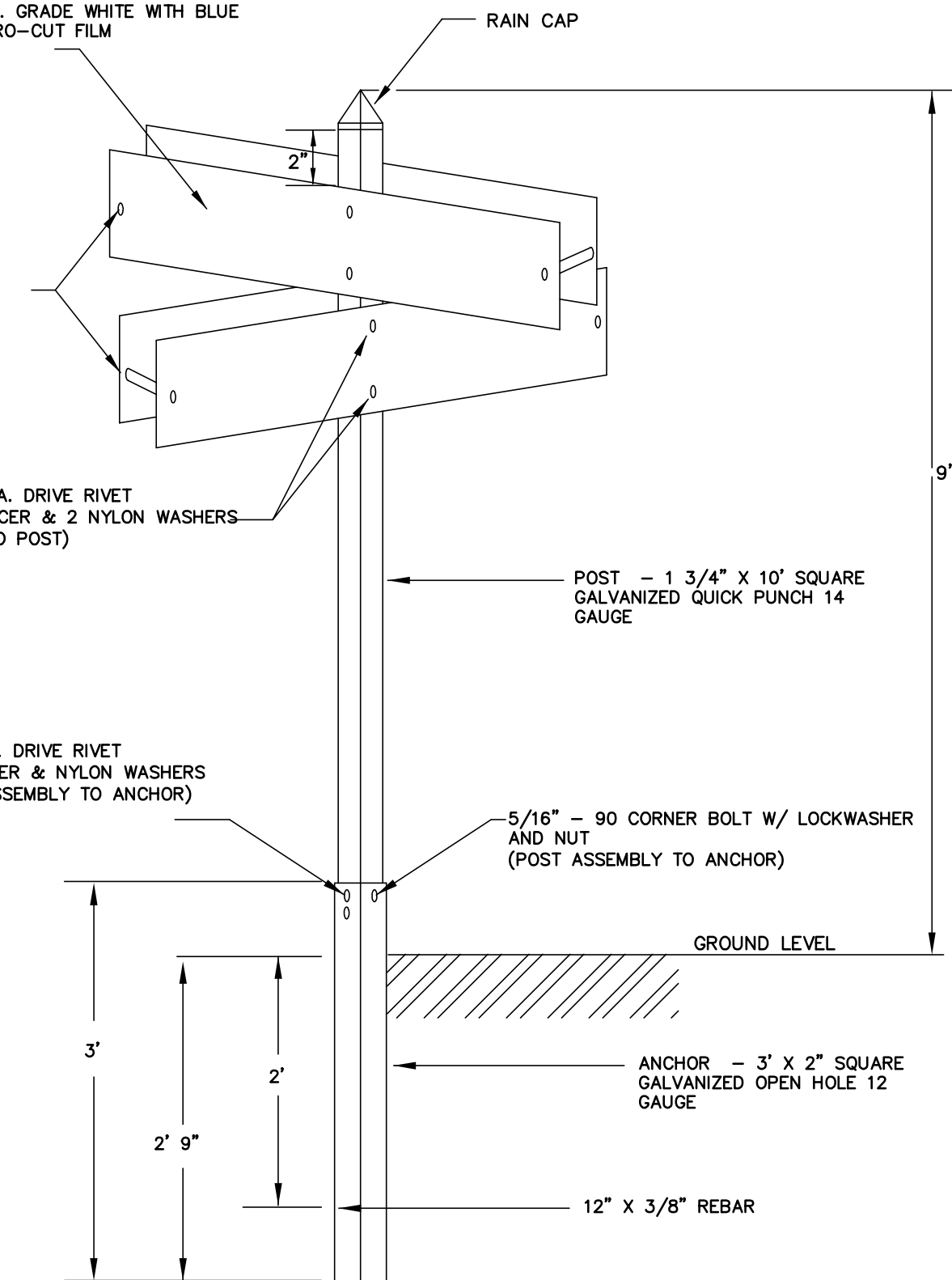


SIZE -- 9" X VARIOUS SIZES
PRINTED -- UPPER CASE AND LOWER CASE LETTERS
WITH 3" SUFFIX
MATERIAL -- 3M VIP DIAG. GRADE WHITE WITH BLUE
TRANSLUCENT 3M-ELECTRO-CUT FILM

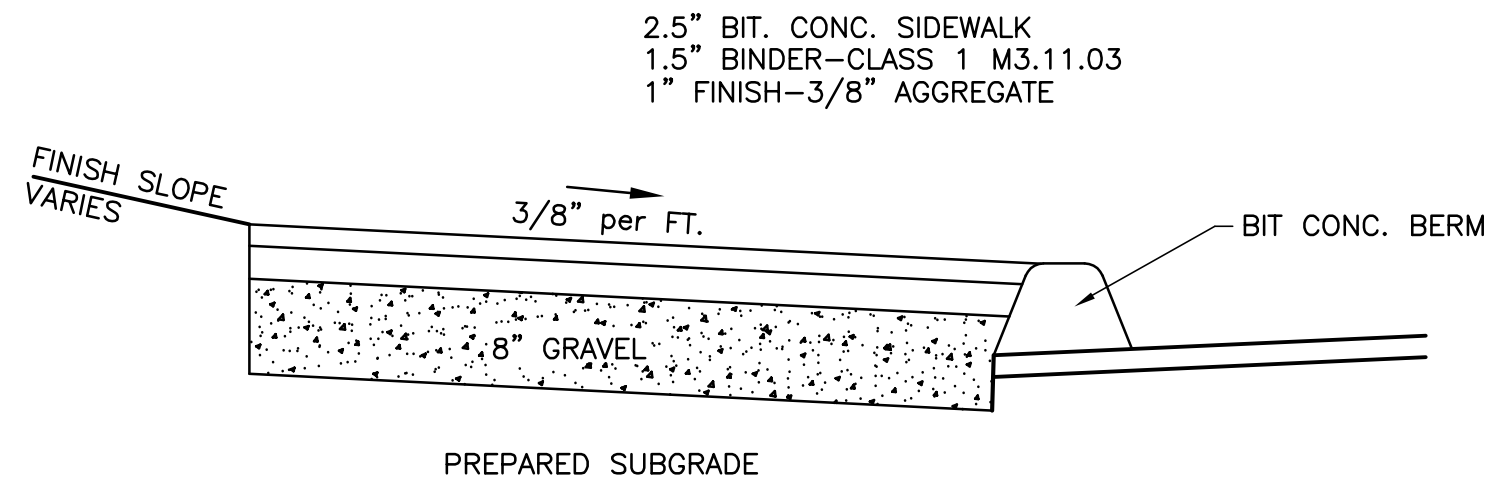
1 5/8, 1 7/8 ALUMINUM
DOUBLE ENDED RIVET
VCR 187-30
(SIGN TO SIGN)

3/8" DIA. DRIVE RIVET
W/ SPACER & 2 NYLON WASHERS
(SIGN TO POST)

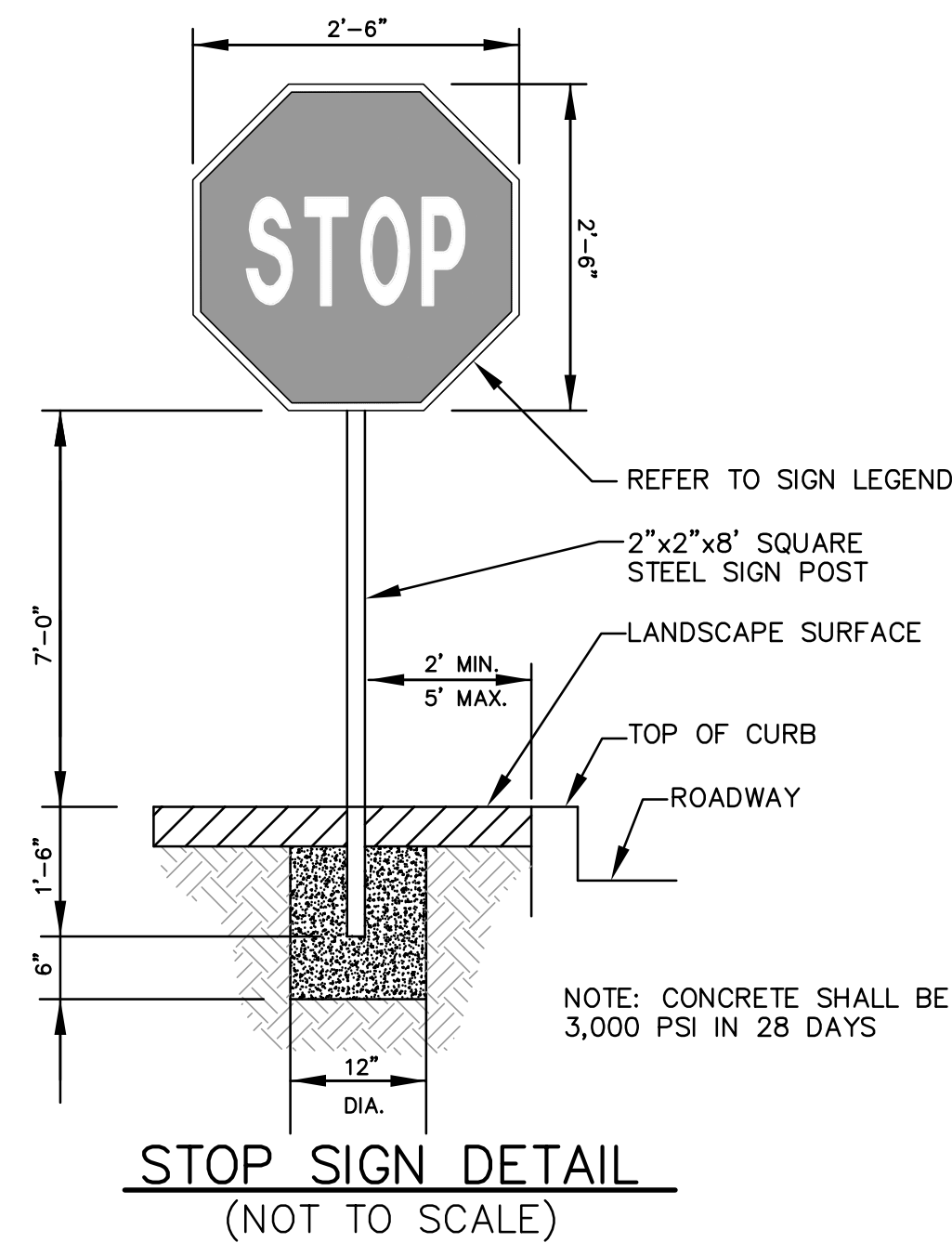
3/8" DIA. DRIVE RIVET
W/ SPACER & NYLON WASHERS
(POST ASSEMBLY TO ANCHOR)



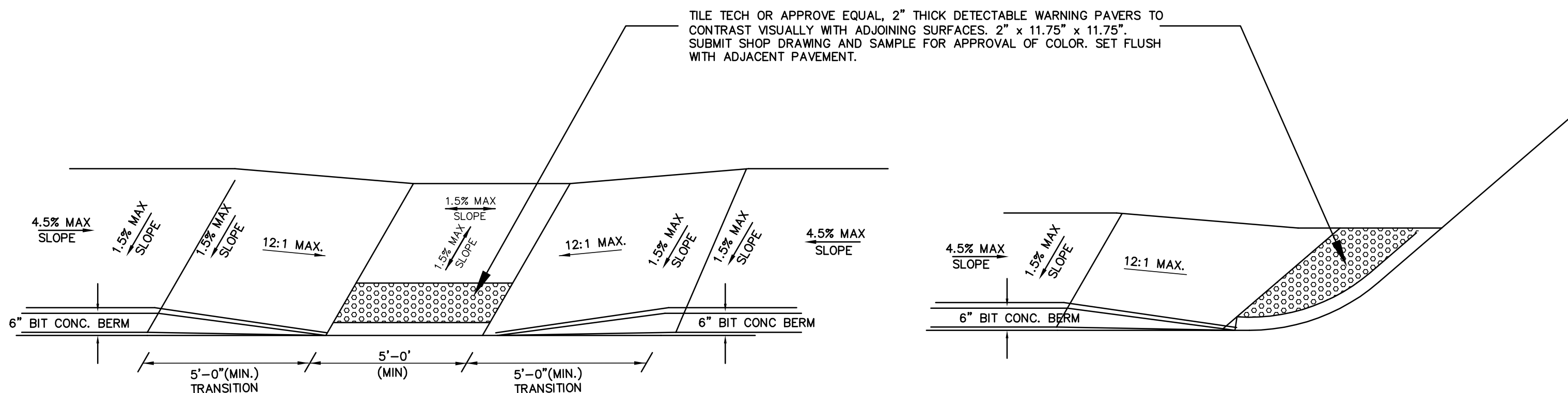
TYPICAL STREET SIGN DETAIL
NOT TO SCALE



BITUMINOUS SIDEWALK DETAIL
NOT TO SCALE:



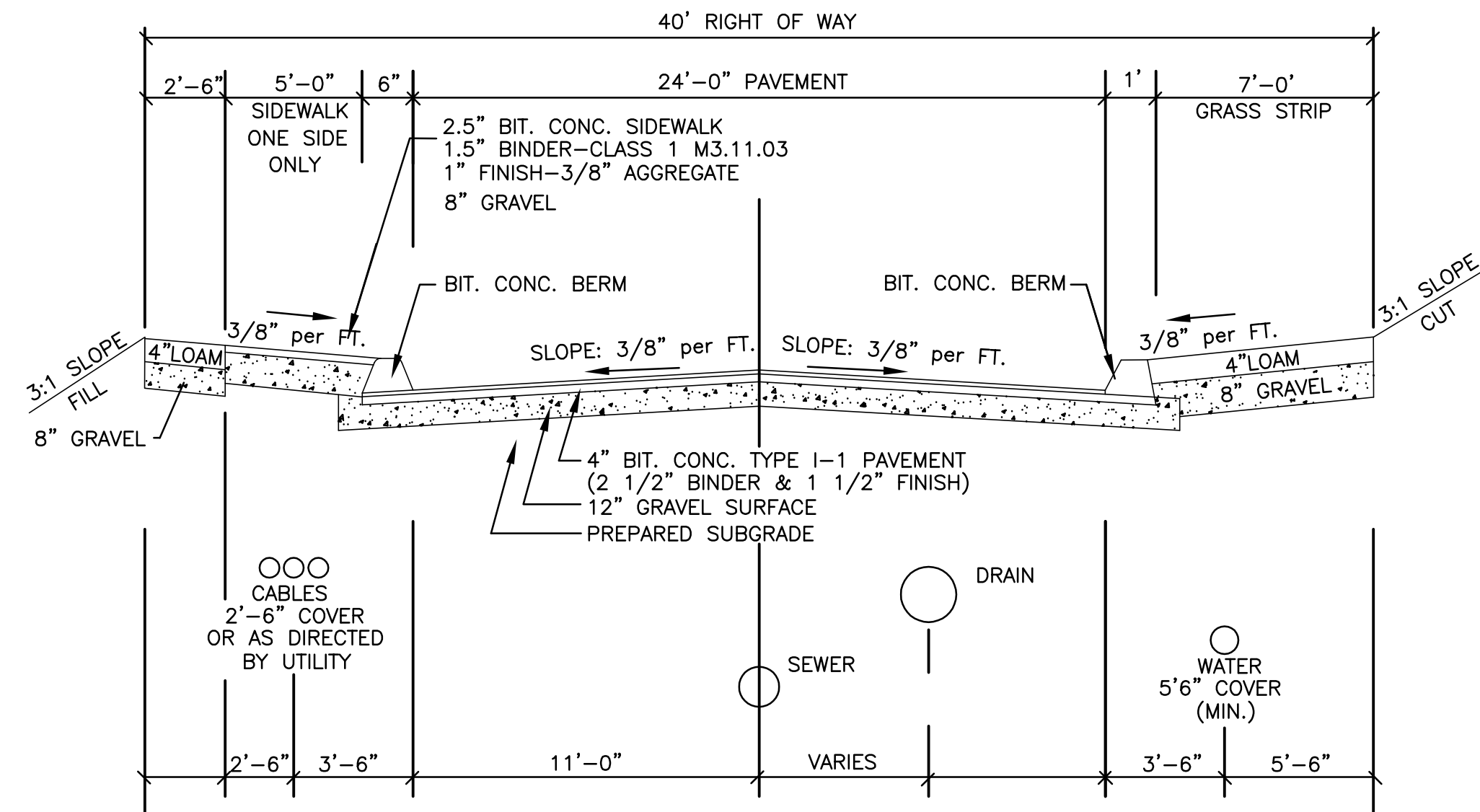
STOP SIGN DETAIL
(NOT TO SCALE)



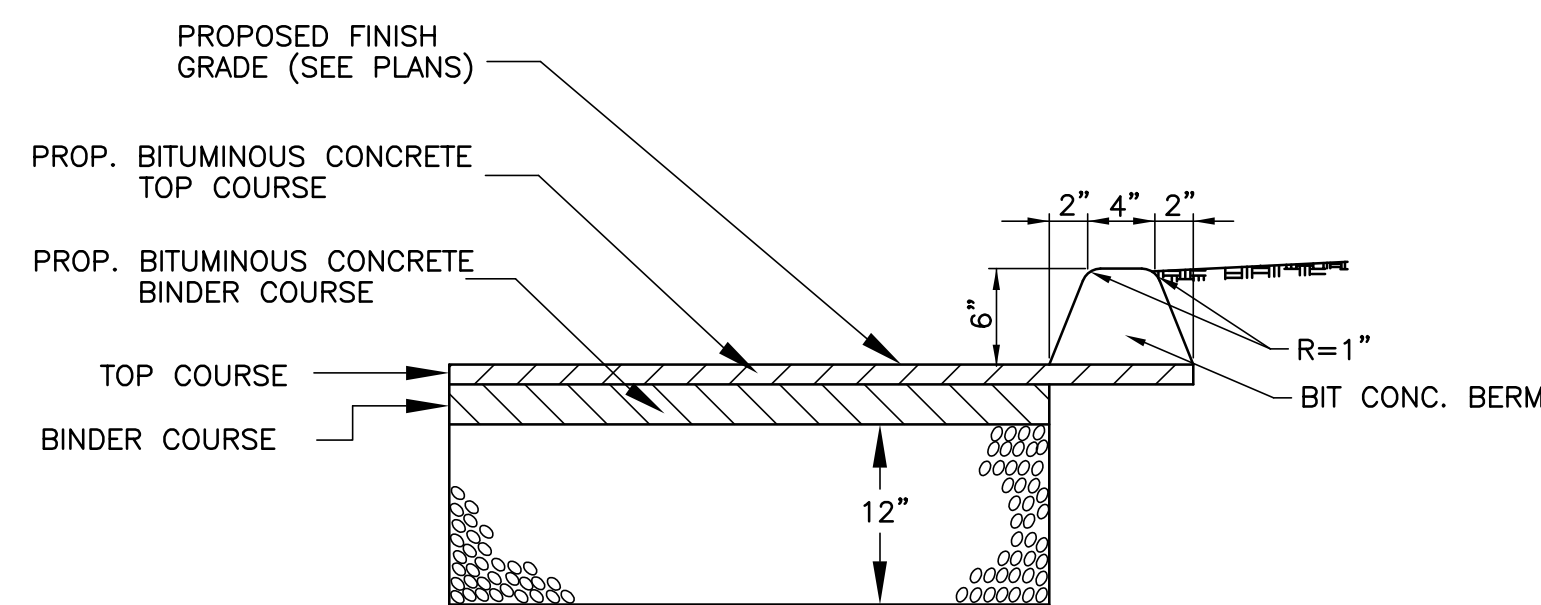
- NOTES:
1. THE DIMENSIONS SHOWN AT ROADWAY EDGE AREA FIXED DISTANCE.
 2. RAMP CROSS SECTION TO BE THE SAME AS ADJACENT SIDEWALK
 3. BITUMINOUS PAVED RAMPS ARE TO BE PROVIDED.
 4. IN NO CASE ARE THE RAMPS TO BE PLACED BEHIND THE STOP LINE.
 5. THE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IN EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE. CONSULT CIVIL ENGINEER PRIOR TO MAKING ANY MODIFICATIONS.

HANDICAP SIDEWALK CURB CUT DETAIL
NOT TO SCALE

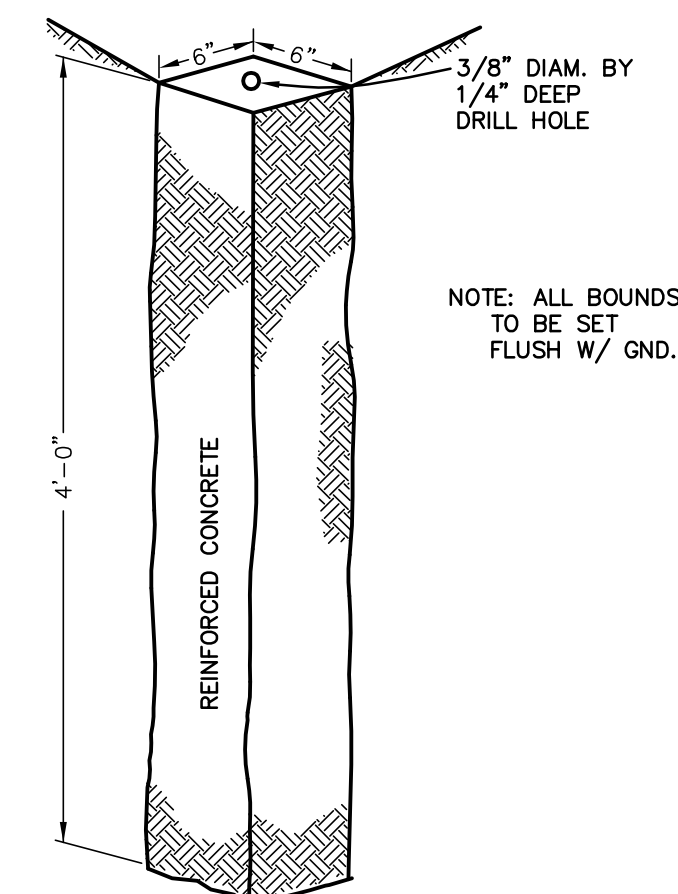
- NOTES:
1. FILL MATERIAL IF REQUIRED, SHALL MEET THE SPECIFICATIONS OF MSSHB M1.01.0, ORDINARY BORROW.
 2. GRAVEL SURFACE FOR ROADWAYS AND SIDEWALKS SHALL BE MSSHB M1.03.0, TYPE B.
 3. SIEVE TEST RESULTS SHALL BE SUBMITTED TO THE TOWN OF LANCASTER REPRESENTATIVE FOR THE GRAVEL.
 4. COMPACTION TEST MUST BE CONDUCTED AND RESULTS SUBMITTED FOR THE SUBBASE AND GRAVEL.
 5. NO PAVING IS ALLOWED BETWEEN NOVEMBER 1 AND APRIL 15.
 6. ALL PAVEMENT SHALL MEET MSSHB M3.11.03, SIMILAR TO THE SIDEWALK SPECIFICATIONS.
 7. BITUMINOUS CONC. BERM SHALL BE INSTALLED IN ALL AREAS ALONG THE ROADWAY WHERE SIDEWALKS ARE PROPOSED.



