

CONVENIENCE STORE PARKER WATER AND SANITARY CONSTRUCTION PLANS

LOCATED IN THE SOUTHEAST QUARTER OF SECTION 29,
TOWNSHIP 6 SOUTH, RANGE 66 WEST 6TH P.M.
LOT 1 OF DOUGLAS 234 FILING NO. 6
TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

APPLICANT/OWNER

TWIN STAR ENERGY, LLC
7671 SHAFFER PARKWAY
LITTLETON, CO 80127
C/O: MARK PERRINO
P: (303) 898-2603

OWNERS'S REP

MAPCM
6415 CHEROKEE DRIVE
SEDALIA, CO 80135
ATTN: MARK A PERRINO
P: (303) 537-2803

ARCHITECT

101, ARCHITECTURE LLC
8400 E. CRESCENT PARKWAY, SUITE 160
GREENWOOD VILLAGE, CO 80111
ATTN: BUDDY POPPITT, LEED AP
P: (720) 881-1600

GAS SERVICE

XCEL ENERGY
1123 WEST 3RD AVENUE
DENVER, CO 80223
ATTN: DONNA GEORGE
P: (303) 571-3306

ELECTRICAL SERVICE

IREA
5496 US HWY 85
SEDALIA, CO 80135
ATTN: BROOKS KAUFMAN
P: (720) 805 3331

TELEPHONE

CENTURYLINK
1801 CALIFORNIA STREET, SUITE 240
DENVER, CO 80202
ATTN: WILLIAM BENSON
WILLIAM.BENSON2@LUMEN.COM

TRAFFIC ENGINEER

RICK ENGINEERING COMPANY
9801 EAST EASTER AVE.
CENTENNIAL, CO 80112
ATTN: JACK SCANLON, PE
P: (303) 537-8020

ENGINEERING CONSULTANT

ENTITLEMENT AND ENGINEERING SOLUTIONS, INC.
501 S CHERRY STREET, SUITE 300
GLENDALE, CO 80246
ATTN: LANDIS GORDON, PE
P: (618) 670-1512

LANDSCAPE ARCHITECT

VALERIAN
970 YUMA STREET SUITE 130
DENVER, CO 80204
ATTN: BRENT KASLON
P: (303) 347-1200

SURVEYOR

RICK ENGINEERING COMPANY
9801 EAST EASTER AVE.
CENTENNIAL, CO 80112
ATTN: ROBERT HENNESSY, PLS
P: (303) 537-8020

WATER/SANITARY SEWER

PARKER WATER AND SANITATION DISTRICT
18100 E. WOODMAN DRIVE
PARKER, CO 80134
ATTN: ROBERT RAMSEY
P: (720) 842-4260

FIRE DEPARTMENT

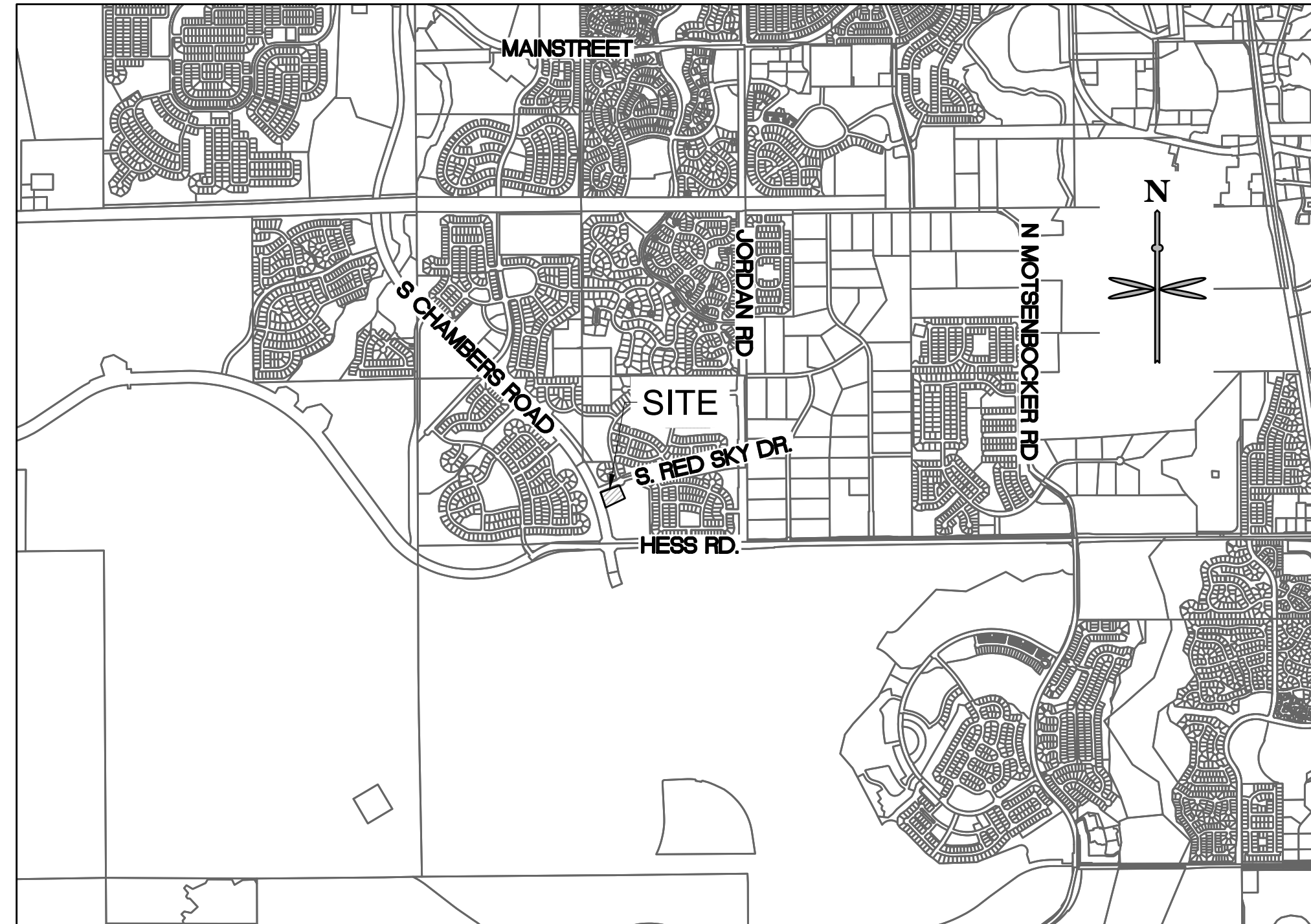
SOUTH METRO FIRE RESCUE AUTHORITY
9195 E. MINERAL AVE.
CENTENNIAL, CO 80112
ATTN: RANDY CAPRA
P: (303) 805-3169

TOWN OF PARKER PLAN REVIEW

20120 E. MAINSTREET
PARKER, CO 80138
ATTN: BRIANNA SIMON
P: (303) 805-3338

GEOTECHNICAL ENGINEER

TERRACON
10625 W. 1-70 FRONTAGE ROAD N, SUITE 3
WHEAT RIDGE, CO 80033
ATTN: JOHN HAAS
P: (303) 454 5290



VICINITY MAP
SCALE: 1" = 2000'

PWSO MATERIALS LIST*

- HYDRANT:
- 1 EA. - HYDRANT
 - 1 EA. - GATE VALVE
 - 1 EA. - 6X8 REDUCER
 - 217 LF - 8" PVC
 - 13 LF - 6" DIP
 - 1 EA. - 8" X 8" TEE
- BUILDING FIRE PROTECTION:
- 267 LF - 4" DIP
 - 4" TAPPING SLEEVE + VALVE, 4" PLUG.
- DOMESTIC WATER:
- 73 LF - 1.5" TYPE K COPPER PIPE
 - 1.5" CURB STOP
 - 1.5" TAPPING SLEEVE + VALVE
- SANITARY SERVICE:
- 274 LF - 4" PVC
 - 1 EA. - 1,200 GAL. GREASE INTERCEPTOR.
 - 1 EA. - SAMPLING MH
 - 2 EA. - HS-20 TRAFFIC RATED CLEANOUT

*QUANTITIES ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ORDERING AND INSTALL.

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
U0.0	PARKER WATER AND SANITARY COVER
U0.1	PWSO STANDARD NOTES
U1.0	UTILITY PLAN
U2.0	WATER & SANITARY SEWER DETAILS
U2.1	WATER & SANITARY SEWER DETAILS
U2.2	WATER & SANITARY SEWER DETAILS
L-3	IRRIGATION PLAN
L-4	IRRIGATION DETAILS AND SPECIFICATIONS
L-5	IRRIGATION DETAILS

BENCHMARK:

THE PRIMARY BENCHMARK USED TO DETERMINE THE BASIS OF ELEVATIONS FOR THE MAP IS BY GPS OBSERVATION NAVD88. A SITE BENCH MARCH HAS BEEN SET AT THE NORTHWEST CORNER OF A DRAIN INLET ON CHAMBERS ROAD, APPROXIMATELY 200' NORTH OF HESS ROAD. ELEVATION = 6075.31

BASIS OF BEARING:

THE BASIS OF BEARING IS THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 29 TOWNSHIP 6 SOUTH, RANGE 66 WEST, 6TH PRINCIPAL MERIDIAN, BEARING SOUTH 89°15'13" WEST AS SHOWN ON FINAL PLAT DOUGLAS 234 FILING NO. 1.

FLOODPLAIN NOTE:

BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER T6SR66WS29 AND DATED MARCH 16, 2016 - SUBJECT PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA.



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.

06/02/2022
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 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: *Robert Ramsey*
(DISTRICT REPRESENTATIVE)

DATE: 06/09/2022

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

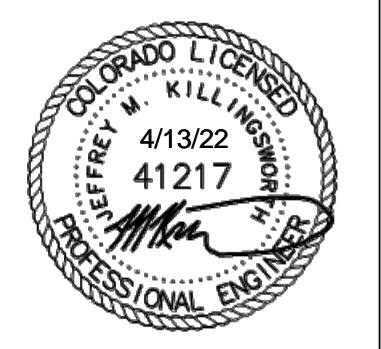
BY: *Robert Ramsey*

DATE: 06/09/2022

811
CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987 or 811
CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.
Know what's below. Call before you dig.

No.	REVISION	DATE

EES
ENTITLEMENT AND ENGINEERING SOLUTIONS, INC.
501 S Cherry St, Suite 300
Glendale, CO 80246
303.572.7597 www.ees-us.com



PWSO CONSTRUCTION PLANS LOT 1
CONVENIENCE STORE
12181 SLICEROO DRIVE, PARKER, CO 80134
PARKER WATER AND SANITARY COVER

PROJECT NO: TWS015.01
DESIGNED BY: LCG
DRAWN BY: JLG
DATE: 4/12/2022

U0.0

P:\TWINSTAR\ENERGY\CO - PARKER - CHAMBERS & HESS\06 CAD\SITE PLAN\LOT 1 COVER SHEET.DWG

GENERAL NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
- THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER, DOUGLAS COUNTY AND OTHER NEIGHBORING CITIES AND TOWNS 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 THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS CONTACT THE PWSO IMMEDIATELY.
- PWSO ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS 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 "AS-BUILT" DRAWINGS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL BY DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE PRINTS SHALL BE TRANSMITTED TO THE PWSO OFFICE.
- 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 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 REMEDIATED 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 PARKER WATER AND SANITATION DISTRICT PAGE 1.7 DISTRICT PLAN APPROVAL PROCEDURES 2017 REVISION COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO 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 ALLOWED IN EASEMENTS OR WITHIN 8' OF 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 PWSO AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSO SPECIFICATION MANUAL.

WATER SYSTEM NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- ALL WATER MAINS SHALL BE PER PWSO MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
- ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED 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 PER PWSO SPECIFICATIONS.
- ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST WITH 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.
- VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES; WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER LOCATIONS SHOWN ON THE PLANS.
- WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSING, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
- THE CONTRACTOR SHALL NOTIFY THE PWSO 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 PWSO STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN PARKER WATER AND SANITATION DISTRICT PAGE 1.8 DISTRICT PLAN APPROVAL PROCEDURES 2017 REVISION. 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.
- 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, DESIGN ENGINEER, AND REPRESENTATIVE OF OTHER APPROVING AGENCIES.
- CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PWSO SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
- HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSO SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSO INSPECTOR/ENGINEER.

