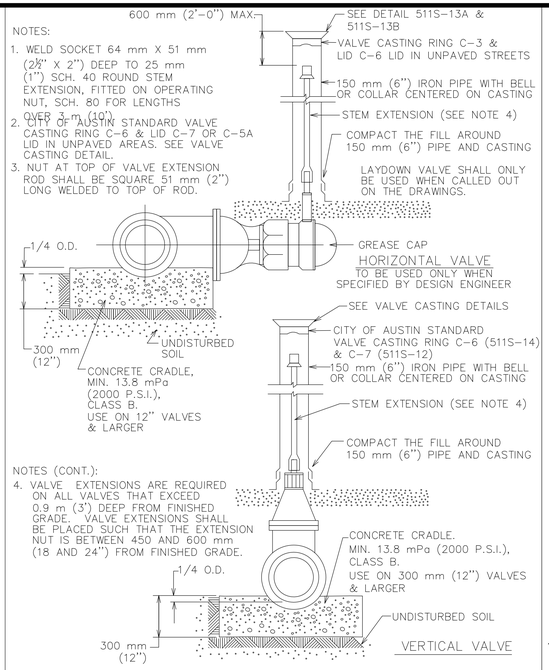
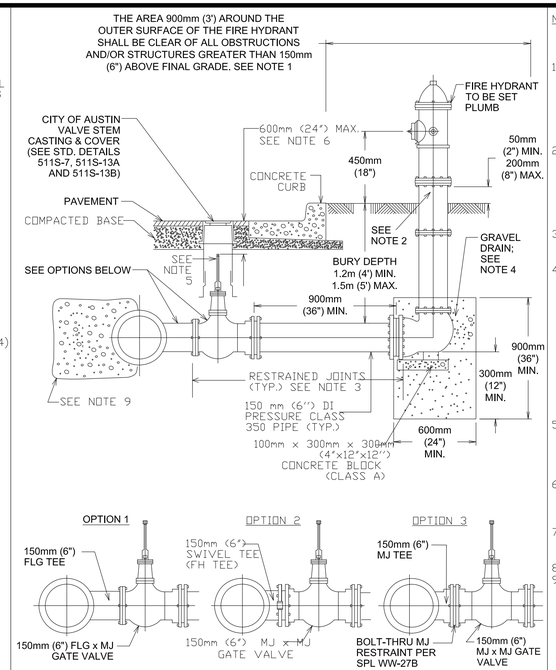


NOTES:
1. WELD SOCKET 64 mm X 51 mm (2½" X 2") DEEP TO 25 mm (1") SCH. 40 ROUND STEM EXTENSION, FITTED ON OPERATING NUT, SCH. 80 FOR LENGTHS OVER 3 m (10').
2. CITY OF AUSTIN STANDARD VALVE CASTING RING C-6 & LID C-7 OR C-5A LID IN UNPAVED AREAS. SEE VALVE CASTING DETAIL.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 51 mm (2") LONG WELDED TO TOP OF ROD.

NOTES (CONT.):
4. VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 0.9 m (3') DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 450 AND 600 mm (18 AND 24") FROM FINISHED GRADE.

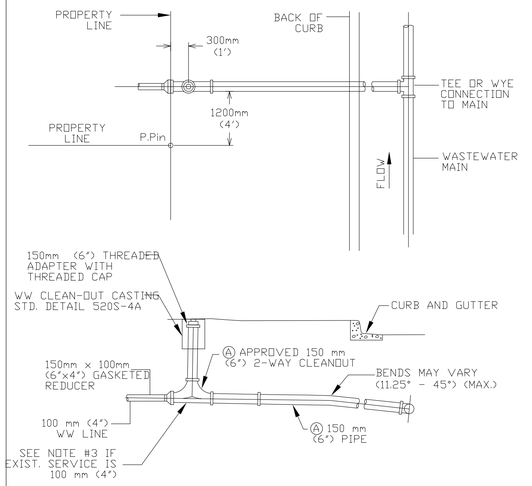
CITY OF AUSTIN AUSTIN WATER UTILITY		TYPICAL GATE VALVE 100 mm–600 mm (4"–24")	
RECORD COPY SIGNED BY KATHI L. FLOWERS 3/9/04 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 511S-7



CITY OF AUSTIN AUSTIN WATER UTILITY		STANDARD FIRE HYDRANT INSTALLATION	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 511S-17 1 OF 2

