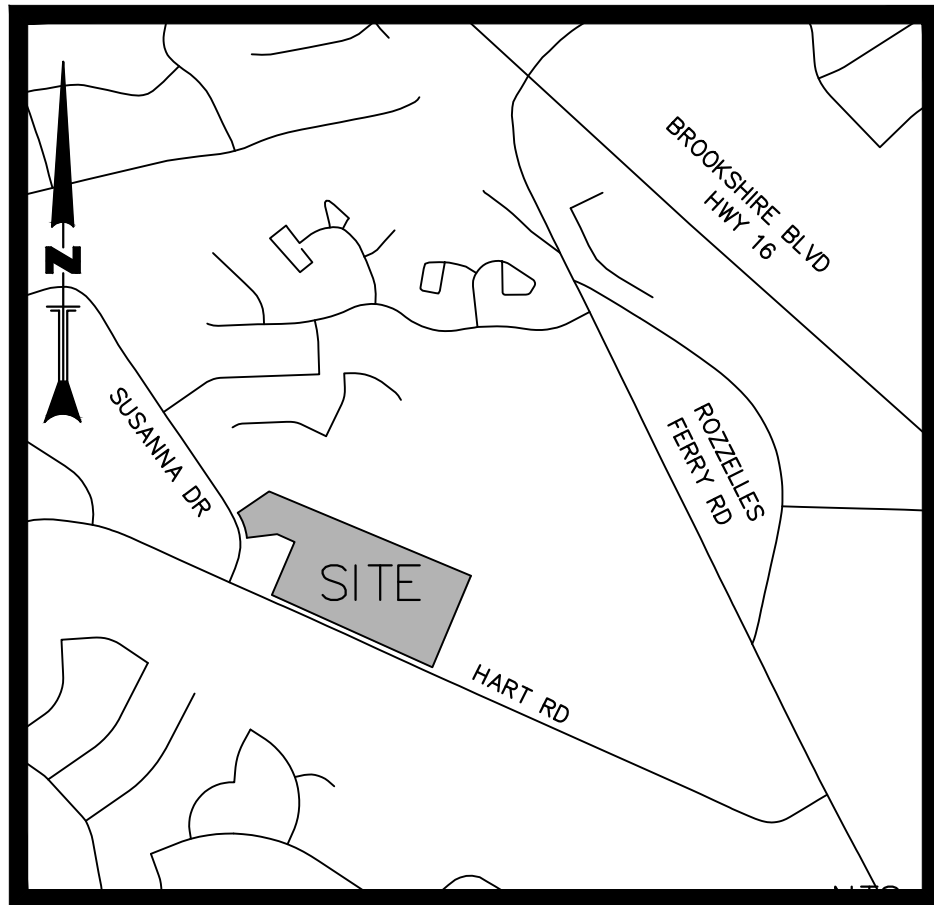


CHARLOTTE
WATER

CHARLOTTE, NORTH CAROLINA

SANITARY SEWER & WATER DISTRIBUTION PLANS
TO SERVE HART ROAD DUPLEXES
CHARLOTTE, NORTH CAROLINA



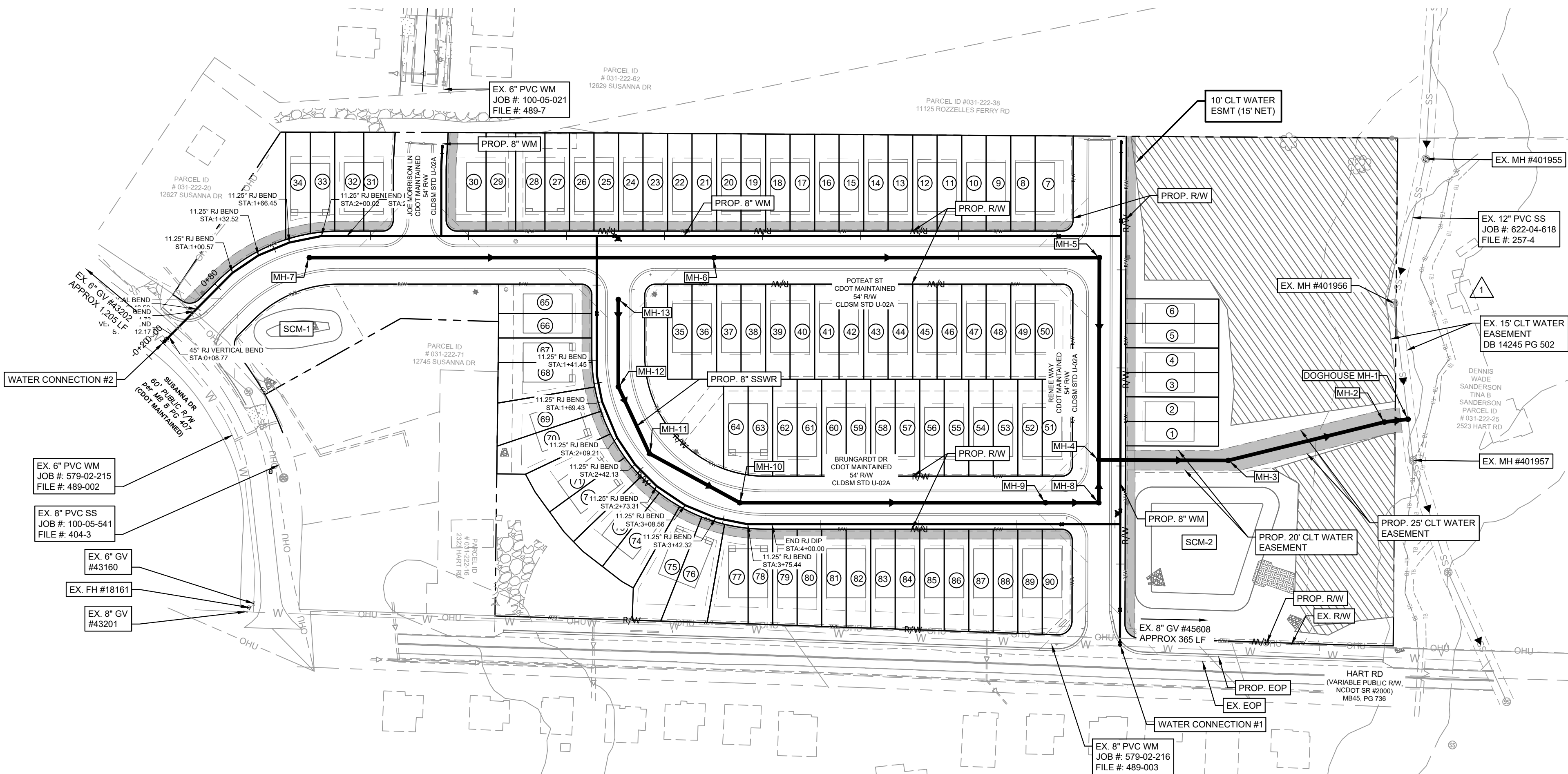
VICINITY MAP

INDEX OF SHEETS

SHEET NO. 1	COVER SHEET
SHEET NO. 2	PERMIT, GENERAL NOTES AND STREET SECTION
SHEET NO. 3	WATER DISTRIBUTION SHEET
SHEET NO. 4	SEWER PLAN & PROFILE (RENEE WAY, MH-3 TO MH-13)
SHEET NO. 5	SEWER PLAN & PROFILE (POTEA ST, MH-4 TO MH-7)
SHEET NO. 6	SEWER PLAN & PROFILE (BRUNGARDT DR, MH-3 TO MH-12)
SHEET NO. 7	SEWER ACCESS ROAD PLAN & PROFILE

NOTE:
THIS PROJECT IS PENDING A CAP REVIEW AND APPROVAL. CAP REVIEW MAY DETERMINE THIS PROJECT WILL REQUIRE ADDITIONAL INFRASTRUCTURE UPGRADES TO ACCOMMODATE THE ADDITIONAL FLOW. PROJECT SHALL NOT BE FINALIZED UNTIL ALL REQUIREMENTS (IF ANY) ARE MET.

NOTE:
THIS PROJECT CONTAINS EASEMENTS THAT MUST BE RECORDED VIA THE CHARLOTTE WATER STANDARD EASEMENT AGREEMENT PRIOR TO RELEASING THIS PROJECT FOR CONSTRUCTION. ALL OFF-SITE EASEMENTS MUST BE RECORDED PRIOR TO RELEASING FOR CONSTRUCTION.



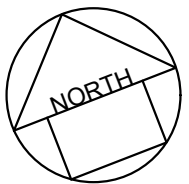
MUNICIPALITY: CHARLOTTE
NCDOT ENCROACHMENT NO: --
CDDOT PERMIT NO:
NCDEQ PERMIT NO:



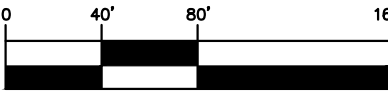
- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT EXISTING UTILITIES ARE LOCATED PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES USING FLAG MEN, ETC., AS NECESSARY TO INSURE SAFETY.
- ALL PAVEMENT CUTS, CONCRETE OR ASPHALT, ARE TO BE REPLACED ACCORDING TO STANDARDS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- SHORING WILL BE ACCORDING TO OSHA TRENCHING STANDARDS PART 1926 SUBPART P, OR AS AMENDED.

NOTE: THIS PROJECT CONTAINS OFF-SITE EASEMENTS THAT MUST BE RECORDED PRIOR TO RELEASING FOR CONSTRUCTION
CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHARLOTTE WATER STANDARD SPECIFICATIONS.

PID #	DB PG #
03122225	



GRAPHIC SCALE



(IN FEET)
HORIZONTAL 1 inch = 80 ft.

