

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

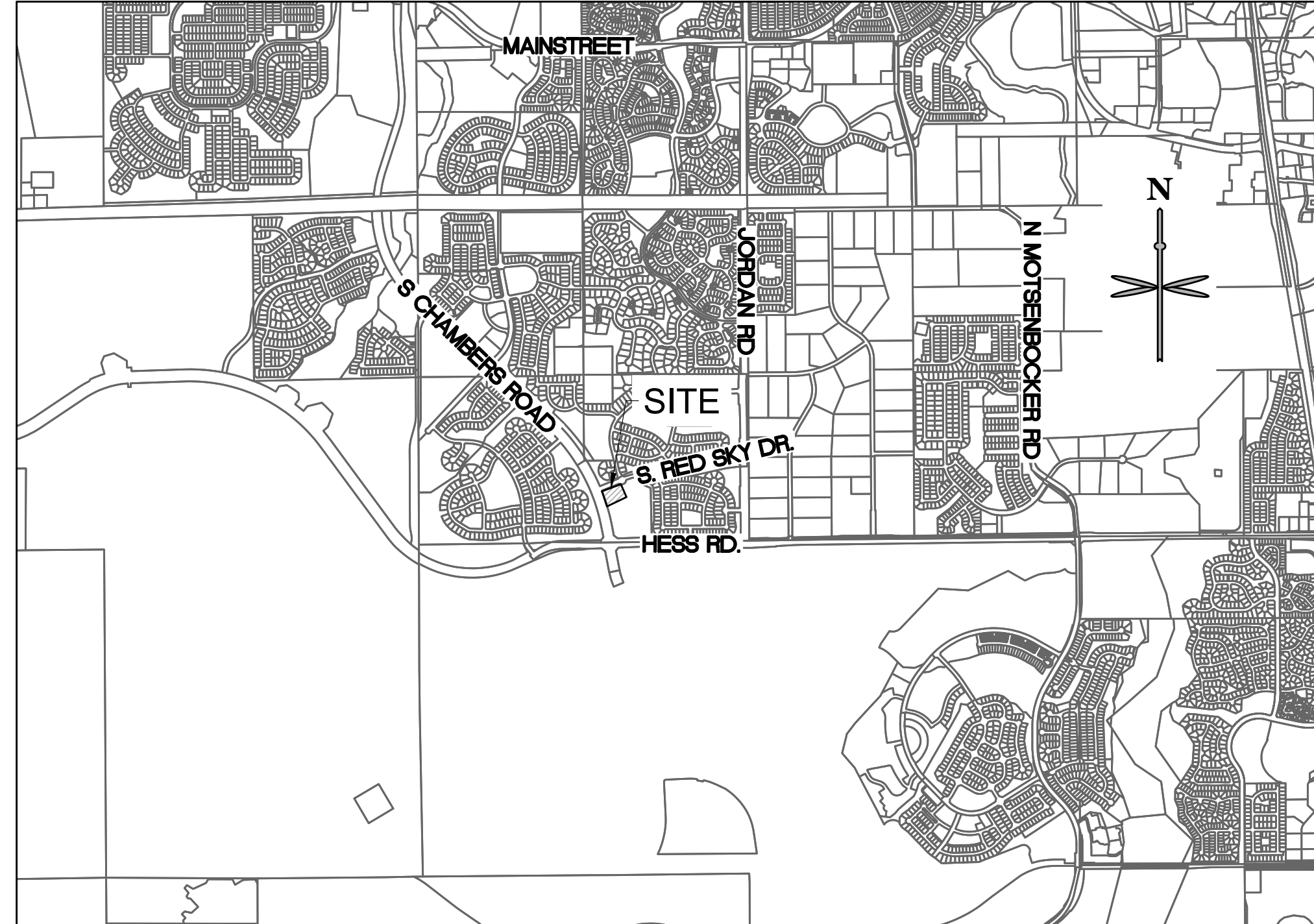
SOUTH METRO FIRE RESCUE AUTHORITY
9195 E. MINERAL AVE.
CENTENNIAL, CO 80112
ATTN: RANDY CAPRA
P: (303) 805-3169

TOWN OF PARKER PLAN REVIEW

20120 E. MAINSTREET
PARKER, CO 80138
ATTN: BRIEANNA 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'

PWSD MATERIALS LIST*

- HYDRANT:
- 1 EA. - HYDRANT
 - 1 EA. - GATE VALVE
 - 95 LF - 6" DIP
 - 1 EA. - TAPPING SLEEVE + VALVE AT 8" WATER MAIN
- BUILDING FIRE PROTECTION
- 139 LF - 4" DIP
 - 1 EA. - 6"X4" REDUCER
 - 1 EA. - TAPPING SLEEVE + VALVE AT 8" WATER MAIN
- DOMESTIC WATER
- 124 LF - 1" COPPER
 - TAPPING SLEEVE + VALVE AT 8" WATER MAIN
- SANITARY SERVICE
- 128 LF - 4" PVC
 - 1 EA. - SAMPLING MH

*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	PWSD 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.

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

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____
(DISTRICT REPRESENTATIVE)

DATE: _____

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____

DATE: _____

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 NFPA 24 when submitting for review.)

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
PWSD 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:	1/19/2022	
<h1>U0.0</h1>		

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 SEWER SERVICES, "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.
16. 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.

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



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

Know what's below.
Call before you dig.

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.

