

**Boondocks**  
**Lot 4A, Crown Point Filing #1**  
 LOCATED IN A PORTION OF THE SW 1/4 OF SECTION 3,  
 T6S, R66W, 6TH P.M., COUNTY OF DOUGLAS, STATE OF COLORADO.

**CONSTRUCTION PLAN SET**

**LEGAL DESCRIPTION:**

Lot 4, Crown Point F#1, 14th Amendment--Reception # 2007081477 of the records of Arapahoe County, Colorado. Containing 847,936 square feet, 14.875 acres, More or Less.

**PROPOSED LEGAL DESCRIPTION:**

The following descriptions are a part of lot 4; Crown Point F # 1, 14th Amendment Rec # 2007081477, Arapahoe County, Colorado and describes two parcels (A&B) which are to be included in a replat of the said lot 4;

**Parcel A**

Beginning at the northeast corner of said lot 4;  
 Thence southerly along the east line of lot 4, which is coincident with west ROW line of E 470, S11°07'44"W, 191.10 feet;  
 Thence leaving said coincident east line with west ROW line of E470; N70°01'13"W; 586.59 feet;  
 Thence S00°00'00"E, 384.86 feet to a platted corner on said lot 4; said platted corner being the northeast corner of lot 2, Crown Point F #1, 14th Amendment, Reception # 20070081477; Arapahoe County, Colorado;  
 Thence along a common lot line of lot 24, lot 4, said Crown Point F#1, 14th amendment; N90°00'00"W, 238.60 ft to a common corner of lot 3, Crown Point F#1, 14th amendment, reception #2007081477, and lot 4;  
 Thence along a common property line of said lots 3 and 4 N00°06'31"W, 634.97 feet to a point on the south ROW line of Cottonwood Dr, Rec. # 00073633, Arapahoe County, Colorado;  
 Thence along said south ROW line on a curve to the right having a chord of S74°15'58"E 526.95 ft and a radius of 2,702.00 ft with a central angle of 111°1'30" with an arc length of 527.79 ft to a point of Tangent;  
 Thence continuing along said south ROW line S68°40'13"E, 90.33 feet.;  
 Thence continuing along the said south ROW line S70°34'46"E, 240.13 ft. to the POINT OF BEGINNING.

Area of Parcel A 5.969 acres.

**Parcel B**

Beginning at the northeast corner of said lot 4;  
 Thence along the east line of lot 4 which is coincident of the west ROW of E 470; S4°07'44"W, 191.10 feet to the TRUE POINT OF BEGINNING;  
 Thence along the common lot line of lot 4 and west ROW of E 470 along the following 5 courses and distances;

- 1) Thence S11°07'44"W, 118.21 feet
  - 2) Thence S14°52'44"W, 95.13 feet to a point of curve;
  - 3) Thence on a curve to the right having a radius of 1,075.92'; a central angle of 22°03'52", an arc length of 414.33 ft and a chord of S25°54'40"W, 411.78 ft to a point of tangent.
  - 4) Thence S36°56'36"W, 228.17ft to a point of curve to the right;
  - 4) Thence on a curve to the right having a radius of 549.41 ft, a central angle of 25°49'10", an arc length of 247.58 ft and a chord of S49°51'11"W; 245.49 ft to the furthest south property corner of said lot 4;
- Thence leaving said E 470 ROW line and continuing north along the common lot line of lot 3, Crown Point F#1, 14th Amendment N00°00'00"E, 732.63 ft to the northeast corner of said lot 3, thence continuing N00°00'00"E, 384.46 ft;  
 Thence S70°13'01"E, 586.59 ft to the TRUE POINT OF BEGINNING of Parcel B

Parcel B contains 8.906 acres.

**TOWN OF PARKER CONTACTS:**

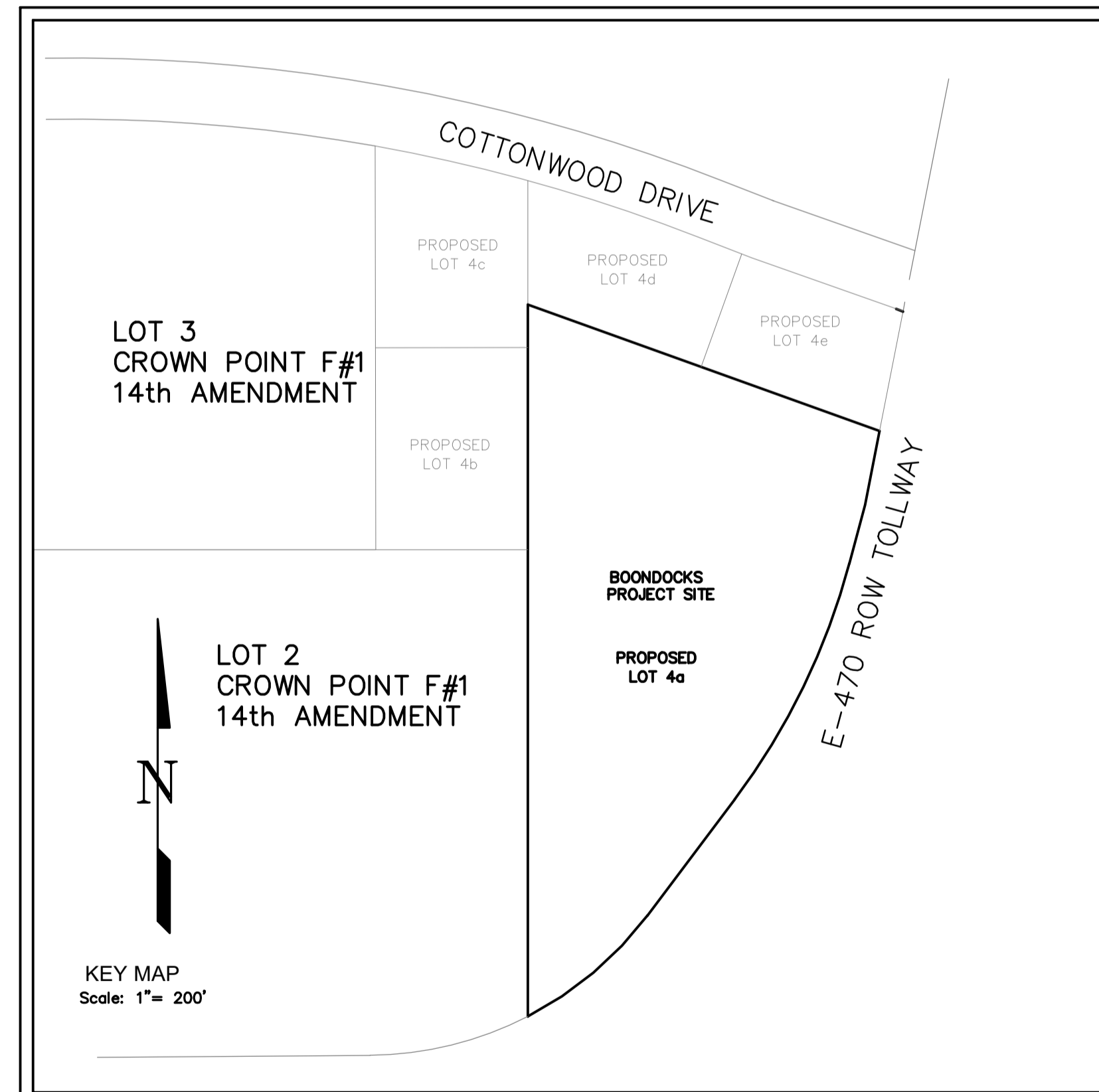
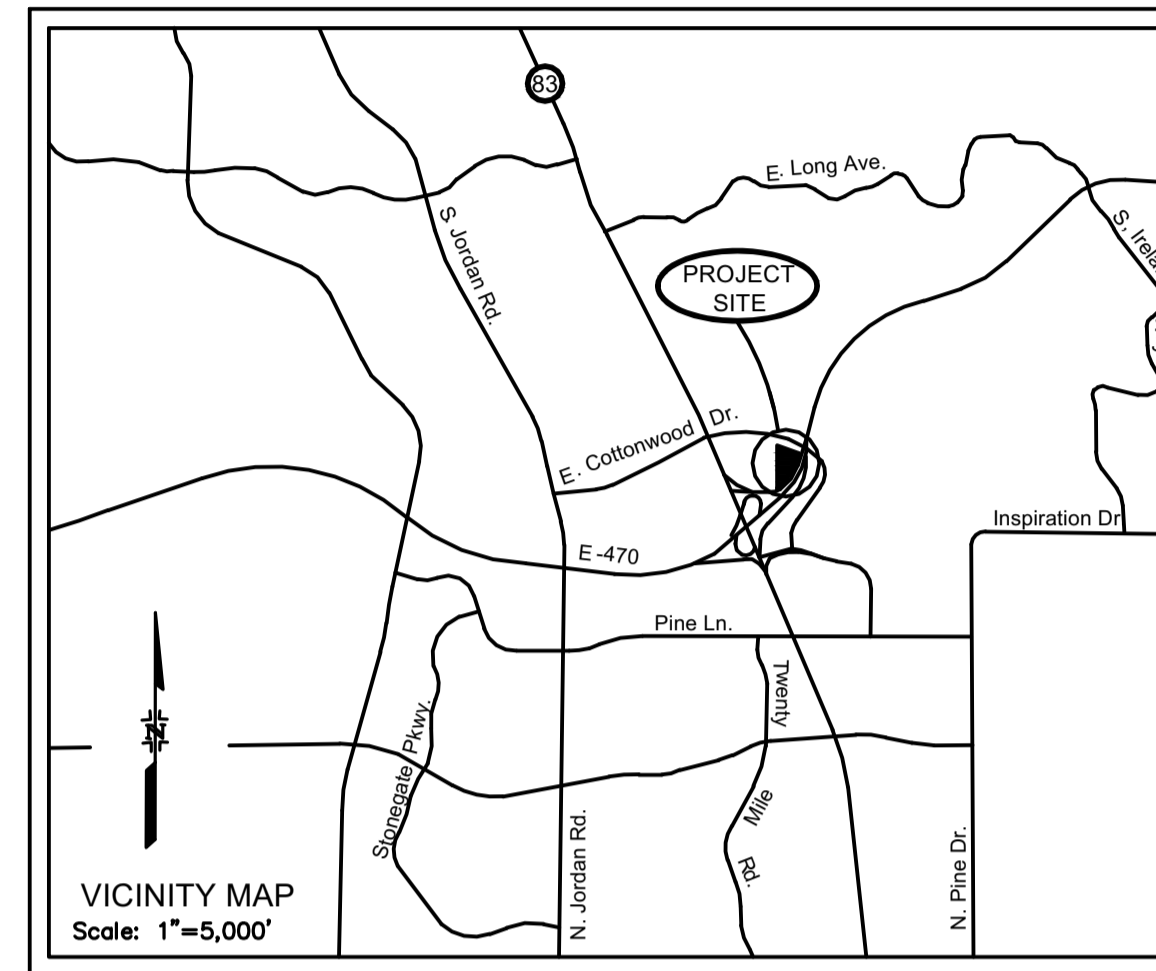
Tom Williams, P.E. -- Engineering & Stormwater Manager: (303) 840-9546  
 Michael Waugh -- Engineering Inspections Supervisor: (303) 805-3231 (Direct) (303) 434-9260 (Cell)  
 Alex Mestdagh, P.E. -- Sr. Development Review Engineer: (303) 805-3204 (Direct) (303) 434-9306 (Cell)  
 Jacob James, P.E. -- Stormwater Project Engineer (303) 805-3166 (Direct) (303) 242-4920 (Cell)  
 Adam Nelson -- Environmental Program Manager: (303) 805-3226 (Direct) (303) 434-6590 (Cell)  
 Alvin Lamle -- Stormwater Technician: (303) 805-3239 (Direct) (303) 434-3778 (Cell)  
 Kurt Patrick ?Engineering Technician: (303) 805-3209 (Direct) (303) 961-1057 (Cell)

**UTILITY CONTACTS:**

Intermountain REA Mr. Jim Potter 5496 North US Highway 85 Sedalia, CO 80135 (303) 688-3100	Xcel Energy 1123 West 3rd Avenue Denver, CO 80223 Builder's Call Line (800) 628-2121
Comcast Cable Mr. Butch Buster 6850 South Tucson Way Englewood, CO 80112 (303) 603-5628	Cottonwood Water & Sanitation District Mr. Patrick F. Mulhern/Laurie Tatlock 2 Inverness Drive East, Suite 200 Englewood, CO 80112 (303) 649-9509
CenturyLink Mr. William Benson 9750 East Costilla Avenue Englewood, CO 80112 (720) 578-5142	

**BENCHMARK:**

A BRASS DISK SET IN CONCRETE FLUSH WITH THE GROUND AND MARKED WITH A DOUGLAS COUNTY FIBERGLASS WITNESS POST, 125 FEET NORTH OF THE CENTERLINE OF A DRIVEWAY, 84 FEET SOUTH OF A DOUBLE 36 IN. CULVERT, 25 FEET WEST OF THE EDGE OF PARKER ROAD, AND 25 FEET EAST OF THE WEST RIGHT OF WAY FENCE.  
 ELEVATION = 5734.24



**LEGEND**

	EXISTING ELEVATION
	PROPOSED ELEVATION
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED 6" VERTICAL CURB & GUTTER AND PARKING LOT STRIPING
	PROPOSED LIGHTING FIXTURE
	PROPOSED FENCE
	PROPOSED STORM SEWER W/ MANHOLE & INLET
	EXISTING STORM SEWER W/ MANHOLE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING WATER LINE W/VALVE & TEE
	PROPOSED WATER LINE W/VALVE & TEE
	EXISTING SANITARY SEWER W/MANHOLE
	PROPOSED SANITARY SEWER W/MANHOLE
	PROPOSED SIGN
	EXISTING EASEMENT
	PROPOSED EASEMENT
	PROPOSED CONCRETE PAN

**SHEET INDEX:**

CIVIL ENGINEERING PLANS	
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**LAND USE SUMMARY TABLE:**

TOTAL BUILDING AREA:	62,678.0 SF	15.9% OF TOTAL SITE
TOTAL PARKING AREA:	126,496.0 SF	32.1% OF TOTAL SITE
PARKING LOT LANDSCAPING:	12,674.0 SF	10.0% OF TOTAL PARKING AREA
DRIVE AISLES:	83,111.0 SF	6.6% OF TOTAL PARKING AREA
SITE LANDSCAPED AREA:	105,038.0 SF	26.7% OF TOTAL SITE
OUTDOOR RECREATIONAL AREA:	99,482.0 SF	25.3% OF TOTAL SITE
<b>TOTAL SITE</b>	<b>393,695.6 SF</b>	<b>100% OF TOTAL SITE</b>

The Town of Parker review constitutes general compliance with the Town's Standards and approved variances, subject to these plans being stamped, signed, and dated by the professional engineer of record. Review by the Town does not constitute approval of the plan design or accuracy and correctness of engineering calculations. Errors in the design or calculations remain the responsibility of the registered professional engineer whose stamp and signature are affixed to this document.

This review does not constitute approval of any private on-site improvements which may be shown. Construction cannot commence until all required drainage/traffic report(s), final development plan(s), special review(s), grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

Town of Parker, Public Works Director \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager --Stormwater \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager --Transportation \_\_\_\_\_ Date \_\_\_\_\_



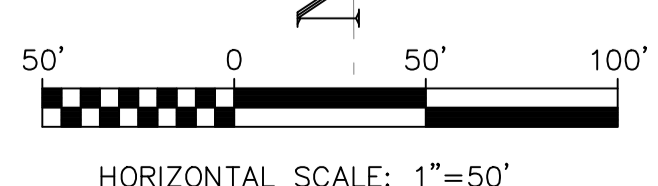
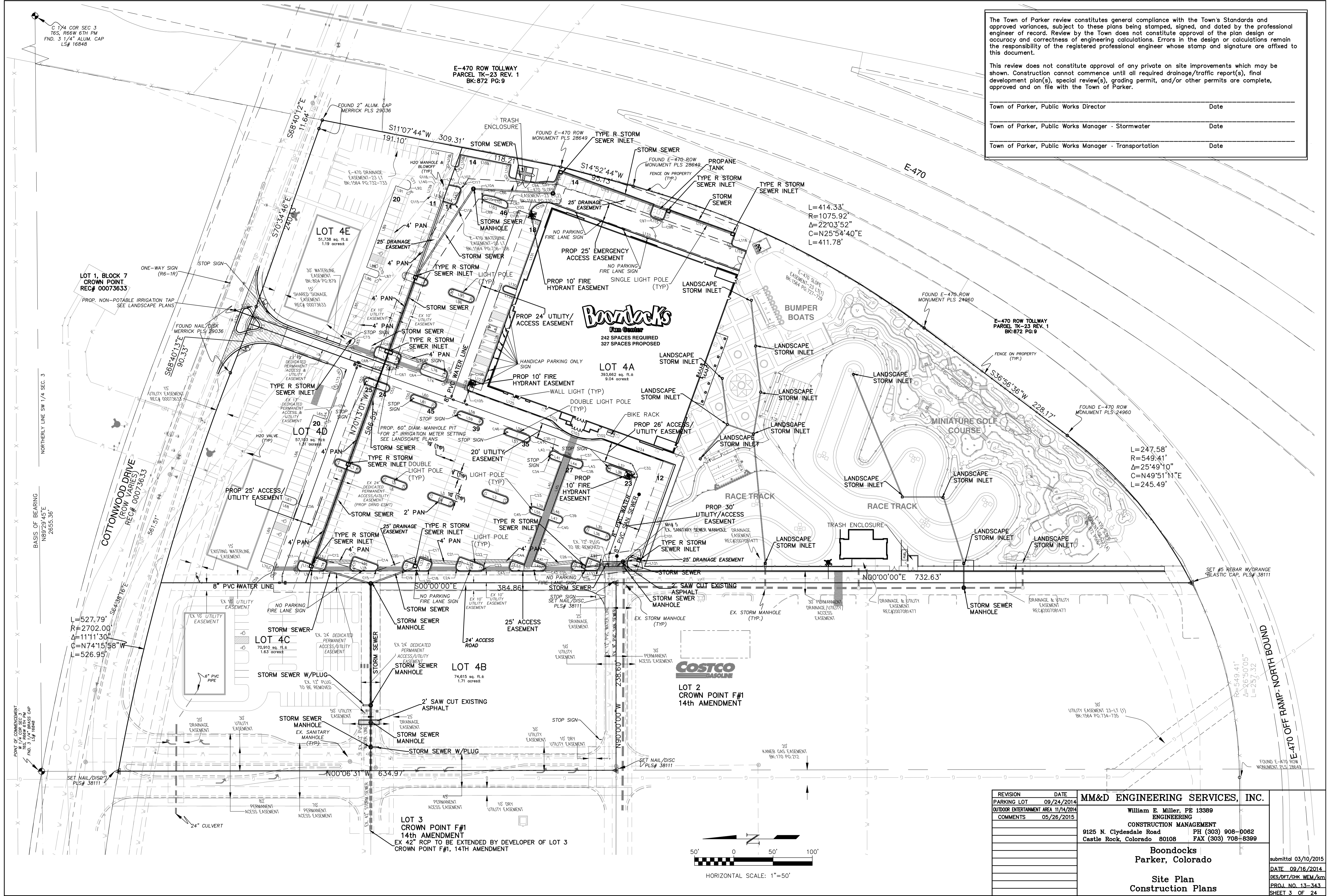
REVISION	DATE	<b>MM&amp;D ENGINEERING SERVICES, INC.</b>
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING
		CONSTRUCTION MANAGEMENT
		9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		<b>Boondocks</b> <b>Parker, Colorado</b> <b>Cover Sheet</b> <b>Construction Plans</b>
		submittal 03/10/2015
		DATE 09/16/2014
		DES/DFI/CHK WEM/km
		PROJ. NO. 13-343
		SHEET 1 OF 24



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Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date



REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389 ENGINEERING
OUTDOOR ENTERTAINMENT AREA	11/14/2014	CONSTRUCTION MANAGEMENT
COMMENTS	05/26/2015	8125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		<b>Boondocks Parker, Colorado</b>
		<b>Site Plan Construction Plans</b>

submittal 03/10/2015  
DATE 09/16/2014  
DES/DFI/CHK WEM/km  
PROJ. NO. 13-343  
SHEET 3 OF 24

Flowline Curve Table

Curve Table			
Curve #	Length	Radius	Delta
C1	14.137	4.500	090.0000
C2	14.137	4.500	180.0000
C3	14.137	4.500	180.0000
C4	14.137	4.500	180.0000
C5	14.137	4.500	180.0000
C6	14.137	4.500	180.0000
C7	14.137	4.500	180.0000
C8	14.137	4.500	180.0000
C9	6.128	5.000	070.2170
C10	9.580	5.000	109.7830
C11	4.712	3.000	090.0000
C12	4.712	3.000	090.0000
C13	3.921	2.500	090.0000
C14	4.712	3.000	090.0000
C15	6.128	5.000	070.2170
C16	9.580	5.000	109.7830
C17	4.712	3.000	090.0000
C18	6.128	5.000	070.2170
C19	9.580	5.000	109.7830
C20	4.712	3.000	090.0000

Curve Table			
Curve #	Length	Radius	Delta
C21	3.921	2.500	090.0000
C22	4.712	3.000	090.0000
C23	6.128	5.000	070.2170
C24	9.580	5.000	109.7830
C25	9.580	5.000	109.7830
C26	4.712	3.000	090.0000
C27	4.712	3.000	090.0000
C28	6.128	5.000	070.2170
C29	14.137	4.500	180.0000
C30	14.137	4.500	180.0000
C31	14.137	4.500	180.0000
C32	14.137	4.500	180.0000
C33	7.969	4.500	090.0000
C34	7.969	4.500	090.0000
C35	7.969	4.500	090.0000
C36	33.814	104.543	018.4223
C37	7.969	4.500	090.0000
C38	6.128	5.000	090.0000
C39	9.580	5.000	109.7830
C40	7.969	4.500	090.0000

Curve Table			
Curve #	Length	Radius	Delta
C41	4.712	3.000	090.0000
C42	6.128	5.000	070.2170
C43	9.580	5.000	109.7830
C44	4.712	3.000	090.0000
C45	7.969	4.500	090.0000
C46	14.137	4.500	180.0000
C47	14.137	4.500	180.0000
C48	14.137	4.500	180.0000
C49	14.137	4.500	180.0000
C50	14.137	4.500	180.0000
C51	14.137	4.500	180.0000
C52	14.137	4.500	180.0000
C53	14.137	4.500	180.0000
C54	7.969	4.500	090.0000
C55	3.921	2.500	090.0000
C56	14.137	4.500	180.0000
C57	3.921	2.500	090.0000
C58	4.231	5.000	048.4852
C59	38.039	43.000	050.8855
C60	92.794	60.000	088.8121

Line Table		
Line #	Length	Direction
L1	25.000	N19° 46' 58.79"E
L2	25.000	S19° 46' 58.79"W
L3	25.000	N19° 46' 58.79"E
L4	25.000	S19° 46' 58.79"W
L5	25.000	N19° 46' 58.79"E
L6	25.000	S19° 46' 58.79"W
L7	25.000	N19° 46' 58.79"E
L8	25.000	S19° 46' 58.79"W
L9	25.505	S00° 00' 00.00"E
L10	4.390	N70° 13' 01.21"W
L11	14.000	N19° 46' 58.79"E
L12	10.000	N70° 13' 01.21"W
L13	14.000	N19° 46' 58.79"E
L14	5.758	S70° 13' 01.21"E
L15	10.230	N70° 13' 01.21"W
L16	28.500	N19° 46' 58.79"E
L17	1.098	S70° 13' 01.21"E
L18	25.505	S00° 00' 00.00"E
L19	5.437	S70° 13' 01.21"E
L20	25.505	S00° 00' 00.00"E

Line Table		
Line #	Length	Direction
L21	4.070	N70° 13' 01.21"W
L22	14.000	N19° 46' 58.79"E
L23	10.000	N70° 13' 01.21"W
L24	14.000	N19° 46' 58.79"E
L25	9.550	N70° 13' 01.21"W
L26	28.505	N19° 46' 58.79"E
L27	0.417	S70° 13' 01.21"E
L28	25.505	S00° 00' 00.00"E
L29	2.882	N70° 13' 01.21"W
L31	14.000	N19° 46' 58.79"E
L32	10.000	N70° 13' 01.21"W
L33	14.000	N19° 46' 58.79"E
L34	4.249	S70° 13' 01.21"E
L35	25.000	N19° 46' 58.79"E
L36	25.000	S19° 46' 58.79"W
L37	25.000	N19° 46' 58.79"E
L38	25.000	S19° 46' 58.79"W
L39	12.500	N19° 46' 58.79"E
L40	65.000	N70° 13' 01.21"W
L41	12.500	S19° 46' 58.79"W

Line Table		
Line #	Length	Direction
L42	1.414	N70° 13' 01.21"W
L43	1.414	S70° 13' 01.21"E
L44	12.500	S19° 46' 58.79"W
L45	65.000	S70° 13' 01.21"E
L46	12.500	N19° 46' 58.79"E
L47	12.500	S19° 46' 58.79"W
L48	56.000	S70° 13' 01.21"E
L49	14.000	N19° 46' 58.79"E
L50	0.801	S70° 13' 01.21"E
L51	36.132	S00° 00' 00.00"E
L52	4.030	N70° 13' 01.21"W
L53	14.000	N19° 46' 58.79"E
L54	65.000	N70° 13' 01.21"W
L55	12.500	S19° 46' 58.79"W
L56	25.000	N19° 46' 58.79"E
L57	25.000	S19° 46' 58.79"W
L58	25.000	N19° 46' 58.79"E
L59	25.000	S19° 46' 58.79"W
L60	25.000	N19° 46' 58.79"E
L61	25.000	S19° 46' 58.79"W

Curve Table			
Curve #	Length	Radius	Delta
C61	15.708	10.000	090.0000
C62	7.854	5.000	090.0000
C63	7.854	5.000	090.0000
C64	7.854	5.000	090.0000
C65	7.854	5.000	090.0000
C66	7.854	5.000	090.0000
C67	7.854	5.000	090.0000
C68	7.854	5.000	090.0000
C69	7.854	5.000	090.0000
C70	7.854	5.000	090.0000
C71	92.708	60.000	088.5298
C72	16.360	10.898	086.0282
C73	3.921	2.500	090.0000
C74	4.712	3.000	090.0000
C75	4.712	3.000	090.0000
C76	3.921	2.500	090.0000
C77	10.306	6.000	098.4118
C78	14.137	4.500	180.0000
C79	14.137	4.500	180.0000
C80	14.137	4.500	180.0000

Curve Table			
Curve #	Length	Radius	Delta
C81	14.137	4.500	180.0000
C82	1.762	12.000	028.4116
C83	10.210	6.500	090.0000
C84	3.921	2.500	090.0000
C85	5.498	3.500	090.0000
C86	4.984	3.500	081.5884
C87	7.969	4.500	090.0000
C88	7.969	4.500	090.0000
C89	7.969	4.500	090.0000
C90	7.969	4.500	090.0000
C91	11.435	5.000	131.0357
C92	3.921	2.500	090.0000
C93	7.069	4.500	090.0000
C94	10.901	30.000	020.8184
C95	15.374	51.000	017.2116
C96	6.128	4.500	078.0413
C97	7.069	4.500	098.4116
C98	7.069	4.500	090.0000
C99	7.069	4.500	090.0000
C100	8.688	9.984	049.8157
C101	7.069	4.500	090.0000
C102	7.207	15.000	027.5271
C103	61.971	64.500	055.0541
C104	7.207	15.000	027.5271

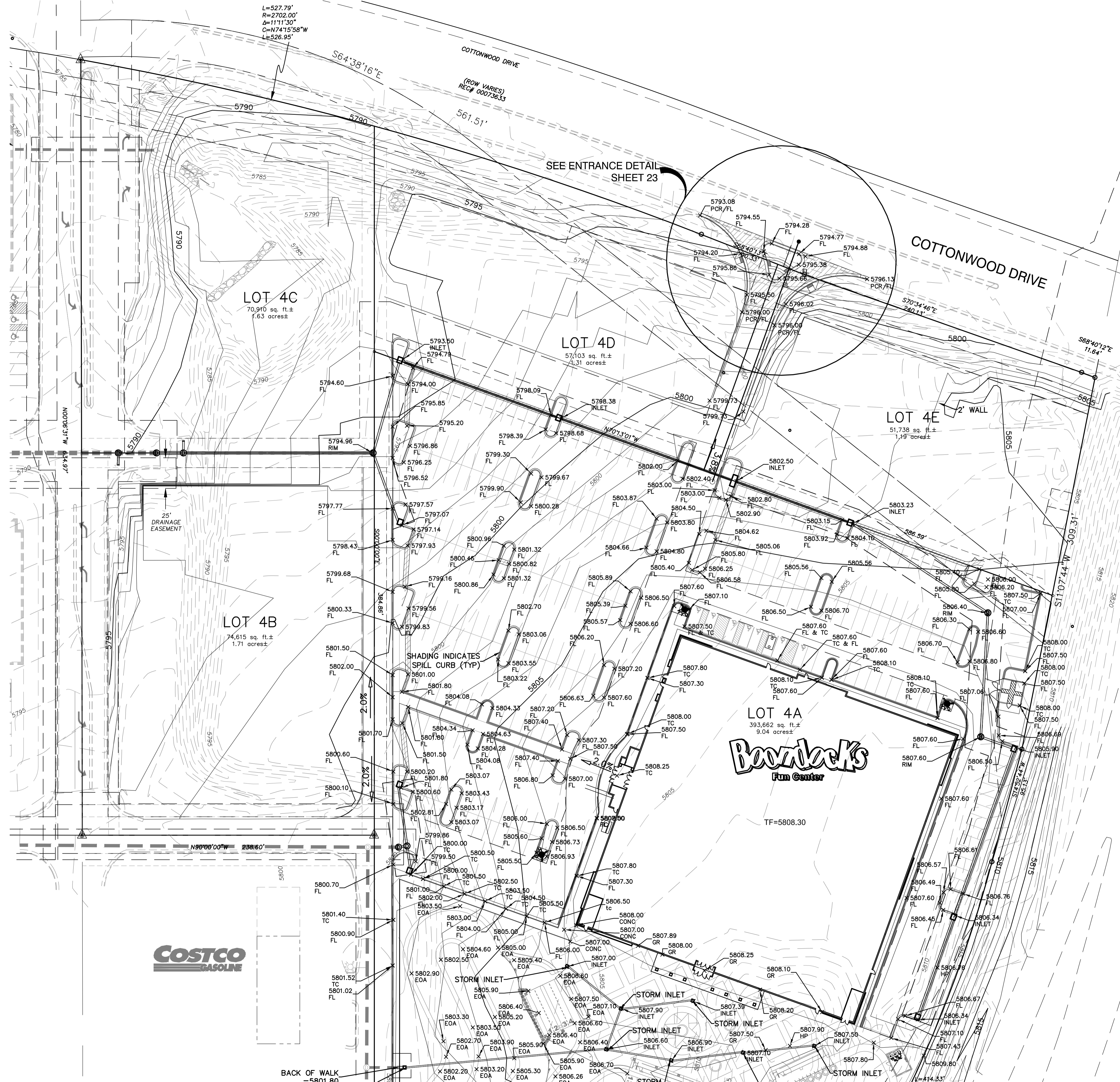
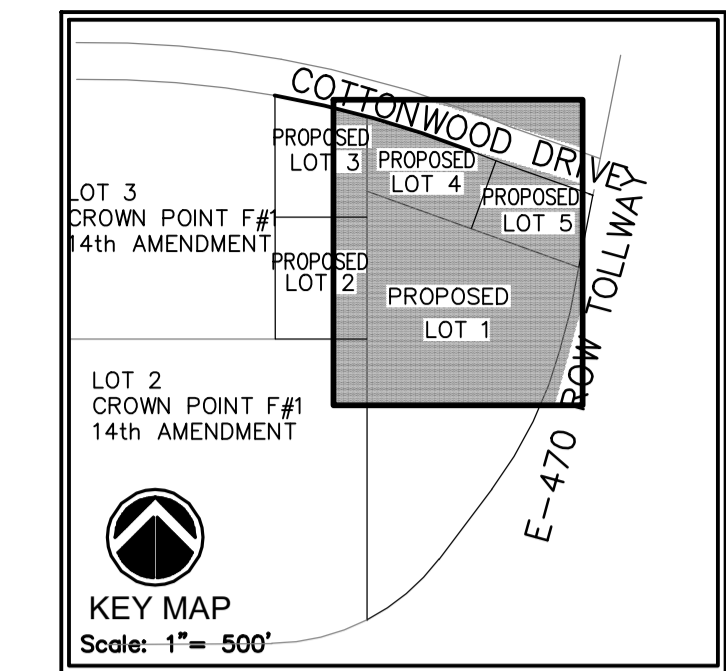
Curve Table			
Curve #	Length	Radius	Delta
C105	7.069	4.500	090.0000
C106	7.069	4.500	090.0000
C107	13.568	4.500	180.0000
C108	7.271	4.500	092.5793
C109	35.782	22.384	091.8212
C110	11.797	5.011	134.8993
C111	11.435	5.000	131.0357
C112	19.833	78.000	014.4220
C113	11.079	5.000	136.9522
C114	19.588	78.000	014.3888
C115	4.184	S70° 13' 01.21"E	
C116	4.272	3.000	081.5884
C117	7.729	4.500	098.4116
C118	7.069	4.500	090.0000

Line Table		
Line #	Length	Direction
L62	25.000	N19° 46' 58.79"E
L63	25.000	S19° 46' 58.79"W
L64	5.000	S70° 13' 01.21"E
L65	15.500	S19° 46' 58.79"W
L66	108.000	S70° 13' 01.21"E
L67	13.500	N19° 46' 58.79"E
L68	13.500	S19° 46' 58.79"W
L69	81.000	S70° 13' 01.21"E
L70	15.500	N19° 46' 58.79"E
L71	4.184	S70° 13' 01.21"E
L72	13.000	S70° 13' 01.21"E
L73	25.000	S19° 46' 58.79"W
L74	5.000	N70° 13' 01.21"W
L75	5.000	N70° 13' 01.21"W
L76	25.000	N19° 46' 58.79"E
L77	5.000	S70° 13' 01.21"E
L78	25.000	S19° 46' 58.79"W
L79	5.000	N70° 13' 01.21"W
L80	25.000	N19° 46' 58.79"E
L81	5.000	S70° 13' 01.21"E
L82	75.968	N19° 46' 58.79"E

Line Table		
Line #	Length	Direction
L83	0.500	N70° 13' 01.21"W
L84	15.500	S19° 46' 58.79"W
L85	82.000	N70° 13' 01.21"W
L86	15.000	N19° 46' 58.79"E
L87	3.000	N70° 13' 01.21"W
L88	15.000	S19° 46' 58.79"W
L89	109.999	N70° 13' 01.21"W
L91	15.500	N19° 46' 58.79"E
L92	3.119	N70° 13' 01.53"E
L93	25.000	N19° 46' 58.79"E
L94	25.000	S19° 46' 58.79"W
L95	25.000	N19° 46' 58.79"E
L96	25.000	S19° 46' 58.79"W
L101	12.959	N19° 46' 58.79"E
L102	0.059	S70° 13' 01.21"E
L103	28.500	S19° 46' 58.79"W
L104	0.444	N70° 13' 01.21"W
L105	10.410	N11° 22' 16.92"E
L106	13.499	S78° 37' 44.35"E
L107	5.000	N11° 22' 15.88"E

Line Table		
Line #	Length	Direction
L108	13.499	N78° 37' 44.35"W
L109	65.000	N11° 22' 15.35"E
L110	11.500	S78° 37' 44.11"E
L111	25.568	N11° 22' 15.78"E
L112	12.705	N70° 13' 01.22"W
L113	128.000	N19° 46' 58.79"E
L114	11.500	S70° 13' 01.21"E
L115	9.000	N19° 46' 58.79"E
L116	11.500	N70° 13' 01.21"W
L117	92.000	N19° 46' 58.79"E
L118	11.500	S70° 13' 01.21"E
L119	16.249	N19° 46' 58.79"E
L120	13.416	S00° 00' 00.00"E
L121	1.421	N70° 13' 01.21"W
L122	11.500	N19° 46' 58.79"E
L123	129.000	N70° 13' 01.21"W
L124	96.258	S19° 46' 58.79"W
L125	108.758	S19° 46' 58.79"W
L126	5.000	N70° 13' 01.21"W
L127	13.500	N19° 46' 58.79"E

Line Table		
Line #	Length	Direction
L128	120.000	N70° 13' 01.21"W
L129	13.500	S19° 46' 58.79"W
L130	13.500	N19° 46' 58.79"E
L131	92.000	N70° 13' 01.21"W
L132	12.484	S19° 46' 58.79"W
L133	251.749	N19° 46' 58.79"E
L134	43.834	N11° 22' 15.78"E
L135	79.864	N19° 46' 58.79"E
L136	22.736	S69° 00' 27.53"E
L137	25.505	S00° 00' 00.00"E
L138	15.000	S19° 50' 24.60"W
L139	13.500	N70° 09' 35.40"W
L140	0	



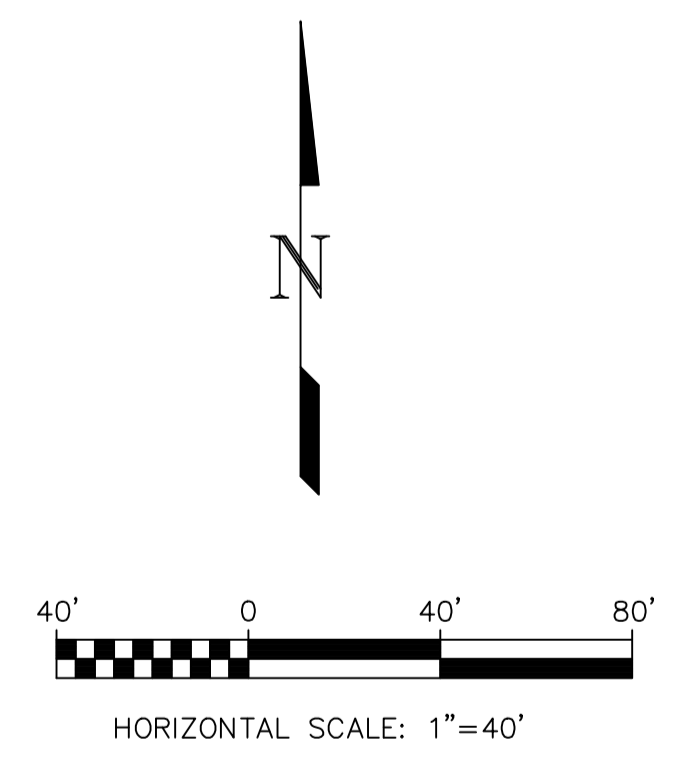
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Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date

NOTES:  
 LOT 4B TO LOT 4E, AS SHOWN ON THIS PLAN, ARE FOR REPRESENTATIONAL PURPOSES ONLY.  
 EACH LOT SHALL SUBMIT A SEPARATE SITE PLAN FOR THE TOWN OF PARKER'S APPROVAL.

CONTOURS REFLECT PROPOSED SUB-GRADE ELEVATIONS BASED ON AN ASSUMED 4" ASPHALT OVER 8" BASE.



