

# PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

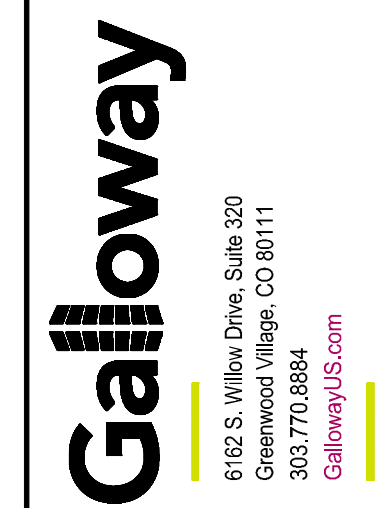
## SITE CONSTRUCTION PLANS PARKER WATER AND SANITATION CONSTRUCTIONS PLANS



SHEET NO. **C-3.0**



UTILITY COVER SHEET  
 MURPHY EXPRESS  
 12405 SOUTH PARKER ROAD  
 PARKER, COLORADO



MURPHY OIL USA, INC.  
 200 PEACH STREET  
 EL DORADO, AR 71730

### PROJECT CONTACTS:

**RECORD OWNER**  
 ETV PARKER COLORADO, LLC  
 2710 E CAMELBACK ROAD, SUITE 210  
 PHOENIX, AZ 85016  
 TEL: (602) 468-6100  
 CONTACT: RYAN AMATO

**DEVELOPER/APPLICANT**  
 MURPHY OIL USA, INC.  
 200 PEACH STREET  
 EL DORADO, AR 71730  
 CONTACT: GARY HEGENER

**ENGINEER/CONSULTANT**  
 GALLOWAY & COMPANY, INC.  
 6162 S. WILLOW DRIVE, SUITE 320  
 GREENWOOD VILLAGE, CO 80111  
 TEL: (303) 770-8884  
 FAX: (303) 770-3636  
 CONTACT: JIM ERWIN-SVORODA, P.E.  
 EMAIL: JIMERWIN@GALLOWAYUS.COM

**LANDSCAPE/CONSULTANT**  
 GALLOWAY & COMPANY, INC.  
 6162 S. WILLOW DRIVE, SUITE 320  
 GREENWOOD VILLAGE, CO 80111  
 TEL: (303) 770-8884  
 FAX: (303) 770-3636  
 CONTACT: TIM NELSON, RLA, ASLA, COP  
 EMAIL: TIMNELSON@GALLOWAYUS.COM

**SURVEYOR**  
 GALLOWAY & COMPANY, INC.  
 1755 TELESTAR DR., SUITE 107  
 COLORADO SPRINGS, CO 80920  
 TEL: (303) 770-8884  
 FAX: (303) 770-3636  
 CONTACT: BRIAN DENNIS, PLS  
 EMAIL: BRIANDENNIS@GALLOWAYUS.COM

### MUNICIPAL & UTILITY CONTACTS:

**ENGINEERING**  
 TOWN OF PARKER - ENGINEERING  
 20120 E. MAIN STREET  
 PARKER, CO 80138  
 TEL: (303) 805-3169  
 CONTACT: RANDY CAPRA

**STORM SEWER**  
 TOWN OF PARKER - PUBLIC WORKS  
 20120 E. MAIN STREET  
 PARKER, CO 80138  
 TEL: (303) 840-9546

**FIRE**  
 SOUTH METRO FIRE RESCUE AUTHORITY  
 9195 E. MINERAL AVE.  
 CENTENNIAL, CO 80112  
 TEL: (720) 989-2244  
 CONTACT: CHP KERKHOVE

**WATER & SANITARY SEWER**  
 PARKER WATER AND SANITATION DISTRICT  
 1800 E. WOODMAN DRIVE  
 PARKER, CO 80135  
 TEL: (303) 841-4627  
 CONTACT: DRAYTON SANDERSON

**GAS**  
 XCEL ENERGY  
 1800 PARKER STREET  
 DENVER, CO 80202  
 EMAIL: RON.H.JOHNSON@XCELENERGY.COM  
 CONTACT: RON JOHNSON

**ELECTRIC**  
 INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION  
 5496 NORTH USHER HIGHWAY 85  
 SEDALIA, CO 80135  
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**TELEVISION**  
 COMCAST  
 1601 MILE HIGH STADIUM CIRCLE  
 DENVER, CO 80204  
 EMAIL: DEAN.FLENTHOPE@COMCAST.COM  
 CONTACT: DEAN FLENTHOPE

**TELEPHONE**  
 CENTURYLINK  
 1801 CALIFORNIA STREET, SUITE 240  
 DENVER, CO 80202  
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 EMAIL: IZZYMILLER@CENTURYLINK.COM



### PWSD GENERAL UTILITY NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD 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 PWSD IMMEDIATELY.
- PWSD 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 PWSD 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 REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF PARKER WATER AND SANITATION DISTRICT PAGE 17 DISTRICT PLAN APPROVAL PROCEDURES 2017 REVISION CONSTRUCTION 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 "Y" 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 PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.

### PWSD SANITARY SEWER NOTES

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

### FIRE NOTES

- IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LINES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
- EMERGENCY VEHICLE ACCESS ROAD IS REQUIRED TO ALLOW ACCESS WITHIN 150' OF ALL EXTERIOR OF THE BUILDING BY AN APPROVED ROUTE.
- FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRES APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. ACCESS ROAD SHALL BE EITHER CONCRETE, ASPHALT, OR OTHER APPROVED ALTERNATIVE MATERIAL ACCOMPANIED WITH AN ENGINEER'S STAMP STATING THE MATERIAL WILL MEET A 75,000 LBS IMPOSED LOAD.
- FIRE HYDRANT(S) ARE REQUIRED TO BE INSTALLED MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF VERTICAL CONSTRUCTION.
- NO PARKING FIRE LANE SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE, ROADWAYS OR DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE, ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR ACCESS ROADWAY FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS EXCEEDING 32 FEET WIDE.
- WHEN FIRE APPARATUS ACCESS ROADS OR 4 WATER SUPPLY FOR FIRE PROTECTION IS REQUIRED TO BE INSTALLED, SUCH PROTECTION SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO BUILDING CONSTRUCTION GOING VERTICAL.

### SHEET INDEX

SHEET NUMBER	DESCRIPTION
C-3.0	UTILITY COVER SHEET
C-3.1	OVERALL UTILITY PLAN
C-3.2	UTILITY DETAILS
C-3.3	UTILITY DETAILS
C-3.4	UTILITY DETAILS
C-3.5	UTILITY DETAILS
C-3.6	UTILITY DETAILS
C-3.7	STORM AND SANITARY PLAN
C-3.8	STORM PLAN & PROFILE
IR-1.1	IRRIGATION PLAN
IR-1.2	IRRIGATION DETAILS
IR-1.3	IRRIGATION NOTES & DETAILS

### PWSD WATER MAIN NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
- ALL BENDS, FLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RIGID OR MEGA-LOGGED. ALL FITTINGS SHALL BE WRAPPED PER PWSD MATERIALS SPECIFICATIONS.
- THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
- FIRE HYDRANTS SHALL CONFORM TO ANWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES PER PWSD 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 PWSD 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 PWSD 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 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 PWSD SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
- HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSD SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSD INSPECTOR/ENGINEER.

SUMMARY OF QUANTITIES (WATER)	
DESCRIPTION	QUANTITY
CONNECT TO EXISTING WATER LINE	
FIRE HYDRANT ASSEMBLY	1 EA
1-1/2" COPPER WATER SERVICE	50 LF
2" SCHEDULE 40 PVC PIPE	223 LF
6" PVC FIRE HYDRANT LATERAL	58 LF
WATER VALVE	5 EA
TEE	2 EA

SUMMARY OF QUANTITIES (SANITARY)	
DESCRIPTION	QUANTITY
CONNECT TO EXISTING SANITARY SEWER LINE	1 EA
4" PVC SANITARY SEWER LINE	163 LF
8" PVC SANITARY SEWER LINE	102 LF
TWO-WAY CLEANOUT	2 EA
SINGLE CLEANOUT	5 EA
WYE AND 4" TO 8" REDUCER	1 EA
GREASE INTERCEPTOR	1 EA
SAMPLING MANHOLE	1 EA

### PWSD DISTRICT ACCEPTANCE NOTES

- UPON COMPLETION OF SANITARY SEWER AND WATER CONSTRUCTION AND TESTING, THE DEVELOPER OR CONTRACTOR SHALL CONTACT THE DISTRICT FOR PROBATIONARY ACCEPTANCE INSPECTION. A PUNCHLIST WILL BE PROVIDED THE DEVELOPER AND CONTRACTOR UPON COMPLETION OF THE INITIAL WALK-THROUGH AND PROBATIONARY ACCEPTANCE WILL BE ISSUED FOLLOWING COMPLETION AND ACCEPTANCE OF THE WORK OUTLINED IN THE PUNCHLIST.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE LINES FOR UP TO 1-YEAR FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- THE DATE OF FINAL ACCEPTANCE WILL BE INDICATED IN THE CONDITIONS OF THE PROBATIONARY ACCEPTANCE LETTER. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT FOR FINAL INSPECTION AND FINAL ACCEPTANCE.

MATERIALS SPECIFICATIONS	
MATERIAL SPECIFICATION	DESCRIPTION
MS-W1, MS-S1, MS-S4	PIPE TYPE - PVC
MS-W2	PIPE TYPE - DUCTILE IRON
MS-W7	TAPPING SLEEVES
MS-W3, MS-S5	FITTINGS
MS-W4, MS-W5, MS-W6, MS-W8, MS-W9	VALVES, AIR RELEASE VALVES
MS-W17, MS-W18	WATER METER
MS-S2	PRECAST MANHOLES
MS-S3	CASTINGS

### BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN. VERTICAL DATUM IS APPROXIMATELY 2.6' FEET BELOW NAVD 88.

SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

### BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHWEST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

### CAUTION - NOTICE TO CONTRACTOR

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

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: *Drayton Sanderson*  
 (DISTRICT REPRESENTATIVE)

DATE: Dec 20 2021

APPROVED FOR CONSTRUCTION  
 PARKER WATER AND SANITATION DISTRICT  
 BY: *Robert Pappala*  
 (DISTRICT ENGINEER)

DATE: Dec 20 2021

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.

*Scott Lepp* 09/02/2021  
 FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

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

THE 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 REVIEWS, GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

**APPROVED**  
 Dec 20 2021  
**PARKER WATER AND  
 SANITATION DISTRICT**

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

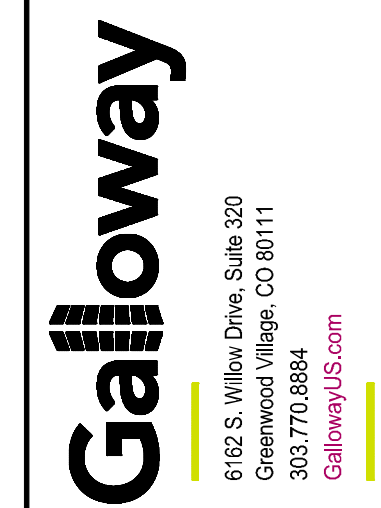
## SITE PLAN DOCUMENTS



**SHEET NO.**  
**C-3.1**



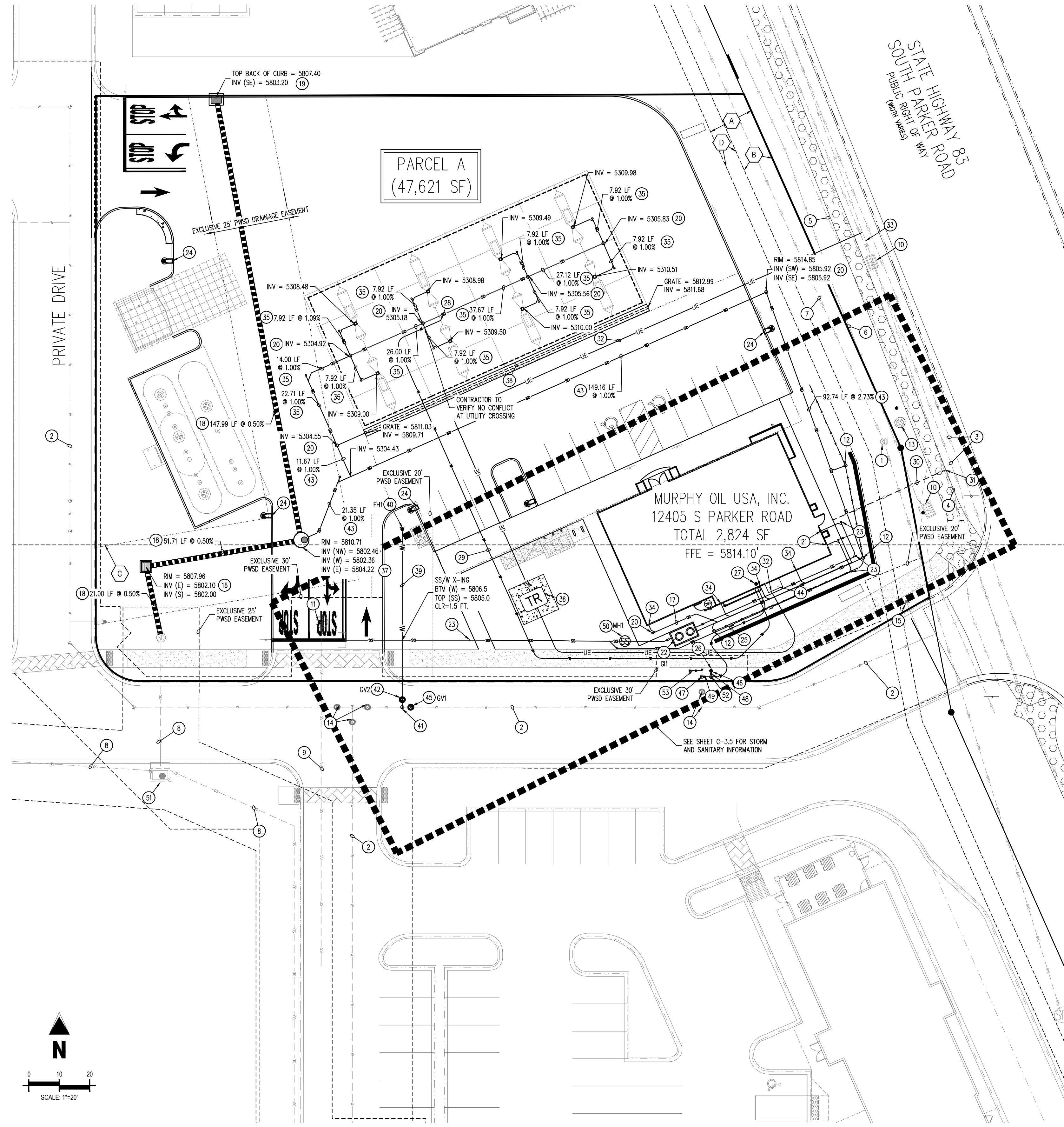
**OVERALL UTILITY PLAN**  
**MURPHY EXPRESS**  
**12405 SOUTH PARKER ROAD**  
**PARKER**  
**COLORADO**



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 9067 S. Topeka, CO 80111  
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 GallowayUS.com

**MURPHY OIL USA, INC.**  
**200 PEACH STREET**  
**EL DORADO, AR 71730**

**MURPHY USA**



- ### SCHEDULE
- EXISTING STORM SEWER MANHOLE TO REMAIN
  - EXISTING WATER LINE INSTALLED BY DEVELOPER
  - EXISTING CATV LINE TO REMAIN
  - EXISTING UNDERGROUND TELEPHONE LINE TO REMAIN
  - EXISTING GAS LINE TO REMAIN
  - EXISTING FIBER OPTIC LINE TO REMAIN
  - EXISTING STORM LINE TO REMAIN
  - EXISTING STORM LINE INSTALLED BY DEVELOPER
  - EXISTING SANITARY SEWER LINE INSTALLED BY DEVELOPER
  - EXISTING COMMUNICATION BOX/Vault TO REMAIN
  - EXISTING SANITARY SEWER MANHOLE PROVIDED BY DEVELOPER
  - PROPOSED YARD DRAIN WITH OPEN GRATE TOP
  - EXISTING SANITARY SEWER MANHOLE TO REMAIN
  - EXISTING 8" WATER STUB AND VALVE INSTALLED BY DEVELOPER
  - EXISTING FIRE HYDRANT TO REMAIN
  - PROPOSED CDOT TYPE C INLET
  - PROPOSED 4" STORM SEWER LINE
  - PROPOSED 18" STORM SEWER LINE
  - PROPOSED CDOT TYPE 13 INLET
  - PROPOSED STORM CLEANOUT
  - PROPOSED 4" SANITARY SEWER SERVICE LINE
  - PROPOSED 1,000 GALLON GREASE INTERCEPTOR
  - PROPOSED SANITARY SEWER CLEANOUT (TYP)
  - PROPOSED SITE LIGHT
  - PROPOSED 1 1/2" DOMESTIC WATER SERVICE LINE TO BUILDING
  - PROPOSED 3/4" IRRIGATION LINE
  - PROPOSED 1 1/2" INTERIOR SET WATER METER AND BACKFLOW
  - PROPOSED FREEZELESS HOSE BIBBS AT PUMP ISLAND (3/4" SCH. 40 PVC)
  - PROPOSED 3/4" WATER LINE TO CANOPY (TO BE CONNECTED AFTER METER)
  - PROPOSED UNDERGROUND TELEPHONE LINE. PLACE HAND HOLES AS NEEDED.
  - CONNECTION TO EXISTING TELEPHONE LINE TO BE COORDINATED WITH TELEPHONE COMPANY.
  - PROPOSED UNDERGROUND ELECTRICAL LINE.
  - CONNECTION TO EXISTING ELECTRICAL LINE TO BE COORDINATED WITH ELECTRICAL COMPANY.
  - PROPOSED ROOF DRAIN CONNECTION
  - PROPOSED 6" PVC ROOF DRAIN LINE
  - PROPOSED TRANSFORMER ON CONCRETE PAD
  - PROPOSED STORM MANHOLE
  - PROPOSED 8" TRENCH DRAIN
  - PROPOSED 6" PVC LATERAL FIRE HYDRANT
  - PROPOSED FIRE HYDRANT FHH#1
  - PROPOSED 8" x 6" TEAT
  - PROPOSED 6" GATE VALVE GV#1
  - PROPOSED 10" ROOF DRAIN
  - PROPOSED ELECTRICAL CABINET PER AREA REQUIREMENTS
  - PROPOSED 8" GATE VALVE GV#2
  - PROPOSED 3/4" IRRIGATION METER
  - TAP EXISTING 8" STUB
  - PROPOSED 3/4" CURB STOP
  - PROPOSED 1 1/2" CURB STOP
  - PROPOSED SANITARY SEWER SAMPLING MANHOLE (REFERENCE PWSO DETAIL 55.3)
  - EXISTING STORM SEWER INLET INSTALLED BY DEVELOPER

### UTILITY INSTALLATION RESPONSIBILITIES

PERMITS AND INSPECTIONS	ELECTRIC RESPONSIBILITY		
	GENERAL CONTRACTOR	UTILITY PROVIDER	N/A
OVERHEAD SERVICE DROP	X	X	
SERVICE CONNECTION		X	
SERVICE ENTRANCE CONDUIT, CONDUCTOR, AND OH POINT OF ATTACHMENT	X		
METER SOCKET	X		
BILLING METER		X	
LOAD SIDE CONDUIT AND CONDUCTOR	X		
ICE AND SNOW SHIELD, IF REQUIRED	X		
GROUND ROD(S)	X		

### TELEPHONE RESPONSIBILITY

CONDUIT/TRENCH	GENERAL CONTRACTOR			UTILITY PROVIDER			N/A		
PULL STRING	X								

### WATER RESPONSIBILITY

TAP	GENERAL CONTRACTOR			UTILITY PROVIDER			N/A		
DOMESTIC METER	X								
DOMESTIC BFP									
IRRIGATION BFP									
IRRIGATION BFP									
HYDRANT									

### FIRE CODE REVIEW BLOCK

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.)

### CAUTION - NOTICE TO CONTRACTOR

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

### BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHWEST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24860 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

### BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN, VERTICAL DATUM IS APPROXIMATELY 2.6± FEET BELOW NAVD 88.

SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM, CAP STAMPED "PLS 36062", EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM, CAP STAMPED "PLS 36062", EL = 5640.22

### UTILITY INSTALLATION RESPONSIBILITIES

**WATER SERVICE:**

- CONTRACTOR TO PROVIDE AND INSTALL TAP AND BACKFLOW DEVICES.
- CONTRACTOR TO PROVIDE AND INSTALL CONNECTION TO BACK SIDE OF METER, INCLUDING FITTINGS, VALVES, CURB STOP, CURB BOX, RPZ (ON IRRIGATION MAIN), WATER SERVICE MAINS, ETC. FOR IRRIGATION AND DOMESTIC SERVICE.

**SEWER SERVICE:**

- CONTRACTOR TO PROVIDE AND INSTALL GRAVITY SERVICE LINES, GREASE TRAP, CONNECTION TO EXISTING STUBOUT, ETC.

**ELECTRIC SERVICE:**

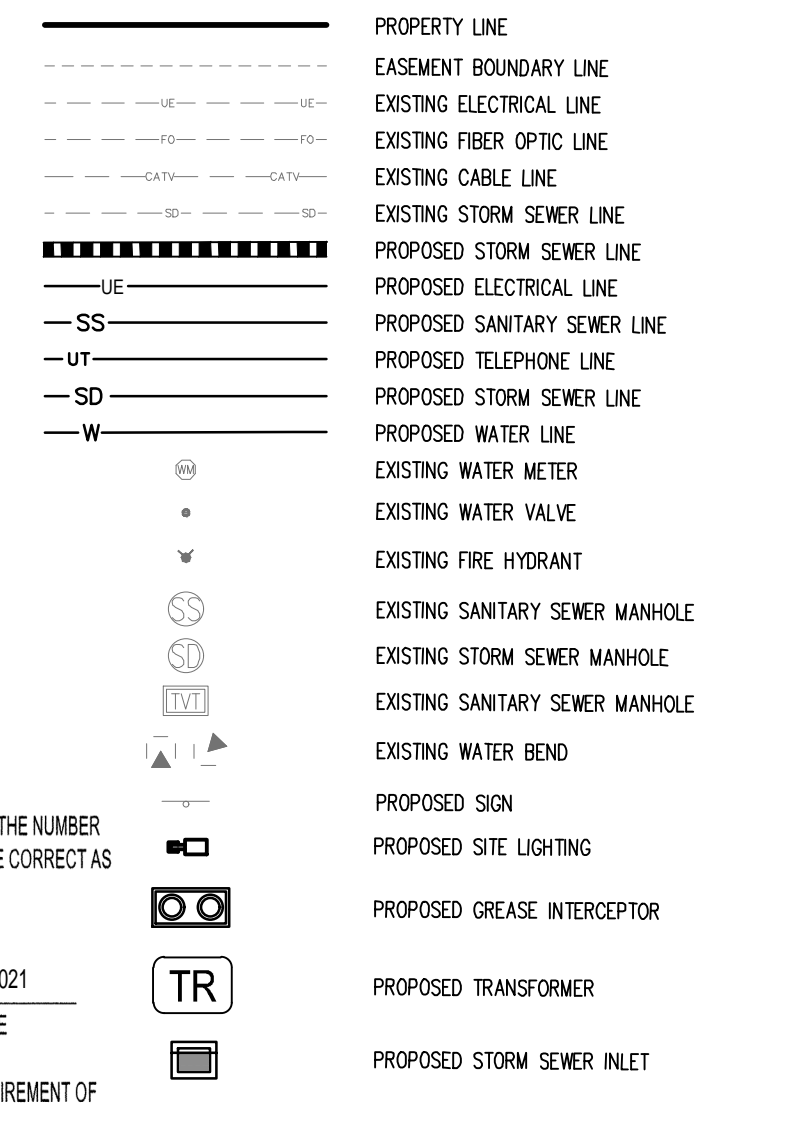
- ELECTRIC COMPANY PROVIDES AND INSTALLS POLE MOUNTED TRANSFORMER.
- CONTRACTOR TO PROVIDE & INSTALL 1-1/2" SCH. 40 CONDUIT WITH PULL STRINGS AND SWEEPS (36" R.) ALONG USE ROUTE FROM TRANSFORMER POLE TO BUILDING ENTRY POINT.
- CONTRACTOR TO PROVIDE AND INSTALL SECONDARY WIRE FROM TRANSFORMER TO BUILDING.

**TELEPHONE SERVICE:**

- TELEPHONE COMPANY WILL PROVIDE, CONDUIT AND PULL WIRE TO BUILDING.
- CONTRACTOR TO INSTALL 4" CONDUIT WITH PULL-STRING FROM BUILDING TO POINT OF CONNECTION.
- CONTRACTOR TO PROVIDE #8 GROUND WIRE CONNECTED TO ELECTRICAL GROUND AND 4"x8" MOUNTED PLYWOOD BACKBOARD INSIDE BUILDING FOR TELEPHONE COMPANY TO MOUNT EQUIPMENT.
- CONTACT AT TWO (2) WEEKS PRIOR TO NEEDING SERVICE.

### EASEMENT SCHEDULE

- PERMANENT DRAINAGE EASEMENT (REC NO. 2004034896)
- 10' UTILITY EASEMENT (REC NO. 2004113377)
- EXCEPTION 12 & EXCEPTION 13 BOUNDARY (APPROXIMATE LOCATION) (BK 1227, PG 2338; BK 1284, PG 1957; BK 1290, PG 1455-1459)
- ADDITIONAL 5' UTILITY EASEMENT BY DEVELOPER PER REFERRAL SP18-047



### GENERAL UTILITY 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 BACKFILL 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 REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
- SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
- 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 6' 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.
- ANY TRAFFIC CONTROL WITHIN PARKER ROAD RIGHT-OF-WAY WILL REQUIRE A CDOT RIGHT-OF-WAY PERMIT.

