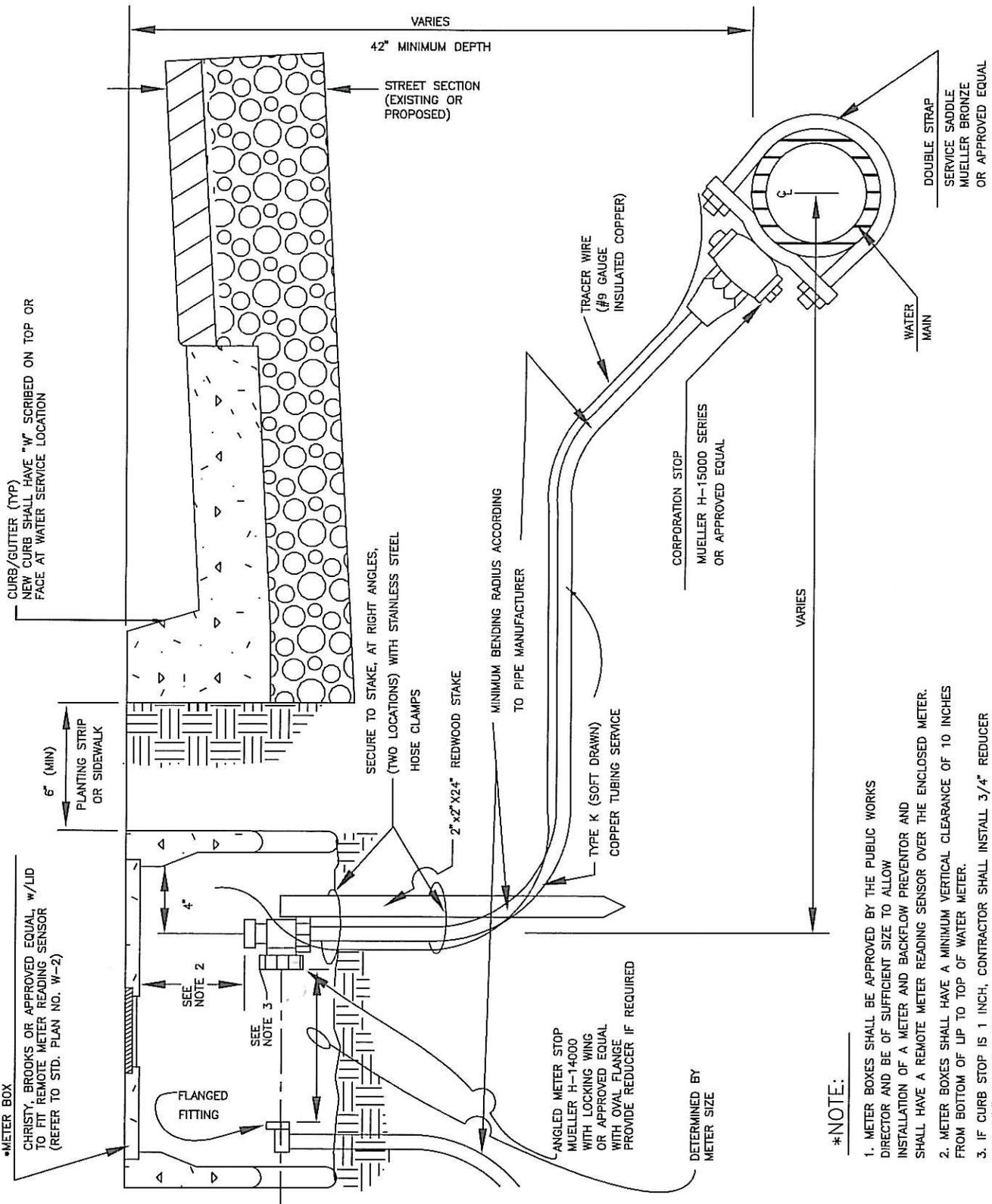


PART IV
WATER STANDARD PLANS

NO.	TITLE
W-1	1" to 2" Service Connection and Meter Box Installation
W-1A	Combination Domestic and Fire Service Detail
W-1B	Domestic Service Detail
W-2	2" and Larger Service Connection and Meter Box Installation
W-3	Backflow Protection
W-4	Valve Box Installation
W-5	Blocking Detail for 4" through 12" Fittings
W-6	Standard Thrust Blocking
W-7	Valve Anchor for Line Valve
W-8	Fire Hydrant Construction
W-9	Typical Valve and Plug Locations
W-10	Typical Water Main Crossing at Sewer or Storm Drain Mains
W-11	Detector Check Valve 4" through 10"
W-12	Typical Trench Section
W-13	Fire Hydrant Installation Order Form
W-14	Water Service Application
W-15	Driveway and Hydrant Location at Corners
W-16	Blow-off Installation Detail
W-17	Air Release Valve Detail
W-18	Water Main Jumper Connection for Disinfection and Testing of New Water Mains
W-19	Wet Tap Construction
W-20	Sprinkler Connection Detail
W-21	Water Sampling Station
W-22	Water Disinfecting Requirements
W-23	Standard Multiple Branch Service Installation (3/4" - 2")
W-24	Typical Separation Requirements



- *NOTE:**
1. METER BOXES SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR AND BE OF SUFFICIENT SIZE TO ALLOW INSTALLATION OF A METER AND BACKFLOW PREVENTOR AND SHALL HAVE A REMOTE METER READING SENSOR OVER THE ENCLOSED METER.
 2. METER BOXES SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 10 INCHES FROM BOTTOM OF LIP TO TOP OF WATER METER.
 3. IF CURB STOP IS 1 INCH, CONTRACTOR SHALL INSTALL 3/4\"/>

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: 1" TO 2" SERVICE CONNECTION & METER BOX INSTALLATION

STANDARD PLAN

DESIGNED BY:
WAG

DRAWN BY:
CR/AB

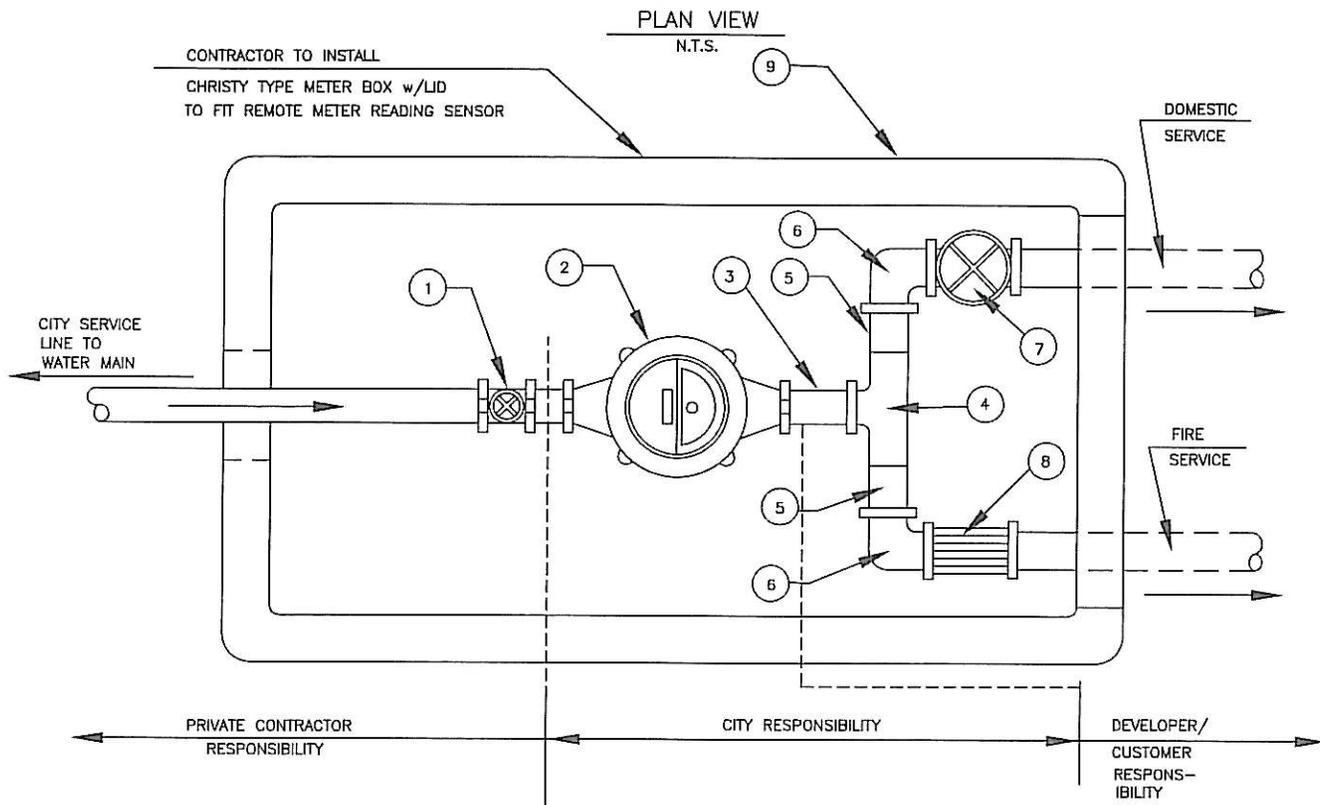
CHECKED BY:
WAG

APPROVED: *[Signature]*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

DATE: *10/18/07*

WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

W-1



- | | | |
|---|--|--|
| <p>① ANGLE CURB STOP—MUELLER H-14000 WITH LOCKING WING (FANGED OVAL)</p> <p>② WATER METER</p> <p>③ BRASS METER COUPLING, SHORT, MALE (OVAL FLANGED)</p> | <p>④ BRASS TEE</p> <p>⑤ BRASS NIPPLE</p> <p>⑥ BRASS STREET ELBOW</p> | <p>⑦ CURB STOP, BALL TYPE WITH LOCKING WING</p> <p>⑧ WATTS CHECK VALVE ASSEMBLY, (WATTS 007 DUAL CHECK)</p> <p>⑨ B-36 METER BOX WITH REMOTE METER READING SENSOR</p> |
|---|--|--|

NOTES:

1. METER SIZE VARIES FROM 3/4" TO 1-1/2" MAXIMUM (VERIFY SIZE WITH CITY). STANDARD FIRE SPRINKLER SYSTEM REQUIRED FOR FIRE SERVICES LARGER THAN 1-1/2".
2. SEPARATE PRIVATE SERVICE LINES ARE REQUIRED FOR DOMESTIC WATER AND FIRE PROTECTION NEEDS. THESE SERVICE LINES MUST BE INSTALLED BY THE CUSTOMER PER UNIFORM PLUMBING CODE REQUIREMENTS.
3. ALL PRIVATE INSTALLATION ACTIVITY SHALL COMPLY WITH THE CITY ORDINANCE No. 13.04 AS AMENDED REGARDING "WATER SERVICES AND CHARGES".
4. CUSTOMER SHALL INSTALL SUITABLE CONTROL VALVES ON EACH PRIVATE SERVICE LINE ON THE RISER TO EACH BUILDING OR A MAXIMUM OF 50' FROM THE METER. THE VALVES SHALL CONTROL THE ENTIRE WATER SUPPLY FROM THE SURFACE.
5. THE MAXIMUM PERMITTED NUMBER OF DWELLING UNITS CONNECTED TO A COMBINATION RESIDENTIAL FIRE SPRINKLER SHALL NOT EXCEED ONE (1) UNIT. PROJECTS WHICH EXCEED THIS LIMITATION MUST INCLUDE A SEPARATE, DEDICATED FIRE SERVICE LINE FOR RESIDENTIAL FIRE PROTECTION.
6. CONNECTIONS TO COPPER SERVICE LINES SHALL BE FLARED FITTINGS.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: COMBINATION DOMESTIC & FIRE SERVICE DETAIL

STANDARD PLAN

DESIGNED BY:
WAG

DRAWN BY:
CR/AB

CHECKED BY:
WAG

APPROVED: *[Signature]*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

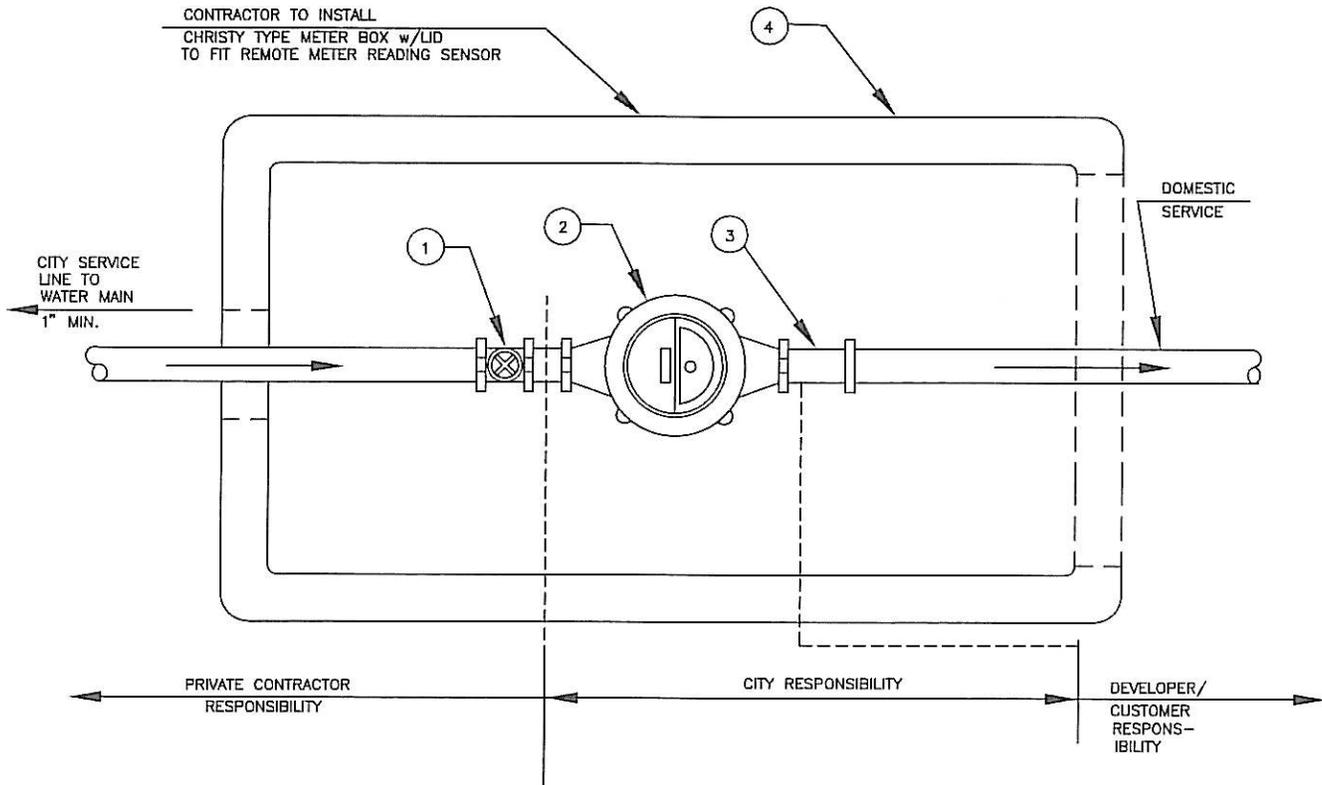
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP. 03-31-08

DATE: 10/18/07

[Signature]

W-1A

PLAN VIEW
N.T.S.