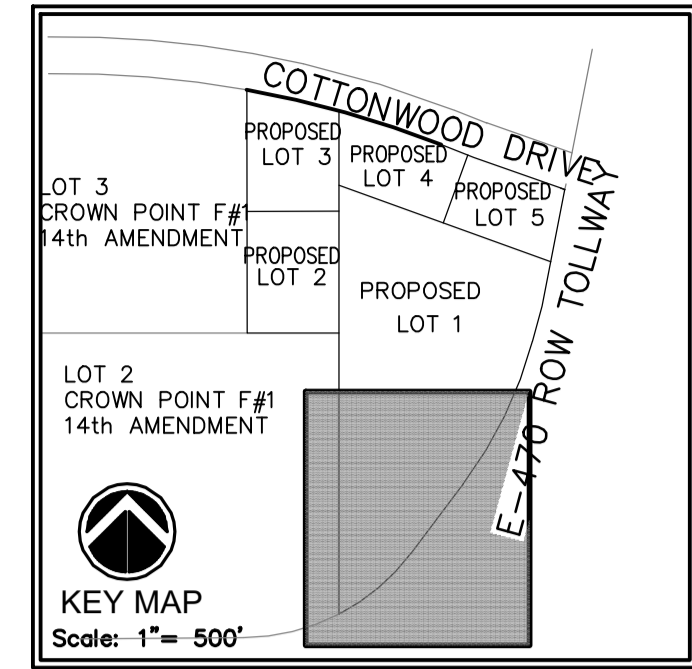
AREA OF DISTURBANCE: 741,500 SF

DIRT QUANTITIES (CU YD):

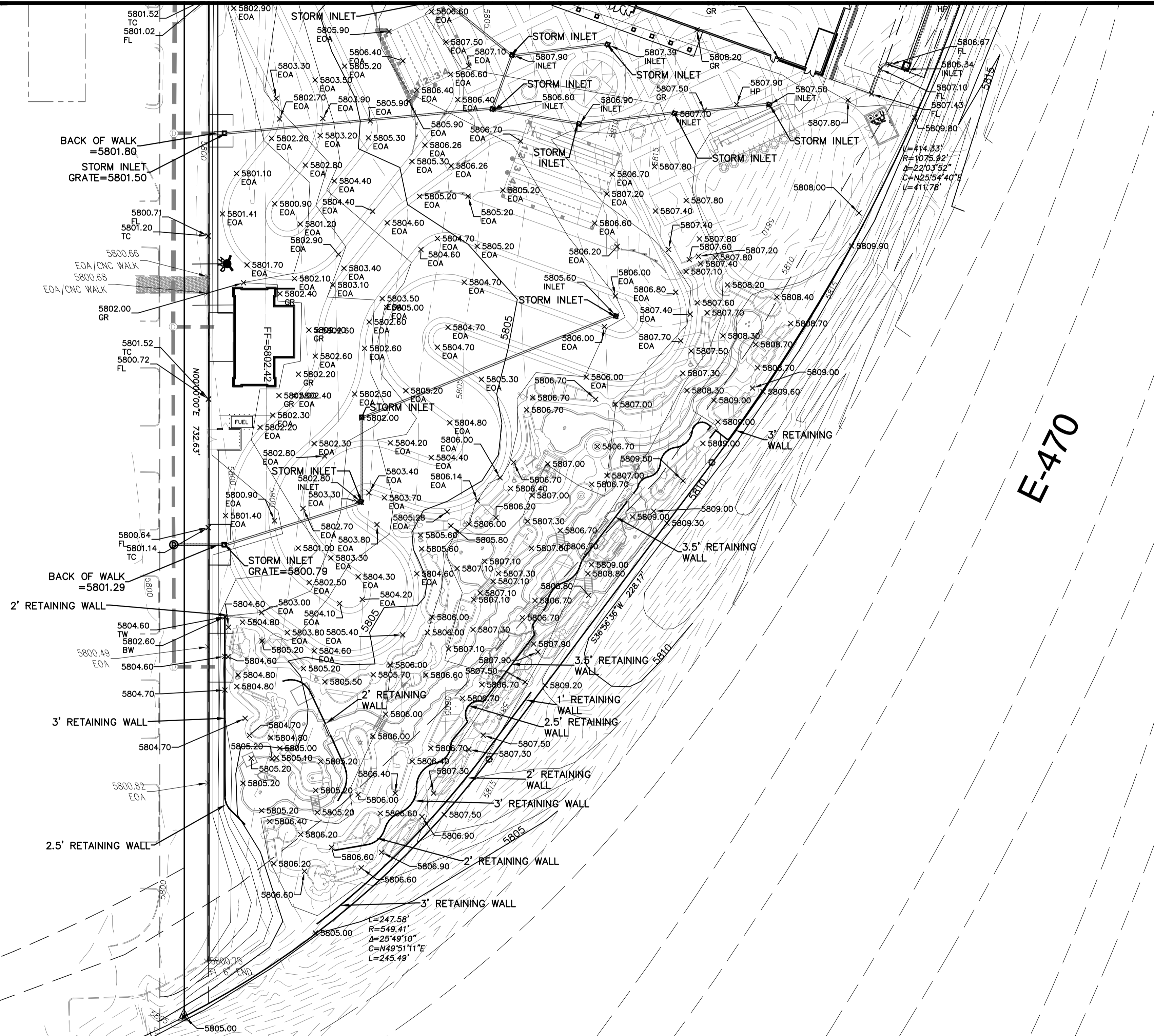
CUT	FILL	NET
19,161	26,983	7,822

REVISION	DATE	<b>MM&amp;D ENGINEERING SERVICES, INC.</b> William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 8125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399  <b>Boondocks          Parker, Colorado          Grading Plan          Construction Plans</b>
PARKING LOT	09/24/2014	
COMMENTS	05/26/2015	
submittal 03/10/2015 DATE 09/16/2014 DES/CHK WEM/km PROJ. NO. 13-343 SHEET 5 OF 24		

Matchline See Sheet 6



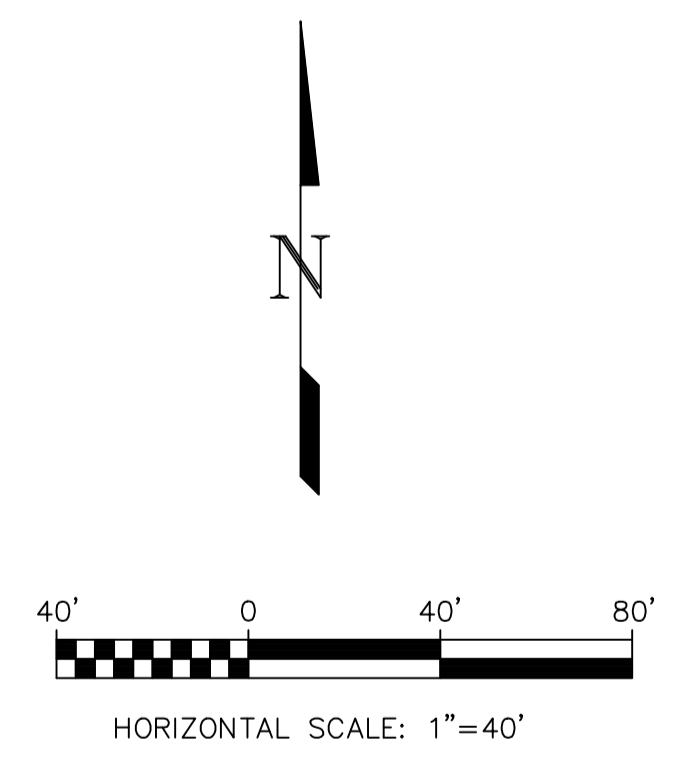
Matchline See Sheet 5



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Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date





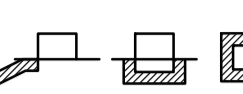

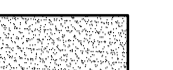


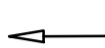
AREA OF DISTURBANCE: 741,500 SF

DIRT QUANTITIES (CU YD):

CUT	FILL	NET
19,161	26,983	7,822

REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 8125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Grading Plan Construction Plans
		submital 03/10/2015 DATE 09/16/2014 DES/CHK WEM/km PROJ. NO. 13-343 SHEET 6 OF 24

**BMP LEGEND**

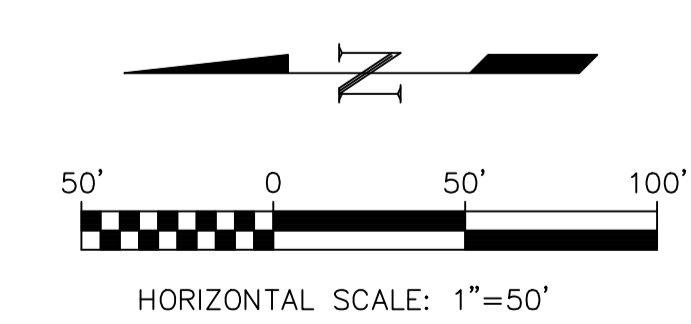
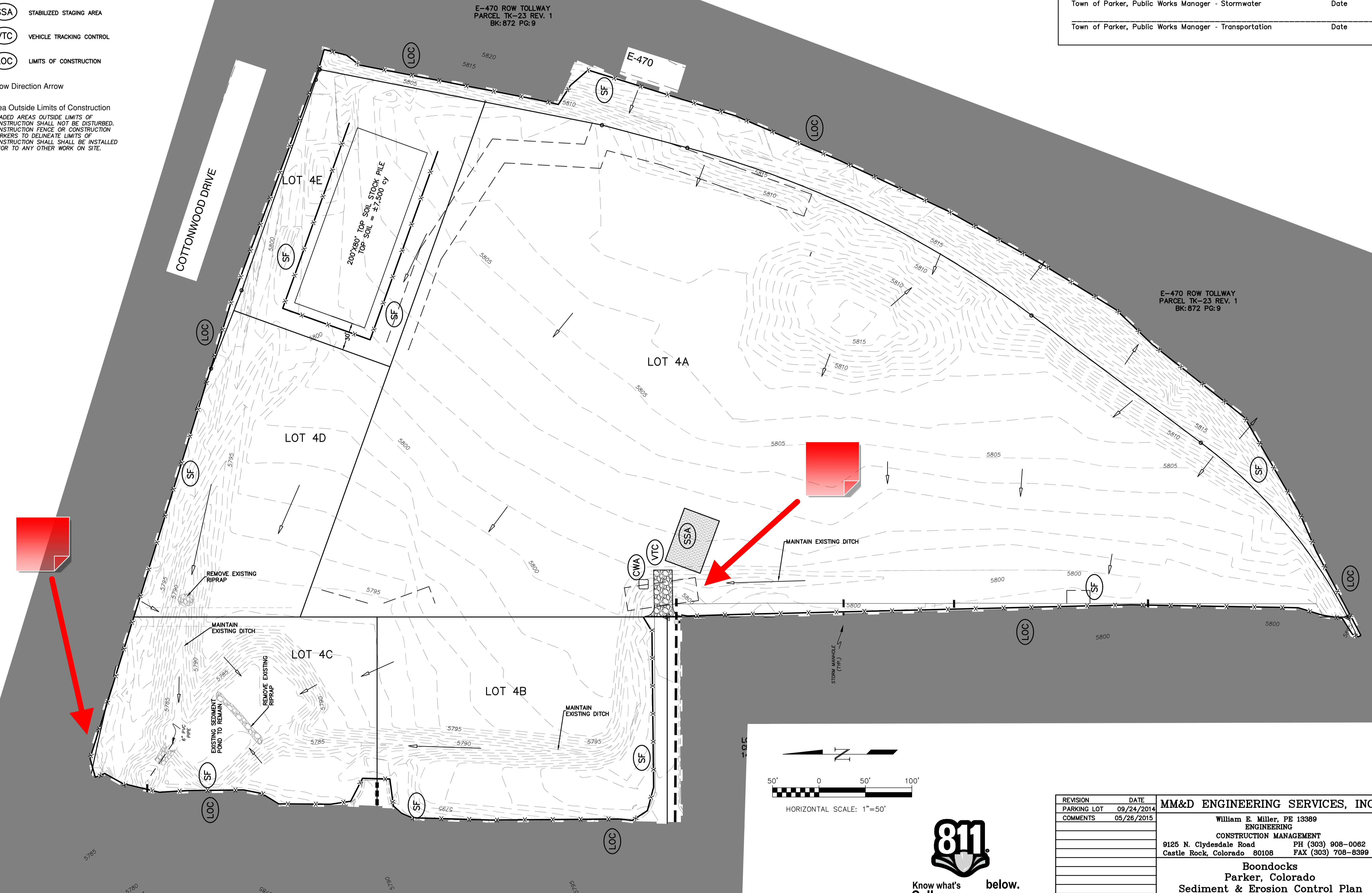
-  (CD) CHECK DAM
-  (CWA) CONCRETE WASHOUT AREA
-  (IP) INLET PROTECTION
-  (SF) SILT FENCE
-  (SSA) STABILIZED STAGING AREA
-  (VTC) VEHICLE TRACKING CONTROL
-  (LOC) LIMITS OF CONSTRUCTION
-  Flow Direction Arrow

Area Outside Limits of Construction  
 SHADED AREAS OUTSIDE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED. CONSTRUCTION FENCE OR CONSTRUCTION MARKERS TO DELINEATE LIMITS OF CONSTRUCTION SHALL BE INSTALLED PRIOR TO ANY OTHER WORK ON SITE.

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Town of Parker, Public Works Director \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager - Stormwater \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager - Transportation \_\_\_\_\_ Date \_\_\_\_\_












REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389 ENGINEERING
COMMENTS	05/26/2015	CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Sediment & Erosion Control Plan Initial Stage Construction Plans
		DATE 09/16/2014 DES/DF1/CHK. WEM/km PROJ. NO. 13-343 SHEET 7 OF 24

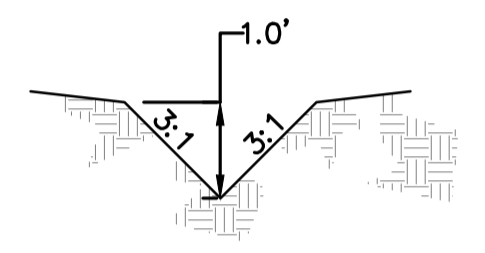
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 Town of Parker, Public Works Manager - Transportation \_\_\_\_\_ Date \_\_\_\_\_

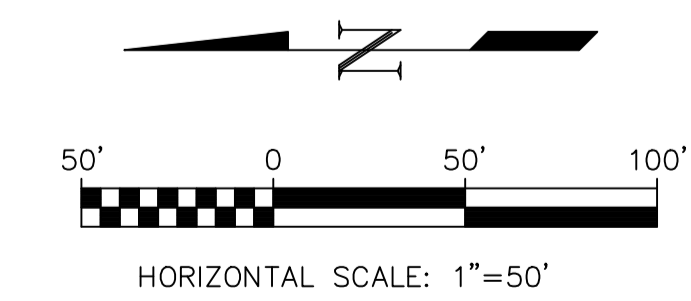
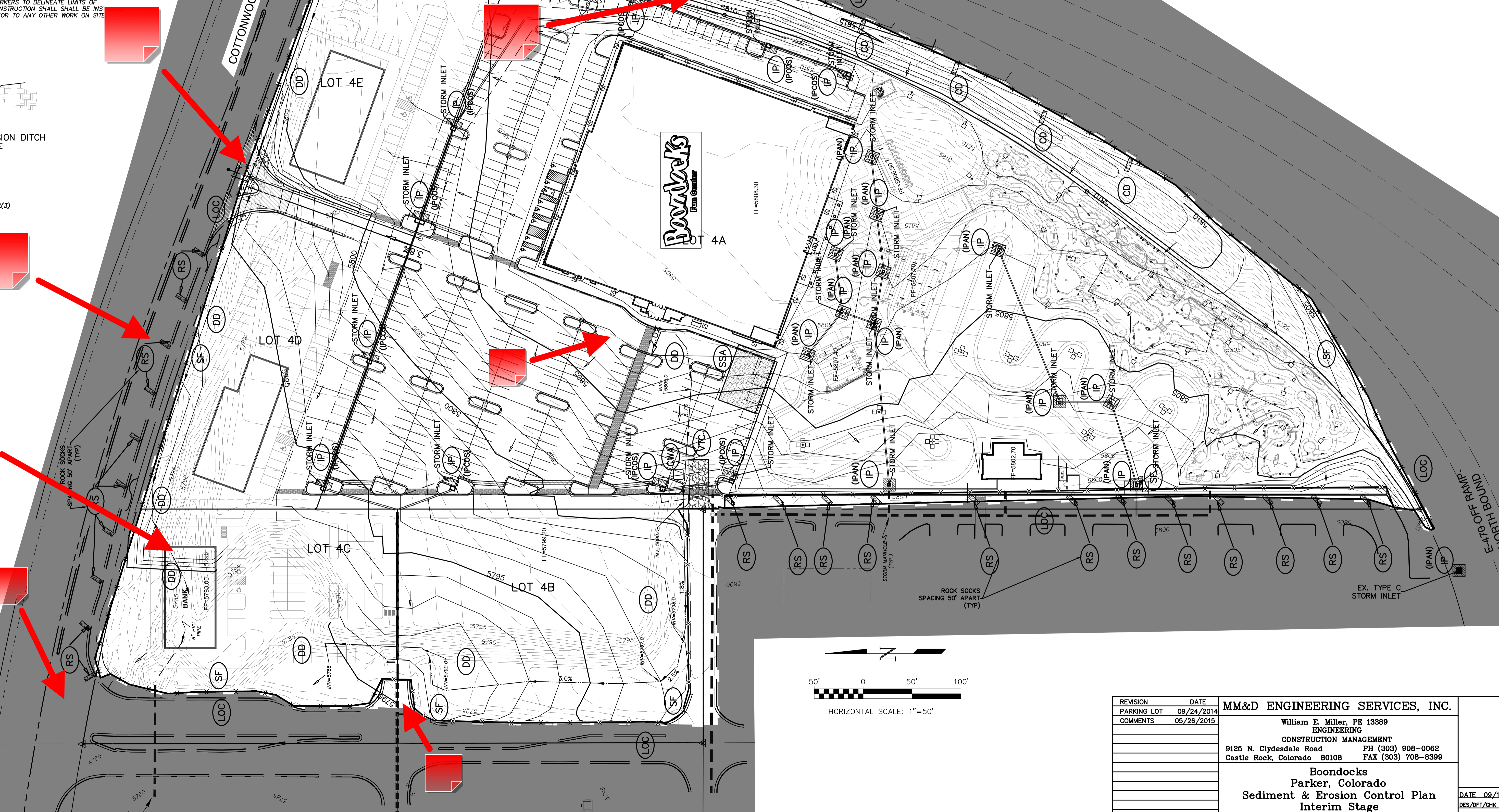
-  CWA CONCRETE WASHOUT AREA
-  DD DIVERSION DITCH
-  IP INLET PROTECTION
-  RS ROCK SOCK
-  SF SILT FENCE
-  SSA STABILIZED STAGING AREA
-  VTC VEHICLE TRACKING CONTROL
-  LOC LIMITS OF CONSTRUCTION
-  Flow Direction Arrow

Area Outside Limits of Construction  
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TYPICAL DIVERSION DITCH  
 NOT TO SCALE

SEDIMENT POND  
 REQUIRED VOLUME  
 9.4 AC.  
 UDFCD SB  
 3600cf x 9.4 ac = 33,33,840 ft(3)  
 EXISTING SEDIMENT BASIN  
 ELEVATION WS = 5785.60  
 ACTUAL VOLUME = 34,000



REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389 ENGINEERING
COMMENTS	05/26/2015	CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Sediment & Erosion Control Plan Interim Stage Construction Plans
		DATE 09/16/2014 DES/DF1/CHK. WEM/km PROJ. NO. 13-343 SHEET 8 OF 24

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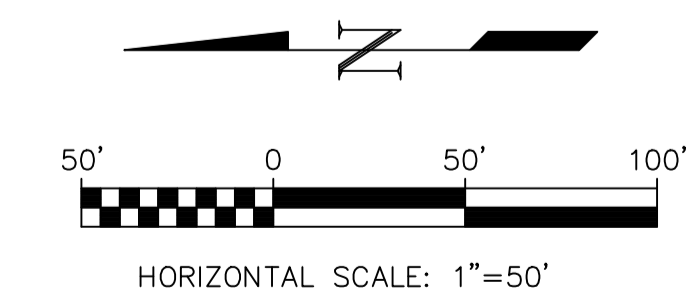
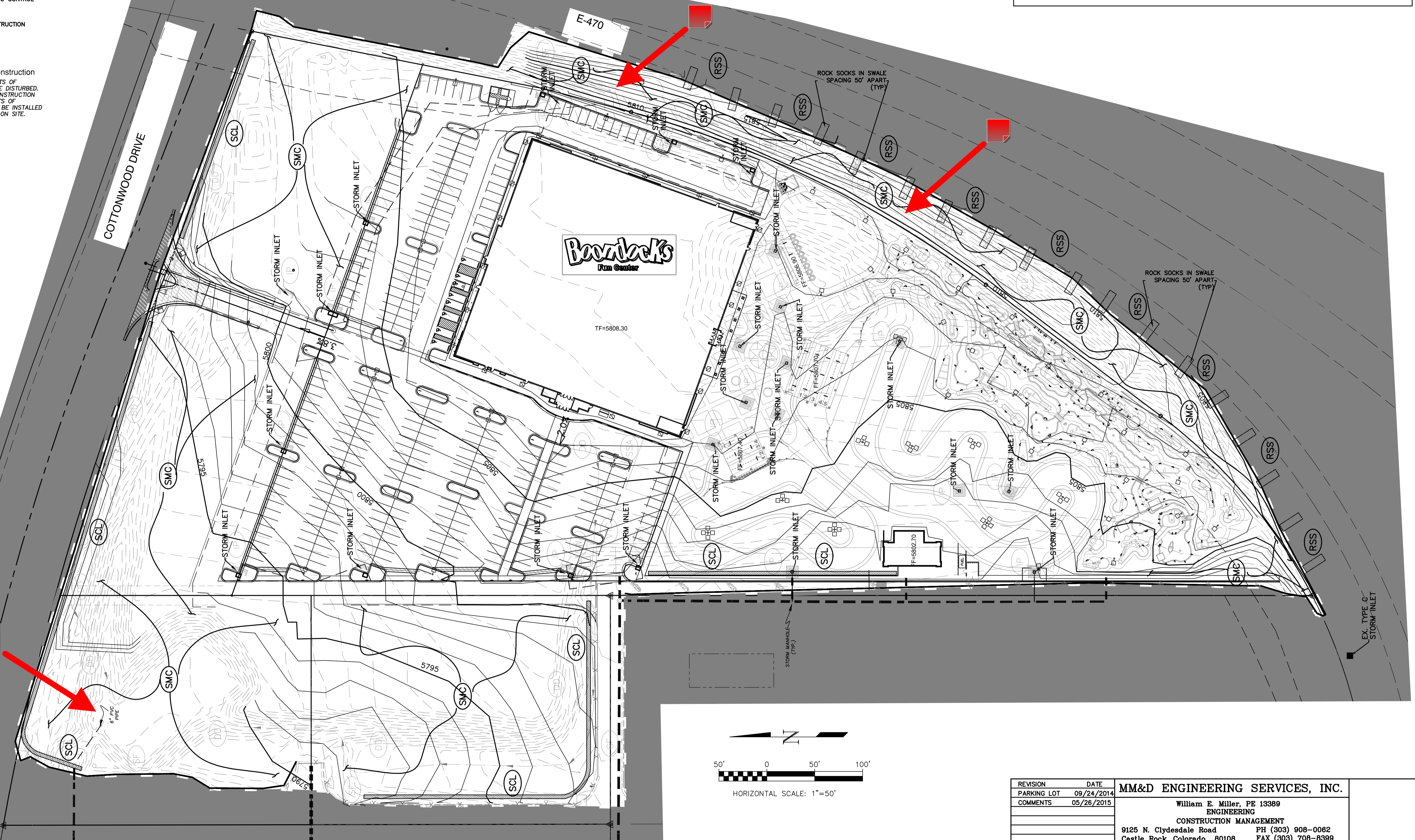
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 Town of Parker, Public Works Manager - Stormwater \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager - Transportation \_\_\_\_\_ Date \_\_\_\_\_

- (SMC) SEEDING, MULCHING AND CRIMPING
- (RS) ROCK SOCK
- (RSS) ROCK SOCK IN SWALE
- (SF) SILT FENCE
- (SCL) SEDIMENT CONTROL LOG
- (SSA) STABILIZED STAGING AREA
- (VTC) VEHICLE TRACKING CONTROL
- (LOC) LIMITS OF CONSTRUCTION

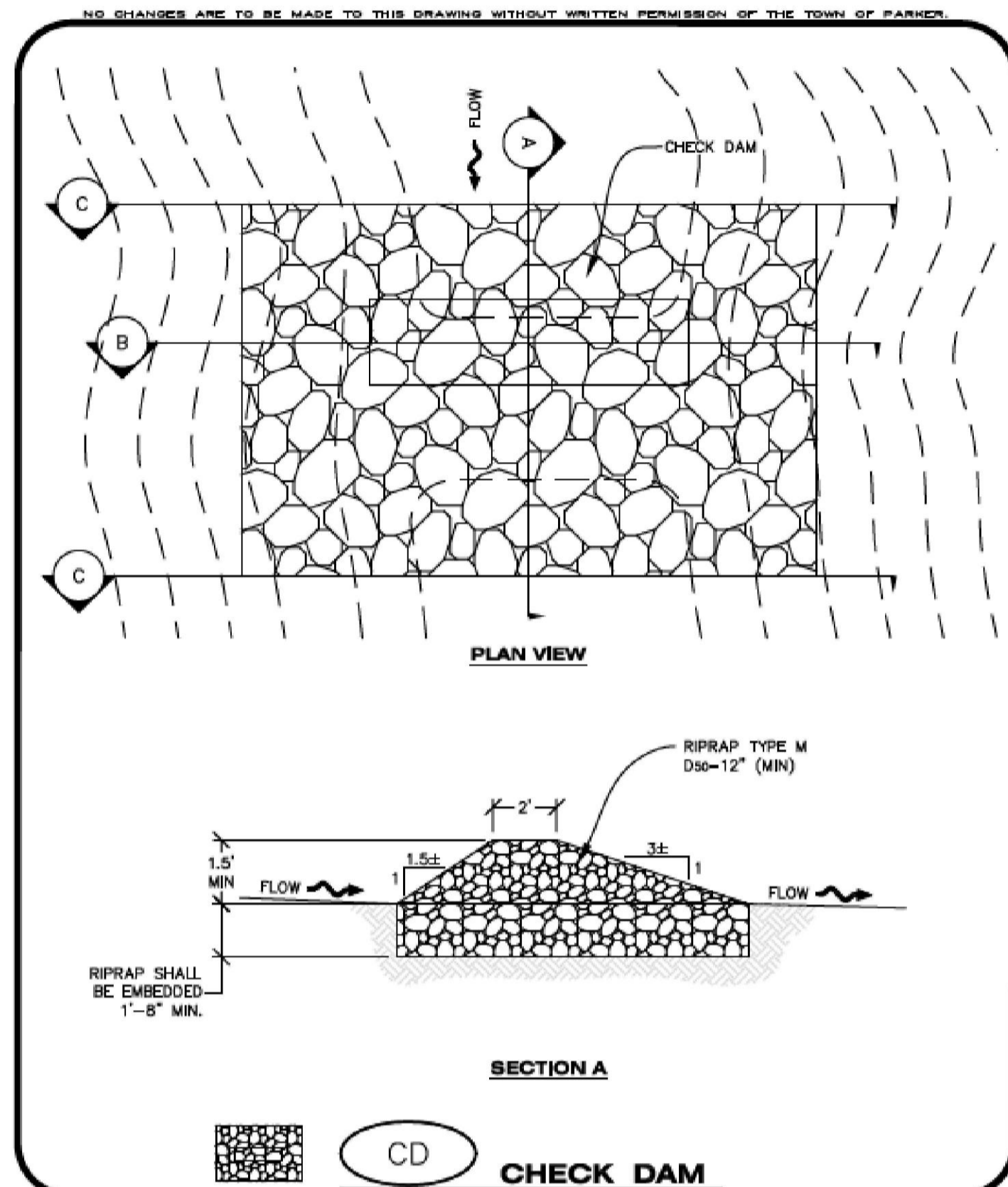
Flow Direction Arrow

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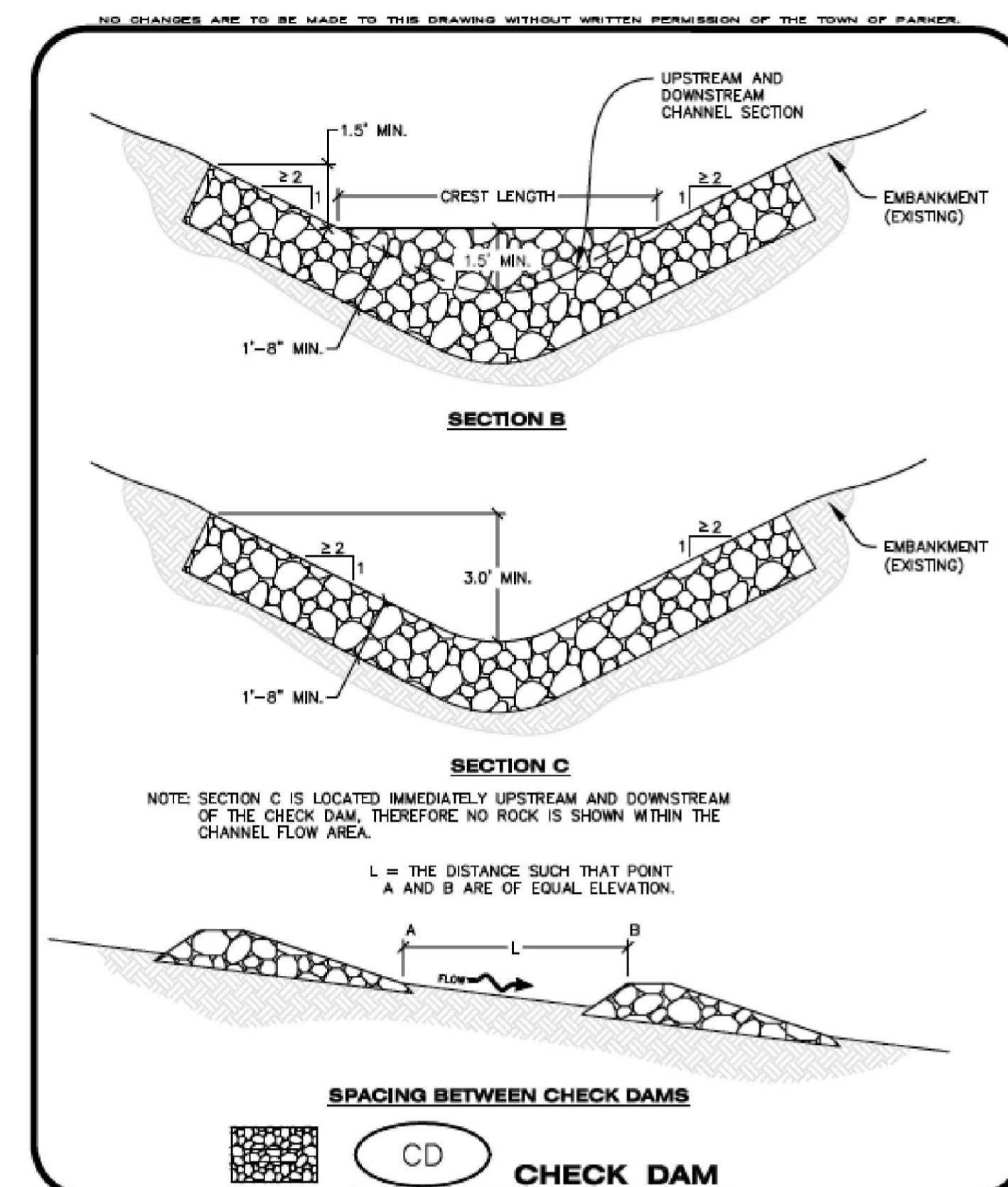


REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING
		CONSTRUCTION MANAGEMENT
		9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado
		Sediment & Erosion Control Plan Final Stage
		Construction Plans
		DATE 09/16/2014 DES/DFI/CHK. WEM/km PROJ. NO. 13-343 SHEET 9 OF 24

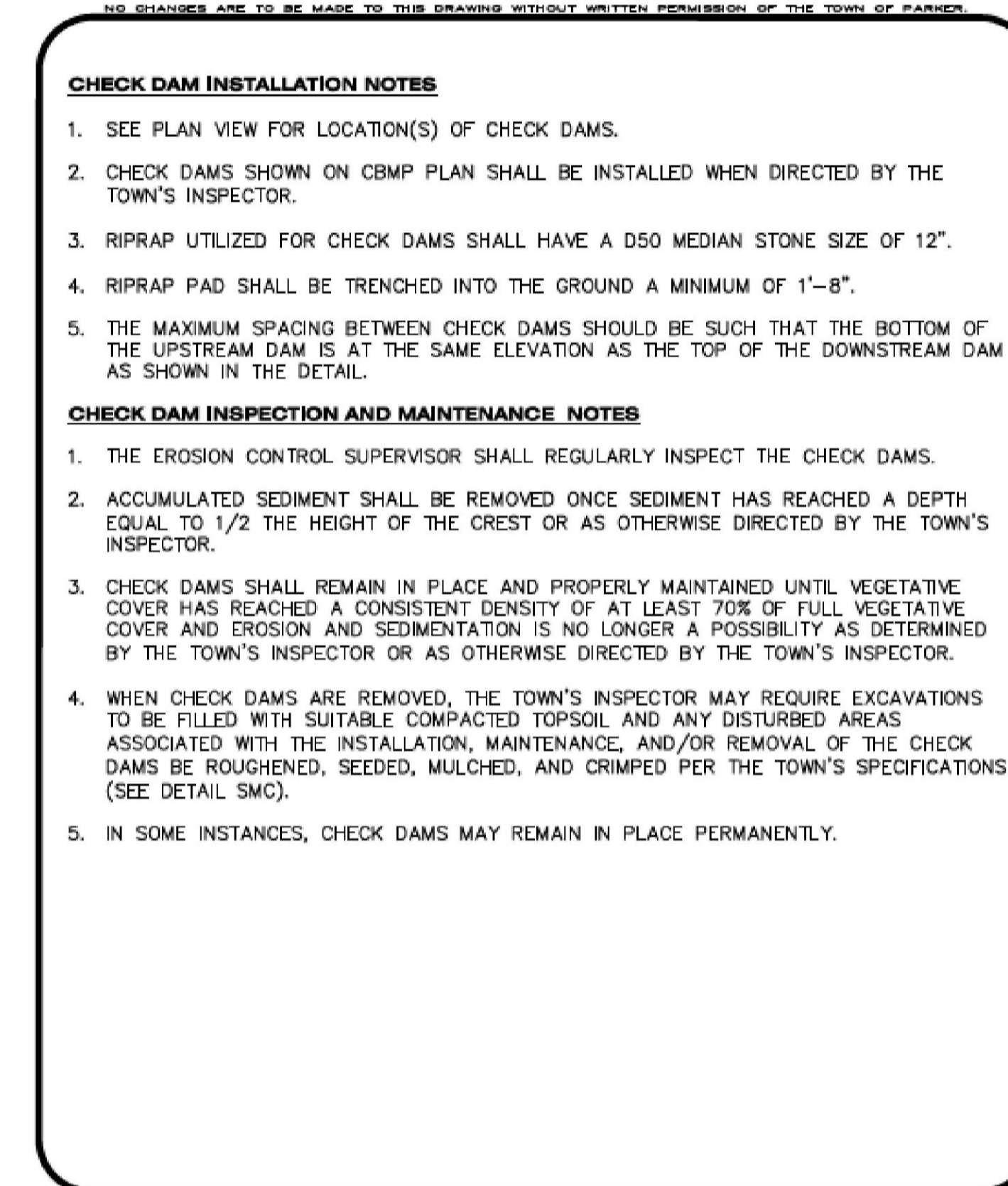




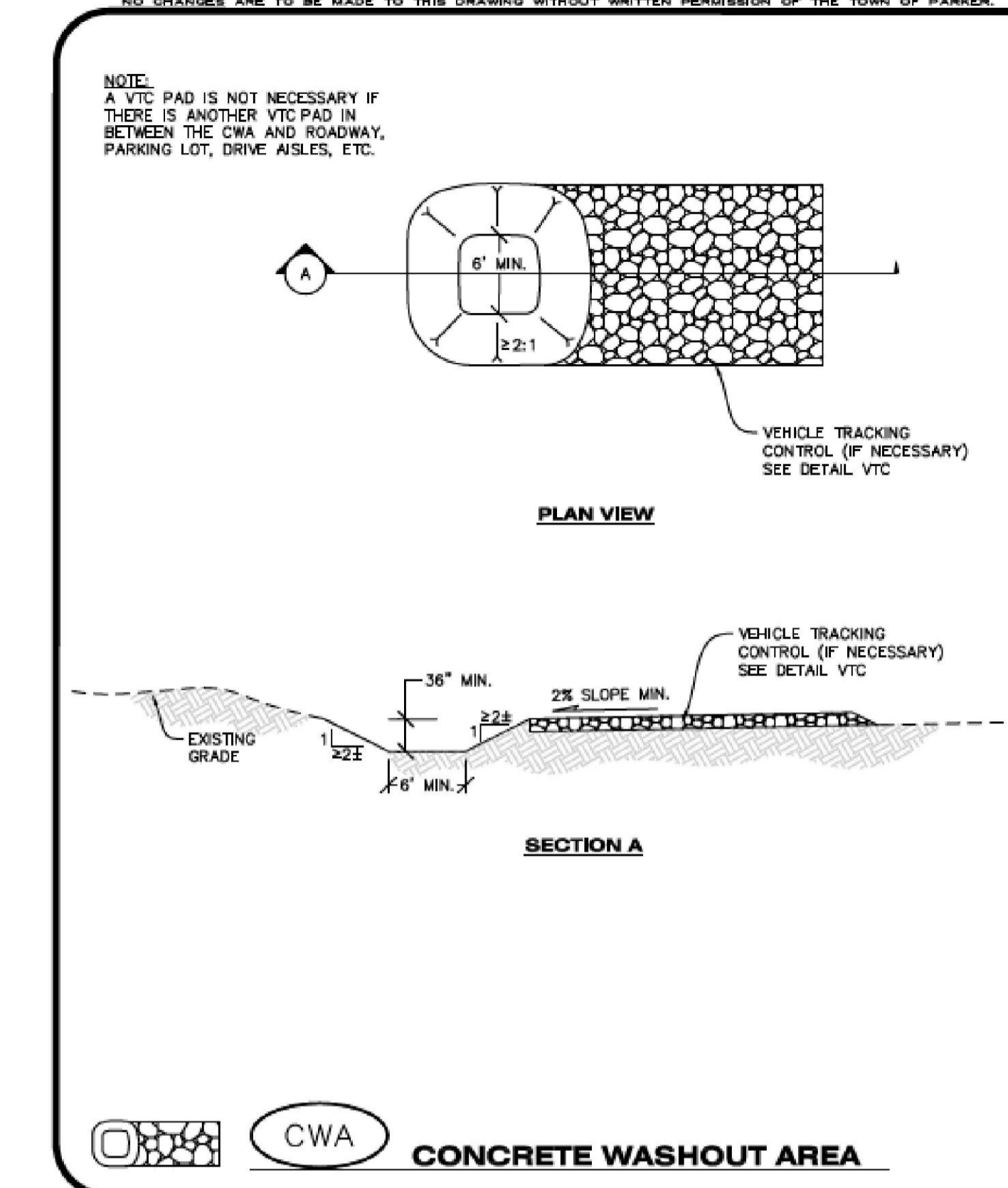
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 CONSTRUCTION BEST MANAGEMENT PRACTICES | 1 OF 3  
 Oct. 2013



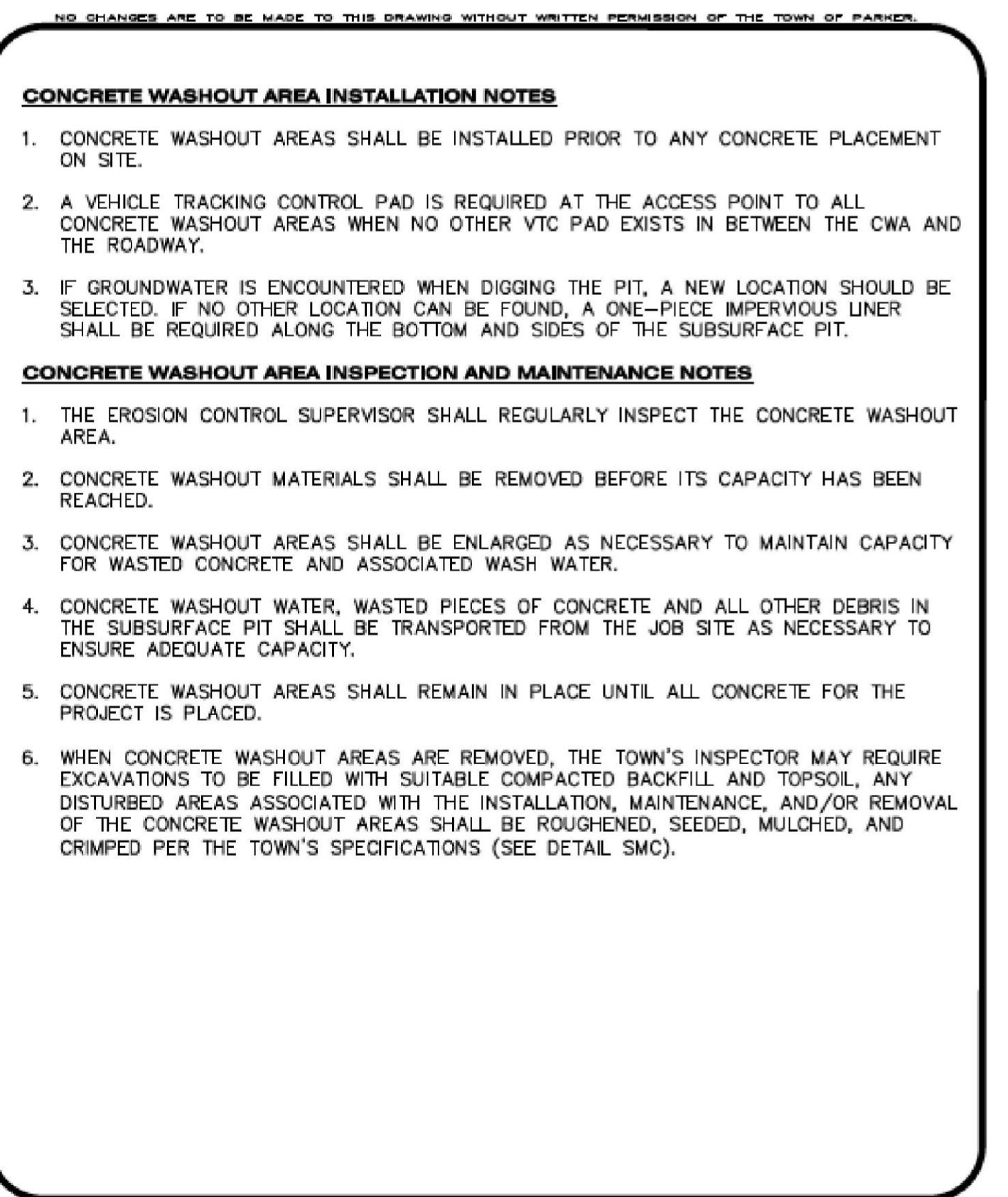
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 CONSTRUCTION BEST MANAGEMENT PRACTICES | 2 OF 3  
 Oct. 2013



