

CONSTRUCTION DOCUMENTS

12" PUBLIC SEWER EXTENSION

PUBLIC SEWER - PHASE 3

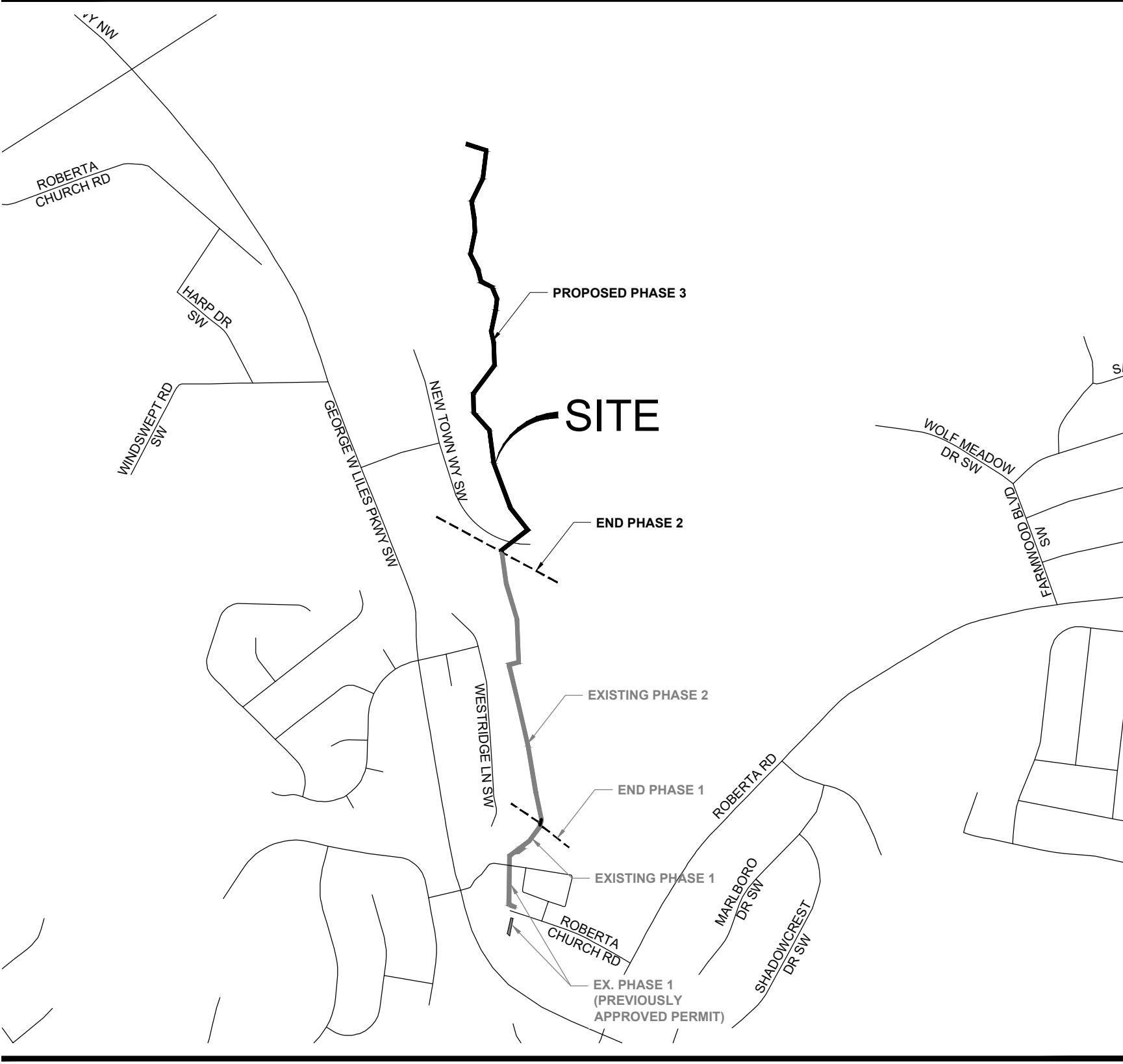
CONCORD, NC

DATE: 02.27.2024

SHEET INDEX

Sheet List Table	
Sheet Number	Sheet Title
C0-00	Cover
C1-00	Sewer Plan - Overall
C1-01	Sewer Plan and Profile
C1-02	Sewer Plan and Profile
C1-03	Sewer Plan and Profile
C1-04	Sewer Plan and Profile
C1-05	Sewer Plan and Profile
C1-06	Sewer Plan and Profile
C1-07	Sewer Plan and Profile
C1-08	Sewer Plan and Profile
C1-09	Sewer Plan and Profile
C1-10	Access Path Plan and Profile
C1-11	Access Path and Construction Entrance Enlargements
C1-20	Sewer Details
C1-21	Erosion Control Details
C1-22	Erosion Control Details
C1-23	Erosion Control Details

VICINITY MAP

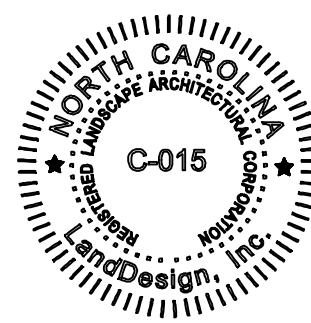
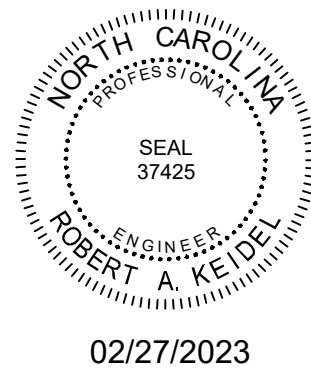


PROJECT TEAM

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NOTES

- LANDDESIGN, INC. DOES NOT INTEND FOR THE INCLUDED CONSTRUCTION SEQUENCING TO DICTATE NOR TAKE RESPONSIBILITY FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, AND SAFETY PRECAUTIONS WHICH ARE GOVERNED BY LOCAL, STATE AND FEDERAL GUIDELINES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION RELATED ACTIVITIES ASSOCIATED WITH THIS PROJECT.

CONSTRUCTION SEQUENCE

- CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN RECIEVED AND THAT THOSE REQUIRED TO BE DISPLAYED ON-SITE ARE AVAILABLE.
- CONTRACTOR SHALL HOLD ON-SITE PRE-CONSTRUCTION MEETING A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL CONTACT CAROLINA ONE CALL AND ALL ENTITIES HAVING BURIED UTILITIES AT LEAST 72 HOURS PRIOR TO DIGGING OR AS DIRECTED AT THE PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES (IF ANY) AT EACH POINT OF ACCESS STORAGE AND CONSTRUCTION AREAS.
- SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH PLANS AND BEFORE START OF WORK. THE CONTRACTOR SHALL NOT INSTALL EROSION CONTROL MEASURES WHERE THE WORK WILL NOT OCCUR FOR SOME TIME. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY CITY/PROJECT ENGINEER OR UPON NCDOT, DWR, AND/OR DEMLR PERSONNEL AS CONDITIONS WARRANT.
- STABILIZATION FOR THIS PROJECT SHALL COMPLY WITH THE TIME FRAME GUIDELINES AS SPECIFIED BY THE NCG-01000 GENERAL CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, AND DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES-EROSION AND SEDIMENTATION CONTROL SECTION.

- ALL SECTIONS SHALL BE SEEDED AT EARLIEST POSSIBLE DATE AFTER INSTALLATION OF PIPE, STRUCTURE, OR ACCESS.
- ONCE GROUND COVER IS FIRMLY ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITH THE APPROVAL OF CITY/ NCDOT/ DWR INSPECTOR.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH THE CITY ENGINEERING DEPARTMENT.

GENERAL NOTES:

- BASE INFORMATION, INCLUDING EXISTING CONDITIONS, TOPOGRAPHY, EXISTING UTILITIES, AND BOUNDARY INFORMATION IS FROM PLANS BY: RB PHARR AND ASSOCIATES, PA.
- ARCHITECTURAL INFORMATION IS FROM PLANS BY: N/A.
- WRITTEN DIMENSIONS PREVAIL OVER SCALED DIMENSIONS. NOTIFY LANDDESIGN OF ANY DISCREPANCIES.
- DIMENSIONS ARE TO FACE OF OBJECT, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND LINE RUNS IN THE FIELD PRIOR TO CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING UTILITIES ARE TO BE REPAIRED IMMEDIATELY AT NO ADDITIONAL EXPENSE TO THE OWNER. LANDDESIGN ASSUMES NO RESPONSIBILITY FOR ANY UTILITIES NOT SHOWN ON PLANS.
- ALL PROPOSED FINISHED GRADES ARE BASED ON INFORMATION PROVIDED BY THE OWNER'S SURVEY AND OR CIVIL ENGINEER. ANY DISCREPANCIES IN ACTUAL FIELD MEASUREMENTS ARE TO BE REPORTED TO LANDDESIGN IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL ITEMS PER DRAWINGS AND SPECIFICATION. NOTIFY LANDDESIGN OF ANY MAJOR DISCREPANCIES BETWEEN CONTRACTOR'S VERIFIED QUANTITIES, BID BOOK, AND INTENT OF DRAWING.
- CONTRACTOR IS RESPONSIBLE FOR ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS ANY QUANTITIES PROVIDE BY LANDDESIGN ARE PROVIDED FOR CONVENIENCE ONLY AND SHALL NOT BE CONSIDERED ABSOLUTE. LANDDESIGN SHOULD BE NOTIFIED OF ANY GRADING DISCREPANCIES.

- THE CONTRACTOR SHALL EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS IN THEIR ENTIRETY. SURVEY THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE BASED ON THOROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED ANY DISCREPANCY AND/ OR UNCERTAINTY AS TO WHAT MATERIAL OR PRODUCT IS TO BE USED, SHALL BE VERIFIED WITH THE OWNER OR LANDDESIGN PRIOR TO BIDDING.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED FOR SAFE EXECUTION AND COMPLETION OF WORK, AND FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- IN THE EVENT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE OWNER & LANDDESIGN SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT THIS SITE AND AND BE RESPONSIBLE FOR ACCURACY AND CORRECTNESS OF SAME.
- CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES AND NOTIFY OWNER & LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- ALL EXISTING WORK OR LANDSCAPING NOT SHOWN TO BE ALTERED OR REMOVED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR(S) SHALL BEAR THE TOTAL EXPENSE FOR, AND SHALL REPAIR ANY DAMAGE TO EXISTING CONDITIONS, OR IMPROVEMENTS NOT INDICATED IN THE DRAWINGS OR SPECIFICATIONS TO RECEIVE ALTERATION, ADDITIONS OR REMOVAL.

LAYOUT NOTES:

- ALL MATERIALS AND CONSTRUCTION WITHIN RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH NCDOT AND CITY OF CONCORD STANDARDS AND SPECIFICATIONS AND ALL OTHER CITY, STATE AND FEDERAL REGULATIONS AND/OR STANDARDS.
- EXISTING UTILITIES ARE SHOWN SCHEMATICALLY AND ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING IMPROVEMENTS IN THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION. REPAIRS SHALL BE EQUAL TO OR BETTER THAN CONDITION PRIOR TO CONSTRUCTION.
- BOUNDARY SURVEY: BOUNDARY SURVEY INFORMATION IS BASED ON THE BOUNDARY SURVEY PREPARED BY RB PHARR AND ASSOCIATES, PA. REFER TO THE BOUNDARY SURVEY AND PLAT TO VERIFY PROPERTY LINES AND EASEMENT LOCATIONS.

Concord Notes

- PER CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98 (2) ALL MATERIALS, EQUIPMENT, LABOR, AND WORKMANSHIP ASSOCIATED WITH PUBLIC WATER AND / OR SEWER EXTENSION AND/OR MODIFICATION SHALL BE IN ACCORDANCE WITH AND SUBJECT TO THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATIONS, THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, AND THE NORTH CAROLINA ADMINISTRATIVE CODE FOR WASTEWATER DISTRIBUTION SYSTEMS. IN THE EVENT OF CONFLICT BETWEEN THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATIONS, THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, OR THE NORTH CAROLINA CODE, THE MOST RESTRICTIVE REQUIREMENTS SHALL APPLY.
- REVIEW AND APPROVAL OF THE PLANS DOES RELIEVE THE OWNER, CONTRACTOR, OR DEVELOPER FROM MEETING THE REQUIREMENTS OF THE CITY OF CONCORD'S OR CABARRUS COUNTY ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, (AS APPLICABLE), CONCORD WATER & SEWER POLICIES AND TECHNICAL SPECIFICATIONS, THE "STANDARD SPECIFICATION FOR WASTEWATER COLLECTION & WASTE DISTRIBUTION FOR CABARRUS COUNTY (WSACC MANUAL) AND ANY OTHER LOCAL, STATE, AND FEDERAL REGULATIONS& APPROVALS. THE CONTRACTOR MUST CONTACT THE CITY OF CONCORD ENGINEERING CONSTRUCTION MANAGER AT 704-920-5425 AT LEAST 24-HOURS PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY.
- THE EXISTING WATER MAIN VALVE RIMS AND STEMS AND THE EXISTING SEWER MAIN MANHOLE RIMS ARE TO BE RAISED OR LOWERED TO FINAL GRADE, AS APPLICABLE AND AT LEAST 3'-FT OF GROUND COVER IS REQUIRED.
- PER THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-98 THE FOLLOWING MINIMUM SEPARATIONS MUST BE INDICATED, UNLESS OTHERWISE APPROVED BY THE CITY OF CONCORD.
 - A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION AND THE CITY'S WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. GREATER SEPERATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS.
 - A MINIMUM VERTICAL SEPERATION OF TWO FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION, INCLUDING BUT NOT LIMITED TO ANY OTHER UTILITY PROVIDER'S LINES OR EQUIPMENT, AND THE CITY'S WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. IF AN EXCEPTION IS GRANTED, A MINIMUM VERTICAL SEPARATION OF ONE FOOT MUST BE MAINTAINED AND THE CITY WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR AN APPROVED FERROUS MATERIAL WITH JOINTS THAT EQUIVALENT TO POTABLE WATER MAIN STANDARDS FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE POINT OF CROSSING. GREATER SEPARATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS.
 - A MINIMUM HORIZONTAL SEPARATION OF TEN FEET SHALL BE MAINTAINED BETWEEN THE CITY WATER DISTRIBUTION SYSTEM AND WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED.

