

N:\PROJECTS\BENCH MARK\ENGINEERING\BENCH MARK SET\CD\CD\F2\PARKER WATER AND SANITATION\F2 COVER.DWG, BURNIN, 12/9/2017 10:05 AM

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23	WATER DETAILS
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25	WATER DETAILS
26	WATER DETAILS

DEVELOPER

E5X MANAGEMENT
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

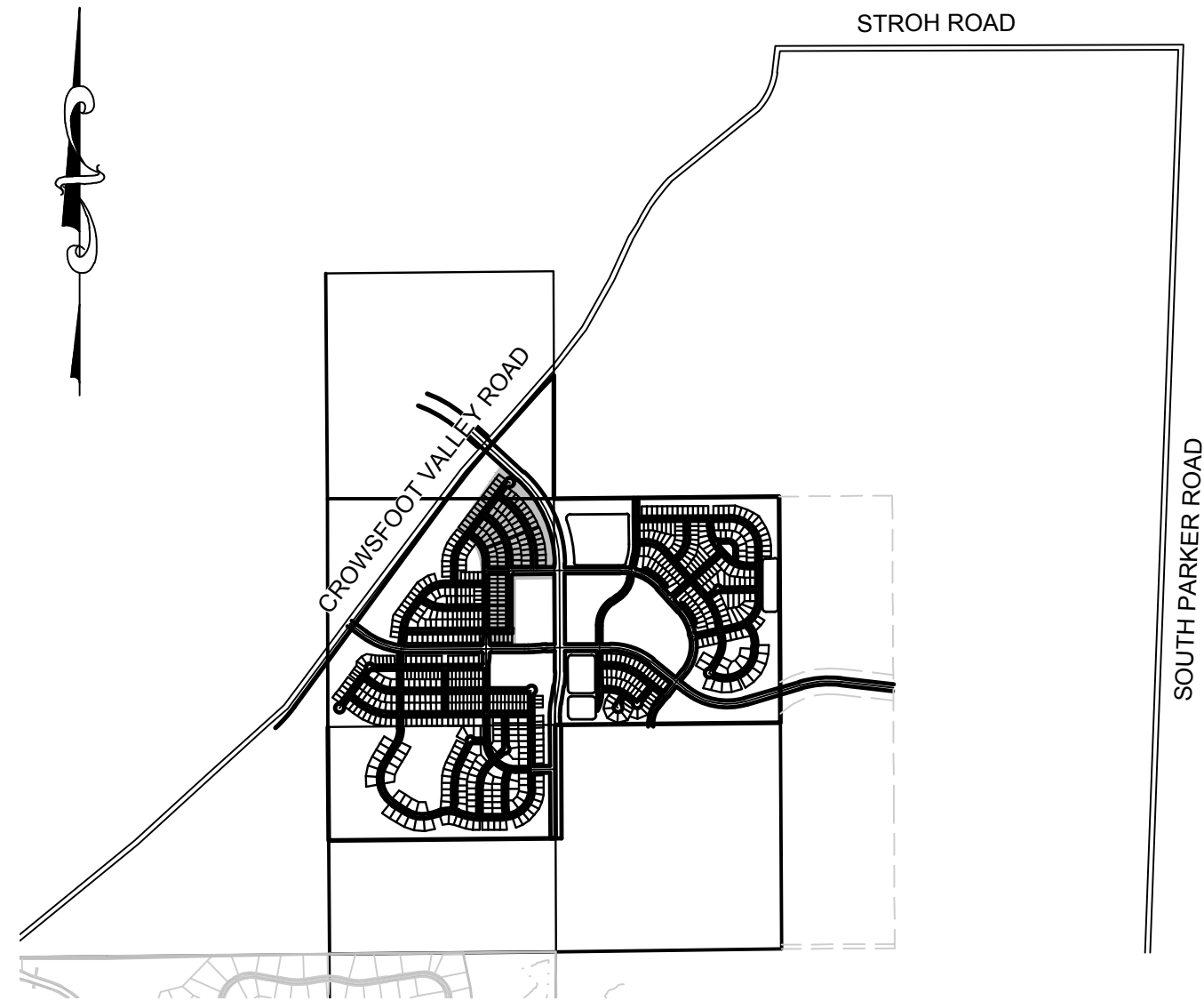
PARKER WATER AND
SANITATION DISTRICT
18100 E. WOODMAN DRIVE
PARKER, CO 80134
TEL: (303) 841-4627

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



VICINITY MAP
SCALE: 1" = 2000'

MATERIALS LIST		
DESCRIPTION	QUANTITY	UNIT
8" WATERPIPE (C900)	4,845	L.F.
6" WATERPIPE (DIP-FIRE HYDRANT LINE)	168	L.F.
8" GATE VALVE W/ BOX	20	EA.
6" GATE VALVE W/ BOX	9	EA.
FIRE HYDRANT ASSEMBLY	9	EA.
8" BLOWOFF	2	EA.
8" BEND	15	EA.
8" CROSS	1	EA.
8" TEE	15	EA.
WATER SERVICE LATERAL W/ WATER METER AND PIT	100	EA.
8" SEWER (SDR-35 PVC)	4,479	L.F.
4' DIA. MANHOLE	24	EA.
INTERMEDIATE PLATFORM	1	EA.
SEWER SERVICE LATERAL W/ WYE TAP	100	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.

(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) _____ DATE _____

(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 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: _____
(DISTRICT REPRESENTATIVE)

DATE SIGNED: _____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____
(DISTRICT ENGINEER)

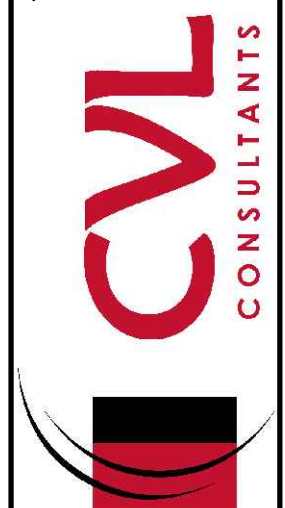
DATE SIGNED: _____



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

UTILITY NOTIFICATION
CENTER OF COLORADO

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



CONSULTANTS

ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
COVER SHEET

SCALE:
AS SHOWN

DRAWN BY: KJD

CHECKED BY: JJ

DATE: AUGUST 2017

FILE NO:
8130283701

SHEET NUMBER
1

Revisions
No.

Appr.
Date

Init.
Date

1. ALL CONSTRUCTION SHALL COMPLY WITH PARKER WATER AND SANITATION DISTRICT SPECIFICATIONS.
2. 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.
3. 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.
4. THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL EXEMPTS THAT ARE NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
7. 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.
8. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. 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.
11. ALL 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.
12. 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.
13. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS: "X" FOR SANITARY SERVICE SEWERS "V" FOR WATER SERVICES
14. NO TREES SHALL BE ALLOWED IN EASEMENTS OR WITHIN 8' OF ANY WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
15. 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.

1. 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.
2. ALL WATER MAINS SHALL BE PER PWD MATERIALS SPECIFICATIONS.
3. 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 PWD MATERIALS SPECIFICATIONS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. 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.
6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS AND PLUGS AT DEAD END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS.
7. PROCAINS 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.
8. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PARKER WATER AND SANITATION 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 PERMATEX NO.1 (RED). THE CHLORINATION OF ANY FINISHED PIPELINE SHALL BE DONE PRIOR TO THE HYDROSTATIC TESTING.
9. 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.
10. 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.
11. 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.
12. 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.
13. PIPE JOINTS MUST BE CLEAN, WELL-GRADED SAND OR SQUEEZED SAND IN ACCORDANCE WITH PARKER WATER AND SANITATION DISTRICT STANDARDS AND SPECIFICATIONS, LATEST REVISION.
14. 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.
15. 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.
16. 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.
17. ALL PIPE LENGTHS ARE APPROXIMATE.
18. 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.

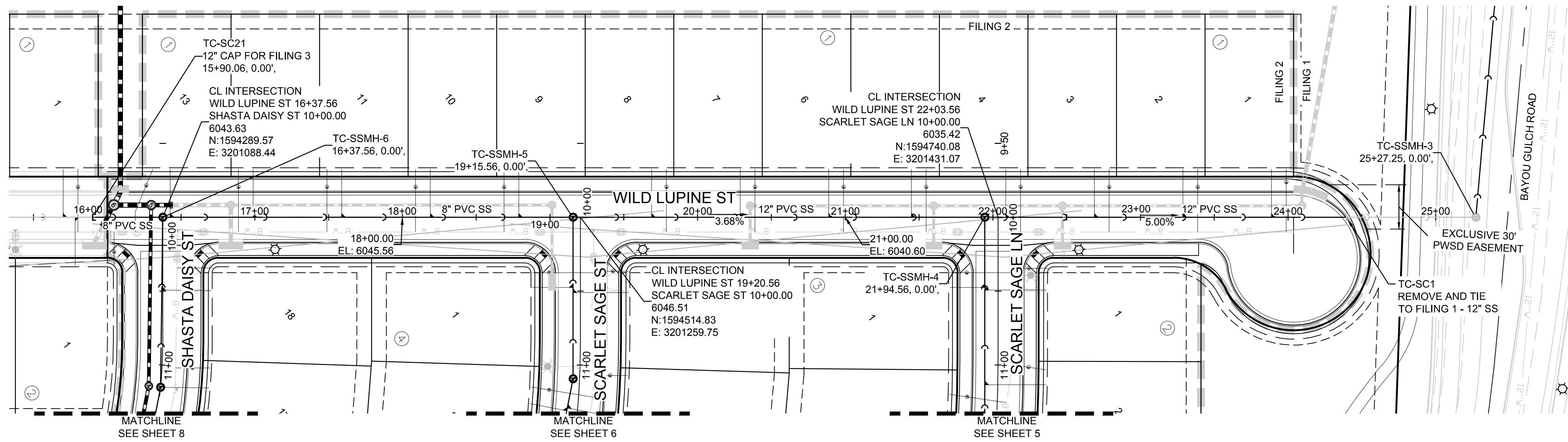
1. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE PARKER WATER AND SANITATION DISTRICT SPECIFICATION.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF 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.
4. 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 18" DIAMETER.
5. 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.
6. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
7. 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.
8. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
10. 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.
11. ALL PIPE LENGTHS ARE APPROXIMATE.
12. 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.
13. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
14. 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.
15. 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.
16. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CLIENT SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

1. 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.
2. 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 TIME GUARANTEED SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
3. 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.

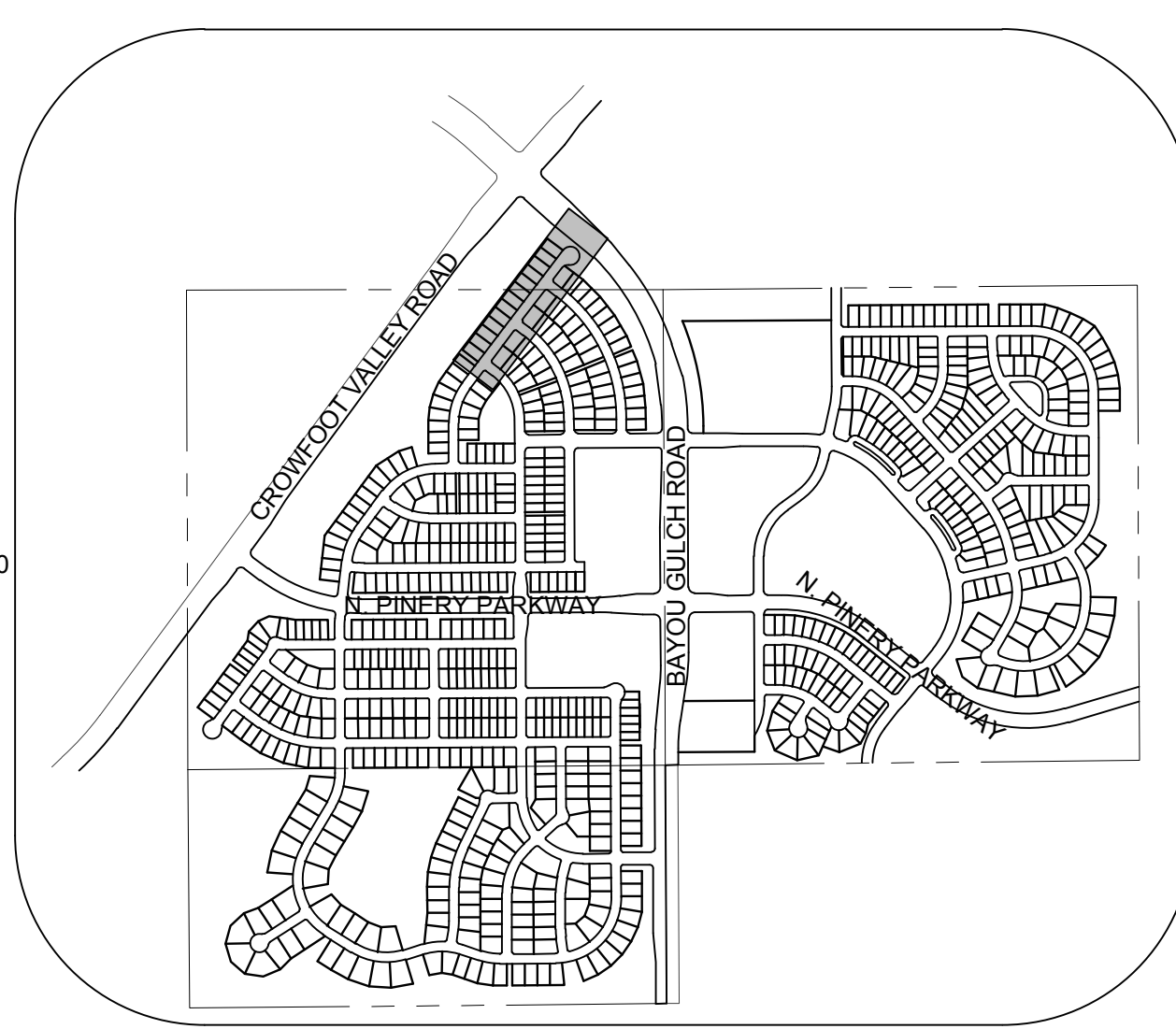
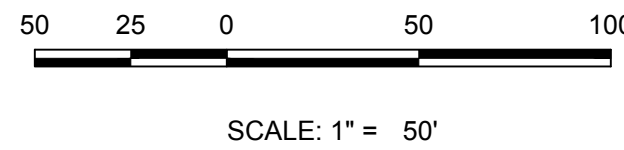
BRIAN P. WILSON
COLORADO P.E. 005006

SHEET NUMBER 2	DRAWN BY: KJD	SCALE: AS SHOWN	TRAILS AT CROWFOOT FLING 2 CONSTRUCTION DRAWINGS PARKER WATER AND SANITATION NOTES	ESX MANAGEMENT 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							
	CHECKED BY: JJD	FILE NO:									
	DATE: AUGUST 2017	8130283701									
					No.	Revisions	Date	Init.	Appr.		

N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\WATER AND SANITATION\SANITARY PLAN AND PROFILE\2 WILD LUPINE ST SANITARY DWS, CDDVA, 12/20/2017 10:15 AM



PLAN: WILD LUPINE ST STA: 15+50.00 TO 25+50.00
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 LINE |
| ⊗ | PROPOSED SIDEWALK | --- | 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 |

SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2,B1,L1	WILD LUPINE ST	23+88.83
F2,B1,L2	WILD LUPINE ST	23+28.83
F2,B1,L3	WILD LUPINE ST	22+68.83
F2,B1,L4	WILD LUPINE ST	22+08.83
F2,B1,L5	WILD LUPINE ST	21+44.83
F2,B1,L6	WILD LUPINE ST	20+88.83
F2,B1,L7	WILD LUPINE ST	20+28.83
F2,B1,L8	WILD LUPINE ST	19+68.83
F2,B1,L9	WILD LUPINE ST	18+78.83
F2,B1,L10	WILD LUPINE ST	18+18.83
F2,B1,L11	WILD LUPINE ST	17+58.83
F2,B1,L12	WILD LUPINE ST	16+98.83
F2,B1,L13	WILD LUPINE ST	16+42.56

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 |
| FL | FLOW LINE | SS | SANITARY SEWER |
| GV | GATE VALVE | STA | STATION |
| HA | HYDRANT ASSEMBLY | 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 |

PROFILE: WILD LUPINE ST STA: 15+50.00 TO 25+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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.

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC 1-800-922-1987
UTILITY NOTIFICATION
CENTER OF COLORADO

10333 E. Dry Creek Rd.
Suite 410
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546



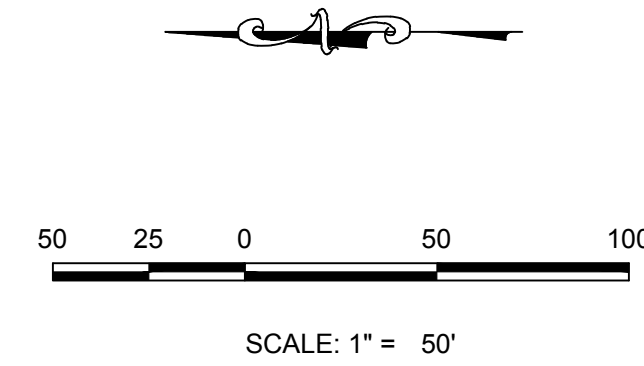
ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
WILD LUPINE ST

SCALE:
AS SHOWN
FILE NO:
8130283701

DRAWN BY: KJD
CHECKED BY: JJJ
DATE: AUGUST 2017

SHEET NUMBER
4



	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	<u>1.0%</u>	PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT	— 5615 —	EXISTING 5' CONTOUR
	PROPOSED W/L 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 LINE
=====	PROPOSED SIDEWALK		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

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
CB	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
FL	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HA	HYDRANT ASSEMBLY	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

SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2,B3,L15	SCARLET SAGE ST	16+06.71
F2,B3,L16	SCARLET SAGE ST	15+44.89
F2,B3,L17	SCARLET SAGE ST	14+83.02
F2,B3,L18	SCARLET SAGE ST	14+28.07
F2,B3,L19	SCARLET SAGE ST	13+53.45
F2,B3,L20	SCARLET SAGE ST	12+91.84
F2,B3,L21	SCARLET SAGE ST	12+35.76
F2,B3,L22	SCARLET SAGE ST	11+73.12
F2,B3,L23	SCARLET SAGE ST	11+29.62
F2,B3,L24	SCARLET SAGE ST	10+50.93
F2,B4,L1	SCARLET SAGE ST	10+47.50
F2,B4,L2	SCARLET SAGE ST	11+31.63
F2,B4,L3	SCARLET SAGE ST	11+94.70
F2,B4,L4	SCARLET SAGE ST	12+69.86
F2,B4,L5	SCARLET SAGE ST	13+42.85
F2,B4,L6	SCARLET SAGE ST	14+48.43
F2,B4,L7	SCARLET SAGE ST	15+03.32
F2,B4,L8	SCARLET SAGE ST	15+65.22
F2,B4,L9	SCARLET SAGE ST	16+38.40

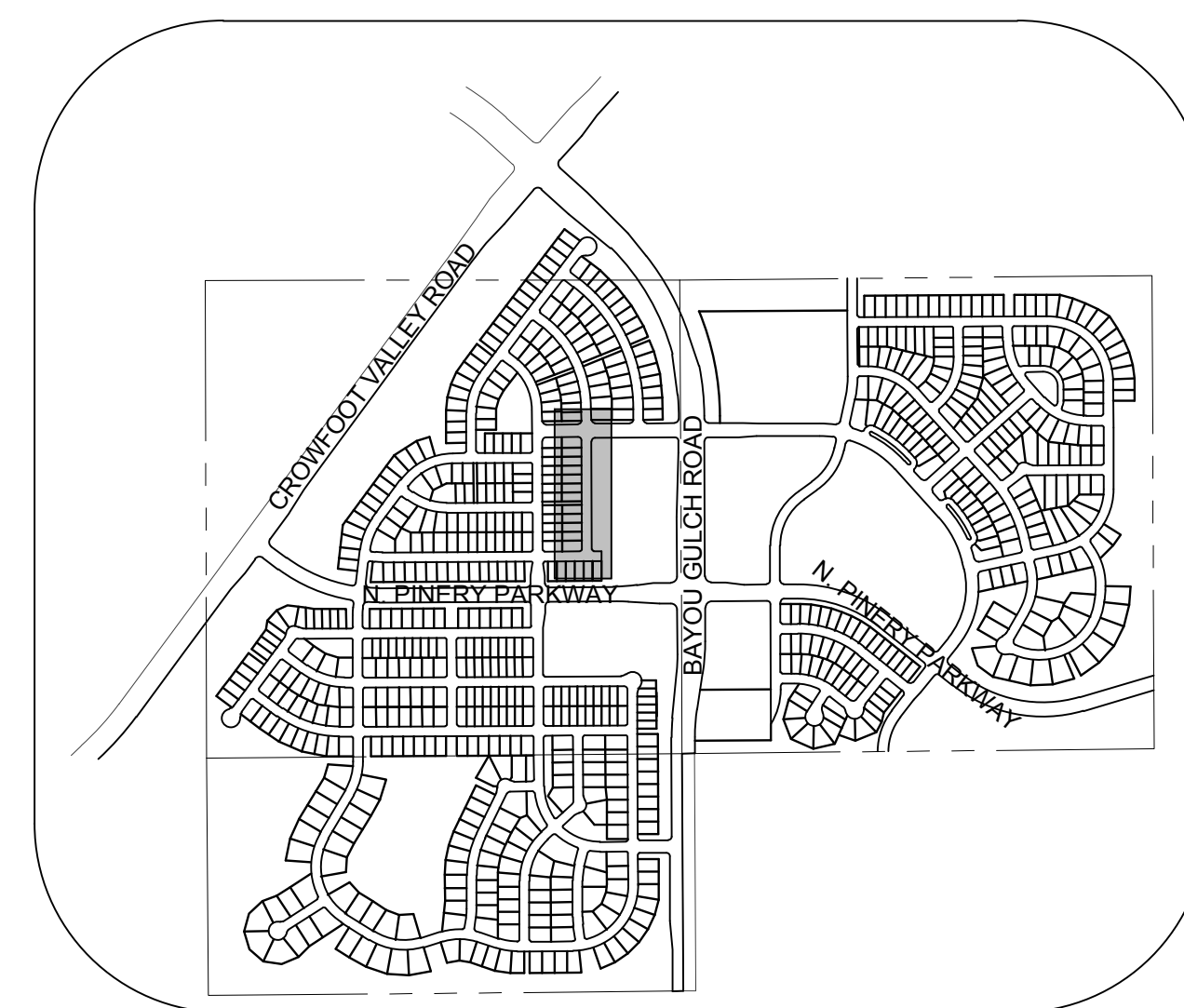
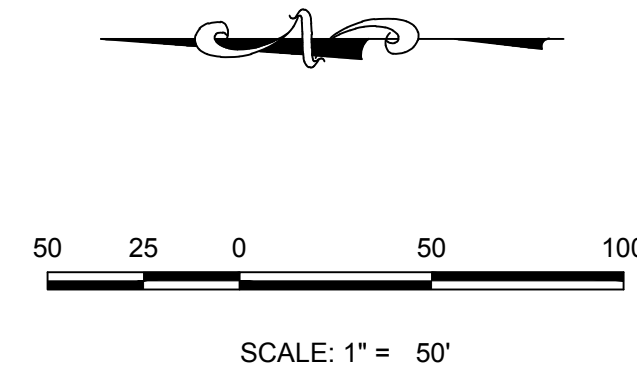


BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

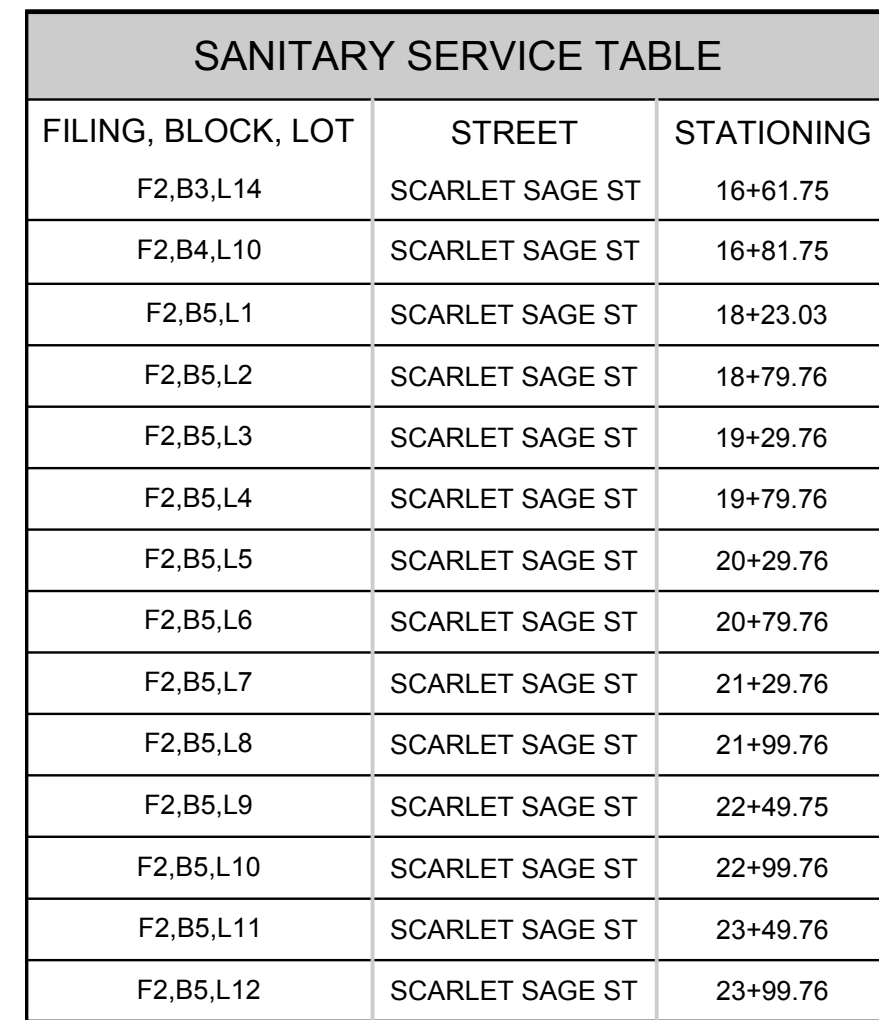
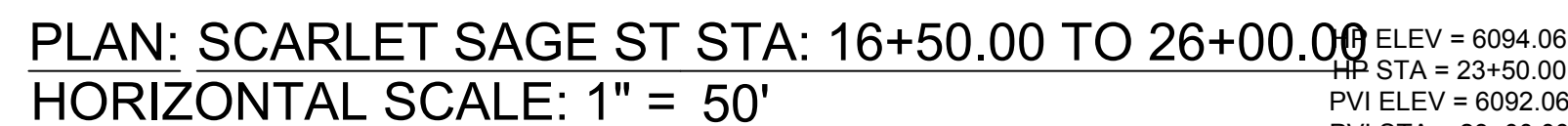
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9
BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID
SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT
THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2"
ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR
SOUTH 00°15'06"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

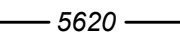
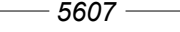
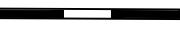
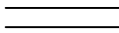
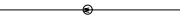
PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067



KEYMAP
N.T.S.
LEGEND



- | | | | |
|---|--|---|----------------------------------|
|  | 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 |  | EXISTING 5' CONTOUR |
|  | PROPOSED W/L FITTING WITH THRUST BLOCK |  | EXISTING 1' CONTOUR |
|  | PROPOSED FLARED END SECTION |  | PROPOSED 5' CONTOUR |
|  | PROPOSED LOW POINT BLOW-OFF |  | 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 LINE |
|  | PROPOSED SIDEWALK |  | 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 |
| BVP | BEGIN VERTICAL PROFILE | PVI | PT. OF VERTICAL INTERSECTION |
| CBO | CURB WITH BLOW OFF | PVT | POINT OF VERTICAL TANGENT |
| CRR | CURB RETURN RADIUS | RCBC | REINFORCED CONCRETE BOX CULVER |
| 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 |
| FL | FINISHED GROUND | SL | SECTION LINE |
| FL | FLOW LINE | SS | SANITARY SEWER |
| GV | GRADE VALVE | STA | STATION |
| HA | HYDRODYNAMIC ASSEMBLY | 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 |

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 005006

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
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BASIS OF BEARINGS:
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CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987

UNCC
UTILITY NOTIFICATION
CENTER OF COLORADO[illegible]

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



CVL
CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL CO 80112

TRAILS AT CROWFOOT
BUILDING 2 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
SCARLET SAGE ST

DRAWN BY:	KJD	SCALE:	AS SHOWN
	CHECKED BY:	FILE NO:	
DATE:	JJJ	8130283701	
	AUGUST 2017		

SHEET NUMBER

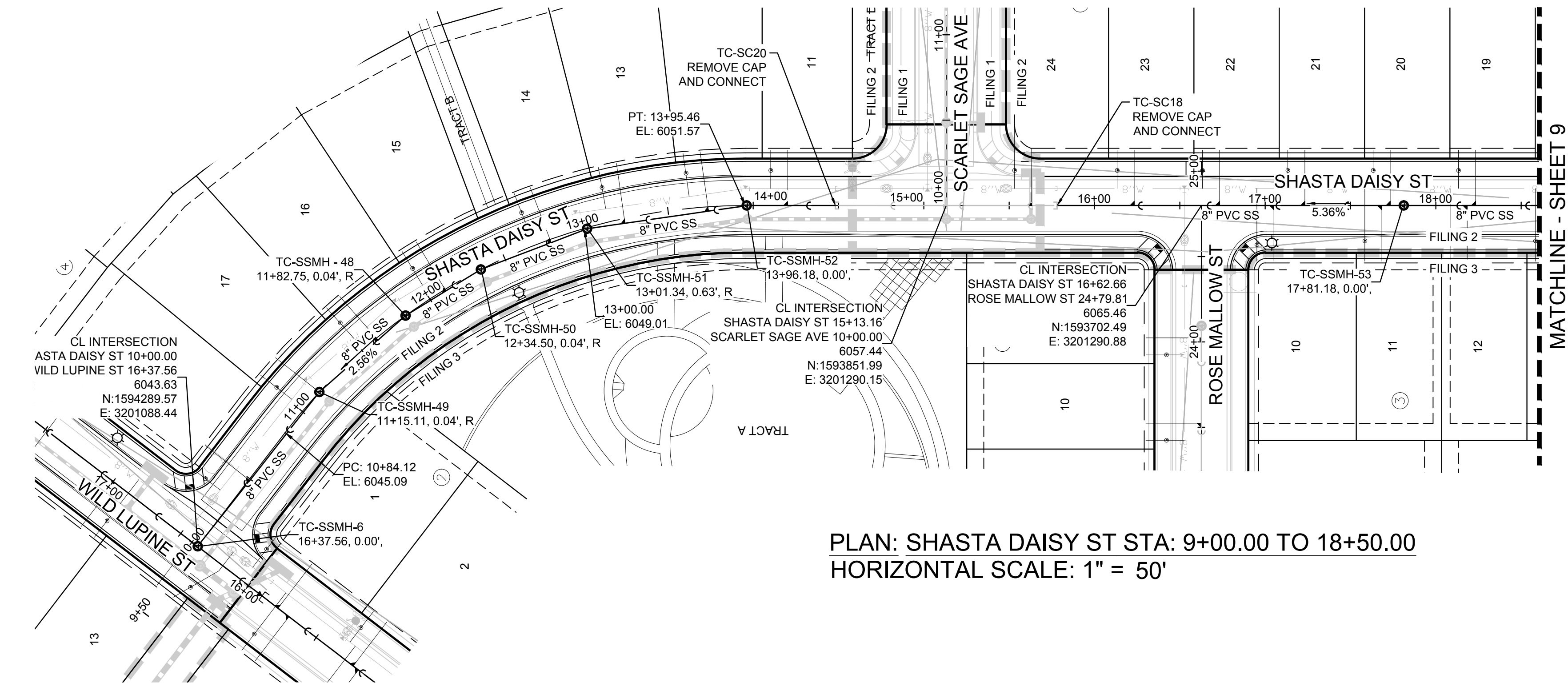
7

N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\WATER AND SANITATION\SANITARY PLAN AND PROFILE\F2 SHASTA DAISY ST SANITARY DWG, KACYW, 12/20/2017 10:35 AM

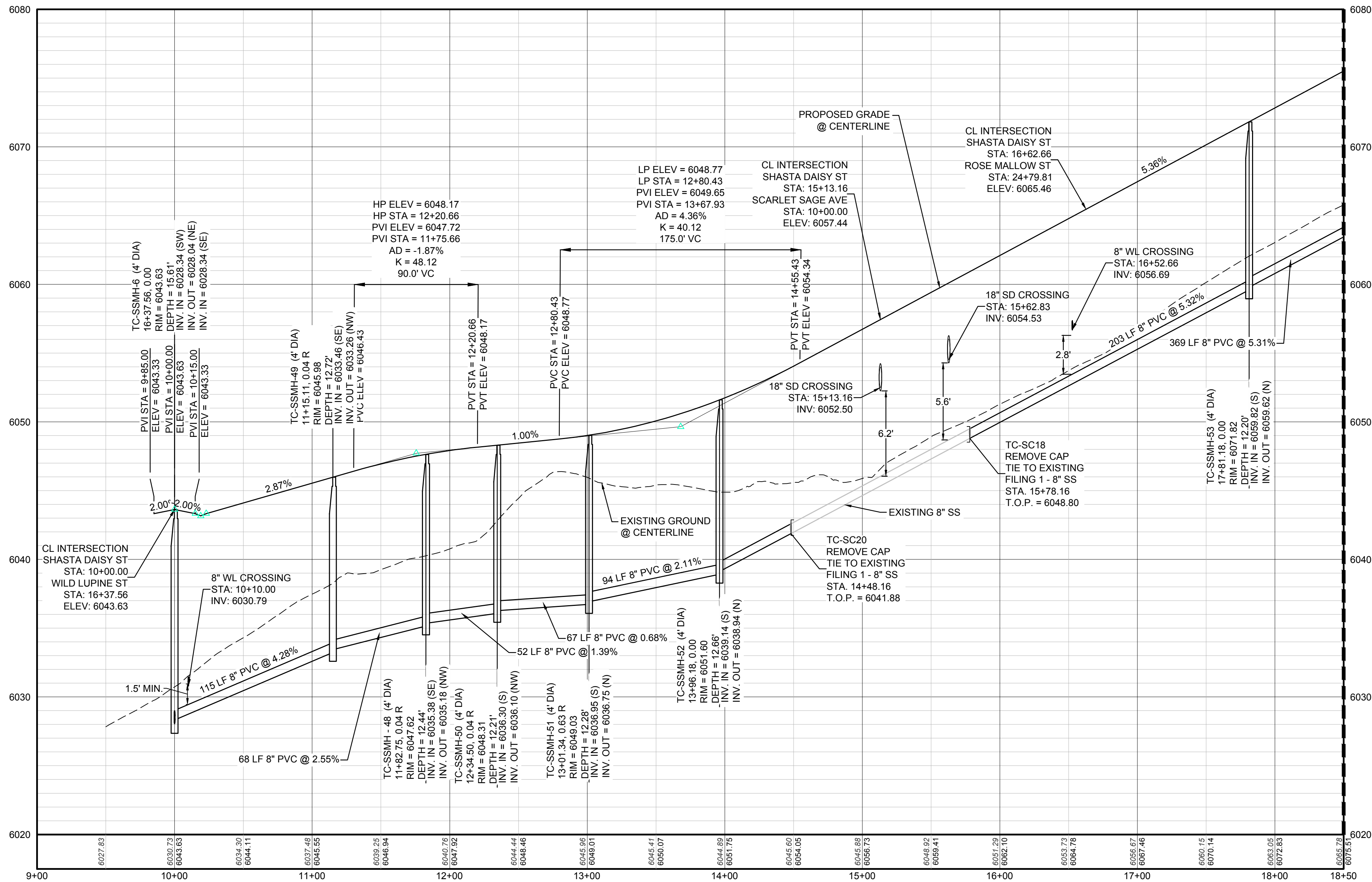


CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
UNCC 1-800-922-1987

UTILITY NOTIFICATION
CENTER OF COLORADO



PLAN: SHASTA DAISY ST STA: 9+00.00 TO 18+50.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: SHASTA DAISY ST STA: 9+00.00 TO 18+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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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SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2.B4.L11	SHASTA DAISY ST	14+20.25
F2.B4.L12	SHASTA DAISY ST	13+73.75
F2.B4.L13	SHASTA DAISY ST	13+23.85
F2.B4.L14	SHASTA DAISY ST	12+78.83
F2.B4.L15	SHASTA DAISY ST	12+10.63
F2.B4.L16	SHASTA DAISY ST	11+61.30
F2.B4.L17	SHASTA DAISY ST	11+15.11
F2.B4.L18	SHASTA DAISY ST	10+49.20
F2.B5.L19	SHASTA DAISY ST	18+23.30
F2.B5.L20	SHASTA DAISY ST	17+73.30
F2.B5.L21	SHASTA DAISY ST	17+23.30
F2.B5.L22	SHASTA DAISY ST	16+73.30
F2.B5.L23	SHASTA DAISY ST	16+23.30
F2.B5.L24	SHASTA DAISY ST	15+63.16
F3.B3.L10	SHASTA DAISY ST	17+05.16
F3.B3.L11	SHASTA DAISY ST	17+68.44
F3.B3.L12	SHASTA DAISY ST	18+18.44

2 BLOCK NUMBER

A LOT TYPE

6 LOT NUMBER

PROPOSED BUTTERFLY VALVE

PROPOSED CAP WITH END OF LINE BLOWOFF

PROPOSED REDUCER

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED WL FITTING WITH THRUST BLOCK