TYPICAL RIGHT OF WAY CROSS SECTION
LANCASTER, MASS.



BITUMINOUS BERM DETAIL
N.T.S.



CONCRETE BOUND DETAIL
NOT TO SCALE:

DETAILS

REVISIONS		DESCRIPTION
No.	DATE	
1	04/10/18	APARTMENTS 136 UNITS
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8	2/19/19	COMMENTS & LANDSCAPE

SITE DEVELOPMENT PLAN
"GOODRIDGE BROOK ESTATES"
Multi Unit & Single Family Subdivision Layout
LANCASTER, MASSACHUSETTS

PREPARED FOR:
CRESCENT BUILDERS, INC.
94 NORTH MAIN STREET
BOYLSTON MA 01583

GLMEngineering
Consultants, Inc.
19 EXCHANGE STREET
HOLLISTON, MA 01746
P: 508-429-1100
F: 508-429-7160
www.GLMengineering.com

DRW.: RST
JOB No. 12,274
DATE: FEBRUARY 8, 2018
SCALE: nts
SHEET: 21 of 27
PLAN #: 27,147

12' Height

5'-0"

2'-0"

12"

12"

PRUNE 1/3 OF CROWN BY THINNING AND SPACING BRANCHES. DO NOT CUT LEADER. DO NOT USE TREE PAINT.

3/4" REINFORCED RUBBER HOSE

3/16" GALVANIZED STEEL CABLE

2"x3"x10" WOOD STAKES (3 PER TREE) NOTCH STAKES FOR WIRE.

TREE WRAP W/30% OVERLAP

3" PINE BARK MULCH (MIN.)

6" SOIL SAUCER (MIN.)

TREE SHALL BE PLANTED SO AS TO MAINTAIN SAME RELATIONSHIP TO FINISHED GRADE AS IT PREVIOUSLY HAD.

PLANTING SOIL

REMOVE TOP 1/3 OF BURLAP BEFORE BACKFILLING

TAMPED SETTING BED

NOT TO SCALE

STEEL BOLLARD CAP

6" I.D. STEEL PIPE
FILLED 3,000 PSI
(MIN) CONCRETE PAINT
REFLECTIVE YELLOW

4'-0" (MIN)

FINISH GRADE

5'-0" (MIN)

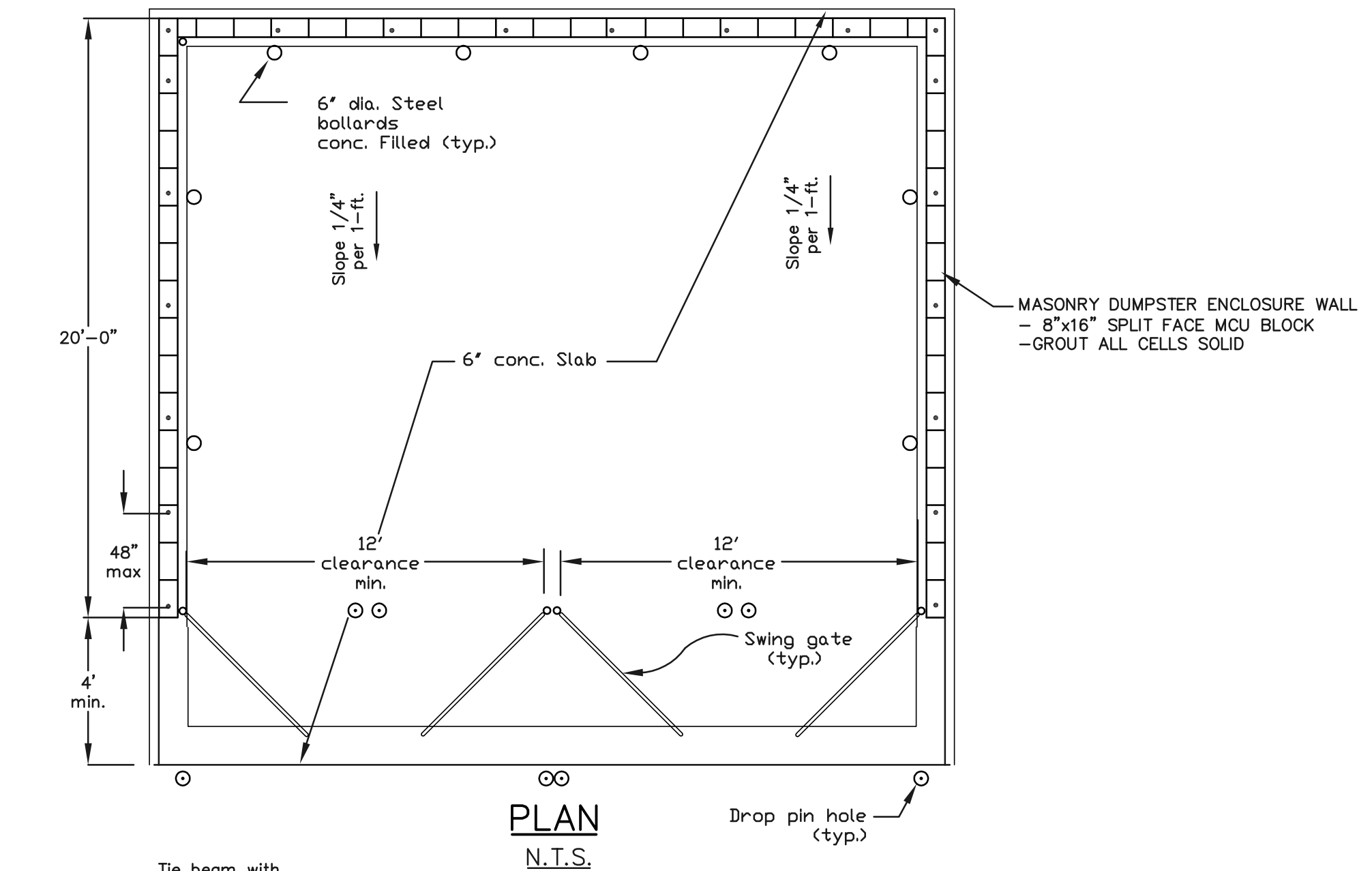
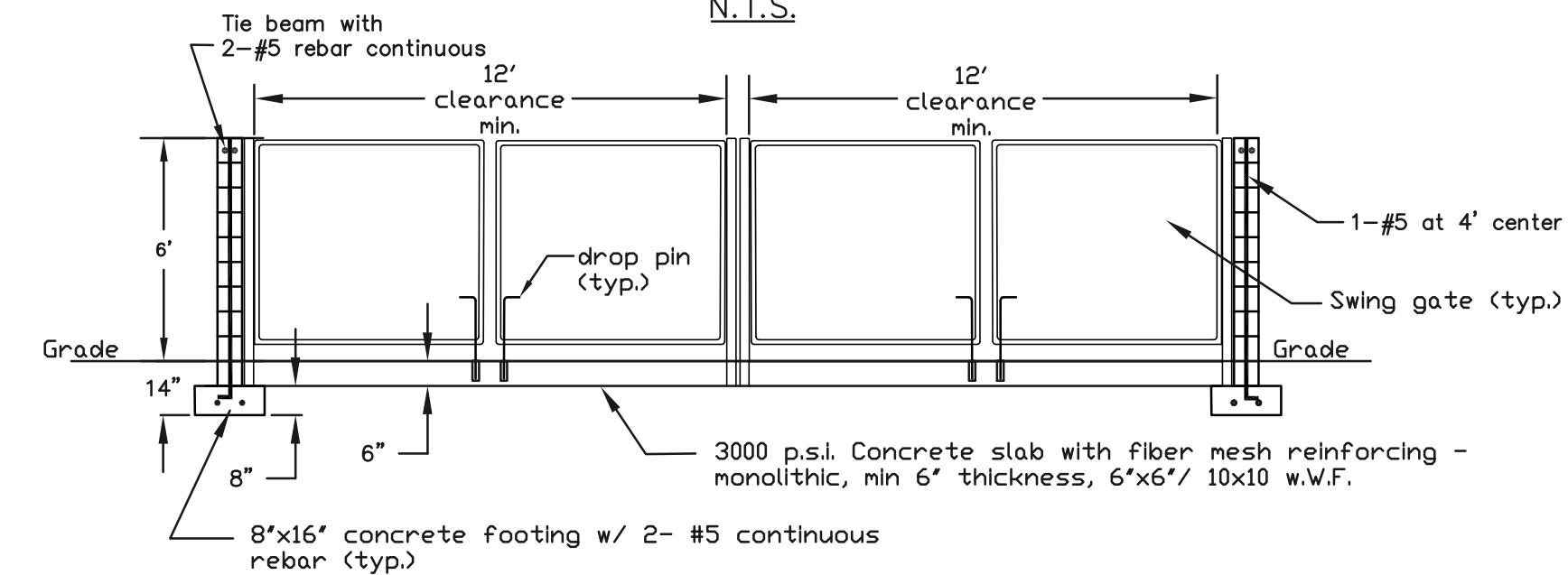
3,000 PSI
CONCRETE BASE

6" (MIN)

6" (MIN)

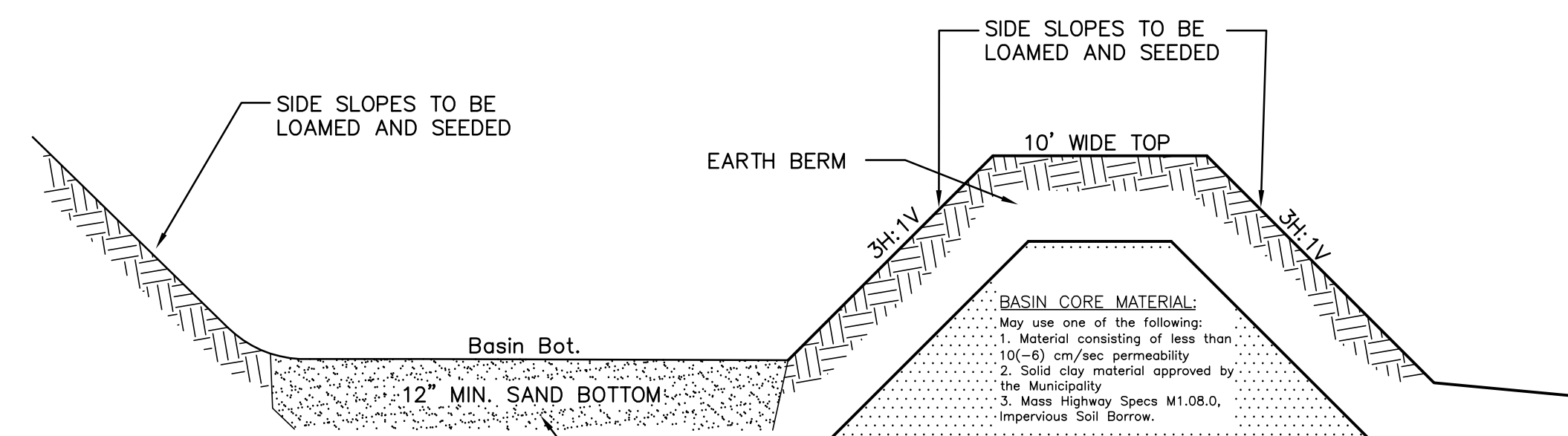
1'-6"

NOT TO SCALE

PLAN

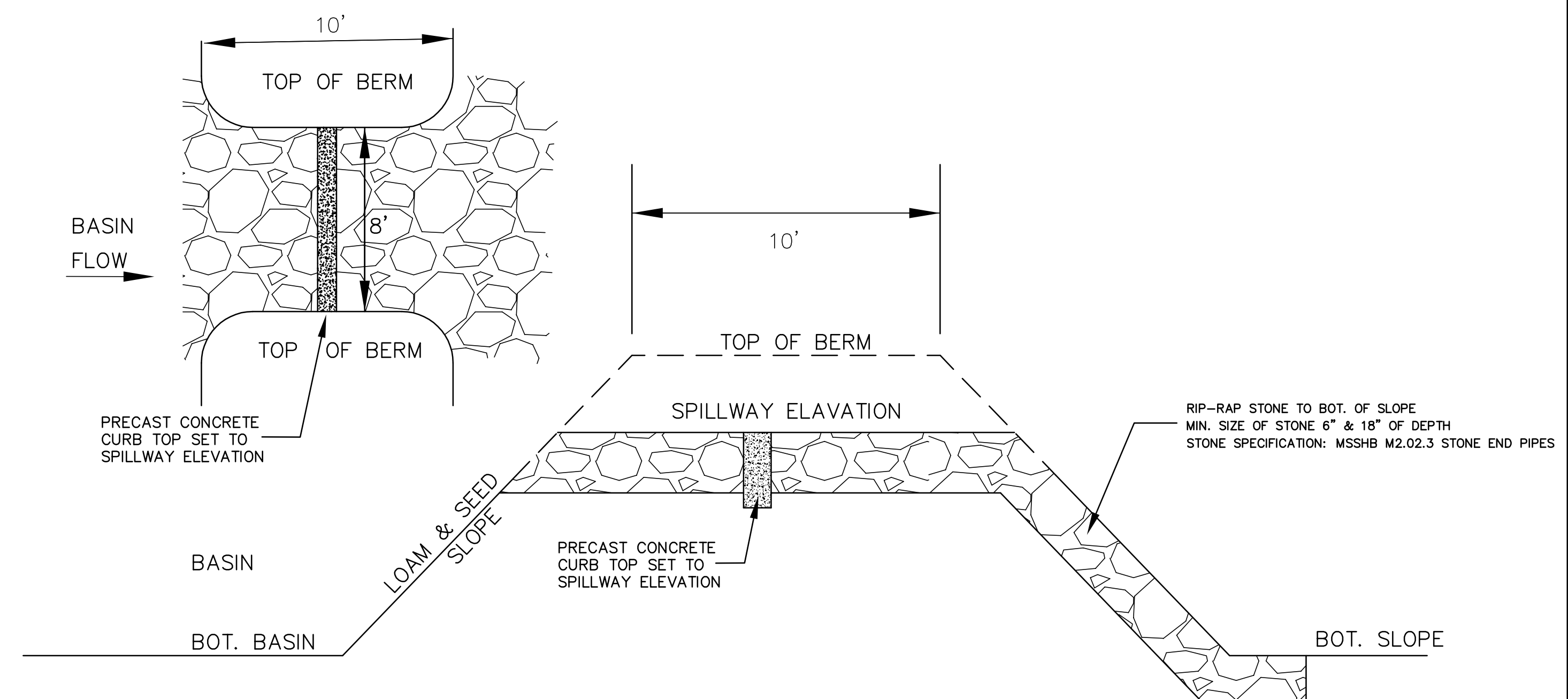
N.T.S.

NOT TO SCALE



BASIN BOTTOM EXCAVATION:
ALL TOPSOIL, SUBSOIL AND ANY DELETERIOUS MATERIAL MUST BE REMOVED FROM THE BOTTOM AREA OF THE DRAINAGE BASIN AND FILLED WITH APPROVED, CLEAN, GRANULAR SAND. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES AND BE GRADED SO NOT MORE THAN 45% OF THE SAMPLE IS RETAINED IN A #4 SIEVE, OF THAT PASSING, 20% OR LESS SHALL PASS A #100 SIEVE AND 5% OR LESS SHALL PASS THE #200 SIEVE.

NOT TO SCALE



NOT TO SCALE



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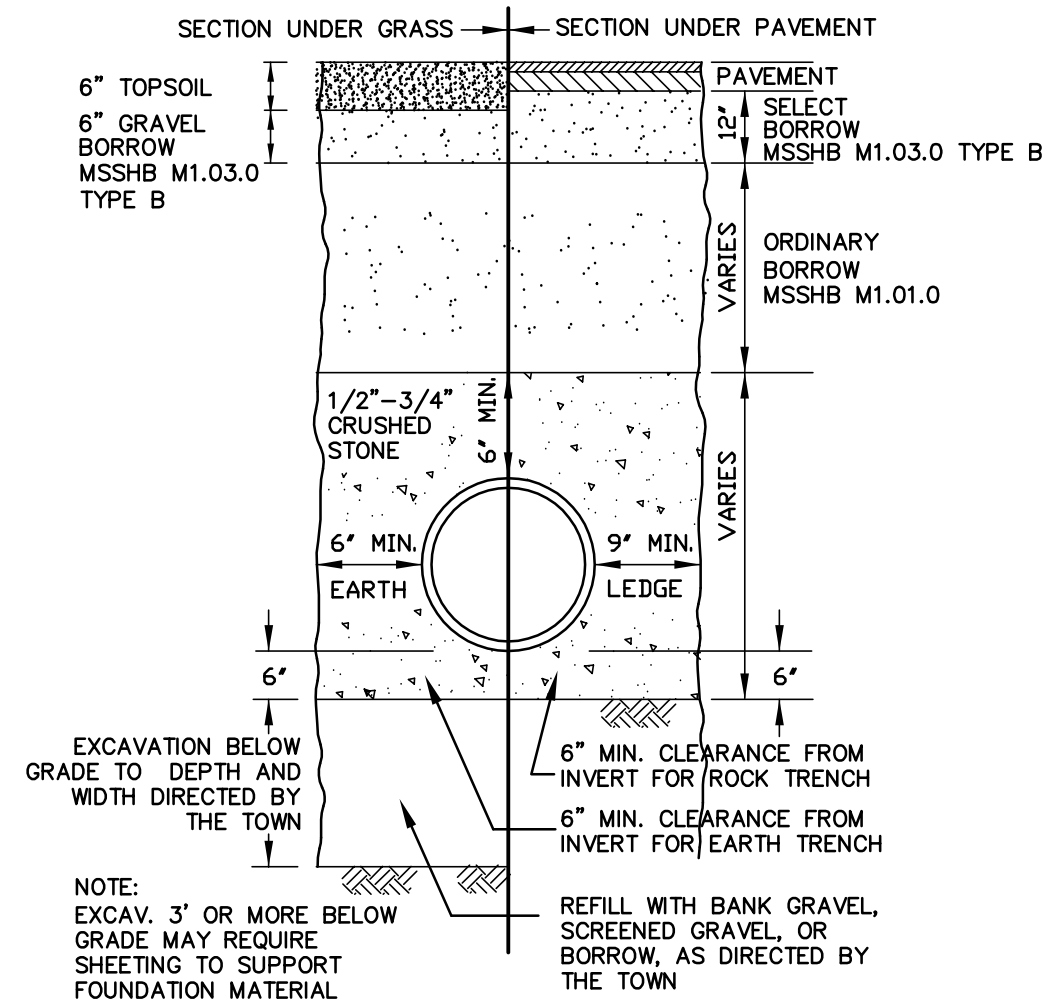
PREPARED FOR:
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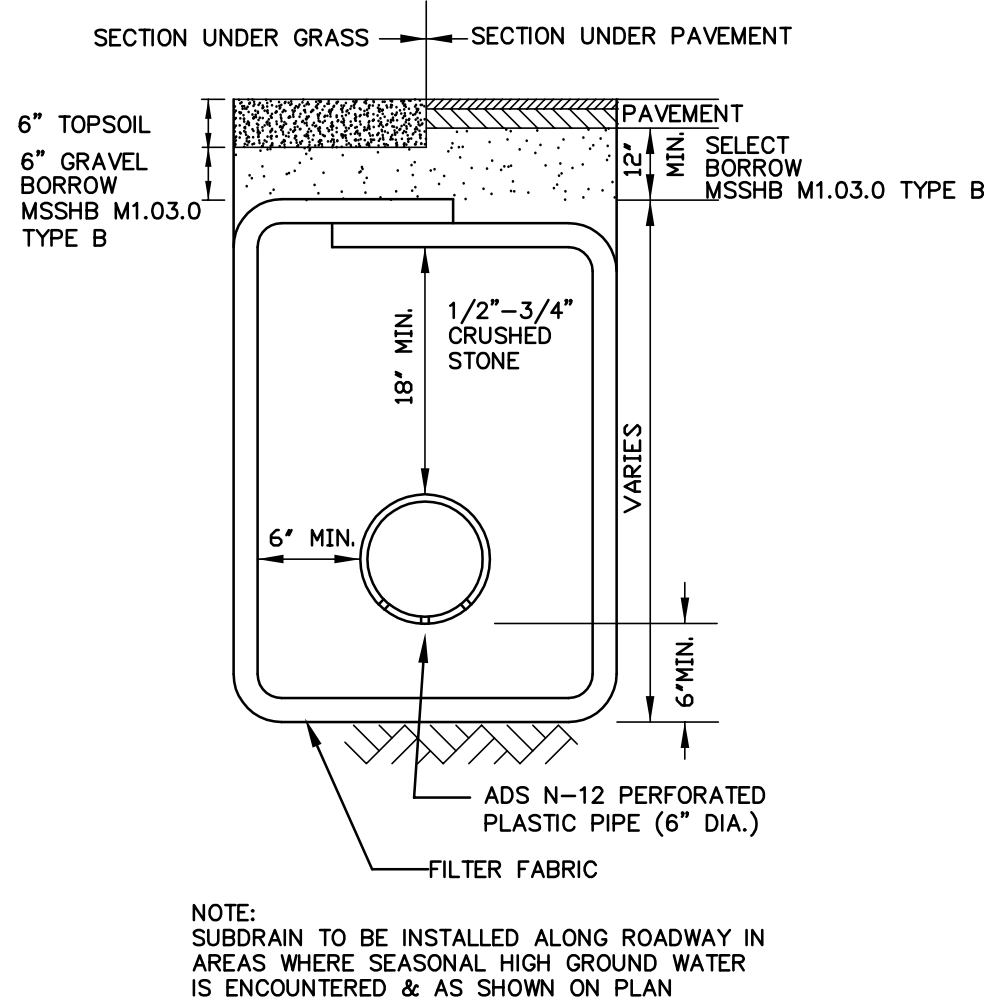
JOB No. 12,274

