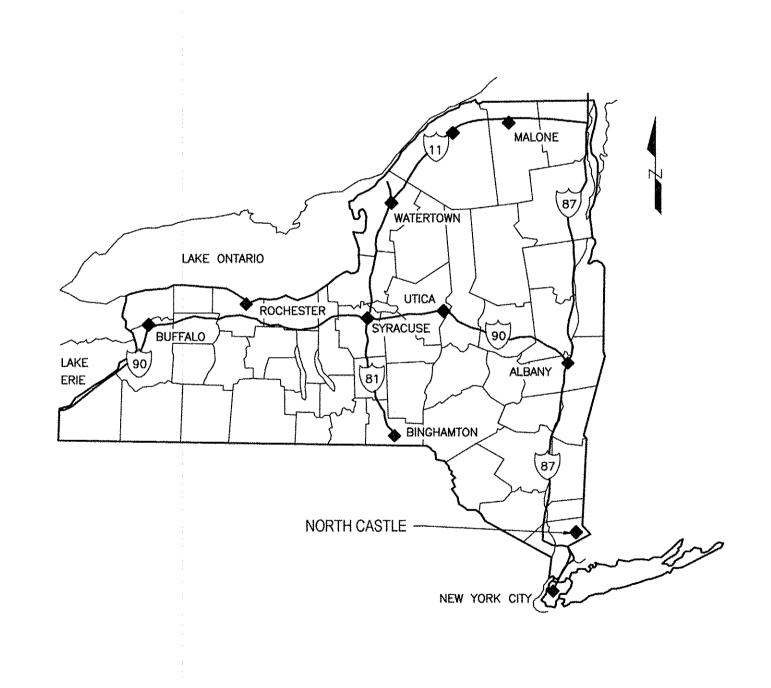
## TOWN OF NORTH CASTLE, NEW YORK WATER DISTRICT NO. 2 DISTRIBUTION SYSTEM REPLACEMENT



GHD PROJECT NO.: 86-16265



TOWN LOCATION MAP

NOT TO SCALE

## OWN OF NORTH CASTLE OFFICIALS

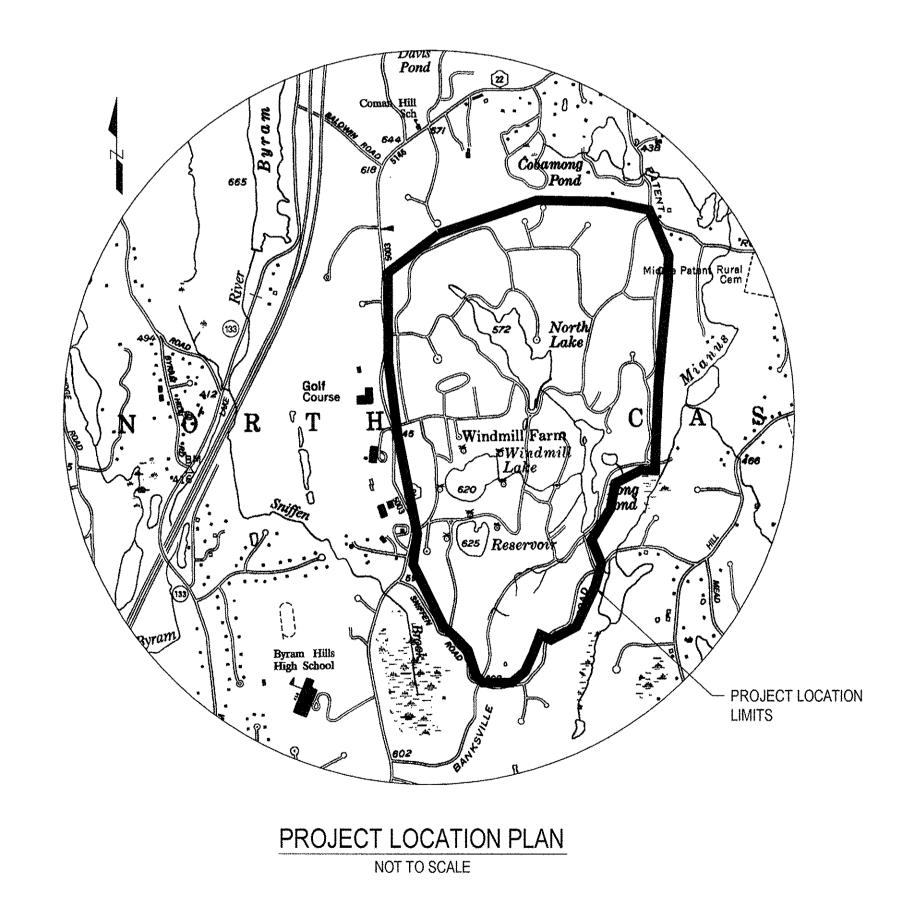
MICHAEL J. SCHILIRO

SUPERVISOR

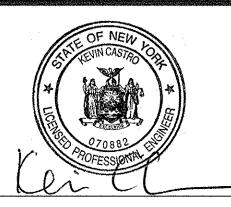
STEPHEN D'ANGELO, BARBARA W. DIGIACINTO, BARRY S. REITER, JOSÉ L. BERRA, COUNCILMAN COUNCILMAN COUNCILMAN

SAL MISITI,

DIRECTOR OF WATER & SEWER OPERATIONS



						NOTES:
						UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE
		WOODS TO A STATE OF THE STATE O			WARE-PROPERTY.	ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.
						IT IS VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM ON THIS DRAWING I
)	FOR CONSTRUCTION	JBA	JSS	KC	05/14	ANYWAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS/HER SEA  AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND DATE OF SUCH ALTERATIO
o	Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job	Project	Date	AND A SPECIFIC DESCRIPTION OF THE ALTERATION.





200000000	Drawn JBA	Designer JBA	Clien Proje
	Drafting JBA Check	Design JSS Check	Title
	Approved (Project Director)	i Cl	0 = -4

Scale AS SHOWN

Client TOWN OF NORTH CASTLE, NEW YORK
Project WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT
Title COVER SHEET

This Drawing shall not be used for Construction unless Signed and Sealed For Construction

Ansi D

Drawing No: 86-16265-G001

Rev: 0

Plot Date: 9 May 2014 - 1:36 AM Plotted by: Joseph Awald Cad File No: G:\86\16265\CADD\Drawings\Civil\86-16265-G001.dwg

GENERAL NOTES - WATERMAIN:

- ALL ELEVATIONS BASED ON A DATUM OF 1983 NAD.
- 2. ALL MATERIALS USED AND CONSTRUCTED METHODS EMPLOYED ARE TO BE IN ACCORDANCE WITH THE LATEST TOWN OF NORTH CASTLE, NEW YORK REGULATIONS AND THESE CONTRACT DOCUMENTS. PIPING SHALL BE DUCTILE IRON PIPE (DIP) CL 52, 8-INCH AND 12-INCH WHERE NOTED.
- CONTRACTOR TO HAVE STAKED OUT ALL UTILITIES PRIOR TO CONSTRUCTION LOCATED AND MARKED BY DIG SAFELY NEW YORK.
- 4. APPROXIMATE LOCATION OF MAINLINE UTILITIES AND EXISTING WATERMAINS ARE SHOWN ON DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING LOCATION AND DEPTH OF ALL UTILITIES. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DETERMINING LOCATION AND DEPTH OF INDIVIDUAL SERVICES, NOT SHOWN.
- 5. ALL DEPTHS OF UTILITIES SHOWN IN PROFILES ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM DEPTHS PRIOR TO INSTALLATION OF WATERMAIN.
- 6. CONTRACTOR SHALL EXCAVATE A TEST PIT OVER ALL EXISTING UTILITY CROSSINGS PRIOR TO INSTALLING ANY NEW PIPING TO VERIFY EXISTING HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS TO ASSURE NO CONFLICT WITH NEW PIPING. THIS WORK SHALL BE PROVIDED AS PART OF THE WATERMAIN UNIT PRICE
- 7. CONTRACTOR SHALL CONTACT UTILITY COMPANIES WHEN EXCAVATING IN THE VICINITY OF EXISTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY EXISTING UTILITIES DAMAGED DUE TO HIS OPERATION.
- 8. CONTRACTOR TO SUPPORT/OR PROTECT EXISTING SEWER, STORM, WATER MAIN, GAS, OR ANY OTHER EXISTING UTILITIES WHERE NECESSARY, IN ACCORDANCE WITH UTILITY OWNER'S REQUIREMENTS.
- 9. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY INTERFERENCE WITH EXISTING UTILITIES AND THE NEW WATER SYSTEM.
- 10. CONTRACTOR MUST KEEP ALL WATER MAINS WITHIN RIGHT-OF-WAY UNLESS AN EASEMENT IS SHOWN. IF A CONTRACTOR NEEDS AN EASEMENT DUE TO CONFLICTS IN THE FIELD, THEY MUST NOTIFY THE OWNER AND GIVE THEM SUFFICIENT TIME TO OBTAIN THE EASEMENT. THERE SHALL BE NO CLAIMS OR ADDITIONAL COSTS ASSOCIATED WITH MOVING PIPE OR CONSTRUCTION DELAYS.
- 11. CONTRACTOR SHALL INSULATE WATERMAIN IF SEPARATION BETWEEN STORM SEWER PIPE/DRYWELLS IS LESS THAN FIVE FEET AS SHOWN ON DETAILS.
- 12. IF THE OWNER DETERMINES THAT PIPE, HYDRANTS, AND/OR VALVES NEED TO BE MOVED OR ADJUSTED IN THE FIELD PRIOR TO INSTALLATION, CONTRACTOR SHALL NOT RECEIVE ANY ADDITIONAL COMPENSATION FOR RELOCATIONS. ALL COSTS SHALL BE COVERED UNDER THE UNIT PRICE ITEMS BASED ON QUANTITY OF ACTUAL MATERIAL INSTALLED.
- 13. ALL WATERMAIN AND SERVICES SHALL BE INSTALLED WITH A MINIMUM OF 4.5' OF COVER.
- 14. IF EXCAVATION OCCURS WITHIN THE ANGLE OF REPOSE FROM EDGE OF PAVED SHOULDER FOR ANY STATE OR COUNTY ROADS, CONTRACTOR MUST SUBMIT A TRENCH SHEETING AND BRACING PLAN TO BE APPROVED BY THE ROAD OWNER.
- CONTRACTOR SHALL SUBMIT A MAINTENANCE AND PROTECTION OF TRAFFIC PLAN TO ROAD OWNERS. PLAN MUST BE APPROVED BY THE ROAD OWNER AND SHALL INCORPORATE DETAILS SHOWN ON DETAIL
- 16. ALL EXISTING ITEMS (INCLUDING TREES, PLANTERS, HEDGES, SIDEWALKS, FENCE, GUIDE LINES, ETC.) MAY NOT BE SHOWN ON DRAWINGS. HOWEVER THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ITEMS, INCLUDING BUT NOT LIMITED TO REPAIRED LANDSCAPING. ALL DAMAGED ITEMS SHALL BE RESTORED TO THEIR EXISTING CONDITION OR BETTER AND AT NO ADDITIONAL COST TO THE
- 17. CONTRACTOR SHALL REMOVE ANY TREES DAMAGED BY HIS CONSTRUCTION OPERATIONS OUTSIDE FROM THE PROPOSED PATH OF WATERMAIN TO THE LIMITS OF CLEARING INDICATED ON THE CONTRACT DRAWINGS, IF NECESSARY.
- 18. CONTRACTOR IS RESPONSIBLE FOR DETERMINING DEPTH OF GROUNDWATER AND FOR ALL COSTS ASSOCIATED WITH DE-WATERIN, CONTROL AND DISPOSAL NECESSARY TO INSTALL PIPING.
- 19. WHEN CONTRACTOR IS WITHIN 5' OF UTILITY POLE THEY MUST COORDINATE SUPPORTING POLES WITH THE UTILITY COMPANY.
- 20. CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD AND PRESERVE ALL SURVEY CONTROL, R.O.W. MONUMENTS, AND INDIVIDUAL PROPERTY CORNER PINS/MONUMENTS IN THE AREA OF CONSTRUCTION. IF DAMAGED, CONTRACTOR SHALL HAVE SURVEYED AND REPLACED AT NO ADDITIONAL COST TO OWNER.
- 21. ALL REMOVED HYDRANTS SHALL BE THE PROPERTY OF THE OWNER AFTER REMOVED, CONTRACTOR SHALL TRANSPORT REMOVED HYDRANTS TO A DESIGNATED AREA IDENTIFIED BY THE OWNER.
- 22. CONTRACTOR SHALL PRESSURE TEST IN ACCORDANCE WITH AWWA STANDARD C600
- 23. CONTRACTOR SHALL KEEP EXISTING WATERMAINS IN SERVICE AND OPERATIONAL UNTIL ALL SERVICES FOR THAT SECTION OF EXISTING WATERMAIN HAS BEEN TRANSFERRED TO THE NEW WATERMAIN IS
- 24. DISINFECTION PROCEDURES SHALL BE FOLLOWED FOR THE NEW WATER MAIN ALONG WITH AN "APPROVAL OF COMPLETED WORKS" IS ISSUED BY THE WESTCHESTER COUNTY HEALTH DEPARTMENT PRIOR TO PLACING THE WATER MAIN INTO SERVICE. THE CONTRACTOR SHALL DISINFECT THE WATER MAIN IN ACCORDANCE WITH THE LATEST AWWA STANDARD C651. A SUMMARY DESCRIPTION PROVIDED BELOW:

STANDARDS:AWWA C651, DISINFECTION PROCEDURES (METHOD NO. 2):

- COMPLETE ALL PRESSURE AND LEAKAGE TESTING PRIOR TO START OF DISINFECTION
- FLUSH ALL PIPE AND APPURTENANCES OF DIRT AND CONTAMINANT MATERIALS
- USE CONTINUOUS FEED METHOD. USE OF SOLID HYPOCHLORITE METHOD IS NOT ALLOWED (TABLET METHOD). CHLORINE INJECTION POINT SHALL BE WITHIN 10-FEET OF THE EXISTING HYDRANT AVAILABLE CHLORINE IN SOLUTION SHALL BE NOT LESS THAN 50 MG/L AND NOT GREATER

THAN 100 MG/L AND SHALL BE HELD IN THE SYSTEM FOR NOT LESS THAN 24-HOURS.

- DURING CHLORINE INJECTION FLUSH EACH HYDRANT UNTIL THE REQUIRED RESIDUAL IS
- AFTER 24-HOURS THE AVAILABLE CHLORINE SHALL BE NO LESS THAN 25 MG/L. REPEAT PROCEDURE AS NECESSARY TO ACHIEVE REQUIRED CHLORINE RESIDUAL AT THE COMPLETION OF THE DISINFECTION PROCEDURE. THOROUGHLY FLUSH THE SYSTEM, UNTIL THE CHLORINE RESIDUAL IS BETWEEN 0.5 AND
  - 1.2 MG/L, COLLECT INITIAL SAMPLES FOR LABORATORY TESTING FOR TOTAL COLIFORM.

A SECOND TOTAL COLIFORM TESTING SHALL BE PERFORMED NO LESS THAN 24-HOURS FOLLOWING THE INITIAL TESTING.

DISPOSE OF SPENT CHLORINE SOLUTION OFF-SITE OR BY NEUTRALIZING THE REMAINING CHLORINE AS APPROVED BY THE OWNER AND APPROPRIATE REGULATORY AGENCIES.

IF EITHER TOTAL COLIFORM TESTING FAILS TO MEET HEALTH DEPARTMENT REQUIREMENTS THE DISINFECTION AND TESTING SHALL BE REDONE AT THE

CONTRACTORS EXPENSE. ANALYSIS SHALL BE PERFORMED BY A STATE CERTIFIED LABORATORY.

PRIOR TO ESTABLISHING SERVICE CONNECTIONS TO EACH HOME OR BUSINESS THE

23. TEST BORINGS ARE PRESENTED AT THE END OF THE SPECIFICATIONS.

SERVICE SHALL BE THOROUGHLY FLUSHED.

24. THE TOWN OF NORTH CASTLE RECORDS INDICATE ADEQUATE PRESSURE AND CAPACITY FOR THE

## **EROSION AND SEDIMENT CONTROL NOTES:**

- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY THE CONTRACTOR DAILY AND IMMEDIATELY AFTER PERIODS OF RAINFALL, REPAIR AND/OR MAINTENANCE OF SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE MADE AS SOON AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF ALL CONTROL MEASURES ON THIS SITE.
- 2. CATCH BASINS SHALL BE PROTECTED WITH INLET PROTECTION
- 3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ALL CONSTRUCTION ACTIVITIES.
- 4. PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
- 5. REFER TO SECTION 01564 FOR ADDITIONAL EROSION AND SEDIMENT CONTROL REQUIREMENTS

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700	MAJOR CONTOUR  MINOR CONTOUR		
₩			
× × × × × × × × × × × × × × × × × × ×	EXISTING WATER VALVES		
*&	EXISTING WATER SERVICE SHUT OFF VALVES		
***	EXISTING HYDRANT		
w	EXISTING WATERMAIN		
	PROPOSED WATER MAIN		
<b>&gt;</b>	PROPOSED GATE VALVE		
<b>&amp;</b>	PROPOSED HYDRANT ASSEMBLY		
•	SOIL BORING LOCATION		
11 18 48 日	PROPOSED FITTINGS/BENDS		
O.D.	OUTSIDE DIAMETER		
СР	CONCRETE PIPE		
ST	EXISTING STORM LINE		
GAS	EXISTING NATURAL GAS LINE		
0	EXISTING CATCH BASIN		
cv ⋈	EXISTING NATURAL GAS VALVE		
\(\tau_{\text{\tint{\text{\tint{\text{\tin}\text{\tex{\tex	EXISTING UTILITY POLE		
WL	TOWN OF NORTH CASTLE GIS WETLAND LINE		
WV	WATER VALVE		
GV	GAS VALVE		
DIP	DUCTILE IRON PIPE		
CL52	PIPE CLASS 52		
EOP	EDGE OF PAVEMENT		
TYP.	TYPICAL		
MIN,	MINIMUM		
MJ	MECHANICAL JOINT		
CB	CATCH BASIN		
ASP	ASPHALT		
UG	UNDERGROUND  PICHT OF WAY		
R-O-W	RIGHT OF WAY		
ELEC. STMH	STORM MANHOLE		
DWG.	DRAWING		

Drawn JBA

Drafting JBA Check

(Project Director)

Scale AS SHOWN

Approved

Designer JBA

JSS

Design Check

DRAWING TITLE COVER SHEET GENERAL NOTES, ABBREVIATIONS, LEGEND, OVERVIEW PLAN, & DRAWING LIST

DRAWING LIST

**EVERGREEN ROW PLAN & PROFILE** 

**EVERGREEN ROW PLAN & PROFILE** 86-16265-C02 86-16265-C03 **EVERGREEN ROW PLAN & PROFILE EVERGREEN ROW PLAN & PROFILE** 86-16265-C04 86-16265-C05 **EVERGREEN ROW PLAN & PROFILE** 

DRG No.

