

MICROAIRE BUILDING EXPANSION

FINAL SITE PLAN (SDP2025-____) APPROVED INITIAL SITE PLAN SDP2025-00111

RIO MAGISTERIAL DISTRICT
ALBEMARLE COUNTY, VIRGINIA

PROJECT SITE INFO:

LOCATION: 3590 GRAND FORKS BOULEVARD
ALBEMARLE COUNTY - CHARLOTTESVILLE, VA

EXISTING USE: INDUSTRIAL BUILDING - MICROAIRE SURGICAL

PROPOSED USE: INDUSTRIAL BUILDING - BUILDING EXPANSION

TOTAL ACREAGE: 9.36 ACRES

OWNER/DEVELOPER: MICROAIRE SURGICAL INSTRUMENTS, LLC

3590 GRAND FORKS BOULEVARD
CHARLOTTESVILLE, VA 22911

SURVEYOR: KIRK HUGHES AND ASSOCIATES
220 EAST HIGH STREET
CHARLOTTESVILLE, VA 22902

ENGINEER: COLLINS ENGINEERING
200 GARRETT STREET, SUITE K
CHARLOTTESVILLE, VA 22902

PARCEL INFORMATION:

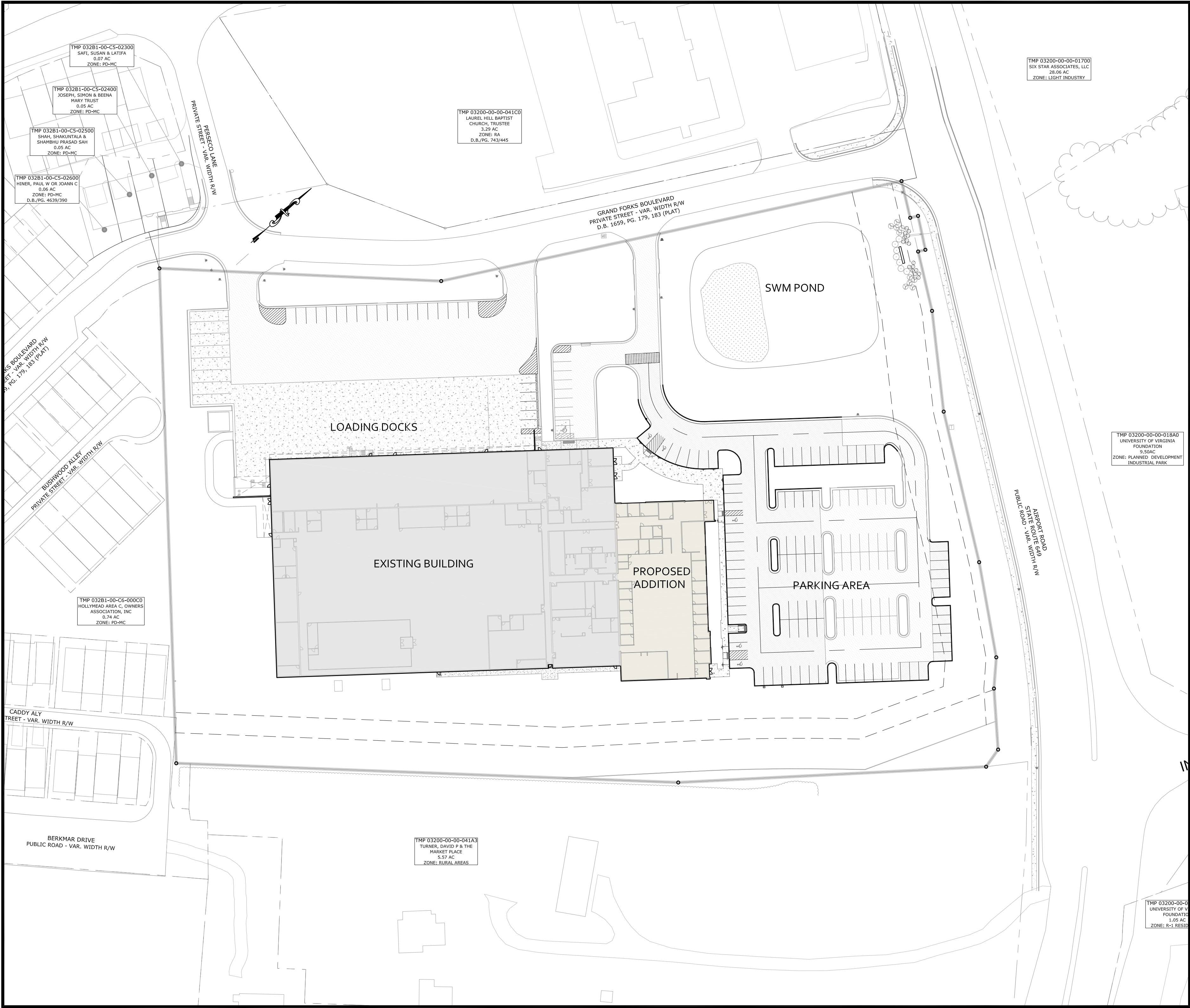
TMP: 03200-00-00-041D2

ACREAGE: 9.36 ACRES

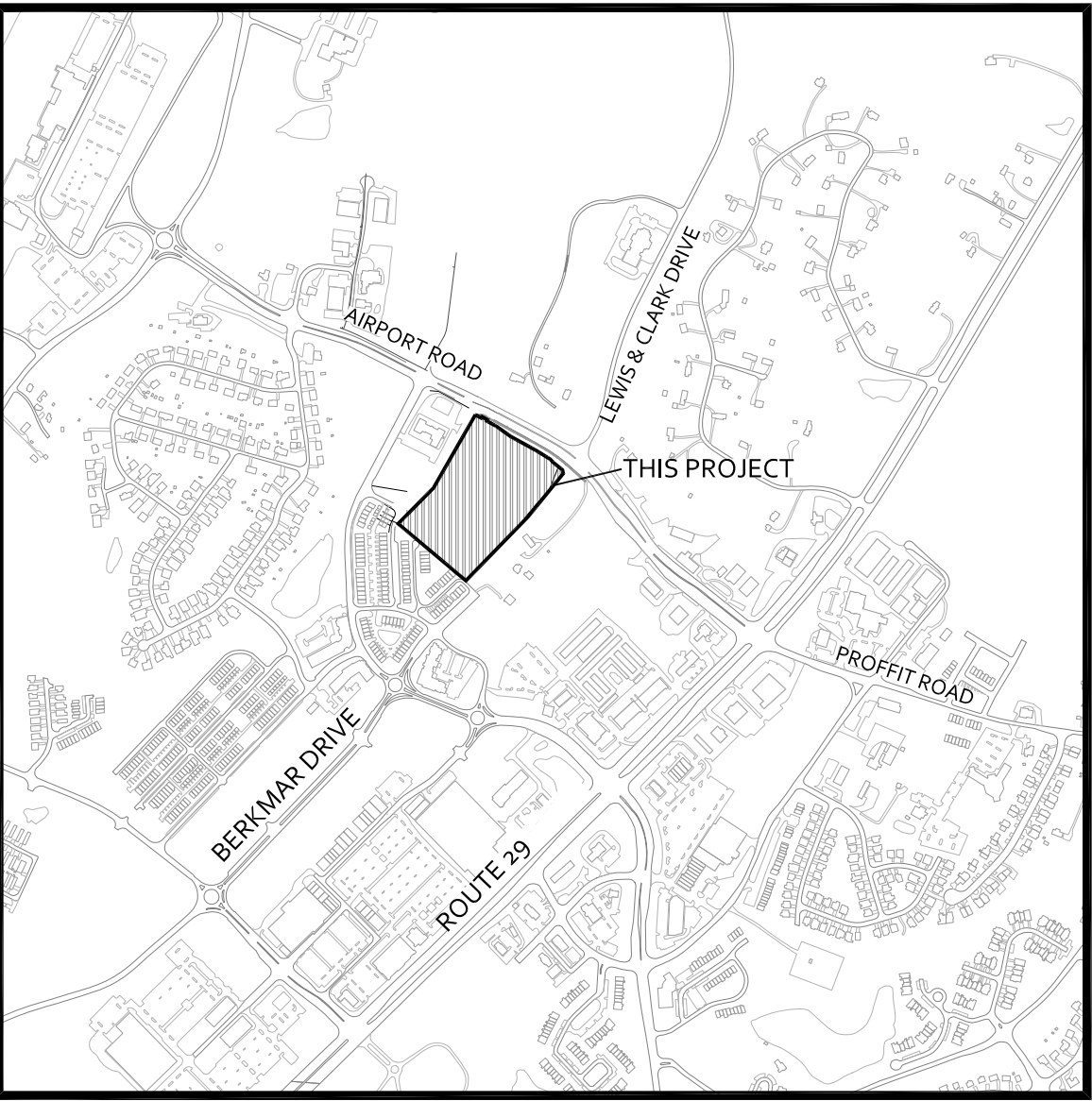
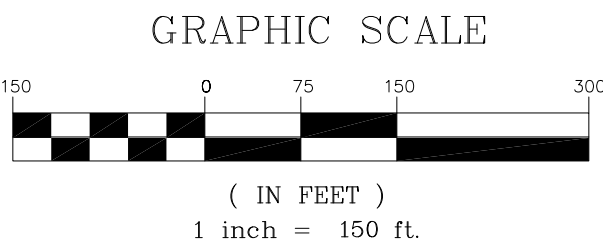
D.B./PG: 4020/569-573 (PLAT)
1659/179-183 (PLAT)
2378/427

ZONING: LI (LIGHT INDUSTRIAL)

THE PROPERTY IS SUBJECT TO THE FOLLOWING
OVERLAY DISTRICTS - ENTRANCE CORRIDOR (EC),
AIRPORT IMPACT AREA (AIA), & STEEP SLOPES
MANAGED OVERLAY DISTRICT



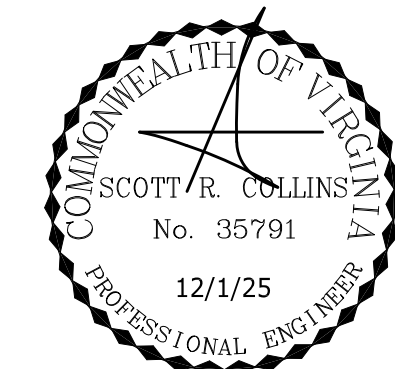
SHEET LAYOUT
SCALE: 1" = 100'



VICINITY MAP
SCALE: 1" = 1,000'

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APPROVALS		DATE
DEPARTMENT OF COMMUNITY DEVELOPMENT		
PLANNER/ZONING		
ENGINEER		
INSPECTIONS		
ARB		
DEPARTMENT OF FIRE RESCUE		
ALBEMARLE COUNTY SERVICE AUTHORITY		
VIRGINIA DEPARTMENT OF TRANSPORTATION		
HEALTH DEPARTMENT		



REVISIONS

REVISION DESCRIPTION	
DATE	12/1/25
INITIAL FINAL SITE PLAN SUBMITTAL	

COLLINS ENGINEERING

200 GARRETT STREET, SUITE K.-CHARLOTTESVILLE, VA 22902 -434.293.3719

MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

COVER



JOB NO.
122076

SCALE
AS SHOWN

SHEET NO.
1

GENERAL NOTES:

OWNER: 03200-00-00-041D2
MICROAIRE SURGICAL INSTRUMENTS, LLC
3590 GRAND FORKS BLVD
CHARLOTTESVILLE, VA 22911
COLLINS ENGINEERING
200 GARRETT ST. SUITE K,
CHARLOTTESVILLE, VA 22902
TELEPHONE: (434)293-3719
FAX: (434)293-2813
CONTACT: MR. SCOTT COLLINS, P.E.
EMAIL: scott@collins-engineering.com

TAX MAP NO.: 03200-00-00-041D2 (D.B. 4020/PG. 569)

AREA: ORIGINAL 9.36 AC., PROPOSED 9.25 AC. WITH BERKMAR DRIVE ROW EXPANSION

ZONING: LIGHT INDUSTRIAL
NOTE: THE PROPERTY IS SUBJECT TO THE FOLLOWING OVERLAY DISTRICTS -
ENTRANCE CORRIDOR (EC), AIRPORT IMPACT AREA (AIA), & STEEP SLOPES
MANAGED OVERLAY DISTRICT

EXISTING/PROPOSED USE: EXISTING 73,000 ± MANUFACTURING/WAREHOUSE FACILITY
PROPOSED 15,625 ± OFFICE ADDITION TO WAREHOUSE

BUILDING HEIGHTS: MAXIMUM BUILDING HEIGHTS SHALL NOT EXCEED 40 FEET

SETBACKS: FRONT - 10' MINIMUM AND NO MAXIMUM
SIDE AND REAR - IF ADJACENT TO COMMERCIAL OR INDUSTRIAL ZONES THE
PRIMARY STRUCTURE SHALL BE CONSTRUCTED AND SEPARATED IN
ACCORDANCE WITH THE BUILDING CODE. IF THE ABUTTING LOT IS ZONED
RESIDENTIAL, RURAL AREAS, OR THE MONTICELLO HISTORIC DISTRICT: (i) NO
PORTION OF ANY STRUCTURE, EXCLUDING SIGNS, SHALL BE LOCATED CLOSER
THAN 50 FEET FROM THE DISTRICT BOUNDARY; AND (ii) NO PORTION OF ANY
OFF-STREET PARKING SPACE SHALL BE LOCATED CLOSER THAN 30 FEET FROM THE
DISTRICT BOUNDARY. NO MAXIMUM SETBACK.

SUBDIVISION STREETS: CURB & GUTTER

WATERSHED: POWELL CREEK WATERSHED - SOUTHERN PORTION OF SITE
NORTH FORK RIVANNA (BELOW WATER INTAKE) WATERSHED - NORTHERN
PORTION OF SITE

AGRICULTURAL/FORESTAL DISTRICT: NONE

TOPO & SURVEY: TOPOGRAPHY AND BOUNDARY PROVIDED BY LICENSED LAND SURVEYOR KIRK
HUGHES & ASSOCIATES IN FEBRUARY, 2012. SURVEY UPDATED IN MAY, 2018 AND
FIELD VERIFIED IN JULY, 2025 BY COLLINS ENGINEERING.

DATUM: NAD 83

EXISTING VEGETATION: TREES AND SHRUBS SURROUNDING EXISTING BUILDING AND PARKING LOT.

CRITICAL SLOPES: STEEP SLOPES IN ACCORDANCE WITH THE COUNTY GIS MAPPING, MANAGED
STEEP SLOPES EXIST ON THE PARCEL. ALSO PER THE COUNTY GIS MAPPING, NO
PRESERVED STEEP SLOPES EXIST ON THE PROPERTY.

FLOODPLAIN: FEMA MAP NO: 51003C0140D, PANEL NO: 0140D, DATE: 2/4/05
NOTE: THIS PROJECT IS NOT LOCATED WITHIN FLOODPLAIN LIMITS.

LIGHTING: THE SITE HAS EXISTING PARKING LOT LIGHTS AND BUILDING LIGHTS THAT SHALL
REMAIN. NEW LIGHTING PROPOSED, SEE LIGHTING PLAN.

RETAINING WALLS: NO RETAINING WALLS ARE PROPOSED WITH THE DEVELOPMENT.

MECHANICAL/ HVAC EQUIPMENT: MECHANICAL EQUIPMENT TO BE LOCATED ON TOP OF THE BUILDING AND
HIDDEN FROM THE VIEW FROM THE ENTRANCE CORRIDOR ALONG AIRPORT
ROAD.

TRASH COLLECTION: EXISTING DUMPSTER LOCATED ON THE SOUTH SIDE OF THE BUILDING

ADJACENT PROPERTY OWNERS: SEE EXISTING CONDITIONS, SHEET 3

PHASING: NONE

UTILITIES: PUBLIC WATER & SEWER

SITE ACCESS: THIS SITE CURRENTLY HAS AN EXISTING ACCESS FROM THE PRIVATE ROAD,
GRAND FORKS BLVD.

PARKING: REQUIRED: WAREHOUSE - (1) SPACE PER EMPLOYEE PLUS (1) SPACE PER
500 SF OF FLOOR AREA OPEN TO THE PUBLIC
REQUIRED:
WAREHOUSE - TOTAL NUMBER OF EMPLOYEES ONSITE DURING SHIFT CHANGE:
100 EMPLOYEES (MINIMUM)
COMPANY - TOTAL NUMBER OF EMPLOYEES ONSITE FOR MONTHLY COMPANY
MEETING: 140 EMPLOYEES (MAXIMUM)
AREA OPEN TO THE PUBLIC: 0 SF

TOTAL PARKING SPACES REQUIRED = 140 SPACES

PROPOSED:

34 - EXISTING SPACES TO REMAIN AT LOADING DOCK AND EX. BLDG
42 - EXISTING SPACES TO REMAIN IN EASTERN PARKING LOT
86 - PROPOSED NEW SPACES

162 - TOTAL SPACES PROVIDED WITH (2) ACCESSIBLE PARKING SPACES & (4) VAN ACCESSIBLE PARKING SPACES

NOTE: (8) EXISTING LOADING SPACES ARE PROVIDED IN THE LOADING DOCK AREA

LANDSCAPING: A LANDSCAPING PLAN IS PROPOSED, SEE LANDSCAPING PLAN THIS SET. LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH ALBEMARLE COUNTY CODE 32-7.9.

STORMWATER MANAGEMENT FACILITY: THERE IS AN EXISTING STORMWATER MANAGEMENT FACILITY LOCATED AT THE NORTHWEST CORNER OF THE SITE, WHICH WILL REMAIN. THIS EXISTING FACILITY IS A DRY RETENTION POND AND CURRENTLY TREATS THE EXISTING RUN-OFF FROM THE SITE AND PROVIDES DETENTION FOR THE RUN-OFF. THE POND WILL BE CONVERTED TO A LEVEL I WET POND WHICH WILL PROVIDE WATER QUALITY AND WATER QUANTITY CONTROL FOR THE SITE.

IMPERVIOUS AREAS:	EXISTING	PROPOSED TOTAL
BUILDING:	72,566 sf	92,526 sf
ROAD & PARKING:	122,854 sf	113,191 sf
SIDEWALK:	6,251 sf	6,767 sf

ESTIMATED EMPLOYEES:	APPROXIMATELY 140 EMPLOYEES TOTAL
MAXIMUM LOT COVERAGE:	52.1%
MAXIMUM FLOOR AREA:	92,600 SF
MAXIMUM AMOUNT OF PAVED PARKING & VEHICULAR CIRCULATION:	113,191 SF X 5% = 5,660 SF

ESTIMATED INCREASE OF DAILY TRIPS FOR WAREHOUSE ADDITION: 159 TRIPS PER DAY, SEE SHEET 6

FIRE FLOW: THE DEVELOPMENT WILL BE SERVED BY PUBLIC WATER AND CONNECT TO PUBLIC SEWER. THE FIRE HYDRANT FLOW TEST PERFORMED BY ACSA ON 8/21/25 PRODUCED AN AWWA Q20 CALCULATED FLOW OF 3,402 GPM.

CLASS 3 - IBC TYPE IIB (NONCOMBUSTIBLE), F=0.8
TOTAL GROSS BUILDING AREA = 89,000 SF
OCCUPANCY C-2 LIMITED COMBUSTIBILITY, O=0.85
NO EXPOSURE WITHIN 40 FT
REQUIRED ISO FIRE FLOW=3,500 GPM
NEEDED FIRE FLOW (50% REDUCTION FOR AUTOMATIC SPRINKLERS)=1750 GPM

DEMOLITION NOTES

1. PRIOR TO DEMOLITION AND CONSTRUCTION, A FIRE PREVENTION PLAN MEETING MUST OCCUR AND A FIRE PREVENTION PLAN MUST BE SUBMITTED TO AND APPROVED BY THE FIRE MARSHAL.
2. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL UNDERGROUND UTILITIES NOT SHOWN ON THIS PLAN SHEET AND SHALL DEMOLISH ALL DISCOVERED UTILITIES AS REQUIRED.
3. THE CONTRACTOR SHALL VIDEO AND INSPECT ALL SANITARY SEWER PIPES AND MANHOLES SLATED TO REMAIN TO DETERMINE ADEQUATE STRUCTURAL INTEGRITY. IF EXISTING SANITARY SEWER IS DAMAGED, THE CONTRACTOR SHALL CONTACT THE ENGINEER.
4. THE CONTRACTOR SHALL EXAMINE THE STRUCTURAL INTEGRITY OF EXISTING STORM SEWER STRUCTURES TO REMAIN AND REPLACE TOPS AS NECESSARY; THIS SHALL BE RECORDED IN THE CONTRACTOR BOOK.
5. ALL EXISTING WATER, SANITARY, AND STORM SEWER SLATED FOR DEMOLITION SHALL BE REMOVED FROM THE BUILDING TO THE PROPERTY LINE, UNLESS MARKED AS TO REMAIN.
6. UTILITIES THAT ARE DISCONNECTED SHALL BE PROPERLY ABANDONED AT THE MAIN LINE. FOR WATER SERVICE LINES, THE CORP STOP MUST BE TURNED OFF AT THE MAIN LINE AND THE SERVICE DISCONNECTED FROM THE MAIN. FOR SEWER LATERALS, THE LATERAL TAP MUST BE SEALED AT THE MAIN LINE SO THAT IT IS WATER TIGHT AND THE LATERAL REMOVED FROM THE MAIN LINE. FOR SANITARY MANHOLES TO BE ABANDONED THE TOP 2' OF THE MANHOLE STRUCTURE SHALL BE REMOVED, ALL LINES DISCONNECTED, AND THE MANHOLE SHOULD BE FILLED WITH STONE AND COVERED, ALL TAPS MUST BE LOCATED AND DISCONNECTED PER PROCEDURE ABOVE.
7. EXISTING ROOF DRAINS SLATED TO BE DEMOLISHED SHALL BE DISCONNECTED AND REMOVED; ROOFDRAINS TO BE REROUTED AS SHOWN ON THE ARCHITECTURAL PLANS.
8. EXISTING DOMINION OVERHEAD/UNDERGROUND ELECTRIC LINES AND OVERHEAD UTILITIES TO THE EXISTING BUILDING SHALL BE DISCONNECTED AND REROUTED AS PROPOSED ON THE UTILITY PLAN SHEET.
9. ANY EXISTING UNDERGROUND STORAGE TANKS SHALL BE DRAINED BY THE OWNER, AND THE CONTRACTOR SHALL FILL AND TANKS SHALL REMAIN.
10. BUILDINGS BEING DEMOLISHED. WHERE A BUILDING IS BEING DEMOLISHED AND A STANDPIPE IS EXISTING WITHIN SUCH A BUILDING, SUCH STANDPIPE SHALL BE MAINTAINED IN AN OPERABLE CONDITION SO AS TO BE AVAILABLE FOR USE BY THE FIRE DEPARTMENT. SUCH STANDPIPE SHALL BE DEMOLISHED WITH THE BUILDING BUT SHALL NOT BE DEMOLISHED MORE THAN ONE FLOOR BELOW THE FLOOR BEING DEMOLISHED.

FIRE DEPARTMENT NOTES

- PROGRAM SUPERINTENDENT. THE OWNER SHALL DESIGNATE A PERSON TO BE THE FIRE PREVENTION PROGRAM SUPERINTENDENT WHO SHALL BE RESPONSIBLE FOR THE FIRE PREVENTION PROGRAM AND ENSURE THAT IT IS CARRIED OUT THROUGH COMPLETION OF THE PROJECT. THE FIRE PREVENTION PROGRAM SUPERINTENDENT SHALL HAVE THE AUTHORITY TO ENFORCE THE PROVISIONS OF THIS CHAPTER AND OTHER PROVISIONS AS NECESSARY TO SECURE THE INTENT OF THIS CHAPTER. WHERE GUARD SERVICE IS PROVIDED, THE SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE GUARD SERVICE.
3. PREPARE PLANS. THE FIRE PREVENTION PROGRAM SUPERINTENDENT SHALL DEVELOP AND MAINTAIN AN APPROVED PREFIRE PLAN IN COOPERATION WITH THE FIRE CHIEF. THE FIRE CHIEF AND THE FIRE CODE OFFICIAL SHALL BE NOTIFIED OF CHANGES AFFECTING THE UTILIZATION OF INFORMATION CONTAINED IN SUCH PREFIRE PLANS.
4. A SITE SPECIFIC FIRE PREVENTION PLAN SHALL BE SUBMITTED TO THE FIRE MARSHAL'S OFFICE PRIOR TO COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION.
5. AN APPROVED KEY BOX SHALL BE MOUNTED TO THE SIDE OF THE FRONT OR MAIN ENTRANCE. ALBEMARLE FIRE AND RESCUE CARRIES THE KNOX BOX MASTER KEY. A KNOX BOX KEY BOX CAN BE ORDERED BY GOING ONLINE TO WWW.KNOXBOX.COM. THE KNOX BOX ALLOWS ENTRY TO THE BUILDING WITHOUT DAMAGING THE LOCK AND DOOR SYSTEM.
6. ACCESS TO THE BUILDING DURING DEMOLITION AND CONSTRUCTION SHALL BE MAINTAINED.
7. FIRE HYDRANTS, FIRE PUMP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL REMAIN CLEAR AND UNOBSTRUCTED BY LANDSCAPING, PARKING OR OTHER OBJECTS. THE FIRE MARSHAL'S OFFICE NO LONGER ALLOWS ANY TYPE OF LANDSCAPING TO BE PLACED IN FRONT OF AND WITHIN 5 FEET OF FIRE HYDRANTS, FIRE PUMP TEST HEADERS, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES.
8. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.
9. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 85,000 LBS.
10. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE CONSISTENT WITH THE MUTCD.
11. THE MINIMUM REQUIRED FIRE FLOW FOR ALL BUILDINGS IS 1,500 GALLONS PER MINUTE.
12. LANDSCAPING IN THE AREA FIRE HYDRANTS, FIRE PUP TEST HEADER, FIRE DEPARTMENT CONNECTIONS OR FIRE SUPPRESSION SYSTEM CONTROL VALVES SHALL BE OF THE TYPE THAT WILL NOT ENCRUCH ON THE REQUIRED FIVE FT RADIUS ON MATURITY OF THE LANDSCAPING.
13. FIRE LANES SHALL BE A MINIMUM OF 20 FEET IN WIDTH. SIGNS AND MARKINGS TO DELINEATE FIRE LANES AS DESIGNATED BY THE FIRE OFFICIAL SHALL BE PROVIDED AND INSTALLED BY THE OWNER OR HIS/HER AGENT OF THE PROPERTY. FIRE APPARATUS ROADS 20' TO 26' IN WIDTH SHALL BE POSTED OR MARKED ON BOTH SIDES "NO PARKING - FIRE LANE".
14. THE BUILDING STREET NUMBER TO BE PLAINLY VISIBLE FROM THE STREET FOR EMERGENCY RESPONDERS.
15. HYDRANT FOR STANDPIPE SYSTEM-BUILDINGS EQUIPPED WITH A STANDPIPE SYSTEM INSTALLED IN ACCORDANCE WITH FIRE DEPARTMENT CONNECTIONS AND FOR STANDPIPES AND SPRINKLERS AND SHALL HAVE A FIRE HYDRANT WITHIN 100 FT OF THE FIRE DEPARTMENT CONNECTIONS. THE DISTANCE SHALL BE PERMITTED TO EXCEED 100 FT WHERE APPROVED BY THE FIRE CODE OFFICIAL.
16. OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13 FEET-6 INCHES.
17. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.
18. NO VEHICLES/MACHINERY OF ANY TYPE, CONSTRUCTION MATERIALS OR CONSTRUCTION DEBRIS ARE TO BE PARKED, PLACED OR STORED EITHER IN FRONT OF AND WITHIN 35 FEET OF A FIRE HYDRANT.
19. NO SMOKING OR VAPING WITHIN THE CONSTRUCTION SAFETY FENCE. NO SMOKING SIGNS SHALL BE POSTED THROUGHOUT EACH BUILDING UNDER CONSTRUCTION AS WELL AS OUTSIDE THE BUILDING.
20. WASTE DISPOSAL OF COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH WORKDAY.
21. CUTTING AND WELDING-OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 35, OF THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, ADDRESSING WELDING AND HOTWORK OPERATIONS.
22. FIRE EXTINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.
23. REQUIRED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.