LandDesign.

PROJECT NARRATIVE

PHASE 2 OF THIS PROJECT CONSISTS OF THE INSTALLATION OF APPROXIMATELY ±8.825 LF OF 12" GRAVITY SEWER ALONG WITH APURTEANANCES AND OTHER PROJECT WORK, FOR THE PURPOSES OF EXTENDING SEWER.

THE PROJECTED AMOUNT OF GROUND DISTURBANCE FOR PHASE 2 IS ±9.93 ACRES. THIS IS BASED UPON A DISTURBANCE OF 9,392 LF, AN AVERAGE CONSTRUCTION WIDTH OF 30 FEET DISTURBED BY THE INSTALLATION OF THE GRAVITY SEWER, AND PROPOSED SEWER ACCESS ROADS.

WORK SHALL PROCEED IN SUCH A MANNER SO AS TO LIMIT THE AMOUNT OF GROUND DISTURBANCE BY HAVING ONLY ONE SECTION OF THE DITCH OPEN AT A TIME AND THEREBY REDUCING THE POTENTIAL FOR LARGE QUANTITIES OF SEDIMENT TO BE TRANSPORTED OFF SITE.

SEEDING OF DENIED AREAS SHALL BE DONE AS SOON AS POSSIBLE, BUT IN NO CASE LONGER THAN 10 DAYS AND IN ACCORDANCE WITH THE SPECIFICATIONS GIVEN IN THE PLANS. REMOVAL OF ALL SEDIMENTATION AND EROSION CONTROL DEVICES SHALL ONLY BE DONE AFTER APPROVAL HAS BEEN COORDINATED WITH THE DEPARTMENT OF ENVIRONMENTAL HEALTH AND NATURAL RESOURCES AND THE CITY OF CONCORD.

LOCATION AND PROTECTION OF ALL UTILITIES IN THE WORK AREA SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PLEASE NOTICE THAT THIS PROJECT CROSSES SEVERAL UNDERGROUND UTILITIES ALONG THE ROUTE OF WORK. MINIMUM SEPARATION BETWEEN THE NEW SEWER LINES AND THESE UTILITIES SHALL BE HELD AT ALL TIMES. IN THE EVENT OF AN UNFORESEEN SITUATION, THE CONTRACTOR IS TO CONTACT THE LANDESIGN IMMEDIATELY.

WITHIN THE WETLANDS - FOR ALL OTHER SEPARATIONS, MATERIALS, TESTING METHODS AND ACCEPTABILITY STANDARDS MEETING WATER MAIN STANDARDS (15A NCAC 18C) SHALL BE SPECIFIED. SPECIFY C-900 PVC PIPE CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.

WITHIN THE WETLANDS INDICATE THE ADDITIONAL MANHOLE REQUIREMENTS:

1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT FRAME AND COVER WITH GASKET.
2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
4. WATERTIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR CONCRETE CONNECTION TYPE MANHOLE.
5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

- 1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES THAT DO NOT EXCEED 10 FEET IN DEPTH. THE CLASS 2 STREAM SHALL HAVE NO IMPACTS OR TEMPORARY STREAM CROSSINGS. PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
- 2. ALL TEMPORARY WETLANDS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING "6 TO 12" OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED MIX. NO EXCESS TEMPORARY EROSION CONTROL MEASURES REQUIRED FOR CONSTRUCTION ACCESS (THOSE AREAS THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE SEED MIX.
- 3. CULTURED STREAM CROSSINGS WILL BE SUBJECT TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
- 4. ANTI-SEEP COLLARS SHALL BE PLACED AT THE DOWN-GRADIENT GRADE/TOPOGRAPHY BOUNDARY OF WETLANDS IMPACT AREAS AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.

REFER TO PHASE 2 PLANS
PREPARED BY LANDDESIGN
UNDER SEPARATE COVER

REFER TO PHASE 1 PLANS
PREPARED BY LANDDESIGN
UNDER SEPARATE COVER

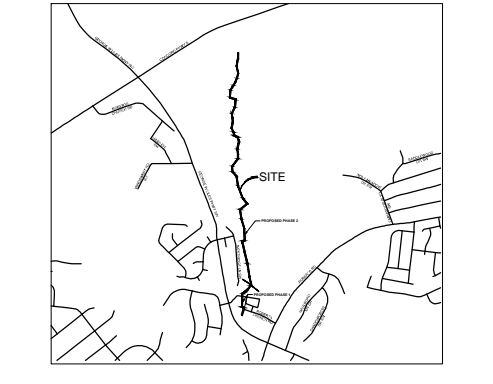
1. ALL NECESSARY ACCESS AGREEMENTS AND EASEMENTS MUST BE OBTAINED AND MUST BE UP TO DATE PRIOR TO STARTING LAND DISTURBING ACTIVITY
2. CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN RECEIVED AND THAT THOSE TO BE DISPLAYED ON-SITE ARE AVAILABLE.
3. CONTRACTOR SHALL HOLD PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS BEFORE THE ACTUAL START OF CONSTRUCTION.
4. CONTRACTOR SHALL CONTACT CAROLINA ONE CALL AND ALL ENTITIES HAVING BURIED UTILITIES AT LEAST 72 HOURS PRIOR TO DIGGING OR AS DIRECTED AT THE PRE-CONSTRUCTION MEETING.
5. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES (IF ANY) AT EACH POINT OF ACCESS TO STORAGE AND CONSTRUCTION AREAS.
6. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH PLANS AND BEFORE STARTING WORK.
7. CONTRACTOR SHALL CLEAR RIGHT-OF-WAY IF NECESSARY.
8. STOCKPILE RIP-RAP ON SITE AND INSTALL ALL OTHER EROSION CONTROL MEASURES WHERE THE WORK IS OCCURRING. THE CONTRACTOR SHALL NOT INSTALL EROSION CONTROL MEASURES WHERE THE WORK WILL NOT OCCUR FOR SOME TIME. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE CITY/PROJECT ENGINEER OR UPON RECOMMENDATION OF NCDEQ DWR/ DEMIL-EROSION AND SEDIMENT CONTROL SECTION PERMANENCE AS CANNOT BE DETERMINED.
9. SPECIFICATION FOR THIS PROJECT SHALL COMPLY WITH THE TIME FRAME GUIDELINES AS ESTABLISHED BY THE NC001 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE APRIL 01, 2019 BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, AND DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.
10. CONTRACTOR SHALL COORDINATE ALL TESTING WITH THE CITY'S ENGINEERING DEPARTMENTS CONSTRUCTION ADMINISTRATOR AND LANDSCAPE AT LEAST 24 HOURS IN ADVANCE OF SUCH WORK.
11. UPON COMPLETION OF THE INSTALLATION AND WITH APPROVAL NCDEQ DWR/ DEMIL-EROSION AND SEDIMENT CONTROL DIVISIONS EXCEPT FOR CREEK/STREAM BANK STABILIZATION SHALL BE REMOVED AND DISPOSED OF IN AN ACCEPTABLE MANNER. EACH SECTION SHALL BE SEED AT EARLIEST POSSIBLE DATE AFTER INSTALLATION OF PIPE OR STRUCTURE.
12. ONCE GROUND COVER IS FIRMLY ESTABLISHED, ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITH THE APPROVAL OF THE EROSION CONTROL INSPECTOR.
13. CONTRACTOR SHALL REFERENCE SPECIAL CONDITIONS FOR JOB SEQUENCE AND OTHER DIRECTIONS, IF ANY CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH THE CITY ENGINEERING DEPARTMENT AND LANDSCAPE.

1. BASE INFORMATION, INCLUDING EXISTING CONDITIONS, TOPOGRAPHY, EXISTING UTILITIES, AND BOUNDARY INFORMATION IS FROM PLANS BY: RB PHARR AND ASSOCIATES, P.A.
2. WRITTEN DIMENSIONS PREVAIL OVER SCALED DIMENSIONS. NOTIFY LANDDESIGN OF ANY DISCREPANCIES.
3. DIMENSIONS ARE TO FACE OF OBJECT, UNLESS NOTED OTHERWISE.
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UNDERGROUND UTILITIES, EASEMENTS, STRUCTURES, AND LINE AND AREA DISCREPANCIES IN ACTUAL FIELD MEASUREMENTS ARE TO BE REPORTED TO LANDDESIGN IMMEDIATELY.
5. ALL PROPOSED FINISHED GRADES ARE BASED ON INFORMATION PROVIDED BY THE OWNER'S SURVEY AND ON THE SURVEY. ANY DISCREPANCIES IN ACTUAL FIELD MEASUREMENTS ARE TO BE REPORTED TO LANDDESIGN IMMEDIATELY.
6. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL ITEMS PER DRAWINGS AND SPECIFICATION. NOTIFY LANDDESIGN OF ANY MAJOR DISCREPANCIES BETWEEN CONTRACTOR'S VERIFIED QUANTITIES, BID BOOK, AND INTENT OF DRAWING.
7. CONTRACTOR IS RESPONSIBLE FOR ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS ANY QUANTITIES PROVIDED BY LANDDESIGN ARE PROVIDED FOR INFORMATION ONLY AND SHALL BE CONSIDERED ABSOLUTE. LANDDESIGN SHOULD BE NOTIFIED OF ANY GRADING DISCREPANCIES.
8. THE CONTRACTOR SHALL EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS IN THEIR ENTIRETY. SURVEY THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE COVERED THROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED. ANY DISCREPANCY AND/OR UNCERTAINTY AS TO WHAT MATERIAL OR PRODUCT IS TO BE USED, SHALL BE VERIFIED WITH THE OWNER OR LANDDESIGN PRIOR TO BIDDING.
9. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED FOR SAFE EXECUTION AND COMPLETION OF WORK, AND FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
10. IN THE EVENT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE OWNER & LANDDESIGN SHALL BE NOTIFIED IMMEDIATELY.
11. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
12. CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT THIS SITE AND BE RESPONSIBLE FOR ACCURACY AND CORRECTNESS OF SAME.
13. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES AND NOTIFY OWNER & LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
14. THE CONTRACTOR SHALL EMPLOY, AS REQUIRED BY GOVERNING AUTHORITIES, AN APPROVED TESTING LABORATORY TO TEST ALL MATERIALS, CONCRETE, SOIL, COMPACTION AND WELDING TO INSURE COMPLIANCE WITH PLANS, STANDARDS AND CODES. COST SHALL BE INCLUDED AS INCIDENTAL TO THE CONTRACT.
15. ALL EXISTING WORK OR LANDSCAPING NOT SHOWN TO BE ALTERED OR REMOVED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR(S) SHALL BEAR THE TOTAL EXPENSE FOR, AND SHALL REPAIR ANY DAMAGE TO EXISTING CONSTRUCTION OR LANDSCAPING INDICATED IN THE DRAWINGS OR SPECIFICATIONS TO RECEIVE ALTERATION, ADDITIONS OR REMOVAL.