- ① ANGLE CURB STOP—MUELLER H-14000 WITH LOCKING WING (FLANGED OVAL)
- ② WATER METER
- ③ BRASS METER COUPLING, SHORT, MALE (OVAL FLANGED)
- ④ B-16 METER BOX WITH REMOTE METER READING SENSOR

NOTES:

1. METER SIZE VARIES FROM 5/8" TO 1-1/2" MAXIMUM (3/4" TYPICAL - VERIFY SIZE WITH CITY).
2. THESE SERVICE LINES MUST BE INSTALLED BY THE CUSTOMER PER UNIFORM PLUMBING CODE REQUIREMENTS.
3. ALL PRIVATE INSTALLATION ACTIVITY SHALL COMPLY WITH THE CITY ORDINANCE No. 13.04 AS AMENDED REGARDING "WATER SERVICES AND CHARGES".
4. CUSTOMER SHALL INSTALL SUITABLE CONTROL VALVES ON EACH PRIVATE SERVICE LINE ON THE RISER TO EACH BUILDING OR A MAXIMUM OF 50' FROM THE METER. THE VALVES SHALL CONTROL THE ENTIRE WATER SUPPLY FROM THE SURFACE.
5. CONNECTIONS TO COPPER SERVICE LINE SHALL BE FLARED FITTINGS.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: DOMESTIC SERVICE DETAIL

STANDARD PLAN

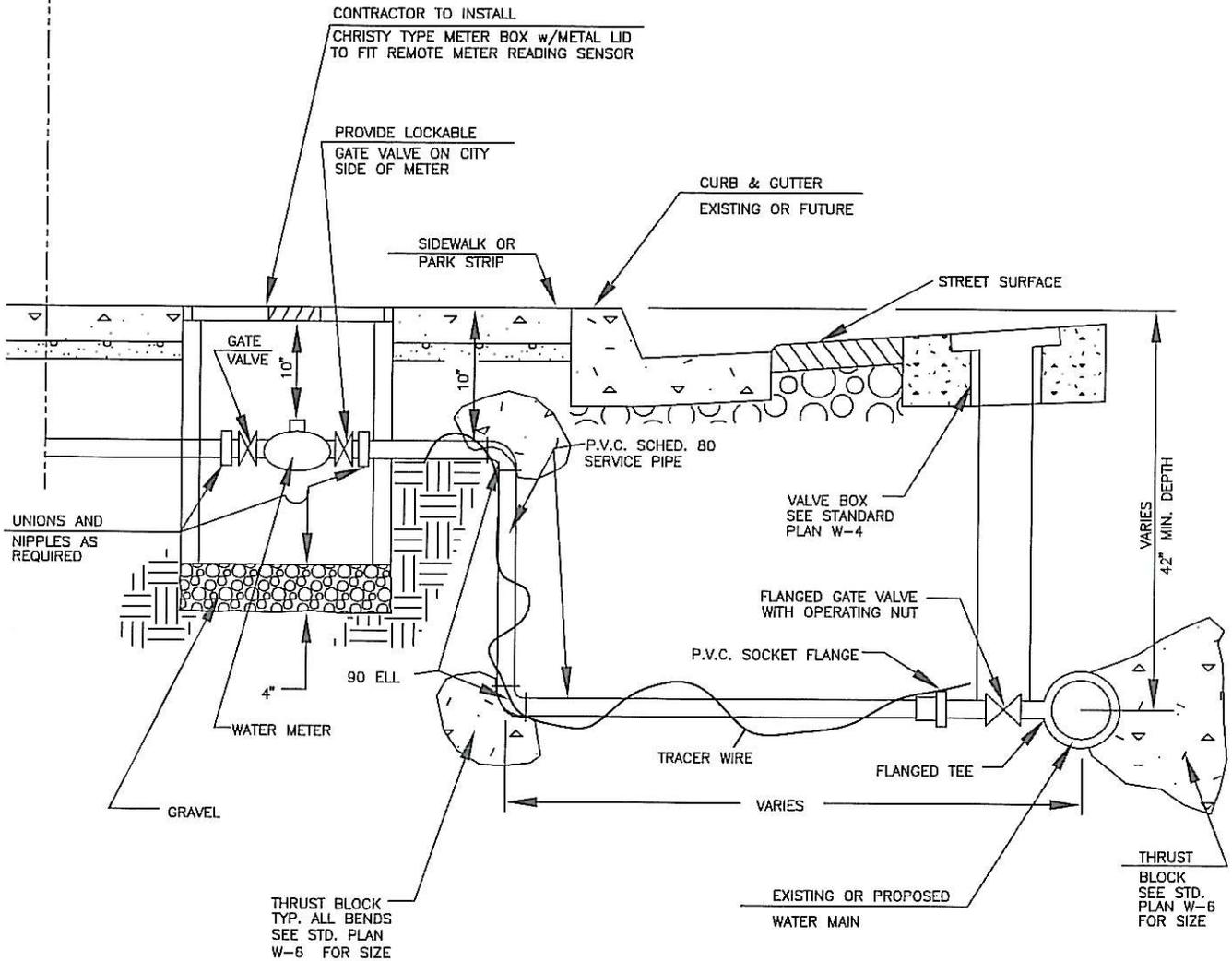
DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08



DATE: 10/18/07
10/18/07

W-1B



NOTE:

1. INSTALLATION TO INCLUDE P.V.C. SCHED. 80 PIPE, SOLVENT WELD PRESSURE RATED FITTINGS AND SOCKET FLANGES AS REQUIRED.
2. METER BOXES SHALL BE OF SUFFICIENT SIZE TO ALLOW INSTALLATION OF A METER AND SHUT OFF VALVE. LID SHALL BE METAL.
3. INSTALLATION TO BE INSTALLED BETWEEN PROPERTY LINE AND BACK OF CURB.
4. VALVE BOX INSTALLATION PER STANDARD PLAN NO. W-4.

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD.**

TITLE: 2" & LARGER SERVICE CONNECTION & METER BOX INSTALLATION

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

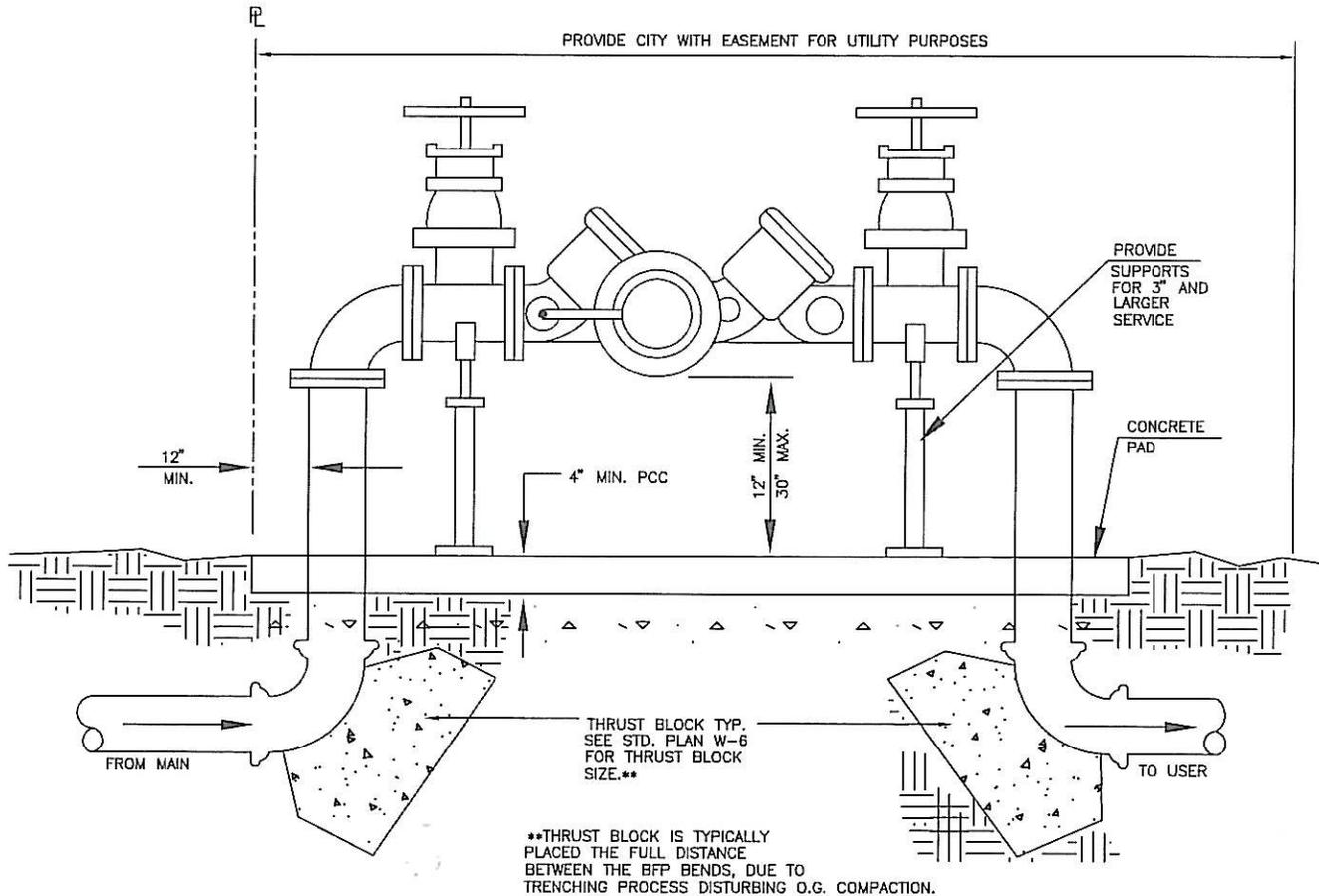
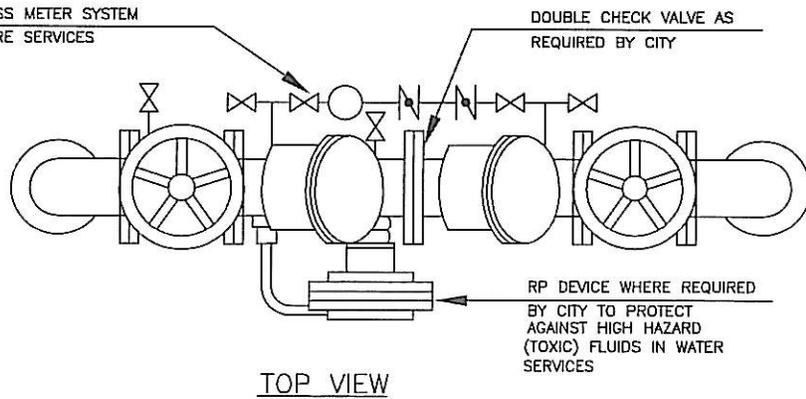
APPROVED: *[Signature]*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE: 10/10/07
10/10/07

W-2

NOTES:

1. CONTRACTOR SHALL INSTALL FREEZE PROTECTION JACKETS ON ALL ABOVE GROUND PIPING AS DIRECTED BY THE PUBLIC WORKS DIRECTOR.
2. BACKFLOW PREVENTION ASSEMBLY SHALL BE PROTECTED WITH A GREEN, HINGED, ENCLOSURE BY LEMUR COMPANY OR APPROVED EQUAL.
3. FOR LANDSCAPE BACKFLOW PREVENTION INSTALL FEBCO B25Y BACKFLOW PREVENTION DEVICE OR EQUAL.



BACKFLOW PREVENTION REQUIREMENTS	
LEVEL OF HAZARD	LEVEL OF PROTECTION
ALL HAZARD (TOXIC)	DOUBLE DETECTOR CHECK VALVE REDUCED PRESSURE DEVICE AND PRESSURE VACUUM BREAKER*

*ALL MUST BE ON STATE APPROVED LIST OF BACKFLOW PREVENTERS

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: BACKFLOW PROTECTION

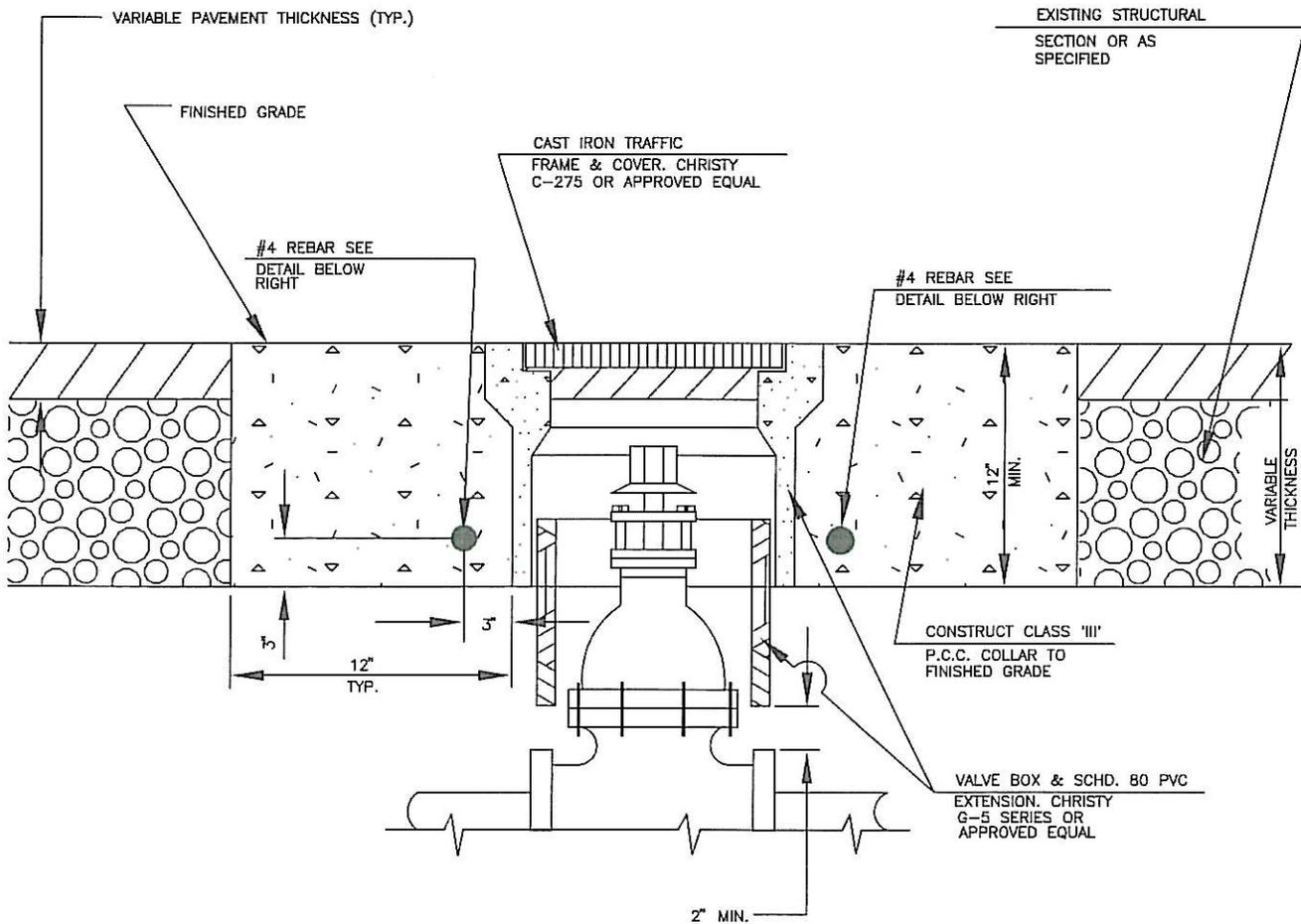
STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

APPROVED:
Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

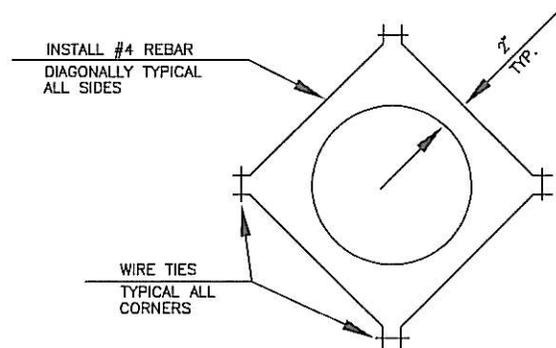
DATE:
10/18/07
10/18/07

W-3



NOTES:

1. P.C.C. SHALL BE CLASS 3. CONSTRUCT PER SECTION 51 OF THE STANDARD SPECIFICATIONS.
2. ALL CASTINGS SHALL BE GRAY CAST IRON CONFORMING TO ASTM A-48, CLASS 30 FREE FROM CRACKS, HOLES SWELLS & OTHER DEFECTS. ALL BEARING SURFACES SHALL BE MACHINED.
3. INSTALL STEM EXTENSION WHEN VALVE IS DEEPER THAN 4 FEET.



