## LAND OF SUSHI

# CROWN POINT FILING NO.1 LOT 4E

LOCATED IN THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 6 SOUTH,
RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN,
CITY OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

## COTTONWOOD WATER & SANITATION CONSTRUCTION PLANS

## MAY 2023

### PROJECT CONTACTS

**PROPERTY OWNER – DEVELOPER**
LAND OF SUSHI
CONTACT: JIN SONG LIU
2412 E. ARAPAHOE ROAD
CENTENNIAL, COLORADO 80122
TELE: ()
EMAIL:

**APPLICANT**
GALLOWAY & CO., INC.
5500 GREENWOOD PLAZA BLVD., SUITE 200
GREENWOOD VILLAGE, CO 80111
TELE: (303) 770-8884
CONTACT: JEFF WEEDER
EMAIL: JEFFWEDDER@GALLOWAYUS.COM

**CIVIL ENGINEER**
GALLOWAY & CO., INC.
5500 GREENWOOD PLAZA BLVD., SUITE 200
GREENWOOD VILLAGE, CO 80111
TELE: (303) 770-8884
CONTACT: SCOTT BROWN, P.E.
EMAIL: SCOTTBROWN@GALLOWAYUS.COM

**LANDSCAPING**
GALLOWAY & CO., INC.
5500 GREENWOOD PLAZA BLVD., SUITE 200
GREENWOOD VILLAGE, CO 80111
TELE: (303) 770-8884
CONTACT: BRYN HALSTEN
EMAIL: BRYNHILDRHALSTEN@GALLOWAYUS.COM

### CITY & UTILITY CONTACTS

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

**STORMWATER**
TOWN OF PARKER – ENGINEERING
20120 E. MAIN STREET
PARKER, CO 80138
TEL: (303) 840-9546
CONTACT: JIM GILBERT

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

**WATER & SANITARY SEWER**
COTTONWOOD WATER AND SANITATION DISTRICT
188 INVERNESS DRIVE WEST
ENGLEWOOD, CO 80112
TEL: (303) 792-9509
CONTACT: SCOTT BARNETT

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

**ELECTRIC**
INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION
5496 NORTH US HIGHWAY 85
SEDALIA, CO 80135
TEL (303) 688-3100
CONTACT: AMANDA STEINER

**TELEVISION**
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1601 MILE HIGH STADIUM CIRCLE
DENVER, CO 80204
EMAIL: DEAN_FLENTHROPE@CABLE.COMCAST.COM
CONTACT: DEAN FLENTHROPE

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CENTURYLINK
1801 CALIFORNIA STREET, SUITE 240
DENVER, CO 80202
CONTACT: IZZY MILLER
EMAIL: IZZY.MILLER@CENTURYLINK.COM

VICINITY MAP
(NOT TO SCALE)

| SHEET INDEX | | |
|---|---|---|
| SHEET NUMBER | SHEET DESCRIPTION | SHEET TITLE |
| 1 | U.0 | UTILITY COVER SHEET |
| 2 | U.1 | UTILITY SITE PLAN |
| 3 | U.2 | WATER PLAN |
| 4 | U.3 | WATER DETAILS |
| 5 | U.4 | SANITARY PLAN |
| 6 | U.5 | SANITARY DETAILS |
| 7 | U.6 | SANITARY DETAILS |

| 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-W17, MS-W18 | WATER METER |
| MS-S3 | CASTINGS |

| SUMMARY OF QUANTITIES (WATER) | |
|---|---|
| DESCRIPTION | QUANTITY |
| CONNECT TO EXISTING WATER STUB | 1 LS |
| 1" COPPER WATER SERVICE | 75 LF |
| 4" PVC WATER SERVICE | 120 LF |
| 6" PVC WATER SERVICE | 142 LF |
| WATER VALVE | 1 EA |
| TEE | 2 EA |
| FIRE HYDRANT | 1 EA |
| 45° BEND | 2 EA |
| FDC | 1 EA |

| SUMMARY OF QUANTITIES (SANITARY) | |
|---|---|
| DESCRIPTION | QUANTITY |
| CONNECT TO EXISTING SANITARY SEWER LINE | 1 EA |
| 4" PVC SANITARY SEWER LINE | 187 LF |
| ONE-WAY CLEANOUT | 4 EA |
| 4' MANHOLE | 1 EA |
| GREASE INTERCEPTOR | 1 EA |
| 45° BEND | 4 EA |

### CAUTION – NOTICE TO CONTRACTOR

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2. 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 POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

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

### ENGINEERS SIGNATURE BLOCK

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS IN THE STATE OF COLORADO.

________________________ SCOTT BROWN
___________ DATE SIGNED

REGISTERED PROFESSIONAL ENGINEER
STATE OF COLORADO No. (PE #45900)
GALLOWAY & COMPANY, INC.
5500 GREENWOOD PLAZA BOULEVARD, SUITE 200
GREENWOOD VILLAGE, CO 80111

### BENCHMARK

SOURCE BENCHMARK: DOUGLAS COUNTY SURVEY MONUMENT DESIGNATION 1109036,
ELEVATION = 5897.572' NAVD88
FOUND 2" ALUMINUM CAP STAMPED "DOUGLAS COUNTY GIS 1109036".

SITE BENCHMARK #1 : ELEVATION = 5824.30' NAVD88, NO. 5 REBAR WITH PINK PLASTIC CAP STAMPED "GALLOWAY CONTROL
SITE BENCHMARK #2 : ELEVATION = 5802.90' NAVD88, CHISELED "+" IN CONCRETE

### BASIS OF BEARINGS

THE LINE BETWEEN THE WEST QUARTER CORNER OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, AND THE CENTER QUARTER CORNER OF SAID SECTION 03, WHICH BEARS N86°26'45"E

### 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.)

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

### SOIL PREPARATION NOTE

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM A GEOTECHNICAL ENGINEERING REPORT PREPARED FOR 18704 COTTONWOOD DRIVE, PARKER, COLORADO AS FOLLOWS:

**GEOTECHNICAL ENGINEER: SCI ENGINEERING, INC**
**PROJECT NO.: 2022-0732.10**

THE CONTRACTOR MUST FULLY REVIEW THESE REPORTS PRIOR TO CONSTRUCTION. INFORMATION IN THE GEOTECHNICAL REPORT SUPERSEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. REFER TO GENERAL STRUCTURAL NOTES FOR SPECIFIC SOIL PREPARATION AT SITE STRUCTURES.

### SIGHT DISTANCE CERTIFICATION

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THE PROPOSED SUBDIVISION, KINGS POINT RETAIL IS DESIGNED IN ACCORDANCE WITH THE TOWN OF PARKER SIGHT DISTANCE CRITERIA AND WITH AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS.

(REGISTERED PROFESSIONAL ENGINEER) (LICENSE NO.) (DATE)

Galloway
5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884
GallowayUS.com

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COTTONWOOD WATER &
SANITATION CONSTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

| # | Date | Issue / Description | Init. |
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| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

UTILITY COVER SHEET

U.0

## LEGEND

- EXISTING PROPERTY LINE
- EXISTING LOT LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- 8W — EXISTING WATER LINE
- IRR — EXISTING IRRIGATION LINE
- W — PROPOSED WATER LINE
- SS — EXISTING SANITARY SEWER
- SS — PROPOSED SANITARY SEWER
- E — PROPOSED ELECTRICAL LINE
- G — PROPOSED GAS LINE
- EXISTING STORM SEWER
- SD — PROPOSED STORM SEWER
- EXISTING FIRE HYDRANT
- EXISTING 4' SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN MANHOLE

## SCHEDULE

1. EXISTING WATER LINE
2. EXISTING STORM SEWER
3. EXISTING SANITARY SEWER
4. EXISTING SANITARY SEWER MANHOLE
5. EXISTING MODIFIED TYPE R INLET
6. EXISTING FIRE HYDRANT
7. PROPOSED 6" STORM SEWER LINE (REFERENCE STORM PLAN)
8. PROPOSED STORM CLEAN OUT (REFERENCE STORM PLANS)
9. PROPOSED 4" SANITARY LINE (REFERENCE OVERALL UTILITY PLAN)
10. PROPOSED 750 GALLON GREASE INTERCEPTOR (REFERENCE SITE DETAILS)
11. PROPOSED SANITARY CLEAN OUT (REFERENCE SITE DETAILS)
12. PROPOSED 1 1/2" DOMESTIC WATER SERVICE LINE TO BUILDING
13. PROPOSED UNDERGROUND ELECTRICAL LINE. COORDINATE WITH IREA.
14. PROPOSED TRANSFORMER ON CONCRETE PAD TO BE COORDINATED WITH IREA
15. PROPOSED UNDERGROUND GAS LINE. COORDINATE WITH IREA.
16. PROPOSED SAMPLING MANHOLE (REFERENCE UTILITY DETAILS)

## UTILITY NOTES

1. CONTRACTOR MUST COORDINATE WORK WITH UTILITY COMPANY AND CITY PRIOR TO BEGINNING WORK AND IS RESPONSIBLE FOR ALL MATERIALS, LABOR, REPAIRS, ETC. TO COMPLETE WORK AND RESTORE AREA TO SAME STATE PRIOR TO STARTING WORK
2. CONTRACTOR TO PLACE IDENTIFICATION RIBBON ABOVE THE CENTER LINE OF ALL PVC PIPE. TAPE IS TO BE PLACED 18" ABOVE PIPE. CONTRACTOR TO ALSO ADHERE #12 TRACER WIRE ON TOP OF ALL PVC PIPE. REFER TO JURISDICTIONAL SPECIFICATIONS.
3. LENGTHS OF STORM/SANITARY SEWER ARE THE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. THEREFORE, LENGTHS SHOWN ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND STRUCTURE WIDTHS.
4. MAINTAIN MINIMUM 18" VERTICAL AND 10' HORIZONTAL SEPARATION BETWEEN POTABLE WATERLINE AND STORM OR SANITARY SEWERS AND LATERALS. A 12" VERTICAL CLEARANCE MUST BE MAINTAINED BETWEEN IRRIGATION LINES.
5. CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THEIR COST.
6. CONTRACTOR RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS OR ANY OTHER GOVERNING AGENCY.
7. ALL WATER AND SANITARY SEWER SERVICES ARE PRIVATELY OWNED AND MAINTAINED. COTTONWOOD WATER & SANITARY DOES NOT OWN OR MAINTAIN SERVICES
8. 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.
9. ALL WATER IS TO BE 4' FEET DEEP.

## GENERAL UTILITY NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2. 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.
3. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS CONTACT THE PWSD IMMEDIATELY.
4. PWSD ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
7. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF "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.
8. 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.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
11. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
    a. "X"FOR SANITARY SERVICE SEWERS
    b. "V"FOR WATER SERVICES
13. NO TREES ALLOWED IN EASEMENTS OR WITHIN 8' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
14. 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.
15. ANY TRAFFIC CONTROL WITHIN PARKER ROAD RIGHT-OF-WAY WILL REQUIRE A CDOT RIGHT-OF-WAY PERMIT.

