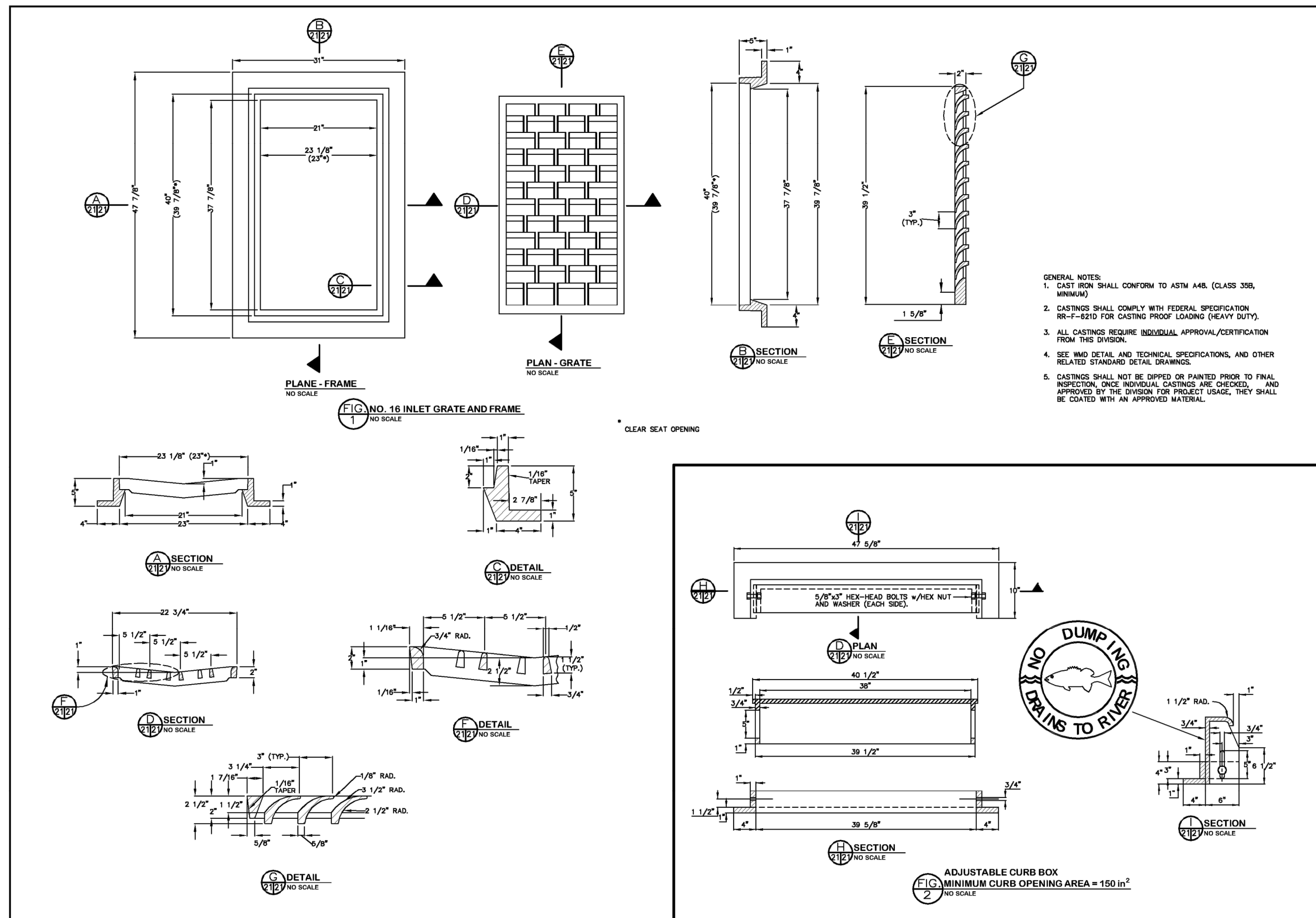


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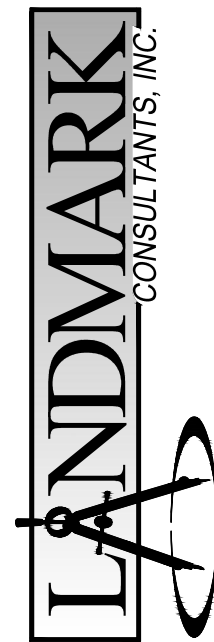
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C.507

02/24/2023

NO	DATE:	BY:	DESCRIPTION:	These drawings are instruments of service provided by landmark engineering and shall not be used for any type of construction or contracting unless signed and sealed by a Professional Engineer in the State of Illinois. Consultants, Inc.
2	03.21.22	EG	Permit Comments & Piling	
3	04.27.22	Grip	Permit Comments #2	
4	07.13.22	Grip	Sheet Service Modification	

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DRAWING FILENAME: P:\3237-05000\Products\Drawings\Sheet 1 - C:\CD\3237-05000\Sheet1.dwg LAYOUT NAME: C510 DATE: Jul 14, 2025 10:44am CAD OPERATOR: E.A. LIST 12 20255 14030261

ADS DURASLOT® PIPE SPECIFICATION

Scope

This specification describes 4- through 36-inch (100 to 900 mm) ADS DURASLOT pipe for use in surface drain applications.

Pipe Requirements

DURASLOT pipe, as manufactured and distributed by ADS, Inc., shall have a smooth interior and annular exterior corrugations with an aluminum slot grate frame mounted longitudinally along the length of the pipe to accept the grate while maintaining the original pipe diameter.

- 4- through 10-inch (100 to 250mm) pipe shall meet AASHTO M252, Type S.
- 12- through 36-inch (300 to 900 mm) pipe shall meet AASHTO M294, Type S or ASTM F2306.
- Manning's "n" value for use in design shall be 0.012.

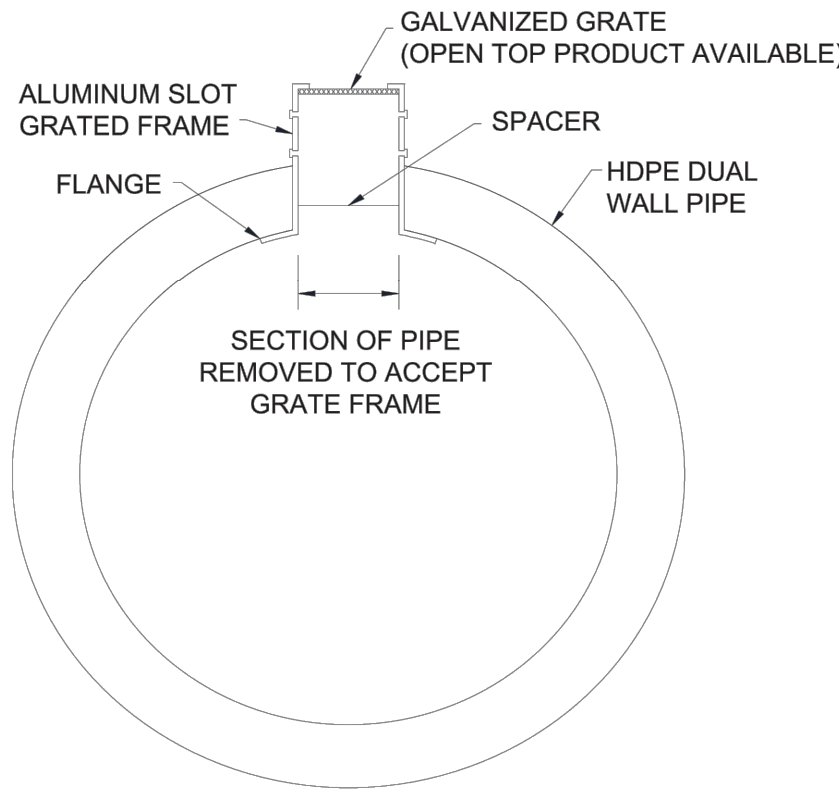
The aluminum slot grate frame shall be manufactured from 0.063" tempered commercial aluminum meeting the requirements of ASTM B209, consisting of two parallel plates separated by spacers spanning the slot on 6" centers. The grate shall be ½ - #13 galvanized steel. The grate shall have a diamond-shaped opening and be ADA compliant. The flange at the bottom of the aluminum slot grate frame shall be riveted to the pipe with a minimum of two rivets per linear foot.

Fittings

DURASLOT fittings shall be modified from fittings which conform to AASHTO M252, AASHTO M294, or ASTM F2306.

Installation

Installation shall be in accordance with ADS recommended installation instructions. Contact your local ADS representative or visit www.ads-pipe.com for a copy of the latest installation guidelines.

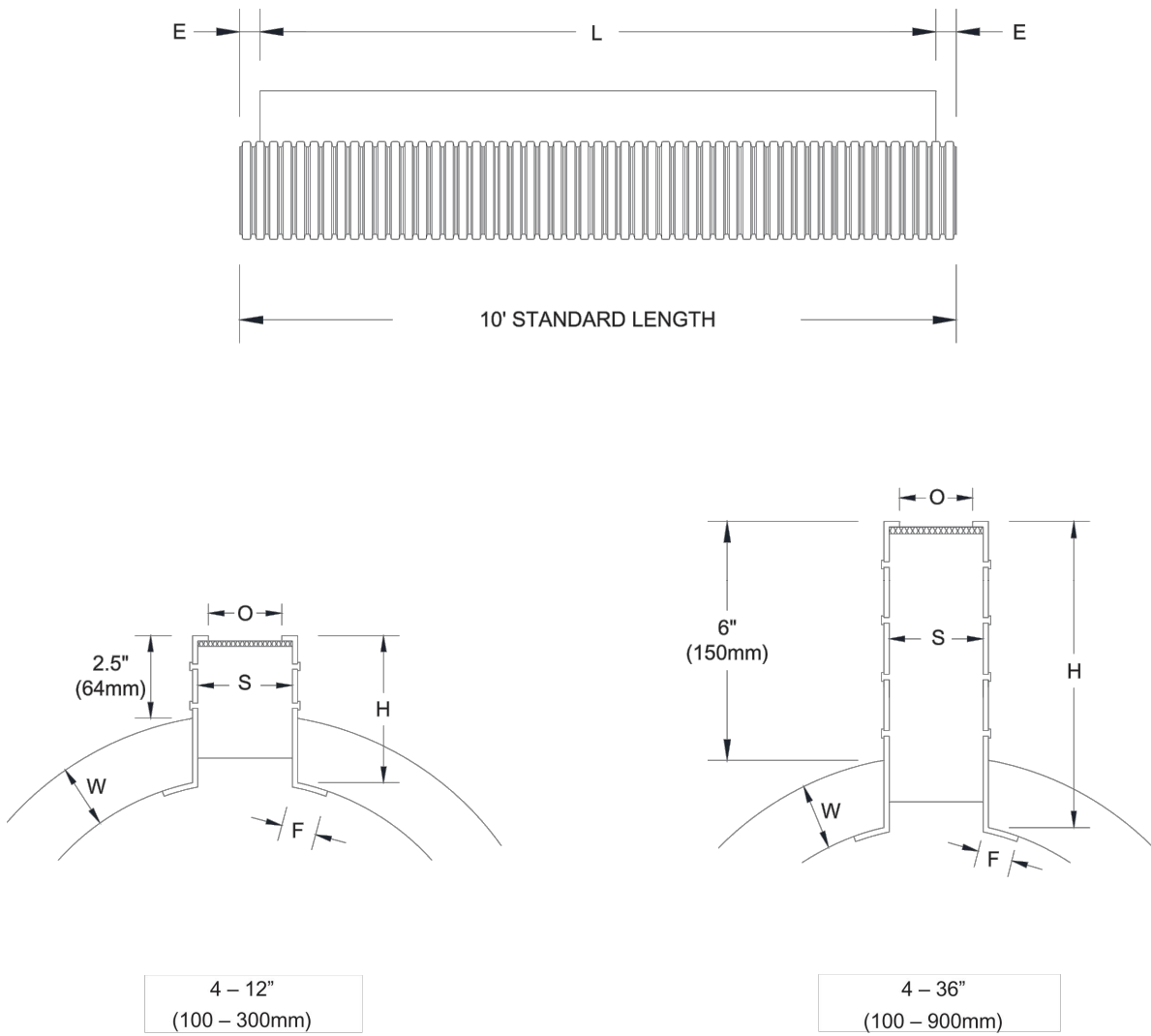


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ADS DURASLOT® STANDARD DIMENSIONS

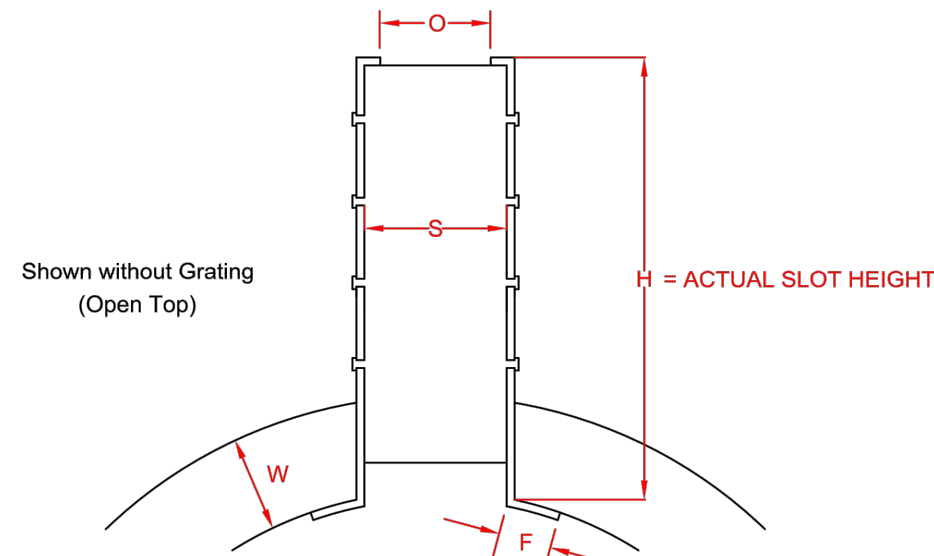
	Nominal Pipe Diameter, in (mm)											
	4" (100)	6" (150)	8" (200)	10" (250)	12" (300)	15" (375)	18" (450)	24" (600)	30" (750)	36" (900)		
L (Drain Grate Length)											116" (3000)	
E (Pipe End Length)											2" (50)	
W (2.5" slot)	2.75" (70)	3" (75)	3" (75)	3" (75)	3.5" (90)	3.75" (95)	4" (100)	4.75" (120)	5" (125)	5.25" (130)		
H (6.0" slot)	6.25" (160)	6.5" (165)	6.5" (165)	6.5" (165)	7" (175)	7" (175)	7" (175)	7.25" (185)	8.25" (210)	8.25" (210)		
W (Pipe Width w/ Corrugation)	0.34" (9)	0.46" (12)	0.61" (15)	0.73" (18)	1.15" (30)	1.30" (33)	1.57" (40)	1.86" (47)	2.56" (65)	2.85" (72)		
F (Flange Length)	0.5" (13)	0.75" (19)	0.75" (19)	0.75" (19)	0.75" (19)	0.75" (19)	0.75" (19)	1.0" (25)	1.0" (25)	1.0" (25)		
O (Opening Width)	1.25" (32)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)	1.75" (45)		
S (Slot Width)	1.75" (45)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)	2.25" (57)		

- Note:
- Variable and custom slot heights upon request. Production of variable and custom slots will require approval by engineering services and fabrication. Signed shop drawings also required from interested party.
 - Other grate material options upon request. Contact local ADS representative for availability of grate material option.