REINFORCEMENT DETAIL

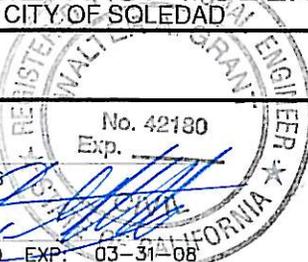
**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: VALVE BOX INSTALLATION

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

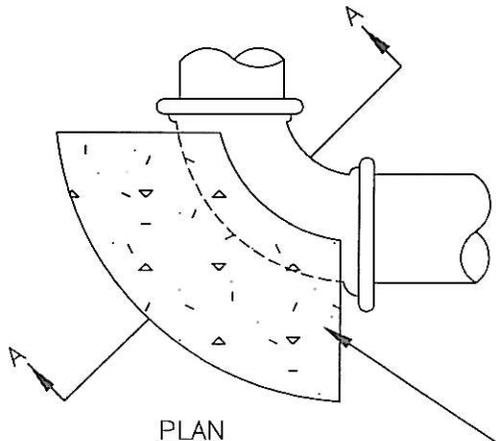
APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 - EXP. 03-31-08



DATE: *10/18/07*
WAG

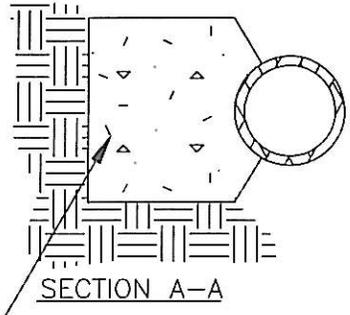
W-4

NOTE: ALL FITTINGS AND VALVES SHALL BE WRAPPED WITH A 8 MIL POLYETHYLENE WRAP AND SECURED WITH 2" WIDE 10 MIL PLASTIC TAPE (POLYWRAP) BEFORE POURING CONCRETE.

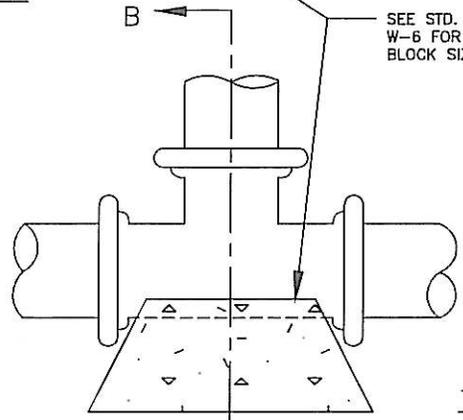


ELBOWS

PLAN

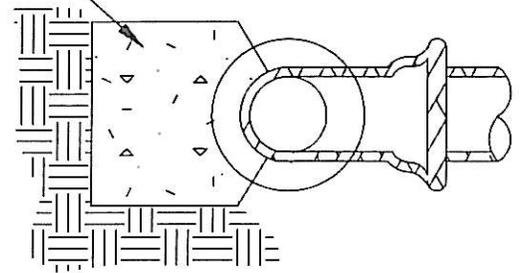


SECTION A-A

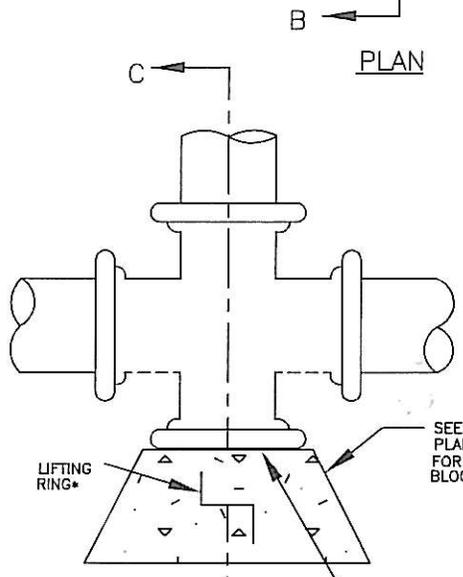


TEES

PLAN

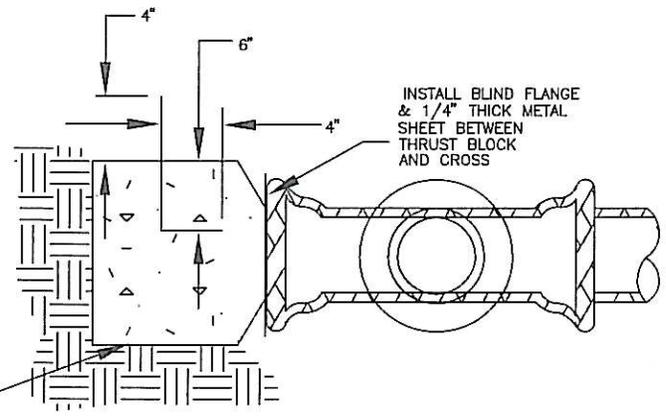


SECTION B-B



CROSS BLOCK ON BRANCH

PLAN



SECTION C-C

INSTALL BLIND FLANGE & 1/4" THICK METAL SHEET BETWEEN THRUST BLOCK AND CROSS

SEE STD. PLAN W-6 FOR THRUST BLOCK SIZE

LIFTING RING*

INSTALL BLIND FLANGE & 1/4" THICK METAL SHEET BETWEEN THRUST BLOCK AND CROSS

*ALL BRANCHES SHALL HAVE A LIFTING RING, USE #5 REBAR TO FABRICATE RING AT CENTER OF BLOCK

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: BLOCKING DETAIL FOR 4" THROUGH 12" FITTINGS

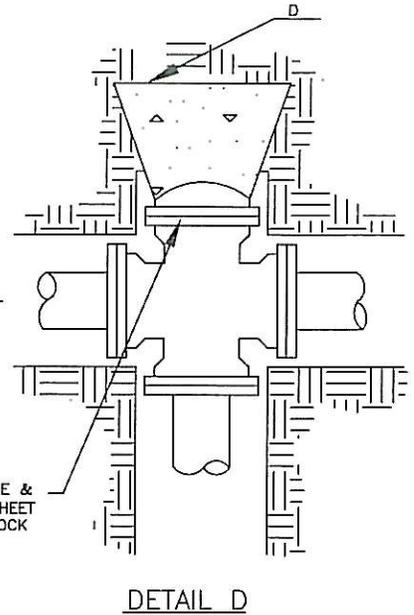
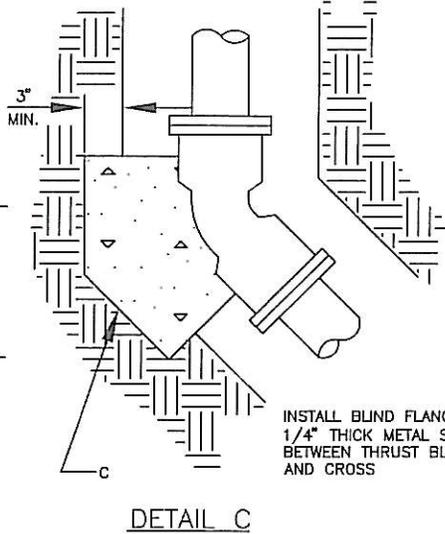
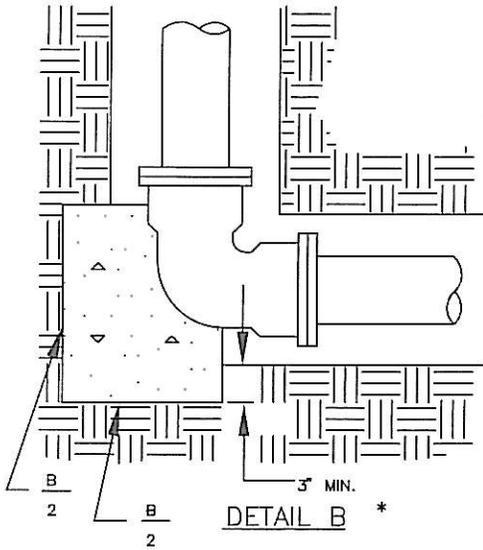
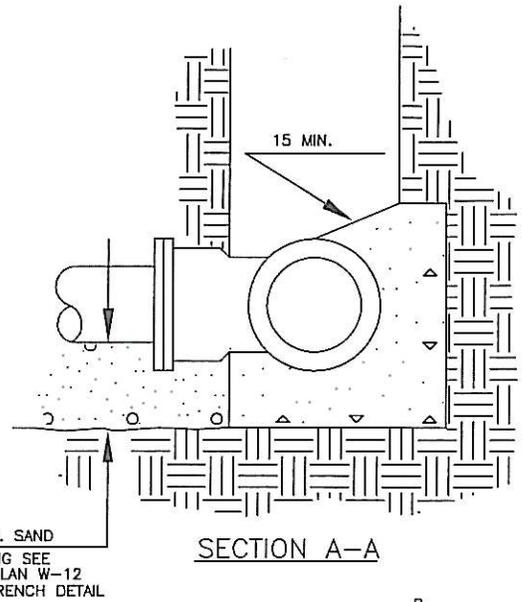
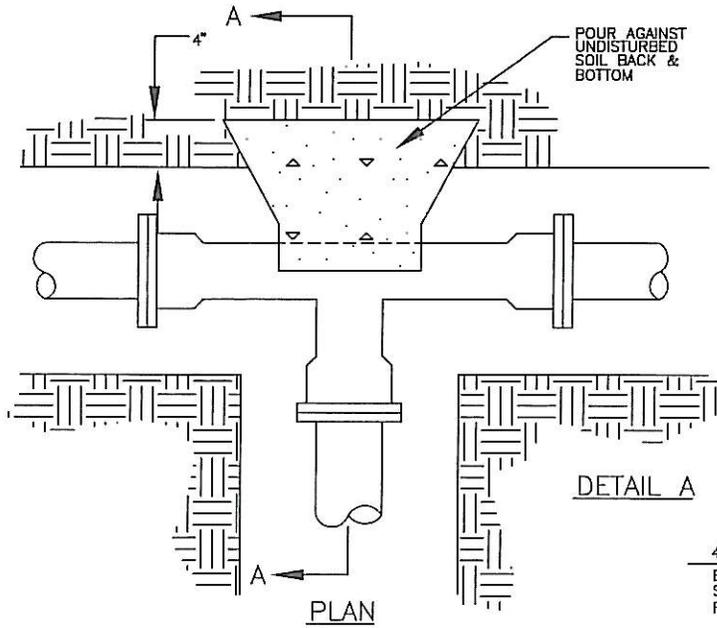
STANDARD PLAN

DESIGNED BY: WAG
DRAWN BY: CR/AB
CHECKED BY: WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE: 10/18/07
10/18/07

W-5



*DEAD ENDS SAME BEARING AREA

REQUIRED BEARING AREA-SQUARE FEET				
AREA	A	B	C	D
6" MAIN & SMALLER IF ALLOWED	5	6	4	5
8" MAIN	8	11	7	8
10" MAIN	11	15	10	12
12" MAIN	17	24	16	17
14" MAIN	22	31	23	22
16" MAIN	30	42	30	30
18" MAIN	39	54	35	39

NOTES:

1. CONCRETE SHALL BE CLASS 'III'.
2. CONCRETE SHALL BE KEPT CLEAR OF ALL FLANGES AND LUGS.
3. THRUST BLOCK SUPPORT IN DETAIL 'A' IS TYPICAL FOR ALL.
4. THRUST BLOCKING IS BASED ON 150 PSI PRESSURE AND 1,000 PSF SOIL BEARING.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: STANDARD THRUST BLOCKING

