

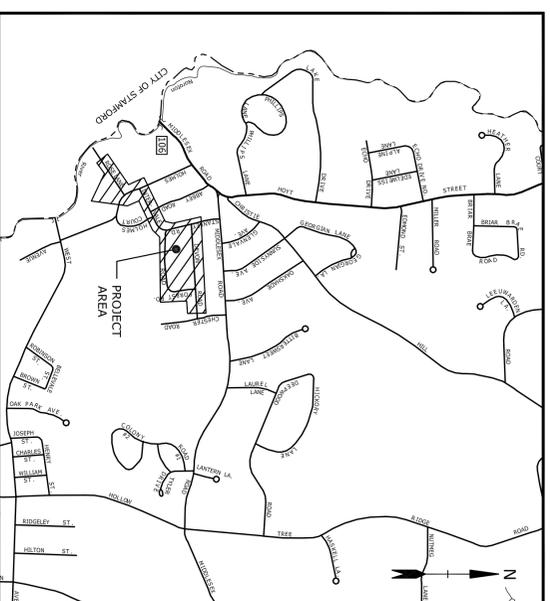
TOWN OF DARIEN, CONNECTICUT

ABBNEY ROAD DRAINAGE IMPROVEMENTS

AUGUST 31, 2015
 BID NO. 2015-16

LIST OF DRAWINGS

SHEET NO.	TITLE
	COVER SHEET
C1.00	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C2.00	INDEX PLAN
C2.10	DRAINAGE AND UTILITY PLAN ENLARGEMENT
C2.11	DRAINAGE AND UTILITY PLAN
C2.20	DRAINAGE AND UTILITY PLAN
C2.30	DRAINAGE AND UTILITY PLAN
C2.40	DRAINAGE AND UTILITY PLAN
C2.50	DRAINAGE AND UTILITY PLAN
C2.60	DRAINAGE AND UTILITY PLAN
C3.00	SEDIMENTATION AND EROSION CONTROL NOTES, NARRATIVE, AND DETAILS
C4.00	STORM DRAINAGE DETAILS - 1
C4.10	STORM DRAINAGE DETAILS - 2
C4.20	STORM DRAINAGE DETAILS - 3
C4.30	STORM DRAINAGE DETAILS - 4
C4.40	STORM DRAINAGE DETAILS - 5
C4.50	STORM DRAINAGE DETAILS - 6
C4.60	STORM DRAINAGE DETAILS - 7
C4.70	ROADWAY DETAILS
C4.80	WATER MAIN RELOCATION DETAILS
C5.00	PLANTING PLAN



PREPARED BY:



1000 Bridgeport Avenue
 Suite 320
 Shelton, CT 06484
 (203) 712-1100

JOHN W. BLOCK P.E.

JOSEPH A. CANAS P.E.

PREPARED FOR:
 TOWN OF DARIEN

FIRST SELECTMAN: JAYME STEVENSON DATE: _____

DEPARTMENT OF PUBLIC WORKS

DIRECTOR: EDWARD L. GENTILE JR., P.E. DATE: _____

GENERAL NOTES

1. INFORMATION ON EXISTING CONDITIONS WAS TAKEN FROM SURVEY PREPARED BY WILLIAM W. SEMOUR, INC., NORBTON, CT. ENTITLED "THE INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND CITY RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR AND/OR RESPONSIBLE PARTY IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO ANY CONSTRUCTION, CALL "CALL BEFORE YOU DIG" AT 1-800-922-4455 AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.

2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF DARLEN AND CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS.
3. HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL BE HANCOCK HI-Q OR ADS-N-12, SMOOTH INTERIOR POLYETHYLENE PIPE.
4. REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS IV UNLESS OTHERWISE NOTED.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ALL PIPING IS PROPERLY BEDDED AND STABILIZED IN AREAS OF HIGH GROUND WATER AND/OR UNSTABLE SOIL CONDITIONS.
6. INSTALL CATCH BASIN TRAPS ONLY ON CATCH BASINS THAT HAVE NO UPSTREAM CONNECTIONS.
7. ALL ROADS DISTURBED SHALL BE MILLED & OVERLAD (2" BIT, COMC, CLASS 1) CURB-TO-CURB.

UTILITY COORDINATION NOTES

1. RELOCATION OF UTILITY COMPANY FACILITIES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE FACILITY OWNERS.
2. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING NEAR OVERHEAD AND UNDERGROUND UTILITIES.
3. IT IS THE RESPONSIBILITY OF EACH BIDDER IN EVALUATING THESE PLANS TO MAKE EXAMINATIONS IN THE FIELD BY VARIOUS METHODS AND OBTAIN NECESSARY INFORMATION FROM AVAILABLE RECORDS, UTILITY CORPORATIONS, AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
4. SEWER AND WATER LINE CROSSING ALL OTHER UTILITIES SHALL MAINTAIN A 12 INCH VERTICAL SEPARATION DISTANCE, OTHERWISE ENCASE 10 EACH SIDE OF CROSSING IN CONCRETE.
5. CONTRACTOR SHALL MAINTAIN AND SUPPORT ALL UTILITIES DURING CONSTRUCTION.
6. EVERSOURCE HAS INSTALLED NEW GAS MAINS SINCE THE PREPARATION OF THESE PLANS. COORDINATE WITH EVERSOURCE AS TO THE CORRECT LOCATIONS OF GAS MAINS AND SERVICES. COST OF COORDINATION SHALL BE INCORPORATED BY THE CONTRACTOR INTO THE BID. EVERSOURCE CONTACT IS GREG WOLOZYN AT (203) 854-6455.
7. COORDINATE RELOCATION OF WATER MAINS AND SERVICES WITH CARLOS VIZCARRANO AT AQUARIUM WATER AT (203) 337-5950.

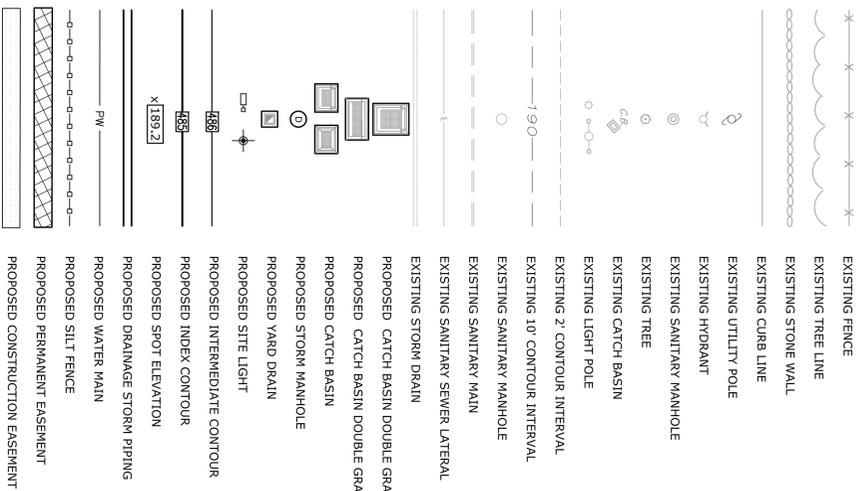
WORK RESTRICTION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR THE WORK.
2. CONTRACTOR SHALL NOT COMMENCE WORK ON PRIVATE PROPERTY UNTIL THE TOWN HAS SECURED PERMANENT EASEMENTS AND ANY CONSTRUCTION RIGHTS AS MAY BE REQUIRED FROM ADJOINING PROPERTY OWNERS.
3. A ROAD OPENING PERMIT FOR WORK WITHIN A TOWN ROAD RIGHT-OF-WAY, INCLUDING TEST PITS, IS TO BE ACQUIRED FROM THE TOWN. TOWN WILL WAIVE FEE FOR PRIME CONTRACTOR.
4. CONTRACTOR MUST MAINTAIN TRAFFIC THROUGHOUT THE DAY FOR RESIDENT ACCESS.
5. CONSTRUCTION VEHICLE PARKING AND ACCESS IS PROHIBITED ON PARK LANE AND DENHURST PLACE. CONSTRUCTION VEHICLE PARKING IS PROHIBITED ON ROSE LANE AND CONSTRUCTION VEHICLES ARE PROHIBITED FROM PROCEEDING ALONG ROSE LANE WEST OF 95 ROSE LANE EASEMENT.
6. WORK HOURS ARE 8:00AM TO 5:00PM, MONDAY - FRIDAY.
7. NO TRENCHES SHALL BE LEFT OPEN OVERNIGHT. PRIOR TO THE END OF THE CONTRACTORS DAILY OPERATIONS, TRENCHES SHALL BE BACKFILLED OR PLATED TO ALLOW ACCESS. PLATES SHALL BE SHIMMED AND STABLE.
8. TWO LANES OF TRAFFIC SHALL BE MAINTAINED. OVERNIGHT LANE CLOSURES ARE PROHIBITED.
9. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO TOWN FOR APPROVAL.
10. POSITIVE DRAINAGE SHALL BE PROVIDED AT ALL TIMES. TEMPORARY DRAINAGE CONNECTIONS MAY BE REQUIRED OVERNIGHT AND SHALL BE INCLUDED IN THE BASE BID.
11. DARLEN POLICE HAVE FIRST RIGHT OF REFUSAL WITH RESPECT TO TRAFFIC CONTROL AND MAY REQUIRE ADDITIONAL CONTROLS AS FIELD CONDITIONS WARRANT.
12. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED SURVEYOR IN THE STATE OF CONNECTICUT TO STAKE THE LIMITS OF THE EASEMENT AT 95 ROSE LANE AND MONUMENT THE EAST PROPERTY CORNERS AS SHOWN.

RESTORATION AND CLOSEOUT NOTES

1. ANY DRAINAGE STRUCTURES, DITCHES, ASPHALT CURBS, OTHER EXISTING CONSTRUCTION OR GRASSED AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION.
2. AREAS OF DISTURBED EARTH SHALL BE STABILIZED BY MULCHING OR OTHER MEANS. SEEDING OF GRASSED AREAS SHALL BE INITIATED AS SOON AS PRACTICAL AS AN EROSION AND SILTATION CONTROL MEASURE. ALL DISTURBED EARTH AREAS SHALL BE TREATED WITH 4" TOPSOIL & SEED.
3. AFTER CONSTRUCTION, THE CONTRACTOR IS TO PROVIDE AN AS-BUILT OF THE STORM DRAINAGE SYSTEM, PREPARED BY A LICENSED SURVEYOR IN THE STATE OF CONNECTICUT.
4. CONTRACTOR IS RESPONSIBLE FOR THE RESTORATION OF PAVEMENT AND CURB LINES DISTURBED BY CONSTRUCTION ACTIVITY.
5. CONTRACTOR IS RESPONSIBLE FOR STABILIZING DISTURBED AREAS WITH VEGETATION CONSISTENT WITH EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF EROSION CONTROLS. CONTRACTOR IS RESPONSIBLE FOR REMOVING CONSTRUCTION FENCE.
6. MATERIAL STOCKPILES TO BE LOCATED OFFSITE. STOCKPILES PROHIBITED FROM OVERNIGHT STORAGE IN RIGHT OF WAY.
7. AT THE CONCLUSION OF THE PROJECT, ALL DRAINAGE APPLICANCES SHALL BE CLEANED.

