05 - FOR INFORMATION ONLY
INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
IDX-01	INDEX OF DRAWINGS		
FIO-01	WATER MAIN STANDARDS - 1		
FIO-02	WATER MAIN STANDARDS - 2		
FIO-03	SANITARY SEWER STANDARDS - 1		
FIO-04	SANITARY SEWER STANDARDS - 2		
FIO-05	EVERSOURCE ELECTRIC		

REV. | DATE | REVISION DESCRIPTION

SIGNATURE BLOCK:
GM2 ASSOCIATES, INC.
115 GLASTONBURY BLVD.
GLASTONBURY, CT 06033

DESIGNER/DRAFTER: PBR CHECKED BY: GA

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER

TOWN(S):
CITY OF MERIDEN

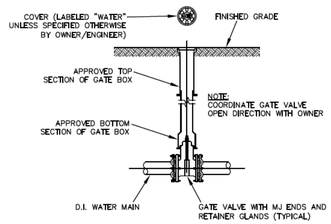
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INDEX OF DRAWINGS

PROJECT NO.:
L079-0004

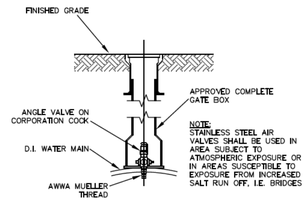
DRAWING NO.:
IDX-01

SHEET NO.:
05.01

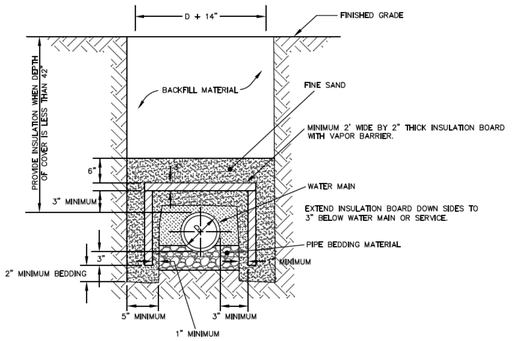
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PLOTTED DATE: 5/12/2026



GATE VALVE
NOT TO SCALE



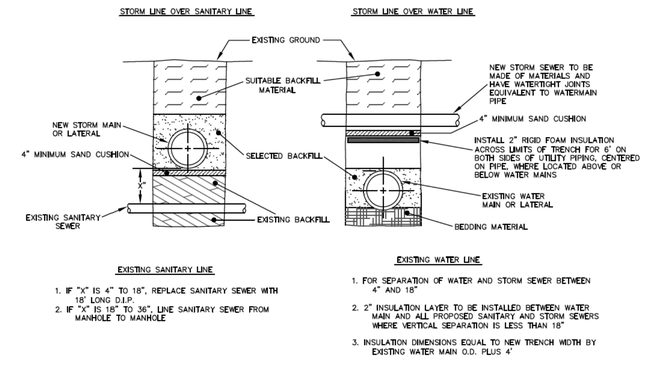
AIR VALVE
NOT TO SCALE



NOTES:

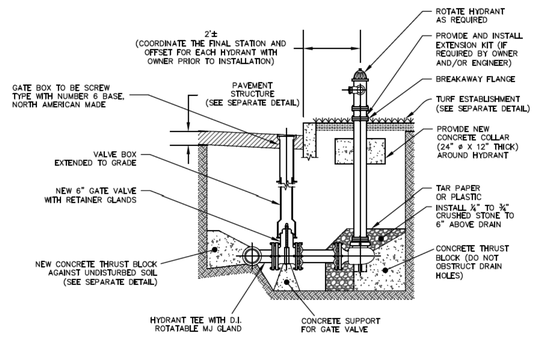
1. INSULATION BOARD TO BE FOAMGLAS OR APPROVED EQUAL MEETING ASTM C-552 WITH A COMPRESSIVE STRENGTH OF 90 PSI.
2. VAPOR BARRIER TO BE PITTCOTE 300 OR APPROVED EQUAL.
3. BACKFILL MATERIAL AROUND INSULATION MUST BE FINE SAND FREE FROM ROOTS, ORGANIC MATTER, OR OTHER INJURIOUS MATERIALS.
4. MAINTAIN 3" MINIMUM CLEARANCE FROM WATER MAIN ON ALL SIDES.
5. FOR REDUCTION IN COVER ONLY WHERE RESULTANT COVER IS LESS THAN 42".

