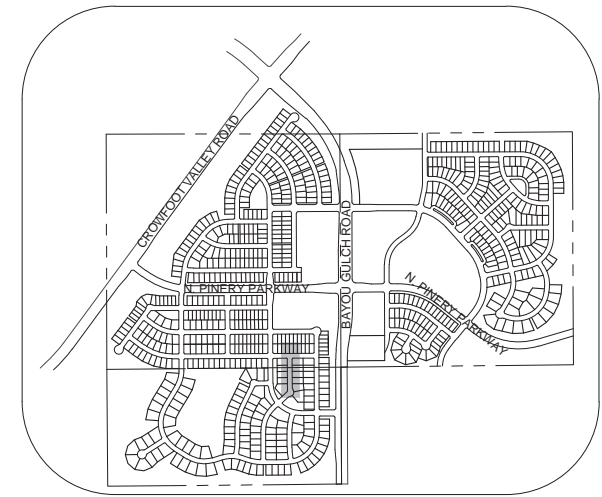
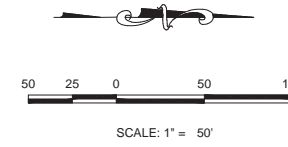
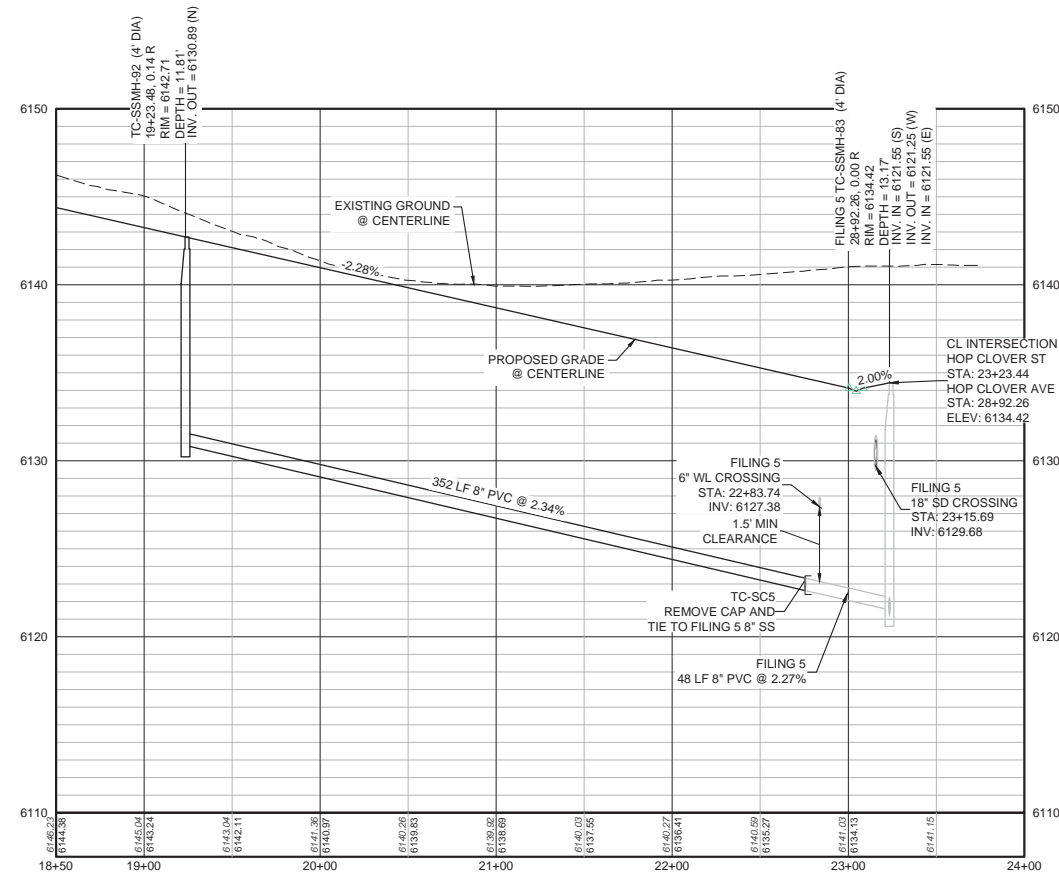


PLAN: HOP CLOVER ST STA: 18+50.00 TO 24+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	- - - -	CENTERLINE
6	LOT NUMBER	— — — —	RIGHT-OF-WAY
⊕	PROPOSED BUTTERFLY VALVE	— — — —	PROPERTY LINE
⌈	PROPOSED CAP WITH END OF LINE BLOWOFF	— — — —	EDGE OF PAVEMENT
⌋	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	— 5615 —	EXISTING 5' CONTOUR
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	— 5616 —	EXISTING 1' CONTOUR
⊕	PROPOSED FLARED END SECTION	— 5620 —	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	— 5607 —	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	— — — —	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	— — — —	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	— — — —	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	— — — —	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	— — — —	SECTION LINE
10.00	EXISTING ELEVATION	— — — —	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	— — — —	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	— — — —	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	— — — —	EXISTING TELEPHONE LINE



PROFILE: HOP CLOVER ST STA: 18+50.00 TO 24+00.00
HORIZONTAL: 1" = 50'
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ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
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EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

SEE SHEET 3 - AREA UTILITY PLAN FOR SANITARY SERVICE STATION TABLE.

N:\PROJECTS\SSR\ENGINEERING\SSR\WATER AND SANITATION\SANITARY PLAN AND PROFILE\RDAMES ROCKET STREET SANITARY.DWG, BRIAN.W, 3/5/2018 3:38 PM

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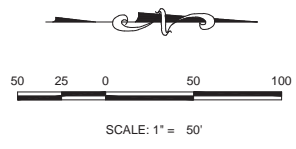
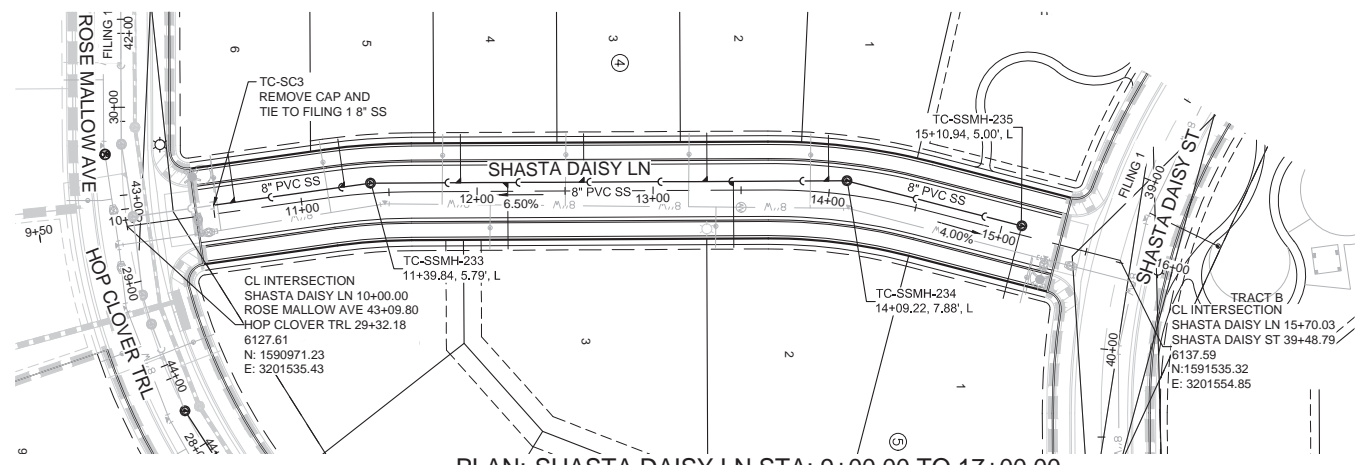
BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

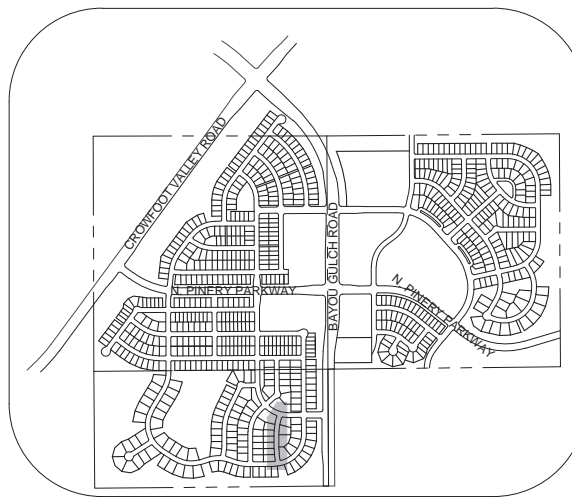
PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

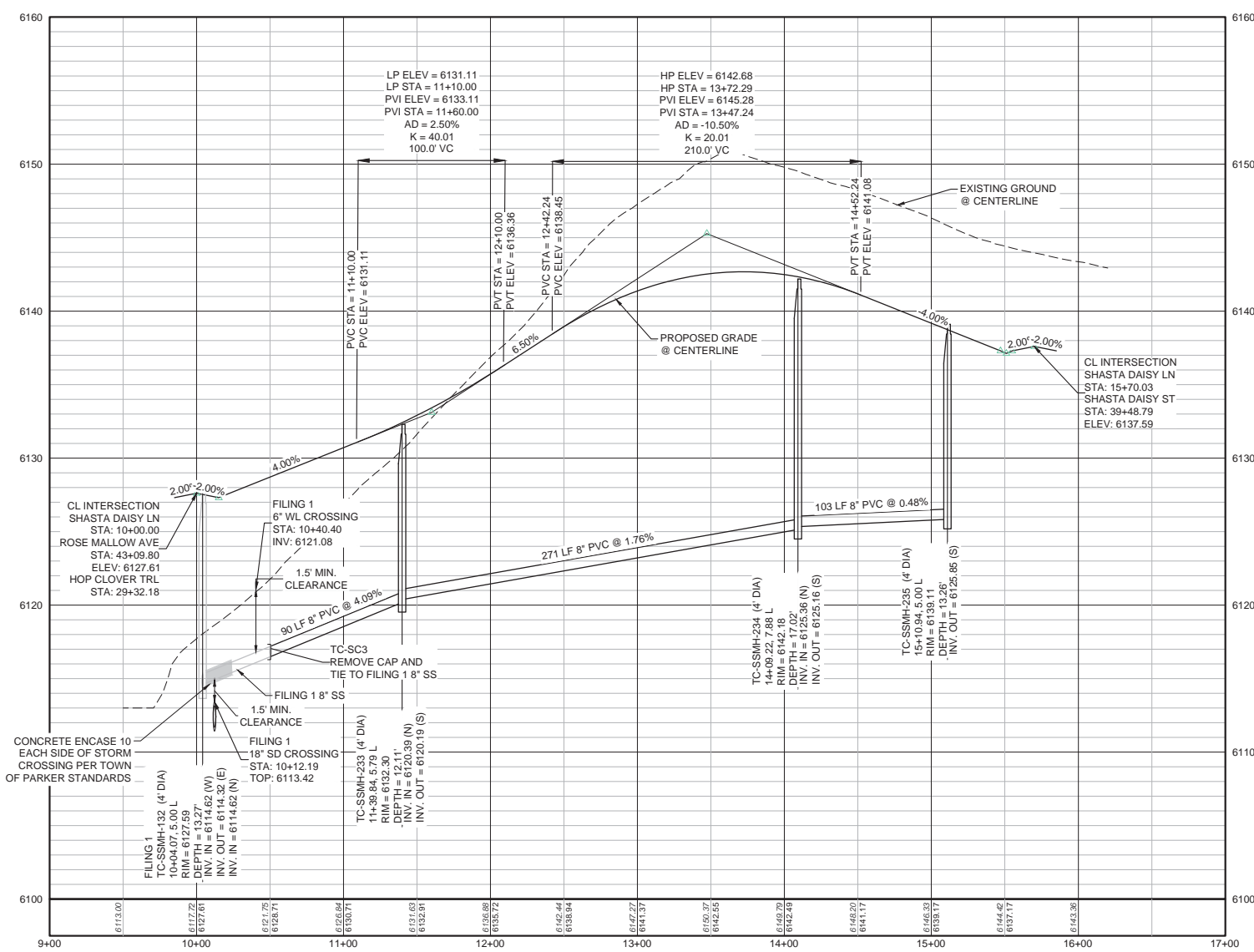
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5	TRAILS AT CROWFOOT			FILING 6 CONSTRUCTION DRAWINGS			
	SANITARY SEWER PLAN AND PROFILE			HOP CLOVER STREET			
No.	Revisions	Date	Init.	Apr.	Date		
10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-2828 Fax: (720) 482-9546		HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112		CVL CONSULTANTS			



PLAN: SHASTA DAISY LN STA: 9+00.00 TO 17+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: SHASTA DAISY LN STA: 9+00.00 TO 17+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	- - - - -	CENTERLINE
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⌋	PROPOSED CAP WITH END OF LINE BLOWOFF	—	EDGE OF PAVEMENT
⌋	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	— 5615	EXISTING 5' CONTOUR
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	— 5616	EXISTING 1' CONTOUR
⊕	PROPOSED FLARED END SECTION	— 5620	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	— 5607	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	—	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	—	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	—	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	—	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	—	SECTION LINE
10.00	EXISTING ELEVATION	—	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	— FO	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	— OH	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	— TEL	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
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HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINE FEET	WSE	WATER SURFACE ELEVATION

SEE SHEET 3 - AREA UTILITY PLAN FOR SANITARY SERVICE STATION TABLE.