NOTES:
1. DIMENSION FROM GUTTER FACE OF CURB TO OUTERMOST PART OF ANY NOZZLE CAP SHALL BE NOT LESS THAN 0.9m (3'), NOR MORE THAN 1.8m (6'). NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 150mm (6") OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 1.2m (4') FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 600 mm (2') LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 1.2m TO 1.5m (4' TO 5'). BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED WHEN EXTENSIONS ARE NEEDED TO ACCOMMODATE FIRE HYDRANTS. SEE STD. DETAIL 511S-17A FOR FIRE HYDRANTS ON DEEP WATER MAINS.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 0.6m (2') IN DIAMETER AND 0.3m (1') DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 150mm (6") ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC TO PREVENT BLOCKAGE OF VOIDS IN THE GRAVEL BY MIGRATION OF BACKFILL MATERIAL. THE BOWL OF EACH HYDRANT SHALL BE WELL BRACED AGAINST UNEXCAVATED EARTH AT THE END OF THE TRENCH TAKING CARE NOT TO OBSTRUCT THE HYDRANT DRAIN HOLES, IF THE HYDRANT LEAD IS NOT RESTRAINED TO THE MAIN.
5. WELD SOCKET 64mm x 51mm (2-1/2" x 2") TO 25mm (1") SCH. 40 ROUND STEM OPERATING NUT. USE SCH. 80 ROUND STEM EXTENSION FOR LENGTHS OVER 3m (10'). VALVE STEM EXTENSIONS SHALL CONSIST OF A SINGLE PIECE OF REQUIRED LENGTH WITH A SOCKET ON ONE END AND A NUT ON THE OTHER.
6. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 0.9 m (3') DEEP FROM FINISHED GRADE. VALVE STEM EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 450 AND 600 mm (18" AND 24") FROM FINISHED GRADE.
7. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 150mm (6") DIAMETER, OUTLET SHALL BE FLANGED AND A FLANGE x FLANGE REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
8. WRAP 8 mil POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
9. THRUST BLOCKING REQUIRED FOR PIPE SIZE & SOIL CONDITION (SEE STD. DETAIL 510-6)

CITY OF AUSTIN AUSTIN WATER UTILITY		STANDARD FIRE HYDRANT INSTALLATION	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 511S-17 2 OF 2

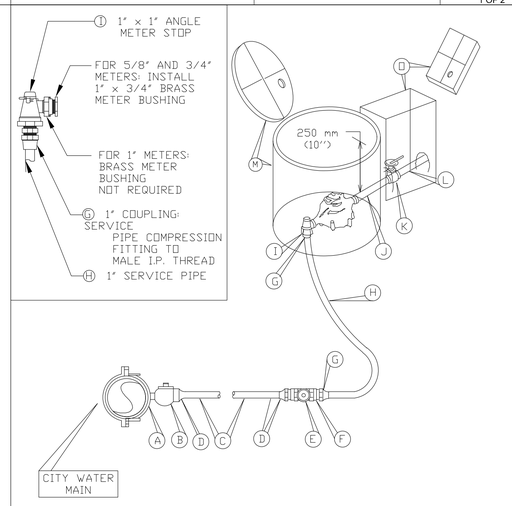


NOTES:
A. TO BE INSTALLED AND INSPECTED DURING SUBDIVISION CONSTRUCTION.

CITY OF AUSTIN AUSTIN WATER UTILITY		SINGLE WASTEWATER SERVICE CONNECTION DETAIL	
RECORD COPY SIGNED BY KATHI L. FLOWERS 9/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 520S-3A 1 OF 2