SANITARY SEWER SYSTEM NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSO ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
- 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 PWSO 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. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
- 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. PARKER WATER AND SANITATION DISTRICT PAGE 1.9 DISTRICT PLAN APPROVAL PROCEDURES 2017 REVISION
- THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSO AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSO SPECIFICATION MANUAL.
- ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PWSO STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
- PRIOR TO STARTING WORK WHERE SEWER MAIN IS TO BE CONNECTED TO EXISTING PWSO 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 PROBATIONARY ACCEPTANCE BY PWSO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN INSTRUCTED BY THE DISTRICT.
- PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

EES UTILITY NOTES:

- UTILITY SERVICE INSTALLATION AND MATERIALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PWSO SPECIFICATIONS.
- ALL SEWER SERVICE PIPE SHALL BE POLYVINYL CHLORIDE GRAVITY PIPE (PVC) SDR 35, MINIMUM BURY DEPTH PWSO WATER REQUIREMENTS.
- CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, WHETHER SHOWN ON THE PLANS OR NOT. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- AT PROPOSED UTILITY CROSSINGS, CONTRACTOR IS TO VERIFY THE REQUIRED GRADES AND CLEARANCES PRIOR TO COMMENCING CONSTRUCTION. ANY REQUIRED CHANGES ARE TO BE COORDINATED DIRECTLY WITH ENGINEER.
- PIPE LENGTHS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR.
- UTILITY BURY DEPTH SHALL CONFORM TO PWSO UTILITY STANDARDS.
- REFER TO PWSO UTILITY STANDARDS AND FOR SANITARY SEWER TRENCHING BACKFILL REQUIREMENTS.
- ALL EXISTING UTILITIES TO REMAIN UNLESS OTHERWISE NOTED. PROTECT IN PLACE FROM DAMAGE.
- SANITARY SEWER PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION AND INSTALLATION OF ALL UTILITY WORK.
- SEE STORM AND SANITARY PLAN AND PROFILE SHEETS FOR DETAILED INFORMATION.
- PWSO IS NOT RESPONSIBLE FOR THE MAINTENANCE OF PRIVATE STORM PIPE OR INFRASTRUCTURE.

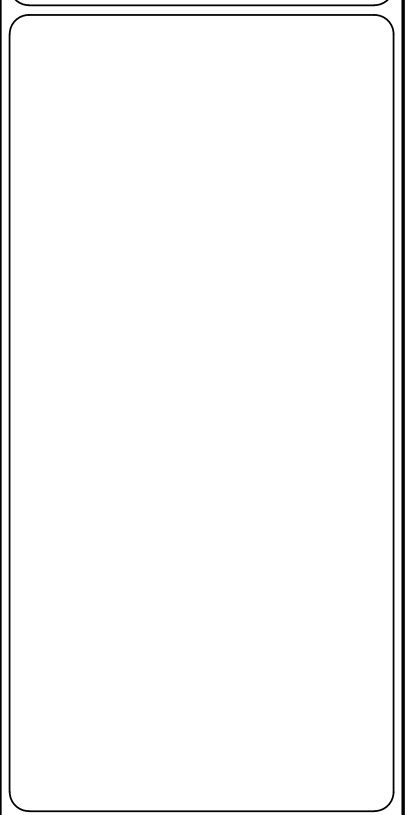
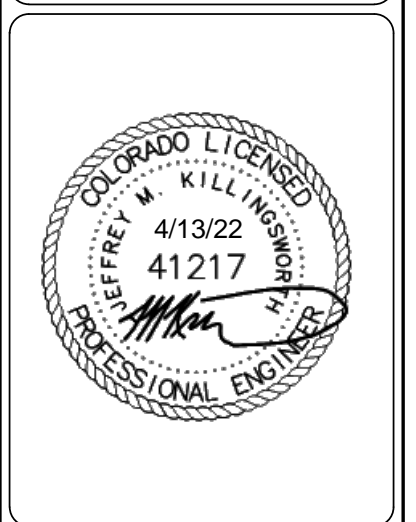
APPROVED
Jun 09 2022
PARKER WATER AND
SANITATION DISTRICT

P:\TWINSTAR\ENERGY\CO. PARKER - CHAMBERS & HESS\06\CAD\SITE PLAN\LOT 1\COVER SHEET.DWG

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Know what's below. Call before you dig.

No.	REVISION	BY	DATE

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 ENVIRONMENTAL
 SOLUTIONS, INC.
 501 S Cherry St, Suite 300
 Glenview, CO 80246
 303.972.7597 www.eesusa.com



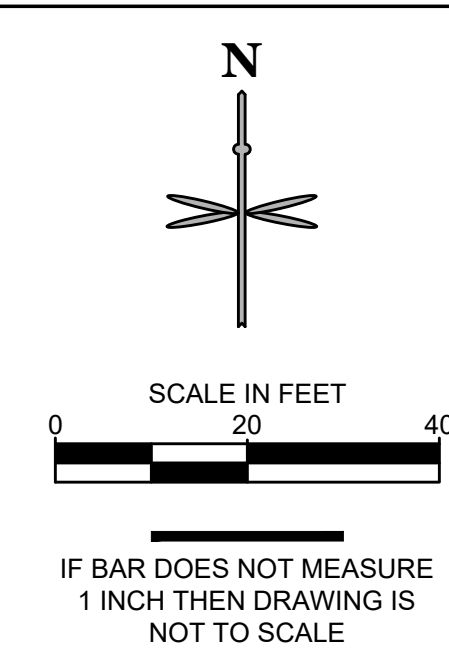
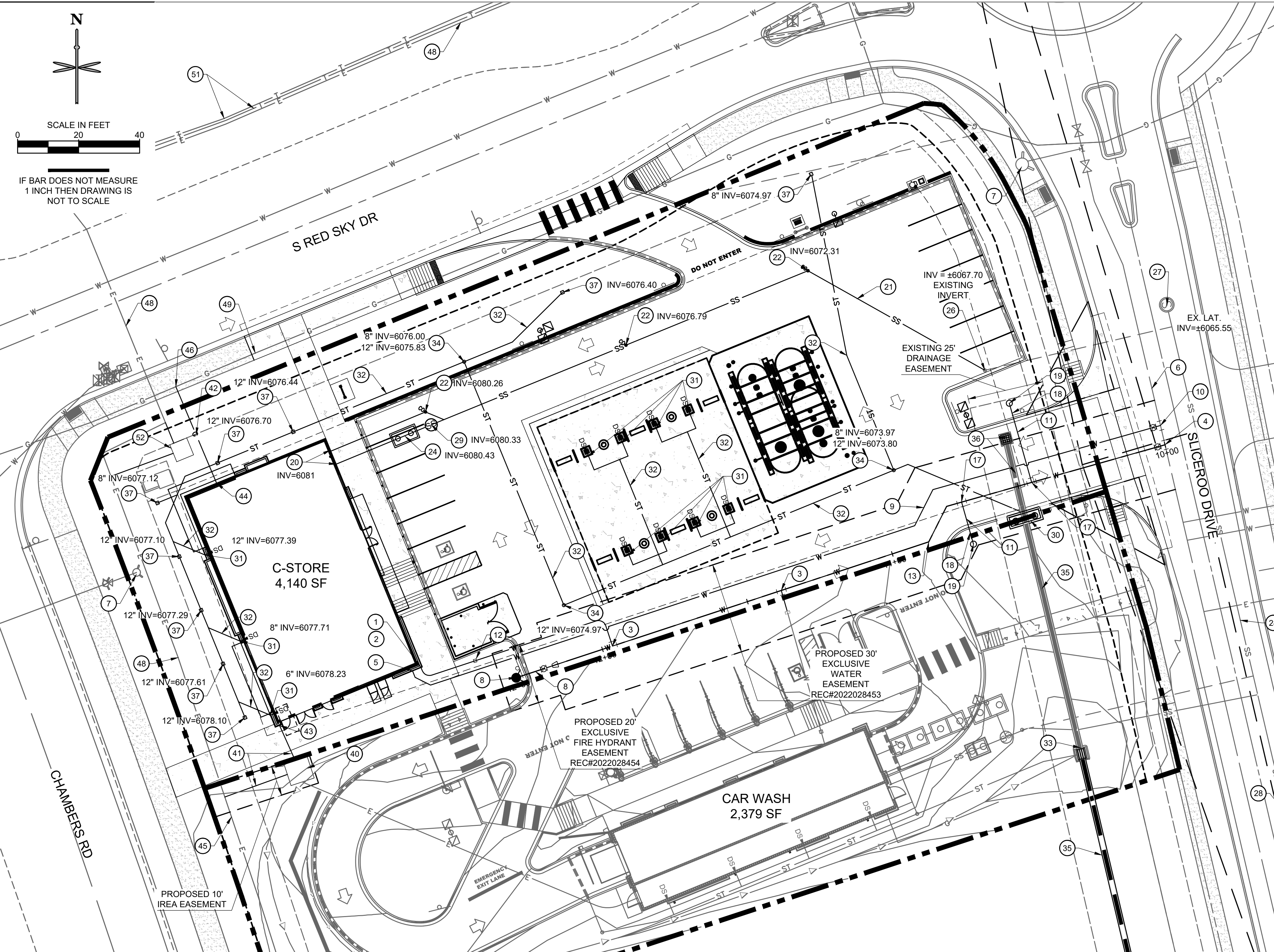
PWSO CONSTRUCTION PLANS LOT 1

CONVENIENCE STORE

12181 SLICEROO DRIVE, PARKER, CO 80134

PWSO STANDARD NOTES

PROJECT NO:	TWS015.01
DESIGNED BY:	LCG
DRAWN BY:	JLG
DATE:	4/12/2022
U0.1	



WATER

- 1 PROPOSED 1.5" TYPE K COPPER LINE (C-STORE), 2" (CAR WASH) DOMESTIC WATER CONNECTION TO BUILDING. STUB 5' OFF OF BUILDING. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION.
- 2 PROPOSED 1.5" DOMESTIC INTERIOR WATER METER (C-STORE), 2" INTERIOR WATER METER (CARWASH).
- 3 PR. 73 LF - 1.5" TYPE K COPPER LINE (C-STORE), 45 LF - 2" (CAR WASH) DOMESTIC WATER TAP.
- 4 PR. 8" X 8" TEE.
- 5 PROPOSED FDC WITH KNOX BOX.
- 6 8" PVC WATER MAIN BY MASTER DEVELOPER.
- 7 F.H. (EXISTING OR BY MASTER DEVELOPER).
- 8 PR. FIRE HYDRANT, 6" VALVE, 6"X8" REDUCER.
- 9 PR. ±267 LF 4" DIP FIRE LINE (PRIVATE). (VERIFY W/ MEP).
- 10 PR. 8" X 4" TS&V, 4" UFL DIP, 4" PLUG (BY OTHERS).
- 11 PR. 3/4" IRRIGATION LINE, VALVE, METER.
- 12 PR. 1.5" DOMESTIC CURB STOP (C-STORE), 2" DOMESTIC CURB STOP (CARWASH).
- 13 PR. ±217 LF 8" PVC FIRE LINE.
- 14 PR. ±13 LF 6" DIP LINE.
- 15 PR. 8"X1.5" TAPPING SLEEVE W/ SADDLE.
- 16 PR. 8"X2" TAPPING SLEEVE W/ SADDLE.
- 17 PR. 8"X3" TAPPING SLEEVE W/ SADDLE.
- 18 3/4" IRRIGATION CURB STOP VALVE + TRAFFIC-RATED COVER.
- 19 3/4" IRRIGATION METER PIT.

SANITARY SEWER

- 20 PROPOSED 4" SANITARY SEWER STUB 5 FEET OFF BUILDING. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION.
- 21 PROPOSED 4" PVC SDR 35 SANITARY SEWER SERVICE @ 2.1% SLOPE.
- 22 PROPOSED HS-20 TRAFFIC RATED SANITARY SEWER CLEANOUT.
- 23 PROPOSED 45" BEND W/ HS-20 TRAFFIC RATED SANITARY SEWER CLEANOUT.
- 24 PR. 1,200 GAL. GREASE INTERCEPTOR. (VERIFY W/ MEP).
- 25 PR. PRIVATE RECLAIM SYSTEM WITH SAND OIL INTERCEPTOR. (VERIFY W/ MEP).
- 26 PR. 4"X6" RED. CONN. TO EX. 6" SAN. STUB. C.O. ATG.
- 27 EXISTING SANITARY MANHOLE BY MASTER DEVELOPER.
- 28 EX. 8" PVC MAIN.
- 29 PROPOSED SAMPLING MANHOLE.