SCALE: nts

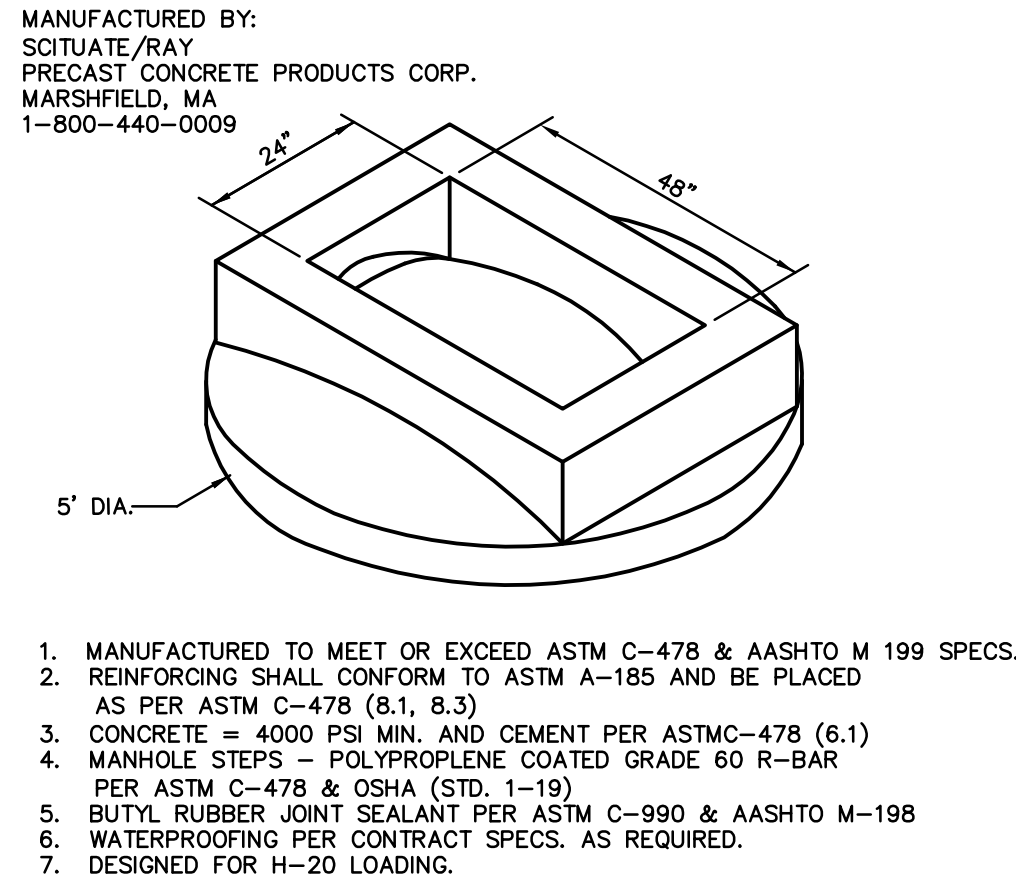
PLAN #: 27,147



**TYPICAL SECTION
EARTH/ROCK TRENCH**
DRAIN PIPES, SEWER MAINS, FORCE MAINS, & WATER MAINS
N.T.S.

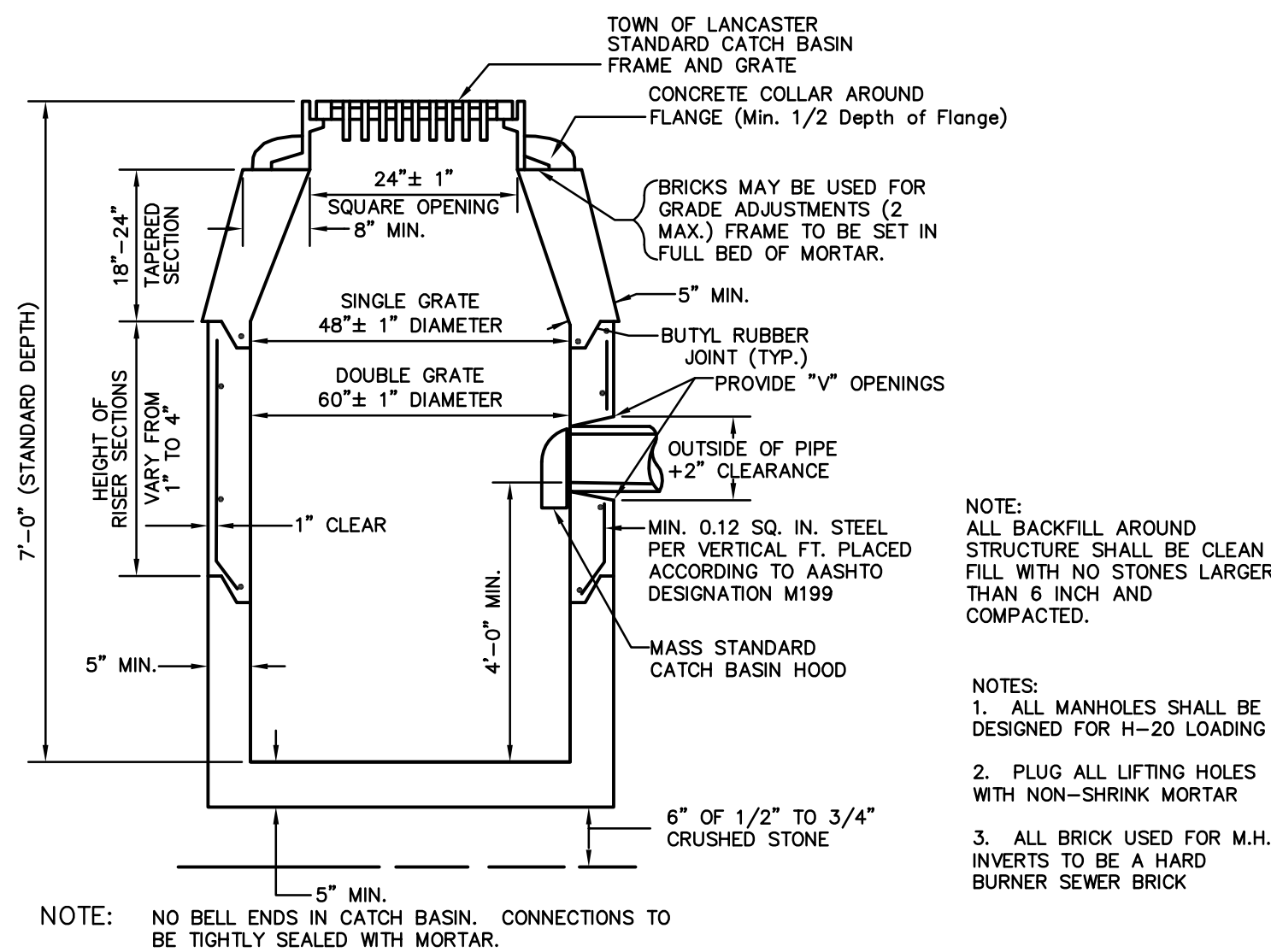


SUBDRAIN DETAIL
N.T.S.

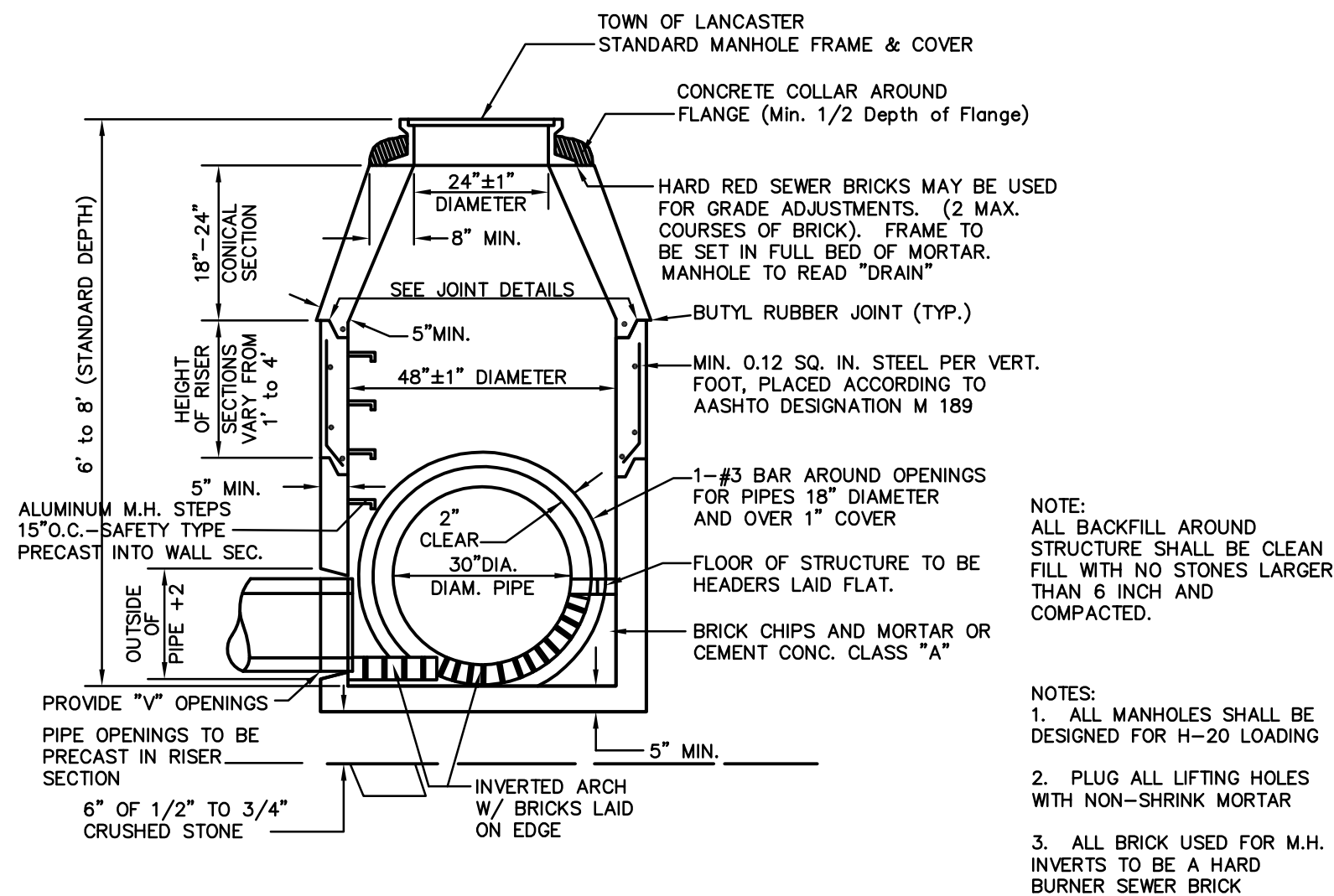


DOUBLE OPEN CATCH BASIN DOME TOP
NOT TO SCALE

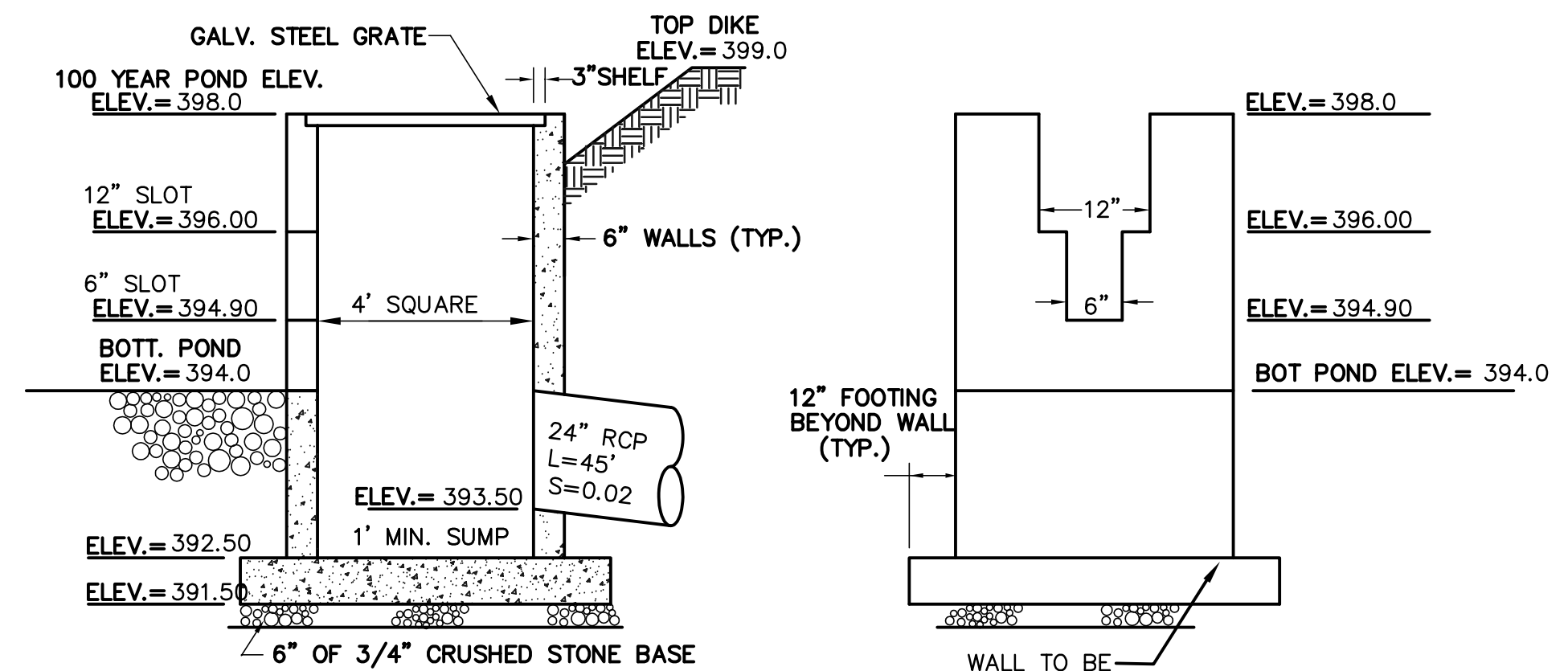
NOTE:
ALL CONSTRUCTION SHALL BE IN ACCORDANCE
WITH THE TOWN OF LANCASTER CONSTRUCTION
STANDARDS AND SPECIFICATIONS.