LEGEND



STANDARD ABBREVIATIONS

ASHTO - AMERICAN ASSOCIATION OF STATE HIGHWAY
 ACCP - ASPHALT COATED CORRUGATED PIPE
 AC - ACRES
 ACI - AMERICAN CONCRETE INSTITUTE
 A.D.A. - AMERICANS WITH DISABILITIES ACT
 ALUM. - ALUMINUM
 BC - BOTTOM OF CURB
 BIT. - BITUMINOUS
 BW - BOTTOM OF WALL
 CB - CATCH BASIN
 CCM - CORRUGATED METAL PIPE
 CPT - CORRUGATED PLASTIC PIPE
 DIA - DIAMETER
 DIP - DUCTILE IRON PIPE
 DMH - DRAINAGE MANHOLE
 EA - EACH
 EL. - ELEVATION
 EXIST. - EXISTING
 EXP. - EXPANSION
 FD - FENCED DRAIN
 FF - FENCED OUTLET
 FF - FIRST FLOOR
 FT - FEET
 GALV. - GALVANIZED
 GR - GRATE
 HDPE - HIGH DENSITY POLYETHYLENE PIPE
 HW - HEADWALL
 HD - HEADWALL
 ID - INSIDE DIAMETER
 IT - JOINT
 MAX. - MAXIMUM
 MEG - MEET EXISTING GRADE
 MIN. - MINIMUM
 MH - MANHOLE
 MPH - MILES PER HOUR
 O.C. - ON CENTER
 O.D. - OUTSIDE DIAMETER
 POP - PROPOSED
 P.P. - PROPOSED CATCH BASIN
 P.S.I. - POUNDS PER SQUARE INCH
 PSMH - PROPOSED SANITARY MANHOLE
 PVC - PLASTIC PIPE
 PAVT. - PAVEMENT
 RCP - REINFORCED CONCRETE PIPE
 RL - ROOF LEADER
 RW - RIGHT OF WAY
 SAN. - SANITARY
 SF - SQUARE FEET
 SMH - SANITARY MANHOLE
 SS - SANITARY SEWER LATERAL
 STD - STANDARD
 TC - TOP OF CURB
 TD - TRENCH DRAIN
 TW - TOP OF WALL
 TYP. - TYPICAL
 VTP - VITRIFIED TILE PIPE
 WT. - WEIGHT
 YD - YARD DRAIN

**Abbey Road
Drainage
Improvements**

Darien, Connecticut
August 31, 2015

Town of Darien

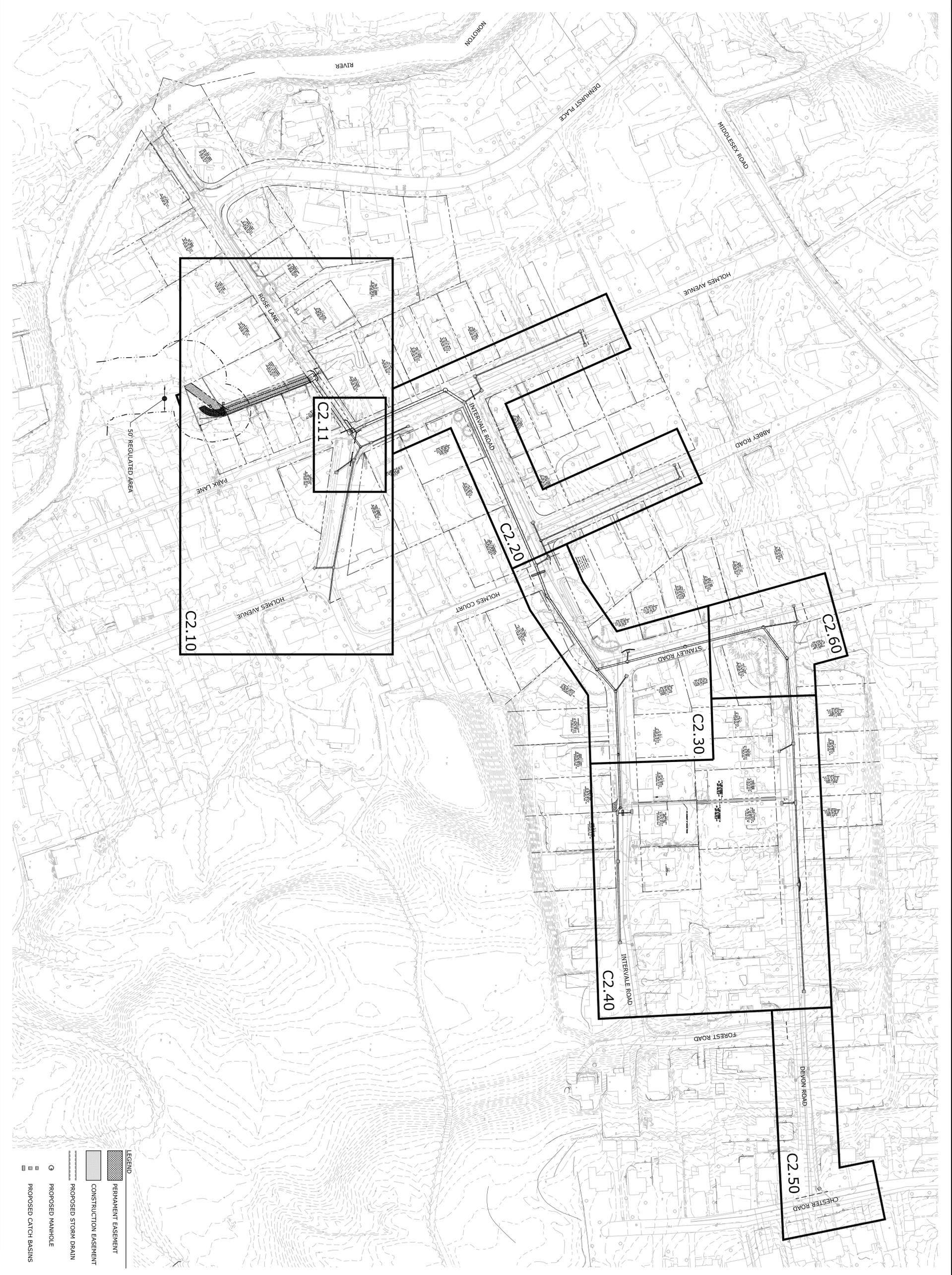
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(203) 712-1100

MARK	DATE	DESCRIPTION
PROJECT NO.	0213	
FILE:	GN-D0213-01.dwg	
DRAWN BY:	MDS	
CHECKED:	JAC	
APPROVED:	JWB	

**GENERAL NOTES, LEGEND
AND
ABBREVIATIONS**

SCALE: NONE

C1.00



LEGEND

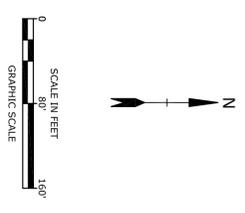
	PERMANENT EASEMENT
	CONSTRUCTION EASEMENT
	PROPOSED STORM DRAIN
	PROPOSED MANHOLE
	PROPOSED CATCH BASINS

MARK	DATE	DESCRIPTION
PROJECT NO:	0213	
FILE:	IN-D0213-01.dwg	
DRAWN BY:	JAC	
CHECKED:	JWB	
APPROVED:		

Darien, Connecticut
 August 31, 2015

**Abbey Road
 Drainage
 Improvements**

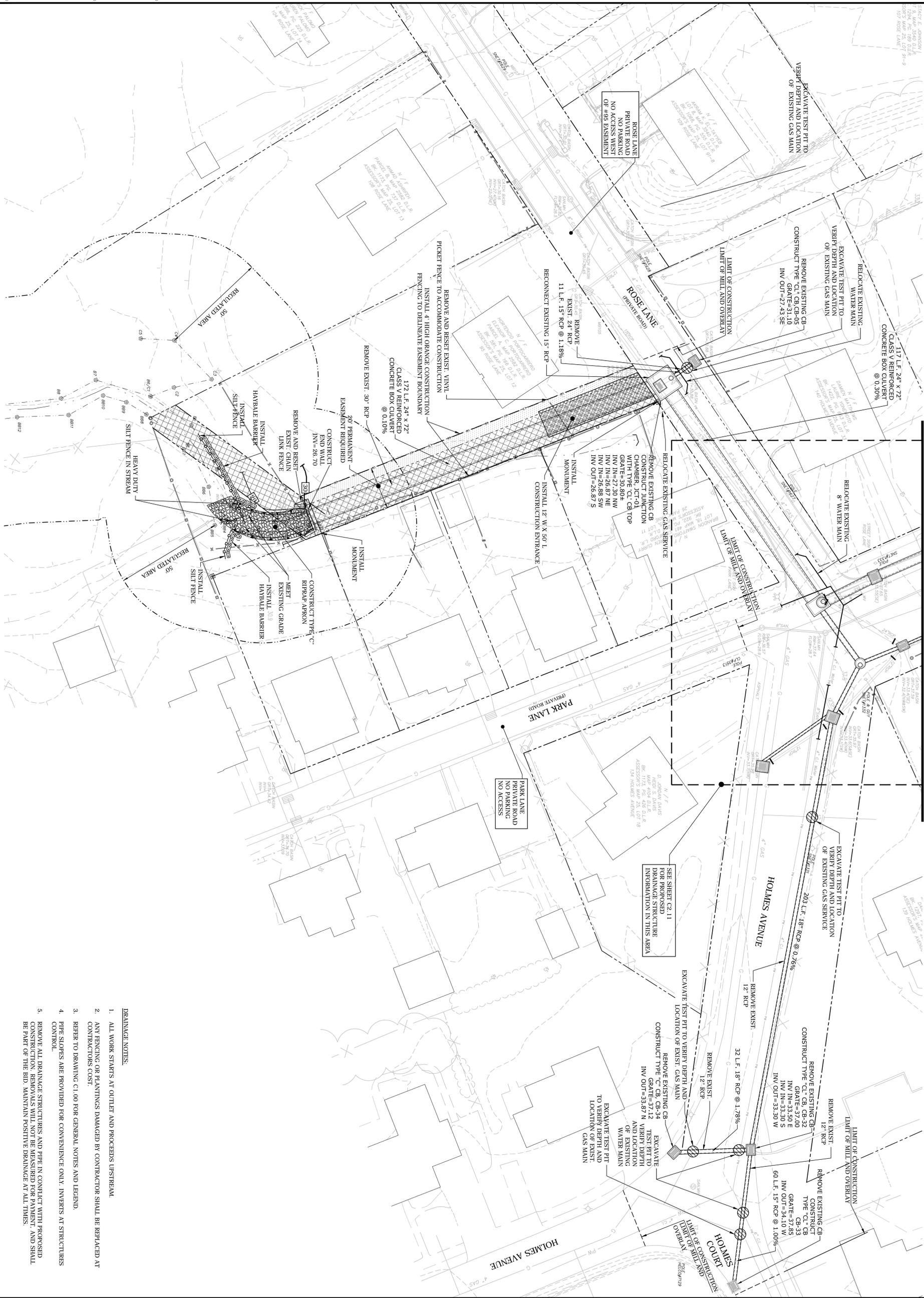
Town of Darien



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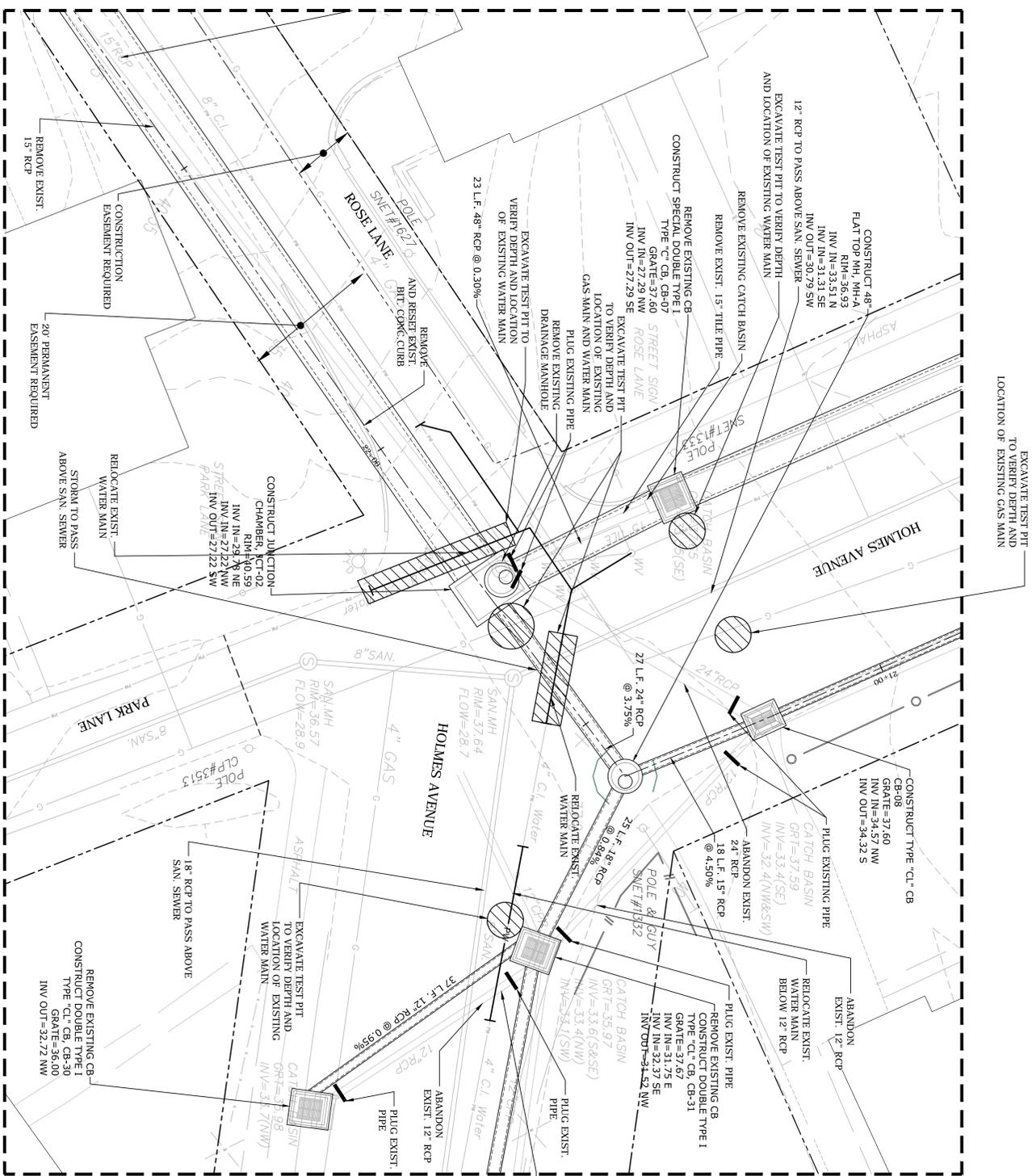
SCALE:
 1" = 80'
C2.00