10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 883-2828 Fax: (720) 883-9546	Revisions	Date	Apr.	Date
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	No.			
TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS SANITARY SEWER PLAN AND PROFILE SHASTA DAISY LANE	SCALE:	AS SHOWN	FILE NO.:	8130283701
DRAWN BY:	DEK	CHECKED BY:	JJJ	DATE:
				AUGUST 2017
SHEET NUMBER	6			

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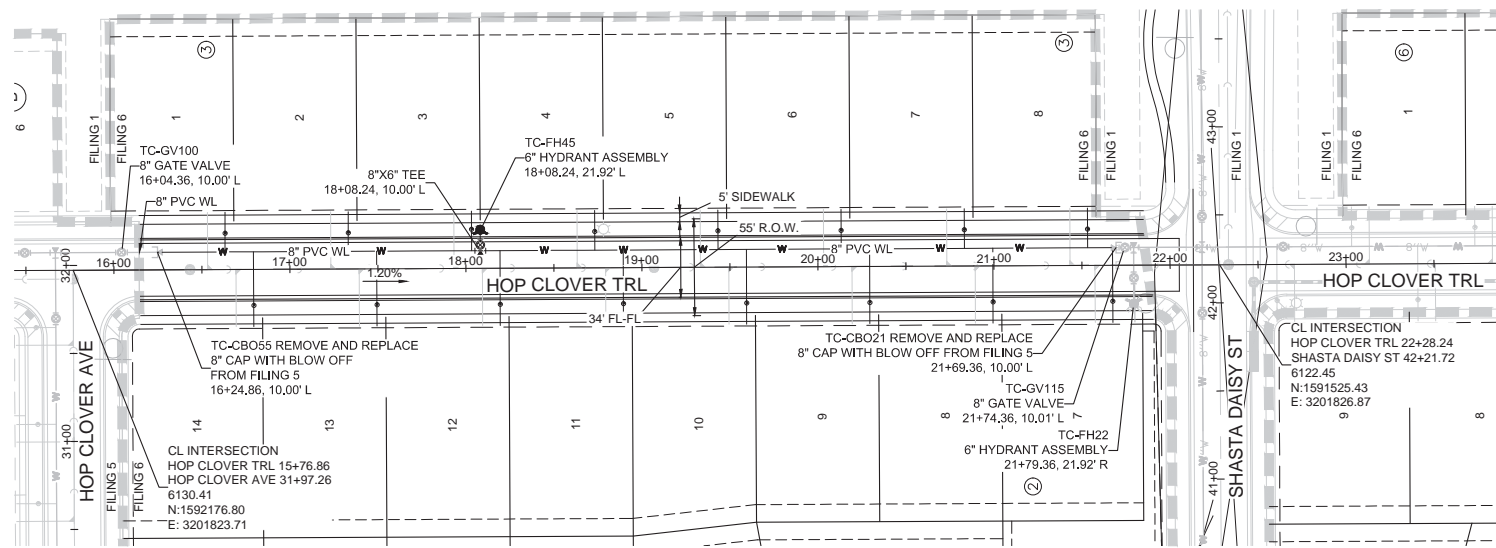
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BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

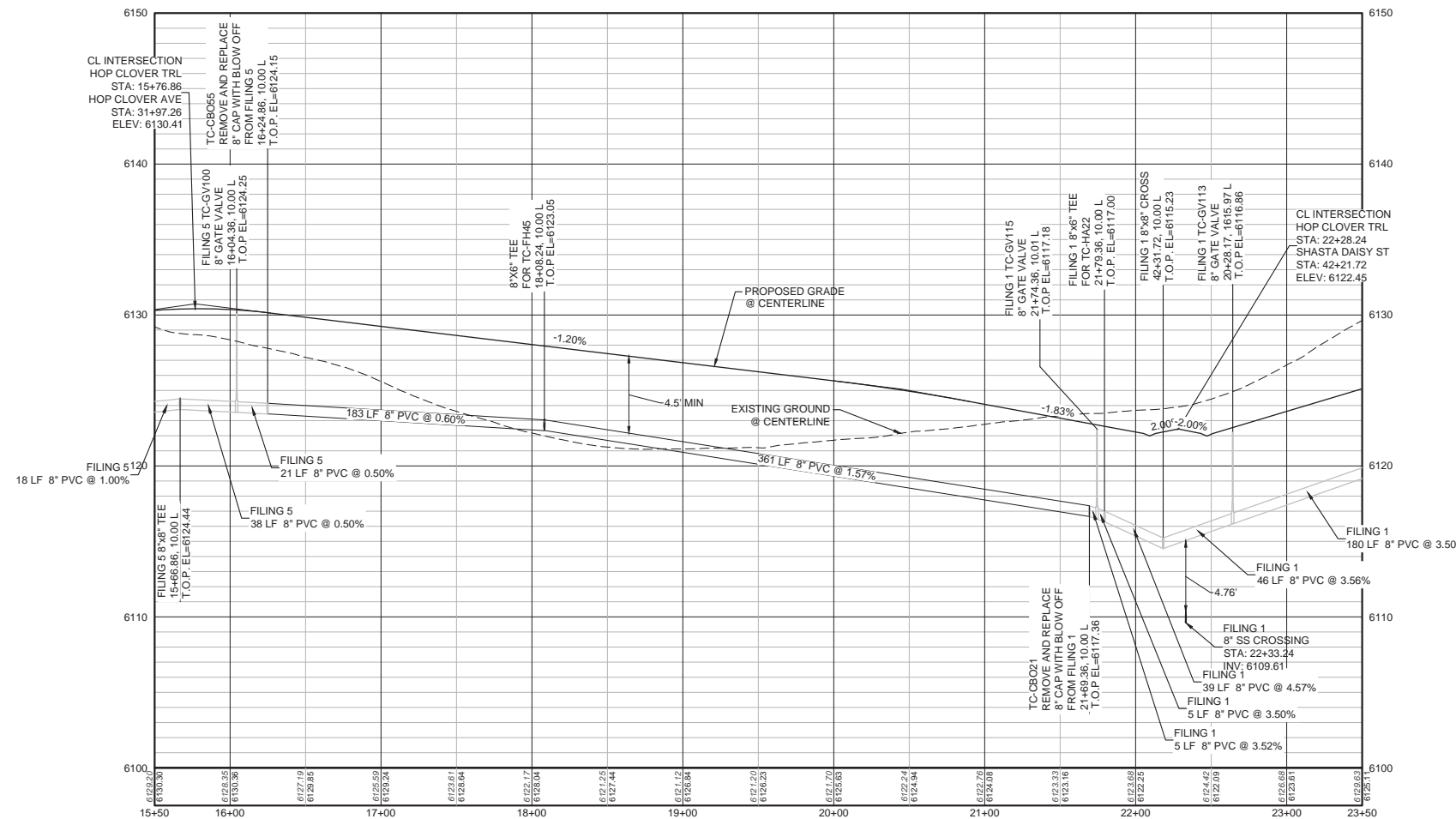
BASIS OF BEARINGS:
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PREPARED UNDER THE SUPERVISION OF

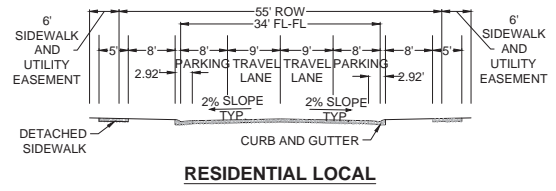
BRIAN P. WILSON
COLORADO P.E. 0050067



PLAN: HOP CLOVER TRL STA: 15+50.00 TO 23+50.00
HORIZONTAL SCALE: 1" = 50'



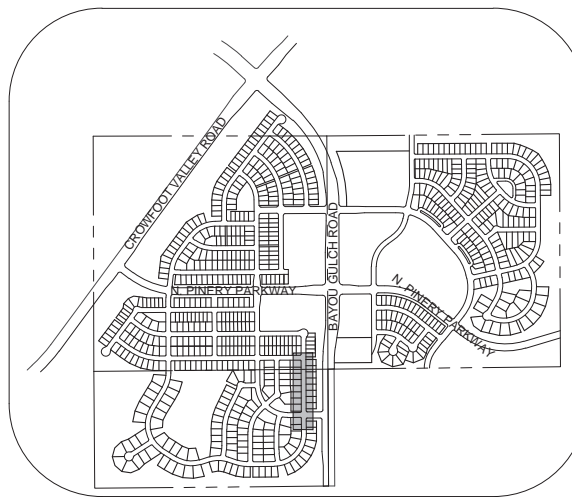
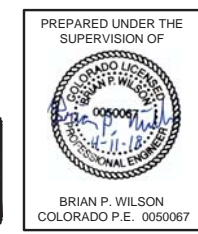
PROFILE: HOP CLOVER TRL STA: 15+50.00 TO 23+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



RESIDENTIAL LOCAL

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM

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KEYMAP
N.T.S.

LEGEND

(2)	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	- - - - -	CENTERLINE
6	LOT NUMBER	—	RIGHT-OF-WAY
(B)	PROPOSED BUTTERFLY VALVE	—	PROPERTY LINE
(C)	PROPOSED CAP WITH END OF LINE BLOWOFF	—	EDGE OF PAVEMENT
(D)	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
(E)	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
(F)	PROPOSED FIRE HYDRANT	—5615	EXISTING 5' CONTOUR
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(H)	PROPOSED FLARED END SECTION	—5620	PROPOSED 5' CONTOUR
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(J)	PROPOSED AIR VALVE	—	PROPOSED STORM DRAIN
(K)	FUTURE PHASE VALVE	—	PROPOSED SEWER LINE WITH MANHOLE
(L)	FUTURE FIRE HYDRANT	—	PROPOSED SEWER LATERAL WITH METER
(M)	PROPOSED LIGHT POLE	—	PROPOSED WATER LATERAL W/ METER
(N)	PROPOSED SIDEWALK	—	SECTION LINE
(O)	PROPOSED SIDEWALK RAMP	—	FILING BOUNDARY
(P)	EXISTING ELEVATION	—	EXISTING FIBER OPTIC LINE
(Q)	PROPOSED DESIGN ELEVATION	—	EXISTING OVERHEAD POWER
(R)	PROPOSED STORM DRAIN INLET	—	EXISTING TELEPHONE LINE
(S)	PROPOSED STORM DRAIN MANHOLE	—	

ABBREVIATIONS

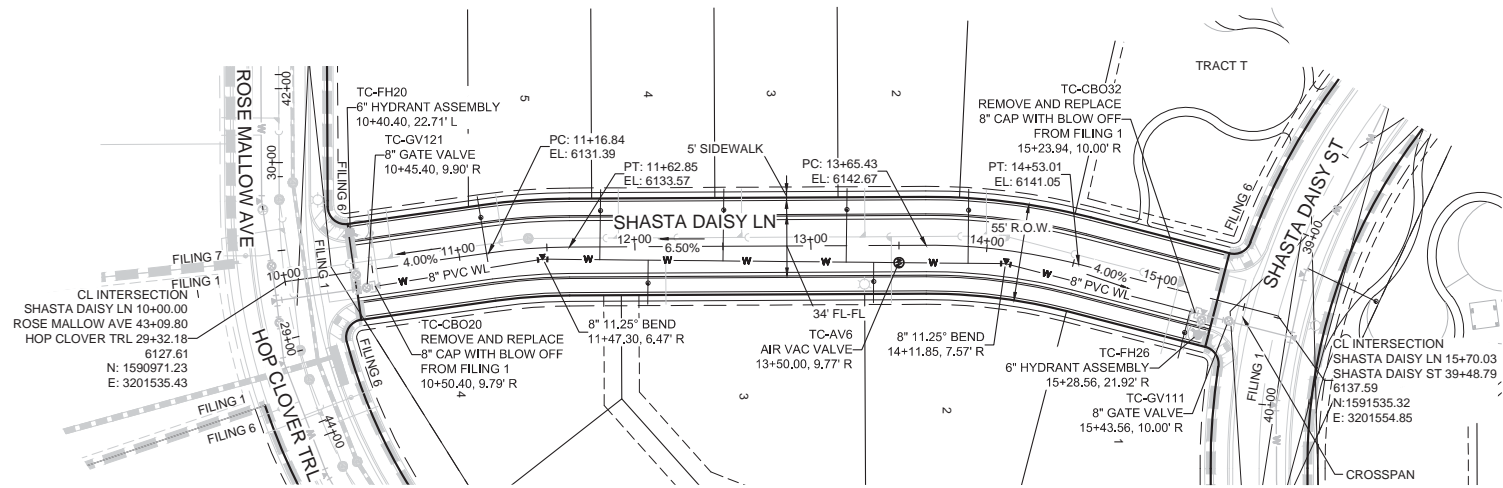
AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
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HP	HIGH POINT	VE	VERTICAL CURVE
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SEE SHEET 3 - AREA UTILITY PLAN FOR WATER SERVICE STATION TABLE.