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6"-24" DURASLOT® Pipe Dimensions For Variable Slot Riser

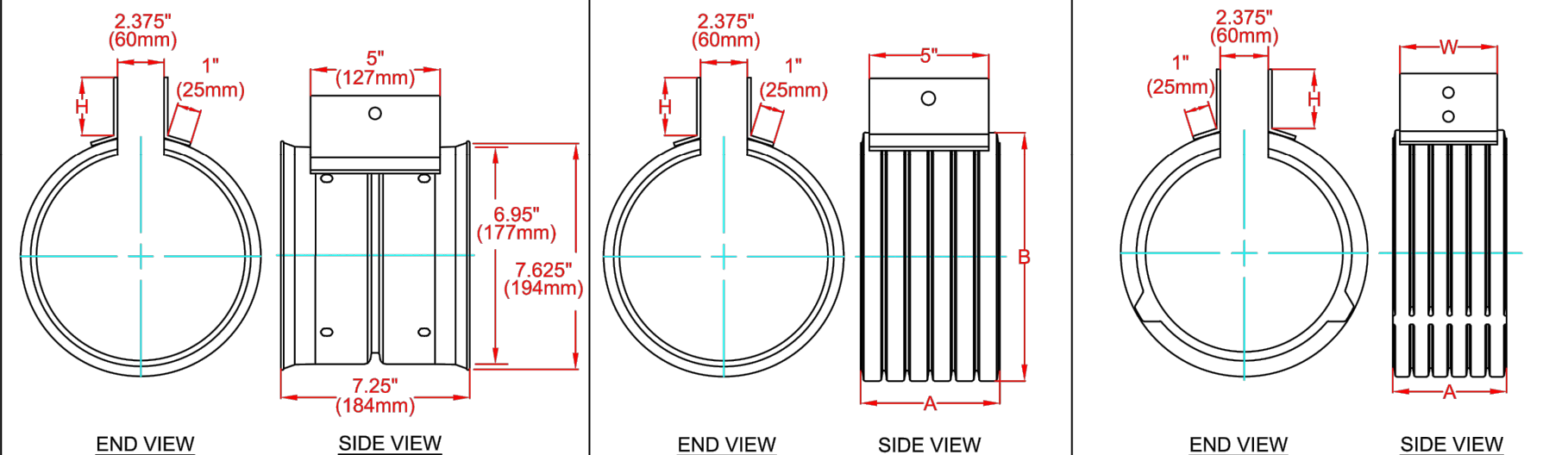


PIPE DIAM.	PIPE WALL THICKNESS (W)	FLANGE WIDTH (F)	SLOT OPENING (O)	THROAT SIZE (S)	SLOT HEIGHT (H)	PRODUCT # (Grated)	PRODUCT # (Open Top)
6" (150mm)	0.5" (13mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	0690DS	0690DSOT
8" (200mm)	0.625" (16mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	0890DS	0890DSOT
10" (250mm)	0.75" (19mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	1090DS	1090DSOT
12" (300mm)	1.125" (29mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	1290DS	1290DSOT
15" (375mm)	1.25" (32mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	1590DS	1590DSOT
18" (450mm)	1.25" (32mm)	0.75" (19mm)	1.75" (44mm)	2.25" (57mm)	Varies*	1890DS	1890DSOT
24" (600mm)	1.875" (48mm)	1.0" (25mm)	1.75" (44mm)	2.25" (57mm)	Varies*	2490DS	2490DSOT

NOTE: Slot Heights to conform to dimensions on project plans. *H at ends of each length of DURASLOT® to be detailed on Slot Dimensions Layouts for approval before production.

REV	DESCRIPTION	BY	MM/DD/YY	CHKD
1	1 OF 1			

6"-24" DURASLOT® Coupler Bands With Variable Slot Riser



PIPE DIAM.	H	PRODUCT #
6" (150mm)	Varies	0691DS

PIPE DIAM.	H	B	A	PRODUCT #
6" (150mm)	Varies	10" (254mm)	8" (190mm)	0891DS
10" (250mm)	Varies	12.5" (318mm)	5.5" (140mm)	1091DS

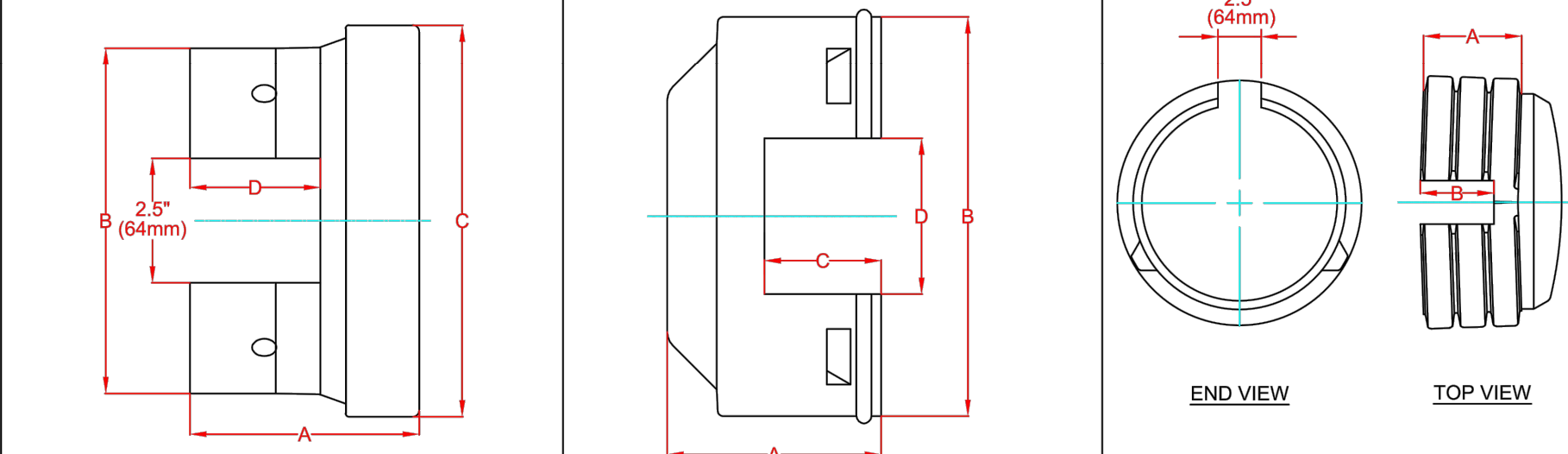
PIPE DIAM.	H	W	A	PRODUCT #
12" (300mm)	Varies	8" (200mm)	7.75" (197mm)	1291DS
15" (375mm)	Varies	9" (229mm)	10.5" (267mm)	1591DS
18" (450mm)	Varies	9" (229mm)	10.5" (267mm)	1891DS
24" (600mm)	Varies	10" (250mm)	12.63" (321mm)	2491DS

NOTE: ALL DIMENSIONS ARE FOR REFERENCE ONLY



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APPROVED BY:	
REVISIONS:	
SCALE:	NTS

6"-24" DURASLOT® End Cap With Variable Slot Riser



PIPE DIAM.	A	B	C	D	PRODUCT #
6" (150mm)	4.5" (114mm)	6.95" (177mm)	7.63" (194mm)	3" (76mm)	0633DS
10" (250mm)	5" (127mm)	11.56" (294mm)	12.13" (308mm)	3.5" (89mm)	1033DS

PIPE DIAM.	A	B	C	D	PRODUCT #
8" (200mm)	4.25" (108mm)	9.875" (248mm)	2.5" (64mm)	2.5" (64mm)	0833DS

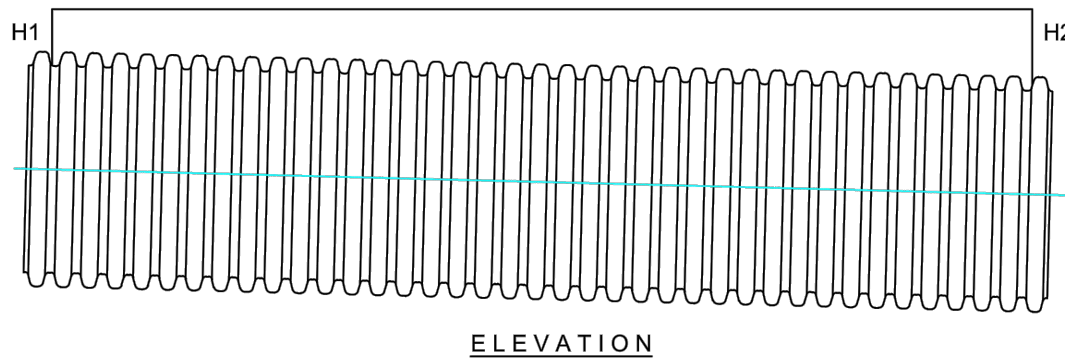
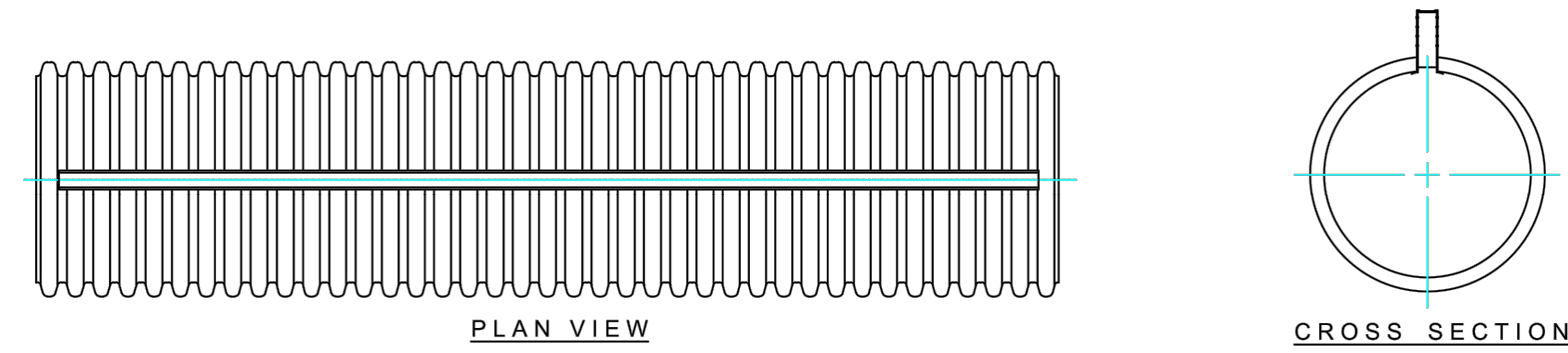
PIPE DIAM.	A	B	PRODUCT #
12" (300mm)	5.78" (146mm)	4.25" (108mm)	1233DS
15" (375mm)	7.77" (197mm)	6.25" (159mm)	1533DS
18" (450mm)	8.04" (204mm)	6.50" (165mm)	1833DS
24" (600mm)	9.45" (240mm)	8" (200mm)	2433DS

NOTE: ALL DIMENSIONS ARE FOR REFERENCE ONLY



DRAWING #:	
DRAWN BY:	
APPROVED BY:	
REVISIONS:	
SCALE:	NTS

6"-24" DURASLOT® Pipe With Variable Slot Riser



NOTE: H1 and H2 vary based on project specifications.