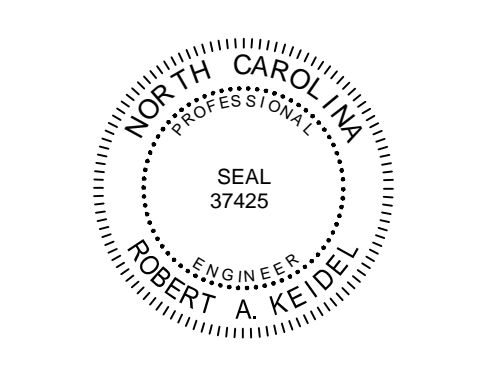
1. PER CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-28 (2) ALL MATERIALS, EQUIPMENT, LABOR, AND WORKSMANSHIP ASSOCIATED WITH PUBLIC WATER MAIN REPAIR, EXTENSION AND/OR MODIFICATION SHALL BE IN ACCORDANCE WITH AND SUBJECT TO THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATIONS; THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, AND THE NORTH CAROLINA ADMINISTRATIVE CODE FOR THE WATER AND SEWER COLLECTION SYSTEMS. THE CITY OF CONCORD'S POLICY OF CONFLICT BETWEEN THE WATER AND SEWER AUTHORITY OF CABARRUS COUNTY'S STANDARD SPECIFICATION: THE CITY OF CONCORD'S ORDINANCES, POLICIES, AND STANDARD SPECIFICATION, OR THE NORTH CAROLINA ADMINISTRATIVE CODE, THE MORE PROTECTIVE REQUIREMENT SHALL PREVAIL.
2. REVIEW AND APPROVAL OF THE PLANS DOES NOT RELIEVE THE OWNER, CONTRACTOR, OR DEVELOPER FROM MEETING THE REQUIREMENTS OF THE CITY OF CONCORDS OR CABARRUS COUNTY ORDINANCES, POLICIES, AND STANDARD SPECIFICATIONS, (AS APPLICABLE), CONCORD WATER & SEWER POLICIES AND TECHNICAL SPECIFICATIONS, THE CITY OF CONCORD SPECIFICATIONS, AND THE CITY OF CONCORDS POLICY OF DISTRIBUTION FOR CABARRUS COUNTY (ISWAC MANUAL) AND ANY OTHER LOCAL, STATE, AND FEDERAL REGULATIONS & APPROVALS.
3. THE CONTRACTOR MUST CONTACT THE CITY OF CONCORD ENGINEERING CONSTRUCTION MANAGER AT 704-920-5425 AT LEAST 24 HOURS PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY.
4. THE EXISTING WATER MAIN VALVE RISERS AND STEMS AND THE EXISTING SEWER MAIN VALVE RISERS ARE TO BE RAISED OR LOWERED TO FINAL GRADE, AS APPLICABLE, AND AT LEAST 3-FT OF GROUND COVER IS TO BE MAINTAINED OVER THE EXISTING UTILITIES AT ALL TIMES PER THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-28.
5. PER THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62, ARTICLE 3, SECTION 62-28: THE FOLLOWING MINIMUM SEPARATIONS MUST BE INDICATED, UNLESS OTHERWISE APPROVED BY THE CITY OF CONCORD:
 - A MINIMUM HORIZONTAL SEPARATION OF FIVE FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION AND THE CITY'S WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. GREATER SEPARATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS.
 - A MINIMUM VERTICAL SEPARATION OF TWO FEET SHALL BE MAINTAINED BETWEEN ANY TYPE OF MAINTENANCE OBSTRUCTION, INCLUDING BUT NOT LIMITED TO ANY OTHER UTILITY PROVIDER'S LINES OR EQUIPMENT, AND THE CITY WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED. IF AN EXCEPTION IS GRANTED, A MINIMUM VERTICAL SEPARATION OF ONE FOOT MUST BE MAINTAINED AND THE CITY WATER DISTRIBUTION LINES, WASTEWATER COLLECTION LINES, AND ASSOCIATED APPURTENANCES SHALL BE PROTECTED BY AN APPROVED FERROUS MATERIAL WITH JOINTS THAT ARE EQUIVALENT TO POTABLE WATER MAIN STANDARDS FOR A DISTANCE OF TEN FEET ON EITHER SIDE OF THE POINT CROSSING. GREATER SEPARATION DISTANCES MAY BE REQUIRED AS SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS.
 - A MINIMUM HORIZONTAL SEPARATION OF TWO FEET SHALL BE MAINTAINED BETWEEN THE CITY WATER DISTRIBUTION SYSTEM AND WASTEWATER COLLECTION LINES AND ASSOCIATED APPURTENANCES, UNLESS AN EXCEPTION IS GRANTED.

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KEY MAP



SEAL



02.27.2023

PROJECT _____

PHASE 3
CITY OF CONCORD
PO BOX 308

[illegible]

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE NORTH

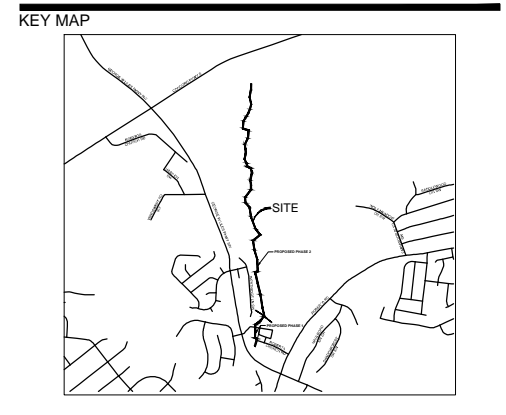
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(NOT TO SCALE)

SEWER PLAN - OVERALL

SHEET NUMBER

C1-00



02.27.2023

PROJECT

PHASE 3

CITY OF CONCORD

PO BOX 308

LANDDESIGN PROJ.# 1020059

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE

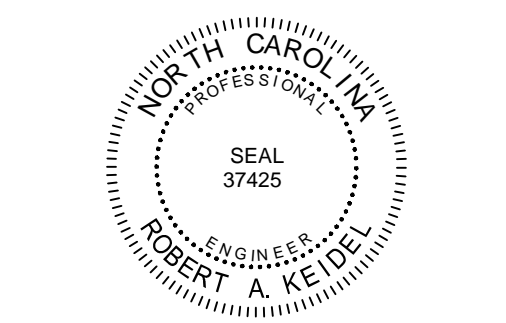


VERT: N/A
HORIZ: 1"=40'

SHEET TITLE

SEWER PLAN AND PROFILE

C1-02



PROJECT


PO BOX 308

NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

SCALE

NORTH

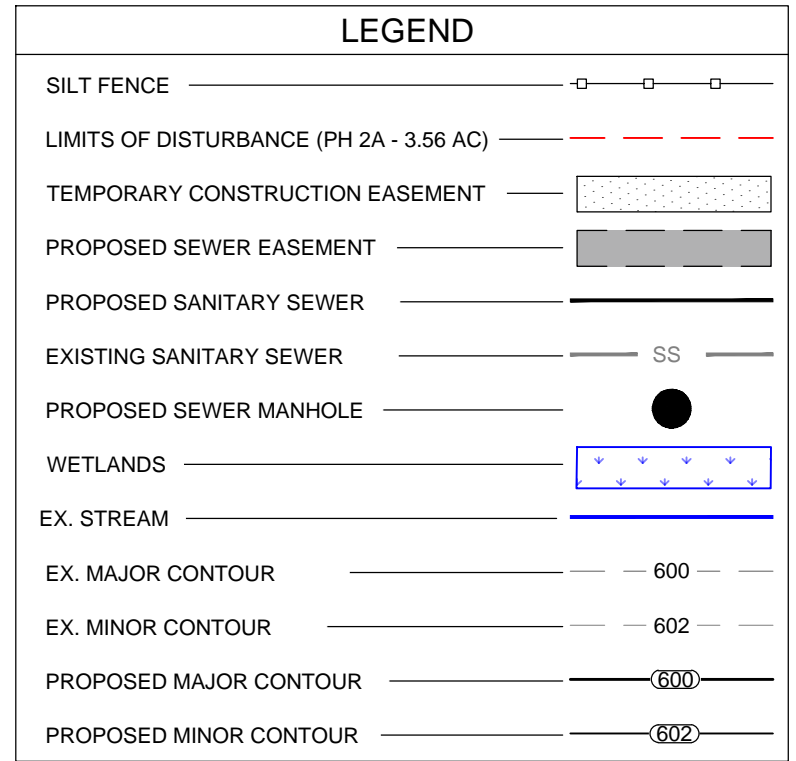
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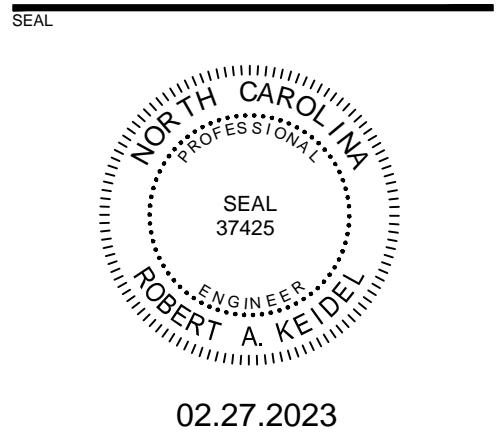
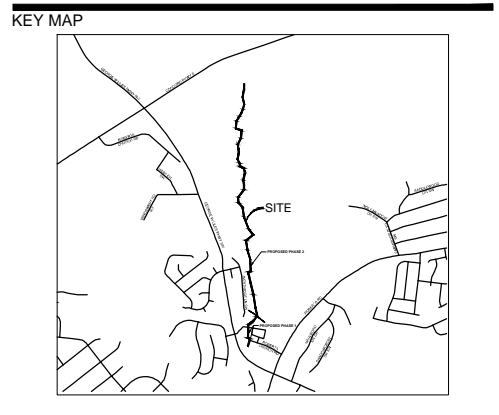


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SHEET NUMBER

C1-03





02.27.2023

ISSUED FOR
PERMITTING

PROJECT

12" PUBLIC
SEWER
EXTENSION

PHASE 3

CITY OF CONCORD

PO BOX 308

LANDDESIGN PROJ.# 1020059

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAKSCALE
VERT: N/A
HORZ: 1"=40'
0 20 40 80'

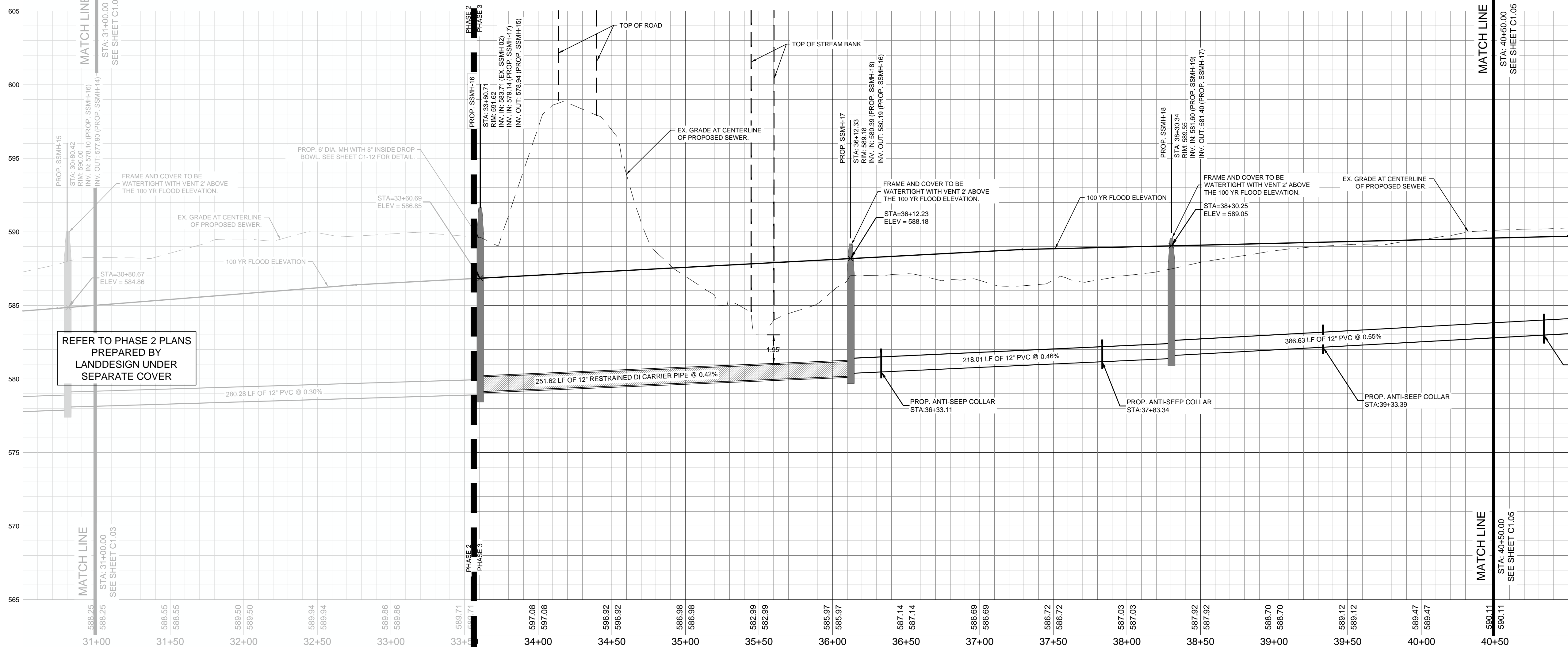
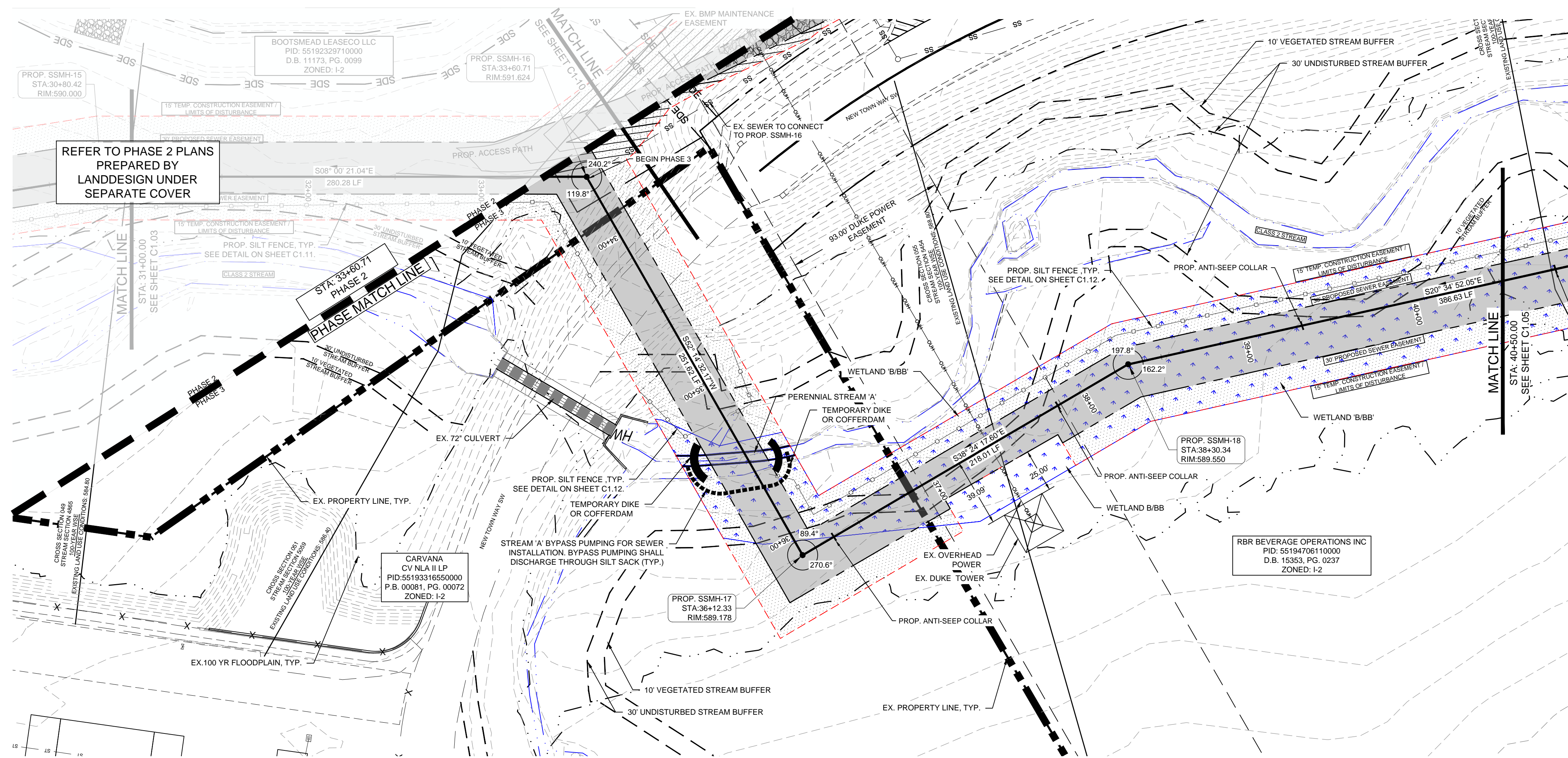
SHEET TITLE