LEGEND	SYMBOLS
ASPHALT (PROFILE)	
BOTTOM OF BANK (TOE)	
BRIDGE	
BUILDING	
CHECK DAM STD. 6.83	
CONCRETE (PROFILE)	
CREEK, DITCH OR BRANCH	
CURB & GUTTER	
EDGE OF ROADWAY	
EXISTING FIRE HYDRANT	
EXIST. WATER OR SAN. SEWER EASEMENT	
EXISTING IRON PIN	
EXISTING WATER VALVE	
EXISTING WATER MAIN	
EXISTING 8" SANITARY SEWER	
EXIST. SAN. SEWER MANHOLE STRUCTURE	
EXISTING GAS MAIN	
EXISTING GAS SERVICE	
FENCE (LABEL TYPE)	
GAS VALVE	
GRAVEL (PROFILE)	
GROUND PROFILE	
GUARD RAIL	
MARSH, POND, WETLAND OR LAKE	
OVERHEAD ELECTRIC	
PIERS	
POWER POLE/GUY WIRE	
PROPERTY LINE	
PROPOSED AIR RELEASE	
PROPOSED FIRE HYDRANT	
PROPOSED WATER MAIN (MARKED EVERY 100')	
PROP. WATER OR SAN. SEWER EASEMENT	
PROP. WATER OR SAN. SEWER TAP	
PROP. WATER VALVE	
PROPOSED 8" SANITARY SEWER	
PROP. SAN. SEWER MANHOLE STRUCTURE	
RIP - RAP	
ROAD/STREET R/W	
SEDIMENT FENCE (SILT FENCE) STD. 6.62	
SIDEWALK	
STREET SIGN (LABEL TYPE)	
STORM DRAIN/CATCH BASIN, YARD AND DROP INLET	
TEMPORARY CONSTRUCTION EASEMENT	
TEMPORARY SEDIMENT TRAP STD. 6.60	
TEMPORARY DIVERSION STD. 6.20	
TEMPORARY STREAM CROSSING STD. 6.70	
TOP OF BANK (TOB)	
TOWER LINE	
TREE & BUSH	
UNDERGROUND CABLE	
UNDERGROUND ELECTRIC	
UNDERGROUND TELEPHONE	
RAILROAD	
WATER METER	

NOTE: LINE WEIGHTS ARE NOT DELINEATED HERE. THEY ARE CONTROLLED THROUGH CLTWater PLOTSTYLE.

DESIGN COMPANY: GATEWAY DESIGN GROUP, PLLC
PLANS PREPARED BY: GREG EMERY, P.E.
EMAIL ADDRESS: greg@gatewaydesigngroup.com
ADDRESS: 8516 FOXBRIDGE DR, WEDDINGTON, NC 28104
PHONE: 828-989-9207
DATE DESIGN COMPLETED: SEPTEMBER 2024
SURVEY COMPANY: CAROLINA GEOMATICS, PLLC
SURVEYED BY: CHEVIS KING, PLS
ADDRESS: 469 HOSPITAL DR, SUITE D, GASTONIA, NC 28054
PHONE: (980) 329-3382
DATE SURVEY COMPLETED: NOVEMBER 2023
DEVELOPER: SAVALEX HOMES LLC
CONTACT: KEVIN BRUNGARDT
EMAIL ADDRESS: kevinbrungardt@alumni.stanfordgsb.org
ADDRESS: 2206 WRENWOOD POND CT, CHARLOTTE NC 28211
PHONE: (214) 402-4545
CONTRACTOR: TBD
PLAN REVIEWER: STEVEN HITE (CHARLOTTE WATER)
INSIDE CHARLOTTE: () YES () NO:
TOPO NO: 489, 490, 404, 405
COMPLEX PROJECT: () YES () NO
PID: 03122214, 03122217, 03122223, 03122224

APPROVALS (SEALS)			
N.C.P.E.		N.C.R.L.S. (AS BUILT)	
SUMMARY OF SEWER MAINS & MANHOLES			
SIZE	LENGTH	SIZE	LENGTH
8"	2,243 LF		
TOTAL NO. OF MANHOLES: 12			
TOTAL NO. UNITS SERVED: 90			
SUMMARY OF WATER MAINS & FIRE HYDRANTS			
SIZE	LENGTH	SIZE	LENGTH
8"	2,397 LF		
TOTAL NO. OF FIRE HYDRANTS: 2			
TOTAL NO. UNITS SERVED: 90			
PROJECT NAME: HART ROAD DUPLEXES			
JOB NO: CW-2024-00069			
DATE OF ACTIVATION:			
DATE AS BUILT: BY:			

CHARLOTTE WATER

APPLICATION FOR PERMIT FOR WATER MAIN EXTENSION

PROJECT NAME: HART ROAD DUPLEXES

CLTWATER PROJECT NO.: CW-2024-00069

PROJECT DESCRIPTION: WATER DISTRIBUTION TO SERVE HART ROAD DUPLEXES
2,291 LF 8" WM, 2 FH, AND MISC APPURTENANCES

DESIGNED BY: FIRM: GATEWAY DESIGN GROUP, PLLC
ENGINEER: GREG EMERY, P.E.
ADDRESS: 8516 FOXBRIDGE DRIVE
WEDDINGTON, NC 28104
PHONE: 828-989-9207

THIS APPLICATION IS MADE UNDER AND IN FULL ACCORD WITH THE PROVISIONS OF CHAPTER 130A-317 OF THE NORTH CAROLINA GENERAL STATUTES, AND SUCH OTHER STATUTES AS RELATED TO PUBLIC WATER SYSTEMS. CLTwater has BEEN GRANTED AUTHORITY TO ISSUE PERMITS FOR EXTENSION OF F WATER MAINS PURSUANT TO 15A NCAC 18C.1801. THE APPLICANT AGREES THAT NO SIGNIFICANT CHANGE OR DEVIATION FROM THE PLANS AND SPECIFICATIONS APPROVED BY CLTwater WILL BE MADE WITHOUT THE WRITTEN CONSENT AND APPROVAL OF CLTwater OR ITS AUTHORIZED REPRESENTATIVE. A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF NORTH CAROLINA SHALL SUBMIT A STATEMENT REFLECTING THAT ADEQUATE OBSERVATIONS DURING AND UPON COMPLETION OF CONSTRUCTION INDICATES THAT CONSTRUCTION WAS COMPLETED IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.

PERMIT NO. _____ DATE _____
APPROVED: _____

KERI B. CANTRELL, PH.D., PE, CHIEF ENGINEER
CHARLOTTE WATER
5100 BROOKSHIRE BLVD.
CHARLOTTE, NORTH CAROLINA 28216

APPLICATION FOR NON-DISCHARGE PERMIT
GRAVITY SEWER MAIN EXTENSION
CHARLOTTE-MECKLENBURG UTILITIES

PROJECT NAME: HART ROAD DUPLEXES

CLTWATER PROJECT NO.: CW-2024-00069 BASIN: MT. ISLAND/CATAWBA

PROJECT TYPE: ☒ NEW CONSTRUCTION ☐ RELOCATION ☐ MODIFICATION OF PERMIT NO. _____
OTHER _____

VOLUME OF WASTEWATER GENERATED BY THIS PROJECT: 17,100 GPD GALLONS PER DAY BASED
ON 190 GAL/DAY/SINGLE FAMILY HOUSEHOLD X 90 HOUSEHOLDS OR

135 GAL/DAY/MULTI-FAMILY UNIT X _____ UNITS OR IS BASED ON: _____

WASTEWATER TREATMENT PLANT RECEIVING WASTEWATER:
☒ McALPINE CR. (NC0024970) ☐ IRWIN CR. (NC0024945) ☐ McDOWELL CR. (NC0036277)

☐ SUGAR CR. (NC0024937) ☐ MALLARD CR. (NC0030210)

NATURE OF WASTEWATER 100 % DOMESTIC _____ % INDUSTRIAL
_____ % COMMERCIAL _____ % OTHER _____

ORIGIN OF WASTEWATER ☒ SUBDIVISION ☐ COMMERCIAL
☐ SCHOOL ☐ INDUSTRIAL
☐ APARTMENTS/CONDO'S ☐ OTHER _____ SINGLE FAMILY ATTACHED _____

LIST ANY PARAMETER AND ITS CONCENTRATION THAT WILL BE GREATER THAN NORMAL DOMESTIC LEVELS:
NONE

IF WASTEWATER IS NON-DOMESTIC, DESCRIBE LEVEL OF PRETREATMENT:
N/A

IF A PRETREATMENT PERMIT IS REQUIRED, HAS ONE BEEN ISSUED? ☐ YES ☐ NO ☒ N/A

HAS ENGINEER DETERMINED THAT DOWNSTREAM SEWERS ARE CAPABLE TO HANDLE THIS FLOW? ☒ YES ☐ NO
PERMIT NO. FOR SEWERS IMMEDIATELY DOWNSTREAM WG-0020883
PIPE DIAMETER OF SEWERS IMMEDIATELY DOWNSTREAM 12 INCH

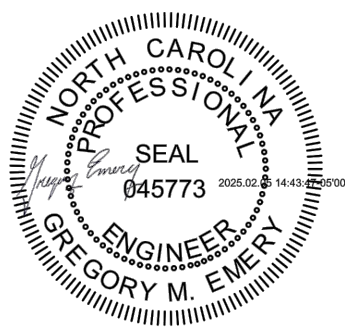
HAS ENGINEER DETERMINED THAT NC DEM AND CLTWATER MINIMUM DESIGN STANDARDS ARE MET BY THIS PROJECT? ☒ YES ☐ NO

COMPLETE NAME AND ADDRESS OF ENGINEERING DESIGN FIRM: GATEWAY DESIGN GROUP, PLLC
8516 FOXBRIDGE DRIVE
WEDDINGTON, NC 28104

TELEPHONE 828 989 9207

PROFESSIONAL ENGINEER'S CERTIFICATION:
I, GREGORY EMERY, ATTEST THAT THIS APPLICATION FOR SANITARY SEWER TO SERVE
HART ROAD DUPLEXES HAS BEEN REVIEWED BY ME AND IS ACCURATE AND COMPLETE TO THE
BEST OF MY KNOWLEDGE. I FURTHER ATTEST THAT TO THE BEST OF MY KNOWLEDGE THE PROPOSED DESIGN HAS BEEN
PREPARED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS. ALTHOUGH CERTAIN PORTIONS OF THIS SUBMITTAL
PACKAGE MAY HAVE BEEN DEVELOPED BY OTHER PROFESSIONALS, INCLUSION OF THESE MATERIALS UNDER MY
SIGNATURE AND SEAL SIGNIFIES THAT I HAVE REVIEWED THIS MATERIAL AND HAVE JUDGED IT TO BE CONSISTENT WITH
THE PROPOSED DESIGN.