CONSTRUCTION FIRE PREVENTION NOTES

1. SMOKING SHALL BE PROHIBITED IN AREAS WHERE SMOKING MAKES CONDITIONS SUCH AS TO MAKE SMOKING A HAZARD AND THESE AREAS SHALL BE DESIGNATED WITH NO SMOKING SIGNS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
2. AREAS WHERE SMOKING CAN OCCUR, SHALL HAVE APPROPRIATE RECEPTACLES FOR DISCARDED SMOKING MATERIALS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
3. PER VIRGINIA STATEWIDE FIRE PREVENTION CODE, VEHICULAR ACCESS FOR FIREFIGHTING SHALL BE PROVIDED AT ALL CONSTRUCTION AND DEMOLITION SITE, PROVIDE ACCESS TO WITHIN 100 FT. OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS, AND HAVE NO OVERHEAD WIRING OR OTHER OVERHEAD OBSTRUCTIONS LOWER THAN 13 FT 6 INCHES; THIS ACCESS MAY BE VIA PERMANENT OR TEMPORARY ROAD, BUT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS IN ALL WEATHER CONDITIONS.
4. CONTRACTOR SHALL ENSURE THE STREET NUMBERS ARE ALWAYS VISIBLE FROM THE FRONTAGE STREET DURING CONSTRUCTION PER THE VIRGINIA STATEWIDE FIRE CODE.
5. AN APPROVED WATER SUPPLY FOR FIREFIGHTING OPERATIONS SHALL BE IN PLACE AND AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE.
6. WASTE AND COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH DAY AND DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
7. FIRE EXTINGUISHERS SHALL BE PROVIDED, WITH NOT LESS THAN ONE APPROVED FIRE EXTINGUISHER AT EACH STAIRWELL, ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED, IN EVERY STORAGE AND CONSTRUCTION SHED AND IN AREAS OF SPECIAL; HAZARD, SUCH AS WHERE FLAMMABLE AND COMBUSTIBLE LIQUIDS ARE STORED OR USED, IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
8. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL COMPLY WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE AND SHALL REQUIRE A PERMIT FROM THE ALBEMARLE COUNTY FIRE MARSHAL'S OFFICE.

BUILDING CODE NOTES:

1. RETAINING WALLS GREATER THAN 3 FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT. WALLS EXCEEDING 4 FEET IN HEIGHT REQUIRE A STAMPED ENGINEERED DESIGN ALSO. SEGMENTED WALLS REQUIRE ROP INSPECTIONS, OTHER WALL REQUIRE INSPECTIONS AS OUTLINED IN THE USBC.
2. A MARKING SHALL BE PLACED AT THE ACCESS POINT, AND ACCESS ROUTE SHALL BE INSTALLED IN ACCORDANCE WITH ICC ANSI A137.3-17 AND THE 2021 VIRGINIA CONSTRUCTION CODE.
3. WHERE THE FLOOD LEVEL RIMS OF PLUMBING FIXTURES ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER, THE FIXTURE SHALL BE PROTECTED BY A BACKWATER VALVE INSTALLED IN THE BUILDING DRAIN, BRANCH OF THE BUILDING DRAIN, OR HORIZONTAL BRANCH SERVING SUCH FIXTURES. PLUMBING FIXTURES HAVING FLOOD LEVEL RIMS ABOVE THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER SHALL NOT DISCHARGE THROUGH A BACKWATER VALVE.
4. ALL ROOF DRAINS SHALL DISCHARGE IN A MANNER NOT TO CAUSE A PUBLIC NUISANCE AND NOT OVER SIDEWALKS.
5. BUILDING STRUCTURE MUST BE BUILT BEFORE JANUARY 1, 1988 MUST HAVE AN ASBESTOS SURVEY PERFORMED IN ORDER TO APPLY FOR A DEMOLITION PERMIT. ASBESTOS REMOVAL PERMITS ARE REQUIRED IF POSITIVE FOR SUCH FROM ALBEMARLE COUNTY AND VDOL. CONTACT VDOL FOR THEIR ADDITIONAL REQUIREMENTS AND PERMITS FOR DEMOLITION PROJECTS AT 540-662-3850 x332.
6. ALL WATER, SEWER, AND FIRE LINES REQUIRE NEW INSPECTION AND TESTING PROCEDURES. THE ACSA PERFORMS ANY TESTING AND INSPECTIONS OF THE PUBLIC SEWER AND WATER MAIN(S). THE ALBEMARLE COUNTY BUILDING INSPECTIONS DEPARTMENT (ACBD) DOES A VISUAL INSPECTION AND WITNESSES THE TESTING OF THE BUILDING DRAIN, WATER SERVICE PIPE AND THE SPRINKLER LEAD-IN CONNECTION.
7. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO RETAIN A SPECIAL INSPECTOR AS OUTLINED IN THE UPDATED ALBEMARLE COUNTY POLICY FOR SUBMITTAL TO PERFORM THE VISUAL INSPECTION AND TESTING OF ALL UTILITIES NOT COVERED BY THE ACSA OR ACBD. THIS INCLUDES BUILDING SEWERS, WATER AND FIRE LINE REPORTS BETWEEN THE MAIN AND THE METER(S)/BUILDING(S).
8. THE SPECIAL INSPECTOR'S LINE REPORT MUST BE SUBMITTED AND APPROVED BY THE ALBEMARLE COUNTY ENGINEERING DEPARTMENT PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED.
9. DUE TO REQUIRED DISTANCES FROM LOT LINES AND STRUCTURES AS REQUIRED BY THE NFPA, UNDERGROUND PROPANE TANKS MAY BE PROHIBITED.

SITE NOTES

1. PROPOSED MECHANICAL EQUIPMENT WILL BE LOCATED ON THE ROOF BEHIND THE PARAPET OF THE PROPOSED BUILDINGS. MECHANICAL EQUIPMENT LOCATED ON THE ROOF OF A BUILDING OR STRUCTURE SHALL BE HIDDEN BEHIND A WALL OR OTHER SOLID ENCLOSURE, EXTENDING NO MORE THAN TWELVE (12) INCHES ABOVE THE HEIGHT OR SUCH EQUIPMENT, SUCH WALL WILL BE CONSTRUCTED OF A MATERIAL HARMONIOUS WITH THE FACADE OF THE BUILDING OR STRUCTURE. MECHANICAL EQUIPMENT LOCATED ON THE GROUND SHALL BE SCREENED FROM VIEW FROM ALL PUBLIC RIGHTS-OF-WAY AND ADJACENT RESIDENTIAL DISTRICTS. AN S-3 SCREEN SHALL BE PROVIDED, EXTENDING NO MORE THAN TWELVE (12) INCHES ABOVE THE HEIGHT OF SUCH EQUIPMENT. THE SCREENING MATERIALS SHALL BE LOCATED IN SUCH A MANNER TO MOST EFFECTIVELY REFLECT NOISE AWAY FROM ADJACENT RESIDENTIAL DISTRICTS.
2. EXISTING AND PROPOSED DUMPSTERS ON SITE SHALL COMPLY WITH BUILDING CODE REQUIREMENTS AND SHALL NOT BE VISIBLE FROM RIGHT-OF-WAY.
3. ALL SIDEWALK WITHIN THE LIMITS OF THE DEVELOPMENT SHALL BE PRIVATE SIDEWALKS AND SHALL BE PRIVATELY MAINTAINED. THIS APPLIES TO ALL SIDEWALKS OUTSIDE OF THE VDOT RIGHT OF WAY.
4. ALL SIDEWALKS AND WALKWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 5'.
5. ALL WALKWAY CROSSINGS SHALL MEET MINIMUM ADA ACCESSIBILITY STANDARDS AND SHALL HAVE A CROSS SLOPES OF 3% OR LESS.
6. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED CONSISTENT WITH MUTCD STANDARDS.
7. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO AN ACCESSIBLE ENTRANCE.
8. ALL SIGNS IDENTIFYING ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 60 INCHES ABOVE THE GROUND/SURFACE (FROM BOTTOM OF SIGN) AND INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. ACCESSIBLE VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
9. RAMPES OVER 30" IN ELEVATION CHANGE REQUIRE HANDRAILS.
10. ALL SITE AND BUILDING CONSTRUCTION SHALL MEET CURRENT BUILDING CODE REQUIREMENTS FOR ACCESSIBILITY AND FOR CHANGE OF OCCUPANCY.
11. PER ADA 206.2.2, ALL BUILDING STANDARDS ACCESSIBLE PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1, AND SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
12. PER ADA 202.1, PARKING SPACES AND ACCESS AISLES SHALL COMPLY WITH 302, SLOPES NOT STEEPER THAN 3% SHALL BE PERMITTED.
13. PER ADA 403.3 THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL BE 5% OR LESS. SLOPES OVER 5% WILL REQUIRE A RAMP.
14. PER ADA 206.2.2 AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES ON THE SAME SITE.
15. ALL PARKING SPACES SHALL BE 9'x18', EXCEPT AS NOTED.
16. HANDICAP PARKING SPACES SHALL BE 8'x18', EXCEPT AS NOTED.
17. ALL HANDICAP PARKING SPACES SHALL BE INDICATED WITH A SIGN.

UTILITY NOTES

- ANY DAMAGE TO EXISTING UTILITIES CAUSED BY CONTRACTOR OR ITS SUBCONTRACTORS SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY AND REPAIRED AT CONTRACTOR'S EXPENSE.
- THE CONTRACT DOCUMENTS DO NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE OR LOCATION OF UTILITIES. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OR THE NON-EXISTENCE OF UTILITIES. AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION, CONTRACTOR SHALL NOTIFY MISS UTILITY (1-800-552-7000) AND/OR THE RESPECTIVE UTILITY COMPANIES FOR GAS, WATER, SEWER, POWER, PHONE, AND CABLE. CONTRACTOR SHALL TIMELY ARRANGE TO HAVE THE VARIOUS UTILITIES LOCATED, AND TO HAVE THEM REMOVED OR RELOCATED, OR TO DETERMINE THE METHOD OF PROTECTION ACCEPTABLE TO THE RESPECTIVE OWNER, IF UTILITIES IN ACCORDANCE WITH THE RESPECTIVE UTILITY'S RULES AND REGULATIONS.
- CONTRACTOR SHALL EXCAVATE TO LOCATE BURIED UTILITIES FAR ENOUGH IN ADVANCE OF ITS WORK TO ALLOW FOR HORIZONTAL AND/OR VERTICAL ADJUSTMENTS TO ITS WORK AND/OR THE UTILITIES. NO ADJUSTMENT IN COMPENSATION OR SCHEDULE WILL BE ALLOWED FOR DELAYS RESULTING FROM CONTRACTOR'S FAILURE TO CONTACT AND COORDINATE WITH UTILITIES.
- WHEN THE WORK CROSSES EXISTING UTILITIES, THE EXISTING UTILITIES SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM DAMAGE DUE TO THE WORK. ALL METHODS FOR SUPPORTING AND MAINTAINING THE EXISTING UTILITIES SHALL BE APPROVED BY THE RESPECTIVE UTILITY COMPANY AND/OR THE ENGINEER.
- CONTRACTOR SHALL EXERCISE CARE TO ENSURE THAT THE GRADE AND ALIGNMENT OF EXISTING UTILITIES ARE MAINTAINED AND THAT NO JOINTS OR CONNECTIONS ARE DISPLACED. BACKFILL SHALL BE CAREFULLY PLACED AND COMPACTED TO PREVENT FUTURE DAMAGE OR SETTLEMENT TO EXISTING UTILITIES. ANY UTILITIES REMOVED AS PART OF THE WORK, AND NOT INDICATED TO BE REMOVED OR ABANDONED, SHALL BE RESTORED USING MATERIALS AND INSTALLATION EQUAL TO THE UTILITY STANDARDS.
- CONTRACTOR SHALL NOTIFY LANDOWNERS, TENANTS, AND THE ENGINEER PRIOR TO THE INTERRUPTION OF ANY SERVICES. SERVICE INTERRUPTIONS SHALL BE KEPT TO A MINIMUM.
- THE ADJUSTMENT OF ALL MANHOLE TOPIES, WATER VALVE BOXES, GAS VALVE BOXES, AND WATER METER BOXES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COSTS ARE TO BE INCLUDED UNDER THE VARIOUS UNIT BID ITEMS, NO SEPARATE PAYMENT WILL BE MADE.
- ALL WATER METER, VALVES, AND FIRE HYDRANT ADJUSTMENTS/RELOCATIONS SHALL BE PERFORMED BY THE CONTRACTOR.
- A MINIMUM OF 18" VERTICAL & 30" HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER LINES & SANITARY SEWER. A MINIMUM OF 12" VERTICAL AND 5' HORIZONTAL SHALL BE MAINTAINED BETWEEN PARALLEL SANITARY AND STORM SEWER.
- MINIMUM DEPTH OF COVER FOR WATER LINES SHALL BE 3'.
- MINIMUM DEPTH OF COVER FOR SANITARY SEWER SHALL BE 3'.
- AT ALL UTILITY CROSSINGS A MINIMUM VERTICAL SEPARATION OF 12" SHALL BE MAINTAINED. A MINIMUM VERTICAL SEPARATION OF 18" SHALL BE MAINTAINED BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE SANITARY SEWER LINE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE IN-CONNECTIONS TO EXISTING OR UNDER CONSTRUCTION INFRASTRUCTURE. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING UTILITIES AND THE PROPOSED UTILITIES.
- GATE VALVES SHALL NOT BE CONSTRUCTED WITHIN THE CURBS, GUTTER PANS OR PAVERS.
- SIGNS AND MARKINGS TO DELINEATE FIRE LANES, AS DESIGNATED BY THE FIRE OFFICIAL, SHALL BE PROVIDED AND INSTALLED BY THE OWNER OR HIS/HER AGENT OF THE PROPERTY INVOLVED.
- ALL WATERLINE MATERIALS SHALL BE CONSTRUCTED OF CLASS 2 DIP.
- A KNOX BOX WILL BE REQUIRED ON EACH BUILDING. THE LOCATION OF THE KNOX BOX CAN BE COORDINATED WITH THE FIRE MARSHAL'S OFFICE.
- ALL PROPOSED SANITARY SEWER IS PUBLIC.
- THE TYPE K COPPER WATER SERVICE LATERALS ARE ON THE PRIVATE SIDE OF THE METER. THE PUBLIC PORTION OF THE WATER SERVICE WILL BE IN ACCORDANCE WITH THE ACSA STANDARD DETAILS.
- ALL WATER LINES AND VALVES (PIV) AND AIR RELEASE BACKFLOW DEVICE ARE REQUIRED AT EACH BUILDING.
- AN RWSA INSPECTOR IS REQUIRED FOR ALL WATERLINE TIE INS AND WORK WITHIN 30' OF RWSA UTILITIES.
- RWSA WILL REQUIRE AN RWSA INSPECTOR ON SITE FOR THE PROPOSED 12" WATERLINE TAP, WITH THREE (3) DAYS NOTICE. RWSA WILL REVIEW THE T.S.&V., DISINFECTION, AND PRESSURE TESTS.
- ALL FIRE HOSE THREADS SHALL BE C&O TYPE.
- ARB: VISIBILITY OF ALL MECHANICAL EQUIPMENT FROM THE ENTRANCE CORRIDOR SHALL BE ELIMINATED.

SITE PLAN LEGEND

GRADING & DRAINAGE NOTES

1. ALL MATERIAL INSIDE FORMS SHALL BE CLEAN AND FREE OF ALL ROCKS AND OTHER LOOSE DEBRIS. SUB-BASE MATERIAL SHALL BE COMPACTED BY MECHANICAL MEANS.
2. CONCRETE SHALL NOT BE PLACED UNLESS THE AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT (F) IN THE SHADE AND RISING.
3. ALL EXISTING CURBS, CURB & GUTTER, SIDEWALK, AND STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JUNCTION. DEMOLITION AND DISPOSAL COST TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PERMIT WILL BE MADE FOR THIS WORK.
4. DRIVEWAY ADJUSTMENTS ARE TO BE DONE IN GENTLE TRANSITIONS RATHER THAN ABRUPT BREAKS AT THE BACK OF WALKS. GRAVEL DRIVEWAYS ABOVE STREET GRADE SHALL BE PAVED FOR A MINIMUM DISTANCE OF 20' BEYOND THE BACK OF THE SIDEWALK OR CURB & GUTTER APRON WHERE APPLICABLE.
5. EXISTING ASPHALT CONCRETE PAVEMENT SHALL BE SAW CUT AND REMOVED AS PER THE SPECIFICATIONS. REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO NOT TEAR, BULGE, OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PLACED PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
6. DISPOSAL OF ALL EXCESS MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.
7. CONTRACTOR SHALL EXERCISE CARE, ESPECIALLY AT INTERSECTIONS AND GUTTER LINES, TO PROVIDE POSITIVE DRAINAGE. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST. POSITIVE DRAINAGE OF ALL ROADWAY AREAS TO THE STORM DRAIN INLETS OR OTHER ACCEPTABLE DRAINAGE CHANNELS AS NOTED ON THE PLANS IS REQUIRED.
8. CONTRACTOR SHALL MAINTAIN EXISTING STREAMS, DITCHES, DRAINAGE STRUCTURES, CULVERTS, AND FLOWS AT ALL TIMES DURING THE WORK. CONTRACTOR SHALL PAY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE WHICH MAY OCCUR AS A RESULT OF FAILING TO MAINTAIN ADEQUATE DRAINAGE.
9. ALL STORM SEWER PIPE AND DROP INLETS SHALL BE CLEARED OF DEBRIS AND ERODED MATERIAL PRIOR TO FINAL ACCEPTANCE.
10. ALL STORM SEWER PIPE JOINTS SHALL BE SEATED AND SEALED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
11. A MINIMUM OF 18" VERTICAL & 10' HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER LINES & SANITARY SEWER. A MINIMUM OF 12" VERTICAL AND 5' HORIZONTAL SHALL BE MAINTAINED BETWEEN PARALLEL SANITARY AND STORM SEWER.
12. ALL PUBLIC STORM SEWER SHALL BE RCP OR HOPE & SHALL HAVE A MINIMUM OF 35" DIAMETER WITH A MINIMUM SLOPE OF 0.25% WITHIN THE R/W.
13. ALL CONSTRUCTION CROSSING POINTS SHALL MEET ADA ACCESSIBLE STANDARDS, AND IN ACCORDANCE WITH SECTION 403.3, THE CROSS SLOPES OF THE WALKWAYS SHALL NOT BE STEEPER THAN 3%. ADDITIONALLY, ANY CHANGE IN LEVEL GREATER THAN 1/4" HIGH SHALL BE RAMPED AND SHALL COMPLY WITH SECTIONS 405 OR 406 PER SECTION 393.4.
14. CONTRACTOR SHALL INSTALL, AND MODIFY AS NECESSARY THE EXISTING RETAINING WALLS BEING UTILIZED, AND ENSURE HANDRAILS AND GUARDRAILS ARE LOCATED ON ALL RETAINING WALLS IN COMPLIANCE WITH ALL CURRENT COUNTY & STATE REQUIREMENTS. 42" GUARDRAILS ARE REQUIRED IN ACCORDANCE WITH 2012 VA CONSTRUCTION CODE 303.2 AT THE TOP OF ANY RETAINING WALL WITH A DIFFERENCE IN GRADE EXCEEDING 30".
15. FINAL DESIGN OF THE BUILDING FOUNDATIONS, WALLS, FACADES & THE CORRESPONDING WATERPROOFING SHALL BE COMPLETED BY THE ARCHITECT TO ALLOW FOR THE PROPOSED GRADE CHANGES SHOWN.
16. DURING CONSTRUCTION THE ACTUAL WALL HEIGHTS MAY VARY FROM THE EXISTING & DESIGN ELEVATIONS. THE CONTRACTOR SHALL CONSULT A PROFESSIONAL LICENSED STRUCTURAL ENGINEER FOR THE CONSTRUCTION OF ANY RETAINING WALL. DESIGNS ARE NOT FURNISHED BY COLLINS ENGINEERING AND ALL FINAL DESIGNS OF THE RETAINING WALLS SHALL BE PROVIDED TO COLLINS ENGINEERING PRIOR TO CONSTRUCTION FOR VERIFICATION. FINAL WALL DESIGN SHALL INCLUDE ALL AS-BUILT PLANNIMETRICS, INCLUDING BUT NOT LIMITED TO ANY VEHICULAR GUARDRAILS, PEDESTRIAN HANDRAILS, PARKING SPACE OVERHANGS AND LANDSCAPING.
17. CONTRACTOR SHALL GRADE THE AREAS SURROUNDING THE PROPOSED BUILDINGS SUCH THAT RUNOFF DRAINS AWAY FROM IT, ENSURING POSITIVE DRAINAGE AT ALL TIMES. PATIOS, SIDEWALKS AND PAVEMENT SHALL BE SLOPED AWAY FROM THE BUILDING WITH A MAXIMUM 1/4" PER 1' CROSS SLOPE WHERE LOCATED WITHIN THE ACCESSIBLE ROUTES AND PVIOUS LANDSCAPING SHALL BE SLOPED A MINIMUM OF 1/4" PER 1' FOR THE INITIAL 10' WHERE LOCATED WITHIN THE PROPERTY LIMITS.
18. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE PARKING LOT. THE SITE SHALL HAVE POSITIVE DRAINAGE THROUGHOUT AND SHALL DIRECT RUNOFF TO PROPOSED OR EXISTING DRAINAGE STRUCTURES.
19. CONTRACTOR SHALL VERIFY ALL TIE-IN CONNECTIONS FOR THE PARKING LOTS TO THE EXISTING ROADS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING ROADS AND/OR CURB AND GUTTER AND THE PROPOSED ROADS, CURB & GUTTER. CONTRACTOR SHALL CONTACT ENGINEER TO INSPECT CURB, ROADWAY & PAVEMENT CONNECTIONS TO EXISTING ROADS, PRIOR TO ANY CONCRETE OR PAVEMENT BEING PLACED.
20. CONTRACTOR SHALL PROVIDE ENGINEER SURVEY WORKSHEETS OF ALL PARKING LOTS, SANITARY SEWER, CLEANOUTS, WATER METERS AND DRAINAGE STRUCTURES PRIOR TO INSTALLATION OF CURBING, DRAINAGE, OR UTILITIES TO COLLINS ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. COLLINS ENGINEERING SHALL VERIFY ALL SURVEY SHEETS TO ENSURE POSITIVE DRAINAGE AND PROPER ELEVATIONS FOR CONSTRUCTION.
21. CONTRACTOR SHALL GRADE THE SITE TO AVOID STANDING WATER. CONTRACTOR TO PROVIDE A SMOOTHLY GRADED TRANSITION FROM DISTURBED AREAS TO UNDISTURBED AREAS. FINISH GRADE SHALL HAVE A CLEAN TOPSOIL. CONTRACTOR SHALL SEED AND STRAW, AND/OR LANDSCAPE ALL BARE AND DISTURBED AREAS. CONTRACTOR TO PROVIDE GROUND COVER MATERIALS OR SOD FOR SLOPES STEEPER THAN 20%. FOUNDATION PLANTINGS SHALL BE PLANTED IN THE FRONT OF THE BUILDING, OUTSIDE THE LIMITS OF THE SIGHT DISTANCE. CONTRACTOR TO CLEAN THE SITE AND DISPOSE OF ALL CONSTRUCTION DEBRIS. GRASS SHALL BE ESTABLISHED PRIOR TO PROJECT CLOSOUT.
22. CONTRACTOR TO REMOVE ALL DEAD BUSHES, TREES, TREE-STUMPS, AND THEIR ABOVE-GROUND ROOTS AND REMOVE ALL PORTIONS OF TREE BRANCHES THAT OVERHANG ROADS AND ALL BRANCHES THAT COME WITHIN 10 FEET OF ROADS.
23. CONTRACTOR SHALL WORK DIRECTLY WITH THE GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER AND SHALL ENSURE ALL OF THEIR DESIGN REQUIREMENTS ARE MET.
24. SEEDS OTHER THAN 3" SHALL BE PLANTED WITH NATIVE STEEP SLOPE MIX WITH ANNUAL RYEGRASS BY ERNST CONSERVATION SEEDS AT A RATE OF 60 LBS. PER ACRE, OR 1 LB. PER 1,000 SF.
25. NO PROPOSED GRADE SHALL EXCEED 2:1 SLOPE.
26. HANDRAILS SHALL BE INSTALLED ON ALL ADA RAMPS AND STEPS WITHIN THE SITE. HANDRAILS/GUARDRAILS SHALL BE INSTALLED ALL RETAINING WALLS THAT ARE HIGHER THAN 30".
27. WALLS A-H ARE PROPOSED CONCRETE RETAINING WALLS, SEE FINAL PLANS FOR ADDITIONAL DETAILS AND STRUCTURAL DESIGN.