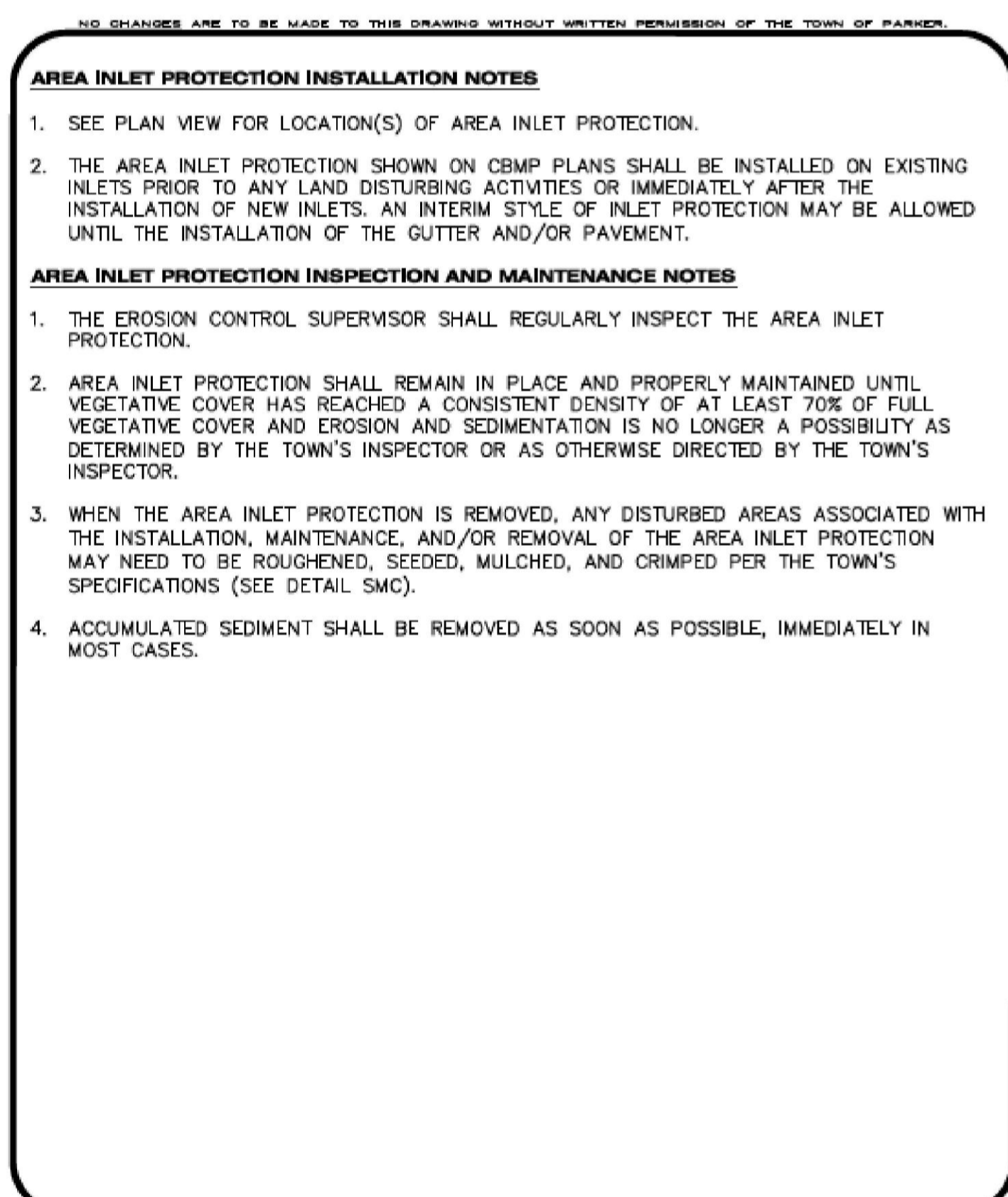
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 CONSTRUCTION BEST MANAGEMENT PRACTICES | 3 OF 3  
 Oct. 2013



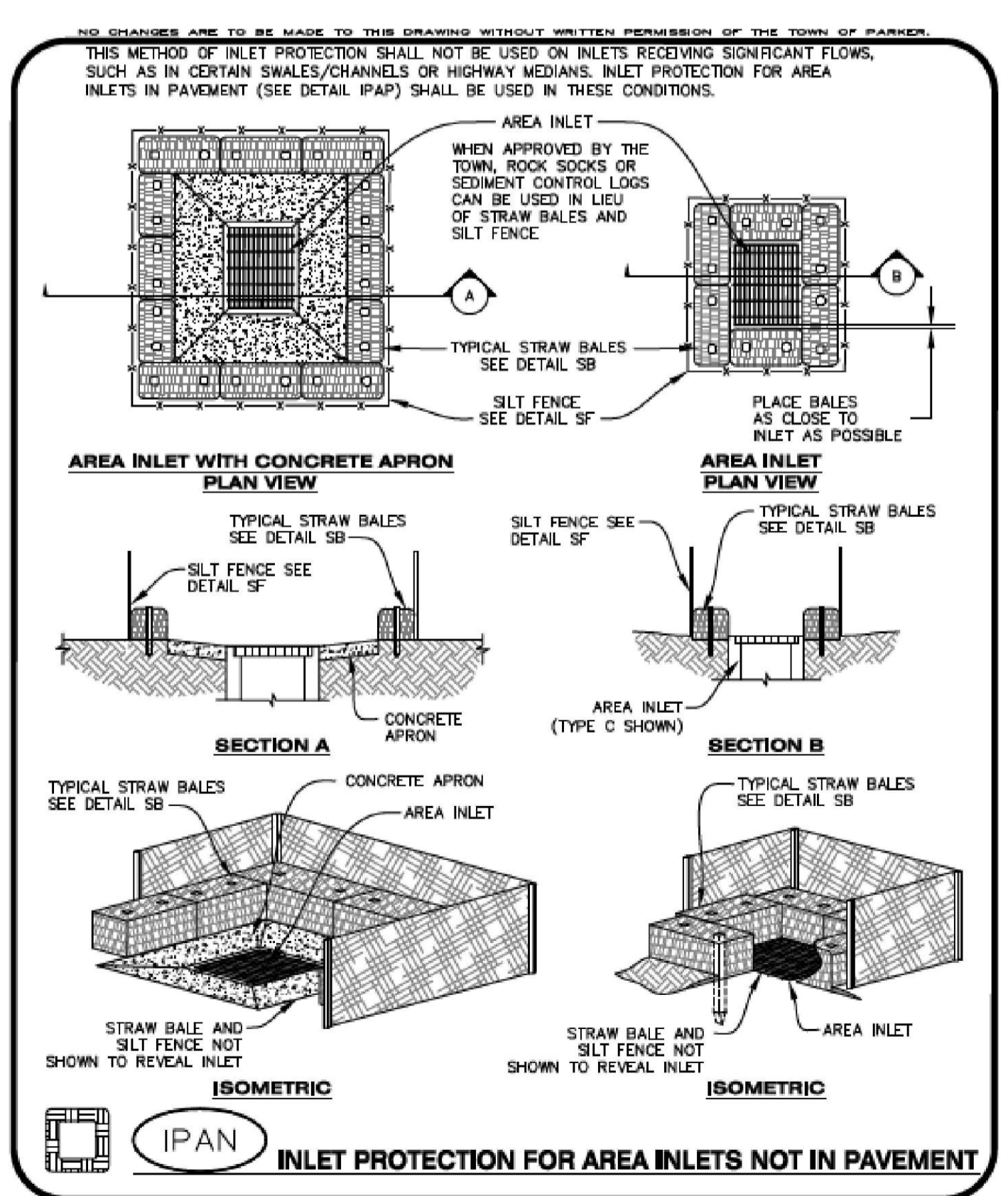
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 CONSTRUCTION BEST MANAGEMENT PRACTICES | 1 OF 2  
 Oct. 2013



**CBMP** | **CWA**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES | 2 OF 2  
 Oct. 2013

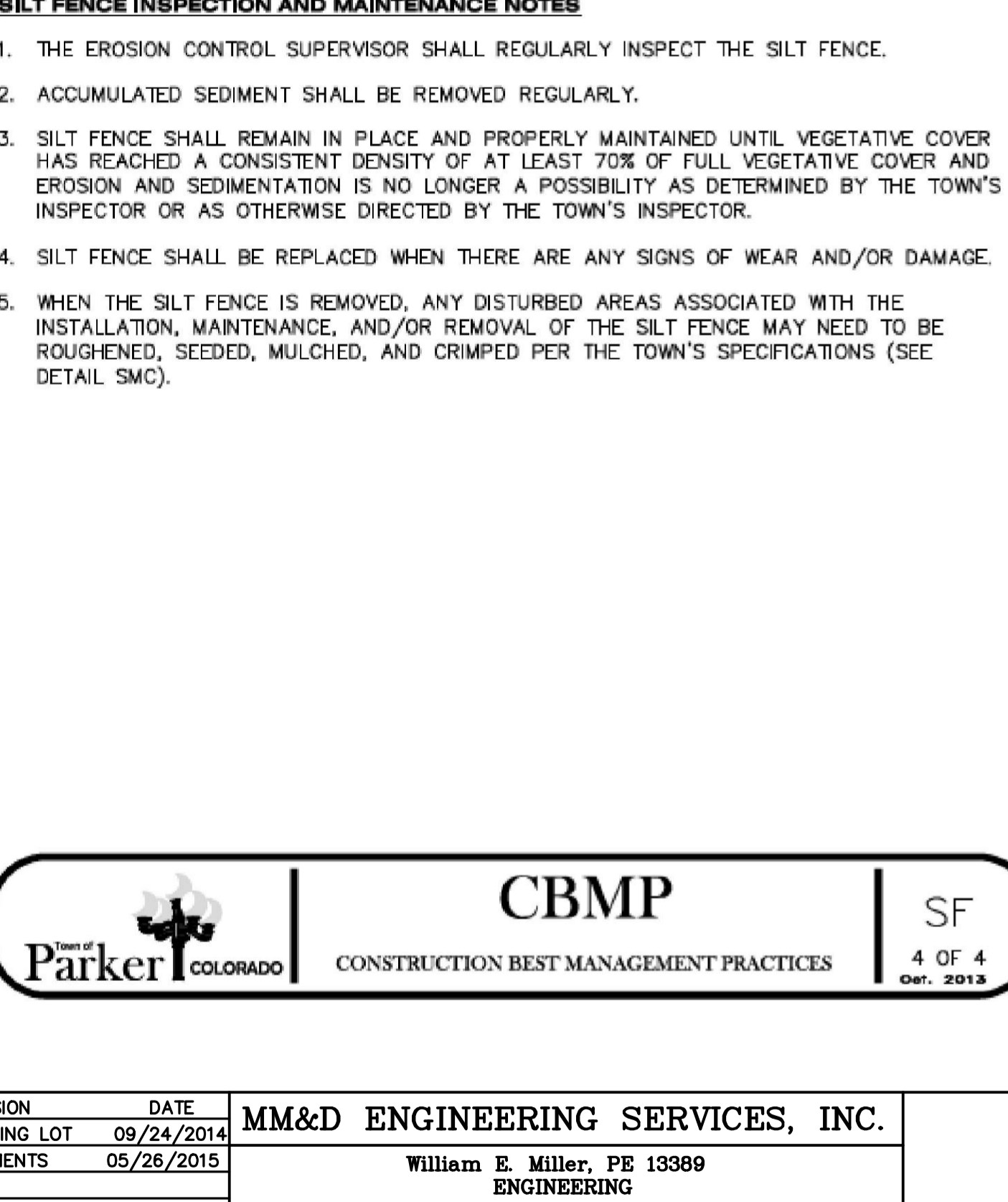
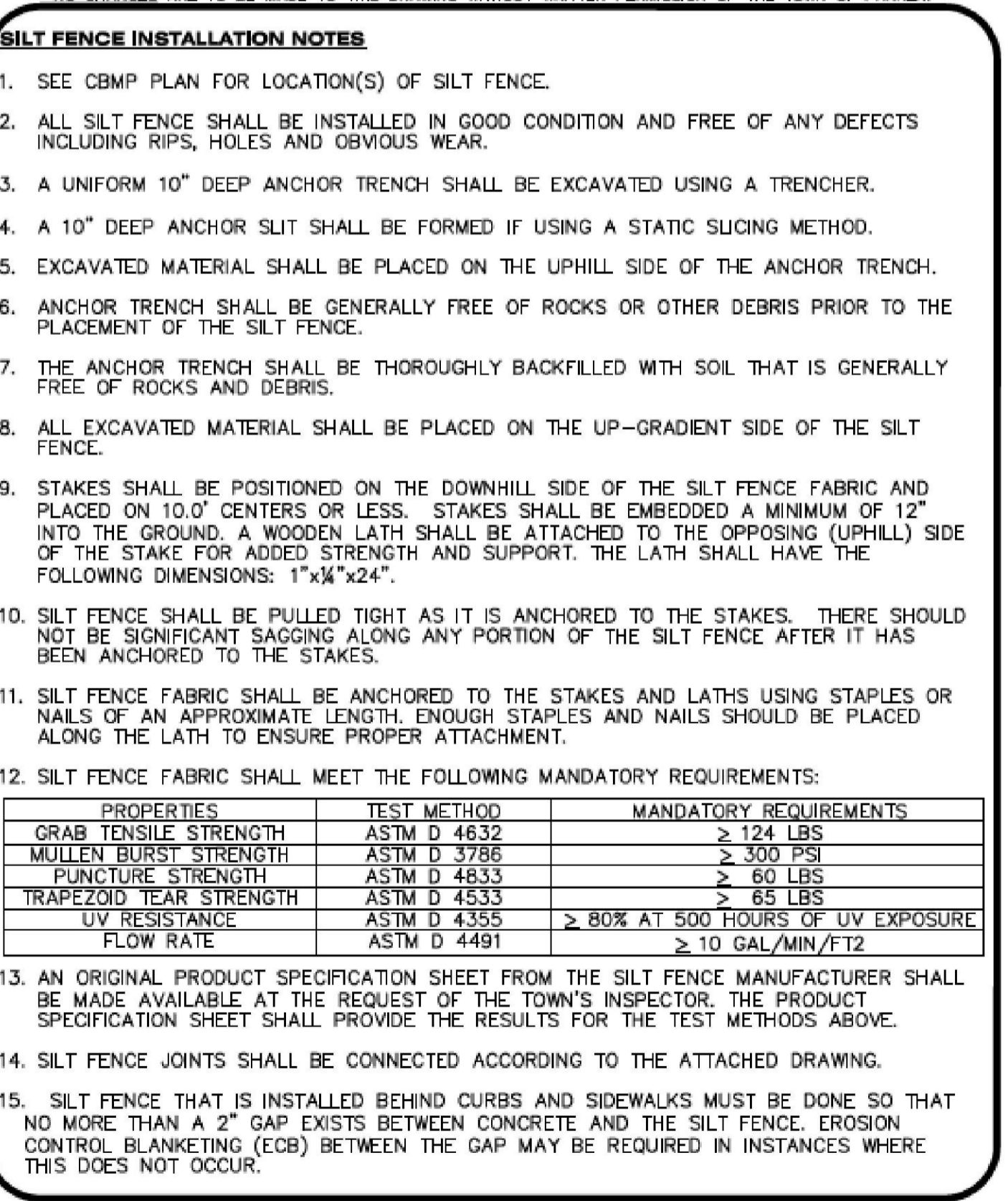
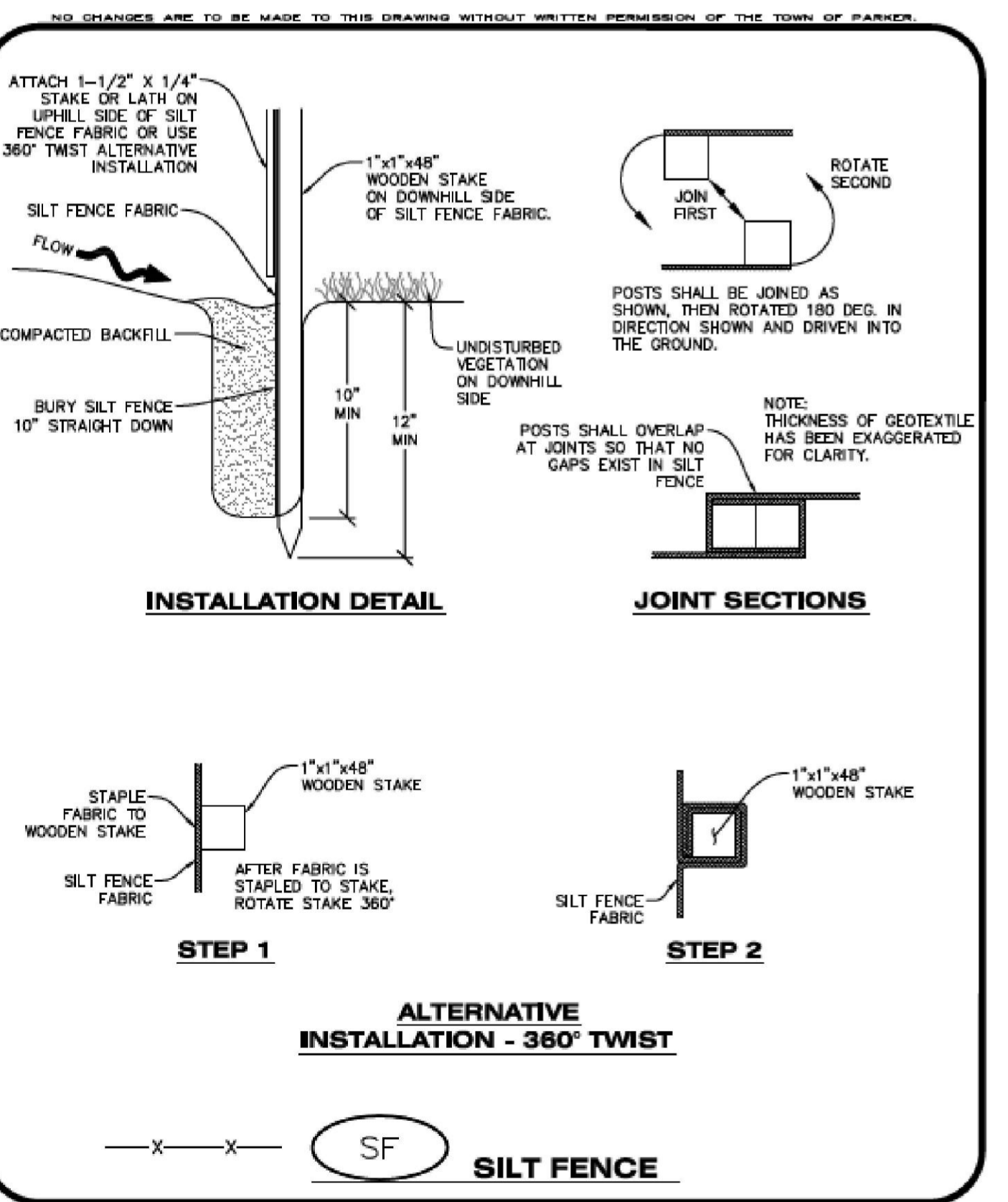
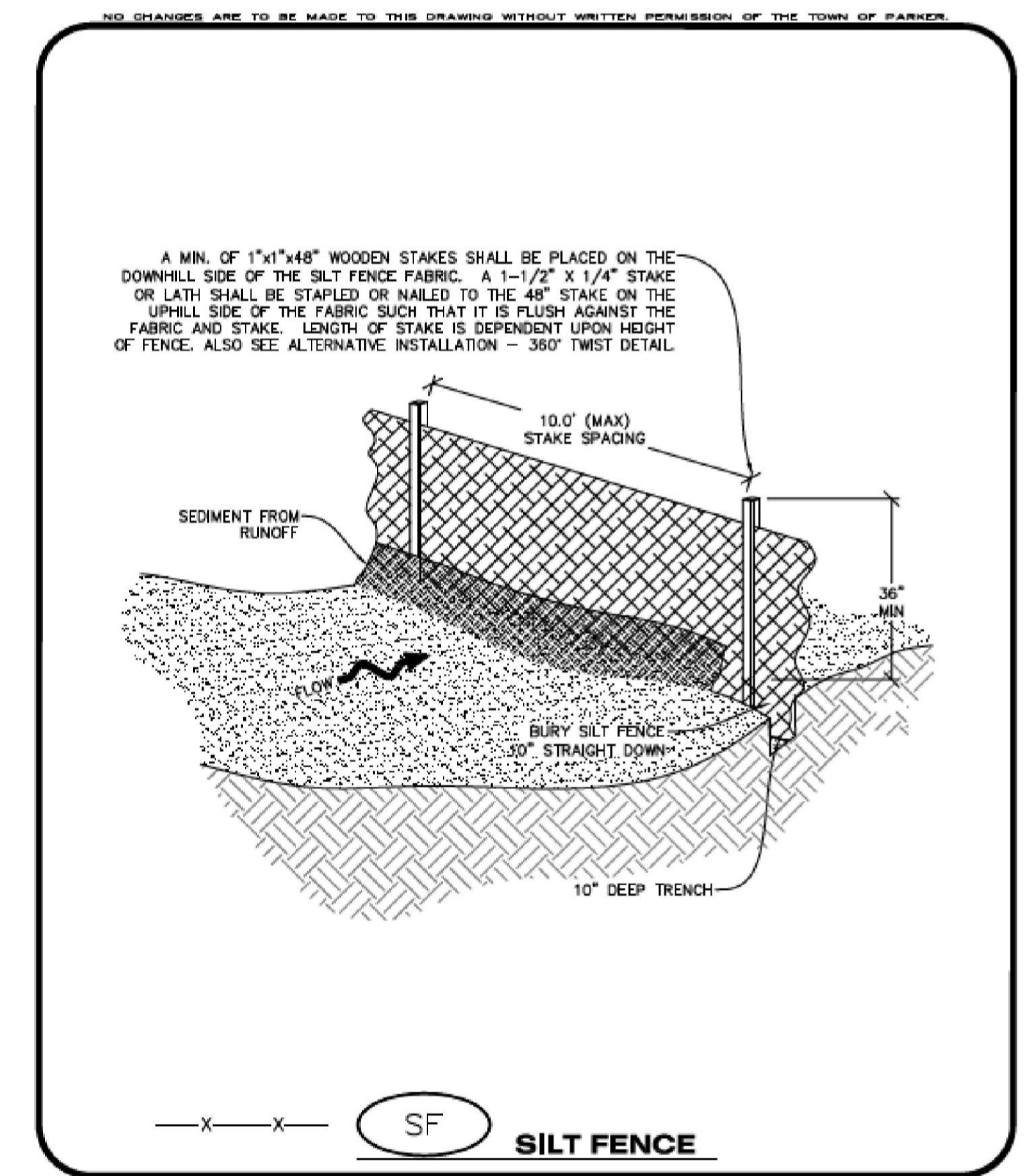
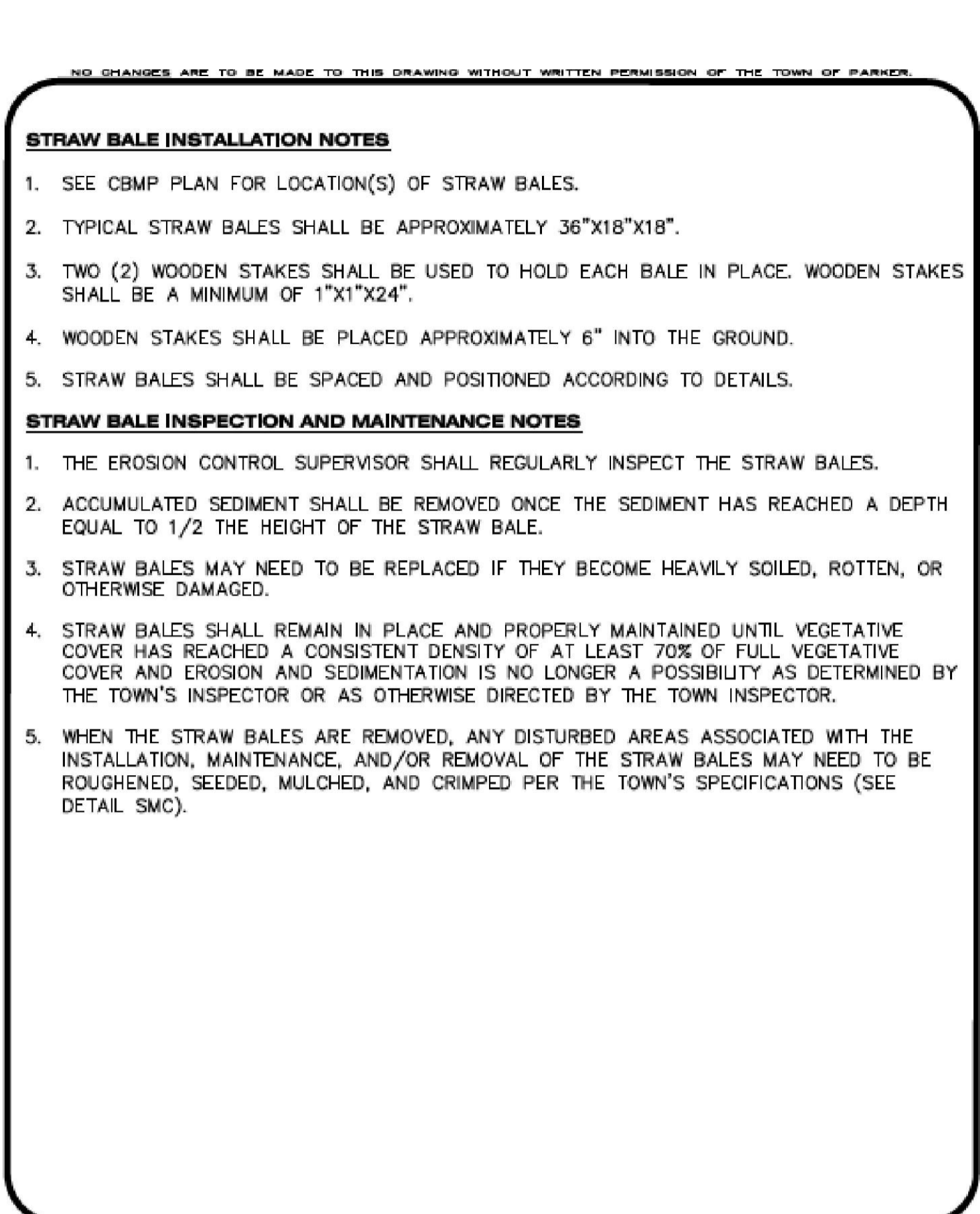
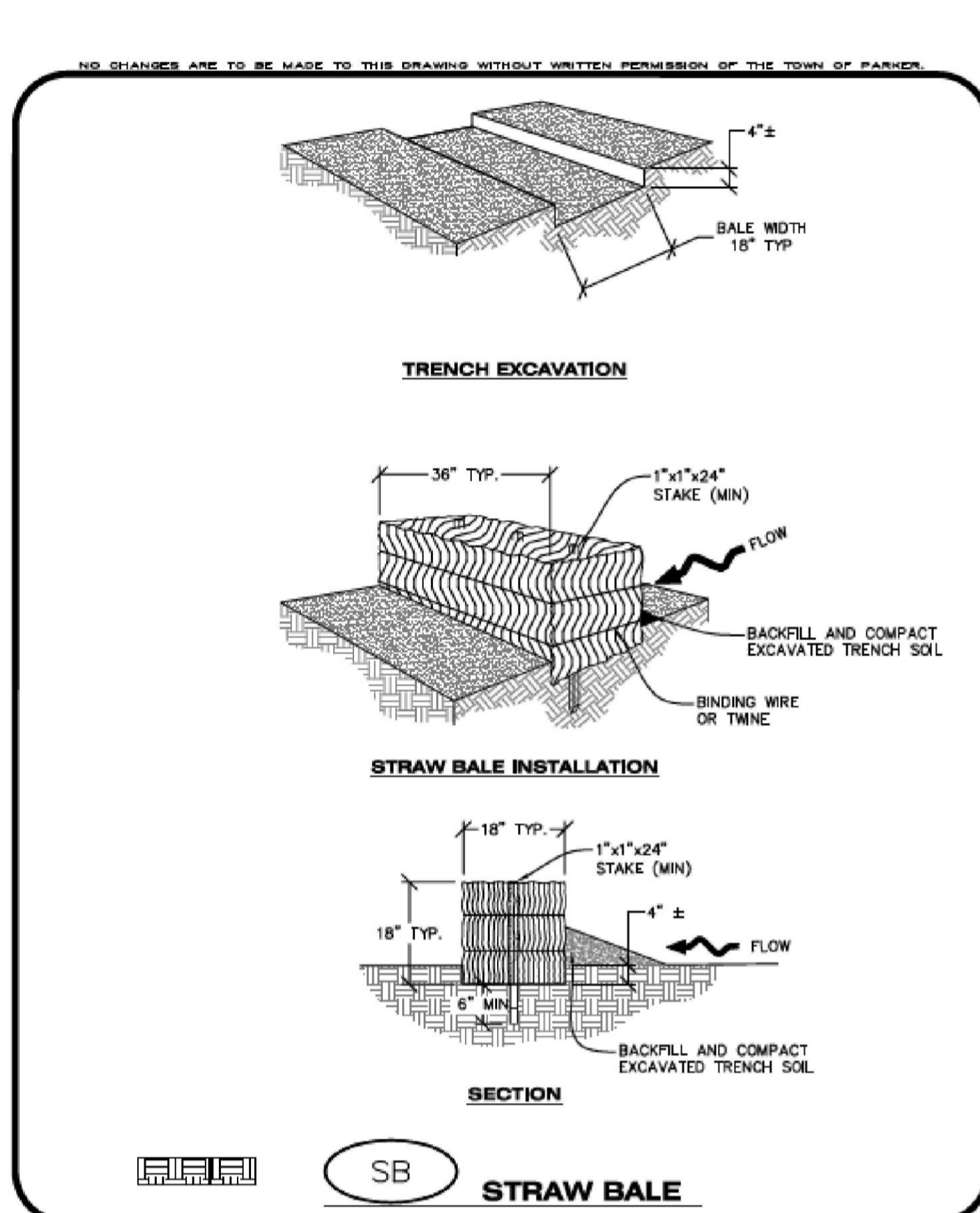
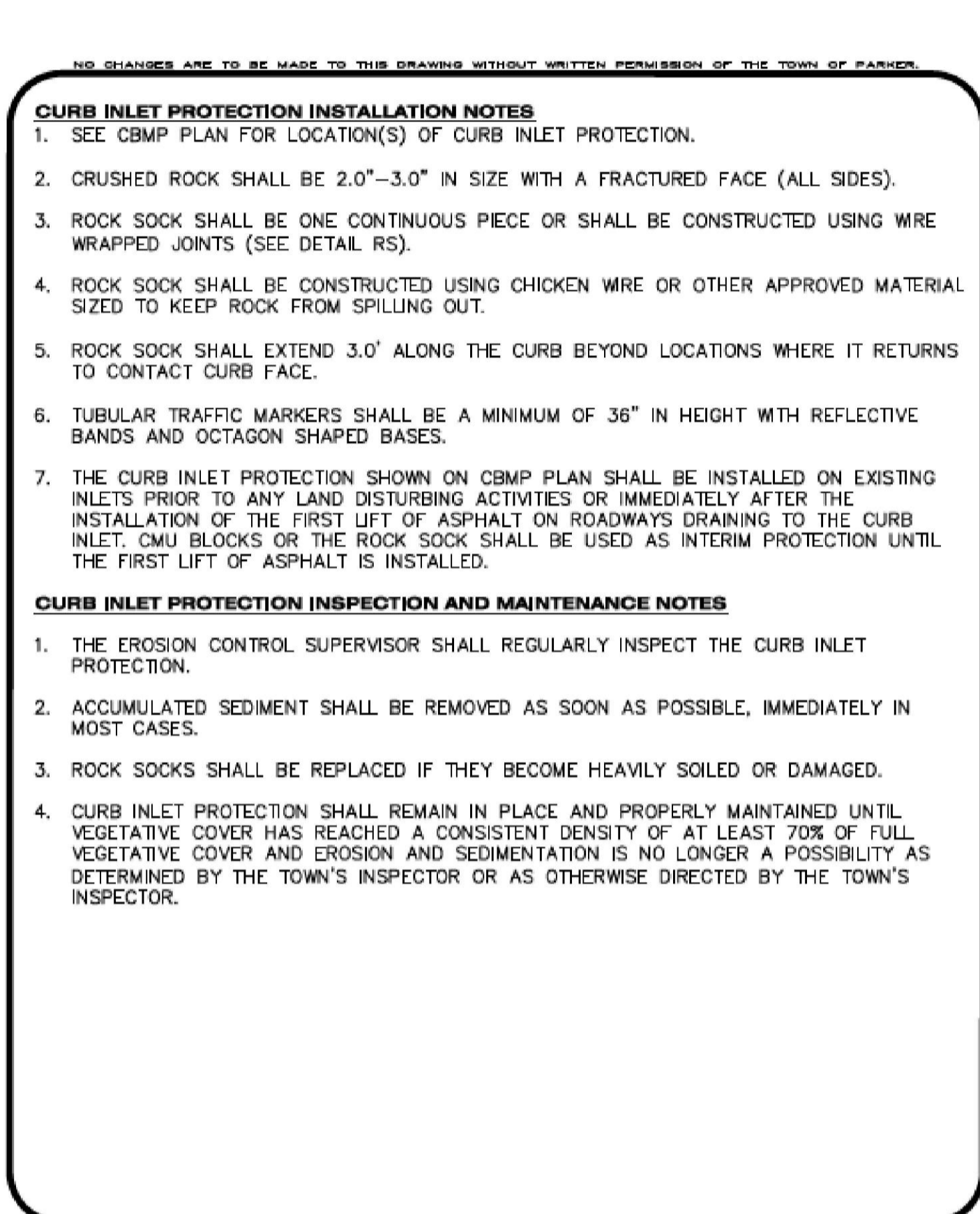
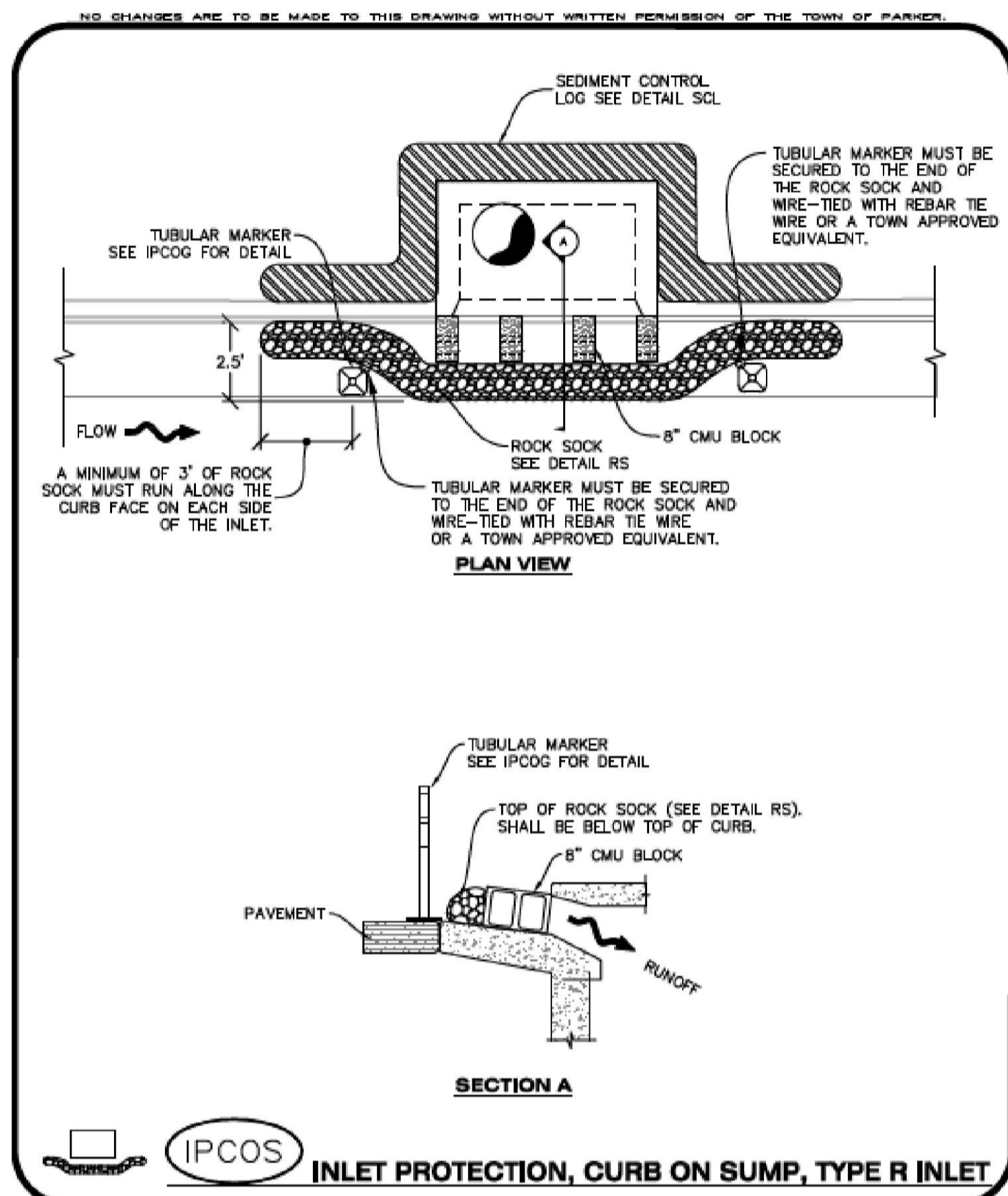