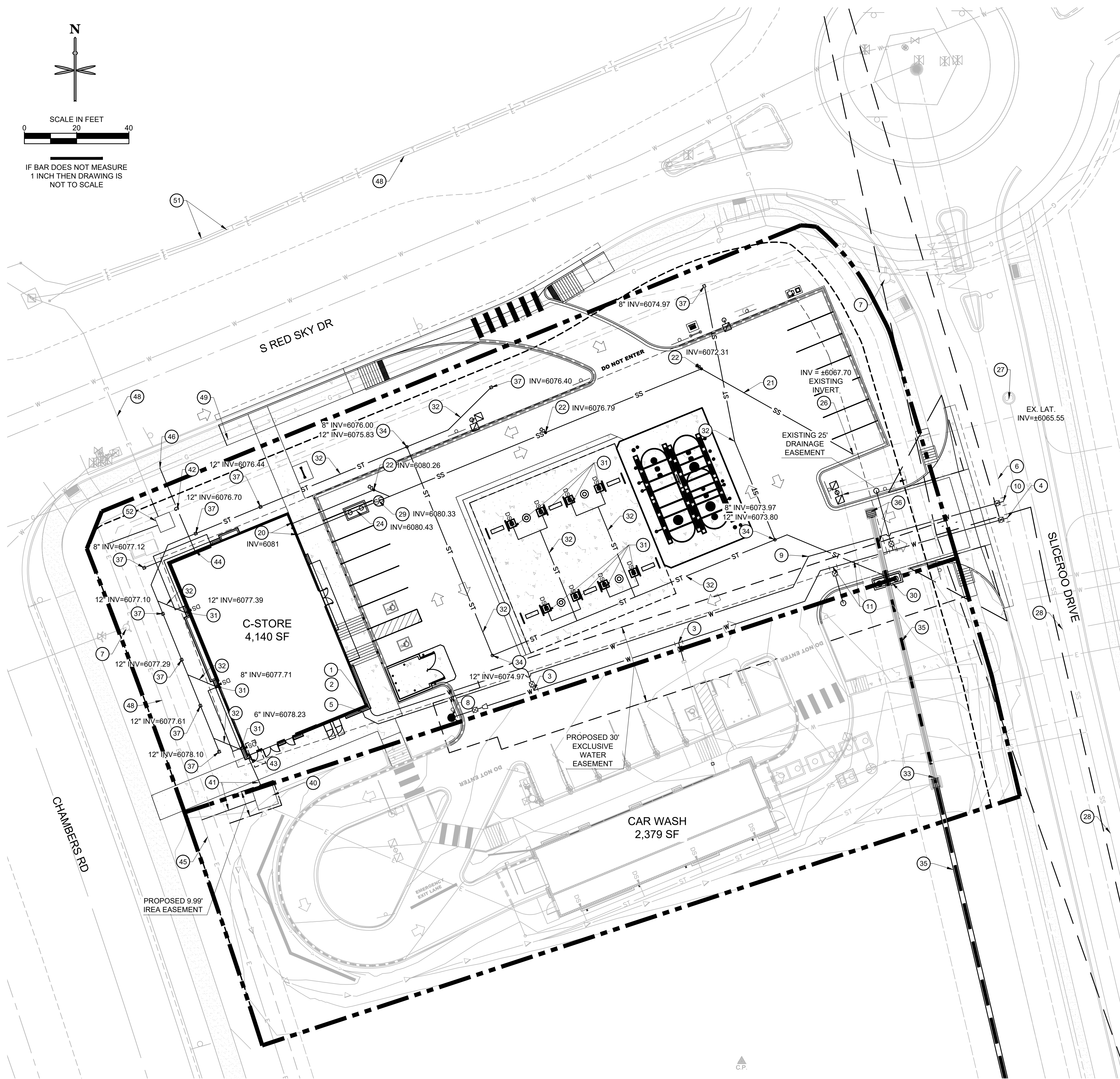
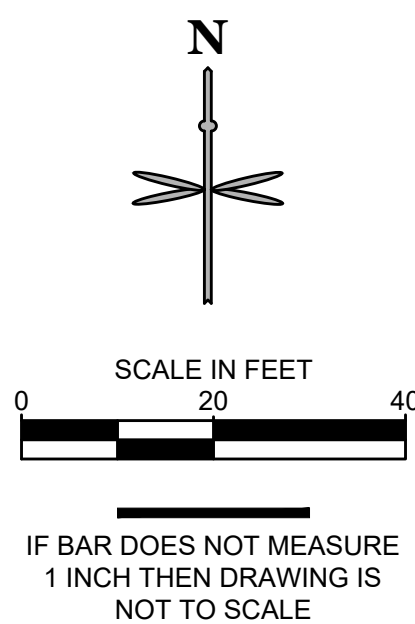
DATE	BY	REVISION

EES
ENTIREMENT AND ENGINEERING SOLUTIONS, INC.
501 S Cherry St, Suite 300
Glenview, CO 80246
303.972.7997 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: 1/19/2022

U0.1



WATER

- 1 PROPOSED 1.5" TYPE K COPPER DOMESTIC WATER CONNECTION TO BUILDING. STUB 5' OFF OF BUILDING. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION.
- 2 PROPOSED 1.5" DOMESTIC WATER METER (INTERIOR).
- 3 PR. 1.5" (C-STORE), 2" (CAR WASH) DOMESTIC WATER TAP.
- 4 PR. 8" X 8" TS&V, 8" PVC MAIN, 8" PLUG (BY OTHERS).
- 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. ±266 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 2" DOMESTIC CURB STOP

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.