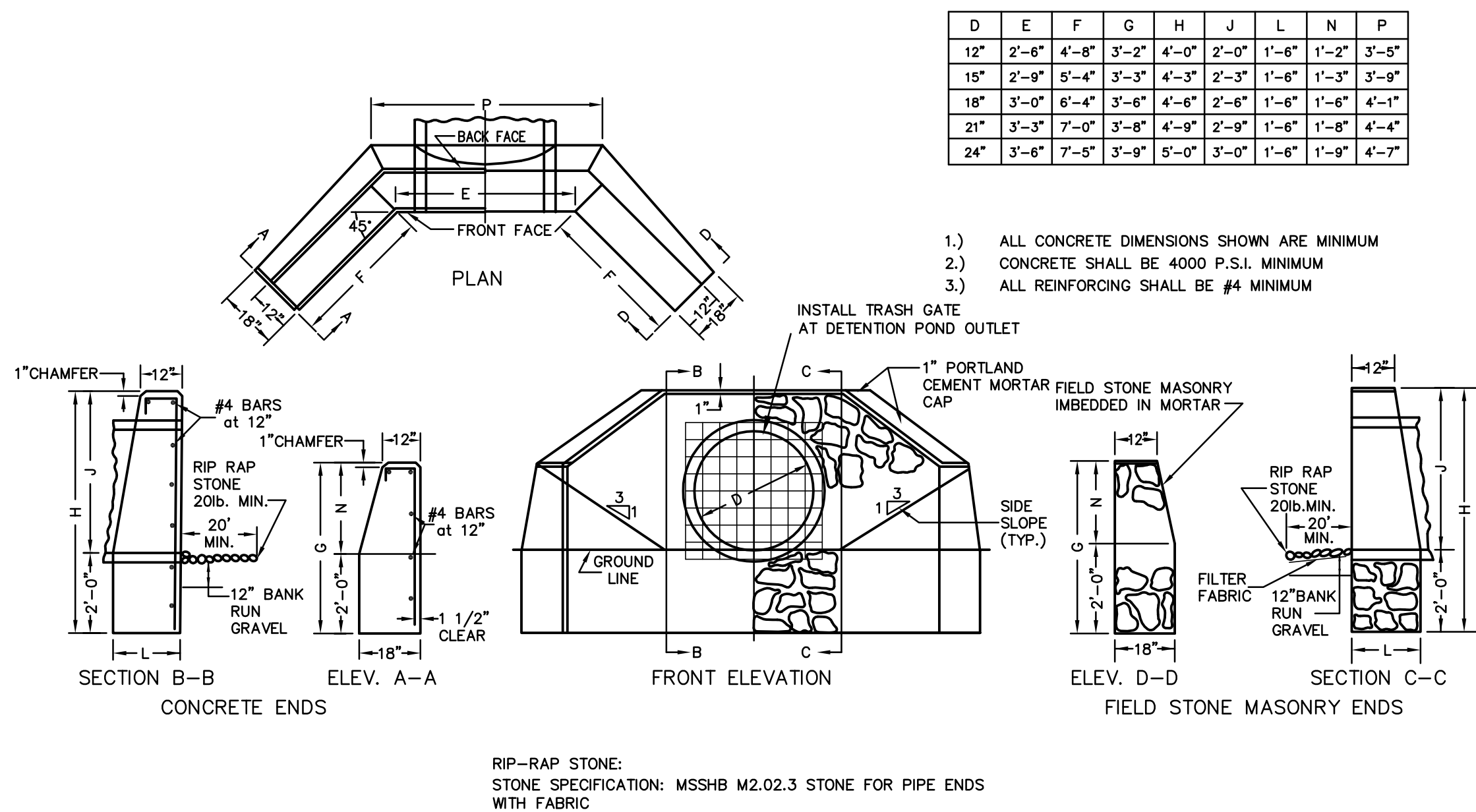
PRECAST CONCRETE CATCH BASIN DETAILS
NOT TO SCALE



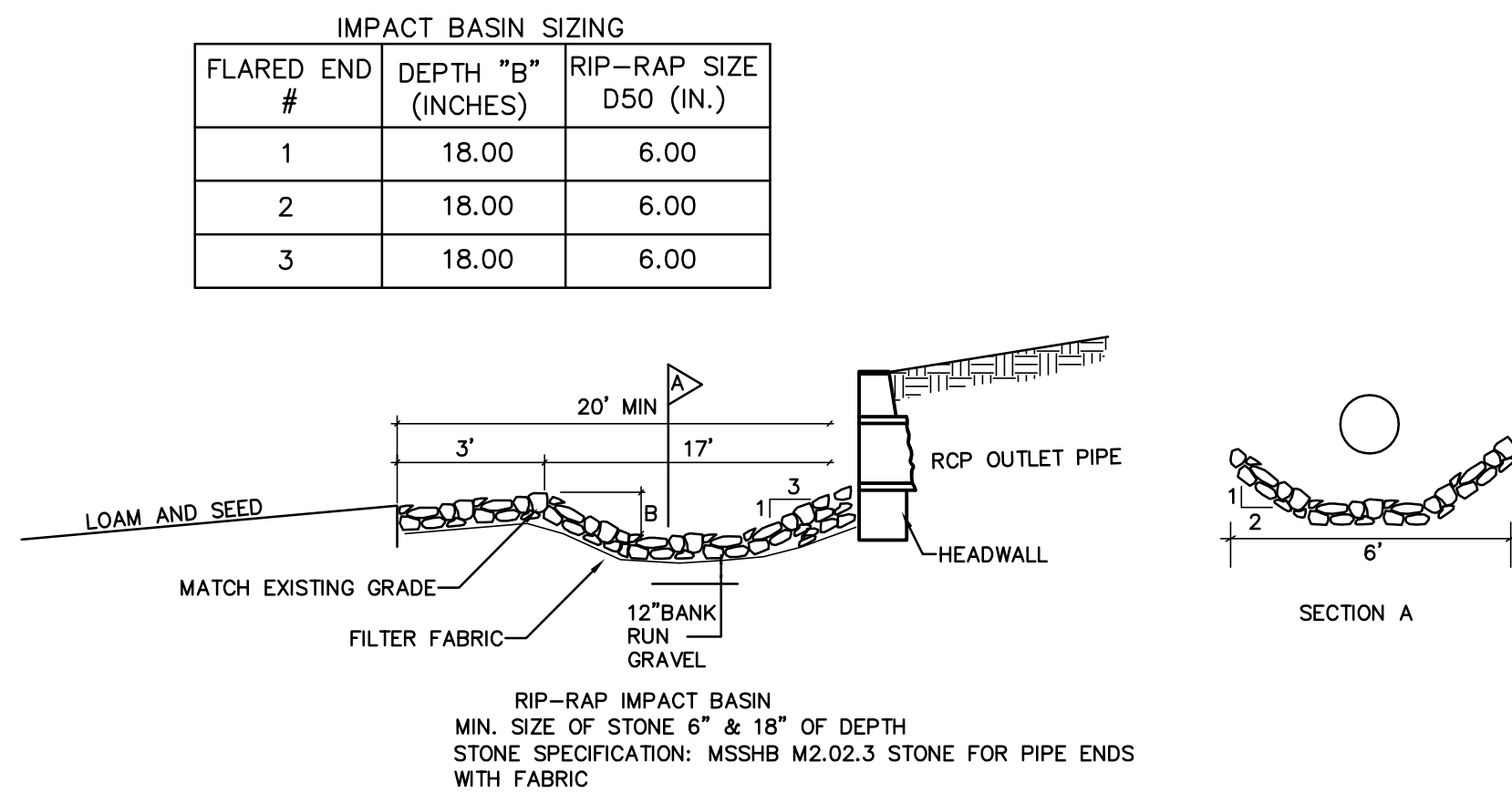
PRECAST CONCRETE MANHOLE DETAILS
NOT TO SCALE



**PROPOSED OUTLET CONTROL STRUCTURE
DRAINAGE BASIN#5**
(PRECAST CONCRETE STRUCTURE)
NOT TO SCALE



CONCRETE AND FIELD STONE MASONRY HEADWALL DETAILS
NOT TO SCALE



RIP-RAP IMPACT BASIN AT HEADWALLS
NOT TO SCALE

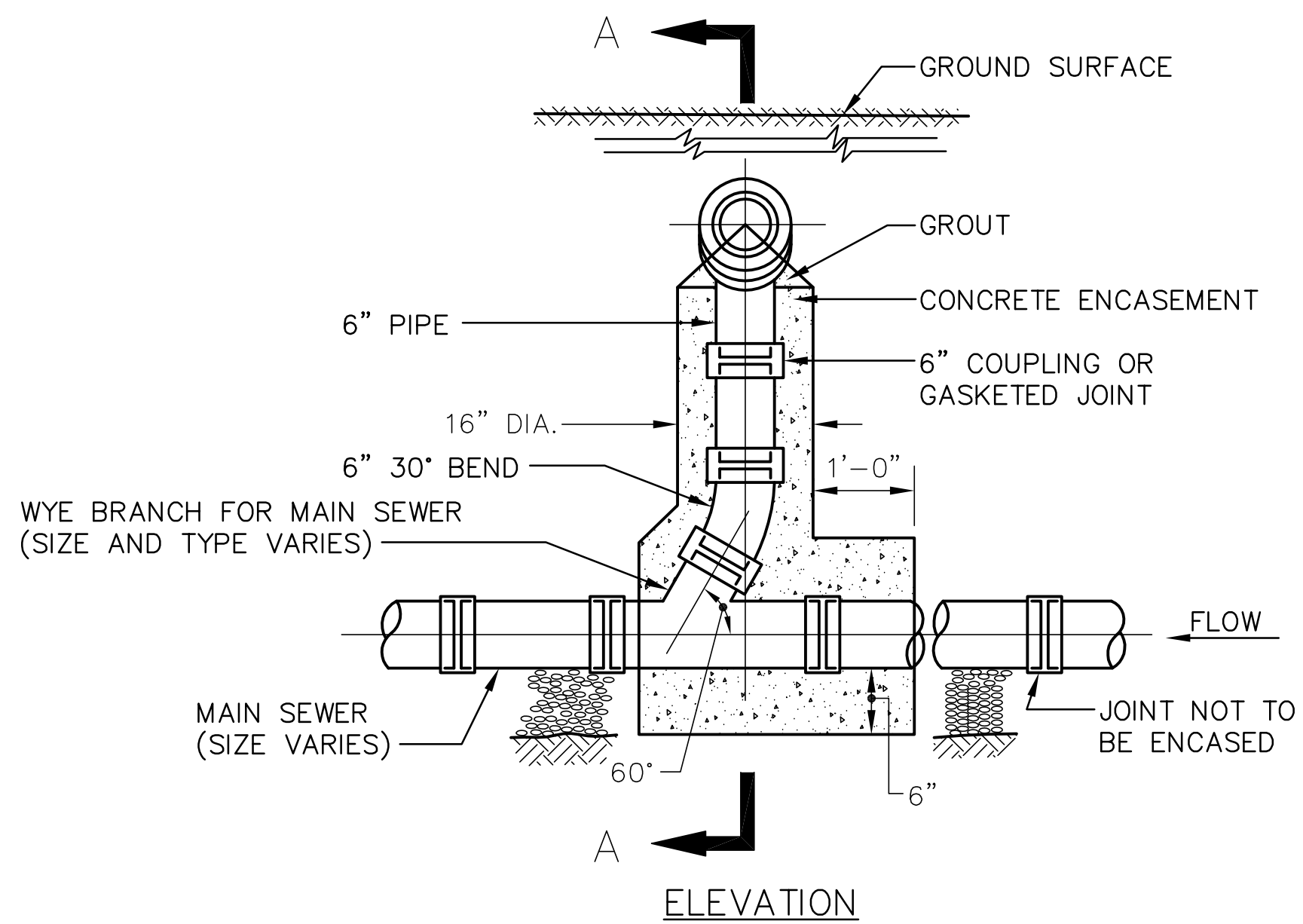
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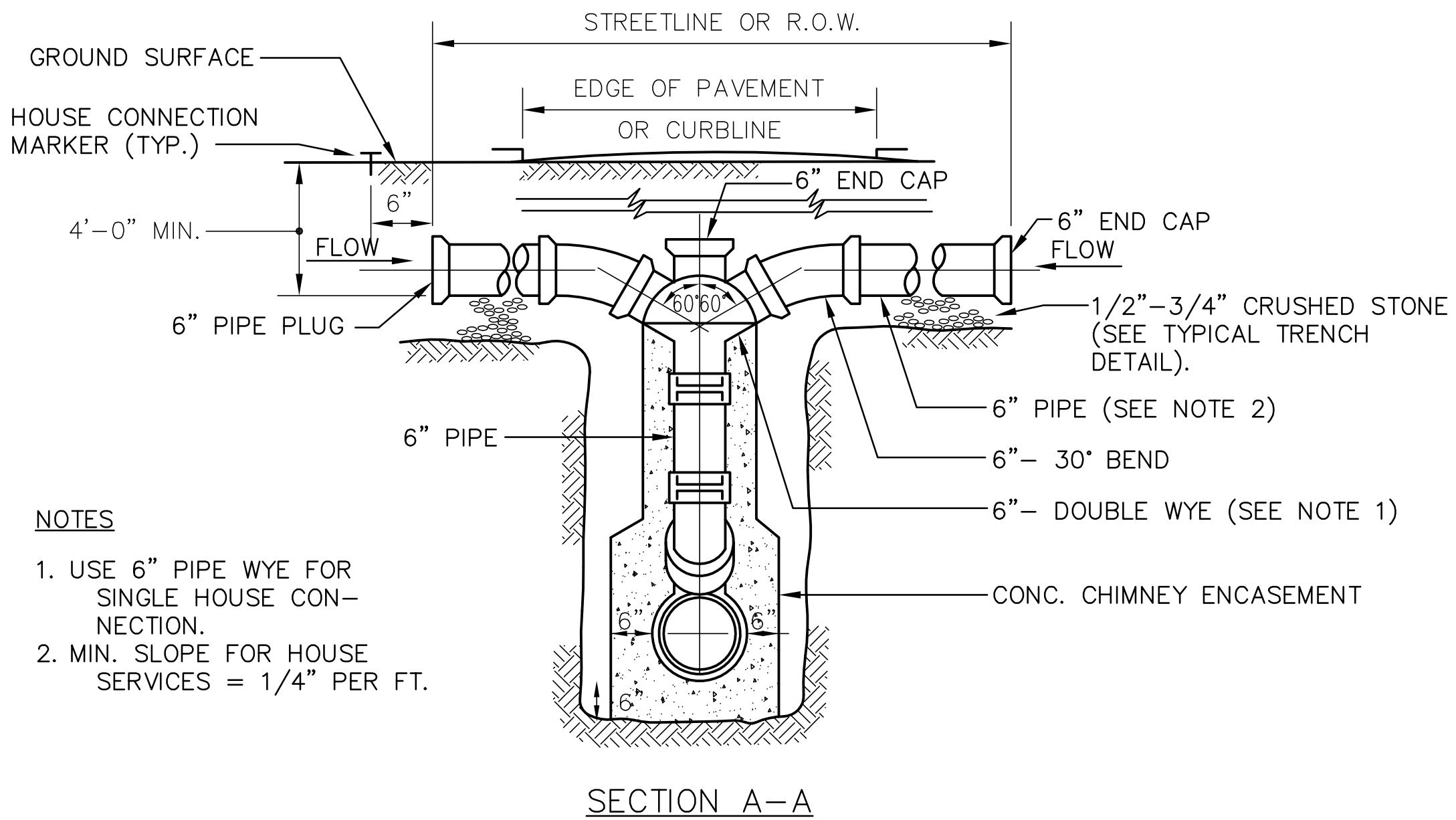
GLM Engineering Consultants, Inc.
19 EXCHANGE STREET
HOLLISTON, MA 01746
P: 508-429-1100
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DRW.: RST	
JOB No.	12,274
DATE:	FEBRUARY 8, 2018
SCALE:	nts
SHEET:	23 of 27
PLAN #:	27,147

DETAILS



TYPICAL HOUSE SERVICE CONNECTION & CHIMNEY DETAIL
(FOR MAIN SEWER OVER 8'-0" DEEP)
NOT TO SCALE

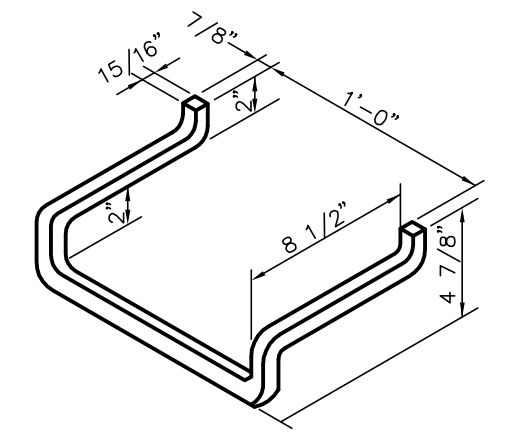


- NOTES**
1. USE 6" PIPE WYE FOR SINGLE HOUSE CONNECTION.
 2. MIN. SLOPE FOR HOUSE SERVICES = 1/4" PER FT.

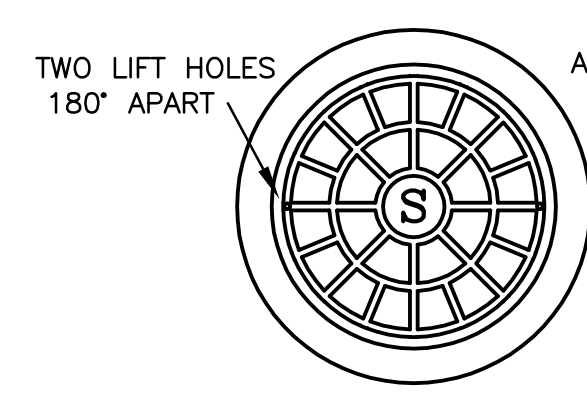
NOTE:
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
DIGSAFE IS TO BE NOTIFIED 72 WORKING HOURS IN ADVANCE OF CONSTRUCTION.
DIGSAFE 1-888-DIG-SAFE



NOTE:
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF LANCASTER CONSTRUCTION STANDARDS AND SPECIFICATIONS.



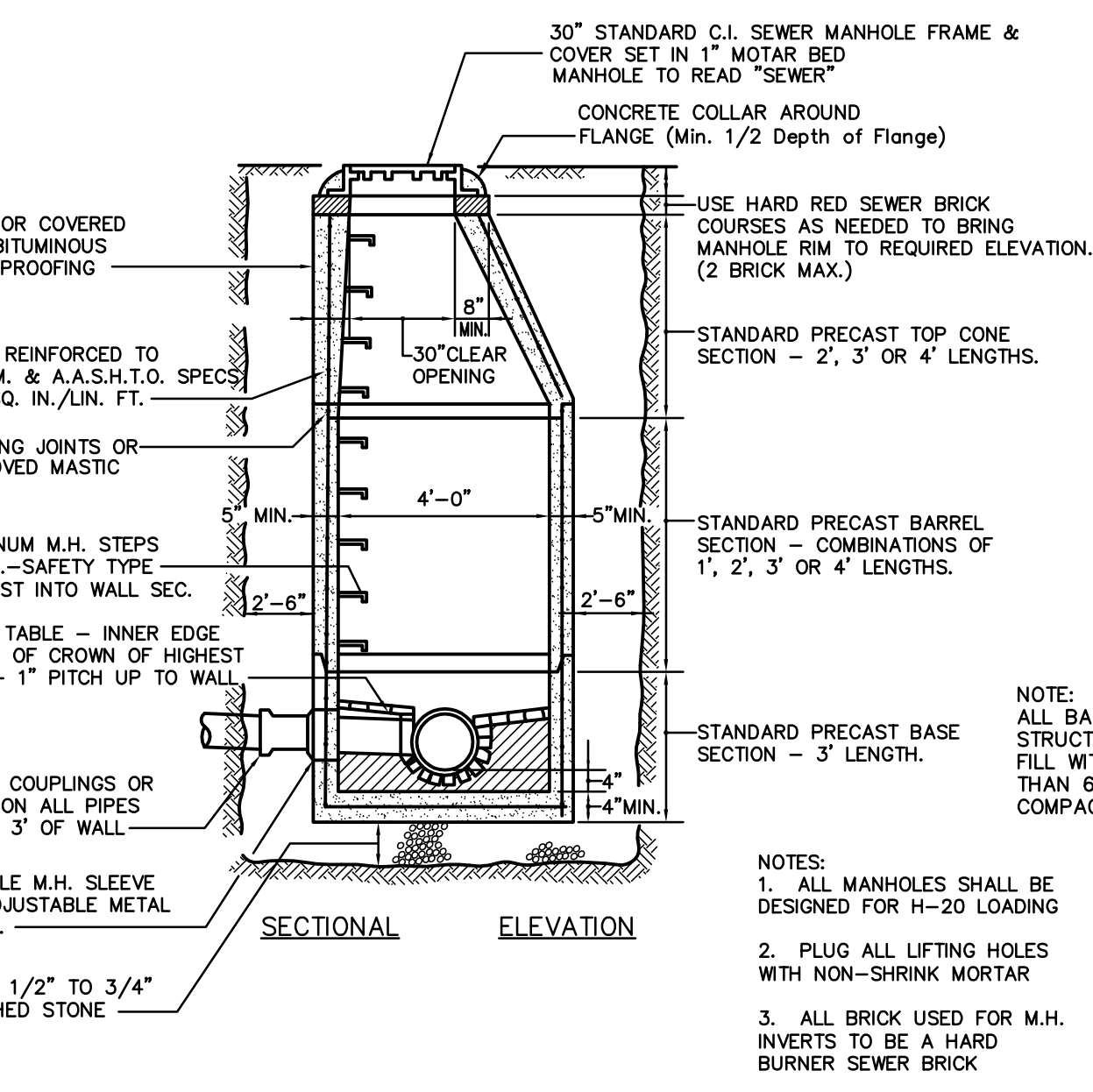
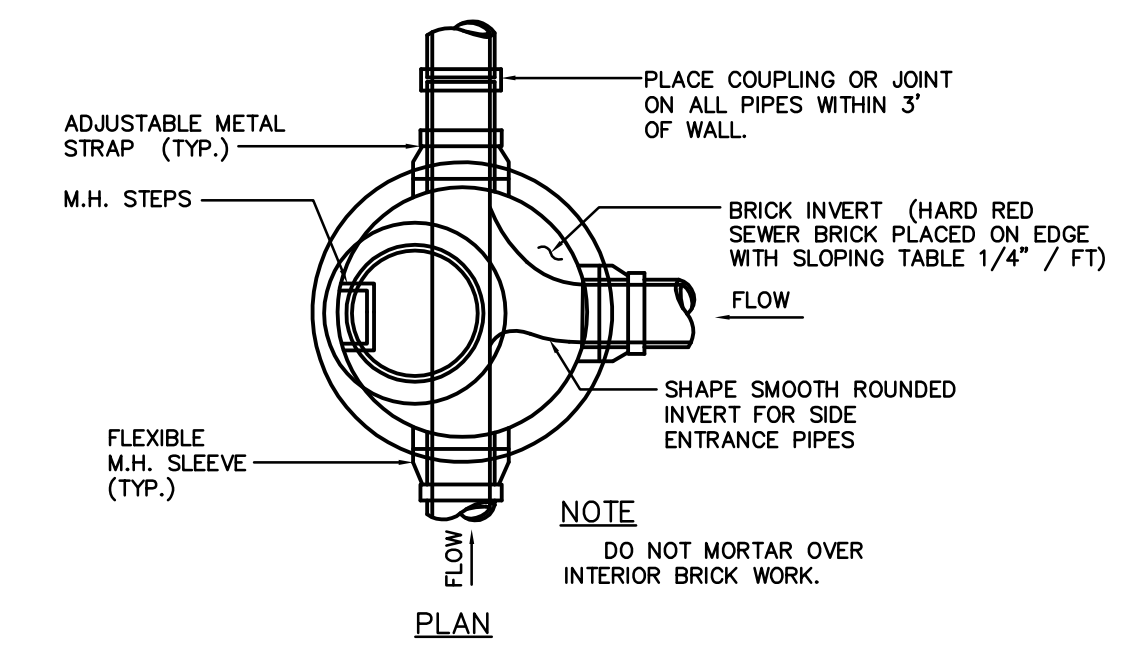
MANHOLE STEP DETAIL
NOT TO SCALE



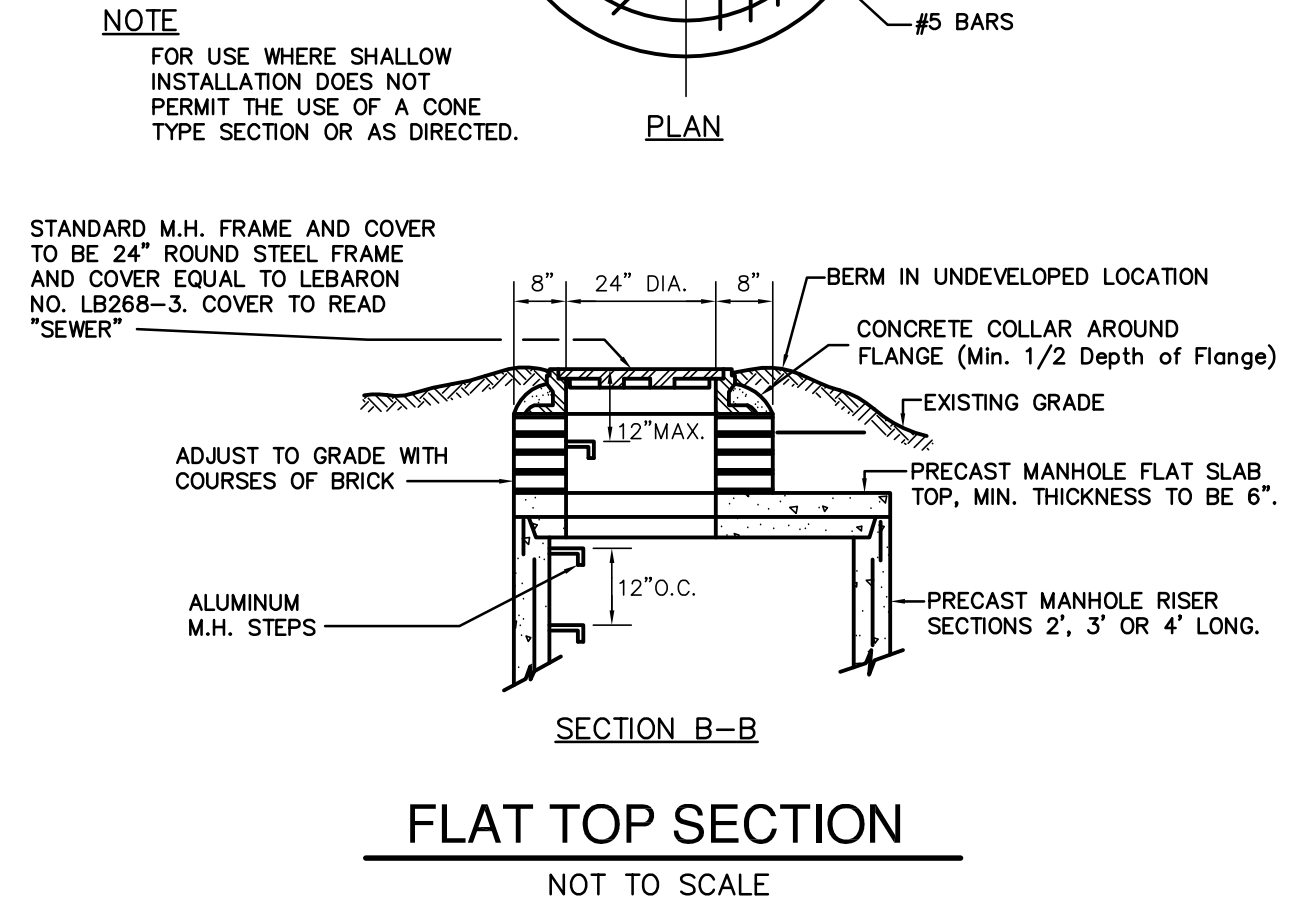
AS MANUFACTURED BY:
LE. BARON FONDRIY CO.
BROCKTON, MA
No. LT 101
MECHANICS IRON FOUNDRY CO.
BOSTON, MA
No. K 6004
C.M. WHITE IRON WORKS
NORTH READING, MA
No. R 258

NOTE:
FOR WATERTIGHT APPLICATIONS USE THE FOLLOWING CASTINGS:
LE. BARON FOUNDRY CO.
WATERTIGHT M.H. FRAME & COVER
No. LBW268-2
OR
LE. BARON FOUNDRY CO.
BOLTED & GASKETED FRAME & COVER
No. LBB268-2
OR APPROVED EQUAL

