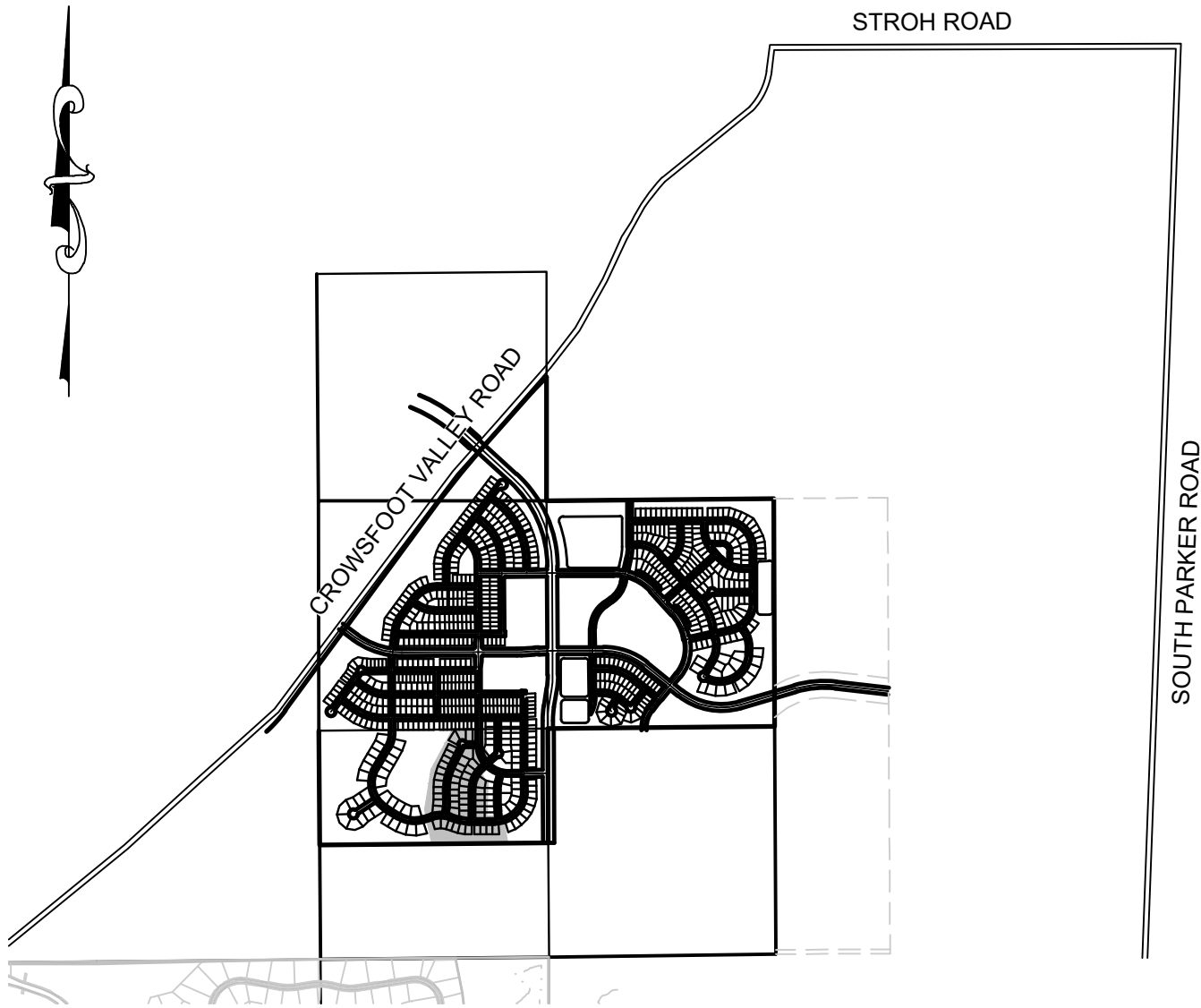


TRAILS AT CROWFOOT FILING 8

PARKER WATER AND SANITATION CONSTRUCTION PLANS

SECTIONS 4, 8, AND 9 TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN COUNTY OF DOUGLAS, STATE OF COLORADO

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	PARKER WATER AND SANITATION NOTES
3	AREA UTILITY PLAN
4	SANITARY P&P ROSE MALLOW WAY
5	WATER P&P ROSE MALLOW WAY
6	SANITARY SEWER DETAILS
7	SANITARY SEWER DETAILS
8	SANITARY SEWER DETAILS
9	WATER DETAILS
10	WATER DETAILS
11	WATER DETAILS
12	WATER DETAILS
13	WATER DETAILS
14	WATER DETAILS
15	WATER DETAILS



VICINITY MAP
SCALE: 1" = 2000'

MATERIALS LIST		
DESCRIPTION	QUANTITY	UNIT
8" WATERPIPE (C900)	310	L.F.
6" WATERPIPE (DIP-FIRE HYDRANT LINE)	16	L.F.
8" GATE VALVE W/ BOX	0	EA.
6" GATE VALVE W/ BOX	1	EA.
FIRE HYDRANT WITH 6" LEAD	1	EA.
8" MISC. FITTINGS	2	EA.
AIR / VAC VALVE	1	EA.
DOMESTIC WATER SERVICE W/ METER	9	EA.
CONNECTION TO EXISTING MAIN	1	EA.
8" SEWER (SDR-35 PVC)	340	L.F.
4' DIA. MANHOLE	2	EA.
SEWER SERVICE LATERAL W/ WYE TAP	9	EA.
CONNECTION TO EXISTING MAIN	1	EA.

FIRE DEPARTMENT APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

[Signature] 05/21/2020
FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULE INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: *[Signature]*
(DISTRICT REPRESENTATIVE)

DATE SIGNED: Jul 08 2020

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: *[Signature]*
(DISTRICT ENGINEER)

DATE SIGNED: Jul 08 2020

PREPARED UNDER THE
SUPERVISION OF



BRIAN P. WILSON
COLORADO P.E. 0050067

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.

DEVELOPER

HR 935 LLC
7353 SOUTH ALTON WAY
CENTENNIAL, CO 80112
TEL: (303) 770-9111
CONTACT: MATT JANKE

PLANNER/
LANDSCAPE
DESIGNER:

PCS GROUP, INC.
200 KALAMATH STREET
DENVER, CO 80233
TEL: (303) 531-4905
CONTACT: JOHN PRESTWICH

SURVEYOR/
ENGINEER:

CVL CONSULTANTS
OF COLORADO, INC.
10333 E. DRY CREEK RD. STE 240
ENGLEWOOD, CO 80112
TEL: (720) 482-9526
CONTACT: JIM JANNICKE

UTILITY
DISTRICT

PARKER WATER AND
SANITATION DISTRICT
18100 E. WOODMAN DRIVE
PARKER, CO 80134
TEL: (303) 841-4627



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 8 CONSTRUCTION DRAWINGS
COVER SHEET

SCALE:
AS SHOWN
FILE NO:
8130283701

DRAWN BY: KJD
CHECKED BY: BPW
DATE: MAY 2020

SHEET NUMBER
1

Revisions
No.
Date
Init.
Appr.
Date

N:\PROJECTS\HSS RANCH\CAD\ENGINEERING\SSHEET SETS\CD\SI\6P\PARKER WATER AND SANITATION\6P COVER.DWG, CDDVA, 5/20/2020, 11:44 AM



UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO

CALL 811

TWO WORKING DAYS

BEFORE YOU DIG

1-800-922-1987

GENERAL NOTES:

- ALL CONSTRUCTION SHALL COMPLY WITH PARKER WATER AND SANITATION DISTRICT SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, HE SHALL CONTACT THE ENGINEER IMMEDIATELY.
- THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS THAT ARE NECESSARY TO PERFORM THE PROPOSED WORK.
- ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
- THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF ROLLED "AS-BUILT" BLUELINE PRINTS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL PRIOR TO PRINTING MYLAR SEPIAS FOR THE DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE MYLAR SEPIA PRINTS SHALL BE TRANSMITTED TO THE PARKER WATER AND SANITATION DISTRICT OFFICE.
- ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
- TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
- NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SERVICE SEWERS "V" FOR WATER SERVICES
- NO TREES SHALL BE ALLOWED IN EASEMENTS OR WITHIN 8' OF ANY WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
- THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.