PROPOSED FLARED END SECTION

PROPOSED LOW POINT BLOW-OFF

PROPOSED AIR VALVE

FUTURE PHASE VALVE

FUTURE FIRE HYDRANT

PROPOSED LIGHT POLE

PROPOSED SIDEWALK

PROPOSED SIDEWALK RAMP

EXISTING ELEVATION

PROPOSED DESIGN ELEVATION

PROPOSED STORM DRAIN INLET

PROPOSED STORM DRAIN MANHOLE

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

PROPOSED DIRECTION OF FLOW

PROPOSED SLOPE & DIRECTION

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

EXISTING FIBER

EXISTING OVERHEAD POWER

EXISTING TELEPHONE LINE

AD ANGLE DIFFERENCE

AV AIR VAC RELEASE VALVE

BVC BEGIN VERTICAL CURVE

BVP BEGIN VERTICAL PROFILE

CBO CAP WITH BLOW OFF

CRR CURB RETURN RADIUS

EL ELEVATION

EP EDGE OF PAVEMENT

EVC END VERTICAL CURVE

EVP END VERTICAL PROFILE

FG FINISHED GROUND

FL FLOW LINE

GV GATE VALVE

HA HYDRANT ASSEMBLY

HCR HANDICAP CURB RAMP

HP HIGH POINT

INV INVERT

K CURVATURE COEFFICIENT

LF LINEAR FEET

MH MANHOLE

N.T.S. NOT TO SCALE

PVC POLYVINYL CHLORIDE

PVI PT. OF VERTICAL INTERSECTION

PVT POINT OF VERTICAL TANGENT

RCBC REINFORCED CONCRETE BOX CULVERT

RCP REINFORCED CONCRETE PIPE

ROW RIGHT OF WAY

SC SANITARY CAP

SD STORM DRAIN

SL SECTION LINE

SS SANITARY SEWER

STA STATION

T.O.P. TOP OF PIPE

UE UTILITY EASEMENT

VC VERTICAL CURVE

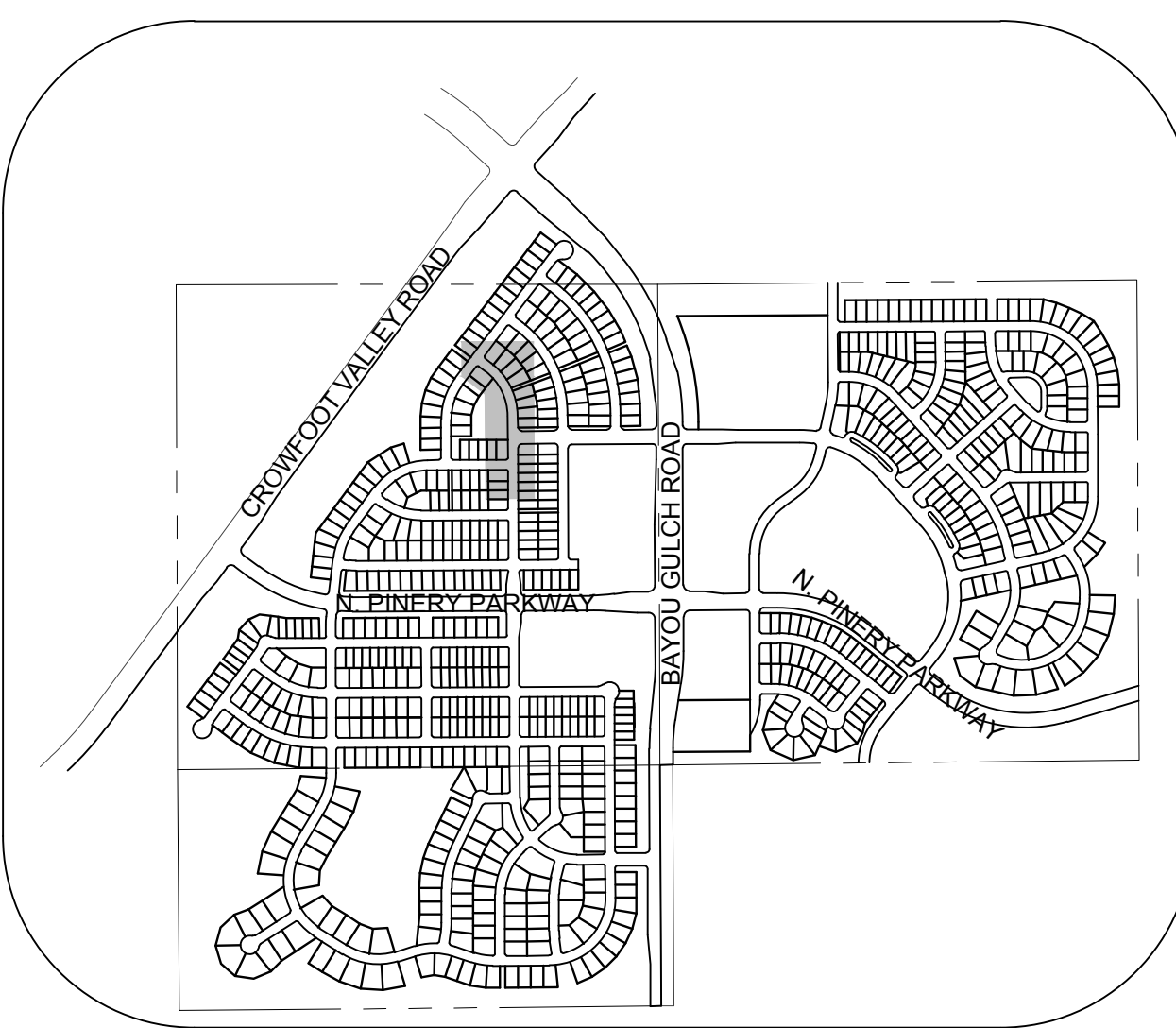
WL WATER LINE

WLC WATER LINE CONNECTION

WSE WATER SURFACE ELEVATION

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067



KEYMAP
N.T.S.
LEGEND

10333 E. Dry Creek Rd.
Englewood, CO 80110
Tel: (720) 482-9526
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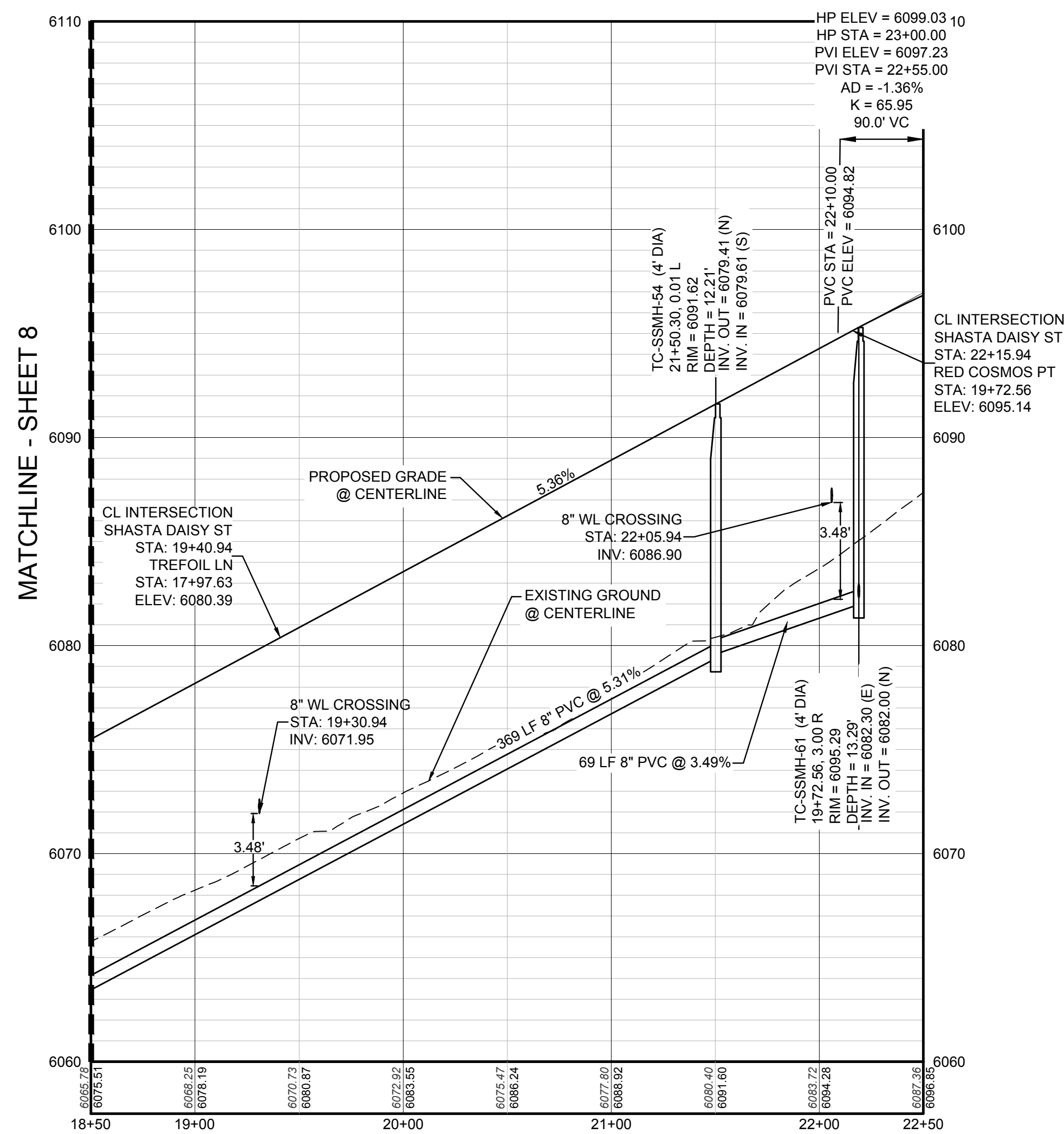
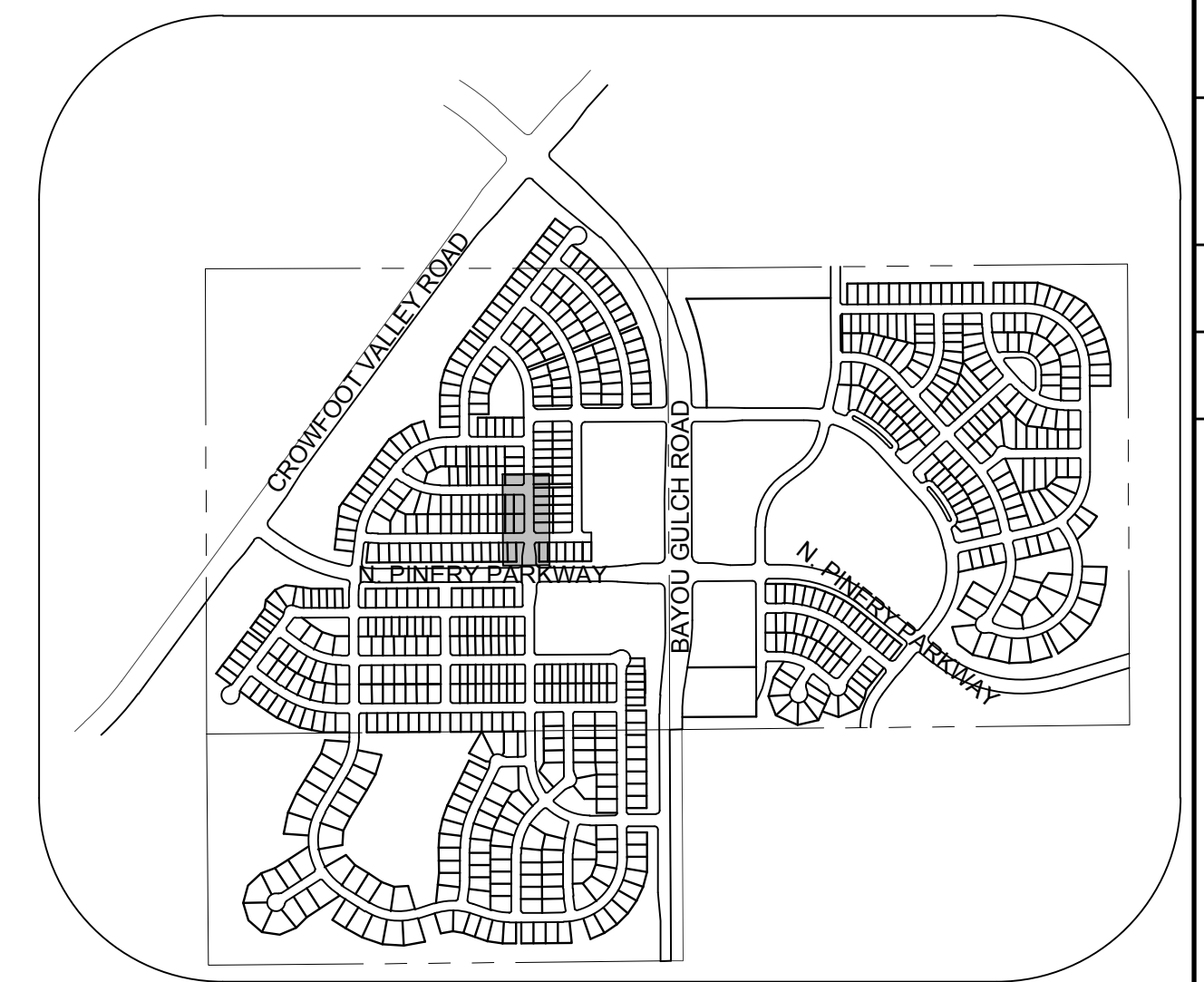
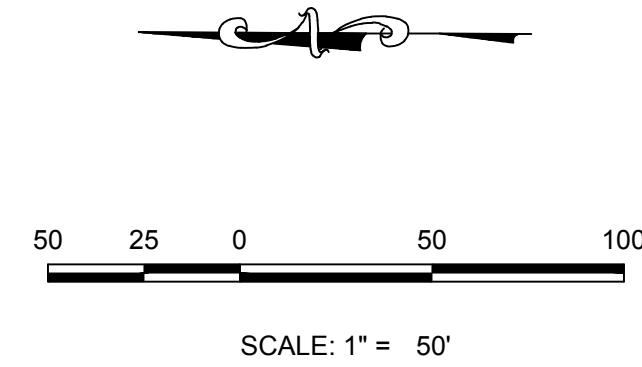
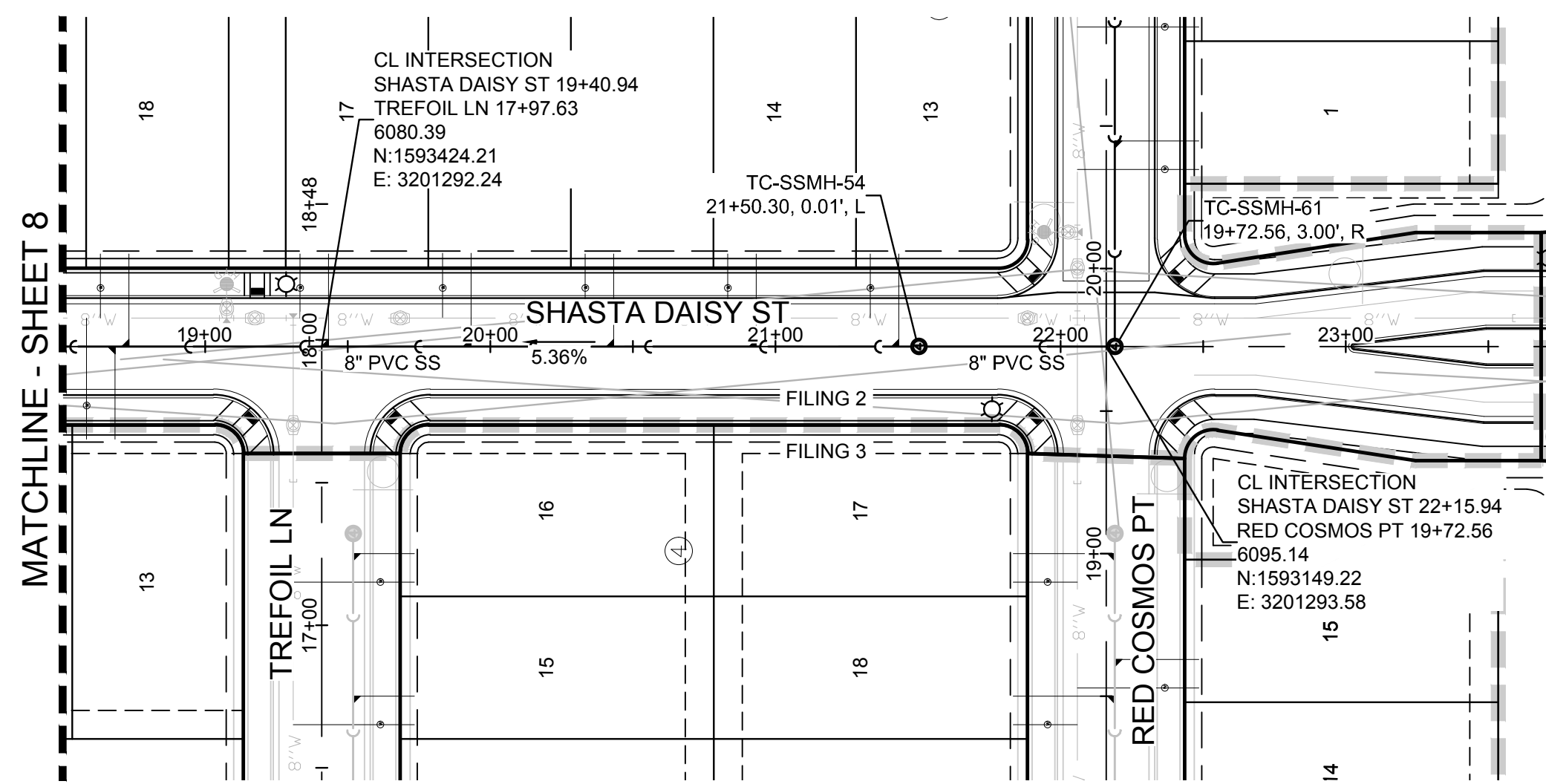
ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
SHASTA DAISY ST

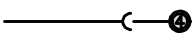
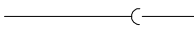
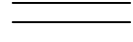
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FILE NO: 8130283701
DRAWN BY: KJD
CHECKED BY: JJJ
DATE: AUGUST 2017

SHEET NUMBER 8

No. Revisions
Date
Init.
Appr.
Date



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2.B5.L13	SHASTA DAISY ST	21+43.30
F2.B5.L14	SHASTA DAISY ST	20+93.30
F2.B5.L15	SHASTA DAISY ST	20+43.30
F2.B5.L16	SHASTA DAISY ST	19+93.30
F2.B5.L17	SHASTA DAISY ST	19+43.30
F2.B5.L18	SHASTA DAISY ST	18+73.30
F3.B3.L13	SHASTA DAISY ST	18+68.44

	PLAN 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
	PROPOSED WL FITTING WITH THRUST BLOCK		EXISTING 1' CONTOUR
	PROPOSED FLARED END SECTION		PROPOSED 5' CONTOUR
	PROPOSED LOW POINT BLOW-OFF		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 LINE
	PROPOSED SIDEWALK		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

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	RCBG	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
FL	FINISHED GROUND	SL	SECTION LINE
FG	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HDR	HYDRANT ASSEMBLY	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	LINEAL FEET	WSE	WATER SURFACE ELEVATION

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A
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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.

333 E. Dry Creek Rd.
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Fax: (720) 482-9546



CVL
CONSULTANTS

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CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
HILLING 2 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
SHASTA DAISY ST

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

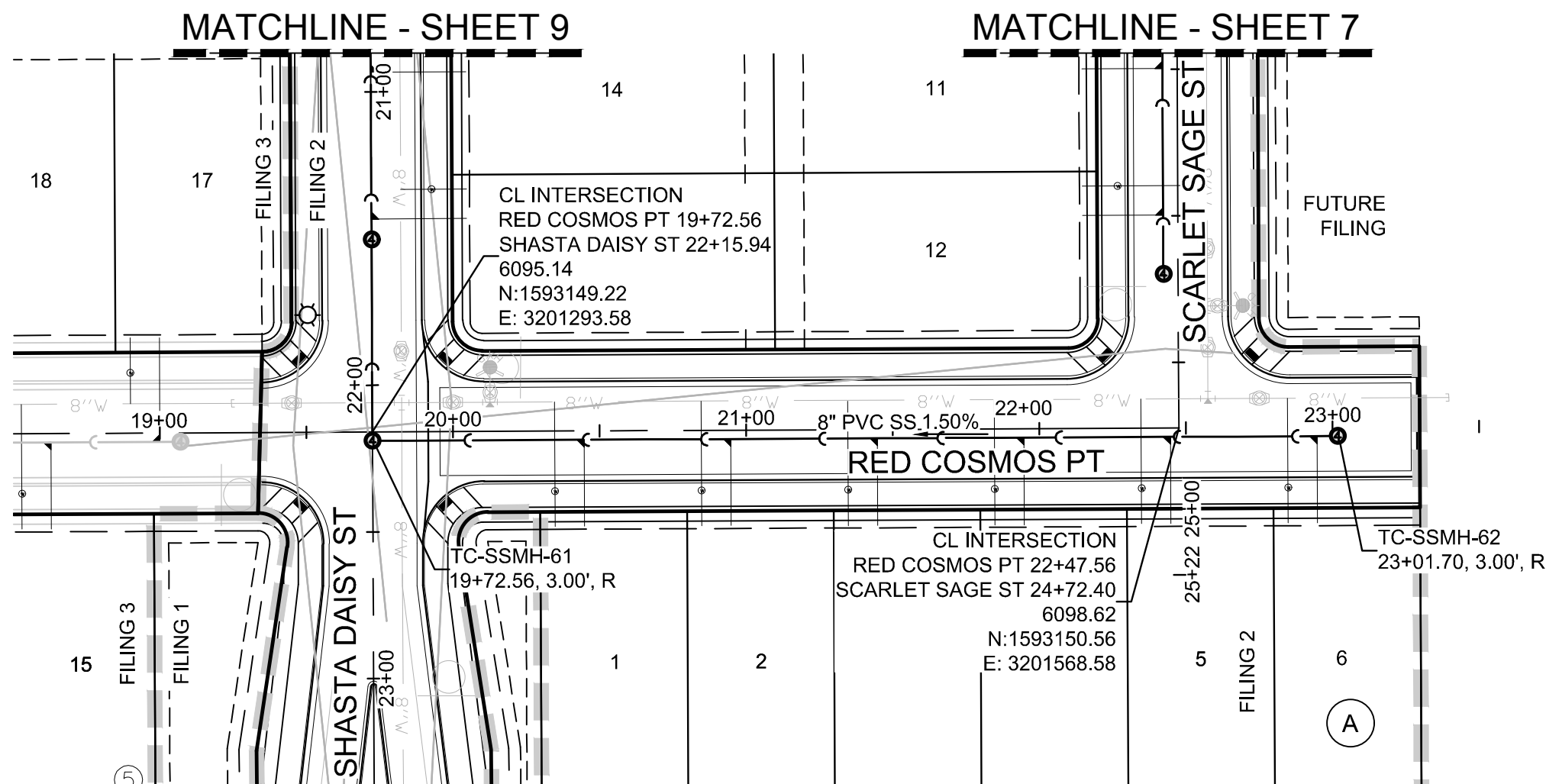
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SHEET NUMBER

N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\WATER AND SANITATION\SANITARY PLAN AND PROFILE\F2 RED COSMOS TERR SANITARY DWG. KACWY. 12/29/2017 10:40 AM

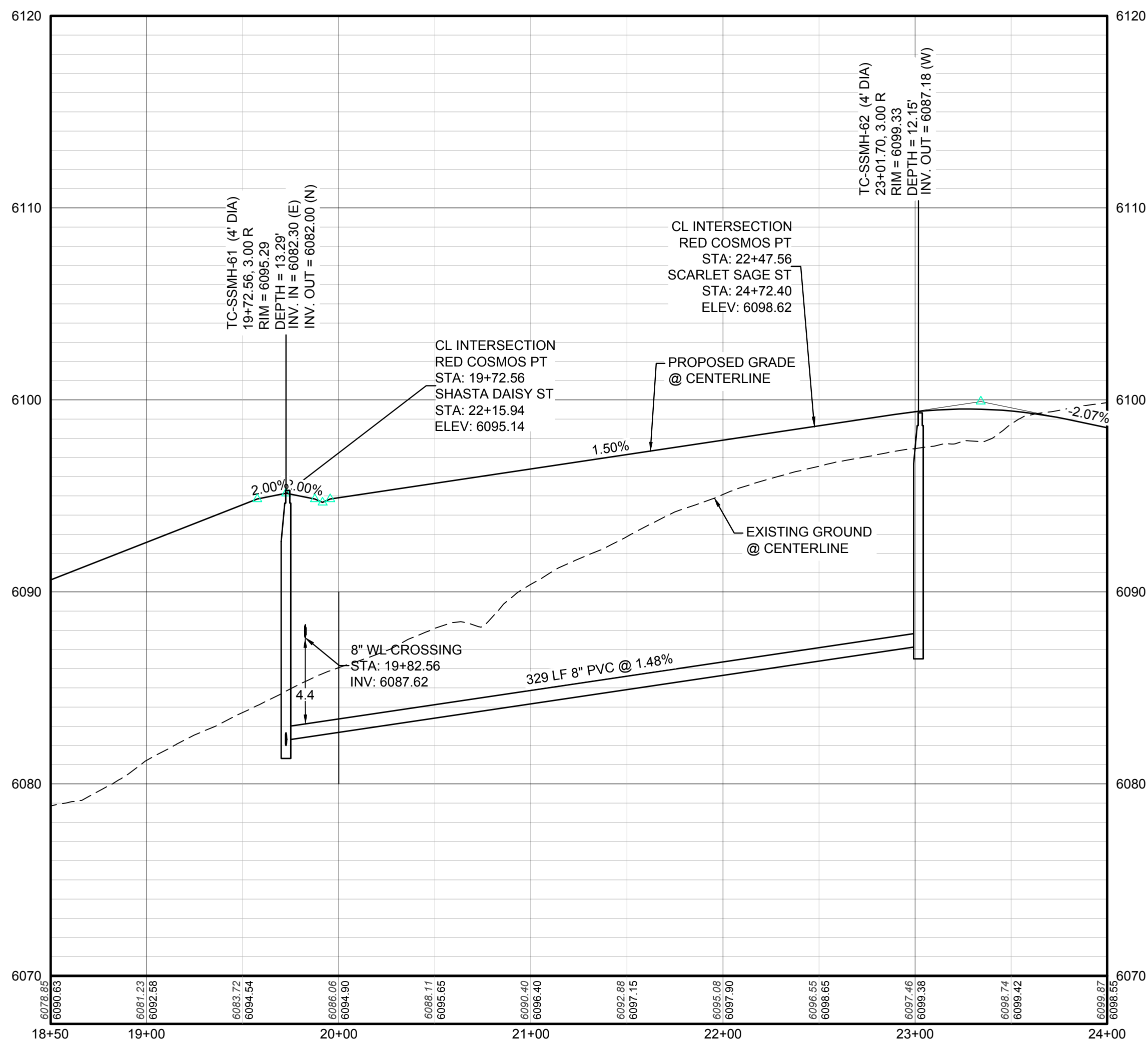


CALL 811
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BEFORE YOU DIG
UNCC 1-800-922-1987