MATCH LINE SHEET C2.20



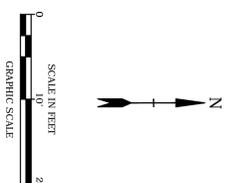
- DRAINAGE NOTES:**
1. ALL WORK STARTS AT OUTLET AND PROCEEDS UPSTREAM.
 2. ANY FENCING OR PLANTINGS DAMAGED BY CONTRACTOR SHALL BE REPLACED AT CONTRACTORS COST.
 3. REFER TO DRAWING C1.00 FOR GENERAL NOTES AND LEGEND.
 4. PIPE SLOPES ARE PROVIDED FOR CONVENIENCE ONLY. INVERTS AT STRUCTURES CONTROL.
 5. REMOVE ALL DRAINAGE STRUCTURES AND PIPE IN CONFLICT WITH PROPOSED CONSTRUCTION. REMOVALS WILL NOT BE MEASURED FOR PAYMENT, AND SHALL BE PART OF THE BID. MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.

<p>1000 Bridgeport Avenue Suite 320 Shelton, CT 06484 (203) 712-1100 www.tighteandbond.com</p>		
<p>Town of Darien Abbey Road Drainage Improvements</p>	<p>Darien, Connecticut August 31, 2015</p>	<p>SCALE IN FEET GRAPHIC SCALE 1" = 20'</p>
<p>C2.10</p>		
<p>SCALE: 1" = 20'</p>	<p>DRAINAGE AND UTILITY PLAN</p>	
<p>DATE: 12/21/13</p>	<p>NAME: DISCUSSION</p>	
<p>FILE: DR-D0213-01.dwg</p>	<p>PRODUCT NO.: D0213</p>	
<p>DRAWN BY: JAC</p>	<p>DATE: 12/21/13</p>	
<p>CHECKED: JMB</p>	<p>DATE: 12/21/13</p>	
<p>APPROVED:</p>	<p>DATE: 12/21/13</p>	



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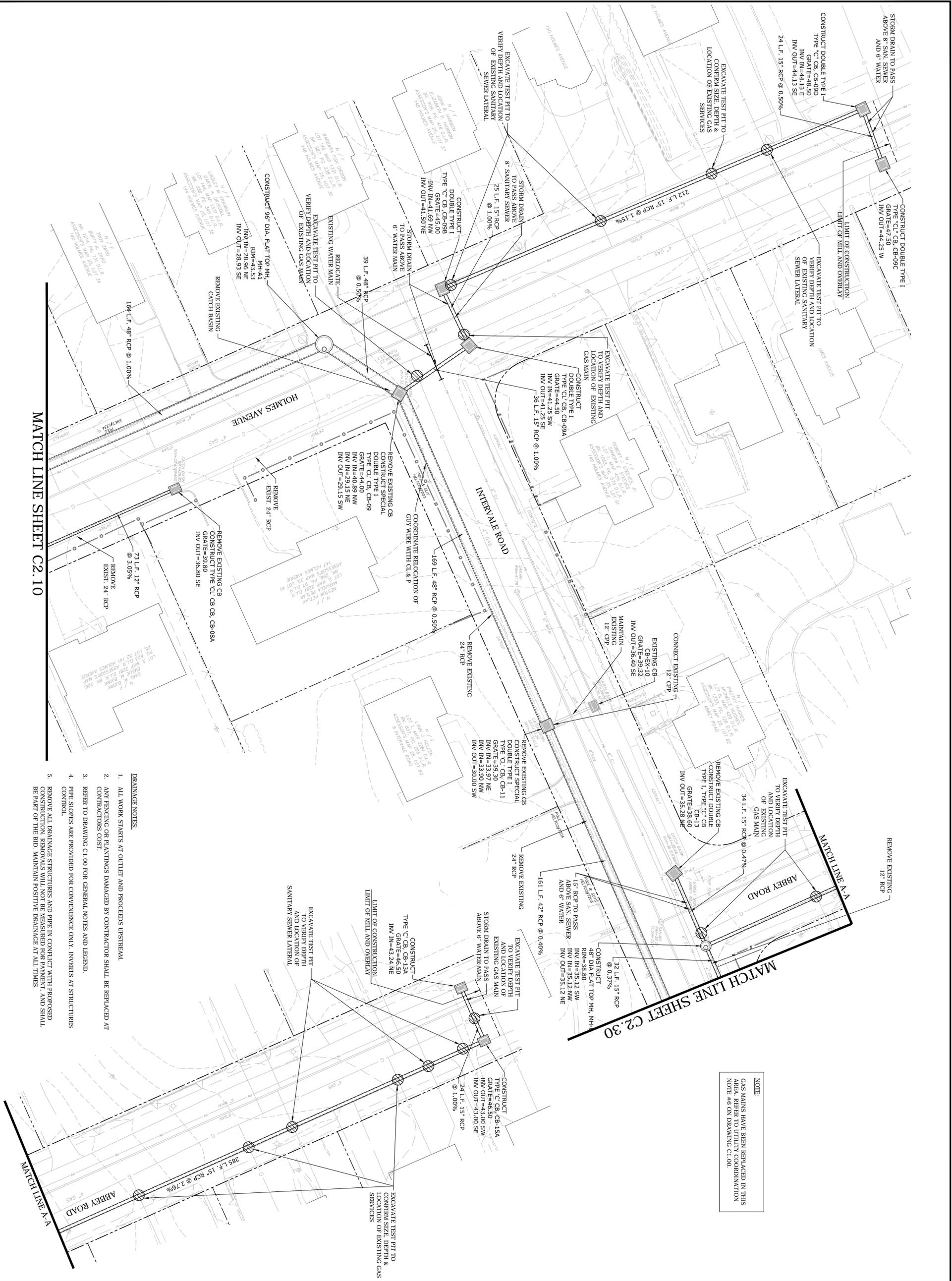
Town of Darien
Abbey Road
Drainage
Improvements

Darien, Connecticut
August 31, 2015

NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE: DR-D0213-01.dwg		
DRAWN BY:	MSS	
CHECKED:	JAC	
APPROVED:	JWB	

DRAINAGE AND UTILITY PLAN ENLARGEMENT
SCALE: 1" = 10'

C2.11



NOTE:
GAS MAINS HAVE BEEN REPLACED IN THIS AREA. REFER TO UTILITY COORDINATION NOTE #6 ON DRAWING CI.00.

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Town of Darien
Abbey Road
Drainage
Improvements

Darien, Connecticut
August 31, 2015

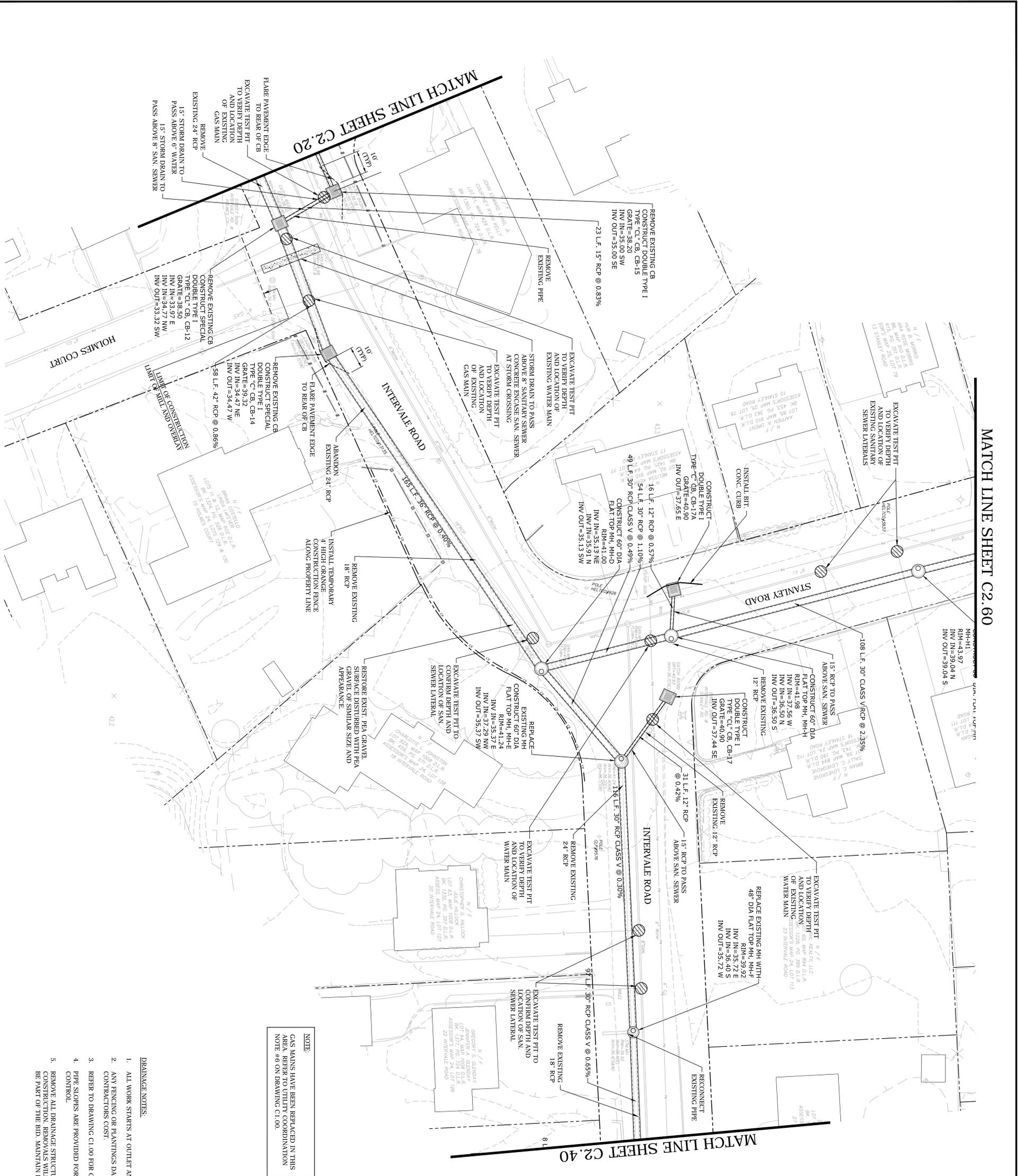
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SCALE: 1" = 20'

C2.20

NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE: DR-D0213-01.dwg		
DRAWN BY:	MSS	
CHECKED:	JAC	
APPROVED:	JWB	

DRAINAGE AND UTILITY PLAN



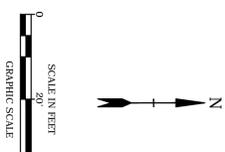
MATCH LINE SHEET C2.60

MATCH LINE SHEET C2.40

NOTE
GAS MAINS HAVE BEEN REPLACED IN THIS AREA REFER TO UTILITY COORDINATION NOTE #48 ON DRAWING C1.00.