**CBMP** | **IPAN**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES | 1 OF 1  
 Oct. 2013



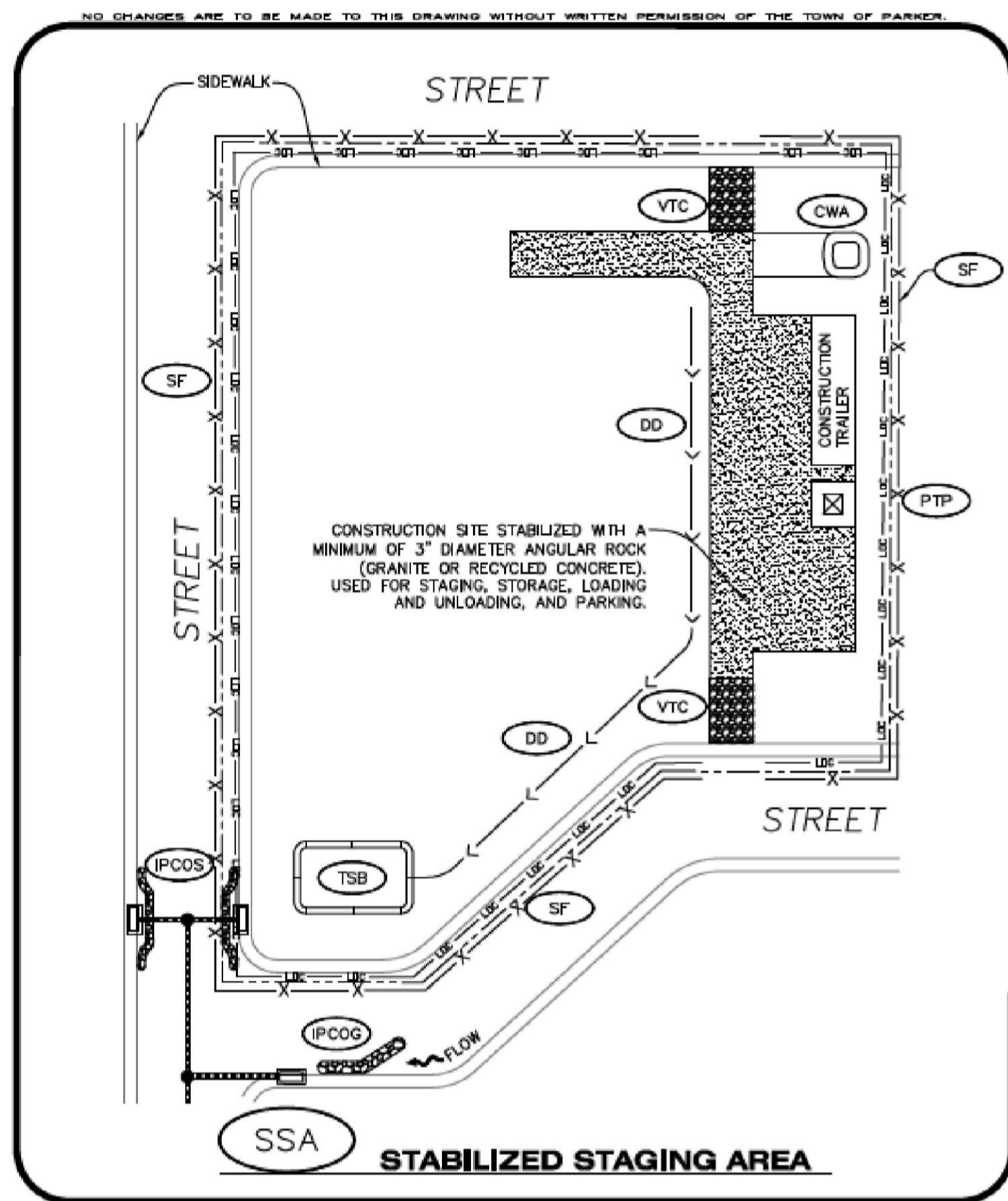
**CBMP** | **IPAN**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES | 1 OF 1  
 Oct. 2013

REVISION	DATE	<b>MM&amp;D ENGINEERING SERVICES, INC.</b> William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
PARKING LOT	09/24/2014	
COMMENTS	05/26/2015	
		<b>Boondocks Parker, Colorado Sediment &amp; Erosion Control Plan Notes &amp; Details Construction Plans</b>
		DATE 09/16/2014 DES/DFI/GHK WEM/km PROJ. NO. 13-343 SHEET 11 OF 24



REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389 ENGINEERING
COMMENTS	09/26/2015	CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Sediment & Erosion Control Plan Notes & Details Construction Plans

DATE 09/16/2014  
DES/DF1/GHK\_WEM/km  
PROJ. NO. 13-343  
SHEET 12 OF 24



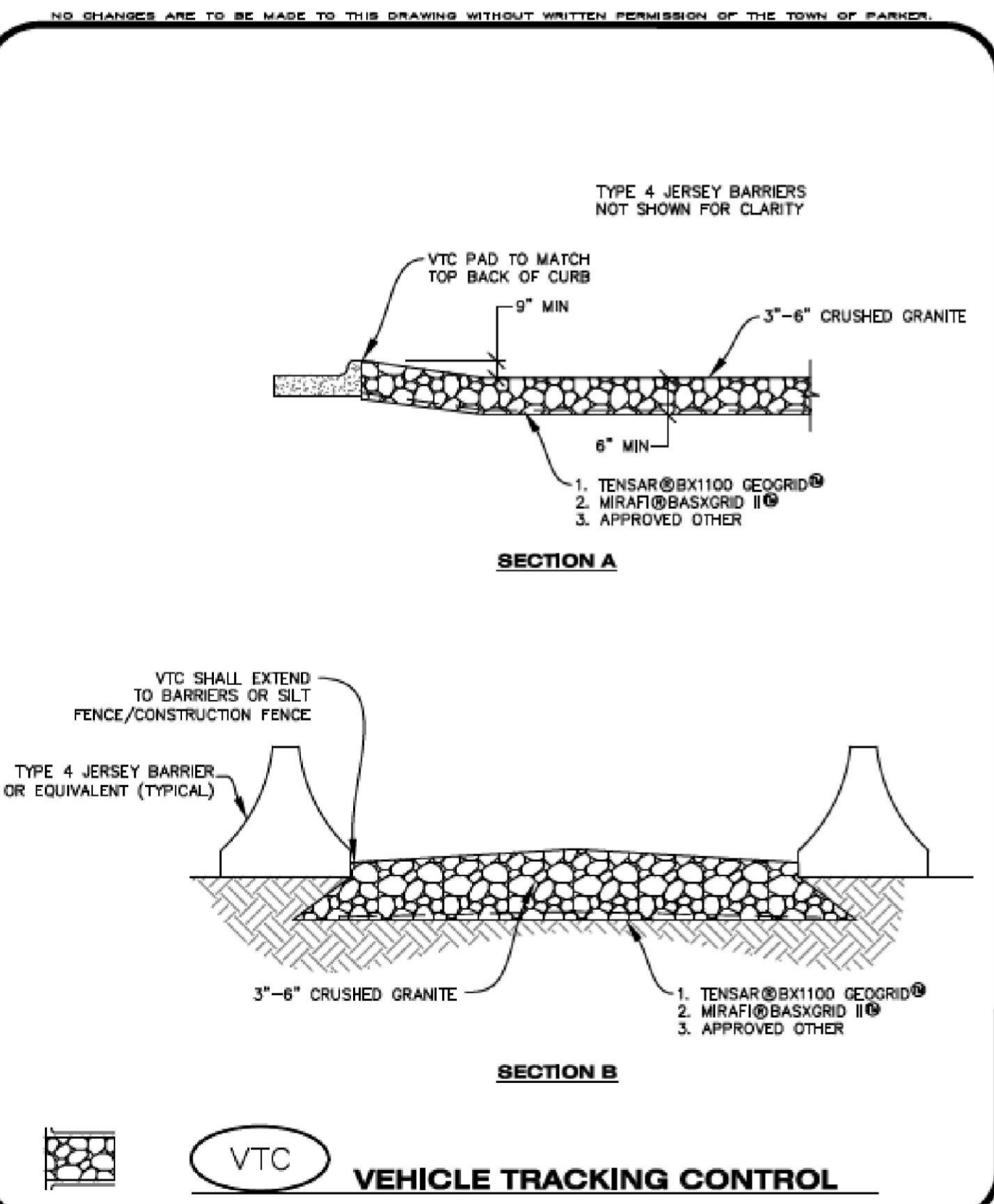
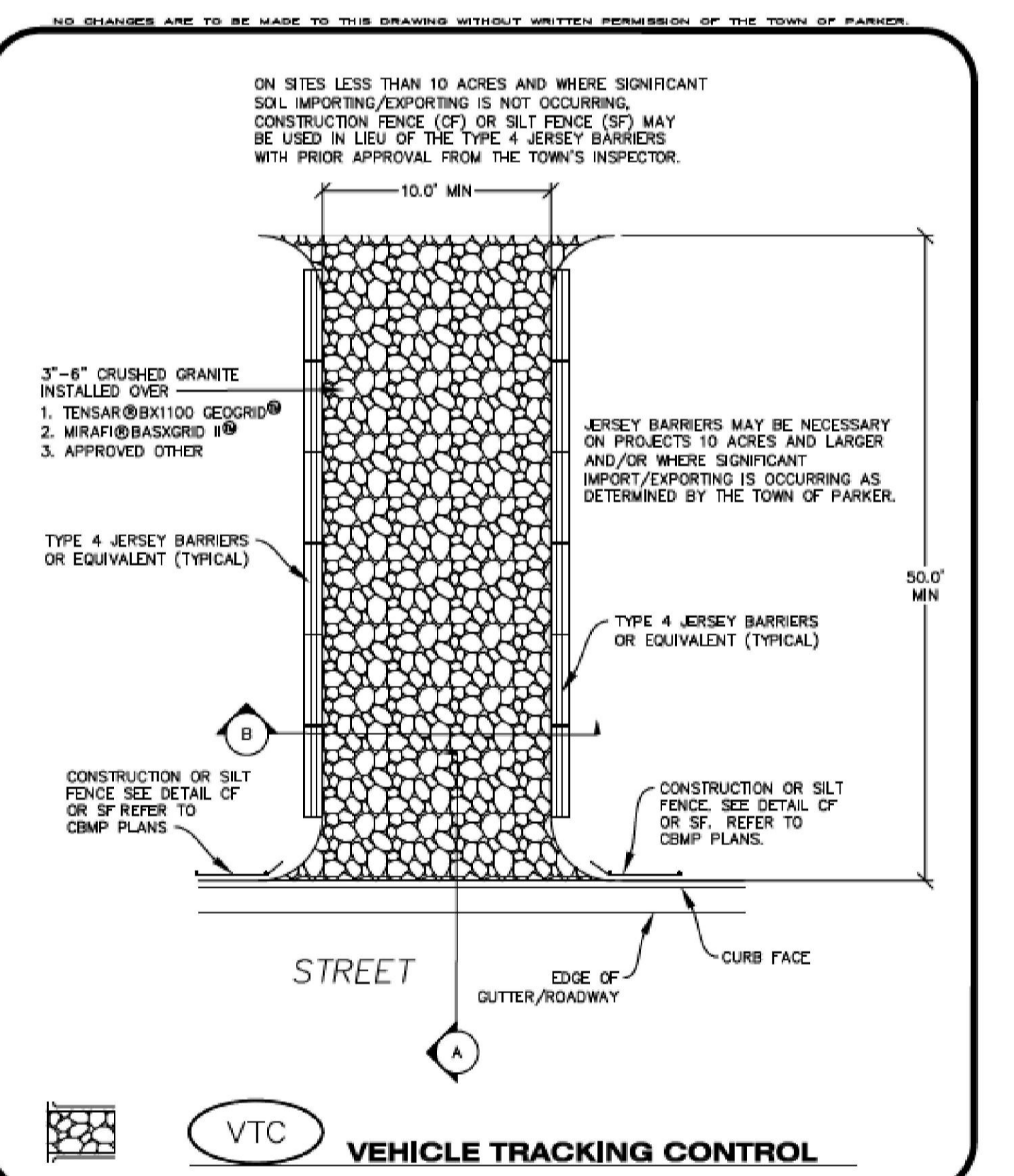
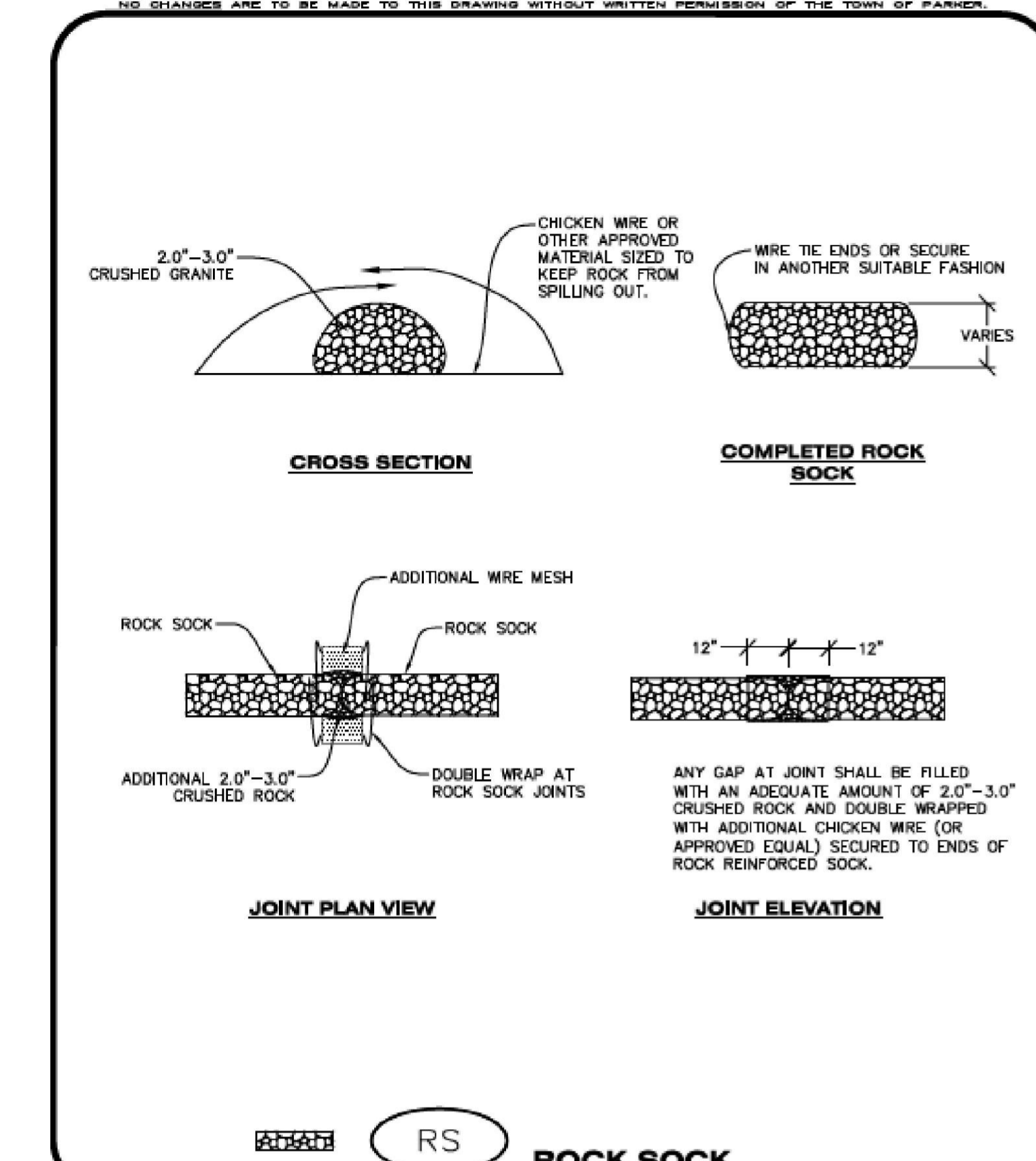
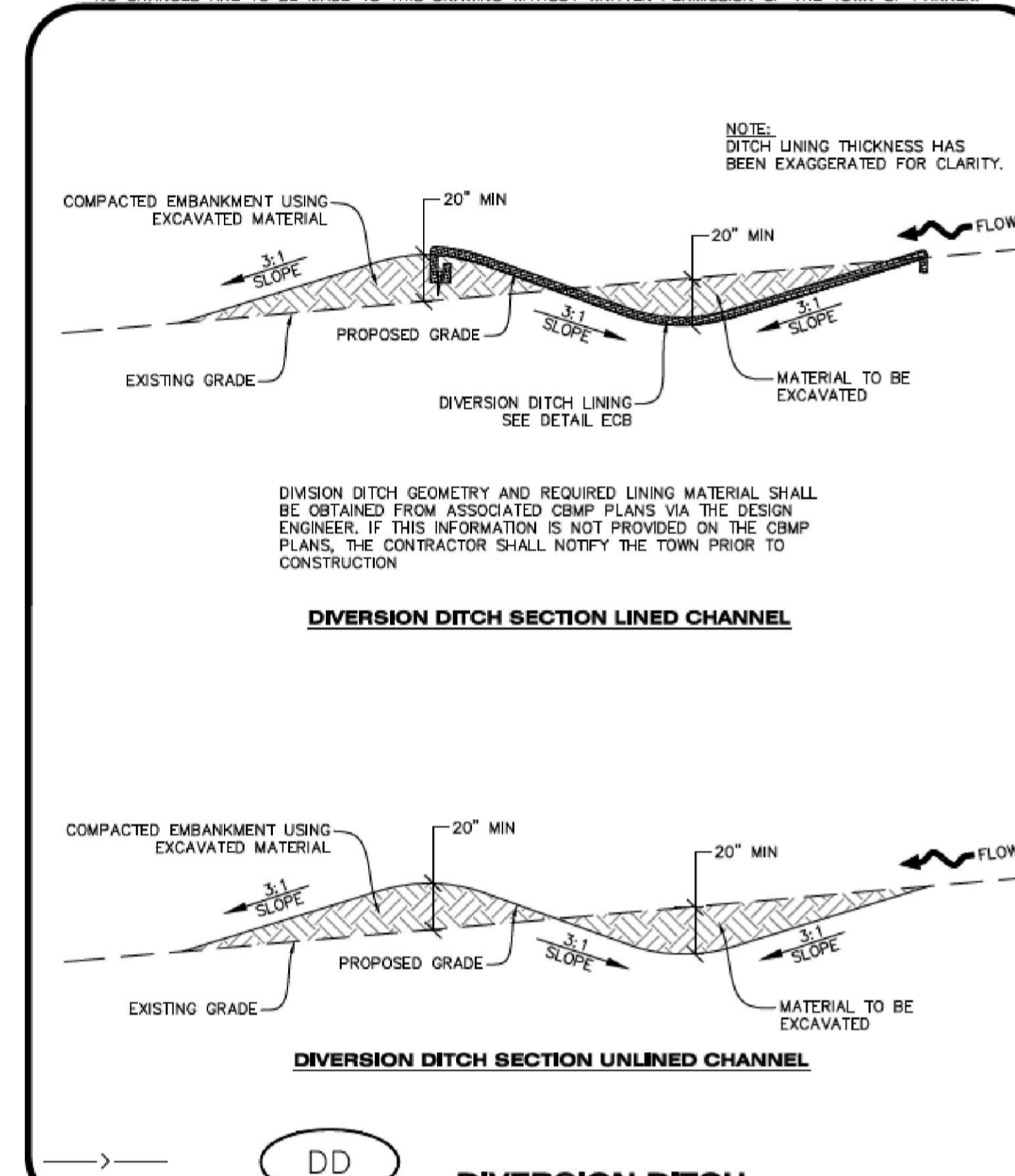
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

**STABILIZED STAGING AREA INSTALLATION NOTES**

- SEE CBMP PLAN FOR LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH TOWN APPROVAL.
- STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND LOADING OPERATIONS.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" DIAMETER OF ANGULAR ROCK (GRANITE OR RECYCLED CONCRETE).
- SSA FOR SMALLER SITES MAY NOT BE PRACTICAL. IN THESE AND SIMILAR SITUATIONS, VARIANCES MAY BE PERMITTED BY THE TOWN.

**STABILIZED STAGING AREA INSPECTION AND MAINTENANCE NOTES**

- THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE STAGING AREA.
- STABILIZED STAGING AREA SHALL BE ENLARGED AS NECESSARY TO CONTAIN PARKING, STORAGE, LOADING, AND UNLOADING.



NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

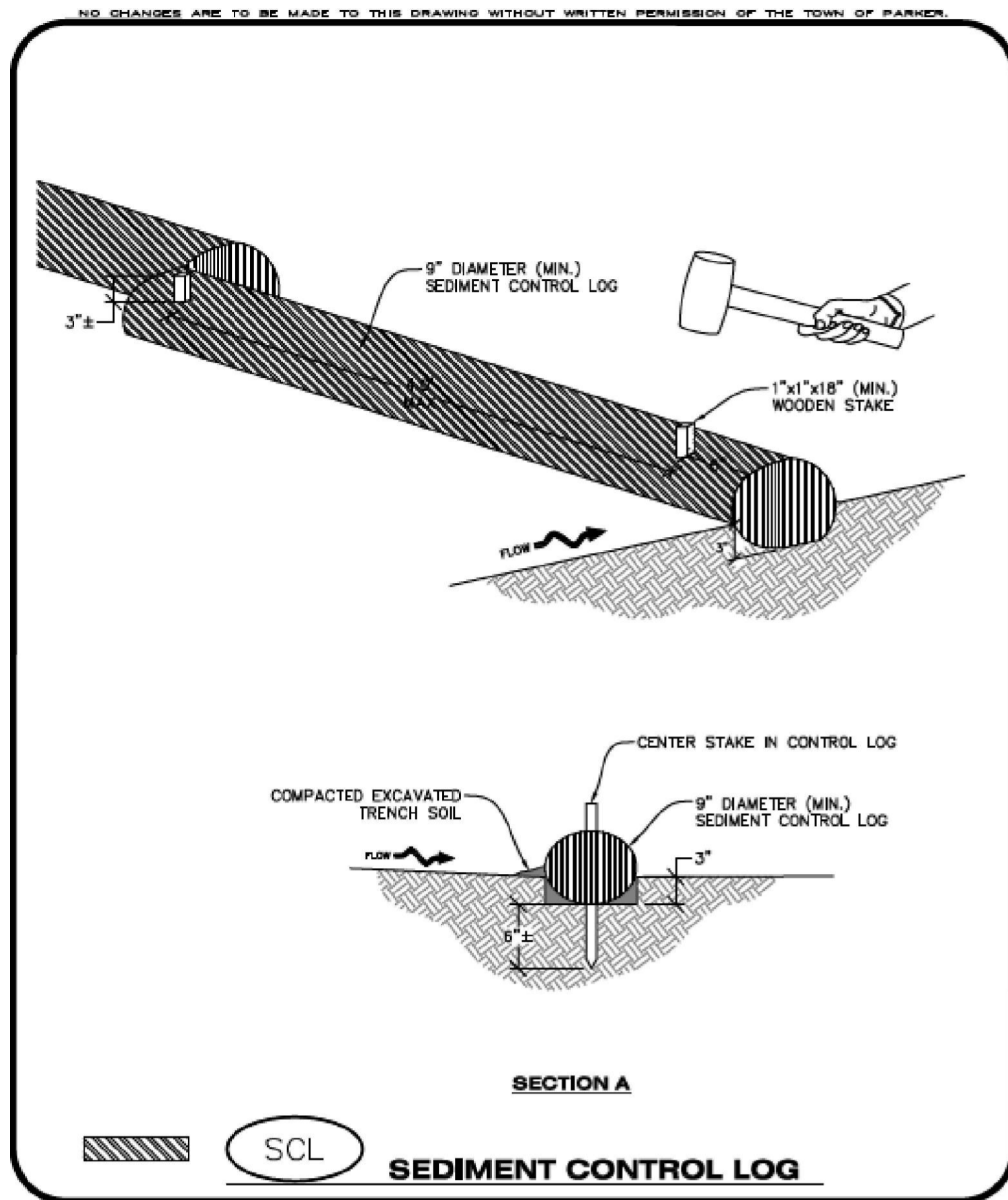
**VEHICLE TRACKING CONTROL PAD INSTALLATION NOTES**

- SEE CBMP PLAN FOR LOCATION(S) OF VEHICLE TRACKING CONTROL PAD(S).
- ALL CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE THROUGH THE APPROVED ACCESS POINT(S). A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL APPROVED ACCESS POINTS TO THE SITE. EXCEPTIONS MAY BE CONSIDERED FOR CONSTRUCTION ACTIVITY OCCURRING IMMEDIATELY ADJACENT TO PAVED AREAS AND WHERE ALTERNATIVE BMP'S ARE IMPLEMENTED. SUCH ACTIVITY MAY INCLUDE, BUT NOT BE LIMITED TO RESIDENTIAL CONSTRUCTION, UTILITY CONSTRUCTION, ETC.
- THE VEHICLE TRACKING CONTROL PAD(S) INDICATED ON CBMP PLAN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- VEHICLE TRACKING CONTROL PADS SHALL BE A MINIMUM OF 50-FOOT LONG AND 10-FOOT WIDE, UNLESS A VARIANCE HAS BEEN GRANTED BY THE TOWN'S INSPECTOR.
- A BIAXIAL GEO-GRID SHALL BE PLACED UNDER THE VEHICLE TRACKING CONTROL PAD PRIOR TO THE PLACEMENT OF ROCK. THE AREA SHALL BE FREE FROM ANY VOIDS, ROCKS AND DEBRIS. THE BIAXIAL GEO-GRID SHALL BE TENSAR BX1100, MIRAFLO BASKGRID II, OR AN APPROVED EQUAL. GEO-GRID SHALL BE PLACED, AND APPROPRIATELY OVERLAPPED IF NECESSARY, TO COVER THE ENTIRE LENGTH AND WIDTH OF THE VEHICLE TRACKING CONTROL PAD.
- CRUSHED ROCK SHALL BE A MINIMUM OF 3-6" GRANITE WITH A FRACTURED FACE (ALL SIDES).

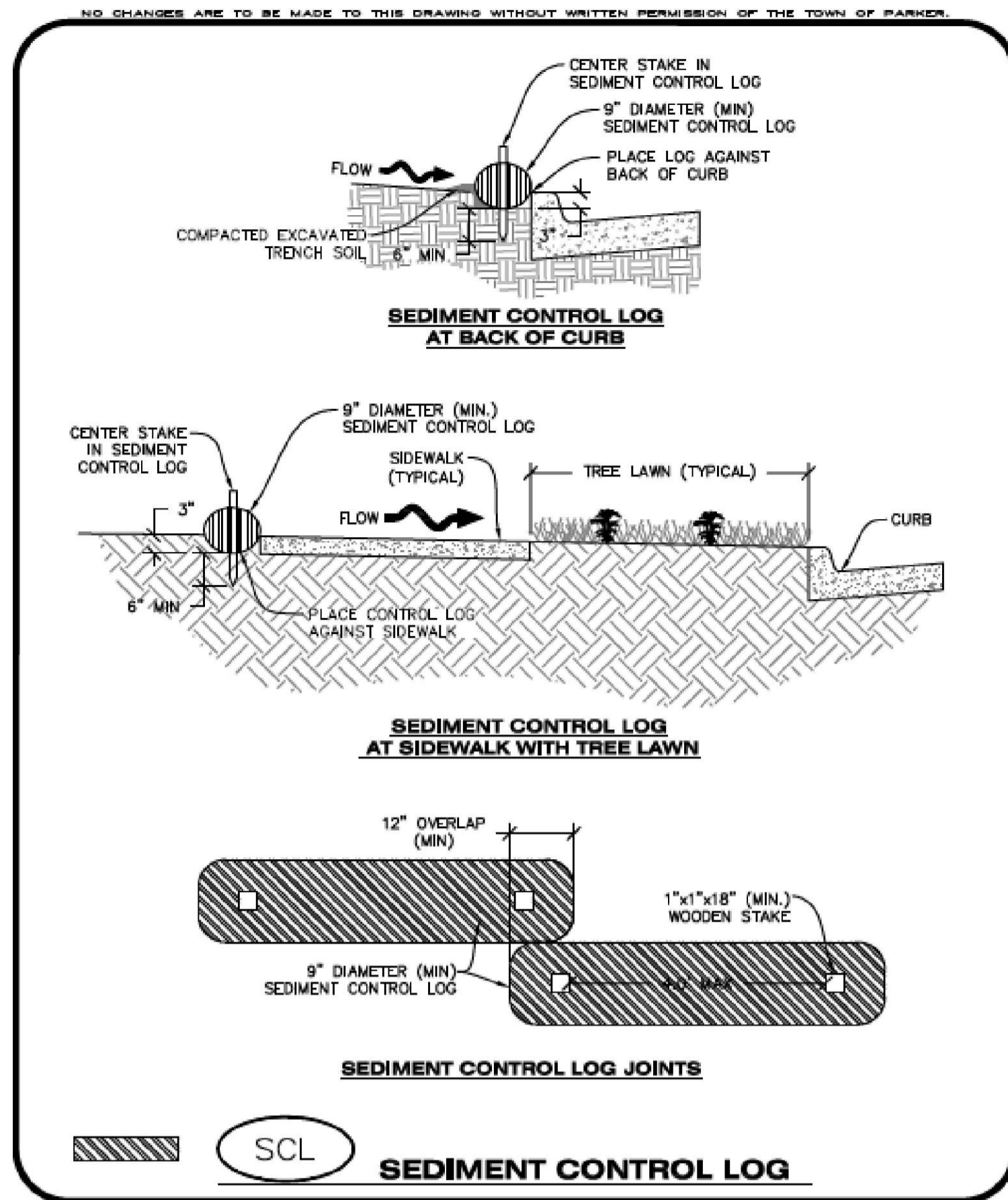
**VEHICLE TRACKING CONTROL PAD INSTALLATION AND MAINTENANCE NOTES**

- THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE VEHICLE TRACKING CONTROL PAD.
- WHEN THE VEHICLE TRACKING CONTROL PAD IS REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE VEHICLE TRACKING CONTROL PAD SHALL BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).
- THE VEHICLE TRACKING CONTROL PAD SHALL BE MAINTAINED SUCH THAT THE ROCK REMAINS RELATIVELY LOOSE AND ACCUMULATED MUD AND OTHER DEBRIS IS REGULARLY REMOVED.

REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389 ENGINEERING
COMMENTS	05/26/2015	CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado
		Sediment & Erosion Control Plan Notes & Details Construction Plans
		DATE 09/16/2014 DES/CHK WEM/km PROJ. NO. 13-343 SHEET 13 OF 24



**CBMP** | SCL | 1 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

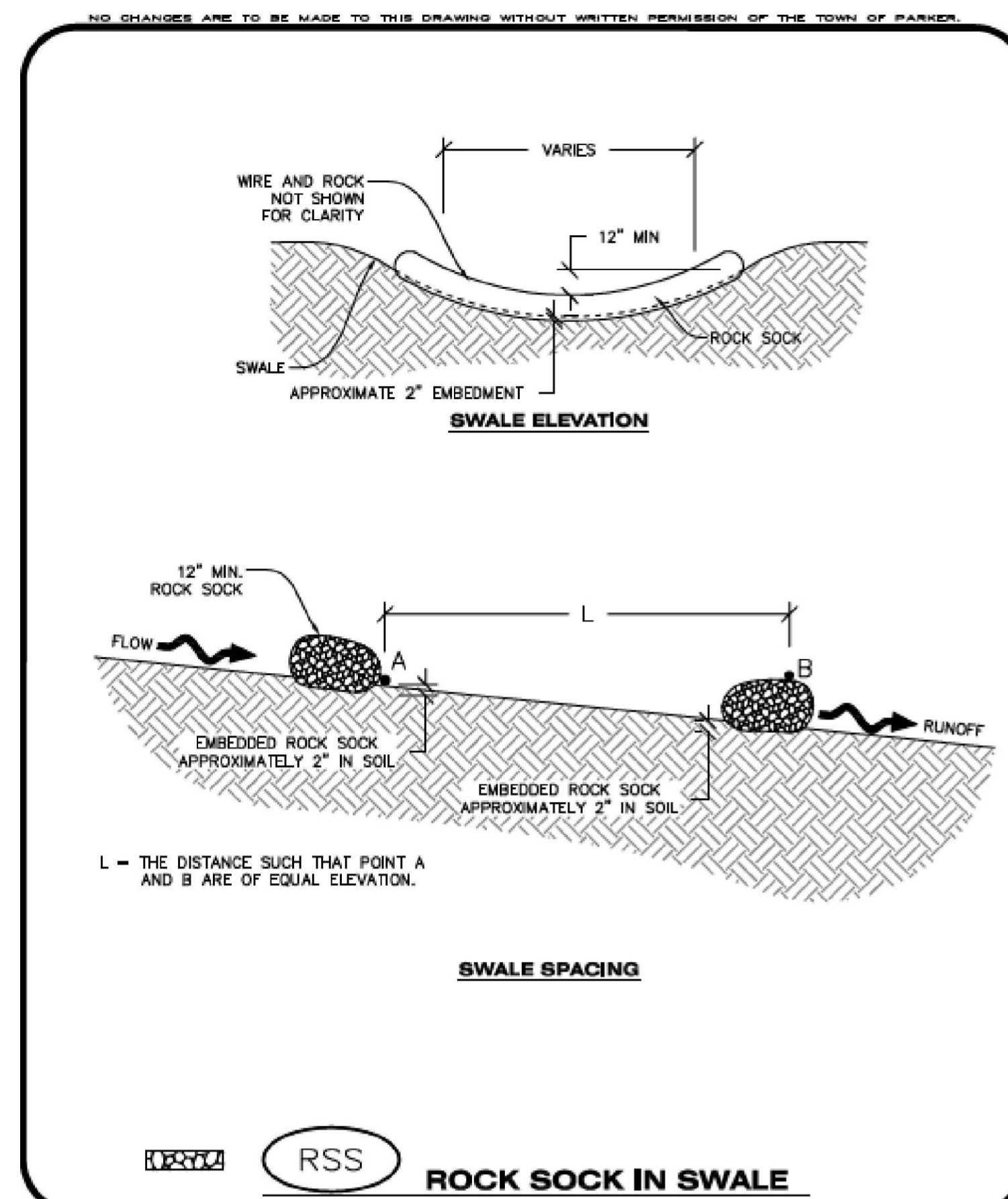


**CBMP** | SCL | 2 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

- NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.
- SEDIMENT CONTROL LOG INSTALLATION NOTES**
- SEE CBMP PLAN FOR LOCATION(S) OF SEDIMENT CONTROL LOGS.
  - ALL SEDIMENT CONTROL LOGS SHALL BE INSTALLED FREE OF DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
  - SEDIMENT CONTROL LOGS SHALL BE INSTALLED IMMEDIATELY ADJACENT TO AN IMPERVIOUS SURFACE SUCH AS A CURB HEAD, SIDEWALK, INLET LID, ETC. NO GAPS SHALL EXIST BETWEEN THE SEDIMENT CONTROL LOG AND THE IMPERVIOUS SURFACE.
  - A UNIFORM 3" DEEP ANCHOR TRENCH (APPROX.) IN THE SHAPE OF A HALF-SPHERE SHALL BE EXCAVATED USING A TRENCHER, SPADE-SHAPED SHOVEL, OR PICK. THE ANCHOR TRENCH SHALL BE SIZED TO ALLOW FOR THE SEDIMENT CONTROL LOG TO SEAT TIGHTLY AGAINST THE ANCHOR TRENCH.
  - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE ANCHOR TRENCH AND PROPERLY COMPACTED.
  - ANCHOR TRENCH SHALL BE RELATIVELY FREE OF ROCKS OR OTHER DEBRIS PRIOR TO THE PLACEMENT.
  - ALL SEDIMENT CONTROL LOGS SHALL BE PLACED 3" (APPROX.) BELOW THE GROUND AND PULLED TIGHT ON BOTH ENDS TO REMOVE ANY CURVES OR SNAGS.
  - THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS RELATIVELY FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED AGAINST THE GROUND AND SEDIMENT CONTROL LOG USING A SHOVEL, OR SIMILAR DEVICE.
  - SEDIMENT CONTROL LOG STAKES SHALL BE MADE OF WOOD AND SECURELY ANCHOR THE SCL IN PLACE.
  - STAKES SHALL BE PLACED ON 4.0' CENTERS AND EMBEDDED APPROXIMATELY 6" INTO THE GROUND. STAKES THAT ARE BROKEN PRIOR TO OR DURING INSTALLATION SHALL BE REPLACED.
  - SEDIMENT CONTROL LOGS SHALL OVERLAP A MINIMUM OF 12". THE OVERLAPPING SHALL OCCUR ON THE UP-GRADE SIDE OF THE LOGS.
  - SEDIMENT CONTROL LOGS SHALL BE STAKED WITHIN 6" FROM EACH END.
  - SEDIMENT CONTROL LOGS THAT ARE INSTALLED BEHIND CURBS AND SIDEWALKS MUST BE DONE SO THAT NO MORE THAN A 2" GAP EXISTS BETWEEN THE CONCRETE AND THE LOG. EROSION CONTROL BLANKETING (ECB) BETWEEN THE GAP MAY BE REQUIRED IN INSTANCES WHERE THIS DOES NOT OCCUR.

- SEDIMENT CONTROL LOG INSPECTION AND MAINTENANCE NOTES**
- THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SEDIMENT CONTROL LOGS.
  - ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 THE HEIGHT OF EXPOSED LOG.
  - SEDIMENT CONTROL LOGS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
  - SEDIMENT CONTROL LOGS SHALL BE REPLACED WHEN THERE ARE ANY SIGNS OF WEAR OR DAMAGE THAT WOULD PREVENT THE SCL FROM FUNCTIONING AS DESIGNED.
  - WHEN THE SEDIMENT CONTROL LOGS ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE SEDIMENT CONTROL LOGS MAY NEED TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

**CBMP** | SCL | 3 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013



**CBMP** | RSS | 1 OF 1  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

- NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.
- SEEDING AND MULCHING SHALL BE PERFORMED ACCORDING TO THE ACCOMPANYING DETAIL(S) AND TEXT. NO EXCEPTIONS SHALL BE MADE**
- SEE PLAN VIEW FOR:
    - LOCATION(S) OF SEEDING AND MULCHING
    - TYPE OF SEED MIX
  - SEED MIXES MAY CONFORM TO THE TABLE PROVIDED WITH THE SMC NOTES OR ALTERNATIVES MAY BE ALLOWED WITH PRIOR PERMISSION BY THE TOWN'S INSPECTOR.
  - SEEDING MAY BE PERFORMED YEAR ROUND ASSUMING THE SOIL IS NOT FROZEN. SEEDING DURING TIMES OF EXTREME TEMPERATURES SHOULD BE AVOIDED IF POSSIBLE.
  - AT THE BEGINNING OF THE LAND DISTURBANCE ACTIVITIES, IT IS HIGHLY RECOMMENDED THAT AN APPROPRIATE AMOUNT OF NATIVE TOPSOIL BE STRIPPED FROM THE SITE AND STOCKPILED. ALL AREAS, PRIOR TO PERMANENT SEEDING AND MULCHING, WILL LIKELY NEED TO BE COVERED WITH AN APPROPRIATE LAYER OF TOPSOIL. THIS REQUIREMENT APPLIES TO ALL AREAS WHERE NATIVE SEEDING IS SPECIFIED ON THE CBMP PLAN AND/OR LANDSCAPING PLANS.
  - IT IS STRONGLY RECOMMENDED THAT SAMPLES FROM THE STRIPPED TOPSOIL BE PROPERLY COLLECTED AND TESTED BY A QUALIFIED LABORATORY TO ENSURE ADEQUATE NUTRIENT CONTENT PRIOR TO SEEDING AND MULCHING. IF IT IS DISCOVERED THAT THE TOPSOIL IS VOID OF THE NUTRIENTS NECESSARY TO SUCCESSFULLY ESTABLISH THE REQUIRED VEGETATION, THEN THE APPROPRIATE AMENDMENTS SHALL BE ADDED.
  - ALL AREAS TO BE SEEDED AND MULCHED SHALL BE SURFACE ROUGHENED ACCORDING TO THE SURFACE ROUGHENING DETAILS AND NOTES. SURFACE ROUGHENING SHALL OCCUR AFTER PLACEMENT OF THE TOPSOIL.
  - WHEN INSTALLED WITH A DRILL SEEDER, SEED SHALL BE PLACED AT A DEPTH OF 1/4 - 1/2 INCH. ROW SPACING SHALL BE NO MORE THAN 6-INCHES.
  - ALL AREAS INCAPABLE OF BEING DRILL SEEDED SHALL BE SURFACE ROUGHENED ACCORDING TO THE SURFACE ROUGHENING NOTES OR EFFECTIVELY ROUGHENED USING A HARROW OR OTHER SUCH IMPLEMENT. ALL AREAS SHALL BE UNIFORMLY HAND BROADCASTED WITH THE PROPER SEED MIX APPLIED AT TWO TIMES THE DRILL SEEDED RATE. BROADCASTED AREAS SHALL THEN BE RE-HARROWED OR RE-RAKED USING A HARD-TIPPED RAKE TO ENSURE THAT SEEDS ARE BURIED TO AN APPROXIMATE DEPTH OF 1/4 - 1/2 INCH.
  - AFTER SEEDING HAS BEEN COMPLETED, MULCH SHALL BE UNIFORMLY APPLIED AT A RATE OF 2 TONS/ACRE (4,000 LBS./ACRE). MULCH SHALL BE MECHANICALLY CRIMPED TO A DEPTH OF 2 INCHES USING A CRIMPER. MULCH SHALL BE HAND CRIMPED AND COVERED WITH A TACKIFIER IN AREAS WHERE MECHANICAL CRIMPING IS NOT POSSIBLE. WHEN SOILS PERMIT, ALL MULCH SHALL BE CRIMPED SUCH THAT THE INDIVIDUAL PIECES OF STRAW OR HAY FORM EXAGGERATED V-SHAPES PROTRUDING OUT OF THE GROUND SEVERAL INCHES.
  - IN CERTAIN INSTANCES, IT MAY BE NECESSARY TO APPLY A TACKIFIER IN ORDER TO HELP WITH STRAW DISPLACEMENT. TACKIFIER SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

**CBMP** | SMC | 1 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

- NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.
- SEEDING AND MULCHING MAINTENANCE NOTES**
- THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SEEDING AND MULCHING.
  - ANY SEEDED AND MULCHED AREAS THAT BECOME DAMAGED SHALL BE REPAIRED WITHIN THE TIME FRAME SPECIFIED BY THE TOWN'S INSPECTOR.
- WEED MANAGEMENT**
- ALL HERBICIDES SHALL BE APPLIED BY COMMERCIAL PESTICIDE APPLICATORS LICENSED BY THE COLORADO DEPARTMENT OF AGRICULTURE AS QUALIFIED APPLICATORS. THE CONTRACTOR SHALL FURNISH DOCUMENTATION OF SUCH LICENSING PRIOR TO HERBICIDE APPLICATION.
  - HERBICIDE APPLICATION METHOD SHALL BE SUCH THAT PLANT GROWTH OUTSIDE THE DESIGNATED TREATMENT AREAS WILL NOT BE DAMAGED. ALL DAMAGE CAUSED BY IMPROPER HERBICIDE APPLICATION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
  - HERBICIDES SHALL BE APPLIED DURING THE APPROPRIATE SEASONS, WHEN TARGET PLANTS ARE ACTIVELY GROWING.
  - AFTER THE GRASS SEED IS ESTABLISHED, APPROPRIATE HERBICIDES SHALL BE APPLIED TO CONTROL THE REMAINING WEEDS TO ENSURE A TIMELY RETURN OF THE FINANCIAL SECURITY. PROPER TIMING OF HERBICIDE APPLICATIONS ARE NECESSARY TO ACHIEVE THE SUPPRESSION OF WEED SEED PRODUCTION AND DEPLETION OF WEED ROOT MASS. ULTIMATELY, THE HERBICIDES USED SHALL BE BASED UPON THE TARGET WEEDS.
  - HERBICIDE TREATMENTS SHALL CONTINUE AT AN APPROPRIATE RATE UNTIL IT IS EVIDENT THAT WEED GROWTH PRESENCE AND GROWTH IS MINIMAL AND MAY BE CONTROLLED THROUGH MOWING AND/OR ANNUAL HERBICIDE TREATMENT.