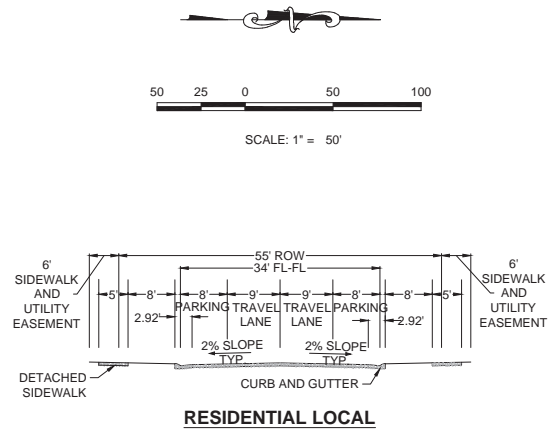
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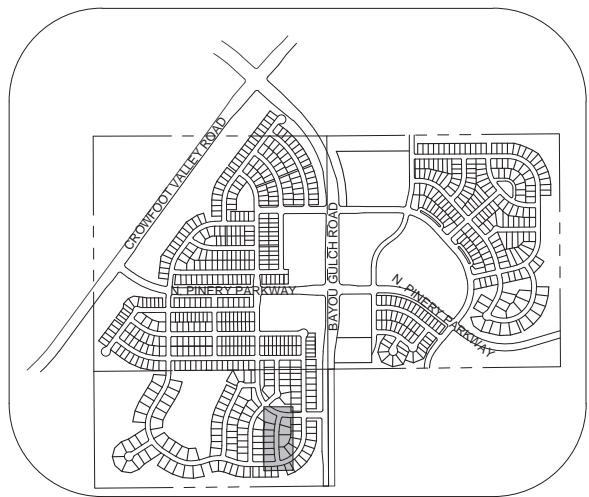
10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	Revisions	Date	Appr.	Date
HR 935 LLC 7333 South Alton Way CENTENNIAL, CO 80112	No.			
TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE HOP CLOVER TRAIL	SCALE: AS SHOWN	FILE NO: 8130283701	DRAWN BY: RHR	CHECKED BY: JW
SHEET NUMBER 7	DATE: AUGUST 2017			



PLAN: SHASTA DAISY LN STA: 10+00.00 TO 16+50.00
HORIZONTAL SCALE: 1" = 50'

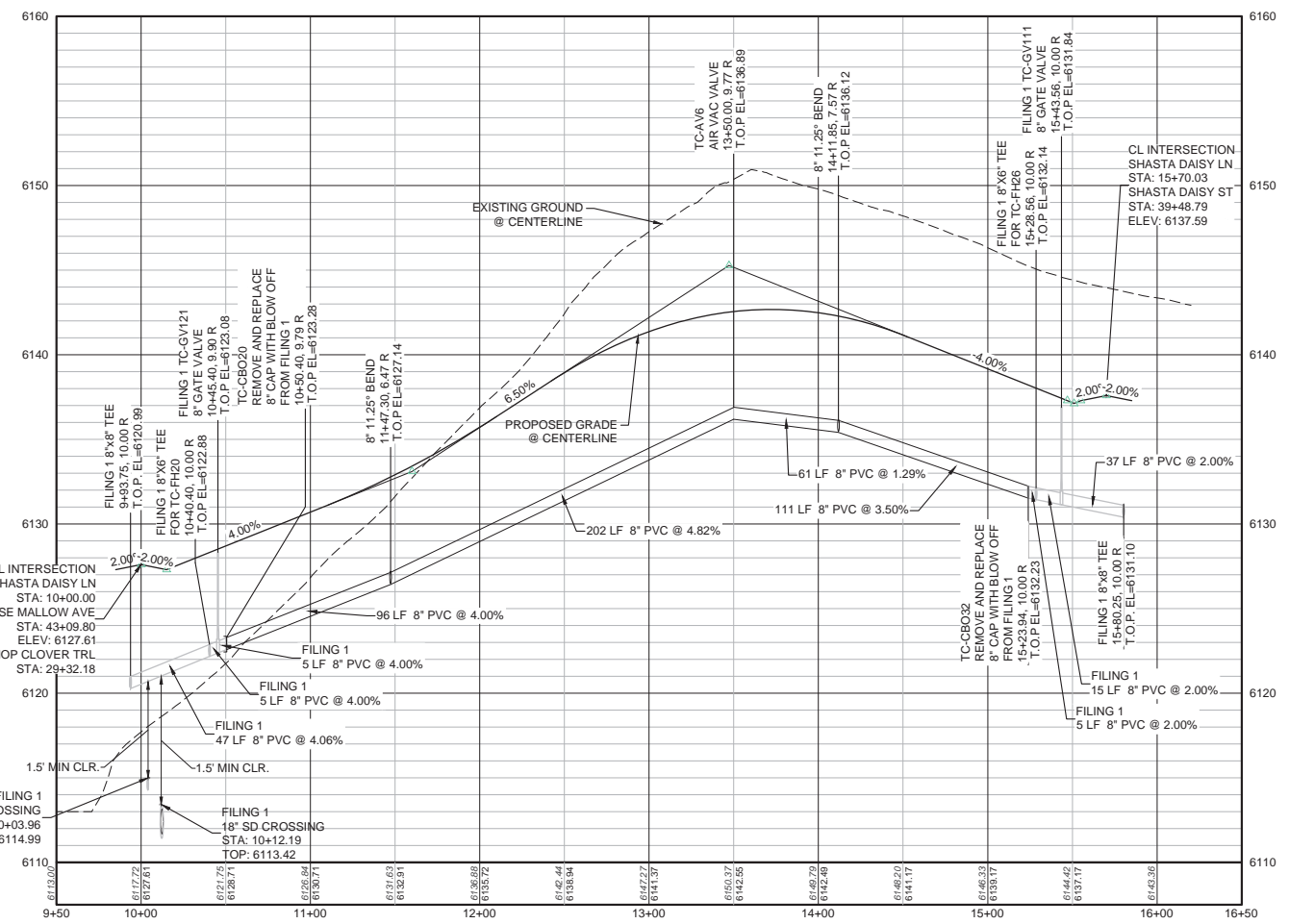


RESIDENTIAL LOCAL



KEYMAP
N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
(A)	LOT TYPE	- - - -	CENTERLINE
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PROFILE: SHASTA DAISY LN STA: 9+50.00 TO 16+50.00
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SEE SHEET 3 - AREA UTILITY PLAN FOR WATER SERVICE STATION TABLE.

N:\PROJECTS\SS RANCH\ENGINEERING\SS RANCH\WATER AND SANITATION\WATER PLAN AND PROFILE\SS SHASTA DAISY LANE WATER.DWG, CDD\VA_3562018.351.PM

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BENCHMARK
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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546	10335 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9528 Fax: (720) 482-9546
HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112
TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE SHASTA DAISY LANE	TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE SHASTA DAISY LANE	TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE SHASTA DAISY LANE	TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE SHASTA DAISY LANE
SCALE: AS SHOWN	SCALE: AS SHOWN	SCALE: AS SHOWN	SCALE: AS SHOWN
DRAWN BY: RHR	DRAWN BY: RHR	DRAWN BY: RHR	DRAWN BY: RHR
CHECKED BY: JJ	CHECKED BY: JJ	CHECKED BY: JJ	CHECKED BY: JJ
DATE: AUGUST 2017	DATE: AUGUST 2017	DATE: AUGUST 2017	DATE: AUGUST 2017
FILE NO: 8130283701	FILE NO: 8130283701	FILE NO: 8130283701	FILE NO: 8130283701
SHEET NUMBER 9	SHEET NUMBER 9	SHEET NUMBER 9	SHEET NUMBER 9
No.	Revisions	Date	Apr.
Date			

INSPECTION POLICY:

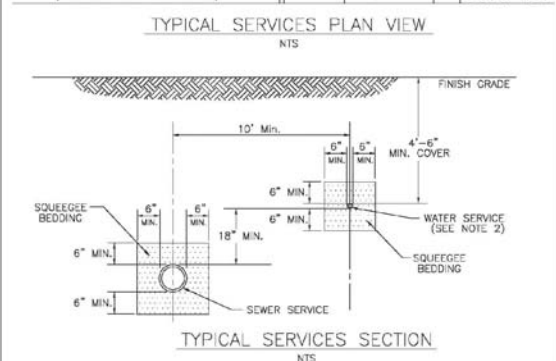
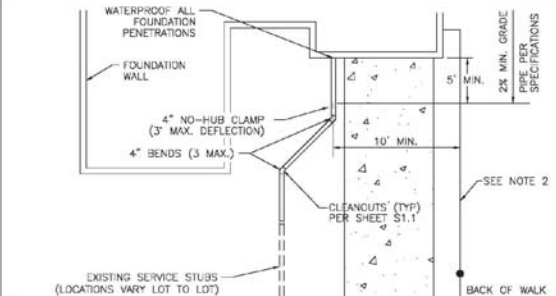
1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
3. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
4. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
5. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
6. LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
7. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

INSTALLATION NOTES:

- SEWER**
1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
 2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3".
 3. MINIMUM GRADE SHALL BE 2%.
 4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
 5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS AND EVERY CHANGE IN DIRECTION. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100' UNLESS THERE ARE CHANGES IN DIRECTION. PROVIDE DUAL CLEAN-OUT WITHIN 5 FEET OF FOUNDATION.
 6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
 7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
 8. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"V" FOR WATER SERVICES

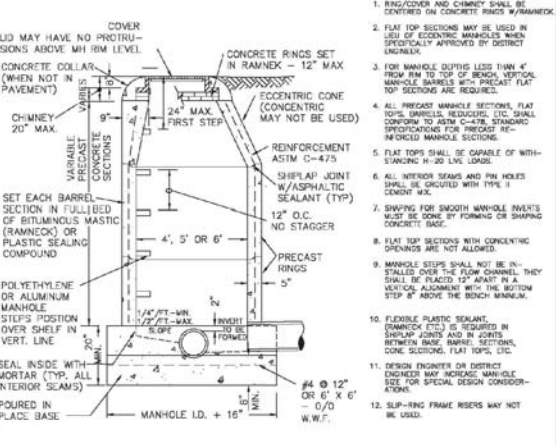
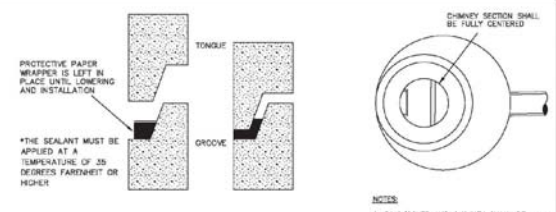
PARKER WATER & SANITATION DISTRICT
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES

SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/02	10/19
		1/08	1/16
DIRECTOR OF ENGINEERING			



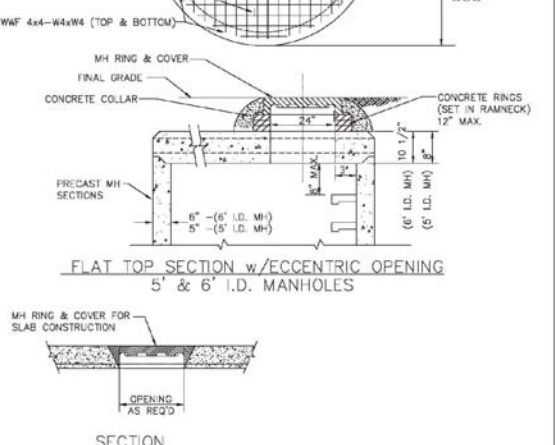
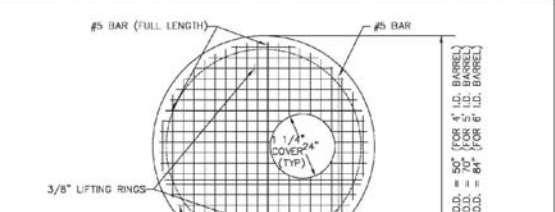
PARKER WATER & SANITATION DISTRICT
TYPICAL SEWER SERVICES

SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	2/00	01/02
		01/16	10/16
DIRECTOR OF ENGINEERING			



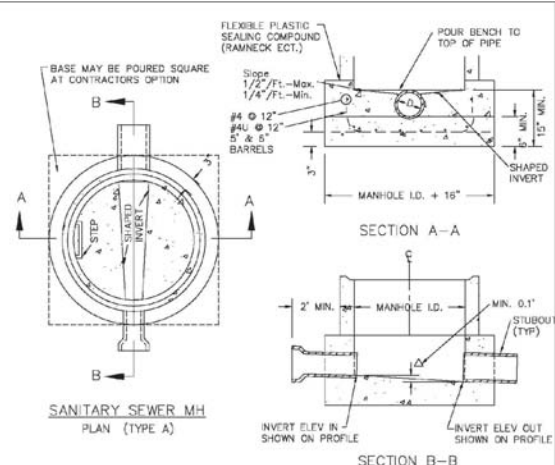
PARKER WATER & SANITATION DISTRICT
PARKER MANHOLE ECCENTRIC CONE

SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	4/01	10/16
		01/02	1/08
		1/16	1/16
DIRECTOR OF ENGINEERING			



PARKER WATER & SANITATION DISTRICT
PRECAST MANHOLE - 5' & 6' I.D. WITH ECCENTRIC CONE

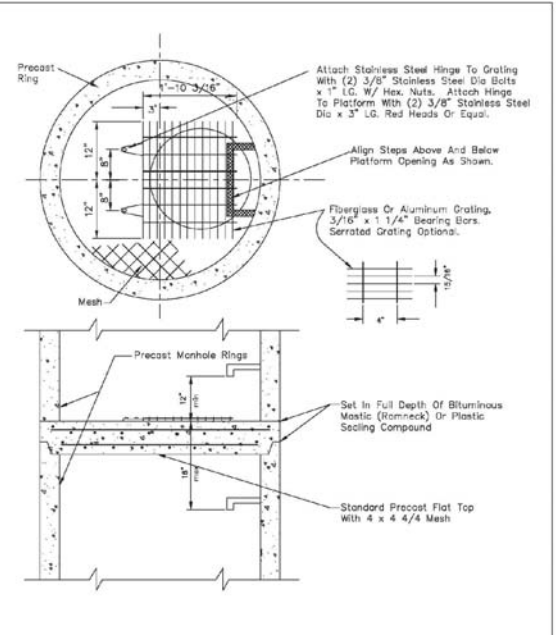
SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/02	01/08
		01/16	10/16
DIRECTOR OF ENGINEERING			



- NOTES:**
1. Manhole barrel min. thickness to be 5".
 2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (See Sewer).
 3. The manhole steps shall conform to District Standards and Specifications.
 4. Precast sections to conform to A.S.T.M C-478.
 5. All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
 6. Stub outs shall extend 2'-0" minimum past manhole O.D. and be satisfactorily plugged.
 7. Reinforcing in base required for manhole.
 8. Slope of bench = 1/2"/FL - Max. 1/4"/FL - Min.
 9. Δ = Invert drop thru MH (if Δ > 18", outside drop MH required). Min. 0.1" for all straight through MH and 0.2" for all angled MH.

PARKER WATER & SANITATION DISTRICT
CAST-IN-PLACE MANHOLE BASE DETAIL

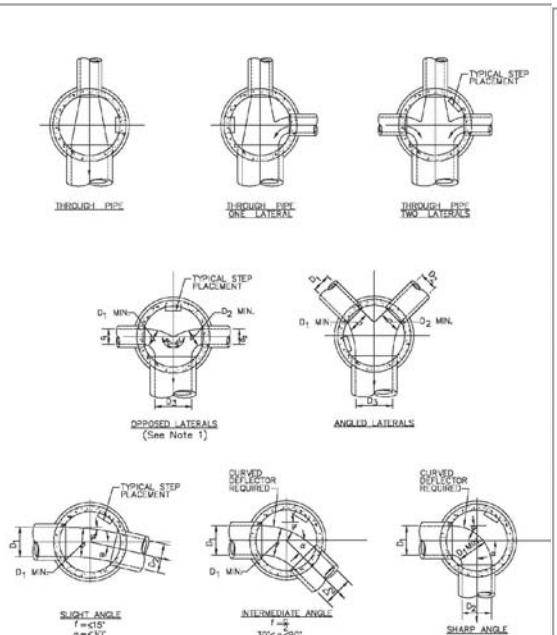
SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/02	01/16
		01/16	10/16
DIRECTOR OF ENGINEERING			



- NOTES:**
- 1.1 Maximum distance between platforms shall be 15' vertically.
 - 1.2 All hardware used inside a manhole shall be stainless steel.
 - 1.3 Manholes over 20' deep shall submit structural calculations on base and wall sizing.

PARKER WATER & SANITATION DISTRICT
INTERMEDIATE PLATFORM FOR MANHOLES OVER 20' DEPTH

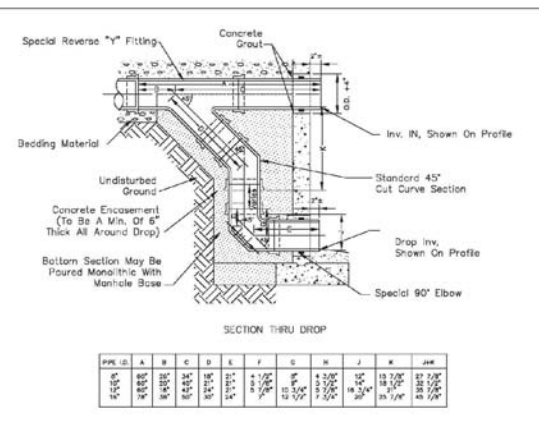
SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	2/00	01/16
		1/16	10/16
DIRECTOR OF ENGINEERING			



- NOTES:**
1. Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT
TYPICAL BASE CHANNELIZATION DETAILS

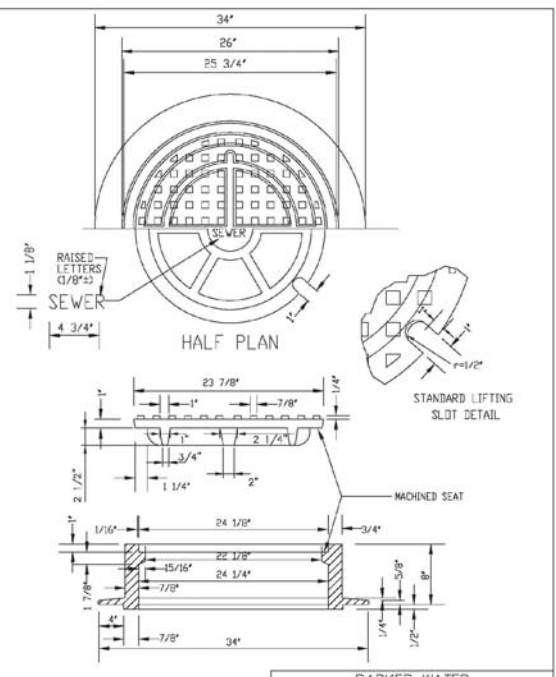
SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/16	10/16
DIRECTOR OF ENGINEERING			



- NOTES:**
1. Mt. Clay Pipe & fittings (A.S.T.M. C-700) shown, details similar for all other pipe.
 2. Diameter of drop shall not be less than the line pipe diameter.
 3. For 18" diameter and larger, outside drop detail shall be a special design.
 4. Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT
OUTSIDE DROP MANHOLE CONSTRUCTION

SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/16	10/16
DIRECTOR OF ENGINEERING			



- NOTE:**
1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
 2. All Casting To Be Dipped In Asphalt Base Paint (Or Approved Equip).
 3. No other manhole lids will be accepted without prior approval from the District Engineer.

PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER

SCALE:	NONE	DATE:	2/98
APPROVED:	PVR	01/16	10/16
DIRECTOR OF ENGINEERING			

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Tel: (720) 782-9228
Fax: (720) 782-9546

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 6 CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE:	AS SHOWN	FILE NO.:	8130283701
DRAWN BY:	JF	DATE:	AUGUST 2017
CHECKED BY:	JU		
DATE:			

No.	Revisions	Init.	Apr.	Date

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TYPE IIa
SANITARY SEWER CROSSING UNDER WATER MAIN
IF $d_s > 2 \text{ ft}$, ENCASMENT NOT REQUIRED

TYPE IIb
SANITARY SEWER CROSSING OVER TOP OF WATER MAIN
FULL ENCASMENT REQUIRED REGARDLESS OF DIMENSION d_s .

TYPE II
CONCRETE ENCASMENT FOR SANITARY SEWERS CROSSING OVER OR UNDER WATER MAIN

GENERAL NOTES FOR TYPE I, II & III ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF ORIGINAL CONSTRUCTION JOINT IS USED AT BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL LIE BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCEPT FOR PROPOSED SEWER OR CONDUIT.
 - TYPE III ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_s \leq 18"$ ($d_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE III IF $d_s \leq 24"$ ($d_s \leq 18"$)
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (APPROX. C-150 OR C-155), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC IF $d_s \leq 18"$ ($d_s \leq 12"$)
 - COMPACTED CLASS "B" BEDDING IF $d_s \leq 24"$ ($d_s \leq 18"$)
 - IF $d_s > 24"$ FOR TYPE III ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OVER THAN 2000 OF SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASMENT TYPE II	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	3/08
	4/01
DIRECTOR OF ENGINEERING	1/08

2008 REVISION SHEET 7

TYPE III
CONCRETE ENCASMENT FOR SANITARY SEWERS
(FULL ENCASMENT) NO SCALE

GENERAL NOTES FOR TYPE I, II & III ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF ORIGINAL CONSTRUCTION JOINT IS USED A BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY. A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCEPT FOR PROPOSED SEWER OR CONDUIT.
 - TYPE III ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I & II ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_s \leq 18"$ ($d_s \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING UNDER WATER MAINS AND $d_s \leq 24"$ ($d_s \leq 18"$)
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_s .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS OR WHERE UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (APPROX. C-150 OR C-155), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC IF $d_s \leq 18"$ ($d_s \leq 12"$)
 - COMPACTED CLASS "B" BEDDING IF $d_s \leq 24"$ ($d_s \leq 18"$)
 - IF $d_s > 24"$ FOR TYPE III ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL.
- SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OVER THAN 2000 OF SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.
- CONDUITS ENCASED PIPING SHALL BE UNID WITH FIBER GLASS REINFORCED PLASTIC (FRP) LAYER.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASMENT TYPE III	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	3/08
	1/15
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.8

MANHOLE INVERT TIE-IN

NOTES

- NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

PARKER WATER & SANITATION DISTRICT	
MANHOLE INVERT TIE-IN DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.9

MANHOLE STUR-OUT DETAIL

NOTES

- IF STUR-OUT IS ABANDONED, THE PIPE SHALL BE REMOVED AND THE HOLE SEALED WITH NON-SHRINK GROUT.
- MECHANICAL PLUG SHALL BE TETHERED AND BOLTED TO WALL OF THE MANHOLE. MECHANICAL PLUGS SHALL BEAR THE NAME OF THE CONTRACTOR.

PARKER WATER & SANITATION DISTRICT	
MANHOLE STUR-OUT DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.10

IN-LINE CLEANOUT SECTIONS

NOTES

- THE WORD "SEWER" TO BE RAISED 3/16"

PARKER WATER & SANITATION DISTRICT	
IN-LINE CLEANOUT SECTIONS	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	2/06
	1/08
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.12

DOMESTIC SEWER TAPPING DETAIL

NOTES

- TAPS IN STAGGERED CONFIGURATION AT 10 O'CLOCK AND 2 O'CLOCK

Sewer service connections shall be positioned at either the 2 o'clock or the 10 o'clock position on the circumference of the sewer main. On new installations, tee or wye fittings shall be used. When tapping into existing sewer main, a saddle connection and approved coring method shall be used. The minimum distance between service connections made along the pipe shall be 3 feet. The minimum distance from either the bell or spigot end of a pipe shall be 3 feet. The minimum distance from the center of a manhole to a service connection shall be either 7 feet or the transition point from the manhole trench to the normal pipe trench, whichever is greater. A maximum of 4 sewer service connections shall be allowed per 20 foot length of pipe. In all cases, a specific soils investigation should be conducted to assure that the external loading will be within allowable limits regardless of the number of taps involved.