UTILITY NOTIFICATION
CENTER OF COLORADO



PLAN: RED COSMOS PT STA: 18+50.00 TO 24+00.00
HORIZONTAL SCALE: 1" = 50'



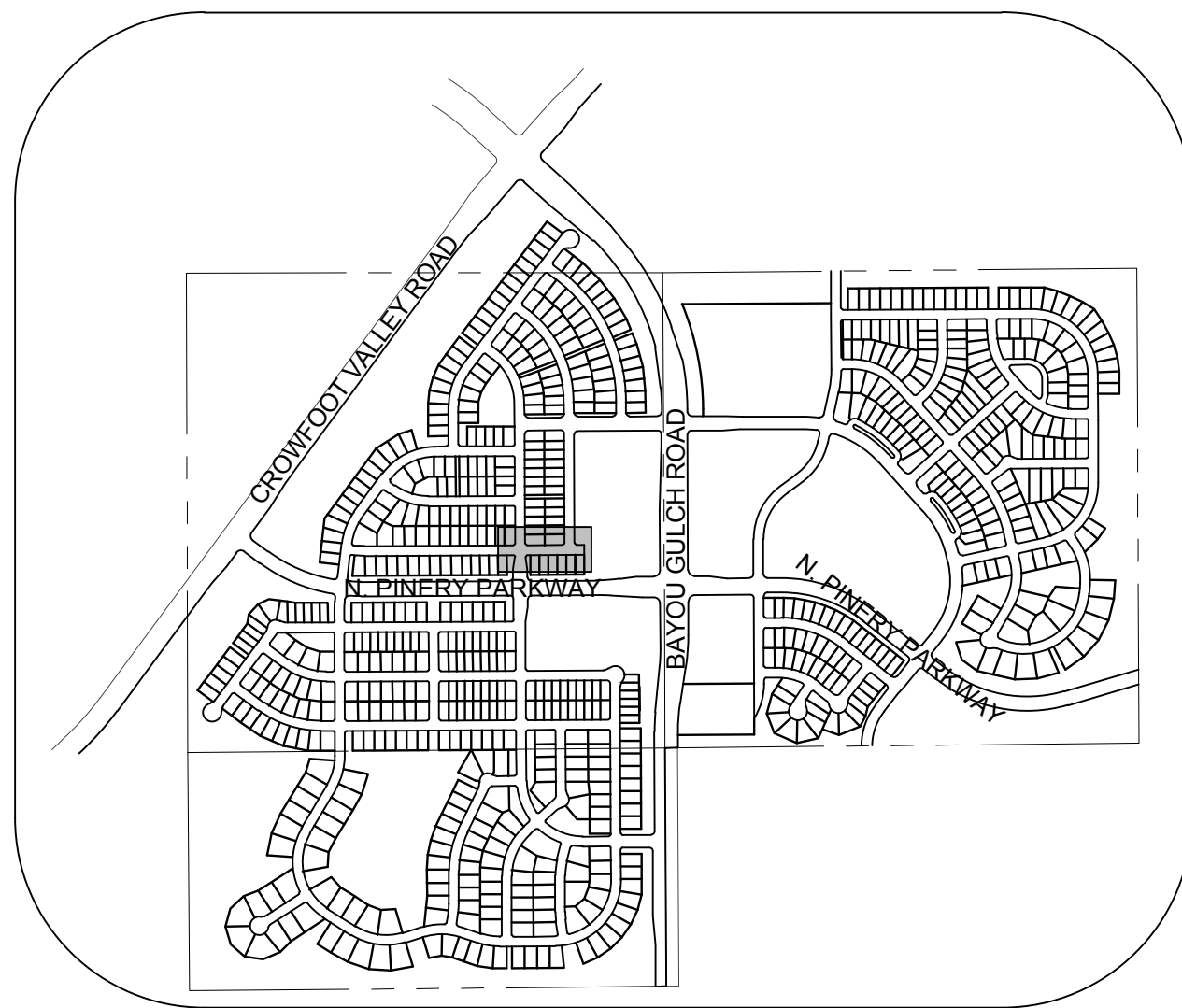
PROFILE: RED COSMOS PT STA: 18+50.00 TO 24+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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



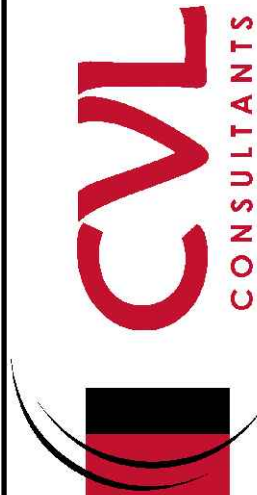
KEYMAP
N.T.S.
LEGEND

2	BLOCK NUMBER	△	PROPOSED RANGE POINT
A	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 LINE
---	PROPOSED SIDEWALK	---	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
BVP	BEGIN VERTICAL PROFILE	PVT	PT. OF VERTICAL INTERSECTION
CB	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
FL	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HA	HYDRANT ASSEMBLY	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

10333 E. Dry Creek Rd.
Suite 110
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546

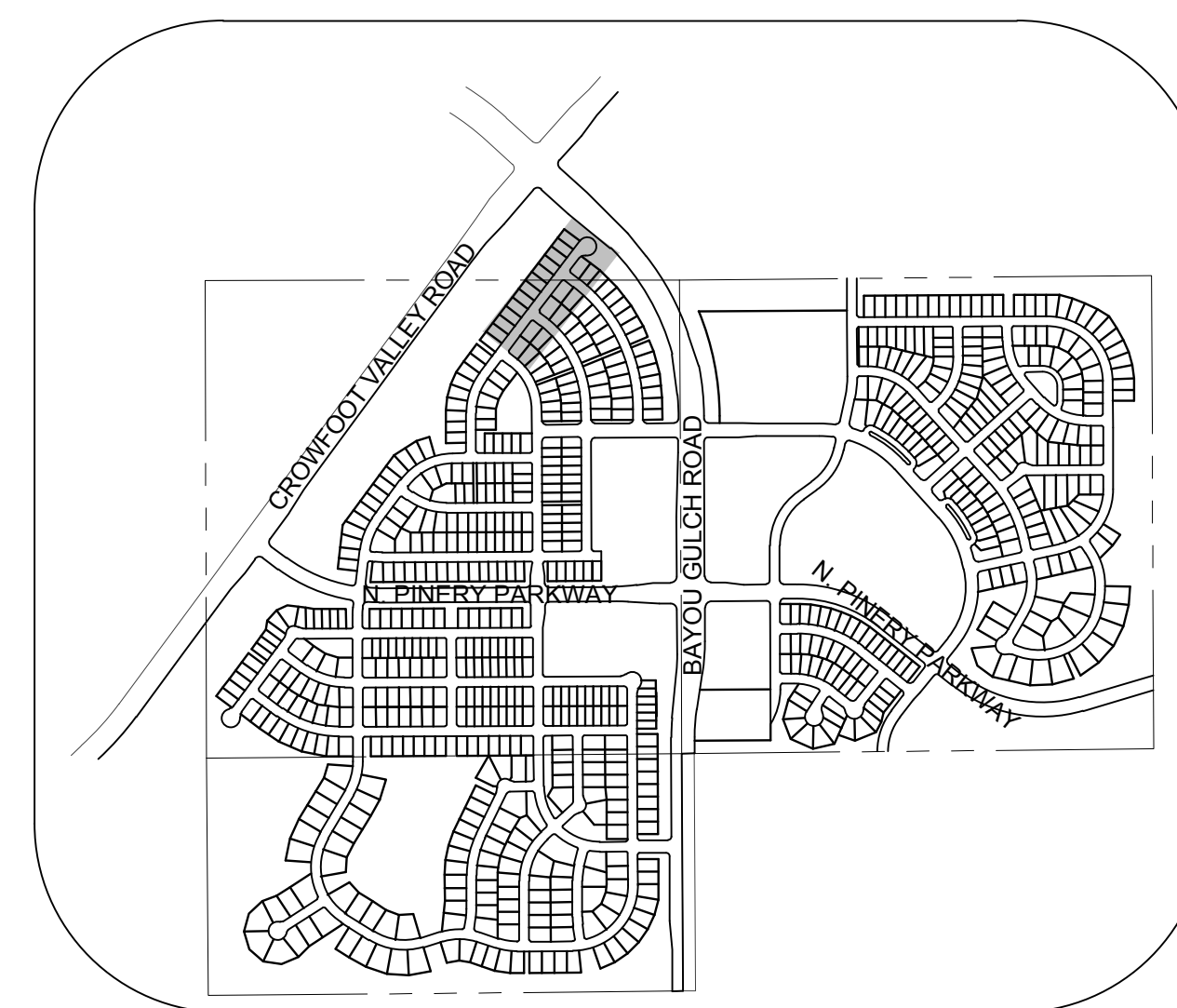
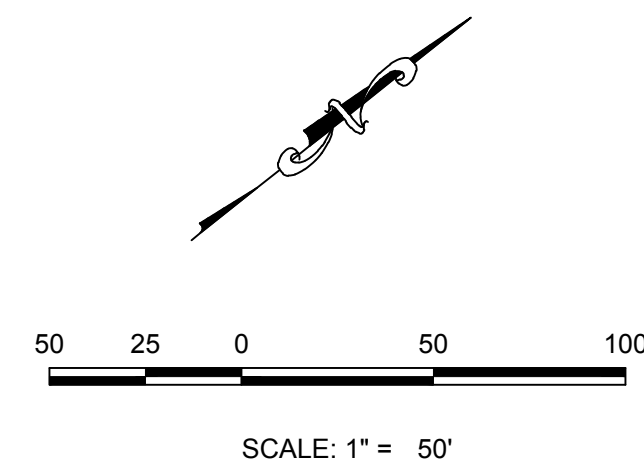


ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN AND PROFILE
RED COSMOS POINT

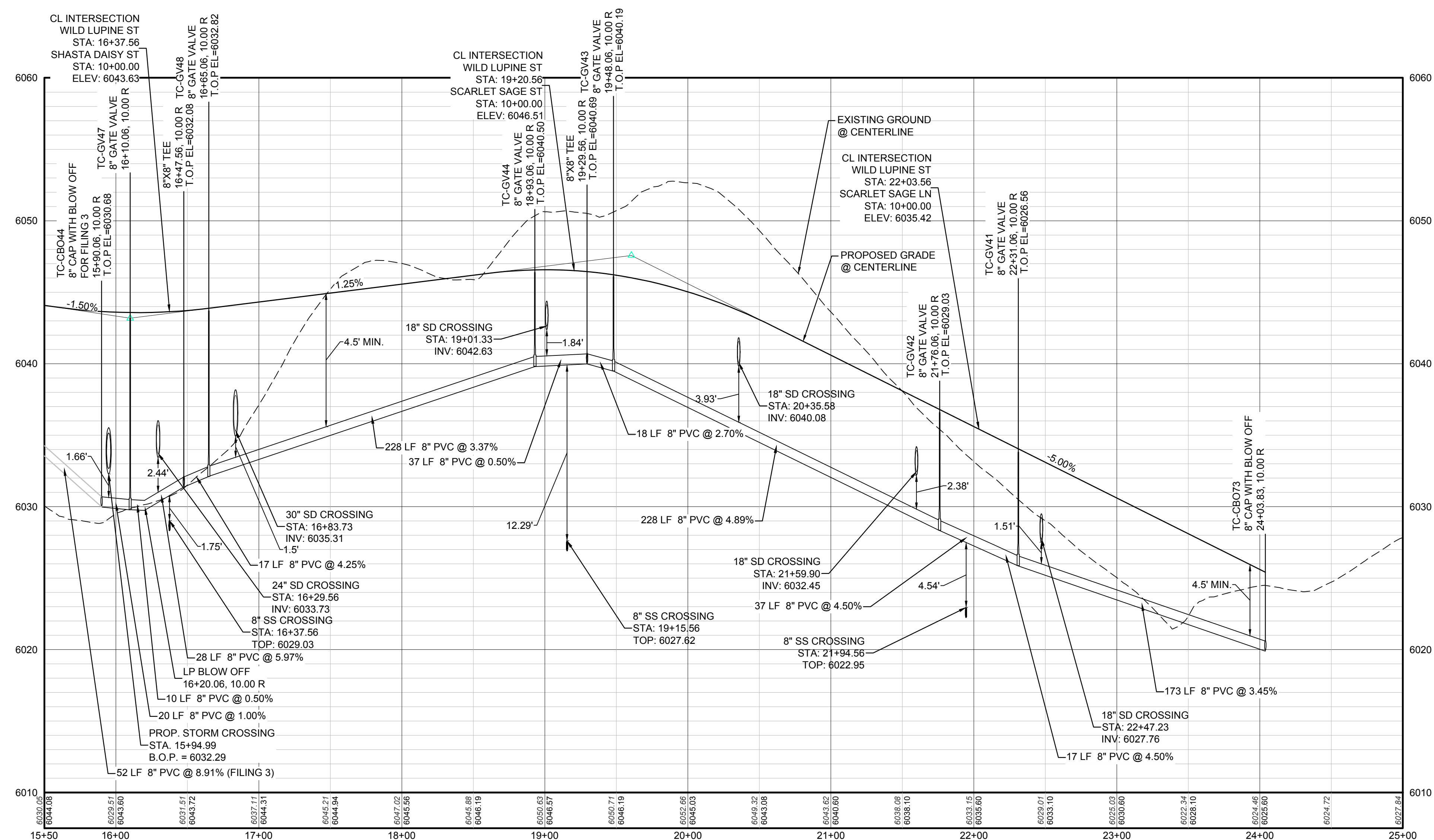
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FILE NO: 8130283701
DATE: AUGUST 2017

SHEET NUMBER
10



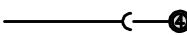
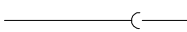
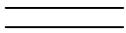
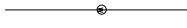
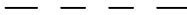
KEYMAP
N.T.S.
LEGEND

PLAN: WILD LUPINE ST STA: 15+50.00 TO 25+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: WILD LUPINE ST STA: 15+50.00 TO 25+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2,B1,L4	WILD LUPINE ST	22+18.83
F2,B1,L5	WILD LUPINE ST	21+54.83
F2,B1,L6	WILD LUPINE ST	20+98.83
F2,B1,L7	WILD LUPINE ST	20+38.83
F2,B1,L8	WILD LUPINE ST	19+78.83
F2,B1,L9	WILD LUPINE ST	18+68.83
F2,B1,L10	WILD LUPINE ST	18+08.83
F2,B1,L11	WILD LUPINE ST	17+48.83
F2,B1,L12	WILD LUPINE ST	16+88.83
F2,B1,L13	WILD LUPINE ST	16+18.99
F2,B2,L1	SCARLET SAGE LN	10+34.50
F2,B2,L2	SCARLET SAGE LN	10+99.86
F2,B2,L3	SCARLET SAGE LN	11+57.50

- | | | | |
|---|--|---|-------------------------------------|
|  | 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 |
|  | PROPOSED WL FITTING
WITH THRUST BLOCK |  | EXISTING 1' CONTOUR |
|  | PROPOSED FLARED
END SECTION |  | PROPOSED 5' CONTOUR |
|  | PROPOSED LOW
POINT BLOW-OFF |  | 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 LINE |
|  | PROPOSED SIDEWALK |  | PROPOSED WATER
LATERAL W/ METER |
|  | PROPOSED SIDEWALK
RAMP |  | SECTION LINE |
| 10.00 | EXISTING ELEVATION |  | FLING BOUNDARY |
| 10.00 | PROPOSED DESIGN
ELEVATION |  | EXISTING FIBER
OPTIC LINE |
|  | PROPOSED STORM
DRAIN INLET |  | EXISTING OVERHEAD
POWER |
|  | PROPOSED STORM
DRAIN MANHOLE |  | 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
FL	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HS	HYDRANT ASSEMBLY	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

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SUPERVISION OF

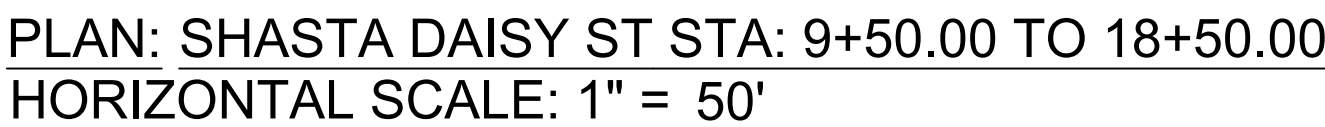
BRIAN P. WILSON
COLORADO P.E. 005006

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.



SHEET NUMBER 11	DRAWN BY: RHR	SCALE:	TRAILS AT CROWFOOT FILING 2 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE WILD LUPINE STREET	 E5X MANAGEMENT 7353 South Allon Way CENTENNIAL, CO 80112	 CVL CONSULTANTS	10333 E. Dry Creek Rd. Suite 240 Englewood, CO 80112 Tel: (720) 462-9526 Fax: (720) 462-9546	No.	Revisions	Date	Init.	Appr.	



KEYMAP
N.T.S.
LEGEND

- | 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 |
| EVF | END VERTICAL PROFILE | SD | STORM DRAIN |
| FG | FINISHED GROUND | SL | SECTION LINE |
| FL | FLOW LINE | SS | SANITARY SEWER |
| GA | GATE VALVE | STA | STATION |
| HA | HYDRANT ASSEMBLY | 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 |



CVL
CONSULTANTS

E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
SHASTA DAISY STREET

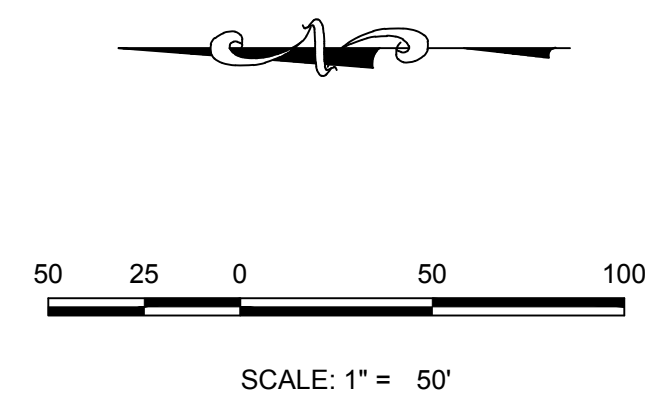
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DATE:			

12

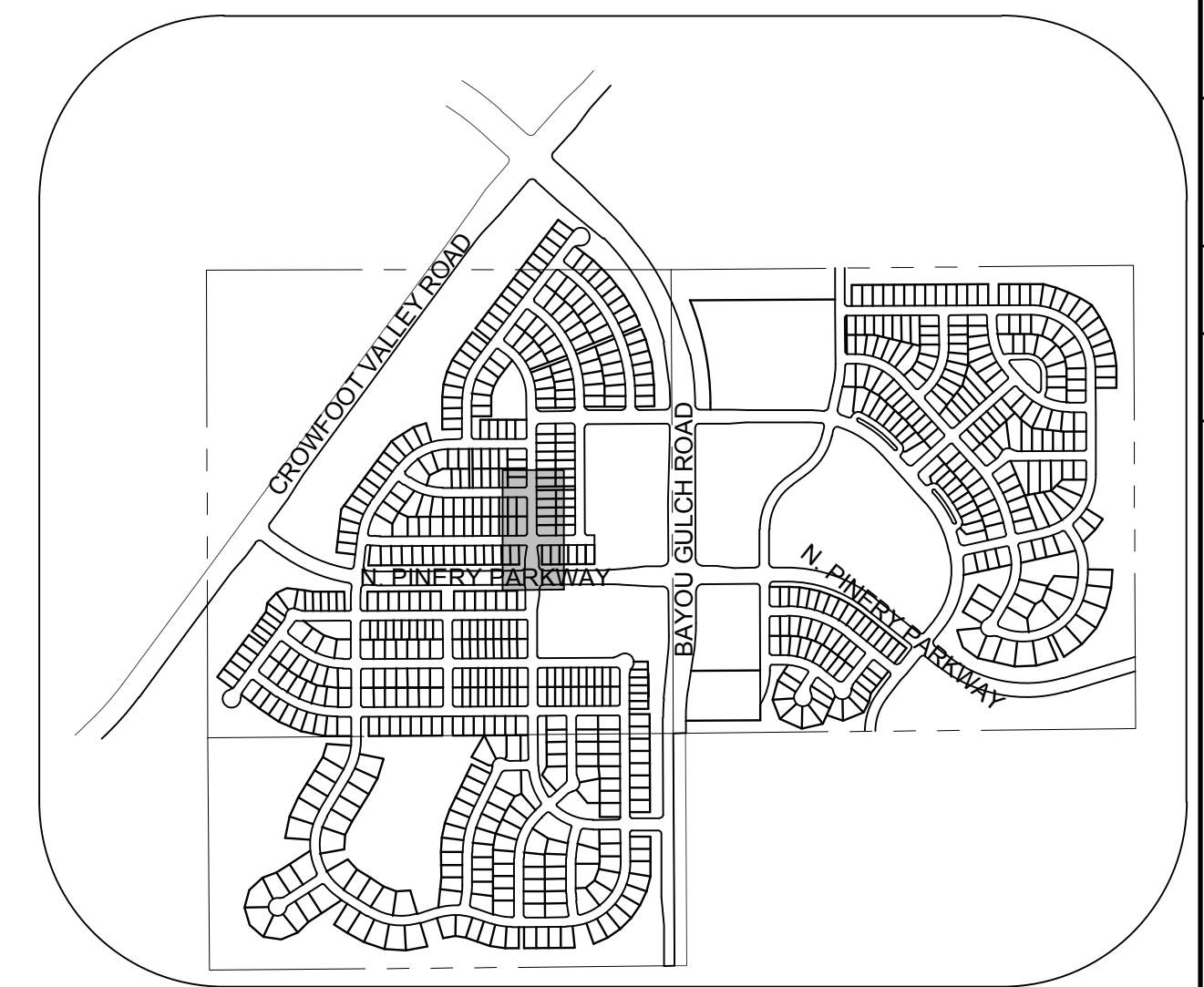
PREPARED UNDER THE
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BRIAN P. WILSON
COLORADO P.E. 005006