**CBMP** | SMC | 2 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

- NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.
- TOWN OF PARKER, SEED MIX 1**
- 20% CANADA WILDRYE
  - 15% CRESTED WHEATGRASS
  - 15% SLENDER WHEATGRASS
  - 10% ANNUAL RYEGRASS
  - 10% SHEEP FESCUE
  - 10% BIG BLUESTEM
  - 10% SIDCOATS GRAMA
  - 5% CANADA BLUEGRASS
  - 5% BLUE GRAMA
- SEEDING RATE:**  
DRILLED: 25 LBS./ACRE  
BROADCAST: 50 LBS./ACRE
- TOWN OF PARKER, SEED MIX 2**
- 22% SLENDER WHEATGRASS
  - 18% SODAR STREAMBANK WHEATGRASS
  - 13% ARIZONA FESCUE
  - 13% BLUE GRAMA
  - 12% BUFFALOGRASS
  - 12% BARLEY OR OATS
  - 5% SPIKE MUHLY
  - 5% INDIAN RICEGRASS
- SEEDING RATE:**  
DRILLED: 25 LBS./ACRE  
BROADCAST: 50 LBS./ACRE
- TOWN OF PARKER, SEED MIX 3 (LOW-GROWTH MIX)**
- 25% EPHRAIM CRESTED WHEATGRASS
  - 23% SHEEP FESCUE
  - 18% PERENNIAL RYEGRASS
  - 13% CANADA BLUEGRASS
  - 12% BARLEY OR OATS
  - 9% BLUE FESCUE
- SEEDING RATE:**  
DRILLED: 25 LBS./ACRE  
BROADCAST: 50 LBS./ACRE
- SEED MIX 4:**  
OTHER SEED MIXES APPROVED BY THE TOWN OF PARKER

**CBMP** | SMC | 3 OF 3  
CONSTRUCTION BEST MANAGEMENT PRACTICES | Oct. 2013

REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	William E. Miller, PE 13389
COMMENTS	05/26/2015	ENGINEERING
		CONSTRUCTION MANAGEMENT
		9125 N. Clydesdale Road PH (303) 908-0082
		Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks
		Parker, Colorado
		Sediment & Erosion Control Plan
		Notes & Details
		Construction Plans
		DATE 09/16/2014
		DES/DFI/CHK. WEM/km
		PROJ. NO. 13-343
		SHEET 14 OF 24

**SEEDING AND MULCHING SHALL BE PERFORMED ACCORDING TO THE ACCOMPANYING DETAIL(S) AND TEXT. NO EXCEPTIONS SHALL BE MADE**

1. SEE PLAN VIEW FOR:
  - LOCATION(S) OF SEEDING AND MULCHING
  - TYPE OF SEED MIX
2. SEED MIXES MAY CONFORM TO THE TABLE PROVIDED WITH THE SMC NOTES OR ALTERNATIVES MAY BE ALLOWED WITH PRIOR PERMISSION BY THE TOWN'S INSPECTOR.
3. SEEDING MAY BE PERFORMED YEAR ROUND ASSUMING THE SOIL IS NOT FROZEN. SEEDING DURING TIMES OF EXTREME TEMPERATURES SHOULD BE AVOIDED IF POSSIBLE.
4. AT THE BEGINNING OF THE LAND DISTURBANCE ACTIVITIES, IT IS HIGHLY RECOMMENDED THAT AN APPROPRIATE AMOUNT OF NATIVE TOPSOIL BE STRIPPED FROM THE SITE AND STOCKPILED. ALL AREAS, PRIOR TO PERMANENT SEEDING AND MULCHING, WILL LIKELY NEED TO BE COVERED WITH AN APPROPRIATE LAYER OF TOPSOIL. THIS REQUIREMENT APPLIES TO ALL AREAS WHERE NATIVE SEEDING IS SPECIFIED ON THE CBMP PLAN AND/OR LANDSCAPING PLANS.
5. IT IS STRONGLY RECOMMENDED THAT SAMPLES FROM THE STRIPPED TOPSOIL BE PROPERLY COLLECTED AND TESTED BY A QUALIFIED LABORATORY TO ENSURE ADEQUATE NUTRIENT CONTENT PRIOR TO SEEDING AND MULCHING. IF IT IS DISCOVERED THAT THE TOPSOIL IS VOID OF THE NUTRIENTS NECESSARY TO SUCCESSFULLY ESTABLISH THE REQUIRED VEGETATION, THEN THE APPROPRIATE AMENDMENTS SHALL BE ADDED.
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7. WHEN INSTALLED WITH A DRILL SEEDER, SEED SHALL BE PLACED AT A DEPTH OF ¼ - ½ INCH. ROW SPACING SHALL BE NO MORE THAN 6-INCHES.
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9. AFTER SEEDING HAS BEEN COMPLETED, MULCH SHALL BE UNIFORMLY APPLIED AT A RATE OF 2 TONS/ACRE (4,000 LBS/ACRE). MULCH SHALL BE MECHANICALLY CRIMPED TO A DEPTH OF 2 INCHES USING A CRIMPER. MULCH SHALL BE HAND CRIMPED AND COVERED WITH A TACKIFIER IN AREAS WHERE MECHANICAL CRIMPING IS NOT POSSIBLE. WHEN SOILS PERMIT, ALL MULCH SHALL BE CRIMPED SUCH THAT THE INDIVIDUAL PIECES OF STRAW OR HAY FORM EXAGGERATED V-SHAPES PROTRUDING OUT OF THE GROUND SEVERAL INCHES.
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**SEEDING AND MULCHING MAINTENANCE NOTES**

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SEEDING AND MULCHING.
  2. ANY SEEDED AND MULCHED AREAS THAT BECOME DAMAGED SHALL BE REPAIRED WITHIN THE TIME FRAME SPECIFIED BY THE TOWN'S INSPECTOR.
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**TOWN OF PARKER, SEED MIX 1**

- 20% CANADA WLDRYE
- 15% CRESTED WHEATGRASS
- 15% SLENDER WHEATGRASS
- 10% ANNUAL RYEGRASS
- 10% SHEEP FESCUE
- 10% BIG BLUESTEM
- 10% SIDEDOTS GRAMA
- 5% CANADA BLUEGRASS
- 5% BLUE GRAMA

**SEEDING RATE:**  
 DRILLED: 25 LBS/ACRE  
 BROADCAST: 50 LBS/ACRE

**TOWN OF PARKER, SEED MIX 2**

- 22% SLENDER WHEATGRASS
- 18% SODAR STREAMBANK WHEATGRASS
- 13% ARIZONA FESCUE
- 13% BLUE GRAMA
- 12% BUFFALOGRASS
- 12% BARLEY OR OATS
- 5% SPIKE MUHLY
- 5% INDIAN RICEGRASS

**SEEDING RATE:**  
 DRILLED: 25 LBS/ACRE  
 BROADCAST: 50 LBS/ACRE

**TOWN OF PARKER, SEED MIX 3 (LOW-GROWTH MIX)**

- 25% EPHRAIM CRESTED WHEATGRASS
- 23% SHEEP FESCUE
- 18% PERENNIAL RYEGRASS
- 13% CANADA BLUEGRASS
- 12% BARLEY OR OATS
- 9% BLUE FESCUE

**SEEDING RATE:**  
 DRILLED: 25 LBS/ACRE  
 BROADCAST: 50 LBS/ACRE

**SEED MIX 4:**  
 OTHER SEED MIXES APPROVED BY THE TOWN OF PARKER



**CBMP**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES

SMC  
 1 OF 3  
 Oct. 2013



**CBMP**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES

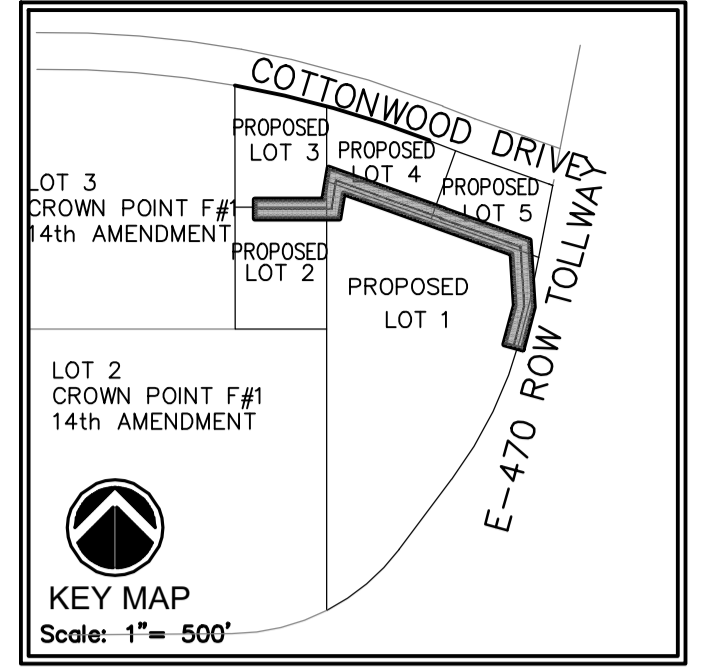
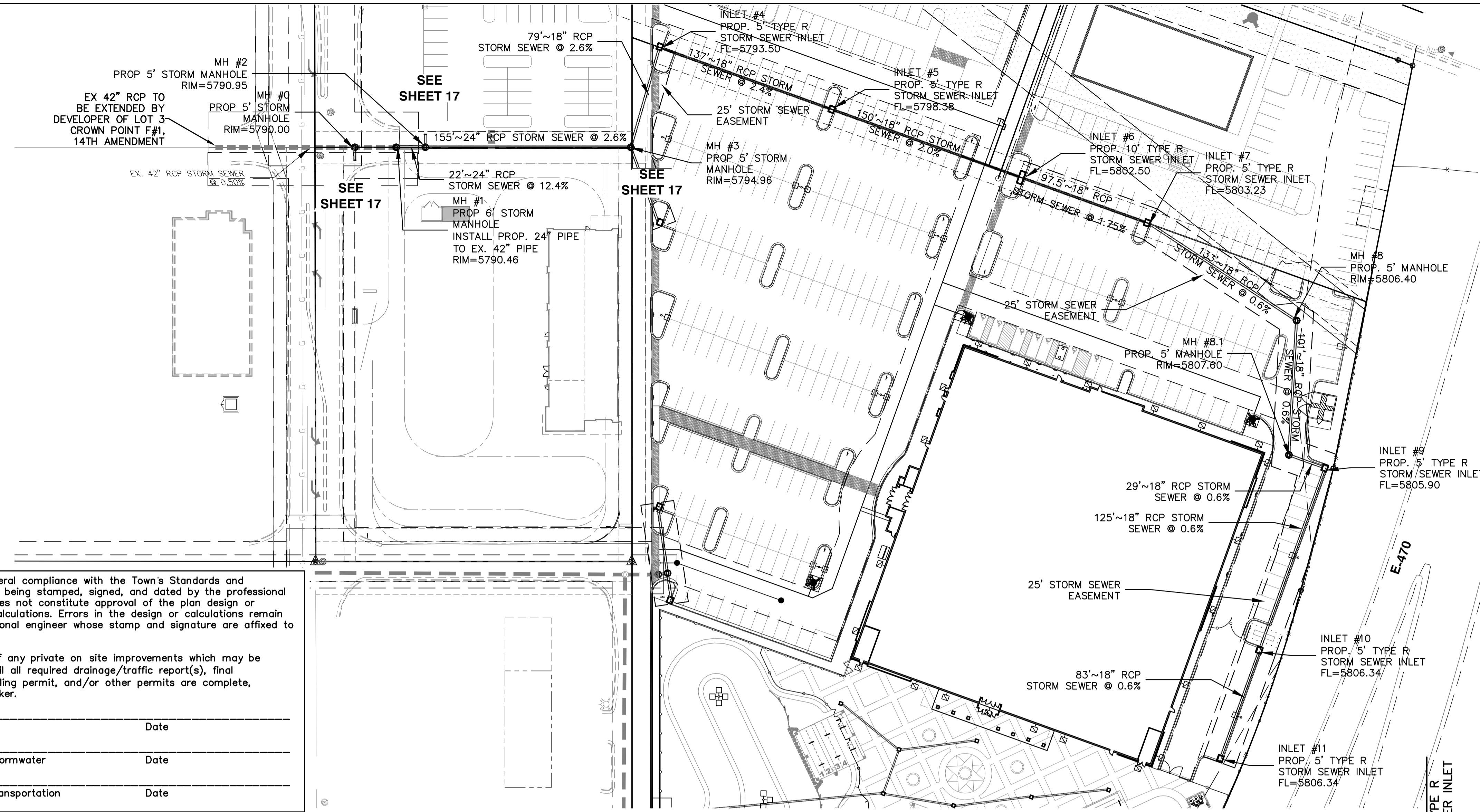
SMC  
 2 OF 3  
 Oct. 2013



**CBMP**  
 CONSTRUCTION BEST MANAGEMENT PRACTICES

SMC  
 3 OF 3  
 Oct. 2013

REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
PARKING LOT	09/24/2014	
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Sediment & Erosion Control Plan Notes & Details Construction Plans
		DATE 09/16/2014
		DWG/DF1/GHK_WEM/km
		PROJ. NO. 13-343
		SHEET 15 OF 24



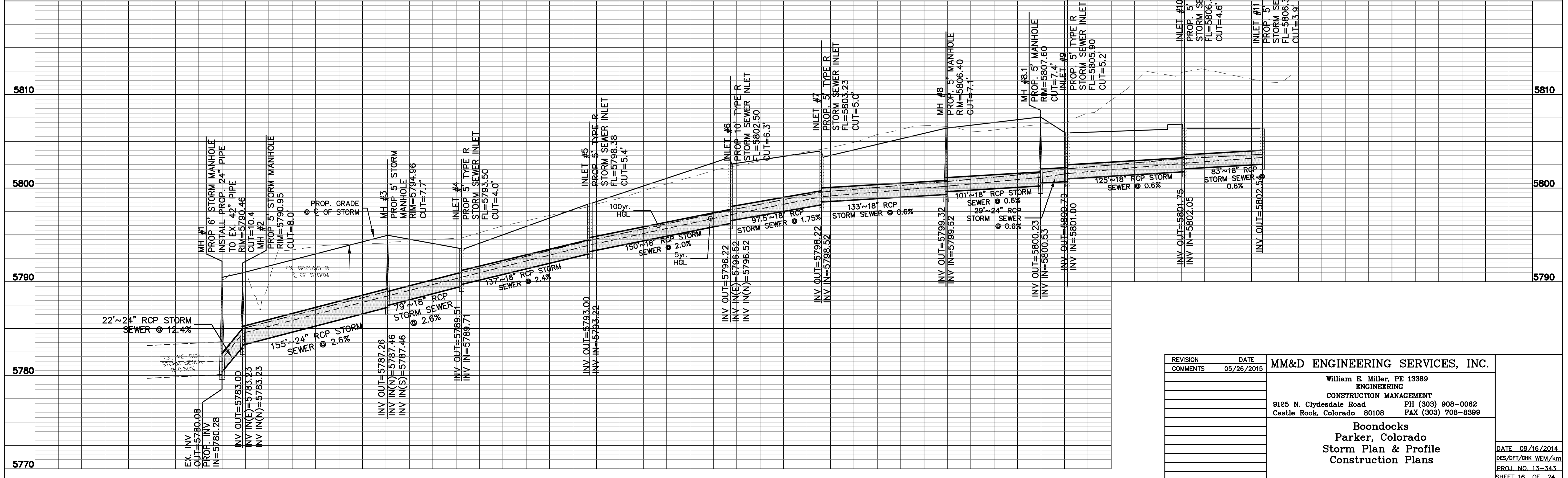
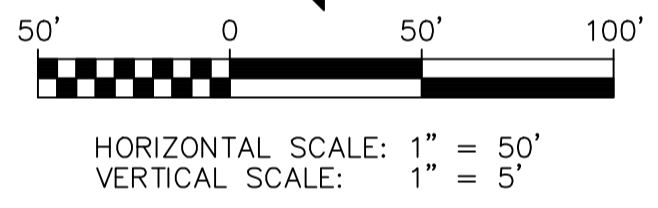
The Town of Parker review constitutes general compliance with the Town's Standards and approved variances, subject to these plans being stamped, signed, and dated by the professional engineer of record. Review by the Town does not constitute approval of the plan design or accuracy and correctness of engineering calculations. Errors in the design or calculations remain the responsibility of the registered professional engineer whose stamp and signature are affixed to this document.

This review does not constitute approval of any private on site improvements which may be shown. Construction cannot commence until all required drainage/traffic report(s), final development plan(s), special review(s), grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date



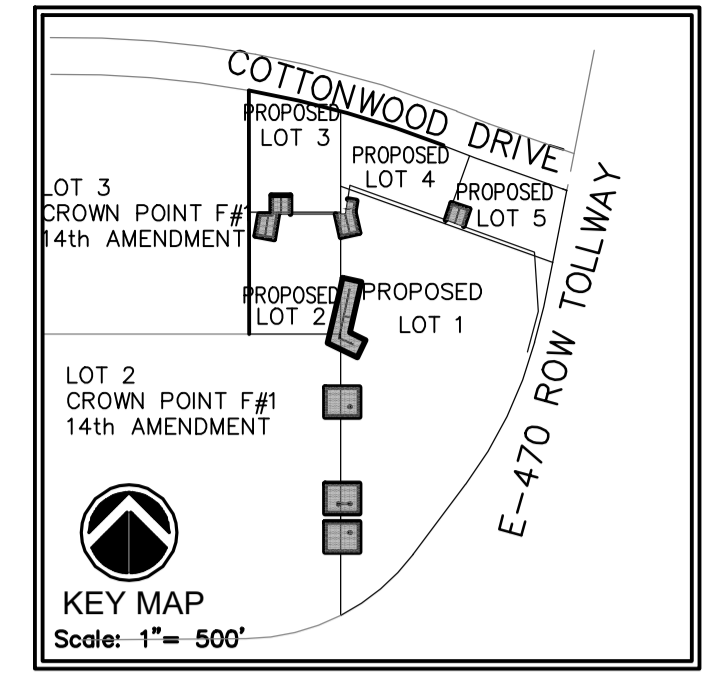
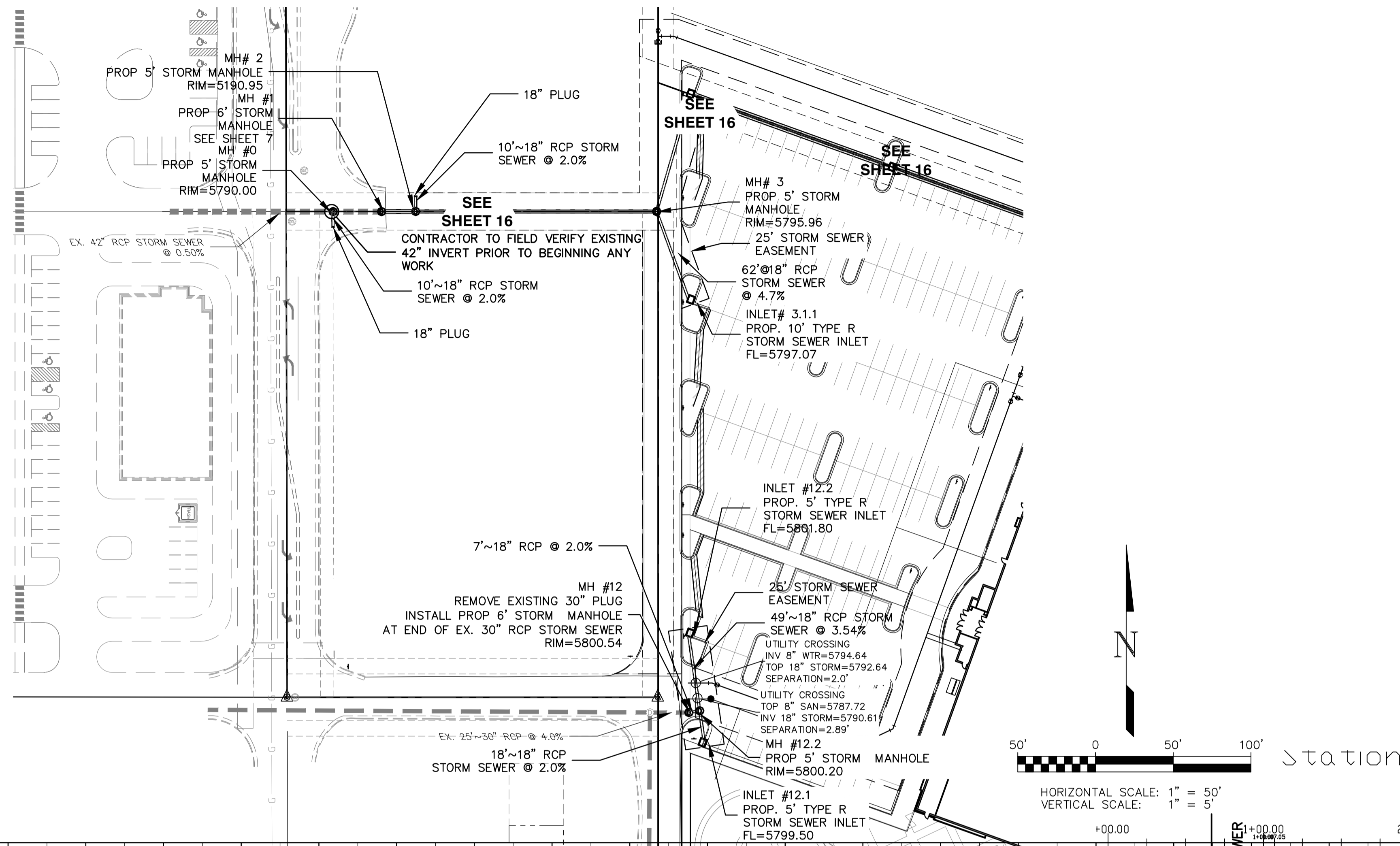
Know what's below. Call before you dig.



REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Storm Plan & Profile Construction Plans
		DATE 09/16/2014 DES/DET/CHK WEM/km PROJ. NO. 13-343 SHEET 16 OF 24



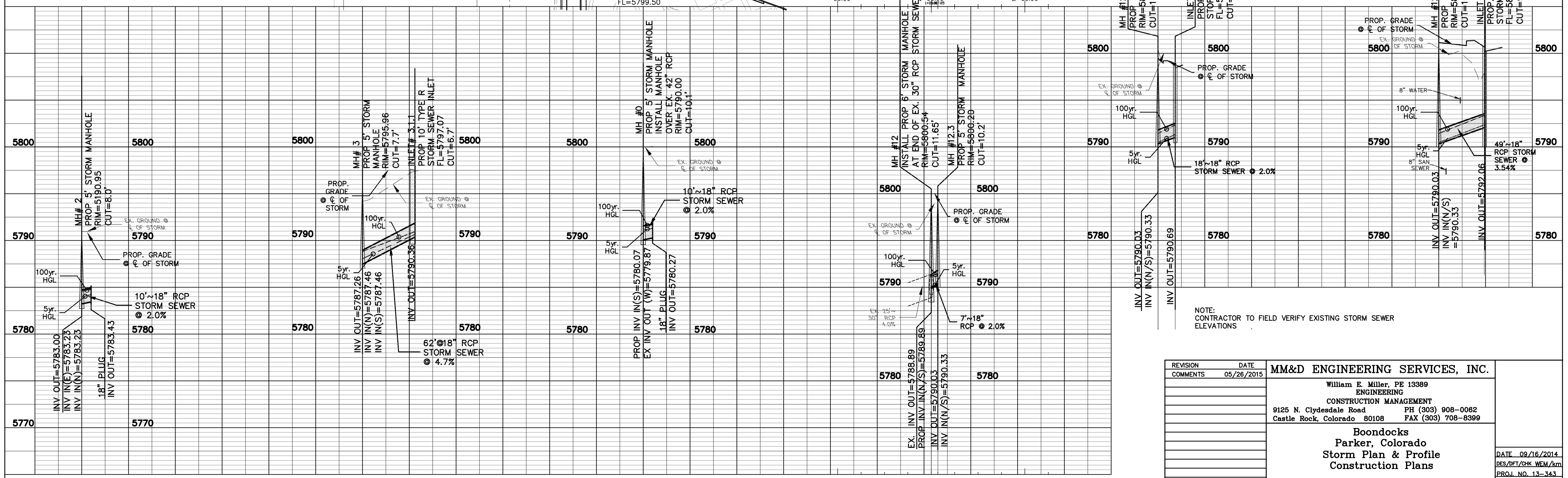
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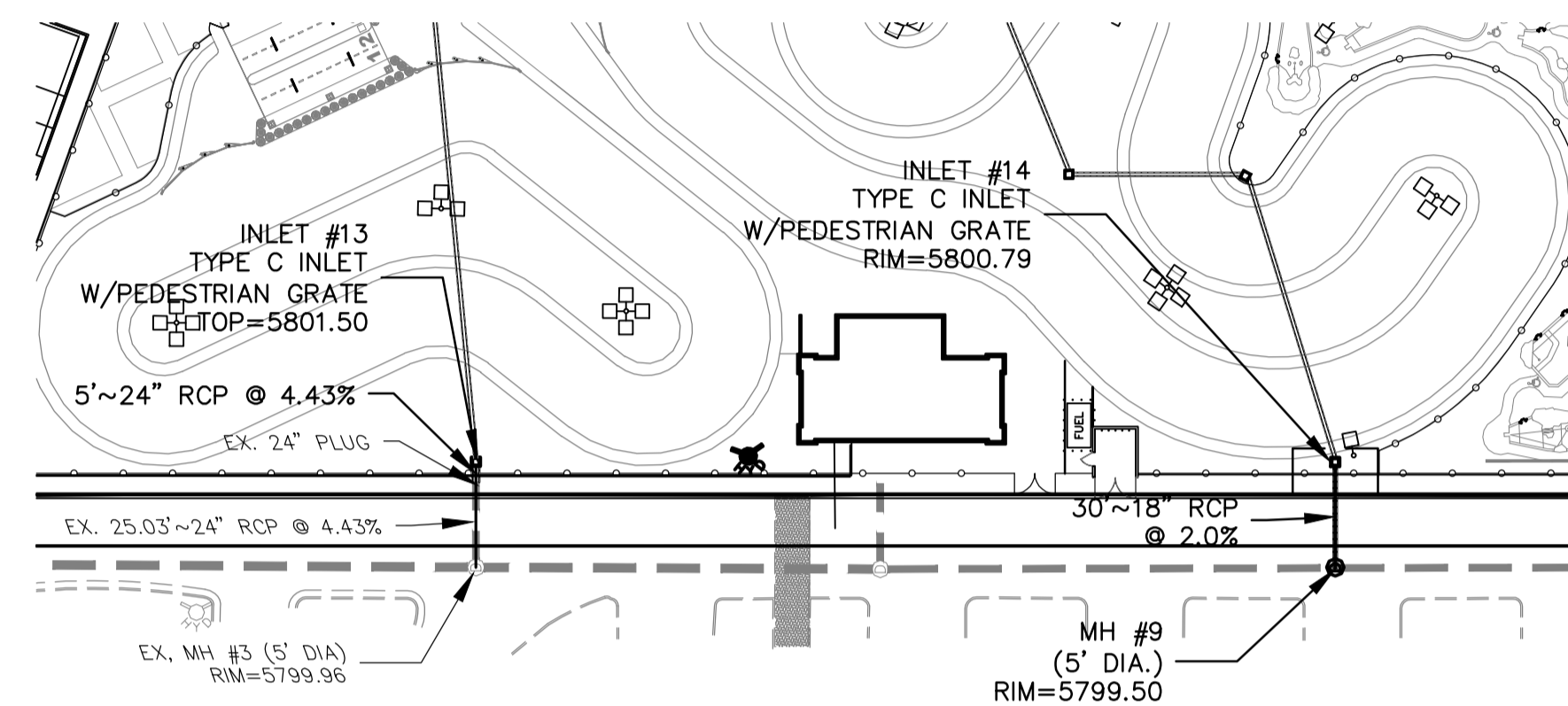
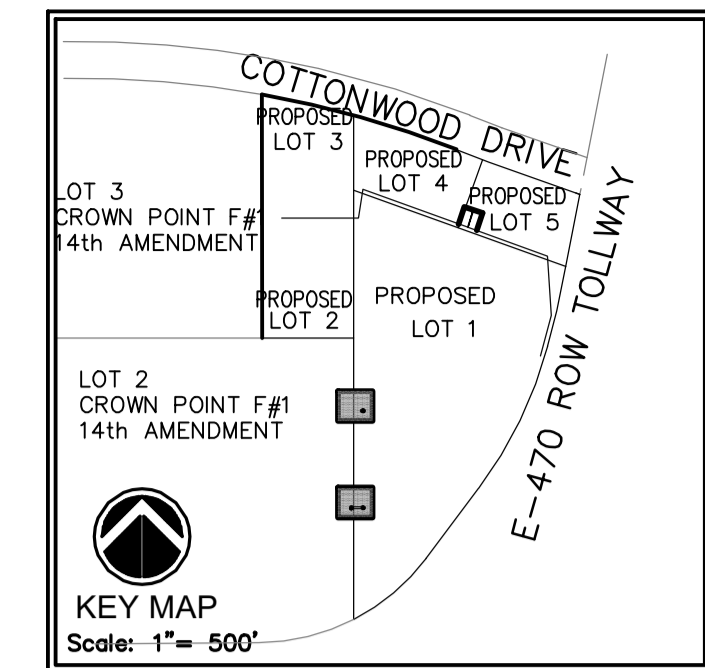
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Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date



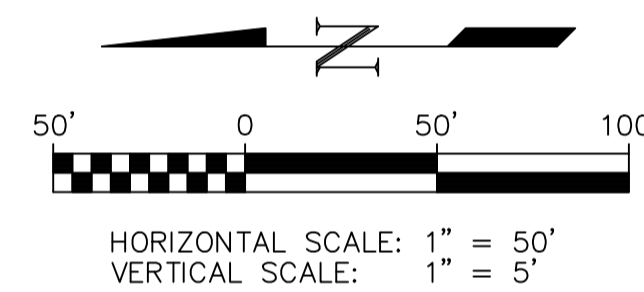
REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
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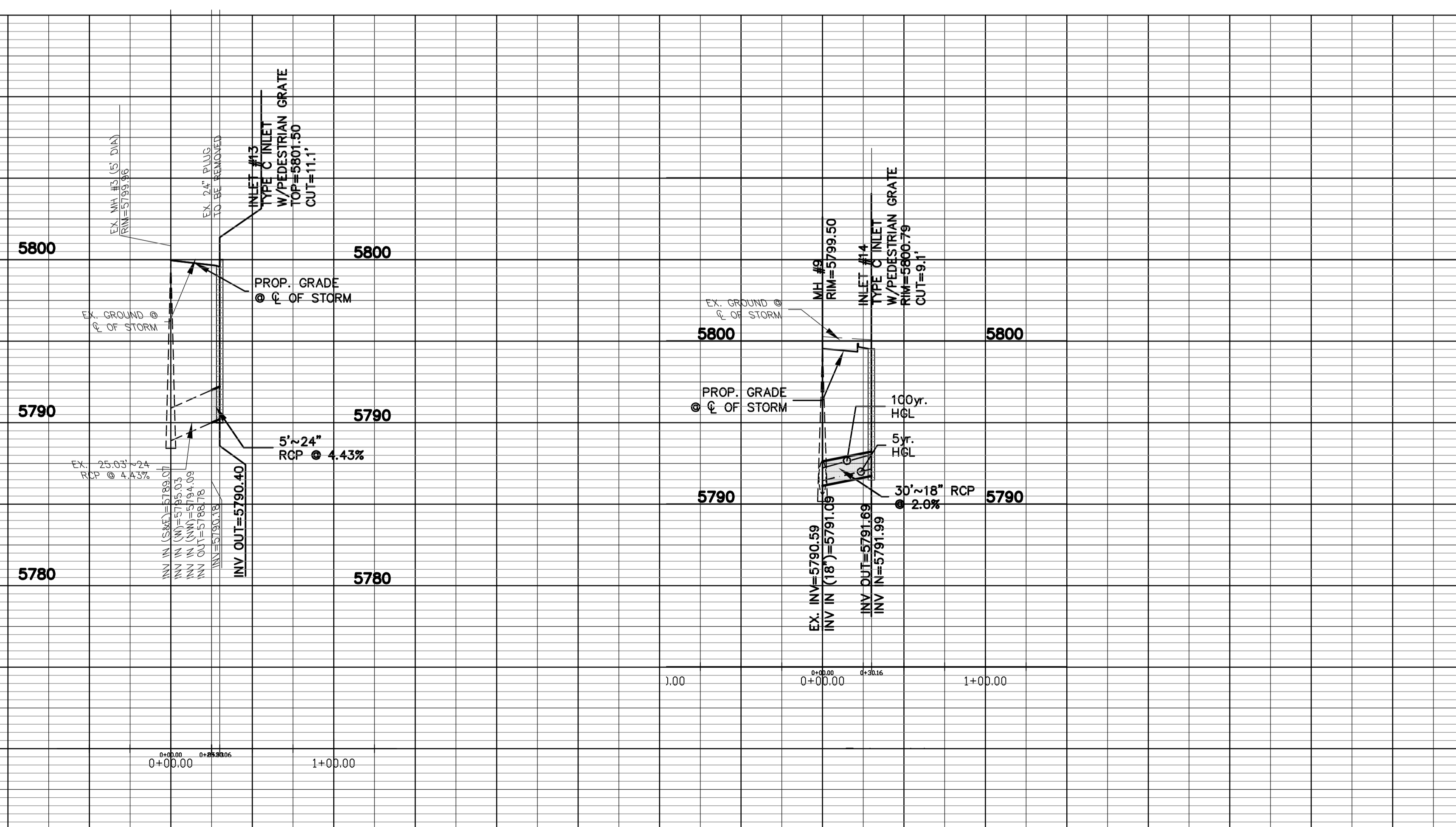
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Town of Parker, Public Works Director \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager - Stormwater \_\_\_\_\_ Date \_\_\_\_\_  
 Town of Parker, Public Works Manager - Transportation \_\_\_\_\_ Date \_\_\_\_\_

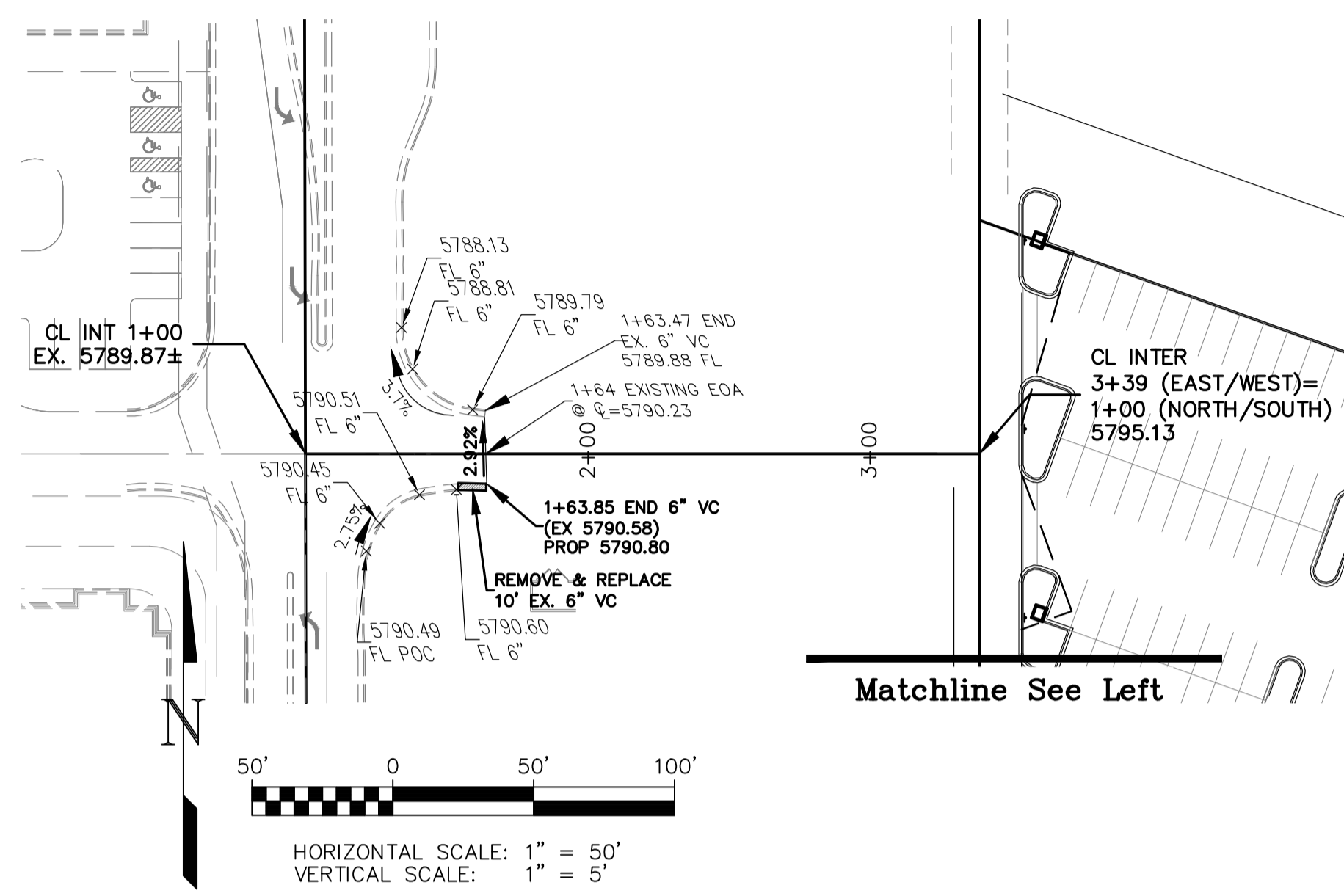
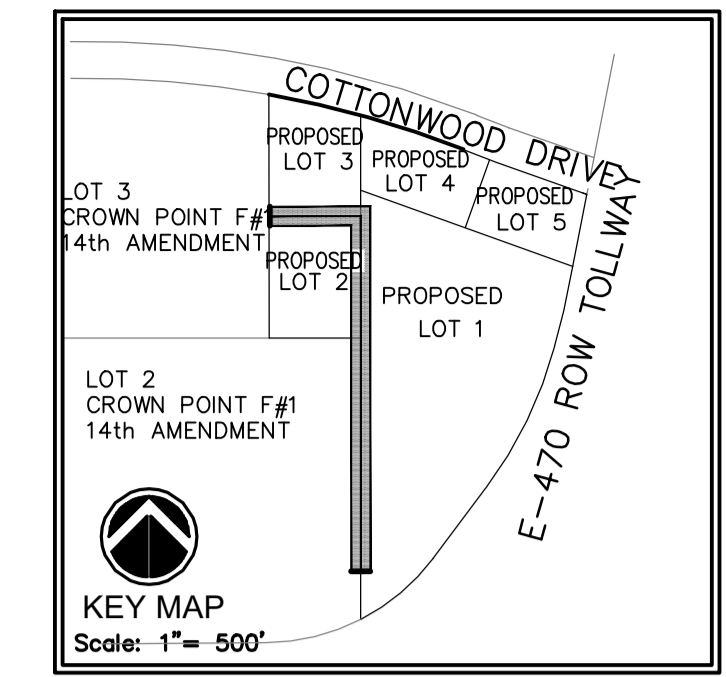


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NOTE:  
CONTRACTOR TO FIELD VERIFY EXISTING STORM SEWER ELEVATIONS

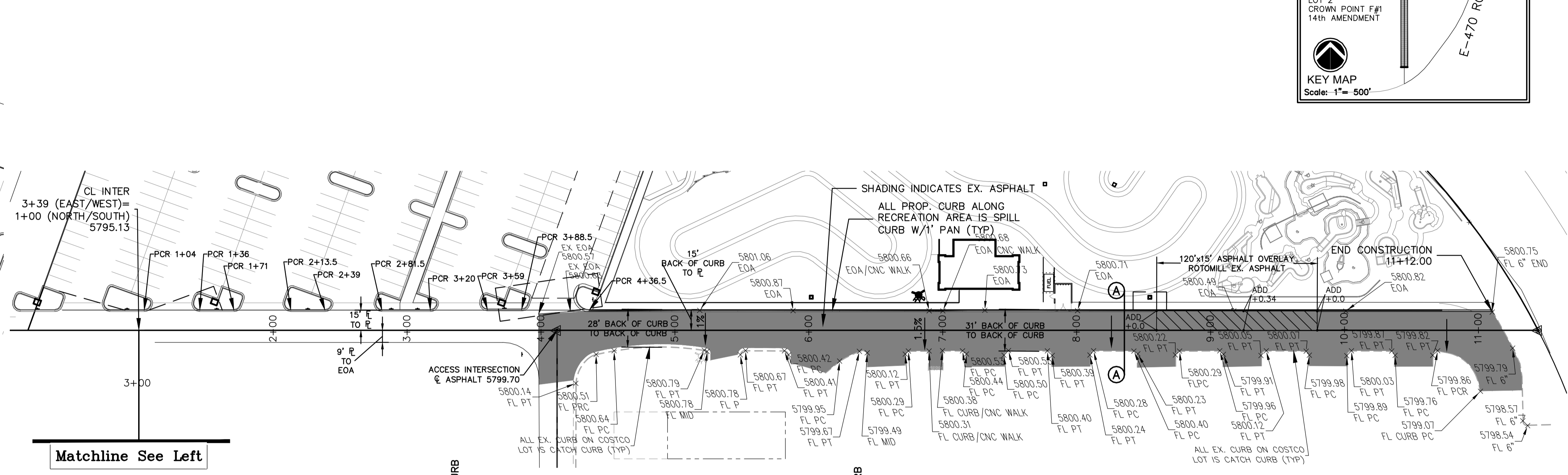
REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Storm Plan & Profile Construction Plans
		DATE 09/16/2014 DES/DET/CHK WEM/km PROJ. NO. 13-343 SHEET 18 OF 24



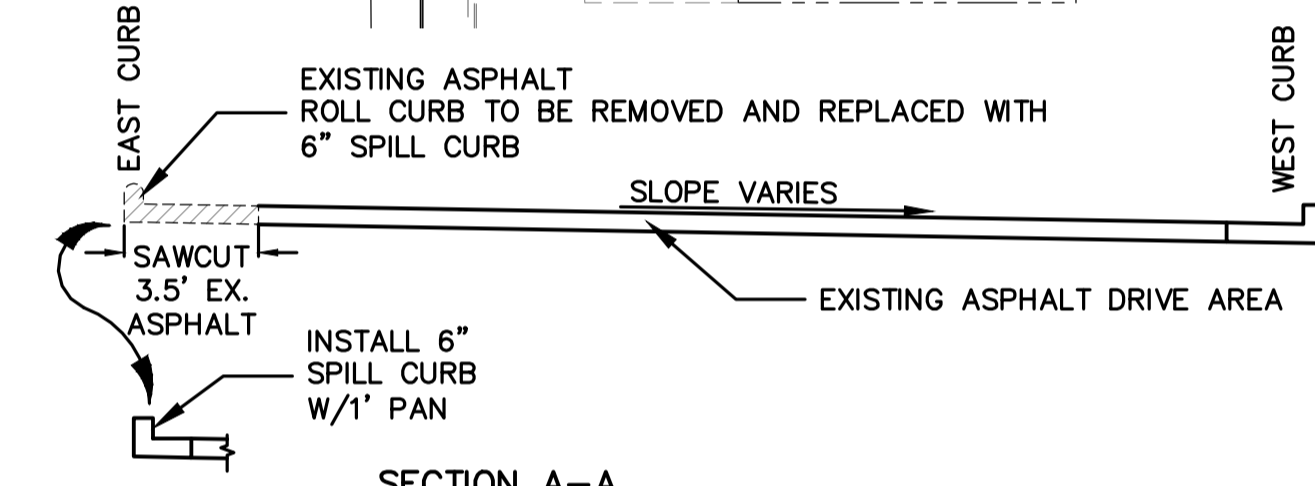
The Town of Parker review constitutes general compliance with the Town's Standards and approved variances, subject to these plans being stamped, signed, and dated by the professional engineer of record. Review by the Town does not constitute approval of the plan design or accuracy and correctness of engineering calculations. Errors in the design or calculations remain the responsibility of the registered professional engineer whose stamp and signature are affixed to this document.