NORTH CAROLINA PROFESSIONAL ENGINEER'S SEAL, SIGNATURE, AND DATE:

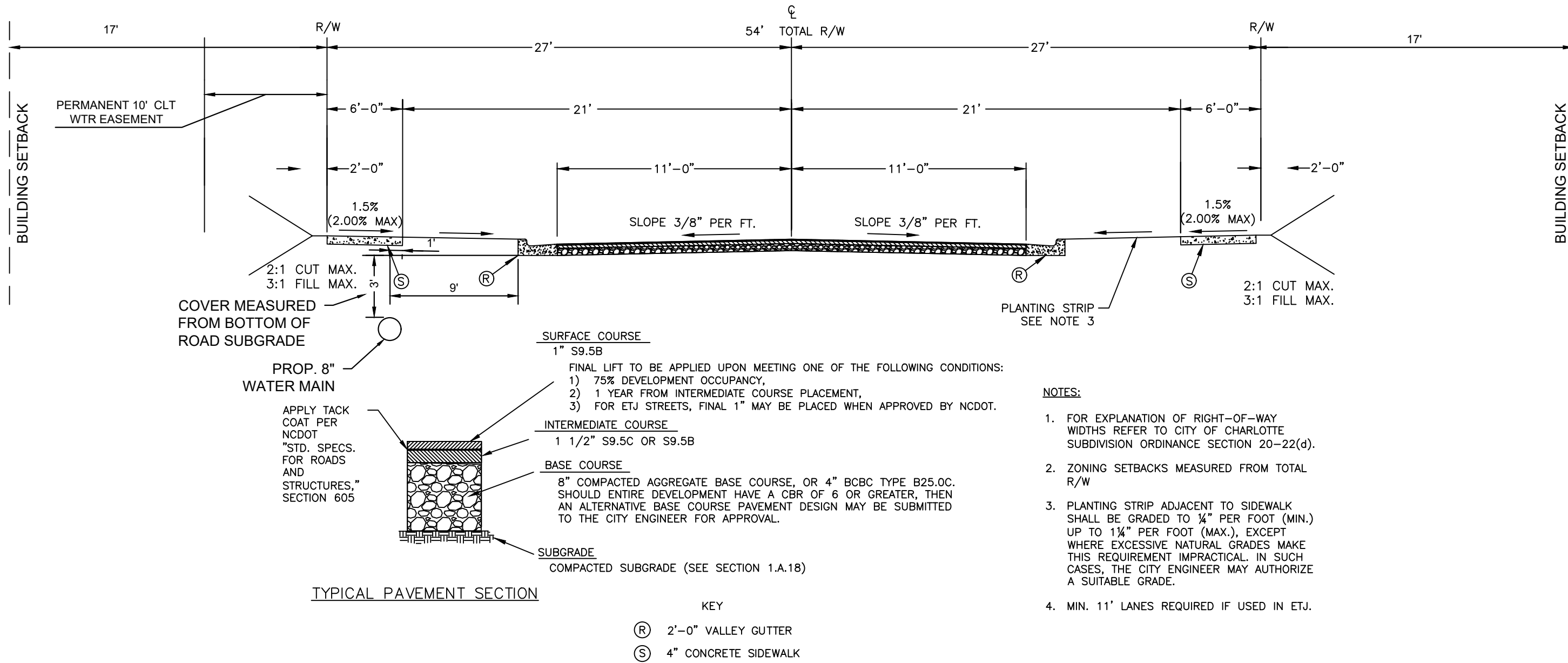


CLTWATER PERMIT NO. _____ ISSUED _____

PLANT FLOW ALLOCATION RECORDED BY: _____

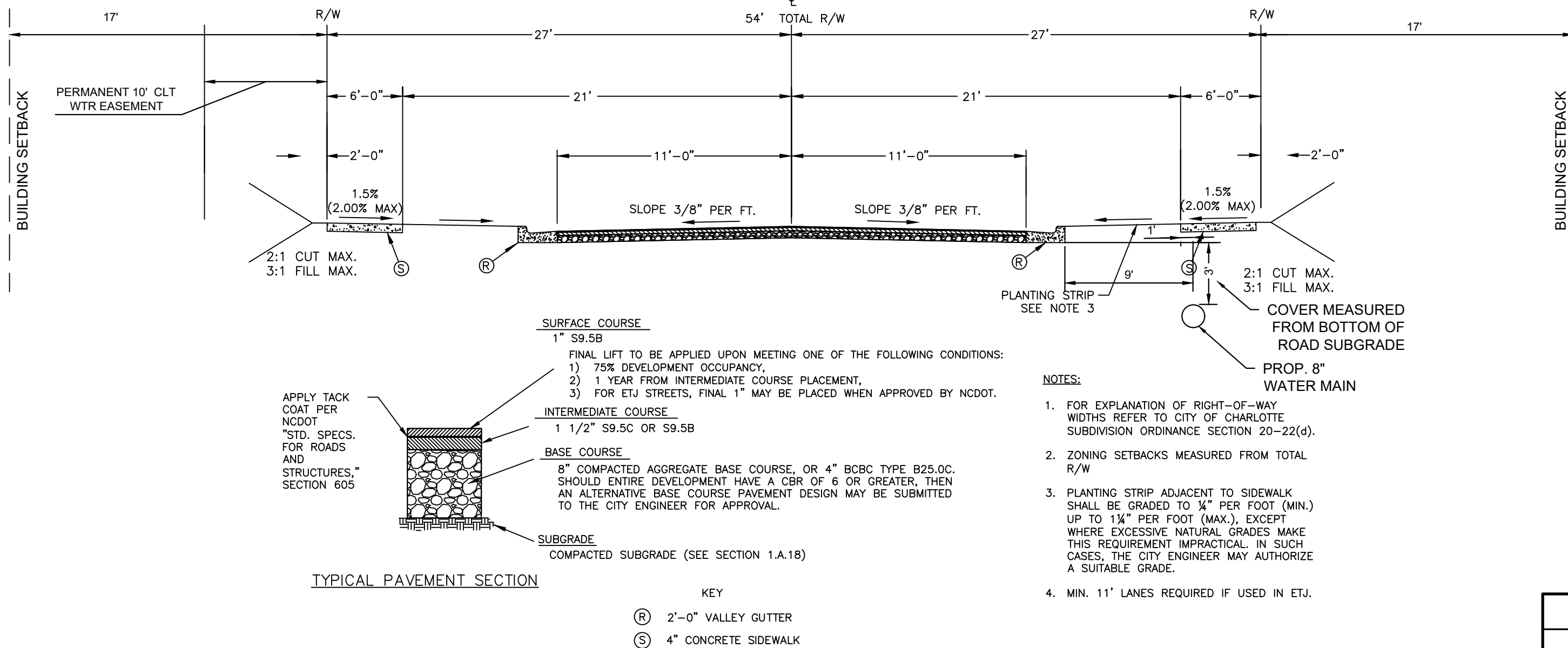
PERMIT APPROVED BY: _____

KERI B. CANTRELL, PHD, PE, CHIEF ENGINEER



BRUNGARDT DR (U-02A)

LOCAL RESIDENTIAL MEDIUM STREET
TYPICAL SECTION



RENEE WAY, POTEAT ST (U-02A)

LOCAL RESIDENTIAL MEDIUM STREET
TYPICAL SECTION

CDOT RIGHT-OF-WAY PERMITTING PROCESS

THE CONTRACTOR/DEVELOPER SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WITHIN CITY OF CHARLOTTE MAINTAINED STREET RIGHTS-OF-WAY (R/W). PRIOR TO CONSTRUCTION, A CONTRACTOR'S EMPLOYEE SHALL HOLD A VALID EXCAVATION CERTIFICATION FROM CDOT'S STREET MAINTENANCE DIVISION (SMD) AND SHALL BE ON SITE DURING WORK IN THE STREET'S PAVEMENT, INCLUDING SIDEWALK AND DRIVEWAYS. CONTACT SMD AT (704) 336-3200 TO ENROLL IN THE NEXT CERTIFICATION CLASS.

THE PERMIT SHALL BE OBTAINED @
[HTTPS://CHARLOTTENC.GOV/TRANSPORTATION/PERMITS/PAGES/UTILITIES.ASPX](https://charlottenc.gov/transportation/permits/pages/utilities.aspx)

BY CITY ORDINANCE, ALL WORK IN THE R/W SHALL BE PERFORMED ACCORDING TO THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH), AND HAVE A VALID PERMIT.

PROVIDE COPY OF PERMIT TO CLTWATER CONSTRUCTION SUPERVISOR PRIOR TO SCHEDULING WORK.