SHEET NUMBER

C1-04

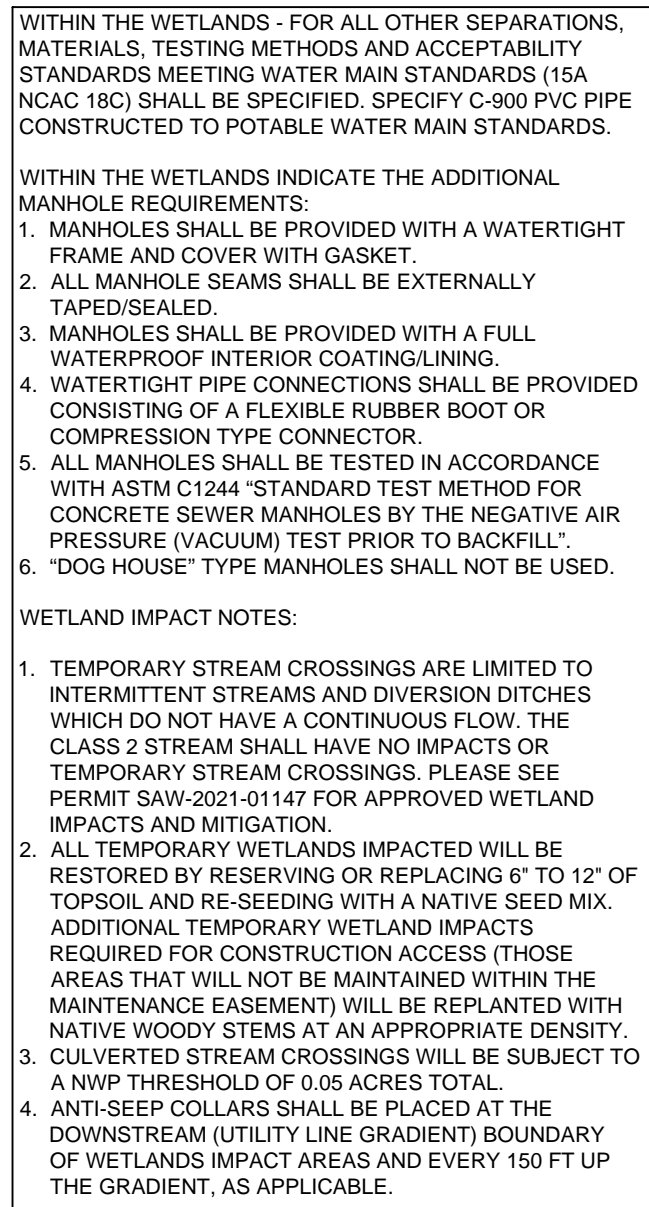
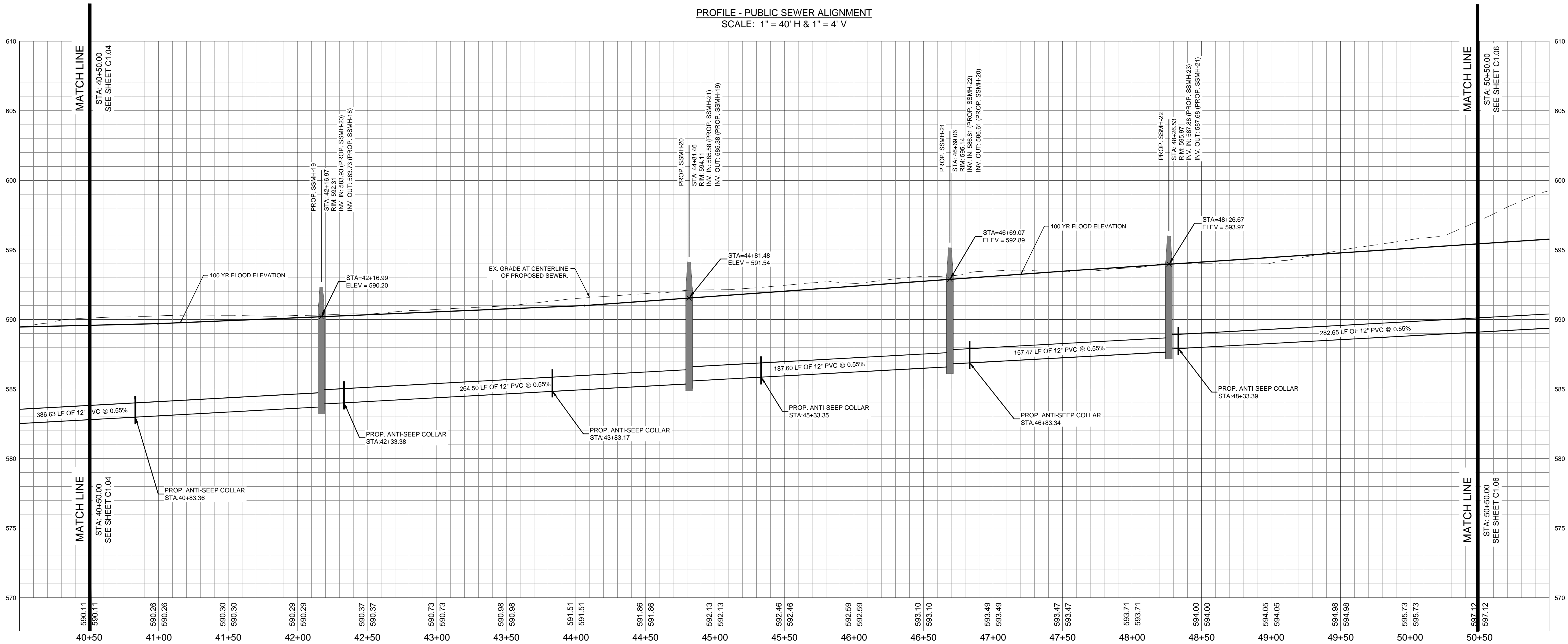
PROFILE - PUBLIC SEWER ALIGNMENT

SCALE: 1" = 40' H & 1" = 4' V

REFER TO PHASE 2 PLANS
PREPARED BY
LANDDESIGN UNDER
SEPARATE COVERREFER TO PHASE 2 PLANS
PREPARED BY
LANDDESIGN UNDER
SEPARATE COVERWITHIN THE WETLANDS - FOR ALL OTHER SEPARATIONS,
MATERIALS, TESTING METHODS AND ACCEPTABILITY
STANDARDS MEETING WATER MAIN STANDARDS (15A
NCAC 18C) SHALL BE SPECIFIED. SPECIFY C-900 PVC PIPE
CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.WITHIN THE WETLANDS INDICATE THE ADDITIONAL
MANHOLE REQUIREMENTS:
1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT
FRAME AND COVER WITH GASKET.
2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY
TAPERED/SEALED.
3. MANHOLES SHALL BE PROVIDED WITH A FULL
WATERPROOF INTERIOR COATING/LINING.
4. WATERTIGHT PIPE CONNECTIONS SHALL BE
PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT
OR COMPRESSION TYPE CONNECTOR.
5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE
WITH ASTM C1244 "STANDARD TEST METHOD FOR
CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR
PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.WETLAND IMPACT NOTES:
1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO
INTERMITTENT STREAMS AND DIVERSION DITCHES
WHICH DO NOT HAVE A CONTINUOUS FLOW. THE
CLASS 2 STREAM SHALL HAVE NO IMPACTS OR
TEMPORARY STREAM CROSSINGS. PLEASE SEE
PERMIT SAW-2021-01147 FOR APPROVED WETLAND
IMPACTS AND MITIGATION.
2. ALL TEMPORARY WETLANDS IMPACTED WILL BE
RESTORED BY RESERVING OR REPLACING 6" TO 12"
OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED
MIX. ADDITIONAL TEMPORARY WETLAND IMPACTS
REQUIRED FOR CONSTRUCTION ACCESS (THOSE
AREAS THAT WILL NOT BE MAINTAINED WITHIN THE
MAINTENANCE EASEMENT) WILL BE REPLANTED WITH
NATIVE WOODY STEMS AT AN APPROPRIATE DENSITY.
3. CULVERTED STREAM CROSSINGS WILL BE SUBJECT
TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
4. ANTI-SEEP COLLARS SHALL BE PLACED AT THE
DOWNSTREAM (UTILITY LINE GRADIENT) BOUNDARY
OF WETLANDS IMPACT AREAS AND EVERY 150 FT UP
THE GRADIENT, AS APPLICABLE.

LEGEND

SILT FENCE	—○—○—○—
LIMITS OF DISTURBANCE (PH 2A - 3.56 AC)	—●—●—●—
TEMPORARY CONSTRUCTION EASEMENT	—■—■—■—
PROPOSED SEWER EASEMENT	—■—■—■—
PROPOSED SANITARY SEWER	—SS—SS—SS—
EXISTING SANITARY SEWER	—SS—SS—SS—
PROPOSED SEWER MANHOLE	—●—●—●—
WETLANDS	—■—■—■—
EX. STREAM	—■—■—■—
EX. MAJOR CONTOUR	—600—
EX. MINOR CONTOUR	—602—
PROPOSED MAJOR CONTOUR	—600—
PROPOSED MINOR CONTOUR	—602—



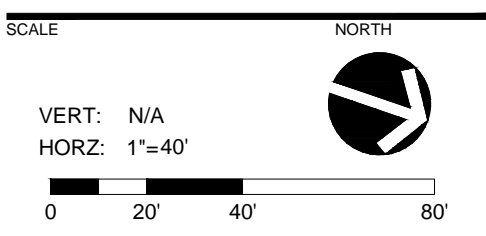
LEGEND

SILT FENCE	
LIMITS OF DISTURBANCE (10:10 AC)	
TEMPORARY CONSTRUCTION EASEMENT	
PROPOSED SEWER EASEMENT	
PROPOSED SANITARY SEWER	
EXISTING SANITARY SEWER	
PROPOSED SEWER MANHOLE	
WETLANDS	
EX. STREAM	
EX. MAJOR CONTOUR	
EX. MINOR CONTOUR	
PROPOSED MAJOR CONTOUR	
PROPOSED MINOR CONTOUR	

PHASE 3
CITY OF CONCORD
PO BOX 308

[illegible]