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

**APPROVED**  
**Dec 20 2021**  
**PARKER WATER AND**  
**SANITATION DISTRICT**

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE PLAN DOCUMENTS



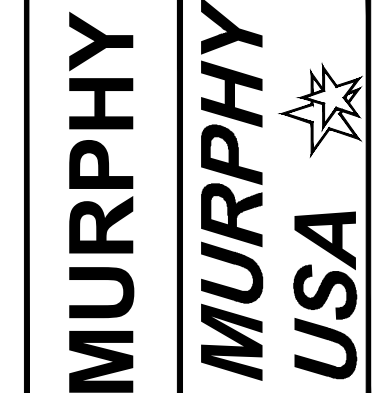
**SHEET NO.**  
**C-3-2**



**UTILITY DETAILS**  
**MURPHY EXPRESS**  
**12405 SOUTH PARKER ROAD**  
**PARKER**  
**COLORADO**

**Galloway**  
 6102 S. Willow Drive, Suite 320  
 Denver, Colorado 80211  
 303.770.8844  
 GallowayUS.com

**MURPHY OIL USA, INC.**  
**200 PEACH STREET**  
**EL DORADO, AR 71730**



**INSPECTION POLICY:**

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

**INSTALLATION NOTES:**

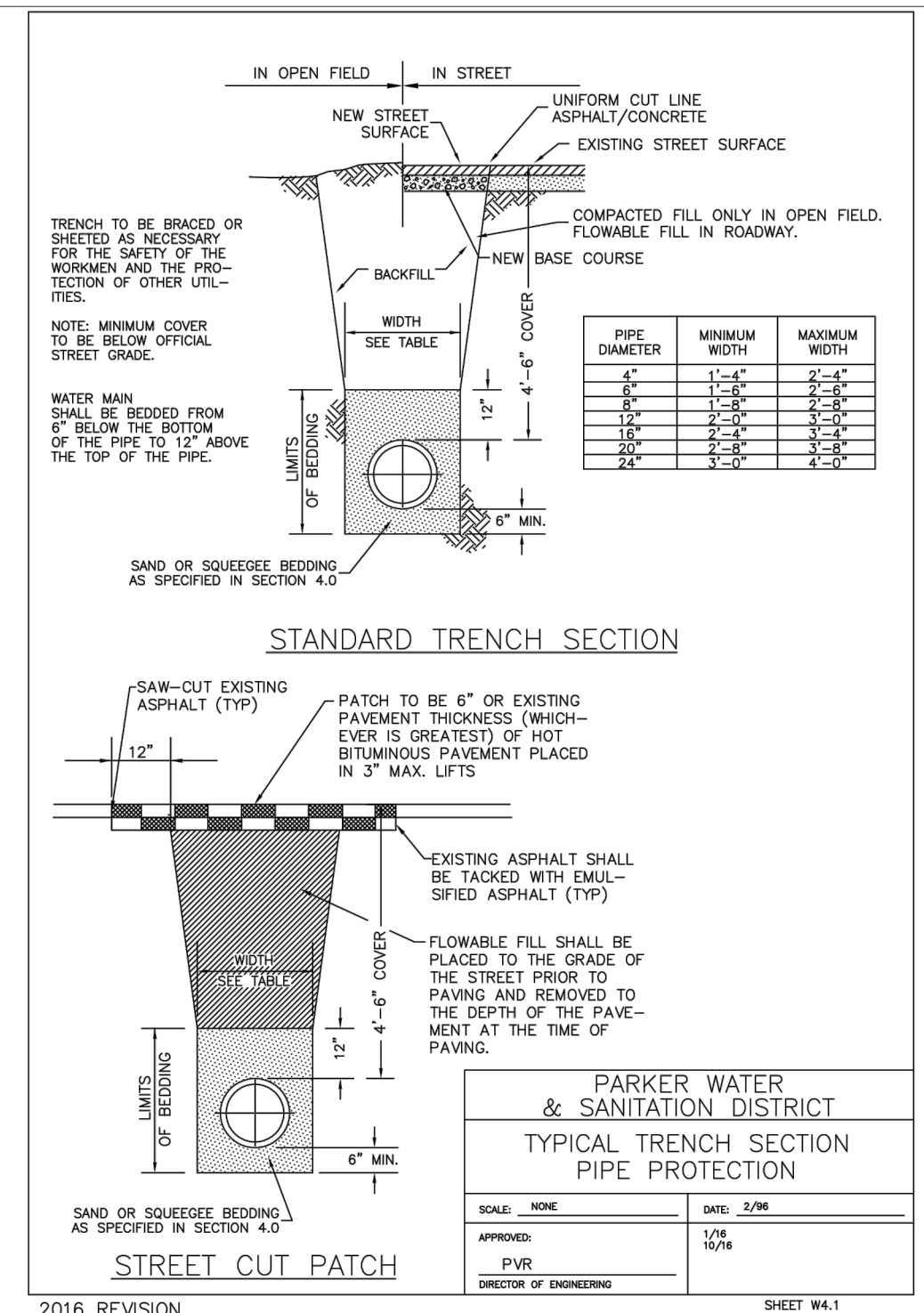
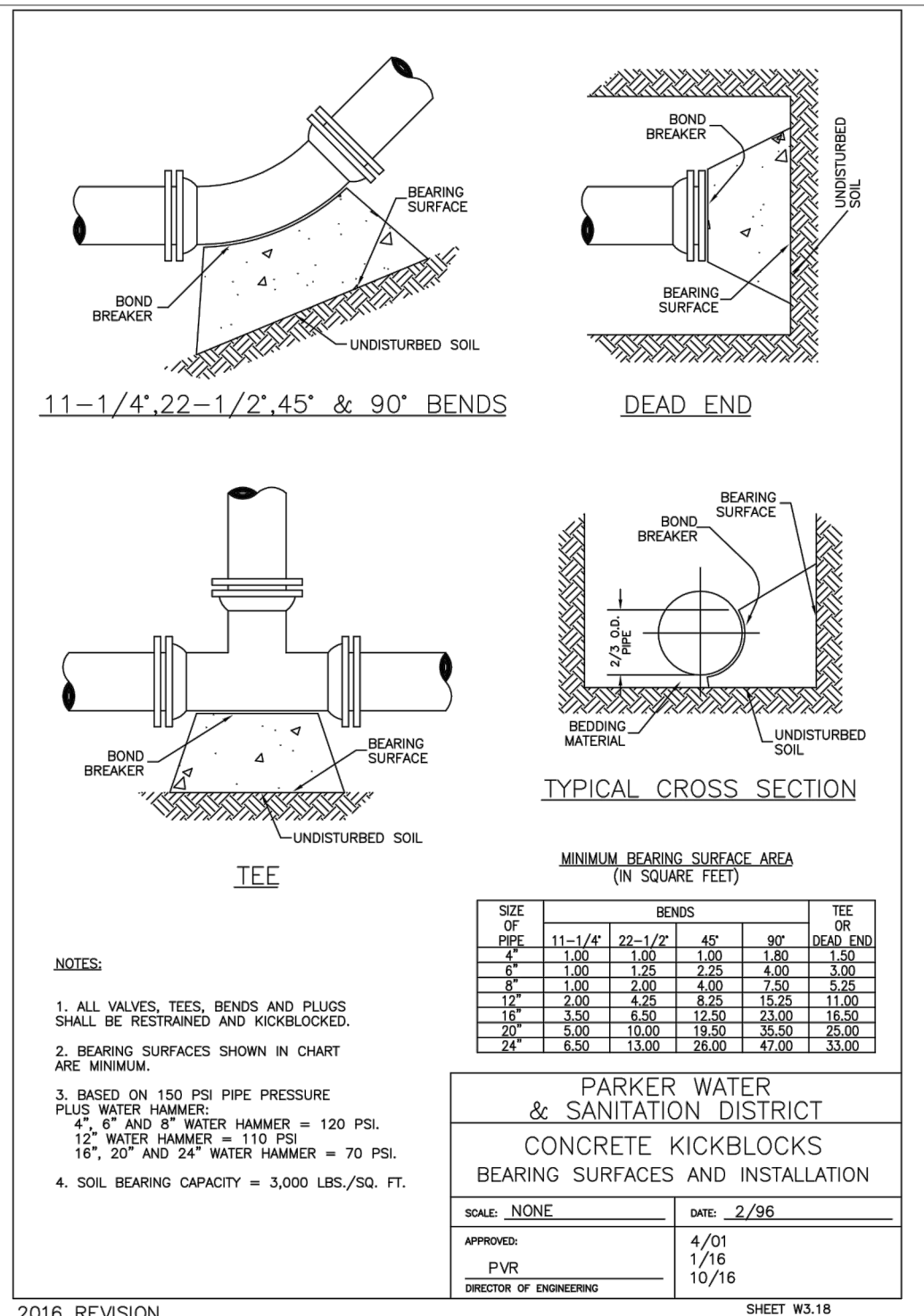
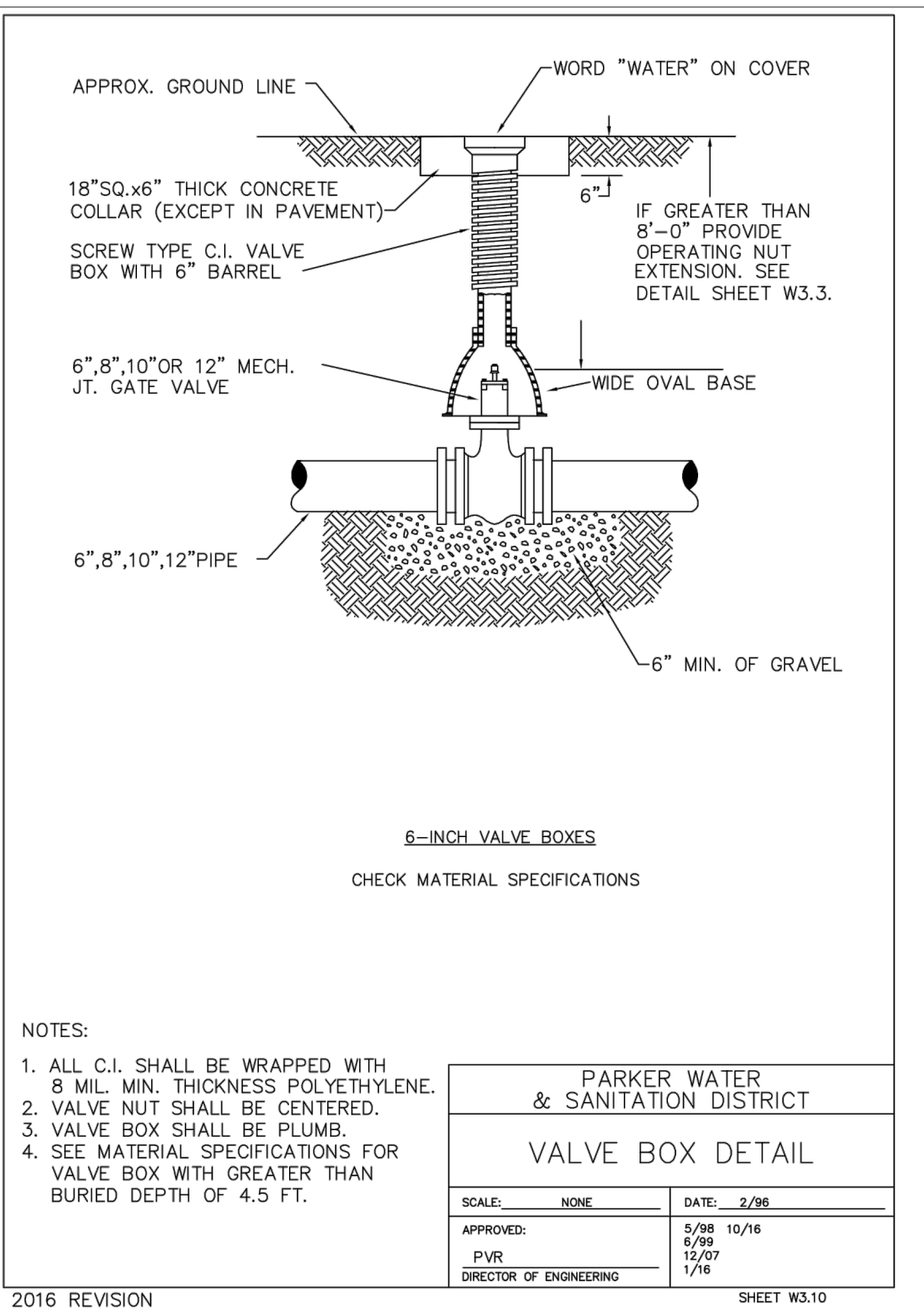
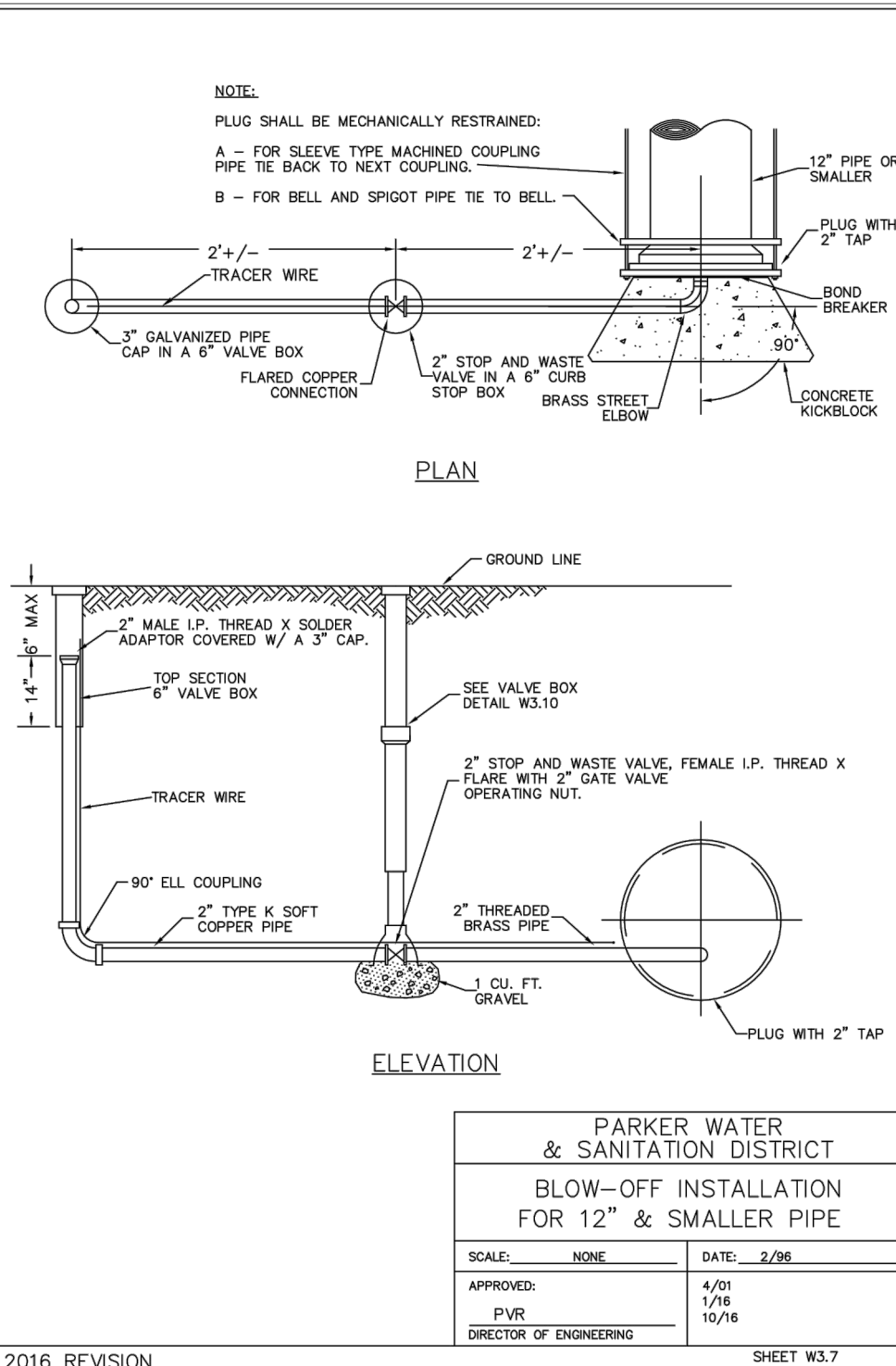
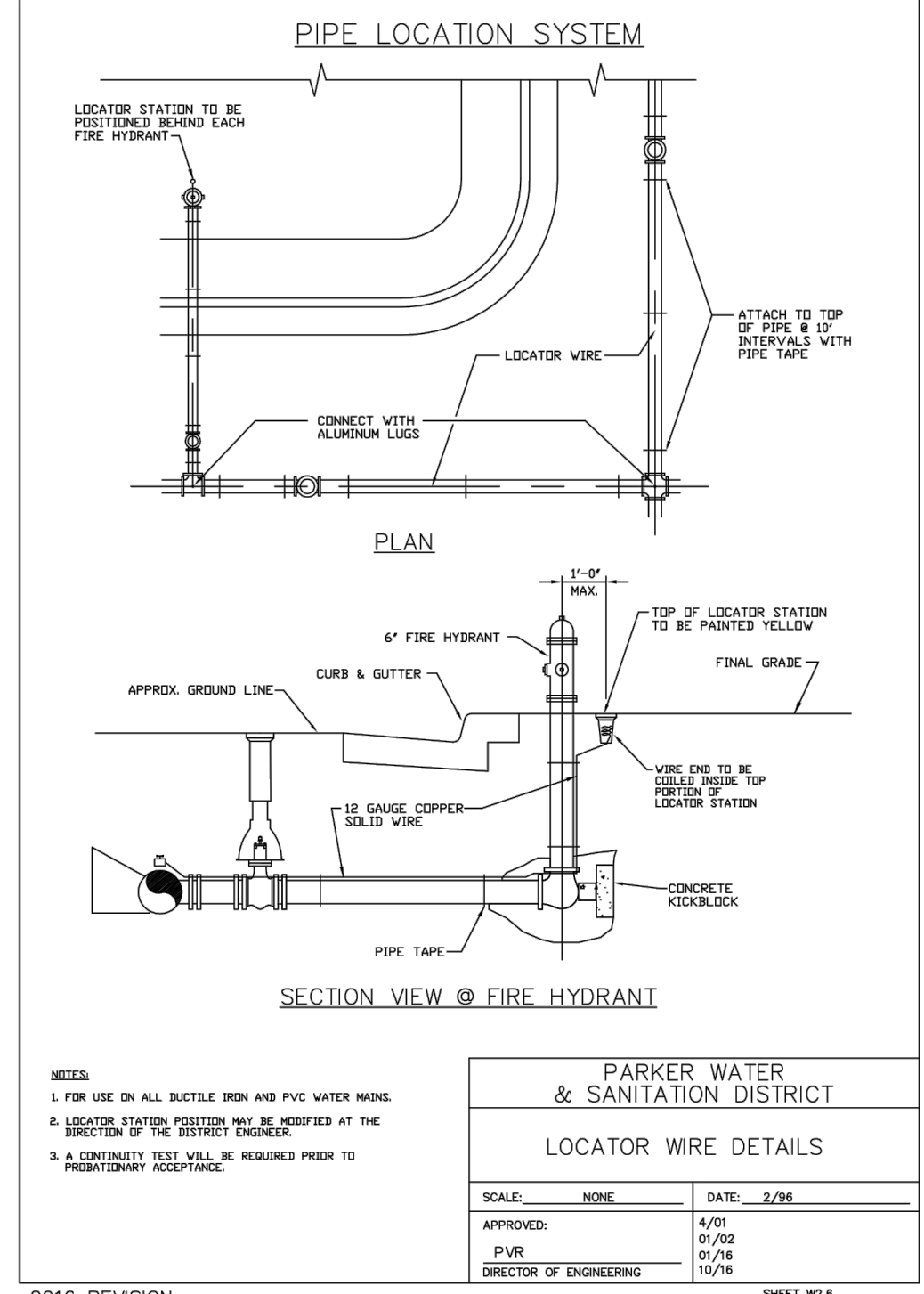
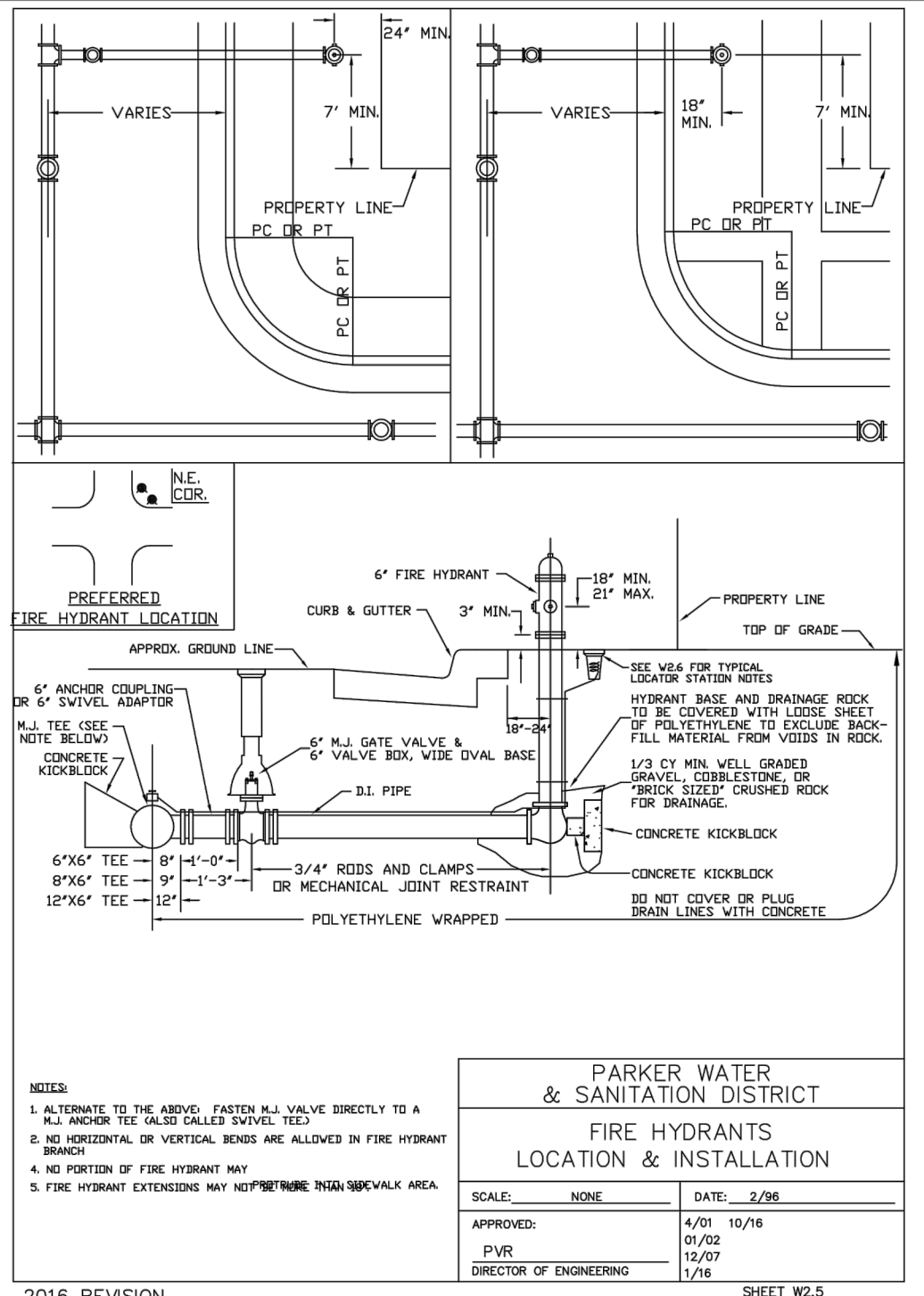
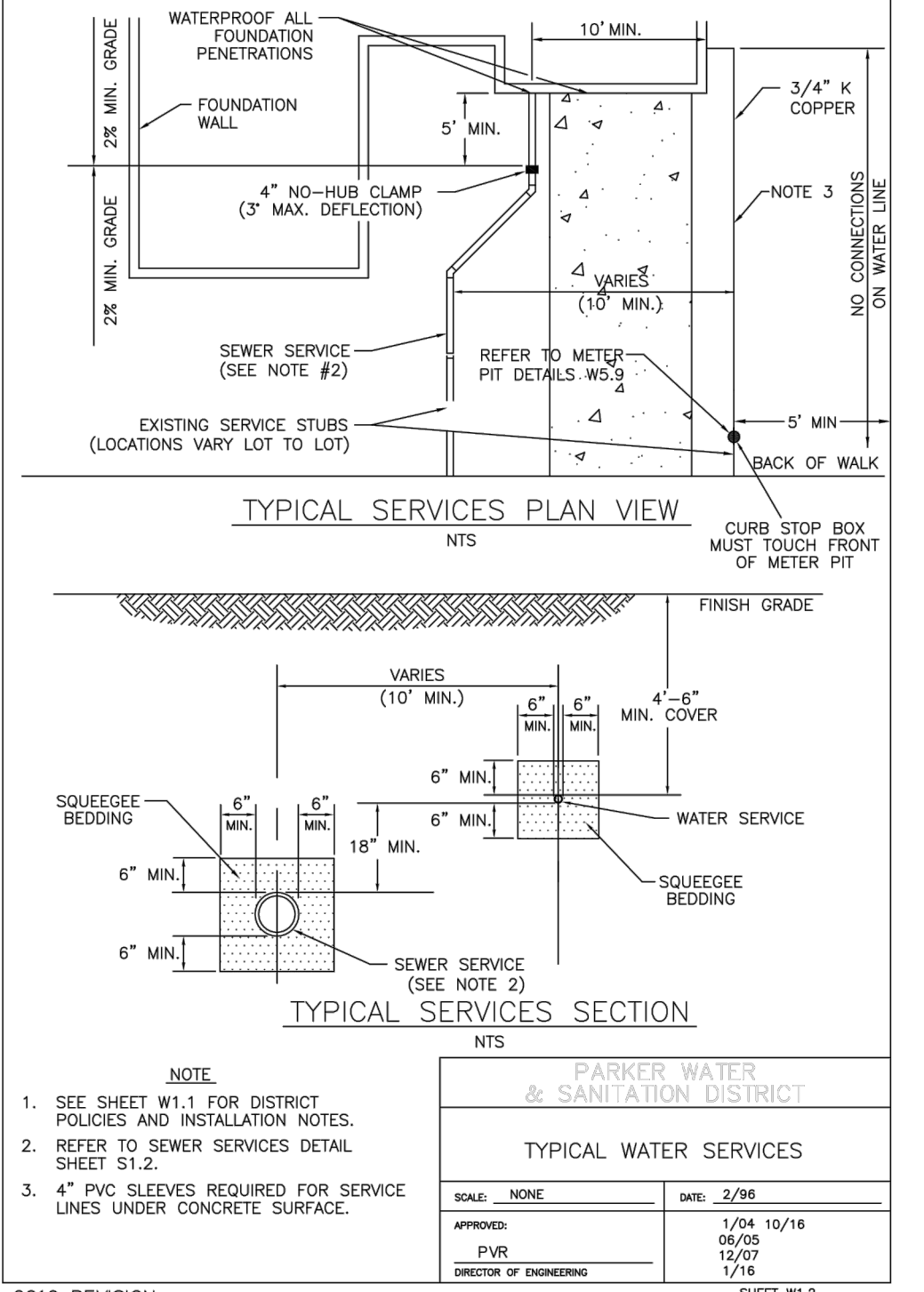
**WATER**

1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING, (3/4" MIN.)
2. APPROVED BEDDING TO BE SQUEEGEE.
3. 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 WILL BE ALLOWED ON SERVICES 3/4" AND SMALLER.
4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD. CRACK SPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURY.
6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISHED GRADE.
7. MOVED CURB BOXES MUST BE INSPECTED BY PWSD PRIOR TO BURIAL.
8. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
9. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
10. CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
11. ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:  
 \* W FOR SANITARY SEWER SERVICE  
 \* V FOR WATER SERVICES
13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSD 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:	1/04	1/16	10/16
	PVR		
	DIRECTOR OF ENGINEERING		

2016 REVISION SHEET W1.1



**PIPE BEDDING:**

(a) Installation of bedding and pipe after completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bedding material shall be placed on the bed and bedding material at pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is installed for line and grade and the joint is made, the bedding material shall be carefully placed and tamped under the bottom of the pipe and in the previously dug bed holes.