WATER MAIN NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PARKER WATER AND SANITATION DISTRICT ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISIONS. ALL WORK SHALL BE INSPECTED AND APPROVED BY PERSONNEL OF THE PARKER WATER SANITATION DISTRICT AND THE DISTRICT ENGINEER.
- ALL WATER MAINS SHALL BE PER PWSO MATERIALS SPECIFICATIONS.
- ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED WITH 8-MIL MINIMUM THICKNESS POLYETHYLENE MATERIAL PER PWSO MATERIALS SPECIFICATIONS.
- THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
- FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPE, FITTINGS, VALVES, MATERIALS, AND LABOR WHICH ARE NECESSARY TO INSTALL THE HYDRANT COMPLETE IN PLACE. SEE MATERIALS SPECIFICATIONS FOR APPROVED MODELS.
- ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS AND PLUGS AT DEAD END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS.
- PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS. THE MORE CLOSELY THE RATE OF DELIVERY IS CORRELATED TO THE RATE OF PIPE LAYING, THE LOWER THE RISK OF CONTAMINATION.
- CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS. THE LINES SHALL BE CHLORINATED IN ACCORDANCE WITH ANSI/AWWA C-651-92., "DISINFECTING WATER MAINS." PARKER WATER AND SANITATION DISTRICT REQUIRES THE INITIAL DOSAGE RATE OF DISINFECTION BE AT LEAST 50 MG PER LITER. CHLORINE TABLETS SHOULD BE ADHERED TO THE TOP OF THE PIPE SECTION WITH PERMATRX NO.1 (RED). THE CHLORINATION OF ANY FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING.
- HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS. ALL PIPE SHALL BE FIELD PRESSURE TESTED TO A MINIMUM OF 150 PSI. ALL TESTING SHALL BE DONE IN THE PRESENCE OF A PARKER WATER AND SANITATION DISTRICT INSPECTOR. LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINES VALVES SHALL NOT EXCEED THE LIMITS SET FOURTH IN THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS.
- VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES WHERE AN ADDITIONAL VALVES SHALL BE PLACED ON THE TAPPING TEE. OTHER VALVE LOCATIONS, SUCH AS WHERE CROSS PANS EXIST, ARE SHOWN ON THE PLANS.
- WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.50 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
- THE CONTRACTOR SHALL NOTIFY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48 HOURS PRIOR TO RE-START.
- PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINED THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
- COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
- VALVE BOXES: TYLER SCREW-TYPE 6 INCHES CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE. CLAY AND BAILEY SCREW-TYPE 6 INCH CAST IRON VALVE BOX ASSEMBLY NO. P-108 WITH NO. 106 LARGE OVAL BASE.
- ALL PIPE LENGTHS ARE APPROXIMATE.
- AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVE OF OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER.

SANITARY SEWER NOTES:

- ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE PARKER WATER AND SANITATION DISTRICT SPECIFICATION.
- ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
- SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PARKER WATER AND SANITATION DISTRICT STANDARD AND SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
- SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.
- THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.
- NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
- SEWER SERVICE TEES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.
- ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
- PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
- AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.
- ALL PIPE LENGTHS ARE APPROXIMATE.
- THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PARKER WATER AND SANITATION DISTRICT AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PARKER WATER AND SANITATION DISTRICT SPECIFICATION MANUAL.
- ALL MANHOLES SHALL HAVE SHAPED INVERTS.
- ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
- PRIOR TO START WORK WHERE SEWER MAIN TO BE INSTALLED INTO EXISTING DISTRICT SEWER SYSTEMS. THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL ACCEPTANCE BY THE DISTRICT. ITS PURPOSE SHALL BE TO PREVENT ANY MUD, WATER OR OTHER MATERIALS FROM ENTERING THE LINE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN SO INSTRUCTED BY THE DISTRICT.
- PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CLIENT SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

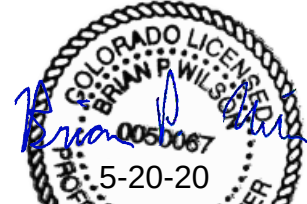
DISTRICT ACCEPTANCE NOTES:

- UPON COMPLETION OF SANITARY SEWER AND WATER CONSTRUCTION AND TESTING, THE DEVELOPER OR CONTRACTOR SHALL CONTACT THE DISTRICT FOR PROBATIONARY ACCEPTANCE INSPECTION. A PUNCHLIST WILL BE PROVIDED THE DEVELOPER AND CONTRACTOR UPON COMPLETION OF THE INITIAL WALK-THRU AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- THE DATE OF FINAL ACCEPTANCE WILL BE INDICATED IN THE CONDITIONS OF THE PROBATIONARY ACCEPTANCE LETTER. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT FOR FINAL INSPECTION AND FINAL ACCEPTANCE.

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

APPROVED

Jul 08 2020

PARKER WATER AND
SANITATION DISTRICT

SHEET NUMBER	DRAWN BY: KJD	CHECKED BY: BPW	DATE: MAY 2020	SCALE: AS SHOWN	FILE NO: 8130283701	TRAILS AT CROWFOOT FILING 8 CONSTRUCTION DRAWINGS PARKER WATER AND SANITATION NOTES	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	 10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	No.	Revisions	Date	Init.	Appr.	Date