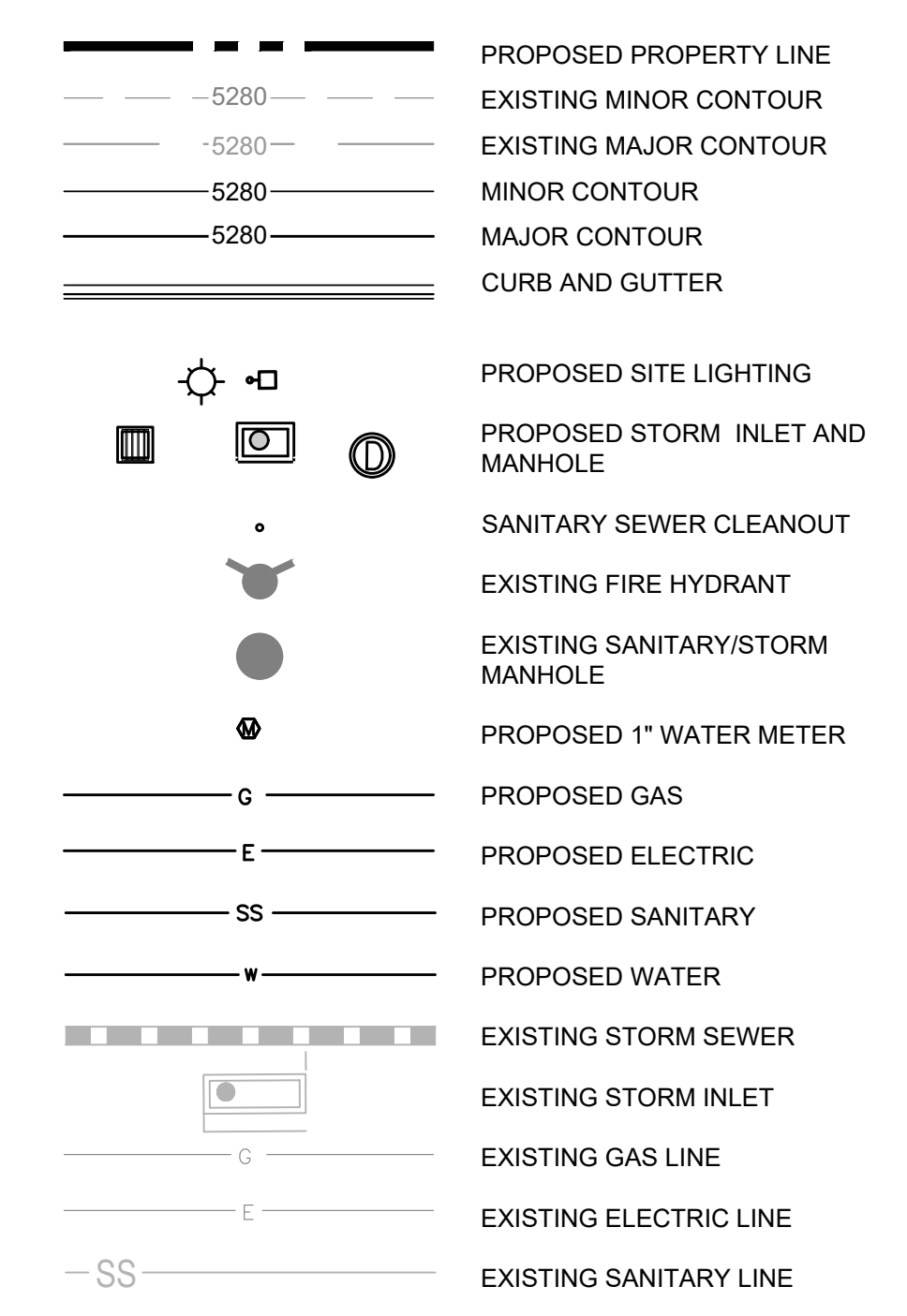
STORM SEWER

- 30 PROPOSED PRIVATE CDOT 10' TYPE R INLET. CONNECTION TO EXISTING PRIVATE STORM SEWER PROVIDED BY 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).
- 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.

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.

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 NFPA 34 when submitting for review.)

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Know what's below. Call before you dig.

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT. THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING/PUBLIC WORKS _____ DATE _____