CHARLOTTE WATER GENERAL NOTES:

- NO PUBLIC WATER OR PUBLIC SANITARY SEWER MAIN CONSTRUCTION MAY TAKE PLACE ON THIS PROJECT UNTIL THE UTILITY CONTRACTOR HAS REQUESTED, SCHEDULED, AND ATTENDED A PRECONSTRUCTION CONFERENCE WITH THE CHARLOTTE WATER CONSTRUCTION INSPECTOR ASSIGNED TO THE PROJECT. ANY WORK PERFORMED PRIOR TO THE PRE-CONSTRUCTION CONFERENCE SHALL NOT BE ACCEPTED BY CHARLOTTE WATER AND SHALL BE REMOVED AND REPLACED WITH NEW MATERIALS.
- APPROVAL FOR BACKFLOW PREVENTION REQUIREMENTS IS NOT PART OF THIS REVIEW. BACKFLOW PREVENTION REVIEW ENTAILS PLAN SUBMITTAL VIA MECKLENBURG COUNTY'S CODE ENFORCEMENT PERMITTING PROCESS AT THE TIME OF APPLICATION FOR BUILDING PERMITS. BACKFLOW PROGRAM REQUIREMENTS ARE AVAILABLE AT <https://www.charlottenc.gov/water/Customer-Care/Backflow/Backflow-Construction-And-Backflow-Prevention-Review>
- ANY REVISION TO THE WATER AND SEWER SERVICE CONFIGURATIONS AND/OR METER LOCATIONS AFTER CONSTRUCTION RELEASE WILL REQUIRE AN RTAP AND/OR RESUBMITTAL TO BACKFLOW FOR REVIEW.
- CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CHARLOTTE WATER STANDARDS AND SPECIFICATIONS ("DESIGN MANUAL") PER WEBSITE AT <https://www.charlottenc.gov/water/DevelopmentBusiness/Design-Manual>
- ALL CONTRACTORS WORKING ON CHARLOTTE WATER PROJECTS ARE REQUIRED TO HAVE ACCESS AT ALL TIMES TO THE DESIGN MANUAL WHILE ON THE JOB SITE.
- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTRACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC811 AT 1-800-632-4949 OR 811 FOR UTILITY LOCATING SERVICES 3 FULL WORKING DAYS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- IF THE PROPOSED WATER AND/OR SANITARY SEWER MAIN IS INSTALLED WITHIN 12" IN ANY DIRECTION (VERTICALLY OR HORIZONTALLY) FROM NATURAL GAS MAINS, THE CONTRACTOR SHALL PROVIDE THE GAS UTILITY OWNER WITH ADEQUATE NOTICE.
- SANITARY SEWER LATERAL LOCATIONS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, AS DETERMINED BY THE CHARLOTTE WATER INSPECTOR.
- SANITARY SEWER LATERALS ARE TO BE INSTALLED AT A DEPTH NO GREATER THAN FIVE (5) FEET WHERE PRACTICAL AT THE PROPERTY LINE UNLESS INDICATED ON THE PLANS TO BE INSTALLED AT "MINIMUM SLOPE".
- MINIMUM COVER OF 36" FOR WATER MAINS (AS MEASURED FROM EDGE OF PAVEMENT / BOTTOM OF CURB GUTTER / BOTTOM OF DITCH IF WITHIN 15' OF A ROAD).
- DUCTILE IRON PIPE (RED BRASS FOR 2 INCH PIPE) REQUIRED FOR BOTH WATER & SANITARY SEWER LINES IF THE FOLLOWING CLEARANCES ARE NOT MET:
 - WATER LINE CROSSING UNDER SEWER LINE (FOR ANY CLEARANCE).
 - 18" VERTICAL FOR WATER LINE INSTALLED ABOVE SEWER LINE.
 - 10' HORIZONTAL SEPARATION FOR WATER LINE PARALLEL TO SEWER LINE (OR 18" VERTICAL SEPARATION IN SEPARATE OR BENCHED DITCHES).
 - FOR WATER LINES 12" CLEARANCE WITH STORM DRAINS, GAS MAINS, TELEPHONE DUCTS, AND UNDERGROUND CABLES.
- RECORDED PLATS ARE REQUIRED FOR ACTIVATION OF WATER MAINS, EASEMENTS ARE NOT ACCEPTABLE.
- ALL WATER MAINS AND SERVICES SHALL BE INSTALLED WITH SOLID COPPER 12-GAUGE TRACER WIRE, 30 MILS BLUE HDPE INSULATION. CONDUCTIVITY TEST REQUIRED DURING FINAL INSPECTION. CONTRACTOR SHALL PROVIDE ALL TEST EQUIPMENT.
- ALL SEWER MAINS AND SERVICES SHALL BE INSTALLED WITH SOLID COPPER 12-GAUGE TRACER WIRE, 30 MILS GREEN HDPE INSULATION. CONDUCTIVITY TEST REQUIRED DURING FINAL INSPECTION. CONTRACTOR SHALL PROVIDE ALL TEST EQUIPMENT.
- COMPLETE TRENCH BACKFILL SHALL BE IN PLACE 30 CALENDAR DAYS PRIOR TO SCHEDULING PVC PIPE MANDREL TESTING OR 10 CALENDAR DAYS PRIOR TO SCHEDULING DUCTILE IRON PIPE MANDREL TESTING.
- CURB AND GUTTER SHALL BE CONSTRUCTED PRIOR TO WATER MAIN INSTALLATION.
- WATER MAIN EXTENSIONS WITHOUT SERVICES SHALL INCLUDE AIR RELEASE AT ALL HIGH POINTS IN WATER MAINS OR EVERY 1000 LF.
- EXISTING MANHOLES MAY HAVE TO BE REPAIRED OR REPLACED, DEPENDING ON THE CONDITION, AS DETERMINED BY THE CHARLOTTE WATER INSPECTOR.
- ALL VALVE ASSEMBLIES SHALL NOT BE INSTALLED IN PROPOSED DRIVEWAYS AND SHALL BE COMPLETELY OUTSIDE OF ADA RAMPS.
- ALL PROPOSED WATER METERS AND BLOW OFF'S SHALL NOT BE INSTALLED IN PROPOSED DRIVEWAYS OR ADA RAMPS.
- FIRE HYDRANTS SHALL BE COMPLETELY OUTSIDE SIDEWALKS AND ADA RAMPS.
- NET 15' WATER MAIN EASEMENT REQUIRED UNLESS APPROVED BY CHARLOTTE WATER.
- ANY NEW METERS OR IRRIGATION METERS INSTALLED/RELOCATED AFTER THE BACTERIAL AND PRESSURE TEST SHALL REQUIRE ADDITIONAL BACTERIAL TEST. A CLTWATER INSPECTOR SHALL WITNESS THE TAP UNCOVERED UNDER STATIC CONDITIONS TO VERIFY IF LEAKS ARE PRESENT.
- TAPPING SLEEVES & TEES ARE REQUIRED TO USE CONCRETE THRUST BLOCKING UNLESS NOTED OTHERWISE.
- PRIVATE MH'S SHALL NOT UTILIZE CLT WATER FRAMES & COVERS.
- MINIMUM SPACING BETWEEN SEWER LATERALS AND WATER SERVICES SHALL BE 5 FEET. MINIMUM SPACING BETWEEN SEWER LATERALS SHALL BE 7 FEET. MINIMUM SPACING BETWEEN WATER SERVICES SHALL BE 3 FEET.

APPROVALS (SEALS)



N.C.P.E.

N.C.R.L.S. (AS BUILT)

**GATEWAY DESIGN
GROUP, PLLC**
8516 FOXBRIDGE DR
WEDDINGTON, NC 28104
910-840-2661
NC FIRM # P-2147



CHARLOTTE WATER
CHARLOTTE, NORTH CAROLINA

CW-2024-00069

Job No. _____ File No. _____

PLAN _____ N / A

PROFILE _____ N / A

Vert. _____ N / A

As Built _____

Date _____

Carolina Geomatics _____

Surveyed By _____

Designed By _____

Drawn By _____

Project-Engr _____

Approved By _____

Date _____

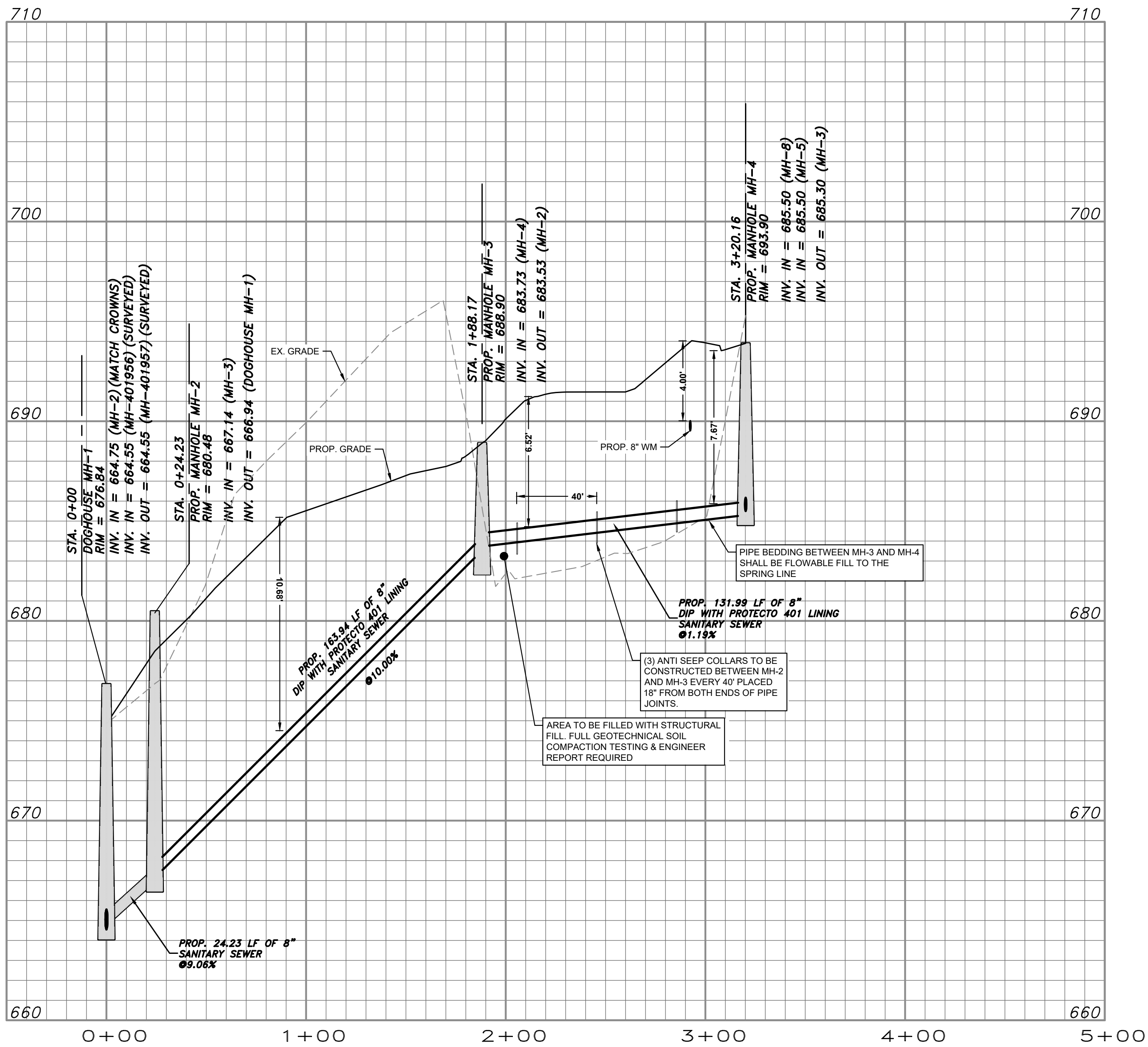
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Of _____