86-16265-G01

86-16265-G02

86-16265-C01

86-16265-C06 NORTH LANE PLAN & PROFILE 86-16265-C07 NORTH LAKE ROAD PLAN & PROFILE 86-16265-C08 NORTH LAKE ROAD PLAN & PROFILE

86-16265-C09 NORTH LAKE ROAD PLAN & PROFILE 86-16265-C10 NORTH LAKE ROAD PLAN & PROFILE

86-16265-C11 FOX RIDGE PLAN & PROFILE FOX RIDGE PLAN & PROFILE

86-16265-C12 86-16265-C13 FOX RIDGE AND ELM PLACE PLAN & PROFILE **UPLAND LANE PLAN & PROFILE** 86-16265-C14

86-16265-C15 **UPLAND LANE PLAN & PROFILE** HARDSCRABBLE CIRCLE & NORTH RIDGE PLAN & PROFILE 86-16265-C16

HARDSCRABBLE PLAN & PROFILE 86-16265-C17 THORNEWOOD ROAD PLAN & PROFILE 86-16265-C18

86-16265-C19 THORNEWOOD ROAD PLAN & PROFILE 86-16265-C20 THORNEWOOD ROAD PLAN & PROFILE

86-16265-C21 WINDMILL ROAD PLAN & PROFILE 86-16265-C22 WINDMILL ROAD PLAN & PROFILE

86-16265-C23 WINDMILL ROAD PLAN & PROFILE 86-16265-C24 WINDMILL ROAD PLAN & PROFILE 86-16265-C25 WINDMILL ROAD PLAN & PROFILE

86-16265-C26 WINDMILL ROAD & WINDMILL COURT PLAN & PROFILE 86-16265-C27 WINDMILL ROAD PLAN & PROFILE

86-16265-C28 WINDMILL ROAD PLAN & PROFILE WINDMILL PLACE PLAN & PROFILE 86-16265-C29 86-16265-C30 WINDMILL PLACE PLAN & PROFILE

86-16265-C31

86-16265-C32 MAPLE WAY PLAN & PROFILE 86-16265-C33 MAPLE WAY & SPRUCE HOLLOW PLAN & PROFILE 86-16265-C34 SPRUCE HILL ROAD PLAN & PROFILE

86-16265-C35 SPRUCE HILL ROAD & SERVICE EASEMENT PLAN & PROFILE 86-16265-C36 LONG POND ROAD PLAN & PROFILE

86-16265-C37 LONG POND ROAD PLAN & PROFILE 86-16265-C38 LONG POND ROAD PLAN & PROFILE 86-16265-C39 LONG POND ROAD PLAN & PROFILE

86-16265-C40 LONG POND ROAD & LONG POND COURT PLAN & PROFILE 86-16265-C41 POND LANE PLAN & PROFILE

86-16265-C42 POND LANE PLAN & PROFILE 86-16265-C43 MILL LANE & OAK RIDGE COURT PLAN & PROFILE

86-16265-C44 VALLEY LANE & BANKSVILLE ROAD PLAN & PROFILE

86-16265-C45 BANKSVILLE ROAD DOGWOOD DRIVE PLAN & PROFILE **DETAILS** 86-16265-C46 86-16265-C47 DETAILS

DETAILS 86-16265-C48 86-16265-C49 DETAILS

DETAILS 86-16265-C50 86-16265-C51 TEMPORARY BYPASS WATER SERVICE

**TOWN OF NORTH CASTLE, NEW YORK** WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT **GENERAL NOTES, ABBREVIATIONS, LEGEND,** 

Rev: 0

for Construction unless Signed and Sealed For Construction

Ansi D

Drawing No: 86-16265-G002

**OVERVIEW PLAN, & DRAWING LIST** 

This Drawing shall not be used Original Size

GHD Consulting Services Inc.

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E cazmail@ghd.com W www.ghd.com

One Remington Park Drive

Cazenovia NY 13035 USA

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Date AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

0 FOR CONSTRUCTION

Plot Date: 9 May 2014 - 2:34 AM

Revision Note: \* indicates signatures on original issue of drawing or last revision of drawing

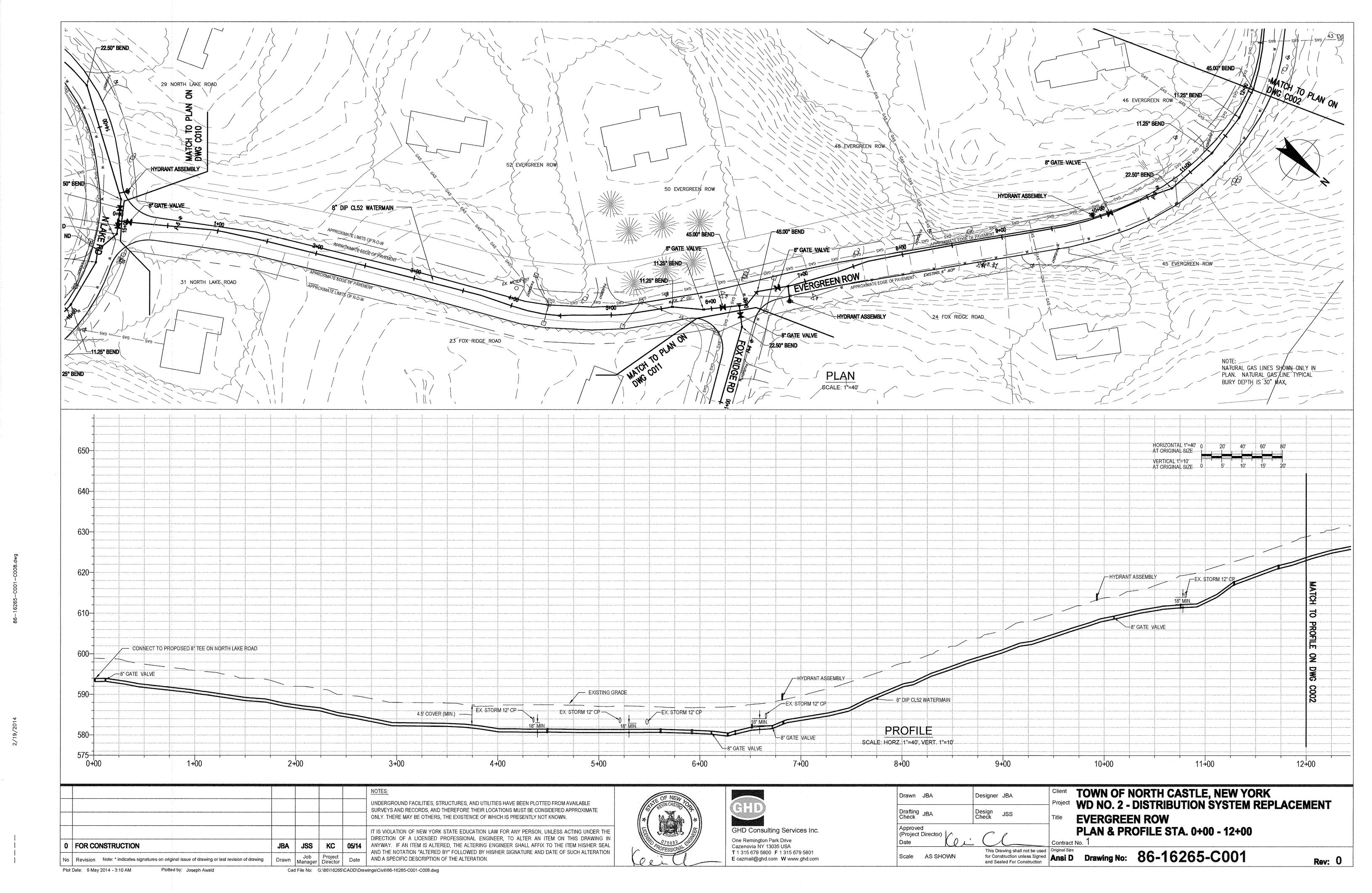
Plotted by: Joseph Awald

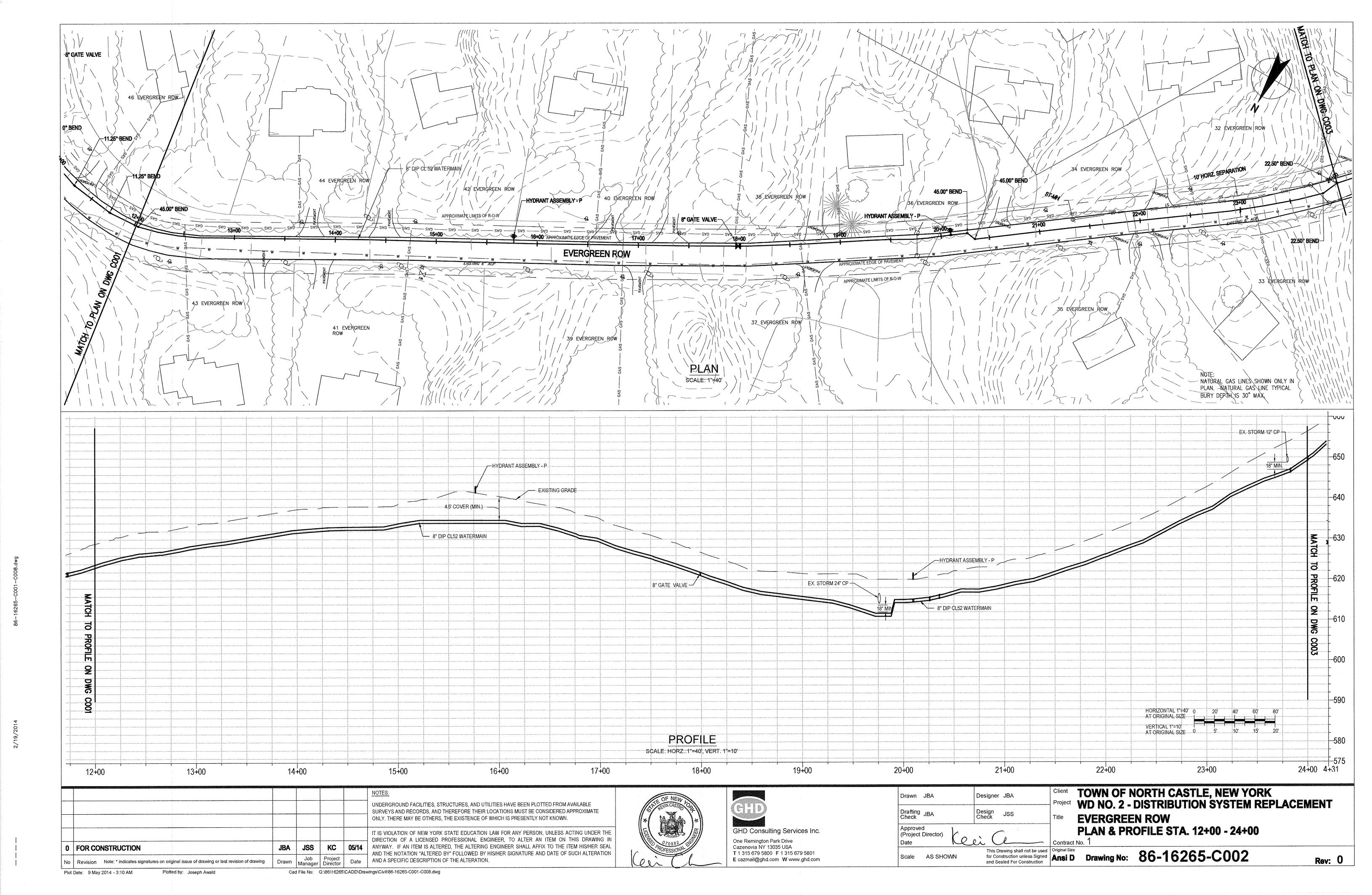
IT IS VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE

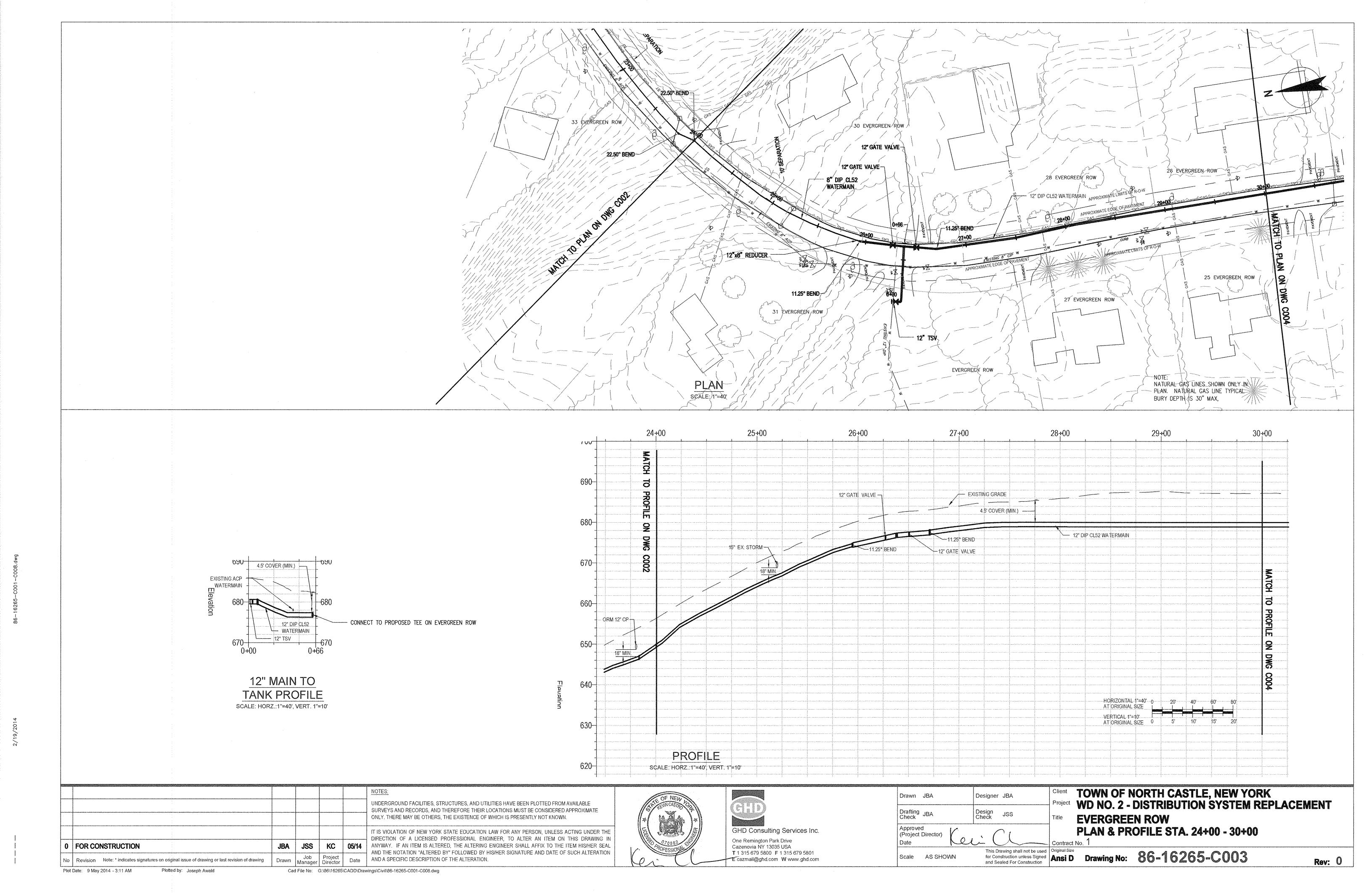
DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM ON THIS DRAWING IN

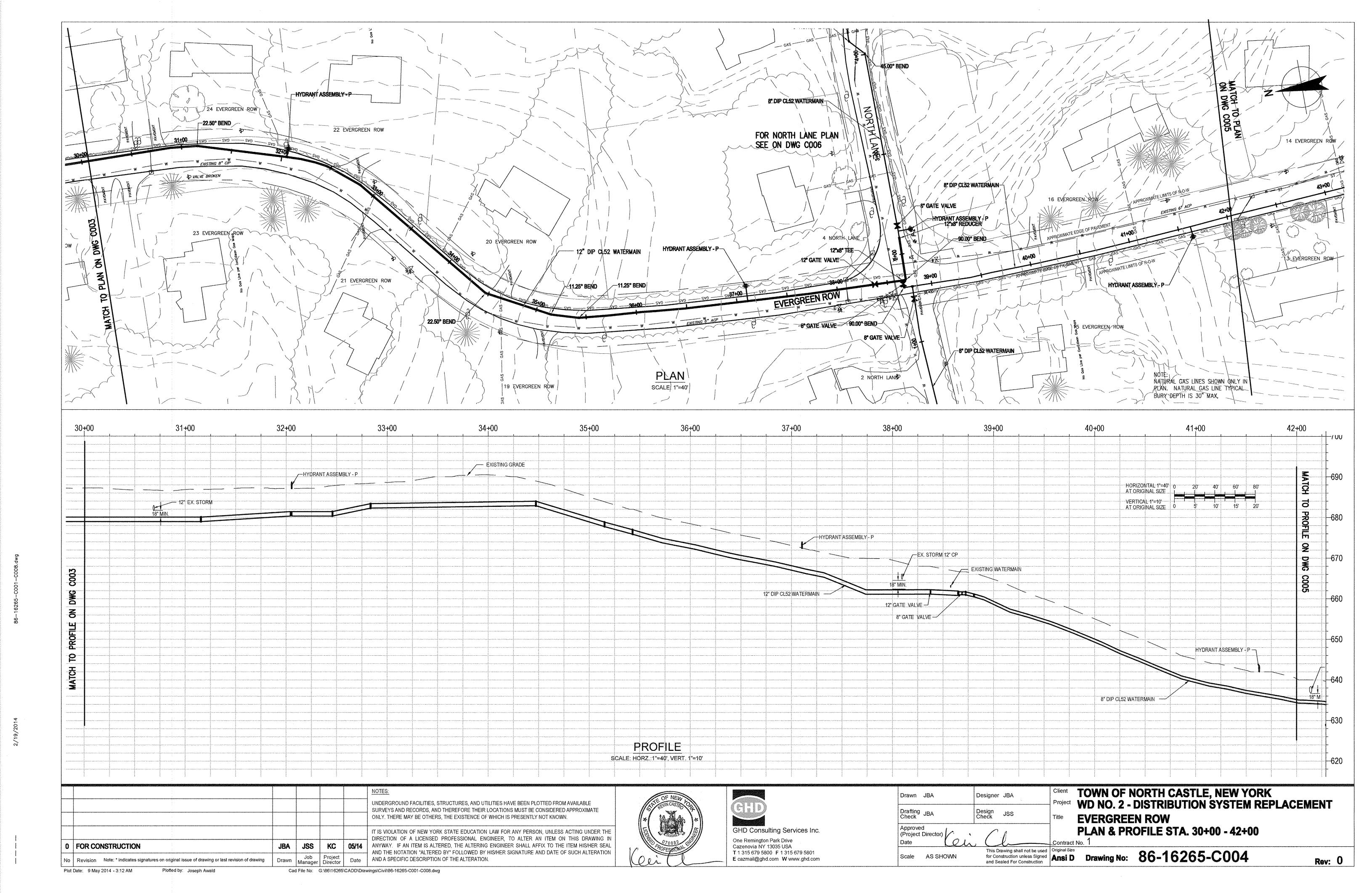
ANYWAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS/HER SEAL