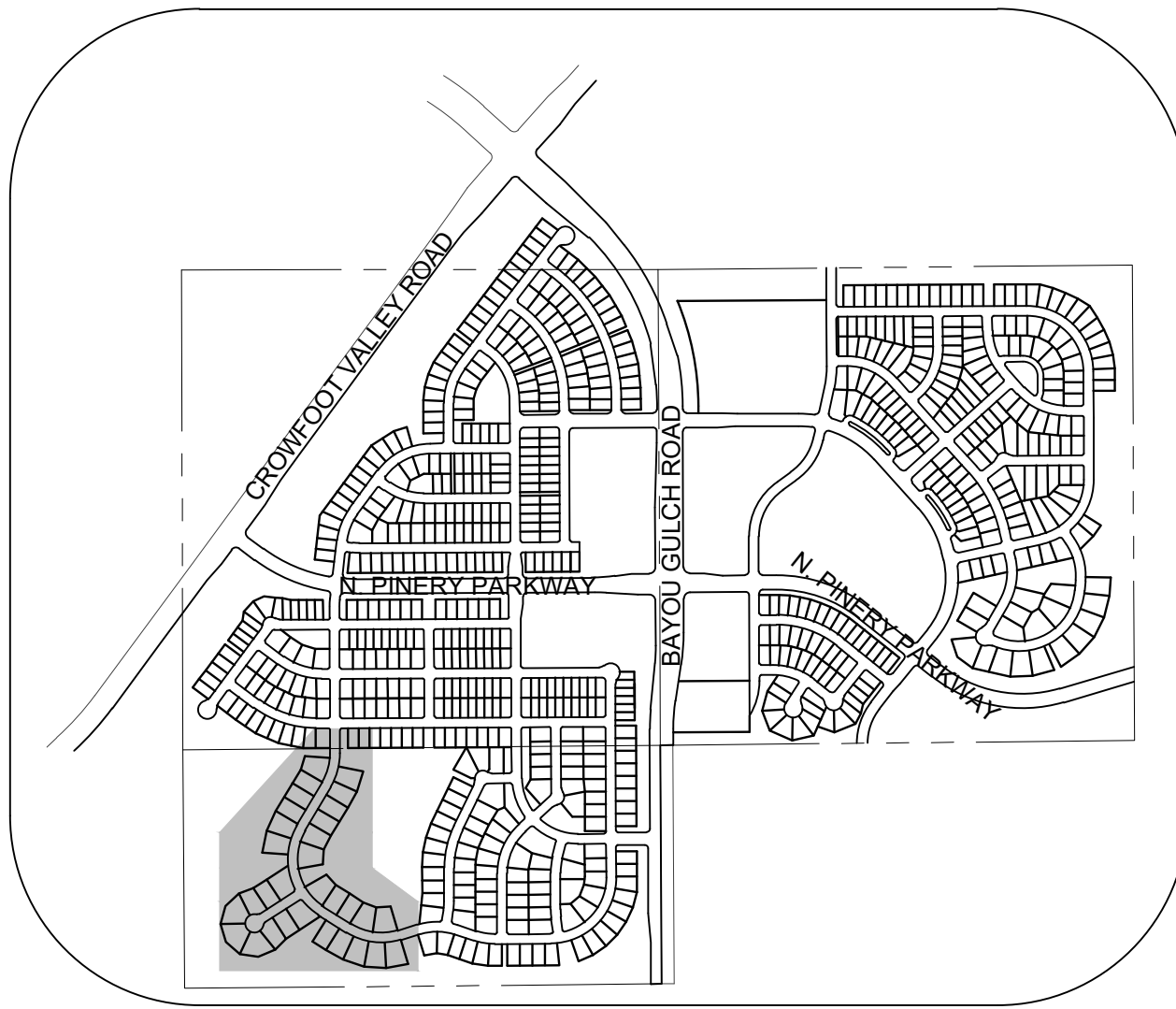
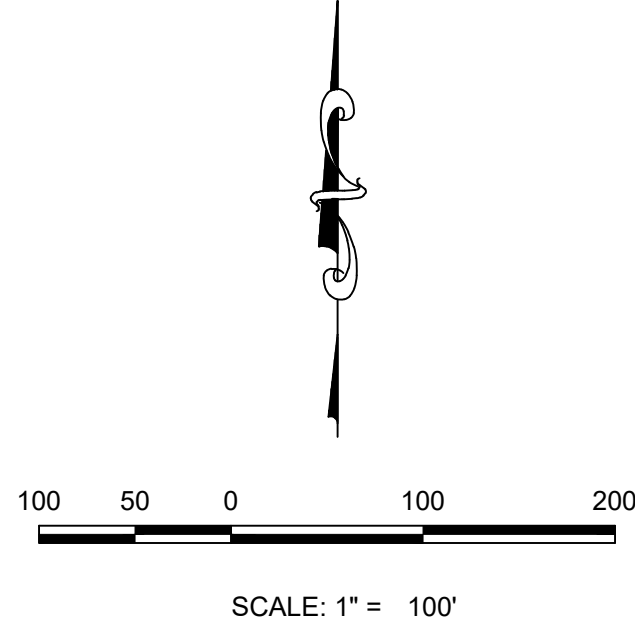
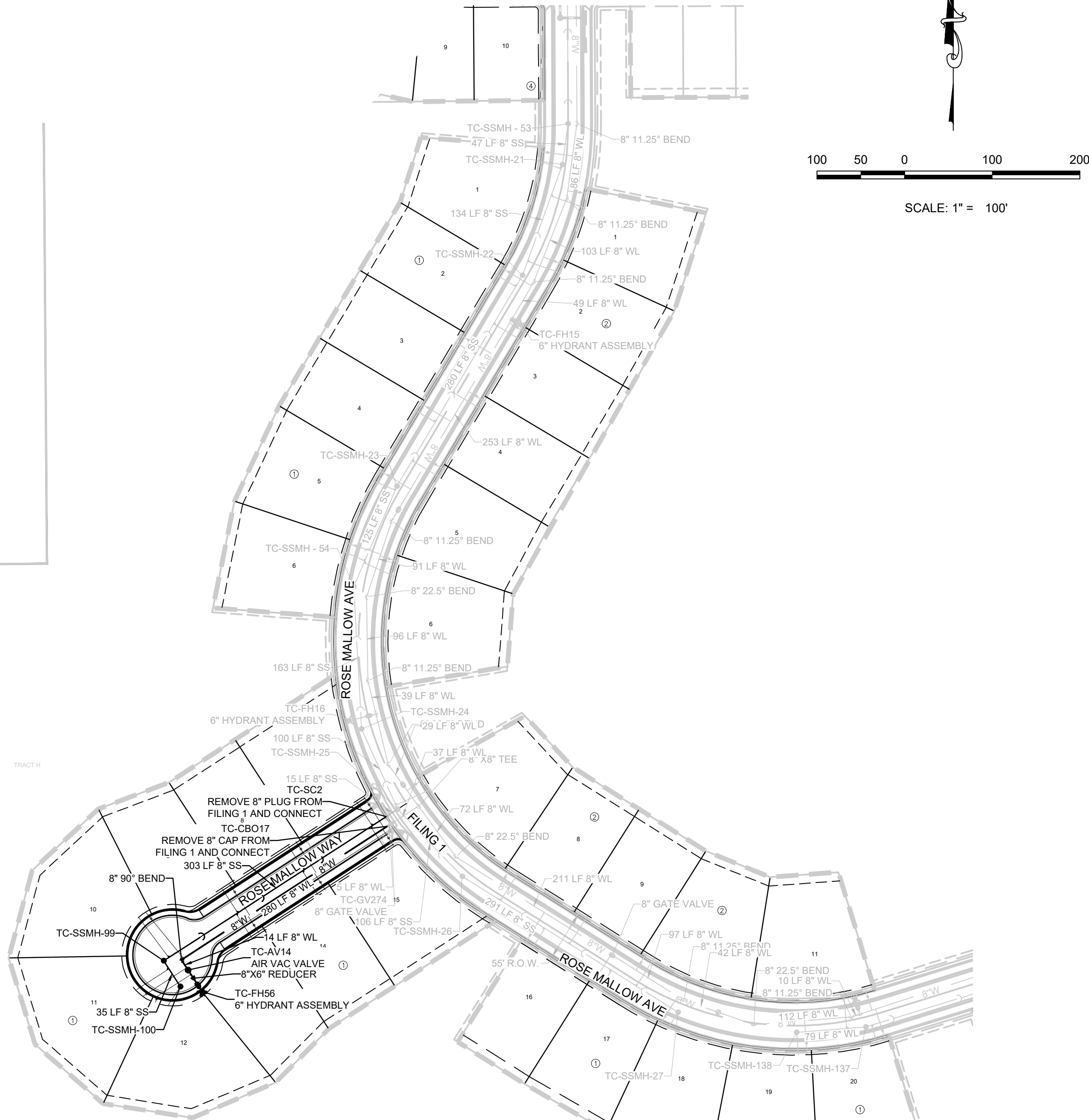
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SANITARY SERVICE TABLE		
FILING, LOT, BLOCK	STREET	STATIONING
F8,B1,L1	ROSE MALLOW AVE	19+88.81
F8,B1,L2	ROSE MALLOW AVE	21+35.68
F8,B1,L3	ROSE MALLOW AVE	22+25.68
F8,B1,L4	ROSE MALLOW AVE	23+15.68
F8,B1,L5	ROSE MALLOW AVE	24+05.62
F8,B1,L6	ROSE MALLOW AVE	24+92.62
F8,B1,L7	ROSE MALLOW WAY	12+83.43
F8,B1,L8	ROSE MALLOW WAY	11+90.65
F8,B1,L9	ROSE MALLOW WAY	11+00.65
F8,B1,L10	ROSE MALLOW WAY	10+07.00
F8,B1,L11	ROSE MALLOW WAY	9+89.14
F8,B1,L12	ROSE MALLOW WAY	9+65.00
F8,B1,L13	ROSE MALLOW WAY	10+98.65
F8,B1,L14	ROSE MALLOW WAY	11+88.65
F8,B1,L15	ROSE MALLOW WAY	12+81.43
F8,B1,L16	ROSE MALLOW AVE	29+93.58
F8,B1,L17	ROSE MALLOW AVE	30+83.58
F8,B1,L18	ROSE MALLOW AVE	31+71.90
F8,B1,L19	ROSE MALLOW AVE	33+06.43
F8,B1,L20	ROSE MALLOW AVE	33+90.10
F8,B2,L1	ROSE MALLOW AVE	20+22.09
F8,B2,L2	ROSE MALLOW AVE	21+03.57
F8,B2,L3	ROSE MALLOW AVE	21+85.16
F8,B2,L4	ROSE MALLOW AVE	22+76.16
F8,B2,L5	ROSE MALLOW AVE	23+66.87
F8,B2,L6	ROSE MALLOW AVE	24+94.56
F8,B2,L7	ROSE MALLOW AVE	27+74.71
F8,B2,L8	ROSE MALLOW AVE	29+34.24
F8,B2,L9	ROSE MALLOW AVE	30+27.18
F8,B2,L10	ROSE MALLOW AVE	31+17.11
F8,B2,L11	ROSE MALLOW AVE	33+62.25

