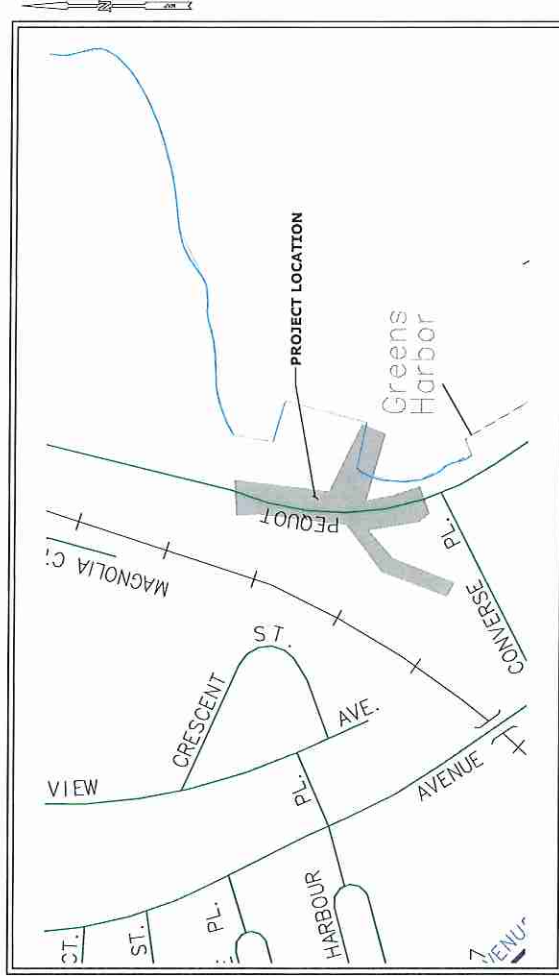


# PEQUOT AVENUE DRAINAGE IMPROVEMENTS

COMMUNITY DEVELOPMENT BLOCK GRANT- DISASTER RECOVERY PROGRAM  
 STATE OF CONNECTICUT DEPARTMENT OF HOUSING  
 U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
 CITY OF NEW LONDON  
 NEW LONDON, CONNECTICUT  
 MMI PROJECT NO. 2389-43

JULY 2018



PROJECT SITE VICINITY MAP:



**LIST OF DRAWINGS**

NO.	TITLE
01	TITLE SHEET
02	TYPICAL SECTION & GENERAL NOTES
03	INDEX PLAN
04	BORING LOGS
05-21	MISCELLANEOUS DETAILS
22-23	EXISTING CONDITIONS & BASELINE LAYOUT PLAN
24-25	ROADWAY PLANS
26-27	DRAINAGE PLANS
28-31	ROADWAY AND DRAINAGE PROFILES
32	DETOUR PLAN
33-41	ROADWAY CROSS SECTIONS

**PREPARED FOR:**  
 CITY OF NEW LONDON  
 181 STATE STREET  
 NEW LONDON, CT 06320

**APPROVED BY:**  
 \_\_\_\_\_  
 STEPHEN SWABERSKI, P.E.  
 CIVIL ENGINEER  
 CITY OF NEW LONDON, CT  
 DATE: \_\_\_\_\_

**DESIGNED BY:**  
  
 MILONE & MACBROOM  
 99 Beatty Drive  
 Shelton, Connecticut 06410  
 (203) 271-1771 Fax (203) 272-9733  
<http://www.miloneandmacbroom.com>

ANTHONY A. CIRIELLO, JR., P.E.  
 COMM. PROFESSIONAL REG. NO. 30809  
 DATE: \_\_\_\_\_

**PREPARED BY:**  
  
 MILONE & MACBROOM®

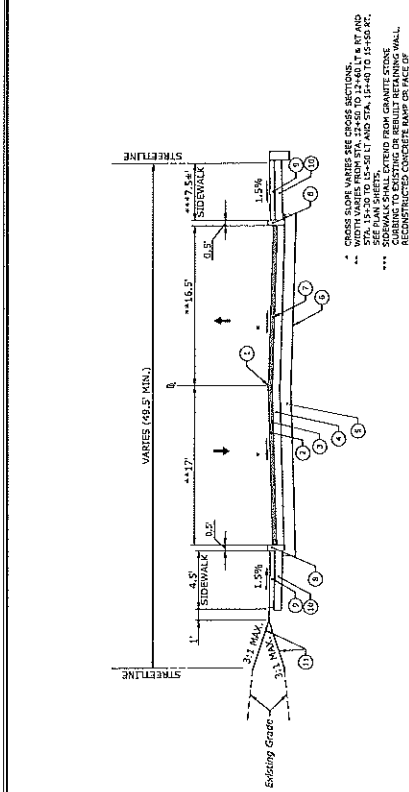
99 Beatty Drive  
 Shelton, CT 06410  
 (203) 271-1771 Fax (203) 272-9733  
[www.miloneandmacbroom.com](http://www.miloneandmacbroom.com)

**PEQUOT AVENUE**  
 PROJECT LENGTH: 181 LF  
 BEGIN STATION: 18+00  
 END STATION: 18+36

STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION  
 "5" SCALE  
 INCLUDING SUPPLEMENTS THERETO DATED JANUARY 2018.



- LEGEND**
- 1 POINT OF APPLICATION OF GRADE
  - 2 2" HMA 50.375
  - 3 5" HMA 50.5
  - 4 8" PROCESSED AGGREGATE BASE
  - 5 12" SUBBASE
  - 6 FORMATION OF SUBGRADE
  - 7 MATERIAL FOR TACK COAT
  - 8 GRANITE STONE CURBING
  - 9 CONCRETE SIDEWALK (2" CONCRETE)
  - 10 CONCRETE SIDEWALK (6" GRANULAR FILL)
  - 11 4" TOPSOIL AND TURF ESTABLISHMENT
- GENERAL NOTES**
1. SURVEY INFORMATION IS BASED UPON FIELD SURVEYS PERFORMED BY MILONE & MACBROOK, INC. IN SEPTEMBER 2002 AND IN APRIL 2017. ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM (NAVD 1989). STREETLINE INFORMATION AS SHOWN ON THE PLANS IS BASED ON INFORMATION PROVIDED BY CITY OF NEW LONDON. NORTH ARROW AND BEARINGS BASED ON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM (NAD 1983).
  2. MILONE & MACBROOK, INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
  3. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
  4. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION OF ANY UTILITIES UNTIL PERMANENT COVER STABILIZATION IS ESTABLISHED. ALL SEDIMENT & EROSION CONTROL MEASURES SHALL CONFORM TO THE "BIOB CONNECTICUT GUIDELINES FOR SOIL EROSION & SEDIMENT CONTROL" AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL. THE DESIGNATED IN-LAND AREAS AND EROSION CONTROL MEASURES SHALL BE NOTIFIED PRIOR TO IMPLEMENTATION OF ANY SOIL & EROSION CONTROL MEASURES NOT DEPICTED ON THE PLANS.
  5. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND INCIDENTAL CONSTRUCTION, FORM 817, 1016 INCLUDING SUPPLEMENTS THERE TO DATED JANUARY 2018, OR AS MODIFIED BY SPECIAL PROVISIONS.
  6. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL MUNICIPAL WATER UTILITY AND SANITARY UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. NEITHER THE OWNER OR THE ENGINEER WILL BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
  7. ALL SLOPES OR DISTURBED AREAS ARE TO BE STABILIZED WITH A MINIMUM OF 4 INCHES OF TOPSOIL AND SEEDED WITH GRASS - REFER TO SPECIAL PROVISIONS FOR FURTHER INFORMATION. THE COST OF TOPSOIL AND SEEDING SHALL BE INCLUDED IN THE ITEM "LANDSCAPING AND PLACING TOPSOIL". EROSION CONTROL MATTING SHALL BE PLACED ON SLOPE AREAS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
  8. THE REMOVAL AND RESETTLEMENT OF FENCES, STONEWALLS, AND ORNAMENTAL AND UTILITARIAN DOMESTIC ACCESSORIES WITHIN THE HIGHWAY LIMITS AND THE REMOVAL AND RESETTLEMENT OF EXISTING MAILBOXES TO BE PAID FOR UNDER THE ITEM "CLEANING AND GRUBBING" UNLESS OTHERWISE SPECIFIED ON THE PLANS.
  9. THE CONTRACTOR SHOULD NOTE THAT ALL PRIVATE AND COMMERCIAL MAIL BOXES, SIGNS, ETC. ARE TO BE RELOCATED USING EXISTING SUPPORTS, WHERE EXISTING SUPPORTS ARE NOT SUITABLE FOR RELOCATION, THE CONTRACTOR SHALL PROVIDE A SIMILAR APPLICATION AT NO ADDITIONAL EXPENSE.
  10. THE WORK TO REMOVE EXISTING BITUMINOUS PAVEMENT TO BE PAID FOR UNDER THE ITEM "EARTH EXCAVATION".
  11. THE COST OF CUTTING BITUMINOUS CONCRETE ROADWAYS, DRIVEWAYS AND SIDEWALKS TO BE PAID FOR AS "CUT BITUMINOUS CONCRETE PAVEMENT".
  12. WITH NO SEPARATE PAYMENT.
  13. EXISTING PROPERTY FROM PINS AND CONCRETE MONUMENTS, WHEN FOUND WITHIN THE WORK LIMITS, SHALL BE LOCATED AND REPLACED IF DISTURBED. THE CONTRACTOR DISTURBS OR DAMAGES ANY FROM PIN OR MONUMENT OUTSIDE THE LIMITS OF WORK, THEY SHALL BE RESET BY A LAND SURVEYOR LICENSED IN CONNECTICUT AT THE CONTRACTOR'S EXPENSE.
  14. THE CONTRACTOR SHALL WALK THE PROJECT PRIOR TO CONSTRUCTION WITH A REPRESENTATIVE FROM THE CITY AND THE ENGINEER. TREES TO BE REMOVED SHALL BE IDENTIFIED TO THE PROJECT FOR REMOVAL AS EXISTING TO PROTECT ALL TREES NOT DESIGNATED FOR REMOVAL. THE COST OF TREE REMOVAL AND TRIMMING SHALL BE INCLUDED IN THE CONTRACT BID ITEM "CLEANING AND GRUBBING".
  15. ALL TREE STUMPS WITHIN THE SLOPE LIMITS SHALL BE REMOVED. ANY TREE AND STUMPS DESIGNATED FOR REMOVAL THAT ARE LOCATED OUTSIDE THE SLOPE LIMITS SHALL BE REMOVED BY EXCAVATION AND THE DISTURBED AREAS SHALL BE LOANED AND SEDED. ALL STUMP REMOVAL SHALL BE PAID FOR UNDER "CLEANING AND GRUBBING".
  16. ANY MAINTENANCE OR REPAIRING OF EQUIPMENT AND VEHICLES SHALL BE PERFORMED AT LEAST 50 FEET FROM WETLANDS OR WATERCOURSES. OIL, GASOLINE, AND CHEMICALS NEEDED AT THE SITE SHALL BE STORED IN A SECONDARY CONTAINER AT LEAST 50 FEET FROM WETLANDS OR WATERCOURSES AND OUTSIDE OF FLOODPLAIN AND FLOODWAY LIMITS TO PREVENT CONTAMINATION FROM POSSIBLE LEAKS.
  17. CALCIUM CHLORIDE AND WATER PLACER FOR DUST CONTROL, AND SWEEPING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS OR AS ORDERED BY THE ENGINEER.



- UTILITY NOTES**
1. THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES HAS BEEN COMPILED FROM THE BEST AVAILABLE INFORMATION. THIS INFORMATION WAS OBTAINED FROM THE UTILITY COMPANY AND CITY RECORDS. FIELD SURVEYS AND THEREFORE, IS APPROXIMATE. ALL UTILITIES AND UNDERGROUND STRUCTURES MAY NOT BE SHOWN.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING EXISTING UTILITIES AT LEAST FORTY-EIGHT (48) HOURS (TWO FULL WORKING DAYS) IN ADVANCE OF THE START OF WORK AND VERIFYING THE ACTUAL LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY WORK. BEFORE YOU DIG, CALL OR VISIT CUTO.COM. ALL UTILITIES THAT DO NOT MATCH HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
  3. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF NECESSARY RELOCATIONS IN WRITING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF THE UTILITY COMPANIES. ALL REQUIRED UTILITY RELOCATIONS SHALL BE PERFORMED BY THE RESPECTIVE UTILITY COMPANY UNLESS OTHERWISE SPECIFIED.
  4. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL WORK WITH THE UTILITY COMPANY FOR THE RELOCATIVE UTILITY COMPANY TO HOLD ANY POLES THAT NEED TO BE SUPPORTED DURING THE CONTRACTOR'S REPAIRING OPERATIONS.
  5. EVERSOURCE GAS WILL BE RELOCATING A PORTION OF THE GAS MAINS TO BE UNDERGROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GAS TO BE EXPOSED AND CORRECT GAS SHALL BE INSTALLED AND SHALL ACCOMMODATE THE WORK BY EVERSOURCE GAS.
  6. UTILITY LINES DAMAGED BY THE CONTRACTOR SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND THE UTILITY COMPANY AND THE COST OF REPAIR WORK SHALL BE BORNE BY THE CONTRACTOR.
  7. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY FOR THE ADJUSTMENT OF UTILITY GATE BOXES AND VALVES.
  8. THE CONTRACTOR SHALL RESET ALL SANITARY SEWER MANHOLE WORK SHALL BE PAID FOR UNDER "RESET MANHOLE (SANITARY SEWER)".
  9. ANY EXISTING SANITARY SEWER LATERALS DAMAGED DURING CONSTRUCTION MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EXISTING SANITARY SEWER LATERALS REQUIRING TEMPORARY PROTECTION MUST BE RECONSTRUCTED TO ORIGINAL ORDER AND PAID FOR UNDER ITEM "PROTECTION AND SUPPORT OF EXISTING UTILITIES".
  10. THE CONTRACTOR SHALL TAKE PRECAUTION TO PREVENT DAMAGE TO EXISTING UNDERGROUND UTILITIES WHEN OPERATING HEAVY MACHINERY SUCH AS VIBRATORY ROLLERS.

PEQUOT AVENUE DRAINAGE IMPROVEMENTS

NEW LONDON, CONNECTICUT

PEQUOT AVENUE

DATE

DESCRIPTION

DATE

OR

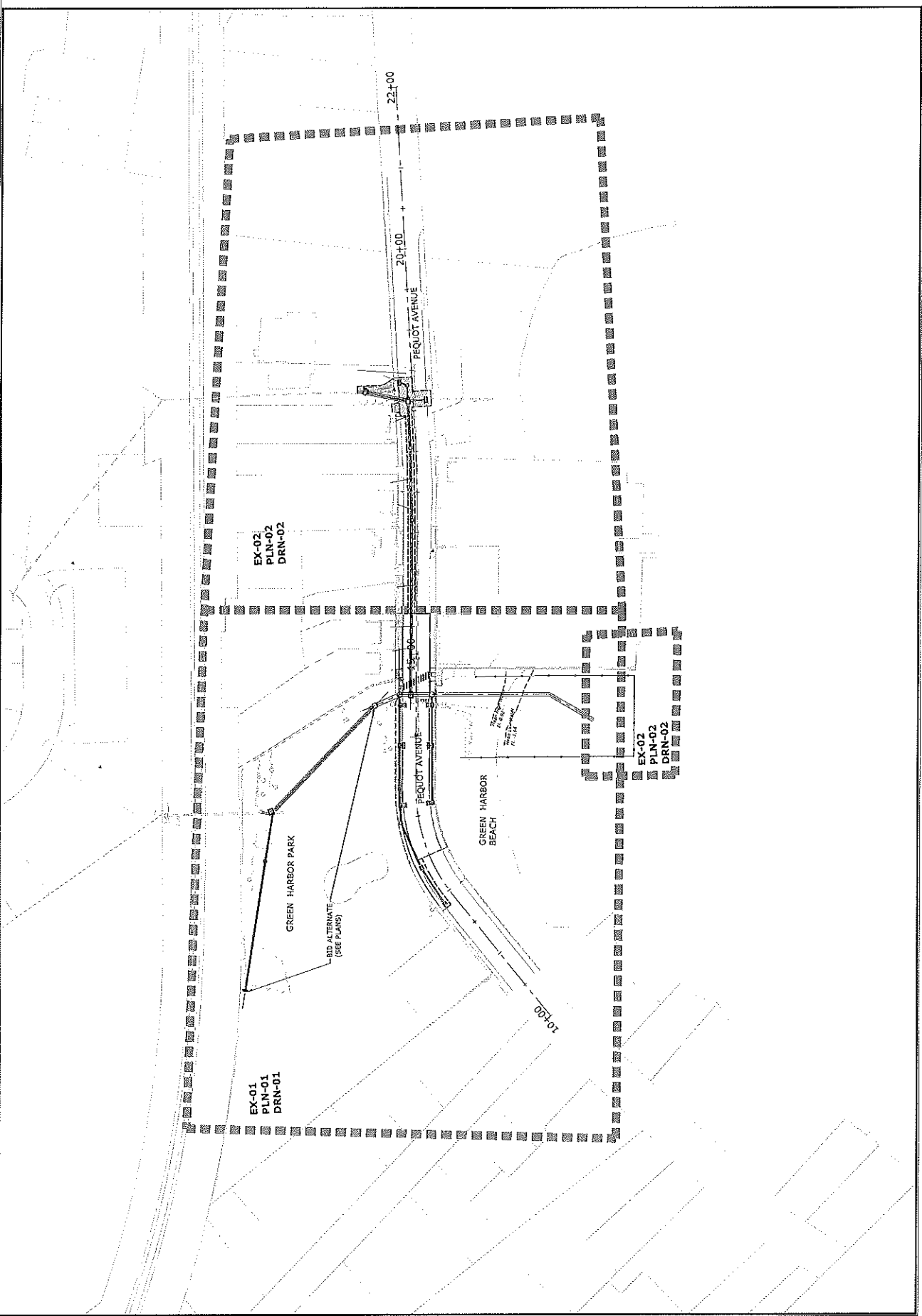
JUN 2017

NO. 2016-43

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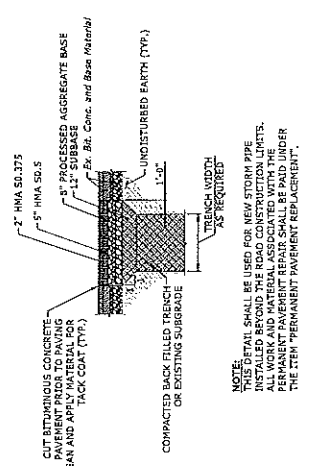
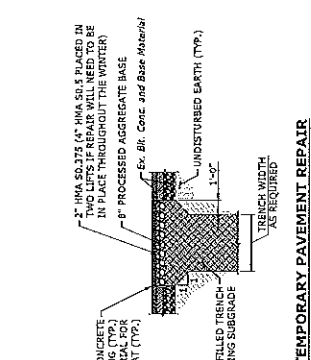
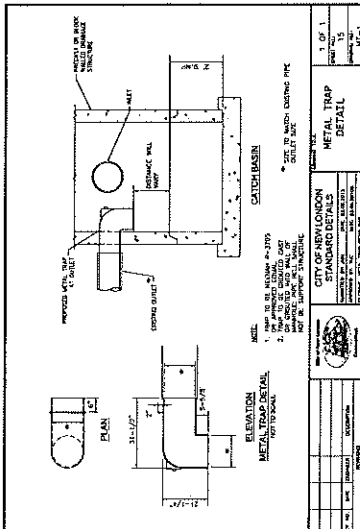
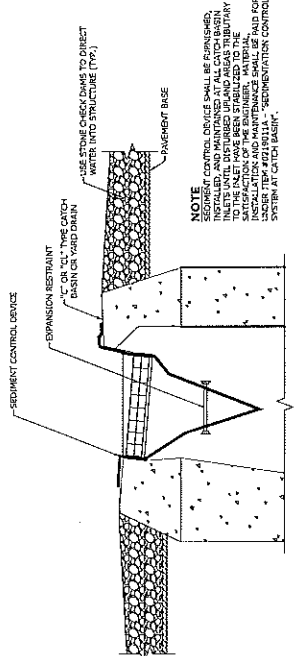
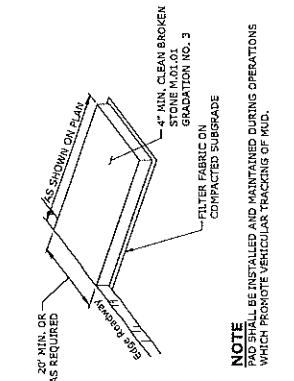
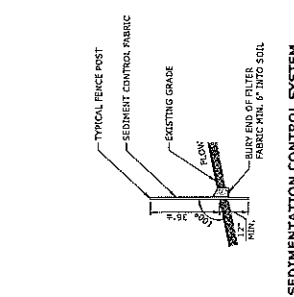
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MILONE & MACBROOK  
99 BROAD STREET  
NEW LONDON, CT 06460  
WWW.MILONEANDMACBROOK.COM

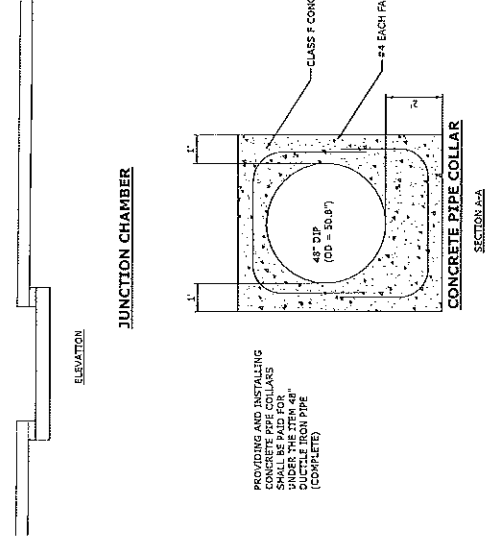
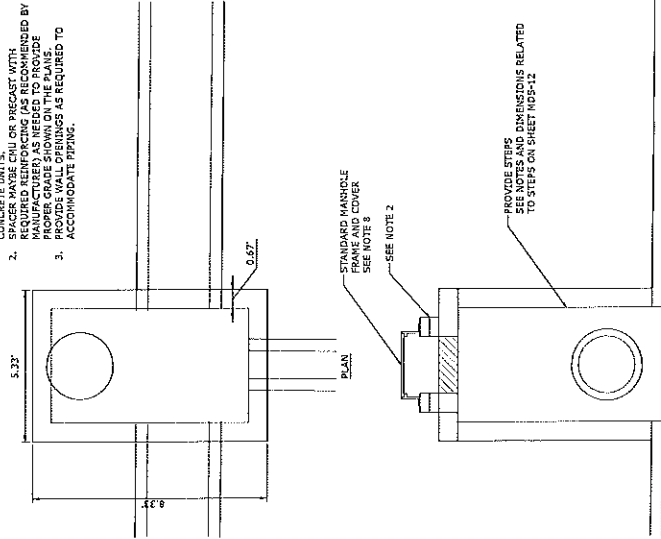


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 www.miloneandmacbroom.com



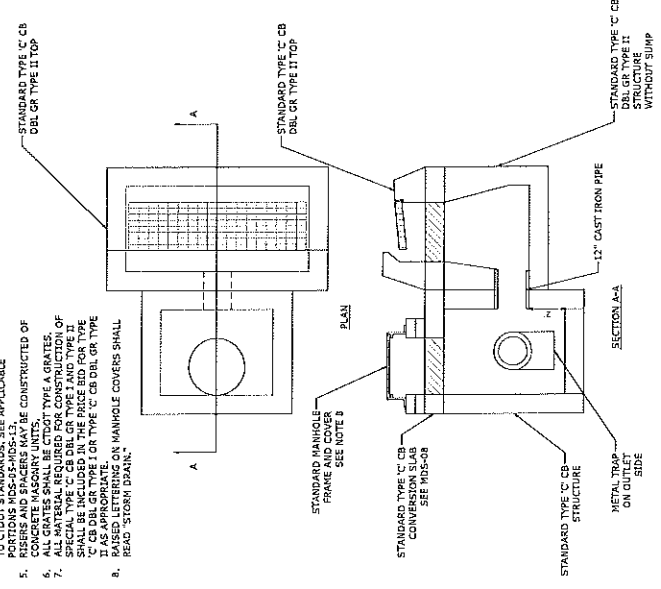


- NOTES:**
1. JUNCTION CHAMBERS SHALL BE PRECAST CONCRETE UNITS.
  2. SPACER MESH CUI OR PRECAST WITH REQUIRED REINFORCING (AS RECOMMENDED BY MANUFACTURER) SHALL BE INSTALLED AT PROPER GRADE SHOWN ON THE PLANS.
  3. PROVIDE WALL OPENINGS AS REQUIRED TO ACCOMMODATE PIPING.