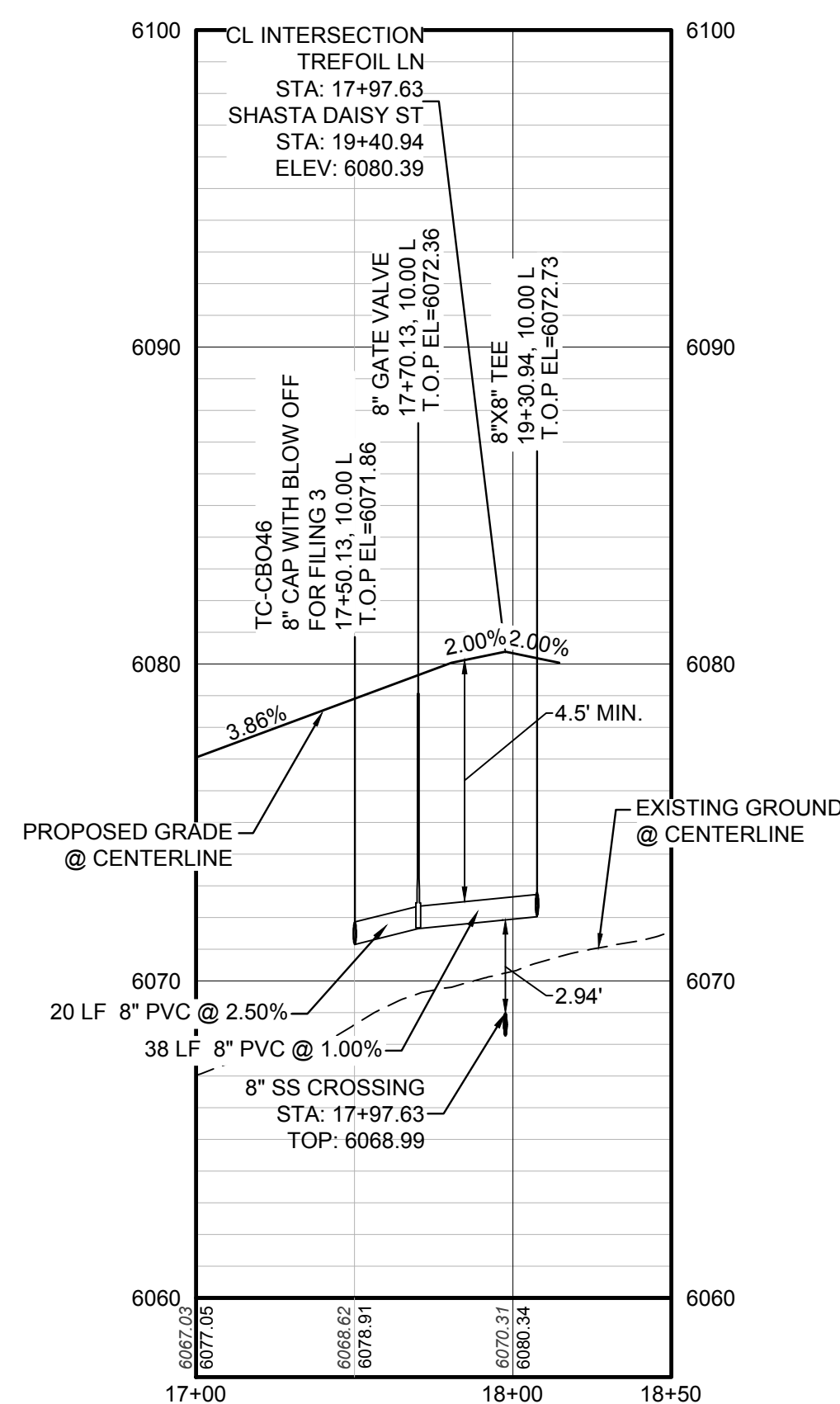
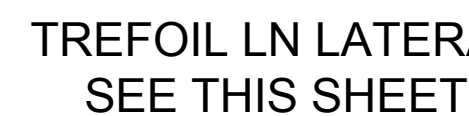




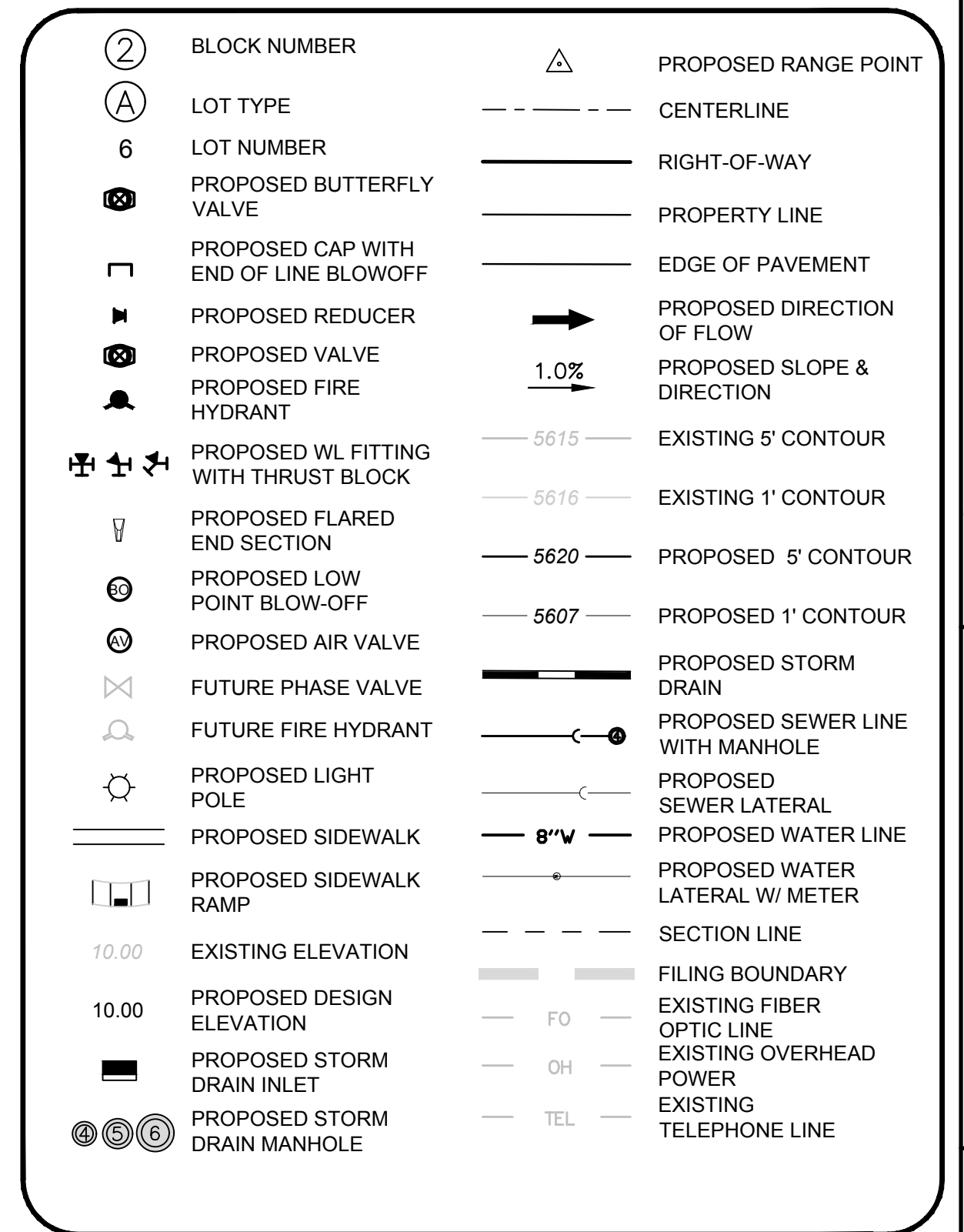
WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2,B5,L13	SHASTA DAISY ST	21+33.30
F2,B5,L14	SHASTA DAISY ST	20+83.30
F2,B5,L15	SHASTA DAISY ST	20+33.30
F2,B5,L16	SHASTA DAISY ST	19+83.30
F2,B5,L17	SHASTA DAISY ST	19+33.30
F2,B5,L18	SHASTA DAISY ST	18+63.30
F3,B3,L13	SHASTA DAISY ST	18+58.44



KEYMAP
N.T.S.
LEGEND



PROFILE: TREFOIL LN STA: 17+00.00 TO 18+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



ABBREVIATIONS

PREPARED UNDER THE
SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 005006

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A
3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST
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UNCC
UTILITY NOTIFICATION
COUNCIL OF CALIFORNIA

Suite 240
glewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



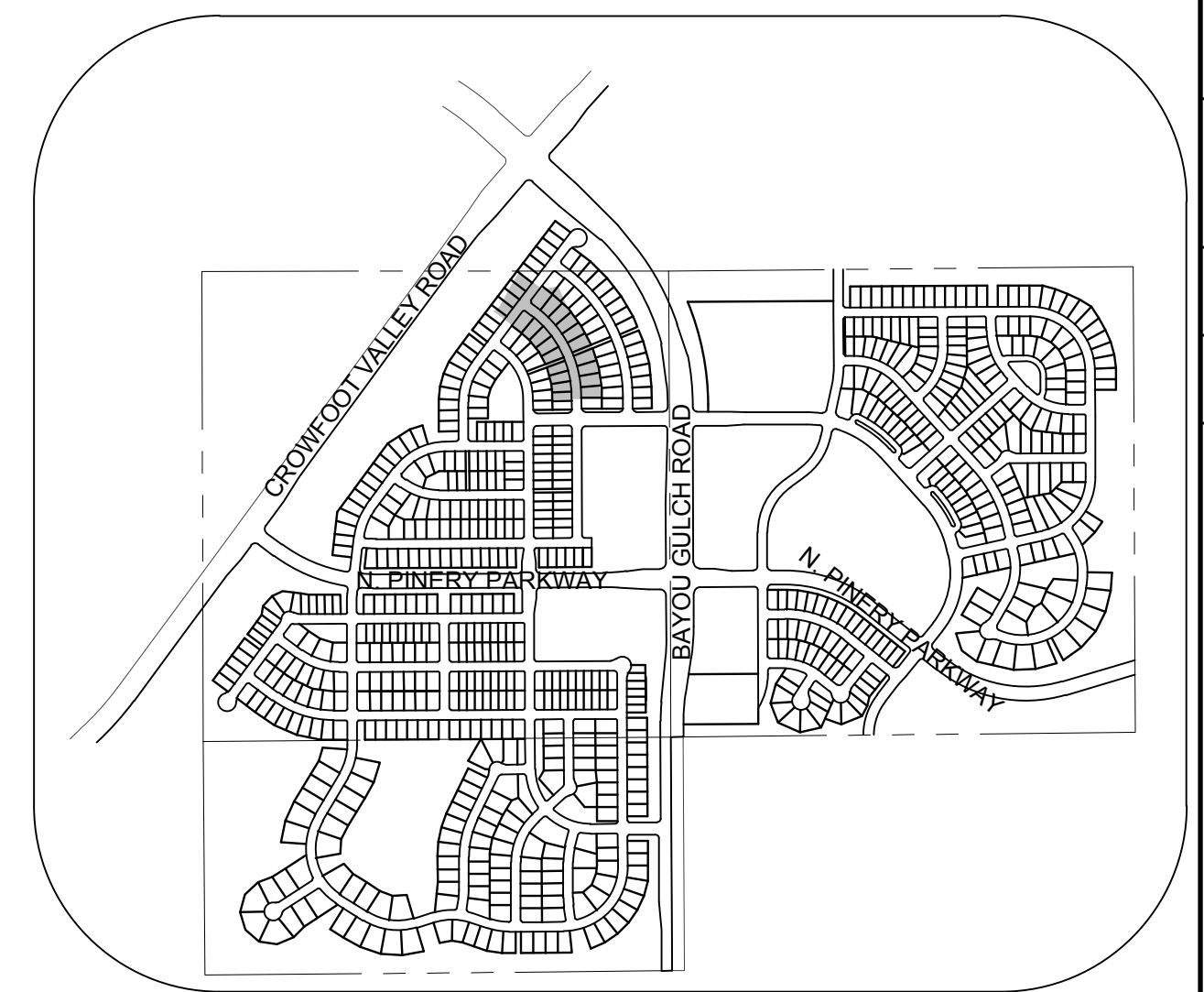
E5X MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 2 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
SHASTA DAISY STREET

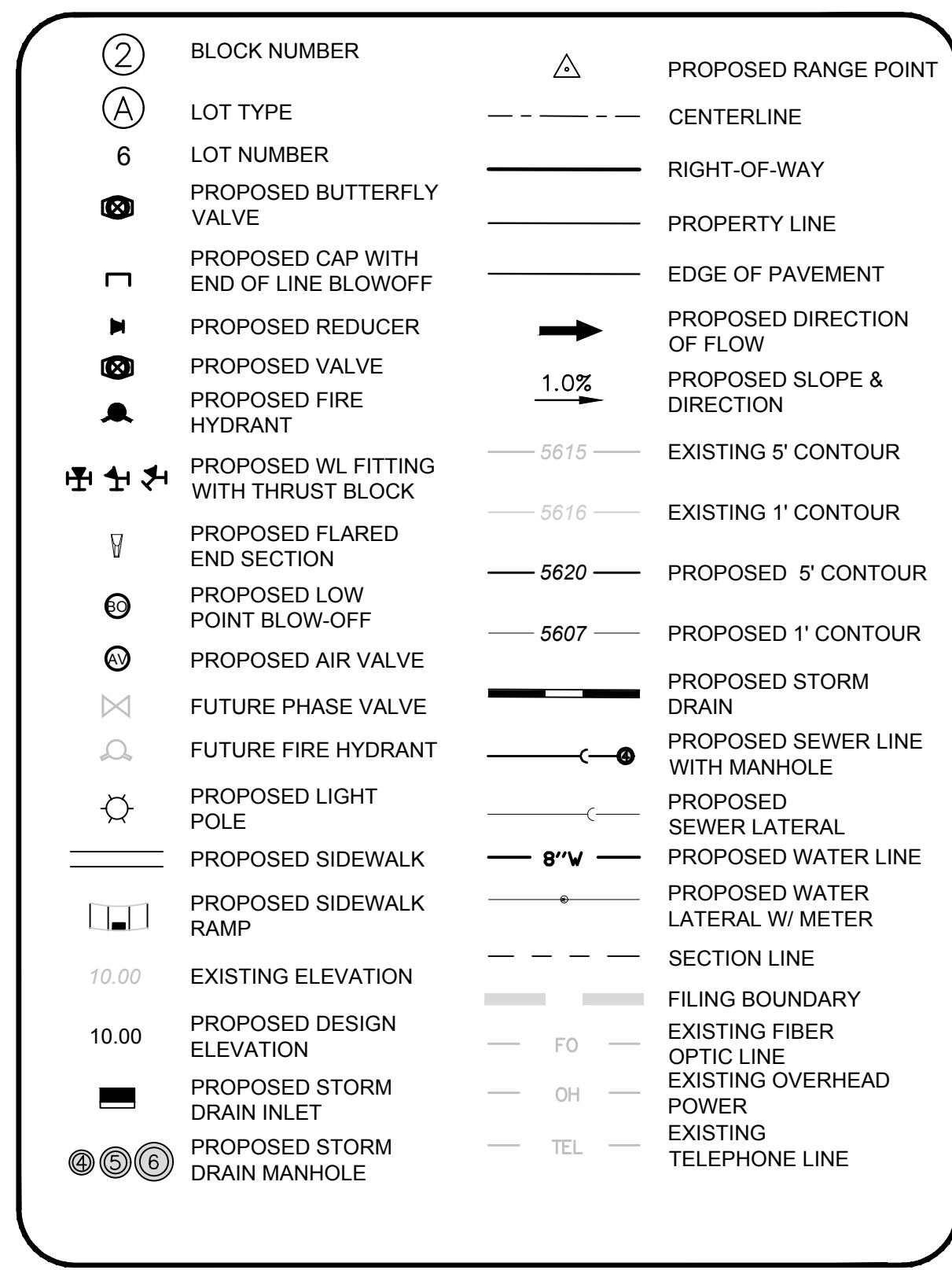
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DATE:	AUGUST 2017		

SHEET NUMBER

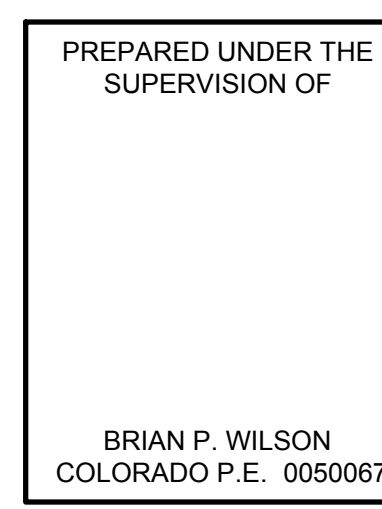
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PLAN: SCARLET SAGE ST STA: 9+50.00 TO 16+50.00
HORIZONTAL SCALE: 1" = 50'

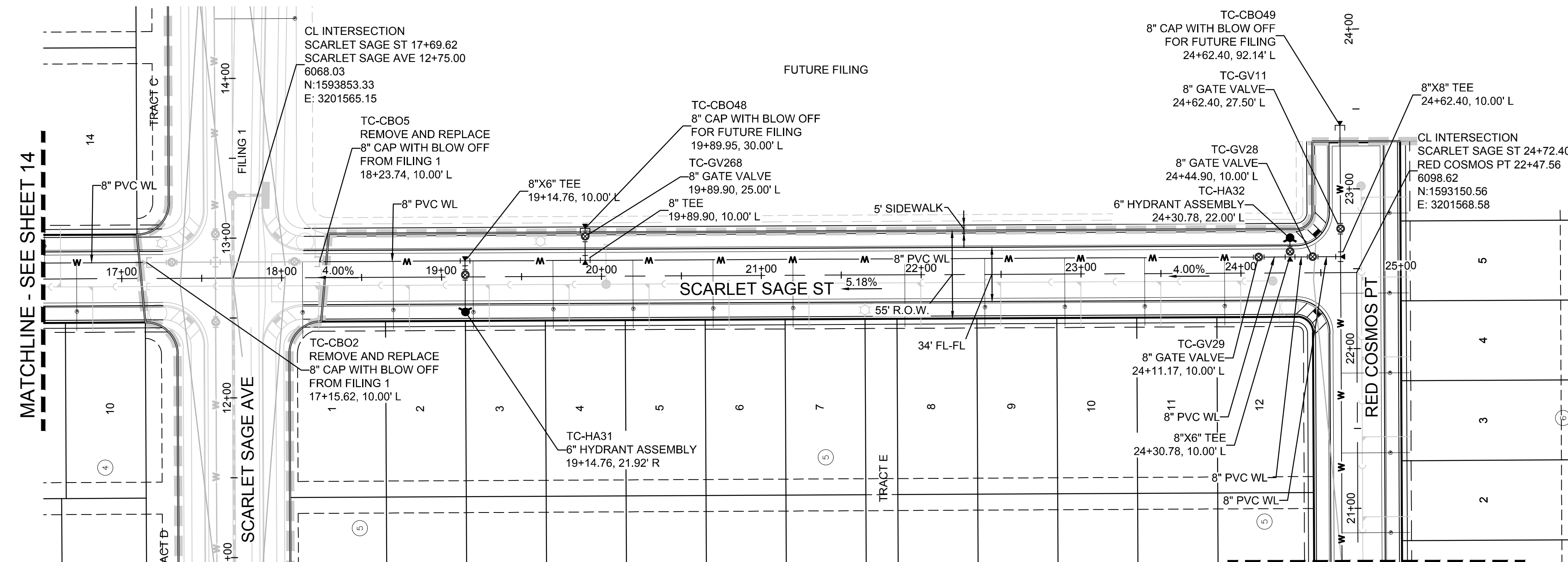


ABBREVIATIONS			
AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
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CBO	CURB RETURN RADIUS	RCBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EV/C	END VERTICAL CURVE	SD	SANITARY DRAIN
EVF	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FL	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HA	HYDRANT ASSEMBLY	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

