIONS DENOTE MINIMUM QUALITY AND PERFORMANCE REQUIRED. APPROVED EQUIVALENT EQUIPMENT BY OTHER MANUFACTURERS IS ACCEPTABLE.

SECTION 16915
LIGHTING CONTROL EQUIPMENT

A. PROJECT INCLUDES
1. LIGHTING CONTROL EQUIPMENT:
   a. PROGRAMMABLE LIGHTING CONTROL SYSTEM.

B. PRODUCTS
1. LIGHTING CONTROL EQUIPMENT COMPONENTS:
   a. CONTACTORS AND RELAYS: ELECTRICALLY-OPERATED AND MECHANICALLY-HELD DEVICES, PROVIDE MECHANICALLY-HELD CONTACTORS WITH S.P.D.T. PILOT RELAY.
   b. TIME SWITCHES: SOLID-STATE TYPE TIME SWITCHES, SOLID STATE, WITH S.P.D.T. DRY CONTACTS FOR RELAY OR CONTACTOR CONTROL. TIME SWITCHES SHALL MAINTAIN PROGRAMMING FOR A MINIMUM OF 10hrs. UPON LOSS OF POWER.
   c. SENSORS: SOLID-STATE TYPE PHOTOELECTRIC RELAYS, SOLID STATE, WITH S.P.D.T. DRY CONTACTS FOR RELAY OR CONTACTOR CONTROL, WITH TIME DELAY TO PREVENT FALSE OPERATION.

END OF SPECIFICATIONS

ELECTRICAL SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
GENERAL	
	CONDUIT RUN CONCEALED IN CEILING OR IN WALL.
	CONDUIT RUN CONCEALED IN FLOOR OR BELOW SLAB/GRADE.
	CONDUIT RUN EXPOSED ON SURFACE.
	CIRCUIT HOME RUN. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS.
	CONDUIT WITH BUSHING AND CAP.
	120/208 VOLT DISTRIBUITION OR BRANCH CIRCUIT PANELBOARD.
J	FLUSH OR SURFACE-MOUNTED JUNCTION BOX.
POWER	
	DUPLEX, GROUNDING TYPE, 120 VOLT, 20 AMP, RECEPTACLE WITH COVERPLATE. PROVIDE #12 GREEN GROUND JUMPER. MOUNT 18" A.F.F. TO CENTER UNLESS OTHERWISE SHOWN.
	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED ABOVE COUNTERTOP BACKSPLASH, OR AT 46" A.F.F. TO CENTER WHERE THERE IS NO ASSOCIATED CASEWORK.
WP	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED IN WEATHERPROOF ENCLOSURE WITH COVER THAT IS WEATHER-RESISTANT WHILE RECEPTACLE IS IN USE.
GF	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT GROUND-FAULT INTERRUPTING TYPE.
	SPECIAL EQUIPMENT CONNECTION SYMBOL. SUBSCRIPT DENOTES EQUIPMENT DESIGNATION. REFER TO EQUIPMENT CONNECTION SCHEDULE(S) FOR EQUIPMENT AND CONNECTION INFORMATION.
CONTROLS	
S	SINGLE POLE, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER.
S_3	THREE WAY, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER.
S_4	FOUR WAY, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER.
S_{OC}	OCCUPANCY SENSOR WALL SWITCH, 120/277-VOLT, 1000W, RECESSED WALL-MOUNTED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. HUBBELL LIGHTHAWK SERIES, OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER.
OS	CEILING-MOUNTED OCCUPANCY SENSOR, LINE-VOLTAGE, 1000 SQ FT, SEMI-RECESSED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. WHITE COLOR. SENSOR TO BE EQUIPPED WITH AUXILIARY RELAY FOR INDEPENDENT CONTROL EXHAUST FAN. HUBBELL OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER.
FT	UNMETERED 240 VOLT, 1PH, 100 AMP, EARTH BURIAL TYPE FOOD TRUCK ELECTRICAL PEDESTAL, UL LISTED NEMA 3R LOCKABLE ENCLOSURE. EQUIPPED WITH THE FOLLOWING: 1-50A/2P BREAKER 1-30A/1P BREAKER 1-20A/1P BREAKER 1-14-50R RECEPTACLE 1-30A BR32U RECEPTACLE 1-20A 5-20R GFI DUPLEX RECEPTACLE
LIGHTING	
	LED LIGHTING FIXTURE. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE.
	LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BALLAST LETTER INDICATES TYPE
	CEILING OR WALL MOUNTED EMERGENCY BATTERY PACK. SEE LIGHT FIXTURE SCHEDULE.
	LED STRIP/INDUSTRIAL. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE.
	LED LIGHTING FIXTURE CEILING OR WALL MOUNTED RESPECTIVELY. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE.
	EXIT SIGN WITH BATTERY NUMBER OF FACES AND ARROWS AS INDICATED ON DRAWINGS. LETTERS INDICATE TYPE. SEE LIGHT FIXTURE SCHEDULE.

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL
COMMERCIAL PROJECTS (ELECTRICAL DESIGN)

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE

ENERGY CODE:	■ PRESCRIPTIVE	☐ PERFORMANCE
ASHRAE 90.1:	☐ PRESCRIPTIVE	☐ PERFORMANCE

LIGHTING SHEDULE

LAMP TYPE REQUIRED IN FIXTURE	
NUMBER OF LAMPS IN FIXTURE	
BALLAST TYPE USED IN FIXTURE	
NUMBER OF BALLASTS IN FIXTURE	
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED	1400W. VS. 2107W.
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (TRADABLE)	100 LUMENS PER WATT
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (NON-TRADABLE)	N.A.

ADDITIONAL EFFICIENCY PACKAGE OPTIONS
- ☐ C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
- ■ C406.3 REDUCED LIGHTING POWER DENSITY
- ☐ C406.4 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

ELECTRICAL SHEET INDEX

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33160 BRIAN D. WINKLER
Brian D Winkler
5/21/25

SHULTZ ENGINEERING GROUP, PC
212 N. McDowell St, Suite 204
Charlotte, NC 28204
(P) 704.334.7363 | (F) 704.347.0093
www.shultzeg.com | SEG - 24-244
NC FIRM LICENSE NUMBER: C-0898
M: CC/JTM E: BW/DH P: CC/ML

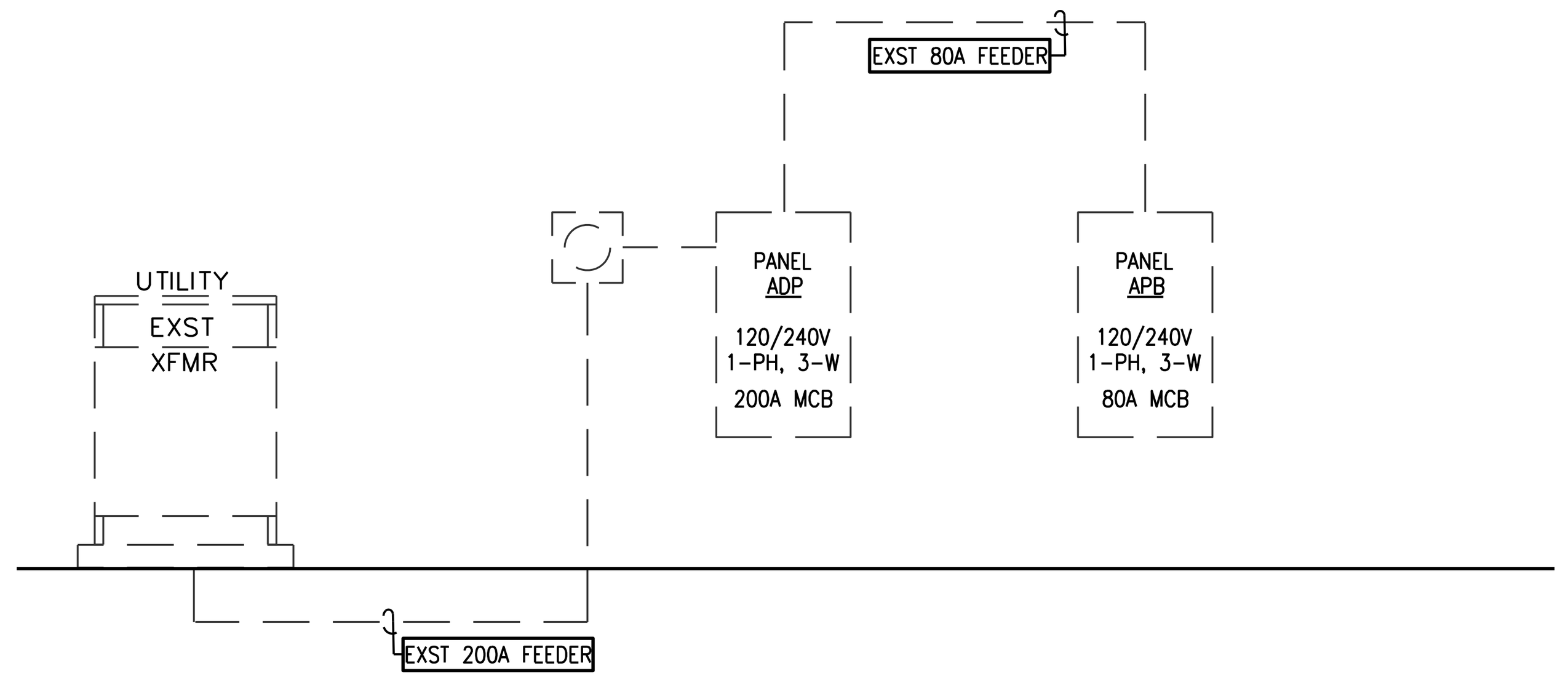
FITFIELDS
314 Tom Hall St.
Fort Mill, SC 29715
(T) 803.981.4330
www.fitfields.com

REVISIONS:
BID SET 05/21/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

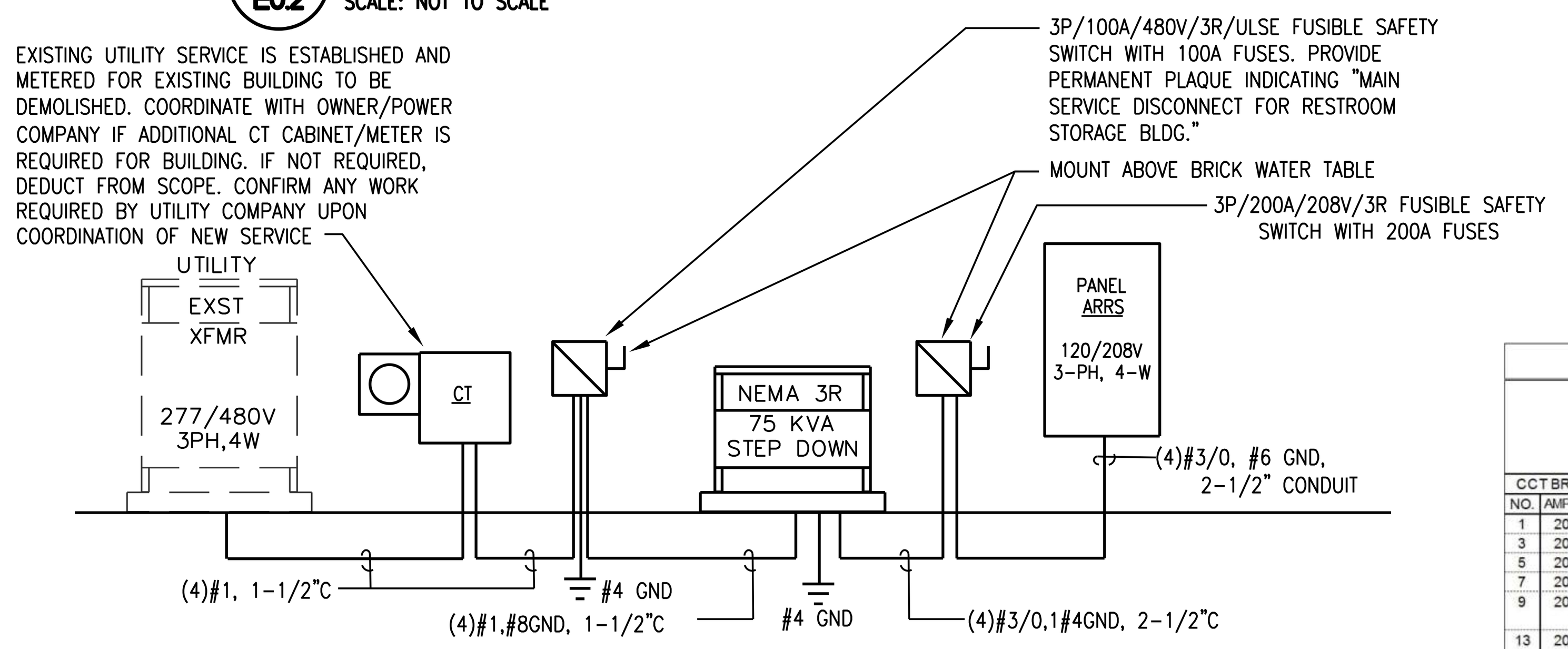
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS SHOWN
DATE: 05/21/2025
SHEET NAME: ELECTRICAL SCHEDULES AND NOTES
SHEET NO: E0.1



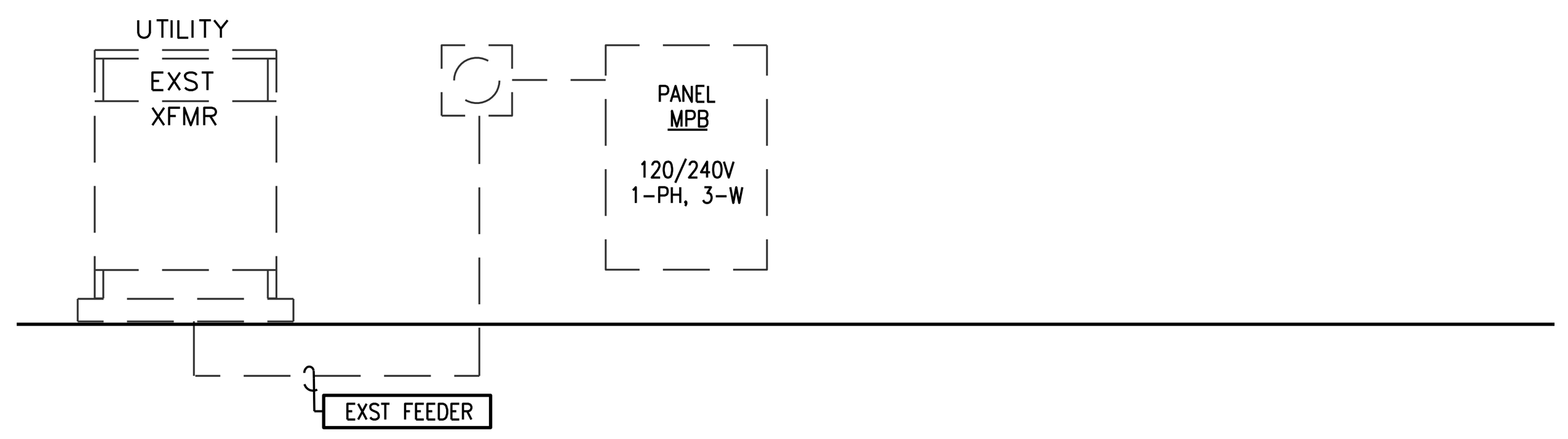
RISER DIAGRAM - ACADEMY PRESS BOX

1 / E0.2 SCALE: NOT TO SCALE



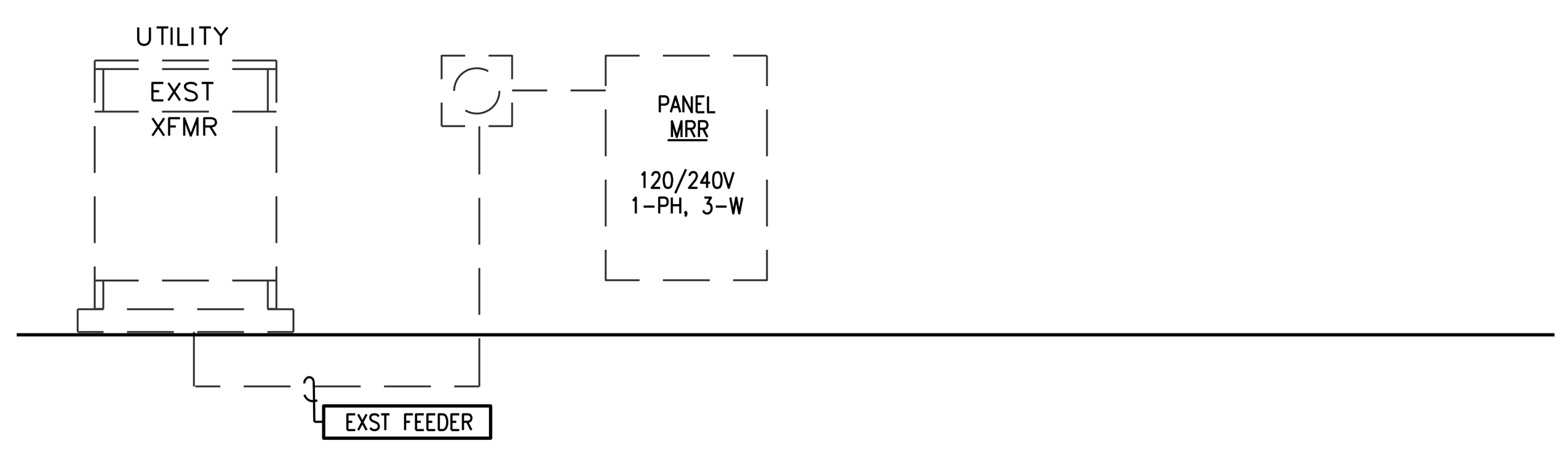
RISER DIAGRAM - ACADEMY RESTROOM AND STORAGE AREA

2 / E0.2 SCALE: NOT TO SCALE



RISER DIAGRAM - MCALLISTER PRESS BOX

3 / E0.2 SCALE: NOT TO SCALE



RISER DIAGRAM - MCALLISTER RESTROOM

4 / E0.2 SCALE: NOT TO SCALE

POWER RISER DIAGRAM NOTES:

1. ALL EQUIPMENT AND FEEDERS SHOWN DASHED ARE EXISTING TO REMAIN, UNLESS NOTED OTHERWISE.
2. ALL NEW WIRE SHALL BE THHN/THWN COPPER.
3. SERIES RATING OF NEW EQUIPMENT IS NOT ALLOWED.
4. ALL NEW MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210.4B.
5. A.I.C. RATINGS SHOWN ON PANELBOARD SCHEDULES ARE THE MINIMUM ALLOWED RATINGS. A.I.C. RATINGS OF ALL NEW PANELBOARDS SHALL EQUAL OR EXCEED THE FAULT CURRENT INDICATED ON THE RISER DIAGRAM OR PANELBOARD SCHEDULES.
6. UNLESS NOTED OTHERWISE, PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL NEW CIRCUITS. GROUNDING CONDUCTORS SHALL BE SIZED PER N.E.C. ARTICLE 250.
7. ALL TERMINATION'S ON NEW ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.
8. PROVIDE APPROPRIATE ARC-FLASH HAZARD LABELING ON ALL NEW ELECTRICAL GEAR INDICATING HAZARD LEVEL PRESENT.
9. IN THE EXISTING GEAR, THE A.I.C. RATING OF ANY NEW CIRCUIT BREAKERS OR ELECTRICAL EQUIPMENT SHALL EQUAL OR EXCEED RATINGS OF EXISTING PANELBOARDS/EQUIPMENT TO WHICH THEY ARE TO BE CONNECTED.
10. EXISTING CONDITIONS WERE DETERMINED FROM LIMITED SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY IRRECONCILABLE CONFLICTS.
11. CONTRACTOR SHALL FIELD VERIFY LOADING AND CIRCUIT BREAKER AVAILABILITY ON EXISTING PANELBOARDS THAT ARE TO BE AFFECTED BY THIS PROJECT, PRIOR TO BEGINNING CONSTRUCTION. AT THE COMPLETION OF PROJECT, AFTER OWNER HAS OCCUPIED THE BUILDING/SPACE, CONTRACTOR SHALL ONCE AGAIN VERIFY LOADING OF AFFECTED PANELBOARDS TO CONFIRM THAT NO PANELBOARD/FEEDER/TRANSFORMER IS BEING OVERLOADED BY THIS WORK.