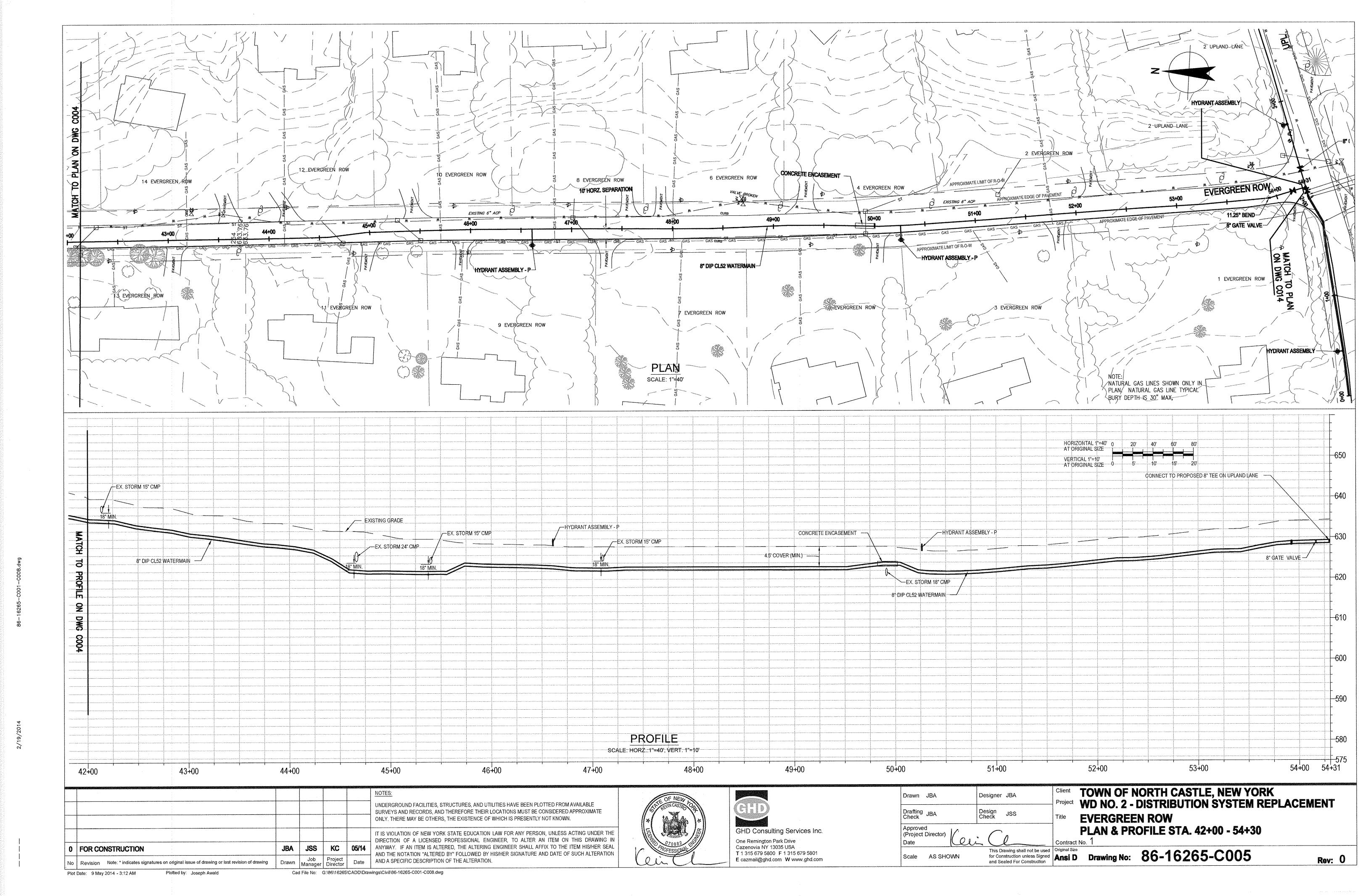
AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND DATE OF SUCH ALTERATION