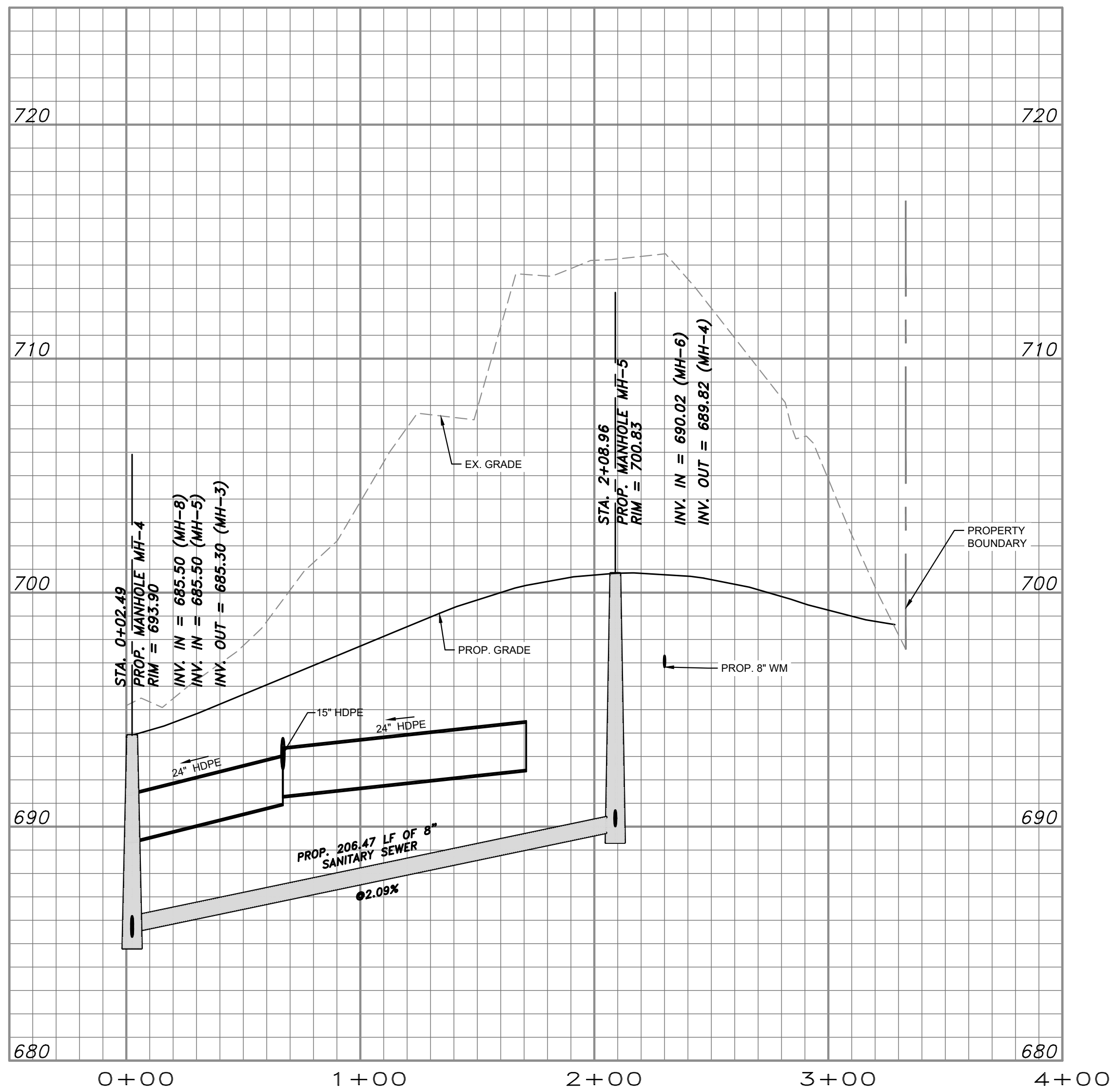
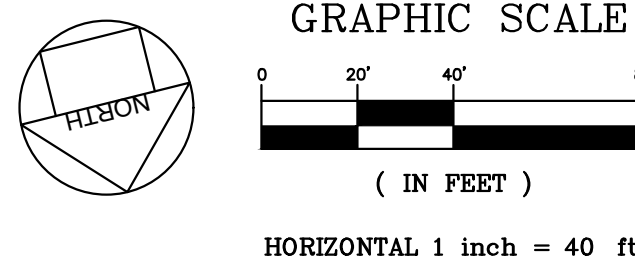
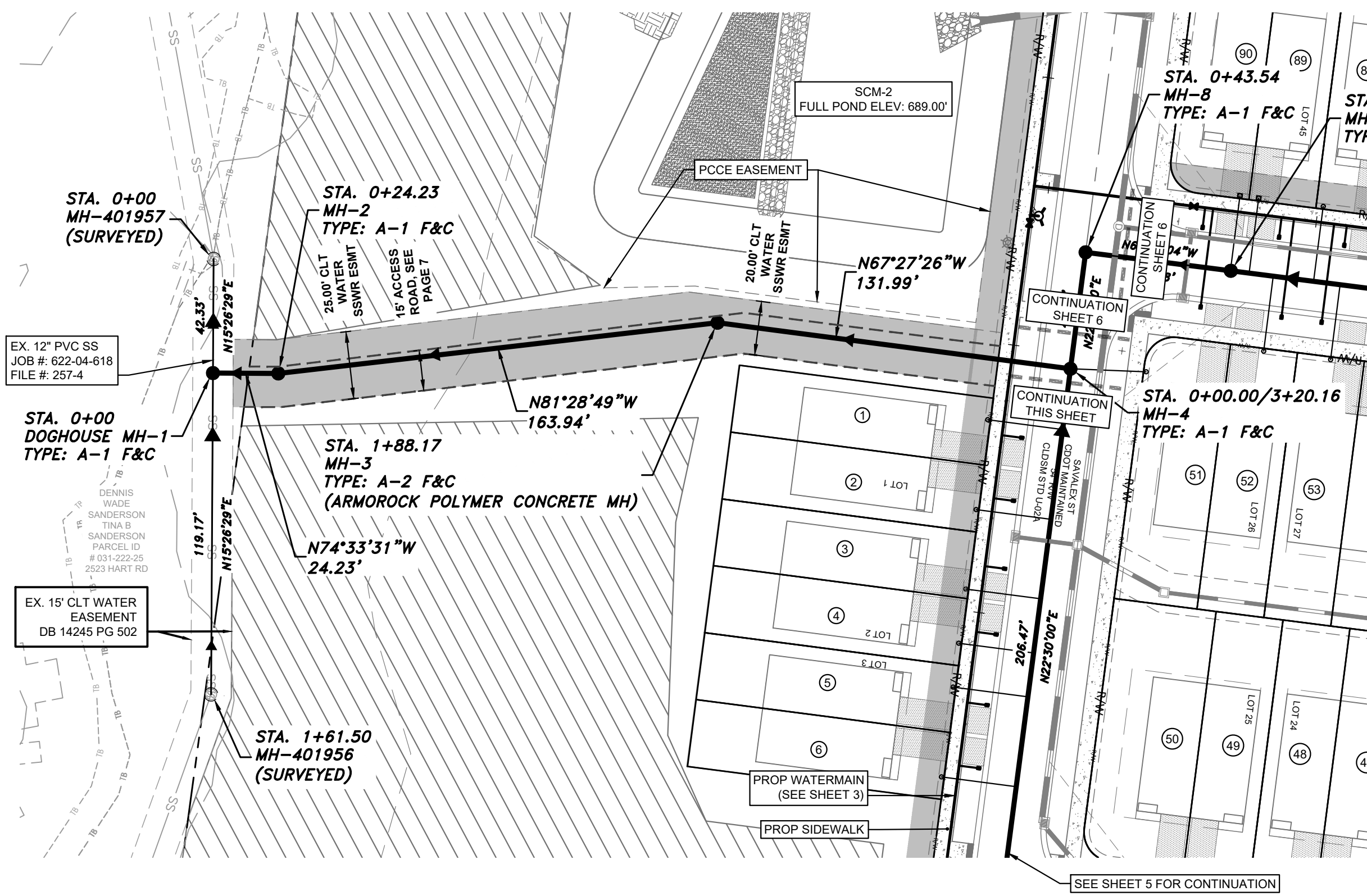
**SANITARY SEWER AND
WATER DISTRIBUTION PLAN TO SERVE
HART ROAD DUPLEXES**