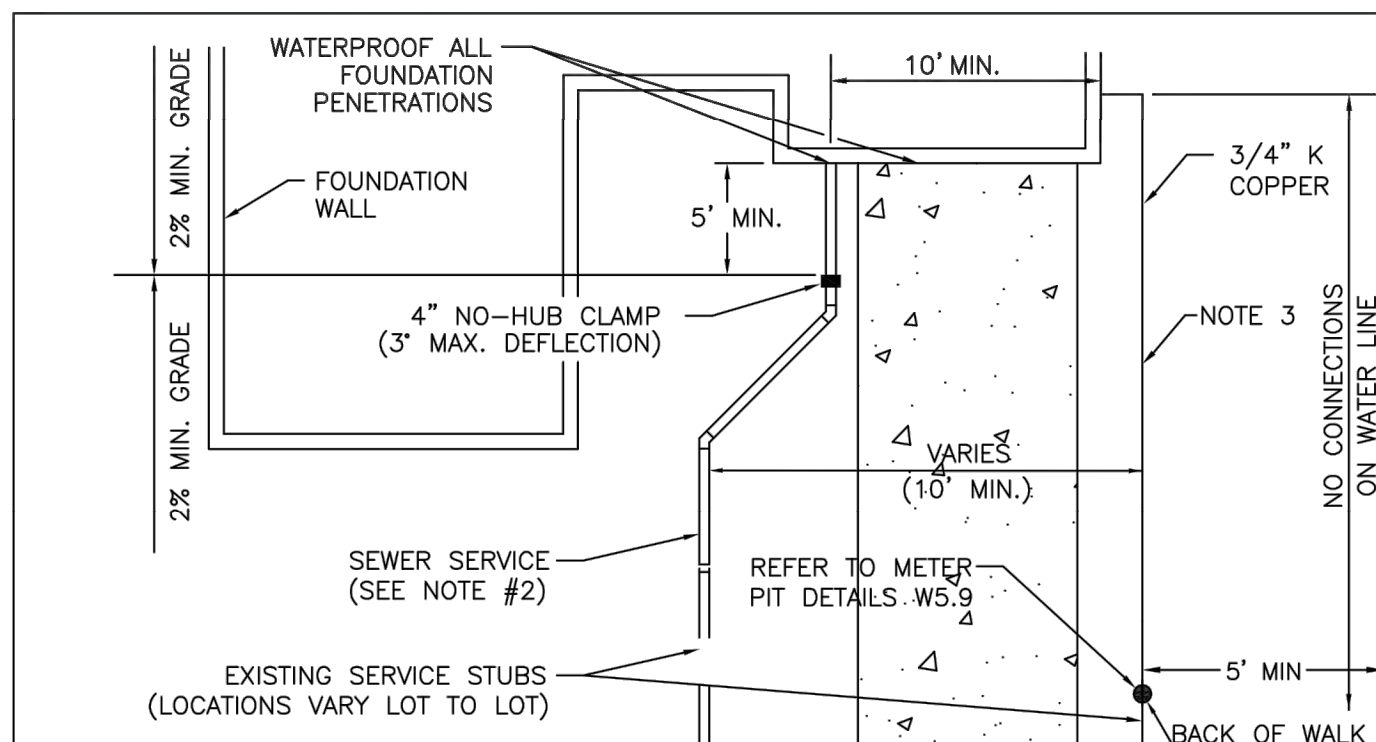
DATE	
BY	
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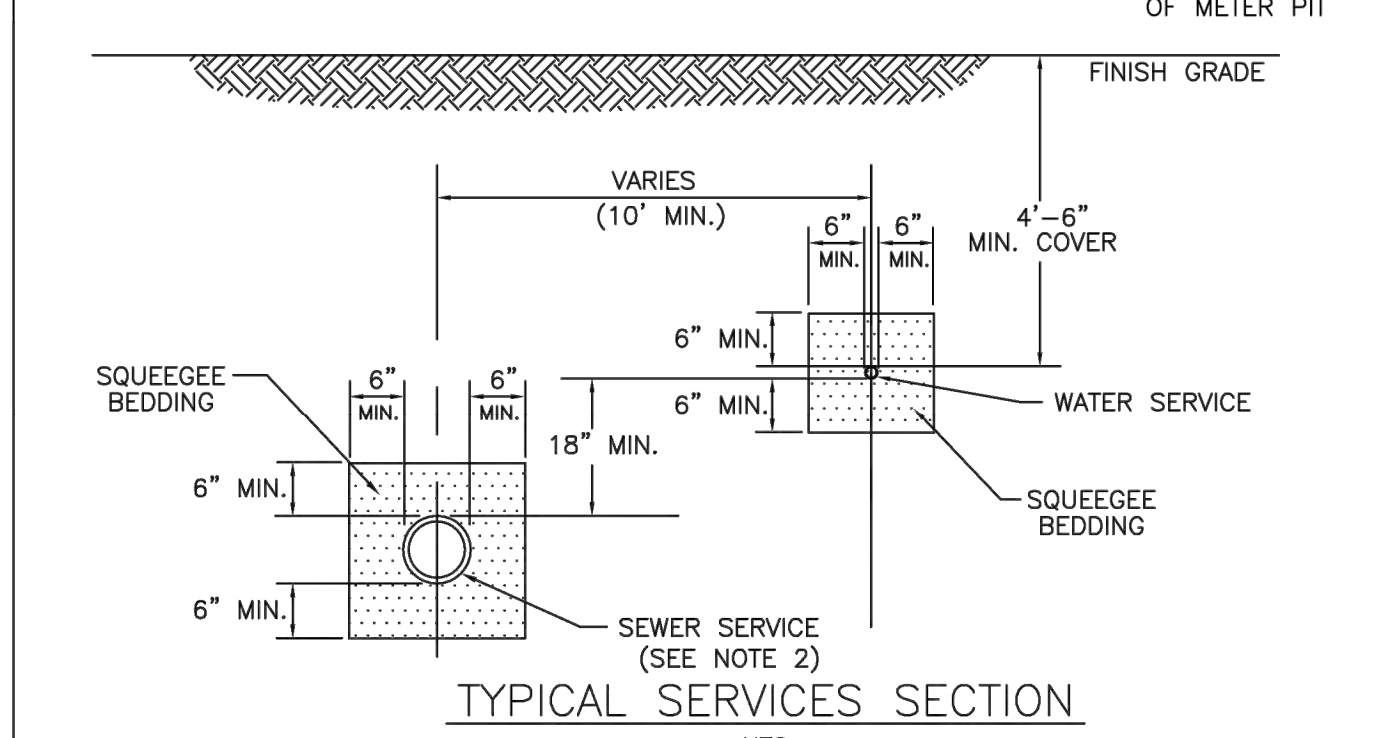
PWSD CONSTRUCTION PLANS LOT 1
CONVENIENCE STORE
12181 SLICEROO DRIVE, PARKER, CO 80134
UTILITY PLAN