STANDARD PLAN

DESIGNED BY:
WAG

DRAWN BY:
CR/AB

CHECKED BY:
WAG

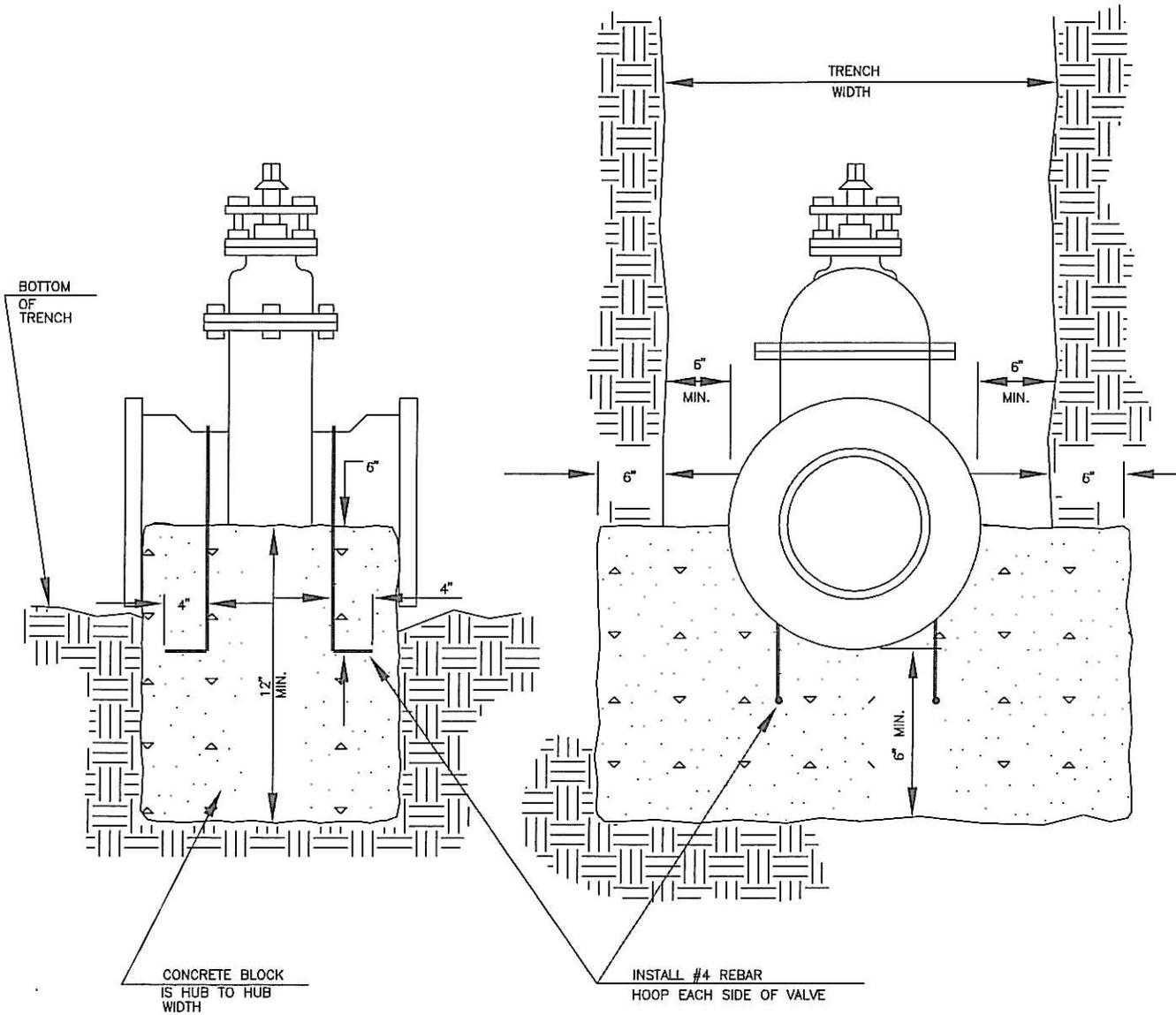
APPROVED:
Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

WALTER A. GRANT, CITY ENGINEER - R.E. 42186 - EXP. 03-31-08



DATE: 10/18/07

W-6



NOTE:

1. CONCRETE BLOCK SHALL BE CLASS 3 CONCRETE, WITH 1 1/2" MAX. SIZE AGGREGATE PER SEC. 90.
2. ALL BURIED VALVES SHALL BE WRAPPED WITH A 8 MIL POLYETHYLENE WRAP AND SECURED WITH 10 MIL PLASTIC TAPE (POLYWRAP) BEFORE POURING CONCRETE.
3. ALL IN-LINE VALVES SHALL HAVE TWO #4 REBAR HOOPS INSTALLED OVER THE TOP OF THE VALVE AND EMBEDDED INTO THE CONCRETE BLOCK.

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: VALVE ANCHOR FOR LINE VALVE

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
HG/AB
CHECKED BY:
WAG

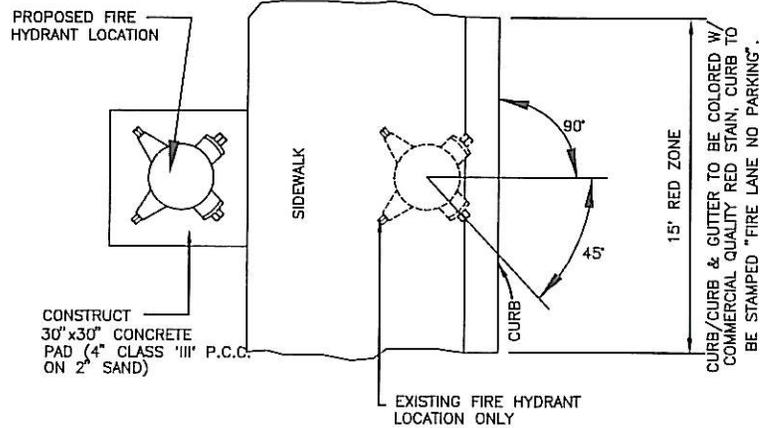
APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE:
10/12/07
10/12/07

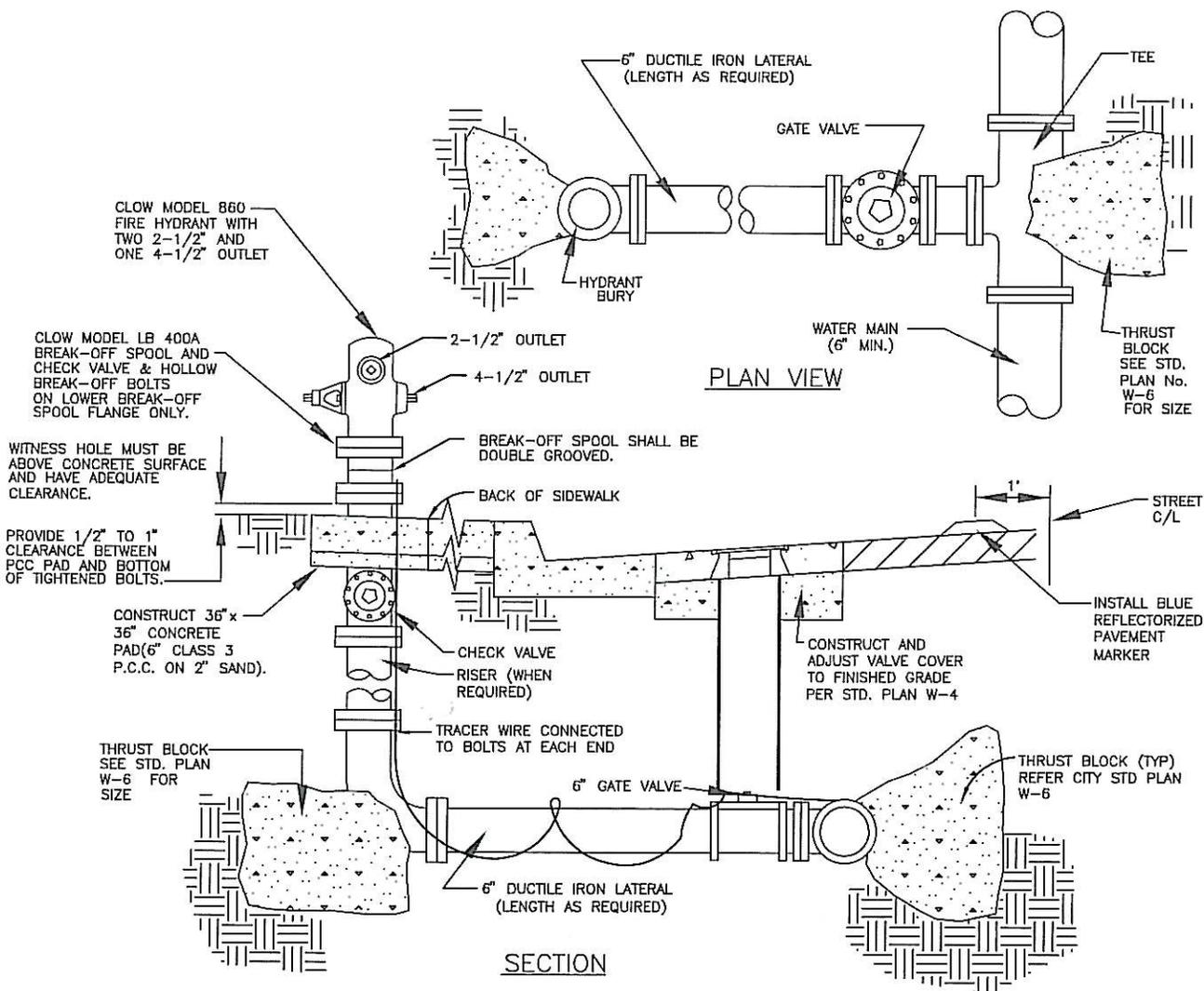
W-7

NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH REQUIREMENTS OF THE APPROVED ENCROACHMENT PERMIT AND STANDARD SPECIFICATIONS.
2. CAST IRON FITTINGS SHALL CONFORM TO THE AWWA SPECIFICATION C110-93.
3. NO OTHER SERVICE CONNECTIONS SHALL BE MADE TO THE FIRE HYDRANT LATERAL.
4. SEE STANDARD PLAN W-15 FOR FIRE HYDRANT LOCATION.
5. FINAL INSPECTION BY THE CITY ENGINEER WILL BE REQUIRED PRIOR TO BACKFILL.
6. HORIZONTAL LOCATION OF NEW HYDRANTS PER CITY STD PLAN W-15, OR AS DIRECTED BY CITY OR FIRE DEPT. WITH 30"x30" CONCRETE PAD.
7. REFER TO SECTION 11.15 FOR PAINT SPECIFICATIONS.



PLAN VIEW



SECTION

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: FIRE HYDRANT CONSTRUCTION

STANDARD PLAN

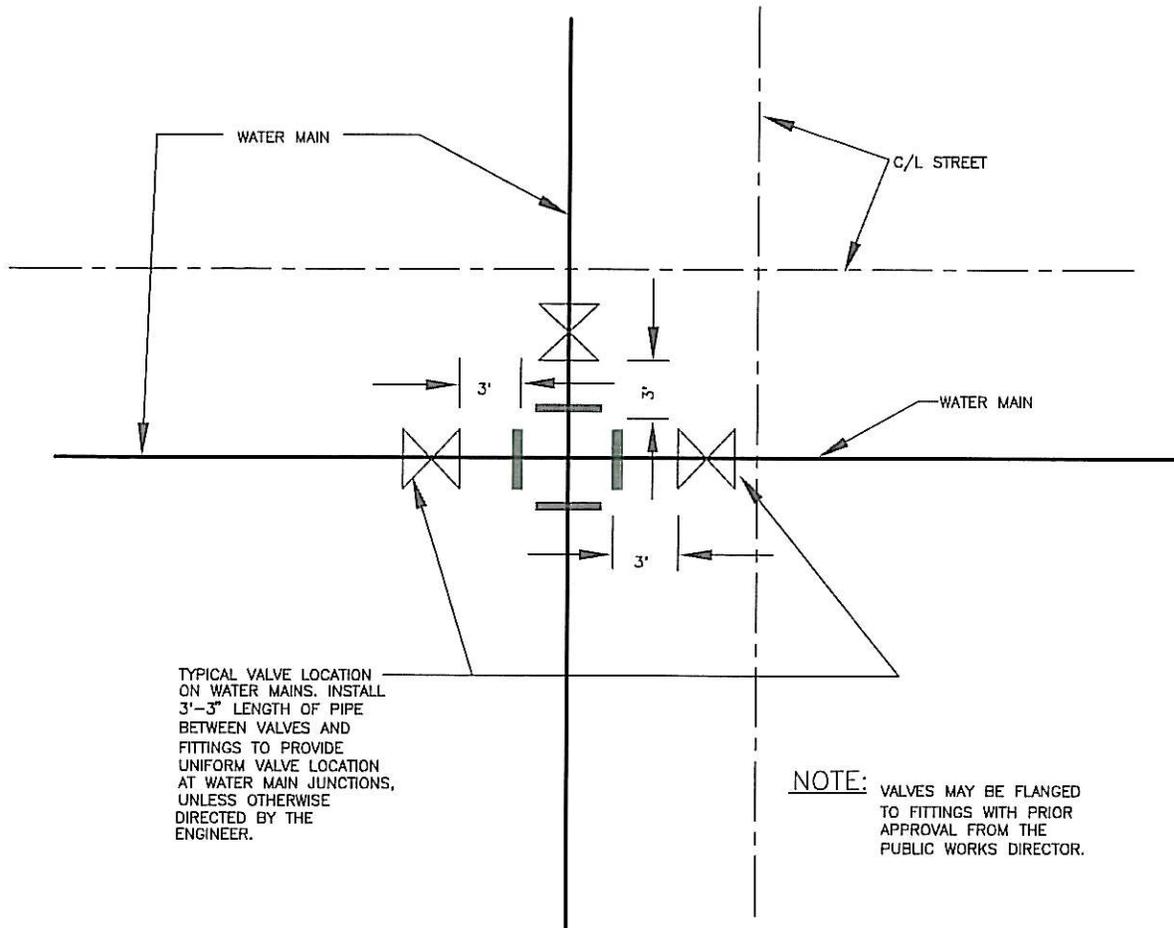
DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

APPROVED:
Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS



DATE:
10/18/07
10/26/07

W-8



DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: TYPICAL VALVE AND PLUG LOCATIONS

STANDARD PLAN

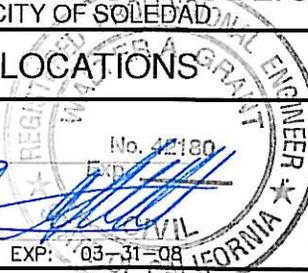
DESIGNED BY:
WAG

DRAWN BY:
HG/AB

CHECKED BY:
WAG

APPROVED: *Clifton W. Brice*
CLIFTON W. BRICE, DIRECTOR OF PUBLIC WORKS

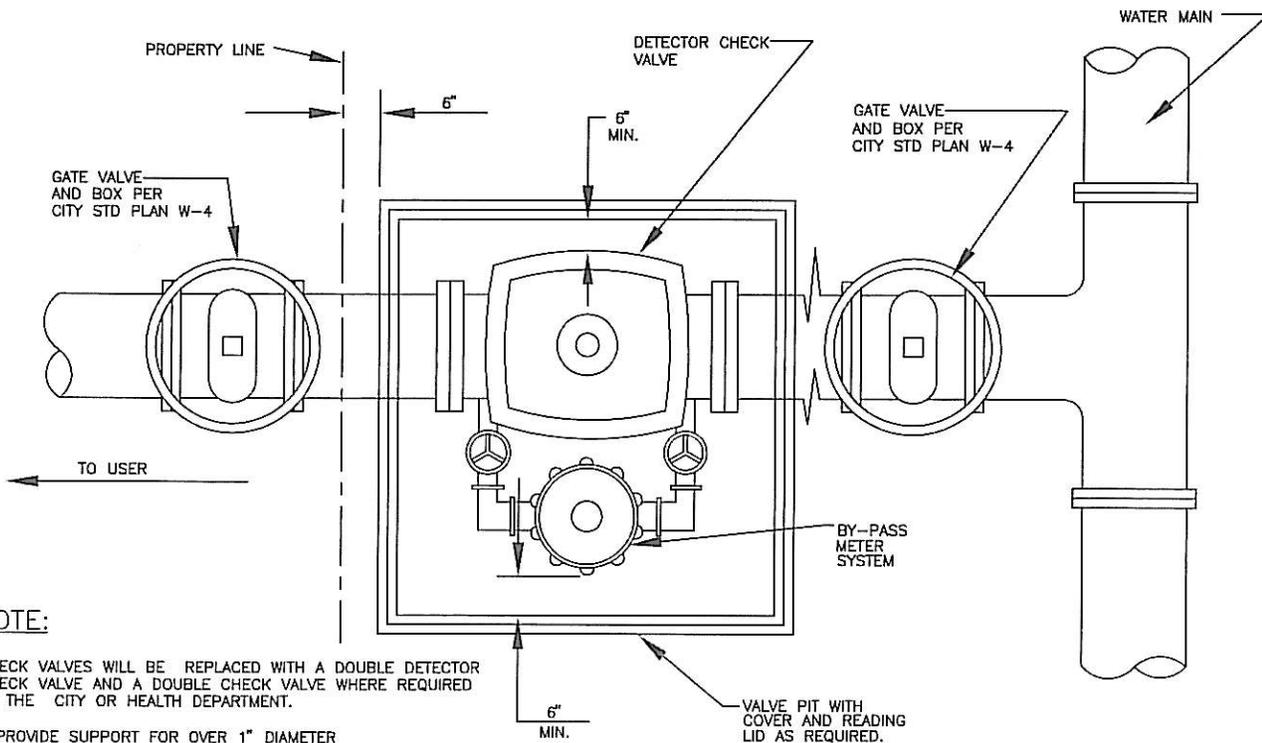
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER



DATE: 10/18/07

Walter A. Grant

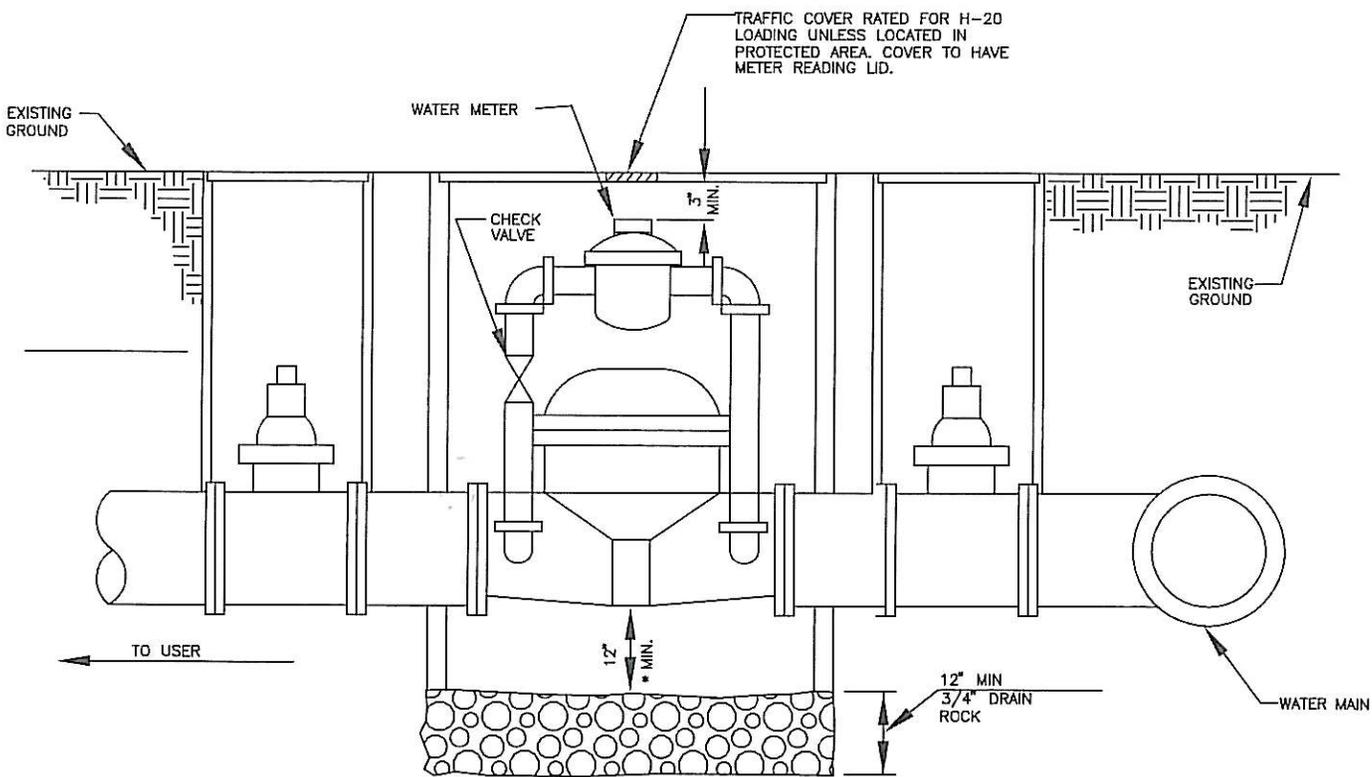
W-9



NOTE:

CHECK VALVES WILL BE REPLACED WITH A DOUBLE DETECTOR CHECK VALVE AND A DOUBLE CHECK VALVE WHERE REQUIRED BY THE CITY OR HEALTH DEPARTMENT.

- PROVIDE SUPPORT FOR OVER 1" DIAMETER



**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: DETECTOR CHECK VALVE 4" THROUGH 10"

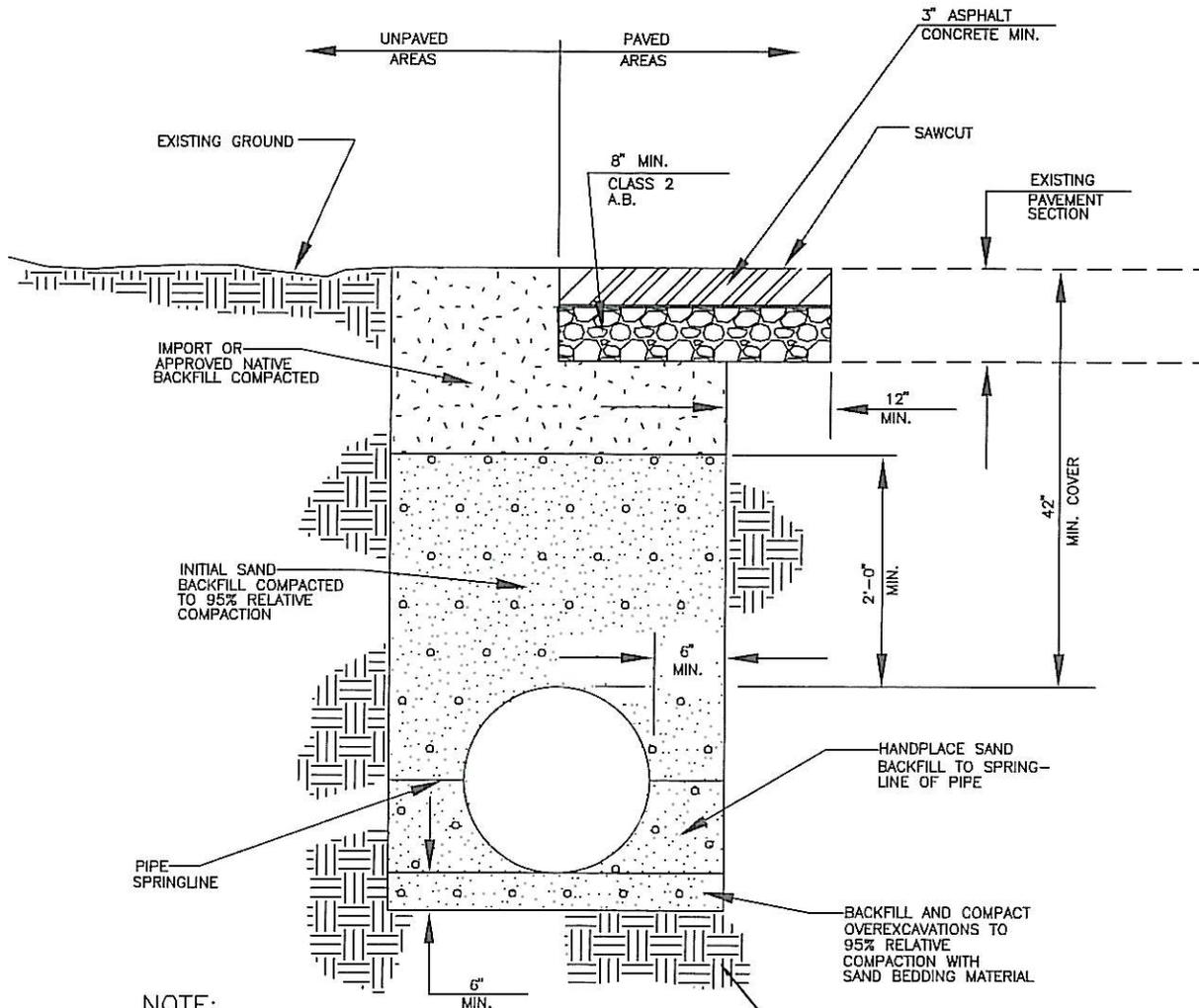
STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

APPROVED:
Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
No. 42180
Exp. _____
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE:
10/18/07
10/18/07

W-11



NOTE:

1. CONFORM TO THE LATEST CAL/OSHA SAFETY STANDARDS, RULES AND REGULATIONS.
2. ALL BACKFILL TO BE PLACED IN MAXIMUM 8" LIFTS AND COMPACTED AS SPECIFIED.
3. ALL STREET CUTS SHALL BE NEATLY SAWCUT ON TRUE LINE TO 1-1/2" MINIMUM DEPTH.
4. ON IMPROVED STREETS THE THICKNESS OF THE A.C. & A.B. SHALL BE EQUIVALENT TO THE EXISTING WITH A MINIMUM SECTION OF 3" A.C. ON 8" CLASS 2 A.B.
5. SAND BEDDING & BACKFILL SHALL HAVE AN S.E. = 30 MIN. AND LAB TEST SHALL BE SUPPLIED TO THE CITY FOR VERIFICATION.

UNDISTURBED NATIVE SOIL (COMPACT IF LOOSE)

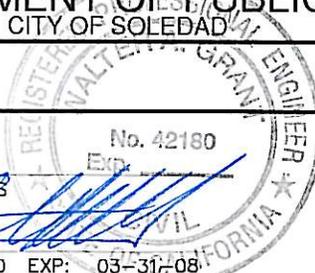
DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: TYPICAL TRENCH SECTION

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08



DATE: 10/18/07
WAG

W-12

CITY OF SOLEDAD WATER DEPARTMENT
FIRE HYDRANT INSTALLATION ORDER

DATE: _____ 20 _____ FIRE HYDRANT NUMBER _____

INSTALL A _____ HYDRANT AT _____ ST. & _____ ST.

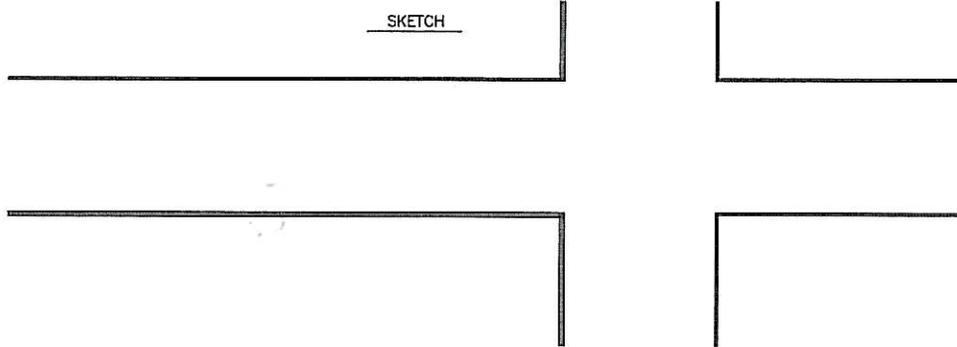
HYDRANT TO BE CONNECTED WITH _____ INCH PIPE TO A _____ INCH MAIN ON _____ SIDE OF _____ STREET.

FIELD REPORT

HYDRANT	SIZE	MFG.	TYPE	
	MAKE	SIZE	OPEN	NO. TURNS
GATE VALVE				
	RISERS	CHECK VALVE		
BREAK OFF				
		MATERIAL	SIZE	DEPTH
MAIN CONNECTED TO				
		MATERIAL	SIZE	LENGTH
CONNECTING LINE				
		MATERIAL	SIZE CUT	SIDEWALK
CUT IN PAVEMENT				

GATE VALVE LOCATED _____ FEET FROM FIRE HYDRANT

SKETCH



COMPLETED _____ 20 _____

BY: _____

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: FIRE HYDRANT INSTALLATION ORDER FORM

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
HG/AB
CHECKED BY:
WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08



DATE: *10/18/07*
WAG

W-13

CITY OF SOLEDAD PUBLIC WORKS DEPARTMENT APPLICATION FOR WATER SERVICE

SERVICE No. _____ DATE: _____ 20 _____

THE UNDERSIGNED HEREBY REQUESTS THAT A _____ INCH CONNECTION BE MADE
WITH THE WATER MAINS OF THE CITY OF SOLEDAD TO SUPPLY WATER TO: _____

ESTIMATED COST/
DEPOSIT: \$ _____ SIGNED: _____

BILLS AGAINST THIS SERVICE TO BE SENT TO:
NAME: _____ IS APPLICANT OWNER, AGENT OR TENANT? _____
STREET _____ HAS PROPERTY EVER BEEN SUPPLIED? _____
P.O. BOX _____ TYPE OF SERVICE REQUIRED: _____
CITY: _____

DATE APPLICANT WILL BE READY FOR SERVICE: _____

SERVICE LOCATION

METER RECORD

_____ FEET _____ OF _____ METER No. _____ SIZE _____
ON _____ SIDE OF _____ READING _____ CU. FT.

MATERIALS USED

ITEM	ITEM

SKETCH

NOTE:
ONE WATER METER SHALL
BE REQUIRED FOR EACH
RESIDENTIAL UNIT, APARTMENT,
CONDO, TOWNHOME, GRANNY
UNIT, AND COMMERCIAL
RENTAL SPACE.