NOTES:
1. DURING SUBDIVISION CONSTRUCTION UTILITY CONTRACTOR INSTALLS WASTEWATER CONNECTION TO MAIN, 150mm (6") STUB WITH HORIZONTAL WYE FOR DOUBLE SERVICES, 150mm (6") SERVICE BRANCH WITH 2-WAY-CLEANOUT(S) AND RISER FOR CLEANOUT(S) (CAPPED), AND PLUG(S) FOR 2-WAY-CLEANOUT(S). AT PROPERTY LINE END ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% (264mm (1/8") PER FOOT) MINIMUM TO 45° MAXIMUM. DEPTH OF SERVICE STUB AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 1.22m (4'), OTHERWISE THE INSTALLED DEPTH WILL TYPICALLY BE 1.22m (4') TO 1.8m (6'). IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, REFER TO DETAIL 520-6. UTILITY CONTRACTOR ALSO INSTALLS WATER CONNECTION TO MAIN WATER PIPE, FITTINGS AND VALVES INCLUDING STOP VALVE-REFER TO DETAIL 520S-9, 9A, 11 AND 11A FOR LOCATION OF STOP VALVES. ALL INSTALLATIONS SHALL BE MADE IN ACCORDANCE WITH INFORMATION SHOWN ON APPLICABLE STANDARD DRAWINGS AND WILL BE INSPECTED BY CITY OF AUSTIN CONSTRUCTION INSPECTION PERSONNEL.
2. CUSTOMER REMOVES PLUG FROM 2-WAY CLEAN-OUT AT PROPERTY LINE, INSTALLS 150mm x 100mm (6"x4") ELASTOMERIC GASKETED BELL REDUCER (SPL WW-227-B). A BUSHING WILL NOT BE ALLOWED. AS AN ALTERNATE, CUSTOMER MAY INSTALL MINIMUM 450mm (18") LENGTH OF 150mm (6") PIPE, INSTALL 100mm (4") WASTEWATER LINES, EXTEND 100mm (4") PIPE 150mm (6") MINIMUM INTO 150mm (6") PIPE AND JOINT BLOCK UNDER THE FLEXIBLE ADAPTER (SPL WW-354) AND CAST IN PLACE CONCRETE SUPPORT BLOCK UNDER THE FLEXIBLE ADAPTER. IF WASTEWATER WILL NOT SATISFACTORILY FLOW BY GRAVITY TO SEWER MAIN ADJACENT TO PROPERTY, PUMP EQUIPMENT MUST BE PROVIDED BY THE CUSTOMER AS PART OF THE CUSTOMER'S WASTEWATER SYSTEM. CUSTOMER ALSO INSTALLS WATER LINES INCLUDING FITTINGS AND VALVES ON BOTH SIDES OF METER, AND INSTALLS METER BOXES AND COVERS. A VENTED SPACER MAY BE USED TO ASSURE PROPER SPACING AND ALIGNMENT OF METER FITTINGS.
3. IF EXISTING WASTEWATER SERVICE IS 100mm (4"), CUSTOMER SHALL INSTALL A 100mm (4") 2-WAY-CLEAN-OUT, SEE SPL WW-227B.
4. IF EXISTING SERVICE IS NOT PVC, THE CUSTOMER SHALL INSTALL A FLEXIBLE ADAPTER (SPL WW-354) AND CAST IN PLACE CONCRETE SUPPORT BLOCK UNDER THE ADAPTER TO TRANSITION TO PVC. THE SUPPORT BLOCK SHALL HAVE MINIMUM DIMENSIONS OF 150mm (6") THICK AND 450mm (18") WIDE AND EXTEND A MINIMUM OF 150mm (6") BEYOND EITHER END OF THE ADAPTER.
5. CUSTOMER IS RESPONSIBLE FOR METER BOX AND PIPING SYSTEM UNTIL METER IS INSTALLED AND WASTEWATER IS CONNECTED. ANY MISSING OR DAMAGED PARTS SHALL BE REINSTALLED BY CUSTOMER WHO SHALL GUARANTEE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE, THAT ALL VALVES AND STOPS, METER BOX AND 2-WAY-CLEANOUTS REMAIN CLEAR OF SIDEWALKS AND OTHER OBSTRUCTIONS.
6. CITY OF AUSTIN ACTIVITY IS LIMITED TO INSTALLATION OF THE WATER METER AND INSPECTION OF CONNECTIONS TO THE CITY'S RESPONSIBILITY ENDS AT THE CUSTOMER'S WATER CUT-OFF VALVE AND AT THE CUSTOMER'S WASTEWATER CONNECTION TO THE 2-WAY CLEAN-OUT.
7. PIPING AND TUBING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14); MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2)(a) AND (3)(b); BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). SERVICE LINES IN THESE AREAS SHALL HAVE A MINIMUM COVER BELOW FINAL STREET GRADE OF 1.07m (42"). ANY EXCEPTION MUST BE SPECIFICALLY APPROVED BY THE ENGINEER.
8. NO METER BOX OR CLEAN-OUT SHALL BE SET IN SIDEWALK OR DRIVEWAY AREA WITHOUT WRITTEN APPROVAL FROM AUSTIN WATER UTILITY.