Bedding is herein defined as the act of placing approved bedding material under the bottom of the pipe, paying particular attention to voids, bell holes, and silt holes. The purpose of bedding is to ensure uniform support for the pipe.

The limits of bedding shall be from six inches (6") below the bottom of the pipe to twelve inches (12") above the top of the pipe. Approved bedding may then be installed to the groundline. See Chapter 2 of these Standards for details and composition of bedding.

(b) Bedding Material: The bedding material shall be a clean well-graded sand or squeegee sand and shall conform to the following limits when tested by means of laboratory sieves:

**Well-Graded Sand for (24-inch or larger diameter)**

Sieve Size	Total Percent Passing by Weight
3/8" inch	100
No. 4	70-100
No. 8	35-93
No. 16	20-80
No. 30	8-60
No. 60	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

If approved by the District, fines form the trench walls and spoils pile may be used to provide uniform support for the pipe. No rock or stone larger than that allowed by the sieve controls, or any other detrimental substances, shall be placed closer to the pipe than six inches (6"). Approved bedding materials shall be stockpiled on the jobsite to be used in the event natural materials become unsatisfactory. The District reserves the right to require the use of the specified bedding material at any time.

**PARKER WATER & SANITATION DISTRICT**  
**PIPE BEDDING**

SCALE:	NONE	DATE:	2/96
APPROVED:	5/08	2/06	10/16
	PVR		
	DIRECTOR OF ENGINEERING		

2016 REVISION SHEET W1.2

**APPROVED**  
**Dec 20 2021**  
**PARKER WATER AND**  
**SANITATION DISTRICT**

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE PLAN DOCUMENTS



**SHEET NO.**  
**C-3.3**



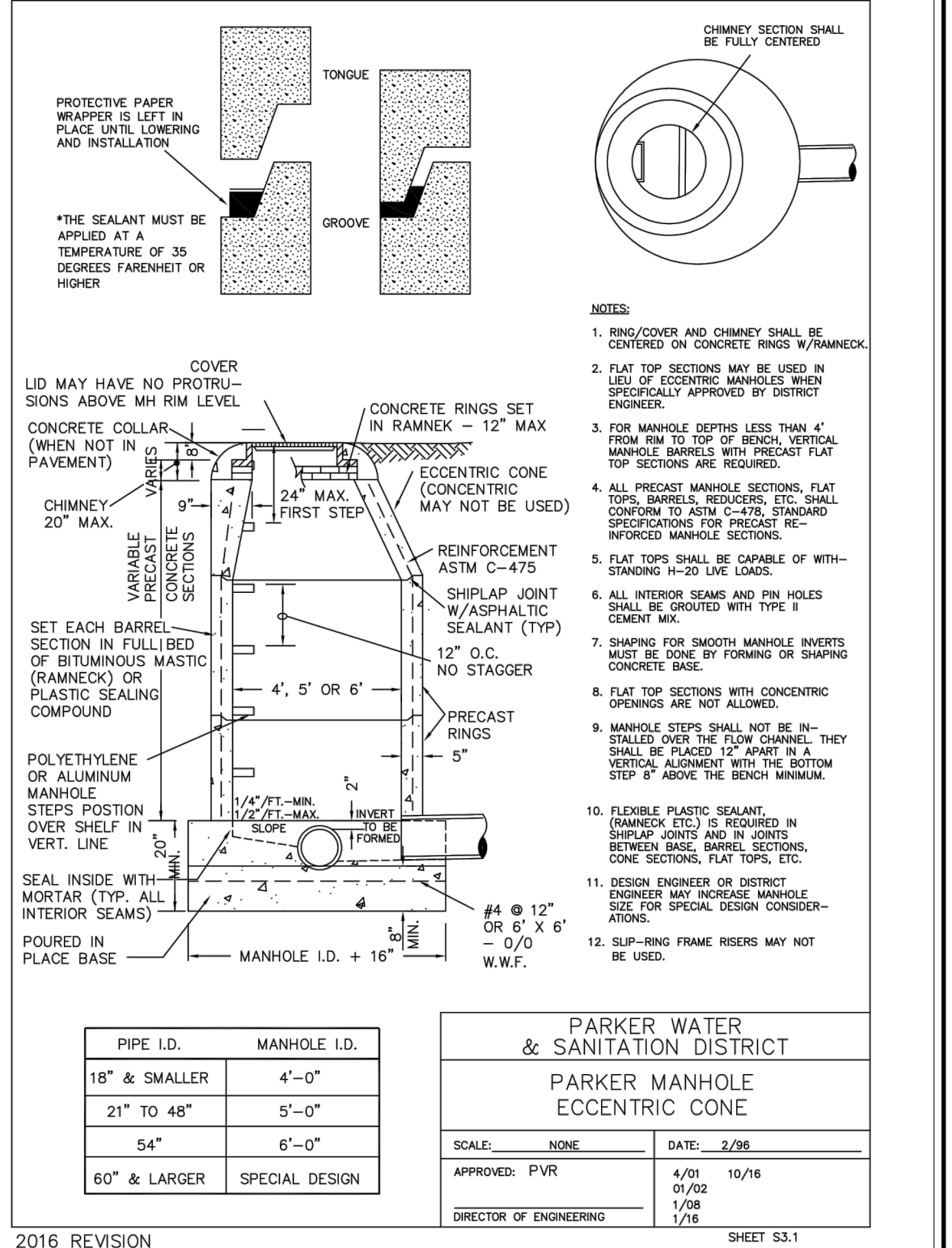
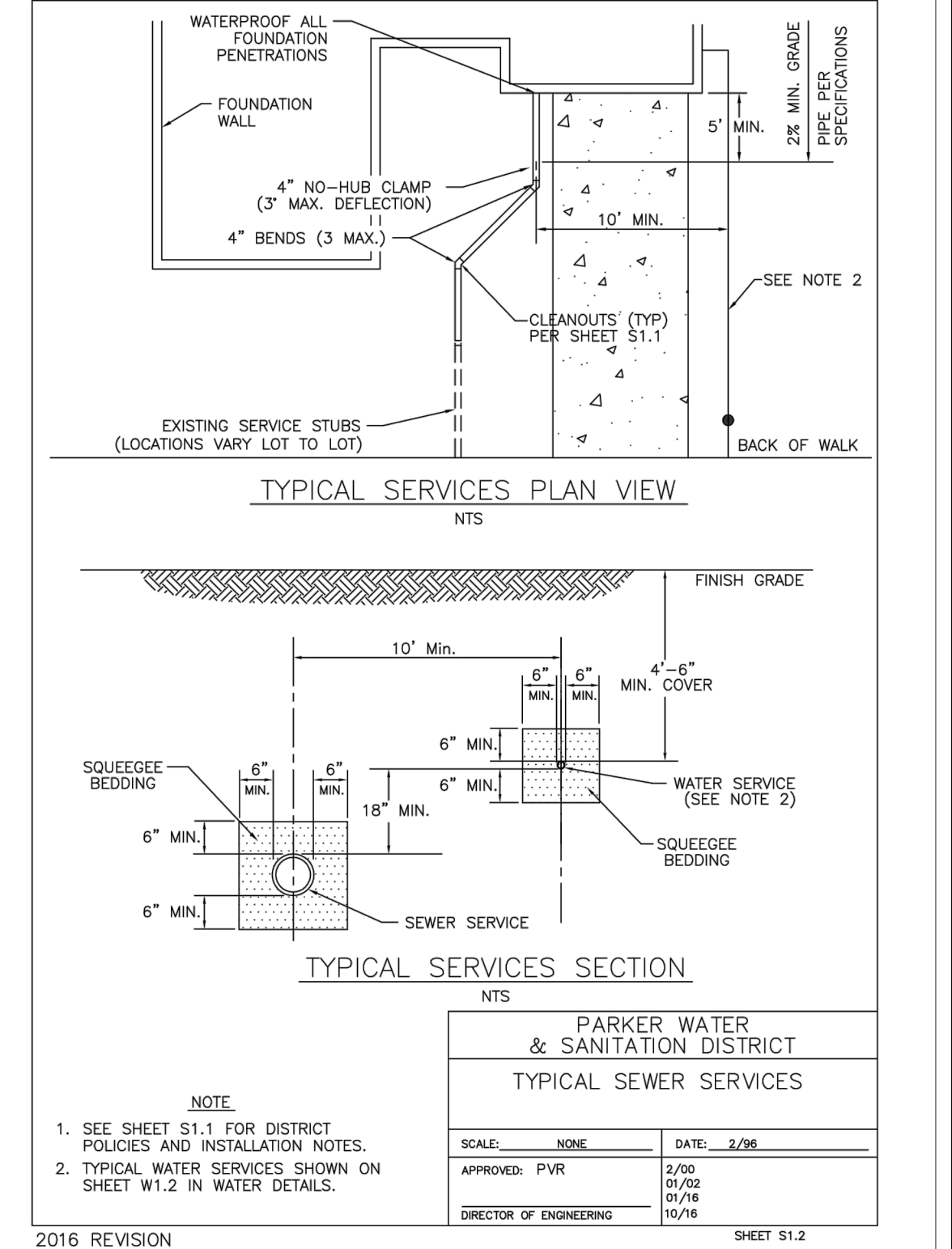
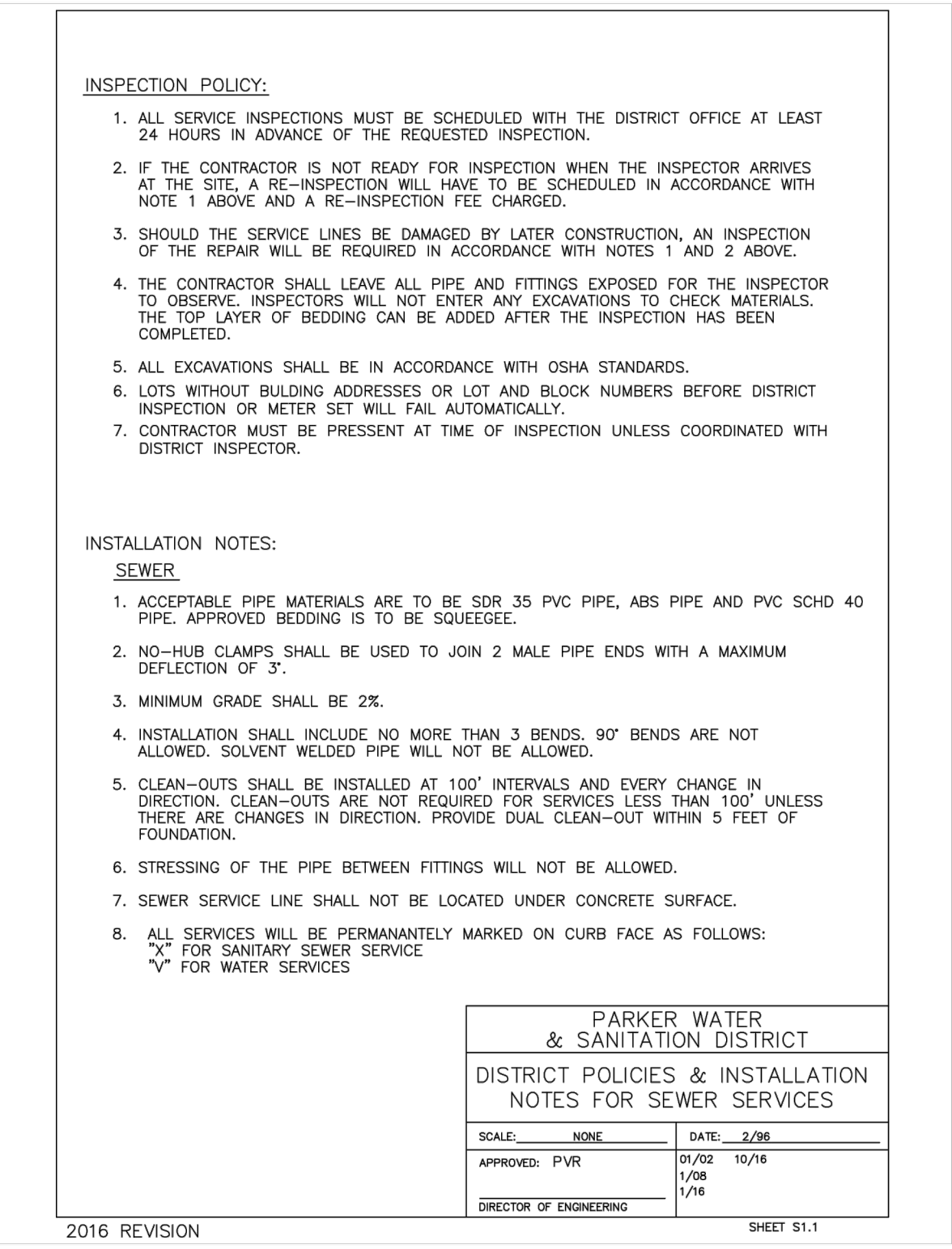
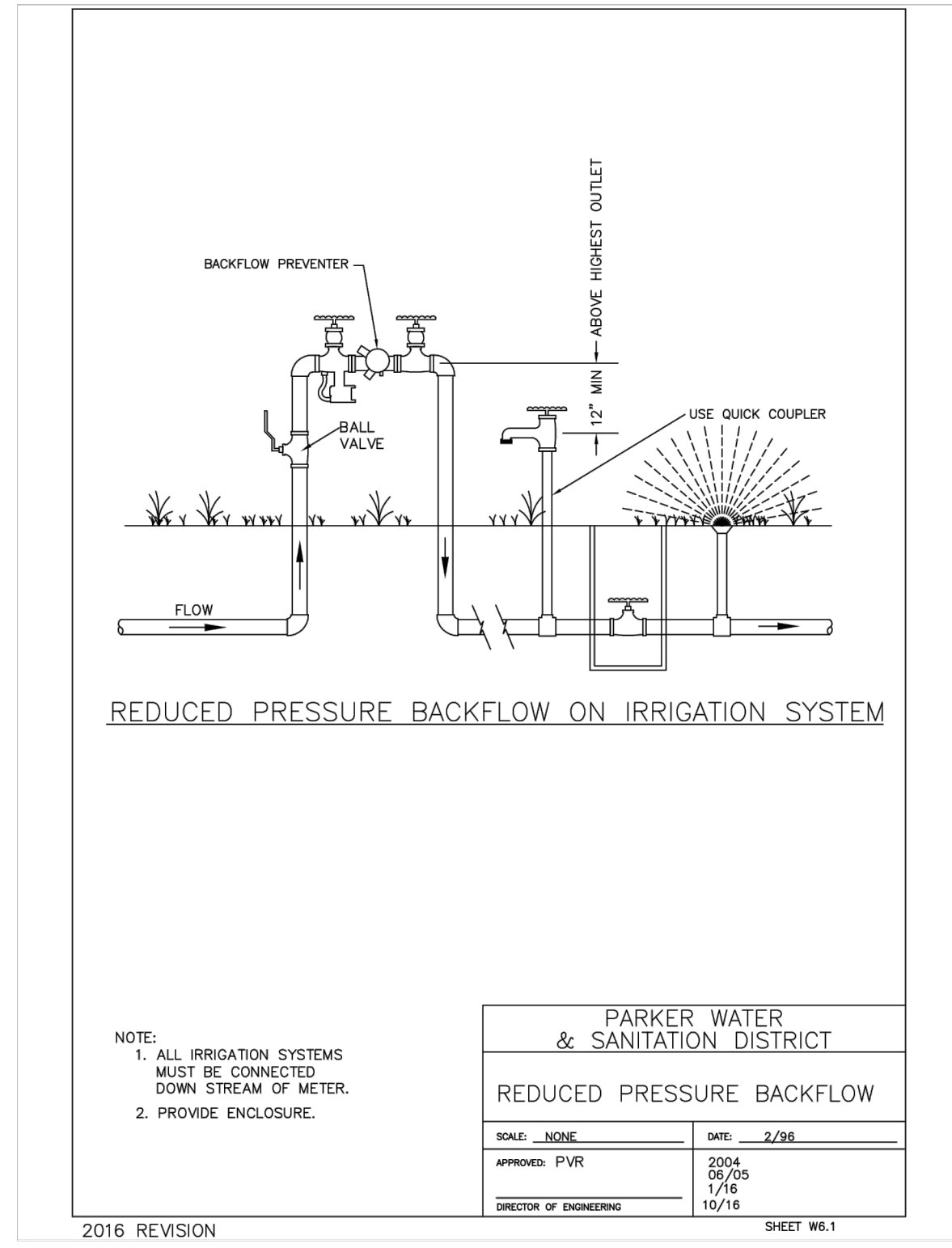
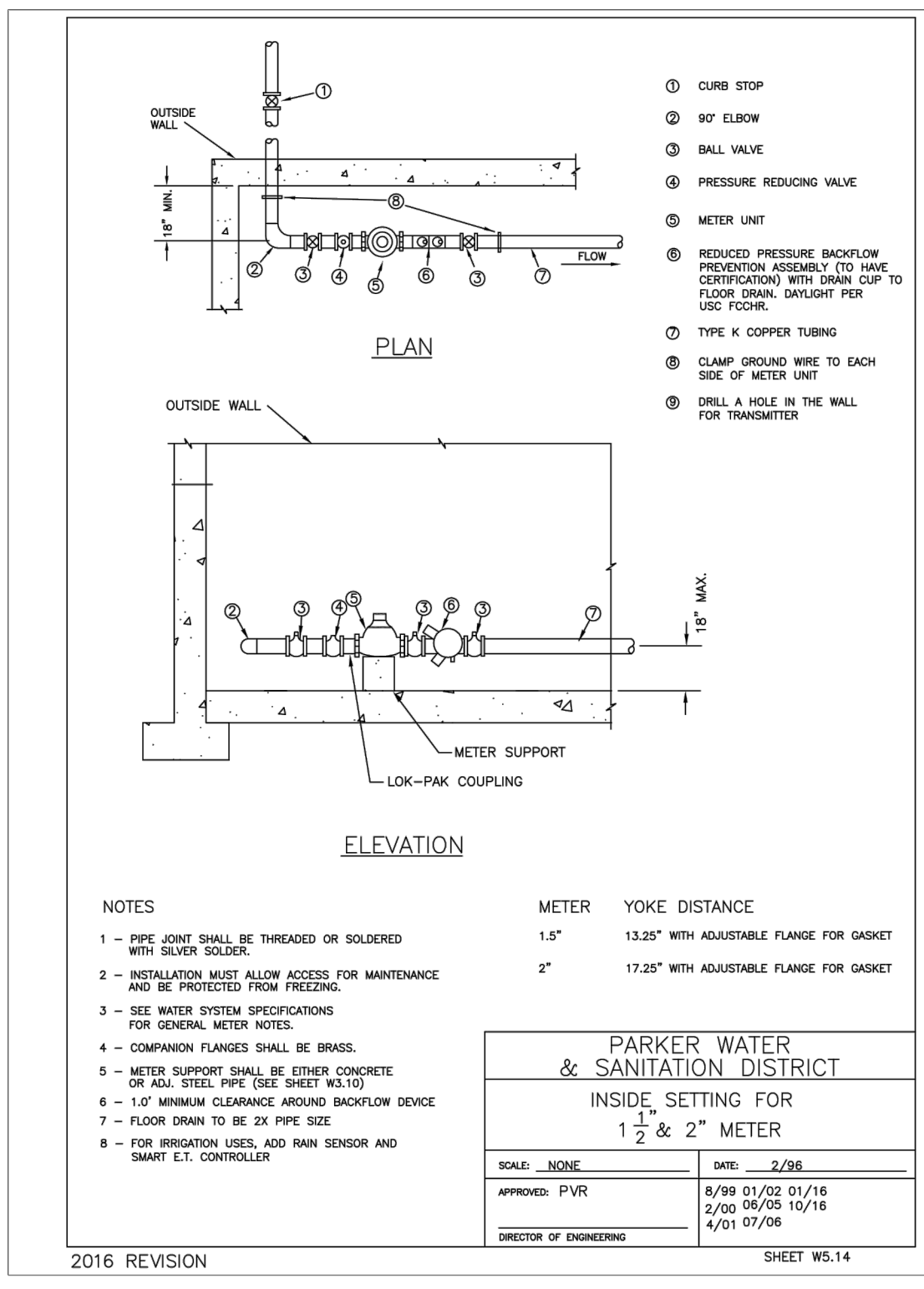
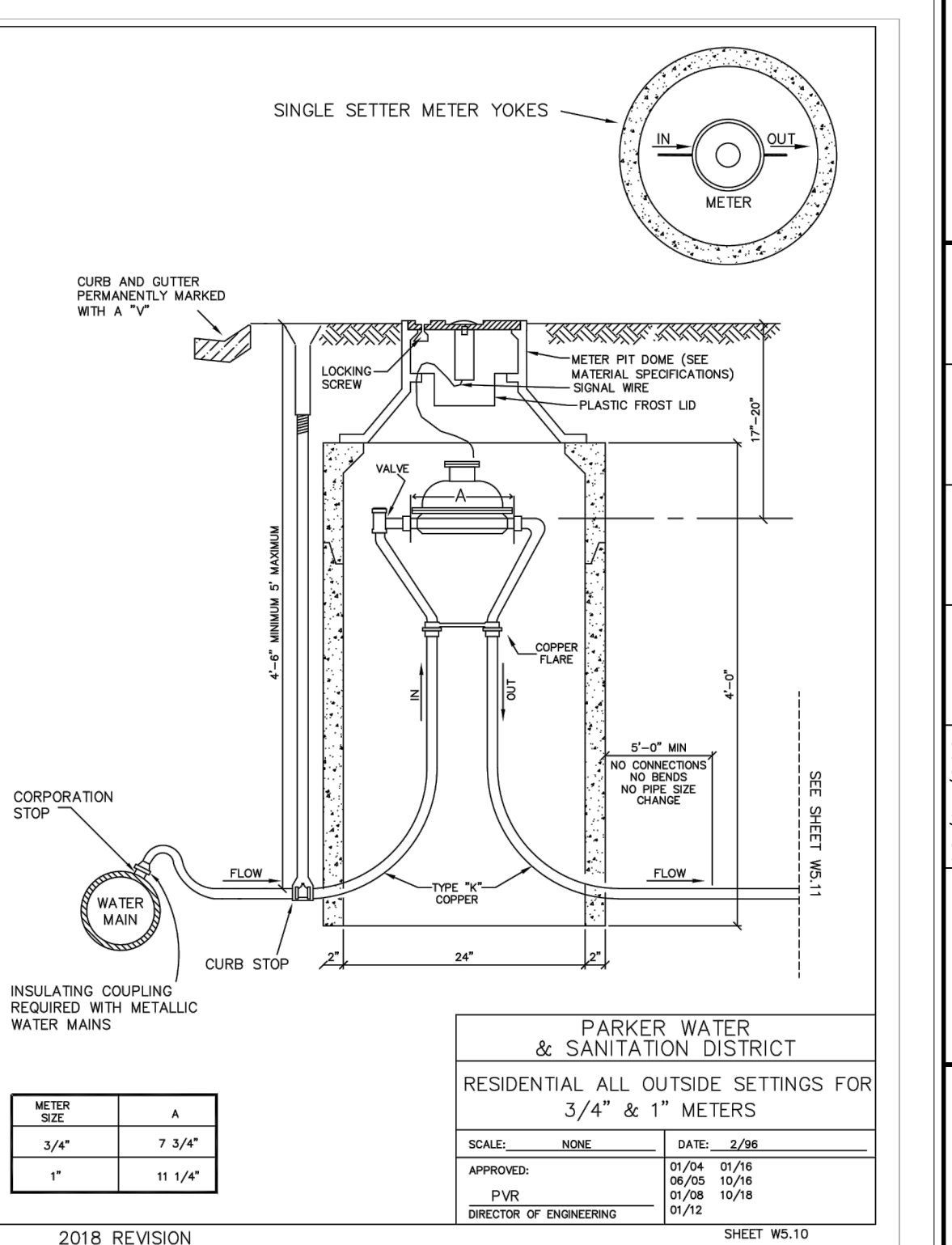
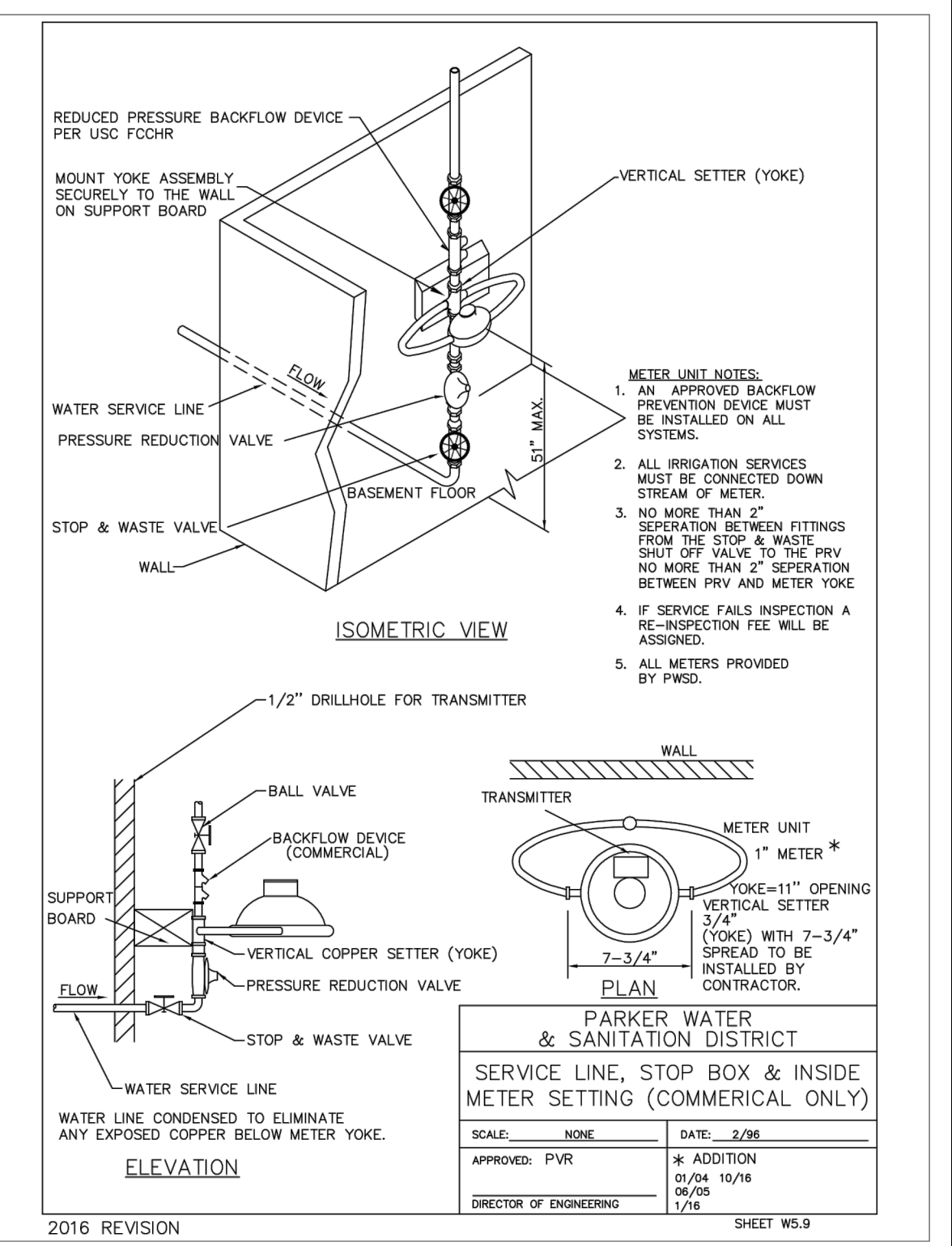
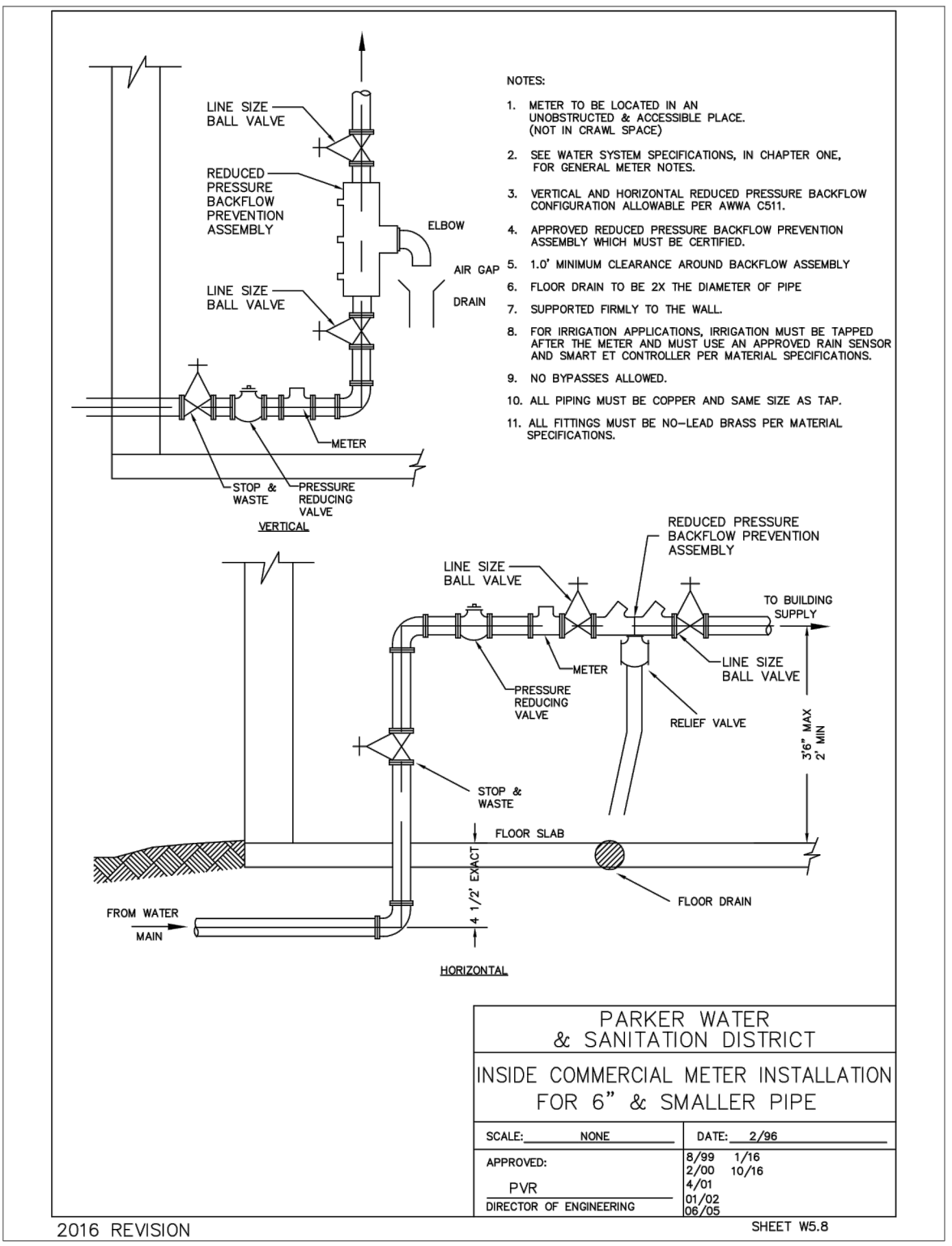
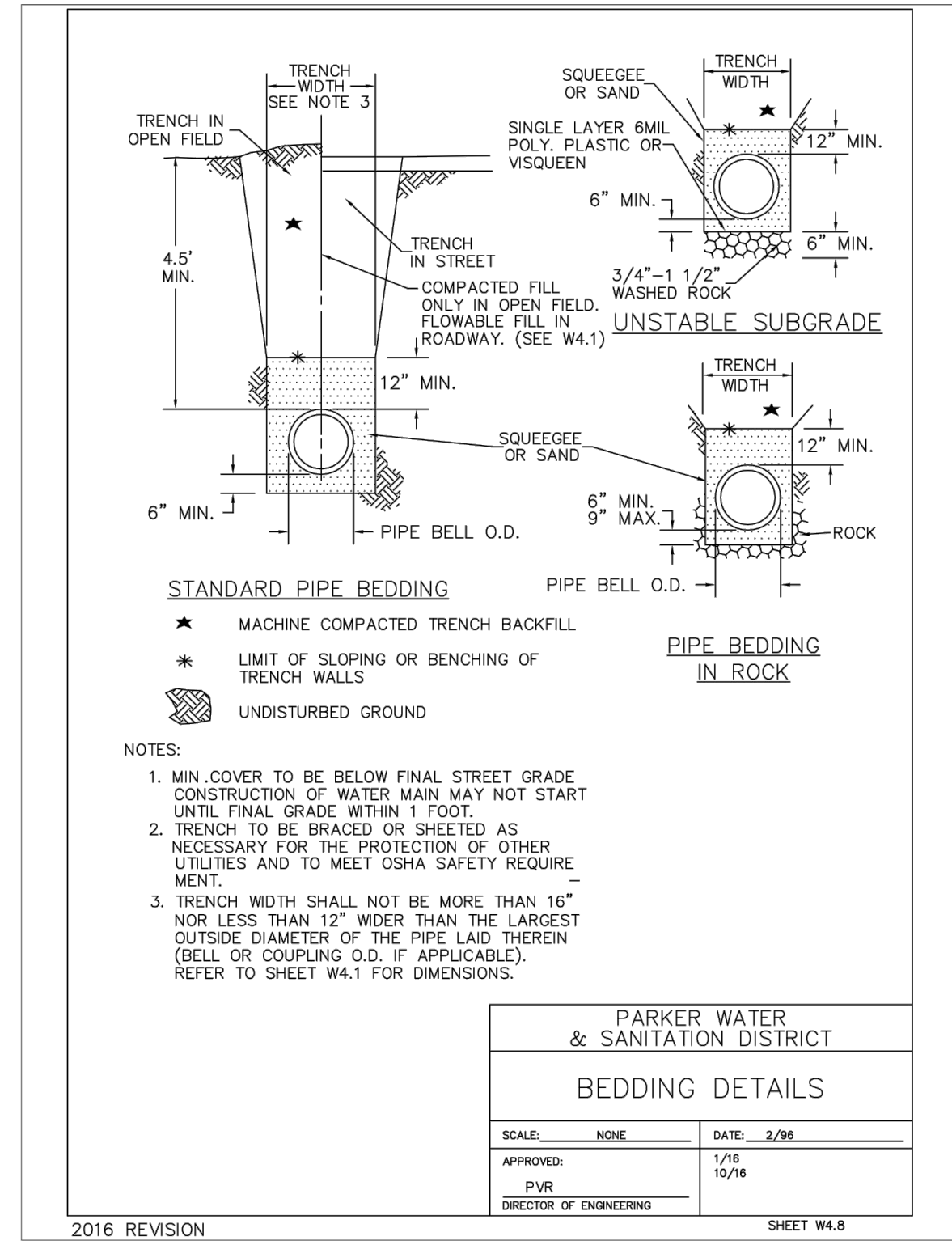
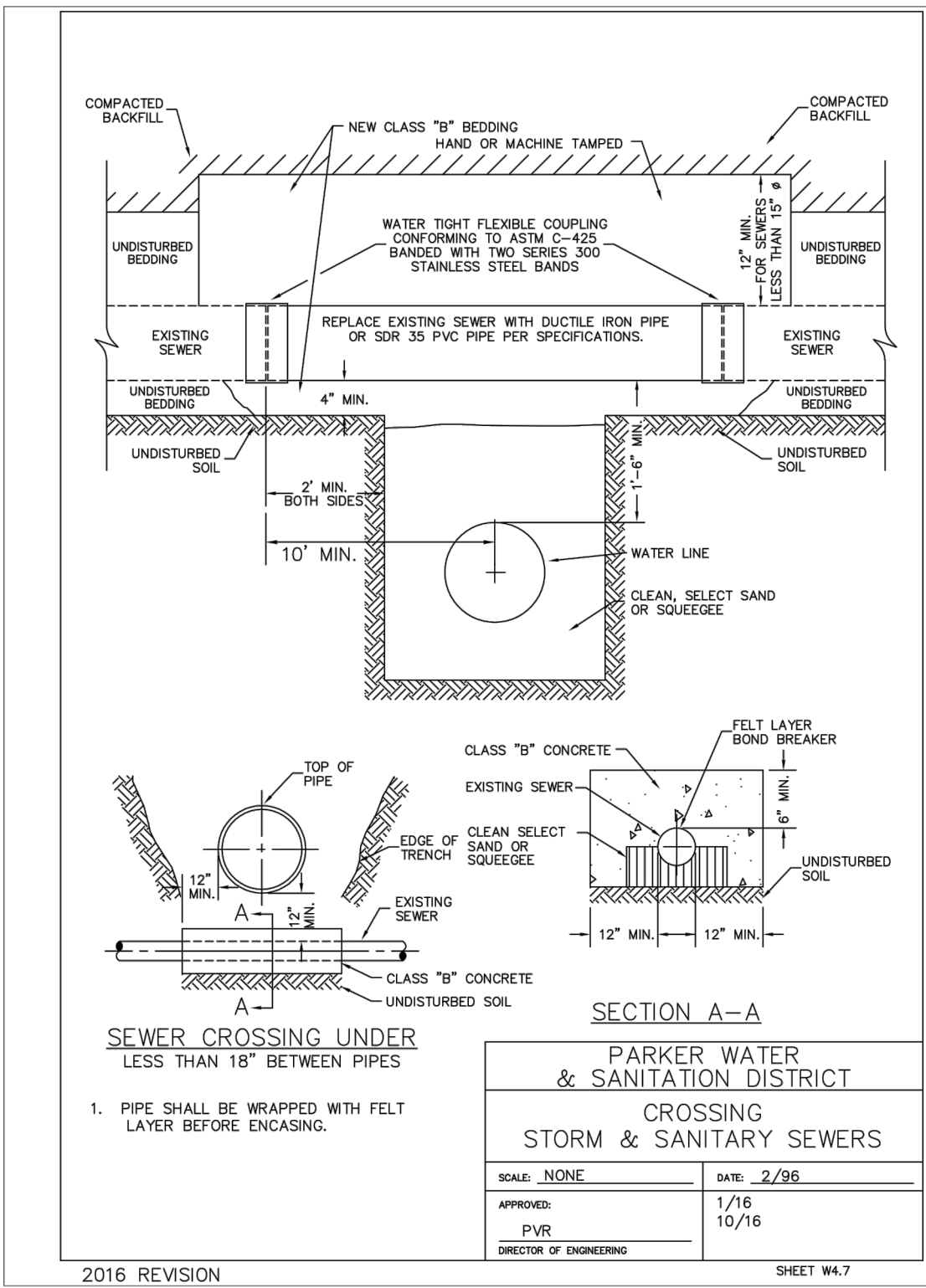
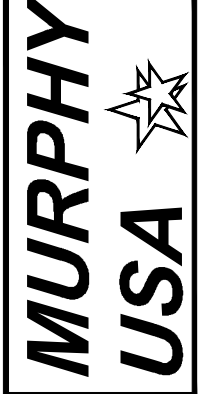
**UTILITY DETAILS**  
**MURPHY EXPRESS**  
**12405 SOUTH PARKER ROAD**  
**PARKER**  
**COLORADO**