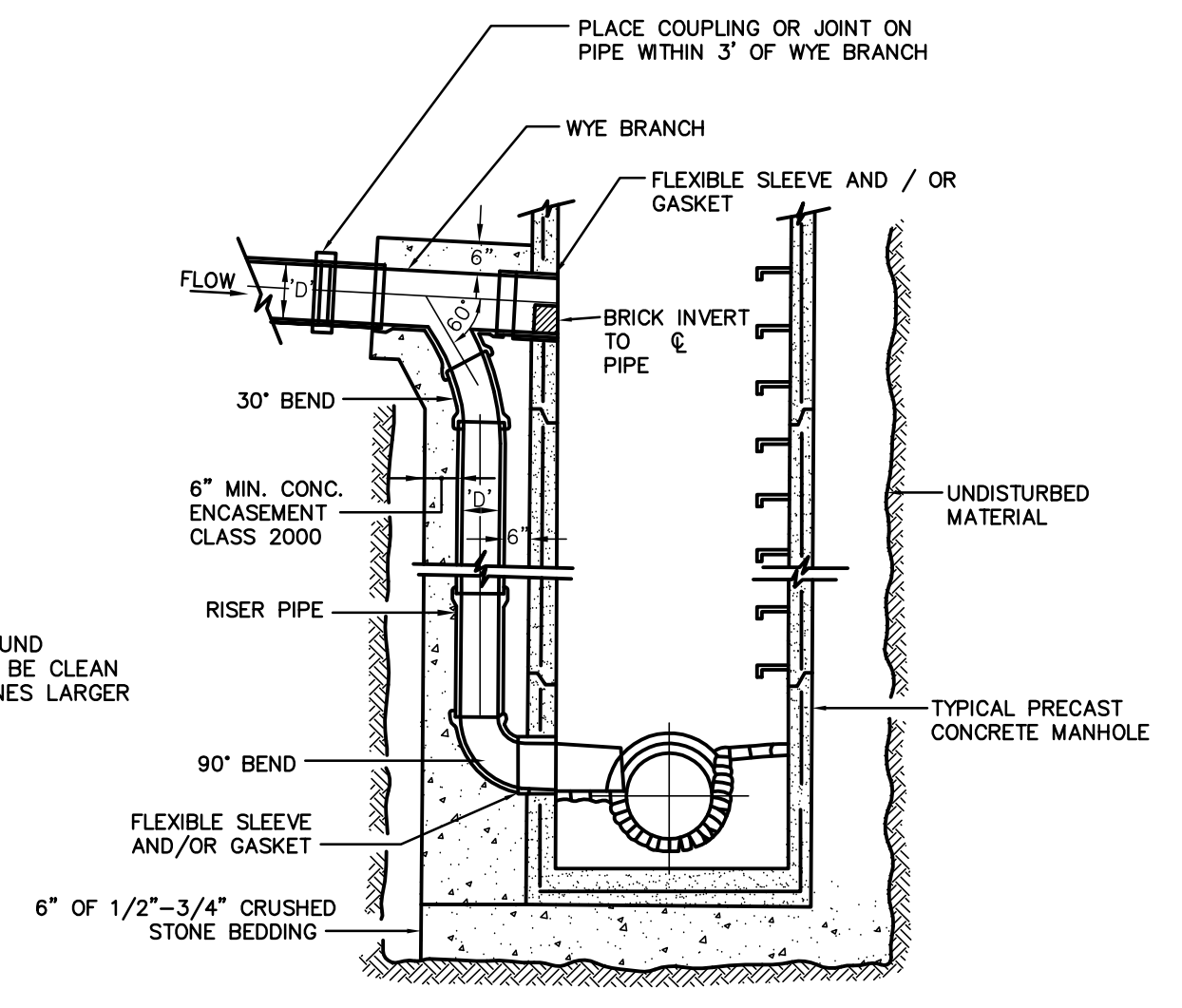
**CAST IRON
MANHOLE FRAME AND COVER**
MIN. WEIGHT=450# PER SET



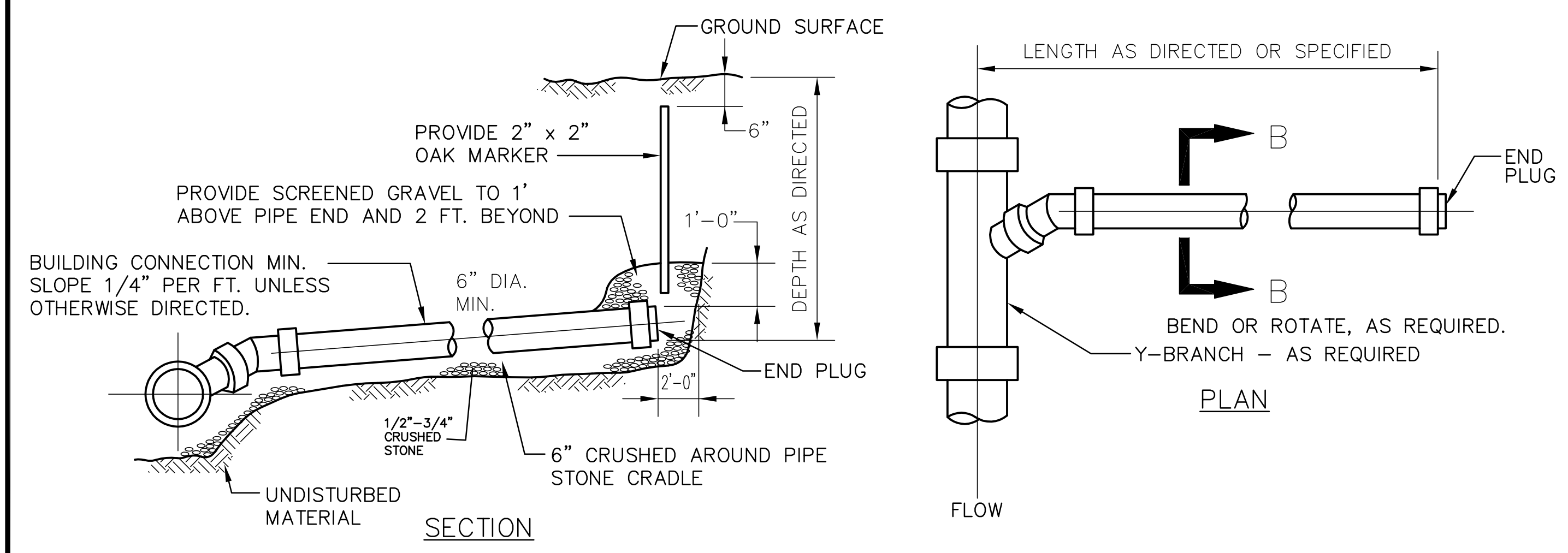
TYPICAL SEWER MANHOLE DETAIL
NOT TO SCALE



FLAT TOP SECTION
NOT TO SCALE



TYPICAL DROP INLET MANHOLE DETAILS
NOT TO SCALE



TYPICAL BUILDING CONNECTION
NOT TO SCALE

NOTE:
DIGSAFE 1-888-DIG-SAFE

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DRW.: RST

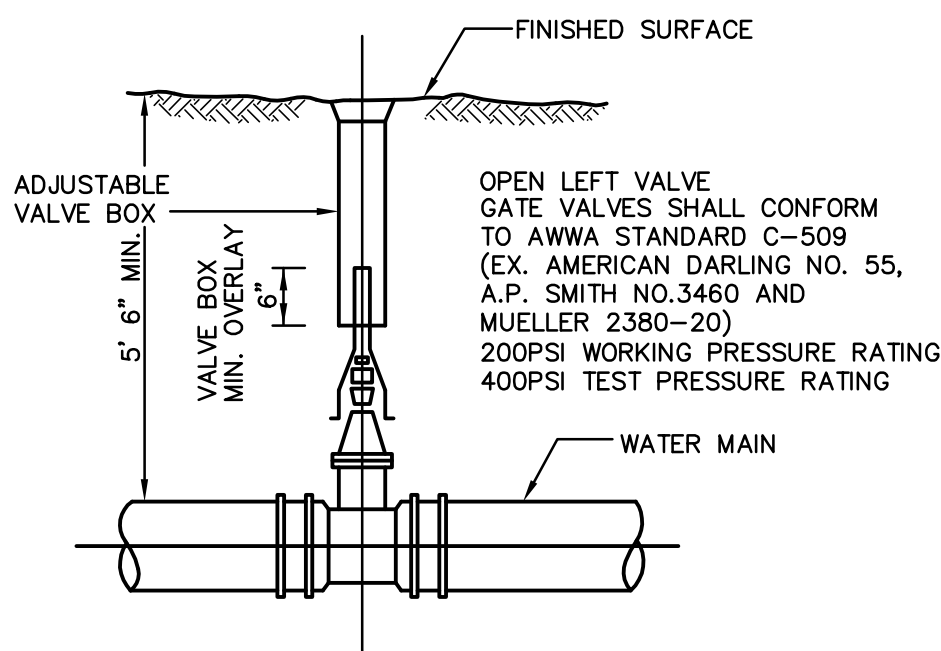
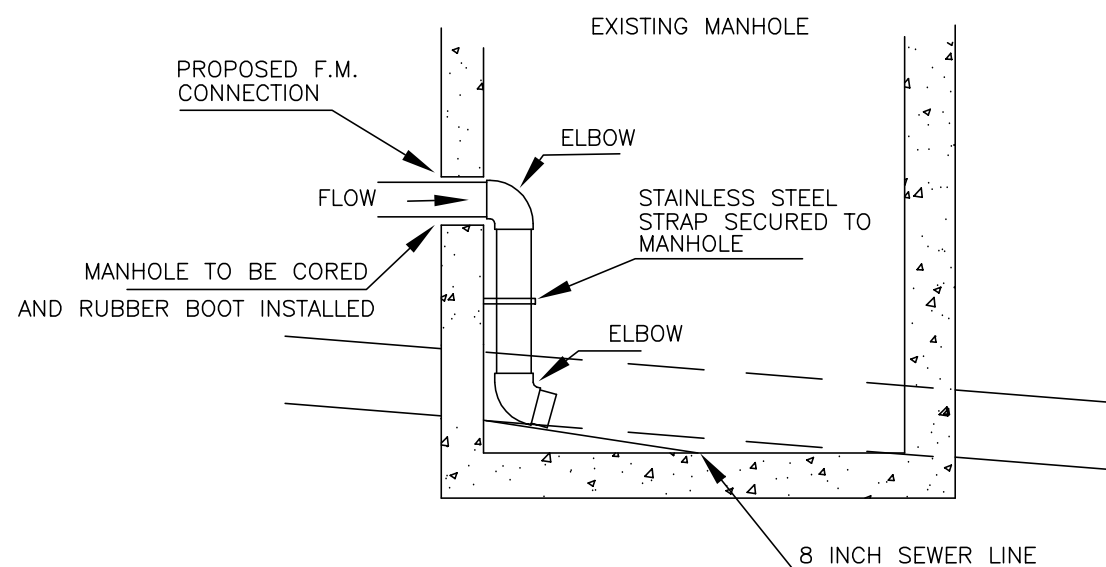
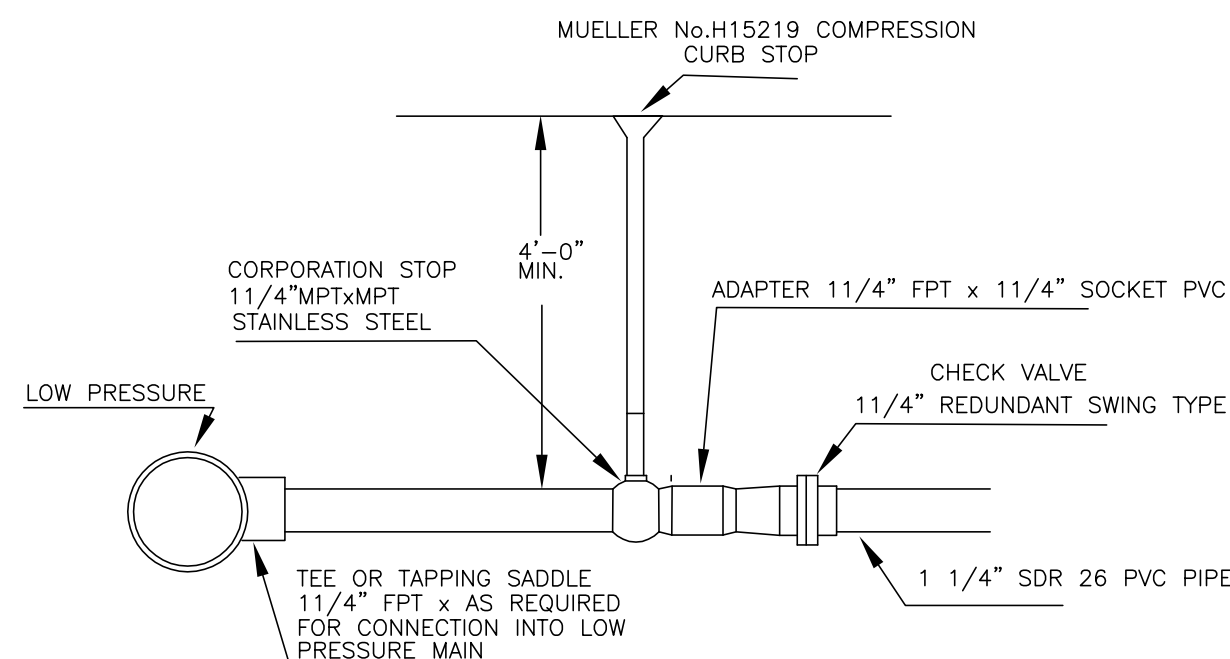
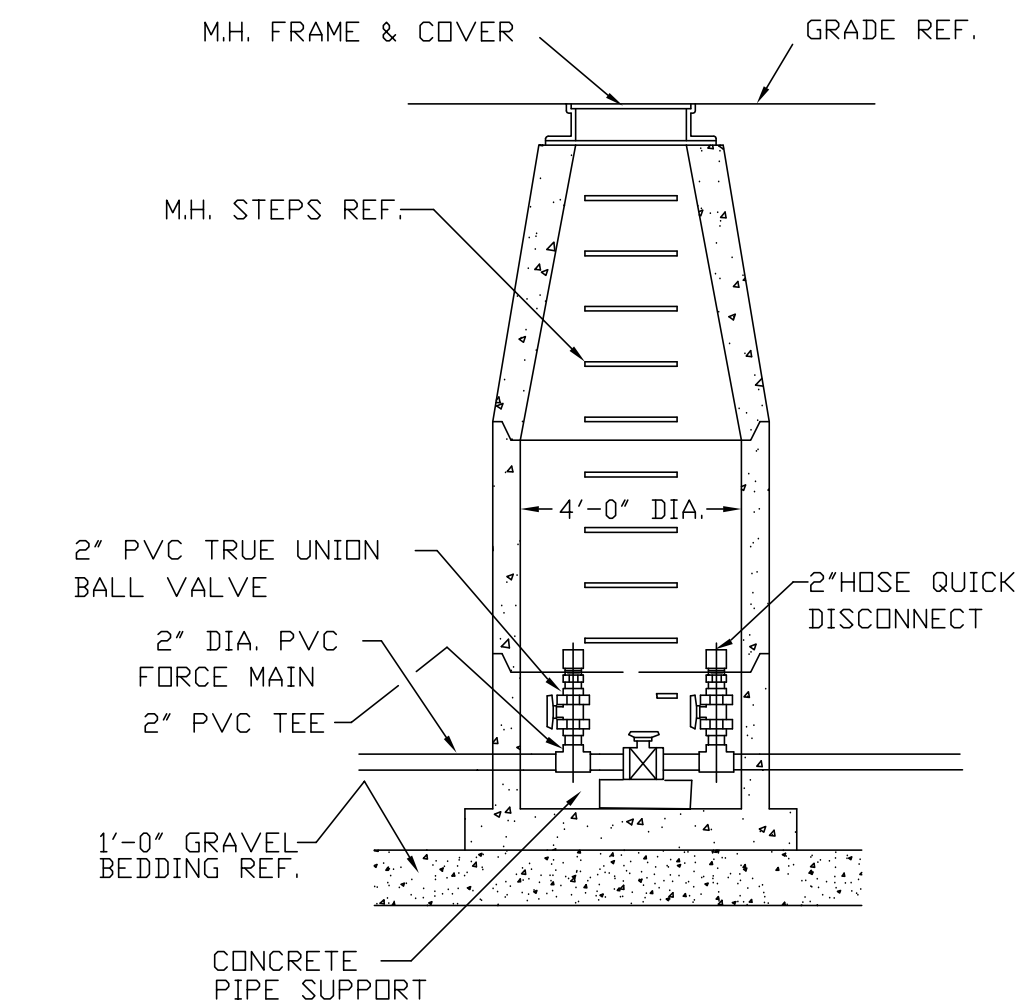
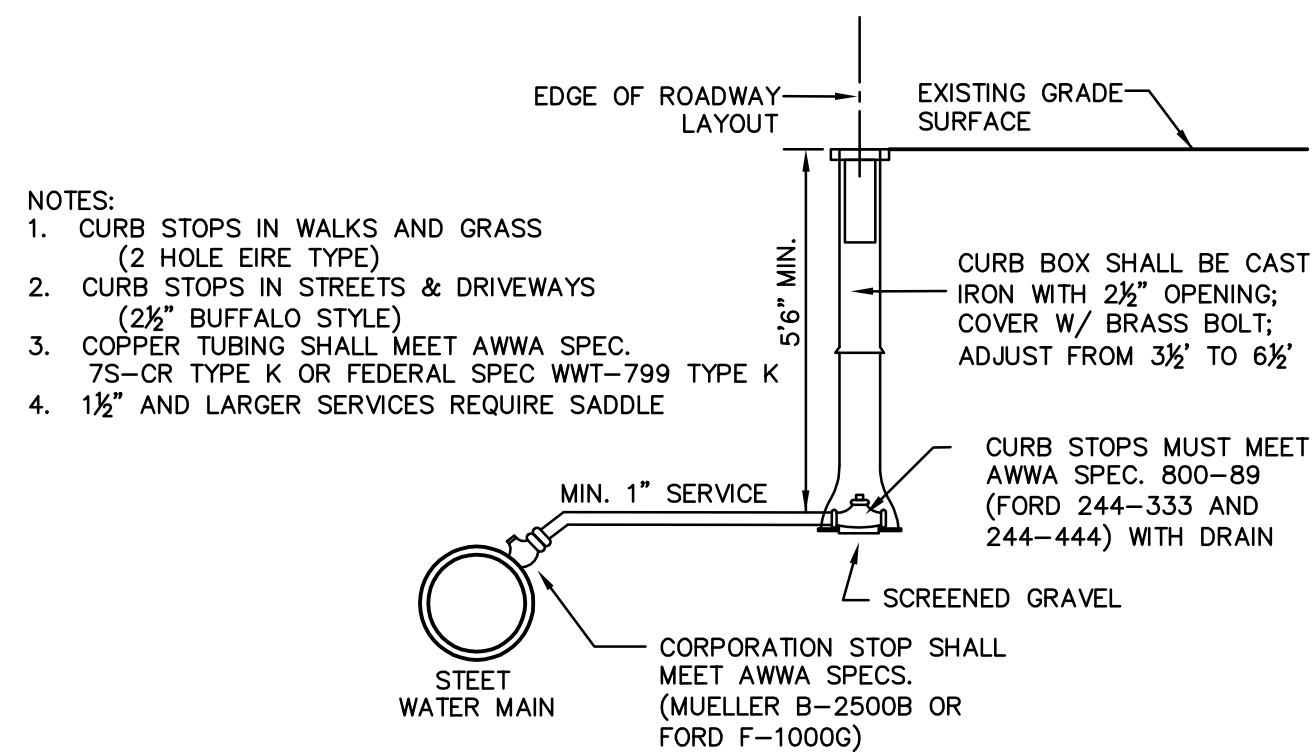
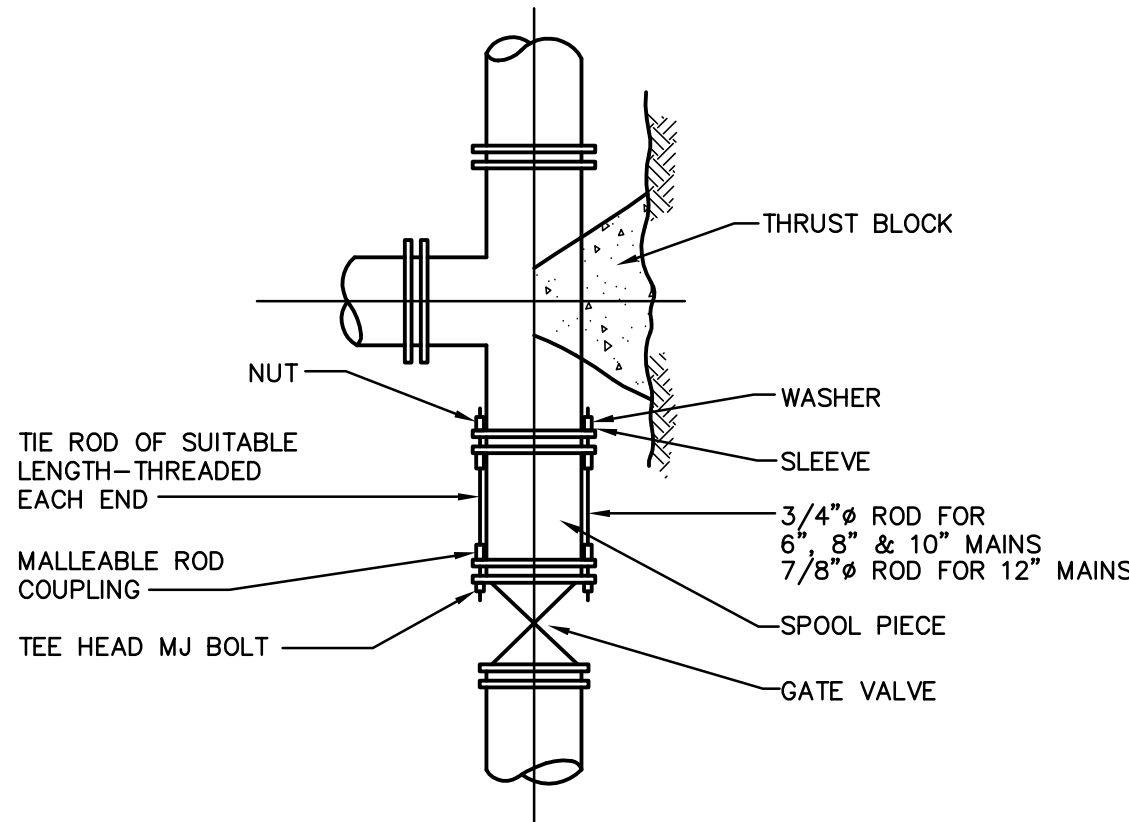
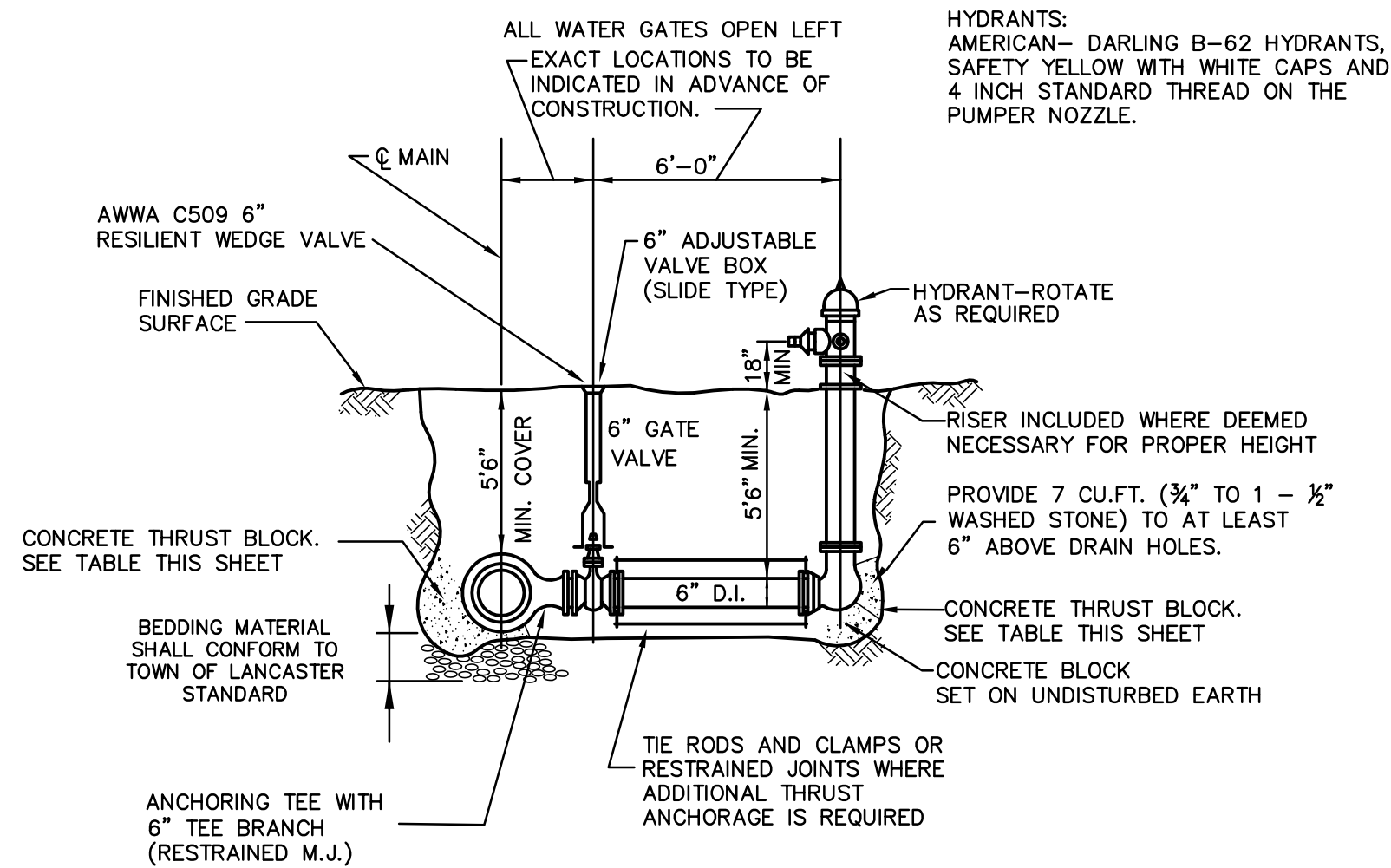
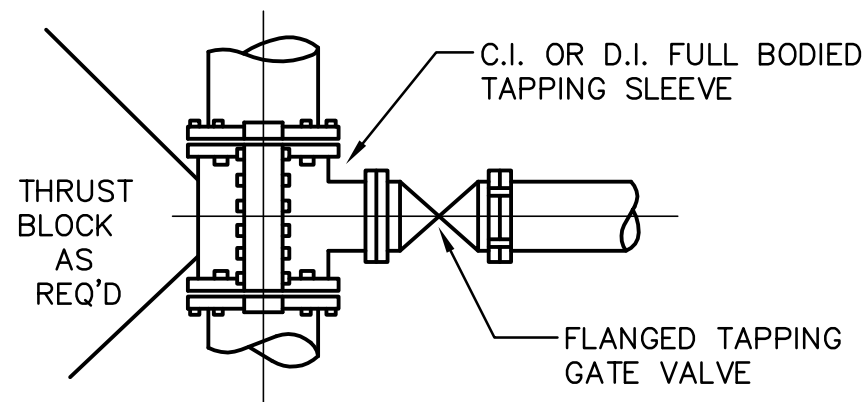
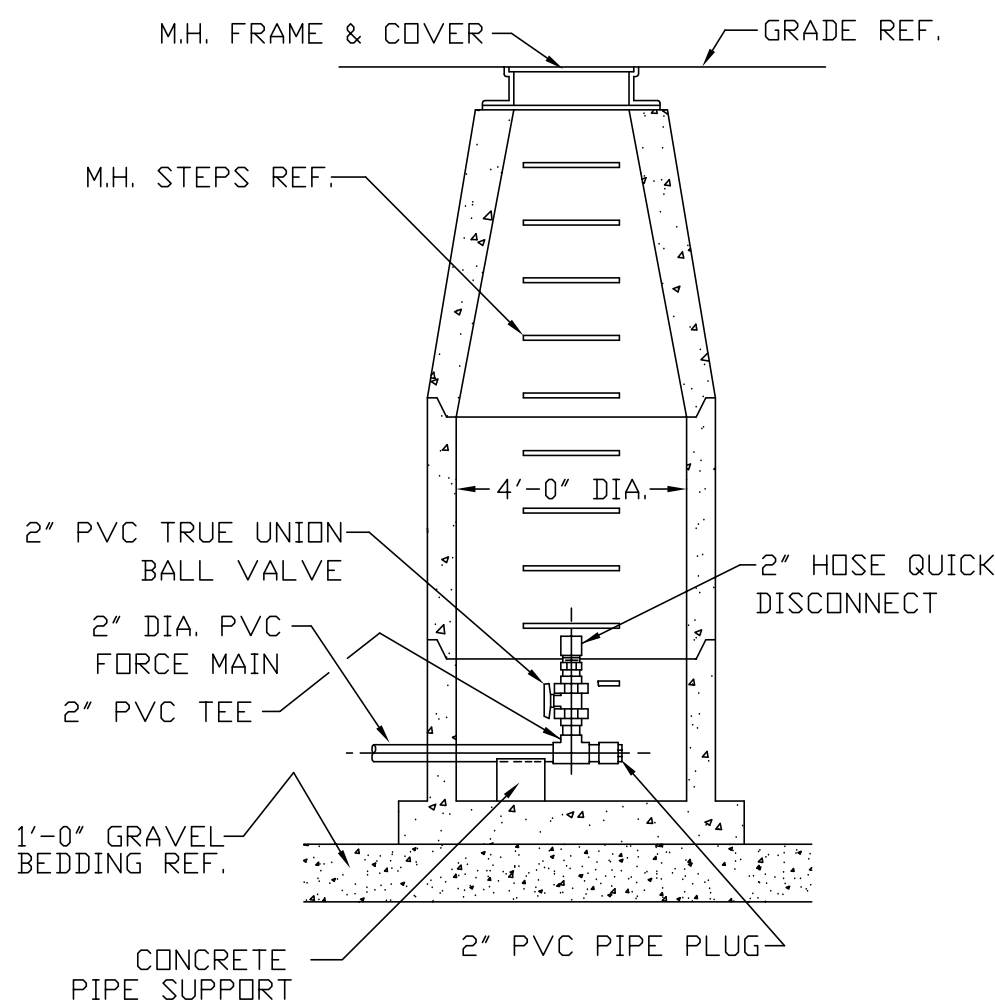
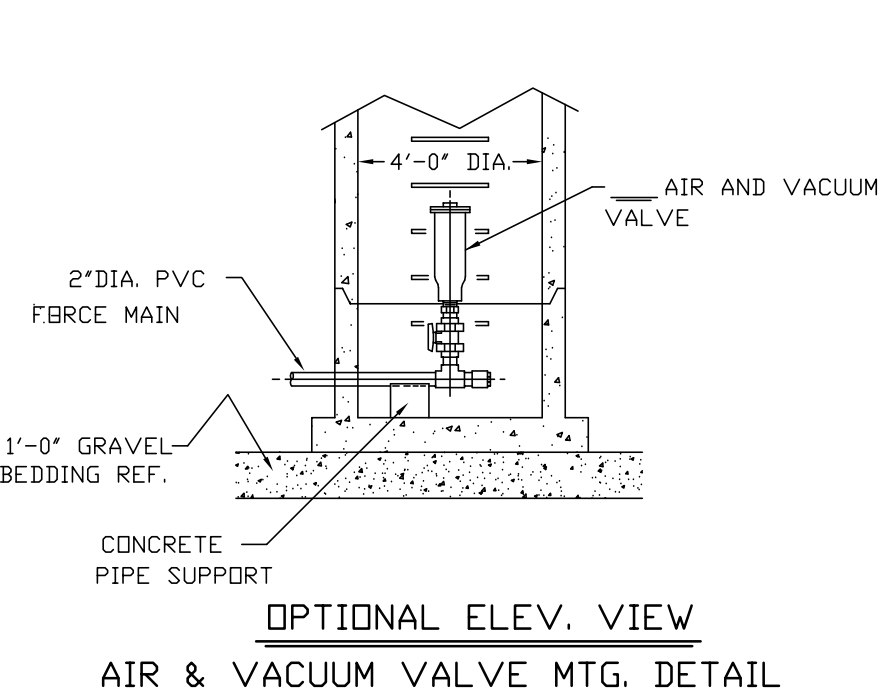
JOB No. 12,274

