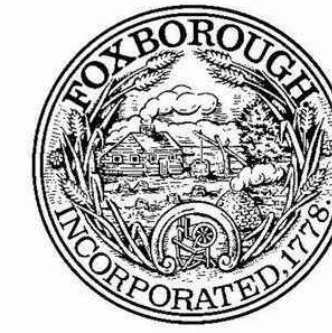


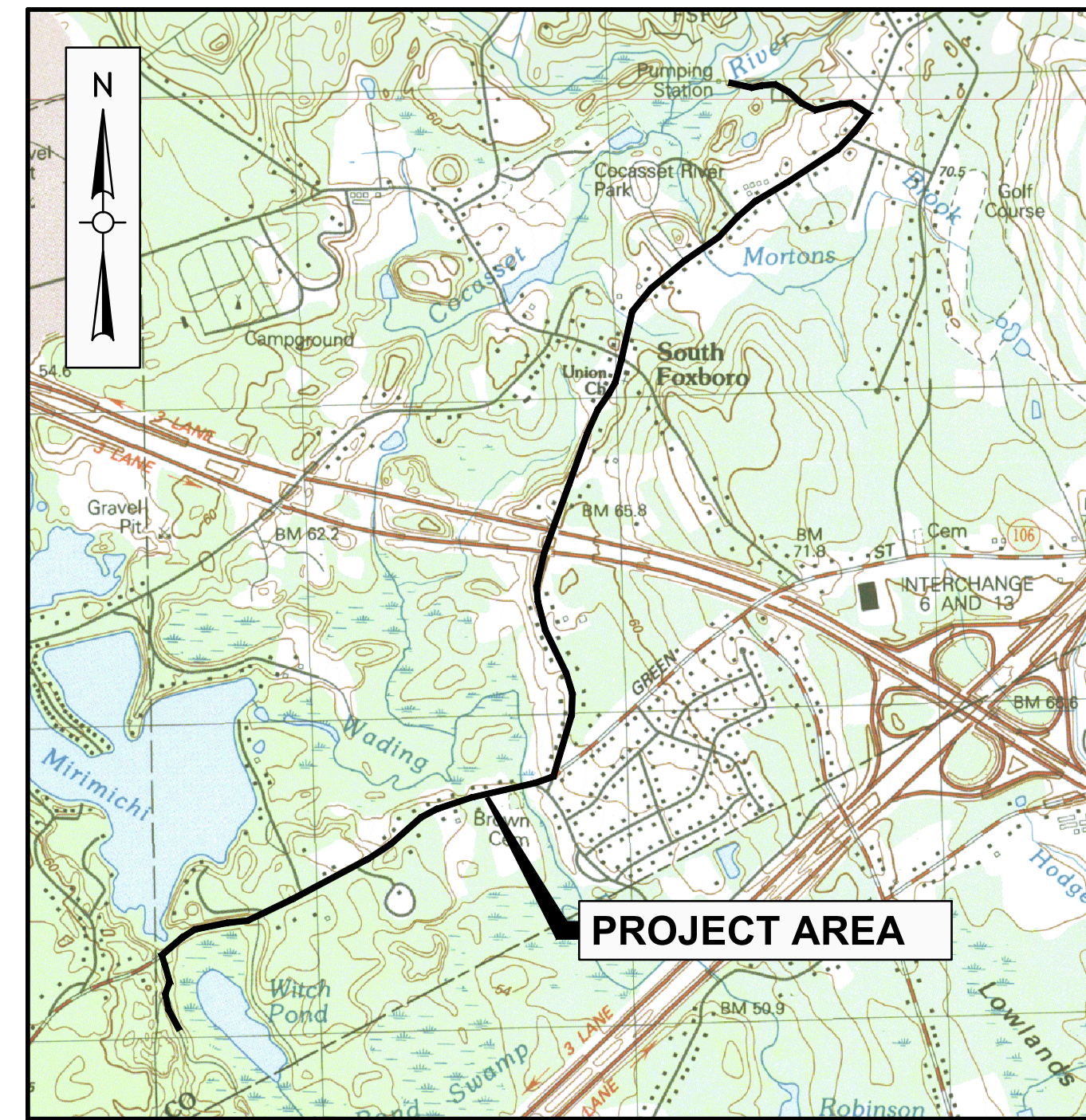
# TOWN OF FOXBOROUGH, MASSACHUSETTS

## DEPARTMENT OF PUBLIC WORKS

### SOUTH STREET AND CEDAR STREET RAW WATER MAIN IMPROVEMENTS



Weston & Sampson Engineers, Inc.  
 55 Walkers Brook Drive, Suite 100  
 Reading, MA 01867  
 978.532.1900 800.SAMPSON  
 www.westonandsampson.com



LOCUS MAP  
 SCALE: N.T.S.

WILLIAM G. KEEGAN, JR.  
 TOWN MANAGER

CHRIS GALLAGHER, DIRECTOR  
 DEPARTMENT OF PUBLIC WORKS

LANCE DELPRIORE, PE  
 TOWN ENGINEER

ROBERT B. WORTHLEY, SUPERINTENDENT  
 WATER AND SEWER DEPARTMENT

DRAWING INDEX	
SHEET	TITLE
G000	COVER SHEET AND DRAWING INDEX
G001	ABBREVIATIONS, NOTES, AND LEGEND
C100	CEDAR STREET
C101	CEDAR STREET
C102	CEDAR STREET AND SOUTH STREET
C103	SOUTH STREET
C104	SOUTH STREET
C105	SOUTH STREET
C106	SOUTH STREET AND SPRAGUE STREET
C107	CONSTRUCTION ZONE SAFETY PLAN I
C107	CONSTRUCTION ZONE SAFETY PLAN II
C501	DETAILS I
C502	DETAILS II
S501	SOUTH STREET - BRACING DEMOLITION
S502	SOUTH STREET - UTILITY SUPPORT RETROFIT
S503	SOUTH STREET - REMOVABLE APPROACH SLAB DETAILS
S504	CEDAR STREET - BRIDGE PLAN, ELEVATION, AND SECTION DETAILS

Issued Date:

JULY 2022



Know what's below.  
 Call before you dig.

Issued For:



*Tara E. McManus*

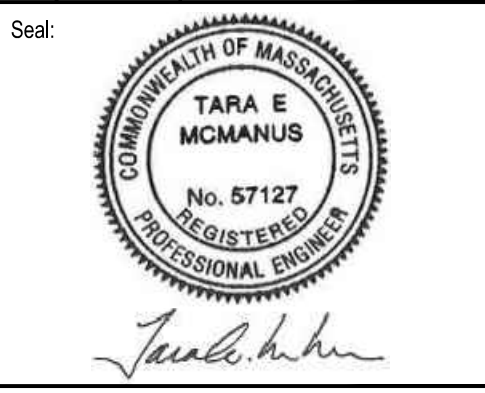
FOR PERMIT REVIEW ONLY



Consultants:


Revisions:

No.	Date	Description



Issued For:

**FOR PERMIT REVIEW ONLY**

Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM

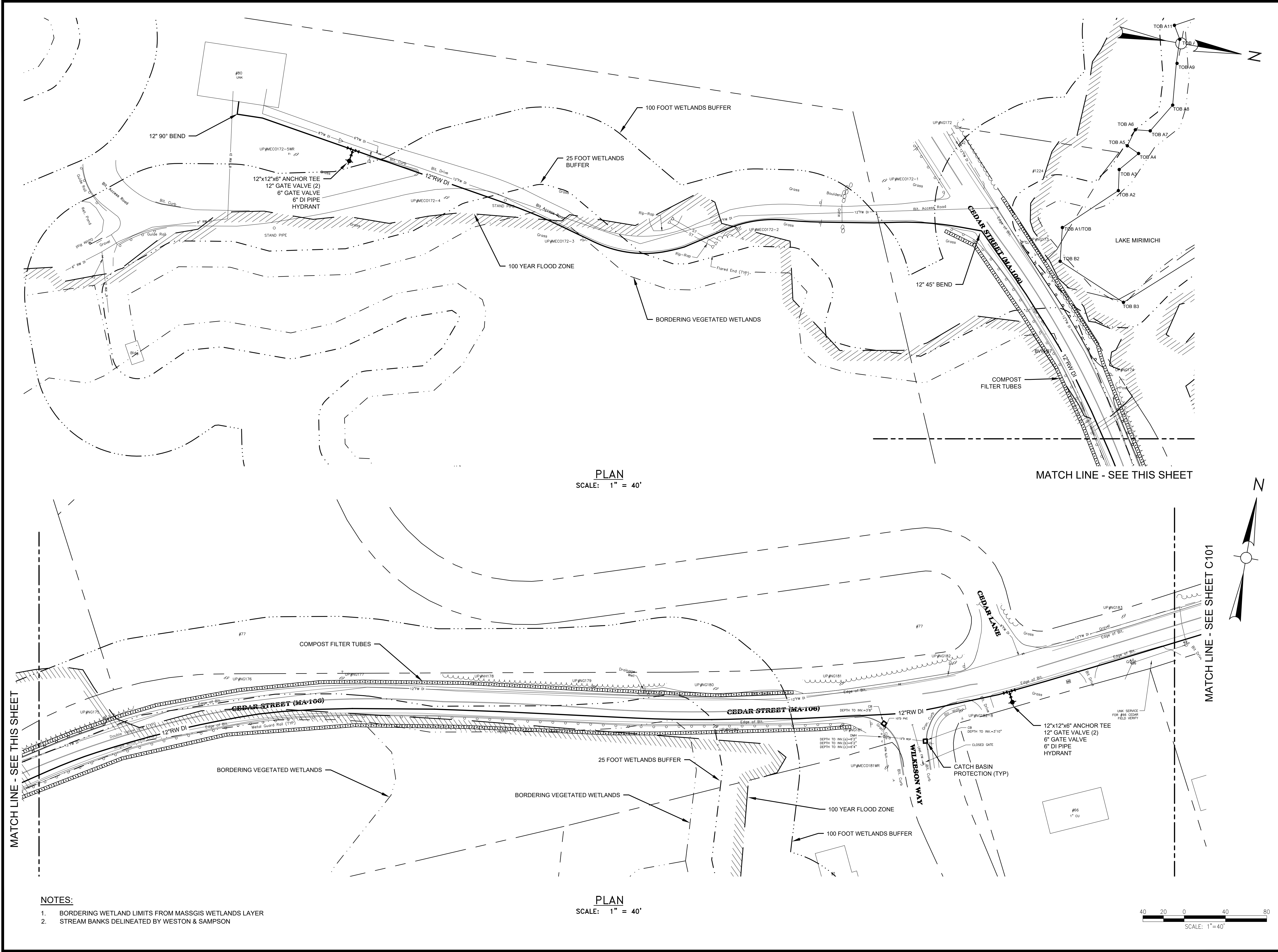
W&S Project No.: ENG20-0384  
W&S File No.:

Drawing Title:

**CEDAR STREET**

Sheet Number:

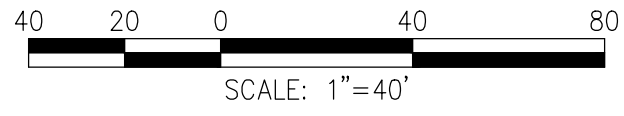
**C100**



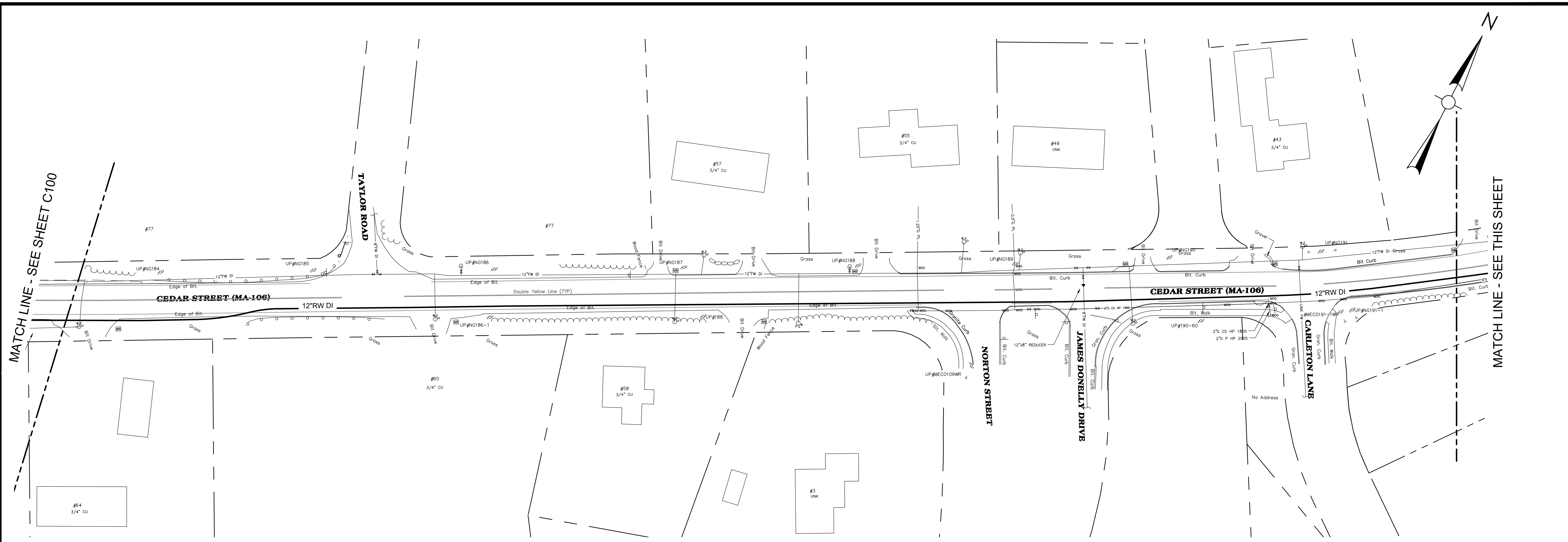
**PLAN**  
SCALE: 1" = 40'