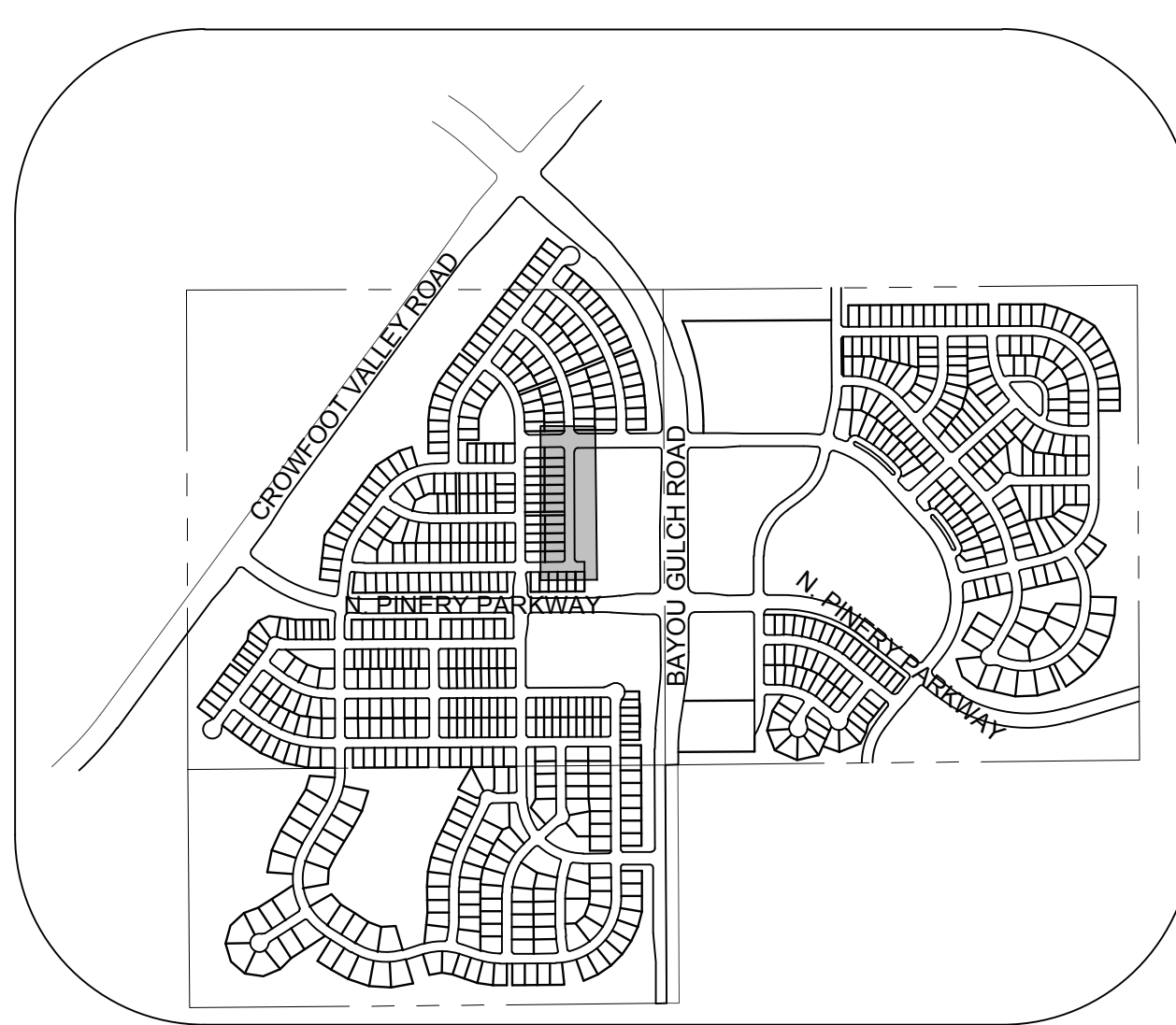
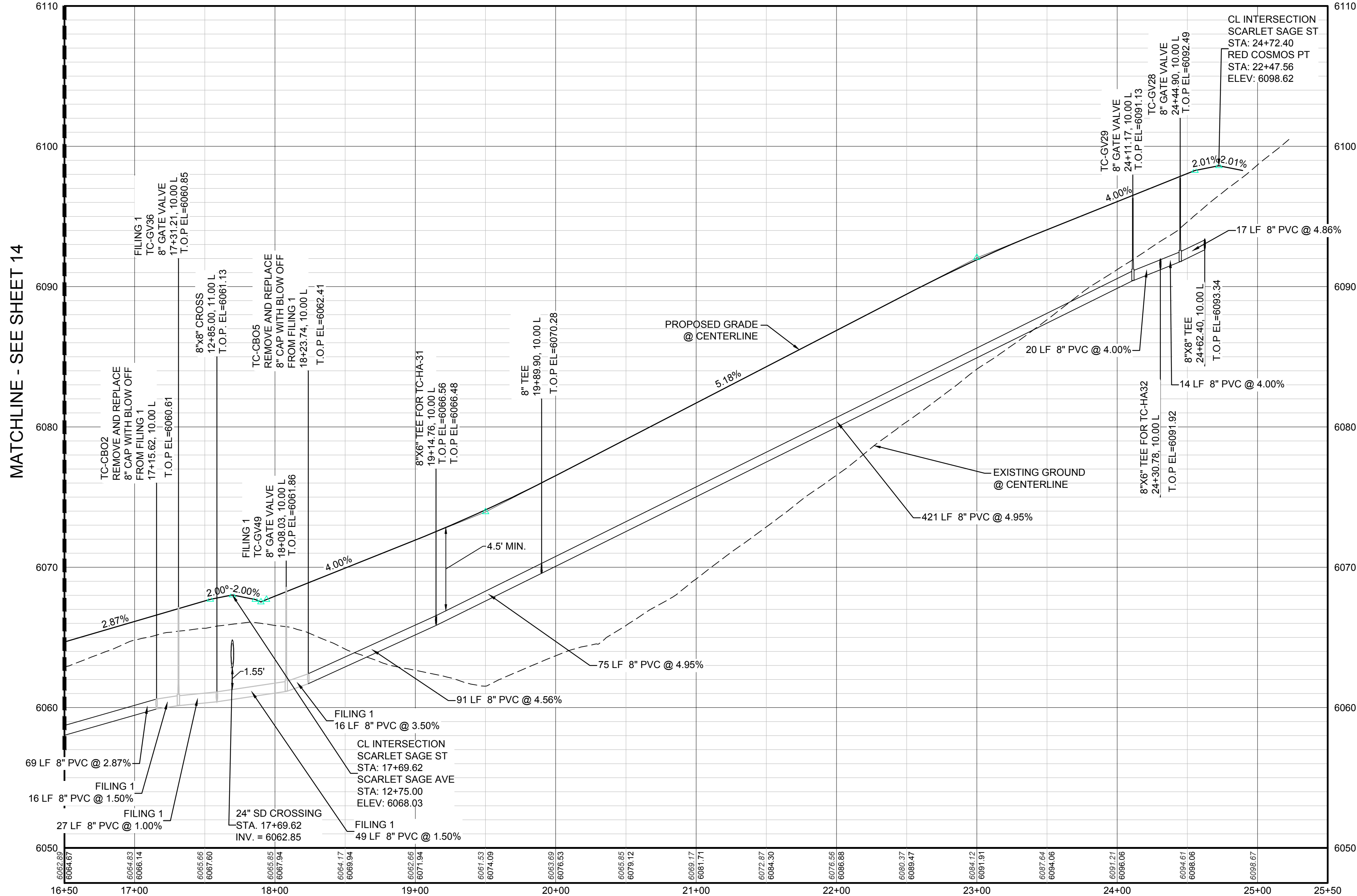


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N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\WATER AND SANITATION\WATER PLAN AND PROFILE\F2 SCARLET SAGE STREET WATER.DWG, KACYW, 12/20/2017 10:53 AM



WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F2,B4,L10	SCARLET SAGE ST	16+71.75
F2,B5,L1	SCARLET SAGE ST	18+13.03
F2,B5,L2	SCARLET SAGE ST	18+69.76
F2,B5,L3	SCARLET SAGE ST	19+19.76
F2,B5,L4	SCARLET SAGE ST	19+69.76
F2,B5,L5	SCARLET SAGE ST	20+19.76
F2,B5,L6	SCARLET SAGE ST	20+69.76
F2,B5,L7	SCARLET SAGE ST	21+19.76
F2,B5,L8	SCARLET SAGE ST	21+89.76
F2,B5,L9	SCARLET SAGE ST	22+39.75
F2,B5,L10	SCARLET SAGE ST	22+89.76
F2,B5,L11	SCARLET SAGE ST	23+39.76
F2,B5,L12	SCARLET SAGE ST	23+89.76



KEYMAP N.T.S. LEGEND

- | | | | |
|-------|---------------------------------------|------|----------------------------------|
| 2 | BLOCK NUMBER | △ | PROPOSED RANGE POINT |
| A | 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 LINE |
| ⌋ | PROPOSED SIDEWALK RAMP | --- | PROPOSED WATER LATERAL W/ METER |
| 10.00 | EXISTING ELEVATION | --- | SECTION LINE |
| 10.00 | PROPOSED DESIGN ELEVATION | --- | FILING BOUNDARY |
| ⌋ | PROPOSED STORM DRAIN INLET | --- | EXISTING FIBER OPTIC LINE |
| ⊗ | PROPOSED STORM DRAIN MANHOLE | --- | EXISTING OVERHEAD POWER |
| | | --- | 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 |
| FL | FLOW LINE | SS | SANITARY SEWER |
| GV | GATE VALVE | STA | STATION |
| HA | HYDRANT ASSEMBLY | 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 |

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.

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

10333 E. Dry Creek Rd.

Englewood, CO 80150

Tel: (720) 482-9526

Fax: (720) 482-9546



ESX MANAGEMENT

7353 South Alton Way

CENTENNIAL, CO 80112

TRAILS AT CROWFOOT

FILING 2 CONSTRUCTION DRAWINGS

WATER PLAN & PROFILE

SCARLET SAGE STREET

DRAWN BY: RHR

CHECKED BY: JJJ

DATE: AUGUST 2017

SHEET NUMBER

15

8130283701

N:\PROJECTS\SSR\BANCROFT\ENGINEERING\SSR\BANCROFT\WATER\WATER PLAN AND PROFILE\2 RED COSMOS TERRACE WATER.DWG, KACYW, 12/20/2017 10:57 AM



UNCC

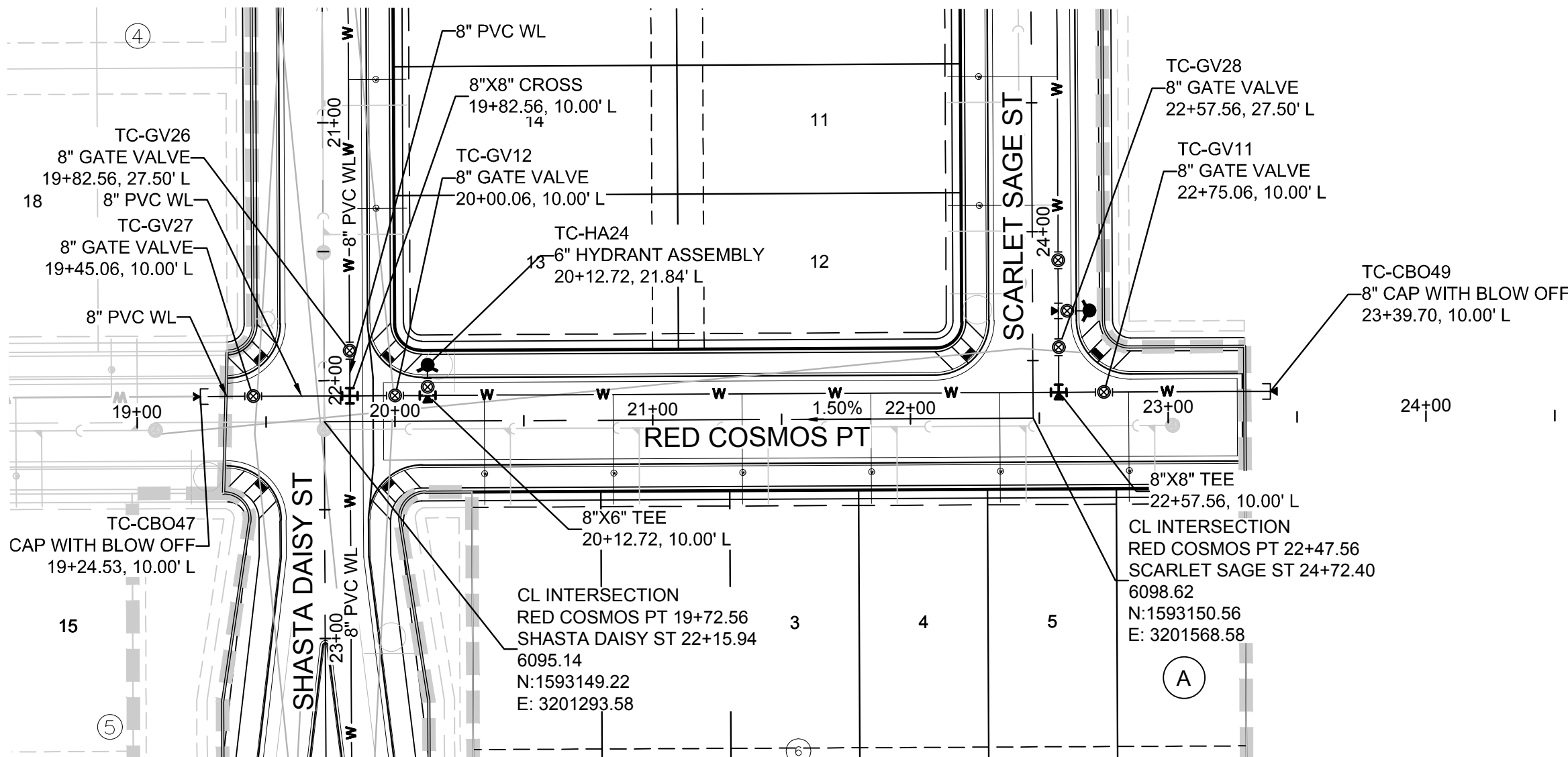
LITELTY NOTIFICATION CENTER OF COLORADO

CALL 811

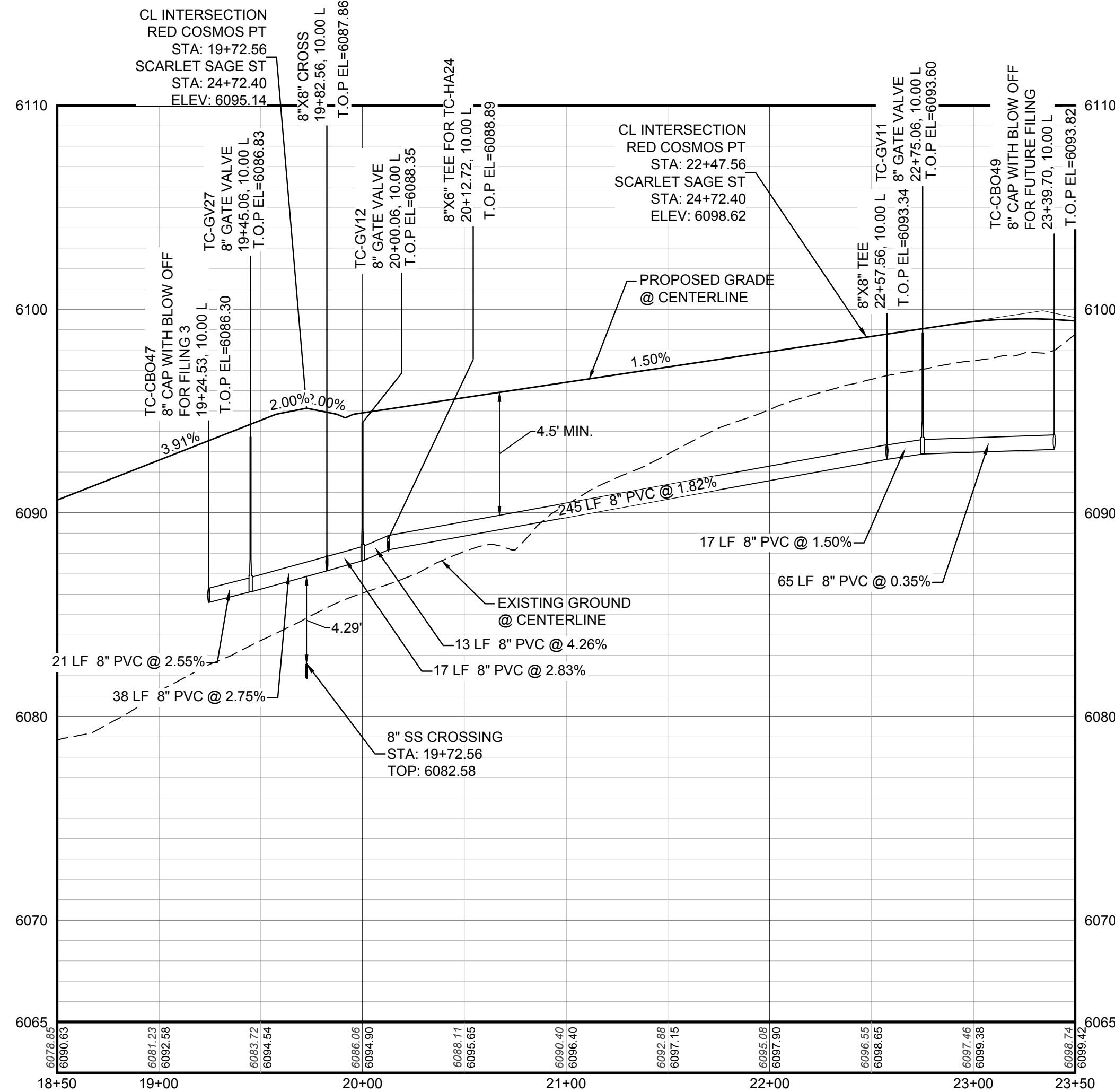
TWO WORKING DAYS

BEFORE YOU DIG

1-800-922-1987



PLAN: RED COSMOS PT STA: 18+50.00 TO 23+50.00
HORIZONTAL SCALE: 1" = 50'



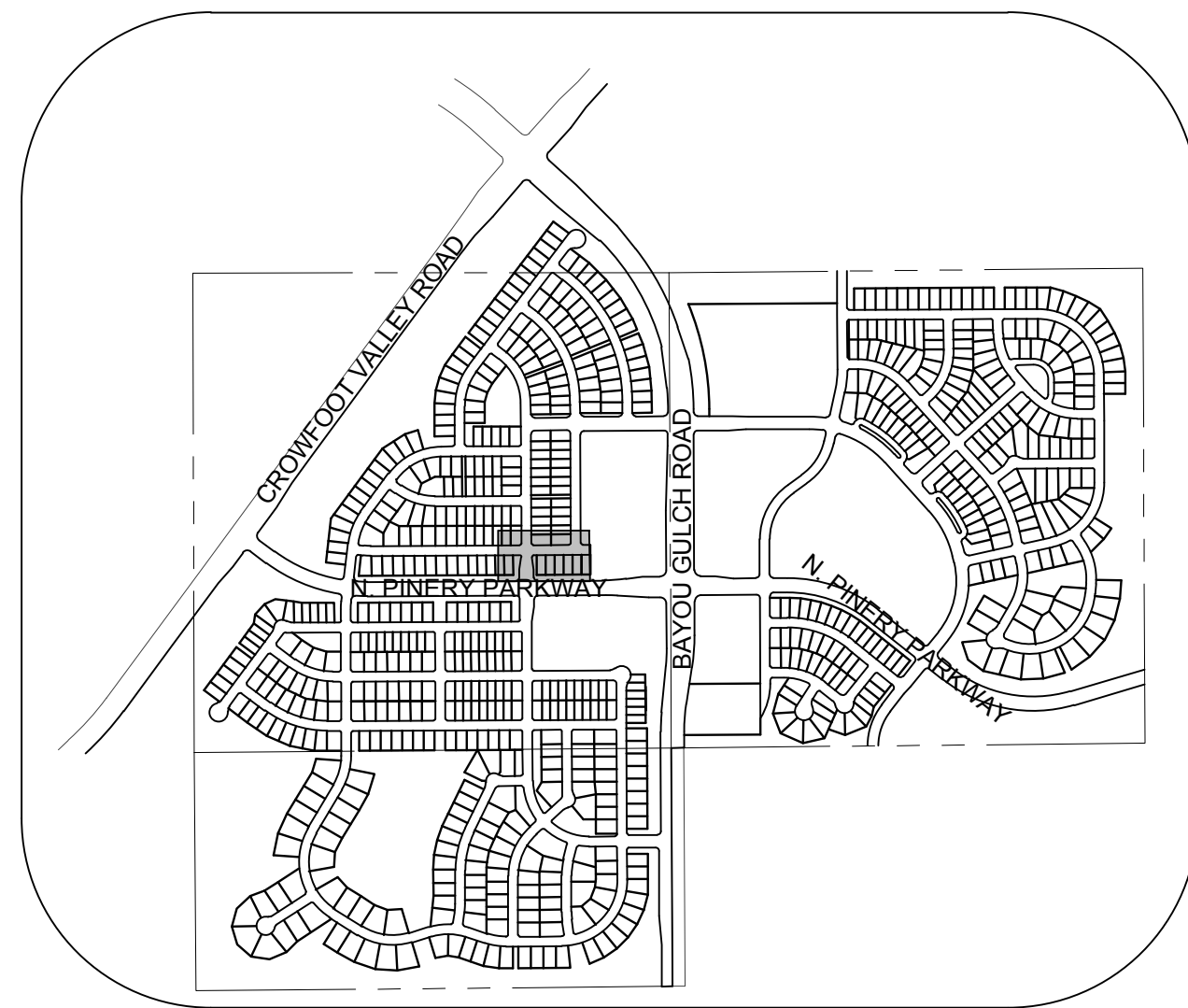
PROFILE: RED COSMOS PT STA: 18+50.00 TO 23+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

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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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067



KEYMAP
N.T.S.
LEGEND

②

BLOCK NUMBER

Ⓐ

LOT TYPE

6

LOT NUMBER

PROPOSED BUTTERFLY VALVE

PROPOSED CAP WITH END OF LINE BLOWOFF

PROPOSED REDUCER

PROPOSED VALVE

PROPOSED FIRE HYDRANT

PROPOSED WL FITTING WITH THRUST BLOCK

PROPOSED FLARED END SECTION

PROPOSED LOW POINT BLOW-OFF

PROPOSED AIR VALVE

FUTURE PHASE VALVE

FUTURE FIRE HYDRANT

PROPOSED LIGHT POLE

PROPOSED SIDEWALK

PROPOSED SIDEWALK RAMP

10.00

EXISTING ELEVATION

10.00

PROPOSED DESIGN ELEVATION

PROPOSED STORM DRAIN INLET

PROPOSED STORM DRAIN MANHOLE

PROPOSED RANGE POINT

CENTERLINE

RIGHT-OF-WAY

PROPERTY LINE

EDGE OF PAVEMENT

PROPOSED DIRECTION OF FLOW

PROPOSED SLOPE & DIRECTION

EXISTING 5' CONTOUR

EXISTING 1' CONTOUR

PROPOSED 5' CONTOUR

PROPOSED 1' CONTOUR

PROPOSED STORM DRAIN

PROPOSED SEWER LINE WITH MANHOLE

PROPOSED SEWER LATERAL

PROPOSED WATER LINE

PROPOSED WATER LATERAL W/ METER

SECTION LINE

FILING BOUNDARY

EXISTING FIBER OPTIC LINE

EXISTING OVERHEAD POWER

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
FL	FLOW LINE	SS	SANITARY SEWER
GV	GATE VALVE	STA	STATION
HA	HYDRANT ASSEMBLY	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

10333 E. Dry Creek Rd.
Suite 100
Englewood, CO 80110
Tel: (720) 482-9526
Fax: (720) 482-9546



ESX MANAGEMENT
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 3 CONSTRUCTION DRAWINGS
WATER PLAN & PROFILE
RED COSMOS POINT

SCALE:
AS SHOWN

DRAWN BY:
RHR

CHECKED BY:
JLJ

DATE:
APRIL 2017

FILE NO:
8130283701

SHEET NUMBER

16

Revisions

No.