WATER MAIN TRENCH
INSULATION DETAIL
NOT TO SCALE

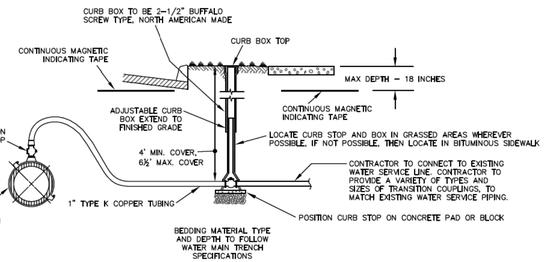


• NEW JOINTS TO BE CENTERED EQUIDISTANT FROM WATER MAIN
• PIPE JOINT REPAIR CLAMPS OR EQUIVALENT TO BE USED ON ALL NEW MAINS AND LATERALS

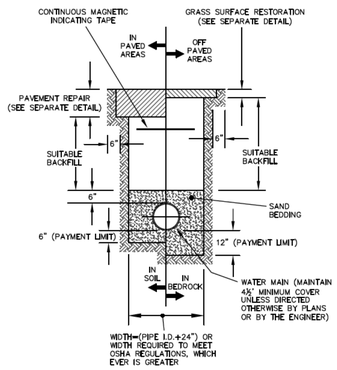
STORM LINE CONFLICTS
NOT TO SCALE



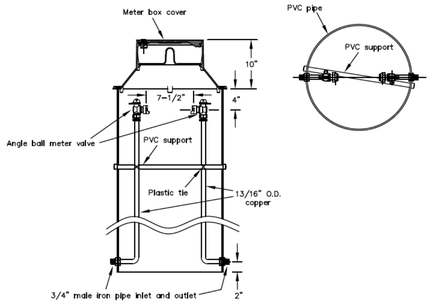
HYDRANT ASSEMBLY
NOT TO SCALE



TYPICAL 1" WATER SERVICE CONNECTION
NOT TO SCALE

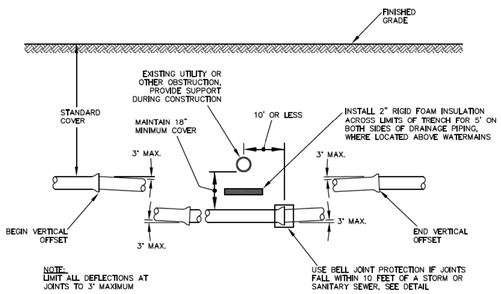


WATER MAIN TRENCH
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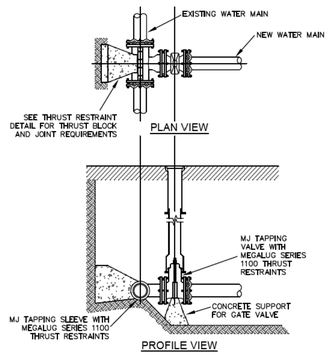


METER PIT DETAIL
NOT TO SCALE

NOTE:
CITY OF MERIDEN TO CONNECT ALL SERVICE TAPS, AND PROVIDE CORPORATION STOP AND SWING.



GRADUAL VERTICAL OFFSET
NOTE
NOT TO SCALE



TAPPING SLEEVE & VALVE
NOT TO SCALE

City of Meriden
Department of Public Works

Water Main Standards

Engineering Division
City Hall **Room 19**
Meriden, Connecticut

DATE: 08/04/2014
DESIGN:
DRAWN: BBD
SCALE: NONE
DWG. WMS1
SHEET 1 OF 2

REV. | DATE | REVISION DESCRIPTION

SIGNATURE BLOCK:
DESIGNER/DRAFTER: CHECKED BY:

PROJECT TITLE: **REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER**

TOWN(S): **CITY OF MERIDEN**

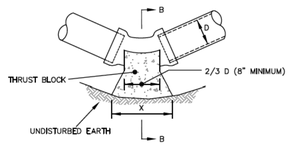
DRAWING TITLE: **WATER MAIN STANDARDS - 1**