PANEL ARRS

MAIN TYPE: MAIN BREAKER — AMPERE RATING: 200 — LUG OPTIONS: — REMARKS: NEW PANEL
VOLTAGE (L-L): 208 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 200
PHASE: 3 — WIRE: 4 — MIN. KAIC: 22 — MOUNTING: SURFACE

NO.	AMPS	P	LOAD DESCRIPTION	NOTE	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	PHASE C	LOAD KVA	WIRE SIZE	NOTE	LOAD DESCRIPTION	P	AMPS	NO
1	25	2	AHU-1		10	2.1	4.1			2.0	10		EH-1	2	30	2
						2.1		4.1		2.0						
5	20	2	CU-1		12	1.0			3.0	2.0	10		EH-2	2	30	2
						1.0	3.0			2.0						
9	20	1	EH-4		12	1.5		3.5		2.0	10		EH-3	2	30	10
11	20	1	LIGHTING		12	1.2			3.2	2.0						
13	20	1	LIGHTING		12	0.2	1.7			1.5	12		EWH-1	2	20	14
15	20	1	ATTIC LIGHT/REC.		12	0.5		2.0		1.5						
17	20	1	ADULT CHANGING STATION		12	1.0			1.4	0.4	12		REC.	1	20	18
19	20	1	HAND DRYER	A	12	1.0	1.7			0.7	12		REC.	1	20	20
21	20	1	HAND DRYER	A	12	1.0		1.2		0.2	12		ATTIC LIGHT/REC.	1	20	22
23	20	1	HAND DRYER	A	12	1.0			9.3	8.3	1		FOOD TRUCK PEDESTALS	2	100	24
25	20	1	SERVICE RECEPTS		12	0.2	8.5			8.3						
27	20	1	OVHD DOOR MOTOR		12	1.2		1.2					SPACE ONLY			28
29	20	1	OVHD DOOR MOTOR		12	1.2			1.2				SPACE ONLY			30
31			SPACE ONLY				0.0						SPACE ONLY			32
33			SPACE ONLY					0.0					SPACE ONLY			34
35			SPACE ONLY						0.0				SPACE ONLY			36
37			SPACE ONLY				0.0						SPACE ONLY			38
39			SPACE ONLY					0.0					SPACE ONLY			40
41			SPACE ONLY						0.0				SPACE ONLY			42
							19.0	12.0	18.1							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	1.4	1.25	1.8				
I ENERGY CODE REQ'D.	1.4			0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.	0.0			2.4	1.00	2.4	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	1.5	1.00	1.5	3.0	1.00	3.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	0.0	1.00	0.0	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	2.0	1.00	2.0			0	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	4.2	1.00	4.2	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	13.5	1.00	13.5	21.1	1.00	21.1	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE: A A PROVIDE ACCESSORY TO BREAKER TO LOCK HANDLE IN THE OFF POSITION

CONNECTED KVA: 49.1
CONNECTED AMPS: 136
DEMAND AMPS: 137

PANEL MRR

MAIN TYPE: MAIN BREAKER — AMPERE RATING: 400 — LUG OPTIONS: — REMARKS: EXISTING PANEL TO REMAIN
VOLTAGE (L-L): 240 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 400
PHASE: 1 — WIRE: 3 — MIN. KAIC: 22 — MOUNTING: SURFACE

NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	NO
1	60	2	RT FIELD LIGHTS		4	2.0	2.0					SPARE	2	20	2
						2.0		2.0							
5	60	2	LFT CNTR LIGHTS		4	2.0	2.0					SPARE	2	20	6
						2.0		2.0							
9	35	2	3RD BASE LIGHTS		8	2.0	2.0					SPARE	2	20	10
						2.0		2.0							
13	35	2	HOME/3RD BASE LIGHTS		8	2.0	2.5		0.5	12	A	NEW LIGHTING/EXHAUST FANS	1	20	14
						2.0		3.0	1.0	12	A	NEW HAND DRYER	1	20	16
17	35	2	1ST BASE LIGHTS		8	2.0	3.0		1.0	12	B	NEW HAND DRYER	1	20	18
						2.0		4.0	2.0	10	B	EH-5	2	30	20
21	20	1	RESTROOM LTS		12	1.0	3.0		2.0						
23	20	1	MUSCO CNTRL PNL		12	1.0		3.0	2.0	10	B	EH-6	2	30	24
25			SPACE ONLY				2.0		2.0						
27			SPACE ONLY					0.0				SPACE ONLY			28
29			SPACE ONLY				0.0					SPACE ONLY			30
31			SPACE ONLY					0.0				SPACE ONLY			32
33			SPACE ONLY				0.0					SPACE ONLY			34
35			SPACE ONLY					0.0				SPACE ONLY			36
37			SPACE ONLY				0.0					SPACE ONLY			38
39			SPACE ONLY					0.0				SPARE	2	200	40
41			SPACE ONLY				0.0								
							16.5	16.0							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	21.5	1.25	26.9				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				0.0	1.00	0.0	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	0.0	1.00	0.0	0.0	1.00	0.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	0.0	1.00	0.0	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	0.0	1.00	0.0			0	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	0.0	1.00	0.0	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	8.0	1.00	8.0	3.0	1.00	3.0	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE:
A USE EXISTING BREAKER
B PROVIDE NEW BREAKER AS INDICATED
C FIELD VERIFY ALL EXISTING LOADS, ANY BREAKERS NOT UTILIZED SHALL BE LABELED SPARE WITH HANDLE TURNED OFF.

CONNECTED KVA: 32.5
CONNECTED AMPS: 135
DEMAND AMPS: 158

PANEL APB

MAIN TYPE: MAIN BREAKER — AMPERE RATING: 80 — LUG OPTIONS: — REMARKS: EXISTING PANEL TO REMAIN
VOLTAGE (L-L): 240 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 125
PHASE: 1 — WIRE: 3 — MIN. KAIC: 10 — MOUNTING: SURFACE

NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	NO
1	20	1	LIGHTS		12	0.5	0.7		0.2	12		LOAD	1	20	2
3	20	1	REC.		12	0.5		0.7	0.2	12		LOAD	1	20	4
5	20	1	LIGHTS		12	0.5	0.7		0.2	12		LOAD	1	20	6
7	20	1	REC.		12	0.5		0.7	0.2	12		LOAD	1	20	8
9	20	2	LOAD		12	0.5	0.8		0.3	12	B	LIGHTS		20	10
						0.5		0.8	0.3	12	B	FLY FANS		20	12
13	20	2	HP-2	B	12	1.0	1.8		0.8	12	B	KITCHEN EQUIPMENT		20	14
						1.0		1.8	0.8	12	B	KITCHEN EQUIPMENT		20	16
17	20	2	HP-3	B	12	1.0	2.0		1.0	12	B	HP-1	2	20	18
						1.0		2.0	1.0						
21	35	2	EWH-2	B	8	3.0	3.2		0.2	12		SERVICE RECEPT		20	22
						3.0		3.0				SPACE ONLY			24
							9.2	9.0							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	1.3	1.25	1.6				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				0.0	1.00	0.0	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	1.5	1.00	1.5	6.0	1.00	6.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	1.6	1.00	1.6	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	6.0	1.00	6.0			0	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	0.0	1.00	0.0	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	0.0	1.00	0.0	1.8	1.00	1.8	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE:
A FIELD VERIFY ALL EXISTING LOADS, ANY BREAKERS NOT UTILIZED SHALL BE LABELED SPARE WITH HANDLE TURNED OFF.
B PROVIDE NEW BREAKER AS INDICATED

CONNECTED KVA: 18.2
CONNECTED AMPS: 76
DEMAND AMPS: 77

PANEL ADP

MAIN TYPE: MAIN BREAKER — AMPERE RATING: 200 — LUG OPTIONS: — REMARKS: EXISTING PANEL TO REMAIN
VOLTAGE (L-L): 240 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 200
PHASE: 1 — WIRE: 3 — MIN. KAIC: 10 — MOUNTING: SURFACE

NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	NO
1	20	1	SCOREBOARD	EX	12	1.2	1.2					SPARE	1	20	2
3	20	1	SCOREBOARD	EX	12	1.2		1.2				SPARE	1	20	4
5			SPACE ONLY				0.0					SPARE	1	20	6
7	80	2	PANEL 'APB'		RISER	9.0		9.0				SPACE ONLY			8
				EX		9.2	9.2					SPACE ONLY			10
11		1	SPARE					0.0				SPACE ONLY			12
13			SPACE ONLY				0.0					SPACE ONLY			14
15			SPACE ONLY					0.0				SPACE ONLY			16
17			SPACE ONLY				0.0					SPACE ONLY			18
19			SPACE ONLY					0.0				SPACE ONLY			20
21			SPACE ONLY				0.0					SPACE ONLY			22
23			SPACE ONLY					0.0				SPACE ONLY			24
25			SPACE ONLY				0.0					SPACE ONLY			26
27			SPACE ONLY					0.0				SPACE ONLY			28
29			SPACE ONLY				0.0					SPACE ONLY			30
							10.4	10.2							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	3.7	1.25	4.6				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				0.0	1.00	0.0	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	1.5	1.00	1.5	6.0	1.00	6.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	1.6	1.00	1.6	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	6.0	1.00	6.0			0	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	0.0	1.00	0.0	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	0.0	1.00	0.0	1.8	1.00	1.8	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE:

CONNECTED KVA: 20.6
CONNECTED AMPS: 86
DEMAND AMPS: 90

PANEL MPB

MAIN TYPE: MAIN BREAKER — AMPERE RATING: 200 — LUG OPTIONS: — REMARKS: EXISTING PANEL TO REMAIN
VOLTAGE (L-L): 240 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 200
PHASE: 1 — WIRE: 3 — MIN. KAIC: 10 — MOUNTING: SURFACE

NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	NO
1	20	1	LIGHTS & REC		12	0.5	1.0		0.5	12		REC	1	20	2
3	20	1	REC UP		12	0.5		1.0	0.5	12		REC	1	20	4
5	30	2	SPARE		10		0.5		0.5	12		REC	1	20	6
								0.5	0.5	12		REC	1	20	8
9	20	2	AC UP		12	2.0	2.5		0.5	12		REC	1	20	10
						2.0		2.5	0.5	12		REC	1	20	12
13	20	2	AC DOWN		12	2.0	2.5		0.5	12		REC	1	20	14
						2.0		2.5	0.5	12		REC	1	20	16
17	20	1	SCOREBOARD		12	2.0	2.5		0.5	12		REC	1	20	18
19			SPACE ONLY					1.0	1.0	12		FRIDGE OUTLET	1	20	20
			NONUSEABLE SPACE				0.0					NONUSEABLE SPACE			
			NONUSEABLE SPACE					0.0				NONUSEABLE SPACE			
							9.0	7.5							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	0.0	1.25	0.0				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				0.0	1.00	0.0	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	5.5	1.00	5.5	0.0	1.00	0.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	1.0	1.00	1.0	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	0.0	1.00	0.0			1	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	8.0	1.00	8.0	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	0.0	1.00	0.0	2.0	1.00	2.0	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE:

CONNECTED KVA: 16.5
CONNECTED AMPS: 69
DEMAND AMPS: 69

EQUIPMENT SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS/PH	HP	LOAD	FLA	MCA	MOCP	FURN. BY	INSTALLED BY	TYPE	SWITCH RATING	POLE	FUSE OR TRIP RATING	NEMA ENCL TYPE	CIRCUIT ID	CONNECTION NOTES	CONNECTION DESIGNATION
			LOAD INFORMATION					DISCONNECT INFORMATION									
HP-1	HEAT PUMP	240/1	-	3.4 KVA		14	24	ELEC. CNTR.	ELEC. CNTR.	FUSED	30	2	30	3R	APB-17		HP-1
HP-2	HEAT PUMP	240/1	-	3.4 KVA		14	24	ELEC. CNTR.	ELEC. CNTR.	FUSED	30	2	30	3R	APB-13	-	HP-2
HP-3	HEAT PUMP	240/1	-	3.4 KVA		14	24	ELEC. CNTR.	ELEC. CNTR.	FUSED	30	2	30	3R	APB-18	-	HP-3
EWH-2	WATER HEATER	240/1	-	6.0 KVA				ELEC. CNTR.	ELEC. CNTR.	FUSED	60	2	35	3R	APB-21	-	EWH-2
EH-1	HEATER	208/1	-	4.8 KVA				MECH. CNTR.	MECH. CNTR.				30		ARRS-2	NOTE 2	EH-1
EH-2	HEATER	208/1	-	4.8 KVA				MECH. CNTR.	MECH. CNTR.	FUSED			30		ARRS-6	NOTE 2	EH-2
EH-3	HEATER	208/1	-	4.8 KVA				MECH. CNTR.	MECH. CNTR.	FUSED			30		ARRS-8	NOTE 2	EH-3
EH-4	HEATER	120/1	-	1.5 KVA				MECH. CNTR.	MECH. CNTR.	FUSED			20		ARRS-9	NOTE 2	EH-4
EWH-1	WATER HEATER	208/1	-	3.0 KVA				ELEC. CNTR.	ELEC. CNTR.	FUSED	30	2	30	3R	ARRS-11	-	EWH-1
CU-1	CONDENSING UNIT	208/1	-	2.5 KVA		12	20	ELEC. CNTR.	ELEC. CNTR.	FUSED	30	2	30	3R	ARRS-5	-	CU-1
EH-5	HEATER	240/1	-	4.8 KVA				MECH. CNTR.	MECH. CNTR.				30		MRR-20	NOTE 2	EH-5
EH-6	HEATER	240/1	-	4.8 KVA				MECH. CNTR.	MECH. CNTR.				30		MRR-24	NOTE 2	EH-6

NOTES:
1 PROVIDE A SINGLE-POLE, MOTOR-RATED, TOGGLE SWITCH WITH OVERLOAD HEATERS SIZED PER EQUIPMENT NAMEPLATE, TO SERVE AS LOCAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF ENCLOSURE WHERE LOCATED OUTDOORS
2 WIRE TO "LINE-SIDE" OF INTEGRAL, N.E.C.-COMPLIANT DISCONNECT SWITCH PROVIDED WITH UNIT.
3 POWER FOR INDOOR AIR HANDLING UNIT IS FED FROM RESPECTIVE OUTDOOR CONDENSING UNIT. EXTEND POWER CIRCUIT FROM CONDENSING UNIT TO LINE-SIDE OF INTEGRAL, N.E.C.-COMPLIANT DISCONNECT SWITCH PROVIDED IN AIR HANDLING UNIT BY MANUFACTURER. FIELD VERIFY CONNECTIONS TO EQUIPMENT WITH MECH. CONTRACTOR PRIOR TO ROUGH-IN.
4 OVERCURRENT VENDORS/INSTALLERS TO ENSURE FULL COORDINATION. ANY CHANGES REQUIRED SHALL BE MADE PRIOR TO ORDERING MATERIALS AND WILL BE INSTALLED AT THE COST OF THE PERSON AND/OR COMPANY MAKING THE CHANGES.