**PERMITS, GENERAL NOTES,
AND STREET CROSS SECTION**

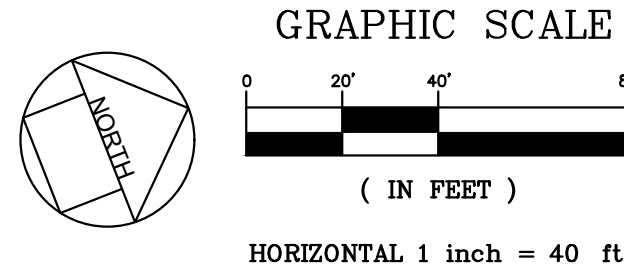
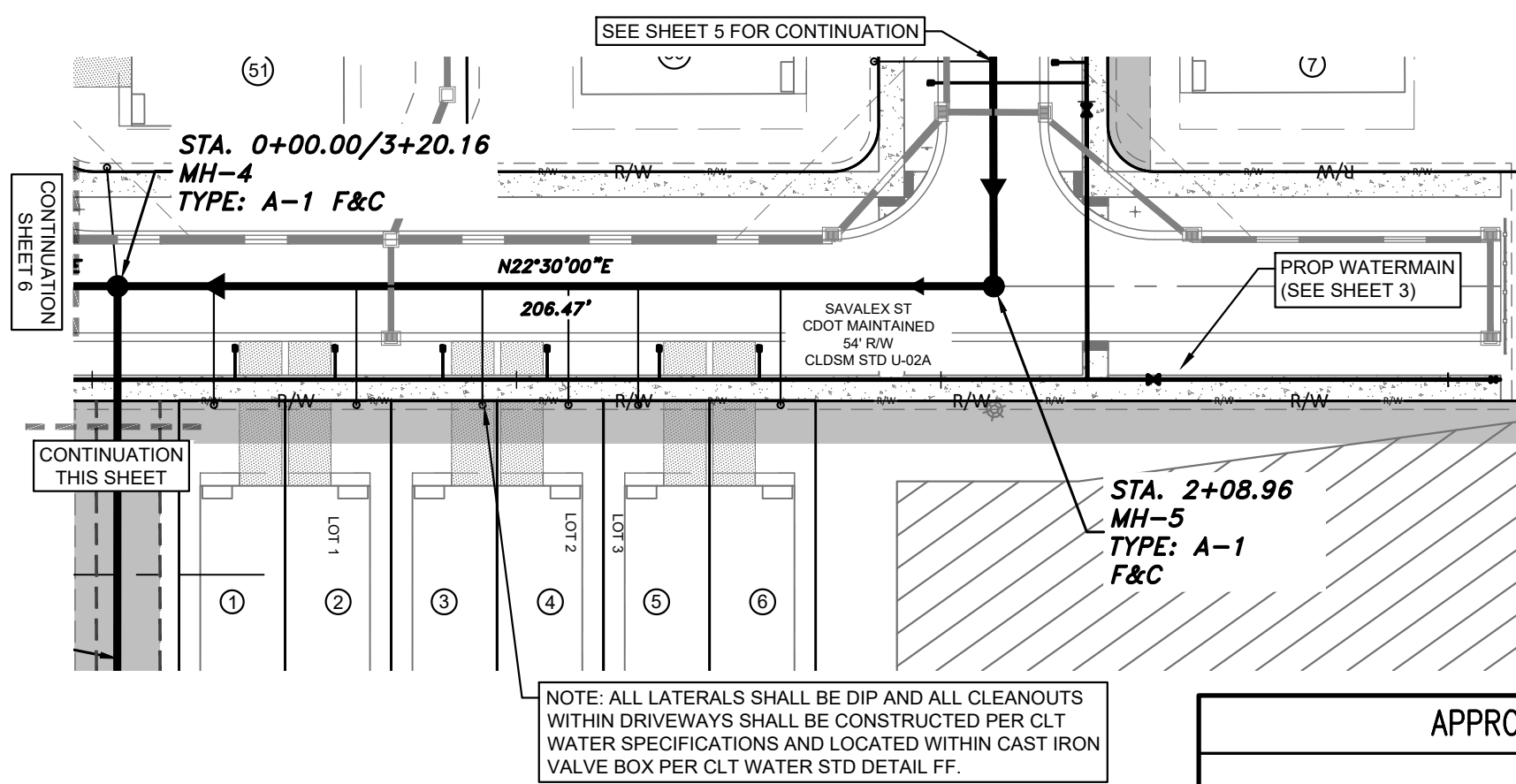
No.	Date	By	Revision



(EX MH-401956 TO MH-3)
TRUNK LINE



(MH-3 TO MH-13)
**RENEE WAY
(CDOT MAINTAINED)**



NOTE:
ALL LATERALS SHALL HAVE 4' OF COVER AT THE PROPERTY LINE.

NOTE:
ALL 4" & 6" LATERALS CONNECTING TO MANHOLES SHALL MATCH CROWNS.

- SANITARY SEWER NOTES:**
- ALL SANITARY SEWER LATERALS MATERIALS FROM TEE TO CO SHALL MATCH THE MAIN MATERIAL UNLESS OTHERWISE DIRECTED.
 - ANY AREA TO BE FILLED W/ STRUCTURAL FILL WILL REQUIRE FULL GEOTECHNICAL SOIL COMPACTION TESTING & ENGINEER REPORT.
 - ALL SANITARY SEWER LATERAL CLEANOUTS TO BE PLACED 1' OUTSIDE BACK OF SIDEWALK WHEN BACK OF SIDEWALK IS AT PUBLIC RIGHT OF WAY. OTHERWISE PLACE CLEAN OUT 1' OUTSIDE PUBLIC RIGHT OF WAY.
 - SERVICE SEPARATION REQUIREMENTS:
 - MIN 7' SEP BETWEEN LATERALS
 - MIN 3' SEP BETWEEN WATER TAPS
 - MIN 5' SET BETWEEN WATER LINE & SSWR LATERAL
 - MIN 7' SEP FROM LATERAL AND MANHOLE
 - AVOID HAVING TAPS, LINES, CO'S, & METER BOXES IN DRIVEWAYS
 - ANY LATERAL AND CO INSTALLED IN THE DRIVEWAY SHALL BE DIP WITH CAST IRON VALVE BOX AT THE CLEAN OUT PER STD DET "FF"

APPROVALS (SEALS)



N.C.P.E. N.C.R.L.S. (AS BUILT)

GATEWAY DESIGN GROUP, PLLC
8516 FOXBRIDGE DR
WEDDINGTON, NC 28104
910-840-2661
NC FIRM # P-2147

CHARLOTTE WATER
CHARLOTTE, NORTH CAROLINA

CW-2024-00069
Job No. File No.
Scales
PLAN 1" = 40'
PROFILE Hor. 1" = 40'
Vert. 1" = 4'
As Built Date 02-05-25

SANITARY SEWER AND WATER DISTRIBUTION PLAN TO SERVE HART ROAD DUPLEXES

TRUNK LINE AND RENEE WAY (EXMH-1 TO MH-4)(MH-5 TO MH-13)

REVISIONS

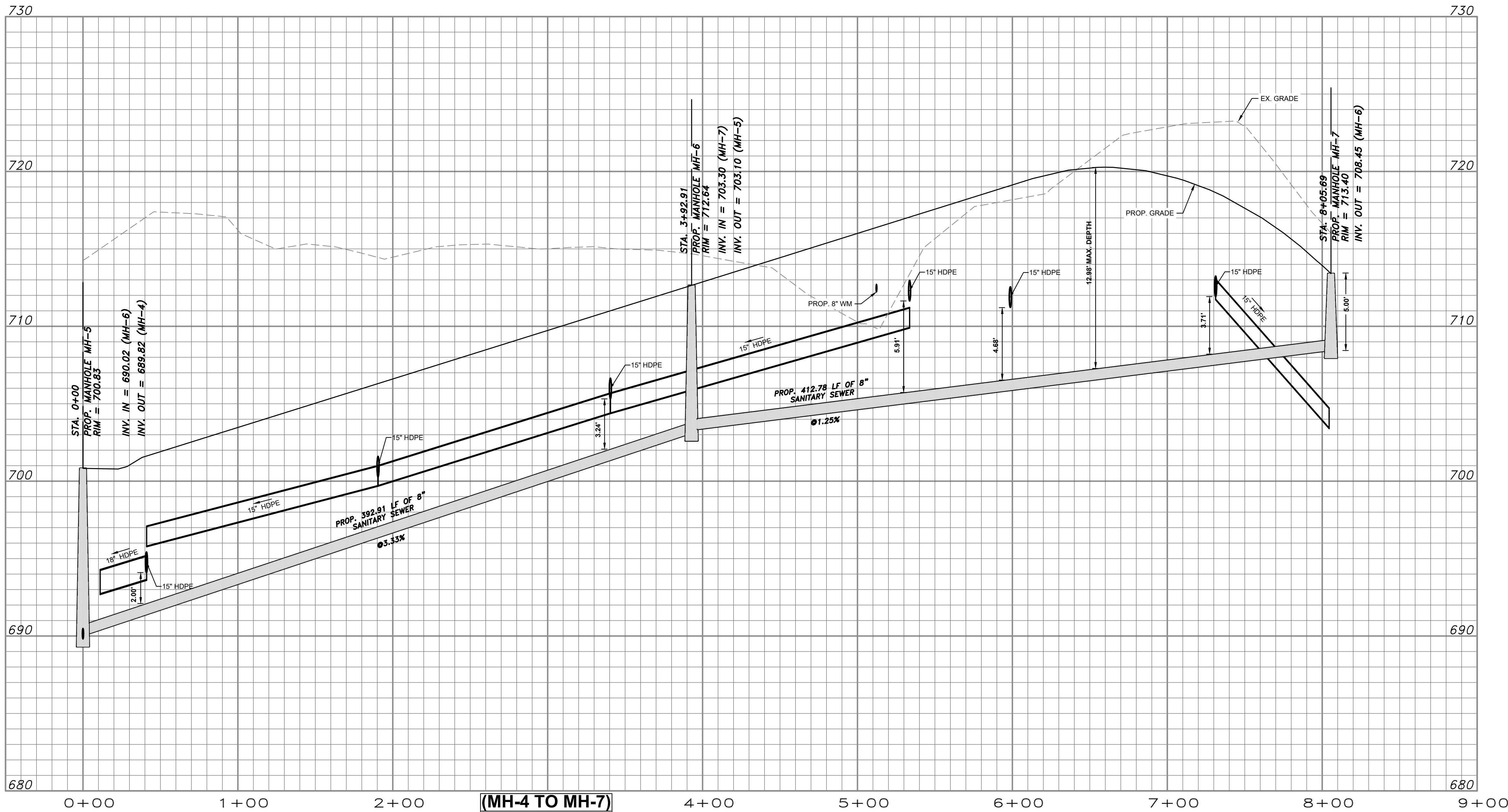
No.	Date	By	Revision

CHARLOTTE WATER
SHEET 4 OF 7

APPROVALS

As Built	GE	GE	GE	GE	GE	GE

APPROVED BY **DATE**



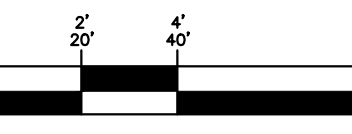
NOTE:
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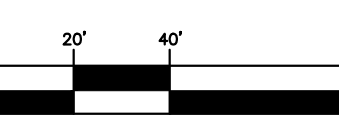
GRAPHIC SCALE



(IN FEET)
VERTICAL 1 inch = 4 ft.
HORIZONTAL 1 inch = 40 ft.