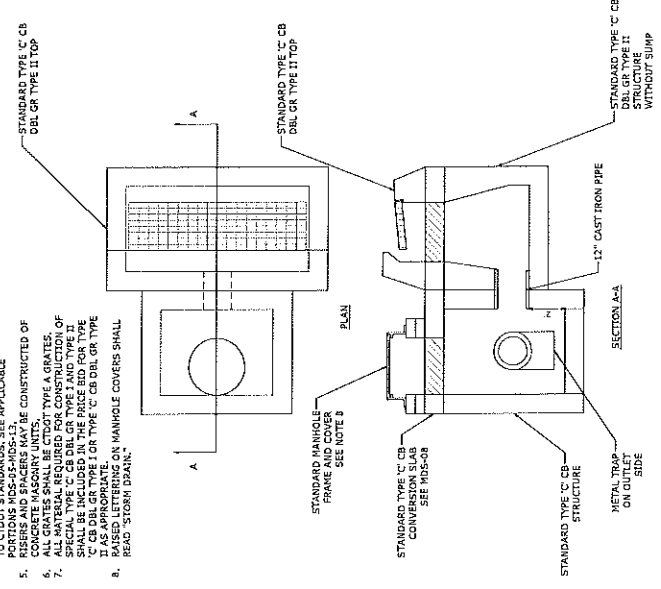


PROVIDING AND INSTALLING COLLARS SHALL BE PAID FOR UNDER THE ITEM 48" CONCRETE PIPE (COMPLETE).

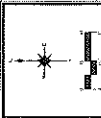
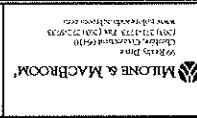
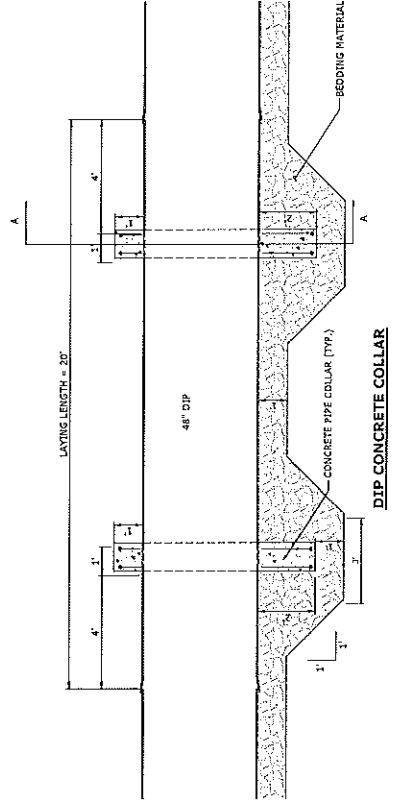
- NOTES CONT:**
4. ALL RASH COMPONENTS SHALL CONFORM TO CDDOT STANDARDS, SEE APPLICABLE PORTIONS MDS-MDS-13.
  5. RISERS AND SPACERS MAY BE CONSTRUCTED OF REBAR AND GRATES.
  6. ALL GRATES SHALL BE CDDOT TYPE A GRATES.
  7. ALL MATERIAL REQUIRED FOR CONSTRUCTION OF COLLARS SHALL BE IDENTIFIED IN THE BIDDING SHALL BE INCLUDED IN THE PRICE BID FOR TYPE 'C' CB DBL GR TYPE I OR TYPE 'C' CB DBL GR TYPE II AS APPROPRIATE. MANHOLE COVERS SHALL BE READ "STORM DRAIN".



**SPECIAL TYPE 'C' CB DBL GR TYPE I**

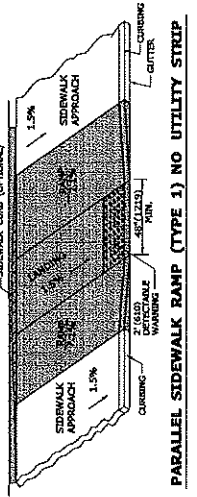


**SPECIAL TYPE 'C' CB DBL GR TYPE II**

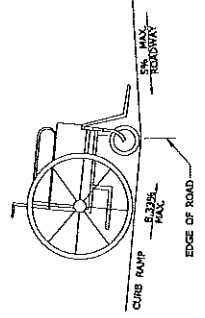


**GENERAL NOTES:**

1. MAXIMUM SLOPES OF SIDEWALK GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP SHOULD NOT EXCEED 5%. THE MAXIMUM GRADE DIFFERENCE BETWEEN THE GUTTER AND CURB RAMP SHALL NOT EXCEED 2".
2. RAMP GRADE SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES. RUNNING SLOPES OF RAMPS SHALL NOT EXCEED 8.33% AND SHALL NOT EXCEED 15' (4.57M) IN LENGTH WITHOUT PROVIDING A LANDING.
3. EXCEED 8.33% AND SHALL NOT EXCEED 15' (4.57M) IN LENGTH WITHOUT PROVIDING A LANDING.
4. SIDEWALK RAMPS SHALL HAVE A COARSE FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE OF THE RAMPS SHALL BE FINISHED TO THE FOLLOWING SPECIFICATIONS:
  - a. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - b. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - c. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - d. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - e. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
5. ANY CROSS THE ENTIRE RAMP CHANGE.
6. ANY FLARED SIDES, DIAGONAL AND PERPENDICULAR RAMPS SHALL HAVE THE RAMP CUT PERPENDICULAR TO THE RAMP SIDES. DIAGONAL AND PERPENDICULAR RAMPS SHOULD BE INSTALLED WITH THE CORNER SIDES OF THE RAMP SHOULD BE THE SAME LENGTH. DIAGONAL RAMPS SHOULD BE INSTALLED WITH THE CORNER SIDES OF THE RAMP PERPENDICULAR TO THE RAMP SIDES.
7. CONCRETE SIDEWALK RAMPS SHOULD NOT BE INSTALLED WHERE CURB HEIGHT IS LESS THAN 20" (508MM). CONTRACTOR SHALL PROVIDE A MINIMUM SLOPE MAY NOT BE AVOIDABLE DUE TO EXISTING SIDEWALK GRADE. IN ACCORDANCE WITH SECTION 15.4274 FOR REMOVAL SHALL BE USED UNLESS OTHERWISE SHOWN ON THE PLANS.
8. CONCRETE SIDEWALK RAMPS SHALL BE CAST IN PLACE.
9. SIDEWALK RAMPS SHALL BE CAST IN PLACE.
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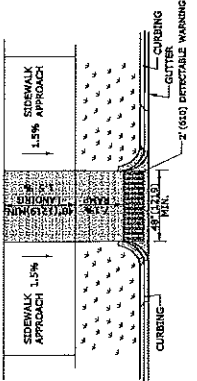


**PARALLEL SIDEWALK RAMP (TYPE 1) NO UTILITY STRIP**



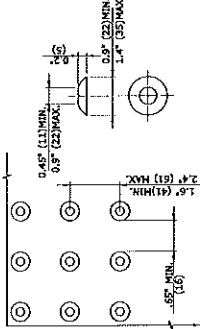
**DETAIL 1  
SEE GRADE CHANGE AT ROADWAY INTERFACE  
SEE NOTE 1 SHEET HW-921.02A**

**PERPENDICULAR SIDEWALK RAMP  
W/CURB RETURNS / UTILITY GRASS STRIP (TYPE 2b)**  
\* OPTIONAL FLARE ONE SIDE OF RAMP

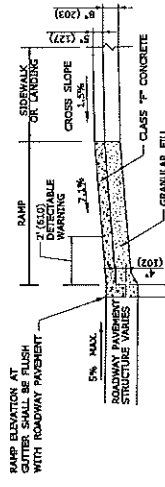


**GENERAL NOTES:**

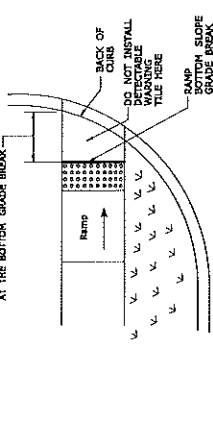
1. RAMPED MEDANS SHALL HAVE A CURB RAMP AT EITHER END AND LEVEL LANDINGS A MINIMUM OF 5' x 5' (1.5m x 1.5m) IN BETWEEN. THE MEDAN SHALL BE FINISHED TO THE FOLLOWING SPECIFICATIONS:
  - a. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - b. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - c. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - d. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
  - e. FINISH SHALL BE UNIFORM, FREE OF SAGS AND SURFT GRADE CHANGES.
2. SEE GENERAL NOTES ON SHEET 1.



**STANDARD DOME ON DETECTABLE WARNING TILES**

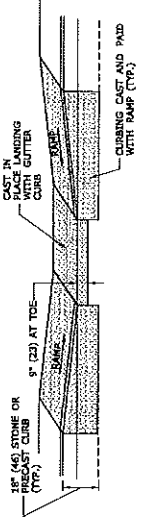


**TYPICAL SECTION THRU SIDEWALK RAMP  
SEE NOTE 2 AND 17**

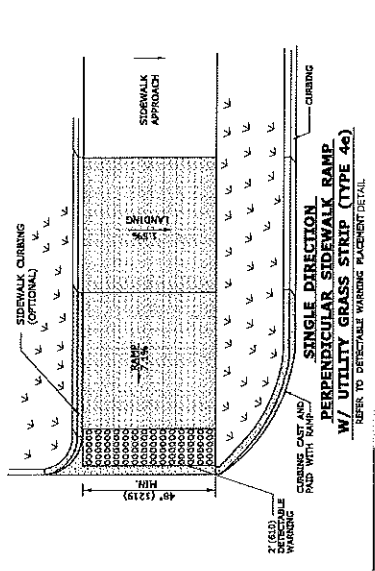


**DETECTABLE WARNING  
PLACEMENT DETAIL**

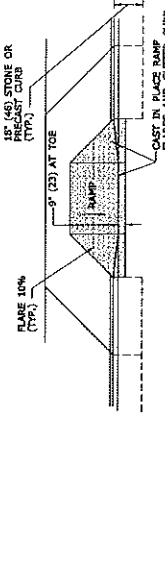
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED



**TYPICAL ELEVATION PARALLEL SIDEWALK RAMP  
WITH CAST IN PLACE GUTTER**



**SINGLE DIRECTION  
PERPENDICULAR SIDEWALK RAMP  
W/ UTILITY GRASS STRIP (TYPE 4c)**



**TYPICAL ELEVATION PERPENDICULAR SIDEWALK RAMP  
WITH CAST IN PLACE GUTTER**

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

NO.	DATE	DESCRIPTION
	8/7	

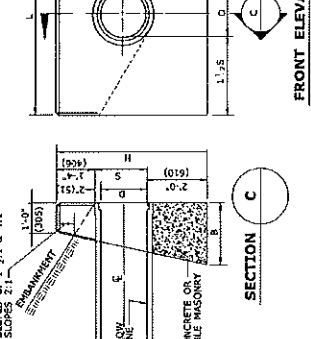
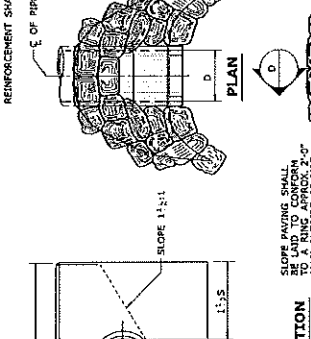
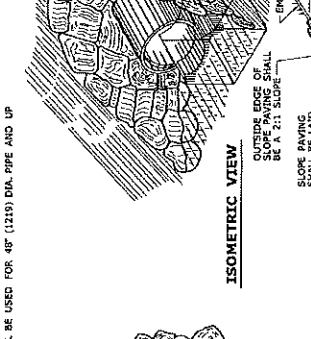
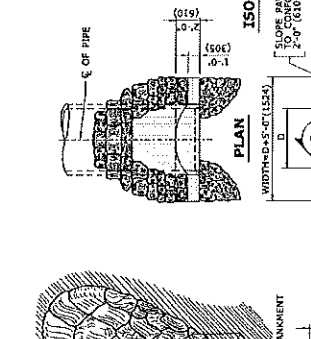
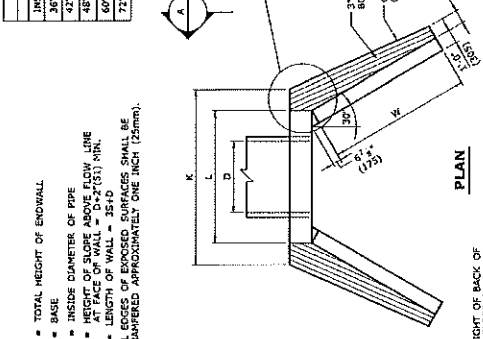
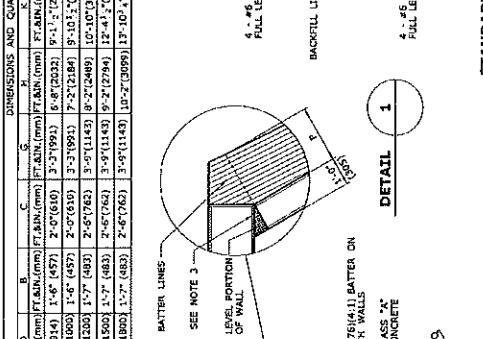
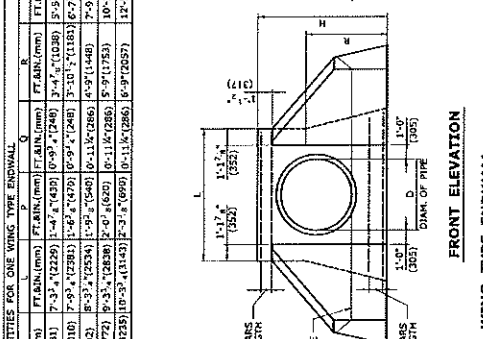
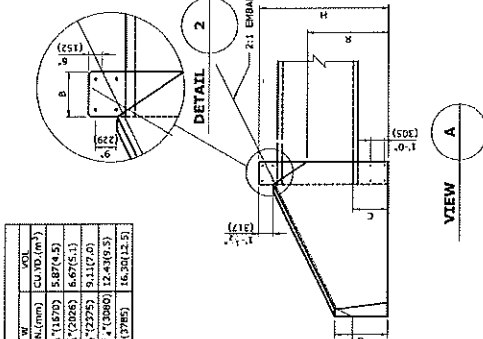
**GENERAL NOTES:**

1. ALL DIMENSIONS ARE NOMINAL. WHEN ONE DIMENSION IS USED FOR NO. OF PIPES, THE DIMENSIONS OF THE ENDWALL SHALL CONFORM TO THAT DIMENSION. THE WALL AND FLOORING SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
2. THESE ENDWALLS SHALL ONLY BE USED AT LOCATIONS WHERE THEY ARE OUTSIDE THE DESIGN CLEAR ZONE.
3. COST OF REINFORCING BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CLASS 'A' CONCRETE.
4. ALL REINFORCING BARS SHALL HAVE 3" (76) COVER MIN.

**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
15" (381)	0.257(236)	0.257(236)	0.257(236)	0.257(236)	1.07(27.7)
18" (457)	0.397(366)	0.397(366)	0.397(366)	0.397(366)	3.52(97.3)
24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)

\* APPROXIMATE QUANTITY FOR MINIMUM CONDITION



**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
15" (381)	0.257(236)	0.257(236)	0.257(236)	0.257(236)	1.07(27.7)
18" (457)	0.397(366)	0.397(366)	0.397(366)	0.397(366)	3.52(97.3)
24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)

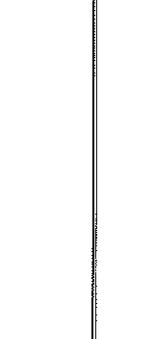
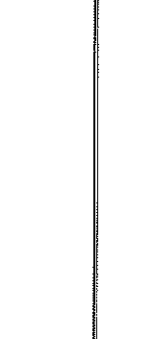
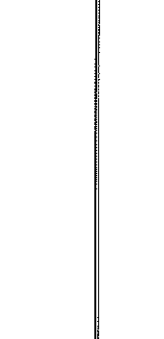
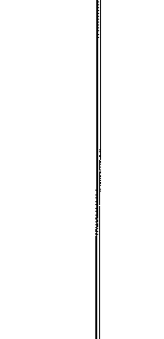
**GENERAL NOTES:**

1. ALL DIMENSIONS ARE NOMINAL. WHEN ONE DIMENSION IS USED FOR NO. OF PIPES, THE DIMENSIONS OF THE ENDWALL SHALL CONFORM TO THAT DIMENSION. THE WALL AND FLOORING SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
2. THESE ENDWALLS SHALL ONLY BE USED AT LOCATIONS WHERE THEY ARE OUTSIDE THE DESIGN CLEAR ZONE.
3. COST OF REINFORCING BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CLASS 'A' CONCRETE.
4. ALL REINFORCING BARS SHALL HAVE 3" (76) COVER MIN.

**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
15" (381)	0.257(236)	0.257(236)	0.257(236)	0.257(236)	1.07(27.7)
18" (457)	0.397(366)	0.397(366)	0.397(366)	0.397(366)	3.52(97.3)
24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)

\* APPROXIMATE QUANTITY FOR MINIMUM CONDITION



**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
15" (381)	0.257(236)	0.257(236)	0.257(236)	0.257(236)	1.07(27.7)
18" (457)	0.397(366)	0.397(366)	0.397(366)	0.397(366)	3.52(97.3)
24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)

**GENERAL NOTES:**

1. ALL DIMENSIONS ARE NOMINAL. WHEN ONE DIMENSION IS USED FOR NO. OF PIPES, THE DIMENSIONS OF THE ENDWALL SHALL CONFORM TO THAT DIMENSION. THE WALL AND FLOORING SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
2. THESE ENDWALLS SHALL ONLY BE USED AT LOCATIONS WHERE THEY ARE OUTSIDE THE DESIGN CLEAR ZONE.
3. COST OF REINFORCING BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CLASS 'A' CONCRETE.
4. ALL REINFORCING BARS SHALL HAVE 3" (76) COVER MIN.

**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
15" (381)	0.257(236)	0.257(236)	0.257(236)	0.257(236)	1.07(27.7)
18" (457)	0.397(366)	0.397(366)	0.397(366)	0.397(366)	3.52(97.3)
24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)



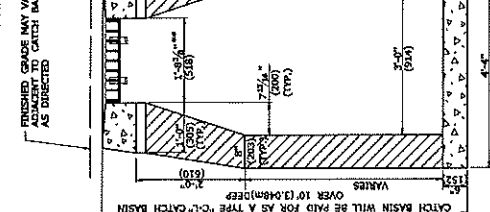
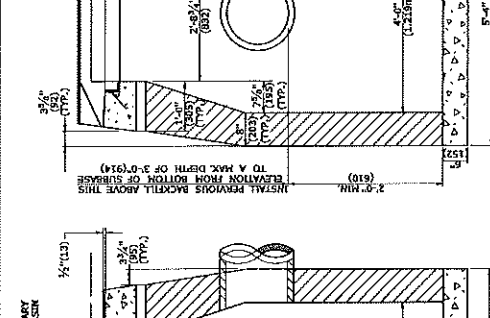
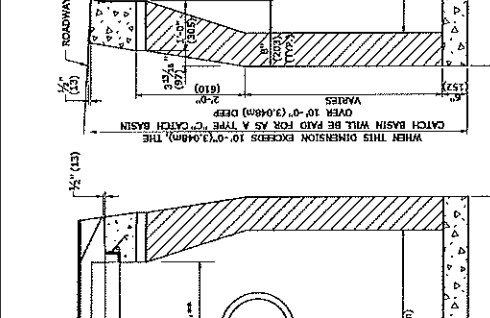
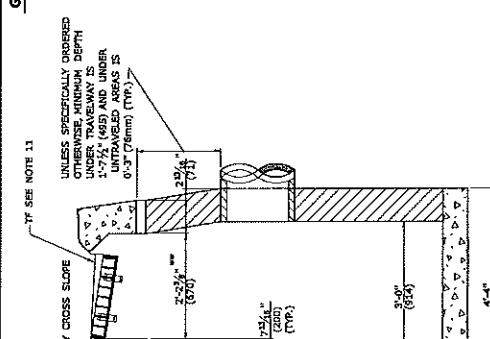
**TABLE WITH QUANTITIES**

D	INS.(mm)	C.V.(m <sup>3</sup> )	VOLUME OF FOOTING	SLOPE PAVING	VOL. (m <sup>3</sup> )
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24" (610)	0.707(658)	0.707(658)	0.707(658)	0.707(658)	4.93(133)
30" (762)	1.017(950)	1.017(950)	1.017(950)	1.017(950)	4.53(123)
36" (914)	1.327(1222)	1.327(1222)	1.327(1222)	1.327(1222)	4.73(127)
42" (1067)	1.637(1514)	1.637(1514)	1.637(1514)	1.637(1514)	5.15(139)
48" (1219)	1.947(1806)	1.947(1806)	1.947(1806)	1.947(1806)	5.66(153)
60" (1524)	2.567(2388)	2.567(2388)	2.567(2388)	2.567(2388)	7.27(199)
72" (1829)	3.187(2980)	3.187(2980)	3.187(2980)	3.187(2980)	9.37(256)



**GENERAL NOTES:**

1. FOR DETAILS OF FRAME AND GRATE SEE STANDARD SHEET HW-507.06.
2. USE APPROPRIATE CONCRETE FOR CURBING SHOWN ON PLANS. IF CURBING IS NOT SPECIFIED ON THE PLANS, IT SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
3. ALL PAVEMENTS IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A COURSE OF 1/2" (12.5mm) SAND OR 1/4" (6.3mm) GRANULAR FILLER. SHALL BE COVERED IN THE BID PRICE FOR THE TYPE OF CATCH BASIN INSTALLER.
4. USE 5'-0" (1.53m) OR UPGRADE SIDE OF CONTIGUOUS GRADE AND 1'-0" (305mm) ON DOWNGRADE SIDE OF CONTIGUOUS GRADE OR AS DIRECTED.
5. IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE MASONRY CODES. THE CURBING SHALL BE CONSTRUCTED TO A MINIMUM THICKNESS OF 4" (102mm) OVER THE ENTIRE LENGTH OF THE CURBING. THE CURBING SHALL BE CONSTRUCTED TO A MINIMUM THICKNESS OF 3" (76mm) NO PROJECTION SHALL EXTEND INSIDE THE LIMITS NOTED BY "A".
6. WALL THICKNESS OF ALL CIP'S OVER 12" (305mm) DEEP SHALL BE INCREASED TO 12" (305mm) THICK. FIRST 10" (254mm) OF ALL CIP'S SHALL BE 12" (305mm) THICK. THE REMAINING 2" (51mm) SHALL BE 8" (203mm) THICK.
7. IMMEDIATELY ABOVE THE BOTTOM OF THE PREVIOUS JOIST.
8. MINIMUM CONCRETE COMPRESSIVE STRENGTH OF F<sub>c</sub> = 4000 PSI (27,580 kPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
9. LATEST STATE OF CONNECTICUT'S STANDARD SPECIFICATIONS AND SUPPLEMENTS SHALL GOVERN.
10. SPACER MAY BE CNU OR PRECAST WITH REQUIRED REINFORCING (RECOMMENDED BY THE MANUFACTURER).
11. TOP OF FRAME (T<sub>F</sub>) ELEVATION SHALL BE MEASURED IN THE CENTER OF GRATE @ GUTTER LINE.