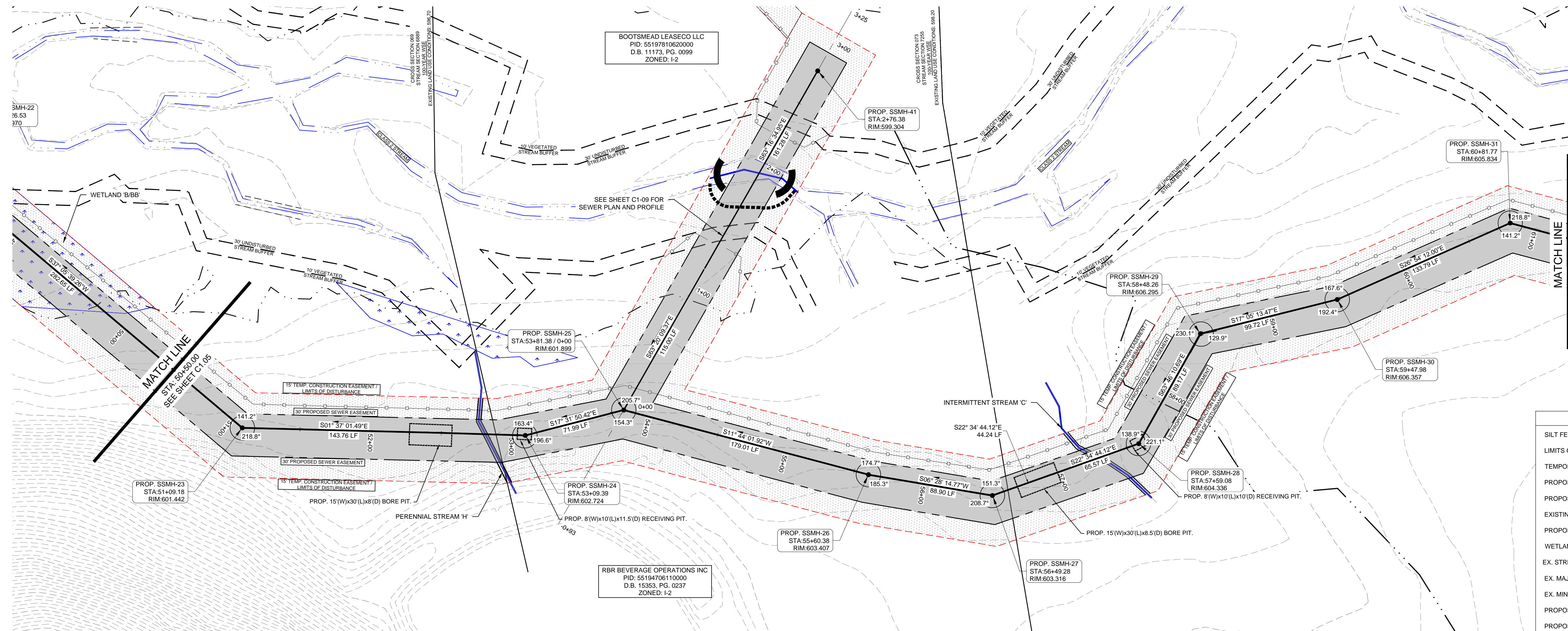
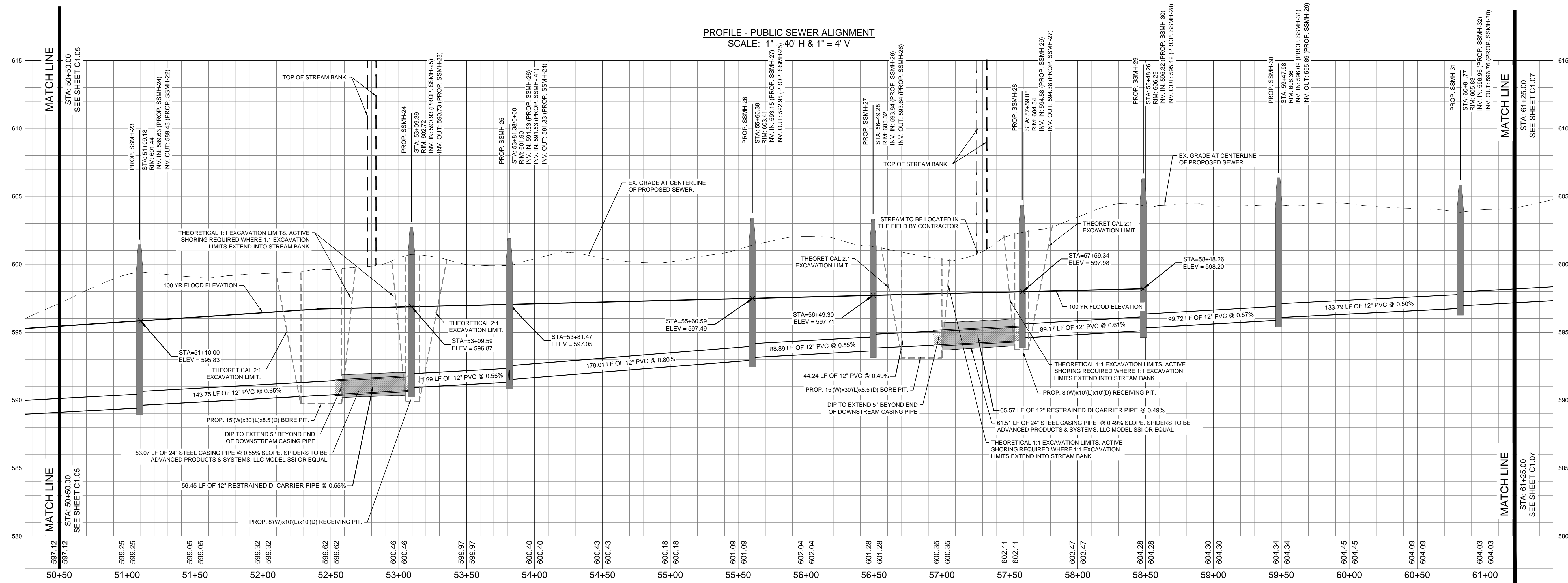
DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK



SEWER PLAN AND PROFILE

SHEET NUMBER

C1-05



WITHIN THE WETLANDS - FOR ALL OTHER SEPARATIONS, MATERIALS, TESTING METHODS AND ACCEPTABILITY STANDARDS MEETING WATER MAIN STANDARDS (15A NCAC 18C) SHALL BE CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.

- WITHIN THE WETLANDS INDICATE THE ADDITIONAL MANHOLE REQUIREMENTS:
1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT FRAME AND COVER WITH GASKET.
 2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
 3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
 4. WATERTIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR COMPRESSION TYPE CONNECTOR.
 5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
 6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES WHICH DO NOT HAVE A CONTINUOUS FLOW. THE CLASS 2 STREAM SHALL HAVE NO IMPACTS OR TEMPORARY STREAM CROSSINGS. PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
2. ALL TEMPORARY WETLANDS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING 6" TO 12" OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED MIX. ADDITIONAL TEMPORARY WETLAND IMPACTS REQUIRED FOR CONSTRUCTION ACCESS (THOSE AREAS THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE WOODY STEMS AT AN APPROPRIATE DENSITY.
3. CULVERTED STREAM CROSSINGS WILL BE SUBJECT TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
4. ANTI-SLEEP COLLARS SHALL BE PLACED AT THE DOWNSTREAM UTILITY LINE GRADIENT BOUNDARY OF WETLANDS IMPACT AREAS AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.

LEGEND

SILT FENCE	—○—○—○—
LIMITS OF DISTURBANCE (10.10 AC)	—
TEMPORARY CONSTRUCTION EASEMENT	—
PROPOSED SEWER EASEMENT	—
PROPOSED SANITARY SEWER	SS
EXISTING SANITARY SEWER	SS
PROPOSED SEWER MANHOLE	●
WETLANDS	—
EX. STREAM	—
EX. MAJOR CONTOUR	600
EX. MINOR CONTOUR	602
PROPOSED MAJOR CONTOUR	600
PROPOSED MINOR CONTOUR	602

ISSUED FOR PERMITTING

12" PUBLIC SEWER EXTENSION

PHASE 3

CITY OF CONCORD

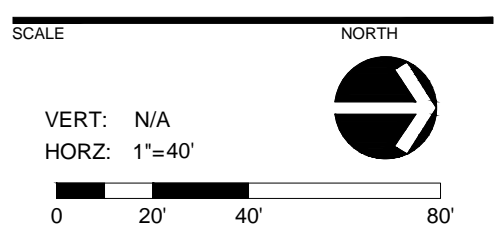
PO BOX 308

LANDDESIGN PROJ.# 1020059

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

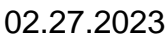
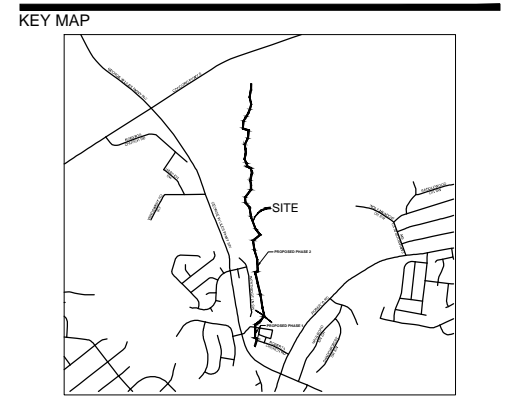


SHEET TITLE

SEWER PLAN AND PROFILE

SHEET NUMBER

C1-06



PROJECT _____

PHASE 3

CITY OF CONCORD

PO BOX 308

WITHIN THE WETLANDS - FOR ALL OTHER SEPARATIONS, MATERIALS, TESTING METHODS AND ACCEPTABILITY STANDARDS MEETING WATER MAIN STANDARDS (15A NCAC 18C) SHALL BE SPECIFIED. SPECIFY C-900 PVC PIPE CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.

WITHIN THE WETLANDS INDICATE THE ADDITIONAL
MANHOLE REQUIREMENTS.

1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT FRAME AND COVER WITH GASKET.
2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
4. WATERTIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR COMPRESSION TYPE CONNECTOR.
5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES WHICH DO NOT HAVE A CONTINUOUS FLOW. THE CLASS 2 PERMIT SHALL NOT BE USED FOR TEMPORARY STREAM CROSSINGS. PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
2. ALL TEMPORARY WETLANDS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING 6" TO 12" OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED MIX. ADDITIONAL TEMPORARY WETLAND IMPACTS WILL BE LIMITED TO 10% OF THE TOTAL WETLAND AREAS THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE WOODY STEMS AT AN APPROPRIATE DENSITY. CROWN COVER SHALL BE MAINTAINED AT OR ABOVE A NWP THRESHOLD OF 0.05 ACRES PLANT.
3. ANTI-SEEP COLLARS SHALL BE PLACED AT THE DOWNSTREAM (UTILITY LINE GRADIENT) BOUNDARY OF ALL TEMPORARY IMPACTS AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.


DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE

NORTH

VERT: N/A

HORZ: $1''=40'$

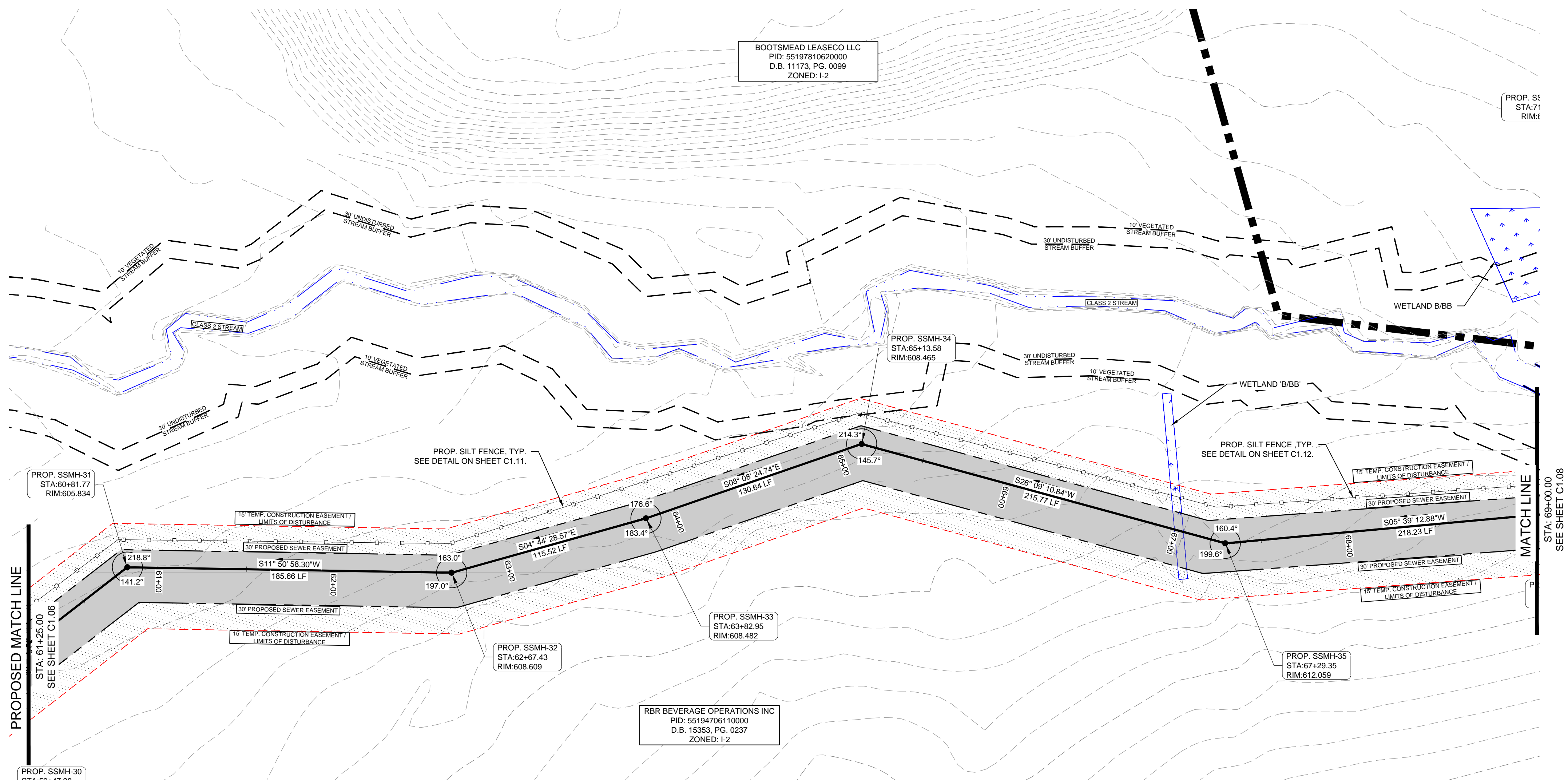
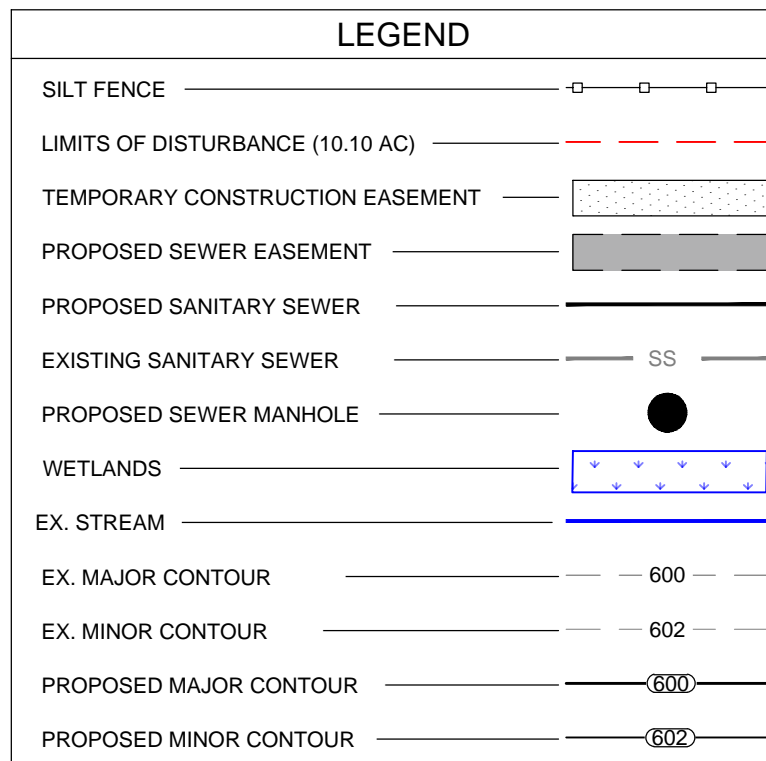


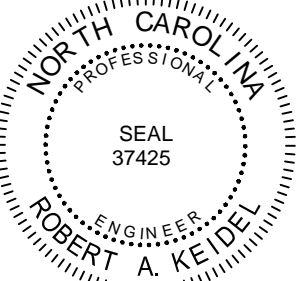
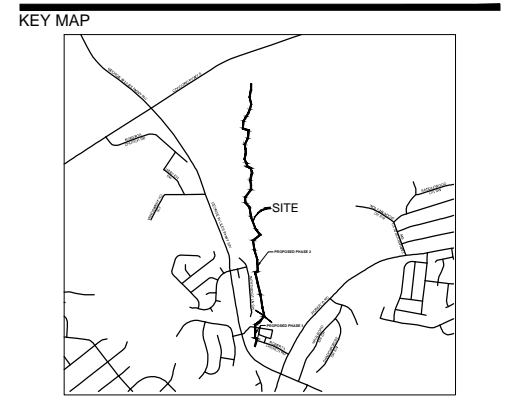
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SEWER PLAN AND PROFILE

SHEET NUMBER

C1-07





02.27.2023

PROJECT

PHASE 3

CITY OF CONCORD

PO BOX 308

WITHIN THE WETLANDS - FOR ALL OTHER PVC SEPARATIONS MATERIALS, TESTING METHODS AND ACCEPTABILITY STANDARDS MEETING WATER MAIN STANDARDS (15A NC 18C) SHALL BE SPECIFIED. SPECIFY C-900 PVC PIPE CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.

WITHIN THE WETLANDS INDICATE THE ADDITIONAL

1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT FRAME AND COVER WITH GASKET.
2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
4. WATERTIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR COMPRESSION TYPE CONNECTOR.
5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES WHICH DO NOT HAVE A CONTINUOUS FLOW. THE CLASSIFICATION SHALL BE BASED ON THE DRAINAGE OF TEMPORARY STREAM CROSSINGS. PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
2. TEMPORARY WETLANDS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING 6" TO 12" OF TOPSOIL, AND RE-SEEDING WITH A NATIVE SEED MIX. ADDITIONAL TEMPORARY WETLAND IMPACTS REQUIRE RESTORATION OF THE WETLAND TO A CONDITION THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE WOODY STEMS AT AN APPROPRIATE DENSITY.
3. TEMPORARY STREAM CROSSINGS SHALL BE SUBJECT TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
4. ANTI-SEEP COLLARS SHALL BE PLACED AT THE DOWNSTREAM (UTILITY LINE GRADIENT) BOUNDARY OF THE WETLAND IMPACT AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.

[illegible]

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE

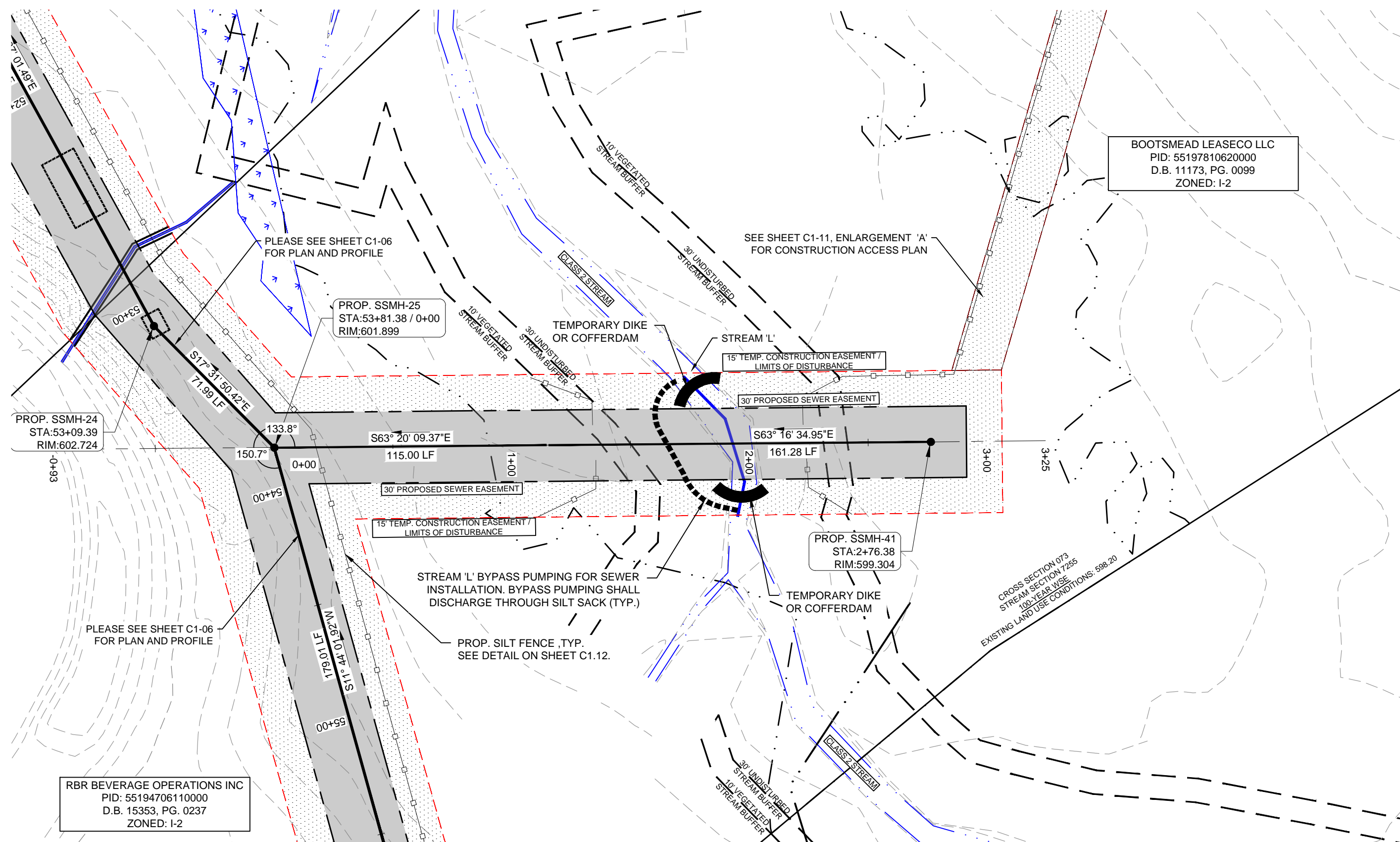
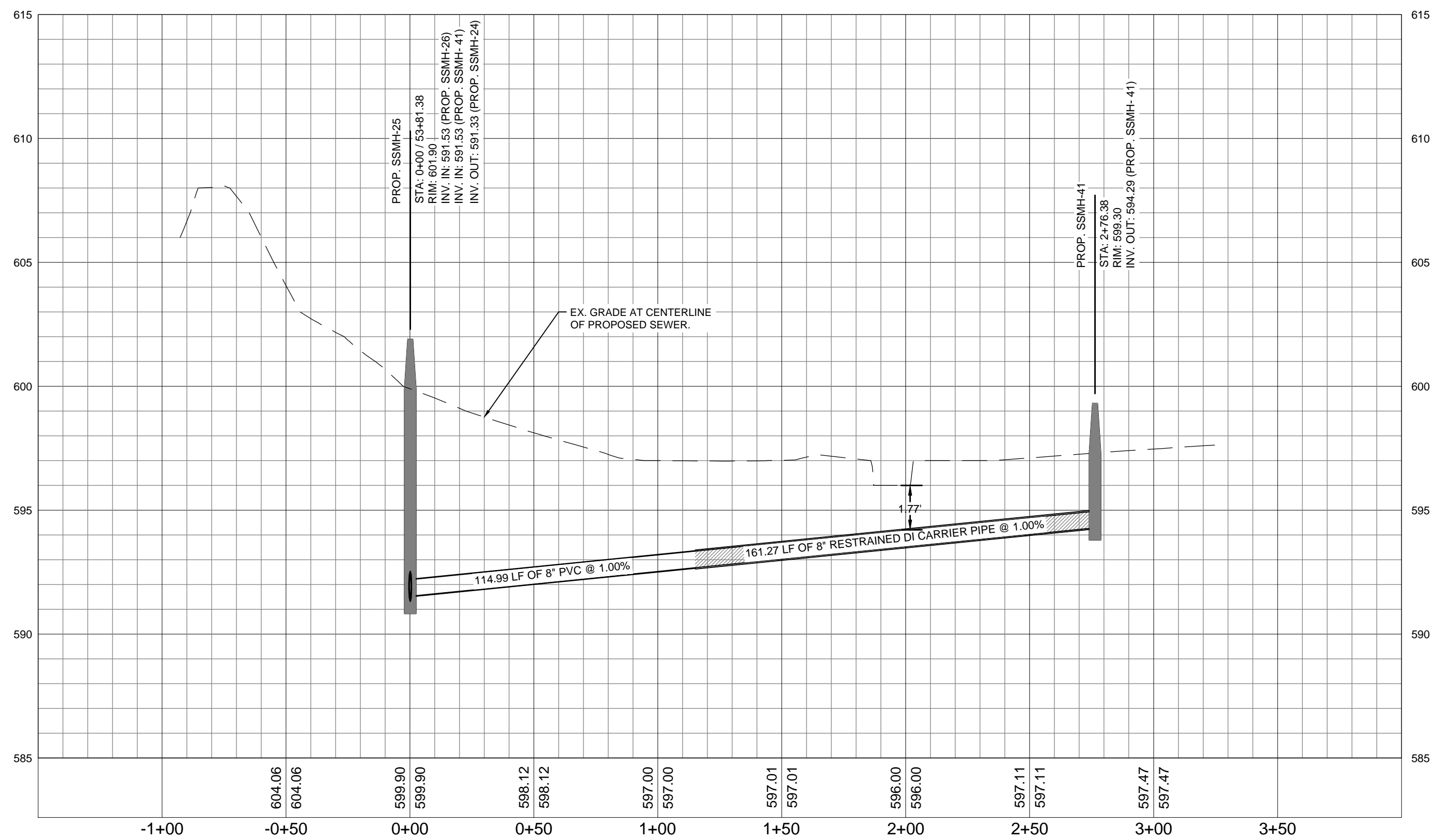
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HORIZ: 1"=40'

SHEET TITLE:

SEWER PLAN AND PROFILE

SHEET NUMBER

C1-08

PROFILE - PUBLIC SEWER LATERAL
SCALE: 1" = 40' H & 1" = 4' V

WITHIN THE WETLANDS - FOR ALL OTHER SEPARATIONS, MATERIALS, TESTING METHODS AND ACCEPTABILITY STANDARDS MEETING WATER MAIN STANDARDS (15A NCAC 18C) SHALL BE SPECIFIED. SPECIFY C-900 PVC PIPE CONSTRUCTED TO POTABLE WATER MAIN STANDARDS.