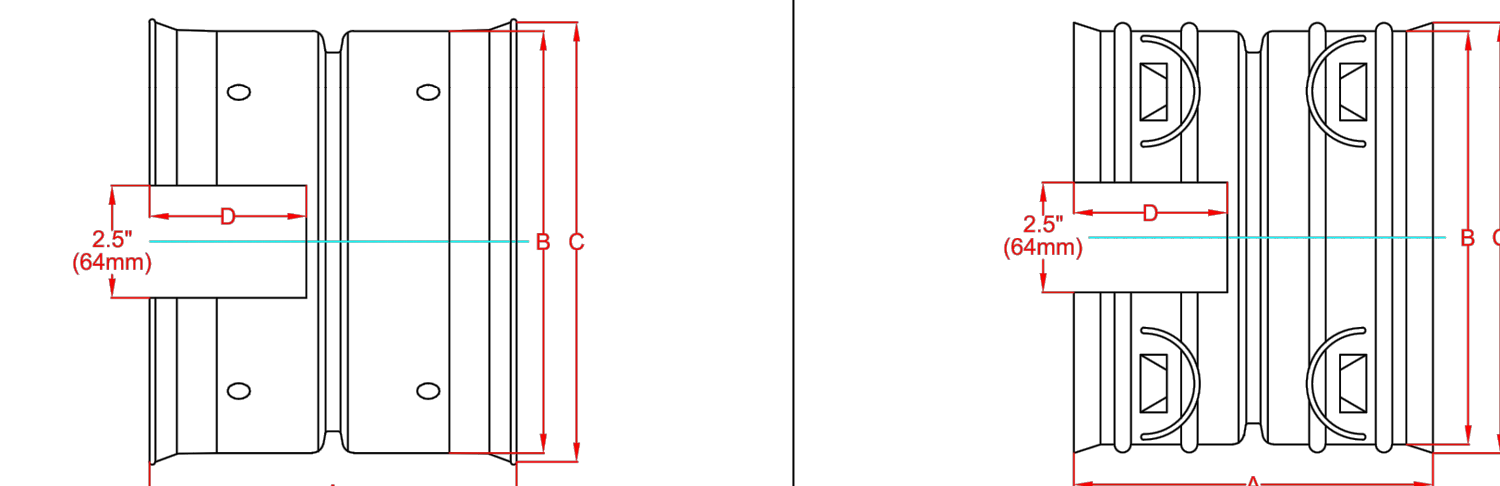
CROSS SECTION

PIPE DIAM.	PRODUCT # (GRATED)	PRODUCT # (OPEN TOP)
6" (150mm)	0690DS	0690DSOT
8" (200mm)	0890DS	0890DSOT
10" (250mm)	1090DS	1090DSOT
12" (300mm)	1290DS	1290DSOT
15" (375mm)	1590DS	1590DSOT
18" (450mm)	1890DS	1890DSOT
24" (600mm)	2490DS	2490DSOT

REV	DESCRIPTION	BY	MM/DD/YY	CHKD
1	1 OF 1			

REV	DESCRIPTION	BY	MM/DD/YY	CHKD
1	1 OF 1			

6"-24" DURASLOT® Adapter With Variable Slot Riser



PIPE DIAM.	A	B	C	D	PRODUCT #
6" (150mm)	7.25" (184mm)	6.95" (177mm)	7.63" (194mm)	3" (76mm)	0662DS
8" (200mm)	8.25" (210mm)	9.17" (233mm)	10.13" (257mm)	3.5" (89mm)	0862DS
10" (250mm)	9.25" (235mm)	11.56" (294mm)	12.13" (308mm)	4" (100mm)	1062DS

PIPE DIAM.	A	B	C	D	PRODUCT #
12" (300mm)	14" (356mm)	14.6" (371mm)	15.4" (391mm)	5.5" (140mm)	1262DS
15" (375mm)	16" (406mm)	17.75" (449mm)	18.6" (472mm)	6.5" (165mm)	1562DS
18" (450mm)	18" (450mm)	21.4" (544mm)	22.4" (569mm)	7.5" (191mm)	1862DS
24" (600mm)	14.8" (373mm)	28.2" (716mm)	29.25" (743mm)	6" (150mm)	2462DS

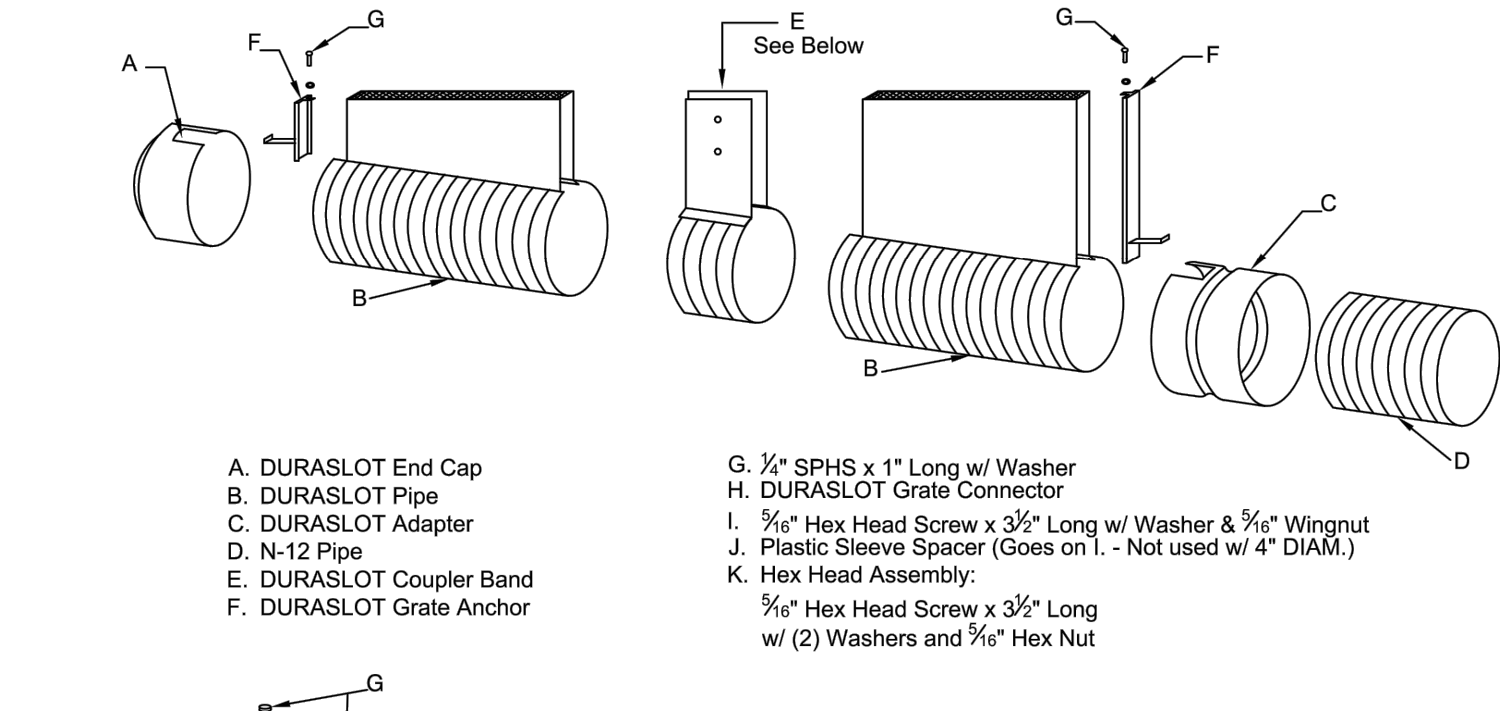
NOTE: ACCEPTABLE ALTERNATE FOR THIS PART



DRAWING #:	
DRAWN BY:	
APPROVED BY:	
REVISIONS:	
SCALE:	NTS

NOTE: ALL DIMENSIONS ARE FOR REFERENCE ONLY

6"-24" DURASLOT® System Assembly With Variable Slot Riser - Grated



- A. DURASLOT End Cap
B. DURASLOT Pipe
C. DURASLOT Adapter
D. N-12 Pipe
E. DURASLOT Coupler Band
F. DURASLOT Grate Anchor
G. ½" SPHS x 1" Long w/ Washer
H. DURASLOT Grate Connector
I. ¾" Hex Head Screw x ¾" Long w/ Washer & ¾" Wingnut
J. Plastic Sleeve Spacer (Goes on I. - Not used w/ 4" DIAM.)
K. Hex Head Assembly
L. ¾" Hex Head Screw x ¾" Long w/ (2) Washers and ¾" Hex Nut

NOTE: Each Cap (A) & Adapter (C) comes with an Anchor (F). Each Coupler Band (E) comes with Hardware - I, J, K, & L.

REV	DESCRIPTION	BY	MM/DD/YY	CHKD
1	1 OF 1			

REV	DESCRIPTION	BY	MM/DD/YY	CHKD
1	1 OF 1			

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DESCRIPTION:		BY:	EG
Permit Comments & Paving		03.21.22	
Permit Comments #2		04.27.22	
Sewer Service Modification		07.13.22	
DATE:		03.21.22	
NO.		2	
PROJECT:		2387-04	
DATE:		1-26-22	
CONTACT:		eng@landmark-co.com	
E.M.L.			

REVIEWED FOR CODE COMPLIANCE

02/24/2023

Steamboat Basecamp - Phase

Details (Duraslot)

SHEET

C.510

DRAWING FILENAME: P:\3327-050000\Products - Drawings\Phase 1 - C\1204283F-064\H\1204283F-064.dwg LAYOUT NAME: C511 DATE: Sep 14, 2022 3:20pm CAD OPERATOR: EA LIST OF REVISIONS: (4/26/2021)

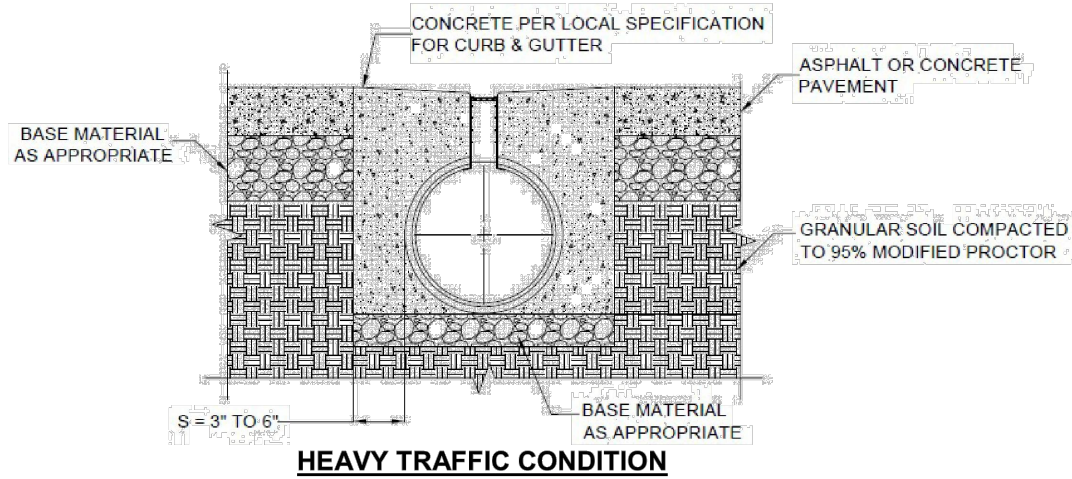
INSTALLATION GUIDE

DURASLOT® Pipe Installation for Stormwater Drainage

DURASLOT® Surface Drains are manufactured to meet AASHTO M252, AASHTO M294 or ASTM F230. It is made from a flexible conduit, which is designed to attain its structural strength utilizing ring compression derived from soil pressure. For this to occur, a minimum height of cover is required. Since this is not possible, the drain must be backfilled with concrete to allow it to accept vehicular traffic. This is true of any pipe with an inlet mounted on top to form this type of surface drain. The pipe cannot function in the manner for which it was designed when it is installed this close to the surface. The concrete-filled trench provides the actual structure for this type of design.

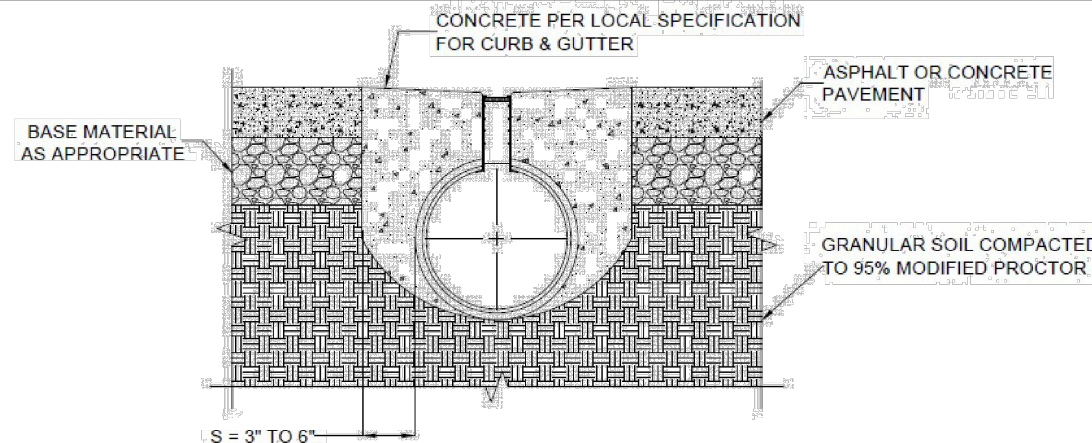
Following are some of the most often utilized installation details for DURASLOT® surface drains:

(A) **Heavy Traffic** - surrounded by concrete for critical loading applications. This would include frequent high-speed HS-20 traffic, such as a highway. The dimensions 'S' is generally 3" to 6" depending on the specific conditions for the project (design layout, traffic patterns, soil properties, etc.)



HEAVY TRAFFIC CONDITION

(B) **Moderate Traffic** - surrounded by concrete to below the center of the pipe. This type of installation has been used when traffic loads are not as heavy (i.e., retail parking lots, against curbs, etc.). The soil below the pipe and concrete must be high quality and well compacted.