**PLAN**  
SCALE: 1" = 40'

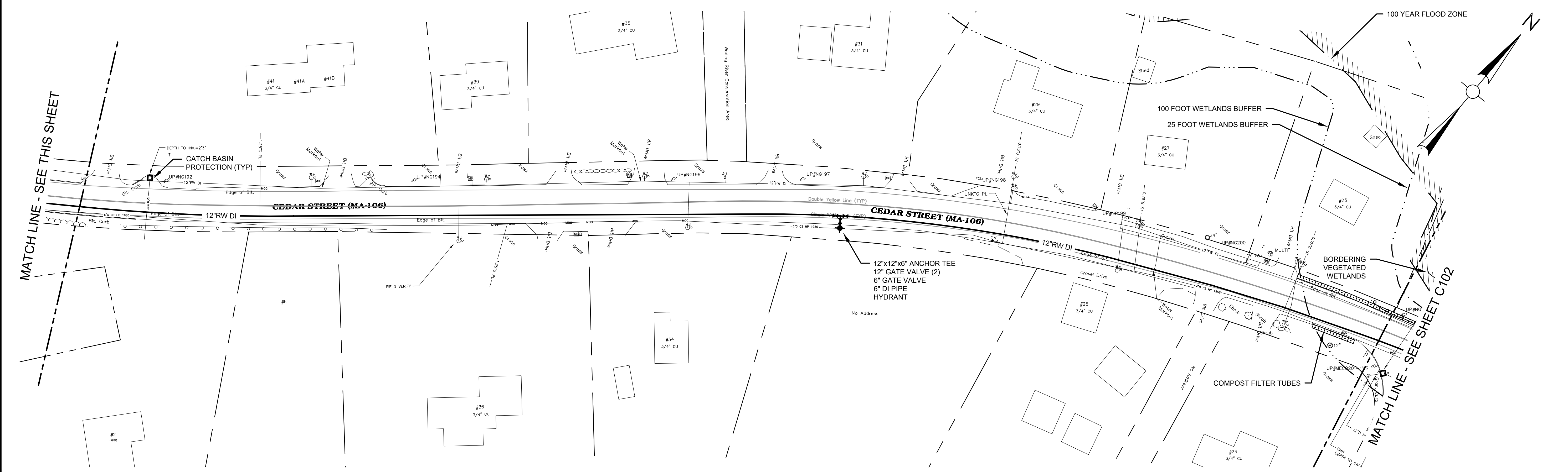
- NOTES:**
- BORDERING WETLAND LIMITS FROM MASSGIS WETLANDS LAYER
  - STREAM BANKS DELINEATED BY WESTON & SAMPSON



W&S Project No.: ENG20-0384; W&S File No.: C100; Date: July 2022

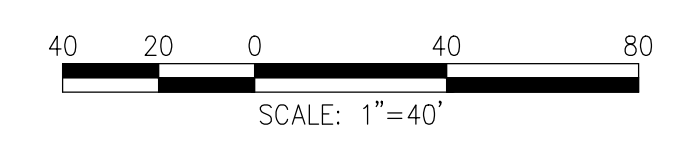


PLAN  
SCALE: 1" = 40'



PLAN  
SCALE: 1" = 40'

- NOTES:**
1. BORDERING WETLAND LIMITS FROM MASSGIS WETLANDS LAYER
  2. STREAM BANKS DELINEATED BY WESTON & SAMPSON



Project:  
TOWN OF FOXBOROUGH,  
MASSACHUSETTS

SOUTH STREET AND CEDAR  
STREET RAW WATER MAIN  
IMPROVEMENTS

**Weston & Sampson**  
Weston & Sampson Engineers, Inc.  
55 Walkers Brook Drive, Suite 100  
Reading, MA 01867  
978.532.1900 800.SAMPSON  
www.westonandsampson.com

Consultants:


Revisions:

No.	Date	Description

Seal:

Issued For:

**FOR PERMIT  
REVIEW ONLY**

Scale: AS NOTED

Date: JULY 2022  
 Drawn By: GJK  
 Reviewed By: LHK  
 Approved By: TEM

W&S Project No.: ENG20-0384  
 W&S File No.:

Drawing Title:  
**CEDAR STREET**

Sheet Number:  
**C101**

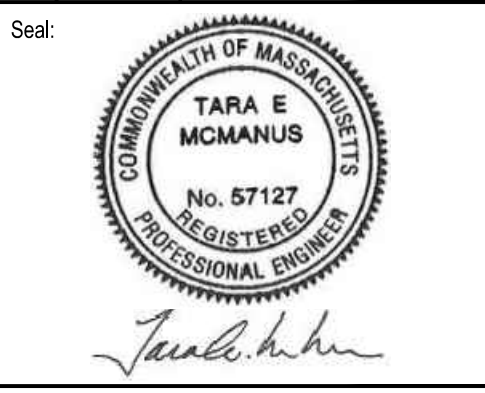
W&S Project No.: ENG20-0384; File No.: ENG20-0384-C101; Date: July 2022

Rev. 2.0 Date: July 2022

Consultants:


Revisions:

No.	Date	Description



Issued For:

**FOR PERMIT REVIEW ONLY**

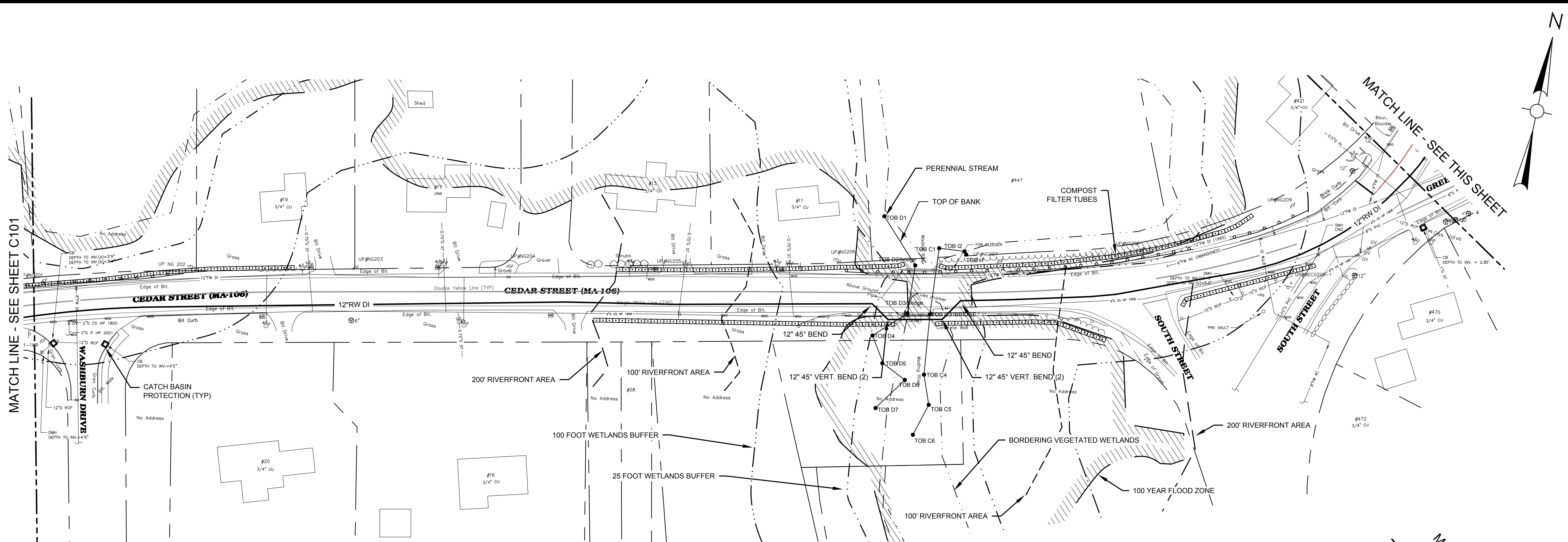
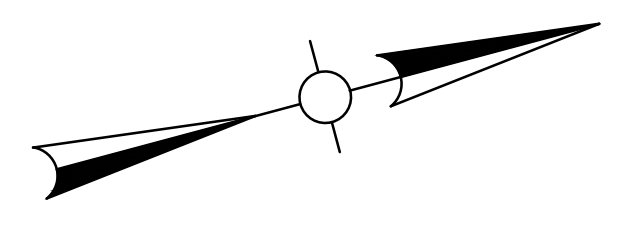
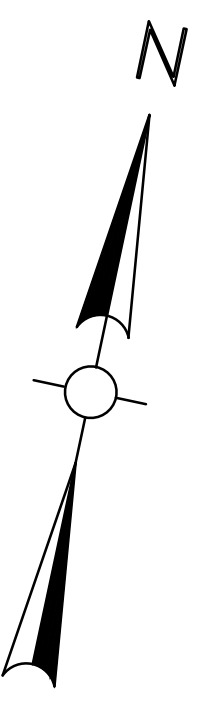
Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM  
W&S Project No.: ENG20-0384  
W&S File No.:

Drawing Title:

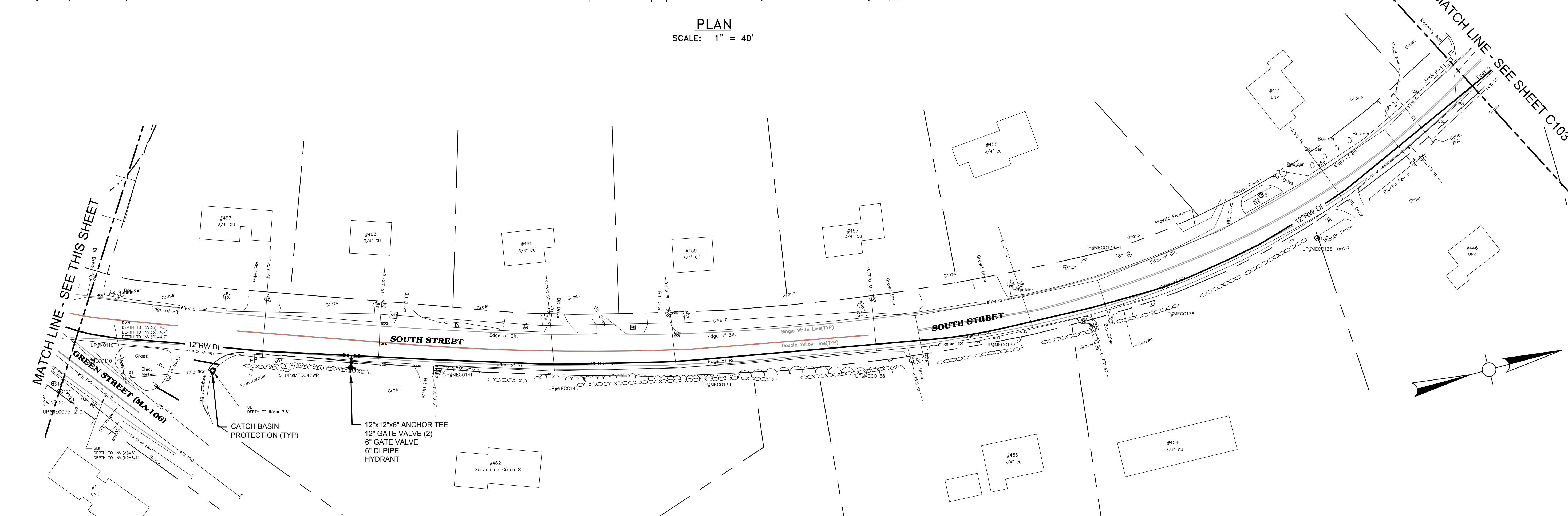
**CEDAR STREET SOUTH STREET**

Sheet Number:

**C102**

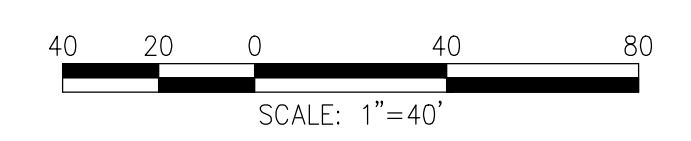


PLAN  
SCALE: 1" = 40'



PLAN  
SCALE: 1" = 40'

- NOTES:
- BORDERING WETLAND LIMITS FROM MASSGIS WETLANDS LAYER
  - STREAM BANKS DELINEATED BY WESTON & SAMPSON
  - SEE STRUCTURAL PLANS FOR THE CEDAR STREET BRIDGE CROSSING