PROJECT NO.: **L079-0004**

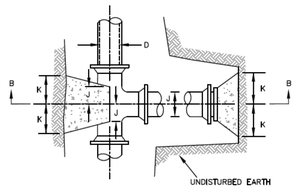
DRAWING NO.: **FIO-01**

SHEET NO.: 05.02

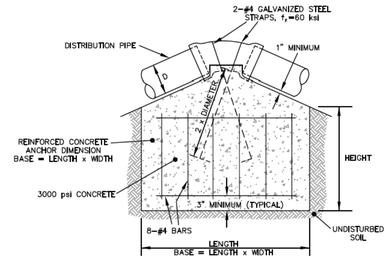
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PLOTTED DATE: 5/12/2026



PLAN

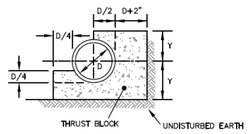


PLAN

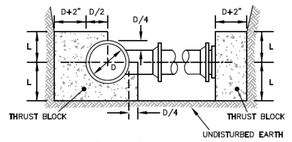


TYPICAL CONCRETE ANCHOR
NOT TO SCALE

BEND		45°			22½°
PIPE DIAMETER (D) IN INCHES		12	8	6	12
VOLUME OF CONCRETE REQUIRED (CF)		157	74	43	81
TYPICAL DIMENSIONS IN FEET	LENGTH	6.33	5	4	5.25
	WIDTH	6.33	5	4	5.25
	HEIGHT	4	3	3	3



SECTION A-A



SECTION B-B

1. ALL CONCRETE SHALL BE 3000 psi @ 28 DAYS.
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 2000 psf AND STATIC WATER PRESSURE OF 200 psi.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS																				
DIMENSION	90° BEND					45° BEND					22½° BEND					11¼° BEND				
D (in)	6	8	10	12	16	6	8	10	12	16	6	8	10	12	16	6	8	10	12	16
X (in)	26	37	42	54	70	18	26	34	38	51	21	19	24	28	38	9	14	16	20	28
Y (in)	15	18	24	26	35	12	14	16	20	26	10	10	12	14	18	6	7	9	10	12

WATER MAIN BEND CONCRETE THRUST BLOCK DETAIL
NOT TO SCALE

1. ALL CONCRETE SHALL BE 3000 psi @ 28 DAYS.
2. DIMENSIONS SHOWN ARE MINIMUM AND ARE BASED UPON SOIL PRESSURE OF 2000 psf AND STATIC WATER PRESSURE OF 200 psi.
3. THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.

TABLE OF DIMENSIONS					
B (in)	6	8	10	12	16
J (in)	6	7	9	10	12
K (in)	12	15	20	24	30
L (in)	12	16	18	22	30

WATER MAIN TEE / PLUG CONCRETE THRUST BLOCK
NOT TO SCALE

City of Meriden
Department of Public Works

Water Main Standards

Engineering Division
City Hall **Room 19**
Meriden, Connecticut

DATE: 02/22/2013
DESIGN:
DRAWN: BBD
SCALE: NONE
DWG. WMS2
SHEET 2
OF 2

REVISION DESCRIPTION | DATE | REV

SIGNATURE BLOCK:

DESIGNER/DRAFTER: CHECKED BY:

PROJECT TITLE: **REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER**

TOWN(S): **CITY OF MERIDEN**

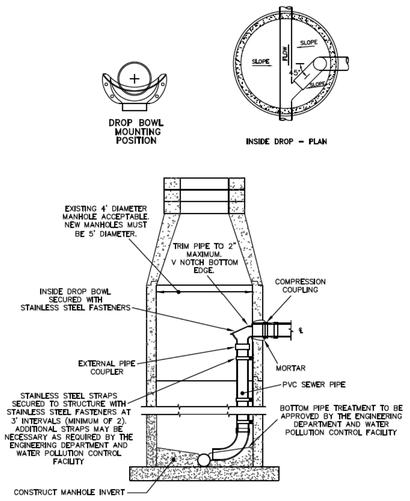
DRAWING TITLE: **WATER MAIN STANDARDS - 2**