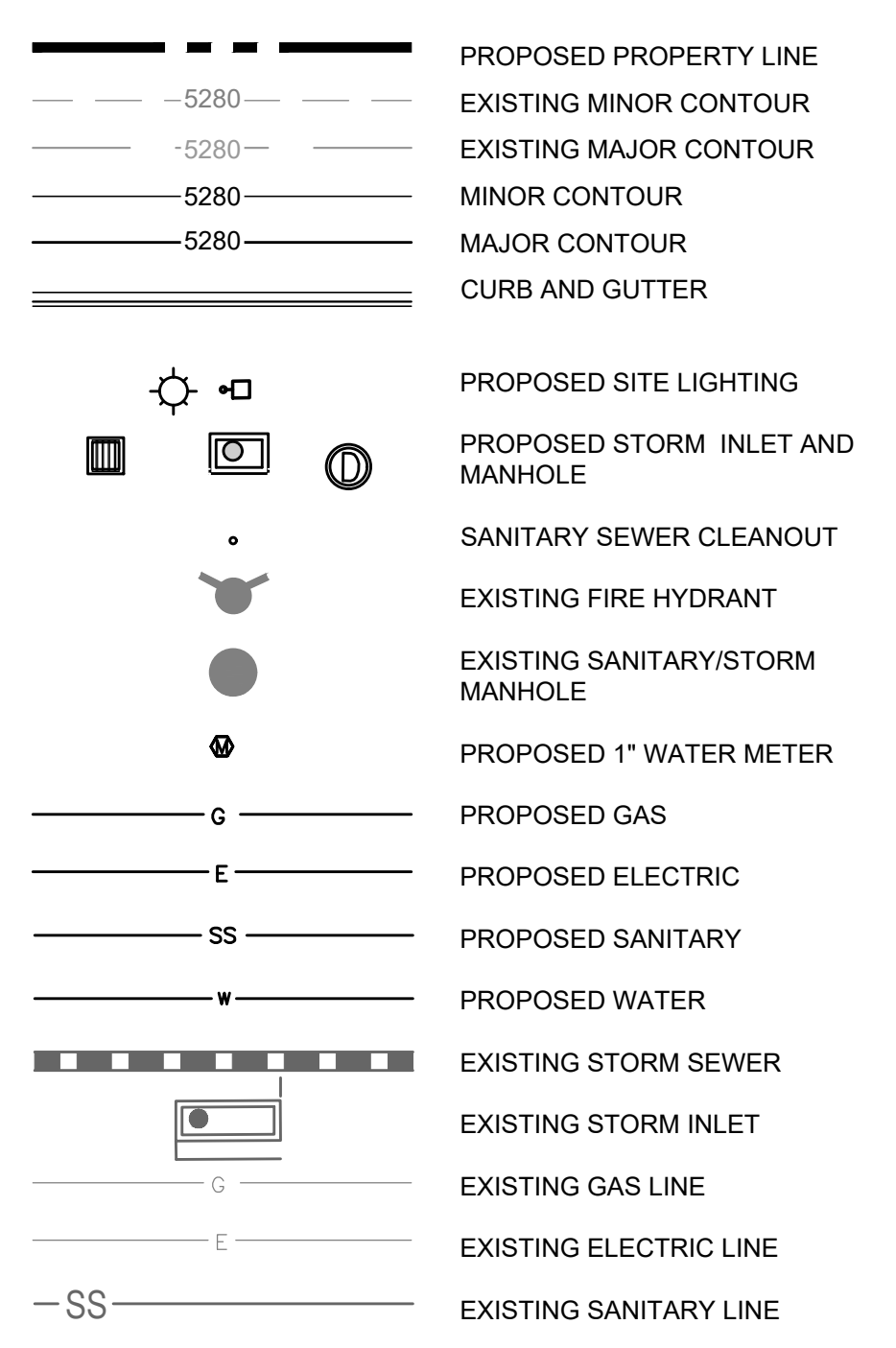
STORM SEWER

- 30 PROPOSED PRIVATE CDOT 10' TYPE R INLET. CONNECTION TO EXISTING PRIVATE STORM SEWER PROVIDED BY BY MASTER DEVELOPER. CONTRACTOR TO VERIFY INVERTS AND NOTIFY ENGINEER OF ANY DISCREPANCY. SEE SHEET C3.0 FOR INVERTS.
- 31 PROPOSED DOWNSPOUT LOCATION.
- 32 PROPOSED BURIED DOWNSPOUT. SEE SHEET C3.1.
- 33 EXISTING PRIVATE STORM SEWER, INLET OR MANHOLE BY MASTER DEVELOPER. PROTECT IN PLACE.
- 34 PROPOSED STORM CLEANOUT.
- 35 PRIVATE 18" STORM SEWER PIPE BY MASTER DEVELOPER. PROTECT IN PLACE.
- 36 PRIVATE STORM SEWER OR INLET BY MASTER DEVELOPER TO BE REMOVED.
- 37 PROPOSED PRIVATE LANDSCAPE DRAIN.

DRY UTILITIES

- 40 PROPOSED 8" X 8" ELECTRICAL TRANSFORMER PAD. REFER TO MEP PLANS FOR TRANSFORMER DESIGN UNDER SEPARATE COVER.
- 41 PROPOSED ELECTRIC LINE. (APPROXIMATE LOCATION, CONTRACTOR TO COORDINATE WITH PROJECT MEP AND UTILITY COMPANY PRIOR TO ANY CONSTRUCTION).
- 42 PROPOSED GAS LINE. (APPROXIMATE LOCATION, CONTRACTOR TO COORDINATE WITH PROJECT MEP AND UTILITY COMPANY PRIOR TO ANY CONSTRUCTION).
- 43 PROPOSED ELECTRICAL METER. (LOCATION FOR REFERENCE ONLY).
- 44 PROPOSED GAS METER. (LOCATION FOR REFERENCE ONLY).
- 45 PROPOSED ELECTRIC LINE CONNECTION TO EXISTING LINE. (LOCATION FOR REFERENCE ONLY).
- 46 PROPOSED GAS LINE CONNECTION TO EXISTING LINE. (LOCATION FOR REFERENCE ONLY).

UTILITY LEGEND

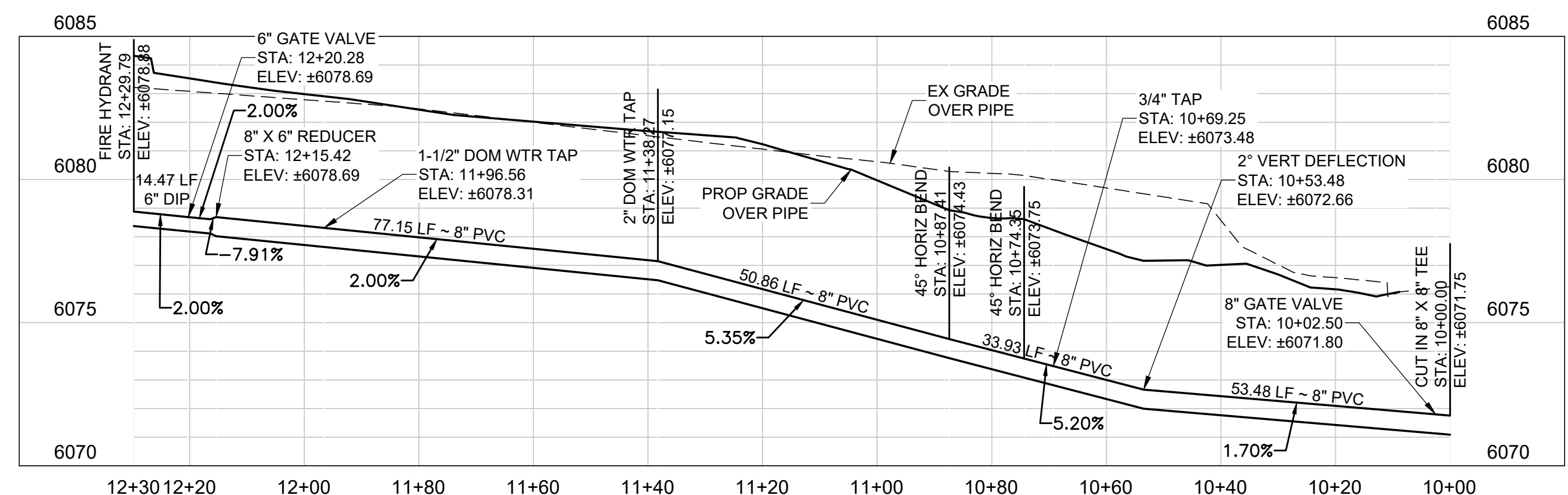


UTILITY NOTES:

1. CONSTRUCT ALL WET UTILITIES IN ACCORDANCE WITH THE TOWN OF PARKER STANDARDS AND DETAILS.
2. ALL PROPOSED EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
3. THE MINIMUM SEPARATION BETWEEN WATERLINES, SANITARY SEWER AND STORM SEWER LINES IS 10 FEET.
4. THE MINIMUM SEPARATION BETWEEN WATER SERVICE LINES IS 3 FEET.
5. THE SITE IS LOCATED WITHIN THE TOWN OF PARKER WATER PRESSURE ZONE.
6. THE CONTRACTOR SHALL NOTIFY ENGINEER AND FIELD VERIFY TYPE, SIZE, AND LOCATION OF EXISTING UTILITIES PRIOR TO UTILITY CONSTRUCTION.
7. THE CONTRACTOR SHALL NOTIFY THE TOWN OF PARKER OF ANY WORK THAT IS REQUIRED SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS TWO WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY THE UTILITIES DEPARTMENT.

DRY UTILITIES CONT.:

- 47 PROPOSED LIGHT POLE, BASE AND FIXTURE (SEE PHOTOMETRIC PLAN UNDER SEPARATE COVER).
- 48 EXISTING UNDERGROUND ELECTRIC.
- 49 EXISTING UNDERGROUND GAS LINE.
- 50 EXISTING UNDERGROUND COMMUNICATION LINE.
- 51 EXISTING TELECOMMUNICATION LINE.
- 52 PROPOSED SWITCH CABINET.



PROFILE Waterline (STA: 10+00 TO 12+30)

SCALES: 1"=20' HORIZONTAL, 1"=4' VERTICAL

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] 06/02/2022
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.)

APPROVED
Jun 09 2022
**PARKER WATER AND
SANITATION DISTRICT**

PITWINSTAR ENERGY CO., PARKER, CHAMBERS & HESS/DM CAD/SITE PLANNING UTILITY PLAN.DWG

811
Know what's below.
Call before you dig.

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987 or 811

CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

DATE	
BY	
REVISION	
No.	

EES
ENGINEERING AND
CONSTRUCTION
SOLUTIONS, INC.
501 S Cherry St, Suite 300
Greeley, CO 80636
970.772.7597 www.eesusa.com