PANEL GRRS

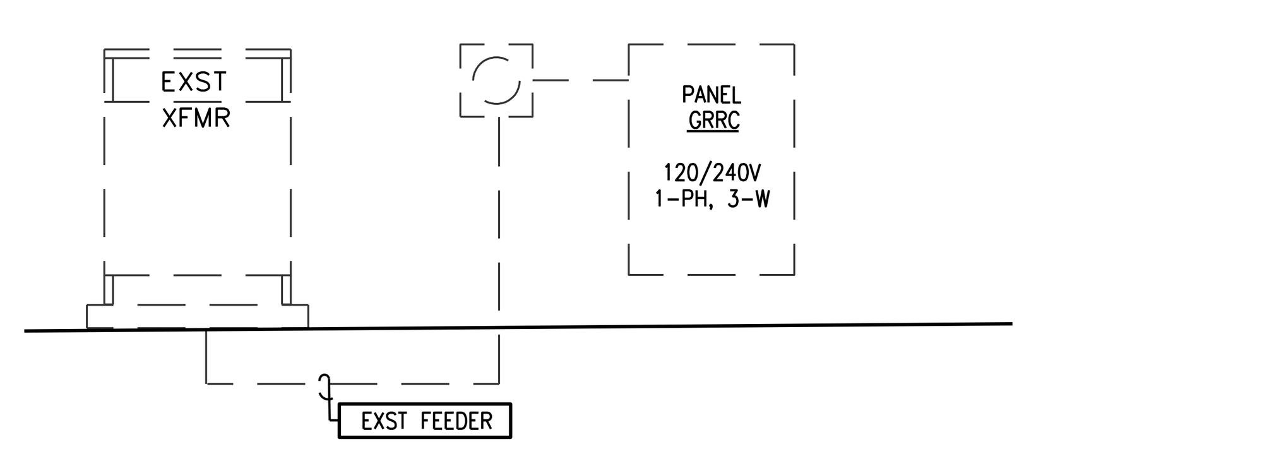
MAIN TYPE: MAIN BREAKER — AMPERE RATING: 225 — LUG OPTIONS: — REMARKS: EXISTING PANEL TO REMAIN
VOLTAGE (L-L): 240 — VOLTAGE (L-N): 120 — BUS RTG (AMPS): 225
PHASE: 1 — WIRE: 3 — MIN. KAIC: 22 — MOUNTING: FLUSH

NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	NO
1	70	2	UN NAMED		4	5.0	10.1		5.0	4		UN NAMED	2	70	2
						5.0		10.1	5.0						
5		1	UNUSABLE SPACE				0.0					UNUSABLE SPACE	1		6
7		1	UNUSABLE SPACE					0.0				UNUSABLE SPACE	1		8
9	20	2	A.C		12	1.0	2.5		1.5	12		BATHROOMS	1	20	10
						1.0		1.8	0.8	12		FRIDGE	1	20	12
13	20		RECEPTACLES		12	0.4	1.9		1.5	12		WATER HEATER		20	14
15	20		RECEPTACLES		12	0.4		1.9	1.5	12		PITHCING MACHINE		20	16
17	30		POPCORN POPPER		10	4.3	4.3			12		UNUSABLE SPACE		20	18
19			NEW HAND DRYER			1.5		1.5				SPACE ONLY			20
21			NEW HAND DRYER			1.5	1.5					SPACE ONLY			22
23			SPACE ONLY					0.0				SPACE ONLY			24
25			SPACE ONLY				0.0					SPACE ONLY			26
27			SPACE ONLY					0.0				SPACE ONLY			28
29			SPACE ONLY				0.0					SPACE ONLY			30
31			SPACE ONLY					0.0				SPACE ONLY			32
33			SPACE ONLY				0.0					SPACE ONLY			34
35			SPACE ONLY					0.0				SPACE ONLY			36
37			SPACE ONLY				0.0					SPACE ONLY			38
39			SPACE ONLY					0.0				SPACE ONLY			40
41			SPACE ONLY				0.0					SPACE ONLY			42
							20.3	15.2							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	0.0	1.25	0.0				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				4.5	1.00	4.5	MOTORS M
E EXTERIOR LIGHTS	0.0	1.25	0.0	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	0.7	1.00	0.7	1.5	1.00	1.5	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	5.1	1.00	5.1	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	0.0	1.00	0.0			1	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	2.0	1.00	2.0	0.0	1.25	0.0	COMPUTER LOADS O
D CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	0.0	1.00	0.0	21.7	1.00	21.7	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

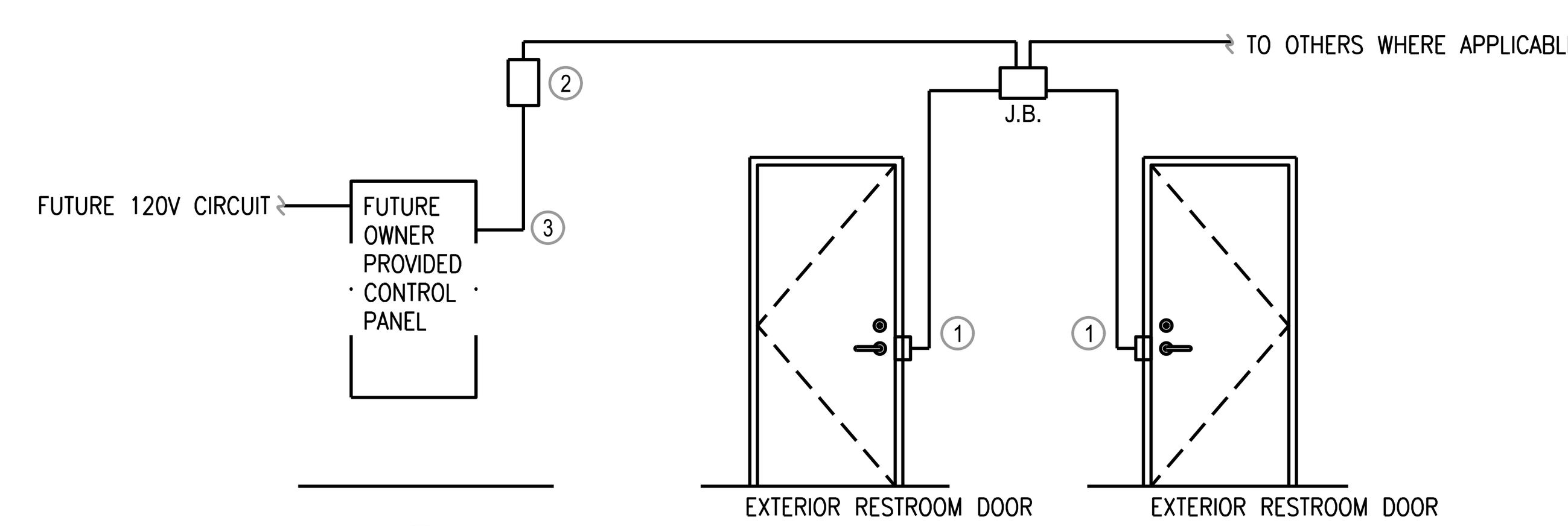
NOTE:

CONNECTED KVA: 35.5
CONNECTED AMPS: 148
DEMAND AMPS: 148



RISER DIAGRAM - GIBSON RESTROOM/CONCESSION

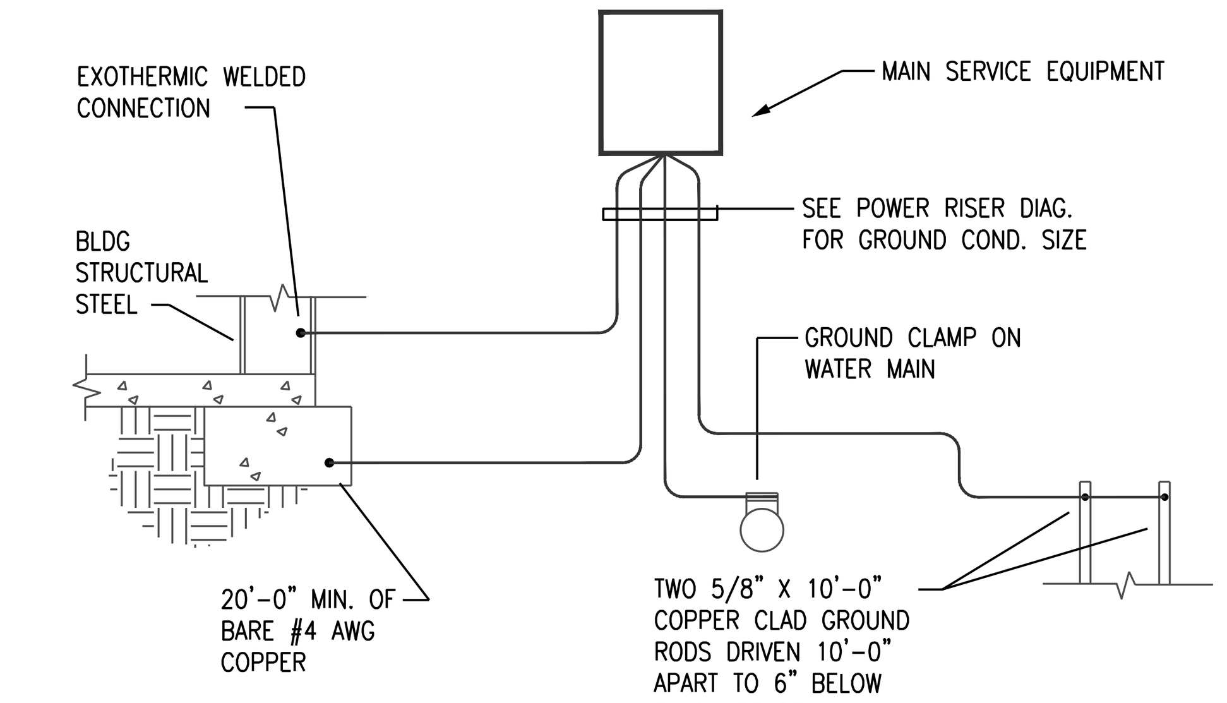
5 / E0.2 SCALE: NOT TO SCALE



(FUTURE) DOOR ACCESS CONTROL SCHEMATIC

6 / E0.2 SCALE: DIAGRAMATIC

1. PROVIDE POWER, CONDUIT AND JUNCTION BOXES TO ALL RESTROOM DOORS FOR ACCESS CONTROL OF DOOR
2. JUNCTION BOX UTILITY SPACE FOR FUTURE TIE-IN OF ACCESS CONTROL
3. FUTURE PROVIDE 3/4" CONDUIT TO REMOTE CONTROL PANEL.



SERVICE GROUNDING DIAGRAM

7 / E0.2 SCALE: DIAGRAMATIC

NOTE: EXTEND GROUNDING ELECTRODE CONDUCTOR TO EACH OF THE TERMINATION POINTS SHOWN ABOVE, WHICH ARE AVAILABLE ON THIS SITE/BUILDING.

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REVISIONS:
BID SET 05/21/25

OWNER:
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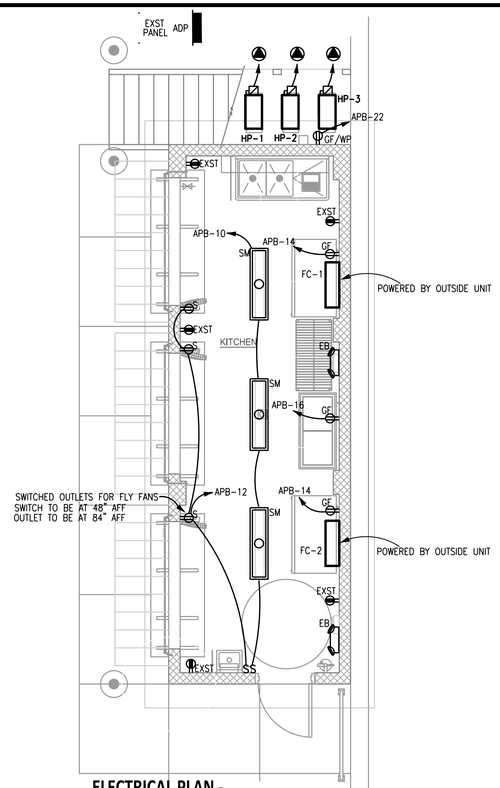
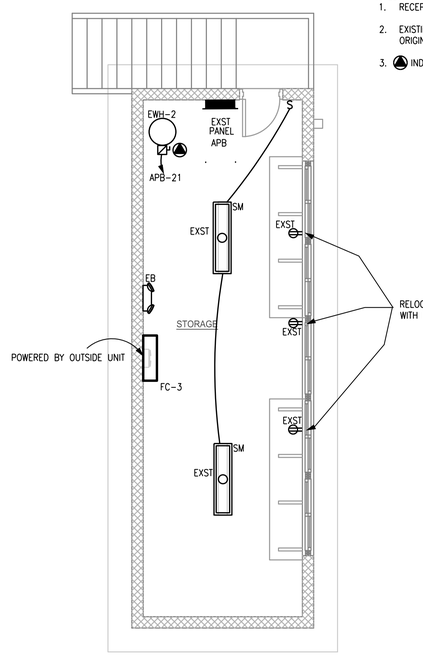
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS SHOWN
DATE: 05/21/2025
SHEET NAME: ELECTRICAL PANEL SCHEDULES & POWER RISER DIAGRAMS
SHEET NO: E0.2



1 ELECTRICAL PLAN - ACADEMY FOOTBALL CONCESSION LOWER LEVEL
E1.0 SCALE: 1/4" = 1'-0"



2 ELECTRICAL PLAN - ACADEMY FOOTBALL CONCESSION UPPER LEVEL
E1.0 SCALE: 1/4" = 1'-0"

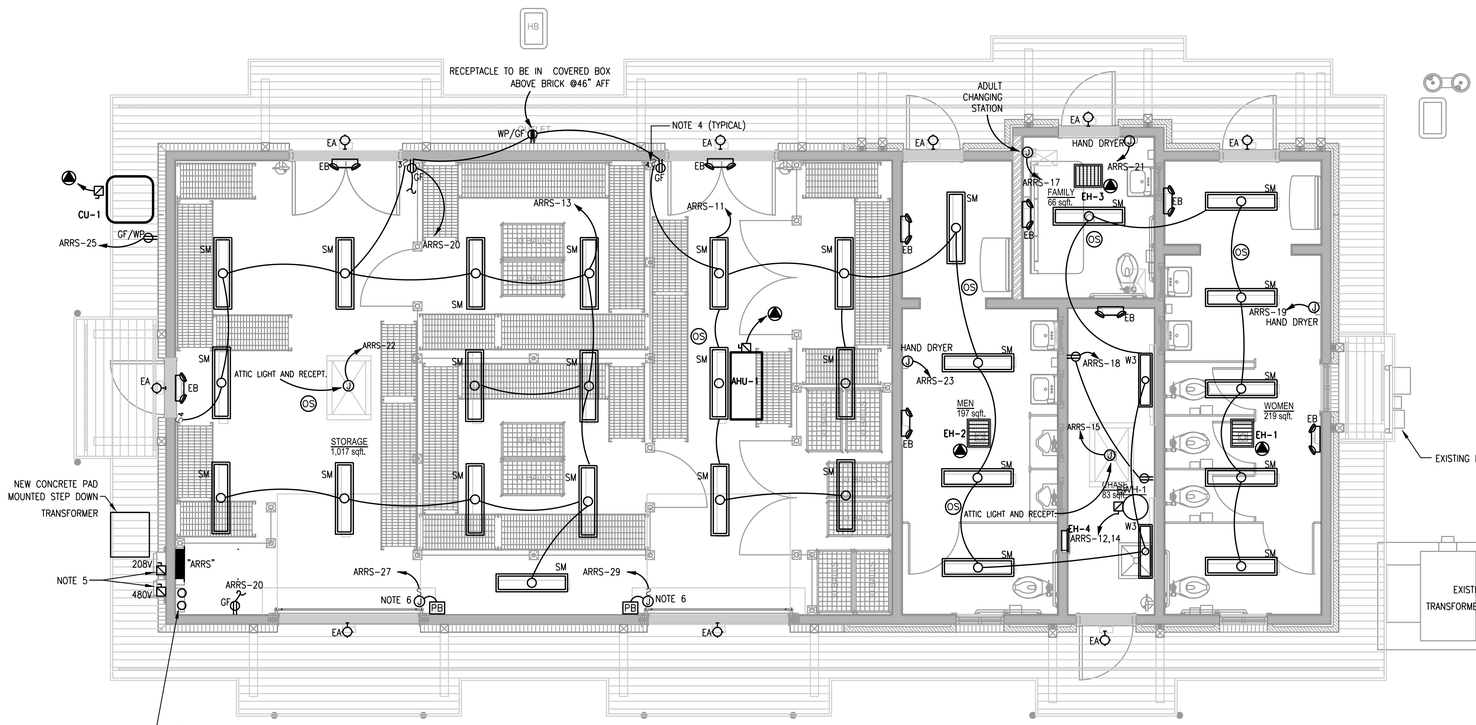
NOTES:
1. RECEPTACLES MARKED "EXST" ARE EXISTING TO REMAIN.
2. EXISTING LIGHT FIXTURES ARE TO BE REPLACED AND TIED BACK TO ORIGINAL CIRCUIT.
3. (A) INDICATES SEE EQUIPMENT SCHEDULE.

LIGHT FIXTURE SCHEDULE

EB	DESCRIPTION:	EMERGENCY BATTERY PACK LIGHT FIXTURE, POLYCARBONATE HOUSING WITH WHITE FINISH, (2)-LIGHT HEADS, INTEGRAL BATTERY.			LAMP INFO:	NO.	TYPE LED	BALLAST TYPE:	NA	NOTE(S):	MOUNT AT 8'-0" NOTE 2
	MANUFACTURER:	LIGHTALARMS	CATALOG SERIES:	LCA-2RHL	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	4.0
EA	DESCRIPTION:	EXTERIOR EMERGENCY LED EGRESS FIXTURE, EQUIP WITH 90 MIN. BATTERY PACK, DARK BRONZE FINISH, WET LOCATION LISTED. PHOTOCELL CONTROL			LAMP INFO:	NO.	TYPE 1,200LUM/2700K	BALLAST TYPE:	NA	NOTE(S):	MOUNT PER ARCH. ELEVATIONS
	MANUFACTURER:	LITHONIA	CATALOG SERIES:	WDGE1	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	10
SM	DESCRIPTION:	4" SURFACE MOUNTED LIGHT, ST SERIES STEEL HOUSING WITH WHITE POLYESTER POWDER COAT.			LAMP INFO:	NO. LED	TYPE 3000LUM/35K	BALLAST TYPE:	NA	NOTE(S):	SURFACE MOUNT TO CEILING
	MANUFACTURER:	LITHONIA	CATALOG SERIES:	STL4	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	20
W3	DESCRIPTION:	3' LED WALL BRACKET, STEEL HOUSING WITH WHITE ENAMEL FINISH, EQUIP WITH OCC. SENSOR			LAMP INFO:	NO. LED	TYPE 2000LUM/35K	BALLAST TYPE:	NA	NOTE(S):	MOUNT AT 9'-6" A.F.F.
	MANUFACTURER:	COLUMBIA	CATALOG SERIES:	LBIL	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	13.0

LIGHT FIXTURE SCHEDULE NOTES

1. VOLTAGES OF LIGHT FIXTURES SHALL BE COORDINATED WITH LIGHTING CIRCUIT TO WHICH FIXTURE IS CONNECTED.
2. ALL EMERGENCY LIGHTS, EXIT SIGNS AND NIGHT LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT SERVING THAT SAME AREA/ROOM.
3. COORDINATE MOUNTING REQUIREMENTS OF ALL FIXTURES WITH ARCHITECTURAL PLANS AND FINISH SCHEDULES.
4. FLANGES AND TRIMS SHALL MATCH CEILING TYPES.
5. PROVIDE WITH APPROPRIATE CHAIN MOUNTING KITS AND MOUNT SO THAT BOTTOM OF FIXTURES ARE AT 8'-6" A.F.F. FIELD COORDINATE LOCATIONS OF FIXTURES WITH EQUIPMENT IN ROOM TO BEST ILLUMINATE ROOM.



3 ELECTRICAL PLAN - ACADEMY Restroom and Storage Extra
E1.0 SCALE: 1/4" = 1'-0"

NOTES:
1. J-BOX AT ATTIC: PROVIDE 4' STRIP LIGHT ALONG WITH GFI DUPLEX RECEPTACLE IN ATTIC SWITCH TO BE ADJACENT TO ATTIC DOOR ACCESS.
2. (A) INDICATES SEE EQUIPMENT SCHEDULE.
3. COVER ANY EXPOSED CONDUIT ON BUILDING WALL.
4. CONNECT WIRING AS SUCH THAT WHEN ANY ONE OCCUPANCY SENSOR DETECTS AN OCCUPANT THE CIRCUIT ENERGIZES ALL LIGHTING IN THE STORAGE AREA.
5. NEATLY POSITION EQUIPMENT ON WALL. MAINTAIN NEC WORKING CLEARANCES.
6. CONNECT MOTORIZED OVERHEAD DOOR. COORDINATE WITH VENDOR FOR EXACT REQUIREMENTS AND PROVIDE ACCORDINGLY. [PB] INDICATES J-BOX FOR PUSH BUTTON TO CONTROL OVERHEAD DOOR.