This review does not constitute approval of any private on site improvements which may be shown. Construction cannot commence until all required drainage/traffic report(s), final development plan(s), special review(s), grading permit, and/or other permits are complete, approved and on file with the Town of Parker.

Town of Parker, Public Works Director	Date
Town of Parker, Public Works Manager - Stormwater	Date
Town of Parker, Public Works Manager - Transportation	Date

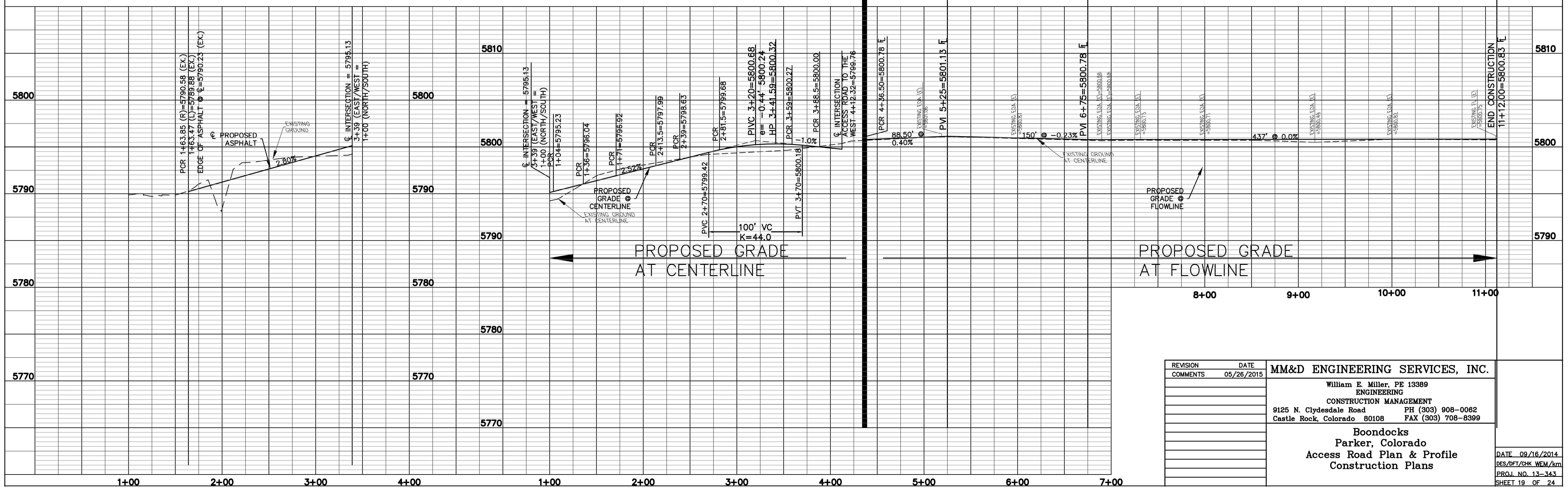
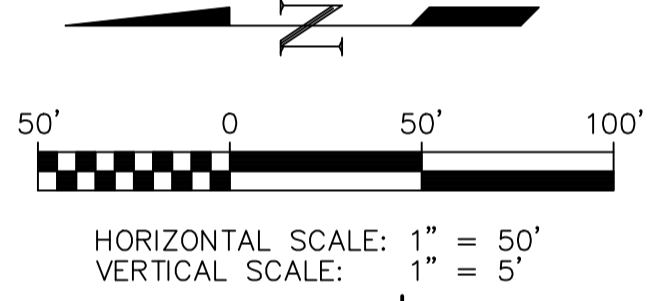


Matchline See Left



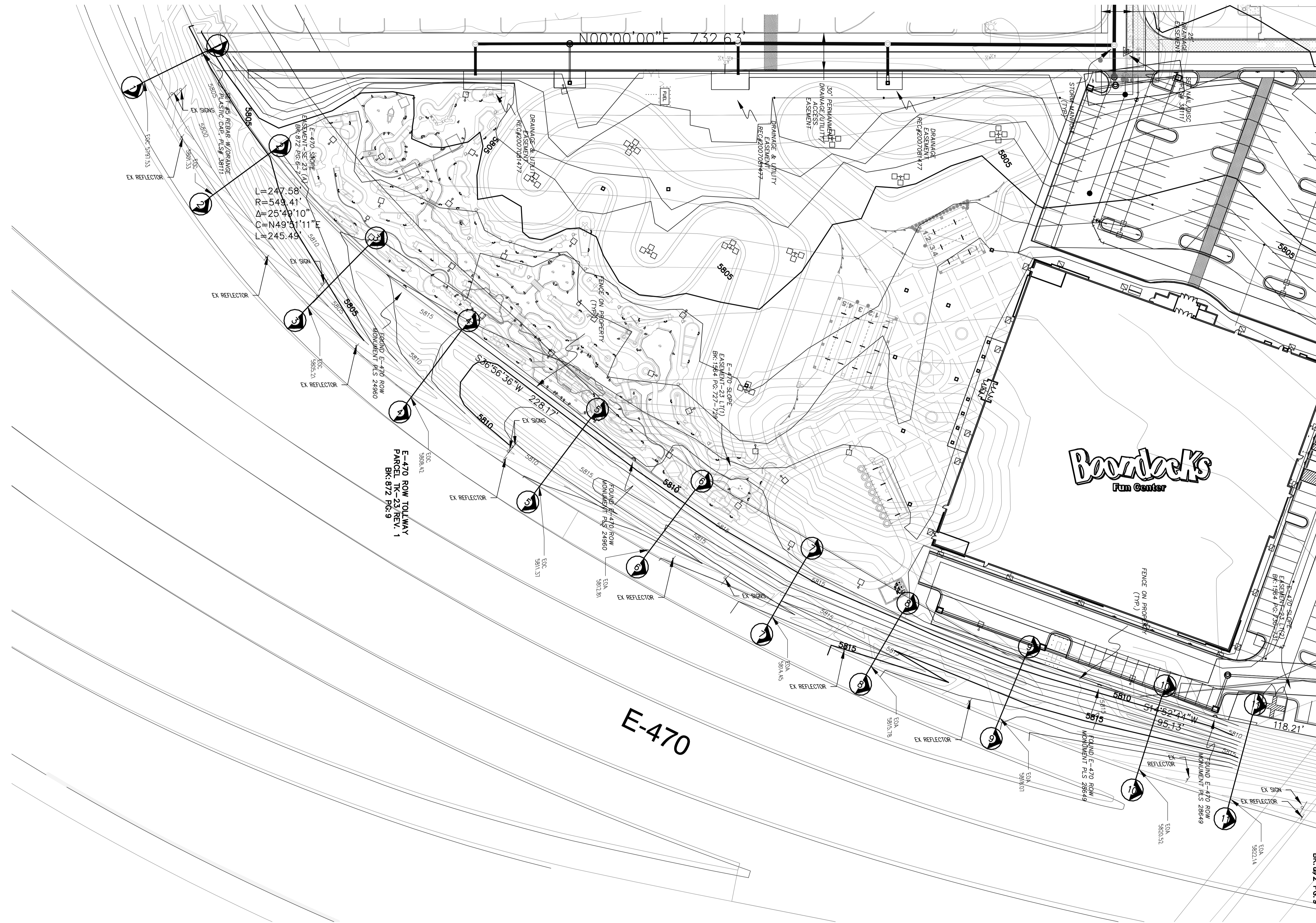
SECTION A-A  
SCALE: 1"=5' HORZ. & VERT.

INDICATES EXISTING ASPHALT DRIVE AREA  
INDICATES AREA TO BE ROTOMILLED (DEPTH +0.34')



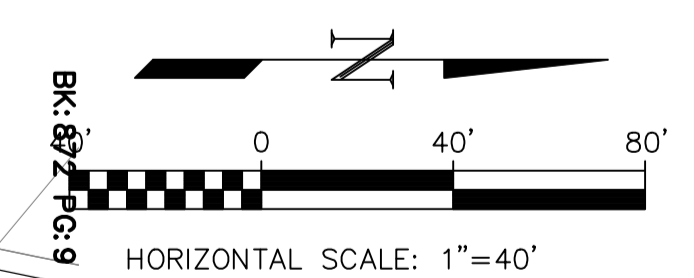
REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Access Road Plan & Profile Construction Plans

DATE 09/16/2014  
DES/DET/CHK WEM/km  
PROJ. NO. 13-343  
SHEET 19 OF 24



**Boondocks**  
Fun Center

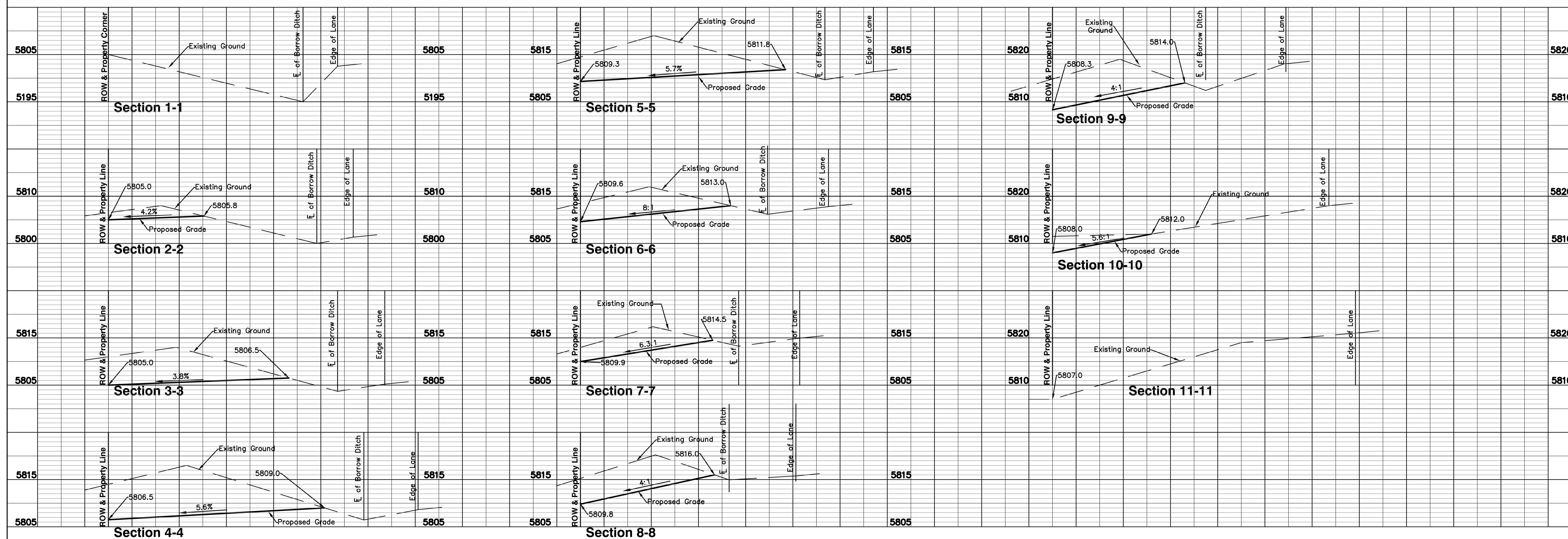
**E-470**



REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING
		CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado
		Cross Sections at E-470 Plan View Construction Plans
		DATE 09/16/2014 DES/DFI/CHK. WEM/km PROJ. NO. 13-343 SHEET 20 OF 24

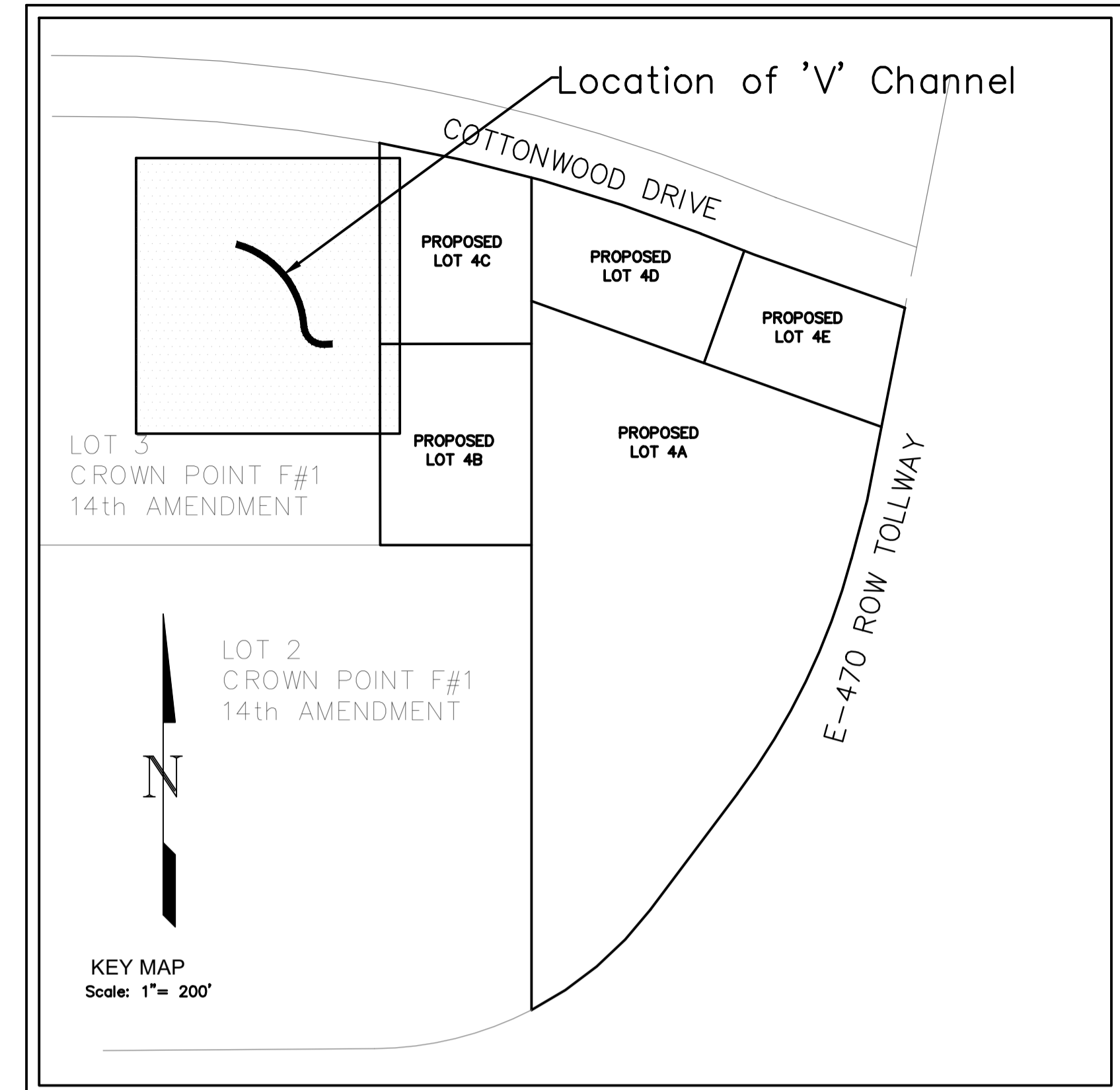
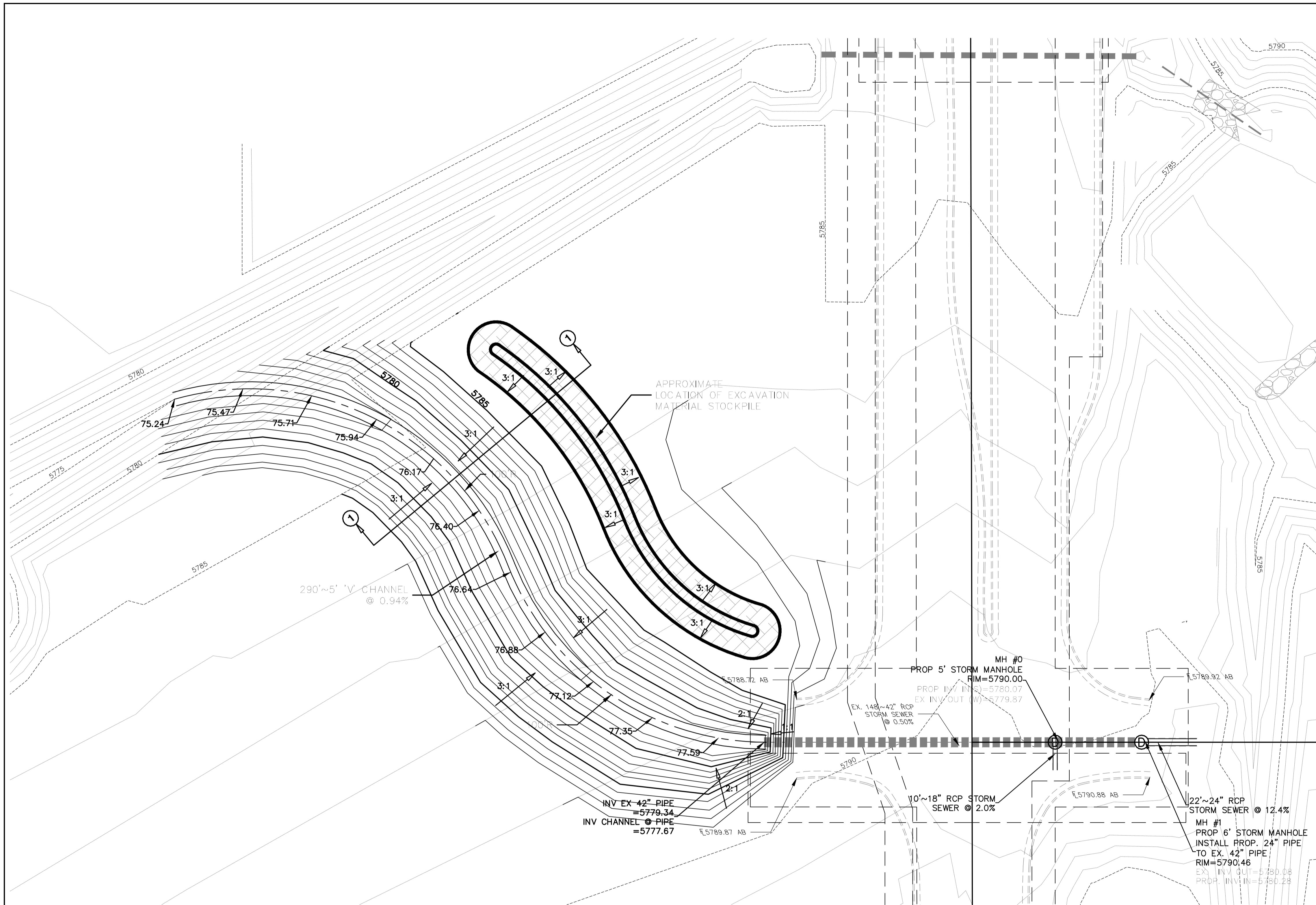


Know what's below.  
Call before you dig.

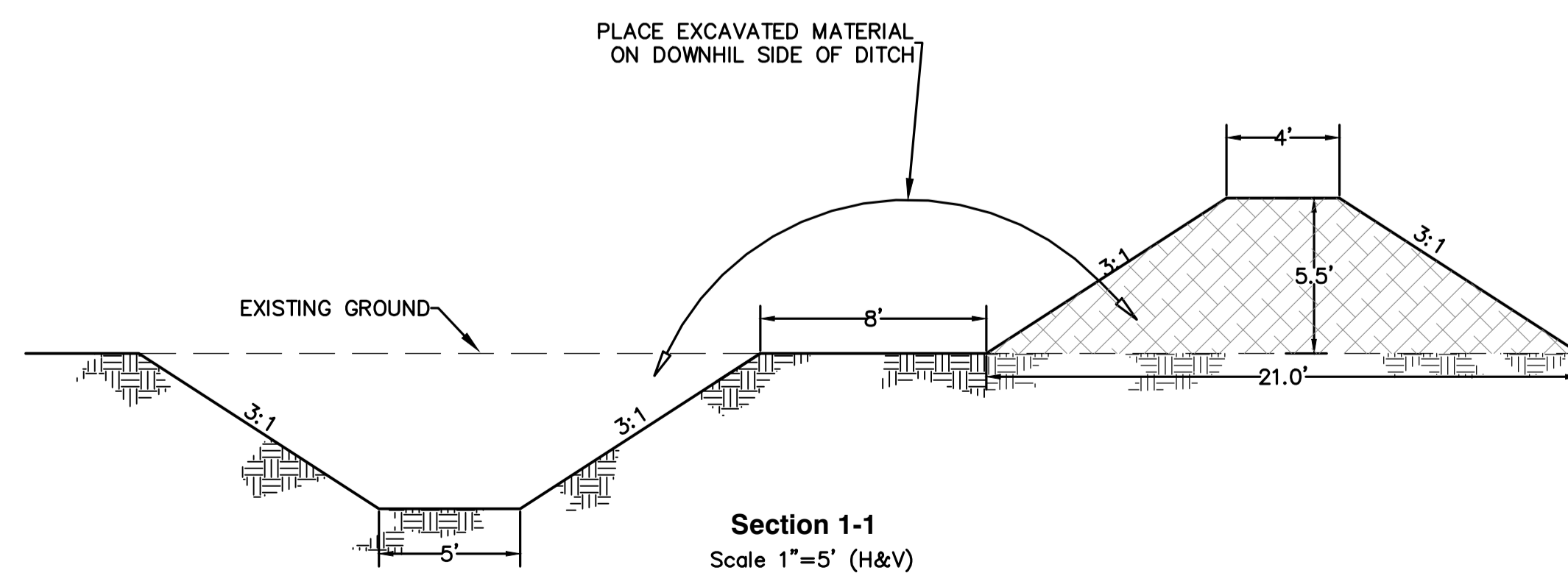
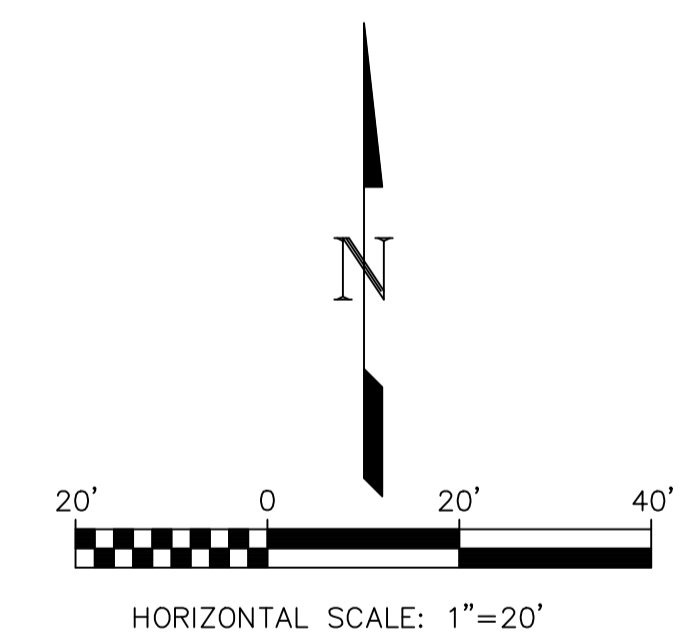


HORIZONTAL SCALE: 1" = 10'  
VERTICAL SCALE: 1" = 10'

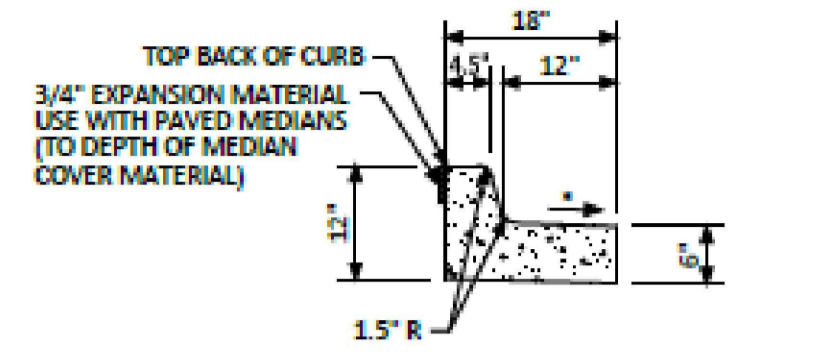
REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	
		William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Cross Sections at E-470 Profile View Construction Plans
		DATE: 08/16/2014 DES/DET/CHK: WEM/AM PROJ. NO.: 13-343 SHEET 21 OF 24



EXISTING PIPE INFORMATION FROM 14TH AMENDMENT, CROWN POINT FILING NO. 1, CONSTRUCTION DOCUMENT ASBULTS, SHEET 15.

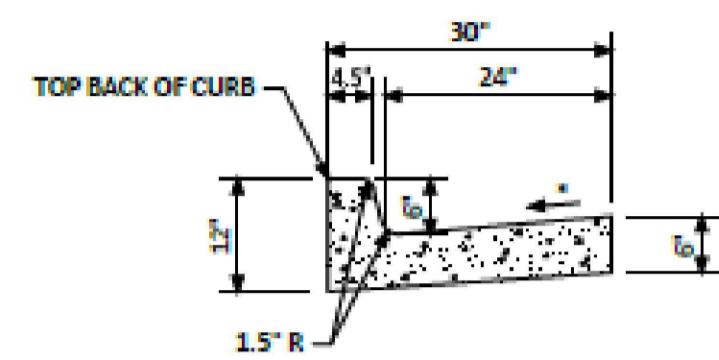


REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING
		CONSTRUCTION MANAGEMENT
		9125 N. Clydesdale Road PH (303) 908-0082
		Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado
		Off-site 5' Channel Design Construction Plans
		DATE 12/23/2014 DES/DF1/CHK WEM/km PROJ. NO. 13-343 SHEET 22 OF 24

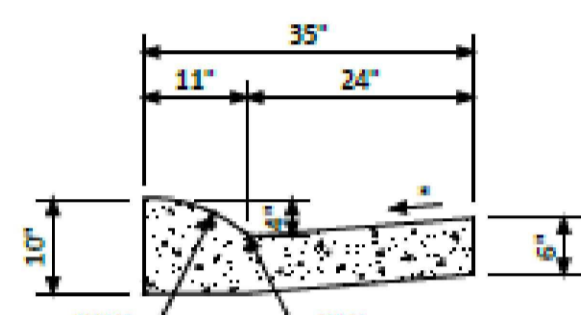


**MEDIAN CURB AND GUTTER SECTION**  
(CDOT CURB AND GUTTER TYPE 2 (SECTION I-B))

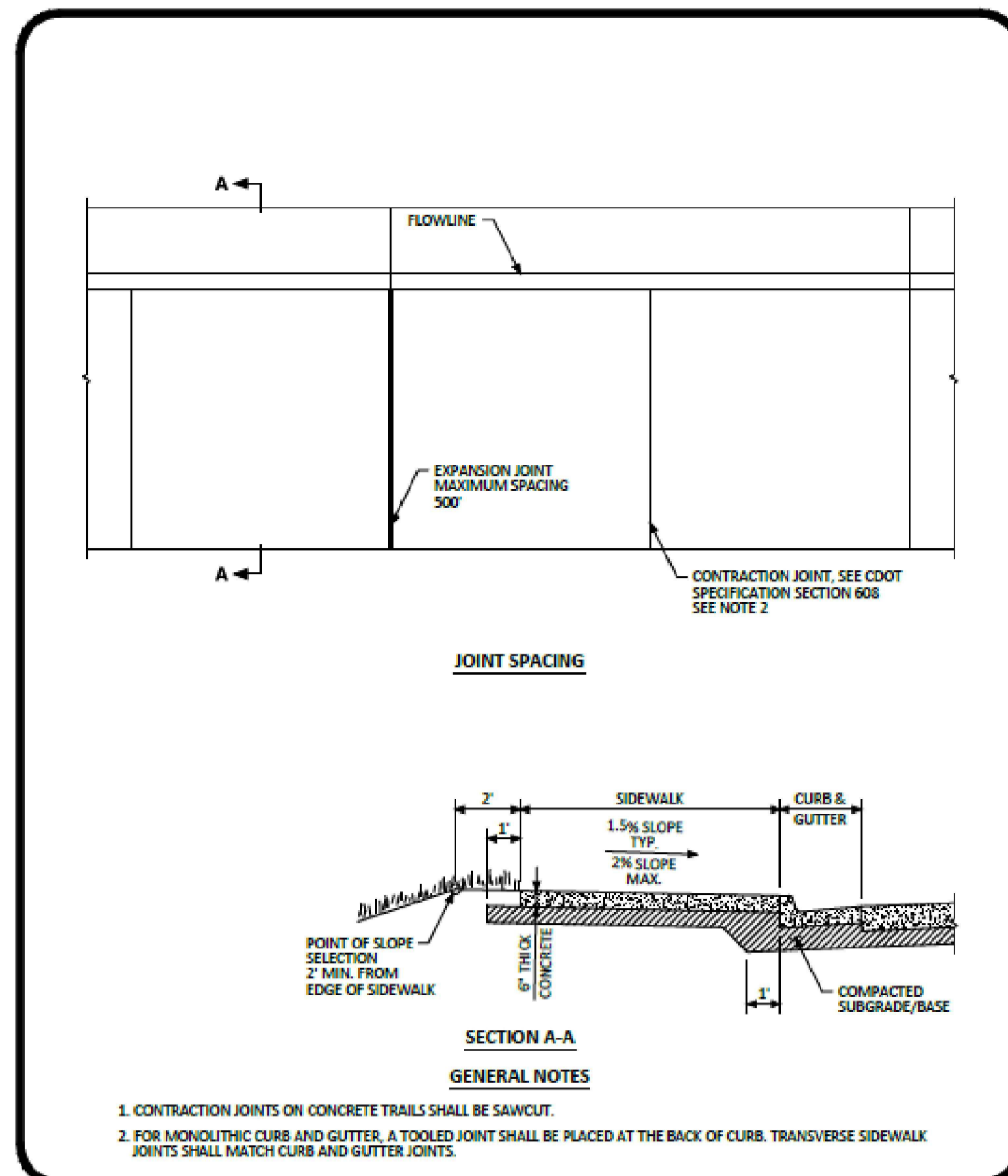
\* GUTTER CROSS SLOPE SHALL BE 1/2 IN./FT. WHEN DRAINING AWAY FROM CURB AND 1 IN./FT. WHEN DRAINING TOWARD CURB. DIRECTION OF SLOPE SHALL MATCH STREET CROSS SLOPE.



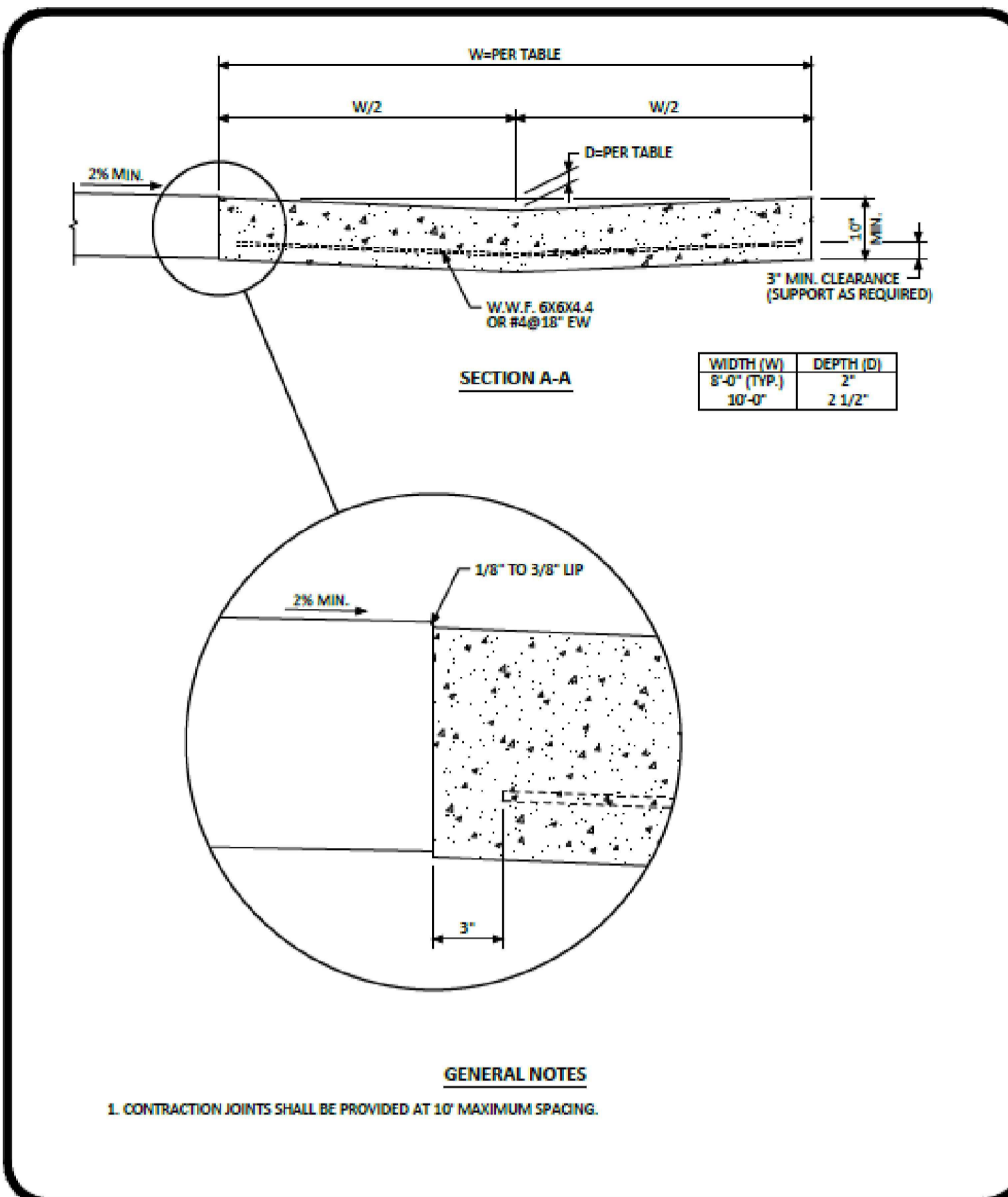
**VERTICAL CURB AND GUTTER SECTION**  
(CDOT CURB AND GUTTER TYPE 2 (SECTION II-B))



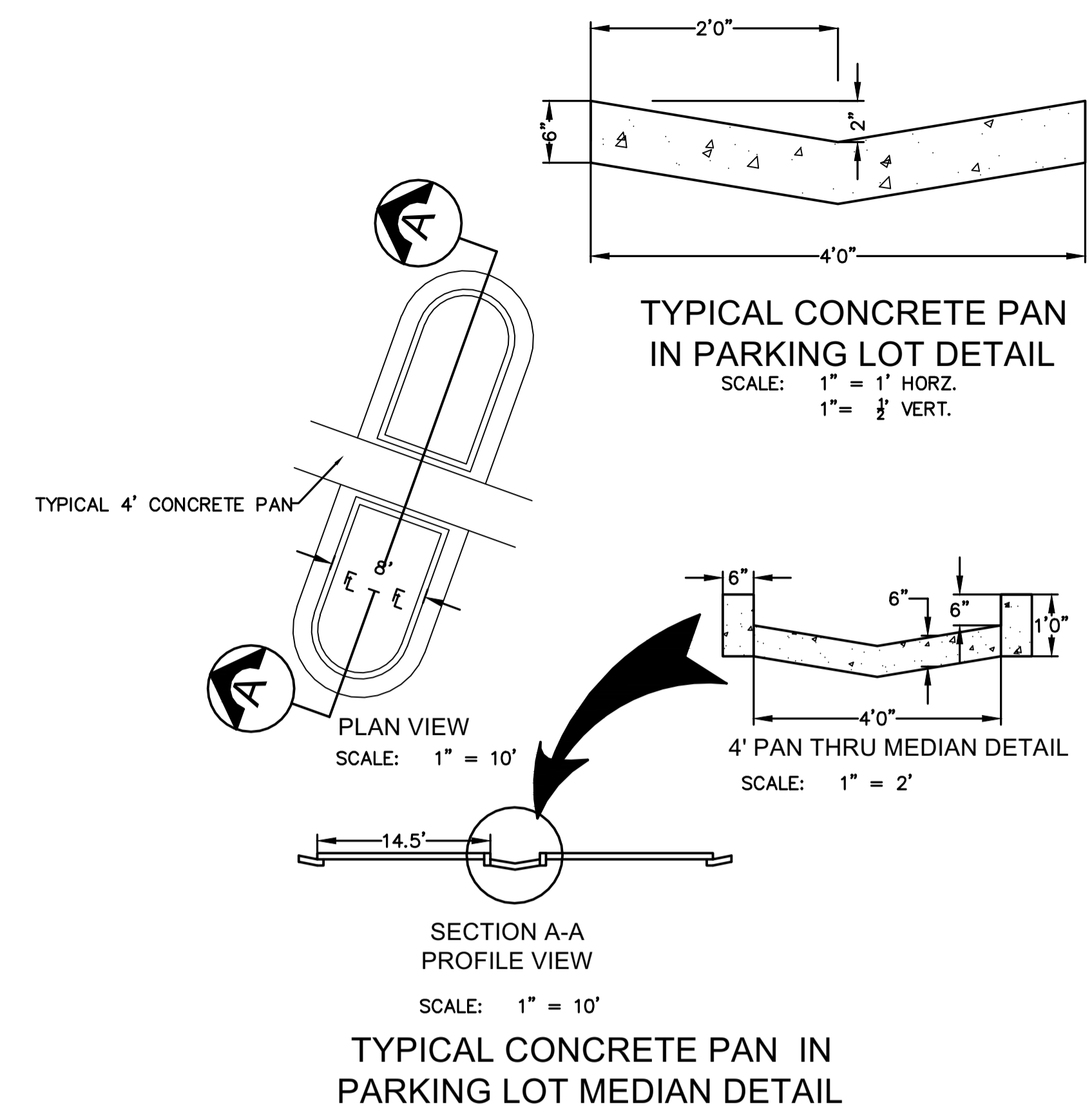
**MOUNTABLE CURB AND GUTTER SECTION**



1. CONTRACTION JOINTS ON CONCRETE TRAILS SHALL BE SAWCUT.  
2. FOR MONOLITHIC CURB AND GUTTER, A TOOLED JOINT SHALL BE PLACED AT THE BACK OF CURB. TRANSVERSE SIDEWALK JOINTS SHALL MATCH CURB AND GUTTER JOINTS.