PROJECT NO.: **L079-0004**

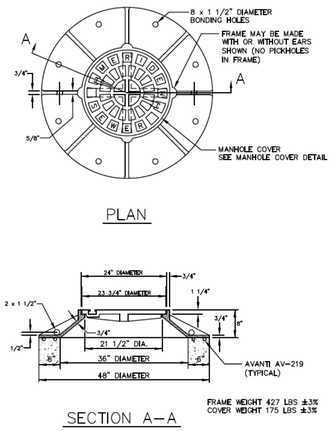
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SHEET NO.: 05.03

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PLOTTED DATE: 5/12/2026



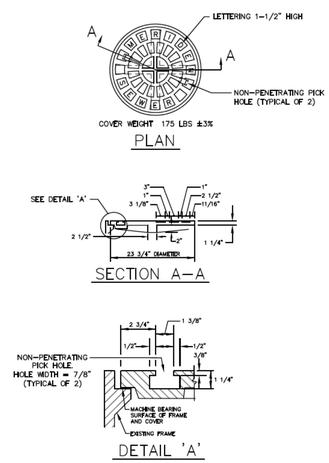
INSIDE DROP MANHOLE
SANITARY SEWER



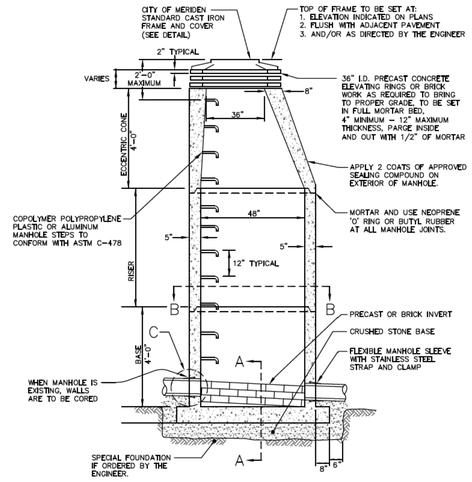
NOTES

1. MANHOLE FRAME AND COVER TO BE LeBARON FOUNDARY INC. CATALOG NUMBER LJ 116 OR APPROVED EQUAL WITH A MINIMUM WEIGHT OF 602 LBS ±3%
2. MACHINE BEARING SURFACE REQUIRED ON THE FRAME SEAT AND COVER.

SANITARY SEWER MANHOLE FRAME



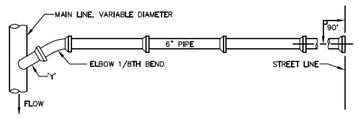
SANITARY SEWER MANHOLE COVER



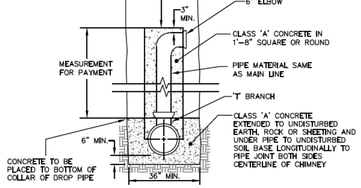
SANITARY SEWER MANHOLE

GENERAL NOTES FOR MANHOLES:

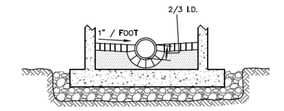
1. Backfill all manholes with bank-run gravel.
2. All pipe, chimney, and drop encasements to be class 'A' concrete. Class 'A' concrete shall be 3000 psi strength at 28 days.
3. Manholes which are located in rights-of-way off City streets shall have bolt down manhole covers.