Date

Init.

Appr.

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:

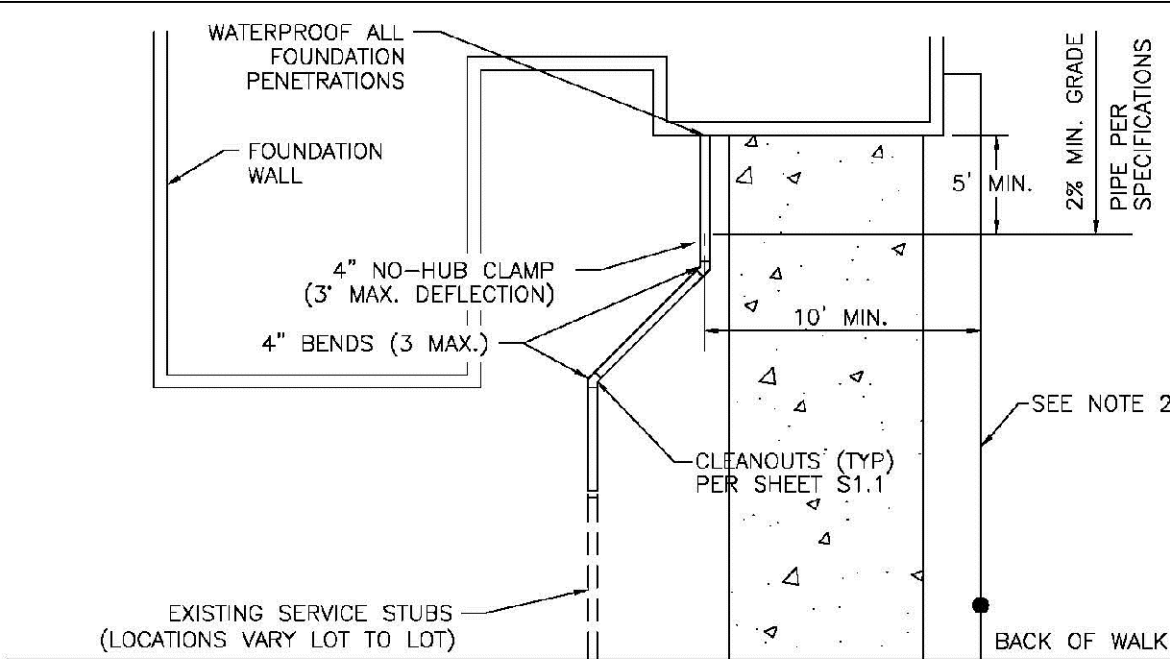
SEWER

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
"W" FOR WATER SERVICES

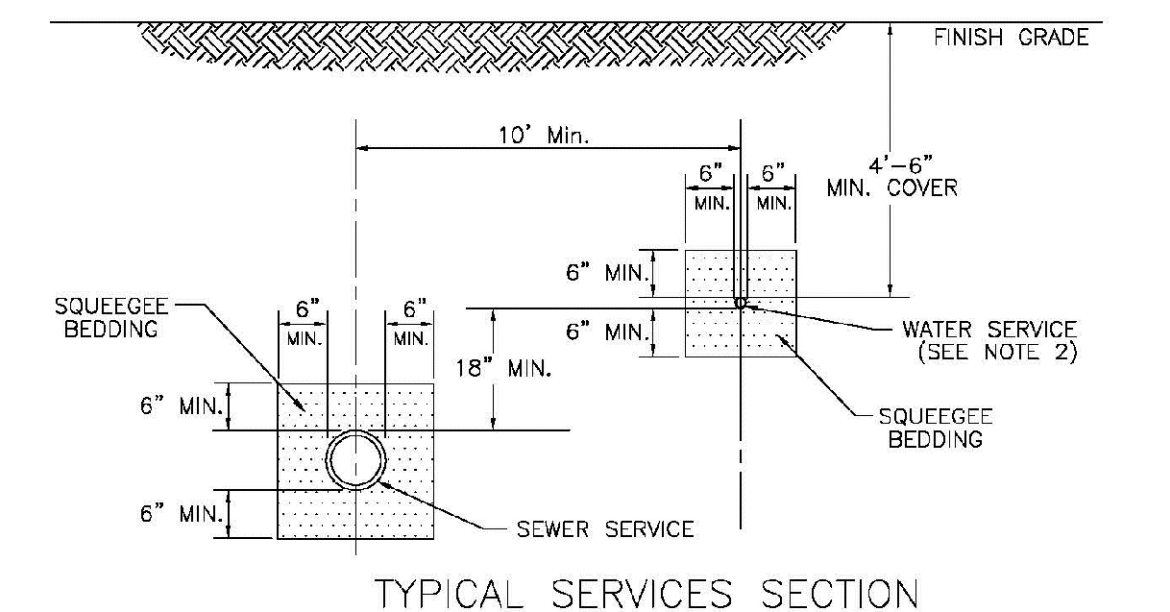
PARKER WATER & SANITATION DISTRICT			
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	01/02 10/16		
DIRECTOR OF ENGINEERING	1/08 1/16		

2016 REVISION

SHEET 51.1



TYPICAL SERVICES PLAN VIEW

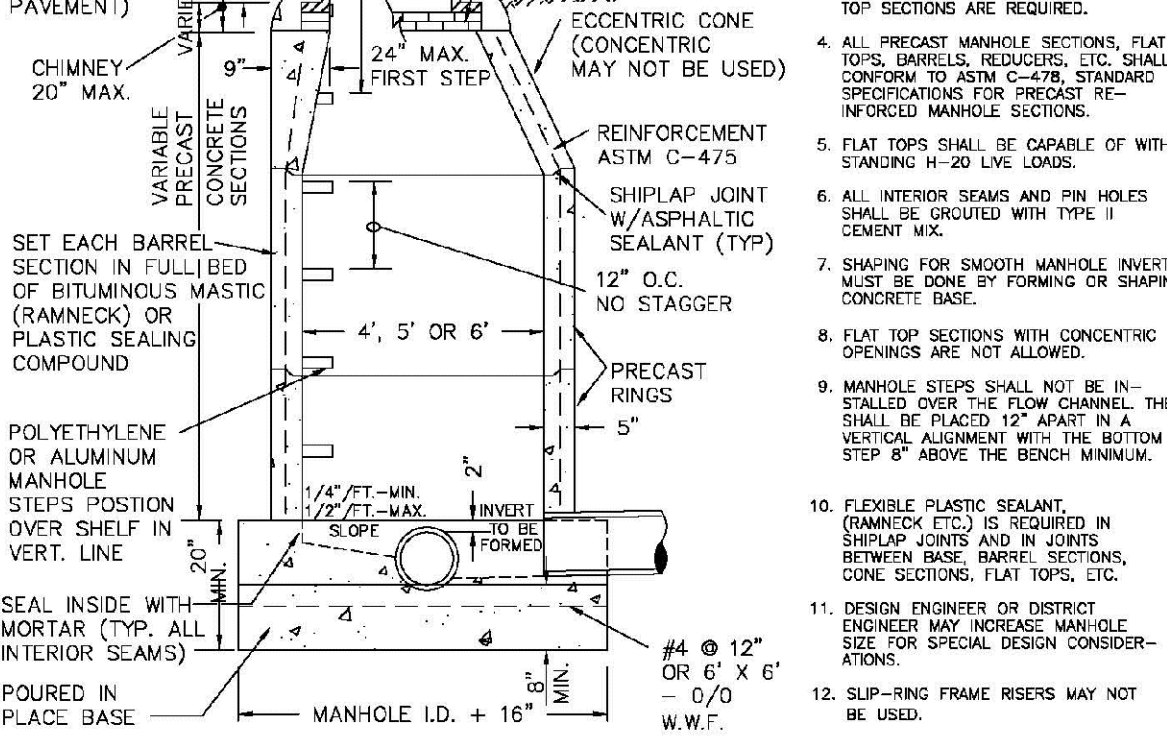
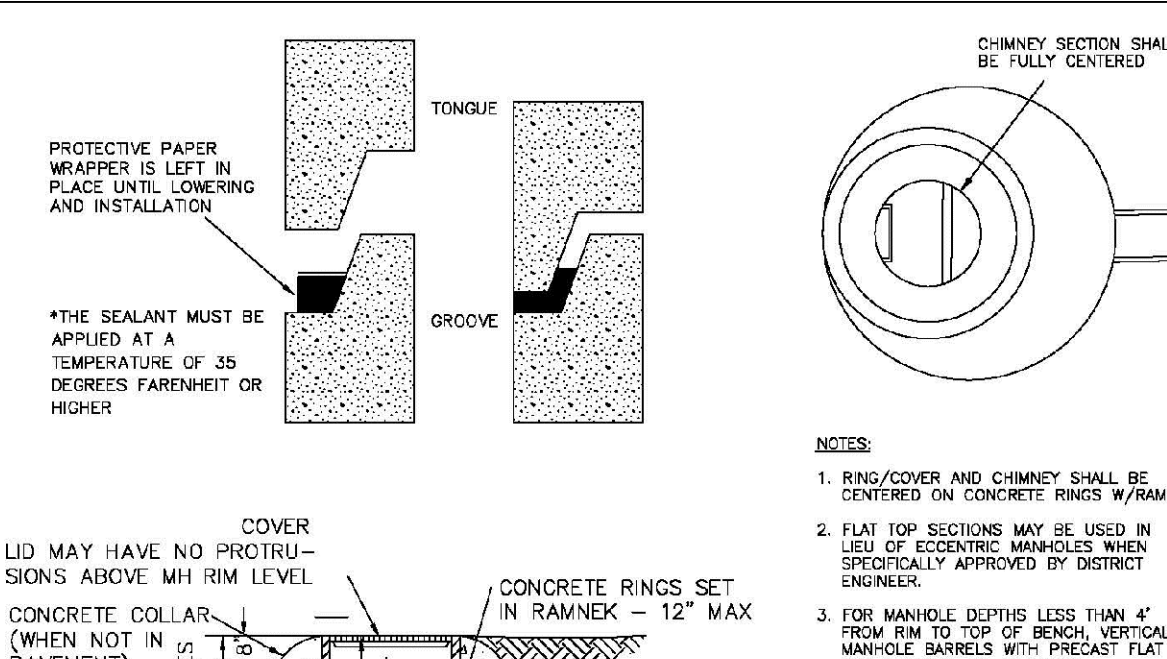


TYPICAL SERVICES SECTION

- NOTE:
1. SEE SHEET 51.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
 2. TYPICAL WATER SERVICES SHOWN ON SHEET W1.2 IN WATER DETAILS.

2016 REVISION

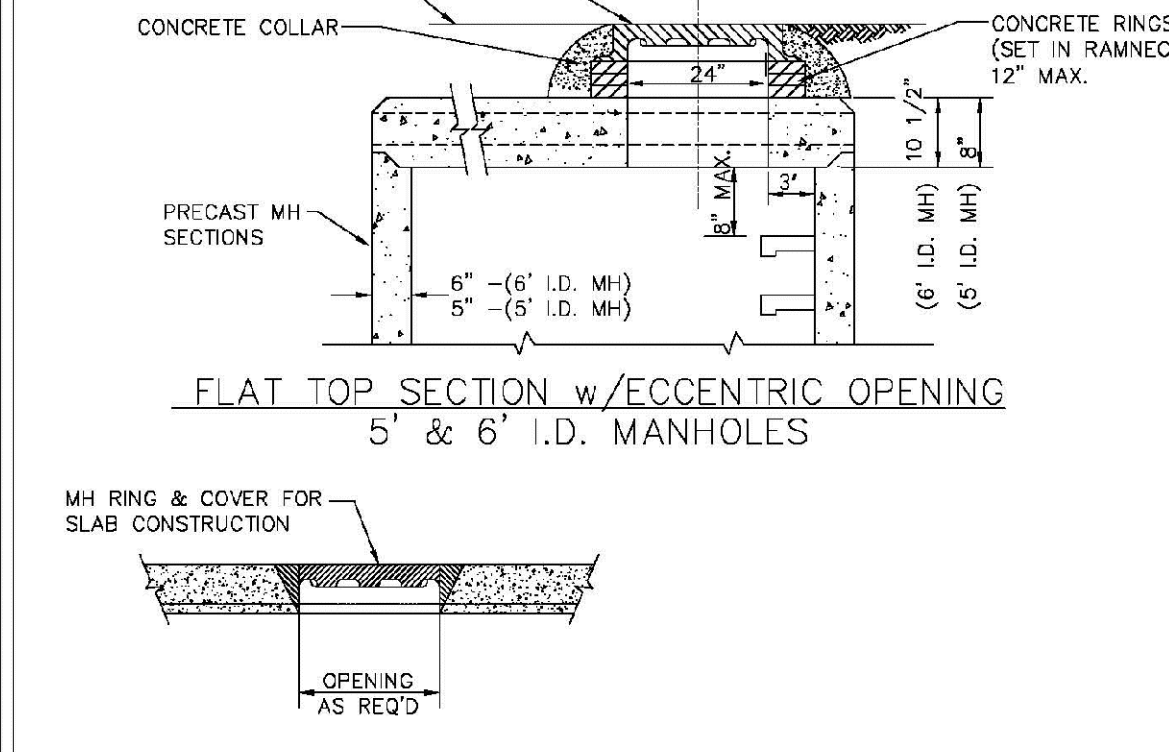
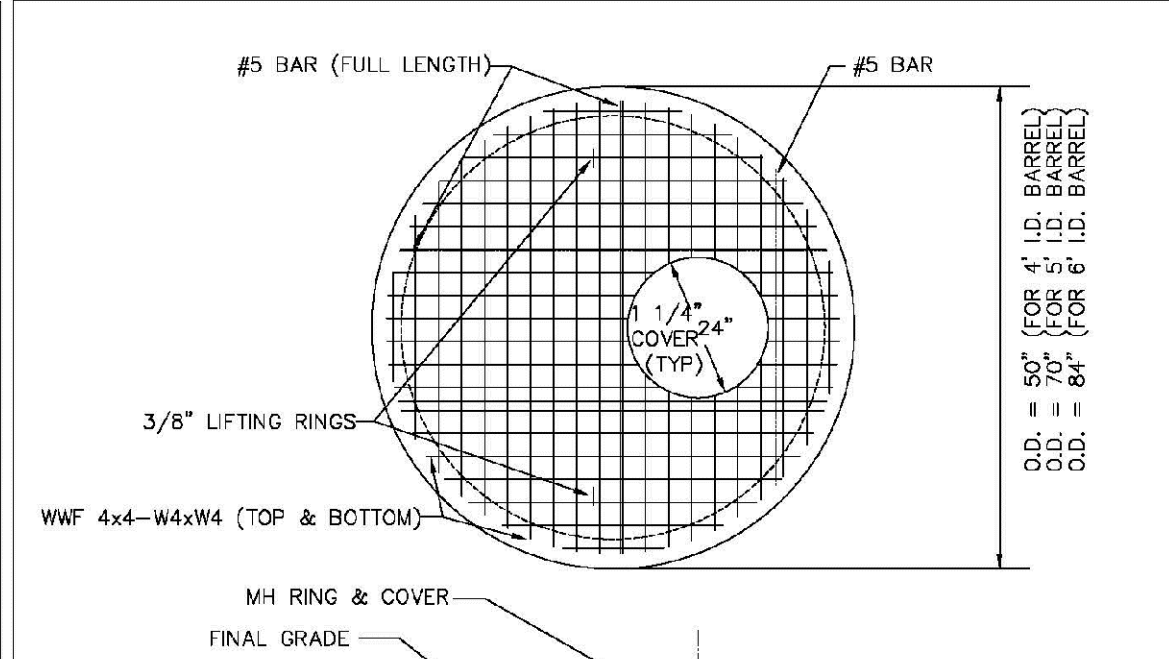
SHEET 51.2



PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

2016 REVISION

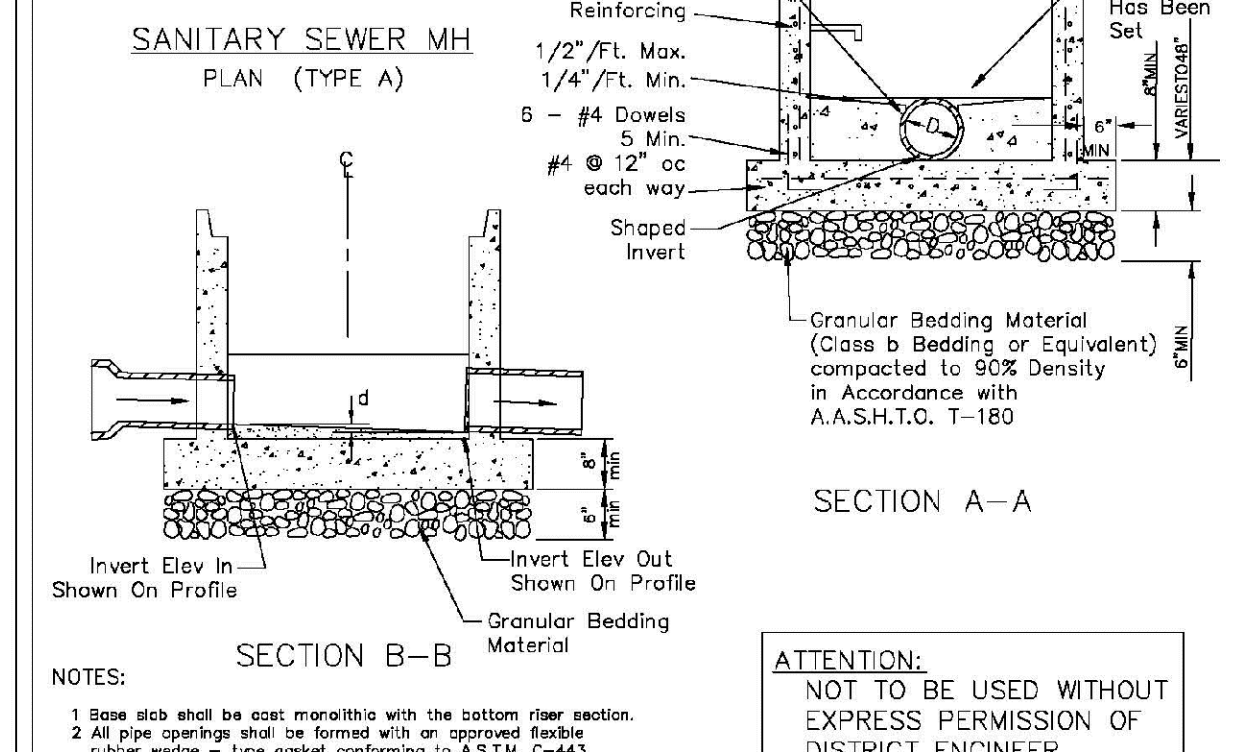
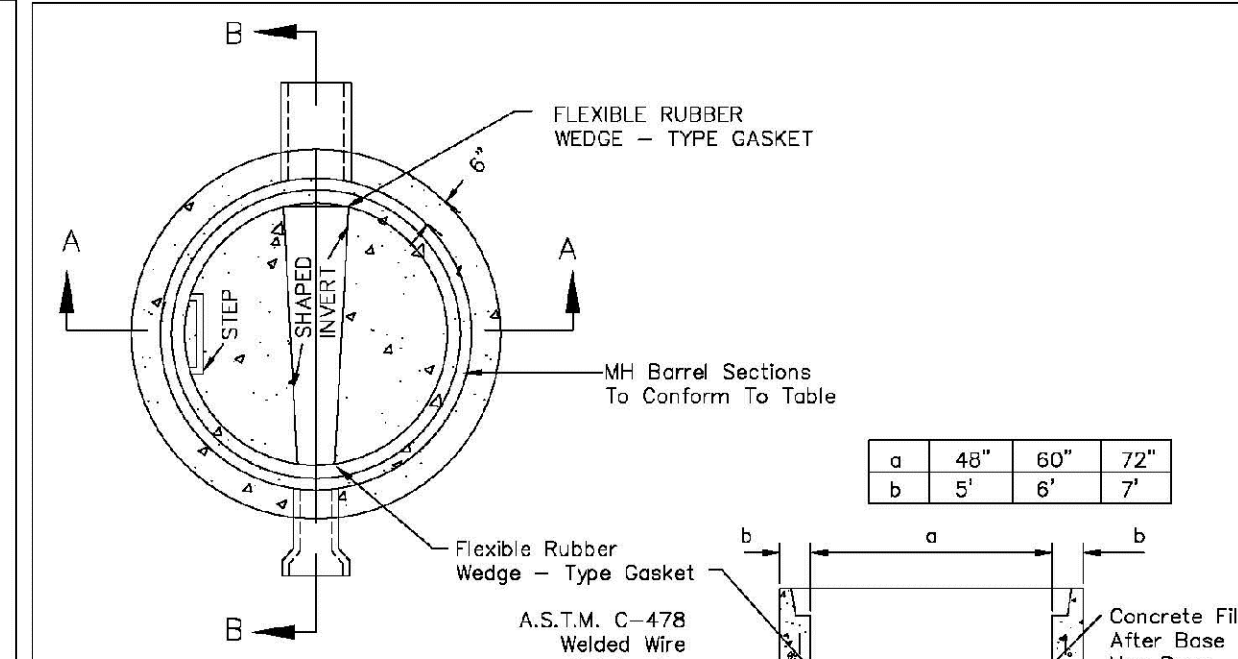
SHEET 51.3