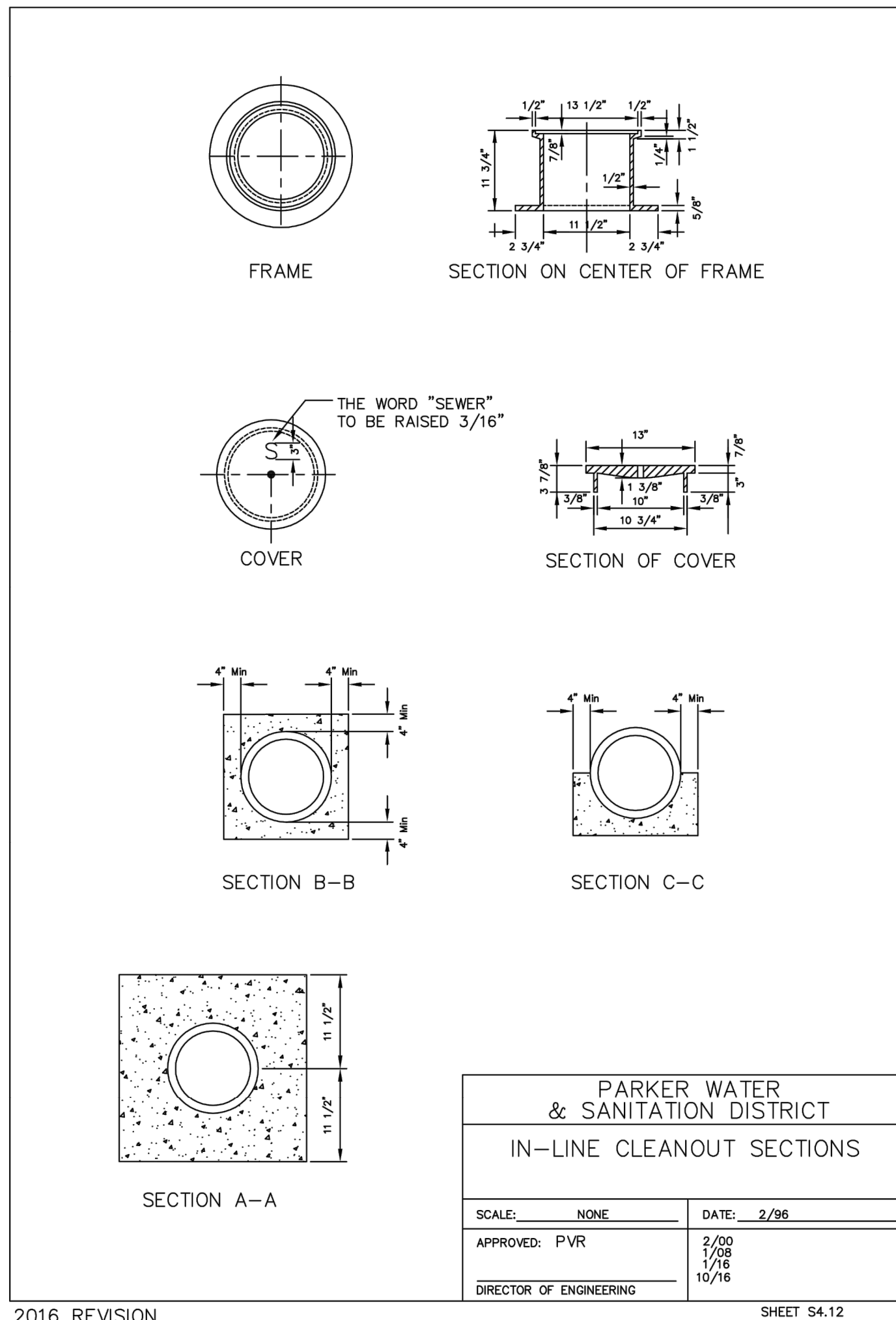
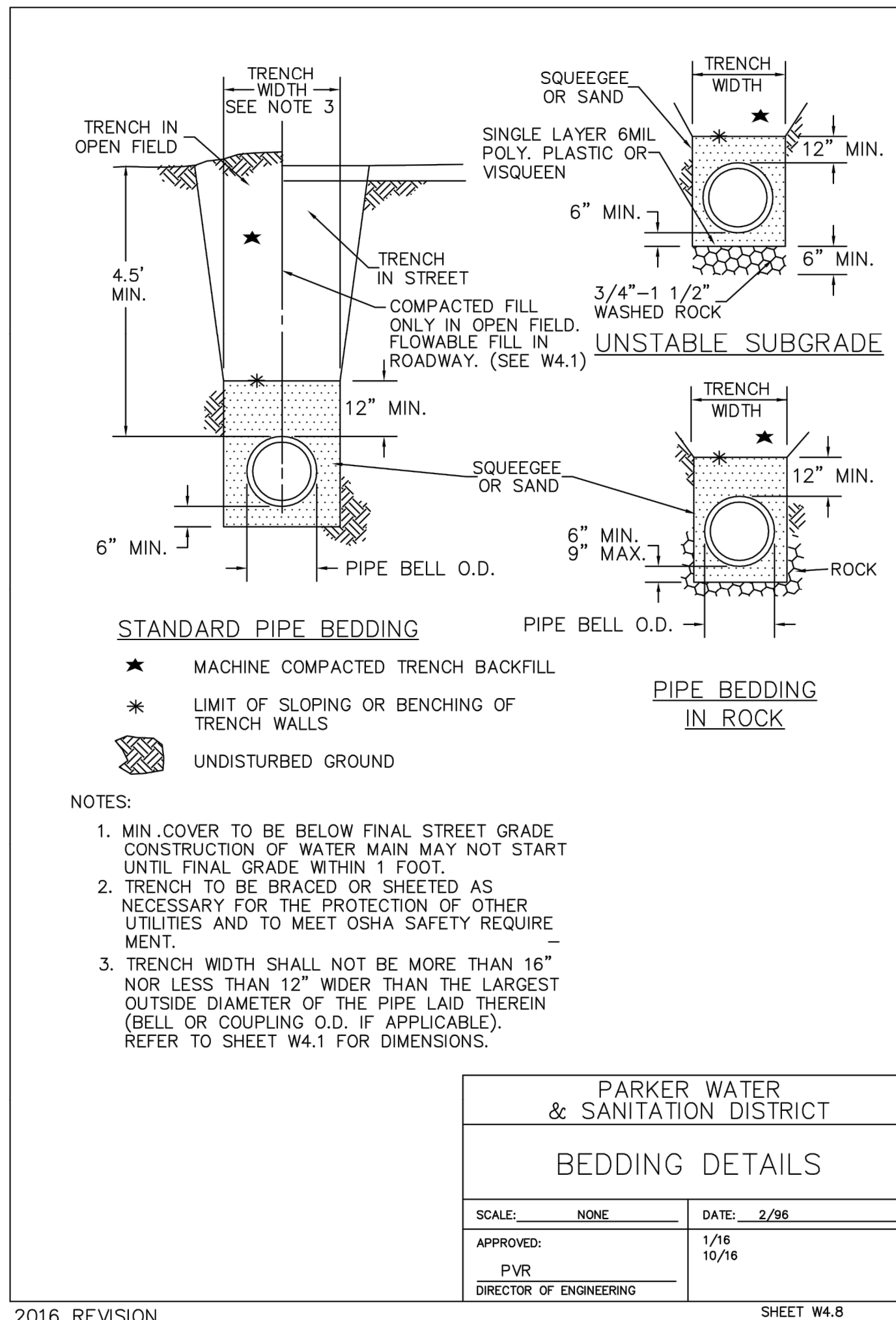
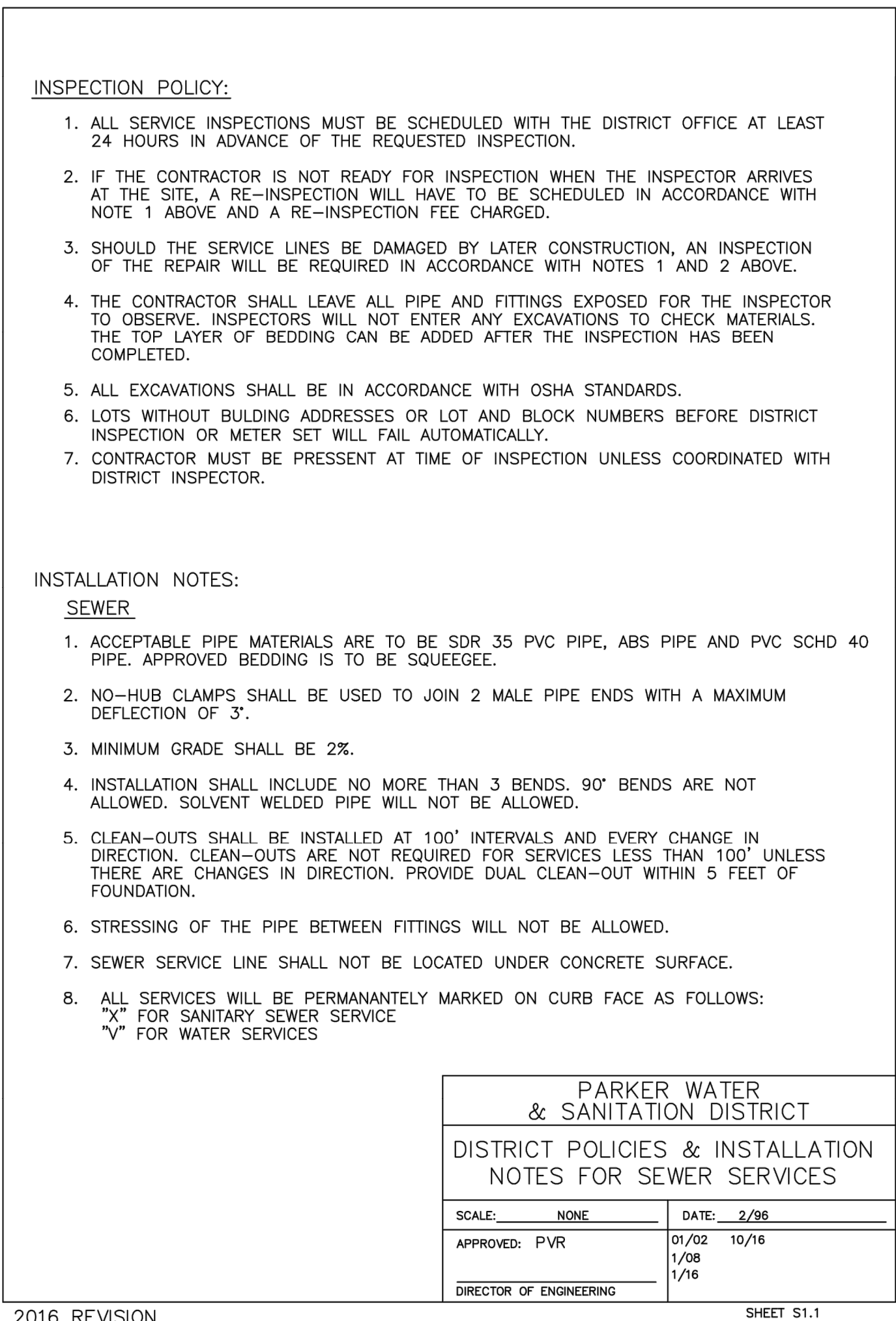
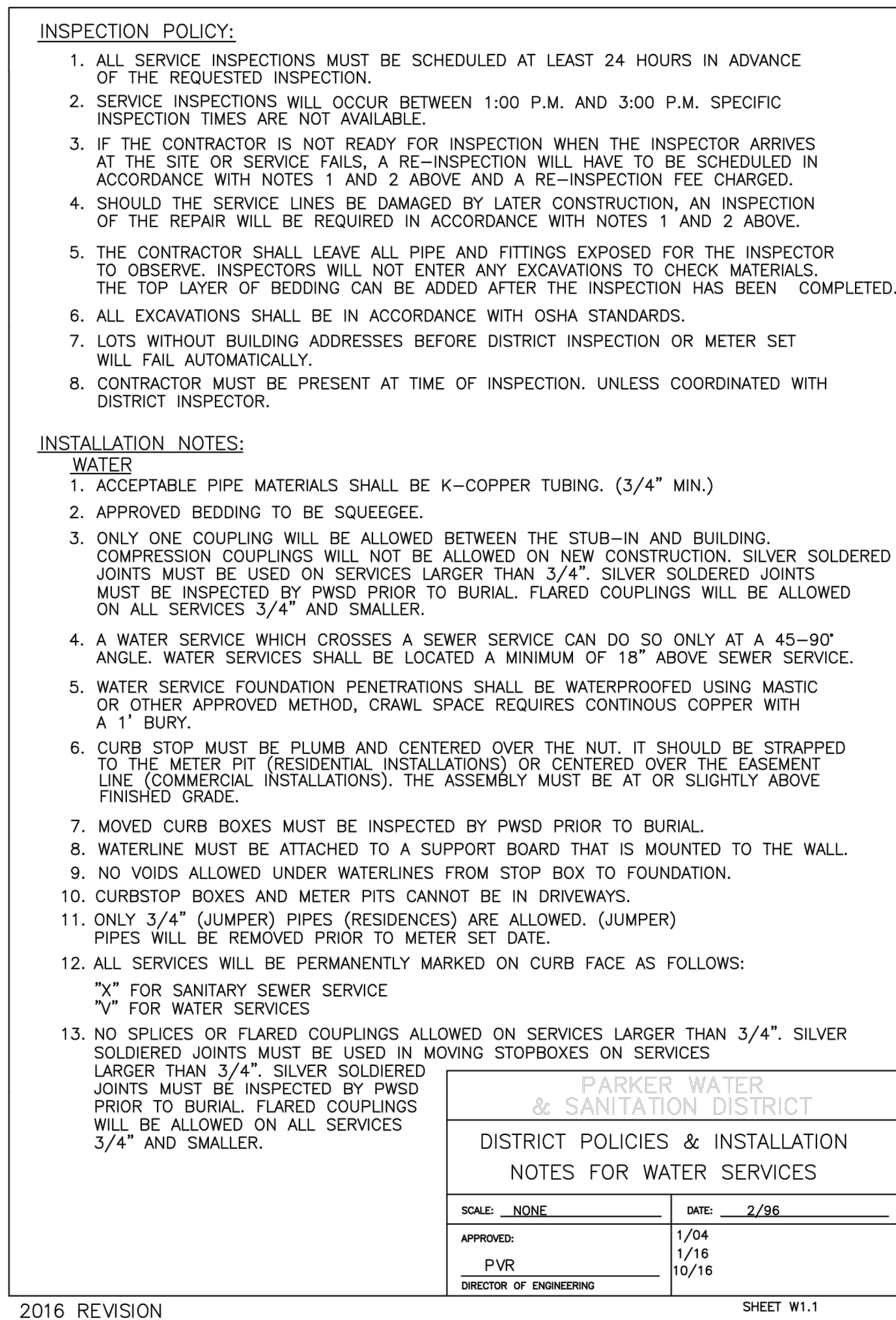
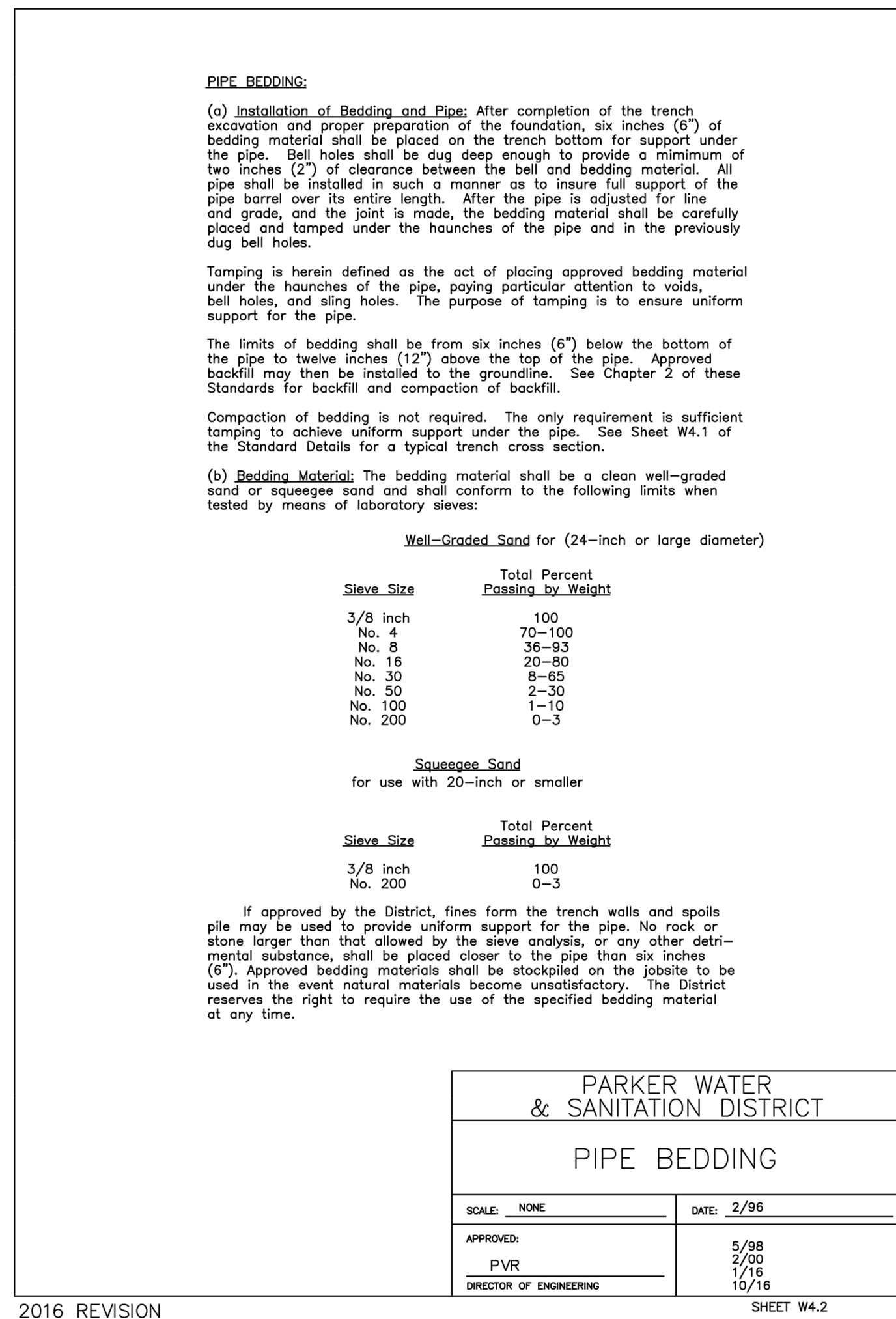