DATE: FEBRUARY 8, 2018

SCALE: nts

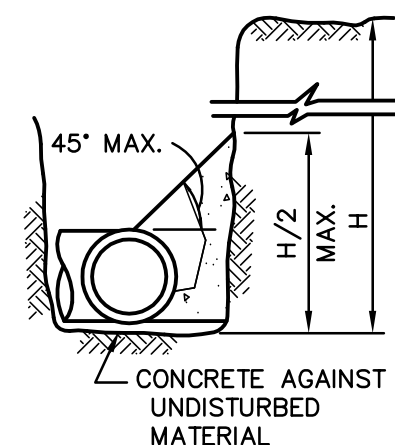
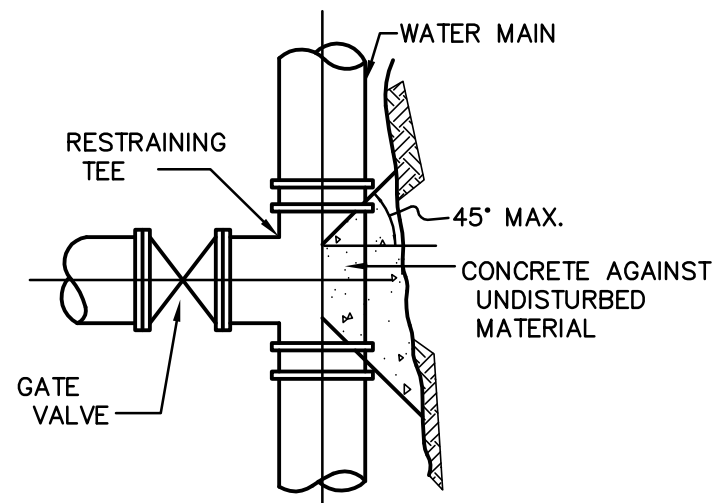
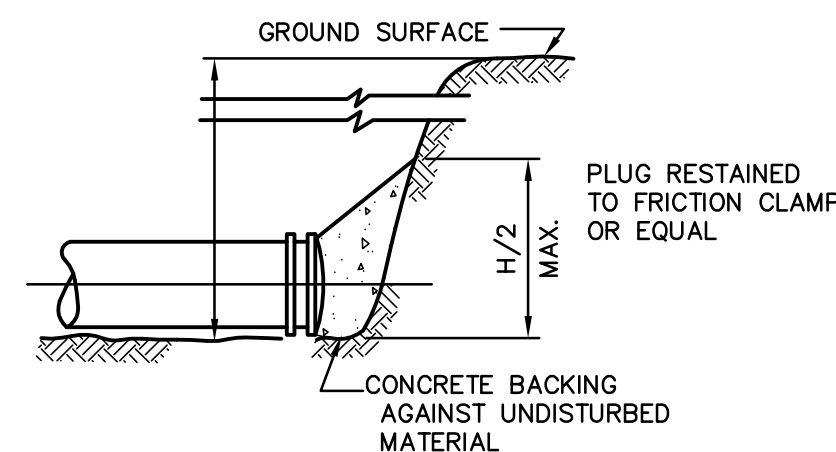
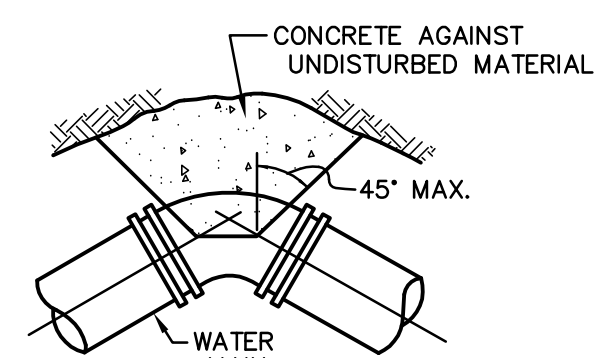
SHEET: 24 of 27

PLAN #: 27,147



NOTE: CONCRETE FOR THRUST BLOCKS SHALL BE NO LONGER THAN THE RATIO OF 2 1/2 : 5 1/2 AND SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2000 PSI (SO THAT FLANGES AND BOLTS ARE ACCESSIBLE.)

BEARING AREAS OF THRUST BLOCKS (BEARING AREA IN SQUARE FT.)				
PIPE SIZE INCHES	1/4 BEND	1/8 BEND	1/16 BEND OR LESS	PLUG TEES
6 AND 8	8	8		8
10 AND 12	22	13	8	16



NOTES:
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF LANCASTER CONSTRUCTION STANDARDS AND SPECIFICATIONS.
2. ALL WATER DETAILS MANUFACTURERS & CONSTRUCTION STANDARDS SHALL CONFORM TO THE TOWN OF LANCASTER STANDARDS,

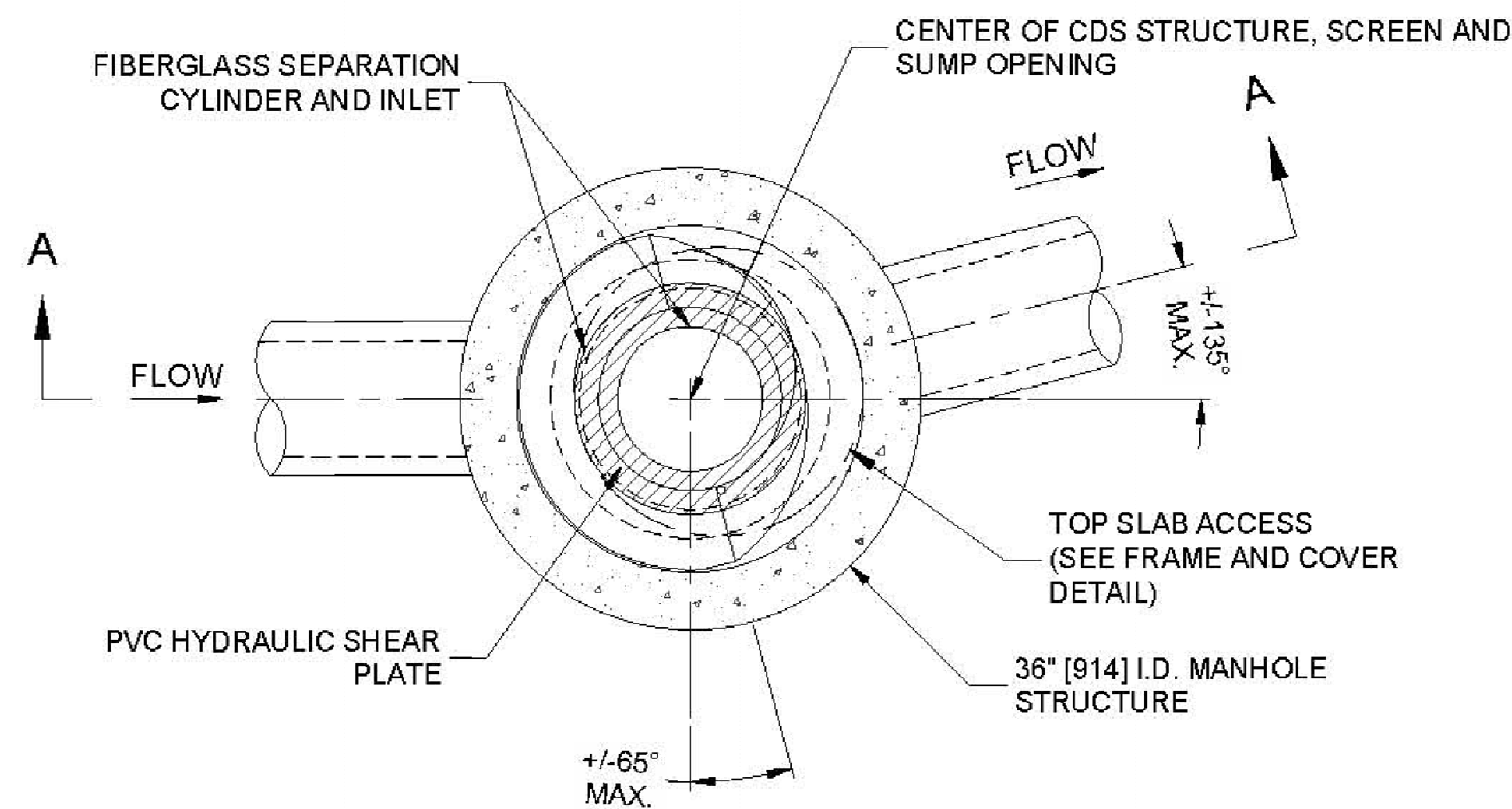
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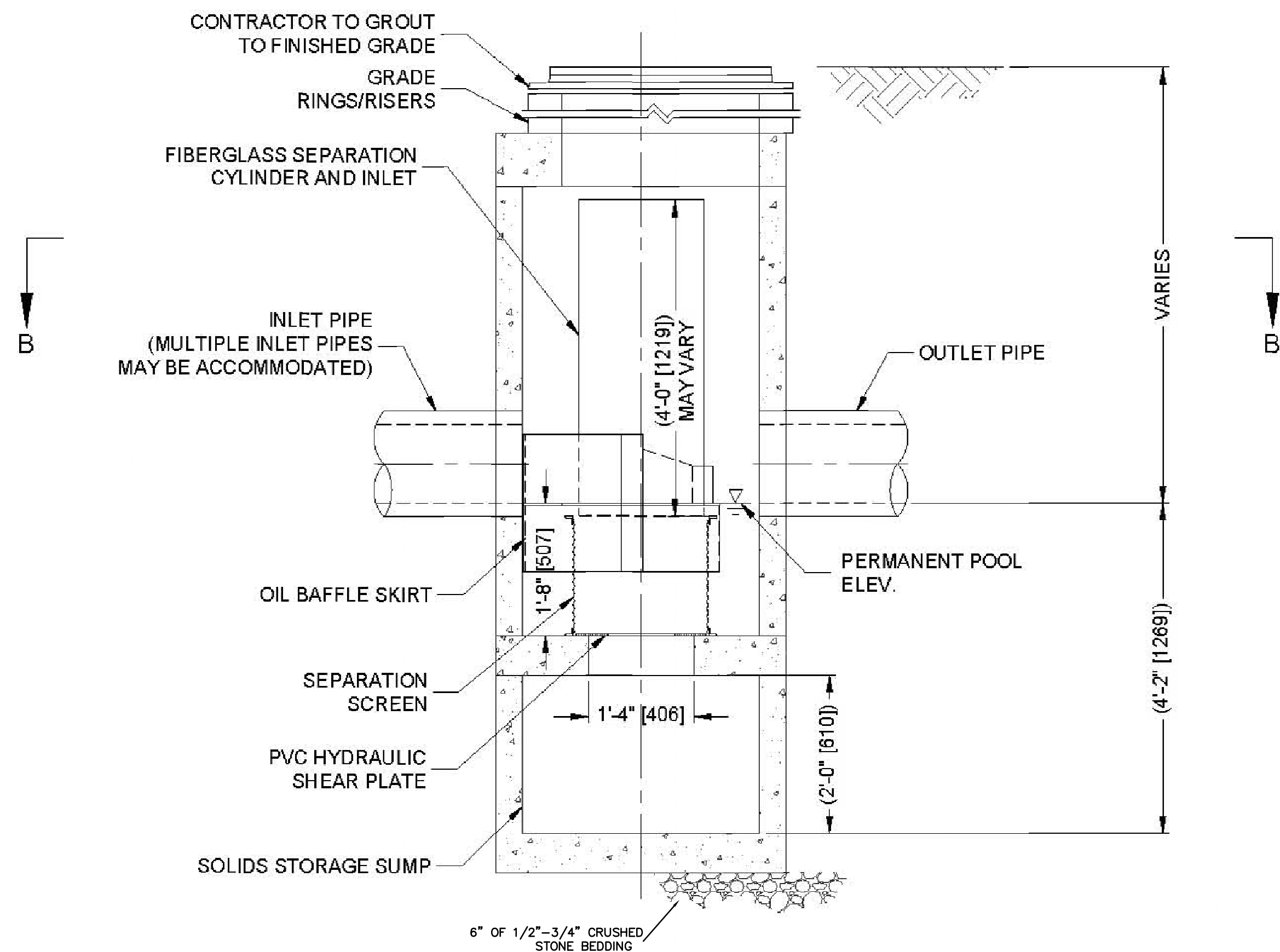
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DRW.: RST	
JOB No.	12,274
DATE:	FEBRUARY 8, 2018
SCALE:	nts
SHEET:	25 of 27
PLAN #:	27,147

DETAILS



PLAN VIEW B-B
N.T.S.

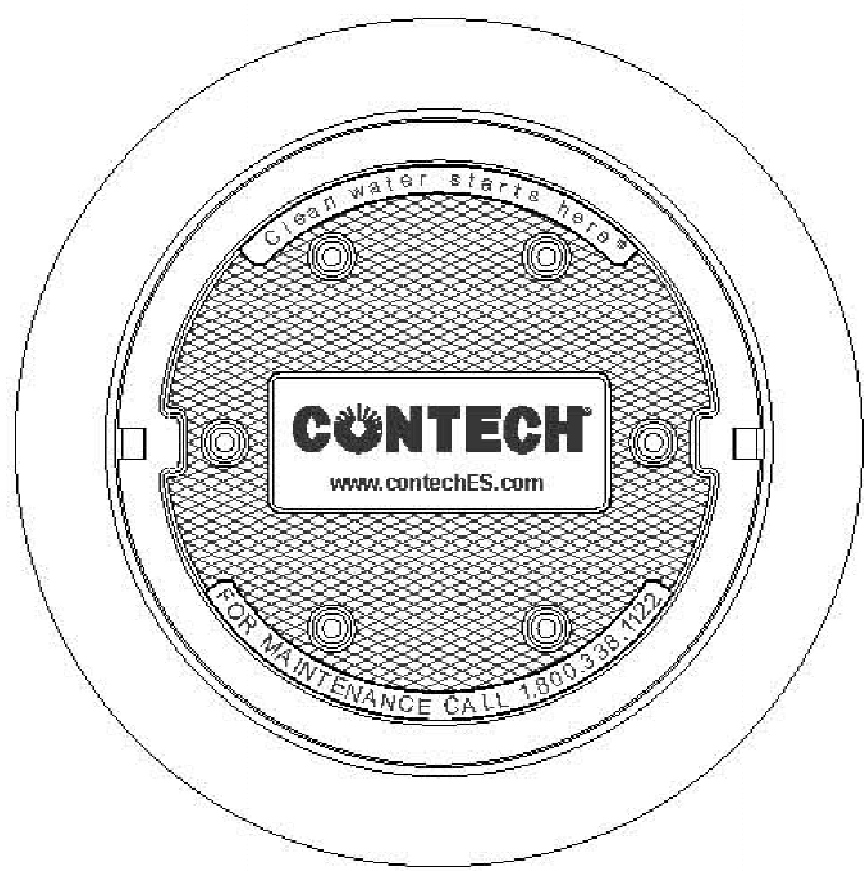


ELEVATION A-A
N.T.S.