REVISIONS

DATE	REVISION DESCRIPTION
12/1/25	INITIAL FINAL SITE PLAN SUBMITTAL

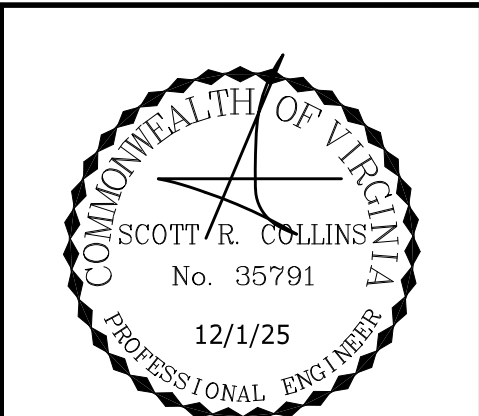
COLLINS ENGINEERING

200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

GENERAL PROJECT NOTES

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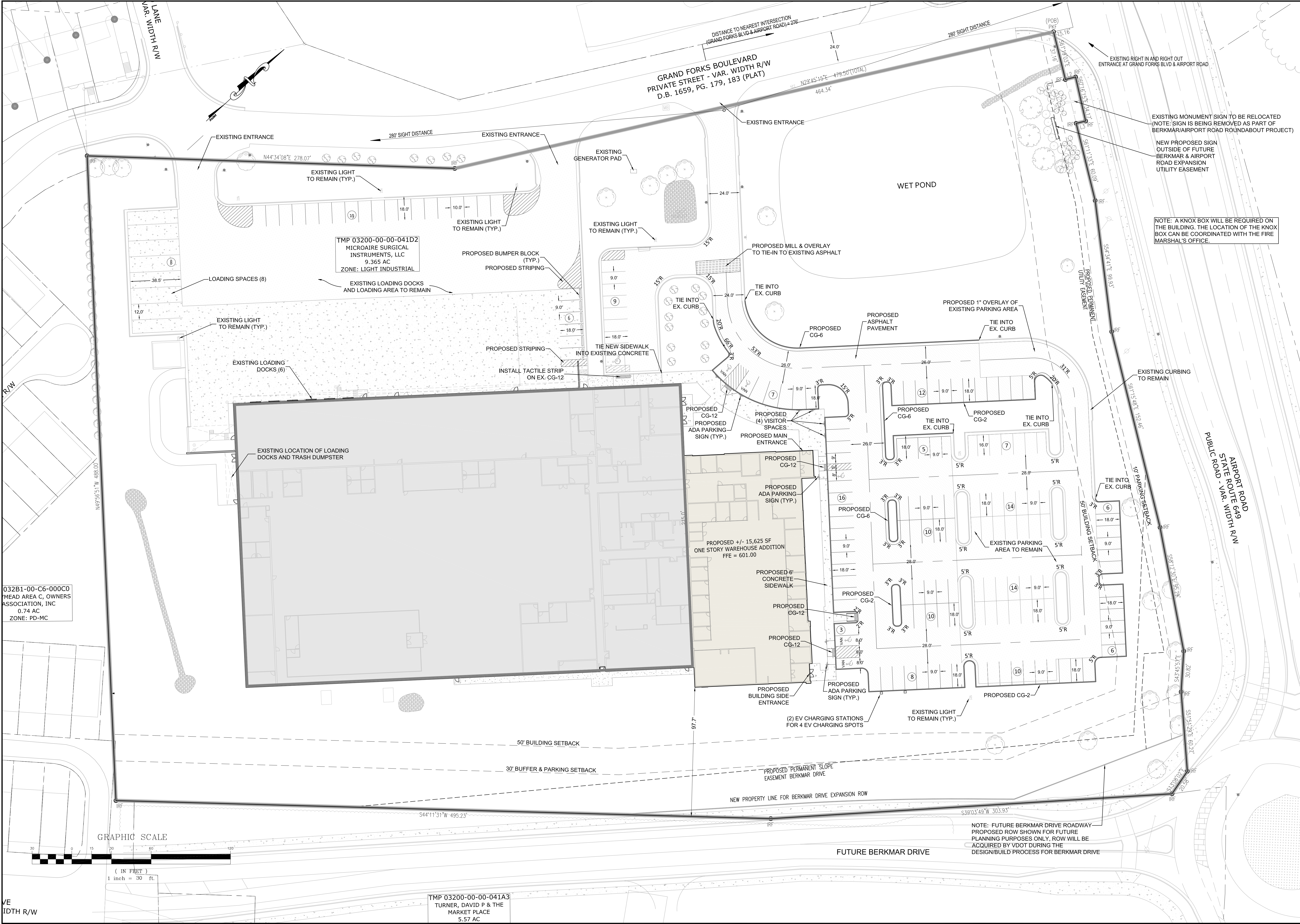
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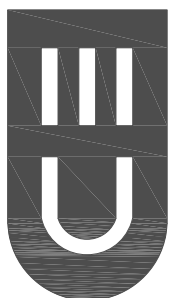
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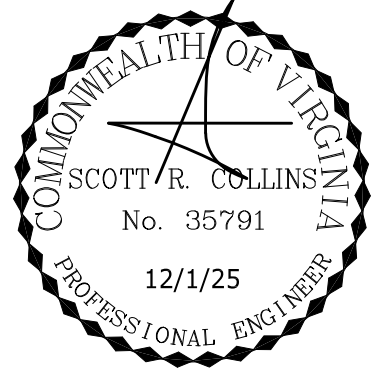
MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

SITE PLAN



JOB NO.	122076
SCALE	1"=30'
SHEET NO.	4

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INITIAL FINAL SITE PLAN SUBMITTAL

DATE

12/1/25

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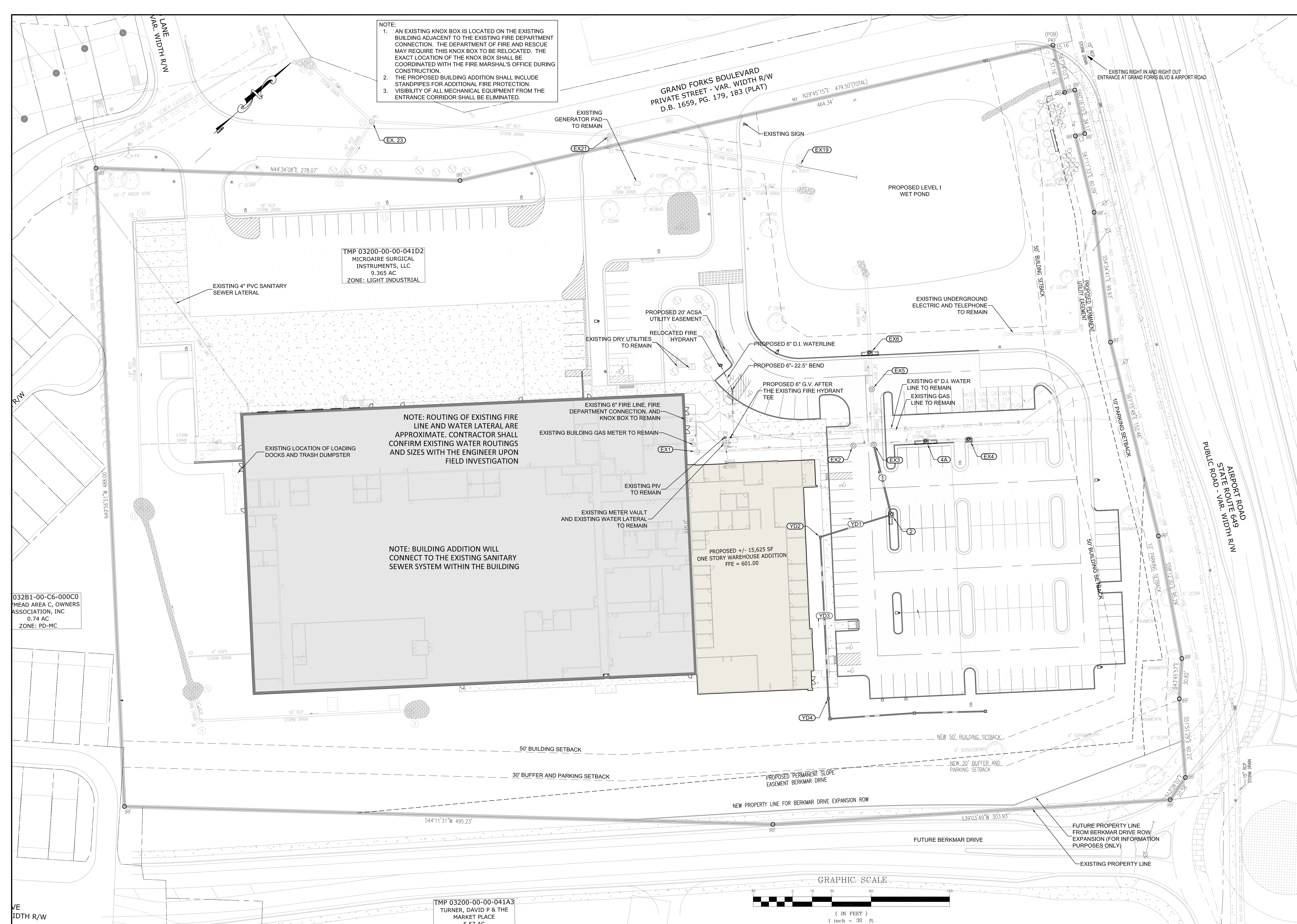
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MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

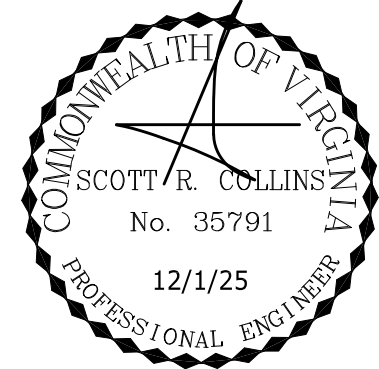
UTILITY PLAN

PROJECT	JOB NO.
122076	122076
SHEET	SCALE
5	1"=30'
	SHEET NO.
	5

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- NOTES:
1. ANY PAVEMENT DAMAGED DURING CONSTRUCTION FROM VEHICLES OR MATERIALS SHALL BE REPLACED OR OVERLAID AS REQUIRED.
 2. ANY CURB DAMAGED DURING CONSTRUCTION SHALL BE REPLACED OR REPAIRED.
 3. CONTRACTOR SHALL VERIFY TIE-IN CONNECTIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE PLAN.
 4. THE EXISTING DRAINAGE AND STORMWATER MANAGEMENT FACILITIES SHALL BE INSPECTED FOR SERVICEABILITY WITH A REPORT PROVIDED TO THE ENGINEER, SO THAT ANY EXISTING DAMAGE MAY BE REMEDIED.



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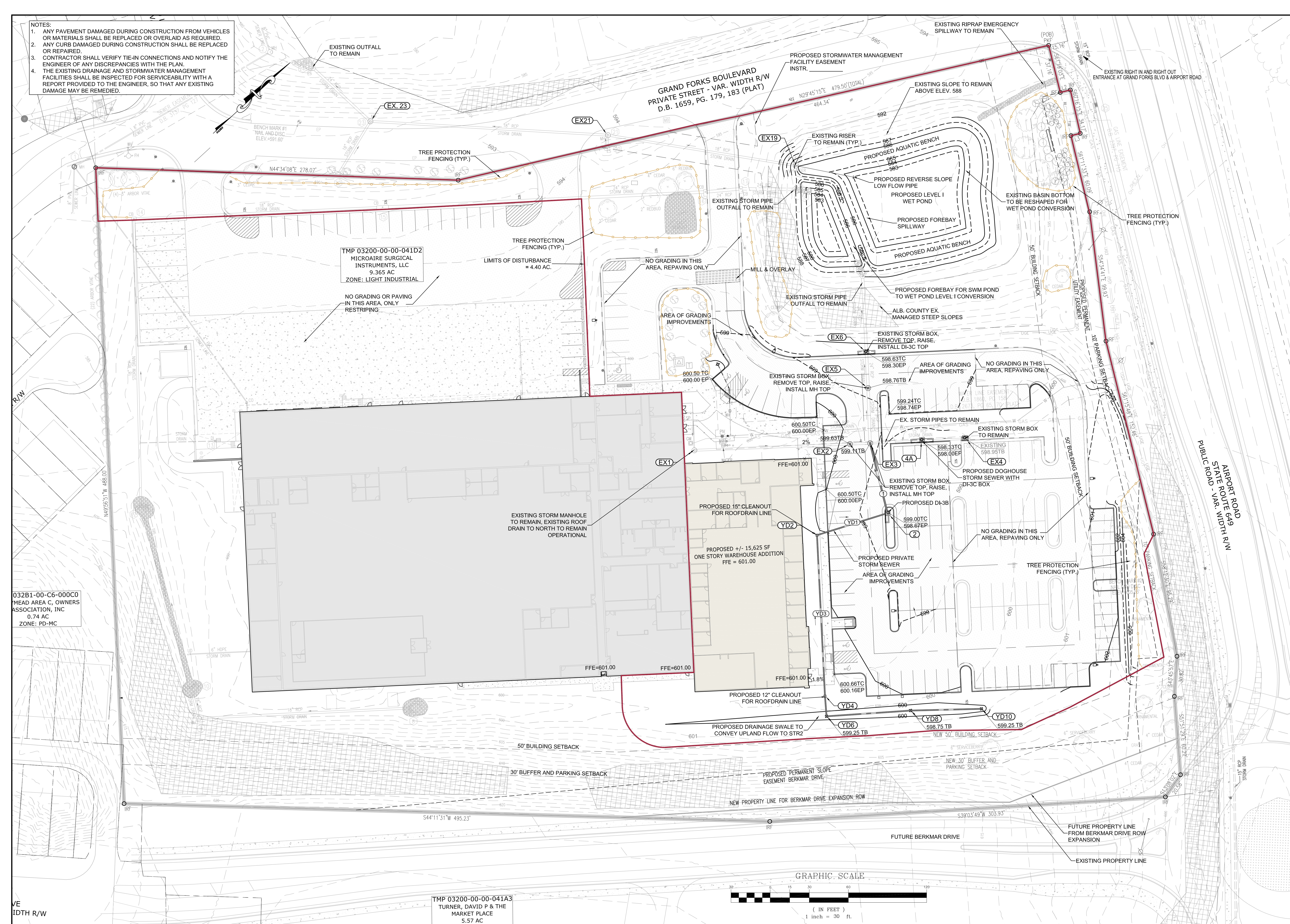
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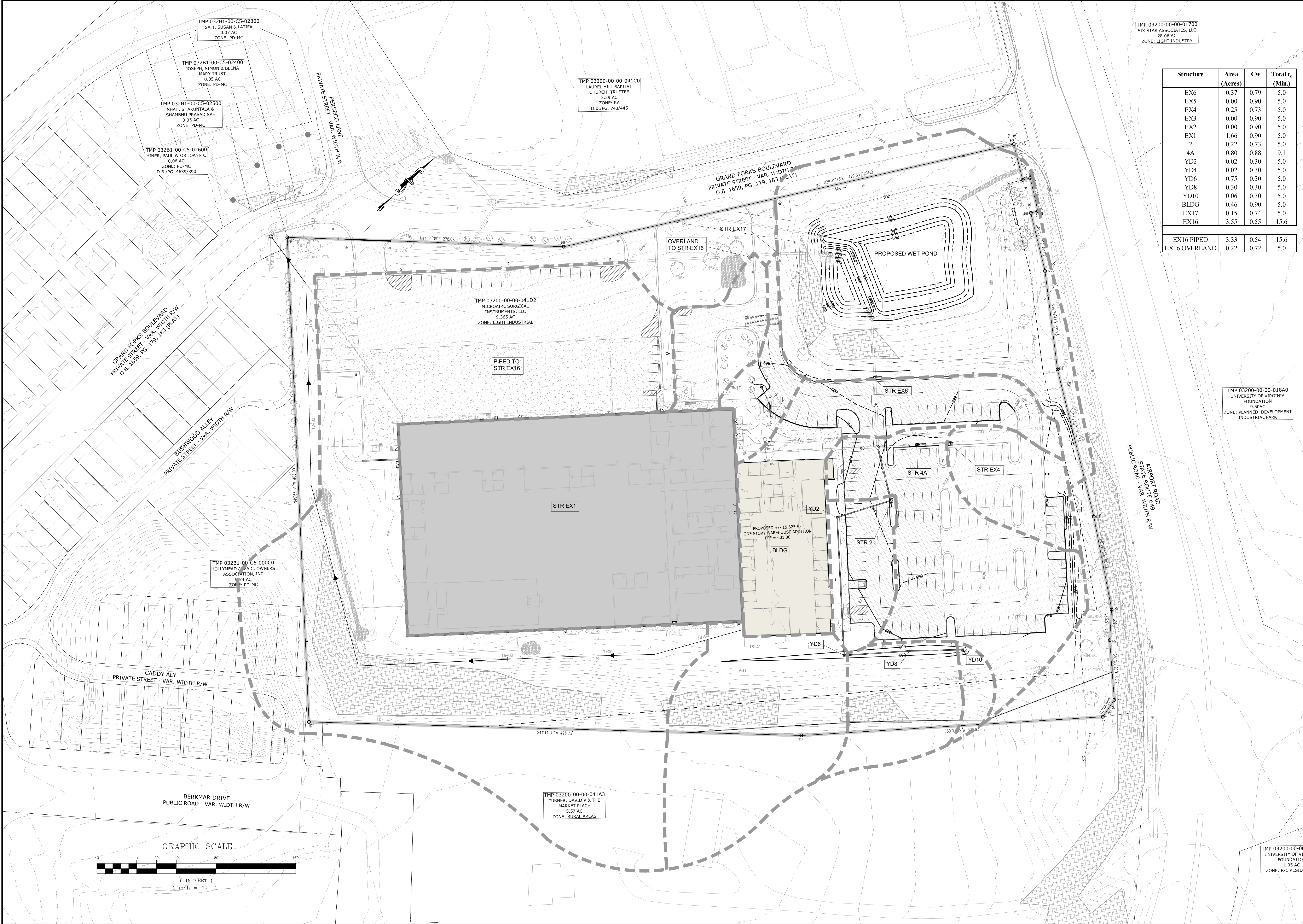
MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

GRADING & DRAINAGE PLAN

JOB NO.
122076
SCALE
1"=30'
SHEET NO.
6

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Structure	Area (Acres)	Cw	Total t _c (Min.)
EX6	0.37	0.79	5.0
EX5	0.00	0.90	5.0
EX4	0.25	0.73	5.0
EX3	0.00	0.90	5.0
EX2	0.00	0.90	5.0
EX1	1.66	0.90	5.0
2	0.22	0.73	5.0
4A	0.80	0.88	9.1
YD2	0.02	0.30	5.0
YD4	0.02	0.30	5.0
YD6	0.75	0.30	5.0
YD8	0.30	0.30	5.0
YD10	0.06	0.30	5.0
BLDG	0.46	0.90	5.0
EX17	0.15	0.74	5.0
EX16	3.55	0.55	15.6

EX16 PIPED	3.33	0.54	15.6
EX16 OVERLAND	0.22	0.72	5.0

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200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT

122076

SCALE

1"=40'

SHEET NO.

7

DRAINAGE MAP & CALCULATIONS

REVISIONS

DATE	REVISION DESCRIPTION
12/1/25	INITIAL FINAL SITE PLAN SUBMITTAL

COMMONWEALTH OF VIRGINIA

SCOTT/R. COLLINS

No. 35791

12/1/25

PROFESSIONAL ENGINEER

DATE

12/1/25

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INITIAL FINAL SITE PLAN SUBMITTAL

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COLLINS ENGINEERING

200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

PROJECT

122076

SCALE

1"=40'

SHEET NO.

7

DRAINAGE MAP & CALCULATIONS

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Design Storm Year =

10

POINT	DOWNSTREAM STRUCTURE	DRAIN AREA ACRES	RUNOFF COEFF. C	CA INCR	ACCUM	INLET TIME MIN	RAIN FALL MIN	RUNOFF Q C.F.S.	INVERT ELEVATIONS UPPER LOWER	LENGTH FEET	SLOPE FT./FT.	DIA INCHES	CAPA- CITY C.F.S.	VEL F.P.S.	FLOW TIME SEC
2		0.22	0.73	0.16	0.92	6.45	6.22	5.7	591.54 590.90	55.18	0.0116	15	7.5	6.8	8.2
EX3	EX3	0.00	0.90	0.00	3.29	9.17	5.54	18.3	591.54 590.90	55.18	0.0116	15	7.5	6.8	8.2
EX5	EX5	0.00	0.90	0.00	3.29	9.24	5.53	18.3	590.80 590.20	42.32	0.0142	24	26.9	9.2	4.6
EX6	EX6	0.00	0.90	0.00	3.29	9.24	5.53	18.3	590.00 589.70	27.70	0.0108	24	23.5	8.3	3.3
EX6	OUT	0.37	0.79	0.29	3.59	9.30	5.52	19.8	589.60 586.74	56.52	0.0506	24	50.9	15.1	3.7
EX4		0.25	0.73	0.18	0.18	5.00	6.67	1.2	595.00 593.42	32.95	0.0480	15	14.1	6.9	4.8
4A	EX3	0.80	0.88	0.70	0.89	9.10	5.56	4.9	593.42 591.50	39.91	0.0481	15	14.2	10.4	3.8
YD10	YD8	0.06	0.30	0.02	0.02	5.00	6.67	0.1	595.25 594.57	54.32	0.0125	12	4.3	2.3	23.2
YD8	YD6	0.30	0.30	0.09	0.11	5.39	6.54	0.7	594.47 594.15	64.66	0.0049	12	2.7	2.9	22.5
YD6	YD4	0.75	0.30	0.23	0.33	5.76	6.42	2.2	594.05 593.97	15.54	0.0051	12	2.8	3.9	4.0
YD4	YD2	0.02	0.30	0.01	0.34	5.83	6.40	2.2	593.87 593.19	123.53	0.0055	12	2.9	4.0	30.8
YD2	2	0.02	0.30	0.01	0.76	6.34	6.25	4.8	593.09 591.64	56.65	0.0256	12	6.2	8.6	6.6
EX1	EX2	1.66	0.90	1.49	1.49	5.00	6.67	9.9	594.50 592.20	115.76	0.0199	18	14.8	8.9	13.0
EX2	EX3	0.00	0.90	0.00	1.49	5.22	6.60	9.9	592.10 591.70	11.98	0.0334	18	19.2	11.0	1.1
BLDG	YD2	0.46	0.90	0.41	0.41	5.00	6.67	2.8	595.50 595.00	5.40	0.0926	8	4.0	12.3	0.4