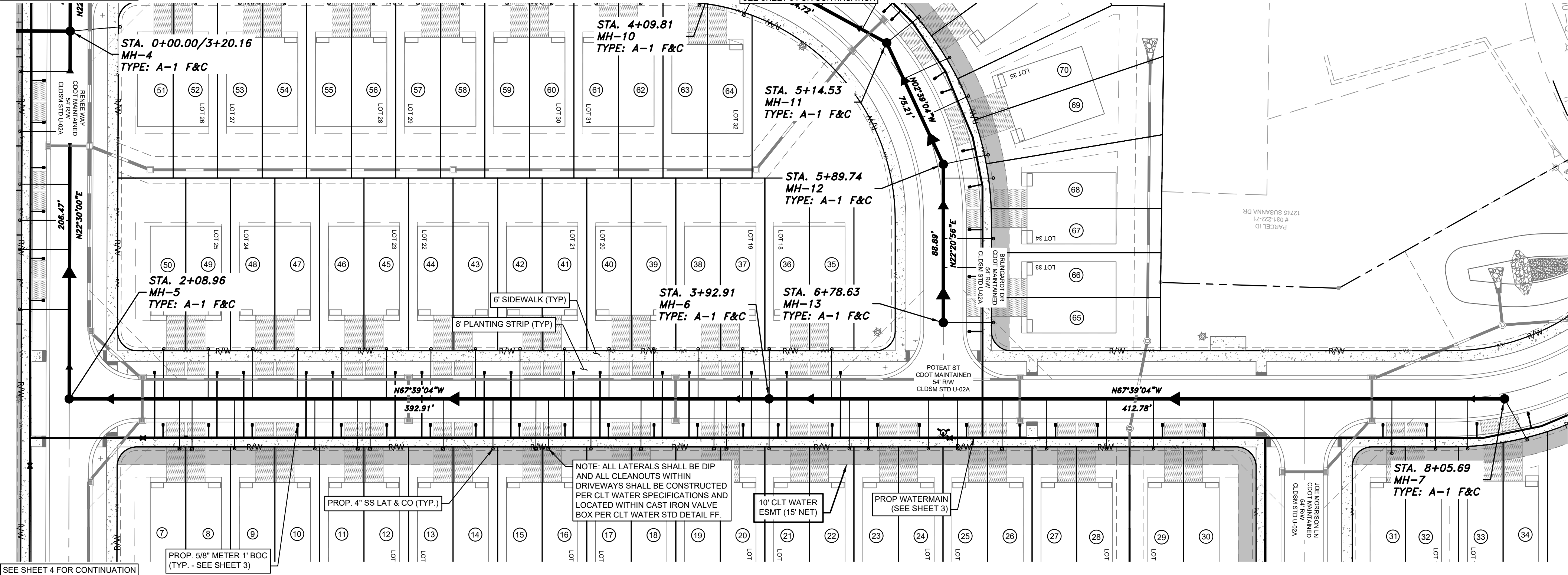
GRAPHIC SCALE



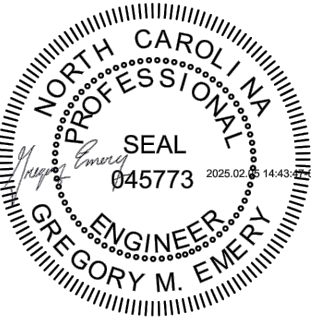
(IN FEET)
HORIZONTAL 1 inch = 40 ft.

SEE SHEET 4 FOR CONTINUATION

SEE SHEET 6 FOR CONTINUATION



APPROVALS (SEALS)



N.C.P.E.

N.C.R.L.S. (AS BUILT)

GATEWAY DESIGN GROUP, PLLC

8516 FOXBRIDGE DR
WEDDINGTON, NC 28104
910-840-2661
NC FIRM # P-2147



CHARLOTTE WATER
CHARLOTTE, NORTH CAROLINA

SANITARY SEWER AND WATER DISTRIBUTION PLAN TO SERVE HART ROAD DUPLEXES

RENEE WAY AND POTEAT ST (MH-4 TO MH-7)

Job No. File No.

Scales 1" = 40'

PLAN 1" = 40'

PROFILE Hor. 1" = 40'

Vert. 1" = 4'

As Built Date 02-05-25

CAROLINA GEOMATICS

Surveyed By

Designed By

GE

Drawn By

GE

Project-Engr

Approved By

Date

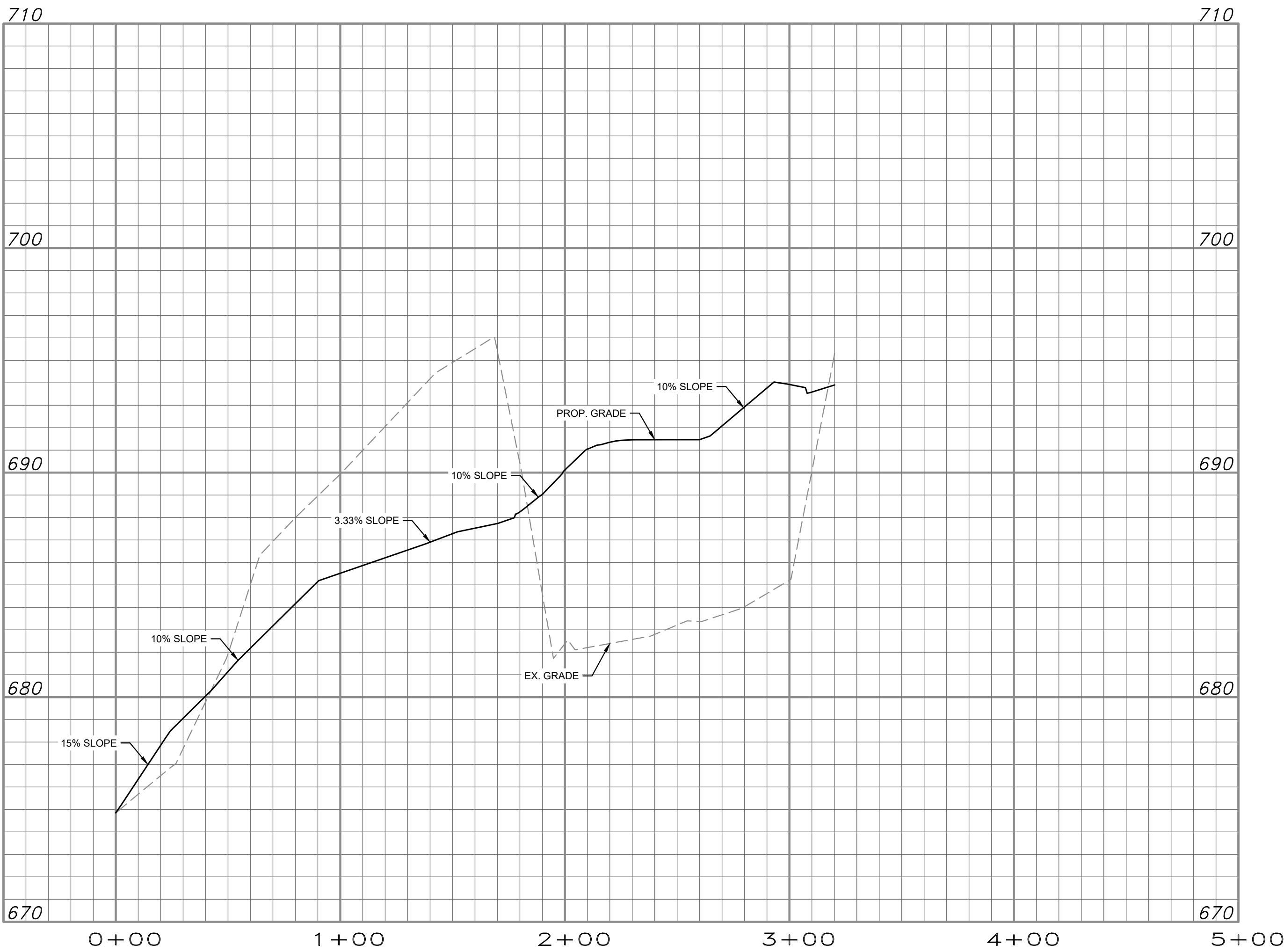
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Of