## BENCHMARK

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SITE BENCHMARK #1 : ELEVATION = 5824.30' NAVD88, NO. 5 REBAR WITH PINK PLASTIC CAP STAMPED "GALLOWAY CONTROL
SITE BENCHMARK #2 : ELEVATION = 5802.90' NAVD88, CHISELED "+" IN CONCRETE

## BASIS OF BEARINGS

THE LINE BETWEEN THE WEST QUARTER CORNER OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, AND THE CENTER QUARTER CORNER OF SAID SECTION 03, WHICH BEARS N86°26'45"E

## CAUTION – NOTICE TO CONTRACTOR

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TOWN OF PARKER, DIRECTOR OF ENGINEERING ____ DATE

## UTILITY INSTALLATION RESPONSIBILITIES

**ELECTRIC RESPONSIBILITY**

| | GENERAL CONTRACTOR | UTILITY PROVIDER | N/A |
|---|---|---|---|
| PERMITS AND INSPECTIONS | X | | |
| OVERHEAD SERVICE DROP | | 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**

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

**WATER RESPONSIBILITY**

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

**SEWER RESPONSIBILITY**

| | GENERAL CONTRACTOR | UTILITY PROVIDER | N/A |
|---|---|---|---|
| TAP | X | | |

H:\L\Land of Sushi\Parker, CO_LOS000001_Cottonwood Drive\0CIV\3-CD\CWSD\LOS01_U-1_Utility Site Plan.dwg - Scott Brown - 2015-04-16

Galloway
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Greenwood Village, CO 80111
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COTTONWOOD WATER & SANITATION CONTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

| # | Date | Issue / Description | Init. |
|---|---|---|---|

| | |
|---|---|
| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

UTILITY SITE PLAN

U.1

## LEGEND

- EXISTING PROPERTY LINE
- EXISTING LOT LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING WATER LINE
- EXISTING IRRIGATION LINE
- PROPOSED WATER LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRICAL LINE
- PROPOSED GAS LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING FIRE HYDRANT
- EXISTING 4' SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN MANHOLE

## NOTE:

1. WATER METER IS INTERNAL TO BUILDING.

## BENCHMARK

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______________________________
TOWN OF PARKER, DIRECTOR OF ENGINEERING          DATE


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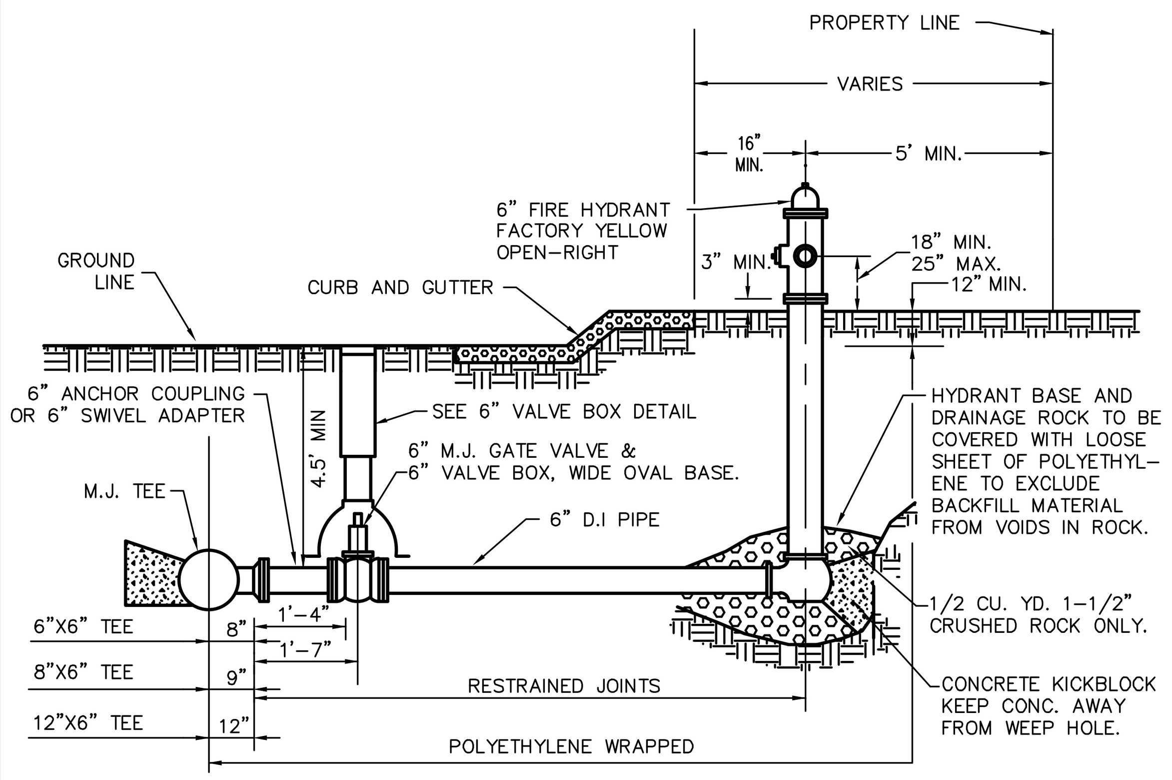
COTTONWOOD WATER & SANITATION CONTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1
AMD 20, LOT 4E
PARKER, COLORADO

| # | Date | Issue / Description | Init. |
|---|---|---|---|

| | |
|---|---|
| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

WATER PLAN

U.2




ONLY THE FOLLOWING FIRE HYDRANTS AND VALVE BOXES LISTED BELOW SHALL BE ACCEPTED FOR CONSTRUCTION.

FIRE HYDRANTS

A. AMERICAN AVK SERIES 27
B. MEULLER CENTURION MODEL A-473.
C. WATEROUS PACER MODEL WB-67-250.

ACCEPTABLE VALVE BOXES

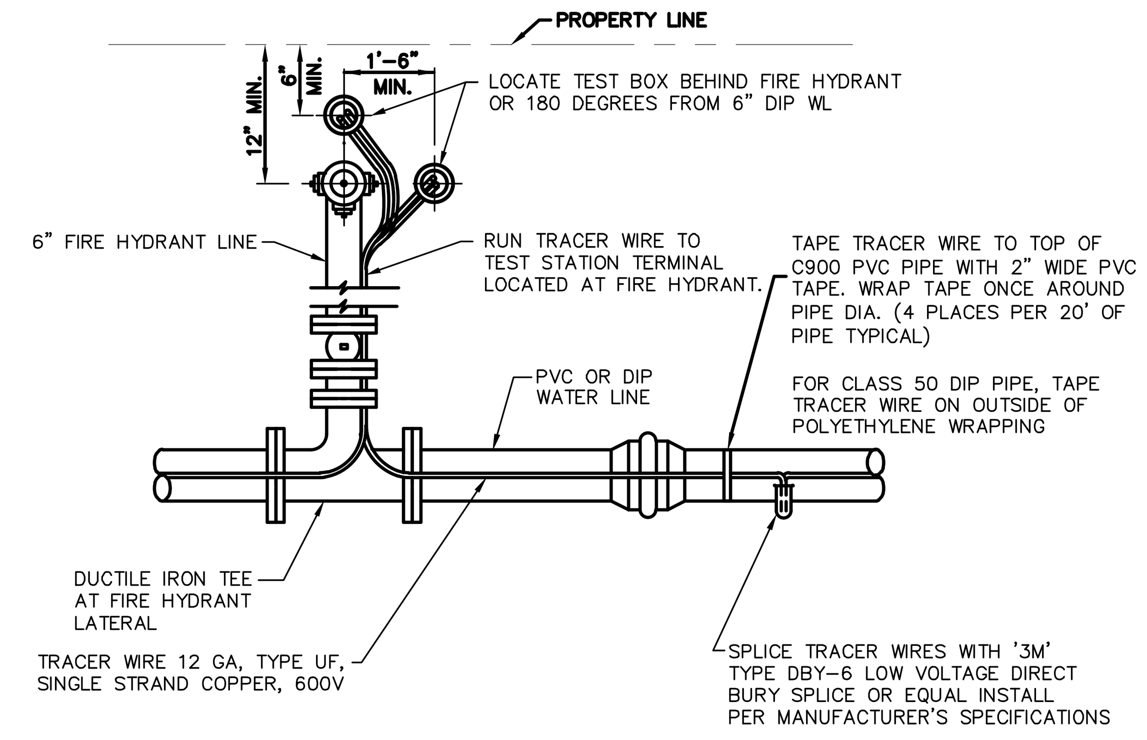
A. TYLER SCREW – TYPE "C" CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE
B. CASTING INC. 6860 SERIES, CI 160B OVAL BASE
C. STAR PIPE, VB-0006 SERIES

NOTES:

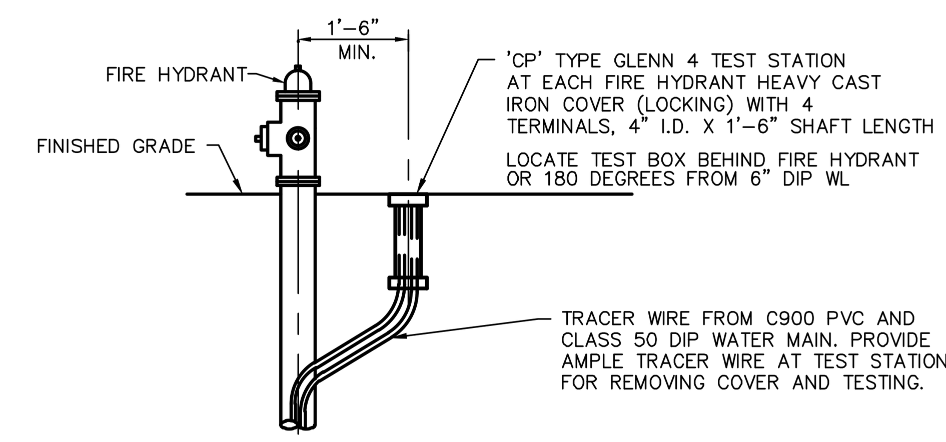
1. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH LINE.
2. DO NOT COVER OR PLUG DRAIN HOLES WITH CONCRETE.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | FIRE HYDRANT ASSEMBLY