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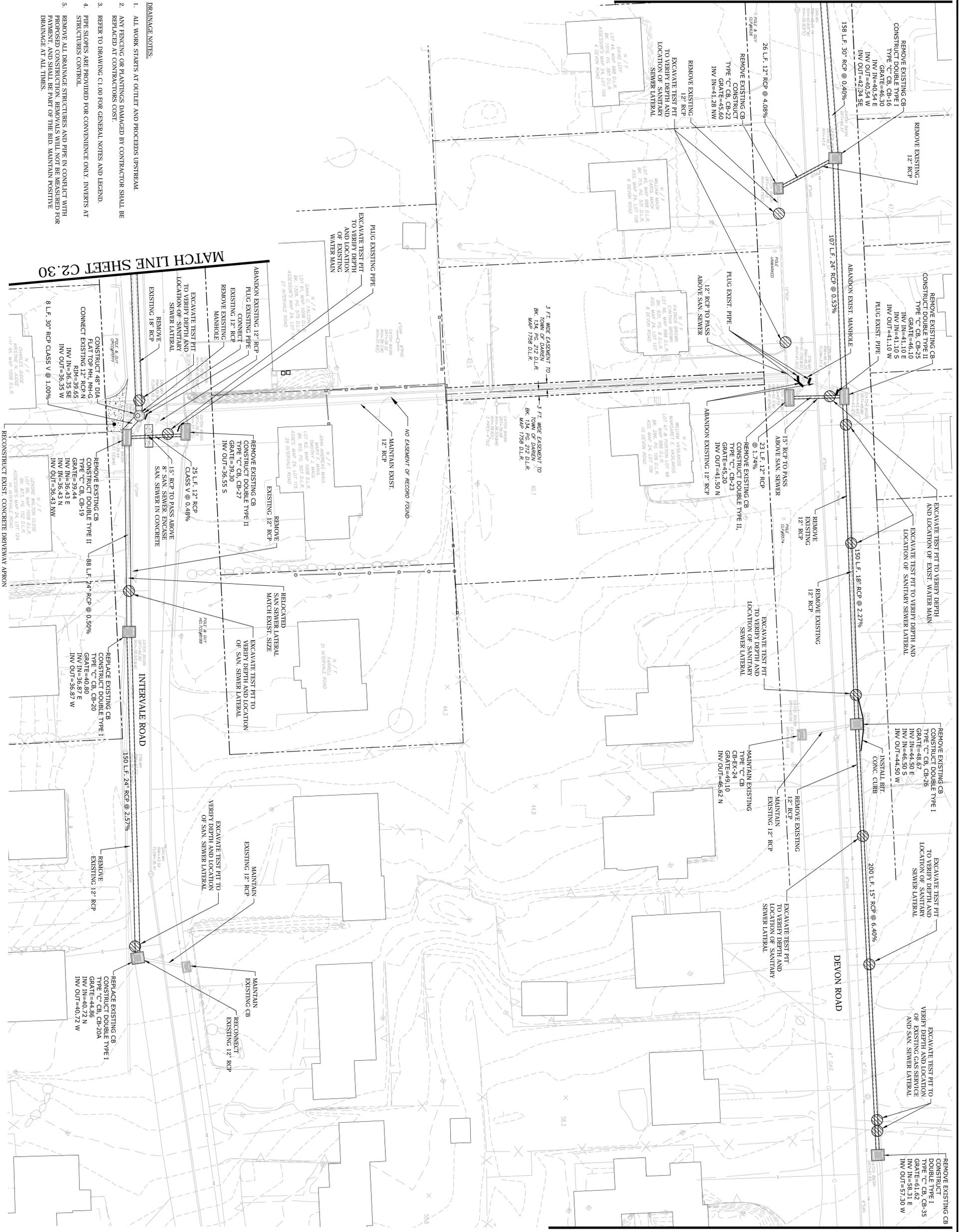
NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE: DR-D0213-01.dwg		
DRAWN BY:	MSS	
CHECKED:	JAC	
APPROVED:	JWB	

DRAINAGE AND UTILITY PLAN

SCALE: 1" = 20'

C2.30

MATCH LINE SHEET C2.60



MATCH LINE SHEET C2.30

MATCH LINE SHEET C2.50

Town of Darien
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SCALE: 1" = 20'

C2.40

SCALE IN FEET
GRAPHIC SCALE

0 40'

NO.	DATE	DESCRIPTION
1	12/21/13	ISSUED FOR PERMIT
2	08/31/15	ISSUED FOR CONSTRUCTION

NAME: _____
DATE: _____
PROJECT NO.: D0213
FILE: DR-D0213-01.dwg
DRAWN BY: MDS
CHECKED: JMC
APPROVED: JWB

DRAINAGE AND
UTILITY PLAN

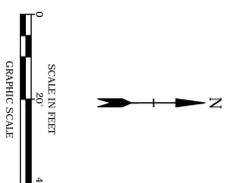
MATCH LINE SHEET C2.40



DRAINAGE NOTES:

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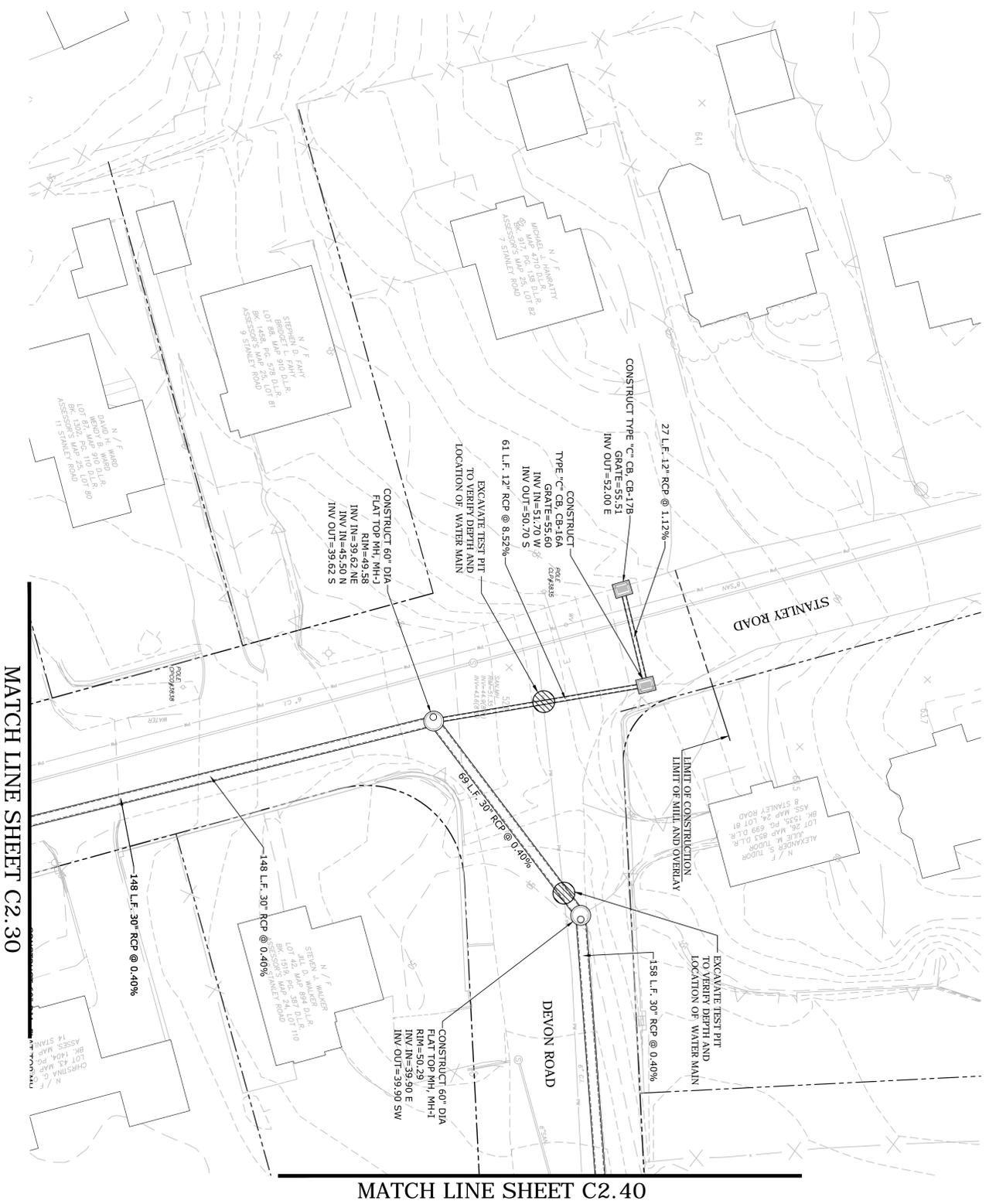


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Darien, Connecticut
August 31, 2015

NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DR-D0213-01.dwg	
DRAWN BY	MOS	
CHECKED	JAC	
APPROVED	JWB	

DRAINAGE AND
UTILITY PLAN
SCALE:
1" = 20'
C2.50

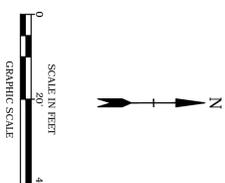


MATCH LINE SHEET C2.30

MATCH LINE SHEET C2.40

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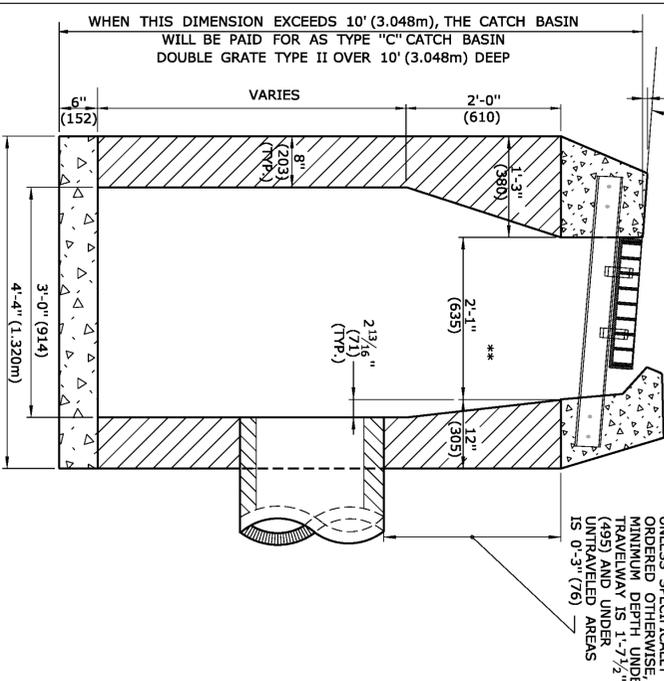
NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DR-D0213-01.dwg	
DRAWN BY	MOS	
CHECKED	JAC	
APPROVED	JWB	

DRAINAGE AND UTILITY PLAN

SCALE: 1" = 20'