NORTH CAROLINA PROFESSIONAL SEAL 33160 ENGINEER BRIAN D. WINKLER
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5/21/25

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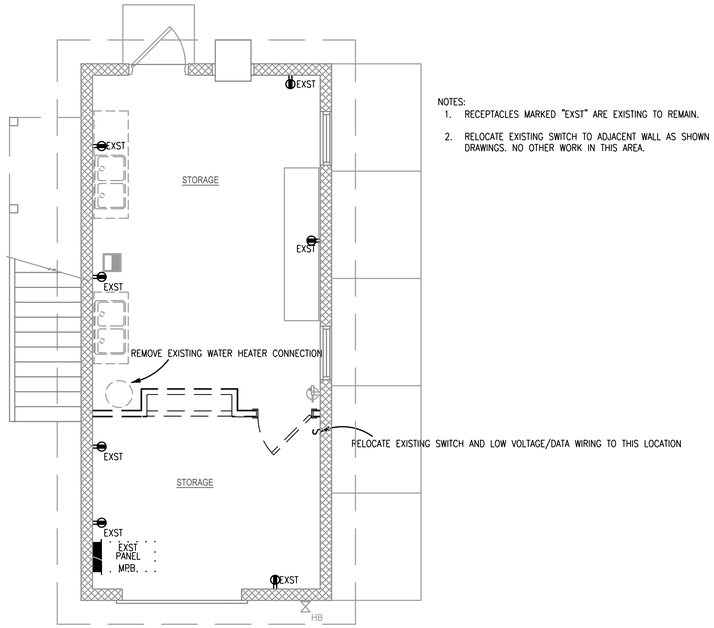
REVISIONS:

1	BASE UPDATED	01/09/25
	BID SET	05/21/25

OWNER: CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

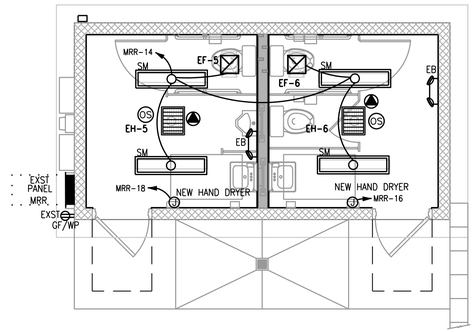
SCALE: AS SHOWN
DATE: 05/21/2025
SHEET NAME: ELECTRICAL FLOOR PLANS
SHEET NO: E1.0



NOTES:
1. RECEPTACLES MARKED "EXST" ARE EXISTING TO REMAIN.
2. RELOCATE EXISTING SWITCH TO ADJACENT WALL AS SHOWN ON DRAWINGS. NO OTHER WORK IN THIS AREA.

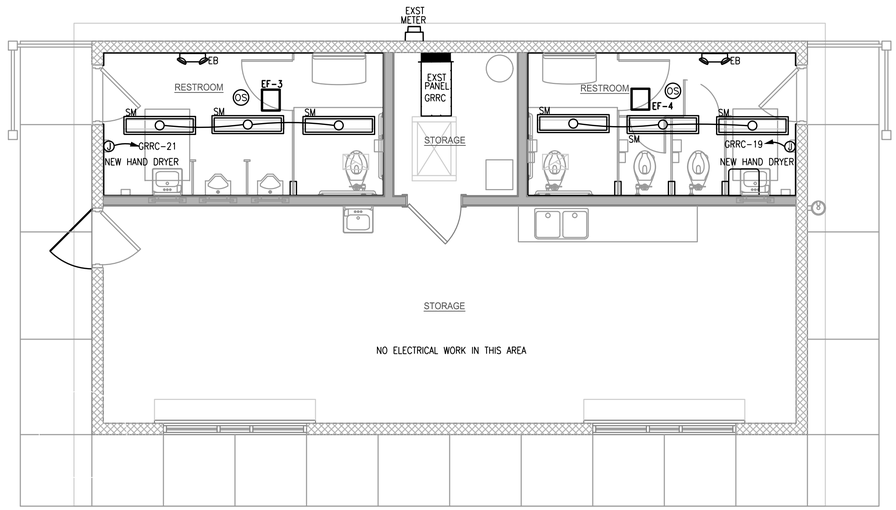
RELOCATE EXISTING SWITCH AND LOW VOLTAGE/DATA WIRING TO THIS LOCATION

1 / E1.1 ELECTRICAL PLAN - McAlister Field Press Box LOWER LEVEL
SCALE: 1/4" = 1'-0"



NOTES:
1. RECEPTACLES MARKED "EXST" ARE EXISTING TO REMAIN.
2. NEW LIGHTING FIXTURES TO BE INSTALLED WITH OCC. SENSOR SWITCH AND TIED BACK TO EXISTING LIGHTING PANELS.
3. ▲ INDICATES SEE EQUIPMENT SCHEDULE
4. EXHAUST FANS ARE TO BE CONNECTED TO AND CONTROLLED BY ROOM LIGHTS.

2 / E1.1 ELECTRICAL PLAN - McAlister Field Restroom
SCALE: 1/4" = 1'-0"



NOTES:
1. LIGHT FIXTURES ARE TO BE REPLACED AND TIED BACK TO ORIGINAL CIRCUIT.
2. EXISTING EXPOSED DOOR CONTROL SYSTEM TO REMAIN. ADJUST EXISTING METAL CONDUIT FOR NEW WALL TILE.
3. TIE EXHAUST FANS INTO LIGHTING CIRCUIT FOR EACH ROOM.

4 / E1.1 ELECTRICAL PLAN - Gibson Concession
SCALE: 1/4" = 1'-0"

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REVISIONS:
BID SET 05/21/25

OWNER:
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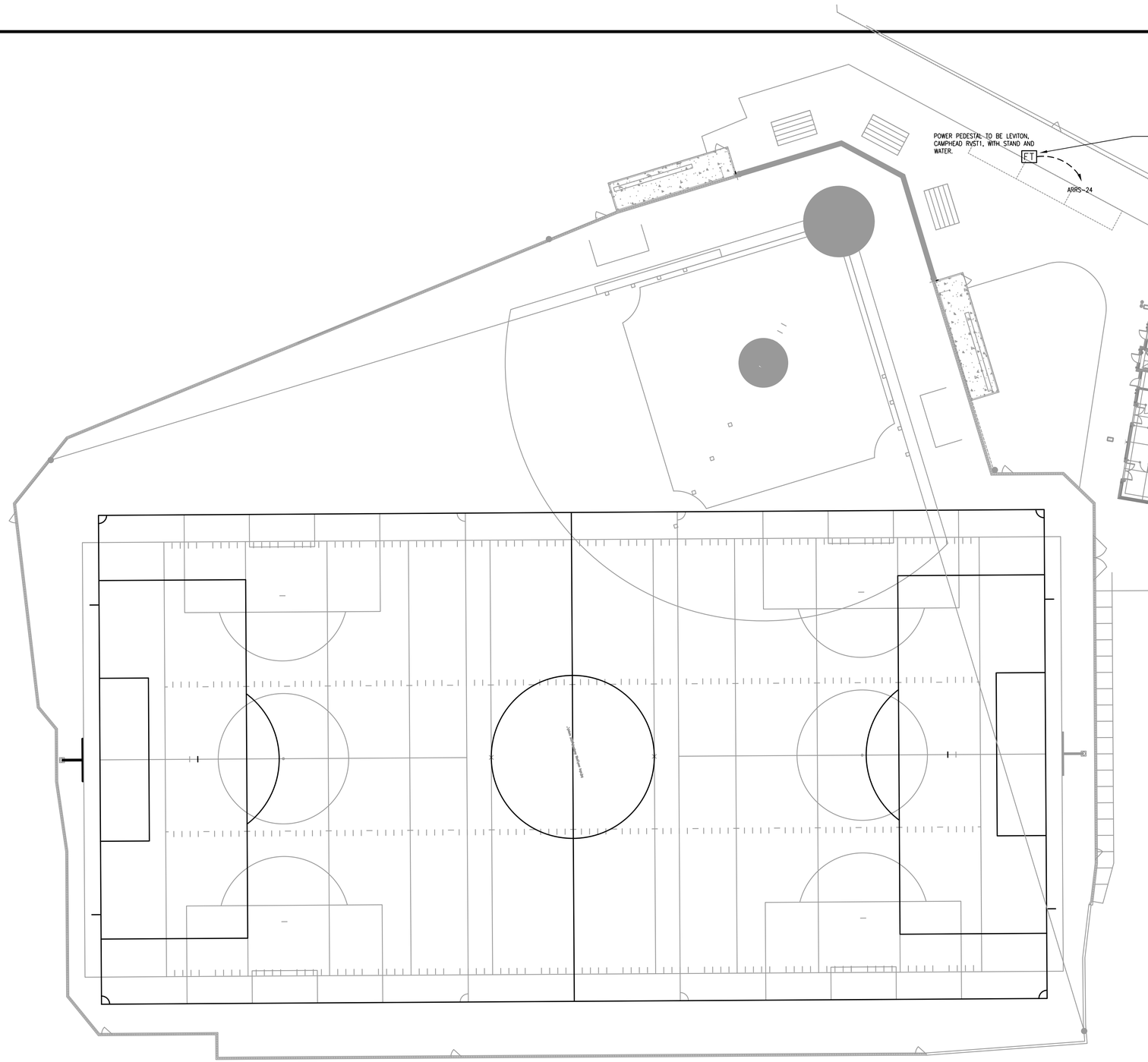
ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS SHOWN
DATE: 05/21/2025
SHEET NAME: ELECTRICAL FLOOR PLANS
SHEET NO: E1.1



1 E2.0

ELECTRICAL PLAN - OVERALL SITE PLAN

SCALE: 1" = 20'-0"

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REVISIONS:

BID SET	05/21/25

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CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: AS SHOWN
DATE: 05/21/2025
SHEET NAME: ELECTRICAL SITE PLAN
SHEET NO: E2.0

PLUMBING FIXTURE SCHEDULES

SHOP DRAWINGS

1. SHOP DRAWINGS SHALL BE SUBMITTED ON THE FOLLOWING ITEMS: CLEANOUTS, DRAINS, PLUMBING FIXTURES, BRASS, TRIM, FIXTURE CARRIERS, DOMESTIC WASTE AND VENT PIPING ABOVE GRADE, DOMESTIC WASTE PIPING BELOW GRADE, COUPLINGS AND DOMESTIC WATER PIPING.

CLEANOUTS - CAST IRON PIPE

1. EXPOSED PIPE (INSIDE SPACES AND CEILING PLENUMS): CAST IRON CLEANOUT TEE WITH BRASS PLUG.
2. IN WALLS: (WCO) CAST IRON FERRULE, CENTER TAPPED BRONZE PLUG WITH STAINLESS STEEL COVER NOT TO EXCEED 8" IN DIAMETER WADE W-8550/W-8480R, EQUAL: ZURN Z-1440-1.
3. IN VINYL COMPOSITION AND QUARRY TILE FLOORS: (FCO) SATIN NIKALOY SCORIATED COVER AND RIN, CLEANOUT PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND LEVELING SCREWS. WADE W-6000S, EQUAL: ZURN Z-1400T.
4. IN CARPET FLOORS: (FCO) SAME AS FOR TILE FLOORS ABOVE PLUS CARPET MARKER.
5. OUTDOOR OR GRADE CLEANOUTS: (GCO) TRACTOR GRATE, NIKALOY SCORIATED COVER, C.O. PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND ADJUSTABLE HEAD. SET IN 18"x18"x6" CONCRETE PAD. WADE W-6000Z-1, EQUAL: ZURN ZN-1400-HD.
6. ALL CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPE UP TO 4" PIPES AND SHALL BE IN 4" IN SIZE FOR LARGER PIPING.

DRAINS - ALL FLOOR DRAINS TO HAVE TRAP PRIMERS PER LOCAL CODE

1. (FD-1) FLOOR DRAIN: CAST IRON BODY, LEVELING SCREWS, INSIDE CAULK, FLASHING COLLAR, ADJUSTABLE STRAINER. DRAIN SIZE SHALL BE 3" UNLESS NOTED OTHERWISE ON THE PLANS. WADE W-1100-G6-1, EQUAL: ZURN ZN-415-6S.
2. (FD-2) FLOOR DRAIN: CAST IRON BODY, LEVELING SCREWS, SEDIMENT BUCKET. WADE W-1340-27, EQUAL: ZURN Z-520-Y.
3. (RD) ROOF DRAIN: CAST IRON BODY AND CAST IRON DOME, GRAVEL STOP FLASHING COLLAR AND DECK CLAMP. WADE W-3000-42-AE-53, EQUAL: ZURN ZC-100-EA-C.
4. (RD) ROOF DRAIN: HEAVY WALLED PVC BODY COMPLETE WITH GALVANIZED STEEL THREADED INSERTS TO ACCEPT SECURING BOLTS, GRAVEL STOP FLASHING COLLAR AND DECK CLAMP, CAST IRON DOME STRAINER. ZURN RD2080-PV3 OR APPROVED EQUAL. OVER- FLOW DRAIN ZURN RD208-PV3 WITH 2" HIGH EXTERNAL WATER DAM.
5. ALL FLOOR DRAINS EXCEPT WHERE INSTALLED IN SLAB-ON-GRADE SHALL BE FLASHED WITH 24"x24", 3 lb. PER SQ. FT. SHEET LEAD EMBEDDED IN FLOOR CONSTRUCTION.
6. (FS) FLOOR SINK: CAST IRON 12"x12"x6" DEEP WITH WHITE ACID RESISTING PORCELAIN ENAMEL TOP AND INTERIOR. SEE PLANS FOR PIPE SIZE AND TOP CONFIGURATION (HALF OR FULL GRATE). WADE W-9130LF-64, EQUAL: ZURN Z-1900.

PLUMBING FIXTURES - GENERAL

1. ALL LIKE FIXTURES AND TRIM SHALL BE OF ONE MANUFACTURER.
2. PROVIDE STOPS ON WATER SUPPLIES TO ALL PLUMBING FIXTURES, INCLUDING FIXTURES NOT FURNISHED UNDER THIS SECTION OF THE WORK, AND ALL WALL HYDRANTS. STOPS ON LAVATORY SUPPLIES SHALL BE CHROME PLATED.
3. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, KOHLER OR CRANE. FLUSH VALVES TO BE ZURN OR EQUAL BY SLOAN.
4. ALL FIXTURES SHALL BE GRADE 'A'. NAME AND TRADEMARK OF MANUFACTURER SHALL BE PRINTED OR PRESSED ON ALL FIXTURES AND A LABEL WHICH CANNOT BE REMOVED WITHOUT DESTROYING IT, CONTAINING THE MANUFACTURER'S NAME OR TRADEMARK AND THE QUALITY OR CLASS OF THE FIXTURE SHALL BE AFFIXED TO ALL FIXTURES AND NOT REMOVED UNTIL AFTER THE WORK HAS BEEN ACCEPTED.
5. EACH WALL HUNG FIXTURE SHALL BE HUNG BY MEANS OF WALL HANGERS, WHICH SHALL BE ANCHORED TO THE PARTITIONS BY MEANS OF 3/8 INCH TOGGLE BOLTS.

PLUMBING FIXTURES - CONNECTIONS

THE FOLLOWING MATERIALS SHALL BE USED TO CONNECT EACH PLUMBING FIXTURE TO THE DRAINAGE SYSTEM:

1. WATER CLOSET: (CONNECTION INCLUDED IN FIXTURE CARRIER).
2. URINAL: RED BRASS PIPE WITH 125# CAST BRONZE SCREWED FITTINGS.
3. LAVATORY: COPPER DWV DRAINAGE PIPE WITH WROUGHT COPPER DWV DRAINAGE FITTINGS. (EXPOSED CHROME PLATED). PROVIDE WHITE ADA INSULATION KITS ON ALL ADA AND GROUP LAVATORIES, TRUEBRO, INC., HANDI LAV-GUARD OR EQUAL.
4. COUNTER SINK: SAME AS FOR LAVATORY.
5. SERVICE SINK: SCHEDULE 40 GALVANIZED STEEL PIPE.
6. DRINKING FOUNTAIN: SAME AS FOR LAVATORY.

PLUMBING FIXTURES - EXECUTION

1. ALL SUPPLIES AND WASTE CONNECTIONS AND FIXTURE ANCHORING SHALL BE FIRMLY SECURED INSIDE WALL AND CHASES. SHOULD ANY SLIPPAGE BE DETECTED DURING OR AFTER INSTALLATION, THE PLUMBING SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE CORRECTION. NO PORTION OF THE WATER PIPING MAY HAVE DISSIMILAR METALS SECURING IT.
2. NO GALVANIZED PIPE WILL BE PERMITTED IN ANY PORTION OF THE WATER SYSTEM WHERE RIGID SCREWED PIPE IS REQUIRED. USE RED BRASS.
3. ALL WATER RUNOUTS TO FIXTURES SHALL BE SECURED INSIDE PLUMBING CHASE TO RIGID BUILDING STRUCTURE OR TO RIGID PLUMBING DRAINAGE PIPING.
4. FILL VOID UNDER FAUCETS ON LAVATORIES AND SINKS WITH PLUMBER'S PUTTY TO PREVENT WATER FROM DRAINING THROUGH FIXTURE HOLES.
5. CAULK FIXTURES TO WALL.

PLUMBING FIXTURE CONNECTION SCHEDULE

LABEL	FIXTURE NAME	COLD WATER	HOT WATER	WASTE	VENT
P-1	WATER CLOSET	1"	-	4"	1-1/2"
P-1A	WATER CLOSET (ADA)	1"	-	4"	1-1/2"
P-1B	WATER CLOSET (TANK TYPE)	1/2"	-	4"	1-1/2"
P-2	URINAL	3/4"	-	2"	1-1/2"
P-4	SINK	1/2"	1/2"	2"	1-1/2"
P-4B	SINK (DOUBLE BOWL)	1/2"	1/2"	2"	1-1/2"
P-6A	DRINKING FOUNTAIN (ADA)	1/2"	-	1-1/2"	1-1/2"
P-5	JANITORS SINK	1/2"	1/2"	3"	1-1/2"
P-8A	WALL MOUNTED LAVATORY	1/2"	1/2"	2"	1-1/2"
FPHB	FROST PROOF HOSE BIB	3/4"	-	-	-

PLUMBING MATERIALS AND NOTES

DOMESTIC WATER PIPING:

1. DOMESTIC WATER PIPING AND JOINTS BELOW GRADE: PROVIDE TYPE 'K' SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 2½" AND SMALLER.
2. DOMESTIC WATER PIPING AND JOINTS ABOVE GRADE: PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 1" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32), JOINTS 1¼" AND LARGER SHALL BE BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8) OR PROVIDE COPPER PIPE AND FITTINGS AS SPECIFIED ABOVE EXCEPT WITH GROOVED ENDS (ASTM B 88, ASME B16.18) AND JOINTS UTILIZING GROOVED MECHANICAL COUPLINGS MEETING (ASTM F1476). "TYPE A" PEX (EQUAL TO UPONOR PEX-A) MAY BE USED ONLY IN BELOW GRADE INSTAKKATIONS WITH PRIOR WRITTEN OWNER'S APPROVAL.
3. STERILIZE THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
4. INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT. FOLLOW SCHEDULE BELOW:

SERVICE TYPE	PIPE SIZES	INSULATION THICKNESS
DOMESTIC HOT WATER & CIRCULATION	1/2" - 1-1/4"	1"
DOMESTIC HOT WATER & CIRCULATION	1-1/2" - 4"	1-1/2"
DOMESTIC COLD WATER	1/2" - 1-1/4"	1/2"
DOMESTIC COLD WATER	1-1/2" - 4"	1"

5. DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED.
6. PROVIDE FULL PORT, BALL TYPE SHUT-OFF VALVES AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
7. PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
8. PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
9. DOMESTIC WATER PIPING SHALL BE SLOPED FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS.