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	4/01
	1/08
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.13

P.V.C. SADDLE CONNECTION DETAIL

NOTES

- SADDLE FITTINGS TO BE PER ASTM D3034.
- CONNECTION SHALL BE Y - SADDLE WITH TWO BONDS

PARKER WATER & SANITATION DISTRICT	
P.V.C. SADDLE CONNECTION DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.14

SADDLE CONNECTION

SECTION QUADRANT 1 SHOWN

Y - SADDLE DETAIL

NOTES

- SADDLE FITTINGS TO BE PER ASTM D3034.
- CONNECTION SHALL BE Y - SADDLE WITH TWO BONDS

PARKER WATER & SANITATION DISTRICT	
P.V.C. SADDLE CONNECTION DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	1/15
	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET 5A.14

TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS

SANITARY SEWER DETAILS

NOTES

- TAPS IN STAGGERED CONFIGURATION AT 10 O'CLOCK AND 2 O'CLOCK

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: NONE	DATE: 2/06
APPROVED: PWR	4/01
	1/08
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET 5A.13

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CVL CONSULTANTS

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7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT FILING 6 CONSTRUCTION DRAWINGS

SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: JF
CHECKED BY: JJ
DATE: AUGUST 2017

SHEET NUMBER **12**

No.	Revisions	Date	Init.	Apr.	Date

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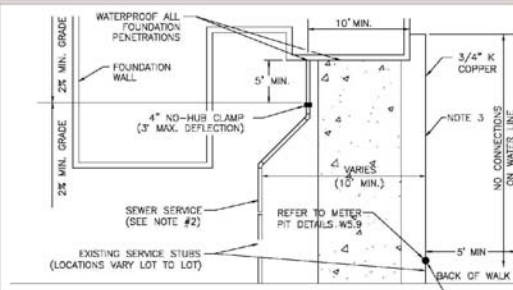
- INSPECTION POLICY:**
1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
 2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
 3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
 4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
 5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
 6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
 7. LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
 8. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION, UNLESS COORDINATED WITH DISTRICT INSPECTOR.

- INSTALLATION NOTES:**
- WATER**
1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING, (3/4" MIN.)
 2. APPROVED BEDDING TO BE SQUEEZE.
 3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STOP-N-BUILD AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSO PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
 4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
 5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD. CRAWL SPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURRY.
 6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE BASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISHED GRADE.
 7. MOVED CURB BOXES MUST BE INSPECTED BY PWSO PRIOR TO BURIAL.
 8. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
 9. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
 10. CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
 11. ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
 12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
 "W" FOR SANITARY SEWER SERVICE
 "Y" FOR WATER SERVICES
 13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSO PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

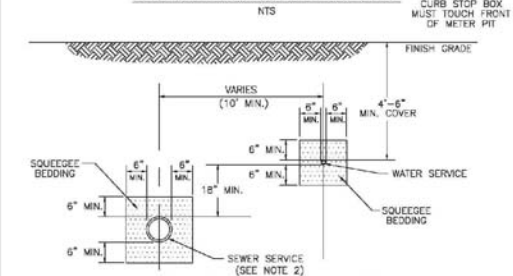
DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W1.1



TYPICAL SERVICES PLAN VIEW



TYPICAL SERVICES SECTION

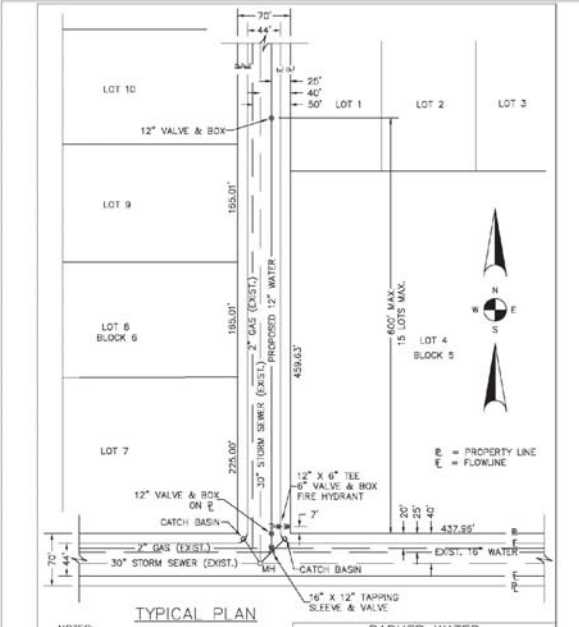
NOTE:

1. SEE SHEET W1.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
2. REFER TO SEWER SERVICES DETAIL SHEET S1.2.
3. 4" PVC SLEEVES REQUIRED FOR SERVICE LINES UNDER CONCRETE SURFACE.

TYPICAL WATER SERVICES	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION

SHEET W1.2



TYPICAL PLAN

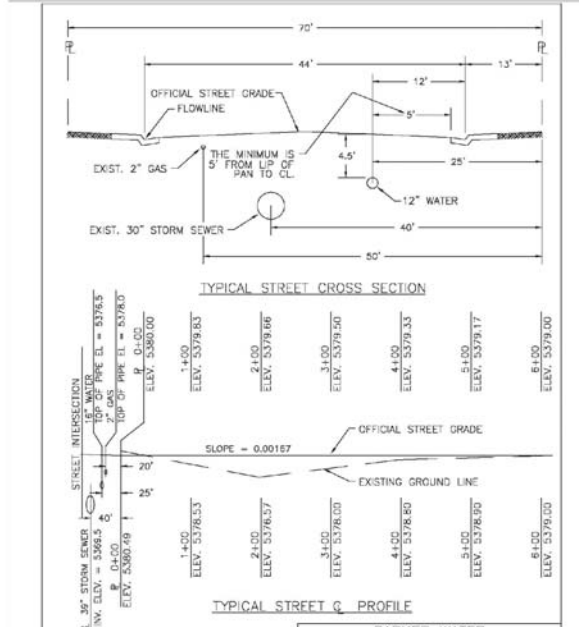
NOTES:

1. SEE "TYPICAL STREET CROSS SECTION - TYPICAL STREET Q PROFILE" DRAWING.
2. ALL FIRE HYDRANTS TO BE LOCATED AT POINTS OTHER THAN CORNER INTERSECTIONS SHALL BE INSTALLED AT A LOT LINE EXTENDED.

PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

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SHEET W2.1

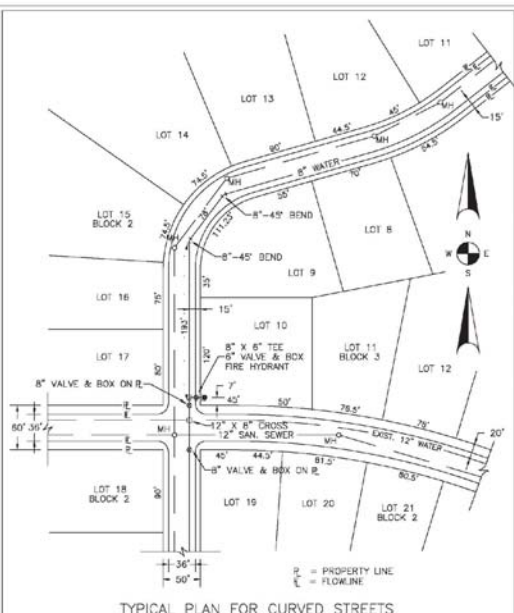


TYPICAL STREET Q PROFILE

PARKER WATER & SANITATION DISTRICT TYPICAL STREET CROSS SECTION	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
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SHEET W2.2



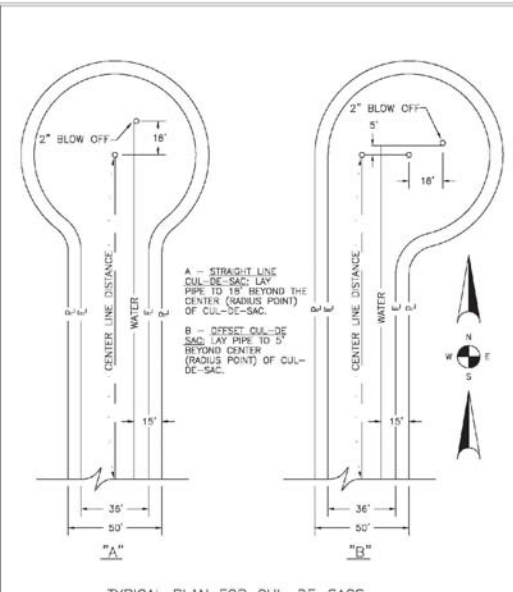
TYPICAL PLAN FOR CURVED STREETS

NOTE: WATER AND SEWER MAY NEVER BE CLOSER THAN 10" HORIZONTALLY AND MUST MAINTAIN A MINIMUM OF 5" FROM THE LP OF PAN ON THE GUTTER.

PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CURVED STREETS	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

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SHEET W2.3

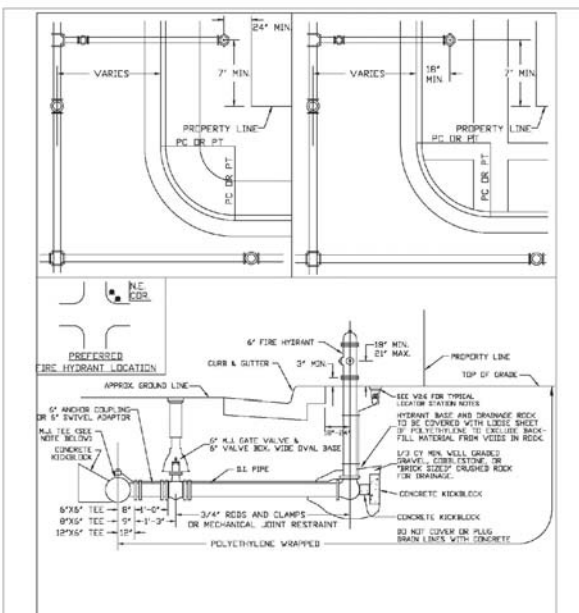


TYPICAL PLAN FOR CUL-DE-SACS

PARKER WATER & SANITATION DISTRICT WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CUL-DE-SACS	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
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PARKER WATER & SANITATION DISTRICT FIRE HYDRANTS LOCATION & INSTALLATION

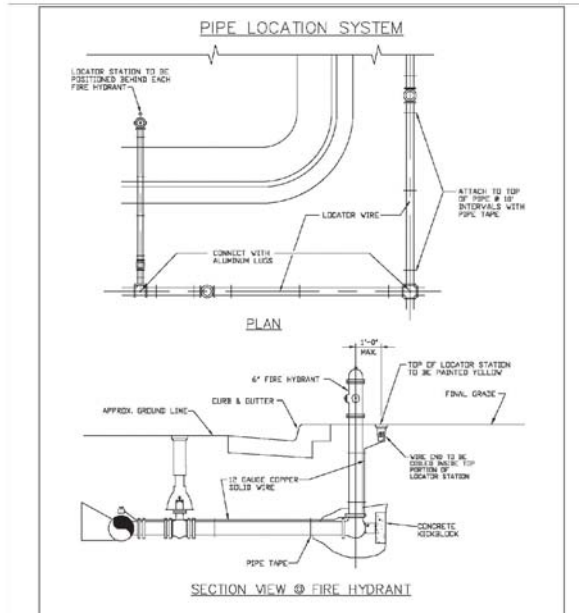
NOTES:

1. ALTERNATE TO THE ABOVE (FURNISH) VALVE DIRECTLY TO A 6\"/>
- 2. NO OPERATIONAL OR VERTICAL BORES ARE ALLOWED IN FIRE HYDRANT BRANCH
- 3. NO PORTION OF THE HYDRANT MAY
- 4. FIRE HYDRANT EXTENSIONS MAY NOT PENETRATE ROADWAY SURFACE AREA.

PARKER WATER & SANITATION DISTRICT FIRE HYDRANTS LOCATION & INSTALLATION	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
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SHEET W2.5



PARKER WATER & SANITATION DISTRICT LOCATOR WIRE DETAILS

NOTES:

1. FOR USE ON ALL DUCTILE IRON AND PVC WATER MAINS
2. LOCATOR STATION POSITIONED MUST BE IDENTIFIED AT THE DIRECTION OF THE SERVICE ENGINEER.
3. A CONVEYANCE TEST WILL BE REQUIRED PRIOR TO PROCEEDING ACCEPTANCE.