C2.60

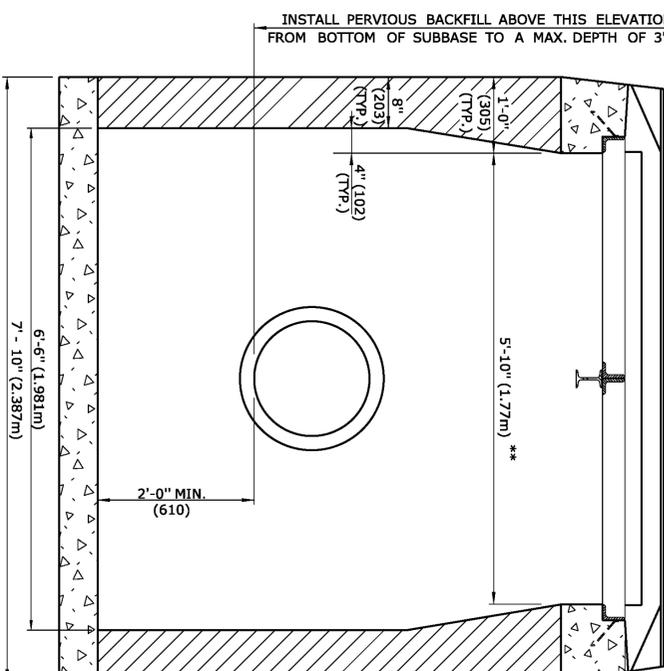
1/4" (13) DROP MIN. ROADWAY CROSS SLOPE



SECTION B

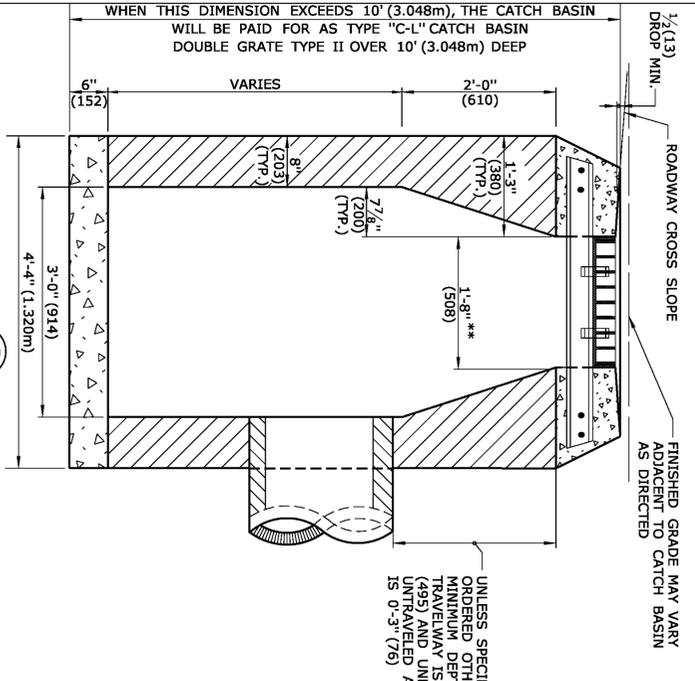
TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II

1/4" (13) DROP MIN. ROADWAY CROSS SLOPE



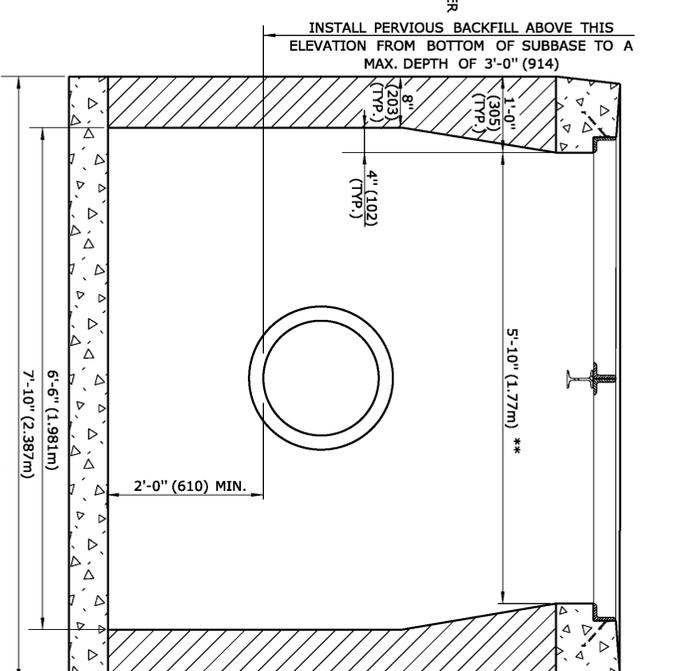
SECTION A

TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II



SECTION B

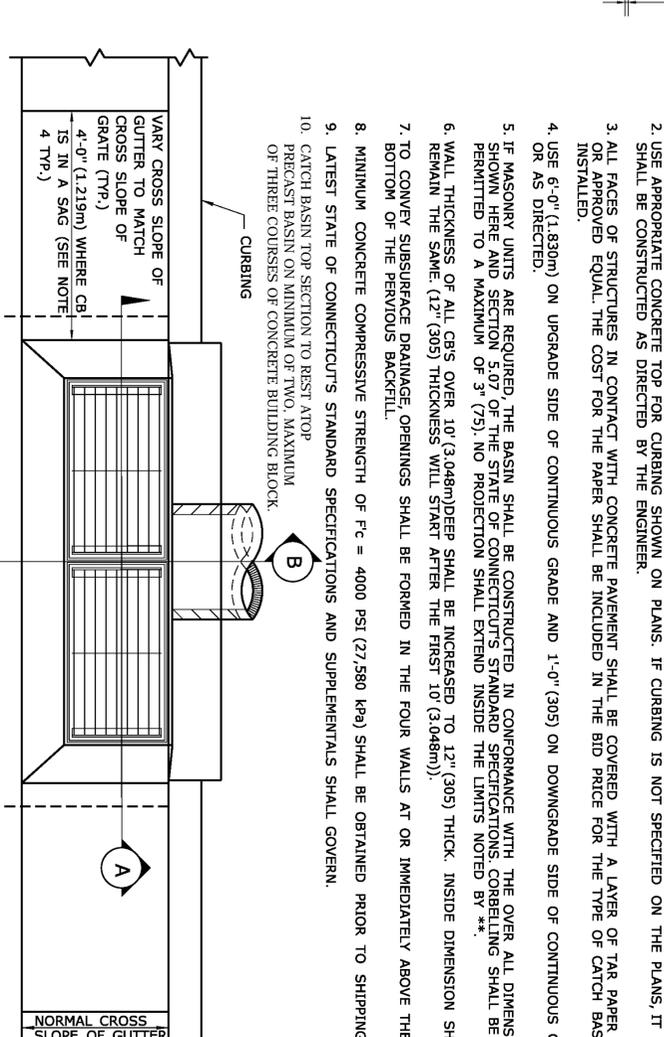
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II



SECTION A

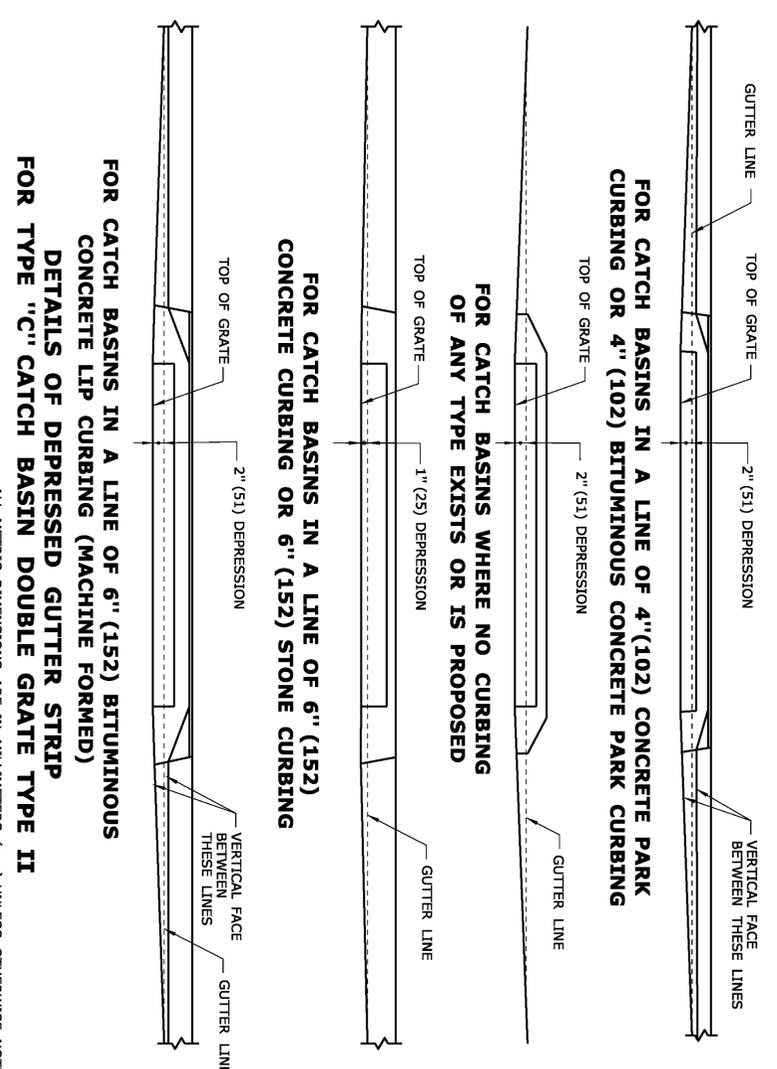
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II

1/4" (13) DROP MIN.



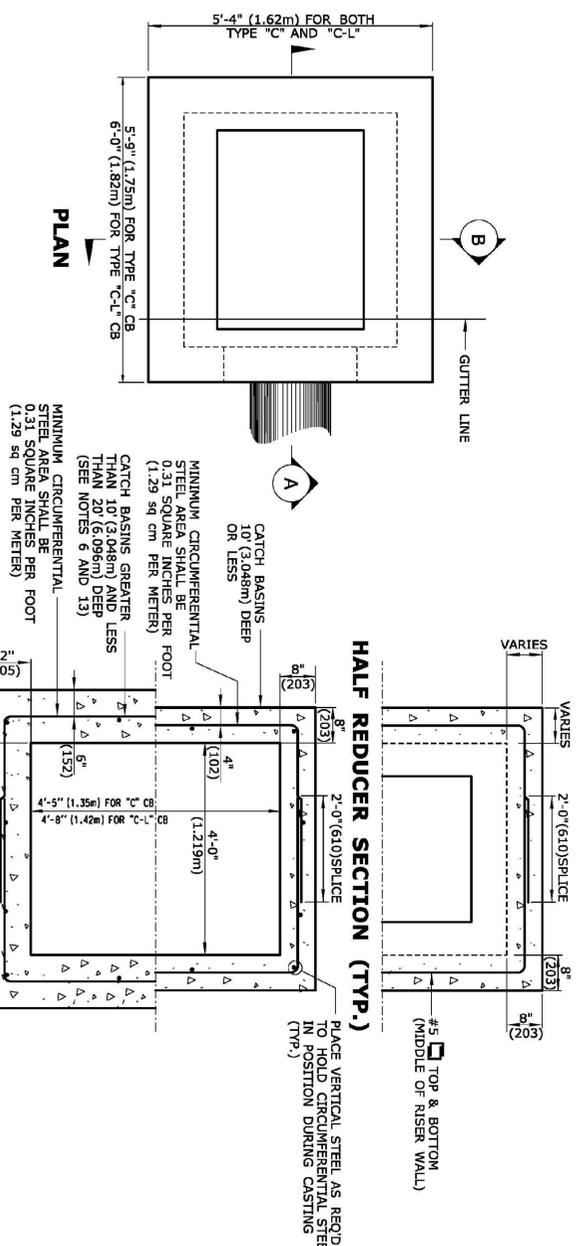
PLAN

- GENERAL NOTES:**
1. FOR DETAILS OF FRAME AND GRATE SEE STANDARD SHEET HW-507.08.
 2. USE APPROPRIATE CONCRETE TOP FOR CURBING SHOWN ON PLANS. IF CURBING IS NOT SPECIFIED ON THE PLANS, IT SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
 3. ALL FACES OF STRUCTURES IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUAL. THE COST FOR THE PAPER SHALL BE INCLUDED IN THE BID PRICE FOR THE TYPE OF CATCH BASIN INSTALLED.
 4. USE 6'-0" (1.830m) ON UPGRADE SIDE OF CONTINUOUS GRADE AND 1'-0" (305) ON DOWNGRADE SIDE OF CONTINUOUS GRADE OR AS DIRECTED.
 5. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE OVER ALL DIMENSIONS SHOWN, HERE AND SECTION 5.07 OF THE STATE OF CONNECTICUT'S STANDARD SPECIFICATIONS. CORRELLING SHALL BE PERMITTED TO A MAXIMUM OF 3" (75). NO PROJECTION SHALL EXTEND INSIDE THE LIMITS NOTED BY **.
 6. WALL THICKNESS OF ALL CPIS OVER 10' (3.048m) DEEP SHALL BE INCREASED TO 12" (305) THICK. INSIDE DIMENSION SHALL REMAIN THE SAME (12" (305) THICKNESS WILL START AFTER THE FIRST 10' (3.048m)).
 7. TO CONVEY SUBSURFACE DRAINAGE OPENINGS SHALL BE FORMED IN THE FOUR WALLS AT OR IMMEDIATELY ABOVE THE BOTTOM OF THE PERVIOUS BACKFILL.
 8. MINIMUM CONCRETE COMPRESSIVE STRENGTH OF Fc = 4000 PSI (27,580 kpa) SHALL BE OBTAINED PRIOR TO SHIPPING.
 9. LATEST STATE OF CONNECTICUT'S STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.
 10. PRECAST BASIN TOP SECTION TO REST ATOP PERVIOUS BACKFILL ON MINIMUM OF TWO, MAXIMUM OF THREE COURSES OF CONCRETE BUILDING BLOCK.