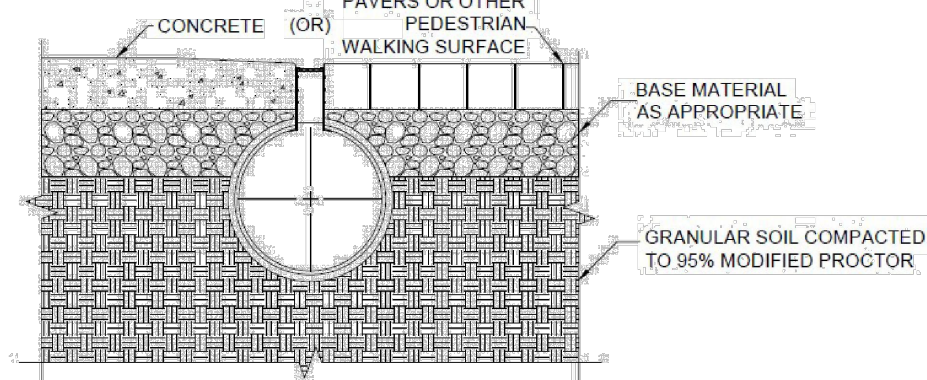
MODERATE TRAFFIC CONDITION

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INSTALLATION GUIDE

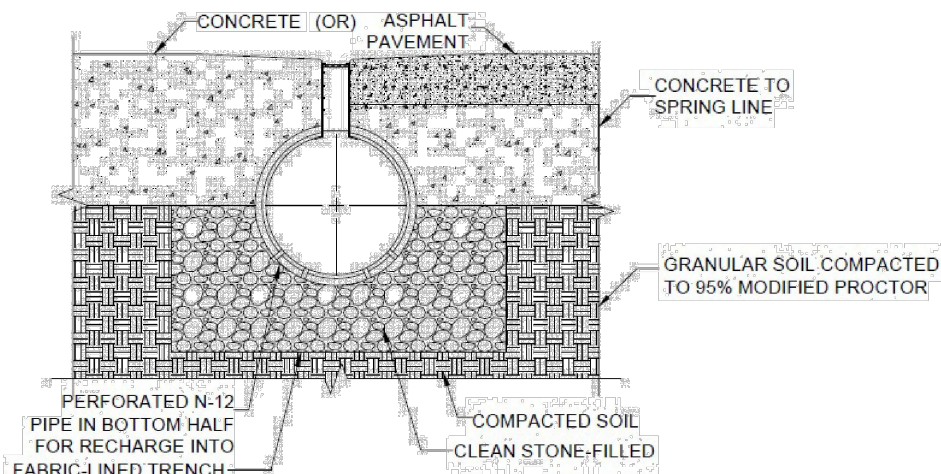
DURASLOT® Pipe Installation for Stormwater Drainage

(C) **Residential / Pedestrian Applications** – concrete, asphalt, or soil concrete slab at grade. For non-vehicular installations (patios, sidewalks, against foundations, and landscaping projects) there still must be a surface adjoining the slot which will not erode where stormwater flows into the slotted inlet.



RESIDENTIAL/PEDESTRIAN CONDITION

(D) **Perforated Pipe for Stormwater Recharge** – concrete down to below the spring line. Pipe perforated in the bottom quadrant set in a filter fabric lined and stone-filled trench to allow surface drainage to recharge into the ground water. For moderate or light traffic only.



STORMWATER RECHARGE CONDITION

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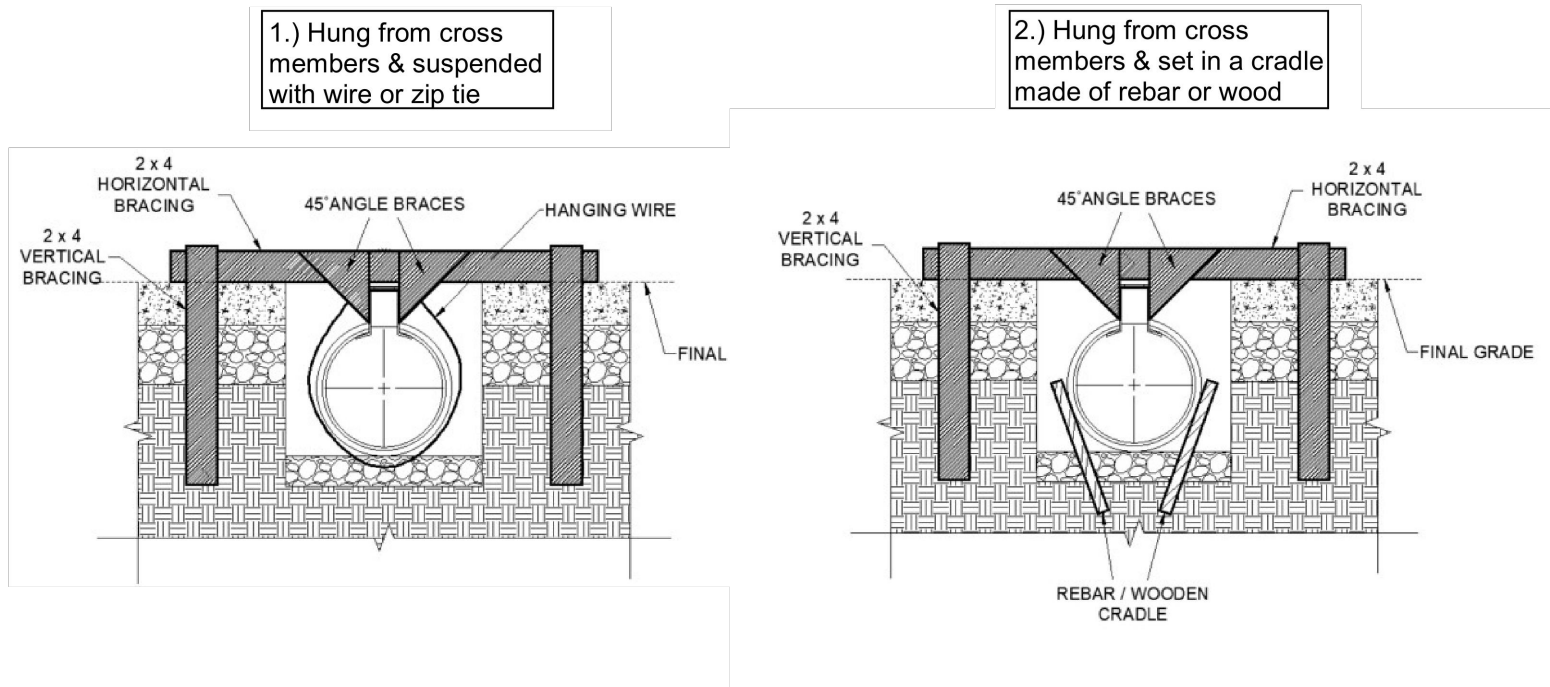
INSTALLATION GUIDE

DURASLOT® Pipe Installation for Stormwater Drainage

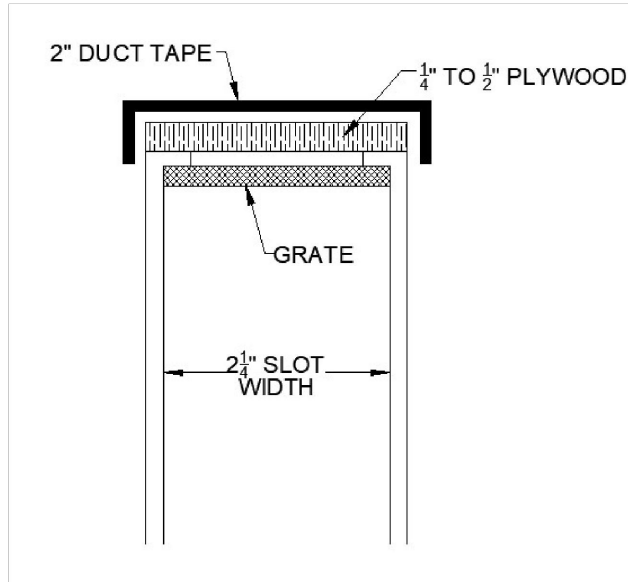
SUGGESTIONS FOR SETTING DURASLOT® INSIDE A TRENCH:

Before backfilling DURASLOT®, one must first set and secure the system in place.

Some methods that have been used are:



Before concrete is poured or asphalt is laid down, the slot opening should be covered to prevent it from being clogged. If you hang the DURASLOT®, a good way to do this is to run a piece of 1/4" to 1/2" plywood over the grates then use 2" duct tape on top.



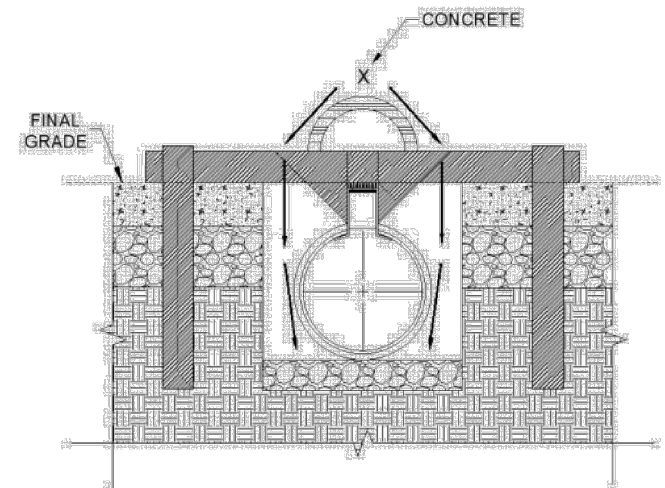
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INSTALLATION GUIDE

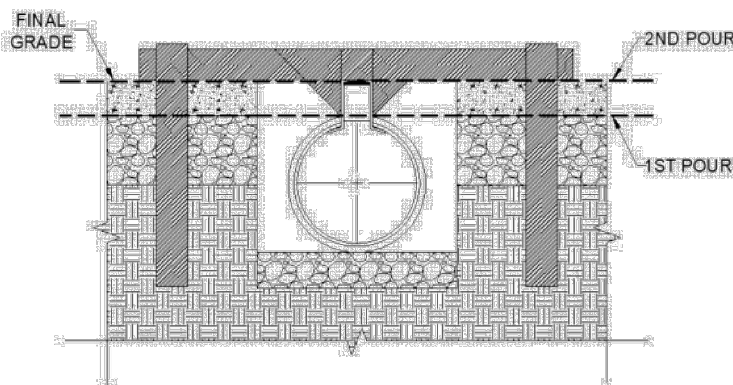
DURASLOT® Pipe Installation for Stormwater Drainage

SUGGESTIONS FOR POURING CONCRETE:

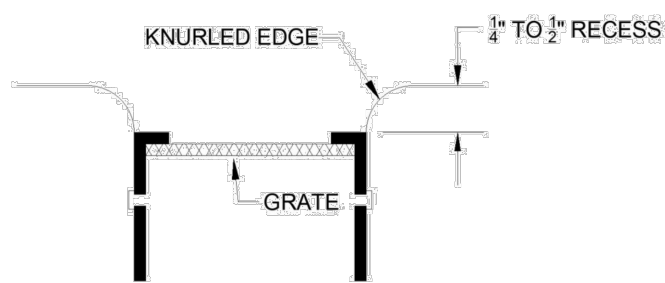
When pouring concrete around DURASLOT®, it is important to keep the system supported laterally so that the slot remains upright. (See above detail for supporting methods). To reduce the risk of tipping, pour concrete over the center of a field cut piece of pipe or a fabricated arch. This can help distribute the concrete evenly to both sides.



When pouring concrete, ensure it is placed on both sides of the slot simultaneously. There should be two separate pours during the installation process. The 1st pour goes to where the pipe meets the slot. The 2nd will be poured to achieve the designed final grade.

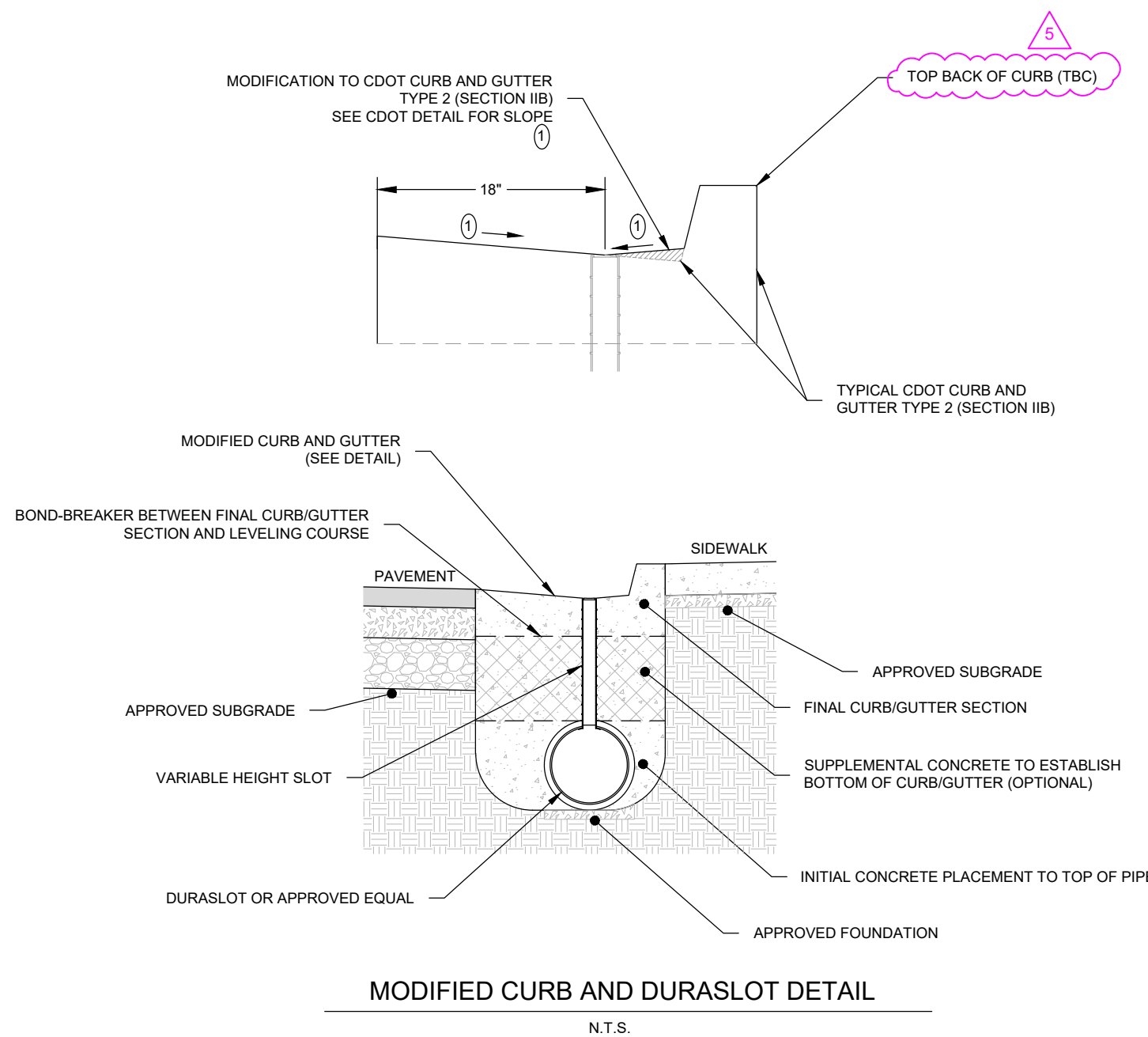


The top of the slot should always be recessed 1/4" for pedestrian applications and 1/2" for heavy traffic applications below finished grade. This allows surface run-off to enter the inlet efficiently and protects the grate and flanges from snowplows and the like. A mason's tool can be used to knurl the edge after the tape and plywood has been removed.