CDS1515-3-C DESIGN NOTES

CDS1515-3-C RATED TREATMENT CAPACITY IS 1.0 CFS, OR PER LOCAL REGULATIONS.
THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN.

CDS UNITS TO BE INSTALLED AT:
DRAIN MH#57
DRAIN MH#66
DRAIN MH#77



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2'; AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
 - IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 - CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



CDS1515-3-C
ONLINE CDS
STANDARD DETAIL

REVISIONS		DESCRIPTION
No.	DATE	
1	04/10/18	APARTMENTS 136 UNITS
2	07/06/18	PLAN LAYOUT & DRAINAGE
3	07/25/18	WATER SYSTEM COMMENTS
4	09/18/18	ENGINEERING COMMENTS
5	11/06/18	ENGINEERING COMMENTS
6	12/27/18	ENGINEERING COMMENTS
7	2/13/19	FIRE ACCESS
8	2/19/19	COMMENTS & LANDSCAPE

SITE DEVELOPMENT PLAN
"GOODRIDGE BROOK ESTATES"
Multi Unit & Single Family Subdivision Layout
LANCASTER, MASSACHUSETTS
PREPARED FOR:
CRESCENT BUILDERS, INC.
94 NORTH MAIN STREET
BOYLSTON MA 01583

GLM Engineering Consultants, Inc.
19 EXCHANGE STREET
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DRW.: RST	
JOB No.	12,274
DATE:	FEBRUARY 8, 2018
SCALE:	nts
SHEET:	26 of 27
PLAN #:	27,147

DEEP HOLE -- #08-1		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	404.0
6"		403.5
16"	B -- SILT LOAM	402.2
84"	C -- FINE SILT LOAM, 5 % GRAVEL	397.0
28"	GROUNDWATER OBSERVED (STANDING / WEEPING)	401.7
24"	SOIL MOTTLING	402.0
24"	ESTIMATED SEASONAL HIGH GROUNDWATER	402.0

DEEP HOLE -- #08-2		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	406.0
4"		405.7
12"	B -- SANDY LOAM	405.0
80"	C -- SILT LOAM	399.3
38"	GROUNDWATER OBSERVED (STANDING / WEEPING)	402.8
30"	SOIL MOTTLING -- FAINT	403.5
30"	ESTIMATED SEASONAL HIGH GROUNDWATER	403.5

DEEP HOLE -- #08-3		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	402.0
2"		401.8
10"	B -- SILT LOAM	401.2
115"	C -- SILT LOAM	392.4
NA	GROUNDWATER OBSERVED (STANDING / WEEPING)	
86"	SOIL MOTTLING -- FAINT	394.8
86"	ESTIMATED SEASONAL HIGH GROUNDWATER	394.8

DEEP HOLE -- #08-4		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	402.2
4"		401.9
14"	B -- SILT LOAM	401.0
76"	C -- SILT LOAM	395.9
NA	GROUNDWATER OBSERVED (STANDING / WEEPING)	
NA	SOIL MOTTLING -- FAINT	
	ESTIMATED SEASONAL HIGH GROUNDWATER	

DEEP HOLE -- #08-5		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	404.5
8"		403.8
26"	B -- SILT LOAM	402.3
108"	C -- SILT LOAM	395.5
48"	GROUNDWATER OBSERVED (STANDING / WEEPING)	400.5
34"	SOIL MOTTLING -- FAINT	401.7
34"	ESTIMATED SEASONAL HIGH GROUNDWATER	401.7

DEEP HOLE -- #08-6		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	406.3
2"		406.0
26"	B -- SILT LOAM	404.1
72"	C -- SILT LOAM	400.3
48"	GROUNDWATER OBSERVED (STANDING / WEEPING)	402.3
38"	SOIL MOTTLING -- FAINT	403.1
38"	ESTIMATED SEASONAL HIGH GROUNDWATER	403.1

DEEP HOLE -- #08-7		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	401.2
2"		401.0
10"	B -- SANDY LOAM	400.4
92"	C -- SANDY LOAM	393.5
NA	GROUNDWATER OBSERVED (STANDING / WEEPING)	
NA	SOIL MOTTLING -- FAINT	
NA	ESTIMATED SEASONAL HIGH GROUNDWATER	

DEEP HOLE -- #08-8		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	394.0
2"		393.8
20"	B -- SILT LOAM	392.3
48"	C1-- COURSE SAND	390.0
108"	C1-- FINE SAND	385.0
52"	GROUNDWATER OBSERVED (STANDING / WEEPING)	389.7
42"	SOIL MOTTLING -- FAINT	390.5
42"	ESTIMATED SEASONAL HIGH GROUNDWATER	390.5

DEEP HOLE -- #08-9		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	398.5
3"		398.3
10"	B -- SANDY LOAM	397.7
102"	C -- SANDY LOAM	390.0
80"	GROUNDWATER OBSERVED (STANDING / WEEPING)	391.8
74"	SOIL MOTTLING -- FAINT	392.3
74"	ESTIMATED SEASONAL HIGH GROUNDWATER	392.3

DEEP HOLE -- #08-10		
HORIZ DEPTH	DATE: 01/28/08 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	398.0
3"		397.8
8"	B -- SANDY LOAM	397.3
48"	C1 -- SANDY LOAM	394.0
	C2 -- SILTY LOAM	
76"		391.7
108"	C3 -- SILTY LOAM WITH SHALE	389.0
88"	GROUNDWATER OBSERVED (STANDING / WEEPING)	390.7
78"	SOIL MOTTLING -- FAINT	391.5
78"	ESTIMATED SEASONAL HIGH GROUNDWATER	391.5

DEEP HOLE -- #1		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	401.8
4"		401.5
19"	B--FINE SANDY LOAM	401.6
108"	C -- FINE SILT LOAM, 20% GRAVEL	392.8
48"	GROUNDWATER OBSERVED (STANDING / WEEPING)	397.8
24"	SOIL MOTTLING -- FAINT	399.8
	ESTIMATED SEASONAL HIGH GROUNDWATER	399.8

DEEP HOLE -- #2		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	404.3
8"		403.6
18"	B--FINE SANDY LOAM	402.8
108"	C -- SILT LOAM	395.3
18"	GROUNDWATER OBSERVED (STANDING / WEEPING)	402.8
18"	SOIL MOTTLING -- FAINT	402.8
18"	ESTIMATED SEASONAL HIGH GROUNDWATER	402.8

DEEP HOLE -- #3		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	398.6
8"		397.9
12"	B--FINE SANDY LOAM	397.6
108"	C -- SILT LOAM	389.6
72"	GROUNDWATER OBSERVED (STANDING / WEEPING)	392.6
NA	SOIL MOTTLING -- FAINT	
72"	ESTIMATED SEASONAL HIGH GROUNDWATER	392.6

DEEP HOLE -- #4		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	402.2
6"		401.7
19"	B--FINE SANDY LOAM	400.6
120"	C -- SILT LOAM	392.2
92"	GROUNDWATER OBSERVED (STANDING / WEEPING)	394.5
NA	SOIL MOTTLING -- FAINT	
92"	ESTIMATED SEASONAL HIGH GROUNDWATER	394.5

DEEP HOLE -- #5		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	406.6
6"		406.1
18"	B -- SANDY LOAM	405.1
37"	C1 -- SANDY LOAM	403.5
113"	C2 -- SILT LOAM	397.2
28"	GROUNDWATER OBSERVED (STANDING / WEEPING)	404.3
28"	SOIL MOTTLING -- FAINT	404.3
28"	ESTIMATED SEASONAL HIGH GROUNDWATER	404.3

DEEP HOLE -- #6		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	407.5
6"		407.0
20"	B -- SANDY LOAM	405.8
36"	C1 -- SANDY LOAM	404.5
113"	C2 -- SILT LOAM	398.1
51"	GROUNDWATER OBSERVED (STANDING / WEEPING)	403.3
24"	SOIL MOTTLING	405.5
24"	ESTIMATED SEASONAL HIGH GROUNDWATER	405.5

DEEP HOLE -- #7		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	403.0
8"		402.3
28"	B -- SILT LOAM	400.7
38"	C1 -- SANDY LOAM	399.8
108"	C2 -- SILT LOAM	394.0
36"	GROUNDWATER OBSERVED (STANDING / WEEPING)	400.0
NA	SOIL MOTTLING	
36"	ESTIMATED SEASONAL HIGH GROUNDWATER	400.0

DEEP HOLE -- #8		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	407.0
6"		406.5
16"	B -- SILT LOAM	405.2
108"	C -- SILT LOAM	397.5
48"	GROUNDWATER OBSERVED (STANDING / WEEPING)	403.0
NA	SOIL MOTTLING	
48"	ESTIMATED SEASONAL HIGH GROUNDWATER	403.0

DEEP HOLE -- #9		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	418.1
8"		417.4
28"	B -- SILT LOAM	415.8
40"	C1 -- SANDY LOAM	414.8
108"	C2 -- SILT LOAM	409.1
44"	GROUNDWATER OBSERVED (STANDING / WEEPING)	414.4
NA	SOIL MOTTLING	
44"	ESTIMATED SEASONAL HIGH GROUNDWATER	414.4

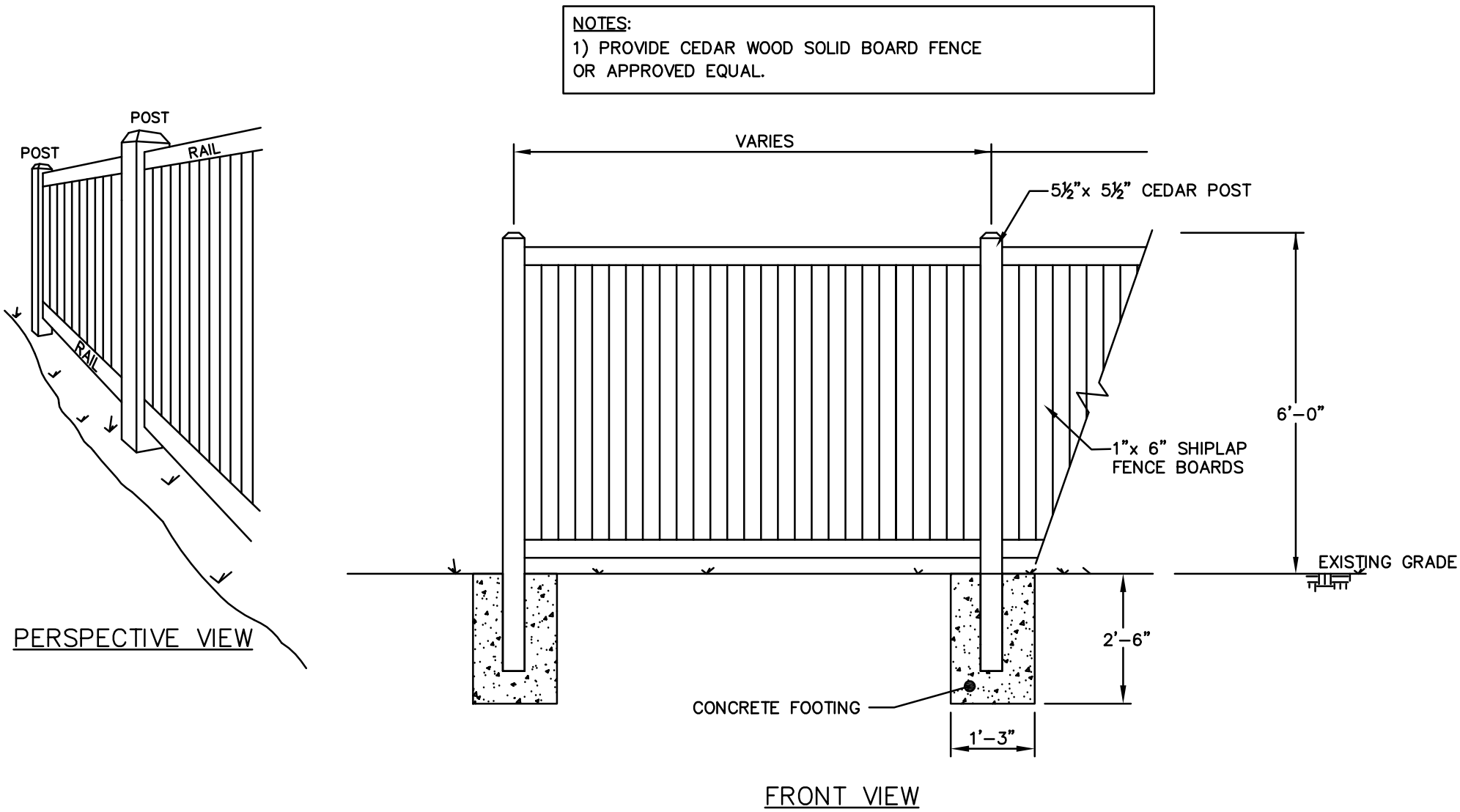
DEEP HOLE -- #10		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	410.1
8"		409.4
18"	B--FINE SANDY LOAM	408.6
28"	C1 -- SANDY LOAM	407.8
108"	C2 -- SILT LOAM	401.1
60"	GROUNDWATER OBSERVED (STANDING / WEEPING)	405.1
NA	SOIL MOTTLING	
60"	ESTIMATED SEASONAL HIGH GROUNDWATER	405.1

DEEP HOLE -- #18-1 (Basin 5)		
HORIZ DEPTH	DATE: 8/14/18 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	394.0
4"		393.7
26"	B -- SILT LOAM	391.8
132"	C1 -- LOAMY SAND	383.0
120"	GROUNDWATER OBSERVED (STANDING / WEEPING)	384.0
NA	SOIL MOTTLING	
	ESTIMATED SEASONAL HIGH GROUNDWATER	

DEEP HOLE -- #18-2 (Basin 4)		
HORIZ DEPTH	DATE: 8/15/18 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	400.0
4"		399.7
30"	B -- SILT LOAM	397.5
84"	C -- LOAMY SAND	393.0
74"	GROUNDWATER OBSERVED (STANDING / WEEPING)	393.8
30"	SOIL MOTTLING	397.5
30"	ESTIMATED SEASONAL HIGH GROUNDWATER	397.5

DEEP HOLE -- #18-3 (Basin 2)		
HORIZ DEPTH	DATE: 03/28/06 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	398.0
4"		397.7
32"	B -- SILT LOAM	395.3
62"	C1 -- LOAMY SAND	392.8
32"	GROUNDWATER OBSERVED (STANDING / WEEPING)	
32"	SOIL MOTTLING	395.3
32"	ESTIMATED SEASONAL HIGH GROUNDWATER	395.3

DEEP HOLE -- #18-4 (Basin 6)		
HORIZ DEPTH	DATE: 8/15/18 SOIL DESCRIPTION	ELEV.
0"	A -- TOPSOIL	396.0
6"		395.5
24"	B--FINE SANDY LOAM	394.0
92"	C1 -- SAND	388.3
108"	C2 -- LOAMY SAND	387.0
None	GROUNDWATER OBSERVED (STANDING / WEEPING)	
90"	SOIL MOTTLING	388.5
90"	ESTIMATED SEASONAL HIGH GROUNDWATER	388.5



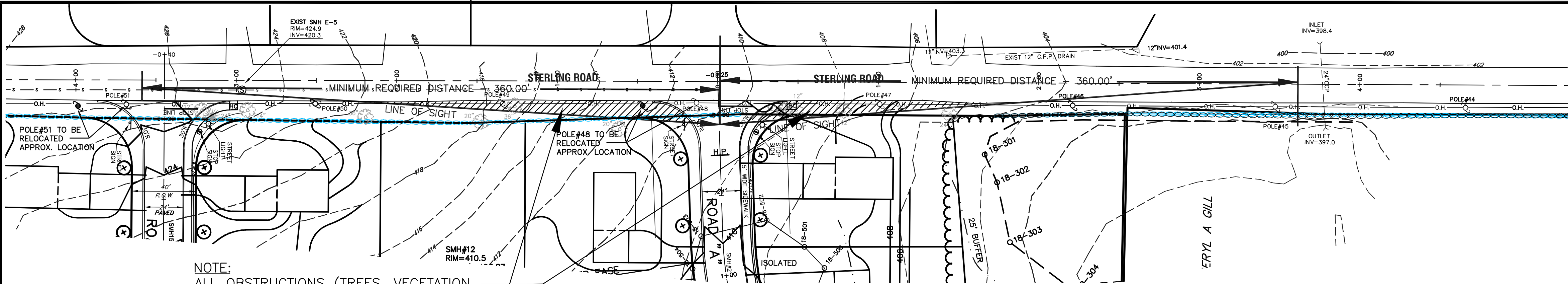
TYPICAL PRIVACY FENCE DETAIL
NOT TO SCALE

REVISIONS		DESCRIPTION
No.	DATE	
1	04/10/18	APARTMENTS 136 UNITS
2	07/06/18	PLAN LAYOUT & DRAINAGE
3	07/25/18	WATER SYSTEM COMMENTS
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5	11/06/18	ENGINEERING COMMENTS
6	12/27/18	ENGINEERING COMMENTS
7	2/13/19	FIRE ACCESS
8	2/19/19	COMMENTS & LANDSCAPE

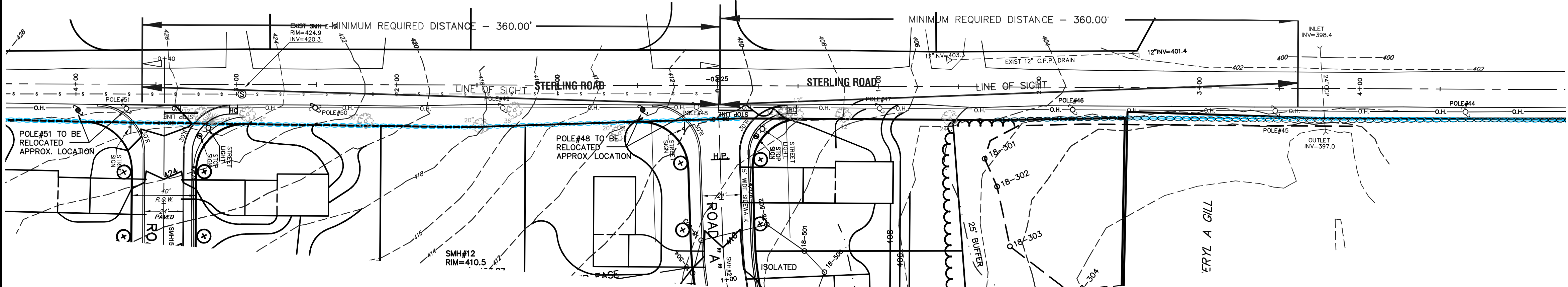
SITE DEVELOPMENT PLAN
"GOODRIDGE BROOK ESTATES"
Multi Unit & Single Family Subdivision Layout
LANCASTER, MASSACHUSETTS
PREPARED FOR:
CRESCENT BUILDERS, INC.
94 NORTH MAIN STREET
BOYLSTON MA 01583

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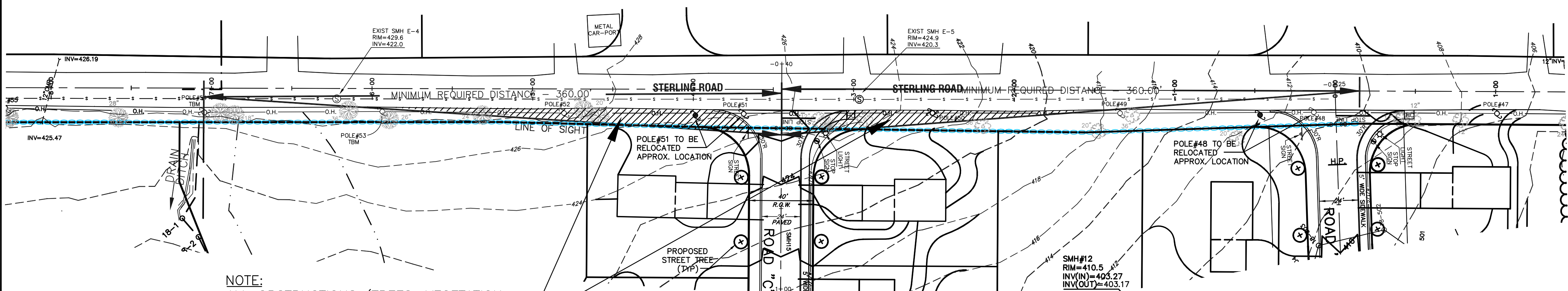
DRW.:	RST
JOB No.	12,274
DATE:	FEBRUARY 8, 2018
SCALE:	
SHEET:	27 of 27
PLAN #:	27,147



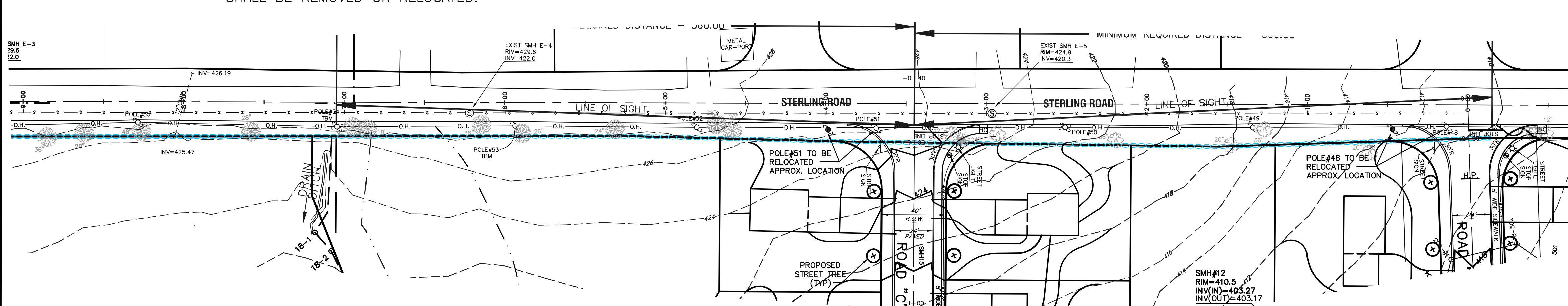
Intersection Sight Distance (ISD) - Road A



Stopping Sight Distance (SSD) - Road A

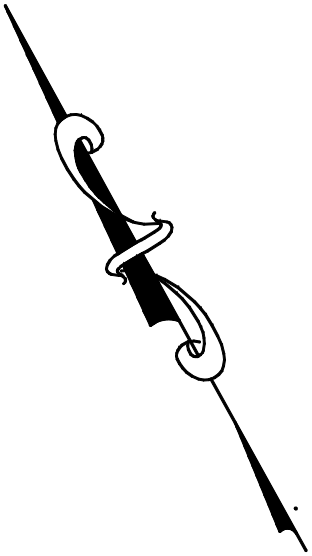


Intesection Sight Distance (ISD) - Road C



Stopping Sight Distance (SSD) - Road C

NOTES:
1. Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.5-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.