WITHIN THE WETLANDS INDICATE THE ADDITIONAL MANHOLE REQUIREMENTS:

1. MANHOLES SHALL BE PROVIDED WITH A WATERTIGHT FRAME AND COVER WITH GASKET.
2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
4. WATERTIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR COMPRESSION TYPE CONNECTOR.
5. ALL MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES WHICH DO NOT HAVE A CONTINUOUS FLOW. THE CLASS 2 STREAM SHALL HAVE NO IMPACTS OR TEMPORARY STREAM CROSSINGS. PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
2. ALL TEMPORARY WETLANDS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING 6" TO 12" OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED MIX. ADDITIONAL TEMPORARY WETLAND IMPACTS REQUIRED FOR CONSTRUCTION ACCESS (THOSE AREAS THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE WOODY STEMS AT AN APPROPRIATE DENSITY.
3. CULVERTED STREAM CROSSINGS WILL BE SUBJECT TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
4. ANTI-SEEP COLLARS SHALL BE PLACED AT THE DOWNSTREAM (UTILITY LINE GRADIENT) BOUNDARY OF WETLANDS IMPACT AREAS AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.

LEGEND

SILT FENCE	—○—○—○—
LIMITS OF DISTURBANCE (10.10 AC)	—●—●—●—
TEMPORARY CONSTRUCTION EASEMENT	—●—●—●—
PROPOSED SEWER EASEMENT	—●—●—●—
PROPOSED SANITARY SEWER	—●—●—●—
EXISTING SANITARY SEWER	—●—●—●—
PROPOSED SEWER MANHOLE	—●—●—●—
WETLANDS	—●—●—●—
EX. STREAM	—●—●—●—
EX. MAJOR CONTOUR	—●—●—●—
EX. MINOR CONTOUR	—●—●—●—
PROPOSED MAJOR CONTOUR	—●—●—●—
PROPOSED MINOR CONTOUR	—●—●—●—

ISSUED FOR
PERMITTING12" PUBLIC
SEWER
EXTENSION

PHASE 3

CITY OF CONCORD

PO BOX 308

LANDDESIGN PROJ.# 1020059

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE

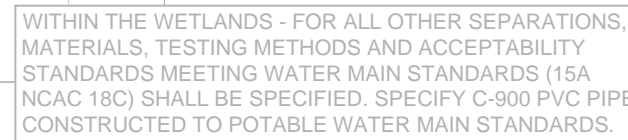
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HORZ: 1"=40'

SHEET TITLE

SEWER PLAN AND PROFILE

SHEET NUMBER

C1-09



WITHIN THE WETLANDS INDICATE THE ADDITIONAL

- WITHIN THE WETLANDS INDICATE THE ADDITIONAL MANHOLE REQUIREMENTS:
1. MANHOLES SHALL BE PROVIDED WITH A WATER/TIGHT FRAME AND COVER WITH GASKET.
 2. ALL MANHOLE SEAMS SHALL BE EXTERNALLY TAPED/SEALED.
 3. MANHOLES SHALL BE PROVIDED WITH A FULL WATERPROOF INTERIOR COATING/LINING.
 4. WATER/TIGHT PIPE CONNECTIONS SHALL BE PROVIDED CONSISTING OF A FLEXIBLE RUBBER BOOT OR COMPRESSION TYPE CONNECTOR.
 5. ALL MANHOLES SHALL BE TIED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL".
 6. "DOG HOUSE" TYPE MANHOLES SHALL NOT BE USED.

WETLAND IMPACT NOTES:

1. TEMPORARY STREAM CROSSINGS ARE LIMITED TO INTERMITTENT STREAMS AND DIVERSION DITCHES WHICH DO NOT HAVE A CONTINUOUS FLOW. THE CLOSURE OF STREAMS AND DIVERSIONS OR TEMPORARY STREAM CROSSINGS, PLEASE SEE PERMIT SAW-2021-01147 FOR APPROVED WETLAND IMPACTS AND MITIGATION.
2. TEMPORARY STREAM CROSSINGS IMPACTED WILL BE RESTORED BY RESERVING OR REPLACING 6" TO 12" OF TOPSOIL AND RE-SEEDING WITH A NATIVE SEED MIX. ADDITIONAL TEMPORARY STREAM CROSSINGS MAY BE REQUIRED FOR CONSTRUCTION ACCESS (THAT ARE AREAS THAT WILL NOT BE MAINTAINED WITHIN THE MAINTENANCE EASEMENT) WILL BE REPLANTED WITH NATIVE PLANTS AND TREES AT AN AREAL DENSITY OF CULVERTED STREAM CROSSINGS WILL BE SUBJECT TO A NWP THRESHOLD OF 0.05 ACRES TOTAL.
3. ANTI-SEEP COLLARS SHALL BE PLACED AT THE DOWN-STREAM (UP-STREAM) END OF EACH TEMPORARY OF WETLANDS IMPACT AREAS AND EVERY 150 FT UP THE GRADIENT, AS APPLICABLE.

SILT FENCE

LIMITS OF DISTURBANCE (PH 2A - 3.56 AC)

TEMPORARY CONSTRUCTION EASEMENT

PROPOSED SEWER EASEMENT

PROPOSED SANITARY SEWER

EXISTING SANITARY SEWER

PROPOSED SEWER MANHOLE

WETLANDS

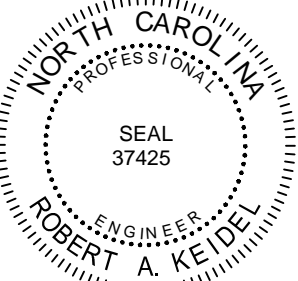
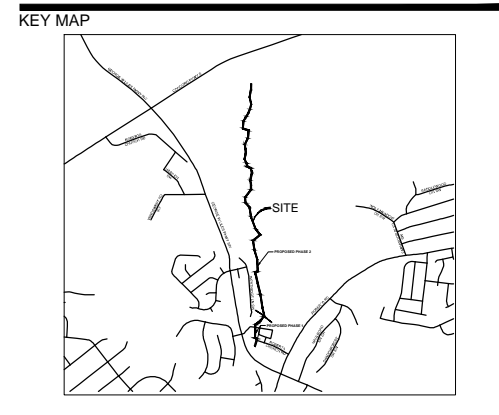
EX. STREAM

EX. MAJOR CONTOUR

EX. MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR



02.27.2023

**ISSUED FOR
PERMITTING**

PHASE 3

CITY OF CONCORD

PO BOX 308

LANDDESIGN PROJ.# 1020059

REVISION / ISSUANCE


NO.	DESCRIPTION	DATE
1	CITY SUBMITTAL	09.01.2022
2	CITY SUBMITTAL 2	09.27.2022
3	CITY SUBMITTAL 3	03.10.2023
4	PHASE 3 FOR CONSTRUCTION	02.27.2024

DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK

SCALE

NORTH

VERT: 1"=2'
HORZ: 1"=20'

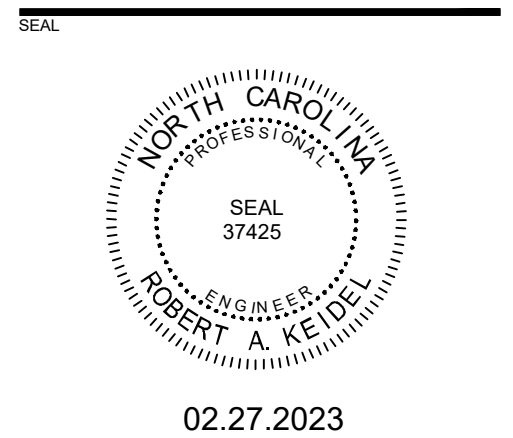


A horizontal graphic scale bar is shown below the text. It is divided into four segments: the first is black, the second is white, the third is black, and the fourth is white. Below the bar are markings for 0, 10', 20', and 40'. To the right of the scale bar is a north arrow, which is a black circle with a white arrow pointing towards the upper-left.