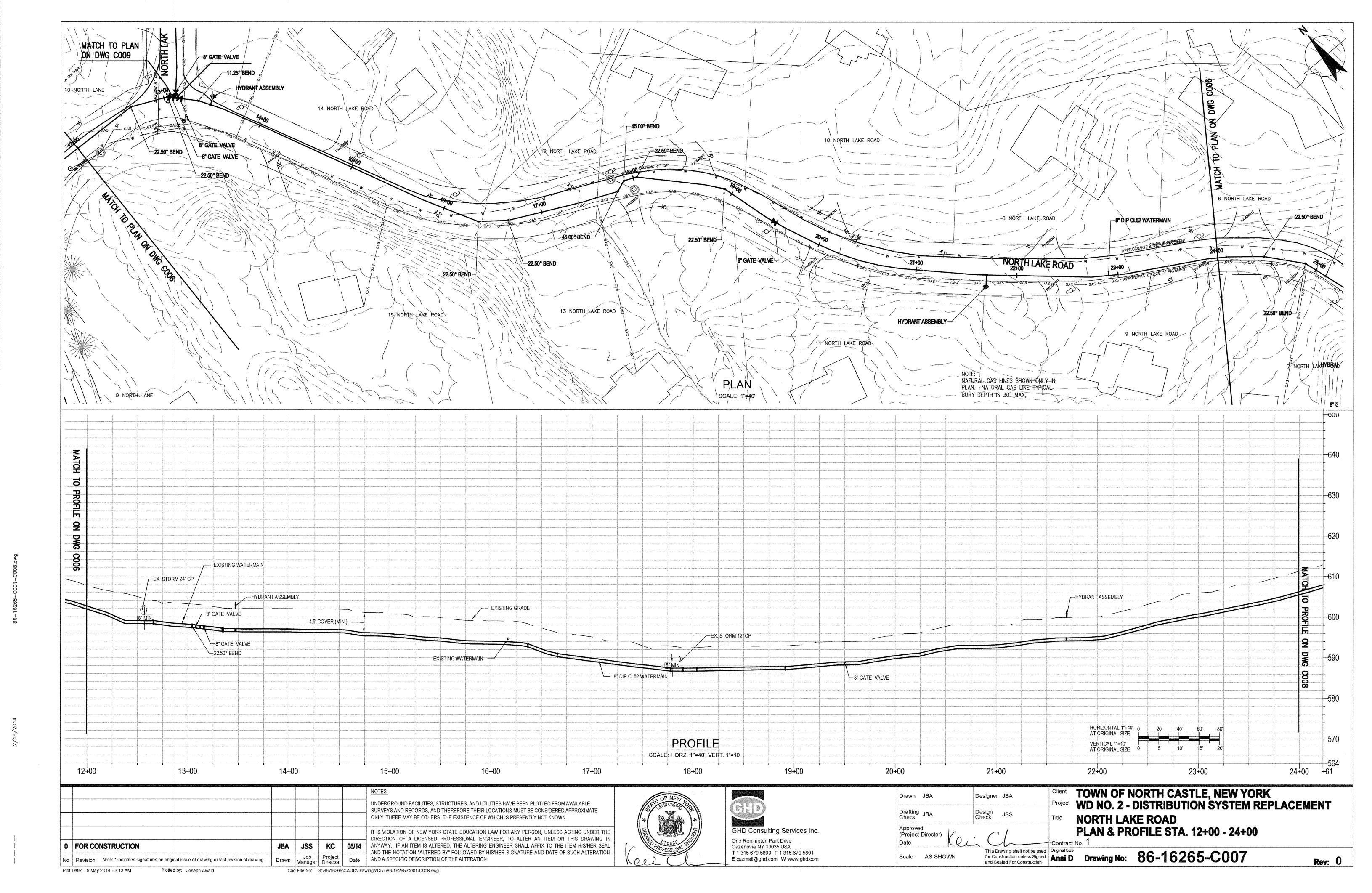


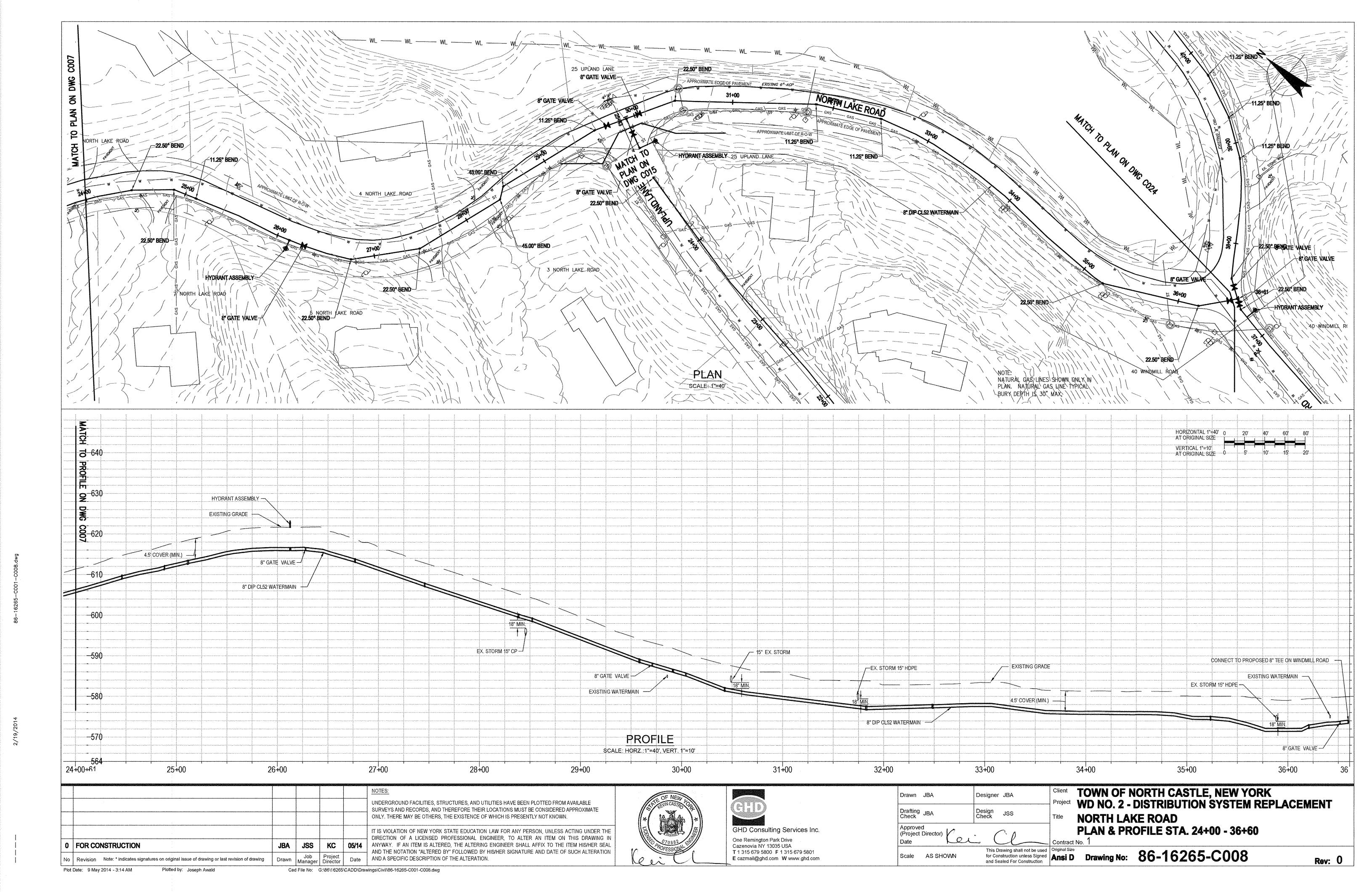


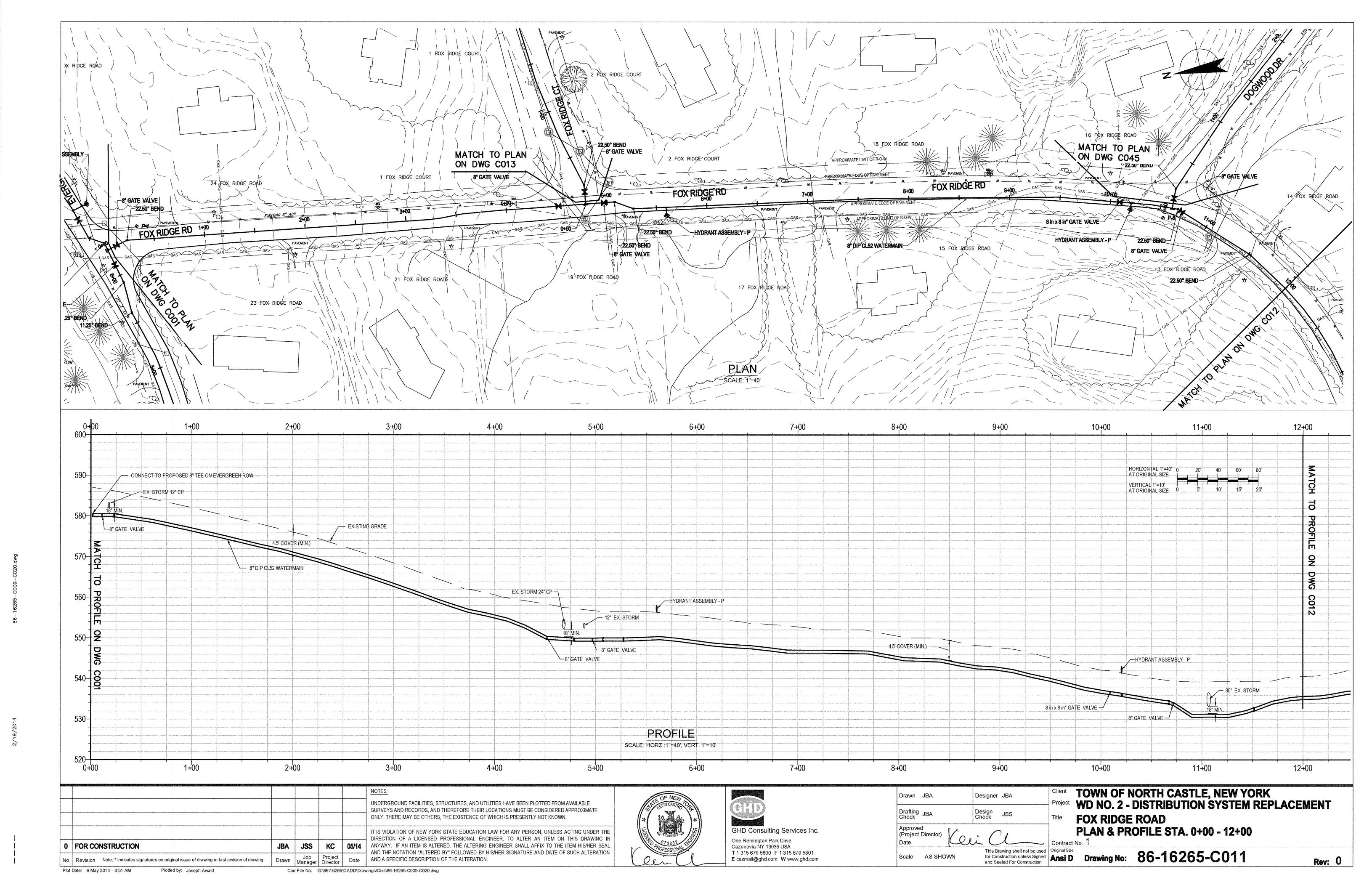


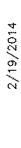


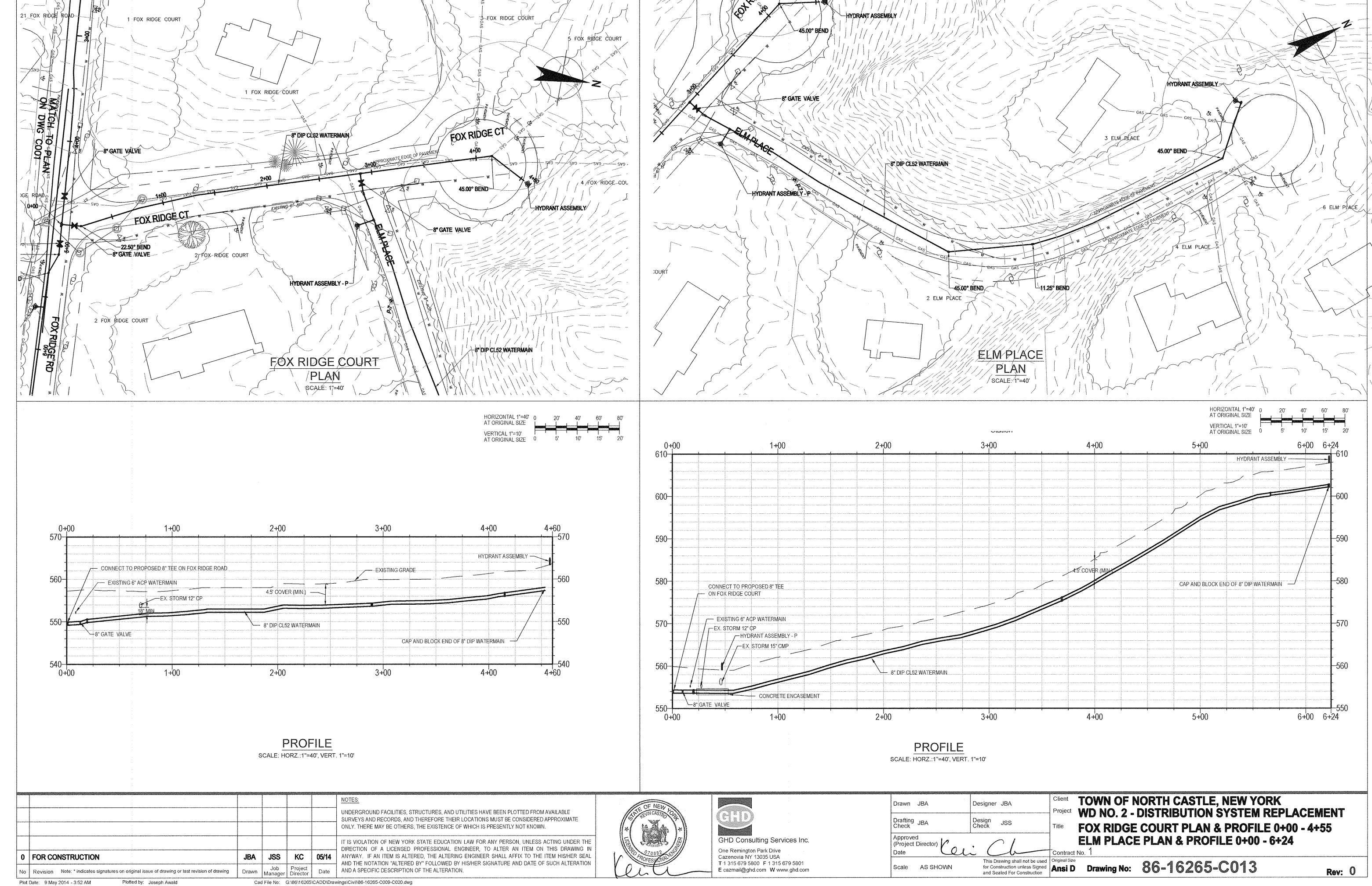


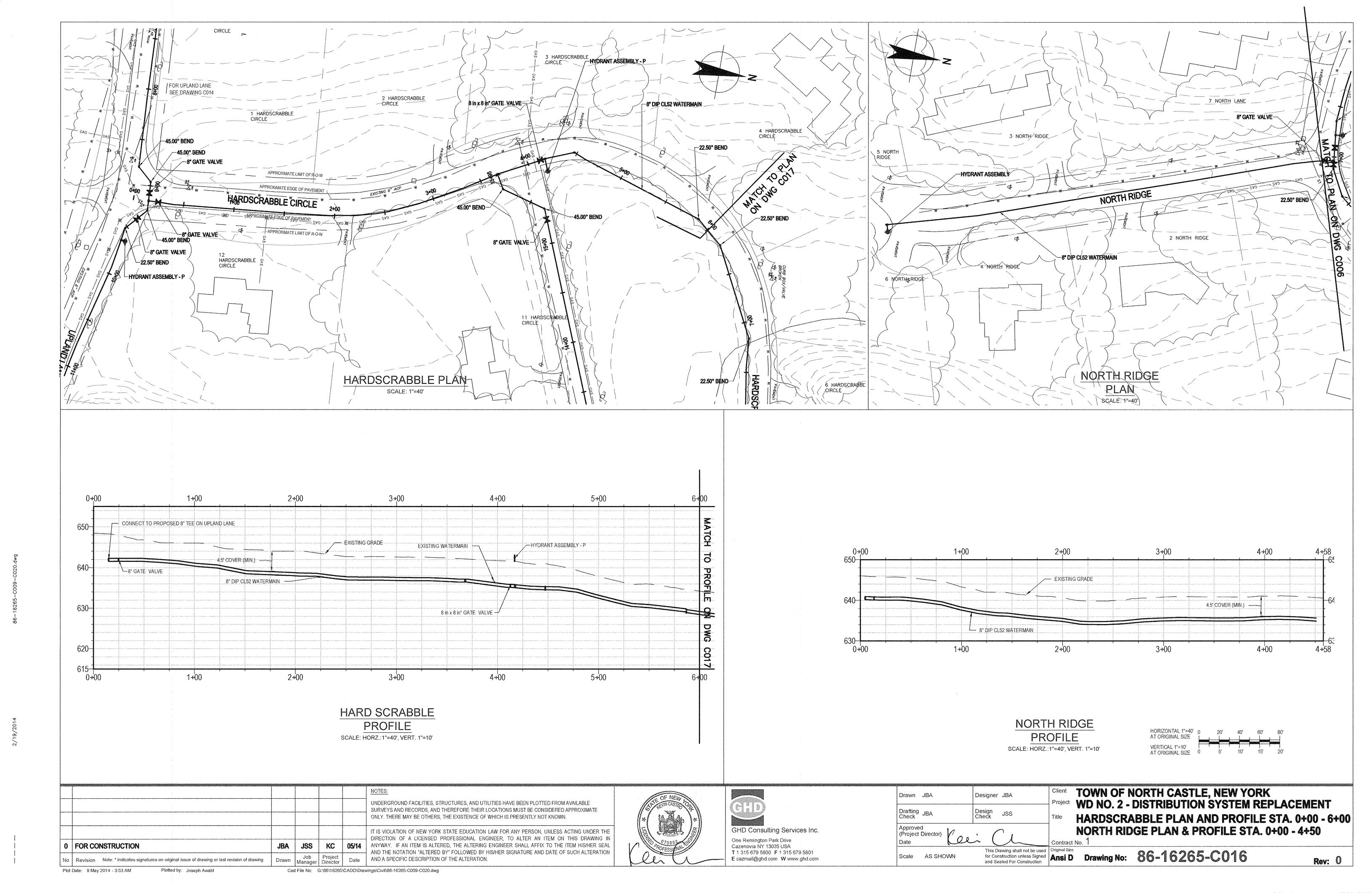


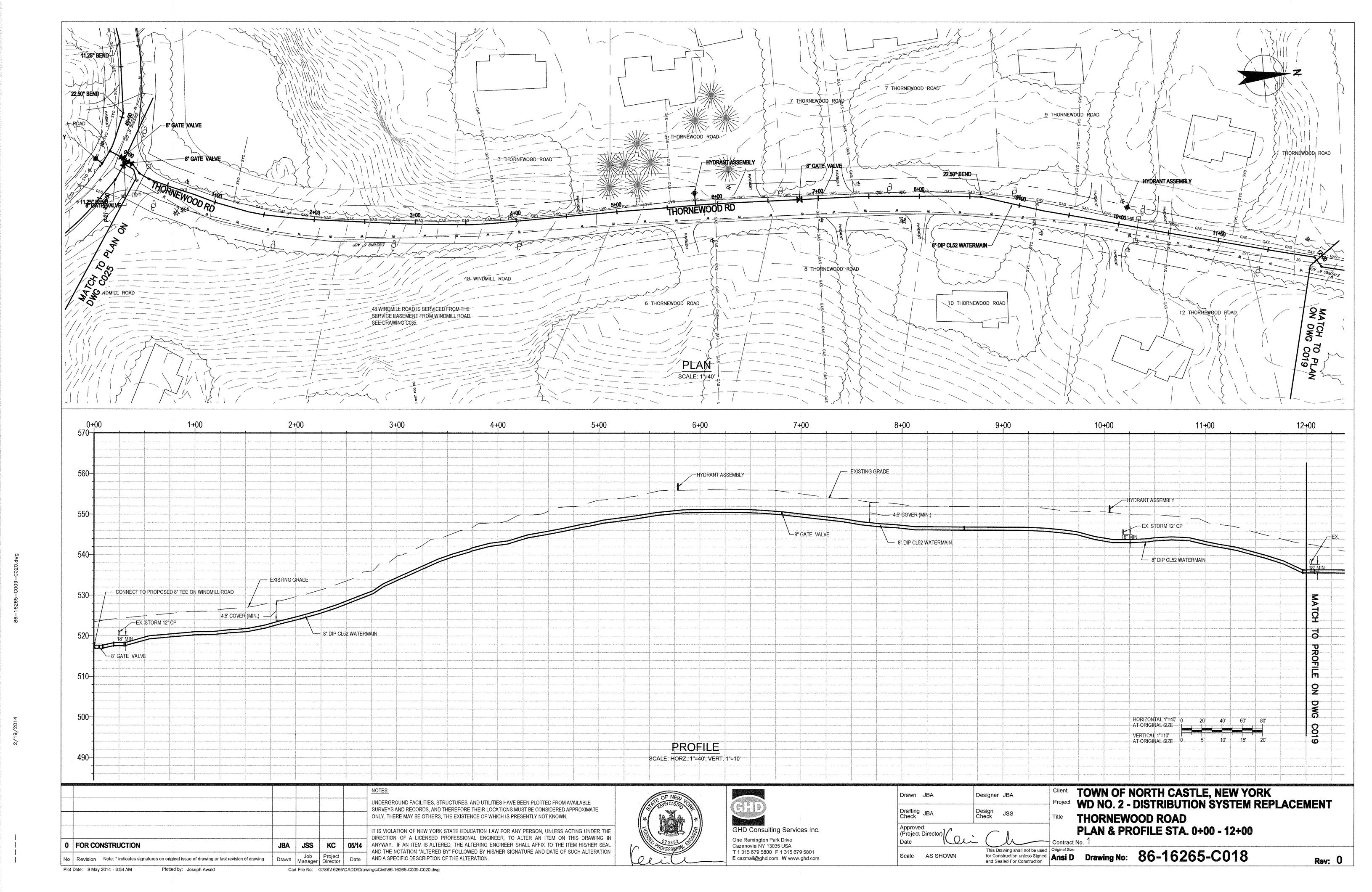


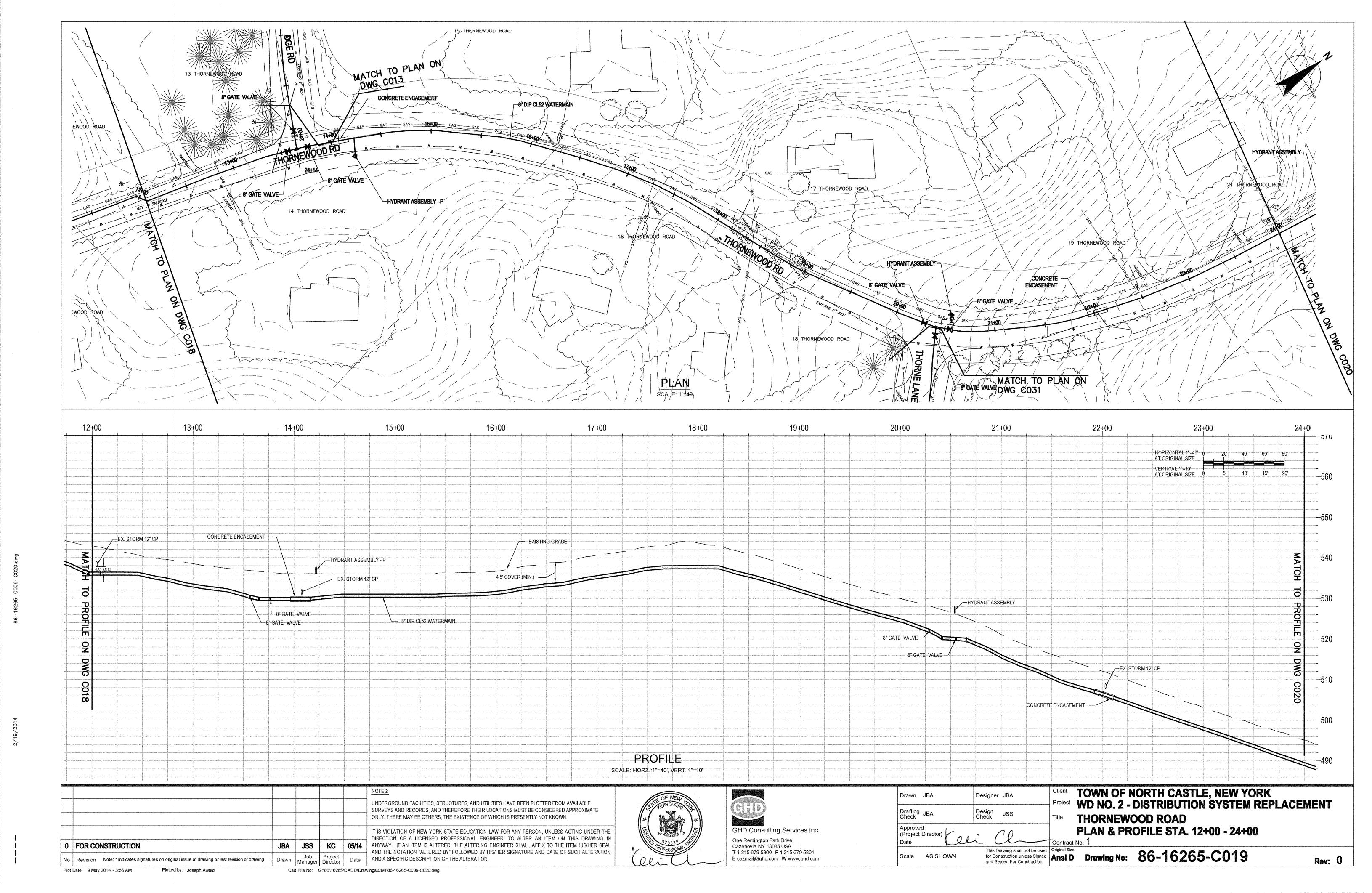


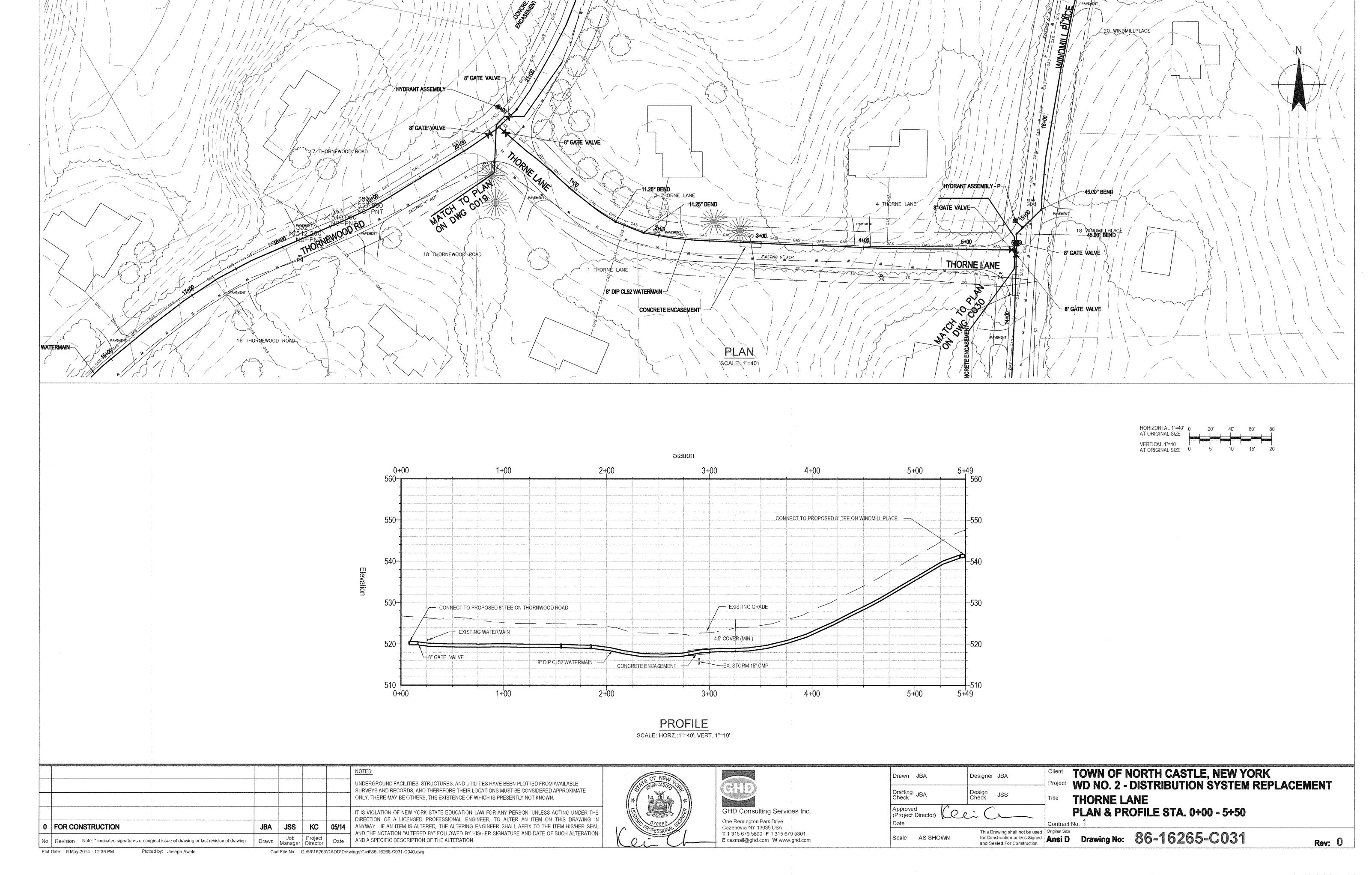












14 MAPLE WAY

Client TOWN OF NORTH CASTLE, NEW YORK
Project WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT **MAPLE WAY** PLAN & PROFILE STA. 0+00 - 12+00