SANITARY WASTE / VENT PIPING:

1. SANITARY WASTE PIPING BELOW GRADE: PROVIDE SERVICE WEIGHT CAST IRON HUB AND SPIGOT PIPE (ASTM A 74) WITH COMPRESSION JOINTS (CISPI HSN) AND NEOPRENE GASKETS (ASTM C 564) OR NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET/STAINLESS STEEL CLAMP JOINTS (CISPI 310) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS (ASTM D2855). FOAM CORE PVC PIPE IS NOT APPROVED. PROVIDE CAST IRON PIPING SPECIFIED ABOVE FOR ALL KITCHEN AND MECHANICAL ROOM WASTE PIPING, PVC IS NOT ACCEPTABLE IN THESE AREAS.
2. SANITARY WASTE/VENT PIPING ABOVE GRADE: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS (ASTM D2855). FOAM CORE PIPE IS NOT APPROVED. DO NOT INSTALL PVC PIPING IN RETURN AIR PLENUMS.
3. SLOPE SANITARY WASTE PIPING AT ¼" PER FOOT MINIMUM FOR PIPING 2½" AND SMALLER AND ⅛" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE.
4. PROVIDE CLEAN-OUTS AT THE BASE OF SANITARY WASTE STACKS AND AT EVERY TURN IN PIPING IN EXCESS OF 45° AND NO FURTHER THAN 100'-0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
5. PROVIDE FLOOR CLEANOUTS WITH TOPS DESIGNED TO MATCH SPECIFIC FLOOR FINISHES SUCH AS CARPET, TILE, ETC. YARD CLEANOUTS SHALL BE PROVIDED IN AN 18"x18"x6" CONCRETE PAD.
6. WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
7. PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD.

PLUMBING DRAWING INDEX

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

1. PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA PLUMBING AND FUEL GAS CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THE PLUMBING SPECIFICATIONS INSOFAR AS THE GENERAL AND SPECIAL CONDITIONS ARE APPLICABLE TO THE PLUMBING WORK, UNLESS OTHERWISE SPECIFIED.
3. SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
4. PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
5. WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.
6. COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
7. FIELD VERIFY PROPER OPERATION OF EXISTING SYSTEMS BEFORE STARTING CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF RECORD OF ANY PROBLEMS OR DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.
8. CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING SURFACES.
9. PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC.
10. PLUMBING PIPING SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. PLUMBING PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE.
11. PLUMBING PIPING, VENTS, ETC. EXTENDING THROUGH EXTERIOR WALLS AND/OR THE ROOF SHALL BE FLASHED AND COUNTER FLASHED IN A WATERPROOF MANNER. COORDINATE FLASHING WITH THE GENERAL CONTRACTOR.
12. DO NOT INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
13. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
14. ATTACH HANGERS TO STRUCTURE, HANGERS SHALL NOT ATTACH TO THE DECK.
15. PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, GYPBOARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS.
16. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES AND EQUIPMENT, FIRE STOPPING, SEISMIC BRACING, PIPE IDENTIFICATION, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM, STORM DRAIN SYSTEM, NATURAL GAS SYSTEM

PLUMBING FIXTURES AND EQUIPMENT:

1. PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.
2. PLUMBING FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
3. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO; PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENTS INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.

FIRE STOPPING:

1. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED. REFER TO ARCHITECTURAL PLANS FOR WALL AND FLOOR TYPES.

SEISMIC BRACING:

1. PROPERLY SUPPORT AND BRACE VERTICALLY AND HORIZONTALLY ALL PIPING, APPARATUS, EQUIPMENT, ETC. IN ACCORDANCE WITH APPLICABLE CODES TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC CONDITIONS.

PIPE IDENTIFICATION:

1. PROVIDE PIPING LABELS FOR ALL PLUMBING PIPING. PIPING LABELS SHALL BE ACRYLIC FACED, WRAP-AROUND TYPE. EACH LABEL SHALL INDICATE THE PIPING CONTENTS, DIRECTION OF FLOW AND SHALL BEAR THE MANUFACTURER'S STANDARD COLOR FOR THE SERVICE INDICATED.
2.

WATER SYSTEM DRAIN DOWN

TYPICAL STEPS TO DRAIN A WATER SYSTEM

NOTE - SOME STEPS MAY NOT BE NECESSARY DEPENDING ON EQUIPMENT INSTALLED. THIS LIST IS PROVIDED AS AN EXAMPLE, PC SHALL USE INDUSTRY APPROVED METHODS, AND SHALL PROVIDE ANY VALVES, FITTINGS, OR OTHER APPURTENANCES NECESSARY TO ACHIEVE DRAIN-DOWN FOR FREEZE PROTECTION.

1. TURN OFF ELECTRICITY TO THE WATER PUMP SYSTEM
2. TURN OFF ELECTRICITY TO WATER HEATER IF ELECTRIC OR TURN OFF GAS SUPPLY IF THE WATER HEATER IS GAS-FIRED.
3. SHUT OFF WATER SYSTEMS BY SHUTTING THE VALVE ON THE MUNICIPAL WATER.
4. DRAIN THE PRESSURE TANK
5. OPEN ALL FAUCETS
6. DISCONNECT HOSES FROM EXTERIOR FAUCETS
7. OPEN DRAIN VALVE CLOSEST TO THE MAIN SHUT-OFF VALVE SO WATER WILL DRAIN OUT TO CLEAR THE SHUT-OFF VALVE
8. DRAIN HOLDING TANK
9. FLUSH ALL TOILETS AND DIP ALL WATER OUT OF THE FLUSH TANK (OR PUMP IT OUT USING A HAND BILGE PUMP)
10. DRAIN ALL FLEXIBLE SPRAY HOSES IN SHOWERS AND SINKS
11. OPEN DIVERTER VALVE TO SHOWER HEAD SO WATER DRAINS OUT
12. DRAIN WATER SOFTENERS SO WATER WILL DRAIN BACK FROM SOFT WATER PIPES AND CONTROLS. (BRINE TANK PROBABLY WILL NOT FREEZE)
13. DRAIN ANY OTHER WATER TREATMENT EQUIPMENT - SUCH AS FILTERS
14. DRAIN WATER HEATERS
15. BLOW OUT ANY REMAINING WATER FROM THE SYSTEM USING AN AIR COMPRESSOR.

PLUMBING FIXTURE SCHEDULES (CON'T)

P-1 - WATER CLOSET (FLOOR MOUNTED)
KOHLER K-96057-B, 1.6 GPF, 16-5/8" HIGH ELONGATED BOWL, SIPHON JET, VITREOUS CHINA; ZURN Z-6000-1 MANUAL FLUSH VALVE MOUNTED 11" ABOVE WATER CLOSET; CHURCH 9500CT OPEN FRONT SEAT, WHITE SOLID PLASTIC.

P-1A - WATER CLOSET (FLOOR MOUNTED, ADA COMPLIANT)
KOHLER K-96057-B, 1.6 GPF, 16-5/8" HIGH ELONGATED BOWL, SIPHON JET, VITREOUS CHINA; ZURN Z-6000-1 MANUAL FLUSH VALVE MOUNTED 11" ABOVE WATER CLOSET; CHURCH 9500CT OPEN FRONT SEAT, WHITE SOLID PLASTIC.

P-1B - WATER CLOSET (FLOOR MOUNTED, TANK TYPE, PRESSURE ASSISTED)
AMERICAN STANDARD 2467.016.02. 1.6 GPF, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, SUPPLY WITH STOP; CHURCH 9500CT OPEN FRONT SEAT, WHITE SOLID PLASTIC.

P-2 - URINAL
AMERICAN STANDARD 6581.001.020, APPROVED BY: KOHLER, CRANE; SIPHON JET, VITREOUS CHINA; ZURN Z-6003-EWS FLUSH VALVE; (ROUGH WASTE OUTLET AT 17"). PROVIDE MOUNTING HEIGHT REQUIRED FOR HANDICAPPED.

P-4 - SINK (SINGLE BOWL)
EAGLE HSAE-10-FA; 18-7/8"X13-3/4"X12-3/4"; STAINLESS STEEL CONSTRUCTION, GOOSENECK FAUCET. INCLUDED P-TRAP.

P-4B - SINK (DOUBLE BOWL)
ADVANCE TABCO FC-2-1824-24R; 2-COMPARTMENT, 24" RIGHT DRAINBOARD, BOWL SIZE 18" X 24" X 14" DEEP, 16 GAUGE 304 STAINLESS STEEL; LK-35 DRAIN; LK-53 PIPE; LK-2433C FAUCET.

P-6A - DRINKING FOUNTAIN (BI-LEVEL, ADA COMPLIANT, OUTDOOR)
MURDOCK GRM45-JF1; BARRIER FREE PEDESTAL MOUNTED, JUG FILLER, BI-LEVEL,18 GAUGE, 304 STAINLESS STEEL BOWLS, GREEN POWDER COATED, HEAVY DUTY, 12 GAUGE WELDED STAINLESS STEEL PEDESTAL.

P-8A - LAVATORY (ADA COMPLIANT)
KOHLER K-2867; 20"X18" ENAMELED CAST IRON, WALL HUNG LAVATORY, 4" CENTERS, CHICAGO FAUCETS 802-665ACP WITH GRID DRAIN. ZURN Z1231, FLOOR MOUNTED HORIZONTAL ARM CARRIER. PROVIDE AND INSTALL 0.5GPM AERATOR.

P-5 - JANITOR'S MOP SERVICE BASIN
FIAT TSB-100, 24"X24"X12" MOLDED STONE BASIN WITH 3" CAST BRASS DRAIN AND DOME STRAINER; SERVICE FAUCET #830-AA WITH VACUUM BREAKER; INTEGRAL STOPS; #832-AA-30" HOSE AND HOSE BRACKET.

HB - HOSE BIB & LOCK BOX
ZURN Z1330-C; WALL HYDRANT WITH INTEGRAL BREAKER, POLISHED CHROME WITH LOOSE KEY CONNECTION AND 3/4" SWEAT INLET. WOODFORD B24, KEY OPERATED, CHROME PLATED, EQUAL.

FPHB - FREEZE PROOF HOSE BIB
MIFAB MHY-20, EXPOSED NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER, POLISHED CHROME PLATED FACE AND 3/4" SWEAT INLET.

GYH - IN-GROUND YARD HYDRANT (FREEZE PROOF)
WOODFORD MODEL Y95, NON-FREEZE YARD HYDRANT WITH INTEGRAL VACUUM BREAKER, BRASS BOX AND 3/4" SWEAT INLET.

EWH-1 - ELECTRIC WATER HEATER
A.O. SMITH DEL-20 (3.0KW, 208V, SINGLE PHASE 20GPH @ 60° TEMP. RISE) WATER HEATERS SHALL HAVE COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE, MAGNESIUM ANODE; GLASS-LINED, 5 YEAR WARRANTY ON TANK, STANDARD WARRANTY ON ACCESSORIES, SEE PLANS FOR SIZES. PROVIDE A 2 GALLON BLADDER TYPE EXPANSION TANK ON WATER HEATERS ABOVE 3 GALLON STORAGE.

EWH-2 - ELECTRIC WATER HEATER
A.O. SMITH DEL-50 (6KW, 208V, SINGLE PHASE 30GPH @ 80° TEMP. RISE) WATER HEATERS SHALL HAVE COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE, MAGNESIUM ANODE; GLASS-LINED, 5 YEAR WARRANTY ON TANK, STANDARD WARRANTY ON ACCESSORIES, SEE PLANS FOR SIZES. PROVIDE A 2 GALLON BLADDER TYPE EXPANSION TANK ON WATER HEATERS ABOVE 3 GALLON STORAGE.

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5/21/25

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ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: PLUMBING SCHEDULES, DETAILS AND NOTES
SHEET NO: P0.1

NORTH CAROLINA
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1-2/P1.0 SANITARY KEYNOTES

1. NEW 3" SANITARTY WASTE LINE THAT SERVES THE BULINDING. SEE CIVIL PLANS FOR CONTINUATION.
2. EXTEND 2" VENT THOUGHT ROOF, PROVIDE PIPE BOOT AND COORDINATE WITH ROOFING SUBCONTRACTOR TO FLASH AND SEAL PENETRATION.
3. 1-1/2" WASTE PIPING FROM EACH COMPARTMENT SHALL DISCHARGE TO FLOOR SINK. 1" (MIN.) AIR GAP.

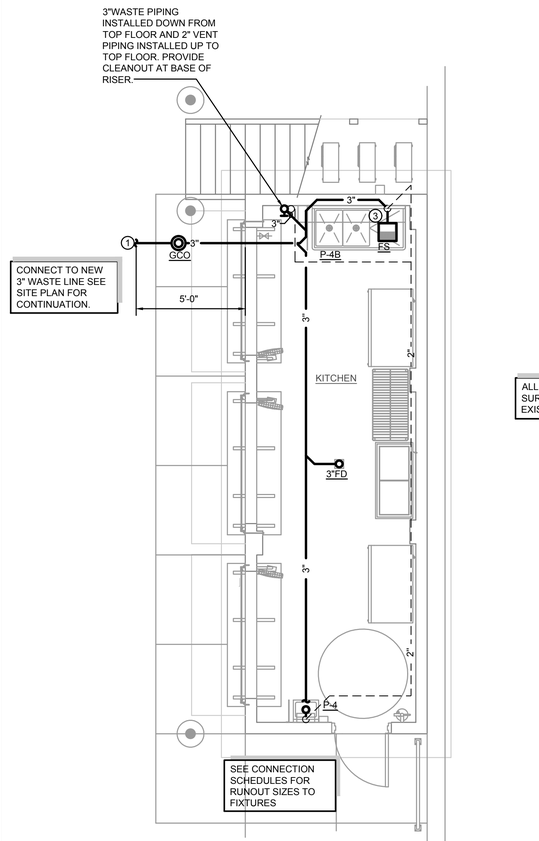
3-4/P1.1 DOMESTIC KEYNOTES

1. NEW 3/4"CW LINE THAT SERVES THE BULINDING. SEE CIVIL PLANS FOR CONTINUATION.
2. NEW ELECTRIC WATER HEATER (EWH-2) INSTALLED AT APPROXIMATE LOCATION SHOWN ON DRAWING. 3/4"CW IN, 3/4"HW OUT & 1" DISCHARGE TO FLOOR DRAIN.
3. 3/4" DOMESTIC WATER PIPING RISES UP TO NEW SHUTOFF VALVE AND PRESSURE REDUCING VALVE (SET TO 70 PSI). PIPING THEN DROP BACK DOWN TO BELOW FLOOR TO SERVE FIRST LEVEL FIXTURES.
4. HOSE BIB FOR CLEANUP - CONNECT TO HOT WATER LINE

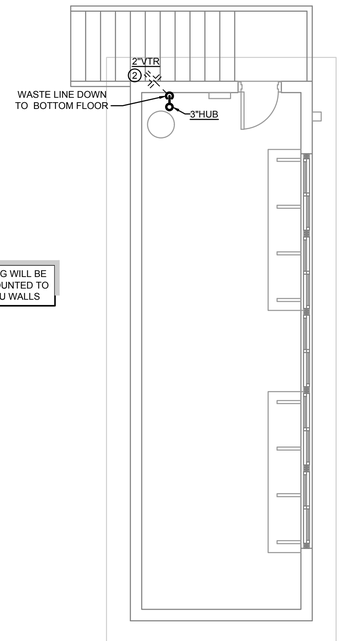
PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING
	EXIST. DOMESTIC COLD WATER
	110°F DOMESTIC HOT WATER PIPING
	EXIST. 110°F DOMESTIC HOT WATER
	110°F HOT WATER RECIRC PIPING
105°	105°F DOMESTIC HOT WATER PIPING
140°	140°F DOMESTIC HOT WATER PIPING
105°	105°F HOT WATER RECIRC PIPING
	EXIST. 110°F HOT WATER RECIRC
	VENT PIPING
	EXIST. VENT PIPING
	WASTE (SANITARY SEWER)
	EXIST. WASTE (SANITARY SEWER)
GW	GREASE WASTE
GW	EXIST. GREASE WASTE
RL	RAIN LEADER PIPING
RL	EXIST. RAIN LEADER PIPING
G	GAS PIPING
G	EXIST. GAS PIPING
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	PRESSURE-REDUCING VALVE
	PIPE UP
	PIPE DOWN
P-1	FIXTURE DESIGNATION
AFF	ABOVE FINISHED FLOOR
AAV	AIR ADMITTANCE VALVE (STUDOR VENT)
PC	PLUMBING SUB-CONTRACTOR
GC	GENERAL CONTRACTOR
MC	MECHANICAL SUB-CONTRACTOR
EC	ELECTRICAL SUB-CONTRACTOR
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
FPHB	FREEZE PROOF HOSE BIBB
FD	FLOOR DRAIN
CW	COLD WATER
HW	HOT WATER
W	WASTE (SANITARY SEWER)
	TIE INTO EXISTING

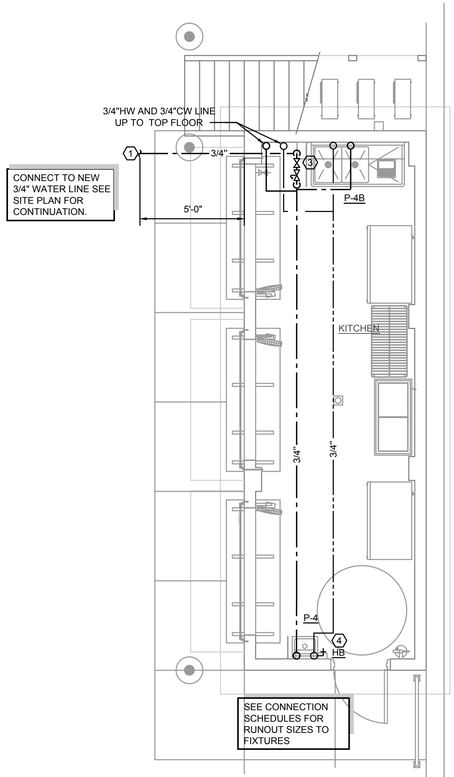
NOT ALL SYMBOLS/ABBREVIATION FROM THIS LEGEND WILL APPEAR IN DRAWING.