WATER SERVICE TABLE		
FILING, LOT, BLOCK	STREET	STATIONING
* F8, B1, L1	ROSE MALLOW AVE	19+72.71
* F8, B1, L2	ROSE MALLOW AVE	21+25.68
* F8, B1, L3	ROSE MALLOW AVE	22+15.68
* F8, B1, L4	ROSE MALLOW AVE	23+05.68
* F8, B1, L5	ROSE MALLOW AVE	23+95.68
* F8, B1, L6	ROSE MALLOW AVE	24+79.97
* F8, B1, L16	ROSE MALLOW AVE	29+83.58
* F8, B1, L17	ROSE MALLOW AVE	30+73.58
* F8, B1, L18	ROSE MALLOW AVE	31+64.55
* F8, B1, L19	ROSE MALLOW AVE	33+15.73
* F8, B1, L20	ROSE MALLOW AVE	33+99.31
* F8, B2, L1	ROSE MALLOW AVE	20+12.19
* F8, B2, L2	ROSE MALLOW AVE	20+91.06
* F8, B2, L3	ROSE MALLOW AVE	21+75.16
* F8, B2, L4	ROSE MALLOW AVE	22+66.16
* F8, B2, L5	ROSE MALLOW AVE	23+56.87
* F8, B2, L6	ROSE MALLOW AVE	24+82.03
* F8, B2, L7	ROSE MALLOW AVE	27+67.44
* F8, B2, L8	ROSE MALLOW AVE	29+24.15
* F8, B2, L9	ROSE MALLOW AVE	30+17.18
* F8, B2, L10	ROSE MALLOW AVE	31+07.18
* F8, B2, L11	ROSE MALLOW AVE	33+95.13
F8,B1,L7	ROSE MALLOW WAY	12+93.43
F8,B1,L8	ROSE MALLOW WAY	12+00.65
F8,B1,L9	ROSE MALLOW WAY	11+10.65
F8,B1,L10	ROSE MALLOW WAY	10+20.73
F8,B1,L11	ROSE MALLOW WAY	9+79.14
F8,B1,L12	ROSE MALLOW WAY	9+70.00
F8,B1,L13	ROSE MALLOW WAY	11+08.65
F8,B1,L14	ROSE MALLOW WAY	11+98.65
F8,B1,L15	ROSE MALLOW WAY	12+91.43

* INSTALLED WITH FILING 1 IMPROVEMENTS

FUTURE
PWSD
WELL SITE



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 SLOPE LATERAL
Ⓢ	PROPOSED LIGHT POLE	8"	PROPOSED WATER LINE LATERAL W/ METER
Ⓢ	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	EXISTING 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
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
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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

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.

[Signature] 07/09/2020
Town of Parker, Director of Engineering Date

PREPARED UNDER THE
SUPERVISION OF

[Stamp]
BRIAN P. WILSON
COLORADO P.E. 0050067

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULING INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: (DISTRICT REPRESENTATIVE) _____ DATE _____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: (DISTRICT ENGINEER) _____ DATE _____

APPROVED
Jul 08 2020
PARKER WATER AND SANITATION DISTRICT

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

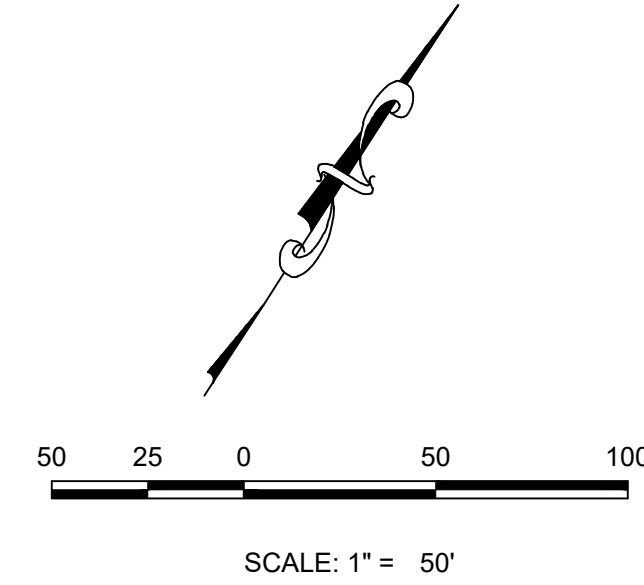
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FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

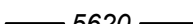
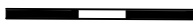
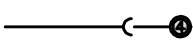
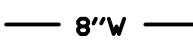
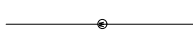
(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.

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.

10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 482-9526 Fax: (720) 482-9546	CVL CONSULTANTS	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	TRAILS AT CROWFOOT FILING 8 CONSTRUCTION DRAWINGS AREA UTILITY PLAN	SCALE: 1/8" = 1'-0" DRAWN BY: JLR CHECKED BY: BPW DATE: MAY 2020	AS SHOWN FILE NO: 8130283701	SHEET NUMBER 3	Revisions No. Date Init. Appr. Date
--	---------------------------	---	--	---	------------------------------------	--------------------------	--



	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		PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT		EXISTING 5' CONTOUR
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	FUTURE FIRE HYDRANT		PROPOSED SEWER LATERAL
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PREPARED UNDER THE
SUPERVISION OF