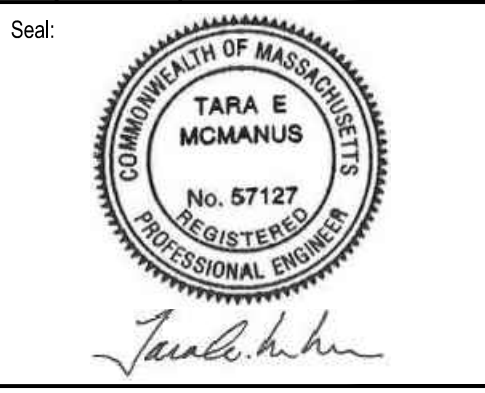
W&S 2022/07/20 10:00 AM Foxborough, MA 01867

REV. 2.0 Date: July 2022

Consultants:


Revisions:

No.	Date	Description

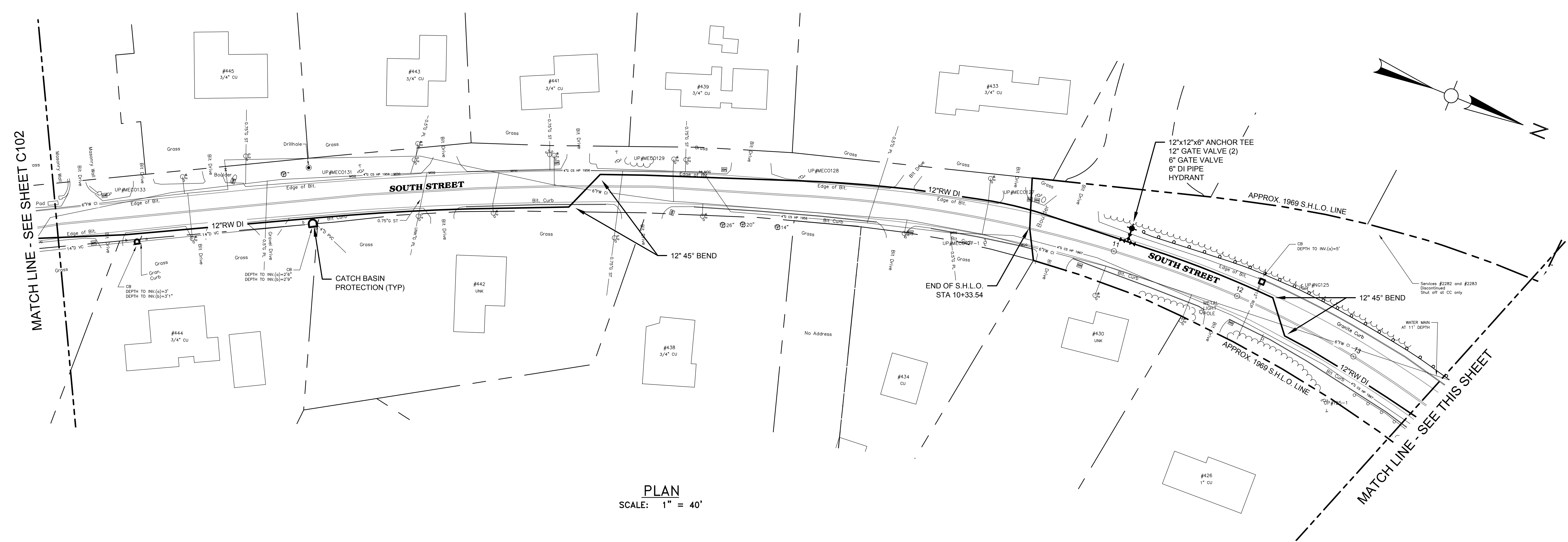


Issued For:  
**FOR PERMIT  
REVIEW ONLY**

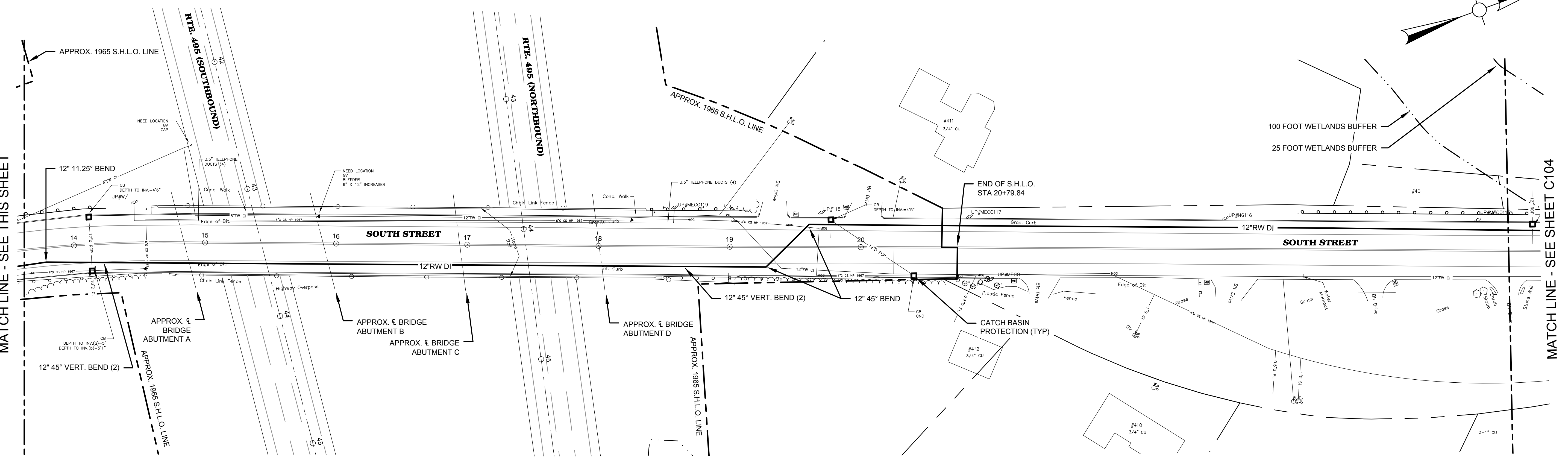
Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM

W&S Project No.: ENG20-0384  
W&S File No.:

Drawing Title:  
**SOUTH STREET**  
Sheet Number:  
**C103**

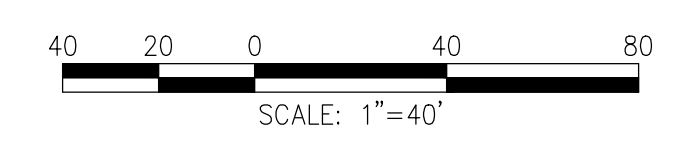


**PLAN**  
SCALE: 1" = 40'



**PLAN**  
SCALE: 1" = 40'

**NOTE:**  
1. SEE STRUCTURAL PLANS FOR MORE INFORMATION FOR THE MassDOT BRIDGE CROSSING.



W&S Project No.: ENG20-0384; File No.: 20-0384-C103; Date: July 2022

Rev. 2.0 Date: July 2022

Consultants:


Revisions:

No.	Date	Description

Seal:



*Tara E. McManus*

Issued For:

**FOR PERMIT  
REVIEW ONLY**

Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM

W&S Project No.: ENG20-0384  
W&S File No.:

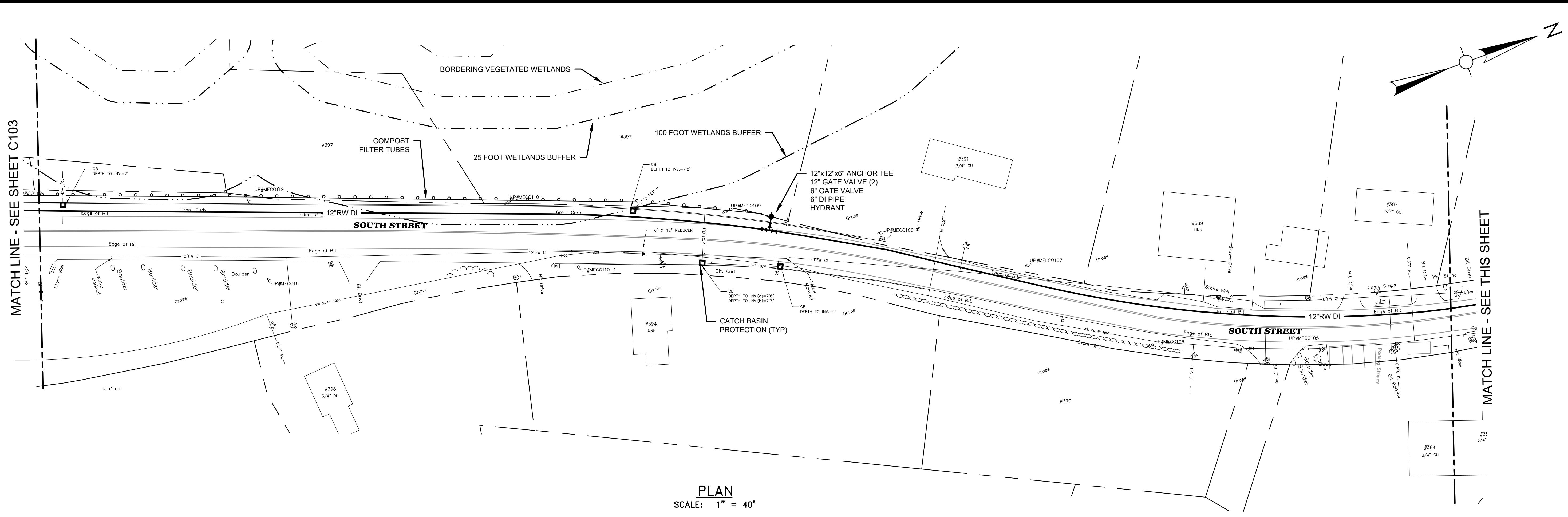
Drawing Title:

**SOUTH STREET**

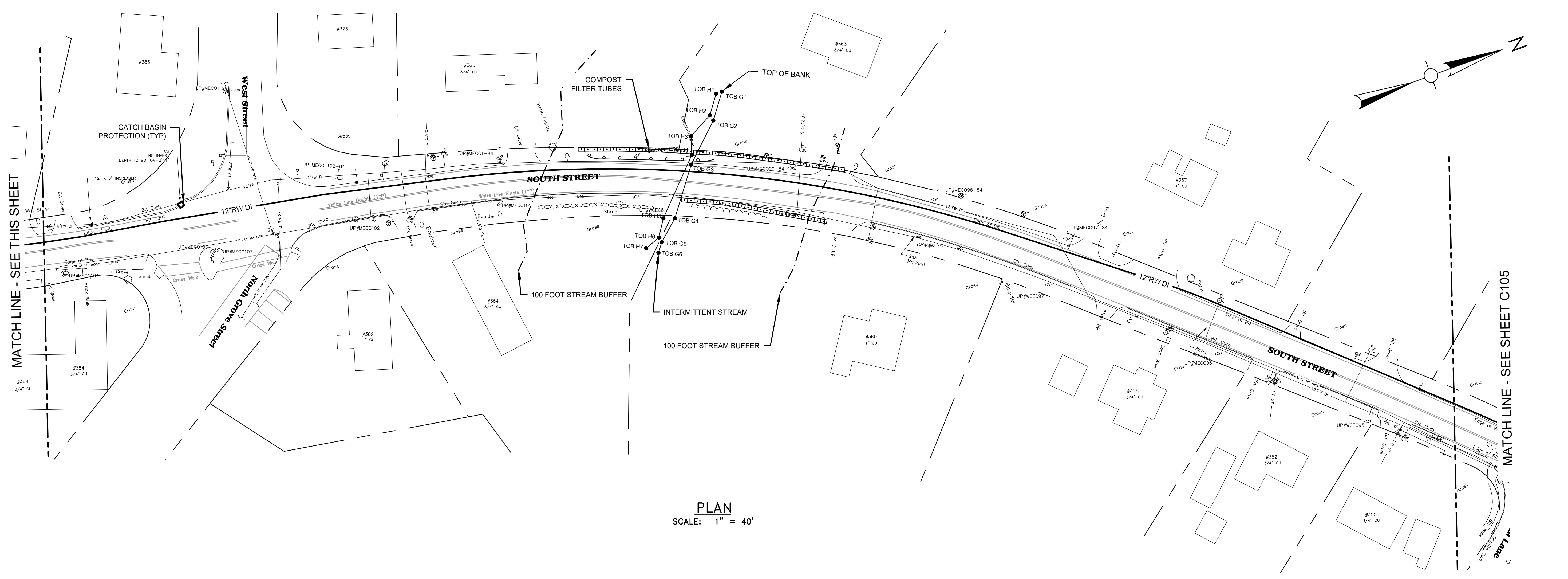
Sheet Number:

**C104**

Rev. 2.0 Date: JULY 2022

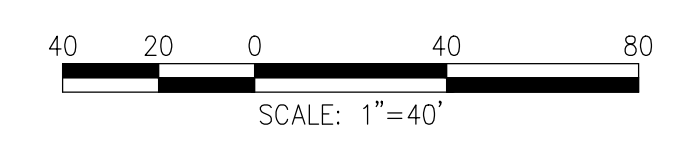


PLAN  
SCALE: 1" = 40'