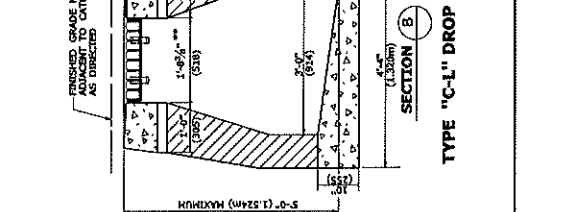
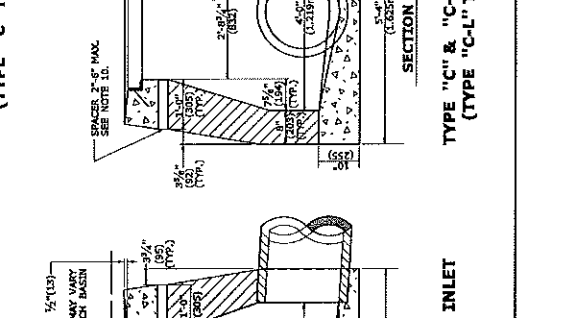
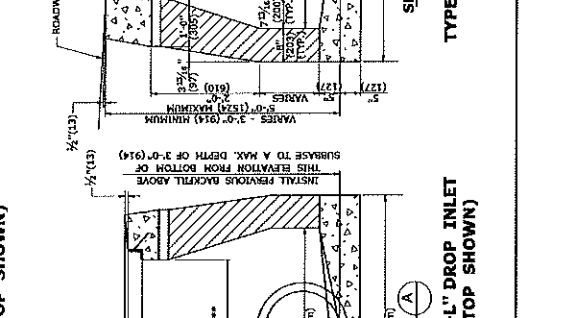
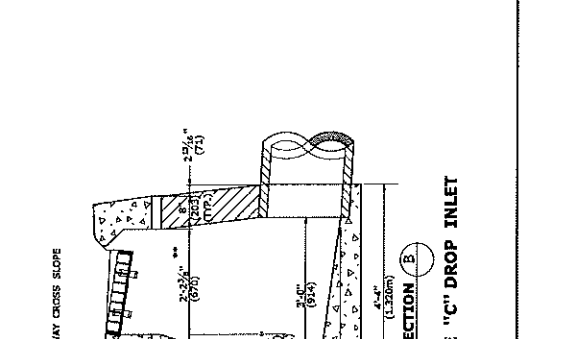
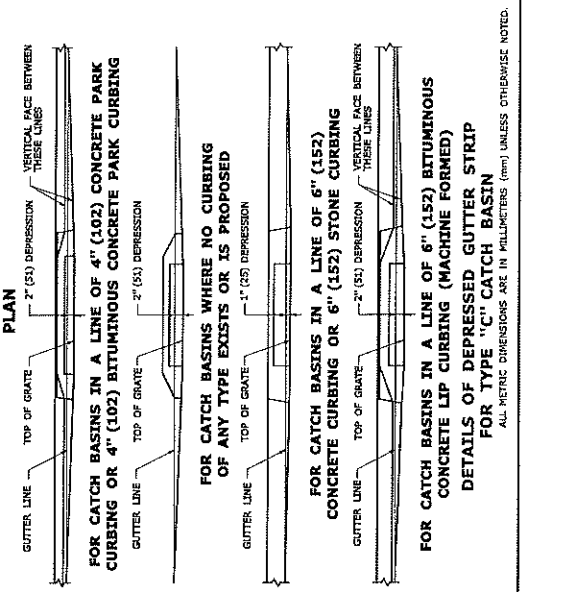


TYPE "C" CATCH BASIN

TYPE "C-L" CATCH BASIN (TYPE "C" TOP SHOWN)

TYPE "C-L" CATCH BASIN

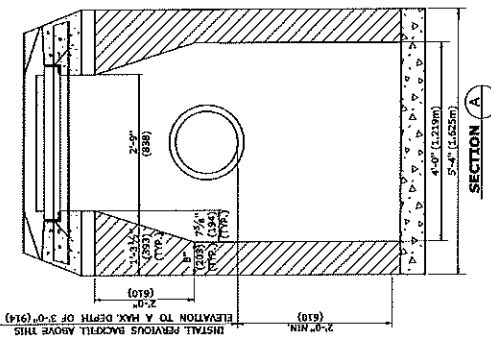
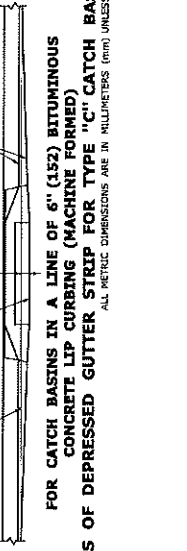
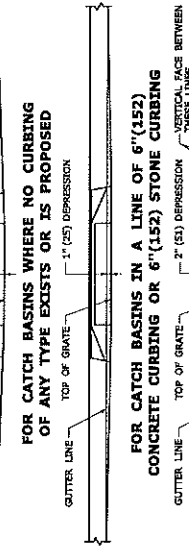
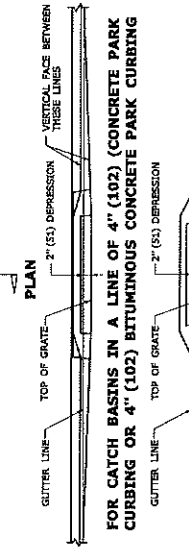
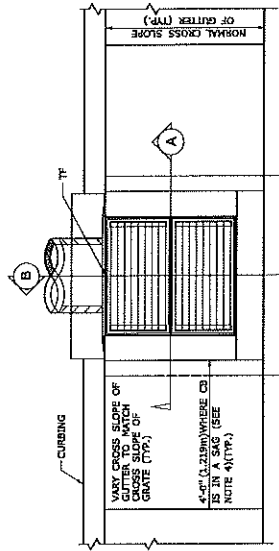
TYPE "C-L" DROP INLET



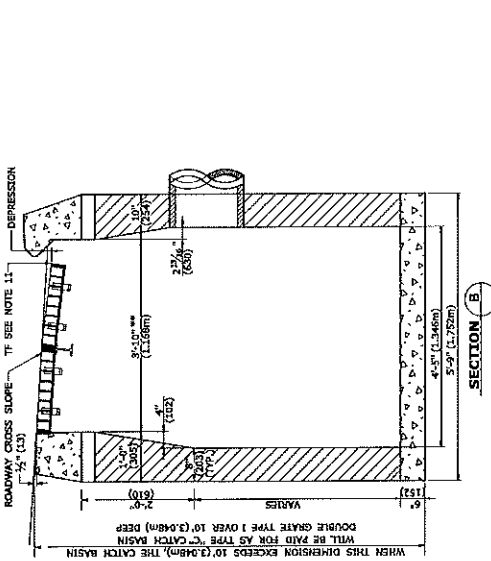
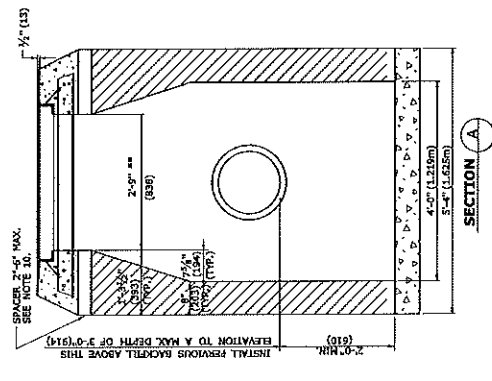
TYPE "C" & "C-L" DROP INLET (TYPE "C-L" TOP SHOWN)

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

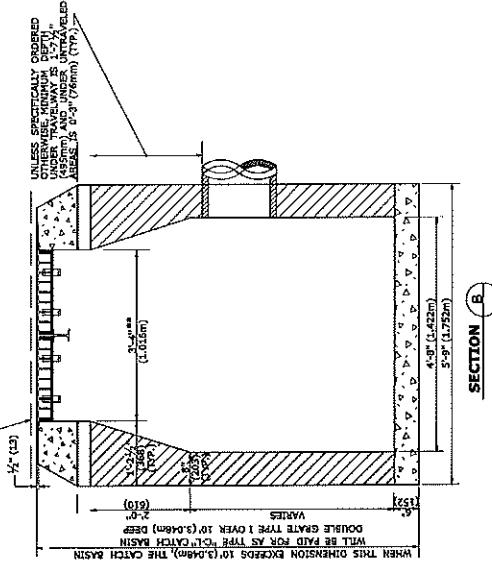
- GENERAL NOTES:**
- FOR DETAILS OF FRAME AND GRATE SEE STANDARD SHEET M4557-06
  - USE APPROPRIATE CONCRETE TOP FOR CURBING SHOWN ON PLANS. IF CURBING IS NOT SPECIFIED ON THE PLANS, IT SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
  - ALL PAVES OF STRUCTURES IN CONTACT WITH CONCRETE PAVEMENT SHALL BE COVERED WITH A LAYER OF TAR PAPER OR APPROVED EQUIVALENT. THE TARPAPER SHALL BE INCLUDED IN THE BID PRICE FOR THE TYPE OF CATCH BASIN INSTALLER.
  - USE 6" (152mm) ON SPURGE SIDE OF CONTIGUOUS GRADE AND 1 1/2" (38mm) ON DOWNHILL SIDE OF CONTIGUOUS GRADE OR AS DIRECTED.
  - 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. STANDARD SPECIFICATIONS CORRELLING SHALL BE PERMITTED TO BE USED FOR THE PAVEMENT. THE WALL THICKNESS OF ALL 6" (152mm) OVER 12" (3048mm) DEEP SHALL BE INCREASED TO 12" (3048mm) THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. (12" (3048mm) THICKNESS WILL START AFTER THE FIRST 10" (2540mm)).
  - TO CONVERT SUBSURFACE DRAINAGE OPENINGS SHALL BE FORMED IN THE FOUR WALLS AT OR IMMEDIATELY ABOVE THE MINIMUM CONCRETE COMPRESSIVE STRENGTH OF  $F_c = 4000$  PSI (27,580 kPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
  - MINIMUM CONCRETE COMPRESSIVE STRENGTH OF  $F_c = 4000$  PSI (27,580 kPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
  - SPACERS MAY BE CHL OR PRECAST WITH REQUIRED REINFORCING (RECOMMENDED BY MANUFACTURER)
  - AS APPLICABLE TO PROJECT, THE MINIMUM CURB ELEVATION SHALL BE MEASURED IN THE CENTER OF THE GRATE @ GUTTER LINE.
  - TOP OF FRAME (FS) ELEVATION SHALL BE MEASURED IN THE CENTER OF THE GRATE @ GUTTER LINE.



SECTION A  
TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE I



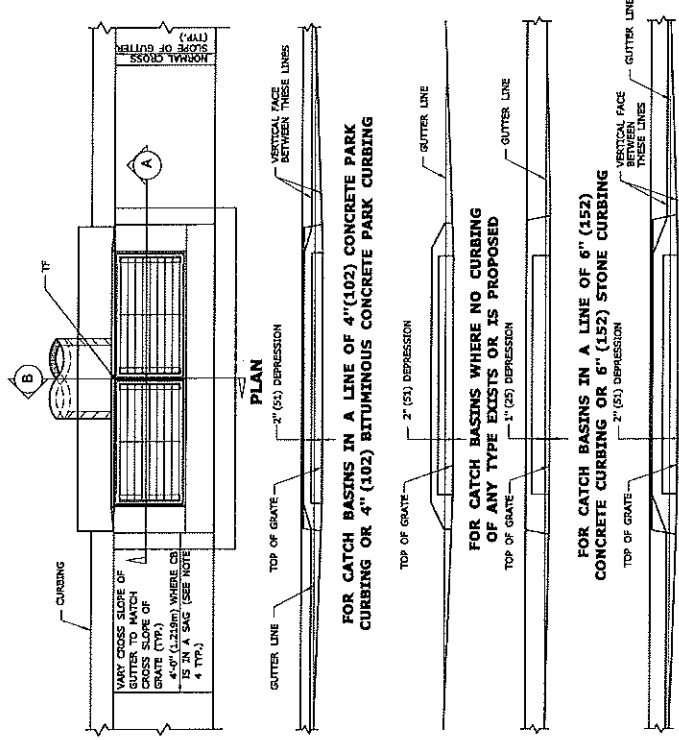
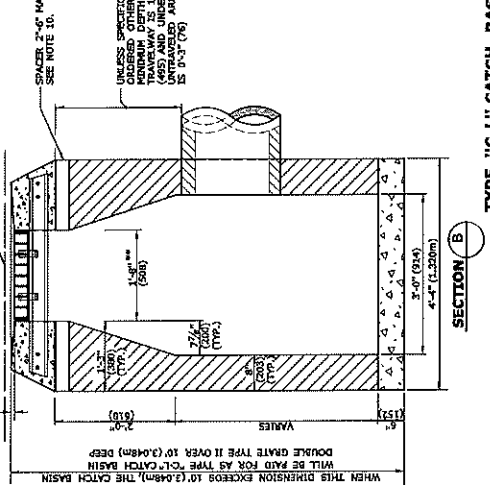
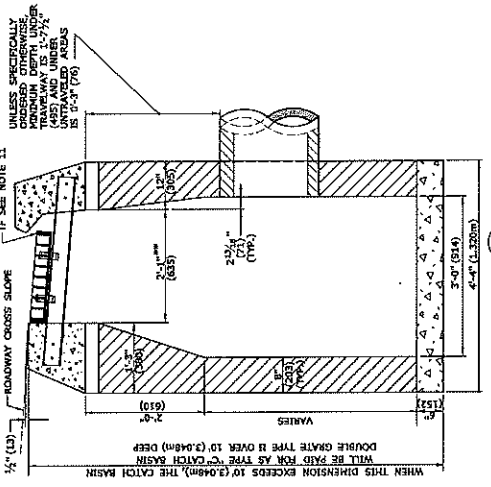
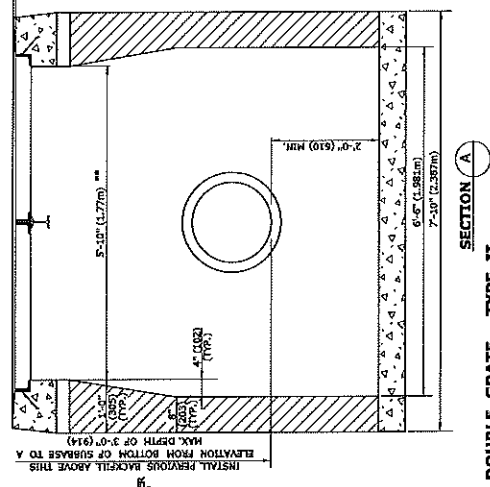
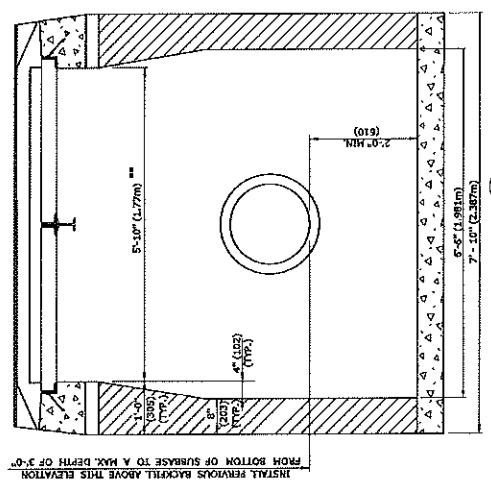
SECTION A  
TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II



DETAILS OF DEPRESSED GUTTER STRIP FOR TYPE "C" CATCH BASIN

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

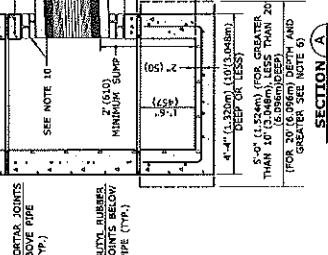
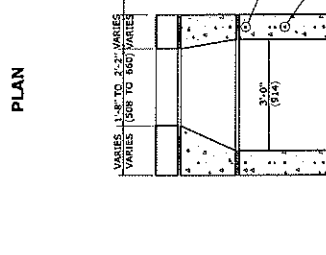
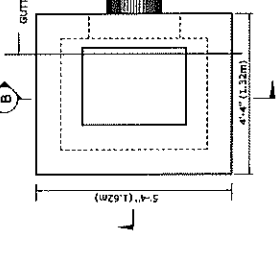
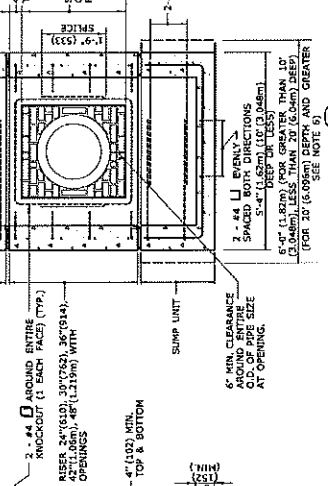
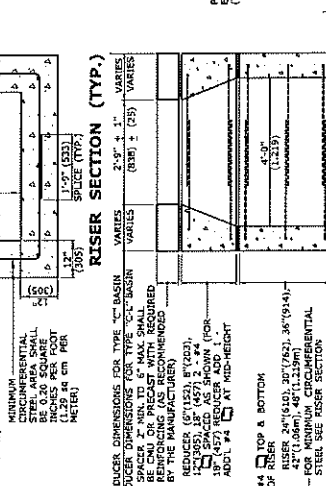
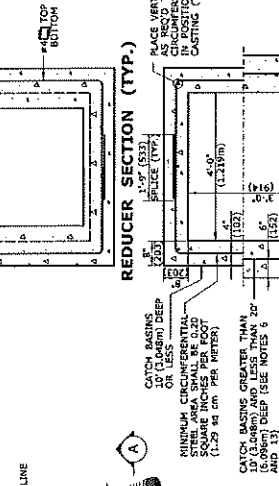
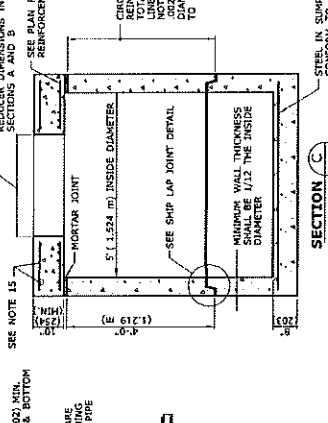
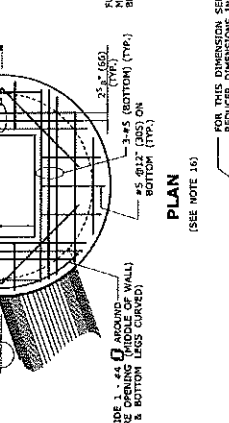
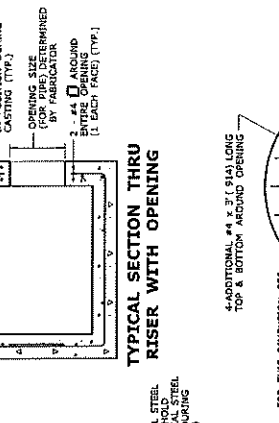
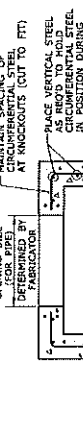
- GENERAL NOTES:**
- FOR DETAILS OF FRAME AND CURB, SEE STANDARDS SHEET HW-507.02.
  - USE APPROPRIATE CONCRETE FOR CURBS AND CURBS ON PAVEMENT. IF CURBING IS NOT SPECIFIED ON THE PLANS, IT SHALL BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.
  - ALL FACES OF STRUCTURES IN CONTACT WITH CONCRETE PAVEMENT 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 OR AS DIRECTED.
  - USE 8'-0" (2.438m) ON UPGRADE SIDE OF CONTINUOUS GRADE AND 1'-0" (0.305) ON DOWNGRADE SIDE OF CONTINUOUS GRADE OR AS DIRECTED.
  - IF MASONRY UNITS ARE REQUIRED, THE BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE OVER ALL DIMENSIONS AND FINISHES SHOWN ON THE PLANS. THE FINISHES SHALL BE PERMITTED TO A MAXIMUM OF 3/16" NO PROJECTION SHALL EXTEND INSIDE THE LIMITS NOTED BY "X".
  - WALL THICKNESS OF ALL CURBS OVER 10" (254mm) DEEP SHALL BE INCREASED TO 12" (305) THICK. INSIDE DIMENSION SHALL REMAIN THE SAME. (12" (305) THICKNESS WILL START AFTER THE FIRST 10" (254mm)).
  - MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE F<sub>c</sub> = 4000 PSI (27.580 MPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
  - LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.
  - TO PROVIDE PROPER GRADE SHOW ON PLANS, REINFORCING (RECOMMENDED BY THE MANUFACTURER) AS NEEDED.
  - TOP OF FRAME (TF) ELEVATION SHALL BE MEASURED IN BETWEEN BOTH GRATES @ THE GUTTER.