(303) 985-3636 DRAWING NO.: WB-4W DATE: 8/2015



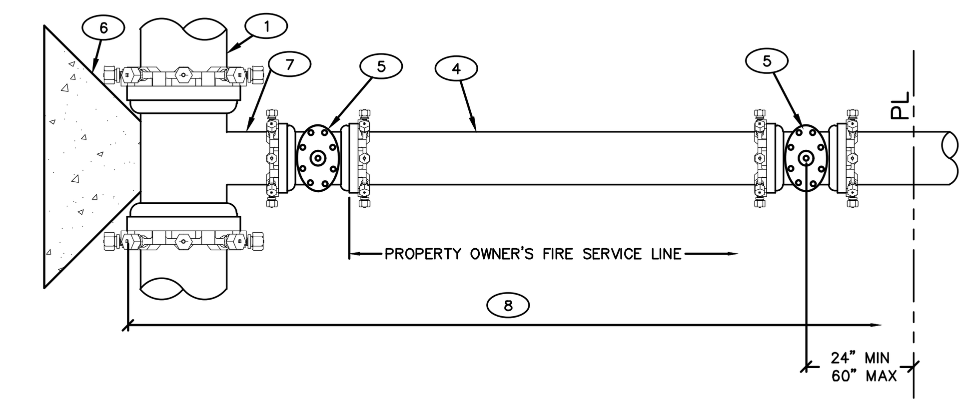

PLAN VIEW



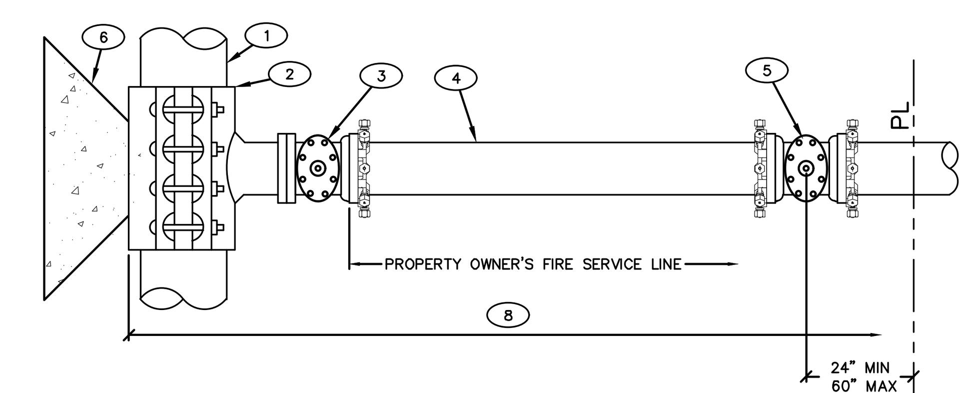

PROFILE

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | PVC & DIP WATER MAIN TRACER WIRE INSTALLATION DETAIL

(303) 985-3636 DRAWING NO.: CTWD-11W DATE: 1/2015




MAIN EXTENSION

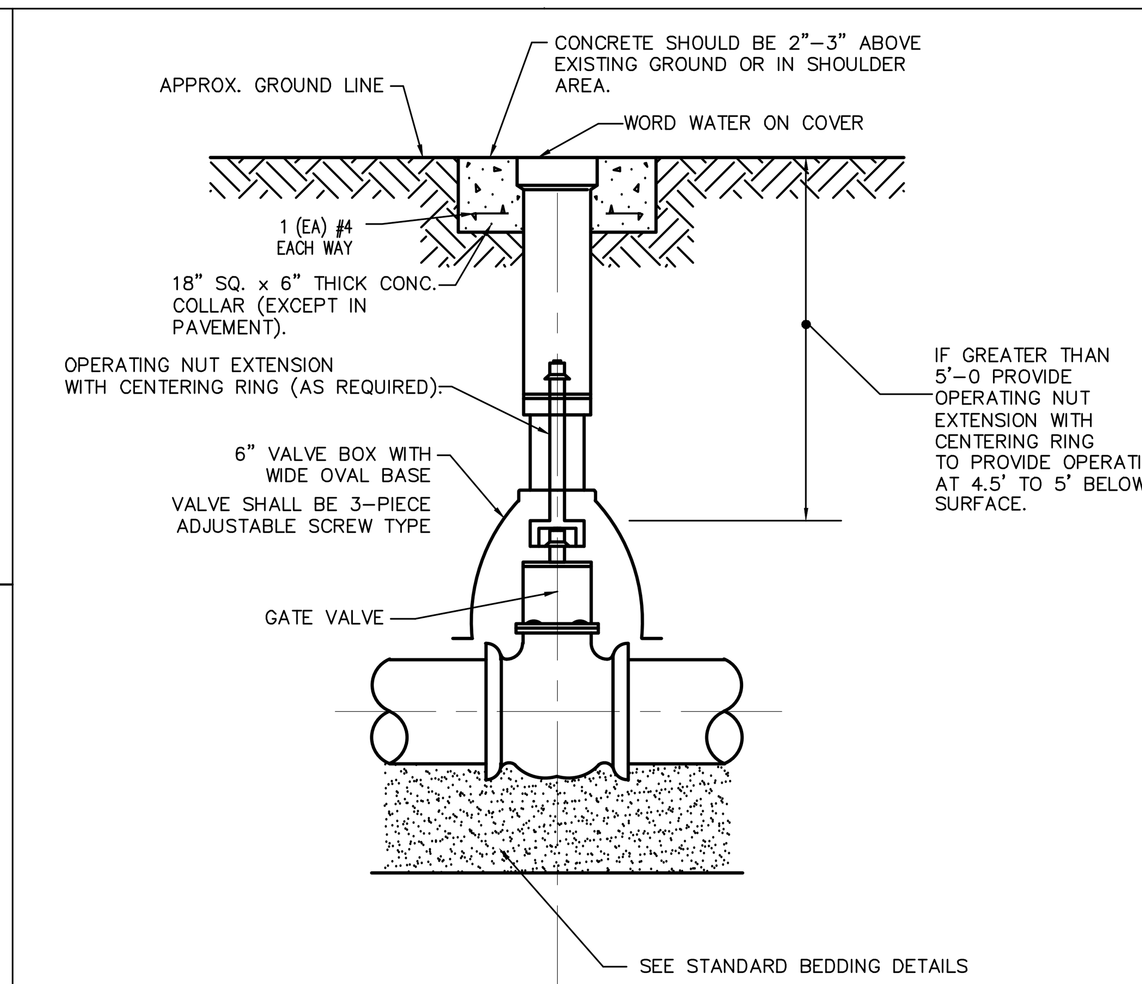



EXISTING MAIN

1. EXIST MAIN
2. TAPPING SLEEVE
3. TAPPING VALVE FLG X MJ
4. DI PIPE FULLY RESTRAINED
5. MJ GV, 2' FROM PL
6. CONC KICKBLOCK
7. MJ ANCHORING TEE
8. POLYETHYLENE WRAPPED

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | 3" AND LARGER DOMESTIC AND FIRELINE CONNECTION

(303) 985-3636 DRAWING NO.: CTWD-37W DATE: 10/2014




NOTES

1. CARE SHALL BE TAKEN WHEN INSTALLING VALVES TO ASSURE PROPER SUPPORT. 3/4" WASHED ROCK SHALL BE INSTALLED UNDER THE VALVE TO PROVIDE ADDITIONAL SUPPORT WHERE REQUIRED
2. VALVES SHALL NOT BE PLACED IN CONCRETE CROSS PANS, SIDEWALKS, OR UNDER CURB & GUTTER. VALVE AND VALVE BOX SHALL BE LOCATED TWO FEET FROM EDGE OF CONCRETE CROSS PAN.
3. VALVES & FITTINGS SHALL BE WRAPPED WITH MIN. 8 MIL. THICKNESS POLYETHYLENE WRAP. SEE DETAIL CTWD-10W
4. VALVES ON POTABLE WATER LINES ARE OPEN-RIGHT. VALVES ON NON-POTABLE WATER LINES ARE OPEN-LEFT.

ACCEPTABLE VALVE BOXES

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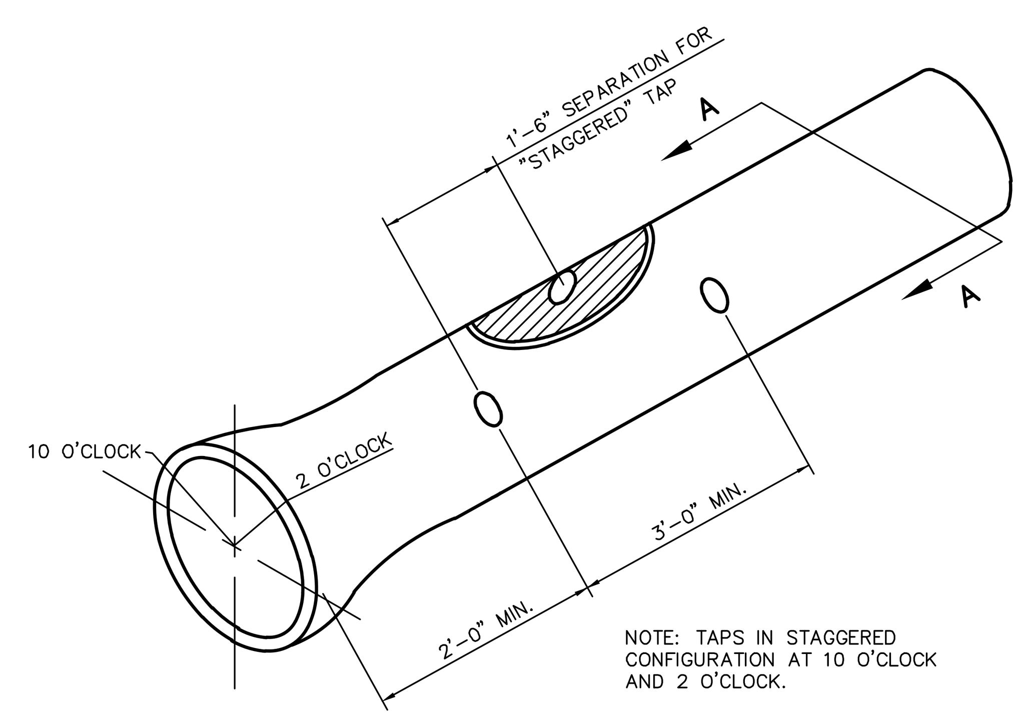
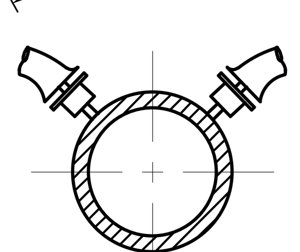
B. CASTING INC. 6860 SERIES, CI 160B OVAL BASE
C. STAR PIPE, VB-0006 SERIES

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | RESILIENT SEATED GATE VALVE DETAIL

(303) 985-3636 DRAWING NO.: CTWD-1W DATE: 1/2015



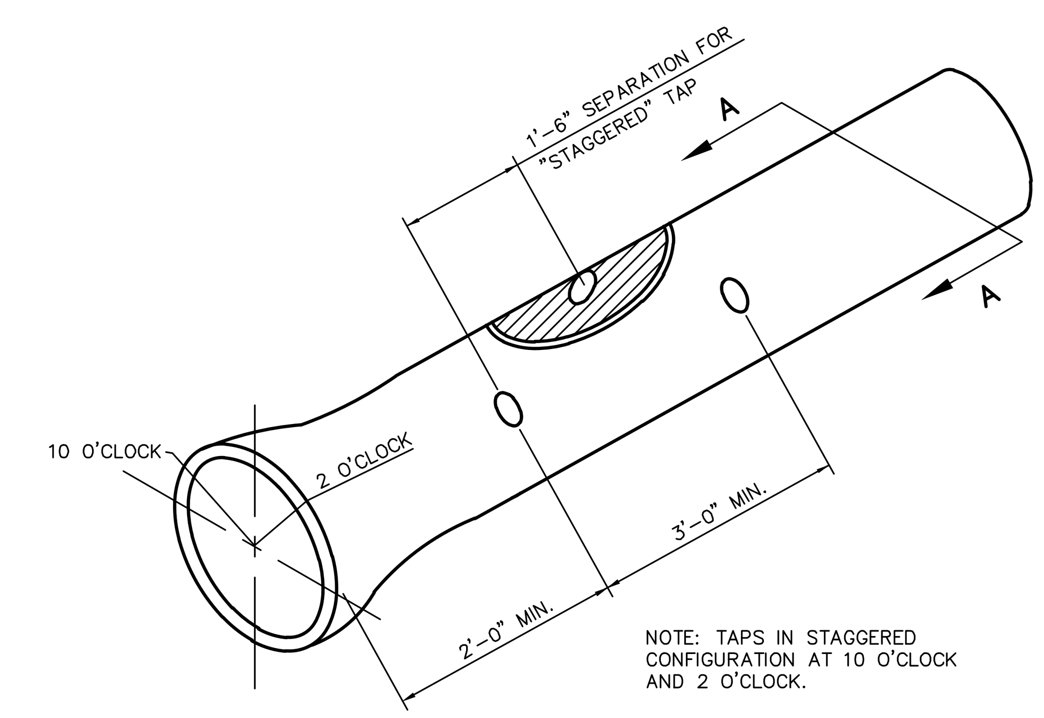
SECTION A-A

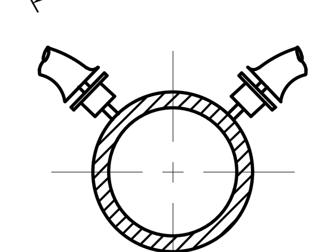
NOTES:

1. SERVICE TAPS – WATER SERVICE TAPS SHALL BE MADE AT EITHER THE 2 O'CLOCK OR THE 10 O'CLOCK POSITION ON THE CIRCUMFERENCE OF A WATER MAIN.
2. THE MINIMUM DISTANCE BETWEEN A TAP MADE AT THE 2 O'CLOCK POSITION AND THE ONE MADE AT THE 10 O'CLOCK POSITION SHALL BE 18-INCHES MEASURED ALONG THE PIPE.
3. THE MINIMUM DISTANCE BETWEEN SUCCESSIVE TAPS MADE EITHER AT THE 2 O'CLOCK OR THE 10 O'CLOCK POSITION SHALL BE 3-FEET.
4. THE MINIMUM DISTANCE FROM EITHER THE BELL OR THE SPIGOT END OF A PIPE TO A TAP SHALL BE 2-FEET.
5. A MAXIMUM OF 4 WATER SERVICE TAPS SHALL BE ALLOWED PER LENGTH OF PIPE.
6. FOR THE REQUIREMENTS ON TAPPING METHODS AND CONNECTIONS. ALL TAPS SHALL BE MADE USING BRASS SADDLES CONFORMING TO DISTRICT AND DENVER WATER DEPARTMENT SPECIFICATIONS.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | DOMESTIC WATER TAPPING DETAIL