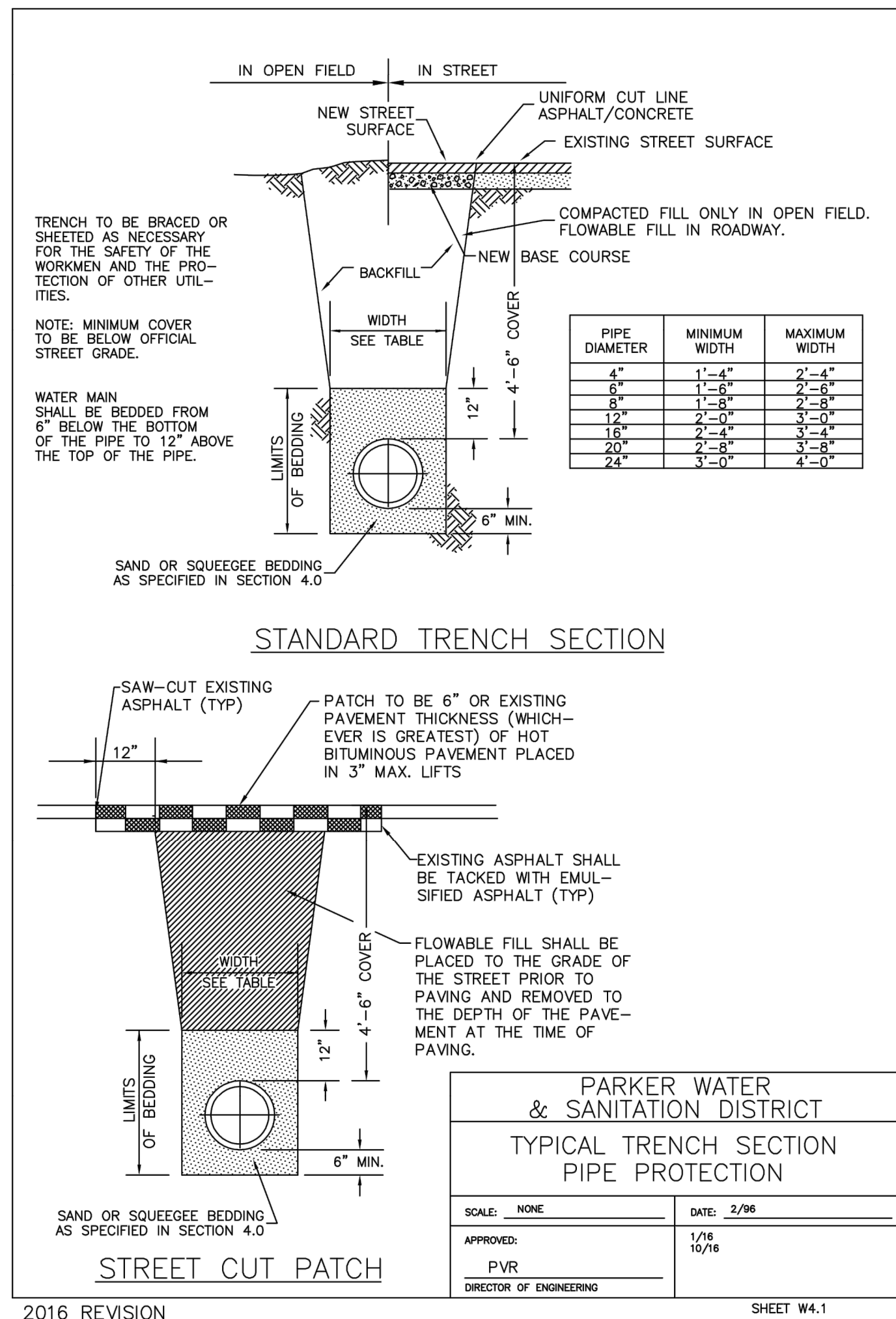
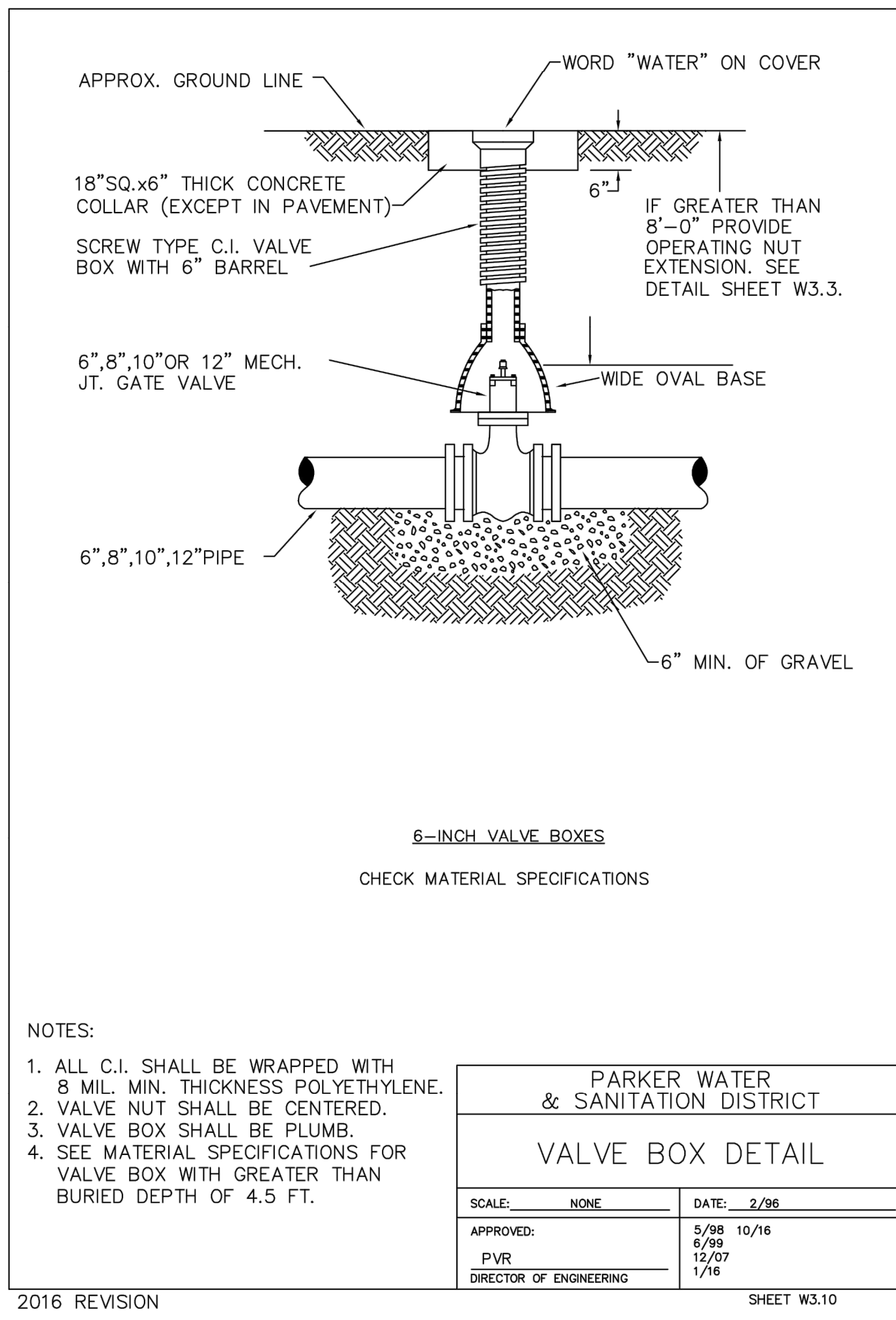
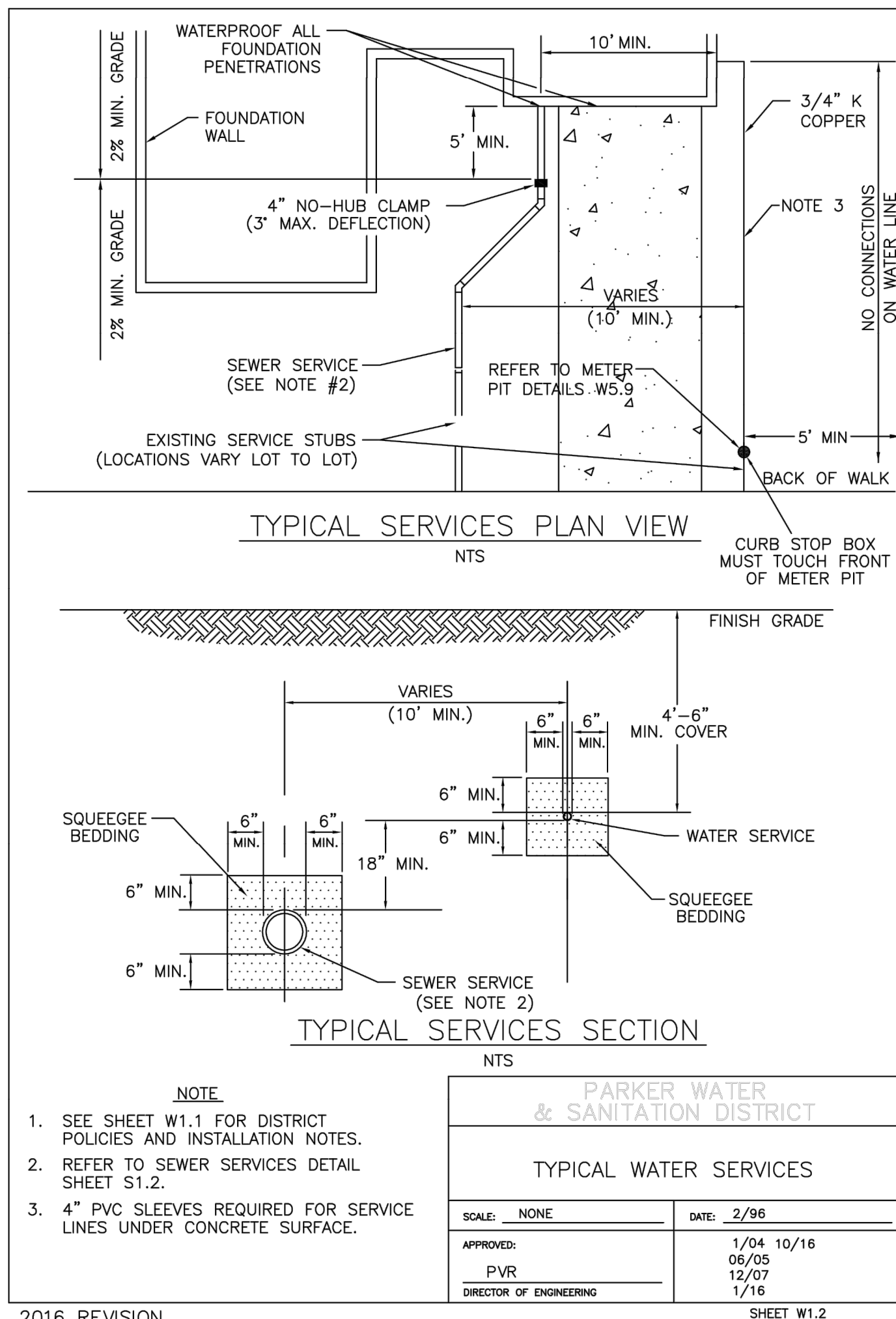
JEFFREY A. KILL
41322
41217
PROFESSIONAL ENGINEER