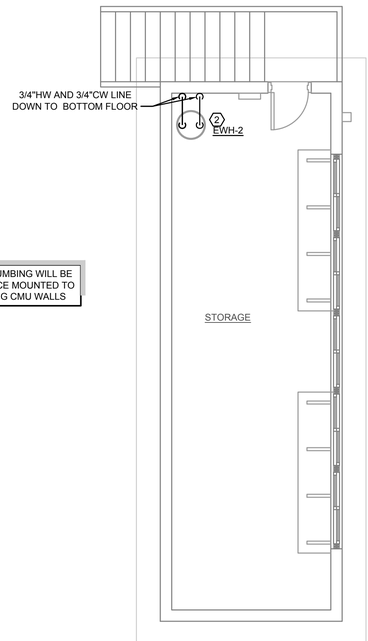
SANITARY WASTE PLAN - ACADEMY FOOTBALL CONCESSION LOWER LEVEL
SCALE: 1/4" = 1'-0"



SANITARY WASTE PLAN - ACADEMY FOOTBALL CONCESSION UPPER LEVEL
SCALE: 1/4" = 1'-0"



DOMESTIC WATER PLAN - ACADEMY FOOTBALL CONCESSION LOWER LEVEL
SCALE: 1/4" = 1'-0"



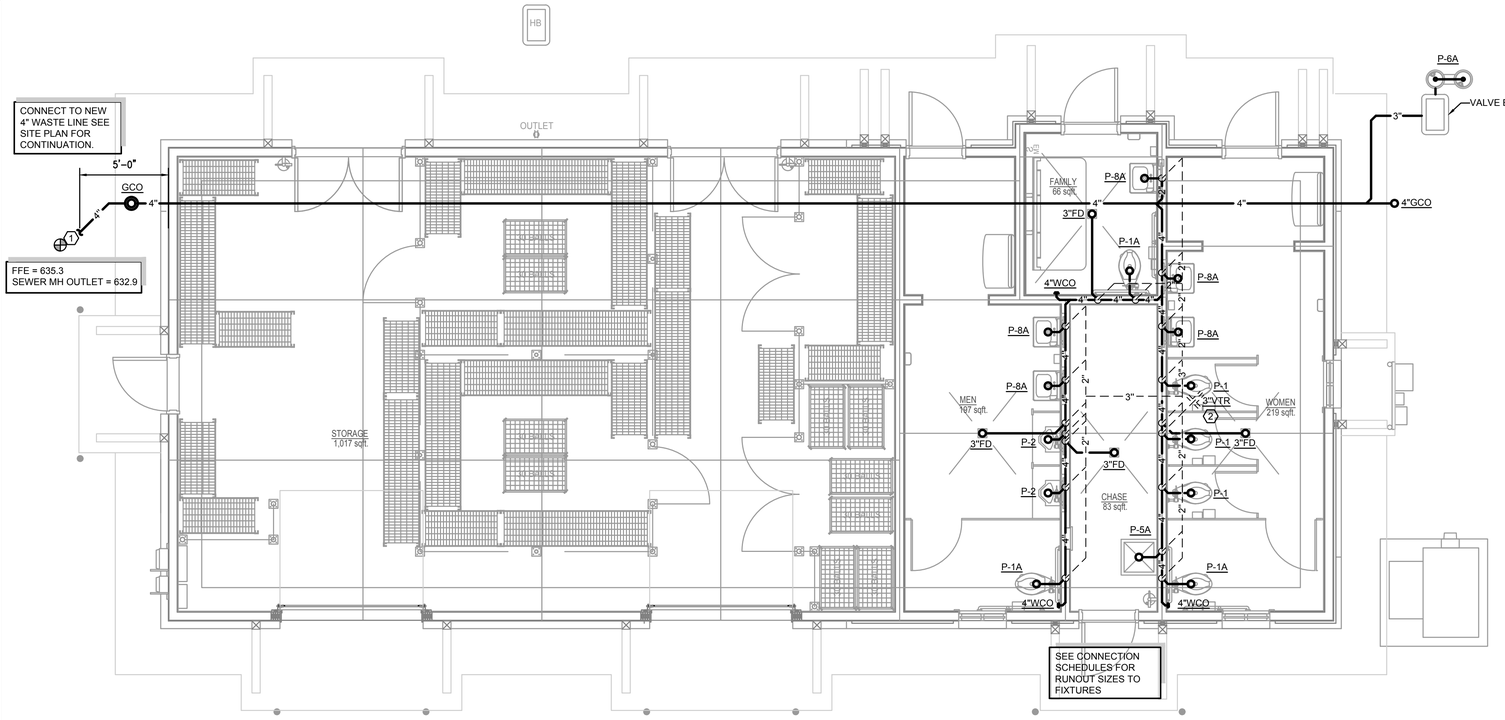
DOMESTIC WATER PLAN - ACADEMY FOOTBALL CONCESSION UPPER LEVEL
SCALE: 1/4" = 1'-0"

REVISIONS:
BID SET 05/21/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

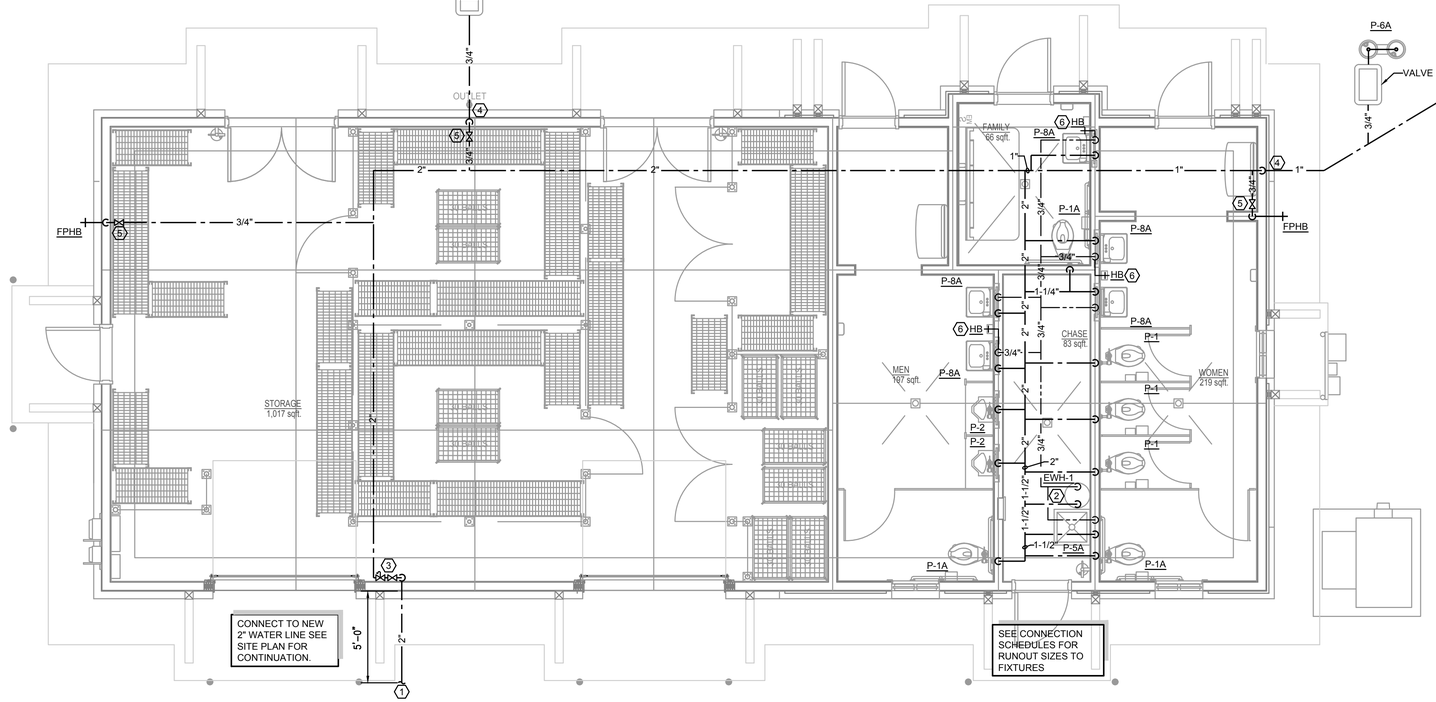
SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: PLUMBING PLAN AND NOTES
SHEET NO: P1.0



SANITARY WASTE PLAN - ACADEMY Restroom and Storage Extra
SCALE: 1/4" = 1'-0"

1/P1.1 SANITARY KEYNOTES

1. NEW 4" W (SANITARY WASTE) PIPING THAT SERVES THE BUILDING. SEE CIVIL PLAN FOR CONTINUATION.
2. NEW 3" VENT PIPING SHALL BE INSTALLED UP TO NEW 3" VTR NEAR THIS APPROXIMATE LOCATION. PC SHALL VERIFY PROPOSED VTR LOCATION ISN'T CLOSER THAN 10' FROM ANY OUTSIDE AIR INTAKES AND SHALL MODIFY PROPOSED VTR LOCATION ACCORDINGLY. ONLY ONE VENT PENETRATION ALLOWED THRU ROOF



DOMESTIC WATER PLAN - ACADEMY Restroom and Storage Extra
SCALE: 1/4" = 1'-0"

2/P1.1 DOMESTIC KEYNOTES

1. NEW 2"CW LINE THAT SERVES THE BULINDING. SEE CIVIL PLANS FOR CONTINUATION.
2. NEW ELECTRIC WATER HEATER (EWH-1) INSTALLED ABOVE MOP SINK. LOCATION SHOWN ON DRAWING. 3/4"CW IN, 3/4"HW OUT & 1" DISCHARGE TO MOP SINK.
3. 2" DOMESTIC WATER RISER WITH SHUTOFF VALVE IN RISE 48"AFF AND PRESSURE REDUCING VALVE UPSTREAM OF ALL FIXTURES (SET TO 70 PSI).
4. 3/4"CW PIPING SHALL BE INSTALLED DOWN IN WALL TO BELOW GRADE (BELOW FROST LEVEL) AND ROUTED TO GROUND BOX.
5. PROVIDE KEY OPERATED 16 GAUGE POWDER COATED STEEL LOCKING ACCESS DOOR (BEST ACCESS DOORS, OR EQUAL) TO HOUSE SHUTOFF VALVE.
6. HOSE BIBB AND LOCK BOX FOR RESTROOM CLEANUP - CONNECT TO HOT WATER LINE.

PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING
	EXIST. DOMESTIC COLD WATER
	110°F DOMESTIC HOT WATER PIPING
	EXIST. 110°F DOMESTIC HOT WATER
	110°F HOT WATER RECIRC PIPING
105°	105°F DOMESTIC HOT WATER PIPING
140°	140°F DOMESTIC HOT WATER PIPING
105°	105°F HOT WATER RECIRC PIPING
	EXIST. 110°F HOT WATER RECIRC
	VENT PIPING
	EXIST. VENT PIPING
	WASTE (SANITARY SEWER)
	EXIST. WASTE (SANITARY SEWER)
GW	GREASE WASTE
GW	EXIST. GREASE WASTE
RL	RAIN LEADER PIPING
RL	EXIST. RAIN LEADER PIPING
G	GAS PIPING
G	EXIST. GAS PIPING
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	PRESSURE-REDUCING VALVE
	PIPE UP
	PIPE DOWN
P-1	FIXTURE DESIGNATION
AFF	ABOVE FINISHED FLOOR
AAV	AIR ADMITTANCE VALVE (STUDOR VENT)
PC	PLUMBING SUB-CONTRACTOR
GC	GENERAL CONTRACTOR
MC	MECHANICAL SUB-CONTRACTOR
EC	ELECTRICAL SUB-CONTRACTOR
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
FPHB	FREEZE PROOF HOSE BIBB
FD	FLOOR DRAIN
CW	COLD WATER
HW	HOT WATER
W	WASTE (SANITARY SEWER)
	TIE INTO EXISTING

NOT ALL SYMBOLS/ABBREVIATION FROM THIS LEGEND WILL APPEAR IN DRAWING.

NORTH CAROLINA PROFESSIONAL SEAL 25028 ENGINEER CHARLIE D. CURLIN JR.
5/21/25

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www.shultzeg.com | SEG - 24-244
NC FIRM LICENSE NUMBER: C-0898
M: CC/JTM E: BW/DH P: CC/ML

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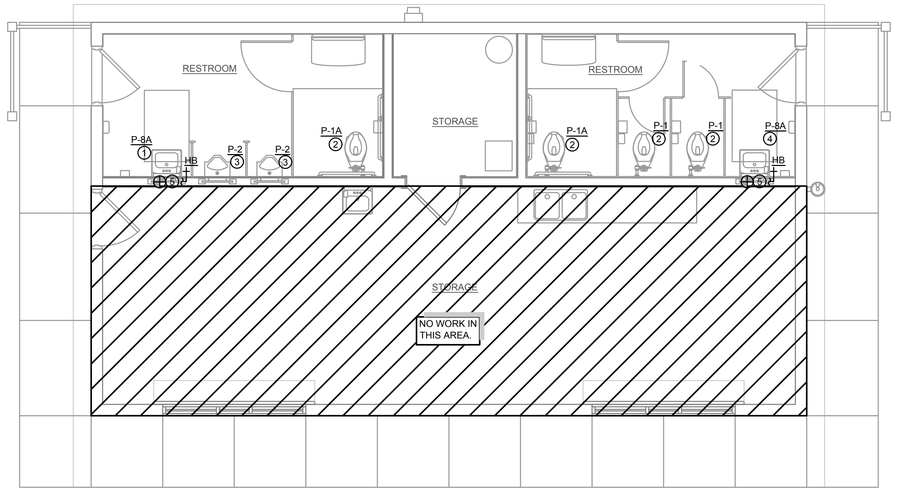
Fort Mill, SC 29715
(T) 803.981.4330
www.fitfields.com

REVISIONS:
BID SET 05/21/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: PLUMBING PLAN AND NOTES
SHEET NO: P1.1



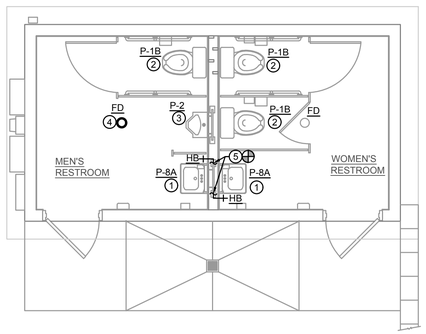
1/P1.2 **PLUMBING PLAN - Gibson Concession**

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

1/P1.2 KEYNOTES

1. EXISTING WALL MOUNTED LAVATORY AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FIXTURE. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW LAVATORY TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
2. EXISTING FLOOR MOUNTED FLUSH VALVE WATER CLOSET AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FIXTURE. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW WATER CLOSET TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
3. EXISTING URINAL AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FIXTURE. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW URINAL TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
4. EXISTING WALL MOUNTED LAVATORY SHALL BE REMOVED. INSTALL NEW LAVATORY APPROXIMATELY 8" PLAN RIGHT OF EXISTING LAVATORY TO PROVIDE ACCESSIBLE CLEARANCES AT LAVATORY, MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW LAVATORY TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
5. HOSE BIBB AND LOCK BOX FOR RESTROOM CLEANUP - CONNECT NEW HOSE BIBB TO EXISTING HOT WATER LINE.

PROVIDE NEW SHUT-OFF VALVES, SEALING RINGS, FIXTURE WATER CONNECTION LINES, STOPS,TRIMMING, ESCUTCHEONS, ETC. FOR THE REPLACEMENT FIXTURES AS WOULD BE DONE FOR A NEW FIXTURE INSTALLATION



2/P1.2 **PLUMBING PLAN - McAlister Field Restroom**

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

2/P1.2 KEYNOTES

1. EXISTING WALL MOUNTED LAVATORY AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FIXTURE. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW LAVATORY TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
2. EXISTING FLOOR MOUNTED TANK TYPE WATER CLOSET AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FLOOR MOUNTED TANK TYPE, PRESSURE ASSISTED WATER CLOSET. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW WATER CLOSET TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
3. EXISTING URINAL AT THIS APPROXIMATE LOCATION SHALL BE REMOVED. INSTALL NEW URINAL APPROXIMATELY 8" PLAN NORTH OF EXISTING URINAL FOR ACCESSIBILITY CLEARANCES, MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW URINAL TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
4. EXISTING FLOOR DRAIN (FD) AT THIS APPROXIMATE LOCATION SHALL BE REPLACED WITH NEW FIXTURE. MODIFY EXISTING ROUGH-INS AS NECESSARY FOR NEW FLOOR DRAIN (FD) TO BE INSTALLED AT THIS APPROXIMATE LOCATION.
5. HOSE BIBB AND LOCK BOX FOR RESTROOM CLEANUP - CONNECT NEW HOSE BIBB TO EXISTING HOT WATER LINE.

PROVIDE NEW SHUT-OFF VALVES, SEALING RINGS, FIXTURE WATER CONNECTION LINES, STOPS,TRIMMING, ESCUTCHEONS, ETC. FOR THE REPLACEMENT FIXTURES AS WOULD BE DONE FOR A NEW FIXTURE INSTALLATION

PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING
	EXIST. DOMESTIC COLD WATER
	110°F DOMESTIC HOT WATER PIPING
	EXIST. 110°F DOMESTIC HOT WATER
	110°F HOT WATER RECIRC PIPING
105°	105°F DOMESTIC HOT WATER PIPING
140°	140°F DOMESTIC HOT WATER PIPING
105°	105°F HOT WATER RECIRC PIPING
	EXIST. 110°F HOT WATER RECIRC
	VENT PIPING
	EXIST. VENT PIPING
	WASTE (SANITARY SEWER)
	EXIST. WASTE (SANITARY SEWER)
GW	GREASE WASTE
GW	EXIST. GREASE WASTE
RL	RAIN LEADER PIPING
RL	EXIST. RAIN LEADER PIPING
G	GAS PIPING
G	EXIST. GAS PIPING
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	PRESSURE-REDUCING VALVE
	PIPE UP
	PIPE DOWN
P-1	FIXTURE DESIGNATION
AFF	ABOVE FINISHED FLOOR
AAV	AIR ADMITTANCE VALVE (STUDOR VENT)
PC	PLUMBING SUB-CONTRACTOR
GC	GENERAL CONTRACTOR
MC	MECHANICAL SUB-CONTRACTOR
EC	ELECTRICAL SUB-CONTRACTOR
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
FPHB	FREEZE PROOF HOSE BIBB
FD	FLOOR DRAIN
CW	COLD WATER
HW	HOT WATER
W	WASTE (SANITARY SEWER)
	TIE INTO EXISTING

NOT ALL SYMBOLS/ABBREVIATION FROM THIS LEGEND WILL APPEAR IN DRAWING.