(303) 985-3636 DRAWING NO.: CTWD-20W DATE: 1/2015

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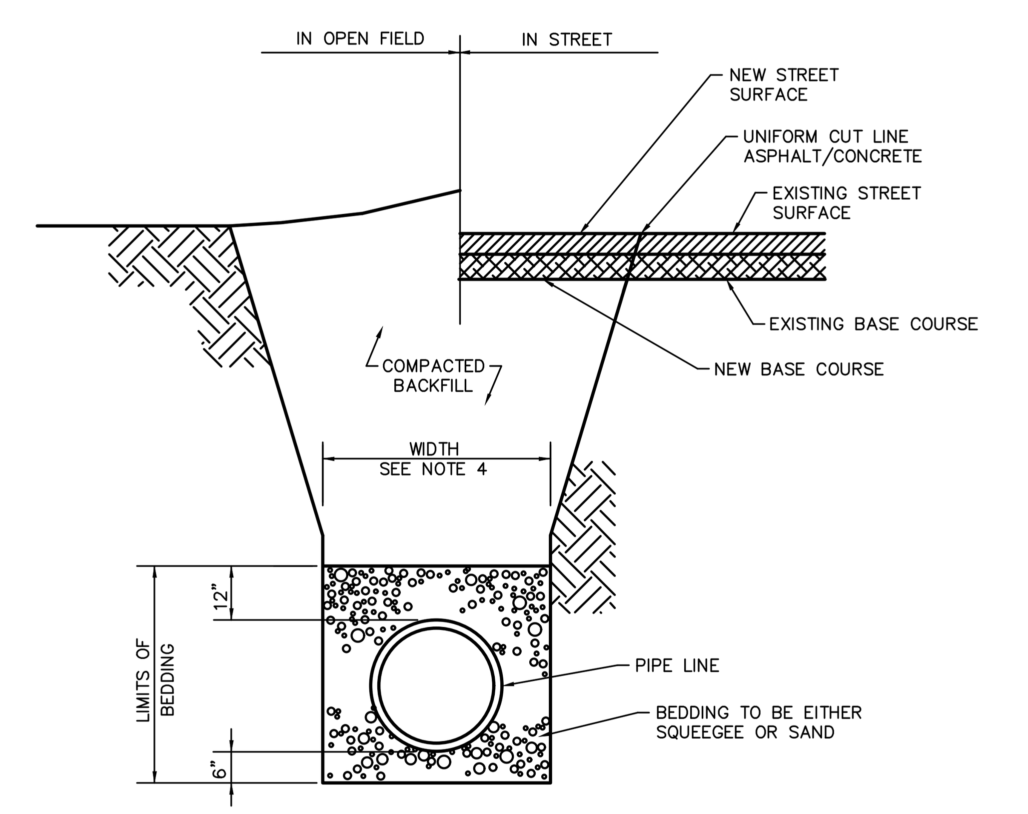
Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | DOMESTIC WATER TAPPING DETAIL

(303) 985-3636 DRAWING NO.: CTWD-20W DATE: 1/2015

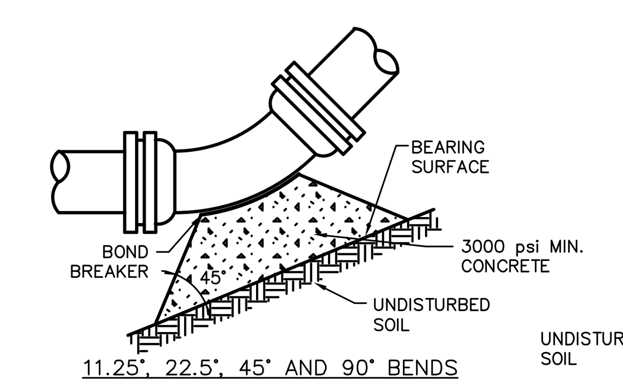

TYPICAL TRENCH SECTION

NOTES:

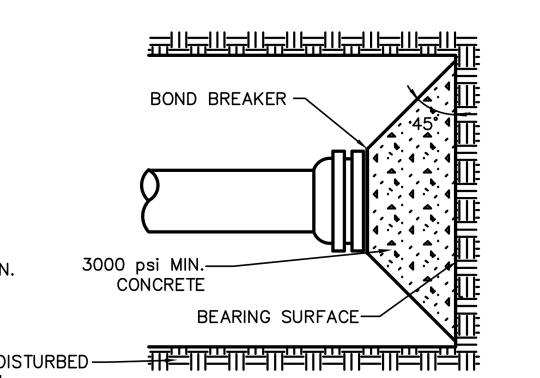
1. MINIMUM COVER TO BE 4.5' BELOW OFFICIAL STREET GRADE.
2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
3. PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
4. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.
5. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 P.S.I. CONCRETE FROM THRENCH BOTTOM TO PIPE SPRINGLINE.
6. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 6" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | STANDARD BEDDING

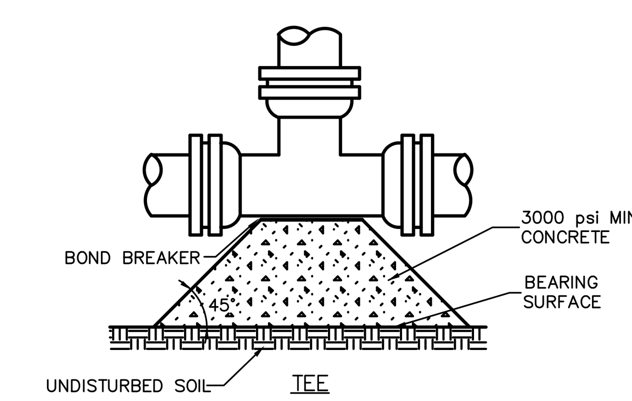
(303) 985-3636 DRAWING NO.: CTWD-16 DATE: 1/2015



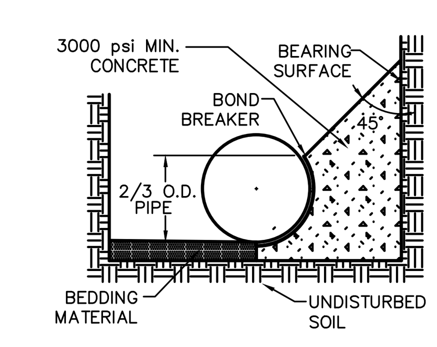

11.25°, 22.5°, 45° AND 90° BENDS




DEAD END




TEE




TYPICAL CROSS SECTION

MINIMUM BEARING SURFACE AREA

(IN SQUARE FEET)

| SIZE OF PIPE | BENDS 11.25° | 22.5° | 45° | 90° | TEE OR DEAD END |
|---|---|---|---|---|---|
| 4" | 1.00 | 1.00 | 1.00 | 2.00 | 1.50 |
| 6" | 1.00 | 1.25 | 2.25 | 4.25 | 3.00 |
| 8" | 1.00 | 2.00 | 4.00 | 7.50 | 5.25 |
| 12" | 2.25 | 4.50 | 8.75 | 16.00 | 11.25 |
| 16" | 3.75 | 7.50 | 14.50 | 27.00 | 19.00 |
| 20" | 5.00 | 10.00 | 19.50 | 35.50 | 25.00 |
| 24" | 7.00 | 14.00 | 27.75 | 51.00 | 36.00 |

NOTES:

1. BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS AND ARE DESIGNED USING THE FOLLOWING CRITERIA:
   1.1. INTERNAL WORKING PRESSURE OF 150 PSI.
   1.2. TRANSIENT (WATER HAMMER) PRESSURE OF 120 PSI FOR 4, 6, AND 8-INCH DIAMETER LINES, 110 PSI FOR 12-INCH LINES, AND 70 PSI FOR 16-INCH AND 20-INCH LINES.
   1.3. MINIMUM UNDISTURBED SOIL BEARING CAPACITY OF 3,000 PSI.
2. ALL SIZES OF BENDS, TEES, AND DEAD ENDS SHALL HAVE KICKBLOCKS.
3. MECHANICAL JOINT RESTRAINT IS ALSO REQUIRED ON ALL FITTINGS. SEE LENGTH OF PIPE RESTRAINT DETAIL FOR SPECIFIC REQUIREMENTS.
4. ALL BENDS SHALL BE RESTRAINED.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | KICKBLOCK

(303) 985-3636 DRAWING NO.: CTWD-12W DATE: 1/2015

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COTTONWOOD WATER & SANITATION CONTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

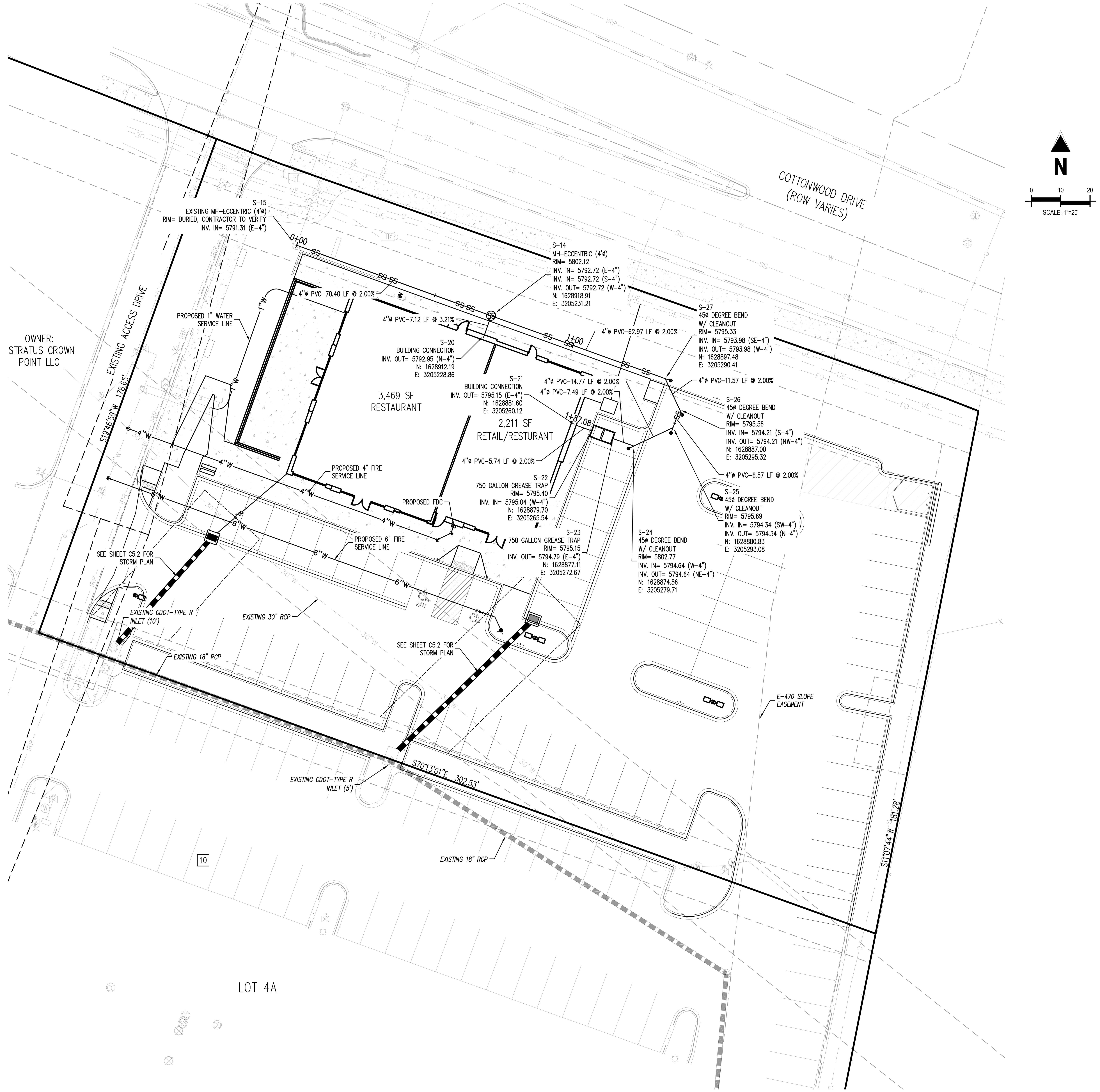
| # | Date | Issue / Description | Init. |
|---|---|---|---|

Project No: LOS000001
Drawn By: JRC
Checked By: SMB
Date: 05/02/2023

WATER DETAILS

U.3

H:\L\Land of Sushi\Parker, CO_LOS000001_Cottonwood Drive\0CIVIL\3-CD\CWSD\LOS01_U-2_Utility Details.dwg - Scott Brown - 2015-04-16




## LEGEND

- EXISTING PROPERTY LINE
- EXISTING LOT LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING WATER LINE
- EXISTING IRRIGATION LINE
- PROPOSED WATER LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRICAL LINE
- PROPOSED GAS LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING FIRE HYDRANT
- EXISTING 4' SANITARY SEWER MANHOLE
- EXISTING STORM DRAIN MANHOLE

## BENCHMARK

SOURCE BENCHMARK: DOUGLAS COUNTY SURVEY MONUMENT DESIGNATION 1109036,
ELEVATION = 5897.572' NAVD88
FOUND 2" ALUMINUM CAP STAMPED "DOUGLAS COUNTY GIS 1109036".