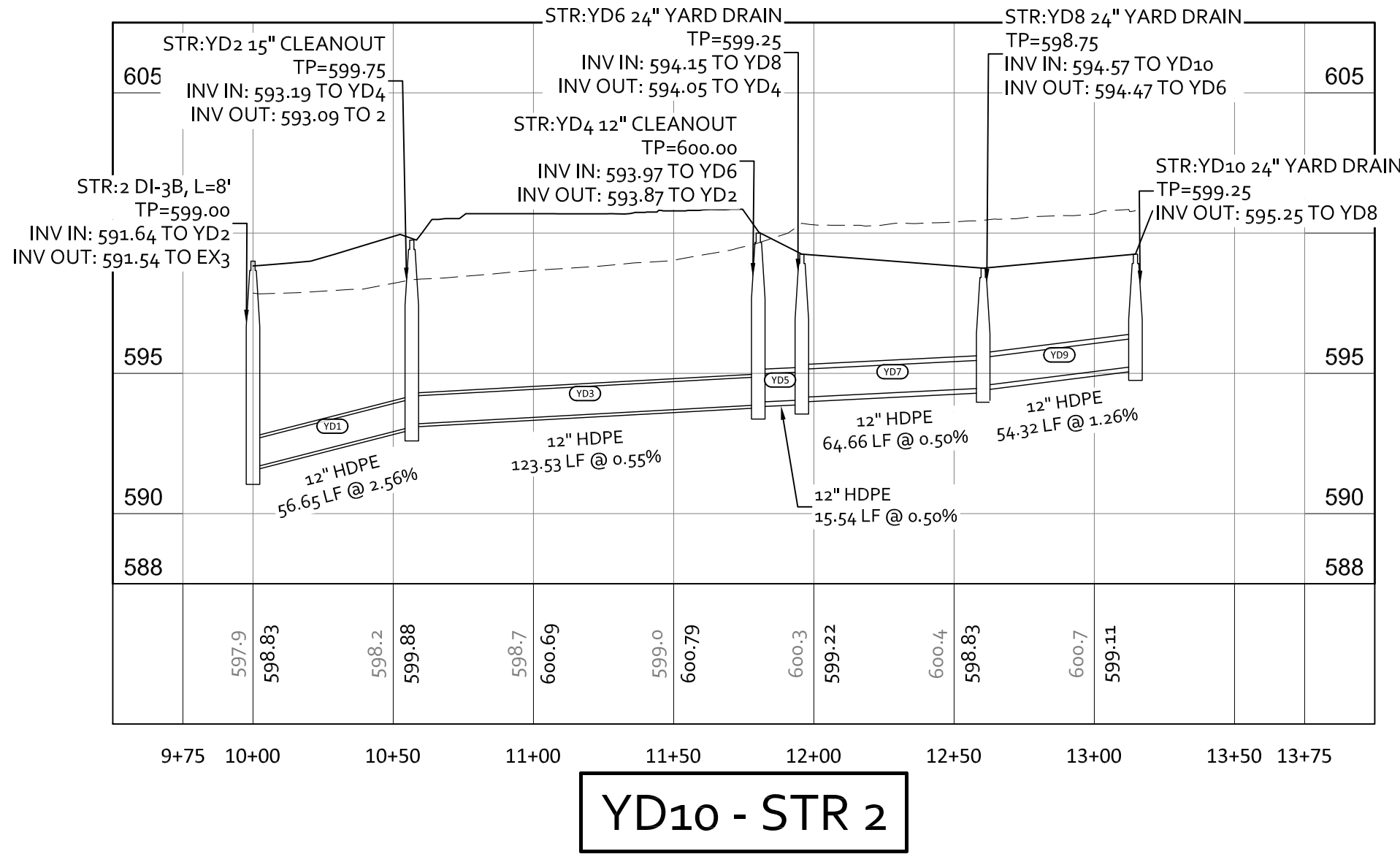
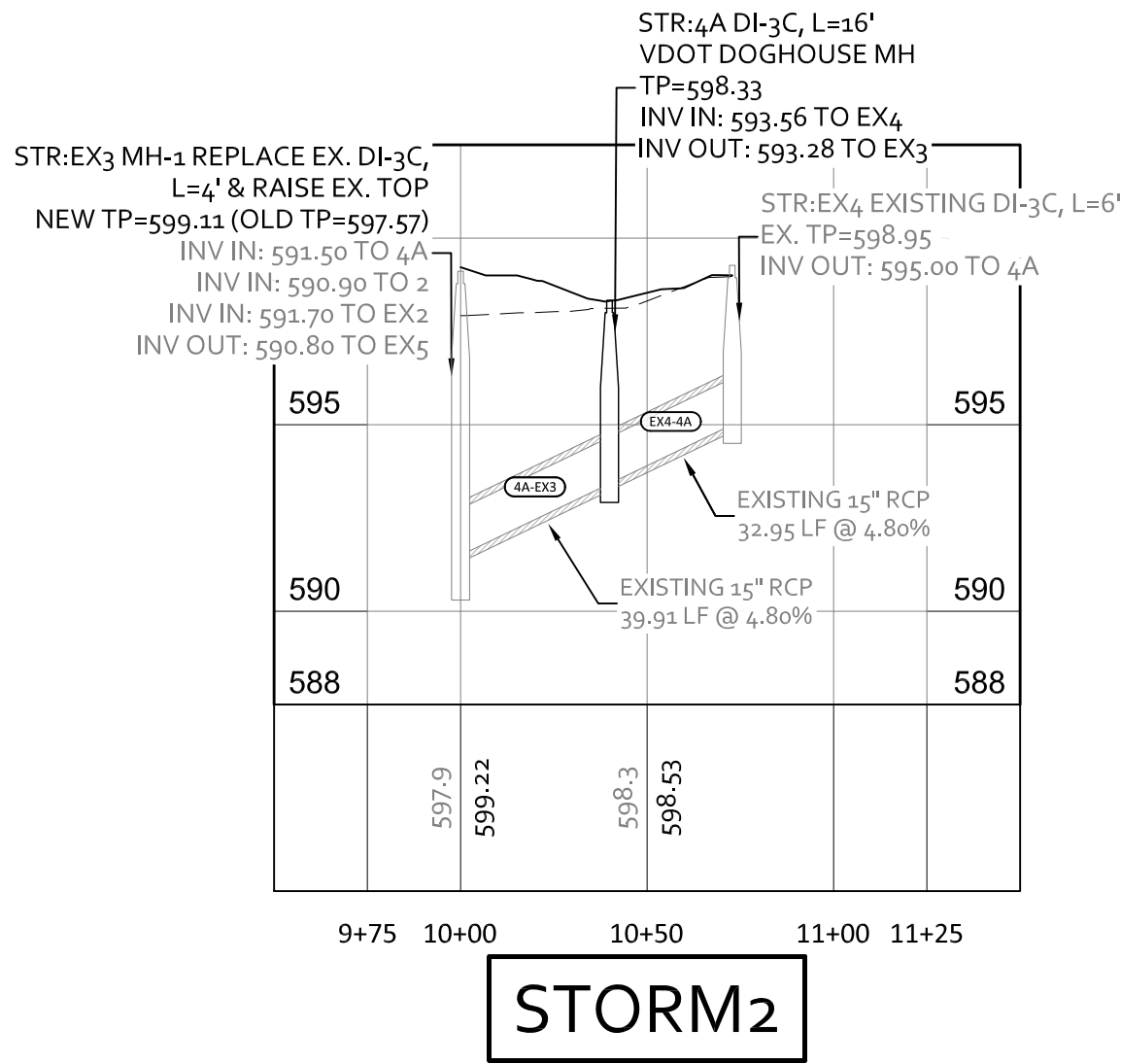
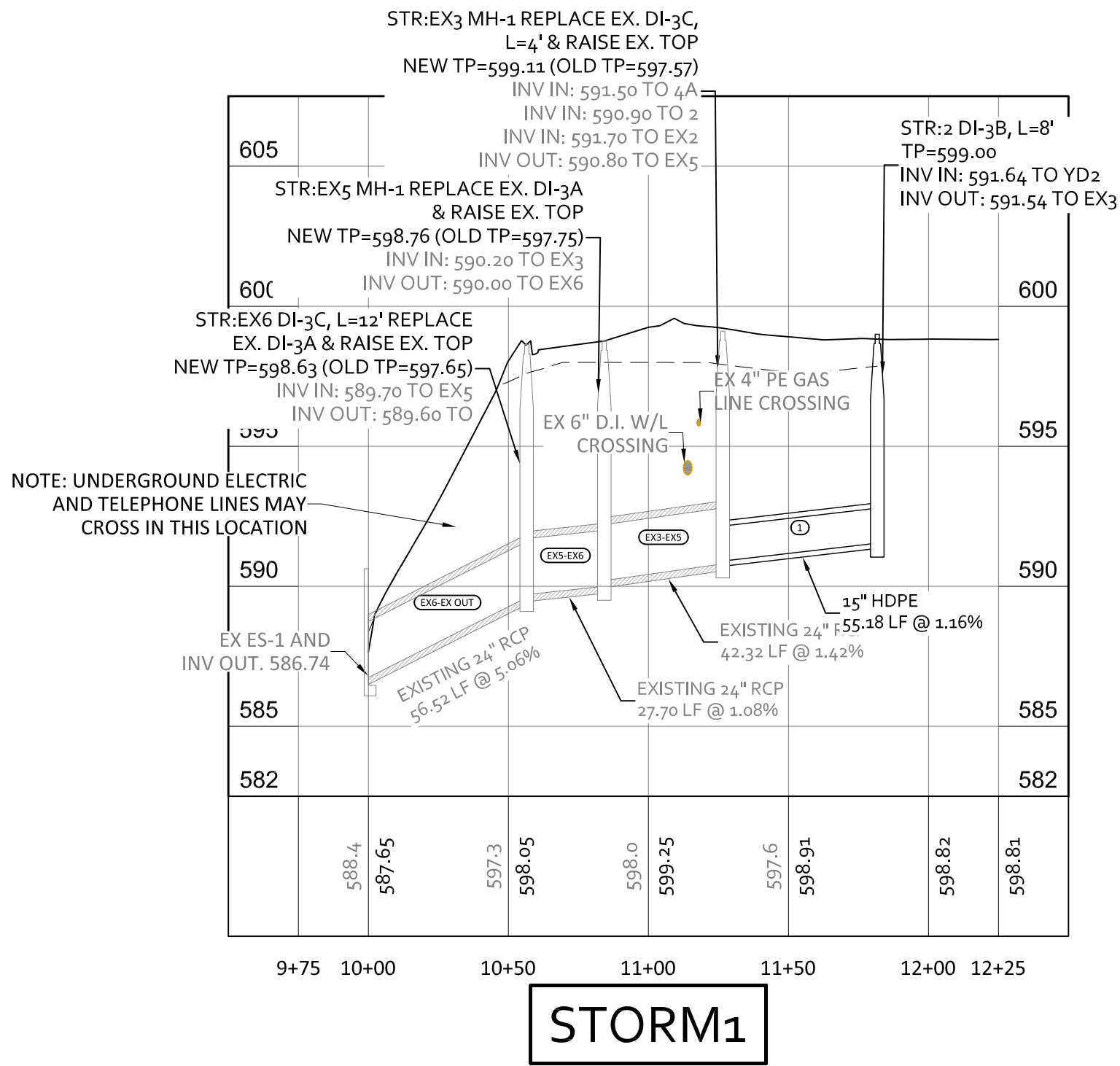
Design Year: 10		Project:				Microaire										Job #: 122076				Prepared by:				KKW, PE	
INLET STATION	OUTLET WATER SURFACE ELEV	L _o	D _o	Q _o ZW	S ₁₀	H _t	V _o	H _o	Q _{IN}	V _{IN}	Q*V _i	V _i ² /2g	H _i	ANGLE	H ₁	H _r	1.3H _i	.5H _i	FINAL H	INLET WATER SURFACE ELEV.	RIM ELEV				
BLDG	595.53	5.40	8	2.75	0.044	0.24	7.9	0.2						0.00	0	0	0.24	NA	0.12	0.65	596.18	601.00			
EX2	592.90	11.98	18	9.94	0.009	0.11	5.6	0.1	9.9	5.6	55.9	0.5	0.17	0	0	0.29	NA	0.15	0.33	593.23	599.63				
EX1	593.40	115.76	18	9.94	0.009	1.04	5.6	0.1						0.00	0	0	0.12	NA	0.06	1.10	594.50	600.80			
YD2	593.08	56.65	12	4.76	0.015	0.86	6.1	0.1	2.8	12.3	33.9	2.4	0.82	0	0	0.97	NA	0.48	1.34	594.42	599.75				
YD4	594.42	123.53	12	2.18	0.003	0.39	2.8	0.0	2.2	2.7	5.89	0.1	0.04	0	0	0.07	NA	0.04	0.43	594.85	600.00				
YD6	594.85	15.54	12	2.15	0.003	0.05	2.7	0.0	0.7	0.9	0.64	0.0	0.00	0	0	0.03	NA	0.02	0.08	594.93	599.25				
YD8	594.95	64.66	12	0.71	0.000	0.02	0.9	0.0	0.1	0.1	0.02	0.0	0.00	0	0	0.00	NA	0.00	0.02	594.97	598.75				
YD10	595.37	54.32	12	0.12	0.000	0.00	0.1	0.0						0.00	0	0	0.00	NA	0.00	0.00	595.37	599.25			
4A	592.50	39.91	15	4.92	0.006	0.23	4.0	0.1	1.2	1.0	1.24	0.0	0.01	0	0	0.07	NA	0.03	0.27	592.77	598.33				
EX4	594.42	32.95	15	1.23	0.000	0.01	1.0	0.0						0.00	0	0	0.00	NA	0.00	0.01	594.43	598.95			
EX6	588.34	56.52	24	19.80	0.008	0.43	6.3	0.2	18.3	5.8	106	0.5	0.18	0	0	0.34	NA	0.17	0.60	588.94	598.63				
EX5	591.30	27.70	24	18.26	0.007	0.18	5.8	0.1	18.3	5.8	106	0.5	0.18	0	0	0.31	NA	0.16	0.35	591.65	598.76				
EX3	591.80	42.32	24	18.26	0.007	0.28	5.8	0.1	9.9	11.0	109	1.9	0.65	0	0	0.78	NA	0.39	0.67	592.47	599.11				
2	592.47	55.18	15	5.71	0.007	0.37	4.7	0.1	4.8	8.6	41.1	1.2	0.41	0	0	0.49	NA	0.24	0.61	593.08	599.00				

PIPE DESIGN																			
Pipe		Hydrology								Pipe									
Starting Structure	Ending Structure	A, Drainage area (acres)	C, rational coeff.	CA increment	CA sum accumulated	Tc, time of conc. (min)	I, rainfall intensity	Q, flow incr. (cfs)	Qt, total flow	Invert in (ft)	Invert out (ft)	L, throat length (ft)	n, manning's coeff.	S, slope	D, Diameter (in)	Full Flow Capacity (cfs)	V, Velocity (fps)	Flow Time (min)	Remarks
Pipe run: STR 22 - OUT																			
2	EX3	0.22	0.73	0.157	0.917	6.45	6.22	0.97	5.71	591.54	590.90	55.2	0.013	0.0116	15	7.54	6.75	0.14	
EX3	EX5	0.00	0.90	0.000	3.294	9.17	5.54	0.00	18.26	590.80	590.20	42.3	0.013	0.0142	24	26.94	9.20	0.08	
EX5	EX6	0.00	0.90	0.000	3.294	9.24	5.53	0.00	18.26	590.00	589.70	27.7	0.013	0.0108	24	23.54	8.27	0.06	
EX6	OUT	0.37	0.79	0.295	3.589	9.30	5.52	1.63	19.80	589.60	586.74	56.5	0.013	0.0506	24	50.89	15.13	0.06	
Pipe run: EX4 - EX3																			
EX4	4A	0.25	0.73	0.185	0.185	5.00	6.67	1.23	1.23	595.00	593.42	33.0	0.013	0.0480	15	14.15	6.88	0.08	
4A	EX3	0.80	0.88	0.701	0.886	9.10	5.56	3.90	4.92	593.42	591.50	39.9	0.013	0.0481	15	14.17	10.42	0.06	
Pipe run: YD10 - STR 2																			
YD10	YD8	0.06	0.30	0.017	0.017	5.00	6.67	0.12	0.12	595.25	594.57	54.3	0.013	0.0125	12	4.32	2.34	0.39	
YD8	YD6	0.30	0.30	0.091	0.108	5.39	6.54	0.60	0.71	594.47	594.15	64.7	0.013	0.0049	12	2.72	2.87	0.38	
YD6	YD4	0.75	0.30	0.226	0.335	5.76	6.42	1.45	2.15	594.05	593.97	15.5	0.013	0.0051	12	2.77	3.89	0.07	
YD4	YD2	0.02	0.30	0.006	0.340	5.83	6.40	0.04	2.18	593.87	593.19	123.5	0.013	0.0055	12	2.86	4.01	0.51	
YD2	2	0.02	0.30	0.007	0.761	6.34	6.25	0.04	4.76	593.09	591.64	56.7	0.013	0.0256	12	6.18	8.64	0.11	
Pipe run: EX1 - EX3																			
EX1	EX2	1.66	0.90	1.491	1.491	5.00	6.67	9.94	9.94	594.50	592.20	115.8	0.013	0.0199	18	14.81	8.93	0.22	
EX2	EX3	0.00	0.90	0.000	1.491	5.22	6.60	0.00	9.94	592.10	591.70	12.0	0.013	0.0334	18	19.19	10.95	0.02	
Pipe run: BLD - YD2																			
BLDG	YD2	0.46	0.90	0.413	0.413	5.00	6.67	2.75	2.75	595.50	595.00	5.4	0.013	0.0926	8	3.98	12.31	0.01	

DRAINAGE DESCRIPTIONS

STR. NO.	PIPE INFORMATION					INLET INFORMATION			
	DIA. (in.)	LENGTH* (ft)	SLOPE (%)	INVERT IN	INVERT OUT	MATERIAL	INLET TYPE	Curb Type	SLOT LENGTH (ft)
2	15	55.18	C	591.54	590.90	HDPE	DI-3B	-	8'
EX3	24	42.32	C	590.80	590.20	RCP	NEW MH-1 TOP	-	-
EX3-EX5	24	42.32	C	590.80	590.20	RCP	NEW MH-1 TOP	-	-
EX5	24	27.70	C	590.00	589.70	RCP	NEW MH-1 TOP	-	-
EX5-EX6	24	27.70	C	590.00	589.70	RCP	NEW DI-3C TOP	-	12'
EX6	24	56.52	C	589.60	586.74	RCP	NEW DI-3C TOP	-	12'
EX6-EX OUT	24	56.52	C	589.60	586.74	RCP	NEW DI-3C TOP	-	12'
EX4	15	32.95	C	595.00	593.42	RCP	EXISTING DI-3C	-	6'
EX4-4A	15	32.95	C	595.00	593.42	RCP	DI-3C	-	16'
4A-EX3	15	39.91	C	593.42	591.50	RCP			
YD10	12	54.32	C	595.25	594.57	HDPE	YARD DRAIN	-	24"
YD9	12	54.32	C	595.25	594.57	HDPE	YARD DRAIN	-	24"
YD8	12	64.66	C	594.47	594.15	HDPE			
YD7	12	64.66	C	594.47	594.15	HDPE			
YD6	12	15.54	C	594.05	593.97	HDPE			
YD5	12	15.54	C	594.05	593.97	HDPE			
YD4	12	123.53	C	593.87	593.19	HDPE			
YD3	12	123.53	C	593.87	593.19	HDPE			
YD2	12	56.65	C	593.09	591.64	HDPE			
YD10	12	56.65	C	593.09	591.64	HDPE			
EX1	18	115.76	C	594.50	592.20	RCP	EXISTING MH-1	-	-
EX1-EX2	18	115.76	C	594.50	592.20	RCP	NEW MH-1 TOP	-	-
EX2	18	11.98	C	592.10	591.70	RCP			
EX2-EX3	18	11.98	C	592.10	591.70	RCP			
BLDG	8	5.40	C	595.50	595.00	HDPE	ROOF DRAIN TIE-IN	-	-
BLDG-YD2	8	5.40	C	595.50	595.00	HDPE			

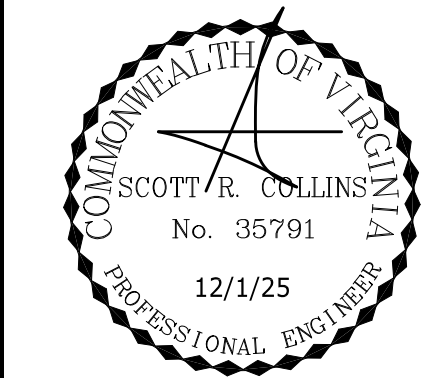
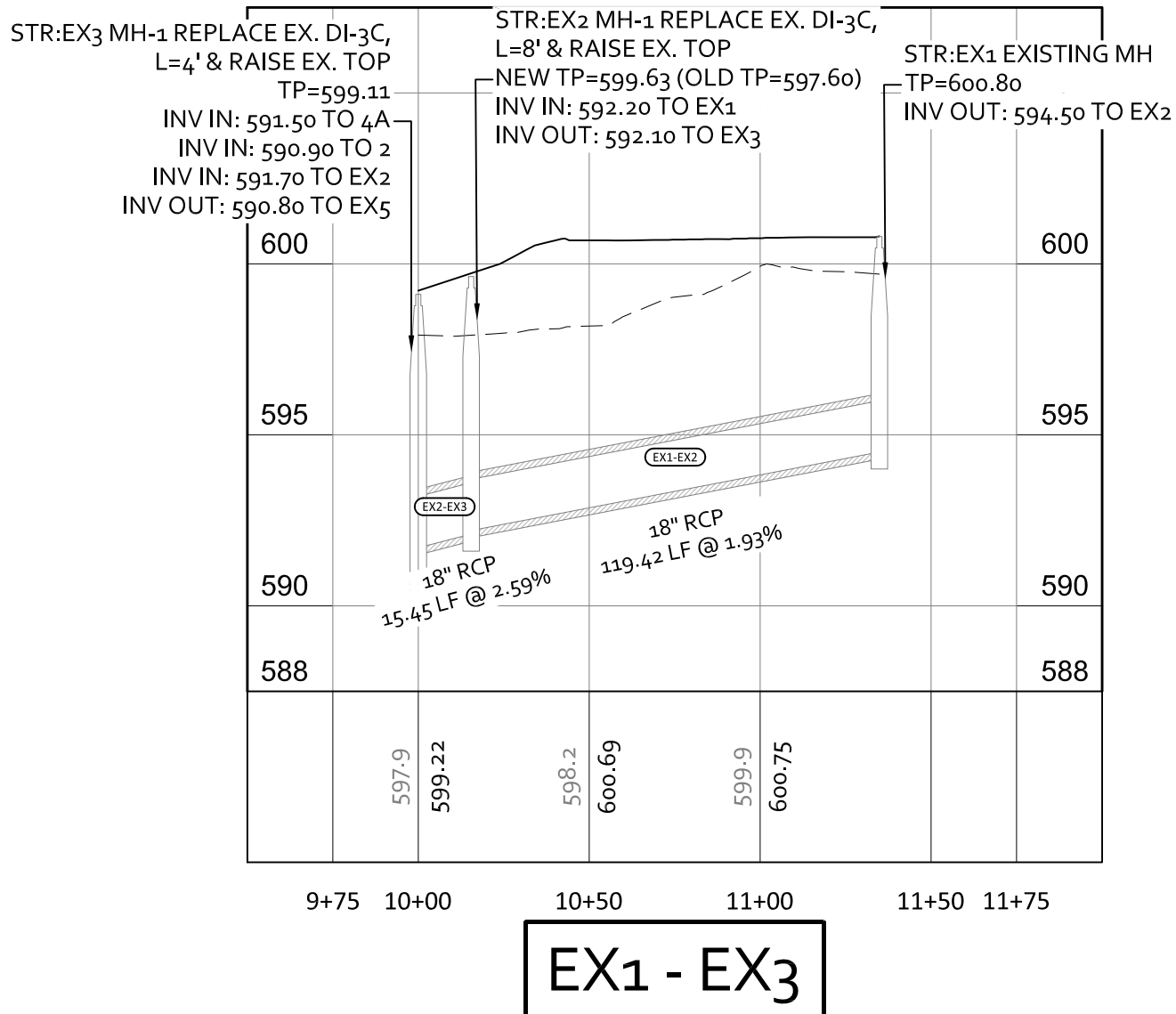
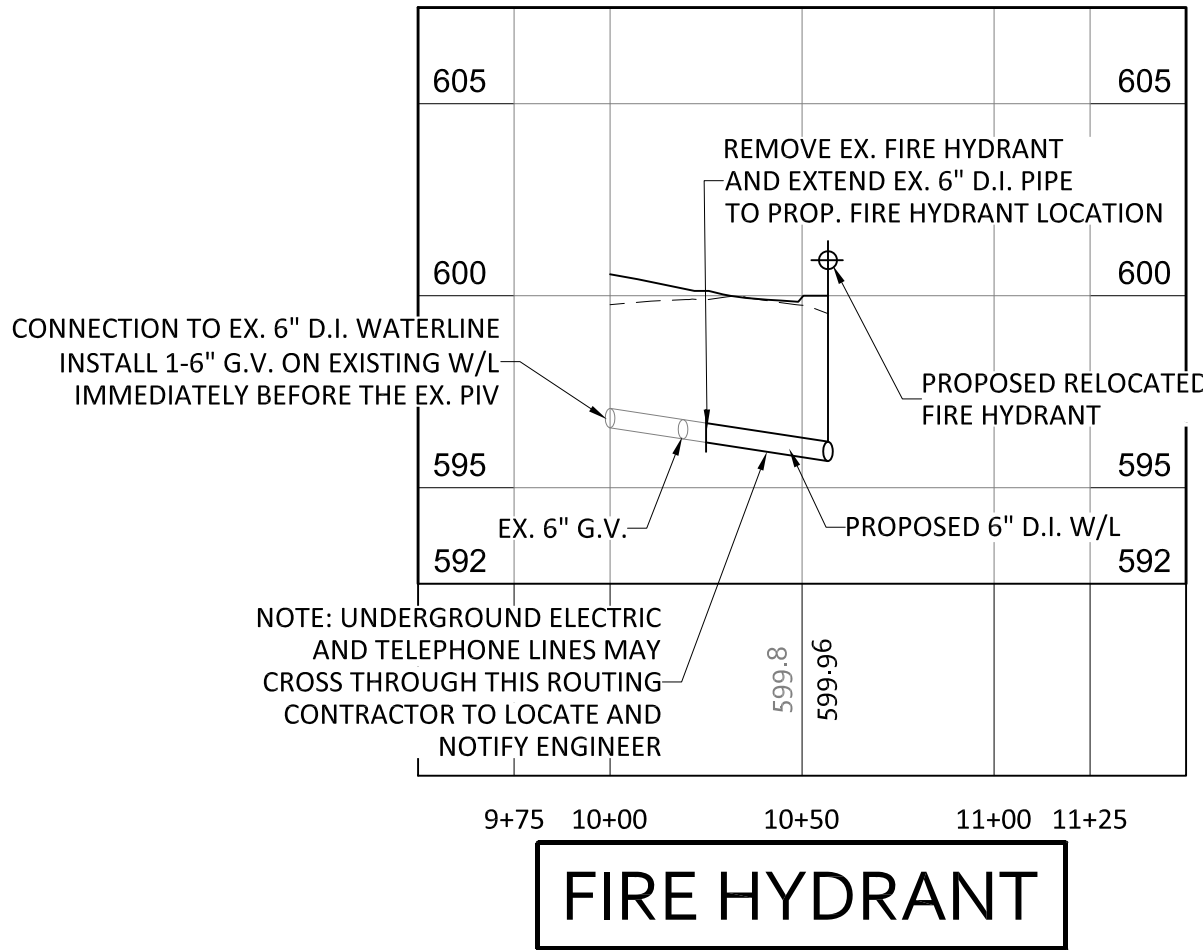
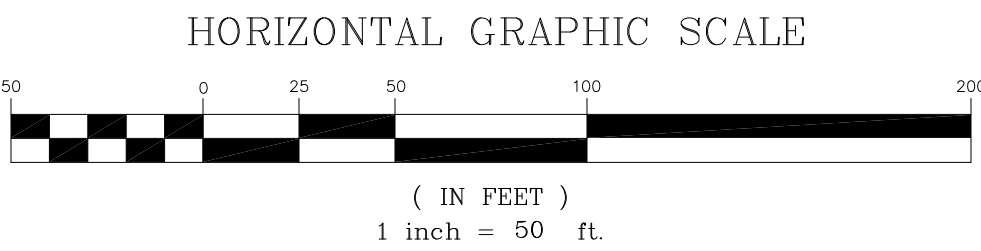
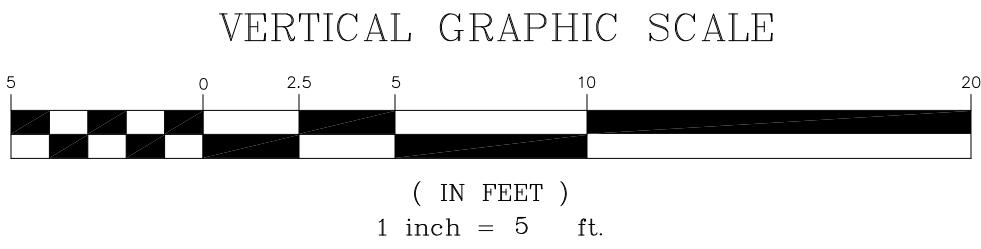
STRUCTURE				DRAINAGE				D	FLOW TYPE
INLET	TYPE	AREA (FT ²)	PERIMETER (FT)	A (ACRES)	C	I (IN/HR)	Q (CFS)		
YD10	24" Nyloplast Yard Inlet	1.15	7.34	0.06	0.30	4.00	0.07	0.0	WEIR FLOW
YD10	24" Nyloplast Yard Inlet	1.15	7.34	0.06	0.30	6.50	0.11	0.4	WEIR FLOW
YD10	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.06	0.30	4.00	0.07	0.4	WEIR FLOW
YD10	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.06	0.30	6.50	0.11	0.6	WEIR FLOW
YD8	24" Nyloplast Yard Inlet	1.15	7.34	0.30	0.30	4.00	0.36	0.0	WEIR FLOW
YD8	24" Nyloplast Yard Inlet	1.15	7.34	0.30	0.30	6.50	0.59	1.1	WEIR FLOW
YD8	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.30	0.30	4.00	0.36	1.2	WEIR FLOW
YD8	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.30	0.30	6.50	0.59	1.7	WEIR FLOW
YD6	24" Nyloplast Yard Inlet	1.15	7.34	0.75	0.30	4.00	0.91	0.0	WEIR FLOW
YD6	24" Nyloplast Yard Inlet	1.15	7.34	0.75	0.30	6.50	1.47	2.0	WEIR FLOW
YD6	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.75	0.30	4.00	0.91	2.3	WEIR FLOW
YD6	24" Nyloplast Yard Inlet - 50% clogged	0.57	3.67	0.75	0.30	6.50	1.47	3.1	WEIR FLOW



NOTE: ALL ROADWAY EMBANKMENT MATERIAL SHALL CONSIST OF SOIL AND BE PLACED IN SUCCESSIVE UNIFORM LAYERS NOT MORE THAN 18 INCHES IN THICKNESS BEFORE COMPACTION OVER THE ENTIRE ROADBED AREA IN ACCORDANCE WITH VDOT 2020 ROAD AND BRIDGE SPECIFICATION 303.04(h)

NOTE: CLASS I BACKFILL MATERIAL SHALL BE CRUSHER RUN AGGREGATE SIZE NO. 25 OR 26, AGGREGATE BASE MATERIAL SIZE 21A OR 21B, FLOWABLE FILL, CONFORMING TO SECTIONS 205, 208 OR 249 RESPECTIVELY, OR CRUSHED GLASS CONFORMING TO THE SIZE REQUIREMENTS FOR CRUSHER RUN AGGREGATE SIZE 25 AND 26, PER VDOT ROAD AND BRIDGE SPECIFICATIONS, SECTION 302.03(a)2G "BACKFILLING".