It is important that all fittings and hardware are used when DURASLOT® is installed. The product is designed as a system: all grate connectors and anchors must be used to keep the grate in tension, and to tie the ends of the grate into the concrete or asphalt. At the end of each run an end cap or adapter should always be utilized (these include the anchor). Only DURASLOT® Couplers should be used to join sections of DURASLOT®. See the Assembly Details for more information.

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MODIFIED CURB AND DURASLOT DETAIL

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Permit Comments #2		Grip	04/27/22	3
Sewer Service Modification		Grip	07/13/22	4
ASI #2 - Additional Spot Elevations, road lateral		Grip	09/14/22	5

PROJECT:	2387-04
DATE:	1-26-22
CONTACT:	Grip
EMAIL:	enr@landmark-co.com

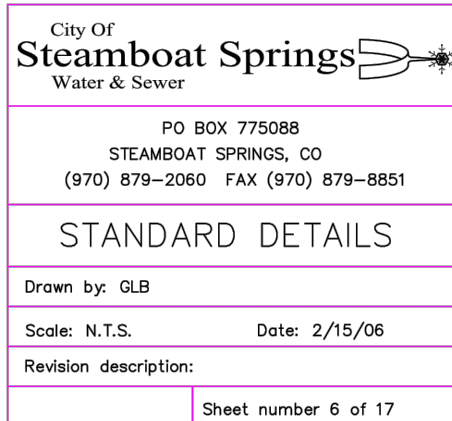
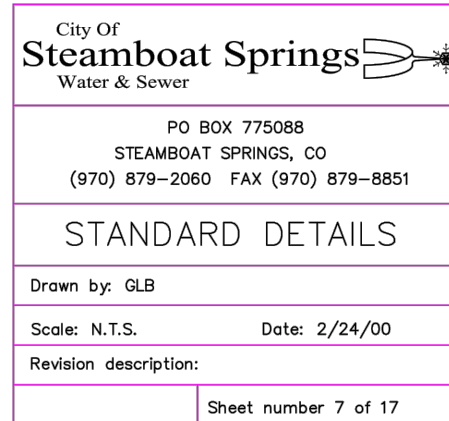
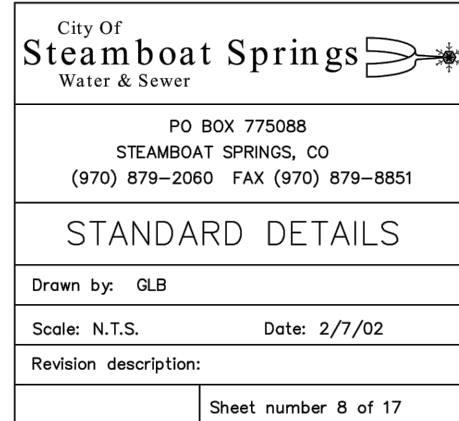
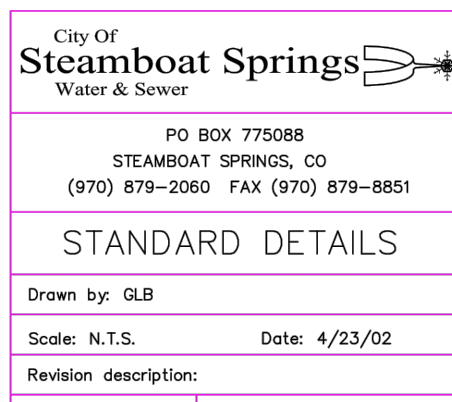
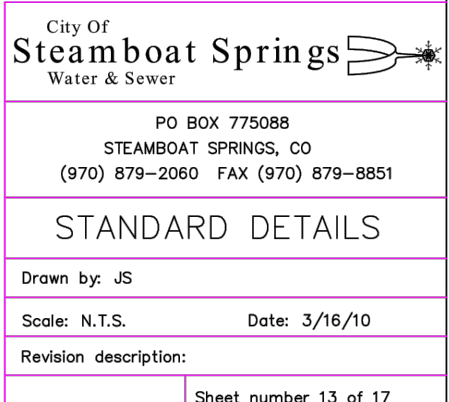
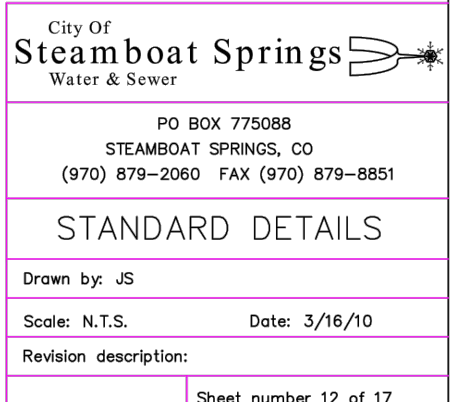
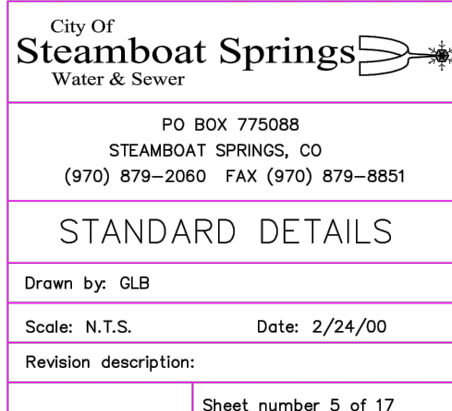
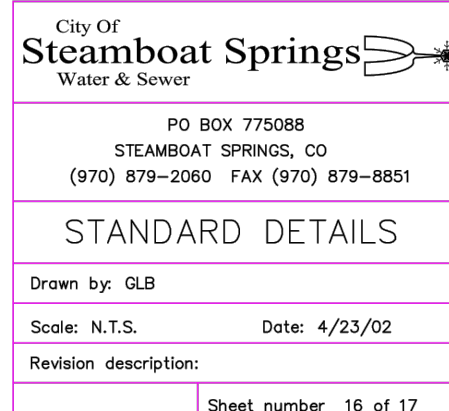
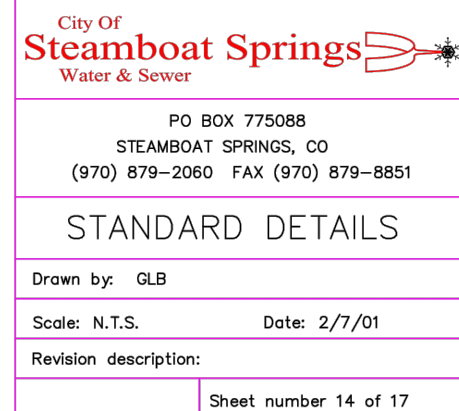
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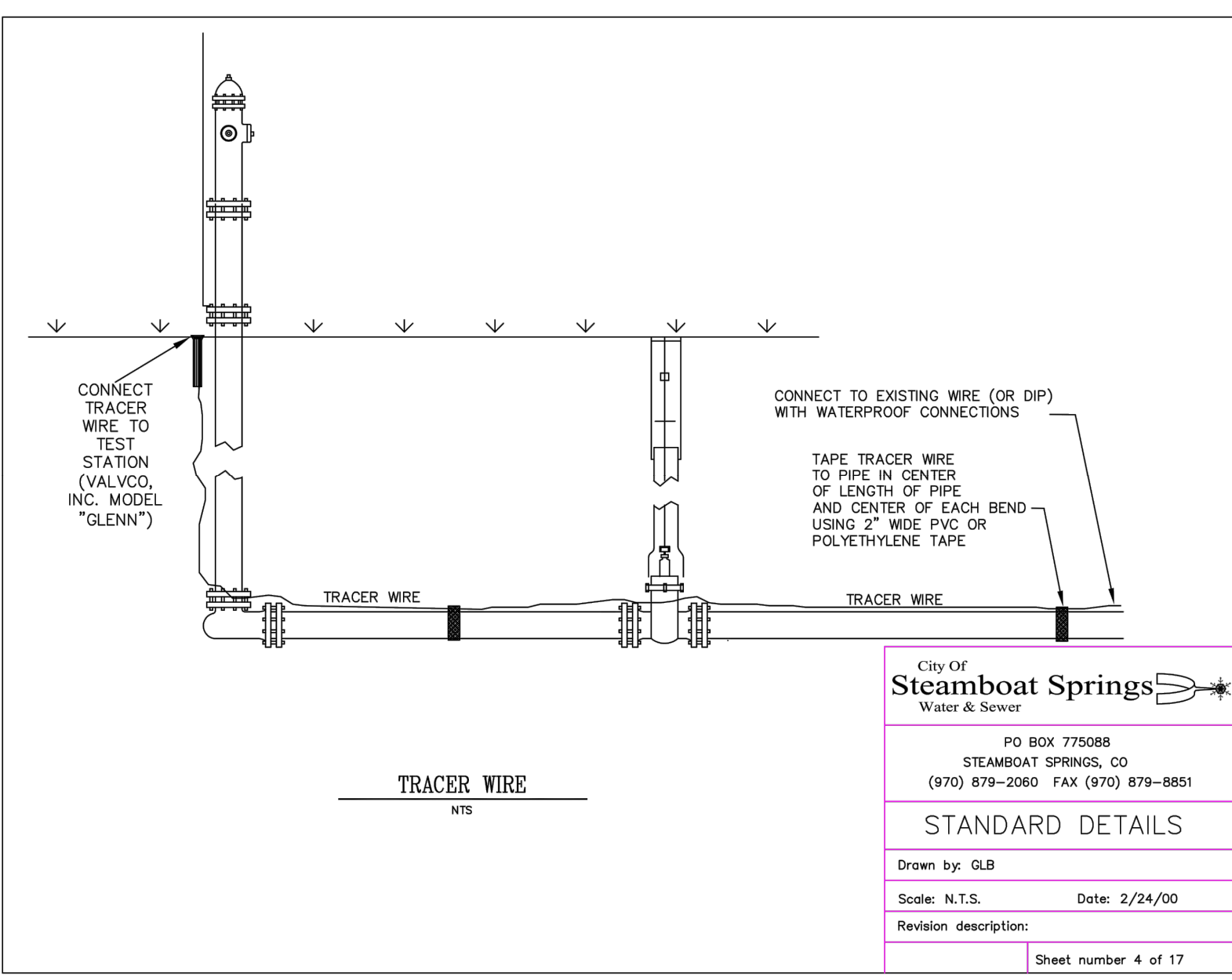
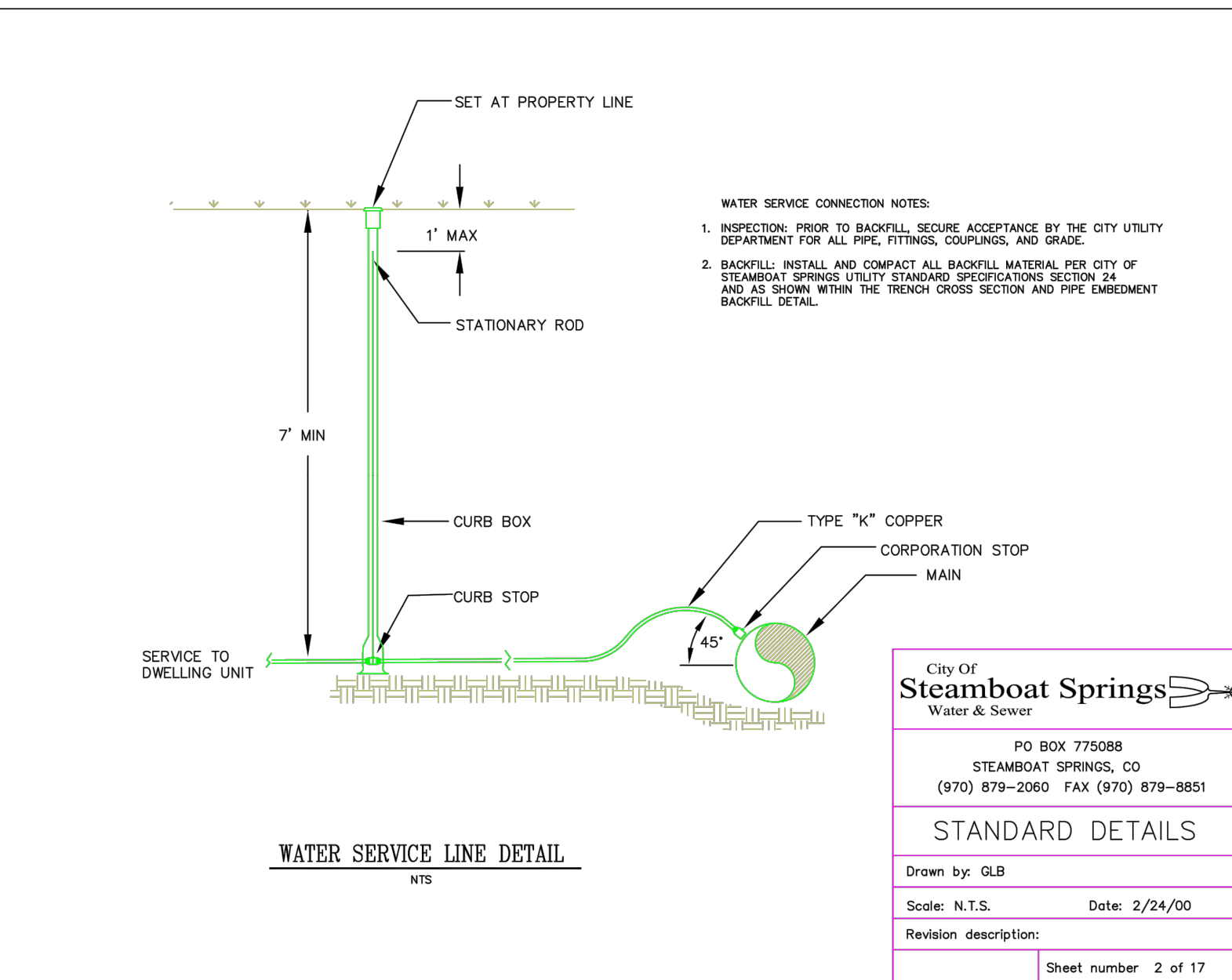
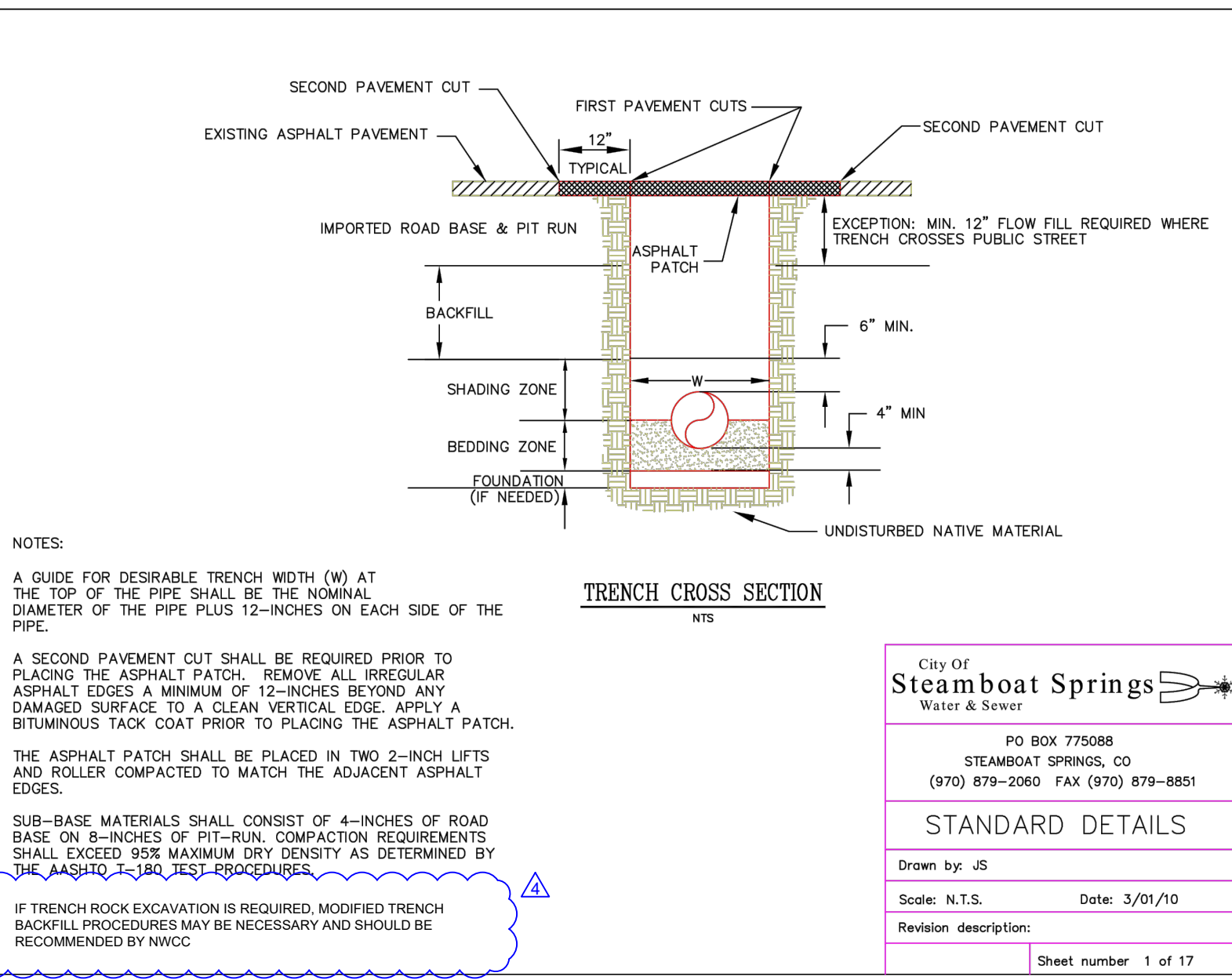
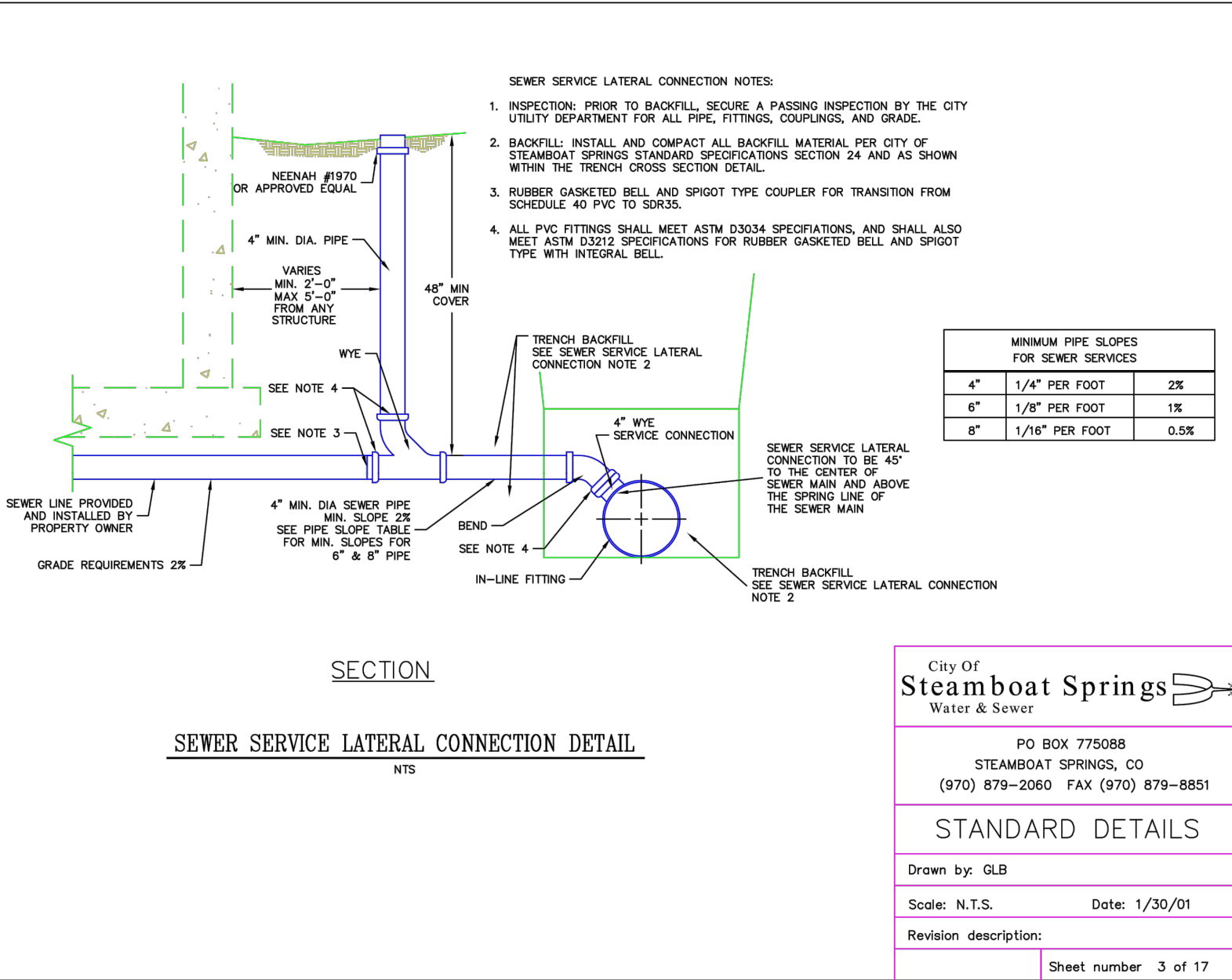
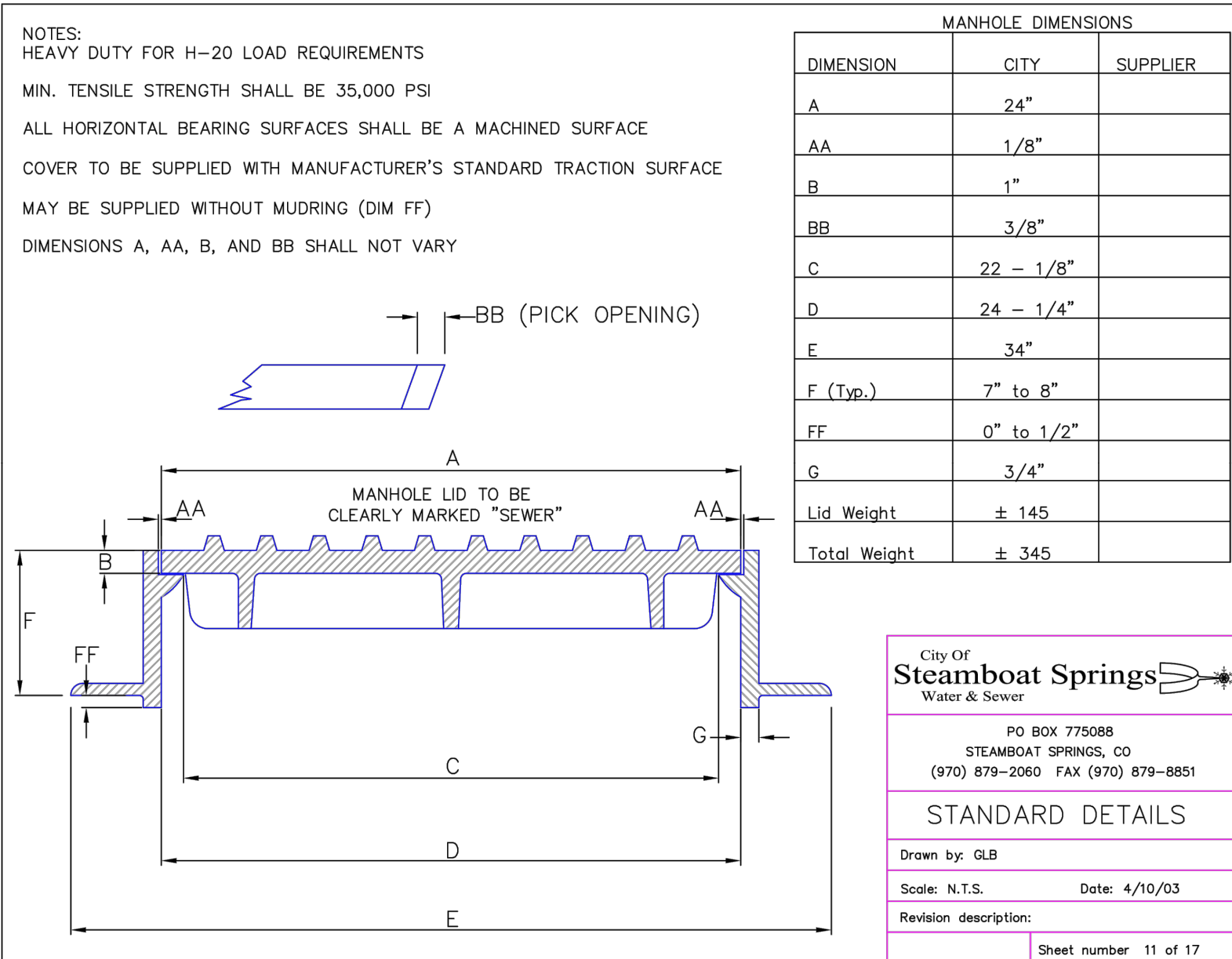
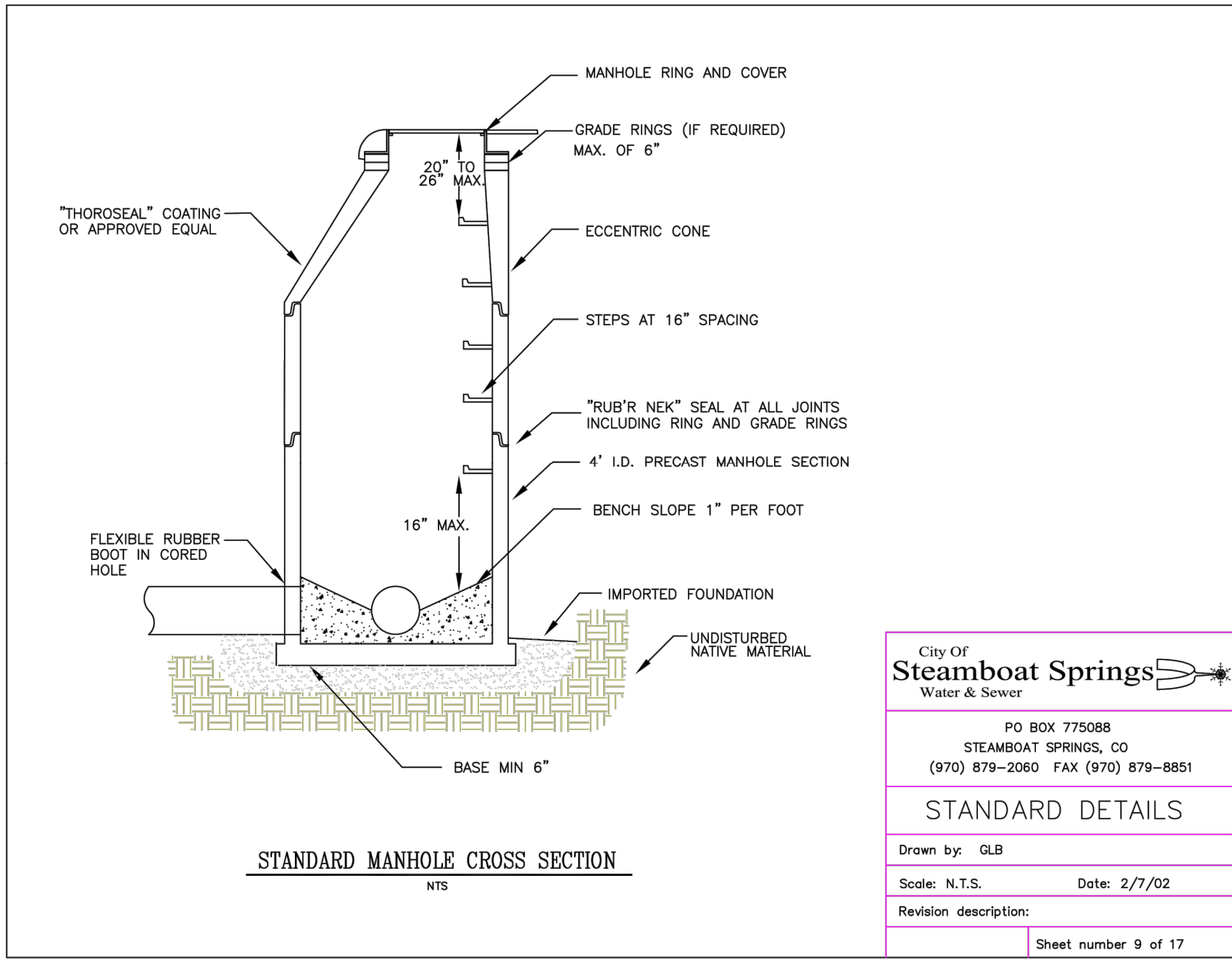
Steamboat Basecamp - Phase
Details (Duraslot)