SITE BENCHMARK #1 : ELEVATION = 5824.30' NAVD88, NO. 5 REBAR WITH PINK PLASTIC CAP STAMPED "GALLOWAY CONTROL
SITE BENCHMARK #2 : ELEVATION = 5802.90' NAVD88, CHISELED "+" IN CONCRETE

## BASIS OF BEARINGS

THE LINE BETWEEN THE WEST QUARTER CORNER OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN, AND THE CENTER QUARTER CORNER OF SAID SECTION 03, WHICH BEARS N86°26'45"E

## CAUTION – NOTICE TO CONTRACTOR

1. 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 DISCREPANCIESTO THE ENGINEER PRIOR TO CONSTRUCTION.

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

2. 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 POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

## 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.)

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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COTTONWOOD WATER & SANITATION CONTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

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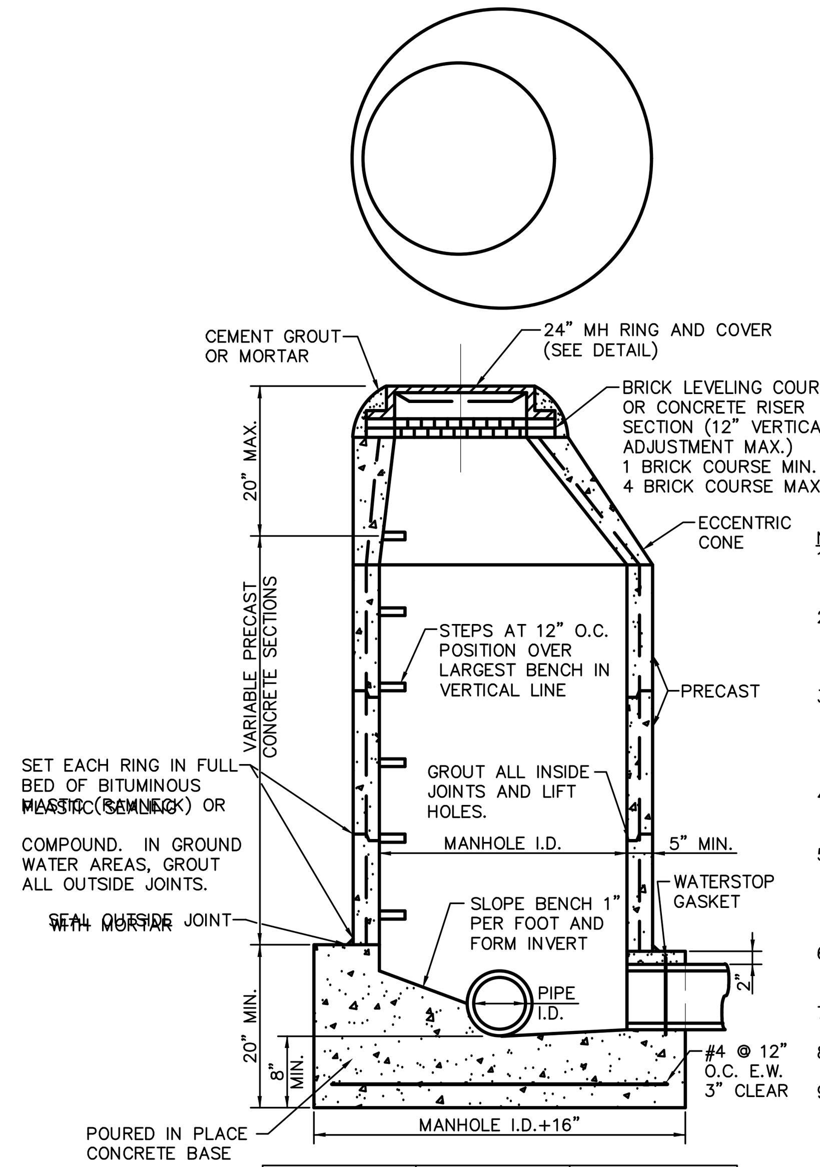
|---|---|---|---|

| | |
|---|---|
| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

SANITARY PLAN

U.4




NOTES:

1. MANHOLE BARREL MIN. DIA. SHALL CONFORM TO TABLE BELOW.
2. SHAPING FOR SMOOTH MANHOLE INVERTS MUST BE DONE BY FORMING OR SHAPING BASE CONCRETE.
3. MANHOLE STEPS SHALL BE ALCOA NO. 12653B OR APPROVED EQUAL. (SEE ALUMINUM STEP DETAIL FOR FURTHER INFORMATION)
4. PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C-478.
5. BLOCK-OUTS WHEN APPROVED SHALL EXTEND A MAX OF 6" PAST MANHOLE O.D. AND BE SATISFACTORILY PLUGGED AND SEALED.
6. CONCRETE MANHOLES MAY BE POURED IN PLACE ONLY WITH PRIOR APPROVAL.
7. ALL MORTAR GROUT SHALL BE MIXED WITH TYPE II CEMENT.
8. BENCH MUST HAVE A BRUSHED, NON-SKID SURFACE.
9. OUTFALL OR DROP MANHOLES SHALL BE LINED WITH STRONG SEAL, POLYTRIPLEX SEWER SHIELD, OR AN APPROVED EQUAL, COATED WITH 20 MIL. MIN. APPLIED IN 4-7 MIL. LAYERS, PER MANUFACTURER'S SPECIFICATIONS.
10. PRE-CAST CONCRETE BASES SHALL NOT BE USED WITHOUT PRIOR APPROVAL OF THE DISTRICT.

SET EACH RING IN FULL BED OF BITUMINOUS MASTIC (RAMNEK) OR COMPOUND. IN GROUND WATER AREAS, GROUT ALL OUTSIDE JOINTS.

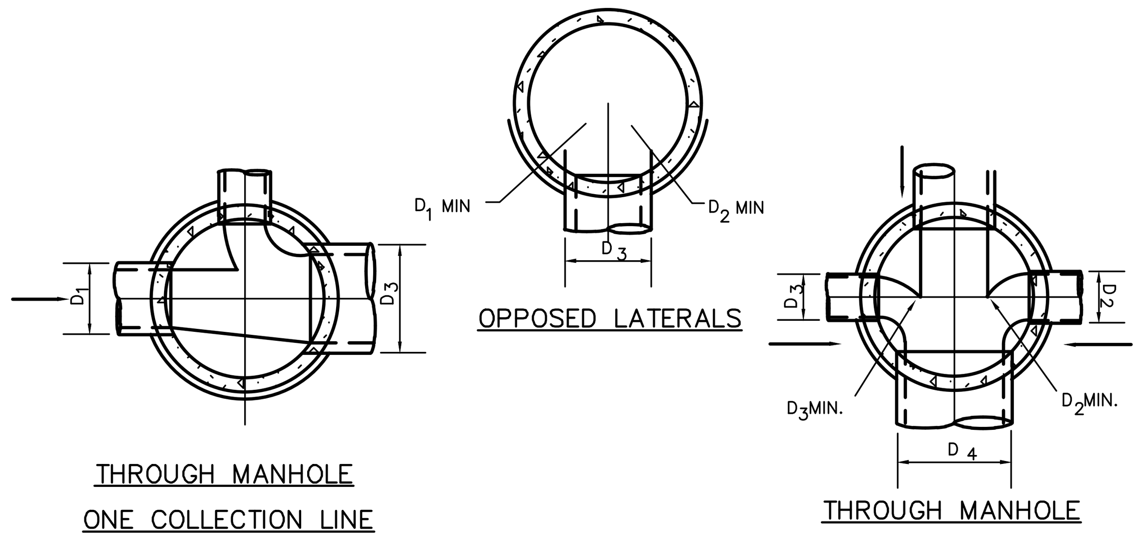
SEAL OUTSIDE JOINT WITH MORTAR

| PIPE I.D. | MANHOLE I.D. | RING & COVER |
|---|---|---|
| 18" & SMALLER | 4'-0"▲ | 24" |
| 21" TO 48" | 5'-0" | 30" |
| 54" | 6'-0" | 30", 36" W/ 24" |
| 60" & LARGER | SPECIAL DESIGN | INNER COVER |

▲ WHENEVER MORE THAN A TWO WAY MANHOLE OF MAX. PIPE I.D. IS REQUIRED, THE MANHOLE SHOULD BE INCREASED TO LARGER DIA., EG. 18"x18"x18", REQUIRES 5'-0" I.D.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | PRECAST MANHOLE

(303) 985-3636 DRAWING NO.: CTWD-2S DATE: 7/2013




THROUGH MANHOLE
ONE COLLECTION LINE

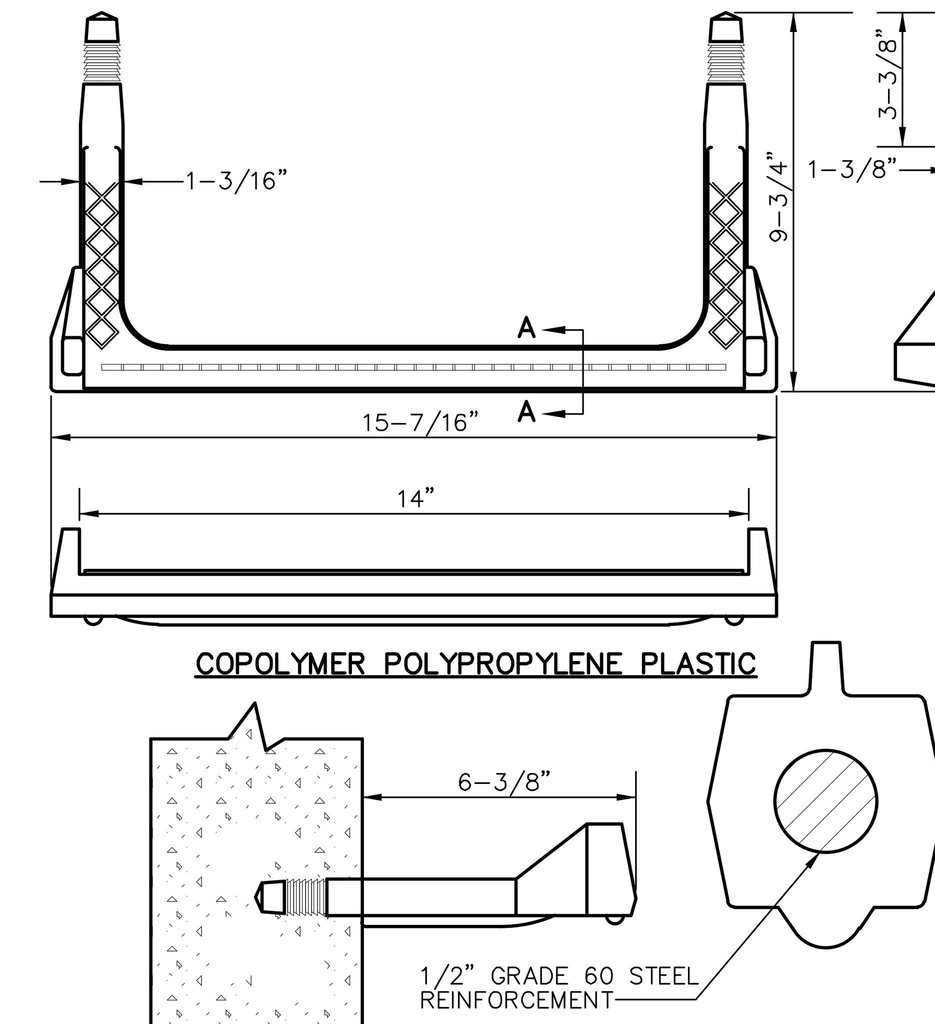
THROUGH MANHOLE
TWO COLLECTION LINES

NOTES:

1. PIPE INVERT ELEVATIONS AND DROP THROUGH MANHOLES SHALL BE IN CONFORMANCE WITH THE REVIEWED AND SIGNED CONSTRUCTION PLANS. THE INTENTION IS TO PROMOTE SMOOTH, NON-TURBULENT FLOW THROUGH THE MANHOLES BY KEEPING THE LARGER LINES LOWER IN THE MANHOLE AND BRINGING THE SMALLER LINES IN SLIGHTLY HIGHER.
2. MAXIMUM INSIDE DROP THROUGH ANY MANHOLE SHALL BE 12 INCHES.
3. MINIMUM DROP THROUGH ANY MANHOLE SHALL BE 0.2 FT.
4. ALL INVERT DEFLECTORS SHALL BE CURVED IN SHAPE TO PROVIDE SMOOTH FLOW TRANSITIONS AS SHOWN ON THIS DETAIL.
5. MINIMUM ANGLE BETWEEN THE CENTERLINE OF ANY INCOMING PIPE AND THE CENTERLINE OF THE OUTGOING PIPE SHALL BE 90 DEGREES.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | BASE AND DEFLECTOR

(303) 985-3636 DRAWING NO.: CTWD-3S DATE: 7/2013

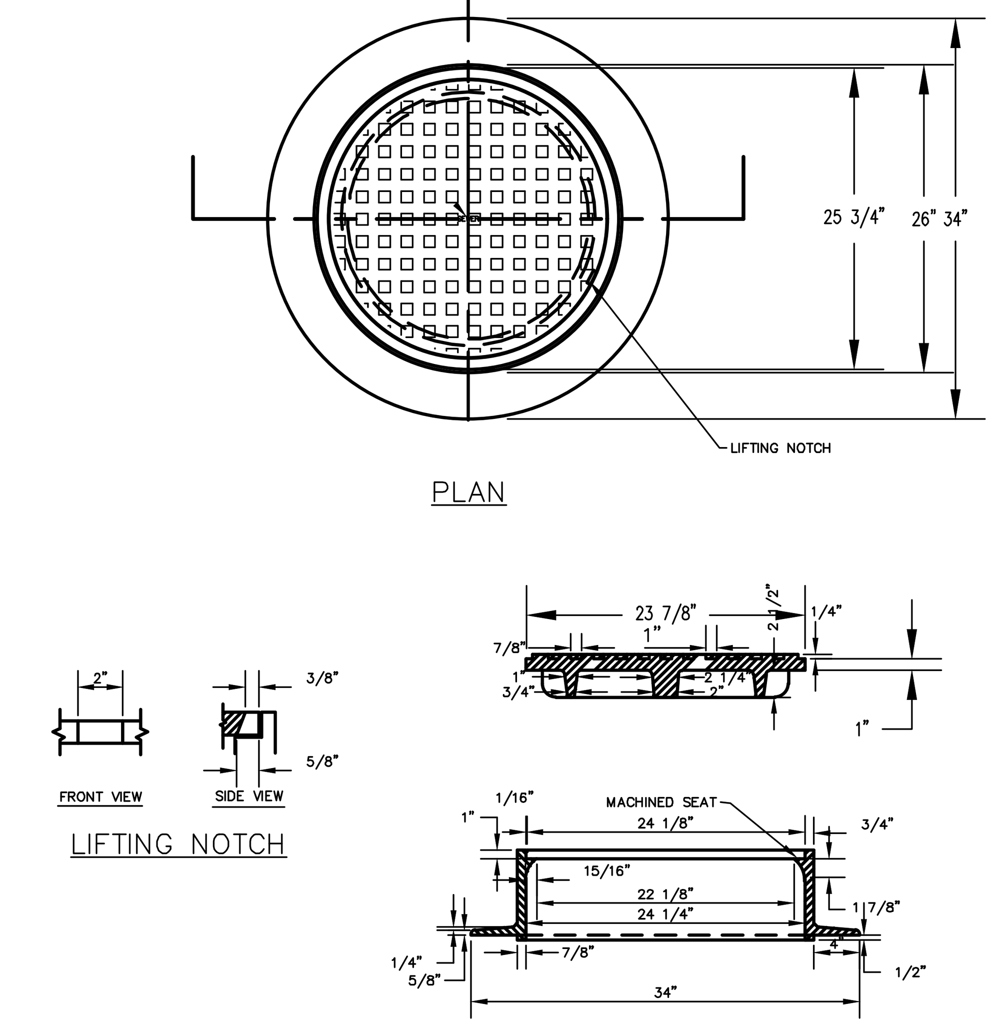



COPOLYMER POLYPROPYLENE PLASTIC

SECTION-A

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | PLASTIC STEP

(303) 985-3636 DRAWING NO.: CTWD-5S DATE: 7/2013



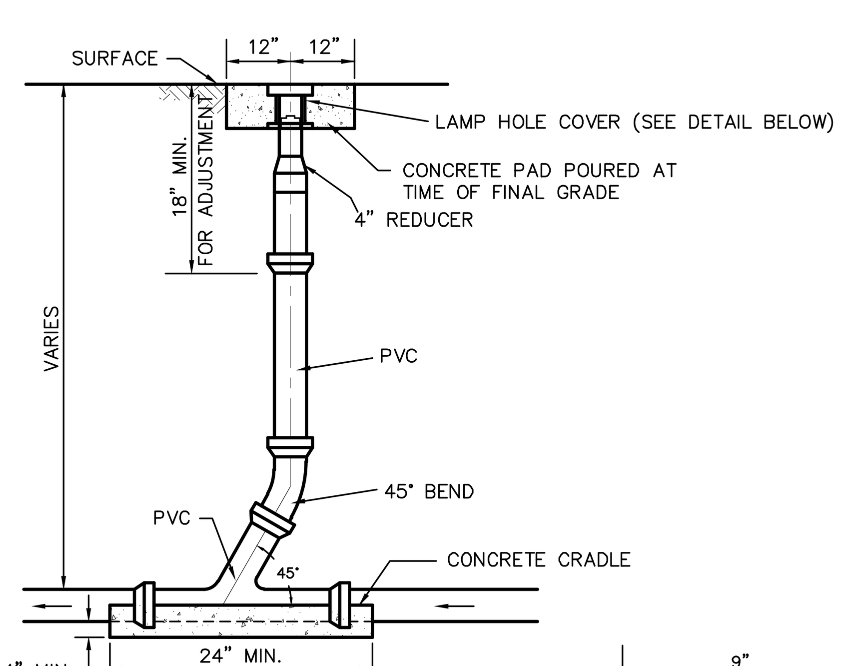

NOTE:

1. CASTING SPECIFICATIONS: ASTM A-48 WITH A MINIMUM TENSILE STRENGTH OF 25 KSI (CLASS 25)
2. ALL CASTINGS TO BE DIPPED IN ASPHALT BASE PAINT (OR APPROVED EQUAL)
3. CASTINGS SHALL BE AS SPECIFIED BELOW OR EQUAL: (CAST IRON ONLY)

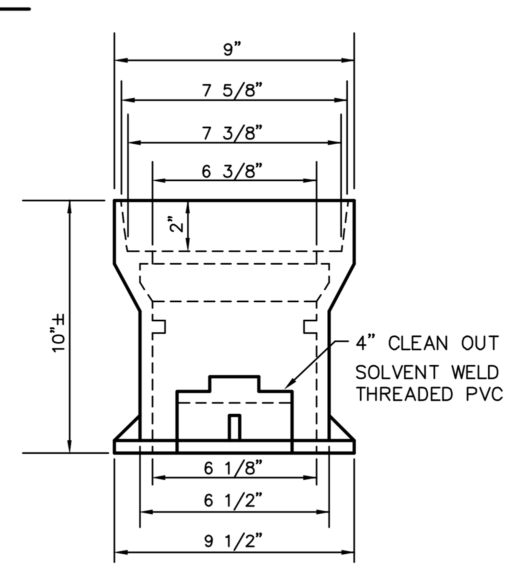
| MANUFACTURES | CAT. # |
|---|---|
| NEENAH | R-1706 |
| CASTINGS, INC. | MH-400-24 C.I. |
| HUTCHINSON FDRY. & STL. INC. | MH-400 |

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | 24" MANHOLE RING AND COVER

(303) 985-3636 DRAWING NO.: CTWD-6S DATE: 7/2013




PLAN VIEW




COVER DETAIL

NOTES:

1. COVER SHALL HAVE A LOCKING LID MARKED "SEWER".
2. TYLER SERIES 6855 SLIP TYPE TOP SECTION, D & L SUPPLY SERIES M8056 OR EQUAL.
3. I.D. = 6 1/8".

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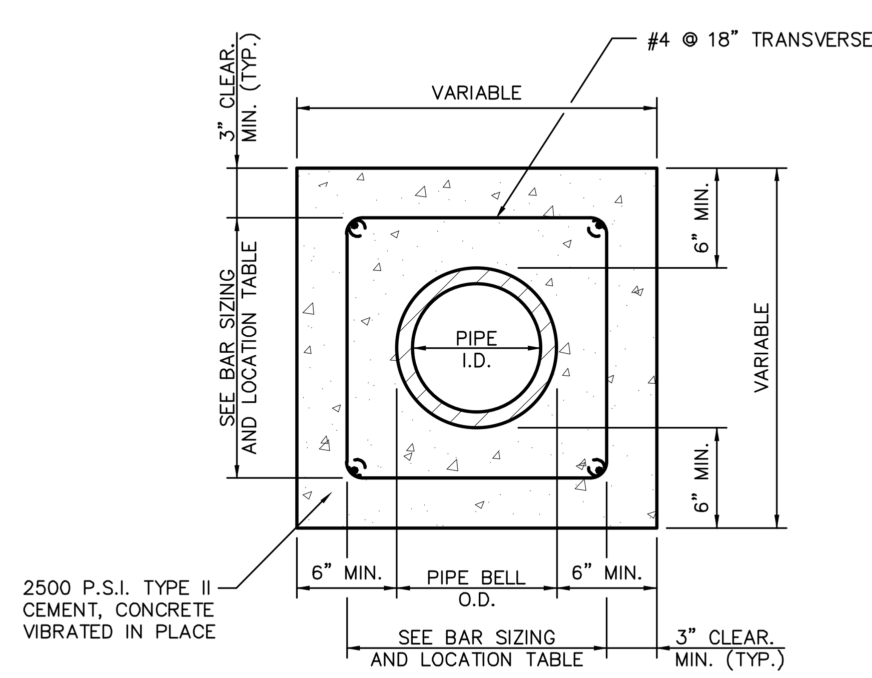


REINFORCEMENT STEEL

| PIPE I.D. | LONGITUDINAL BARS - LOCATION | | |
|---|---|---|---|
| 4 IN. | 4-NO. 4 BARS | 1 EACH | CORNER |
| 6 IN. | 4-NO. 4 BARS | 1 EACH | CORNER |
| 8 IN. | 4-NO. 4 BARS | 1 EACH | CORNER |
| 10 IN. | 8-NO. 4 BARS | 3 EACH | SIDE |
| 12 IN. | 8-NO. 4 BARS | 3 EACH | SIDE |
| 15 IN. | 8-NO. 4 BARS | 3 EACH | SIDE |
| 18 IN. | 8-NO. 4 BARS | 3 EACH | SIDE |
| 21 IN. | 12-NO. 4 BARS | 4 EACH | SIDE |
| 24 IN. | 12-NO. 4 BARS | 4 EACH | SIDE |
| 27 IN. | 12-NO. 4 BARS | 4 EACH | SIDE |
| 30 IN. | 12-NO. 4 BARS | 4 EACH | SIDE |
| 33 IN. | 12-NO. 4 BARS | 4 EACH | SIDE |
| 36 IN. | 16-NO. 4 BARS | 5 EACH | SIDE |

NOTE:

THE DISTRICT SHALL REVIEW THIS DETAIL FOR USE ON A CASE BY CASE BASIS. SPECIAL ENCASEMENTS MAY BE REQUIRED AT CREEK CROSSINGS AND CONDUIT CROSSINGS.