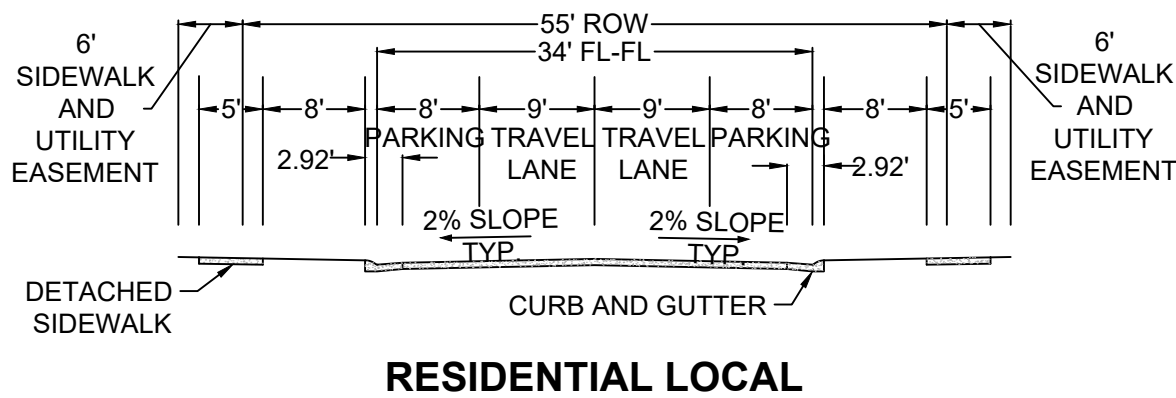
BRIAN P. WILSON
COLORADO P.E. 0050067

APPROVED
Jul 08 2020
PARKER WATER AND
SANITATION DISTRICT

N:\PROJECTS\SSR\CHANDLER\ENGINEERING\SSR\SET\SD\SD\PARKER WATER AND SANITATION\WATER PAPER\ROSE MALLOW WAY WATER DWG.CDD\VA.5202020.1201.PM



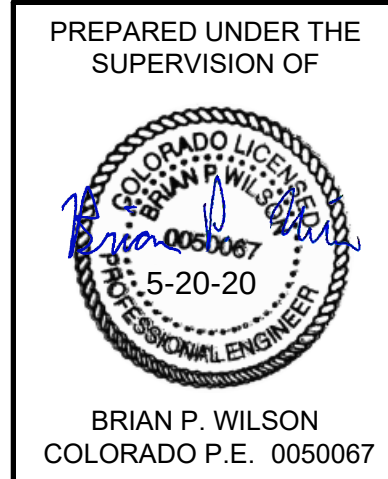
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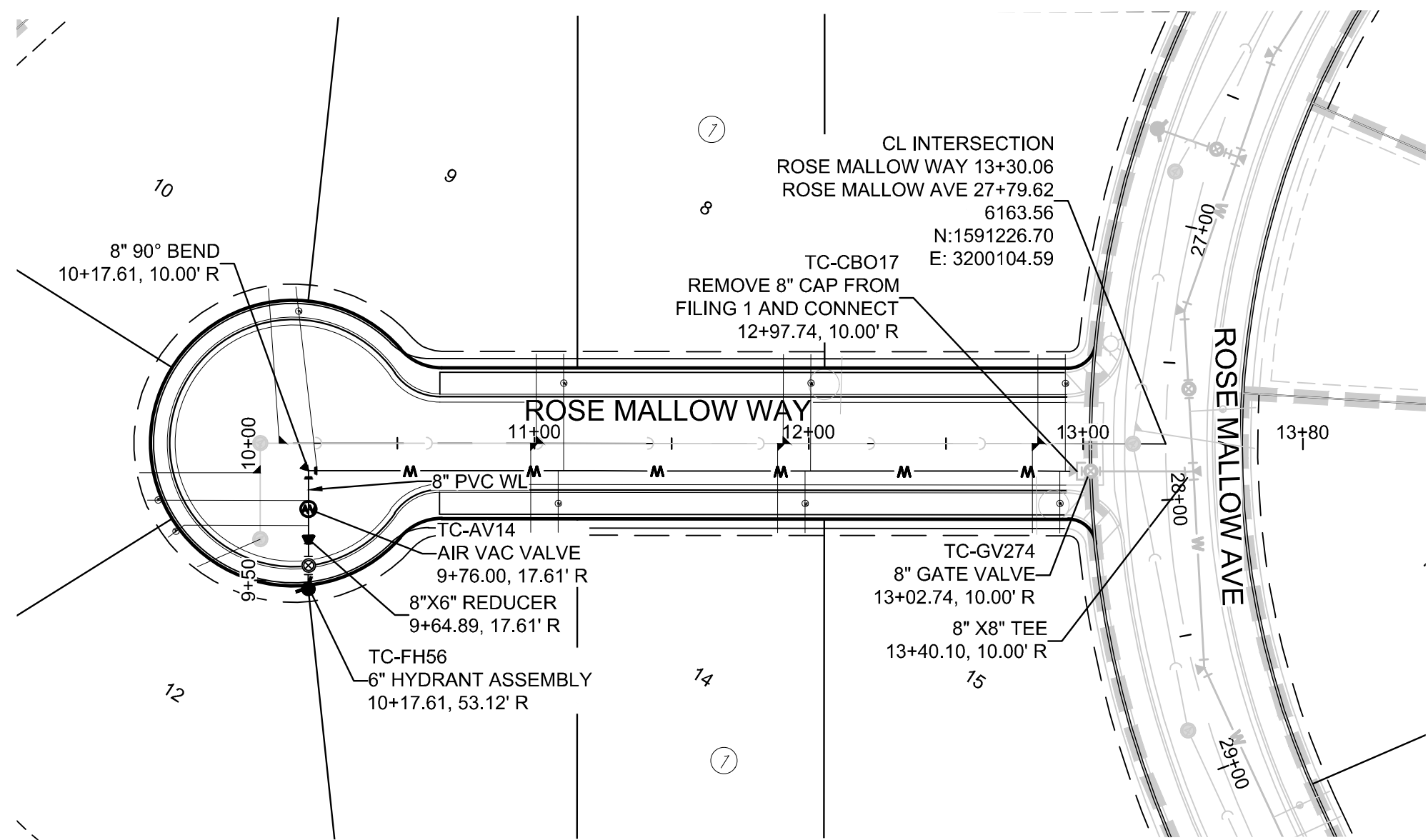
RESIDENTIAL LOCAL