7 MAPLE WA

HORIZONTAL 1"=40" 0 AT ORIGINAL SIZE L

-HYDRANT ASSEMBLY

11+00

VERTICAL 1"=10' AT ORIGINAL SIZE

11<del>+</del>00

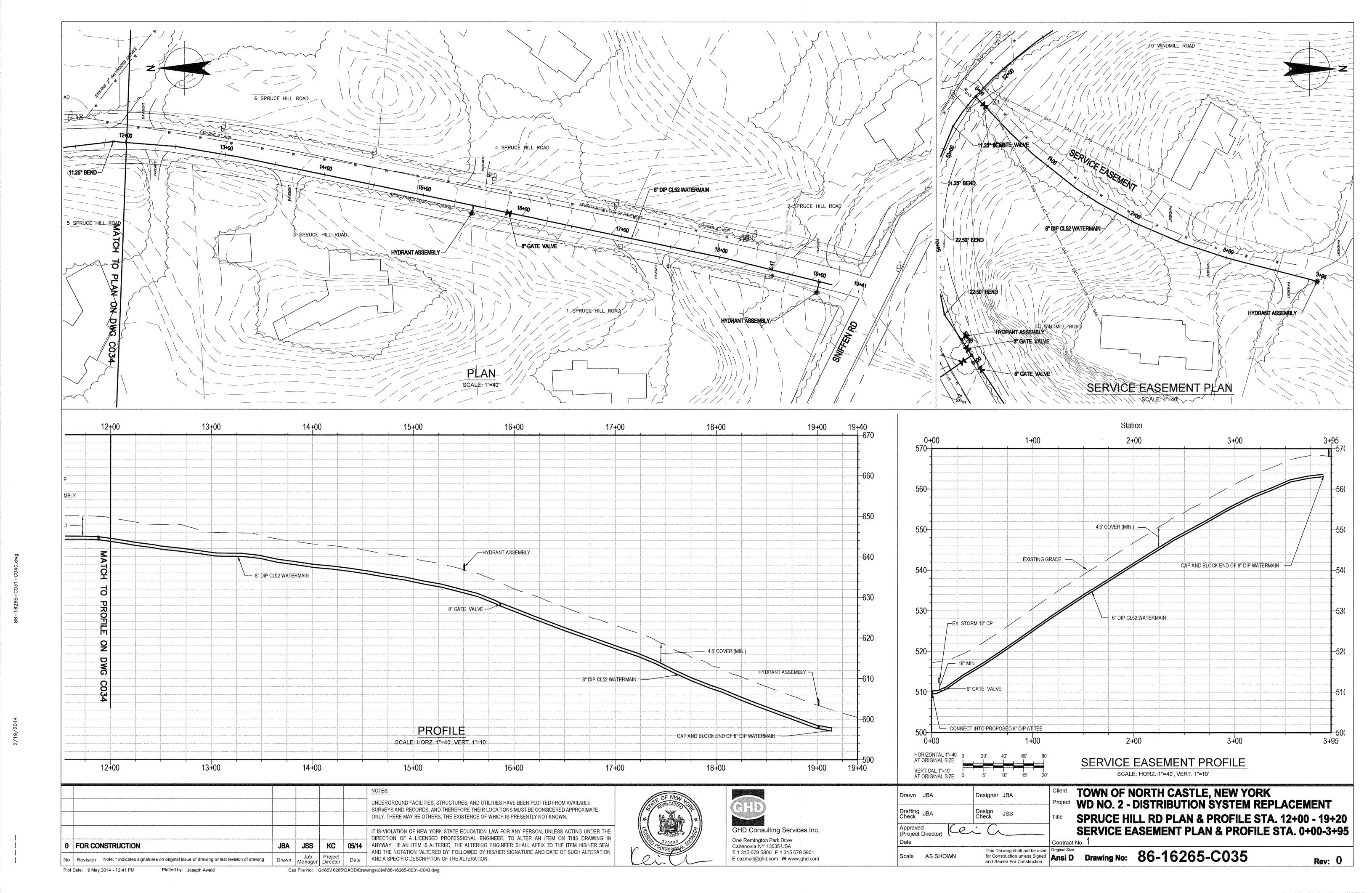
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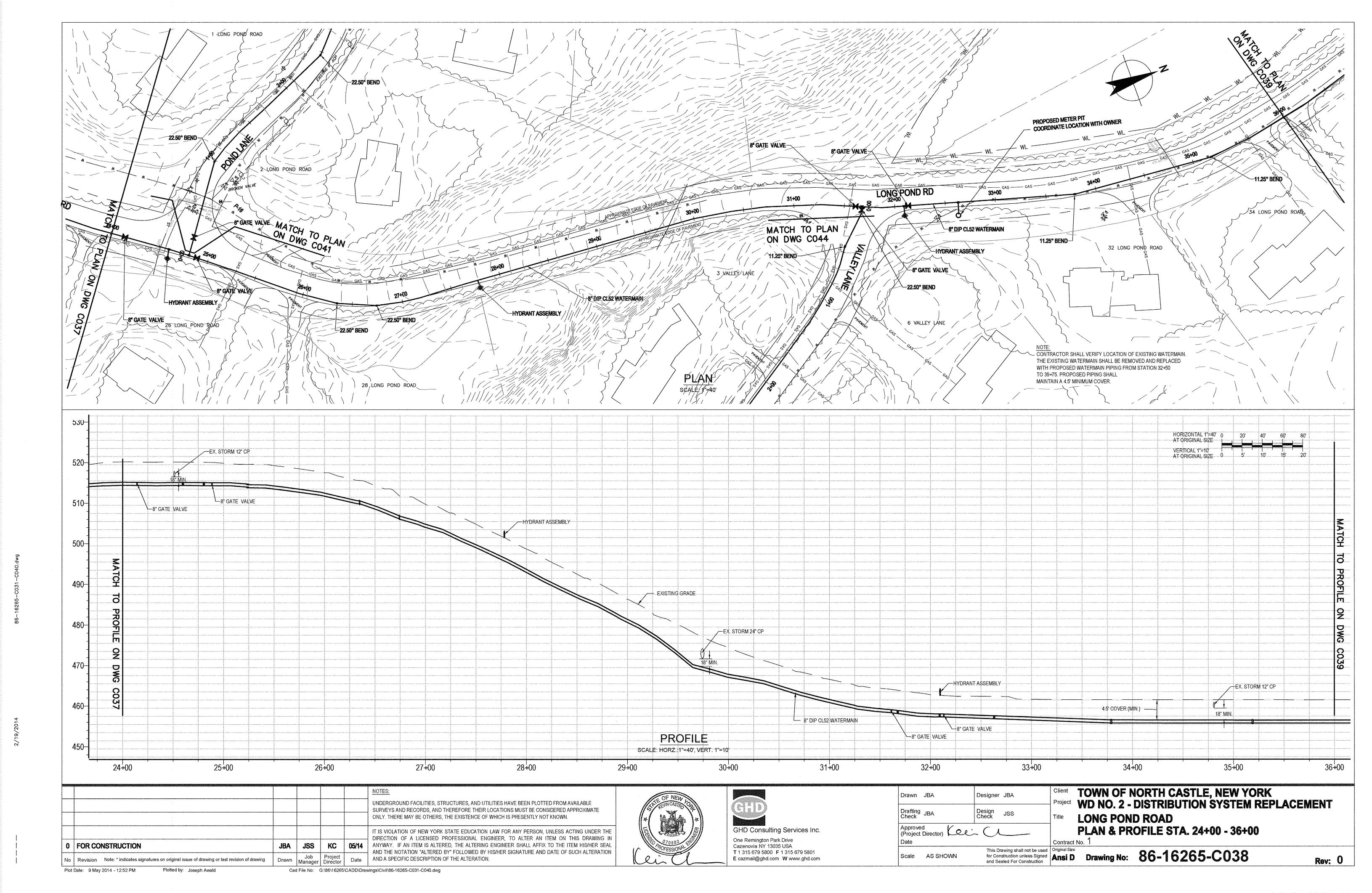
12+00

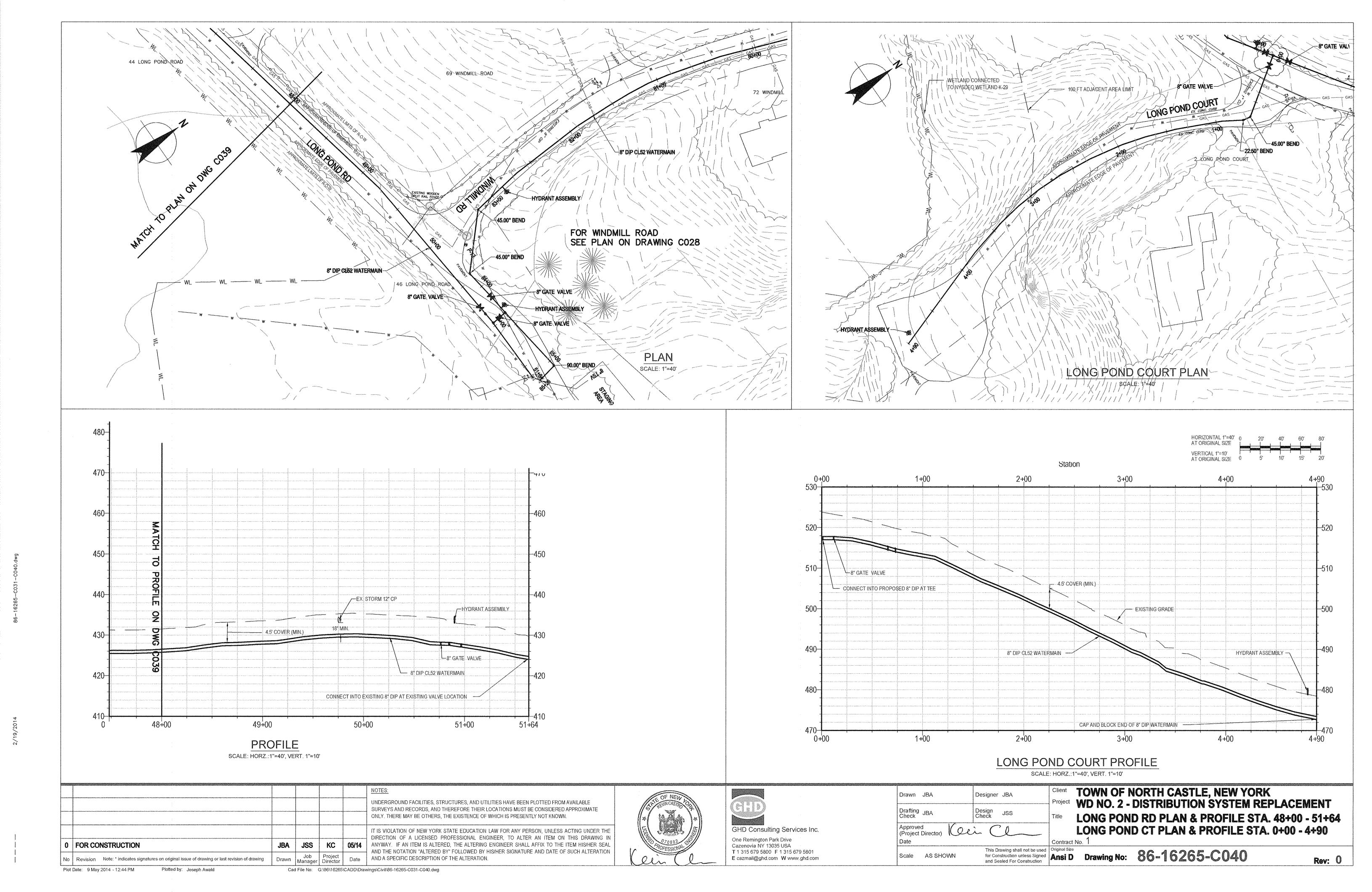
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DWG