- NOTES:
1. ALL FILL TO BE PLACED AT 95% COMPACTION.
 2. MINIMUM 3.5' OF COVER MUST BE MAINTAINED OVER W/L.
 3. MINIMUM OF 1' OF VERTICAL SEPARATION FROM STORM SEWER & W/L AND 1.5' OF SEPARATION BETWEEN W/L & SANITARY SEWER MUST BE PROVIDED.



REVISIONS

REVISION DESCRIPTION
INITIAL FINAL SITE PLAN SUBMITTAL

DATE
12/1/25

COLLINS ENGINEERING
200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902 -434.293.3719

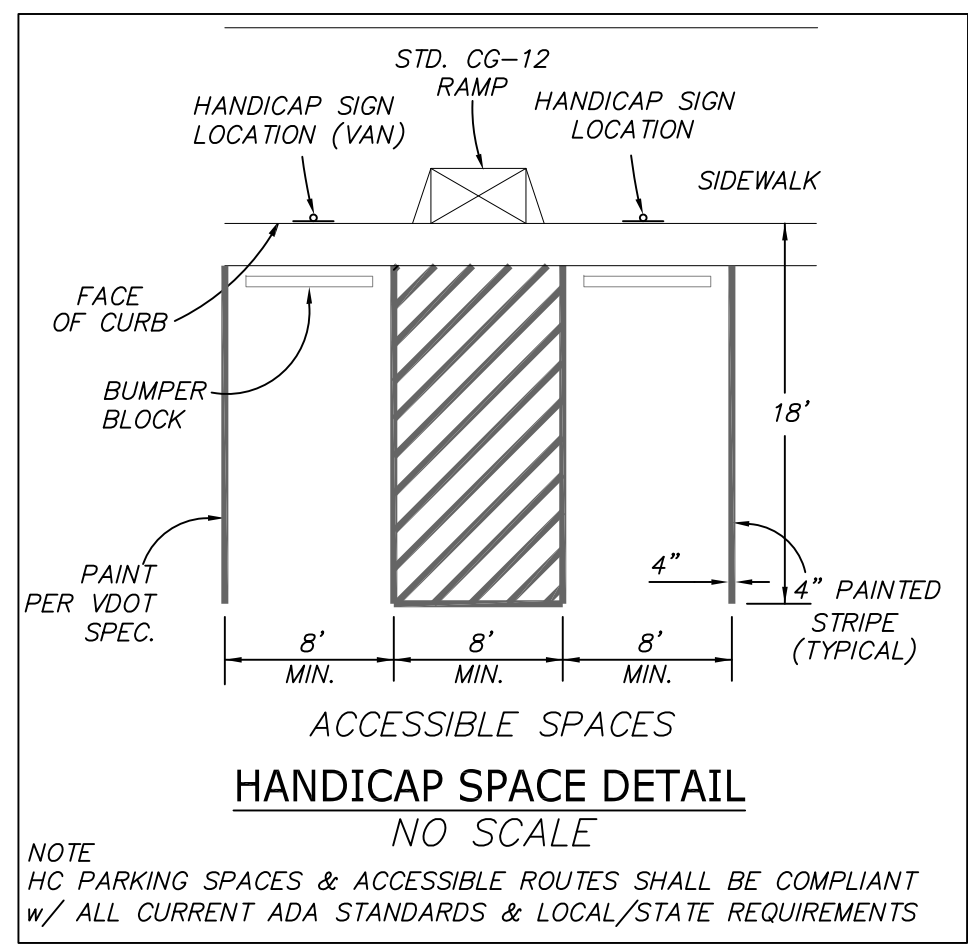
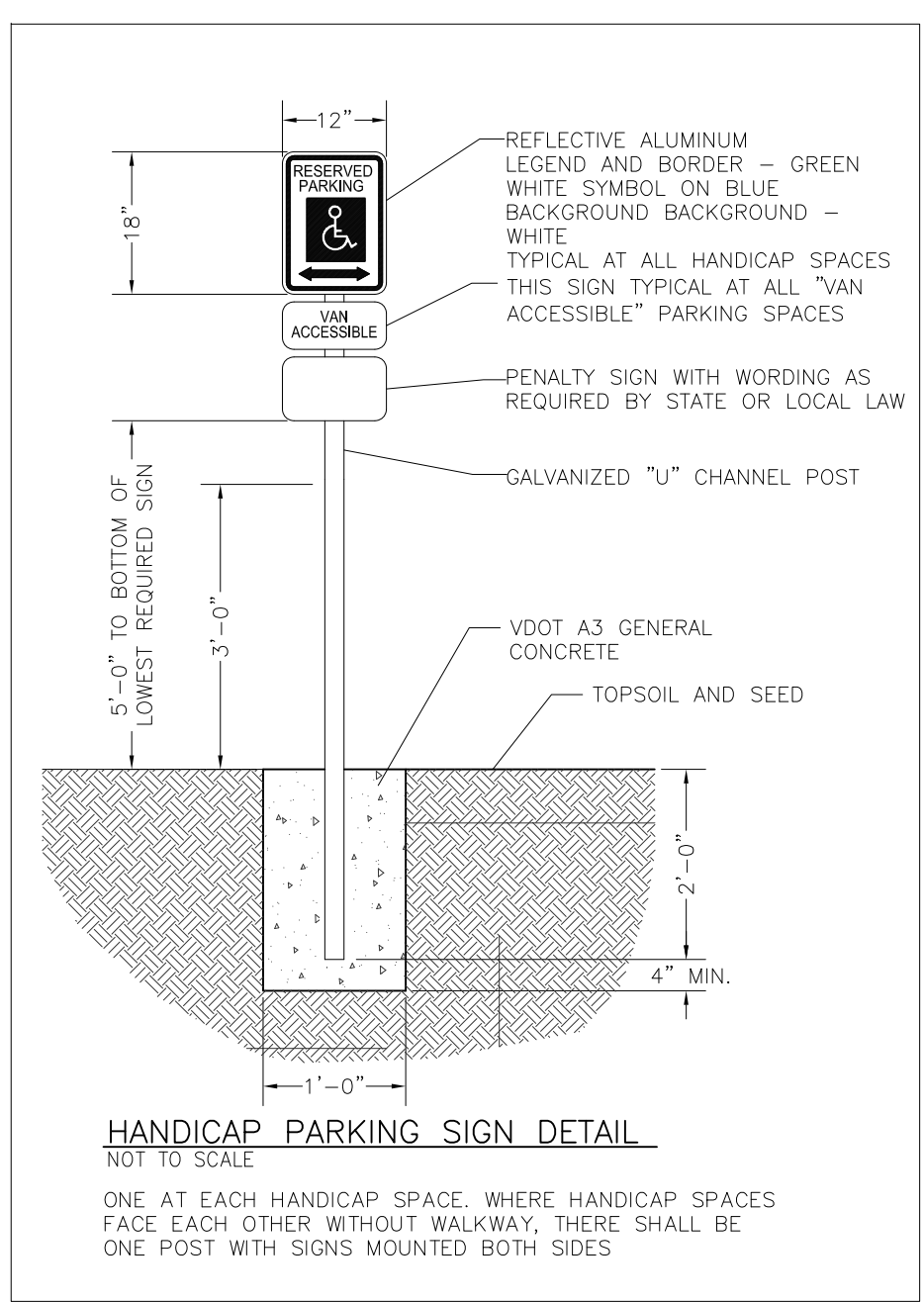
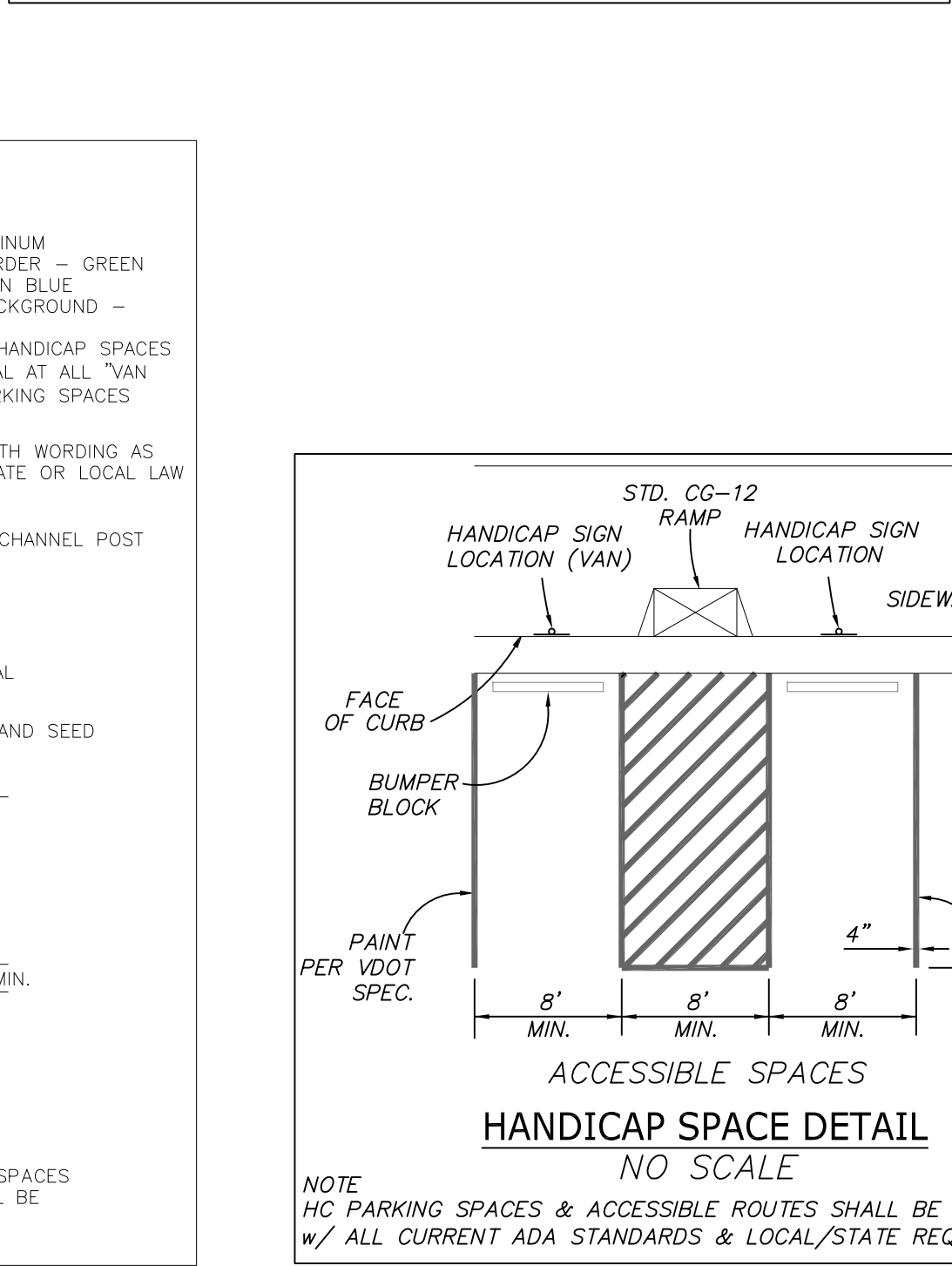
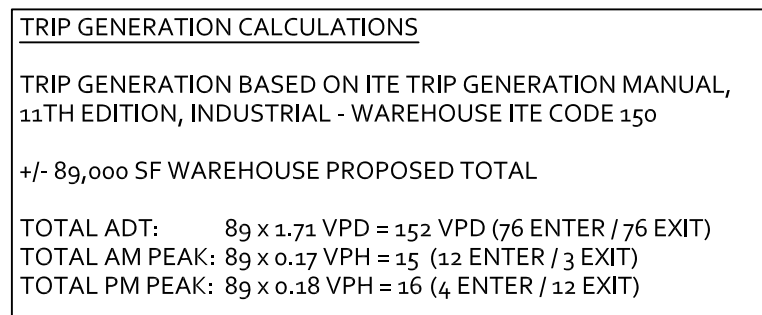
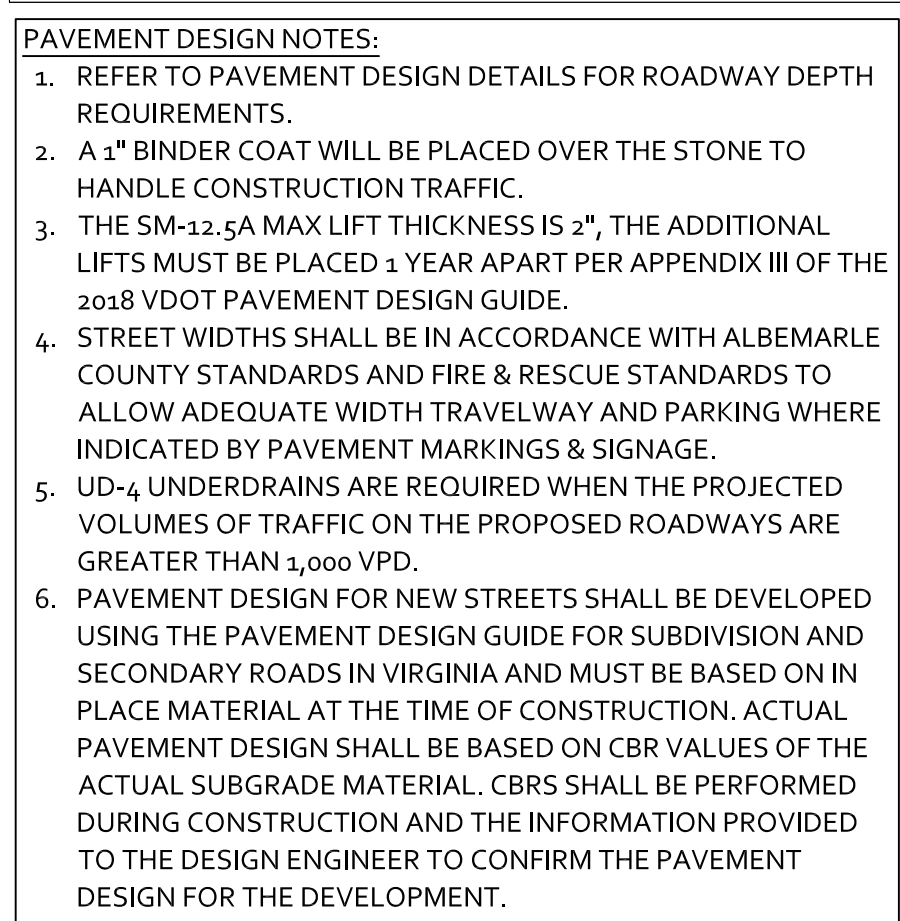
PROJECT
122076

SCALE
N/A

SHEET NO.
9

MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

DRAINAGE & UTILITY PROFILES



SITE PLAN NOTES

GENERAL

1. CONTRACTOR SHALL OBTAIN A VDOT WORK PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE VDOT RIGHT OF WAY. VDOT TO REVIEW AND APPROVE THE PERMIT AND MAINTENANCE OF TRAFFIC PLAN PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE VDOT RIGHT OF WAY.
2. EXISTING AND PROPOSED DUMPSTERS ON SITE SHALL COMPLY WITH APPLICABLE COUNTY REQUIREMENTS. DUMPSTERS SHALL BE SCREENED AND NOT BE VISIBLE FROM RIGHT-OF-WAY.
3. ALL SIDEWALK WITHIN THE LIMITS OF THE DEVELOPMENT SHALL BE PRIVATE SIDEWALKS AND SHALL BE PRIVATELY MAINTAINED.
4. ALL SIDEWALKS AND WALKWAYS SHALL HAVE A MINIMUM CLEAR WIDTH OF 5', EXCEPT WHERE NOTED ON THE SITE PLAN.
5. ALL WALKWAY CROSSINGS SHALL MEET MINIMUM ADA ACCESSIBILITY STANDARDS AND SHALL HAVE A CROSS SLOPES OF 2% OR LESS.
6. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE INSTALLED CONSISTENT WITH MUTCD STANDARDS.
7. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO AN ACCESSIBLE ENTRANCE.
8. ALL SIGNS IDENTIFYING ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 60 INCHES ABOVE THE GROUND/SURFACE (FROM BOTTOM OF SIGN) AND INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. ACCESSIBLE VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
9. RAMP SLOPES OVER 3% IN ELEVATION CHANGE REQUIRE HANDRAILS.
10. PER 502.6 OF THE 2030 ADA DESIGN STANDARDS ACCESSIBLE PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1, AND SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE".
11. PER ADA 502.4, PARKING SPACES AND ACCESS AISLES SHALL COMPLY WITH 302, SLOPES NOT STEEPER THAN 2% SHALL BE PERMITTED.
12. PER ADA 403.3 THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL BE 5% OR LESS. SLOPES OVER 5% WILL REQUIRE A RAMP.
13. PER ADA 206.2.2 AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES ON THE SAME SITE.
14. ALL PARKING SPACES SHALL BE 9'x18', EXCEPT AS NOTED.
15. HANDICAP PARKING SPACES SHALL BE 9'x18', EXCEPT AS NOTED.
16. ALL HANDICAP PARKING SPACES SHALL BE INDICATED WITH A SIGN.
17. CONTRACTOR SHALL VERIFY ALL ROAD CONNECTIONS, INCLUDING RECENTLY CONSTRUCTED AREAS, VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
18. CONTRACTOR SHALL CONFIRM ALL UTILITY, DRAINAGE, AND ROAD CONNECTIONS, AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
19. () REPRESENTS ONE PROPOSED PARKING SPACE.
20. OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13'-0".
21. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 85,000 LBS.
22. SEE SHEET 3 FOR COMPLETE PROJECT BOUNDARY DIMENSIONS AND METES AND BOUNDS.
23. CURB RADI SHOWN, REPRESENTED WITH AN 'R', DIMENSION THE FACE OF CURB.
24. ALL PRIVATE TRAVELWAYS SHALL BE OWNED AND MAINTAINED BY THE LAND OWNER. NO PUBLIC AGENCY, INCLUDING VDOT AND THE COUNTY OF ALBEMARLE WILL BE RESPONSIBLE FOR MAINTAINING THE TRAVELWAYS WITHIN THE DEVELOPMENT.
25. ALL PRIVATE YARD DRAIN DESIGN INFORMATION (INCLUDING INVERTS OF THE SYSTEM) SHALL BE PROVIDED BY THE CIVIL ENGINEER DURING CONSTRUCTION.
26. SEE FINAL SITE PLAN FOR DESIGN OF THE CONCRETE STEPS AND RAMPS.
27. CONTRACTOR SHALL PERFORM ENGINEER SURVEY WORKSHEETS OF ALL ROADWAYS, MANHOLE TOPS AND DRAINAGE STRUCTURES PRIOR TO INSTALLATION OF EIP, DRAINAGE, OR UTILITIES TO COLLINS ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. COLLINS ENGINEERING SHALL VERIFY ALL SURVEY SHEETS TO ENSURE POSITIVE DRAINAGE AND PROPER ELEVATIONS FOR CONSTRUCTION.
28. WALLS WITH HEIGHT OF 3'0" OR GREATER SHALL REQUIRE HANDRAILS. - SEE NOTES & DETAILS SHEET.
29. A KNOW BOX WILL BE REQUIRED ON EACH BUILDING. THE LOCATION OF THE KNOW BOX CAN BE COORDINATED WITH THE FIRE MARSHAL'S OFFICE.

VIRGINIA DEPARTMENT OF TRANSPORTATION

1. VDOT WILL ONLY MAINTAIN WITHIN DRAINAGE EASEMENTS TO THE EXTENT NECESSARY TO PROTECT THE ROADWAY FROM FLOODING OR DAMAGE.
2. A MOT PLAN SHALL BE PROVIDED PRIOR TO THE START OF CONSTRUCTION FOR ANY WORK ON EXISTING ROADWAYS THAT HAVE BEEN ACCEPTED BY VDOT. PRESENTLY, THE EXISTING ROADWAY INTERSECTIONS FOR THIS DEVELOPMENT ARE UNDER CONSTRUCTION AND HAVE NOT YET BEEN ACCEPTED BY VDOT. NO MOT PLAN IS REQUIRED AT THIS TIME FOR THE IMPROVEMENTS AT THE ENTRANCES.
3. IF A TRAFFIC MAINTENANCE PLAN (TMP) IS REQUIRED, THEN IT SHALL BE PREPARED BY AN ADVANCED WORK ZONE CERTIFIED PERSON, CERTIFICATION CARD AND VERIFICATION NUMBER IS REQUIRED ON THE TMP SUBMITTAL.
4. REQUIRE FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES WILL NEED TO BE MAINTAINED AT ALL TIMES FOR WORK WITHIN THE RIGHT OF WAY.
5. LANDSCAPING PLANTS AND TREES ADJACENT TO THE SIGHT DISTANCE TRIANGLE SHALL BE MAINTAINED IN AREA BETWEEN 2' AND 7' FEET ABOVE THE GROUND AS A CLEAR ZONE TO PRESERVE SIGHT LINES AND ACCOMMODATE PEDESTRIANS. THE APARTMENT COMPLEX MANAGEMENT COMPANY WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SIGHT LINES.
6. BRANCHES FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES WILL NEED TO BE MAINTAINED AT ALL TIMES FOR WORK WITHIN THE RIGHT OF WAY.
7. LANDSCAPING PLANTS AND TREES ADJACENT TO THE SIGHT DISTANCE TRIANGLE SHALL BE MAINTAINED IN AREA BETWEEN 2' AND 7' FEET ABOVE THE GROUND AS A CLEAR ZONE TO PRESERVE SIGHT LINES AND ACCOMMODATE PEDESTRIANS. THE APARTMENT COMPLEX MANAGEMENT COMPANY WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SIGHT LINES.
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25. LANDSCAPING PLANTS AND TREES ADJACENT TO THE SIGHT DISTANCE TRIANGLE SHALL BE MAINTAINED IN AREA BETWEEN 2' AND 7' FEET ABOVE THE GROUND AS A CLEAR ZONE TO PRESERVE SIGHT LINES AND ACCOMMODATE PEDESTRIANS. THE APARTMENT COMPLEX MANAGEMENT COMPANY WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SIGHT LINES.
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42. BRANCHES FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES WILL NEED TO BE MAINTAINED AT ALL TIMES FOR WORK WITHIN THE RIGHT OF WAY.
43. LANDSC

ALBEMARLE COUNTY - GENERAL CONSTRUCTION NOTES

1. PRIOR TO ANY CONSTRUCTION WITHIN ANY EXISTING PUBLIC RIGHT-OF-WAY, INCLUDING CONNECTION TO ANY EXISTING ROAD, A PERMIT SHALL BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT). THIS PLAN AS DRAWN MAY NOT ACCURATELY REFLECT THE REQUIREMENTS OF THE PERMIT. WHERE ANY DISCREPANCIES OCCUR THE REQUIREMENTS OF THE PERMIT SHALL GOVERN.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT SPECIFICATIONS AND STANDARDS OF VDOT UNLESS OTHERWISE NOTED.
3. EROSION AND SILTATION CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN AND SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR OTHER CONSTRUCTION.
4. ALL SLOPES AND DISTURBED AREAS ARE TO BE FERTILIZED, SEEDED, AND MULCHED.
5. THE MAXIMUM ALLOWABLE SLOPE IS 2:1 (HORIZONTAL:VERTICAL), WHERE REASONABLY OBTAINABLE, LESSER SLOPES OF 3:1 OR BETTER TO BE ACHIEVED.
6. PAVED, RIP-RAP, OR STABILIZATION MAT LINED DITCH MAY BE REQUIRED WHEN IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, IT IS DEEMED NECESSARY IN ORDER TO STABILIZE A DRAINAGE CHANNEL.
7. ALL TRAFFIC CONTROL SIGNS SHALL CONFORM WITH THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES.
8. UNLESS OTHERWISE NOTED, ALL CONCRETE PIPES SHALL BE REINFORCED CONCRETE PIPE-CLASS III.
9. ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY (29 CFE PART 1926).