NORTH CAROLINA
PROFESSIONAL SEAL
25028
ENGINEER
CHARLIE D. CURLIN JR.
5/21/25

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www.fitfields.com

REVISIONS:
BID SET 05/21/25

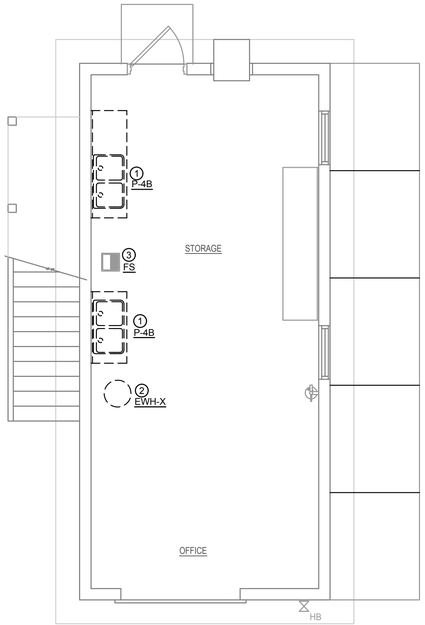
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: PLUMBING PLAN AND NOTES
SHEET NO: P1.2

1/P1.3 SANITARY KEYNOTES

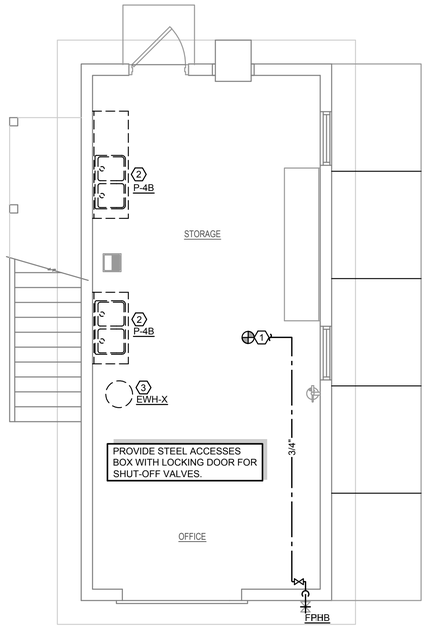
1. EXISTING SINK TO BE REMOVED, REMOVE ALL PVC LEADING TO FLOOR SINK (FS).
2. REMOVE EXISTING WATER HEATER (EWH-X).
3. EXISTING FLOOR SINK (FS) TO REMAIN.



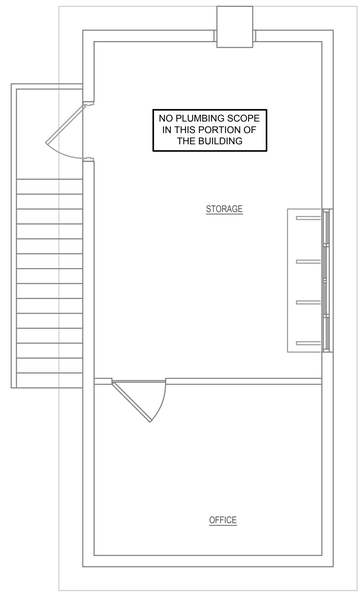
1/P1.3 SANITARY WASTE PLAN - McAlister Field Press Box LOWER LEVEL
SCALE: 1/4" = 1'-0"

2/P1.3 DOMESTIC KEYNOTES

1. CONNECT NEW 3/4" CW PIPING TO NEAREST EXISTING 3/4" (OR LARGER) CW PIPING NEAR THIS APPROXIMATE LOCATION. PC SHALL VERIFY EXACT SIZE, INVERT, LOCATION AND DIRECTION OF FLOW OF EXISTING CW PIPING PRIOR TO STARTING WORK.
2. EXISTING SINK TO BE REMOVED, CAP HW AND CW LINES AT THE WALL.
3. REMOVE EXISTING WATER HEATER (EWH-X).



2/P1.3 DOMESTIC WATER PLAN - McAlister Field Press Box LOWER LEVEL
SCALE: 1/4" = 1'-0"



3/P1.3 PLUMBING PLAN - McAlister Field Press Box UPPER LEVEL
SCALE: 1/4" = 1'-0"

PLUMBING LEGEND

	DOMESTIC COLD WATER PIPING
	EXIST. DOMESTIC COLD WATER
	110°F DOMESTIC HOT WATER PIPING
	EXIST. 110°F DOMESTIC HOT WATER
	110°F HOT WATER RECIRC PIPING
105°	105°F DOMESTIC HOT WATER PIPING
140°	140°F DOMESTIC HOT WATER PIPING
105°	105°F HOT WATER RECIRC PIPING
	EXIST. 110°F HOT WATER RECIRC
	VENT PIPING
	EXIST. VENT PIPING
	WASTE (SANITARY SEWER)
	EXIST. WASTE (SANITARY SEWER)
GW	GREASE WASTE
GW	EXIST. GREASE WASTE
RL	RAIN LEADER PIPING
RL	EXIST. RAIN LEADER PIPING
G	GAS PIPING
G	EXIST. GAS PIPING
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	PRESSURE-REDUCING VALVE
	PIPE UP
	PIPE DOWN
P-1	FIXTURE DESIGNATION
AFF	ABOVE FINISHED FLOOR
AAV	AIR ADMITTANCE VALVE (STUDOR VENT)
PC	PLUMBING SUB-CONTRACTOR
GC	GENERAL CONTRACTOR
MC	MECHANICAL SUB-CONTRACTOR
EC	ELECTRICAL SUB-CONTRACTOR
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
YCO	YARD CLEAN OUT
FPHB	FREEZE PROOF HOSE BIBB
FD	FLOOR DRAIN
CW	COLD WATER
HW	HOT WATER
W	WASTE (SANITARY SEWER)
	TIE INTO EXISTING

NOT ALL SYMBOLS/ABBREVIATION FROM THIS LEGEND WILL APPEAR IN DRAWING.

NORTH CAROLINA PROFESSIONAL SEAL 25028 ENGINEER CHARLIE D. CURLIN JR.
5/21/25

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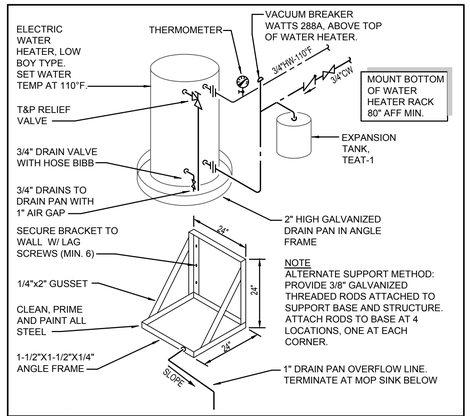
REVISIONS:	
BID SET	05/21/25

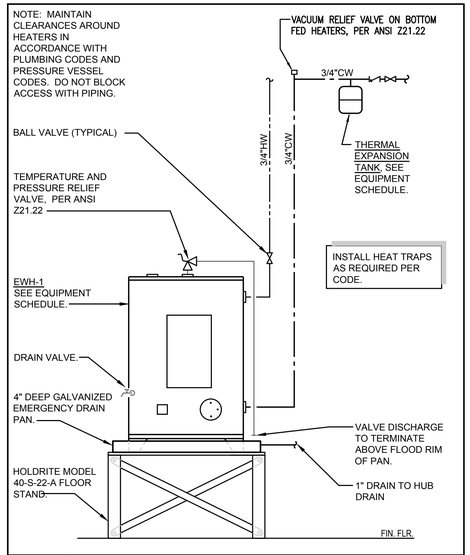
OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

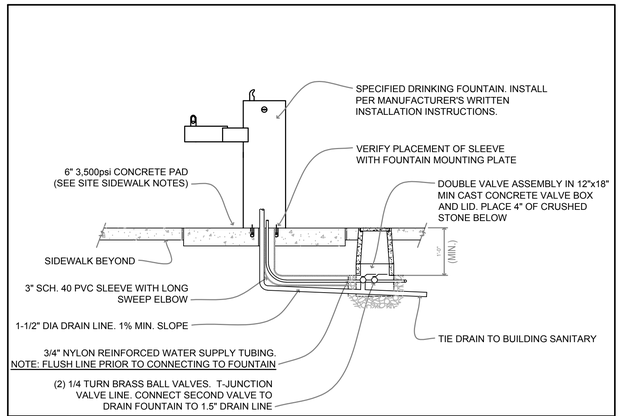
SCALE: 1/4"= 1'-0"
DATE: 05/21/2025
SHEET NAME: PLUMBING PLAN AND NOTES
SHEET NO: P1.3



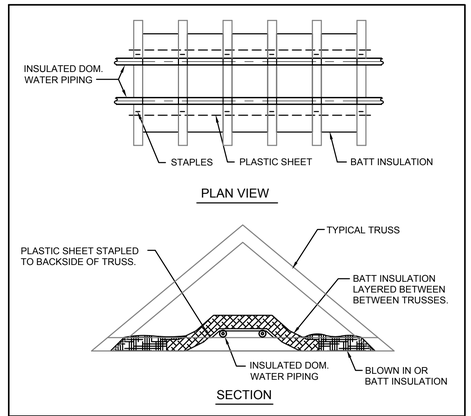
1	EHW-1 - ELECTRIC WATER HEATER
P2.0	NO SCALE



2	EHW-2 - FLOOR MOUNTED WATER HEATER
P2.0	NO SCALE



3	DF - DRINKING FOUNTAIN DETAIL
P2.0	NO SCALE

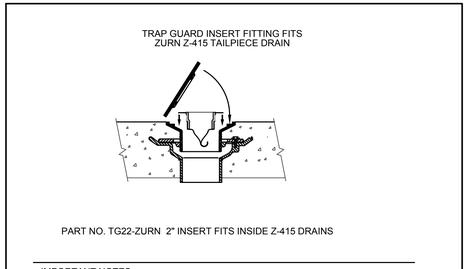


4	FREEZE PROTECTION OF PIPING IN ATTIC
P2.0	NO SCALE

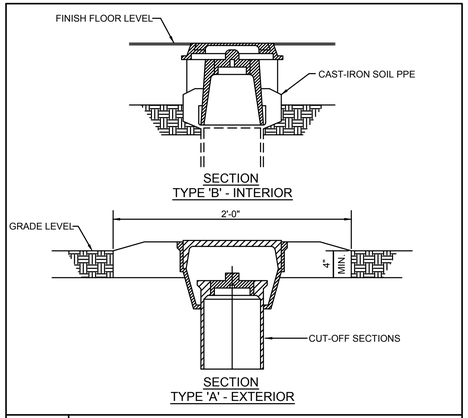
5	SINK OFFSET WASTE FOR ADA
P2.0	NO SCALE

6	FLOOR DRAIN
P2.0	NO SCALE

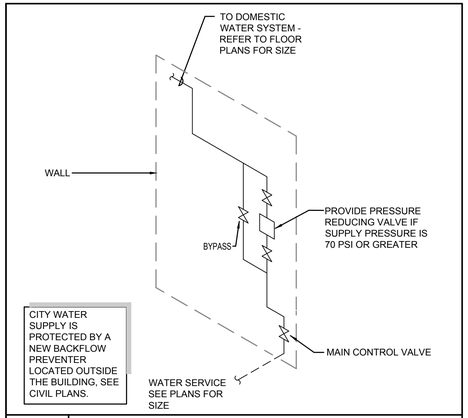
7	WALL CLEANOUTS
P2.0	NO SCALE



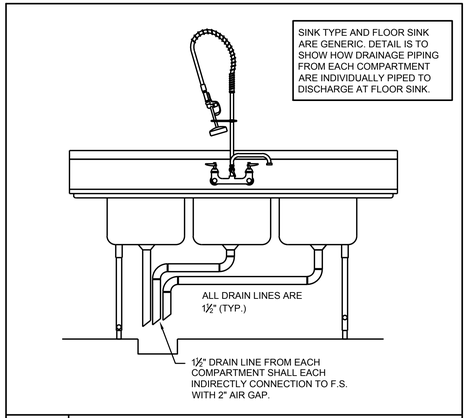
8	TRAP GUARD INSERT FOR FLOOR DRAINS
P2.0	NO SCALE



9	CLEANOUT CAP
P2.0	NO SCALE



10	TYPICAL BUILDING WATER SERVICE RISER
P2.0	NO SCALE



11	MULTIPLE COMPARTMENT SINK PIPING DETAIL
P2.0	NO SCALE

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5/21/25

REVISIONS:
BID SET 05/21/25

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

ACADEMY COMPLEX RENOVATIONS
165 ACADEMY AVE NW.
CONCORD, NORTH CAROLINA

SCALE: NONE
DATE: 05/21/2025
SHEET NAME:
PLUMBING DETAILS

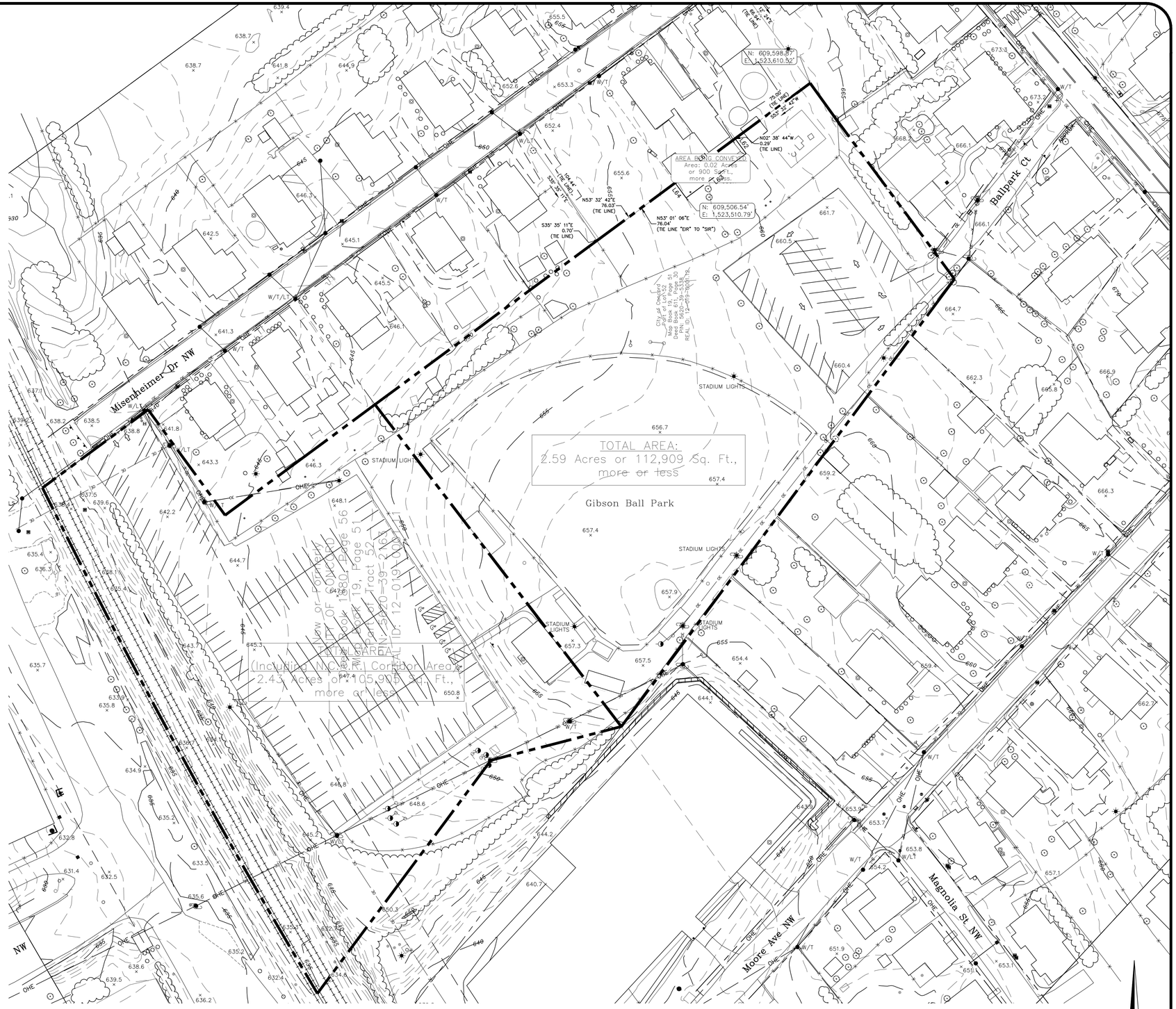
SHEET NO:
P2.0

GENERAL INFORMATION:

1. PROJECT NAME: GIBSON BALL PARK TRAIL CONNECTOR
2. OWNER: CITY OF CONCORD
   35 CABARRUS AVE. W
   CONCORD, NC 28025
3. SITE ADDRESS: 323 MISENHEIMER DRIVE NW
   CONCORD, NC 28025
4. TOTAL SITE AREA: 5.02 ACRES
5. ZONING: RC
6. TAX MAP ID#: 56203921630000 & 56203943940000
7. THE PARCEL IS NOT LOCATED IN A FEMA FLOOD ZONE - FEMA MAP NO. 3710562000K DATED NOVEMBER 16, 2018.
8. EXISTING SURVEY AND INFORMATION PROVIDED BY AVIOIMAGE MAPPING SERVICES, INC.

LEGEND

- LANDSCAPE LIGHT
- HYDRANT
- WATER METER
- UTILITY PEDESTAL
- FLAG POLE
- ELECTRIC POLE
- LIGHT
- STORM CLEANOUT
- STORM DRAIN MANHOLE
- SIGN
- CHAIN LINK FENCE
- CREEK
- OVERHEAD ELECTRIC
- BASEBALL FIELD
- TREES
- SHRUBS
- 634.5 EXISTING SPOT ELEVATION
- 645 EXISTING CONTOUR
- PROPERTY LINE



GRAPHIC SCALE
40 0 20 40 80
1 inch = 40 ft.