PROJECT NO: TWS015.01
DESIGNED BY: LCG
DRAWN BY: JLG
DATE: 1/19/2022

U1.0



TYPICAL SERVICES PLAN VIEW



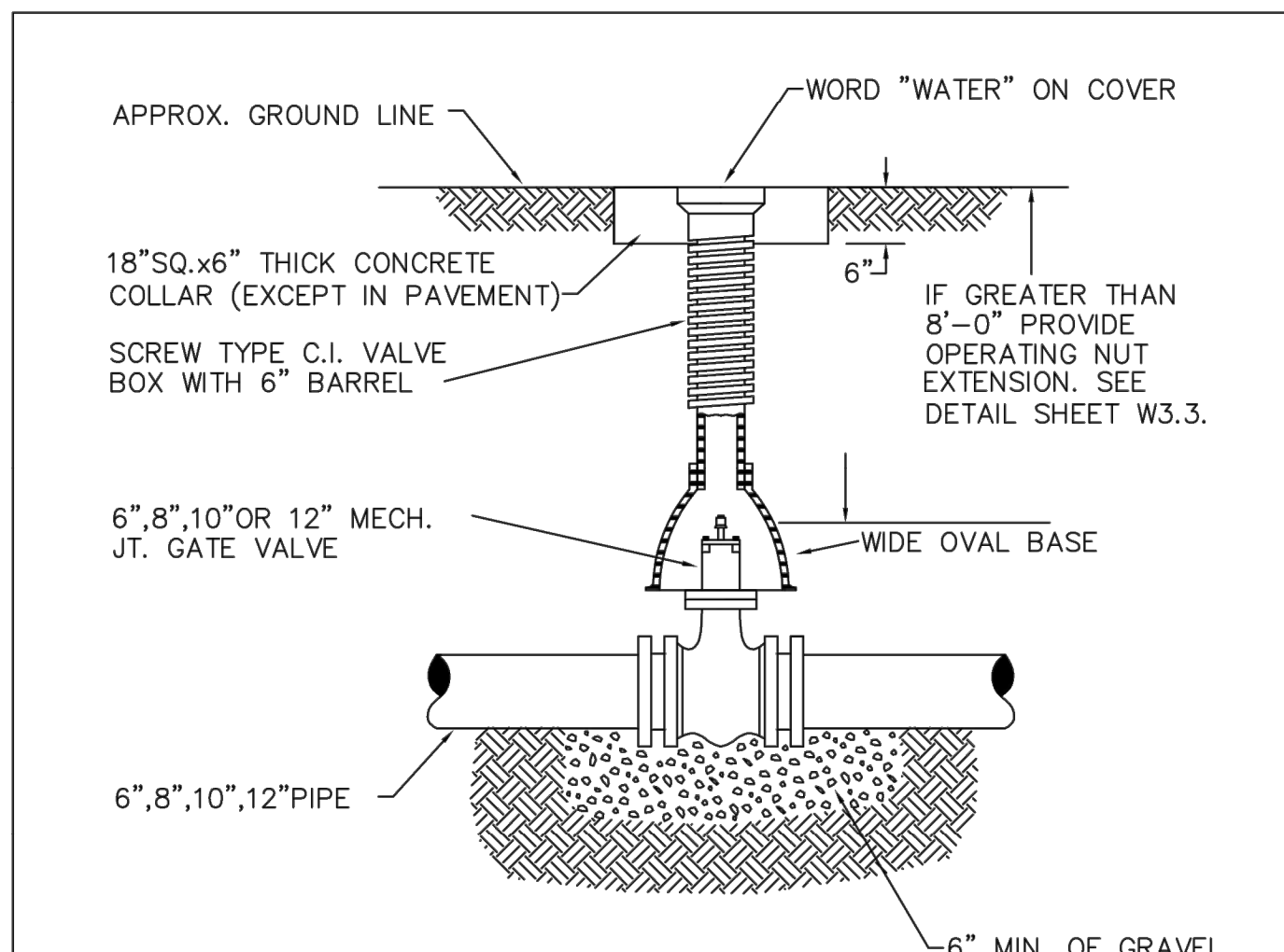
NOTE

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

PARKER WATER & SANITATION DISTRICT
TYPICAL WATER SERVICES

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/04 10/16 06/05 12/07 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W1.2