PARKER WATER & SANITATION DISTRICT LOCATOR WIRE DETAILS	
SCALE: NONE	DATE: 2/26
APPROVED: PVR	1/16
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SHEET W2.6

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HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				
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SHEET NUMBER	13		AUGUST 2017	

MECHANICAL JOINT RESTRAINT

WEDGE DETAIL BOLT HOLE DETAIL

NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	CS INCHES	RS INCHES	W INCHES	M INCHES
4"	2	2				
6"	5	3	11.12	8.5	7.00	0.88
8"	8	4	13.37	11.75	8.15	1.00
10"	8	5	15.62	14.00	11.25	1.00
12"	8	5	17.88	16.25	13.50	1.25
4"	4	2				
6"	6	3	11.12	8.5	7.00	0.88
8"	6	4	13.37	11.75	8.15	1.00
10"	8	5	15.62	14.00	11.25	1.00
12"	8	5	17.88	16.25	13.50	1.25

NOTES:
1. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.

**PARKER WATER & SANITATION DISTRICT
MECHANICAL JOINT RESTRAINT DETAILS**

SCALE: NONE DATE: 2/98

APPROVED: 2/00 DATE: 4/07
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11-1/4", 22-1/2", 45" & 90" BENDS DEAD END

TEE TYPICAL CROSS SECTION

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

SIZE OF PIPE	MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)	TEE OR DEAD END
4"	1.00	1.00
6"	1.25	1.25
8"	1.50	1.50
10"	1.75	1.75
12"	2.00	2.00
14"	2.25	2.25
16"	2.50	2.50
18"	2.75	2.75
20"	3.00	3.00

NOTES:
1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE KICKBLOCKED AND KICKBLOCKS SHALL BE KICKBLOCKED AND KICKBLOCKED.
2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.
3. BASED ON 150 PSI PIPING PRESSURE PLUS WEDGE HAMMER.
4. 6" AND 8" WATER HAMMER = 120 PSI.
12" WATER HAMMER = 110 PSI.
16", 20" AND 24" WATER HAMMER = 70 PSI.
5. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.

**PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS BEARING SURFACES AND INSTALLATION**

SCALE: NONE DATE: 2/98

APPROVED: 4/07 DATE: 12/09
1/16 10/18
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2016 REVISION SHEET NO.18

HALF PLAN STANDARD LIFTING SLOT DETAIL

**PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER**

SCALE: NONE DATE: 6/08

APPROVED: 12/09 DATE: 12/09
12/09 12/09
PVR 10/18
DIRECTOR OF ENGINEERING

2016 REVISION SHEET NO.19

ACCESS MAN-HOLE ACCESS MANHOLE AND AIR VALVE ASSEMBLY

**PARKER WATER & SANITATION DISTRICT
ACCESS MANHOLE ASSEMBLY**

SCALE: NONE DATE: 2/98

APPROVED: 4/07 DATE: 12/09
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STANDARD TRENCH SECTION STREET CUT PATCH

**PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION**

SCALE: NONE DATE: 2/98

APPROVED: 1/16 DATE: 2/00
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PIPE BEDDING

TABLE:

PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	12"	24"
6"	18"	30"
8"	24"	36"
10"	30"	42"
12"	36"	48"
14"	42"	54"
16"	48"	60"
18"	54"	66"
20"	60"	72"
24"	72"	84"

**PARKER WATER & SANITATION DISTRICT
PIPE BEDDING**

SCALE: NONE DATE: 2/98

APPROVED: 1/16 DATE: 2/00
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PLAN VIEW PROFILE TYPICAL SECTION

**PARKER WATER & SANITATION DISTRICT
WATERLINE ENCASEMENT**

SCALE: NONE DATE: 2/98

APPROVED: 1/16 DATE: 2/00
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2016 REVISION SHEET NO.3

PLAN FOR PERPENDICULAR CROSSING PLAN FOR ANGLE CROSSING

PROFILE

**PARKER WATER & SANITATION DISTRICT
BORED CROSSINGS BENEATH CONDUITS**

SCALE: NONE DATE: 2/98

APPROVED: 2/00 DATE: 1/16
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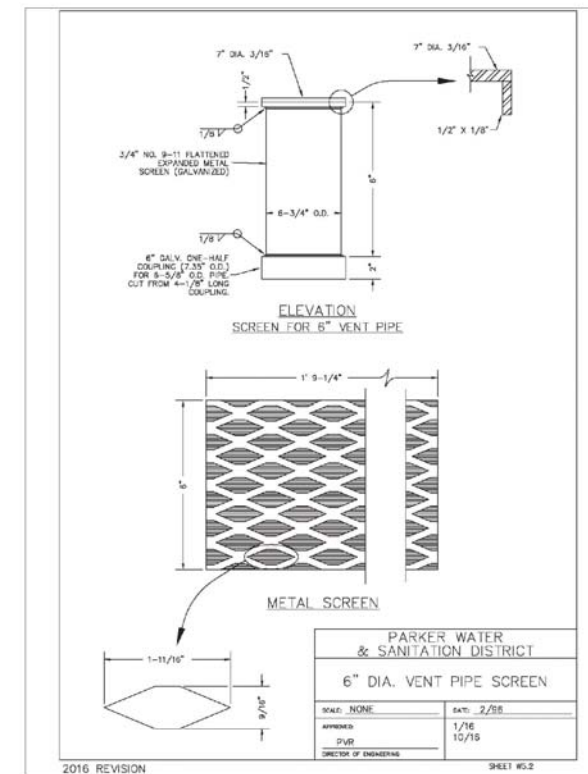
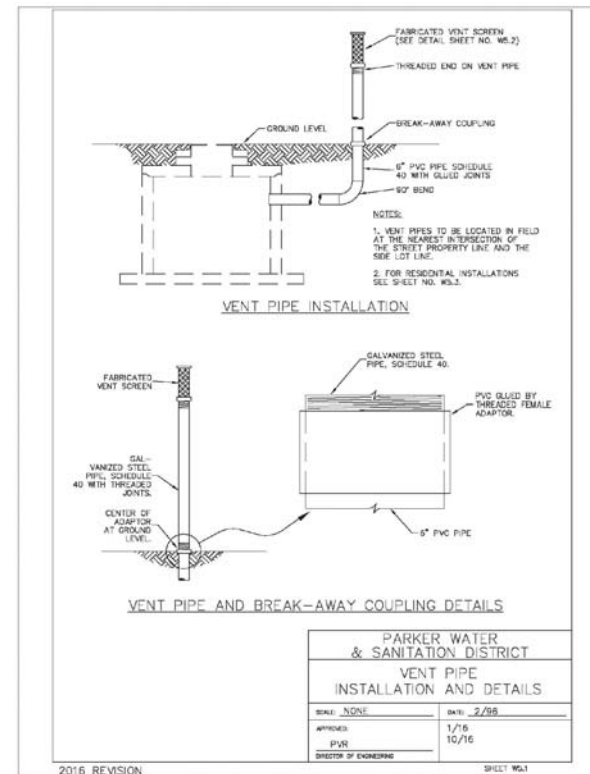
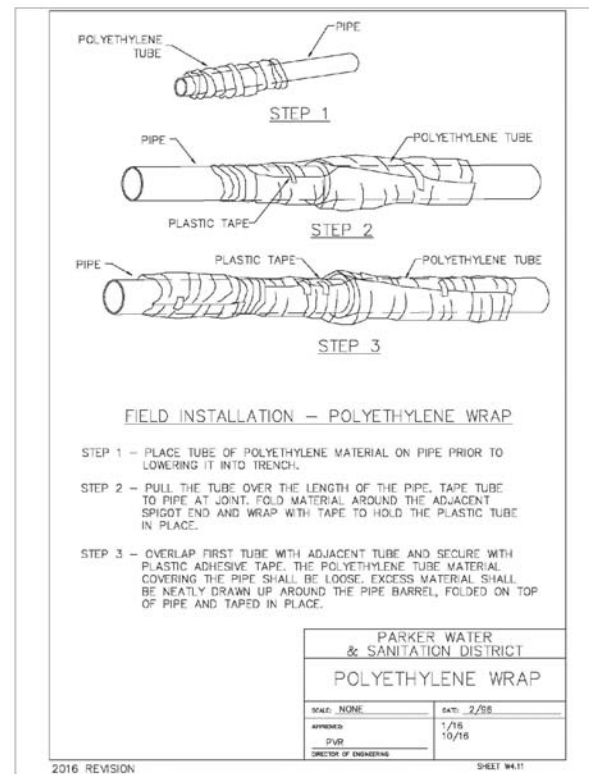
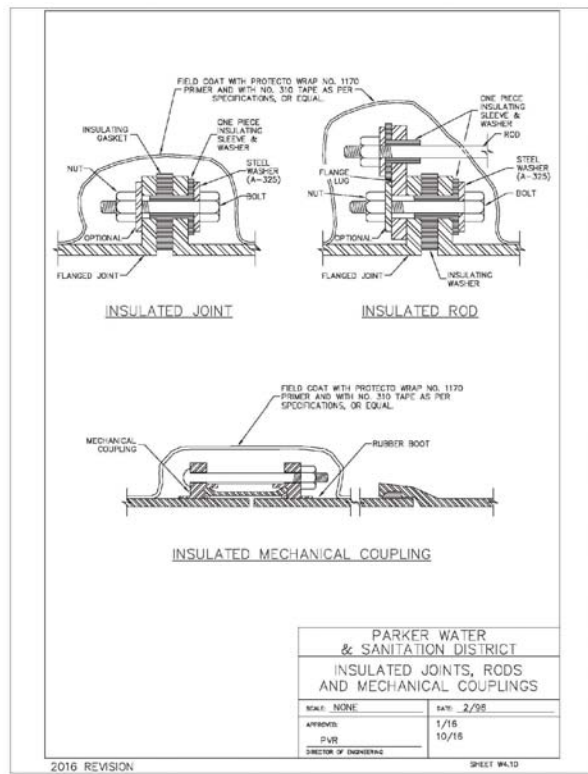
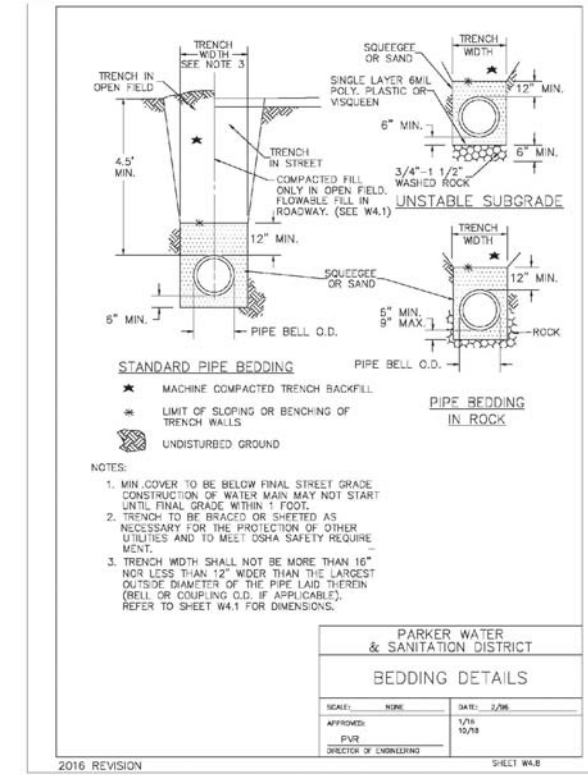
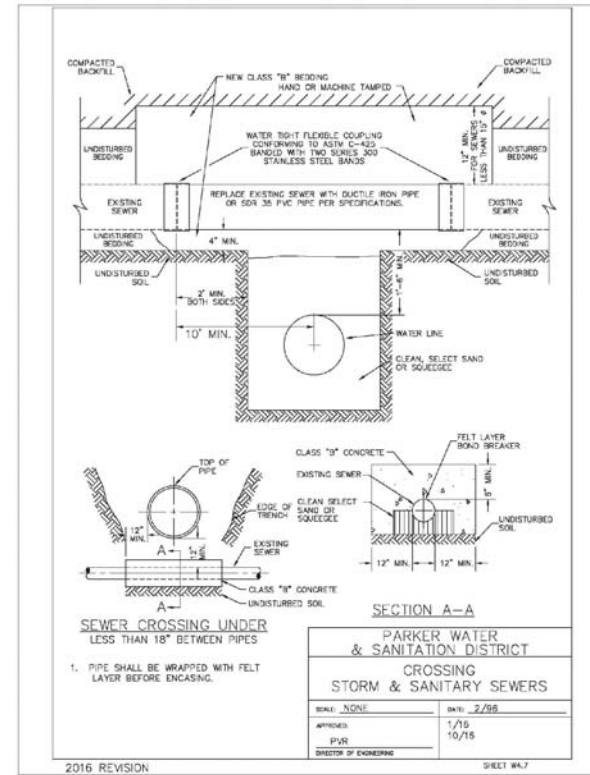
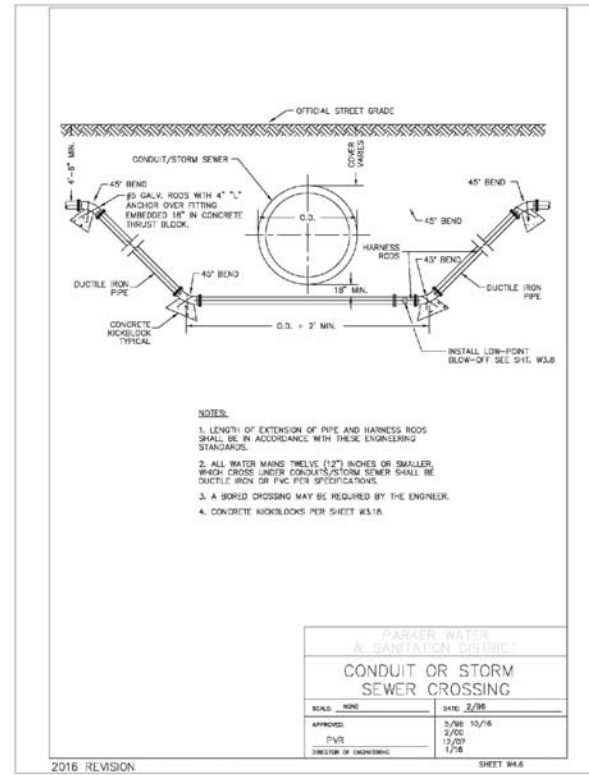
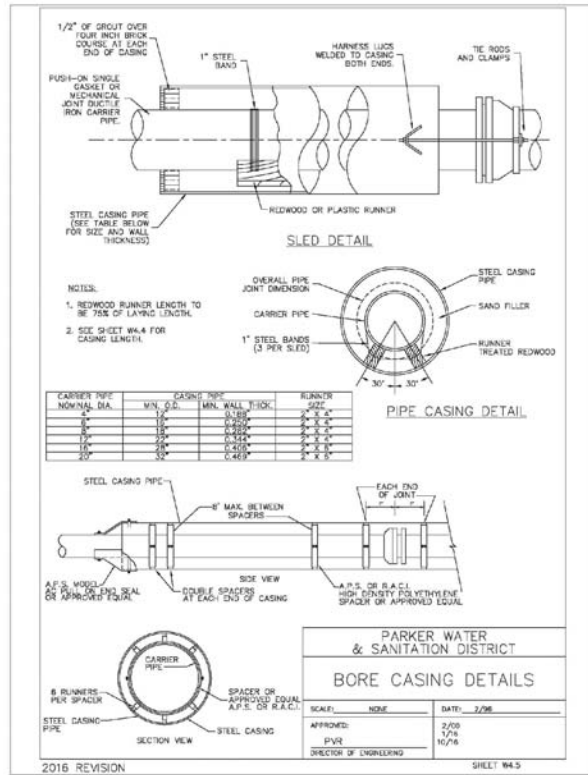
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WATER DETAILS