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

**GENERAL NOTES:**

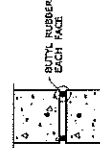
- REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
- DETAILS ON THIS SHEET SHOW STANDARD REINFORCEMENT. WELDED WIRE FABRIC WITH AN OVERLAP SHALL BE USED ONLY IF SPECIFICALLY NOTED OTHERWISE.
- ALL LAP SPLICES, DEVELOPMENT LENGTHS, BENDS (FOR REINFORCEMENT) AND WELDED WIRE FABRIC SHALL CONFORM TO AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- ALL REINFORCEMENT SHALL HAVE A MINIMUM CLEAR COVER OF 2"(51), EXCEPT FOR BENEATH CONCRETE WHERE THE MINIMUM SHALL BE 1" (25.4).
- MINIMUM CONCRETE COMPRESSIVE STRENGTH: F<sub>c</sub> = 4000 PSI (27.580 MPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
- BASES AND RISERS AT A DEPTH OF 20'(6.096) AND GREATER SHALL BE DESIGNED BY THE CONTRACTOR AND WORKING DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
- CONCRETE SHALL BE PLACED AND CURED ACCORDING TO STANDARD PRACTICES.
- FOR DOT MAINTENANCE PERSONNEL RISERS MAY BE PREFABRICATED WITH PIPE OPENINGS IN PLACE SHALL BE PROVIDED. ANY RISERS USED WHERE A PIPE OPENING IS TO REMAIN IN PLACE, ALL FOUR WALLS, ADEQUATE REINFORCING AROUND PIPE OPENINGS CONFORMING TO THESE SPECIFICATIONS SHALL BE PROVIDED. RISERS WHERE THE REINFORCEMENT OF THE PIPE WITH RESPECT TO THE CORNER OF THE CATCH BASIN CANNOT BE CHANGED, A ROUND STRUCTURE CONFORMING TO ASTM C778 SHALL BE USED. REINFORCING FOR THE ROUND TOP SLAB WITH RECTANGULAR OPENING SHALL CONFORM TO DETAILS SHOWN HEREON TO STATE OF CONNECTICUT.
- THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL RECLOSE SAID OPENING AT NO ADDITIONAL COST TO THE STATE. OPENING FOR PIPE SHALL NOT RESULT IN THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL COVER.
- FOR ADDITIONAL DETAILS, SEE OTHER CATCH BASIN SHEETS.
- WALL THICKNESS OF ALL CBS OVER 10'(3.048m) DEEP SHALL BE INCREASED TO 12" (305) THICK. THE FIRST 10'(3.048m).
- BUTYL RUBBER JOINT SEAL SHALL CONFORM TO AASHTO M-198 AND MORTAR SHALL CONFORM TO THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS MATERIAL SECTION M11.04.
- THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE PROVIDED IN THE TOPS OF SLABS. THE TOTAL AREA OF REINFORCEMENT PROVIDED SHALL BE PROVIDED IN EACH DIRECTION. THE MAXIMUM SPACING OF THIS REINFORCEMENT SHALL NOT EXCEED 18 INCHES (457).
- THE DETAILS SHOWN IN THE PLAN VIEW FOR PRECAST CONCRETE ROUND STRUCTURES SHALL ALSO BE USED FOR CONVERTING MANHOLES TO CATCH BASINS.



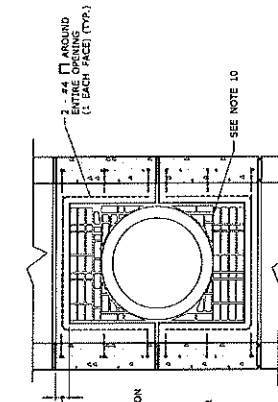
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

**GENERAL NOTES:**

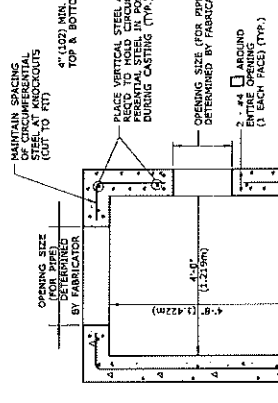
- REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
- ALL REINFORCING SHALL BE WELDED WIRE FABRIC WITH AN AREA EQUAL TO OR GREATER THAN THE REINFORCING SHOWN MAY BE SUBSTITUTED.
- ALL LAP SPICES, DEVELOPMENT LENGTHS, BENDS FOR REINFORCEMENT, AND WELDED WIRE FABRIC SHALL CONFORM TO ASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
- CONCRETE SHALL BE PLACED IN LAYERS OF 2" (51.18) EXCEPT FOR BENEATH BOTTOM REINFORCEMENT IN TOP SLABS, WHERE THE MINIMUM CONCRETE COMPRESSIVE STRENGTH  $F_c = 4000$  PSI (27.580 MPa) SHALL BE OBTAINED PRIOR TO SHIPPING.
- RISERS AND RISERS AT A DEPTH OF 20" (508mm) AND GREATER SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER FOR REVIEW.
- SEE STANDARD SHEET HW-507.08 FOR CATCH BASIN FRAMES AND GRATES.
- FOR DOT MAINTENANCE PERSONNEL, RISERS MAY BE PREFABRICATED WITH PIPE OPENINGS IN ALL FOUR WALLS. ADEQUATE REINFORCING AROUND PIPE OPENINGS CONFORMING TO THESE NOTES MUST BE PROVIDED. ANY RISERS USED WHERE A PIPE OPENING IS TO REMAIN IN PLACE SHALL BE CAST WITH A BUTYL RUBBER JOINT SEAL ABOVE THE OPENING.
- RISERS SHALL NEVER HAVE CORNER PIPE ENTRIES, WHERE THE ALIGNMENT OF THE PIPE WITH RESPECT TO THE CORNER OF THE CATCH BASIN CANNOT BE CHANGED. A ROUND STRUCTURE CONFORMING TO ASTM C478 SHALL BE USED FOR REINFORCING FOR THE ROUND TOP SLAB WITH CONCRETE REINFORCING SHALL BE CAST USING MATERIALS WHICH CONFORM TO STATE OF CONNECTICUT STANDARD SPECIFICATIONS SECTION 14.02.02. IF THE ENGINEER DETERMINES THAT THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL RECLOSE AND REINFORCE THE OPENING TO THE SATISFACTION OF THE ENGINEER.
- ALL PIPE OPENINGS SHALL BE CLOSED USING MATERIALS WHICH CONFORM TO STATE OF CONNECTICUT STANDARD SPECIFICATIONS SECTION 14.02.02. IF THE ENGINEER DETERMINES THAT THE CLOSURE OF ANY PIPE OPENING IS UNSATISFACTORY, THE CONTRACTOR SHALL RECLOSE AND REINFORCE THE OPENING TO THE SATISFACTION OF THE ENGINEER.
- REINFORCING SHALL BE CAST WITH CONCRETE REINFORCING SHALL BE CAST USING MATERIALS WHICH CONFORM TO STATE OF CONNECTICUT STANDARD SPECIFICATIONS AND SUPPLEMENTALS SHALL GOVERN.
- FOR ADDITIONAL DETAILS SEE OTHER CATCH BASIN SHEETS.
- CONCRETE SHALL BE CAST WITH A BUTYL RUBBER JOINT SEAL ABOVE THE OPENING. THE INSIDE DIMENSION SHALL REMAIN THE SAME. (THE 12" (303) THICKNESS WILL START AFTER THE RISER 10" (254mm).)
- BUTYL RUBBER JOINT SEAL SHALL CONFORM TO ASHTO M-198 AND MORTAR SHALL CONFORM TO THE LATEST STATE OF CONNECTICUT STANDARD SPECIFICATIONS MATERIAL SECTION 14.04.



**MORTAR JOINT BUTYL RUBBER DETAIL**

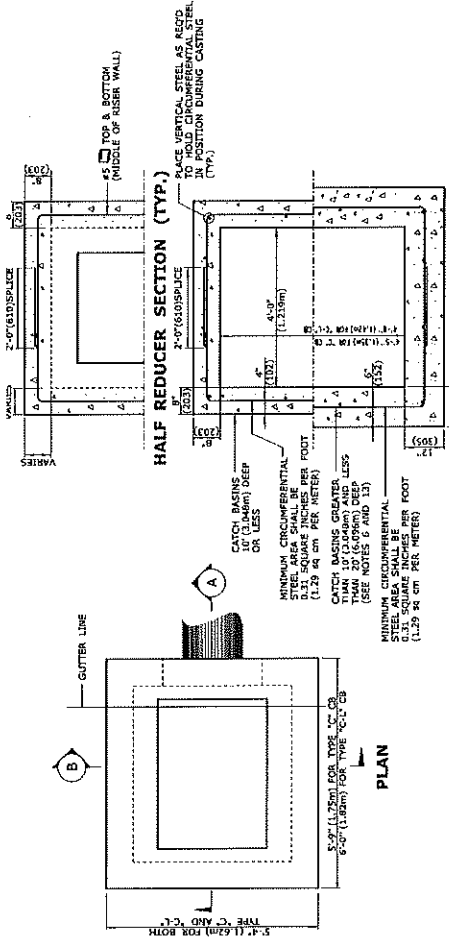


**DOUBLE RISER OPENING (TYP.)  
 PIPES GREATER THAN 24" (610) O.D.**

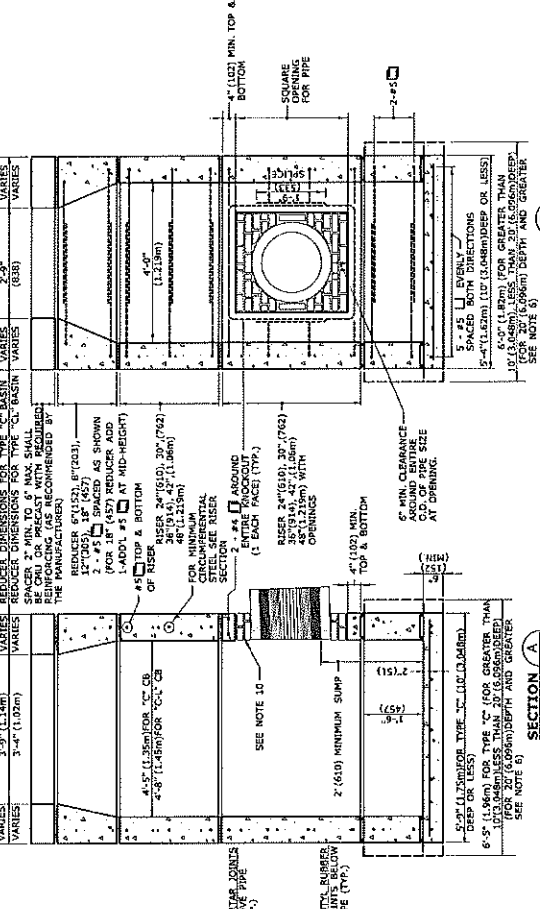


**TYPICAL SECTION THRU SINGLE  
 RISER WITH OPENING**

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



**RISER SECTION (TYP.)**



**SECTION A**  
**SECTION B**  
**SECTION C**

NOTE: REINFORCEMENT IN FAR FACE WALL NOT SHOWN FOR CLARITY

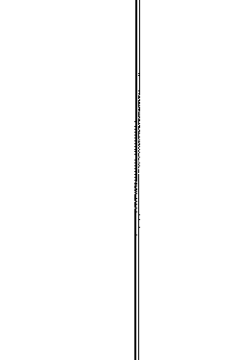
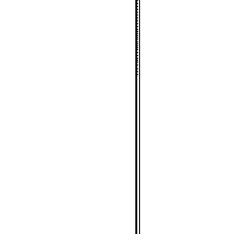
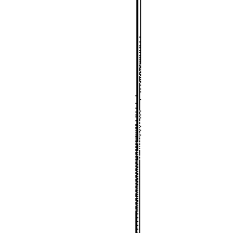
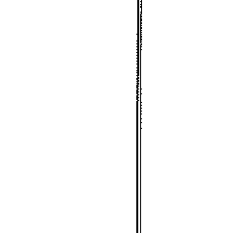
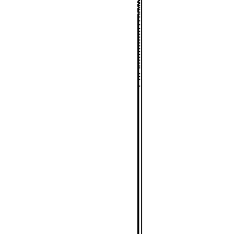
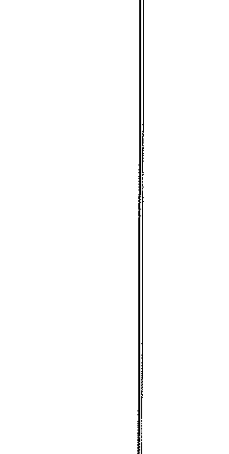
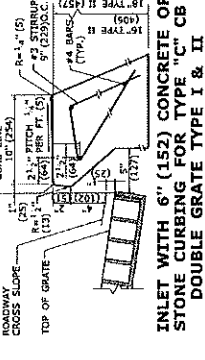
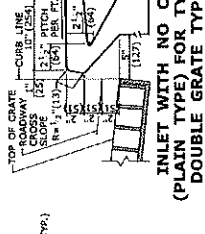
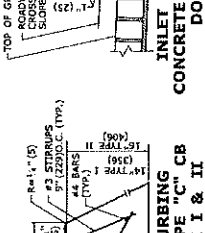
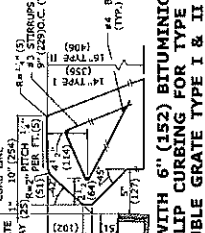
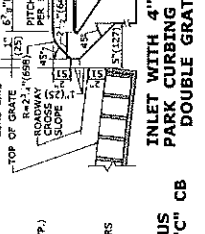
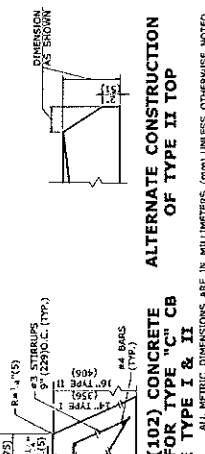
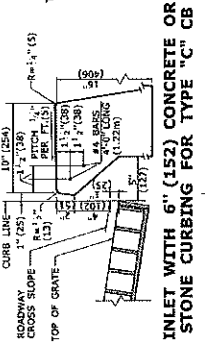
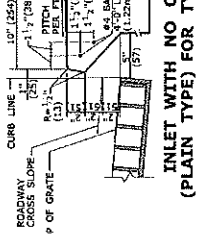
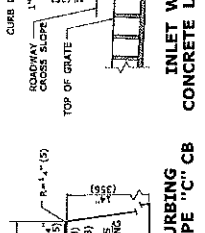
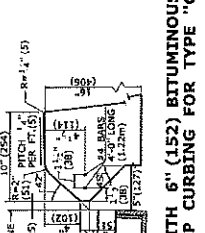
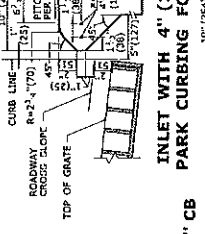
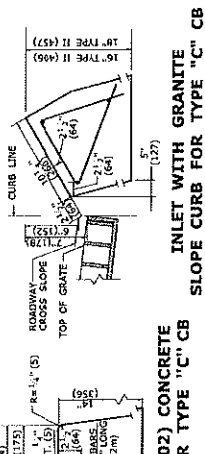
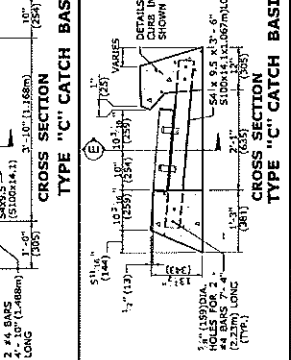
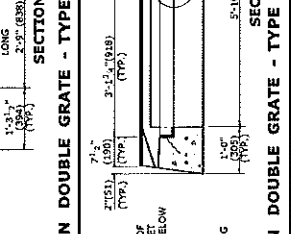
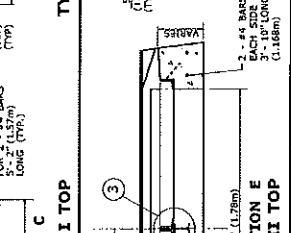
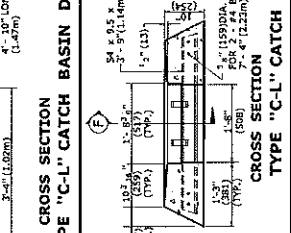
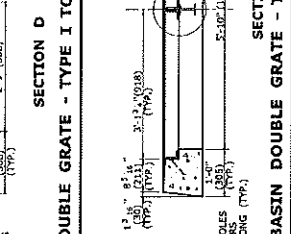
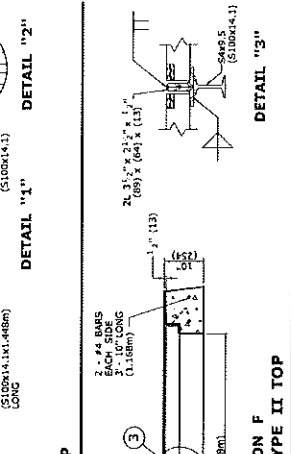
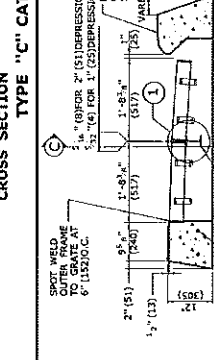
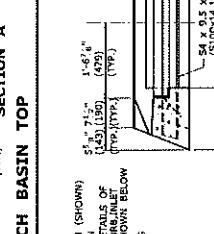
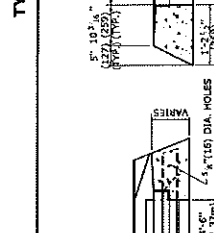
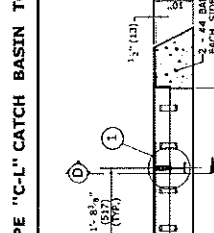
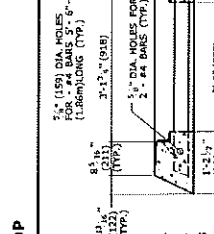
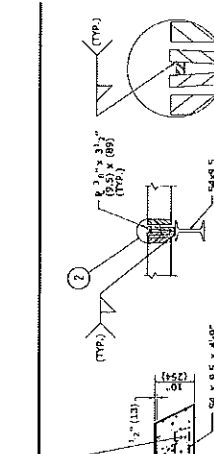
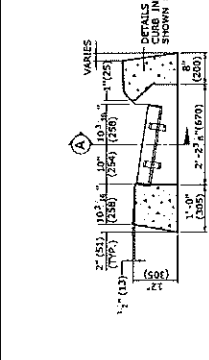
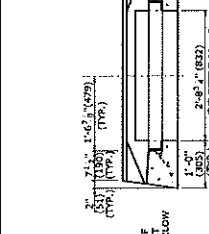
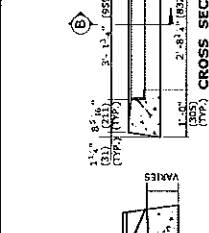
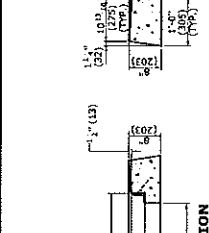
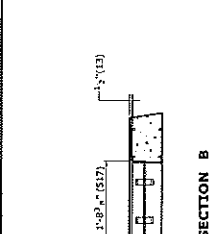
PRECAST CONCRETE TYPE "C" & "C-L" DOUBLE GRATE TYPE I CATCH BASIN  
 (UNDER 10" (254mm) DEEP SHOWN)



NO.	DATE	DESCRIPTION

**GENERAL NOTES:**

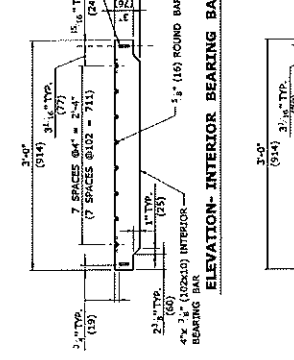
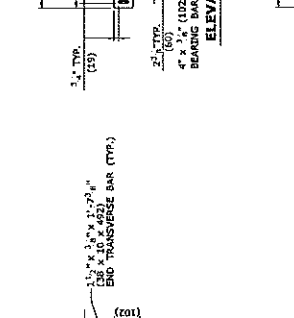
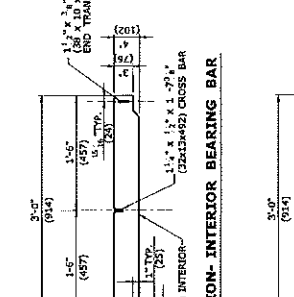
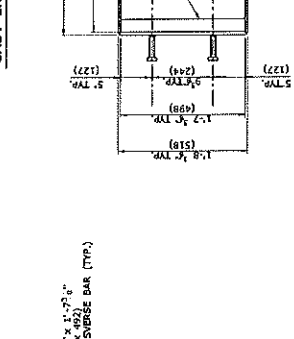
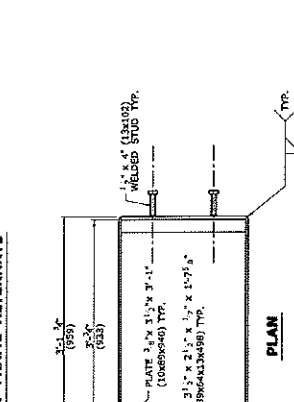
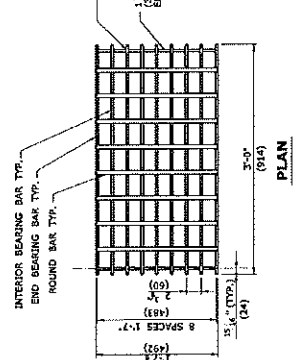
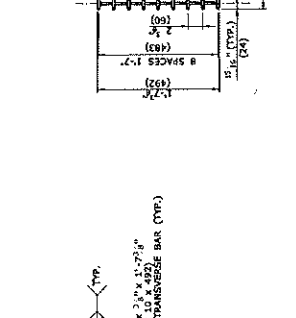
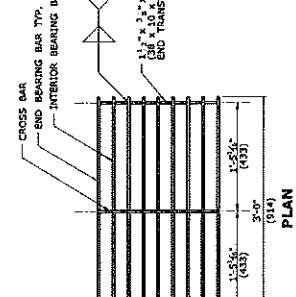
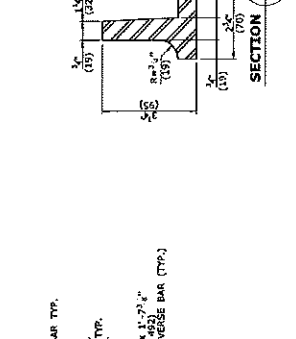
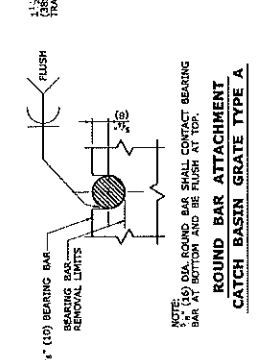
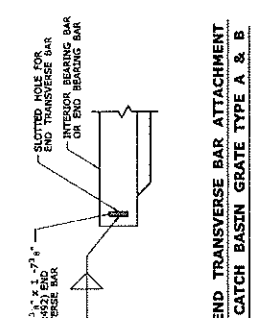
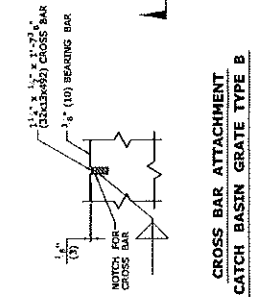
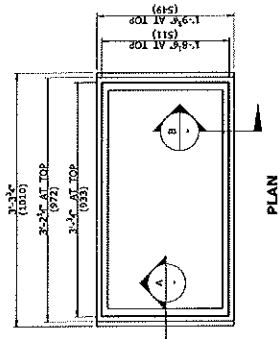
- FOR DETAILS OF FRAME AND GRATE SEE STANDARD SHEET HW-507 CB.
- ALL STEEL EXCEPT REINFORCING BARS SHALL BE GALVANIZED IN CONFORMANCE WITH SECTION HEADS OF CONNECTICUT'S STANDARD SPECIFICATIONS.
- ALL BARS SHALL HAVE A MINIMUM 2" (51) COVER.



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

**GENERAL NOTES:**

1. STEEL OR CAST IRON SHALL BE USED FOR FRAMES. STEEL SHALL BE USED FOR TYPE "A" & "B" GRATES.
2. TYPE "A" GRATES SHALL BE USED ON ALL ROADWAYS WHERE BICYCLE TRAFFIC IS ALLOWED OR AS DIRECTED BY THE ENGINEER.
3. TYPE "B" GRATES SHALL BE USED ON ALL LIMITED ACCESS OR AS DIRECTED BY THE ENGINEER.
4. STEEL FRAMES AND GRATES SHALL BE GALVANIZED IN ACCORDANCE WITH ARTICLE 6.03.03.
5. DO NOT GALVANIZE CAST IRON FRAMES.
6. DIMENSIONAL TOLERANCES SHALL BE ± 1/16" (1.6).
7. ALL STEEL BARS SHALL BE WELDED AT ALL INTERSECTIONS.
8. ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS STRUCTURAL WELDING CODE D11.