PARKER WATER & SANITATION DISTRICT			
PRECAST MANHOLE - 5' & 6' I.D. WITH ECCENTRIC CONE			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	01/02 01/16		
DIRECTOR OF ENGINEERING	1/08 10/16		

2016 REVISION

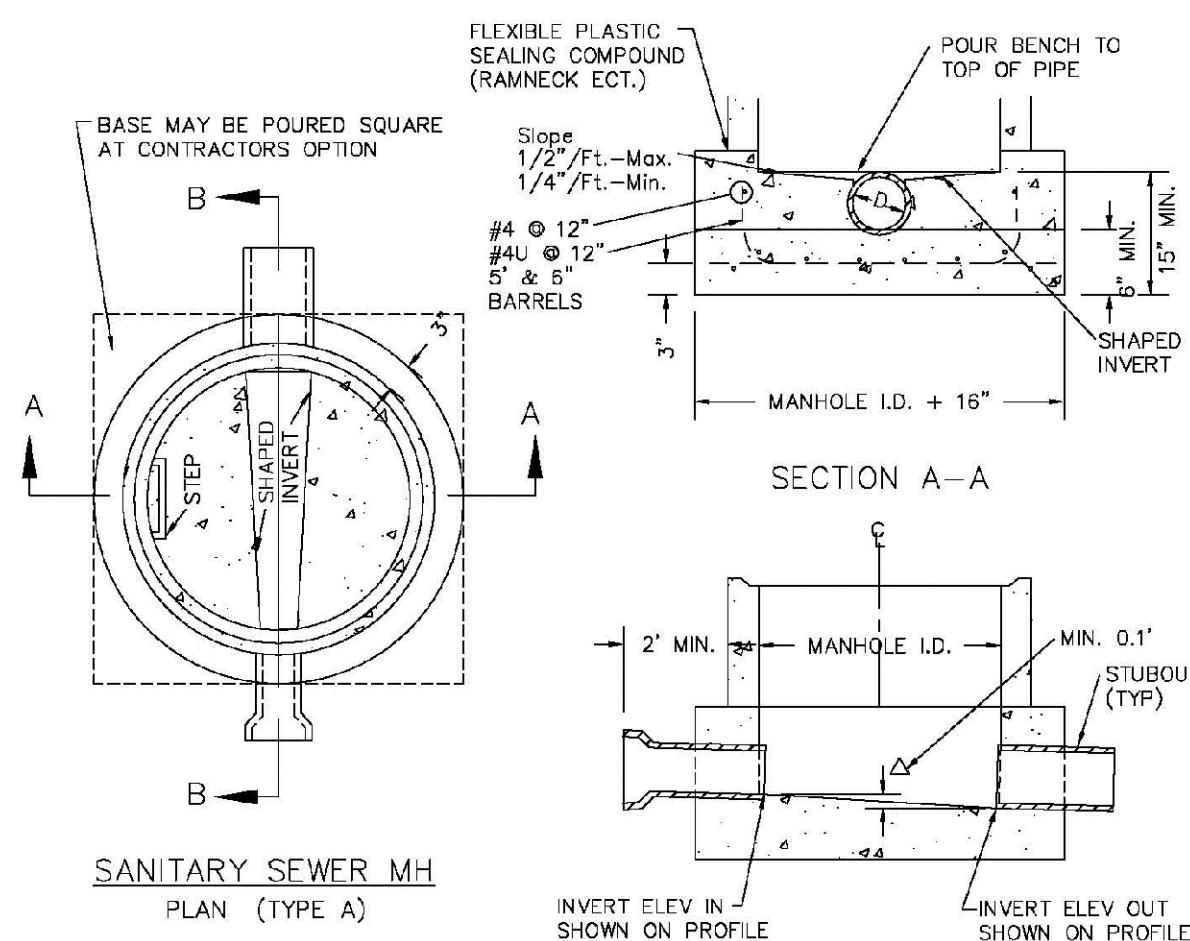
SHEET 53.3



PARKER WATER & SANITATION DISTRICT			
PRECAST MANHOLE BASE DETAIL			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	01/02 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET 53.4

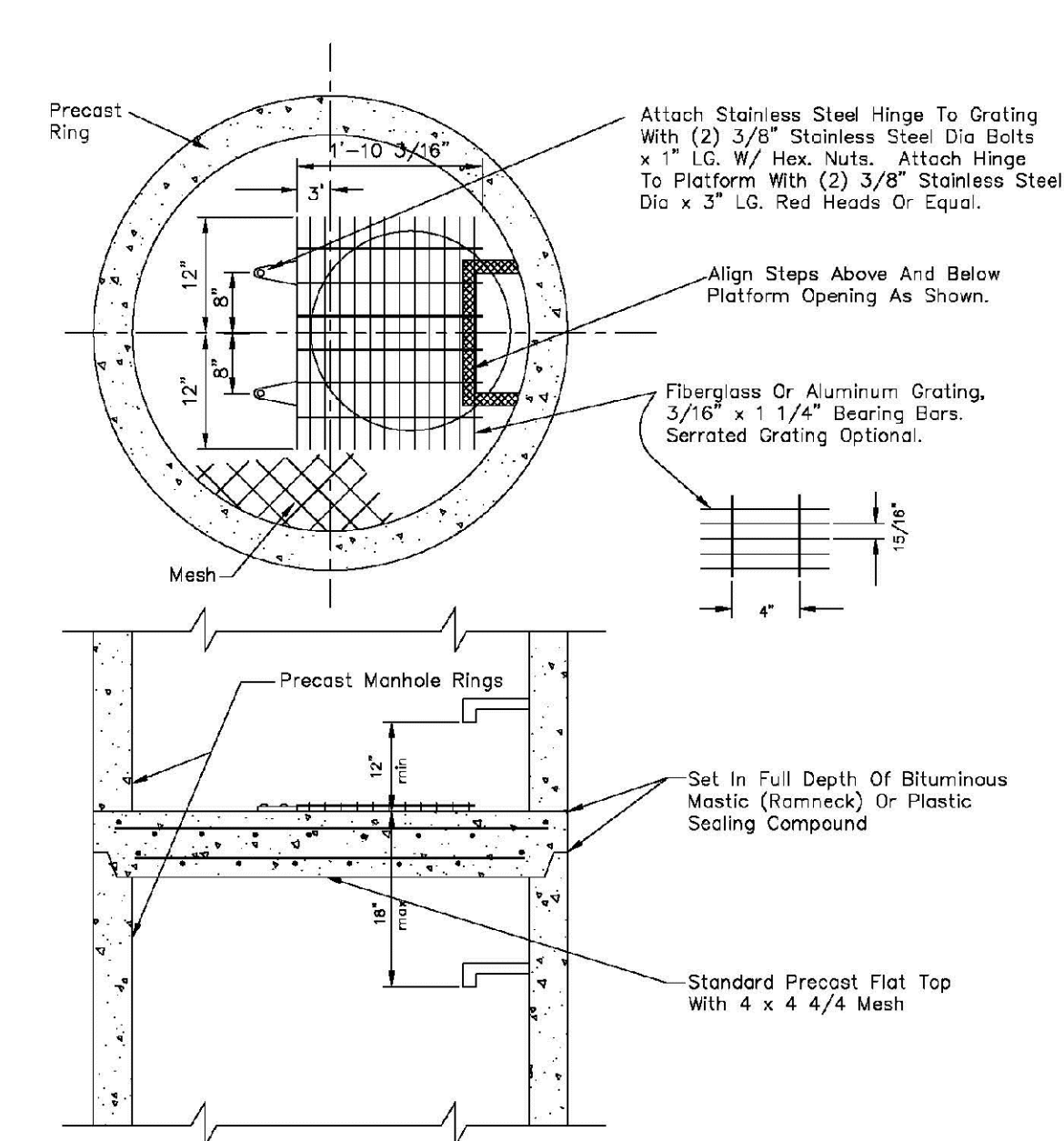


- NOTES:
1. Manhole barrel min. thickness to be 5".
 2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
 3. The manhole steps shall conform to District Standards and Specifications.
 4. Precast sections to conform to A.S.T.M. C-478.
 5. All dead-end 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"/FT.-Max. 1/4"/FT.-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: 2/96		
APPROVED: PVR	01/02 01/16		
DIRECTOR OF ENGINEERING	10/16		

2016 REVISION

SHEET 53.5

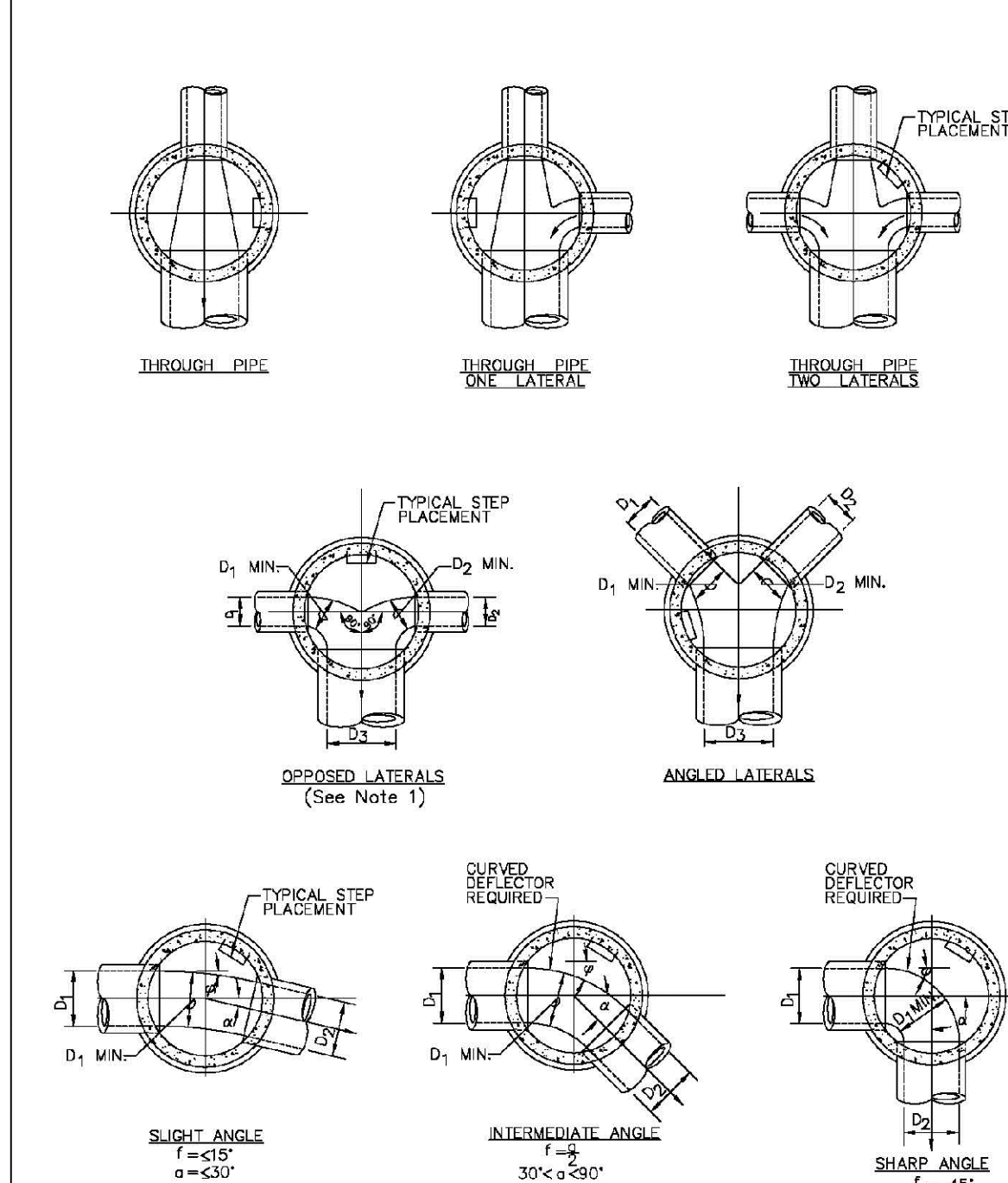


- NOTES:
- 1.1 Maximum distance between platforms shall be 15' vertically.
 - 1.2 All hardware used inside a manhole shall be stainless steel.
 - 1.3 Manholes over 20' deep shall submit structural calculations on base and wall sizing.

PARKER WATER & SANITATION DISTRICT			
INTERMEDIATE PLATFORM FOR MANHOLES OVER 20' DEPTH			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	2/00 01/16		
DIRECTOR OF ENGINEERING	10/16		

2016 REVISION

SHEET 53.6

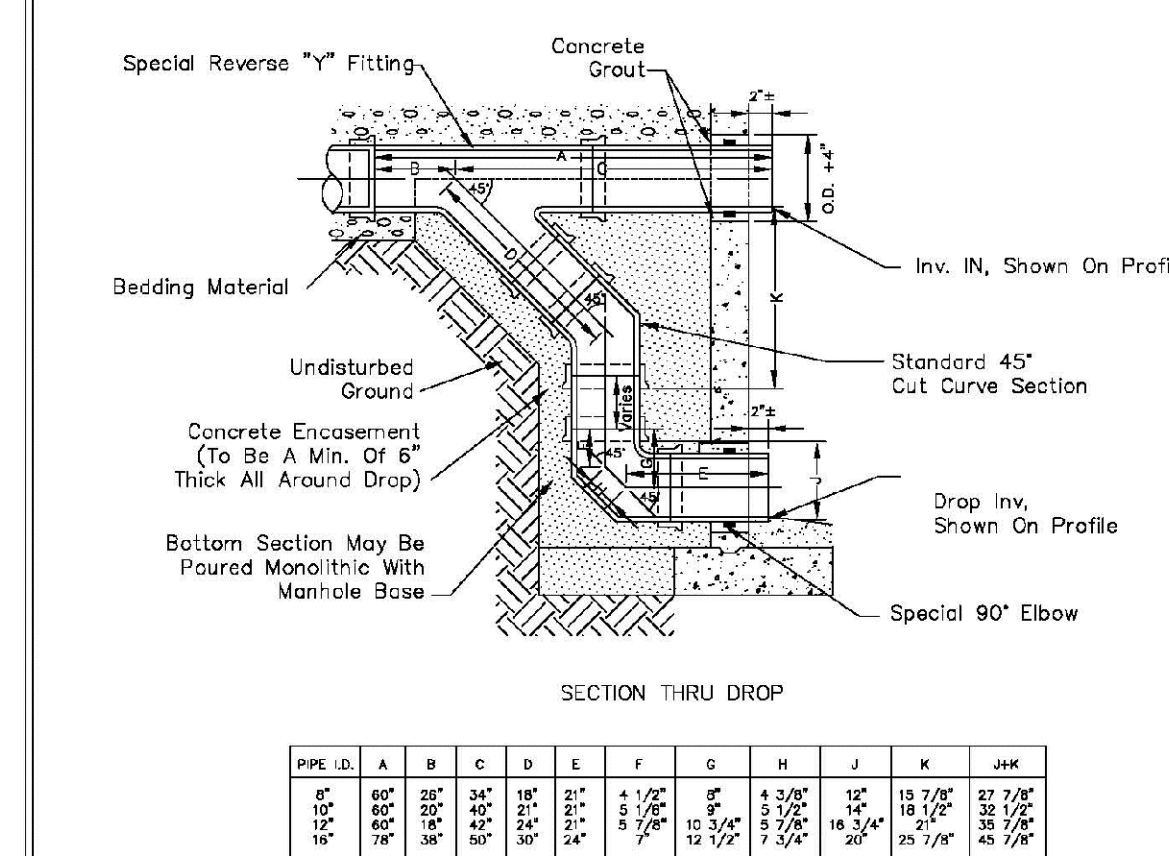


- NOTES:
1. Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT			
TYPICAL BASE CHANNELIZATION DETAILS			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET 53.7



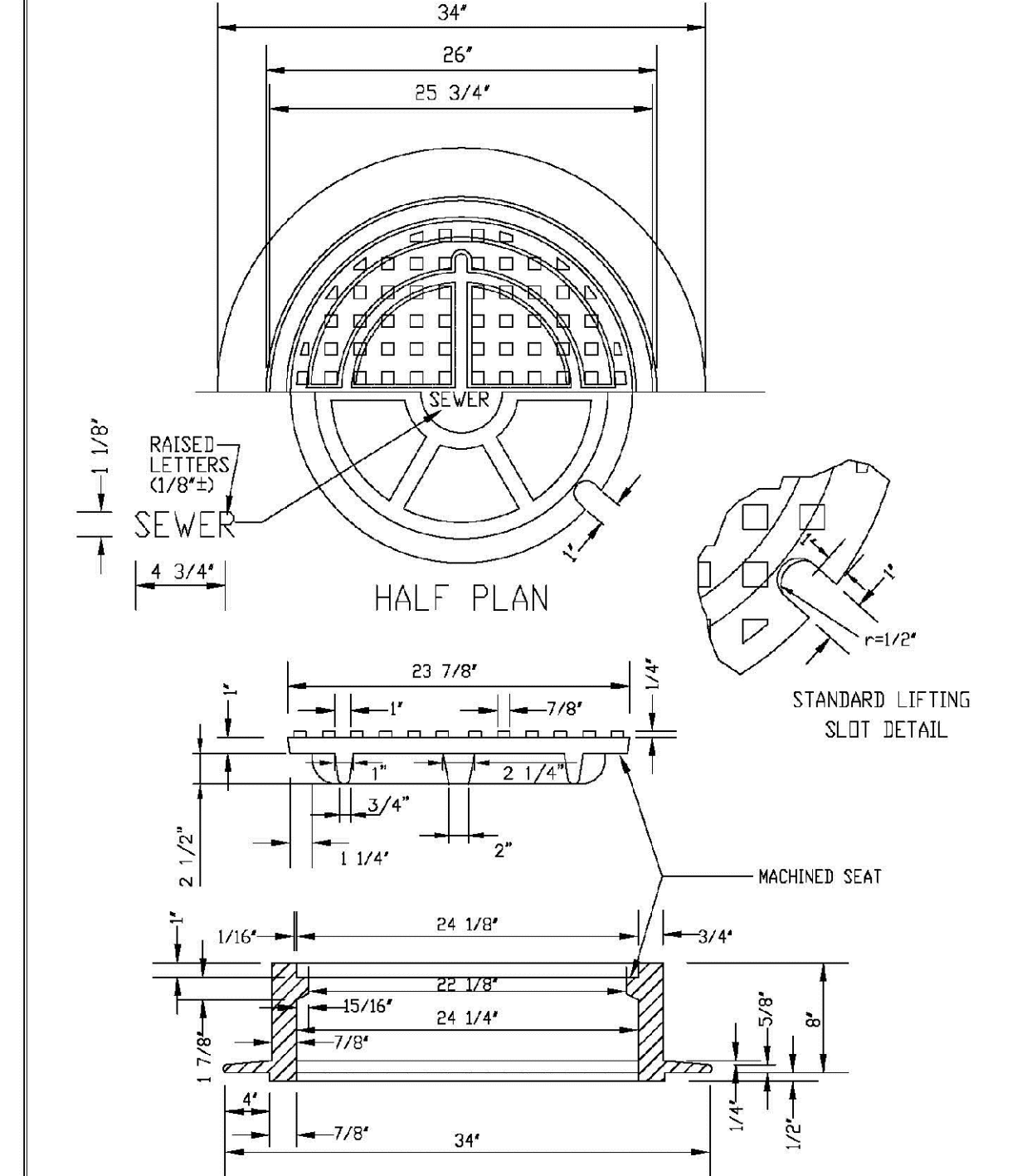
- NOTES:
1. Vlt Clay Pipe & fittings (A.S.T.M. C-700) shown, details similar for all other pipe.
 2. Diameter of drop shall not be less than the line pipe diameter.
 3. For 18" diameter and larger, outside drop detail shall be a special design.
 4. Manhole shall be coated using bituminous mastic (ramneck)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

OUTSIDE DROP MANHOLE CONSTRUCTION

PARKER WATER & SANITATION DISTRICT			
OUTSIDE DROP MANHOLE CONSTRUCTION			
SCALE: NONE	DATE: 2/96		
APPROVED: PVR	01/16 10/16		
DIRECTOR OF ENGINEERING			

2016 REVISION

SHEET 53.8

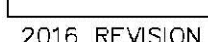
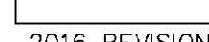
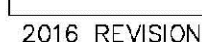
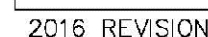
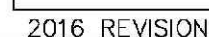


- NOTE:
1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25)
 2. All Casting To Be Dipped in Asphalt Base Coat (Or Approved Equal).
 3. No other manhole lids will be accepted without prior approval from the District Engineer.

2016 REVISION

SHEET 53.9

SHEET W1.1



N:\PROJECTS\BENCH\ENGINEERING\DRAWING\DETAILS\DWG. BROWNY 12/20/17 11:02 AM