BENCHMARK
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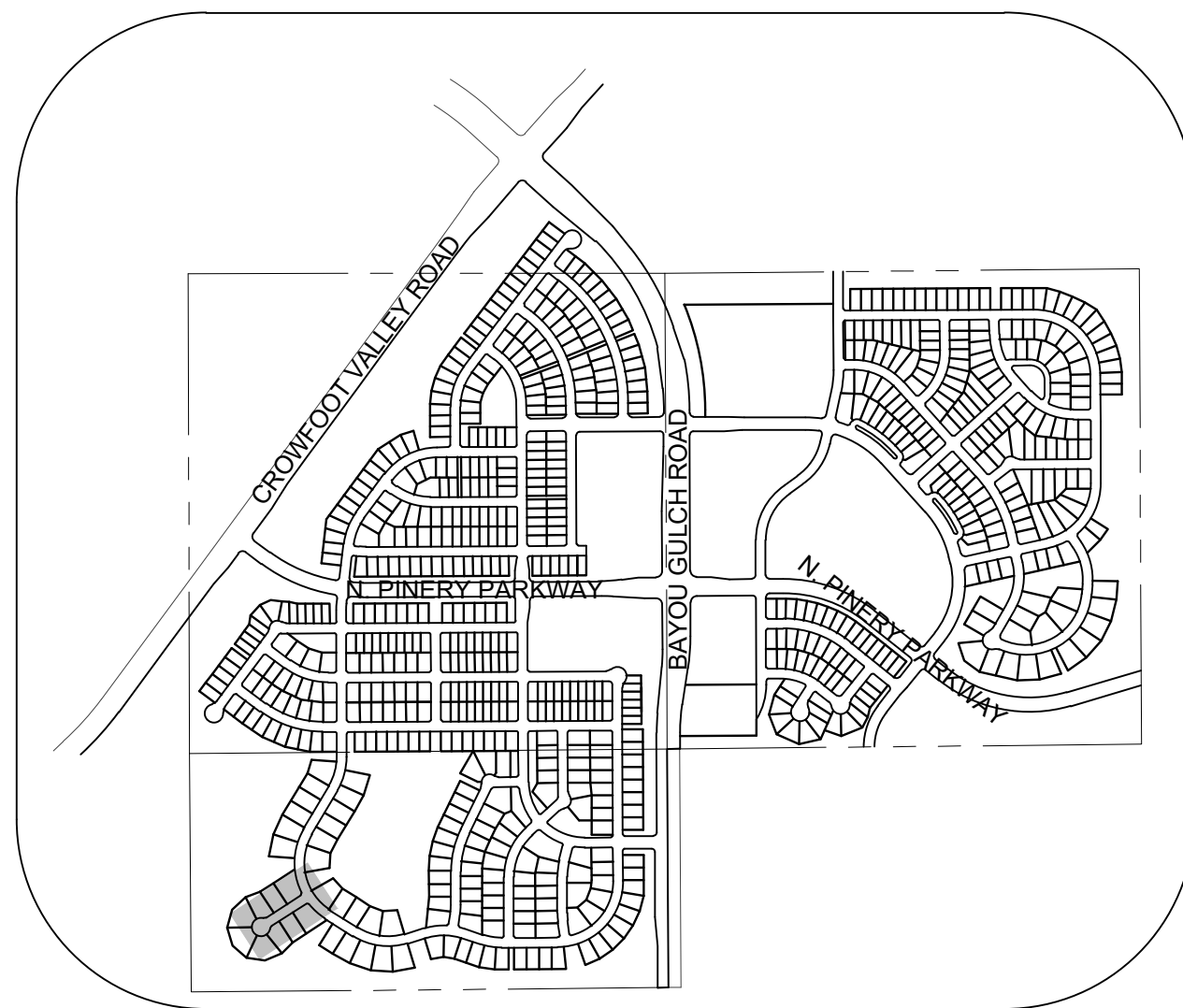
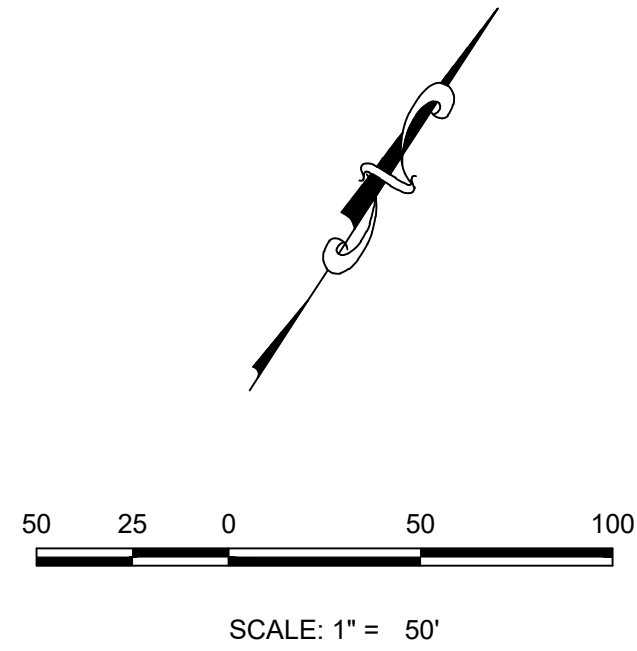
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APPROVED
Jul 08 2020
**PARKER WATER AND
SANITATION DISTRICT**



PLAN: ROSE MALLOW WAY STA: 9+50.00 TO 14+00.00
HORIZONTAL SCALE: 1" = 50'



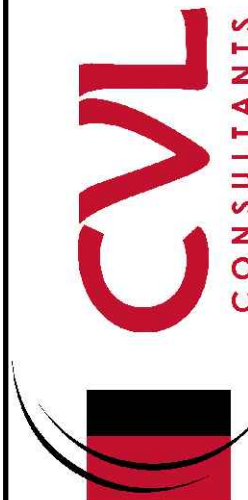
KEYMAP
N.T.S.
LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	---	CENTERLINE
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10.00	EXISTING ELEVATION	---	FILING BOUNDARY
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ABBREVIATIONS

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10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 8 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
ROSE MALLOW WAY

SCALE: AS SHOWN
DRAWN BY: RRR
CHECKED BY: BPW
FILE NO: 8130283701
DATE: MAY 2020

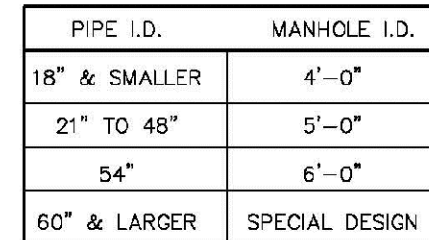
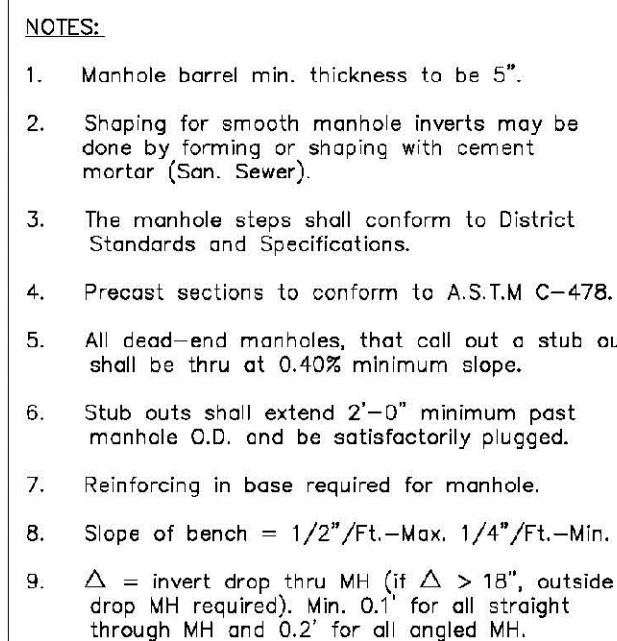
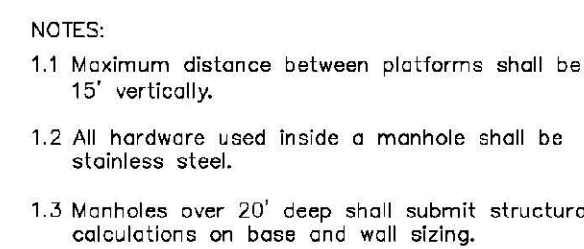
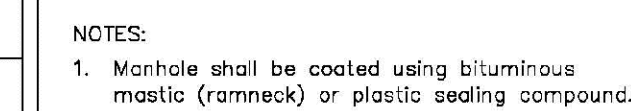
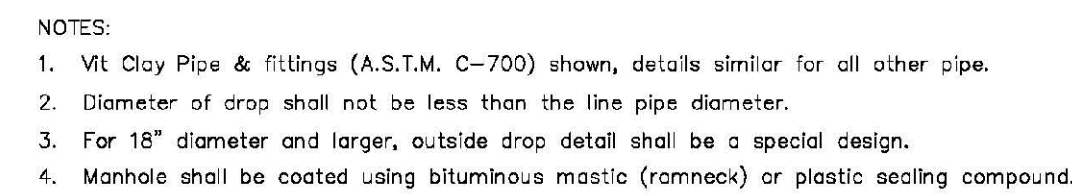
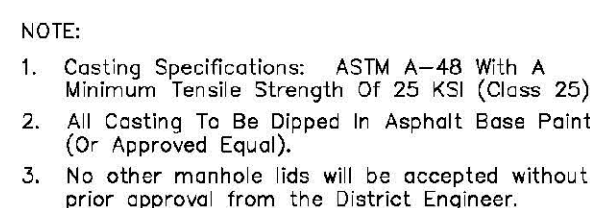
SHEET NUMBER
5

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 DAMAGED AREA SHALL BE CONDUCTED WITH NOTES 1 AND 2 ABOVE.
4. THE CONTRACTOR SHALL LEAVE ALL FILL 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.