**Galloway**

6162 S. Willow Drive, Suite 320  
 Denver, CO 80111  
 303.770.8844  
 GallowayUS.com

**MURPHY OIL USA, INC.**

**200 PEACH STREET**  
**EL DORADO, AR 71730**



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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

**APPROVED**  
**Dec 20 2021**  
**PARKER WATER AND SANITATION DISTRICT**

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

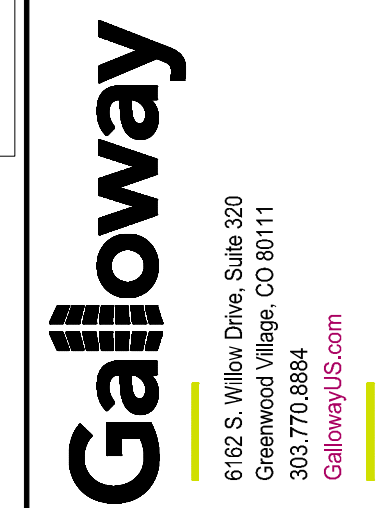
## SITE PLAN DOCUMENTS



**SHEET NO. C-3.4**



**UTILITY DETAILS**  
**MURPHY EXPRESS**  
**12405 SOUTH PARKER ROAD**  
**PARKER COLORADO**



**MURPHY OIL USA, INC.**  
 200 PEACH STREET  
 EL DORADO, AR 71730

**MURPHY USA**

**SANITARY SEWER MH PLAN (TYPE A)**

**SECTION A-A**

**SECTION B-B**

**NOTES:**

- Base slab shall be cast monolithically with the bottom riser section.
- All pipe openings shall be formed with an approved flexible rubber wedge - use gasket conforming to A.S.T.M. C-478 which shall be capable of providing a water - tight joint with zero leakage around the installed pipe.
- Manhole steps installed in bottom riser section shall conform to PRECAST Standards and Specifications.
- Standard and Specifications. However, as an alternate a special cast-in-place concrete section may be used in the bottom riser section which shall meet the same standards and specifications as the PRECAST manhole section.
- Grouted flow channels and inverts shall conform to PRECAST Standards and Specifications. Manhole barrel min. diameter shall conform to table. Precast barrel sections in conformance with A.S.T.M. C-478. All end-manhole shall be stubbed thru to 1/4" MIN. below the invert.
- Slab notes shall extend 2'-0" min past manhole O.D. and be satisfactorily sloped.
- 2" Invert drop thru Manhole (P = 1/4" outside drop MH req'd)
- Slope of bench = 1/2" FT. - Max 1/4" FT. - Min.

**PARKER WATER & SANITATION DISTRICT PRECAST MANHOLE BASE DETAIL**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/02 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.4

**SANITARY SEWER MH PLAN (TYPE A)**

**SECTION A-A**

**SECTION B-B**

**NOTES:**

- Manhole barrel min. thickness to be 5".
- Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
- The manhole steps shall conform to District Standards and Specifications.
- Pre-cast sections to conform to A.S.T.M. C-478.
- All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
- Stub outs shall extend 2'-0" minimum past manhole O.D. and be satisfactorily plugged.
- Reinforcing in base required for manhole.
- Slope of bench = 1/2" FT. - Max. 1/4" FT. - Min.
- $\Delta$  = Invert drop thru MH (if  $\Delta > 18"$ , 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 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.5

**PARKER WATER & SANITATION DISTRICT TYPICAL BASE CHANNELIZATION DETAILS**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.7

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

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.9

**PARKER WATER & SANITATION DISTRICT STANDARD EXTRUDED ALUMINUM MANHOLE STEP**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.10

**TYPICAL TRENCH DETAIL**

**NOTES:**

- Shaping or benching of trench side walls, wherever permitted shall be in accordance with applicable Federal, State and Local utility regulations.
- Trench shall be braced and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, plants, no pavement will be made for removal, replacement or relocation of such and surface, utilities, sidewalks, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.
- If dimension "D" is < 5", then existing adjacent pavement shall be removed and replaced up to the gutter. Maximum depth any width, B<sub>1</sub> & B<sub>2</sub> shall then be based upon this actual width.

**PARKER WATER & SANITATION DISTRICT SEWER TRENCHING AND BEDDING DETAIL**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S4.1

**PARKER WATER & SANITATION DISTRICT IN-LINE CLEANOUT SECTIONS**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S4.2

**PARKER WATER & SANITATION DISTRICT SAMPLING MANHOLE**

SCALE: NONE DATE: 2/96  
 APPROVED: PVR 01/08 10/16  
 DIRECTOR OF ENGINEERING SHEET S3.3

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE PLAN DOCUMENTS



Know what's below.  
Call before you dig.

SHEET NO. C-3.5



**PARKER COLORADO**

**MANHOLE COVER STANDARD DETAIL**

DATE: NOVEMBER 2020  
DETAIL: 33 OF 33

GENERAL NOTES:  
1. LOAD RATING - HEAVY DUTY.  
2. COATING - UNDRIPPED.  
3. ESTIMATED WEIGHT - 132 LBS.  
4. MATERIAL SPECIFICATION - GRAY IRON ASTM A88 CLASS B.  
5. FOR USE ON ALL PRIVATE AND PUBLIC STORM SEWER.

**ACO DRAIN**  
**KlassikDrain - K200 Galvanized steel edge rail channel system**

One meter channel: 39.37' (1 meter)

Half meter channel: 19.69' (0.5 meter)

Knock-outs included on every 5th channel

Total capacity = 19 gallons

Outlet	Product	Outlet size (in)	Invert depth (ft)	CFS
A	Bottom outlet - K200	4" round	7.87'	153
B	Bottom outlet - K2040	4" round	15.75'	236
C	End outlet - K200	4" round	7.87'	344
D	End outlet - K240	4" round	15.75'	200
E	Type K2 902G	4" round	25.53'	263
F	Type K2 902G	4" round	31.83'	297
G	Type K2 902G	4" round	23.76'	254
H	Type K2 902G	4" round	31.83'	658
I	Type K2 902G	4" round	24.69'	576
J	Type K2 902G	4" round	24.13'	254
K	Type K2 902G	4" round	31.87'	658
L	Type K2 902G	4" round	31.26'	598
M	Type K2 902G	4" round	31.26'	651
N	Type K2 902G	4" round	31.87'	1149
O	Type K2 902G	4" round	30.33'	640
P	Type K2 902G	4" round	23.19'	251
Q	Type K2 902G	4" round	23.90'	288
S	Type K2 902G	4" round		0.64

April 2018 www.ACOdrain.us

**ACO DRAIN**  
**Type 678Q Longitudinal ductile iron grate (ADA)**

**Product Features**

- Certified to EN 1433 Load Class C - 56,000 lbs - 967 psi
- Uses 'QuickLok' boltless locking system
- Suitable for use with K200, K2000, H200K13, and H200K13 channels
- Manufactured from ductile iron to ASTM A 536-84 - Grade 65-45-12
- E-coated for improved resistance against rust
- Complies with ADA - American Disabilities Act of 1990 Section 4.5.4
- Complies with ASME: A31.2.6.3 - 2001: Section 7.1.2 Heel Resistant Strainers and Grates
- Bicycle Tire Penetration Resistant to AS 3996 - 2006

**Specifications**

General: The surface drainage system that be ACO Drain K200, K2000, H200K13, and H200K13, channels\* complete with ACO Type 678Q longitudinal ductile iron grate with 'QuickLok' locking as manufactured by ACO, Inc. or similar approved.

Materials: The covers shall be manufactured from ductile iron and have minimum properties as follows:

- Independently certified to meet Load Class C
- to EN 1433 - 56,000 lbs - 967 psi
- Ductile iron to ASTM A 536-84 - Grade 65-45-12
- Intake area of 51.62 sq. in. (330.97 cm<sup>2</sup>) per half meter of grate

The overall width of 9.41" (239mm) and overall length of 19.69" (500mm). Slots measure at a maximum of 1.41" (35.5mm) by 0.31" (8mm).

Installation: The trench drain system and grates shall be installed in accordance with the manufacturer's installation instructions and recommendations.

April 2018 www.ACOdrain.us

**ACO DRAIN**  
**Type 678Q Longitudinal ductile iron grate (ADA)**

**Plan view**

**Side elevation**

Description	Part No.	Length inches (mm)	Width inches (mm)	Weight lbs.
QuickLok grate	90038	19.69 (500)	9.41 (239)	22.0
QuickLok locking bar	10457	-	-	0.5
QuickLok grate removal tool	03118	-	-	0.3

**'QuickLok' locking mechanism**

ACO 'QuickLok' is a patented boltless locking system. Grates are removed and replaced with the minimum time and effort for ease of maintenance. The unique design provides a positive 'snap down' fit into the locking bar. A slot is fixed to the grate which 'locks' into the spring clip on the locking bar.

The 'QuickLok' slot is made from stainless steel and high density polyethylene. The locking bar and clip are stainless steel, for use in both general purpose and corrosive environments.

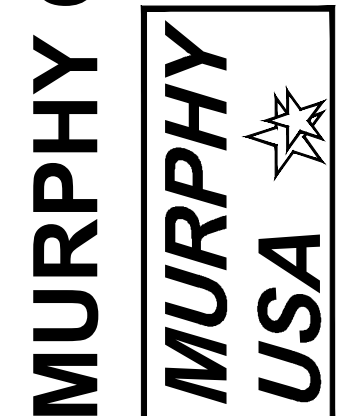
**ACO Inc.**  
Northeast Sales Office: 9470 Princeton Drive, Akron, OH 44300, Tel: (440) 639-7220, Fax: (440) 639-7255  
West Sales Office: 825 W. Bechtolt St., Casa Grande, AZ 85122, Tel: (520) 421-9988, Fax: (520) 421-9999  
Southeast Sales Office: 4211 Pleasant Road, Fort Mill, SC 29508, Tel: (803) 543-7654, Fax: (803) 543-7653

April 2018 www.ACOdrain.us

**MURPHY OIL USA, INC.**  
200 PEACH STREET  
EL DORADO, AR 71730

**UTILITY DETAILS**  
MURPHY EXPRESS  
12405 SOUTH PARKER ROAD  
PARKER COLORADO

**Galloway**  
6162 S. Willow Drive, Suite 320  
Wenger, CO 80111  
GallowayUS.com



08/04/2021  
DATE: 08/04/2021  
JES: JES  
KML: KML  
DES: DES  
PRN: PRN  
PM: PM  
DRW: DRW  
OTB: OTB

SHEET NO. C-3.5

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.

TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE PLAN DOCUMENTS



Know what's below.  
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SHEET NO.

C-3.6



UTILITY DETAILS  
MURPHY EXPRESS

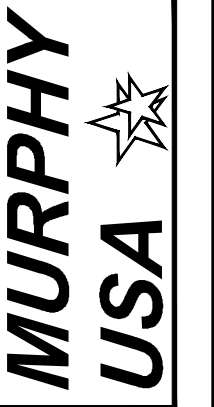
12405 SOUTH PARKER ROAD  
PARKER COLORADO

Galloway

6162 S. Willow Drive, Suite 320  
Englewood, CO 80111  
303.770.8844  
GallowayUS.com

MURPHY OIL USA, INC.

200 PEACH STREET  
EL DORADO, AR 71730



### STEEL GRATE QUANTITIES

PIECES	DESCRIPTION	LENGTH PER FT. (LBS.)	WEIGHT PER FT. (LBS.)
4	5/8" x 7/8" BEAM	48"	7.50
2	3/2" x 1/2" FLAT	26 5/8"	2.90
2	3" x 1/2" FLAT	26 5/8"	2.50

TOTAL LBS. = 131

### QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. OF STEPS
2'-0"	1.0	75	0
3'-0"	1.3	85	0
4'-0"	1.7	97	0
5'-0"	2.1	109	1
6'-0"	2.5	122	2
7'-0"	2.9	135	3
8'-0"	3.3	148	4
9'-0"	3.7	161	5
10'-0"	4.1	174	6
11'-0"	4.5	187	7
12'-0"	4.9	200	8

### GENERAL NOTES

- INLET TYPE C IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- REINFORCING BARS SHALL BE GRADE 60, EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A MIN. 2 INCH CLEARANCE, OUT OR BEND AROUND PIPES AS REQUIRED.
- CONCRETE SLOPE AND DITCH PAVING SHALL BE IN ACCORDANCE WITH SECTION 507. REINFORCEMENT FOR CONCRETE PAVING SHALL BE 6" X 6" - W4.4 X W4.4 OR 6" X 6" - W2.3 X W2.3.
- STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
- THE STANDARD INLET GRATES SHALL BE USED IN ALL TYPE C INLETS UNLESS CLOSE MESH INLET GRATES ARE SPECIFIED ON THE PLANS.
- CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET - 6 INCHES AND SHALL CONFORM TO ASHTO M 199.
- SEE STANDARD PLAN M-604-11 FOR REINFORCEMENT AROUND THE PIPE OPENING.
- ALL INLETS SHALL HAVE A 4" HIGH DIA. METAL MEDALLION WITH A "NO DRAINAGE TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE TOP OF THE INLET WITH A PERMANENT FASTENER.
- 3/4" TYPICAL HEX HEAD OR TWISTED CROSS BARS AT 4" ON CTRS. WELDED TO 4" x 3/4" BEARING BARS SPACED AT 24" CTRS.
- 402 BARS SHALL BE EQUALLY SPACED FROM EACH OTHER.