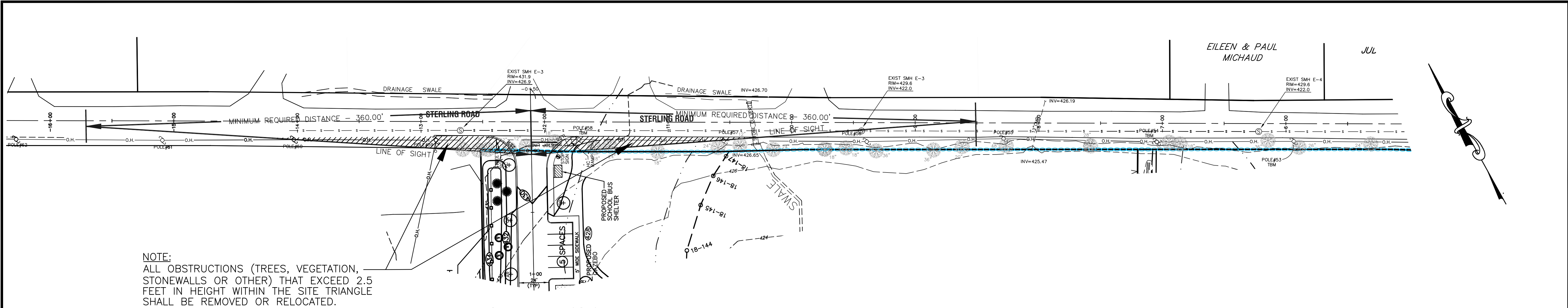


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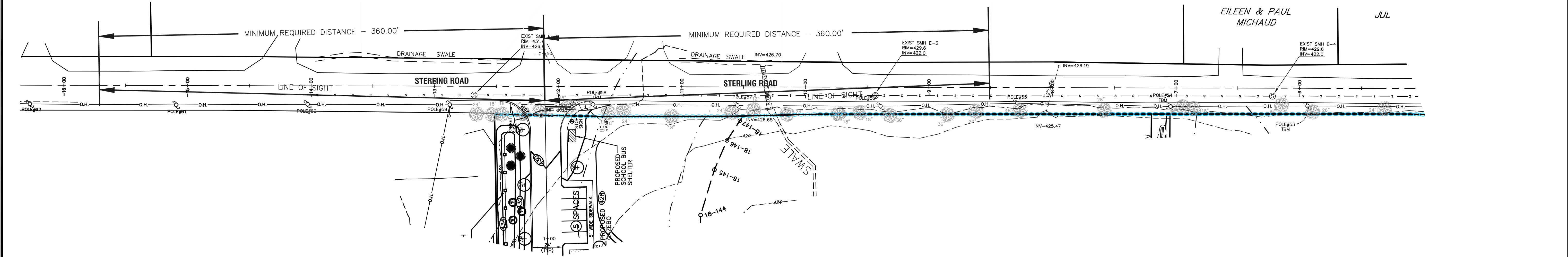
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DRW.:	RST
JOB No.	12,274
DATE:	FEBRUARY 8, 2018
SCALE:	1"= 40'
SHEET:	SUP-A1
PLAN #:	27,147

REVISIONS	
No.	DESCRIPTION
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7	2/13/19 FIRE ACCESS
8	2/19/19 COMMENTS & LANDSCAPE



Intersection Sight Distance (ISD) - Apartment Drive



Stopping Sight Distance (SSD) - Apartment Drive

REVISIONS	
No.	DATE
1	04/10/18
2	07/06/18
3	07/25/18
4	09/18/18
5	11/06/18
6	12/27/18
7	2/13/19
8	2/19/19

DESCRIPTION
APARTMENTS 136 UNITS
PLAN LAYOUT & DRAINAGE
WATER SYSTEM COMMENTS
ENGINEERING COMMENTS
ENGINEERING COMMENTS
ENGINEERING COMMENTS
FIRE ACCESS
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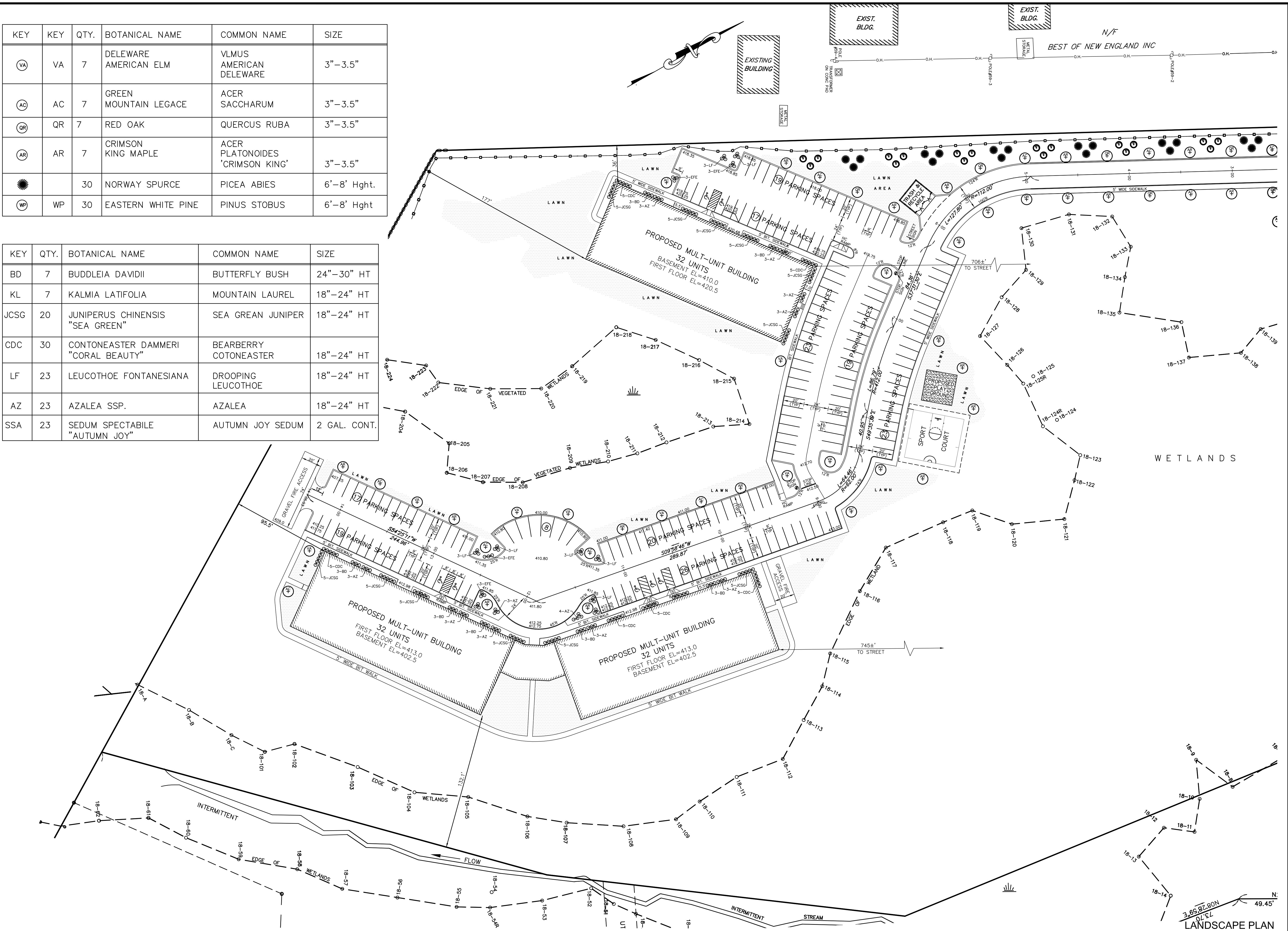
PREPARED FOR:
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DRW.: RST
JOB No. 12,274
DATE: FEBRUARY 8, 2018
SCALE: 1"= 40'
SHEET: SUP-A2
PLAN #: 27,147

KEY	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
ⓋⒶ	VA	7	DELEWARE AMERICAN ELM	VLMUS AMERICAN DELEWARE	3"—3.5"
ⒶⒸ	AC	7	GREEN MOUNTAIN LEGACE	ACER SACCHARUM	3"—3.5"
ⒶⓇ	QR	7	RED OAK	QUERCUS RUBA	3"—3.5"
ⒶⓇ	AR	7	CRIMSON KING MAPLE	ACER PLATONOIDES 'CRIMSON KING'	3"—3.5"
☀		30	NORWAY SPURCE	PICEA ABIES	6'—8' Hght.
ⓈⓈⒶ	WP	30	EASTERN WHITE PINE	PINUS STOBUS	6'—8' Hght

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
BD	7	BUDDLEIA DAVIDII	BUTTERFLY BUSH	24"—30" HT
KL	7	KALMIA LATIFOLIA	MOUNTAIN LAUREL	18"—24" HT
JCSG	20	JUNIPERUS CHINENSIS "SEA GREEN"	SEA GREAN JUNIPER	18"—24" HT
CDC	30	CONTONEASTER DAMMERI "CORAL BEAUTY"	BEARBERRY COTONEASTER	18"—24" HT
LF	23	LEUCOTHOE FONTANESIANA	DROOPING LEUCOTHOE	18"—24" HT
AZ	23	AZALEA SSP.	AZALEA	18"—24" HT
SSA	23	SEDUM SPECTABILE "AUTUMN JOY"	AUTUMN JOY SEDUM	2 GAL. CONT.



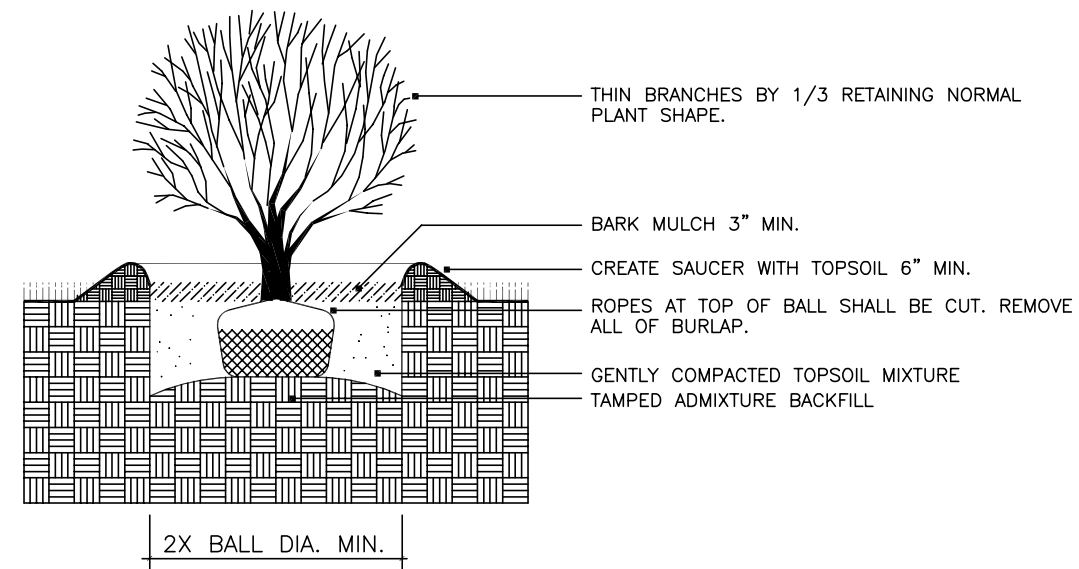
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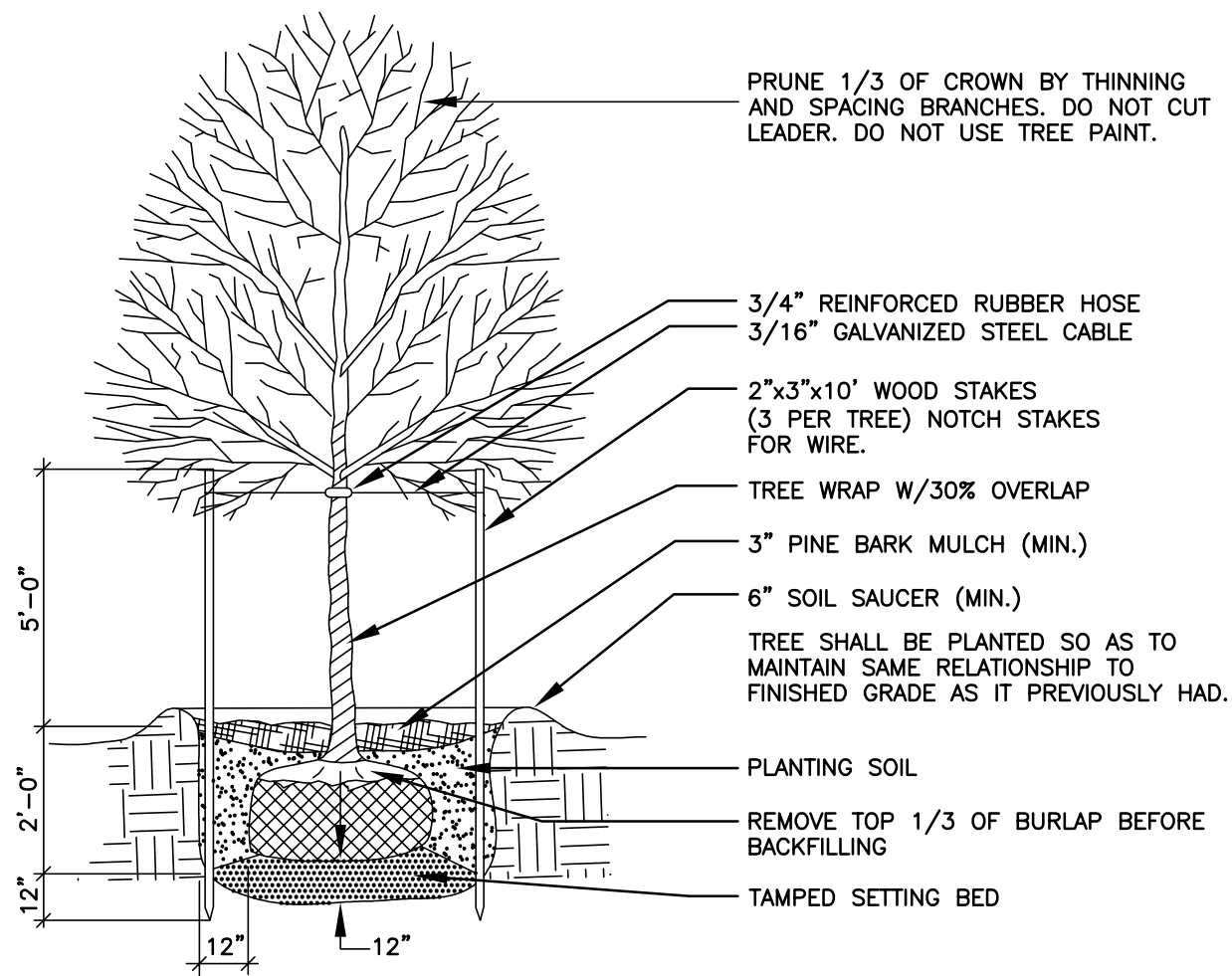
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DRW.: RST
JOB No. 12,274
DATE: FEBRUARY 8, 2018
SCALE: 1"= 40'
SHEET: L1
PLAN #: 27,147



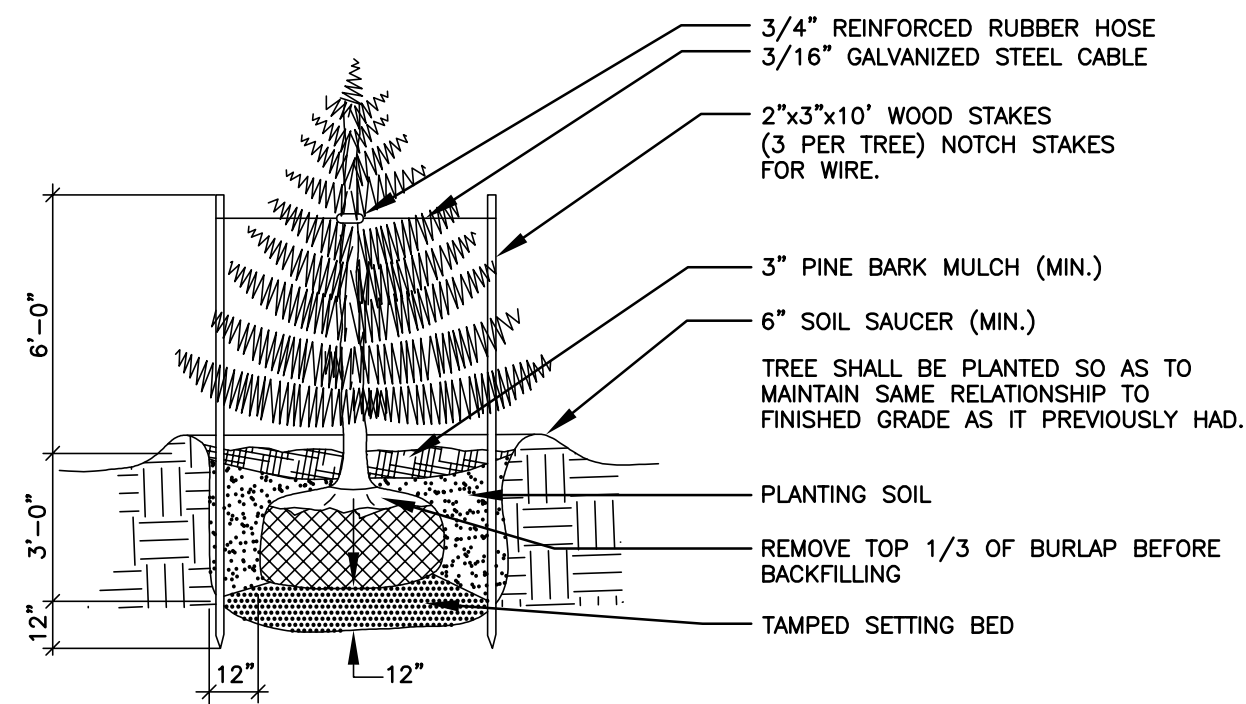
BALL AND BURLAP SHRUB PLANTING

NOT TO SCALE



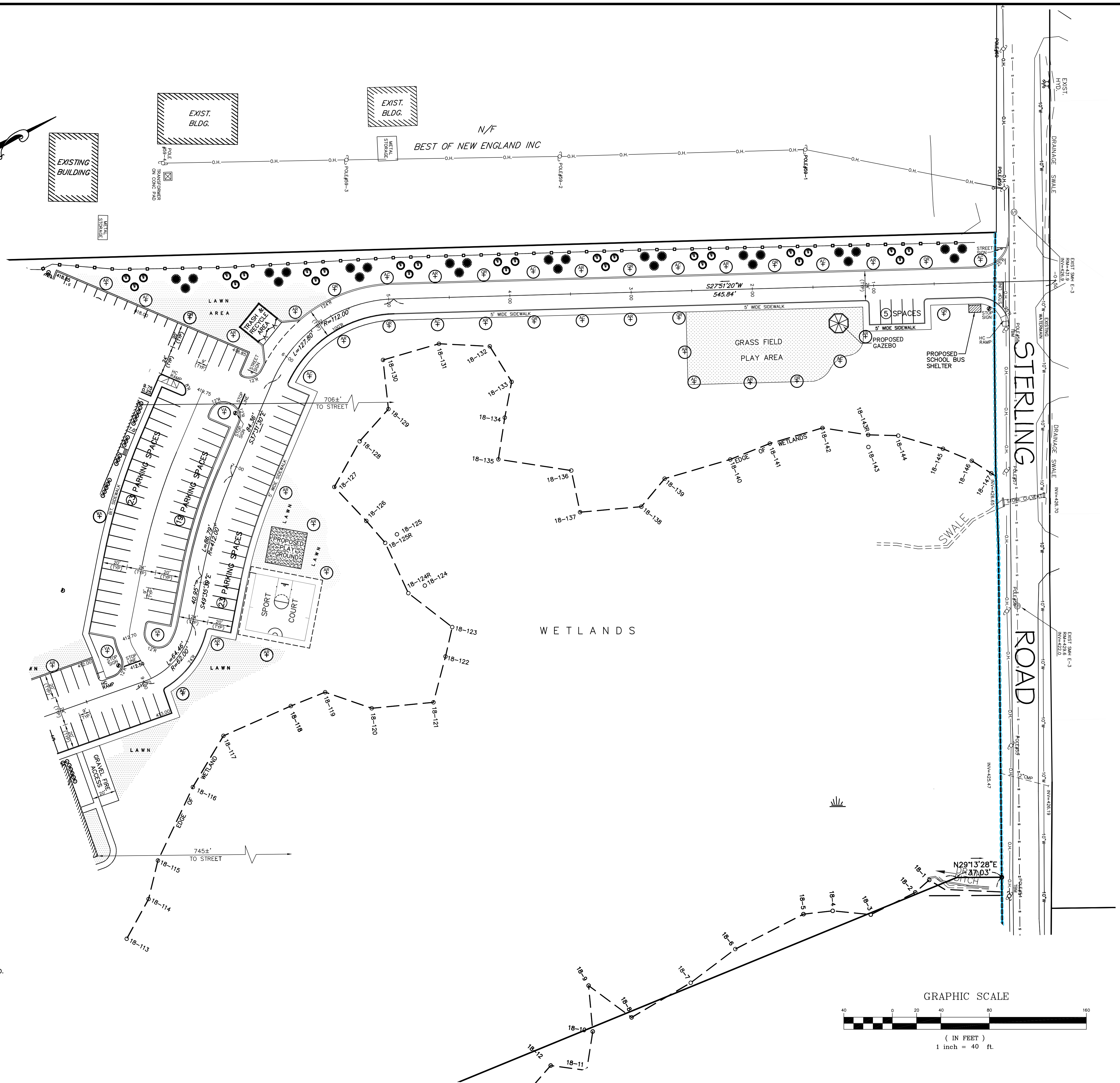
TYP. DECIDUOUS TREE PLANTING

NOT TO SCALE



TYP. EVERGREEN TREE PLANTING

NOT TO SCALE



LANDSCAPE PLAN

REVISIONS		DESCRIPTION	
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SHEET:	L2
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