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

2016 REVISION

2016 REVISION

SHEET S1.22016 REVISION2016 REVISION2016 REVISION2016 REVISION2016 REVISION2016 REVISION2016 REVISION

APPROVED
Jul 08 2020
PARKER WATER AND
SANITATION DISTRICT

<u>TOE POCKET DETAILS</u> <u>STANDARD EXTRUDED</u> <u>ALUMINUM MANHOLE STEP</u>	PARKER WATER & SANITATION DISTRICT	
	STANDARD EXTRUDED ALUMINUM MANHOLE STEP	
	SCALE: NONE	DATE: 2/96
	APPROVED: PVR	01/15 10/16
DIRECTOR OF ENGINEERING		

- a) ASTM C-478
- b) ASTM A-615 GRADE 60 (STEEL, ROD)
- c) ASTM A216-69, TYPE II, GRADE 1608 (POLYPROPYLENE)

2.2 STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 3-5/8" RAD LEG AND SHALL PROJECT FROM THE WALL 5-5/8" INCHES.

2.3 STEPS INSTALLED IN MANHOLE BARREL SECTIONS SHALL HAVE AN 8-1/4" RAD LEG AND SHALL PROJECT FROM THE WALL 4-7/8" INCHES.

2.4 ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8" INCHES.

2.5 STEPS SHALL BE INSTALLED USING THE PRESS-TITE METHOD UTILIZING A FORCE OF 250 LBS PER LEG FOR 15 MINUTES.

2.6 TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.

2.7 INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 1000 LBS PER LEG FOR 15 MINUTES.

2.8 STEPS SHALL BE INSTALLED BY THE "PRESS-TITE" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUDED IN PLACE.

NOTES: 3.1 THE CAST ALUMINUM MANHOLE STEP SHALL ONLY BE USED WHEN SPECIFIED ON THE DRAWINGS. 3.2 ALUMINUM ALLOY SPECIFICATIONS a. ALLOY DESIGNATION: A360.35 b. MIN. TENSILE STRENGTH= 40 K.S.I. c. MIN. YIELD STRENGTH= 20 K.S.I. d. MIN. TENSILE STRENGTH= 27.45 K.S.I. e. ELONGATION= 10% IN 2" f. BRINELL HARDNESS= 70 3.3 MINIMUM LOAD CAPACITY, STEP SPACING AND ALUMINUM: TO POCKET: DETAILS AND OTHER APPLICABLE NOTES OR DETAILS SPECIFIED ON ATTACHED ALUMINUM MANHOLE STEP SHALL ALSO APPLY TO THIS STANDARD. 3.4 MIN. WT. = 2.6 LBS.	 CAST ALUMINUM MANHOLE STEP PARKER WATER & SANITATION DISTRICT CAST ALUMINUM MANHOLE STEP <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <tr> <td style="width: 50%; padding: 5px;"> SCALE: <u>NONE</u> </td> <td style="width: 50%; padding: 5px;"> DATE: <u>2/98</u> </td> </tr> <tr> <td style="width: 50%; padding: 5px;"> APPROVED: <u>PVR</u> </td> <td style="width: 50%; padding: 5px;"> 02/98 10/95 </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> DIRECTOR OF ENGINEERING </td> </tr> </table>	SCALE: <u>NONE</u>	DATE: <u>2/98</u>	APPROVED: <u>PVR</u>	02/98 10/95	DIRECTOR OF ENGINEERING	
SCALE: <u>NONE</u>	DATE: <u>2/98</u>						
APPROVED: <u>PVR</u>	02/98 10/95						
DIRECTOR OF ENGINEERING							

STEEL PIPE STENCILED IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPEARANCE WITH 2" STENCILS INDICATING TYPE OF APPEARANCE (W/12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST. REDUCED POST ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.	PARKER WATER & SANITATION DISTRICT MARKER POST DETAIL <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <tr> <td style="width: 40%;">SCALE:</td> <td style="width: 60%;">NONE</td> </tr> <tr> <td>DATE:</td> <td>2/98</td> </tr> <tr> <td>APPROVED: PVR</td> <td>2/00 4/01 1/06 1/06</td> </tr> <tr> <td colspan="2">DIRECTOR OF ENGINEERING</td> </tr> </table>	SCALE:	NONE	DATE:	2/98	APPROVED: PVR	2/00 4/01 1/06 1/06	DIRECTOR OF ENGINEERING	
SCALE:	NONE								
DATE:	2/98								
APPROVED: PVR	2/00 4/01 1/06 1/06								
DIRECTOR OF ENGINEERING									

= Thickness of Asphaltic Concrete Base Course (A + B + C)				NOTES			
= Thickness of Asphaltic Concrete Wearing Surface (A + C + S)				1. Spacing of benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.			
(a) Total Asphalt Thickness ($T_g + T_w$)				2. Trench shall be benched and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, etc. (i.e., utilities adjacent to the trench, no pavement will be made for removal, replacement or reconstruction of curb and gutter utilities, sidewalks, structures, etc., outside the maximum limit of excavation as shown and the contractor shall be responsible for protection of same.)			
(b) Outside Pipe or Conduit Span Dimension				3. If dimension $T_g \leq 1'$, then existing asphaltic concrete shall be removed and replaced up to the gutter. Maximum asphalt width, $T_g + B$, shall then be based upon this overall width.			
= Specified Bedding Trench Width and Max Bedding Trench Width at a point 1' from Face Top of Side Note 3)							
= Max. Pay Width of Asphaltic Concrete Base Course (or Asphaltic Concrete Cold Mix) (See Note 3)							
= Max. Pay Width of Asphaltic Concrete Bedding Surface or Depth of Base Course (See Note 3)							
= Depth of Surface to Top of Pipe							
= Depth from Surface to 1' to 1' above Top of Pipe							

TABLE II		
NOMINAL DIAMETER (D)	MINIMUM THICKNESS (t)	MIN. WELD OF GRADE (E _W)
16" & smaller	6"	B ₂ & B ₃
21" to 32"	8"	B ₂ & B ₃
36" to 42"	8"	B ₂ & B ₃
48" & longer	1/4" □	1.25 B ₂

PARKER WATER
& SANITATION DISTRICT

TRENCHING AND BEDDING
DETAIL - CLASS "A"

SCALE: _____

APPROVED: PVR

DATE: 2/98

1/78

DIRECTOR OF ENGINEERING

PARKER WATER & SANITATION DISTRICT	
TRENCHING AND BEDDING CLASS "B"	
SCALE: NONE	DATE: 2/95
APPROVED: PVR	5/98 2/00 1/16
DIRECTOR OF ENGINEERING	10/16

NOTES:

3.1 BELL HOLES SHALL BE EXCAVATED AT ALL BELL AND SPRIGOT JOINTS.

3.2 BEDDING TRENCH BACKFILL TO BE COMPACTED TO 90% DENSITY. ASHSTO T-99 IN 6"X12" MEAS. AND 90% DENSITY ASHSTO T-99 IN ALL PUBLIC R.O.W.

AND BEDDING DETAILS SHALL BE A SPECIAL DESIGN.