PLAN  
SCALE: 1" = 40'

- NOTES:
- BORDERING WETLAND LIMITS FROM MASSGIS WETLANDS LAYER
  - STREAM BANKS DELINEATED BY WESTON & SAMPSON



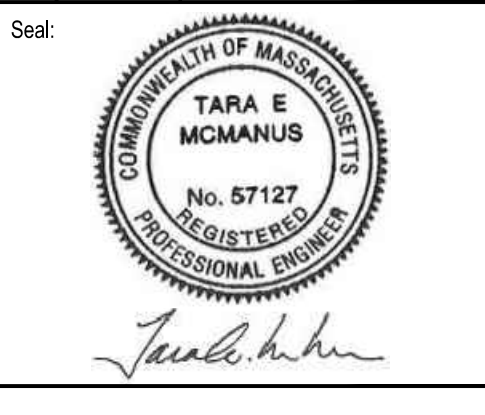
Weston & Sampson Engineers, Inc. 55 Walkers Brook Drive, Suite 100 Reading, MA 01867 978.532.1900 www.westonandsampson.com

Rev. 2.0 Date: JULY 2022

Consultants:


Revisions:

No.	Date	Description



Issued For:

**FOR PERMIT REVIEW ONLY**

Scale: AS NOTED

Date: JULY 2022

Drawn By: GJK

Reviewed By: LHK

Approved By: TEM

W&S Project No.: ENG20-0384

W&S File No.:

Drawing Title:

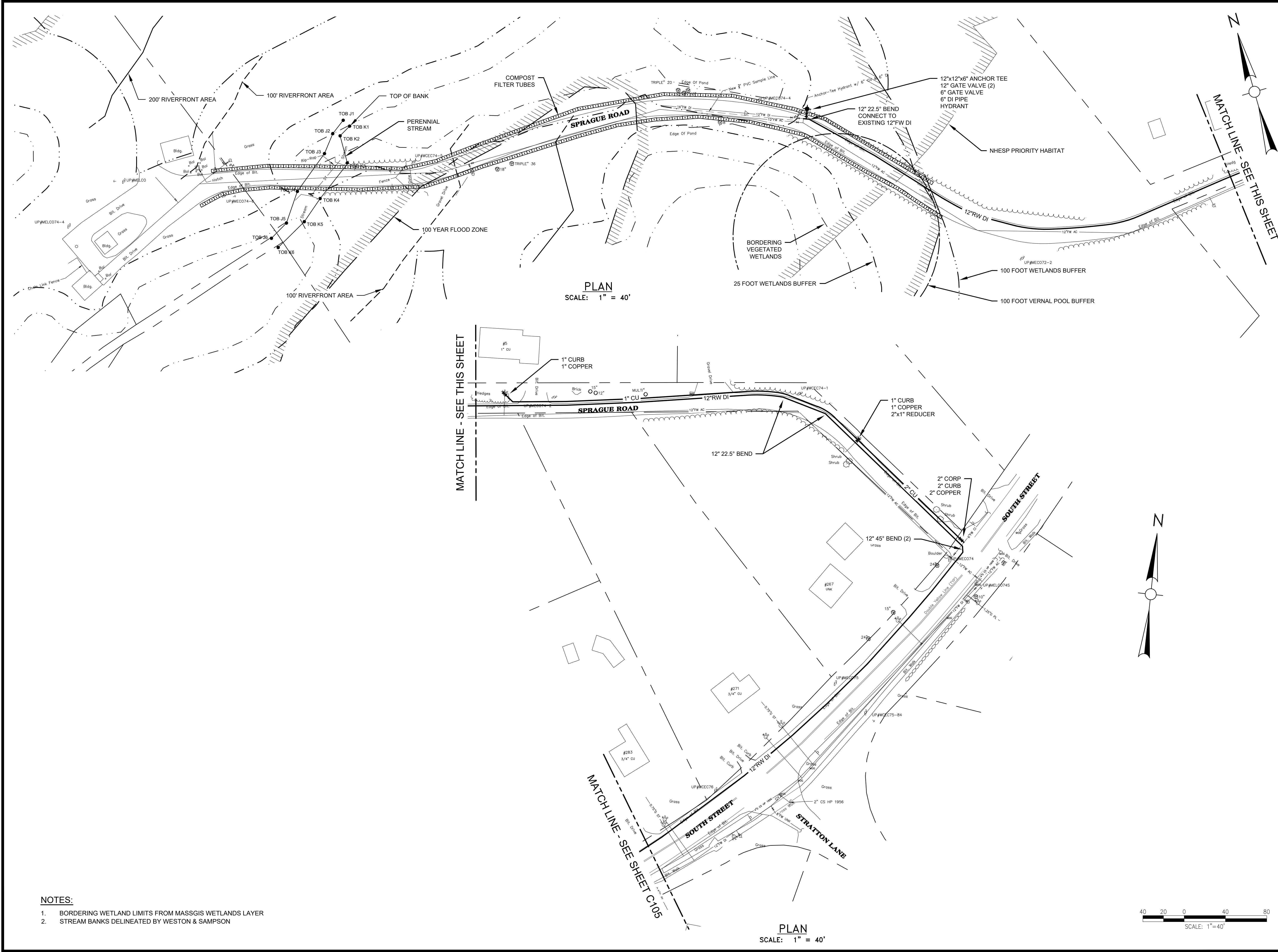
**SOUTH STREET**

Sheet Number:

**C105**







PLAN  
SCALE: 1" = 40'

PLAN  
SCALE: 1" = 40'

- NOTES:**
- BORDERING WETLAND LIMITS FROM MASSGIS WETLANDS LAYER
  - STREAM BANKS DELINEATED BY WESTON & SAMPSON



Project:  
TOWN OF FOXBOROUGH,  
MASSACHUSETTS

SOUTH STREET AND CEDAR  
STREET RAW WATER MAIN  
IMPROVEMENTS

**Weston & Sampson**  
Weston & Sampson Engineers, Inc.  
55 Walkers Brook Drive, Suite 100  
Reading, MA 01867  
978.532.1900 800.SAMPSON  
www.westonandsampson.com

Consultants:


Revisions:

No.	Date	Description

Seal:

Issued For:  
**FOR PERMIT  
REVIEW ONLY**

Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM  
W&S Project No.: ENG20-0384  
W&S File No.:

Drawing Title:  
**SOUTH STREET  
SPRAGUE STREET**

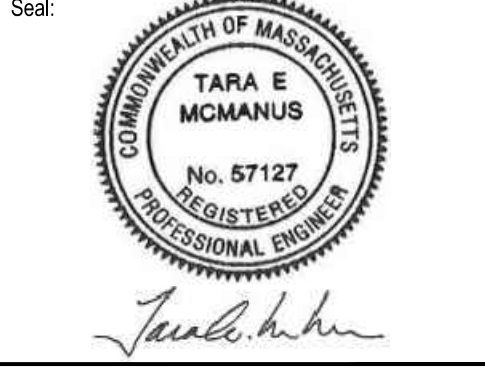
Sheet Number:  
**C106**

Consultants:

No.	Date	Description

Revisions:

No.	Date	Description



Issued For:

**FOR PERMIT REVIEW ONLY**

Scale: AS NOTED  
 Date: JULY 2022  
 Drawn By: GJK  
 Reviewed By: LHK  
 Approved By: TEM  
 W&S Project No.: ENG20-0384  
 W&S File No.:

Drawing Title:

**DETAILS I**

Sheet Number:

**C501**

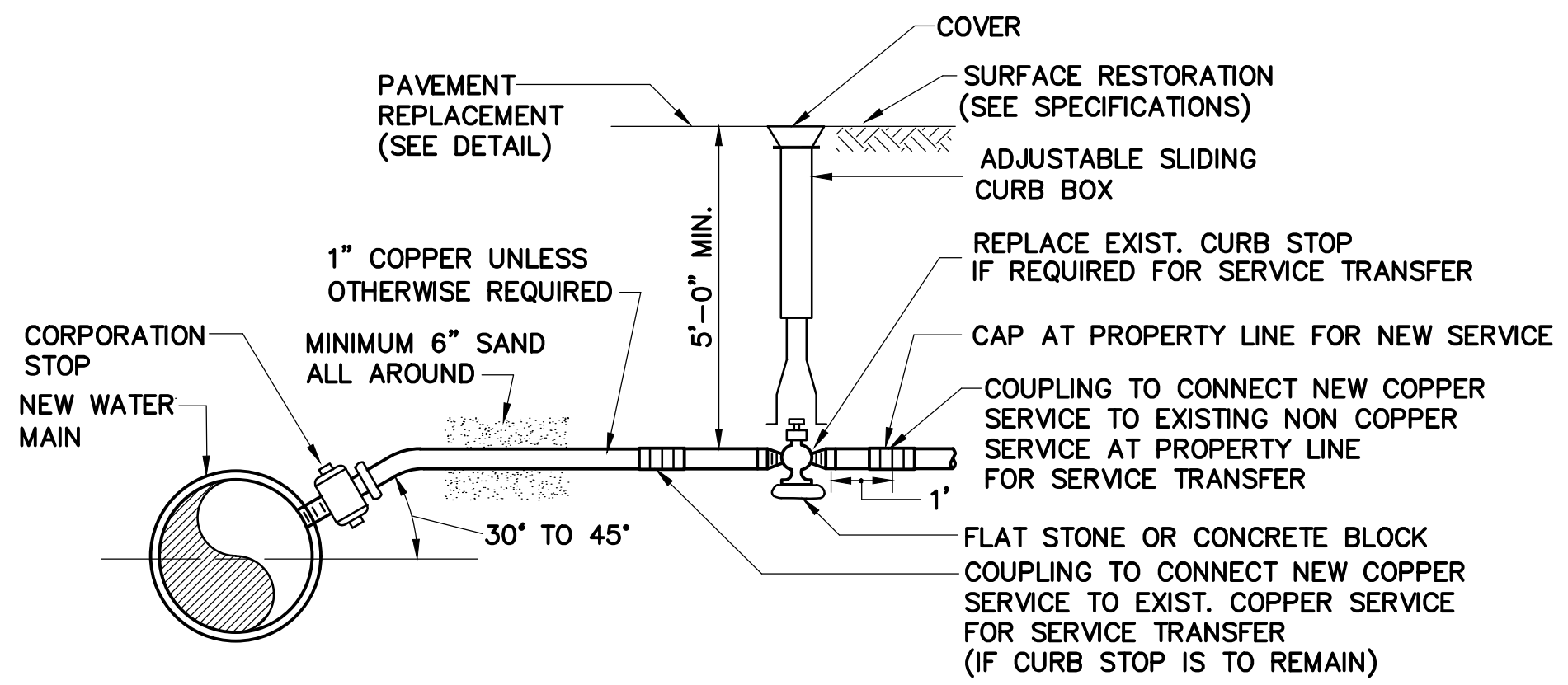
Rev. 2.0 Date: July 2020

**TABLE 1**  
 REQUIRED LENGTH OF RESTRAINED JOINTS FROM FITTINGS (FEET)

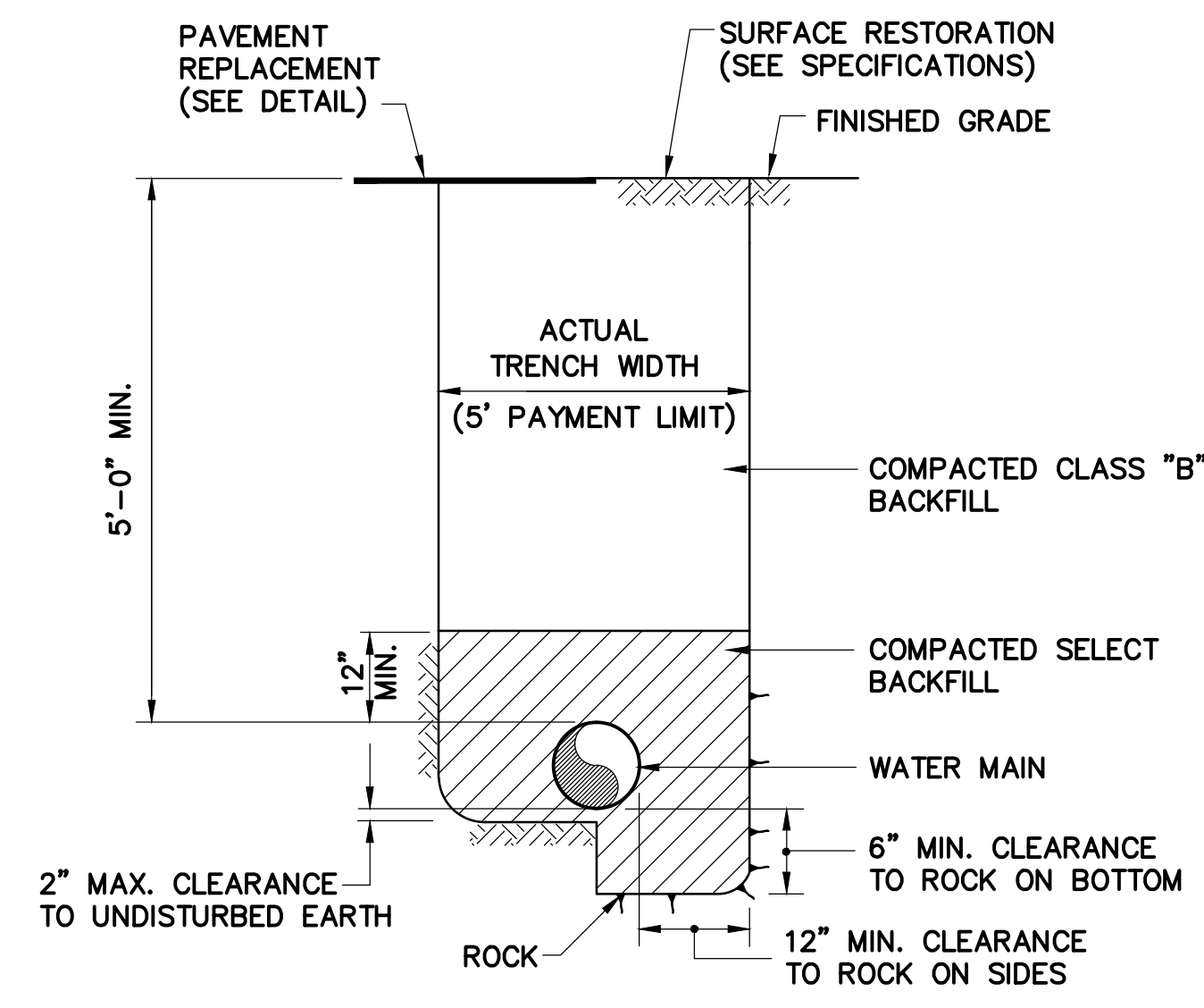
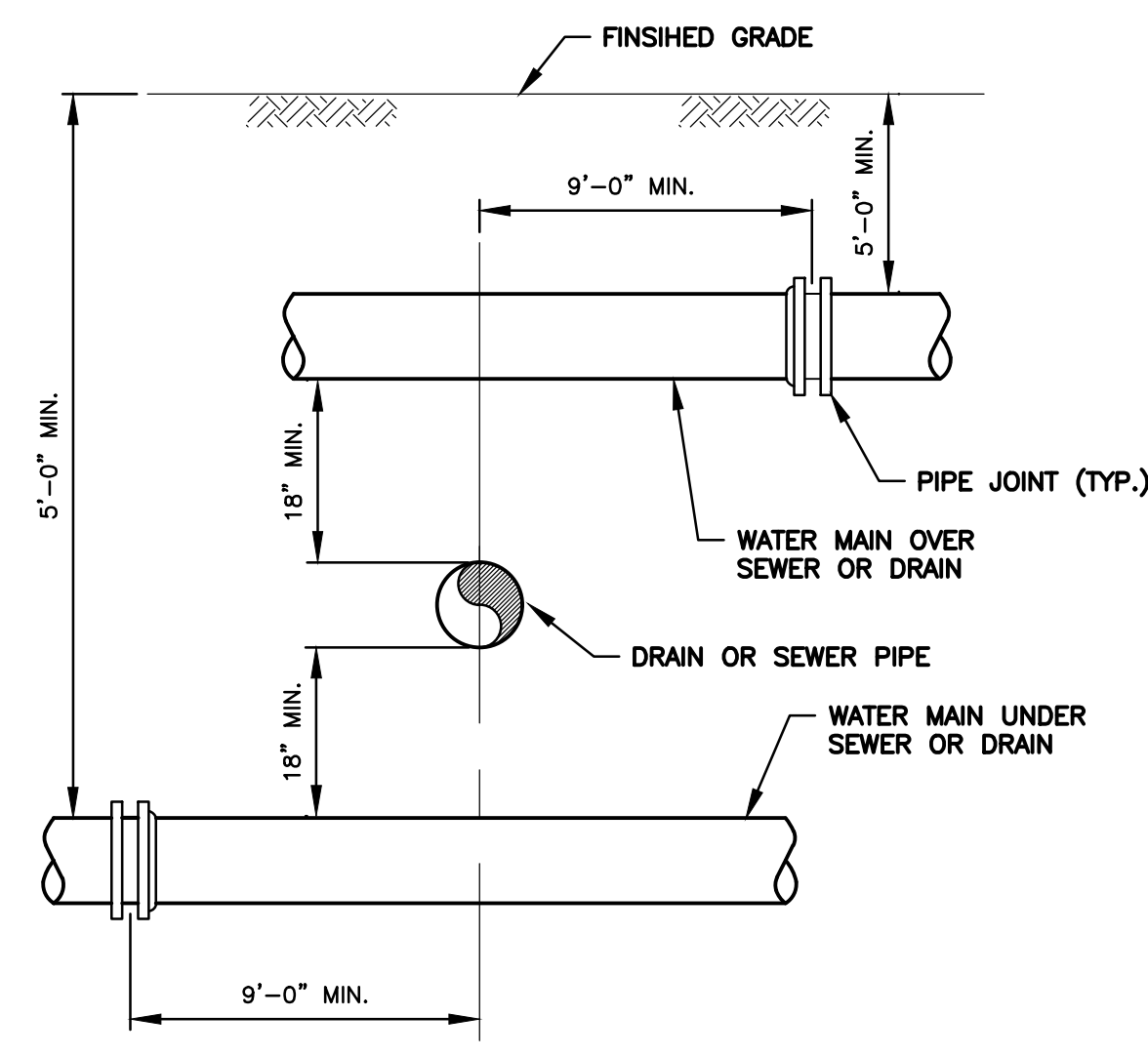
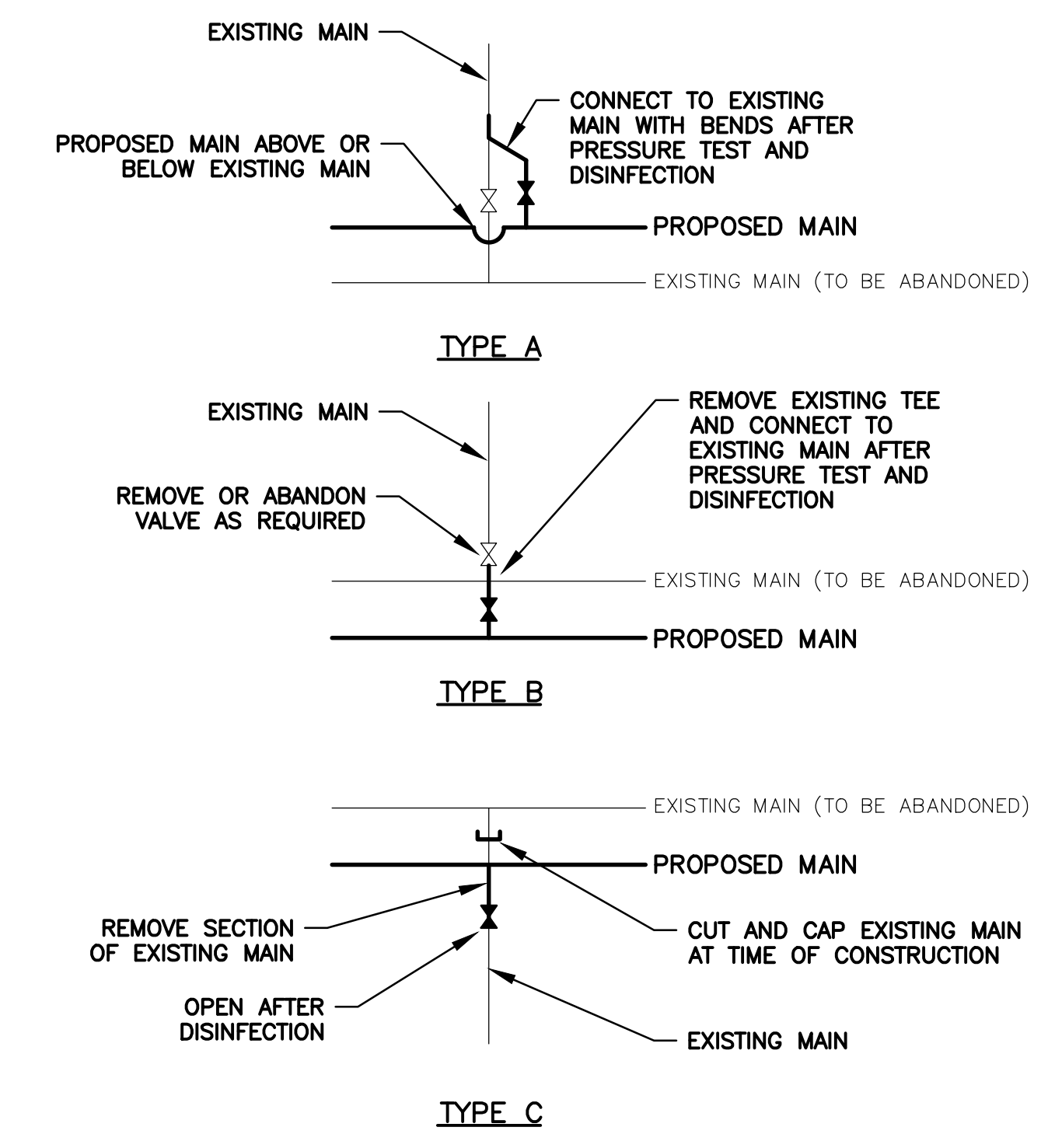
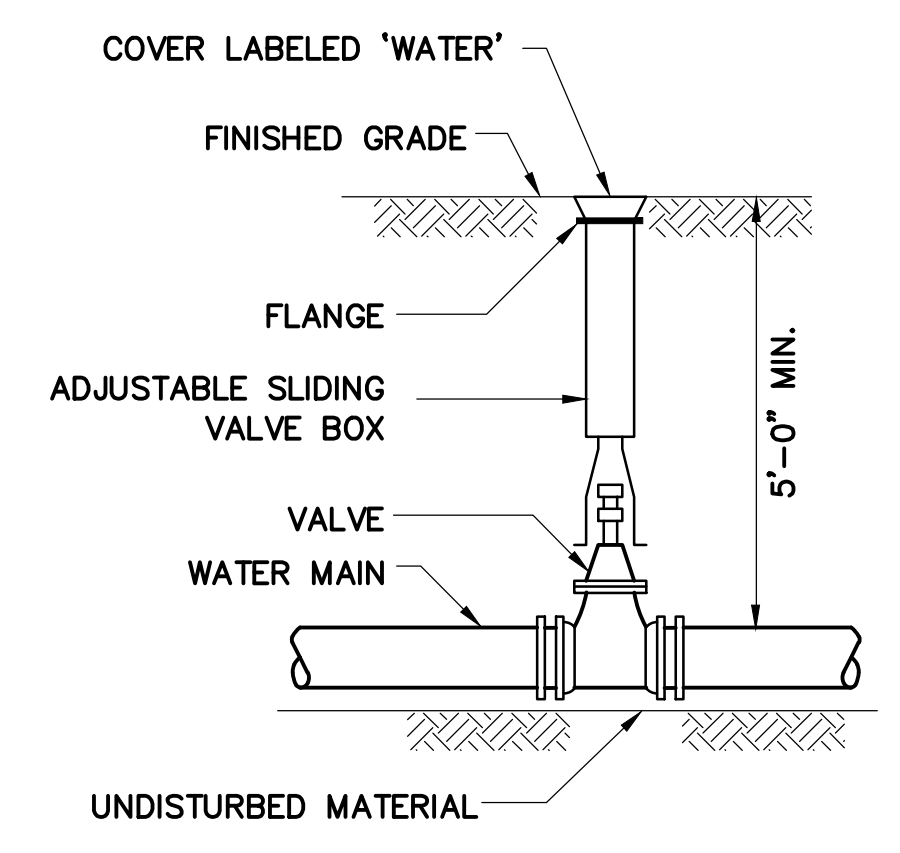
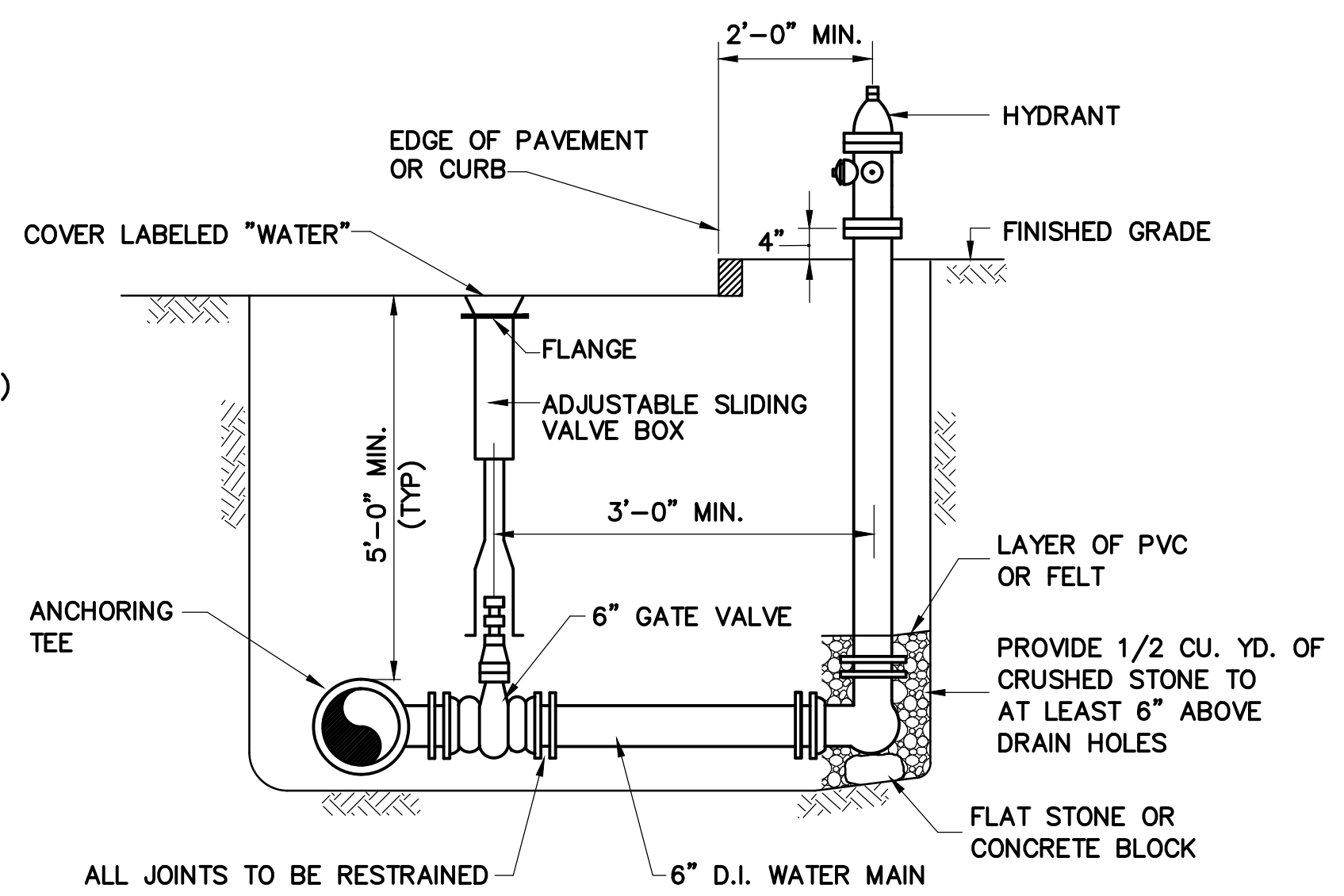
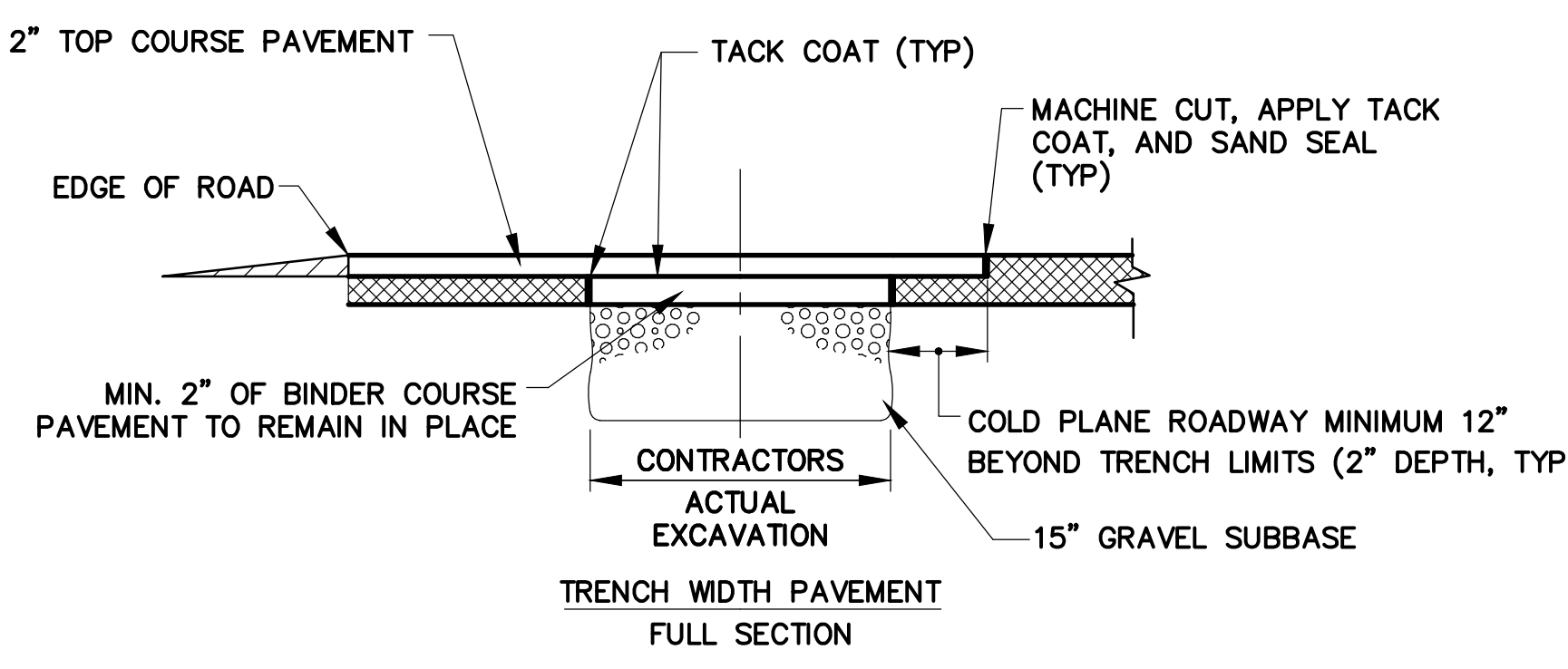
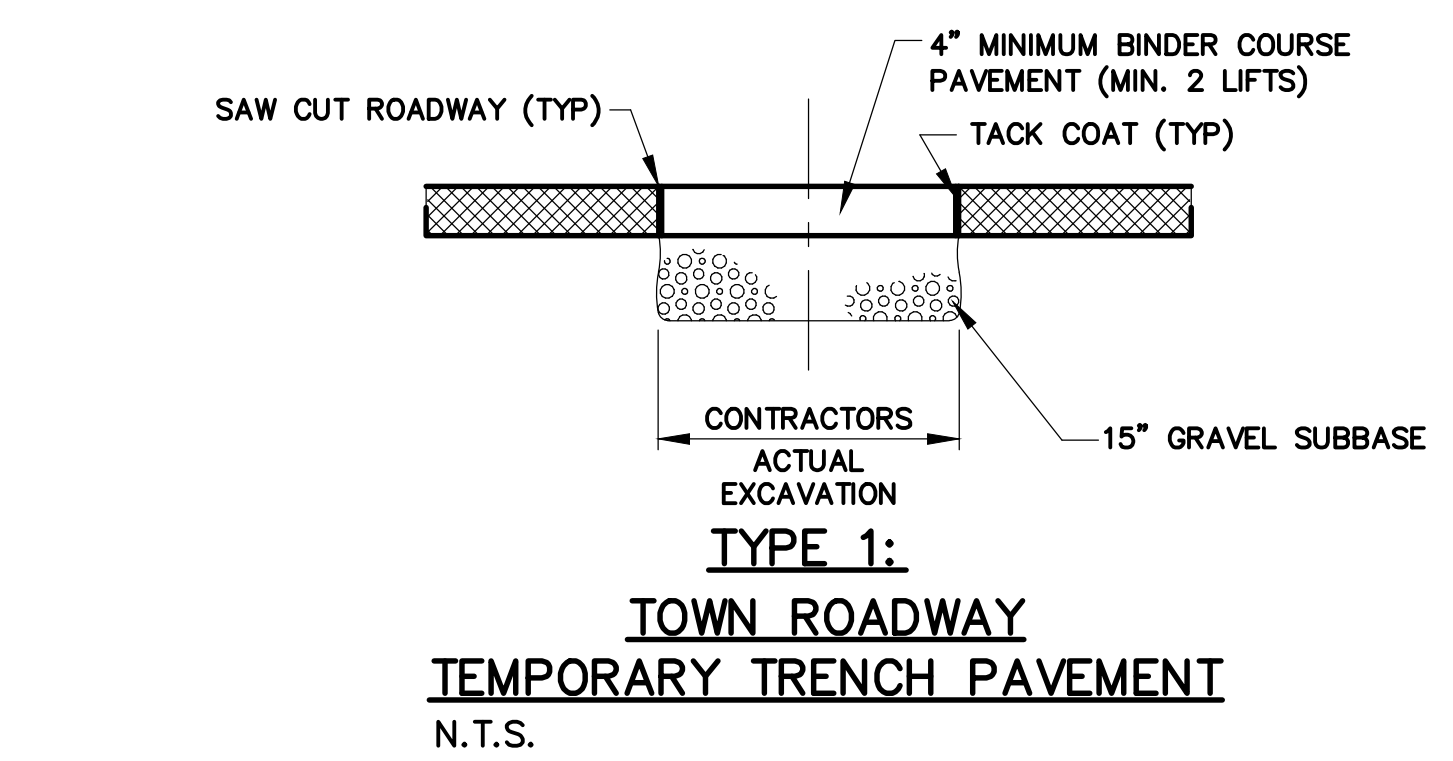
PIPE SIZE	90° BEND	45° BEND OR WYE BRANCH	22 1/2° BEND	11 1/4° BEND	PLUG, CAP OR IN-LINE VALVE	TEE (BRANCH)
6"	25 (30.5)	10.5 (12.5)	5 (6)	2.5 (3)	43 (64)	34 (51)
8"	33 (40)	13.5 (16.5)	6.5 (8)	3 (4)	55 (82)	47 (70)
10"	40 (48.5)	16.5 (20)	8 (9.5)	4 (5)	67 (100)	58 (87)
12"	47 (56.5)	19.5 (23.5)	9.5 (11.5)	4.5 (5.5)	79 (118)	70 (105)
16"	59.5 (72)	24.5 (30)	12 (14.5)	6 (7)	101 (152)	92 (139)
20"	72 (86.5)	30 (36)	14.5 (17)	7 (8.5)	123 (184)	114 (171)
24"	84 (100)	35 (41)	16.5 (20)	8 (10)	144 (216)	134 (202)
30"	100 (120)	41 (50)	20 (24)	10 (12)	174 (261)	165 (247)