VALVE BOX DETAIL

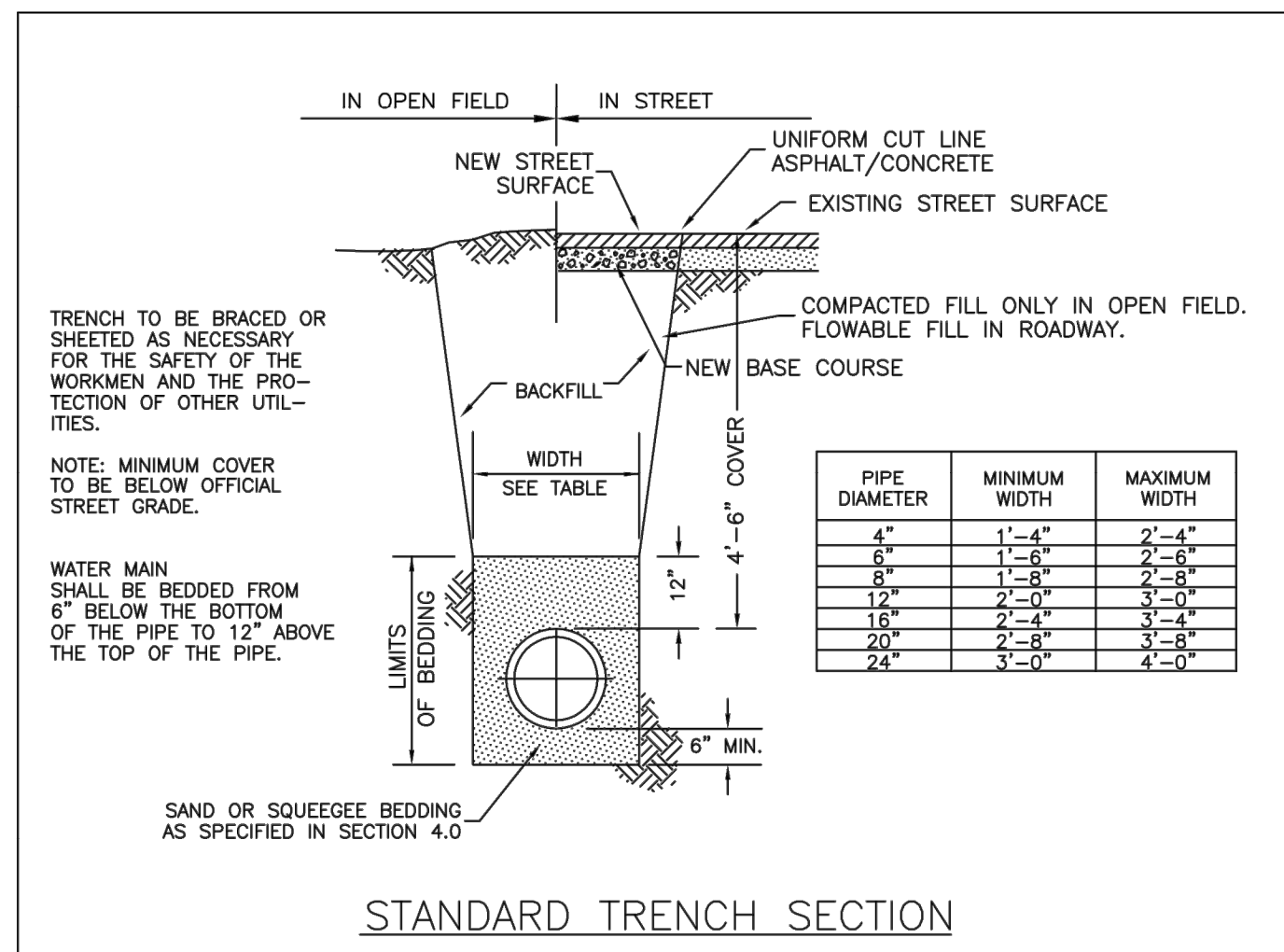
NOTES:

- ALL C.I. SHALL BE WRAPPED WITH 8 MIL. MIN. THICKNESS POLYETHYLENE.
- VALVE NUT SHALL BE CENTERED.
- VALVE BOX SHALL BE PLUMB.
- SEE MATERIAL SPECIFICATIONS FOR VALVE BOX WITH GREATER THAN BURIED DEPTH OF 4.5 FT.

PARKER WATER & SANITATION DISTRICT
VALVE BOX DETAIL

SCALE: NONE	DATE: 2/96
APPROVED: PVR	5/98 10/16 6/99 12/07 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.10