N

North Carolina 811 www.nc811.org

CONTRACTOR SHALL NOTIFY "NORTH CAROLINA ONE CALL" (811) OR (1-800-632-4949) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ROPER CIVIL ENGINEERING
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NORTH CAROLINA PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROPER
6-9-25

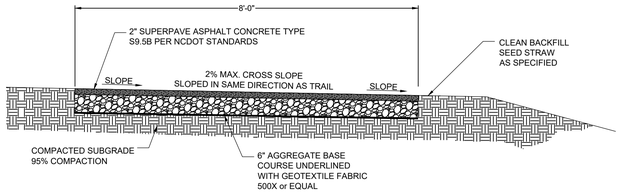
ROPER CIVIL ENGINEERING CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

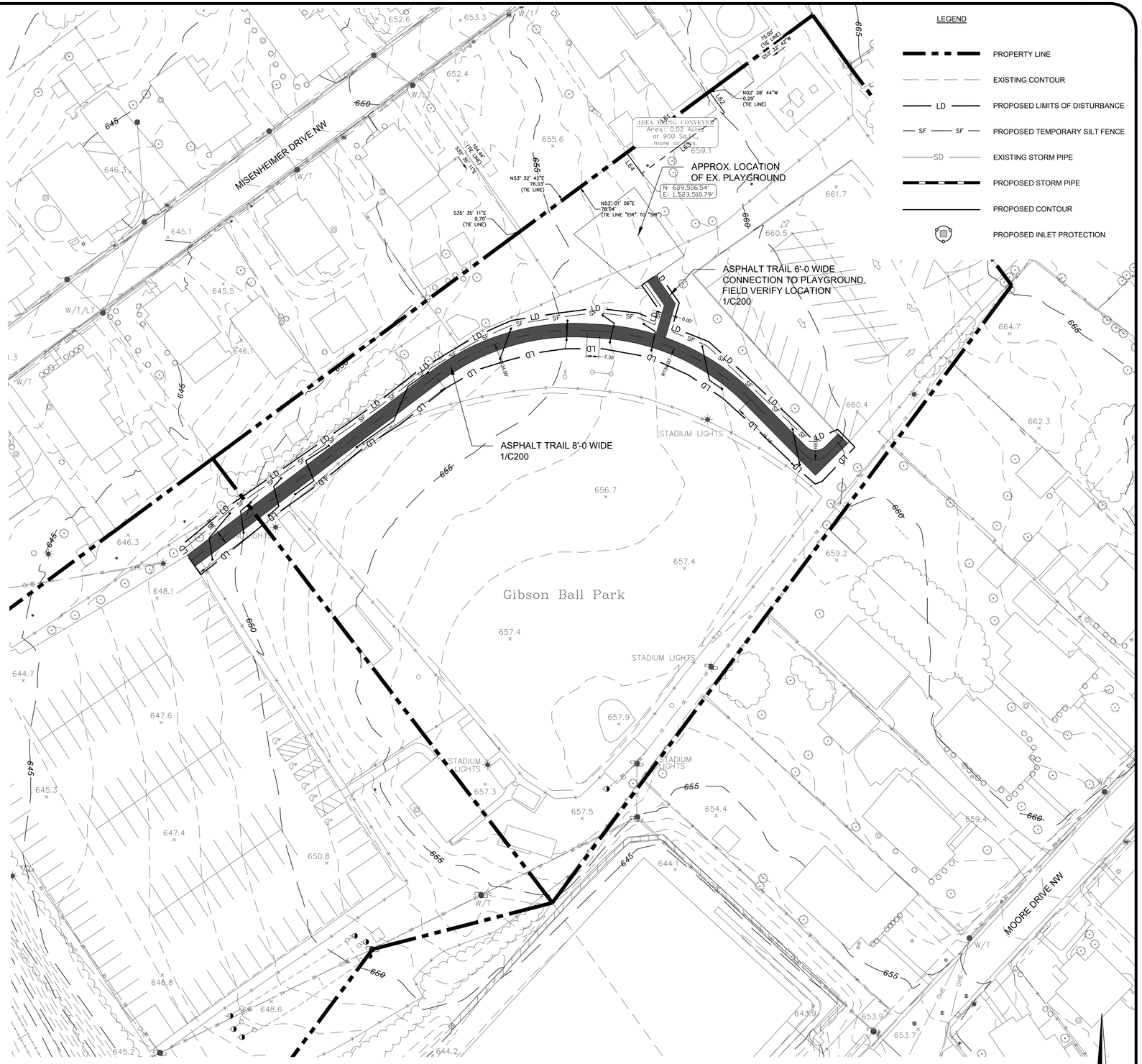
GIBSON FIELD TRAIL CONNECTOR
323 MISENHEIMER DR. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 40'-0"
DATE: 06-09-25
SHEET NAME: EXISTING CONDITIONS
SHEET NO: C900



NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ALL SLOPES DISTURBED BY CONSTRUCTION.
2. SIDE SLOPES SHALL NOT EXCEED 3:1. CUT & FILL SLOPES SHALL TIE INTO EXISTING SLOPES TO CREATE AN EVEN TRANSITION.
3. CROSS SLOPE TYPICALLY TO LOW SIDE BUT CROSS SLOPE TO INSIDE OF DOWNHILL CURVES, WITH GRADUAL TRANSITIONS BETWEEN ANY CROSS SLOPE DIRECTION CHANGES.

1 ASPHALT TRAIL
NOT TO SCALE



GRAPHIC SCALE
30 0 15 30 60
1 inch = 30 ft.

FITFIELDS
314 TOM HALL ST.
FORT MILL, SC
803.981.4330
FITFIELDS.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1589 DAVID A. BOOK

NORTH CAROLINA CERTIFICATE OF AUTHORIZATION FITFIELDS, PLLC COA# 389

REVISIONS:
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

GIBSON FIELD
TRAIL CONNECTOR
323 MISENHEIMER DR. NW
CONCORD, NORTH CAROLINA

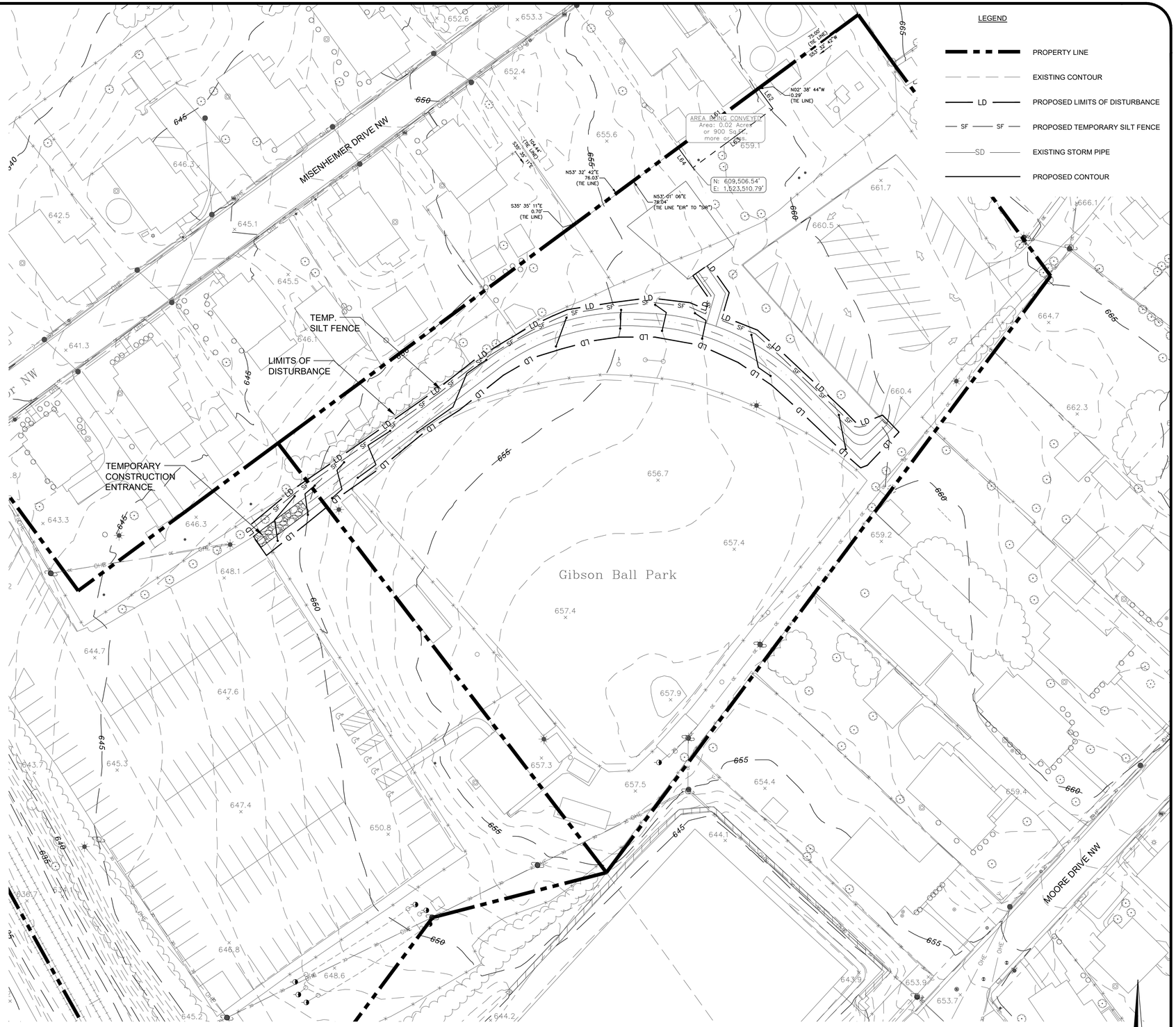
SCALE: 1" = 30'-0"
DATE: 06-09-25
SHEET NAME: LAYOUT AND GRADING PLAN
SHEET NO: C901

CONSTRUCTION SEQUENCE PHASE 1:

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM NCDEQ - DEMLR AND STORMWATER PERMIT FROM CITY OF CONCORD, AND ALL OTHER NECESSARY PERMITS FROM OTHER APPLICABLE AGENCIES.
2. AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION, CONTACT THE DEMLR SECTION IN THE MOORESVILLE REGIONAL DEQ OFFICE AT (704)663-1699 AND THE ENGINEER. MEET WITH DEMLR REPRESENTATIVES AND THE ENGINEER ON-SITE AT THEIR REQUEST FOR A PRE-CONSTRUCTION MEETING.
3. PRIOR TO ANY CLEARING OR INSTALLATION OF EROSION CONTROL DEVICES, CONTRACTOR SHALL STAKE CLEARING LIMITS AND STAKE ALL TREES, STRUCTURES AND WETLANDS TO REMAIN AND BE PROTECTED. ALL BUFFERS AND WETLANDS SHALL BE CLEARLY DELINEATED IN THE FIELD TO BE PROTECTED.
4. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND PERIMETER CONSTRUCTION FENCING AND SILT FENCE. TIRE WASH MAY BE REQUIRED IF CONSTRUCTION ENTRANCE IS NOT SUFFICIENT TO RETAIN SOIL. CONTRACTOR TO BLOCK ALL POSSIBLE ENTRANCES TO SITE BESIDES APPROVED CONSTRUCTION ENTRANCE W/ FENCING AND ORANGE BARRELS.
5. UPON COMPLETION OF INITIAL MEASURES, CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
6. INSTALL SILT FENCE, DIVERSION DITCHES, TREE PROTECTION, AND ANY OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
8. GENERAL CONTRACTOR SHALL ENSURE THAT EROSION CONTROL MEASURES ARE IN PLACE AND FUNCTIONING PRIOR TO GRUBBING AND GRADING OPERATIONS.
9. BEGIN DEMO AND GRADING, INSTALLING ADDITIONAL EROSION CONTROL MEASURES AS INDICATED, AS REQUIRED, AND AS DEEMED NECESSARY BY THE EROSION CONTROL INSPECTOR.
10. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
11. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
12. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES. NO DEVICE SHALL BE REMOVED UNTIL SITE IS STABILIZED.
13. ALL EROSION CONTROL DEVICES SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM EVENT. IF ANY FAILURES ARE FOUND THEY SHOULD BE REPAIRED AS SOON AS POSSIBLE.
14. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CONCORD STANDARDS, THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, AND U.S. DEPT. OF AGRICULTURE.
15. THE CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO THE REMOVAL OF ANY EROSION CONTROL MEASURES.
16. ONCE FINAL STABILIZATION HAS BEEN REACHED, THE NOTICE OF TERMINATION MAY BE FILED TO CLOSE-OUT THE LAND DISTURBANCE PERMIT.

EROSION CONTROL NOTES:

1. INLET PROTECTION IS REQUIRED FOR ALL INLETS LOCATED IN THE WORKING AREA AND REQUIRED UNTIL THE SITE IS FULLY STABILIZED
2. ANY GRADING BEYOND THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN IS SUBJECT TO A FINE.
3. GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND SUBJECT TO A FINE.
4. ALL SLOPES MUST BE SEEDED AND MULCHED WITHIN 15 WORKING DAYS OR 21 CALENDAR DAYS, WHICHEVER SHORTER. ALL OTHER AREAS, 15 WORKING DAYS OR 90 CALENDAR DAYS WHICHEVER IS SHORTER. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
5. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY OF CONCORD EROSION CONTROL DEPARTMENT.
6. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
7. ALL ELEVATIONS ARE IN REFERENCE TO THE SURVEYORS BENCHMARK WHICH MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUND BREAKING.
8. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH CITY OF CONCORD STANDARDS AND THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
9. PERMANENT CUT AND FILL SLOPES PLACED ON A SUITABLE FOUNDATION SHOULD BE CONSTRUCTED AT 2:1(HORIZONTAL TO VERTICAL) OR FLATTER. PERMANENT SLOPES OF 3:1 SHOULD BE CONSTRUCTED WHERE MOWING IS DESIRABLE AND AS INDICATED. IF FILL MATERIAL IS BROUGHT ONTO THE PROPERTY OR IF WASTE MATERIAL IS HAULED FROM THE PROPERTY THEN THE CONTRACTOR SHALL DISCLOSE THE LOCATION OF ANY ON-SITE AND/OR OFF-SITE B0RROW LOCATION AND/OR WASTE BURIAL LOCATION TO THE EROSION CONTROL INSPECTOR.
10. LIMITS OF CLEARING SHOWN ARE BASED ON CUT AND FILL SLOPES OR OTHER GRADING REQUIREMENTS.
11. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES AS INDICATED PRIOR TO GRADING OPERATIONS. NO DEVICE MAY BE REMOVED UNTIL SITE IS STABILIZED.
12. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS.
13. ALL DISTANCES ARE HORIZONTAL GROUND.
14. ANCHOR SILT FENCE WITH STONE ON TREE PROTECTION ZONES. DO NOT BURY.



MAINTENANCE SCHEDULE:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY STORM EVENT, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY REPAIRS OR CLEANING NECESSARY TO MAINTAIN EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE COMPLETED IMMEDIATELY.
2. ALL SEEDED AREAS SHALL BE REFERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SEEDING SCHEDULE.

WETLANDS NOTE:

THERE ARE NO JURISDICTIONAL WETLANDS IN THE PROJECT AREA. NO JURISDICTIONAL WETLANDS WILL BE IMPACTED DURING CONSTRUCTION.

TOTAL DENUDED AREA = 0.2 ACRES

GRAPHIC SCALE
30 0 15 30 60
1 inch = 30 ft.

North Carolina 811 www.ncc811.org

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PROFESSIONAL ENGINEER SEAL 24914 MATTHEW C. ROPER 6-9-25

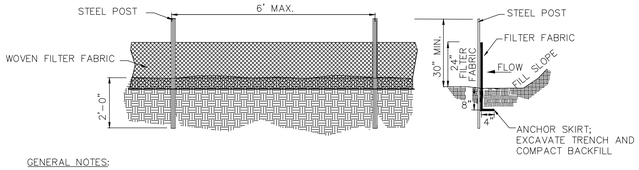
ROPER CIVIL ENGINEERING NORTH CAROLINA CORPORATE SEAL P-1266

REVISIONS:
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

GIBSON FIELD TRAIL CONNECTOR
323 MISENHEIMER DR. NW
CONCORD, NORTH CAROLINA

SCALE: 1" = 30'-0"
DATE: 06-09-25
SHEET NAME: EROSION CONTROL PLAN
SHEET NO: C902



GENERAL NOTES:

1. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWIM BUFFERS, STREAMS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.

MAINTENANCE NOTES:

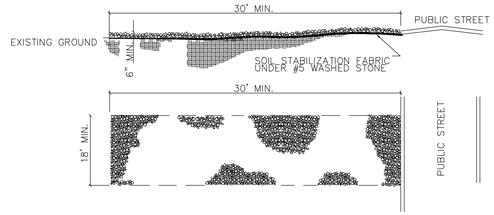
1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROX. HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

1 TEMPORARY SILT FENCE

NOT TO SCALE

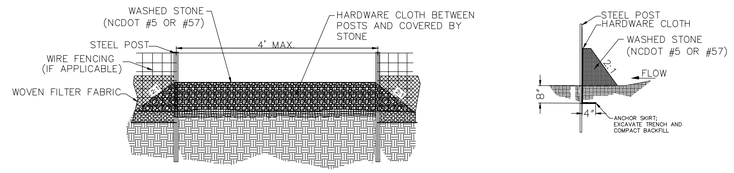
NOTES:

1. A STABILIZED ENTRANCE PAD OF #5 WASHED STONE AND RAILROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY. ANY AGGREGATE TRACKED INTO THE ROADWAY MUST BE SWEPT BACK ONSITE ON A NIGHTLY BASIS.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.



2 STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



GENERAL NOTES:

1. SEDIMENT FILTER OUTLET AND HARDWARE CLOTH SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
2. HARDWARE CLOTH SHALL BE ANCHORED TO THE STEEL POSTS SECURELY USING APPROPRIATE ANCHORS. HARDWARE CLOTH SHALL BE KEYED IN A MINIMUM OF 12 INCHES IN LENGTH AND BACKFILLED PROPERLY AS SHOWN IN ABOVE DETAIL. HARDWARE CLOTH TO BE SAME AS STD. #30.09 (19 GAUGE, 1/4" SPACING).
3. POSTS SHALL BE NO MORE THAN 4 FEET APART.
4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.

MAINTENANCE NOTES:

1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

3 SILT FENCE OUTLET OPTION 2

NOT TO SCALE

FOR LATE WINTER AND EARLY SPRING:

SEEDING MIXTURE:
RYE (GRAIN) – 120 LB/ACRE
ANNUAL LESPEDEZA (KOBE) – 50 LB/ACRE
(OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE)

SEEDING DATES:
JAN. 1 – MAY 1

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR SUMMER:

SEEDING MIXTURE:
GERMAN MILLET – 40 LB/ACRE
(A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)

SEEDING DATES:
MAY 1 – AUG. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE

FOR FALL:

SEEDING MIXTURE:
RYE (GRAIN) – 120 LB/ACRE

SEEDING DATES:
AUG. 15 – DEC 30

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER

MULCH:
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL

MAINTENANCE:
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 LB/ACRE KOBE LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

FOR ADDITIONAL INFORMATION, REFER TO NCDEQ EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL (ESCPDM), SECTION 6.10.
FOR PERMANENT SEEDING SPECIFICATIONS, INCLUDING SEED BED PREP, SEASONAL LIMITATIONS FOR SEEDING OPERATIONS, THE KINDS OF GRADES OF FERTILIZERS, THE KINDS OF SEED, AND THE RATES OF APPLICATION OF LIMESTONE, FERTILIZER, AND SEED, REFER TO NCDEQ ESCPDM SECTION 6.11

4 SEEDING SCHEDULE

NOT TO SCALE

5 RESERVED

NOT TO SCALE

6 RESERVED

NOT TO SCALE

7 RESERVED

NOT TO SCALE

8 RESERVED

NOT TO SCALE

9 RESERVED

NOT TO SCALE

3007 Hinsdale Street
Charlotte, NC 28210
(T) 704.582.3751

PROFESSIONAL SEAL 24914 ENGINEER MATTHEW G. ROBERTS
6-9-25

ROBERTS CIVIL ENGINEERING, INC. CORPORATE SEAL P-1266 NORTH CAROLINA

REVISIONS:
6.09.25 BID SET

OWNER:
CITY OF CONCORD
35 CABARRUS AVE. W
CONCORD, NORTH CAROLINA

GIBSON FIELD TRAIL CONNECTOR
323 MISENHEIMER DR. NW
CONCORD, NORTH CAROLINA

SCALE: NTS
DATE: 06-09-25
SHEET NAME: EROSION CONTROL DETAILS
SHEET NO: C903