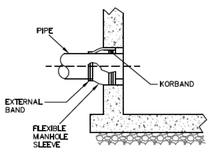
TYPICAL HOUSE CONNECTION LATERAL
PLAN VIEW



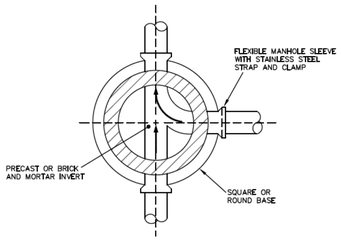
TYPICAL CHIMNEY



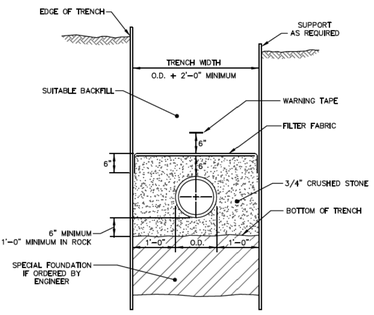
SECTION A–A



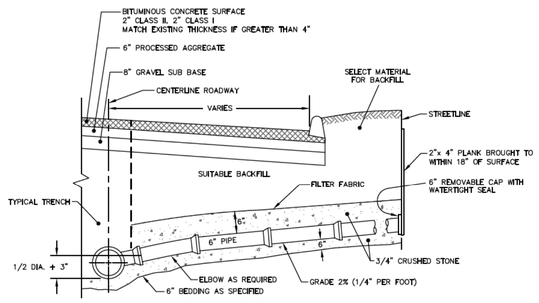
VIEW C
CORING OF EXISTING MANHOLE



SECTION B–B



TYPICAL TRENCH SECTION
SANITARY SEWER



TYPICAL HOUSE CONNECTION LATERAL
PROFILE VIEW

SANITARY SEWER MAIN EXTENSION STANDARD NOTES:

1. The sanitary sewer main and service connection must be constructed in accordance with the City of Meriden Department of Public Works Standards and Specifications.
2. The Contractor must contact "Call Before You Dig" at 1-800-922-4455 for location and marking of all existing utilities prior to any excavation.
3. Upon completion of the sanitary sewer main installation, as-built plans must be submitted to the City of Meriden Engineering Division and certified by a licensed Land Surveyor or Civil Engineer. These plans must be in accordance with the Engineering Division standards.
4. Sanitary sewer lines shall be a minimum of ten feet apart horizontally and 18" apart vertically from any water line.
5. A pre-construction meeting must be held one week **prior to** beginning construction to include the Contractor, **Design** Engineering, and City Engineering staff. The **Contractor shall** be responsible for organi**zing this meeting.**
6. The City Public Works Facility Inspector must be notified by the Contractor a minimum of 48 hours **prior to beginning** construction.
7. Final wye locations must be coordinated with the individual property owners prior to begining construction**.**
8. A public hearing must be held for any sanitary **sewer main** extension and Public Uti**lities Commision** approval **will** be required.
9. Sanitary sewer main lines must pass a low pressure **air test** per City of Meriden Specifications. TV/videotape inspection of the main line will be required per City of Meriden Requirements**.**
10. Sanitary sewer manholes must pass a vacuum **test per City of** Meriden Specifications**.**

Detail Sheet

Sanitary Sewer Standards

DEPARTMENT OF PUBLIC WORKS

Engineering Division

City Hall **Room 19**

Meriden, Connecticut

DATE: *04/02/12*
DESIGN:
DRAWN: *BBD*
SCALE: *Not to Scale*
DWG.
SHEET *1* OF *1*

REV. | DATE | REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: CHECKED BY:

PROJECT TITLE: **REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER**

TOWN(S): **CITY OF MERIDEN**

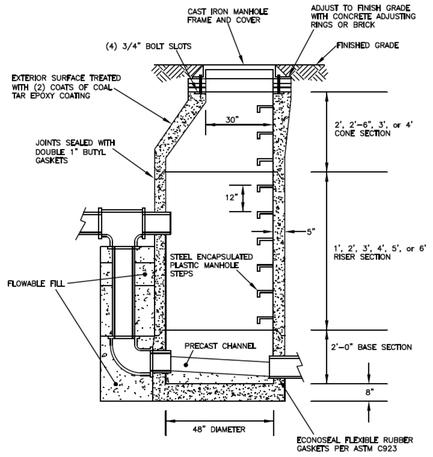
DRAWING TITLE: **SEWER MAIN STANDARDS -1**

PROJECT NO.: **L079-0004**

DRAWING NO.: **FIO-03**

SHEET NO.: 05.04

LASTED SAVED BY: PBarbosa **FILE NAME:** M:\41097_Oregon_Rd_Meriden\300_Engineering & Design\310-Bridge\Contract Plans\SB_CP_41097_04184_FIO_SMS-1.dgn
PLOTTED DATE: 5/12/2026