**NOTES:**

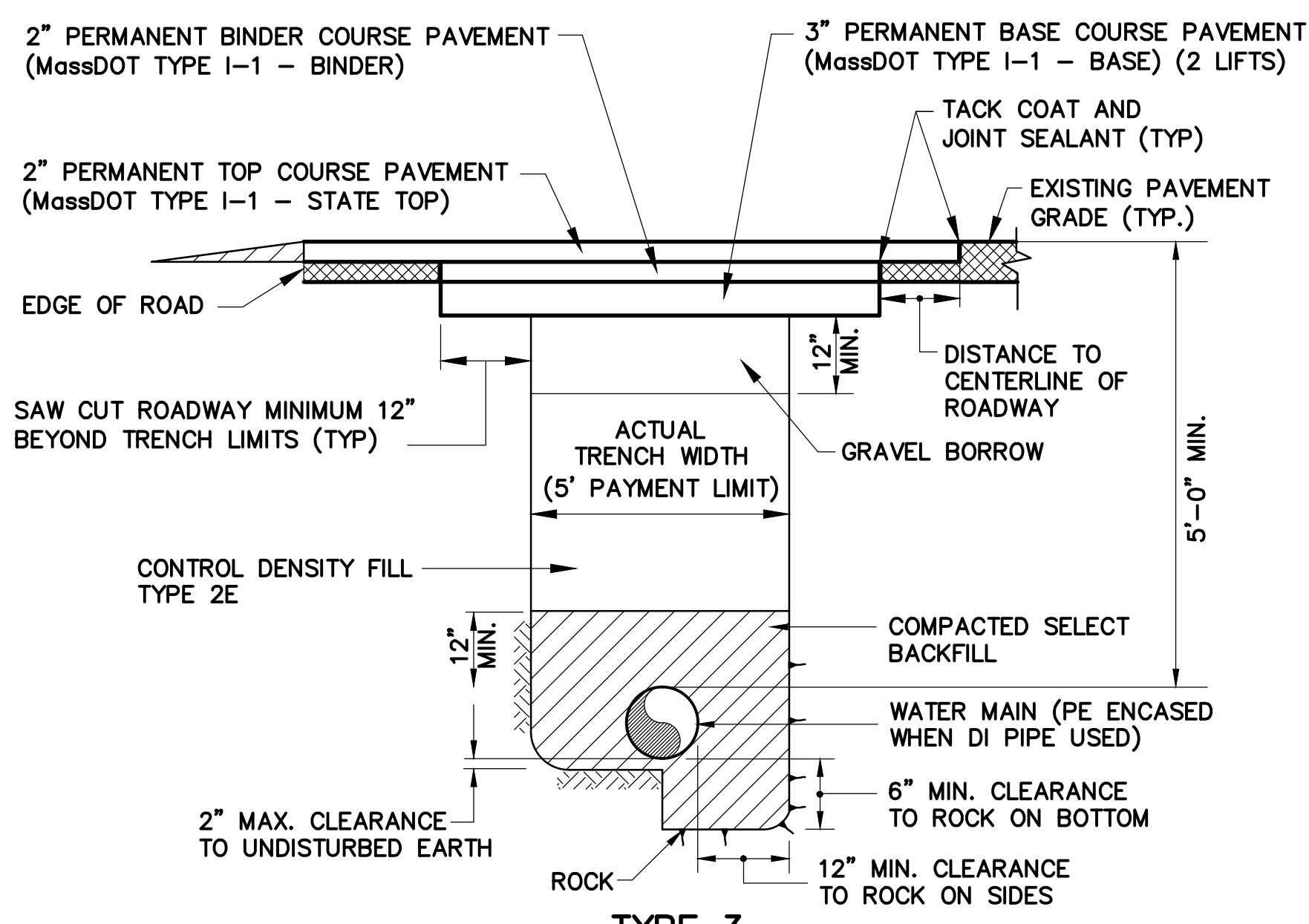
- RESTRAINED LENGTHS LISTED IN PARENTHESES ARE FOR PIPE WRAPPED IN POLYETHYLENE. THE OTHER ASSOCIATED LENGTHS ARE FOR PLAIN UNWRAPPED DUCTILE IRON PIPE.
- THE CONTRACTOR SHALL USE THIS TABLE IN CONJUNCTION WITH THE APPROPRIATE PIPE SPECIFICATION SECTION.