### BAR LIST FOR H = 2 FT. - 6 IN. AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
NO. 401	4	3'-0"	13'-4"
NO. 402	6	2'-2 1/2"	8'-0"
NO. 403	4	1'-0"	13'-4"

### STANDARD PLAN NO. M-604-10

Standard Sheet No. 1 of 1

### STEEL GRATE QUANTITIES

PIECES	DESCRIPTION	LENGTH PER FT. (LBS.)	WEIGHT PER FT. (LBS.)
4	5/8" x 7/8" BEAM	48"	7.50
2	3/2" x 1/2" FLAT	26 5/8"	2.90
2	3" x 1/2" FLAT	26 5/8"	2.50

TOTAL LBS. = 131

### QUANTITIES FOR ONE INLET

H	CONCRETE (CU. YDS.)	STEEL (LBS.)	NO. OF STEPS
3'-0"	1.3	72	4
3'-6"	1.5	78	4
4'-0"	1.8	89	5
4'-6"	1.8	104	6
5'-0"	1.9	109	6
5'-6"	2.1	122	7
6'-0"	2.2	136	8
6'-6"	2.4	141	8
7'-0"	2.5	154	9
7'-6"	2.7	168	10
8'-0"	2.8	173	10
8'-6"	3.0	187	11
9'-0"	3.1	200	12
9'-6"	3.3	205	12
10'-0"	3.4	219	13

### GENERAL NOTES

- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- CAST-IN-PLACE CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES.
- EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/8" OF AN INCH.
- REINFORCING BARS SHALL BE DEFORMED #4 AND SHALL HAVE A 2 INCH MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE GRADE 60 AND EPOXY COATED.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET - 6 INCHES AND SHALL CONFORM TO ASHTO M 199.
- ALL GRATES AND FRAMES SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06. GRATES AND FRAMES SHALL BE DESIGNED TO WITHSTAND HS 20 LOADING.
- STATION POINT IS AT THE CENTER OF THE INLET.
- GRATE SHALL HAVE "DUMP NO WASTE DRAINS TO STREAM" MESSAGE CAST ON SURFACE.

### BAR LIST FOR H = 3 FT. - 0 IN.

MARK	NO. REQ'D.	DIMENSIONS	LENGTH
401	4	3'-0"	13'-4"
402	2	3'-4 1/2"	8'-0"
403	4	2'-2 1/2"	13'-4"

### STANDARD PLAN NO. M-604-13

Standard Sheet No. 1 of 1

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

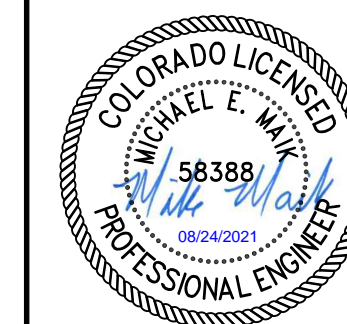
LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE PLAN DOCUMENTS



Know what's below.  
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SHEET NO. C-3.7



STORM AND SANITARY PLAN  
MURPHY EXPRESS  
12405 SOUTH PARKER ROAD  
PARKER  
COLORADO

**Galloway**  
6162 S. Willow Drive, Suite 320  
Englewood, CO 80111  
303.770.9848  
GallowayUS.com

MURPHY OIL USA, INC.  
200 PEACH STREET  
EL DORADO, AR 71730



### BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHEAST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

### BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN, VERTICAL DATUM IS APPROXIMATELY 2.6± FEET BELOW NAVD 88.

### SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

### CAUTION – NOTICE TO CONTRACTOR

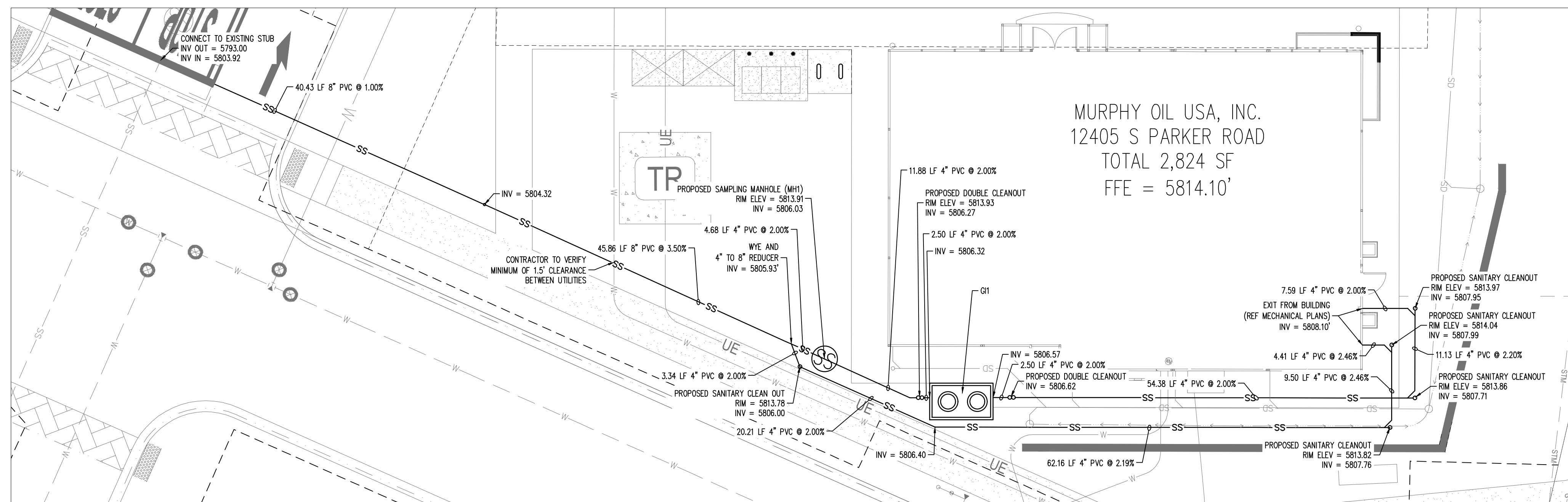
- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



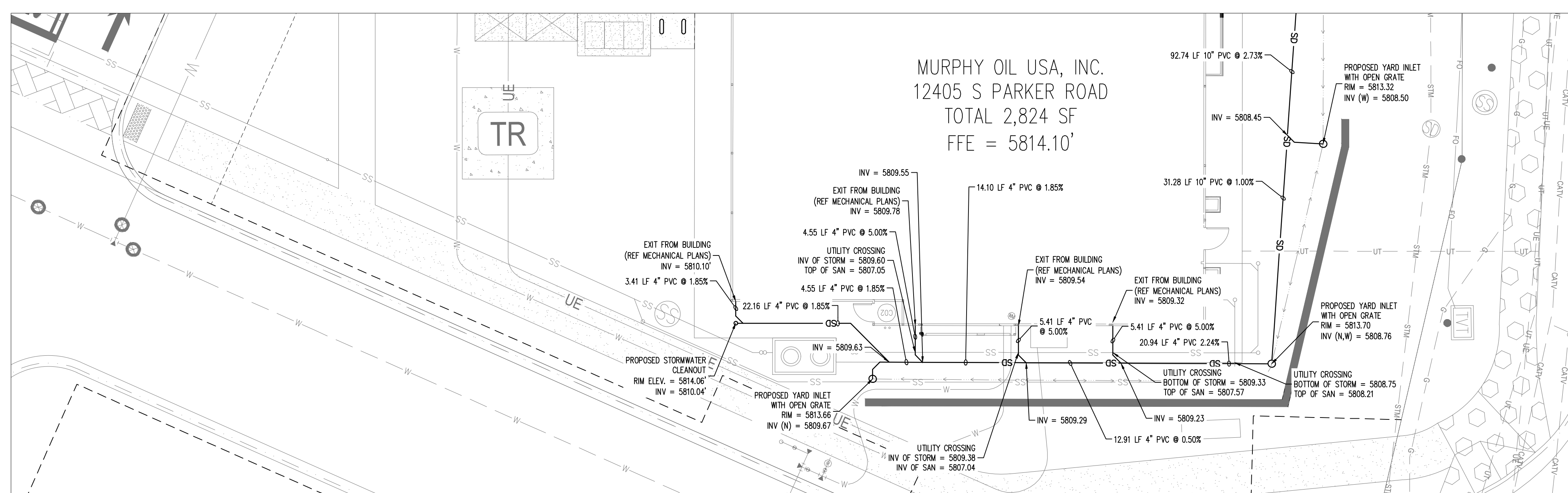
Know what's below.  
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NOTE: CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.



SANITARY PLAN



STORM PLAN

# PARKER AND PINE FILING NO. 1 LOT 2 – SITE PLAN

MURPHY OIL USA, INC.

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

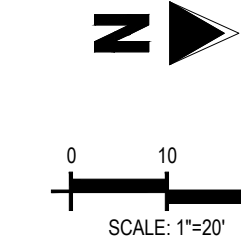
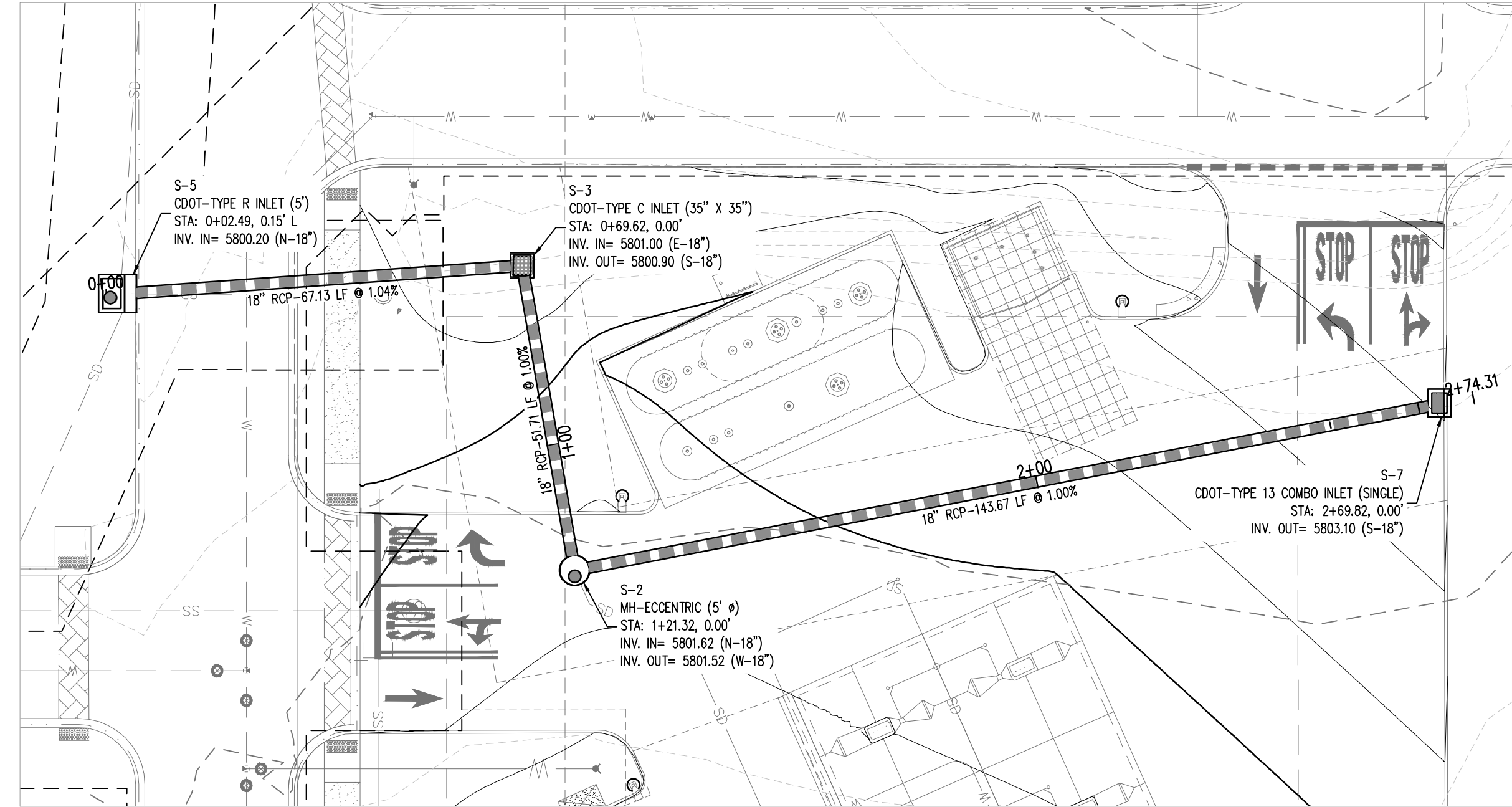
## SITE PLAN DOCUMENTS



Know what's below.  
Call before you dig.

SHEET NO.

C-3.8



### BASIS OF BEARING

BEARINGS ARE BASED ON A PORTION OF THE EAST LINE OF LOT 1, BLOCK 3, PARKER AUTO PLAZA FILING NO. 1 AND BEING A PORTION OF THE WEST RIGHT OF WAY LINE OF PARKER ROAD, THE SOUTH END OF THE LINE BEING THE SOUTHEAST CORNER OF SAID LOT 1, BLOCK 3, MONUMENTED ON THE NORTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 24960 AND ON THE SOUTH END BY A FOUND NO. 4 REBAR RED PLASTIC CAP PLS 23524, AND IS CONSIDERED TO BEAR S23°56'20"E, A DISTANCE OF 553.91 FEET.

### BENCHMARK

ELEVATIONS SHOWN ARE BASED ON CONTROL PROVIDED BY MARTIN & MARTIN. VERTICAL DATUM IS APPROXIMATELY 2.6± FEET BELOW NAVD 88.

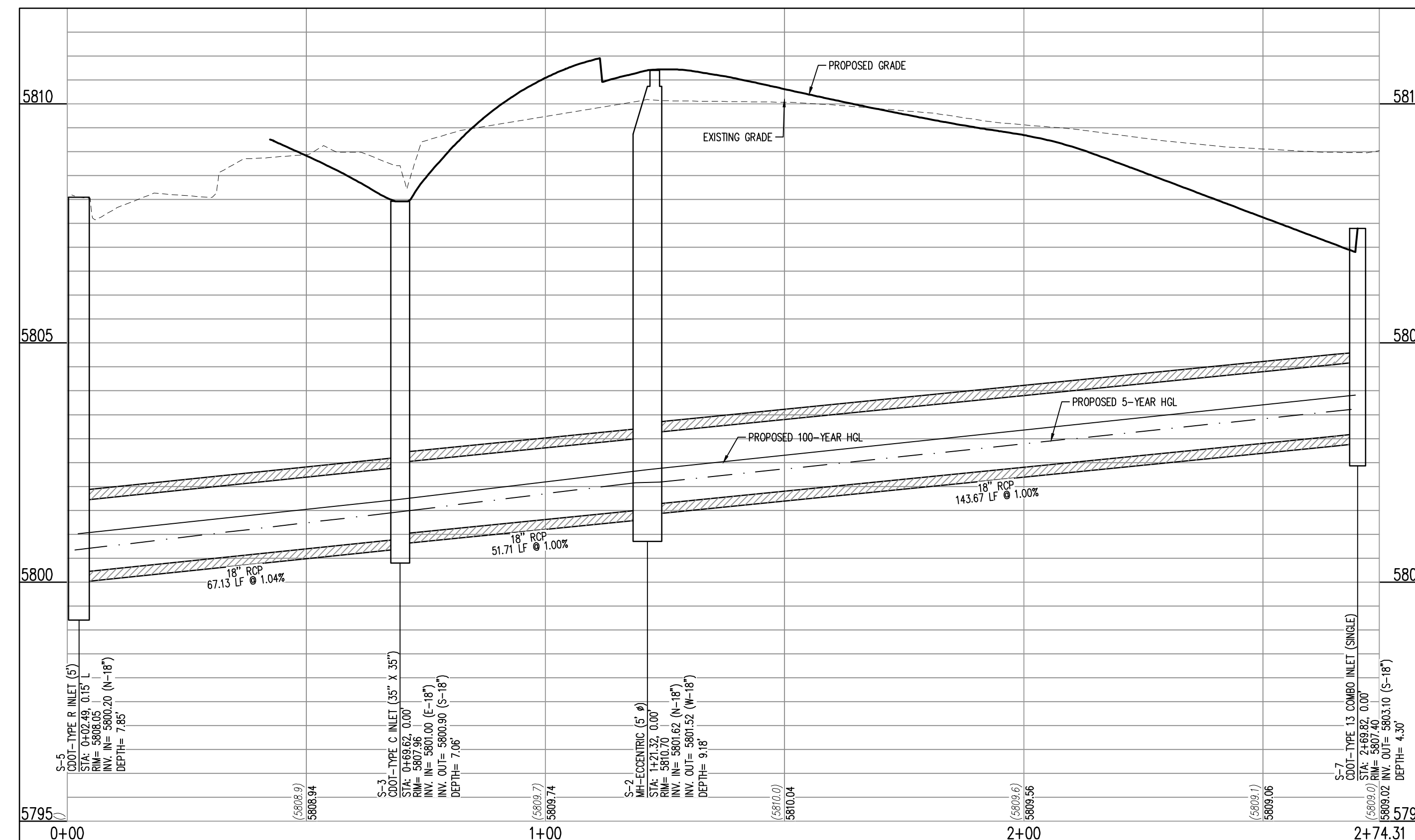
### SITE BENCHMARKS:

SITE BENCHMARK #1: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5634.76

SITE BENCHMARK #2: #5 REBAR WITH 2" ALUMINUM; CAP STAMPED "PLS 36062"; EL = 5640.22

NOTE: CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS. PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.



STM A  
STA: 0+00 - 2+74.31  
SCALE: H: 1"=20' V: 1"=10'

### UTILITY LEGEND

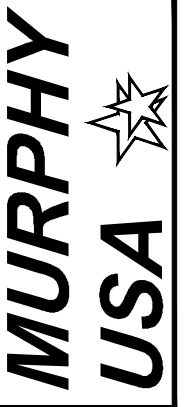
- - - - - w - EXISTING WATER LINE
- - - - - ss - EXISTING SANITARY SEWER
- - - - - ss - PROPOSED SANITARY SEWER
- - - - - sd - EXISTING STORM SEWER
- - - - - sd - PROPOSED STORM SEWER
- - - - - sd - PROPOSED ROOF DRAIN
- ⊙ - PROPOSED MANHOLE
- ⊙ - PROPOSED CLEANOUT
- ⊙ - EXISTING GATE VALVE
- ⊙ - PROPOSED GATE VALVE
- ⊙ - EXISTING FIRE HYDRANT
- ⊙ - PROPOSED HORIZONTAL BEND
- ⊙ - PROPOSED FIRE HYDRANT
- ⊙ - EXISTING INLET
- ⊙ - PROPOSED INLET

**Galloway**

6162 S. Willow Drive, Suite 320  
Englewood, CO 80111  
303.770.9884  
GallowayUS.com

MURPHY OIL USA, INC.

200 PEACH STREET  
EL DORADO, AR 71730



OTB DATE PRN PM DES DRW  
08/04/2021  
**STORM PLAN AND PROFILE**  
**MURPHY EXPRESS**  
**12405 SOUTH PARKER ROAD**  
**PARKER COLORADO**

IRRIGATION CONTROLLER 'A'

VALVE NUMBER	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
VALVE SIZE	1.0"	1.0"	1.0"	1.0"	1.0"	OPEN	OPEN	OPEN	OPEN	OPEN
G.P.M.	6.6	6.7	4.9	2.8	4.8	OPEN	OPEN	OPEN	OPEN	OPEN
OPERATION PSI	40	40	40	40	40	OPEN	OPEN	OPEN	OPEN	OPEN
ZONE TYPE	ROTATOR	ROTATOR	DRIP	DRIP	DRIP	OPEN	OPEN	OPEN	OPEN	OPEN

# PARKER AND PINE FILING NO. 1 LOT 2

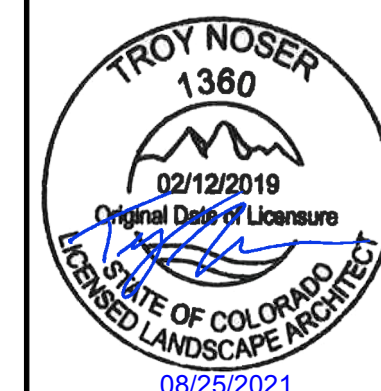
MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO  
**SITE CONSTRUCTION PLANS**

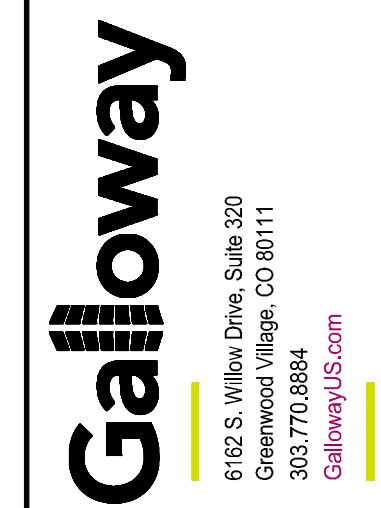


Know what's below.  
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SHEET NO. **IR1.1**

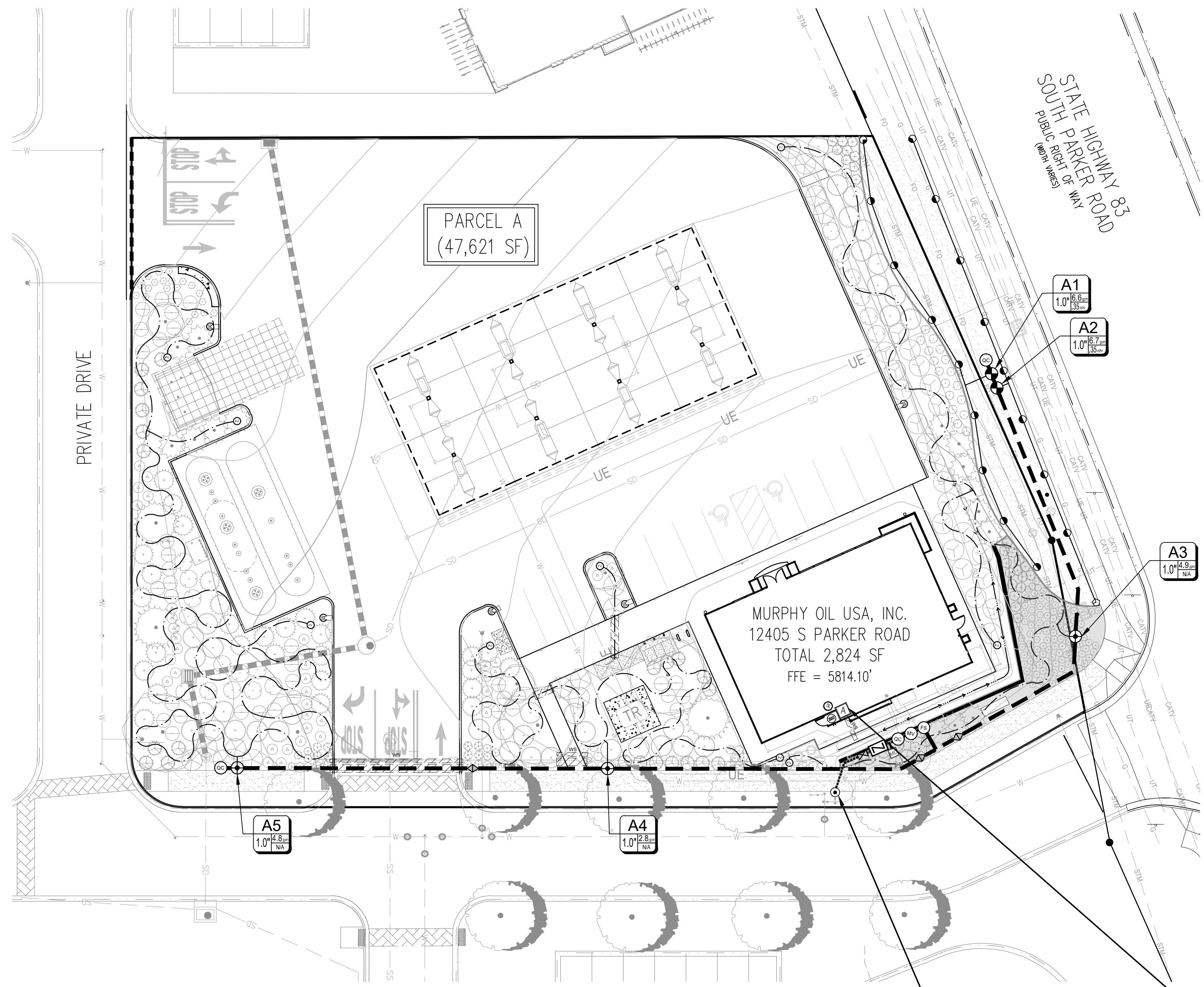


IRRIGATION PLAN  
 MURPHY EXPRESS  
 12405 SOUTH PARKER ROAD  
 PARKER, COLORADO



6102 S. Willow Drive, Suite 320  
 Littleton, CO 80111  
 303.770.8844  
 GallowayUS.com

MURPHY OIL USA, INC.  
 200 PEACH STREET  
 EL DORADO, AR 71730



**IRRIGATION LEGEND**

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	REMARKS/DETAIL
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**CONTROLLERS AND SENSORS**

A	HUNTER	I-CORE 10 STATION	IRRIGATION CONTROLLER TO BE A HUNTER IC-1000-M, WITHIN METAL VANDAL RESISTANT LOCKABLE PEDESTAL CABINET. IRRIGATION CONTROLLER TO BE LOCATED AS DIRECTED BY OWNER OR OWNERS REPRESENTATIVE.	DETAIL 1 / IR1.2
B	HUNTER	SOLAR-SYNC	ET/RAIN/FREEZE SENSOR - MOUNT PER DETAIL AND PLAN LOCATION	DETAIL 4 / IR1.2

**POINT OF CONNECTION**

C	PER CITY OR WATER DISTRICT CODES AND STANDARDS	3/4" POINT OF CONNECTION, REFERENCE CIVIL PLANS FOR TAP LOCATION.	SEE P.O.C. DIAGRAM THIS SHEET
M	PER CITY OR WATER DISTRICT CODES AND STANDARDS	IRRIGATION METER, REFERENCE CIVIL PLANS FOR METER LOCATION.	SEE P.O.C. DIAGRAM THIS SHEET
N	FEBCO MODEL 825YA	3/4" BACKFLOW PREVENTER-MOUNT IN GUARDSHACK MODEL #GS-1 W/ FROST GUARD BAG MODEL #FG-1 FOR WINTERIZATION, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 2 / IR1.2

**VALVES**

MV	HUNTER	IBV-101G-FS	1" MASTER VALVE	DETAIL 16 / IR1.3
FS	FLOMEC	QS200-10	1" ULTRASONIC FLOWMETER WITH 1" PVC TEE RECEPTACLE	DETAIL 12 / IR1.2
CV	HUNTER	ICV-FS-ADJ	REMOTE CONTROL VALVE, SIZE PER PLAN. ADJUST PRESSURE REGULATOR BETWEEN 60-85PSI. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMs.	DETAIL 3 / IR1.2
RC	RAINBIRD	XCZ-100-PRB-COM (0.3-20 GPM)	DRIP CONTROL ZONE KITS (24 VAC-60HZ)-IRRIGATION CONTRACTOR TO VERIFY DRIP ZONES PRESSURE REQUIREMENTS AND USE VALVE REGULATOR FOR HIGH PRESSURES. GROUP VALVES TO FIT WITHIN WATER SCHEDULES/MAXIMIZE AVAILABLE GPMs.	DETAIL 5 / IR1.2
QC	HUNTER	HQ-44-LRC	1" QUICK COUPLER WITH LOCK	DETAIL 9 / IR1.2
GV	WATTS	WGV-X	GATE VALVE, SEE POINT OF CONNECTION SCHEMATIC DIAGRAMS	DETAIL 7 / IR1.2
AP	ANY APPROVED	ANY APPROVED	PVC BALL VALVE - SIZE PER MAINLINE SIZE	DETAIL 11 / IR1.2

**MAIN LINE / LATERALS & SLEEVES**

---	ANY APPROVED	PRESSURIZED PVC MAINLINE - 1-1/2" CLASS 200 PVC PIPE UNLESS OTHERWISE NOTED ON THE PLANS	DETAIL 10 / IR1.2
---	ANY APPROVED	LATERAL LINE - USE CLASS 200 PVC, SIZE 1"-INCH SIZE UNLESS OTHERWISE NOTED ON THE PLANS. INSTALL ANTI-FREEZE DRAINS AT LOW POINTS	DETAIL 10 / IR1.2
---	ANY APPROVED	IRRIGATION SLEEVE - SCHEDULE 40 PVC TWICE THE SIZE OF THE PIPE TO BE INSERTED, ONE SLEEVE PER PIPE	DETAIL 10 / IR1.2
---	ANY APPROVED	CONTROL WIRING SLEEVE - 2" SCHEDULE 40 PVC PIPE (SEE WIRING/SPLICING/SLEEVING NOTE, THIS SHEET)	DETAIL 10 / IR1.2

**ROTORS & SPRAY HEADS**

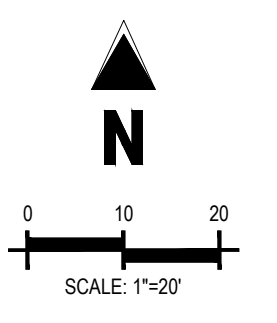
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-QUARTER	MAROON	8-13"	0.16	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-135°	MAROON	8-13"	0.24	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-90 (TURF) PROS-12-CV/MP1000-90 (SEED)	MP ROTATOR-HALF	MAROON	8-13"	0.32	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP1000-360 (TURF) PROS-12-CV/MP1000-360 (SEED)	MP ROTATOR-FULL	OLIVE	8-13"	0.65	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-QUARTER	BLUE	20-28"	0.74	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-135°	BLUE	20-28"	1.29	40	DETAIL 15 / IR1.3
R	HUNTER	PROS-06-CV/MP3000-90 (TURF) PROS-12-CV/MP3000-90 (SEED)	MP ROTATOR-HALF	BLUE	20-28"	1.58	40	DETAIL 15 / IR1.3

**SPRAY NOTES:**  
 1. CONTRACTOR SHALL USE RADIUS REDUCTION SCREWS ON MP ROTATORS AS NECESSARY TO ACHIEVE APPROPRIATE RADII COVERAGE.