 COLLINS ENGINEERING 200 GARRETT STREET, SUITE K.-CHARLOTTESVILLE, VA 22902 -434.293.3719	PROJECT MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN		NOTES & DETAILS
	JOB NO. 122076	SHEET	
	SCALE N/A	SHEET NO. 10	
	REVISIONS		
	DATE 12/1/25	REVISION DESCRIPTION INITIAL FINAL SITE PLAN SUBMITTAL	

ROADWAY CONSTRUCTION NOTES

- GENERAL
- CONSTRUCTION INSPECTION OF ALL PROPOSED ROADS WITHIN THE DEVELOPMENT WILL BE MADE BY THE COUNTY. THE CONTRACTOR MUST NOTIFY THE DEPARTMENT OF COMMUNITY DEVELOPMENT (296-5832) 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION.
 - UPON COMPLETION OF FINE GRADING AND PREPARATION OF THE ROADBED SUBGRADE, THE CONTRACTOR SHALL HAVE CBR TESTS PERFORMED ON THE SUBGRADE SOIL. THREE (3) COPIES OF THE TEST RESULTS SHALL BE SUBMITTED TO THE COUNTY. IF A SUBGRADE SOIL CBR OF 30 OR GREATER IS NOT OBTAINABLE, A REVISED PAVEMENT DESIGN SHALL BE MADE BY THE DESIGN ENGINEER AND SUBMITTED WITH THE TEST RESULTS FOR APPROVAL.
 - SURFACE DRAINAGE AND PIPE DISCHARGE MUST BE RETAINED WITHIN THE PUBLIC RIGHT-OF-WAY OR WITHIN EASEMENTS PRIOR TO ACCEPTANCE BY THE COUNTY. ALL DRAINAGE OUTFALL EASEMENTS ARE TO BE EXTENDED TO A BOUNDARY LINE OR A NATURAL WATERCOURSE.
 - GUARDRAIL LOCATIONS ARE APPROXIMATE. EXACT LENGTH, LOCATION AND APPROPRIATE END TREATMENTS WILL BE FIELD VERIFIED AT THE TIME OF CONSTRUCTION. ADDITIONAL GUARDRAIL MAY BE REQUIRED AT LOCATIONS NOT SHOWN WHEN, IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, IT IS DEEMED NECESSARY. WHEN GUARDRAIL IS REQUIRED, IT SHALL BE INSTALLED FOUR (4) FEET OFFSET FROM THE EDGE OF PAVEMENT TO THE FACE OF GUARDRAIL, AND ROADWAY SHOULDER WIDTHS SHALL BE INCREASED TO SEVEN (7) FEET.
 - WHERE URBAN CROSS SECTIONS ARE INSTALLED, ALL RESIDENTIAL DRIVEWAY ENTRANCES SHALL CONFORM TO VDOT CG-5(A, B OR C).
 - WHERE RURAL CROSS SECTIONS ARE INSTALLED, ALL RESIDENTIAL DRIVEWAY ENTRANCES SHALL CONFORM TO VDOT STANDARD PE-1.
 - COMPLIANCE WITH THE MINIMUM PAVEMENT WIDTH, SHOULDER WIDTH AND DITCH SECTIONS, AS SHOWN ON THE TYPICAL PAVEMENT SECTION DETAIL, SHALL BE STRICTLY ADHERED TO.
 - ROAD PLAN APPROVAL FOR SUBDIVISIONS IS SUBJECT TO FINAL SUBDIVISION PLAT VALIDATION. SHOULD THE FINAL PLAT FOR THIS PROJECT EXPIRE PRIOR TO SIGNING AND RECORDATION, THEN APPROVAL OF THESE PLANS SHALL BE NULL AND VOID.
 - ALL SIGNS OR OTHER REGULATORY DEVICES SHALL CONFORM WITH THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES AND THE ALBEMARLE COUNTY ROAD NAMING AND PROPERTY NUMBERING ORDINANCE AND MANUAL.
 - TRAFFIC CONTROL OR OTHER REGULATORY SIGNS OR BARRICADES SHALL BE INSTALLED BY THE DEVELOPER WHEN, IN THE OPINION OF THE COUNTY ENGINEER, OR DESIGNEE, THEY ARE DEEMED NECESSARY IN ORDER TO PROVIDE SAFE AND CONVENIENT ACCESS.
 - THE SPEED LIMITS TO BE POSTED ON SPEED LIMIT SIGNS ARE 5 MPH BELOW THE DESIGN SPEED, OR AS DETERMINED BY VDOT FOR PUBLIC ROADS.
 - VDOT STANDARD CD-1 OR CD-2 CROSS-DRAINS UNDER TO BE INSTALLED UNDER THE SUBBASE MATERIAL AT ALL CUT AND FILL TRANSITIONS AND GRADE SAG POINTS AS SHOWN ON THE ROAD PROFILES.
 - A VIDEO CAMERA INSPECTION IS REQUIRED FOR ALL STORM SEWERS AND CULVERTS THAT ARE DEEMED INACCESSIBLE TO VDOT OR COUNTY INSPECTIONS. THE VIDEO INSPECTION SHALL BE CONDUCTED IN ACCORDANCE WITH VDOT'S VIDEO CAMERA INSPECTION PROCEDURE AND WITH A VDOT OR COUNTY INSPECTOR PRESENT.

GRADING

- THE LATEST EDITION OF THE ROAD & BRIDGE SPECIFICATIONS, THE ROAD & BRIDGE STANDARDS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS SHALL GOVERN THE MATERIAL AND CONSTRUCTION METHODS OF THIS PROJECT.
- WHERE UNSUITABLE MATERIAL IS ENCOUNTERED IN THE ROADWAY, IT SHALL BE REMOVED FROM THE ENTIRE ROAD RIGHT OF WAY WIDTH AND REPLACED WHERE NECESSARY WITH SUITABLE MATERIAL TO THE SATISFACTION OF THE ENGINEER.
- ALL GROWTH OF TREES AND VEGETATION SHALL BE CLEARED AND GRUBBED FOR THE ENTIRE EASEMENT. OTHER TREES AND VEGETATION WHICH OBSTRUCT SIGHT DISTANCES AT ROAD INTERSECTIONS SHALL BE REMOVED.
- ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE CONSTRUCTION OF THE SUBGRADE.

DRAINAGE

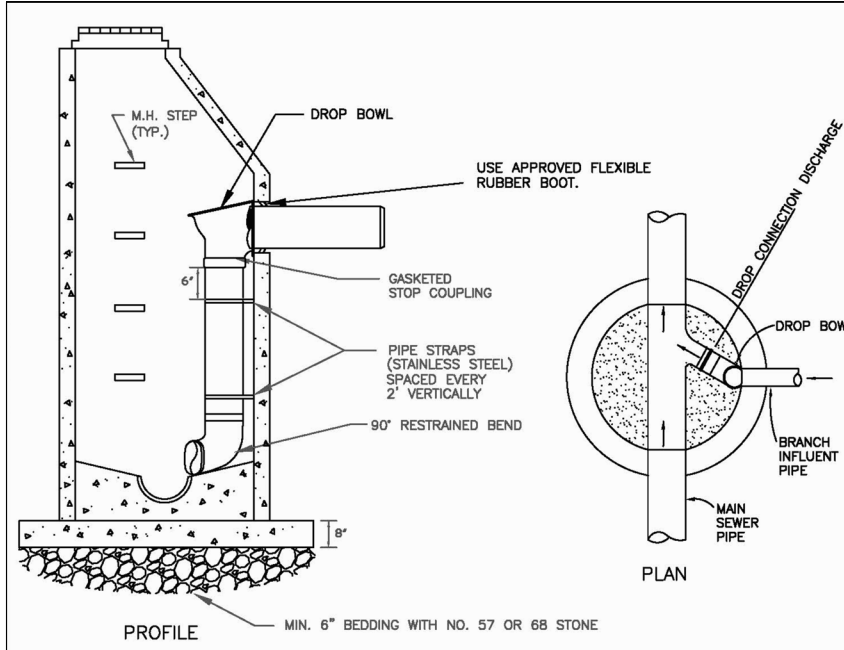
- ALL PIPE CULVERTS, EXCEPT PRIVATE ENTRANCES, SHOWN HEREON ARE TO BE RCP WITH A MINIMUM COVER OF ONE (1) FOOT.
- STANDARD UNDERDRAINS (CD-1 OR CD-2 OR UD-4'S) TO BE PROVIDED AS INDICATED ON THE PLANS, OR WHERE FIELD CONDITIONS INDICATE.
- ALL DRIVEWAY ENTRANCE PIPES SHALL BE A MINIMUM OF TWENTY (20) FEET IN LENGTH AND HAVE A MINIMUM DIAMETER OF FIFTEEN (15) INCHES AND SHALL BE PLACED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS UNLESS OTHERWISE NOTED ON PLANS.
- DRAINAGE EASEMENT SHALL BE CLEARED AND GRADED TO THE SATISFACTION OF THE ENGINEER. DRAINAGE EASEMENTS SHALL EXTEND TO A POINT DEEMED AS NATURAL WATER COURSE.

PAVEMENT

- AN ACTUAL COPY OF THE CBR REPORT IS TO BE SUBMITTED PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE MATERIAL. IF THE SSV VALUES ARE LESS THAN 10, THE DEVELOPER WILL BE REQUIRED TO SUBMIT FOR ENGINEERS APPROVAL THE PROPOSED METHOD OF CORRECTION.
- SUBGRADE MUST BE APPROVED BY THE ENGINEER FOR GRADE, TEMPLATE AND COMPACTION BEFORE BASE IS PLACED.
- TEST REPORTS ON SELECT MATERIALS MUST BE SUBMITTED SHOWING THE MATERIAL MEETS REQUIRED GRADATION FOR TYPE I, II, OR III PRIOR TO PLACING AGGREGATE BASE.
- THE REQUIREMENTS TO PUGMILL AGGREGATE BASE WILL BE WAIVED IN THE EVENT THAT THE SURFACE COURSE IS BEGINNING AT THE COMPLETION OF THE INSTALLATION OF THE AGGREGATE BASE. IN THE EVENT THAT THE SURFACE COURSE IS APPLIED PRIOR TO 60 DAYS, THE PUGMILL REQUIREMENT WILL APPLY.
- THE USE OF AN AGGREGATE SPREADER IS REQUIRED WHEN PLACING AGGREGATE BASE.
- BASE MUST BE APPROVED BY ENGINEER FOR DEPTH, TEMPLATE, AND COMPACTION BEFORE SURFACE TREATMENT IS APPLIED.
- PRIME COAT MUST BE APPLIED TO BASE MATERIAL PRIOR TO PLACEMENT OF ASPHALT (PRIME COAT RC-250 @ 0.3 GAL/SQ. YD.).
- BITUMINOUS SURFACE TO BE APPLIED IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- ENCROACHMENT: POSTS, WALLS, SIGNS, OR SIMILAR ORNAMENTAL STRUCTURES THAT DO NOT ENHANCE A ROADWAY'S CAPACITY OR TRAFFIC SAFETY, SHALL NOT BE PERMITTED WITHIN THE RIGHT OF WAY. ONLY THOSE STRUCTURES SPECIFICALLY AUTHORIZED BY PERMIT ISSUED BY VIRGINIA DEPARTMENT OF TRANSPORTATION MAY BE LOCATED WITHIN THE STREETS RIGHT OF WAY.

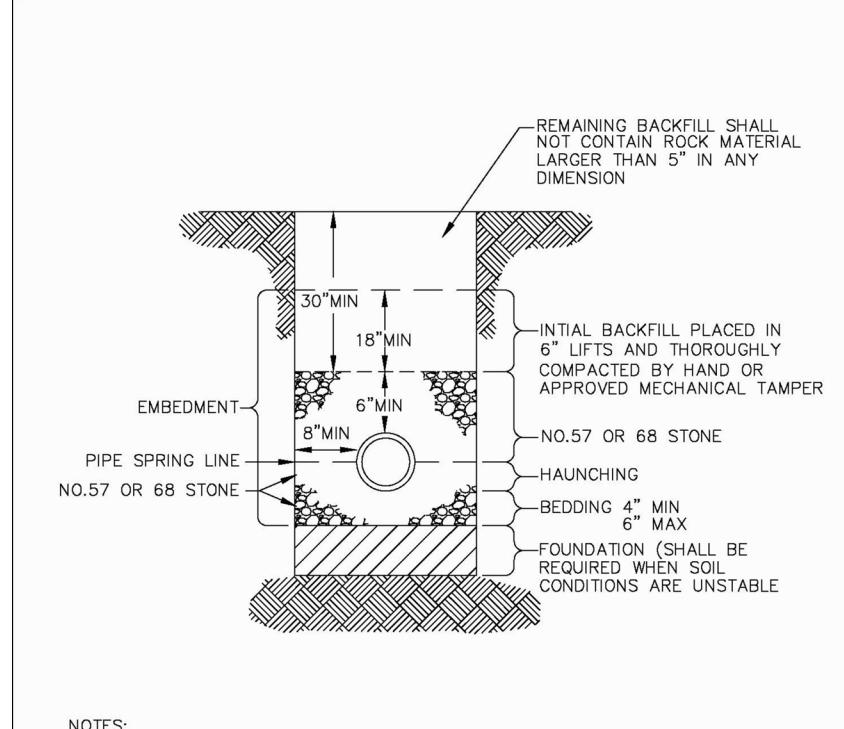
INSPECTIONS

- NOTE - MANDATORY INSPECTIONS ARE REQUIRED AT THE FOLLOWING PHASES:
- INSTALLATION OF ANY ENCLOSED DRAINAGE SYSTEM BEFORE IT IS COVERED.
 - INSTALLATION OF ANY ENCLOSED UTILITY PLACEMENTS WITHIN THE RIGHT-OF-WAY BEFORE BEING COVERED.
- CONSTRUCTION OF THE CUTS AND FILLS, INCLUDING FIELD DENSITY TESTS, BEFORE PLACEMENT OF ROADBED BASE MATERIALS.
 - A FINAL PAVEMENT DESIGN, BASED ON ACTUAL SOIL CHARACTERISTICS AND CERTIFIED TESTS, SHALL BE COMPLETED AND APPROVED BEFORE THE PAVEMENT STRUCTURE IS PLACED.
 - PLACEMENT OF BASE MATERIALS, INCLUDING STONE DEPTHS, CONSISTENT WITH THE APPROVED PAVEMENT DESIGN, PRIOR TO PLACEMENT OF THE PAVING COURSE OR COURSES, FOLLOWED BY FIELD DENSITY AND MOISTURE TESTS AND THE PLACEMENT OF A PAVING COURSE AS SOON AS POSSIBLE.
 - CONSTRUCTION OF PAVEMENT, INCLUDING DEPTH AND DENSITY, UPON COMPLETION AS PART OF THE FINAL INSPECTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING VDOT A MINIMUM OF ONE WEEK PRIOR TO EACH OF THE ABOVE PHASES OF CONSTRUCTION TO SCHEDULE AN INSPECTION.
 - FAILURE OF THE CONTRACTOR TO SCHEDULE THESE INSPECTIONS WILL REQUIRE ADDITIONAL TESTING OF THE ROADS AT THE DISCRETION OF VDOT OR MAY LEAD TO THE ROADS NOT BEING ELIGIBLE FOR STATE MAINTENANCE.



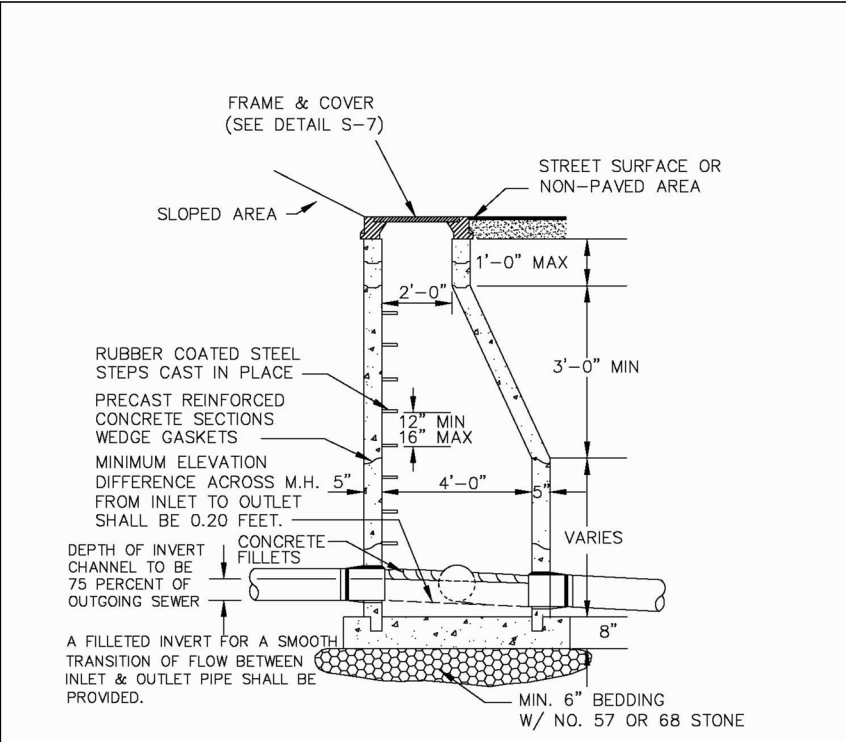
- NOTES:
- VERTICAL DROP PIPE SHALL BE SDR 26 P.V.C. SIZED THE SAME AS THE INCOMING PIPE AND CONNECTED TO THE DROP FITTING WITH STANDARD GASKET JOINT.
 - VERTICAL DROP PIPE SHALL BE STRAPPED TO THE MANHOLE AT PIPE JOINTS. STRAPS SHALL BE MADE OF STAINLESS STEEL.
 - SHAPE INVERT AS NEEDED TO PROVIDE SMOOTH TRANSITION FROM DROP CONNECTION DISCHARGE POINT TO SPRING LINE OF MANHOLE INVERT.
 - DROP CONNECTION DISCHARGE FITTING SHALL BE ORIENTED AT 45 DEGREES INTO THE FLOW.
 - VERTICAL DROP PIPE SHALL BE INSTALLED AT 90 DEGREES FROM THE ACCESS STEPS.
 - MINIMUM 60" DIAMETER MANHOLE REQUIRED: MINIMUM 72" DIAMETER MANHOLE REQUIRED FOR A SINGLE 10" OR 12" DIAMETER DROP CONNECTION, OR TWO 8" DIAMETER DROP CONNECTIONS.
 - 90-DEGREE BEND IS NOT IN CHANNEL. P.V.C. PIPE SHALL EXTEND TO THE EDGE OF THE CHANNEL. HORIZONTAL PIPE SHALL BE GLUED TO THE 90-DEGREE FITTING. STRAP, AS NEEDED, TO BE DETERMINED BY ACSA.

ALBEMARLE COUNTY SERVICE AUTHORITY	STANDARD INTERNAL DROP CONNECTION NOT TO SCALE	REV 8/6/2024 DETAIL S-4
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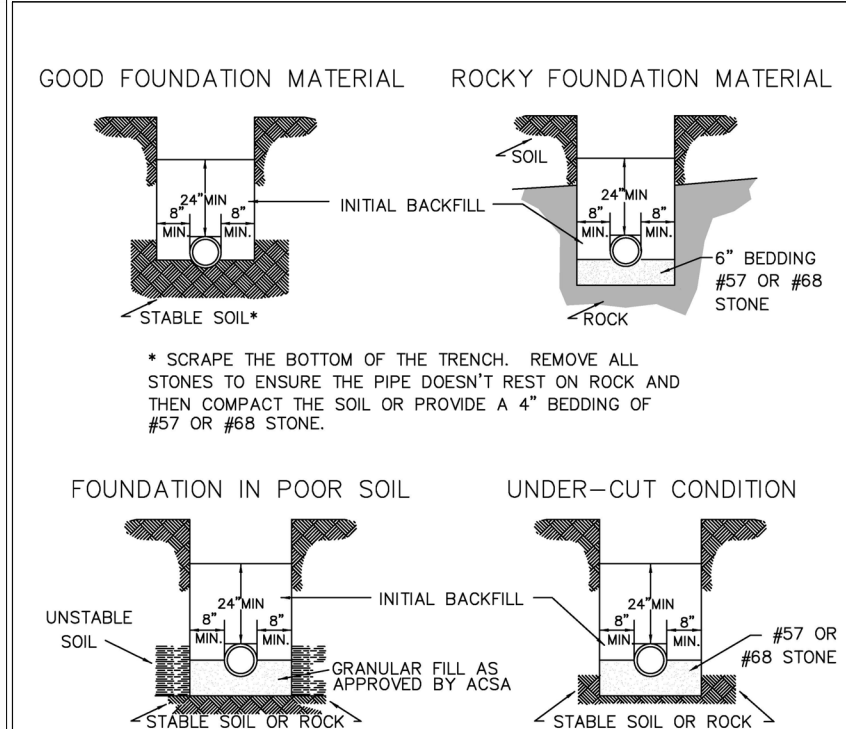
- NOTES:
- OPEN CUTS IN PAVED AREAS WITHIN EXISTING VDOT RIGHT-OF-WAY SHALL BE BACKFILLED ENTIRELY WITH NO. 21A STONE.
 - FOR DUCTILE IRON PIPE, THE BOTTOM OF THE TRENCH SHALL BE SCRAPED AND COMPACTED, AND ALL STONES REMOVED OR A 4" BEDDING OF NO. 57 OR #68 STONE.
 - WHERE ROCK IS ENCOUNTERED PIPE SHALL BE INSTALLED ON A MINIMUM 4" BEDDING OF NO. 57 OR #68 STONE.

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL SEWER PIPE INSTALLATION IN TRENCH NOT TO SCALE	REV 8/6/2024 DETAIL S-1
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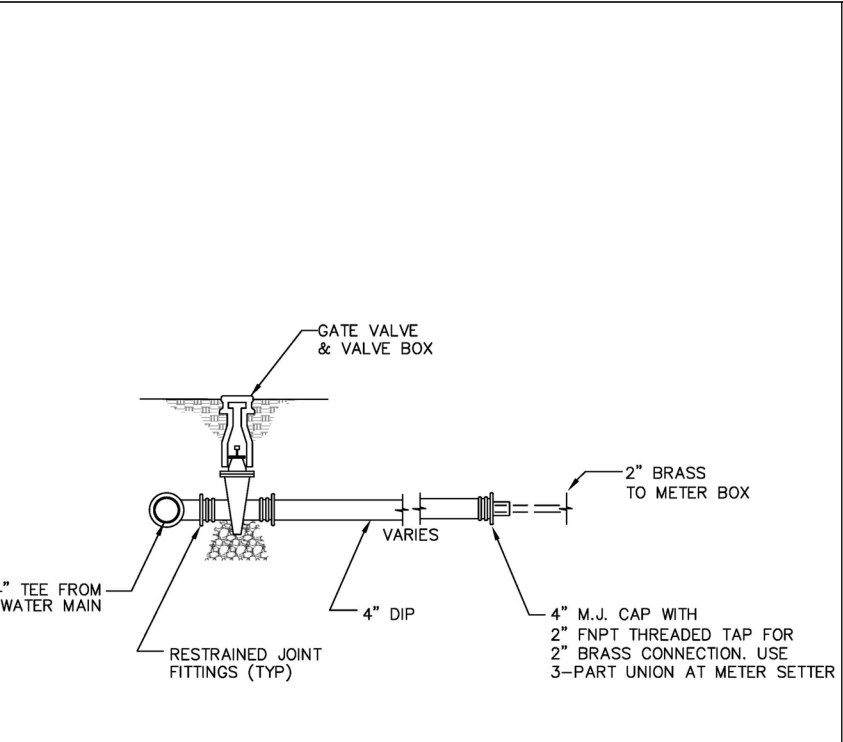
- NOTES:
- BEDDING THICKNESS REQUIREMENT SHOWN IS MINIMUM AND SHALL BE SPECIFICALLY DETERMINED BY THE CONSULTANT FOR THE SOIL CONDITIONS.
 - THE DEVELOPER'S ENGINEER WILL DETERMINE WHETHER MANHOLES SHALL HAVE EXTENDED OR NON-EXTENDED BASES.
 - ALL JOINTS AND LIFT HOLES TO BE SEALED & GROUTED OUTSIDE OF MANHOLE. INLETS AND OUTLETS ARE TO BE SEALED & GROUTED INSIDE AND OUTSIDE OF MANHOLE.
 - BUOYANCY CALCULATIONS FOR MANHOLE BASES TO BE SUBMITTED FOR MANHOLES WITH 100-YEAR FLOODPLAIN.
 - ELEVATION DIFFERENCE ACROSS M.H. FROM ANY INLET TO OUTLET SHALL BE MINIMUM 0.2 FEET; MAXIMUM EQUAL TO THE OUTLET PIPE DIAMETER.

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL MANHOLE SECTION SHOWING BRANCH TIE-IN NOT TO SCALE	REV 8/6/2024 DETAIL S-2
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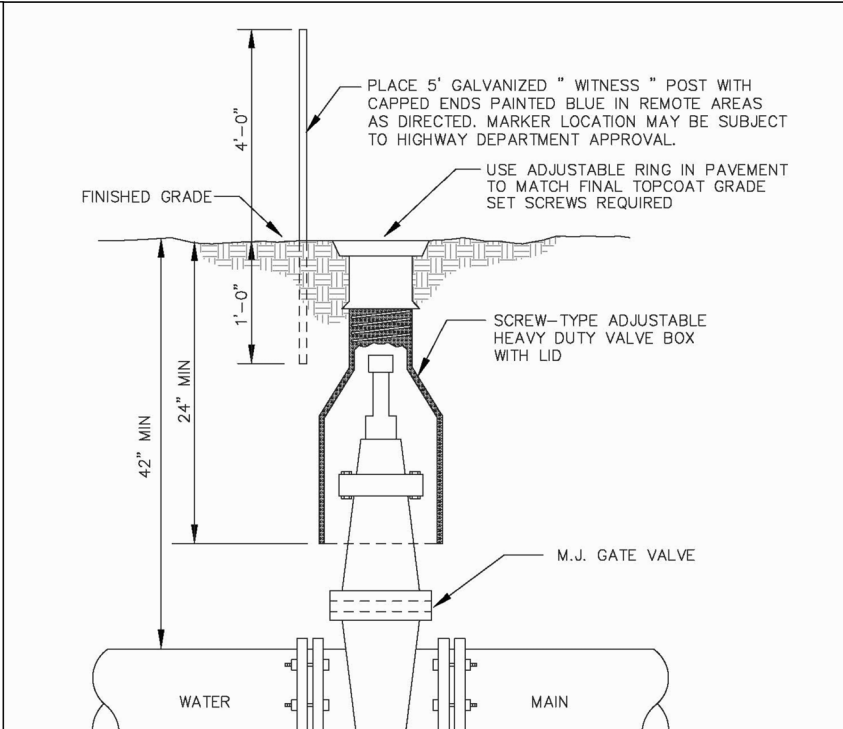
- NOTES:
- NO ROCKS SHALL BE ALLOWED WITHIN 24" OF THE WATER LINES.
 - NO ROCKS LARGER THAN 6" IN ANY DIMENSION SHALL BE ALLOWED ABOVE THE INITIAL BACKFILL.
 - THE INITIAL BACKFILL SHALL BE PLACED AND COMPACTED IN 6" LIFTS.
 - NO ORGANIC OR FROZEN MATERIAL, OR DEBRIS SHALL BE ALLOWED IN THE TRENCH.
 - BRUSH HOLES SHALL BE DUG OUT IN ALL CASES.
 - OPEN CUTS IN PAVED AREAS WITHIN EXISTING VDOT RIGHT-OF-WAY SHALL BE BACKFILLED ENTIRELY WITH NO. 21A STONE.