**PUSD CONSTRUCTION PLANS LOT 1
CONVENIENCE STORE
12181 SLICEROO DRIVE, PARKER, CO 80134
UTILITY PLAN**

PROJECT NO:	TWS015.01
DESIGNED BY:	LCG
DRAWN BY:	JLG
DATE:	4/12/2022

U1.0

TOWN OF PARKER, DIRECTOR OF ENGINEERING/PUBLIC WORKS DATE



DATE: _____

BY: _____

REVISION: _____

No. _____

EES
ENGINEERING AND
SOLUTIONS, INC.
501 S Cherry St, Suite 300
Glenville, CO 80246
303.572.7597 www.eesusa.com

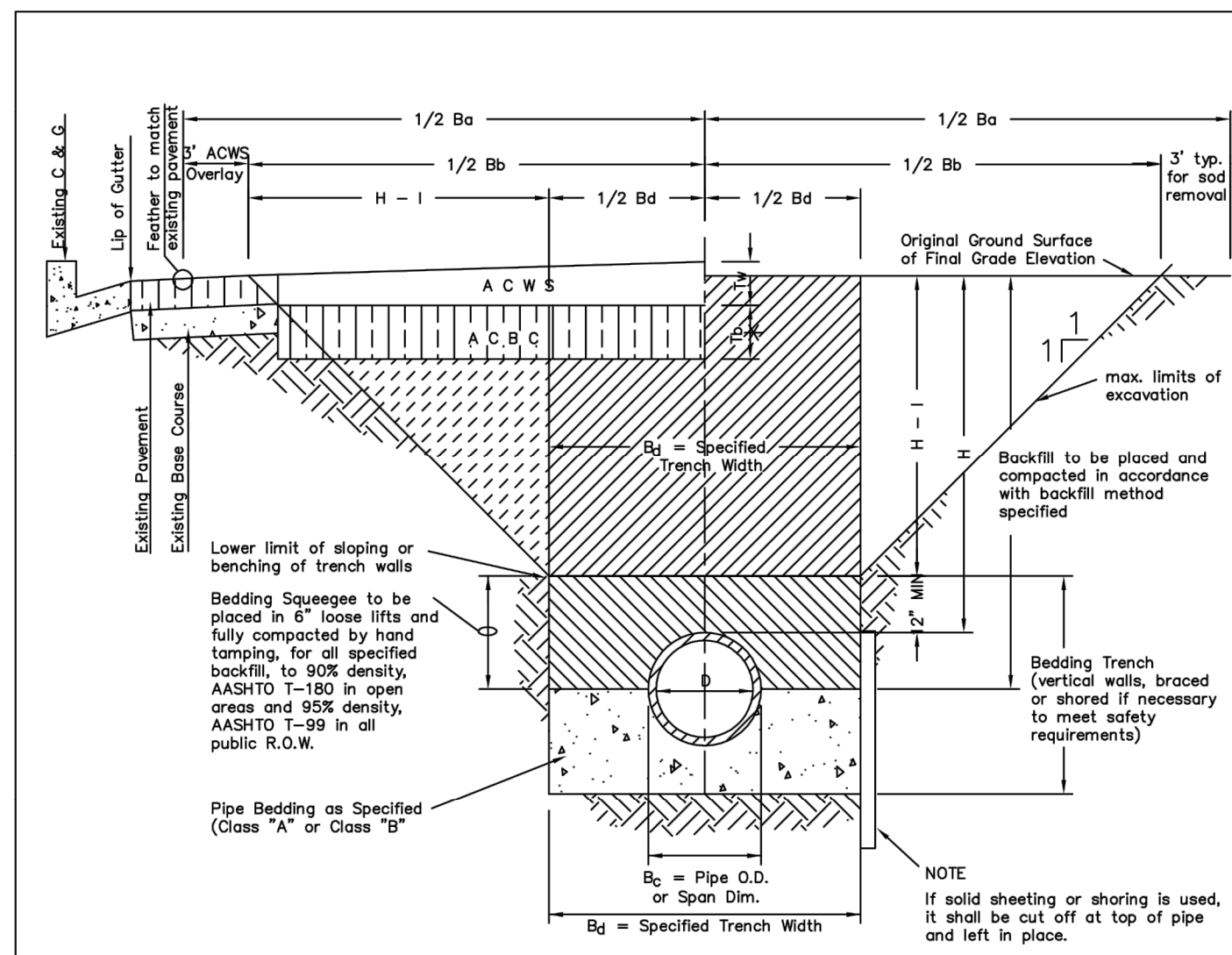
PROFESSIONAL ENGINEER
4/13/22
41217

APPROVED
Jun 09 2022
PARKER WATER AND
SANITATION DISTRICT

PWSO CONSTRUCTION PLANS LOT 1
CONVENIENCE STORE
12181 SLICEROOD DRIVE, PARKER, CO 80134
WATER & SANITARY SEWER DETAILS

PROJECT NO.: TWS015.01
DESIGNED BY: LCG
DRAWN BY: JLG
DATE: 4/12/2022

U2.0



TYPICAL TRENCH DETAIL

NOTES

1. Sloping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.
2. Trench shall be braced and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, etc. Unless otherwise specified on the plans, no pavement will be made for removal, replacement or relocation of curb and gutter, utilities, sidewalks, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.
3. If dimension "B₂" is $c \le 5'$, then existing asphalt pavement shall be removed and replaced up to the gutter. Maximum asphalt pay width, B₂ & B₃, shall then be based upon this actual width.

TABLE II
ASPHALT AND BASE COURSE REPLACEMENT SCHEDULE

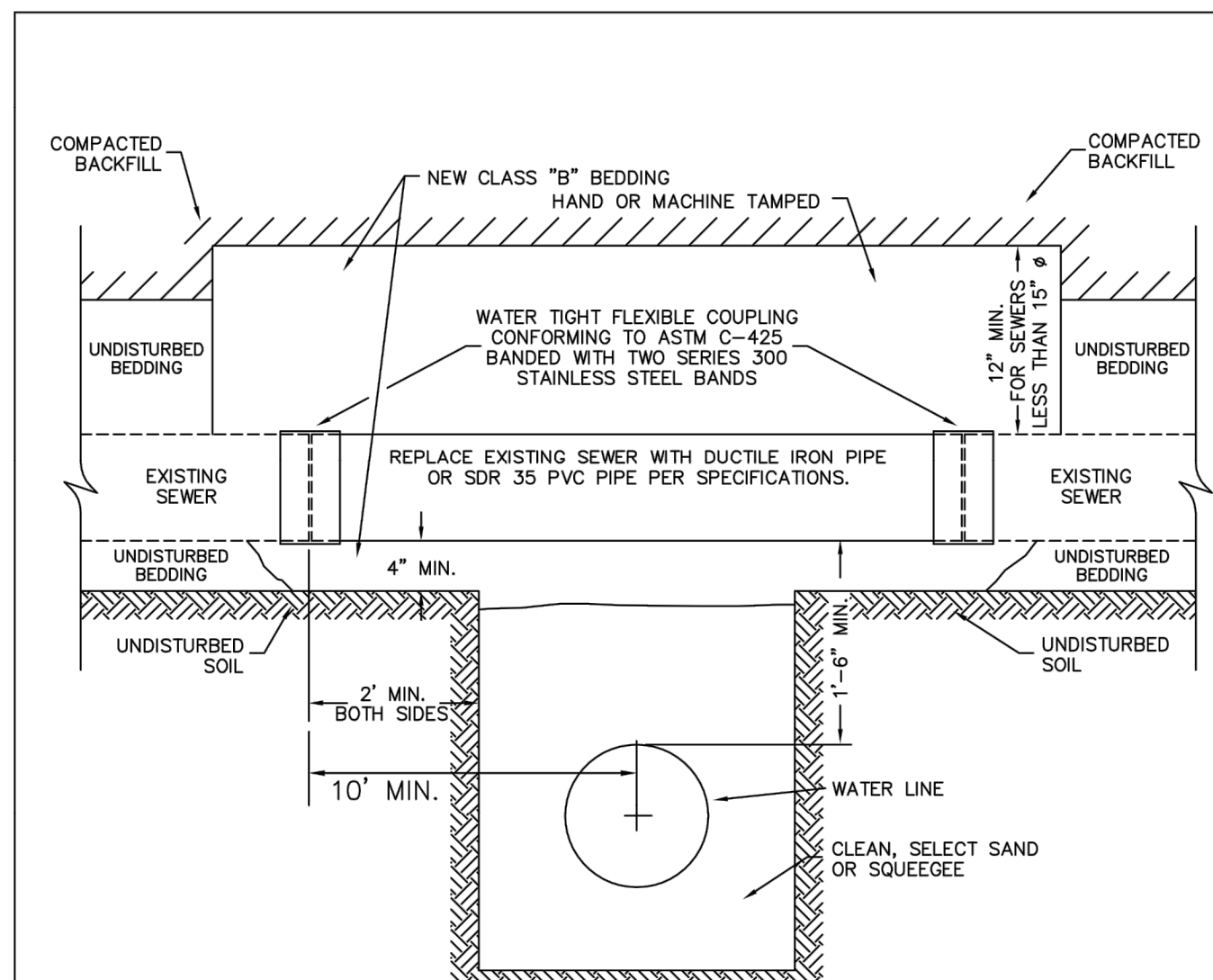
STREET WIDTH	ASPHALTIC BASE COURSE (T ₁)	ASPHALTIC WEARING SURFACE (T ₂)	TOTAL THICKNESS (T ₁ + T ₂)
UP TO 36'	4"	2"	6"
36' TO 44'	4"	3"	7"
44' TO 48'	5"	3"	8"
WIDER THAN 48'	6"	3"	9"

PARKER WATER & SANITATION DISTRICT
SEWER TRENCHING AND BEDDING DETAIL

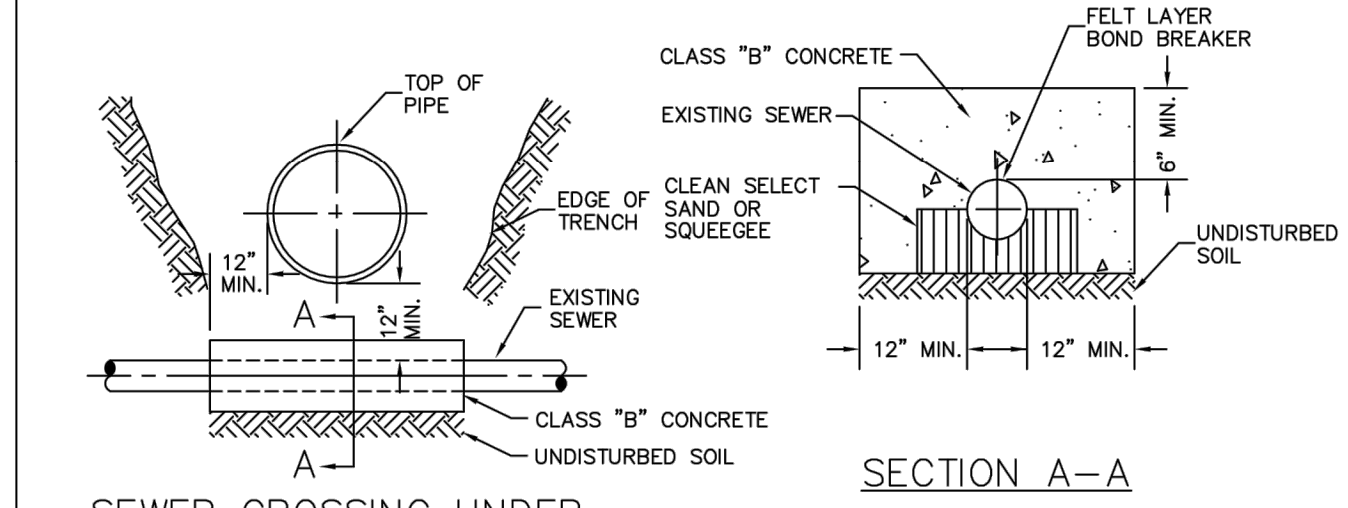
SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98 1/16 10/16
DIRECTOR OF ENGINEERING