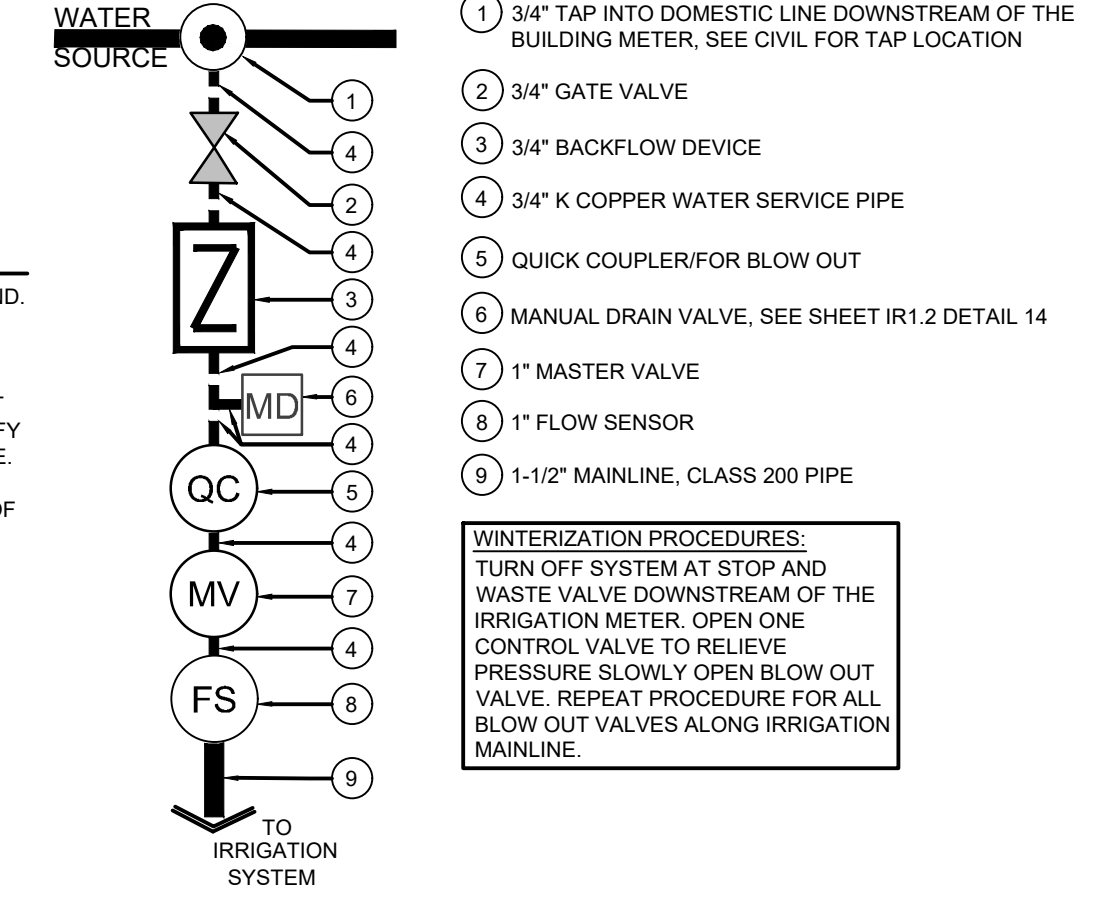
**DRIP SYSTEM**

POINT SOURCE EMITTERS	RAINBIRD	FOR LANDSCAPE BED AREAS - XBS-XXX	XERI BLACK STRIPE POLY TUBING (OR APPROVED EQUAL), CONNECTION TO PVC LATERAL PER CONTRACTOR. ATTACH TREE & SHRUB DRIP EMITTERS PER THE EMITTER SCHEDULE BELOW. USE 3/4-INCH POLY TUBING UNLESS OTHERWISE NOTED. FLOWS IN GPM FOR LINE CHANGES SHALL BE: (3/4"-1 TO 7 GPM), (1"-12" TO 14 GPM), (1-1/2" TO 35 GPM). INSTALL SEVERAL IN-LINE CHECK VALVES IN ZONES W/ LARGE ELEVATION DIFFERENCES. GROUP DRIP CONTROLLER VALVES TOGETHER TO MAXIMIZE WATER WINDOWS.	DETAIL 8 / IR1.2
DRIP EMITTER SCHEDULE	HUNTER	AFV-B	AUTOMATIC FLUSH VALVE WITH BARB CONNECTION.	DETAIL 13 / IR1.2

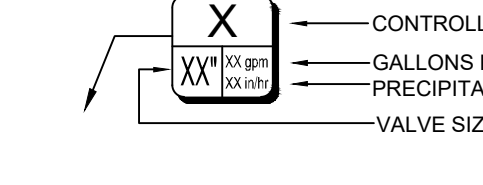
**CAUTION**  
 UTILITIES EXIST WITHIN CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THEIR LOCATION PRIOR TO CONSTRUCTION.



**TYPICAL POINT OF CONNECTION SCHEMATIC DIAGRAM**



**VALVE KEY DIAGRAM**



**WIRING / SPLICING / SLEEVING NOTES**

14 AWG WIRE TO BE USED FOR UP TO 10,000 LF. 12 AWG WIRE SHALL BE USED BETWEEN 10,000 LF & 15,000 LF.  
 ALL CONNECTIONS AND SPLICES MUST BE MADE WITH DRY-8 WATERPROOF CONNECTORS. LEAVE 5 LF OF WIRE SLACK FOR EASE OF MAINTENANCE AND PREVENT DAMAGE FROM CONTRACTION.  
 PROVIDE AND INSTALL SCHEDULE 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA.  
 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 REVIEWS(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.  
 TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

**IRRIGATION DISCLAIMER**

- IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPALITIES ENTITIES AND THIS DIAGRAMMATIC IN NATURE.
- CONTRACTOR SHALL INSTALL MAINLINES 12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
- THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PITS, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.
- ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 5' AWAY FROM ANY BUILDING FOUNDATION. ADDITIONAL REQUIREMENTS MAY BE LISTED IN THE GEOTECHNICAL REPORT REGARDING IRRIGATION NEAR BUILDING FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO ABIDE BY THE 5' MINIMUM DISTANCE AND/OR THE GEOTECHNICAL REPORT REQUIREMENTS. IF THIS EQUIPMENT IS SHOWN WITHIN THE 5' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
- REFER TO SHEET IR1.2 FOR IRRIGATION DETAILS AND IR1.3 FOR IRRIGATION NOTES.

**UTILITY NOTES**

- THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
- THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
- THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

**POINT OF CONNECTION 'A'**

STATIC PRESSURE: +/- TBD  
 SIZE OF TAP: 3/4"  
 • USE 3/4" TAP AND INTO THE DOMESTIC WATER LINE DOWNSTREAM OF THE BUILDING METER.  
 • 3/4" TYPE K COPPER SERVICE FROM THE TAP THROUGH THE IRRIGATION BACKFLOW, TO THE MASTER VALVE.  
 • CONTRACTOR SHALL VERIFY LOCATION OF THE EQUIPMENT, IN FIELD WITH OWNER OR OWNERS AUTHORIZED REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.  
 • SEE POINT OF CONNECTION DIAGRAM, THIS SHEET, FOR THE IRRIGATION SYSTEM EQUIPMENT CONFIGURATION.  
 • THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION. SEE GENERAL IRRIGATION NOTES.  
 • WHEN WATER PRESSURE TO THE IRRIGATION SYSTEM EXCEEDS 100 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A PRESSURE REDUCING / REGULATING VALVE (PRV) TO LIMIT THE WATER TO 80 PSI MAXIMUM. WHEN PRESSURE DROPS BELOW 65 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A BOOSTER PUMP TO A MINIMUM PRESSURE OF 80 PSI.

**CONTROLLER 'A' NOTE**

- ONE (1) TO STATION CONTROLLER, SEE LEGEND.
- FIVE (5) OPEN STATIONS FOR FUTURE EXPANSION.
- STATION RUN ORDER SHALL MATCH PLANS.
- LOCATE CONTROLLER IN THE UTILITY CLOSET AS SPECIFIED ON THE BUILDING PLANS. VERIFY LOCATION WITH OWNER OR REPRESENTATIVE.
- 120 VAC POWER TO CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLERS TO 120 VAC SHALL BE PERFORMED BY THE LANDSCAPE CONTRACTOR.
- CONDUIT FROM INSIDE THE BUILDING TO EXTERIOR IRRIGATION SYSTEM SHALL BE PROVIDED BY OTHERS.

# PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.

A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO

## SITE CONSTRUCTION PLANS



Know what's below.  
 Call before you dig.

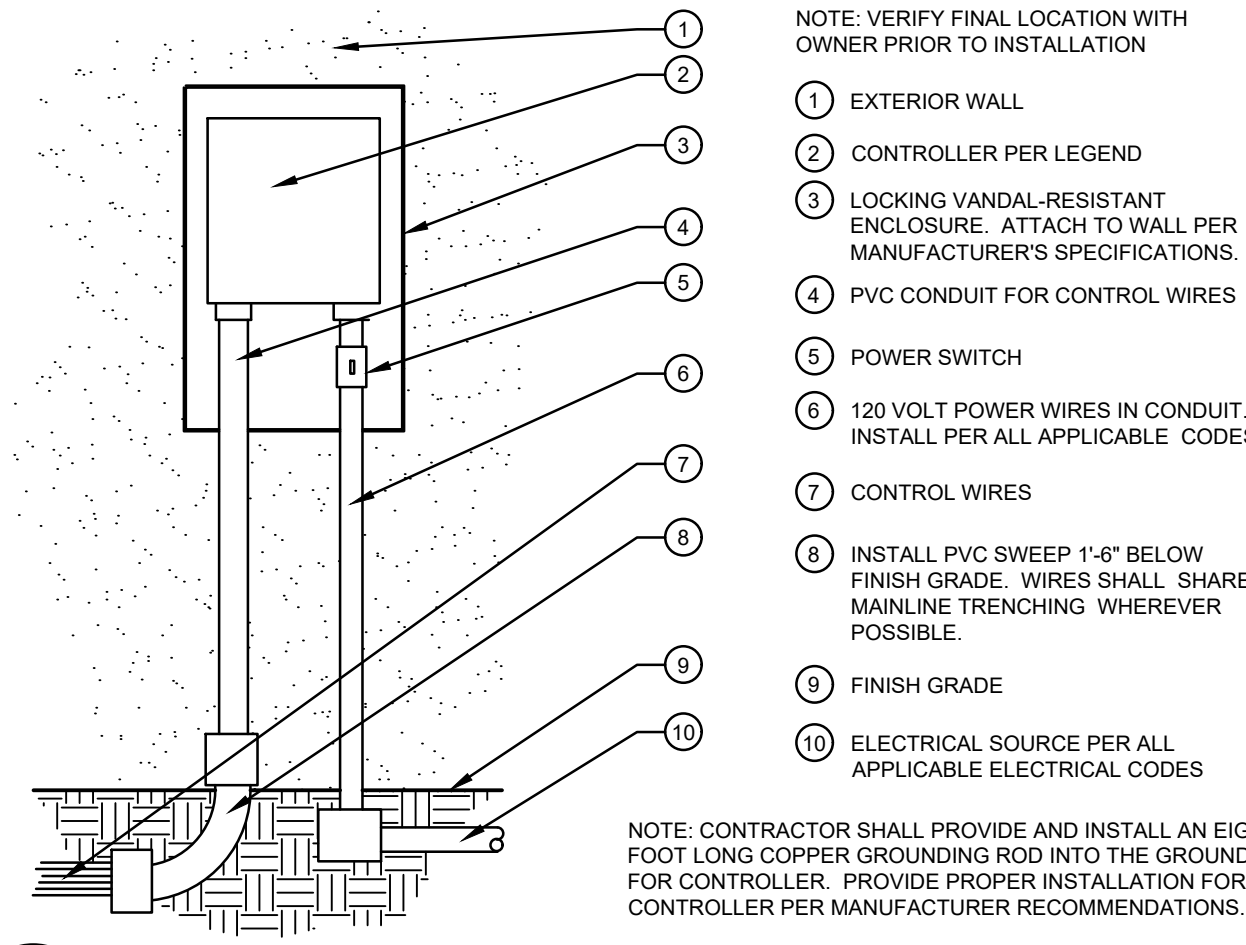
SHEET NO. IR1.2



IRRIGATION DETAILS  
 MURPHY EXPRESS  
 12405 SOUTH PARKER ROAD  
 PARKER, COLORADO

**Galloway**  
 6122 S. Willow Drive, Suite 320  
 Aurora, CO 80011  
 303.770.8844  
 GallowayUS.com

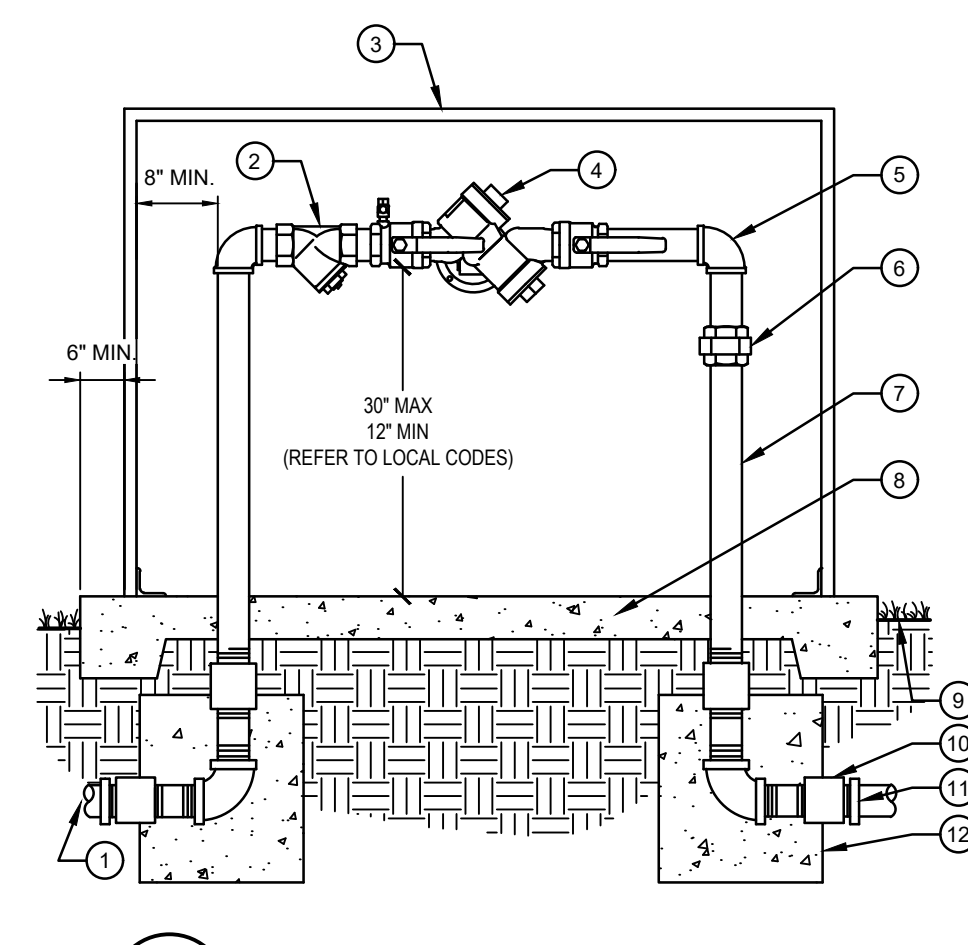
**MURPHY OIL USA, INC.**  
 200 PEACH STREET  
 EL DORADO, AR 71730



**1 WALL MOUNT CONTROLLER**  
 SCALE: NOT TO SCALE

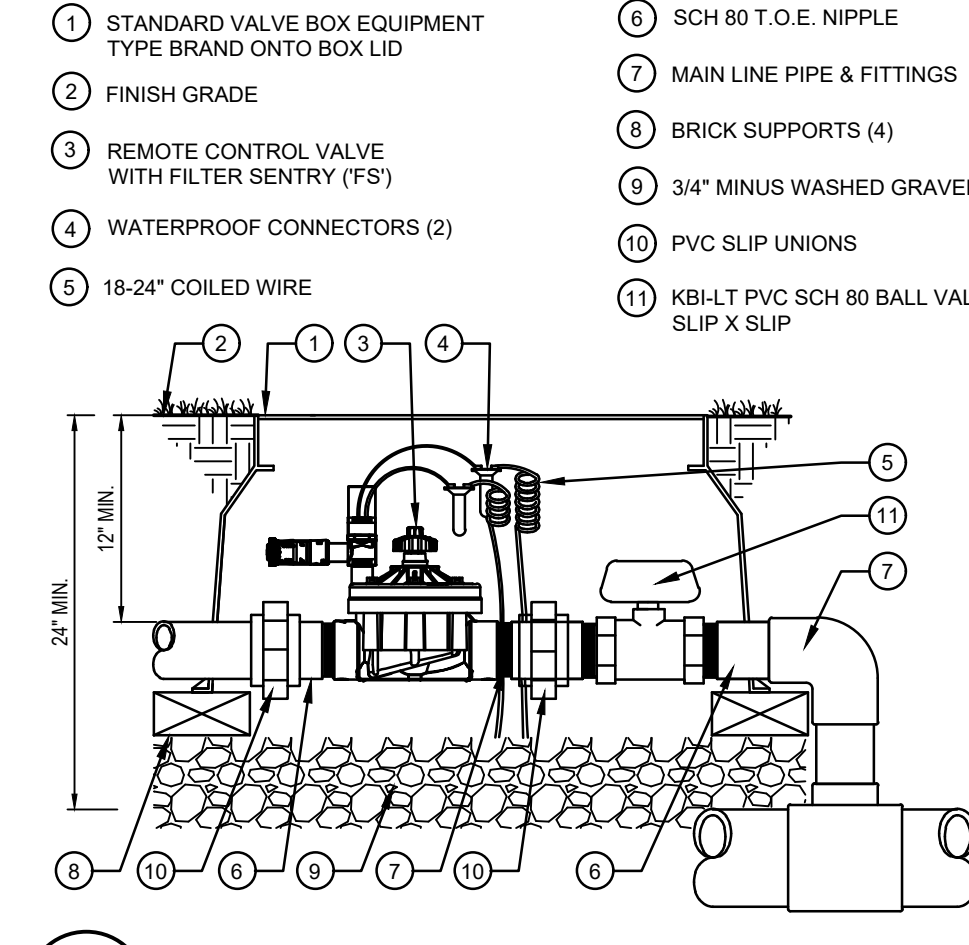
- NOTE: VERIFY FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION
- EXTERIOR WALL
  - CONTROLLER PER LEGEND
  - LOCKING VANDAL-RESISTANT ENCLOSURE. ATTACH TO WALL PER MANUFACTURER'S SPECIFICATIONS.
  - PVC CONDUIT FOR CONTROL WIRES
  - POWER SWITCH
  - 120 VOLT POWER WIRES IN CONDUIT. INSTALL PER ALL APPLICABLE CODES.
  - CONTROL WIRES
  - INSTALL PVC SWEEP 1'-6" BELOW FINISH GRADE. WIRES SHALL SHARE MAINLINE TRENCHING WHEREVER POSSIBLE.
  - FINISH GRADE
  - ELECTRICAL SOURCE PER ALL APPLICABLE ELECTRICAL CODES

NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL AN EIGHT FOOT LONG COPPER GROUNDING ROD INTO THE GROUND FOR CONTROLLER. PROVIDE PROPER INSTALLATION FOR CONTROLLER PER MANUFACTURER RECOMMENDATIONS.