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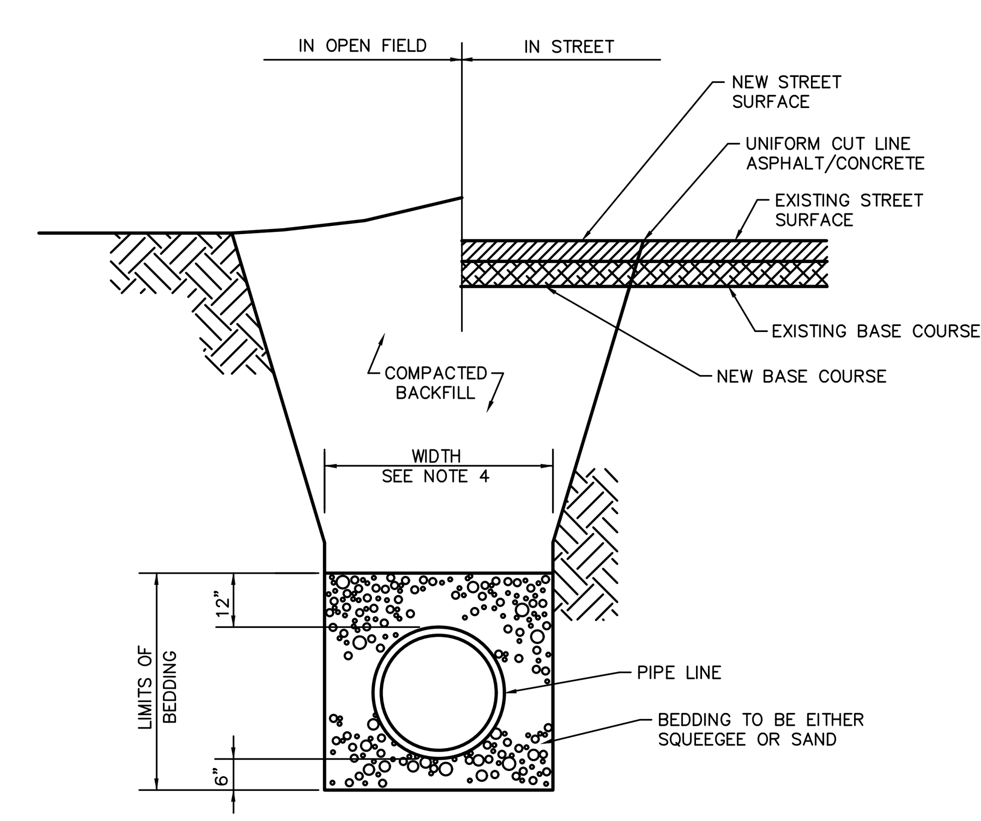


TYPICAL TRENCH SECTION

NOTES:

1. MINIMUM COVER TO BE 4.5' BELOW OFFICIAL STREET GRADE.
2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
3. PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
4. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.
5. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 P.S.I. CONCRETE FROM THRENCH BOTTOM TO PIPE SPRINGLINE.
6. COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 6" UNDER AND 12" OVER PIPE WILL REQUIRE 70% RELATIVE DENSITY TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 95% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.

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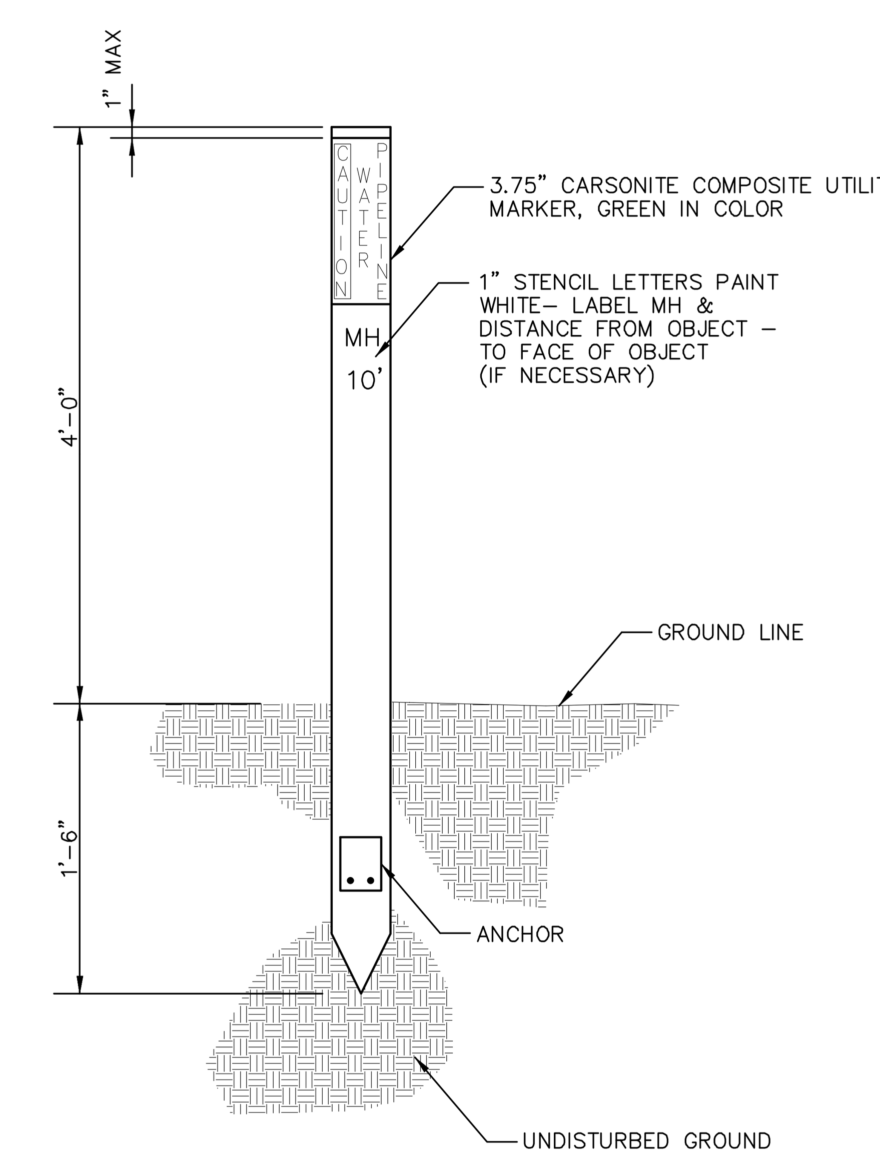


NOTE:

1. USE MARKER POST IN AREAS WHERE UTILITY CANNOT BE LOCATED FROM OTHER IMPROVEMENTS.

Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | CARSONITE MANHOLE MARKER POST

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COTTONWOOD WATER & SANITATION CONTRUCTION PLANS
LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

| # | Date | Issue / Description | Init. |
|---|---|---|---|

| | |
|---|---|
| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

SANITARY DETAILS

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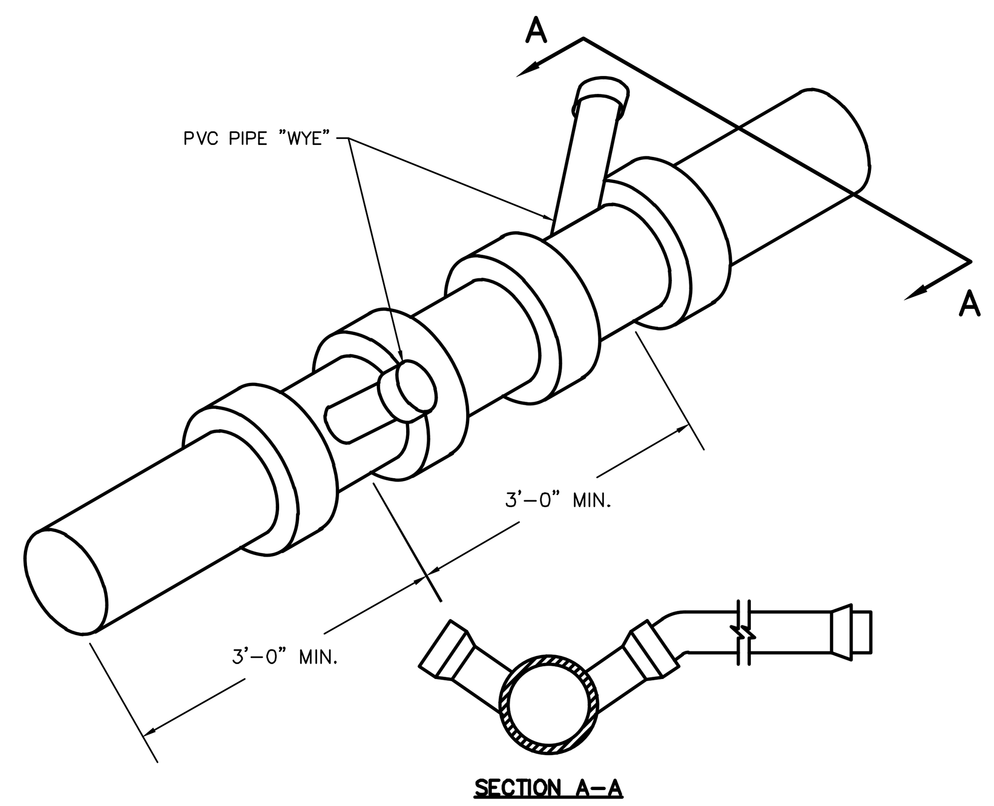


NOTE
TAPS IN STAGGERED CONFIGURATION AT
10 O'CLOCK OR
2 O'CLOCK POSITION

NOTES:

1. SANITARY SEWER SERVICE TAPS SHALL BE LOCATED ON THE MAIN AT THE 2 O'CLOCK OR 10 O'CLOCK POSITION.
2. THE MINIMUM DISTANCE BETWEEN ANY TWO CONSECUTIVE FITTINGS SHALL BE 3 FEET, MEASURED BETWEEN FITTING CENTERLINES.
3. SANITARY SEWER SERVICE TAPS SHALL NOT BE MADE WITHIN 3 FEET OF A PIPE JOINT, OR 5 FEET FROM EDGE OF MANHOLE BASE.
4. A MAXIMUM OF FOUR SERVICE TAPS ARE ALLOWED PER 20 FOOT LENGTH OF PIPE.
5. ALL SANITARY SEWER TAPS SHALL USE "WYE" STYLE FITTINGS. TEES ARE NOT ALLOWED.
6. SERVICE CONNECTIONS TO MANHOLES SHALL BE PERFORMED IN ACCORDANCE WITH THE "SERVICE CONNECTION TO DEAD-END MANHOLE" CONSTRUCTION DETAIL.