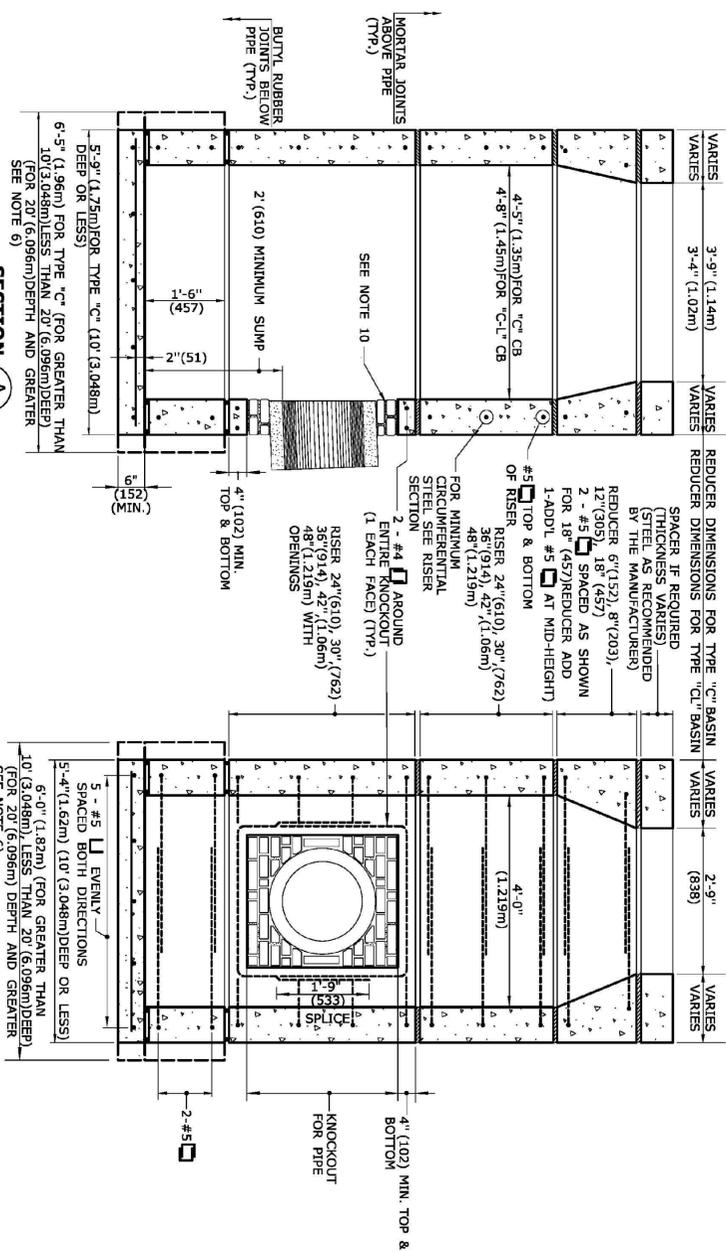


FOR CATCH BASINS IN A LINE OF 6" (152) BITUMINOUS CONCRETE LIP CURBING (MACHINE FORMED) DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN DOUBLE GRATE TYPE II

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (MM) UNLESS OTHERWISE NOTED



HALF REDUCER SECTION (TYP.)

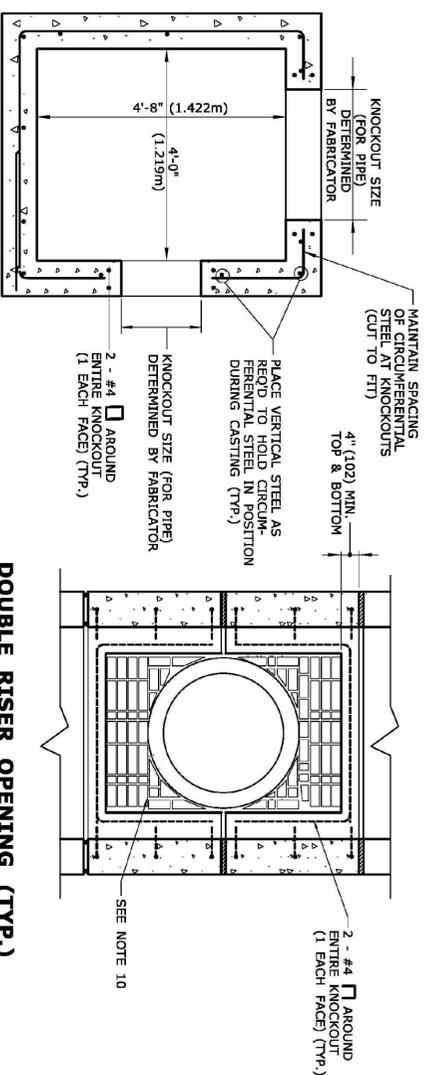


PRECAST CONCRETE TYPE "C" & "C-L" DOUBLE GRATE TYPE I CATCH BASIN

NOTE: REINFORCEMENT IN FAR FACE WALL NOT SHOWN FOR CLARITY

(UNDER 10' (3,048m) DEEP SHOWN)

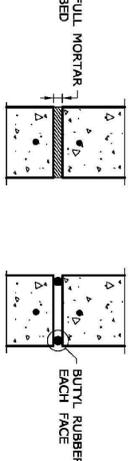
TYPICAL SECTION THRU SINGLE RISER WITH KNOCKOUTS



DOUBLE RISER OPENING (TYP.) PIPES GREATER THAN 24" (610) O.D.

ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

MORTAR JOINT BUTYL RUBBER JOINT DETAIL



- NOTES:
1. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
 2. DETAILS ON THIS SHEET SHOW STANDARD REINFORCEMENT, WELDED WIRE FABRIC WITH AN AREA EQUAL TO OR GREATER THAN THE REINFORCING SHOWN MAY BE SUBSTITUTED.
 3. ALL LAP SPLICES, DEVELOPMENT LENGTHS, BENDS FOR REINFORCEMENT, AND WELDED WIRE FABRIC SHALL CONFORM TO ASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
 4. ALL REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 2", EXCEPT FOR BENEATH BOTTOM REINFORCEMENT IN TOP SLABS, WHERE THE MINIMUM MAY BE 1 1/2"
 5. MINIMUM CONCRETE COMPRESSIVE STRENGTH FC=4,000PSI SHALL BE OBTAINED BEFORE SHIPPING.
 6. BASES AND RISERS AT A DEPTH OF 20" AND GREATER SHALL BE DESIGNED BY THE CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
 7. SEE STANDARD DRAWING 507-K FOR CATCH BASIN FRAMES AND GRATES.
 8. RISERS SHALL NEVER HAVE CORNER PIPE ENTRIES, WHERE THE ALIGNMENT OF THE PIPE WITH THE RISER IS NOT PERPENDICULAR. CORNER ENTRIES SHALL BE DESIGNED BY THE CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
 9. ALL PIPE OPENINGS SHALL BE CLOSED USING MATERIALS WHICH CONFORM TO STATE OF CONNECTICUT STANDARD SPECIFICATIONS SECTION M.08.02. IF THE ENGINEER DETERMINES THAT THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL RECLOSE SAID RESULT IN A REDUCED WALL THICKNESS.
 10. THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS AND SUPPLEMENTS SHALL GOVERN.
 11. FOR ADDITIONAL DETAILS, SEE OTHER CATCH BASIN SHEETS.
 12. WALL THICKNESS OF ALL CBS OVER 10" DEEP SHALL BE INCREASED TO 12" THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. (THE 12" THICKNESS SHALL START AFTER THE FIRST 10")
 13. BUTYL RUBBER JOINT SEAL SHALL CONFORM TO ASHTO M-198 AND MORTAR SHALL CONFORM TO THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS MATERIAL SECTION M11.04.
 14. SHRINKAGE AND TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN THE TOPS OF SLABS. THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE AT LEAST 0.125 IN²/FT IN EACH DIRECTION. THE MAXIMUM SPACING OF THIS REINFORCEMENT SHALL NOT EXCEED 18 INCHES.
 15. CATCH BASIN TOP SECTION TO REST ATOP PRECAST BASIN ON MINIMUM OF TWO, MAXIMUM OF THREE COURSES OF CONCRETE BUILDING BLOCK.

Town of Darien

Abbey Road
Drainage
Improvements

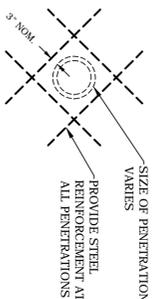
Darien, Connecticut
August 31, 2015

NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DS-D0213-01.dwg	MOS
DRAWN BY	JAC	JMB
CHECKED	JAC	JMB
APPROVED	JMB	

STORM DRAINAGE
DETAILS - 4

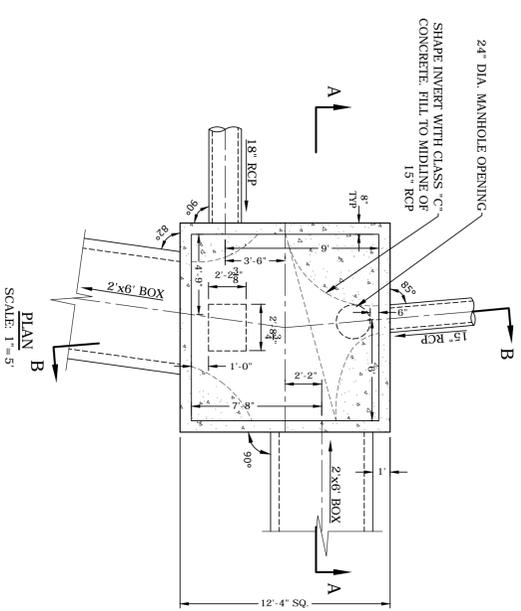
SCALE:
AS NOTED
C4.30

Tighe & Bond
www.tighebond.com
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