12+00



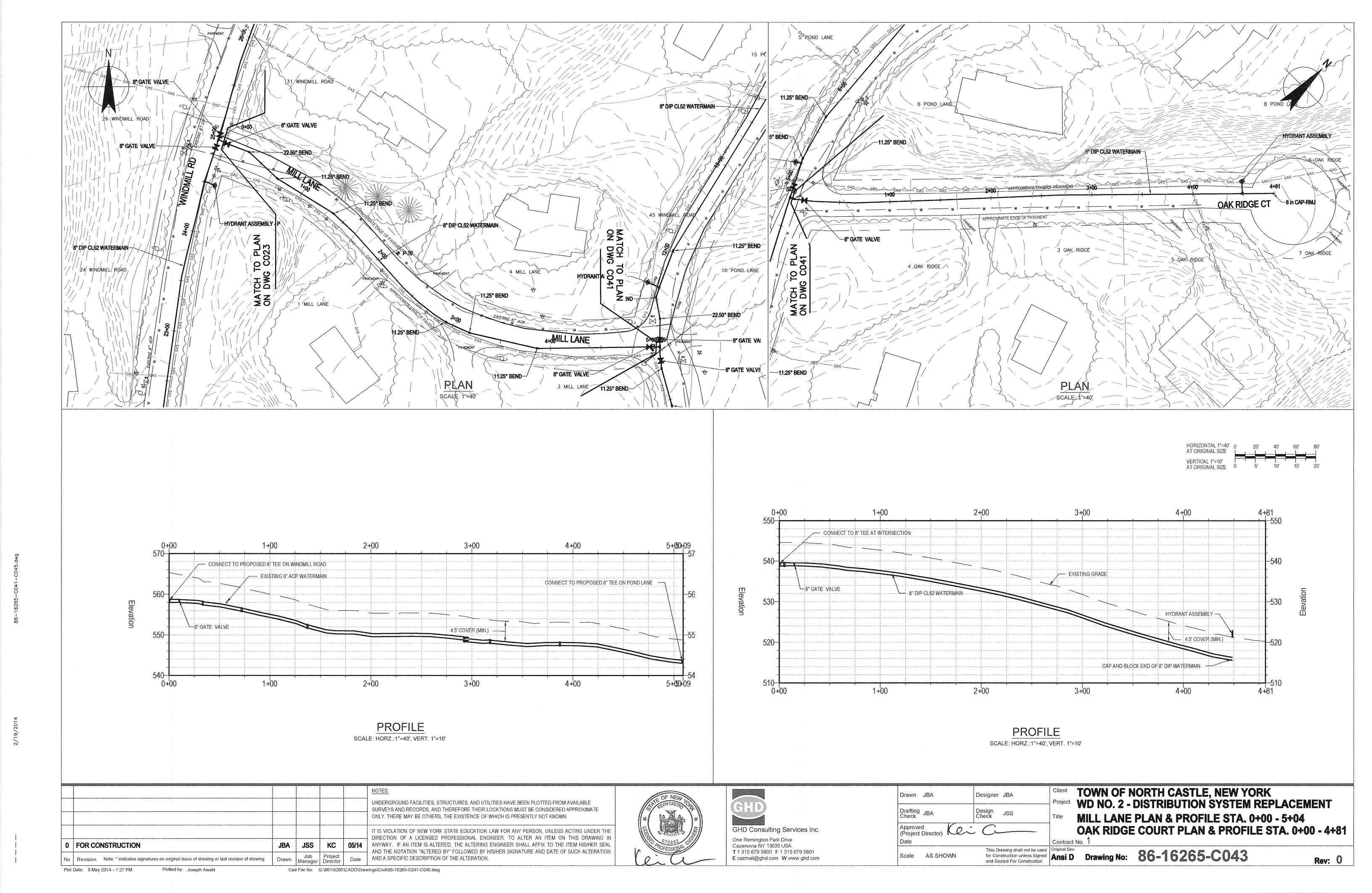


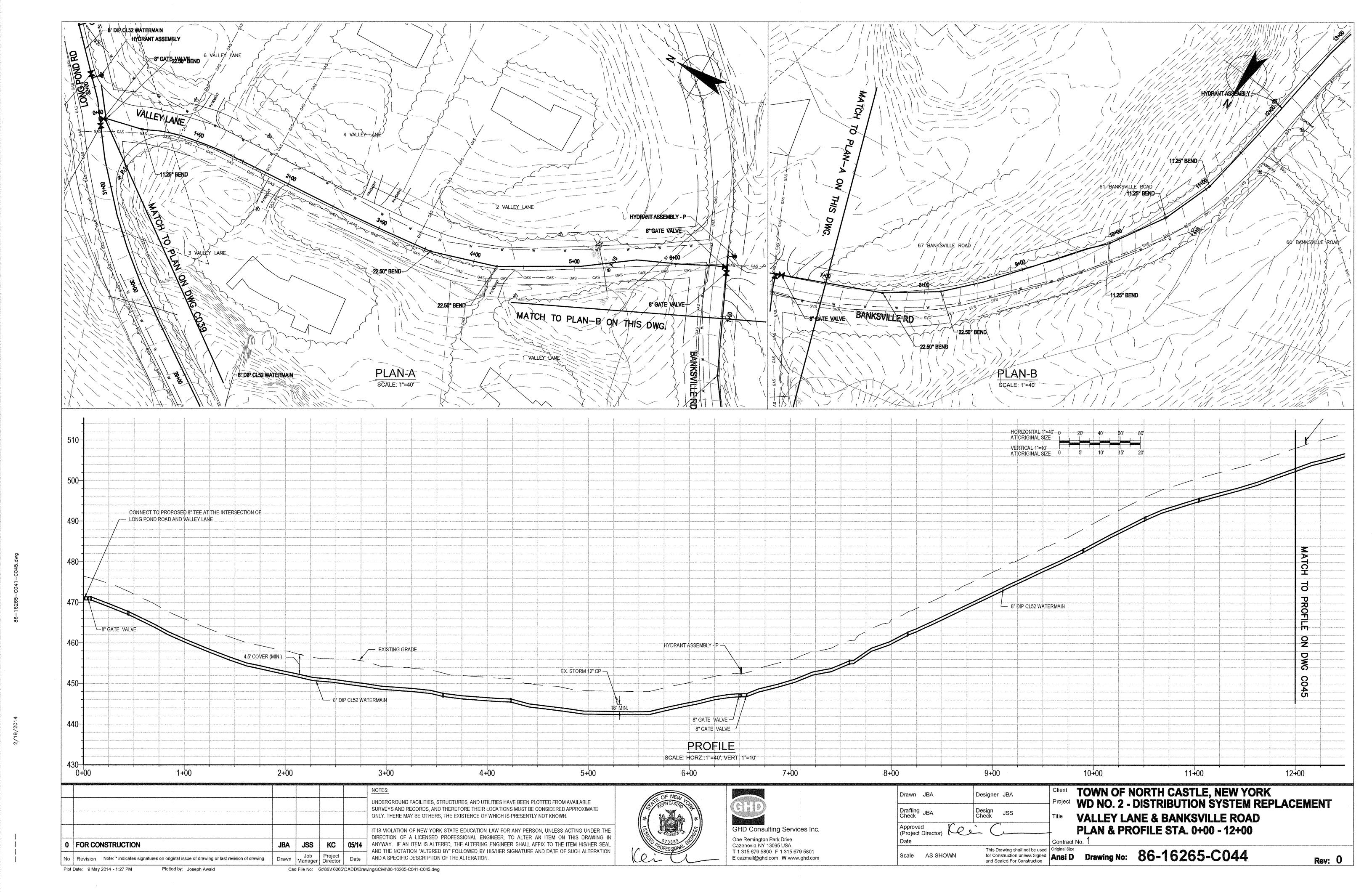


Plot Date: 9 May 2014 - 1:26 PM

Plotted by: Joseph Awald

Cad File No: G:\86\16265\CADD\Drawings\Civil\86-16265-C041-C045.dwg





5 DOGWOOD / PLACE

5+83 -----550

5+83

Rev: 0

5+00

CAP AND BLOCK END OF 8" DIP WATERMAIN

5+00

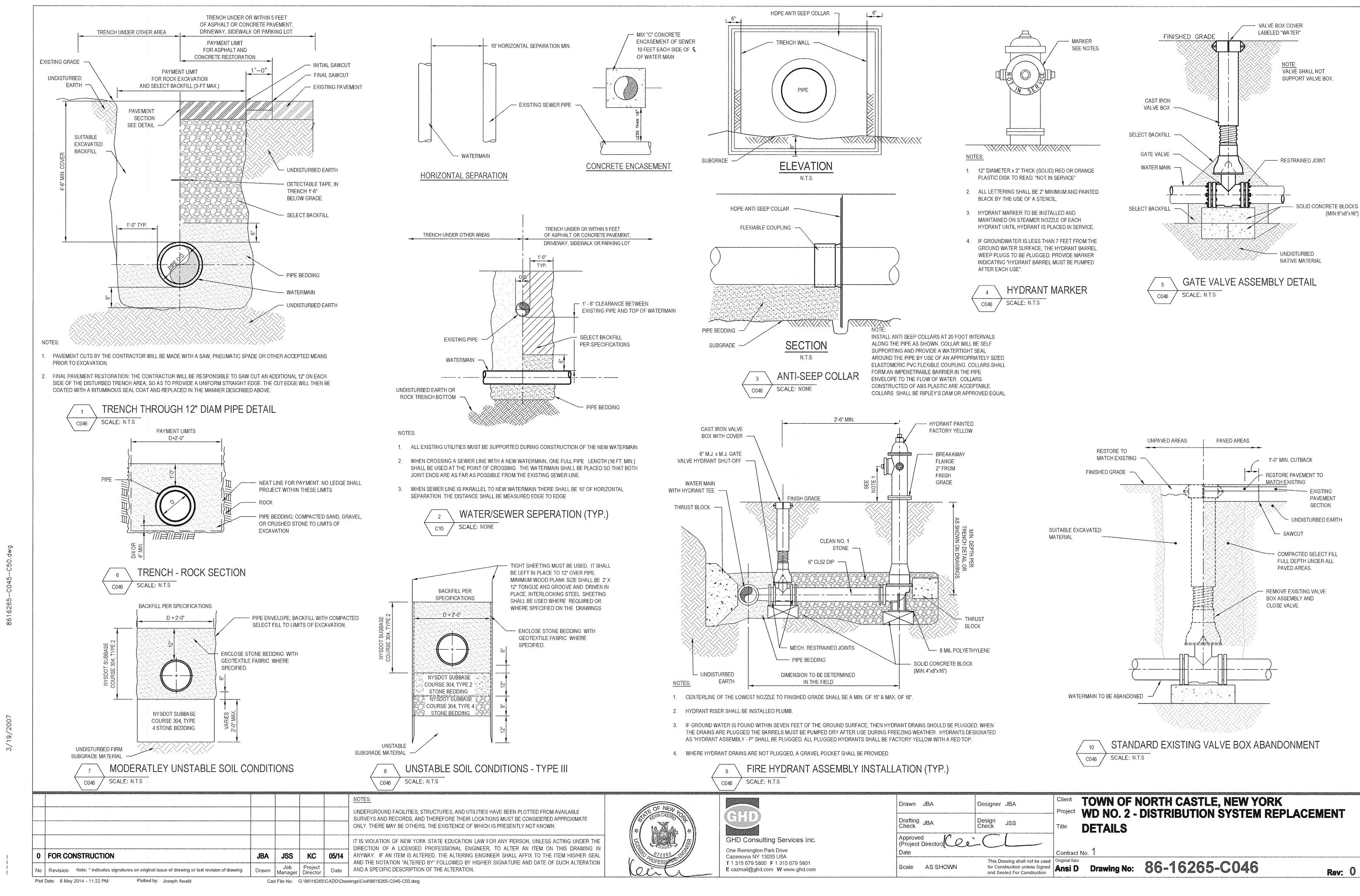
HYDRANT ASSEMBLY -

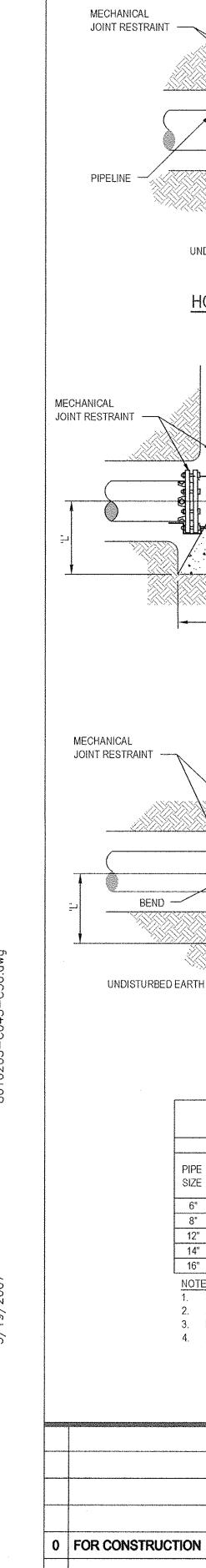
TO DIP CL52 WATERMAIN 6 DOGWOOD PLACE

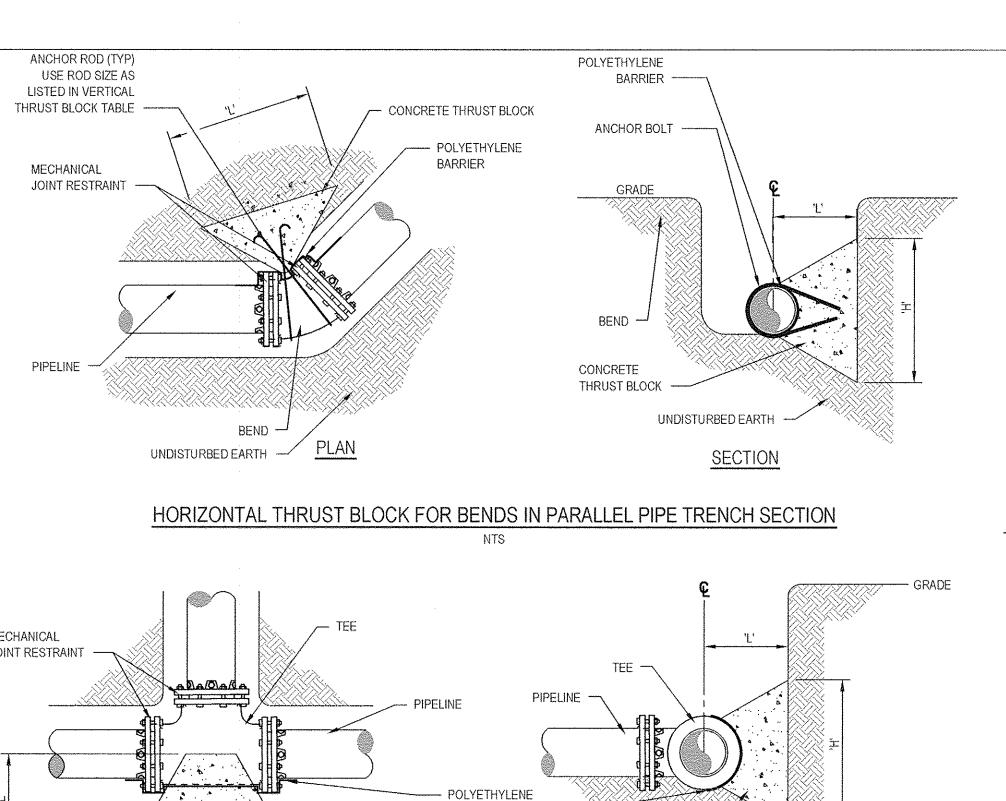
HYDRANT ASSEMBLY

4+00

4+00







HORIZONTAL THRUST BLOCK FOR TEES

BARRIER

THRUST BLOCK

PLAN

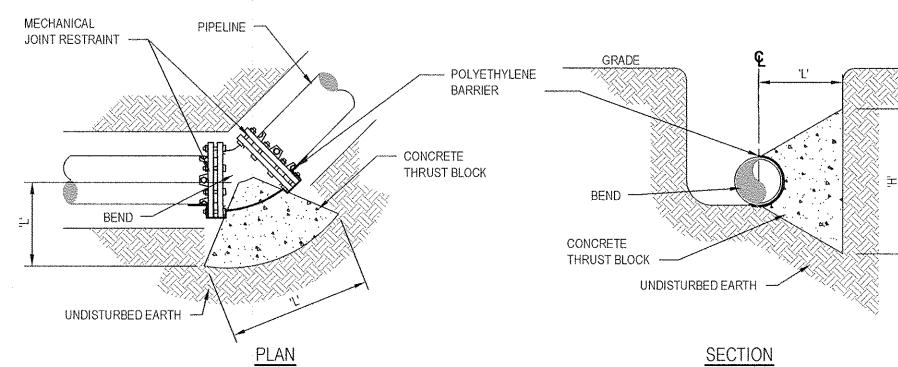
UNDISTURBED EARTH

CONCRETE

THRUST BLOCK

UNDISTURBED EARTH

SECTION

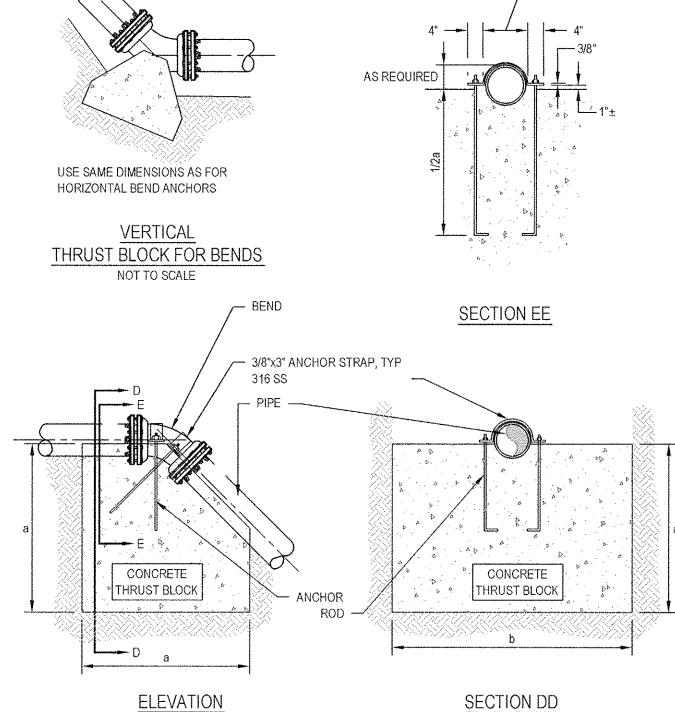


HORIZONTAL THRUST BLOCK FOR BENDS NTS

					ONTAL ANCH VERAGE SC					
				UP TO 150 P.	S.I. WORKIN	G PRESSUF	RE .	·		
PIPE SIZE	PLUG, CAP, TEE OR TAP SLEEVE		90° BEND		45°	BEND	22 1/2° BEND		11 1/4° BEND	
SIZE	Н	L	Н	L	Н	L	Н	L	Н	L
6"	1'-0"	2'-0"	1'-0"	2'-0"	1'-0"	1'-4"	0'-9"	1'-0"	0'-6"	1'-0"
8"	1'-4"	2'-8"	1'-4"	2'-8"	1'-4"	1'-6"	1'-0"	1'-0"	0'-9"	1'-0"
12"	2'-0"	4'-0"	2'-0"	4'-0"	2'-0"	2'-2"	1'-6"	1'-6"	1'-3"	1'-3"
14"	2'-4"	4'-8"	2'-4"	4'-8"	2'-4"	2'-6"	1'-9"	1'-9"	1'-4"	1'-4"
16°	2'-8"	5'-4"	2'-8"	5'-4"	2'-8"	3'-0"	2'-0"	2'-0"	1'-6"	1'-6"

- SIZES BASED ON 150 PSI PRESSURE IN PIPELINE AND 2,000 PSF SOIL BEARING STRENGTH.
- 2. ALL EXPOSED PORTIONS OF ANCHOR STRAPS TO RECEIVE A MINIMUM OF 2 FIELD COATS OF BITUMASTIC MATERIAL 3. PRIOR TO PLACING CONCRETE WRAP ANCHORS & ALL FITTINGS IN 8-MIL THICK POLYTHENE.
- 4. ALL ANCHOR RODS SHALL BE TYPE 304 STAINLESS STEEL,

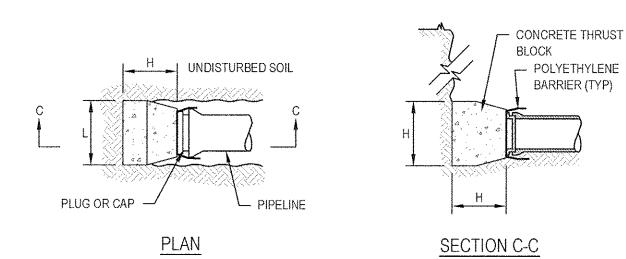
THRUST BLOCK - HORIZONTAL (TYP.) SCALE: N.T.S



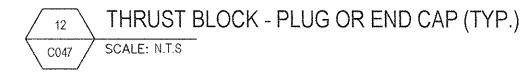
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		45° E	BEND	01 10	1001.0.		BEND	JOONE		11 1/4°	' BEND	<del> </del>
PIPE		DIMENSION ROD	DIMENSION ROD					DIMENSION		ROD		
SIZE	а	b	C	Ø	а	b	С	Ø	a	b	c	Ø
6"	3'-0"	3'-0"	2'-0"	3/4"	2'-6"	2'-3"	1'-6"	3/4"	2'-6"	2'-0"	1'-6"	3/4"
8"	3'-6"	3'-6"	2'-6"	3/4"	3'-0"	3'-0"	1'-9"	3/4"	2'-6"	2'-6"	1'-3"	3/4"
12"	4'-9"	4'-6"	3'-3"	3/4"	4'-0"	3'-9"	2'-6"	3/4"	3'-3"	3'-3"	1'-9"	3/4"
14"	5'-3"	5'-0"	3'-9"	3/4"	4'-3"	4'-3"	2'-6"	3/4"	3'-6"	3'-6"	2'-0"	3/4"
16"	5'-9"	5'-6"	4'-0"	3/4"	4'-9"	4'-6"	2'-9"	3/4"	3'-9"	3'-9"	2'-0"	3/4"

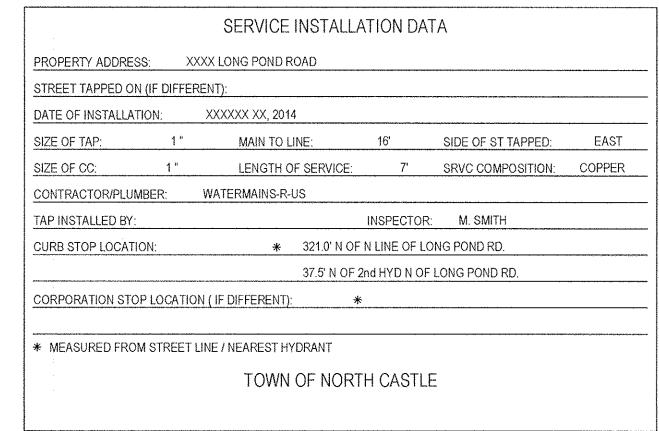
- 1. SIZES BASED ON 150 PSI PRESSURE IN PIPELINE AND 2,000 PSF SOIL BEARING STRENGTH.
- 2. ALL EXPOSED PORTIONS OF ANCHOR STRAPS TO RECEIVE A MINIMUM OF 2 FIELD COATS OF BITUMASTIC
- PRIOR TO PLACING CONCRETE WRAP ANCHORS & ALL FITTINGS IN 8-MIL THICK POLYTHENE.
- 4. ALL ANCHOR RODS SHALL BE TYPE 304 STAINLESS STEEL.

THRUST BLOCK - VERTICAL (TYP.) SCALE: N.T.S C047



INSTALL POLYETHYLENE BARRIER PRIOR TO PLACING CONCRETE. 2. FOR DIMENSION SIZING, USE CHART FOR HORIZONTAL THRUST BLOCKS.



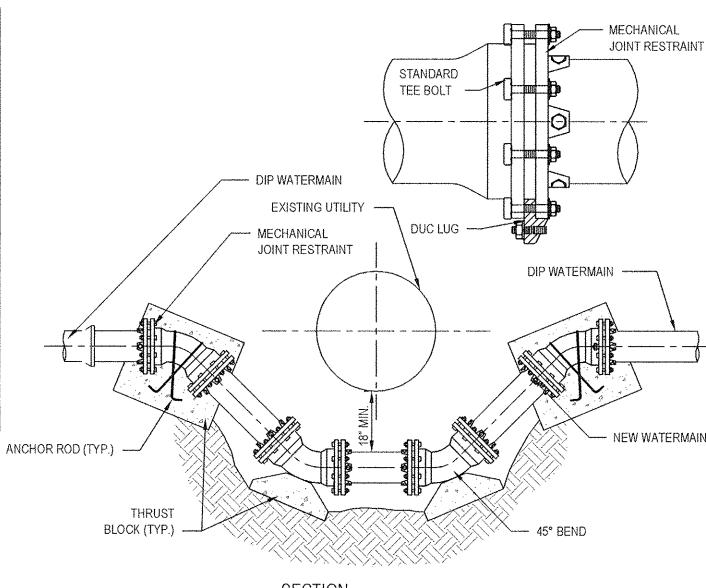


# NOTES:

- AS REQUIRED

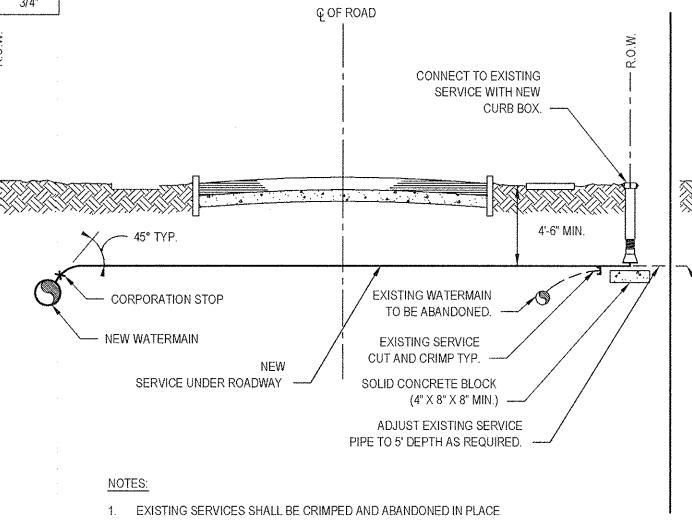
- NEW OR REVISED WATER SERVICE CARDS ARE TO BE TYPED OR NEATLY PRINTED WITH THE REQUIRED INFORMATION, AS SHOWN.
- 2. AT CORNER LOTS, A WATER SERVICE CARD IS TO BE MADE FOR EACH STREET WHEN THE WATER SERVICE IS LOCATED ON THE STREET OTHER THAN THE GIVEN PROPERTY ADDRESS.
- WATER SERVICES THAT ARE ABANDONED AT TAP ARE TO BE MARKED "ABANDONED AT TAP" ACROSS THE FACE OF THE WATER SERVICE CARD, WITH THE CONTRACTOR'S NAME AND DATE BEING NOTED.
- MEASUREMENT FOR LOCATION OF THE CURB STOP IS TO BE TAKEN FROM THE EXTENSION OF THE NEAREST INTERSECTING STREET RIGHT-OF-WAY, AS MEASURED PARALLEL TO THE STREET ON WHICH THE WATER SERVICE IS LOCATED.
- WHERE LOCATION OF THE CURB STOP IS GREATER THAN 200 FEET FROM THE NEAREST INTERSECTING STREET RIGHT-OF-WAY, AN ADDITIONAL MEASUREMENT IS REQUIRED TO BE TAKEN FROM THE NEAREST HYDRANT

EXAMPLE WATER SERVICE CARD SCALE: N.T.S



- 1. RESTRAINED MECHANICAL JOINTS AS SHOWN.
- 2. VALVES, TEES AND HYDRANTS MAY BE RESTRAINED SIMILARLY.
- 3. ONE FULL PIPE LENGTH SHALL BE CENTERED UNDER THE EXISTING UTILITY CROSSING.
- 4. WATERLINE JOINTS SHALL BE PLACED EQUIDISTANT FROM THE EXISTING UTILITY AT THE CROSSING.
- 5. IF EXISTING PIPE IS CIP OR PVC, CONNECT TO NEW FITTING ONLY WHEN ALLOWED BY ENGINEER.