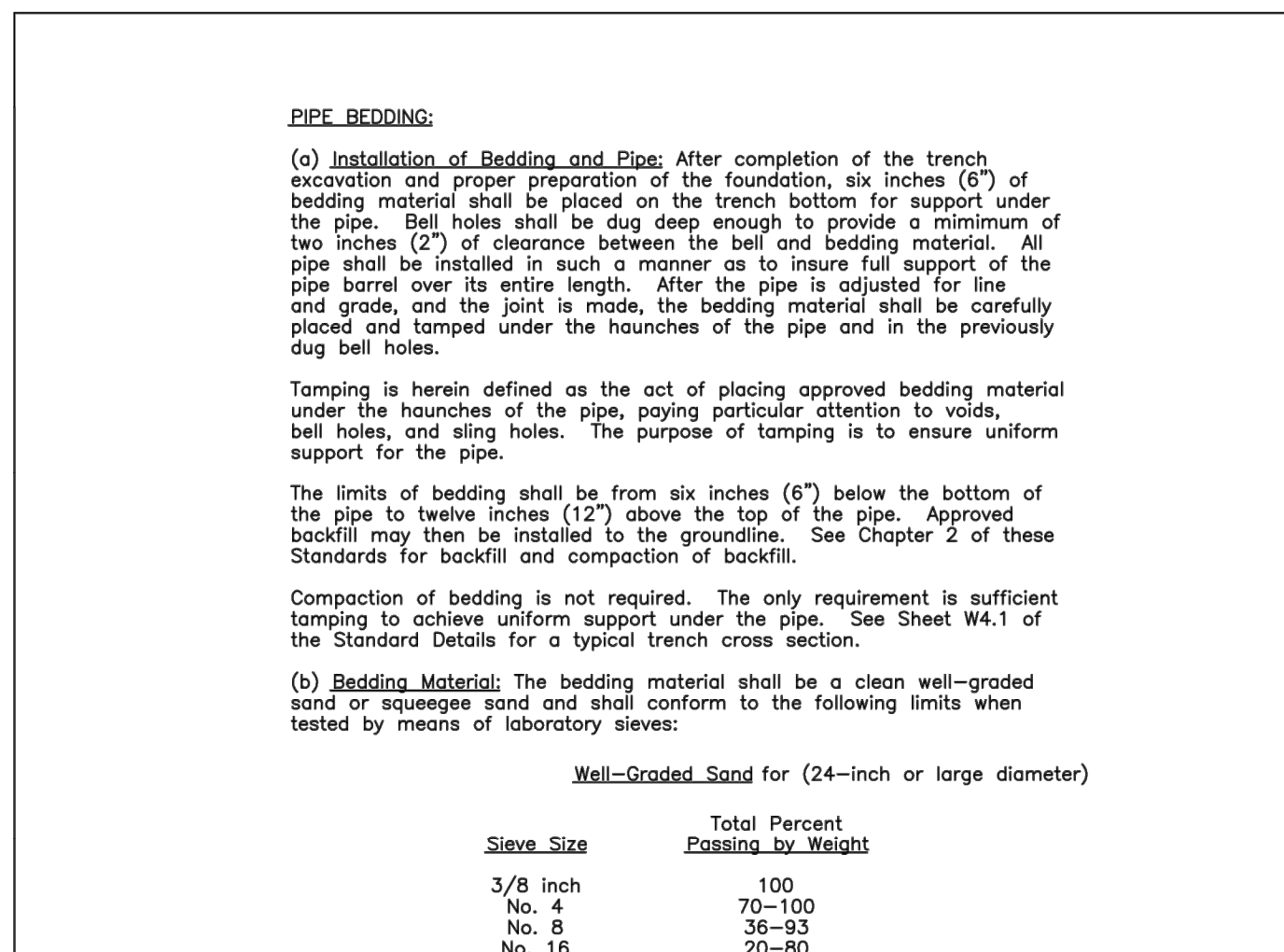
STANDARD TRENCH SECTION

STREET CUT PATCH

PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W4.1



PIPE BEDDING

Well-Graded Sand for (24-inch or large diameter)

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	70-100
No. 8	36-93
No. 16	20-80
No. 30	8-65
No. 50	2-30
No. 100	1-10
No. 200	0-3

Squeegee Sand for use with 20-inch or smaller

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 200	0-3

PARKER WATER & SANITATION DISTRICT
PIPE BEDDING

SCALE: NONE	DATE: 2/96
APPROVED: PVR	5/98 2/00 1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W4.2

- INSPECTION POLICY:**
- ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
 - SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
 - IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
 - 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.
 - 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.
 - ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
 - LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
 - CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION. UNLESS COORDINATED WITH DISTRICT INSPECTOR.

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

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

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/04 10/16 1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W1.1

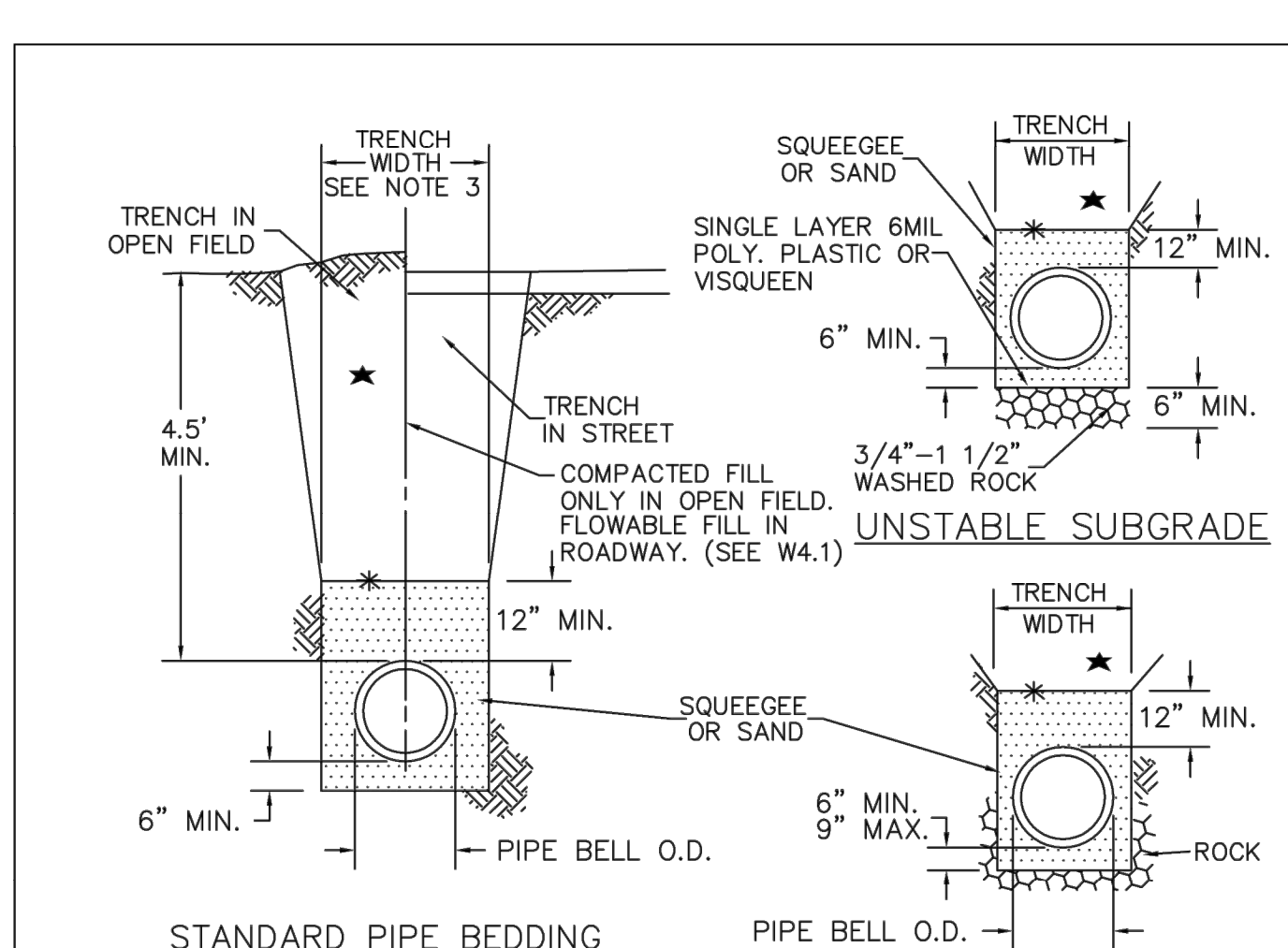
- INSPECTION POLICY:**
- ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
 - IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
 - 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.
 - 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.
 - ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
 - LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
 - CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