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DATE: AUGUST 2017

SHEET NUMBER: 16

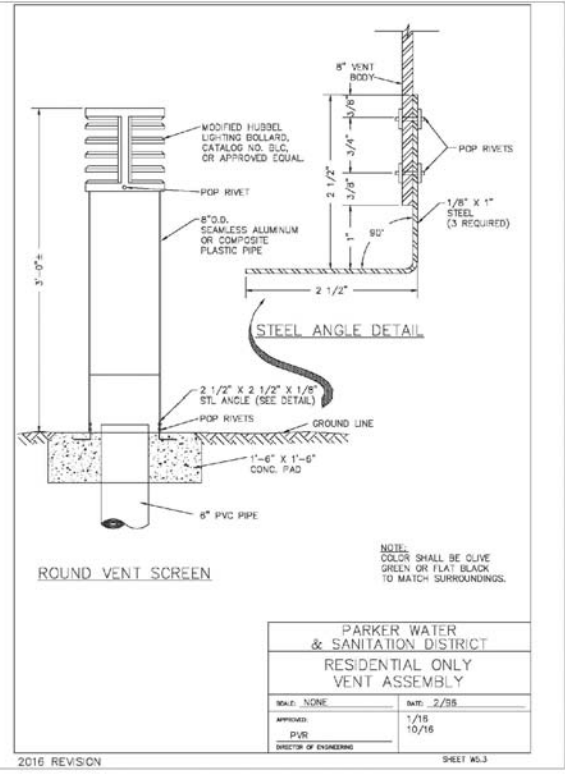
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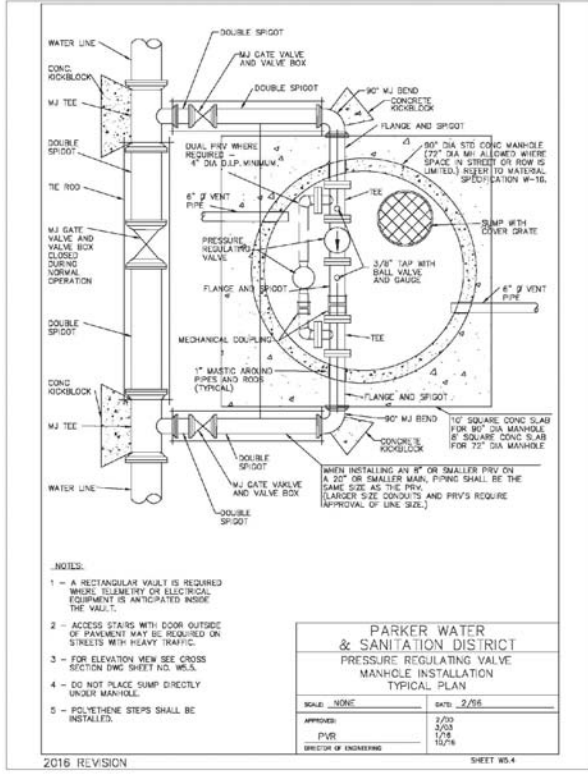
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**PARKER WATER & SANITATION DISTRICT
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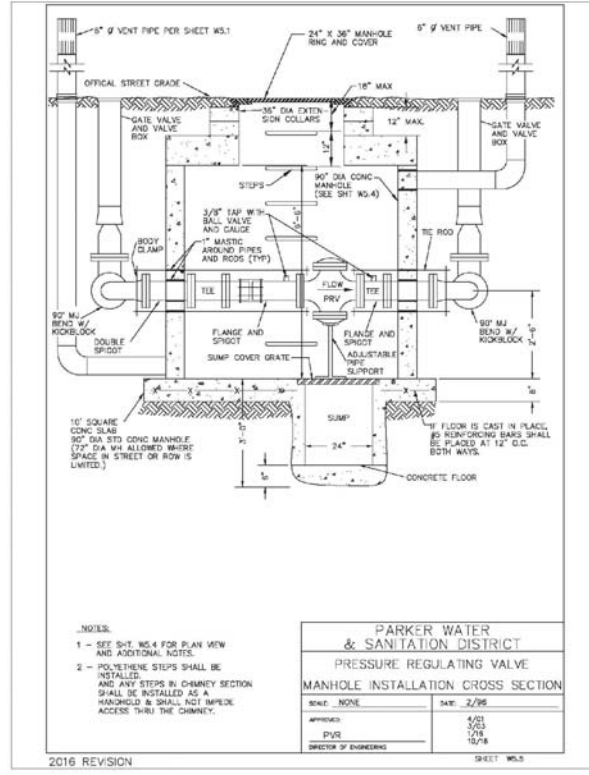
2016 REVISION SHEET NO.3



**PARKER WATER & SANITATION DISTRICT
PRESSURE REGULATING VALVE
MANHOLE INSTALLATION
TYPICAL PLAN**

SCALE: NONE	DATE: 2/28
APPROVED: 2/20	DATE: 10/16
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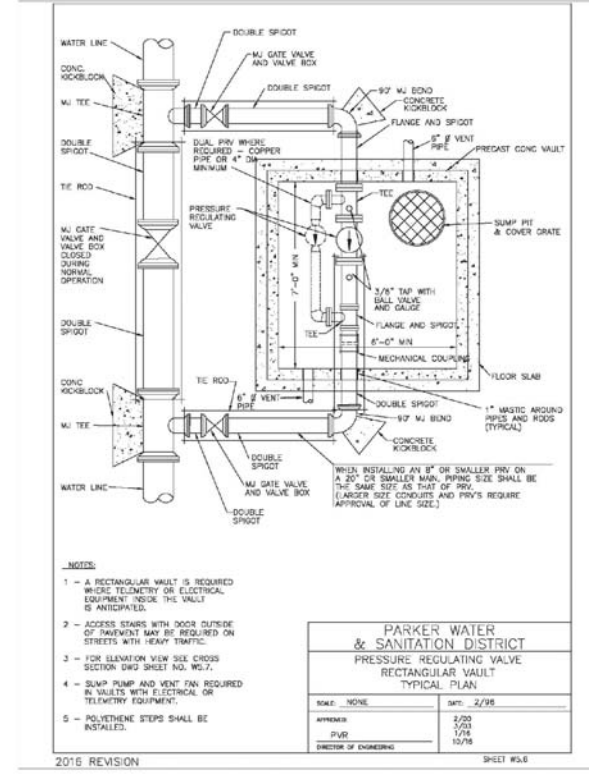
2016 REVISION SHEET NO.4



**PARKER WATER & SANITATION DISTRICT
PRESSURE REGULATING VALVE
MANHOLE INSTALLATION CROSS SECTION**

SCALE: NONE	DATE: 2/28
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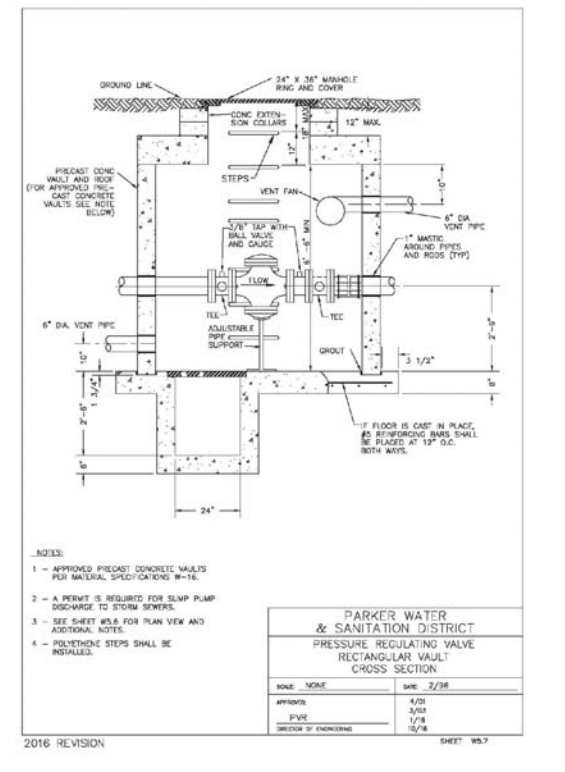
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**PARKER WATER & SANITATION DISTRICT
PRESSURE REGULATING VALVE
RECTANGULAR VAULT
TYPICAL PLAN**

SCALE: NONE	DATE: 2/28
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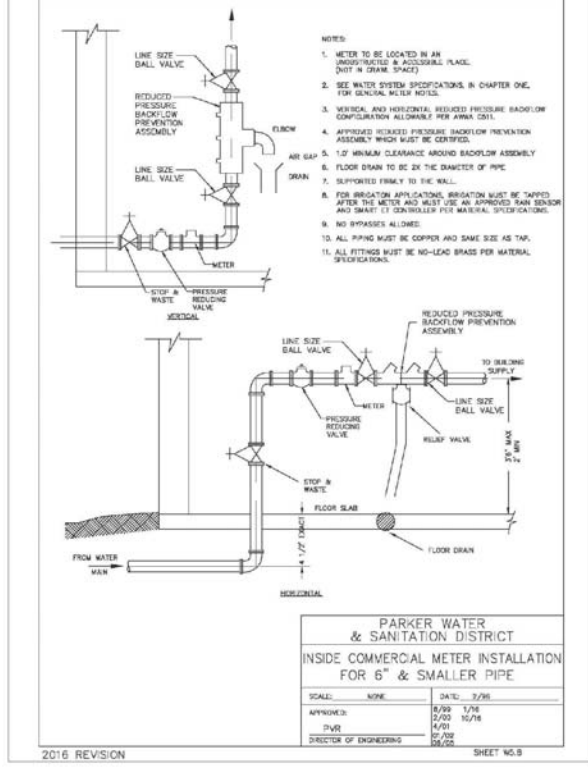
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**PARKER WATER & SANITATION DISTRICT
PRESSURE REGULATING VALVE
RECTANGULAR VAULT
CROSS SECTION**