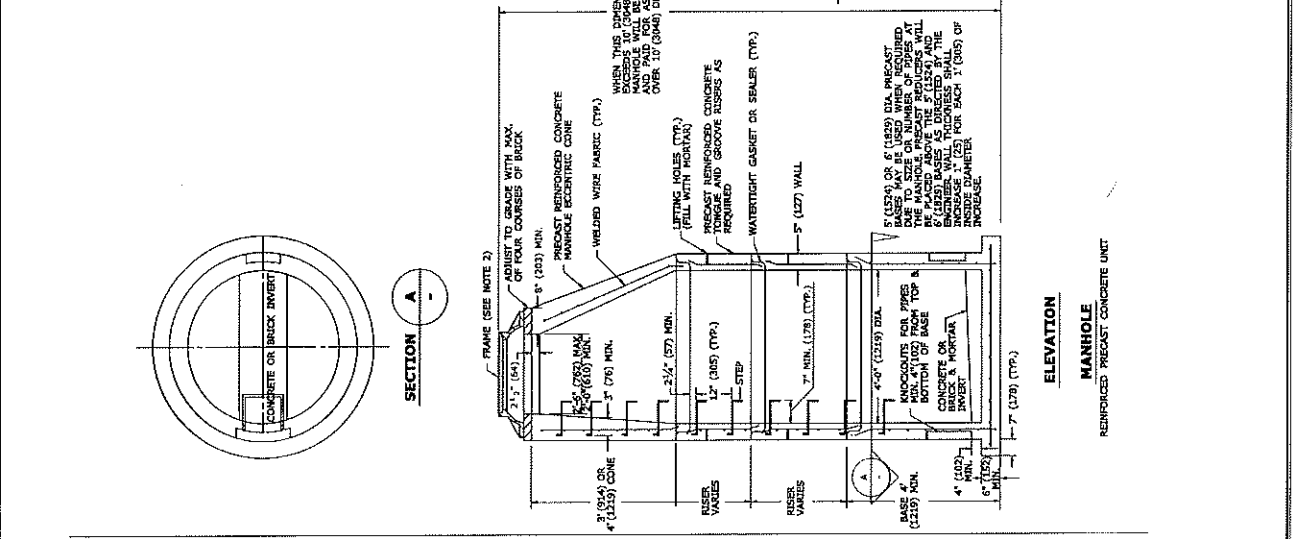
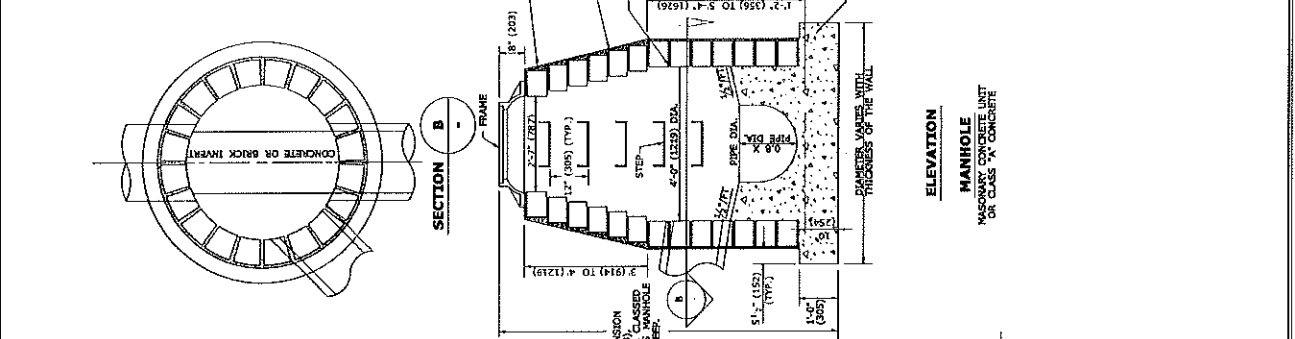
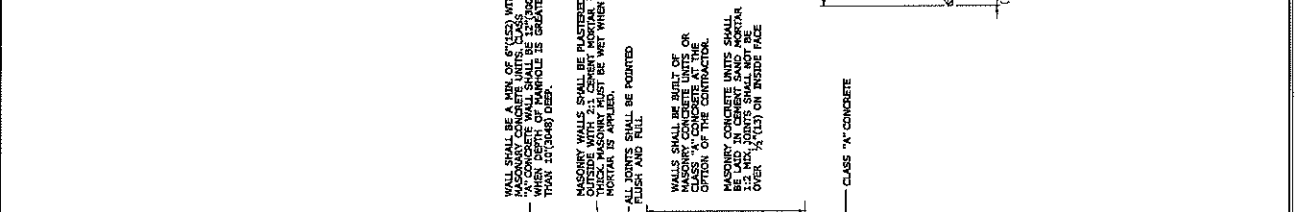
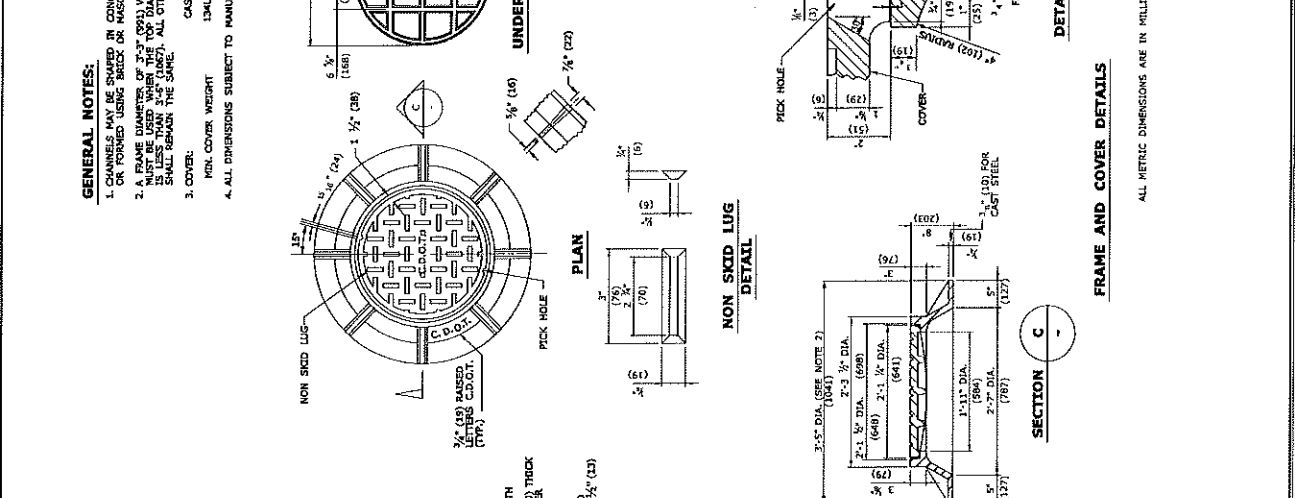
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (MM) UNLESS OTHERWISE NOTED



DATE	DESCRIPTION	DATE BY

**GENERAL NOTES:**

- CHANNELS MAY BE SHAPED IN CONCRETE BASE OF MANHOLE ON FORMED USING BRICK OR MASONRY.
- ALL METRIC DIMENSIONS ARE IN MILLIMETERS (MM) UNLESS OTHERWISE NOTED
- COVER: CAST IRON STEEL  
 MIN. COVER WEIGHT 134LB.(61kg) 134LB.(61kg)
- ALL DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

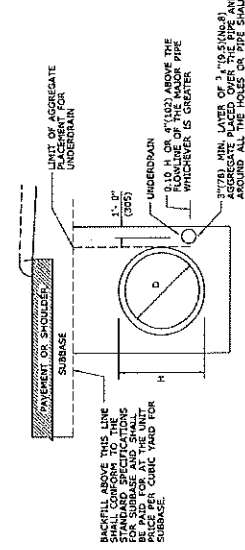


CONCRETE OR BRICK INVERT  
 4'-0" (1016) DIA.  
 4'-0" (1016) DIA.  
 4'-0" (1016) DIA.

CONCRETE OR BRICK INVERT  
 4'-0" (1016) DIA.

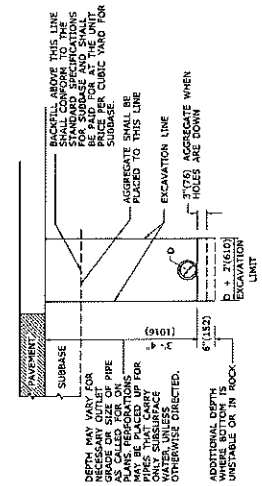
CONCRETE OR BRICK INVERT  
 4'-0" (1016) DIA.

**GENERAL NOTES:**  
 1. THE OUTLET ENDWALL CAN BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE SHALL BE CLASS CC CONCRETE.  
 2. IF PRECAST CONCRETE ENDWALL IS USED, THE OUTLET SHALL BE CRACKED AND SEALED TO ENDWALL DURING WITH NON-SHRINK GROUT.



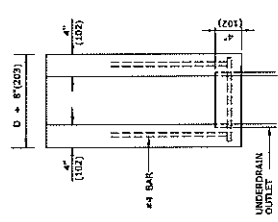
NOTE:  
 PAY LIMIT FOR TRENCH EXCAVATION AND BEDDING SHALL BE THE SAME AS FOR TRENCH EXCAVATION AND BEDDING OF MATERIAL OR GRANULAR FILL.

**CULVERT AND UNDERDRAIN IN THE SAME TRENCH**

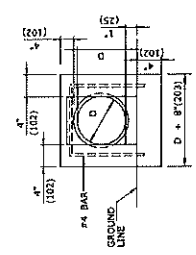


**UNDERDRAIN**

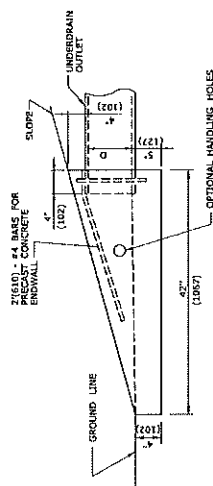
ALL METRIC DIMENSIONS ARE IN MILLIMETERS (MM) UNLESS OTHERWISE NOTED



**PLAN VIEW**



**ELEVATION**



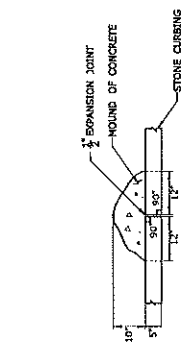
**ENDWALL**

**UNDERDRAIN OUTLET DETAILS**

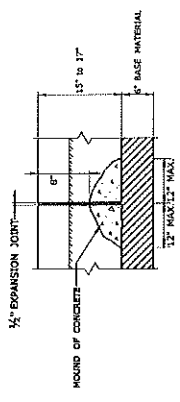
DESCRIPTION	DATE	BY

MISCELLANEOUS DETAILS  
 PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
 PEQUOT AVENUE  
 NEW LONDON, CONNECTICUT

DATE: JULY 2018  
 DRAWING NO: 20180443  
 PROJECT NO: MGS-15

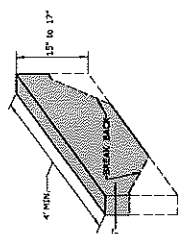


**PLAN**

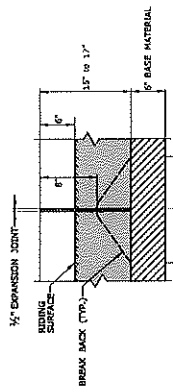


**BACK ELEVATION**

**MOUND OF CONCRETE AT ALL JOINTS FOR STONE CURBING**

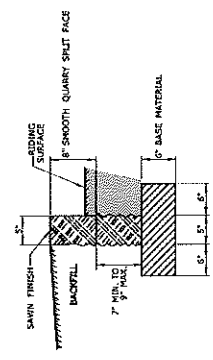


**STONE CURBING**



**FRONT ELEVATION**

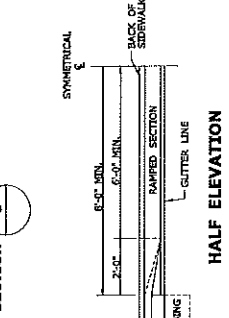
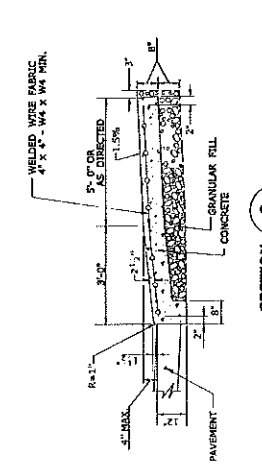
MAXIMUM ALLOWABLE BREAK BACK IS 5" FOR CURB LENGTHS OF 6' OR MORE, 8" FOR CURB LENGTHS LESS THAN 6'



**SECTION**

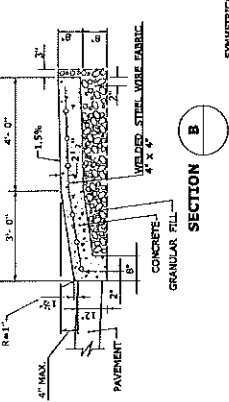
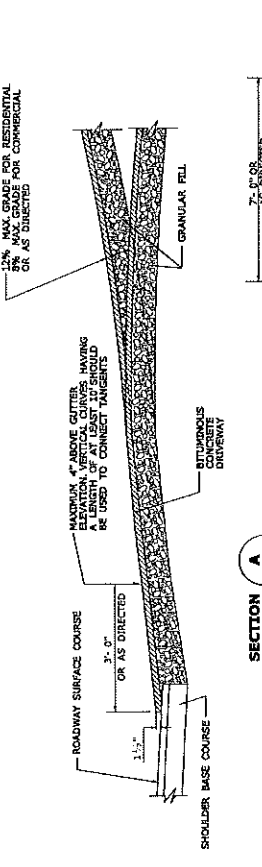
DESCRIPTION	DATE	BY

**GENERAL NOTES:**  
 1. DRIVEWAY ESTABLISHMENT SHALL BE A MINIMUM OF 12' WIDE, EXCLUDING CURBING WHEN PRESENT.  
 2. WELDED WIRE FABRIC MATS WITH REINFORCING AT CLOSER SPACING MAY BE USED.  
 3. SURFACE INHA. 50.375 TO BE PLACED IN TWO EQUAL LIFTS FOR BOTH RESIDENTIAL AND COMMERCIAL DRIVEWAYS.



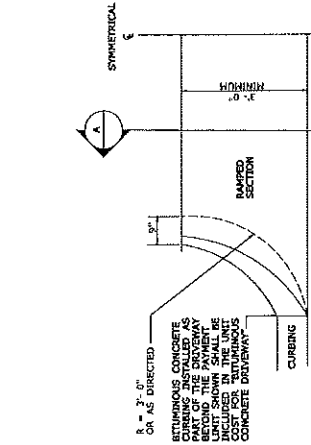
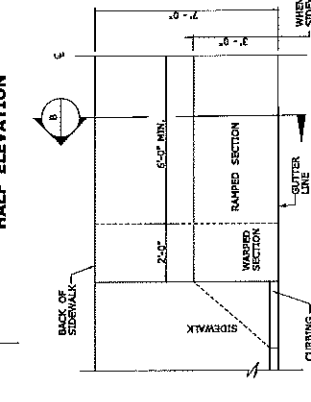
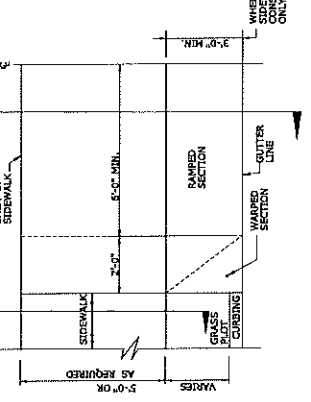
**SECTION C**  
 HALF ELEVATION  
 CONCRETE DRIVEWAY RAMP WHERE CURB IS SEPARATED FROM SIDEWALK BY GRASS PLOT

**SECTION D**  
 HALF ELEVATION  
 5' WIDE CONCRETE SIDEWALK WITH GRASS PLOT



**SECTION A**  
 TYPICAL SECTION  
 BITUMINOUS CONCRETE SIDEWALK AND DRIVEWAY

**SECTION B**  
 HALF ELEVATION  
 CONCRETE DRIVEWAY RAMP WHERE SIDEWALK ADJOINS CURBING



**HALF PLAN OF CONCRETE DRIVEWAY RAMP WHERE CURB IS SEPARATED FROM SIDEWALK BY GRASS PLOT**

**HALF PLAN OF CONCRETE DRIVEWAY RAMP WHERE SIDEWALK ADJOINS CURBING**

**HALF BITUMINOUS CONCRETE DRIVEWAY PLAN**

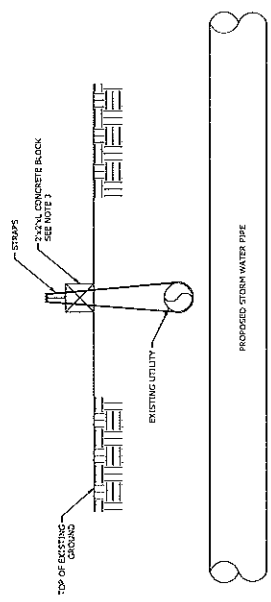
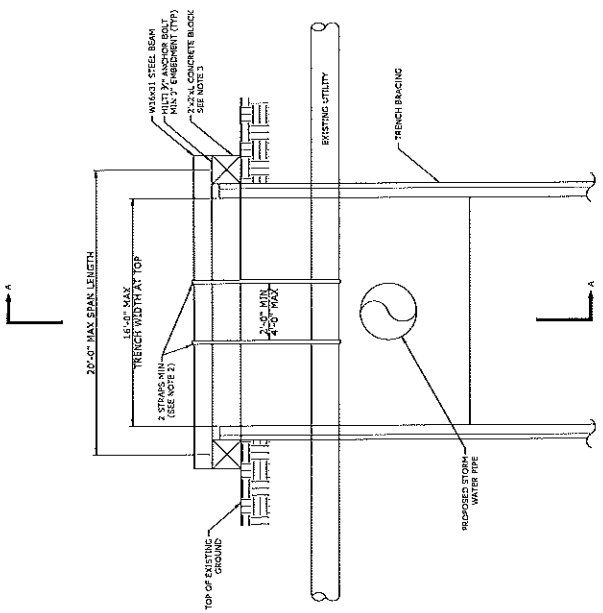
WHEN NO CONCRETE SIDEWALK IS PROPOSED, OMIT THIS SECTION ONLY

WHEN NO CONCRETE SIDEWALK IS PROPOSED, OMIT THIS SECTION ONLY

WHEN NO CONCRETE SIDEWALK IS PROPOSED, OMIT THIS SECTION ONLY

SUPPORT SYSTEM FOR 16'-0" MAX TRENCH WIDTH		
EXISTING UTILITY	STEEL BEAM (SEE NOTE 1)	STRAPS MIN WORKING LOAD
12'-0" DI	W16x21	10000 LBS

- NOTES:
1. STRUCTURE STEEL TO CONFORM TO ASTM A729 GRADE 50.
  2. SEE STRAPS AND INCIDENTAL RIGGING COMPONENTS TO SURE THE WORKING LOAD.
  3. RU - SHALL BE AVAILABILITY AND SIZE CONSTRAINTS.



SECTION A-A  
 SUGGESTED UTILITY SUPPORT DETAIL  
 NOT TO SCALE

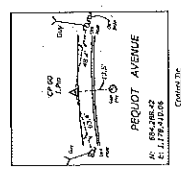
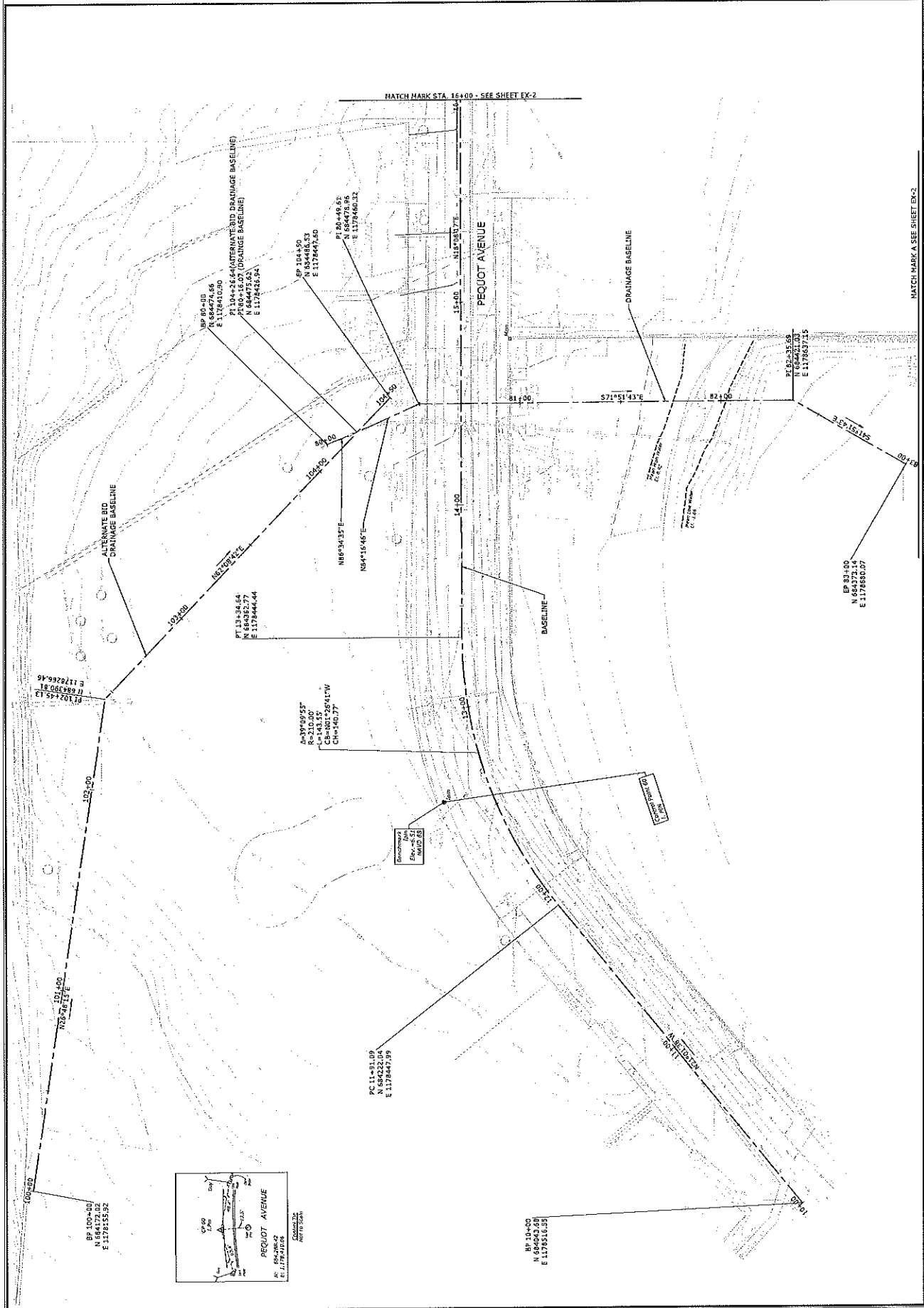


MILTON & MACBROOM  
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 Phone: (203) 211-1111 Fax: (203) 212-2733  
 www.miltonandmacbroom.com