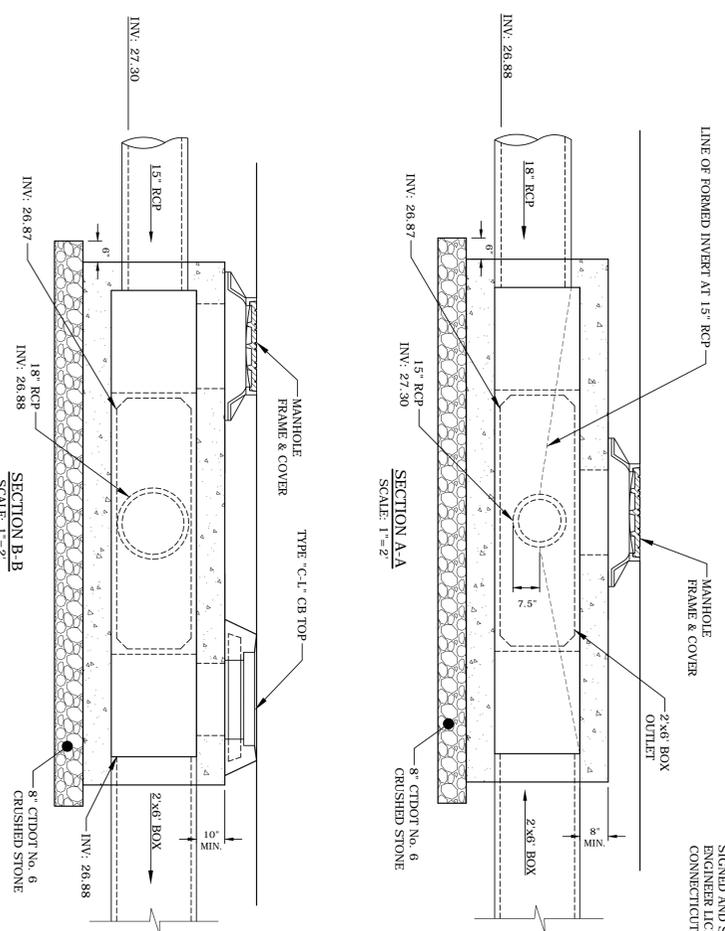


PENETRATION REINFORCING DETAIL
NOT TO SCALE

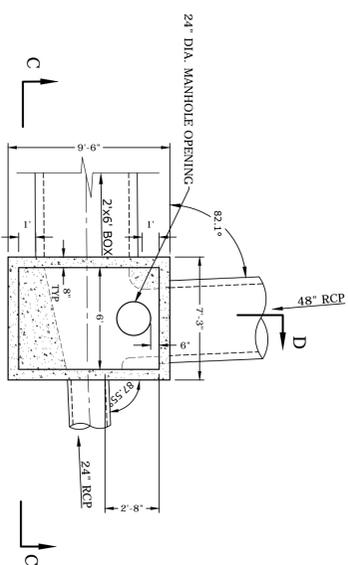
- NOTES:
1. REINFORCING DETAIL APPLIES TO ALL PENETRATIONS.
 2. SIZE AND SPACING OF REINFORCEMENT TO BE DETERMINED BY STRUCTURAL ENGINEER.



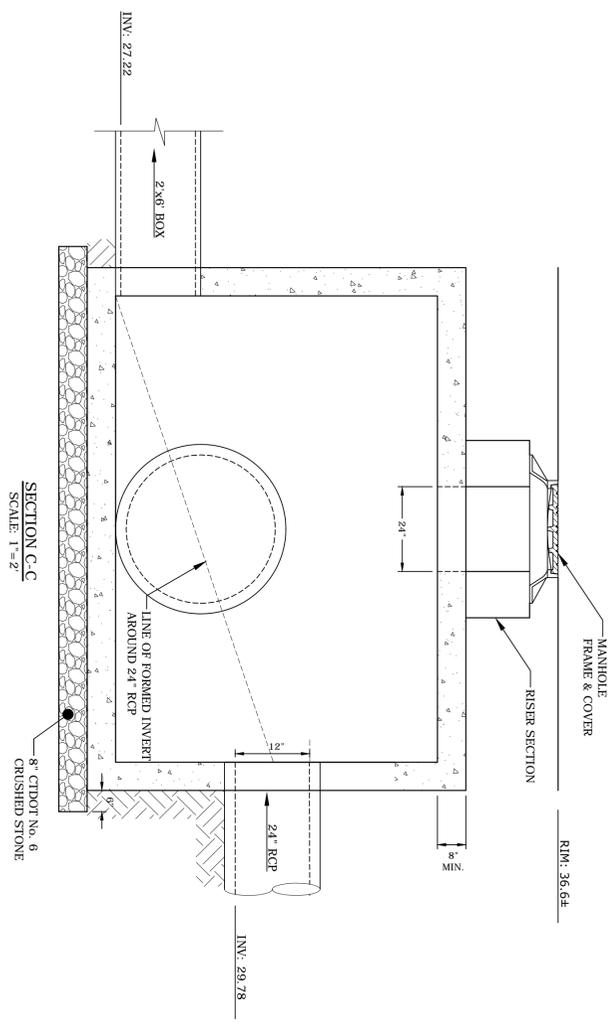
- NOTES:
1. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
 2. CONCRETE TO BE 4,500psi
 3. STRUCTURES TO SUPPORT APPLIED EARTH LOADS AND HS-20 LOADING.
 4. CONTRACTOR TO SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR PROPOSED JUNCTION CHAMBERS. SUBMITTAL SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.



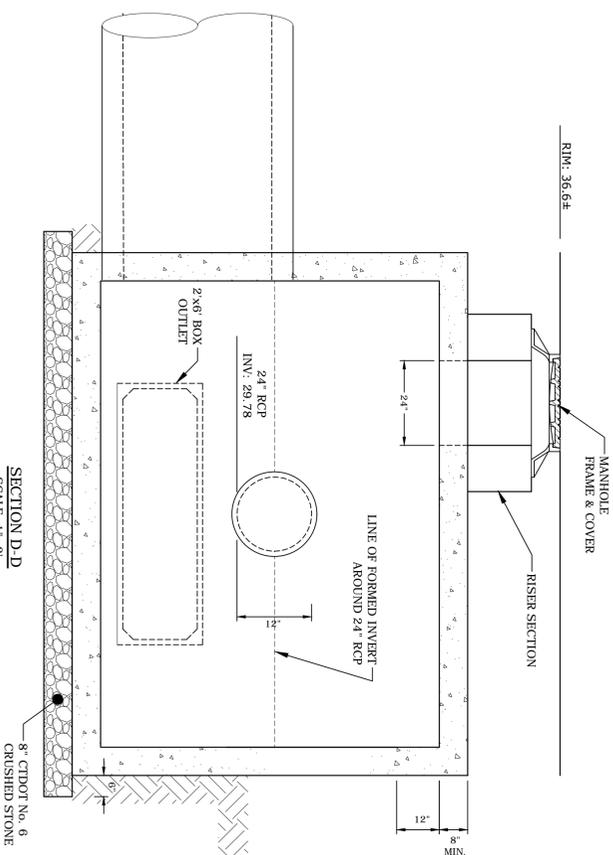
JUNCTION CHAMBER 1
AS NOTED



- NOTES:
1. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
 2. CONCRETE TO BE 4,500psi
 3. STRUCTURES TO SUPPORT APPLIED EARTH LOADS AND HS-20 LOADING.
 4. CONTRACTOR TO SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR PROPOSED JUNCTION CHAMBERS. SUBMITTAL SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.

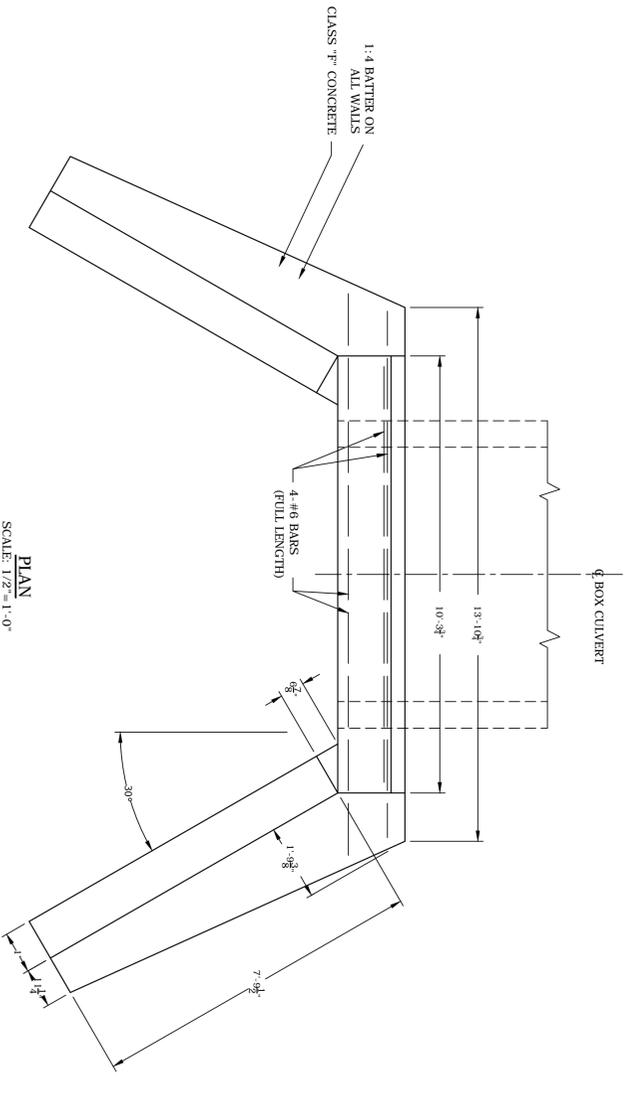


SECTION C-C
SCALE: 1\"/>

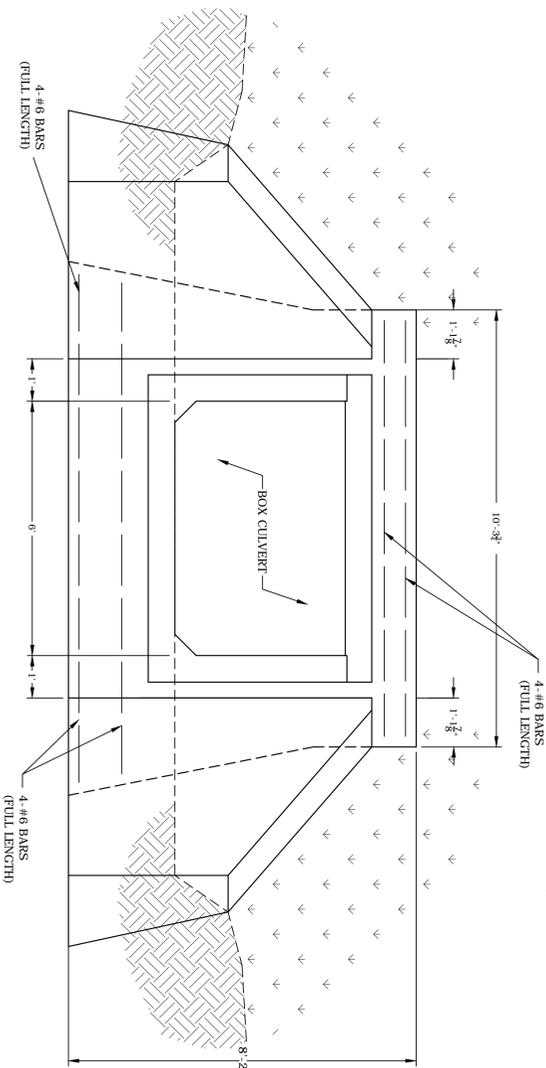


SECTION D-D
SCALE: 1\"/>

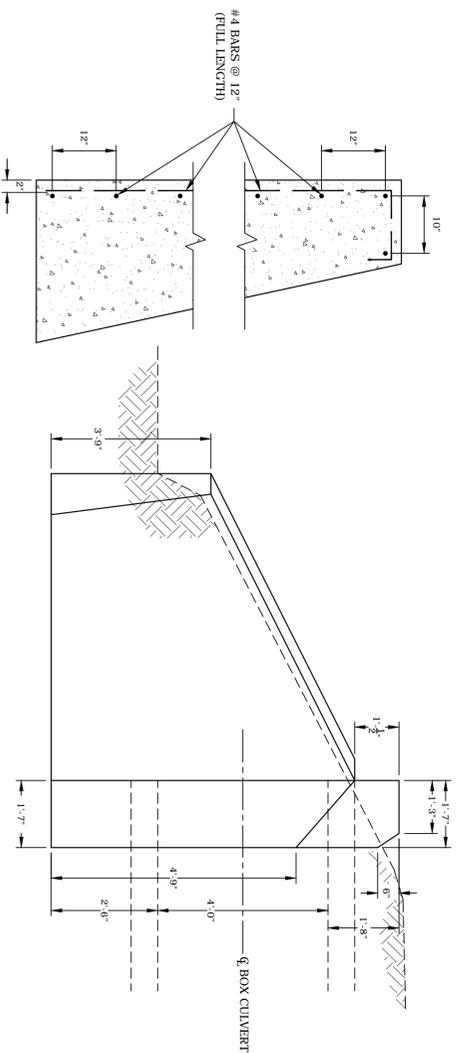
NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DS-D0213-01.dwg	
DRAWN BY	MSS	
CHECKED	JAC	
APPROVED	JWB	