**NOTE:** PROVIDE SADDLE FOR ALL AC AND PVC MAINS AND ALL 2" OR LARGER STOPS



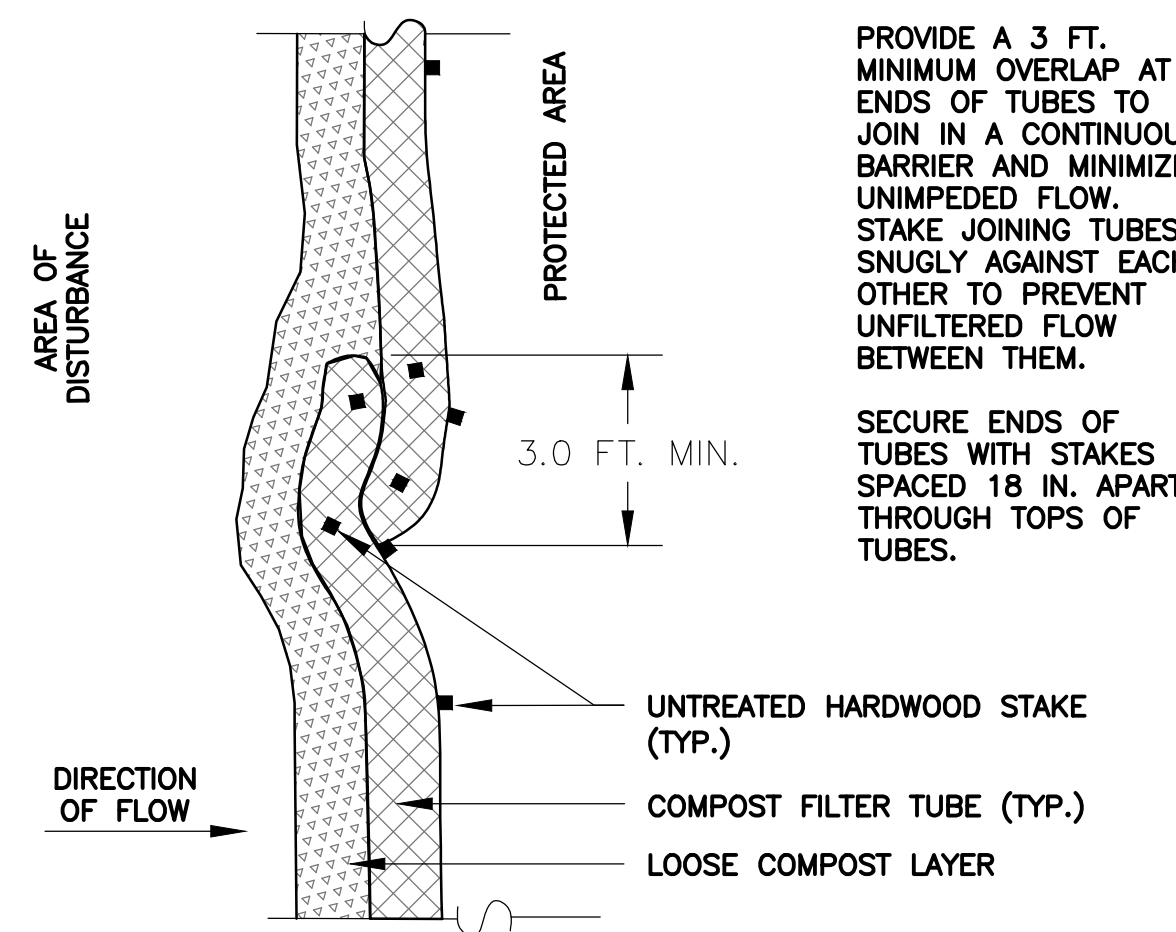
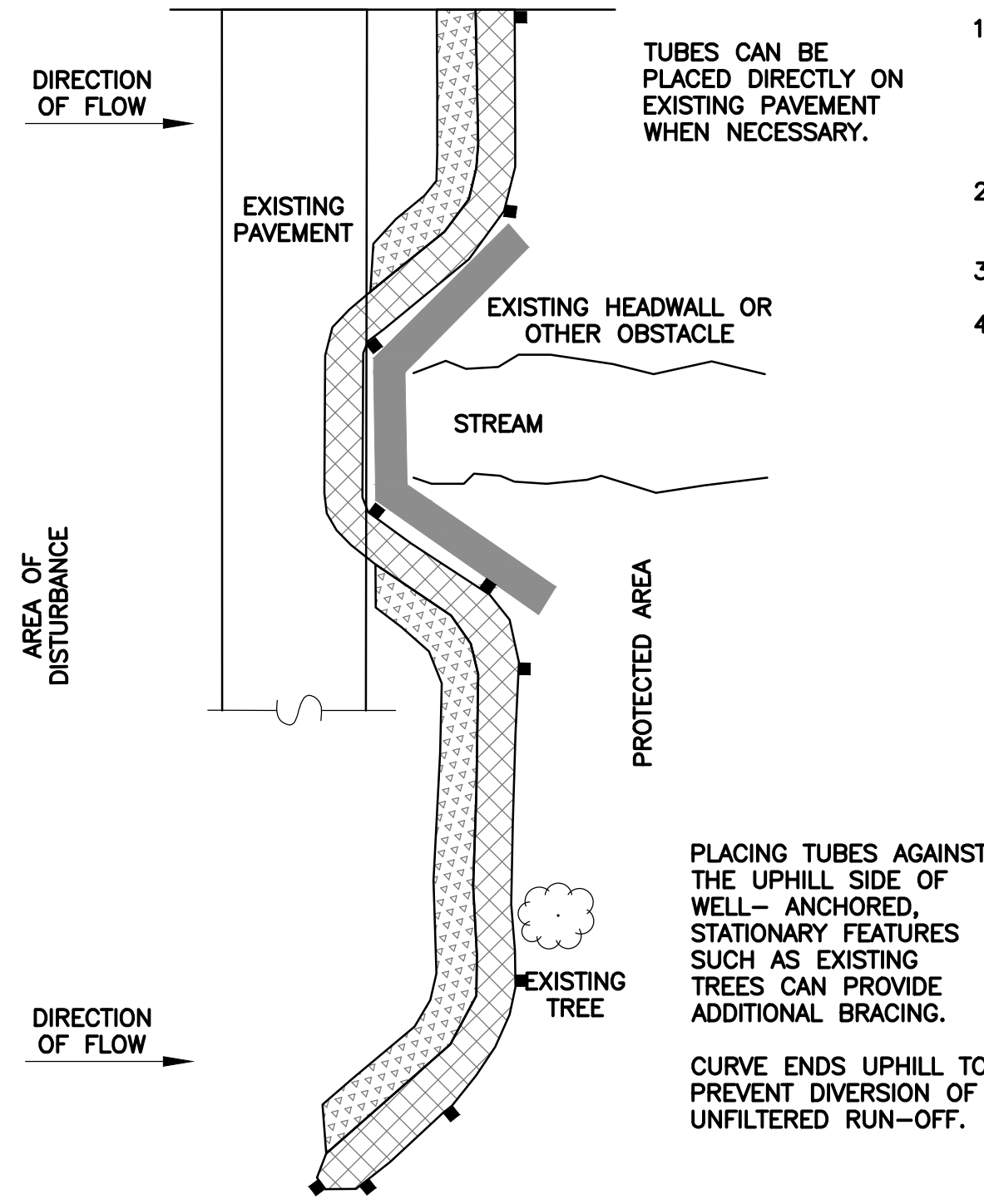
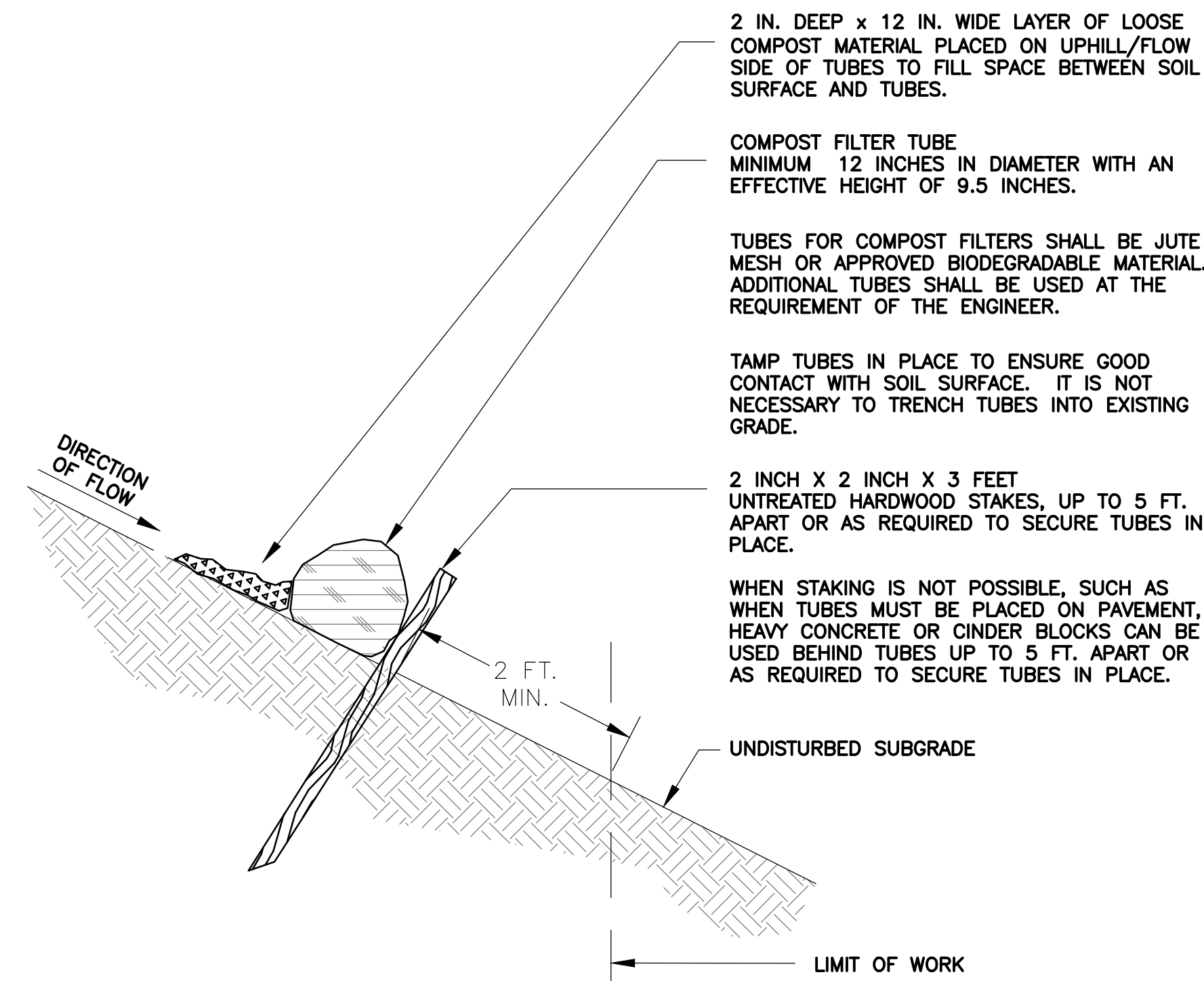
**NOTE:** THIS DETAIL IS FOR WORK OUTSIDE OF MassDOT S.H.L.O.