ALBEMARLE COUNTY SERVICE AUTHORITY	DUCTILE IRON WATER MAIN INSTALLATION AND BEDDING NOT TO SCALE	REV 8/6/2024 DETAIL W-1
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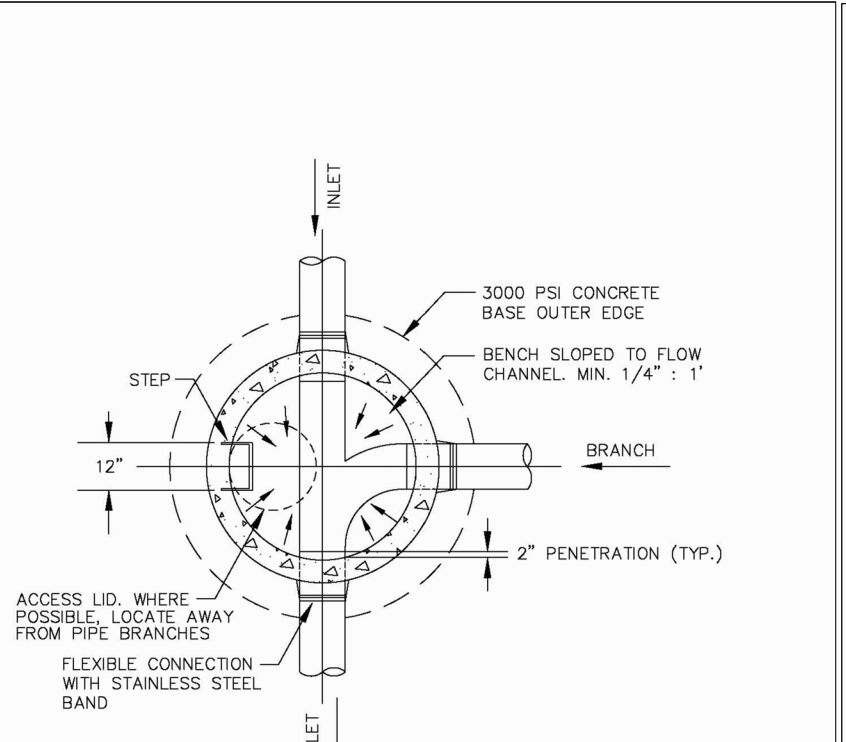
- NOTES:
- GATE VALVE WILL BE 4" UNLESS OTHERWISE SPECIFIED BY THE ACSA.
 - DIP TO EXTEND AT LEAST 24" BEYOND CURB, OR TO WITHIN 24" OF METER BOX.
 - SERVICE LINE CONNECTS AT MAIN WITH X4" TEE (OR TAPPING SLEEVE FOR RETROFIT).

ALBEMARLE COUNTY SERVICE AUTHORITY	LARGE METER SERVICE LINE NOT TO SCALE	REV 8/6/2024 DETAIL W-7
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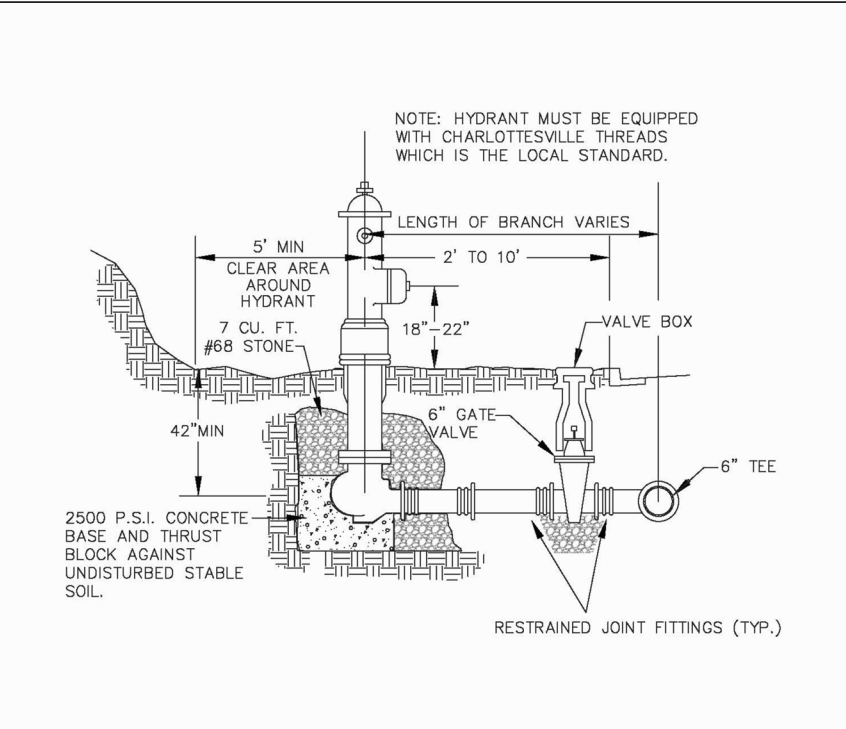
- NOTES:
- MINIMUM 6" OF #57 OR #68 STONE TO BE PLACED UNDER GATE VALVE.
 - IN REMOTE AREAS, VALVE BOXES SHALL EXTEND SIX (6) INCHES ABOVE GRADE.

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL GATE VALVE NOT TO SCALE	REV 8/6/2024 DETAIL W-2
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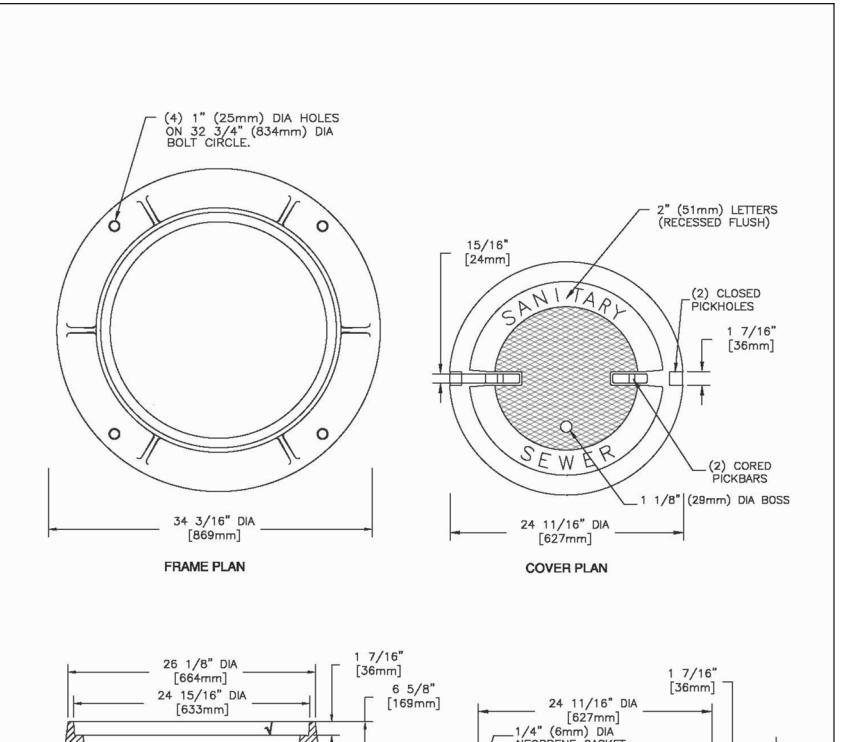
- NOTES:
- ALL CONNECTIONS TO EXISTING MANHOLES SHALL BE CORED AND A FLEXIBLE CONNECTION "BOOT" INSTALLED.
 - MANHOLE BENCH AND INVERT TO BE FACTORY-POURED OR SOLID CONCRETE.
 - BRANCH CONNECTIONS SHALL OCCUR WITH MINIMUM 80° ANGLE FROM OUTLET.

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL MANHOLE PLAN SHOWING BRANCH TIE-IN NOT TO SCALE	REV 8/6/2024 DETAIL S-3
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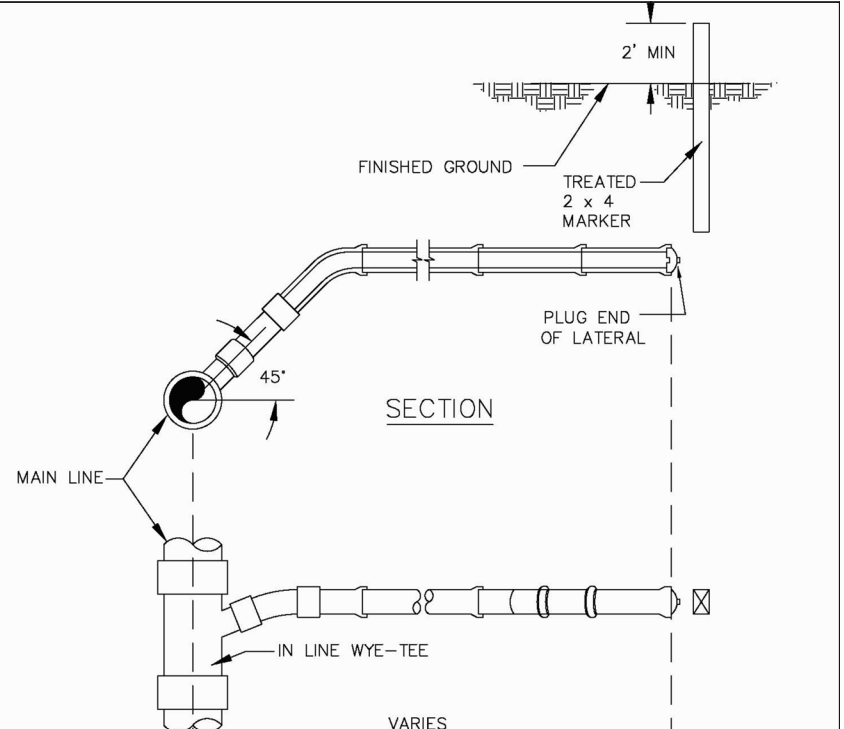
- NOTES:
- SURROUND WEEP HOLES WITH GRAVEL AND KEEP FREE OF CONCRETE.
 - MAINTAIN A 4" MINIMUM COVER FROM THE MAIN TO THE FIRE HYDRANT (INCLUDING DITCHES).
 - FINISHED GRADE SHALL SLOPE AWAY FROM THE FIRE HYDRANT AND VALVE BOX.
 - THE GATE VALVE IS PREFERRED IN PAVEMENT AFTER TEE WITH MAIN. IT IS ALLOWED IN SHOULDER, OR BEHIND TEE, BUT NOT ALLOWED IN DITCH OR OUTTER.
 - FIRE HYDRANTS SHALL BE INSTALLED AT LOCATIONS WHERE WEEP HOLES ARE ABOVE THE FINISHING GRADE. IN REMOTE AREAS, WEEP HOLES ARE NOT REQUIRED. THE WEEP HOLES SHALL BE PLUGGED AND THE HYDRANT SHALL BE PLUMPED DRY.

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL FIRE HYDRANT ASSEMBLY DETAIL NOT TO SCALE	REV 8/6/2024 DETAIL W-3
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- NOTES:
- WHERE A SEWER SERVICE LATERAL CONNECTS TO A MANHOLE AND NO INVERT ELEVATION FOR THE SERVICE LATERAL IS INDICATED, THE TOP (CROWN) ELEVATION OF THE SERVICE LATERAL PIPE SHALL BE AT LEAST 0.2' HIGHER THAN THE TOP (CROWN) ELEVATION OF THE LOWEST PIPE CONNECTED TO THE MANHOLE.
 - SEWER LATERALS TAPPED INTO AN EXISTING SEWER MAIN SHALL BE CONNECTED USING A PIPE SADDLE.
 - SEWER LATERAL SHALL BE SLOPED PER SLOPE CODE, MINIMUM 2% (1/4" PER FOOT) IS DESIRED.
 - ALL SEWER LATERALS SHALL HAVE A MINIMUM DIAMETER OF 4".

ALBEMARLE COUNTY SERVICE AUTHORITY	TYPICAL MANHOLE FRAME AND COVER NOT TO SCALE	REV 8/6/2024 DETAIL S-7
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- NOTES:
- WHERE A SEWER SERVICE LATERAL CONNECTS TO A MANHOLE AND NO INVERT ELEVATION FOR THE SERVICE LATERAL IS INDICATED, THE TOP (CROWN) ELEVATION OF THE SERVICE LATERAL PIPE SHALL BE AT LEAST 0.2' HIGHER THAN THE TOP (CROWN) ELEVATION OF THE LOWEST PIPE CONNECTED TO THE MANHOLE.
 - SEWER LATERALS TAPPED INTO AN EXISTING SEWER MAIN SHALL BE CONNECTED USING A PIPE SADDLE.
 - SEWER LATERAL SHALL BE SLOPED PER SLOPE CODE, MINIMUM 2% (1/4" PER FOOT) IS DESIRED.
 - ALL SEWER LATERALS SHALL HAVE A MINIMUM DIAMETER OF 4".

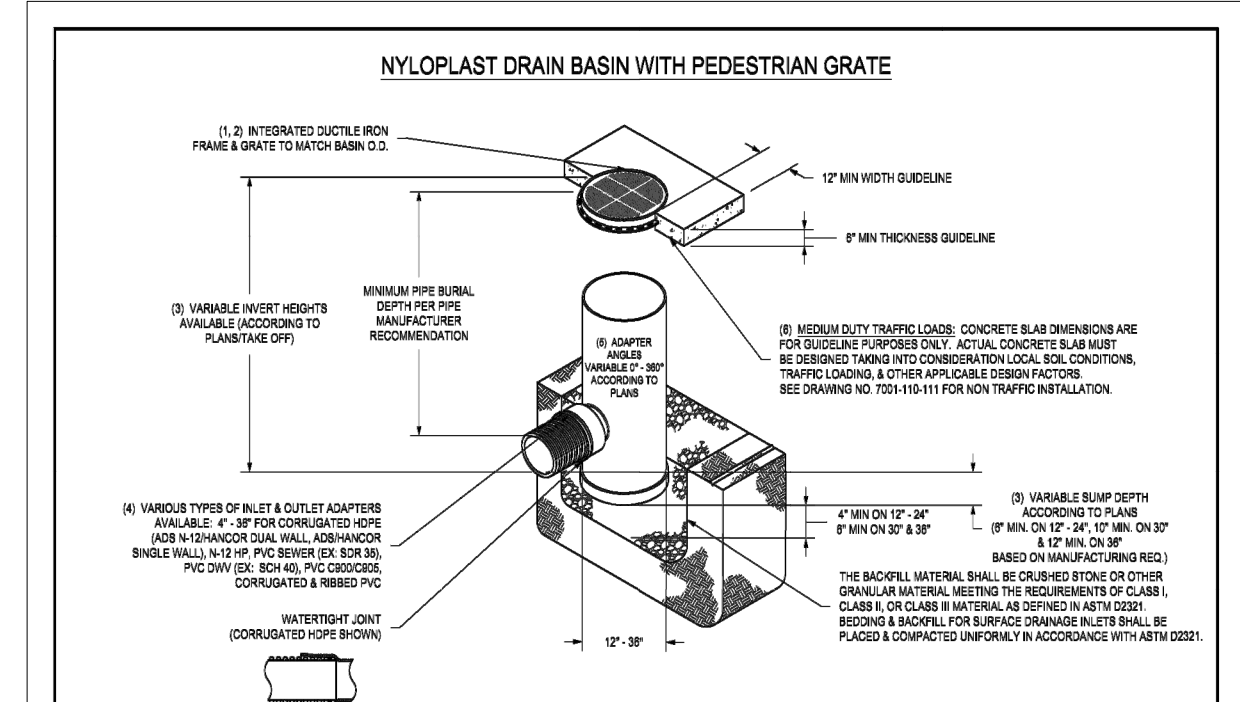
ALBEMARLE COUNTY SERVICE AUTHORITY	SEWER SERVICE LATERAL CONNECTION NOT TO SCALE	REV 8/6/2024 DETAIL S-9
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ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA)
GENERAL WATER & SEWER CONDITIONS (September 14, 2021)

- WORK SHALL BE SUBJECT TO INSPECTION BY ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA) INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER ACSA OFFICIALS AT THE START OF THE WORK.
- THE ALBEMARLE COUNTY SERVICE AUTHORITY SHALL HAVE ACCESS TO USE THE AIRSPACE ABOVE THE LOCATION OF CONSTRUCTION FOR THE FLIGHT OF UNMANNED AERIAL VEHICLES FOR THE PURPOSE OF IMAGERY COLLECTION.
- THE LOCATION OF EXISTING UTILITIES ACROSS THE LINE OF THE PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL, ON HIS OWN INITIATIVE, LOCATE ALL UNDERGROUND LINES AND STRUCTURES, AS NECESSARY.
- ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CURRENT EDITION OF THE GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS, AS ADOPTED BY THE ACSA.
- DATUM FOR ALL ELEVATIONS SHOWN IN NATIONAL GEODETIC SURVEY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7903).
- ALL WATER AND SEWER PIPES SHALL HAVE A MINIMUM OF THREE AND A HALF (3.5) FEET OF COVER MEASURED FROM THE TOP OF PIPE, OVER THE CENTERLINE OF PIPE. THIS INCLUDES ALL FIRE HYDRANT LINES, SERVICE LATERALS AND WATER LINES, ETC.
- ALL WATER AND SEWER APPURTENANCES ARE TO BE LOCATED OUTSIDE OF ROADSIDE DITCHES.
- VALVES ON DEADEND LINES SHALL BE RODDED TO PROVIDE ADEQUATE RESTRAINT FOR THE VALVE DURING A FUTURE EXTENSION OF THE LINE.
- TREES ARE NOT PERMITTED IN THE ACSA EASEMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE NO-LEAD REGULATION REGARDING BRASS FITTINGS EFFECTIVE JANUARY 4, 2014 (SENATE BILL 3874, WHICH AMENDS THE SAFE DRINKING WATER ACT).
- THE SEWER LATERAL BEYOND THE CONNECTION AT THE SEWER MAIN SHALL BE PRIVATE. THE SEWER LATERAL STUB-OUT SHALL UNDERGO THE ACSA LOW-PRESSURE AIR TEST TO SATISFY COUNTY TESTING REQUIREMENTS. VISUAL INSPECTION OF THE SEWER LATERAL STUB-OUT SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
- THE SEWER LATERAL BEYOND THE CONNECTION AT A MANHOLE SHALL BE PRIVATE. VISUAL INSPECTION AND PRESSURE TESTING OF THE SEWER LATERAL SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
- THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE IS PRIVATE. VISUAL INSPECTION AND TESTING OF THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
- ALL FLUSHING OF FIRE SPRINKLER MAINS SHALL NOT OCCUR UNTIL APPROVAL IS GIVEN BY THE ACSA.
- PRIOR TO BACKFLOW PREVENTION DEVICE TESTING AND THE ESTABLISHMENT OF WATER SERVICE, ALL BACKFLOW PREVENTION DEVICE INSTALLATIONS SHALL MEET THE ACSA BACKFLOW REQUIREMENTS AS DETAILED IN SECTION 8 OF THE MOST RECENT REVISION OF THE ACSA RULES AND REGUALIONS.
- A DEED OF EASEMENT AND EASEMENT PLAT FOR THE UTILITY EASEMENTS, APPROVED BY THE ACSA, SHALL BE RECORDED PRIOR TO ANY WATER AND/OR SEWER SERVICE BEING ESTABLISHED.

RIVANNA WATER & SEWER AUTHORITY (RWSA)
GENERAL WATER & SANITARY SEWER NOTES
LAST REVISED: DECEMBER 2023

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST VERSION OF THE GENERAL WATER AND SEWER DESIGN AND CONSTRUCTION STANDARDS - VERSION 1.0, ADOPTED IN DECEMBER 2014, EXCEPT AS MODIFIED BELOW OR MODIFIED IN SPECIAL NOTES.
- RWSA SHALL APPROVE ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION, A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH RWSA PRIOR TO THE START OF ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7903).
- RWSA ENGINEER (DYON VEGA AT (434) 977-3970 EXT. 170) SHALL BE NOTIFIED THREE BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION.
- ALL WORK IS SUBJECT TO INSPECTION BY RWSA STAFF. NO TIE-INS TO THE EXISTING SYSTEM SHALL BE MADE WITHOUT COORDINATION WITH AND THE PRESENCE OF RWSA STAFF. NO WORK SHALL BE CONDUCTED ON RWSA FACILITIES ON WEEKENDS OR HOLIDAYS WITHOUT SPECIAL WRITTEN PERMISSION FROM RWSA.
- FOR SANITARY SEWER LINE CONSTRUCTION: RWSA MAY REQUIRE BYPASS PUMPING FOR TIE-INS TO THE EXISTING SYSTEM. ALL DOGHOUSE MANHOLES MUST BE PRESSURE-TESTED BEFORE A CONNECTION IS MADE TO THE SYSTEM.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS IS FROM DATA AVAILABLE AT THE TIME OF DESIGN AND IS NOT NECESSARILY COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATION, SIZE AND DEPTH OF ALL EXISTING UTILITIES, BOTH SURFACE AND SUBSURFACE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE CONTRACTOR SHALL USE DUE DILIGENCE TO PROTECT ALL UTILITIES AND STRUCTURES FROM DAMAGE AT ALL TIMES, WHETHER SHOWN ON THE PLANS OR NOT. DAMAGE TO ANY EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- EROSION AND SEDIMENT CONTROL FACILITIES SHALL NOT BE PERMITTED IN THE RWSA EASEMENT WITHOUT SPECIAL WRITTEN PERMISSION FROM RWSA. NO GRADING SHALL BE PERMITTED IN THE RWSA EASEMENT UNLESS PERMITTED OTHERWISE BY RWSA IN WRITING.
- NO BLASTING SHALL BE PERMITTED WITHIN 100 FEET OF RWSA FACILITIES WITHOUT WRITTEN PERMISSION AND RWSA APPROVAL OF THE BLASTING PLAN. GROUND MONITORING DURING BLASTING AND A PRE-BLAST SURVEY MAY BE REQUIRED. FOR BLASTING WITHIN 100 FEET OF ANY OPERATIVE RWSA SEWER LINES, BYPASS PUMPING AND/OR PRE- AND POST-CCTV MAY BE REQUIRED. RWSA MAY ALSO REQUIRE CERTIFICATION FROM A LICENSED PROFESSIONAL ENGINEER STATING THAT THE PROPOSED BLASTING WILL NOT DAMAGE ANY RWSA FACILITIES. DAMAGE TO ANY UTILITIES DUE TO BLASTING SHALL BE REPAIRED BY THE CONTRACTOR TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL OBSERVE MINIMUM SEPARATION REQUIREMENTS FOR UTILITY CROSSINGS. WHEN A CROSSING IS MADE UNDER AN EXISTING FACILITY, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE EXISTING PIPE. THE AREA OF THE CROSSING SHALL BE BACKFILLED WITH COMPACTED 57 STONE TO THE SPRINGLINE OF THE EXISTING PIPE.
- NEW WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED, CHLORINATED, FLUSHED AND HAVE WATER SAMPLES APPROVED PRIOR TO MAKING ANY PERMANENT CONNECTION TO THE PUBLIC WATER SYSTEM. APPROVED METHODS OF FILLING AND FLUSHING NEW WATER MAINS WILL BE REQUIRED TO PREVENT ANY CONTAMINATION OF THE PUBLIC WATER SYSTEM.
- ALL EASEMENTS FOR NEW RWSA FACILITIES SHALL BE RECORDED PRIOR TO PLACING THE NEW FACILITIES INTO SERVICE.
- NO PERMANENT STRUCTURAL FACILITIES WILL BE PERMITTED IN THE RWSA EASEMENT. THIS INCLUDES BUILDING OVERHANGS, RETAINING WALLS, FOOTERS FOR ANY STRUCTURE, DRAINAGE STRUCTURES, ETC.
- TREES ARE NOT PERMITTED IN THE RWSA EASEMENT.