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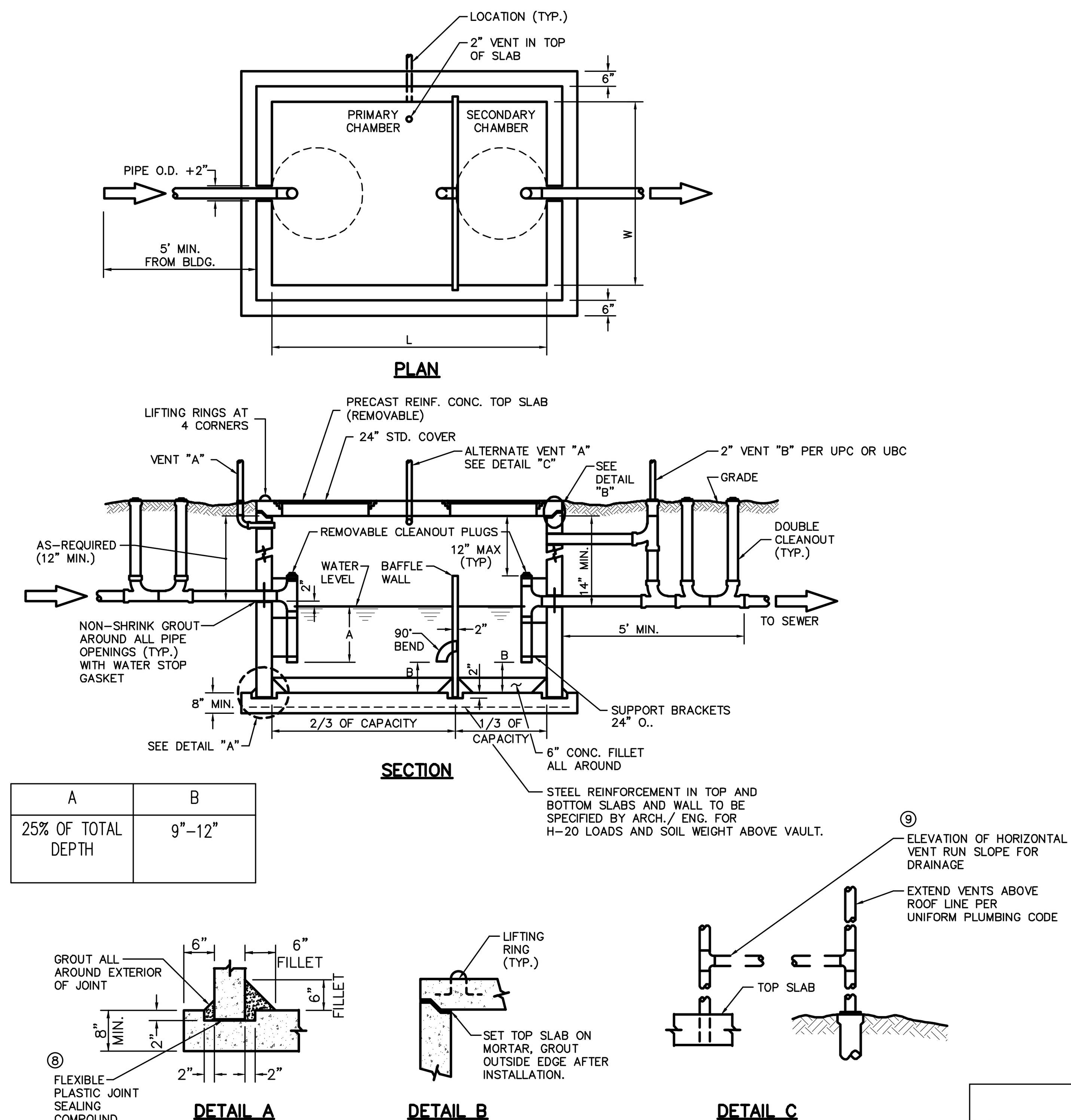


| A | B |
|---|---|
| 25% OF TOTAL DEPTH | 9"-12" |



GENERAL NOTES:

1. THESE STANDARD DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR GREASE INTERCEPTOR AND SHALL NOT BE USED FOR CONSTRUCTION. THE ARCHITECT/ENGINEER SHALL FURNISH STRUCTURAL DESIGN CRITERIA, HYDRAULIC LOADING, VOLUME & RETENTION TIME REQUIREMENTS AND DETAILED CONSTRUCTION DRAWINGS, INCLUDING SITE PLAN FOR APPROVAL PRIOR TO CONSTRUCTION.
2. SECONDARY TANK HAS VOLUME EQUAL TO 1/3 OF TOTAL CAPACITY.
3. ALL PIPE AND FITTINGS TO BE SCHEDULE 40 PVC EXCEPT WHERE NOTED OTHERWISE AND SHALL BE 4" MINIMUM DIAMETER.
4. WELLS, BOTTOM AND TOP SLAB TO BE REINFORCED THROUGHOUT. ADDITIONAL DIAGONAL REINFORCING TOP AND BOTTOM IS REQUIRED AROUND ACCESS OPENINGS. ALL REBAR SHALL HAVE A 3" MINIMUM COVER TO FACE OF CONCRETE.
5. THICKNESS OF WALLS, BOTTOM AND TOP SLAB TO BE DETERMINED FROM STRUCTURAL LOADING REQUIREMENTS BY ARCHITECT/ENGINEER. CAST-IN- PLACE BOTTOM SLAB SHALL NOT BE LESS THAN 8" THICK.
6. INLET AND OUTLET PIPE SIZES SHALL BE DETERMINED BY ARCHITECT/ENGINEER BUT SHALL NOT BE LESS THAN 4" DIAMETER (OUTLET PIPE INVERT TO BE 2" LOWER THAN INLET).
7. REINFORCED CONCRETE BOTTOM SLAB SHOWN. (MAY BE INTEGRALLY CAST WITH PRE-CAST WALL SECTIONS AT CONTRACTOR'S OPTION).
8. ALL JOINTS IN PRE-CAST SECTIONS TO BE SEALED WITH FLEXIBLE PLASTIC JOINT SEALING COMPOUND TO FED. SPEC. S-SS-C0210 (EXCEPT TOP SLAB).
9. VENT PIPE MATERIALS AND LOCATION SHALL BE IN ACCORDANCE WITH THE PLUMBING CODE.
10. ROUND OR CIRCULAR GREASE INTERCEPTOR WILL REQUIRE SPECIAL DESIGN AND APPROVAL.
11. PRE-CAST CONCRETE SHAPES ARE SHOWN: CAST-IN-PLACE CONCRETE STRUCTURE IS OPTIONAL.
12. PRE-CAST REINFORCED CONCRETE SECTIONS SHALL BE IN ACCCORDANCE WITH ASTM-C-478.
13. DESIGN CRITERIA: (MINIMUM)

| | |
|---|---|
| UNIT WEIGHT OF "SOIL" | 120 PCF |
| EQUIVALENT FLUID PRESSURE | 30 PCF |
| LIVELOADS (IF APPLICABLE) | AASHTO H=20 |
| CONCRETE STRENGTH (F'c)(TYPE II CEMENT) | 4000 PSI |

TOP SLAB MAY BE ONE PIECE OF MULTIPLE SEGMENT CONSTRUCTION AT CONTRACTOR'S OPTION.

14. SUPPORT BRACKETS AND CLEAN-OUT PLUGS SHALL BE BRASS
14. OTHER VARIOUS COMBINATIONS OF TANK DIMENSIONS MAY BE SUBMITTED FOR APPROVAL, PROVIDED THAT ANY ALTERNATE DESIGN SHALL HAVE THE SAME BASIC PROPORTIONAL DIMENSIONS, COMPARABLE VOLUMES AND FUNCTIONAL CAPABILITIES AS THESE STANDARD DETAILS.
15. DRAWINGS ARE NOT TO SCALE.
16. REFER TO LITTLETON/ENGLEWOOD WASTEWATER TREATMENT PLANT FATS, OILS, AND GREASE POLICY FOR GREASE INTERCEPTOR SIZING.

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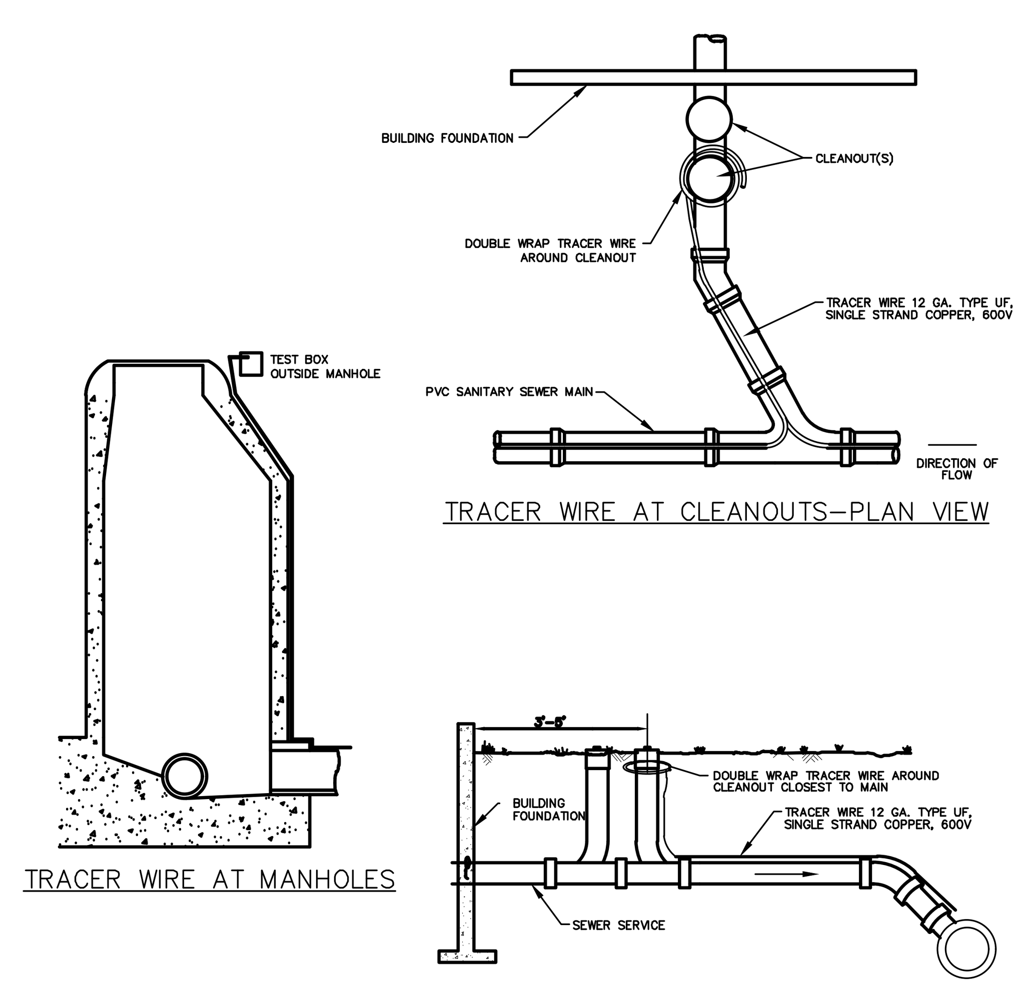


Kennedy/Jenks Consultants | COTTONWOOD WATER AND SANITATION DISTRICT | TRACER WIRE

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LAND OF SUSHI
CROWN POINT FILING NO. 1

AMD 20, LOT 4E
PARKER, COLORADO

| # | Date | Issue / Description | Init. |
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| Project No: | LOS000001 |
| Drawn By: | JRC |
| Checked By: | SMB |
| Date: | 05/02/2023 |

SANITARY DETAILS

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