SHEET

C.511



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DESCRIPTION:		BY:	DATE:	NO.
Permit Comments & Printing		EG	03.21.22	2
Permit Comments #2		GLB	04.27.22	3
Sewer Service Modification		GLB	07.13.22	4

PROJECT:	2387-04
DATE:	1-26-22
CONTACT:	GLB
EMAIL:	eng@landmark-co.com

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02/24/2023

Steamboat Basecamp - Phase
Details (Water & Sewer)

SHEET

C.516

STEAMBOAT BASECAMP OWNERSHIP AND MAINTENANCE (O&M) PLAN FOR EXTENDED DETENTION BASIN

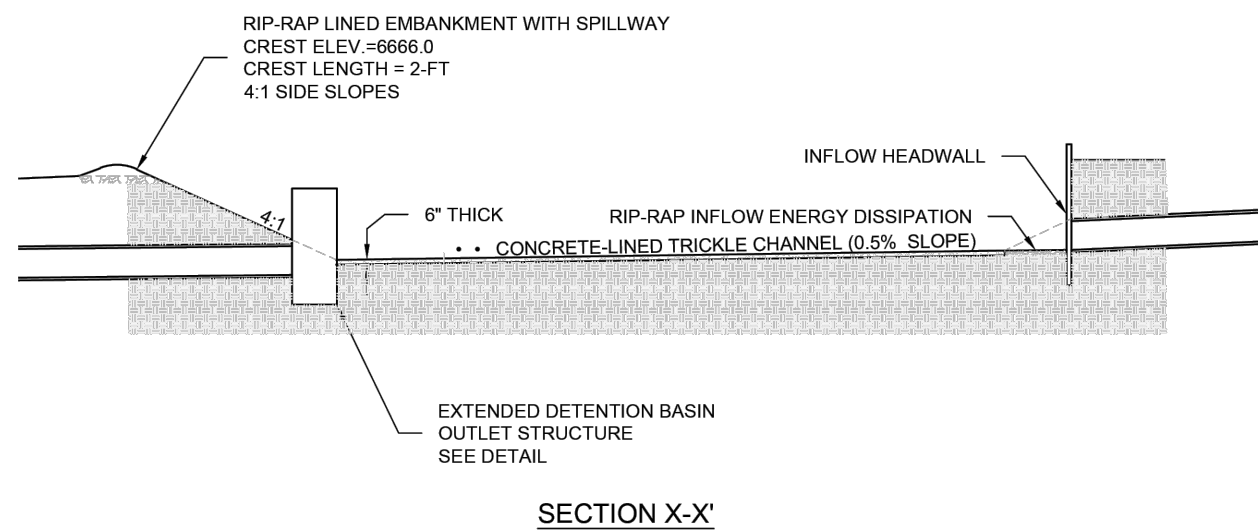
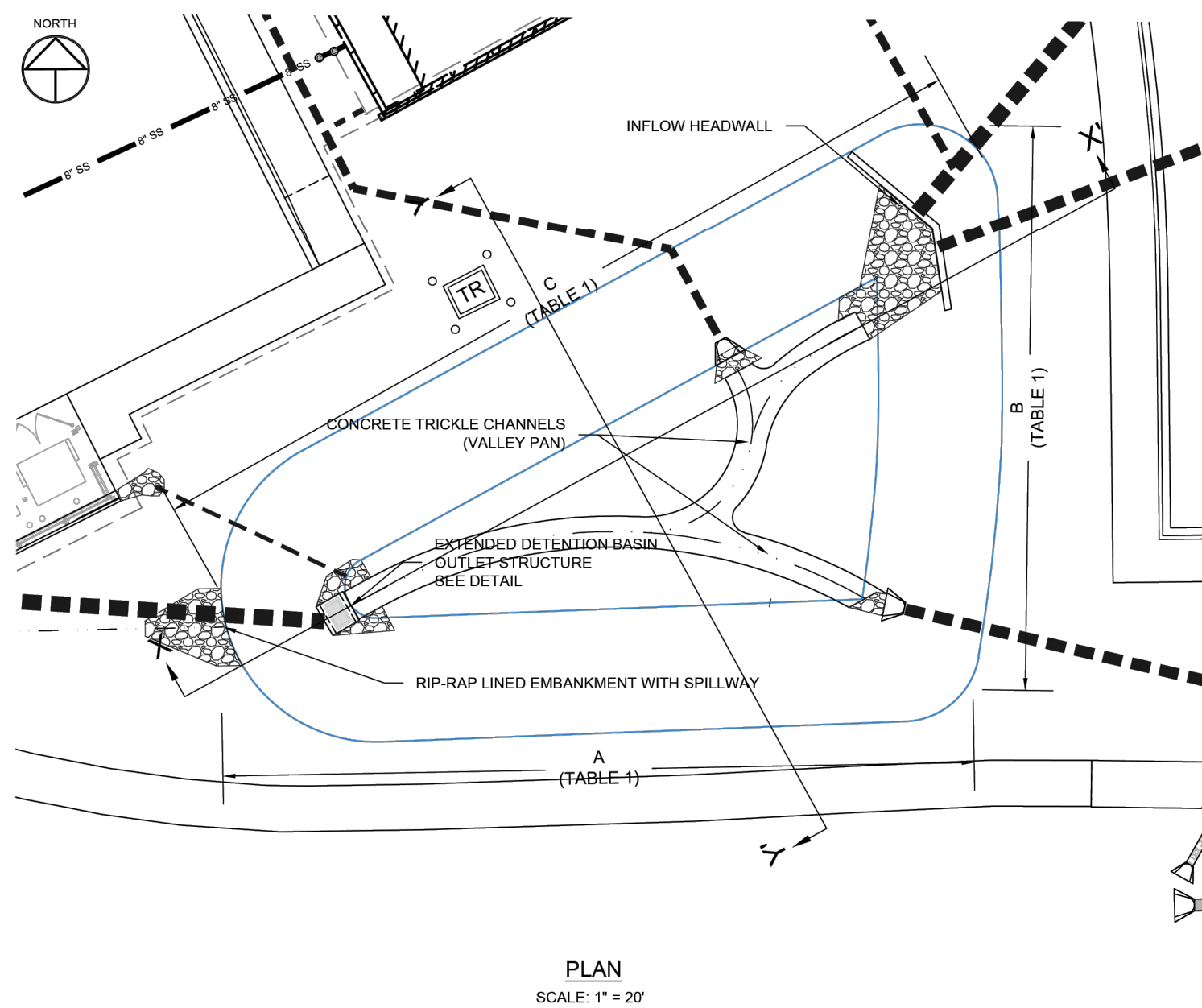
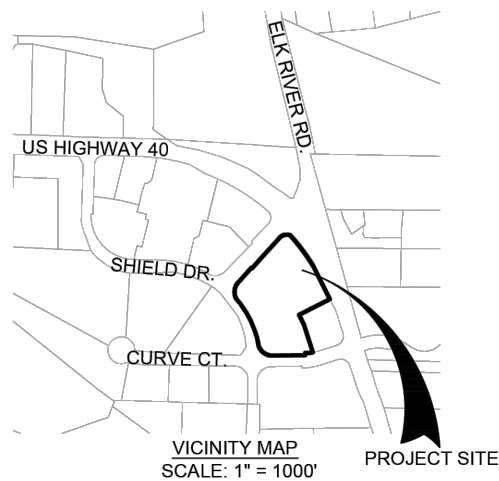
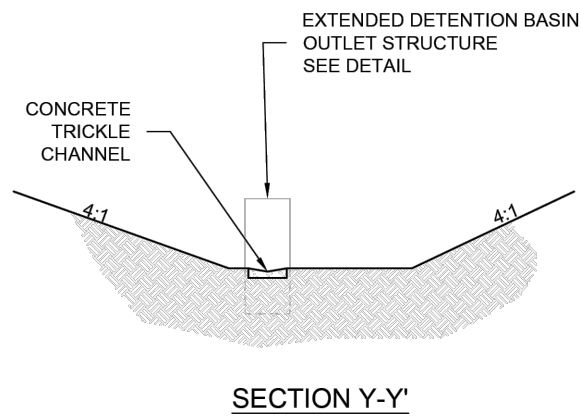


TABLE 1: POND DIMENSIONS	
DIM A (ft)	97
DIM B (ft)	73
DIM C (ft)	113

NOTES:

1. FOR ADDITIONAL DESIGN INFORMATION REFER TO THE CONSTRUCTION DRAWINGS FOR THIS PROJECT.
2. DISTURBANCE OF WETLAND AREAS SHALL BE AVOIDED DURING MAINTENANCE OPERATIONS.
3. SEE DETAILED NOTES ON THE THIRD SHEET OF THIS PLAN FOR ALL MAINTENANCE REQUIREMENTS.