DATE COMPLETED _____ FOREMAN _____

DEPARTMENT OF PUBLIC WORKS CITY OF SOLEDAD

TITLE: WATER SERVICE APPLICATION

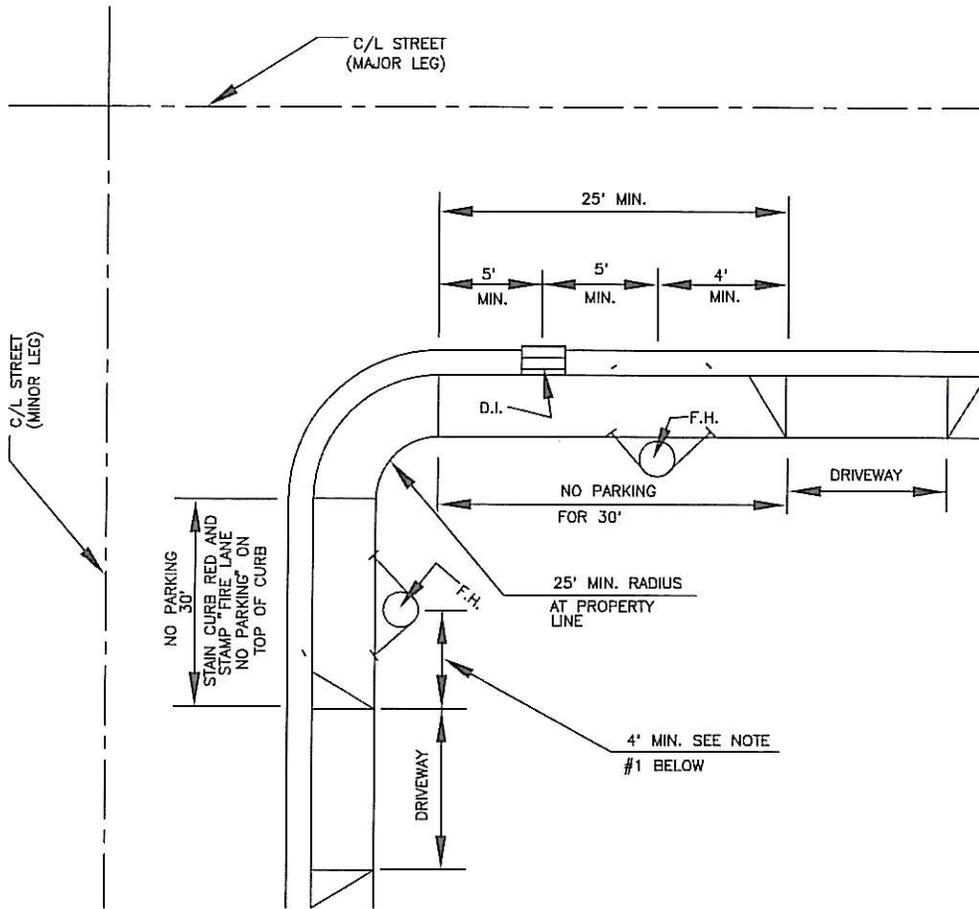
STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
HG/AB
CHECKED BY:
WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
Walter A. Grant
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE: *10/18/07*
10/19/07

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25' PROPERTY LINE RADIUS OR MORE

NOTE:

1. DRIVEWAY APPROACHES SHALL NOT BE CONSTRUCTED WITHIN 4' OF STREET LIGHTS OR FIRE HYDRANTS, EXCEPT ON CUL-DE-SACS.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: DRIVEWAY & HYDRANT LOCATION AT CORNERS

STANDARD PLAN

DESIGNED BY:
WAG

DRAWN BY:
HG/AB

CHECKED BY:
WAG

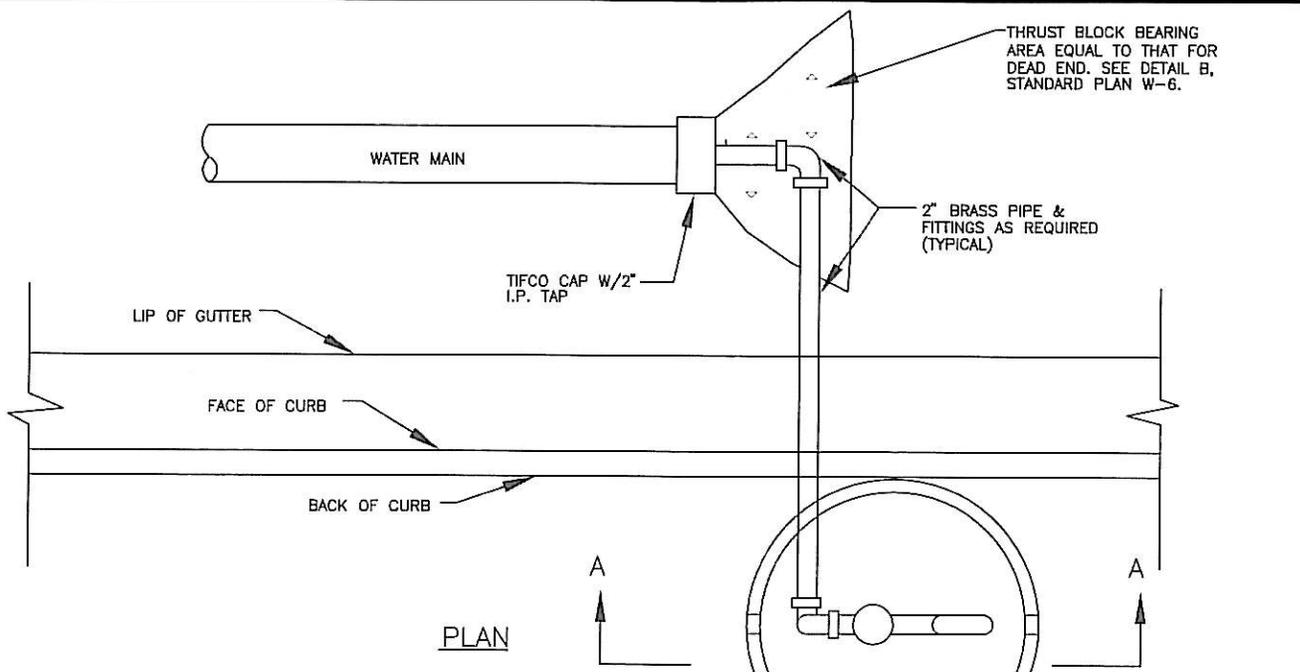
APPROVED:
Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

No. 42180
Exp. _____

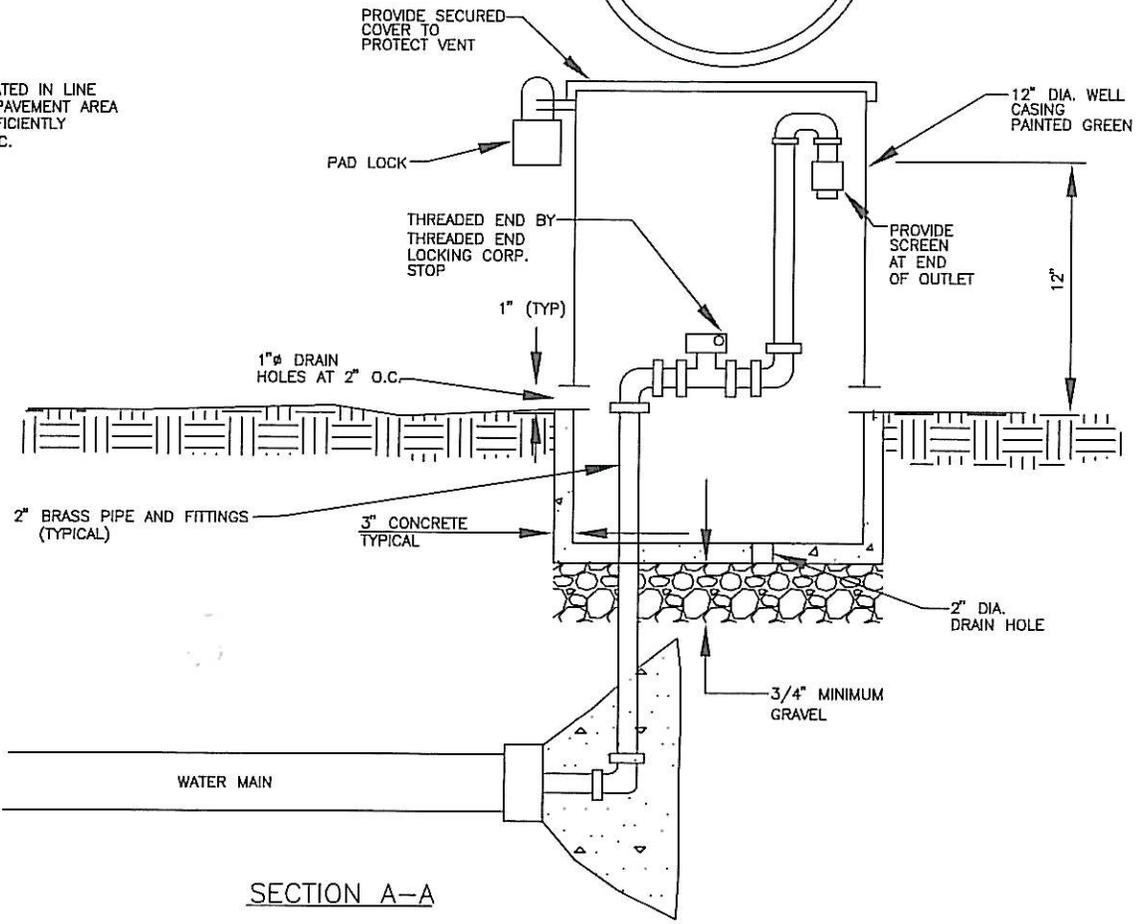
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 - EXP. 03-31-08

DATE:
10/18/07
10/18/07

W-15



NOTE:
 BLOW-OFF MAY BE LOCATED IN LINE WITH MAIN OUTSIDE OF PAVEMENT AREA (FUTURE PHASE) IF SUFFICIENTLY PROTECTED FROM TRAFFIC.



DEPARTMENT OF PUBLIC WORKS
 CITY OF SOLEDAD

TITLE: BLOW-OFF INSTALLATION DETAIL

STANDARD PLAN

DESIGNED BY:
 WAG

DRAWN BY:
 HG/AB

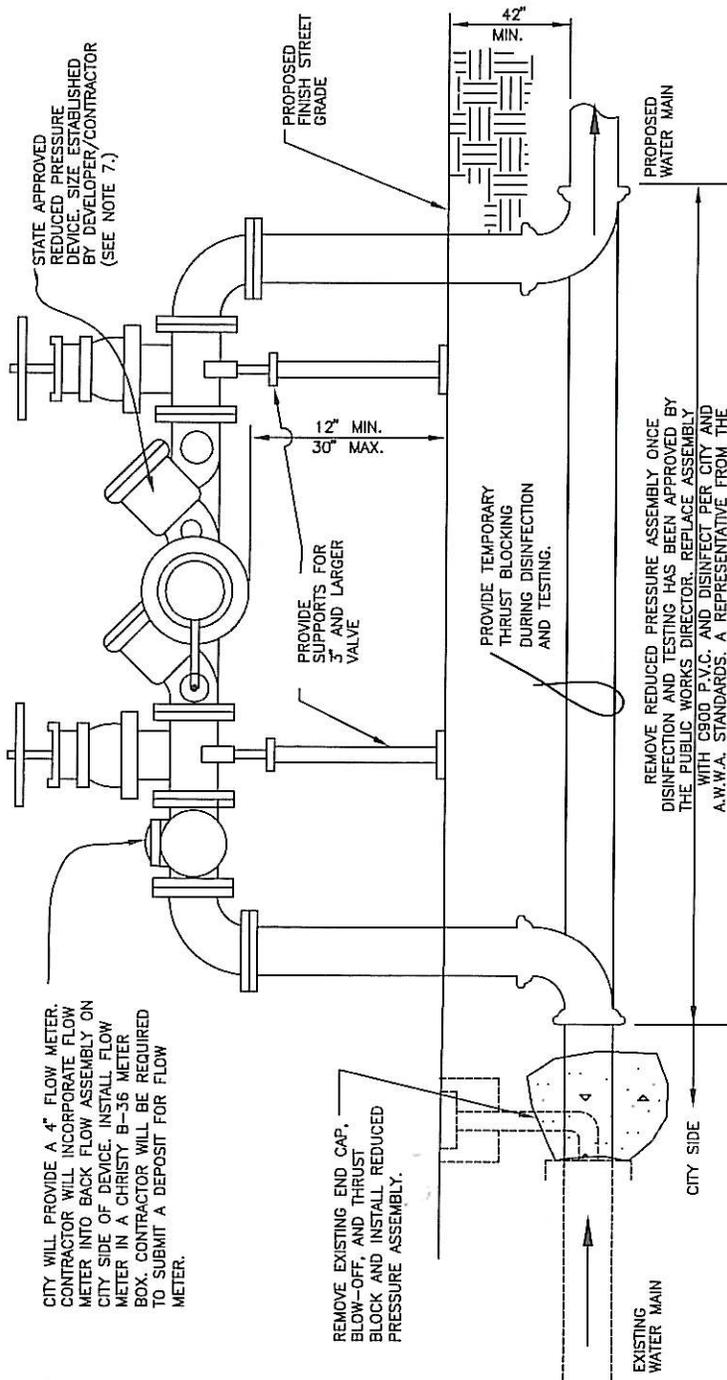
CHECKED BY:
 WAG

APPROVED:
Clifton W. Price
 CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

DATE:
 10/18/07
 10/20/07

WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

W-16



CITY WILL PROVIDE A 4" FLOW METER. CONTRACTOR WILL INCORPORATE FLOW METER INTO BACK FLOW ASSEMBLY ON CITY SIDE OF DEVICE. INSTALL FLOW METER IN A CHRISTY B-36 METER BOX. CONTRACTOR WILL BE REQUIRED TO SUBMIT A DEPOSIT FOR FLOW METER.

REMOVE EXISTING END CAP, BLOW-OFF, AND THRUST BLOCK AND INSTALL REDUCED PRESSURE ASSEMBLY.

PROVIDE SUPPORTS FOR 3" AND LARGER VALVE

PROVIDE TEMPORARY THRUST BLOCKING DURING DISINFECTION AND TESTING.

REMOVE REDUCED PRESSURE ASSEMBLY ONCE DISINFECTION AND TESTING HAS BEEN APPROVED BY THE PUBLIC WORKS DIRECTOR. REPLACE ASSEMBLY WITH C900 P.V.C. AND DISINFECT PER CITY AND A.W.W.A. STANDARDS. A REPRESENTATIVE FROM THE PUBLIC WORKS DEPARTMENT SHALL OBSERVE REPLACEMENT.

NOTES:

1. ALL WORK TO BE DONE IN STRICT CONFORMANCE WITH CITY, STATE, AND A.W.W.A. STANDARDS.
2. A STATE APPROVED LIST OF REDUCED PRESSURE DEVICES CAN BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT BY CALLING (831)223-5173
3. NO WORK SHALL BE DONE TO EXISTING WATER MAINS UNLESS A REPRESENTATIVE FROM THE PUBLIC WORKS DEPARTMENT IS PRESENT AT ALL TIMES TO OBSERVE THE WORK.
4. CONTRACTOR WILL NOT OPERATE ANY EXISTING WATER VALVES. EXISTING WATER VALVES WILL BE OPERATED BY CITY FORCES ONLY.
5. CONTRACTOR SHALL SUBMIT A DISINFECTION AND TESTING PLAN TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL PRIOR TO CONSTRUCTING THE PROPOSED WATER SYSTEM. DISINFECTION PLAN SHALL CONTAIN METHOD OF CHLORINATION, PROPOSED METHOD OF CHLORINATION, PROPOSED STATE APPROVED TESTING LAB, PROPOSED SAMPLE SITES (25% OF SERVICE LOCATIONS REQUIRED) AND PROPOSED PHASING PLAN IF THE ENTIRE WATER SYSTEM IS NOT DISINFECTED AT THE SAME TIME.
6. CONTRACTOR WILL BE CHARGED FOR WATER USED DURING DISINFECTION, TESTING, AND FLUSHING. CALL CITY PUBLIC WORKS DEPARTMENT FOR CURRENT WATER CHARGE RATES.
7. IT IS RECOMMENDED THAT A 4" MIN. JUMPER BE USED FOR CHARGING & DISINFECTING NEW SUBDIVISION WATER SYSTEMS & LONG WATER MAIN EXTENSIONS.