WATERMAIN RELOCATION DETAIL (TYP.) SCALE: N.T.S

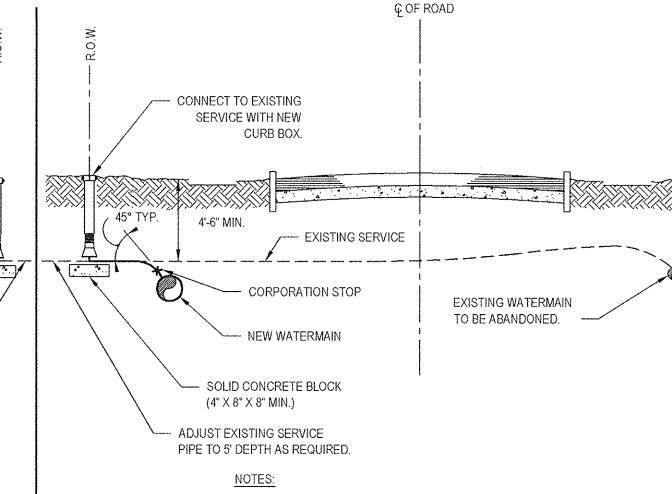


- 2. SERVICE SADDLES SHALL BE USED UNDER THE FOLLOWING CONDITIONS: 2.1. WHEN SERVICES ARE PLACED ON 4" OR SMALLER PIPES,
- WHEN SERVICES LARGER THAN 1" ARE PLACED ON A 6" PIPE.
- WHEN SERVICES LARGER THAN 1" 1/2" ARE PLACED ON AN 8" PIPE WHEN SERVICES LARGER THAN 1 1/2" ARE PLACED ON DUCTILE IRON PIPE.

Scale AS SHOWN

3. CURB BOXES SHALL NOT BE PLACED IN SIDEWALKS.





1. EXISTING SERVICES SHALL BE CRIMPED AND ABANDONED IN PLACE

2. SERVICE SADDLES SHALL BE USED UNDER THE FOLLOWING CONDITIONS: WHEN SERVICES ARE PLACED ON 4" OR SMALLER PIPES.

WHEN SERVICES LARGER THAN 1" ARE PLACED ON A 6" PIPE.

WHEN SERVICES LARGER THAN 1" 1/2" ARE PLACED ON AN 8" PIPE.

WHEN SERVICES LARGER THAN 1 1/2" ARE PLACED ON DUCTILE IRON PIPE.

CURB BOXES SHALL NOT BE PLACED IN SIDEWALKS.

NEAR SIDE SERVICE REPLACEMENT /INSTALLATION SCALE: N.T.S

NOTES: UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY, THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

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Designer JBA Drawn JBA Drafting JBA Design Check JSS Approved (Project Director)

TOWN OF NORTH CASTLE, NEW YORK WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT **DETAILS** 

This Drawing shall not be used Original Size for Construction unless Signed and Sealed For Construction

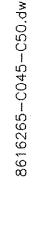
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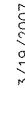
Drawing No: 86-16265-C047

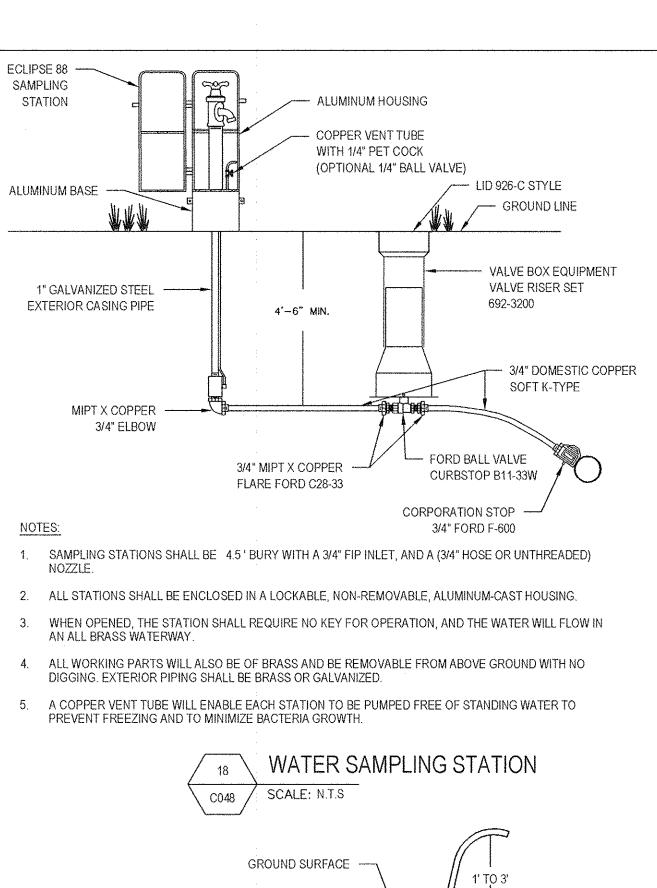
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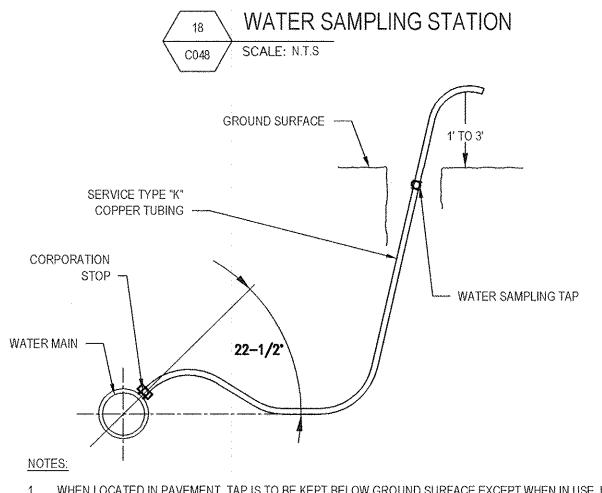
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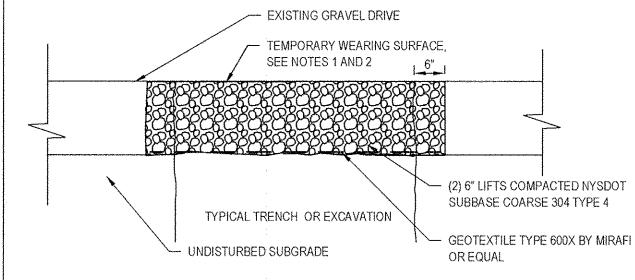




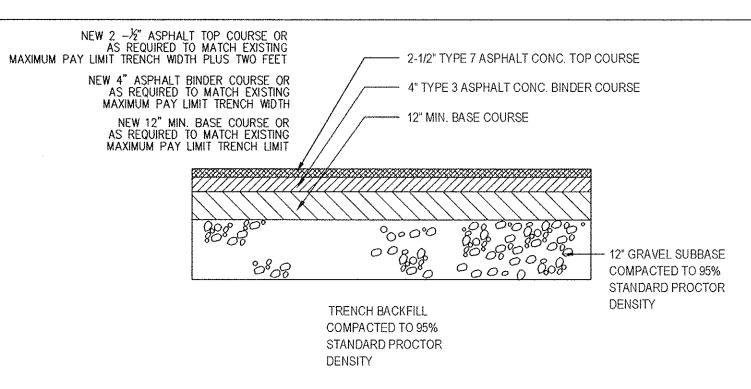


- WHEN LOCATED IN PAVEMENT, TAP IS TO BE KEPT BELOW GROUND SURFACE EXCEPT WHEN IN USE. UPON NOTIFICATION OF ACCEPTABLE SAMPLE RESULTS, CORPORATION STOP IS TO BE CLOSED, AND TUBING
- 2. TAP MAY BE LOCATED AT THE SAME LOCATION OF A NEW WATER SERVICE. AFTER SAMPLE IS APPROVED, COPPER TUBING TO THE SURFACE IS TO BE REMOVED.
- LOCATION OF TAP IS SUBJECT TO PRIOR APPROVAL OF THE OWNERS REPRESENTATIVE
- ANY DISINFECTION / SAMPLING TAP NOT USED FOR A WATER SERVICE, MUST BE REMOVED FROM THE WATER MAIN, AND THE THREADED CORPORATION STOP TAP SHALL BE PLUGGED WITH A THREADED BRASS PLUG. AFTER PLUGGING MAIN, COAT BRASS PLUG WITH BITUMASTIC COATING.

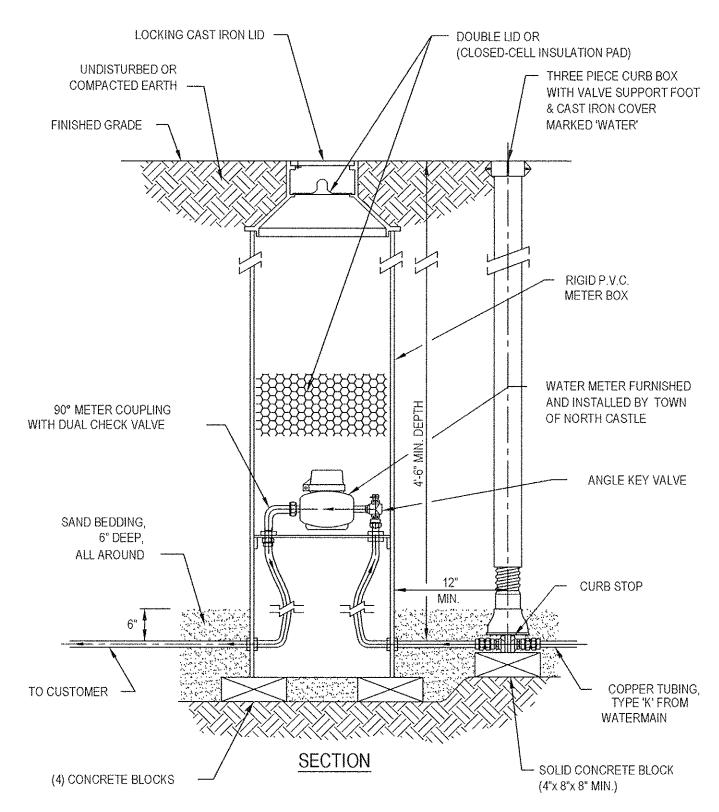




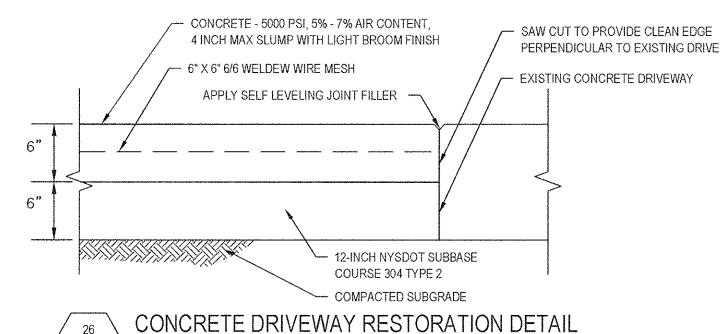




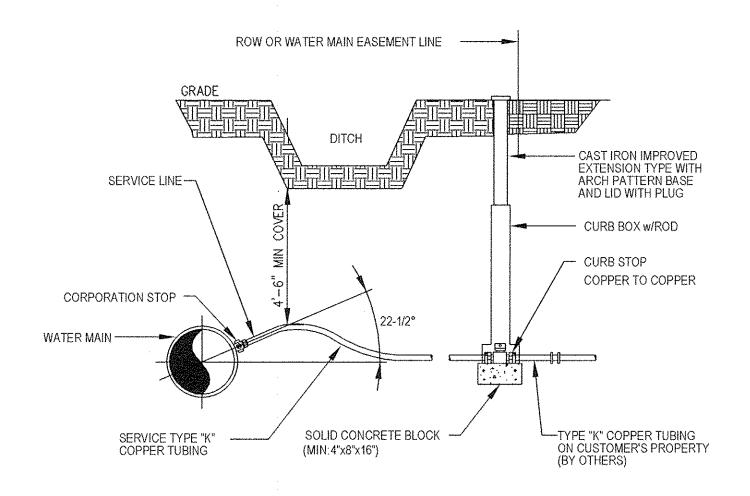
ROADWAY PAVEMENT SECTION SCALE: NONE C048



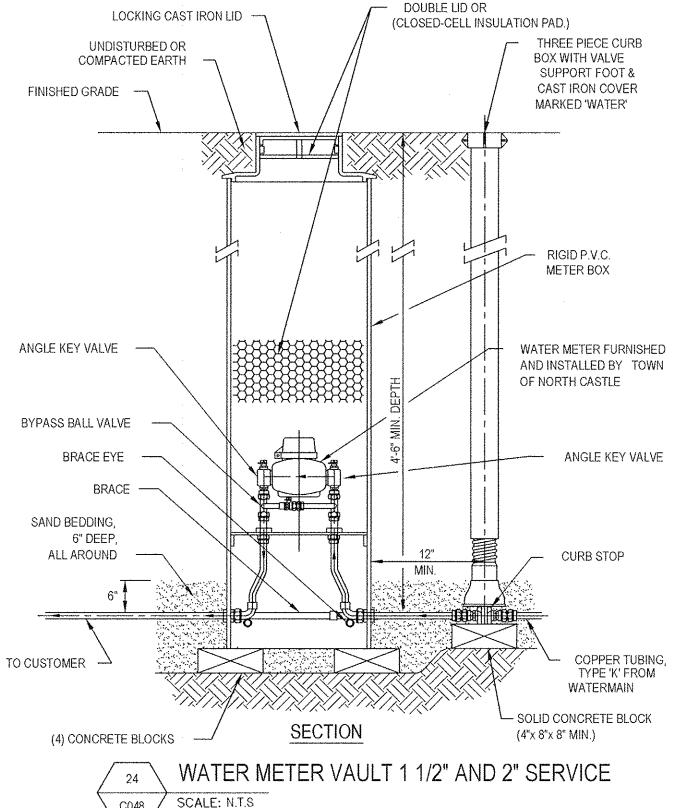




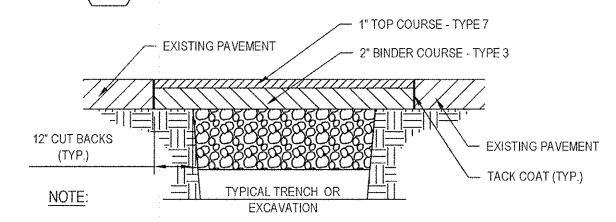
CONCRETE DRIVEWAY RESTORATION DETAIL SCALE: N.T.S C048







SCALE: N.T.S C048



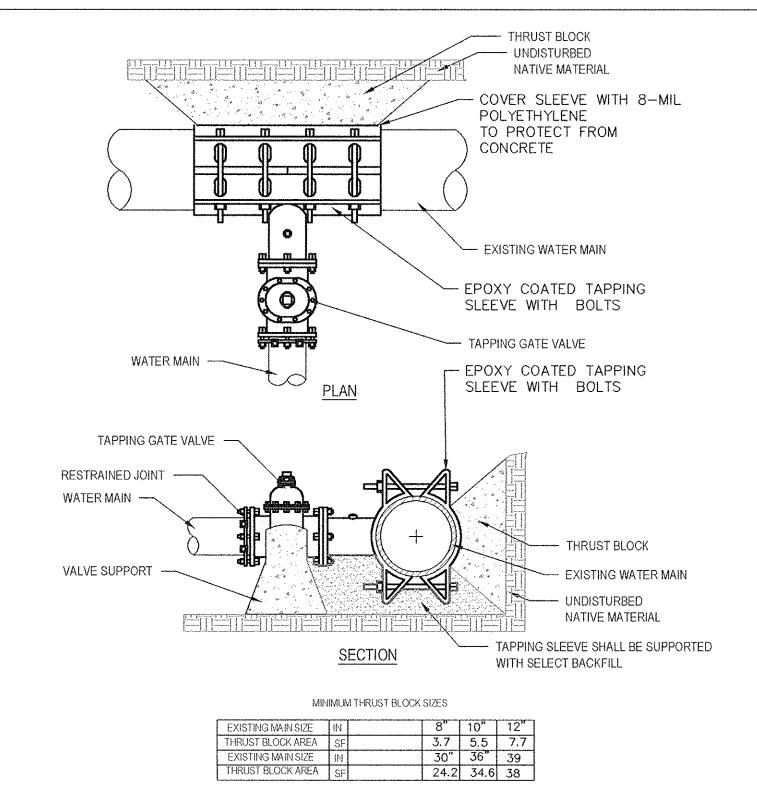
- 1. SEE TYPICAL TRENCH AND RESTORATION DETAIL FOR TRANSITION INTO EXISTING
- 2. ALL GRAVEL/STONE DRIVEWAYS SHALL BE REPLACED WITH MATCHING EXISTING MATERIAL
- TO A DEPTH OF 12-INCHES. 3. PAYMENT LIMITS FOR PAVEMENT ARE SAME AS ABOVE.

SCALE: N.T.S

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C048

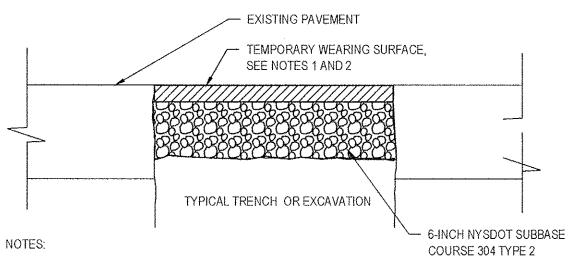
RESIDENTIAL ASPHALT DRIVEWAY RESTORATION DETAIL



### **NOTES**

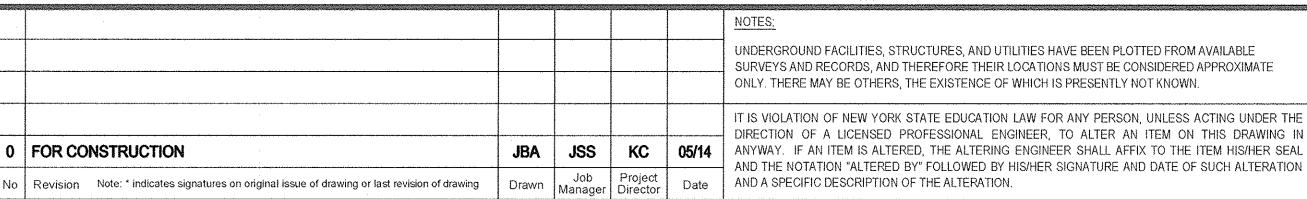
- TAPPING SLEEVE IS APPROVED FOR USE WHERE WORKING PRESSURES ARE UNDER 150PSI.
- CONCRETE MUST BEAR UPON UNDISTURBED NATIVE MATERIAL
- ROUGH FORMS SHALL BE USED TO CONTAIN CONCRETE FOR THRUST BLOCKS. MECHANICAL JOINTS ARE NOT TO BE COVERED.
- 4. ALLOW POURED CONCRETE THRUST BLOCKS TO SET PRIOR TO BACKFILLING
- 5. ALL PIPE AND FITTINGS TO BE WRAPPED POLYETHYLENE ENCASEMENT.
- ALL FITTINGS ARE TO BE MECHANICALLY RESTRAINED

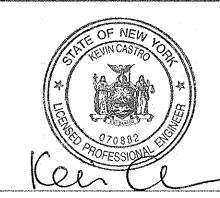
TAPPING SLEEVE (LIVE TAP) WITH THRUST BLOCK SCALE: NONE C048

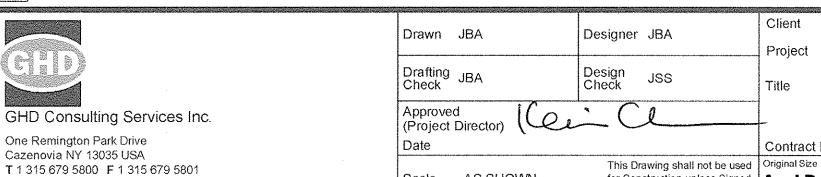


- 1. TEMPORARY PAVEMENT MATERIAL IS TO BE 2-INCHES THICK ASPHALT CONCRETE OR RECYCLED ASPHALT MATERIAL. ASPHALT COLD PATCH AND UNTREATED MILLING MATERIALS ARE UNACCEPTABLE FOR USE.
- 2. FROM NOVEMBER THROUGH APRIL, OR WHEN LOCAL BITUMINOUS PLANTS ARE NOT OPERATING, PROVIDE COLD MIX BITUMINOUS SURFACING NYSDOT SPECIFICATION SECTION 405, TYPE 2, PLACED TO A 4-INCH COMPACTED THICKNESS.
- TEMPORARY PAVEMENT IS TO BE PLACED WITHIN 24 HOURS AFTER BACKFILLING TRENCH OR EXCAVATION.
- 4. ALL MATERIALS ARE TO BE COMPACTED TO FORM A FIRM AND SMOOTH SURFACE.