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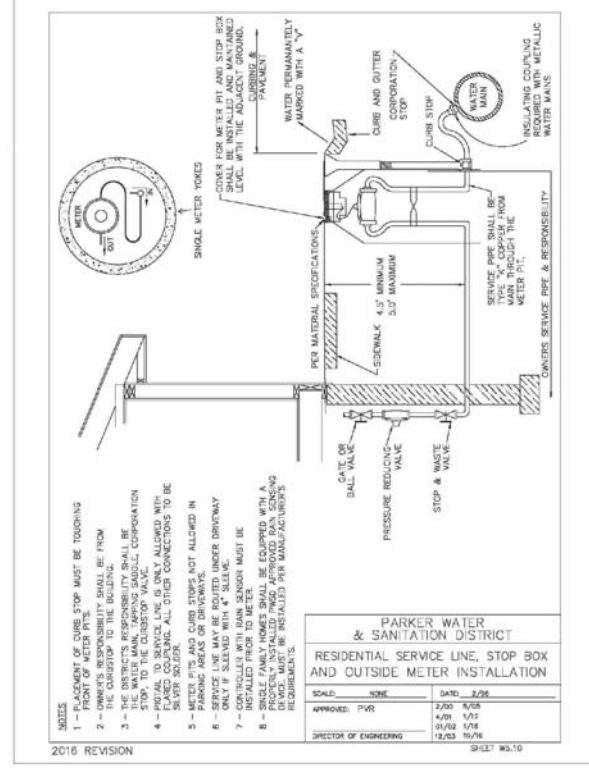
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**PARKER WATER & SANITATION DISTRICT
INSIDE COMMERCIAL METER INSTALLATION
FOR 6\"/>

SCALE: NONE	DATE: 2/28
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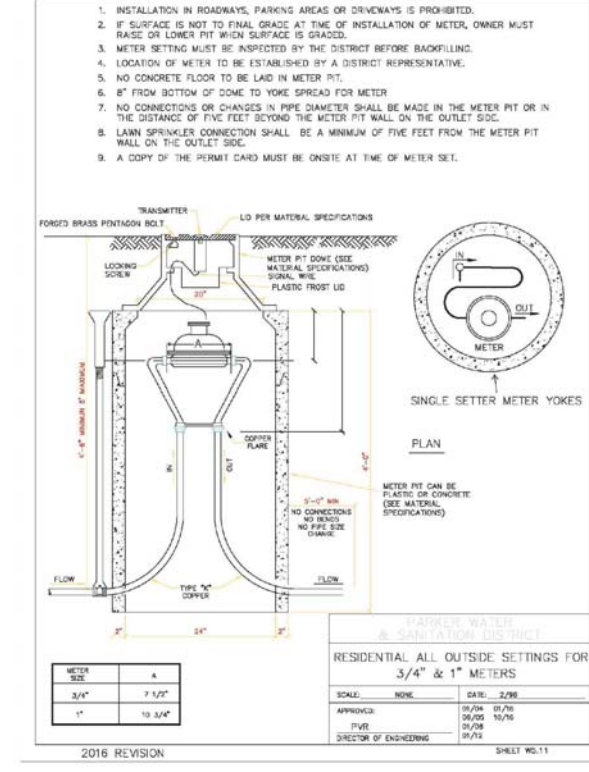
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**PARKER WATER & SANITATION DISTRICT
RESIDENTIAL SERVICE LINE, STOP BOX
AND OUTSIDE METER INSTALLATION**

SCALE: NONE	DATE: 2/28
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**PARKER WATER & SANITATION DISTRICT
RESIDENTIAL ALL OUTSIDE SETTINGS FOR
3/4\"/>

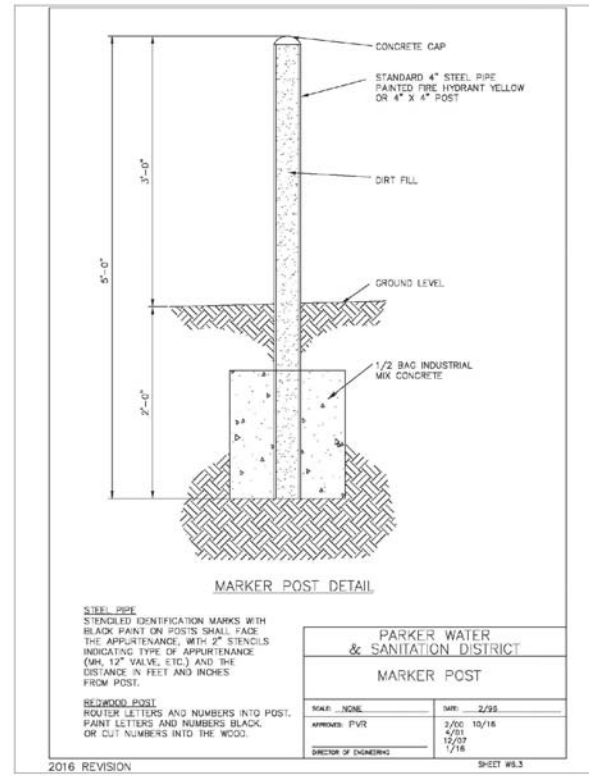
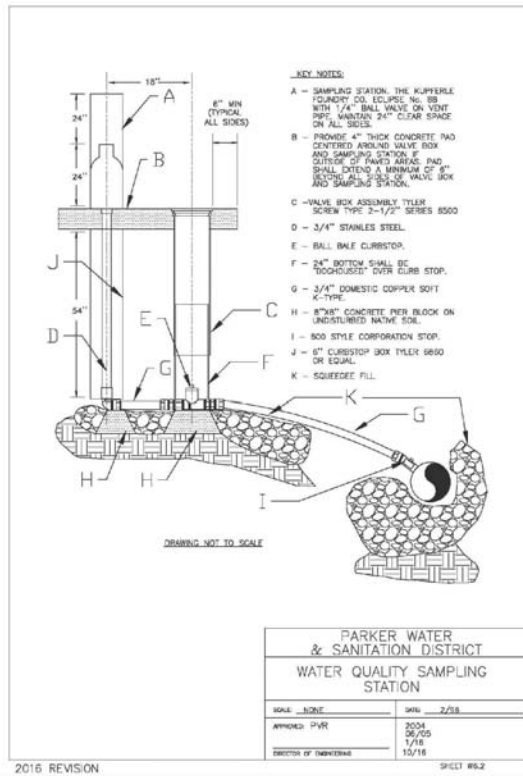
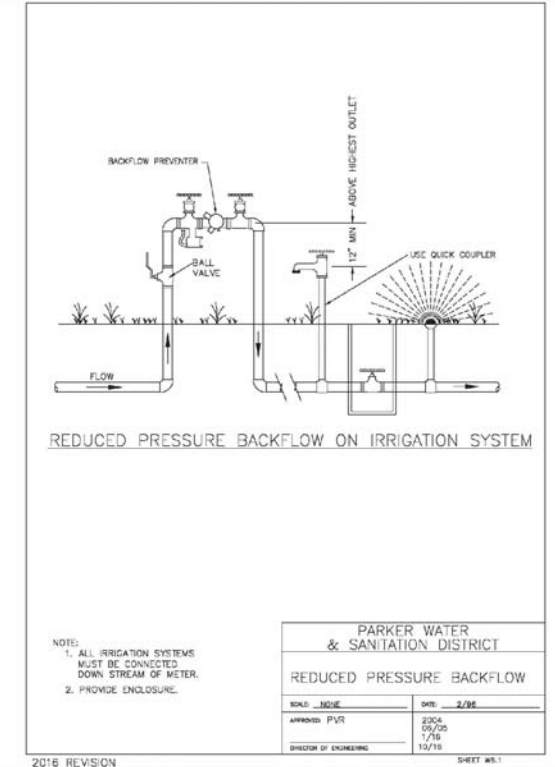
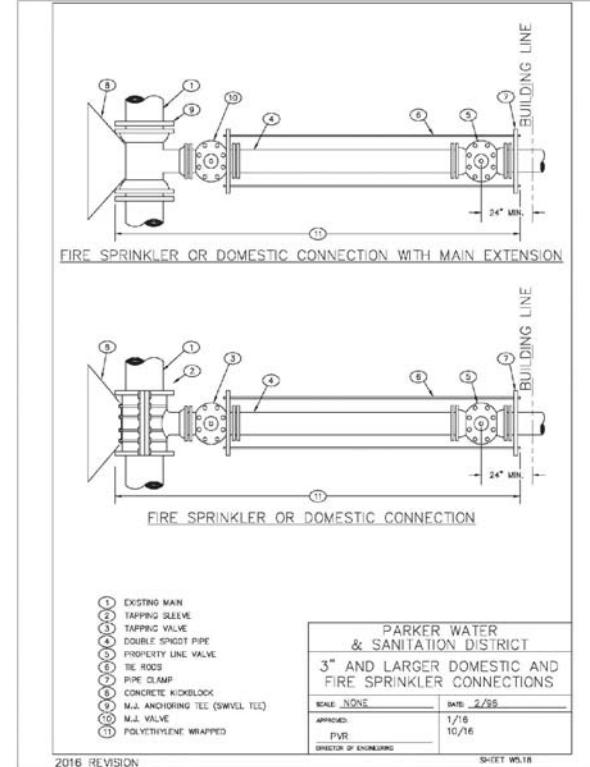
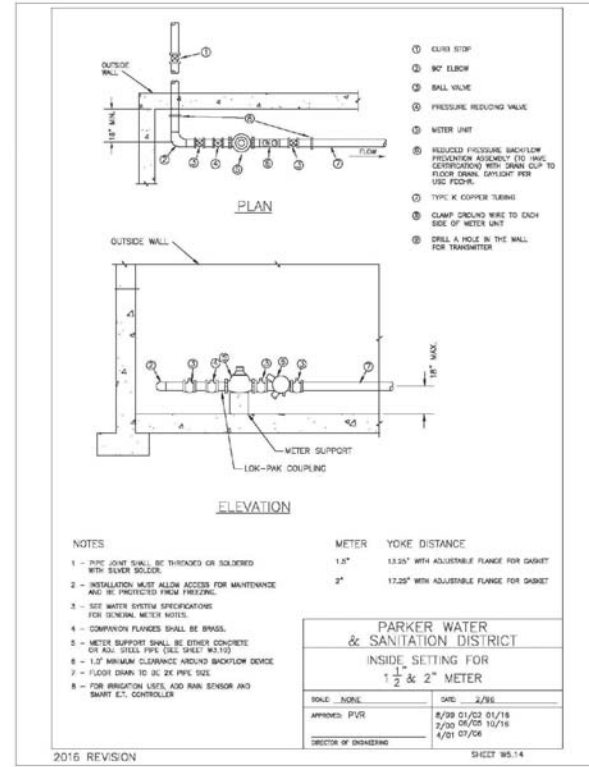
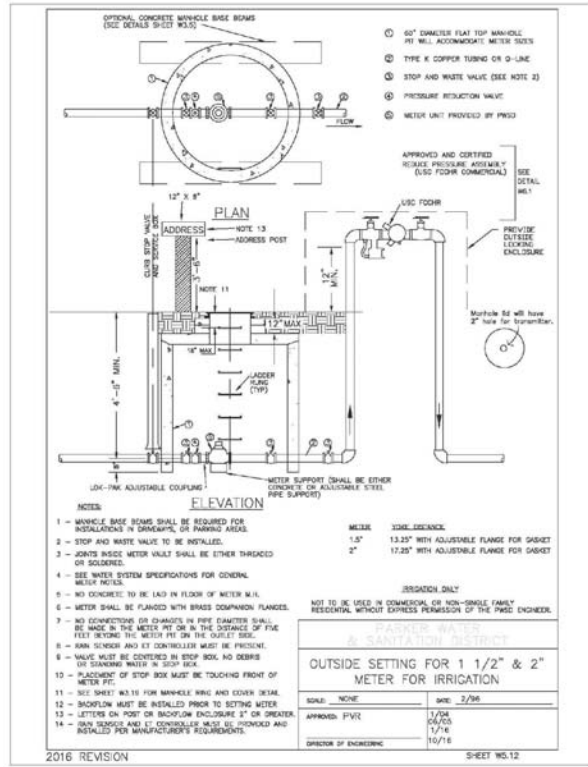
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				19										