SHEET S4.1



TYPICAL SERVICES PLAN VIEW



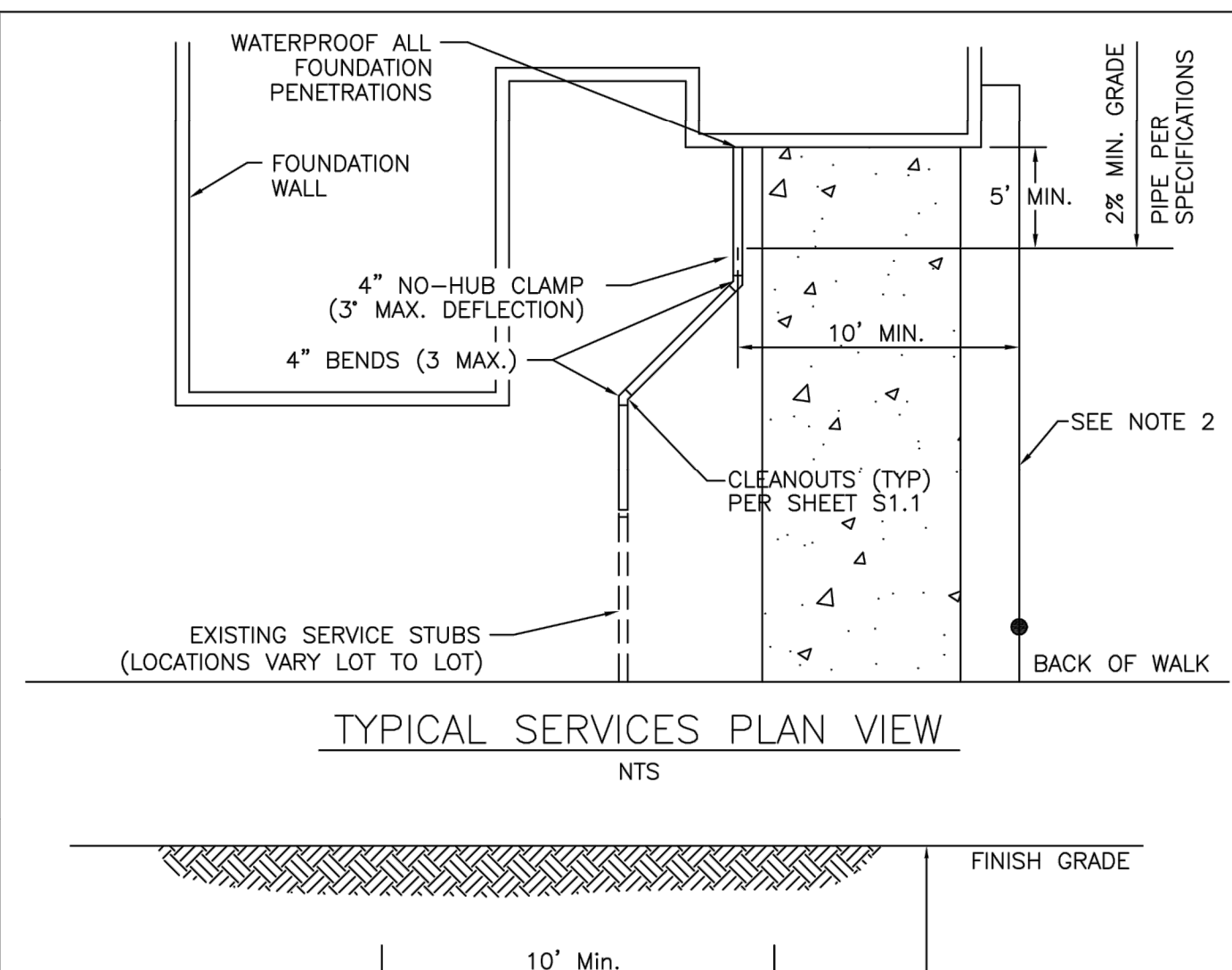
SECTION A-A

PARKER WATER & SANITATION DISTRICT
CROSSING STORM & SANITARY SEWERS

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16 10/16
DIRECTOR OF ENGINEERING

SHEET W4.7



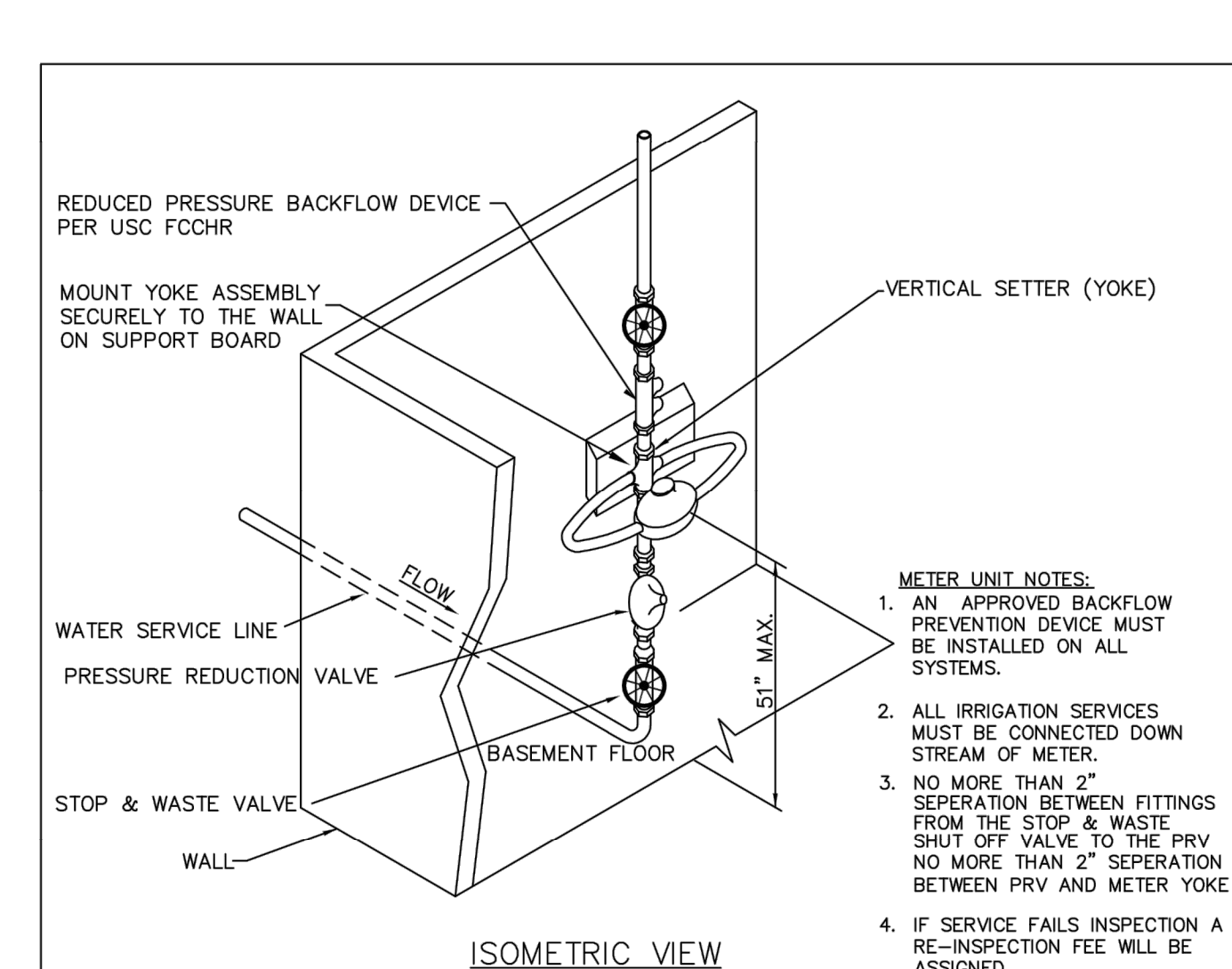
TYPICAL SERVICES SECTION

PARKER WATER & SANITATION DISTRICT
TYPICAL SEWER SERVICES

SCALE: NONE DATE: 2/96

APPROVED: PVR 2/00 01/02 01/16 10/16
DIRECTOR OF ENGINEERING

SHEET S1.2



ISOMETRIC VIEW

PARKER WATER & SANITATION DISTRICT
SERVICE LINE, STOP BOX & INSIDE METER SETTING (COMMERCIAL ONLY)