- INSTALLATION NOTES:**
- SEWER**
- ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
 - NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3".
 - MINIMUM GRADE SHALL BE 2%.
 - INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
 - 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.
 - STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
 - SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
 - 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 1/08 1/16
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2016 REVISION SHEET S1.1



STANDARD PIPE BEDDING
PIPE BEDDING IN ROCK

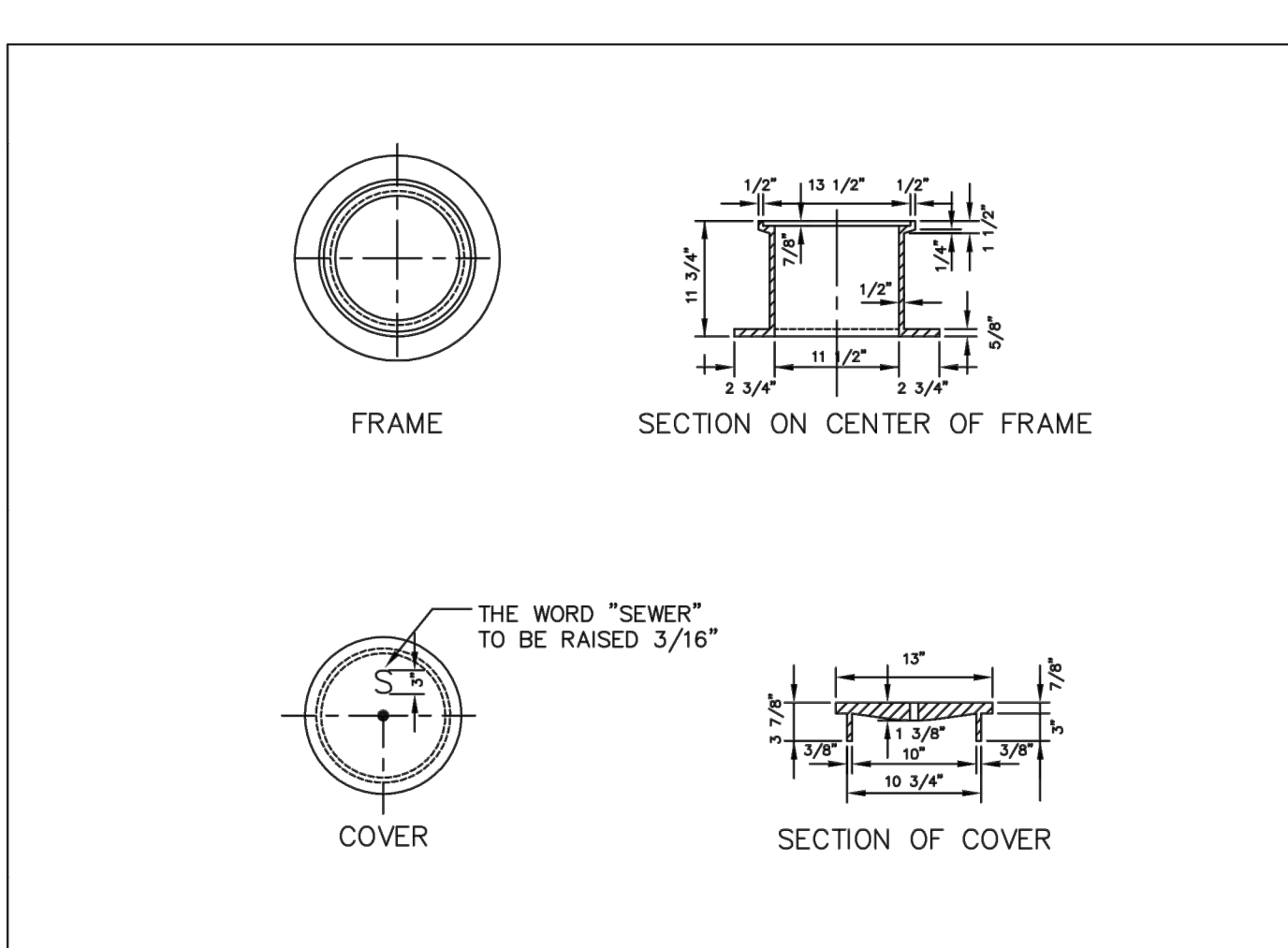
NOTES:

- MIN. COVER TO BE BELOW FINAL STREET GRADE CONSTRUCTION OF WATER MAIN MAY NOT START UNTIL FINAL GRADE WITHIN 1 FOOT.
- TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE PROTECTION OF OTHER UTILITIES AND TO MEET OSHA SAFETY REQUIREMENT.
- TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE LAID THEREIN (BELL OR COUPLING O.D. IF APPLICABLE). REFER TO SHEET W4.1 FOR DIMENSIONS.

PARKER WATER & SANITATION DISTRICT
BEDDING DETAILS

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W4.8



FRAME
COVER
SECTION ON CENTER OF FRAME
SECTION OF COVER

PARKER WATER & SANITATION DISTRICT
IN-LINE CLEANOUT SECTIONS

SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 1/08 1/16 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET S4.12

P:\TWINSTAR\ENERGY\COO - CHAMBERS & HESS\06 CAD\PSWALUZ.D\PWSO DETAILS.DWG

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**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: 1/19/2022

U2.0