CITY OF AUSTIN AUSTIN WATER UTILITY		SINGLE WASTEWATER SERVICE CONNECTION DETAIL	
RECORD COPY SIGNED BY KATHI L. FLOWERS 9/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 520S-3A 2 OF 2



CITY RESPONSIBILITY ENDS ON THE CUSTOMER SIDE OF THE METER BOX

CITY OF AUSTIN AUSTIN WATER UTILITY		INSTALLATION FOR A 16mm, 19mm OR 25mm (5/8", 3/4" OR 1") POTABLE METER	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 520S-11 1 OF 2

MATERIAL LIST
- Ⓐ SERVICE CLAMP REQUIRED ON ALL PLASTIC AND ASBESTOS CEMENT PIPE AND ON ALL IRON PIPE 300mm (12") AND SMALLER.
- Ⓑ 38mm (1-1/2") CORPORATION STOP-SERVICE PIPE OUTLET. SPL WW-68
- Ⓒ 38mm (1-1/2") SERVICE PIPE
- Ⓓ 38mm (1-1/2") COUPLING: SERVICE PIPE TO MALE I.P.T. (COMPRESSION FITTING)
- Ⓔ 38mm (1-1/2") BALL VALVE. SEE SPL WW -275
- Ⓕ BRONZE BUSHING, 38mm x 25mm (1-1/2"x1") I.P. THREADS
- Ⓖ 25mm (1") COUPLING: SERVICE PIPE TO MALE I.P.T.(COMPRESSION FITTING).
- Ⓗ 25mm (1") SERVICE PIPE PER SPL-WW-65.
- Ⓘ ANGLE METER STOP: SERVICE PIPE INLET x SWIVEL COUPLING NUT OUTLET AND BRASS BUSHING:
  - -FOR 16mm AND 19mm (5/8" AND 3/4") METERS: 25mm x 19mm (1"x3/4") BRASS METER BUSHING.
  - -FOR 25mm (1") METERS: BRASS METER BUSHING NOT REQUIRED.
  - -FOR ALL, SEE SPL WW-68.
- Ⓙ WATER METER COUPLING: MALE I.P.T. x SWIVEL COUPLING NUT:
  - -FOR 16mm AND 19mm (5/8" AND 3/4") METERS: 19mm x 213mm (3/4"x8-1/2") LONG
  - -FOR 25mm (1") METERS: 25mm x 213mm (1"x8-1/2") LONG
- Ⓚ BALL VALVE. SEE SPL WW-276. 19mm OR 25mm (3/4" OR 1") (PROPERTY OWNER'S CUT-OFF VALVE)
- Ⓛ 19mm or 25mm (3/4" or 1") PIPE MEETING CITY OF AUSTIN PLUMBING CODE REQUIREMENTS.
- Ⓜ AMR/AMI READY METER BOX AND LID PER SPL WW-145 OR WW-145A
- Ⓝ N/A
- Ⓞ PROPERTY OWNER'S BALL VALVE BOX AND LID, RECTANGULAR PLASTIC BOX, DFW #D1200 OR EQUAL.

NOTES:
1. SERVICE PIPE SHALL BE COPPER TUBE SIZE. IT SHALL BE ANNEALED SEAMLESS TYPE 'K' COPPER TUBING MEETING THE CURRENT ASTM B88 STANDARD WITH NO SWEAT OR SOLDERED JOINTS.
2. SERVICE SADDLE SHALL BE WRAPPED COMPLETELY WITH 0.2mm (8 MIL) POLYETHYLENE FILM.
3. TOP OF BOXES SHOULD BE 25mm (1") ABOVE GROUND OR FLUSH WITH PAVEMENT SURFACE.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT, AND OUT OF SIDEWALK AND VEHICULAR TRAFFIC AREA.
6. BALL VALVE Ⓔ SHALL NOT BE LOCATED UNDER CURB OR PAVEMENT, AND NOT BE LOCATED MORE THAN 600mm (24") HORIZONTALLY FROM METER BOX OR 900mm (36") BELOW FINAL GRADE.

CITY OF AUSTIN AUSTIN WATER UTILITY		INSTALLATION FOR A 16mm, 19mm OR 25mm (5/8", 3/4" OR 1") POTABLE METER	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 520S-11 2 OF 2

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March 06, 2014

PROPOSED CIRCLE K CONVENIENCE STORE
2615 WEST PECAN STREET
PFLUGERVILLE, TEXAS 78660

Revisions:

#	Date Issued:	Description:
-	-	-

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

SITE PLAN RELEASE

FILE NUMBER:_____ EXPIRATION DATE: _____

CASE MANAGER:_____ APPLICATION DATE: _____

REVIEWED BY:

Watershed Protection and Development Review Dept. Date

SHEET No. 18 of ___

Sheet Title:

DETAIL SHEET 5

Date: 3/6/ 2014

Project Number: 13502

Drawn By: TJB

Scale:

Sheet Number:

C-7.4