DEPARTMENT OF PUBLIC WORKS

CITY OF SOLEDAD

TITLE: WATER MAIN JUMPER CONNECTION FOR DISINFECTION AND TESTING OF NEW WATER MAINS

DESIGNED BY: WAG
 DRAWN BY: HG/AB
 CHECKED BY: WAG

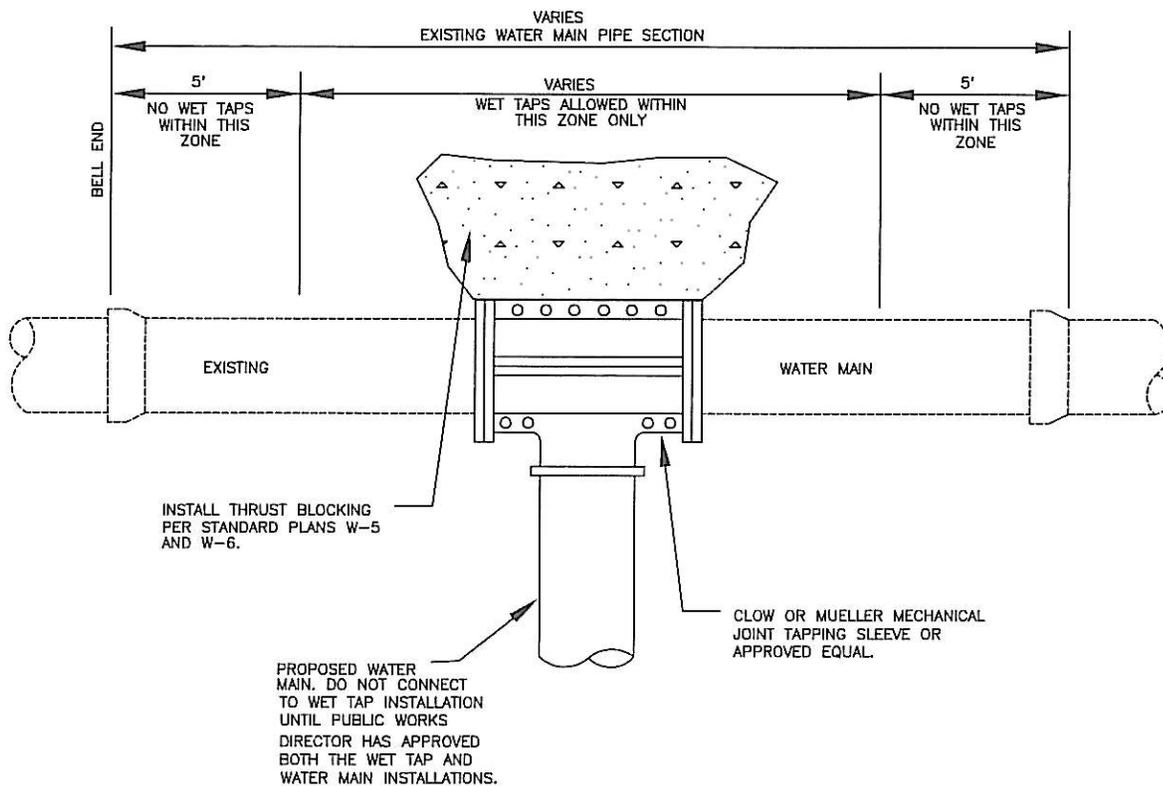
APPROVED: *Clifton W. Price*
 CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS
 WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP. 03-31-08

No. 42180
 Exp.

DATE: 10/18/07
W. Grant

STANDARD PLAN

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NOTES:

1. NO WORK SHALL BE DONE TO EXISTING WATER MAINS UNLESS A REPRESENTATIVE FROM THE PUBLIC WORKS DEPARTMENT IS PRESENT AT ALL TIMES TO OBSERVE THE WORK.
2. CONTRACTOR WILL NOT OPERATE ANY EXISTING WATER VALVES. EXISTING WATER VALVES WILL BE OPERATED BY CITY FORCES ONLY.
3. CONTRACTOR SHALL SUBMIT A DISINFECTION PLAN TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL PRIOR TO CONSTRUCTING THE PROPOSED WET TAP. DISINFECTING OF WET TAP INSTALLATION SHALL BE DONE IN STRICT CONFORMANCE WITH LATEST A.W.W.A. STANDARDS.
4. DISINFECTION AND TESTING OF PROPOSED WATER MAIN SHALL CONFORM TO STANDARD PLAN W-18.
5. WET TAP VALVE SHALL BE WRAPPED WITH A 8 MILL POLYETHYLENE WRAP AND SECURED WITH 10 MIL PLASTIC TAPE (POLYWRAP) BEFORE PLACING CONCRETE.

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: WET TAP CONSTRUCTION

STANDARD PLAN

DESIGNED BY:
WAG

APPROVED:

Clifton W. Price

DATE:

10/18/07

DRAWN BY:
HG/AB

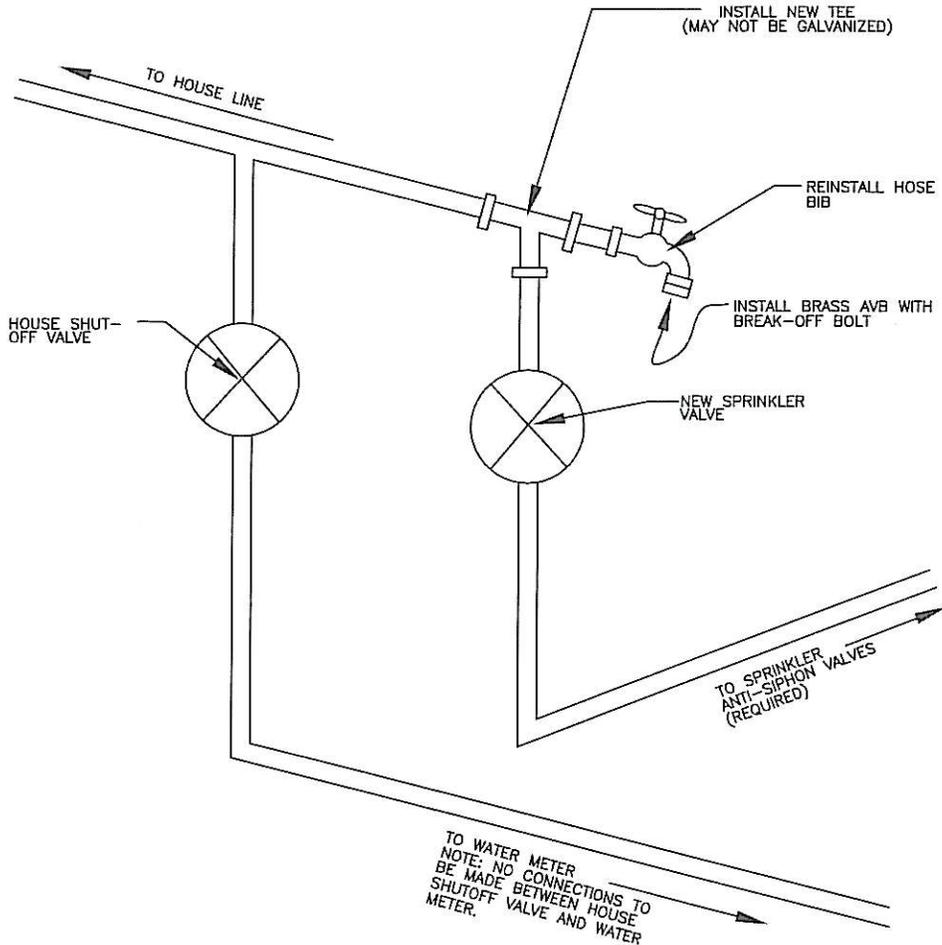
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

CHECKED BY:
WAG

WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

10/18/07

W-19



NOTES:

1. BE CAREFUL NOT TO MIX FERROUS AND NONFERROUS METALS, AS THIS WILL CAUSE ELECTROLYSIS.

**DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD**

TITLE: SPRINKLER CONNECTION DETAIL

STANDARD PLAN

DESIGNED BY:
WAG

APPROVED:

Clifton W. Price
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

No. 42180

DATE:

10/18/07

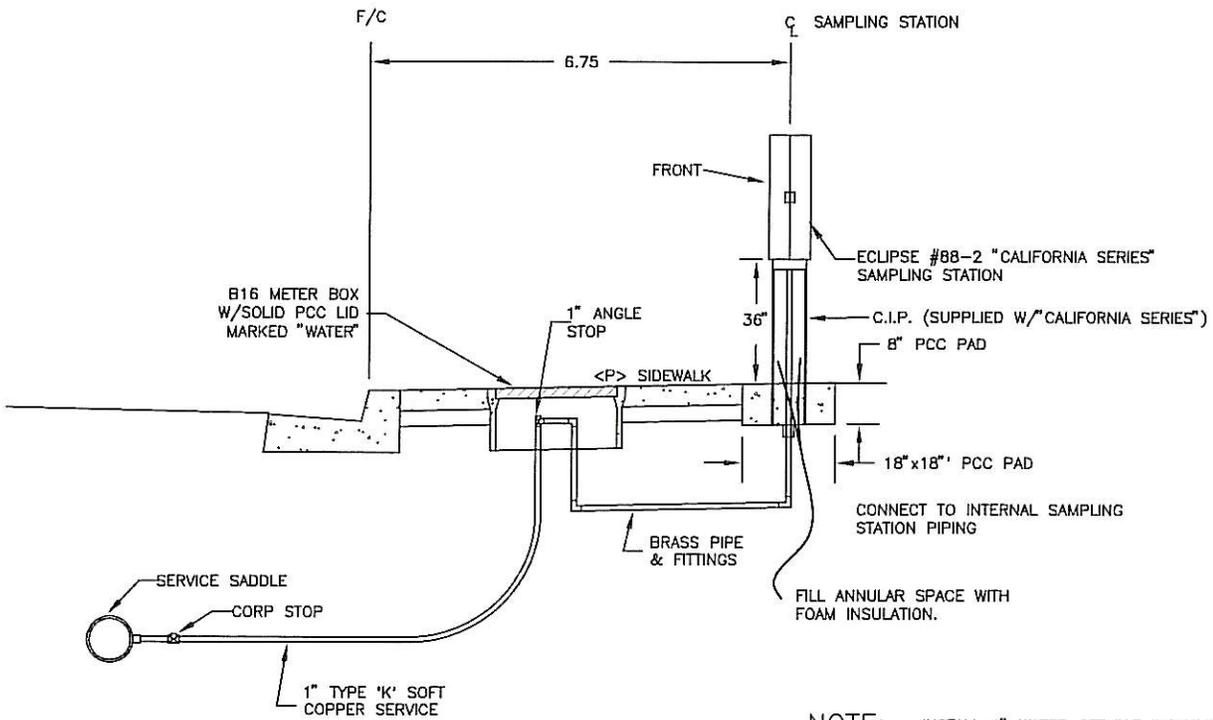
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WAG

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10/18/07

W-20



NOTE: INSTALL 1" WATER SERVICE INCLUDING FITTINGS & PIPE FROM MAIN TO ANGLE STOP PER SOLEDAD STANDARDS FOR WATER SYSTEMS INSTALLATION.

WATER SAMPLING STATION

N.T.S.

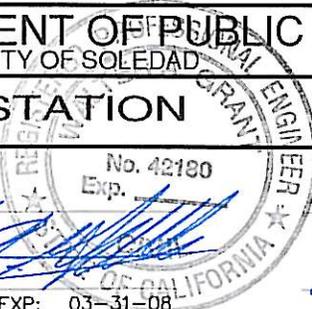
DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: WATER SAMPLING STATION

STANDARD PLAN

DESIGNED BY:
WAG

APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS



DATE: 10/18/07
WAG

DRAWN BY:
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WAG

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WATER DISINFECTION METHOD

- A. AFTER BEING TESTED AND BEFORE BEING PLACED INTO SERVICE, THE ENTIRE POTABLE WATER SYSTEM SHALL BE DISINFECTED WITH CHLORINE. THE SYSTEM SHALL BE FILLED WITH A CHLORINE SOLUTION OF 50 PARTS PER MILLION CHLORINE AND LEFT TO STAND A MINIMUM OF 24 HOURS.
- B. AFTER 24 HOURS, THE WATER IN THE SYSTEM SHALL BE TESTED. IF THE FREE CHLORINE RESIDUAL IS UNDER 25 PARTS PER MILLION, THE SYSTEM SHALL BE DRAINED AND DISINFECTED AGAIN AS DESCRIBED ABOVE. THIS PROCESS SHALL CONTINUE UNTIL A 25 PARTS PER MILLION RESIDUAL FREE CHLORINE COUNT IS OBTAINED AFTER A 24 HOUR PERIOD.