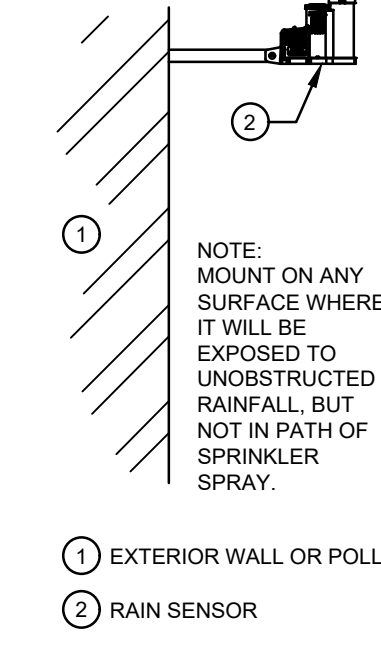
**2 BACKFLOW PREVENTER, REDUCED PRESSURE**  
 SCALE: NOT TO SCALE

- TO POINT OF CONNECTION, ADAPT AS NECESSARY ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES
- BRASS WYE STRAINER W/60 MESH SCREEN
- ENCLOSURE PER IRRIGATION LEGEND
- BACKFLOW PREVENTER UNIT
- BRASS 90 DEGREE ELLS (TYP.)
- BRASS UNION (TYPICAL)
- BRASS NIPPLES (TYPICAL)
- 4" CONCRETE PAD - SLOPE TO DRAIN AWAY FROM BACKFLOW PREVENTER
- FINISH GRADE 2" BELOW PAD
- BRASS COUPLING
- PIPE ADAPTER AND MAINLINE PIPE
- 12"X12"X12" THRUST BLOCKS

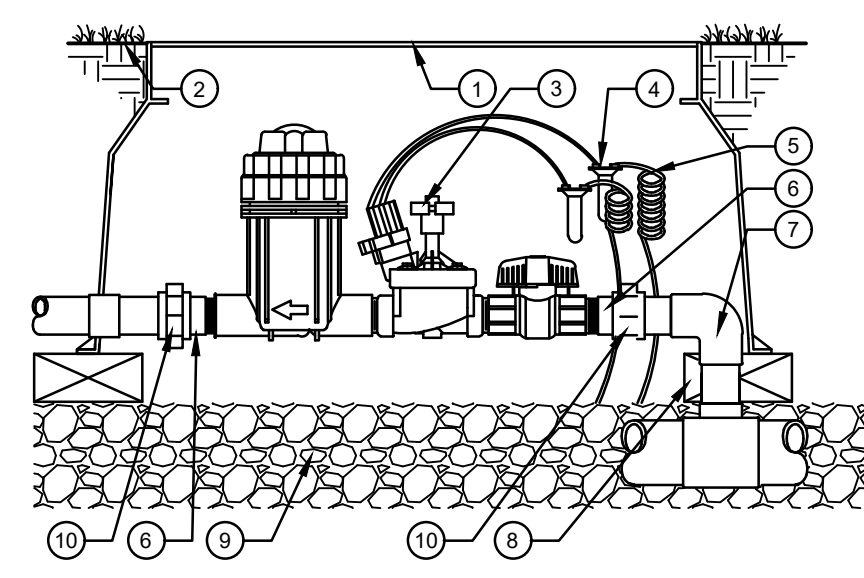


**3 REMOTE CONTROL VALVE**  
 SCALE: NOT TO SCALE

- STANDARD VALVE BOX EQUIPMENT TYPE BRAND ONTO BOX LID
- FINISH GRADE
- REMOTE CONTROL VALVE WITH FILTER SENTRY (FS)
- WATERPROOF CONNECTORS (2)
- 18-24" COILED WIRE
- SCH 80 T.O.E. NIPPLE
- MAIN LINE PIPE & FITTINGS
- BRICK SUPPORTS (4)
- 3/4" MINUS WASHED GRAVEL
- PVC SLIP UNIONS
- KBI-LT PVC SCH 80 BALL VALVE SLIP X SLIP

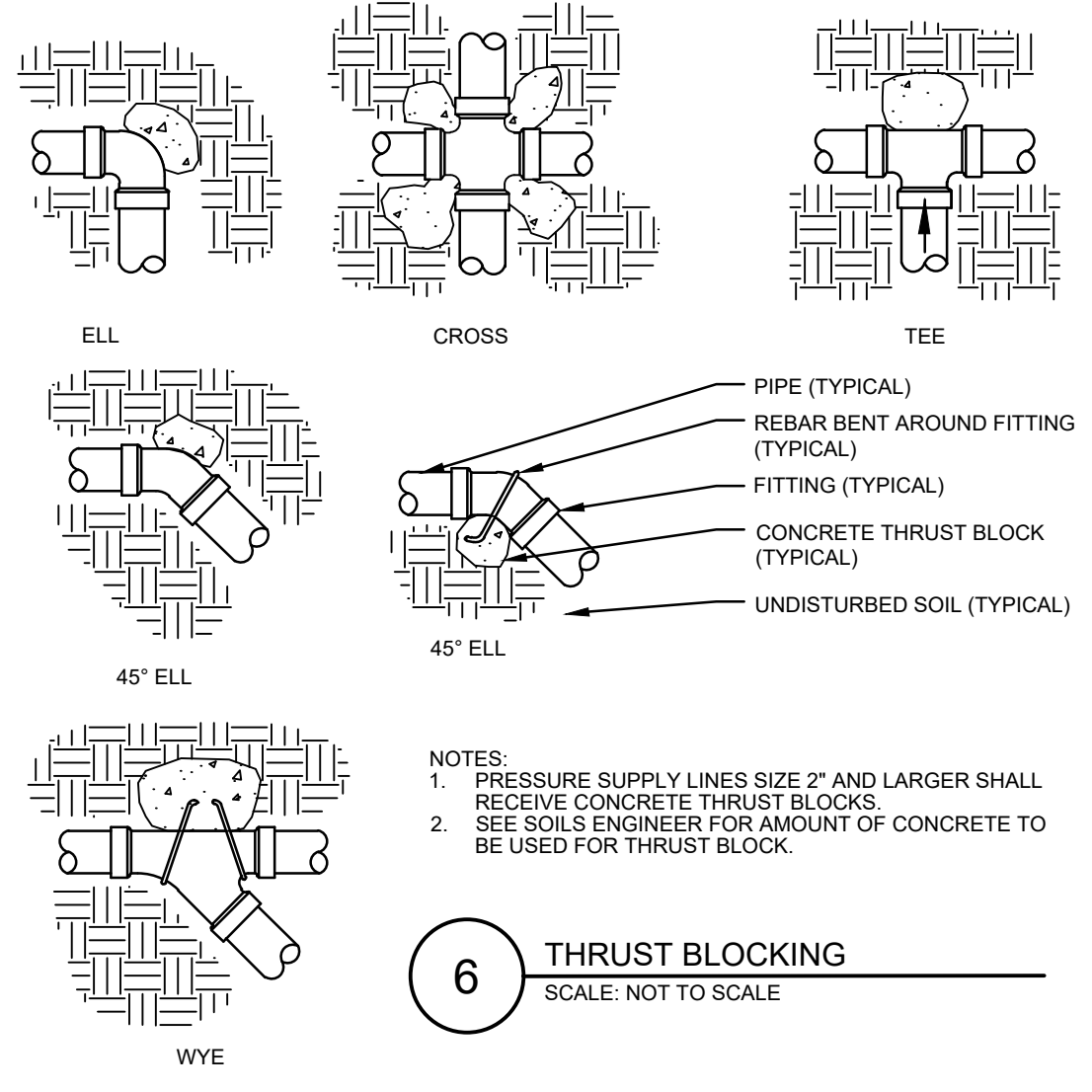


**4 WEATHER SENSOR**  
 SCALE: NOT TO SCALE



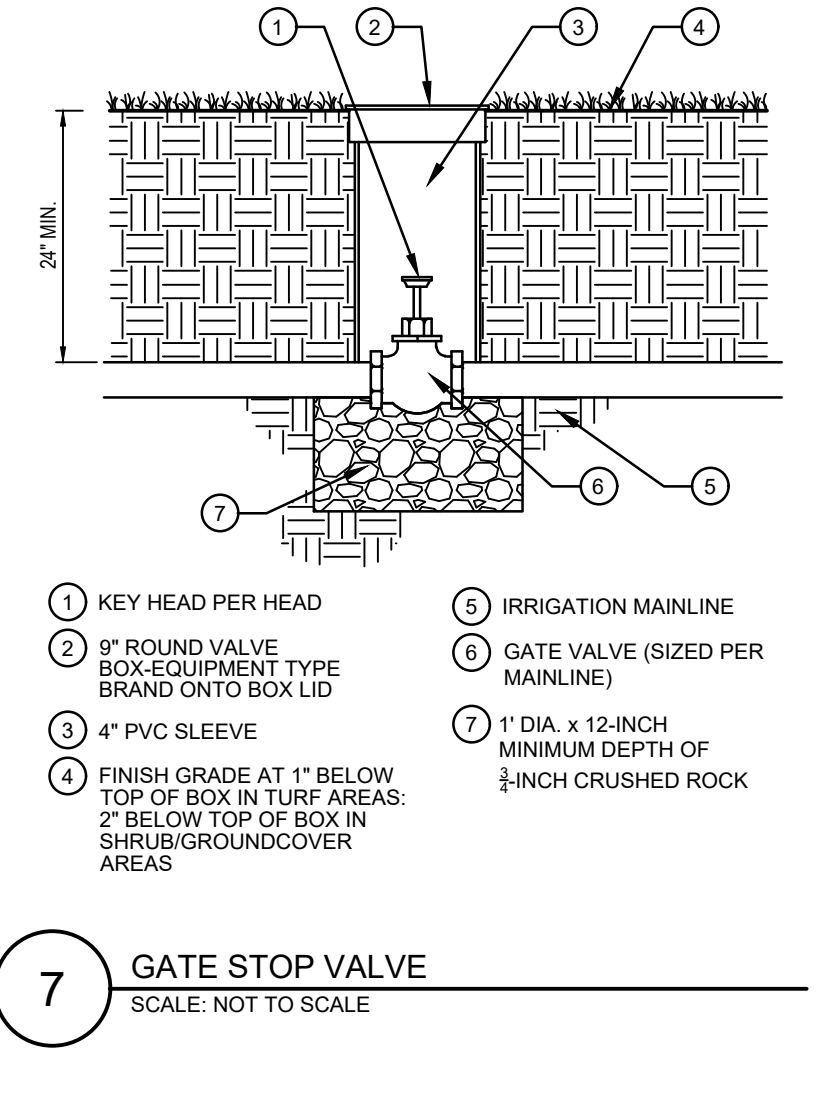
**5 REMOTE DRIP CONTROL VALVE**  
 SCALE: NOT TO SCALE

- STANDARD VALVE BOX, BRAND EQUIPMENT TYPE AND ZONE NUMBER ONTO LID
- FINISH GRADE
- DRIP ZONE KIT PER PLAN
- WATERPROOF CONNECTORS (2)
- 18-24" COILED WIRE
- SCH 80 T.O.E. NIPPLE
- MAIN LINE PIPE & FITTINGS
- BRICK SUPPORTS (4)
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
- PVC SLIP UNIONS



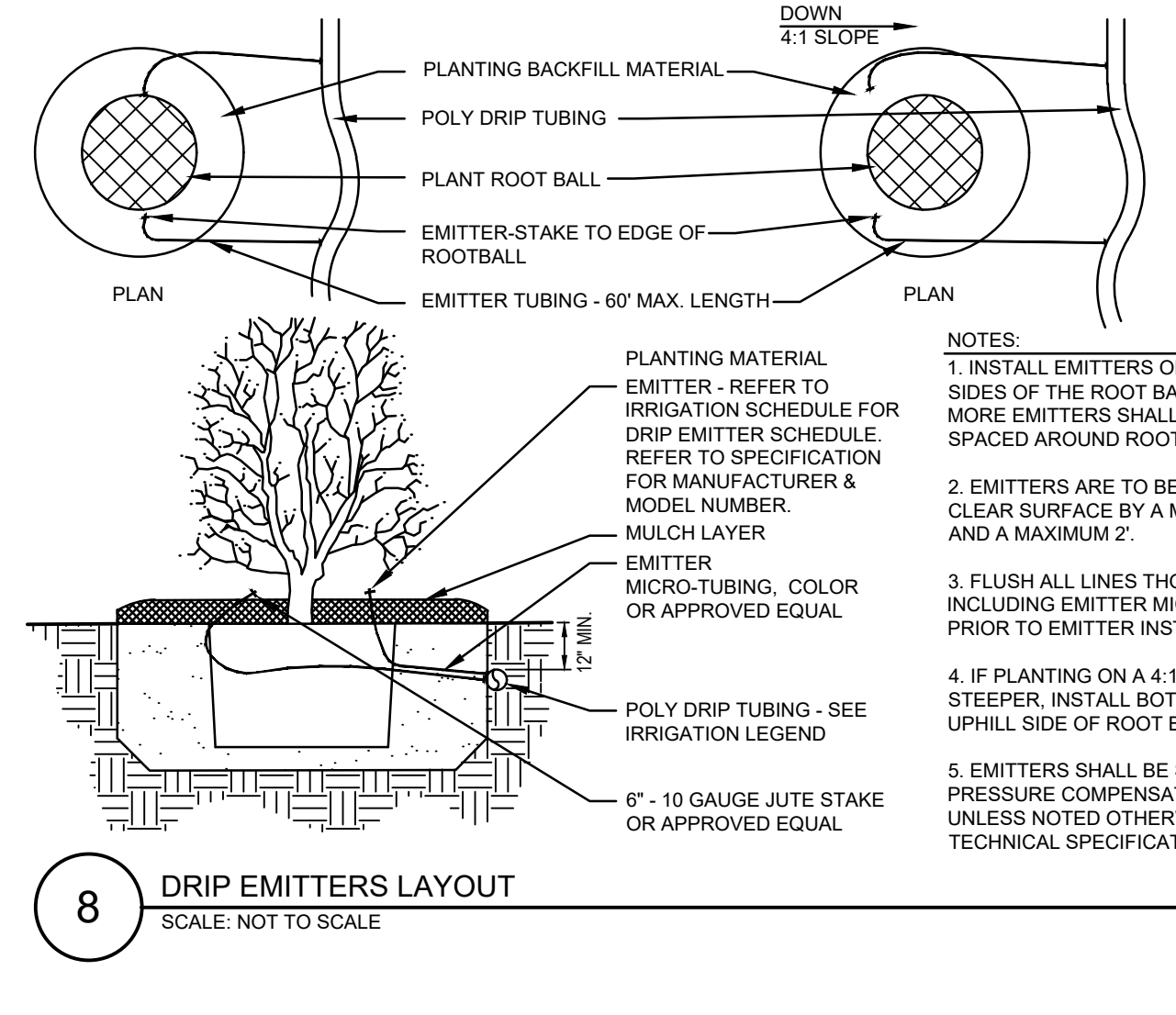
**6 THRUST BLOCKING**  
 SCALE: NOT TO SCALE

- PIPE (TYPICAL)  
 REBAR BENT AROUND FITTING (TYPICAL)  
 FITTING (TYPICAL)  
 CONCRETE THRUST BLOCK (TYPICAL)  
 UNDISTURBED SOIL (TYPICAL)



**7 GATE STOP VALVE**  
 SCALE: NOT TO SCALE

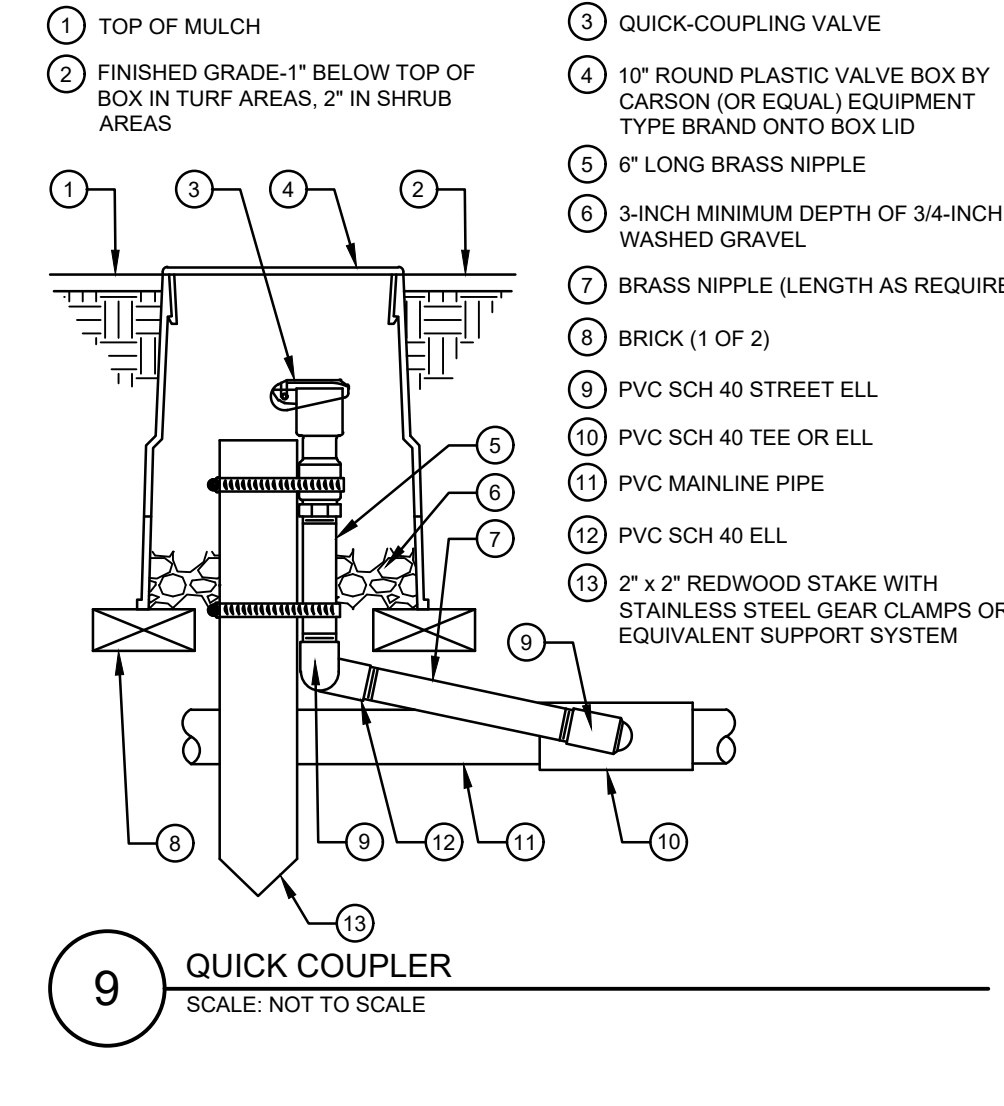
- KEY HEAD PER HEAD
- 9" ROUND VALVE BOX-EQUIPMENT TYPE BRAND ONTO BOX LID
- 4" PVC SLEEVE
- FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS; 2" BELOW TOP OF BOX IN SHRUB/GROUND COVER AREAS
- IRRIGATION MAINLINE
- GATE VALVE (SIZED PER MAINLINE)
- 1" DIA. x 12-INCH MINIMUM DEPTH OF 3/4-INCH CRUSHED ROCK



**8 DRIP EMITTERS LAYOUT**  
 SCALE: NOT TO SCALE

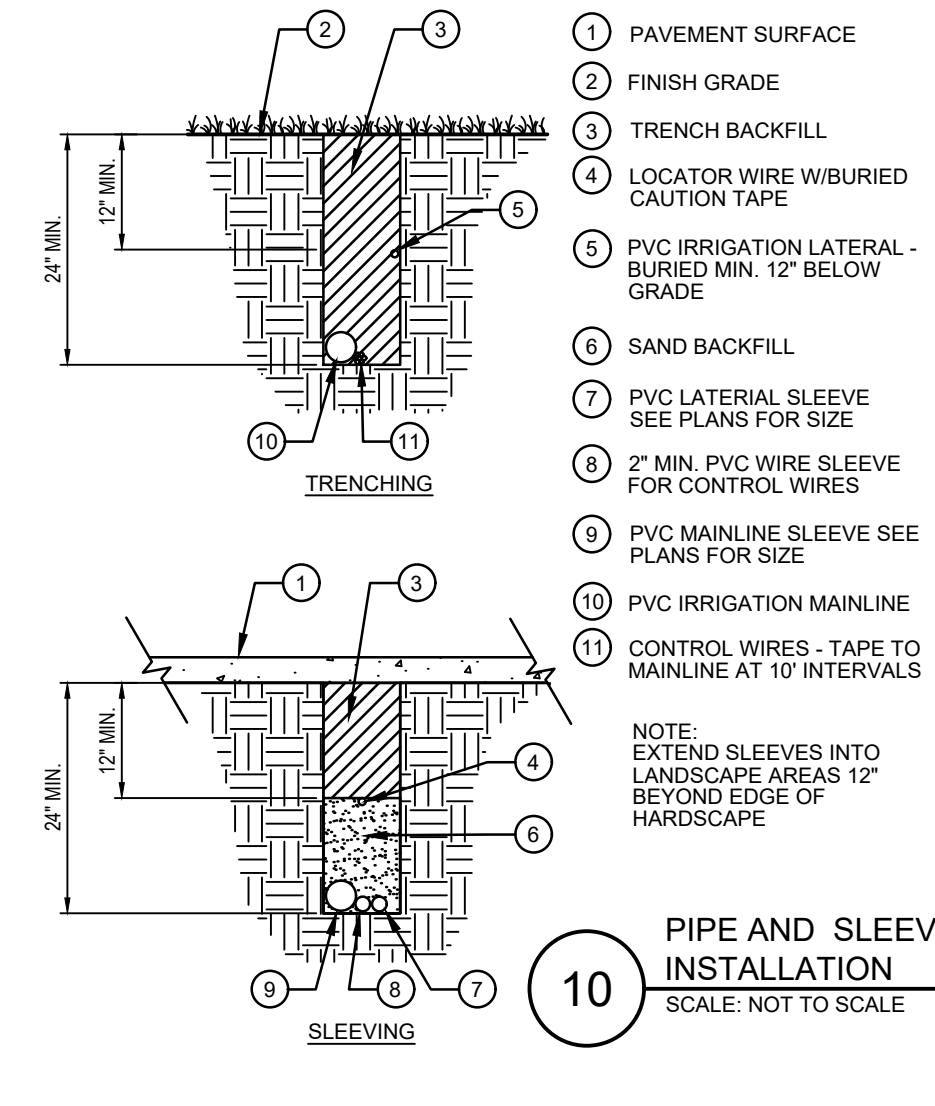
- PLANTING BACKFILL MATERIAL  
 POLY DRIP TUBING  
 PLANT ROOT BALL  
 EMITTER-STAKE TO EDGE OF ROOTBALL  
 EMITTER TUBING - 60" MAX. LENGTH
- PLANTING MATERIAL EMITTER - REFER TO IRRIGATION SCHEDULE FOR DRIP EMITTER SCHEDULE. REFER TO SPECIFICATION FOR MANUFACTURER & MODEL NUMBER  
 MULCH LAYER  
 EMITTER MICRO-TUBING, COLOR OR APPROVED EQUAL  
 POLY DRIP TUBING - SEE IRRIGATION LEGEND  
 6" - 10 GAUGE JUTE STAKE OR APPROVED EQUAL

- NOTES:  
 1. INSTALL EMITTERS ON OPPOSING SIDES OF THE ROOT BALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.  
 2. EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM 2".  
 3. FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.  
 4. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.  
 5. EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.



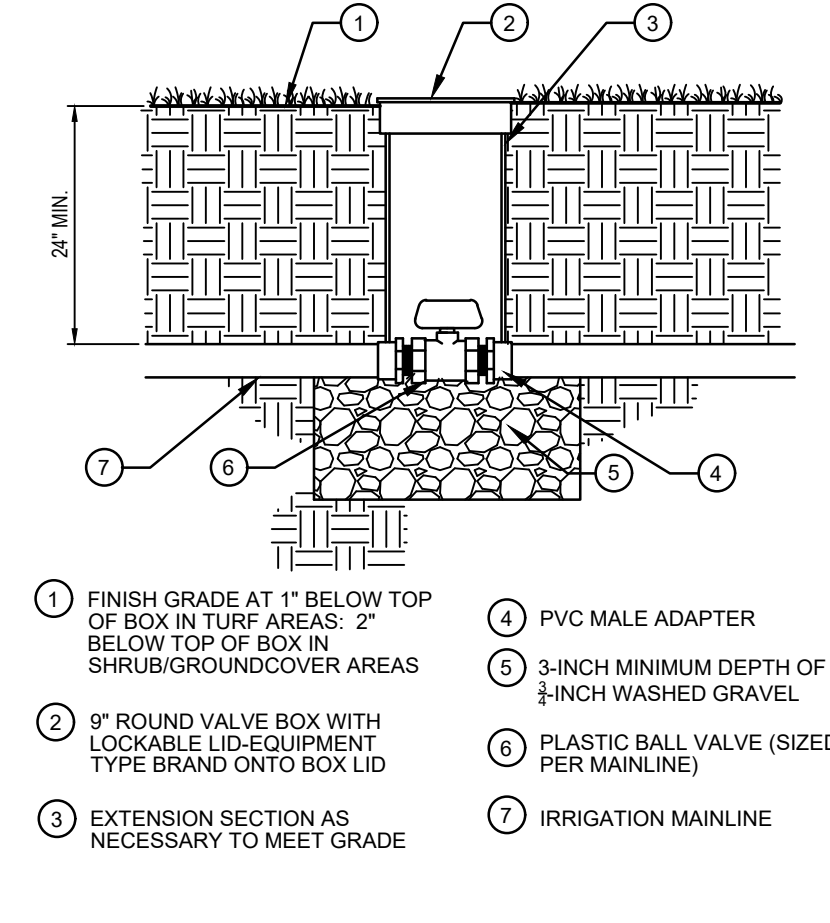
**9 QUICK COUPLER**  
 SCALE: NOT TO SCALE

- TOP OF MULCH
- FINISHED GRADE-1" BELOW TOP OF BOX IN TURF AREAS; 2" IN SHRUB AREAS
- QUICK-COUPLING VALVE
- 10" ROUND PLASTIC VALVE BOX BY CARSON (OR EQUAL) EQUIPMENT TYPE BRAND ONTO BOX LID
- 6" LONG BRASS NIPPLE
- 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- BRICK (1 OF 2)
- PVC SCH 40 STREET ELL
- PVC SCH 40 TEE OR ELL
- PVC MAINLINE PIPE
- PVC SCH 40 ELL
- 2" x 2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM



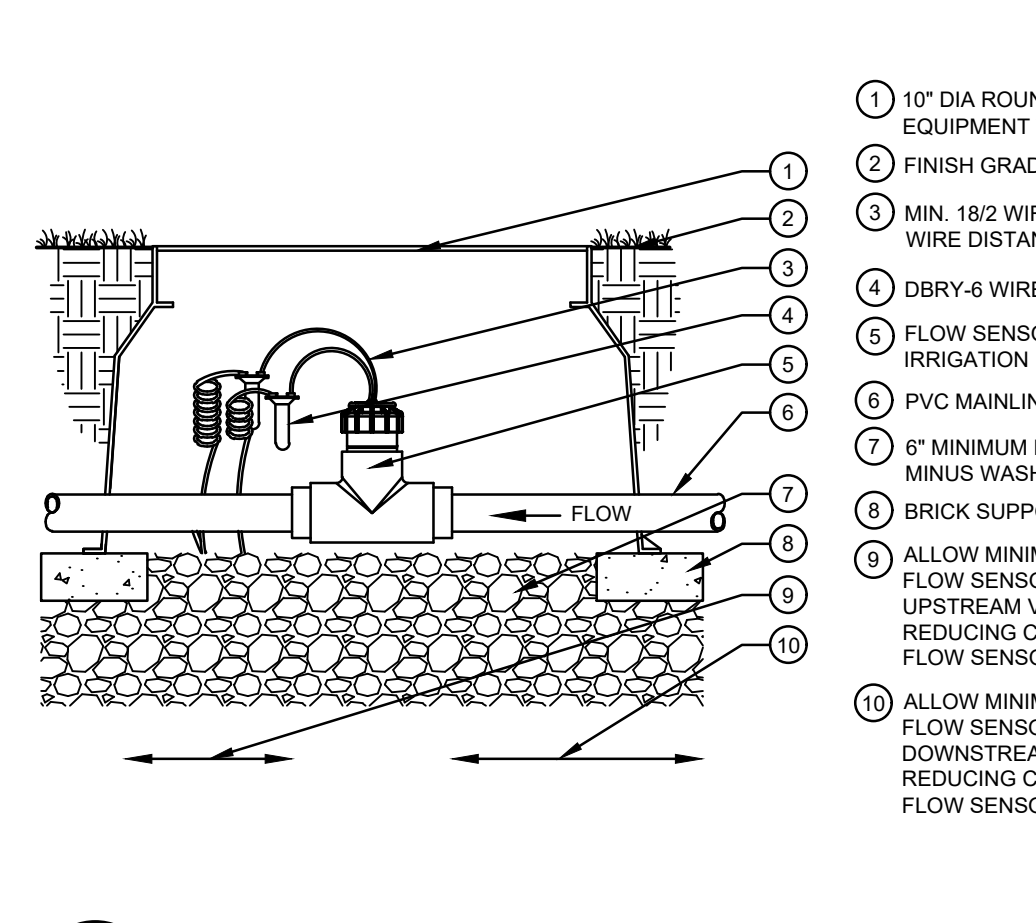
**10 PIPE AND SLEEVE INSTALLATION**  
 SCALE: NOT TO SCALE

- PAVEMENT SURFACE
  - FINISH GRADE
  - TRENCH BACKFILL
  - LOCATOR WIRE W/BURIED CAUTION TAPE
  - PVC IRRIGATION LATERAL - BURIED MIN. 12" BELOW GRADE
  - SAND BACKFILL
  - PVC LATERAL SLEEVE - SEE PLANS FOR SIZE
  - 2" MIN. PVC WIRE SLEEVE FOR CONTROL WIRES
  - PVC MAINLINE SLEEVE - SEE PLANS FOR SIZE
  - PVC IRRIGATION MAINLINE
  - CONTROL WIRES - TAPE TO MAINLINE AT 10" INTERVALS
- NOTE: EXTEND SLEEVES INTO LANDSCAPE AREAS 12" BEYOND EDGE OF HARDSCAPE