PARKER WATER & SANITATION DISTRICT	
TRENCHING AND BEDDING CLASS "B"	
SCALE: _____	DATE: 2/28
APPROVED: PVR	5/98 2/00 1/10
DIRECTOR OF ENGINEERING	10/16

PARKER WATER & SANITATION DISTRICT	
TRECHING AND BEDDING CLASS "B"	
SCALE: NONE	DATE: 2/98
APPROVED: PVR	5/98 2/00 1/01
DIRECTOR OF ENGINEERING	10/76

The diagram illustrates the construction details for a concrete encasement around a sanitary sewer pipe. The top part shows a side view of the proposed sewer or conduit being encased. The bottom part is a detailed cross-section showing the following components and dimensions:

- Pier Support**: Indicated as required on each side.
- Concrete Arch**: With a strength of $f'_c = 2000 \text{ PSI}$.
- Shoring**: Required during construction.
- Undisturbed Earth**: The material surrounding the trench.
- Hand Excavation**: Required around the sanitary sewer.
- Sanitary Sewer**: The existing pipe being encased.
- Filler Material**: Specified as per Note 13, filling the space between the arch and the earth.
- Dimensions**:
 - A vertical dimension of 6' from the ground surface to the top of the arch.
 - A horizontal dimension of 6' from the centerline of the sewer to the edge of the arch.
 - An overall width of O.D. + 12" at the base of the arch.
 - A depth of 6' for the undisturbed earth below the arch.
 - A total height of 12' from the base of the arch to the ground surface.

TYPE I CONCRETE ENCASEMENT FOR SANITARY SEWERS (CONCRETE ARCH)

GENERAL NOTES FOR TYPE I, II & III ENCASEMENT

CONCRETE TO BE CAST AGAIN UNDISTURBED SOIL OR SHORING IF OPTIONAL CONSTRUCTION JUMP IS USED & BOTTOM HALF OF ENCASEMENT 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 ENCASEMENT FILL:

- TYPE I & TYPE II ENCASEMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
- TYPE III ENCASEMENT SHALL EXTEND AT LEAST TO FEET EACH SIDE OF WATER MAIN.

UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASEMENTS NEED NOT BE REINFORCED. REINFORCEMENT IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.

TYPE I & II ENCASEMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:

- TYPE I OR TYPE II IF $d \leq 18"$ ($d \leq 12'$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
- WATER MAINS AND $d_2 \leq 24"$ ($d_2 \leq 18'$)
- TYPE II IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_2 .
- EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, WHERE UNDESIRABLE, SHALL BE UNDERCUTTED.
- WHERE UNDESIRABLE SOIL CONDITIONS ARE ENCOUNTERED, TYPE I OR TYPE II ENCASEMENT WILL BE REQUIRED AS FACTORY.
- IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-900 OR C-15), CONCRETE ENCASEMENT MAY NOT BE REQUIRED.

FILLER MATERIAL BETWEEN CONDUITS TO BE:

- APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC.
- IF $d_1, d_2 \leq 6"$
- COMPACTED CLASS "B" BEDDING IF $d_1, d_2 > 6"$
- IF $d_1 > 6"$ FOR TYPE II ENCASEMENT POUR CONCRETE ON UNDISTURBED SOIL.

SHORING OR SHEETING, IF USED, TO BE CUT OFF AT TOP OF ENCASEMENT.

THESE ENCASEMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS. IN CERTAIN SITUATIONS, THESE CONDUIT CHARTER "D" IS EXCEEDING LARGE, PIER 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**

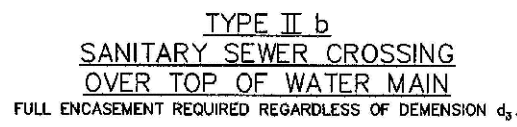
**CONCRETE ENCASEMENT
TYPE I**

SCALE: NONE DATE: 2/98

APPROVED: JFN

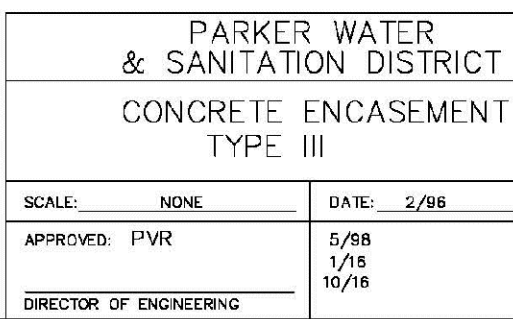
SUPERVISOR

APPROVED
Jul 08 2020
PARKER WATER AND
SANITATION DISTRICT

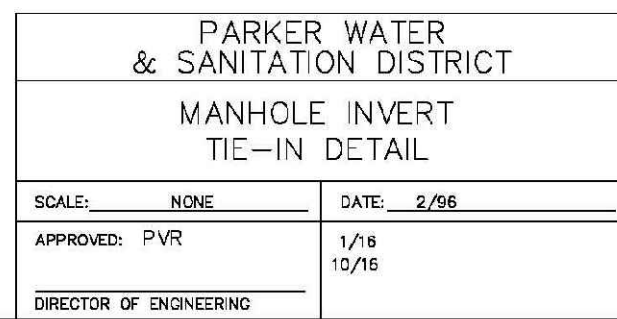


PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASEMENT TYPE II	
SCALE: <u>NONE</u>	DATE: <u>2/96</u>
APPROVED: <u>JFN</u>	<u>5/98</u> <u>4/01</u> <u>1/08</u>
DISTRICT ENGINEER	

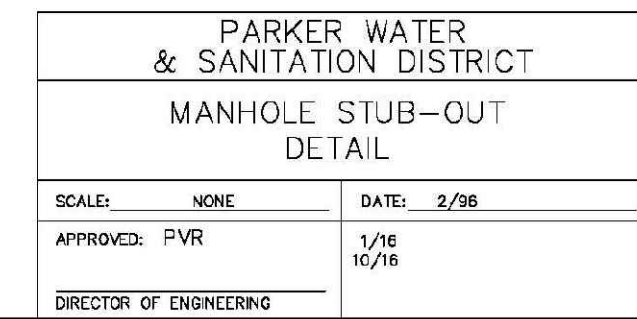
SHEET 7



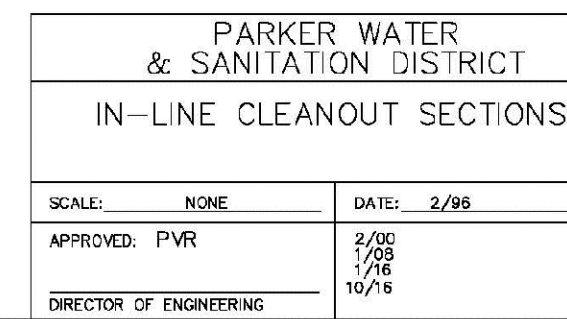
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SHEET S4.9



SHEET S4.10

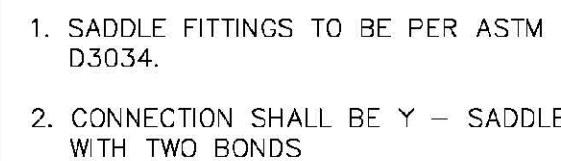


SHEET S4.12



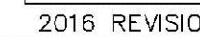
PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: <u> NONE </u>	DATE: <u> 2/96 </u>
APPROVED: PVR	4/01 1/08 1/16
DIRECTOR OF ENGINEERING	10/16

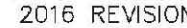
SHEET S4.13



PARKER WATER & SANITATION DISTRICT	
P.V.C. SADDLE CONNECTION DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/18 10/10
DIRECTOR OF ENGINEERING	

SHEET S4.14





Jul 08 2020

PARKER WATER AND SANITATION DISTRICT