DATE	BY	DESCRIPTION

EXISTING CONDITIONS AND BASELINE LAYOUT PLAN  
 PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
 NEW LONDON, CONNECTICUT

NO.	1
DATE	JULY 2010
PROJECT NO.	2384-0
ISSUE	EX-1
SCALE	AS SHOWN

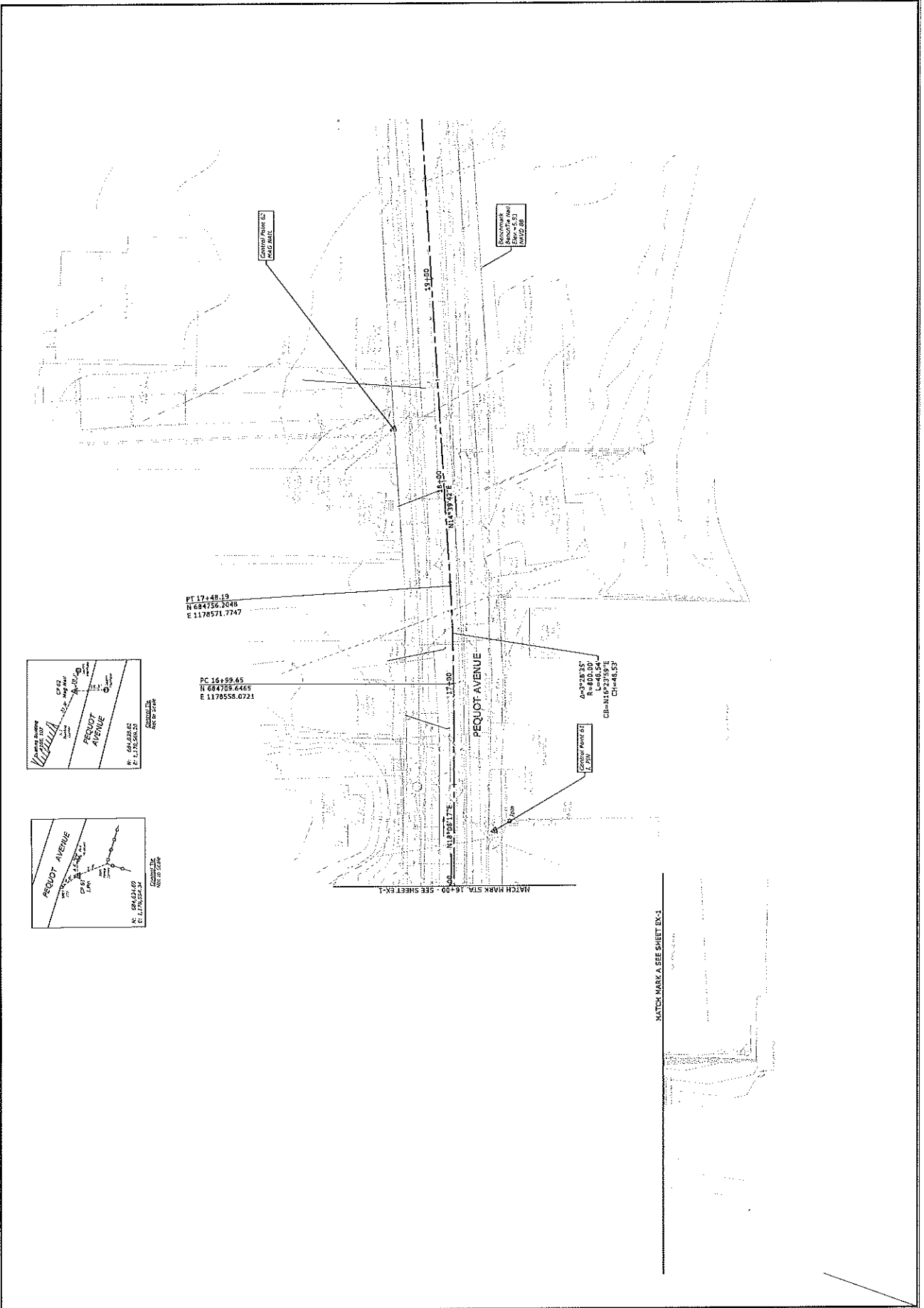
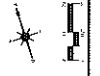


MATCH MARK A SEE SHEET EX-2

PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
NEW LONDON, CONNECTICUT

DESCRIPTION	DATE	BY

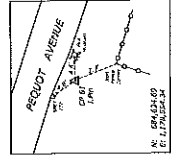
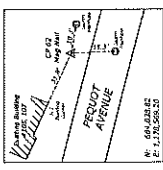
**MILONE & MACBROOM**  
 29 Kings Drive  
 Old Saybrook, CT 06456  
 (203) 231-1773 Fax (203) 231-9733  
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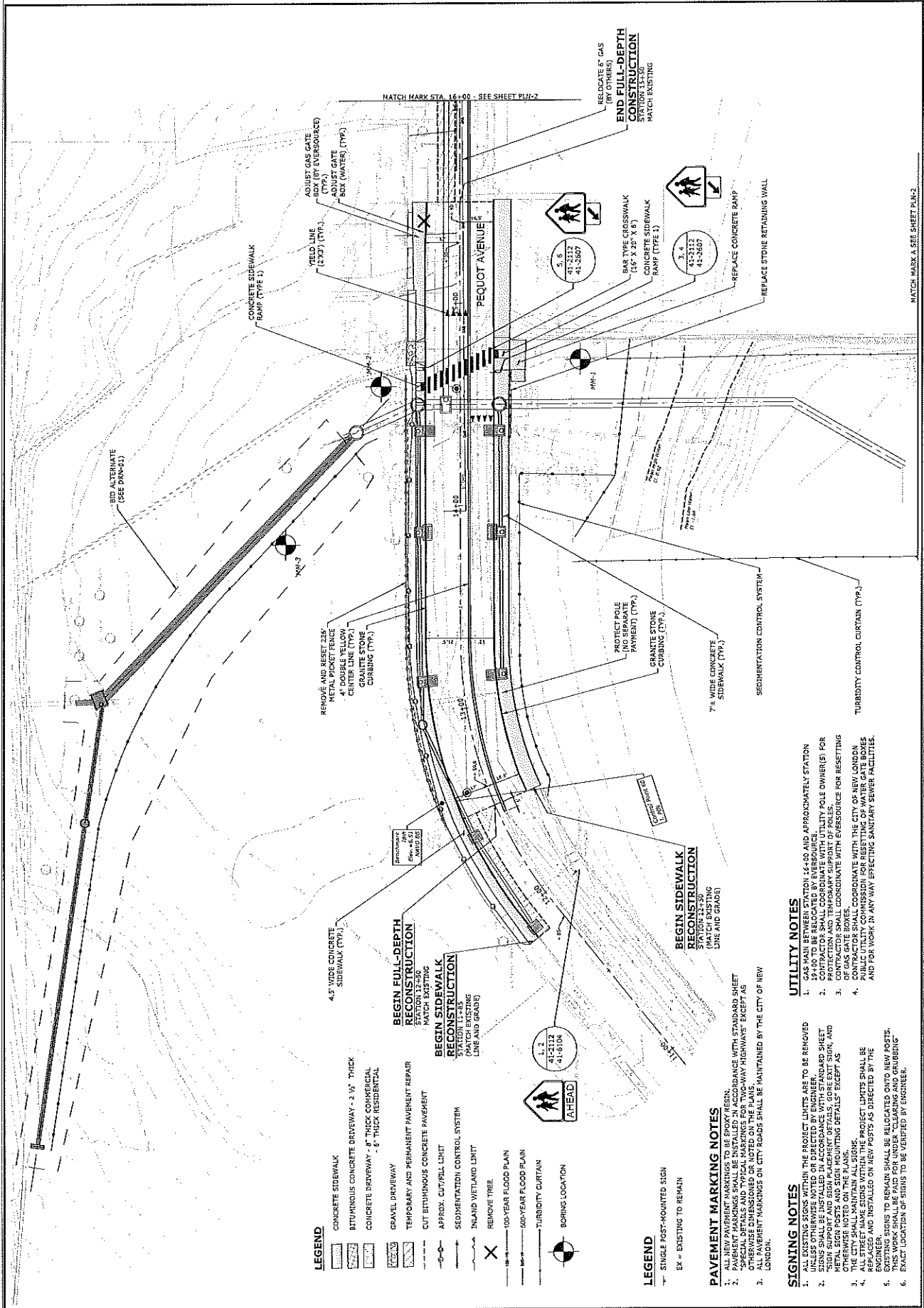
PT 17+48.19  
 N 684756.2048  
 E 1178571.7747

PC 16+59.65  
 N 684705.6465  
 E 1178558.0721

A=3°08'35"  
 R=800.00'  
 L=120'  
 CH=48.53'



MATCH MARK A SEE SHEET EX-1



**LEGEND**

- CONCRETE SIDEWALK
- BITUMINOUS CONCRETE DRIVEWAY - 2 1/2" THICK
- CONCRETE DRIVEWAY - 8" THICK COMMERCIAL
- 6" THICK RESIDENTIAL
- GRAVEL DRIVEWAY
- TEMPORARY AND PERMANENT PAVEMENT REPAIR
- CUT BITUMINOUS CONCRETE PAVEMENT
- APPROX. CUT/FILL LIMIT
- SEDIMENTATION CONTROL SYSTEM
- INLAND WETLAND LIMIT
- REMOVE TREE
- 100-YEAR FLOOD PLAN
- 500-YEAR FLOOD PLAN
- TURBIDITY CURTAIN
- BORING LOCATION

**LEGEND**

- SINGLE POST-MOUNTED SIGN
- EX - EXISTING TO REMAIN

**PAVEMENT MARKING NOTES**

- ALL NEW PAVEMENT MARKINGS TO BE BROWN RESIN.
- PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET "SPECIAL DETAILS AND TYPICAL MARKINGS FOR TWO-WAY HIGHWAYS" EXCEPT AS NOTED OTHERWISE.
- ALL PAVEMENT MARKINGS ON CITY ROADS SHALL BE MAINTAINED BY THE CITY OF NEW LONDON.

**SIGNING NOTES**

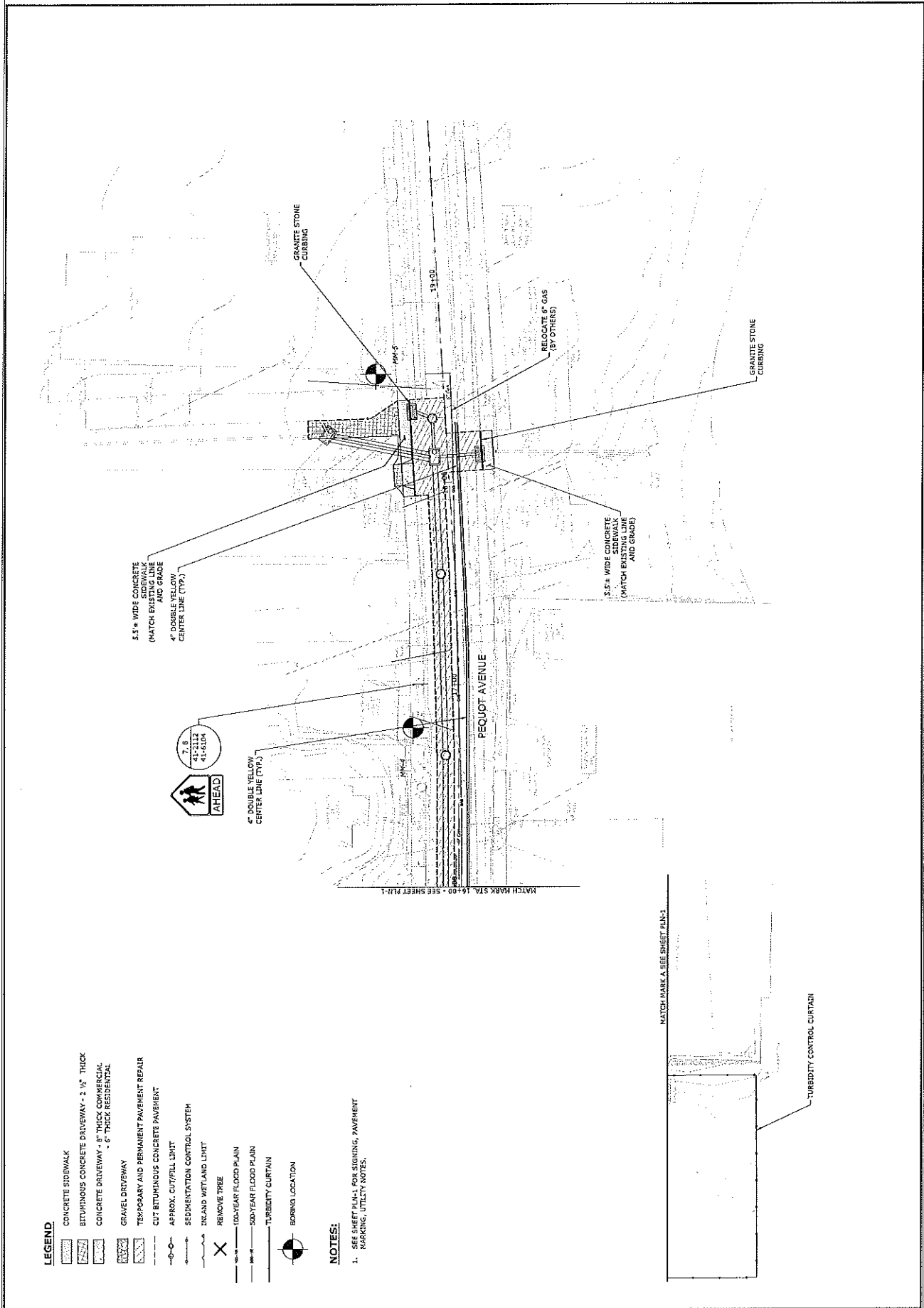
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED UNLESS OTHERWISE NOTED OR DIRECTED BY ENGINEER.
- SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SHEET "SPECIAL DETAILS AND TYPICAL MARKINGS FOR TWO-WAY HIGHWAYS" AND "SPECIAL DETAILS AND TYPICAL MARKINGS FOR ONE-WAY HIGHWAYS" UNLESS OTHERWISE NOTED ON THE PLANS.
- THE CITY OF NEW LONDON SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL SIGNS TO REMAIN SHALL BE RELOCATED INTO NEW POSTS. THIS WORK SHALL BE PAID FOR UNDER "CLEANING AND GRUBBING".
- EXACT LOCATION OF SIGNS TO BE VERIFIED BY ENGINEER.















**UTILITY NOTES**

- GAS MAIN BETWEEN STATION 16+00 AND APPROXIMATELY STATION 19+00 TO BE RELOCATED BY EVERSOURCE.
- CONTRACTOR SHALL COORDINATE WITH UTILITY POLE OWNERS (S) FOR RELOCATION OF ALL UTILITY POLES WITHIN THE PROJECT LIMITS.
- CONTRACTOR SHALL COORDINATE WITH EVERSOURCE FOR RESETTING OF GAS GATE BOXES.
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF NEW LONDON FOR ANY WORK IN ANY WAY AFFECTING SANITARY SEWER FACILITIES.

MATCH MARK A SEE SHEET PLAN-2

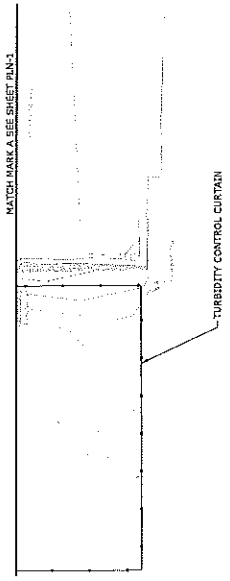




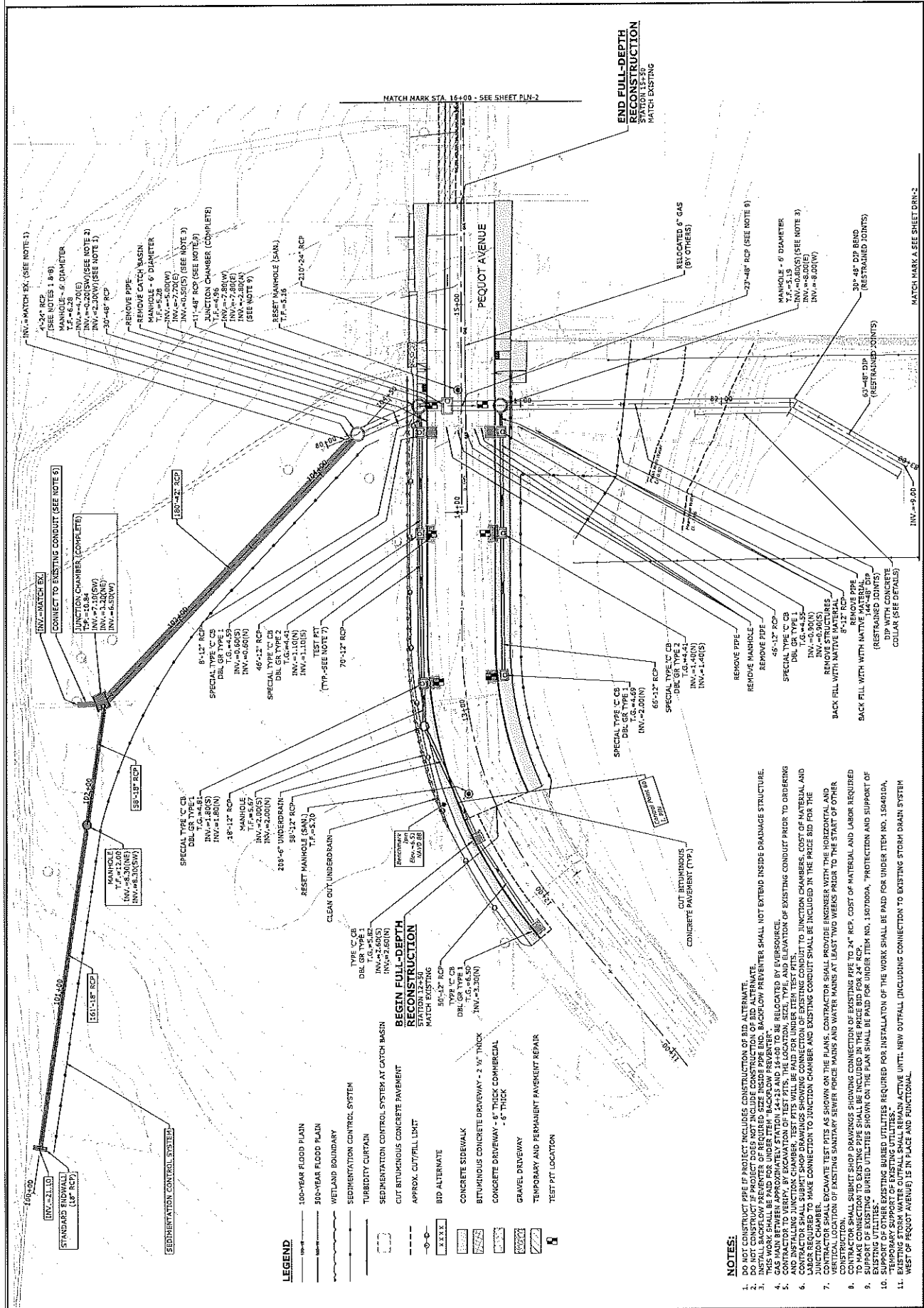
- LEGEND:**
-  CONCRETE SIDEWALK
  -  BITUMINOUS CONCRETE DRIVEWAY - 2 1/2" THICK
  -  CONCRETE DRIVEWAY - 8" THICK COMMERCIAL  
- 6" THICK RESIDENTIAL
  -  GRAVEL DRIVEWAY
  -  TEMPORARY AND PERMANENT PAVEMENT REPAIR
  -  CUT BITUMINOUS CONCRETE PAVEMENT
  -  APPROX. CUT/FILL LIMIT
  -  SEDIMENTATION CONTROL SYSTEM
  -  INLAND WETLAND LIMIT
  -  REMOVE TREE
  -  100-YEAR FLOOD PLAIN
  -  500-YEAR FLOOD PLAIN
  -  TURBIDITY CURTAIN
  -  BORING LOCATION

**NOTES:**

1. SEE SHEET PLAN-1 FOR SIGNING, PAVEMENT MARKING, UTILITY NOTES.

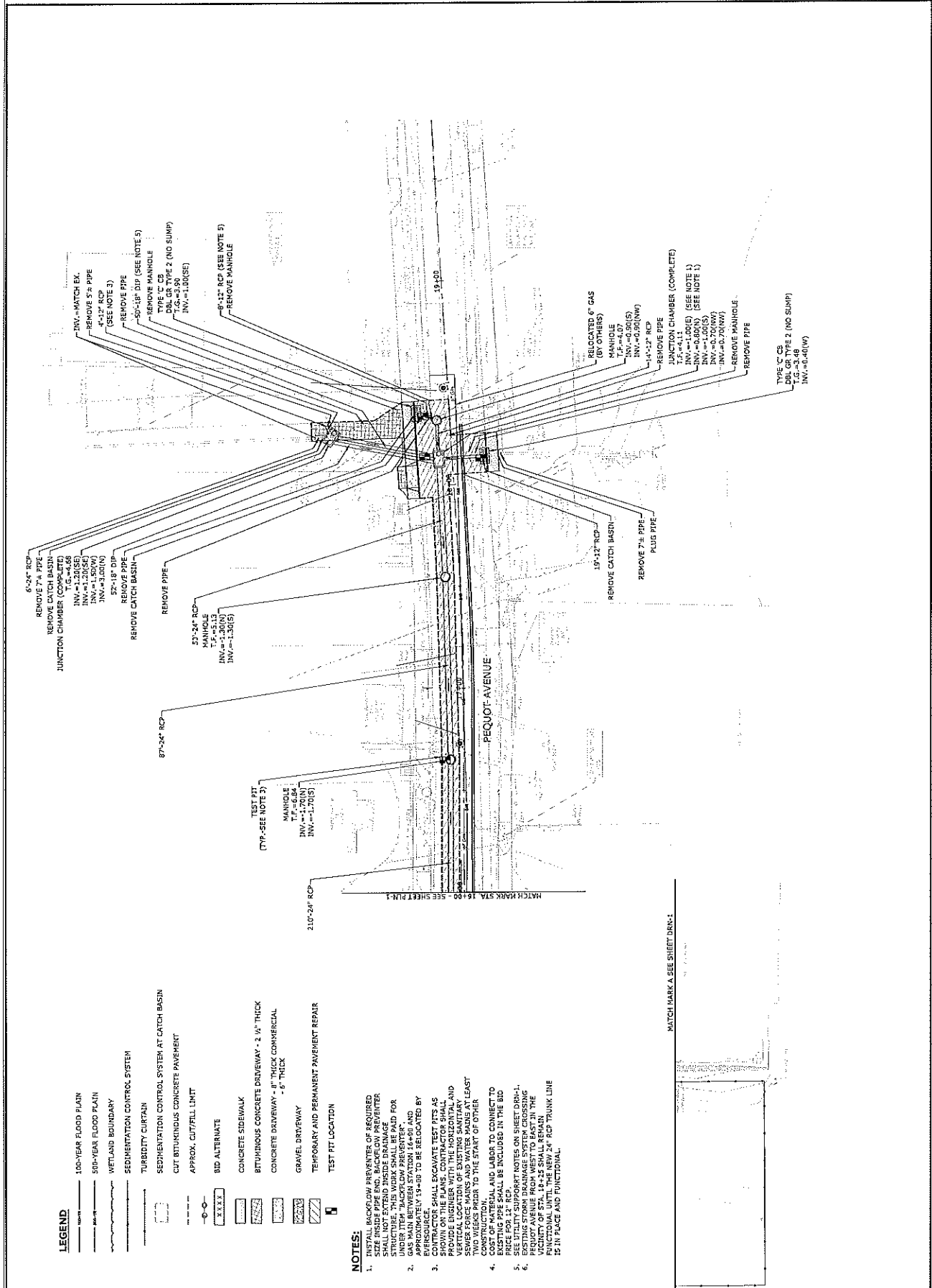


TURBIDITY CONTROL CURTAIN



- NOTES:**
- DO NOT CONSTRUCT PIPE IF PROJECT INCLUDES CONSTRUCTION OF BID ALTERNATE.
  - DO NOT CONSTRUCT IF PROJECT DOES NOT INCLUDE CONSTRUCTION OF BID ALTERNATE.
  - THIS WORK SHALL BE PAID FOR UNDER ITEM "BACKFLOW PREVENTER, BACKFLOW PREVENTER SHALL NOT EXTEND INSIDE DRAINAGE STRUCTURE.
  - GAS MAIN BETWEEN APPROXIMATELY STATION 14+25 AND 16+00 TO BE RELOCATED BY REVERSE.
  - INSTALLING JUNCTION CHAMBER, TEST PITS, AND JUNCTION CHAMBER SHALL BE PAID FOR UNDER ITEM TEST PITS.
  - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING CONNECTION OF EXISTING CONDUIT TO JUNCTION CHAMBERS. COST OF MATERIAL AND LABOR REQUIRED TO MAKE CONNECTION TO JUNCTION CHAMBER AND EXISTING CONDUIT SHALL BE INCLUDED IN THE PRICE BID FOR THE CONTRACTOR.
  - CONTRACTOR SHALL EXCAVATE TEST PITS AS SHOWN ON THE PLANS. CONTRACTOR SHALL PROVIDE ENGINEER WITH THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING SANITARY SEWER FORCE MAINS AND WATER MAINS AT LEAST TWO WEEKS PRIOR TO THE START OF OTHER WORK.
  - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING CONNECTION OF EXISTING PIPE TO 24" RCP. COST OF MATERIAL AND LABOR REQUIRED TO MAKE CONNECTION TO EXISTING PIPE SHALL BE INCLUDED IN THE PRICE BID FOR 24" RCP.
  - SUPPORT OF EXISTING BURIED UTILITIES SHOWN ON THE PLAN SHALL BE PAID FOR UNDER ITEM NO. 1507000A. PROTECTION AND SUPPORT OF OTHER EXISTING BURIED UTILITIES REQUIRED FOR INSTALLATION OF THE WORK SHALL BE PAID FOR UNDER ITEM NO. 1504010A.
  - SUPPORT OF OTHER EXISTING BURIED UTILITIES REQUIRED FOR INSTALLATION OF THE WORK SHALL BE PAID FOR UNDER ITEM NO. 1504010A.
  - EXISTING STORM WATER OUTFALL SHALL REMAIN ACTIVE UNTIL NEW OUTFALL (INCLUDING CONNECTION TO EXISTING STORM DRAIN SYSTEM WEST OF PEQUOT AVENUE) IS IN PLACE AND FUNCTIONAL.