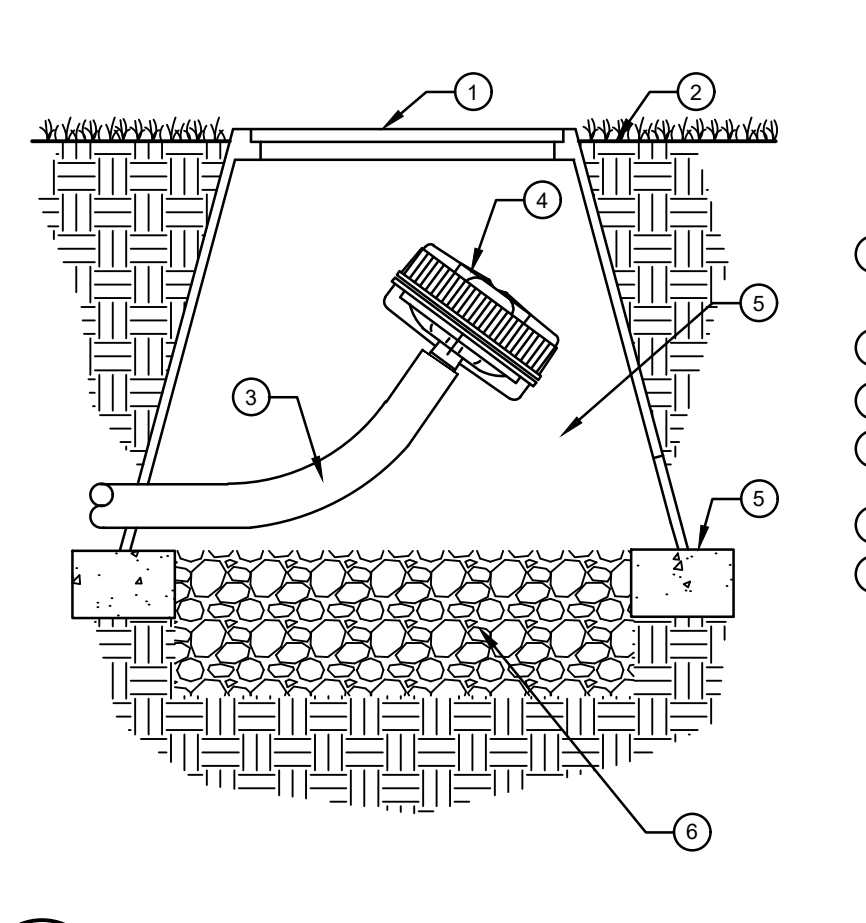
**11 PLASTIC BALL VALVE**  
 SCALE: NOT TO SCALE

- FINISH GRADE AT 1" BELOW TOP OF BOX IN TURF AREAS; 2" BELOW TOP OF BOX IN SHRUB/GROUND COVER AREAS
- 9" ROUND VALVE BOX WITH LOCKABLE LID-EQUIPMENT TYPE BRAND ONTO BOX LID
- EXTENSION SECTION AS NECESSARY TO MEET GRADE
- PVC MALE ADAPTER
- 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- PLASTIC BALL VALVE (SIZED PER MAINLINE)
- IRRIGATION MAINLINE



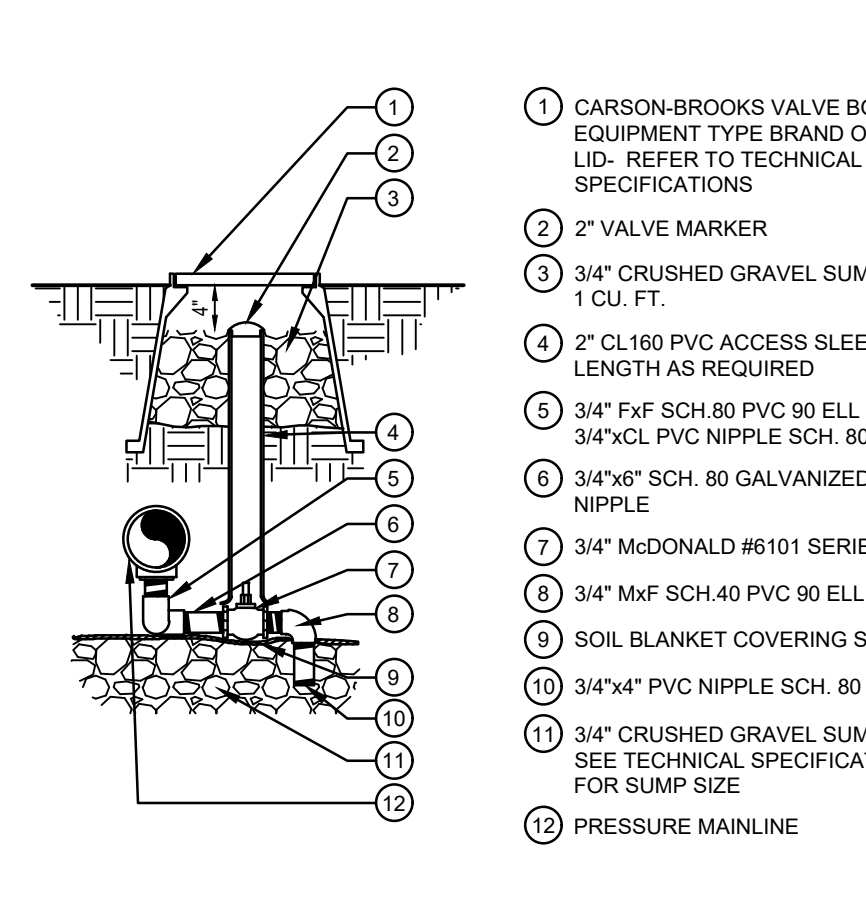
**12 FLOW SENSOR**  
 SCALE: NOT TO SCALE

- 10" DIA ROUND VALVE BOX, BRAND EQUIPMENT TYPE ONTO LID
- FINISH GRADE
- MIN. 18/2 WIRE TO CONTROLLER, MAX WIRE DISTANCE RUN OF 1,000'
- DBRY-6 WIRE CONNECTORS (2)
- FLOW SENSOR AS REFERENCED IN IRRIGATION LEGEND
- PVC MAINLINE PIPE
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL
- BRICK SUPPORTS (3)
- ALLOW MINIMUM DISTANCE OF 10X FLOW SENSOR SIZE FROM NEAREST UPSTREAM VALVE, FITTING, OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR
- ALLOW MINIMUM DISTANCE OF 5X FLOW SENSOR SIZE FROM NEAREST DOWNSTREAM VALVE, FITTING OR REDUCING COUPLER FROM EDGE OF FLOW SENSOR



**13 FLUSH DRAIN VALVE**  
 SCALE: NOT TO SCALE

- 6" DIA ROUND VALVE BOX, EQUIPMENT TYPE BRAND ONTO LID
- FINISH GRADE
- POLYPIPE DRIP LINE
- AUTOMATIC FLUSH VALVE
- BRICK SUPPORTS (3)
- 6" MINIMUM LAYER OF 3/4" MINUS WASHED GRAVEL



**14 MANUAL DRAIN VALVE**  
 SCALE: NOT TO SCALE

- CARSON-BROOKS VALVE BOX, EQUIPMENT TYPE BRAND ONTO BOX LID - REFER TO TECHNICAL SPECIFICATIONS
- 2" VALVE MARKER
- 3/4" CRUSHED GRAVEL SUMP 1 CU. FT.
- 2" CL160 PVC ACCESS SLEEVE - LENGTH AS REQUIRED
- 3/4" Fx F SCH 80 PVC 90 ELL (2)
- 3/4"XCL PVC NIPPLE SCH. 80 (2)
- 3/4"x6" SCH. 80 GALVANIZED STEEL NIPPLE
- 3/4" McDONALD #6101 SERIES VALVE
- 3/4" Mx F SCH.40 PVC 90 ELL
- SOIL BLANKET COVERING SUMP
- 3/4"x4" PVC NIPPLE SCH. 80
- 3/4" CRUSHED GRAVEL SUMP - SEE TECHNICAL SPECIFICATIONS FOR SUMP SIZE
- PRESSURE MAINLINE

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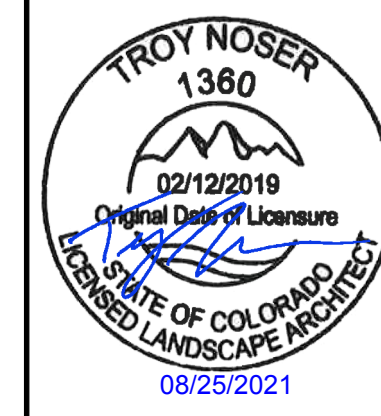
TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE



# PARKER AND PINE FILING NO. 1 LOT 2

MURPHY OIL USA, INC.  
 A PORTION OF LOT 1, BLOCK 3 PARKER AUTO PLAZA FILING NO. 1  
 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M.  
 TOWN OF PARKER, DOUGLAS COUNTY, STATE OF COLORADO  
**SITE CONSTRUCTION PLANS**

SHEET NO. **IR1.3**



IRRIGATION NOTES & DETAILS  
 MURPHY EXPRESS  
 12405 SOUTH PARKER ROAD  
 PARKER, COLORADO

### GENERAL IRRIGATION NOTES

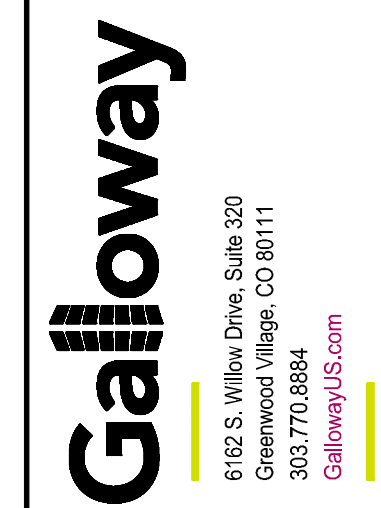
- IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL ENGINEERS, MUNICIPAL ENTITIES AND THIS IS DIAGRAMMATIC IN NATURE. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR GRAPHIC CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
- REFER TO SPECIFICATIONS (AS APPROPRIATE) FOR SUBMITTALS, INSPECTIONS AND OTHER APPLICABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING. THE PROJECT SPECIFICATIONS ARE A PART OF THESE PLANS AND SHALL BE CONSULTED BY THE IRRIGATION CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING WORK AS SPECIFIED IN THE PROJECT SPECIFICATIONS AND ON THE PLANS.
- THE IRRIGATION CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK, AND SHALL OBTAIN ALL ENGINEERING, LANDSCAPE, AND OTHER APPLICABLE PLANS & DOCUMENTS. CONTRACTOR SHALL THOROUGHLY REVIEW PLANS & REPORT ANY CONFLICTS OR DISCREPANCIES TO OWNER'S REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK. DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE EXISTED AT THE TIME OF THE IRRIGATION DESIGN PREPARATION. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT GIVEN, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY TO BRING THE SYSTEM TO A PROPER WORKING CONDITION, AND TO THE OWNER'S SATISFACTION.
- IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, RETAINING WALLS, ETC. THE IRRIGATION CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUBCONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE SLEEVES THROUGH WALL, UNDER ROADWAY PAVING, ETC.
- THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO

- THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- SEE CIVIL ENGINEER'S DRAWINGS FOR IRRIGATION POINT OF CONNECTION (TAP) AND DOMESTIC WATER SUPPLY.
- ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE POINT OF CONNECTION NOTE TAG(S) ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DIFFERENCES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE AND LANDSCAPE ARCHITECT. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED OR PRESSURES HAVE GREATLY CHANGED PRIOR TO THE START OF THE IRRIGATION SYSTEM CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR RECOMMENDING A SOLUTION AND PROVIDING AN ADD ALTERNATE BID FOR IRRIGATION COSTS.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE EXCEEDS 5 PSI HIGHER OR LOWER THAN AVAILABLE WATER PRESSURE.
- NO MORE THAN 90% OF AVAILABLE MINIMUM STATIC WATER PRESSURE WAS USED IN PREPARATION OF THESE PLANS, FURTHERMORE, THE MAXIMUM FLOW THROUGH THE METER SHOULD NOT EXCEED 75% OF THE MAXIMUM SAFE FLOW.
- SUPPLY LINE AND METER TO BE PROVIDED BY GENERAL CONTRACTOR. BACKFLOW PREVENTER TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN AFTER THE IRRIGATION WATER METER.
- INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF EQUIPMENT WILL BE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE. THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO REMOVE AND REPLACE ALL UNAPPROVED SUBSTITUTED EQUIPMENT AT HIS OWN COST IF SO DIRECTED BY THE OWNER.
- WHEN INSTALLING IRRIGATION PIPE AND EQUIPMENT NEXT TO HARDSCAPE (SUCH

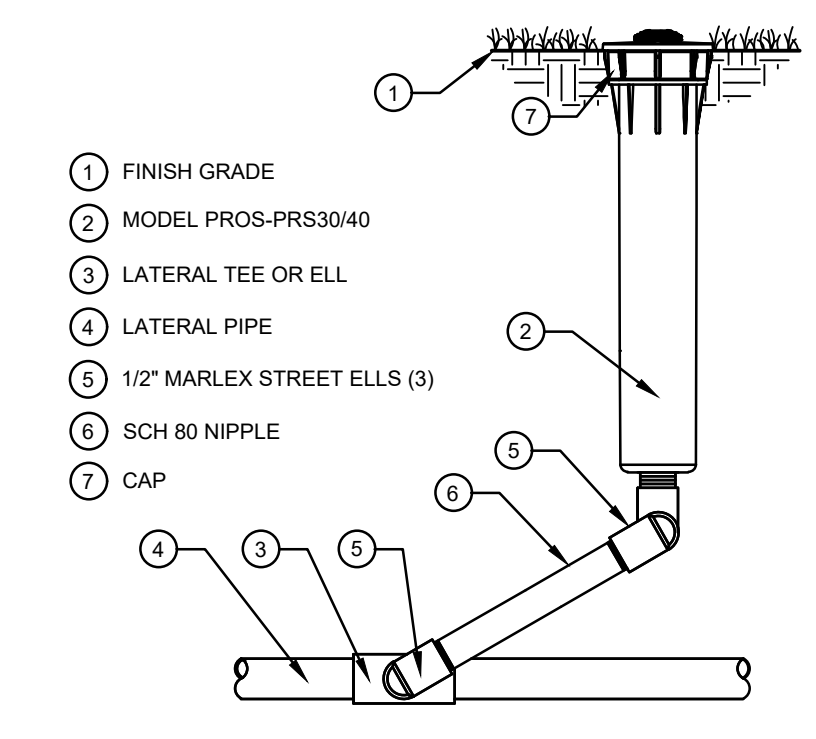
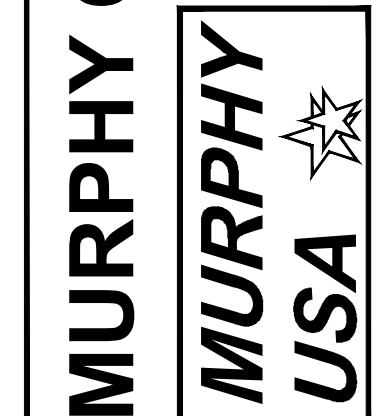
- AS WALLS, CURBS, OR WALKS), PLACE PIPE AS CLOSE AS POSSIBLE TO HARDSCAPE TO AVOID CONFLICTS WITH PLANTING. REFER TO MAINLINE TRENCHING DETAILS FOR ADDITIONAL INFORMATION.
- THE IRRIGATION CONTRACTOR SHALL COORDINATE 120 V A.C. ELECTRICAL POWER TO CONTROLLERS AND DEDICATE ONE (1) 20-AMP BREAKER FOR EACH CONTROLLER. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO MAKE THE FINAL HOOK-UP FROM THE ELECTRICAL SOURCE TO THE CONTROLLER UNIT ONLY.
- THE RAIN SENSOR SHALL BE LOCATED NEAR THE IRRIGATION CONTROLLER, AND SHALL BE MOUNTED AS SHOWN ON THE DETAIL AND/OR LEGEND. LOCATE SENSOR AWAY FROM TALL TREES, SHRUBS, AND OTHER POTENTIAL OBSTRUCTIONS.
- ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL. NO SPLICES SHALL BE ALLOWED EXCEPT AT VALVES AND CONTROLLER. WHERE SPLICES MAY BE NECESSARY DUE TO EXCESSIVELY LONG WIRE RUNS, THE CONTRACTOR SHALL MAKE ALL SPLICES IN 6" ROUND VALVE BOXES WITH 3MS "DBY-DIRECT BURIAL SPLICE KIT". THE CONTRACTOR SHALL LABEL ALL WIRES WITH WATERPROOF TAGS AND MARKERS AT ALL SPLICES AND VALVE MANIFOLDS, AND SHALL LEAVE A 24" COIL OF EXCESS WIRE AT EACH CONNECTION.
- CONTRACTOR SHALL PROVIDE #10 COMMON WIRE, DIRECT BURIAL, TO ALL REMOTE CONTROL VALVES.
- CONNECT ALL DIRECT BURIAL WIRES TO VALVES USING 3MS "DBY-DIRECT BURIAL SPLICE KIT" (UNLESS OTHERWISE SPECIFIED).
- PROVIDE ADDITIONAL IRRIGATION CONTROL WIRES TO THE AMOUNT OF OPEN ZONES ON THE CONTROLLER ALONG EACH BRANCH OF MAINLINE FOR FUTURE EXPANSION. STUB ADDITIONAL CONTROL WIRES INTO BACK OF IRRIGATION CONTROLLERS.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE SLEEVES AND PIPE SLEEVES UNDER PAVED AREAS PRIOR TO PAVING. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. ALL SLEEVING SHALL BE PVC SCHEDULE 40 PIPE. SLEEVES FOR MAINLINE AND LATERAL LINES SHALL BE A MINIMUM TWICE THE DIAMETER OF THE ENCLOSED PIPE. SLEEVES FOR CONTROL WIRES SHALL BE AS PER THE SLEEVING / WIRING NOTE AND THE WIRING SLEEVE LEGEND ITEM AS SHOWN ON THESE DRAWINGS.
- TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEIOUS MATERIALS LARGER THAN 1" IN DIAMETER. BACKFILL SHALL BE

- COMPACTED TO 90% MAXIMUM DRY DENSITY.
- WHERE VALVES ARE LOCATED IN CLOSE PROXIMITY TO EACH OTHER, CLUSTER VALVES INTO MANIFOLDS. INSTALL NO MORE THAN ONE VALVE PER VALVE BOX.
- MANUAL DRAIN VALVE FOR FREEZE PROTECTION ARE TO BE LOCATED AT ALL LOW POINTS OF IRRIGATION LATERAL LINES. WHERE THE LOW POINT IS AT THE END OF THE LINE, LOCATE DRAIN VALVE A MINIMUM OF 12" DOWNSTREAM FROM THE LAST SPRINKLER HEAD. SEE DETAIL FOR VALVE ORIENTATION.
- USE TEFLON TAPE ON ALL PVC MALE PIPE THREADS ON ALL SWING JOINT AND VALVE ASSEMBLIES.
- ALL IRRIGATION HEADS, INCLUDING FIXED-SPRAY AND DRIP DEVICES, SHALL BE SET PERPENDICULAR TO THE FINISH GRADE OF THE AREA TO BE IRRIGATED.
- ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 3' AWAY FROM ANY BUILDING FOUNDATION. IF THIS EQUIPMENT IS SHOWN WITHIN THE 3' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
- EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, IT IS THE INTENT OF THE IRRIGATION DESIGN TO INDICATE ALL SPRAY HEADS AS "POP-UPS". IN THE EVENT THAT POP-UP HEADS HAVE NOT BEEN SPECIFIED IN TURF AREAS, IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BRING THIS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BIDDING AND CONSTRUCTION.
- ALL SPRAY AND ROTOR HEAD LOCATIONS SHALL BE STAKED, FLAGGED AND/OR OTHERWISE CLEARLY MARKED ON THE GROUND PRIOR TO INSTALLATION. SPRINKLER HEAD STAKING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE LANDSCAPE ARCHITECT BEFORE INSTALLATION. STAKED LOCATIONS SHALL BE SPACED TO PROVIDE HEAD-TO-HEAD COVERAGE. RECOMMENDED SETBACK DISTANCE OF ALL PROPOSED IRRIGATION HEADS IS 12" FROM BACK OF CURB AND EDGE OF PAVEMENT.
- FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO WALKS, ROADWAYS, AND/OR BUILDINGS AS MUCH AS POSSIBLE. THIS SHALL INCLUDE SELECTING THE BEST NOZZLE ARC AND RADIUS TO FIT THE EXISTING SITE CONDITIONS.
- ALL POP-UP TYPE SPRINKLER HEADS INSTALLED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE SPRINKLER HEAD IS FLUSH WITH THE ADJACENT SIDEWALK, OR PAVING. ALL POP-UP HEADS AWAY FROM HARDSCAPE EDGES IN

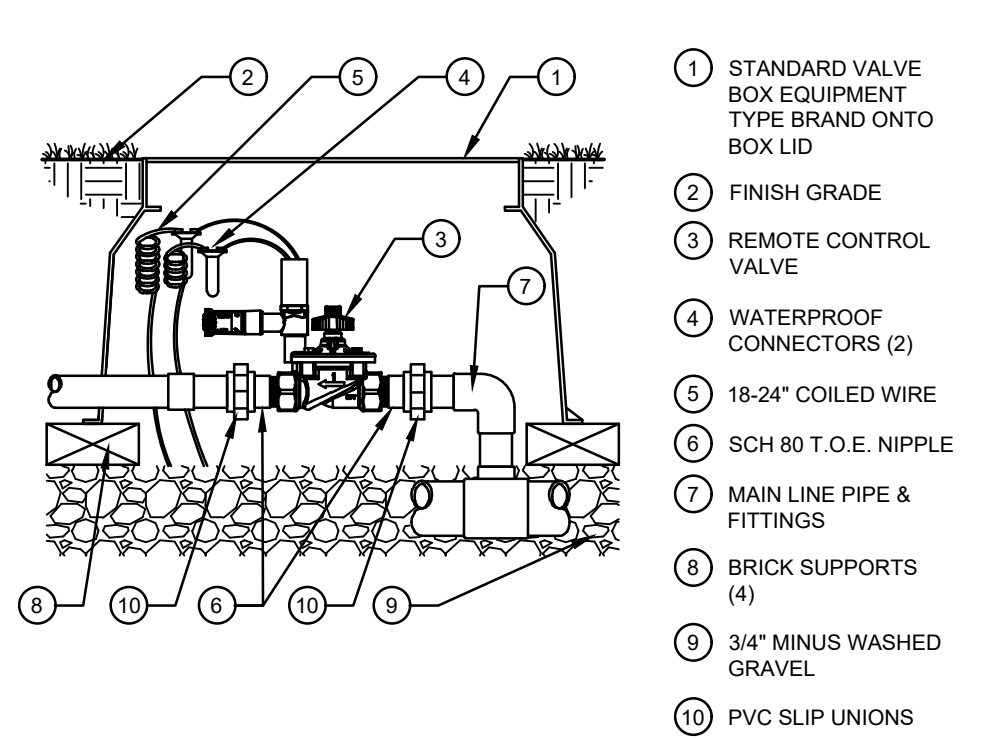
- TURF SHALL BE 1" ABOVE THE FINISH GRADE TO PREVENT CONTACT WITH MOWERS.
- EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
- UPON COMPLETION OF INSTALLATION OF IRRIGATION SYSTEM, IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING:
  - ACCURATE AND COMPLETE "AS BUILT" PLANS OF IRRIGATION SYSTEM INCLUDING 8-1/2" X 11" ZONE MAP TO BE PLACED INSIDE EACH CONTROLLER BOX.
  - LOG ON ALL WATER WINDOWS, RUN SCHEDULE TIMES, AND OTHER CHANGES AND/OR MODIFICATIONS TO THE IRRIGATION SYSTEM SINCE INSTALLATION.
  - ONE HOUR OF TRAINING TO OWNER ON IRRIGATION SYSTEM AND CONTROLLER OPERATION.
  - THREE OF EACH TYPE OF HEAD AND EMITTER INSTALLED.
  - ONE OF EACH TYPE OF VALVE INSTALLED.
  - REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNERS REPRESENTATIVE.
- PRIOR TO ACCEPTANCE OF IRRIGATION SYSTEM AT THE END OF THE MAINTENANCE PERIOD, THE IRRIGATION CONTRACTOR SHALL PROVIDE THE FOLLOWING: CURRENT SCHEDULE RUN TIME AND WATER WINDOW LOG, ALONG WITH NOTING ANY OTHER PERTINENT INFORMATION.
- UNLESS OTHERWISE SPECIFIED, THE IRRIGATION CONTRACTOR SHALL REPAIR OR REPLACE ANYTHING DAMAGED BY HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL INSTALL MAINLINES 12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
- IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND SPECIFICATIONS, THE PLAN SHALL TAKE PRECEDENCE.
- THE IRRIGATION SYSTEM SHALL BE INSTALLED BY A QUALIFIED IRRIGATION CONTRACTOR.



MURPHY OIL USA, INC.  
 200 PEACH STREET  
 EL DORADO, AR 71730



15 MP ROTATOR SPRINKLER  
 SCALE: NOT TO SCALE



16 MASTER VALVE  
 SCALE: NOT TO SCALE



### Landscape/Irrigation Worksheet

Project Name: **Murphy Oil USA - 12405 S Parker Rd**

Landscape/Irrigation Tap address (physical location of tap) **3/4" Tap off the domestic line downstream of the building meter (12405 S Parker Rd, Parker, CO 80134)**

Landscape Area	High Water	Low Water	Drip Irrigated	Sub-Total of	PWSID one	SFE Requirement (Sub-Total Calculation divided by 6000 = requirement)
	TURF (6,000sf = 1 SFE)	Native Grass and Perennials (10,000sf = 1 SFE)				
Area #1	2,500 sf x 1 = 2,500	0 sf x .6 = 0	10,497 sf x .3 = 3,149	0 sf x 0 = 0	5,649 sf	6,000
						0.94 SFE's

Worksheet Completed by: **Troy Noser**  
 Company: **Galloway**  
 Address: **6162 S Willow Drive Suite 320 Greenwood Village, CO 80111**  
 Phone #: **303-770-8884**

Owner/Developer: \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 Billing Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_

Manufacturer: **ET Controller (with Rain Sensor)**  
 Model number: **Hunter I-Core w/ Solar Sync Hunter IC-1000-M**

Tap Size Requirements:  
 0 - 1 SFE's requires a 3/4-inch tap  
 1.1 - 2.0 SFE's requires a 1-inch tap  
 2.1 - 4.0 SFE's requires a 1 1/2-inch tap  
 4.1 - 7.0 SFE's requires a 2-inch tap  
 7.1 - 16.0 SFE's requires a 3-inch tap

**APPROVED**  
 Dec 20 2021  
**PARKER WATER AND SANITATION DISTRICT**

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TOWN OF PARKER, DIRECTOR OF ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_