TEMPORARY PAVEMENT DETAIL C048 SCALE: N.T.S







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TOWN OF NORTH CASTLE, NEW YORK WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT **DETAILS** 

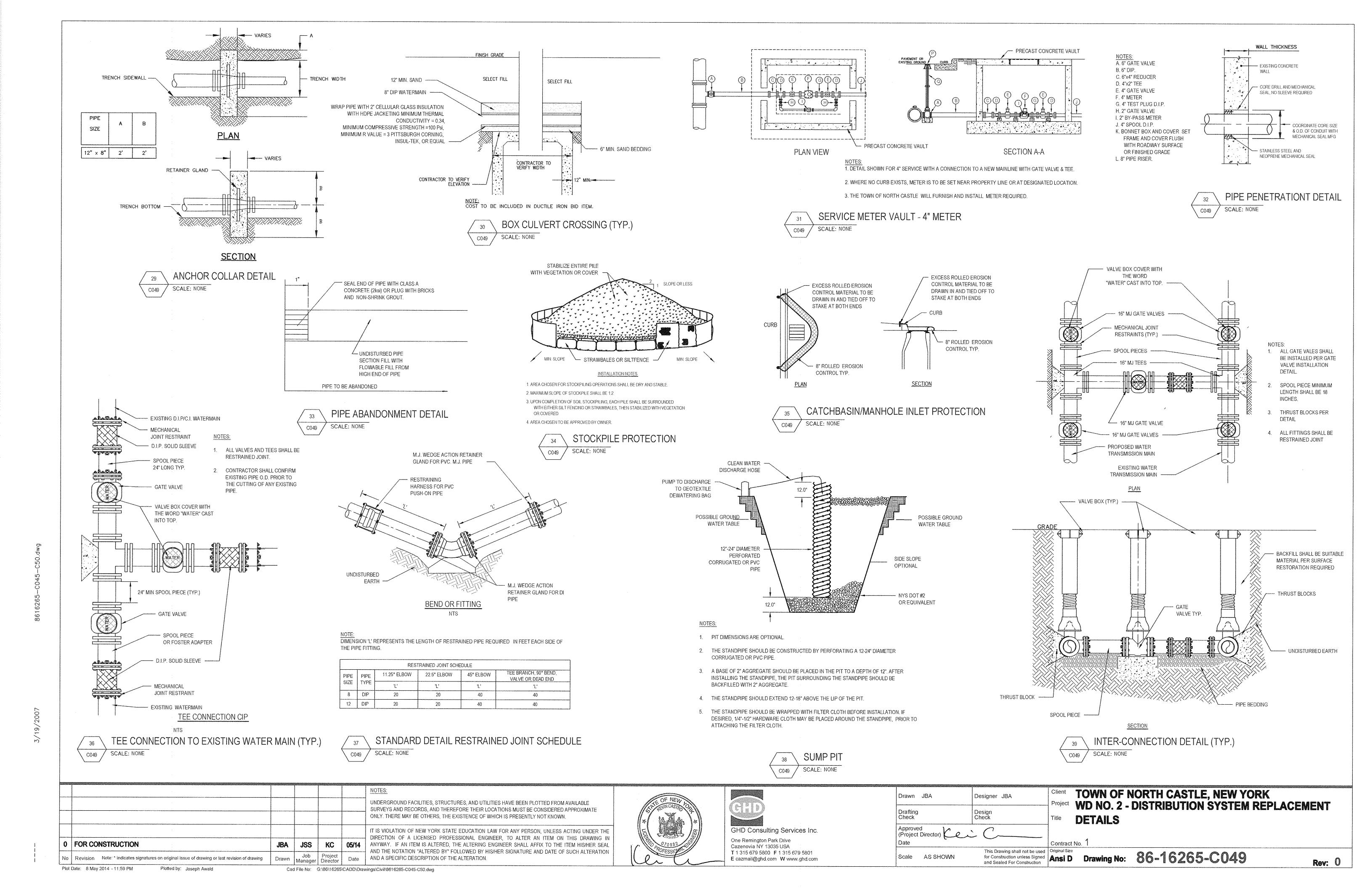
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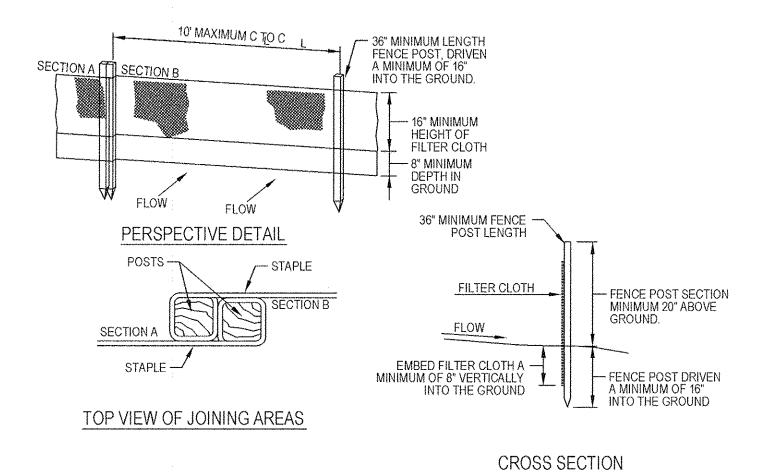
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Drawing No: 86-16265-C048

Rev: 0

Plot Date: 8 May 2014 - 11:53 PM Plotted by: Joseph Awald Cad File No: G:\86\16265\CADD\Drawings\Civil\8616265-C045-C50.dwg

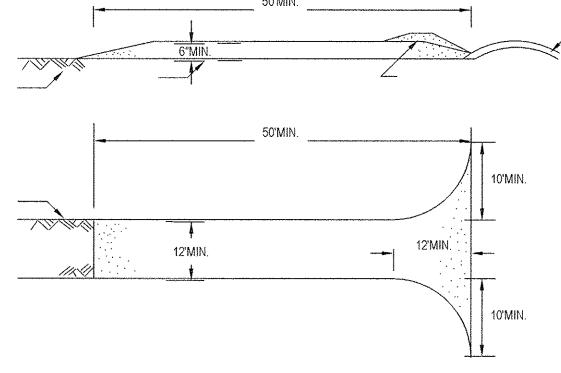




### NOTES:

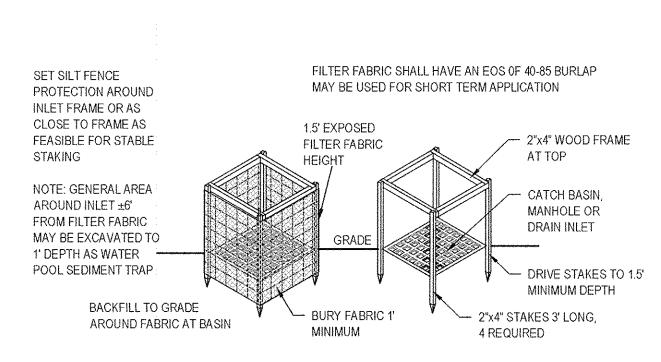
- 1. WHERE ENDS OF THE FILTER CLOTH COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
- 2. ALL SILT FENCES SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE.
- 3. THE AREA BELOW THE FENCE MUST BE UNDISTURBED OR STABILIZED.
- 4. FENCE POSTS (FOR FABRIC UNITS): THE LENGTH SHALL BE A MINIMUM OF 36 INCHES LONG. WOOD POSTS 2 X 2 WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES WILL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHT NOT LESS THAN 1.00 POUND PER LINEAR FOOT.



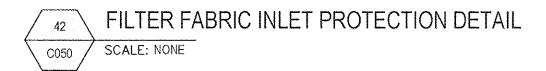


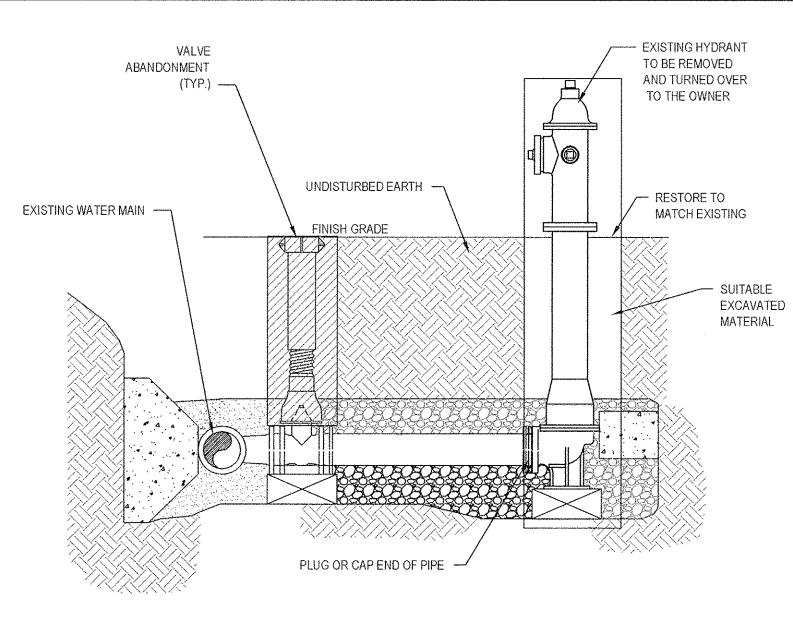
- 1. STONE SIZE USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH NOT LESS THAN 50 FEET
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 7. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
- 10. STABILIZED CONSTRUCTION ENTRANCE'S SHALL BE PLACED SHALL BE COORDINATED WITH THE OWNER AND AT ALL CONSTRUCTION STAGING AREAS.



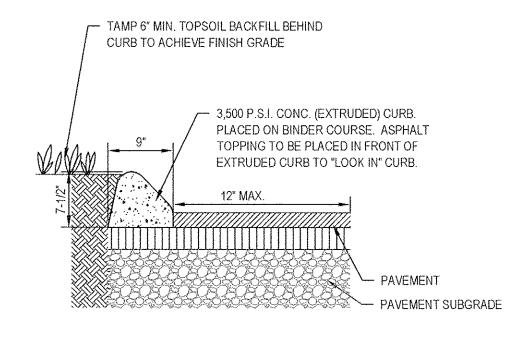


REPRODUCED FROM NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

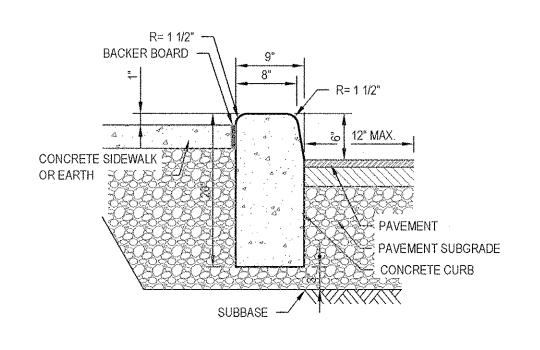




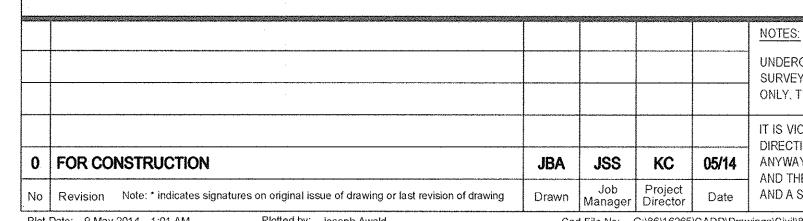
FIRE HYDRANT REMOVAL DETAIL SCALE: N.T.S C050







SCALE: N.T.S C050



UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY, THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.

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Client	TOWN OF NORTH CASTLE, NEW YORK
	WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT
Title	DETAILS

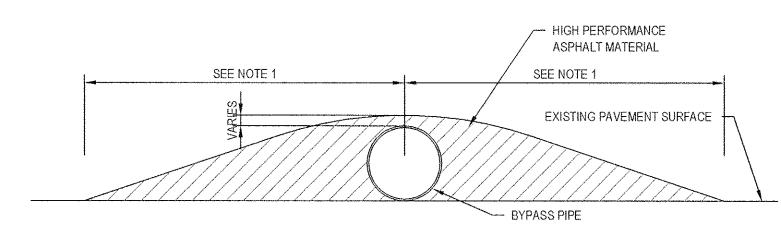
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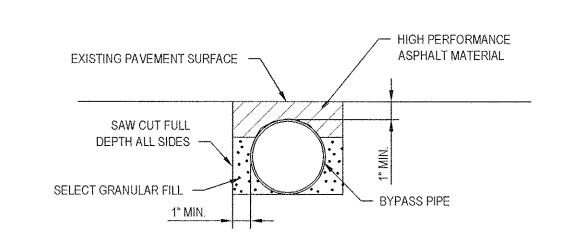
Drawing No: 86-16265-C050

Rev: A

Plot Date: 9 May 2014 - 1:01 AM Cad File No: G:\86\16265\CADD\Drawings\Civil\8616265-C045-C50.dwg Plotted by: Joseph Awald



## DRIVEWAY CROSSING

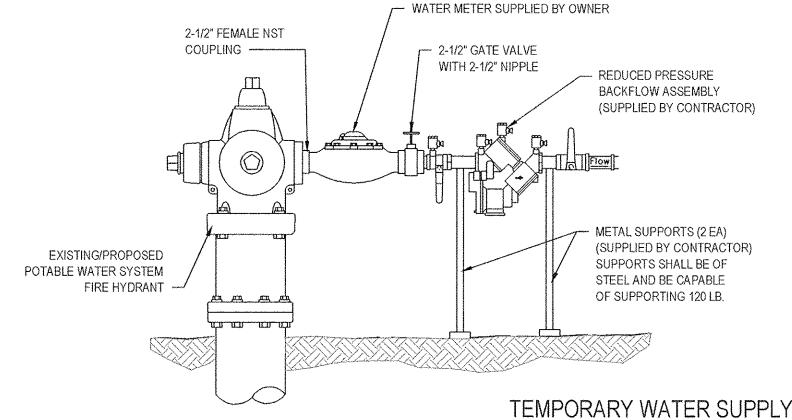


### NOTES:

- WIDTH OF ASPHALT PAD FOR DRIVEWAY CROSSING WILL VARY DEPENDING UPON EXISTING CONDITIONS. WIDTH AND SLOPE WILL BE AS DIRECTED BY PROJECT MANAGER TO PERMIT SAFE VEHICULAR ACCESS.
- 2. HANDICAP ACCESSIBLE RAMP MAY BE USED INSTEAD OF RUNNING BYPASS PIPE UNDERGROUND FOR CROSSINGS ON SIDEWALK.

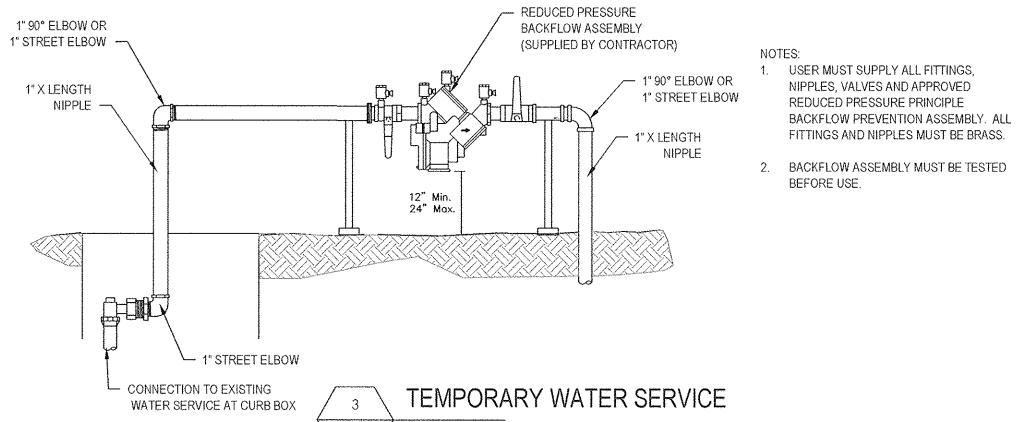
# SIDEWALK AND STREET CROSSING





- 1. BACKFLOW ASSEMBLY SHALL BE TESTED BY A CERTIFIED BACKFLOW ASSEMBLY TESTER BEFORE USING AND ALSO EACH TIME THE METER
  - 2. USER MUST REMOVE BACKFLOW ASSEMBLY WHEN HYDRANT METER IS REMOVED OR RELOCATED.
- 3. USER IS LIABLE FOR ANY DAMAGE TO THE HYDRANT AND ALL ATTACHMENTS TO THE
- 4. USER MUST USE GATE VALVE TO CONTROL FLOW OF WATER, NOT THE HYDRANT VALVE ASSEMBLY.

TEMPORARY WATER SUPPLY HYDRANT METER ASSEMBLY (TYP.) SCALE: N.T.S C051 /



1" STREET ELBOW —	(SUPPLIED BY CONTRACTOR)
1" X LENGTH NIPPLE	1" 90° ELBOW OR 1" STREET ELBOW 1" X LENGTH NIPPLE
1" STREET ELBO	OW O
CONNECTION TO EXISTING WATER SERVICE AT CURB BC	TEMPORARY WATER SERVICE  SCALE: N.T.S

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						NOTES:  UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN.
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	0 FOR CONSTRUCTION	JBA	JSS	KC	05/14	ANYWAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS/HER SE/ AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND DATE OF SUCH ALTERATION
	No Revision Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date	AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
-	Plot Date: 9 May 2014 - 1:19 AM Plotted by: Joseph Awald	Cac	f File No:	G:\86\16265	\CADD\Drav	wings\Civil\8616265-C51.dwg



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TOWN OF NORTH CASTLE, NEW YORK

ject WD NO. 2 - DISTRIBUTION SYSTEM REPLACEMENT TEMPORARY/BYPASS WATER SERVICE **PLAN AND DETAILS** tract No. 1

for Construction unless Signed and Sealed For Construction

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Drawing No: 86-16265-C051

Rev: 0