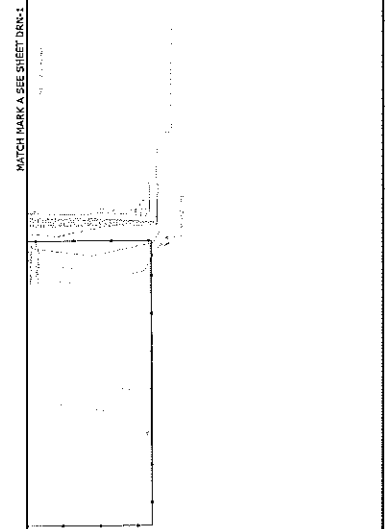
DESCRIPTION	DATE	BY



- LEGEND**
- 100-YEAR FLOOD PLAIN
  - 500-YEAR FLOOD PLAIN
  - WETLAND BOUNDARY
  - SEDIMENTATION CONTROL SYSTEM
  - TURBIDITY CURTAIN
  - SEDIMENTATION CONTROL SYSTEM AT CATCH BASIN
  - CUT BITUMINOUS CONCRETE PAVEMENT
  - APPROX. CUT/FILL LIMIT
  - BID ALTERNATE
  - CONCRETE SIDEWALK
  - BITUMINOUS CONCRETE DRIVEWAY - 2" THICK
  - CONCRETE DRIVEWAY - 8" THICK COMMERCIAL - 6" THICK
  - GRAVEL DRIVEWAY
  - TEMPORARY AND PERMANENT PAVEMENT REPAIR
  - TEST PIT LOCATION

**NOTES:**

- INSTALL BACK-SLOW PREVENTER OF REQUIRED SIZE AT EACH MANHOLE. PREVENTER SHALL NOT EXTEND INSIDE DRAINAGE STRUCTURE. THIS WORK SHALL BE PAID FOR BY THE OWNER.
- APPROXIMATELY 19+00 TO BE RELOCATED BY OTHERS. SHALL EXCAVATE TEST PIT AS SHOWN ON THE PLANS. CONTRACTOR SHALL PROVIDE ENGINEER WITH THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING GAS SERVICE MAINS AND WATER MAINS AT LEAST TWO WEEKS PRIOR TO THE START OF OTHER CONSTRUCTION. ALL LABOR TO CONNECT TO EXISTING PIPE SHALL BE INCLUDED IN THE BID PRICE FOR 12" RCP.
- SEE NOTE 1 ON SHEET DRN-1.
- EXISTING STORM DRAINAGE SYSTEM CROSSING PEQUOT AVENUE FROM WEST TO EAST IN THE VICINITY OF STA. 18+25 SHALL REMAIN IN PLACE AND FUNCTIONAL.





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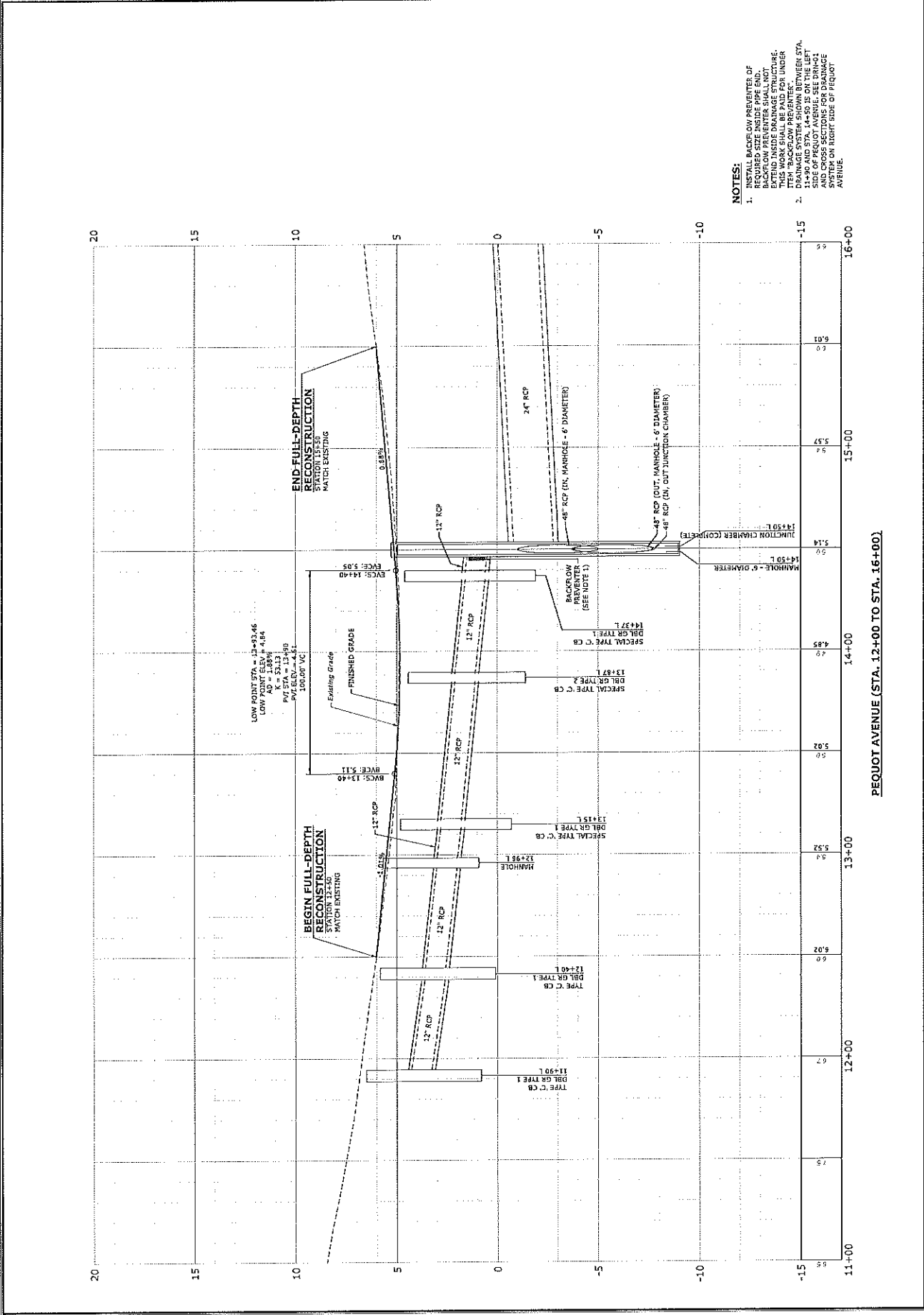
DATE	DESCRIPTION

PROJECT: PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
 LOCATION: NEW LONDON, CONNECTICUT

ROADWAY AND DRAINAGE PROFILE  
 PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
 NEW LONDON, CONNECTICUT

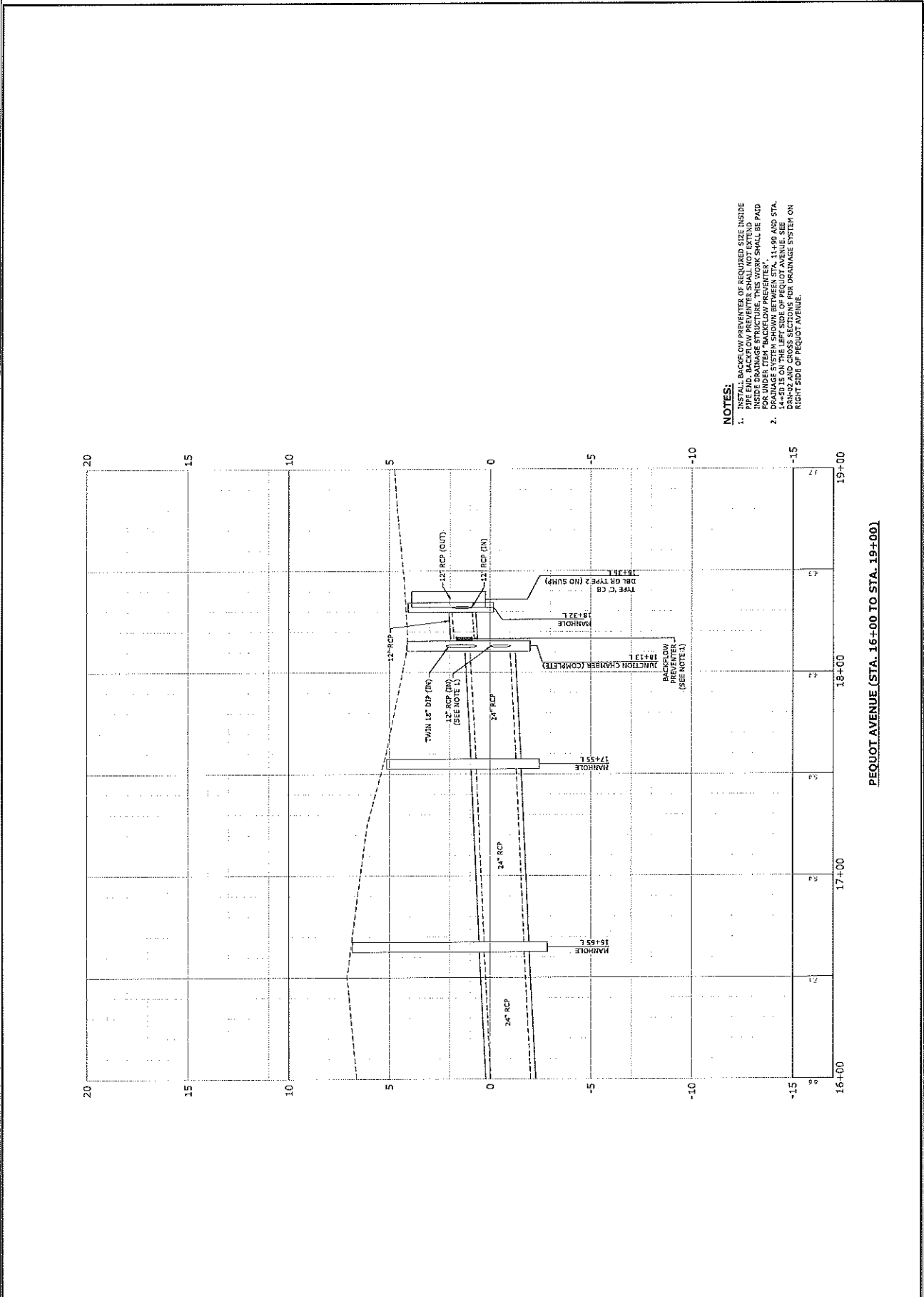
DATE	DESCRIPTION

DATE: JULY 2018  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 PROJECT: 238P-43  
 PROJ: 238P-43



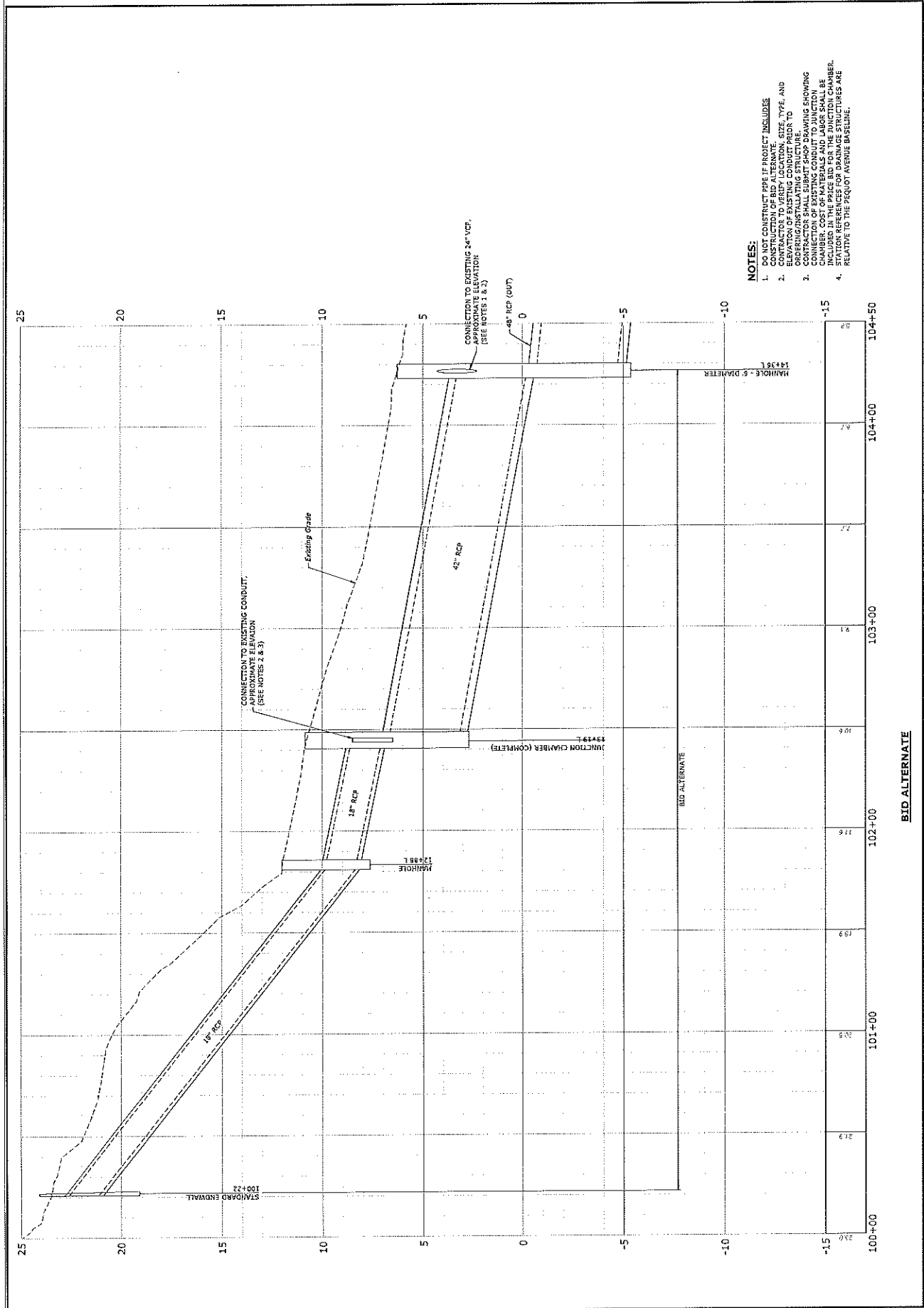
- NOTES:**
- INSTALL BACKFLOW PREVENTER OF REQUIRED SIZE INSIDE PIPE END. BACKFLOW PREVENTER SHALL NOT BE USED ON THE DRAINAGE STRUCTURE. SEE THE DRAINAGE PLAN UNDER ITEM "BACKFLOW PREVENTER". DRAINAGE SYSTEM SHOWN BETWEEN STA. 12+00 AND 13+00 IS THE EXISTING SYSTEM. SEE DAMAGE AND CROSS SECTIONS FOR DAMAGE SYSTEM ON RIGHT SIDE OF PEQUOT AVENUE.

PEQUOT AVENUE (STA. 12+00 TO STA. 16+00)



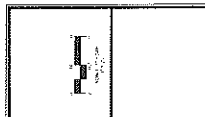
- NOTES:**
1. INSTALL BACKFLOW PREVENTER OF REQUIRED SIZE INSIDE DRAINAGE STRUCTURE. THE BACKFLOW PREVENTER SHALL BE UNDER DRAINAGE STRUCTURE. THIS WORK SHALL BE PAID FOR UNDER ITEM "BACKFLOW PREVENTER".
  2. DRAINAGE SYSTEM SHOWN BETWEEN STA. 11+96 AND STA. 18+00 AND CROSS SECTIONS FOR DRAINAGE SYSTEM ON RIGHT SIDE OF PEQUOT AVENUE.

PEQUOT AVENUE (STA. 16+00 TO STA. 19+00)

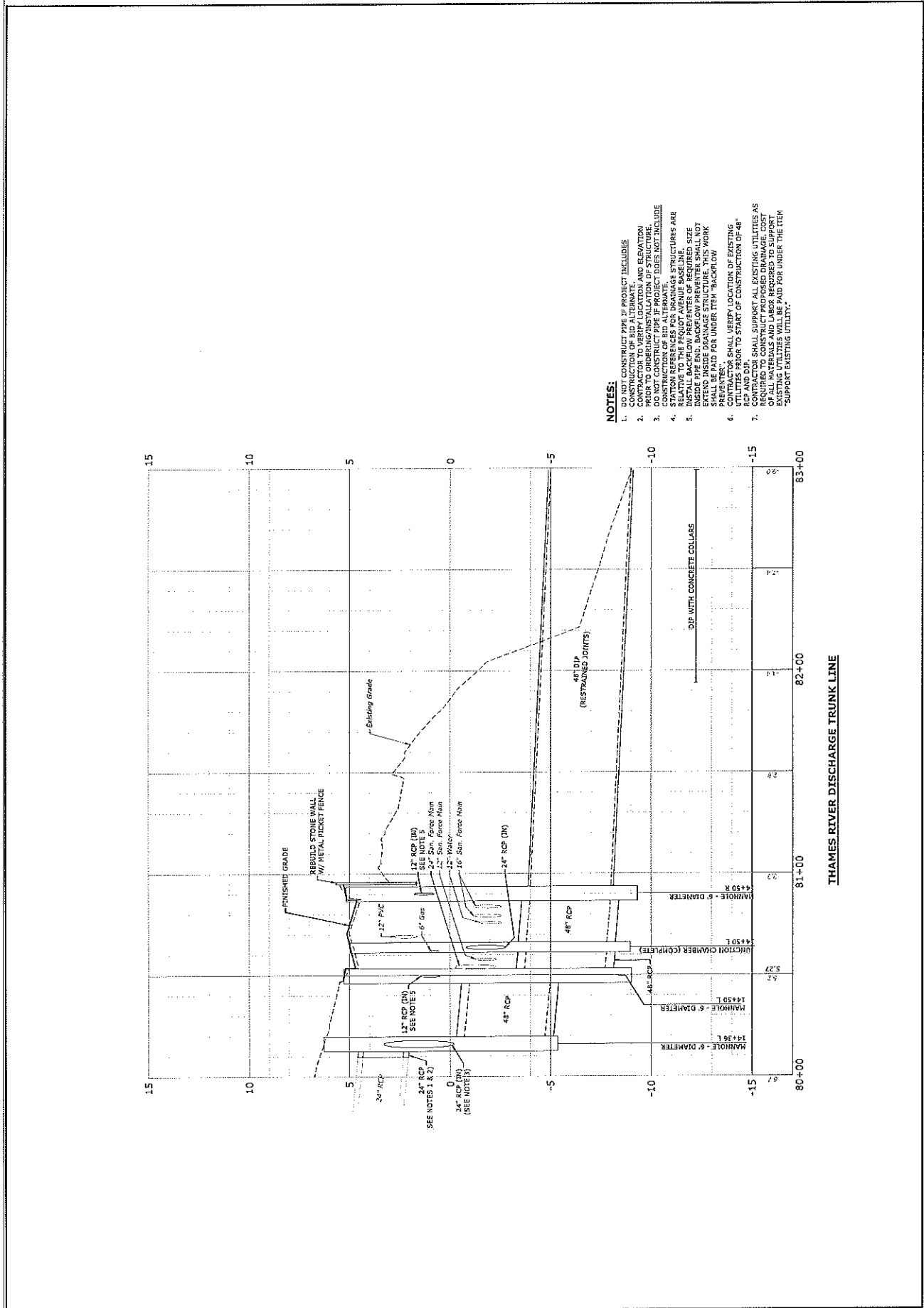


- NOTES:**
- DO NOT CONSTRUCT PIPE IF PROJECT INCLUDES EXISTING CONDUIT. CONTRACTOR TO VERIFY LOCATION, SIZE, TYPE, AND ELEVATION OF EXISTING CONDUIT PRIOR TO ORDERING/INSTALLING STRUCTURE.
  - CONNECTION OF EXISTING CONDUIT TO JUNCTION CHAMBER. COST OF MATERIALS AND LABOR SHALL BE STATION REFERENCES FOR DRAINAGE STRUCTURES ARE RELATIVE TO THE PEQUOT AVENUE BASELINE.