1. 12" OF PRESTRESS GRATE SHALL BE DUCTILE IRON PER APCA 808 (SEE NOTE 2)	2. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	3. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	4. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	5. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	6. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	7. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	8. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	9. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	10. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	11. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	12. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	13. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	14. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	15. VARIABLE INSERT-REDUCES ANNUAL ACCORDING TO PLASTICITY INDEX	16. 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LANDSCAPE NOTES

1. CONTRACTOR TO USE EXTREME CARE AND CAUTION AS NOT TO DAMAGE ANY TREES SCHEDULED TO REMAIN OUTSIDE LIMITS OF CONSTRUCTION. LIMITS OF DISTURBANCE AND TREE PROTECTION FENCING SERVE AS LIMITS OF CONSTRUCTION.
2. NO CONSTRUCTION EQUIPMENT OR STORAGE SHALL OCCUR WITHIN DRIPLINE OF EXISTING TREES. PRIOR TO MOBILIZATION CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT (LA) TO DISCUSS TREE PROTECTION EFFORTS. ALL TREE PROTECTION MEASURES SHALL BE APPROVED BY LA AND/OR TREE ARBORIST BEFORE ANY CONSTRUCTION ACTIVITIES SHALL TAKE PLACE ON-SITE. CONTRACTOR TO MONITOR TREES FOR STRESS AND/OR DAMAGE AND ADVISE LA AND TREE ARBORIST IF ANY OCCUR.
3. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT AND/OR TREE ARBORIST 48-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY NEEDED WITHIN ANY TREE PROTECTION MEASURE. ALL TREE PROTECTION MEASURES SHALL BE REPLACED IN ORIGINAL LOCATION ONCE WORK HAS BEEN COMPLETED. NO WORK SHALL BE DONE WITHIN DRIPLINE OF EXISTING TREES UNLESS APPROVED BY TREE ARBORIST OR LANDSCAPE ARCHITECT PRIOR TO WORK.
4. ALL WORK TO BE PERFORMED BY THE CONTRACTOR WITHIN THE DRIPLINE OF ANY EXISTING TREE OR TREE PROTECTION AREA SHALL BE DONE IN A MANNER SENSITIVE TO ENSURING NO DAMAGE WILL BE DONE TO THE EXISTING TREES. THE PREFERRED METHOD FOR GRADING SMALL AREAS WITHIN THE DRIPLINE SHALL BE DONE BY HAND. LARGER AREAS TO BE GRADED MAY BE DONE WITH A SMALL BOBCAT/TRACT-HOE. CONTRACTOR TO DISCUSS METHODS OF GRADING WORK WITH LANDSCAPE ARCHITECT AND TREE ARBORIST PRIOR TO COMMENCING ANY SUCH WORK WITHIN DESIGNATED TREE PROTECTION AREAS OR WITHIN EXISTING DRIPLINES.
5. ALL PLANTS HAVING A QUANTITY GREATER THAN ONE (1) SHALL BE MATCHED AND SUPPLIED FROM THE SAME SOURCE (PER SPECIES).
6. CONTACT LANDSCAPE ARCHITECT AT THE TIME OF PLANT MATERIAL DELIVERY, BEFORE ANY SUBSTITUTIONS OR CHANGES, IF SCHEDULED TYPES ARE UNAVAILABLE, AND FOLLOWING INSTALLATION. ALL PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLACEMENT OF ORDERS.
7. LANDSCAPE ARCHITECT SHALL INSPECT AND APPROVE ALL PLANT MATERIAL AT TIME OF DELIVERY AS WELL AS AFTER INITIAL PLACEMENT PRIOR TO PLANTING. CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT 48-HOURS PRIOR TO DELIVERY.
8. PLANT LOCATIONS TO BE REEVALUATED AND REVISED, IF NECESSARY, AFTER FINISHED GRADING.
9. MULCH IN PLANTERS AND PLANTING BEDS TO BE CLEAN AND FREE FROM PEST AND DISEASES. MULCH SHALL BE APPLIED TO A 2-INCH DEPTH. MULCH RINGS 24-INCHES MIN. IN DIAMETER ARE TO BE PLACED AROUND ALL TREES NOT LOCATED IN PLANTING BEDS. MULCH TO BE DOUBLE-SHREDDED HARDWOOD.
10. CONTRACTOR TO VERIFY ALL QUANTITIES BETWEEN PLAN AND PLANT LIST AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY PRIOR TO ORDERING.
11. ALL STREET TREES WITHIN THE PUBLIC RIGHT OF WAY SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

LANDSCAPE TABULATION
SITE AREA CANOPY
REQUIREMENT:

10% OF PROJECT SITE AREA REQUIRED
9.36 ACRES (407,920 SQ. FT)
10% OF SITE = 40,792 SQ. FT OF TREE CANOPY REQUIRED

1,191 SF EXISTING CANOPY TO BE PRESERVED
48,579 SF OF PROPOSED CANOPY
49,810 SF OF TOTAL TREE CANOPY PROVIDED

STREETS

REQUIREMENT:

1 LARGE SHADE TREE EVERY 50' OR 1 MEDIUM SHADE TREE EVERY 40' ALONG GRAND FORKS BLVD
1 LARGE SHADE TREE EVERY 35' ALONG AIRPORT RD PER ENTRANCE CORRIDOR REQUIREMENTS

AIRPORT RD:

487 LF OF ROAD FRONTAGE
487/ 50' = 14 TREES REQUIRED
3 LARGE SHADE TREES EXISTING
11 LARGE SHADE TREES PROPOSED
14 LARGE SHADE TREES PROVIDED

GRAND FORKS BLVD:

639 LF OF ROAD FRONTAGE
639/ 50' = 13 TREES REQUIRED
13 LARGE SHADE TREES PROPOSED

PARKING

REQUIREMENT:

5% OF TOTAL PARKING & CIRCULATION AREA

PARKING AREA #1:

28,430 SF
28,430 * 5% = 1,421 SF REQUIRED
1,649 SF PROPOSED

PARKING AREA #2:

58,085 SF
28,430 * 5% = 2,904 SF REQUIRED
3,854 SF PROPOSED

REQUIREMENT:

1 LARGE OR MEDIUM SHADE TREE PER 10 PARKING SPACES

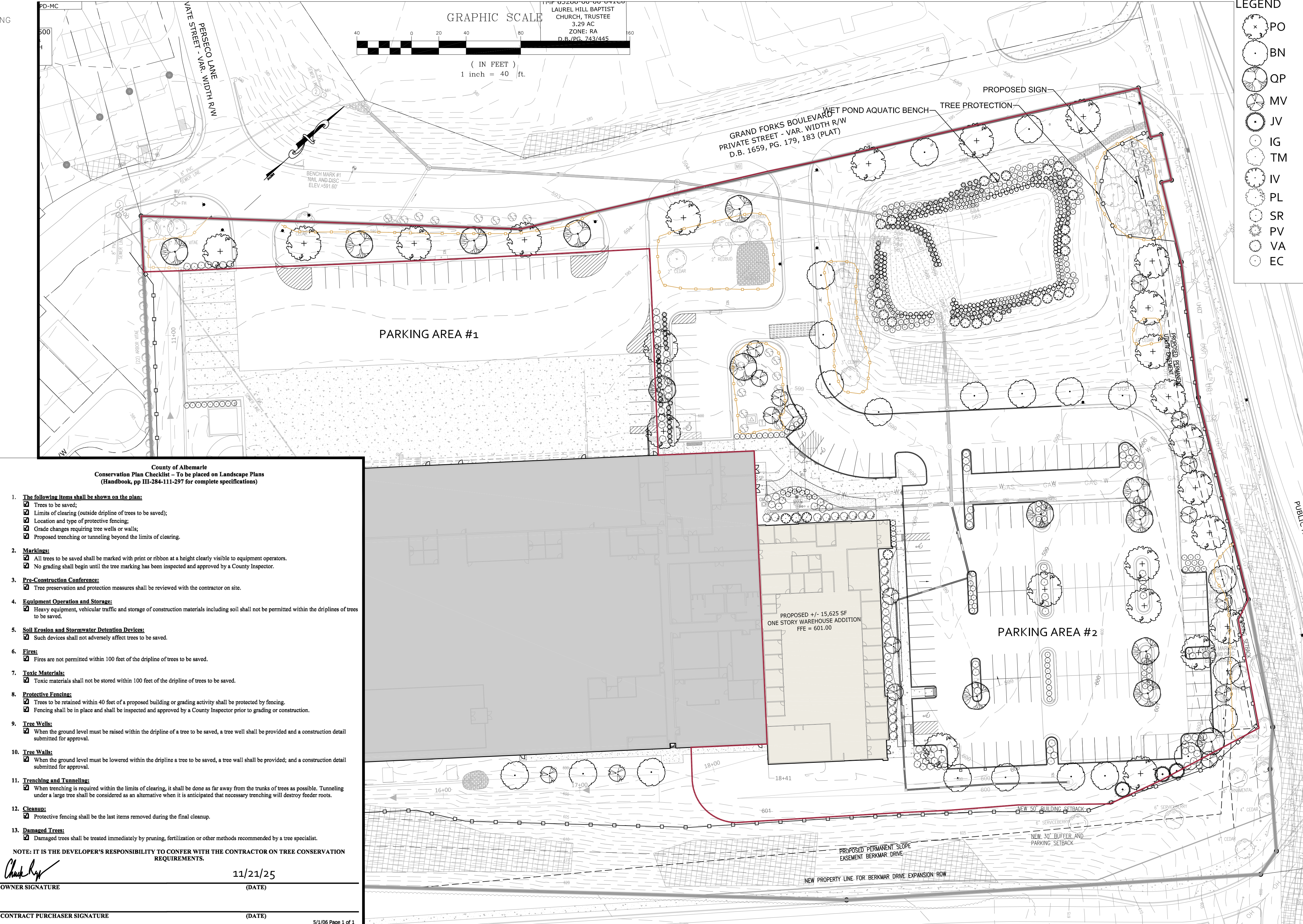
PARKING AREA #1:

47 PARKING SPACES
5 SHADE TREE REQUIRED
5 SHADE TREES PROPOSED

PARKING AREA #2:

128 PARKING SPACES
13 SHADE TREE REQUIRED
14 SHADE TREES PROPOSED

PLANT SCHEDULE						
SYM	BOTANICAL	COMMON NAME	SIZE	CANOPY (sf)	TOTAL SITE	
					QUANTITY	COVERAGE (sf)
TREES						
BN	BETULA NIGRA	RIVER BIRCH	3 1/2" cal.	397	21	8,337
QP	QUERCUS PALUSTRIS	PIN OAK	2 1/2" cal.	370	14	5,180
PO	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	3 1/2" cal.	1253	24	30,072
UNDERSTORY TREES						
MV	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	6-7' ht.	113	16	1,808
EVERGREEN TREES						
JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5'-7' ht.	16	3	48
SHRUBS & GRASSES						
IG	ILEX GLABRA	INKBERRY HOLLY	3-GAL	23	138	3,174
TM	TAXUS X MEDIA 'DENSIFORMIS'	SPREADING YEW	3-GAL		109	
IV	ILEX VERTICILLATA	WINTERBERRY	3-GAL	41	30	1,230
SR	SARCOCOCCA RUSCIFOLIA	FRAGRANT SWEETBOX	3-GAL		14	
PL	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN LAUREL	3-GAL		18	
PV	PANICUM VIRGATUM	SWITCHGRASS	1-GAL		125	
VA	VALISNERIA AMERICANA	WILD CELERY	1-GAL		150	
EC	ELODEA CANADENSIS	WATERWEED	1-GAL		112	
EXISTING CANOPY						1,191
TOTAL CANOPY						49,810
NOTE: ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT; THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT.						



County of Albemarle
Conservation Plan Checklist - To be placed on Landscape Plans
(Handbook, pp III-284-111-297 for complete specifications)

1. The following items shall be shown on the plans:
[X] Trees to be saved;
[X] Limits of clearing (outside dripline of trees to be saved);
[X] Location and type of protective fencing;
[X] Grade changes requiring tree wells or walls;
[X] Proposed trenching or tunneling beyond the limits of clearing.

2. Markings:
[X] All trees to be saved shall be marked with print or ribbon at a height clearly visible to equipment operators.
[X] No grading shall begin until the tree marking has been inspected and approved by a County Inspector.

3. Pre-Construction Conference:
[X] Tree preservation and protection measures shall be reviewed with the contractor on site.

4. Equipment Operation and Storage:
[X] Heavy equipment, vehicular traffic and storage of construction materials including soil shall not be permitted within the driplines of trees to be saved.

5. Soil Erosion and Stormwater Detention Devices:
[X] Such devices shall not adversely affect trees to be saved.

6. Fires:
[X] Fires are not permitted within 100 feet of the dripline of trees to be saved.

7. Toxic Materials:
[X] Toxic materials shall not be stored within 100 feet of the dripline of trees to be saved.

8. Protective Fencing:
[X] Trees to be retained within 40 feet of a proposed building or grading activity shall be protected by fencing.
[X] Fencing shall be in place and shall be inspected and approved by a County Inspector prior to grading or construction.

9. Tree Wells:
[X] When the ground level must be raised within the dripline of a tree to be saved, a tree well shall be provided and a construction detail submitted for approval.

10. Tree Walls:
[X] When the ground level must be lowered within the dripline a tree to be saved, a tree wall shall be provided; and a construction detail submitted for approval.

11. Trenching and Tunneling:
[X] When trenching is required within the limits of clearing, it shall be done as far away from the trunks of trees as possible. Tunneling under a large tree shall be considered as an alternative when it is anticipated that necessary trenching will destroy feeder roots.

12. Cleanup:
[X] Protective fencing shall be the last items removed during the final cleanup.

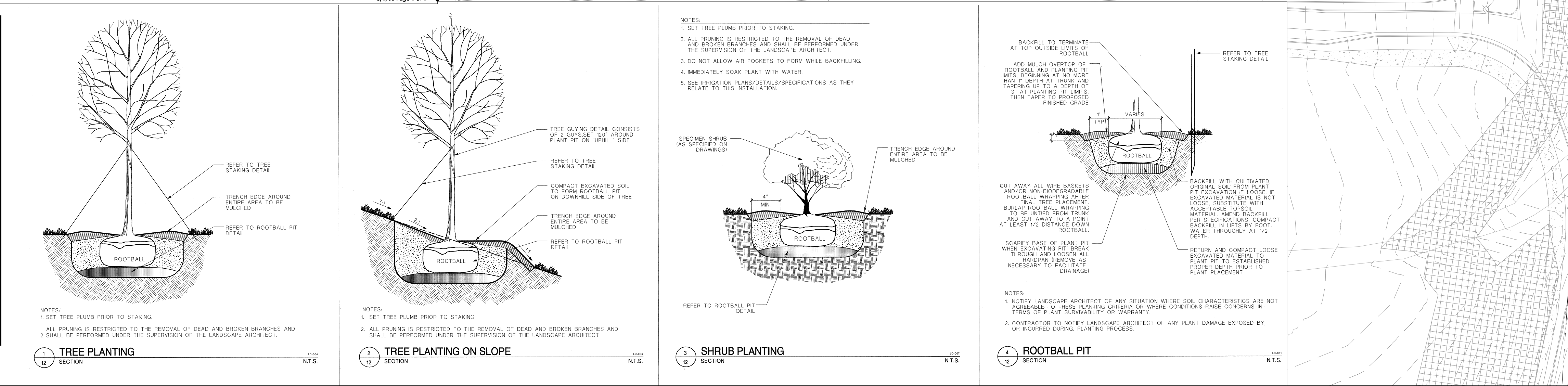
13. Damaged Trees:
[X] Damaged trees shall be treated immediately by pruning, fertilization or other methods recommended by a tree specialist.

NOTE: IT IS THE DEVELOPER'S RESPONSIBILITY TO CONFER WITH THE CONTRACTOR ON TREE CONSERVATION REQUIREMENTS.

OWNER SIGNATURE: *Chuck By* 11/21/25 (DATE)

CONTRACT PURCHASER SIGNATURE (DATE)

5/1/06 Page 1 of 1



LEGEND

- PO
- BN
- QP
- MV
- JV
- IG
- TM
- IV
- PL
- SR
- PV
- VA
- EC

REVISIONS

DATE	REVISION DESCRIPTION
12/1/25	INITIAL FINAL SITE PLAN SUBMITTAL

CE COLLINS ENGINEERING

200 GARRETT STREET, SUITE K-CHARLOTTESVILLE, VA 22902-434.293.3719

PROJECT: MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

SHEET: LANDSCAPING PLAN

JOB NO. 122076

SCALE 1"=40'

SHEET NO. 12

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NOTES:
BOUNDS SHOWN @ 1/4" FOR REFERENCE ONLY.
MOUNTING HEIGHT (POLE HEIGHT + CONCRETE BASE).
PHOTOGRAPHIC ASSUME NEW FEATURE HEAD AT EACH LOCATION.

Prepared by:
OLD COMMONWEALTH LIGHTING ASSOCIATES
3761 WESTERRE PARKWAY, SUITE D
BEDFORD, VIRGINIA 22101
804-459-3559

NOTES:
THE CALCULATIONS SET FORTH HEREIN ARE BASED ON PROJECT SPECIFICATIONS PROVIDED TO OLD COMMONWEALTH LIGHTING ASSOCIATES, ACTUAL OR MEASURED VALUES MAY VARY FROM THE FORECASTED RESULTS DUE TO TOLERANCES IN CALCULATION METHOD, TESTING PROCEDURES, COMPONENT PROCEDURES, COMPONENT PERFORMANCE, MEASUREMENT TECHNIQUES AND VARYING FIELD CONDITIONS SUCH AS, BUT NOT LIMITED TO: VOLUME, TEMPERATURE, ATMOSPHERIC/ENVIRONMENTAL CONDITIONS AND IMPROPER OR UNDOCUMENTED LUMINAIRE PROCEDURES. FURTHER, ROOM OVERSIGHTS, REFLECTANCES, FURNITURE AND ARCHITECTURAL ELEMENTS WITHIN THE SPACE MAY SIGNIFICANTLY AFFECT CALCULATIONS. VERIFICATION OF THE CALCULATIONS HEREIN INCLUDING DESIGN ACCEPTABILITY AND COMPLIANCE WITH ANY APPLICABLE LIGHTING CODES IS NOT THE RESPONSIBILITY OF OLD COMMONWEALTH LIGHTING ASSOCIATES AND SHALL BE THE RESPONSIBILITY OF THE ARCHITECT, OWNER OR OWNERS REPRESENTATIVE, AS APPLICABLE.

NO ALTERATIONS OR MODIFICATIONS SHALL BE MADE TO THIS PLAN WITHOUT THE PERMISSION OF OLD COMMONWEALTH LIGHTING ASSOCIATES. THE PHOTOGRAPHIC DATA SPECIFIC TO THE LISTED MANUFACTURERS AND RESPECTIVE CATALOG NUMBERS AS OUTLINED IN THE LUMINAIRE SCHEDULE. SUBSTITUTIONS OR DEVIATIONS FROM THIS PLAN MAY RESULT IN DIFFERENT RESULTS. SITE INFORMATION SUCH AS POLE LOCATION, ORIENTATION, MOUNTING HEIGHT, ETC. SHOULD BE COORDINATED PRIOR TO INSTALLATION BY THE CONTRACTOR AND/OR CREW. RESPONSIBILITY FOR THE PROJECT LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS AND SUPPLIED PER MANUFACTURER.



T349LED
19" SLIM LED AREA/FLOOD/WALL MOUNT

FEATURES

USE OF PRODUCT

The intended use of this product is ideal for highways, streets, parking lots, public entrances, and any commercial or industrial applications.

HOUSING

Rugged die cast aluminum housing with easy access to future compartment.

FINISH

Standard Matt-finished, architectural powdercoat over a precise chromate conversion coating. Consult factory for custom architectural finishes.

OPTICS

White aluminum reflector is designed for maximum photometric efficiency and optimum light distribution. Rotatable optics available in Type I, II, III, IV or V. Flat glass lens provided impact resistance. Lens sealed by a one-piece silicon gasket which prohibits entrance of outside contaminants.

LED

High output LEDs offer a minimum estimated operating life of 50,000 hours in 5000K with CRI>85. Efficiency 110lm/W. LEDs placed on high performance aluminum heatsink for reduced junction temperatures and extended life.

ORDERING INFO

SERIES	WATT/LUMENS	COLOR TEMPERATURE	VOLTAGE	DISTRIBUTION TYPES	MOUNTING	FINISH
T349LED	30W - 30W/3330lm	30K - 3000K	UNV - 120V/277V	T1 - Type I	S8 - Swivel bracket	S2 - Bronze
	40W - 40W/4330lm	30K - 3000K	240V - 240V	T2 - Type II	SF - Splitter	MTD - Made to order
	50W - 50W/5330lm	40K - 4000K	480V - 480V	T3 - Type III	TSAM65 - 6' arm mount square pole	MGTG - Marine grade
	60W - 60W/6330lm	50K - 5000K		T4 - Type IV	TSAM105 - 10' arm mount square pole	Made to order
	110W - 110W/12330lm			T5 - Type V	TSAM65 - 6' arm mount round pole	
	170W - 170W/17330lm				TSAM105 - 10' arm mount round pole	
	240W - 240W/25330lm				TWMB90 - 9' wall mount bracket in splitter	
					TWMB90 - 9' wall mount 90° bracket tilt splitter	

OPTIONS

PC - Protocol 120-277V
PR - Protocol NEMA
HS - House side shield
BS - Bird Spikes
ESBW - Emergency Battery 8W (10W/50W Future Range)
ES20W - Emergency Battery 20W (25W/25W Future Range)
MSR - Standard PIR Remote Motion Sensor
MFR - FS211 PIR Remote Motion Sensor
MSI - Standard PIR (integral) motion sensor
MFI - FS211 PIR (integral) motion sensor

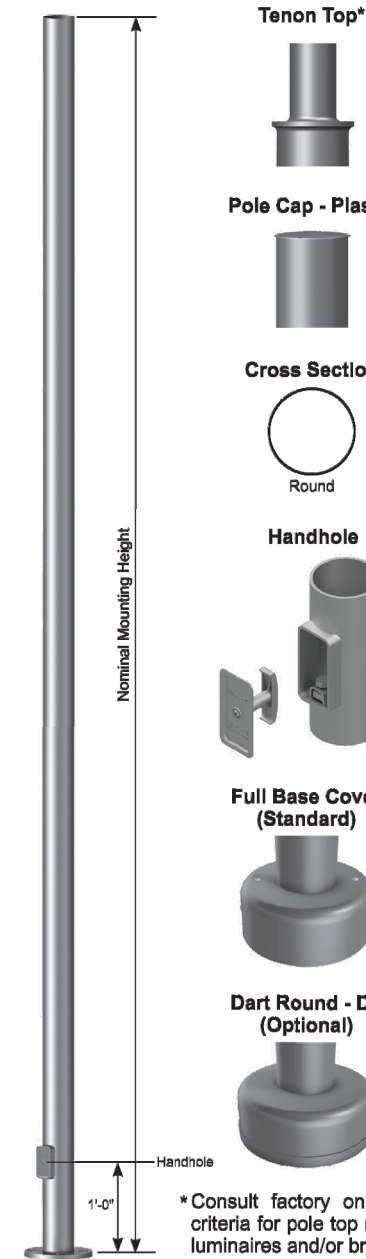
Note:
1. Integral Emergency battery.
2. Two days turn-in time required.
3. Limited delivery times.
4. Requires splitter.



RAYON LIGHTING GROUP, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.
1531 N. AMERICA ST. COMPTON, CA 90221 TEL: 924.444.3333 FAX: 924.444.3365 WWW.RAYONLIGHTING.COM



Job Name: _____ Client Name: _____
Job Location - City: _____ State: _____ Created By: _____ Date: _____
Product: DS340 _____ Quote: _____ Customer Approval: _____ Date: _____



SPECIFICATIONS

Pole Shaft - The pole shaft is fabricated from hot rolled welded steel tubing of one-piece construction with a minimum yield strength of 42 KSI.

Pole Top - A removable pole cap is provided for poles receiving drilling patterns for side-mount luminaire arm assemblies. For top mount luminaire and/or bracket consult the factory. Consult the luminaire manufacturer for correct tenon size or drill pattern. Other pole top options include pole cap only (PC) or plain top (PL) which is typical when the pole top diameter matches the necessary slip fit dimensions.

Handhole - A reinforced handhole with grounding provision is provided at 1'-0" from the base and of the pole assembly. Each handhole includes an easy to install, self-contained Swing Latch handhole cover assembly. U.S. Patent Swing Latch cover is fabricated from durable polycarbonate/ABS blend plastic. All pole assemblies are provided with a 2.50" x 5.00" rectangular handhole. Handhole dimensions are nominal.

Base Cover - A two-piece full base cover fabricated from ABS plastic is provided with each pole assembly. Additional base cover options, including the dart round (DT) cast aluminum cover, are available upon request.

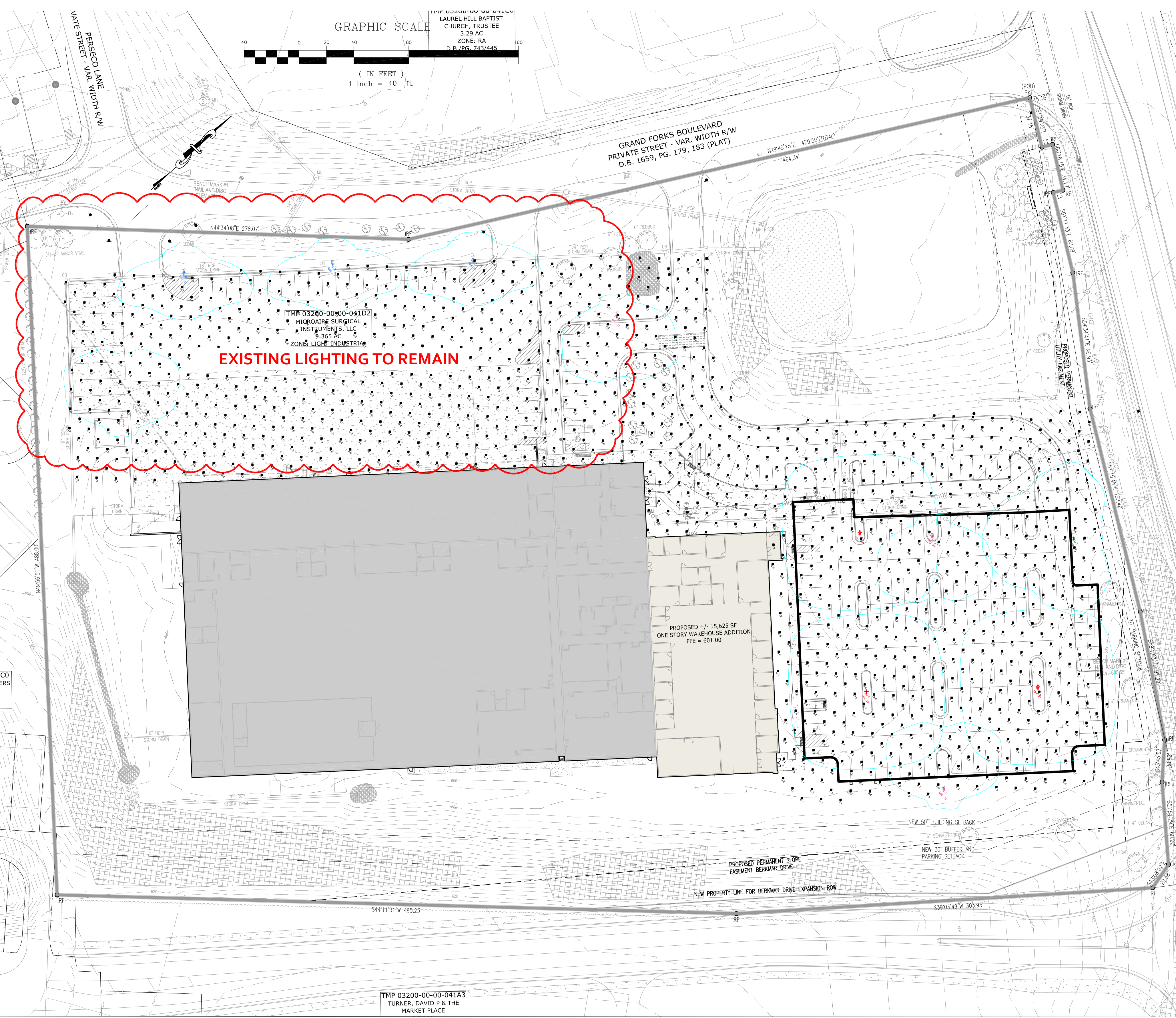
Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an 1" band on one end and are galvanized a minimum of 12" on the threaded end.

Hardware - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

Finish - Standard finishes are Galvanized (GV) or Finish Painted (FP). Additional finish options, including Finish Paint over Galvanizing (FPGV) or any of the V-PRO® Finish Coating Systems are available upon request. See the product ordering code for color options.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

* Consult factory on loading criteria for pole top mounted luminaires and/or brackets.



Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Mounting Height
+	2	T349LED-119-XX-50K-T4	Single	RAYON T349LEDB SINGLE	AL-1	1,000	12866	119.98	23
2 @	1	T349LED-119-XX-50K-T4_1	2 @ 90 degrees	RAYON T349LEDB 2 @ 90	AL-3	1,000	12866	119.98	23
4 @	3	T349LED-119-XX-50K-T5_1	4 @ 90 Degrees	RAYON T349LEDB QUAD	AL-4	1,000	13035	119.33	23

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Ground	illuminance	Fc	1.66	10.8	0.0	N.A.	N.A.
Main Parking Lot	illuminance	Fc	4.18	10.8	1.0	4.18	10.80



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PROJECT MICROAIRE BUILDING EXPANSION - FINAL SITE PLAN

LIGHTING PLAN

SHEET
JOB NO.
122076
SCALE
1"=40'
SHEET NO.
13