PROJECT:	2387-004	NO.	DATE:	BY:	DESCRIPTION:
DATE:	12/23/2021	1	12-23-21	DS	DRT Comments
DRAWN BY:	DCS				
CHECKED BY:	LCI				

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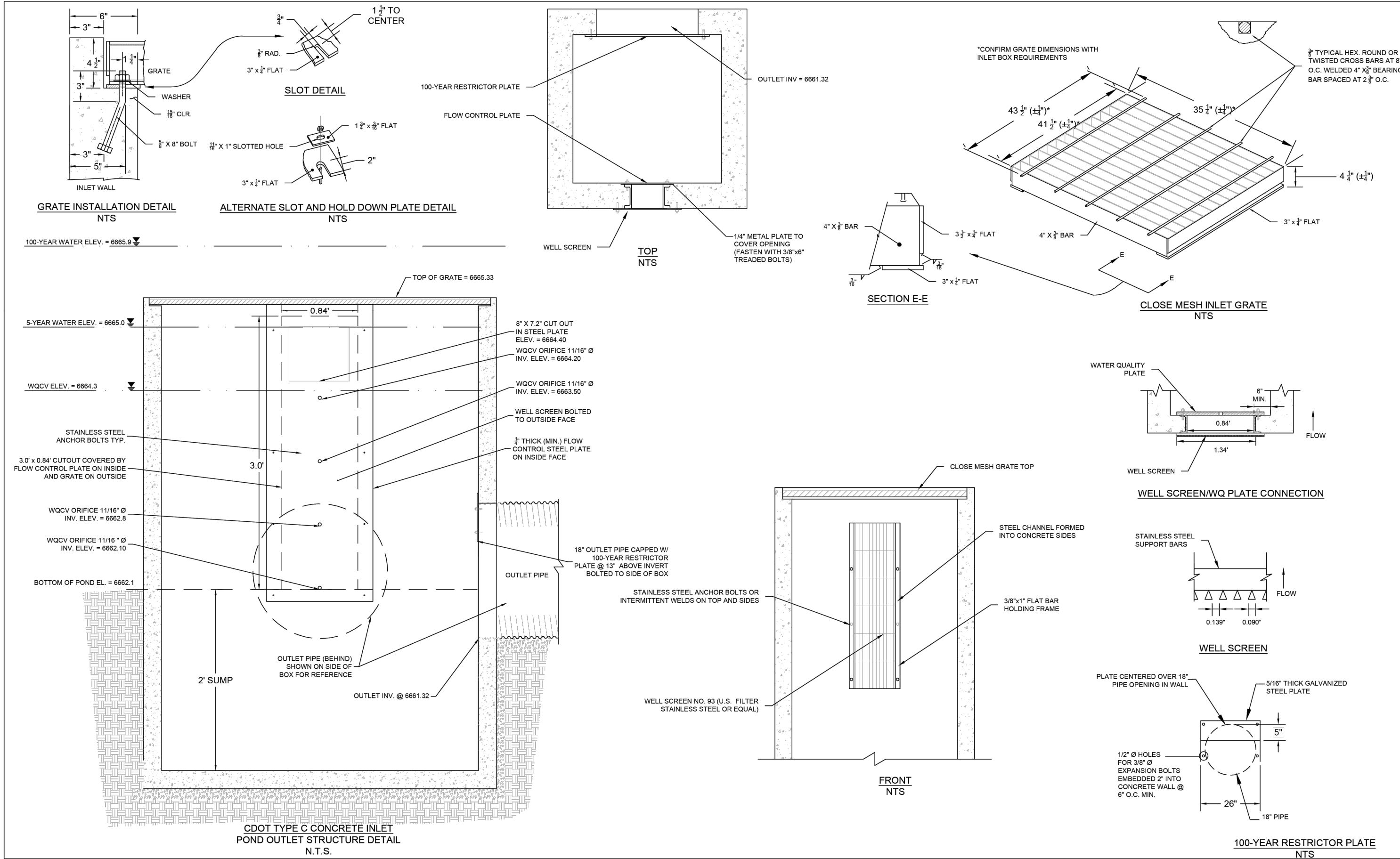
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Steamboat Basecamp
Ownership & Maintenance Plan
Extended Detention Basin

SHEET

1

Of 3



PROJECT:	2387-004	NO.	DATE:	BY:	DESCRIPTION:
DATE:	12/23/2021	1	12-23-21	DS	DRT Comments
DRAWN BY:	DCS				
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Steamboat Basecamp
Ownership & Maintenance Plan
Outlet Structure Details

SHEET

2

Of 3 Sheets

OWNERSHIP AND MAINTENANCE (O&M) PLAN FOR STEAMBOAT BASECAMP EXTENDED DETENTION BASIN

1. GENERAL PROJECT INFORMATION

- A. STEAMBOAT BASECAMP: LOT 1, WORLDWEST SUBDIVISION
- B. RECEIVING WATER: ROADSIDE DITCH ON CURVE COURT. ULTIMATE OUTFALL YAMPA RIVER
- C. PROPERTY OWNER: MAY RIEGLER PROPERTIES
2201 WISCONSIN AVE NW
SUITE 200
WASHINGTON DC 20007
gary@mayriegler.com
- D. AGENCY RESPONSIBLE FOR MAINTENANCE: SAME AS OWNER
970-871-9494
- E. DESIGN ENGINEER: LANDMARK CONSULTANTS, INC.
141 9TH STREET
STEAMBOAT SPRINGS, CO 80487
970-871-9494
ATTN: ERIK GRIEPENTROG, P.E.
ERIK@LANDMARK-CO.COM

2. GENERAL FACILITY DESCRIPTION

THIS FACILITY IS AN EXTENDED DETENTION BASIN THAT WILL RELEASE THE WATER QUALITY CAPTURE VOLUME OVER 48 HOURS. THE FACILITY HAS BEEN ADOPTED AND APPROVED BY THE MAY RIEGLER PROPERTIES AS A PART OF THE STEAMBOAT BASECAMP PROJECT. IT WILL RECEIVE RUNOFF FROM 3.17 ACRES AND WILL OCCUPY A PARCEL OF 0.12 ACRES THAT WILL BE USED TO TREAT RUNOFF VIA SETTLING AND PROVIDE ACCESS FOR MAINTENANCE ACTIVITIES.

3. INSPECTION & MAINTENANCE FREQUENCY & PROCEDURE

- A. MAINTENANCE ACTIVITIES SHALL OCCUR ACCORDING TO TABLE 3:

TABLE 3: MAINTENANCE ACTIVITY/FREQUENCY	
ACTIVITY	REQUIRED FREQUENCY
LAWN MOWING AND LAWN CARE	ROUTINE - DEPENDING ON AESTHETIC REQUIREMENTS
DEBRIS AND LITTER REMOVAL	ROUTINE - TWICE ANNUALLY UPON INSPECTION AND AS NEEDED FOLLOWING SIGNIFICANT RAINFALL EVENTS
SEDIMENT REMOVAL FROM FOREBAY AND MICROPOOL	ROUTINE - ONCE ANNUALLY AFTER COMPLETION OF SNOWMELT FROM CONTRIBUTING BASIN
NUISANCE CONTROL	NON-ROUTINE - HANDLE AS NECESSARY PER INSPECTION OR LOCAL COMPLAINTS
EROSION AND SEDIMENT CONTROL	NON-ROUTINE - PERIODIC REPAIR AS NECESSARY DASH ON INSPECTION
STRUCTURAL	NON-ROUTINE REPAIR AS NEEDED BASED ON INSPECTIONS
INSPECTIONS	ROUTINE - TWO TIMES ANNUALLY, ONCE AFTER COMPLETION OF SNOWMELT AND ONCE AFTER SIGNIFICANT RAINFALL EVENT
SEDIMENT REMOVAL	NON-ROUTINE - PERFORMED WHEN SEDIMENT ACCUMULATION OCCUPIES 20% OF WQCV (1,091 CF OR 1.4 FT DEEP). THIS MAY VARY CONSIDERABLY, BUT EXPECT TO DO THIS EVERY 15 TO 20 YEARS

B. REVISIONS TO MAINTENANCE FREQUENCY:

DATES/REASONS FOR CHANGES:

- C. TRAFFIC CONTROL: N/A
- D. THE FACILITY DOES NOT REQUIRE CONFINED SPACE ENTRY PROCEDURES.
- E. DEWATERING AND WATER CONTROL: DEWATERING OF THE MICRO-POOL BY PUMPING ONTO THE EDGES BOTTOM GRASSES WILL BE NEEDED TO REMOVE ACCUMULATED SEDIMENT FROM THE MICRO-POOL'S BOTTOM.
- F. DEBRIS, & TRASH REMOVAL & DISPOSAL
REMOVAL SHALL BE CONDUCTED IF THERE IS PRESENCE OF TRASH OR DEBRIS AT INSPECTION. SEDIMENT AND DEBRIS SHALL BE REMOVED MANUALLY USING A SHOVEL OR RAKE AND DISPOSED OF AT A LICENSED FACILITY. THE LONGEST DISTANCE BETWEEN THE EDGE OF AN ACCESS ROAD AND THE FAR CORNER OF A STRUCTURE REQUIRING SEDIMENT REMOVAL IS 35 FEET.
- G. VEGETATION MANAGEMENT
SEE SECTION 3 OF THE NOTES ON THIS SHEET
- H. WETLAND AREAS: N/A
- I. DESCRIBE ADDITIONAL REQUIRED MAINTENANCE PROCEDURES AND FREQUENCIES - N/A
- J. MATERIALS TESTING OF SEDIMENT REMOVED FROM SITE IS NOT REQUIRED.
- K. ALL MAINTENANCE MATERIALS AND TOOLS SHALL BE REMOVED FROM THE SITE FOLLOWING MAINTENANCE COMPLETION.

3. EQUIPMENT, STAFFING, AND VEGETATION MANAGEMENT

- A. EQUIPMENT REQUIRED: SHOVEL, RAKE, BACKHOE, CAMERA, DATA LOG / INSPECTION REPORT
- B. STAFFING: ONE PERSON WHO IS QUALIFIED TO RUN THE REQUIRED EQUIPMENT IS REQUIRED FOR MAINTENANCE
- C. SEED: SEED MIXES ARE AS FOLLOWS:

- D. MOWING: MOWING MAY BE REQUIRED DEPENDING ON THE TYPE OF PLANTINGS. IF GRASS IS STARTED FROM SEED, ALLOW TIME FOR GERMINATION AND ESTABLISHMENT OF GRASS PRIOR TO MOWING. IF MOWING IS REQUIRED DURING THIS PERIOD FOR WEED CONTROL, IT SHOULD BE ACCOMPLISHED WITH HAND-HELD STRING TRIMMERS TO MINIMIZE DISTURBANCE TO THE SEEDBED. AFTER ESTABLISHED, MOW AS DESIRED OR AS NEEDED FOR WEED CONTROL. MOWING OF NATIVE/DROUGHT TOLERANT GRASSES MAY STOP OR BE REDUCED TO MAINTAIN A LENGTH OF NO LESS THAN 6 INCHES.
- E. WEEDS & UNDESIRABLE VEGETATION: MAINTAIN HEALTHY, WEED FREE VEGETATION. WEEDS SHOULD BE REMOVED BY HAND TOOLS, MOWING, WEED WHACKING OR OTHER MEANS AS APPROPRIATE BEFORE THEY FLOWER. THE FREQUENCY OF WEEDING WILL DEPEND ON THE PLANTING SCHEME AND COVER.

4. SNOW AND ICE CONTROL

FACILITY IS LOCATED WITHIN A SNOW STORAGE AREA. FACILITY SHALL BE INSPECTED AFTER SNOWMELT AND DEBRIS AND LITTER REMOVED.

5. RIGHT-OF-WAY, ADJACENT OWNERSHIP, & ACCESS

- A. RIGHT-OF-WAY DESCRIPTION: CURVE COURT, ROW VARIES. SHIELD DRIVE, ROW VARIES.
- B. ADJACENT OWNERSHIP: N/A
- C. ACCESS INFORMATION AND DETAILS: MAINTENANCE ACCESS TO THE FACILITY IS VIA THE DRIVEWAY OFF OF SHIELD DRIVE. PROCEED TO THE SOUTH SIDE OF THE MAIN PARKING AREA
- D. MAINTENANCE OPERATIONS WILL NOT IMPACT OR OBSTRUCT RIGHT-OF-WAY AND A RIGHT-OF-WAY PERMIT IS NOT REQUIRED

7. HYDRAULIC DESIGN

A. FLOW RATES (CFS):		INFLOW		OUTFLOW	
BASE FLOW:	0 CFS	0 CFS		0 CFS	
WQ EVENT:	NA	NA		NA	
5-YEAR:	10.26 CFS	0.31 CFS		0.31 CFS	
100-YEAR:	31.01 CFS	7.90 CFS		7.90 CFS	
B. VOLUMES, DEPTHS, & WSELS:		ITEM	VOLUME	WSEL	DEPTH
		EXTENDED DETENTION BASIN	213,429.6 CF	4.8'	6662.1
		WQCV	1,907 CF	6663.9	1.8'
		5-YEAR	1,918 CF	6663.9	1.8'
		100-YEAR	2,675 CF	6664.2	2.1'
		C. WQCV DRAIN TIME = 40 HOURS			

8. SENSITIVE AREAS, WETLANDS, & PERMITS

THE SITE INCLUDES 0.24 ACRES OF WETLANDS LOCATED NORTH OF THE DEVELOPMENT. MAINTENANCE ACTIVITIES WILL NOT IMPACT THE WETLANDS.

8. MISCELLANEOUS INFORMATION

- A. PROJECT SURVEY:
TOPOGRAPHIC AND EXISTING CONDITIONS PER LANDMARK GROUND SURVEY 10-30-2020. SOME OFF-SITE AND ADJACENT PROPERTY INFORMATION WAS DIGITIZED FROM AERIAL IMAGERY. LANDMARK IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING CONDITIONS AND/OR PROPERTY INFORMATION INCLUDING EASEMENTS AND ENCUMBRANCES AND THE OWNER ASSUMES ALL RISK WITH COMPLYING WITH THE LEGAL REQUIREMENTS OF THIS PROJECT.
- PROJECT BENCHMARKS IS RECOVERED NO. 5 REBAR W/ 1 1/2" ALUMINUM CAP STAMPED LANDMARK LS 29039, ELEV=6667.80 NAVD 88. THE COORDINATE SYSTEM IS COLORADO COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011), NAVD88, COMBINED SCALE FACTOR: (N+14)5966.11

PROJECT:	2387-004	NO.	DATE:	BY:	DESCRIPTION:
DATE:	12/23/2021				
DRAWN BY:	DCS				
CHECKED BY:	LCI				

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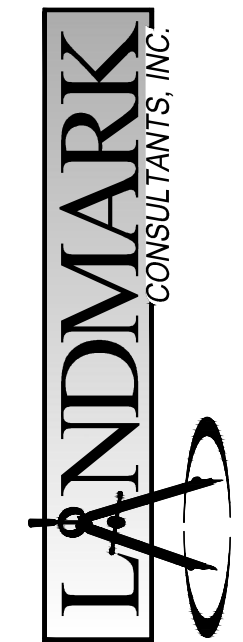
Steamboat Basecamp
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3

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NO.	DATE:	BY:	DESCRIPTION:
1	07.13.22	Grip	Sewer Service Modification
2	09.14.22	Grip	AS1 #2 - Additional Spot Elevations, and lateral
3	09.27.22	Grip	Additional info for Bus Stop and Headwall
4	02.08.23	Grip	Rev completed - updated overall package

PROJECT:	2387-04
DATE:	1-26-22
CONTACT:	Grip
EMAIL:	erik@landmark-co.com

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02/24/2023

Steamboat Basecamp - Phase
O&M PLAN

SHEET

C.520

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