ACCESS PATH PLAN AND PROFILE

SHEET NUMBER

C1-10




PROJECT

**12" PUBLIC
SEWER
EXTENSION**

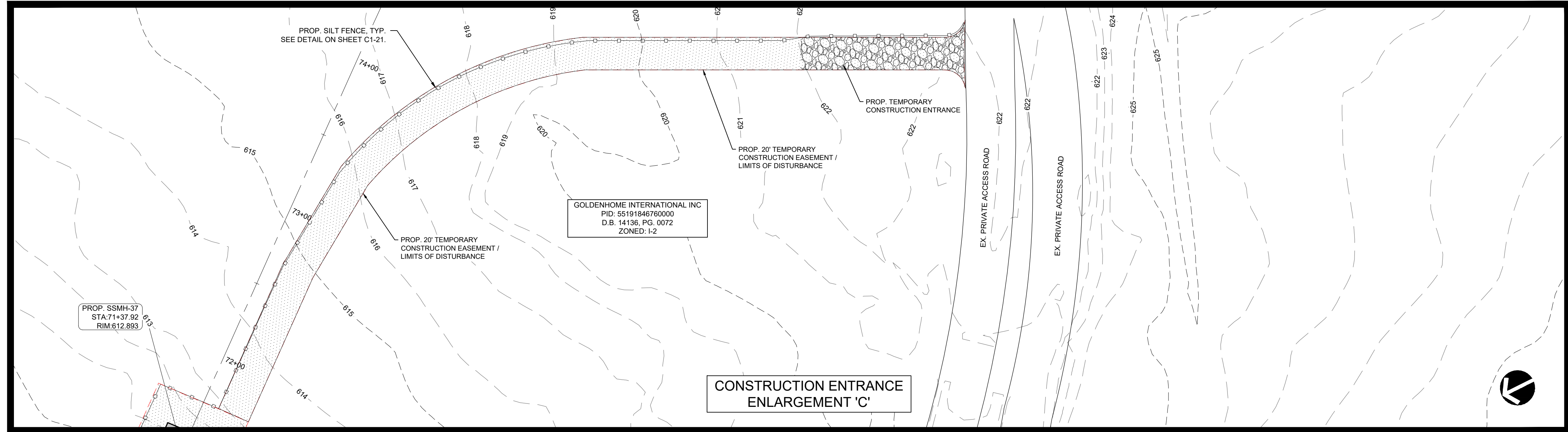
PHASE 3

CITY OF CONCORD

PO BOX 308

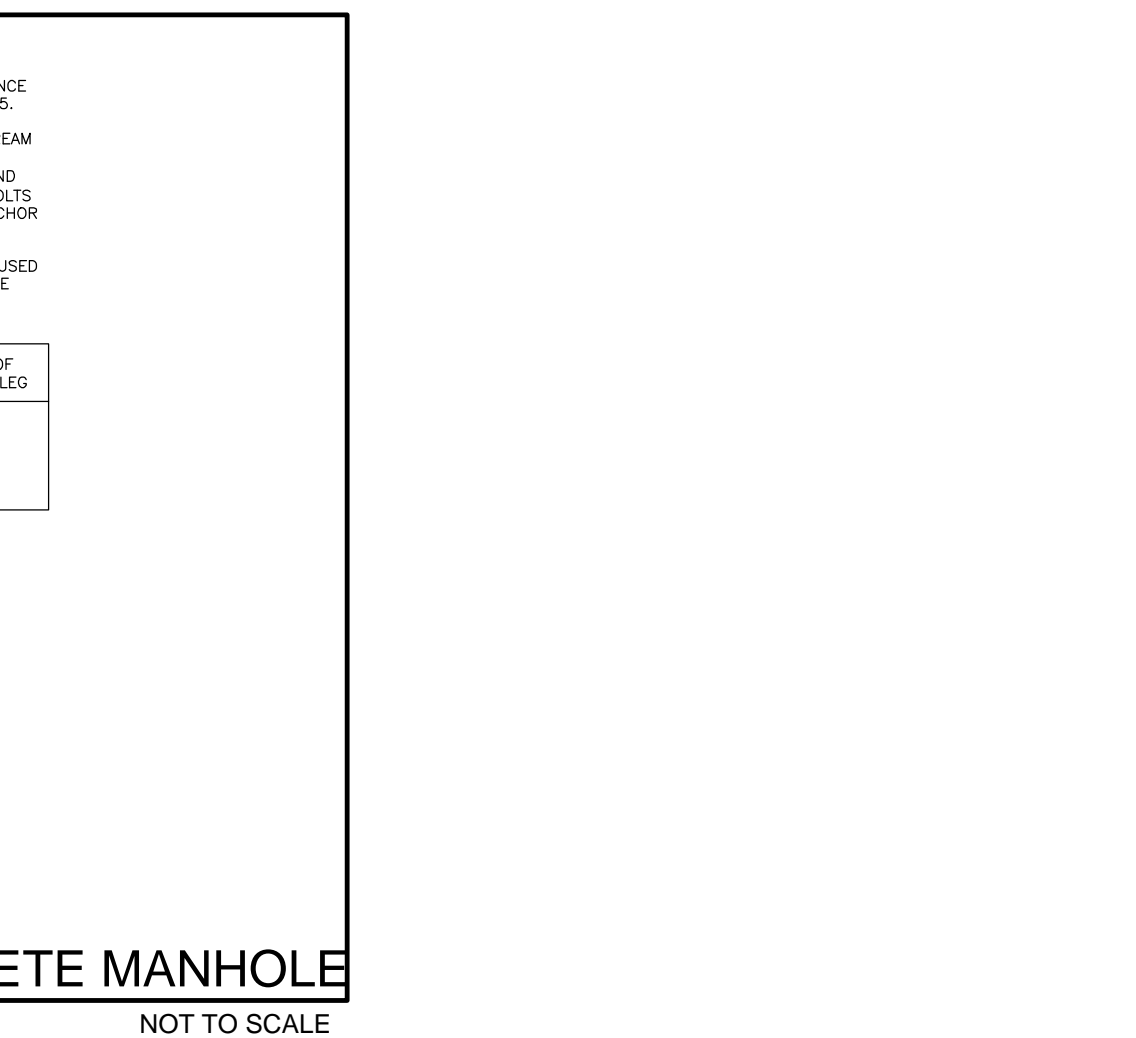
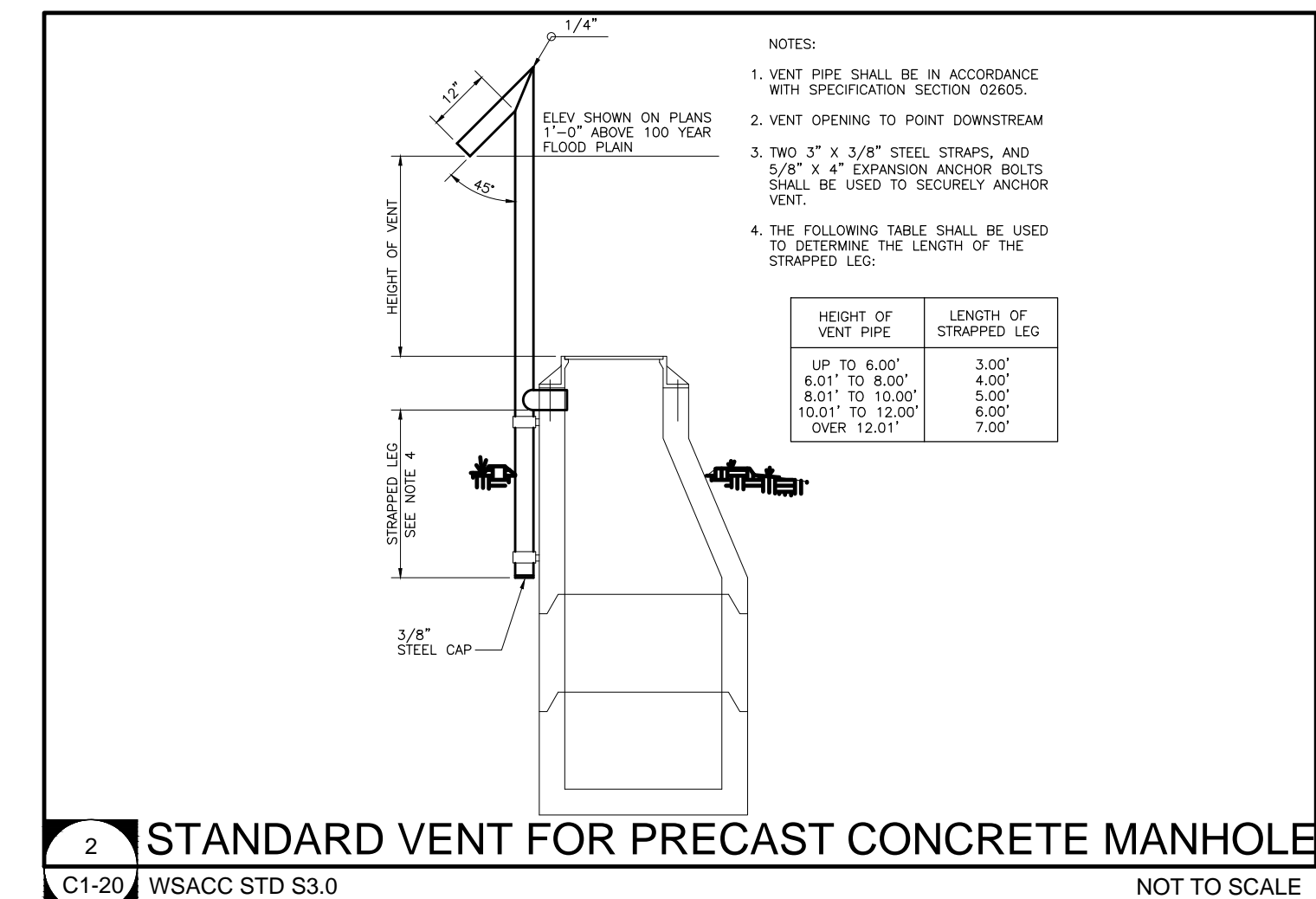
DESIGNED BY:	LDI
DRAWN BY:	RSW
CHECKED BY:	RAK
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SCALE	NORTH
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VERT: -	
HORZ: 1"=40'	
	
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SHEET TITLE	
ACCESS PATH AND CONSTRUCTION ENTRANCE ENLARGEMENTS	
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SHEET NUMBER	

C1-11



2/28/2024 1:24 PM D:\RHB\BANDERS\TEMP\PLATES\28BEE02505\DWG\DOCUMENT\RAE\DWG\061021059_PLN - GRAVITY SEWER - ACCESS
PATHS.DWG

ORIGINAL SHEET SIZE: 24" X 36"



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

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

SECTION E: GROUND STABILIZATION

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

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

GROUND STABILIZATION SPECIFICATION

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

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none">Temporary grass seed covered with straw or other mulches and tackifiersHydroseedingRolled erosion control products with or without temporary grass seedAppropriately applied straw or other mulchPlastic sheeting	<ul style="list-style-type: none">Permanent grass seed covered with straw or other mulches and tackifiersGeotextile fabrics such as permanent soil reinforcement mattingHydroseedingShrubs or other permanent plantings covered with mulchUniform and evenly distributed ground cover sufficient to restrain erosionStructural methods such as concrete, asphalt or retaining wallsRolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

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

EQUIPMENT AND VEHICLE MAINTENANCE

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

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

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

PAINT AND OTHER LIQUID WASTE

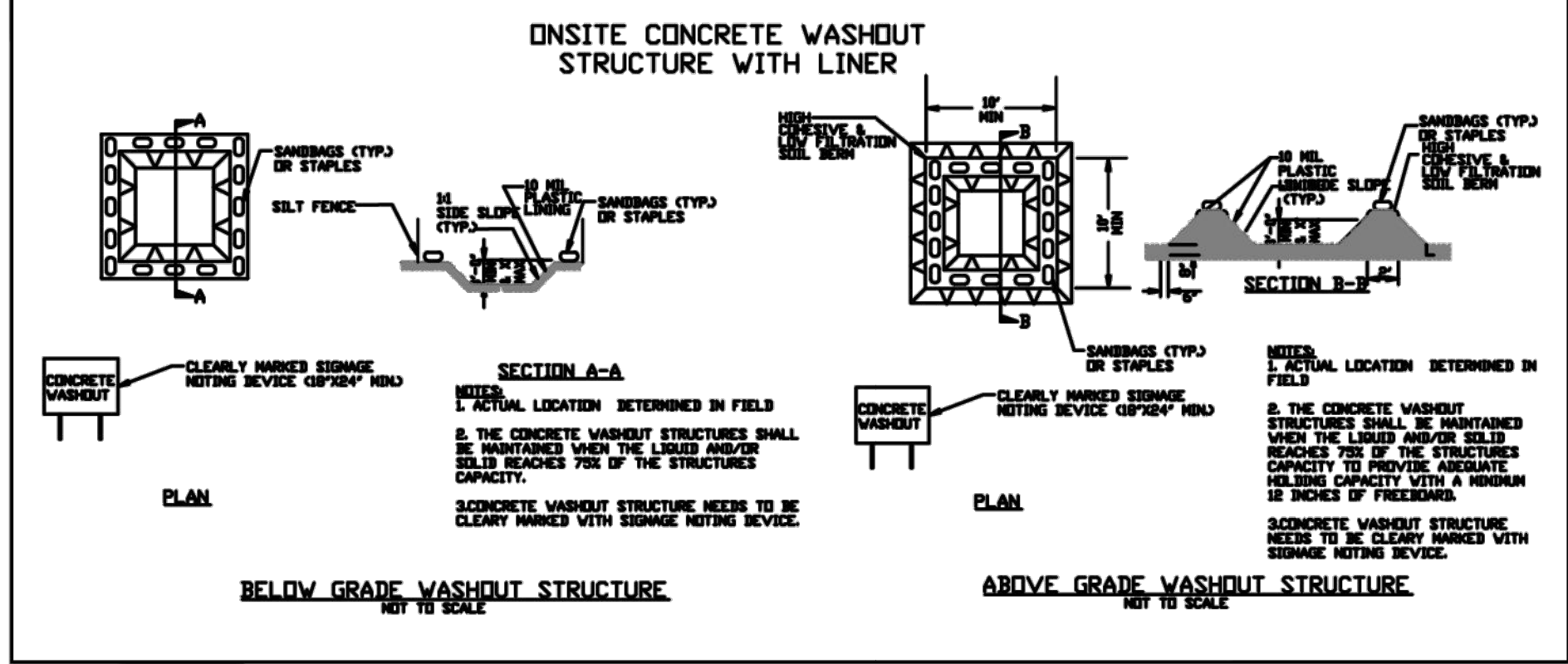
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled,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

PORTABLE TOILETS

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

EARTHEN STOCKPILE MANAGEMENT

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



CONCRETE WASHOUTS

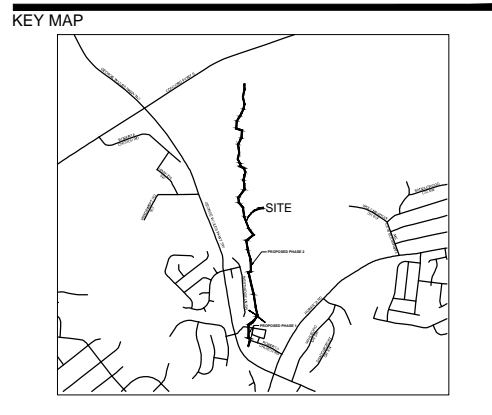
- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the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

HERBICIDES, PESTICIDES AND RODENTICIDES

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

HAZARDOUS AND TOXIC WASTE

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



02.27.2023

ISSUED FOR PERMITTING

PROJECT
12" PUBLIC SEWER EXTENSION
PHASE 3
CITY OF CONCORD
PO BOX 308
CONCORD, NC 28026

REVISION / ISSUANCE		
NO.	DESCRIPTION	DATE
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DESIGNED BY: LDI
DRAWN BY: RSK
CHECKED BY: RAK
SCALE: NORTH
VERT: N/A
HORZ: NTS
(NOT TO SCALE)
SHEET TITLE
EROSION CONTROL DETAILS
SHEET NUMBER

C1-22

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

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

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

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

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

2. Additional Documentation

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

- This general permit as well as the certificate of coverage, after it is received.
- Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.

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

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

- Anticipated bypasses and unanticipated bypasses.

- Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

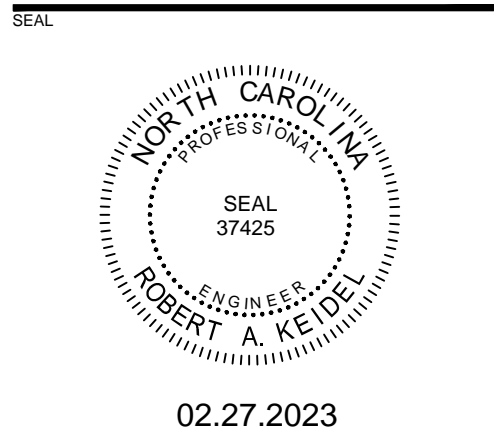
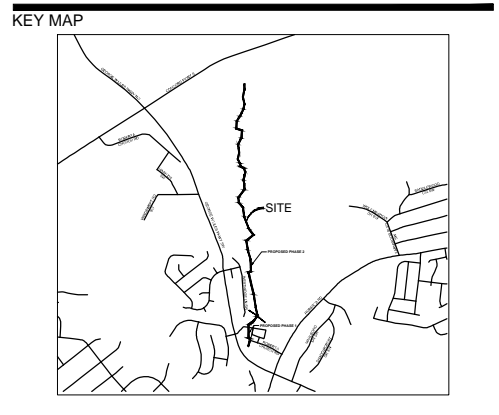
After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland.	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none">A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6).Division staff may waive the requirement for a written report on a case-by-case basis.



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



02.27.2023

ISSUED FOR
PERMITTING

PROJECT
**12" PUBLIC
SEWER
EXTENSION**
PHASE 3
CITY OF CONCORD
PO BOX 308
CONCORD, NC 28026

LANDDESIGN PROJ# 1020059		
REVISION / ISSUANCE		
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