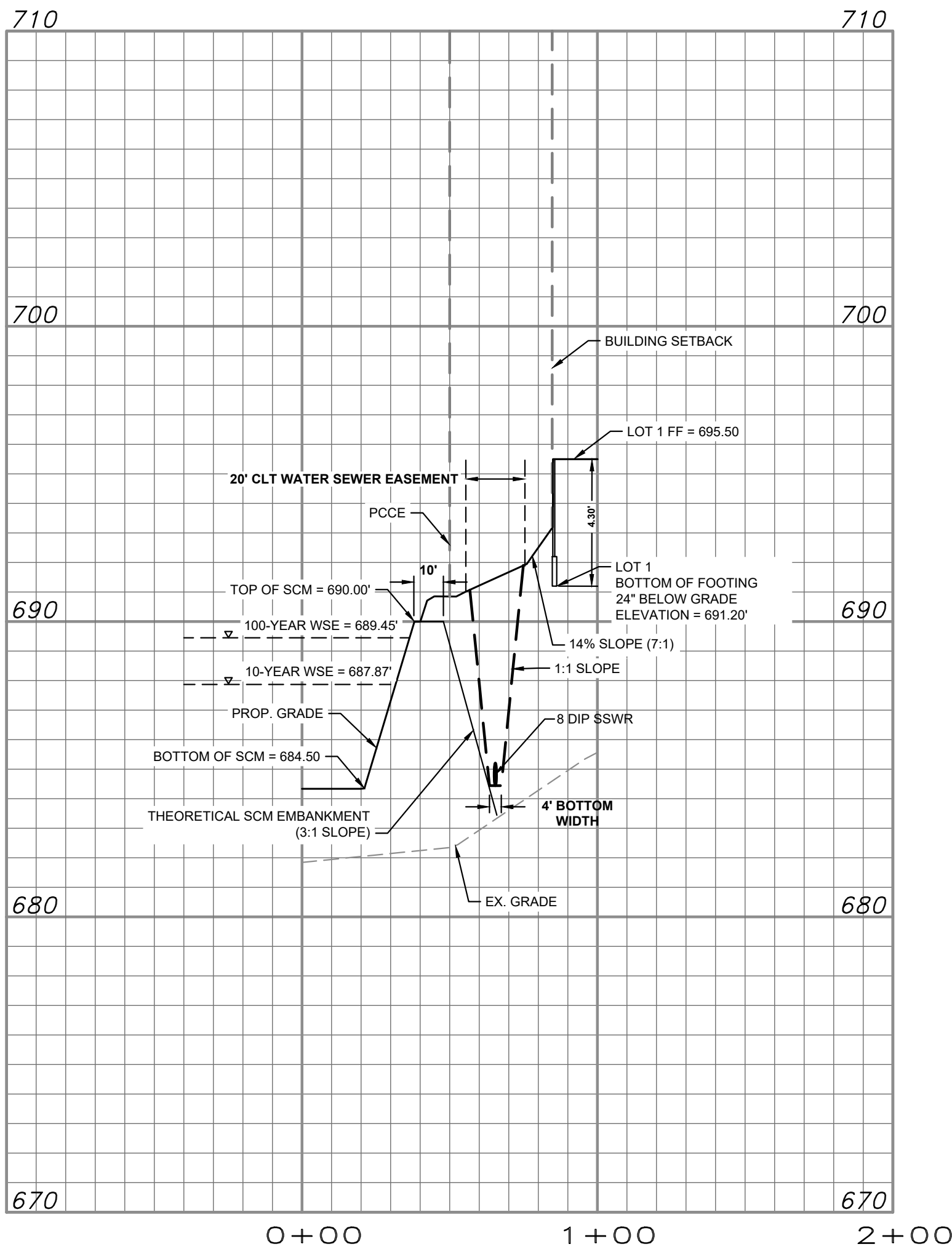
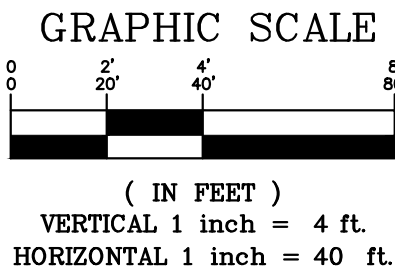
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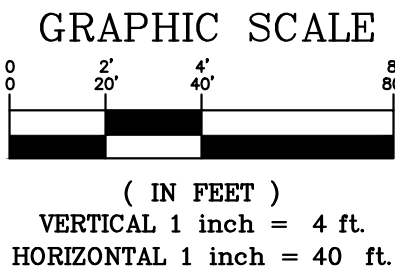
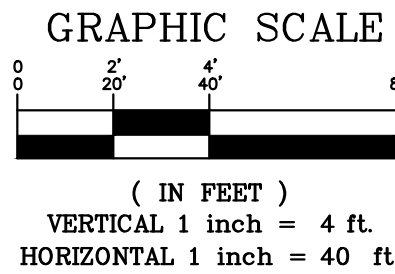
A CITY OF CHARLOTTE DEPARTMENT



SANITARY SEWER ACCESS ROAD PROFILE



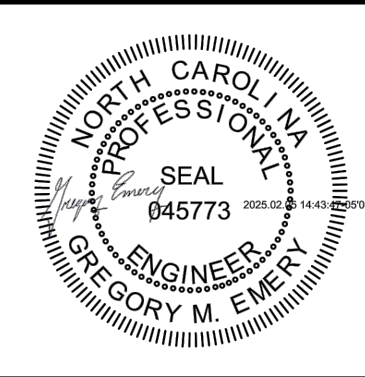
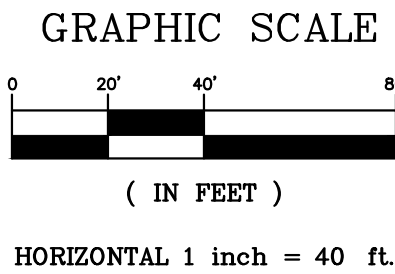
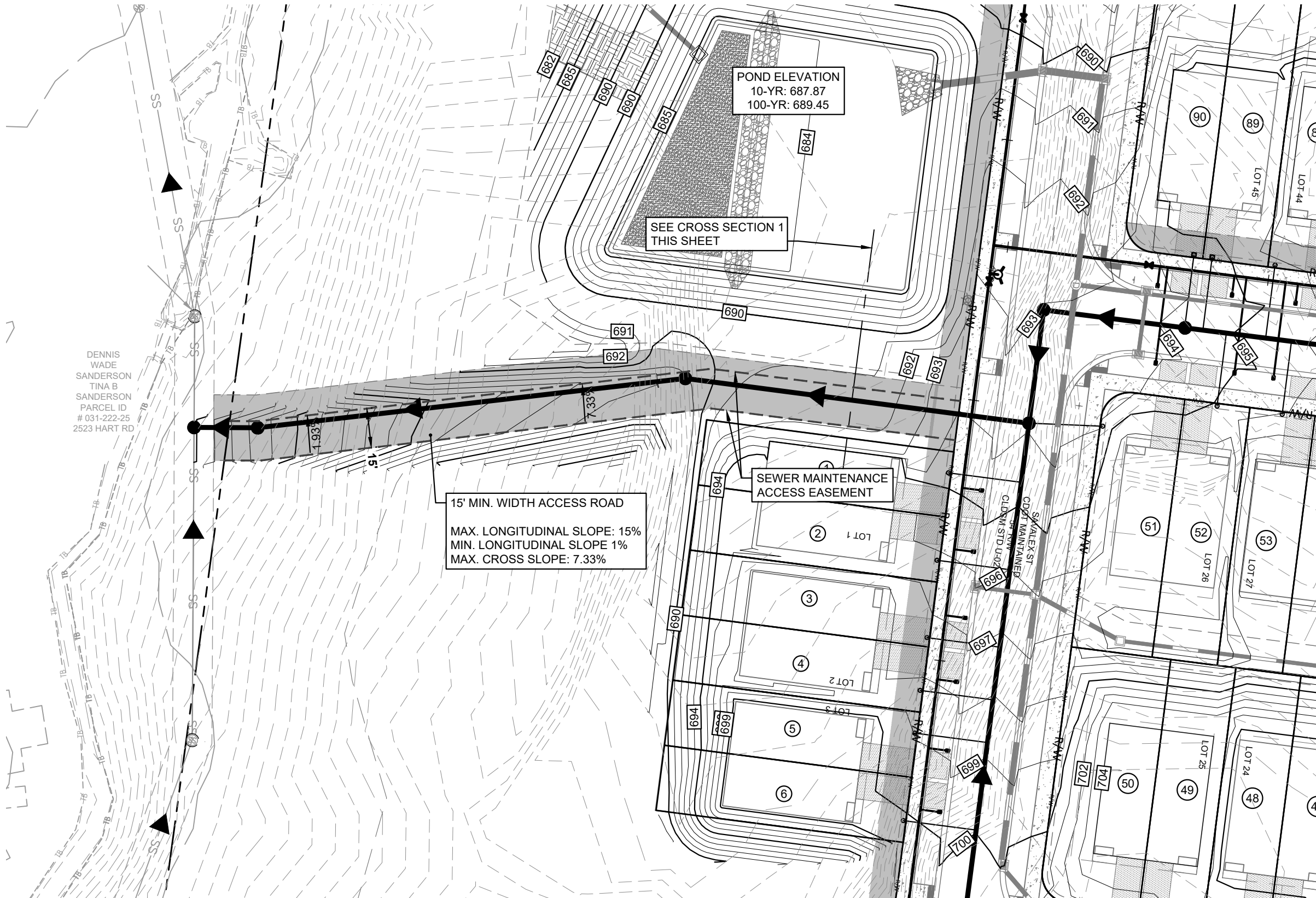
CROSS SECTION 1



- SANITARY SEWER NOTES:**
- ALL SANITARY SEWER LATERALS MATERIALS FROM TEE TO CO SHALL MATCH THE MAIN MATERIAL UNLESS OTHERWISE DIRECTED.
 - ANY AREA TO BE FILLED W/ STRUCTURAL FILL WILL REQUIRE FULL GEOTECHNICAL SOIL COMPACTION TESTING & ENGINEER REPORT.
 - ALL SANITARY SEWER LATERAL CLEANOUTS TO BE PLACED 1' OUTSIDE BACK OF SIDEWALK WHEN BACK OF SIDEWALK IS AT PUBLIC RIGHT OF WAY. OTHERWISE PLACE CLEAN OUT 1' OUTSIDE PUBLIC RIGHT OF WAY
 - SERVICE SEPARATION REQUIREMENTS:
 - MIN 7' SEP BETWEEN LATERALS
 - MIN 3' SEP BETWEEN WATER TAPS
 - MIN 5' SET BETWEEN WATER LINE & SSWR LATERAL
 - MIN 7' SEP FROM LATERAL AND MANHOLE
 - AVOID HAVING TAPS, LINES, CO'S, & METER BOXES IN DRIVEWAYS

NOTE:
ALL LATERALS SHALL HAVE 4' OF COVER AT THE PROPERTY LINE.

NOTE:
ALL 4\"/>



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CHARLOTTE WATER
CHARLOTTE, NORTH CAROLINA

SANITARY SEWER AND WATER DISTRIBUTION PLAN TO SERVE HART ROAD DUPLEXES

SANITARY SEWER ACCESS ROAD

No.	Date	By	Revision

Job No.	File No.
PLAN	1\"/>

CAROLINA GEOMATICS	GE	GE	GE			Sheet	Of
Surveyed By	Designed By	Drawn By	Project-Engr	Approved By	Date	7	7