**NOTES:**

- SEE SECTION 02745, PAVING FOR PAVEMENT SCHEDULE.
- FOR ALL TRENCH PAVEMENTS, CONTRACTOR SHALL INSTALL ASPHALT EMULSION TACK COAT TO ALL SUBSURFACES AND VERTICAL SAW CUTS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT.
- PAVEMENT SHALL BE INSTALLED FLUSH WITH EXISTING GRADE BEFORE WINTER SHUTDOWN.
- TOP LAYER OF PAVEMENT SHALL BE INSTALLED BY MECHANICAL MEANS.
- TRENCH EDGES SHALL BE PAINTED IF ANY SURFACES ARE LEFT MORE THAN 7 DAYS WITHOUT TOP COURSE PAVEMENT.

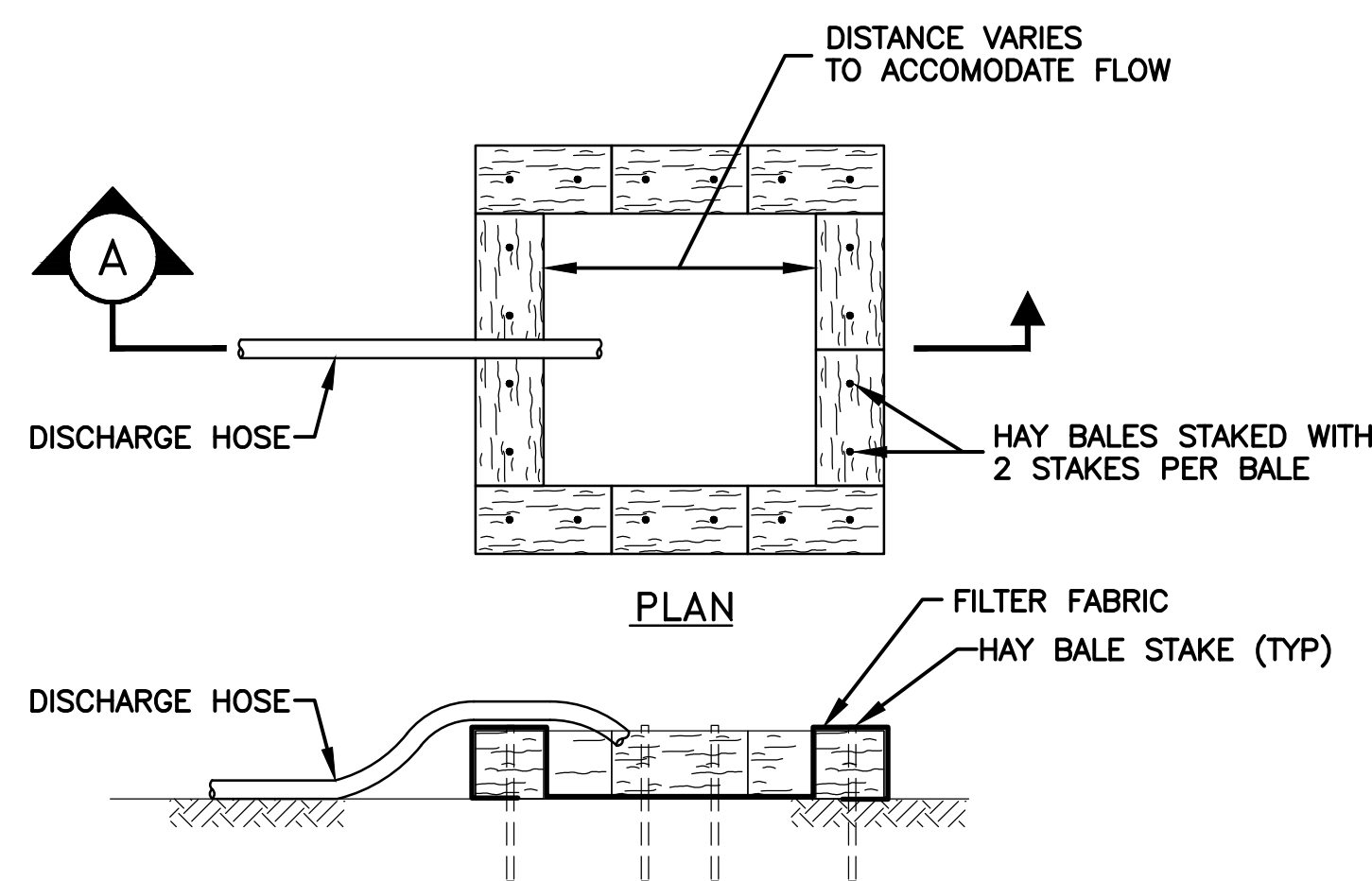
**PAVEMENT REPLACEMENT DETAILS**  
 N.T.S.



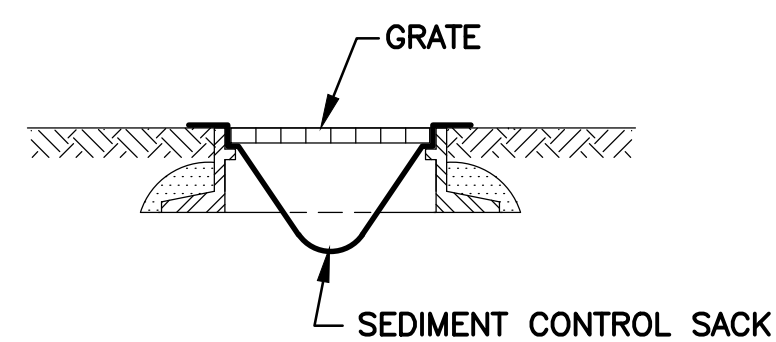
- GENERAL NOTES:**
1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
  2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
  3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
  4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

**SINGLE COMPOST FILTER TUBE DETAIL**  
NOT TO SCALE

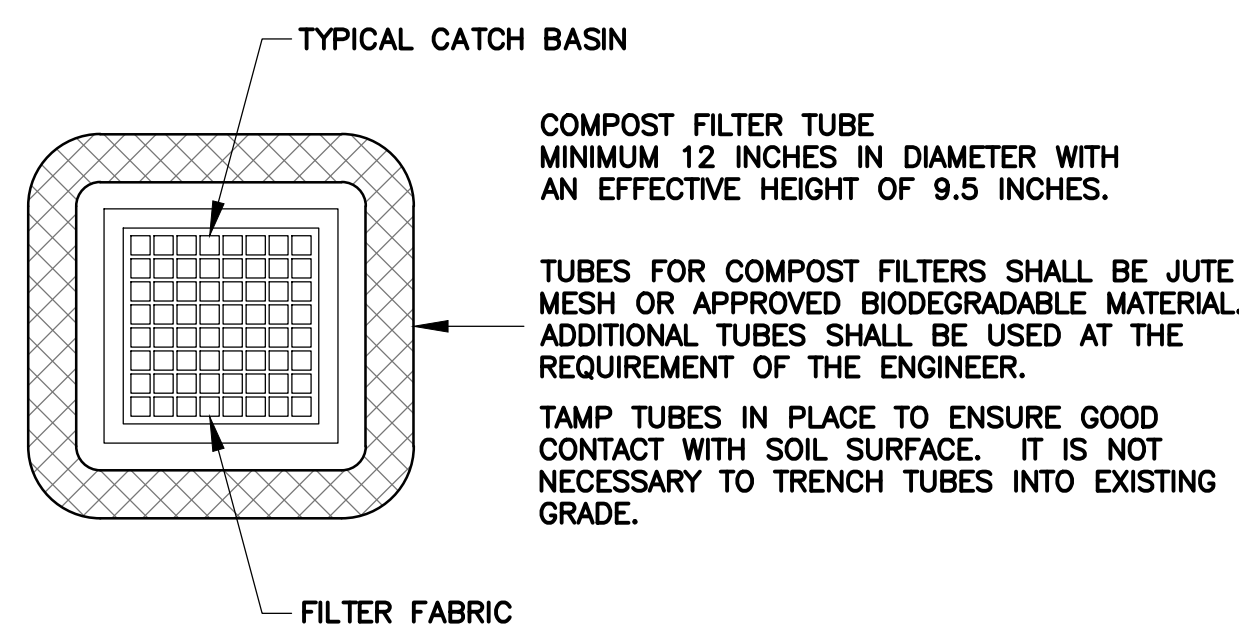
**PLAN VIEW - JOIN DETAIL**



**DEWATERING DISCHARGE DISPOSAL DETAIL**  
N.T.S.

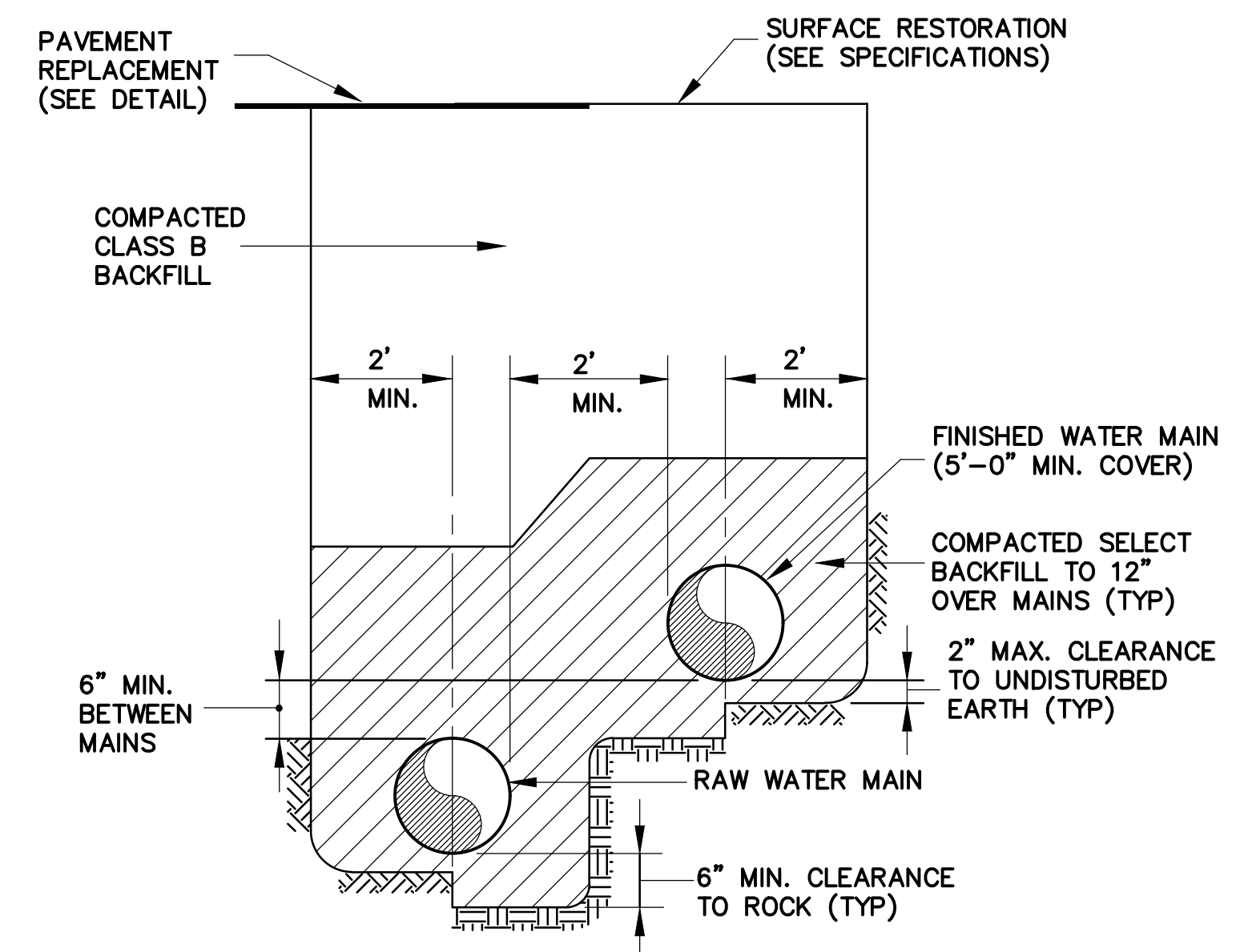


**CATCH BASIN PROTECTION DETAIL**  
N.T.S.



- NOTES:**
1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
  2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
  3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
  4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
  5. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE.
  6. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
  7. PROVIDE A 3 FT. MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM. SECURE ENDS OF TUBES WITH STAKES SPACED 18 IN. APART THROUGH TOPS OF TUBES.

**CATCH BASIN PROTECTION DETAIL**  
N.T.S.



**DUAL WATER MAIN TRENCH DETAIL**  
N.T.S.

Consultants:

Revisions:

No.	Date	Description



Seal: Tara E. McManus  
Registered Professional Engineer  
No. 57127  
Commonwealth of Massachusetts

FOR PERMIT REVIEW ONLY

Scale: AS NOTED  
Date: JULY 2022  
Drawn By: GJK  
Reviewed By: LHK  
Approved By: TEM  
W&S Project No.: ENG20-0384  
W&S File No.:

Drawing Title: DETAILS II  
Sheet Number: C502  
Rev. 2.0 Date: July 2022  
COPYRIGHT © 2021 WESTON & SAMPSON, INC.