BID ALTERNATE



DATE	DESCRIPTION

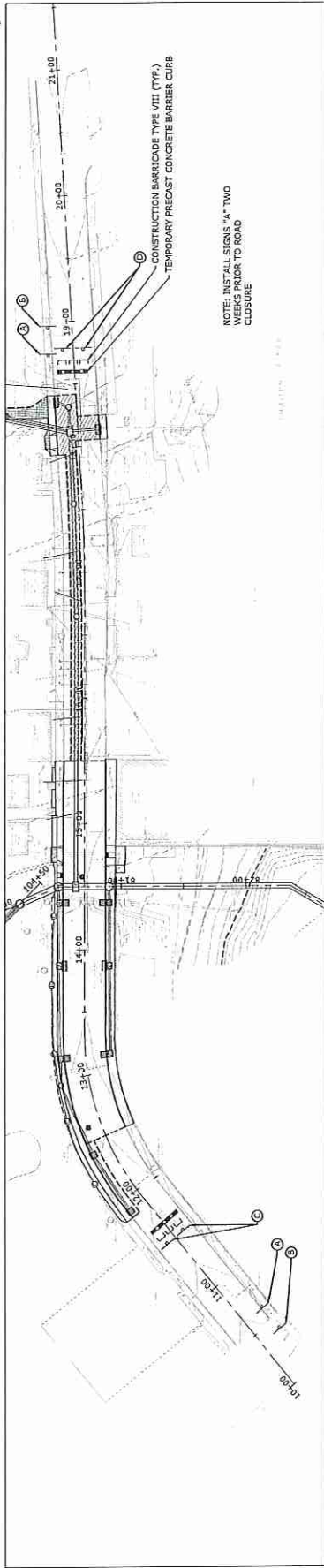
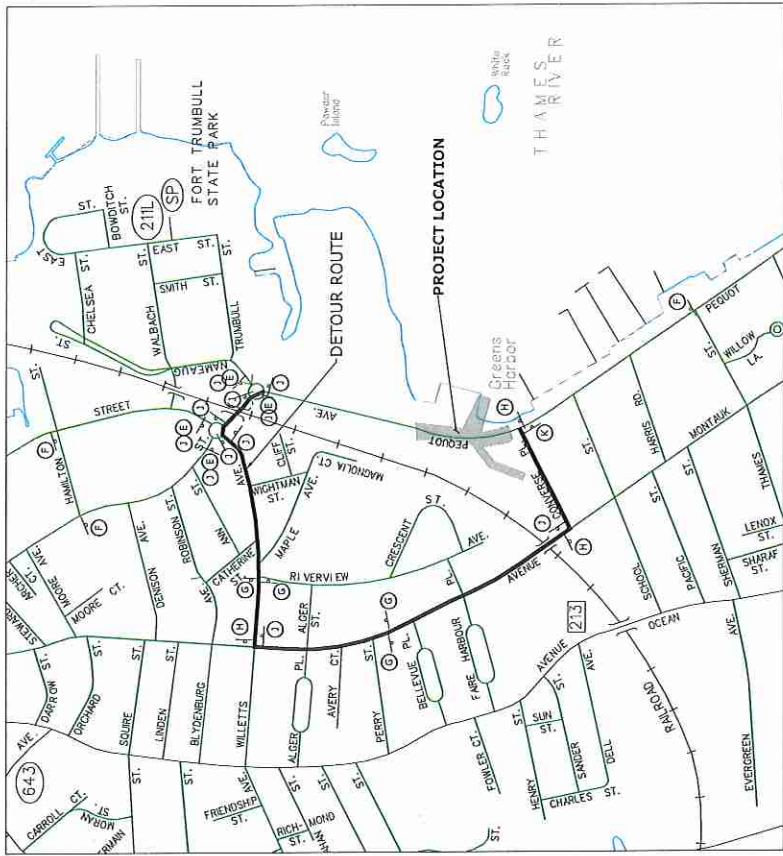


- NOTES:**
- DO NOT CONSTRUCT PIPE IF PROJECT INCLUDES CONSTRUCTION OF BID ALTERNATE.
  - CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND RECORD THEM AS SHOWN ON THIS DRAWING.
  - DO NOT CONSTRUCT PIPE IF PROJECT LINES NOT INCLUDE CONSTRUCTION OF BID ALTERNATE.
  - STATION REFERENCES FOR DRAINAGE STRUCTURES ARE INSIDE PIPE END. BACKFLOW PREVENTER SHALL NOT BE PAID FOR UNDER ITEM "BACKFLOW PREVENTER".
  - CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES AND RECORD TO START OF CONSTRUCTION OF 48" RCP AND 24" RCP.
  - CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITIES AS SHOWN ON THIS DRAWING. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SUPPORT OF EXISTING UTILITIES WILL BE PAID FOR UNDER THE ITEM "SUPPORT EXISTING UTILITY."

PLAN DESIGNATION	MESSAGE	SIZE	WATER/CONCRETE DISSEMINATION
A	BEGINNING (OR END) ROAD CLOSED USE DETOUR	60"x30"	80-9928
B	STOP	48"	31-0557
C	ROAD CLOSED	48"x30"	80-9080
D	ROAD CLOSED TO TRUCK TRAFFIC	60"x30"	80-9081
E	PROJECT AVENUE LOCAL TRAFFIC ONLY	60"x30"	(80-9928)
F	PROJECT AVENUE LOCAL TRAFFIC ONLY	72"x30"	(80-9929)
G	PROJECT AVENUE DETOUR	60"x10" 24"x12" 21"x15"	(80-9913) (80-9767) (51-2625)
H	PROJECT AVENUE	50"x13" 48"x18"	(80-9913) (80-9762)
J	PROJECT AVENUE	60"x10" 48"x13"	(80-9913) (80-9761)
K	END DETOUR	24"x18"	(80-9768)
L	PROJECT AVENUE CLOSED 5 MILES LOCAL TRAFFIC ONLY	72"x30"	(80-9929)

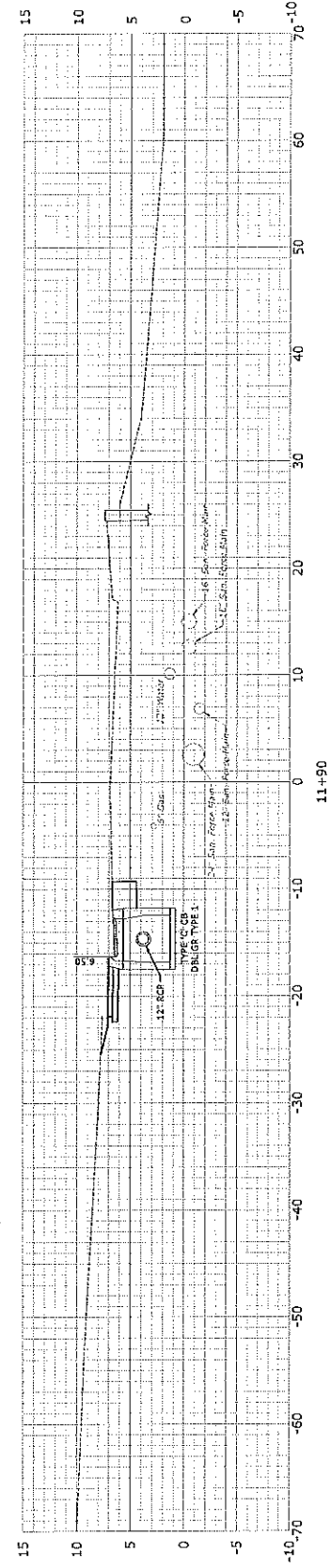
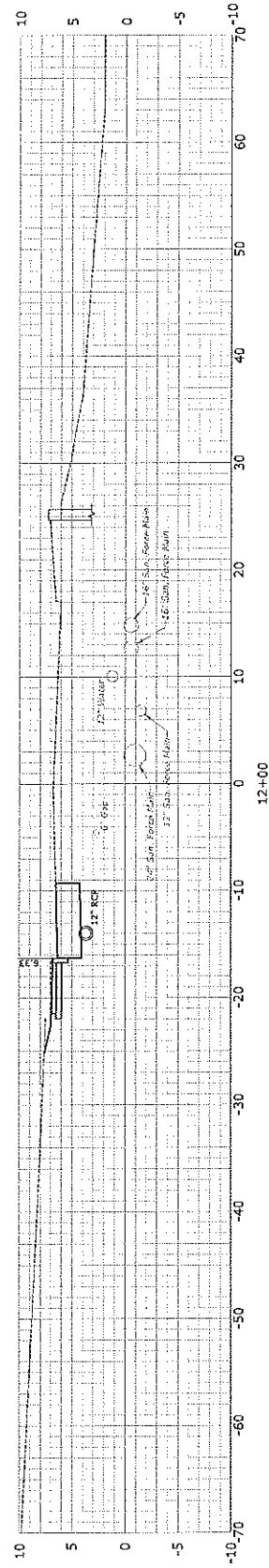
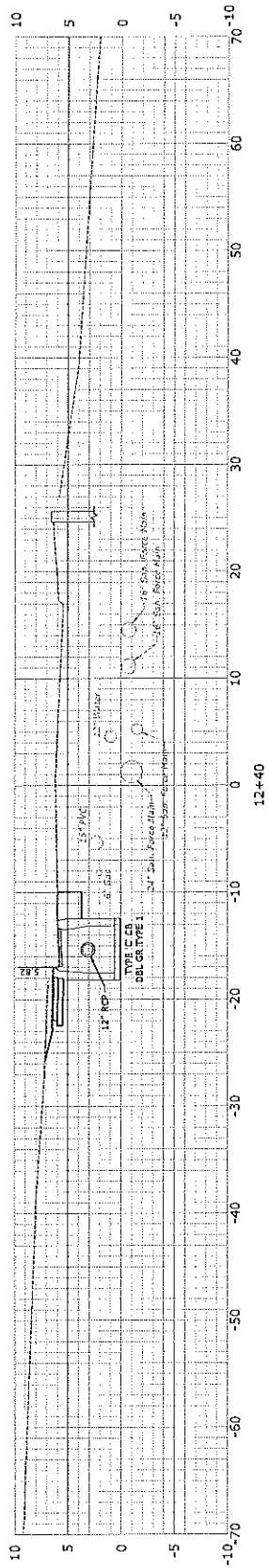
**DETOUR NOTES:**

1. THE CONTRACTOR SHALL INSTALL PLASTER SAFETY FENCE AT THE EDGE OF EXCAVATION AT THE END OF EACH WORK DAY. COST TO PROVIDE AND INSTALL FENCE SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR "MAINTENANCE AND PROTECTION OF TRAFFIC".
2. DETOUR SIGNS SHALL BE COVERED WHEN THE DETOUR IS NOT IN OPERATION.
3. DETOUR SIGNS SHALL BE REMOVED WHEN THE DETOUR IS NO LONGER REQUIRED.
4. ACCESS AND EGRESS TO DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.
5. THE COST OF THE DETOUR SIGNS SHALL BE PAID FOR UNDER ITEM NO. 1.2200(A) CONSTRUCTION SIGNS - TYPE VII REFLECTIVE SHEETING.
6. CONTRACTOR SHALL NOTIFY STATE, TOWN AND EMERGENCY SERVICES AT LEAST 14 DAYS IN ADVANCE OF ROAD CLOSURE/DETOUR.
7. THE COST TO FURNISH, INSTALL, RELOCATE TEMPORARY PRECAST CONCRETE BARRIER CURB SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR "MAINTENANCE AND PROTECTION OF TRAFFIC".
8. ALL CONSTRUCTION SIGNS SHALL BE MOUNTED ON BREAKAWAY POSTS.
9. EXISTING SIGNS THAT CONFLICT WITH THOSE COVERED AS DIRECTED BY THE ENGINEER.
10. HIGH INTENSITY WARNING LIGHTS SHALL BE USED AT ALL TIMES WITH SIGNS WHERE APPLICABLE. COST OF WARNING LIGHTS SHALL BE INCLUDED IN PRICE BID FOR "CONSTRUCTION SIGNS-TYPE VII REFLECTIVE SHEETING".





**NOTE:**  
 1. LOCATION OF ALL UTILITIES SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION, SIZE, TYPE AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONDITIONS SHOWN ON THE DRAWINGS OR AS ORDERED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION OF PROPOSED DRAINAGE. TEST PIT EXCAVATION TO BE PAID FOR UNDER THE ITEM "TEST PIT".







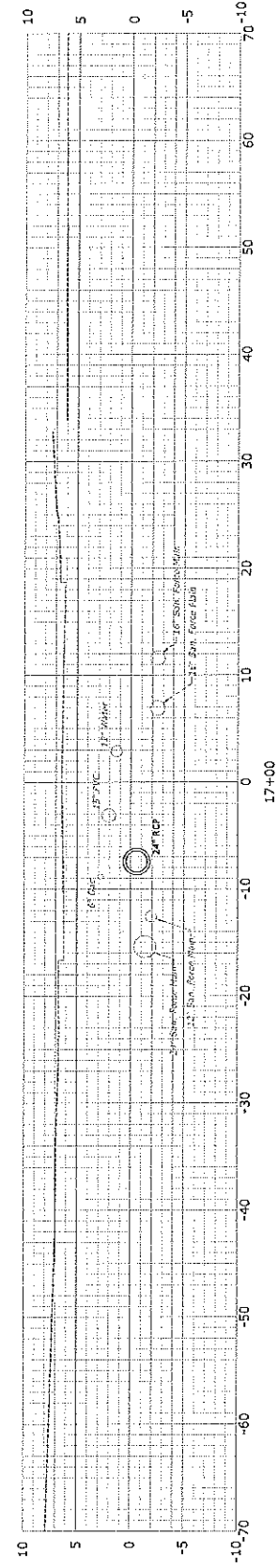
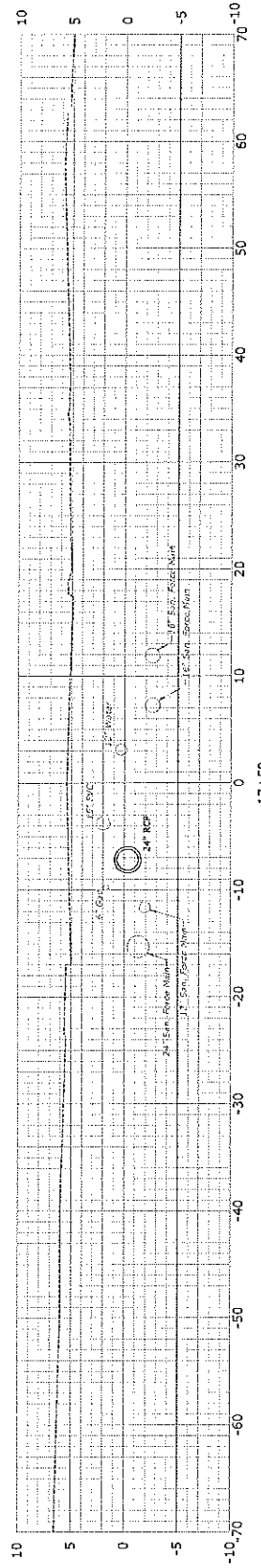
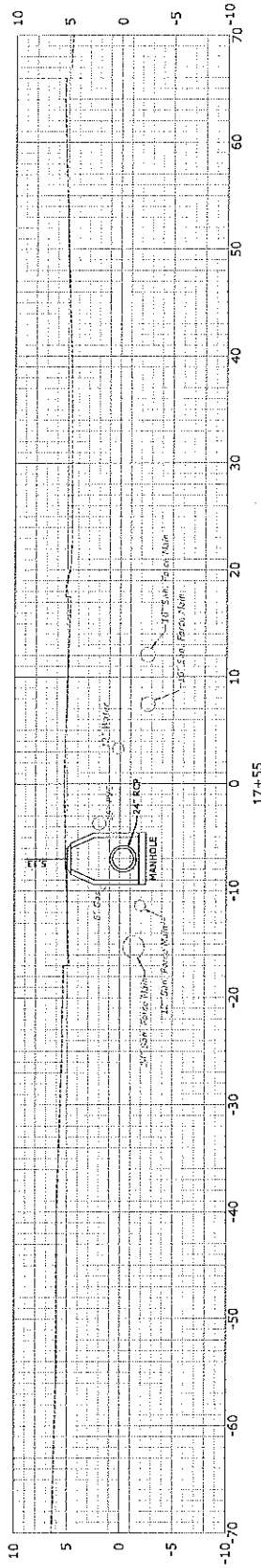






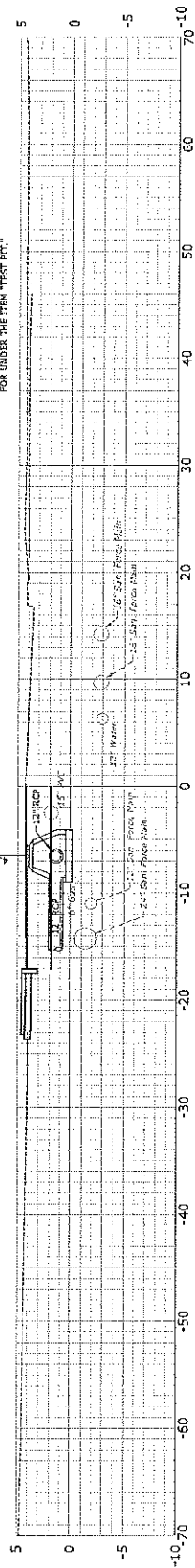
**NOTE:**

1. LOCATION OF ALL UTILITIES SHOWN IS APPROXIMATE. LOCATIONS SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. EXCAVATION LOCATION, SIZE, DEPTH AND ELEVATION OF EXCAVATION TO BE ORDERED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION OF EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR UNDER THE ITEM TEST PIT.

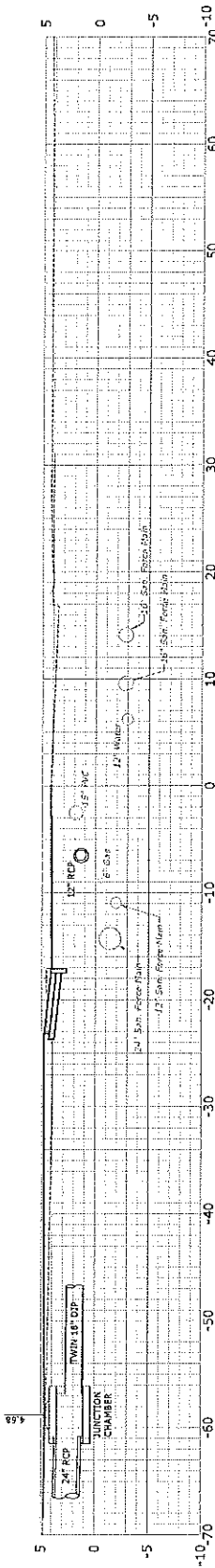


**NOTE:**

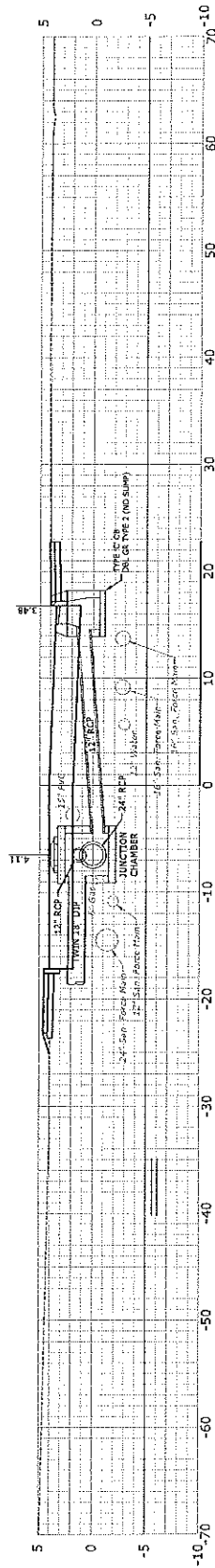
1. LOCATIONS OF ALL UTILITIES SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION, SIZE, TYPE, AND ELEVATION BY EXCAVATION OF TEST PITS AT LOCATIONS SHOWN ON THE DRAWINGS OR AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPOSED DRAINAGE. TEST PIT EXCAVATION TO BE PAID FOR UNDER THE ITEM "TEST PIT".



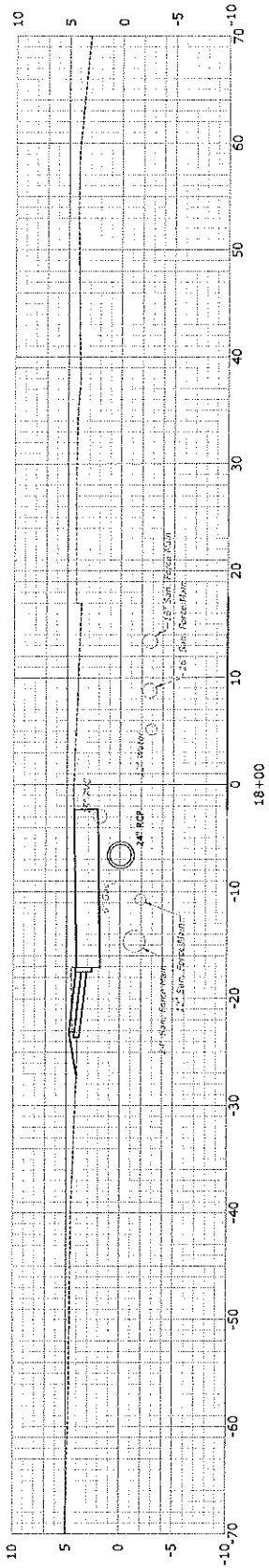
18+32



18+27.19



18+13

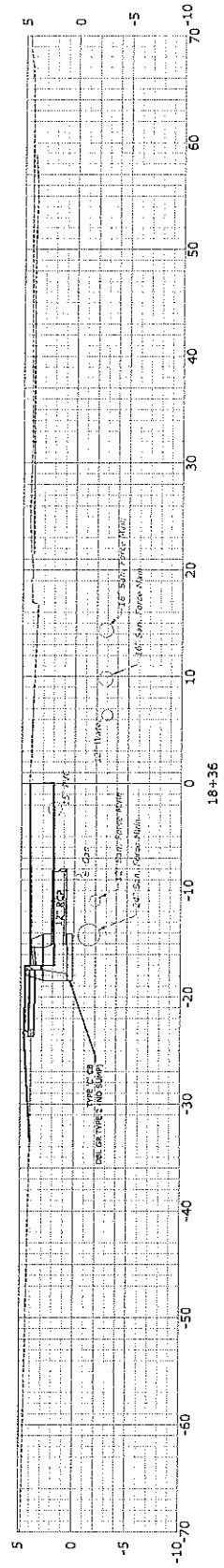


18+00



**NOTE:**

1. LOCATION OF ALL UTILITIES SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION, SIZE, TYPE AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONDITIONS SHOWN ON THE DRAWINGS OR AS ORDERED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION OF ANY EXCAVATION SHALL BE THE BASIS FOR THE EXCAVATION. TEST PIT EXCAVATION TO BE PAID FOR UNDER THE FIRST TEST PIT.



18+36

41

ROADWAY CROSS SECTIONS  
PEQUOT AVENUE DRAINAGE IMPROVEMENTS  
NEW LONDON, CONNECTICUT

DATE: JULY 2018  
DRAWN BY: JDM  
CHECKED BY: JDM  
SCALE: AS SHOWN  
PROJECT NO.: 2018-43  
SHEET NO.: 565-8

DATE	DESCRIPTION

MILONE & MACBROOM  
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