FINAL FLUSHING

- A. FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE NEWLY LAID WATERLINE. FLUSHING SHALL CONTINUE UNTIL THE FREE AVAILABLE CHLORINE LEVEL IS ONE MILLIGRAM PER LITER OR LESS. BACTERIOLOGICAL SAMPLES SHALL BE TAKEN FROM THE HOSE BIB FOLLOWING DISINFECTION TO TEST THE EFFECTIVENESS OF THE PROCESS. SAMPLES SHALL BE PROCESSED BY A STATE CERTIFIED LAB AND LAB RESULTS PRESENTED TO THE CONTRACTING OFFICER'S REPRESENTATIVE WITHIN 48 HOURS.
- B. CONTRACTOR WILL BE REQUIRED TO PREPARE A DISINFECTION PLAN FOR ALL PROJECTS INVOLVING WATER MAIN INSTALLATION. THIS WILL BE SUBMITTED FOR PROIR APPROVAL
- C. AT LEAST 25% OF THE WATER SERVICES MUST BE TESTED FOR PRESENCE OF COLIFORM INCLUDING AT ALL BLOW-OFFS AND ENDS OF MAINS FOR SUBDIVISIONS.
- D. CONTRACTOR IS REQUIRED TO PROVIDE A MAP IDENTIFYING THE TEST LOCATIONS BY ADDRESS OR OTHER MEANS SO TESTED SAMPLES CAN BE CORRELATED WITH THE LOCATION WHERE THE SAMPLE WAS TAKEN.
- E. AN INDEPENDENT TESTING LAB, PRE-APPROVED BY THE CITY, WILL BE RESPONSIBLE FOR TAKING THE SAMPLES TO INSURE THE CHAIN OF CUSTODY IS MAINTAINED.
- F. REFER TO THE AMERICAN WATER WORKS ASSOCIATION CURRENT REVISION TO STANDARD SPECIFICATION ANSI/AWWA C651-99.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: WATER DISINFECTING REQUIREMENTS

STANDARD PLAN

DESIGNED BY:
WAG
DRAWN BY:
CR/AB
CHECKED BY:
WAG

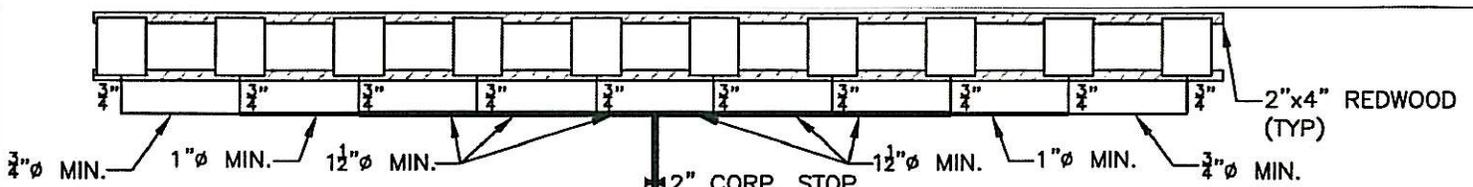
APPROVED: *Clifton W. Price*
CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS



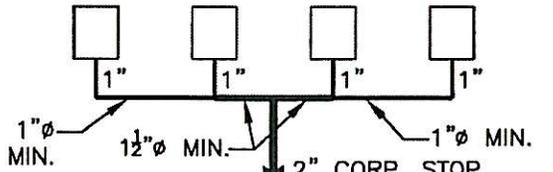
DATE: *10/18/07*
10/18/07

W-22

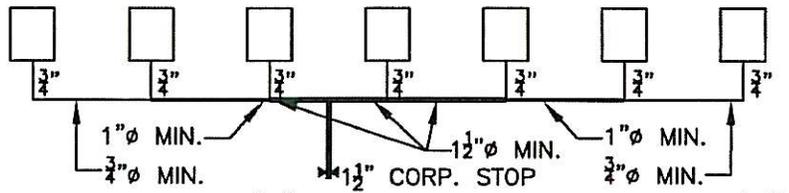
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08



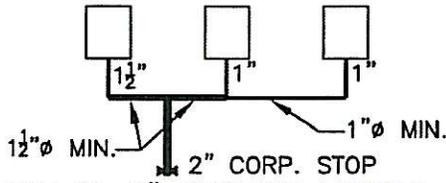
CASE I: 2" SERVICE LATERAL WITH 10x3/4" BRANCHES



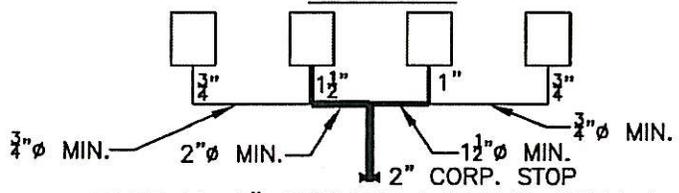
CASE II: 2" SERVICE LATERAL WITH 4x1" BRANCHES



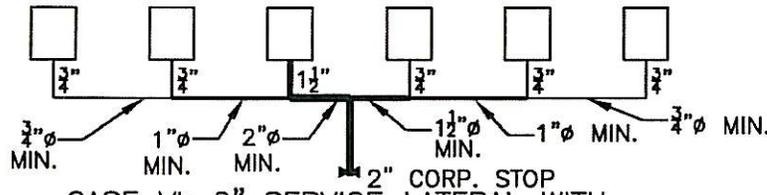
CASE III: 1-1/2" SERVICE LATERAL WITH 7x3/4" BRANCHES



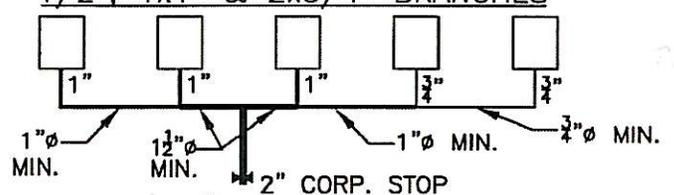
CASE IV: 2" SERVICE LATERAL WITH 1x1 1/2" & 2x1" BRANCHES



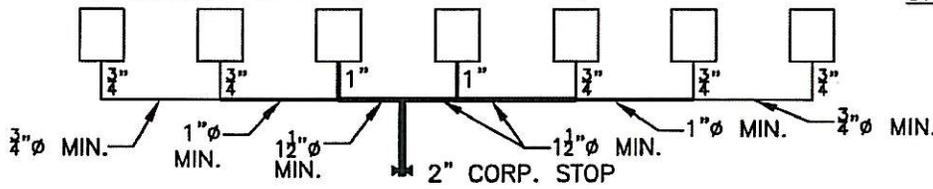
CASE V: 2" SERVICE LATERAL WITH 1x1 1/2", 1x1" & 2x3/4" BRANCHES



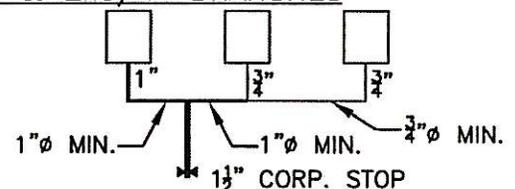
CASE VI: 2" SERVICE LATERAL WITH 1x1 1/2" & 5x3/4" BRANCHES



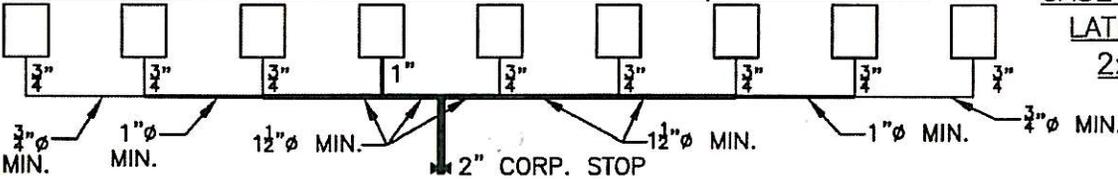
CASE VII: 2" SERVICE LATERAL WITH 3x1" & 2x3/4" BRANCHES



CASE VIII: 2" SERVICE LAT. WITH 2x1" & 5x3/4" BRANCHES



CASE X: 1-1/2" SERVICE LATERAL WITH 1x1" & 2x3/4" BRANCHES



CASE IX: 2" SERVICE LATERAL WITH 1x1" & 8x3/4" BRANCHES

NOTES:

1. THE MAXIMUM NUMBER OF CONNECTED METERS ON THE SERVICE LINE IS AS SHOWN IN EACH CASE.
2. REFER TO DRAWINGS #2981, #2982, #2984 & #3274 FOR WATER & FIRE SERVICES INSTALLATIONS.
3. ALL FITTINGS ARE THREADED BRASS AND PIPING IS COPPER.
4. MAINTAIN 2" MINIMUM SEPARATION BETWEEN METER BOXES.
5. DIMENSIONING REFERS TO PIPE SIZE ONLY.
6. REFER TO DWG. #3688 FOR RADIO READ CONDUIT INSTALLATION.
7. REFER TO CASE NO. 1 FOR 2"x4" BOARD PLACEMENT UNDER MULTIPLE BOXES.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: STANDARD MULTIPLE BRANCH SERVICE INSTALLATIONS (3/4"-2")

STANDARD PLAN

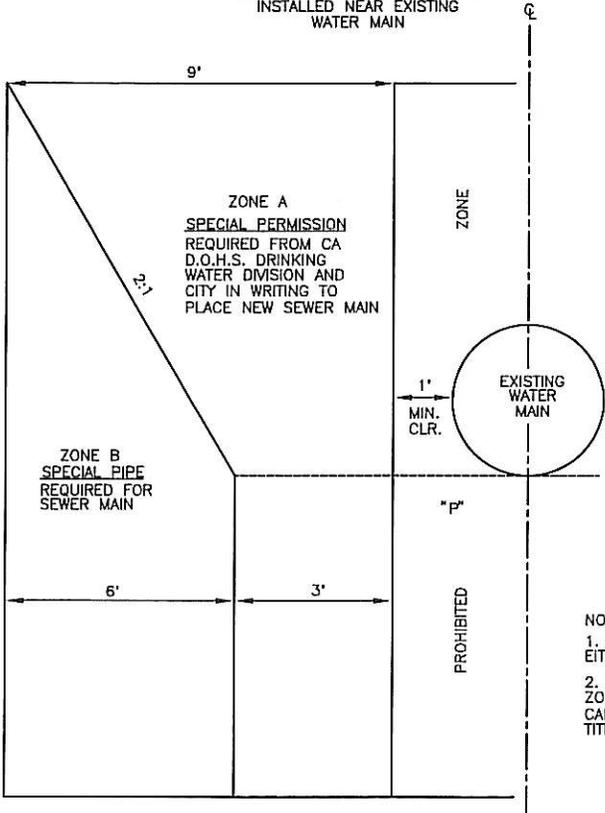
DESIGNED BY:
WAG
DRAWN BY:
AB
CHECKED BY:
WAG

APPROVED: *[Signature]*
CLIFTON W. BRICE, DIRECTOR OF PUBLIC WORKS
WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

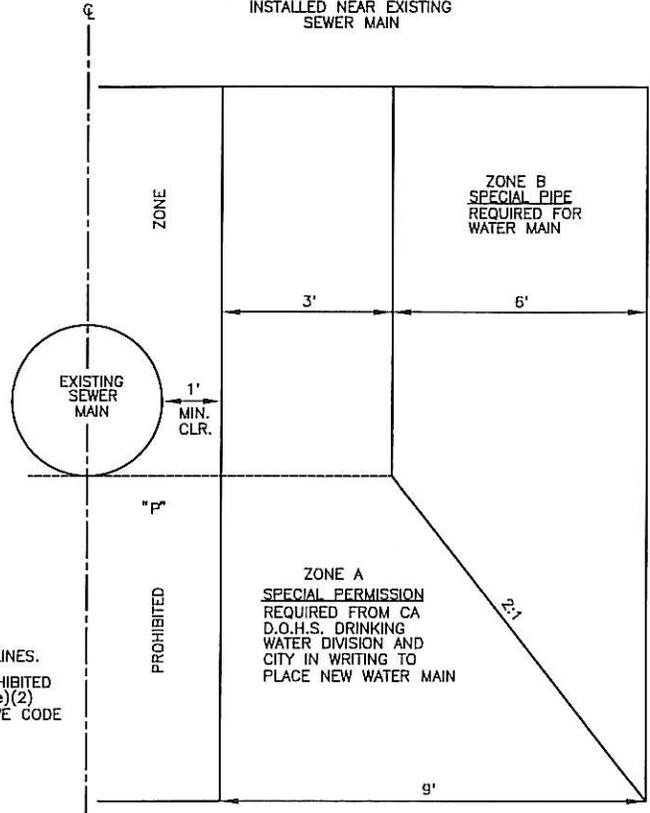
DATE:
10/18/07
10/18/07

W-23

CASE 1
NEW SEWER MAIN
INSTALLED NEAR EXISTING
WATER MAIN

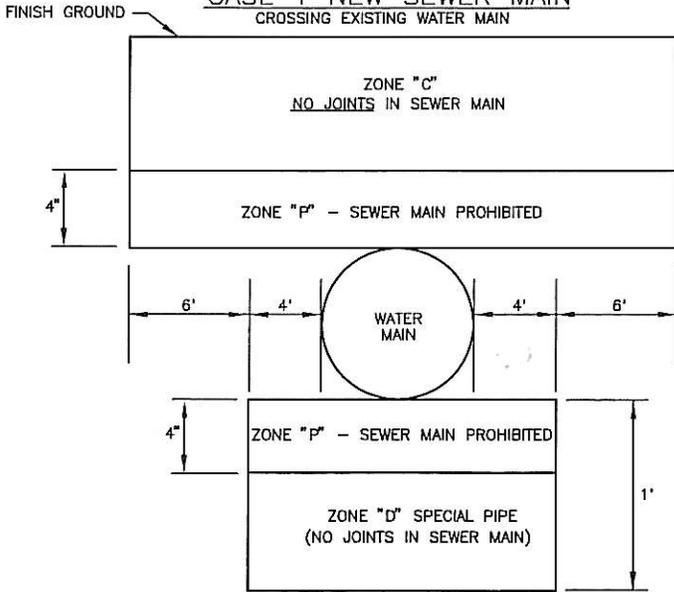


CASE 2
NEW WATER MAIN
INSTALLED NEAR EXISTING
SEWER MAIN

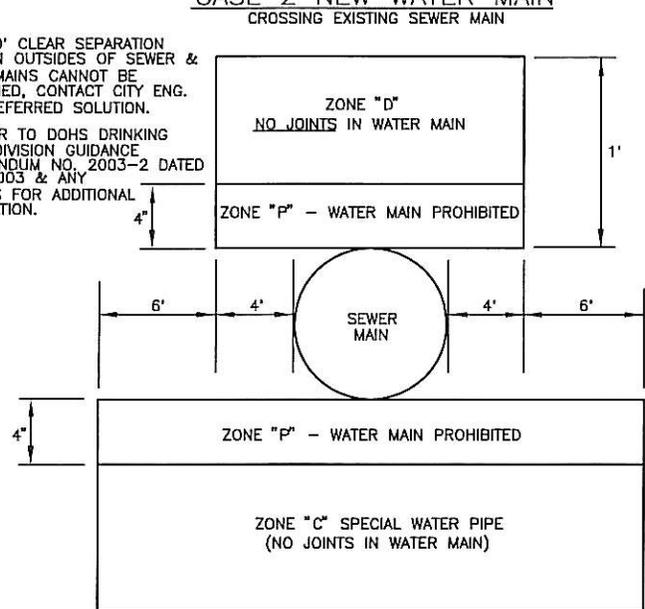


NOTES:
1. ZONE IDENTICAL ON EITHER SIDE OF CENTERLINES.
2. ZONES "P" IS A PROHIBITED ZONE, SECTION 64630 (e)(2) CALIFORNIA ADMINISTRATIVE CODE TITLE 22.

CASE 1 NEW SEWER MAIN
CROSSING EXISTING WATER MAIN



CASE 2 NEW WATER MAIN
CROSSING EXISTING SEWER MAIN



NOTES:
1. IF 10' CLEAR SEPARATION BETWEEN OUTSIDES OF SEWER & WATER MAINS CANNOT BE MAINTAINED, CONTACT CITY ENG. FOR PREFERRED SOLUTION.
2. REFER TO DOHS DRINKING WATER DIVISION GUIDANCE MEMORANDUM NO. 2003-2 DATED 4/14/2003 & ANY UPDATES FOR ADDITIONAL INFORMATION.

DEPARTMENT OF PUBLIC WORKS
CITY OF SOLEDAD

TITLE: TYPICAL SEPARATION REQUIREMENTS

STANDARD PLAN

DESIGNED BY:
WAG

APPROVED:

DRAWN BY:
AB

CLIFTON W. PRICE, DIRECTOR OF PUBLIC WORKS

CHECKED BY:
WAG

WALTER A. GRANT, CITY ENGINEER - R.E. 42180 EXP: 03-31-08

DATE: 10/10/17

WAG

W-24