1. CONTRACTION JOINTS SHALL BE PROVIDED AT 10' MAXIMUM SPACING.



**TYPICAL CONCRETE PAN IN PARKING LOT MEDIAN DETAIL**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

**Parker COLORADO**

**CURB, GUTTER, AND SIDEWALK SECTIONS STANDARD DETAIL**

DATE AUGUST 2014

DETAIL **3**

1 OF 1

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

**Parker COLORADO**

**ATTACHED SIDEWALK STANDARD DETAIL**

DATE AUGUST 2014

DETAIL **4**

2 OF 2

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

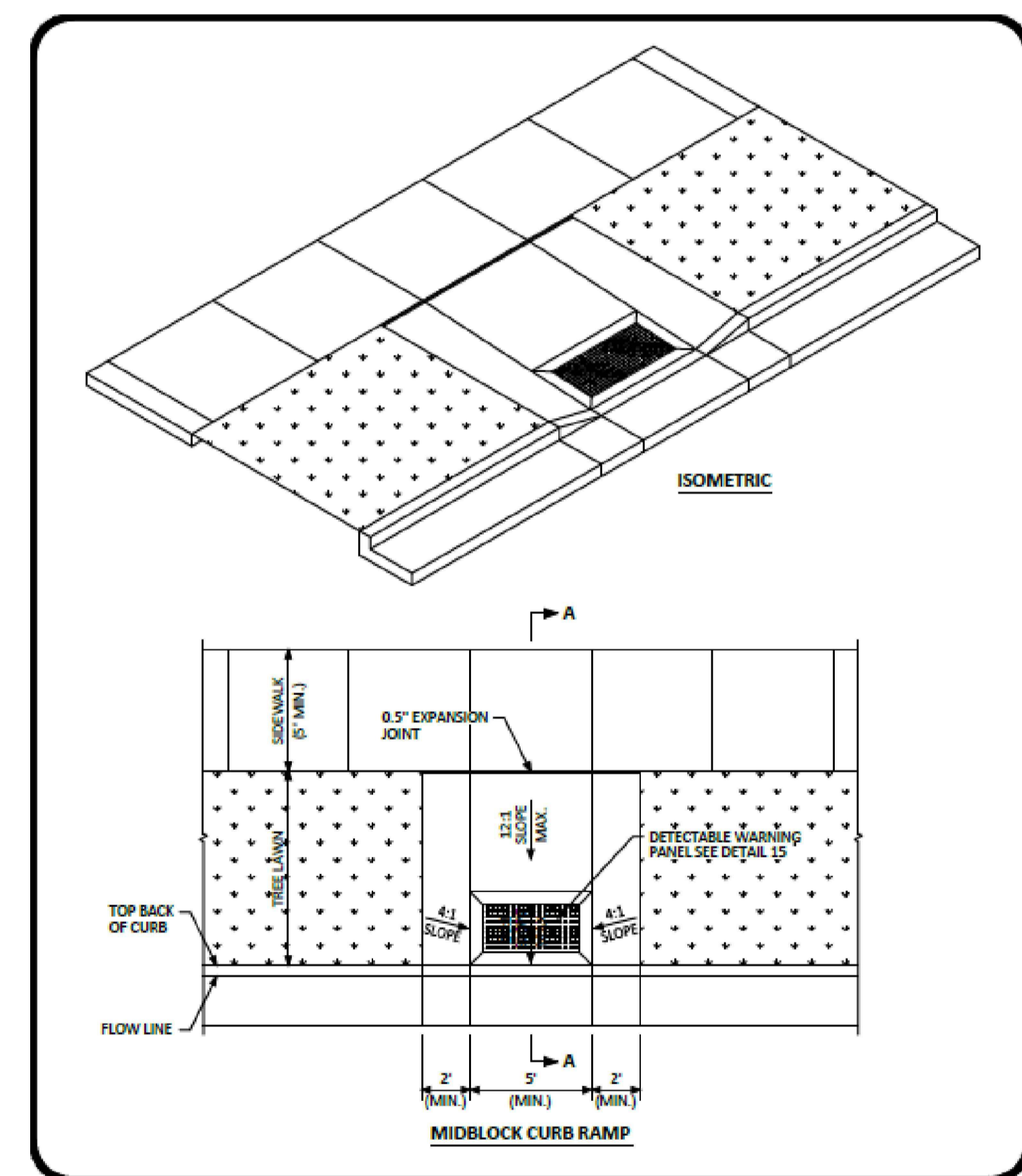
**Parker COLORADO**

**CROSS PAN LAYOUT STANDARD DETAIL**

DATE AUGUST 2014

DETAIL **19**

1 OF 1



NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

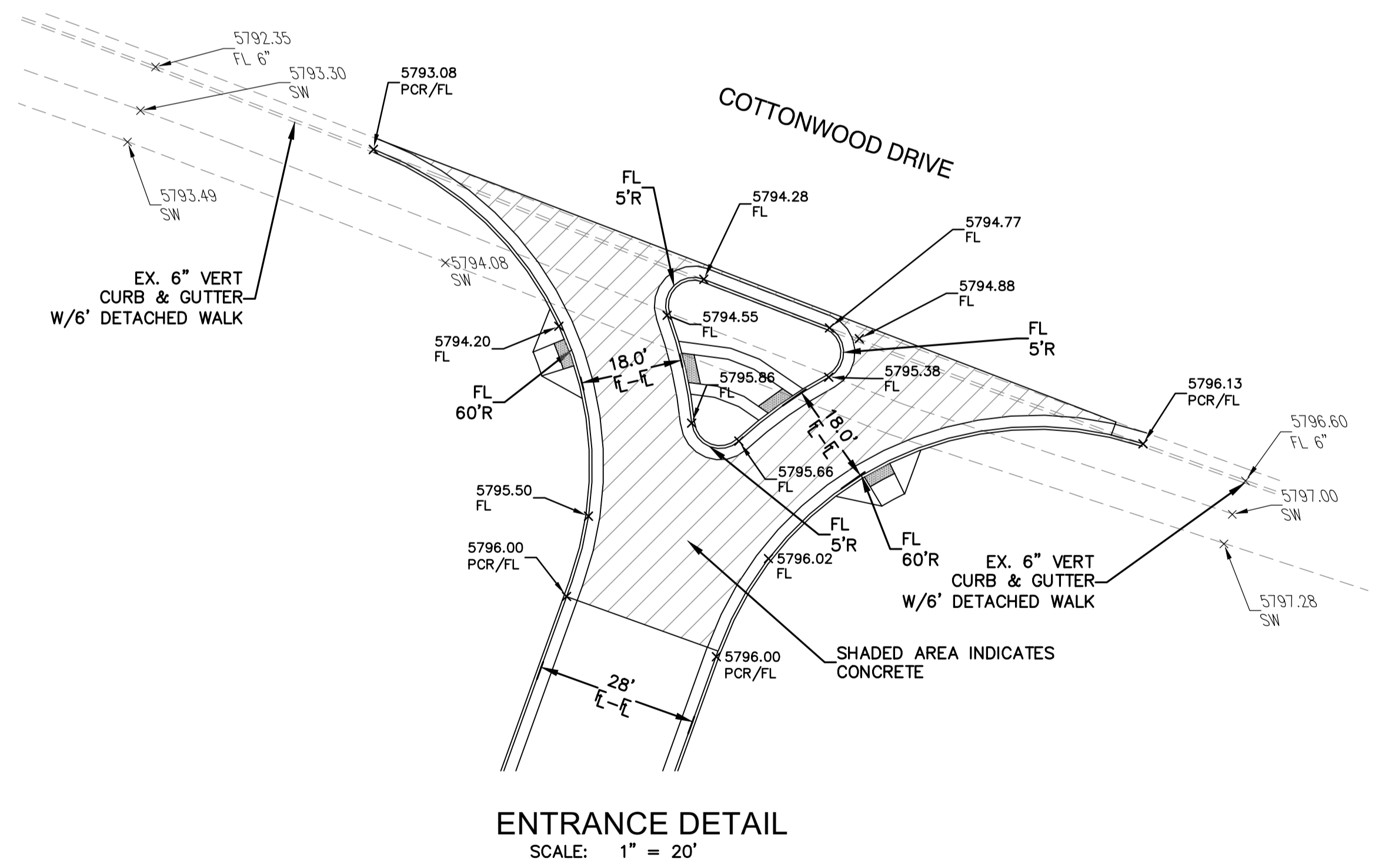
**Parker COLORADO**

**MIDBLOCK CURB RAMP LAYOUT STANDARD DETAIL**

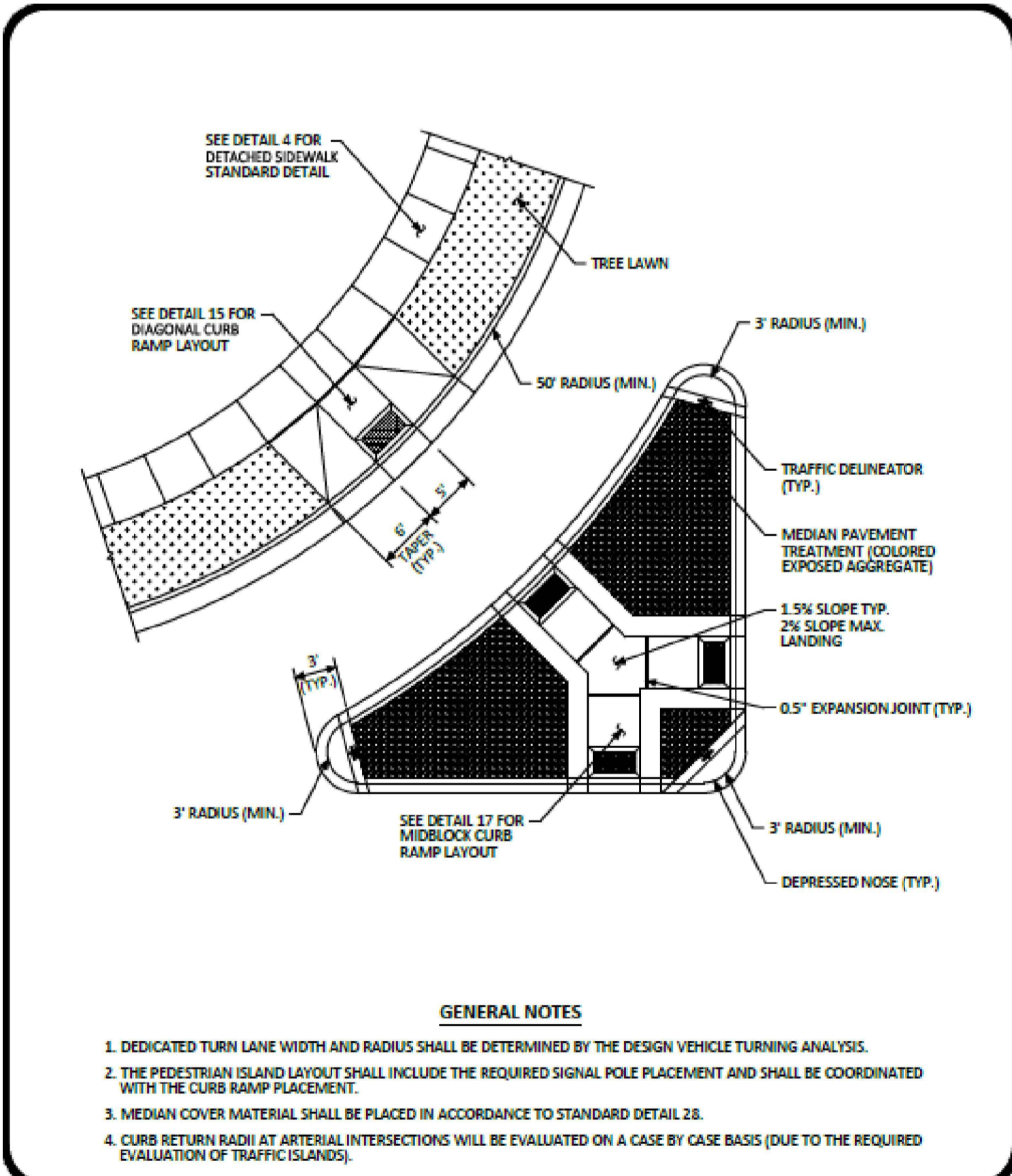
DATE AUGUST 2014

DETAIL **17**

1 OF 2



**ENTRANCE DETAIL**  
SCALE: 1" = 20'



1. DEDICATED TURN LANE WIDTH AND RADIUS SHALL BE DETERMINED BY THE DESIGN VEHICLE TURNING ANALYSIS.  
2. THE PEDESTRIAN ISLAND LAYOUT SHALL INCLUDE THE REQUIRED SIGNAL POLE PLACEMENT AND SHALL BE COORDINATED WITH THE CURB RAMP PLACEMENT.  
3. MEDIAN COVER MATERIAL SHALL BE PLACED IN ACCORDANCE TO STANDARD DETAIL 28.  
4. CURB RETURN RADII AT ARTERIAL INTERSECTIONS WILL BE EVALUATED ON A CASE BY CASE BASIS (DUE TO THE REQUIRED EVALUATION OF TRAFFIC ISLANDS).

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

**Parker COLORADO**

**CURB RAMP ARTERIAL/ARTERIAL LAYOUT STANDARD DETAIL**

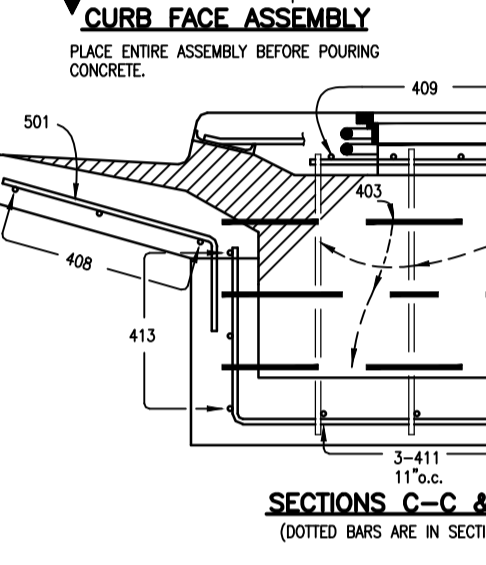
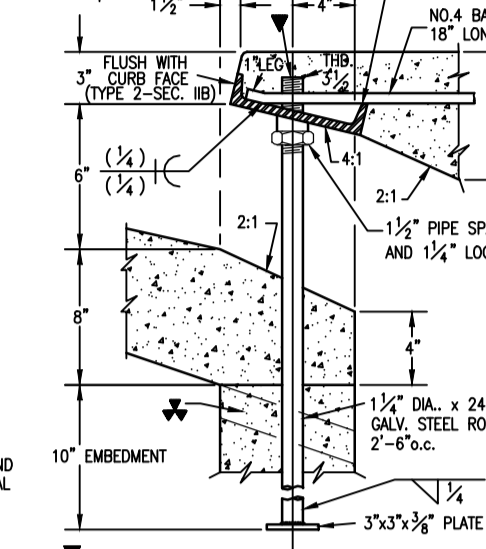
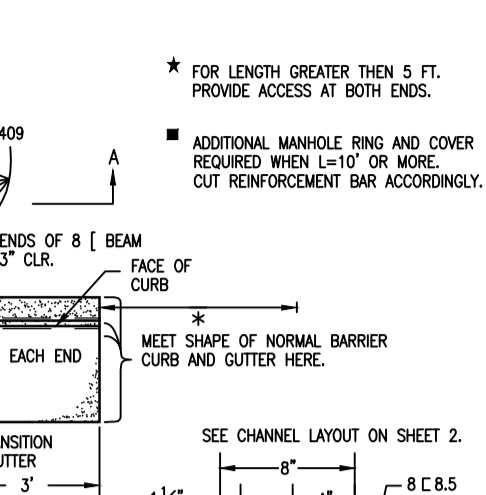
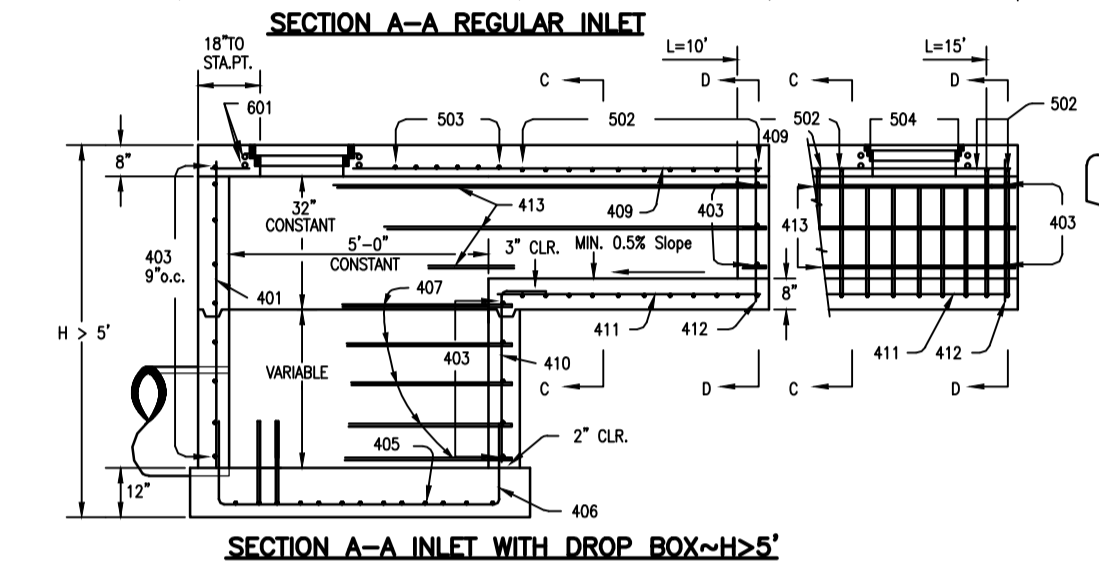
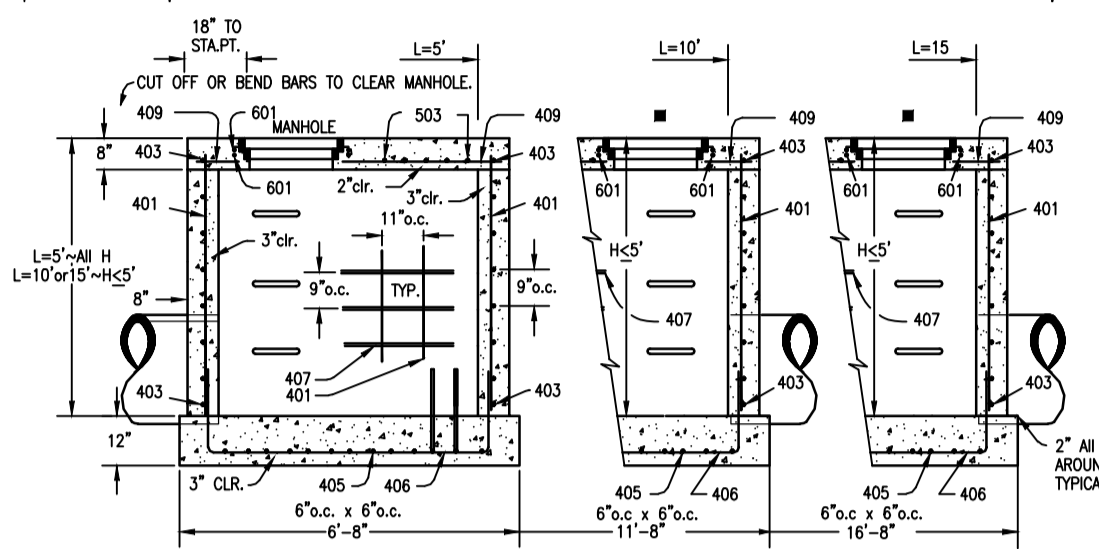
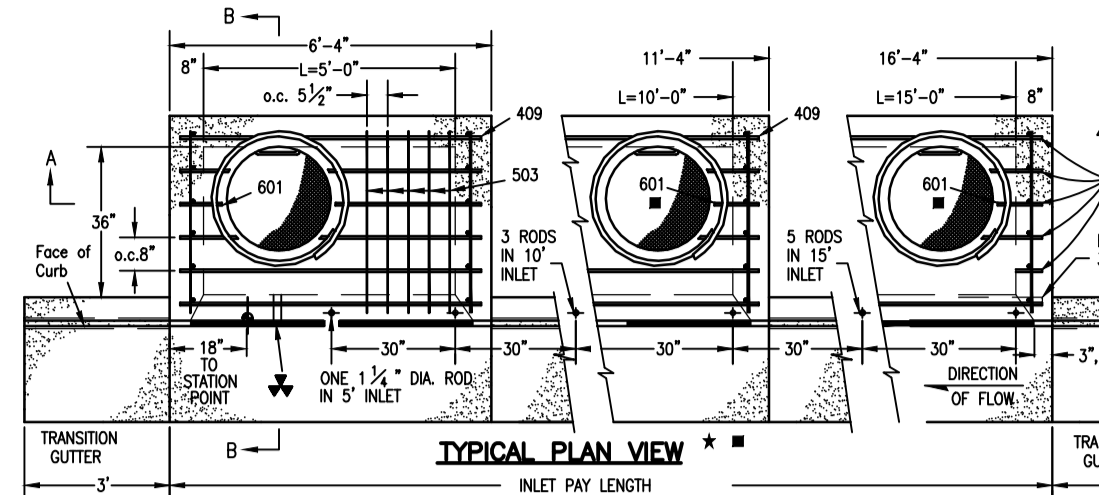
DATE AUGUST 2014

DETAIL **16**

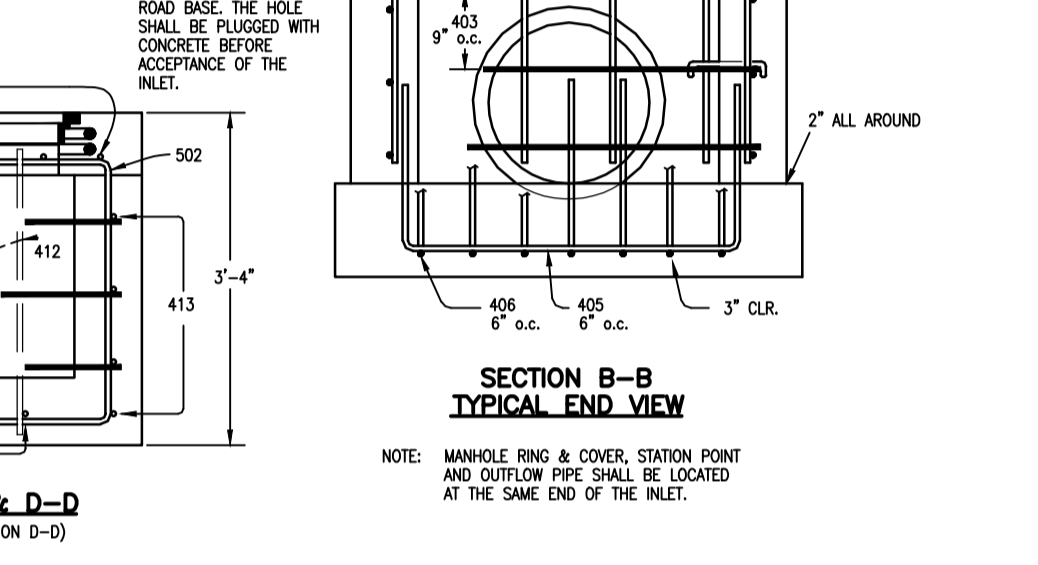
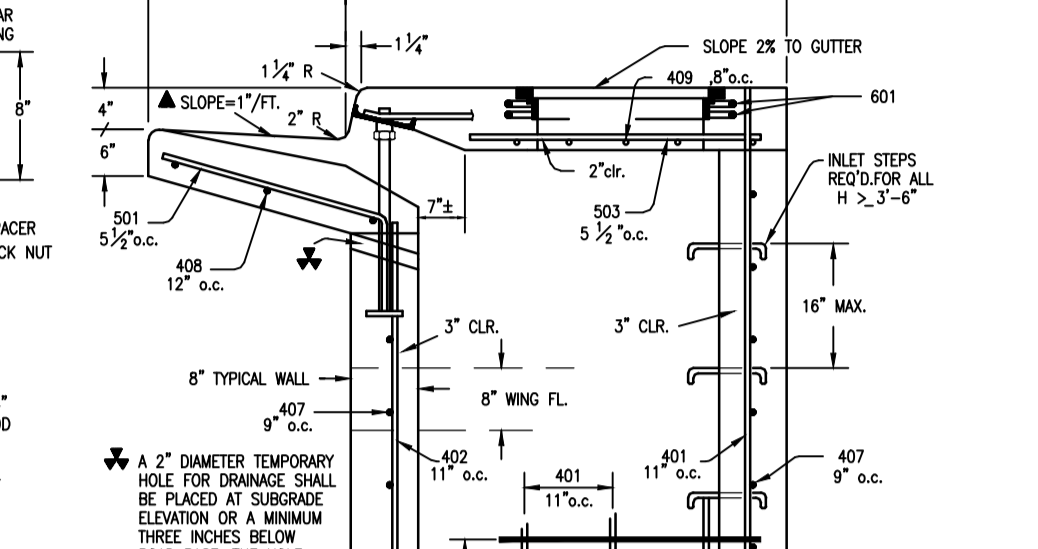
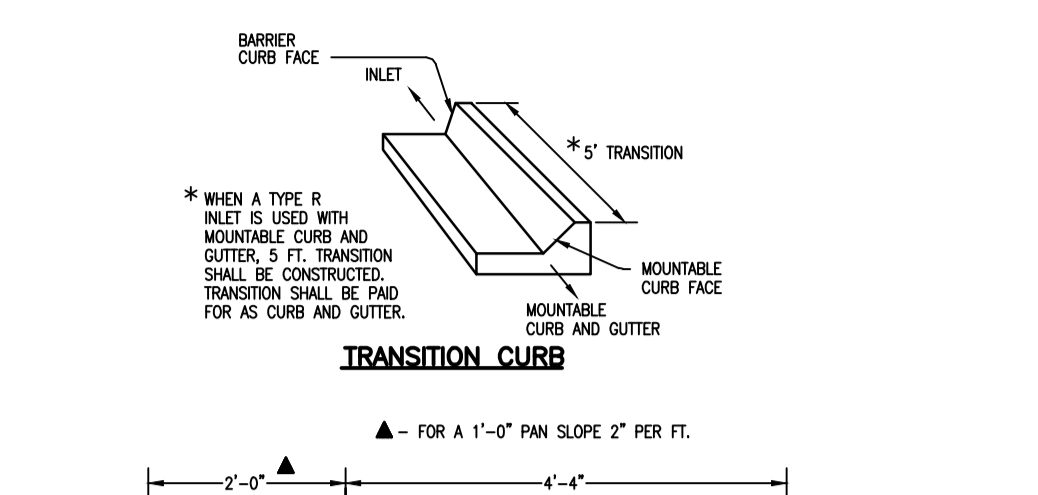
1 OF 1

REVISION	DATE	MM&D ENGINEERING SERVICES, INC.
COMMENTS	05/26/2015	William E. Miller, PE 13389 ENGINEERING CONSTRUCTION MANAGEMENT 9125 N. Clydesdale Road PH (303) 908-0082 Castle Rock, Colorado 80108 FAX (303) 708-8399
		Boondocks Parker, Colorado Detail Sheet Construction Plans

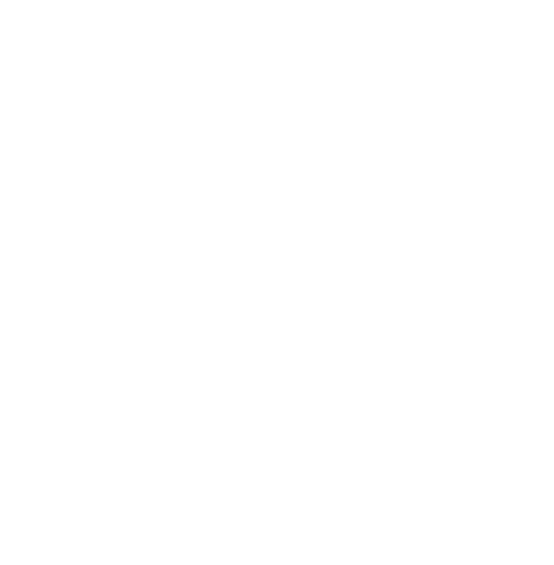
submittal 03/10/2015  
DATE 09/16/2014  
DES/DF1/GHK\_WEM/km  
PROJ. NO. 13-343  
SHEET 23 OF 24



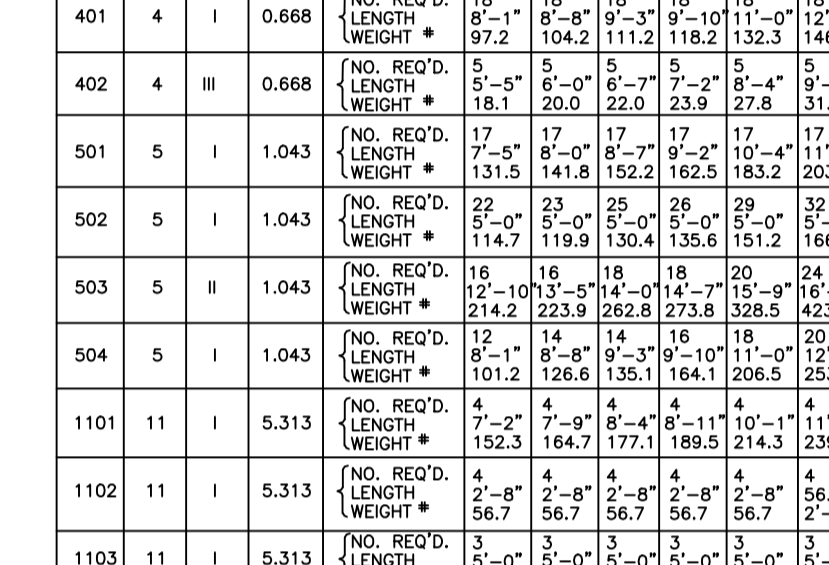
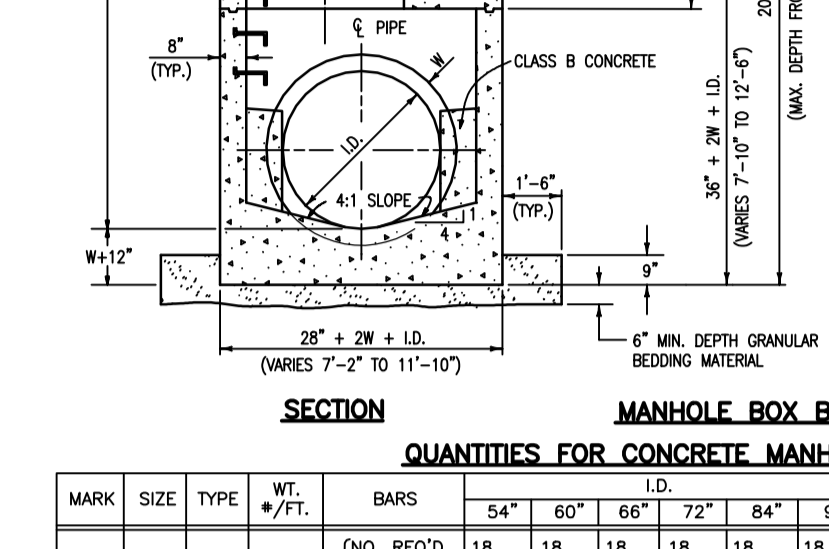
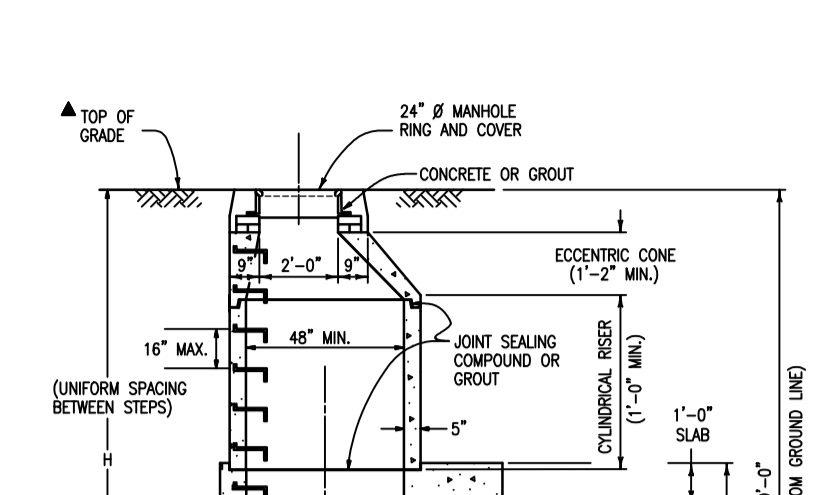
SECTIONS C-C & D-D (DOTTED BARS ARE IN SECTION D-D)



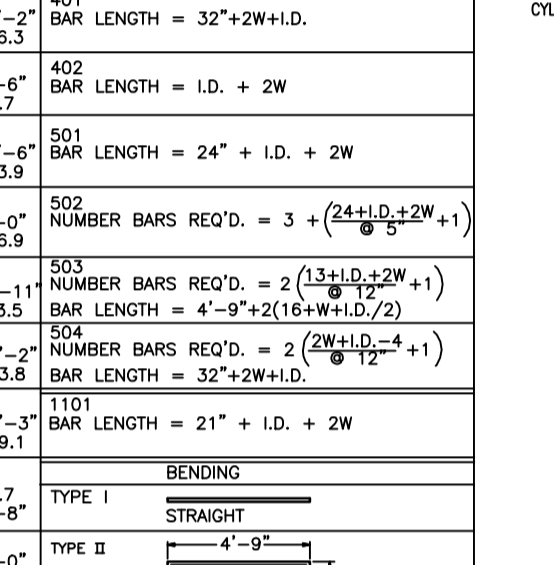
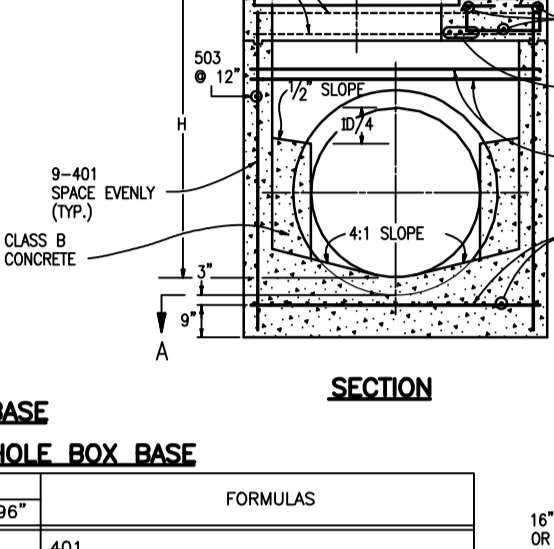
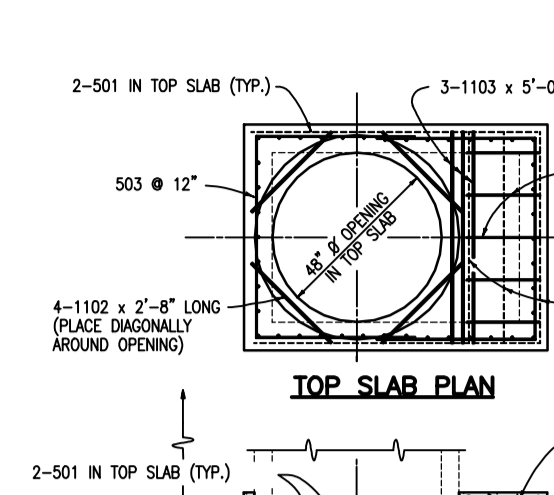
SECTION QUANTITIES FOR CONCRETE MANHOLE BOX BASE



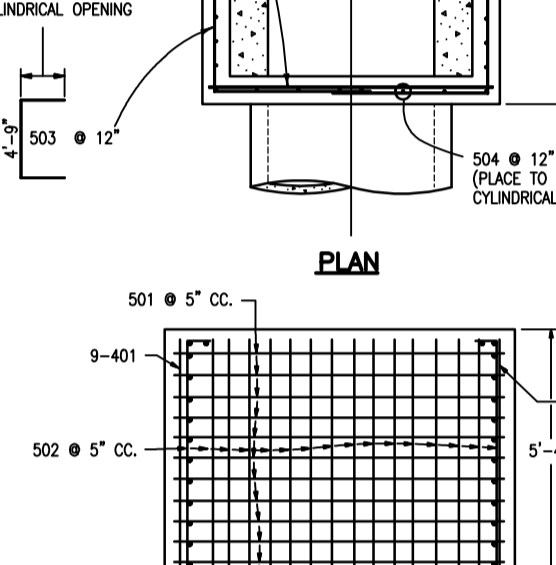
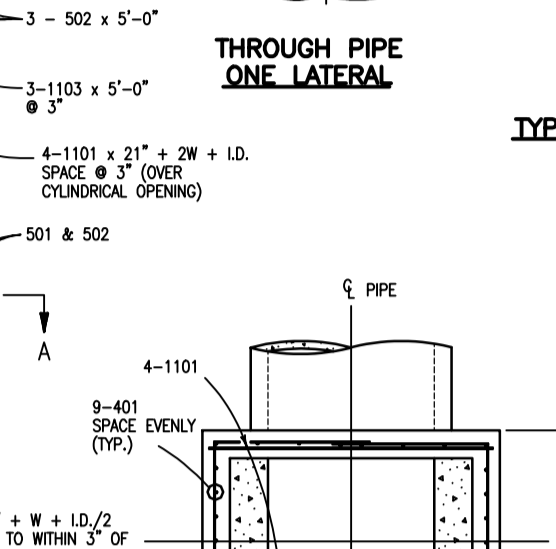
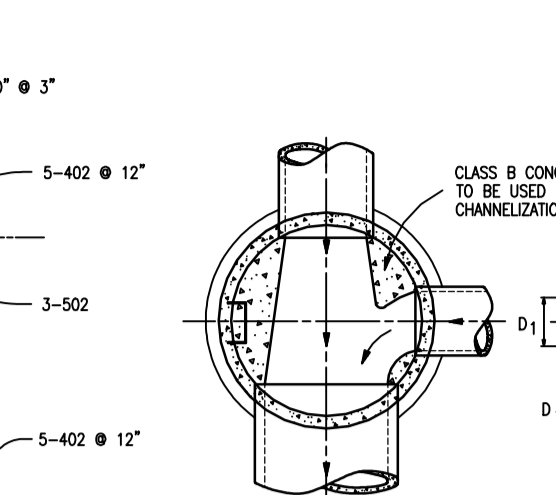
TYPICAL CHANNELIZATION DETAILS