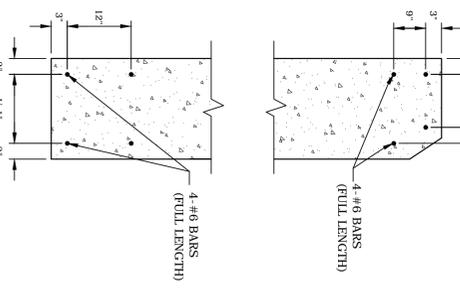
PLAN
SCALE: 1/2"=1'-0"



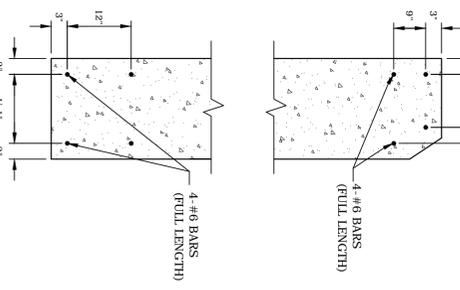
FRONT ELEVATION
SCALE: 1/2"=1'-0"



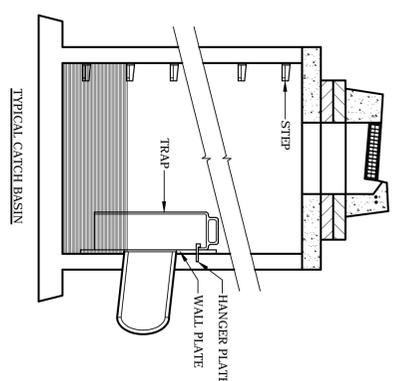
SIDE ELEVATION
SCALE: 1/2"=1'-0"



DETAIL OF BAR SPACING
SCALE: 3/4"=1'-0"



DETAIL OF BAR SPACING
SCALE: 3/4"=1'-0"



TYPICAL CATCH BASIN

- NOTES:
1. TO BE USED ONLY WHERE THERE ARE NO UPSTREAM CATCH BASINS CONTRIBUTING TO THE STRUCTURE.

CATCH BASIN TRAP DETAIL
NO SCALE

CAST IRON HOOD			CAST IRON HANGER PLATE		
A	B	C	A	B	C
9 1/2	16	4 3/4	6	10	12
11 1/2	20 1/2	5 1/2	8	12	15
13 1/4	23 1/2	6 1/2	10	15	18
15 3/4	26	7 1/2	12	18	21
18	27	9	15	21	24
20	27	10	18	24	27
25 1/4	30	11 1/4	21	27	30
30	35 3/4	15	24	30	36

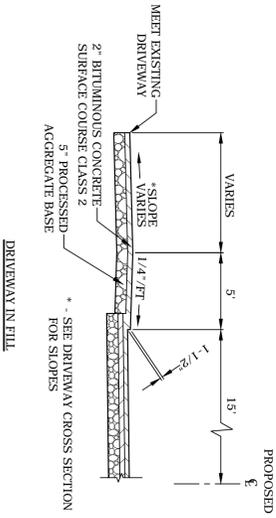
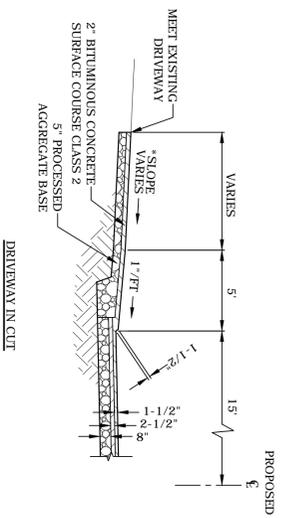
NOTE: CAST IRON HANGER PLATE FURNISHED WITH HOOD.

Tighe & Bond
www.tighebond.com
1000 Bridgeport Avenue
Suite 320
Shelton, CT 06484
(203) 712-1100

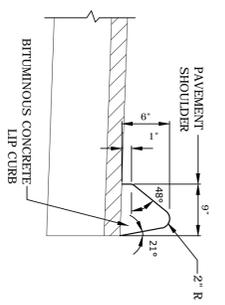
Town of Darien
Abbey Road
Drainage
Improvements
Darien, Connecticut
August 31, 2015

STORM DRAINAGE DETAILS - 7
SCALE: AS NOTED
C4.60

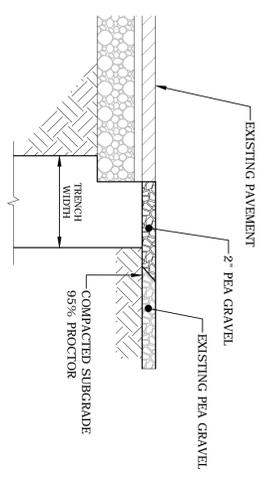
DATE: _____
DRAWN BY: JAC
CHECKED: JMB
APPROVED: _____



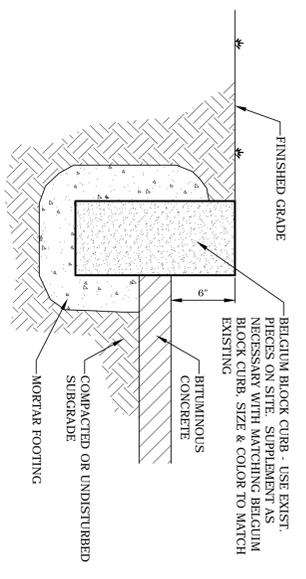
DRIVEWAYS AND SIDEWALKS ON LOCAL ROADS
N.T.S.



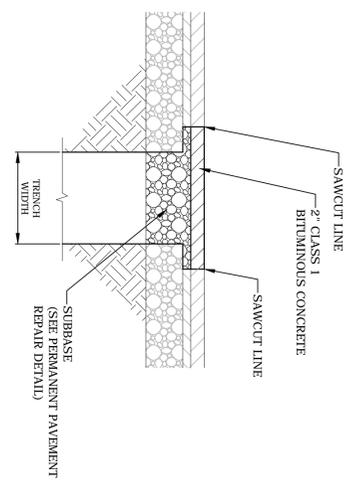
BITUMINOUS CONCRETE LIP CURBING
NO SCALE



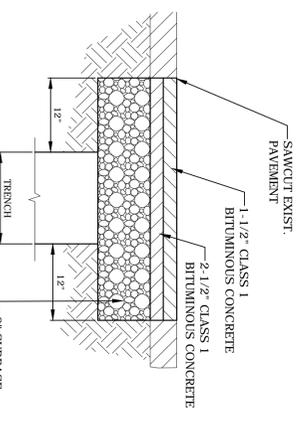
PEA GRAVEL PARKING AREA
NO SCALE



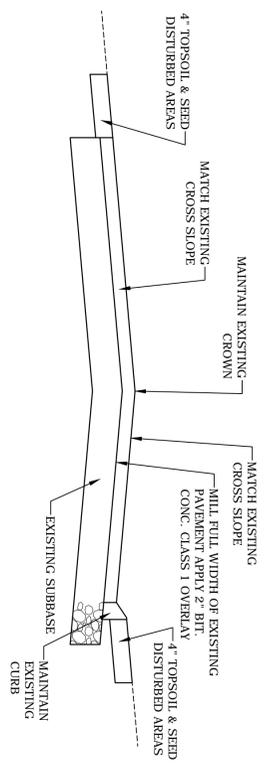
BELGIUM BLOCK CURBING
NO SCALE



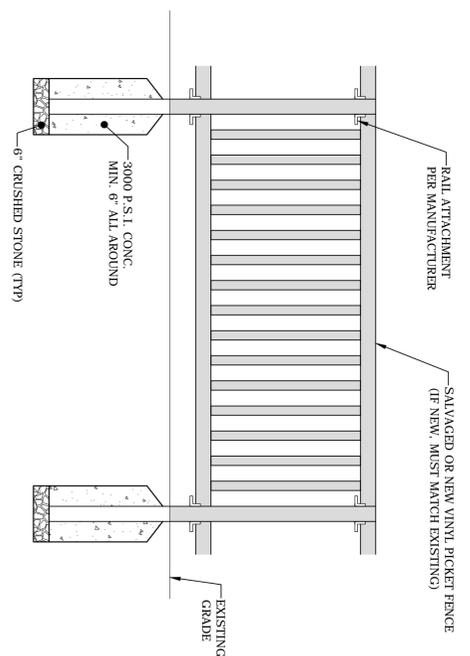
TEMPORARY PAVEMENT REPAIR
NO SCALE



PERMANENT PAVEMENT REPAIR
NO SCALE

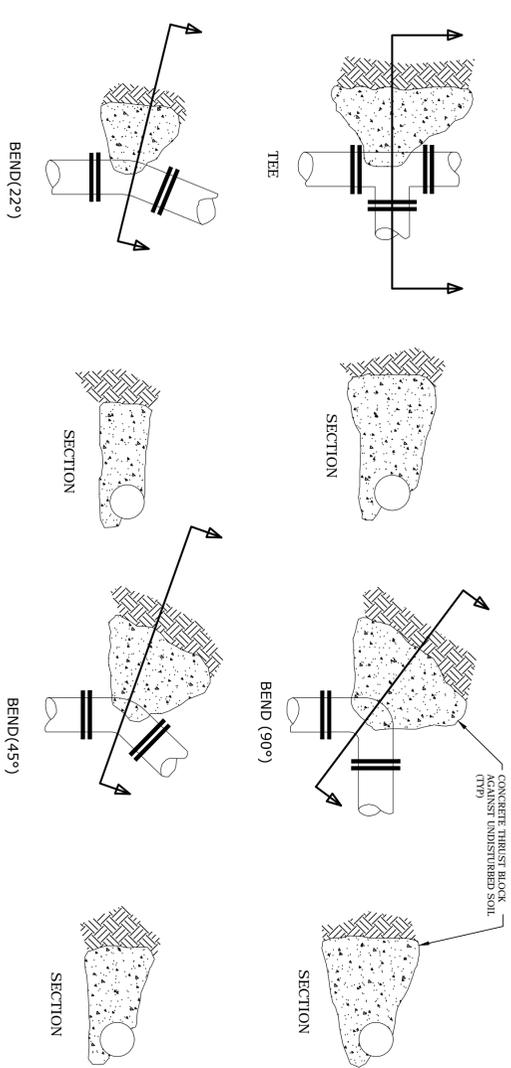


MILL & OVERLAY OF EXISTING PAVEMENT
NO SCALE

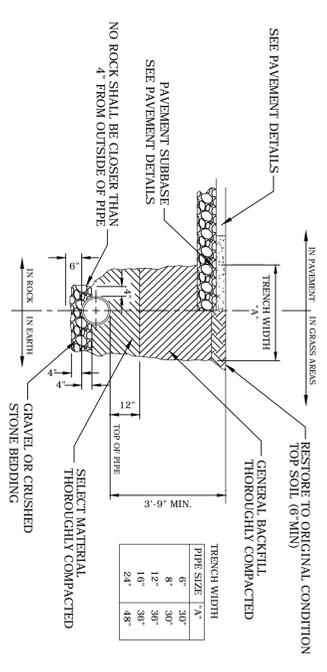


VINYL PICKET FENCE DETAIL
NO SCALE

SCALE:	AS NOTED	
C4.70		
ROADWAY DETAILS		
NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DS-D0213-01.dwg	
DRAWN BY	MOS	
CHECKED	JAC	
APPROVED	JWB	



THRUST BLOCK DETAILS
NO SCALE



TYPICAL TRENCH DETAIL
NO SCALE

TRENCH WIDTH	PIPE SIZE	"A"
6"	8"	30"
8"	12"	36"
12"	16"	36"
16"	24"	48"

Town of Darien
Abbey Road
Drainage
Improvements
Darien, Connecticut
August 31, 2015

NAME	DATE	DESCRIPTION
PROJECT NO.	D0213	
FILE	DS-D0213-01.dwg	
DRAWN BY	MOS	
CHECKED	JAC	
APPROVED	JWB	

WATER MAIN
RELOCATION DETAILS
SCALE: AS NOTED
C4.80