SANITARY SEWER MANHOLE WITH OUTSIDE DROP

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: CHECKED BY:

PROJECT TITLE: **REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER**

TOWN(S): **CITY OF MERIDEN**

DRAWING TITLE: **SEWER MAIN STANDARDS -1**

PROJECT NO.: **L079-0004**

DRAWING NO.: **FIO-04**

SHEET NO.: 05.05

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PLOTTED DATE: 5/12/2026

OH PRIMARY & SECONDARY WIRE

OH PRIMARY FUTURE (MOVE 2)

OH 3PH PRI & SECONDARY REMOVAL

MOVE 1
-Replace & relocate Poles 91929 & 91930 to south side of Oregon Rd for bridge replacement
-Replace 1PH tap to Pole 92380 from Pole 91930 to Pole 2523

PROPOSED MOVE 2
-Replace & relocate Pole 91929 closer to road for truck access
-Pole 91929 to be tangent, add anchor to Pole 91930
MOVE 2 LOCATIONS TO BE FINALIZED AT LATER DATE

N

POLE 91929 (REMOVE)

POLE 91930 (REMOVE)

POLE 91928S
-Install 35' stub pole & anchor

MERIDEN CHESHIRE HWY

OREGON RD

POLE 92380

POLE 91928 (INSTALL, PERMANENT)
-Replace pole with 45'
-Pole to be relocated approx. 15' east of existing location
-Remove overhead wires to existing Pole 91929

POLE 91929 (INSTALL, TEMPORARY)
-Install 50' pole & anchor
-Pole 91929 to be replaced & relocated closer to road after construction is complete for permanent line truck access (Move 2)

POLE 6550
-FTR pole to be removed
-Eversource to install new 40' pole

POLE 91930 (INSTALL, PERMANENT?)
-Install 50' pole
-Anchor to be added to Pole 91930 on Move 2

POLE 2523
-Pole to be replaced with 45/1
-Pole to be relocated approx. 10' south of existing location
-Remove overhead wires to existing Pole 91930 & install wires to Pole 6550

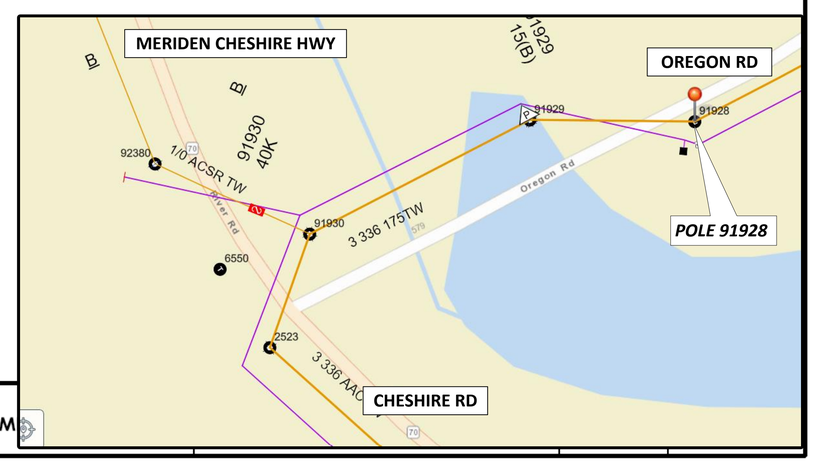
POLE 2524

CHESHIRE RD

POLE 2525

POLE 2526

POLE 2527



SIGNATURE BLOCK:

DESIGNER/DRAFTER: CHECKED BY:

SCALE: 1" = 40'-0"

PROJECT TITLE:
REPLACEMENT OF BRIDGE NO. 04184 CARRYING OREGON ROAD OVER QUINNIPIAC RIVER

TOWN(S):
CITY OF M

LASTED SAVED BY: Rbarbosa FILE NAME: M:\41097_Oregon Rd_Meriden\300_Engineering & Design\310Bridge\Contract Plans\SS_CP_41097_04184_RAILING_DET2.dgn

https://en.oryxlearning.com/question/maths/6th-grade/angle-relationships