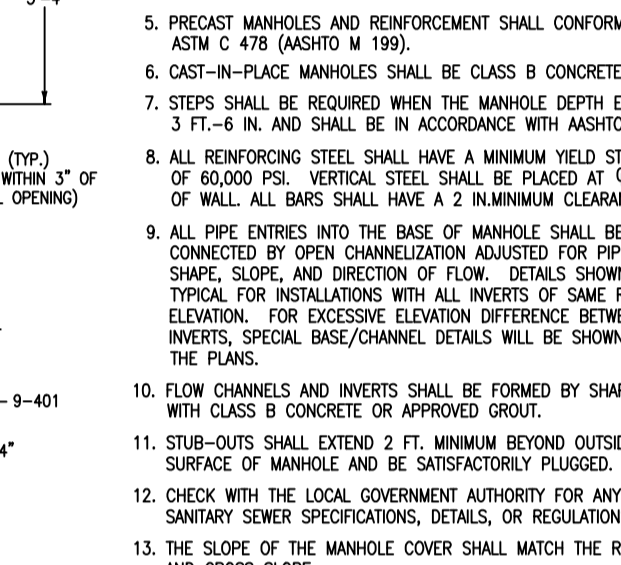
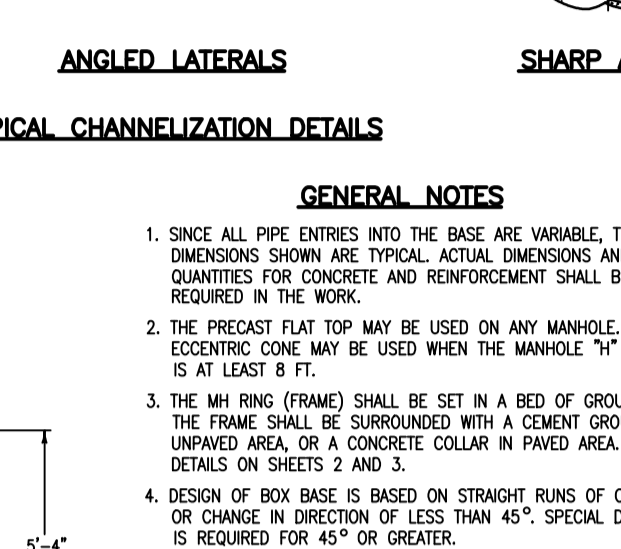
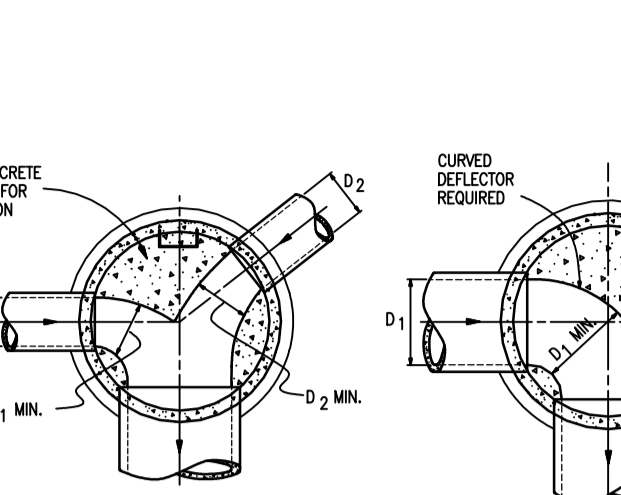
SECTION A-A (STEEL IN BOTTOM OF BASE)



SECTION F-F CAST-IN-PLACE SLAB BASE



SECTION I-I PRECAST MANHOLE BASES



SECTION L-L MANHOLE SLAB BASE

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

MARK	DIA. IN.	O.C. SPACING	TYPE	ALL INLETS, H = 5'			INLETS, H = 5'		
				L=5'	L=10'	L=15'	L=5'	L=10'	L=15'
				NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
401	1 1/2"	11"	II	15	21	26	11	7	11
402	1 1/2"	11"	II	7	13	18	7	7	7
403	9"	11"	II	4	10	14	4	4	4
405	6"	VI	II	11	8	10	11	6	10
406	6"	VIII	II	7	13	10	7	8	10
407	9"	II	II	5	10	10	5	5	10
408	12"	II	II	3	11	10	3	3	10
409	8"	II	II	6	10	10	6	6	10
410	1 1/2"	VI	II	3	3	3	3	3	3
411	1 1/2"	II	II	3	5	2	3	10	2
412	1 1/2"	II	II	3	2	9	3	2	9
413	9"	II	II	7	10	10	7	7	10
501	5 1/2"	IV	II	11	3	4	22	3	4
502	5 1/2"	III	II	11	11	5	17	11	5
503	5 1/2"	II	II	5	3	6	27	3	6
504	5 1/2"	IX	II	5	8	4	5	8	4
601	2 1/2"	V	II	2	8	10	2	8	10

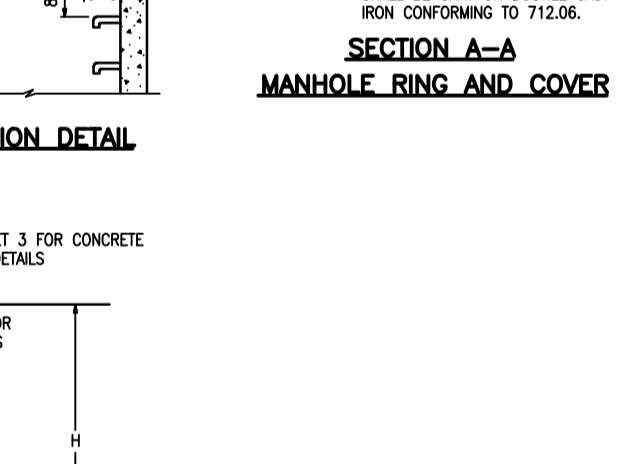
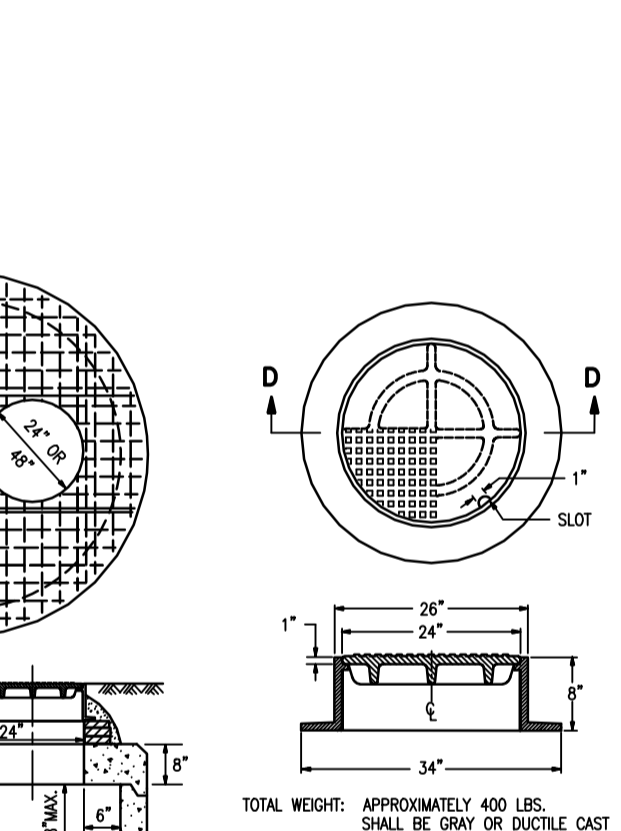
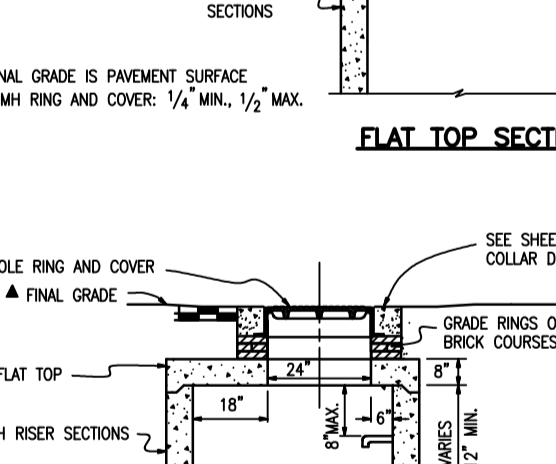
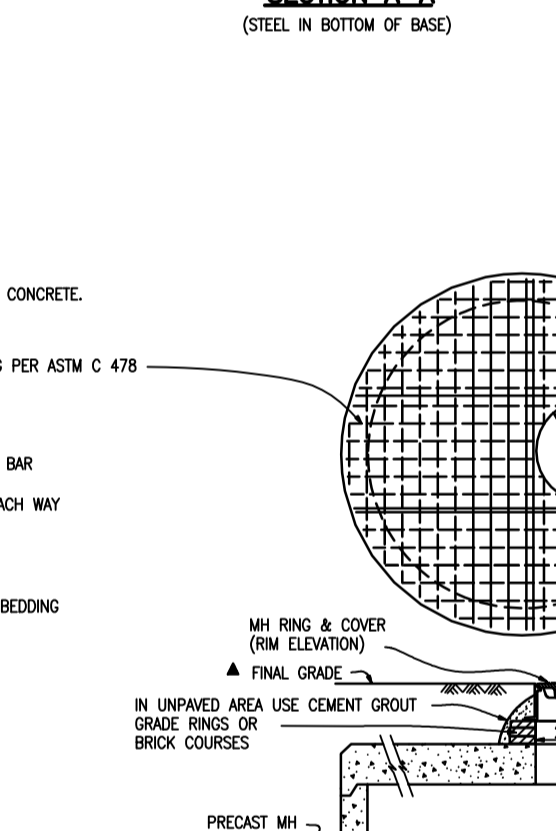
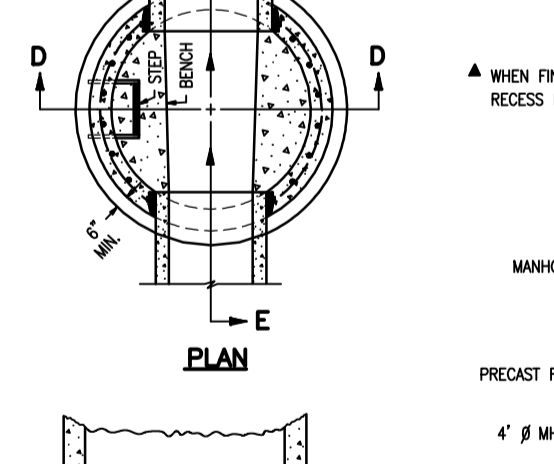
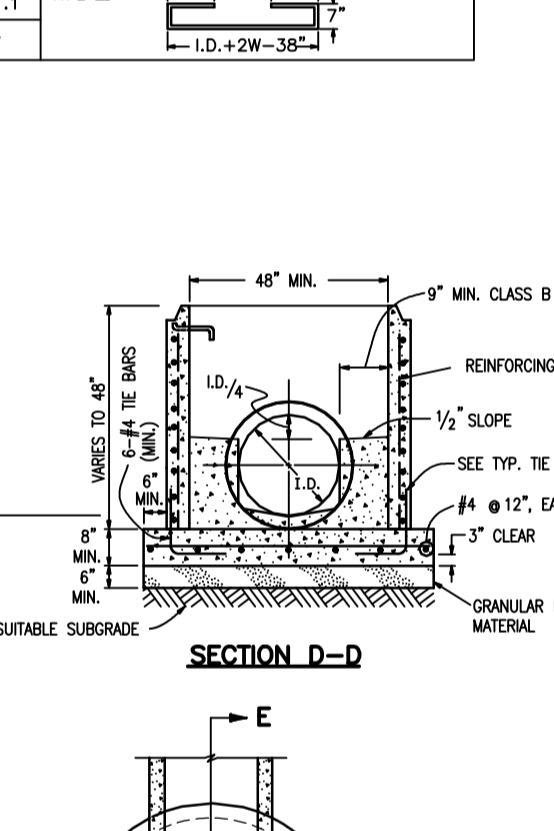
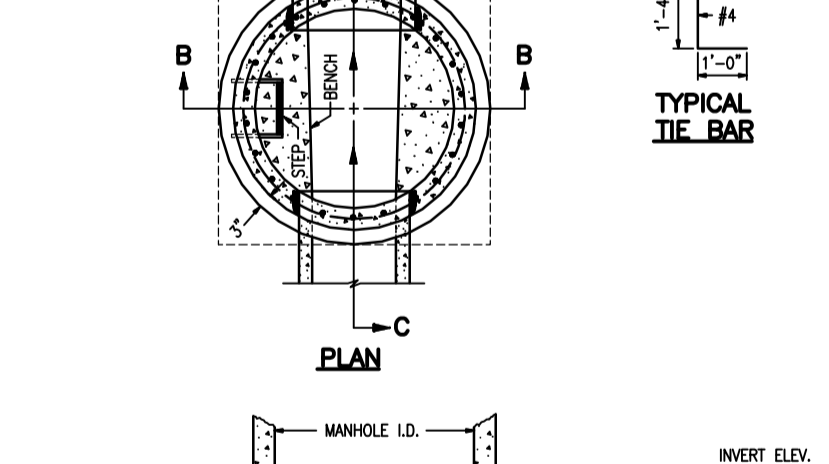
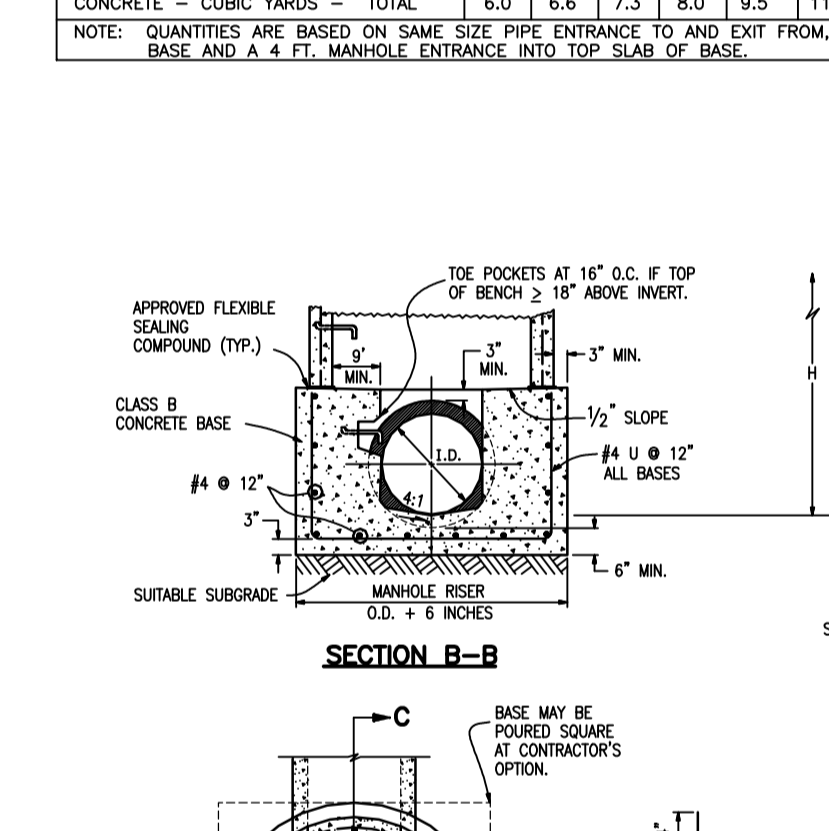
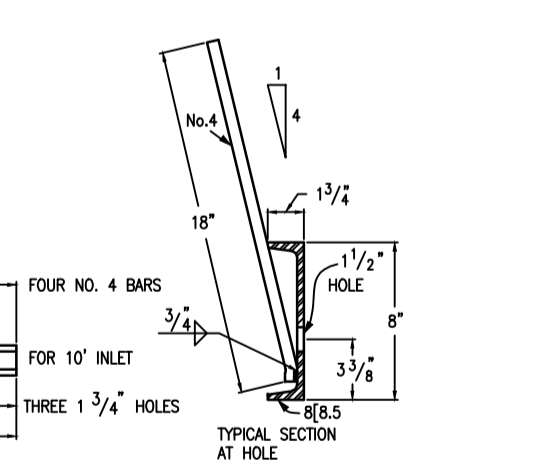
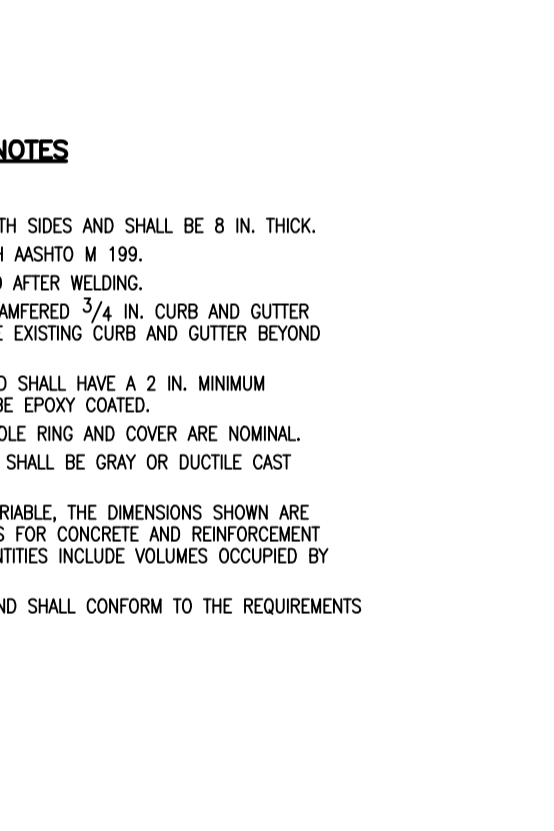
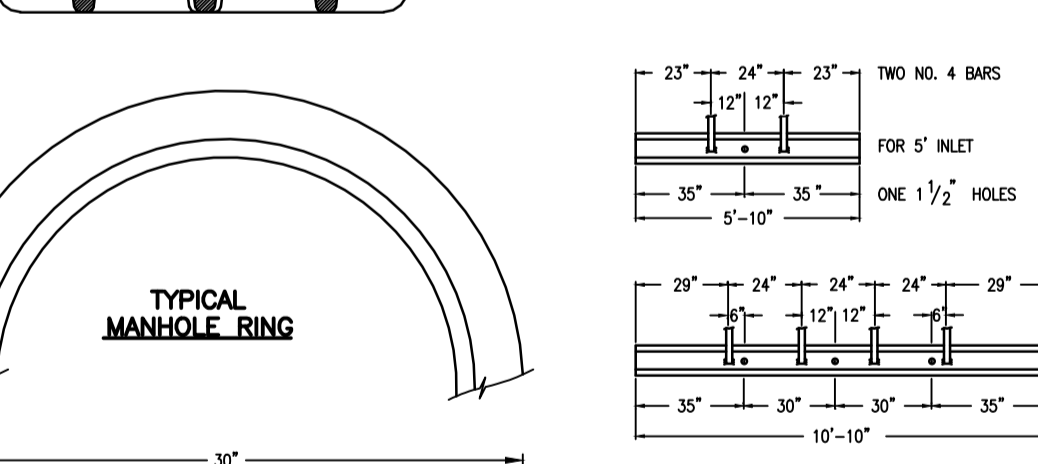
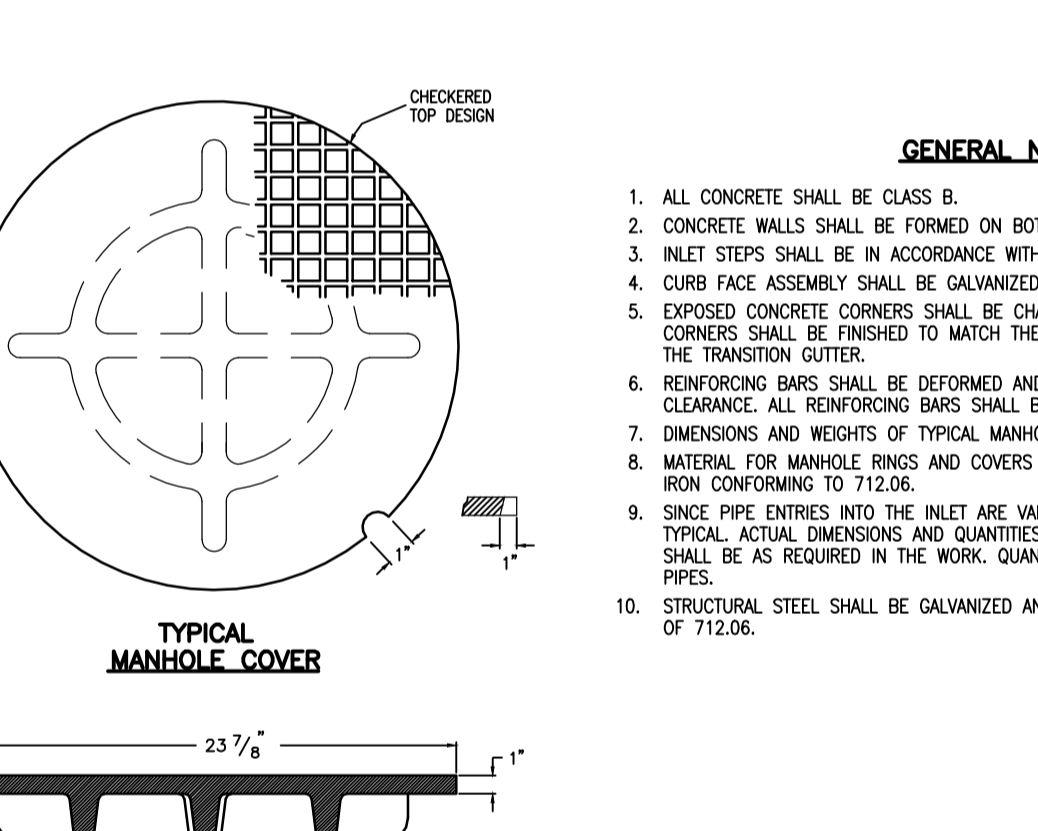
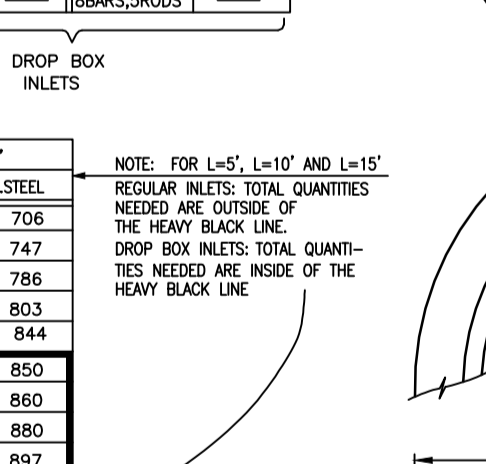
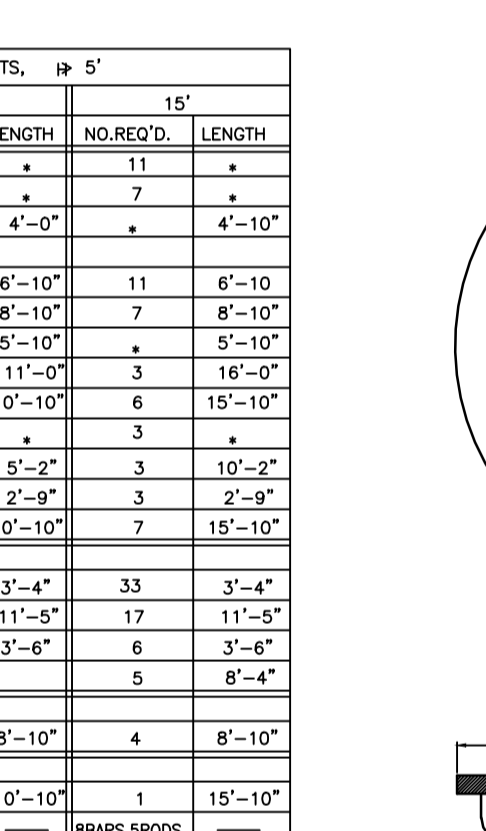
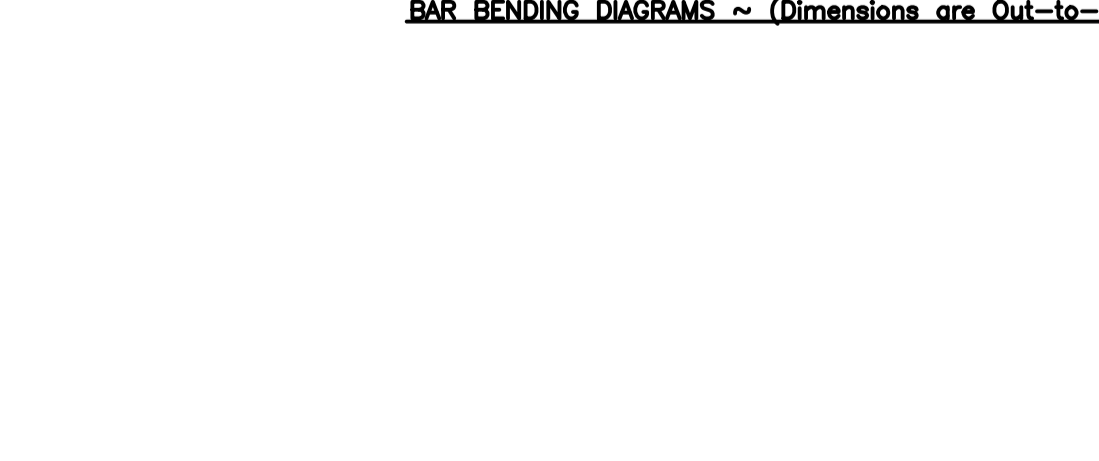
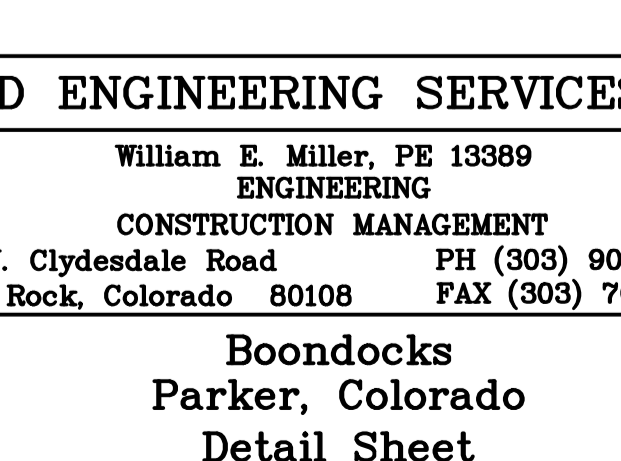
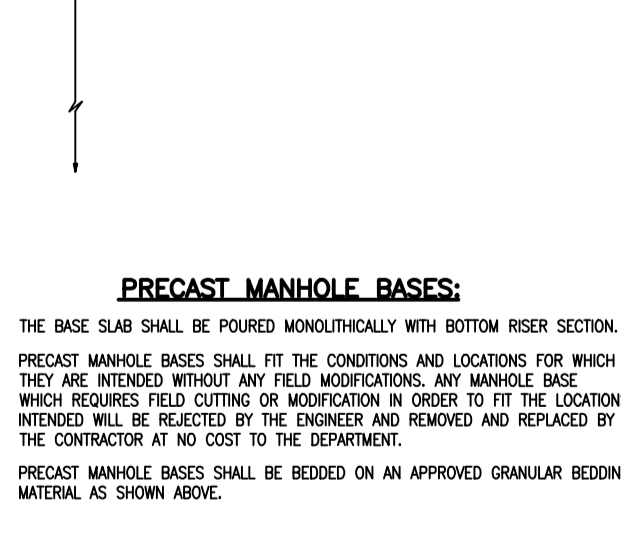
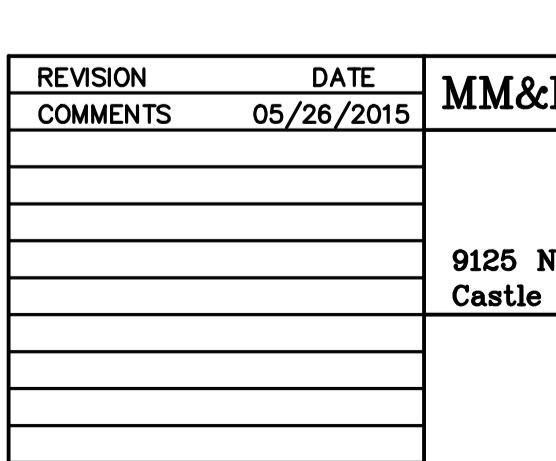
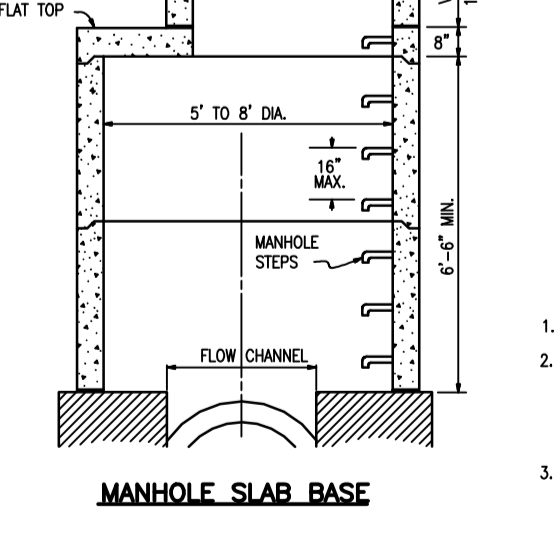
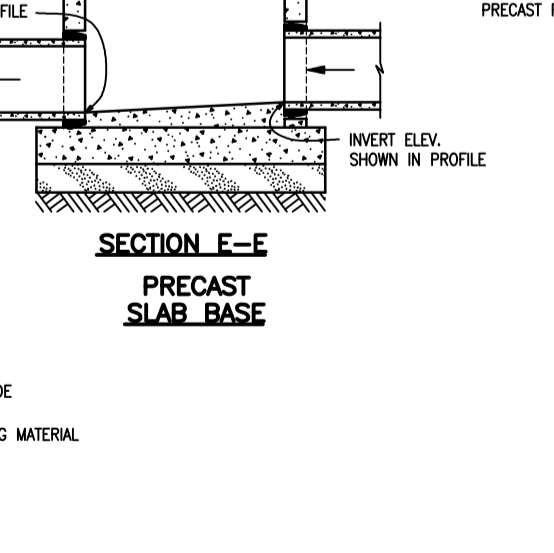
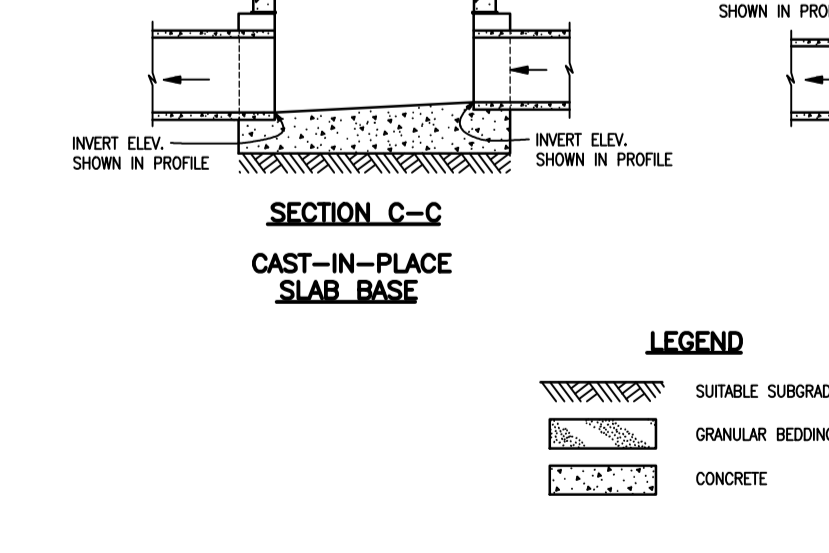
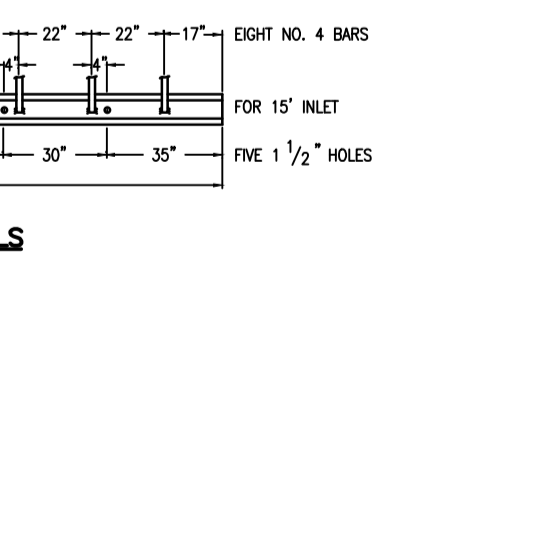
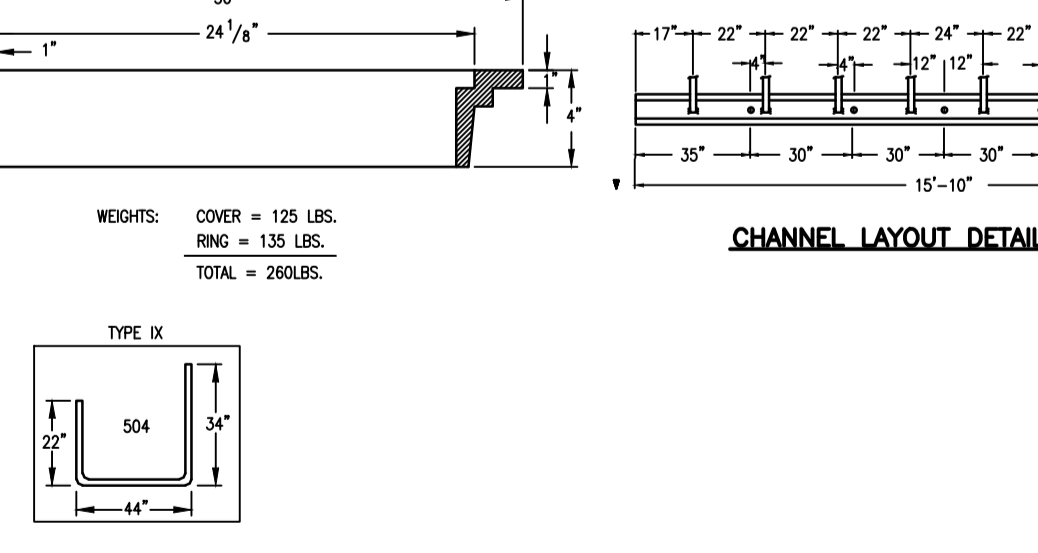
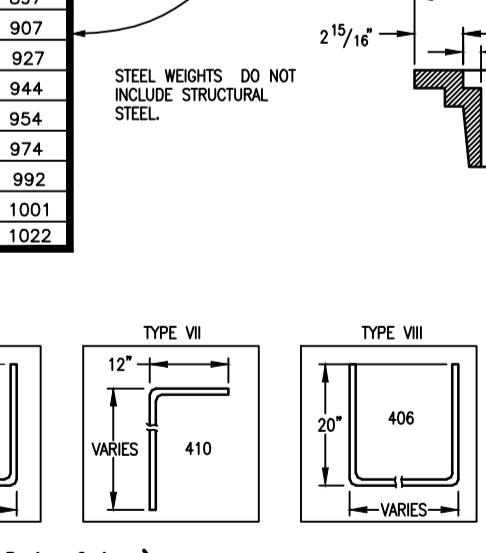


TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

H'	LENGTH	REGULAR INLETS		DROPPED INLETS	
		NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
3'-0"	2'-8"	10	7	3.2	285
3'-6"	3'-2"	10	7	3.4	305
4'-0"	3'-8"	12	9	3.7	326
4'-6"	4'-2"	12	9	3.9	334
5'-0"	4'-8"	14	11	4.1	354
5'-6"	5'-2"	16	13	4.4	375
6'-0"	5'-8"	16	13	4.6	382
6'-6"	6'-2"	18	15	4.8	402
7'-0"	6'-8"	20	17	5.0	423
7'-6"	7'-2"	20	17	5.3	430
8'-0"	7'-8"	22	19	5.5	451
8'-6"	8'-2"	24	21	5.7	471
9'-0"	8'-8"	24	21	6.0	479
9'-6"	9'-2"	26	23	6.2	499
10'-0"	9'-8"	28	25	6.4	520
10'-6"	10'-2"	28	25	6.7	527
11'-0"	10'-8"	30	27	6.9	547



BAR BENDING DIAGRAMS ~ (Dimensions are Out-to-Out of Bar)



SECTION N-N MANHOLE SLAB BASE



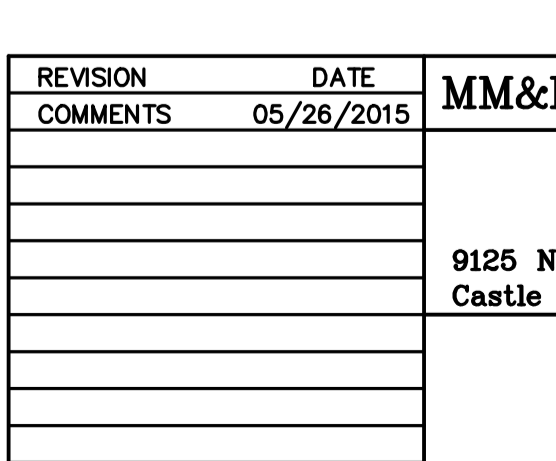
SECTION P-P MANHOLE SLAB BASE



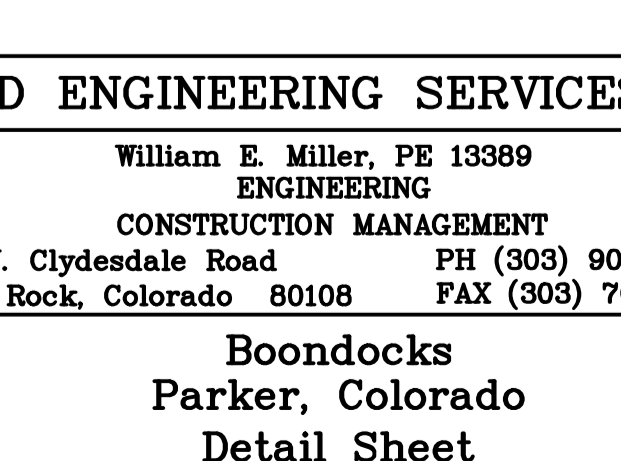
SECTION R-R MANHOLE SLAB BASE



SECTION T-T MANHOLE SLAB BASE



SECTION V-V MANHOLE SLAB BASE



SECTION X-X MANHOLE SLAB BASE

REINFORCING STEEL TOTAL

CONCRETE - CUBIC YARDS - TOTAL

GENERAL NOTES

SECTION QUANTITIES FOR CONCRETE MANHOLE BOX BASE

TYPICAL MANHOLE COVER

TYPICAL MANHOLE RING

CHANNEL LAYOUT DETAILS

TYPICAL TIE BAR

SECTION A-A (STEEL IN BOTTOM OF BASE)

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

SECTION H-H

SECTION I-I

SECTION J-J

SECTION K-K

SECTION L-L

SECTION M-M

SECTION N-N

SECTION O-O

SECTION P-P

SECTION Q-Q

SECTION R-R

SECTION S-S

SECTION T-T

SECTION U-U

SECTION V-V

SECTION W-W

SECTION X-X

SECTION Y-Y

SECTION Z-Z

REVISION COMMENTS

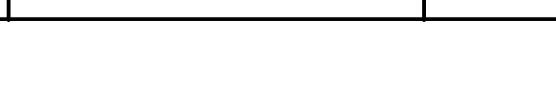
DATE 05/26/2015

MM&D ENGINEERING SERVICES, INC.

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Boondocks Parker, Colorado Detail Sheet Construction Plans

submittal 03/10/2015 DATE 09/16/2014 DES/DET/CHK. WEM/km PROJ. NO. 13-343 SHEET 24 OF 24



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