SCALE: NONE DATE: 2/96

APPROVED: PVR 01/04 10/16 06/05 1/16
DIRECTOR OF ENGINEERING

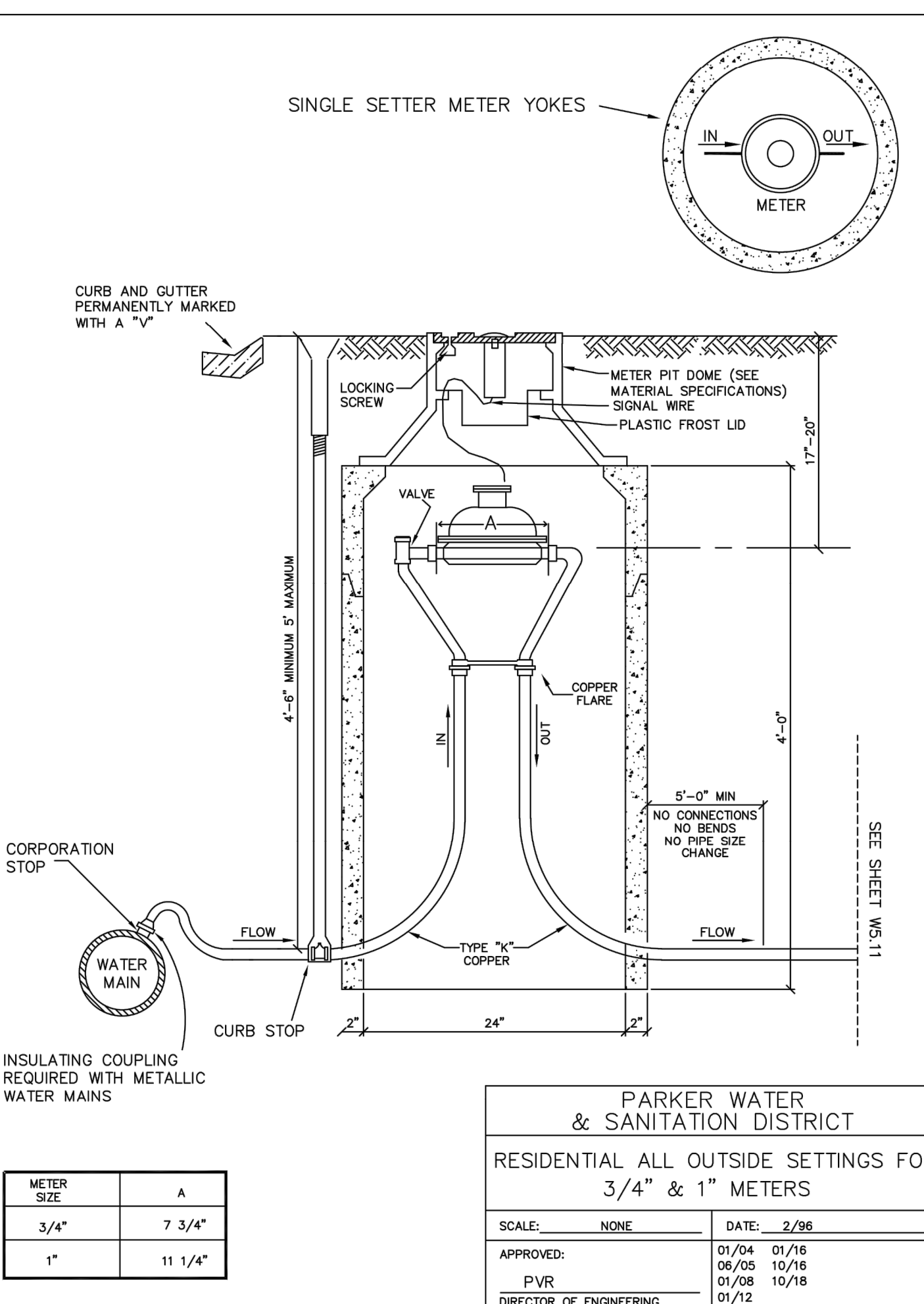
SHEET W5.9

2016 REVISION

2016 REVISION

2016 REVISION

2016 REVISION



SINGLE SETTER METER YOKES

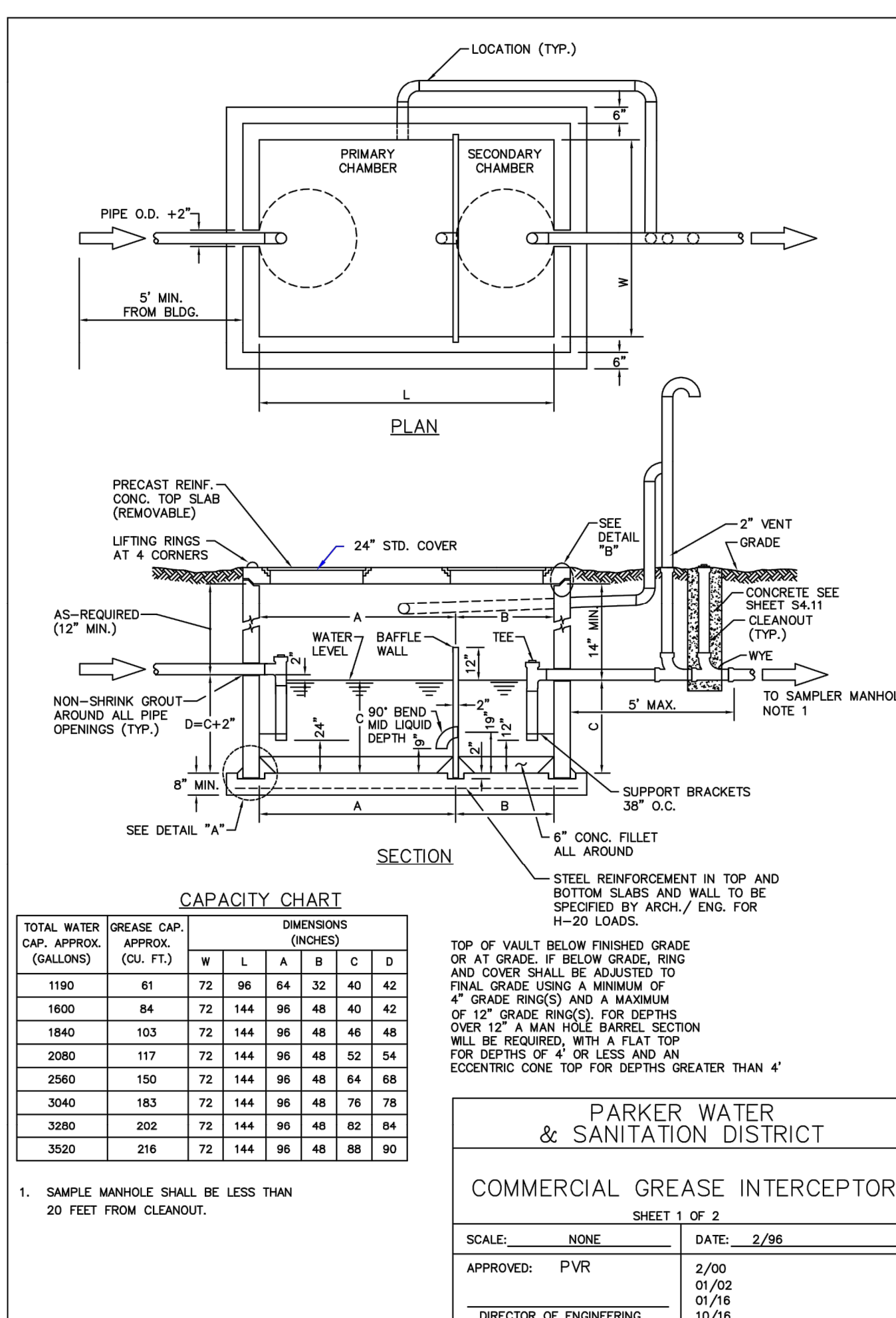
PARKER WATER & SANITATION DISTRICT
RESIDENTIAL ALL OUTSIDE SETTINGS FOR 3/4\"/>

SCALE: NONE DATE: 2/96

APPROVED: PVR 01/04 01/16 06/05 10/16 01/08 10/18 01/12
DIRECTOR OF ENGINEERING

SHEET W5.10

2018 REVISION



PLAN

SECTION

PARKER WATER & SANITATION DISTRICT
COMMERCIAL GREASE INTERCEPTOR

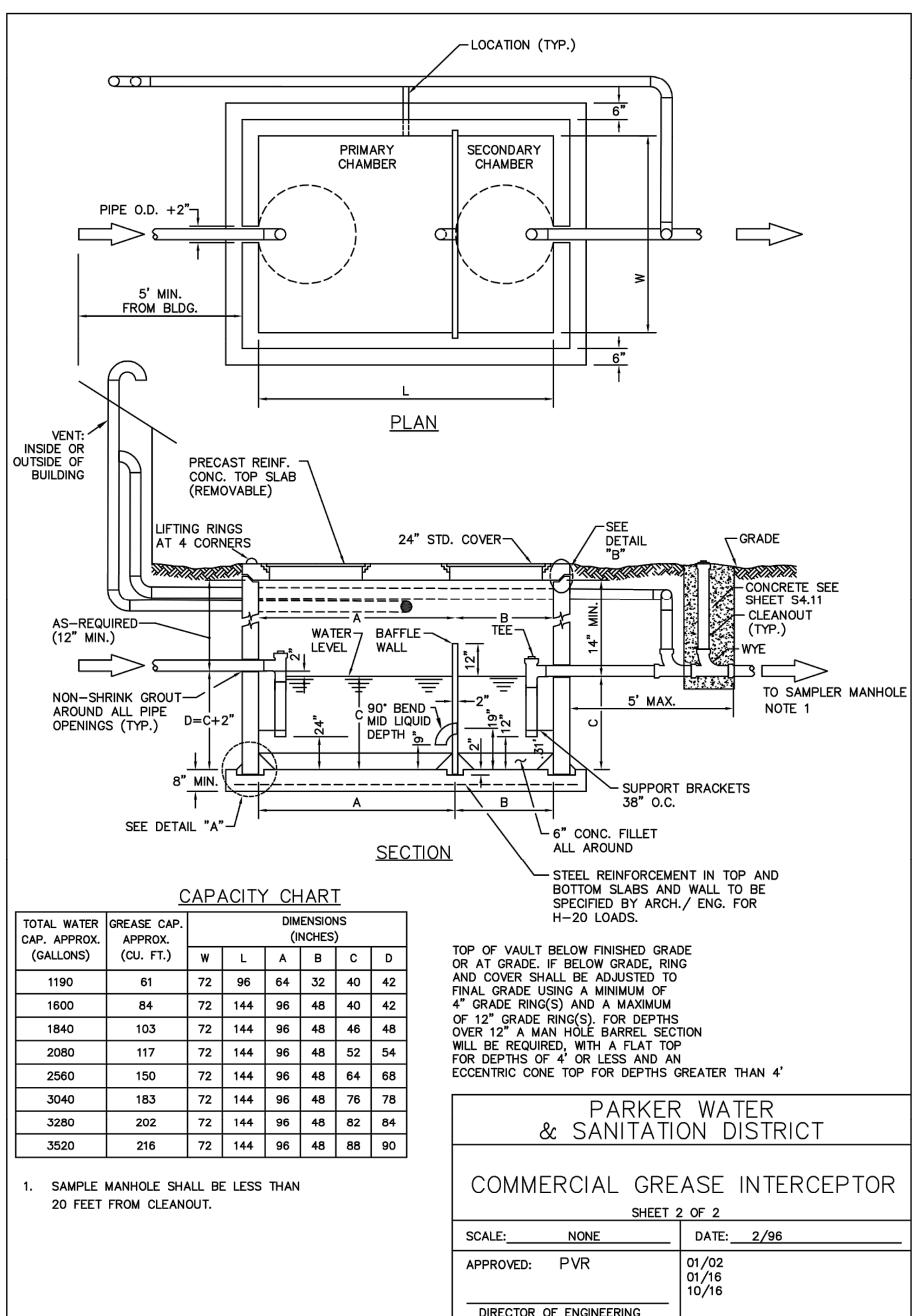
SCALE: NONE DATE: 2/96

APPROVED: PVR 2/00 01/02 01/16 10/16
DIRECTOR OF ENGINEERING

SHEET 1 OF 2

1. SAMPLE MANHOLE SHALL BE LESS THAN 20 FEET FROM CLEANOUT.

2016 REVISION



PLAN

SECTION

PARKER WATER & SANITATION DISTRICT
COMMERCIAL GREASE INTERCEPTOR

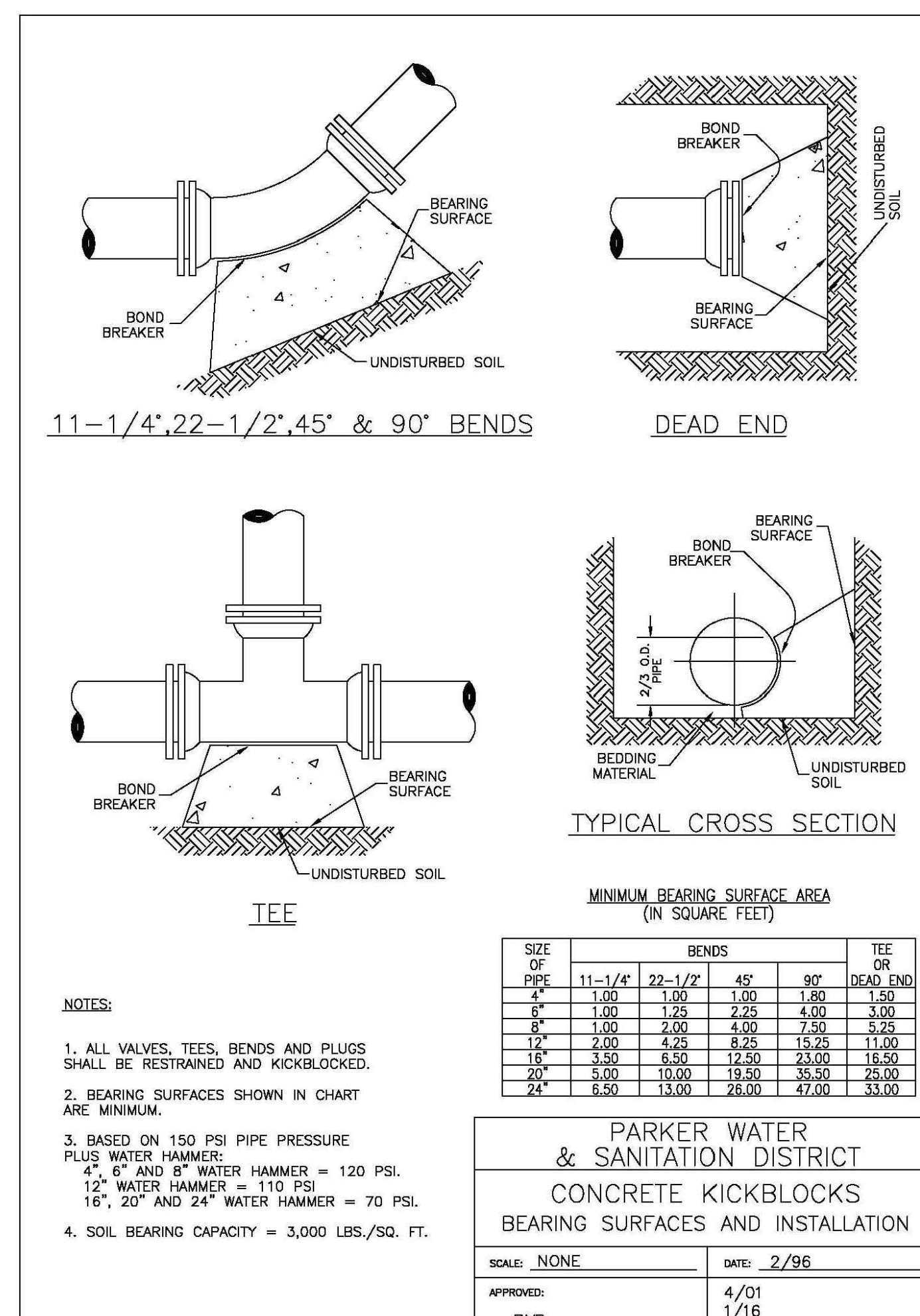
SCALE: NONE DATE: 2/96

APPROVED: PVR 2/00 01/02 01/16 10/16
DIRECTOR OF ENGINEERING

SHEET 2 OF 2

1. SAMPLE MANHOLE SHALL BE LESS THAN 20 FEET FROM CLEANOUT.

2016 REVISION



11-1/4\", 22-1/2\", 45\"/>

DEAD END

TYPICAL CROSS SECTION

PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS BEARING SURFACES AND INSTALLATION

SCALE: NONE DATE: 2/96

APPROVED: PVR 4/01 1/16 10/16
DIRECTOR OF ENGINEERING

SHEET W3.18

1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RESTRAINED AND KICKBLOCKED.

2. BEARING SURFACES SHOWN IN CHART ARE MINIMUM.

3. BASED ON 150 PSI PIPE PRESSURE PLUS WATER HAMMER:
4\"/>

2016 REVISION

DATE: _____

BY: _____

REVISION: _____

No. _____

EES
ENGINEERING AND SOLUTIONS, INC.
501 S Cherry St, Suite 300
Glenview, CO 80246
303.972.7597 www.eesusa.com

PROFESSIONAL ENGINEER

APPROVED
Jun 09 2022
PARKER WATER AND SANITATION DISTRICT

PWD CONSTRUCTION PLANS LOT 1
CONVENIENCE STORE
12181 SLICEROOD DRIVE, PARKER, CO 80134

WATER & SANITARY SEWER DETAILS

PROJECT NO.: TWS015.01
DESIGNED BY: LCG
DRAWN BY: JLG
DATE: 4/12/2022

U2.1